



# Full wwPDB X-ray Structure Validation Report ⓘ

May 15, 2020 – 05:28 pm BST

PDB ID : 4V51  
Title : Structure of the *Thermus thermophilus* 70S ribosome complexed with mRNA, tRNA and paromomycin  
Authors : Selmer, M.; Dunham, C.M.; Murphy, F.V.; Weixlbaumer, A.; Petry, S.; Weir, J.R.; Kelley, A.C.; Ramakrishnan, V.  
Deposited on : 2006-07-31  
Resolution : 2.80 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

---

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : 2.11  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.11

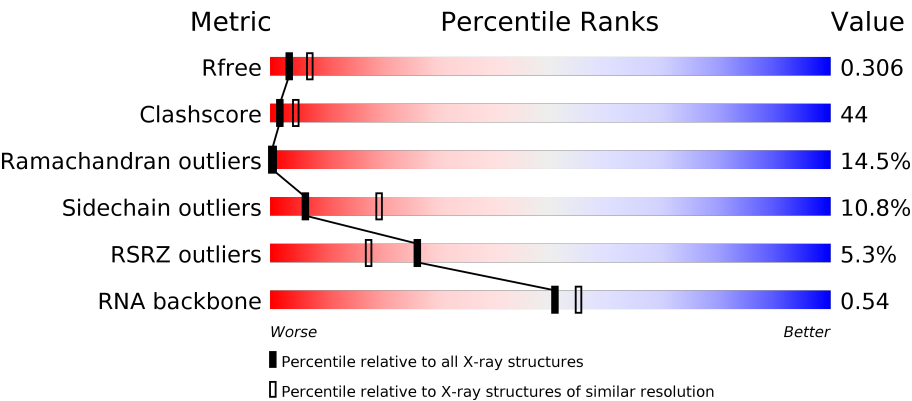
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 2.80 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 <sub>free</sub>	130704	3140 (2.80-2.80)
Clashscore	141614	3569 (2.80-2.80)
Ramachandran outliers	138981	3498 (2.80-2.80)
Sidechain outliers	138945	3500 (2.80-2.80)
RSRZ outliers	127900	3078 (2.80-2.80)
RNA backbone	3102	1227 (3.10-2.50)

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

Mol	Chain	Length	Quality of chain
1	AA	1522	<div><div>2%</div><div>24%</div><div>62%</div><div>11%</div><div>..</div></div>
1	CA	1522	<div><div>2%</div><div>23%</div><div>64%</div><div>11%</div><div>..</div></div>
2	AB	256	<div><div>11%</div><div>21%</div><div>54%</div><div>15%</div><div>8%</div></div>
2	CB	256	<div><div>11%</div><div>21%</div><div>54%</div><div>15%</div><div>8%</div></div>

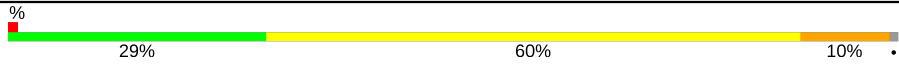
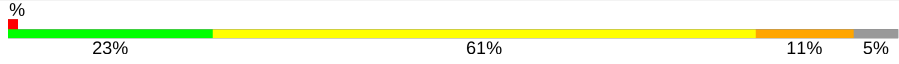
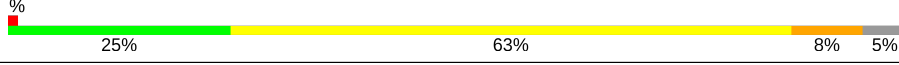
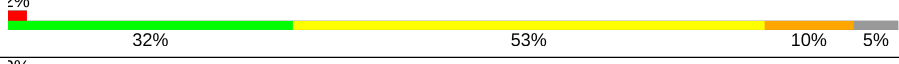
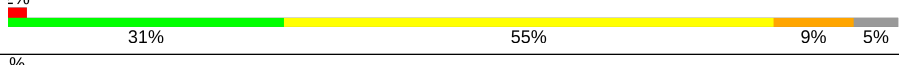
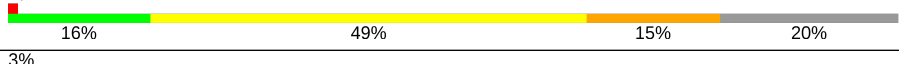
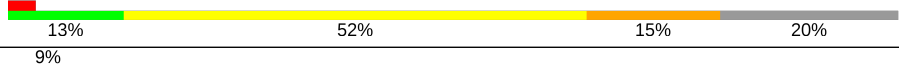

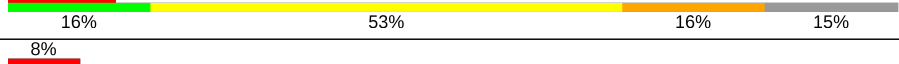
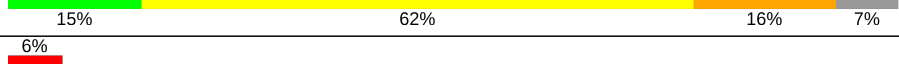
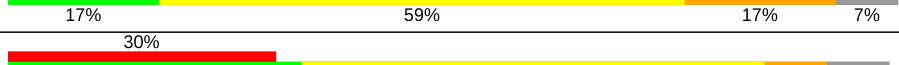
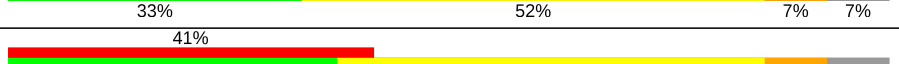
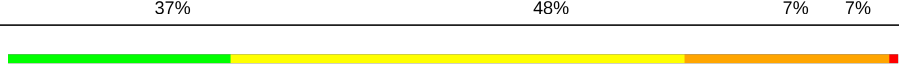
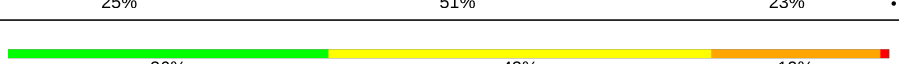
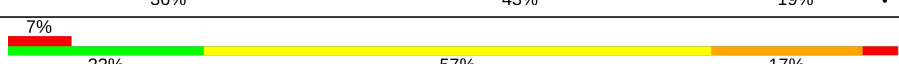
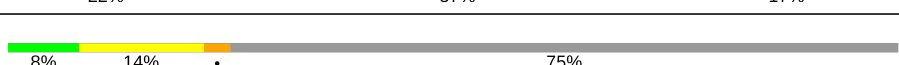
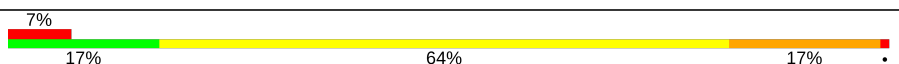
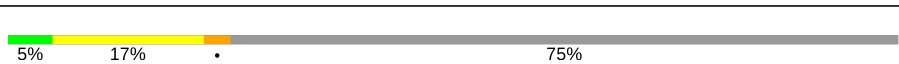
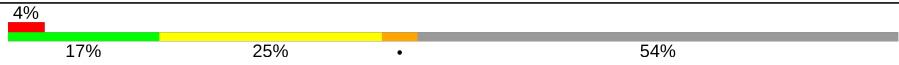


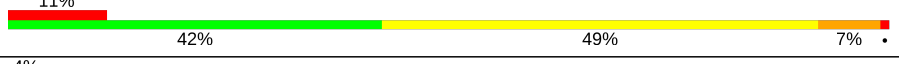



Continued on next page...

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
3	AC	239	
3	CC	239	
4	AD	209	
4	CD	209	
5	AE	162	
5	CE	162	
6	AF	101	
6	CF	101	
7	AG	156	
7	CG	156	
8	AH	138	
8	CH	138	
9	AI	128	
9	CI	128	
10	AJ	105	
10	CJ	105	
11	AK	129	
11	CK	129	
12	AL	135	
12	CL	135	
13	AM	126	
13	CM	126	
14	AN	61	
14	CN	61	
15	AO	89	

*Continued on next page...*

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	89	
16	AP	88	
16	CP	88	
17	AQ	105	
17	CQ	105	
18	AR	88	
18	CR	88	
19	AS	93	
19	CS	93	
20	AT	106	
20	CT	106	
21	AU	27	
21	CU	27	
22	AV	77	
22	CV	77	
23	AW	76	
23	AY	76	
23	CW	76	
23	CY	76	
24	AX	24	
24	CX	24	
25	B0	85	
25	D0	85	
26	B1	98	
26	D1	98	

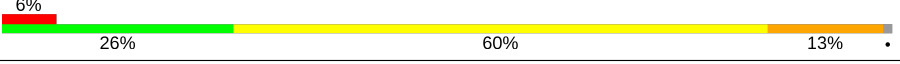
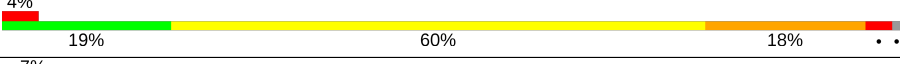
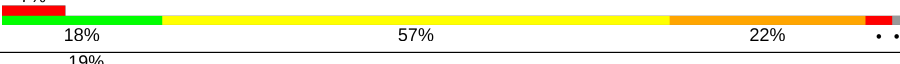
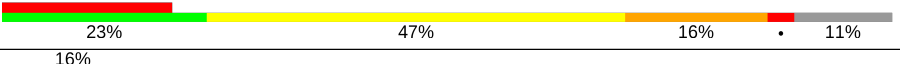
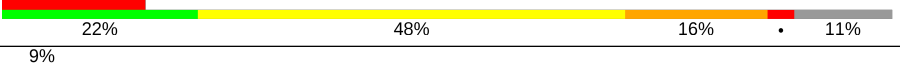
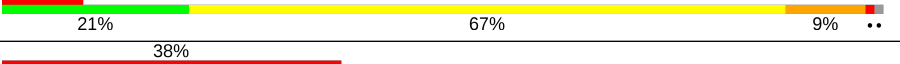
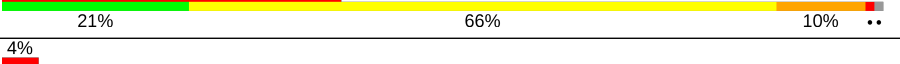
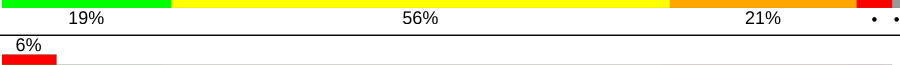
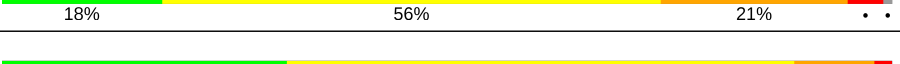
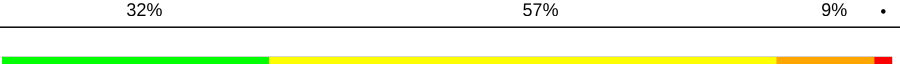
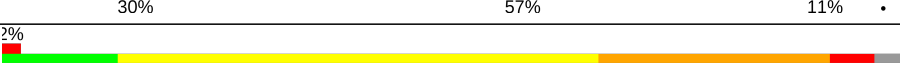
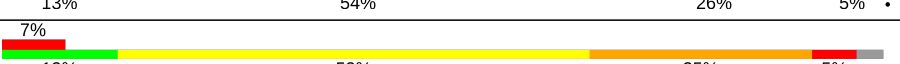
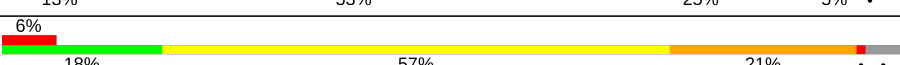
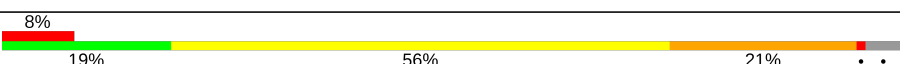
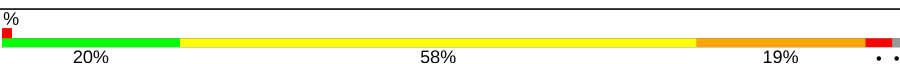
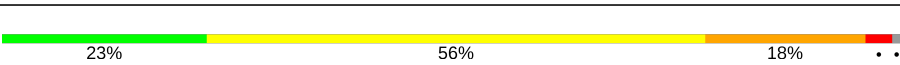


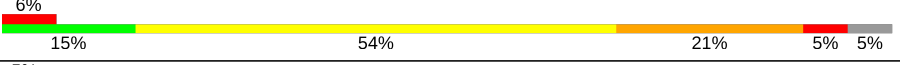


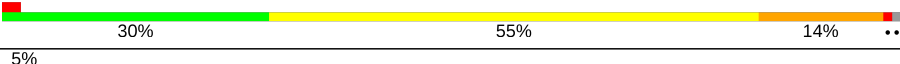



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
27	B2	72	
27	D2	72	
28	B3	60	
28	D3	60	
29	B4	71	
29	D4	71	
30	B5	60	
30	D5	60	
31	B6	54	
31	D6	54	
32	B7	49	
32	D7	49	
33	B8	65	
33	D8	65	
34	BA	2787	
34	DA	2787	
35	BB	122	
35	DB	122	
36	BC	229	
36	DC	229	
37	BD	276	
37	DD	276	
38	BE	206	
38	DE	206	
39	BF	210	




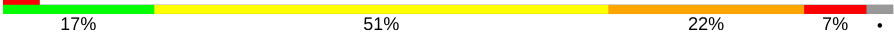
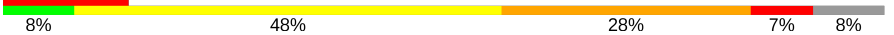
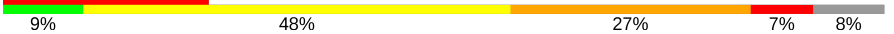
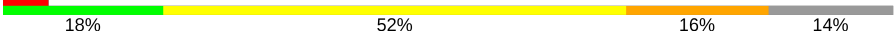
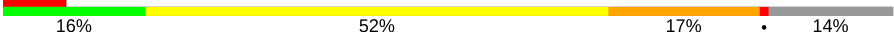
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
39	DF	210	
40	BG	182	
40	DG	182	
41	BH	180	
41	DH	180	
42	BI	148	
42	DI	148	
43	BN	140	
43	DN	140	
44	BO	122	
44	DO	122	
45	BP	150	
45	DP	150	
46	BQ	141	
46	DQ	141	
47	BR	118	
47	DR	118	
48	BS	112	
48	DS	112	
49	BT	146	
49	DT	146	
50	BU	118	
50	DU	118	
51	BV	101	
51	DV	101	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
52	BW	113	
52	DW	113	
53	BX	96	
53	DX	96	
54	BY	110	
54	DY	110	
55	BZ	206	
55	DZ	206	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
56	MG	AA	1618	-	-	-	X
56	MG	AA	1633	-	-	-	X
56	MG	AA	1697	-	-	-	X
56	MG	BA	3004	-	-	-	X
56	MG	BA	3403	-	-	-	X
56	MG	BA	3413	-	-	-	X
56	MG	BB	201	-	-	-	X
56	MG	BB	213	-	-	-	X
56	MG	CA	1622	-	-	-	X
56	MG	CA	1637	-	-	-	X
56	MG	CA	1646	-	-	-	X
56	MG	CA	1685	-	-	-	X
56	MG	CA	1719	-	-	-	X
56	MG	CA	1729	-	-	-	X
56	MG	CA	1752	-	-	-	X
56	MG	DA	3004	-	-	-	X
56	MG	DA	3187	-	-	-	X
56	MG	DA	3219	-	-	-	X
56	MG	DA	3255	-	-	-	X
56	MG	DA	3261	-	-	-	X
56	MG	DA	3273	-	-	-	X

## 2 Entry composition

There are 58 unique types of molecules in this entry. The entry contains 291075 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1504	Total	C	N	O	P	0	0	0
			32329	14390	5992	10444	1503			
1	CA	1504	Total	C	N	O	P	0	0	0
			32329	14390	5992	10444	1503			

- Molecule 2 is a protein called 30S RIBOSOMAL PROTEIN S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			
2	CB	235	Total	C	N	O	S	0	0	1
			1901	1213	342	341	5			

- Molecule 3 is a protein called 30S RIBOSOMAL PROTEIN S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			
3	CC	207	Total	C	N	O	S	0	0	1
			1613	1016	315	281	1			

- Molecule 4 is a protein called 30S RIBOSOMAL PROTEIN S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			
4	CD	208	Total	C	N	O	S	0	0	0
			1703	1066	339	291	7			

- Molecule 5 is a protein called 30S RIBOSOMAL PROTEIN S5.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			
5	CE	151	Total	C	N	O	S	0	0	1
			1147	724	218	201	4			

- Molecule 6 is a protein called 30S RIBOSOMAL PROTEIN S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			
6	CF	101	Total	C	N	O	S	0	0	0
			843	531	155	154	3			

- Molecule 7 is a protein called 30S RIBOSOMAL PROTEIN S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			
7	CG	155	Total	C	N	O	S	0	0	0
			1257	781	252	218	6			

- Molecule 8 is a protein called 30S RIBOSOMAL PROTEIN S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			
8	CH	138	Total	C	N	O	S	0	0	0
			1116	705	215	193	3			

- Molecule 9 is a protein called 30S RIBOSOMAL PROTEIN S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O		0	0	0
			1011	639	198	174				
9	CI	127	Total	C	N	O		0	0	0
			1011	639	198	174				

- Molecule 10 is a protein called 30S RIBOSOMAL PROTEIN S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	99	Total	C	N	O	S	0	0	1
			795	499	157	138	1			

- Molecule 11 is a protein called 30S RIBOSOMAL PROTEIN S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			
11	CK	119	Total	C	N	O	S	0	0	0
			885	549	168	165	3			

- Molecule 12 is a protein called 30S RIBOSOMAL PROTEIN S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			
12	CL	125	Total	C	N	O	S	0	0	1
			971	611	196	163	1			

- Molecule 13 is a protein called 30S RIBOSOMAL PROTEIN S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	125	Total	C	N	O	S	0	0	1
			988	611	206	169	2			
13	CM	125	Total	C	N	O	S	0	0	1
			988	611	206	169	2			

- Molecule 14 is a protein called 30S RIBOSOMAL PROTEIN S14.

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

- Molecule 15 is a protein called 30S RIBOSOMAL PROTEIN S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			
15	CO	88	Total	C	N	O	S	0	0	0
			734	459	147	126	2			

- Molecule 16 is a protein called 30S RIBOSOMAL PROTEIN S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			
16	CP	84	Total	C	N	O	S	0	0	1
			701	443	140	117	1			

- Molecule 17 is a protein called 30S RIBOSOMAL PROTEIN S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			
17	CQ	100	Total	C	N	O	S	0	0	1
			824	528	152	142	2			

- Molecule 18 is a protein called 30S RIBOSOMAL PROTEIN S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	70	Total	C	N	O	0	0	0
			574	367	112	95			
18	CR	70	Total	C	N	O	0	0	0
			574	367	112	95			

- Molecule 19 is a protein called 30S RIBOSOMAL PROTEIN S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			
19	CS	79	Total	C	N	O	S	0	0	1
			630	403	115	110	2			

- Molecule 20 is a protein called 30S RIBOSOMAL PROTEIN S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			
20	CT	99	Total	C	N	O	S	0	0	0
			763	470	162	129	2			

- Molecule 21 is a protein called 30S RIBOSOMAL PROTEIN THX.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	AU	25	Total	C	N	O	0	0	1
			209	128	51	30			
21	CU	25	Total	C	N	O	0	0	1
			209	128	51	30			

- Molecule 22 is a RNA chain called P-SITE TRNA FMET (UNMODIFIED BASES EXCEPT FOR THYMINE 54).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	77	Total	C	N	O	P	0	0	0
			1645	733	297	538	77			
22	CV	77	Total	C	N	O	P	0	0	0
			1645	733	297	538	77			

- Molecule 23 is a RNA chain called E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES).

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AW	76	Total	C	N	O	P	0	0	0
			1623	723	290	534	76			
23	AY	19	Total	C	N	O	P	0	0	0
			407	183	78	128	18			
23	CW	76	Total	C	N	O	P	0	0	0
			1623	723	290	534	76			
23	CY	19	Total	C	N	O	P	0	0	0
			407	183	78	128	18			

- Molecule 24 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	AX	11	Total	C	N	O	P	0	0	0
			235	106	44	74	11			
24	CX	11	Total	C	N	O	P	0	0	0
			235	106	44	74	11			

- Molecule 25 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	B0	85	Total	C	N	O	S	0	0	0
			650	401	137	111	1			
25	D0	85	Total	C	N	O	S	0	0	0
			650	401	137	111	1			

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	B1	89	Total	C	N	O	0	0	1
			693	435	140	118			
26	D1	89	Total	C	N	O	0	0	1
			693	435	140	118			

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	B2	51	Total	C	N	O	S	0	0	1
			421	263	85	72	1			
27	D2	51	Total	C	N	O	S	0	0	1
			421	263	85	72	1			

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	B3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			
28	D3	60	Total	C	N	O	S	0	0	1
			468	298	91	78	1			

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
29	B4	50	Total	C	N	O	0	0	1
			242	143	50	49			
29	D4	50	Total	C	N	O	0	0	1
			242	143	50	49			

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	B5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			
30	D5	59	Total	C	N	O	S	0	0	0
			459	288	90	76	5			

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	B6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			
31	D6	45	Total	C	N	O	S	0	0	1
			381	235	78	64	4			

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			
32	D7	49	Total	C	N	O	S	0	0	1
			419	257	105	55	2			

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	B8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			
33	D8	64	Total	C	N	O	S	0	0	1
			508	326	102	78	2			

- Molecule 34 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BA	2772	Total	C	N	O	P	0	0	0
			59708	26573	11171	19193	2771			
34	DA	2772	Total	C	N	O	P	0	0	0
			59708	26573	11171	19193	2771			

- Molecule 35 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			
35	DB	119	Total	C	N	O	P	0	0	0
			2551	1136	471	826	118			

- Molecule 36 is a protein called 50S RIBOSOMAL PROTEIN L1.

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

*Continued on next page...*

*Continued from previous page...*

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

- Molecule 37 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BD	272	Total	C	N	O	S	0	0	1
			2105	1329	417	356	3			
37	DD	272	Total	C	N	O	S	0	0	1
			2105	1329	417	356	3			

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BE	205	Total	C	N	O	S	0	0	1
			1564	988	300	270	6			
38	DE	205	Total	C	N	O	S	0	0	1
			1564	988	300	270	6			

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BF	208	Total	C	N	O	S	0	0	1
			1624	1035	304	282	3			
39	DF	208	Total	C	N	O	S	0	0	1
			1624	1035	304	282	3			

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L5.

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

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BH	160	Total	C	N	O	S	0	0	1
			1223	773	229	220	1			
41	DH	160	Total	C	N	O	S	0	0	1
			1223	773	229	220	1			

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BI	146	Total	C	N	O	S	0	0	1
			1132	723	201	207	1			
42	DI	146	Total	C	N	O	S	0	0	1
			1132	723	201	207	1			

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BN	139	Total	C	N	O	S	0	0	1
			1105	712	207	182	4			
43	DN	139	Total	C	N	O	S	0	0	1
			1105	712	207	182	4			

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L14.

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

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			
45	DP	146	Total	C	N	O	S	0	0	0
			1114	692	227	193	2			

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BQ	136	Total	C	N	O	S	0	0	0
			1080	688	204	183	5			
46	DQ	136	Total	C	N	O	S	0	0	0
			1080	688	204	183	5			

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L17.



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
47	BR	117	Total	C	N	O	0	0	0
			960	599	202	159			
47	DR	117	Total	C	N	O	0	0	0
			960	599	202	159			

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
48	BS	99	Total	C	N	O	0	0	1
			771	486	155	130			
48	DS	99	Total	C	N	O	0	0	1
			771	486	155	130			

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	BT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			
49	DT	138	Total	C	N	O	S	0	0	1
			1142	710	235	196	1			

- Molecule 50 is a protein called 50S RIBOSOMAL PROTEIN L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			
50	DU	117	Total	C	N	O	S	0	0	0
			958	604	202	151	1			

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	BV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			
51	DV	101	Total	C	N	O	S	0	0	0
			779	501	142	135	1			

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	DW	113	Total	C	N	O	S	0	0	0
			896	563	176	155	2			

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	BX	93	Total	C	N	O		0	0	1
			726	471	132	123				
53	DX	93	Total	C	N	O		0	0	1
			726	471	132	123				

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	BY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			
54	DY	101	Total	C	N	O	S	0	0	1
			776	500	149	123	4			

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	BZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			
55	DZ	177	Total	C	N	O	S	0	0	1
			1404	897	253	252	2			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	BA	454	Total	Mg	0	0
			454	454		
56	CA	189	Total	Mg	0	0
			189	189		
56	DF	1	Total	Mg	0	0
			1	1		
56	CV	4	Total	Mg	0	0
			4	4		
56	BE	1	Total	Mg	0	0
			1	1		
56	AW	22	Total	Mg	0	0
			22	22		

*Continued on next page...*

*Continued from previous page...*

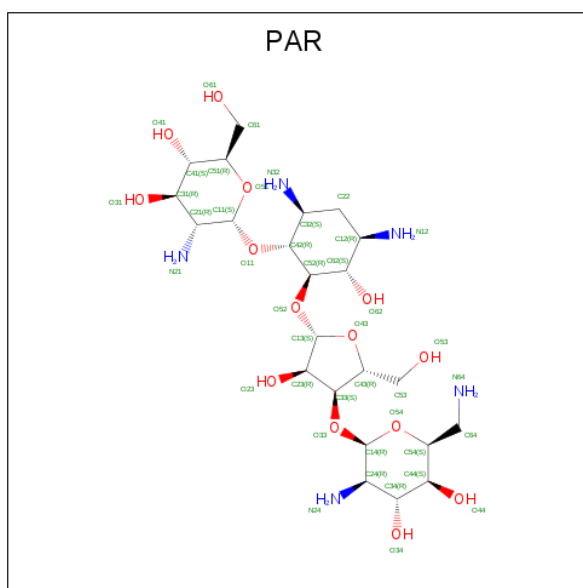
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	DU	1	Total 1	Mg 1	0	0
56	B1	1	Total 1	Mg 1	0	0
56	DZ	1	Total 1	Mg 1	0	0
56	AX	4	Total 4	Mg 4	0	0
56	DD	2	Total 2	Mg 2	0	0
56	B5	2	Total 2	Mg 2	0	0
56	BB	19	Total 19	Mg 19	0	0
56	DO	1	Total 1	Mg 1	0	0
56	AE	1	Total 1	Mg 1	0	0
56	CU	1	Total 1	Mg 1	0	0
56	BF	2	Total 2	Mg 2	0	0
56	AV	7	Total 7	Mg 7	0	0
56	BX	1	Total 1	Mg 1	0	0
56	B2	5	Total 5	Mg 5	0	0
56	AA	215	Total 215	Mg 215	0	0
56	CX	6	Total 6	Mg 6	0	0
56	BN	1	Total 1	Mg 1	0	0
56	DH	1	Total 1	Mg 1	0	0
56	DS	1	Total 1	Mg 1	0	0
56	DE	1	Total 1	Mg 1	0	0
56	B3	1	Total 1	Mg 1	0	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	CJ	1	Total 1	Mg 1	0	0
56	DA	398	Total 398	Mg 398	0	0
56	B7	2	Total 2	Mg 2	0	0
56	CF	1	Total 1	Mg 1	0	0
56	BV	1	Total 1	Mg 1	0	0
56	CM	1	Total 1	Mg 1	0	0
56	BO	1	Total 1	Mg 1	0	0
56	CW	13	Total 13	Mg 13	0	0
56	D5	2	Total 2	Mg 2	0	0
56	DN	1	Total 1	Mg 1	0	0
56	AY	1	Total 1	Mg 1	0	0
56	DB	12	Total 12	Mg 12	0	0

- Molecule 57 is PAROMOMYCIN (three-letter code: PAR) (formula:  $C_{23}H_{45}N_5O_{14}$ ).

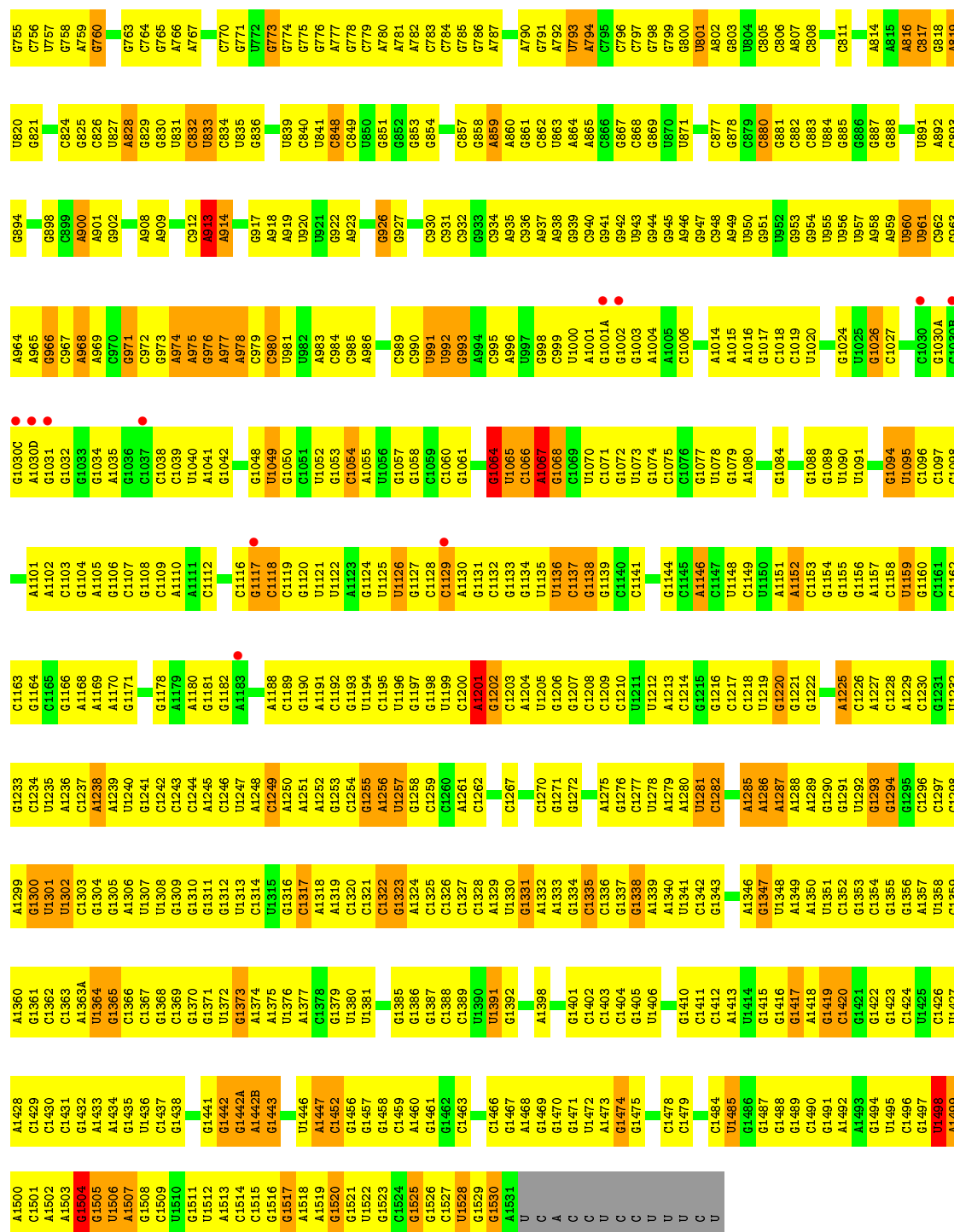


Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
57	AA	1	Total	C	N	O	0	0
			42	23	5	14		
57	CA	1	Total	C	N	O	0	0
			42	23	5	14		

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	CN	1	Total	Zn	0	0
			1	1		
58	AD	1	Total	Zn	0	0
			1	1		
58	CD	1	Total	Zn	0	0
			1	1		
58	AN	1	Total	Zn	0	0
			1	1		

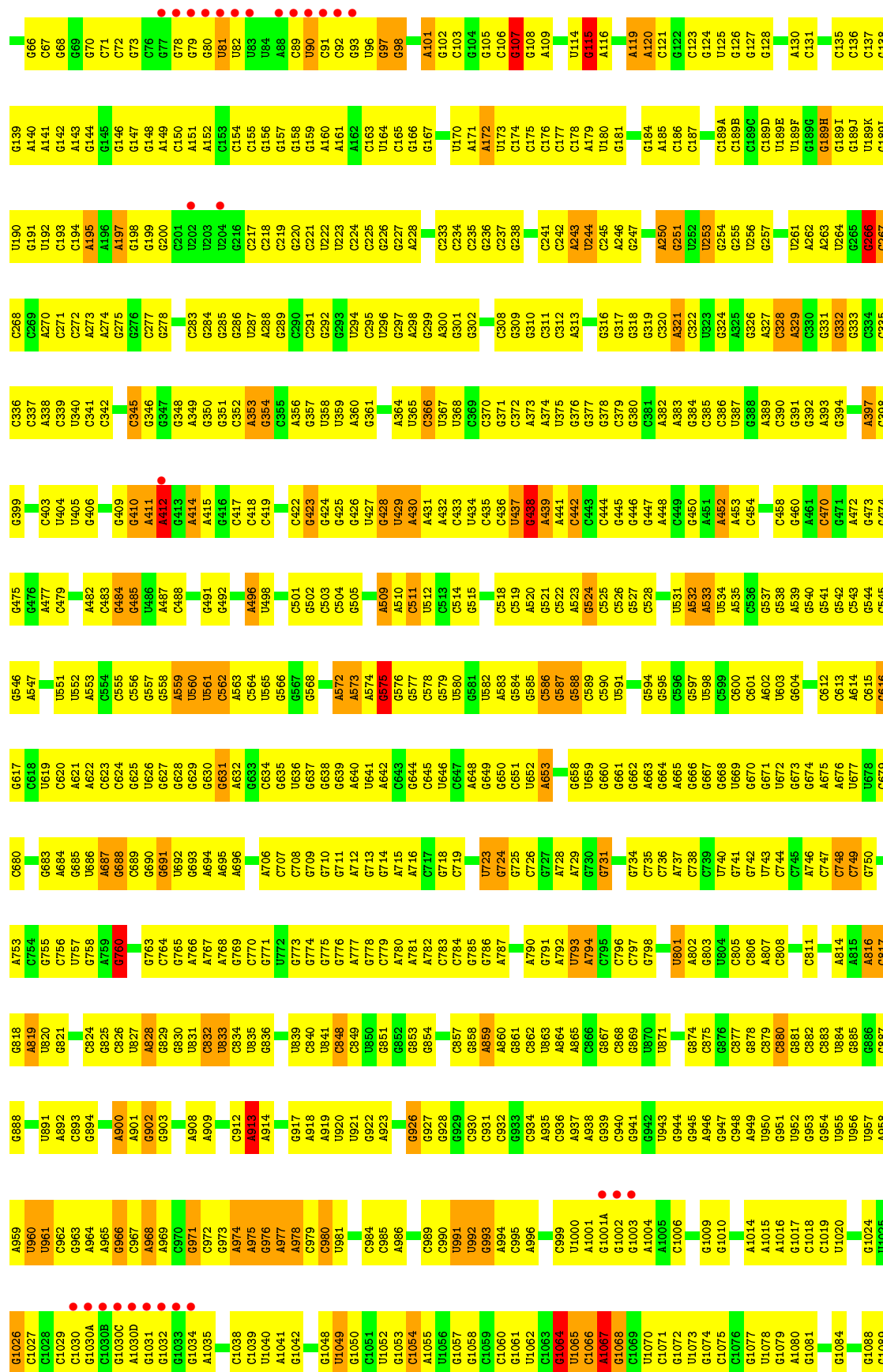




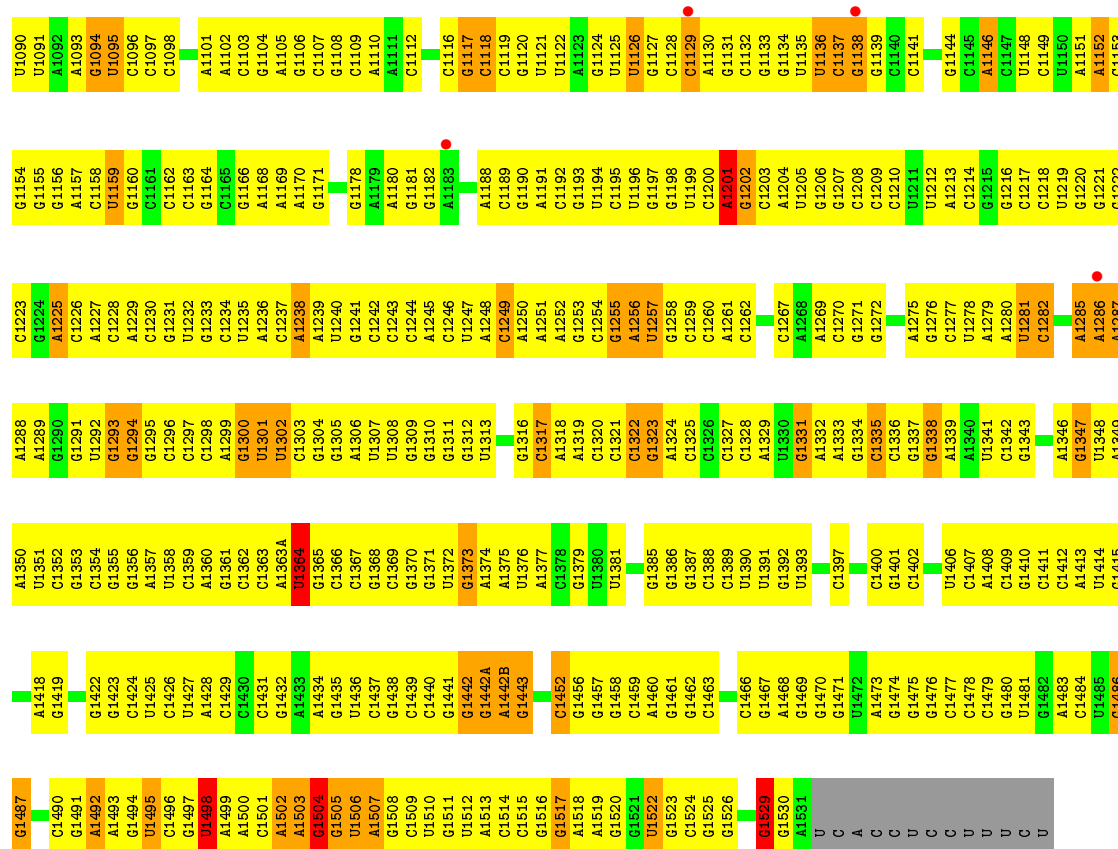
● Molecule 1: 16S ribosomal RNA

Chain CA: 23% 64% 11%

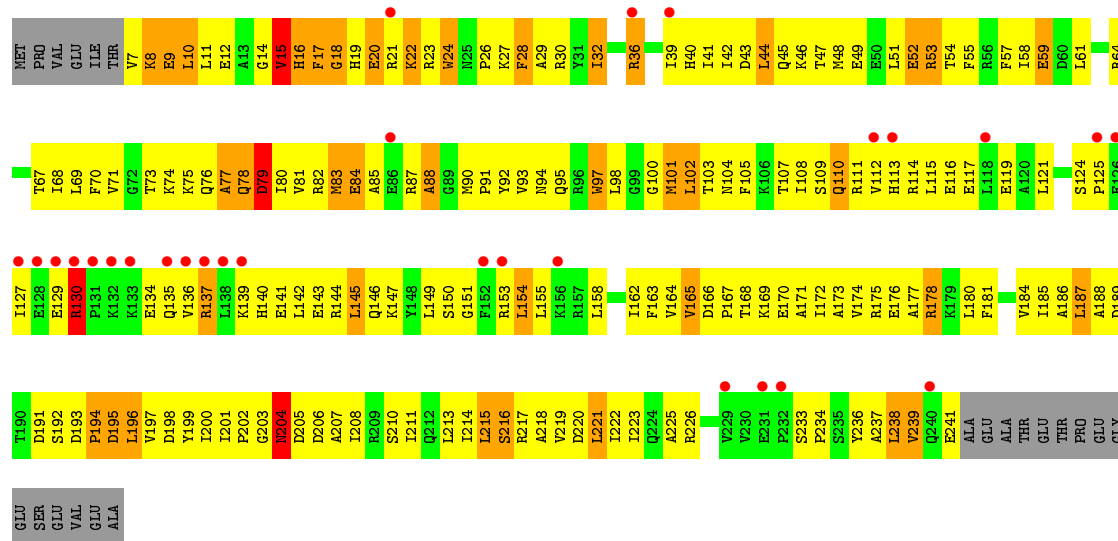






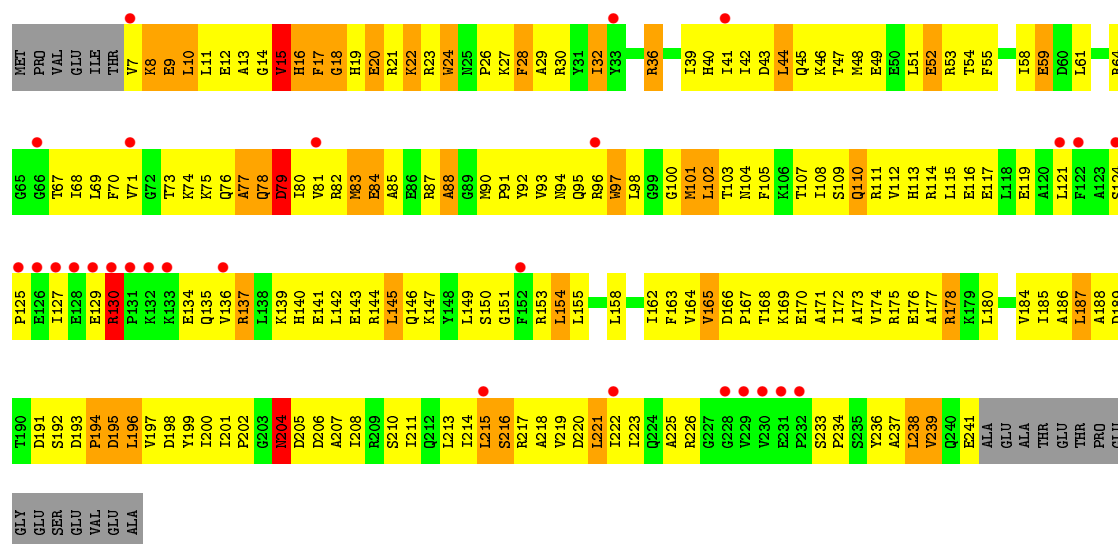


### • Molecule 2: 30S RIBOSOMAL PROTEIN S2

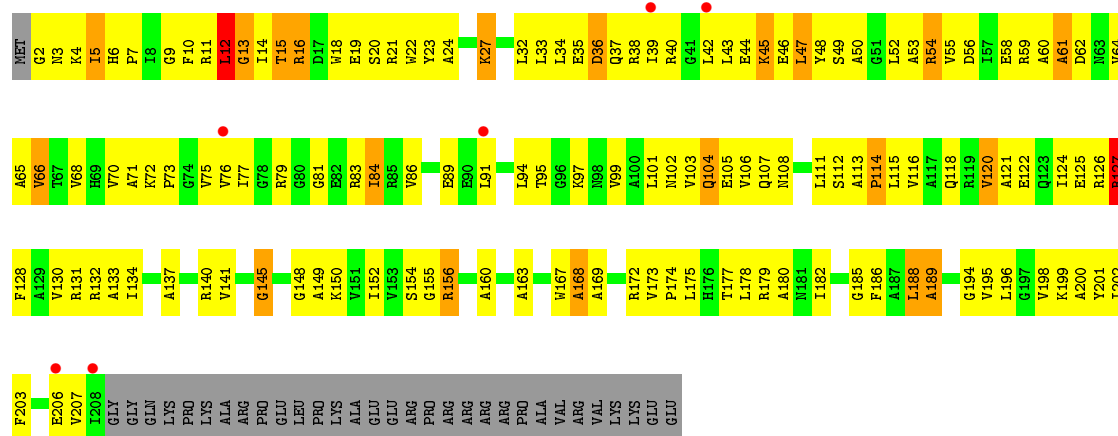


### • Molecule 2: 30S RIBOSOMAL PROTEIN S2

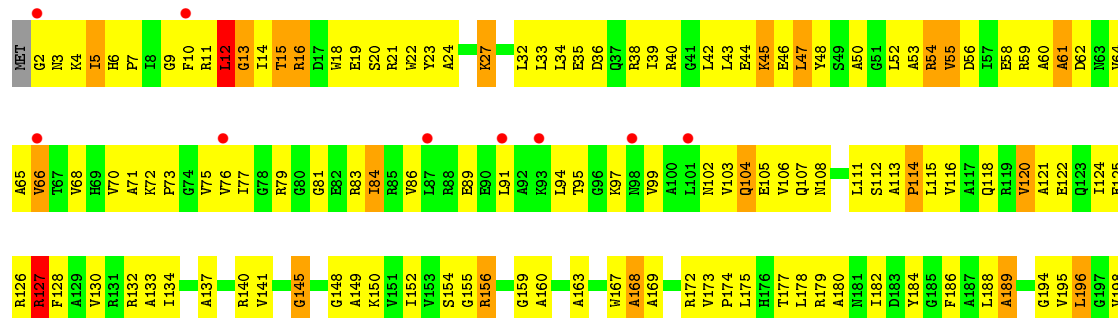


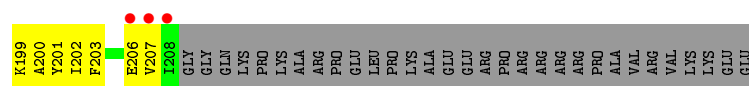


• Molecule 3: 30S RIBOSOMAL PROTEIN S3



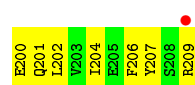
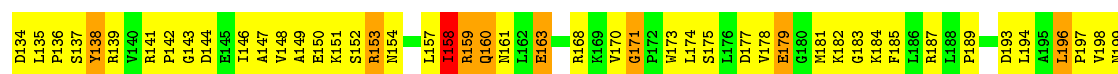
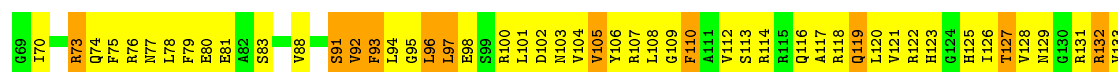
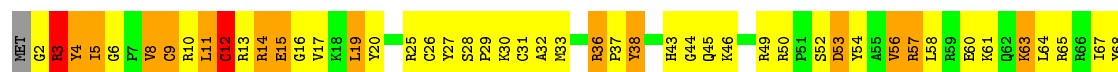
• Molecule 3: 30S RIBOSOMAL PROTEIN S3





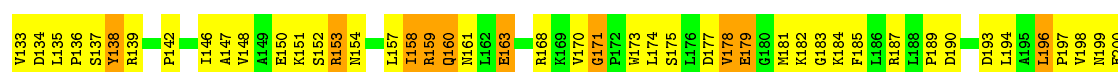
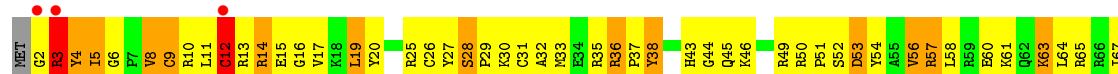
• Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain AD: 27% 56% 16%



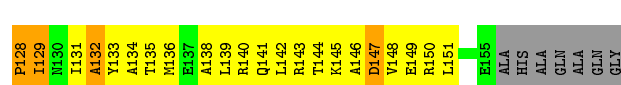
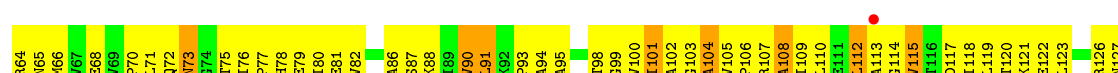
• Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain CD: 2% 27% 56% 16%

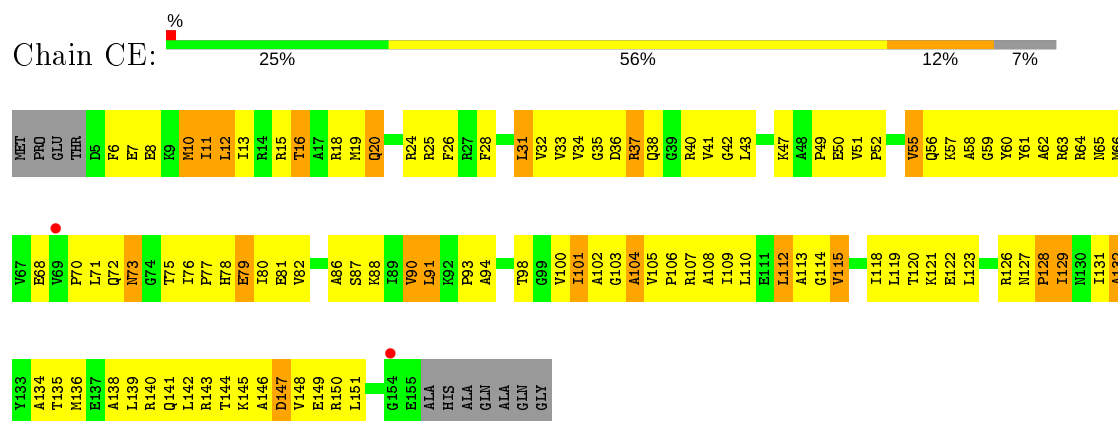


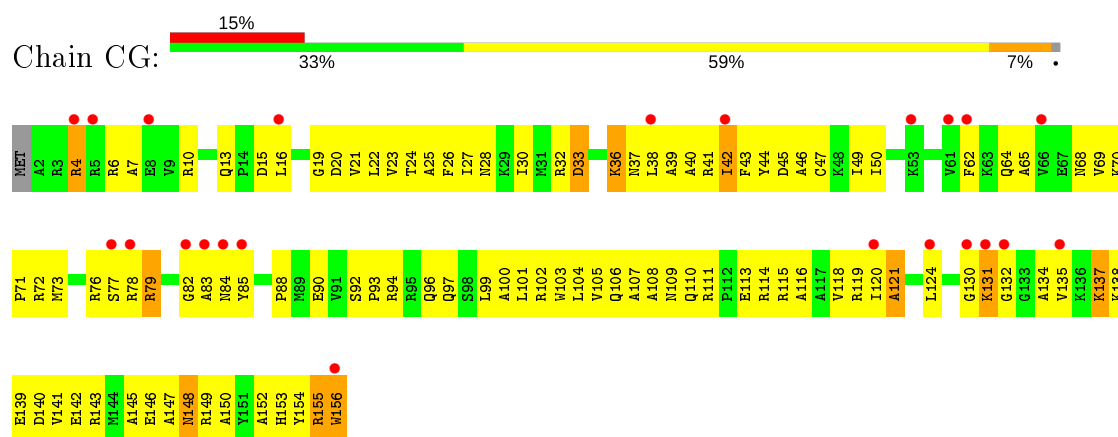
• Molecule 5: 30S RIBOSOMAL PROTEIN S5

Chain AE: 20% 60% 13% 7%

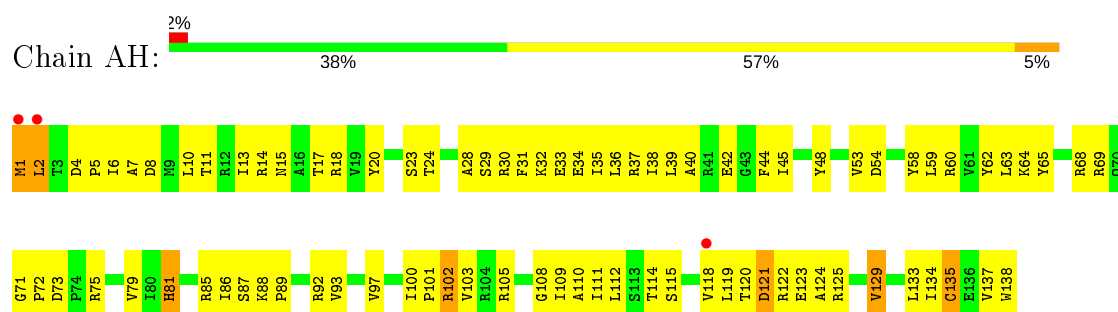


- Molecule 5: 30S RIBOSOMAL PROTEIN S5

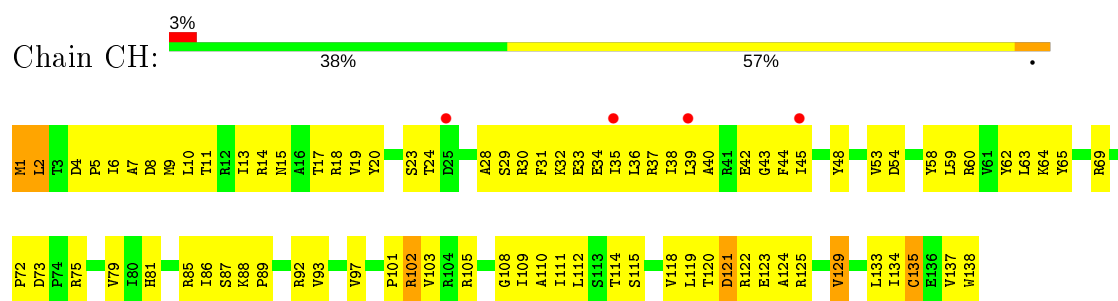




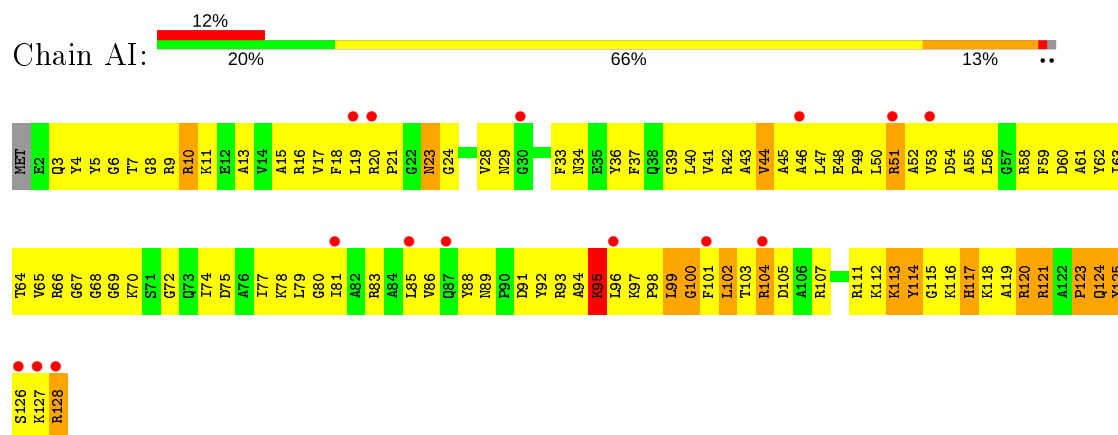
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



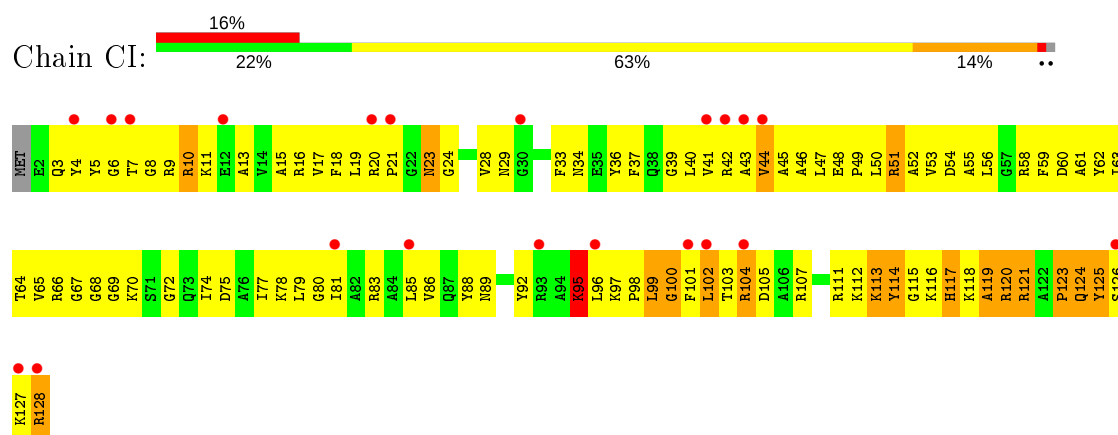
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



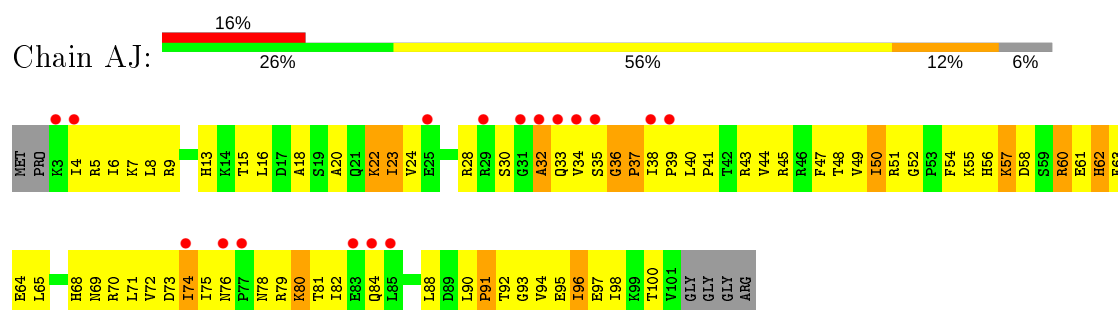
• Molecule 9: 30S RIBOSOMAL PROTEIN S9



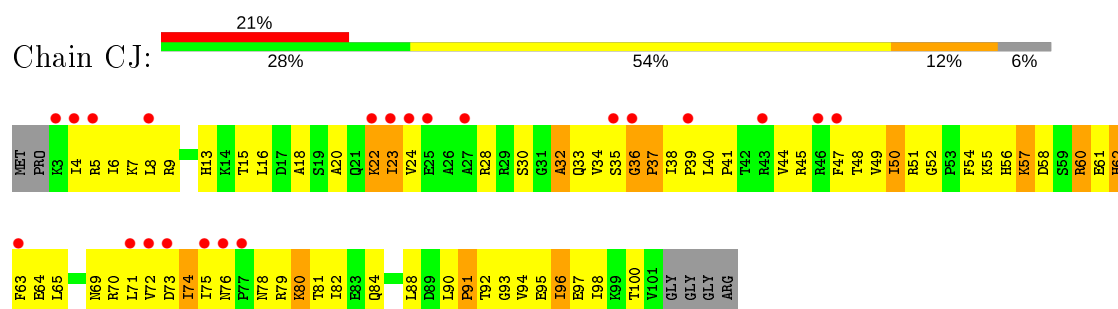
• Molecule 9: 30S RIBOSOMAL PROTEIN S9



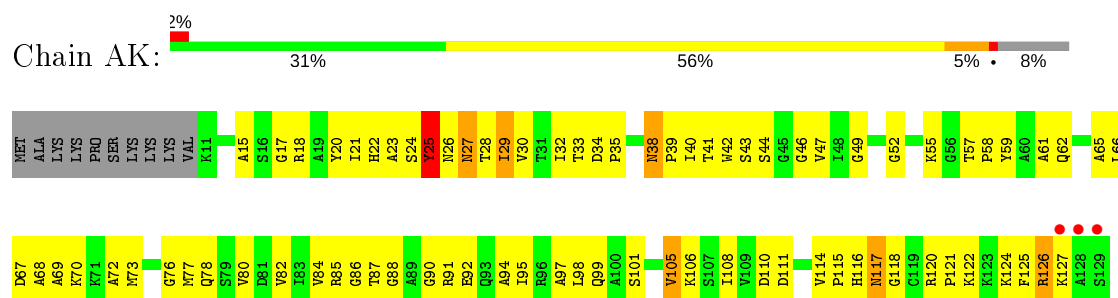
• Molecule 10: 30S RIBOSOMAL PROTEIN S10



• Molecule 10: 30S RIBOSOMAL PROTEIN S10

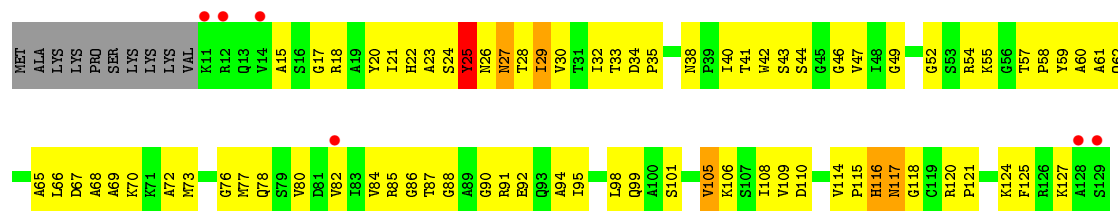


• Molecule 11: 30S RIBOSOMAL PROTEIN S11

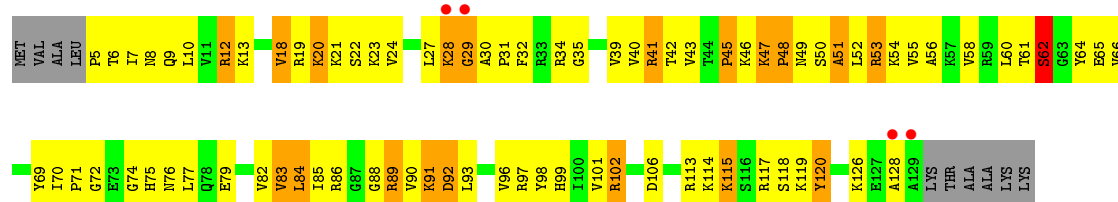


• Molecule 11: 30S RIBOSOMAL PROTEIN S11

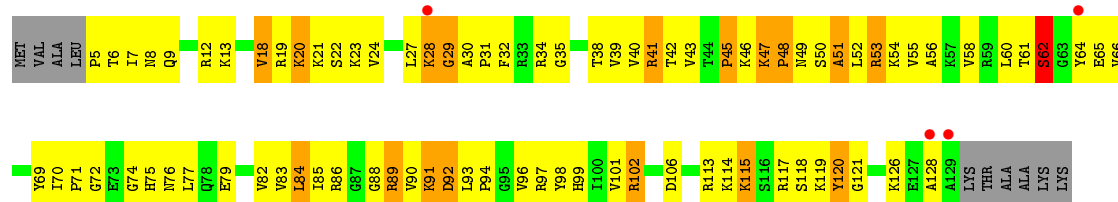




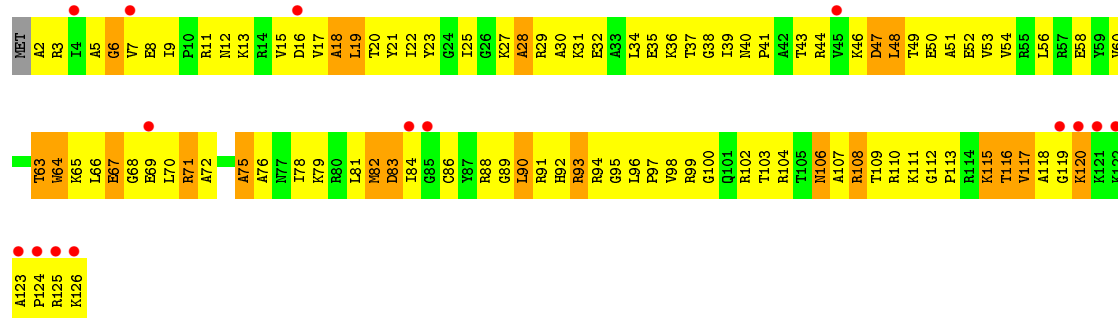
• Molecule 12: 30S RIBOSOMAL PROTEIN S12



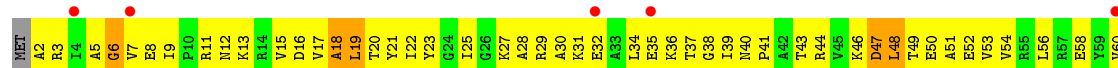
• Molecule 12: 30S RIBOSOMAL PROTEIN S12

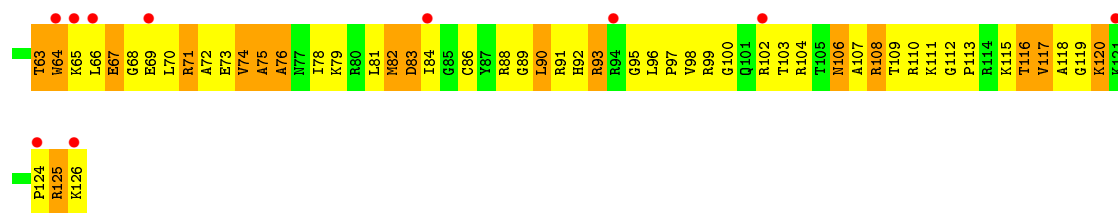


• Molecule 13: 30S RIBOSOMAL PROTEIN S13



• Molecule 13: 30S RIBOSOMAL PROTEIN S13

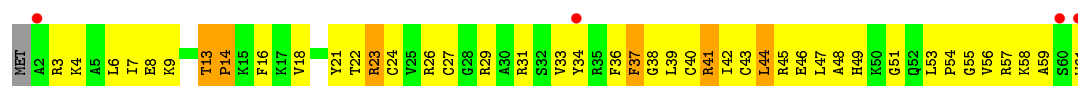




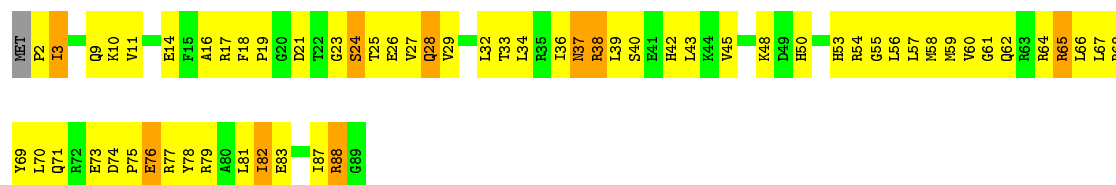
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



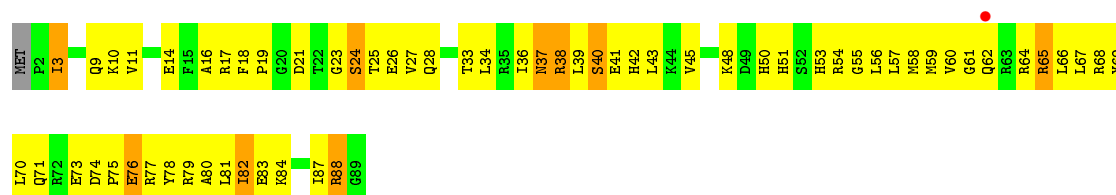
• Molecule 14: 30S RIBOSOMAL PROTEIN S14



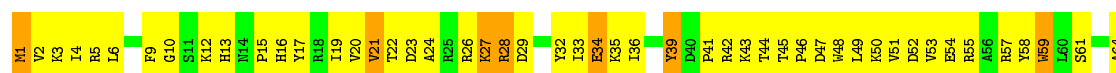
• Molecule 15: 30S RIBOSOMAL PROTEIN S15



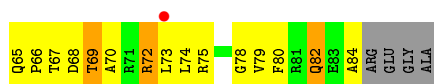
• Molecule 15: 30S RIBOSOMAL PROTEIN S15



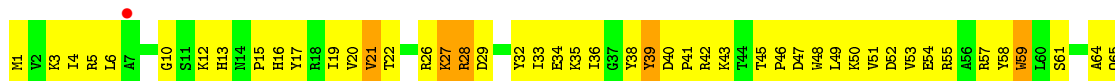
• Molecule 16: 30S RIBOSOMAL PROTEIN S16



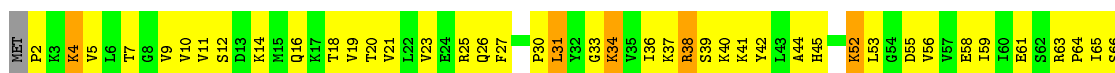




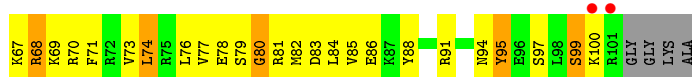
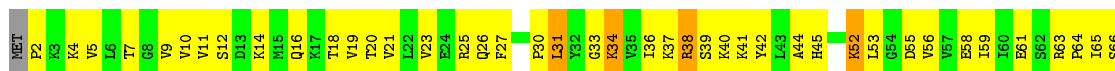
• Molecule 16: 30S RIBOSOMAL PROTEIN S16



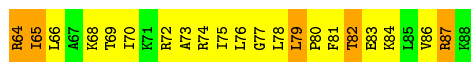
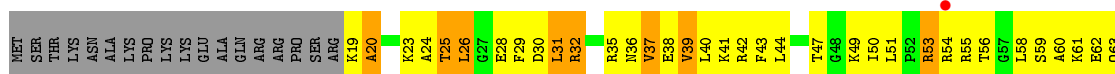
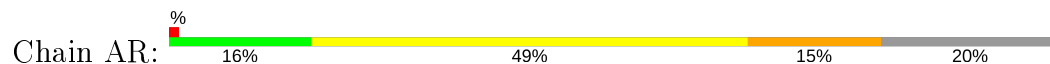
• Molecule 17: 30S RIBOSOMAL PROTEIN S17



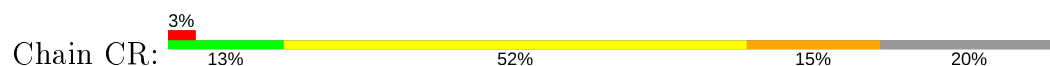
• Molecule 17: 30S RIBOSOMAL PROTEIN S17

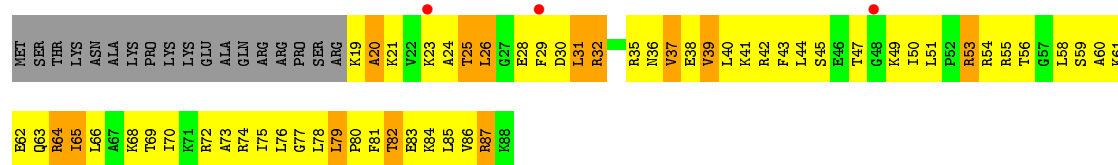


• Molecule 18: 30S RIBOSOMAL PROTEIN S18

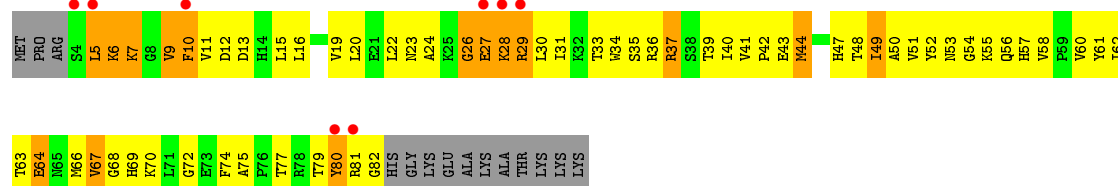
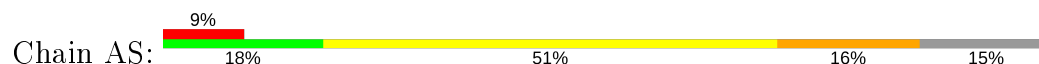


• Molecule 18: 30S RIBOSOMAL PROTEIN S18

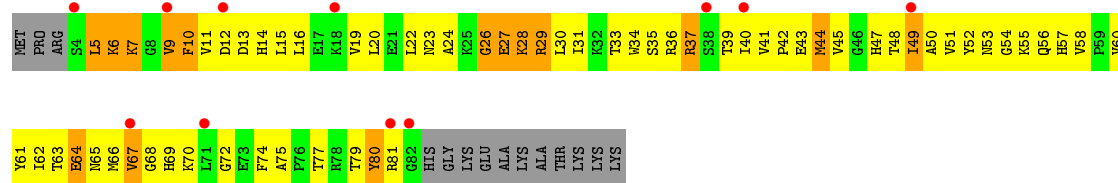
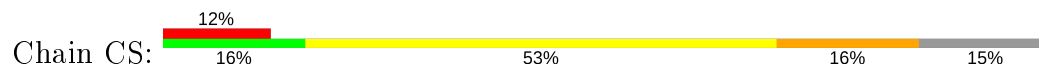




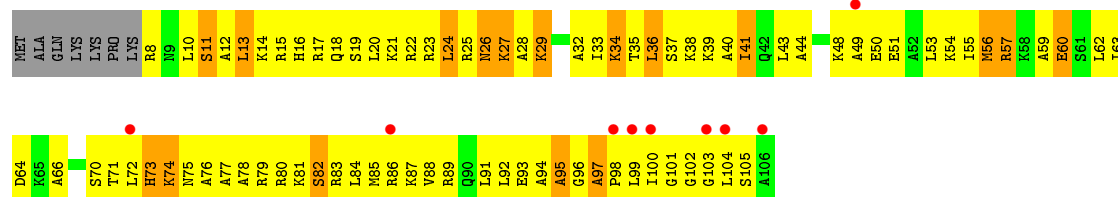
• Molecule 19: 30S RIBOSOMAL PROTEIN S19



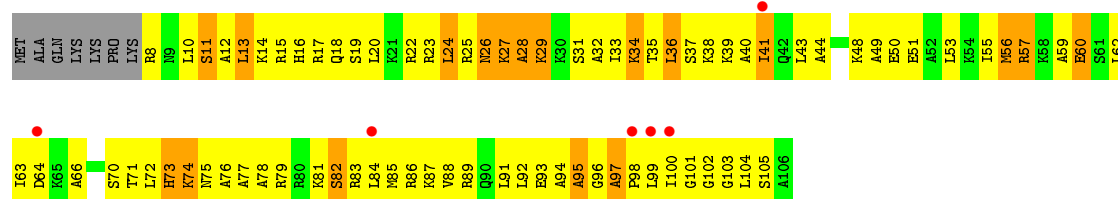
• Molecule 19: 30S RIBOSOMAL PROTEIN S19



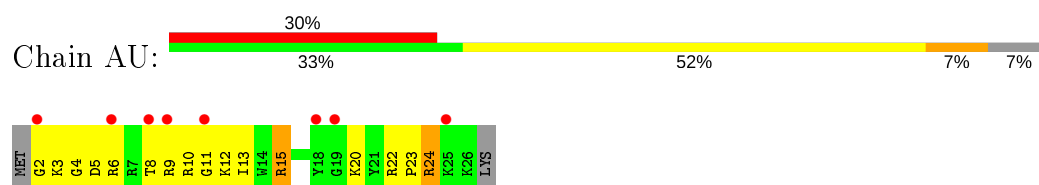
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



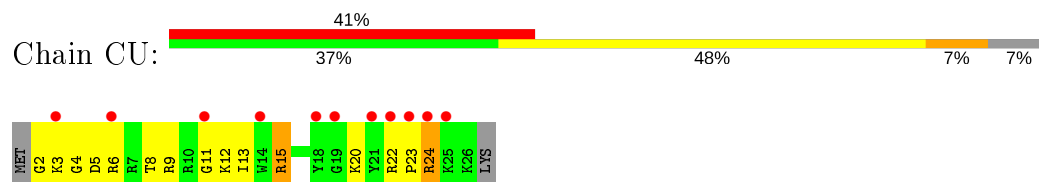
• Molecule 20: 30S RIBOSOMAL PROTEIN S20



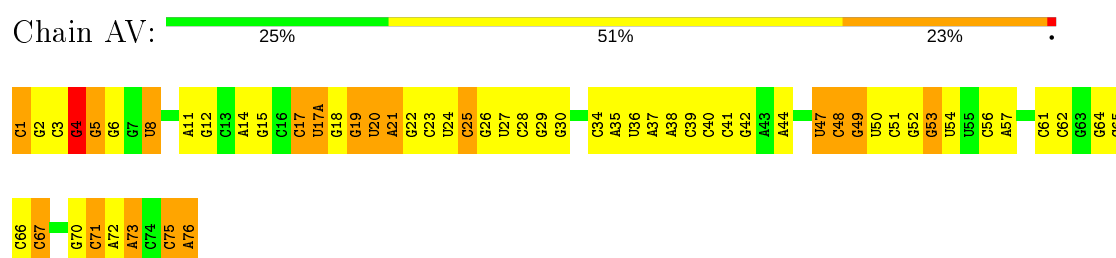
• Molecule 21: 30S RIBOSOMAL PROTEIN THX



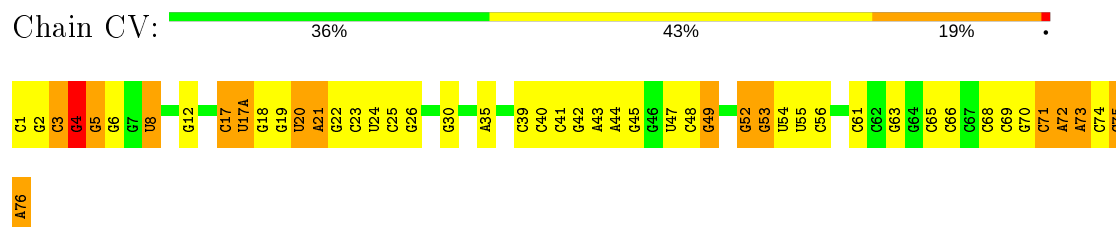
- Molecule 21: 30S RIBOSOMAL PROTEIN THX



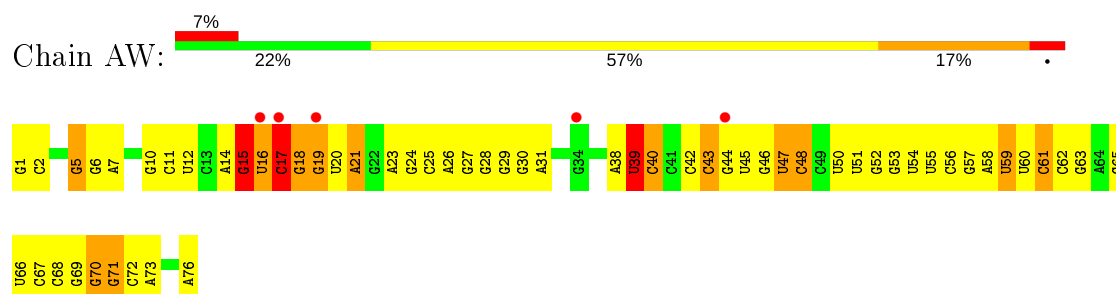
- Molecule 22: P-SITE TRNA FMET (UNMODIFIED BASES EXCEPT FOR THYMINE 54)



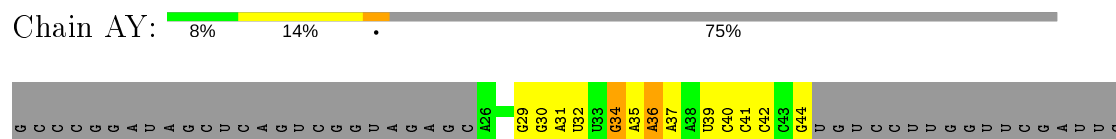
- Molecule 22: P-SITE TRNA FMET (UNMODIFIED BASES EXCEPT FOR THYMINE 54)



- Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)



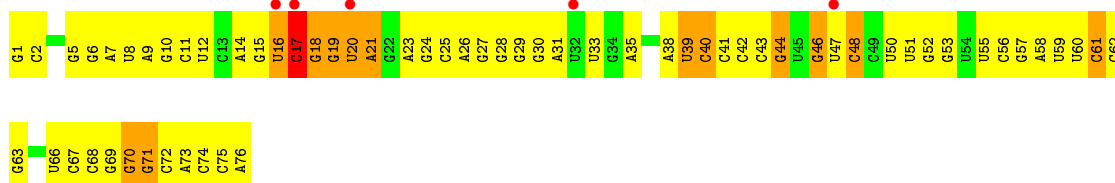
- Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)



G A G A G U C C G G C C A

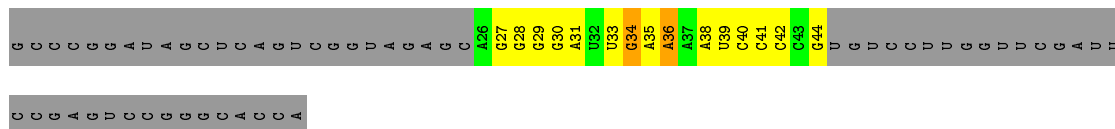
- Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)

Chain CW: 



- Molecule 23: E-SITE TRNA PHE OR A-SITE TRNA PHE (UNMODIFIED BASES)

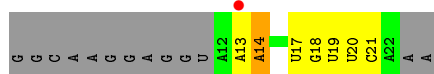
Chain CY: 




G C C G A A G U C C G G C C A

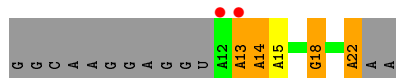
- Molecule 24: MRNA

Chain AX: 



- Molecule 24: MRNA

Chain CX: 




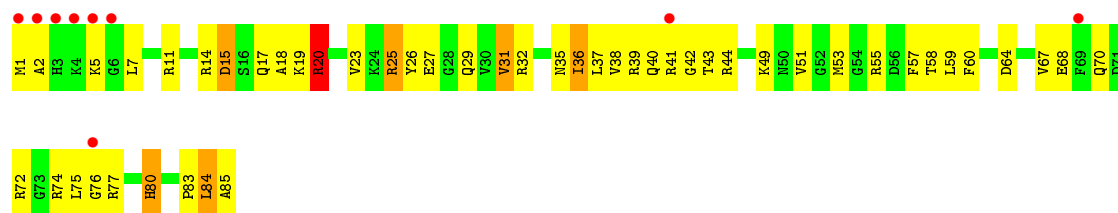
- Molecule 25: 50S RIBOSOMAL PROTEIN L27

Chain B0: 

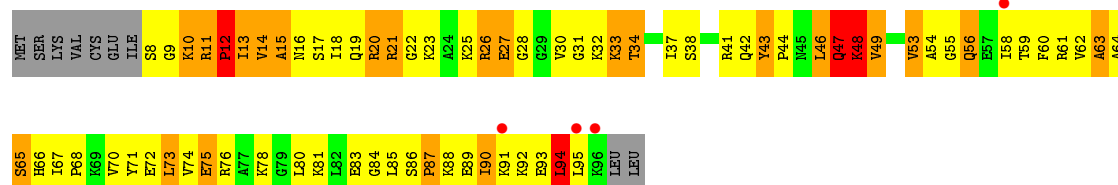
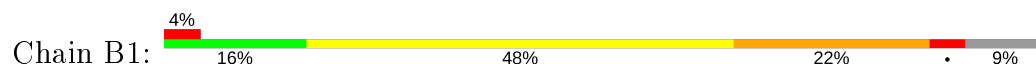


- Molecule 25: 50S RIBOSOMAL PROTEIN L27

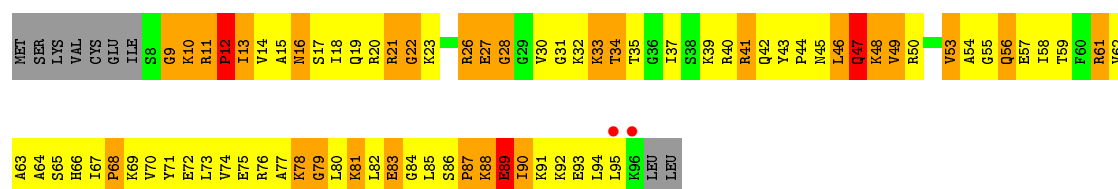
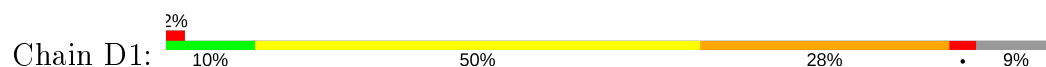
Chain D0: 



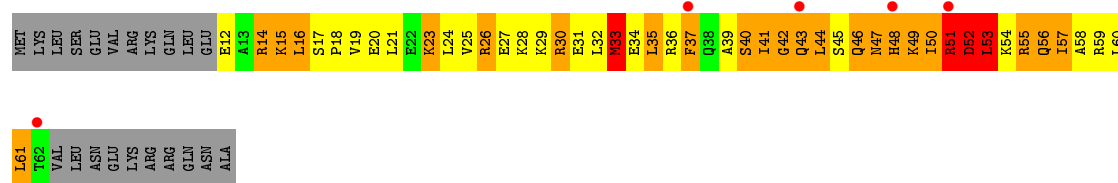
• Molecule 26: 50S RIBOSOMAL PROTEIN L28



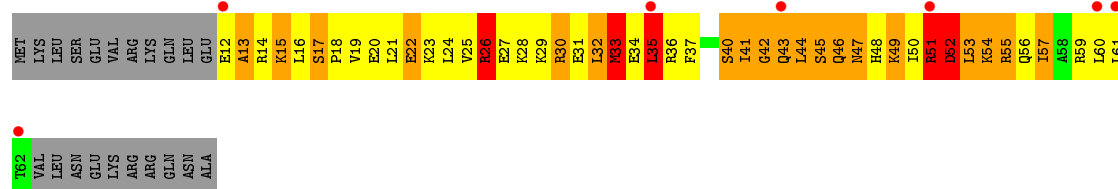
• Molecule 26: 50S RIBOSOMAL PROTEIN L28



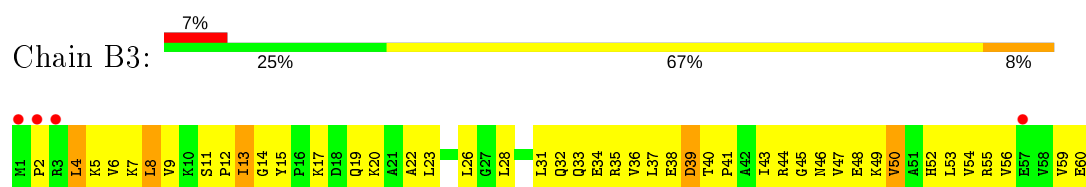
• Molecule 27: 50S RIBOSOMAL PROTEIN L29



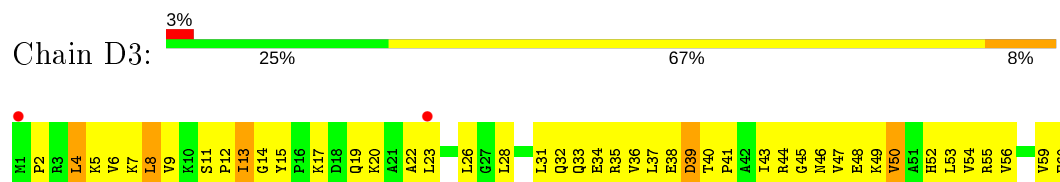
• Molecule 27: 50S RIBOSOMAL PROTEIN L29



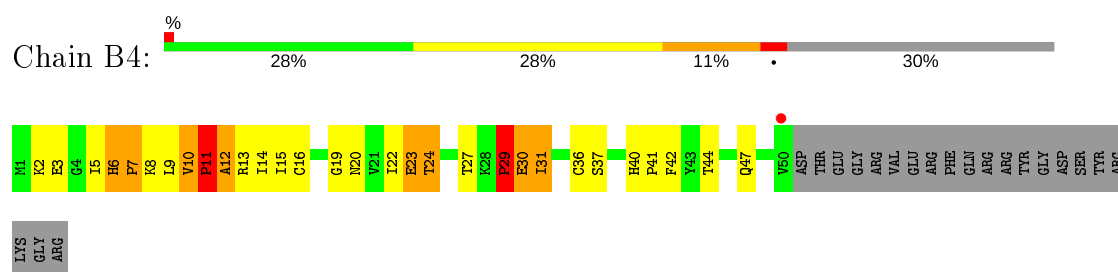
• Molecule 28: 50S RIBOSOMAL PROTEIN L30



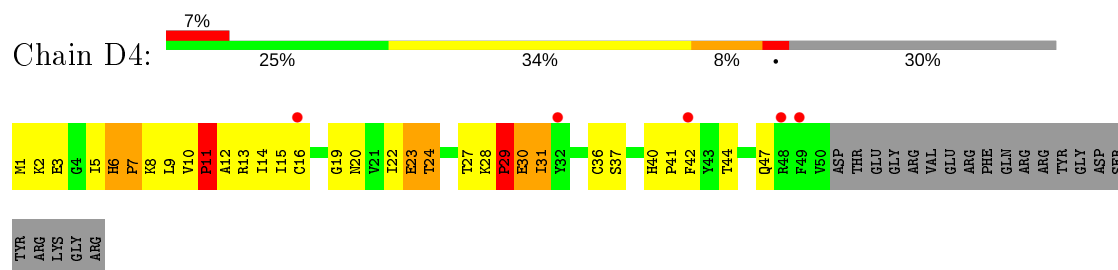
• Molecule 28: 50S RIBOSOMAL PROTEIN L30



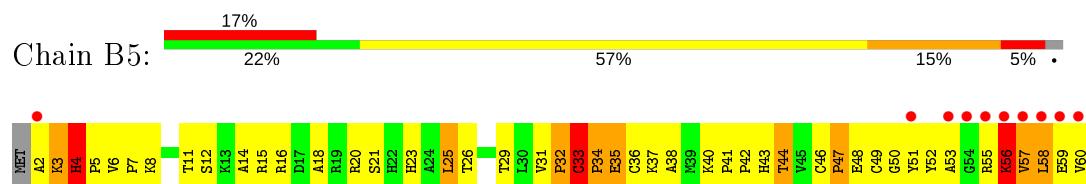
• Molecule 29: 50S RIBOSOMAL PROTEIN L31



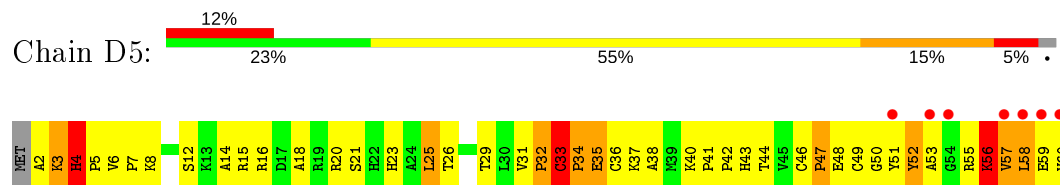
• Molecule 29: 50S RIBOSOMAL PROTEIN L31



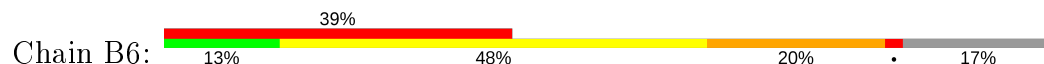
• Molecule 30: 50S RIBOSOMAL PROTEIN L32

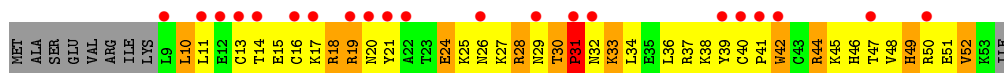


• Molecule 30: 50S RIBOSOMAL PROTEIN L32

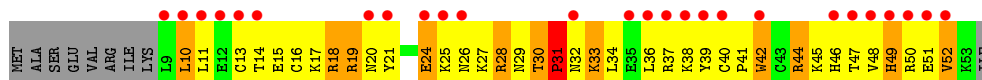
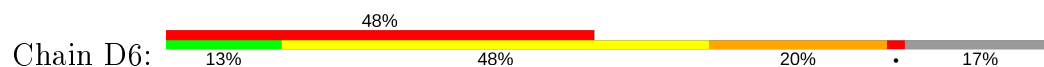


• Molecule 31: 50S RIBOSOMAL PROTEIN L33

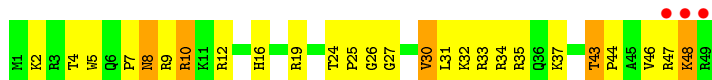




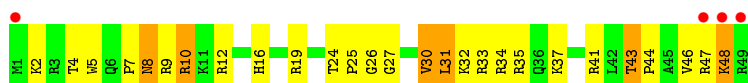
• Molecule 31: 50S RIBOSOMAL PROTEIN L33



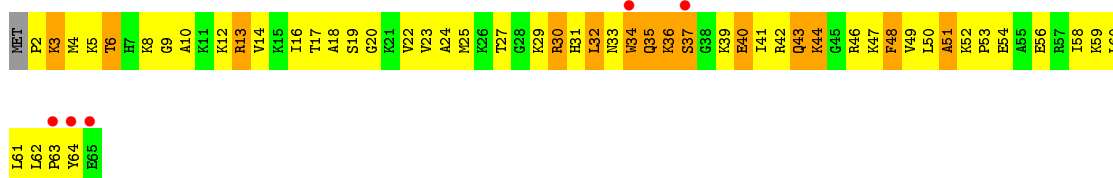
• Molecule 32: 50S RIBOSOMAL PROTEIN L34



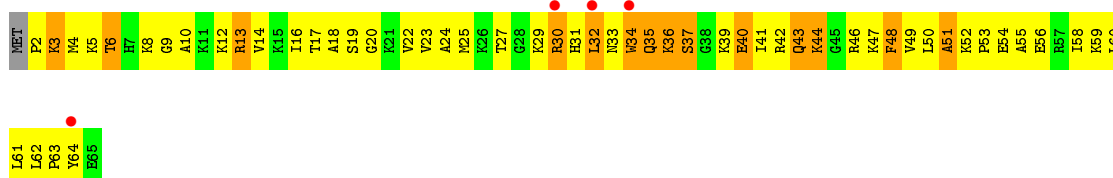
• Molecule 32: 50S RIBOSOMAL PROTEIN L34



• Molecule 33: 50S RIBOSOMAL PROTEIN L35



• Molecule 33: 50S RIBOSOMAL PROTEIN L35



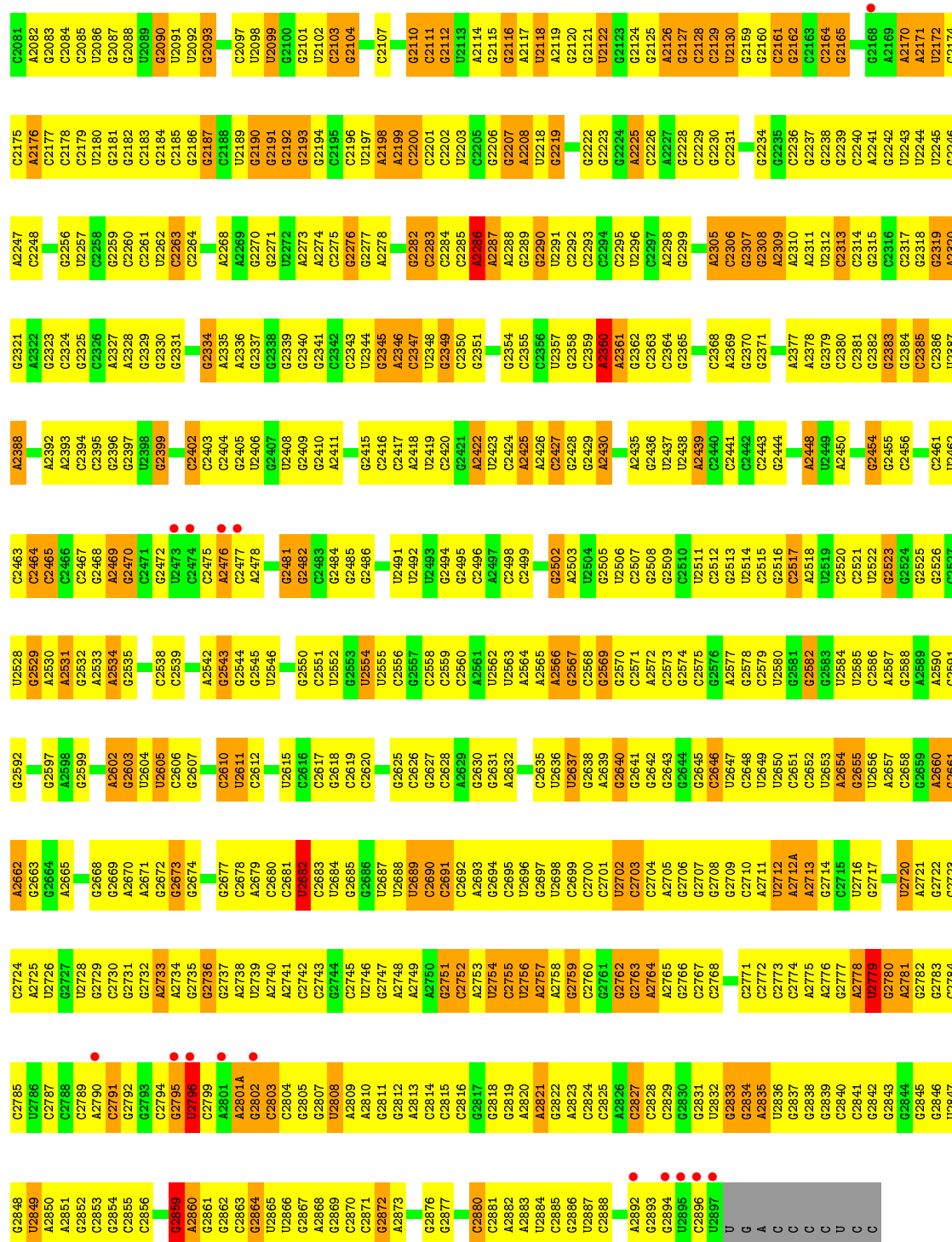
• Molecule 34: 23S RIBOSOMAL RNA



C961	C962	C963	C964	C965	G968	G969	C970	C971	C972	C973	C974	C975	G977	G978	G979	A980	A981	C982	A983	A984	G985	G986	G987	A988	A989	C990	C991	C992	C993	C994	C995	C996	C997	C998	C999	A1000	A1001	G1002	G1003	G1004	G1005	G1006	C1007	A1010	G1011	G1012	C1013	C1014	C1015	G1016	G1017	G1018	G1019	A1020	A1021	G1022	C1023	G1024																																																																																																																																																																											
U895	A896	C897	C898	A899	A900	A901	C902	C903	U907	C908	A909	A910	A911	C912	C913	C914	C915	A916	A917	A918	A919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975																																																																																																																																																								
C814	C815	C816	C817	C818	C819	C820	C821	C822	C823	C824	C825	C826	C827	C828	C829	C830	C831	C832	C833	C834	C835	C836	C837	C838	C839	C840	C841	C842	C843	C844	C845	C846	C847	C848	C849	C850	C851	C852	C853	C854	C855	C856	C857	C858	C859	C860	C861	C862	C863	C864	C865	C866	C867	C868	C869	C870	C871	C872	C873	C874	C875	C876	C877	C878	C879	C880	C881	C882	C883	C884	C885	C886	C887	C888	C889	C890	C891	C892	C893	C894	C895	C896	C897	C898	C899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	C910	C911	C912	C913	C914	C915	C916	C917	C918	C919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975																																																																				
C671	C672	C673	C674	C675	C676	C677	C678	C679	C680	C681	C682	C683	C684	C685	C686	C687	C688	C689	C690	C691	C692	C693	C694	C695	C696	C697	C698	C699	C700	C701	C702	C703	C704	C705	C706	C707	C708	C709	C710	C711	C712	C713	C714	C715	C716	C717	C718	C719	C720	C721	C722	C723	C724	C725	C726	C727	C728	C729	C730	C731	C732	C733	C734	C735	C736	C737	C738	C739	C740	C741	C742	C743	C744	C745																																																																																																																																																											
A746	U747	A748	A749	A750	A751	A752	A753	A754	C755	C756	C757	C758	C759	C760	C761	C762	C763	C764	C765	C766	C767	C768	C769	C770	C771	C772	C773	C774	C775	C776	C777	C778	C779	C780	C781	C782	C783	C784	C785	C786	C787	C788	C789	C790	C791	C792	C793	C794	C795	C796	C797	C798	C799	C800	C801	C802	C803	C804	C805	C806	C807	C808	C809	C810	C811	C812	C813	C814	C815	C816	C817	C818	C819	C820	C821	C822	C823	C824	C825	C826	C827	C828	C829	C830	C831	C832	C833	C834	C835	C836	C837	C838	C839	C840	C841	C842	C843	C844	C845	C846	C847	C848	C849	C850	C851	C852	C853	C854	C855	C856	C857	C858	C859	C860	C861	C862	C863	C864	C865	C866	C867	C868	C869	C870	C871	C872	C873	C874	C875	C876	C877	C878	C879	C880	C881	C882	C883	C884	C885	C886	C887	C888	C889	C890	C891	C892	C893	C894	C895	C896	C897	C898	C899	C900	C901	C902	C903	C904	C905	C906	C907	C908	C909	C910	C911	C912	C913	C914	C915	C916	C917	C918	C919	C920	C921	C922	C923	C924	C925	C926	C927	C928	C929	C930	C931	C932	C933	C934	C935	C936	C937	C938	C939	C940	C941	C942	C943	C944	C945	C946	C947	C948	C949	C950	C951	C952	C953	C954	C955	C956	C957	C958	C959	C960	C961	C962	C963	C964	C965	C966	C967	C968	C969	C970	C971	C972	C973	C974	C975
U606	U607	A608	A609	G610	G611	G612	G613	U614	U615	U616	U617	U618	U619	U620	U621	U622	U623	U624	U625	U626	U627	U628	U629	U630	U631	U632	U633	U634	U635	U636	U637	U638	U639	U640	U641	U642	U643	U644	U645	U646	U647	U648	U649	U650	U651	U652	U653	U654	U655	U656	U657	U658	U659	U660	U661	U662	U663	U664	U665	U666	U667	U668	U669	U670	U671	U672	U673	U674	U675	U676	U677	U678	U679	U680	U681	U682	U683	U684	U685	U686	U687	U688	U689	U690	U691	U692	U693	U694	U695	U696	U697	U698	U699	U700	U701	U702	U703	U704	U705	U706	U707	U708	U709	U710	U711	U712	U713	U714	U715	U716	U717	U718	U719	U720	U721	U722	U723	U724	U725	U726	U727	U728	U729	U730	U731	U732	U733	U734	U735	U736	U737	U738	U739	U740	U741	U742	U743	U744	U745																																																																																										
C537	C538	C539	C540	C541	C542	C543	C544	C545	C546	C547	C548	C549	C550	C551	C552	C553	C554	C555	C556	C557	C558	C559	C560	C561	C562	C563	C564	C565	C566	C567	C568	C569	C570	C571	C572	C573	C574	C575	C576	C577	C578	C579	C580	C581	C582	C583	C584	C585	C586	C587	C588	C589	C590	C591	C592	C593	C594	C595	C596	C597	C598	C599	C600	C601	C602	C603	C604	C605																																																																																																																																																																	
G468	G469	A470	U471	U472	U473	U474	U475	U476	U477	U478	U479	U480	U481	U482	U483	U484	U485	U486	U487	U488	U489	U490	U491	U492	U493	U494	U495	U496	U497	U498	U499	U500	U501	U502	U503	U504	U505	U506	U507	U508	U509	U510	U511	U512	U513	U514	U515	U516	U517	U518	U519	U520	U521	U522	U523	U524	U525	U526	U527	U528	U529	U530	U531	U532	U533	U534	U535	U536																																																																																																																																																																	
G400	A401	A402	U403	U404	U405	U406	U407	U408	U409	U410	U411	U412	U413	U414	U415	U416	U417	U418	U419	U420	U421	U422	U423	U424	U425	U426	U427	U428	U429	U430	U431	U432	U433	U434	U435	U436	U437	U438	U439	U440	U441	U442	U443	U444	U445	U446	U447	U448	U449	U450	U451	U452	U453	U454	U455	U456	U457	U458	U459	U460	U461	U462	U463	U464	U465																																																																																																																																																																				
A320	C321	C322	C323	C324	C325	C326	C327	C328	C329	C330	C331	C332	C333	C334	C335	C336	C337	C338	C339	C340	C341	C342	C343	C344	C345	C346	C347	C348	C349	C350	C351	C352	C353	C354	C355	C356	C357	C358	C359	C360	C361	C362	C363	C364	C365	C366	C367	C368	C369	C370	C371	C372	C373	C374	C375	C376	C377	C378	C379	C380	C381	C382	C383	C384	C385	C386	C387	C388	C389	C390	C391	C392	C393	C394	C395	C396	C397	C398	C399																																																																																																																																																						
U271L	U271M	U271N	U271O	U271P	U271Q	U271R	U271S	U271T	U271U	U271V	U271W	U271X	U271Y	U271Z	U272	U273	U274	U275	U276	U277	U278	U279	U280	U281	U282	U283	U284	U285	U286	U287	U288	U289	U290	U291	U292	U293	U294	U295	U296	U297	U298	U299	U300	U301	U302	U303	U304	U305	U306	U307	U308	U309	U310	U311	U312	U313	U314	U315	U316	U317	U318	U319	U320	U321	U322	U323	U324	U325	U326	U327	U328	U329	U330	U331	U332	U333	U334	U335	U336	U337	U338	U339	U340	U341	U342	U343	U344	U345	U346	U347	U348	U349	U350	U351	U352	U353	U354	U355	U356	U357	U358	U359	U360	U361	U362	U363	U364	U365	U366	U367	U368	U369	U370	U371	U372	U373	U374	U375	U376	U377	U378	U379	U380	U381	U382	U383	U384	U385	U386	U387	U388	U389	U390	U391	U392	U393	U394	U395	U396	U397	U398	U399	U400	U401	U402	U403	U404	U405	U406	U407	U408	U409	U410	U411	U412	U413	U414	U415	U416	U417	U418	U419	U420	U421	U422	U423	U424	U425	U426	U427	U428	U429	U430	U431	U432	U433	U434	U435	U436	U437	U438	U439	U440	U441	U442	U443	U444	U445	U446	U447	U448	U449	U450	U451	U452	U453	U454	U455	U456	U457	U458	U459	U460	U461	U462	U463	U464	U465																					
G220	A221	A222	A223	A224	A225	A226	A227	A228	A229	A230	A231	A232	A233	A234	A235	A236	A237	A238	A239	A240	A241	A242	A243	A244	A245	A246	A247	A248	A249	A250	A251	A252	A253	A254	A255	A256	A257	A258	A259	A260	A261	A262	A263	A264	A265	A266	A267	A268	A269	A270	A271	A272	A273	A274	A275	A276	A277	A278	A279	A280	A281	A282	A283	A284	A285	A286	A287	A288	A289	A290	A291	A292	A293	A294	A295	A296	A297	A298	A299	A300	A301	A302	A303	A304	A305	A306	A307	A308	A309	A310	A311	A312	A313	A314	A315	A316	A317	A318	A319	A320	A321	A322	A323	A324	A325	A326	A327	A328	A329	A330	A331	A332	A333	A334	A335	A336	A337	A338	A339	A340	A341	A342	A343	A344	A345	A346	A347	A348	A349	A350	A351	A352	A353	A354	A355	A356	A357	A358	A359	A360	A361	A362	A363	A364	A365	A366	A367	A368	A369	A370	A371	A372	A373	A374	A375	A376	A377	A378	A379	A380	A381	A382	A383	A384	A385	A386	A387	A388	A389	A390	A391	A392	A393	A394	A395	A396	A397	A398	A399	A400	A401	A402	A403	A404	A405	A406	A407	A408	A409	A410	A411	A412	A413	A414	A415	A416	A417	A418	A419	A420	A421	A422	A423	A424	A425	A426	A427	A428	A429	A430	A431	A432	A433	A434	A435	A436	A437	A438	A439	A440	A44								



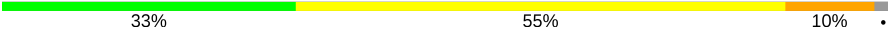
A2013	G1929	C1843	U1775	G1695	U1621	C1547	U1405	G1337	A1268	U1205	U1142	G1025
A2014	G1776	C1844	G1776	G1696	G1622	C1548	U1406	G1338	A1269	G1206	A1142A	U1026
A2015	G1777	G1845	U1777	G1697	G1623	C1549	U1407	G1339	A1270	C1207	A1143	A1027
U2016	G1932	G1846	U1778	A1698	G1624	C1550	C1408	U1340	G1271	C1208	G1144	A1028
U2017	G1933	A1847	U1779	G1699	G1625	C1551	C1409	U1341	G1272	C1209	C1145	A1029
G2018	G1934	G1848	U1780	A1700	G1626	C1554	G1410	U1344	U1273	A1210	C1146	G1030
A2019	A1936	G1849	U1781	G1701	U1629	A1584	C1411	G1344	A1274	U1211	C1147	G1031
A2020	A1937	G1850	A1783	G1702	U1630	A1588	A1412	G1345	A1275	G1215	A1148	U1032
C2021	A1938	U1851	A1784	G1703	G1635	A1589	G1413	G1346	A1276	G1216	A1149	U1033
U2022	U1939	C1852	A1785	G1704	G1636	G1559	U1414	G1347	G1277	G1217	C1150	G1034
G2023	U1940	A1853	A1786	G1705	G1637	G1560	U1415	G1348	G1278	G1218	G1151	U1035
G2024	U1946	G1854	A1789	G1706	U1639	A1562	G1416	A1349	G1279	A1220	G1152	G1036
C2025	C1947	G1855	G1790	U1709	G1640	C1564	U1417	A1350	G1280	C1221	G1153	G1037
G2027	G1948	U1858	A1791	G1710	A1641	C1568	A1418	C1351	G1281	C1221A	G1154	C1038
U2028	G1949	A1859	U1796	G1711	G1642	U1568	A1419	U1352	G1282	G1222	A1155	G1039
G2029	G1950	G1860	U1797	G1712	G1643	A1569	A1420	A1353	A1284	G1223	A1156	C1040
A2030	U1951	G1861	C1797	U1713	G1644	A1570	G1421	G1354	G1285	G1224	G1157	G1041
A2031	A1952	G1862	U1798	G1714	G1645	A1571	G1422	G1355	A1286	G1225	C1158	G1042
G2032	A1953	G1863	G1799	G1715	G1646	A1572	G1423	G1356	A1287	A1226	U1159	C1043
A2033	G1954	U1864	C1800	G1716	G1647	A1573	G1424	U1357	U1288	G1227	G1160	G1044
G2034	U1955	G1865	A1803	G1717	G1648	C1574	A1425	G1358	C1289	G1228	C1161	A1045
G2035	U1956	C1866	U1804	G1718	G1649	U1577	A1426	A1359	C1290	G1229	G1162	A1046
G2036	G1962	A1876	U1805	G1719	G1652	U1578	C1427	A1360	C1291	G1230	G1163	G1047
G2037	U1963	A1877	U1806	G1720	G1653	A1579	A1428	A1361	U1292	G1231	G1164	A1048
G1964	G1964	G1878	G1806	U1739	A1655	A1579	G1429	G1362	U1293	G1232	U1165	A1049
C1967	C1967	C1879	U1807	G1740	G1656	A1587	G1430	G1363	U1294	G1233	C1166	A1050
C2040	U1968	U1880	U1808	G1741	C1657	C1588	U1431	G1364	C1295	U1234	U1167	G1051
U2041	A1969	C1881	A1809	G1742	C1658	C1589	U1432	A1365	C1296	G1235	G1168	C1052
A2042	A1970	G1882	A1810	G1743	C1659	U1590	G1433	A1366	C1297	G1236	G1169	C1053
C2043	A1971	G1883	G1811	G1744	G1660	A1591	G1434	A1367	G1298	A1237	G1170	A1106
A1971	A1972	A1884	A1812	G1745	C1661	A1592	G1435	G1368	U1300	G1238	G1171	G1107
C2050	A2051	A1885	G1813	G1746	C1662	C1587	U1436	G1369	A1301	G1239	G1172	U1108
A2051	G1980	C1886	A1814	G1747	A1664	C1588	A1437	C1370	A1302	U1240	A1174	U1109
G2052	G1981	C1887	G1815	G1748	G1665	C1589	U1438	C1371	G1309	A1241	U1175	G1110
C2055	C1982	A1888	G1816	G1749	G1666	A1590	A1439	G1372	G1310	A1242	G1176	G1111
G2056	C1983	U1889	G1817	A1749	G1667	A1591	G1440	A1377	G1311	A1243	A1177	G1112
A2059	G1984	U1898	U1819	G1750	A1668	G1594	G1441	A1378	U1312	G1244	G1178	U1113
A2060	U1985	G1899	U1820	G1751	C1670	G1595	U1442	A1379	U1313	G1245	C1179	G1114
G2061	A1986	A1900	A1821	G1752	G1671	G1596	A1443	A1380	U1314	A1246	C1180	G1115
A2062	G1987	C1902	G1823	G1753	G1672	A1597	G1444	G1381	C1315	G1247	C1181	G1116
C2063	G1988	G1903	G1824	A1755	G1673	C1598	G1445A	G1382	C1316	G1248	A1182	G1117
C2064	C1990	U1825	G1825	G1756	C1675	U1602	G1446	A1383	U1317	U1249	G1183	C1118
C2065	U1991	G1906	G1826	U1757	G1678	A1603	U1447	A1384	A1317	G1250	G1184	C1119
G2066	G1992	G1907	C1827	U1758	U1679	A1608	G1448	A1385	C1318	C1251	C1185	G1120
G2067	U1993	C1908	G1828	G1759	U1680	A1609	G1449	C1386	G1319	G1252	G1186	G1121
U2068	G1994	G1909	A1829	G1760	G1681	G1594	U1450	C1387	A1322	A1253	G1187	G1122
G2069	G1997	G1910	C1830	G1761	G1682	A1608	U1451	G1388	U1324	A1254	U1188	C1123
G2070	G1998	U1911	G1831	G1762	G1683	A1609	G1452	G1389	G1324	U1255	A1189	C1124
A2071	G2004	A1912	G1832	G1763	C1684	A1610	G1453	U1394	U1325	G1256	G1190	G1125
C2072	A2005	C1913	U1833	G1764	C1685	A1611	G1454	A1395	U1326	G1257	G1191	A1129
C2073	U2074	U1915	G1835	G1765	U1688	A1614	G1455	A1396	C1327	G1258	G1192	U1130
U2075	G2006	U1915	G1835	U1766	C1689	C1615	G1456	U1397	G1328	G1259	G1193	U1131
G2076	G2009	C1924	G1839	G1767	A1689	A1616	G1457	C1398	U1329	G1260	A1194	A1132
G2077	G2010	C1925	G1840	U1768	A1690	A1617	A1458	G1400	C1330	A1261	C1195	A1133
U2079	U2011	U1926	U1841	G1771	A1691	C1617	G1459	G1401	G1331	U1263	C1196	U1135
G2080	G2012	G1842	G1842	G1772	U1692	A1618	G1460	C1402	G1332	G1264	G1196	G1136
				G1773	U1693	A1544	G1461	C1403	U1335	A1265	C1201	C1140
				G1774	C1594	G1620	C1466	C1404	A1336	U1267	A1204	U1141

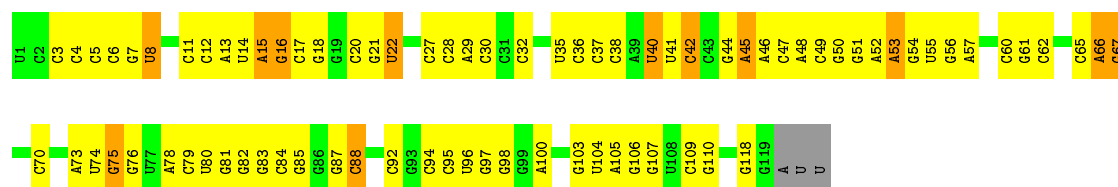


C1043	G1044	A1045	A1046	A1047	A1048	C1049	A1050	G1051	C1052	C1053	A1054	A1107	U1108	C1109	G1110	A1111	G1112	U1113	G1114	G1115	C1116	G1117	C1118	C1119	G1120	C1121	C1122	C1123	G1124	G1125	A1129	U1130	G1131	A1132	U1133	C1135	G1136	C1140	U1141	U1142	A1142A	A1143	C1144	C1145	C1146	C1147	A1148	G1149	C1150	G1151	C1152	G1153	G1154	A1155	A1156	C1158																																																																																																																																																																																																																																																																																																																																																																																																																																																													
G877	G878	G879	A880	A881	G882	G883	A884	G885	G886	G887	G888	G889	G890	G891	G892	G893	G894	G895	G896	G897	G898	G899	G900	G901	G902	G903	G904	G905	G906	G907	G908	G909	G910	G911	G912	G913	G914	G915	G916	G917	G918	G919	G920	G921	G922	G923	G924	G925	G926	G927	G928	G929	G930	G931	G932	G933	G934	G935	G936	G937	G938	G939	G940	G941	G942																																																																																																																																																																																																																																																																																																																																																																																																																																																				
U827	U828	A829	G830	G831	G832	U833	C834	A835	G836	C837	C838	U839	U840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902																																																																																																																																																																																																																																																																																																																																																																																																																																										
U907	C908	A909	A910	A911	C912	U913	C914	C915	G916	G917	A918	G919	U920	U921	U922	U923	U924	U925	A926	G927	G928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	U1000	A1001	G1002	G1003	C1004	C1005	C1006	A1007	U1008	U1009	U1010	U1011	U1012	C1013	U1014	U1015	U1016	U1017	U1018	U1019	U1020	A1021	G1022	U1023	G1024	A1025	U1026	U1027	A1028	U1029	G1030	U1031	U1032	U1033	U1034	U1035	U1036	U1037	U1038	U1039	U1040	U1041	G1042																																																																																																																																																																																																																																																																																																																																																																														
C754	C755	C756	U757	C758	G759	G760	A761	G765	G766	U767	G768	G769	G770	U774	G775	G776	U780	A781	A782	A783	A784	G785	G786	U787	A788	A789	C790	C791	G792	A793	G794	C795	C796	C797	G798	A802	G805	C806	U807	G808	G809	U810	U811	C812	U813	U814	U815	U816	U817	U818	U819	U820	U821	U822	U823	U824	U825	U826	U827	U828	U829	U830	U831	U832	U833	U834	U835	U836	U837	U838	U839	U840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	U1000	A1001	G1002	G1003	C1004	C1005	C1006	A1007	U1008	U1009	U1010	U1011	U1012	C1013	U1014	U1015	U1016	U1017	U1018	U1019	U1020	A1021	G1022	U1023	G1024	A1025	U1026	U1027	A1028	U1029	G1030	U1031	U1032	U1033	U1034	U1035	U1036	U1037	U1038	U1039	U1040	U1041	G1042																																																																																																																																																																																																																																			
C754	C755	C756	U757	C758	G759	G760	A761	G765	G766	U767	G768	G769	G770	U774	G775	G776	U780	A781	A782	A783	A784	G785	G786	U787	A788	A789	C790	C791	G792	A793	G794	C795	C796	C797	G798	A802	G805	C806	U807	G808	G809	U810	U811	C812	U813	U814	U815	U816	U817	U818	U819	U820	U821	U822	U823	U824	U825	U826	U827	U828	U829	U830	U831	U832	U833	U834	U835	U836	U837	U838	U839	U840	U841	U842	U843	U844	U845	U846	U847	U848	U849	U850	U851	U852	U853	U854	U855	U856	U857	U858	U859	U860	U861	U862	U863	U864	U865	U866	U867	U868	U869	U870	U871	U872	U873	U874	U875	U876	U877	U878	U879	U880	U881	U882	U883	U884	U885	U886	U887	U888	U889	U890	U891	U892	U893	U894	U895	U896	U897	U898	U899	U900	U901	U902	U903	U904	U905	U906	U907	U908	U909	U910	U911	U912	U913	U914	U915	U916	U917	U918	U919	U920	U921	U922	U923	U924	U925	U926	U927	U928	U929	U930	U931	U932	U933	U934	U935	U936	U937	U938	U939	U940	U941	U942	U943	U944	U945	U946	U947	U948	U949	U950	U951	U952	U953	U954	U955	U956	U957	U958	U959	U960	U961	U962	U963	U964	U965	U966	U967	U968	U969	U970	U971	U972	U973	U974	U975	U976	U977	U978	U979	U980	U981	U982	U983	U984	U985	U986	U987	U988	U989	U990	U991	U992	U993	U994	U995	U996	U997	U998	U999	U1000	A1001	G1002	G1003	C1004	C1005	C1006	A1007	U1008	U1009	U1010	U1011	U1012	C1013	U1014	U1015	U1016	U1017	U1018	U1019	U1020	A1021	G1022	U1023	G1024	A1025	U1026	U1027	A1028	U1029	G1030	U1031	U1032	U1033	U1034	U1035	U1036	U1037	U1038	U1039	U1040	U1041	G1042																																																																																																																																																																																																																																			
C1421A	G143	C143A	C144	G145	G146	G147	C148	A149	C150	C151	C152	G153	G154	C154A	U157	G158	G159	G160	A161	G162	G163	G164	G165	G166	G167	G168	G169	G170	G171	G172	G173	C174	G175	G176	G177	G178	G179	G180	G181	A182	C183	C184	U185	G186	G187	G188	G189	A190	C191	G192	U193	G194	A195	U196	A197	G198	G199	G200	U201	U202	C203	A204	G205	C206	U207	C208	C209	A210	G211	G212	G213	G214	G215	G216	G217	G218	G219	G220	G221	G222	G223	G224	G225	G226	G227	G228	G229	G230	C231	G232	G233	U234	G235	C236	C237	C238	U239	G240	G241	G242	U243	A244	G245	C246	G247	G248	C249	G250	A251	C252	G253	A254	G255	A256	A257	G258	G259	G260	G261	A262	G263	G264	G265	G266	C267	G268	G269	G270	A271	A272	C273	G274	G275	G276	G277	G278	G279	C280	A281	G282	U283	U284	C285	G286	C287	G288	G289	G290	C291	C292	G293	G294	G295	C296	G297	G298	A299	U300	U301	U302	U303	G304	U305	U306	G307	A308	A309	A310	A311	G312	G313	G314	G315	G316	G317	G318	G319	G320	G321	G322	G323	G324	G325	G326	G327	G328	G329	G330	G331	G332	G333	G334	G335	G336	G337	G338	G339	G340	G341	G342	G343	G344	G345	G346	G347	G348	G349	U350	G351	G352	G353	G354	G355	G356	G357	G358	G359	G360	G361	U362	U363	U364	U365	U366	U367	U368	U369	U370	U371	U372	U373	U374	U375	U376	U377	U378	U379	U380	U381	U382	U383	U384	U385	U386	U387	U388	U389	U390	U391	U392	U393	U394	U395	U396	U397	U398	U399	U400	U401	U402	U403	U404	U405	U406	U407	U408	U409	U410	U411	U412	U413	U414	U415	U416	U417	U418	U419	U420	U421	U422	U423	U424	U425	U426	U427	U428	U429	U430	U431	U432	U433	U434	U435	U436	U437	U438	U439	U440	U441	U442	U443	U444	U445	U446	U447	U448	U449	U450	U451	U452	U453	U454	U455	U456	U457	U458	U459	U460	U461	U462	U463	U464	U465	U466	U467	U468	U469	U470	U471	U472	U473	U474	U475	U476	U477	U478	U479	U480	U481	U482	U483	U484	U485	U486	U487	U488	U489	U490	U491	U492	U493	U494	U495	U496	U497	U498	U499	U500	U501	U502	U503	U504	U505	U506	U507	U508	U509	U510	U511	U512	U513	U514	U515	U516	U517	U518	U519	U520	U521	U522	U523	U524	U525	U526	U527	U528	U529	U530	U531	U532	U533	U534	U535	U536	U537	U538	U539	U540	U541	U542	U543	U544	U545	U546	U547	U548	U549	U550	U551	U552	U553	U554	U555	U556	U557	U558	U559	U560	U561	U562	U563	U564	U565	U566	U567	U568	U569	U570	U571	U572	U573	U574	U575	U576	U577	U578	U579	U580	U581	U582	U583	U584	U585	U586	U587	U588	U589	U590	U591	U592	U593	U594	U595	U596	U597	U598	U599	U600	U601	U602	U603	U604	U605	U606	U607	U608	U609	U610	U611	U612	U613	U614	U615	U616	U617	U618	U619	U620	U621	U622	U623	U624	U625	U626	U627	U628	U629	U630	U631	U632	U633	U634	U635	U636	U637	U638	U639	U640	U641	U642	U643

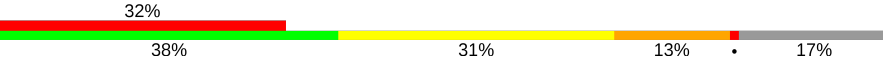
C2097	G2027	G1950	G1862	C1797	G1714	G1651	C1574	A1495	G1426	G1356	A1287	A1296	U1159
U2098	U2028	U1951	G1863	U1798	G1717	G1652	G1577	A1496	A1427	U1357	U1288	G1227	G1160
U2099	A2030	A1952	U1864	A1852	G1718	A1852	U1577	U1497	G1428	G1358	C1289	G1228	C1161
G2100	A2031	A1953	G1865	C1800	G1719	G1653	C1578	U1498	G1429	A1359	C1290	G1229	G1162
G2101	G2032	U1954	G1866	A1804	U1720	A1654	U1579	C1499	U1430	A1360	C1291	G1230	G1163
U2102	G2033	U1955	A1876	G1804	G1721	A1655	C1582	G1500	U1431	G1361	U1292	G1231	G1164
C2103	U2034	G1959	A1877	U1805	A1722	C1656	C1583	C1501	C1432	C1362	C1293	G1232	U1165
G2104	G2035	G1960	G1878	U1806	U1739	C1657	C1584	U1502	U1433	G1363	C1298	G1233	U1166
C2107	G2036	U1962	C1879	U1807	G1740	C1658	C1585	U1503	G1434	G1364	G1299	G1234	U1167
C2108	G2037	U1963	C1880	G1808	G1741	G1661	A1887	C1504	G1435	A1365	G1299	G1235	G1168
U2109	G2038	G1964	G1881	U1809	G1742	G1662	G1588	C1505	G1436	A1366	G1300	G1236	G1169
G2110	C2039	G1967	G1882	A1810	G1743	C1663	G1589	A1507	U1437	A1367	A1301	G1237	G1170
C2111	C2040	U1968	A1884	G1811	C1745	A1664	U1590	A1508	U1438	G1368	A1302	G1238	G1171
G2112	U2041	A1969	A1885	G1812	G1745A	A1665	U1591	C1509	A1439	G1369	C1305	G1239	G1172
U2113	A2042	U1970	A1886	A1813	G1746	G1666	C1592	C1509A	G1440	C1376	C1306	U1240	U1174
G2114	C2043	A1971	C1887	G1814	G1747	G1667	G1593	A1509B	G1441	G1377	G1306	U1241	U1175
G2115	C2044	A1972	G1888	A1815	G1747A	A1668	G1594	G1520	G1442	A1378	G1309	G1242	G1176
G2116	C2050	A1972	A1889	G1816	G1748	A1669	G1595	G1524	G1443	G1379	G1310	G1243	A1177
G2117	A2051	G1980	G1890	G1817	G1749	A1670	U1596	G1525	A1445	G1380	G1311	G1244	C1178
U2118	G2052	U1981	U1818	U1818	A1750	U1671	A1597	U1518	G1445A	G1381	U1312	G1245	C1179
G2119	G2053	A1981	A1900	A1819	C1751	G1674	U1602	G1519	C1445A	A1384	U1313	G1246	C1180
A2120	A2054	C1982	A1901	U1820	G1752	A1675	A1603	G1520	C1446	G1385	U1314	G1247	G1181
G2121	C2055	G1983	G1902	G1821	G1753	A1676	U1607	G1524	G1447	G1386	C1314	G1248	A1182
G2122	G2056	G1984	G1903	G1822	A1755	A1677	C1611	G1525	G1448	G1387	G1317	U1249	G1183
A2059	A2059	U1986	C1905	G1824	G1756	A1678	C1612	G1526	G1449	G1388	G1318	G1251	C1185
A2060	A2060	G1987	G1906	A1825	U1757	U1679	A1608	G1527	U1453	G1389	G1319	G1252	G1186
G2061	G2061	C1988	G1907	G1826	U1758	A1678	A1609	A1528A	G1455	U1394	A1322	U1254	G1187
A2062	A2062	G1989	C1908	G1827	G1759	G1681	A1610	G1529	G1456	U1395	U1323	U1255	A1189
C2063	C2063	C1990	G1909	G1828	U1760	G1682	C1611	G1530	A1457	U1396	G1324	U1256	G1190
C2064	C2064	U1991	C1910	G1828	G1762	C1683	A1614	C1531	G1458	U1397	G1325	G1257	G1191
C2065	C2065	G1992	U1911	G1831	G1764	C1684	C1615	C1532	G1459	C1398	U1326	G1258	G1192
G2066	G2066	U1993	A1912	C1832	G1765	C1685	G1616	G1533	A1460	G1399	G1327	G1259	G1193
G2067	G2067	U1994	A1913	C1833	U1766	C1686	C1617	G1534	G1461	G1400	G1328	G1260	A1194
U2068	U2068	G1997	C1914	U1834	C1767	U1688	A1618	C1543	G1464	G1401	U1329	G1261	G1195
G2069	G2069	U1998	U1915	G1835	U1768	A1689	C1619	A1544	G1465	C1402	G1330	U1262	C1196
G2070	G2070	G2004	U1923	G1839	C1771	A1690	G1620	A1545	G1466	C1403	A1331	U1263	C1201
A2071	A2071	A2005	C1924	G1840	G1772	C1691	U1621	C1546	G1467	C1404	G1332	G1264	C1202
G2072	G2072	C2006	C1925	U1841	A1773	U1692	G1622	C1547	C1468	U1405	U1335	A1265	G1203
U2074	U2074	G2009	U1926	G1842	U1775	C1693	G1623	C1548	A1471	U1406	A1336	U1266	G1204
U2075	U2075	G2010	G1929	C1843	U1776	G1695	G1624	C1550	G1474	C1407	G1337	U1267	U1205
C2078	C2078	U2011	G1930	C1844	U1777	G1696	G1625	C1551	G1475	C1408	G1338	U1268	U1206
U2079	U2079	G2012	U1931	G1845	U1778	G1697	G1626	A1554	C1476	C1409	U1339	G1270	G1207
G2080	G2080	A2013	A1932	G1846	U1779	A1698	U1629	G1558	A1477	C1410	U1340	G1271	G1208
C2081	C2081	A2014	G1933	A1847	U1780	G1699	U1635	A1559	G1478	A1412	U1341	U1272	G1209
A2082	A2082	A2015	C1934	G1848	A1781	U1701	G1635	G1559	U1481	G1413	G1344	A1274	U1211
C2083	C2083	U2016	G1935	G1850	A1782	G1702	C1636	A1562	G1482	G1414	G1345	U1275	G1215
G2084	G2084	U2017	A1936	U1851	A1784	G1703	U1639	G1563	G1483	U1415	G1346	A1276	G1216
C2085	C2085	G2018	A1937	C1852	A1785	G1704	C1640	C1564	G1484	C1416	G1347	G1277	G1217
G2086	G2086	A2019	A1938	A1853	A1786	G1705	A1641	G1568	G1485	C1417	G1348	U1278	A1220
G2087	G2087	A2020	U1939	A1854	A1789	G1707	G1642	A1496	A1486	U1418	A1349	G1279	G1221
G2088	G2088	C2021	U1940	G1855	A1790	U1709	G1643	A1490	A1487	U1420	G1350	G1280	C1221A
U2089	U2089	U2022	U1941	G1856	A1791	U1710	G1644	A1491	G1488	G1421	G1351	G1281	C1222
G2090	G2090	G2023	U1946	G1858	A1792	C1711	G1647	G1492	G1489	G1422	U1352	A1284	G1223
U2091	U2091	G2024	C1947	A1859	G1792	C1712	G1648	C1493	A1572	G1425	A1353	G1285	G1224
G2092	G2092	C2025	G1948	C1860	U1796	C1713		G1573	A1494		G1355	A1286	G1225

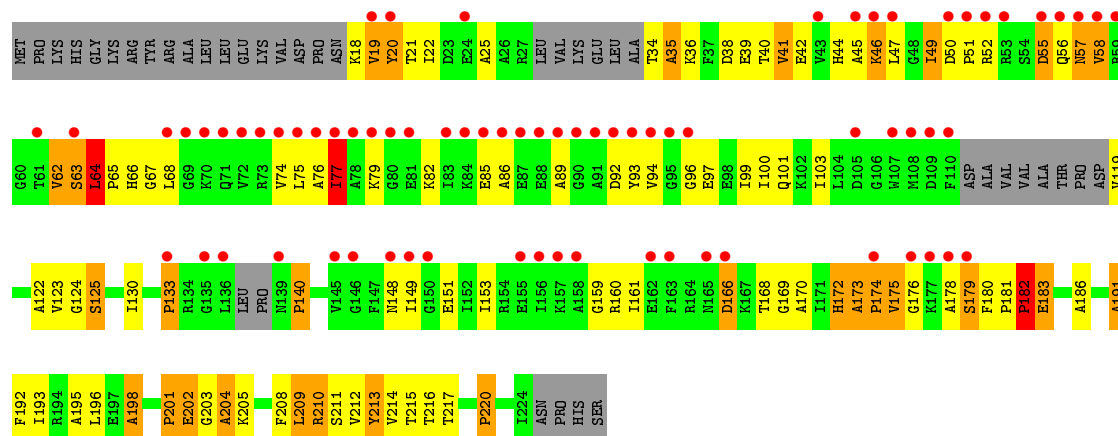


Chain DB: 

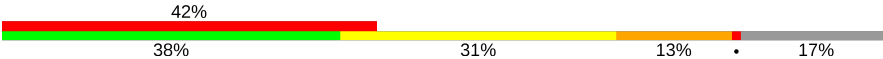


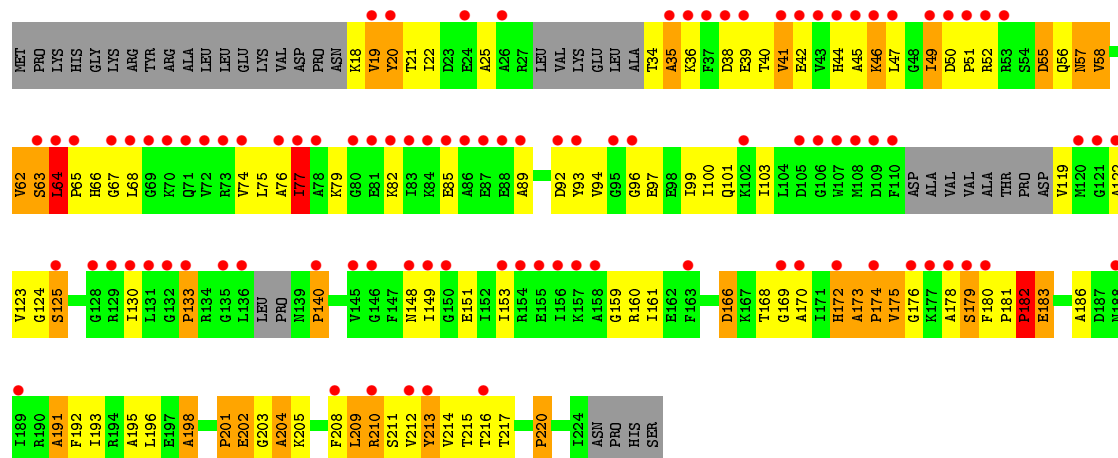
• Molecule 36: 50S RIBOSOMAL PROTEIN L1

Chain BC: 



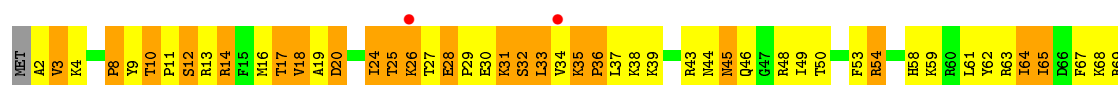
• Molecule 36: 50S RIBOSOMAL PROTEIN L1

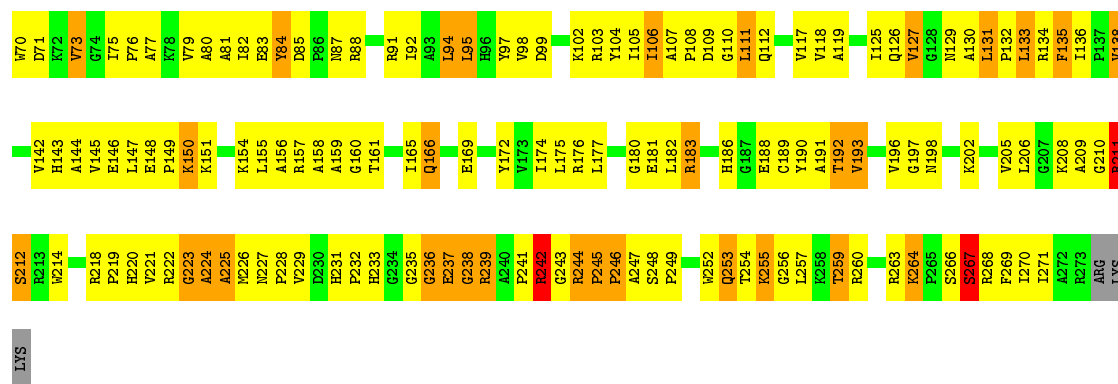
Chain DC: 



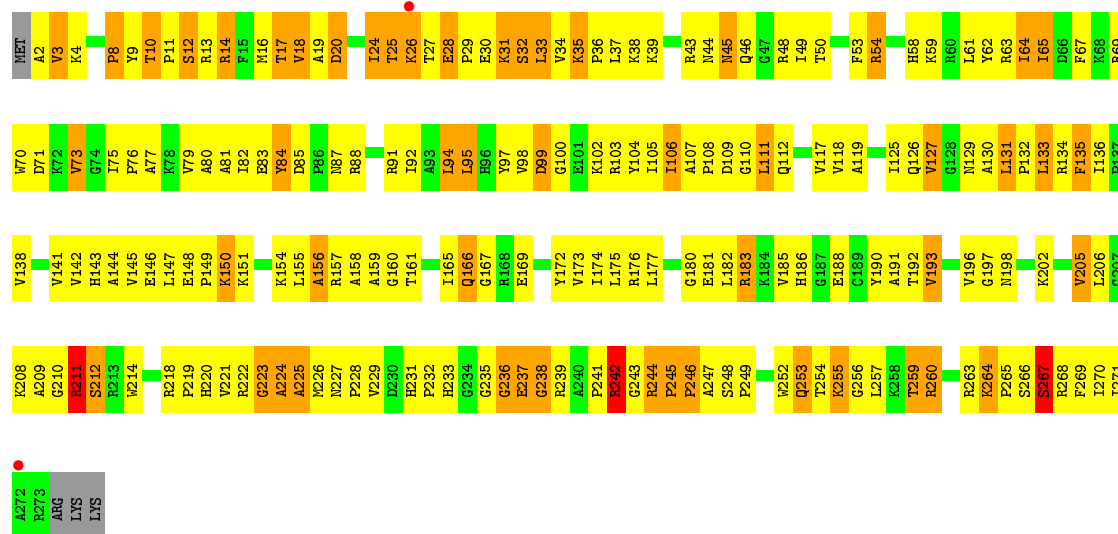
• Molecule 37: 50S RIBOSOMAL PROTEIN L2

Chain BD: 

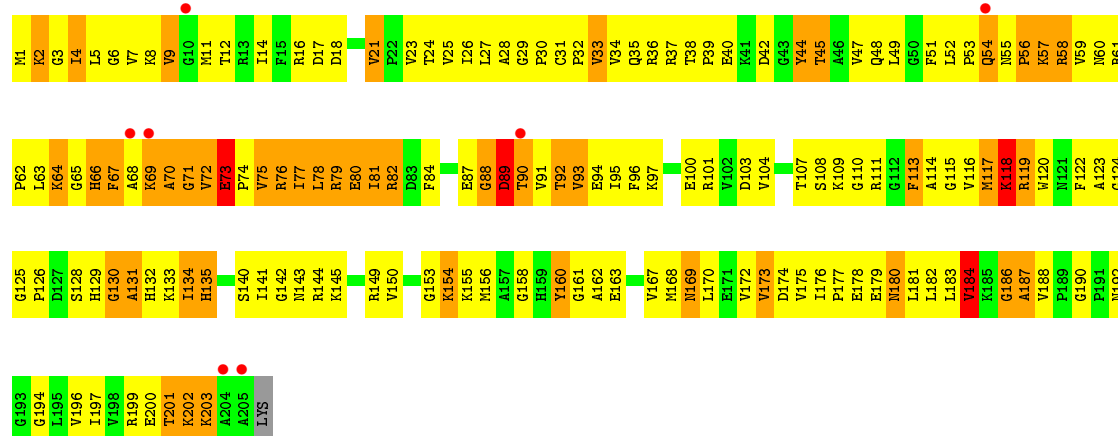




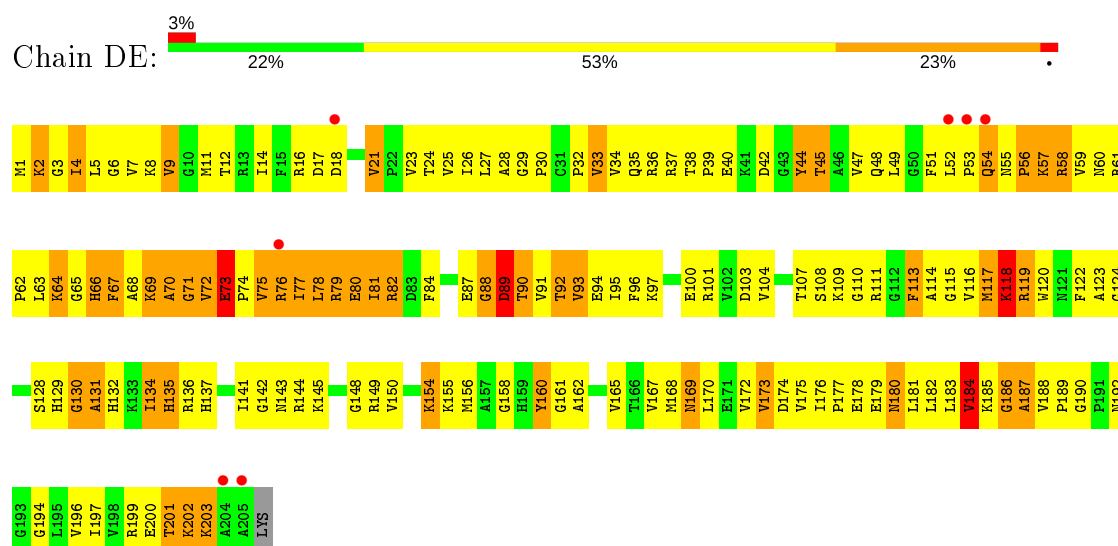
### • Molecule 37: 50S RIBOSOMAL PROTEIN L2



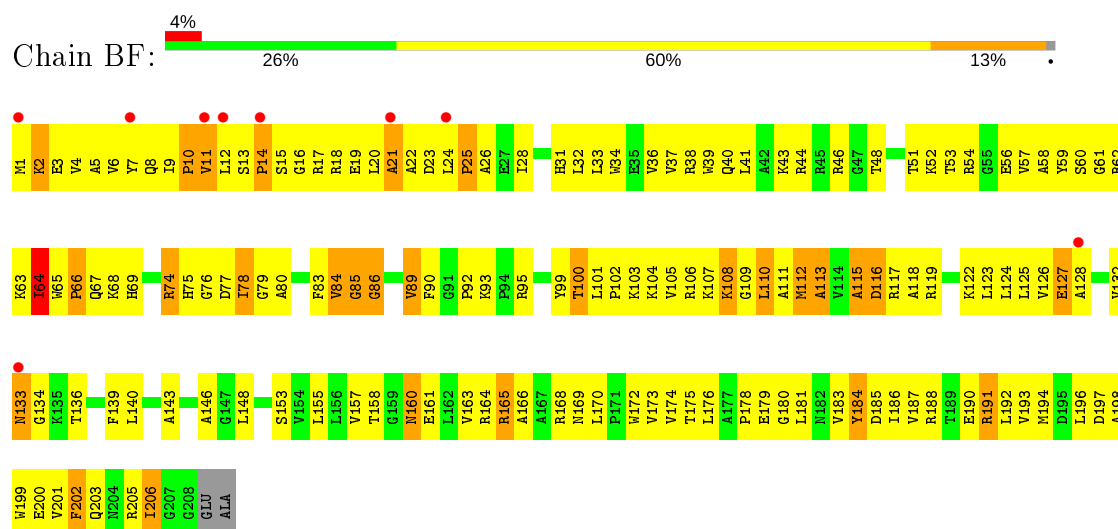
### • Molecule 38: 50S RIBOSOMAL PROTEIN L3



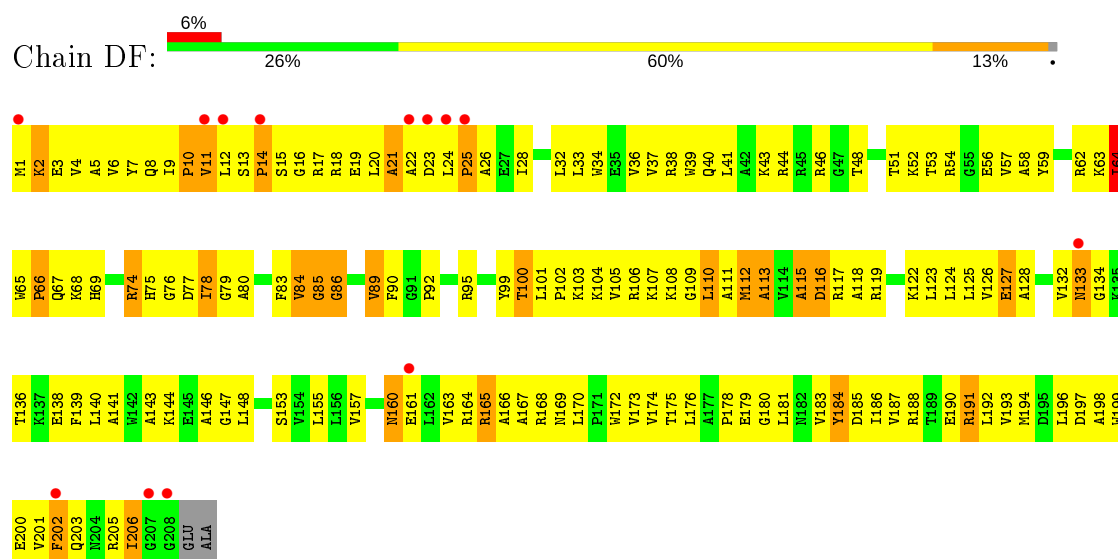
### • Molecule 38: 50S RIBOSOMAL PROTEIN L3



• Molecule 39: 50S RIBOSOMAL PROTEIN L4

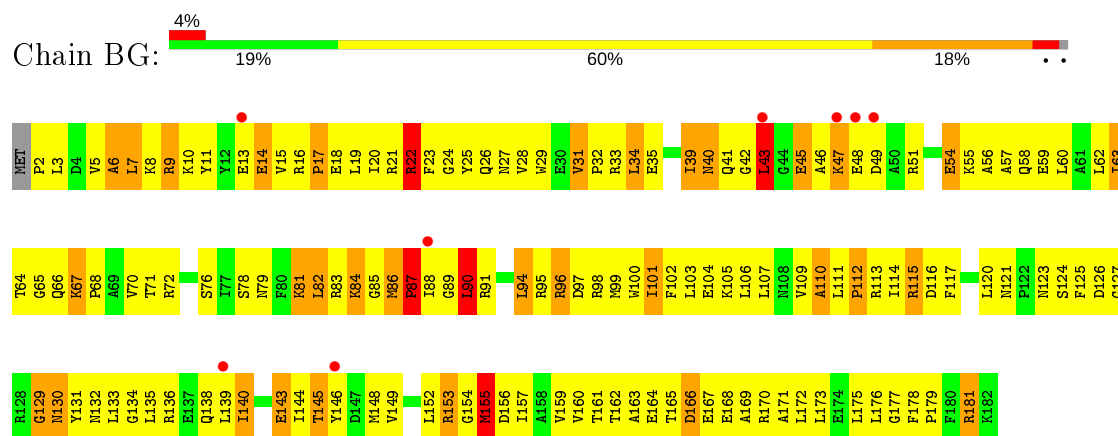


• Molecule 39: 50S RIBOSOMAL PROTEIN L4

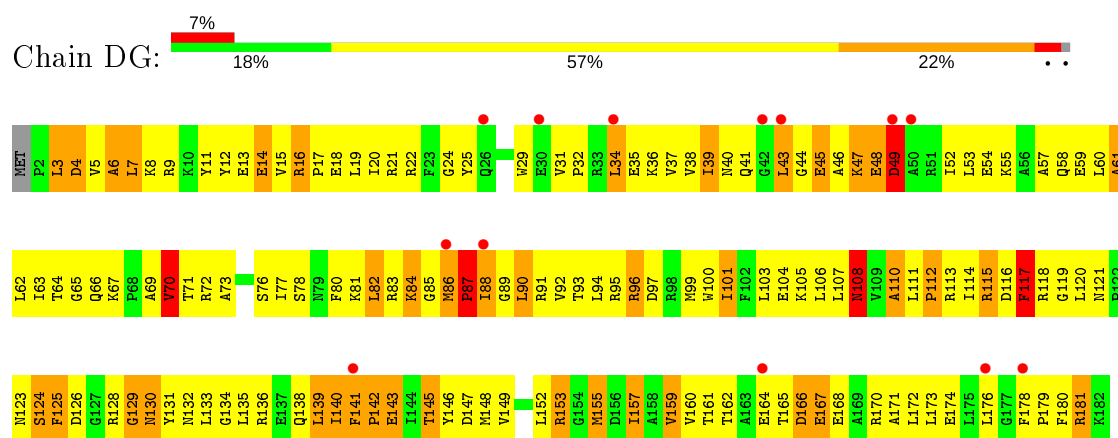




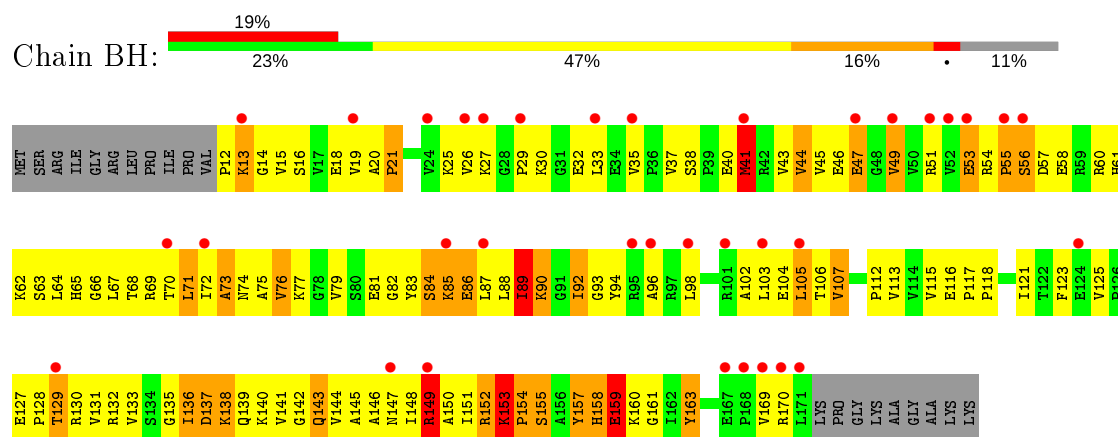
• Molecule 40: 50S RIBOSOMAL PROTEIN L5



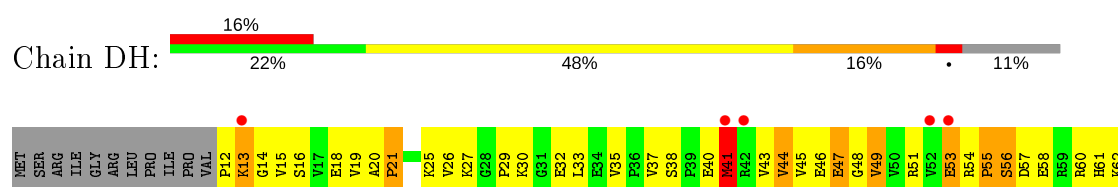
• Molecule 40: 50S RIBOSOMAL PROTEIN L5

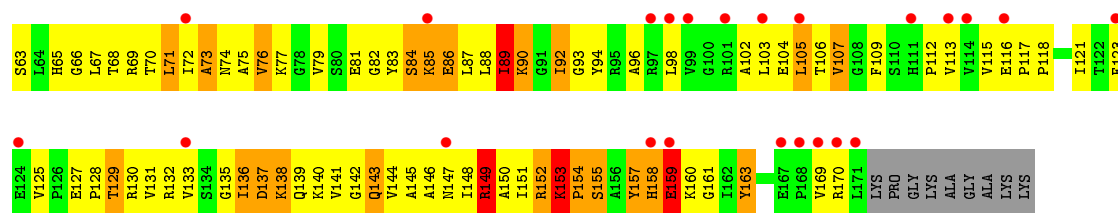


• Molecule 41: 50S RIBOSOMAL PROTEIN L6

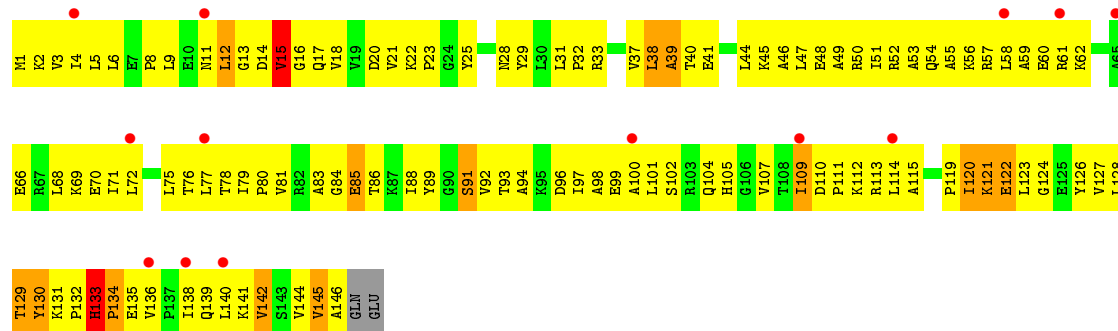


• Molecule 41: 50S RIBOSOMAL PROTEIN L6

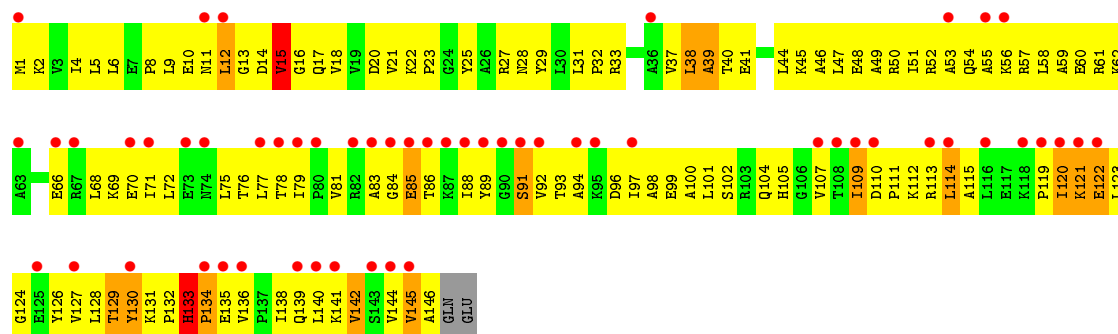




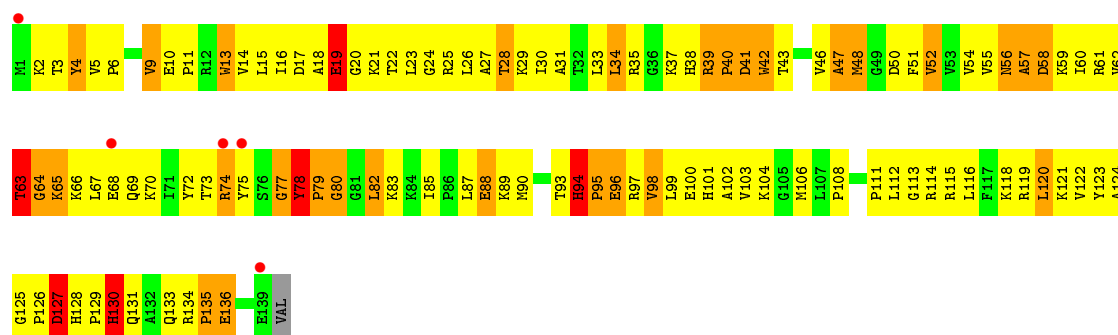
● Molecule 42: 50S RIBOSOMAL PROTEIN L9



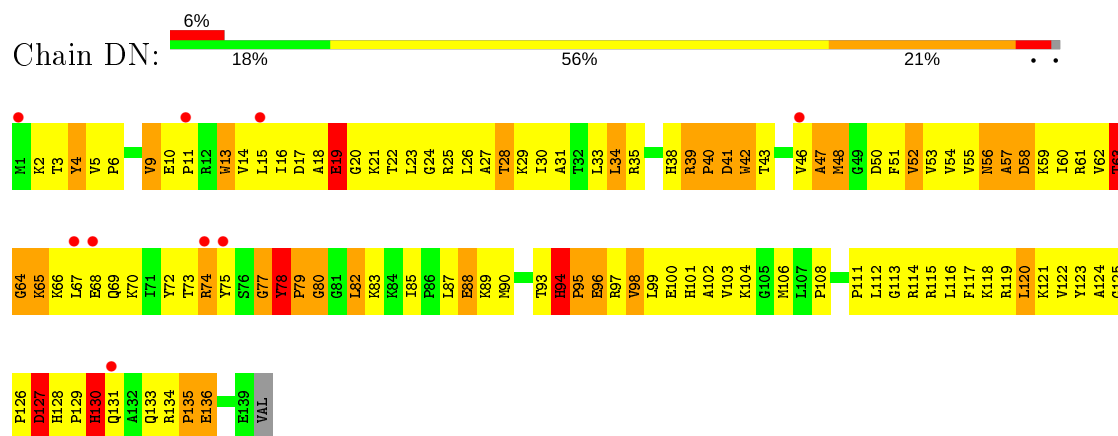
● Molecule 42: 50S RIBOSOMAL PROTEIN L9



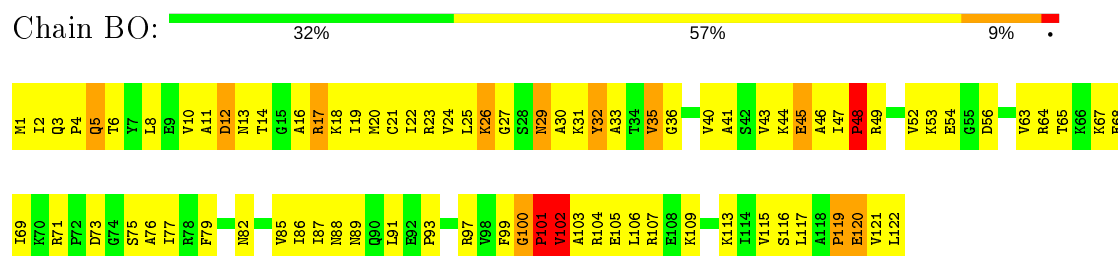
● Molecule 43: 50S RIBOSOMAL PROTEIN L13



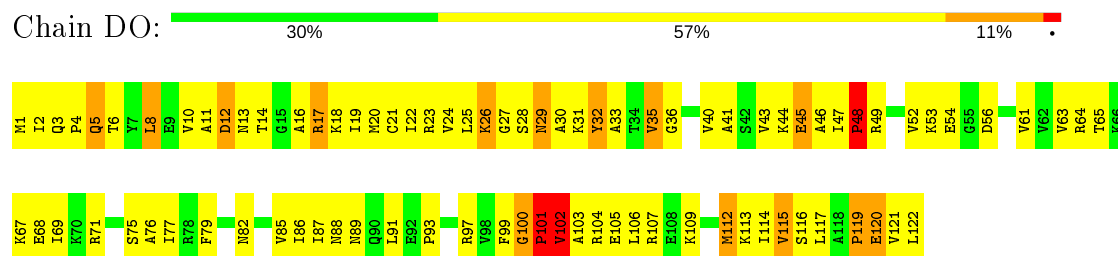
- Molecule 43: 50S RIBOSOMAL PROTEIN L13



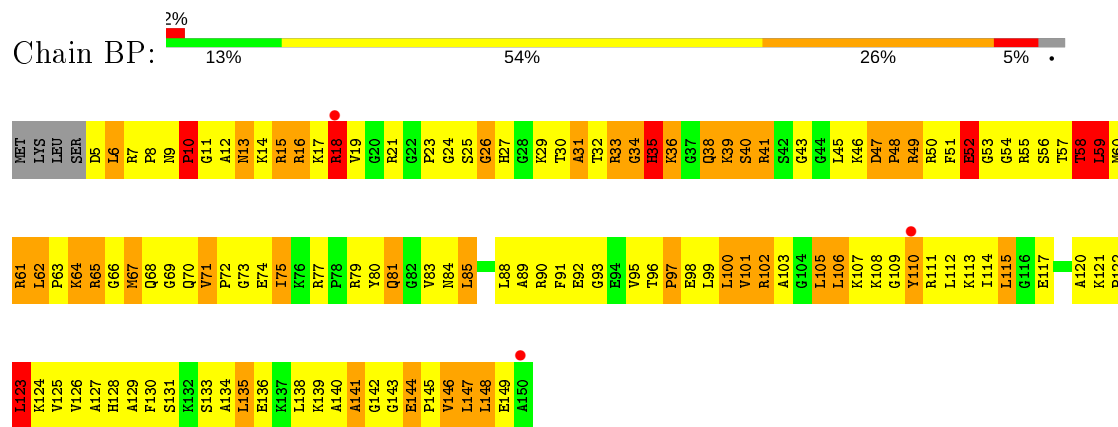
- Molecule 44: 50S RIBOSOMAL PROTEIN L14



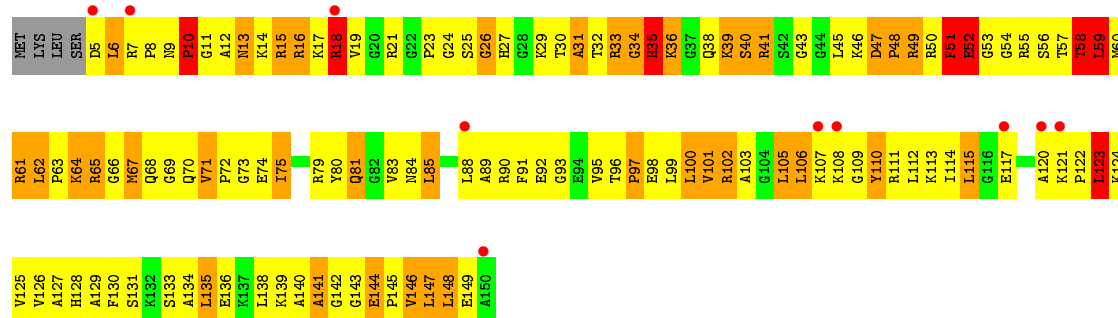
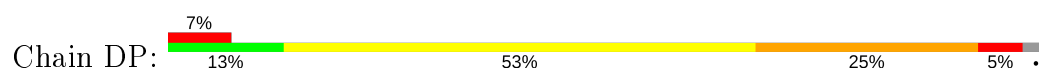
- Molecule 44: 50S RIBOSOMAL PROTEIN L14



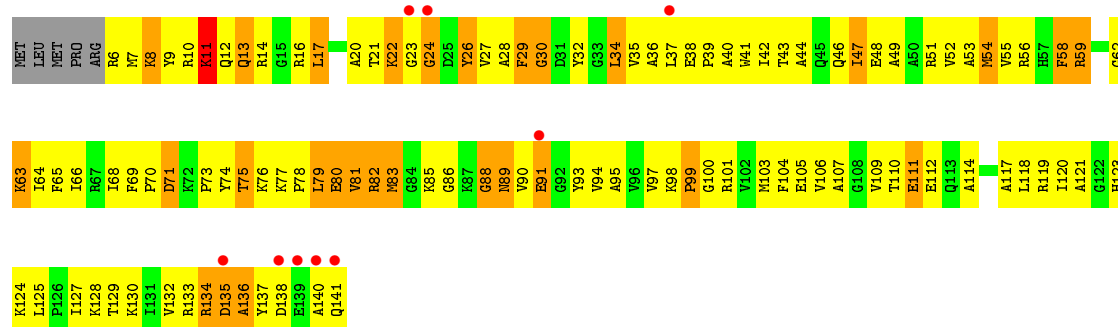
- Molecule 45: 50S RIBOSOMAL PROTEIN L15



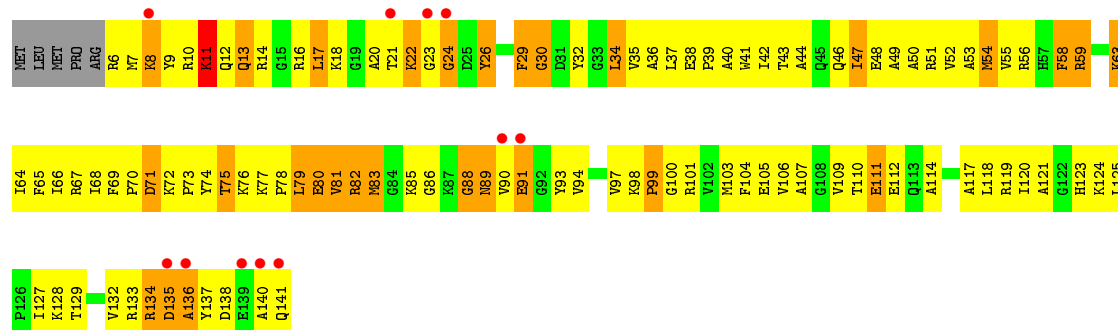
- Molecule 45: 50S RIBOSOMAL PROTEIN L15



● Molecule 46: 50S RIBOSOMAL PROTEIN L16

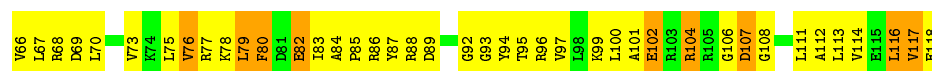


● Molecule 46: 50S RIBOSOMAL PROTEIN L16



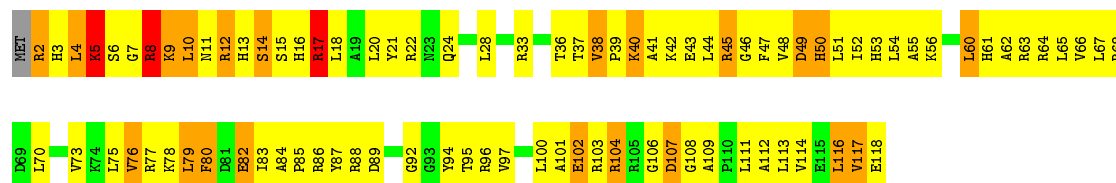
● Molecule 47: 50S RIBOSOMAL PROTEIN L17





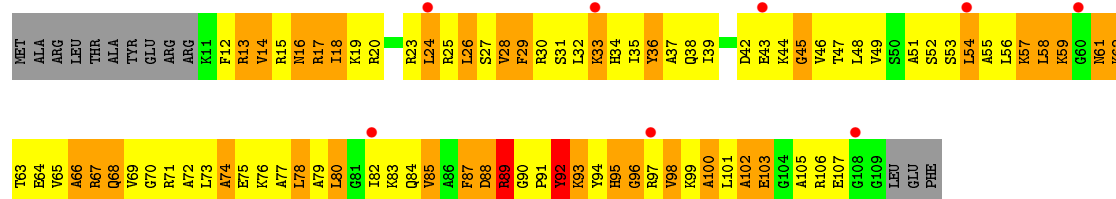
• Molecule 47: 50S RIBOSOMAL PROTEIN L17

Chain DR: 23% 56% 18%



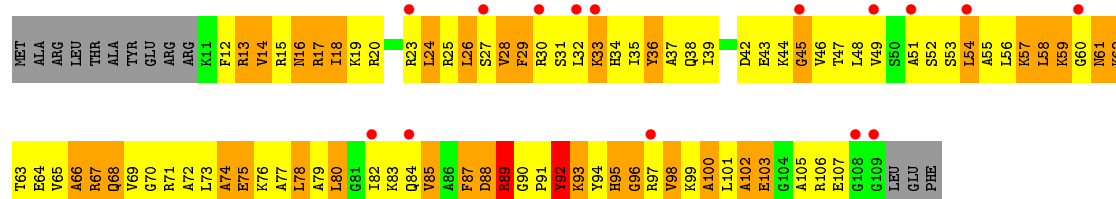
• Molecule 48: 50S RIBOSOMAL PROTEIN L18

Chain BS: 7% 11% 46% 30% 12%



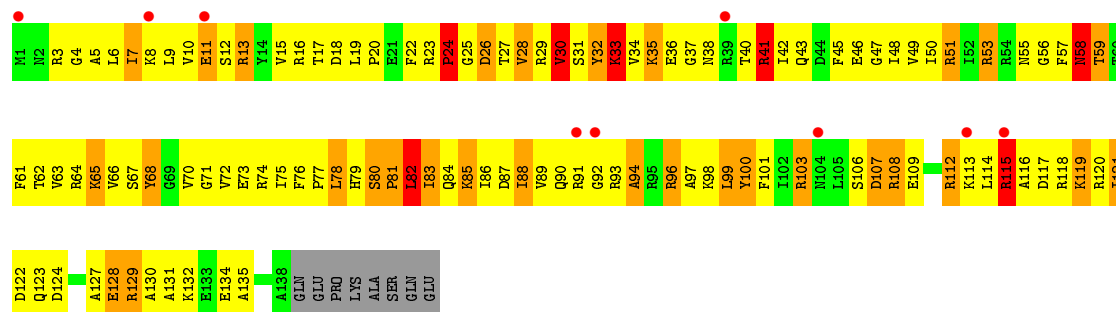
• Molecule 48: 50S RIBOSOMAL PROTEIN L18

Chain DS: 13% 10% 46% 31% 12%

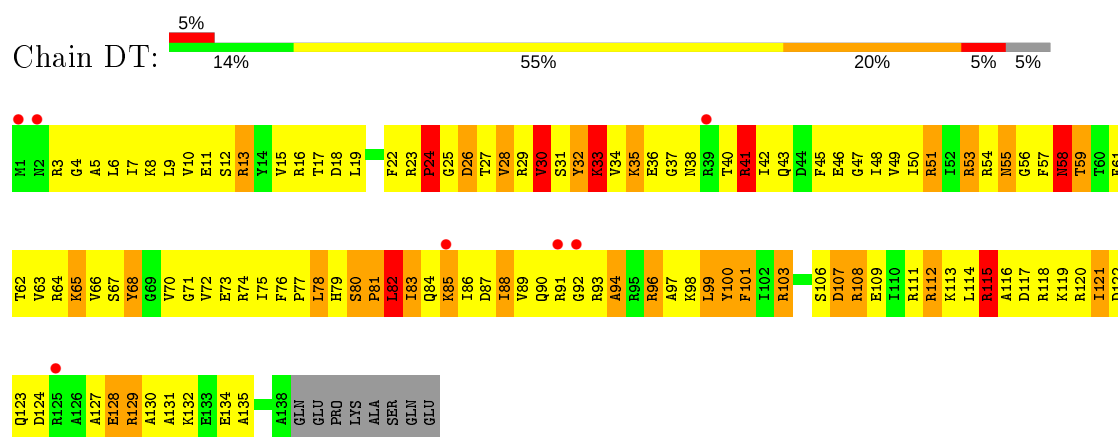


• Molecule 49: 50S RIBOSOMAL PROTEIN L19

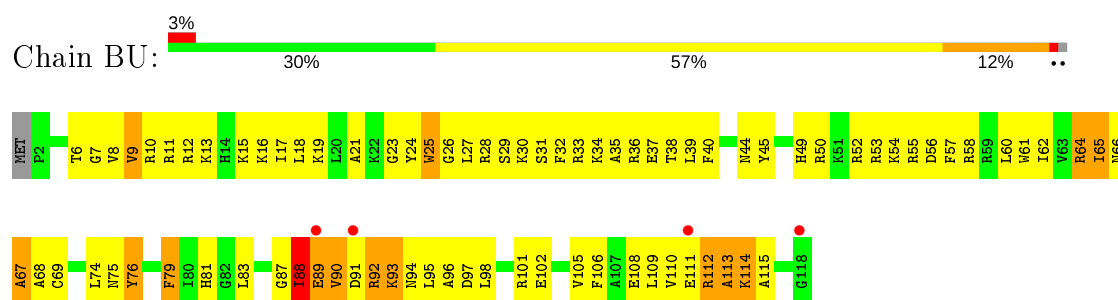
Chain BT: 6% 15% 54% 21% 5% 5%



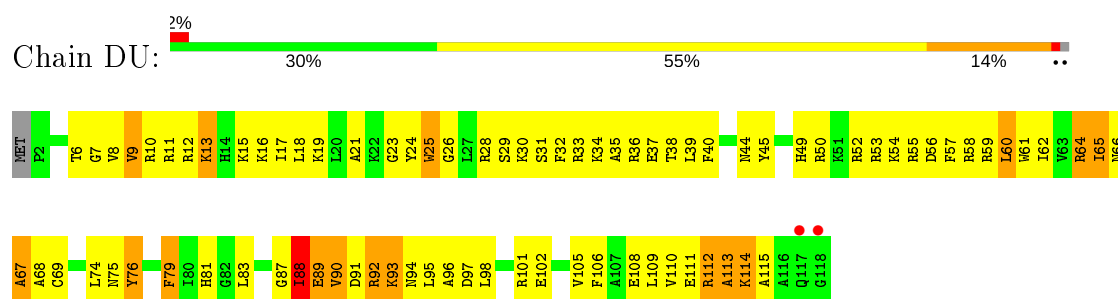
• Molecule 49: 50S RIBOSOMAL PROTEIN L19



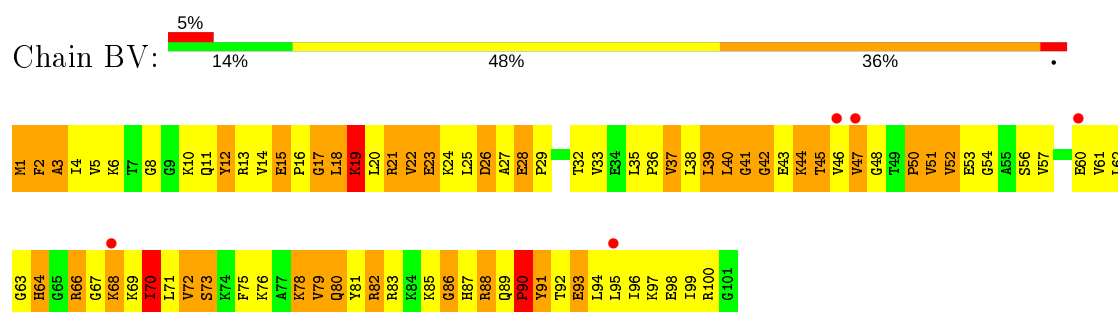
• Molecule 50: 50S RIBOSOMAL PROTEIN L20



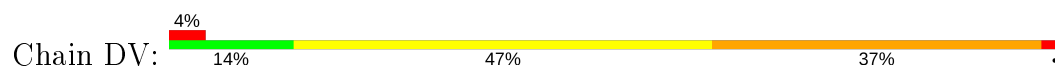
• Molecule 50: 50S RIBOSOMAL PROTEIN L20

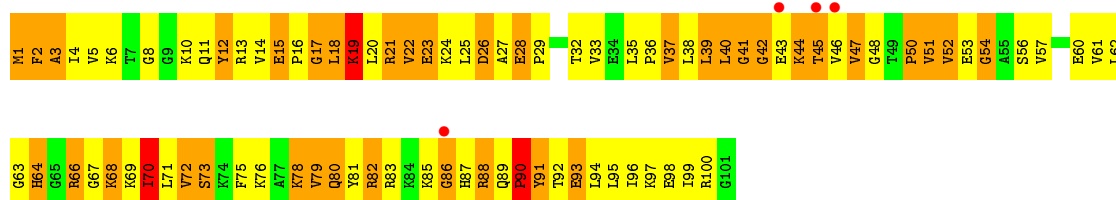


• Molecule 51: 50S RIBOSOMAL PROTEIN L21



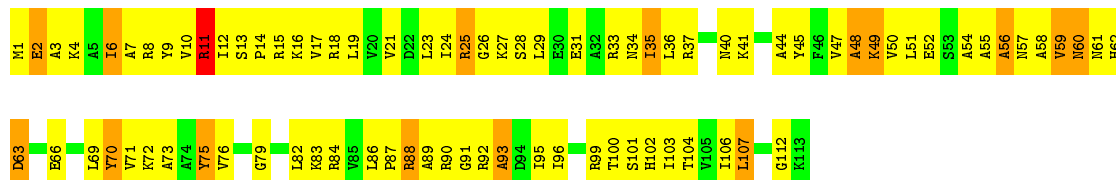
• Molecule 51: 50S RIBOSOMAL PROTEIN L21





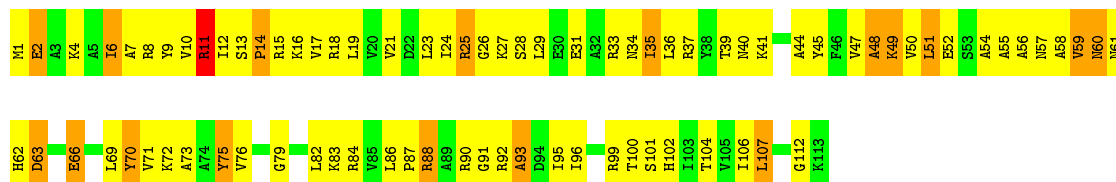
• Molecule 52: 50S RIBOSOMAL PROTEIN L22

Chain BW: 27% 59% 13%



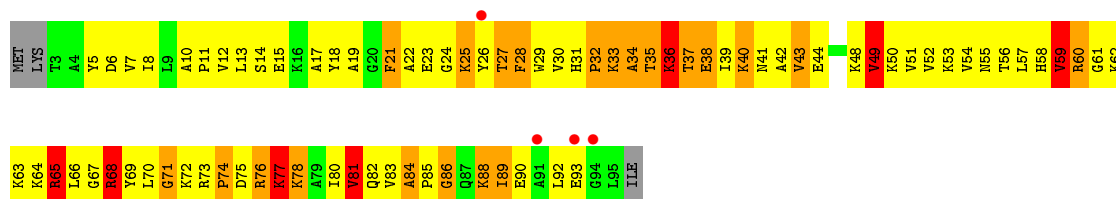
• Molecule 52: 50S RIBOSOMAL PROTEIN L22

Chain DW: 28% 56% 15%



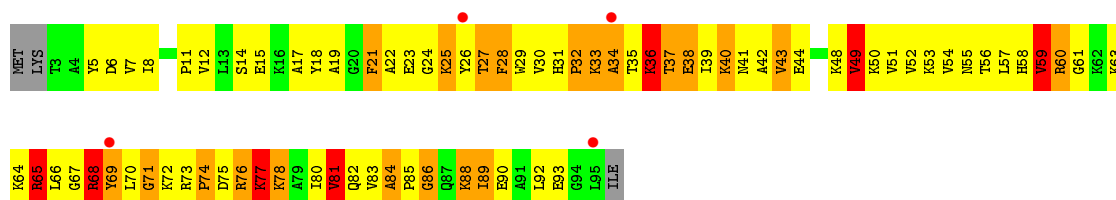
• Molecule 53: 50S RIBOSOMAL PROTEIN L23

Chain BX: 4% 14% 54% 22% 7%

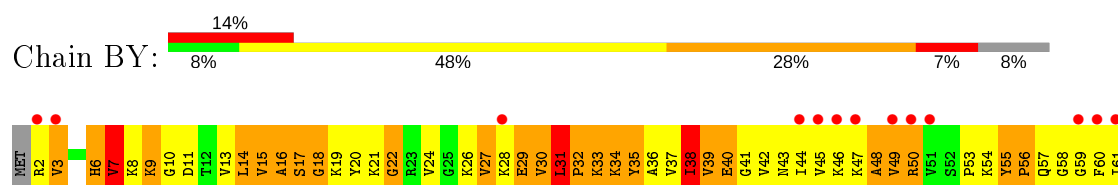


• Molecule 53: 50S RIBOSOMAL PROTEIN L23

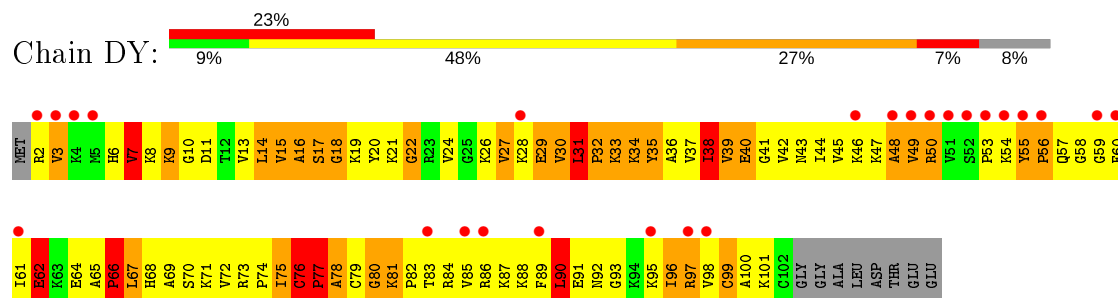
Chain DX: 4% 17% 51% 22% 7%



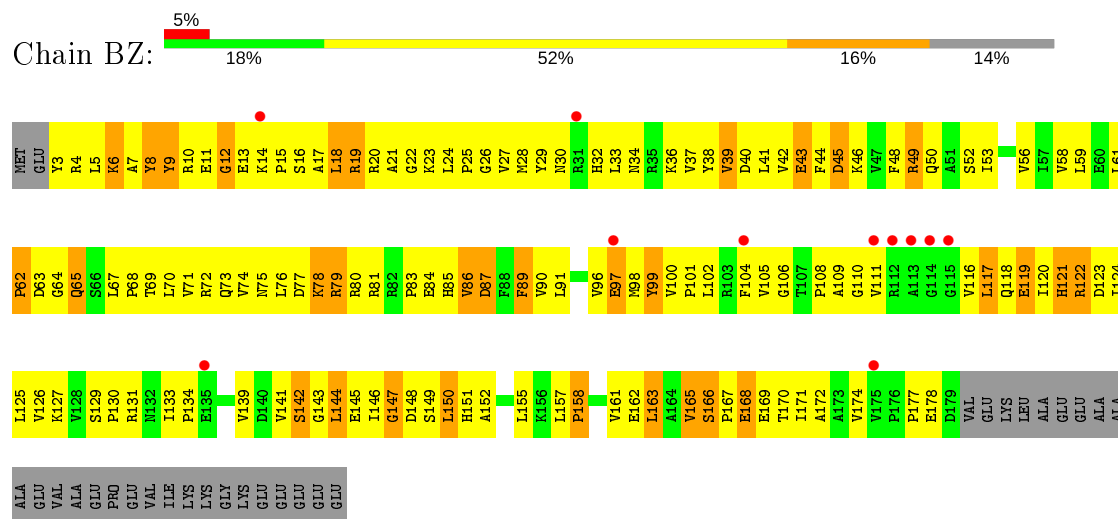
• Molecule 54: 50S RIBOSOMAL PROTEIN L24



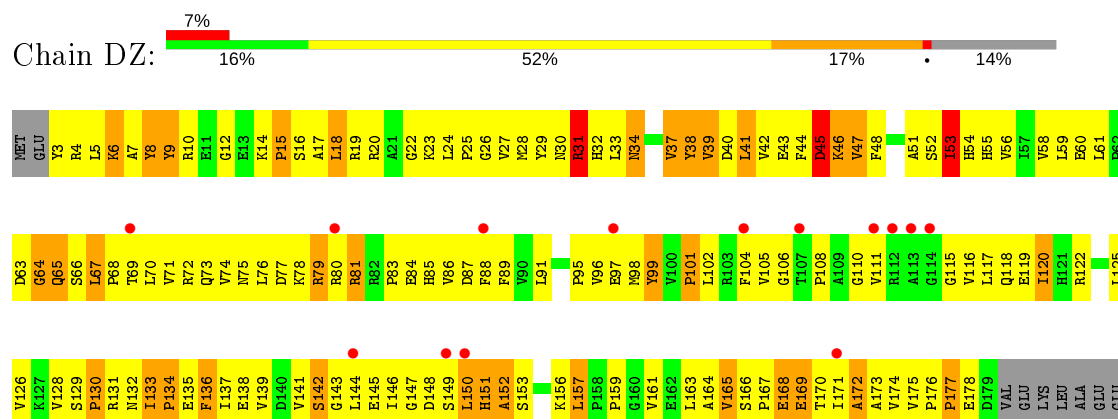
• Molecule 54: 50S RIBOSOMAL PROTEIN L24



• Molecule 55: 50S RIBOSOMAL PROTEIN L25



• Molecule 55: 50S RIBOSOMAL PROTEIN L25





ALA  
ALA  
ALA  
GLU  
VAL  
ALA  
GLU  
PRO  
GLU  
VAL  
ILE  
LYS  
LYS  
GLY  
LYS  
GLU  
GLU  
GLU  
GLU

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	213.32Å 452.95Å 631.36Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	50.00 – 2.80 49.96 – 2.80	Depositor EDS
% Data completeness (in resolution range)	90.7 (50.00-2.80) 90.7 (49.96-2.80)	Depositor EDS
$R_{merge}$	0.28	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.84 (at 2.81Å)	Xtriage
Refinement program	CNS 1.1	Depositor
R, $R_{free}$	0.272 , 0.313 0.266 , 0.306	Depositor DCC
$R_{free}$ test set	64102 reflections (4.77%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	36.9	Xtriage
Anisotropy	0.160	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.19 , 81.8	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.35$ , $\langle L^2 \rangle = 0.17$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
$F_o, F_c$ correlation	0.86	EDS
Total number of atoms	291075	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	58.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.24% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

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

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: 5MU, ZN, MG, 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	0.50	0/36190	0.71	20/56486 (0.0%)
1	CA	0.47	0/36190	0.71	24/56486 (0.0%)
2	AB	0.33	0/1936	0.59	0/2611
2	CB	0.33	0/1936	0.59	0/2611
3	AC	0.35	0/1637	0.58	0/2207
3	CC	0.34	0/1637	0.58	0/2207
4	AD	0.42	0/1733	0.67	0/2318
4	CD	0.41	0/1733	0.66	0/2318
5	AE	0.41	0/1163	0.66	0/1566
5	CE	0.39	0/1163	0.65	0/1566
6	AF	0.37	0/856	0.64	0/1154
6	CF	0.38	0/856	0.65	0/1154
7	AG	0.34	0/1276	0.54	0/1709
7	CG	0.33	0/1276	0.54	0/1709
8	AH	0.35	0/1136	0.62	0/1527
8	CH	0.34	0/1136	0.62	0/1527
9	AI	0.32	0/1027	0.55	0/1372
9	CI	0.32	0/1027	0.55	0/1372
10	AJ	0.36	0/808	0.62	0/1087
10	CJ	0.34	0/808	0.62	0/1087
11	AK	0.38	0/900	0.64	0/1213
11	CK	0.35	0/900	0.63	0/1213
12	AL	0.42	0/987	0.71	0/1322
12	CL	0.43	0/987	0.73	0/1322
13	AM	0.34	0/994	0.62	0/1322
13	CM	0.32	0/994	0.61	0/1322
14	AN	0.39	0/501	0.66	0/664
14	CN	0.38	0/501	0.64	0/664
15	AO	0.38	0/745	0.63	0/992
15	CO	0.36	0/745	0.61	0/992
16	AP	0.43	0/717	0.69	0/965
16	CP	0.42	0/717	0.68	0/965

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AQ	0.41	0/837	0.67	0/1119
17	CQ	0.38	0/837	0.66	0/1119
18	AR	0.39	0/579	0.70	0/768
18	CR	0.38	0/579	0.70	0/768
19	AS	0.37	0/643	0.61	0/867
19	CS	0.36	0/643	0.60	0/867
20	AT	0.33	0/765	0.59	0/1007
20	CT	0.32	0/765	0.59	0/1007
21	AU	0.45	0/213	0.56	0/279
21	CU	0.44	0/213	0.55	0/279
22	AV	0.51	1/1814 (0.1%)	0.72	0/2825
22	CV	0.50	1/1814 (0.1%)	0.72	0/2825
23	AW	0.43	1/1813 (0.1%)	0.77	6/2823 (0.2%)
23	AY	0.36	0/456	0.72	0/710
23	CW	0.45	1/1813 (0.1%)	0.76	2/2823 (0.1%)
23	CY	0.35	0/456	0.68	0/710
24	AX	0.58	0/263	0.84	0/407
24	CX	0.58	0/263	0.81	1/407 (0.2%)
25	B0	0.38	0/658	0.65	0/878
25	D0	0.39	0/658	0.65	0/878
26	B1	0.61	0/700	1.04	1/931 (0.1%)
26	D1	0.52	0/700	0.99	1/931 (0.1%)
27	B2	0.45	0/423	0.99	3/560 (0.5%)
27	D2	0.45	0/423	0.89	2/560 (0.4%)
28	B3	0.37	0/473	0.61	0/636
28	D3	0.39	0/473	0.61	0/636
29	B4	0.47	0/241	0.88	4/334 (1.2%)
29	D4	0.44	0/241	0.88	4/334 (1.2%)
30	B5	0.42	0/473	0.74	0/639
30	D5	0.40	0/473	0.73	0/639
31	B6	0.39	0/387	0.62	0/517
31	D6	0.39	0/387	0.62	0/517
32	B7	0.51	0/427	0.73	0/563
32	D7	0.53	0/427	0.70	0/563
33	B8	0.50	0/516	0.81	0/681
33	D8	0.48	0/516	0.80	0/681
34	BA	0.62	4/66876 (0.0%)	0.77	56/104407 (0.1%)
34	DA	0.62	5/66876 (0.0%)	0.77	53/104407 (0.1%)
35	BB	0.39	0/2853	0.70	0/4451
35	DB	0.38	0/2853	0.70	0/4451
36	BC	0.38	0/1145	0.68	7/1556 (0.4%)
36	DC	0.40	0/1145	0.68	7/1556 (0.4%)
37	BD	0.52	0/2155	0.87	3/2907 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
37	DD	0.51	0/2155	0.86	3/2907 (0.1%)
38	BE	0.43	0/1597	0.76	0/2155
38	DE	0.45	0/1597	0.77	0/2155
39	BF	0.45	0/1659	0.70	0/2246
39	DF	0.44	0/1659	0.69	0/2246
40	BG	0.39	0/1498	0.72	1/2013 (0.0%)
40	DG	0.35	0/1498	0.73	0/2013
41	BH	0.33	0/1246	0.69	0/1684
41	DH	0.35	0/1246	0.69	0/1684
42	BI	0.35	0/1147	0.66	0/1553
42	DI	0.34	0/1147	0.66	0/1553
43	BN	0.40	0/1132	0.78	0/1527
43	DN	0.45	0/1132	0.79	0/1527
44	BO	0.48	0/943	0.74	0/1269
44	DO	0.49	0/943	0.75	0/1269
45	BP	0.42	0/1131	1.00	6/1504 (0.4%)
45	DP	0.41	0/1131	1.00	7/1504 (0.5%)
46	BQ	0.37	0/1100	0.72	1/1470 (0.1%)
46	DQ	0.37	0/1100	0.72	1/1470 (0.1%)
47	BR	0.40	0/974	0.74	1/1302 (0.1%)
47	DR	0.38	0/974	0.74	1/1302 (0.1%)
48	BS	0.40	0/779	0.73	0/1038
48	DS	0.39	0/779	0.73	0/1038
49	BT	0.42	0/1156	0.77	2/1544 (0.1%)
49	DT	0.42	0/1156	0.77	1/1544 (0.1%)
50	BU	0.37	0/975	0.68	0/1297
50	DU	0.40	0/975	0.69	0/1297
51	BV	0.38	0/789	0.73	0/1054
51	DV	0.40	0/789	0.73	0/1054
52	BW	0.43	0/907	0.72	0/1216
52	DW	0.45	0/907	0.72	0/1216
53	BX	0.53	0/740	0.89	3/995 (0.3%)
53	DX	0.50	0/740	0.89	3/995 (0.3%)
54	BY	0.41	0/789	0.78	0/1053
54	DY	0.43	0/789	0.78	0/1053
55	BZ	0.35	0/1436	0.64	0/1951
55	DZ	0.36	0/1436	0.62	0/1951
All	All	0.52	13/314628 (0.0%)	0.74	224/470502 (0.0%)

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
1	AA	2	37
1	CA	2	29
22	AV	0	2
22	CV	0	2
23	AW	3	1
23	CW	2	0
24	CX	0	1
26	B1	0	1
34	BA	30	81
34	DA	28	79
All	All	67	233

All (13) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	CW	1	G	OP3-P	-7.25	1.52	1.61
23	AW	1	G	OP3-P	-7.19	1.52	1.61
22	CV	1	C	OP3-P	-7.12	1.52	1.61
22	AV	1	C	OP3-P	-6.95	1.52	1.61
34	BA	783	A	C5-C6	-6.34	1.35	1.41
34	BA	774	A	C5-C6	-6.20	1.35	1.41
34	DA	783	A	C5-C6	-6.18	1.35	1.41
34	DA	656	G	O5'-C5'	5.50	1.53	1.44
34	DA	652	C	C3'-O3'	5.42	1.49	1.42
34	BA	652	C	C3'-O3'	5.41	1.49	1.42
34	DA	768	G	C5-C6	-5.33	1.37	1.42
34	BA	656	G	O5'-C5'	5.32	1.52	1.44
34	DA	1786	A	C5-C6	-5.16	1.36	1.41

All (224) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	CW	17	C	N1-C1'-C2'	10.99	128.28	114.00
34	DA	1962	C	N1-C1'-C2'	10.90	128.18	114.00
34	BA	1962	C	N1-C1'-C2'	10.48	127.62	114.00
34	BA	669	G	N9-C1'-C2'	10.36	127.47	114.00
34	DA	669	G	N9-C1'-C2'	10.24	127.32	114.00
34	BA	1722	A	N9-C1'-C2'	9.93	126.91	114.00
34	BA	1397	U	C2'-C3'-O3'	9.86	131.19	109.50
34	DA	1397	U	C2'-C3'-O3'	9.86	131.20	109.50
34	DA	1722	A	N9-C1'-C2'	9.68	126.58	114.00
34	DA	1250	G	C2'-C3'-O3'	9.46	130.32	109.50
34	DA	283	A	C2'-C3'-O3'	9.28	129.93	109.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	BA	1250	G	C2'-C3'-O3'	9.26	129.88	109.50
45	DP	53	GLY	N-CA-C	-9.17	90.18	113.10
34	BA	283	A	C2'-C3'-O3'	9.06	129.44	109.50
45	BP	53	GLY	N-CA-C	-8.99	90.63	113.10
34	DA	1819	A	C2'-C3'-O3'	8.82	128.91	109.50
34	BA	2360	A	N9-C1'-C2'	-8.80	102.32	112.00
34	BA	1300	U	N1-C1'-C2'	8.75	125.38	114.00
34	DA	1300	U	N1-C1'-C2'	8.65	125.24	114.00
1	AA	1498	U	C2'-C3'-O3'	8.62	128.47	109.50
34	BA	1819	A	C2'-C3'-O3'	8.58	128.37	109.50
34	DA	2360	A	N9-C1'-C2'	-8.46	102.69	112.00
34	BA	1544	A	N9-C1'-C2'	8.45	124.99	114.00
34	DA	1544	A	N9-C1'-C2'	8.42	124.94	114.00
1	CA	412	A	N9-C1'-C2'	8.32	124.82	114.00
23	CW	70	G	C2'-C3'-O3'	8.30	127.77	109.50
1	AA	412	A	N9-C1'-C2'	8.28	124.77	114.00
34	DA	2662	A	N9-C1'-C2'	8.02	124.43	114.00
34	BA	2662	A	N9-C1'-C2'	7.96	124.34	114.00
34	DA	1820	U	C2'-C3'-O3'	7.93	126.94	109.50
45	DP	41	ARG	N-CA-C	-7.83	89.87	111.00
45	DP	52	GLU	N-CA-C	7.81	132.09	111.00
45	BP	52	GLU	N-CA-C	7.77	131.98	111.00
1	CA	575	G	C2'-C3'-O3'	7.70	126.45	109.50
1	AA	575	G	C2'-C3'-O3'	7.70	126.44	109.50
27	D2	53	LEU	N-CA-C	-7.68	90.26	111.00
23	AW	47	U	N1-C1'-C2'	7.68	123.98	114.00
45	BP	41	ARG	N-CA-C	-7.63	90.40	111.00
1	CA	1498	U	C2'-C3'-O3'	7.61	126.25	109.50
34	BA	1652	A	C2'-C3'-O3'	7.61	126.25	109.50
34	BA	1458	C	N1-C1'-C2'	7.61	123.89	114.00
34	DA	2191	G	C2'-C3'-O3'	7.61	126.24	109.50
45	BP	59	LEU	N-CA-C	-7.60	90.47	111.00
1	AA	410	G	C2'-C3'-O3'	7.54	126.08	109.50
1	AA	366	C	C2'-C3'-O3'	7.52	126.05	109.50
45	DP	59	LEU	N-CA-C	-7.51	90.73	111.00
34	BA	2191	G	C2'-C3'-O3'	7.51	126.02	109.50
37	BD	238	GLY	N-CA-C	-7.49	94.37	113.10
1	CA	410	G	C2'-C3'-O3'	7.49	125.98	109.50
34	BA	783	A	N9-C1'-C2'	-7.47	103.78	112.00
34	BA	1786	A	N9-C1'-C2'	7.44	123.68	114.00
34	DA	1458	C	N1-C1'-C2'	7.43	123.65	114.00
34	BA	472	A	C2'-C3'-O3'	7.41	125.80	109.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	DA	472	A	C2'-C3'-O3'	7.38	125.73	109.50
34	DA	1484	G	C2'-C3'-O3'	7.36	125.70	109.50
34	DA	1652	A	C2'-C3'-O3'	7.34	125.64	109.50
34	DA	783	A	N9-C1'-C2'	-7.31	103.95	112.00
1	CA	366	C	C2'-C3'-O3'	7.28	125.52	109.50
1	CA	1064	G	C2'-C3'-O3'	7.27	125.49	109.50
37	DD	238	GLY	N-CA-C	-7.26	94.96	113.10
34	BA	1484	G	C2'-C3'-O3'	7.23	125.41	109.50
34	DA	1694	C	C2'-C3'-O3'	7.22	125.39	109.50
23	AW	70	G	C2'-C3'-O3'	7.22	125.38	109.50
1	CA	115	G	C2'-C3'-O3'	7.21	125.37	109.50
1	AA	1064	G	C2'-C3'-O3'	7.17	125.28	109.50
1	AA	115	G	C2'-C3'-O3'	7.05	125.01	109.50
34	DA	2796	U	N1-C1'-C2'	7.03	123.13	114.00
34	DA	1786	A	N9-C1'-C2'	6.99	123.09	114.00
45	DP	54	GLY	N-CA-C	-6.95	95.72	113.10
37	DD	237	GLU	N-CA-C	6.93	129.72	111.00
34	BA	2796	U	N1-C1'-C2'	6.91	122.98	114.00
45	BP	54	GLY	N-CA-C	-6.85	95.98	113.10
37	BD	237	GLU	N-CA-C	6.82	129.40	111.00
34	BA	1379	A	N9-C1'-C2'	6.81	122.85	114.00
34	BA	1694	C	C2'-C3'-O3'	6.80	124.58	113.70
34	BA	1820	U	C2'-C3'-O3'	6.71	124.43	113.70
23	AW	17	C	N1-C1'-C2'	6.71	122.72	114.00
34	DA	2033	A	N9-C1'-C2'	6.68	122.69	114.00
27	B2	51	ARG	N-CA-C	-6.62	93.11	111.00
1	AA	1504	G	C2'-C3'-O3'	6.62	124.30	113.70
26	D1	9	GLY	N-CA-C	-6.59	96.61	113.10
34	BA	2033	A	N9-C1'-C2'	6.54	122.50	114.00
34	BA	1992	G	N9-C1'-C2'	6.54	122.50	114.00
34	DA	1379	A	N9-C1'-C2'	6.46	122.40	114.00
34	DA	2225	A	C2'-C3'-O3'	6.38	123.90	113.70
34	DA	1616	A	N9-C1'-C2'	6.32	122.22	114.00
37	BD	267	SER	N-CA-C	-6.29	94.03	111.00
34	DA	1992	G	N9-C1'-C2'	6.29	122.17	114.00
34	DA	1773	A	N9-C1'-C2'	-6.29	105.09	112.00
23	AW	5	G	N9-C1'-C2'	-6.27	105.10	112.00
1	AA	913	A	C2'-C3'-O3'	6.25	123.71	113.70
23	AW	47	U	O4'-C1'-N1	6.23	113.19	108.20
1	CA	760	G	N9-C1'-C2'	-6.21	105.17	112.00
34	BA	1616	A	N9-C1'-C2'	6.18	122.04	114.00
53	DX	75	ASP	N-CA-C	-6.15	94.41	111.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	BA	1773	A	N9-C1'-C2'	-6.13	105.26	112.00
37	DD	267	SER	N-CA-C	-6.12	94.46	111.00
34	DA	2286	A	N9-C1'-C2'	6.12	121.95	114.00
1	AA	760	G	N9-C1'-C2'	-6.09	105.30	112.00
1	CA	428	G	C2'-C3'-O3'	6.09	123.45	113.70
34	DA	562	U	N1-C1'-C2'	6.09	121.91	114.00
36	BC	174	PRO	N-CA-CB	6.05	110.56	103.30
34	BA	1934	C	C2'-C3'-O3'	6.03	123.34	113.70
34	BA	1301	A	N9-C1'-C2'	6.02	121.83	114.00
34	BA	1970	A	C5'-C4'-O4'	6.00	116.30	109.10
34	DA	1301	A	N9-C1'-C2'	5.98	121.77	114.00
1	AA	428	G	C2'-C3'-O3'	5.98	123.26	113.70
34	BA	671	C	C5'-C4'-O4'	-5.93	101.98	109.10
36	DC	174	PRO	N-CA-CB	5.92	110.41	103.30
1	CA	266	G	C2'-C3'-O3'	5.88	123.11	113.70
34	BA	562	U	N1-C1'-C2'	5.87	121.63	114.00
45	DP	58	THR	N-CA-C	-5.86	95.18	111.00
34	BA	2286	A	N9-C1'-C2'	5.85	121.61	114.00
53	BX	75	ASP	N-CA-C	-5.85	95.20	111.00
34	BA	2225	A	C2'-C3'-O3'	5.85	123.06	113.70
29	D4	41	PRO	N-CA-CB	5.82	110.29	103.30
34	BA	265	A	N9-C1'-C2'	5.82	121.56	114.00
29	B4	41	PRO	N-CA-CB	5.81	110.27	103.30
34	DA	1934	C	C2'-C3'-O3'	5.80	122.98	113.70
34	BA	1820	U	C4'-C3'-C2'	5.80	108.40	102.60
1	CA	533	A	C2'-C3'-O3'	5.76	122.92	113.70
40	BG	54	GLU	N-CA-C	-5.75	95.47	111.00
34	DA	671	C	C5'-C4'-O4'	-5.74	102.21	109.10
34	DA	673	C	C5'-C4'-C3'	-5.73	106.83	116.00
1	CA	913	A	C2'-C3'-O3'	5.71	122.84	113.70
34	DA	265	A	N9-C1'-C2'	5.71	121.43	114.00
1	AA	266	G	C2'-C3'-O3'	5.69	122.81	113.70
46	BQ	11	LYS	N-CA-C	-5.68	95.66	111.00
34	BA	386	G	N9-C1'-C2'	5.68	121.38	114.00
34	DA	2796	U	O4'-C1'-N1	5.66	112.73	108.20
34	DA	272	G	C2'-C3'-O3'	5.66	122.75	113.70
34	BA	1694	C	N1-C1'-C2'	5.64	121.33	114.00
29	D4	29	PRO	N-CA-CB	5.62	110.05	103.30
29	B4	29	PRO	N-CA-CB	5.62	110.04	103.30
1	AA	412	A	O4'-C1'-N9	5.61	112.69	108.20
27	B2	55	ARG	N-CA-C	-5.61	95.86	111.00
45	BP	58	THR	N-CA-C	-5.61	95.86	111.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1335	C	N1-C1'-C2'	5.61	121.29	114.00
46	DQ	11	LYS	N-CA-C	-5.60	95.88	111.00
34	BA	2796	U	O4'-C1'-N1	5.59	112.67	108.20
36	BC	133	PRO	N-CA-CB	5.59	110.01	103.30
34	BA	673	C	C5'-C4'-C3'	-5.59	107.06	116.00
34	BA	272	G	C2'-C3'-O3'	5.58	122.62	113.70
34	BA	2859	G	C2'-C3'-O3'	5.57	122.60	113.70
1	CA	1504	G	C2'-C3'-O3'	5.56	122.60	113.70
34	DA	2859	G	C2'-C3'-O3'	5.56	122.59	113.70
27	D2	51	ARG	N-CA-C	-5.55	96.00	111.00
1	CA	1529	G	N9-C1'-C2'	5.55	121.22	114.00
34	DA	386	G	N9-C1'-C2'	5.47	121.11	114.00
36	DC	133	PRO	N-CA-CB	5.47	109.86	103.30
29	B4	11	PRO	N-CA-CB	5.47	109.86	103.30
27	B2	52	ASP	N-CA-C	-5.45	96.30	111.00
34	DA	1987	G	C5'-C4'-O4'	-5.45	102.56	109.10
1	CA	412	A	O4'-C1'-N9	5.44	112.56	108.20
34	BA	1722	A	O4'-C1'-N9	5.44	112.55	108.20
36	DC	220	PRO	N-CA-CB	5.43	109.82	103.30
29	D4	11	PRO	N-CA-CB	5.42	109.81	103.30
34	DA	488	G	N9-C1'-C2'	-5.41	106.05	112.00
34	BA	1992	G	C2'-C3'-O3'	5.41	122.36	113.70
36	BC	220	PRO	N-CA-CB	5.40	109.78	103.30
34	BA	387	U	C2'-C3'-O3'	5.40	122.33	113.70
36	BC	140	PRO	N-CA-CB	5.38	109.76	103.30
34	DA	1992	G	C2'-C3'-O3'	5.37	122.30	113.70
36	DC	140	PRO	N-CA-CB	5.37	109.74	103.30
49	BT	30	VAL	N-CA-C	5.36	125.48	111.00
34	DA	1495	A	N9-C1'-C2'	5.36	120.96	114.00
34	BA	2346	A	N9-C1'-C2'	5.35	120.96	114.00
34	DA	1722	A	O4'-C1'-N9	5.34	112.48	108.20
1	AA	533	A	C2'-C3'-O3'	5.34	122.24	113.70
1	CA	920	U	C5'-C4'-C3'	-5.33	107.47	116.00
1	AA	1335	C	N1-C1'-C2'	5.33	120.93	114.00
1	CA	509	A	C2'-C3'-O3'	5.32	122.20	113.70
1	CA	586	C	N1-C1'-C2'	-5.31	106.16	112.00
34	DA	1694	C	N1-C1'-C2'	5.31	120.91	114.00
53	BX	77	LYS	N-CA-C	5.31	125.34	111.00
29	D4	7	PRO	N-CA-CB	5.30	109.66	103.30
36	BC	182	PRO	N-CA-CB	5.30	109.66	103.30
36	DC	182	PRO	N-CA-CB	5.30	109.66	103.30
34	DA	1822	G	C5'-C4'-O4'	-5.29	102.75	109.10

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B1	65	SER	N-CA-C	-5.29	96.72	111.00
34	BA	1822	G	C5'-C4'-O4'	-5.28	102.77	109.10
34	DA	629	G	C5'-C4'-C3'	-5.26	107.59	116.00
49	DT	30	VAL	N-CA-C	5.25	125.18	111.00
34	BA	493	G	C5'-C4'-C3'	-5.25	107.60	116.00
34	BA	1495	A	N9-C1'-C2'	5.23	120.80	114.00
34	BA	1987	G	C5'-C4'-O4'	-5.22	102.83	109.10
23	AW	15	G	C2'-C3'-O3'	5.22	122.05	113.70
1	CA	410	G	C4'-C3'-O3'	5.21	123.43	113.00
53	DX	77	LYS	N-CA-C	5.21	125.08	111.00
34	DA	1970	A	C5'-C4'-O4'	5.21	115.35	109.10
1	AA	410	G	C4'-C3'-O3'	5.21	123.41	113.00
36	BC	201	PRO	N-CA-CB	5.20	109.54	103.30
36	DC	201	PRO	N-CA-CB	5.20	109.54	103.30
36	DC	181	PRO	N-CA-CB	5.18	109.52	103.30
29	B4	7	PRO	N-CA-CB	5.16	109.49	103.30
1	CA	1201	A	C2'-C3'-O3'	5.16	121.95	113.70
34	DA	1819	A	C4'-C3'-C2'	5.15	107.75	102.60
47	BR	8	ARG	N-CA-C	5.13	124.84	111.00
34	DA	2346	A	N9-C1'-C2'	5.13	120.66	114.00
1	CA	1067	A	C2'-C3'-O3'	5.12	121.89	113.70
34	BA	1000	A	C5'-C4'-C3'	-5.12	107.81	116.00
24	CX	22	A	C2'-C3'-O3'	5.12	121.89	113.70
53	DX	59	VAL	N-CA-C	5.11	124.80	111.00
34	BA	1286	A	N9-C1'-C2'	5.11	120.64	114.00
36	BC	181	PRO	N-CA-CB	5.10	109.42	103.30
1	AA	1067	A	C2'-C3'-O3'	5.09	121.84	113.70
34	BA	629	G	C5'-C4'-C3'	-5.08	107.86	116.00
34	BA	669	G	C5'-C4'-C3'	5.08	124.12	116.00
49	BT	82	LEU	CA-CB-CG	5.08	126.98	115.30
34	BA	1458	C	O4'-C1'-N1	5.07	112.25	108.20
1	AA	1201	A	C2'-C3'-O3'	5.06	121.79	113.70
34	DA	1458	C	O4'-C1'-N1	5.06	112.25	108.20
1	CA	572	A	N9-C1'-C2'	5.05	120.57	114.00
34	DA	1635	G	C5'-C4'-O4'	-5.05	103.04	109.10
47	DR	8	ARG	N-CA-C	5.05	124.64	111.00
1	CA	107	G	N9-C1'-C2'	-5.05	106.45	112.00
53	BX	59	VAL	N-CA-C	5.05	124.63	111.00
1	AA	920	U	C5'-C4'-C3'	-5.04	107.94	116.00
1	AA	509	A	C2'-C3'-O3'	5.02	121.74	113.70
34	BA	283	A	C4'-C3'-O3'	5.01	123.02	113.00
45	DP	51	PHE	N-CA-C	5.01	124.53	111.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	DA	1000	A	C5'-C4'-C3'	-5.01	107.99	116.00
34	DA	100	G	O4'-C1'-N9	5.01	112.20	108.20
34	BA	1250	G	C4'-C3'-C2'	5.00	107.61	102.60

All (67) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	410	G	C3'
1	AA	412	A	C1'
23	AW	17	C	C1'
23	AW	47	U	C1'
23	AW	70	G	C3'
34	BA	100	G	C1'
34	BA	283	A	C3'
34	BA	472	A	C3'
34	BA	669	G	C4',C3',C1'
34	BA	945	A	C1'
34	BA	1250	G	C3'
34	BA	1300	U	C4',C3',C1'
34	BA	1379	A	C1'
34	BA	1397	U	C3'
34	BA	1458	C	C1'
34	BA	1484	G	C3'
34	BA	1544	A	C1'
34	BA	1609	A	C2'
34	BA	1652	A	C3'
34	BA	1694	C	C4',C3'
34	BA	1697	G	C3'
34	BA	1722	A	C1'
34	BA	1819	A	C3'
34	BA	1934	C	C3'
34	BA	1962	C	C4',C1'
34	BA	2191	G	C3'
34	BA	2286	A	C1'
34	BA	2662	A	C1'
34	BA	2796	U	C1'
1	CA	410	G	C3'
1	CA	412	A	C1'
23	CW	17	C	C1'
23	CW	70	G	C3'
34	DA	100	G	C1'
34	DA	283	A	C3'

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atom
34	DA	472	A	C3'
34	DA	669	G	C4',C3',C1'
34	DA	945	A	C1'
34	DA	1300	U	C4',C3',C1'
34	DA	1379	A	C1'
34	DA	1458	C	C1'
34	DA	1484	G	C3'
34	DA	1544	A	C1'
34	DA	1609	A	C2'
34	DA	1652	A	C3'
34	DA	1694	C	C4',C3'
34	DA	1697	G	C3'
34	DA	1722	A	C1'
34	DA	1819	A	C3'
34	DA	1934	C	C3'
34	DA	1962	C	C4',C1'
34	DA	2191	G	C3'
34	DA	2286	A	C1'
34	DA	2662	A	C1'
34	DA	2796	U	C1'

All (233) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	107	G	Sidechain
1	AA	1077	G	Sidechain
1	AA	1220	G	Sidechain
1	AA	1293	G	Sidechain
1	AA	1373	G	Sidechain
1	AA	1391	U	Sidechain
1	AA	1417	G	Sidechain
1	AA	1418	A	Sidechain
1	AA	1420	C	Sidechain
1	AA	1434	A	Sidechain
1	AA	1463	C	Sidechain
1	AA	1474	G	Sidechain
1	AA	1485	U	Sidechain
1	AA	1525	G	Sidechain
1	AA	1528	U	Sidechain
1	AA	253	U	Sidechain
1	AA	371	G	Sidechain
1	AA	38	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
1	AA	438	G	Sidechain
1	AA	541	G	Sidechain
1	AA	575	G	Sidechain
1	AA	587	G	Sidechain
1	AA	622	A	Sidechain
1	AA	682	G	Sidechain
1	AA	691	G	Sidechain
1	AA	724	G	Sidechain
1	AA	740	U	Sidechain
1	AA	760	G	Sidechain
1	AA	773	G	Sidechain
1	AA	801	U	Sidechain
1	AA	832	C	Sidechain
1	AA	880	C	Sidechain
1	AA	884	U	Sidechain
1	AA	898	G	Sidechain
1	AA	9	G	Sidechain
1	AA	900	A	Sidechain
1	AA	991	U	Sidechain
22	AV	25	C	Sidechain
22	AV	4	G	Sidechain
23	AW	39	U	Sidechain
26	B1	43	TYR	Sidechain
34	BA	1023	U	Sidechain
34	BA	1132	A	Sidechain
34	BA	1158	C	Sidechain
34	BA	1161	C	Sidechain
34	BA	1188	U	Sidechain
34	BA	1192	G	Sidechain
34	BA	1340	U	Sidechain
34	BA	1352	U	Sidechain
34	BA	1370	C	Sidechain
34	BA	1611	C	Sidechain
34	BA	1647	G	Sidechain
34	BA	1675	C	Sidechain
34	BA	1692	U	Sidechain
34	BA	1758	G	Sidechain
34	BA	1772	G	Sidechain
34	BA	1773	A	Sidechain
34	BA	1775	U	Sidechain
34	BA	1807	G	Sidechain
34	BA	1808	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
34	BA	1820	U	Sidechain
34	BA	1834	U	Sidechain
34	BA	188	G	Sidechain
34	BA	189	G	Sidechain
34	BA	1898	U	Sidechain
34	BA	1940	U	Sidechain
34	BA	1980	G	Sidechain
34	BA	1985	G	Sidechain
34	BA	1992	G	Sidechain
34	BA	2004	G	Sidechain
34	BA	2009	G	Sidechain
34	BA	201	C	Sidechain
34	BA	2010	G	Sidechain
34	BA	2017	U	Sidechain
34	BA	2033	A	Sidechain
34	BA	2079	U	Sidechain
34	BA	2090	G	Sidechain
34	BA	2306	C	Sidechain
34	BA	2360	A	Sidechain
34	BA	242	G	Sidechain
34	BA	2454	G	Sidechain
34	BA	2464	C	Sidechain
34	BA	2517	C	Sidechain
34	BA	2564	A	Sidechain
34	BA	2569	G	Sidechain
34	BA	2582	G	Sidechain
34	BA	2597	G	Sidechain
34	BA	2603	G	Sidechain
34	BA	2605	U	Sidechain
34	BA	2682	U	Sidechain
34	BA	271(H)	G	Sidechain
34	BA	271(Q)	G	Sidechain
34	BA	271(Y)	U	Sidechain
34	BA	2764	A	Sidechain
34	BA	2779	U	Sidechain
34	BA	379	G	Sidechain
34	BA	398	G	Sidechain
34	BA	459	U	Sidechain
34	BA	463	G	Sidechain
34	BA	465	G	Sidechain
34	BA	475	U	Sidechain
34	BA	476	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
34	BA	488	G	Sidechain
34	BA	505	A	Sidechain
34	BA	532	A	Sidechain
34	BA	542	C	Sidechain
34	BA	543	C	Sidechain
34	BA	562	U	Sidechain
34	BA	570	G	Sidechain
34	BA	588	U	Sidechain
34	BA	669	G	Sidechain
34	BA	670	A	Sidechain
34	BA	692	C	Sidechain
34	BA	700	G	Sidechain
34	BA	734	A	Sidechain
34	BA	74	A	Sidechain
34	BA	79	G	Sidechain
34	BA	802	A	Sidechain
34	BA	810	U	Sidechain
34	BA	939	G	Sidechain
34	BA	968	G	Sidechain
34	BA	987	G	Sidechain
1	CA	107	G	Sidechain
1	CA	1077	G	Sidechain
1	CA	1293	G	Sidechain
1	CA	1364	U	Sidechain
1	CA	1373	G	Sidechain
1	CA	1393	U	Sidechain
1	CA	1486	G	Sidechain
1	CA	1495	U	Sidechain
1	CA	1498	U	Sidechain
1	CA	1502	A	Sidechain
1	CA	1522	U	Sidechain
1	CA	24	U	Sidechain
1	CA	253	U	Sidechain
1	CA	266	G	Sidechain
1	CA	38	G	Sidechain
1	CA	438	G	Sidechain
1	CA	587	G	Sidechain
1	CA	691	G	Sidechain
1	CA	724	G	Sidechain
1	CA	740	U	Sidechain
1	CA	760	G	Sidechain
1	CA	773	G	Sidechain

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	CA	801	U	Sidechain
1	CA	832	C	Sidechain
1	CA	879	C	Sidechain
1	CA	880	C	Sidechain
1	CA	884	U	Sidechain
1	CA	9	G	Sidechain
1	CA	900	A	Sidechain
22	CV	4	G	Sidechain
22	CV	52	G	Sidechain
24	CX	18	G	Sidechain
34	DA	1023	U	Sidechain
34	DA	1025	G	Sidechain
34	DA	1132	A	Sidechain
34	DA	1158	C	Sidechain
34	DA	1161	C	Sidechain
34	DA	1188	U	Sidechain
34	DA	1192	G	Sidechain
34	DA	1340	U	Sidechain
34	DA	1349	A	Sidechain
34	DA	1352	U	Sidechain
34	DA	1438	U	Sidechain
34	DA	1629	U	Sidechain
34	DA	1647	G	Sidechain
34	DA	1675	C	Sidechain
34	DA	1692	U	Sidechain
34	DA	1758	G	Sidechain
34	DA	1772	G	Sidechain
34	DA	1773	A	Sidechain
34	DA	1775	U	Sidechain
34	DA	1807	G	Sidechain
34	DA	1834	U	Sidechain
34	DA	189	G	Sidechain
34	DA	1940	U	Sidechain
34	DA	1985	G	Sidechain
34	DA	1992	G	Sidechain
34	DA	2004	G	Sidechain
34	DA	201	C	Sidechain
34	DA	2010	G	Sidechain
34	DA	2017	U	Sidechain
34	DA	2031	A	Sidechain
34	DA	2033	A	Sidechain
34	DA	2059	A	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
34	DA	2079	U	Sidechain
34	DA	2090	G	Sidechain
34	DA	2201	C	Sidechain
34	DA	2360	A	Sidechain
34	DA	2434	A	Sidechain
34	DA	2454	G	Sidechain
34	DA	2464	C	Sidechain
34	DA	250	G	Sidechain
34	DA	2517	C	Sidechain
34	DA	2564	A	Sidechain
34	DA	2569	G	Sidechain
34	DA	2581	G	Sidechain
34	DA	2582	G	Sidechain
34	DA	2597	G	Sidechain
34	DA	2603	G	Sidechain
34	DA	2604	U	Sidechain
34	DA	2605	U	Sidechain
34	DA	261	G	Sidechain
34	DA	2682	U	Sidechain
34	DA	271(H)	G	Sidechain
34	DA	271(Q)	G	Sidechain
34	DA	271(Y)	U	Sidechain
34	DA	2764	A	Sidechain
34	DA	2779	U	Sidechain
34	DA	379	G	Sidechain
34	DA	400	G	Sidechain
34	DA	446	G	Sidechain
34	DA	459	U	Sidechain
34	DA	465	G	Sidechain
34	DA	475	U	Sidechain
34	DA	476	G	Sidechain
34	DA	488	G	Sidechain
34	DA	532	A	Sidechain
34	DA	543	C	Sidechain
34	DA	562	U	Sidechain
34	DA	567	A	Sidechain
34	DA	669	G	Sidechain
34	DA	670	A	Sidechain
34	DA	682	G	Sidechain
34	DA	726	G	Sidechain
34	DA	734	A	Sidechain
34	DA	74	A	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
34	DA	787	U	Sidechain
34	DA	79	G	Sidechain
34	DA	802	A	Sidechain
34	DA	963	U	Sidechain
34	DA	968	G	Sidechain

## 5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32329	0	16314	1350	0
1	CA	32329	0	16316	1333	0
2	AB	1901	0	1951	258	0
2	CB	1901	0	1951	256	0
3	AC	1613	0	1677	209	0
3	CC	1613	0	1677	203	0
4	AD	1703	0	1764	192	0
4	CD	1703	0	1766	191	0
5	AE	1147	0	1207	161	0
5	CE	1147	0	1206	159	0
6	AF	843	0	857	98	0
6	CF	843	0	857	101	0
7	AG	1257	0	1296	125	0
7	CG	1257	0	1296	122	0
8	AH	1116	0	1177	128	0
8	CH	1116	0	1177	130	0
9	AI	1011	0	1041	140	0
9	CI	1011	0	1041	140	0
10	AJ	795	0	840	147	0
10	CJ	795	0	840	144	0
11	AK	885	0	904	104	0
11	CK	885	0	904	96	0
12	AL	971	0	1057	122	0
12	CL	971	0	1057	120	0
13	AM	988	0	1055	156	0
13	CM	988	0	1055	151	0
14	AN	492	0	530	62	0
14	CN	492	0	529	61	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
15	AO	734	0	771	70	0
15	CO	734	0	771	76	0
16	AP	701	0	720	83	0
16	CP	701	0	720	75	0
17	AQ	824	0	891	91	0
17	CQ	824	0	891	90	0
18	AR	574	0	644	97	0
18	CR	574	0	644	94	0
19	AS	630	0	652	106	0
19	CS	630	0	652	106	0
20	AT	763	0	861	106	0
20	CT	763	0	861	102	0
21	AU	209	0	221	23	0
21	CU	209	0	221	22	0
22	AV	1645	0	838	61	0
22	CV	1645	0	838	51	0
23	AW	1623	0	821	83	0
23	AY	407	0	208	16	0
23	CW	1623	0	821	81	0
23	CY	407	0	208	13	0
24	AX	235	0	119	6	0
24	CX	235	0	119	5	0
25	B0	650	0	654	72	0
25	D0	650	0	654	78	0
26	B1	693	0	764	182	0
26	D1	693	0	764	197	0
27	B2	421	0	460	124	0
27	D2	421	0	461	125	0
28	B3	468	0	523	53	0
28	D3	468	0	523	52	0
29	B4	242	0	103	22	0
29	D4	242	0	103	23	0
30	B5	459	0	480	75	0
30	D5	459	0	480	70	0
31	B6	381	0	390	59	0
31	D6	381	0	390	56	0
32	B7	419	0	467	35	0
32	D7	419	0	467	35	0
33	B8	508	0	576	110	0
33	D8	508	0	576	114	0
34	BA	59708	0	30096	2501	0
34	DA	59708	0	30096	2505	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	BB	2551	0	1294	106	0
35	DB	2551	0	1294	100	0
36	BC	1142	0	865	109	0
36	DC	1142	0	865	106	0
37	BD	2105	0	2182	357	0
37	DD	2105	0	2182	362	0
38	BE	1564	0	1629	325	0
38	DE	1564	0	1629	323	0
39	BF	1624	0	1677	237	0
39	DF	1624	0	1677	235	0
40	BG	1474	0	1534	237	0
40	DG	1474	0	1534	242	0
41	BH	1223	0	1282	199	0
41	DH	1223	0	1282	211	0
42	BI	1132	0	1218	198	0
42	DI	1132	0	1218	200	0
43	BN	1105	0	1180	209	0
43	DN	1105	0	1180	215	0
44	BO	933	0	996	139	0
44	DO	933	0	996	139	0
45	BP	1114	0	1187	322	0
45	DP	1114	0	1187	322	0
46	BQ	1080	0	1127	224	0
46	DQ	1080	0	1127	214	0
47	BR	960	0	1021	171	0
47	DR	960	0	1021	170	0
48	BS	771	0	832	182	0
48	DS	771	0	831	186	0
49	BT	1142	0	1202	219	0
49	DT	1142	0	1202	231	0
50	BU	958	0	1015	183	0
50	DU	958	0	1014	186	0
51	BV	779	0	851	212	0
51	DV	779	0	851	216	0
52	BW	896	0	953	111	0
52	DW	896	0	953	110	0
53	BX	726	0	778	203	0
53	DX	726	0	778	200	0
54	BY	776	0	870	220	0
54	DY	776	0	870	216	0
55	BZ	1404	0	1432	219	0
55	DZ	1404	0	1432	241	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	AA	215	0	0	0	0
56	AE	1	0	0	0	0
56	AV	7	0	0	0	0
56	AW	22	0	0	0	0
56	AX	4	0	0	0	0
56	AY	1	0	0	0	0
56	B1	1	0	0	0	0
56	B2	5	0	0	0	0
56	B3	1	0	0	0	0
56	B5	2	0	0	0	0
56	B7	2	0	0	0	0
56	BA	454	0	0	0	0
56	BB	19	0	0	0	0
56	BE	1	0	0	0	0
56	BF	2	0	0	0	0
56	BN	1	0	0	0	0
56	BO	1	0	0	0	0
56	BV	1	0	0	0	0
56	BX	1	0	0	0	0
56	CA	189	0	0	0	0
56	CF	1	0	0	0	0
56	CJ	1	0	0	0	0
56	CM	1	0	0	0	0
56	CU	1	0	0	0	0
56	CV	4	0	0	0	0
56	CW	13	0	0	0	0
56	CX	6	0	0	0	0
56	D5	2	0	0	0	0
56	DA	398	0	0	0	0
56	DB	12	0	0	0	0
56	DD	2	0	0	0	0
56	DE	1	0	0	0	0
56	DF	1	0	0	0	0
56	DH	1	0	0	0	0
56	DN	1	0	0	0	0
56	DO	1	0	0	0	0
56	DS	1	0	0	0	0
56	DU	1	0	0	0	0
56	DZ	1	0	0	0	0
57	AA	42	0	45	3	0
57	CA	42	0	45	0	0
58	AD	1	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
58	AN	1	0	0	0	0
58	CD	1	0	0	0	0
58	CN	1	0	0	0	0
All	All	291075	0	196199	21274	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 44.

All (21274) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DV:70:ILE:HB	51:DV:90:PRO:HB2	1.21	1.18
42:BI:79:ILE:HG12	42:BI:140:LEU:HD11	1.21	1.17
3:CC:20:SER:HB2	3:CC:40:ARG:HH22	1.00	1.17
37:DD:35:LYS:HD3	37:DD:63:ARG:HB3	1.24	1.17
34:DA:2491:U:H5'	34:DA:2570:G:H5''	1.26	1.16
34:BA:2128:C:H2'	34:BA:2129:C:H5''	1.28	1.16
1:AA:950:U:H3'	13:AM:102:ARG:HH12	1.03	1.16
34:BA:1590:U:H2'	34:BA:1591:G:H5''	1.29	1.15
34:BA:2701:C:H3'	34:BA:2702:U:H5''	1.24	1.15
34:DA:612:C:H2'	34:DA:613:G:H5''	1.25	1.15
51:BV:70:ILE:HB	51:BV:90:PRO:HB2	1.20	1.15
53:BX:72:LYS:HG3	53:BX:74:PRO:HD3	1.23	1.14
34:DA:2781:A:H5'	34:DA:2782:G:H5'	1.19	1.14
48:DS:28:VAL:HG12	48:DS:29:PHE:H	1.12	1.14
37:BD:79:VAL:HG21	37:BD:111:LEU:HD11	1.28	1.14
34:BA:1332:G:H22	34:BA:1609:A:H2'	1.05	1.14
48:DS:89:ARG:HA	48:DS:89:ARG:HE	1.04	1.14
38:DE:52:LEU:HB2	38:DE:76:ARG:HB2	1.26	1.14
54:BY:46:LYS:H	54:BY:62:GLU:HG2	1.02	1.14
53:DX:60:ARG:HG2	53:DX:74:PRO:HD2	1.26	1.14
3:AC:148:GLY:HA3	3:AC:203:PHE:HB3	1.29	1.13
28:D3:6:VAL:HG13	28:D3:54:VAL:HG11	1.23	1.13
43:DN:65:LYS:HE2	43:DN:65:LYS:HA	1.26	1.13
49:DT:28:VAL:HG22	49:DT:47:GLY:H	1.08	1.13
53:DX:36:LYS:HZ2	53:DX:39:ILE:HA	0.99	1.13
37:DD:79:VAL:HG21	37:DD:111:LEU:HD11	1.28	1.12
45:BP:146:VAL:HG22	45:BP:147:LEU:H	1.11	1.12
51:BV:28:GLU:HG3	51:BV:29:PRO:HD3	1.25	1.12
1:AA:1441:G:H5''	1:AA:1442:G:H5''	1.25	1.12
45:BP:126:VAL:HA	45:BP:145:PRO:HB2	1.25	1.12

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BS:89:ARG:HA	48:BS:89:ARG:HE	1.02	1.12
53:DX:72:LYS:HG3	53:DX:74:PRO:HD3	1.23	1.12
48:BS:28:VAL:HG12	48:BS:29:PHE:H	1.11	1.11
2:AB:22:LYS:HZ3	2:AB:22:LYS:HA	1.09	1.11
49:BT:28:VAL:HG22	49:BT:47:GLY:H	1.11	1.11
1:CA:950:U:H3'	13:CM:102:ARG:HH12	1.03	1.11
34:DA:2175:C:H2'	34:DA:2176:A:H5''	1.29	1.11
23:AW:39:U:H2'	23:AW:40:C:H5''	1.25	1.11
26:B1:20:ARG:HD3	26:B1:41:ARG:HD3	1.33	1.11
3:CC:14:ILE:HG12	3:CC:15:THR:H	1.12	1.11
34:BA:2491:U:H5'	34:BA:2570:G:H5''	1.24	1.11
43:BN:65:LYS:HE2	43:BN:65:LYS:HA	1.25	1.11
10:AJ:80:LYS:HE3	1:CA:1162:C:H4'	1.29	1.11
34:BA:2781:A:H5'	34:BA:2782:G:H5'	1.19	1.10
34:BA:1826:G:H4'	37:BD:242:ARG:HH21	0.95	1.10
1:CA:1363(A):A:H4'	1:CA:1364:U:H5''	1.33	1.10
45:DP:146:VAL:HG22	45:DP:147:LEU:H	1.10	1.10
34:DA:2562:U:H1'	44:DO:23:ARG:HH12	1.13	1.10
54:BY:15:VAL:HG12	54:BY:16:ALA:H	1.07	1.10
34:BA:612:C:H2'	34:BA:613:G:H5''	1.26	1.10
34:BA:996:A:H4'	50:BU:92:ARG:HE	0.97	1.10
3:AC:14:ILE:HG12	3:AC:15:THR:H	1.12	1.10
34:DA:145:G:H2'	34:DA:146:G:H5''	1.31	1.10
45:BP:45:LEU:HD23	45:BP:46:LYS:H	1.10	1.10
34:DA:996:A:H4'	50:DU:92:ARG:HE	0.95	1.10
48:BS:17:ARG:HA	48:BS:20:ARG:HE	1.15	1.09
3:CC:148:GLY:HA3	3:CC:203:PHE:HB3	1.32	1.09
37:BD:35:LYS:HD3	37:BD:63:ARG:HB3	1.21	1.09
51:DV:28:GLU:HG3	51:DV:29:PRO:HD3	1.24	1.09
39:BF:53:THR:HG22	39:BF:56:GLU:HB2	1.32	1.09
53:BX:60:ARG:HG2	53:BX:74:PRO:HD2	1.26	1.09
54:DY:46:LYS:H	54:DY:62:GLU:HG2	1.03	1.09
26:B1:16:ASN:HB3	26:B1:46:LEU:HG	1.35	1.09
28:B3:6:VAL:HG13	28:B3:54:VAL:HG11	1.25	1.09
34:BA:1484:G:H2'	34:BA:1485:G:H5''	1.34	1.09
36:DC:58:VAL:HG21	36:DC:166:ASP:H	0.96	1.09
34:BA:2562:U:H1'	44:BO:23:ARG:NH1	1.68	1.08
46:DQ:82:ARG:HG2	46:DQ:82:ARG:HH11	1.16	1.08
45:DP:45:LEU:HD23	45:DP:46:LYS:H	1.11	1.08
34:BA:2562:U:H1'	44:BO:23:ARG:HH12	1.14	1.08
26:B1:13:ILE:HG21	26:B1:63:ALA:HB2	1.27	1.08

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2175:C:H2'	34:BA:2176:A:H5''	1.29	1.08
27:B2:16:LEU:H	27:B2:18:PRO:HD2	1.11	1.08
45:DP:126:VAL:HA	45:DP:145:PRO:HB2	1.23	1.08
48:DS:17:ARG:HA	48:DS:20:ARG:HE	1.13	1.08
34:DA:1484:G:H2'	34:DA:1485:G:H5''	1.35	1.08
34:DA:1590:U:H2'	34:DA:1591:G:H5''	1.30	1.08
34:DA:49:A:H4'	34:DA:50:U:H5'	1.35	1.08
36:BC:58:VAL:HG21	36:BC:166:ASP:H	0.95	1.08
39:BF:3:GLU:HG3	39:BF:19:GLU:HB2	1.34	1.08
38:BE:52:LEU:HB2	38:BE:76:ARG:HB2	1.26	1.08
42:DI:77:LEU:HD21	42:DI:101:LEU:HD13	1.36	1.08
33:B8:62:LEU:HD13	34:BA:242:G:H5''	1.33	1.08
34:DA:2701:C:H3'	34:DA:2702:U:H5''	1.24	1.08
54:DY:15:VAL:HG12	54:DY:16:ALA:H	1.04	1.08
34:DA:2128:C:H2'	34:DA:2129:C:H5''	1.28	1.08
34:DA:2758:A:H2'	34:DA:2759:G:H5''	1.33	1.08
1:AA:1363(A):A:H4'	1:AA:1364:U:H5''	1.35	1.07
20:AT:50:GLU:HB3	20:AT:100:ILE:HG12	1.36	1.07
55:DZ:97:GLU:HB3	55:DZ:125:LEU:HD21	1.30	1.07
35:DB:42:C:H4'	40:DG:67:LYS:HB2	1.36	1.07
3:AC:20:SER:HB2	3:AC:40:ARG:HH22	0.98	1.07
2:CB:22:LYS:HZ3	2:CB:22:LYS:HA	1.14	1.07
42:DI:79:ILE:HG12	42:DI:140:LEU:HD11	1.19	1.07
49:BT:91:ARG:HB3	49:BT:116:ALA:HA	1.36	1.07
34:DA:2415:G:H4'	45:DP:67:MET:H	0.94	1.07
39:DF:53:THR:HG22	39:DF:56:GLU:HB2	1.35	1.07
45:BP:45:LEU:HD23	45:BP:46:LYS:N	1.70	1.07
7:AG:64:GLN:HG3	7:AG:68:ASN:HD21	1.20	1.07
34:DA:1332:G:H22	34:DA:1609:A:H2'	1.09	1.07
27:B2:49:LYS:HD2	27:B2:53:LEU:HD13	1.34	1.06
45:BP:59:LEU:HA	45:BP:61:ARG:NH1	1.70	1.06
34:BA:145:G:H2'	34:BA:146:G:H5''	1.33	1.06
34:DA:2415:G:H4'	45:DP:67:MET:N	1.70	1.06
2:CB:22:LYS:NZ	2:CB:22:LYS:HA	1.70	1.06
38:DE:201:THR:HG22	38:DE:203:LYS:H	1.20	1.06
34:DA:2762:G:H2'	34:DA:2763:G:H5''	1.35	1.06
42:BI:77:LEU:HD21	42:BI:101:LEU:HD13	1.33	1.06
28:D3:8:LEU:HD11	28:D3:31:LEU:HD23	1.38	1.06
34:DA:1826:G:H4'	37:DD:242:ARG:HH21	0.95	1.06
34:BA:2415:G:H4'	45:BP:67:MET:H	0.95	1.05
46:BQ:82:ARG:HG2	46:BQ:82:ARG:HH11	1.14	1.05

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BX:36:LYS:HZ2	53:BX:39:ILE:HA	1.10	1.05
55:BZ:151:HIS:HB3	55:BZ:170:THR:HA	1.36	1.05
34:BA:2415:G:H4'	45:BP:67:MET:N	1.71	1.05
2:AB:22:LYS:HA	2:AB:22:LYS:NZ	1.69	1.05
34:BA:954:G:H4'	46:BQ:13:GLN:HE21	1.21	1.05
20:CT:13:LEU:H	20:CT:13:LEU:HD12	1.21	1.05
22:CV:70:G:H2'	22:CV:71:C:H5''	1.34	1.04
34:DA:145:G:C2'	34:DA:146:G:H5''	1.85	1.04
34:BA:49:A:H4'	34:BA:50:U:H5'	1.35	1.04
34:DA:2562:U:H1'	44:DO:23:ARG:NH1	1.69	1.04
12:AL:46:LYS:HG2	12:AL:47:LYS:H	1.20	1.04
33:D8:62:LEU:HD13	34:DA:242:G:H5''	1.34	1.04
11:AK:127:LYS:HE2	11:AK:127:LYS:HA	1.39	1.04
54:DY:37:VAL:HG23	54:DY:38:ILE:H	1.22	1.04
34:BA:145:G:C2'	34:BA:146:G:H5''	1.87	1.04
40:BG:111:LEU:HA	40:BG:114:ILE:HG12	1.38	1.04
48:DS:74:ALA:HB1	48:DS:103:GLU:HG3	1.36	1.04
34:BA:2758:A:H2'	34:BA:2759:G:H5''	1.35	1.04
48:BS:74:ALA:HB1	48:BS:103:GLU:HG3	1.36	1.04
20:CT:50:GLU:HB3	20:CT:100:ILE:HG12	1.35	1.04
52:BW:25:ARG:HB2	52:BW:25:ARG:HH11	1.23	1.04
44:DO:47:ILE:HG13	44:DO:48:PRO:HD2	1.39	1.04
53:BX:36:LYS:NZ	53:BX:39:ILE:HA	1.72	1.03
10:CJ:4:ILE:HB	10:CJ:74:ILE:HD11	1.37	1.03
43:DN:39:ARG:HE	43:DN:41:ASP:HB2	1.21	1.03
54:BY:8:LYS:H	54:BY:8:LYS:HD2	1.23	1.03
55:BZ:145:GLU:HG3	55:BZ:146:ILE:H	1.18	1.03
45:DP:45:LEU:HD23	45:DP:46:LYS:N	1.72	1.03
47:BR:56:LYS:HD2	47:BR:88:ARG:HA	1.39	1.03
53:BX:65:ARG:HE	53:BX:65:ARG:HA	1.22	1.03
16:AP:45:THR:HG22	16:AP:47:ASP:H	1.23	1.03
49:DT:29:ARG:HD3	49:DT:86:ILE:HG22	1.41	1.03
30:D5:4:HIS:HB3	30:D5:5:PRO:HD3	1.41	1.03
34:DA:1884:A:H2'	34:DA:1885:A:H5''	1.40	1.03
34:DA:612:C:C2'	34:DA:613:G:H5''	1.89	1.03
55:DZ:151:HIS:HB3	55:DZ:170:THR:HA	1.41	1.03
34:BA:2712:U:O2'	34:BA:2712(A):A:H5''	1.59	1.03
22:CV:71:C:H5'	22:CV:71:C:H6	1.20	1.02
34:DA:954:G:H4'	46:DQ:13:GLN:HE21	1.17	1.02
48:BS:89:ARG:HA	48:BS:89:ARG:NE	1.72	1.02
49:BT:27:THR:O	49:BT:28:VAL:HG23	1.59	1.02

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:70:G:C2'	22:CV:71:C:H5''	1.89	1.02
34:DA:2129:C:H2'	34:DA:2130:U:H4'	1.37	1.02
1:AA:1347:G:H22	1:AA:1373:G:H2'	1.25	1.02
39:DF:3:GLU:HG3	39:DF:19:GLU:HB2	1.35	1.02
34:BA:2762:G:H2'	34:BA:2763:G:H5''	1.37	1.02
41:DH:41:MET:HB3	41:DH:43:VAL:HG13	1.39	1.02
45:DP:59:LEU:HA	45:DP:61:ARG:NH1	1.74	1.02
47:DR:56:LYS:HD2	47:DR:88:ARG:HA	1.40	1.02
18:AR:56:THR:HB	18:AR:58:LEU:HD13	1.39	1.02
41:DH:96:ALA:HB2	41:DH:105:LEU:HB3	1.41	1.02
54:BY:28:LYS:O	54:BY:38:ILE:HB	1.59	1.02
10:AJ:48:THR:HA	10:AJ:62:HIS:HB3	1.41	1.02
1:CA:1347:G:H22	1:CA:1373:G:H2'	1.25	1.02
53:BX:65:ARG:HA	53:BX:65:ARG:NE	1.74	1.02
18:CR:56:THR:HB	18:CR:58:LEU:HD13	1.40	1.02
49:DT:91:ARG:HB3	49:DT:116:ALA:HA	1.37	1.02
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG22	1.40	1.02
44:BO:47:ILE:HG13	44:BO:48:PRO:HD2	1.37	1.01
54:BY:37:VAL:HG23	54:BY:38:ILE:H	1.21	1.01
11:CK:127:LYS:HA	11:CK:127:LYS:HE2	1.39	1.01
23:AW:16:U:C5	23:AW:18:G:H5'	1.95	1.01
34:BA:2103:C:H3'	34:BA:2104:G:H5''	1.41	1.01
47:BR:38:VAL:HB	47:BR:39:PRO:HD3	1.40	1.01
48:BS:89:ARG:CA	48:BS:89:ARG:HE	1.73	1.01
34:DA:571:A:H5'	34:DA:2030:A:H62	1.24	1.01
42:DI:76:THR:HG22	42:DI:139:GLN:HB3	1.40	1.01
34:BA:2129:C:H2'	34:BA:2130:U:H4'	1.39	1.01
26:D1:9:GLY:O	26:D1:10:LYS:HG3	1.59	1.01
53:DX:65:ARG:HA	53:DX:65:ARG:HE	1.20	1.01
46:BQ:11:LYS:HE2	46:BQ:85:LYS:HG2	1.42	1.01
48:DS:89:ARG:CA	48:DS:89:ARG:HE	1.74	1.01
40:BG:161:THR:HG22	40:BG:163:ALA:H	1.18	1.01
43:BN:39:ARG:HE	43:BN:41:ASP:HB2	1.24	1.01
27:D2:33:MET:HG2	53:DX:11:PRO:HD2	1.42	1.01
34:DA:1879:C:H2'	34:DA:1880:C:H5''	1.42	1.01
20:AT:57:ARG:HB2	20:AT:57:ARG:HH11	1.26	1.01
34:BA:1879:C:H2'	34:BA:1880:C:H5''	1.41	1.01
34:DA:2103:C:H3'	34:DA:2104:G:H5''	1.41	1.01
35:DB:7:G:H3'	35:DB:8:U:H5''	1.43	1.01
43:DN:42:TRP:HB2	50:DU:64:ARG:CZ	1.90	1.01
34:BA:571:A:H5'	34:BA:2030:A:H62	1.20	1.00

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:64:ALA:HA	26:B1:67:ILE:HG13	1.40	1.00
12:CL:46:LYS:HG2	12:CL:47:LYS:H	1.21	1.00
55:DZ:165:VAL:HG12	55:DZ:166:SER:H	1.23	1.00
34:BA:1578:U:H2'	34:BA:1579:A:H5''	1.41	1.00
10:AJ:4:ILE:HB	10:AJ:74:ILE:HD11	1.38	1.00
41:BH:41:MET:HB3	41:BH:43:VAL:HG13	1.39	1.00
28:B3:8:LEU:HD11	28:B3:31:LEU:HD23	1.41	1.00
55:BZ:69:THR:HG22	55:BZ:90:VAL:HA	1.42	1.00
7:CG:64:GLN:HG3	7:CG:68:ASN:HD21	1.21	1.00
16:CP:45:THR:HG22	16:CP:47:ASP:H	1.25	1.00
42:BI:9:LEU:H	42:BI:13:GLY:HA2	1.24	1.00
10:CJ:37:PRO:HA	10:CJ:72:VAL:HG22	1.42	1.00
16:AP:22:THR:HA	16:AP:33:ILE:HG12	1.43	1.00
34:BA:2464:C:HO2'	34:BA:2465:C:H6	1.02	1.00
34:BA:612:C:C2'	34:BA:613:G:H5''	1.91	1.00
38:BE:117:MET:HA	38:BE:122:PHE:H	1.26	1.00
1:AA:382:A:H2'	1:AA:383:A:H8	1.25	1.00
1:AA:585:G:H4'	12:AL:8:ASN:HD21	1.26	1.00
23:AW:39:U:C2'	23:AW:40:C:H5''	1.92	1.00
45:BP:24:GLY:HA3	45:BP:33:ARG:HH21	1.27	1.00
1:CA:382:A:H2'	1:CA:383:A:H8	1.24	1.00
34:DA:2712:U:O2'	34:DA:2712(A):A:H5''	1.61	0.99
36:BC:58:VAL:HG21	36:BC:166:ASP:N	1.77	0.99
16:CP:22:THR:HA	16:CP:33:ILE:HG12	1.42	0.99
47:DR:38:VAL:HB	47:DR:39:PRO:HD3	1.40	0.99
44:BO:64:ARG:HD3	44:BO:101:PRO:HB2	1.44	0.99
49:BT:29:ARG:HD3	49:BT:86:ILE:HG22	1.40	0.99
1:CA:382:A:H2'	1:CA:383:A:C8	1.96	0.99
45:DP:24:GLY:HA3	45:DP:33:ARG:HH21	1.26	0.99
53:DX:36:LYS:NZ	53:DX:39:ILE:HA	1.76	0.99
5:AE:76:ILE:HG12	5:AE:77:PRO:HD2	1.45	0.99
1:CA:950:U:H3'	13:CM:102:ARG:NH1	1.78	0.99
27:D2:30:ARG:HH21	53:DX:11:PRO:HG3	1.24	0.99
41:BH:13:LYS:HA	41:BH:13:LYS:HE2	1.45	0.99
43:BN:42:TRP:HB2	50:BU:64:ARG:CZ	1.91	0.99
34:DA:1578:U:H2'	34:DA:1579:A:H5''	1.40	0.99
49:DT:27:THR:O	49:DT:28:VAL:HG23	1.61	0.99
53:DX:65:ARG:HA	53:DX:65:ARG:NE	1.73	0.99
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.44	0.99
20:AT:13:LEU:HD12	20:AT:13:LEU:H	1.22	0.99
1:AA:950:U:H3'	13:AM:102:ARG:NH1	1.77	0.99

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BE:201:THR:HG22	38:BE:203:LYS:H	1.20	0.99
34:DA:2533:A:H2'	34:DA:2534:A:H5''	1.42	0.99
54:DY:28:LYS:O	54:DY:38:ILE:HB	1.63	0.99
26:D1:19:GLN:HG3	26:D1:44:PRO:HG3	1.40	0.99
42:DI:9:LEU:H	42:DI:13:GLY:HA2	1.24	0.99
34:DA:598:G:H5'	45:DP:15:ARG:HD2	1.40	0.99
26:B1:19:GLN:HE21	34:BA:379:G:H21	1.05	0.98
34:BA:2533:A:H2'	34:BA:2534:A:H5''	1.41	0.98
36:BC:168:THR:HA	36:BC:173:ALA:HB2	1.45	0.98
34:DA:1779:U:H5	34:DA:1784:A:N7	1.60	0.98
30:B5:4:HIS:HB3	30:B5:5:PRO:HD3	1.43	0.98
1:CA:585:G:H4'	12:CL:8:ASN:HD21	1.24	0.98
26:B1:47:GLN:HG2	34:BA:2230:G:H1'	1.02	0.98
34:BA:1884:A:H2'	34:BA:1885:A:H5''	1.40	0.98
1:CA:1347:G:N2	1:CA:1373:G:H2'	1.79	0.98
54:DY:90:LEU:HG	54:DY:91:GLU:H	1.22	0.98
37:DD:147:LEU:HD13	37:DD:155:LEU:HD11	1.41	0.98
1:CA:1256:A:H61	1:CA:1278:U:H1'	1.28	0.98
10:CJ:48:THR:HA	10:CJ:62:HIS:HB3	1.45	0.98
3:AC:14:ILE:HG12	3:AC:15:THR:N	1.77	0.98
10:CJ:70:ARG:HH11	10:CJ:70:ARG:HG3	1.28	0.98
42:BI:110:ASP:HB2	42:BI:113:ARG:HB2	1.45	0.98
49:DT:28:VAL:CG2	49:DT:47:GLY:H	1.75	0.98
10:AJ:70:ARG:HG3	10:AJ:70:ARG:HH11	1.29	0.98
41:BH:96:ALA:HB2	41:BH:105:LEU:HB3	1.43	0.98
42:BI:76:THR:HG22	42:BI:139:GLN:HB3	1.44	0.98
36:DC:58:VAL:HG21	36:DC:166:ASP:N	1.77	0.98
34:BA:2262:U:C2'	34:BA:2263:C:H5''	1.93	0.98
34:DA:2262:U:C2'	34:DA:2263:C:H5''	1.94	0.98
52:DW:25:ARG:HH11	52:DW:25:ARG:HB2	1.24	0.98
1:CA:180:U:H2'	1:CA:181:G:H5''	1.46	0.98
20:CT:57:ARG:HH11	20:CT:57:ARG:HB2	1.27	0.98
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.43	0.97
26:D1:26:ARG:HH21	26:D1:28:GLY:HA2	1.28	0.97
26:B1:47:GLN:CG	34:BA:2230:G:H1'	1.94	0.97
34:BA:92:A:H2'	34:BA:93:G:H8	1.27	0.97
23:CW:39:U:H2'	23:CW:40:C:H5''	1.45	0.97
37:DD:17:THR:HG23	37:DD:205:VAL:H	1.30	0.97
54:BY:90:LEU:HG	54:BY:91:GLU:H	1.25	0.97
48:DS:89:ARG:HA	48:DS:89:ARG:NE	1.73	0.97
36:BC:46:LYS:HA	36:BC:46:LYS:HE2	1.47	0.97

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D1:46:LEU:O	26:D1:46:LEU:HD22	1.64	0.97
34:DA:2359:C:H2'	34:DA:2360:A:H5'	1.46	0.97
38:DE:117:MET:HA	38:DE:122:PHE:H	1.26	0.97
44:DO:64:ARG:HD3	44:DO:101:PRO:HB2	1.44	0.97
1:AA:1256:A:H61	1:AA:1278:U:H1'	1.28	0.97
1:AA:180:U:H2'	1:AA:181:G:H5''	1.47	0.97
1:AA:382:A:H2'	1:AA:383:A:C8	1.98	0.97
54:DY:8:LYS:H	54:DY:8:LYS:HD2	1.28	0.97
35:BB:7:G:H3'	35:BB:8:U:H5''	1.43	0.97
39:BF:22:ALA:HA	39:BF:26:ALA:HB2	1.47	0.97
1:CA:78:G:H22	1:CA:91:C:H42	1.12	0.97
37:BD:174:ILE:HD12	37:BD:174:ILE:H	1.30	0.97
40:BG:82:LEU:HD22	40:BG:87:PRO:HG3	1.47	0.97
34:DA:2639:A:H2'	34:DA:2640:G:H5''	1.46	0.97
34:DA:996:A:H4'	50:DU:92:ARG:NE	1.79	0.97
41:DH:16:SER:HB2	41:DH:27:LYS:HB2	1.46	0.97
34:BA:598:G:H5'	45:BP:15:ARG:HD2	1.43	0.96
55:BZ:151:HIS:HA	55:BZ:171:ILE:HG12	1.46	0.96
5:CE:76:ILE:HG12	5:CE:77:PRO:HD2	1.44	0.96
39:DF:78:ILE:H	39:DF:78:ILE:HD13	1.28	0.96
34:BA:2681:C:H5	34:BA:2725:A:H62	1.12	0.96
39:BF:78:ILE:H	39:BF:78:ILE:HD13	1.26	0.96
36:DC:168:THR:HA	36:DC:173:ALA:HB2	1.47	0.96
1:AA:1347:G:N2	1:AA:1373:G:H2'	1.81	0.96
46:DQ:11:LYS:HE2	46:DQ:85:LYS:HG2	1.42	0.96
26:D1:10:LYS:HG2	26:D1:15:ALA:N	1.80	0.96
34:DA:92:A:H2'	34:DA:93:G:H8	1.26	0.96
41:DH:13:LYS:HA	41:DH:13:LYS:HE2	1.45	0.96
1:AA:975:A:H4'	1:AA:976:G:H5''	1.47	0.96
45:BP:16:ARG:HH11	45:BP:18:ARG:HB2	1.31	0.96
42:DI:110:ASP:HB2	42:DI:113:ARG:HB2	1.46	0.96
41:BH:152:ARG:HB3	41:BH:161:GLY:HA2	1.46	0.96
55:BZ:39:VAL:HG23	55:BZ:40:ASP:N	1.80	0.96
55:DZ:27:VAL:HG12	55:DZ:28:MET:H	1.26	0.96
34:BA:1948:G:H8	34:BA:1948:G:H5'	1.30	0.96
34:BA:2679:A:O2'	34:BA:2680:C:H5'	1.66	0.96
40:BG:76:SER:HB3	40:BG:84:LYS:H	1.29	0.96
14:AN:13:THR:N	14:AN:14:PRO:HD2	1.81	0.96
1:CA:532:A:H2	1:CA:1206:G:H21	1.10	0.96
46:DQ:30:GLY:HA2	46:DQ:107:ALA:HB2	1.47	0.96
34:BA:1590:U:C2'	34:BA:1591:G:H5''	1.95	0.95

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1689:A:H62	34:BA:1698:A:H2	0.98	0.95
49:BT:28:VAL:CG2	49:BT:47:GLY:H	1.78	0.95
51:DV:19:LYS:NZ	51:DV:20:LEU:H	1.64	0.95
12:AL:47:LYS:HB3	12:AL:48:PRO:HD3	1.47	0.95
34:BA:1826:G:H4'	37:BD:242:ARG:NH2	1.81	0.95
37:BD:147:LEU:HD13	37:BD:155:LEU:HD11	1.47	0.95
55:BZ:6:LYS:HD3	55:BZ:6:LYS:H	1.28	0.95
53:BX:60:ARG:HE	53:BX:74:PRO:HG3	1.31	0.95
34:DA:287:C:N4	34:DA:354:G:H1	1.63	0.95
36:DC:46:LYS:HA	36:DC:46:LYS:HE2	1.46	0.95
51:DV:15:GLU:HB3	51:DV:16:PRO:CD	1.96	0.95
1:AA:78:G:H22	1:AA:91:C:H42	1.12	0.95
53:BX:77:LYS:HD3	53:BX:78:LYS:HD2	1.49	0.95
46:DQ:127:ILE:HG22	46:DQ:128:LYS:H	1.30	0.95
34:BA:1717:G:H2'	34:BA:1718:G:H5''	1.48	0.95
55:BZ:79:ARG:H	55:BZ:79:ARG:HD2	1.30	0.95
18:AR:56:THR:HB	18:AR:58:LEU:CD1	1.96	0.95
27:B2:23:LYS:HB2	53:BX:5:TYR:HE1	1.31	0.95
53:BX:12:VAL:HG11	53:BX:27:THR:HG23	1.45	0.95
34:DA:1826:G:H4'	37:DD:242:ARG:NH2	1.80	0.95
45:DP:75:ILE:N	45:DP:75:ILE:HD13	1.80	0.95
34:BA:1779:U:H5	34:BA:1784:A:N7	1.63	0.95
34:BA:2175:C:C2'	34:BA:2176:A:H5''	1.96	0.95
55:DZ:116:VAL:HG12	55:DZ:117:LEU:H	1.31	0.95
43:BN:43:THR:O	43:BN:46:VAL:HG12	1.66	0.95
55:BZ:152:ALA:HB1	55:BZ:167:PRO:HB2	1.48	0.95
4:CD:73:ARG:HH11	4:CD:73:ARG:HA	1.31	0.95
33:D8:59:LYS:HD3	45:DP:50:ARG:HB3	1.49	0.95
34:DA:1590:U:C2'	34:DA:1591:G:H5''	1.97	0.95
37:DD:186:HIS:HD2	37:DD:188:GLU:H	1.13	0.95
14:CN:13:THR:N	14:CN:14:PRO:HD2	1.82	0.95
33:D8:32:LEU:C	33:D8:34:TRP:H	1.67	0.95
37:DD:17:THR:CG2	37:DD:205:VAL:HB	1.96	0.95
43:DN:43:THR:O	43:DN:46:VAL:HG12	1.67	0.95
12:AL:6:THR:H	12:AL:9:GLN:HE21	1.13	0.95
34:BA:2359:C:H2'	34:BA:2360:A:H5'	1.46	0.95
54:BY:46:LYS:N	54:BY:62:GLU:HG2	1.81	0.95
1:CA:975:A:H4'	1:CA:976:G:H5''	1.49	0.95
18:CR:56:THR:HB	18:CR:58:LEU:CD1	1.96	0.95
26:D1:27:GLU:HG2	26:D1:32:LYS:HB2	1.48	0.95
45:DP:16:ARG:HH11	45:DP:18:ARG:HB2	1.30	0.95

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:DX:60:ARG:HE	53:DX:74:PRO:HG3	1.32	0.95
34:BA:2036:C:H6	34:BA:2036:C:H5'	1.31	0.94
1:CA:1117:G:H4'	9:CI:104:ARG:CZ	1.97	0.94
26:D1:62:VAL:HG13	26:D1:64:ALA:H	1.32	0.94
40:DG:112:PRO:C	40:DG:113:ARG:HA	1.88	0.94
49:DT:40:THR:O	49:DT:41:ARG:HB2	1.66	0.94
34:BA:2893:G:H5'	34:BA:2894:G:H5'	1.49	0.94
51:BV:15:GLU:HB3	51:BV:16:PRO:CD	1.97	0.94
34:DA:2175:C:C2'	34:DA:2176:A:H5''	1.96	0.94
1:AA:1117:G:H4'	9:AI:104:ARG:CZ	1.96	0.94
3:AC:20:SER:HB2	3:AC:40:ARG:NH2	1.82	0.94
27:B2:55:ARG:NH1	34:BA:72:U:H5'	1.82	0.94
45:BP:95:VAL:HA	45:BP:99:LEU:HD23	1.49	0.94
1:CA:979:C:H3'	1:CA:980:C:H5''	1.49	0.94
26:D1:78:LYS:NZ	26:D1:93:GLU:HB2	1.82	0.94
45:DP:16:ARG:HG2	45:DP:18:ARG:H	1.31	0.94
54:DY:46:LYS:N	54:DY:62:GLU:HG2	1.83	0.94
34:DA:2358:G:H1	45:DP:55:ARG:HH22	1.15	0.94
34:BA:996:A:H4'	50:BU:92:ARG:NE	1.81	0.94
54:BY:95:LYS:HG2	54:BY:101:LYS:H	1.33	0.94
42:DI:129:THR:HG23	42:DI:135:GLU:HB3	1.49	0.94
2:AB:18:GLY:H	2:AB:42:ILE:HG22	1.32	0.94
37:BD:35:LYS:HG2	37:BD:64:ILE:N	1.82	0.94
41:BH:16:SER:HB2	41:BH:27:LYS:HB2	1.47	0.94
34:DA:2206:G:H21	34:DA:2207:G:H5'	1.31	0.94
4:AD:73:ARG:HH11	4:AD:73:ARG:HA	1.31	0.94
43:BN:55:VAL:HG12	43:BN:126:PRO:HA	1.49	0.94
51:BV:19:LYS:NZ	51:BV:20:LEU:H	1.65	0.94
34:DA:1301:A:O2'	34:DA:1302:A:H2'	1.67	0.94
34:DA:2893:G:H5'	34:DA:2894:G:H5'	1.49	0.94
39:DF:22:ALA:HA	39:DF:26:ALA:HB2	1.50	0.94
39:DF:24:LEU:HB3	39:DF:25:PRO:HD2	1.48	0.94
41:DH:127:GLU:HB3	41:DH:128:PRO:HD2	1.50	0.94
51:DV:19:LYS:HG3	51:DV:20:LEU:N	1.81	0.94
53:DX:12:VAL:HG11	53:DX:27:THR:HG23	1.47	0.94
43:BN:73:THR:O	43:BN:75:TYR:N	2.01	0.94
41:DH:152:ARG:HB3	41:DH:161:GLY:HA2	1.47	0.94
34:DA:2012:G:H4'	52:DW:96:ILE:HD11	1.49	0.94
39:BF:3:GLU:HB2	39:BF:20:LEU:H	1.33	0.94
1:AA:979:C:H3'	1:AA:980:C:H5''	1.49	0.94
23:AW:16:U:H5	23:AW:18:G:H5'	1.31	0.94

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:287:C:N4	34:BA:354:G:H1	1.65	0.94
42:DI:38:LEU:H	42:DI:38:LEU:HD12	1.32	0.94
34:BA:2206:G:H21	34:BA:2207:G:H5'	1.32	0.94
38:BE:14:ILE:HD11	38:BE:173:VAL:HG11	1.49	0.94
39:BF:24:LEU:HB3	39:BF:25:PRO:HD2	1.47	0.94
1:CA:1441:G:H5''	1:CA:1442:G:H5''	1.50	0.94
44:DO:22:ILE:HG12	44:DO:41:ALA:HA	1.50	0.94
5:AE:101:ILE:HG13	5:AE:119:LEU:HD23	1.49	0.93
27:B2:32:LEU:HG	27:B2:33:MET:H	1.28	0.93
34:BA:1019:U:H3	34:BA:1142(A):A:H62	1.11	0.93
37:BD:17:THR:CG2	37:BD:205:VAL:HB	1.99	0.93
45:BP:16:ARG:HG2	45:BP:18:ARG:H	1.31	0.93
33:B8:59:LYS:HD3	45:BP:50:ARG:HB3	1.50	0.93
1:CA:442:C:H42	1:CA:492:G:H1	1.15	0.93
18:AR:53:ARG:HG3	18:AR:63:GLN:HE21	1.29	0.93
30:B5:55:ARG:HG3	30:B5:56:LYS:H	1.33	0.93
34:BA:2639:A:H2'	34:BA:2640:G:H5''	1.48	0.93
44:BO:22:ILE:HG12	44:BO:41:ALA:HA	1.50	0.93
37:DD:174:ILE:HD12	37:DD:174:ILE:H	1.33	0.93
1:AA:442:C:H42	1:AA:492:G:H1	1.13	0.93
34:DA:2464:C:HO2'	34:DA:2465:C:H6	1.02	0.93
37:BD:27:THR:HG23	37:BD:28:GLU:H	1.34	0.93
52:BW:6:ILE:HG12	52:BW:104:THR:HG23	1.50	0.93
12:CL:47:LYS:HB3	12:CL:48:PRO:HD3	1.51	0.93
34:DA:286:C:H2'	34:DA:287:C:H5''	1.49	0.93
34:BA:286:C:H2'	34:BA:287:C:H5''	1.51	0.93
46:BQ:30:GLY:HA2	46:BQ:107:ALA:HB2	1.47	0.93
27:D2:32:LEU:HG	27:D2:33:MET:N	1.83	0.93
34:DA:2636:U:O2'	34:DA:2637:U:H5''	1.68	0.93
43:DN:73:THR:O	43:DN:75:TYR:N	2.01	0.93
49:DT:32:TYR:HD2	49:DT:32:TYR:N	1.65	0.93
51:DV:15:GLU:HB3	51:DV:16:PRO:HD2	1.51	0.93
52:DW:6:ILE:HG12	52:DW:104:THR:HG23	1.48	0.93
1:AA:818:G:O2'	1:AA:819:A:H5''	1.69	0.93
20:AT:56:MET:HG3	20:AT:88:VAL:HG21	1.51	0.93
45:DP:101:VAL:HG23	45:DP:107:LYS:HA	1.51	0.93
47:DR:45:ARG:HG3	47:DR:46:GLY:H	1.34	0.93
49:DT:28:VAL:HG22	49:DT:47:GLY:N	1.83	0.93
54:DY:95:LYS:HG2	54:DY:101:LYS:H	1.32	0.93
46:BQ:75:THR:HG21	46:BQ:85:LYS:HE3	1.51	0.93
54:BY:95:LYS:HB3	54:BY:100:ALA:HA	1.49	0.93

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:72:A:H3'	22:CV:73:A:H5''	1.50	0.93
39:DF:139:PHE:HB2	39:DF:166:ALA:HB1	1.51	0.93
50:DU:31:SER:HB3	50:DU:34:LYS:HB2	1.50	0.93
50:DU:64:ARG:HA	50:DU:64:ARG:NE	1.84	0.93
1:AA:1293:G:HO2'	1:AA:1294:G:H8	0.98	0.93
1:AA:1321:C:C5'	1:AA:1322:C:H5''	1.99	0.93
12:AL:32:PHE:HB3	12:AL:84:LEU:HD21	1.51	0.93
27:B2:41:ILE:HG12	34:BA:94(A):G:N2	1.84	0.93
55:BZ:39:VAL:HG23	55:BZ:40:ASP:H	1.32	0.93
37:DD:27:THR:O	37:DD:29:PRO:HD2	1.69	0.93
55:DZ:126:VAL:HG12	55:DZ:163:LEU:HA	1.48	0.93
1:CA:1057:G:H5''	3:CC:154:SER:HB2	1.51	0.92
33:B8:32:LEU:C	33:B8:34:TRP:H	1.68	0.92
38:DE:77:ILE:HG22	38:DE:78:LEU:H	1.32	0.92
45:DP:95:VAL:HA	45:DP:99:LEU:HD23	1.48	0.92
1:AA:1057:G:H5''	3:AC:154:SER:HB2	1.48	0.92
34:BA:2128:C:C2'	34:BA:2129:C:H5''	1.99	0.92
2:CB:18:GLY:H	2:CB:42:ILE:HG22	1.33	0.92
37:DD:35:LYS:HG2	37:DD:64:ILE:N	1.84	0.92
46:DQ:43:THR:HA	46:DQ:94:VAL:HG12	1.47	0.92
54:DY:95:LYS:HB3	54:DY:100:ALA:HA	1.50	0.92
22:AV:52:G:HO2'	22:AV:53:G:H8	1.00	0.92
50:BU:64:ARG:NE	50:BU:64:ARG:HA	1.83	0.92
51:BV:19:LYS:HG3	51:BV:20:LEU:N	1.81	0.92
3:CC:20:SER:HB2	3:CC:40:ARG:NH2	1.84	0.92
43:DN:65:LYS:HD3	43:DN:67:LEU:HG	1.52	0.92
46:DQ:43:THR:OG1	46:DQ:46:GLN:HG3	1.68	0.92
34:BA:329:G:H1	54:BY:19:LYS:HE3	1.35	0.92
34:DA:1689:A:H62	34:DA:1698:A:H2	1.04	0.92
3:AC:105:GLU:HG2	3:AC:106:VAL:H	1.35	0.92
42:BI:144:VAL:HG12	42:BI:145:VAL:H	1.35	0.92
50:BU:90:VAL:HG12	50:BU:91:ASP:H	1.35	0.92
53:BX:53:LYS:HE3	53:BX:55:ASN:HD21	1.32	0.92
5:CE:101:ILE:HG13	5:CE:119:LEU:HD23	1.49	0.92
34:DA:1717:G:H2'	34:DA:1718:G:H5''	1.49	0.92
34:DA:2128:C:C2'	34:DA:2129:C:H5''	1.99	0.92
43:DN:9:VAL:HG12	43:DN:10:GLU:H	1.33	0.92
38:BE:77:ILE:HG22	38:BE:78:LEU:H	1.35	0.92
30:D5:55:ARG:HG3	30:D5:56:LYS:H	1.32	0.92
34:DA:2175:C:H1'	36:DC:215:THR:HA	1.52	0.92
39:DF:3:GLU:HB2	39:DF:20:LEU:H	1.34	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DN:55:VAL:HG12	43:DN:126:PRO:HA	1.49	0.92
45:BP:58:THR:O	45:BP:61:ARG:NE	2.02	0.92
46:BQ:43:THR:HA	46:BQ:94:VAL:HG12	1.51	0.92
55:BZ:158:PRO:HG2	55:BZ:161:VAL:HG21	1.51	0.92
1:CA:954:G:H4'	13:CM:120:LYS:HG3	1.52	0.92
34:DA:1494:A:O2'	34:DA:1495:A:H5''	1.70	0.92
50:DU:90:VAL:HG12	50:DU:91:ASP:H	1.34	0.92
34:BA:2781:A:C5'	34:BA:2782:G:H5'	2.00	0.92
37:BD:27:THR:HG21	37:BD:83:GLU:HG2	1.50	0.92
34:DA:2681:C:H5	34:DA:2725:A:H62	1.13	0.92
39:DF:32:LEU:HD21	39:DF:105:VAL:HG13	1.52	0.92
41:BH:44:VAL:HG12	41:BH:45:VAL:H	1.34	0.92
53:BX:12:VAL:HG12	53:BX:27:THR:O	1.70	0.92
54:DY:15:VAL:HG12	54:DY:16:ALA:N	1.85	0.92
11:AK:29:ILE:HB	11:AK:44:SER:HB3	1.52	0.91
13:AM:97:PRO:C	13:AM:98:VAL:HA	1.89	0.91
55:BZ:10:ARG:HH21	55:BZ:26:GLY:H	1.13	0.91
34:DA:2781:A:C5'	34:DA:2782:G:H5'	1.99	0.91
53:DX:77:LYS:HD3	53:DX:78:LYS:HD2	1.50	0.91
34:BA:2012:G:H4'	52:BW:96:ILE:HD11	1.53	0.91
44:BO:101:PRO:O	44:BO:102:VAL:HG13	1.70	0.91
14:CN:13:THR:H	14:CN:14:PRO:HD2	1.34	0.91
18:CR:65:ILE:HD12	18:CR:66:LEU:N	1.84	0.91
34:DA:2068:U:H3	34:DA:2430:A:H2	1.14	0.91
34:DA:329:G:H1	54:DY:19:LYS:HE3	1.35	0.91
43:DN:24:GLY:O	43:DN:28:THR:HG22	1.69	0.91
4:AD:43:HIS:HA	4:AD:46:LYS:HE3	1.52	0.91
1:AA:1054:C:H42	23:AY:34:G:H1'	1.35	0.91
22:AV:2:G:H4'	25:B0:7:LEU:CB	2.01	0.91
26:B1:26:ARG:HB2	26:B1:34:THR:HA	1.50	0.91
41:BH:92:ILE:HG22	41:BH:93:GLY:H	1.34	0.91
34:DA:27:G:HO2'	34:DA:28:A:H8	0.92	0.91
37:BD:186:HIS:HD2	37:BD:188:GLU:H	1.16	0.91
50:BU:24:TYR:HB2	50:BU:29:SER:HB3	1.52	0.91
1:CA:16:A:O2'	1:CA:17:U:H5'	1.68	0.91
18:CR:53:ARG:HG3	18:CR:63:GLN:HE21	1.32	0.91
39:BF:101:LEU:HD12	39:BF:102:PRO:HD2	1.51	0.91
30:D5:20:ARG:HH12	52:DW:15:ARG:CZ	1.83	0.91
45:DP:131:SER:H	45:DP:134:ALA:HB3	1.33	0.91
45:DP:62:LEU:H	45:DP:62:LEU:HD13	1.34	0.91
1:AA:16:A:O2'	1:AA:17:U:H5'	1.70	0.91

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:65:ILE:HD12	18:AR:66:LEU:N	1.86	0.91
34:BA:860:U:H5	34:BA:917:A:N7	1.69	0.91
39:BF:139:PHE:HB2	39:BF:166:ALA:HB1	1.49	0.91
3:CC:105:GLU:HG2	3:CC:106:VAL:H	1.34	0.91
3:CC:14:ILE:HG12	3:CC:15:THR:N	1.78	0.91
26:B1:47:GLN:HG2	34:BA:2230:G:C1'	1.98	0.91
31:B6:33:LYS:HA	31:B6:33:LYS:HE2	1.51	0.91
44:BO:19:ILE:HG22	44:BO:43:VAL:HA	1.52	0.91
34:DA:1131:G:HO2'	34:DA:1132:A:H8	0.95	0.91
34:DA:676:A:H8	34:DA:2069:G:H21	1.10	0.91
34:BA:1224:C:O3'	51:BV:88:ARG:HB3	1.69	0.91
34:BA:1301:A:O2'	34:BA:1302:A:H2'	1.68	0.91
34:BA:914:C:H2'	34:BA:915:C:H5'	1.52	0.91
52:BW:59:VAL:HG12	52:BW:60:ASN:N	1.86	0.91
13:CM:97:PRO:C	13:CM:98:VAL:HA	1.91	0.91
44:DO:19:ILE:HG22	44:DO:43:VAL:HA	1.53	0.91
45:DP:58:THR:O	45:DP:61:ARG:NE	2.04	0.91
34:BA:1332:G:H22	34:BA:1609:A:C2'	1.83	0.91
48:BS:85:VAL:HG23	48:BS:106:ARG:HB2	1.52	0.91
49:BT:40:THR:O	49:BT:41:ARG:HB2	1.68	0.91
4:CD:96:LEU:H	4:CD:96:LEU:HD22	1.35	0.91
26:B1:13:ILE:HG21	26:B1:63:ALA:CB	2.00	0.91
34:BA:2636:U:O2'	34:BA:2637:U:H5''	1.71	0.91
37:BD:34:VAL:HG21	37:BD:103:ARG:HA	1.49	0.91
12:CL:6:THR:H	12:CL:9:GLN:HE21	1.12	0.91
5:AE:101:ILE:H	5:AE:101:ILE:HD13	1.35	0.90
37:BD:27:THR:O	37:BD:29:PRO:HD2	1.71	0.90
42:BI:38:LEU:HD12	42:BI:38:LEU:H	1.35	0.90
45:BP:75:ILE:N	45:BP:75:ILE:HD13	1.86	0.90
1:CA:579:G:H5'	1:CA:728:A:H1'	1.50	0.90
1:CA:9:G:H5''	5:CE:122:GLU:OE2	1.71	0.90
11:CK:29:ILE:HB	11:CK:44:SER:HB3	1.53	0.90
28:D3:8:LEU:CD1	28:D3:31:LEU:HD23	2.01	0.90
37:DD:34:VAL:HG21	37:DD:103:ARG:HA	1.52	0.90
45:DP:101:VAL:HG13	45:DP:102:ARG:H	1.36	0.90
49:DT:32:TYR:CD2	49:DT:32:TYR:N	2.36	0.90
53:DX:27:THR:HB	53:DX:78:LYS:N	1.86	0.90
34:BA:27:G:HO2'	34:BA:28:A:H8	0.97	0.90
34:DA:1453:U:H5'	47:DR:63:ARG:HE	1.35	0.90
41:DH:92:ILE:HG22	41:DH:93:GLY:H	1.36	0.90
41:BH:127:GLU:HB3	41:BH:128:PRO:HD2	1.50	0.90

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BN:57:ALA:HB3	43:BN:124:ALA:HA	1.53	0.90
55:BZ:15:PRO:O	55:BZ:19:ARG:HG3	1.71	0.90
7:CG:47:CYS:HA	7:CG:50:ILE:HG12	1.53	0.90
34:DA:2036:C:H6	34:DA:2036:C:H5'	1.34	0.90
55:DZ:130:PRO:HA	55:DZ:133:ILE:HD11	1.52	0.90
43:BN:9:VAL:HG12	43:BN:10:GLU:H	1.34	0.90
34:BA:1453:U:H5'	47:BR:63:ARG:HE	1.35	0.90
50:BU:31:SER:HB3	50:BU:34:LYS:HB2	1.52	0.90
54:BY:15:VAL:HG12	54:BY:16:ALA:N	1.87	0.90
14:CN:3:ARG:HB3	14:CN:3:ARG:HH11	1.36	0.90
26:D1:26:ARG:HG2	26:D1:34:THR:OG1	1.71	0.90
34:DA:1024:G:H3'	34:DA:1025:G:H5''	1.52	0.90
34:DA:191:A:O2'	34:DA:192:C:H5'	1.71	0.90
55:DZ:151:HIS:HA	55:DZ:171:ILE:HG12	1.53	0.90
37:BD:35:LYS:HD3	37:BD:63:ARG:CB	2.00	0.90
45:BP:101:VAL:HG23	45:BP:107:LYS:HA	1.53	0.90
1:CA:1321:C:C5'	1:CA:1322:C:H5''	1.99	0.90
3:CC:54:ARG:HH12	3:CC:56:ASP:HB2	1.35	0.90
34:DA:914:C:H2'	34:DA:915:C:H5'	1.52	0.90
1:AA:954:G:H4'	13:AM:120:LYS:HG3	1.51	0.90
47:BR:45:ARG:HG3	47:BR:46:GLY:H	1.37	0.90
49:BT:32:TYR:N	49:BT:32:TYR:HD2	1.68	0.90
50:BU:34:LYS:HA	50:BU:34:LYS:HE2	1.54	0.90
23:CW:39:U:H2'	23:CW:40:C:C5'	2.01	0.90
10:CJ:6:ILE:HD11	10:CJ:72:VAL:HB	1.53	0.90
31:D6:33:LYS:HA	31:D6:33:LYS:HE2	1.51	0.90
42:DI:144:VAL:HG12	42:DI:145:VAL:H	1.37	0.90
26:B1:27:GLU:HG2	26:B1:32:LYS:HB2	1.54	0.90
34:BA:1494:A:O2'	34:BA:1495:A:H5''	1.71	0.90
34:BA:676:A:H8	34:BA:2069:G:H21	1.15	0.90
39:BF:66:PRO:O	39:BF:67:GLN:HB3	1.70	0.90
45:BP:23:PRO:HB2	45:BP:33:ARG:HG3	1.53	0.90
49:BT:32:TYR:CD2	49:BT:32:TYR:N	2.40	0.90
20:CT:56:MET:HG3	20:CT:88:VAL:HG21	1.51	0.90
46:DQ:52:VAL:HG13	46:DQ:53:ALA:H	1.36	0.90
2:AB:137:ARG:HA	2:AB:137:ARG:HH11	1.37	0.90
34:BA:2781:A:H5'	34:BA:2782:G:C5'	2.02	0.90
34:DA:1948:G:H5'	34:DA:1948:G:H8	1.33	0.90
34:DA:2758:A:C2'	34:DA:2759:G:H5''	2.01	0.90
34:DA:658:C:H2'	34:DA:659:C:H5''	1.54	0.90
45:DP:23:PRO:HB2	45:DP:33:ARG:HG3	1.52	0.90

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:75:ILE:HD13	54:DY:76:CYS:H	1.37	0.90
26:B1:47:GLN:HB2	34:BA:397:G:H5''	1.53	0.89
43:BN:65:LYS:HD3	43:BN:67:LEU:HG	1.53	0.89
54:BY:45:VAL:HA	54:BY:62:GLU:HB2	1.53	0.89
34:DA:389:G:H22	45:DP:71:VAL:HG12	1.36	0.89
44:DO:101:PRO:O	44:DO:102:VAL:HG13	1.71	0.89
1:AA:9:G:H5''	5:AE:122:GLU:OE2	1.72	0.89
10:AJ:6:ILE:HG22	10:AJ:98:ILE:HG13	1.54	0.89
42:BI:129:THR:HG23	42:BI:135:GLU:HB3	1.51	0.89
34:BA:389:G:H22	45:BP:71:VAL:HG12	1.37	0.89
49:BT:29:ARG:HB3	49:BT:85:LYS:HA	1.50	0.89
53:BX:27:THR:HB	53:BX:78:LYS:N	1.86	0.89
22:CV:70:G:H2'	22:CV:71:C:C5'	2.02	0.89
14:AN:3:ARG:HB3	14:AN:3:ARG:NH1	1.88	0.89
41:BH:118:PRO:HG2	41:BH:121:ILE:HB	1.55	0.89
48:BS:98:VAL:HG13	48:BS:100:ALA:H	1.37	0.89
49:BT:28:VAL:HG22	49:BT:47:GLY:N	1.87	0.89
37:DD:35:LYS:HD3	37:DD:63:ARG:CB	2.01	0.89
46:DQ:75:THR:HG21	46:DQ:85:LYS:HE3	1.52	0.89
52:DW:59:VAL:HG12	52:DW:60:ASN:N	1.83	0.89
45:BP:131:SER:H	45:BP:134:ALA:HB3	1.34	0.89
51:BV:22:VAL:O	51:BV:23:GLU:HB2	1.72	0.89
55:BZ:33:LEU:HD23	55:BZ:90:VAL:HG21	1.53	0.89
34:DA:2348:U:C2'	34:DA:2349:G:H5''	2.02	0.89
38:DE:14:ILE:HD11	38:DE:173:VAL:HG11	1.53	0.89
23:AW:39:U:H2'	23:AW:40:C:C5'	2.03	0.89
36:BC:49:ILE:HD12	36:BC:49:ILE:H	1.37	0.89
1:CA:17:U:H2'	1:CA:18:C:C6	2.08	0.89
37:DD:44:ASN:HB2	37:DD:48:ARG:O	1.72	0.89
34:BA:286:C:H42	34:BA:355:G:H1	1.20	0.89
46:BQ:127:ILE:HG22	46:BQ:128:LYS:H	1.36	0.89
46:BQ:43:THR:OG1	46:BQ:46:GLN:HG3	1.71	0.89
27:D2:47:ASN:HA	27:D2:50:ILE:O	1.71	0.89
34:DA:2723:C:H5''	47:DR:2:ARG:CD	2.02	0.89
34:DA:814:C:H5''	51:DV:86:GLY:HA3	1.54	0.89
28:B3:8:LEU:CD1	28:B3:31:LEU:HD23	2.03	0.89
34:BA:1528(A):A:H3'	34:BA:1529:G:H5''	1.55	0.89
34:DA:2640:G:H5'	34:DA:2640:G:H8	1.38	0.89
34:BA:1024:G:H3'	34:BA:1025:G:H5''	1.53	0.89
34:BA:2348:U:C2'	34:BA:2349:G:H5''	2.02	0.89
51:BV:15:GLU:HB3	51:BV:16:PRO:HD2	1.52	0.89

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:21:ARG:HD3	51:BV:21:ARG:H	1.36	0.89
2:CB:137:ARG:HA	2:CB:137:ARG:HH11	1.38	0.89
34:DA:2472:G:H2'	34:DA:2529:G:N2	1.88	0.89
54:DY:28:LYS:HA	54:DY:39:VAL:H	1.38	0.89
1:AA:1504:G:OP1	1:AA:1507:A:H4'	1.72	0.89
8:AH:102:ARG:H	8:AH:102:ARG:HE	1.20	0.89
34:DA:1019:U:H3	34:DA:1142(A):A:H62	1.13	0.89
34:DA:2753:A:O2'	34:DA:2754:U:H5'	1.72	0.89
43:DN:54:VAL:HB	43:DN:122:VAL:HG22	1.55	0.89
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.07	0.89
34:BA:1594:G:H5'	34:BA:1594:G:H8	1.37	0.89
40:BG:76:SER:HB2	40:BG:83:ARG:HB3	1.54	0.89
42:BI:71:ILE:HG13	42:BI:72:LEU:HD22	1.55	0.89
45:BP:115:LEU:HA	45:BP:134:ALA:HB2	1.54	0.89
49:BT:55:ASN:HD22	49:BT:58:ASN:HD21	1.21	0.89
54:BY:46:LYS:H	54:BY:62:GLU:CG	1.86	0.89
37:DD:27:THR:HG23	37:DD:28:GLU:H	1.35	0.89
1:AA:1190:G:H3'	3:AC:3:ASN:ND2	1.88	0.88
55:BZ:74:VAL:HG22	55:BZ:86:VAL:HG13	1.53	0.88
3:CC:73:PRO:O	3:CC:76:VAL:HG22	1.73	0.88
34:DA:451:C:H4'	39:DF:52:LYS:NZ	1.86	0.88
45:DP:115:LEU:HA	45:DP:134:ALA:HB2	1.55	0.88
48:DS:13:ARG:O	48:DS:15:ARG:HG2	1.74	0.88
50:DU:88:ILE:C	50:DU:90:VAL:H	1.76	0.88
53:DX:36:LYS:HD2	53:DX:36:LYS:O	1.73	0.88
1:AA:1442:G:C8	1:AA:1442:G:H5'	2.08	0.88
45:BP:101:VAL:HG13	45:BP:102:ARG:H	1.36	0.88
53:BX:63:LYS:HE3	53:BX:70:LEU:HD22	1.55	0.88
55:BZ:4:ARG:HG2	55:BZ:58:VAL:HB	1.53	0.88
33:D8:30:ARG:HH21	45:DP:62:LEU:HB2	1.38	0.88
34:DA:2701:C:H3'	34:DA:2702:U:C5'	2.03	0.88
34:DA:2762:G:C2'	34:DA:2763:G:H5''	2.03	0.88
34:DA:27:G:H22	34:DA:512:G:H2'	1.38	0.88
43:DN:57:ALA:HB3	43:DN:124:ALA:HA	1.55	0.88
4:AD:96:LEU:H	4:AD:96:LEU:HD22	1.37	0.88
27:B2:47:ASN:C	27:B2:49:LYS:H	1.75	0.88
34:BA:259:G:H21	34:BA:621:A:H8	1.21	0.88
35:BB:74:U:H2'	35:BB:75:G:H5''	1.54	0.88
43:BN:54:VAL:HB	43:BN:122:VAL:HG22	1.55	0.88
38:DE:77:ILE:HG22	38:DE:78:LEU:N	1.88	0.88
39:DF:101:LEU:HD12	39:DF:102:PRO:HD2	1.54	0.88

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DR:10:LEU:HB3	47:DR:17:ARG:HD2	1.55	0.88
53:DX:63:LYS:HE3	53:DX:70:LEU:HD22	1.53	0.88
35:DB:75:G:H1'	55:DZ:27:VAL:HG21	1.55	0.88
26:B1:13:ILE:HG23	26:B1:14:VAL:H	1.34	0.88
12:CL:32:PHE:HB3	12:CL:84:LEU:HD21	1.55	0.88
51:DV:21:ARG:H	51:DV:21:ARG:HD3	1.38	0.88
53:DX:53:LYS:HE3	53:DX:55:ASN:HD21	1.36	0.88
34:BA:1332:G:N2	34:BA:1609:A:H2'	1.88	0.88
34:BA:1614:A:H62	52:BW:93:ALA:HB2	1.38	0.88
37:BD:17:THR:HG23	37:BD:205:VAL:H	1.35	0.88
1:CA:1293:G:HO2'	1:CA:1294:G:H8	0.96	0.88
4:CD:43:HIS:HA	4:CD:46:LYS:HE3	1.54	0.88
5:CE:101:ILE:H	5:CE:101:ILE:HD13	1.36	0.88
34:DA:1332:G:H22	34:DA:1609:A:C2'	1.87	0.88
34:DA:1879:C:C2'	34:DA:1880:C:H5''	2.03	0.88
41:DH:118:PRO:HG2	41:DH:121:ILE:HB	1.53	0.88
34:DA:1614:A:H62	52:DW:93:ALA:HB2	1.37	0.88
1:AA:579:G:H5'	1:AA:728:A:H1'	1.53	0.88
3:AC:54:ARG:HH12	3:AC:56:ASP:HB2	1.36	0.88
28:B3:8:LEU:HA	28:B3:54:VAL:HG22	1.56	0.88
34:BA:191:A:O2'	34:BA:192:C:H5'	1.74	0.88
34:DA:1594:G:H5'	34:DA:1594:G:H8	1.36	0.88
38:DE:35:GLN:HE21	38:DE:37:ARG:HE	1.22	0.88
41:DH:44:VAL:HG12	41:DH:45:VAL:H	1.37	0.88
3:AC:73:PRO:O	3:AC:76:VAL:HG22	1.73	0.88
37:BD:64:ILE:O	37:BD:64:ILE:HG12	1.73	0.88
38:BE:75:VAL:C	38:BE:77:ILE:H	1.76	0.88
34:DA:1224:C:O3'	51:DV:88:ARG:HB3	1.71	0.88
10:AJ:5:ARG:HA	10:AJ:73:ASP:OD1	1.72	0.88
34:BA:2701:C:H3'	34:BA:2702:U:C5'	2.03	0.88
1:CA:1277:C:HO2'	1:CA:1279:A:H8	1.20	0.88
37:DD:35:LYS:HG2	37:DD:64:ILE:H	1.37	0.88
42:DI:71:ILE:HG13	42:DI:72:LEU:HD22	1.55	0.88
50:DU:24:TYR:HB2	50:DU:29:SER:HB3	1.53	0.88
1:AA:552:U:O2'	1:AA:553:A:H5'	1.74	0.88
25:B0:36:ILE:HD11	34:BA:2355:C:H5'	1.55	0.88
34:BA:2377:A:H4'	48:BS:107:GLU:HB3	1.56	0.88
34:BA:571:A:H5'	34:BA:2030:A:N6	1.89	0.88
34:BA:1826:G:C4'	37:BD:242:ARG:HH21	1.85	0.88
37:BD:35:LYS:HG2	37:BD:64:ILE:H	1.34	0.88
33:B8:30:ARG:HH21	45:BP:62:LEU:HB2	1.38	0.88

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.08	0.88
26:D1:46:LEU:HD21	26:D1:48:LYS:HE3	1.55	0.88
34:DA:860:U:H5	34:DA:917:A:N7	1.70	0.88
40:DG:88:ILE:HG13	40:DG:89:GLY:H	1.38	0.88
14:AN:3:ARG:HH11	14:AN:3:ARG:HB3	1.35	0.88
43:BN:46:VAL:HG13	43:BN:47:ALA:H	1.38	0.88
10:CJ:5:ARG:HA	10:CJ:73:ASP:OD1	1.73	0.88
37:DD:267:SER:C	37:DD:269:PHE:H	1.77	0.88
48:DS:98:VAL:HG13	48:DS:100:ALA:H	1.38	0.88
14:AN:13:THR:H	14:AN:14:PRO:HD2	1.35	0.87
33:B8:32:LEU:HB3	33:B8:35:GLN:H	1.37	0.87
34:BA:365:C:H6	34:BA:365:C:H5'	1.39	0.87
34:DA:286:C:H42	34:DA:355:G:H1	1.19	0.87
37:DD:27:THR:HG21	37:DD:83:GLU:HG2	1.55	0.87
10:AJ:6:ILE:HD11	10:AJ:72:VAL:HB	1.56	0.87
40:BG:145:THR:HG23	40:BG:148:MET:HB2	1.56	0.87
54:BY:28:LYS:HA	54:BY:39:VAL:H	1.38	0.87
14:CN:3:ARG:NH1	14:CN:3:ARG:HB3	1.89	0.87
45:DP:38:GLN:HG3	45:DP:39:LYS:H	1.37	0.87
34:BA:1879:C:C2'	34:BA:1880:C:H5''	2.04	0.87
34:BA:2068:U:H3	34:BA:2430:A:H2	1.17	0.87
34:BA:2758:A:C2'	34:BA:2759:G:H5''	2.04	0.87
43:BN:46:VAL:HG11	43:BN:48:MET:HG3	1.56	0.87
42:DI:79:ILE:HG12	42:DI:140:LEU:CD1	2.05	0.87
48:DS:85:VAL:HG23	48:DS:106:ARG:HB2	1.55	0.87
55:DZ:18:LEU:HD12	55:DZ:18:LEU:H	1.38	0.87
34:BA:2358:G:H1	45:BP:55:ARG:HH22	1.18	0.87
34:DA:2348:U:H2'	34:DA:2349:G:H5''	1.55	0.87
34:DA:2377:A:H4'	48:DS:107:GLU:HB3	1.57	0.87
36:DC:49:ILE:HD12	36:DC:49:ILE:H	1.38	0.87
34:DA:673:C:H5'	39:DF:54:ARG:HH12	1.38	0.87
34:BA:1484:G:H2'	34:BA:1485:G:C5'	2.05	0.87
34:BA:2175:C:H1'	36:BC:215:THR:HA	1.53	0.87
34:BA:2472:G:H2'	34:BA:2529:G:N2	1.90	0.87
54:BY:48:ALA:HB3	54:BY:59:GLY:H	1.37	0.87
40:DG:60:LEU:O	40:DG:63:ILE:HG13	1.74	0.87
53:DX:65:ARG:CZ	53:DX:66:LEU:H	1.87	0.87
30:B5:20:ARG:HH12	52:BW:15:ARG:CZ	1.87	0.87
45:BP:112:LEU:H	45:BP:128:HIS:CD2	1.92	0.87
34:BA:2415:G:C4'	45:BP:67:MET:H	1.85	0.87
34:DA:956:G:OP2	46:DQ:85:LYS:HD2	1.74	0.87

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DE:154:LYS:HA	38:DE:154:LYS:HE3	1.56	0.87
34:DA:2415:G:C4'	45:DP:67:MET:H	1.84	0.87
22:AV:15:G:H22	22:AV:48:C:H42	1.23	0.87
34:BA:27:G:H22	34:BA:512:G:H2'	1.40	0.87
34:BA:956:G:OP2	46:BQ:85:LYS:HD2	1.73	0.87
51:BV:83:ARG:HG2	51:BV:83:ARG:HH11	1.39	0.87
53:BX:64:LYS:HG2	53:BX:65:ARG:N	1.89	0.87
26:D1:20:ARG:HD3	26:D1:41:ARG:HD3	1.54	0.87
33:D8:35:GLN:HA	34:DA:2420:C:OP2	1.74	0.87
13:AM:69:GLU:HB3	13:AM:72:ALA:HB3	1.56	0.87
1:CA:1190:G:H3'	3:CC:3:ASN:ND2	1.88	0.87
28:D3:6:VAL:CG1	28:D3:54:VAL:HG11	2.05	0.87
34:DA:171:G:H2'	34:DA:172:C:O4'	1.75	0.87
34:DA:2201:C:O2'	34:DA:2202:C:H5'	1.75	0.87
40:DG:125:PHE:HB3	40:DG:166:ASP:HB2	1.56	0.87
1:AA:1190:G:P	3:AC:5:ILE:HG23	2.14	0.87
34:BA:171:G:H2'	34:BA:172:C:O4'	1.75	0.87
37:BD:102:LYS:O	37:BD:103:ARG:HG2	1.75	0.87
41:BH:87:LEU:HD13	41:BH:148:ILE:HG21	1.55	0.87
43:BN:24:GLY:O	43:BN:28:THR:HG22	1.74	0.87
1:CA:818:G:O2'	1:CA:819:A:H5''	1.75	0.87
28:D3:4:LEU:HD21	28:D3:56:VAL:HG13	1.57	0.87
55:DZ:10:ARG:HH21	55:DZ:26:GLY:N	1.72	0.87
36:BC:58:VAL:CG2	36:BC:166:ASP:H	1.86	0.86
37:BD:227:ASN:HB3	37:BD:228:PRO:HD2	1.56	0.86
40:BG:67:LYS:H	40:BG:67:LYS:HD2	1.36	0.86
8:CH:102:ARG:H	8:CH:102:ARG:HE	1.21	0.86
34:DA:1840:G:H1	34:DA:1902:C:H42	1.22	0.86
37:DD:227:ASN:HB3	37:DD:228:PRO:HD2	1.55	0.86
38:DE:75:VAL:C	38:DE:77:ILE:H	1.78	0.86
7:AG:47:CYS:HA	7:AG:50:ILE:HG12	1.57	0.86
27:B2:47:ASN:HA	27:B2:50:ILE:O	1.74	0.86
34:BA:1902:C:H1'	37:BD:244:ARG:HD3	1.56	0.86
34:BA:2640:G:H8	34:BA:2640:G:H5'	1.37	0.86
22:CV:2:G:H4'	25:D0:7:LEU:CB	2.05	0.86
34:DA:1528(A):A:H3'	34:DA:1529:G:H5''	1.56	0.86
34:DA:2679:A:O2'	34:DA:2680:C:H5'	1.73	0.86
38:DE:109:LYS:HB3	47:DR:2:ARG:HH12	1.40	0.86
27:B2:14:ARG:CZ	27:B2:57:ILE:HG21	2.05	0.86
34:BA:2762:G:C2'	34:BA:2763:G:H5''	2.04	0.86
12:CL:41:ARG:HH11	12:CL:41:ARG:HB3	1.39	0.86

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:78:HIS:HE1	5:AE:143:ARG:H	1.20	0.86
45:BP:62:LEU:HD13	45:BP:62:LEU:H	1.38	0.86
13:CM:69:GLU:HB3	13:CM:72:ALA:HB3	1.56	0.86
22:CV:52:G:HO2'	22:CV:53:G:H8	0.94	0.86
25:D0:20:ARG:N	25:D0:20:ARG:HD3	1.90	0.86
39:DF:206:ILE:O	39:DF:206:ILE:HD12	1.76	0.86
43:DN:126:PRO:O	43:DN:127:ASP:HB2	1.74	0.86
50:DU:34:LYS:HE2	50:DU:34:LYS:HA	1.58	0.86
34:BA:2348:U:H2'	34:BA:2349:G:H5''	1.55	0.86
43:BN:126:PRO:O	43:BN:127:ASP:HB2	1.75	0.86
46:BQ:52:VAL:HG13	46:BQ:53:ALA:H	1.39	0.86
48:BS:88:ASP:CG	48:BS:89:ARG:H	1.76	0.86
53:BX:65:ARG:CZ	53:BX:66:LEU:H	1.87	0.86
7:CG:69:VAL:HA	7:CG:138:LYS:HD2	1.57	0.86
43:DN:14:VAL:HA	43:DN:135:PRO:HG2	1.55	0.86
44:DO:4:PRO:O	44:DO:5:GLN:HB2	1.75	0.86
3:AC:16:ARG:NH1	3:AC:16:ARG:HB2	1.90	0.86
4:AD:11:LEU:C	4:AD:13:ARG:N	2.24	0.86
28:B3:6:VAL:CG1	28:B3:54:VAL:HG11	2.06	0.86
48:BS:13:ARG:O	48:BS:15:ARG:HG2	1.74	0.86
34:DA:1902:C:H1'	37:DD:244:ARG:HD3	1.55	0.86
37:DD:64:ILE:O	37:DD:64:ILE:HG12	1.75	0.86
53:DX:12:VAL:HG12	53:DX:27:THR:O	1.75	0.86
23:AW:16:U:H3'	23:AW:17:C:H5'	1.58	0.86
23:AW:20:U:H2'	23:AW:21:A:H4'	1.56	0.86
34:BA:141:A:H8	34:BA:1408:C:HO2'	1.19	0.86
33:B8:35:GLN:HA	34:BA:2420:C:OP2	1.75	0.86
43:BN:14:VAL:HA	43:BN:135:PRO:HG2	1.56	0.86
42:DI:133:HIS:HB2	42:DI:134:PRO:CD	2.06	0.86
34:DA:106:C:H1'	54:DY:2:ARG:HE	1.40	0.86
42:BI:88:ILE:HG22	42:BI:89:TYR:H	1.41	0.86
53:BX:36:LYS:HD2	53:BX:36:LYS:O	1.75	0.86
42:DI:81:VAL:HG11	42:DI:88:ILE:HD12	1.58	0.86
48:DS:17:ARG:HA	48:DS:20:ARG:NE	1.90	0.86
54:DY:15:VAL:CG1	54:DY:16:ALA:H	1.89	0.86
37:BD:44:ASN:HB2	37:BD:48:ARG:O	1.75	0.86
44:BO:1:MET:HE3	44:BO:67:LYS:HE2	1.57	0.86
53:BX:33:LYS:C	53:BX:35:THR:H	1.77	0.86
3:CC:16:ARG:NH1	3:CC:16:ARG:HB2	1.91	0.86
49:DT:109:GLU:HB3	49:DT:113:LYS:HE3	1.58	0.86
51:DV:89:GLN:HE21	51:DV:90:PRO:HD2	1.41	0.86

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2262:U:H2'	34:BA:2263:C:H5''	1.58	0.86
38:BE:51:PHE:HB3	38:BE:76:ARG:HB3	1.58	0.86
39:BF:32:LEU:HD21	39:BF:105:VAL:HG13	1.56	0.86
41:BH:19:VAL:HG21	41:BH:44:VAL:HG13	1.58	0.86
51:BV:89:GLN:HE21	51:BV:90:PRO:HD2	1.39	0.86
8:CH:33:GLU:HA	8:CH:36:LEU:HD12	1.56	0.86
10:CJ:6:ILE:HG22	10:CJ:98:ILE:HG13	1.56	0.86
34:DA:1484:G:H2'	34:DA:1485:G:C5'	2.06	0.86
42:DI:72:LEU:HB3	42:DI:138:ILE:HG12	1.57	0.86
49:DT:29:ARG:HB3	49:DT:85:LYS:HA	1.56	0.86
54:DY:45:VAL:HA	54:DY:62:GLU:HB2	1.54	0.86
9:AI:47:LEU:C	9:AI:49:PRO:HD2	1.96	0.85
34:BA:451:C:H4'	39:BF:52:LYS:NZ	1.90	0.85
37:BD:35:LYS:NZ	37:BD:104:TYR:HB2	1.91	0.85
37:BD:27:THR:HG23	37:BD:28:GLU:N	1.89	0.85
38:BE:154:LYS:HE3	38:BE:154:LYS:HA	1.56	0.85
42:BI:133:HIS:HB2	42:BI:134:PRO:CD	2.06	0.85
54:BY:8:LYS:NZ	54:BY:74:PRO:HD3	1.91	0.85
1:CA:1190:G:P	3:CC:5:ILE:HG23	2.15	0.85
39:DF:181:LEU:HD11	39:DF:186:ILE:HD11	1.56	0.85
40:DG:145:THR:HG23	40:DG:148:MET:HB2	1.58	0.85
49:DT:30:VAL:HG21	49:DT:84:GLN:H	1.40	0.85
53:DX:33:LYS:C	53:DX:35:THR:H	1.78	0.85
9:AI:95:LYS:HD3	9:AI:96:LEU:N	1.91	0.85
10:AJ:80:LYS:HE3	1:CA:1162:C:C4'	2.06	0.85
22:AV:70:G:H2'	22:AV:71:C:H5'	1.58	0.85
34:BA:1840:G:H1	34:BA:1902:C:H42	1.24	0.85
34:BA:658:C:H2'	34:BA:659:C:H5''	1.55	0.85
34:BA:925:C:H2'	34:BA:926:A:H5''	1.57	0.85
33:D8:32:LEU:HB3	33:D8:35:GLN:H	1.38	0.85
34:DA:1884:A:C2'	34:DA:1885:A:H5''	2.04	0.85
38:DE:51:PHE:HB3	38:DE:76:ARG:HB3	1.56	0.85
49:DT:55:ASN:HD22	49:DT:58:ASN:HD21	1.24	0.85
43:DN:42:TRP:N	50:DU:64:ARG:HH21	1.74	0.85
2:AB:48:MET:HA	2:AB:51:LEU:HD12	1.57	0.85
27:B2:23:LYS:HB2	53:BX:5:TYR:CE1	2.10	0.85
34:BA:1884:A:C2'	34:BA:1885:A:H5''	2.05	0.85
34:BA:807:U:H2'	34:BA:808:G:H8	1.39	0.85
5:CE:78:HIS:HE1	5:CE:143:ARG:H	1.24	0.85
10:CJ:74:ILE:H	10:CJ:74:ILE:HD13	1.40	0.85
34:DA:807:U:H2'	34:DA:808:G:H8	1.39	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:22:THR:HG22	16:AP:32:TYR:HA	1.58	0.85
27:B2:14:ARG:NH2	27:B2:57:ILE:HG21	1.91	0.85
34:BA:2308:G:O6	34:BA:2310:A:H2'	1.76	0.85
51:BV:19:LYS:HZ3	51:BV:20:LEU:N	1.74	0.85
12:CL:18:VAL:HG23	12:CL:19:ARG:H	1.41	0.85
34:DA:271(D):G:H1	34:DA:271(T):C:H42	1.23	0.85
34:DA:287:C:H42	34:DA:354:G:H1	0.87	0.85
38:DE:24:THR:HG23	38:DE:184:VAL:HG23	1.58	0.85
44:DO:1:MET:HE3	44:DO:67:LYS:HG2	1.58	0.85
2:AB:187:LEU:HD23	2:AB:201:ILE:HG22	1.58	0.85
26:B1:26:ARG:CB	26:B1:34:THR:HA	2.06	0.85
28:B3:4:LEU:HD21	28:B3:56:VAL:HG13	1.59	0.85
33:B8:14:VAL:HG11	33:B8:22:VAL:HG13	1.59	0.85
39:BF:206:ILE:HD12	39:BF:206:ILE:O	1.76	0.85
45:BP:38:GLN:HG3	45:BP:39:LYS:H	1.39	0.85
50:BU:88:ILE:C	50:BU:90:VAL:H	1.76	0.85
2:CB:187:LEU:HD23	2:CB:201:ILE:HG22	1.56	0.85
9:CI:95:LYS:HD3	9:CI:96:LEU:N	1.91	0.85
35:DB:74:U:H2'	35:DB:75:G:H5''	1.57	0.85
35:DB:7:G:C3'	35:DB:8:U:H5''	2.07	0.85
34:DA:1826:G:C4'	37:DD:242:ARG:HH21	1.85	0.85
41:DH:87:LEU:HD13	41:DH:148:ILE:HG21	1.57	0.85
42:DI:115:ALA:HB2	42:DI:131:LYS:HE3	1.55	0.85
53:DX:64:LYS:HG2	53:DX:65:ARG:N	1.91	0.85
54:DY:46:LYS:H	54:DY:62:GLU:CG	1.87	0.85
12:AL:18:VAL:HG23	12:AL:19:ARG:H	1.42	0.85
25:B0:20:ARG:HD3	25:B0:20:ARG:N	1.89	0.85
34:BA:2864:G:H5'	34:BA:2864:G:H8	1.42	0.85
38:BE:35:GLN:HE21	38:BE:37:ARG:HE	1.20	0.85
38:BE:77:ILE:HG22	38:BE:78:LEU:N	1.91	0.85
42:BI:72:LEU:HB3	42:BI:138:ILE:HG12	1.59	0.85
49:BT:30:VAL:HG21	49:BT:84:GLN:H	1.40	0.85
34:DA:481:G:H1'	34:DA:506:G:H21	1.41	0.85
40:DG:86:MET:HB2	40:DG:87:PRO:HD3	1.57	0.85
1:AA:184:G:H2'	1:AA:185:A:H8	1.42	0.85
34:BA:287:C:H42	34:BA:354:G:H1	0.87	0.85
34:DA:259:G:H21	34:DA:621:A:H8	1.22	0.85
48:DS:61:ASN:HD22	48:DS:61:ASN:C	1.80	0.85
12:AL:60:LEU:HD21	12:AL:66:VAL:HG22	1.57	0.85
17:AQ:67:LYS:HA	17:AQ:70:ARG:HH12	1.39	0.85
34:BA:1948:G:C8	34:BA:1948:G:H5'	2.12	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BH:43:VAL:HG11	41:BH:53:GLU:H	1.41	0.85
16:CP:22:THR:HG22	16:CP:32:TYR:HA	1.59	0.85
34:DA:1722:A:C2'	34:DA:1739:U:H5''	2.07	0.85
34:DA:2781:A:H5'	34:DA:2782:G:C5'	2.03	0.85
34:BA:814:C:H5''	51:BV:86:GLY:HA3	1.58	0.85
38:BE:36:ARG:HH21	38:BE:88:GLY:HA3	1.42	0.85
46:BQ:20:ALA:HB2	46:BQ:99:PRO:HG2	1.59	0.85
43:DN:39:ARG:HE	43:DN:41:ASP:CB	1.90	0.85
1:AA:1117:G:H4'	9:AI:104:ARG:NH1	1.90	0.85
34:BA:1131:G:HO2'	34:BA:1132:A:H8	0.89	0.85
37:BD:267:SER:C	37:BD:269:PHE:H	1.79	0.85
55:BZ:12:GLY:O	55:BZ:13:GLU:HG3	1.77	0.85
6:CF:9:VAL:C	6:CF:10:LEU:HD12	1.97	0.85
53:DX:60:ARG:HB2	53:DX:72:LYS:O	1.77	0.85
12:AL:41:ARG:HH11	12:AL:41:ARG:HB3	1.41	0.84
40:BG:111:LEU:HA	40:BG:114:ILE:CG1	2.07	0.84
48:BS:28:VAL:N	48:BS:89:ARG:HD2	1.91	0.84
51:BV:72:VAL:HG12	51:BV:73:SER:H	1.41	0.84
53:BX:60:ARG:HG2	53:BX:74:PRO:CD	2.07	0.84
34:BA:106:C:H1'	54:BY:2:ARG:HE	1.41	0.84
34:DA:2308:G:O6	34:DA:2310:A:H2'	1.77	0.84
48:DS:88:ASP:CG	48:DS:89:ARG:H	1.77	0.84
33:B8:51:ALA:C	33:B8:53:PRO:HD2	1.97	0.84
45:DP:6:LEU:HG	45:DP:8:PRO:O	1.76	0.84
54:DY:48:ALA:HB3	54:DY:59:GLY:H	1.40	0.84
27:B2:32:LEU:HG	27:B2:33:MET:N	1.90	0.84
34:BA:2599:G:C8	37:BD:236:GLY:HA2	2.13	0.84
34:BA:676:A:H2	34:BA:802:A:H61	1.24	0.84
37:BD:27:THR:CG2	37:BD:28:GLU:H	1.89	0.84
44:BO:4:PRO:O	44:BO:5:GLN:HB2	1.75	0.84
37:DD:102:LYS:O	37:DD:103:ARG:HG2	1.78	0.84
43:DN:46:VAL:HG11	43:DN:48:MET:HG3	1.58	0.84
45:DP:112:LEU:H	45:DP:128:HIS:CD2	1.94	0.84
46:DQ:133:ARG:O	46:DQ:134:ARG:HB2	1.76	0.84
50:DU:92:ARG:HB2	51:DV:11:GLN:NE2	1.92	0.84
51:DV:19:LYS:HZ2	51:DV:20:LEU:H	1.24	0.84
53:DX:30:VAL:HG12	53:DX:31:HIS:H	1.42	0.84
10:AJ:74:ILE:HD13	10:AJ:74:ILE:H	1.41	0.84
34:BA:2729:G:H2'	34:BA:2730:C:H6	1.41	0.84
47:BR:63:ARG:HA	47:BR:80:PHE:CE2	2.12	0.84
49:BT:109:GLU:HB3	49:BT:113:LYS:HE3	1.59	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:11:LEU:C	4:CD:13:ARG:H	1.80	0.84
4:CD:11:LEU:C	4:CD:13:ARG:N	2.26	0.84
4:CD:199:ASN:OD1	4:CD:201:GLN:HB2	1.77	0.84
33:D8:51:ALA:C	33:D8:53:PRO:HD2	1.96	0.84
2:AB:51:LEU:HD23	2:AB:201:ILE:HD12	1.58	0.84
3:AC:53:ALA:O	3:AC:54:ARG:HB2	1.77	0.84
1:CA:1117:G:H4'	9:CI:104:ARG:NH1	1.91	0.84
38:DE:60:ASN:OD1	38:DE:62:PRO:HD2	1.76	0.84
3:AC:179:ARG:HB2	3:AC:207:VAL:HA	1.58	0.84
26:B1:89:GLU:H	26:B1:89:GLU:CD	1.78	0.84
27:B2:30:ARG:H	27:B2:30:ARG:HD2	1.43	0.84
34:BA:481:G:H1'	34:BA:506:G:H21	1.41	0.84
38:BE:24:THR:HG23	38:BE:184:VAL:HG23	1.60	0.84
41:BH:55:PRO:HG2	41:BH:56:SER:H	1.43	0.84
48:BS:28:VAL:HG12	48:BS:29:PHE:N	1.92	0.84
32:D7:19:ARG:HG2	32:D7:19:ARG:HH11	1.42	0.84
48:DS:28:VAL:N	48:DS:89:ARG:HD2	1.93	0.84
51:DV:83:ARG:HG2	51:DV:83:ARG:HH11	1.42	0.84
4:AD:119:GLN:HG3	4:AD:123:HIS:CD2	2.13	0.84
34:BA:2723:C:H5''	47:BR:2:ARG:CD	2.07	0.84
35:BB:7:G:C3'	35:BB:8:U:H5''	2.07	0.84
37:BD:267:SER:HA	37:BD:270:ILE:HG13	1.60	0.84
40:BG:31:VAL:HG22	40:BG:32:PRO:CD	2.07	0.84
42:BI:115:ALA:HB2	42:BI:131:LYS:HE3	1.57	0.84
37:DD:267:SER:HA	37:DD:270:ILE:HG13	1.60	0.84
51:DV:72:VAL:HG12	51:DV:73:SER:H	1.41	0.84
34:BA:1722:A:C2'	34:BA:1739:U:H5''	2.06	0.84
43:BN:42:TRP:N	50:BU:64:ARG:HH21	1.74	0.84
1:CA:184:G:H2'	1:CA:185:A:H8	1.43	0.84
12:CL:60:LEU:HD21	12:CL:66:VAL:HG22	1.59	0.84
17:CQ:67:LYS:HA	17:CQ:70:ARG:HH12	1.42	0.84
25:D0:36:ILE:HD11	34:DA:2355:C:H5'	1.57	0.84
34:DA:2555:U:H2'	34:DA:2556:C:H5'	1.60	0.84
34:DA:925:C:H2'	34:DA:926:A:H5''	1.58	0.84
43:DN:46:VAL:HG13	43:DN:47:ALA:H	1.42	0.84
34:DA:483:A:H8	54:DY:47:LYS:HZ3	1.24	0.84
1:AA:17:U:H2'	1:AA:18:C:C6	2.13	0.84
55:BZ:108:PRO:HB3	55:BZ:142:SER:HA	1.59	0.84
42:DI:88:ILE:HG22	42:DI:89:TYR:H	1.43	0.84
44:DO:69:ILE:HD13	44:DO:77:ILE:HG23	1.58	0.84
46:DQ:140:ALA:HB3	55:DZ:53:ILE:HG12	1.60	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:49:THR:HB	13:AM:52:GLU:HG3	1.59	0.84
33:B8:6:THR:CG2	33:B8:63:PRO:HD3	2.08	0.84
41:BH:105:LEU:H	41:BH:105:LEU:HD13	1.43	0.84
47:BR:10:LEU:HB3	47:BR:17:ARG:HD2	1.58	0.84
53:BX:60:ARG:HB2	53:BX:72:LYS:O	1.78	0.84
34:DA:2359:C:C2'	34:DA:2360:A:H5'	2.07	0.84
39:DF:46:ARG:HG3	39:DF:46:ARG:HH11	1.43	0.84
1:AA:1057:G:H5''	3:AC:154:SER:CB	2.07	0.83
10:CJ:8:LEU:HB3	10:CJ:16:LEU:HD21	1.59	0.83
34:DA:2712:U:H1'	34:DA:2712(A):A:C8	2.13	0.83
6:AF:55:ASP:HB2	6:AF:86:ARG:HH12	1.43	0.83
34:BA:1747(A):G:H2'	34:BA:1748:G:H5''	1.59	0.83
34:BA:2747:G:O6	34:BA:2755:C:H5''	1.78	0.83
46:BQ:133:ARG:O	46:BQ:134:ARG:HB2	1.77	0.83
48:BS:17:ARG:HA	48:BS:20:ARG:NE	1.93	0.83
1:CA:189(H):G:H2'	1:CA:189(I):G:H8	1.42	0.83
1:CA:1057:G:H5''	3:CC:154:SER:CB	2.08	0.83
8:CH:20:TYR:HA	8:CH:65:TYR:CE2	2.13	0.83
34:DA:2206:G:N2	34:DA:2207:G:H5'	1.91	0.83
34:DA:2426:A:H3'	34:DA:2427:C:H5'	1.60	0.83
37:DD:27:THR:HG23	37:DD:28:GLU:N	1.90	0.83
38:DE:91:VAL:HG13	38:DE:95:ILE:HD11	1.59	0.83
40:DG:41:GLN:HB3	40:DG:43:LEU:CD1	2.08	0.83
45:DP:23:PRO:CB	45:DP:33:ARG:HG3	2.08	0.83
46:DQ:20:ALA:HB2	46:DQ:99:PRO:HG2	1.60	0.83
47:DR:63:ARG:HA	47:DR:80:PHE:CE2	2.13	0.83
34:BA:1717:G:C2'	34:BA:1718:G:H5''	2.08	0.83
47:BR:28:LEU:HD12	47:BR:48:VAL:HG21	1.60	0.83
53:BX:30:VAL:HG12	53:BX:31:HIS:H	1.40	0.83
3:CC:53:ALA:O	3:CC:54:ARG:HB2	1.77	0.83
34:DA:1332:G:N2	34:DA:1609:A:H2'	1.92	0.83
34:DA:1747(A):G:H2'	34:DA:1748:G:H5''	1.59	0.83
47:DR:95:THR:HA	47:DR:116:LEU:O	1.77	0.83
34:BA:571:A:C5'	34:BA:2030:A:H62	1.90	0.83
51:BV:28:GLU:CG	51:BV:29:PRO:HD3	2.07	0.83
1:CA:1104:G:H4'	2:CB:111:ARG:NH1	1.94	0.83
28:D3:8:LEU:HA	28:D3:54:VAL:HG22	1.58	0.83
43:DN:39:ARG:NE	43:DN:41:ASP:HB2	1.92	0.83
4:AD:11:LEU:C	4:AD:13:ARG:H	1.79	0.83
39:BF:143:ALA:HA	39:BF:146:ALA:HB3	1.59	0.83
43:BN:28:THR:HG23	43:BN:29:LYS:H	1.44	0.83

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BR:95:THR:HA	47:BR:116:LEU:O	1.78	0.83
3:CC:179:ARG:HB2	3:CC:207:VAL:HA	1.59	0.83
34:DA:571:A:H5'	34:DA:2030:A:N6	1.93	0.83
36:DC:58:VAL:CG2	36:DC:166:ASP:H	1.87	0.83
41:DH:105:LEU:HD13	41:DH:105:LEU:H	1.44	0.83
41:DH:19:VAL:HG21	41:DH:44:VAL:HG13	1.58	0.83
34:BA:2206:G:N2	34:BA:2207:G:H5'	1.92	0.83
39:BF:181:LEU:HD11	39:BF:186:ILE:HD11	1.59	0.83
36:DC:44:HIS:CD2	36:DC:175:VAL:HA	2.14	0.83
37:DD:35:LYS:NZ	37:DD:104:TYR:HB2	1.94	0.83
41:DH:136:ILE:O	41:DH:137:ASP:HB2	1.78	0.83
42:DI:79:ILE:HB	42:DI:142:VAL:HG13	1.61	0.83
33:D8:25:MET:HG3	45:DP:64:LYS:HB2	1.60	0.83
49:DT:109:GLU:O	49:DT:112:ARG:HG3	1.79	0.83
34:DA:106:C:H1'	54:DY:2:ARG:NE	1.93	0.83
34:BA:2359:C:C2'	34:BA:2360:A:H5'	2.07	0.83
34:BA:271(D):G:H1	34:BA:271(T):C:H42	1.23	0.83
40:BG:86:MET:HG3	40:BG:87:PRO:HD2	1.58	0.83
13:CM:23:TYR:HE1	13:CM:70:LEU:HD22	1.43	0.83
34:DA:2298:A:H2'	34:DA:2299:G:O4'	1.79	0.83
37:DD:35:LYS:HZ1	37:DD:104:TYR:HB2	1.42	0.83
51:DV:28:GLU:CG	51:DV:29:PRO:HD3	2.06	0.83
4:AD:199:ASN:OD1	4:AD:201:GLN:HB2	1.77	0.83
18:AR:31:LEU:HG	18:AR:65:ILE:HD13	1.61	0.83
47:BR:73:VAL:O	47:BR:76:VAL:HG12	1.79	0.83
51:BV:47:VAL:HG22	51:BV:48:GLY:H	1.44	0.83
43:BN:33:LEU:HD23	43:BN:52:VAL:HG22	1.61	0.83
53:BX:55:ASN:O	53:BX:77:LYS:HB3	1.79	0.83
22:CV:72:A:C3'	22:CV:73:A:H5''	2.09	0.83
34:DA:1948:G:H5'	34:DA:1948:G:C8	2.13	0.83
49:DT:109:GLU:HA	49:DT:112:ARG:HG2	1.60	0.83
1:AA:882:C:O2'	1:AA:883:C:H5'	1.79	0.83
7:AG:69:VAL:HA	7:AG:138:LYS:HD2	1.59	0.83
34:BA:1348:G:H2'	34:BA:1349:A:H5''	1.61	0.83
34:BA:2599:G:H8	37:BD:236:GLY:HA2	1.41	0.83
34:BA:2753:A:O2'	34:BA:2754:U:H5'	1.77	0.83
34:BA:536:A:H2'	34:BA:537:C:C6	2.14	0.83
34:BA:673:C:H5'	39:BF:54:ARG:HH12	1.42	0.83
36:BC:49:ILE:HG22	36:BC:50:ASP:H	1.44	0.83
29:B4:10:VAL:O	40:BG:2:PRO:HG2	1.79	0.83
51:BV:70:ILE:CB	51:BV:90:PRO:HB2	2.08	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:353:A:H5'	1:CA:353:A:H8	1.44	0.83
15:CO:39:LEU:HD12	15:CO:56:LEU:HD13	1.61	0.83
26:D1:26:ARG:NH2	26:D1:28:GLY:HA2	1.94	0.83
34:DA:1578:U:C2'	34:DA:1579:A:H5''	2.08	0.83
34:DA:639:U:H2'	34:DA:640:C:C6	2.13	0.83
34:DA:2599:G:H8	37:DD:236:GLY:HA2	1.43	0.83
34:BA:2189:U:H3'	34:BA:2190:G:H5''	1.60	0.82
43:BN:39:ARG:HE	43:BN:41:ASP:CB	1.92	0.82
48:BS:85:VAL:CG2	48:BS:106:ARG:HB2	2.09	0.82
39:DF:18:ARG:HG2	39:DF:19:GLU:H	1.42	0.82
5:AE:76:ILE:HD11	5:AE:142:LEU:HD11	1.60	0.82
8:AH:103:VAL:HG21	8:AH:109:ILE:O	1.79	0.82
19:AS:48:THR:HG22	19:AS:61:TYR:HA	1.61	0.82
43:BN:39:ARG:NE	43:BN:41:ASP:HB2	1.94	0.82
48:BS:67:ARG:H	48:BS:69:VAL:HG12	1.44	0.82
3:CC:189:ALA:HB3	3:CC:196:LEU:HB2	1.61	0.82
9:CI:47:LEU:C	9:CI:49:PRO:HD2	1.99	0.82
54:DY:8:LYS:NZ	54:DY:74:PRO:HD3	1.93	0.82
5:AE:126:ARG:HG3	5:AE:126:ARG:HH11	1.44	0.82
27:B2:47:ASN:O	27:B2:49:LYS:N	2.13	0.82
33:B8:18:ALA:HB3	34:BA:651:G:H5''	1.60	0.82
36:BC:44:HIS:CD2	36:BC:175:VAL:HA	2.13	0.82
34:BA:1353:A:H4'	37:BD:38:LYS:HZ1	1.45	0.82
39:BF:18:ARG:HG2	39:BF:19:GLU:H	1.42	0.82
45:BP:23:PRO:CB	45:BP:33:ARG:HG3	2.09	0.82
49:BT:109:GLU:HA	49:BT:112:ARG:HG2	1.61	0.82
50:BU:92:ARG:HB2	51:BV:11:GLN:NE2	1.93	0.82
54:BY:15:VAL:CG1	54:BY:16:ALA:H	1.89	0.82
54:BY:8:LYS:HB2	54:BY:28:LYS:HZ3	1.44	0.82
46:BQ:140:ALA:HB3	55:BZ:53:ILE:HG13	1.60	0.82
2:CB:48:MET:HA	2:CB:51:LEU:HD12	1.59	0.82
6:CF:55:ASP:HB2	6:CF:86:ARG:HH12	1.45	0.82
27:D2:32:LEU:HG	27:D2:33:MET:H	1.40	0.82
33:D8:49:VAL:O	33:D8:53:PRO:HD3	1.79	0.82
34:DA:2729:G:H2'	34:DA:2730:C:H6	1.43	0.82
48:DS:61:ASN:HD22	48:DS:62:LYS:N	1.77	0.82
50:DU:92:ARG:O	50:DU:94:ASN:N	2.12	0.82
34:DA:482:A:H4'	54:DY:47:LYS:NZ	1.95	0.82
27:B2:48:HIS:NE2	34:BA:75:G:H4'	1.94	0.82
34:BA:2189:U:C3'	34:BA:2190:G:H5''	2.10	0.82
1:CA:438:G:H4'	1:CA:439:A:OP1	1.77	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2787:C:H1'	38:DE:61:ARG:HB2	1.60	0.82
34:DA:2864:G:H8	34:DA:2864:G:H5'	1.44	0.82
41:DH:55:PRO:HG2	41:DH:56:SER:H	1.44	0.82
1:AA:438:G:H4'	1:AA:439:A:OP1	1.79	0.82
3:AC:189:ALA:HB3	3:AC:196:LEU:HB2	1.61	0.82
34:BA:1578:U:C2'	34:BA:1579:A:H5''	2.09	0.82
34:BA:1846:G:H5'	34:BA:1847:A:OP2	1.79	0.82
34:BA:2201:C:O2'	34:BA:2202:C:H5'	1.79	0.82
34:BA:543:C:H42	34:BA:551:G:H1	1.27	0.82
50:BU:92:ARG:O	50:BU:94:ASN:N	2.11	0.82
51:BV:70:ILE:HB	51:BV:90:PRO:CB	2.08	0.82
55:BZ:10:ARG:HH21	55:BZ:26:GLY:N	1.78	0.82
34:DA:1348:G:H2'	34:DA:1349:A:H5''	1.61	0.82
40:DG:63:ILE:HD12	40:DG:64:THR:N	1.93	0.82
41:DH:43:VAL:HG11	41:DH:53:GLU:H	1.43	0.82
45:DP:48:PRO:HG2	45:DP:49:ARG:H	1.44	0.82
1:AA:1031:G:H2'	1:AA:1032:G:H8	1.44	0.82
1:AA:1152:A:H5''	10:AJ:13:HIS:HD2	1.45	0.82
34:BA:2787:C:H1'	38:BE:61:ARG:HB2	1.59	0.82
48:BS:61:ASN:HD22	48:BS:62:LYS:N	1.76	0.82
34:DA:2348:U:H2'	34:DA:2349:G:C5'	2.09	0.82
34:DA:2599:G:C8	37:DD:236:GLY:HA2	2.14	0.82
40:DG:82:LEU:HD22	40:DG:87:PRO:HG2	1.61	0.82
43:DN:66:LYS:HA	43:DN:69:GLN:HB2	1.61	0.82
46:DQ:52:VAL:HG13	46:DQ:53:ALA:N	1.93	0.82
34:DA:2189:U:H3'	34:DA:2190:G:H5''	1.61	0.82
48:DS:28:VAL:HG12	48:DS:29:PHE:N	1.93	0.82
34:BA:871:U:H4'	46:BQ:69:PHE:CE2	2.15	0.82
55:BZ:10:ARG:NH2	55:BZ:26:GLY:N	2.28	0.82
19:CS:48:THR:HG22	19:CS:61:TYR:HA	1.60	0.82
25:D0:41:ARG:HD2	25:D0:41:ARG:H	1.45	0.82
33:D8:14:VAL:HG11	33:D8:22:VAL:HG13	1.59	0.82
34:DA:676:A:H2	34:DA:802:A:H61	1.25	0.82
43:DN:33:LEU:HD23	43:DN:52:VAL:HG22	1.61	0.82
50:DU:83:LEU:HB3	50:DU:88:ILE:CD1	2.10	0.82
1:AA:1527:C:O2'	1:AA:1528:U:H5'	1.78	0.82
34:BA:2533:A:C2'	34:BA:2534:A:H5''	2.09	0.82
34:BA:2712:U:H1'	34:BA:2712(A):A:C8	2.15	0.82
55:BZ:10:ARG:HD2	55:BZ:36:LYS:HB3	1.62	0.82
34:DA:1717:G:C2'	34:DA:1718:G:H5''	2.09	0.82
37:DD:118:VAL:HG22	37:DD:119:ALA:H	1.45	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:78:HIS:CE1	5:AE:143:ARG:H	1.97	0.82
23:AW:62:C:H2'	23:AW:63:G:H8	1.44	0.82
34:BA:481:G:H1'	34:BA:506:G:N2	1.94	0.82
35:BB:80:U:H2'	35:BB:81:G:H21	1.44	0.82
4:CD:119:GLN:HG3	4:CD:123:HIS:CD2	2.13	0.82
46:DQ:82:ARG:HG2	46:DQ:82:ARG:NH1	1.95	0.82
5:AE:76:ILE:HG22	5:AE:93:PRO:HB3	1.60	0.81
1:AA:624:C:O3'	16:AP:10:GLY:HA2	1.80	0.81
25:B0:41:ARG:H	25:B0:41:ARG:HD2	1.45	0.81
49:BT:109:GLU:O	49:BT:112:ARG:HG3	1.80	0.81
26:D1:85:LEU:HB3	26:D1:87:PRO:HD3	1.62	0.81
36:DC:49:ILE:HG22	36:DC:50:ASP:H	1.44	0.81
38:DE:36:ARG:HH21	38:DE:88:GLY:HA3	1.43	0.81
55:DZ:125:LEU:HD23	55:DZ:126:VAL:N	1.94	0.81
5:AE:51:VAL:HB	5:AE:52:PRO:HD3	1.60	0.81
34:BA:2287:A:H62	34:BA:2344:U:H3	1.25	0.81
37:BD:76:PRO:HG2	37:BD:98:VAL:HG21	1.62	0.81
41:BH:92:ILE:HG22	41:BH:93:GLY:N	1.94	0.81
50:BU:6:THR:HG21	50:BU:10:ARG:NH2	1.95	0.81
2:CB:51:LEU:HD23	2:CB:201:ILE:HD12	1.60	0.81
25:D0:70:GLN:OE1	25:D0:72:ARG:HD3	1.81	0.81
39:DF:143:ALA:HA	39:DF:146:ALA:HB3	1.62	0.81
1:AA:735:C:O2'	1:AA:736:C:H5'	1.80	0.81
25:B0:70:GLN:OE1	25:B0:72:ARG:HD3	1.81	0.81
29:B4:6:HIS:HA	40:BG:67:LYS:HE3	1.61	0.81
42:BI:81:VAL:HG11	42:BI:88:ILE:HD12	1.62	0.81
39:DF:66:PRO:O	39:DF:67:GLN:HB3	1.79	0.81
55:DZ:151:HIS:CB	55:DZ:170:THR:HA	2.10	0.81
5:CE:51:VAL:HB	5:CE:52:PRO:HD3	1.61	0.81
13:CM:49:THR:HB	13:CM:52:GLU:HG3	1.61	0.81
38:DE:77:ILE:CG2	38:DE:78:LEU:H	1.93	0.81
51:DV:19:LYS:NZ	51:DV:20:LEU:N	2.29	0.81
51:DV:22:VAL:O	51:DV:23:GLU:HB2	1.77	0.81
34:BA:2312:U:H4'	40:BG:71:THR:HG21	1.61	0.81
34:BA:2426:A:H3'	34:BA:2427:C:H5'	1.61	0.81
41:BH:136:ILE:O	41:BH:137:ASP:HB2	1.78	0.81
51:BV:19:LYS:HB3	51:BV:96:ILE:O	1.80	0.81
34:DA:2245:U:H5'	34:DA:2246:G:H5'	1.61	0.81
1:AA:1116:C:H3'	1:AA:1117:G:H5''	1.62	0.81
1:AA:189(H):G:H2'	1:AA:189(I):G:H8	1.43	0.81
40:BG:31:VAL:HG22	40:BG:32:PRO:HD2	1.63	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BP:146:VAL:HG22	45:BP:147:LEU:N	1.95	0.81
45:BP:48:PRO:HG2	45:BP:49:ARG:H	1.44	0.81
55:BZ:149:SER:HB2	55:BZ:172:ALA:O	1.80	0.81
23:CW:12:U:H3	23:CW:23:A:H61	1.28	0.81
33:D8:35:GLN:HE21	33:D8:36:LYS:HZ2	1.27	0.81
33:D8:6:THR:CG2	33:D8:63:PRO:HD3	2.09	0.81
34:DA:2639:A:C2'	34:DA:2640:G:H5''	2.10	0.81
34:DA:571:A:C5'	34:DA:2030:A:H62	1.92	0.81
37:DD:25:THR:HG21	37:DD:81:ALA:HB1	1.59	0.81
39:DF:65:TRP:HZ3	39:DF:75:HIS:HD2	1.25	0.81
43:DN:57:ALA:HB2	43:DN:123:TYR:O	1.81	0.81
12:AL:24:VAL:HG13	12:AL:98:TYR:CE2	2.16	0.81
37:BD:4:LYS:NZ	37:BD:20:ASP:HA	1.96	0.81
46:BQ:52:VAL:HG13	46:BQ:53:ALA:N	1.94	0.81
51:BV:62:LEU:HD22	51:BV:98:GLU:HA	1.62	0.81
34:DA:1846:G:H5'	34:DA:1847:A:OP2	1.81	0.81
34:DA:2189:U:C3'	34:DA:2190:G:H5''	2.10	0.81
40:DG:111:LEU:HB2	40:DG:112:PRO:HD3	1.63	0.81
49:DT:89:VAL:CG1	49:DT:91:ARG:HE	1.92	0.81
35:BB:44:G:H1'	35:BB:47:C:H42	1.46	0.81
33:B8:25:MET:HG3	45:BP:64:LYS:HB2	1.61	0.81
46:BQ:82:ARG:NH1	46:BQ:82:ARG:HG2	1.93	0.81
34:BA:106:C:H1'	54:BY:2:ARG:NE	1.96	0.81
1:CA:1152:A:H5''	10:CJ:13:HIS:HD2	1.46	0.81
3:CC:20:SER:CB	3:CC:40:ARG:HH22	1.91	0.81
6:CF:10:LEU:HD12	6:CF:10:LEU:N	1.96	0.81
37:BD:35:LYS:HZ1	37:BD:104:TYR:HB2	1.46	0.81
49:BT:89:VAL:CG1	49:BT:91:ARG:HE	1.93	0.81
26:D1:87:PRO:HB2	26:D1:91:LYS:NZ	1.95	0.81
44:DO:87:ILE:HG23	44:DO:91:LEU:HA	1.62	0.81
53:DX:36:LYS:HZ2	53:DX:39:ILE:CA	1.88	0.81
8:AH:29:SER:HB3	8:AH:32:LYS:HD2	1.62	0.81
14:AN:24:CYS:HB3	14:AN:27:CYS:O	1.81	0.81
33:B8:49:VAL:O	33:B8:53:PRO:HD3	1.81	0.81
34:BA:2645:G:H3'	34:BA:2646:C:H5'	1.61	0.81
35:BB:74:U:C2'	35:BB:75:G:H5''	2.10	0.81
1:CA:1116:C:H3'	1:CA:1117:G:H5''	1.62	0.81
5:CE:43:LEU:HD21	5:CE:132:ALA:HB1	1.63	0.81
5:CE:76:ILE:HG22	5:CE:93:PRO:HB3	1.62	0.81
46:DQ:23:GLY:O	46:DQ:100:GLY:HA3	1.79	0.81
6:AF:9:VAL:C	6:AF:10:LEU:HD12	2.00	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1747(A):G:C2'	34:BA:1748:G:H5''	2.11	0.81
34:BA:2298:A:H2'	34:BA:2299:G:O4'	1.80	0.81
52:BW:25:ARG:HB2	52:BW:25:ARG:NH1	1.96	0.81
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.17	0.81
1:CA:434:U:H2'	1:CA:435:C:C6	2.16	0.81
3:CC:16:ARG:HB2	3:CC:16:ARG:HH11	1.46	0.81
34:DA:365:C:H5'	34:DA:365:C:H6	1.43	0.81
36:DC:18:LYS:HD2	36:DC:19:VAL:HG23	1.63	0.81
48:DS:101:LEU:HD22	48:DS:102:ALA:H	1.46	0.81
51:DV:71:LEU:HD13	51:DV:72:VAL:N	1.96	0.81
27:B2:44:LEU:C	27:B2:46:GLN:H	1.80	0.80
32:B7:19:ARG:HH11	32:B7:19:ARG:HG2	1.44	0.80
34:BA:1987:G:H8	34:BA:1987:G:H5'	1.45	0.80
45:BP:100:LEU:O	45:BP:102:ARG:N	2.14	0.80
51:BV:71:LEU:HD13	51:BV:72:VAL:N	1.96	0.80
2:CB:44:LEU:H	2:CB:44:LEU:HD12	1.45	0.80
5:CE:78:HIS:CE1	5:CE:143:ARG:H	1.99	0.80
12:CL:24:VAL:HG13	12:CL:98:TYR:CE2	2.16	0.80
23:CW:51:U:H3	23:CW:63:G:H1	1.28	0.80
34:DA:2533:A:C2'	34:DA:2534:A:H5''	2.10	0.80
34:DA:2746:U:H4'	41:DH:138:LYS:HD3	1.63	0.80
34:DA:543:C:H42	34:DA:551:G:H1	1.26	0.80
53:DX:60:ARG:HG2	53:DX:74:PRO:CD	2.08	0.80
8:AH:33:GLU:HA	8:AH:36:LEU:HD12	1.61	0.80
45:BP:71:VAL:HG12	45:BP:72:PRO:HD3	1.62	0.80
55:BZ:53:ILE:HG22	55:BZ:71:VAL:HB	1.62	0.80
1:CA:552:U:O2'	1:CA:553:A:H5'	1.82	0.80
5:CE:50:GLU:HG3	5:CE:52:PRO:HD2	1.63	0.80
19:CS:20:LEU:O	19:CS:23:ASN:HB3	1.80	0.80
31:D6:20:ASN:ND2	31:D6:21:TYR:H	1.79	0.80
34:DA:622:G:O2'	34:DA:623:G:H5'	1.80	0.80
46:DQ:75:THR:HB	46:DQ:88:GLY:HA2	1.63	0.80
51:DV:19:LYS:HB3	51:DV:96:ILE:O	1.80	0.80
52:DW:25:ARG:HB2	52:DW:25:ARG:NH1	1.96	0.80
1:AA:625:G:H2'	1:AA:626:U:H6	1.47	0.80
3:AC:116:VAL:HG21	3:AC:202:ILE:HD11	1.62	0.80
34:BA:919:G:H5''	35:BB:81:G:H1'	1.63	0.80
38:BE:109:LYS:HB3	47:BR:2:ARG:HH12	1.44	0.80
42:BI:79:ILE:HG12	42:BI:140:LEU:CD1	2.07	0.80
33:B8:25:MET:HB2	45:BP:62:LEU:CD2	2.11	0.80
53:BX:64:LYS:HG2	53:BX:65:ARG:H	1.45	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BX:27:THR:HB	53:BX:78:LYS:H	1.46	0.80
55:BZ:10:ARG:NH2	55:BZ:26:GLY:H	1.79	0.80
20:CT:12:ALA:H	20:CT:13:LEU:HD12	1.44	0.80
27:D2:47:ASN:HB2	27:D2:51:ARG:HD2	1.64	0.80
30:D5:20:ARG:NH1	52:DW:15:ARG:CZ	2.44	0.80
41:DH:92:ILE:HG22	41:DH:93:GLY:N	1.96	0.80
43:DN:55:VAL:HG12	43:DN:56:ASN:H	1.47	0.80
45:DP:100:LEU:O	45:DP:102:ARG:N	2.14	0.80
45:DP:35:HIS:O	45:DP:36:LYS:HG3	1.81	0.80
1:AA:1190:G:OP1	3:AC:5:ILE:HD12	1.81	0.80
19:AS:20:LEU:O	19:AS:23:ASN:HB3	1.79	0.80
30:B5:32:PRO:O	30:B5:33:CYS:HB3	1.80	0.80
33:B8:35:GLN:HE21	33:B8:36:LYS:HZ2	1.26	0.80
34:BA:1175:U:H4'	34:BA:1176:G:H5'	1.63	0.80
6:CF:97:PHE:O	18:CR:31:LEU:HD23	1.80	0.80
25:D0:27:GLU:HG3	25:D0:68:GLU:HA	1.63	0.80
34:DA:1141:U:H2'	43:DN:63:THR:HG22	1.63	0.80
34:DA:2262:U:H2'	34:DA:2263:C:H5''	1.62	0.80
34:DA:481:G:H1'	34:DA:506:G:N2	1.96	0.80
50:DU:112:ARG:HG2	50:DU:112:ARG:HH11	1.46	0.80
53:DX:27:THR:HB	53:DX:78:LYS:H	1.45	0.80
1:AA:1104:G:H4'	2:AB:111:ARG:NH1	1.95	0.80
1:AA:1468:A:H2'	1:AA:1469:G:O4'	1.80	0.80
5:AE:50:GLU:HG3	5:AE:52:PRO:HD2	1.64	0.80
8:AH:20:TYR:HA	8:AH:65:TYR:CE2	2.17	0.80
34:BA:639:U:H2'	34:BA:640:C:C6	2.16	0.80
53:BX:50:LYS:HB3	53:BX:82:GLN:HB2	1.64	0.80
1:CA:1347:G:C8	9:CI:107:ARG:HB3	2.17	0.80
18:CR:31:LEU:HG	18:CR:65:ILE:HD13	1.63	0.80
34:DA:1365:A:H2'	34:DA:1366:A:H8	1.45	0.80
35:DB:80:U:H2'	35:DB:81:G:H21	1.44	0.80
37:DD:27:THR:CG2	37:DD:28:GLU:H	1.93	0.80
34:DA:1353:A:H4'	37:DD:38:LYS:HZ1	1.45	0.80
42:DI:69:LYS:HA	42:DI:136:VAL:CG2	2.12	0.80
51:DV:47:VAL:HG22	51:DV:48:GLY:H	1.43	0.80
53:DX:50:LYS:HB3	53:DX:82:GLN:HB2	1.63	0.80
34:BA:780:G:H21	34:BA:783:A:H62	1.29	0.80
54:BY:8:LYS:HB2	54:BY:28:LYS:NZ	1.97	0.80
54:BY:37:VAL:O	54:BY:38:ILE:HB	1.82	0.80
3:CC:116:VAL:HG21	3:CC:202:ILE:HD11	1.63	0.80
10:CJ:40:LEU:HD23	10:CJ:40:LEU:H	1.45	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D1:40:ARG:HD3	26:D1:41:ARG:N	1.96	0.80
33:D8:25:MET:HB2	45:DP:62:LEU:CD2	2.12	0.80
34:DA:1665:A:C2'	34:DA:1666:G:H5'	2.11	0.80
34:DA:871:U:H4'	46:DQ:69:PHE:CE2	2.15	0.80
34:BA:229:A:H3'	34:BA:230:U:H5'	1.64	0.80
38:BE:60:ASN:OD1	38:BE:62:PRO:HD2	1.82	0.80
1:CA:1502:A:H5'	1:CA:1504:G:N7	1.95	0.80
4:CD:119:GLN:HG3	4:CD:123:HIS:HD2	1.43	0.80
8:CH:29:SER:HB3	8:CH:32:LYS:HD2	1.63	0.80
34:DA:1822:G:H8	34:DA:1822:G:H5'	1.46	0.80
34:DA:780:G:H21	34:DA:783:A:H62	1.26	0.80
39:DF:65:TRP:CZ3	39:DF:75:HIS:HD2	1.99	0.80
53:DX:34:ALA:O	53:DX:36:LYS:HG3	1.81	0.80
3:AC:16:ARG:HH11	3:AC:16:ARG:HB2	1.47	0.80
10:AJ:8:LEU:HB3	10:AJ:16:LEU:HD21	1.62	0.80
34:BA:1341:U:C2	53:BX:77:LYS:HE2	2.17	0.80
34:BA:1378:A:O2'	34:BA:1379:A:H5''	1.81	0.80
34:BA:2348:U:H2'	34:BA:2349:G:C5'	2.11	0.80
34:BA:2394:C:OP1	45:BP:63:PRO:HD2	1.81	0.80
36:BC:18:LYS:HD2	36:BC:19:VAL:HG23	1.63	0.80
40:BG:43:LEU:HD23	40:BG:88:ILE:HG22	1.62	0.80
2:CB:67:THR:HG21	2:CB:155:LEU:HG	1.63	0.80
5:CE:126:ARG:HH11	5:CE:126:ARG:HG3	1.47	0.80
34:DA:536:A:H2'	34:DA:537:C:C6	2.15	0.80
48:DS:17:ARG:C	48:DS:19:LYS:H	1.84	0.80
53:DX:56:THR:C	53:DX:57:LEU:HD12	2.02	0.80
53:DX:76:ARG:O	53:DX:77:LYS:HB2	1.82	0.80
4:AD:119:GLN:HG3	4:AD:123:HIS:HD2	1.43	0.80
10:AJ:48:THR:CA	10:AJ:62:HIS:HB3	2.11	0.80
10:AJ:80:LYS:CE	1:CA:1162:C:H4'	2.11	0.80
34:BA:2577:A:H5''	34:BA:2578:G:H5'	1.64	0.80
34:BA:541:C:H2'	34:BA:542:C:C6	2.16	0.80
42:BI:79:ILE:HB	42:BI:142:VAL:HG13	1.63	0.80
49:BT:98:LYS:HB3	49:BT:100:TYR:CE1	2.17	0.80
49:BT:80:SER:CB	49:BT:81:PRO:HD3	2.11	0.80
50:BU:112:ARG:HG2	50:BU:112:ARG:HH11	1.46	0.80
1:CA:114:U:H2'	1:CA:115:G:C8	2.16	0.80
1:CA:328:C:H4'	1:CA:329:A:H5'	1.62	0.80
27:D2:47:ASN:C	27:D2:49:LYS:H	1.82	0.80
34:DA:132:G:H5'	34:DA:132:G:H8	1.47	0.80
34:DA:1747(A):G:C2'	34:DA:1748:G:H5''	2.10	0.80

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:10:LEU:HD12	6:AF:10:LEU:N	1.97	0.80
34:BA:2245:U:H5'	34:BA:2246:G:H5'	1.63	0.80
44:BO:25:LEU:O	44:BO:26:LYS:HG3	1.80	0.80
48:BS:101:LEU:HD22	48:BS:102:ALA:H	1.46	0.80
48:BS:54:LEU:C	48:BS:56:LEU:H	1.82	0.80
26:D1:10:LYS:HE2	26:D1:14:VAL:HG23	1.64	0.80
33:D8:18:ALA:HB3	34:DA:651:G:H5''	1.63	0.80
3:AC:104:GLN:CD	3:AC:105:GLU:H	1.85	0.79
13:AM:91:ARG:HB2	13:AM:98:VAL:HG21	1.64	0.79
30:B5:57:VAL:HG23	30:B5:58:LEU:H	1.46	0.79
38:BE:77:ILE:CG2	38:BE:78:LEU:H	1.96	0.79
46:BQ:75:THR:HB	46:BQ:88:GLY:HA2	1.63	0.79
48:BS:35:ILE:H	48:BS:53:SER:HB2	1.47	0.79
51:BV:19:LYS:NZ	51:BV:20:LEU:N	2.28	0.79
1:CA:1321:C:H5'	1:CA:1322:C:H5''	1.64	0.79
26:D1:10:LYS:HB3	26:D1:13:ILE:O	1.83	0.79
34:DA:2645:G:H3'	34:DA:2646:C:H5'	1.64	0.79
34:DA:621:A:H2'	34:DA:622:G:H5'	1.64	0.79
48:DS:54:LEU:C	48:DS:56:LEU:H	1.82	0.79
54:DY:37:VAL:O	54:DY:38:ILE:HB	1.80	0.79
1:AA:434:U:H2'	1:AA:435:C:C6	2.16	0.79
10:AJ:33:GLN:H	10:AJ:75:ILE:HD11	1.45	0.79
40:BG:60:LEU:O	40:BG:64:THR:HG22	1.82	0.79
43:BN:83:LYS:HE2	43:BN:85:ILE:HD11	1.63	0.79
45:BP:30:THR:HG22	45:BP:31:ALA:H	1.46	0.79
48:BS:61:ASN:HD22	48:BS:61:ASN:C	1.82	0.79
34:DA:1353:A:H4'	37:DD:38:LYS:NZ	1.97	0.79
45:DP:105:LEU:O	45:DP:106:LEU:HB2	1.83	0.79
48:DS:85:VAL:CG2	48:DS:106:ARG:HB2	2.12	0.79
55:DZ:61:LEU:HB2	55:DZ:65:GLN:HB2	1.64	0.79
1:AA:1347:G:C8	9:AI:107:ARG:HB3	2.18	0.79
1:AA:353:A:H5'	1:AA:353:A:H8	1.47	0.79
4:AD:9:CYS:HA	4:AD:12:CYS:HB2	1.64	0.79
15:AO:87:ILE:HG22	15:AO:88:ARG:H	1.47	0.79
20:AT:32:ALA:O	20:AT:36:LEU:HB2	1.83	0.79
27:B2:30:ARG:HG3	27:B2:30:ARG:HH11	1.48	0.79
34:BA:1722:A:H2'	34:BA:1739:U:H5''	1.63	0.79
34:BA:2317:C:C2'	34:BA:2318:G:H5'	2.12	0.79
34:BA:2729:G:H2'	34:BA:2730:C:C6	2.17	0.79
37:BD:255:LYS:HE3	37:BD:255:LYS:H	1.48	0.79
45:BP:6:LEU:HG	45:BP:8:PRO:O	1.80	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:179:A:H2'	1:CA:180:U:H6	1.47	0.79
19:CS:63:THR:O	19:CS:66:MET:HG2	1.83	0.79
34:DA:1175:U:H4'	34:DA:1176:G:H5'	1.62	0.79
26:D1:19:GLN:HE21	34:DA:379:G:H21	1.30	0.79
34:DA:528:A:C2	34:DA:2043:C:H4'	2.17	0.79
51:DV:62:LEU:HD22	51:DV:98:GLU:HA	1.64	0.79
1:AA:1281:U:H4'	1:AA:1282:C:OP2	1.82	0.79
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.47	0.79
51:BV:19:LYS:HG3	51:BV:20:LEU:H	1.47	0.79
53:BX:76:ARG:O	53:BX:77:LYS:HB2	1.82	0.79
3:CC:83:ARG:O	3:CC:86:VAL:HG22	1.82	0.79
35:DB:44:G:H1'	35:DB:47:C:H42	1.47	0.79
45:DP:30:THR:HG22	45:DP:31:ALA:H	1.46	0.79
53:DX:64:LYS:HG2	53:DX:65:ARG:H	1.47	0.79
2:AB:67:THR:HG21	2:AB:155:LEU:HG	1.63	0.79
26:B1:19:GLN:HG3	26:B1:44:PRO:HG3	1.64	0.79
26:B1:18:ILE:HA	26:B1:44:PRO:HD2	1.64	0.79
30:B5:4:HIS:HB3	30:B5:5:PRO:CD	2.13	0.79
31:B6:15:GLU:OE1	31:B6:18:ARG:HG3	1.83	0.79
34:BA:1485:G:H1'	34:BA:1505:C:N4	1.98	0.79
34:BA:2530:A:H2'	34:BA:2531:A:H5'	1.63	0.79
52:BW:50:VAL:HG13	52:BW:51:LEU:H	1.47	0.79
1:CA:1031:G:H2'	1:CA:1032:G:H8	1.45	0.79
27:D2:47:ASN:HD22	27:D2:48:HIS:N	1.79	0.79
34:DA:229:A:H3'	34:DA:230:U:H5'	1.64	0.79
39:DF:57:VAL:HG12	39:DF:58:ALA:N	1.96	0.79
34:DA:528:A:H5"	43:DN:114:ARG:HH12	1.47	0.79
45:DP:131:SER:HB2	45:DP:134:ALA:H	1.47	0.79
45:DP:146:VAL:HG22	45:DP:147:LEU:N	1.94	0.79
53:DX:55:ASN:O	53:DX:77:LYS:HB3	1.82	0.79
2:AB:36:ARG:HB2	2:AB:41:ILE:HD11	1.65	0.79
38:BE:91:VAL:HG13	38:BE:95:ILE:HD11	1.62	0.79
45:BP:35:HIS:O	45:BP:36:LYS:HG3	1.83	0.79
51:BV:43:GLU:HA	51:BV:48:GLY:CA	2.13	0.79
1:CA:882:C:O2'	1:CA:883:C:H5'	1.83	0.79
19:CS:40:ILE:HB	19:CS:67:VAL:O	1.83	0.79
37:DD:176:ARG:HH11	37:DD:176:ARG:HG2	1.45	0.79
44:DO:63:VAL:HG23	44:DO:64:ARG:N	1.98	0.79
45:DP:47:ASP:HB3	45:DP:48:PRO:CA	2.13	0.79
51:DV:19:LYS:HG3	51:DV:20:LEU:H	1.47	0.79
53:DX:61:GLY:O	53:DX:70:LEU:HB3	1.82	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:44:LEU:HD12	2:AB:44:LEU:H	1.45	0.79
27:B2:46:GLN:HG2	27:B2:50:ILE:HG13	1.65	0.79
34:BA:1947:C:C2'	34:BA:1948:G:H5''	2.13	0.79
39:BF:46:ARG:HH11	39:BF:46:ARG:HG3	1.46	0.79
40:BG:111:LEU:CA	40:BG:114:ILE:HG12	2.11	0.79
42:BI:133:HIS:HB2	42:BI:134:PRO:HD3	1.65	0.79
45:BP:89:ALA:HB1	45:BP:121:LYS:NZ	1.98	0.79
46:BQ:68:ILE:HG23	46:BQ:103:MET:HA	1.65	0.79
1:CA:1190:G:OP1	3:CC:5:ILE:HD12	1.83	0.79
34:DA:2262:U:O2'	34:DA:2263:C:H5''	1.82	0.79
37:DD:14:ARG:HG2	37:DD:14:ARG:HH11	1.45	0.79
43:DN:28:THR:HG23	43:DN:29:LYS:H	1.48	0.79
1:AA:1316:G:H2'	1:AA:1317:C:H5''	1.65	0.79
14:AN:39:LEU:HD13	14:AN:47:LEU:HD12	1.64	0.79
34:BA:1365:A:H2'	34:BA:1366:A:H8	1.47	0.79
40:BG:41:GLN:HG2	40:BG:155:MET:HB3	1.65	0.79
41:BH:148:ILE:O	41:BH:151:ILE:HG12	1.83	0.79
34:BA:1652:A:OP1	47:BR:9:LYS:HD2	1.83	0.79
49:BT:50:ILE:HD12	49:BT:50:ILE:N	1.98	0.79
51:BV:70:ILE:HG12	51:BV:71:LEU:N	1.97	0.79
1:CA:735:C:O2'	1:CA:736:C:H5'	1.83	0.79
13:CM:91:ARG:HB2	13:CM:98:VAL:HG21	1.64	0.79
23:CW:16:U:C5	23:CW:18:G:H5'	2.18	0.79
25:D0:72:ARG:HB3	25:D0:75:LEU:HB2	1.65	0.79
34:DA:969:U:H2'	34:DA:970:C:C6	2.17	0.79
37:DD:4:LYS:NZ	37:DD:20:ASP:HA	1.97	0.79
39:DF:46:ARG:HG3	39:DF:46:ARG:NH1	1.96	0.79
54:DY:10:GLY:HA2	54:DY:27:VAL:HG13	1.63	0.79
55:DZ:53:ILE:HG22	55:DZ:71:VAL:HB	1.63	0.79
1:AA:1497:G:O2'	1:AA:1498:U:H5'	1.82	0.79
3:AC:20:SER:CB	3:AC:40:ARG:HH22	1.90	0.79
27:B2:41:ILE:HG12	34:BA:94(A):G:H21	1.45	0.79
34:BA:2639:A:C2'	34:BA:2640:G:H5''	2.12	0.79
37:BD:118:VAL:HG22	37:BD:119:ALA:H	1.47	0.79
43:BN:120:LEU:HD11	43:BN:122:VAL:HG23	1.65	0.79
43:BN:55:VAL:HG12	43:BN:56:ASN:H	1.47	0.79
34:BA:2415:G:O3'	45:BP:66:GLY:HA3	1.83	0.79
1:CA:976:G:H5'	1:CA:1358:U:O2'	1.82	0.79
7:CG:64:GLN:HG3	7:CG:68:ASN:ND2	1.97	0.79
26:D1:26:ARG:CB	26:D1:34:THR:HA	2.13	0.79
34:DA:1805:U:O2	37:DD:50:THR:HB	1.82	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2317:C:C2'	34:DA:2318:G:H5'	2.13	0.79
37:DD:76:PRO:HG2	37:DD:98:VAL:HG21	1.63	0.79
34:DA:2415:G:O3'	45:DP:66:GLY:HA3	1.83	0.79
45:DP:89:ALA:HB1	45:DP:121:LYS:NZ	1.97	0.79
52:DW:29:LEU:HD21	52:DW:33:ARG:HH21	1.47	0.79
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.18	0.79
34:BA:2876:G:H4'	49:BT:3:ARG:HD3	1.65	0.79
39:BF:8:GLN:HB3	39:BF:126:VAL:HA	1.65	0.79
44:BO:87:ILE:HG23	44:BO:91:LEU:HA	1.64	0.79
25:D0:23:VAL:HA	25:D0:38:VAL:HG22	1.62	0.79
34:DA:2287:A:H62	34:DA:2344:U:H3	1.26	0.79
34:DA:954:G:H4'	46:DQ:13:GLN:NE2	1.97	0.79
43:DN:120:LEU:HD11	43:DN:122:VAL:HG23	1.65	0.79
54:DY:37:VAL:HG23	54:DY:38:ILE:N	1.97	0.79
20:AT:12:ALA:H	20:AT:13:LEU:HD12	1.46	0.78
26:B1:19:GLN:H	26:B1:44:PRO:HD3	1.48	0.78
34:BA:1453:U:H5'	47:BR:63:ARG:NE	1.97	0.78
26:D1:46:LEU:H	26:D1:46:LEU:HD13	1.47	0.78
27:D2:30:ARG:NH2	53:DX:11:PRO:HG3	1.99	0.78
1:AA:179:A:H2'	1:AA:180:U:H6	1.47	0.78
34:BA:1577:C:H2'	34:BA:1578:U:C6	2.18	0.78
34:BA:528:A:C2	34:BA:2043:C:H4'	2.18	0.78
44:BO:69:ILE:HD13	44:BO:77:ILE:HG23	1.65	0.78
45:BP:47:ASP:HB3	45:BP:48:PRO:CA	2.11	0.78
26:D1:89:GLU:O	26:D1:93:GLU:HG2	1.84	0.78
27:D2:54:LYS:C	27:D2:56:GLN:H	1.86	0.78
34:DA:1019:U:H3	34:DA:1142(A):A:N6	1.82	0.78
34:DA:1378:A:O2'	34:DA:1379:A:H5''	1.83	0.78
54:DY:15:VAL:HG12	54:DY:17:SER:H	1.48	0.78
1:AA:376:G:H2'	1:AA:377:G:H8	1.49	0.78
34:BA:1484:G:C2'	34:BA:1485:G:H5''	2.13	0.78
37:BD:25:THR:HG21	37:BD:81:ALA:HB1	1.66	0.78
42:BI:9:LEU:HB2	42:BI:12:LEU:O	1.84	0.78
45:BP:131:SER:HB2	45:BP:134:ALA:H	1.47	0.78
51:BV:19:LYS:HG2	51:BV:96:ILE:HB	1.65	0.78
31:D6:15:GLU:OE1	31:D6:18:ARG:HG3	1.84	0.78
34:DA:1453:U:H5'	47:DR:63:ARG:NE	1.97	0.78
48:DS:78:LEU:HD11	48:DS:103:GLU:HB3	1.65	0.78
25:B0:23:VAL:HA	25:B0:38:VAL:HG22	1.66	0.78
34:BA:2746:U:H4'	41:BH:138:LYS:HD3	1.64	0.78
34:BA:1902:C:O2'	37:BD:244:ARG:HB2	1.83	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2579:C:H4'	38:BE:134:ILE:HD12	1.63	0.78
44:BO:35:VAL:HG11	44:BO:103:ALA:HB3	1.63	0.78
34:BA:482:A:H4'	54:BY:47:LYS:NZ	1.97	0.78
54:BY:8:LYS:HZ1	54:BY:74:PRO:HD3	1.46	0.78
1:CA:1316:G:H2'	1:CA:1317:C:H5''	1.63	0.78
1:CA:328:C:H4'	1:CA:329:A:C5'	2.13	0.78
2:CB:158:LEU:HD12	2:CB:158:LEU:H	1.48	0.78
3:CC:104:GLN:CD	3:CC:105:GLU:H	1.85	0.78
26:D1:46:LEU:C	26:D1:46:LEU:HD22	2.04	0.78
30:D5:57:VAL:HG23	30:D5:58:LEU:H	1.47	0.78
33:D8:32:LEU:C	33:D8:34:TRP:N	2.36	0.78
34:DA:1899:G:H22	34:DA:1902:C:H41	1.31	0.78
34:DA:2845:G:O2'	34:DA:2846:G:H5'	1.83	0.78
43:DN:83:LYS:HE2	43:DN:85:ILE:HD11	1.64	0.78
47:DR:11:ASN:OD1	47:DR:12:ARG:N	2.17	0.78
1:AA:114:U:H2'	1:AA:115:G:C8	2.18	0.78
1:AA:386:C:C2'	1:AA:387:U:H5'	2.14	0.78
3:AC:83:ARG:O	3:AC:86:VAL:HG22	1.83	0.78
17:AQ:67:LYS:O	17:AQ:69:LYS:N	2.16	0.78
26:B1:19:GLN:OE1	26:B1:44:PRO:HB3	1.82	0.78
32:B7:12:ARG:HD3	32:B7:46:VAL:HG21	1.65	0.78
33:B8:43:GLN:C	33:B8:44:LYS:HD2	2.04	0.78
34:BA:2729:G:H1'	38:BE:187:ALA:HB2	1.64	0.78
45:BP:59:LEU:HA	45:BP:61:ARG:CZ	2.14	0.78
33:B8:27:THR:HA	45:BP:62:LEU:HD11	1.65	0.78
48:BS:92:TYR:CD1	48:BS:93:LYS:N	2.52	0.78
25:D0:32:ARG:H	25:D0:35:ASN:ND2	1.82	0.78
34:DA:1141:U:H2'	43:DN:63:THR:CG2	2.13	0.78
40:DG:67:LYS:HD2	40:DG:67:LYS:N	1.98	0.78
41:DH:148:ILE:O	41:DH:151:ILE:HG12	1.84	0.78
47:DR:64:ARG:HA	47:DR:67:LEU:HD23	1.64	0.78
51:DV:43:GLU:HA	51:DV:48:GLY:CA	2.13	0.78
1:AA:328:C:H4'	1:AA:329:A:H5'	1.64	0.78
12:AL:89:ARG:HB2	12:AL:89:ARG:NH1	1.99	0.78
34:BA:969:U:H2'	34:BA:970:C:C6	2.18	0.78
37:BD:176:ARG:HG2	37:BD:176:ARG:HH11	1.48	0.78
37:BD:79:VAL:HG21	37:BD:111:LEU:CD1	2.13	0.78
43:BN:46:VAL:HG13	43:BN:47:ALA:N	1.98	0.78
53:BX:58:HIS:O	53:BX:59:VAL:HG13	1.83	0.78
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.18	0.78
1:CA:1442:G:H5'	1:CA:1442:G:C8	2.19	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:13:ILE:O	8:CH:17:THR:HG23	1.84	0.78
34:DA:1722:A:H2'	34:DA:1739:U:H5''	1.64	0.78
34:DA:2747:G:O6	34:DA:2755:C:H5''	1.81	0.78
45:DP:146:VAL:CG2	45:DP:147:LEU:H	1.91	0.78
13:AM:23:TYR:HE1	13:AM:70:LEU:HD22	1.47	0.78
17:AQ:26:GLN:HB3	17:AQ:37:LYS:HG2	1.66	0.78
34:BA:1353:A:H4'	37:BD:38:LYS:NZ	1.97	0.78
34:BA:2283:C:H2'	34:BA:2284:C:H5'	1.64	0.78
39:BF:65:TRP:HZ3	39:BF:75:HIS:HD2	1.32	0.78
41:BH:85:LYS:HD3	41:BH:133:VAL:HB	1.66	0.78
1:CA:1442(A):G:H3'	1:CA:1442(B):A:C5'	2.14	0.78
1:CA:979:C:C3'	1:CA:980:C:H5''	2.14	0.78
17:CQ:26:GLN:HB3	17:CQ:37:LYS:HG2	1.64	0.78
34:DA:1485:G:H1'	34:DA:1505:C:N4	1.99	0.78
37:DD:17:THR:HG22	37:DD:205:VAL:HB	1.66	0.78
19:AS:40:ILE:HB	19:AS:67:VAL:O	1.83	0.78
25:B0:27:GLU:HG3	25:B0:68:GLU:HA	1.64	0.78
31:B6:20:ASN:ND2	31:B6:21:TYR:H	1.80	0.78
33:B8:32:LEU:C	33:B8:34:TRP:N	2.36	0.78
34:BA:622:G:O2'	34:BA:623:G:H5'	1.83	0.78
38:BE:100:GLU:O	38:BE:172:VAL:HG23	1.84	0.78
54:BY:28:LYS:HB2	54:BY:37:VAL:C	2.04	0.78
1:CA:1281:U:H4'	1:CA:1282:C:OP2	1.81	0.78
1:CA:584:G:H1	1:CA:757:U:H3	1.30	0.78
26:D1:22:GLY:H	26:D1:39:LYS:HA	1.48	0.78
34:DA:1639:U:O2'	34:DA:1640:C:H5''	1.84	0.78
34:DA:1947:C:C2'	34:DA:1948:G:H5''	2.14	0.78
34:DA:2468:G:N2	34:DA:2481:G:H2'	1.99	0.78
34:DA:2530:A:H2'	34:DA:2531:A:H5'	1.64	0.78
36:DC:64:LEU:HD13	36:DC:65:PRO:HD2	1.66	0.78
40:DG:114:ILE:HD11	40:DG:140:ILE:HD13	1.66	0.78
45:DP:65:ARG:HB2	45:DP:65:ARG:NH1	1.99	0.78
1:AA:1442:G:H2'	1:AA:1442(A):G:H5''	1.65	0.78
5:AE:7:GLU:HB3	5:AE:112:LEU:HD13	1.66	0.78
7:AG:64:GLN:HG3	7:AG:68:ASN:ND2	1.96	0.78
34:BA:1805:U:O2	37:BD:50:THR:HB	1.84	0.78
34:BA:2052:G:H4'	38:BE:143:ASN:O	1.84	0.78
35:BB:74:U:C3'	35:BB:75:G:H5''	2.14	0.78
37:BD:79:VAL:CG2	37:BD:111:LEU:HD11	2.10	0.78
37:BD:25:THR:O	37:BD:27:THR:N	2.17	0.78
37:BD:4:LYS:HZ1	37:BD:20:ASP:HA	1.49	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:39:TRP:O	39:BF:43:LYS:HG2	1.83	0.78
50:BU:83:LEU:HB3	50:BU:88:ILE:CD1	2.13	0.78
1:CA:1501:C:OP2	1:CA:1504:G:H2'	1.84	0.78
10:CJ:33:GLN:H	10:CJ:75:ILE:HD11	1.49	0.78
26:D1:26:ARG:HB2	26:D1:34:THR:HA	1.64	0.78
43:DN:42:TRP:N	50:DU:64:ARG:NH2	2.31	0.78
1:AA:1321:C:H5'	1:AA:1322:C:H5''	1.64	0.78
15:AO:39:LEU:HD12	15:AO:56:LEU:HD13	1.65	0.78
19:AS:63:THR:O	19:AS:66:MET:HG2	1.83	0.78
36:BC:64:LEU:HD13	36:BC:65:PRO:HD2	1.64	0.78
45:BP:65:ARG:HB2	45:BP:65:ARG:NH1	1.98	0.78
52:BW:10:VAL:O	52:BW:11:ARG:HB2	1.82	0.78
1:CA:834:C:H2'	1:CA:835:U:H6	1.49	0.78
1:CA:1054:C:H42	23:CY:34:G:H1'	1.49	0.78
43:DN:33:LEU:HD23	43:DN:52:VAL:CG2	2.14	0.78
53:DX:58:HIS:O	53:DX:59:VAL:HG13	1.83	0.78
1:AA:1490:C:O2'	1:AA:1491:G:H5'	1.84	0.77
34:BA:1665:A:C2'	34:BA:1666:G:H5'	2.14	0.77
36:BC:44:HIS:HD2	36:BC:175:VAL:HA	1.49	0.77
45:BP:17:LYS:C	45:BP:19:VAL:H	1.87	0.77
53:BX:61:GLY:O	53:BX:70:LEU:HB3	1.83	0.77
54:BY:87:LYS:O	54:BY:88:LYS:HB2	1.85	0.77
2:CB:36:ARG:HB2	2:CB:41:ILE:HD11	1.65	0.77
14:CN:39:LEU:HD13	14:CN:47:LEU:HD12	1.65	0.77
34:DA:2110:G:H1	34:DA:2179:C:H42	1.30	0.77
34:DA:658:C:C2'	34:DA:659:C:H5''	2.13	0.77
41:DH:37:VAL:HG12	41:DH:38:SER:H	1.48	0.77
45:DP:17:LYS:C	45:DP:19:VAL:H	1.86	0.77
51:DV:70:ILE:CB	51:DV:90:PRO:HB2	2.10	0.77
54:DY:8:LYS:HZ1	54:DY:74:PRO:HD3	1.50	0.77
1:AA:737:A:H2'	1:AA:738:C:C6	2.19	0.77
10:AJ:40:LEU:HB2	10:AJ:41:PRO:HD2	1.66	0.77
34:BA:1639:U:O2'	34:BA:1640:C:H5''	1.84	0.77
34:BA:2262:U:O2'	34:BA:2263:C:H5''	1.84	0.77
37:BD:24:ILE:O	37:BD:24:ILE:HG23	1.84	0.77
2:CB:84:GLU:HB3	2:CB:219:VAL:HG21	1.65	0.77
3:CC:52:LEU:HD23	3:CC:52:LEU:H	1.50	0.77
3:CC:58:GLU:H	3:CC:65:ALA:HB3	1.49	0.77
34:DA:1987:G:H5'	34:DA:1987:G:H8	1.48	0.77
37:DD:255:LYS:HE3	37:DD:255:LYS:H	1.49	0.77
37:DD:25:THR:O	37:DD:27:THR:N	2.16	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DF:157:VAL:HG12	39:DF:176:LEU:O	1.85	0.77
51:DV:70:ILE:HG12	51:DV:71:LEU:N	1.98	0.77
54:DY:28:LYS:HB2	54:DY:37:VAL:C	2.04	0.77
22:AV:70:G:C2'	22:AV:71:C:H5'	2.14	0.77
27:B2:34:GLU:O	27:B2:36:ARG:N	2.18	0.77
34:BA:1518:U:H2'	34:BA:1519:G:O4'	1.85	0.77
39:BF:205:ARG:O	39:BF:206:ILE:HG23	1.84	0.77
41:BH:43:VAL:CG1	41:BH:53:GLU:H	1.97	0.77
47:BR:11:ASN:OD1	47:BR:12:ARG:N	2.17	0.77
48:BS:17:ARG:C	48:BS:19:LYS:H	1.83	0.77
48:BS:37:ALA:HB2	48:BS:99:LYS:NZ	1.99	0.77
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.20	0.77
2:CB:69:LEU:HB3	2:CB:162:ILE:HG22	1.66	0.77
48:DS:92:TYR:CD1	48:DS:93:LYS:N	2.53	0.77
48:DS:37:ALA:HB2	48:DS:99:LYS:NZ	1.99	0.77
6:AF:97:PHE:O	18:AR:31:LEU:HD23	1.84	0.77
28:B3:8:LEU:CD1	28:B3:31:LEU:HA	2.14	0.77
34:BA:1019:U:H3	34:BA:1142(A):A:N6	1.80	0.77
34:BA:286:C:C2'	34:BA:287:C:H5''	2.15	0.77
37:BD:8:PRO:HB3	37:BD:14:ARG:HB2	1.65	0.77
37:BD:106:ILE:HD11	37:BD:196:VAL:HG13	1.66	0.77
48:BS:27:SER:HB3	48:BS:89:ARG:NH1	1.99	0.77
53:BX:34:ALA:O	53:BX:36:LYS:HG3	1.84	0.77
34:DA:2052:G:H4'	38:DE:143:ASN:O	1.84	0.77
45:DP:71:VAL:HG12	45:DP:72:PRO:HD3	1.63	0.77
45:DP:7:ARG:HB3	45:DP:8:PRO:HD3	1.65	0.77
1:AA:584:G:H1	1:AA:757:U:H3	1.30	0.77
1:AA:630:G:H2'	1:AA:631:G:H5''	1.66	0.77
19:AS:16:LEU:H	19:AS:16:LEU:HD12	1.50	0.77
19:AS:9:VAL:O	19:AS:11:VAL:N	2.18	0.77
34:BA:271(U):G:O2'	34:BA:271(V):G:H5'	1.85	0.77
34:BA:955:C:H5'	34:BA:956:G:OP2	1.84	0.77
37:BD:102:LYS:C	37:BD:103:ARG:HG2	2.05	0.77
41:BH:40:GLU:O	41:BH:41:MET:HB2	1.85	0.77
44:BO:64:ARG:CZ	49:BT:70:VAL:HG21	2.14	0.77
55:BZ:151:HIS:HB3	55:BZ:170:THR:CA	2.14	0.77
5:CE:6:PHE:HB2	5:CE:34:VAL:HG13	1.67	0.77
34:DA:286:C:C2'	34:DA:287:C:H5''	2.14	0.77
34:DA:541:C:H2'	34:DA:542:C:C6	2.18	0.77
44:DO:35:VAL:HG11	44:DO:103:ALA:HB3	1.65	0.77
26:B1:17:SER:C	26:B1:18:ILE:HD12	2.05	0.77

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:13:ILE:CG2	26:B1:63:ALA:HB2	2.11	0.77
30:B5:29:THR:HG21	34:BA:2814:C:O2'	1.85	0.77
34:BA:528:A:H5''	43:BN:114:ARG:HH12	1.50	0.77
45:BP:66:GLY:O	45:BP:67:MET:C	2.23	0.77
43:BN:42:TRP:N	50:BU:64:ARG:NH2	2.32	0.77
10:CJ:40:LEU:HB2	10:CJ:41:PRO:HD2	1.65	0.77
20:CT:13:LEU:CD1	20:CT:13:LEU:H	1.98	0.77
23:CW:29:G:H1	23:CW:41:C:H42	1.31	0.77
34:DA:2468:G:H22	34:DA:2481:G:H2'	1.50	0.77
34:DA:2729:G:H2'	34:DA:2730:C:C6	2.19	0.77
27:D2:48:HIS:NE2	34:DA:75:G:H4'	1.99	0.77
35:DB:74:U:C2'	35:DB:75:G:H5''	2.14	0.77
34:DA:2579:C:H4'	38:DE:134:ILE:HD12	1.67	0.77
41:DH:68:THR:HA	41:DH:71:LEU:HB2	1.66	0.77
42:DI:127:VAL:HG22	42:DI:139:GLN:HG3	1.66	0.77
42:DI:9:LEU:HB2	42:DI:12:LEU:O	1.85	0.77
48:DS:35:ILE:H	48:DS:53:SER:HB2	1.47	0.77
54:DY:8:LYS:HB2	54:DY:28:LYS:NZ	2.00	0.77
54:DY:28:LYS:HE2	54:DY:30:VAL:HG22	1.65	0.77
55:DZ:9:TYR:CE1	55:DZ:61:LEU:HD13	2.20	0.77
1:AA:1118:C:H42	1:AA:1155:G:H1	1.31	0.77
1:AA:979:C:C3'	1:AA:980:C:H5''	2.15	0.77
2:AB:201:ILE:HG21	2:AB:214:ILE:HG21	1.67	0.77
8:AH:103:VAL:CG2	8:AH:110:ALA:HB2	2.14	0.77
27:B2:16:LEU:N	27:B2:18:PRO:HD2	1.95	0.77
34:BA:1490:A:H5'	34:BA:1491:G:OP2	1.84	0.77
42:BI:127:VAL:HG22	42:BI:139:GLN:HG3	1.65	0.77
45:BP:47:ASP:OD1	45:BP:49:ARG:HB2	1.84	0.77
51:BV:43:GLU:HA	51:BV:48:GLY:HA3	1.66	0.77
54:BY:10:GLY:HA2	54:BY:27:VAL:HG13	1.67	0.77
55:BZ:126:VAL:HG12	55:BZ:163:LEU:HA	1.66	0.77
12:CL:89:ARG:HB2	12:CL:89:ARG:NH1	2.00	0.77
34:DA:1169:G:H1	34:DA:1180:C:H42	1.30	0.77
30:D5:29:THR:HG21	34:DA:2814:C:O2'	1.84	0.77
37:DD:106:ILE:HD11	37:DD:196:VAL:HG13	1.66	0.77
37:DD:24:ILE:O	37:DD:24:ILE:HG23	1.85	0.77
39:DF:157:VAL:HG23	39:DF:194:MET:HB3	1.65	0.77
40:DG:41:GLN:HB3	40:DG:43:LEU:HD11	1.66	0.77
50:DU:6:THR:HG21	50:DU:10:ARG:NH2	1.98	0.77
2:AB:19:HIS:O	2:AB:39:ILE:HG23	1.84	0.77
13:AM:13:LYS:HA	13:AM:44:ARG:HH11	1.49	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:38:A:H2'	23:AW:39:U:H5''	1.67	0.77
34:BA:1141:U:H2'	43:BN:63:THR:HG22	1.64	0.77
34:BA:292:C:H42	34:BA:348:G:H1	1.32	0.77
34:BA:483:A:H8	54:BY:47:LYS:HZ3	1.32	0.77
43:BN:46:VAL:CG1	43:BN:48:MET:HG3	2.15	0.77
25:D0:51:VAL:HG21	25:D0:80:HIS:HA	1.67	0.77
30:D5:4:HIS:HB3	30:D5:5:PRO:CD	2.12	0.77
34:DA:2180:U:H2'	34:DA:2181:G:C8	2.20	0.77
34:DA:2577:A:H5''	34:DA:2578:G:H5'	1.66	0.77
34:DA:271(U):G:O2'	34:DA:271(V):G:H5'	1.84	0.77
34:DA:2822:G:H2'	34:DA:2823:A:H5''	1.65	0.77
43:DN:46:VAL:HG13	43:DN:47:ALA:N	1.99	0.77
46:DQ:68:ILE:HG23	46:DQ:103:MET:HA	1.67	0.77
51:DV:70:ILE:HB	51:DV:90:PRO:CB	2.10	0.77
34:DA:1341:U:C2	53:DX:77:LYS:HE2	2.19	0.77
55:DZ:76:LEU:HD23	55:DZ:83:PRO:HA	1.65	0.77
1:AA:1522:U:H2'	1:AA:1523:G:H8	1.49	0.77
15:AO:69:TYR:CZ	15:AO:73:GLU:HG3	2.19	0.77
34:BA:658:C:C2'	34:BA:659:C:H5''	2.14	0.77
34:BA:784:A:H5'	34:BA:785:G:OP1	1.85	0.77
41:BH:68:THR:HA	41:BH:71:LEU:HB2	1.67	0.77
42:BI:98:ALA:HB1	42:BI:109:ILE:HD13	1.67	0.77
30:B5:20:ARG:NH1	52:BW:15:ARG:CZ	2.48	0.77
2:CB:20:GLU:HG3	2:CB:191:ASP:HB2	1.66	0.77
5:CE:76:ILE:HD11	5:CE:142:LEU:HD11	1.66	0.77
33:D8:43:GLN:C	33:D8:44:LYS:HD2	2.05	0.77
34:DA:61:G:H1	34:DA:94:C:H42	1.32	0.77
40:DG:48:GLU:HG2	40:DG:49:ASP:H	1.50	0.77
41:DH:85:LYS:HD3	41:DH:133:VAL:HB	1.65	0.77
47:DR:73:VAL:O	47:DR:76:VAL:HG12	1.85	0.77
5:AE:6:PHE:HB2	5:AE:34:VAL:HG13	1.66	0.77
39:BF:57:VAL:HG12	39:BF:58:ALA:N	1.98	0.77
39:BF:65:TRP:CZ3	39:BF:75:HIS:HD2	2.02	0.77
40:BG:64:THR:HG23	40:BG:65:GLY:H	1.50	0.77
43:BN:33:LEU:HD23	43:BN:52:VAL:CG2	2.14	0.77
34:BA:811:U:H3'	45:BP:25:SER:O	1.84	0.77
34:BA:2009:G:N3	47:BR:107:ASP:HA	1.99	0.77
52:BW:29:LEU:HD21	52:BW:33:ARG:HH21	1.49	0.77
10:CJ:38:ILE:HD11	10:CJ:71:LEU:HD23	1.67	0.77
19:CS:16:LEU:HD12	19:CS:16:LEU:H	1.48	0.77
20:CT:32:ALA:O	20:CT:36:LEU:HB2	1.84	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:17:C:H5''	22:CV:17(A):U:C6	2.20	0.77
34:DA:2009:G:N3	47:DR:107:ASP:HA	2.00	0.77
34:DA:2283:C:H2'	34:DA:2284:C:H5'	1.67	0.77
34:DA:2729:G:H1'	38:DE:187:ALA:HB2	1.65	0.77
51:DV:69:LYS:HG3	51:DV:70:ILE:H	1.50	0.77
51:DV:73:SER:HB2	51:DV:75:PHE:CE1	2.21	0.77
13:AM:19:LEU:HB3	13:AM:25:ILE:HG21	1.66	0.76
34:BA:1899:G:H22	34:BA:1902:C:H41	1.33	0.76
34:BA:621:A:H2'	34:BA:622:G:H5'	1.66	0.76
37:BD:63:ARG:HH11	37:BD:63:ARG:HG3	1.49	0.76
48:BS:34:HIS:HB3	48:BS:53:SER:HB3	1.68	0.76
53:BX:56:THR:HA	53:BX:77:LYS:HB2	1.67	0.76
34:DA:1902:C:O2'	37:DD:244:ARG:HB2	1.83	0.76
37:DD:8:PRO:HB3	37:DD:14:ARG:HB2	1.68	0.76
34:DA:2810:A:H2'	38:DE:61:ARG:NH2	1.99	0.76
49:DT:98:LYS:HB3	49:DT:100:TYR:CE1	2.19	0.76
52:DW:40:ASN:O	52:DW:41:LYS:HG2	1.84	0.76
7:AG:79:ARG:NE	7:AG:84:ASN:HD21	1.82	0.76
1:AA:186:C:H5'	20:AT:78:ALA:HB1	1.68	0.76
26:B1:46:LEU:H	26:B1:46:LEU:HD12	1.49	0.76
34:BA:2555:U:H2'	34:BA:2556:C:H5'	1.65	0.76
39:BF:148:LEU:HD21	39:BF:191:ARG:HH11	1.49	0.76
42:BI:88:ILE:HG22	42:BI:89:TYR:N	2.00	0.76
43:BN:66:LYS:HA	43:BN:69:GLN:HB2	1.67	0.76
45:BP:24:GLY:CA	45:BP:33:ARG:HH21	1.98	0.76
54:BY:37:VAL:HG23	54:BY:38:ILE:N	1.99	0.76
1:CA:386:C:C2'	1:CA:387:U:H5'	2.14	0.76
7:CG:79:ARG:NE	7:CG:84:ASN:HD21	1.82	0.76
26:D1:9:GLY:H	26:D1:48:LYS:NZ	1.83	0.76
32:D7:43:THR:HG23	32:D7:44:PRO:HD2	1.65	0.76
32:D7:48:LYS:HE3	34:DA:125:G:H21	1.51	0.76
37:DD:102:LYS:C	37:DD:103:ARG:HG2	2.05	0.76
39:DF:148:LEU:HD21	39:DF:191:ARG:HH11	1.49	0.76
42:DI:93:THR:HG22	42:DI:119:PRO:HB3	1.66	0.76
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.20	0.76
3:AC:77:ILE:O	3:AC:83:ARG:HB3	1.85	0.76
8:AH:13:ILE:O	8:AH:17:THR:HG23	1.85	0.76
14:AN:13:THR:H	14:AN:14:PRO:CD	1.98	0.76
34:BA:2801(A):A:HO2'	34:BA:2803:C:H5	1.31	0.76
45:BP:7:ARG:HB3	45:BP:8:PRO:HD3	1.67	0.76
1:CA:1321:C:H5'	1:CA:1322:C:C5'	2.15	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:383:A:H2'	1:CA:384:G:H5'	1.67	0.76
3:CC:70:VAL:HG12	3:CC:71:ALA:N	2.01	0.76
34:DA:2307:G:H21	34:DA:2308:G:C5'	1.97	0.76
35:DB:45:A:H1'	40:DG:95:ARG:NH2	2.00	0.76
2:AB:20:GLU:HG3	2:AB:191:ASP:HB2	1.65	0.76
10:AJ:40:LEU:HD23	10:AJ:40:LEU:H	1.49	0.76
19:AS:36:ARG:HH12	19:AS:75:ALA:HB3	1.50	0.76
35:BB:6:C:HO2'	48:BS:29:PHE:HE1	1.29	0.76
40:BG:23:PHE:HZ	40:BG:171:ALA:HB3	1.50	0.76
44:BO:63:VAL:HG23	44:BO:64:ARG:N	1.99	0.76
1:CA:521:G:O2'	1:CA:522:C:H5'	1.85	0.76
1:CA:979:C:H3'	1:CA:980:C:C5'	2.14	0.76
17:CQ:67:LYS:O	17:CQ:69:LYS:N	2.18	0.76
34:DA:1635:G:H8	34:DA:1635:G:H5'	1.51	0.76
34:DA:1652:A:OP1	47:DR:9:LYS:HD2	1.85	0.76
34:DA:1751:C:O2'	34:DA:1752:C:H5'	1.85	0.76
34:DA:212:G:O2'	34:DA:213:A:H5'	1.86	0.76
38:DE:93:VAL:C	38:DE:95:ILE:H	1.88	0.76
34:DA:2311:A:H2	40:DG:82:LEU:HD12	1.51	0.76
34:DA:2876:G:H4'	49:DT:3:ARG:HD3	1.66	0.76
53:DX:59:VAL:HG23	53:DX:74:PRO:HG2	1.67	0.76
1:AA:979:C:H3'	1:AA:980:C:C5'	2.15	0.76
4:AD:17:VAL:HG11	4:AD:197:PRO:HB2	1.68	0.76
13:AM:118:ALA:HB1	13:AM:119:GLY:N	2.00	0.76
28:B3:6:VAL:HG13	28:B3:54:VAL:CG1	2.13	0.76
32:B7:43:THR:HG23	32:B7:44:PRO:HD2	1.68	0.76
34:BA:1169:G:H1	34:BA:1180:C:H42	1.30	0.76
41:BH:44:VAL:HG12	41:BH:45:VAL:N	2.01	0.76
43:BN:57:ALA:HB2	43:BN:123:TYR:O	1.85	0.76
49:BT:65:LYS:HA	49:BT:65:LYS:NZ	2.00	0.76
51:BV:73:SER:HB2	51:BV:75:PHE:CE1	2.20	0.76
1:CA:630:G:H2'	1:CA:631:G:H5''	1.66	0.76
4:CD:96:LEU:N	4:CD:96:LEU:HD22	2.01	0.76
15:CO:82:ILE:O	15:CO:82:ILE:HD13	1.85	0.76
38:DE:2:LYS:HD3	38:DE:95:ILE:HG22	1.68	0.76
39:DF:25:PRO:HB3	39:DF:119:ARG:HB2	1.68	0.76
48:DS:27:SER:HB3	48:DS:89:ARG:NH1	2.00	0.76
13:AM:65:LYS:HA	13:AM:66:LEU:HD12	1.67	0.76
25:B0:32:ARG:H	25:B0:35:ASN:ND2	1.84	0.76
34:BA:539:G:H2'	34:BA:540:C:H6	1.51	0.76
51:BV:2:PHE:HB3	51:BV:42:GLY:HA2	1.68	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1118:C:H42	1:CA:1155:G:H1	1.32	0.76
5:CE:101:ILE:CG1	5:CE:119:LEU:HD23	2.14	0.76
19:CS:9:VAL:O	19:CS:11:VAL:N	2.19	0.76
20:CT:50:GLU:HB3	20:CT:100:ILE:CG1	2.16	0.76
41:DH:40:GLU:O	41:DH:41:MET:HB2	1.84	0.76
42:DI:109:ILE:H	42:DI:109:ILE:HD12	1.50	0.76
51:DV:19:LYS:HG2	51:DV:96:ILE:HB	1.65	0.76
1:AA:189(H):G:H2'	1:AA:189(I):G:C8	2.20	0.76
11:AK:23:ALA:HB3	11:AK:86:GLY:O	1.86	0.76
23:AW:27:G:H1	23:AW:43:C:H42	1.33	0.76
34:BA:1947:C:H2'	34:BA:1948:G:H5''	1.68	0.76
34:BA:2180:U:H2'	34:BA:2181:G:C8	2.20	0.76
34:BA:2307:G:H21	34:BA:2308:G:C5'	1.97	0.76
38:BE:26:ILE:HD12	38:BE:196:VAL:HG21	1.66	0.76
34:BA:2810:A:H2'	38:BE:61:ARG:NH2	2.01	0.76
43:BN:131:GLN:HE22	43:BN:134:ARG:HA	1.51	0.76
53:BX:56:THR:C	53:BX:57:LEU:HD12	2.05	0.76
55:BZ:5:LEU:HD13	55:BZ:43:GLU:HB3	1.66	0.76
1:CA:189(H):G:H2'	1:CA:189(I):G:C8	2.21	0.76
13:CM:118:ALA:HB1	13:CM:119:GLY:N	2.00	0.76
13:CM:13:LYS:HA	13:CM:44:ARG:HH11	1.48	0.76
13:CM:19:LEU:HB3	13:CM:25:ILE:HG21	1.66	0.76
22:CV:49:G:H1	22:CV:65:C:H42	1.31	0.76
30:D5:32:PRO:O	30:D5:33:CYS:HB3	1.84	0.76
34:DA:1484:G:C2'	34:DA:1485:G:H5''	2.14	0.76
41:DH:144:VAL:O	41:DH:144:VAL:HG12	1.86	0.76
41:DH:43:VAL:CG1	41:DH:53:GLU:H	1.98	0.76
46:DQ:47:ILE:HG12	46:DQ:68:ILE:HD11	1.66	0.76
48:DS:67:ARG:H	48:DS:69:VAL:HG12	1.50	0.76
37:BD:76:PRO:HG2	37:BD:98:VAL:CG2	2.15	0.76
2:CB:19:HIS:O	2:CB:39:ILE:HG23	1.86	0.76
13:CM:65:LYS:HA	13:CM:66:LEU:HD12	1.68	0.76
34:DA:1484:G:H21	34:DA:1505:C:H41	1.34	0.76
34:DA:1509(A):A:H2'	34:DA:1509(B):A:H8	1.51	0.76
34:DA:1518:U:H2'	34:DA:1519:G:O4'	1.86	0.76
34:DA:292:C:H42	34:DA:348:G:H1	1.32	0.76
42:DI:133:HIS:HB2	42:DI:134:PRO:HD3	1.66	0.76
47:DR:28:LEU:HD12	47:DR:48:VAL:HG21	1.65	0.76
51:DV:43:GLU:HA	51:DV:48:GLY:HA3	1.67	0.76
53:DX:56:THR:O	53:DX:57:LEU:HD12	1.84	0.76
19:AS:6:LYS:HD2	19:AS:6:LYS:H	1.51	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:61:C:H2'	23:AW:62:C:C6	2.21	0.76
40:BG:42:GLY:C	40:BG:43:LEU:HD22	2.06	0.76
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.20	0.76
1:CA:336:C:H2'	1:CA:337:C:H6	1.49	0.76
14:CN:13:THR:H	14:CN:14:PRO:CD	1.98	0.76
15:CO:87:ILE:HG22	15:CO:88:ARG:H	1.51	0.76
34:DA:1221(A):C:O2'	34:DA:1222:C:H5'	1.86	0.76
34:DA:1899:G:N2	34:DA:1902:C:H41	1.84	0.76
1:AA:1321:C:H5'	1:AA:1322:C:C5'	2.15	0.76
2:AB:158:LEU:H	2:AB:158:LEU:HD12	1.51	0.76
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.66	0.76
8:AH:102:ARG:N	8:AH:102:ARG:HE	1.84	0.76
26:B1:53:VAL:HG21	26:B1:74:VAL:HG21	1.67	0.76
46:BQ:47:ILE:HG12	46:BQ:68:ILE:HD11	1.67	0.76
14:CN:24:CYS:HB3	14:CN:27:CYS:O	1.85	0.76
33:D8:52:LYS:N	33:D8:53:PRO:CD	2.48	0.76
34:DA:1937:A:O2'	34:DA:1938:A:H5'	1.85	0.76
36:DC:44:HIS:HD2	36:DC:175:VAL:HA	1.50	0.76
43:DN:55:VAL:CG1	43:DN:126:PRO:HA	2.16	0.76
45:DP:24:GLY:CA	45:DP:33:ARG:HH21	1.98	0.76
49:DT:50:ILE:N	49:DT:50:ILE:HD12	2.01	0.76
7:AG:148:ASN:N	7:AG:148:ASN:HD22	1.84	0.75
20:AT:13:LEU:CD1	20:AT:13:LEU:H	1.99	0.75
27:B2:55:ARG:H	27:B2:56:GLN:HE21	1.32	0.75
34:BA:2845:G:O2'	34:BA:2846:G:H5'	1.85	0.75
39:BF:25:PRO:HB3	39:BF:119:ARG:HB2	1.68	0.75
41:BH:37:VAL:HG12	41:BH:38:SER:H	1.49	0.75
34:BA:1141:U:H2'	43:BN:63:THR:CG2	2.15	0.75
46:BQ:85:LYS:HG3	46:BQ:86:GLY:N	2.00	0.75
49:BT:100:TYR:HD2	49:BT:103:ARG:HH21	1.34	0.75
51:BV:43:GLU:H	51:BV:48:GLY:HA2	1.51	0.75
51:BV:69:LYS:HG3	51:BV:70:ILE:H	1.50	0.75
26:D1:37:ILE:HG21	34:DA:2080:G:O5'	1.86	0.75
28:D3:8:LEU:CD1	28:D3:31:LEU:HA	2.15	0.75
34:DA:955:C:H5'	34:DA:956:G:OP2	1.86	0.75
38:DE:79:ARG:HH11	38:DE:79:ARG:HG2	1.51	0.75
40:DG:114:ILE:HB	40:DG:117:PHE:HD1	1.51	0.75
49:DT:80:SER:CB	49:DT:81:PRO:HD3	2.15	0.75
1:AA:1458:G:H2'	1:AA:1459:C:H6	1.51	0.75
19:AS:6:LYS:HG2	19:AS:7:LYS:HD3	1.69	0.75
27:B2:33:MET:HG2	53:BX:11:PRO:HD2	1.66	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1799:G:H4'	34:BA:1800:C:O5'	1.86	0.75
34:BA:2632:A:H1'	38:BE:61:ARG:NH1	2.01	0.75
34:BA:451:C:H4'	39:BF:52:LYS:HZ2	1.49	0.75
43:BN:55:VAL:CG1	43:BN:126:PRO:HA	2.16	0.75
46:BQ:23:GLY:O	46:BQ:100:GLY:HA3	1.85	0.75
55:BZ:125:LEU:HD23	55:BZ:126:VAL:N	2.01	0.75
1:CA:376:G:H2'	1:CA:377:G:H8	1.51	0.75
1:CA:673:G:H2'	1:CA:674:G:C8	2.21	0.75
7:CG:15:ASP:HB3	7:CG:19:GLY:N	2.00	0.75
23:CW:38:A:H3'	23:CW:39:U:H5''	1.68	0.75
40:DG:124:SER:HB2	40:DG:131:TYR:CD1	2.21	0.75
1:AA:336:C:H2'	1:AA:337:C:H6	1.51	0.75
3:AC:94:LEU:HD12	3:AC:95:THR:N	2.01	0.75
25:B0:32:ARG:H	25:B0:35:ASN:HD21	1.35	0.75
27:B2:44:LEU:C	27:B2:46:GLN:N	2.39	0.75
27:B2:52:ASP:O	27:B2:53:LEU:C	2.25	0.75
31:B6:20:ASN:HD22	31:B6:21:TYR:H	1.34	0.75
34:BA:1509(A):A:H2'	34:BA:1509(B):A:H8	1.51	0.75
1:CA:625:G:H2'	1:CA:626:U:H6	1.51	0.75
9:CI:4:TYR:HB2	9:CI:19:LEU:HB2	1.67	0.75
15:CO:37:ASN:N	15:CO:37:ASN:HD22	1.83	0.75
34:DA:1593:G:C2'	34:DA:1594:G:H5''	2.16	0.75
53:DX:56:THR:HA	53:DX:77:LYS:HB2	1.67	0.75
1:AA:349:A:O2'	1:AA:350:G:H5'	1.87	0.75
2:AB:67:THR:C	2:AB:68:ILE:HD12	2.07	0.75
18:AR:29:PHE:CE1	18:AR:31:LEU:HB3	2.22	0.75
39:BF:46:ARG:NH1	39:BF:46:ARG:HG3	2.00	0.75
41:BH:85:LYS:NZ	41:BH:145:ALA:HA	2.02	0.75
45:BP:71:VAL:CG1	45:BP:72:PRO:HD3	2.16	0.75
49:BT:92:GLY:HA2	49:BT:114:LEU:HA	1.69	0.75
1:CA:337:C:H2'	1:CA:338:A:H8	1.51	0.75
3:CC:94:LEU:HD12	3:CC:95:THR:N	2.00	0.75
19:CS:36:ARG:HH12	19:CS:75:ALA:HB3	1.49	0.75
25:D0:41:ARG:HD3	25:D0:44:ARG:HD2	1.67	0.75
34:DA:1038:C:H42	34:DA:1117:G:H1	1.34	0.75
34:DA:141:A:H8	34:DA:1408:C:HO2'	1.34	0.75
34:DA:2810:A:H2'	38:DE:61:ARG:HH21	1.52	0.75
34:DA:2884:U:H2'	34:DA:2885:C:H5'	1.68	0.75
34:DA:361:G:H2'	34:DA:362:U:H5''	1.69	0.75
33:D8:27:THR:HA	45:DP:62:LEU:HD11	1.67	0.75
2:AB:36:ARG:H	2:AB:41:ILE:HD13	1.52	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B5:40:LYS:CD	30:B5:46:CYS:HB3	2.16	0.75
34:BA:1038:C:H42	34:BA:1117:G:H1	1.33	0.75
53:BX:33:LYS:C	53:BX:35:THR:N	2.38	0.75
2:CB:7:VAL:O	2:CB:11:LEU:HG	1.87	0.75
27:D2:35:LEU:H	27:D2:35:LEU:HD23	1.52	0.75
34:DA:2632:A:H1'	38:DE:61:ARG:HH12	1.52	0.75
34:DA:320:A:H2'	39:DF:136:THR:OG1	1.85	0.75
38:DE:26:ILE:HD12	38:DE:196:VAL:HG21	1.68	0.75
40:DG:48:GLU:HG2	40:DG:49:ASP:N	2.01	0.75
41:DH:46:GLU:O	41:DH:47:GLU:HB2	1.86	0.75
45:DP:59:LEU:HA	45:DP:61:ARG:CZ	2.16	0.75
50:DU:83:LEU:HB3	50:DU:88:ILE:HG12	1.67	0.75
53:DX:21:PHE:HD1	53:DX:21:PHE:H	1.35	0.75
15:AO:23:GLY:O	15:AO:24:SER:HB3	1.85	0.75
20:AT:50:GLU:HG3	20:AT:51:GLU:H	1.50	0.75
26:B1:86:SER:N	26:B1:87:PRO:HD3	2.01	0.75
34:BA:2468:G:H22	34:BA:2481:G:H2'	1.50	0.75
37:BD:14:ARG:HG2	37:BD:14:ARG:HH11	1.50	0.75
40:BG:161:THR:HG22	40:BG:163:ALA:N	1.97	0.75
53:BX:59:VAL:HG23	53:BX:74:PRO:HG2	1.68	0.75
55:BZ:53:ILE:CG2	55:BZ:71:VAL:HB	2.15	0.75
1:CA:737:A:H2'	1:CA:738:C:C6	2.21	0.75
5:CE:7:GLU:HB3	5:CE:112:LEU:HD13	1.68	0.75
23:CW:19:G:H1	23:CW:56:C:H42	1.32	0.75
34:DA:1779:U:C5	34:DA:1784:A:N7	2.51	0.75
34:DA:271(P):C:H2'	34:DA:271(Q):G:C8	2.21	0.75
38:DE:11:MET:HB3	38:DE:24:THR:HA	1.68	0.75
43:DN:46:VAL:CG1	43:DN:48:MET:HG3	2.15	0.75
34:DA:2394:C:OP1	45:DP:63:PRO:HD2	1.87	0.75
38:DE:111:ARG:HA	47:DR:2:ARG:HB3	1.69	0.75
1:AA:834:C:H2'	1:AA:835:U:H6	1.50	0.75
31:B6:41:PRO:HG2	31:B6:44:ARG:O	1.86	0.75
34:BA:2468:G:N2	34:BA:2481:G:H2'	2.00	0.75
38:BE:79:ARG:HH11	38:BE:79:ARG:HG2	1.52	0.75
45:BP:105:LEU:O	45:BP:106:LEU:HB2	1.85	0.75
45:BP:95:VAL:HG23	45:BP:125:VAL:HG23	1.68	0.75
8:CH:73:ASP:OD2	8:CH:75:ARG:HG3	1.87	0.75
34:DA:1799:G:H4'	34:DA:1800:C:O5'	1.85	0.75
34:DA:782:A:H5'	34:DA:783:A:C2	2.22	0.75
37:DD:142:VAL:HG23	37:DD:192:THR:C	2.07	0.75
41:DH:85:LYS:NZ	41:DH:145:ALA:HA	2.01	0.75

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:33:GLN:O	10:AJ:75:ILE:HG12	1.86	0.75
33:B8:35:GLN:HE21	33:B8:36:LYS:NZ	1.84	0.75
34:BA:807:U:H2'	34:BA:808:G:C8	2.21	0.75
55:BZ:116:VAL:HG13	55:BZ:117:LEU:HD23	1.69	0.75
18:CR:29:PHE:CE1	18:CR:31:LEU:HB3	2.22	0.75
34:DA:1286:A:H2'	34:DA:1288:U:OP2	1.87	0.75
34:DA:1577:C:H2'	34:DA:1578:U:C6	2.22	0.75
39:DF:103:LYS:HA	39:DF:106:ARG:HG3	1.68	0.75
43:DN:131:GLN:HE22	43:DN:134:ARG:HA	1.52	0.75
49:DT:65:LYS:HA	49:DT:65:LYS:NZ	2.01	0.75
43:DN:42:TRP:H	50:DU:64:ARG:HH21	1.33	0.75
1:AA:179:A:H2'	1:AA:180:U:C6	2.22	0.75
1:AA:383:A:H2'	1:AA:384:G:H5'	1.69	0.75
13:AM:3:ARG:HG2	13:AM:9:ILE:CG1	2.17	0.75
37:BD:75:ILE:O	37:BD:118:VAL:HG23	1.87	0.75
4:CD:17:VAL:HG11	4:CD:197:PRO:HB2	1.68	0.75
8:CH:30:ARG:NH1	8:CH:30:ARG:HB3	2.01	0.75
26:D1:68:PRO:O	26:D1:70:VAL:N	2.20	0.75
34:DA:807:U:H2'	34:DA:808:G:C8	2.21	0.75
44:DO:25:LEU:O	44:DO:26:LYS:HG3	1.87	0.75
45:DP:62:LEU:N	45:DP:62:LEU:HD22	2.02	0.75
34:DA:2707:G:H5''	47:DR:68:ARG:NH2	2.02	0.75
54:DY:8:LYS:HB2	54:DY:28:LYS:HZ3	1.51	0.75
2:AB:204:ASN:HD21	2:AB:207:ALA:N	1.85	0.74
25:B0:36:ILE:HD11	34:BA:2355:C:C5'	2.17	0.74
34:BA:782:A:H5'	34:BA:783:A:C2	2.22	0.74
35:BB:29:A:H2'	35:BB:30:C:C6	2.22	0.74
41:BH:98:LEU:HD13	41:BH:125:VAL:HG23	1.68	0.74
1:CA:179:A:H2'	1:CA:180:U:C6	2.21	0.74
2:CB:36:ARG:H	2:CB:41:ILE:HD13	1.52	0.74
30:D5:55:ARG:HG3	30:D5:56:LYS:N	2.02	0.74
34:DA:1598:C:H5'	53:DX:37:THR:HB	1.69	0.74
38:DE:38:THR:HG22	38:DE:40:GLU:H	1.52	0.74
45:DP:62:LEU:N	45:DP:62:LEU:HD13	2.02	0.74
38:DE:109:LYS:CB	47:DR:2:ARG:HH12	2.00	0.74
54:DY:17:SER:CB	54:DY:71:LYS:HD2	2.17	0.74
4:AD:96:LEU:N	4:AD:96:LEU:HD22	2.02	0.74
25:B0:51:VAL:HG21	25:B0:80:HIS:HA	1.67	0.74
34:BA:1639:U:C2'	34:BA:1640:C:H5''	2.17	0.74
34:BA:2506:U:H4'	34:BA:2507:C:OP1	1.86	0.74
34:BA:2707:G:H5''	47:BR:68:ARG:NH2	2.02	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BS:78:LEU:HD11	48:BS:103:GLU:HB3	1.68	0.74
2:CB:77:ALA:HB2	2:CB:211:ILE:HD13	1.67	0.74
7:CG:26:PHE:O	7:CG:30:ILE:HG12	1.86	0.74
11:CK:23:ALA:HB3	11:CK:86:GLY:O	1.85	0.74
15:CO:56:LEU:O	15:CO:60:VAL:HG23	1.87	0.74
23:CW:39:U:H4'	23:CW:39:U:OP1	1.87	0.74
34:DA:1490:A:H5'	34:DA:1491:G:OP2	1.85	0.74
42:DI:58:LEU:O	42:DI:58:LEU:HD23	1.87	0.74
47:DR:9:LYS:O	47:DR:10:LEU:HG	1.86	0.74
50:DU:64:ARG:HE	50:DU:64:ARG:CA	2.00	0.74
53:DX:31:HIS:ND1	53:DX:32:PRO:HD2	2.02	0.74
5:AE:101:ILE:CG1	5:AE:119:LEU:HD23	2.16	0.74
7:AG:15:ASP:HB3	7:AG:19:GLY:N	2.02	0.74
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HD23	1.68	0.74
20:AT:104:LEU:HD23	20:AT:105:SER:N	2.01	0.74
34:BA:2645:G:H3'	34:BA:2646:C:C5'	2.14	0.74
34:BA:271(P):C:H2'	34:BA:271(Q):G:C8	2.21	0.74
42:BI:69:LYS:HA	42:BI:136:VAL:CG2	2.16	0.74
45:BP:85:LEU:CD2	45:BP:85:LEU:H	2.00	0.74
10:CJ:48:THR:CA	10:CJ:62:HIS:HB3	2.15	0.74
20:CT:50:GLU:HG3	20:CT:51:GLU:H	1.51	0.74
23:CW:16:U:H3'	23:CW:17:C:H5'	1.67	0.74
39:DF:8:GLN:HB3	39:DF:126:VAL:HA	1.67	0.74
49:DT:80:SER:HB3	49:DT:81:PRO:HD3	1.69	0.74
52:DW:10:VAL:O	52:DW:11:ARG:HB2	1.85	0.74
1:AA:1308:U:H5''	13:AM:98:VAL:N	2.02	0.74
1:AA:1392:G:N2	1:AA:1502:A:H8	1.85	0.74
2:AB:77:ALA:HB2	2:AB:211:ILE:HD13	1.68	0.74
8:AH:73:ASP:OD2	8:AH:75:ARG:HG3	1.86	0.74
15:AO:56:LEU:O	15:AO:60:VAL:HG23	1.87	0.74
16:AP:20:VAL:HG23	16:AP:35:LYS:HA	1.68	0.74
34:BA:1396:U:H2'	34:BA:1396:U:O2	1.88	0.74
34:BA:1887:C:C3'	34:BA:1888:G:H5''	2.17	0.74
34:BA:1899:G:N2	34:BA:1902:C:H41	1.85	0.74
34:BA:361:G:H2'	34:BA:362:U:H5''	1.69	0.74
34:BA:2635:C:OP1	38:BE:77:ILE:HG21	1.87	0.74
3:CC:113:ALA:HB3	3:CC:114:PRO:HD3	1.70	0.74
26:D1:33:LYS:HG2	26:D1:34:THR:H	1.51	0.74
34:DA:171:G:H2'	34:DA:172:C:C4'	2.17	0.74
34:DA:1821:A:H2'	34:DA:1822:G:H5''	1.69	0.74
35:DB:29:A:H2'	35:DB:30:C:C6	2.22	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:76:PRO:HG2	37:DD:98:VAL:CG2	2.17	0.74
41:DH:102:ALA:HB2	41:DH:117:PRO:HB3	1.68	0.74
41:DH:98:LEU:HD13	41:DH:125:VAL:HG23	1.69	0.74
34:DA:598:G:H5'	45:DP:15:ARG:CD	2.17	0.74
1:AA:521:G:O2'	1:AA:522:C:H5'	1.87	0.74
7:AG:102:ARG:HG2	7:AG:106:GLN:HE21	1.51	0.74
13:AM:91:ARG:HG3	13:AM:98:VAL:HG11	1.68	0.74
23:AW:16:U:H4'	23:AW:16:U:OP1	1.87	0.74
23:AY:29:G:H2'	23:AY:30:G:H8	1.53	0.74
34:BA:1689:A:N6	34:BA:1698:A:H2	1.81	0.74
38:BE:93:VAL:C	38:BE:95:ILE:H	1.87	0.74
45:BP:84:ASN:HA	45:BP:115:LEU:O	1.88	0.74
54:BY:75:ILE:CD1	54:BY:76:CYS:H	2.00	0.74
1:CA:524:G:H2'	1:CA:525:C:C6	2.23	0.74
19:CS:6:LYS:HG2	19:CS:7:LYS:HD3	1.68	0.74
22:CV:71:C:C6	22:CV:71:C:H5'	2.13	0.74
35:DB:74:U:C3'	35:DB:75:G:H5''	2.16	0.74
48:DS:34:HIS:HB3	48:DS:53:SER:HB3	1.68	0.74
48:DS:37:ALA:HB2	48:DS:99:LYS:HZ1	1.50	0.74
50:DU:64:ARG:CA	50:DU:64:ARG:NE	2.51	0.74
51:DV:43:GLU:H	51:DV:48:GLY:HA2	1.50	0.74
55:DZ:10:ARG:HH21	55:DZ:26:GLY:H	1.33	0.74
1:AA:328:C:H4'	1:AA:329:A:C5'	2.17	0.74
9:AI:4:TYR:HB2	9:AI:19:LEU:HB2	1.68	0.74
34:BA:858:U:O2	34:BA:2268:A:H2'	1.88	0.74
34:BA:1798:U:H5'	37:BD:259:THR:HG22	1.67	0.74
34:BA:2810:A:H2'	38:BE:61:ARG:HH21	1.53	0.74
39:BF:157:VAL:HG23	39:BF:194:MET:HB3	1.67	0.74
53:BX:21:PHE:H	53:BX:21:PHE:HD1	1.34	0.74
9:CI:15:ALA:HA	9:CI:65:VAL:HA	1.69	0.74
12:CL:46:LYS:CG	12:CL:47:LYS:H	1.99	0.74
31:D6:20:ASN:HD22	31:D6:21:TYR:H	1.32	0.74
52:DW:50:VAL:HG13	52:DW:51:LEU:H	1.53	0.74
53:DX:33:LYS:C	53:DX:35:THR:N	2.38	0.74
54:DY:17:SER:HB2	54:DY:71:LYS:HD2	1.69	0.74
1:AA:337:C:H2'	1:AA:338:A:H8	1.51	0.74
34:BA:1484:G:H21	34:BA:1505:C:H41	1.34	0.74
34:BA:2327:A:H2'	34:BA:2328:A:C8	2.23	0.74
53:BX:60:ARG:NE	53:BX:74:PRO:HG3	2.01	0.74
1:CA:1381:U:H1'	7:CG:78:ARG:NH1	2.03	0.74
13:CM:120:LYS:HE3	13:CM:120:LYS:HA	1.68	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:451:C:H4'	39:DF:52:LYS:HZ1	1.50	0.74
37:DD:30:GLU:HG3	37:DD:63:ARG:CZ	2.18	0.74
42:DI:98:ALA:HB1	42:DI:109:ILE:HD13	1.69	0.74
45:DP:95:VAL:HG23	45:DP:125:VAL:HG23	1.70	0.74
1:AA:1154:G:H2'	1:AA:1155:G:H8	1.53	0.74
33:B8:52:LYS:N	33:B8:53:PRO:CD	2.50	0.74
41:BH:102:ALA:HB2	41:BH:117:PRO:HB3	1.68	0.74
54:BY:28:LYS:HE2	54:BY:30:VAL:HG22	1.68	0.74
26:D1:46:LEU:HD22	26:D1:48:LYS:H	1.53	0.74
32:D7:12:ARG:HD3	32:D7:46:VAL:HG21	1.69	0.74
34:DA:1190:G:H5'	45:DP:35:HIS:HB3	1.70	0.74
34:DA:1639:U:C2'	34:DA:1640:C:H5''	2.17	0.74
34:DA:811:U:H3'	45:DP:25:SER:O	1.88	0.74
45:DP:64:LYS:O	45:DP:66:GLY:N	2.21	0.74
45:DP:74:GLU:C	45:DP:75:ILE:HD13	2.08	0.74
53:DX:60:ARG:NE	53:DX:74:PRO:HG3	2.02	0.74
1:AA:524:G:H2'	1:AA:525:C:C6	2.23	0.74
34:BA:2110:G:H1	34:BA:2179:C:H42	1.32	0.74
43:BN:128:HIS:CD2	43:BN:131:GLN:HB2	2.23	0.74
2:CB:201:ILE:HG21	2:CB:214:ILE:HG21	1.69	0.74
7:CG:102:ARG:HG2	7:CG:106:GLN:HE21	1.51	0.74
15:CO:69:TYR:CZ	15:CO:73:GLU:HG3	2.22	0.74
30:D5:40:LYS:CE	30:D5:46:CYS:HB3	2.18	0.74
34:DA:847:U:H2'	34:DA:848:G:H5''	1.69	0.74
45:DP:71:VAL:CG1	45:DP:72:PRO:HD3	2.18	0.74
50:DU:87:GLY:O	50:DU:88:ILE:HG23	1.88	0.74
53:DX:65:ARG:CA	53:DX:65:ARG:NE	2.51	0.74
55:DZ:5:LEU:HG	55:DZ:47:VAL:HG21	1.70	0.74
3:AC:206:GLU:HG2	3:AC:207:VAL:HG23	1.68	0.74
13:AM:120:LYS:HE3	13:AM:120:LYS:HA	1.69	0.74
13:AM:3:ARG:HG2	13:AM:9:ILE:HG12	1.69	0.74
38:BE:111:ARG:HA	47:BR:2:ARG:HB3	1.68	0.74
39:BF:84:VAL:HG12	39:BF:85:GLY:N	2.03	0.74
50:BU:64:ARG:CA	50:BU:64:ARG:NE	2.51	0.74
50:BU:87:GLY:O	50:BU:88:ILE:HG23	1.88	0.74
1:CA:197:A:N7	1:CA:221:C:H4'	2.03	0.74
5:CE:144:THR:O	5:CE:148:VAL:HG23	1.88	0.74
34:DA:2635:C:OP1	38:DE:77:ILE:HG21	1.88	0.74
37:DD:79:VAL:CG2	37:DD:111:LEU:HD11	2.13	0.74
41:DH:106:THR:HG22	41:DH:112:PRO:HB3	1.70	0.74
45:DP:17:LYS:O	45:DP:19:VAL:N	2.20	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DQ:75:THR:HA	46:DQ:88:GLY:HA2	1.69	0.74
51:DV:2:PHE:HB3	51:DV:42:GLY:HA2	1.68	0.74
1:AA:728:A:H2'	1:AA:729:A:C8	2.23	0.73
2:AB:204:ASN:HD21	2:AB:207:ALA:H	1.36	0.73
3:AC:52:LEU:HD23	3:AC:52:LEU:H	1.53	0.73
18:AR:29:PHE:HE1	18:AR:31:LEU:HB3	1.52	0.73
20:AT:71:THR:HG22	20:AT:72:LEU:N	2.02	0.73
34:BA:1879:C:C3'	34:BA:1880:C:H5''	2.18	0.73
34:BA:2632:A:H1'	38:BE:61:ARG:HH12	1.52	0.73
34:BA:587:C:C5	45:BP:33:ARG:HG2	2.23	0.73
37:BD:142:VAL:HG23	37:BD:192:THR:C	2.08	0.73
38:BE:38:THR:HG22	38:BE:40:GLU:H	1.51	0.73
43:BN:58:ASP:C	43:BN:60:ILE:H	1.90	0.73
46:BQ:130:LYS:HD2	55:BZ:80:ARG:NH1	2.03	0.73
34:BA:17:G:H4'	50:BU:25:TRP:CH2	2.23	0.73
53:BX:63:LYS:HD2	53:BX:70:LEU:HD13	1.67	0.73
1:CA:1154:G:H2'	1:CA:1155:G:H8	1.53	0.73
34:DA:2502:G:H5''	34:DA:2503:A:H5''	1.70	0.73
38:DE:100:GLU:O	38:DE:172:VAL:HG23	1.87	0.73
45:DP:47:ASP:OD1	45:DP:49:ARG:HB2	1.88	0.73
45:DP:85:LEU:CD2	45:DP:85:LEU:H	2.01	0.73
1:AA:976:G:H5'	1:AA:1358:U:O2'	1.88	0.73
1:AA:735:C:H2'	1:AA:736:C:H6	1.53	0.73
2:AB:178:ARG:HB2	2:AB:178:ARG:HH11	1.53	0.73
9:AI:50:LEU:O	9:AI:53:VAL:HG22	1.88	0.73
10:AJ:32:ALA:HB1	10:AJ:75:ILE:HG13	1.69	0.73
32:B7:48:LYS:HE3	34:BA:125:G:H21	1.53	0.73
34:BA:1598:C:H5'	53:BX:37:THR:HB	1.69	0.73
34:BA:1751:C:O2'	34:BA:1752:C:H5'	1.88	0.73
45:BP:85:LEU:HD23	45:BP:85:LEU:H	1.53	0.73
54:BY:15:VAL:HG12	54:BY:17:SER:H	1.53	0.73
1:CA:255:G:H1'	17:CQ:16:GLN:NE2	2.01	0.73
4:CD:96:LEU:CD2	4:CD:96:LEU:H	2.00	0.73
6:CF:67:MET:HB2	6:CF:68:PRO:HD2	1.70	0.73
8:CH:103:VAL:CG2	8:CH:110:ALA:HB2	2.17	0.73
9:CI:115:GLY:O	9:CI:116:LYS:HG2	1.88	0.73
10:CJ:33:GLN:O	10:CJ:75:ILE:HG12	1.88	0.73
13:CM:3:ARG:HG2	13:CM:9:ILE:CG1	2.17	0.73
18:CR:29:PHE:HE1	18:CR:31:LEU:HB3	1.52	0.73
37:DD:92:ILE:HD13	37:DD:104:TYR:HD2	1.53	0.73
37:DD:118:VAL:HG22	37:DD:119:ALA:N	2.03	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:539:A:H2'	1:AA:540:G:C8	2.23	0.73
2:AB:10:LEU:H	2:AB:10:LEU:HD23	1.54	0.73
34:BA:1708:C:H2'	34:BA:1709:U:H6	1.53	0.73
34:BA:925:C:C2'	34:BA:926:A:H5''	2.17	0.73
34:BA:61:G:H1	34:BA:94:C:H42	1.35	0.73
38:BE:11:MET:HB3	38:BE:24:THR:HA	1.70	0.73
54:BY:17:SER:CB	54:BY:71:LYS:HD2	2.18	0.73
54:BY:76:CYS:O	54:BY:78:ALA:N	2.22	0.73
9:CI:10:ARG:HH21	9:CI:11:LYS:HB2	1.53	0.73
16:CP:20:VAL:HG23	16:CP:35:LYS:HA	1.69	0.73
18:CR:36:ASN:HD22	18:CR:39:VAL:HG21	1.53	0.73
25:D0:32:ARG:H	25:D0:35:ASN:HD21	1.33	0.73
34:DA:154:G:H1	34:DA:172:C:N4	1.87	0.73
23:CW:76:A:O2'	34:DA:2394:C:N3	2.18	0.73
34:DA:2672:G:H2'	34:DA:2673:G:H5''	1.70	0.73
54:DY:75:ILE:CD1	54:DY:76:CYS:H	2.00	0.73
27:B2:55:ARG:N	27:B2:56:GLN:HE21	1.86	0.73
34:BA:171:G:H2'	34:BA:172:C:C4'	2.18	0.73
43:BN:55:VAL:HG12	43:BN:56:ASN:N	2.03	0.73
55:BZ:139:VAL:HG12	55:BZ:141:VAL:HG12	1.71	0.73
8:CH:11:THR:HG22	8:CH:15:ASN:HD21	1.53	0.73
25:D0:51:VAL:CG2	25:D0:80:HIS:HA	2.18	0.73
34:DA:1879:C:C3'	34:DA:1880:C:H5''	2.17	0.73
34:DA:2196:C:O2'	34:DA:2197:U:H5'	1.88	0.73
37:DD:267:SER:C	37:DD:269:PHE:N	2.40	0.73
43:DN:58:ASP:C	43:DN:60:ILE:H	1.90	0.73
44:DO:64:ARG:CZ	49:DT:70:VAL:HG21	2.17	0.73
45:DP:66:GLY:O	45:DP:67:MET:C	2.26	0.73
46:DQ:141:GLN:NE2	55:DZ:72:ARG:HG2	2.03	0.73
53:DX:89:ILE:HA	53:DX:92:LEU:HD12	1.68	0.73
55:DZ:27:VAL:HG12	55:DZ:28:MET:N	2.01	0.73
1:AA:255:G:H1'	17:AQ:16:GLN:NE2	2.02	0.73
35:BB:20:C:C2'	35:BB:21:G:H5''	2.18	0.73
41:BH:46:GLU:O	41:BH:47:GLU:HB2	1.86	0.73
45:BP:138:LEU:HD13	45:BP:142:GLY:HA3	1.70	0.73
49:BT:61:PHE:CE2	49:BT:76:PHE:HB2	2.23	0.73
53:BX:40:LYS:O	53:BX:42:ALA:N	2.20	0.73
55:BZ:18:LEU:O	55:BZ:21:ALA:N	2.22	0.73
8:CH:102:ARG:N	8:CH:102:ARG:HE	1.86	0.73
15:CO:23:GLY:O	15:CO:24:SER:HB3	1.88	0.73
22:CV:49:G:H1	22:CV:65:C:N4	1.86	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1887:C:C3'	34:DA:1888:G:H5''	2.19	0.73
1:AA:1244:C:H2'	1:AA:1245:A:H8	1.54	0.73
1:AA:1292:U:O2'	1:AA:1293:G:H5'	1.88	0.73
1:AA:197:A:N7	1:AA:221:C:H4'	2.04	0.73
8:AH:30:ARG:HB3	8:AH:30:ARG:NH1	2.03	0.73
19:AS:42:PRO:O	19:AS:43:GLU:HB3	1.87	0.73
25:B0:72:ARG:HB3	25:B0:75:LEU:HB2	1.67	0.73
26:B1:67:ILE:N	26:B1:68:PRO:HD2	2.04	0.73
30:B5:29:THR:O	30:B5:42:PRO:HD3	1.88	0.73
34:BA:997:G:OP1	50:BU:93:LYS:HD3	1.88	0.73
45:BP:102:ARG:HD2	45:BP:102:ARG:O	1.87	0.73
50:BU:64:ARG:CA	50:BU:64:ARG:HE	2.00	0.73
53:BX:89:ILE:HA	53:BX:92:LEU:HD12	1.69	0.73
54:BY:31:LEU:HB3	54:BY:32:PRO:HA	1.70	0.73
46:BQ:140:ALA:CB	55:BZ:99:TYR:HB2	2.19	0.73
1:CA:186:C:H5'	20:CT:78:ALA:HB1	1.69	0.73
1:CA:626:U:H2'	1:CA:627:G:H8	1.54	0.73
2:CB:74:LYS:NZ	2:CB:76:GLN:HB2	2.03	0.73
3:CC:14:ILE:CG1	3:CC:15:THR:H	1.98	0.73
3:CC:77:ILE:O	3:CC:83:ARG:HB3	1.87	0.73
20:CT:104:LEU:HD23	20:CT:105:SER:N	2.04	0.73
27:D2:20:GLU:O	27:D2:23:LYS:HB3	1.87	0.73
33:D8:35:GLN:HE21	33:D8:36:LYS:NZ	1.86	0.73
34:DA:1012:U:O4	43:DN:28:THR:HG21	1.88	0.73
34:DA:1396:U:H2'	34:DA:1396:U:O2	1.88	0.73
34:DA:2632:A:H1'	38:DE:61:ARG:NH1	2.03	0.73
34:DA:2859:G:H2'	34:DA:2860:A:C8	2.24	0.73
34:DA:27:G:O2'	34:DA:28:A:H8	1.71	0.73
42:DI:91:SER:H	42:DI:121:LYS:HE3	1.52	0.73
45:DP:84:ASN:HA	45:DP:115:LEU:O	1.89	0.73
33:D8:25:MET:CG	45:DP:64:LYS:HB2	2.18	0.73
52:DW:35:ILE:HG22	52:DW:36:LEU:N	2.04	0.73
1:AA:1392:G:H21	1:AA:1502:A:H8	1.37	0.73
4:AD:4:TYR:O	4:AD:5:ILE:HB	1.88	0.73
4:AD:96:LEU:H	4:AD:96:LEU:CD2	2.01	0.73
9:AI:10:ARG:HH21	9:AI:11:LYS:HB2	1.51	0.73
27:B2:49:LYS:HB3	27:B2:53:LEU:HD22	1.69	0.73
34:BA:1635:G:H8	34:BA:1635:G:H5'	1.54	0.73
34:BA:212:G:O2'	34:BA:213:A:H5'	1.89	0.73
34:BA:8:A:H2'	34:BA:9:U:C6	2.23	0.73
38:BE:2:LYS:HD3	38:BE:95:ILE:HG22	1.69	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BG:112:PRO:C	40:BG:113:ARG:HA	2.09	0.73
34:BA:1012:U:O4	43:BN:28:THR:HG21	1.89	0.73
49:BT:80:SER:HB3	49:BT:81:PRO:HD3	1.70	0.73
52:BW:29:LEU:O	52:BW:33:ARG:HG3	1.87	0.73
1:CA:107:G:H2'	1:CA:108:G:H5'	1.70	0.73
1:CA:1244:C:H2'	1:CA:1245:A:H8	1.54	0.73
1:CA:1440:C:H2'	1:CA:1441:G:O4'	1.87	0.73
3:CC:206:GLU:HG2	3:CC:207:VAL:HG23	1.71	0.73
11:CK:44:SER:O	11:CK:47:VAL:HB	1.87	0.73
13:CM:3:ARG:HG2	13:CM:9:ILE:HG12	1.69	0.73
28:D3:6:VAL:HG13	28:D3:54:VAL:CG1	2.10	0.73
34:DA:1821:A:C2'	34:DA:1822:G:H5''	2.19	0.73
34:DA:1658:C:OP1	38:DE:132:HIS:ND1	2.22	0.73
41:DH:154:PRO:HG2	41:DH:155:SER:H	1.53	0.73
43:DN:55:VAL:HG12	43:DN:56:ASN:N	2.03	0.73
46:DQ:85:LYS:HG3	46:DQ:86:GLY:N	2.04	0.73
2:AB:178:ARG:HH22	2:AB:196:LEU:C	1.91	0.73
1:AA:19:C:H5''	5:AE:86:ALA:HB2	1.69	0.73
9:AI:97:LYS:HB3	9:AI:98:PRO:HD3	1.71	0.73
10:AJ:70:ARG:CG	10:AJ:70:ARG:HH11	2.01	0.73
26:B1:85:LEU:C	26:B1:87:PRO:HD3	2.09	0.73
31:B6:32:ASN:CG	31:B6:33:LYS:H	1.91	0.73
34:BA:143:G:H2'	34:BA:143(A):C:H6	1.53	0.73
34:BA:2822:G:H2'	34:BA:2823:A:H5''	1.69	0.73
38:BE:109:LYS:CB	47:BR:2:ARG:HH12	2.00	0.73
53:BX:31:HIS:ND1	53:BX:32:PRO:HD2	2.03	0.73
1:CA:1343:G:H1'	9:CI:121:ARG:HH12	1.54	0.73
1:CA:19:C:H5''	5:CE:86:ALA:HB2	1.68	0.73
2:CB:178:ARG:HH22	2:CB:196:LEU:C	1.92	0.73
10:CJ:70:ARG:HH11	10:CJ:70:ARG:CG	2.01	0.73
34:DA:1188:U:C2'	34:DA:1189:A:H5'	2.19	0.73
34:DA:1899:G:H22	34:DA:1902:C:N4	1.85	0.73
34:DA:1947:C:H2'	34:DA:1948:G:H5''	1.69	0.73
34:DA:2645:G:H3'	34:DA:2646:C:C5'	2.17	0.73
34:DA:2682:U:O4	34:DA:2728:U:H1'	1.89	0.73
25:D0:77:ARG:HH22	34:DA:857:C:H5'	1.53	0.73
34:DA:8:A:H2'	34:DA:9:U:C6	2.23	0.73
35:DB:20:C:C2'	35:DB:21:G:H5''	2.18	0.73
40:DG:114:ILE:HB	40:DG:117:PHE:CD1	2.23	0.73
54:DY:87:LYS:O	54:DY:88:LYS:HB2	1.86	0.73
1:AA:673:G:H2'	1:AA:674:G:C8	2.22	0.73

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:58:TYR:O	8:AH:59:LEU:HD23	1.88	0.73
34:BA:2502:G:H5''	34:BA:2503:A:H5''	1.69	0.73
39:BF:103:LYS:HA	39:BF:106:ARG:HG3	1.71	0.73
40:BG:19:LEU:HD22	40:BG:23:PHE:CE1	2.24	0.73
45:BP:62:LEU:N	45:BP:62:LEU:HD22	2.04	0.73
13:CM:91:ARG:HG3	13:CM:98:VAL:HG11	1.70	0.73
37:DD:35:LYS:CD	37:DD:63:ARG:HB3	2.14	0.73
45:DP:126:VAL:HA	45:DP:145:PRO:CB	2.13	0.73
50:DU:12:ARG:O	50:DU:15:LYS:HG2	1.88	0.73
1:AA:1381:U:H1'	7:AG:78:ARG:NH1	2.02	0.73
2:AB:97:TRP:CH2	2:AB:173:ALA:HA	2.23	0.73
8:AH:103:VAL:HG21	8:AH:110:ALA:HB2	1.71	0.73
11:AK:21:ILE:HB	11:AK:84:VAL:HG12	1.70	0.73
26:B1:92:LYS:C	26:B1:94:LEU:H	1.90	0.73
34:BA:1221(A):C:O2'	34:BA:1222:C:H5'	1.89	0.73
34:BA:1822:G:H5'	34:BA:1822:G:H8	1.52	0.73
34:BA:2884:U:H2'	34:BA:2885:C:H5'	1.68	0.73
34:BA:847:U:H2'	34:BA:848:G:H5''	1.69	0.73
40:BG:67:LYS:N	40:BG:67:LYS:HD2	2.04	0.73
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.23	0.73
1:CA:1441:G:C5'	1:CA:1442:G:H5''	2.19	0.73
3:CC:76:VAL:HG23	3:CC:77:ILE:N	2.04	0.73
28:D3:31:LEU:HD12	34:DA:1157:G:O2'	1.89	0.73
31:D6:32:ASN:CG	31:D6:33:LYS:H	1.92	0.73
33:D8:32:LEU:HD11	33:D8:41:ILE:HG22	1.71	0.73
37:DD:75:ILE:O	37:DD:118:VAL:HG23	1.87	0.73
40:DG:135:LEU:HD11	40:DG:157:ILE:HG23	1.71	0.73
49:DT:100:TYR:HD2	49:DT:103:ARG:HH21	1.33	0.73
49:DT:61:PHE:CE2	49:DT:76:PHE:HB2	2.24	0.73
49:DT:89:VAL:HG11	49:DT:91:ARG:HE	1.52	0.73
55:DZ:150:LEU:H	55:DZ:150:LEU:HD13	1.51	0.73
9:AI:15:ALA:HA	9:AI:65:VAL:HA	1.71	0.72
23:AW:19:G:H22	23:AW:56:C:H42	1.33	0.72
25:B0:41:ARG:HD3	25:B0:44:ARG:HD2	1.69	0.72
34:BA:1903:G:OP2	37:BD:241:PRO:HB2	1.89	0.72
40:BG:39:ILE:HD13	40:BG:155:MET:CE	2.19	0.72
41:BH:141:VAL:HG12	41:BH:142:GLY:N	2.04	0.72
3:CC:6:HIS:ND1	14:CN:49:HIS:HB3	2.04	0.72
19:CS:42:PRO:O	19:CS:43:GLU:HB3	1.88	0.72
26:D1:30:VAL:O	26:D1:30:VAL:HG12	1.89	0.72
31:D6:41:PRO:HG2	31:D6:44:ARG:O	1.88	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1798:U:H5'	37:DD:259:THR:HG22	1.69	0.72
34:DA:2506:U:H4'	34:DA:2507:C:OP1	1.88	0.72
37:DD:186:HIS:CD2	37:DD:188:GLU:H	2.02	0.72
40:DG:133:LEU:HD11	40:DG:157:ILE:HG12	1.70	0.72
41:DH:141:VAL:HG12	41:DH:142:GLY:N	2.04	0.72
51:DV:75:PHE:CE1	51:DV:89:GLN:HB3	2.24	0.72
55:DZ:18:LEU:HB3	55:DZ:23:LYS:HB2	1.71	0.72
55:DZ:7:ALA:HB2	55:DZ:59:LEU:HD22	1.71	0.72
2:AB:7:VAL:O	2:AB:11:LEU:HG	1.88	0.72
34:BA:132:G:H5'	34:BA:132:G:H8	1.52	0.72
42:BI:93:THR:HG22	42:BI:119:PRO:HB3	1.71	0.72
2:CB:97:TRP:CH2	2:CB:173:ALA:HA	2.23	0.72
10:CJ:32:ALA:HB1	10:CJ:75:ILE:HG13	1.69	0.72
12:CL:24:VAL:HG13	12:CL:98:TYR:HE2	1.54	0.72
26:D1:78:LYS:HZ2	26:D1:93:GLU:HB2	1.51	0.72
27:D2:33:MET:HG2	53:DX:11:PRO:CD	2.17	0.72
30:D5:29:THR:O	30:D5:42:PRO:HD3	1.89	0.72
33:D8:23:VAL:HG12	33:D8:46:ARG:HH11	1.54	0.72
34:DA:1509(A):A:H2'	34:DA:1509(B):A:C8	2.25	0.72
34:DA:15:G:O2'	34:DA:16:G:H5'	1.89	0.72
34:DA:1803:A:H4'	37:DD:259:THR:CG2	2.19	0.72
1:AA:1277:C:HO2'	1:AA:1279:A:H8	1.35	0.72
1:AA:1422:G:H2'	1:AA:1423:G:H8	1.53	0.72
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.71	0.72
3:AC:70:VAL:HG12	3:AC:71:ALA:N	2.04	0.72
8:AH:11:THR:HA	8:AH:14:ARG:NH1	2.03	0.72
30:B5:2:ALA:HA	34:BA:2015:A:C1'	2.20	0.72
25:B0:36:ILE:HD11	34:BA:2355:C:C4'	2.19	0.72
34:BA:2749:A:H1'	41:BH:63:SER:OG	1.89	0.72
34:BA:344:G:H8	34:BA:344:G:H5'	1.54	0.72
40:BG:94:LEU:N	40:BG:94:LEU:HD23	2.05	0.72
45:BP:16:ARG:NH1	45:BP:18:ARG:HB2	2.04	0.72
45:BP:64:LYS:O	45:BP:66:GLY:N	2.20	0.72
54:BY:8:LYS:HD2	54:BY:8:LYS:N	2.03	0.72
4:CD:9:CYS:HA	4:CD:12:CYS:HB2	1.71	0.72
42:DI:88:ILE:HG22	42:DI:89:TYR:N	2.04	0.72
1:AA:135:C:H2'	1:AA:136:C:H5'	1.72	0.72
20:AT:50:GLU:HB3	20:AT:100:ILE:CG1	2.17	0.72
22:AV:20:U:H5'	22:AV:21:A:OP2	1.89	0.72
26:B1:26:ARG:NH2	26:B1:28:GLY:HA2	2.04	0.72
34:BA:1188:U:C2'	34:BA:1189:A:H5'	2.19	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1509(A):A:H2'	34:BA:1509(B):A:C8	2.24	0.72
34:BA:1937:A:O2'	34:BA:1938:A:H5'	1.88	0.72
37:BD:30:GLU:HG3	37:BD:63:ARG:CZ	2.19	0.72
41:BH:154:PRO:HG2	41:BH:155:SER:H	1.54	0.72
50:BU:12:ARG:O	50:BU:15:LYS:HG2	1.89	0.72
1:CA:67:C:H2'	1:CA:68:G:C8	2.24	0.72
3:CC:150:LYS:HB3	3:CC:201:TYR:HB2	1.71	0.72
13:CM:3:ARG:HH21	40:DG:146:TYR:HD1	1.37	0.72
34:DA:2834:G:H5'	34:DA:2835:A:OP2	1.89	0.72
34:DA:539:G:H2'	34:DA:540:C:H6	1.54	0.72
44:DO:16:ALA:HA	44:DO:46:ALA:HA	1.71	0.72
51:DV:80:GLN:O	51:DV:81:TYR:N	2.22	0.72
53:DX:63:LYS:O	53:DX:68:ARG:HA	1.88	0.72
30:B5:40:LYS:CE	30:B5:46:CYS:HB3	2.19	0.72
30:B5:55:ARG:HG3	30:B5:56:LYS:N	2.03	0.72
34:BA:1593:G:C2'	34:BA:1594:G:H5''	2.19	0.72
34:BA:2313:C:H2'	34:BA:2314:C:H6	1.55	0.72
36:BC:45:ALA:CB	36:BC:210:ARG:HA	2.19	0.72
54:BY:27:VAL:HG12	54:BY:29:GLU:H	1.54	0.72
55:BZ:61:LEU:HB2	55:BZ:65:GLN:HB2	1.71	0.72
1:CA:1208:C:H2'	1:CA:1209:C:H6	1.55	0.72
2:CB:204:ASN:HD21	2:CB:207:ALA:N	1.87	0.72
7:CG:148:ASN:HD22	7:CG:148:ASN:N	1.87	0.72
8:CH:11:THR:HA	8:CH:14:ARG:NH1	2.04	0.72
27:D2:49:LYS:HG2	27:D2:53:LEU:HD13	1.72	0.72
34:DA:1689:A:N6	34:DA:1698:A:H2	1.83	0.72
50:DU:91:ASP:O	50:DU:95:LEU:HB2	1.89	0.72
1:AA:1208:C:H2'	1:AA:1209:C:H6	1.53	0.72
2:AB:74:LYS:NZ	2:AB:76:GLN:HB2	2.05	0.72
5:AE:71:LEU:O	5:AE:72:GLN:HG3	1.90	0.72
12:AL:47:LYS:CB	12:AL:48:PRO:HD3	2.19	0.72
23:AW:30:G:O2'	23:AW:31:A:H5'	1.90	0.72
27:B2:41:ILE:O	27:B2:42:GLY:C	2.28	0.72
34:BA:1899:G:H22	34:BA:1902:C:N4	1.87	0.72
39:BF:101:LEU:HD12	39:BF:102:PRO:CD	2.20	0.72
47:BR:78:LYS:O	47:BR:82:GLU:HB3	1.89	0.72
1:CA:963:G:H1	1:CA:972:C:H42	1.37	0.72
16:CP:50:LYS:HD3	16:CP:51:VAL:N	2.04	0.72
26:D1:17:SER:O	26:D1:44:PRO:HD2	1.89	0.72
30:D5:2:ALA:HA	34:DA:2015:A:H1'	1.72	0.72
34:DA:2313:C:H2'	34:DA:2314:C:H6	1.53	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2784:C:H2'	34:DA:2785:C:H6	1.55	0.72
39:DF:39:TRP:O	39:DF:43:LYS:HG2	1.89	0.72
45:DP:16:ARG:NH1	45:DP:18:ARG:HB2	2.03	0.72
1:AA:1095:U:H2'	1:AA:1096:C:C6	2.25	0.72
1:AA:1249:C:H5'	1:AA:1249:C:H6	1.54	0.72
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.25	0.72
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.71	0.72
1:AA:1189:C:H5"	3:AC:5:ILE:HG21	1.71	0.72
3:AC:76:VAL:HG23	3:AC:77:ILE:HG13	1.72	0.72
8:AH:11:THR:HG22	8:AH:15:ASN:HD21	1.52	0.72
34:BA:1594:G:H5'	34:BA:1594:G:C8	2.24	0.72
34:BA:2836:U:H2'	34:BA:2837:G:H8	1.55	0.72
41:BH:106:THR:HG22	41:BH:112:PRO:HB3	1.70	0.72
46:BQ:34:LEU:HD12	46:BQ:34:LEU:C	2.10	0.72
52:BW:75:TYR:HD1	52:BW:75:TYR:N	1.88	0.72
53:BX:65:ARG:CZ	53:BX:66:LEU:N	2.52	0.72
25:D0:25:ARG:HD2	25:D0:29:GLN:HE22	1.55	0.72
26:D1:85:LEU:C	26:D1:87:PRO:HD3	2.10	0.72
30:D5:40:LYS:CD	30:D5:46:CYS:HB3	2.19	0.72
34:DA:1503:U:H2'	34:DA:1504:C:C6	2.25	0.72
34:DA:271(G):C:H2'	34:DA:271(H):G:H8	1.54	0.72
41:DH:44:VAL:HG12	41:DH:45:VAL:N	2.04	0.72
45:DP:138:LEU:HD13	45:DP:142:GLY:HA3	1.70	0.72
1:AA:1443:G:N2	1:AA:1460:A:H1'	2.04	0.72
2:AB:69:LEU:HB3	2:AB:162:ILE:HG22	1.70	0.72
8:AH:86:ILE:HG21	8:AH:133:LEU:HD22	1.70	0.72
15:AO:82:ILE:O	15:AO:82:ILE:HD13	1.89	0.72
27:B2:32:LEU:O	27:B2:33:MET:HB2	1.87	0.72
34:BA:1262:A:P	52:BW:99:ARG:HH12	2.13	0.72
34:BA:419:C:H2'	34:BA:420:C:H6	1.54	0.72
42:BI:58:LEU:O	42:BI:58:LEU:HD23	1.89	0.72
50:BU:64:ARG:HE	50:BU:64:ARG:HA	1.54	0.72
43:BN:42:TRP:H	50:BU:64:ARG:HH21	1.36	0.72
3:CC:76:VAL:HG23	3:CC:77:ILE:HG13	1.72	0.72
8:CH:58:TYR:O	8:CH:59:LEU:HD23	1.88	0.72
1:CA:1291:G:H4'	9:CI:39:GLY:HA3	1.70	0.72
34:DA:143:G:H2'	34:DA:143(A):C:H6	1.53	0.72
34:DA:17:G:H4'	50:DU:25:TRP:CH2	2.25	0.72
34:DA:676:A:H8	34:DA:2069:G:N2	1.87	0.72
37:DD:35:LYS:HD2	37:DD:104:TYR:CD1	2.25	0.72
37:DD:35:LYS:HD2	37:DD:104:TYR:CE1	2.24	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:35:LYS:HE3	37:DD:64:ILE:C	2.10	0.72
33:D8:25:MET:HB2	45:DP:62:LEU:HD23	1.72	0.72
34:DA:1162:G:H1'	51:DV:91:TYR:OH	1.89	0.72
52:DW:27:LYS:O	52:DW:70:TYR:HB2	1.90	0.72
55:DZ:9:TYR:HE1	55:DZ:61:LEU:HD13	1.53	0.72
1:AA:922:G:N3	1:AA:1398:A:H2	1.88	0.72
5:AE:144:THR:O	5:AE:148:VAL:HG23	1.90	0.72
23:AW:38:A:H3'	23:AW:39:U:H5''	1.72	0.72
34:BA:1779:U:C5	34:BA:1784:A:N7	2.53	0.72
37:BD:154:LYS:C	37:BD:155:LEU:HD12	2.10	0.72
45:BP:122:PRO:HB3	45:BP:141:ALA:HB1	1.72	0.72
33:B8:25:MET:HB2	45:BP:62:LEU:HD23	1.71	0.72
47:BR:9:LYS:O	47:BR:10:LEU:HG	1.88	0.72
49:BT:89:VAL:HG11	49:BT:91:ARG:HE	1.53	0.72
50:BU:83:LEU:HB3	50:BU:88:ILE:HG12	1.70	0.72
1:CA:1292:U:O2'	1:CA:1293:G:H5'	1.90	0.72
10:CJ:96:ILE:H	10:CJ:96:ILE:HD13	1.53	0.72
38:DE:167:VAL:HG11	38:DE:187:ALA:O	1.90	0.72
43:DN:15:LEU:HB2	43:DN:134:ARG:HB2	1.72	0.72
45:DP:85:LEU:HD23	45:DP:85:LEU:H	1.54	0.72
47:DR:116:LEU:O	47:DR:117:VAL:HB	1.89	0.72
50:DU:17:ILE:HG23	50:DU:39:LEU:HD12	1.72	0.72
50:DU:83:LEU:HB3	50:DU:88:ILE:CG1	2.20	0.72
54:DY:90:LEU:CG	54:DY:91:GLU:H	2.02	0.72
23:AW:57:G:H2'	23:AW:58:A:H5'	1.72	0.72
31:B6:45:LYS:HZ1	34:BA:2370:G:H21	1.37	0.72
35:BB:15:A:H3'	35:BB:16:G:H5'	1.71	0.72
45:BP:30:THR:HG22	45:BP:31:ALA:N	2.04	0.72
46:BQ:75:THR:HA	46:BQ:88:GLY:HA2	1.71	0.72
1:CA:728:A:H2'	1:CA:729:A:C8	2.25	0.72
2:CB:67:THR:C	2:CB:68:ILE:HD12	2.11	0.72
19:CS:31:ILE:HG23	19:CS:49:ILE:HG23	1.72	0.72
34:DA:1434:A:H61	34:DA:1558:A:H62	1.36	0.72
34:DA:784:A:H5'	34:DA:785:G:OP1	1.89	0.72
43:DN:128:HIS:CD2	43:DN:131:GLN:HB2	2.24	0.72
43:DN:31:ALA:HA	43:DN:34:LEU:HD23	1.71	0.72
45:DP:30:THR:HG22	45:DP:31:ALA:N	2.03	0.72
46:DQ:47:ILE:CG1	46:DQ:68:ILE:HD11	2.20	0.72
54:DY:76:CYS:O	54:DY:78:ALA:N	2.22	0.72
55:DZ:165:VAL:HG12	55:DZ:166:SER:N	2.02	0.72
1:AA:1291:G:H4'	9:AI:39:GLY:HA3	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:49:ILE:HD12	19:AS:49:ILE:H	1.54	0.71
26:B1:60:PHE:HD1	26:B1:70:VAL:HG22	1.54	0.71
31:B6:28:ARG:HG2	31:B6:28:ARG:HH11	1.55	0.71
34:BA:1188:U:O2'	34:BA:1189:A:H5'	1.89	0.71
34:BA:1502:C:H2'	34:BA:1502:C:O2	1.90	0.71
34:BA:2859:G:H2'	34:BA:2860:A:C8	2.25	0.71
38:BE:36:ARG:HH21	38:BE:88:GLY:CA	2.03	0.71
41:BH:20:ALA:HB1	41:BH:21:PRO:CD	2.19	0.71
42:BI:109:ILE:H	42:BI:109:ILE:HD12	1.55	0.71
45:BP:146:VAL:CG2	45:BP:147:LEU:H	1.93	0.71
53:BX:65:ARG:NH2	53:BX:66:LEU:H	1.87	0.71
2:CB:178:ARG:HB2	2:CB:178:ARG:HH11	1.53	0.71
15:CO:54:ARG:NH1	15:CO:58:MET:HE2	2.05	0.71
27:D2:53:LEU:O	27:D2:54:LYS:HG2	1.90	0.71
31:D6:45:LYS:HZ1	34:DA:2370:G:H21	1.34	0.71
37:DD:154:LYS:C	37:DD:155:LEU:HD12	2.11	0.71
37:DD:35:LYS:HG2	37:DD:64:ILE:HG23	1.70	0.71
40:DG:8:LYS:O	40:DG:11:TYR:HB3	1.88	0.71
53:DX:63:LYS:HD2	53:DX:70:LEU:HD13	1.72	0.71
3:AC:76:VAL:HG23	3:AC:77:ILE:N	2.05	0.71
12:AL:115:LYS:O	12:AL:117:ARG:HG3	1.90	0.71
12:AL:24:VAL:HG13	12:AL:98:TYR:HE2	1.54	0.71
6:AF:99:ALA:HB1	18:AR:23:LYS:NZ	2.05	0.71
40:BG:16:ARG:O	40:BG:20:ILE:HG13	1.89	0.71
41:BH:144:VAL:O	41:BH:144:VAL:HG12	1.88	0.71
41:BH:67:LEU:O	41:BH:71:LEU:HD13	1.90	0.71
48:BS:101:LEU:HD13	48:BS:102:ALA:N	2.05	0.71
51:BV:75:PHE:CE1	51:BV:89:GLN:HB3	2.25	0.71
1:CA:975:A:H5'	1:CA:975:A:H8	1.55	0.71
8:CH:103:VAL:HG21	8:CH:110:ALA:HB2	1.71	0.71
23:CW:62:C:H2'	23:CW:63:G:H8	1.54	0.71
34:DA:613:G:H8	34:DA:613:G:H5'	1.55	0.71
41:DH:41:MET:SD	41:DH:55:PRO:HD3	2.30	0.71
45:DP:144:GLU:N	45:DP:145:PRO:HD3	2.05	0.71
47:DR:18:LEU:HD13	47:DR:18:LEU:C	2.10	0.71
50:DU:92:ARG:HD2	51:DV:11:GLN:CG	2.20	0.71
3:AC:36:ASP:HA	3:AC:39:ILE:HD12	1.72	0.71
10:AJ:49:VAL:O	10:AJ:60:ARG:HB2	1.89	0.71
15:AO:37:ASN:HD22	15:AO:37:ASN:N	1.88	0.71
16:AP:50:LYS:HD3	16:AP:51:VAL:N	2.04	0.71
25:B0:51:VAL:CG2	25:B0:80:HIS:HA	2.19	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:B2:32:LEU:CG	27:B2:33:MET:H	1.99	0.71
34:BA:2180:U:H2'	34:BA:2181:G:H8	1.55	0.71
43:BN:31:ALA:HA	43:BN:34:LEU:HD23	1.72	0.71
46:BQ:75:THR:HA	46:BQ:89:ASN:H	1.55	0.71
47:BR:116:LEU:O	47:BR:117:VAL:HB	1.90	0.71
52:BW:84:ARG:HB2	52:BW:96:ILE:HG22	1.72	0.71
55:BZ:117:LEU:HA	55:BZ:174:VAL:HA	1.72	0.71
55:BZ:150:LEU:HD13	55:BZ:150:LEU:H	1.55	0.71
1:CA:450:G:H4'	16:CP:41:PRO:O	1.91	0.71
11:CK:124:LYS:HD2	11:CK:125:PHE:CE1	2.26	0.71
30:D5:20:ARG:HB3	30:D5:23:HIS:HD2	1.53	0.71
32:D7:7:PRO:HB2	34:DA:1309:G:H4'	1.73	0.71
25:D0:77:ARG:NH2	34:DA:857:C:H5'	2.04	0.71
37:DD:223:GLY:O	37:DD:226:MET:HG3	1.90	0.71
44:DO:46:ALA:H	44:DO:54:GLU:HG2	1.55	0.71
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.73	0.71
1:AA:626:U:H2'	1:AA:627:G:H8	1.56	0.71
3:AC:14:ILE:CG1	3:AC:15:THR:H	1.97	0.71
5:AE:43:LEU:HD21	5:AE:132:ALA:HB1	1.71	0.71
9:AI:18:PHE:HB3	9:AI:20:ARG:NH1	2.05	0.71
15:AO:54:ARG:NH1	15:AO:58:MET:HE1	2.06	0.71
18:AR:36:ASN:HD22	18:AR:39:VAL:HG21	1.55	0.71
25:B0:25:ARG:HD2	25:B0:29:GLN:HE22	1.54	0.71
30:B5:2:ALA:HA	34:BA:2015:A:H1'	1.70	0.71
34:BA:2362:G:O2'	34:BA:2363:C:H5'	1.90	0.71
34:BA:2680:C:H2'	34:BA:2681:C:O2	1.90	0.71
41:BH:41:MET:SD	41:BH:55:PRO:HD3	2.30	0.71
43:BN:41:ASP:N	50:BU:64:ARG:HH21	1.89	0.71
53:BX:33:LYS:O	53:BX:35:THR:N	2.24	0.71
53:BX:65:ARG:CA	53:BX:65:ARG:NE	2.52	0.71
1:CA:1003:G:H2'	1:CA:1004:A:H4'	1.73	0.71
1:CA:1244:C:H2'	1:CA:1245:A:C8	2.26	0.71
1:CA:950:U:H4'	1:CA:971:G:N2	2.05	0.71
3:CC:150:LYS:HG3	3:CC:169:ALA:HB2	1.72	0.71
5:CE:71:LEU:O	5:CE:72:GLN:HG3	1.90	0.71
10:CJ:49:VAL:O	10:CJ:60:ARG:HB2	1.90	0.71
1:CA:1308:U:H5''	13:CM:98:VAL:N	2.05	0.71
34:DA:1594:G:C8	34:DA:1594:G:H5'	2.22	0.71
34:DA:1708:C:H2'	34:DA:1709:U:H6	1.55	0.71
34:DA:2709:G:O2'	34:DA:2710:C:H5'	1.91	0.71
34:DA:879:G:H1	34:DA:898:C:N4	1.88	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:997:G:OP1	50:DU:93:LYS:HD3	1.89	0.71
34:DA:528:A:H5''	43:DN:114:ARG:NH1	2.04	0.71
48:DS:87:PHE:O	48:DS:88:ASP:HB2	1.90	0.71
52:DW:29:LEU:O	52:DW:33:ARG:HG3	1.89	0.71
53:DX:65:ARG:CZ	53:DX:66:LEU:N	2.53	0.71
55:DZ:166:SER:HB2	55:DZ:167:PRO:C	2.11	0.71
1:AA:107:G:H2'	1:AA:108:G:H5'	1.72	0.71
1:AA:1302:U:C5	13:AM:17:VAL:HG21	2.25	0.71
2:AB:18:GLY:H	2:AB:42:ILE:CG2	2.03	0.71
5:AE:87:SER:HB3	5:AE:131:ILE:HD13	1.72	0.71
6:AF:11:ASN:O	6:AF:14:LEU:HG	1.91	0.71
8:AH:85:ARG:NE	8:AH:87:SER:O	2.23	0.71
25:B0:77:ARG:NH2	34:BA:857:C:H5'	2.06	0.71
26:B1:15:ALA:O	26:B1:46:LEU:HD23	1.90	0.71
26:B1:26:ARG:HH21	26:B1:28:GLY:HA2	1.55	0.71
33:B8:23:VAL:HG12	33:B8:46:ARG:HH11	1.55	0.71
28:B3:31:LEU:HD12	34:BA:1157:G:O2'	1.90	0.71
34:BA:1286:A:H2'	34:BA:1288:U:OP2	1.90	0.71
34:BA:271(G):C:H2'	34:BA:271(H):G:H8	1.54	0.71
34:BA:541:C:H2'	34:BA:542:C:C5	2.24	0.71
46:BQ:47:ILE:CG1	46:BQ:68:ILE:HD11	2.20	0.71
51:BV:69:LYS:HG3	51:BV:70:ILE:N	2.05	0.71
52:BW:40:ASN:O	52:BW:41:LYS:HG2	1.89	0.71
8:CH:87:SER:HA	8:CH:93:VAL:HG23	1.71	0.71
34:DA:549:G:C3'	34:DA:551:G:H5''	2.20	0.71
36:DC:45:ALA:CB	36:DC:210:ARG:HA	2.20	0.71
40:DG:34:LEU:HD11	40:DG:103:LEU:HD11	1.72	0.71
40:DG:40:ASN:O	40:DG:155:MET:HB2	1.89	0.71
47:DR:2:ARG:HD3	47:DR:5:LYS:HZ2	1.55	0.71
54:DY:28:LYS:HD2	54:DY:37:VAL:HG12	1.72	0.71
54:DY:8:LYS:HD2	54:DY:8:LYS:N	2.05	0.71
55:DZ:116:VAL:O	55:DZ:174:VAL:HG13	1.91	0.71
1:AA:1428:A:H2'	1:AA:1429:C:C6	2.26	0.71
1:AA:706:A:H1'	11:AK:29:ILE:HD11	1.72	0.71
3:AC:150:LYS:HB3	3:AC:201:TYR:HB2	1.71	0.71
3:AC:6:HIS:ND1	14:AN:49:HIS:HB3	2.04	0.71
34:BA:884:C:O2'	34:BA:892:G:C8	2.42	0.71
37:BD:35:LYS:HD2	37:BD:104:TYR:CD1	2.26	0.71
33:B8:25:MET:CG	45:BP:64:LYS:HB2	2.20	0.71
38:BE:111:ARG:HA	47:BR:2:ARG:CG	2.21	0.71
54:BY:17:SER:HB2	54:BY:71:LYS:HD2	1.69	0.71

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BY:31:LEU:HB3	54:BY:32:PRO:CA	2.19	0.71
55:BZ:118:GLN:O	55:BZ:120:ILE:HG12	1.91	0.71
1:CA:1189:C:H5''	3:CC:5:ILE:HG21	1.73	0.71
9:CI:97:LYS:HB3	9:CI:98:PRO:HD3	1.70	0.71
27:D2:15:LYS:C	27:D2:17:SER:H	1.94	0.71
27:D2:54:LYS:O	27:D2:56:GLN:N	2.24	0.71
34:DA:2307:G:H21	34:DA:2308:G:H5'	1.54	0.71
34:DA:2836:U:H2'	34:DA:2837:G:H8	1.56	0.71
34:DA:925:C:C2'	34:DA:926:A:H5''	2.19	0.71
39:DF:57:VAL:CG1	39:DF:58:ALA:N	2.53	0.71
41:DH:20:ALA:HB1	41:DH:21:PRO:CD	2.20	0.71
42:DI:88:ILE:CD1	42:DI:123:LEU:HG	2.20	0.71
45:DP:102:ARG:O	45:DP:102:ARG:HD2	1.90	0.71
45:DP:33:ARG:O	45:DP:34:GLY:C	2.27	0.71
52:DW:75:TYR:HD1	52:DW:75:TYR:N	1.87	0.71
55:DZ:116:VAL:HG12	55:DZ:117:LEU:N	2.04	0.71
1:AA:674:G:H2'	1:AA:675:A:H8	1.56	0.71
1:AA:811:C:O2'	1:AA:901:A:N1	2.24	0.71
34:BA:1503:U:H2'	34:BA:1504:C:C6	2.25	0.71
34:BA:2307:G:H21	34:BA:2308:G:H5'	1.55	0.71
34:BA:2834:G:H5'	34:BA:2835:A:OP2	1.90	0.71
25:B0:77:ARG:HH22	34:BA:857:C:H5'	1.55	0.71
34:BA:2312:U:O3'	40:BG:71:THR:HG21	1.90	0.71
1:CA:107:G:C2'	1:CA:108:G:H5'	2.20	0.71
1:CA:1478:C:H2'	1:CA:1479:C:H6	1.55	0.71
1:CA:474:G:H2'	1:CA:475:G:H8	1.56	0.71
26:D1:26:ARG:HB3	26:D1:35:THR:H	1.55	0.71
40:DG:41:GLN:HE21	40:DG:155:MET:HG3	1.56	0.71
49:DT:48:ILE:O	49:DT:63:VAL:HA	1.91	0.71
51:DV:47:VAL:HG22	51:DV:48:GLY:N	2.05	0.71
54:DY:8:LYS:CE	54:DY:72:VAL:HG23	2.20	0.71
55:DZ:48:PHE:CD2	55:DZ:52:SER:HA	2.26	0.71
1:AA:107:G:C2'	1:AA:108:G:H5'	2.20	0.71
1:AA:1194:U:H2'	1:AA:1195:C:C6	2.25	0.71
1:AA:1343:G:H1'	9:AI:121:ARG:HH12	1.54	0.71
34:BA:142:A:C8	34:BA:1408:C:H1'	2.25	0.71
34:BA:154:G:H1	34:BA:172:C:N4	1.87	0.71
37:BD:267:SER:C	37:BD:269:PHE:N	2.43	0.71
37:BD:35:LYS:HD2	37:BD:104:TYR:CE1	2.25	0.71
1:AA:1423:G:H5'	44:BO:49:ARG:HH21	1.54	0.71
44:BO:87:ILE:CG2	44:BO:91:LEU:HA	2.21	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BT:48:ILE:O	49:BT:63:VAL:HA	1.90	0.71
53:BX:77:LYS:CD	53:BX:78:LYS:HD2	2.20	0.71
54:BY:90:LEU:HG	54:BY:91:GLU:N	2.04	0.71
1:CA:349:A:O2'	1:CA:350:G:H5'	1.90	0.71
2:CB:10:LEU:H	2:CB:10:LEU:HD23	1.55	0.71
9:CI:83:ARG:O	9:CI:86:VAL:HG12	1.91	0.71
1:CA:1302:U:C5	13:CM:17:VAL:HG21	2.26	0.71
37:DD:63:ARG:HG3	37:DD:63:ARG:HH11	1.56	0.71
38:DE:36:ARG:HH21	38:DE:88:GLY:CA	2.04	0.71
54:DY:28:LYS:HD2	54:DY:37:VAL:CG1	2.21	0.71
1:AA:1423:G:H5'	44:BO:49:ARG:NH2	2.04	0.71
1:AA:155:C:H2'	1:AA:156:G:C8	2.25	0.71
1:AA:67:C:H2'	1:AA:68:G:C8	2.25	0.71
26:B1:21:ARG:HD3	26:B1:22:GLY:H	1.56	0.71
34:BA:2736:G:H5'	34:BA:2736:G:H8	1.56	0.71
37:BD:186:HIS:CD2	37:BD:188:GLU:H	2.06	0.71
37:BD:35:LYS:HG2	37:BD:64:ILE:HG23	1.73	0.71
42:BI:91:SER:H	42:BI:121:LYS:HE3	1.56	0.71
50:BU:91:ASP:O	50:BU:95:LEU:HB2	1.90	0.71
51:BV:73:SER:N	51:BV:88:ARG:HH22	1.87	0.71
2:CB:18:GLY:H	2:CB:42:ILE:CG2	2.03	0.71
6:CF:82:ARG:HB3	6:CF:82:ARG:HH11	1.55	0.71
19:CS:5:LEU:HG	19:CS:10:PHE:CD1	2.25	0.71
34:DA:2454:G:O2'	34:DA:2455:G:H5'	1.90	0.71
34:DA:2712:U:HO2'	34:DA:2712(A):A:H5''	1.54	0.71
34:DA:419:C:H2'	34:DA:420:C:H6	1.55	0.71
34:DA:80:G:O2'	34:DA:81:G:H5'	1.90	0.71
39:DF:84:VAL:HG12	39:DF:85:GLY:N	2.06	0.71
43:DN:58:ASP:O	43:DN:60:ILE:HG13	1.91	0.71
43:DN:95:PRO:O	43:DN:97:ARG:N	2.24	0.71
44:DO:87:ILE:CG2	44:DO:91:LEU:HA	2.19	0.71
44:DO:64:ARG:NH1	49:DT:70:VAL:HG21	2.06	0.71
51:DV:73:SER:N	51:DV:88:ARG:HH22	1.88	0.71
1:AA:1442(A):G:H3'	1:AA:1442(B):A:H5''	1.71	0.71
17:AQ:68:ARG:HG2	17:AQ:68:ARG:HH11	1.55	0.71
20:AT:50:GLU:HG3	20:AT:51:GLU:N	2.05	0.71
23:AW:59:U:H2'	23:AW:60:U:O4'	1.90	0.71
23:AY:39:U:H2'	23:AY:40:C:H6	1.54	0.71
34:BA:1358:G:O2'	34:BA:1359:A:H5''	1.90	0.71
34:BA:2023:G:H5'	34:BA:2617:C:H4'	1.73	0.71
34:BA:2689:U:H5''	34:BA:2690:C:H5'	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:549:G:C3'	34:BA:551:G:H5''	2.20	0.71
34:BA:80:G:O2'	34:BA:81:G:H5'	1.91	0.71
35:BB:44:G:H1'	35:BB:47:C:N4	2.06	0.71
37:BD:92:ILE:HD13	37:BD:104:TYR:HD2	1.53	0.71
45:BP:58:THR:O	45:BP:61:ARG:CZ	2.38	0.71
50:BU:92:ARG:HD2	51:BV:11:GLN:CG	2.20	0.71
1:CA:194:C:H2'	1:CA:195:A:H5''	1.72	0.71
1:CA:266:G:H5''	1:CA:268:C:H41	1.54	0.71
3:CC:105:GLU:HG2	3:CC:106:VAL:N	2.04	0.71
4:CD:133:VAL:HG11	4:CD:138:TYR:HD1	1.56	0.71
9:CI:18:PHE:HB3	9:CI:20:ARG:NH1	2.05	0.71
13:CM:116:THR:HG22	13:CM:117:VAL:N	2.05	0.71
20:CT:50:GLU:HG3	20:CT:51:GLU:N	2.05	0.71
26:D1:19:GLN:OE1	26:D1:44:PRO:HB3	1.91	0.71
34:DA:536:A:H2'	34:DA:537:C:H6	1.55	0.71
34:DA:587:C:C5	45:DP:33:ARG:HG2	2.26	0.71
37:DD:155:LEU:HD23	37:DD:177:LEU:HD22	1.73	0.71
34:DA:2749:A:H1'	41:DH:63:SER:OG	1.91	0.71
51:DV:35:LEU:HD22	51:DV:61:VAL:HA	1.73	0.71
51:DV:69:LYS:HG3	51:DV:70:ILE:N	2.05	0.71
53:DX:33:LYS:O	53:DX:35:THR:N	2.24	0.71
54:DY:31:LEU:HB3	54:DY:32:PRO:CA	2.19	0.71
7:AG:20:ASP:HB3	7:AG:23:VAL:HG23	1.73	0.70
27:B2:25:VAL:C	27:B2:27:GLU:H	1.91	0.70
34:BA:154:G:H1	34:BA:172:C:H42	1.39	0.70
51:BV:47:VAL:HG22	51:BV:48:GLY:N	2.05	0.70
54:BY:81:LYS:CD	54:BY:96:ILE:HB	2.21	0.70
1:CA:155:C:H2'	1:CA:156:G:C8	2.26	0.70
9:CI:50:LEU:O	9:CI:53:VAL:HG22	1.90	0.70
22:CV:52:G:O2'	22:CV:53:G:H8	1.71	0.70
34:DA:1358:G:O2'	34:DA:1359:A:H5''	1.91	0.70
34:DA:1665:A:H2'	34:DA:1666:G:H5'	1.72	0.70
34:DA:296:C:O2'	34:DA:297:C:H5'	1.90	0.70
34:DA:344:G:H5'	34:DA:344:G:H8	1.55	0.70
46:DQ:75:THR:HA	46:DQ:89:ASN:H	1.54	0.70
38:DE:111:ARG:HA	47:DR:2:ARG:CG	2.21	0.70
48:DS:101:LEU:HD13	48:DS:102:ALA:N	2.06	0.70
49:DT:92:GLY:HA2	49:DT:114:LEU:HA	1.71	0.70
53:DX:76:ARG:C	53:DX:76:ARG:HD3	2.11	0.70
55:DZ:79:ARG:H	55:DZ:79:ARG:HD2	1.56	0.70
3:AC:127:ARG:HD2	3:AC:127:ARG:N	2.06	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:83:ARG:O	9:AI:86:VAL:HG12	1.91	0.70
10:AJ:96:ILE:HD13	10:AJ:96:ILE:H	1.56	0.70
37:BD:35:LYS:CD	37:BD:63:ARG:HB3	2.12	0.70
41:BH:20:ALA:HB1	41:BH:21:PRO:HD2	1.73	0.70
48:BS:28:VAL:CG1	48:BS:29:PHE:H	1.95	0.70
54:BY:8:LYS:CE	54:BY:72:VAL:HG23	2.21	0.70
8:CH:112:LEU:HD11	8:CH:114:THR:HG22	1.74	0.70
13:CM:23:TYR:CE1	13:CM:70:LEU:HD22	2.26	0.70
19:CS:16:LEU:O	19:CS:20:LEU:HG	1.91	0.70
19:CS:29:ARG:HD2	19:CS:30:LEU:H	1.56	0.70
31:D6:28:ARG:HG2	31:D6:28:ARG:HH11	1.56	0.70
34:DA:1903:G:OP2	37:DD:241:PRO:HB2	1.91	0.70
25:D0:36:ILE:HD11	34:DA:2355:C:C5'	2.20	0.70
34:DA:27:G:N2	34:DA:512:G:H2'	2.05	0.70
34:DA:598:G:C5'	45:DP:15:ARG:HD2	2.19	0.70
50:DU:64:ARG:HA	50:DU:64:ARG:HE	1.55	0.70
14:AN:13:THR:N	14:AN:14:PRO:CD	2.54	0.70
23:AW:66:U:H2'	23:AW:67:C:C6	2.26	0.70
34:BA:2591:C:H2'	34:BA:2592:G:C8	2.26	0.70
44:BO:16:ALA:HA	44:BO:46:ALA:HA	1.72	0.70
48:BS:37:ALA:HB2	48:BS:99:LYS:HZ1	1.52	0.70
53:BX:60:ARG:HG3	53:BX:72:LYS:H	1.56	0.70
1:CA:1031:G:H2'	1:CA:1032:G:C8	2.26	0.70
8:CH:103:VAL:HG21	8:CH:109:ILE:O	1.90	0.70
29:D4:1:MET:N	40:DG:67:LYS:NZ	2.38	0.70
34:DA:1188:U:O2'	34:DA:1189:A:H5'	1.91	0.70
34:DA:2866:U:C6	34:DA:2868:A:H1'	2.26	0.70
35:DB:15:A:H3'	35:DB:16:G:H5'	1.71	0.70
41:DH:136:ILE:H	41:DH:136:ILE:HD12	1.56	0.70
42:DI:1:MET:HG3	42:DI:23:PRO:HA	1.72	0.70
45:DP:50:ARG:HH21	45:DP:50:ARG:HG2	1.56	0.70
47:DR:62:ALA:O	47:DR:66:VAL:HG23	1.91	0.70
54:DY:27:VAL:HG12	54:DY:29:GLU:H	1.55	0.70
54:DY:97:ARG:O	54:DY:97:ARG:HG3	1.91	0.70
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.27	0.70
1:AA:155:C:H2'	1:AA:156:G:H8	1.56	0.70
2:AB:21:ARG:HB3	2:AB:39:ILE:HA	1.73	0.70
13:AM:19:LEU:O	13:AM:22:ILE:HD12	1.90	0.70
34:BA:1131:G:O2'	34:BA:1132:A:H8	1.68	0.70
34:BA:146:G:H2'	34:BA:147:U:O4'	1.91	0.70
34:BA:27:G:N2	34:BA:512:G:H2'	2.05	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:676:A:H8	34:BA:2069:G:N2	1.89	0.70
34:BA:879:G:H1	34:BA:898:C:N4	1.90	0.70
37:BD:131:LEU:HB2	37:BD:136:ILE:HD11	1.73	0.70
45:BP:144:GLU:N	45:BP:145:PRO:HD3	2.05	0.70
45:BP:33:ARG:O	45:BP:34:GLY:C	2.29	0.70
46:BQ:82:ARG:O	46:BQ:83:MET:HB2	1.91	0.70
54:BY:43:ASN:ND2	54:BY:64:GLU:HG3	2.05	0.70
1:CA:1388:C:H2'	1:CA:1389:C:H6	1.55	0.70
1:CA:556:C:O2'	1:CA:557:G:H5'	1.90	0.70
1:CA:922:G:H4'	5:CE:20:GLN:HA	1.73	0.70
34:DA:1112:G:H1'	34:DA:1113:U:OP1	1.90	0.70
34:DA:1114:G:H2'	34:DA:1115:G:H5''	1.74	0.70
34:DA:2180:U:H2'	34:DA:2181:G:H8	1.55	0.70
34:DA:2736:G:H5'	34:DA:2736:G:H8	1.55	0.70
34:DA:603:A:H4'	34:DA:604:G:O5'	1.91	0.70
38:DE:38:THR:HG23	38:DE:39:PRO:HD2	1.71	0.70
40:DG:139:LEU:HD23	40:DG:149:VAL:HG21	1.71	0.70
45:DP:24:GLY:HA2	45:DP:33:ARG:HE	1.56	0.70
54:DY:81:LYS:CD	54:DY:96:ILE:HB	2.21	0.70
1:AA:1256:A:H61	1:AA:1278:U:C1'	2.04	0.70
2:AB:121:LEU:O	2:AB:121:LEU:HD23	1.92	0.70
7:AG:132:GLY:H	7:AG:135:VAL:CG2	2.03	0.70
6:AF:89:MET:SD	18:AR:76:LEU:HD21	2.31	0.70
19:AS:16:LEU:O	19:AS:20:LEU:HG	1.92	0.70
19:AS:31:ILE:HG23	19:AS:49:ILE:HG23	1.73	0.70
26:B1:78:LYS:NZ	26:B1:93:GLU:HB2	2.07	0.70
35:BB:15:A:H5'	35:BB:16:G:C8	2.26	0.70
42:BI:78:THR:HA	42:BI:141:LYS:O	1.92	0.70
45:BP:17:LYS:O	45:BP:19:VAL:N	2.23	0.70
51:BV:80:GLN:O	51:BV:81:TYR:N	2.24	0.70
1:CA:1352:C:H2'	1:CA:1353:G:H8	1.54	0.70
1:CA:72:C:H2'	1:CA:73:G:H8	1.56	0.70
1:CA:939:G:H5''	7:CG:102:ARG:NH2	2.06	0.70
6:CF:99:ALA:HB1	18:CR:23:LYS:HZ1	1.57	0.70
27:D2:41:ILE:HG22	27:D2:42:GLY:N	2.06	0.70
34:DA:1820:U:C2	37:DD:202:LYS:HB3	2.26	0.70
54:DY:31:LEU:HB3	54:DY:32:PRO:HA	1.70	0.70
55:DZ:24:LEU:HD21	55:DZ:86:VAL:HG23	1.73	0.70
5:AE:71:LEU:HD11	5:AE:114:GLY:HA3	1.73	0.70
11:AK:43:SER:HA	11:AK:47:VAL:HG21	1.74	0.70
23:AW:17:C:H5	34:BA:2180:U:O3'	1.74	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1112:G:H1'	34:BA:1113:U:OP1	1.91	0.70
26:B1:19:GLN:NE2	34:BA:379:G:H21	1.85	0.70
42:BI:1:MET:HG3	42:BI:23:PRO:HA	1.72	0.70
45:BP:124:LYS:HA	45:BP:143:GLY:HA3	1.73	0.70
1:CA:674:G:H2'	1:CA:675:A:H8	1.56	0.70
19:CS:49:ILE:HD12	19:CS:49:ILE:H	1.56	0.70
34:DA:1987:G:C8	34:DA:1987:G:H5'	2.27	0.70
26:D1:19:GLN:NE2	34:DA:379:G:H21	1.88	0.70
35:DB:20:C:H2'	35:DB:21:G:H5''	1.74	0.70
35:DB:44:G:H1'	35:DB:47:C:N4	2.06	0.70
1:AA:1244:C:H2'	1:AA:1245:A:C8	2.26	0.70
1:AA:266:G:H5''	1:AA:268:C:H41	1.57	0.70
3:AC:150:LYS:HG3	3:AC:169:ALA:HB2	1.72	0.70
32:B7:7:PRO:HB2	34:BA:1309:G:H4'	1.73	0.70
42:BI:75:LEU:HD21	42:BI:105:HIS:ND1	2.06	0.70
44:BO:64:ARG:NH1	49:BT:70:VAL:HG21	2.06	0.70
34:BA:1666:G:O3'	44:BO:6:THR:HG23	1.91	0.70
45:BP:16:ARG:HH11	45:BP:16:ARG:HG3	1.56	0.70
45:BP:62:LEU:N	45:BP:62:LEU:HD13	2.05	0.70
46:BQ:43:THR:HG1	46:BQ:46:GLN:HG3	1.56	0.70
47:BR:2:ARG:O	47:BR:2:ARG:HD2	1.92	0.70
49:BT:91:ARG:CB	49:BT:116:ALA:HA	2.19	0.70
51:BV:35:LEU:HD22	51:BV:61:VAL:HA	1.73	0.70
53:BX:36:LYS:HD3	53:BX:38:GLU:HB2	1.72	0.70
1:CA:1435:G:H2'	1:CA:1436:U:H6	1.57	0.70
3:CC:130:VAL:O	3:CC:134:ILE:HG12	1.90	0.70
11:CK:21:ILE:HB	11:CK:84:VAL:HG12	1.73	0.70
26:D1:86:SER:N	26:D1:87:PRO:HD3	2.05	0.70
31:D6:45:LYS:NZ	34:DA:2370:G:H21	1.90	0.70
34:DA:1502:C:H2'	34:DA:1502:C:O2	1.91	0.70
34:DA:2314:C:O2'	34:DA:2315:G:H5'	1.91	0.70
34:DA:2591:C:H2'	34:DA:2592:G:C8	2.27	0.70
34:DA:2873:A:C2	47:DR:6:SER:HB2	2.27	0.70
37:DD:25:THR:HG22	37:DD:82:ILE:O	1.92	0.70
37:DD:95:LEU:O	37:DD:95:LEU:HD12	1.91	0.70
39:DF:161:GLU:O	39:DF:165:ARG:HG2	1.92	0.70
34:DA:1666:G:O3'	44:DO:6:THR:HG23	1.91	0.70
45:DP:122:PRO:HB3	45:DP:141:ALA:HB1	1.73	0.70
50:DU:91:ASP:O	50:DU:92:ARG:O	2.08	0.70
50:DU:92:ARG:HD2	51:DV:11:GLN:HG3	1.73	0.70
1:AA:963:G:H1	1:AA:972:C:H42	1.37	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BB:20:C:H2'	35:BB:21:G:H5''	1.74	0.70
38:BE:167:VAL:HG11	38:BE:187:ALA:O	1.91	0.70
40:BG:165:THR:HB	40:BG:167:GLU:OE1	1.91	0.70
46:BQ:132:VAL:HG11	55:BZ:81:ARG:CZ	2.22	0.70
47:BR:64:ARG:HA	47:BR:67:LEU:HD23	1.72	0.70
50:BU:91:ASP:O	50:BU:92:ARG:O	2.08	0.70
55:BZ:141:VAL:HG23	55:BZ:144:LEU:HD23	1.73	0.70
2:CB:102:LEU:CD1	2:CB:102:LEU:H	2.04	0.70
2:CB:121:LEU:O	2:CB:121:LEU:HD23	1.91	0.70
3:CC:36:ASP:HA	3:CC:39:ILE:HD12	1.73	0.70
8:CH:122:ARG:HH11	8:CH:122:ARG:HB2	1.57	0.70
23:CW:20:U:H2'	23:CW:21:A:H4'	1.74	0.70
34:DA:858:U:O2	34:DA:2268:A:H2'	1.92	0.70
36:DC:49:ILE:HG22	36:DC:50:ASP:N	2.06	0.70
45:DP:13:ASN:HD22	45:DP:13:ASN:H	1.39	0.70
53:DX:11:PRO:HB3	53:DX:26:TYR:HE2	1.57	0.70
1:AA:1352:C:H2'	1:AA:1353:G:H8	1.54	0.70
1:AA:194:C:H2'	1:AA:195:A:H5''	1.74	0.70
1:AA:474:G:H2'	1:AA:475:G:H8	1.55	0.70
1:AA:625:G:H2'	1:AA:626:U:C6	2.26	0.70
2:AB:218:ALA:O	2:AB:222:ILE:HG13	1.92	0.70
4:AD:133:VAL:HG11	4:AD:138:TYR:HD1	1.57	0.70
4:AD:138:TYR:HD2	4:AD:139:ARG:N	1.90	0.70
26:B1:62:VAL:HG13	26:B1:64:ALA:H	1.56	0.70
33:B8:30:ARG:NH2	45:BP:62:LEU:HB2	2.07	0.70
34:BA:2784:C:H2'	34:BA:2785:C:H6	1.56	0.70
34:BA:320:A:H2'	39:BF:136:THR:OG1	1.91	0.70
45:BP:80:TYR:CZ	45:BP:111:ARG:HG2	2.27	0.70
34:BA:598:G:C5'	45:BP:15:ARG:HD2	2.22	0.70
34:BA:911:A:H2'	46:BQ:9:TYR:OH	1.92	0.70
47:BR:38:VAL:HB	47:BR:39:PRO:CD	2.19	0.70
47:BR:62:ALA:O	47:BR:66:VAL:HG23	1.91	0.70
48:BS:90:GLY:O	48:BS:92:TYR:HD1	1.75	0.70
50:BU:83:LEU:HB3	50:BU:88:ILE:CG1	2.22	0.70
52:BW:34:ASN:O	52:BW:37:ARG:HB3	1.92	0.70
54:BY:8:LYS:H	54:BY:8:LYS:CD	1.98	0.70
55:BZ:162:GLU:O	55:BZ:162:GLU:HG3	1.90	0.70
1:CA:1116:C:C3'	1:CA:1117:G:H5''	2.21	0.70
1:CA:963:G:N3	10:CJ:55:LYS:NZ	2.39	0.70
6:CF:33:TYR:CE1	6:CF:75:LEU:HA	2.27	0.70
6:CF:60:PHE:C	6:CF:61:LEU:HD12	2.11	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:102:ARG:HG2	12:CL:102:ARG:HH11	1.56	0.70
17:CQ:76:LEU:HG	17:CQ:77:VAL:N	2.05	0.70
27:D2:32:LEU:CG	27:D2:33:MET:N	2.51	0.70
42:DI:83:ALA:HA	42:DI:89:TYR:CD1	2.26	0.70
46:DQ:66:ILE:HG22	46:DQ:104:PHE:CD2	2.26	0.70
47:DR:38:VAL:HB	47:DR:39:PRO:CD	2.19	0.70
48:DS:90:GLY:O	48:DS:92:TYR:HD1	1.74	0.70
50:DU:83:LEU:HB3	50:DU:88:ILE:HD11	1.74	0.70
52:DW:84:ARG:HB2	52:DW:96:ILE:HG22	1.73	0.70
1:AA:975:A:H5'	1:AA:975:A:H8	1.56	0.70
4:AD:11:LEU:O	4:AD:13:ARG:N	2.23	0.70
22:AV:73:A:H8	22:AV:73:A:H5'	1.56	0.70
27:B2:46:GLN:NE2	27:B2:47:ASN:HA	2.06	0.70
34:BA:1240:U:O2'	34:BA:1241:A:H5'	1.92	0.70
34:BA:1722:A:C2	34:BA:1740:G:H2'	2.27	0.70
34:BA:2866:U:C6	34:BA:2868:A:H1'	2.27	0.70
40:BG:96:ARG:O	40:BG:99:MET:HB3	1.91	0.70
41:BH:12:PRO:O	41:BH:15:VAL:HG22	1.91	0.70
49:BT:33:LYS:HZ2	49:BT:33:LYS:HA	1.57	0.70
50:BU:92:ARG:HD2	51:BV:11:GLN:HG3	1.73	0.70
1:CA:1256:A:N6	1:CA:1278:U:H1'	2.05	0.70
1:CA:939:G:H5''	7:CG:102:ARG:NH1	2.07	0.70
2:CB:30:ARG:HH21	2:CB:194:PRO:CG	2.05	0.70
2:CB:21:ARG:HB3	2:CB:39:ILE:HA	1.74	0.70
34:DA:141:A:H8	34:DA:1408:C:O2'	1.73	0.70
34:DA:2327:A:H2'	34:DA:2328:A:C8	2.27	0.70
34:DA:482:A:H4'	54:DY:47:LYS:HZ1	1.57	0.70
35:DB:15:A:H5'	35:DB:16:G:C8	2.26	0.70
42:DI:109:ILE:HD12	42:DI:109:ILE:N	2.07	0.70
1:AA:1003:G:H2'	1:AA:1004:A:C4'	2.22	0.69
5:AE:56:GLN:HE22	5:AE:60:TYR:HB2	1.56	0.69
13:AM:116:THR:HG22	13:AM:117:VAL:N	2.07	0.69
19:AS:29:ARG:HD2	19:AS:30:LEU:H	1.56	0.69
34:BA:1140:C:H1'	34:BA:1143:A:C2	2.27	0.69
34:BA:1987:G:H5'	34:BA:1987:G:C8	2.25	0.69
34:BA:2197:U:O2'	34:BA:2198:A:H5''	1.91	0.69
41:BH:136:ILE:HD12	41:BH:136:ILE:H	1.57	0.69
45:BP:24:GLY:HA2	45:BP:33:ARG:HE	1.56	0.69
48:BS:87:PHE:O	48:BS:88:ASP:HB2	1.92	0.69
52:BW:75:TYR:N	52:BW:75:TYR:CD1	2.60	0.69
1:CA:818:G:C2'	1:CA:819:A:H5''	2.21	0.69

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:56:GLN:HE22	5:CE:60:TYR:HB2	1.56	0.69
11:CK:24:SER:HB3	11:CK:27:ASN:O	1.92	0.69
14:CN:7:ILE:HG13	14:CN:8:GLU:N	2.06	0.69
20:CT:71:THR:HG22	20:CT:72:LEU:N	2.06	0.69
34:DA:1914:C:H2'	34:DA:1915:U:O4'	1.92	0.69
34:DA:2455:G:H2'	34:DA:2456:C:C6	2.27	0.69
34:DA:2771:C:O2	34:DA:2771:C:H2'	1.90	0.69
34:DA:893:C:H2'	34:DA:894:C:H5'	1.72	0.69
41:DH:12:PRO:O	41:DH:15:VAL:HG22	1.91	0.69
45:DP:106:LEU:O	45:DP:107:LYS:HG2	1.92	0.69
45:DP:146:VAL:HG13	45:DP:147:LEU:HG	1.72	0.69
45:DP:58:THR:O	45:DP:61:ARG:CZ	2.40	0.69
54:DY:43:ASN:ND2	54:DY:64:GLU:HG3	2.06	0.69
55:DZ:98:MET:O	55:DZ:125:LEU:HA	1.91	0.69
55:DZ:151:HIS:HD2	55:DZ:170:THR:HG22	1.56	0.69
1:AA:450:G:H4'	16:AP:41:PRO:O	1.91	0.69
2:AB:30:ARG:HH21	2:AB:194:PRO:CG	2.05	0.69
3:AC:130:VAL:O	3:AC:134:ILE:HG12	1.92	0.69
10:AJ:75:ILE:HG13	10:AJ:76:ASN:H	1.56	0.69
23:AW:38:A:C3'	23:AW:39:U:H5''	2.22	0.69
26:B1:13:ILE:O	26:B1:14:VAL:HB	1.91	0.69
34:BA:1547:C:O2'	34:BA:1548:C:H5'	1.92	0.69
34:BA:1803:A:H4'	37:BD:259:THR:CG2	2.22	0.69
34:BA:2317:C:H2'	34:BA:2318:G:H5'	1.74	0.69
33:B8:61:LEU:HB3	34:BA:593:G:H4'	1.74	0.69
38:BE:38:THR:HG23	38:BE:39:PRO:HD2	1.73	0.69
39:BF:23:ASP:O	39:BF:24:LEU:HD22	1.91	0.69
39:BF:34:TRP:HB2	45:BP:10:PRO:O	1.92	0.69
48:BS:89:ARG:O	48:BS:92:TYR:HB3	1.91	0.69
1:CA:626:U:H2'	1:CA:627:G:C8	2.26	0.69
1:CA:706:A:H1'	11:CK:29:ILE:HD11	1.74	0.69
40:DG:88:ILE:HG13	40:DG:89:GLY:N	2.05	0.69
42:DI:1:MET:O	42:DI:20:ASP:HA	1.92	0.69
45:DP:16:ARG:HG3	45:DP:16:ARG:HH11	1.57	0.69
54:DY:14:LEU:HG	54:DY:15:VAL:O	1.91	0.69
1:AA:1442(A):G:O6	34:BA:2863:C:H4'	1.91	0.69
11:AK:44:SER:O	11:AK:47:VAL:HB	1.92	0.69
26:B1:64:ALA:HA	26:B1:67:ILE:CG1	2.20	0.69
34:BA:203:C:H3'	34:BA:204:A:H5''	1.74	0.69
34:BA:2682:U:O4	34:BA:2728:U:H1'	1.92	0.69
34:BA:27:G:H1'	34:BA:513:A:H62	1.57	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BC:49:ILE:HG22	36:BC:50:ASP:N	2.06	0.69
45:BP:146:VAL:HG13	45:BP:147:LEU:HG	1.74	0.69
46:BQ:47:ILE:HD12	46:BQ:47:ILE:H	1.57	0.69
53:BX:18:TYR:HA	53:BX:21:PHE:CE1	2.27	0.69
54:BY:28:LYS:HD2	54:BY:37:VAL:HG12	1.72	0.69
1:CA:1293:G:O2'	1:CA:1294:G:H8	1.74	0.69
23:CY:28:G:H2'	23:CY:29:G:H8	1.55	0.69
27:D2:47:ASN:C	27:D2:49:LYS:N	2.45	0.69
33:D8:29:LYS:O	33:D8:32:LEU:N	2.24	0.69
37:DD:48:ARG:HG3	37:DD:48:ARG:HH11	1.56	0.69
38:DE:168:MET:O	38:DE:170:LEU:HD12	1.93	0.69
49:DT:29:ARG:HH21	49:DT:84:GLN:NE2	1.90	0.69
53:DX:14:SER:H	53:DX:17:ALA:HB3	1.57	0.69
53:DX:57:LEU:HD13	53:DX:77:LYS:HG3	1.74	0.69
53:DX:77:LYS:CD	53:DX:78:LYS:HD2	2.22	0.69
1:AA:1116:C:C3'	1:AA:1117:G:H5''	2.21	0.69
1:AA:818:G:C2'	1:AA:819:A:H5''	2.22	0.69
1:AA:950:U:H4'	1:AA:971:G:N2	2.07	0.69
5:AE:135:THR:O	5:AE:138:ALA:HB3	1.93	0.69
6:AF:60:PHE:C	6:AF:61:LEU:HD12	2.11	0.69
12:AL:24:VAL:O	12:AL:24:VAL:HG12	1.92	0.69
12:AL:41:ARG:CG	12:AL:42:THR:H	2.05	0.69
34:BA:1162:G:H1'	51:BV:91:TYR:OH	1.92	0.69
38:BE:11:MET:CB	38:BE:24:THR:HA	2.23	0.69
39:BF:123:LEU:HD12	39:BF:124:LEU:N	2.08	0.69
39:BF:9:ILE:HG12	39:BF:14:PRO:C	2.12	0.69
42:BI:83:ALA:HA	42:BI:89:TYR:CD1	2.26	0.69
34:BA:528:A:H5''	43:BN:114:ARG:NH1	2.06	0.69
45:BP:96:THR:O	45:BP:99:LEU:HB3	1.92	0.69
54:BY:75:ILE:HD13	54:BY:76:CYS:H	1.57	0.69
1:CA:1503:A:O2'	1:CA:1504:G:O5'	2.09	0.69
1:CA:221:C:O2'	1:CA:222:U:H5'	1.92	0.69
19:CS:63:THR:HG22	19:CS:66:MET:HE2	1.74	0.69
34:DA:2023:G:H5'	34:DA:2617:C:H4'	1.74	0.69
34:DA:2444:G:OP2	39:DF:68:LYS:HE2	1.92	0.69
27:D2:52:ASP:OD1	34:DA:76:C:H4'	1.92	0.69
34:DA:784:A:N7	37:DD:229:VAL:HG21	2.06	0.69
34:DA:2178:C:H4'	36:DC:46:LYS:NZ	2.08	0.69
45:DP:62:LEU:CD1	45:DP:62:LEU:H	1.99	0.69
45:DP:96:THR:O	45:DP:99:LEU:HB3	1.93	0.69
44:DO:76:ALA:HB3	49:DT:75:ILE:HB	1.74	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1262:A:P	52:DW:99:ARG:HH12	2.15	0.69
54:DY:60:PHE:C	54:DY:61:ILE:HD12	2.13	0.69
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.27	0.69
1:AA:556:C:O2'	1:AA:557:G:H5'	1.92	0.69
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.73	0.69
16:AP:20:VAL:HG21	16:AP:32:TYR:CG	2.27	0.69
25:B0:49:LYS:N	25:B0:80:HIS:HB3	2.07	0.69
34:BA:1434:A:H61	34:BA:1558:A:H62	1.39	0.69
34:BA:2836:U:H2'	34:BA:2837:G:C8	2.28	0.69
38:BE:111:ARG:HA	47:BR:2:ARG:HG3	1.75	0.69
47:BR:5:LYS:H	47:BR:5:LYS:HD2	1.57	0.69
50:BU:17:ILE:HG23	50:BU:39:LEU:HD12	1.72	0.69
53:BX:76:ARG:C	53:BX:76:ARG:HD3	2.13	0.69
54:BY:14:LEU:HG	54:BY:15:VAL:O	1.92	0.69
5:CE:135:THR:O	5:CE:138:ALA:HB3	1.93	0.69
5:CE:71:LEU:HD11	5:CE:114:GLY:HA3	1.73	0.69
7:CG:116:ALA:O	7:CG:120:ILE:HG12	1.92	0.69
7:CG:132:GLY:H	7:CG:135:VAL:CG2	2.05	0.69
26:D1:85:LEU:CB	26:D1:87:PRO:HD3	2.22	0.69
30:D5:2:ALA:HA	34:DA:2015:A:C1'	2.22	0.69
33:D8:30:ARG:NH2	45:DP:62:LEU:HB2	2.07	0.69
34:DA:1504:C:O2'	34:DA:1505:C:H5'	1.93	0.69
43:DN:78:TYR:HD1	43:DN:79:PRO:N	1.90	0.69
44:DO:13:ASN:ND2	44:DO:97:ARG:HB2	2.06	0.69
7:AG:118:VAL:O	7:AG:121:ALA:HB3	1.91	0.69
9:AI:3:GLN:C	9:AI:4:TYR:HD1	1.96	0.69
23:AW:25:C:H2'	23:AW:26:A:H8	1.56	0.69
33:B8:32:LEU:HD11	33:B8:41:ILE:HG22	1.74	0.69
34:BA:2178:C:H4'	36:BC:46:LYS:NZ	2.08	0.69
34:BA:2672:G:H2'	34:BA:2673:G:H5''	1.73	0.69
37:BD:35:LYS:HE3	37:BD:64:ILE:C	2.12	0.69
40:BG:6:ALA:HB3	40:BG:104:GLU:OE1	1.91	0.69
40:BG:76:SER:CB	40:BG:84:LYS:H	2.04	0.69
45:BP:47:ASP:HB3	45:BP:48:PRO:HA	1.74	0.69
1:CA:1095:U:H2'	1:CA:1096:C:C6	2.27	0.69
1:CA:32:A:H2'	1:CA:33:A:C8	2.27	0.69
1:CA:939:G:H2'	1:CA:940:C:H6	1.57	0.69
12:CL:41:ARG:HH11	12:CL:41:ARG:CB	2.05	0.69
19:CS:6:LYS:H	19:CS:6:LYS:HD2	1.55	0.69
34:DA:2712:U:H1'	34:DA:2712(A):A:H8	1.56	0.69
37:DD:176:ARG:NH1	37:DD:176:ARG:HG2	2.05	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DF:84:VAL:O	39:DF:86:GLY:N	2.25	0.69
43:DN:41:ASP:N	50:DU:64:ARG:HH21	1.91	0.69
44:DO:13:ASN:HD21	44:DO:97:ARG:H	1.40	0.69
45:DP:47:ASP:HB3	45:DP:48:PRO:O	1.93	0.69
51:DV:19:LYS:CG	51:DV:20:LEU:N	2.56	0.69
11:AK:124:LYS:HD2	11:AK:125:PHE:CE1	2.28	0.69
29:B4:11:PRO:C	29:B4:13:ARG:H	1.96	0.69
34:BA:1679:U:H2'	34:BA:1680:U:H5'	1.73	0.69
34:BA:408:G:H2'	34:BA:409:C:H6	1.57	0.69
37:BD:71:ASP:HB2	37:BD:103:ARG:HH22	1.58	0.69
44:BO:47:ILE:CG1	44:BO:48:PRO:HD2	2.20	0.69
45:BP:106:LEU:O	45:BP:107:LYS:HG2	1.93	0.69
45:BP:13:ASN:HD22	45:BP:13:ASN:H	1.40	0.69
49:BT:29:ARG:CB	49:BT:85:LYS:HA	2.23	0.69
53:BX:11:PRO:HB3	53:BX:26:TYR:HE2	1.57	0.69
2:CB:218:ALA:O	2:CB:222:ILE:HG13	1.92	0.69
3:CC:127:ARG:HD2	3:CC:127:ARG:N	2.08	0.69
10:CJ:39:PRO:HA	10:CJ:70:ARG:NH1	2.08	0.69
18:CR:79:LEU:HD23	18:CR:80:PRO:HD2	1.75	0.69
34:DA:784:A:C5	37:DD:229:VAL:HG21	2.28	0.69
37:DD:131:LEU:HB2	37:DD:136:ILE:HD11	1.75	0.69
42:DI:58:LEU:HA	42:DI:61:ARG:HH11	1.58	0.69
45:DP:50:ARG:O	45:DP:57:THR:HG23	1.92	0.69
50:DU:95:LEU:C	50:DU:97:ASP:H	1.96	0.69
1:AA:375:U:H2'	1:AA:376:G:H8	1.57	0.69
1:AA:376:G:OP2	16:AP:67:THR:HG21	1.93	0.69
1:AA:626:U:H2'	1:AA:627:G:C8	2.28	0.69
1:AA:724:G:O2'	1:AA:725:G:H5'	1.93	0.69
3:AC:73:PRO:HA	3:AC:76:VAL:HG13	1.74	0.69
9:AI:46:ALA:HB2	9:AI:74:ILE:HG23	1.74	0.69
17:AQ:56:VAL:O	17:AQ:77:VAL:HB	1.93	0.69
25:B0:20:ARG:HD3	25:B0:20:ARG:H	1.57	0.69
34:BA:893:C:H2'	34:BA:894:C:H5'	1.73	0.69
40:BG:131:TYR:HB3	40:BG:159:VAL:CG1	2.23	0.69
47:BR:18:LEU:HD13	47:BR:18:LEU:C	2.13	0.69
49:BT:91:ARG:HA	49:BT:117:ASP:H	1.56	0.69
53:BX:14:SER:H	53:BX:17:ALA:HB3	1.57	0.69
54:BY:60:PHE:C	54:BY:61:ILE:HD12	2.13	0.69
54:BY:97:ARG:O	54:BY:97:ARG:HG3	1.92	0.69
8:CH:86:ILE:HG21	8:CH:133:LEU:HD22	1.74	0.69
12:CL:41:ARG:CG	12:CL:42:THR:H	2.06	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:19:LEU:HA	13:CM:22:ILE:HD12	1.74	0.69
29:D4:11:PRO:C	29:D4:13:ARG:H	1.96	0.69
34:DA:1635:G:H5'	34:DA:1635:G:C8	2.27	0.69
34:DA:1784:A:H4'	34:DA:1785:A:O5'	1.93	0.69
34:DA:2182:G:H2'	34:DA:2183:C:H6	1.58	0.69
37:DD:147:LEU:HD13	37:DD:155:LEU:CD1	2.20	0.69
38:DE:203:LYS:HD2	38:DE:203:LYS:O	1.93	0.69
38:DE:5:LEU:HB2	38:DE:51:PHE:HD2	1.58	0.69
39:DF:9:ILE:HG12	39:DF:14:PRO:C	2.12	0.69
43:DN:15:LEU:O	43:DN:136:GLU:HA	1.93	0.69
50:DU:31:SER:O	50:DU:33:ARG:N	2.26	0.69
1:AA:1031:G:H2'	1:AA:1032:G:C8	2.25	0.69
1:AA:1318:A:H1'	19:AS:37:ARG:NH2	2.08	0.69
10:AJ:47:PHE:CE1	10:AJ:63:PHE:HB2	2.27	0.69
12:AL:46:LYS:CG	12:AL:47:LYS:H	1.98	0.69
17:AQ:76:LEU:HG	17:AQ:77:VAL:N	2.07	0.69
26:B1:62:VAL:C	26:B1:64:ALA:H	1.96	0.69
34:BA:1820:U:C2	37:BD:202:LYS:HB3	2.27	0.69
34:BA:1925:C:O2'	34:BA:1926:U:H5'	1.92	0.69
52:BW:27:LYS:O	52:BW:70:TYR:HB2	1.93	0.69
53:BX:56:THR:O	53:BX:57:LEU:HD12	1.91	0.69
1:CA:1015:A:H2'	1:CA:1016:A:H8	1.57	0.69
1:CA:295:C:H2'	1:CA:296:U:C6	2.28	0.69
2:CB:233:SER:HB2	2:CB:234:PRO:HD2	1.75	0.69
6:CF:89:MET:SD	18:CR:76:LEU:HD21	2.32	0.69
12:CL:8:ASN:ND2	17:CQ:34:LYS:HE2	2.07	0.69
26:D1:89:GLU:CD	26:D1:89:GLU:N	2.46	0.69
34:DA:92:A:H2'	34:DA:93:G:C8	2.19	0.69
28:D3:17:LYS:HG2	34:DA:969:U:OP1	1.93	0.69
41:DH:20:ALA:HB1	41:DH:21:PRO:HD2	1.73	0.69
43:DN:66:LYS:HB3	43:DN:70:LYS:HB2	1.74	0.69
54:DY:95:LYS:HG2	54:DY:101:LYS:N	2.08	0.69
55:DZ:130:PRO:CA	55:DZ:133:ILE:HD11	2.22	0.69
1:AA:32:A:H2'	1:AA:33:A:C8	2.27	0.69
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.28	0.69
1:AA:72:C:H2'	1:AA:73:G:H8	1.57	0.69
2:AB:36:ARG:H	2:AB:41:ILE:CD1	2.06	0.69
4:AD:127:THR:HA	4:AD:132:ARG:HA	1.75	0.69
9:AI:115:GLY:O	9:AI:116:LYS:HG2	1.93	0.69
34:BA:1114:G:H2'	34:BA:1115:G:H5''	1.74	0.69
34:BA:1914:C:H2'	34:BA:1915:U:O4'	1.92	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2538:C:O2'	34:BA:2539:C:H5'	1.92	0.69
37:BD:270:ILE:HD12	37:BD:270:ILE:O	1.92	0.69
38:BE:111:ARG:HA	47:BR:2:ARG:CB	2.23	0.69
38:BE:203:LYS:O	38:BE:203:LYS:HD2	1.93	0.69
39:BF:57:VAL:CG1	39:BF:58:ALA:N	2.56	0.69
40:BG:134:GLY:HA2	40:BG:156:ASP:HA	1.74	0.69
43:BN:15:LEU:HB2	43:BN:134:ARG:HB2	1.75	0.69
53:BX:60:ARG:CG	53:BX:74:PRO:HD2	2.15	0.69
1:CA:1255:G:H5'	1:CA:1256:A:OP1	1.93	0.69
1:CA:373:A:O2'	1:CA:374:A:H5'	1.93	0.69
3:CC:70:VAL:O	3:CC:106:VAL:HG23	1.93	0.69
25:D0:36:ILE:HD11	34:DA:2355:C:C4'	2.22	0.69
25:D0:49:LYS:N	25:D0:80:HIS:HB3	2.07	0.69
34:DA:1231:G:H2'	34:DA:1232:G:H8	1.57	0.69
34:DA:142:A:C8	34:DA:1408:C:H1'	2.28	0.69
34:DA:1773:A:C2'	34:DA:1774:C:H5'	2.23	0.69
34:DA:1925:C:O2'	34:DA:1926:U:H5'	1.93	0.69
34:DA:2292:C:O2'	34:DA:2293:C:H5'	1.92	0.69
34:DA:2689:U:H4'	34:DA:2690:C:H6	1.58	0.69
34:DA:581:C:O2'	34:DA:582:G:H5'	1.91	0.69
29:D4:6:HIS:N	40:DG:67:LYS:HE3	2.08	0.69
43:DN:134:ARG:HG3	43:DN:134:ARG:O	1.92	0.69
49:DT:81:PRO:C	49:DT:82:LEU:HD12	2.13	0.69
51:DV:25:LEU:H	51:DV:94:LEU:HD12	1.58	0.69
53:DX:60:ARG:HG3	53:DX:72:LYS:H	1.55	0.69
1:AA:1388:C:H2'	1:AA:1389:C:H6	1.57	0.69
1:AA:939:G:H2'	1:AA:940:C:H6	1.58	0.69
3:AC:105:GLU:HG2	3:AC:106:VAL:N	2.06	0.69
4:AD:33:MET:HE2	4:AD:37:PRO:HA	1.75	0.69
1:AA:19:C:H5"	5:AE:86:ALA:CB	2.23	0.69
13:AM:96:LEU:O	13:AM:98:VAL:HG22	1.93	0.69
26:B1:48:LYS:HG3	26:B1:49:VAL:H	1.57	0.69
26:B1:88:LYS:O	26:B1:92:LYS:N	2.26	0.69
27:B2:30:ARG:HA	27:B2:33:MET:SD	2.33	0.69
26:B1:41:ARG:HH12	34:BA:189:G:P	2.16	0.69
34:BA:296:C:O2'	34:BA:297:C:H5'	1.93	0.69
39:BF:8:GLN:CB	39:BF:126:VAL:HA	2.23	0.69
43:BN:13:TRP:O	43:BN:14:VAL:HG23	1.93	0.69
44:BO:2:ILE:HD11	44:BO:82:ASN:ND2	2.08	0.69
44:BO:46:ALA:H	44:BO:54:GLU:HG2	1.55	0.69
50:BU:83:LEU:HB3	50:BU:88:ILE:HD11	1.75	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BX:63:LYS:O	53:BX:68:ARG:HA	1.92	0.69
1:CA:1249:C:H6	1:CA:1249:C:H5'	1.57	0.69
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.74	0.69
9:CI:46:ALA:HB2	9:CI:74:ILE:HG23	1.75	0.69
10:CJ:75:ILE:HG13	10:CJ:76:ASN:H	1.57	0.69
12:CL:115:LYS:O	12:CL:117:ARG:HG3	1.91	0.69
18:CR:53:ARG:HA	18:CR:56:THR:OG1	1.93	0.69
31:D6:20:ASN:ND2	31:D6:21:TYR:N	2.41	0.69
34:DA:2312:U:H2'	34:DA:2313:C:H5''	1.75	0.69
43:DN:133:GLN:O	43:DN:135:PRO:HD3	1.92	0.69
47:DR:45:ARG:HG3	47:DR:46:GLY:N	2.08	0.69
50:DU:88:ILE:C	50:DU:90:VAL:N	2.46	0.69
55:DZ:39:VAL:HG21	55:DZ:44:PHE:CD2	2.27	0.69
5:AE:147:ASP:HA	5:AE:150:ARG:HB3	1.75	0.68
8:AH:122:ARG:HB2	8:AH:122:ARG:HH11	1.58	0.68
34:BA:1345:C:O2'	34:BA:1346:G:H5'	1.93	0.68
34:BA:598:G:H5'	45:BP:15:ARG:CD	2.19	0.68
37:BD:155:LEU:HD23	37:BD:177:LEU:HD22	1.75	0.68
43:BN:134:ARG:O	43:BN:134:ARG:HG3	1.93	0.68
43:BN:65:LYS:HE2	43:BN:65:LYS:CA	2.16	0.68
46:BQ:78:PRO:O	46:BQ:79:LEU:CB	2.41	0.68
54:BY:28:LYS:HD2	54:BY:37:VAL:CG1	2.23	0.68
1:CA:135:C:H2'	1:CA:136:C:H5'	1.74	0.68
1:CA:1423:G:O2'	1:CA:1424:C:H5'	1.93	0.68
26:D1:37:ILE:HG21	34:DA:2080:G:P	2.32	0.68
27:D2:14:ARG:NH2	27:D2:57:ILE:HG21	2.08	0.68
37:DD:70:TRP:CH2	37:DD:150:LYS:HA	2.28	0.68
41:DH:67:LEU:O	41:DH:71:LEU:HD13	1.93	0.68
46:DQ:22:LYS:HZ3	46:DQ:22:LYS:HA	1.58	0.68
51:DV:35:LEU:CD2	51:DV:61:VAL:HA	2.23	0.68
18:AR:53:ARG:HA	18:AR:56:THR:OG1	1.92	0.68
34:BA:128:C:H2'	34:BA:129:C:H6	1.58	0.68
31:B6:45:LYS:NZ	34:BA:2370:G:H21	1.90	0.68
34:BA:2741:A:H2'	34:BA:2742:C:O4'	1.93	0.68
34:BA:536:A:H2'	34:BA:537:C:H6	1.55	0.68
37:BD:27:THR:CG2	37:BD:28:GLU:N	2.52	0.68
43:BN:78:TYR:HD1	43:BN:79:PRO:N	1.90	0.68
52:BW:82:LEU:HD12	52:BW:82:LEU:N	2.08	0.68
55:BZ:16:SER:HA	55:BZ:19:ARG:HD2	1.74	0.68
1:CA:735:C:H2'	1:CA:736:C:H6	1.56	0.68
2:CB:204:ASN:HD21	2:CB:207:ALA:H	1.38	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:23:LYS:O	6:CF:27:GLN:HG2	1.93	0.68
7:CG:118:VAL:O	7:CG:121:ALA:HB3	1.92	0.68
33:D8:61:LEU:HB3	34:DA:593:G:H4'	1.74	0.68
39:DF:78:ILE:CD1	39:DF:78:ILE:H	2.05	0.68
44:DO:47:ILE:CG1	44:DO:48:PRO:HD2	2.21	0.68
47:DR:78:LYS:O	47:DR:83:ILE:HG12	1.92	0.68
50:DU:29:SER:OG	50:DU:30:LYS:HE3	1.93	0.68
34:DA:993:G:OP1	50:DU:50:ARG:NH2	2.27	0.68
4:AD:146:ILE:HD12	4:AD:146:ILE:N	2.09	0.68
6:AF:99:ALA:HB1	18:AR:23:LYS:HZ2	1.59	0.68
7:AG:97:GLN:HG2	7:AG:101:LEU:HD11	1.75	0.68
8:AH:109:ILE:HG12	8:AH:110:ALA:N	2.07	0.68
10:AJ:39:PRO:HA	10:AJ:70:ARG:NH1	2.07	0.68
12:AL:6:THR:OG1	12:AL:9:GLN:HG3	1.93	0.68
1:AA:954:G:H4'	13:AM:120:LYS:CG	2.24	0.68
18:AR:79:LEU:HD23	18:AR:80:PRO:HD2	1.76	0.68
33:B8:29:LYS:O	33:B8:32:LEU:N	2.25	0.68
34:BA:2312:U:H2'	34:BA:2313:C:H5''	1.74	0.68
34:BA:954:G:H4'	46:BQ:13:GLN:NE2	2.02	0.68
39:BF:157:VAL:HG12	39:BF:176:LEU:O	1.94	0.68
41:BH:46:GLU:CG	41:BH:51:ARG:HB2	2.24	0.68
43:BN:15:LEU:O	43:BN:136:GLU:HA	1.93	0.68
45:BP:50:ARG:O	45:BP:57:THR:HG23	1.92	0.68
49:BT:29:ARG:HH21	49:BT:84:GLN:NE2	1.91	0.68
49:BT:80:SER:OG	49:BT:81:PRO:HD3	1.92	0.68
1:CA:736:C:H2'	1:CA:737:A:C8	2.28	0.68
53:DX:36:LYS:HD3	53:DX:38:GLU:HB2	1.75	0.68
1:AA:1054:C:H42	23:AY:34:G:C1'	2.06	0.68
1:AA:1256:A:N6	1:AA:1278:U:H1'	2.05	0.68
1:AA:295:C:H2'	1:AA:296:U:C6	2.28	0.68
34:BA:2689:U:H4'	34:BA:2690:C:H6	1.58	0.68
34:BA:2725:A:O2'	34:BA:2726:U:H2'	1.94	0.68
42:BI:145:VAL:HG12	42:BI:146:ALA:N	2.08	0.68
42:BI:52:ARG:HG3	42:BI:53:ALA:H	1.58	0.68
42:BI:79:ILE:HB	42:BI:142:VAL:CG1	2.24	0.68
54:BY:86:ARG:HB3	54:BY:88:LYS:HZ2	1.58	0.68
1:CA:59:A:H1'	1:CA:354:G:N2	2.09	0.68
1:CA:376:G:OP2	16:CP:67:THR:HG21	1.93	0.68
3:CC:73:PRO:HA	3:CC:76:VAL:HG13	1.75	0.68
5:CE:122:GLU:O	5:CE:123:LEU:HD23	1.94	0.68
34:DA:2538:C:O2'	34:DA:2539:C:H5'	1.93	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2569:G:O2'	34:DA:2570:G:H5'	1.94	0.68
34:DA:814:C:O2'	34:DA:815:C:H5'	1.93	0.68
39:DF:63:LYS:CE	39:DF:67:GLN:HB2	2.22	0.68
43:DN:70:LYS:HG3	43:DN:72:TYR:HE1	1.58	0.68
45:DP:124:LYS:HA	45:DP:143:GLY:HA3	1.74	0.68
47:DR:2:ARG:HD2	47:DR:2:ARG:O	1.93	0.68
9:AI:18:PHE:HB3	9:AI:20:ARG:HH11	1.58	0.68
19:AS:5:LEU:HG	19:AS:10:PHE:CD1	2.27	0.68
20:AT:13:LEU:HD12	20:AT:13:LEU:N	2.04	0.68
34:BA:1504:C:O2'	34:BA:1505:C:H5'	1.92	0.68
34:BA:603:A:H4'	34:BA:604:G:O5'	1.93	0.68
37:BD:118:VAL:HG22	37:BD:119:ALA:N	2.07	0.68
40:BG:173:LEU:HB3	40:BG:178:PHE:CG	2.29	0.68
43:BN:57:ALA:CB	43:BN:124:ALA:HA	2.23	0.68
43:BN:58:ASP:O	43:BN:60:ILE:HG13	1.94	0.68
46:BQ:134:ARG:HG2	46:BQ:135:ASP:H	1.58	0.68
48:BS:90:GLY:O	48:BS:92:TYR:CD1	2.47	0.68
53:BX:64:LYS:CG	53:BX:65:ARG:H	2.07	0.68
1:CA:67:C:O2'	1:CA:171:A:H1'	1.94	0.68
3:CC:32:LEU:HD22	3:CC:59:ARG:NH1	2.08	0.68
10:CJ:38:ILE:HG12	10:CJ:71:LEU:O	1.94	0.68
34:DA:1140:C:H1'	34:DA:1143:A:C2	2.29	0.68
34:DA:1899:G:O2'	34:DA:1900:A:H5''	1.93	0.68
34:DA:270:A:O2'	34:DA:271:A:H5'	1.93	0.68
46:DQ:134:ARG:HG2	46:DQ:135:ASP:H	1.59	0.68
53:DX:65:ARG:NH2	53:DX:66:LEU:H	1.90	0.68
54:DY:28:LYS:CE	54:DY:30:VAL:HG22	2.23	0.68
3:AC:70:VAL:O	3:AC:106:VAL:HG23	1.94	0.68
7:AG:140:ASP:HA	7:AG:143:ARG:HH11	1.59	0.68
14:AN:36:PHE:O	14:AN:38:GLY:N	2.27	0.68
19:AS:63:THR:HG22	19:AS:66:MET:HE2	1.75	0.68
22:AV:40:C:H2'	22:AV:41:C:C6	2.29	0.68
22:AV:40:C:H2'	22:AV:41:C:H6	1.58	0.68
27:B2:41:ILE:CG1	34:BA:94(A):G:N2	2.57	0.68
34:BA:2461:C:H2'	34:BA:2462:U:C6	2.27	0.68
34:BA:2701:C:C3'	34:BA:2702:U:H5''	2.15	0.68
34:BA:784:A:N7	37:BD:229:VAL:HG21	2.08	0.68
34:BA:78:A:H2'	34:BA:79:G:C8	2.29	0.68
39:BF:132:VAL:HG22	39:BF:133:ASN:H	1.59	0.68
35:BB:103:G:H1'	55:BZ:73:GLN:HE22	1.58	0.68
1:CA:1104:G:O2'	1:CA:1105:A:H5'	1.93	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:724:G:O2'	1:CA:725:G:H5'	1.94	0.68
1:CA:811:C:O2'	1:CA:901:A:N1	2.25	0.68
4:CD:13:ARG:O	4:CD:15:GLU:N	2.27	0.68
4:CD:32:ALA:O	4:CD:36:ARG:N	2.21	0.68
4:CD:4:TYR:O	4:CD:5:ILE:HB	1.92	0.68
10:CJ:96:ILE:HD13	10:CJ:96:ILE:N	2.08	0.68
16:CP:27:LYS:H	16:CP:27:LYS:HD2	1.59	0.68
16:CP:75:ARG:O	16:CP:78:GLY:N	2.27	0.68
17:CQ:68:ARG:HH11	17:CQ:68:ARG:HG2	1.57	0.68
26:D1:73:LEU:HD13	26:D1:90:ILE:HG22	1.76	0.68
34:DA:271(E):U:H2'	34:DA:271(F):C:C6	2.29	0.68
34:DA:2720:U:O2	34:DA:2720:U:H2'	1.93	0.68
37:DD:35:LYS:NZ	37:DD:64:ILE:O	2.24	0.68
39:DF:164:ARG:HD3	39:DF:175:THR:OG1	1.93	0.68
40:DG:13:GLU:O	40:DG:14:GLU:HB2	1.94	0.68
34:DA:626:U:C2	45:DP:105:LEU:HG	2.28	0.68
47:DR:78:LYS:O	47:DR:82:GLU:HB3	1.94	0.68
1:AA:1015:A:H2'	1:AA:1016:A:H8	1.58	0.68
1:AA:386:C:H2'	1:AA:387:U:H5'	1.75	0.68
1:AA:389:A:H2'	1:AA:390:C:C5'	2.24	0.68
14:AN:41:ARG:HG3	14:AN:42:ILE:N	2.09	0.68
25:B0:38:VAL:HB	25:B0:59:LEU:HD12	1.76	0.68
27:B2:14:ARG:CD	27:B2:57:ILE:HB	2.23	0.68
34:BA:2314:C:O2'	34:BA:2315:G:H5'	1.94	0.68
34:BA:271(D):G:H1	34:BA:271(T):C:N4	1.91	0.68
39:BF:164:ARG:HD3	39:BF:175:THR:OG1	1.93	0.68
42:BI:1:MET:O	42:BI:20:ASP:HA	1.94	0.68
43:BN:133:GLN:O	43:BN:135:PRO:HD3	1.94	0.68
54:BY:75:ILE:HD11	54:BY:79:CYS:CA	2.24	0.68
1:CA:1241:G:H2'	1:CA:1242:C:C6	2.29	0.68
1:CA:375:U:H2'	1:CA:376:G:H8	1.58	0.68
6:CF:11:ASN:O	6:CF:14:LEU:HG	1.94	0.68
9:CI:18:PHE:HB3	9:CI:20:ARG:HH11	1.58	0.68
14:CN:41:ARG:HG3	14:CN:42:ILE:N	2.07	0.68
33:D8:43:GLN:O	33:D8:44:LYS:HD2	1.94	0.68
34:DA:1722:A:C2	34:DA:1740:G:H2'	2.28	0.68
34:DA:27:G:H1'	34:DA:513:A:H62	1.58	0.68
37:DD:79:VAL:HG21	37:DD:111:LEU:CD1	2.15	0.68
44:DO:63:VAL:HB	44:DO:102:VAL:HG12	1.76	0.68
47:DR:10:LEU:HB3	47:DR:17:ARG:CD	2.23	0.68
50:DU:95:LEU:HD11	51:DV:11:GLN:O	1.94	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DV:12:TYR:CD2	51:DV:12:TYR:N	2.60	0.68
1:AA:59:A:H1'	1:AA:354:G:N2	2.08	0.68
15:AO:17:ARG:HH11	15:AO:17:ARG:HG3	1.58	0.68
20:AT:57:ARG:HH11	20:AT:57:ARG:CB	2.06	0.68
34:BA:1448:G:H5'	34:BA:1449:A:OP1	1.94	0.68
34:BA:1821:A:C2'	34:BA:1822:G:H5''	2.24	0.68
34:BA:2121:G:H2'	34:BA:2122:U:C6	2.28	0.68
34:BA:2579:C:O3'	38:BE:131:ALA:HB2	1.93	0.68
34:BA:925:C:C3'	34:BA:926:A:H5''	2.24	0.68
37:BD:17:THR:HG22	37:BD:205:VAL:HB	1.74	0.68
45:BP:85:LEU:HB2	45:BP:120:ALA:HB2	1.75	0.68
46:BQ:75:THR:HG21	46:BQ:85:LYS:CE	2.23	0.68
46:BQ:78:PRO:O	46:BQ:79:LEU:HB2	1.94	0.68
34:BA:2873:A:C2	47:BR:6:SER:HB2	2.28	0.68
53:BX:37:THR:HG23	53:BX:54:VAL:HB	1.74	0.68
55:BZ:145:GLU:HG3	55:BZ:146:ILE:N	2.01	0.68
1:CA:1003:G:H2'	1:CA:1004:A:C4'	2.23	0.68
1:CA:1194:U:H2'	1:CA:1195:C:C6	2.29	0.68
1:CA:539:A:H2'	1:CA:540:G:C8	2.28	0.68
9:CI:48:GLU:N	9:CI:49:PRO:HD2	2.09	0.68
13:CM:76:ALA:HA	13:CM:79:LYS:HD2	1.75	0.68
34:DA:1448:G:H5'	34:DA:1449:A:OP1	1.94	0.68
34:DA:2689:U:H5''	34:DA:2690:C:H5'	1.75	0.68
40:DG:170:ARG:O	40:DG:174:GLU:HG3	1.94	0.68
42:DI:127:VAL:HG13	42:DI:139:GLN:HB2	1.75	0.68
42:DI:83:ALA:HA	42:DI:89:TYR:CE1	2.29	0.68
45:DP:80:TYR:CZ	45:DP:111:ARG:HG2	2.28	0.68
47:DR:5:LYS:HD2	47:DR:5:LYS:H	1.56	0.68
52:DW:82:LEU:N	52:DW:82:LEU:HD12	2.08	0.68
13:AM:76:ALA:HA	13:AM:79:LYS:HD2	1.76	0.68
34:BA:141:A:H8	34:BA:1408:C:O2'	1.75	0.68
34:BA:1887:C:H3'	34:BA:1888:G:H5''	1.74	0.68
34:BA:195:A:H5''	34:BA:196:A:OP2	1.93	0.68
34:BA:539:G:H2'	34:BA:540:C:C6	2.29	0.68
39:BF:63:LYS:CE	39:BF:67:GLN:HB2	2.24	0.68
44:BO:113:LYS:O	44:BO:117:LEU:HG	1.94	0.68
49:BT:88:ILE:HG22	49:BT:89:VAL:HG23	1.73	0.68
50:BU:95:LEU:C	50:BU:97:ASP:H	1.98	0.68
1:CA:1152:A:H5''	10:CJ:13:HIS:CD2	2.29	0.68
9:CI:3:GLN:C	9:CI:4:TYR:HD1	1.98	0.68
11:CK:21:ILE:HD12	11:CK:21:ILE:N	2.09	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:58:VAL:O	12:CL:65:GLU:HA	1.94	0.68
17:CQ:58:GLU:O	17:CQ:59:ILE:HD13	1.94	0.68
27:D2:26:ARG:HA	27:D2:29:LYS:HE2	1.76	0.68
34:DA:1240:U:O2'	34:DA:1241:A:H5'	1.94	0.68
37:DD:71:ASP:HB2	37:DD:103:ARG:HH22	1.58	0.68
37:DD:158:ALA:HB3	37:DD:161:THR:HG21	1.76	0.68
42:DI:145:VAL:HG12	42:DI:146:ALA:N	2.08	0.68
43:DN:30:ILE:HG23	43:DN:52:VAL:HG11	1.76	0.68
45:DP:16:ARG:HG2	45:DP:17:LYS:N	2.09	0.68
50:DU:95:LEU:HD12	51:DV:11:GLN:HE21	1.58	0.68
2:AB:102:LEU:CD1	2:AB:102:LEU:H	2.06	0.68
2:AB:163:PHE:HA	2:AB:185:ILE:HG13	1.75	0.68
26:B1:49:VAL:HB	26:B1:64:ALA:HB2	1.76	0.68
34:BA:2127:G:H2'	34:BA:2128:C:C6	2.29	0.68
34:BA:2312:U:C2'	34:BA:2313:C:H5''	2.24	0.68
34:BA:2312:U:H4'	40:BG:71:THR:CG2	2.24	0.68
34:BA:919:G:C5'	35:BB:81:G:H1'	2.24	0.68
37:BD:231:HIS:ND1	37:BD:232:PRO:HD2	2.08	0.68
39:BF:78:ILE:CD1	39:BF:78:ILE:H	2.03	0.68
41:BH:127:GLU:HB3	41:BH:128:PRO:CD	2.24	0.68
46:BQ:66:ILE:HG22	46:BQ:104:PHE:CD2	2.29	0.68
50:BU:88:ILE:C	50:BU:90:VAL:N	2.47	0.68
51:BV:35:LEU:CD2	51:BV:61:VAL:HA	2.24	0.68
53:BX:57:LEU:HD13	53:BX:77:LYS:HG3	1.75	0.68
1:CA:1129:C:H4'	1:CA:1130:A:H5'	1.75	0.68
1:CA:1442(A):G:H3'	1:CA:1442(B):A:H5''	1.76	0.68
3:CC:7:PRO:O	3:CC:11:ARG:HG2	1.94	0.68
11:CK:43:SER:HA	11:CK:47:VAL:HG21	1.75	0.68
6:CF:100:ASN:O	18:CR:28:GLU:HG2	1.94	0.68
27:D2:15:LYS:HA	27:D2:18:PRO:HD2	1.76	0.68
34:DA:1280:G:C3'	34:DA:1281:G:H5''	2.24	0.68
34:DA:1748:G:H8	34:DA:1748:G:H5'	1.59	0.68
34:DA:2286:A:H5''	34:DA:2287:A:O4'	1.94	0.68
32:D7:37:LYS:HE2	34:DA:469:G:O6	1.93	0.68
34:DA:541:C:H2'	34:DA:542:C:C5	2.28	0.68
36:DC:191:ALA:O	36:DC:195:ALA:HB3	1.94	0.68
38:DE:111:ARG:HA	47:DR:2:ARG:HG3	1.75	0.68
48:DS:90:GLY:O	48:DS:92:TYR:CD1	2.47	0.68
34:DA:483:A:O4'	54:DY:47:LYS:HD3	1.94	0.68
1:AA:1129:C:H4'	1:AA:1130:A:H5'	1.75	0.67
2:AB:233:SER:HB2	2:AB:234:PRO:HD2	1.74	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:32:ALA:O	4:AD:36:ARG:N	2.22	0.67
13:AM:19:LEU:HA	13:AM:22:ILE:HD12	1.75	0.67
14:AN:7:ILE:HG13	14:AN:8:GLU:N	2.08	0.67
22:AV:50:U:H2'	22:AV:51:C:C6	2.29	0.67
26:B1:71:TYR:O	26:B1:74:VAL:N	2.27	0.67
39:BF:3:GLU:CG	39:BF:19:GLU:HB2	2.19	0.67
41:BH:84:SER:O	41:BH:85:LYS:HB2	1.93	0.67
46:BQ:89:ASN:O	46:BQ:91:GLU:N	2.27	0.67
52:BW:88:ARG:HB3	52:BW:92:ARG:HB3	1.76	0.67
3:CC:77:ILE:HA	3:CC:84:ILE:HG22	1.77	0.67
10:CJ:47:PHE:CE1	10:CJ:63:PHE:HB2	2.29	0.67
12:CL:24:VAL:HG12	12:CL:24:VAL:O	1.94	0.67
1:CA:1318:A:H1'	19:CS:37:ARG:NH2	2.08	0.67
26:D1:87:PRO:CD	26:D1:88:LYS:H	2.07	0.67
34:DA:2029:G:H2'	34:DA:2031:A:OP2	1.94	0.67
34:DA:2461:C:H2'	34:DA:2462:U:C6	2.29	0.67
34:DA:419:C:O2'	34:DA:420:C:H5'	1.94	0.67
37:DD:27:THR:CG2	37:DD:28:GLU:N	2.55	0.67
45:DP:47:ASP:HB3	45:DP:48:PRO:HA	1.75	0.67
46:DQ:75:THR:HG21	46:DQ:85:LYS:CE	2.24	0.67
52:DW:79:GLY:HA3	52:DW:100:THR:HG23	1.76	0.67
1:AA:1502:A:H5'	1:AA:1504:G:N7	2.09	0.67
6:AF:33:TYR:CE1	6:AF:75:LEU:HA	2.29	0.67
8:AH:112:LEU:HD11	8:AH:114:THR:HG22	1.75	0.67
1:AA:1152:A:H5''	10:AJ:13:HIS:CD2	2.28	0.67
10:AJ:48:THR:HA	10:AJ:62:HIS:CB	2.22	0.67
12:AL:58:VAL:O	12:AL:65:GLU:HA	1.93	0.67
31:B6:20:ASN:ND2	31:B6:21:TYR:N	2.42	0.67
34:BA:1986:A:C2'	34:BA:1987:G:H5''	2.24	0.67
34:BA:2036:C:H5'	34:BA:2036:C:C6	2.22	0.67
34:BA:2208:A:H1'	34:BA:2219:G:N3	2.09	0.67
34:BA:8:A:H2'	34:BA:9:U:C5	2.29	0.67
35:BB:65:C:H41	35:BB:109:C:H2'	1.59	0.67
37:BD:138:VAL:HA	37:BD:165:ILE:HG21	1.75	0.67
34:BA:626:U:C2	45:BP:105:LEU:HG	2.30	0.67
34:BA:587:C:H5	45:BP:33:ARG:HH11	1.42	0.67
1:CA:1305:G:H5'	21:CU:4:GLY:HA3	1.75	0.67
1:CA:853:G:O2'	1:CA:854:G:H5'	1.94	0.67
11:CK:22:HIS:O	11:CK:28:THR:HG23	1.93	0.67
16:CP:20:VAL:HG21	16:CP:32:TYR:CG	2.30	0.67
22:CV:4:G:HO2'	22:CV:5:G:H8	1.40	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D0:80:HIS:N	25:D0:80:HIS:CD2	2.63	0.67
27:D2:30:ARG:HH11	27:D2:30:ARG:HG3	1.59	0.67
33:D8:54:GLU:O	33:D8:58:ILE:HG12	1.94	0.67
34:DA:1658:C:OP1	38:DE:132:HIS:CE1	2.48	0.67
34:DA:1679:U:H2'	34:DA:1680:U:H5'	1.76	0.67
34:DA:2121:G:H2'	34:DA:2122:U:C6	2.29	0.67
39:DF:78:ILE:N	39:DF:78:ILE:HD13	2.08	0.67
41:DH:118:PRO:HB2	41:DH:121:ILE:HD12	1.76	0.67
41:DH:137:ASP:O	41:DH:138:LYS:HG3	1.94	0.67
44:DO:24:VAL:HG23	44:DO:33:ALA:HB2	1.75	0.67
39:DF:34:TRP:HB2	45:DP:10:PRO:O	1.94	0.67
55:DZ:40:ASP:HB3	55:DZ:43:GLU:HB2	1.77	0.67
1:AA:532:A:H2	1:AA:1206:G:H21	1.43	0.67
3:AC:32:LEU:HD22	3:AC:59:ARG:NH1	2.10	0.67
4:AD:43:HIS:O	4:AD:45:GLN:N	2.27	0.67
7:AG:116:ALA:O	7:AG:120:ILE:HG12	1.94	0.67
23:AW:40:C:H5'	23:AW:40:C:H6	1.58	0.67
27:B2:14:ARG:O	27:B2:18:PRO:HD3	1.95	0.67
32:B7:30:VAL:O	32:B7:31:LEU:C	2.33	0.67
34:BA:1348:G:C2'	34:BA:1349:A:H5''	2.23	0.67
34:BA:2709:G:O2'	34:BA:2710:C:H5'	1.93	0.67
37:BD:245:PRO:O	37:BD:246:PRO:C	2.33	0.67
38:BE:111:ARG:CG	47:BR:2:ARG:HG3	2.25	0.67
38:BE:75:VAL:O	38:BE:77:ILE:N	2.26	0.67
45:BP:105:LEU:HD12	45:BP:105:LEU:N	2.09	0.67
46:BQ:22:LYS:NZ	46:BQ:22:LYS:HA	2.09	0.67
52:BW:35:ILE:HG22	52:BW:36:LEU:N	2.09	0.67
54:BY:20:TYR:CE1	54:BY:42:VAL:HG22	2.29	0.67
5:CE:147:ASP:HA	5:CE:150:ARG:HB3	1.75	0.67
14:CN:36:PHE:O	14:CN:38:GLY:N	2.27	0.67
34:DA:1639:U:H2'	34:DA:1640:C:H5''	1.77	0.67
34:DA:1986:A:C2'	34:DA:1987:G:H5''	2.24	0.67
34:DA:2317:C:H2'	34:DA:2318:G:H5'	1.76	0.67
41:DH:84:SER:O	41:DH:85:LYS:HB2	1.93	0.67
42:DI:78:THR:HA	42:DI:141:LYS:O	1.94	0.67
46:DQ:47:ILE:H	46:DQ:47:ILE:HD12	1.59	0.67
54:DY:71:LYS:NZ	54:DY:71:LYS:HB2	2.10	0.67
54:DY:75:ILE:CD1	54:DY:76:CYS:N	2.56	0.67
1:AA:1255:G:H5'	1:AA:1256:A:OP1	1.93	0.67
1:AA:737:A:H2'	1:AA:738:C:H6	1.60	0.67
23:AW:27:G:H2'	23:AW:28:G:C8	2.29	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2491:U:H4'	34:BA:2570:G:OP1	1.95	0.67
34:BA:814:C:O2'	34:BA:815:C:H5'	1.94	0.67
37:BD:70:TRP:CH2	37:BD:150:LYS:HA	2.28	0.67
34:BA:195:A:OP1	45:BP:46:LYS:HE2	1.95	0.67
34:BA:994:C:O2	51:BV:10:LYS:HE2	1.95	0.67
1:CA:1277:C:H2'	1:CA:1278:U:H5'	1.76	0.67
1:CA:17:U:H2'	1:CA:18:C:H6	1.58	0.67
4:CD:33:MET:CE	4:CD:37:PRO:HA	2.25	0.67
8:CH:109:ILE:HG12	8:CH:110:ALA:N	2.09	0.67
34:DA:154:G:H1	34:DA:172:C:H42	1.39	0.67
26:D1:34:THR:HG21	34:DA:388:G:P	2.33	0.67
34:DA:621:A:H2'	34:DA:622:G:C5'	2.25	0.67
38:DE:109:LYS:HB3	47:DR:2:ARG:NH1	2.08	0.67
39:DF:205:ARG:O	39:DF:206:ILE:HG23	1.94	0.67
40:DG:107:LEU:HD11	40:DG:178:PHE:CE1	2.28	0.67
40:DG:88:ILE:CG1	40:DG:89:GLY:H	2.06	0.67
41:DH:89:ILE:HD11	41:DH:129:THR:HB	1.75	0.67
44:DO:13:ASN:HD22	44:DO:97:ARG:HB2	1.59	0.67
46:DQ:30:GLY:CA	46:DQ:107:ALA:HB2	2.25	0.67
49:DT:31:SER:C	49:DT:32:TYR:HD2	1.98	0.67
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.30	0.67
2:AB:18:GLY:N	2:AB:42:ILE:HG22	2.08	0.67
6:AF:86:ARG:O	6:AF:87:ARG:HG2	1.94	0.67
16:AP:28:ARG:HG2	16:AP:28:ARG:HH11	1.58	0.67
34:BA:2569:G:O2'	34:BA:2570:G:H5'	1.95	0.67
37:BD:45:ASN:CG	37:BD:46:GLN:H	1.98	0.67
38:BE:108:SER:O	38:BE:162:ALA:HA	1.95	0.67
38:BE:5:LEU:HB2	38:BE:51:PHE:HD2	1.59	0.67
39:BF:155:LEU:HD23	39:BF:186:ILE:HD13	1.76	0.67
44:BO:13:ASN:ND2	44:BO:97:ARG:HB2	2.09	0.67
46:BQ:26:TYR:HD1	46:BQ:26:TYR:O	1.78	0.67
48:BS:14:VAL:HG12	48:BS:15:ARG:N	2.09	0.67
1:CA:155:C:H2'	1:CA:156:G:H8	1.57	0.67
1:CA:389:A:H2'	1:CA:390:C:C5'	2.24	0.67
4:CD:100:ARG:NH1	4:CD:137:SER:HA	2.10	0.67
4:CD:11:LEU:O	4:CD:13:ARG:N	2.28	0.67
4:CD:33:MET:HE2	4:CD:37:PRO:HA	1.75	0.67
9:CI:21:PRO:HA	9:CI:58:ARG:O	1.95	0.67
12:CL:28:LYS:O	12:CL:29:GLY:C	2.33	0.67
26:D1:94:LEU:CD2	26:D1:95:LEU:H	2.08	0.67
27:D2:14:ARG:CZ	27:D2:57:ILE:HG21	2.24	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2362:G:O2'	34:DA:2363:C:H5'	1.93	0.67
34:DA:2836:U:H2'	34:DA:2837:G:C8	2.29	0.67
38:DE:11:MET:CB	38:DE:24:THR:HA	2.24	0.67
38:DE:75:VAL:O	38:DE:77:ILE:N	2.28	0.67
40:DG:101:ILE:O	40:DG:101:ILE:HG13	1.94	0.67
43:DN:131:GLN:NE2	43:DN:134:ARG:HA	2.10	0.67
46:DQ:78:PRO:O	46:DQ:79:LEU:HB2	1.94	0.67
46:DQ:89:ASN:O	46:DQ:91:GLU:N	2.27	0.67
48:DS:14:VAL:HG12	48:DS:15:ARG:N	2.08	0.67
49:DT:91:ARG:HA	49:DT:117:ASP:H	1.59	0.67
53:DX:57:LEU:HD22	53:DX:76:ARG:HD2	1.77	0.67
1:AA:1426:C:O2'	1:AA:1427:U:H5'	1.94	0.67
6:AF:23:LYS:O	6:AF:27:GLN:HG2	1.94	0.67
8:AH:87:SER:HA	8:AH:93:VAL:HG23	1.76	0.67
12:AL:92:ASP:O	12:AL:93:LEU:HD23	1.93	0.67
34:BA:1231:G:H2'	34:BA:1232:G:H8	1.58	0.67
34:BA:1528(A):A:C3'	34:BA:1529:G:H5''	2.25	0.67
34:BA:581:C:O2'	34:BA:582:G:H5'	1.94	0.67
34:BA:2631:G:N2	38:BE:61:ARG:NH1	2.42	0.67
34:BA:587:C:H5	45:BP:33:ARG:NH1	1.91	0.67
45:BP:50:ARG:HG2	45:BP:50:ARG:HH21	1.59	0.67
49:BT:91:ARG:HB3	49:BT:116:ALA:CA	2.21	0.67
34:DA:1170:G:H1	34:DA:1179:C:H42	1.43	0.67
34:DA:2129:C:H2'	34:DA:2130:U:C4'	2.21	0.67
37:DD:58:HIS:CD2	37:DD:59:LYS:N	2.63	0.67
34:DA:2579:C:O3'	38:DE:131:ALA:HB2	1.95	0.67
39:DF:123:LEU:HD12	39:DF:124:LEU:N	2.09	0.67
39:DF:117:ARG:NH2	39:DF:187:VAL:HA	2.09	0.67
38:DE:111:ARG:HA	47:DR:2:ARG:CB	2.24	0.67
54:DY:90:LEU:HG	54:DY:91:GLU:N	2.01	0.67
2:AB:135:GLN:O	2:AB:139:LYS:HB2	1.95	0.67
6:AF:46:ARG:HH12	18:AR:37:VAL:HG21	1.60	0.67
17:AQ:67:LYS:CA	17:AQ:70:ARG:HH12	2.07	0.67
23:AW:18:G:H1	23:AW:55:U:H1'	1.59	0.67
26:B1:92:LYS:C	26:B1:94:LEU:N	2.44	0.67
31:B6:19:ARG:HE	31:B6:19:ARG:N	1.92	0.67
34:BA:1997:G:O2'	34:BA:1998:G:H5'	1.95	0.67
34:BA:2029:G:H2'	34:BA:2031:A:OP2	1.94	0.67
34:BA:2286:A:H5''	34:BA:2287:A:O4'	1.94	0.67
41:BH:104:GLU:HA	41:BH:113:VAL:O	1.95	0.67
43:BN:95:PRO:O	43:BN:97:ARG:N	2.28	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BO:24:VAL:HG23	44:BO:33:ALA:HB2	1.76	0.67
44:BO:91:LEU:N	44:BO:91:LEU:HD22	2.09	0.67
45:BP:92:GLU:HG3	45:BP:123:LEU:HD22	1.77	0.67
35:BB:78:A:O2'	46:BQ:21:THR:HG21	1.93	0.67
54:BY:95:LYS:HG2	54:BY:101:LYS:N	2.08	0.67
1:CA:386:C:H2'	1:CA:387:U:H5'	1.76	0.67
1:CA:627:G:H2'	1:CA:628:G:H8	1.59	0.67
15:CO:39:LEU:O	15:CO:42:HIS:HB3	1.95	0.67
16:CP:50:LYS:C	16:CP:50:LYS:HD3	2.15	0.67
34:DA:1887:C:H3'	34:DA:1888:G:H5''	1.75	0.67
34:DA:271(G):C:H2'	34:DA:271(H):G:C8	2.29	0.67
34:DA:78:A:H2'	34:DA:79:G:C8	2.29	0.67
35:DB:15:A:H3'	35:DB:16:G:C5'	2.24	0.67
40:DG:134:GLY:C	40:DG:135:LEU:HD12	2.14	0.67
40:DG:86:MET:HB2	40:DG:87:PRO:CD	2.24	0.67
43:DN:16:ILE:O	43:DN:54:VAL:HA	1.95	0.67
47:DR:4:LEU:O	47:DR:4:LEU:HD13	1.94	0.67
52:DW:88:ARG:HB3	52:DW:92:ARG:HB3	1.76	0.67
3:AC:27:LYS:HA	3:AC:27:LYS:NZ	2.10	0.67
4:AD:100:ARG:NH1	4:AD:137:SER:HA	2.10	0.67
6:AF:8:ILE:HD12	6:AF:26:ILE:HD13	1.77	0.67
33:B8:32:LEU:HD23	33:B8:35:GLN:O	1.94	0.67
34:BA:2455:G:H2'	34:BA:2456:C:C6	2.30	0.67
34:BA:2653:U:C5'	34:BA:2654:A:H5''	2.25	0.67
34:BA:271(P):C:H2'	34:BA:271(Q):G:H8	1.59	0.67
34:BA:2771:C:H2'	34:BA:2771:C:O2	1.94	0.67
34:BA:784:A:C5	37:BD:229:VAL:HG21	2.30	0.67
35:BB:15:A:H3'	35:BB:16:G:C5'	2.24	0.67
42:BI:127:VAL:HG13	42:BI:139:GLN:HB2	1.76	0.67
42:BI:48:GLU:O	42:BI:51:ILE:HB	1.95	0.67
45:BP:89:ALA:HB1	45:BP:121:LYS:HZ1	1.59	0.67
51:BV:78:LYS:HD3	51:BV:78:LYS:C	2.16	0.67
1:CA:1250:A:H2	1:CA:1370:G:H1'	1.60	0.67
1:CA:1437:C:O2'	1:CA:1438:G:H5'	1.94	0.67
2:CB:163:PHE:HA	2:CB:185:ILE:HG13	1.76	0.67
4:CD:138:TYR:HD2	4:CD:139:ARG:N	1.92	0.67
25:D0:20:ARG:H	25:D0:20:ARG:HD3	1.58	0.67
30:D5:55:ARG:CG	30:D5:56:LYS:H	2.08	0.67
37:DD:4:LYS:HZ1	37:DD:20:ASP:HA	1.57	0.67
38:DE:167:VAL:HG22	38:DE:170:LEU:HD11	1.77	0.67
45:DP:85:LEU:HB2	45:DP:120:ALA:HB2	1.76	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:DX:18:TYR:HA	53:DX:21:PHE:CE1	2.30	0.67
54:DY:8:LYS:H	54:DY:8:LYS:CD	2.00	0.67
55:DZ:97:GLU:CB	55:DZ:125:LEU:HD21	2.19	0.67
1:AA:67:C:O2'	1:AA:171:A:H1'	1.95	0.67
9:AI:48:GLU:N	9:AI:49:PRO:HD2	2.10	0.67
18:AR:43:PHE:C	18:AR:44:LEU:HD12	2.15	0.67
26:B1:11:ARG:HB3	26:B1:12:PRO:HD2	1.75	0.67
26:B1:26:ARG:HG2	26:B1:34:THR:OG1	1.95	0.67
34:BA:2681:C:H5	34:BA:2725:A:N6	1.91	0.67
36:BC:82:LYS:NZ	36:BC:151:GLU:HA	2.10	0.67
38:BE:134:ILE:H	38:BE:134:ILE:HD13	1.58	0.67
53:BX:40:LYS:HG3	53:BX:41:ASN:H	1.60	0.67
1:CA:192:U:H2'	1:CA:193:C:H6	1.60	0.67
1:CA:867:G:O2'	1:CA:868:C:H5'	1.95	0.67
6:CF:82:ARG:HB3	6:CF:82:ARG:NH1	2.09	0.67
6:CF:99:ALA:HB1	18:CR:23:LYS:NZ	2.08	0.67
7:CG:140:ASP:HA	7:CG:143:ARG:HH11	1.58	0.67
7:CG:76:ARG:HH11	7:CG:76:ARG:HG2	1.59	0.67
9:CI:63:ILE:HG22	9:CI:64:THR:N	2.10	0.67
11:CK:17:GLY:HA3	11:CK:77:MET:SD	2.35	0.67
13:CM:19:LEU:O	13:CM:22:ILE:HD12	1.95	0.67
34:DA:203:C:H3'	34:DA:204:A:H5''	1.76	0.67
34:DA:2680:C:H2'	34:DA:2681:C:O2	1.94	0.67
34:DA:2693:A:H2'	34:DA:2694:G:H8	1.60	0.67
35:DB:65:C:H41	35:DB:109:C:H2'	1.58	0.67
37:DD:106:ILE:C	37:DD:106:ILE:HD13	2.15	0.67
34:DA:2745:C:O2'	41:DH:142:GLY:HA3	1.95	0.67
41:DH:46:GLU:HG2	41:DH:51:ARG:HB2	1.77	0.67
41:DH:88:LEU:O	41:DH:89:ILE:HG23	1.95	0.67
34:DA:911:A:H2'	46:DQ:9:TYR:OH	1.93	0.67
51:DV:25:LEU:N	51:DV:94:LEU:HD12	2.10	0.67
53:DX:40:LYS:O	53:DX:42:ALA:N	2.23	0.67
1:AA:1442(A):G:C3'	1:AA:1442(B):A:H5''	2.25	0.67
4:AD:13:ARG:O	4:AD:15:GLU:N	2.28	0.67
15:AO:11:VAL:HG21	15:AO:34:LEU:HD22	1.77	0.67
22:AV:66:C:H2'	22:AV:67:C:C6	2.30	0.67
29:B4:6:HIS:N	40:BG:67:LYS:HE2	2.09	0.67
34:BA:2292:C:O2'	34:BA:2293:C:H5'	1.94	0.67
34:BA:2796:U:O2'	34:BA:2799:C:H5'	1.95	0.67
37:BD:176:ARG:HG2	37:BD:176:ARG:NH1	2.08	0.67
42:BI:83:ALA:HA	42:BI:89:TYR:CE1	2.30	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BU:56:ASP:O	50:BU:60:LEU:HG	1.95	0.67
50:BU:95:LEU:HD11	51:BV:11:GLN:O	1.95	0.67
53:BX:40:LYS:C	53:BX:42:ALA:H	1.98	0.67
2:CB:165:VAL:HG23	2:CB:166:ASP:H	1.60	0.67
2:CB:36:ARG:H	2:CB:41:ILE:CD1	2.06	0.67
7:CG:20:ASP:HB3	7:CG:23:VAL:HG23	1.77	0.67
8:CH:33:GLU:O	8:CH:36:LEU:HB2	1.95	0.67
17:CQ:9:VAL:HG21	17:CQ:84:LEU:HD13	1.77	0.67
26:D1:61:ARG:HG2	26:D1:61:ARG:HH11	1.59	0.67
34:DA:2127:G:H2'	34:DA:2128:C:C6	2.30	0.67
34:DA:994:C:O2	51:DV:10:LYS:HE2	1.94	0.67
37:DD:58:HIS:HD2	37:DD:59:LYS:N	1.93	0.67
39:DF:23:ASP:O	39:DF:24:LEU:HD22	1.94	0.67
42:DI:52:ARG:HG3	42:DI:53:ALA:H	1.60	0.67
46:DQ:52:VAL:CG1	46:DQ:53:ALA:H	2.08	0.67
51:DV:79:VAL:O	51:DV:80:GLN:HB3	1.94	0.67
1:AA:1277:C:H2'	1:AA:1278:U:H5'	1.76	0.66
1:AA:1190:G:H3'	3:AC:3:ASN:HD22	1.60	0.66
3:AC:64:VAL:CG2	3:AC:99:VAL:HG12	2.25	0.66
7:AG:76:ARG:HH11	7:AG:76:ARG:HG2	1.60	0.66
8:AH:35:ILE:O	8:AH:39:LEU:HB2	1.96	0.66
33:B8:52:LYS:N	33:B8:53:PRO:HD2	2.10	0.66
33:B8:54:GLU:O	33:B8:58:ILE:HG12	1.95	0.66
34:BA:1658:C:OP1	38:BE:132:HIS:ND1	2.27	0.66
34:BA:2312:U:H2'	34:BA:2313:C:C5'	2.25	0.66
34:BA:271(G):C:H2'	34:BA:271(H):G:C8	2.29	0.66
34:BA:298:G:H5'	34:BA:299:A:OP1	1.95	0.66
34:BA:993:G:OP1	50:BU:50:ARG:NH2	2.28	0.66
39:BF:178:PRO:HG2	39:BF:179:GLU:OE1	1.94	0.66
44:BO:99:PHE:O	44:BO:100:GLY:O	2.13	0.66
7:CG:97:GLN:HG2	7:CG:101:LEU:HD11	1.76	0.66
19:CS:50:ALA:HA	19:CS:58:VAL:O	1.95	0.66
31:D6:19:ARG:HE	31:D6:19:ARG:N	1.93	0.66
32:D7:8:ASN:C	32:D7:8:ASN:HD22	1.98	0.66
34:DA:1384:A:N3	34:DA:1405:U:H1'	2.09	0.66
34:DA:146:G:H2'	34:DA:147:U:O4'	1.95	0.66
34:DA:2653:U:C5'	34:DA:2654:A:H5''	2.25	0.66
35:DB:106:G:H5''	55:DZ:31:ARG:HB3	1.78	0.66
39:DF:101:LEU:HD12	39:DF:102:PRO:CD	2.23	0.66
39:DF:24:LEU:HB3	39:DF:25:PRO:CD	2.22	0.66
44:DO:24:VAL:CG2	44:DO:33:ALA:HB2	2.25	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:963:G:N3	10:AJ:55:LYS:NZ	2.41	0.66
11:AK:24:SER:HB3	11:AK:27:ASN:O	1.96	0.66
13:AM:23:TYR:CE1	13:AM:70:LEU:HD22	2.29	0.66
34:BA:1170:G:H1	34:BA:1179:C:H42	1.43	0.66
34:BA:1190:G:H5'	45:BP:35:HIS:HB3	1.76	0.66
34:BA:1773:A:C2'	34:BA:1774:C:H5'	2.24	0.66
26:B1:37:ILE:HG21	34:BA:2080:G:O5'	1.95	0.66
37:BD:158:ALA:HB3	37:BD:161:THR:HG21	1.77	0.66
41:BH:153:LYS:H	41:BH:153:LYS:HD3	1.59	0.66
42:BI:88:ILE:CD1	42:BI:123:LEU:HG	2.24	0.66
47:BR:60:LEU:HD23	47:BR:60:LEU:C	2.15	0.66
1:CA:1106:G:H5''	3:CC:172:ARG:HG2	1.76	0.66
1:CA:1477:C:O2'	1:CA:1478:C:H5'	1.94	0.66
1:CA:383:A:C2'	1:CA:384:G:H5'	2.25	0.66
1:CA:957:U:H3	1:CA:960:U:H5''	1.60	0.66
6:CF:46:ARG:HH12	18:CR:37:VAL:HG21	1.60	0.66
9:CI:116:LYS:O	9:CI:118:LYS:N	2.28	0.66
1:CA:1250:A:H4'	9:CI:68:GLY:H	1.60	0.66
10:CJ:30:SER:OG	10:CJ:81:THR:HG22	1.95	0.66
18:CR:53:ARG:HH21	18:CR:60:ALA:N	1.93	0.66
26:D1:46:LEU:O	26:D1:48:LYS:N	2.28	0.66
32:D7:30:VAL:O	32:D7:31:LEU:C	2.33	0.66
34:DA:2772:C:H2'	34:DA:2773:C:C6	2.31	0.66
34:DA:2784:C:H2'	34:DA:2785:C:C6	2.31	0.66
34:DA:580:C:O2'	34:DA:581:C:H5'	1.96	0.66
39:DF:132:VAL:HG22	39:DF:133:ASN:H	1.59	0.66
41:DH:104:GLU:HA	41:DH:113:VAL:O	1.96	0.66
42:DI:113:ARG:NH1	42:DI:132:PRO:HG3	2.11	0.66
43:DN:58:ASP:C	43:DN:60:ILE:HG13	2.15	0.66
47:DR:45:ARG:CG	47:DR:46:GLY:H	2.07	0.66
1:AA:1250:A:H4'	9:AI:68:GLY:H	1.59	0.66
5:AE:110:LEU:HD21	5:AE:139:LEU:HD21	1.78	0.66
26:B1:19:GLN:HE21	34:BA:379:G:N2	1.88	0.66
29:B4:29:PRO:C	29:B4:31:ILE:H	1.98	0.66
34:BA:271(E):U:H2'	34:BA:271(F):C:C6	2.31	0.66
37:BD:35:LYS:NZ	37:BD:64:ILE:O	2.27	0.66
38:BE:168:MET:O	38:BE:170:LEU:HD12	1.94	0.66
43:BN:131:GLN:NE2	43:BN:134:ARG:HA	2.08	0.66
43:BN:70:LYS:HG3	43:BN:72:TYR:HE1	1.60	0.66
45:BP:74:GLU:C	45:BP:75:ILE:HD13	2.14	0.66
48:BS:77:ALA:O	48:BS:80:LEU:HD12	1.95	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BX:57:LEU:CD1	53:BX:77:LYS:HD2	2.25	0.66
55:BZ:52:SER:OG	55:BZ:53:ILE:N	2.28	0.66
1:CA:644:G:C2'	1:CA:645:C:H5'	2.26	0.66
1:CA:706:A:N7	1:CA:707:C:H5	1.93	0.66
9:CI:18:PHE:HB2	9:CI:62:TYR:O	1.95	0.66
18:CR:53:ARG:HH21	18:CR:60:ALA:H	1.43	0.66
34:DA:271(D):G:H1	34:DA:271(T):C:N4	1.92	0.66
40:DG:41:GLN:HA	40:DG:155:MET:HB3	1.77	0.66
46:DQ:75:THR:CB	46:DQ:88:GLY:HA2	2.26	0.66
48:DS:89:ARG:O	48:DS:92:TYR:HB3	1.95	0.66
53:DX:40:LYS:HG3	53:DX:41:ASN:H	1.60	0.66
54:DY:86:ARG:HB3	54:DY:88:LYS:HZ2	1.60	0.66
55:DZ:19:ARG:HG2	55:DZ:19:ARG:HH11	1.58	0.66
55:DZ:74:VAL:HG22	55:DZ:86:VAL:HG13	1.76	0.66
55:DZ:28:MET:HA	55:DZ:88:PHE:O	1.96	0.66
6:AF:100:ASN:O	18:AR:28:GLU:HG2	1.95	0.66
26:B1:85:LEU:CB	26:B1:87:PRO:HD3	2.26	0.66
27:B2:24:LEU:O	27:B2:27:GLU:HB3	1.95	0.66
34:BA:235:U:H2'	34:BA:236:C:H6	1.60	0.66
36:BC:191:ALA:O	36:BC:195:ALA:HB3	1.95	0.66
40:BG:171:ALA:O	40:BG:175:LEU:HD12	1.95	0.66
53:BX:23:GLU:HG3	53:BX:24:GLY:N	2.11	0.66
1:CA:375:U:H4'	16:CP:17:TYR:CE2	2.29	0.66
10:CJ:6:ILE:O	10:CJ:71:LEU:HD12	1.95	0.66
13:CM:96:LEU:O	13:CM:98:VAL:HG22	1.94	0.66
13:CM:9:ILE:N	13:CM:9:ILE:HD12	2.10	0.66
34:DA:128:C:H2'	34:DA:129:C:H6	1.59	0.66
34:DA:2852:G:H2'	34:DA:2853:C:C6	2.30	0.66
36:DC:82:LYS:NZ	36:DC:151:GLU:HA	2.10	0.66
41:DH:85:LYS:O	41:DH:132:ARG:HA	1.96	0.66
44:DO:23:ARG:HH11	44:DO:23:ARG:HG2	1.61	0.66
47:DR:28:LEU:HD13	47:DR:28:LEU:O	1.96	0.66
1:AA:373:A:O2'	1:AA:374:A:H5'	1.95	0.66
4:AD:110:PHE:H	4:AD:110:PHE:HD1	1.44	0.66
27:B2:14:ARG:NE	27:B2:57:ILE:HB	2.11	0.66
34:BA:2182:G:H2'	34:BA:2183:C:H6	1.59	0.66
34:BA:2732:G:O2'	34:BA:2733:A:H5'	1.95	0.66
37:BD:63:ARG:NH1	37:BD:63:ARG:HG3	2.10	0.66
40:BG:45:GLU:HB2	40:BG:47:LYS:HG3	1.77	0.66
41:BH:137:ASP:O	41:BH:138:LYS:HG3	1.96	0.66
47:BR:8:ARG:NE	47:BR:8:ARG:HA	2.11	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BS:54:LEU:C	48:BS:56:LEU:N	2.49	0.66
49:BT:81:PRO:C	49:BT:82:LEU:HD12	2.15	0.66
51:BV:79:VAL:O	51:BV:80:GLN:HB3	1.93	0.66
54:BY:71:LYS:NZ	54:BY:71:LYS:HB2	2.11	0.66
1:CA:1256:A:H61	1:CA:1278:U:C1'	2.05	0.66
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.29	0.66
1:CA:180:U:C2'	1:CA:181:G:H5''	2.24	0.66
12:CL:27:LEU:O	12:CL:29:GLY:N	2.29	0.66
12:CL:47:LYS:CB	12:CL:48:PRO:HD3	2.24	0.66
23:CW:30:G:H2'	23:CW:31:A:H8	1.60	0.66
27:D2:52:ASP:OD1	27:D2:53:LEU:N	2.29	0.66
34:DA:2491:U:H4'	34:DA:2570:G:OP1	1.95	0.66
34:DA:2513:G:H2'	34:DA:2514:U:C6	2.31	0.66
34:DA:2636:U:C2'	34:DA:2637:U:H5''	2.26	0.66
34:DA:2801(A):A:HO2'	34:DA:2803:C:H5	1.44	0.66
34:DA:285:C:C3'	34:DA:286:C:H5''	2.26	0.66
34:DA:587:C:H5	45:DP:33:ARG:NH1	1.92	0.66
38:DE:173:VAL:HG12	38:DE:174:ASP:N	2.11	0.66
43:DN:78:TYR:CD1	43:DN:79:PRO:N	2.64	0.66
46:DQ:34:LEU:C	46:DQ:34:LEU:HD12	2.16	0.66
53:DX:60:ARG:CG	53:DX:74:PRO:HD2	2.16	0.66
55:DZ:166:SER:HB2	55:DZ:168:GLU:N	2.11	0.66
1:AA:1105:A:H2'	1:AA:1106:G:H8	1.61	0.66
1:AA:337:C:H2'	1:AA:338:A:C8	2.31	0.66
1:AA:659:U:O2'	1:AA:660:G:H5'	1.95	0.66
13:AM:9:ILE:HD12	13:AM:9:ILE:N	2.11	0.66
26:B1:46:LEU:N	26:B1:46:LEU:HD12	2.05	0.66
34:BA:1153:C:H2'	34:BA:1154:G:O4'	1.95	0.66
34:BA:142:A:H8	34:BA:1408:C:H1'	1.60	0.66
34:BA:1493:C:O2	34:BA:1493:C:H2'	1.95	0.66
34:BA:2543:G:H2'	34:BA:2544:G:O4'	1.96	0.66
34:BA:92:A:H2'	34:BA:93:G:C8	2.20	0.66
34:BA:2444:G:OP2	39:BF:68:LYS:HE2	1.95	0.66
44:BO:24:VAL:CG2	44:BO:33:ALA:HB2	2.26	0.66
45:BP:65:ARG:HB2	45:BP:65:ARG:HH11	1.59	0.66
49:BT:65:LYS:HA	49:BT:65:LYS:HZ3	1.58	0.66
55:BZ:18:LEU:O	55:BZ:20:ARG:N	2.28	0.66
1:CA:1443:G:N2	1:CA:1460:A:H1'	2.11	0.66
1:CA:922:G:H2'	1:CA:923:A:C8	2.31	0.66
4:CD:133:VAL:HG12	4:CD:135:LEU:H	1.60	0.66
1:CA:19:C:H5''	5:CE:86:ALA:CB	2.24	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:28:ARG:HG3	6:CF:28:ARG:HH11	1.61	0.66
19:CS:36:ARG:HH12	19:CS:75:ALA:CB	2.07	0.66
26:D1:10:LYS:HG2	26:D1:15:ALA:H	1.57	0.66
27:D2:44:LEU:C	27:D2:46:GLN:H	1.97	0.66
34:DA:1348:G:C2'	34:DA:1349:A:H5''	2.24	0.66
34:DA:2197:U:O2'	34:DA:2198:A:H5''	1.95	0.66
34:DA:2725:A:O2'	34:DA:2726:U:H2'	1.95	0.66
34:DA:510:C:H2'	34:DA:511:U:O4'	1.96	0.66
34:DA:539:G:H2'	34:DA:540:C:C6	2.30	0.66
37:DD:25:THR:O	37:DD:25:THR:HG23	1.94	0.66
38:DE:91:VAL:HG13	38:DE:95:ILE:CD1	2.24	0.66
46:DQ:22:LYS:HA	46:DQ:22:LYS:NZ	2.11	0.66
46:DQ:20:ALA:CB	46:DQ:99:PRO:HG2	2.25	0.66
48:DS:77:ALA:O	48:DS:80:LEU:HD12	1.95	0.66
49:DT:91:ARG:CB	49:DT:116:ALA:HA	2.21	0.66
49:DT:58:ASN:C	49:DT:58:ASN:HD22	1.98	0.66
52:DW:34:ASN:O	52:DW:37:ARG:HB3	1.94	0.66
53:DX:37:THR:HG23	53:DX:54:VAL:HB	1.77	0.66
54:DY:71:LYS:HZ2	54:DY:71:LYS:HB2	1.60	0.66
55:DZ:27:VAL:CG1	55:DZ:28:MET:H	2.07	0.66
9:AI:63:ILE:HG22	9:AI:64:THR:N	2.11	0.66
34:BA:1635:G:C8	34:BA:1635:G:H5'	2.31	0.66
34:BA:1786:A:H2	34:BA:2606:C:H1'	1.60	0.66
34:BA:482:A:H4'	54:BY:47:LYS:HZ2	1.58	0.66
34:BA:613:G:H5'	34:BA:613:G:H8	1.58	0.66
38:BE:180:ASN:C	38:BE:181:LEU:HD22	2.16	0.66
39:BF:123:LEU:HD12	39:BF:124:LEU:H	1.60	0.66
41:BH:153:LYS:HB2	41:BH:154:PRO:CD	2.26	0.66
50:BU:69:CYS:SG	50:BU:79:PHE:HD1	2.18	0.66
53:BX:55:ASN:ND2	53:BX:78:LYS:HE2	2.10	0.66
1:CA:939:G:H2'	1:CA:940:C:C6	2.30	0.66
4:CD:43:HIS:O	4:CD:45:GLN:N	2.29	0.66
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.78	0.66
10:CJ:40:LEU:H	10:CJ:40:LEU:CD2	2.08	0.66
32:D7:12:ARG:HG3	32:D7:12:ARG:HH11	1.60	0.66
34:DA:271(P):C:H2'	34:DA:271(Q):G:H8	1.59	0.66
38:DE:117:MET:CA	38:DE:122:PHE:H	2.07	0.66
38:DE:7:VAL:HA	38:DE:194:GLY:O	1.96	0.66
38:DE:52:LEU:H	38:DE:76:ARG:HB3	1.61	0.66
39:DF:155:LEU:HD23	39:DF:186:ILE:HD13	1.78	0.66
40:DG:124:SER:HB2	40:DG:131:TYR:CE1	2.30	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DH:19:VAL:CG2	41:DH:44:VAL:HG13	2.26	0.66
44:DO:2:ILE:HD11	44:DO:82:ASN:ND2	2.11	0.66
51:DV:78:LYS:C	51:DV:78:LYS:HD3	2.15	0.66
1:AA:736:C:H2'	1:AA:737:A:C8	2.31	0.66
2:AB:21:ARG:CB	2:AB:39:ILE:HA	2.26	0.66
10:AJ:39:PRO:HA	10:AJ:70:ARG:HH12	1.59	0.66
19:AS:50:ALA:HA	19:AS:58:VAL:O	1.96	0.66
28:B3:17:LYS:HG2	34:BA:969:U:OP1	1.96	0.66
34:BA:143(A):C:H2'	34:BA:143(A):C:O2	1.94	0.66
34:BA:1639:U:H2'	34:BA:1640:C:H5''	1.77	0.66
34:BA:2415:G:H2'	34:BA:2416:C:C6	2.31	0.66
34:BA:2636:U:C2'	34:BA:2637:U:H5''	2.25	0.66
34:BA:945:A:H5''	34:BA:946:G:OP2	1.95	0.66
37:BD:25:THR:HG22	37:BD:82:ILE:O	1.96	0.66
41:BH:90:LYS:HB2	41:BH:159:GLU:O	1.95	0.66
45:BP:62:LEU:HD22	45:BP:62:LEU:H	1.61	0.66
46:BQ:20:ALA:CB	46:BQ:99:PRO:HG2	2.25	0.66
50:BU:69:CYS:HG	50:BU:79:PHE:HD1	1.44	0.66
54:BY:28:LYS:CE	54:BY:30:VAL:HG22	2.25	0.66
1:CA:1054:C:O2'	1:CA:1055:A:H5''	1.96	0.66
5:CE:112:LEU:N	5:CE:112:LEU:HD23	2.11	0.66
5:CE:87:SER:HB3	5:CE:131:ILE:HD13	1.78	0.66
15:CO:17:ARG:HG3	15:CO:17:ARG:HH11	1.59	0.66
20:CT:89:ARG:HB2	20:CT:104:LEU:HD11	1.77	0.66
34:DA:2230:G:H2'	34:DA:2231:C:H6	1.60	0.66
34:DA:78:A:H2'	34:DA:79:G:H8	1.61	0.66
38:DE:120:TRP:CE3	38:DE:155:LYS:HD3	2.30	0.66
39:DF:157:VAL:HG23	39:DF:194:MET:CB	2.25	0.66
40:DG:111:LEU:HA	40:DG:114:ILE:HD13	1.78	0.66
42:DI:75:LEU:HD21	42:DI:105:HIS:ND1	2.10	0.66
43:DN:89:LYS:O	43:DN:93:THR:HG22	1.96	0.66
45:DP:16:ARG:CG	45:DP:18:ARG:H	2.07	0.66
50:DU:102:GLU:HB2	50:DU:105:VAL:HG23	1.77	0.66
50:DU:57:PHE:HA	50:DU:60:LEU:HB2	1.78	0.66
1:AA:1104:G:O2'	1:AA:1105:A:H5'	1.95	0.66
1:AA:1458:G:H2'	1:AA:1459:C:C6	2.31	0.66
3:AC:54:ARG:NH1	3:AC:56:ASP:HB2	2.10	0.66
16:AP:82:GLN:N	16:AP:82:GLN:HE21	1.93	0.66
19:AS:36:ARG:HH12	19:AS:75:ALA:CB	2.09	0.66
32:B7:12:ARG:HH11	32:B7:12:ARG:HG3	1.61	0.66
33:B8:32:LEU:O	33:B8:33:ASN:HB3	1.95	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1748:G:H8	34:BA:1748:G:H5'	1.59	0.66
34:BA:2703:C:H2'	34:BA:2704:C:H6	1.61	0.66
34:BA:285:C:C3'	34:BA:286:C:H5''	2.26	0.66
43:BN:58:ASP:C	43:BN:60:ILE:N	2.49	0.66
48:BS:89:ARG:CB	48:BS:97:ARG:HH12	2.09	0.66
49:BT:92:GLY:HA2	49:BT:114:LEU:CA	2.25	0.66
49:BT:67:SER:O	49:BT:68:TYR:HB2	1.96	0.66
43:BN:42:TRP:HB2	50:BU:64:ARG:NE	2.10	0.66
52:BW:75:TYR:CE1	52:BW:104:THR:HB	2.31	0.66
1:CA:434:U:H2'	1:CA:435:C:H6	1.61	0.66
11:CK:57:THR:HG22	11:CK:59:TYR:H	1.61	0.66
34:DA:1162:G:N3	51:DV:91:TYR:HE1	1.94	0.66
34:DA:2741:A:H2'	34:DA:2742:C:O4'	1.95	0.66
34:DA:576:U:O2'	34:DA:577:G:H5'	1.95	0.66
34:DA:587:C:H5	45:DP:33:ARG:HH11	1.43	0.66
43:DN:15:LEU:HG	43:DN:134:ARG:HD2	1.76	0.66
46:DQ:75:THR:CA	46:DQ:88:GLY:HA2	2.25	0.66
55:DZ:58:VAL:HA	55:DZ:67:LEU:O	1.95	0.66
1:AA:319:G:O2'	1:AA:320:C:H5'	1.95	0.66
3:AC:7:PRO:O	3:AC:11:ARG:HG2	1.96	0.66
13:AM:81:LEU:HB3	13:AM:89:GLY:HA2	1.77	0.66
30:B5:40:LYS:HD3	30:B5:46:CYS:HB3	1.78	0.66
34:BA:1384:A:N3	34:BA:1405:U:H1'	2.11	0.66
34:BA:78:A:H2'	34:BA:79:G:H8	1.60	0.66
37:BD:58:HIS:CD2	37:BD:59:LYS:N	2.64	0.66
38:BE:7:VAL:HA	38:BE:194:GLY:O	1.96	0.66
38:BE:35:GLN:NE2	38:BE:37:ARG:HE	1.93	0.66
41:BH:19:VAL:CG2	41:BH:44:VAL:HG13	2.26	0.66
34:BA:1131:G:OP1	43:BN:80:GLY:HA2	1.96	0.66
46:BQ:75:THR:CA	46:BQ:88:GLY:HA2	2.26	0.66
46:BQ:75:THR:CB	46:BQ:88:GLY:HA2	2.26	0.66
49:BT:53:ARG:HG2	49:BT:53:ARG:HH11	1.61	0.66
52:BW:79:GLY:HA3	52:BW:100:THR:HG23	1.78	0.66
2:CB:75:LYS:HG2	2:CB:78:GLN:NE2	2.11	0.66
6:CF:52:ILE:HG22	6:CF:52:ILE:O	1.96	0.66
7:CG:62:PHE:HA	7:CG:124:LEU:HD22	1.78	0.66
26:D1:75:GLU:O	26:D1:76:ARG:HD3	1.96	0.66
34:DA:1547:C:O2'	34:DA:1548:C:H5'	1.95	0.66
34:DA:195:A:H5''	34:DA:196:A:OP2	1.96	0.66
34:DA:1986:A:H2'	34:DA:1987:G:H5''	1.78	0.66
34:DA:528:A:N1	34:DA:2042:A:H2'	2.11	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:64:A:O2'	34:DA:65:C:H5'	1.96	0.66
37:DD:48:ARG:NH1	37:DD:48:ARG:HG3	2.11	0.66
39:DF:8:GLN:CB	39:DF:126:VAL:HA	2.25	0.66
40:DG:41:GLN:HE21	40:DG:155:MET:CG	2.09	0.66
40:DG:70:VAL:CA	40:DG:88:ILE:HD11	2.25	0.66
41:DH:153:LYS:HB2	41:DH:154:PRO:CD	2.26	0.66
41:DH:152:ARG:CB	41:DH:161:GLY:HA2	2.25	0.66
41:DH:46:GLU:CG	41:DH:51:ARG:HB2	2.26	0.66
42:DI:79:ILE:HB	42:DI:142:VAL:CG1	2.25	0.66
46:DQ:82:ARG:O	46:DQ:83:MET:HB2	1.94	0.66
51:DV:71:LEU:O	51:DV:90:PRO:HA	1.96	0.66
53:DX:57:LEU:CD1	53:DX:77:LYS:HD2	2.25	0.66
1:AA:192:U:H2'	1:AA:193:C:H6	1.60	0.65
1:AA:340:U:O2'	1:AA:341:C:H5'	1.96	0.65
1:AA:939:G:H5''	7:AG:102:ARG:NH2	2.10	0.65
11:AK:21:ILE:N	11:AK:21:ILE:HD12	2.10	0.65
26:B1:13:ILE:HG12	26:B1:14:VAL:N	2.10	0.65
34:BA:1665:A:H2'	34:BA:1666:G:H5'	1.77	0.65
34:BA:1925:C:C2'	34:BA:1926:U:H5'	2.26	0.65
34:BA:271(P):C:H5''	42:BI:45:LYS:HE3	1.79	0.65
34:BA:2745:C:O2'	41:BH:142:GLY:HA3	1.97	0.65
34:BA:774:A:O2'	34:BA:775:G:OP2	2.12	0.65
36:BC:56:GLN:O	36:BC:57:ASN:HB2	1.97	0.65
37:BD:106:ILE:HD11	37:BD:196:VAL:CG1	2.26	0.65
37:BD:48:ARG:HH11	37:BD:48:ARG:HG3	1.61	0.65
38:BE:182:LEU:C	38:BE:183:LEU:HD12	2.17	0.65
45:BP:47:ASP:HB3	45:BP:48:PRO:C	2.16	0.65
46:BQ:10:ARG:NH1	46:BQ:10:ARG:HB2	2.11	0.65
46:BQ:85:LYS:HG3	46:BQ:86:GLY:H	1.61	0.65
48:BS:74:ALA:HB1	48:BS:103:GLU:CG	2.21	0.65
55:BZ:28:MET:SD	55:BZ:33:LEU:HD21	2.36	0.65
1:CA:1348:U:H2'	1:CA:1349:A:H8	1.61	0.65
1:CA:1473:A:O2'	1:CA:1474:G:H5'	1.97	0.65
1:CA:430:A:C2'	1:CA:431:A:H5'	2.26	0.65
1:CA:628:G:O2'	1:CA:629:G:H5'	1.96	0.65
6:CF:86:ARG:O	6:CF:87:ARG:HG2	1.96	0.65
7:CG:47:CYS:HA	7:CG:50:ILE:CG1	2.25	0.65
8:CH:119:LEU:HD12	8:CH:124:ALA:HA	1.79	0.65
8:CH:85:ARG:NE	8:CH:87:SER:O	2.30	0.65
16:CP:28:ARG:HH11	16:CP:28:ARG:HG2	1.61	0.65
17:CQ:56:VAL:O	17:CQ:77:VAL:HB	1.96	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:83:GLU:HB2	37:DD:92:ILE:HD11	1.79	0.65
43:DN:58:ASP:C	43:DN:60:ILE:N	2.50	0.65
34:DA:2562:U:C1'	44:DO:23:ARG:HH12	2.01	0.65
51:DV:43:GLU:N	51:DV:48:GLY:HA2	2.11	0.65
1:AA:627:G:H2'	1:AA:628:G:H8	1.61	0.65
7:AG:26:PHE:O	7:AG:30:ILE:HG12	1.97	0.65
17:AQ:81:ARG:NH1	17:AQ:84:LEU:HD11	2.11	0.65
27:B2:33:MET:HG3	53:BX:10:ALA:HB1	1.76	0.65
34:BA:1678:G:N2	34:BA:1989:G:H22	1.93	0.65
34:BA:2580:U:H5'	38:BE:131:ALA:H	1.60	0.65
34:BA:743:G:O2'	34:BA:744:G:H5'	1.95	0.65
36:BC:47:LEU:HD21	36:BC:172:HIS:CB	2.27	0.65
37:BD:25:THR:HG23	37:BD:25:THR:O	1.95	0.65
38:BE:111:ARG:HG2	47:BR:2:ARG:HG3	1.77	0.65
39:BF:157:VAL:HG23	39:BF:194:MET:CB	2.26	0.65
40:BG:20:ILE:O	40:BG:24:GLY:HA2	1.96	0.65
41:BH:85:LYS:O	41:BH:132:ARG:HA	1.96	0.65
42:BI:131:LYS:CG	42:BI:132:PRO:HA	2.26	0.65
43:BN:30:ILE:HG23	43:BN:52:VAL:HG11	1.77	0.65
43:BN:41:ASP:N	50:BU:64:ARG:NH2	2.43	0.65
45:BP:16:ARG:HG2	45:BP:17:LYS:N	2.10	0.65
51:BV:24:LYS:HA	51:BV:94:LEU:HD12	1.77	0.65
51:BV:69:LYS:HB3	51:BV:93:GLU:HB3	1.76	0.65
53:BX:26:TYR:OH	53:BX:89:ILE:HG21	1.96	0.65
1:CA:1151:A:HO2'	1:CA:1152:A:H8	1.44	0.65
1:CA:625:G:H2'	1:CA:626:U:C6	2.31	0.65
1:CA:782:A:C2'	1:CA:783:C:H5'	2.27	0.65
1:CA:954:G:H4'	13:CM:120:LYS:CG	2.24	0.65
4:CD:146:ILE:HD12	4:CD:146:ILE:N	2.11	0.65
10:CJ:80:LYS:HB2	10:CJ:80:LYS:HZ3	1.61	0.65
27:D2:49:LYS:O	27:D2:53:LEU:N	2.29	0.65
34:DA:2555:U:C2'	34:DA:2556:C:H5'	2.26	0.65
34:DA:2796:U:O2'	34:DA:2799:C:H5'	1.95	0.65
41:DH:90:LYS:HB2	41:DH:159:GLU:O	1.95	0.65
42:DI:131:LYS:CG	42:DI:132:PRO:HA	2.25	0.65
45:DP:47:ASP:HB3	45:DP:48:PRO:C	2.16	0.65
50:DU:69:CYS:HG	50:DU:79:PHE:HD1	1.41	0.65
51:DV:69:LYS:HB3	51:DV:93:GLU:HB3	1.79	0.65
53:DX:23:GLU:HG3	53:DX:24:GLY:N	2.11	0.65
1:AA:15:G:H4'	5:AE:24:ARG:NH2	2.11	0.65
1:AA:442:C:N4	1:AA:492:G:H1	1.91	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:27:LEU:O	12:AL:29:GLY:N	2.29	0.65
12:AL:47:LYS:HB3	12:AL:48:PRO:CD	2.25	0.65
16:AP:75:ARG:O	16:AP:78:GLY:N	2.27	0.65
23:AW:16:U:C4	23:AW:18:G:H3'	2.32	0.65
26:B1:87:PRO:O	26:B1:91:LYS:N	2.28	0.65
33:B8:43:GLN:O	33:B8:44:LYS:HD2	1.95	0.65
34:BA:15:G:O2'	34:BA:16:G:H5'	1.96	0.65
34:BA:2343:C:H2'	34:BA:2344:U:C6	2.32	0.65
34:BA:270:A:O2'	34:BA:271:A:H5'	1.95	0.65
34:BA:633:A:H2'	34:BA:634:C:H5'	1.77	0.65
34:BA:686:G:N2	34:BA:788:A:H61	1.94	0.65
36:BC:51:PRO:HG3	36:BC:204:ALA:HB3	1.78	0.65
45:BP:16:ARG:CG	45:BP:18:ARG:H	2.08	0.65
34:BA:2334:G:H21	48:BS:18:ILE:HD11	1.60	0.65
55:BZ:6:LYS:H	55:BZ:6:LYS:CD	2.06	0.65
1:CA:1105:A:H2'	1:CA:1106:G:H8	1.62	0.65
1:CA:1321:C:H5''	1:CA:1322:C:H5''	1.78	0.65
1:CA:341:C:O2'	1:CA:342:C:H5'	1.96	0.65
1:CA:551:U:H2'	1:CA:552:U:C6	2.30	0.65
1:CA:659:U:O2'	1:CA:660:G:H5'	1.97	0.65
34:DA:2426:A:H3'	34:DA:2427:C:C5'	2.25	0.65
34:DA:322:A:H3'	39:DF:169:ASN:HD21	1.61	0.65
34:DA:549:G:H3'	34:DA:551:G:H5''	1.77	0.65
34:DA:774:A:O2'	34:DA:775:G:OP2	2.12	0.65
34:DA:792:G:H5''	34:DA:793:A:H5'	1.78	0.65
43:DN:13:TRP:O	43:DN:14:VAL:HG23	1.96	0.65
1:CA:1423:G:H5'	44:DO:49:ARG:NH2	2.12	0.65
49:DT:53:ARG:HG2	49:DT:53:ARG:HH11	1.61	0.65
1:AA:1460:A:H2'	1:AA:1461:G:O4'	1.95	0.65
1:AA:430:A:C2'	1:AA:431:A:H5'	2.26	0.65
1:AA:501:C:H2'	1:AA:502:G:H8	1.62	0.65
12:AL:28:LYS:O	12:AL:29:GLY:C	2.34	0.65
17:AQ:58:GLU:O	17:AQ:59:ILE:HD13	1.97	0.65
19:AS:63:THR:HG22	19:AS:66:MET:CE	2.27	0.65
40:BG:7:LEU:HB2	40:BG:104:GLU:OE2	1.97	0.65
34:BA:2840:C:H4'	47:BR:53:HIS:CD2	2.31	0.65
50:BU:102:GLU:HB2	50:BU:105:VAL:HG23	1.77	0.65
55:BZ:69:THR:HG22	55:BZ:90:VAL:CA	2.24	0.65
34:DA:1493:C:O2	34:DA:1493:C:H2'	1.96	0.65
34:DA:298:G:H5'	34:DA:299:A:OP1	1.95	0.65
44:DO:91:LEU:N	44:DO:91:LEU:HD22	2.12	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DS:54:LEU:C	48:DS:56:LEU:N	2.50	0.65
49:DT:65:LYS:HZ3	49:DT:65:LYS:HA	1.61	0.65
49:DT:88:ILE:HG22	49:DT:89:VAL:HG23	1.79	0.65
53:DX:64:LYS:CG	53:DX:65:ARG:H	2.10	0.65
1:AA:1250:A:H2	1:AA:1370:G:H1'	1.61	0.65
1:AA:939:G:H5''	7:AG:102:ARG:NH1	2.12	0.65
2:AB:23:ARG:HG3	2:AB:23:ARG:HH11	1.61	0.65
5:AE:131:ILE:O	5:AE:134:ALA:HB3	1.95	0.65
11:AK:22:HIS:O	11:AK:28:THR:HG23	1.96	0.65
23:AW:38:A:C2'	23:AW:39:U:H5''	2.26	0.65
27:B2:50:ILE:O	27:B2:51:ARG:HB3	1.96	0.65
27:B2:52:ASP:OD1	27:B2:53:LEU:N	2.29	0.65
34:BA:1784:A:H4'	34:BA:1785:A:O5'	1.96	0.65
34:BA:1986:A:H2'	34:BA:1987:G:H5''	1.78	0.65
34:BA:2425:A:H5''	34:BA:2427:C:O4'	1.96	0.65
34:BA:2454:G:O2'	34:BA:2455:G:H5'	1.97	0.65
34:BA:2712:U:H1'	34:BA:2712(A):A:H8	1.60	0.65
39:BF:161:GLU:O	39:BF:165:ARG:HG2	1.95	0.65
41:BH:14:GLY:O	41:BH:29:PRO:HD3	1.97	0.65
49:BT:57:PHE:C	49:BT:59:THR:H	2.00	0.65
1:CA:1064:G:N2	1:CA:1190:G:H2'	2.11	0.65
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.32	0.65
1:CA:337:C:H2'	1:CA:338:A:C8	2.32	0.65
4:CD:127:THR:HA	4:CD:132:ARG:HA	1.77	0.65
10:CJ:8:LEU:HD22	10:CJ:20:ALA:HB2	1.79	0.65
34:DA:1314:C:H6	34:DA:1314:C:H5'	1.61	0.65
34:DA:2735:G:C2'	34:DA:2736:G:H5''	2.27	0.65
34:DA:860:U:C5	34:DA:917:A:N7	2.61	0.65
36:DC:77:ILE:HD13	36:DC:77:ILE:O	1.96	0.65
34:DA:1654:A:C2	38:DE:113:PHE:CD1	2.84	0.65
41:DH:89:ILE:N	41:DH:89:ILE:HD13	2.10	0.65
45:DP:143:GLY:C	45:DP:145:PRO:HD3	2.16	0.65
45:DP:65:ARG:HH11	45:DP:65:ARG:HB2	1.60	0.65
52:DW:75:TYR:CE1	52:DW:104:THR:HB	2.31	0.65
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.32	0.65
1:AA:341:C:O2'	1:AA:342:C:H5'	1.97	0.65
13:AM:90:LEU:O	13:AM:92:HIS:N	2.28	0.65
18:AR:53:ARG:HH21	18:AR:60:ALA:H	1.44	0.65
18:AR:74:ARG:HG2	18:AR:81:PHE:CD1	2.32	0.65
27:B2:26:ARG:HA	27:B2:29:LYS:HE2	1.77	0.65
30:B5:20:ARG:HB3	30:B5:23:HIS:HD2	1.60	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:B8:6:THR:HG22	33:B8:63:PRO:HD3	1.78	0.65
34:BA:1280:G:C3'	34:BA:1281:G:H5''	2.26	0.65
34:BA:2640:G:C8	34:BA:2640:G:H5'	2.27	0.65
34:BA:2864:G:H5'	34:BA:2864:G:C8	2.28	0.65
34:BA:483:A:O4'	54:BY:47:LYS:HD3	1.95	0.65
34:BA:549:G:H3'	34:BA:551:G:H5''	1.77	0.65
39:BF:10:PRO:HG2	39:BF:11:VAL:H	1.61	0.65
47:BR:41:ALA:C	47:BR:43:GLU:H	2.00	0.65
50:BU:74:LEU:HD21	50:BU:110:VAL:HG13	1.78	0.65
51:BV:12:TYR:N	51:BV:12:TYR:CD2	2.64	0.65
51:BV:47:VAL:HG13	51:BV:48:GLY:N	2.12	0.65
51:BV:63:GLY:O	51:BV:64:HIS:HB3	1.97	0.65
51:BV:80:GLN:C	51:BV:80:GLN:OE1	2.34	0.65
51:BV:83:ARG:HG2	51:BV:83:ARG:NH1	2.09	0.65
1:CA:26:A:N6	1:CA:558:G:H1'	2.12	0.65
12:CL:6:THR:OG1	12:CL:9:GLN:HG3	1.96	0.65
30:D5:4:HIS:CB	30:D5:5:PRO:HD3	2.24	0.65
34:DA:2208:A:H1'	34:DA:2219:G:N3	2.12	0.65
34:DA:74:A:H4'	34:DA:75:G:O5'	1.96	0.65
34:DA:8:A:H2'	34:DA:9:U:C5	2.29	0.65
37:DD:34:VAL:O	37:DD:34:VAL:HG13	1.96	0.65
38:DE:108:SER:O	38:DE:162:ALA:HA	1.96	0.65
41:DH:98:LEU:HB2	41:DH:125:VAL:CG2	2.26	0.65
45:DP:105:LEU:HD12	45:DP:105:LEU:N	2.11	0.65
53:DX:12:VAL:CG1	53:DX:27:THR:HG23	2.24	0.65
54:DY:75:ILE:HD13	54:DY:76:CYS:N	2.09	0.65
1:AA:957:U:H3	1:AA:960:U:H5''	1.61	0.65
4:AD:96:LEU:HD12	4:AD:139:ARG:NH1	2.11	0.65
9:AI:116:LYS:O	9:AI:118:LYS:N	2.29	0.65
12:AL:41:ARG:HH11	12:AL:41:ARG:CB	2.07	0.65
16:AP:50:LYS:HD3	16:AP:50:LYS:C	2.17	0.65
23:AW:27:G:H1	23:AW:43:C:N4	1.93	0.65
26:B1:73:LEU:HD22	26:B1:90:ILE:HG23	1.78	0.65
34:BA:2735:G:C2'	34:BA:2736:G:H5''	2.27	0.65
34:BA:74:A:H4'	34:BA:75:G:O5'	1.97	0.65
36:BC:85:GLU:HB3	36:BC:153:ILE:CB	2.27	0.65
37:BD:223:GLY:O	37:BD:226:MET:HG3	1.96	0.65
39:BF:192:LEU:HD23	39:BF:193:VAL:N	2.11	0.65
41:BH:46:GLU:HG2	41:BH:51:ARG:HB2	1.77	0.65
1:CA:1278:U:H5''	1:CA:1279:A:O4'	1.97	0.65
1:CA:1406:U:O2'	1:CA:1407:C:H5'	1.96	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:27:LYS:NZ	3:CC:27:LYS:HA	2.11	0.65
31:D6:15:GLU:CD	31:D6:18:ARG:HG3	2.17	0.65
33:D8:32:LEU:O	33:D8:33:ASN:HB3	1.96	0.65
34:DA:1528(A):A:C3'	34:DA:1529:G:H5''	2.27	0.65
34:DA:2312:U:C2'	34:DA:2313:C:H5''	2.26	0.65
34:DA:2672:G:C2'	34:DA:2673:G:H5''	2.27	0.65
34:DA:2757:A:N1	41:DH:67:LEU:HD22	2.12	0.65
34:DA:408:G:H2'	34:DA:409:C:H6	1.61	0.65
34:DA:833:U:H2'	34:DA:834:C:C6	2.31	0.65
38:DE:111:ARG:CG	47:DR:2:ARG:HG3	2.26	0.65
42:DI:48:GLU:O	42:DI:51:ILE:HB	1.94	0.65
45:DP:46:LYS:HG2	45:DP:52:GLU:HG2	1.79	0.65
38:DE:111:ARG:HG2	47:DR:2:ARG:HG3	1.78	0.65
49:DT:108:ARG:HH11	49:DT:108:ARG:CB	2.10	0.65
49:DT:67:SER:O	49:DT:68:TYR:HB2	1.97	0.65
1:AA:551:U:H2'	1:AA:552:U:C6	2.32	0.65
1:AA:644:G:C2'	1:AA:645:C:H5'	2.27	0.65
1:AA:1106:G:H5''	3:AC:172:ARG:HG2	1.78	0.65
8:AH:11:THR:HA	8:AH:14:ARG:HH12	1.59	0.65
9:AI:21:PRO:HA	9:AI:58:ARG:O	1.96	0.65
12:AL:102:ARG:HH11	12:AL:102:ARG:HG2	1.60	0.65
17:AQ:10:VAL:HG23	17:AQ:55:ASP:O	1.96	0.65
18:AR:64:ARG:O	18:AR:66:LEU:N	2.30	0.65
22:AV:72:A:C3'	22:AV:73:A:H5''	2.27	0.65
33:B8:32:LEU:HG	33:B8:34:TRP:CE3	2.32	0.65
34:BA:1349:A:N6	34:BA:1598:C:N4	2.44	0.65
34:BA:1821:A:H2'	34:BA:1822:G:H5''	1.77	0.65
34:BA:2511:U:O3'	38:BE:123:ALA:HB3	1.97	0.65
32:B7:37:LYS:HE2	34:BA:469:G:O6	1.96	0.65
34:BA:860:U:C5	34:BA:917:A:N7	2.60	0.65
41:BH:41:MET:SD	41:BH:54:ARG:HA	2.37	0.65
42:BI:114:LEU:HD23	42:BI:130:TYR:CE1	2.32	0.65
53:BX:57:LEU:HD11	53:BX:77:LYS:HD2	1.78	0.65
12:CL:102:ARG:CG	12:CL:102:ARG:HH11	2.10	0.65
15:CO:11:VAL:HG21	15:CO:34:LEU:HD22	1.77	0.65
17:CQ:27:PHE:CZ	17:CQ:36:ILE:HD11	2.32	0.65
22:CV:71:C:C5'	22:CV:71:C:H6	2.02	0.65
27:D2:49:LYS:O	27:D2:50:ILE:C	2.35	0.65
34:DA:2030:A:H5''	34:DA:2031:A:OP1	1.97	0.65
34:DA:2181:G:H2'	34:DA:2182:G:H8	1.61	0.65
34:DA:2312:U:H2'	34:DA:2313:C:C5'	2.27	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2317:C:O2'	34:DA:2318:G:H5'	1.97	0.65
36:DC:74:VAL:HA	36:DC:119:VAL:CB	2.26	0.65
44:DO:99:PHE:O	44:DO:100:GLY:O	2.14	0.65
46:DQ:78:PRO:O	46:DQ:79:LEU:CB	2.42	0.65
50:DU:88:ILE:O	50:DU:90:VAL:N	2.29	0.65
1:AA:579:G:H2'	1:AA:580:U:C6	2.32	0.65
6:AF:50:TYR:CE1	18:AR:77:GLY:HA2	2.32	0.65
10:AJ:92:THR:HG23	10:AJ:93:GLY:H	1.62	0.65
10:AJ:96:ILE:HD13	10:AJ:96:ILE:N	2.11	0.65
11:AK:17:GLY:HA3	11:AK:77:MET:SD	2.37	0.65
12:AL:8:ASN:ND2	17:AQ:34:LYS:HE2	2.12	0.65
17:AQ:27:PHE:CZ	17:AQ:36:ILE:HD11	2.32	0.65
17:AQ:9:VAL:HG21	17:AQ:84:LEU:HD13	1.79	0.65
31:B6:15:GLU:CD	31:B6:18:ARG:HG3	2.17	0.65
34:BA:2863:C:C2'	34:BA:2864:G:H5''	2.27	0.65
45:BP:101:VAL:C	45:BP:103:ALA:H	1.99	0.65
53:BX:12:VAL:CG1	53:BX:27:THR:HG23	2.24	0.65
2:CB:135:GLN:O	2:CB:139:LYS:HB2	1.95	0.65
7:CG:27:ILE:HD12	7:CG:27:ILE:H	1.62	0.65
10:CJ:7:LYS:C	10:CJ:8:LEU:HD12	2.17	0.65
19:CS:63:THR:HG22	19:CS:66:MET:CE	2.27	0.65
38:DE:134:ILE:H	38:DE:134:ILE:HD13	1.62	0.65
43:DN:42:TRP:HB2	50:DU:64:ARG:NE	2.10	0.65
34:DA:252:G:OP2	45:DP:50:ARG:NH1	2.29	0.65
47:DR:8:ARG:HA	47:DR:8:ARG:NE	2.11	0.65
48:DS:61:ASN:C	48:DS:61:ASN:ND2	2.51	0.65
27:D2:33:MET:CG	53:DX:11:PRO:HD2	2.22	0.65
54:DY:47:LYS:O	54:DY:49:VAL:HG23	1.97	0.65
1:AA:1054:C:O2'	1:AA:1055:A:H5''	1.97	0.65
1:AA:34:C:O2'	1:AA:35:G:H5'	1.97	0.65
1:AA:936:C:H2'	1:AA:937:A:O4'	1.97	0.65
3:AC:27:LYS:HZ3	3:AC:27:LYS:HA	1.62	0.65
4:AD:33:MET:CE	4:AD:37:PRO:HA	2.27	0.65
8:AH:112:LEU:C	8:AH:112:LEU:HD12	2.17	0.65
25:B0:41:ARG:H	25:B0:41:ARG:CD	2.10	0.65
25:B0:80:HIS:N	25:B0:80:HIS:CD2	2.63	0.65
34:BA:18:C:O3'	50:BU:23:GLY:HA2	1.97	0.65
34:BA:2177:C:O2'	36:BC:46:LYS:HE3	1.97	0.65
34:BA:2202:C:H1'	37:BD:151:LYS:HZ1	1.62	0.65
34:BA:2693:A:H2'	34:BA:2694:G:H8	1.62	0.65
34:BA:2712:U:HO2'	34:BA:2712(A):A:H5''	1.60	0.65

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2852:G:H2'	34:BA:2853:C:C6	2.31	0.65
34:BA:621:A:H2'	34:BA:622:G:C5'	2.26	0.65
42:BI:58:LEU:HA	42:BI:61:ARG:HH11	1.61	0.65
45:BP:47:ASP:HB3	45:BP:48:PRO:O	1.97	0.65
38:BE:109:LYS:HB3	47:BR:2:ARG:NH1	2.11	0.65
50:BU:95:LEU:HD12	51:BV:11:GLN:HE21	1.60	0.65
51:BV:22:VAL:O	51:BV:23:GLU:CB	2.45	0.65
54:BY:37:VAL:CG2	54:BY:38:ILE:H	2.05	0.65
10:CJ:40:LEU:HD23	10:CJ:40:LEU:N	2.12	0.65
13:CM:11:ARG:O	13:CM:13:LYS:N	2.30	0.65
34:DA:2639:A:H2'	34:DA:2640:G:C5'	2.26	0.65
37:DD:246:PRO:HB2	37:DD:255:LYS:CG	2.26	0.65
37:DD:45:ASN:CG	37:DD:46:GLN:H	1.99	0.65
39:DF:57:VAL:CG1	39:DF:58:ALA:H	2.10	0.65
41:DH:87:LEU:N	41:DH:131:VAL:O	2.30	0.65
43:DN:41:ASP:N	50:DU:64:ARG:NH2	2.45	0.65
50:DU:62:ILE:HA	50:DU:65:ILE:HD12	1.79	0.65
52:DW:75:TYR:N	52:DW:75:TYR:CD1	2.60	0.65
3:AC:18:TRP:HE3	3:AC:18:TRP:H	1.46	0.64
7:AG:62:PHE:HA	7:AG:124:LEU:HD22	1.78	0.64
16:AP:4:ILE:HB	16:AP:66:PRO:HB3	1.78	0.64
17:AQ:65:ILE:N	17:AQ:65:ILE:HD12	2.13	0.64
27:B2:16:LEU:H	27:B2:18:PRO:CD	2.01	0.64
33:B8:35:GLN:HA	34:BA:2420:C:P	2.37	0.64
34:BA:2230:G:H2'	34:BA:2231:C:H6	1.62	0.64
34:BA:2317:C:O2'	34:BA:2318:G:H5'	1.97	0.64
34:BA:404:C:H4'	34:BA:405:U:H5'	1.79	0.64
34:BA:809:G:O4'	34:BA:1254:A:H1'	1.97	0.64
40:BG:43:LEU:HD12	40:BG:153:ARG:HD2	1.78	0.64
41:BH:88:LEU:O	41:BH:89:ILE:HG23	1.96	0.64
43:BN:15:LEU:HG	43:BN:134:ARG:HD2	1.77	0.64
43:BN:42:TRP:H	50:BU:64:ARG:HD2	1.61	0.64
54:BY:48:ALA:O	54:BY:58:GLY:HA3	1.97	0.64
1:CA:392:G:H2'	1:CA:393:A:H8	1.62	0.64
1:CA:707:C:O2'	1:CA:708:C:H5'	1.97	0.64
2:CB:92:TYR:CE2	2:CB:151:GLY:HA3	2.32	0.64
3:CC:64:VAL:CG2	3:CC:99:VAL:HG12	2.27	0.64
4:CD:121:VAL:O	4:CD:134:ASP:HA	1.97	0.64
13:CM:81:LEU:HB3	13:CM:89:GLY:HA2	1.78	0.64
17:CQ:10:VAL:HG23	17:CQ:55:ASP:O	1.97	0.64
27:D2:24:LEU:O	27:D2:27:GLU:HB3	1.96	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D2:49:LYS:HD3	27:D2:53:LEU:HD22	1.77	0.64
34:DA:2345:G:H5''	34:DA:2347:C:O4'	1.97	0.64
34:DA:2543:G:H2'	34:DA:2544:G:O4'	1.95	0.64
34:DA:2772:C:H2'	34:DA:2773:C:H6	1.62	0.64
34:DA:2863:C:C2'	34:DA:2864:G:H5''	2.26	0.64
34:DA:604:G:H2'	34:DA:605:C:H6	1.62	0.64
37:DD:253:GLN:HB3	37:DD:255:LYS:HE2	1.79	0.64
38:DE:154:LYS:HE3	38:DE:154:LYS:CA	2.27	0.64
41:DH:153:LYS:H	41:DH:153:LYS:HD3	1.62	0.64
41:DH:41:MET:HA	41:DH:41:MET:HE3	1.78	0.64
42:DI:78:THR:H	42:DI:140:LEU:HD12	1.61	0.64
42:DI:62:LYS:O	42:DI:62:LYS:HD3	1.97	0.64
54:DY:37:VAL:O	54:DY:38:ILE:CB	2.44	0.64
54:DY:97:ARG:HH21	54:DY:98:VAL:CG2	2.10	0.64
55:DZ:120:ILE:HG12	55:DZ:172:ALA:HA	1.78	0.64
55:DZ:71:VAL:HG11	55:DZ:74:VAL:HG23	1.77	0.64
1:AA:1348:U:H2'	1:AA:1349:A:H8	1.62	0.64
38:BE:120:TRP:CE3	38:BE:155:LYS:HD3	2.31	0.64
34:BA:322:A:OP2	39:BF:169:ASN:HB2	1.97	0.64
41:BH:89:ILE:N	41:BH:89:ILE:HD13	2.11	0.64
42:BI:113:ARG:NH1	42:BI:132:PRO:HG3	2.13	0.64
48:BS:99:LYS:O	48:BS:101:LEU:N	2.30	0.64
49:BT:65:LYS:CE	49:BT:66:VAL:H	2.10	0.64
51:BV:25:LEU:H	51:BV:94:LEU:HD12	1.62	0.64
54:BY:75:ILE:CD1	54:BY:76:CYS:N	2.61	0.64
1:CA:1424:C:O2'	1:CA:1425:U:H5'	1.97	0.64
5:CE:76:ILE:CG1	5:CE:77:PRO:HD2	2.23	0.64
10:CJ:63:PHE:C	14:CN:59:ALA:HB2	2.18	0.64
27:D2:49:LYS:CD	27:D2:53:LEU:HD22	2.26	0.64
34:DA:1131:G:OP1	43:DN:80:GLY:HA2	1.97	0.64
34:DA:1419:A:O2'	34:DA:1420:U:H5''	1.96	0.64
34:DA:235:U:H2'	34:DA:236:C:H6	1.60	0.64
34:DA:1786:A:H2	34:DA:2606:C:H1'	1.63	0.64
34:DA:743:G:O2'	34:DA:744:G:H5'	1.98	0.64
36:DC:47:LEU:HD21	36:DC:172:HIS:CB	2.27	0.64
37:DD:126:GLN:O	37:DD:193:VAL:HG11	1.97	0.64
38:DE:92:THR:O	38:DE:93:VAL:HG23	1.97	0.64
40:DG:16:ARG:N	40:DG:17:PRO:HD2	2.12	0.64
40:DG:57:ALA:O	40:DG:60:LEU:HB3	1.97	0.64
42:DI:114:LEU:HD23	42:DI:130:TYR:CE1	2.32	0.64
45:DP:101:VAL:C	45:DP:103:ALA:H	1.99	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DQ:63:LYS:HG2	46:DQ:65:PHE:CZ	2.33	0.64
49:DT:65:LYS:CE	49:DT:66:VAL:H	2.10	0.64
55:DZ:145:GLU:HG3	55:DZ:146:ILE:H	1.63	0.64
55:DZ:156:LYS:O	55:DZ:156:LYS:HG2	1.98	0.64
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.32	0.64
1:AA:728:A:H2'	1:AA:729:A:H8	1.62	0.64
1:AA:779:C:O2'	1:AA:780:A:H5'	1.96	0.64
10:AJ:9:ARG:HG2	10:AJ:69:ASN:OD1	1.98	0.64
12:AL:91:LYS:O	12:AL:92:ASP:HB2	1.97	0.64
34:BA:2116:G:H5'	34:BA:2117:A:OP2	1.98	0.64
37:BD:246:PRO:HB2	37:BD:255:LYS:HG3	1.80	0.64
40:BG:39:ILE:HD13	40:BG:155:MET:SD	2.37	0.64
34:BA:2757:A:N1	41:BH:67:LEU:HD22	2.12	0.64
34:BA:941:A:H4'	45:BP:35:HIS:CE1	2.31	0.64
49:BT:92:GLY:C	49:BT:94:ALA:H	2.00	0.64
54:BY:90:LEU:CG	54:BY:91:GLU:H	2.04	0.64
54:BY:97:ARG:HH21	54:BY:98:VAL:CG2	2.10	0.64
1:CA:1353:G:O2'	1:CA:1354:C:H5'	1.98	0.64
2:CB:21:ARG:CB	2:CB:39:ILE:HA	2.27	0.64
8:CH:11:THR:HG22	8:CH:15:ASN:ND2	2.11	0.64
12:CL:75:HIS:CD2	12:CL:77:LEU:H	2.16	0.64
20:CT:13:LEU:HD12	20:CT:13:LEU:N	2.03	0.64
26:D1:46:LEU:N	26:D1:46:LEU:HD13	2.11	0.64
26:D1:94:LEU:HD22	26:D1:95:LEU:H	1.61	0.64
27:D2:49:LYS:CG	27:D2:53:LEU:HD22	2.28	0.64
33:D8:35:GLN:HA	34:DA:2420:C:P	2.38	0.64
34:DA:1654:A:H2	38:DE:113:PHE:CD1	2.14	0.64
34:DA:1997:G:O2'	34:DA:1998:G:H5'	1.96	0.64
34:DA:2864:G:O2'	34:DA:2865:U:H5'	1.98	0.64
34:DA:451:C:H4'	39:DF:52:LYS:HZ2	1.59	0.64
34:DA:2177:C:O2'	36:DC:46:LYS:HE3	1.96	0.64
37:DD:94:LEU:HD13	37:DD:94:LEU:C	2.18	0.64
39:DF:10:PRO:HG2	39:DF:11:VAL:H	1.63	0.64
46:DQ:55:VAL:HG23	55:DZ:178:GLU:HB3	1.78	0.64
54:DY:10:GLY:HA2	54:DY:27:VAL:CG1	2.26	0.64
55:DZ:63:ASP:O	55:DZ:65:GLN:N	2.28	0.64
1:AA:797:C:OP1	11:AK:124:LYS:HE2	1.97	0.64
1:AA:939:G:H2'	1:AA:940:C:C6	2.31	0.64
8:AH:137:VAL:O	8:AH:138:TRP:HB3	1.98	0.64
16:AP:27:LYS:H	16:AP:27:LYS:HD2	1.62	0.64
25:B0:43:THR:H	34:BA:2331:G:H4'	1.63	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B3:7:LYS:C	28:B3:54:VAL:HG13	2.17	0.64
34:BA:1173:G:H5'	34:BA:1174:A:OP2	1.98	0.64
38:BE:91:VAL:HG13	38:BE:95:ILE:CD1	2.27	0.64
47:BR:10:LEU:HB3	47:BR:17:ARG:CD	2.26	0.64
49:BT:31:SER:C	49:BT:32:TYR:HD2	1.99	0.64
1:CA:302:G:H21	1:CA:556:C:C4'	2.10	0.64
1:CA:414:A:H2'	1:CA:415:A:O4'	1.97	0.64
1:CA:585:G:H4'	12:CL:8:ASN:ND2	2.07	0.64
1:CA:939:G:H5''	7:CG:102:ARG:HH22	1.62	0.64
13:CM:79:LYS:O	13:CM:82:MET:HB3	1.97	0.64
1:CA:624:C:O3'	16:CP:10:GLY:HA2	1.97	0.64
22:CV:39:C:O2'	22:CV:40:C:H5'	1.98	0.64
33:D8:52:LYS:N	33:D8:53:PRO:HD2	2.10	0.64
34:DA:1280:G:H3'	34:DA:1281:G:H5''	1.80	0.64
34:DA:633:A:H2'	34:DA:634:C:H5'	1.78	0.64
36:DC:85:GLU:HB3	36:DC:153:ILE:CB	2.27	0.64
41:DH:41:MET:SD	41:DH:54:ARG:HA	2.37	0.64
34:DA:2840:C:H4'	47:DR:53:HIS:CD2	2.32	0.64
1:AA:1353:G:O2'	1:AA:1354:C:H5'	1.97	0.64
1:AA:630:G:C2'	1:AA:631:G:H5''	2.28	0.64
1:AA:867:G:O2'	1:AA:868:C:H5'	1.97	0.64
3:AC:118:GLN:O	3:AC:122:GLU:HG3	1.97	0.64
5:AE:122:GLU:O	5:AE:123:LEU:HD23	1.97	0.64
8:AH:89:PRO:HA	8:AH:92:ARG:NH1	2.13	0.64
10:AJ:63:PHE:C	14:AN:59:ALA:HB2	2.17	0.64
12:AL:75:HIS:CD2	12:AL:77:LEU:H	2.15	0.64
16:AP:45:THR:HG22	16:AP:47:ASP:N	2.06	0.64
18:AR:53:ARG:HH21	18:AR:60:ALA:N	1.95	0.64
23:AY:39:U:H2'	23:AY:40:C:C6	2.31	0.64
34:BA:1803:A:H2	34:BA:1822:G:N3	1.95	0.64
34:BA:1844:C:O2'	34:BA:1845:G:H5'	1.97	0.64
34:BA:2345:G:H5''	34:BA:2347:C:O4'	1.97	0.64
34:BA:2884:U:C2'	34:BA:2885:C:H5'	2.27	0.64
37:BD:106:ILE:HD13	37:BD:106:ILE:C	2.17	0.64
39:BF:24:LEU:CB	39:BF:25:PRO:HD2	2.25	0.64
40:BG:18:GLU:O	40:BG:22:ARG:HB2	1.96	0.64
41:BH:89:ILE:N	41:BH:89:ILE:CD1	2.61	0.64
42:BI:71:ILE:CG1	42:BI:72:LEU:HD22	2.25	0.64
44:BO:63:VAL:HG23	44:BO:64:ARG:H	1.61	0.64
1:CA:1190:G:H3'	3:CC:3:ASN:HD22	1.60	0.64
1:CA:1466:C:H2'	1:CA:1467:G:O4'	1.97	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:35:G:H2'	1:CA:36:C:C6	2.32	0.64
2:CB:18:GLY:N	2:CB:42:ILE:HG22	2.08	0.64
10:CJ:39:PRO:HA	10:CJ:70:ARG:HH12	1.61	0.64
23:CW:38:A:H2'	23:CW:39:U:O4'	1.98	0.64
26:D1:13:ILE:HG23	26:D1:14:VAL:N	2.11	0.64
34:DA:1049:C:H2'	34:DA:1050:A:H8	1.62	0.64
34:DA:2036:C:C6	34:DA:2036:C:H5'	2.26	0.64
34:DA:207:A:H2'	34:DA:208:C:O4'	1.96	0.64
34:DA:2580:U:C5'	38:DE:131:ALA:H	2.11	0.64
34:DA:2658:C:H2'	34:DA:2658:C:O2	1.97	0.64
34:DA:2681:C:H5	34:DA:2725:A:N6	1.91	0.64
34:DA:2863:C:C3'	34:DA:2864:G:H5''	2.28	0.64
34:DA:286:C:C3'	34:DA:287:C:H5''	2.27	0.64
37:DD:28:GLU:HB2	37:DD:29:PRO:CD	2.28	0.64
48:DS:12:PHE:O	48:DS:12:PHE:HD1	1.81	0.64
43:DN:40:PRO:HA	50:DU:64:ARG:NH2	2.13	0.64
51:DV:19:LYS:CG	51:DV:20:LEU:H	2.10	0.64
1:AA:26:A:N6	1:AA:558:G:H1'	2.12	0.64
1:AA:414:A:H2'	1:AA:415:A:O4'	1.97	0.64
1:AA:434:U:H2'	1:AA:435:C:H6	1.61	0.64
16:AP:53:VAL:HG23	16:AP:54:GLU:N	2.13	0.64
20:AT:89:ARG:HB2	20:AT:104:LEU:HD11	1.78	0.64
33:B8:62:LEU:N	33:B8:63:PRO:HD2	2.13	0.64
34:BA:1227:G:O2'	34:BA:1228:G:H5'	1.97	0.64
34:BA:1658:C:OP1	38:BE:132:HIS:O	2.16	0.64
34:BA:2036:C:C5'	34:BA:2036:C:H6	2.07	0.64
34:BA:2308:G:H2'	34:BA:2309:A:C8	2.32	0.64
34:BA:64:A:O2'	34:BA:65:C:H5'	1.98	0.64
34:BA:943:U:OP2	45:BP:38:GLN:CD	2.36	0.64
36:BC:49:ILE:CD1	36:BC:49:ILE:H	2.10	0.64
42:BI:78:THR:H	42:BI:140:LEU:HD12	1.62	0.64
51:BV:19:LYS:CG	51:BV:20:LEU:N	2.55	0.64
1:CA:1502:A:H2'	1:CA:1502:A:N3	2.13	0.64
8:CH:35:ILE:O	8:CH:39:LEU:HB2	1.98	0.64
16:CP:53:VAL:HG23	16:CP:54:GLU:N	2.13	0.64
16:CP:82:GLN:HE21	16:CP:82:GLN:N	1.96	0.64
34:DA:2175:C:C3'	34:DA:2176:A:H5''	2.28	0.64
34:DA:2379:G:H2'	34:DA:2380:C:C6	2.33	0.64
34:DA:412:A:H2'	34:DA:413:C:H5'	1.80	0.64
34:DA:588:U:H2'	34:DA:589:C:C6	2.31	0.64
41:DH:92:ILE:HD12	41:DH:92:ILE:N	2.12	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:110:ASP:O	42:DI:114:LEU:HG	1.98	0.64
47:DR:10:LEU:HD22	47:DR:17:ARG:HD2	1.80	0.64
44:DO:104:ARG:NH1	49:DT:35:LYS:HD3	2.13	0.64
1:AA:1060:C:H2'	1:AA:1061:G:H8	1.62	0.64
1:AA:797:C:O2'	1:AA:798:G:H5'	1.97	0.64
7:AG:150:ALA:HA	11:AK:57:THR:HG21	1.80	0.64
7:AG:27:ILE:HD12	7:AG:27:ILE:H	1.61	0.64
7:AG:47:CYS:HA	7:AG:50:ILE:CG1	2.26	0.64
11:AK:57:THR:HG22	11:AK:59:TYR:H	1.62	0.64
13:AM:90:LEU:HA	13:AM:93:ARG:HB2	1.80	0.64
16:AP:74:LEU:O	16:AP:79:VAL:HG23	1.97	0.64
23:AW:68:C:O2'	23:AW:69:G:H5'	1.98	0.64
26:B1:89:GLU:O	26:B1:93:GLU:N	2.30	0.64
32:B7:8:ASN:HD22	32:B7:8:ASN:C	2.01	0.64
32:B7:9:ARG:NH1	34:BA:1310:G:OP2	2.31	0.64
34:BA:1049:C:H2'	34:BA:1050:A:H8	1.62	0.64
34:BA:2208:A:H1'	34:BA:2219:G:C4	2.32	0.64
34:BA:2580:U:C5'	38:BE:131:ALA:H	2.09	0.64
34:BA:2772:C:H2'	34:BA:2773:C:C6	2.33	0.64
34:BA:914:C:C2'	34:BA:915:C:H5'	2.26	0.64
35:BB:3:C:H42	35:BB:118:G:H1	1.46	0.64
37:BD:58:HIS:HD2	37:BD:59:LYS:N	1.94	0.64
34:BA:322:A:H3'	39:BF:169:ASN:HD21	1.61	0.64
48:BS:17:ARG:CZ	48:BS:89:ARG:NH2	2.61	0.64
51:BV:19:LYS:CG	51:BV:20:LEU:H	2.10	0.64
55:BZ:166:SER:HB2	55:BZ:168:GLU:N	2.11	0.64
30:D5:59:GLU:O	30:D5:60:VAL:HG23	1.98	0.64
34:DA:142:A:H5'	34:DA:142(A):C:OP2	1.98	0.64
34:DA:2742:C:O2'	34:DA:2743:C:H5'	1.97	0.64
34:DA:945:A:H5''	34:DA:946:G:OP2	1.97	0.64
37:DD:77:ALA:HB2	37:DD:97:TYR:CD2	2.32	0.64
34:DA:322:A:OP2	39:DF:169:ASN:HB2	1.97	0.64
39:DF:178:PRO:HG2	39:DF:179:GLU:OE1	1.97	0.64
39:DF:181:LEU:CD1	39:DF:186:ILE:HD11	2.28	0.64
42:DI:14:ASP:O	42:DI:17:GLN:HB2	1.98	0.64
48:DS:58:LEU:CD2	48:DS:68:GLN:HB2	2.27	0.64
55:DZ:15:PRO:O	55:DZ:19:ARG:HG3	1.96	0.64
1:AA:782:A:C2'	1:AA:783:C:H5'	2.27	0.64
6:AF:52:ILE:O	6:AF:52:ILE:HG22	1.95	0.64
13:AM:11:ARG:O	13:AM:13:LYS:N	2.30	0.64
6:AF:60:PHE:CZ	18:AR:78:LEU:HD21	2.33	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1188:U:H2'	34:BA:1189:A:H5'	1.79	0.64
34:BA:1419:A:O2'	34:BA:1420:U:H5''	1.97	0.64
34:BA:2672:G:C2'	34:BA:2673:G:H5''	2.28	0.64
34:BA:2720:U:O2	34:BA:2720:U:H2'	1.96	0.64
37:BD:28:GLU:HB2	37:BD:29:PRO:CD	2.27	0.64
41:BH:89:ILE:HD11	41:BH:129:THR:HB	1.79	0.64
43:BN:78:TYR:CD1	43:BN:79:PRO:N	2.65	0.64
47:BR:4:LEU:O	47:BR:4:LEU:HD13	1.97	0.64
47:BR:78:LYS:O	47:BR:83:ILE:HG12	1.98	0.64
1:CA:1073:U:H2'	1:CA:1074:G:H8	1.63	0.64
1:CA:1510:U:H2'	1:CA:1511:G:C8	2.32	0.64
1:CA:782:A:H2'	1:CA:783:C:H5'	1.80	0.64
8:CH:6:ILE:N	8:CH:6:ILE:HD12	2.13	0.64
26:D1:46:LEU:N	26:D1:46:LEU:CD1	2.61	0.64
26:D1:89:GLU:O	26:D1:93:GLU:N	2.23	0.64
29:D4:29:PRO:C	29:D4:31:ILE:H	2.00	0.64
34:DA:2730:C:O2'	34:DA:2731:G:H5'	1.97	0.64
34:DA:404:C:H4'	34:DA:405:U:H5'	1.79	0.64
34:DA:884:C:O2'	34:DA:892:G:C8	2.43	0.64
37:DD:92:ILE:HD12	37:DD:92:ILE:O	1.96	0.64
41:DH:89:ILE:N	41:DH:89:ILE:CD1	2.61	0.64
46:DQ:10:ARG:HB2	46:DQ:10:ARG:NH1	2.13	0.64
47:DR:60:LEU:HD23	47:DR:60:LEU:C	2.17	0.64
49:DT:57:PHE:C	49:DT:59:THR:H	1.99	0.64
53:DX:57:LEU:HD11	53:DX:77:LYS:HD2	1.79	0.64
54:DY:16:ALA:HA	54:DY:21:LYS:HD2	1.78	0.64
2:AB:42:ILE:HD11	2:AB:202:PRO:HB2	1.80	0.64
4:AD:133:VAL:HG12	4:AD:135:LEU:H	1.63	0.64
5:AE:12:LEU:O	5:AE:13:ILE:HD12	1.97	0.64
10:AJ:38:ILE:HG12	10:AJ:71:LEU:O	1.96	0.64
10:AJ:40:LEU:HD21	10:AJ:69:ASN:HB3	1.79	0.64
12:AL:46:LYS:HG2	12:AL:47:LYS:N	2.04	0.64
17:AQ:10:VAL:O	17:AQ:53:LEU:HD12	1.98	0.64
34:BA:2175:C:C3'	34:BA:2176:A:H5''	2.27	0.64
34:BA:2801(A):A:H4'	34:BA:2802:G:H5'	1.79	0.64
39:BF:51:THR:HG21	39:BF:92:PRO:HD2	1.80	0.64
42:BI:77:LEU:HD11	42:BI:101:LEU:HD22	1.79	0.64
43:BN:58:ASP:C	43:BN:60:ILE:HG13	2.18	0.64
44:BO:13:ASN:HD21	44:BO:97:ARG:H	1.44	0.64
49:BT:58:ASN:C	49:BT:58:ASN:HD22	2.01	0.64
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.32	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:226:G:O2'	1:CA:227:G:H5'	1.98	0.64
1:CA:939:G:H5''	7:CG:102:ARG:HH12	1.63	0.64
2:CB:115:LEU:HD13	2:CB:145:LEU:HD12	1.79	0.64
3:CC:18:TRP:HE3	3:CC:18:TRP:H	1.44	0.64
10:CJ:9:ARG:HG2	10:CJ:69:ASN:OD1	1.98	0.64
23:CW:17:C:C5	34:DA:2180:U:H4'	2.32	0.64
30:D5:43:HIS:HD2	34:DA:2815:C:O2'	1.81	0.64
34:DA:1593:G:H2'	34:DA:1594:G:H5''	1.78	0.64
34:DA:1678:G:N2	34:DA:1989:G:H22	1.95	0.64
34:DA:1925:C:C2'	34:DA:1926:U:H5'	2.28	0.64
34:DA:2637:U:H5'	34:DA:2637:U:H6	1.63	0.64
34:DA:2801(A):A:H4'	34:DA:2802:G:H5'	1.80	0.64
37:DD:106:ILE:HD11	37:DD:196:VAL:CG1	2.27	0.64
37:DD:231:HIS:ND1	37:DD:232:PRO:HD2	2.13	0.64
34:DA:608:A:OP1	39:DF:100:THR:HG21	1.97	0.64
43:DN:18:ALA:HB1	43:DN:21:LYS:HG2	1.80	0.64
46:DQ:23:GLY:C	46:DQ:100:GLY:HA3	2.18	0.64
51:DV:19:LYS:HZ2	51:DV:20:LEU:N	1.93	0.64
52:DW:10:VAL:HG23	52:DW:101:SER:O	1.97	0.64
53:DX:78:LYS:HD3	53:DX:78:LYS:O	1.98	0.64
55:DZ:96:VAL:HG22	55:DZ:97:GLU:N	2.13	0.64
1:AA:383:A:C2'	1:AA:384:G:H5'	2.27	0.64
1:AA:853:G:O2'	1:AA:854:G:H5'	1.97	0.64
5:AE:50:GLU:OE2	5:AE:51:VAL:HG23	1.98	0.64
6:AF:28:ARG:HH11	6:AF:28:ARG:HG3	1.61	0.64
10:AJ:8:LEU:HD22	10:AJ:20:ALA:HB2	1.79	0.64
1:AA:1305:G:H5'	21:AU:4:GLY:HA3	1.77	0.64
27:B2:58:ALA:O	27:B2:60:LEU:N	2.31	0.64
34:BA:2181:G:H2'	34:BA:2182:G:H8	1.62	0.64
25:B0:18:ALA:HB1	34:BA:2271:G:OP1	1.98	0.64
37:BD:246:PRO:HB2	37:BD:255:LYS:CG	2.27	0.64
38:BE:92:THR:O	38:BE:93:VAL:HG23	1.98	0.64
39:BF:198:ALA:O	39:BF:201:VAL:HG12	1.97	0.64
40:BG:60:LEU:O	40:BG:63:ILE:HG13	1.98	0.64
42:BI:109:ILE:N	42:BI:109:ILE:HD12	2.12	0.64
42:BI:77:LEU:HD11	42:BI:101:LEU:HB2	1.79	0.64
43:BN:78:TYR:CD1	43:BN:79:PRO:HD3	2.33	0.64
45:BP:97:PRO:O	45:BP:98:GLU:HB3	1.98	0.64
46:BQ:63:LYS:HG2	46:BQ:65:PHE:CZ	2.33	0.64
50:BU:29:SER:OG	50:BU:30:LYS:HE3	1.96	0.64
50:BU:50:ARG:HG2	50:BU:53:ARG:NH2	2.13	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1038:C:H2'	1:CA:1039:C:C6	2.33	0.64
9:CI:113:LYS:HD2	9:CI:113:LYS:N	2.13	0.64
11:CK:127:LYS:CE	11:CK:127:LYS:HA	2.24	0.64
13:CM:15:VAL:O	13:CM:19:LEU:HD23	1.98	0.64
25:D0:17:GLN:O	25:D0:19:LYS:HD3	1.96	0.64
34:DA:1153:C:H2'	34:DA:1154:G:O4'	1.98	0.64
34:DA:1227:G:O2'	34:DA:1228:G:H5'	1.96	0.64
34:DA:2590:A:O2'	34:DA:2591:C:H5'	1.98	0.64
34:DA:247:G:H4'	34:DA:386:G:C5	2.33	0.64
37:DD:35:LYS:NZ	37:DD:65:ILE:HA	2.13	0.64
38:DE:75:VAL:C	38:DE:77:ILE:N	2.51	0.64
47:DR:4:LEU:O	47:DR:6:SER:N	2.29	0.64
55:DZ:151:HIS:HA	55:DZ:171:ILE:CG1	2.28	0.64
1:AA:1064:G:N2	1:AA:1190:G:H2'	2.13	0.63
1:AA:250:A:H4'	1:AA:251:G:O5'	1.98	0.63
1:AA:27:G:O2'	1:AA:28:G:H5'	1.99	0.63
1:AA:579:G:H2'	1:AA:580:U:H6	1.62	0.63
8:AH:11:THR:HG22	8:AH:15:ASN:ND2	2.11	0.63
10:AJ:50:ILE:HA	10:AJ:60:ARG:HB3	1.79	0.63
10:AJ:45:ARG:HB2	10:AJ:65:LEU:HB3	1.80	0.63
15:AO:39:LEU:O	15:AO:42:HIS:HB3	1.98	0.63
34:BA:1887:C:H2'	34:BA:1888:G:H5''	1.80	0.63
26:B1:32:LYS:HG2	34:BA:2396:G:O2'	1.98	0.63
34:BA:2653:U:H5'	34:BA:2654:A:H5''	1.80	0.63
34:BA:2863:C:C3'	34:BA:2864:G:H5''	2.29	0.63
37:BD:92:ILE:O	37:BD:92:ILE:HD12	1.98	0.63
40:BG:70:VAL:HA	40:BG:90:LEU:CD1	2.28	0.63
42:BI:62:LYS:O	42:BI:62:LYS:HD3	1.97	0.63
43:BN:16:ILE:O	43:BN:54:VAL:HA	1.97	0.63
44:BO:76:ALA:HB3	49:BT:75:ILE:HB	1.79	0.63
47:BR:5:LYS:N	47:BR:5:LYS:HD2	2.13	0.63
48:BS:12:PHE:HD1	48:BS:12:PHE:O	1.81	0.63
48:BS:48:LEU:N	48:BS:48:LEU:HD12	2.13	0.63
48:BS:61:ASN:ND2	48:BS:61:ASN:C	2.52	0.63
50:BU:62:ILE:HA	50:BU:65:ILE:HD12	1.80	0.63
51:BV:72:VAL:HG12	51:BV:73:SER:N	2.13	0.63
51:BV:71:LEU:O	51:BV:90:PRO:HA	1.98	0.63
54:BY:37:VAL:O	54:BY:38:ILE:CB	2.47	0.63
1:CA:1388:C:H2'	1:CA:1389:C:C6	2.33	0.63
1:CA:319:G:O2'	1:CA:320:C:H5'	1.99	0.63
1:CA:340:U:O2'	1:CA:341:C:H5'	1.98	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:94:VAL:HG12	10:CJ:95:GLU:N	2.13	0.63
20:CT:56:MET:O	20:CT:59:ALA:HB3	1.97	0.63
25:D0:41:ARG:CD	25:D0:41:ARG:H	2.10	0.63
34:DA:2703:C:H2'	34:DA:2704:C:H6	1.63	0.63
34:DA:359:A:H2'	34:DA:360:G:O4'	1.98	0.63
34:DA:925:C:C3'	34:DA:926:A:H5''	2.27	0.63
37:DD:161:THR:O	37:DD:196:VAL:HG23	1.98	0.63
34:DA:1844:C:H5'	37:DD:256:GLY:O	1.98	0.63
43:DN:112:LEU:O	43:DN:115:ARG:N	2.31	0.63
49:DT:29:ARG:CB	49:DT:85:LYS:HA	2.28	0.63
51:DV:2:PHE:O	51:DV:3:ALA:HB2	1.98	0.63
55:DZ:99:TYR:HA	55:DZ:125:LEU:HA	1.80	0.63
1:AA:1049:U:H1'	1:AA:1201:A:N7	2.13	0.63
2:AB:75:LYS:HG2	2:AB:78:GLN:NE2	2.12	0.63
2:AB:92:TYR:CE2	2:AB:151:GLY:HA3	2.33	0.63
9:AI:126:SER:O	9:AI:127:LYS:HB3	1.97	0.63
23:AW:16:U:O4	23:AW:18:G:H3'	1.98	0.63
26:B1:19:GLN:CD	26:B1:44:PRO:HB3	2.18	0.63
28:B3:7:LYS:O	28:B3:54:VAL:HG13	1.97	0.63
34:BA:528:A:N1	34:BA:2042:A:H2'	2.12	0.63
25:B0:43:THR:HG22	34:BA:2331:G:O2'	1.96	0.63
34:BA:2379:G:H2'	34:BA:2380:C:C6	2.33	0.63
34:BA:70:G:H2'	34:BA:113:G:O2'	1.98	0.63
37:BD:25:THR:CG2	37:BD:82:ILE:H	2.11	0.63
37:BD:25:THR:HG21	37:BD:82:ILE:N	2.12	0.63
39:BF:80:ALA:O	39:BF:83:PHE:HB2	1.99	0.63
43:BN:89:LYS:O	43:BN:93:THR:HG22	1.97	0.63
44:BO:23:ARG:HG2	44:BO:23:ARG:HH11	1.62	0.63
45:BP:101:VAL:HG13	45:BP:102:ARG:N	2.11	0.63
46:BQ:30:GLY:CA	46:BQ:107:ALA:HB2	2.24	0.63
34:BA:1276:A:H1'	47:BR:16:HIS:HE1	1.63	0.63
54:BY:97:ARG:HH21	54:BY:98:VAL:HG21	1.63	0.63
1:CA:1492:A:H2'	1:CA:1493:A:C8	2.33	0.63
1:CA:15:G:H4'	5:CE:24:ARG:NH2	2.13	0.63
1:CA:950:U:H2'	1:CA:951:G:H8	1.64	0.63
1:CA:954:G:H2'	1:CA:955:U:H6	1.63	0.63
4:CD:96:LEU:HD12	4:CD:139:ARG:NH1	2.14	0.63
8:CH:6:ILE:H	8:CH:6:ILE:HD12	1.63	0.63
13:CM:90:LEU:O	13:CM:92:HIS:N	2.26	0.63
10:CJ:49:VAL:HG13	14:CN:41:ARG:HB2	1.80	0.63
27:D2:14:ARG:NE	27:D2:57:ILE:HB	2.13	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1188:U:H2'	34:DA:1189:A:H5'	1.79	0.63
25:D0:43:THR:H	34:DA:2331:G:H4'	1.63	0.63
34:DA:500:G:N2	34:DA:502:A:H3'	2.13	0.63
34:DA:941:A:H4'	45:DP:35:HIS:CE1	2.33	0.63
34:DA:943:U:OP2	45:DP:38:GLN:CD	2.37	0.63
36:DC:45:ALA:HB2	36:DC:210:ARG:HA	1.80	0.63
37:DD:35:LYS:HZ3	37:DD:104:TYR:HD1	1.46	0.63
39:DF:51:THR:HG21	39:DF:92:PRO:HD2	1.79	0.63
41:DH:14:GLY:O	41:DH:29:PRO:HD3	1.98	0.63
45:DP:26:GLY:HA2	45:DP:30:THR:HG21	1.80	0.63
48:DS:87:PHE:HB2	48:DS:106:ARG:HD3	1.80	0.63
49:DT:29:ARG:HG3	49:DT:30:VAL:HG13	1.79	0.63
1:AA:1278:U:H5''	1:AA:1279:A:O4'	1.99	0.63
1:AA:389:A:H2'	1:AA:390:C:H5'	1.79	0.63
1:AA:392:G:H2'	1:AA:393:A:H8	1.62	0.63
9:AI:113:LYS:N	9:AI:113:LYS:HD2	2.12	0.63
30:B5:46:CYS:SG	30:B5:47:PRO:HD2	2.38	0.63
31:B6:36:LEU:HD13	31:B6:50:ARG:NH1	2.12	0.63
34:BA:1280:G:H3'	34:BA:1281:G:H5''	1.79	0.63
34:BA:149:A:H2'	34:BA:150:C:C6	2.32	0.63
34:BA:189:G:H2'	34:BA:205:G:N2	2.13	0.63
34:BA:576:U:O2'	34:BA:577:G:H5'	1.98	0.63
25:B0:74:ARG:HH12	35:BB:13:A:H8	1.46	0.63
39:BF:117:ARG:NH2	39:BF:187:VAL:HA	2.12	0.63
40:BG:23:PHE:HZ	40:BG:171:ALA:CB	2.12	0.63
41:BH:41:MET:HE3	41:BH:41:MET:HA	1.81	0.63
42:BI:75:LEU:HD21	42:BI:105:HIS:CE1	2.34	0.63
51:BV:19:LYS:C	51:BV:20:LEU:HD12	2.19	0.63
55:BZ:145:GLU:CG	55:BZ:146:ILE:H	1.96	0.63
1:CA:630:G:C2'	1:CA:631:G:H5''	2.28	0.63
3:CC:95:THR:HG21	3:CC:99:VAL:CG1	2.28	0.63
5:CE:126:ARG:NH1	5:CE:126:ARG:HG3	2.12	0.63
34:DA:1220:A:O2'	34:DA:1221:C:H5''	1.98	0.63
34:DA:149:A:H2'	34:DA:150:C:C6	2.34	0.63
34:DA:1773:A:H2'	34:DA:1774:C:H5'	1.81	0.63
34:DA:2068:U:N3	34:DA:2430:A:H2	1.91	0.63
34:DA:2653:U:H5'	34:DA:2654:A:H5''	1.80	0.63
34:DA:2824:C:H2'	34:DA:2825:C:O4'	1.98	0.63
34:DA:49:A:H4'	34:DA:50:U:C5'	2.22	0.63
37:DD:31:LYS:NZ	37:DD:31:LYS:HA	2.13	0.63
50:DU:69:CYS:SG	50:DU:79:PHE:HD1	2.20	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:38:ILE:N	54:DY:66:PRO:O	2.31	0.63
55:DZ:67:LEU:N	55:DZ:67:LEU:HD12	2.12	0.63
1:AA:1038:C:H2'	1:AA:1039:C:C6	2.33	0.63
2:AB:169:LYS:HD2	2:AB:170:GLU:OE2	1.97	0.63
3:AC:107:GLN:H	3:AC:107:GLN:CD	2.02	0.63
8:AH:103:VAL:HG21	8:AH:109:ILE:C	2.18	0.63
11:AK:127:LYS:CE	11:AK:127:LYS:HA	2.24	0.63
13:AM:46:LYS:HG3	13:AM:47:ASP:N	2.14	0.63
19:AS:39:THR:HG22	19:AS:40:ILE:N	2.13	0.63
34:BA:2784:C:H2'	34:BA:2785:C:C6	2.32	0.63
34:BA:491:G:H2'	34:BA:492:A:C8	2.34	0.63
36:BC:45:ALA:HB2	36:BC:210:ARG:HA	1.80	0.63
34:BA:1798:U:C5'	37:BD:259:THR:HG22	2.28	0.63
37:BD:77:ALA:HB2	37:BD:97:TYR:CD2	2.33	0.63
38:BE:93:VAL:HG21	38:BE:180:ASN:OD1	1.98	0.63
44:BO:13:ASN:HD22	44:BO:97:ARG:HB2	1.63	0.63
46:BQ:29:PHE:O	46:BQ:30:GLY:O	2.16	0.63
1:CA:501:C:H2'	1:CA:502:G:H8	1.64	0.63
9:CI:112:LYS:HG2	9:CI:119:ALA:H	1.64	0.63
16:CP:20:VAL:HG21	16:CP:32:TYR:CB	2.28	0.63
23:CW:27:G:H2'	23:CW:28:G:C8	2.33	0.63
34:DA:1173:G:H5'	34:DA:1174:A:OP2	1.97	0.63
34:DA:154(A):C:H5	34:DA:171:G:H1	1.45	0.63
34:DA:2295:C:O2'	34:DA:2296:U:H5'	1.99	0.63
34:DA:2323:G:H2'	34:DA:2324:C:O4'	1.99	0.63
34:DA:833:U:H2'	34:DA:834:C:H6	1.63	0.63
36:DC:56:GLN:O	36:DC:57:ASN:HB2	1.97	0.63
37:DD:246:PRO:HB2	37:DD:255:LYS:HG3	1.80	0.63
39:DF:123:LEU:HD12	39:DF:124:LEU:H	1.63	0.63
39:DF:3:GLU:O	39:DF:19:GLU:HA	1.98	0.63
40:DG:22:ARG:HH11	40:DG:22:ARG:HG2	1.63	0.63
40:DG:71:THR:HG22	40:DG:89:GLY:CA	2.28	0.63
41:DH:19:VAL:HG11	41:DH:44:VAL:HG22	1.81	0.63
45:DP:62:LEU:H	45:DP:62:LEU:HD22	1.61	0.63
48:DS:36:TYR:HD1	48:DS:36:TYR:N	1.96	0.63
49:DT:100:TYR:HD2	49:DT:103:ARG:NH2	1.97	0.63
51:DV:19:LYS:C	51:DV:20:LEU:HD12	2.18	0.63
54:DY:76:CYS:SG	54:DY:77:PRO:CD	2.86	0.63
1:AA:186:C:C5'	20:AT:78:ALA:HB1	2.28	0.63
1:AA:376:G:O2'	1:AA:377:G:H5'	1.99	0.63
1:AA:706:A:N7	1:AA:707:C:H5	1.96	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:97:TRP:HZ2	2:AB:102:LEU:HD13	1.64	0.63
10:AJ:6:ILE:O	10:AJ:6:ILE:HD12	1.98	0.63
34:BA:154(A):C:H5	34:BA:171:G:H1	1.47	0.63
34:BA:833:U:H2'	34:BA:834:C:C6	2.33	0.63
36:BC:76:ALA:HB3	36:BC:94:VAL:CG1	2.28	0.63
37:BD:25:THR:HG21	37:BD:82:ILE:H	1.64	0.63
38:BE:173:VAL:HG12	38:BE:174:ASP:N	2.13	0.63
34:BA:2631:G:N2	38:BE:61:ARG:HH12	1.97	0.63
38:BE:75:VAL:C	38:BE:77:ILE:N	2.49	0.63
40:BG:133:LEU:HD12	40:BG:133:LEU:C	2.19	0.63
41:BH:98:LEU:HB2	41:BH:125:VAL:CG2	2.29	0.63
43:BN:18:ALA:HB1	43:BN:21:LYS:HG2	1.79	0.63
45:BP:126:VAL:HA	45:BP:145:PRO:CB	2.14	0.63
49:BT:80:SER:CB	49:BT:81:PRO:CD	2.76	0.63
51:BV:43:GLU:N	51:BV:48:GLY:HA2	2.12	0.63
1:CA:939:G:H5''	7:CG:102:ARG:CZ	2.28	0.63
8:CH:112:LEU:C	8:CH:112:LEU:HD12	2.19	0.63
8:CH:137:VAL:O	8:CH:138:TRP:HB3	1.98	0.63
10:CJ:6:ILE:HD12	10:CJ:6:ILE:O	1.99	0.63
18:CR:32:ARG:HA	18:CR:69:THR:HG21	1.80	0.63
28:D3:54:VAL:HG12	28:D3:55:ARG:N	2.14	0.63
33:D8:32:LEU:HG	33:D8:34:TRP:CE3	2.33	0.63
33:D8:6:THR:HG22	33:D8:63:PRO:HD3	1.80	0.63
34:DA:1710:C:O2'	34:DA:1711:C:H5'	1.98	0.63
34:DA:2040:C:H2'	34:DA:2041:U:H6	1.63	0.63
34:DA:189:G:H2'	34:DA:205:G:N2	2.13	0.63
34:DA:2334:G:H21	48:DS:18:ILE:HD11	1.64	0.63
34:DA:2287:A:N6	34:DA:2344:U:H3	1.96	0.63
34:DA:2758:A:C3'	34:DA:2759:G:H5''	2.29	0.63
35:DB:15:A:C3'	35:DB:16:G:H5'	2.28	0.63
34:DA:1828:G:O6	37:DD:222:ARG:HD3	1.97	0.63
38:DE:69:LYS:O	38:DE:70:ALA:C	2.37	0.63
40:DG:11:TYR:O	40:DG:15:VAL:HB	1.99	0.63
42:DI:69:LYS:HA	42:DI:136:VAL:HG21	1.81	0.63
45:DP:75:ILE:N	45:DP:75:ILE:CD1	2.51	0.63
48:DS:88:ASP:CG	48:DS:89:ARG:N	2.52	0.63
49:DT:28:VAL:CG2	49:DT:46:GLU:HA	2.29	0.63
50:DU:28:ARG:NH1	50:DU:38:THR:OG1	2.31	0.63
51:DV:5:VAL:HG21	51:DV:36:PRO:HB2	1.80	0.63
54:DY:37:VAL:CG2	54:DY:38:ILE:H	2.05	0.63
1:AA:1064:G:H5'	1:AA:1066:C:H1'	1.80	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:114:ARG:HA	2:AB:117:GLU:HG3	1.81	0.63
3:AC:188:LEU:HD22	3:AC:188:LEU:N	2.13	0.63
4:AD:58:LEU:HD23	4:AD:206:PHE:CE1	2.34	0.63
10:AJ:7:LYS:C	10:AJ:8:LEU:HD12	2.18	0.63
14:AN:6:LEU:HB3	14:AN:23:ARG:NH2	2.13	0.63
16:AP:20:VAL:HG21	16:AP:32:TYR:CB	2.29	0.63
26:B1:9:GLY:O	26:B1:10:LYS:HB3	1.98	0.63
36:BC:49:ILE:HD12	36:BC:49:ILE:N	2.12	0.63
34:BA:1658:C:OP1	38:BE:132:HIS:CE1	2.52	0.63
39:BF:3:GLU:O	39:BF:19:GLU:HA	1.98	0.63
39:BF:199:TRP:CZ3	39:BF:203:GLN:HG3	2.33	0.63
41:BH:30:LYS:NZ	41:BH:81:GLU:HG2	2.14	0.63
41:BH:92:ILE:HD12	41:BH:92:ILE:N	2.12	0.63
48:BS:88:ASP:CG	48:BS:89:ARG:N	2.51	0.63
1:CA:1064:G:H5'	1:CA:1066:C:H1'	1.80	0.63
1:CA:1310:G:O2'	1:CA:1311:G:H5'	1.98	0.63
1:CA:685:G:O2'	1:CA:686:U:H5'	1.98	0.63
2:CB:41:ILE:N	2:CB:41:ILE:HD12	2.14	0.63
4:CD:110:PHE:HD1	4:CD:110:PHE:H	1.45	0.63
5:CE:50:GLU:OE2	5:CE:51:VAL:HG23	1.99	0.63
7:CG:93:PRO:HA	7:CG:96:GLN:HB2	1.80	0.63
10:CJ:40:LEU:HD21	10:CJ:69:ASN:HB3	1.81	0.63
17:CQ:19:VAL:CG2	17:CQ:44:ALA:HB3	2.28	0.63
19:CS:44:MET:N	19:CS:44:MET:SD	2.72	0.63
34:DA:1264:G:H3'	34:DA:1265:A:H5''	1.79	0.63
34:DA:143(A):C:H2'	34:DA:143(A):C:O2	1.97	0.63
34:DA:2732:G:O2'	34:DA:2733:A:H5'	1.99	0.63
34:DA:621:A:C2'	34:DA:622:G:H5'	2.29	0.63
34:DA:717:G:H2'	34:DA:718:A:O4'	1.99	0.63
37:DD:245:PRO:O	37:DD:246:PRO:C	2.35	0.63
39:DF:192:LEU:HD23	39:DF:193:VAL:N	2.12	0.63
39:DF:3:GLU:CG	39:DF:19:GLU:HB2	2.20	0.63
40:DG:41:GLN:HA	40:DG:155:MET:CB	2.28	0.63
42:DI:77:LEU:HD11	42:DI:101:LEU:HB2	1.80	0.63
45:DP:92:GLU:HG3	45:DP:123:LEU:HD22	1.79	0.63
46:DQ:26:TYR:HD1	46:DQ:26:TYR:O	1.80	0.63
48:DS:99:LYS:O	48:DS:101:LEU:N	2.30	0.63
49:DT:33:LYS:HA	49:DT:33:LYS:HZ2	1.64	0.63
53:DX:26:TYR:OH	53:DX:89:ILE:HG21	1.98	0.63
54:DY:8:LYS:HE3	54:DY:72:VAL:HG23	1.81	0.63
54:DY:97:ARG:HH21	54:DY:98:VAL:HG21	1.63	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1293:G:O2'	1:AA:1294:G:H8	1.74	0.63
1:AA:950:U:H2'	1:AA:951:G:H8	1.64	0.63
5:AE:129:ILE:O	5:AE:132:ALA:HB3	1.99	0.63
9:AI:18:PHE:HB2	9:AI:62:TYR:O	1.98	0.63
13:AM:49:THR:HG22	13:AM:51:ALA:H	1.63	0.63
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.32	0.63
17:AQ:45:HIS:HB2	17:AQ:69:LYS:HE2	1.80	0.63
19:AS:35:SER:C	19:AS:37:ARG:H	2.01	0.63
30:B5:55:ARG:CG	30:B5:56:LYS:H	2.08	0.63
34:BA:1220:A:O2'	34:BA:1221:C:H5''	1.98	0.63
34:BA:2377:A:H4'	48:BS:107:GLU:CB	2.28	0.63
34:BA:2742:C:O2'	34:BA:2743:C:H5'	1.99	0.63
37:BD:253:GLN:HB3	37:BD:255:LYS:HE2	1.81	0.63
40:BG:60:LEU:C	40:BG:60:LEU:HD13	2.18	0.63
42:BI:14:ASP:O	42:BI:17:GLN:HB2	1.99	0.63
47:BR:10:LEU:HD22	47:BR:17:ARG:HD2	1.81	0.63
54:BY:10:GLY:HA2	54:BY:27:VAL:CG1	2.29	0.63
54:BY:37:VAL:HG13	54:BY:69:ALA:HA	1.81	0.63
54:BY:38:ILE:HG22	54:BY:39:VAL:N	2.14	0.63
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.34	0.63
1:CA:736:C:H2'	1:CA:737:A:H8	1.63	0.63
3:CC:152:ILE:HB	3:CC:199:LYS:HB2	1.81	0.63
3:CC:55:VAL:HG12	3:CC:55:VAL:O	1.99	0.63
6:CF:8:ILE:HD12	6:CF:26:ILE:HD13	1.81	0.63
10:CJ:48:THR:HA	10:CJ:62:HIS:CB	2.25	0.63
17:CQ:65:ILE:HD12	17:CQ:65:ILE:N	2.13	0.63
6:CF:60:PHE:CZ	18:CR:78:LEU:HD21	2.34	0.63
26:D1:28:GLY:C	26:D1:30:VAL:H	2.01	0.63
31:D6:36:LEU:HD13	31:D6:50:ARG:NH1	2.12	0.63
34:DA:1278:A:O2'	34:DA:1279:G:H5'	1.98	0.63
34:DA:136:G:H1	34:DA:143(A):C:H42	1.45	0.63
34:DA:1844:C:O2'	34:DA:1845:G:H5'	1.98	0.63
34:DA:2543:G:H5'	34:DA:2543:G:H8	1.63	0.63
37:DD:235:GLY:O	37:DD:236:GLY:C	2.35	0.63
40:DG:112:PRO:O	40:DG:113:ARG:HA	1.99	0.63
1:AA:662:G:H2'	1:AA:663:A:C8	2.34	0.63
2:AB:101:MET:HA	2:AB:108:ILE:HG13	1.81	0.63
2:AB:167:PRO:HG2	2:AB:168:THR:H	1.64	0.63
3:AC:64:VAL:HG21	3:AC:99:VAL:HG12	1.81	0.63
4:AD:11:LEU:O	4:AD:13:ARG:O	2.17	0.63
4:AD:67:ILE:HG22	4:AD:68:TYR:CD1	2.34	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:50:TYR:CZ	18:AR:77:GLY:HA2	2.34	0.63
8:AH:28:ALA:HA	8:AH:59:LEU:HD21	1.81	0.63
13:AM:15:VAL:O	13:AM:19:LEU:HD23	1.99	0.63
13:AM:70:LEU:HD23	13:AM:70:LEU:C	2.18	0.63
25:B0:17:GLN:O	25:B0:19:LYS:HD3	1.98	0.63
34:BA:152:G:H1	34:BA:174:C:H42	1.46	0.63
34:BA:1656:C:H2'	34:BA:1657:C:H6	1.63	0.63
34:BA:2051:A:OP2	34:BA:2051:A:H8	1.82	0.63
34:BA:247:G:H4'	34:BA:386:G:C5	2.33	0.63
34:BA:492:A:H2'	34:BA:493:G:O4'	1.99	0.63
36:BC:50:ASP:CG	36:BC:55:ASP:HA	2.19	0.63
43:BN:66:LYS:HB3	43:BN:70:LYS:HB2	1.79	0.63
45:BP:131:SER:N	45:BP:134:ALA:HB3	2.12	0.63
48:BS:36:TYR:HD1	48:BS:36:TYR:N	1.95	0.63
46:BQ:140:ALA:HB1	55:BZ:99:TYR:HB2	1.80	0.63
1:CA:336:C:H2'	1:CA:337:C:C6	2.33	0.63
1:CA:376:G:O2'	1:CA:377:G:H5'	1.99	0.63
1:CA:662:G:H2'	1:CA:663:A:C8	2.34	0.63
16:CP:74:LEU:O	16:CP:79:VAL:HG23	1.98	0.63
34:DA:18:C:O3'	50:DU:23:GLY:HA2	1.98	0.63
23:CW:17:C:C4	34:DA:2180:U:H4'	2.34	0.63
34:DA:2308:G:H2'	34:DA:2309:A:C8	2.34	0.63
34:DA:604:G:O2'	34:DA:605:C:H5'	1.98	0.63
37:DD:270:ILE:O	37:DD:270:ILE:HD12	1.98	0.63
38:DE:117:MET:HA	38:DE:122:PHE:N	2.06	0.63
39:DF:9:ILE:HG23	39:DF:13:SER:O	1.98	0.63
42:DI:25:TYR:HE2	42:DI:29:TYR:CD2	2.16	0.63
49:DT:92:GLY:HA2	49:DT:114:LEU:CA	2.27	0.63
53:DX:55:ASN:ND2	53:DX:78:LYS:HE2	2.14	0.63
1:AA:1321:C:H5''	1:AA:1322:C:H5''	1.77	0.63
1:AA:1435:G:H2'	1:AA:1436:U:H6	1.63	0.63
1:AA:922:G:H2'	1:AA:923:A:C8	2.33	0.63
8:AH:119:LEU:HD12	8:AH:124:ALA:HA	1.79	0.63
13:AM:83:ASP:CG	13:AM:84:ILE:H	2.00	0.63
20:AT:71:THR:HG22	20:AT:72:LEU:H	1.64	0.63
34:BA:136:G:H1	34:BA:143(A):C:H42	1.46	0.63
34:BA:359:A:H2'	34:BA:360:G:O4'	1.98	0.63
39:BF:117:ARG:HH21	39:BF:187:VAL:HA	1.64	0.63
41:BH:153:LYS:N	41:BH:153:LYS:HD3	2.13	0.63
46:BQ:42:ILE:HG22	46:BQ:47:ILE:CD1	2.29	0.63
49:BT:65:LYS:HZ2	49:BT:66:VAL:N	1.97	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:25:LEU:N	51:BV:94:LEU:HD12	2.14	0.63
53:BX:73:ARG:N	53:BX:74:PRO:CD	2.61	0.63
1:CA:1049:U:H1'	1:CA:1201:A:N7	2.13	0.63
1:CA:250:A:H4'	1:CA:251:G:O5'	1.98	0.63
1:CA:579:G:H2'	1:CA:580:U:H6	1.64	0.63
9:CI:3:GLN:HG2	9:CI:20:ARG:NH2	2.14	0.63
18:CR:43:PHE:C	18:CR:44:LEU:HD12	2.19	0.63
19:CS:10:PHE:HZ	19:CS:70:LYS:HE2	1.64	0.63
26:D1:47:GLN:OE1	34:DA:2230:G:H1'	1.98	0.63
34:DA:1497:U:H5'	34:DA:1498:C:H5	1.64	0.63
34:DA:2116:G:H5'	34:DA:2117:A:OP2	1.99	0.63
34:DA:2571:C:C5'	34:DA:2572:A:H5''	2.29	0.63
34:DA:914:C:C2'	34:DA:915:C:H5'	2.26	0.63
38:DE:101:ARG:HB3	38:DE:201:THR:OG1	1.99	0.63
38:DE:52:LEU:H	38:DE:76:ARG:CB	2.12	0.63
39:DF:24:LEU:CB	39:DF:25:PRO:HD2	2.27	0.63
44:DO:63:VAL:HG23	44:DO:64:ARG:H	1.61	0.63
47:DR:50:HIS:O	47:DR:54:LEU:HB2	1.98	0.63
48:DS:17:ARG:O	48:DS:18:ILE:HG22	1.99	0.63
50:DU:74:LEU:HD21	50:DU:110:VAL:HG13	1.80	0.63
52:DW:83:LYS:O	52:DW:84:ARG:HD3	1.99	0.63
1:AA:1370:G:O2'	1:AA:1371:G:H5'	1.99	0.62
1:AA:1388:C:H2'	1:AA:1389:C:C6	2.34	0.62
1:AA:644:G:H2'	1:AA:645:C:H5'	1.81	0.62
4:AD:25:ARG:C	4:AD:27:TYR:H	2.02	0.62
10:AJ:30:SER:OG	10:AJ:81:THR:HG22	1.98	0.62
13:AM:79:LYS:O	13:AM:82:MET:HB3	1.99	0.62
18:AR:58:LEU:HD23	18:AR:62:GLU:HB3	1.81	0.62
23:AW:6:G:O2'	23:AW:7:A:H5'	1.99	0.62
26:B1:84:GLY:O	26:B1:85:LEU:HD23	1.98	0.62
34:BA:1899:G:O2'	34:BA:1900:A:H5''	1.98	0.62
34:BA:2283:C:H2'	34:BA:2284:C:C5'	2.29	0.62
34:BA:2426:A:H3'	34:BA:2427:C:C5'	2.28	0.62
34:BA:307:G:H21	34:BA:330:A:H62	1.47	0.62
34:BA:510:C:H2'	34:BA:511:U:O4'	1.98	0.62
35:BB:16:G:O2'	35:BB:17:C:H5'	1.98	0.62
40:BG:91:ARG:C	40:BG:91:ARG:HD2	2.19	0.62
41:BH:87:LEU:N	41:BH:131:VAL:O	2.32	0.62
42:BI:37:VAL:HG12	42:BI:38:LEU:N	2.14	0.62
50:BU:26:GLY:C	50:BU:28:ARG:N	2.50	0.62
51:BV:89:GLN:NE2	51:BV:90:PRO:HD2	2.14	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1054:C:N4	23:CY:34:G:H1'	2.12	0.62
1:CA:1241:G:H2'	1:CA:1242:C:H6	1.64	0.62
1:CA:178:C:O2'	1:CA:179:A:H5'	1.99	0.62
1:CA:728:A:H2'	1:CA:729:A:H8	1.63	0.62
2:CB:101:MET:HA	2:CB:108:ILE:HG13	1.79	0.62
2:CB:97:TRP:HZ2	2:CB:102:LEU:HD13	1.64	0.62
2:CB:115:LEU:HD23	2:CB:153:ARG:CZ	2.28	0.62
3:CC:112:SER:HB3	3:CC:115:LEU:HD12	1.81	0.62
18:CR:26:LEU:HD21	18:CR:42:ARG:HD2	1.81	0.62
23:CY:33:U:H5'	23:CY:34:G:OP2	1.99	0.62
25:D0:39:ARG:HH21	34:DA:2355:C:H1'	1.64	0.62
29:D4:6:HIS:CA	40:DG:67:LYS:HE3	2.29	0.62
34:DA:2283:C:H2'	34:DA:2284:C:C5'	2.29	0.62
34:DA:2631:G:N2	38:DE:61:ARG:NH1	2.47	0.62
34:DA:2864:G:C8	34:DA:2864:G:H5'	2.30	0.62
34:DA:310:A:OP1	54:DY:18:GLY:HA2	1.99	0.62
34:DA:485:C:O2'	34:DA:486:C:H5'	1.99	0.62
39:DF:198:ALA:O	39:DF:201:VAL:HG12	1.99	0.62
39:DF:20:LEU:O	39:DF:24:LEU:HD23	1.99	0.62
41:DH:127:GLU:HB3	41:DH:128:PRO:CD	2.24	0.62
41:DH:153:LYS:N	41:DH:153:LYS:HD3	2.14	0.62
47:DR:41:ALA:C	47:DR:43:GLU:H	2.02	0.62
53:DX:40:LYS:C	53:DX:42:ALA:H	2.01	0.62
53:DX:73:ARG:N	53:DX:74:PRO:CD	2.62	0.62
55:DZ:30:ASN:C	55:DZ:32:HIS:H	2.03	0.62
1:AA:302:G:H21	1:AA:556:C:C4'	2.12	0.62
3:AC:77:ILE:HA	3:AC:84:ILE:HG22	1.79	0.62
4:AD:30:LYS:C	4:AD:32:ALA:H	2.03	0.62
10:AJ:6:ILE:O	10:AJ:71:LEU:HD12	1.98	0.62
12:AL:119:LYS:C	12:AL:120:TYR:HD1	2.02	0.62
31:B6:10:LEU:HD22	31:B6:10:LEU:H	1.64	0.62
34:BA:207:A:H2'	34:BA:208:C:O4'	1.99	0.62
34:BA:30:G:O2'	34:BA:31:C:H5'	1.99	0.62
34:BA:604:G:H2'	34:BA:605:C:H6	1.64	0.62
38:BE:167:VAL:HG22	38:BE:170:LEU:HD11	1.79	0.62
41:BH:118:PRO:HB2	41:BH:121:ILE:HD12	1.81	0.62
44:BO:89:ASN:O	44:BO:91:LEU:HD22	1.98	0.62
46:BQ:11:LYS:HE2	46:BQ:85:LYS:CG	2.26	0.62
47:BR:113:LEU:HD12	47:BR:114:VAL:H	1.64	0.62
47:BR:4:LEU:O	47:BR:6:SER:N	2.32	0.62
53:BX:78:LYS:HD3	53:BX:78:LYS:O	1.98	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:644:G:H2'	1:CA:645:C:H5'	1.80	0.62
12:CL:82:VAL:HB	12:CL:106:ASP:OD1	2.00	0.62
16:CP:45:THR:HG22	16:CP:47:ASP:N	2.08	0.62
19:CS:41:VAL:HB	19:CS:44:MET:HG2	1.80	0.62
26:D1:40:ARG:NH1	26:D1:42:GLN:HA	2.13	0.62
27:D2:15:LYS:O	27:D2:16:LEU:HB3	1.99	0.62
28:D3:8:LEU:HB2	28:D3:28:LEU:HD13	1.79	0.62
34:DA:2182:G:H2'	34:DA:2183:C:C6	2.34	0.62
34:DA:70:G:H2'	34:DA:113:G:O2'	1.98	0.62
36:DC:41:VAL:HB	36:DC:178:ALA:HB3	1.81	0.62
36:DC:49:ILE:CD1	36:DC:49:ILE:H	2.11	0.62
34:DA:1789:A:OP1	37:DD:222:ARG:HG3	1.98	0.62
37:DD:223:GLY:O	37:DD:225:ALA:N	2.32	0.62
37:DD:268:ARG:NH1	37:DD:269:PHE:HE1	1.96	0.62
38:DE:23:VAL:HA	38:DE:184:VAL:O	1.98	0.62
40:DG:47:LYS:HE2	40:DG:82:LEU:HG	1.82	0.62
40:DG:60:LEU:HD22	40:DG:63:ILE:HD11	1.80	0.62
42:DI:91:SER:HB3	42:DI:121:LYS:HE3	1.79	0.62
43:DN:16:ILE:HG23	43:DN:54:VAL:HG22	1.81	0.62
45:DP:97:PRO:O	45:DP:98:GLU:HB3	1.97	0.62
46:DQ:29:PHE:O	46:DQ:30:GLY:O	2.16	0.62
47:DR:4:LEU:C	47:DR:6:SER:H	2.01	0.62
51:DV:19:LYS:HZ3	51:DV:20:LEU:N	1.96	0.62
51:DV:50:PRO:O	51:DV:51:VAL:HB	1.98	0.62
54:DY:76:CYS:SG	54:DY:77:PRO:HD3	2.39	0.62
54:DY:9:LYS:HG3	54:DY:11:ASP:OD2	1.99	0.62
55:DZ:95:PRO:HA	55:DZ:130:PRO:HD3	1.81	0.62
1:AA:628:G:O2'	1:AA:629:G:H5'	1.99	0.62
3:AC:43:LEU:O	3:AC:47:LEU:HB3	1.99	0.62
4:AD:110:PHE:CE2	4:AD:148:VAL:HG23	2.34	0.62
1:AA:1346:A:H5"	9:AI:120:ARG:HH12	1.63	0.62
9:AI:3:GLN:HG2	9:AI:20:ARG:NH2	2.14	0.62
11:AK:38:ASN:HD22	11:AK:38:ASN:N	1.96	0.62
13:AM:68:GLY:O	13:AM:70:LEU:N	2.32	0.62
18:AR:32:ARG:HA	18:AR:69:THR:HG21	1.80	0.62
30:B5:32:PRO:HD2	34:BA:2886:G:O2'	1.99	0.62
33:B8:13:ARG:NH2	34:BA:250:G:OP2	2.32	0.62
34:BA:1710:C:O2'	34:BA:1711:C:H5'	1.99	0.62
34:BA:2513:G:H2'	34:BA:2514:U:C6	2.33	0.62
34:BA:2772:C:H2'	34:BA:2773:C:H6	1.64	0.62
34:BA:717:G:H2'	34:BA:718:A:O4'	2.00	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BB:15:A:C3'	35:BB:16:G:H5'	2.28	0.62
35:BB:15:A:H5'	35:BB:16:G:H8	1.63	0.62
37:BD:138:VAL:HA	37:BD:165:ILE:CG2	2.28	0.62
37:BD:172:TYR:CD1	37:BD:186:HIS:HA	2.33	0.62
34:BA:1844:C:H5'	37:BD:256:GLY:O	1.99	0.62
39:BF:53:THR:CG2	39:BF:56:GLU:HB2	2.21	0.62
40:BG:70:VAL:HA	40:BG:90:LEU:HD12	1.79	0.62
44:BO:69:ILE:HD12	44:BO:69:ILE:N	2.15	0.62
48:BS:58:LEU:CD2	48:BS:68:GLN:HB2	2.29	0.62
49:BT:108:ARG:HH11	49:BT:108:ARG:CB	2.11	0.62
51:BV:5:VAL:HG21	51:BV:36:PRO:CG	2.28	0.62
54:BY:31:LEU:HB2	54:BY:36:ALA:H	1.64	0.62
1:CA:1060:C:H2'	1:CA:1061:G:H8	1.63	0.62
1:CA:779:C:O2'	1:CA:780:A:H5'	1.99	0.62
3:CC:107:GLN:CD	3:CC:107:GLN:H	2.02	0.62
7:CG:13:GLN:O	7:CG:24:THR:HG21	1.98	0.62
13:CM:49:THR:HG22	13:CM:51:ALA:H	1.64	0.62
15:CO:3:ILE:HG12	15:CO:3:ILE:O	1.99	0.62
20:CT:18:GLN:O	20:CT:22:ARG:HG3	1.99	0.62
26:D1:10:LYS:HG2	26:D1:14:VAL:HA	1.80	0.62
31:D6:10:LEU:H	31:D6:10:LEU:HD22	1.65	0.62
34:DA:1747:G:H2'	34:DA:1747(A):G:H8	1.63	0.62
34:DA:2024:G:O2'	34:DA:2025:C:H5'	1.99	0.62
34:DA:2092:U:H4'	34:DA:2093:G:O5'	2.00	0.62
34:DA:2330:G:O2'	34:DA:2331:G:H5'	1.99	0.62
34:DA:2580:U:H5'	38:DE:131:ALA:H	1.63	0.62
35:DB:40:U:H1'	35:DB:45:A:H61	1.64	0.62
34:DA:2511:U:O3'	38:DE:123:ALA:HB3	1.99	0.62
38:DE:93:VAL:HG21	38:DE:180:ASN:OD1	1.98	0.62
42:DI:71:ILE:CG1	42:DI:72:LEU:HD22	2.27	0.62
44:DO:69:ILE:N	44:DO:69:ILE:HD12	2.15	0.62
34:DA:389:G:N2	45:DP:71:VAL:HG12	2.13	0.62
48:DS:17:ARG:HG3	48:DS:18:ILE:N	2.14	0.62
51:DV:47:VAL:HG13	51:DV:48:GLY:N	2.13	0.62
54:DY:37:VAL:HG13	54:DY:69:ALA:HA	1.81	0.62
1:AA:625:G:O2'	1:AA:626:U:H5'	1.99	0.62
2:AB:165:VAL:HG23	2:AB:166:ASP:H	1.62	0.62
17:AQ:63:ARG:HG2	17:AQ:64:PRO:HD2	1.82	0.62
20:AT:18:GLN:O	20:AT:22:ARG:HG3	1.99	0.62
26:B1:89:GLU:HG2	26:B1:90:ILE:H	1.64	0.62
27:B2:49:LYS:HA	27:B2:53:LEU:HB3	1.80	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1162:G:N3	51:BV:91:TYR:HE1	1.96	0.62
34:BA:2162:G:H5'	34:BA:2171:A:H5''	1.82	0.62
34:BA:2348:U:C2'	34:BA:2349:G:C5'	2.75	0.62
34:BA:2722:G:H2'	34:BA:2723:C:C6	2.34	0.62
30:B5:43:HIS:HD2	34:BA:2815:C:O2'	1.82	0.62
34:BA:27:G:H1'	34:BA:513:A:N6	2.14	0.62
34:BA:893:C:H2'	34:BA:894:C:C5'	2.29	0.62
36:BC:41:VAL:HB	36:BC:178:ALA:HB3	1.81	0.62
38:BE:101:ARG:HB3	38:BE:201:THR:OG1	1.98	0.62
38:BE:26:ILE:HG22	38:BE:27:LEU:N	2.13	0.62
40:BG:127:GLY:HA2	40:BG:166:ASP:HB3	1.80	0.62
40:BG:25:TYR:CE2	40:BG:32:PRO:HD3	2.35	0.62
43:BN:120:LEU:CD1	43:BN:122:VAL:HG23	2.29	0.62
45:BP:143:GLY:C	45:BP:145:PRO:HD3	2.19	0.62
49:BT:28:VAL:CG2	49:BT:46:GLU:HA	2.30	0.62
49:BT:82:LEU:O	49:BT:83:ILE:C	2.37	0.62
50:BU:57:PHE:HA	50:BU:60:LEU:HB2	1.80	0.62
50:BU:88:ILE:O	50:BU:90:VAL:N	2.31	0.62
54:BY:47:LYS:O	54:BY:49:VAL:HG23	1.98	0.62
55:BZ:85:HIS:ND1	55:BZ:86:VAL:N	2.47	0.62
1:CA:1504:G:OP1	1:CA:1507:A:H4'	2.00	0.62
1:CA:353:A:H5'	1:CA:353:A:C8	2.32	0.62
1:CA:417:C:O2'	1:CA:418:C:H5'	2.00	0.62
1:CA:955:U:O2'	1:CA:956:U:H5'	1.99	0.62
2:CB:185:ILE:HG22	2:CB:199:TYR:CB	2.25	0.62
3:CC:70:VAL:HG12	3:CC:71:ALA:H	1.65	0.62
4:CD:58:LEU:HD23	4:CD:206:PHE:CE1	2.33	0.62
9:CI:126:SER:O	9:CI:127:LYS:HB3	1.98	0.62
17:CQ:63:ARG:HG2	17:CQ:64:PRO:HD2	1.81	0.62
30:D5:40:LYS:HE2	30:D5:46:CYS:HB3	1.82	0.62
34:DA:1131:G:O2'	34:DA:1132:A:H8	1.73	0.62
34:DA:2884:U:C2'	34:DA:2885:C:H5'	2.29	0.62
34:DA:893:C:H2'	34:DA:894:C:C5'	2.29	0.62
40:DG:140:ILE:O	40:DG:140:ILE:HD12	1.99	0.62
43:DN:57:ALA:CB	43:DN:124:ALA:HA	2.27	0.62
1:AA:1096:C:O2'	1:AA:1097:C:H5'	2.00	0.62
1:AA:1310:G:O2'	1:AA:1311:G:H5'	1.99	0.62
1:AA:1401:G:H2'	1:AA:1402:C:O4'	1.99	0.62
1:AA:277:C:O2'	1:AA:278:G:H5'	2.00	0.62
1:AA:648:A:H2'	1:AA:649:G:H8	1.64	0.62
5:AE:71:LEU:CD2	5:AE:115:VAL:HG13	2.29	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:6:ILE:N	8:AH:6:ILE:HD12	2.14	0.62
10:AJ:32:ALA:H	10:AJ:78:ASN:HD21	1.47	0.62
10:AJ:94:VAL:HG12	10:AJ:95:GLU:N	2.14	0.62
15:AO:75:PRO:O	15:AO:78:TYR:HB3	1.99	0.62
18:AR:53:ARG:HG3	18:AR:63:GLN:NE2	2.09	0.62
28:B3:54:VAL:HG12	28:B3:55:ARG:N	2.12	0.62
30:B5:59:GLU:O	30:B5:60:VAL:HG23	1.99	0.62
34:BA:1195:G:O2'	34:BA:1196:C:H5'	2.00	0.62
34:BA:1204:A:N1	34:BA:1241:A:H2	1.97	0.62
34:BA:1497:U:H5'	34:BA:1498:C:H5	1.64	0.62
34:BA:2345:G:N3	34:BA:2381:C:H2'	2.14	0.62
34:BA:608:A:OP1	39:BF:100:THR:HG21	1.99	0.62
34:BA:870:A:H5''	46:BQ:7:MET:HB2	1.81	0.62
36:BC:47:LEU:HD23	36:BC:47:LEU:N	2.14	0.62
38:BE:11:MET:H	49:BT:8:LYS:HE3	1.63	0.62
38:BE:154:LYS:HE3	38:BE:154:LYS:CA	2.27	0.62
41:BH:140:LYS:O	41:BH:144:VAL:HG23	1.99	0.62
47:BR:2:ARG:HD3	47:BR:5:LYS:HZ2	1.64	0.62
51:BV:19:LYS:HZ2	51:BV:20:LEU:H	1.48	0.62
55:BZ:166:SER:HB2	55:BZ:167:PRO:C	2.19	0.62
1:CA:1346:A:H5''	9:CI:120:ARG:HH12	1.65	0.62
1:CA:551:U:H2'	1:CA:552:U:H6	1.64	0.62
1:CA:936:C:H2'	1:CA:937:A:O4'	1.98	0.62
2:CB:144:ARG:HG3	2:CB:145:LEU:N	2.15	0.62
5:CE:129:ILE:O	5:CE:132:ALA:HB3	2.00	0.62
5:CE:110:LEU:HD21	5:CE:139:LEU:HD21	1.79	0.62
5:CE:57:LYS:O	5:CE:61:TYR:HD2	1.81	0.62
19:CS:9:VAL:O	19:CS:9:VAL:HG12	1.99	0.62
23:CW:28:G:H1	23:CW:42:C:H42	1.46	0.62
34:DA:1803:A:H2	34:DA:1822:G:N3	1.97	0.62
34:DA:671:C:O2'	34:DA:672:C:H5'	2.00	0.62
36:DC:76:ALA:HB3	36:DC:94:VAL:CG1	2.30	0.62
37:DD:35:LYS:CG	37:DD:64:ILE:HG23	2.30	0.62
38:DE:55:ASN:CG	38:DE:75:VAL:HG13	2.20	0.62
34:DA:2311:A:C2	40:DG:82:LEU:HD12	2.32	0.62
41:DH:158:HIS:O	41:DH:159:GLU:HB2	2.00	0.62
47:DR:5:LYS:HD2	47:DR:5:LYS:N	2.13	0.62
50:DU:56:ASP:O	50:DU:60:LEU:HG	1.99	0.62
51:DV:72:VAL:HG12	51:DV:73:SER:N	2.14	0.62
54:DY:38:ILE:HG22	54:DY:39:VAL:N	2.12	0.62
1:AA:1118:C:N4	1:AA:1155:G:H1	1.98	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:180:U:C2'	1:AA:181:G:H5''	2.24	0.62
1:AA:221:C:O2'	1:AA:222:U:H5'	1.98	0.62
5:AE:112:LEU:HD23	5:AE:112:LEU:N	2.13	0.62
1:AA:1342:C:H1'	9:AI:124:GLN:HE22	1.64	0.62
9:AI:5:TYR:OH	9:AI:7:THR:HA	1.99	0.62
12:AL:89:ARG:HH11	12:AL:89:ARG:HB2	1.65	0.62
19:AS:41:VAL:HB	19:AS:44:MET:HG2	1.79	0.62
34:BA:2323:G:H2'	34:BA:2324:C:O4'	1.98	0.62
34:BA:2571:C:C5'	34:BA:2572:A:H5''	2.30	0.62
34:BA:2870:C:H2'	34:BA:2871:C:O4'	1.99	0.62
34:BA:491:G:O2'	34:BA:492:A:H5'	2.00	0.62
36:BC:34:THR:O	36:BC:35:ALA:CB	2.48	0.62
38:BE:30:PRO:HD3	38:BE:180:ASN:ND2	2.13	0.62
46:BQ:44:ALA:HA	46:BQ:47:ILE:HD13	1.81	0.62
50:BU:31:SER:O	50:BU:33:ARG:N	2.32	0.62
51:BV:50:PRO:O	51:BV:51:VAL:HB	1.99	0.62
51:BV:5:VAL:HG21	51:BV:36:PRO:HB2	1.80	0.62
55:BZ:40:ASP:HB3	55:BZ:43:GLU:HG3	1.80	0.62
1:CA:1121:U:H2'	1:CA:1122:U:H6	1.64	0.62
2:CB:169:LYS:HD2	2:CB:170:GLU:OE2	1.99	0.62
2:CB:23:ARG:HH11	2:CB:23:ARG:HG3	1.63	0.62
3:CC:54:ARG:NH1	3:CC:56:ASP:HB2	2.10	0.62
4:CD:110:PHE:CE2	4:CD:148:VAL:HG23	2.35	0.62
11:CK:70:LYS:O	11:CK:73:MET:HB2	1.98	0.62
12:CL:18:VAL:HG23	12:CL:19:ARG:N	2.14	0.62
26:D1:78:LYS:NZ	26:D1:90:ILE:HA	2.15	0.62
34:DA:2723:C:H5''	47:DR:2:ARG:NE	2.15	0.62
34:DA:2728:U:O2'	34:DA:2729:G:H5'	1.99	0.62
36:DC:21:THR:O	36:DC:22:ILE:HD13	1.99	0.62
38:DE:182:LEU:C	38:DE:183:LEU:HD12	2.20	0.62
40:DG:45:GLU:HB2	40:DG:47:LYS:HG3	1.81	0.62
34:DA:806:C:OP2	45:DP:39:LYS:HD2	1.99	0.62
54:DY:31:LEU:HG	54:DY:34:LYS:HB2	1.81	0.62
55:DZ:70:LEU:HG	55:DZ:91:LEU:HD11	1.81	0.62
2:AB:44:LEU:HA	2:AB:47:THR:OG1	1.99	0.62
23:AW:51:U:H3	23:AW:63:G:H1	1.48	0.62
26:B1:11:ARG:HH11	26:B1:60:PHE:HA	1.65	0.62
28:B3:23:LEU:HD11	28:B3:50:VAL:HG11	1.81	0.62
33:B8:50:LEU:O	33:B8:52:LYS:N	2.28	0.62
34:BA:142:A:H5'	34:BA:142(A):C:OP2	1.99	0.62
34:BA:1842:G:H2'	34:BA:1843:C:C6	2.34	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:17:C:C5	34:BA:2180:U:H4'	2.34	0.62
34:BA:2824:C:H2'	34:BA:2825:C:O4'	2.00	0.62
34:BA:2893:G:H5'	34:BA:2894:G:C5'	2.27	0.62
34:BA:792:G:H5''	34:BA:793:A:H5'	1.80	0.62
36:BC:18:LYS:HB3	36:BC:22:ILE:HD11	1.80	0.62
41:BH:152:ARG:CB	41:BH:161:GLY:HA2	2.23	0.62
42:BI:71:ILE:HG13	42:BI:72:LEU:N	2.15	0.62
50:BU:112:ARG:O	50:BU:115:ALA:HB3	1.99	0.62
51:BV:62:LEU:CD2	51:BV:98:GLU:HA	2.30	0.62
54:BY:17:SER:HA	54:BY:71:LYS:HD2	1.81	0.62
54:BY:26:LYS:HG2	54:BY:27:VAL:H	1.65	0.62
34:BA:896:A:H5''	55:BZ:146:ILE:HD12	1.80	0.62
1:CA:1458:G:H2'	1:CA:1459:C:H6	1.65	0.62
1:CA:1514:C:O2'	1:CA:1515:C:H5'	2.00	0.62
1:CA:541:G:O2'	1:CA:542:G:H5'	2.00	0.62
13:CM:46:LYS:HG3	13:CM:47:ASP:N	2.14	0.62
13:CM:83:ASP:CG	13:CM:84:ILE:H	2.02	0.62
20:CT:57:ARG:HH11	20:CT:57:ARG:CB	2.06	0.62
28:D3:23:LEU:HD11	28:D3:50:VAL:HG11	1.82	0.62
34:DA:2387:U:H5'	34:DA:2388:A:OP2	2.00	0.62
34:DA:30:G:H2'	34:DA:31:C:C6	2.34	0.62
34:DA:30:G:O2'	34:DA:31:C:H5'	1.98	0.62
36:DC:18:LYS:HB3	36:DC:22:ILE:HD11	1.81	0.62
36:DC:49:ILE:HD12	36:DC:49:ILE:N	2.13	0.62
37:DD:92:ILE:HD13	37:DD:104:TYR:CD2	2.35	0.62
37:DD:172:TYR:CD1	37:DD:186:HIS:HA	2.34	0.62
38:DE:35:GLN:NE2	38:DE:37:ARG:HE	1.95	0.62
38:DE:55:ASN:HD21	38:DE:75:VAL:CG2	2.12	0.62
43:DN:120:LEU:CD1	43:DN:122:VAL:HG23	2.29	0.62
43:DN:78:TYR:CD1	43:DN:79:PRO:HD3	2.34	0.62
48:DS:36:TYR:N	48:DS:36:TYR:CD1	2.67	0.62
1:AA:1053:G:N7	1:AA:1200:C:H5''	2.14	0.62
1:AA:253:U:H2'	1:AA:254:G:H8	1.65	0.62
1:AA:336:C:H2'	1:AA:337:C:C6	2.33	0.62
3:AC:95:THR:HG21	3:AC:99:VAL:CG1	2.29	0.62
4:AD:65:ARG:HG3	4:AD:75:PHE:CD1	2.35	0.62
23:AW:39:U:C2'	23:AW:40:C:C5'	2.72	0.62
26:B1:11:ARG:HB3	26:B1:12:PRO:CD	2.30	0.62
26:B1:13:ILE:HG23	26:B1:14:VAL:N	2.12	0.62
27:B2:52:ASP:O	27:B2:53:LEU:O	2.17	0.62
34:BA:1322:A:O3'	52:BW:84:ARG:NH2	2.33	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1324:G:H3'	34:BA:1325:G:C5'	2.30	0.62
34:BA:2758:A:C3'	34:BA:2759:G:H5''	2.29	0.62
34:BA:2832:U:H4'	34:BA:2833:G:H5''	1.81	0.62
34:BA:286:C:C3'	34:BA:287:C:H5''	2.29	0.62
35:BB:74:U:H2'	35:BB:75:G:O4'	2.00	0.62
38:BE:117:MET:HA	38:BE:122:PHE:N	2.06	0.62
41:BH:19:VAL:HG11	41:BH:44:VAL:HG22	1.80	0.62
49:BT:3:ARG:O	49:BT:7:ILE:HG12	1.99	0.62
1:CA:1431:C:H2'	1:CA:1432:G:O4'	1.99	0.62
1:CA:579:G:H2'	1:CA:580:U:C6	2.35	0.62
1:CA:78:G:H22	1:CA:91:C:N4	1.92	0.62
2:CB:91:PRO:HG3	2:CB:154:LEU:HD12	1.82	0.62
2:CB:36:ARG:HB2	2:CB:41:ILE:CD1	2.30	0.62
5:CE:51:VAL:O	5:CE:55:VAL:HG23	2.00	0.62
8:CH:86:ILE:HG12	8:CH:135:CYS:HA	1.82	0.62
12:CL:45:PRO:HD3	12:CL:51:ALA:O	1.99	0.62
20:CT:82:SER:O	20:CT:86:ARG:HB2	1.99	0.62
25:D0:32:ARG:N	25:D0:35:ASN:ND2	2.47	0.62
32:D7:19:ARG:HG2	32:D7:19:ARG:NH1	2.13	0.62
34:DA:2672:G:C3'	34:DA:2673:G:H5''	2.30	0.62
34:DA:2828:C:O2'	34:DA:2829:C:H5'	1.99	0.62
34:DA:2887:U:H2'	34:DA:2888:C:H6	1.65	0.62
34:DA:491:G:O2'	34:DA:492:A:H5'	1.99	0.62
36:DC:47:LEU:N	36:DC:47:LEU:HD23	2.15	0.62
41:DH:85:LYS:HZ1	41:DH:145:ALA:HA	1.65	0.62
41:DH:37:VAL:HG12	41:DH:38:SER:N	2.14	0.62
44:DO:113:LYS:O	44:DO:117:LEU:HG	2.00	0.62
48:DS:48:LEU:N	48:DS:48:LEU:HD12	2.14	0.62
49:DT:65:LYS:HZ2	49:DT:66:VAL:N	1.98	0.62
50:DU:91:ASP:OD2	50:DU:96:ALA:HB2	1.99	0.62
53:DX:58:HIS:C	53:DX:59:VAL:HG22	2.20	0.62
53:DX:29:TRP:CZ3	53:DX:76:ARG:HG2	2.35	0.62
1:AA:403:C:O2'	1:AA:404:U:H5'	2.00	0.62
7:AG:32:ARG:O	7:AG:33:ASP:HB2	1.99	0.62
26:B1:26:ARG:HB2	26:B1:34:THR:CA	2.28	0.62
34:BA:1245:G:OP1	45:BP:16:ARG:HD2	2.00	0.62
34:BA:2295:C:O2'	34:BA:2296:U:H5'	1.99	0.62
34:BA:271(M):G:H2'	34:BA:271(N):U:C5'	2.30	0.62
34:BA:604:G:O2'	34:BA:605:C:H5'	1.99	0.62
37:BD:267:SER:HA	37:BD:270:ILE:CG1	2.29	0.62
48:BS:89:ARG:HB2	48:BS:97:ARG:HH22	1.64	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:2:PHE:O	51:BV:3:ALA:HB2	2.00	0.62
5:CE:12:LEU:O	5:CE:13:ILE:HD12	1.99	0.62
8:CH:89:PRO:HA	8:CH:92:ARG:NH1	2.15	0.62
10:CJ:50:ILE:HA	10:CJ:60:ARG:HB3	1.82	0.62
10:CJ:92:THR:HG23	10:CJ:93:GLY:H	1.62	0.62
13:CM:70:LEU:C	13:CM:70:LEU:HD23	2.20	0.62
26:D1:26:ARG:N	26:D1:26:ARG:HD3	2.13	0.62
28:D3:23:LEU:CD1	28:D3:50:VAL:HG11	2.30	0.62
30:D5:57:VAL:HB	30:D5:58:LEU:HD12	1.82	0.62
34:DA:1642:G:O2'	34:DA:1643:G:H5'	2.00	0.62
34:DA:2590:A:H2'	34:DA:2591:C:H6	1.64	0.62
34:DA:27:G:H1'	34:DA:513:A:N6	2.13	0.62
40:DG:153:ARG:O	40:DG:153:ARG:HG2	2.00	0.62
40:DG:166:ASP:O	40:DG:170:ARG:N	2.26	0.62
45:DP:33:ARG:O	45:DP:35:HIS:N	2.33	0.62
48:DS:89:ARG:CB	48:DS:97:ARG:HH12	2.12	0.62
51:DV:12:TYR:N	51:DV:12:TYR:HD2	1.97	0.62
51:DV:72:VAL:HA	51:DV:88:ARG:NH2	2.15	0.62
1:AA:805:C:H2'	1:AA:806:C:H6	1.64	0.62
10:AJ:16:LEU:HD23	10:AJ:94:VAL:HG13	1.82	0.62
12:AL:88:GLY:H	12:AL:98:TYR:HA	1.64	0.62
34:BA:1703:G:H2'	34:BA:1704:G:C8	2.35	0.62
34:BA:1899:G:N2	34:BA:1902:C:N4	2.47	0.62
34:BA:2283:C:C2'	34:BA:2284:C:H5'	2.28	0.62
34:BA:2287:A:C2	34:BA:2346:A:C2	2.88	0.62
34:BA:2730:C:O2'	34:BA:2731:G:H5'	1.99	0.62
35:BB:74:U:H2'	35:BB:75:G:C5'	2.30	0.62
37:BD:31:LYS:HA	37:BD:31:LYS:NZ	2.14	0.62
38:BE:55:ASN:HD21	38:BE:75:VAL:CG2	2.12	0.62
38:BE:69:LYS:O	38:BE:70:ALA:C	2.39	0.62
42:BI:110:ASP:C	42:BI:112:LYS:H	2.03	0.62
43:BN:42:TRP:HE3	43:BN:48:MET:HE1	1.65	0.62
46:BQ:42:ILE:N	46:BQ:42:ILE:HD12	2.15	0.62
54:BY:71:LYS:HZ2	54:BY:71:LYS:HB2	1.65	0.62
54:BY:9:LYS:HG3	54:BY:11:ASP:OD2	2.00	0.62
3:CC:102:ASN:O	3:CC:103:VAL:HG23	1.99	0.62
5:CE:131:ILE:O	5:CE:134:ALA:HB3	2.00	0.62
8:CH:11:THR:HA	8:CH:14:ARG:HH12	1.63	0.62
11:CK:18:ARG:HB3	11:CK:33:THR:OG1	2.00	0.62
12:CL:46:LYS:HG2	12:CL:47:LYS:N	2.05	0.62
12:CL:88:GLY:H	12:CL:98:TYR:HA	1.65	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:90:LEU:HA	13:CM:93:ARG:HB2	1.82	0.62
19:CS:39:THR:HG22	19:CS:40:ILE:N	2.15	0.62
26:D1:10:LYS:HG2	26:D1:14:VAL:C	2.20	0.62
26:D1:82:LEU:HG	26:D1:83:GLU:N	2.15	0.62
34:DA:1722:A:H2	34:DA:1740:G:H2'	1.65	0.62
34:DA:2283:C:C2'	34:DA:2284:C:H5'	2.30	0.62
38:DE:57:LYS:C	38:DE:59:VAL:H	2.03	0.62
46:DQ:20:ALA:HB2	46:DQ:99:PRO:CG	2.30	0.62
48:DS:17:ARG:CZ	48:DS:89:ARG:NH2	2.62	0.62
49:DT:92:GLY:C	49:DT:94:ALA:H	2.02	0.62
50:DU:95:LEU:HD12	51:DV:11:GLN:HG3	1.82	0.62
30:D5:20:ARG:HH12	52:DW:15:ARG:NE	1.97	0.62
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.00	0.61
1:AA:1442(A):G:H3'	1:AA:1442(B):A:C5'	2.30	0.61
3:AC:77:ILE:HG22	3:AC:81:GLY:HA2	1.81	0.61
4:AD:19:LEU:HD12	4:AD:19:LEU:H	1.64	0.61
5:AE:47:LYS:N	5:AE:47:LYS:HD3	2.14	0.61
6:AF:82:ARG:HB3	6:AF:82:ARG:HH11	1.63	0.61
10:AJ:97:GLU:C	10:AJ:98:ILE:HD12	2.20	0.61
17:AQ:66:SER:OG	17:AQ:69:LYS:HB3	2.00	0.61
34:BA:1317:A:H2'	34:BA:1318:C:H6	1.65	0.61
36:BC:76:ALA:HB3	36:BC:94:VAL:HG13	1.82	0.61
37:BD:94:LEU:C	37:BD:94:LEU:HD13	2.21	0.61
41:BH:105:LEU:HD22	41:BH:105:LEU:O	2.00	0.61
46:BQ:109:VAL:HG12	46:BQ:110:THR:H	1.65	0.61
49:BT:29:ARG:HG3	49:BT:30:VAL:HG13	1.80	0.61
53:BX:57:LEU:HD22	53:BX:76:ARG:HD2	1.82	0.61
53:BX:5:TYR:C	53:BX:7:VAL:H	2.03	0.61
3:CC:77:ILE:HG22	3:CC:81:GLY:HA2	1.82	0.61
9:CI:126:SER:O	9:CI:128:ARG:HD2	2.00	0.61
9:CI:53:VAL:HB	9:CI:92:TYR:CE2	2.35	0.61
12:CL:47:LYS:HB3	12:CL:48:PRO:CD	2.29	0.61
12:CL:91:LYS:O	12:CL:92:ASP:HB2	1.99	0.61
28:D3:2:PRO:O	28:D3:39:ASP:HB3	2.00	0.61
33:D8:62:LEU:N	33:D8:63:PRO:HD2	2.14	0.61
34:DA:1114:G:H2'	34:DA:1115:G:C5'	2.29	0.61
34:DA:1847:A:H3'	34:DA:1848:A:H5'	1.82	0.61
34:DA:2074:U:H2'	34:DA:2075:U:C6	2.35	0.61
34:DA:2720:U:H5'	34:DA:2721:A:OP2	2.00	0.61
34:DA:292:C:N4	34:DA:348:G:H1	1.97	0.61
34:DA:686:G:N2	34:DA:788:A:H61	1.98	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:D7:12:ARG:HG3	34:DA:686:G:O6	2.00	0.61
35:DB:16:G:O2'	35:DB:17:C:H5'	2.00	0.61
36:DC:18:LYS:O	36:DC:20:TYR:N	2.33	0.61
37:DD:142:VAL:HG23	37:DD:193:VAL:N	2.14	0.61
37:DD:30:GLU:CD	37:DD:63:ARG:HE	2.03	0.61
40:DG:125:PHE:HA	40:DG:130:ASN:O	1.99	0.61
44:DO:32:TYR:N	44:DO:32:TYR:HD1	1.98	0.61
48:DS:106:ARG:HD2	48:DS:106:ARG:O	2.00	0.61
49:DT:108:ARG:HB3	49:DT:108:ARG:HH11	1.64	0.61
49:DT:57:PHE:O	49:DT:59:THR:N	2.33	0.61
53:DX:5:TYR:C	53:DX:7:VAL:H	2.03	0.61
1:AA:1121:U:H2'	1:AA:1122:U:H6	1.65	0.61
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.35	0.61
1:AA:386:C:O2'	1:AA:387:U:H5'	1.99	0.61
4:AD:49:ARG:HE	4:AD:49:ARG:HA	1.65	0.61
5:AE:126:ARG:NH1	5:AE:126:ARG:HG3	2.10	0.61
18:AR:26:LEU:HD21	18:AR:42:ARG:HD2	1.81	0.61
26:B1:32:LYS:HA	34:BA:2396:G:O2'	2.00	0.61
27:B2:47:ASN:C	27:B2:49:LYS:N	2.46	0.61
34:BA:1171:G:H3'	34:BA:1173:G:O4'	2.01	0.61
34:BA:292:C:N4	34:BA:348:G:H1	1.96	0.61
35:BB:73:A:H2	55:BZ:34:ASN:HD21	1.48	0.61
36:BC:22:ILE:CG2	36:BC:25:ALA:HB2	2.31	0.61
37:BD:148:GLU:HB2	37:BD:151:LYS:HD2	1.82	0.61
37:BD:35:LYS:NZ	37:BD:65:ILE:HA	2.15	0.61
38:BE:52:LEU:H	38:BE:76:ARG:HB3	1.63	0.61
39:BF:57:VAL:CG1	39:BF:58:ALA:H	2.12	0.61
40:BG:115:ARG:NH2	40:BG:136:ARG:HG3	2.14	0.61
41:BH:37:VAL:HG12	41:BH:38:SER:N	2.15	0.61
41:BH:85:LYS:HZ1	41:BH:145:ALA:HA	1.65	0.61
43:BN:40:PRO:HA	50:BU:64:ARG:NH2	2.14	0.61
46:BQ:23:GLY:C	46:BQ:100:GLY:HA3	2.20	0.61
47:BR:45:ARG:HG3	47:BR:46:GLY:N	2.11	0.61
48:BS:30:ARG:NH2	48:BS:62:LYS:HD2	2.15	0.61
49:BT:29:ARG:HG2	49:BT:86:ILE:H	1.66	0.61
54:BY:17:SER:CA	54:BY:71:LYS:HD2	2.30	0.61
1:CA:603:U:O2'	1:CA:604:G:H5'	2.00	0.61
1:CA:737:A:H2'	1:CA:738:C:H6	1.62	0.61
2:CB:42:ILE:HD11	2:CB:202:PRO:HB2	1.80	0.61
4:CD:49:ARG:HE	4:CD:49:ARG:HA	1.64	0.61
10:CJ:98:ILE:HD12	10:CJ:98:ILE:N	2.15	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:D5:40:LYS:HD3	30:D5:46:CYS:HB3	1.82	0.61
33:D8:13:ARG:HB3	45:DP:63:PRO:HA	1.81	0.61
34:DA:1430:C:H2'	34:DA:1431:U:H6	1.66	0.61
34:DA:185:U:H4'	34:DA:218:A:H4'	1.81	0.61
34:DA:2377:A:H4'	48:DS:107:GLU:CB	2.29	0.61
34:DA:237:C:O2'	34:DA:238:C:H5'	1.99	0.61
34:DA:2722:G:H2'	34:DA:2723:C:C6	2.35	0.61
34:DA:919:G:H5''	35:DB:81:G:H1'	1.81	0.61
35:DB:3:C:H42	35:DB:118:G:H1	1.48	0.61
36:DC:51:PRO:HG3	36:DC:204:ALA:HB3	1.81	0.61
36:DC:22:ILE:CG2	36:DC:25:ALA:HB2	2.30	0.61
43:DN:82:LEU:H	43:DN:82:LEU:HD12	1.65	0.61
49:DT:108:ARG:NH1	49:DT:108:ARG:HB3	2.15	0.61
55:DZ:48:PHE:O	55:DZ:52:SER:N	2.32	0.61
1:AA:1258:G:H2'	1:AA:1259:C:C6	2.35	0.61
2:AB:41:ILE:HD12	2:AB:41:ILE:N	2.14	0.61
4:AD:8:VAL:O	4:AD:10:ARG:N	2.32	0.61
6:AF:9:VAL:HA	6:AF:59:TYR:O	2.00	0.61
8:AH:33:GLU:O	8:AH:36:LEU:HB2	1.99	0.61
9:AI:5:TYR:HA	9:AI:17:VAL:O	2.01	0.61
12:AL:32:PHE:CB	12:AL:84:LEU:HD21	2.29	0.61
17:AQ:25:ARG:HG3	17:AQ:25:ARG:O	1.99	0.61
19:AS:44:MET:SD	19:AS:44:MET:N	2.73	0.61
34:BA:1204:A:N1	34:BA:1241:A:C2	2.68	0.61
34:BA:2677:G:H2'	34:BA:2678:C:H6	1.65	0.61
34:BA:2697:G:O2'	34:BA:2698:U:H5'	2.00	0.61
34:BA:412:A:H2'	34:BA:413:C:H5'	1.80	0.61
34:BA:892:G:C8	34:BA:893:C:C4	2.88	0.61
36:BC:18:LYS:O	36:BC:20:TYR:N	2.32	0.61
37:BD:147:LEU:HD13	37:BD:155:LEU:CD1	2.27	0.61
37:BD:255:LYS:N	37:BD:255:LYS:HE3	2.15	0.61
38:BE:117:MET:CA	38:BE:122:PHE:H	2.08	0.61
38:BE:30:PRO:O	38:BE:32:PRO:HD3	2.00	0.61
38:BE:57:LYS:C	38:BE:59:VAL:H	2.03	0.61
47:BR:79:LEU:HD23	47:BR:83:ILE:HB	1.82	0.61
49:BT:98:LYS:HB3	49:BT:100:TYR:HE1	1.64	0.61
52:BW:10:VAL:HG23	52:BW:101:SER:O	2.00	0.61
53:BX:39:ILE:O	53:BX:42:ALA:HB3	2.00	0.61
1:CA:1053:G:N7	1:CA:1200:C:H5''	2.15	0.61
1:CA:1505:G:H5''	1:CA:1506:U:H5''	1.83	0.61
1:CA:271:C:H2'	1:CA:272:C:H6	1.65	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:797:C:OP1	11:CK:124:LYS:HE2	2.00	0.61
14:CN:6:LEU:HB3	14:CN:23:ARG:NH2	2.15	0.61
16:CP:4:ILE:HB	16:CP:66:PRO:HB3	1.81	0.61
34:DA:549:G:H2'	34:DA:551:G:H5''	1.82	0.61
36:DC:50:ASP:CG	36:DC:55:ASP:HA	2.21	0.61
40:DG:139:LEU:HD12	40:DG:140:ILE:N	2.15	0.61
46:DQ:127:ILE:HG22	46:DQ:128:LYS:N	2.09	0.61
50:DU:26:GLY:C	50:DU:28:ARG:N	2.51	0.61
51:DV:80:GLN:C	51:DV:80:GLN:OE1	2.38	0.61
53:DX:39:ILE:O	53:DX:42:ALA:HB3	2.00	0.61
54:DY:15:VAL:O	54:DY:16:ALA:HB2	1.99	0.61
54:DY:20:TYR:CE1	54:DY:42:VAL:HG22	2.35	0.61
55:DZ:10:ARG:NH2	55:DZ:26:GLY:N	2.47	0.61
1:AA:1151:A:HO2'	1:AA:1152:A:H8	1.47	0.61
12:AL:32:PHE:HB3	12:AL:84:LEU:CD2	2.27	0.61
26:B1:89:GLU:N	26:B1:89:GLU:CD	2.50	0.61
27:B2:14:ARG:CZ	27:B2:57:ILE:CG2	2.76	0.61
34:BA:1278:A:O2'	34:BA:1279:G:H5'	2.00	0.61
34:BA:1441:G:O2'	34:BA:1442:G:H5'	1.99	0.61
34:BA:1642:G:O2'	34:BA:1643:G:H5'	2.01	0.61
34:BA:1773:A:H2'	34:BA:1774:C:H5'	1.81	0.61
34:BA:2040:C:H2'	34:BA:2041:U:H6	1.66	0.61
34:BA:2186:G:H2'	34:BA:2187:G:H5''	1.82	0.61
34:BA:2330:G:O2'	34:BA:2331:G:H5'	2.00	0.61
34:BA:2807:G:H1	34:BA:2892:A:H62	1.48	0.61
36:BC:74:VAL:HA	36:BC:119:VAL:CB	2.30	0.61
39:BF:78:ILE:N	39:BF:78:ILE:HD13	2.08	0.61
43:BN:15:LEU:HD21	43:BN:55:VAL:CG2	2.30	0.61
43:BN:82:LEU:H	43:BN:82:LEU:HD12	1.66	0.61
46:BQ:55:VAL:HG23	55:BZ:178:GLU:HB3	1.80	0.61
47:BR:45:ARG:CG	47:BR:46:GLY:H	2.09	0.61
48:BS:85:VAL:HG23	48:BS:106:ARG:CB	2.28	0.61
1:CA:403:C:O2'	1:CA:404:U:H5'	2.00	0.61
1:CA:797:C:O2'	1:CA:798:G:H5'	1.99	0.61
2:CB:141:GLU:O	2:CB:145:LEU:HB2	2.01	0.61
4:CD:8:VAL:O	4:CD:10:ARG:N	2.30	0.61
7:CG:84:ASN:OD1	23:CW:33:U:H5''	2.01	0.61
8:CH:28:ALA:HA	8:CH:59:LEU:HD21	1.82	0.61
34:DA:2415:G:H2'	34:DA:2416:C:C6	2.35	0.61
34:DA:2701:C:C3'	34:DA:2702:U:H5''	2.15	0.61
34:DA:2735:G:O2'	34:DA:2736:G:H5''	2.00	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2870:C:H2'	34:DA:2871:C:O4'	1.99	0.61
45:DP:17:LYS:C	45:DP:19:VAL:N	2.54	0.61
46:DQ:42:ILE:N	46:DQ:42:ILE:HD12	2.16	0.61
46:DQ:6:ARG:O	46:DQ:6:ARG:HG3	2.00	0.61
48:DS:89:ARG:O	48:DS:92:TYR:CG	2.54	0.61
50:DU:92:ARG:C	50:DU:94:ASN:N	2.54	0.61
51:DV:73:SER:HB2	51:DV:75:PHE:CZ	2.36	0.61
54:DY:31:LEU:HB2	54:DY:36:ALA:H	1.65	0.61
54:DY:75:ILE:HD11	54:DY:79:CYS:CA	2.31	0.61
46:DQ:140:ALA:CB	55:DZ:99:TYR:HB2	2.30	0.61
1:AA:1320:C:H5'	19:AS:70:LYS:HG3	1.83	0.61
1:AA:1431:C:C2'	1:AA:1432:G:H5'	2.31	0.61
1:AA:35:G:H2'	1:AA:36:C:C6	2.36	0.61
1:AA:707:C:O2'	1:AA:708:C:H5'	2.00	0.61
7:AG:38:LEU:O	7:AG:42:ILE:HG13	2.01	0.61
9:AI:103:THR:HG22	9:AI:105:ASP:N	2.15	0.61
9:AI:113:LYS:H	9:AI:113:LYS:HD2	1.64	0.61
10:AJ:98:ILE:N	10:AJ:98:ILE:HD12	2.15	0.61
19:AS:9:VAL:HG12	19:AS:9:VAL:O	1.99	0.61
23:AW:48:C:H2'	23:AW:59:U:H4'	1.81	0.61
30:B5:50:GLY:HA3	30:B5:56:LYS:HG2	1.82	0.61
30:B5:6:VAL:HG13	30:B5:7:PRO:HD2	1.81	0.61
34:BA:1000:A:H5'	34:BA:1001:A:OP2	2.00	0.61
34:BA:2277:G:C2'	34:BA:2278:A:H5'	2.29	0.61
34:BA:2728:U:O2'	34:BA:2729:G:H5'	2.00	0.61
34:BA:2779:U:H1'	34:BA:2781:A:C5	2.35	0.61
34:BA:2864:G:O2'	34:BA:2865:U:H5'	1.99	0.61
34:BA:706:A:H2'	34:BA:707:G:O4'	2.00	0.61
35:BB:3:C:N4	35:BB:118:G:H1	1.99	0.61
37:BD:268:ARG:NH1	37:BD:269:PHE:HE1	1.99	0.61
37:BD:35:LYS:HZ1	37:BD:65:ILE:HA	1.63	0.61
37:BD:83:GLU:HB2	37:BD:92:ILE:HD11	1.81	0.61
39:BF:9:ILE:HG23	39:BF:13:SER:O	2.00	0.61
40:BG:19:LEU:HD22	40:BG:23:PHE:HE1	1.64	0.61
41:BH:158:HIS:O	41:BH:159:GLU:HB2	1.99	0.61
44:BO:63:VAL:CG2	44:BO:64:ARG:N	2.63	0.61
47:BR:54:LEU:HD21	47:BR:65:LEU:HB3	1.81	0.61
55:BZ:40:ASP:HB3	55:BZ:43:GLU:CG	2.30	0.61
1:CA:1019:C:O2'	1:CA:1020:U:H5'	2.01	0.61
1:CA:1227:A:H2'	1:CA:1228:C:O5'	2.00	0.61
1:CA:1418:A:C2	1:CA:1483:A:C2	2.88	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:389:A:H2'	1:CA:390:C:H5'	1.81	0.61
1:CA:683:G:H2'	1:CA:684:A:C8	2.35	0.61
1:CA:707:C:OP1	11:CK:85:ARG:NH1	2.33	0.61
2:CB:197:VAL:CG1	2:CB:200:ILE:HG12	2.31	0.61
9:CI:113:LYS:H	9:CI:113:LYS:HD2	1.65	0.61
34:DA:1230:C:H2'	34:DA:1231:G:H8	1.65	0.61
34:DA:2103:C:C3'	34:DA:2104:G:H5''	2.25	0.61
34:DA:2523:G:H8	34:DA:2523:G:H5'	1.66	0.61
34:DA:271(P):C:H5''	42:DI:45:LYS:HE3	1.80	0.61
34:DA:2845:G:OP1	49:DT:56:GLY:N	2.33	0.61
34:DA:285:C:H3'	34:DA:286:C:H5''	1.82	0.61
34:DA:2807:G:H1	34:DA:2892:A:H62	1.48	0.61
34:DA:674:G:P	39:DF:54:ARG:HH22	2.24	0.61
36:DC:34:THR:O	36:DC:35:ALA:CB	2.49	0.61
38:DE:30:PRO:HD3	38:DE:180:ASN:ND2	2.14	0.61
39:DF:80:ALA:O	39:DF:83:PHE:HB2	2.00	0.61
42:DI:127:VAL:HG22	42:DI:139:GLN:CG	2.31	0.61
46:DQ:109:VAL:HG12	46:DQ:110:THR:H	1.65	0.61
48:DS:89:ARG:HB2	48:DS:97:ARG:HH22	1.64	0.61
44:DO:104:ARG:HH12	49:DT:35:LYS:HD3	1.65	0.61
1:AA:123:C:H42	1:AA:238:G:H1	1.48	0.61
1:AA:782:A:H2'	1:AA:783:C:H5'	1.83	0.61
6:AF:18:GLN:O	6:AF:21:LEU:HB2	2.00	0.61
20:AT:56:MET:O	20:AT:59:ALA:HB3	2.00	0.61
22:AV:52:G:O2'	22:AV:53:G:H8	1.77	0.61
34:BA:1259:G:O2'	34:BA:1260:G:H5'	2.01	0.61
34:BA:1907:G:O2'	34:BA:1908:C:H5'	2.00	0.61
34:BA:2290:G:H5'	34:BA:2290:G:H8	1.66	0.61
34:BA:742:G:O2'	34:BA:743:G:H5'	1.99	0.61
38:BE:176:ILE:N	38:BE:176:ILE:HD12	2.15	0.61
38:BE:4:ILE:O	38:BE:4:ILE:HG23	2.00	0.61
33:B8:13:ARG:HB3	45:BP:63:PRO:HA	1.82	0.61
48:BS:17:ARG:O	48:BS:18:ILE:HG22	2.00	0.61
48:BS:42:ASP:C	48:BS:44:LYS:H	2.04	0.61
48:BS:87:PHE:HB2	48:BS:106:ARG:HD3	1.81	0.61
52:BW:25:ARG:HH11	52:BW:25:ARG:CB	2.08	0.61
54:BY:16:ALA:HA	54:BY:21:LYS:HD2	1.80	0.61
54:BY:38:ILE:N	54:BY:66:PRO:O	2.34	0.61
54:BY:75:ILE:HD12	54:BY:76:CYS:N	2.14	0.61
1:CA:1320:C:H5'	19:CS:70:LYS:HG3	1.81	0.61
1:CA:27:G:O2'	1:CA:28:G:H5'	1.99	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:10:PHE:HD2	3:CC:11:ARG:NH1	1.99	0.61
13:CM:31:LYS:HA	13:CM:34:LEU:HD12	1.83	0.61
17:CQ:14:LYS:HB2	17:CQ:14:LYS:NZ	2.15	0.61
18:CR:53:ARG:HG3	18:CR:63:GLN:NE2	2.10	0.61
25:D0:38:VAL:HB	25:D0:59:LEU:HD12	1.81	0.61
31:D6:10:LEU:CD1	33:D8:36:LYS:HD3	2.31	0.61
34:DA:1403:C:H5''	34:DA:1471:A:H1'	1.82	0.61
34:DA:2774:C:H2'	34:DA:2775:A:O4'	2.00	0.61
34:DA:870:A:H5''	46:DQ:7:MET:HB2	1.82	0.61
38:DE:30:PRO:O	38:DE:32:PRO:HD3	2.01	0.61
48:DS:89:ARG:CB	48:DS:97:ARG:HH22	2.13	0.61
52:DW:59:VAL:CG1	52:DW:60:ASN:N	2.53	0.61
1:AA:178:C:O2'	1:AA:179:A:H5'	2.00	0.61
2:AB:115:LEU:HD23	2:AB:153:ARG:CZ	2.30	0.61
2:AB:103:THR:HA	2:AB:180:LEU:HD11	1.83	0.61
5:AE:57:LYS:O	5:AE:61:TYR:HD2	1.84	0.61
10:AJ:40:LEU:CD2	10:AJ:40:LEU:H	2.12	0.61
12:AL:45:PRO:HD3	12:AL:51:ALA:O	2.01	0.61
17:AQ:38:ARG:HA	17:AQ:38:ARG:HE	1.65	0.61
22:AV:17:C:H5''	22:AV:17(A):U:C6	2.35	0.61
34:BA:1114:G:H2'	34:BA:1115:G:C5'	2.31	0.61
34:BA:237:C:O2'	34:BA:238:C:H5'	2.00	0.61
34:BA:661:C:H4'	45:BP:18:ARG:HG2	1.83	0.61
37:BD:235:GLY:O	37:BD:237:GLU:HG2	2.01	0.61
45:BP:16:ARG:HG3	45:BP:16:ARG:NH1	2.14	0.61
47:BR:113:LEU:HD12	47:BR:114:VAL:N	2.15	0.61
38:BE:11:MET:N	49:BT:8:LYS:HE3	2.16	0.61
50:BU:92:ARG:O	50:BU:95:LEU:N	2.33	0.61
51:BV:5:VAL:CG2	51:BV:36:PRO:HB2	2.31	0.61
51:BV:73:SER:HB2	51:BV:75:PHE:CZ	2.35	0.61
52:BW:59:VAL:CG1	52:BW:60:ASN:N	2.56	0.61
54:BY:15:VAL:O	54:BY:16:ALA:HB2	2.01	0.61
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.36	0.61
4:CD:11:LEU:O	4:CD:13:ARG:O	2.18	0.61
12:CL:23:LYS:O	12:CL:24:VAL:HG23	2.01	0.61
12:CL:6:THR:N	12:CL:9:GLN:HE21	1.92	0.61
30:D5:32:PRO:HD2	34:DA:2886:G:O2'	2.01	0.61
34:DA:2571:C:H5'	34:DA:2572:A:H5''	1.83	0.61
34:DA:492:A:H2'	34:DA:493:G:O4'	2.01	0.61
41:DH:103:LEU:H	41:DH:103:LEU:HD23	1.65	0.61
41:DH:61:HIS:O	41:DH:65:HIS:N	2.31	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:77:LEU:HD11	42:DI:101:LEU:HD22	1.81	0.61
42:DI:58:LEU:HA	42:DI:61:ARG:NH1	2.15	0.61
43:DN:96:GLU:HG2	43:DN:97:ARG:H	1.65	0.61
44:DO:20:MET:O	44:DO:41:ALA:HB1	2.01	0.61
50:DU:79:PHE:C	50:DU:79:PHE:HD2	2.03	0.61
51:DV:24:LYS:HA	51:DV:94:LEU:HD12	1.82	0.61
51:DV:72:VAL:O	51:DV:73:SER:HB3	2.01	0.61
54:DY:48:ALA:O	54:DY:58:GLY:HA3	1.99	0.61
1:AA:1192:C:H2'	1:AA:1193:G:O4'	2.01	0.61
5:AE:102:ALA:HB1	5:AE:106:PRO:HG2	1.82	0.61
11:AK:43:SER:OG	11:AK:47:VAL:HG11	2.01	0.61
12:AL:18:VAL:HG23	12:AL:19:ARG:N	2.15	0.61
16:AP:34:GLU:OE2	16:AP:55:ARG:HD3	2.00	0.61
34:BA:1227:G:OP1	50:BU:13:LYS:HD3	2.01	0.61
34:BA:1504:C:O2'	34:BA:1505:C:C5'	2.48	0.61
34:BA:2030:A:H5''	34:BA:2031:A:OP1	2.01	0.61
34:BA:2658:C:O2	34:BA:2658:C:H2'	1.99	0.61
34:BA:588:U:H2'	34:BA:589:C:C6	2.35	0.61
34:BA:659:C:H6	34:BA:659:C:C5'	2.14	0.61
34:BA:1654:A:C2	38:BE:113:PHE:CD1	2.88	0.61
38:BE:55:ASN:CG	38:BE:75:VAL:HG13	2.21	0.61
45:BP:80:TYR:CE2	45:BP:111:ARG:HG2	2.35	0.61
45:BP:115:LEU:HA	45:BP:134:ALA:CB	2.29	0.61
51:BV:72:VAL:HA	51:BV:88:ARG:NH2	2.15	0.61
1:CA:386:C:O2'	1:CA:387:U:H5'	2.00	0.61
2:CB:114:ARG:HA	2:CB:117:GLU:HG3	1.82	0.61
3:CC:64:VAL:HG21	3:CC:99:VAL:HG12	1.83	0.61
4:CD:126:ILE:HG22	4:CD:127:THR:N	2.16	0.61
5:CE:36:ASP:O	5:CE:37:ARG:HB2	2.00	0.61
8:CH:20:TYR:HD1	8:CH:65:TYR:CD2	2.19	0.61
10:CJ:97:GLU:C	10:CJ:98:ILE:HD12	2.20	0.61
25:D0:43:THR:HG22	34:DA:2331:G:O2'	2.00	0.61
28:D3:7:LYS:C	28:D3:54:VAL:HG13	2.21	0.61
34:DA:1019:U:HO2'	34:DA:1021:A:H2	1.47	0.61
34:DA:1221(A):C:H2'	34:DA:1222:C:H6	1.65	0.61
34:DA:1665:A:O2'	34:DA:1666:G:H5'	2.00	0.61
34:DA:2186:G:H2'	34:DA:2187:G:H5''	1.82	0.61
34:DA:2345:G:N3	34:DA:2381:C:H2'	2.15	0.61
34:DA:2640:G:C8	34:DA:2640:G:H5'	2.28	0.61
34:DA:2863:C:H2'	34:DA:2864:G:H5''	1.83	0.61
34:DA:473:G:H5''	34:DA:508:G:N2	2.15	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:659:C:H5'	34:DA:659:C:H6	1.65	0.61
38:DE:26:ILE:HG22	38:DE:27:LEU:N	2.15	0.61
41:DH:76:VAL:HG12	41:DH:77:LYS:N	2.16	0.61
43:DN:42:TRP:HA	43:DN:48:MET:HE1	1.83	0.61
47:DR:100:LEU:HD23	47:DR:112:ALA:HA	1.82	0.61
49:DT:50:ILE:HD11	49:DT:64:ARG:CB	2.31	0.61
51:DV:51:VAL:HG12	51:DV:52:VAL:N	2.15	0.61
55:DZ:152:ALA:HB1	55:DZ:167:PRO:HB2	1.83	0.61
1:AA:1003:G:C2	1:AA:1004:A:H1'	2.36	0.61
1:AA:1070:U:O2'	1:AA:1071:C:H5'	2.01	0.61
1:AA:1520:G:O2'	1:AA:1521:G:H5'	2.01	0.61
1:AA:1522:U:H2'	1:AA:1523:G:C8	2.32	0.61
1:AA:683:G:H2'	1:AA:684:A:C8	2.36	0.61
7:AG:13:GLN:O	7:AG:24:THR:HG21	2.00	0.61
7:AG:93:PRO:HA	7:AG:96:GLN:HB2	1.81	0.61
12:AL:82:VAL:HB	12:AL:106:ASP:OD1	2.00	0.61
23:AW:45:U:O2'	23:AW:46:G:H5'	2.00	0.61
31:B6:36:LEU:HD13	31:B6:50:ARG:CZ	2.31	0.61
32:B7:19:ARG:NH1	32:B7:19:ARG:HG2	2.15	0.61
34:BA:1001:A:H2'	34:BA:1002:G:O4'	2.00	0.61
34:BA:1045:A:H3'	34:BA:1045:A:N3	2.15	0.61
34:BA:145:G:H2'	34:BA:146:G:C5'	2.21	0.61
34:BA:1750:G:O2'	34:BA:1751:C:H5'	2.01	0.61
34:BA:2051:A:H5'	34:BA:2578:G:O4'	2.00	0.61
34:BA:2735:G:O2'	34:BA:2736:G:H5''	2.01	0.61
37:BD:126:GLN:O	37:BD:193:VAL:HG11	2.00	0.61
38:BE:197:ILE:HD11	38:BE:199:ARG:HH22	1.66	0.61
46:BQ:52:VAL:CG1	46:BQ:53:ALA:H	2.10	0.61
47:BR:11:ASN:O	47:BR:12:ARG:HB2	2.01	0.61
47:BR:63:ARG:HA	47:BR:80:PHE:CZ	2.35	0.61
48:BS:89:ARG:O	48:BS:92:TYR:CG	2.54	0.61
49:BT:108:ARG:NH1	49:BT:108:ARG:HB3	2.16	0.61
51:BV:21:ARG:CD	51:BV:21:ARG:H	2.10	0.61
53:BX:55:ASN:HB2	53:BX:78:LYS:HD2	1.83	0.61
1:CA:1320:C:H5'	19:CS:70:LYS:CG	2.31	0.61
5:CE:71:LEU:CD2	5:CE:115:VAL:HG13	2.31	0.61
7:CG:38:LEU:O	7:CG:42:ILE:HG13	2.01	0.61
34:DA:1496:A:H8	34:DA:1577:C:HO2'	1.47	0.61
34:DA:1697:G:C5'	34:DA:1698:A:H5''	2.31	0.61
34:DA:1887:C:H2'	34:DA:1888:G:H5''	1.82	0.61
34:DA:2208:A:H1'	34:DA:2219:G:C4	2.35	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:542:C:N4	34:DA:543:C:H41	1.98	0.61
35:DB:30:C:OP2	48:DS:32:LEU:HD11	1.99	0.61
37:DD:35:LYS:HZ1	37:DD:65:ILE:HA	1.66	0.61
44:DO:89:ASN:O	44:DO:91:LEU:HD22	2.01	0.61
45:DP:16:ARG:NH1	45:DP:16:ARG:HG3	2.16	0.61
55:DZ:128:VAL:CG2	55:DZ:161:VAL:HG22	2.31	0.61
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.35	0.61
1:AA:539:A:H2'	1:AA:540:G:H8	1.64	0.61
3:AC:11:ARG:HG2	3:AC:11:ARG:HH11	1.65	0.61
4:AD:17:VAL:HG11	4:AD:197:PRO:CB	2.31	0.61
5:AE:36:ASP:OD2	5:AE:38:GLN:HB2	2.01	0.61
9:AI:10:ARG:HD3	9:AI:75:ASP:HB3	1.83	0.61
10:AJ:80:LYS:HZ3	10:AJ:80:LYS:HB2	1.66	0.61
10:AJ:49:VAL:HG13	14:AN:41:ARG:HB2	1.82	0.61
21:AU:5:ASP:O	21:AU:11:GLY:HA3	2.01	0.61
25:B0:32:ARG:N	25:B0:35:ASN:ND2	2.48	0.61
26:B1:66:HIS:C	26:B1:68:PRO:HD2	2.21	0.61
34:BA:1114:G:C2'	34:BA:1115:G:H5''	2.31	0.61
34:BA:1464:C:HO2'	34:BA:1528:A:H8	1.49	0.61
34:BA:2637:U:H6	34:BA:2637:U:H5'	1.65	0.61
37:BD:34:VAL:O	37:BD:34:VAL:HG13	2.01	0.61
41:BH:103:LEU:HD23	41:BH:103:LEU:H	1.65	0.61
42:BI:77:LEU:O	42:BI:78:THR:HB	2.01	0.61
44:BO:18:LYS:HB2	44:BO:45:GLU:HG2	1.83	0.61
49:BT:50:ILE:N	49:BT:50:ILE:CD1	2.62	0.61
52:BW:83:LYS:O	52:BW:84:ARG:HD3	2.01	0.61
1:CA:1144:G:H21	1:CA:1146:A:H62	1.49	0.61
1:CA:1346:A:N1	1:CA:1374:A:H5''	2.14	0.61
1:CA:805:C:H2'	1:CA:806:C:H6	1.65	0.61
2:CB:193:ASP:OD2	2:CB:196:LEU:HD11	2.00	0.61
7:CG:113:GLU:HB2	7:CG:119:ARG:HG2	1.83	0.61
11:CK:44:SER:H	11:CK:47:VAL:CG2	2.14	0.61
12:CL:92:ASP:O	12:CL:93:LEU:HD23	2.00	0.61
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.33	0.61
17:CQ:66:SER:OG	17:CQ:69:LYS:HB3	2.01	0.61
19:CS:35:SER:C	19:CS:37:ARG:H	2.02	0.61
30:D5:31:VAL:HB	30:D5:32:PRO:HD2	1.82	0.61
34:DA:1204:A:N1	34:DA:1241:A:H2	1.98	0.61
34:DA:1840:G:H1	34:DA:1902:C:N4	1.96	0.61
34:DA:2779:U:H1'	34:DA:2781:A:C5	2.36	0.61
34:DA:307:G:H21	34:DA:330:A:H62	1.48	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:491:G:H2'	34:DA:492:A:C8	2.35	0.61
34:DA:993:G:H5''	51:DV:75:PHE:CE2	2.36	0.61
37:DD:35:LYS:HG2	37:DD:64:ILE:CG2	2.31	0.61
37:DD:25:THR:HG21	37:DD:82:ILE:N	2.15	0.61
38:DE:197:ILE:O	38:DE:197:ILE:HG13	2.01	0.61
39:DF:199:TRP:CZ3	39:DF:203:GLN:HG3	2.35	0.61
46:DQ:35:VAL:HG23	46:DQ:100:GLY:O	2.00	0.61
1:AA:1288:A:H2'	1:AA:1289:A:C8	2.36	0.60
1:AA:271:C:H2'	1:AA:272:C:H6	1.66	0.60
8:AH:30:ARG:HB3	8:AH:30:ARG:HH11	1.65	0.60
19:AS:58:VAL:HG23	19:AS:58:VAL:O	2.00	0.60
22:AV:23:C:H2'	22:AV:24:U:C6	2.36	0.60
34:BA:1665:A:O2'	34:BA:1666:G:H5'	2.01	0.60
34:BA:1747:G:H2'	34:BA:1747(A):G:H8	1.66	0.60
34:BA:419:C:O2'	34:BA:420:C:H5'	2.00	0.60
36:BC:191:ALA:O	36:BC:193:ILE:N	2.33	0.60
39:BF:125:LEU:HD21	39:BF:199:TRP:CD1	2.36	0.60
42:BI:98:ALA:CB	42:BI:109:ILE:HD13	2.30	0.60
43:BN:78:TYR:CD1	43:BN:79:PRO:CD	2.84	0.60
50:BU:91:ASP:OD2	50:BU:96:ALA:HB2	2.01	0.60
1:CA:1118:C:N4	1:CA:1155:G:H1	1.98	0.60
3:CC:120:VAL:O	3:CC:124:ILE:HD12	2.00	0.60
3:CC:43:LEU:O	3:CC:47:LEU:HB3	2.01	0.60
4:CD:117:ALA:O	4:CD:121:VAL:HG23	2.00	0.60
6:CF:18:GLN:O	6:CF:21:LEU:HB2	2.00	0.60
9:CI:10:ARG:HD3	9:CI:75:ASP:HB3	1.82	0.60
14:CN:21:TYR:OH	14:CN:23:ARG:NH2	2.34	0.60
23:CW:39:U:H2'	23:CW:40:C:H5'	1.83	0.60
33:D8:32:LEU:HD23	33:D8:35:GLN:O	2.01	0.60
34:DA:1114:G:C2'	34:DA:1115:G:H5''	2.30	0.60
34:DA:1259:G:O2'	34:DA:1260:G:H5'	2.01	0.60
34:DA:1314:C:C6	34:DA:1314:C:H5'	2.35	0.60
34:DA:1411:C:H2'	34:DA:1412:A:C8	2.35	0.60
34:DA:1785:A:OP2	34:DA:1982:C:H5'	2.00	0.60
34:DA:659:C:C5'	34:DA:659:C:H6	2.13	0.60
34:DA:71:A:H5'	34:DA:71:A:H8	1.64	0.60
39:DF:155:LEU:HD12	39:DF:174:VAL:O	2.01	0.60
40:DG:41:GLN:HB3	40:DG:43:LEU:HD13	1.83	0.60
45:DP:83:VAL:CG1	45:DP:112:LEU:HD21	2.31	0.60
46:DQ:44:ALA:HA	46:DQ:47:ILE:HD13	1.82	0.60
48:DS:34:HIS:CD2	48:DS:54:LEU:HB2	2.35	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DT:53:ARG:O	49:DT:53:ARG:HD3	2.00	0.60
43:DN:42:TRP:H	50:DU:64:ARG:HD2	1.65	0.60
51:DV:63:GLY:O	51:DV:64:HIS:HB3	1.99	0.60
1:AA:1095:U:H2'	1:AA:1096:C:H6	1.65	0.60
1:AA:1456:G:H2'	1:AA:1457:G:O4'	2.01	0.60
1:AA:685:G:O2'	1:AA:686:U:H5'	2.01	0.60
5:AE:10:MET:HB2	5:AE:32:VAL:HG22	1.83	0.60
9:AI:112:LYS:HG2	9:AI:119:ALA:H	1.67	0.60
26:B1:62:VAL:HG21	26:B1:67:ILE:HA	1.82	0.60
29:B4:13:ARG:CB	40:BG:2:PRO:HG3	2.32	0.60
31:B6:36:LEU:O	31:B6:37:ARG:HG3	2.02	0.60
33:B8:14:VAL:HG22	33:B8:24:ALA:HB2	1.83	0.60
34:BA:1688:U:H1'	34:BA:1701:A:C6	2.36	0.60
34:BA:2580:U:H5'	38:BE:131:ALA:HB2	1.83	0.60
34:BA:271(R):G:O2'	34:BA:271(S):G:H5'	2.01	0.60
34:BA:2720:U:H5'	34:BA:2721:A:OP2	2.01	0.60
34:BA:2774:C:H2'	34:BA:2775:A:O4'	2.01	0.60
34:BA:473:G:H5''	34:BA:508:G:N2	2.16	0.60
34:BA:621:A:C2'	34:BA:622:G:H5'	2.30	0.60
34:BA:738:G:O2'	34:BA:739:G:H5'	2.01	0.60
34:BA:879:G:H1	34:BA:898:C:H42	1.49	0.60
35:BB:87:G:H2'	35:BB:88:C:H5''	1.83	0.60
37:BD:235:GLY:O	37:BD:236:GLY:C	2.38	0.60
48:BS:34:HIS:CD2	48:BS:54:LEU:HB2	2.36	0.60
49:BT:80:SER:HB3	49:BT:81:PRO:CD	2.31	0.60
50:BU:79:PHE:C	50:BU:79:PHE:HD2	2.04	0.60
30:B5:25:LEU:HD12	52:BW:19:LEU:HB3	1.83	0.60
54:BY:95:LYS:HD3	54:BY:100:ALA:CB	2.31	0.60
1:CA:668:G:O2'	1:CA:669:U:H5'	2.01	0.60
9:CI:10:ARG:NH2	9:CI:11:LYS:HB2	2.16	0.60
10:CJ:75:ILE:HG13	10:CJ:76:ASN:N	2.16	0.60
17:CQ:10:VAL:O	17:CQ:53:LEU:HD12	2.01	0.60
18:CR:50:ILE:HD11	18:CR:74:ARG:NH1	2.17	0.60
22:CV:53:G:O2'	22:CV:54:5MU:H5''	2.01	0.60
22:CV:74:C:H2'	22:CV:75:C:H5'	1.84	0.60
26:D1:86:SER:N	26:D1:87:PRO:CD	2.64	0.60
34:DA:2892:A:C4	34:DA:2893:G:H1'	2.35	0.60
34:DA:646:A:H2'	34:DA:647:G:O4'	2.02	0.60
37:DD:129:ASN:O	37:DD:193:VAL:HG12	2.01	0.60
41:DH:30:LYS:NZ	41:DH:81:GLU:HG2	2.15	0.60
42:DI:72:LEU:O	42:DI:138:ILE:HA	2.01	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DO:63:VAL:CG2	44:DO:64:ARG:N	2.63	0.60
45:DP:101:VAL:CG2	45:DP:107:LYS:HA	2.29	0.60
47:DR:113:LEU:HD12	47:DR:114:VAL:H	1.65	0.60
47:DR:18:LEU:HD11	47:DR:22:ARG:CZ	2.31	0.60
51:DV:83:ARG:HG2	51:DV:83:ARG:NH1	2.12	0.60
3:AC:76:VAL:HG23	3:AC:77:ILE:H	1.67	0.60
4:AD:121:VAL:O	4:AD:134:ASP:HA	2.01	0.60
9:AI:53:VAL:HB	9:AI:92:TYR:CE2	2.36	0.60
10:AJ:40:LEU:N	10:AJ:40:LEU:HD23	2.16	0.60
13:AM:69:GLU:HB2	13:AM:70:LEU:N	2.16	0.60
28:B3:8:LEU:HB2	28:B3:28:LEU:HD13	1.83	0.60
31:B6:42:TRP:CE3	31:B6:42:TRP:HA	2.35	0.60
34:BA:266:G:H2'	34:BA:267:C:H5''	1.83	0.60
39:BF:183:VAL:O	39:BF:187:VAL:HG23	2.02	0.60
40:BG:76:SER:HB3	40:BG:84:LYS:N	2.09	0.60
43:BN:96:GLU:HG2	43:BN:97:ARG:H	1.66	0.60
45:BP:26:GLY:HA2	45:BP:30:THR:HG21	1.83	0.60
46:BQ:6:ARG:O	46:BQ:6:ARG:HG3	2.00	0.60
49:BT:108:ARG:HH11	49:BT:108:ARG:HB3	1.65	0.60
1:CA:1003:G:N3	1:CA:1004:A:H1'	2.17	0.60
1:CA:442:C:N4	1:CA:492:G:H1	1.93	0.60
1:CA:645:C:O2'	1:CA:646:U:H5'	2.01	0.60
6:CF:9:VAL:HA	6:CF:59:TYR:O	2.01	0.60
9:CI:5:TYR:HA	9:CI:17:VAL:O	2.00	0.60
15:CO:75:PRO:O	15:CO:78:TYR:HB3	2.01	0.60
19:CS:60:VAL:HG22	19:CS:61:TYR:O	2.01	0.60
26:D1:87:PRO:HD2	26:D1:88:LYS:H	1.66	0.60
34:DA:1045:A:H3'	34:DA:1045:A:N3	2.16	0.60
34:DA:1504:C:O2'	34:DA:1505:C:C5'	2.49	0.60
34:DA:2716:U:O2'	34:DA:2717:G:H5'	2.02	0.60
34:DA:809:G:O4'	34:DA:1254:A:H1'	2.01	0.60
38:DE:176:ILE:HD12	38:DE:176:ILE:N	2.15	0.60
38:DE:24:THR:CG2	38:DE:184:VAL:HG23	2.30	0.60
44:DO:69:ILE:HD12	44:DO:69:ILE:H	1.66	0.60
45:DP:50:ARG:NH2	45:DP:50:ARG:HG2	2.15	0.60
49:DT:65:LYS:HE3	49:DT:66:VAL:H	1.65	0.60
49:DT:3:ARG:O	49:DT:7:ILE:HG12	2.01	0.60
51:DV:5:VAL:HG21	51:DV:36:PRO:CG	2.30	0.60
53:DX:55:ASN:HB2	53:DX:78:LYS:HD2	1.83	0.60
55:DZ:165:VAL:CG1	55:DZ:166:SER:H	2.08	0.60
1:AA:255:G:O6	1:AA:266:G:O6	2.20	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:417:C:O2'	1:AA:418:C:H5'	2.01	0.60
2:AB:141:GLU:O	2:AB:145:LEU:HB2	2.02	0.60
3:AC:112:SER:HB3	3:AC:115:LEU:HD12	1.82	0.60
4:AD:73:ARG:HH11	4:AD:73:ARG:CA	2.09	0.60
1:AA:693:G:H1'	7:AG:82:GLY:HA3	1.83	0.60
17:AQ:40:LYS:HD2	17:AQ:42:TYR:CZ	2.36	0.60
26:B1:20:ARG:HD3	26:B1:41:ARG:CD	2.20	0.60
26:B1:86:SER:N	26:B1:87:PRO:CD	2.64	0.60
30:B5:57:VAL:HB	30:B5:58:LEU:HD12	1.81	0.60
34:BA:1847:A:H3'	34:BA:1848:A:H5'	1.82	0.60
34:BA:2129:C:H2'	34:BA:2130:U:C4'	2.22	0.60
34:BA:185:U:H4'	34:BA:218:A:H4'	1.83	0.60
34:BA:2779:U:H1'	34:BA:2781:A:N7	2.17	0.60
34:BA:955:C:OP1	46:BQ:13:GLN:HG3	2.01	0.60
37:BD:92:ILE:HD13	37:BD:104:TYR:CD2	2.34	0.60
40:BG:131:TYR:CG	40:BG:132:ASN:N	2.68	0.60
42:BI:133:HIS:CB	42:BI:134:PRO:CD	2.79	0.60
42:BI:25:TYR:HE2	42:BI:29:TYR:CD2	2.19	0.60
54:BY:31:LEU:HG	54:BY:34:LYS:HB2	1.83	0.60
55:BZ:6:LYS:HB3	55:BZ:8:TYR:CE1	2.37	0.60
1:CA:1342:C:H1'	9:CI:124:GLN:HE22	1.67	0.60
1:CA:473:G:H2'	1:CA:474:G:H8	1.66	0.60
5:CE:101:ILE:HG12	5:CE:119:LEU:HA	1.83	0.60
5:CE:36:ASP:OD2	5:CE:38:GLN:HB2	2.01	0.60
9:CI:28:VAL:HA	9:CI:63:ILE:O	2.01	0.60
6:CF:50:TYR:CE1	18:CR:77:GLY:HA2	2.36	0.60
28:D3:11:SER:OG	28:D3:13:ILE:HG12	2.01	0.60
34:DA:1349:A:N6	34:DA:1598:C:N4	2.49	0.60
34:DA:1798:U:C5'	37:DD:259:THR:HG22	2.30	0.60
34:DA:195:A:OP1	45:DP:46:LYS:HE2	2.00	0.60
34:DA:1986:A:C3'	34:DA:1987:G:H5''	2.31	0.60
39:DF:117:ARG:HH21	39:DF:187:VAL:HA	1.65	0.60
44:DO:18:LYS:HB2	44:DO:45:GLU:HG2	1.83	0.60
34:DA:662:G:OP1	45:DP:18:ARG:HD2	2.01	0.60
33:D8:59:LYS:CD	45:DP:50:ARG:HB3	2.29	0.60
46:DQ:109:VAL:HG12	46:DQ:110:THR:N	2.16	0.60
49:DT:82:LEU:O	49:DT:83:ILE:C	2.39	0.60
50:DU:31:SER:C	50:DU:33:ARG:H	2.04	0.60
55:DZ:30:ASN:HD21	55:DZ:32:HIS:HB2	1.66	0.60
1:AA:1374:A:H2'	1:AA:1375:A:H8	1.66	0.60
2:AB:144:ARG:HG3	2:AB:145:LEU:N	2.15	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:155:GLY:O	3:AC:156:ARG:HB2	2.02	0.60
7:AG:145:ALA:O	7:AG:147:ALA:N	2.31	0.60
8:AH:119:LEU:HB2	8:AH:124:ALA:HB2	1.83	0.60
8:AH:6:ILE:H	8:AH:6:ILE:HD12	1.67	0.60
20:AT:82:SER:O	20:AT:86:ARG:HB2	2.01	0.60
25:B0:11:ARG:NH1	25:B0:11:ARG:HB3	2.17	0.60
26:B1:11:ARG:HE	26:B1:61:ARG:H	1.48	0.60
34:BA:1785:A:OP2	34:BA:1982:C:H5'	2.02	0.60
34:BA:2182:G:H2'	34:BA:2183:C:C6	2.35	0.60
34:BA:2672:G:C3'	34:BA:2673:G:H5''	2.31	0.60
34:BA:549:G:H2'	34:BA:551:G:H5''	1.84	0.60
38:BE:52:LEU:H	38:BE:76:ARG:CB	2.15	0.60
46:BQ:109:VAL:HG12	46:BQ:110:THR:N	2.15	0.60
46:BQ:35:VAL:HG23	46:BQ:100:GLY:O	2.00	0.60
48:BS:17:ARG:C	48:BS:19:LYS:N	2.54	0.60
49:BT:65:LYS:HZ2	49:BT:66:VAL:H	1.49	0.60
55:BZ:18:LEU:HB3	55:BZ:23:LYS:HB2	1.84	0.60
1:CA:1452:C:H4'	1:CA:1456:G:C5'	2.31	0.60
1:CA:954:G:H2'	1:CA:955:U:C6	2.36	0.60
8:CH:30:ARG:HH11	8:CH:30:ARG:HB3	1.64	0.60
12:CL:119:LYS:C	12:CL:120:TYR:HD1	2.04	0.60
12:CL:39:VAL:HG12	12:CL:40:VAL:N	2.17	0.60
17:CQ:40:LYS:HD2	17:CQ:42:TYR:CZ	2.36	0.60
23:CW:41:C:H2'	23:CW:42:C:H5'	1.81	0.60
34:DA:1907:G:O2'	34:DA:1908:C:H5'	2.02	0.60
34:DA:2030:A:H4'	34:DA:2031:A:H8	1.66	0.60
34:DA:2039:C:O2'	34:DA:2040:C:H5'	2.02	0.60
34:DA:2162:G:H5'	34:DA:2171:A:H5''	1.83	0.60
34:DA:2425:A:H5''	34:DA:2427:C:O4'	2.01	0.60
34:DA:2502:G:H5''	34:DA:2503:A:C5'	2.32	0.60
34:DA:271(R):G:O2'	34:DA:271(S):G:H5'	2.01	0.60
34:DA:879:G:H1	34:DA:898:C:H42	1.47	0.60
38:DE:4:ILE:HG23	38:DE:4:ILE:O	2.01	0.60
45:DP:108:LYS:C	45:DP:110:TYR:H	2.05	0.60
45:DP:89:ALA:HB1	45:DP:121:LYS:HZ1	1.67	0.60
46:DQ:52:VAL:CG1	46:DQ:53:ALA:N	2.63	0.60
47:DR:63:ARG:HA	47:DR:80:PHE:CZ	2.36	0.60
48:DS:85:VAL:HG23	48:DS:106:ARG:CB	2.31	0.60
48:DS:85:VAL:O	48:DS:106:ARG:HA	2.00	0.60
51:DV:22:VAL:O	51:DV:23:GLU:CB	2.46	0.60
34:DA:58:G:OP1	53:DX:72:LYS:HA	2.01	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1497:G:C2'	1:AA:1498:U:H5'	2.32	0.60
1:AA:350:G:O2'	1:AA:351:G:H5'	2.02	0.60
2:AB:115:LEU:HD13	2:AB:145:LEU:HD12	1.82	0.60
3:AC:172:ARG:HH11	3:AC:172:ARG:HB3	1.67	0.60
4:AD:117:ALA:O	4:AD:121:VAL:HG23	2.02	0.60
4:AD:52:SER:O	4:AD:54:TYR:N	2.35	0.60
5:AE:76:ILE:CG1	5:AE:77:PRO:HD2	2.26	0.60
1:AA:710:G:OP1	6:AF:54:LYS:HE3	2.01	0.60
26:B1:10:LYS:HD2	26:B1:15:ALA:H	1.65	0.60
28:B3:23:LEU:CD1	28:B3:50:VAL:HG11	2.30	0.60
34:BA:1654:A:H2	38:BE:113:PHE:CD1	2.19	0.60
34:BA:1722:A:H2	34:BA:1740:G:H2'	1.64	0.60
34:BA:83:G:N1	34:BA:102:G:H2'	2.17	0.60
35:BB:81:G:H5'	35:BB:82:G:OP2	2.02	0.60
37:BD:161:THR:O	37:BD:196:VAL:HG23	2.01	0.60
42:BI:127:VAL:HG22	42:BI:139:GLN:CG	2.31	0.60
34:BA:2562:U:C1'	44:BO:23:ARG:HH12	2.02	0.60
46:BQ:22:LYS:CE	46:BQ:22:LYS:HA	2.31	0.60
49:BT:63:VAL:O	49:BT:73:GLU:HA	2.01	0.60
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.37	0.60
1:CA:777:A:H2'	1:CA:778:G:H8	1.67	0.60
2:CB:14:GLY:O	2:CB:15:VAL:HG13	2.01	0.60
7:CG:32:ARG:O	7:CG:33:ASP:HB2	2.00	0.60
10:CJ:45:ARG:HB2	10:CJ:65:LEU:HB3	1.82	0.60
13:CM:68:GLY:O	13:CM:70:LEU:N	2.34	0.60
29:D4:1:MET:N	40:DG:67:LYS:HZ1	1.97	0.60
34:DA:1582:C:H2'	34:DA:1583:A:H8	1.66	0.60
34:DA:2343:C:H2'	34:DA:2344:U:C6	2.37	0.60
34:DA:956:G:H5'	34:DA:957:A:OP2	2.02	0.60
37:DD:267:SER:HA	37:DD:270:ILE:CG1	2.31	0.60
42:DI:46:ALA:O	42:DI:49:ALA:HB3	2.01	0.60
34:DA:661:C:H4'	45:DP:18:ARG:HG2	1.82	0.60
34:DA:1276:A:H1'	47:DR:16:HIS:HE1	1.65	0.60
55:DZ:69:THR:O	55:DZ:70:LEU:HD23	2.00	0.60
1:AA:939:G:H5''	7:AG:102:ARG:HH22	1.66	0.60
1:AA:954:G:H2'	1:AA:955:U:C6	2.37	0.60
5:AE:10:MET:CB	5:AE:32:VAL:HG22	2.32	0.60
27:B2:47:ASN:HD22	27:B2:47:ASN:N	1.99	0.60
28:B3:2:PRO:O	28:B3:39:ASP:HB3	2.01	0.60
30:B5:4:HIS:CB	30:B5:5:PRO:HD3	2.27	0.60
34:BA:1230:C:O2'	34:BA:1231:G:H5'	2.01	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1947:C:C3'	34:BA:1948:G:H5''	2.31	0.60
34:BA:2863:C:H2'	34:BA:2864:G:H5''	1.83	0.60
34:BA:2892:A:H2'	34:BA:2893:G:O4'	2.01	0.60
38:BE:11:MET:H	49:BT:8:LYS:CE	2.14	0.60
39:BF:2:LYS:HG3	39:BF:25:PRO:HG2	1.83	0.60
43:BN:16:ILE:HG23	43:BN:54:VAL:HG22	1.82	0.60
44:BO:63:VAL:HB	44:BO:102:VAL:HG12	1.82	0.60
45:BP:121:LYS:HB3	45:BP:122:PRO:HD2	1.83	0.60
34:BA:662:G:OP1	45:BP:18:ARG:HD2	2.02	0.60
47:BR:4:LEU:C	47:BR:6:SER:H	2.04	0.60
48:BS:17:ARG:HG3	48:BS:18:ILE:N	2.17	0.60
51:BV:51:VAL:HG12	51:BV:52:VAL:N	2.16	0.60
54:BY:75:ILE:HG12	54:BY:80:GLY:N	2.16	0.60
55:BZ:151:HIS:HA	55:BZ:171:ILE:CG1	2.29	0.60
1:CA:1070:U:O2'	1:CA:1071:C:H5'	2.02	0.60
1:CA:447:G:H2'	1:CA:485:G:N2	2.15	0.60
1:CA:862:C:O2'	1:CA:863:U:H5'	2.02	0.60
6:CF:22:GLU:O	6:CF:26:ILE:HG13	2.01	0.60
7:CG:43:PHE:O	7:CG:46:ALA:HB3	2.01	0.60
10:CJ:4:ILE:CB	10:CJ:74:ILE:HD11	2.23	0.60
18:CR:26:LEU:HD12	18:CR:29:PHE:CE2	2.37	0.60
20:CT:81:LYS:O	20:CT:83:ARG:N	2.35	0.60
28:D3:28:LEU:HA	28:D3:33:GLN:OE1	2.02	0.60
31:D6:36:LEU:HD13	31:D6:50:ARG:CZ	2.31	0.60
34:DA:1171:G:H3'	34:DA:1173:G:O4'	2.01	0.60
34:DA:1204:A:N1	34:DA:1241:A:C2	2.70	0.60
34:DA:1441:G:O2'	34:DA:1442:G:H5'	2.01	0.60
34:DA:271(M):G:H2'	34:DA:271(N):U:C5'	2.31	0.60
37:DD:11:PRO:C	37:DD:13:ARG:H	2.05	0.60
37:DD:267:SER:O	37:DD:269:PHE:N	2.34	0.60
38:DE:180:ASN:C	38:DE:181:LEU:HD22	2.21	0.60
38:DE:6:GLY:HA2	38:DE:51:PHE:CE2	2.37	0.60
40:DG:70:VAL:CB	40:DG:88:ILE:HD11	2.32	0.60
42:DI:1:MET:HB2	42:DI:21:VAL:O	2.02	0.60
43:DN:56:ASN:ND2	43:DN:126:PRO:HD3	2.17	0.60
49:DT:66:VAL:HA	49:DT:71:GLY:HA2	1.83	0.60
50:DU:83:LEU:C	50:DU:88:ILE:HD11	2.21	0.60
55:DZ:33:LEU:HG	55:DZ:34:ASN:H	1.64	0.60
1:AA:1241:G:H2'	1:AA:1242:C:H6	1.67	0.60
2:AB:193:ASP:OD2	2:AB:196:LEU:HD11	2.02	0.60
2:AB:219:VAL:HA	2:AB:222:ILE:HD12	1.84	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:36:ARG:HB2	2:AB:41:ILE:CD1	2.31	0.60
3:AC:186:PHE:HA	3:AC:198:VAL:O	2.02	0.60
8:AH:44:PHE:HD1	8:AH:79:VAL:HG12	1.66	0.60
19:AS:10:PHE:HZ	19:AS:70:LYS:HE2	1.66	0.60
21:AU:6:ARG:NH2	21:AU:15:ARG:NH2	2.50	0.60
34:BA:2383:G:O2'	34:BA:2384:G:H5'	2.01	0.60
37:BD:244:ARG:HG2	37:BD:245:PRO:HG3	1.83	0.60
37:BD:43:ARG:HB3	37:BD:54:ARG:HB2	1.82	0.60
42:BI:110:ASP:O	42:BI:114:LEU:HG	2.02	0.60
43:BN:77:GLY:O	43:BN:78:TYR:HB3	2.02	0.60
34:BA:957:A:H5'	46:BQ:76:LYS:HG3	1.83	0.60
47:BR:50:HIS:O	47:BR:54:LEU:HB2	2.02	0.60
48:BS:89:ARG:HB3	48:BS:97:ARG:HH12	1.65	0.60
52:BW:50:VAL:HG13	52:BW:51:LEU:N	2.15	0.60
54:BY:54:LYS:O	54:BY:55:TYR:O	2.20	0.60
55:BZ:143:GLY:O	55:BZ:144:LEU:HD13	2.02	0.60
1:CA:1190:G:H3'	3:CC:3:ASN:HD21	1.66	0.60
1:CA:973:G:H3'	1:CA:974:A:H5''	1.84	0.60
2:CB:44:LEU:HA	2:CB:47:THR:OG1	2.02	0.60
4:CD:30:LYS:C	4:CD:32:ALA:H	2.02	0.60
4:CD:64:LEU:O	4:CD:67:ILE:HB	2.01	0.60
12:CL:89:ARG:NE	12:CL:91:LYS:HE2	2.17	0.60
17:CQ:67:LYS:CA	17:CQ:70:ARG:HH12	2.12	0.60
33:D8:14:VAL:HG22	33:D8:24:ALA:HB2	1.83	0.60
34:DA:1245:G:OP1	45:DP:16:ARG:HD2	2.01	0.60
34:DA:2011:U:C2'	34:DA:2012:G:H5'	2.32	0.60
34:DA:2051:A:H8	34:DA:2051:A:OP2	1.84	0.60
34:DA:2893:G:H5'	34:DA:2894:G:C5'	2.27	0.60
34:DA:391:G:O2'	34:DA:392:C:H5'	2.02	0.60
34:DA:692:C:O2'	34:DA:693:C:H5'	2.02	0.60
34:DA:892:G:C8	34:DA:893:C:C4	2.90	0.60
37:DD:174:ILE:H	37:DD:174:ILE:CD1	2.09	0.60
38:DE:116:VAL:O	38:DE:117:MET:HB3	2.02	0.60
39:DF:2:LYS:HG3	39:DF:25:PRO:HG2	1.84	0.60
39:DF:65:TRP:HZ3	39:DF:75:HIS:CD2	2.14	0.60
42:DI:129:THR:CG2	42:DI:135:GLU:HB3	2.27	0.60
46:DQ:34:LEU:HD11	46:DQ:129:THR:CG2	2.31	0.60
34:DA:955:C:OP1	46:DQ:13:GLN:HG3	2.01	0.60
46:DQ:85:LYS:HG3	46:DQ:86:GLY:H	1.65	0.60
53:DX:59:VAL:CG2	53:DX:74:PRO:HG2	2.31	0.60
54:DY:17:SER:HA	54:DY:71:LYS:HD2	1.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:77:PRO:O	54:DY:78:ALA:HB2	2.01	0.60
1:AA:1073:U:H2'	1:AA:1074:G:H8	1.67	0.60
1:AA:1313:U:OP2	19:AS:6:LYS:HB3	2.02	0.60
1:AA:1431:C:H2'	1:AA:1432:G:H5'	1.82	0.60
1:AA:33:A:H2'	1:AA:34:C:C6	2.37	0.60
3:AC:120:VAL:O	3:AC:124:ILE:HD12	2.02	0.60
7:AG:26:PHE:CE2	7:AG:30:ILE:HD11	2.37	0.60
12:AL:102:ARG:CG	12:AL:102:ARG:HH11	2.15	0.60
12:AL:6:THR:N	12:AL:9:GLN:HE21	1.93	0.60
18:AR:50:ILE:HD11	18:AR:74:ARG:NH1	2.17	0.60
34:BA:1497:U:C5'	34:BA:1498:C:H5	2.15	0.60
34:BA:1593:G:H2'	34:BA:1594:G:H5''	1.82	0.60
34:BA:2849:U:O4	49:BT:23:ARG:NH2	2.29	0.60
34:BA:472:A:H2'	34:BA:473:G:H5'	1.84	0.60
36:BC:21:THR:O	36:BC:22:ILE:HD13	2.01	0.60
37:BD:223:GLY:O	37:BD:224:ALA:C	2.39	0.60
43:BN:67:LEU:O	43:BN:68:GLU:HB2	2.02	0.60
46:BQ:42:ILE:HG22	46:BQ:47:ILE:HD12	1.82	0.60
46:BQ:52:VAL:CG1	46:BQ:53:ALA:N	2.65	0.60
48:BS:89:ARG:CB	48:BS:97:ARG:HH22	2.13	0.60
55:BZ:163:LEU:HD23	55:BZ:163:LEU:H	1.67	0.60
1:CA:186:C:C5'	20:CT:78:ALA:HB1	2.32	0.60
4:CD:147:ALA:HB2	4:CD:182:LYS:CB	2.32	0.60
1:CA:710:G:OP1	6:CF:54:LYS:HE3	2.01	0.60
10:CJ:30:SER:HB2	10:CJ:80:LYS:HG3	1.84	0.60
10:CJ:32:ALA:H	10:CJ:78:ASN:HD21	1.48	0.60
12:CL:89:ARG:HB2	12:CL:89:ARG:HH11	1.66	0.60
19:CS:58:VAL:HG23	19:CS:58:VAL:O	2.01	0.60
27:D2:54:LYS:C	27:D2:56:GLN:N	2.54	0.60
34:DA:1001:A:H2'	34:DA:1002:G:O4'	2.02	0.60
34:DA:1195:G:O2'	34:DA:1196:C:H5'	2.00	0.60
34:DA:145:G:C3'	34:DA:146:G:H5''	2.31	0.60
34:DA:1817:G:OP1	37:DD:88:ARG:NH2	2.34	0.60
34:DA:2846:G:H2'	34:DA:2847:U:O4'	2.02	0.60
34:DA:389:G:H22	45:DP:71:VAL:CG1	2.11	0.60
35:DB:87:G:H2'	35:DB:88:C:H5''	1.83	0.60
36:DC:191:ALA:O	36:DC:193:ILE:N	2.34	0.60
37:DD:63:ARG:HG3	37:DD:63:ARG:NH1	2.14	0.60
34:DA:1658:C:OP1	38:DE:132:HIS:O	2.20	0.60
40:DG:128:ARG:O	40:DG:129:GLY:O	2.19	0.60
44:DO:65:THR:HA	44:DO:82:ASN:HA	1.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DP:34:GLY:O	45:DP:35:HIS:O	2.20	0.60
48:DS:71:ARG:O	48:DS:74:ALA:HB3	2.02	0.60
48:DS:88:ASP:OD2	48:DS:89:ARG:N	2.35	0.60
34:DA:1322:A:O3'	52:DW:84:ARG:NH2	2.33	0.60
53:DX:35:THR:O	53:DX:36:LYS:C	2.39	0.60
55:DZ:150:LEU:CD2	55:DZ:171:ILE:HG13	2.32	0.60
55:DZ:48:PHE:CE2	55:DZ:52:SER:HA	2.36	0.60
1:AA:15:G:H4'	5:AE:24:ARG:HH22	1.65	0.60
1:AA:556:C:C2'	1:AA:557:G:H5'	2.32	0.60
1:AA:603:U:O2'	1:AA:604:G:H5'	2.02	0.60
11:AK:70:LYS:O	11:AK:73:MET:HB2	2.01	0.60
16:AP:21:VAL:O	16:AP:21:VAL:CG2	2.50	0.60
37:BD:11:PRO:C	37:BD:13:ARG:H	2.05	0.60
37:BD:13:ARG:NH1	37:BD:16:MET:SD	2.75	0.60
38:BE:11:MET:H	49:BT:8:LYS:NZ	2.00	0.60
38:BE:23:VAL:HA	38:BE:184:VAL:O	2.02	0.60
43:BN:56:ASN:ND2	43:BN:126:PRO:HD3	2.17	0.60
44:BO:65:THR:HA	44:BO:82:ASN:HA	1.82	0.60
47:BR:18:LEU:HD11	47:BR:22:ARG:CZ	2.32	0.60
48:BS:71:ARG:O	48:BS:74:ALA:HB3	2.02	0.60
49:BT:57:PHE:O	49:BT:59:THR:N	2.35	0.60
50:BU:92:ARG:HH22	51:BV:10:LYS:HB3	1.67	0.60
50:BU:92:ARG:O	50:BU:93:LYS:C	2.40	0.60
53:BX:59:VAL:CG2	53:BX:74:PRO:HG2	2.32	0.60
55:BZ:101:PRO:HA	55:BZ:123:ASP:HB3	1.83	0.60
46:BQ:141:GLN:HG3	55:BZ:72:ARG:NH1	2.17	0.60
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.02	0.60
3:CC:118:GLN:O	3:CC:122:GLU:HG3	2.02	0.60
5:CE:110:LEU:O	5:CE:115:VAL:HG23	2.02	0.60
5:CE:150:ARG:HB2	5:CE:150:ARG:HH11	1.67	0.60
11:CK:73:MET:O	11:CK:76:GLY:N	2.35	0.60
13:CM:69:GLU:HB2	13:CM:70:LEU:N	2.16	0.60
17:CQ:81:ARG:NH1	17:CQ:84:LEU:HD11	2.16	0.60
18:CR:35:ARG:O	18:CR:37:VAL:HG13	2.00	0.60
23:CY:28:G:H2'	23:CY:29:G:C8	2.36	0.60
30:D5:25:LEU:HD12	52:DW:19:LEU:HB3	1.83	0.60
33:D8:13:ARG:NH2	34:DA:250:G:OP2	2.35	0.60
33:D8:29:LYS:O	33:D8:30:ARG:C	2.40	0.60
34:DA:2036:C:H6	34:DA:2036:C:C5'	2.12	0.60
34:DA:2463:C:O2'	34:DA:2464:C:H5'	2.02	0.60
34:DA:2779:U:H1'	34:DA:2781:A:N7	2.17	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:472:A:H2'	34:DA:473:G:H5'	1.84	0.60
37:DD:223:GLY:O	37:DD:224:ALA:C	2.40	0.60
38:DE:33:VAL:HG11	38:DE:88:GLY:HA2	1.82	0.60
40:DG:115:ARG:NH2	40:DG:136:ARG:HG3	2.17	0.60
40:DG:117:PHE:O	40:DG:118:ARG:HG3	2.02	0.60
41:DH:30:LYS:HB2	41:DH:79:VAL:HA	1.84	0.60
41:DH:86:GLU:N	41:DH:86:GLU:OE1	2.35	0.60
42:DI:123:LEU:CD1	42:DI:144:VAL:HG22	2.32	0.60
48:DS:31:SER:HB3	48:DS:34:HIS:O	2.02	0.60
1:AA:763:G:O2'	1:AA:764:C:H5'	2.01	0.59
1:AA:1191:A:P	3:AC:3:ASN:HD21	2.25	0.59
4:AD:103:ASN:O	4:AD:106:TYR:HB3	2.01	0.59
6:AF:30:LEU:HD23	6:AF:75:LEU:HD11	1.84	0.59
11:AK:105:VAL:HG23	11:AK:105:VAL:O	2.02	0.59
13:AM:11:ARG:NH2	40:BG:146:TYR:HD2	1.99	0.59
13:AM:82:MET:SD	13:AM:83:ASP:N	2.75	0.59
34:BA:1230:C:H2'	34:BA:1231:G:H8	1.67	0.59
34:BA:2103:C:H3'	34:BA:2104:G:C5'	2.25	0.59
34:BA:491:G:H2'	34:BA:492:A:H8	1.66	0.59
38:BE:116:VAL:O	38:BE:117:MET:HB3	1.99	0.59
34:BA:1141:U:O5'	43:BN:63:THR:HG21	2.02	0.59
45:BP:17:LYS:C	45:BP:19:VAL:N	2.55	0.59
33:B8:12:LYS:O	45:BP:65:ARG:HB3	2.02	0.59
45:BP:83:VAL:CG1	45:BP:112:LEU:HD21	2.32	0.59
46:BQ:37:LEU:O	46:BQ:99:PRO:HB3	2.02	0.59
48:BS:106:ARG:O	48:BS:106:ARG:HD2	2.02	0.59
49:BT:100:TYR:HD2	49:BT:103:ARG:NH2	2.00	0.59
50:BU:74:LEU:HD12	50:BU:74:LEU:O	2.02	0.59
50:BU:95:LEU:HD12	51:BV:11:GLN:HG3	1.83	0.59
53:BX:92:LEU:O	53:BX:93:GLU:HB3	2.02	0.59
19:CS:29:ARG:HD2	19:CS:30:LEU:N	2.16	0.59
23:CW:39:U:C2'	23:CW:40:C:C5'	2.77	0.59
25:D0:11:ARG:NH1	25:D0:11:ARG:HB3	2.17	0.59
28:D3:7:LYS:O	28:D3:54:VAL:HG13	2.02	0.59
34:DA:1656:C:H2'	34:DA:1657:C:H6	1.66	0.59
34:DA:2756:U:H4'	34:DA:2757:A:OP1	2.01	0.59
35:DB:50:G:OP2	48:DS:62:LYS:HG3	2.00	0.59
39:DF:140:LEU:HD13	39:DF:170:LEU:HD21	1.84	0.59
41:DH:66:GLY:HA2	41:DH:69:ARG:HB2	1.84	0.59
42:DI:94:ALA:HB1	42:DI:114:LEU:HD12	1.84	0.59
43:DN:72:TYR:N	43:DN:85:ILE:O	2.34	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DO:13:ASN:HD21	44:DO:97:ARG:N	2.00	0.59
44:DO:32:TYR:CD1	44:DO:32:TYR:N	2.69	0.59
45:DP:80:TYR:CE2	45:DP:111:ARG:HG2	2.37	0.59
45:DP:91:PHE:CE2	45:DP:95:VAL:HG12	2.37	0.59
50:DU:50:ARG:HG2	50:DU:53:ARG:NH2	2.17	0.59
34:DA:1151:G:H5''	50:DU:81:HIS:CE1	2.37	0.59
54:DY:17:SER:CA	54:DY:71:LYS:HD2	2.32	0.59
2:AB:197:VAL:CG1	2:AB:200:ILE:HG12	2.32	0.59
8:AH:58:TYR:C	8:AH:59:LEU:HD23	2.22	0.59
9:AI:53:VAL:HG23	9:AI:55:ALA:HB3	1.83	0.59
12:AL:23:LYS:O	12:AL:24:VAL:HG23	2.01	0.59
17:AQ:14:LYS:NZ	17:AQ:14:LYS:HB2	2.16	0.59
28:B3:15:TYR:O	28:B3:20:LYS:HE2	2.02	0.59
34:BA:2543:G:H8	34:BA:2543:G:H5'	1.67	0.59
37:BD:48:ARG:HG3	37:BD:48:ARG:NH1	2.15	0.59
38:BE:200:GLU:OE2	38:BE:200:GLU:N	2.34	0.59
34:BA:674:G:P	39:BF:54:ARG:HH22	2.25	0.59
40:BG:135:LEU:N	40:BG:135:LEU:HD12	2.17	0.59
46:BQ:82:ARG:CG	46:BQ:82:ARG:HH11	1.98	0.59
34:BA:2707:G:H5''	47:BR:68:ARG:HH21	1.68	0.59
48:BS:85:VAL:O	48:BS:106:ARG:HA	2.01	0.59
48:BS:88:ASP:OD2	48:BS:89:ARG:N	2.35	0.59
55:BZ:108:PRO:CB	55:BZ:142:SER:HA	2.30	0.59
1:CA:1370:G:O2'	1:CA:1371:G:H5'	2.02	0.59
2:CB:167:PRO:HG2	2:CB:168:THR:H	1.66	0.59
3:CC:155:GLY:O	3:CC:156:ARG:HB2	2.03	0.59
3:CC:186:PHE:HA	3:CC:198:VAL:O	2.02	0.59
10:CJ:6:ILE:HG13	10:CJ:72:VAL:O	2.01	0.59
13:CM:91:ARG:NH1	19:CS:81:ARG:NH2	2.50	0.59
26:D1:64:ALA:O	26:D1:67:ILE:HG13	2.02	0.59
32:D7:30:VAL:HG12	32:D7:31:LEU:N	2.17	0.59
34:DA:1464:C:HO2'	34:DA:1528:A:H8	1.49	0.59
25:D0:18:ALA:HB1	34:DA:2271:G:OP1	2.01	0.59
34:DA:27:G:H22	34:DA:512:G:C2'	2.13	0.59
34:DA:2852:G:H2'	34:DA:2853:C:H6	1.64	0.59
34:DA:752:A:O2'	34:DA:753:C:OP2	2.18	0.59
35:DB:7:G:H3'	35:DB:8:U:C5'	2.27	0.59
37:DD:148:GLU:HB2	37:DD:151:LYS:HD2	1.83	0.59
38:DE:111:ARG:NE	38:DE:160:TYR:HE1	2.01	0.59
38:DE:114:ALA:HB3	38:DE:160:TYR:HB3	1.83	0.59
38:DE:11:MET:H	49:DT:8:LYS:NZ	2.00	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DN:78:TYR:CD1	43:DN:79:PRO:CD	2.84	0.59
54:DY:13:VAL:HG12	54:DY:14:LEU:H	1.66	0.59
54:DY:54:LYS:O	54:DY:55:TYR:O	2.20	0.59
1:AA:1441:G:C5'	1:AA:1442:G:H5''	2.17	0.59
1:AA:585:G:H4'	12:AL:8:ASN:ND2	2.08	0.59
8:AH:20:TYR:HD1	8:AH:65:TYR:CD2	2.20	0.59
9:AI:10:ARG:NH2	9:AI:11:LYS:HB2	2.15	0.59
12:AL:89:ARG:NE	12:AL:91:LYS:HE2	2.17	0.59
34:BA:1314:C:H5'	34:BA:1314:C:H6	1.66	0.59
34:BA:2590:A:H2'	34:BA:2591:C:H6	1.67	0.59
34:BA:2887:U:H2'	34:BA:2888:C:H6	1.66	0.59
37:BD:108:PRO:HG2	37:BD:111:LEU:HB2	1.82	0.59
38:BE:51:PHE:HD1	38:BE:52:LEU:HD12	1.67	0.59
39:BF:24:LEU:HB3	39:BF:25:PRO:CD	2.21	0.59
39:BF:20:LEU:O	39:BF:24:LEU:HD23	2.02	0.59
41:BH:70:THR:HG22	41:BH:74:ASN:HD21	1.67	0.59
46:BQ:20:ALA:HB2	46:BQ:99:PRO:CG	2.29	0.59
49:BT:82:LEU:O	49:BT:84:GLN:N	2.35	0.59
55:BZ:158:PRO:CG	55:BZ:161:VAL:HG21	2.31	0.59
1:CA:1191:A:P	3:CC:3:ASN:HD21	2.24	0.59
3:CC:70:VAL:HG12	3:CC:72:LYS:H	1.67	0.59
7:CG:115:ARG:HB2	7:CG:118:VAL:HG22	1.84	0.59
9:CI:18:PHE:HD1	9:CI:62:TYR:HD2	1.50	0.59
9:CI:5:TYR:OH	9:CI:7:THR:HA	2.02	0.59
30:D5:50:GLY:HA3	30:D5:56:LYS:HG2	1.84	0.59
34:DA:1230:C:O2'	34:DA:1231:G:H5'	2.01	0.59
34:DA:1324:G:H3'	34:DA:1325:G:H4'	1.84	0.59
34:DA:2533:A:C3'	34:DA:2534:A:H5''	2.32	0.59
39:DF:205:ARG:C	39:DF:206:ILE:HG13	2.21	0.59
41:DH:89:ILE:O	41:DH:90:LYS:HB2	2.02	0.59
41:DH:98:LEU:HB2	41:DH:125:VAL:HG21	1.84	0.59
42:DI:38:LEU:H	42:DI:38:LEU:CD1	2.11	0.59
42:DI:77:LEU:O	42:DI:78:THR:HB	2.03	0.59
45:DP:115:LEU:HA	45:DP:134:ALA:CB	2.30	0.59
53:DX:50:LYS:O	53:DX:82:GLN:N	2.35	0.59
54:DY:26:LYS:HG2	54:DY:27:VAL:H	1.65	0.59
54:DY:75:ILE:HG12	54:DY:80:GLY:N	2.17	0.59
3:AC:70:VAL:HG12	3:AC:72:LYS:H	1.67	0.59
4:AD:147:ALA:HB2	4:AD:182:LYS:CB	2.32	0.59
6:AF:53:ALA:O	6:AF:54:LYS:HB2	2.03	0.59
6:AF:45:LEU:HD11	6:AF:57:GLN:HB3	1.85	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:31:LYS:HA	13:AM:34:LEU:HD12	1.83	0.59
17:AQ:19:VAL:CG2	17:AQ:44:ALA:HB3	2.32	0.59
31:B6:11:LEU:HG	31:B6:26:ASN:ND2	2.17	0.59
34:BA:1141:U:H5''	34:BA:1142(A):A:O4'	2.02	0.59
34:BA:1264:G:H3'	34:BA:1265:A:H5''	1.84	0.59
34:BA:1679:U:C2'	34:BA:1680:U:H5'	2.32	0.59
34:BA:2463:C:O2'	34:BA:2464:C:H5'	2.03	0.59
34:BA:2845:G:OP1	49:BT:56:GLY:N	2.34	0.59
34:BA:2892:A:C4	34:BA:2893:G:H1'	2.36	0.59
34:BA:364:C:H2'	34:BA:365:C:H5''	1.85	0.59
37:BD:125:ILE:O	37:BD:125:ILE:HG22	2.02	0.59
37:BD:95:LEU:O	37:BD:95:LEU:HD12	2.02	0.59
39:BF:115:ALA:O	39:BF:116:ASP:C	2.40	0.59
39:BF:132:VAL:HG22	39:BF:133:ASN:N	2.16	0.59
44:BO:86:ILE:H	44:BO:86:ILE:HD12	1.66	0.59
45:BP:46:LYS:HG2	45:BP:52:GLU:HG2	1.83	0.59
53:BX:29:TRP:CZ3	53:BX:76:ARG:HG2	2.37	0.59
53:BX:37:THR:CG2	53:BX:54:VAL:HB	2.32	0.59
53:BX:83:VAL:O	53:BX:84:ALA:HB3	2.02	0.59
1:CA:1003:G:C2	1:CA:1004:A:H1'	2.36	0.59
1:CA:1096:C:O2'	1:CA:1097:C:H5'	2.01	0.59
1:CA:556:C:C2'	1:CA:557:G:H5'	2.33	0.59
4:CD:25:ARG:C	4:CD:27:TYR:H	2.05	0.59
6:CF:19:LEU:HD11	6:CF:59:TYR:CE2	2.38	0.59
6:CF:30:LEU:HD23	6:CF:75:LEU:HD11	1.83	0.59
7:CG:62:PHE:HA	7:CG:124:LEU:CD2	2.33	0.59
9:CI:53:VAL:HG23	9:CI:55:ALA:HB3	1.85	0.59
10:CJ:16:LEU:HD23	10:CJ:94:VAL:HG13	1.82	0.59
15:CO:37:ASN:N	15:CO:37:ASN:ND2	2.48	0.59
20:CT:33:ILE:HD12	20:CT:63:ILE:HG12	1.84	0.59
33:D8:50:LEU:O	33:D8:52:LYS:N	2.31	0.59
34:DA:1324:G:H3'	34:DA:1325:G:C5'	2.32	0.59
34:DA:152:G:H1	34:DA:174:C:H42	1.48	0.59
34:DA:2277:G:C2'	34:DA:2278:A:H5'	2.33	0.59
34:DA:2657:A:H1'	34:DA:2665:A:N6	2.18	0.59
34:DA:2697:G:O2'	34:DA:2698:U:H5'	2.02	0.59
36:DC:76:ALA:HB3	36:DC:94:VAL:HG13	1.85	0.59
38:DE:200:GLU:OE2	38:DE:200:GLU:N	2.35	0.59
46:DQ:68:ILE:HD12	46:DQ:68:ILE:C	2.22	0.59
34:DA:2296:U:H2'	48:DS:13:ARG:NH2	2.18	0.59
55:DZ:116:VAL:CG1	55:DZ:117:LEU:H	2.11	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DZ:132:ASN:O	55:DZ:134:PRO:HD3	2.01	0.59
1:AA:197:A:C6	1:AA:221:C:H5'	2.37	0.59
1:AA:389:A:C2'	1:AA:390:C:H5'	2.33	0.59
6:AF:6:VAL:C	6:AF:7:ASN:HD22	2.05	0.59
7:AG:92:SER:OG	7:AG:93:PRO:HD2	2.03	0.59
9:AI:8:GLY:O	9:AI:15:ALA:N	2.31	0.59
13:AM:117:VAL:O	13:AM:118:ALA:HB2	2.03	0.59
15:AO:82:ILE:HD13	15:AO:87:ILE:H	1.67	0.59
25:B0:72:ARG:CB	25:B0:75:LEU:HB2	2.33	0.59
26:B1:11:ARG:CB	26:B1:12:PRO:HD2	2.32	0.59
32:B7:24:THR:OG1	32:B7:25:PRO:HD2	2.03	0.59
34:BA:1449:A:H1'	34:BA:1529:G:H8	1.68	0.59
34:BA:2287:A:N6	34:BA:2344:U:H3	1.96	0.59
34:BA:252:G:OP2	45:BP:50:ARG:NH1	2.34	0.59
36:BC:77:ILE:O	36:BC:77:ILE:HD13	2.02	0.59
38:BE:33:VAL:HG11	38:BE:88:GLY:HA2	1.84	0.59
39:BF:122:LYS:HB3	39:BF:191:ARG:HG2	1.83	0.59
39:BF:84:VAL:O	39:BF:86:GLY:N	2.34	0.59
41:BH:153:LYS:H	41:BH:153:LYS:CD	2.15	0.59
44:BO:107:ARG:NH2	49:BT:35:LYS:HD2	2.16	0.59
34:BA:910:A:N7	46:BQ:13:GLN:HB2	2.18	0.59
1:CA:1095:U:H2'	1:CA:1096:C:H6	1.67	0.59
1:CA:1258:G:H2'	1:CA:1259:C:C6	2.37	0.59
1:CA:33:A:H2'	1:CA:34:C:C6	2.36	0.59
1:CA:648:A:H2'	1:CA:649:G:H8	1.66	0.59
2:CB:47:THR:HG23	2:CB:202:PRO:HG2	1.84	0.59
16:CP:28:ARG:NH1	16:CP:29:ASP:OD2	2.36	0.59
34:DA:1679:U:C2'	34:DA:1680:U:H5'	2.31	0.59
34:DA:2011:U:O2'	34:DA:2012:G:H5'	2.02	0.59
34:DA:2696:U:H2'	34:DA:2697:G:H8	1.65	0.59
35:DB:15:A:H5'	35:DB:16:G:H8	1.64	0.59
37:DD:125:ILE:HG22	37:DD:125:ILE:O	2.02	0.59
37:DD:210:GLY:O	37:DD:212:SER:N	2.35	0.59
39:DF:157:VAL:CG2	39:DF:194:MET:HB3	2.32	0.59
42:DI:98:ALA:CB	42:DI:109:ILE:HD13	2.32	0.59
45:DP:85:LEU:HA	45:DP:88:LEU:CB	2.32	0.59
46:DQ:42:ILE:HA	46:DQ:46:GLN:OE1	2.03	0.59
46:DQ:42:ILE:HG22	46:DQ:47:ILE:CD1	2.32	0.59
47:DR:97:VAL:HG22	47:DR:114:VAL:HG22	1.84	0.59
49:DT:13:ARG:NE	49:DT:13:ARG:HA	2.17	0.59
52:DW:84:ARG:HB2	52:DW:96:ILE:CG2	2.33	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:DX:92:LEU:O	53:DX:93:GLU:HB3	2.02	0.59
3:AC:66:VAL:HG11	3:AC:91:LEU:HD13	1.84	0.59
4:AD:196:LEU:HD12	4:AD:196:LEU:H	1.67	0.59
9:AI:126:SER:O	9:AI:128:ARG:HD2	2.01	0.59
10:AJ:75:ILE:HG13	10:AJ:76:ASN:N	2.17	0.59
26:B1:15:ALA:C	26:B1:46:LEU:HD23	2.22	0.59
34:BA:1582:C:H2'	34:BA:1583:A:H8	1.68	0.59
34:BA:1887:C:C2'	34:BA:1888:G:H5''	2.33	0.59
37:BD:18:VAL:HG13	37:BD:19:ALA:O	2.02	0.59
38:BE:27:LEU:O	38:BE:27:LEU:HG	2.01	0.59
38:BE:3:GLY:CA	38:BE:81:ILE:HG21	2.33	0.59
41:BH:66:GLY:HA2	41:BH:69:ARG:HB2	1.84	0.59
43:BN:55:VAL:CG1	43:BN:56:ASN:H	2.15	0.59
33:B8:59:LYS:CD	45:BP:50:ARG:HB3	2.29	0.59
45:BP:66:GLY:O	45:BP:68:GLN:HB3	2.01	0.59
46:BQ:30:GLY:HA2	46:BQ:107:ALA:CB	2.26	0.59
47:BR:87:TYR:HE1	47:BR:117:VAL:HG13	1.68	0.59
53:BX:52:VAL:O	53:BX:52:VAL:HG12	2.03	0.59
1:CA:1135:U:H4'	1:CA:1136:U:H5	1.66	0.59
1:CA:254:G:OP1	17:CQ:67:LYS:O	2.21	0.59
1:CA:302:G:N3	1:CA:556:C:H4'	2.17	0.59
2:CB:32:ILE:HD13	2:CB:40:HIS:HB3	1.84	0.59
4:CD:168:ARG:HH11	4:CD:168:ARG:HG3	1.67	0.59
9:CI:103:THR:HG22	9:CI:105:ASP:N	2.17	0.59
34:DA:1484:G:N2	34:DA:1505:C:H41	2.00	0.59
34:DA:2855:C:H2'	34:DA:2856:C:H6	1.67	0.59
34:DA:855:G:H2'	34:DA:856:C:C6	2.38	0.59
43:DN:46:VAL:O	43:DN:47:ALA:CB	2.50	0.59
44:DO:88:ASN:O	44:DO:91:LEU:N	2.35	0.59
45:DP:85:LEU:HD21	45:DP:117:GLU:O	2.03	0.59
49:DT:80:SER:CB	49:DT:81:PRO:CD	2.80	0.59
51:DV:62:LEU:CD2	51:DV:98:GLU:HA	2.32	0.59
1:AA:1003:G:N3	1:AA:1004:A:H1'	2.17	0.59
1:AA:1144:G:H21	1:AA:1146:A:H62	1.50	0.59
1:AA:1343:G:C1'	9:AI:121:ARG:HH12	2.16	0.59
1:AA:226:G:O2'	1:AA:227:G:H5'	2.01	0.59
1:AA:501:C:H2'	1:AA:502:G:C8	2.37	0.59
1:AA:541:G:O2'	1:AA:542:G:H5'	2.03	0.59
1:AA:862:C:O2'	1:AA:863:U:H5'	2.02	0.59
4:AD:108:LEU:HD21	4:AD:183:GLY:HA3	1.84	0.59
8:AH:89:PRO:HA	8:AH:92:ARG:HH11	1.68	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1343:G:H1'	9:AI:121:ARG:NH1	2.16	0.59
9:AI:125:TYR:HD2	9:AI:126:SER:N	2.00	0.59
19:AS:29:ARG:HD2	19:AS:30:LEU:N	2.16	0.59
34:BA:1434:A:O2'	34:BA:1435:G:H5'	2.03	0.59
34:BA:145:G:C3'	34:BA:146:G:H5''	2.32	0.59
34:BA:1840:G:H1	34:BA:1902:C:N4	1.97	0.59
40:BG:106:LEU:HD12	40:BG:110:ALA:HB3	1.85	0.59
40:BG:133:LEU:HD12	40:BG:133:LEU:O	2.03	0.59
40:BG:16:ARG:N	40:BG:17:PRO:HD2	2.17	0.59
41:BH:61:HIS:O	41:BH:65:HIS:N	2.32	0.59
45:BP:85:LEU:HD23	45:BP:85:LEU:N	2.18	0.59
48:BS:58:LEU:HD11	48:BS:68:GLN:OE1	2.02	0.59
49:BT:65:LYS:HE3	49:BT:66:VAL:H	1.66	0.59
34:BA:1151:G:H5''	50:BU:81:HIS:CE1	2.38	0.59
50:BU:90:VAL:HG12	50:BU:91:ASP:N	2.12	0.59
53:BX:50:LYS:O	53:BX:82:GLN:N	2.36	0.59
1:CA:123:C:H42	1:CA:238:G:H1	1.51	0.59
1:CA:1343:G:H1'	9:CI:121:ARG:NH1	2.16	0.59
1:CA:255:G:O6	1:CA:266:G:O6	2.21	0.59
3:CC:22:TRP:NE1	3:CC:36:ASP:OD1	2.36	0.59
8:CH:119:LEU:HB2	8:CH:124:ALA:HB2	1.85	0.59
8:CH:44:PHE:HD1	8:CH:79:VAL:HG12	1.67	0.59
11:CK:105:VAL:HG23	11:CK:105:VAL:O	2.03	0.59
18:CR:58:LEU:HD23	18:CR:62:GLU:HB3	1.85	0.59
22:CV:23:C:H2'	22:CV:24:U:C6	2.37	0.59
26:D1:17:SER:C	26:D1:18:ILE:HD12	2.23	0.59
26:D1:26:ARG:HB3	26:D1:34:THR:HA	1.85	0.59
26:D1:19:GLN:CG	26:D1:44:PRO:HG3	2.26	0.59
27:D2:14:ARG:O	27:D2:15:LYS:O	2.21	0.59
27:D2:41:ILE:HG12	34:DA:94(A):G:N2	2.17	0.59
28:D3:15:TYR:O	28:D3:20:LYS:HE2	2.02	0.59
35:DB:3:C:N4	35:DB:118:G:H1	2.01	0.59
39:DF:132:VAL:HG22	39:DF:133:ASN:N	2.17	0.59
35:DB:45:A:H1'	40:DG:95:ARG:CZ	2.31	0.59
42:DI:133:HIS:CB	42:DI:134:PRO:CD	2.79	0.59
45:DP:131:SER:N	45:DP:134:ALA:HB3	2.12	0.59
50:DU:79:PHE:C	50:DU:79:PHE:CD2	2.75	0.59
50:DU:92:ARG:O	50:DU:93:LYS:C	2.40	0.59
51:DV:89:GLN:NE2	51:DV:90:PRO:HD2	2.16	0.59
1:AA:1169:A:H2'	1:AA:1170:A:H8	1.67	0.59
1:AA:261:U:H2'	1:AA:263:A:OP2	2.02	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:664:G:H22	1:AA:741:G:H1	1.51	0.59
1:AA:834:C:H2'	1:AA:835:U:C6	2.36	0.59
1:AA:954:G:H2'	1:AA:955:U:H6	1.66	0.59
1:AA:939:G:H5''	7:AG:102:ARG:CZ	2.32	0.59
8:AH:86:ILE:HG12	8:AH:135:CYS:HA	1.82	0.59
9:AI:18:PHE:HD1	9:AI:62:TYR:HD2	1.50	0.59
18:AR:31:LEU:HG	18:AR:65:ILE:CD1	2.31	0.59
19:AS:60:VAL:HG22	19:AS:61:TYR:O	2.03	0.59
27:B2:46:GLN:HE21	27:B2:47:ASN:HA	1.67	0.59
34:BA:1150:C:O2'	34:BA:1151:G:H5'	2.03	0.59
34:BA:729:G:C4	34:BA:1775:U:O2	2.56	0.59
34:BA:2175:C:H2'	34:BA:2176:A:C5'	2.20	0.59
34:BA:2392:A:H2	34:BA:2424:C:H42	1.49	0.59
34:BA:2852:G:H2'	34:BA:2853:C:H6	1.66	0.59
34:BA:285:C:H3'	34:BA:286:C:H5''	1.84	0.59
34:BA:659:C:H6	34:BA:659:C:H5'	1.68	0.59
35:BB:54:G:O2'	35:BB:55:U:H5'	2.03	0.59
40:BG:138:GLN:OE1	40:BG:153:ARG:N	2.36	0.59
35:BB:6:C:O2'	48:BS:29:PHE:HE1	1.85	0.59
49:BT:13:ARG:NE	49:BT:13:ARG:HA	2.18	0.59
53:BX:55:ASN:HB2	53:BX:77:LYS:HD3	1.85	0.59
55:BZ:39:VAL:CG2	55:BZ:40:ASP:N	2.53	0.59
1:CA:418:C:H2'	1:CA:419:C:H6	1.68	0.59
1:CA:958:A:H2'	1:CA:959:A:C8	2.37	0.59
3:CC:182:ILE:HG12	3:CC:203:PHE:HA	1.84	0.59
3:CC:22:TRP:CH2	3:CC:32:LEU:HB2	2.38	0.59
5:CE:10:MET:CB	5:CE:32:VAL:HG22	2.33	0.59
11:CK:29:ILE:CB	11:CK:44:SER:HB3	2.31	0.59
23:CW:2:C:H42	23:CW:71:G:H1	1.50	0.59
32:D7:8:ASN:HD22	32:D7:9:ARG:N	2.00	0.59
22:CV:12:G:H1'	34:DA:1923:U:O2'	2.03	0.59
34:DA:271(U):G:C2'	34:DA:271(V):G:H5'	2.33	0.59
34:DA:2849:U:O4	49:DT:23:ARG:NH2	2.31	0.59
34:DA:908:C:O2'	34:DA:909:A:H5'	2.03	0.59
35:DB:74:U:H2'	35:DB:75:G:O4'	2.02	0.59
37:DD:13:ARG:NH1	37:DD:16:MET:SD	2.76	0.59
37:DD:25:THR:CG2	37:DD:82:ILE:H	2.14	0.59
38:DE:179:GLU:OE1	38:DE:179:GLU:HA	2.02	0.59
38:DE:61:ARG:CG	38:DE:62:PRO:HD3	2.33	0.59
40:DG:66:GLN:OE1	40:DG:94:LEU:HD23	2.03	0.59
41:DH:87:LEU:C	41:DH:88:LEU:HD22	2.22	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1019:C:O2'	1:AA:1020:U:H5'	2.02	0.59
1:AA:1103:C:H5''	2:AB:98:LEU:HD13	1.85	0.59
1:AA:1327:C:OP2	21:AU:12:LYS:NZ	2.36	0.59
5:AE:147:ASP:HA	5:AE:150:ARG:HH11	1.68	0.59
5:AE:51:VAL:O	5:AE:55:VAL:HG23	2.02	0.59
6:AF:82:ARG:HB3	6:AF:82:ARG:NH1	2.17	0.59
11:AK:110:ASP:O	18:AR:84:LYS:HD2	2.03	0.59
12:AL:120:TYR:N	12:AL:120:TYR:HD1	2.01	0.59
16:AP:55:ARG:HE	16:AP:55:ARG:HA	1.67	0.59
18:AR:26:LEU:HD12	18:AR:29:PHE:CE2	2.38	0.59
27:B2:46:GLN:NE2	27:B2:47:ASN:CA	2.66	0.59
28:B3:28:LEU:HA	28:B3:33:GLN:OE1	2.01	0.59
30:B5:40:LYS:HE2	30:B5:46:CYS:HB3	1.84	0.59
34:BA:2098:U:H2'	34:BA:2099:U:H6	1.68	0.59
34:BA:2523:G:H5'	34:BA:2523:G:H8	1.66	0.59
34:BA:2756:U:H4'	34:BA:2757:A:OP1	2.02	0.59
34:BA:389:G:H22	45:BP:71:VAL:CG1	2.13	0.59
37:BD:172:TYR:HD1	37:BD:186:HIS:HA	1.67	0.59
37:BD:266:SER:O	37:BD:267:SER:CB	2.50	0.59
38:BE:36:ARG:NH2	38:BE:88:GLY:CA	2.65	0.59
41:BH:30:LYS:HB2	41:BH:79:VAL:HA	1.85	0.59
42:BI:46:ALA:O	42:BI:49:ALA:HB3	2.02	0.59
43:BN:42:TRP:HA	43:BN:48:MET:HE1	1.84	0.59
43:BN:63:THR:O	43:BN:64:GLY:O	2.19	0.59
49:BT:50:ILE:HD11	49:BT:64:ARG:CB	2.32	0.59
34:BA:751:A:H5'	52:BW:90:ARG:HG2	1.84	0.59
1:CA:222:U:H2'	1:CA:223:U:H6	1.68	0.59
1:CA:47:C:C6	1:CA:365:U:H2'	2.37	0.59
1:CA:807:A:H2'	1:CA:808:C:C6	2.38	0.59
12:CL:70:ILE:N	12:CL:70:ILE:HD12	2.17	0.59
17:CQ:38:ARG:HA	17:CQ:38:ARG:HE	1.67	0.59
19:CS:35:SER:C	19:CS:37:ARG:N	2.57	0.59
26:D1:73:LEU:O	26:D1:76:ARG:HG2	2.03	0.59
26:D1:9:GLY:H	26:D1:48:LYS:HZ1	1.49	0.59
32:D7:9:ARG:HG3	32:D7:9:ARG:HH11	1.68	0.59
34:DA:1695:G:H2'	34:DA:1696:G:H5'	1.85	0.59
34:DA:754:C:H2'	34:DA:755:C:H6	1.67	0.59
35:DB:106:G:O2'	35:DB:107:G:H5'	2.02	0.59
35:DB:60:C:O2'	35:DB:61:G:H5'	2.03	0.59
36:DC:191:ALA:C	36:DC:193:ILE:H	2.07	0.59
38:DE:120:TRP:CE2	38:DE:155:LYS:HB3	2.38	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:75:LEU:HD21	42:DI:105:HIS:CE1	2.38	0.59
45:DP:101:VAL:HG13	45:DP:102:ARG:N	2.11	0.59
47:DR:79:LEU:HD23	47:DR:83:ILE:HB	1.84	0.59
49:DT:27:THR:O	49:DT:28:VAL:CG2	2.46	0.59
43:DN:40:PRO:HA	50:DU:64:ARG:CZ	2.33	0.59
51:DV:5:VAL:CG2	51:DV:36:PRO:HB2	2.32	0.59
53:DX:57:LEU:HD13	53:DX:77:LYS:CG	2.32	0.59
54:DY:38:ILE:HG12	54:DY:66:PRO:HA	1.84	0.59
1:AA:1135:U:H4'	1:AA:1136:U:H5	1.66	0.59
1:AA:1190:G:H3'	3:AC:3:ASN:HD21	1.66	0.59
1:AA:1249:C:H4'	9:AI:36:TYR:OH	2.03	0.59
1:AA:1320:C:H5'	19:AS:70:LYS:CG	2.33	0.59
1:AA:447:G:H2'	1:AA:485:G:N2	2.18	0.59
1:AA:708:C:H2'	1:AA:709:G:H8	1.67	0.59
2:AB:171:ALA:O	2:AB:174:VAL:HB	2.03	0.59
8:AH:120:THR:HG23	8:AH:123:GLU:OE1	2.02	0.59
8:AH:1:MET:H3	8:AH:1:MET:HE2	1.68	0.59
10:AJ:30:SER:HB2	10:AJ:80:LYS:HG3	1.84	0.59
1:AA:103:C:OP2	20:AT:14:LYS:HD3	2.02	0.59
20:AT:87:LYS:HG3	20:AT:91:LEU:HD11	1.84	0.59
34:BA:2098:U:H2'	34:BA:2099:U:C6	2.38	0.59
34:BA:2846:G:H2'	34:BA:2847:U:O4'	2.03	0.59
34:BA:30:G:H2'	34:BA:31:C:C6	2.37	0.59
34:BA:646:A:H3'	34:BA:647:G:H8	1.68	0.59
37:BD:77:ALA:CB	37:BD:97:TYR:HA	2.33	0.59
39:BF:18:ARG:HG2	39:BF:19:GLU:N	2.17	0.59
39:BF:64:ILE:HD11	39:BF:65:TRP:CZ2	2.38	0.59
34:BA:806:C:OP2	45:BP:39:LYS:HD2	2.02	0.59
46:BQ:140:ALA:N	55:BZ:53:ILE:HD12	2.18	0.59
48:BS:65:VAL:O	48:BS:67:ARG:N	2.36	0.59
49:BT:66:VAL:HA	49:BT:71:GLY:HA2	1.84	0.59
53:BX:36:LYS:O	53:BX:38:GLU:N	2.36	0.59
1:CA:625:G:O2'	1:CA:626:U:H5'	2.03	0.59
4:CD:73:ARG:HH11	4:CD:73:ARG:CA	2.08	0.59
11:CK:34:ASP:HB2	11:CK:35:PRO:HD2	1.85	0.59
12:CL:53:ARG:HG2	12:CL:53:ARG:HH11	1.68	0.59
13:CM:82:MET:SD	13:CM:83:ASP:N	2.76	0.59
26:D1:13:ILE:HG13	26:D1:14:VAL:H	1.66	0.59
34:DA:1000:A:H5'	34:DA:1001:A:OP2	2.02	0.59
34:DA:1682:G:H2'	34:DA:1683:C:C6	2.38	0.59
34:DA:1695:G:C2'	34:DA:1696:G:H5'	2.33	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1703:G:H2'	34:DA:1704:G:C8	2.37	0.59
34:DA:1796:U:H2'	34:DA:1797:C:C6	2.38	0.59
34:DA:2677:G:H2'	34:DA:2678:C:H6	1.66	0.59
34:DA:2832:U:H4'	34:DA:2833:G:H5''	1.84	0.59
34:DA:646:A:H3'	34:DA:647:G:H8	1.66	0.59
39:DF:125:LEU:HD21	39:DF:199:TRP:CD1	2.38	0.59
40:DG:82:LEU:HD22	40:DG:87:PRO:CG	2.33	0.59
45:DP:66:GLY:O	45:DP:68:GLN:HB3	2.03	0.59
45:DP:5:ASP:O	45:DP:6:LEU:HB3	2.03	0.59
46:DQ:22:LYS:HA	46:DQ:22:LYS:CE	2.33	0.59
47:DR:113:LEU:HD12	47:DR:114:VAL:N	2.18	0.59
49:DT:91:ARG:HB3	49:DT:116:ALA:CA	2.22	0.59
54:DY:95:LYS:HD3	54:DY:100:ALA:CB	2.33	0.59
55:DZ:145:GLU:CG	55:DZ:146:ILE:H	2.16	0.59
1:AA:302:G:N3	1:AA:556:C:H4'	2.17	0.58
1:AA:975:A:C4'	1:AA:976:G:H5''	2.26	0.58
2:AB:194:PRO:HG2	2:AB:195:ASP:H	1.67	0.58
2:AB:43:ASP:OD2	2:AB:46:LYS:HB2	2.03	0.58
3:AC:58:GLU:HB2	3:AC:65:ALA:HB2	1.85	0.58
26:B1:10:LYS:HD2	26:B1:15:ALA:N	2.18	0.58
34:BA:1411:C:H2'	34:BA:1412:A:C8	2.38	0.58
34:BA:2502:G:H5''	34:BA:2503:A:C5'	2.32	0.58
34:BA:2533:A:C3'	34:BA:2534:A:H5''	2.32	0.58
34:BA:27:G:O2'	34:BA:28:A:H8	1.75	0.58
34:BA:908:C:O2'	34:BA:909:A:H5'	2.03	0.58
34:BA:993:G:H5''	51:BV:75:PHE:CE2	2.37	0.58
36:BC:77:ILE:HG21	36:BC:122:ALA:C	2.23	0.58
38:BE:186:GLY:O	38:BE:188:VAL:HG12	2.03	0.58
39:BF:140:LEU:HD13	39:BF:170:LEU:HD21	1.85	0.58
42:BI:94:ALA:HB1	42:BI:114:LEU:HD12	1.85	0.58
45:BP:34:GLY:O	45:BP:35:HIS:O	2.20	0.58
53:BX:58:HIS:C	53:BX:59:VAL:HG22	2.21	0.58
1:CA:708:C:H2'	1:CA:709:G:H8	1.68	0.58
2:CB:103:THR:HA	2:CB:180:LEU:HD11	1.84	0.58
3:CC:188:LEU:HD22	3:CC:188:LEU:N	2.18	0.58
4:CD:103:ASN:O	4:CD:106:TYR:HB3	2.02	0.58
6:CF:1:MET:HB3	6:CF:66:GLU:HG2	1.85	0.58
10:CJ:70:ARG:HG3	10:CJ:70:ARG:NH1	2.09	0.58
13:CM:117:VAL:O	13:CM:118:ALA:HB2	2.02	0.58
17:CQ:45:HIS:HB2	17:CQ:69:LYS:HE2	1.85	0.58
1:CA:1320:C:OP1	19:CS:70:LYS:NZ	2.36	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:71:THR:HG22	20:CT:72:LEU:H	1.68	0.58
21:CU:6:ARG:NH2	21:CU:15:ARG:NH2	2.50	0.58
33:D8:23:VAL:HG12	33:D8:46:ARG:NH1	2.18	0.58
34:DA:1227:G:OP1	50:DU:13:LYS:HD3	2.02	0.58
34:DA:646:A:C8	34:DA:647:G:H1'	2.38	0.58
25:D0:74:ARG:HH12	35:DB:13:A:H8	1.48	0.58
37:DD:135:PHE:CD1	37:DD:135:PHE:N	2.71	0.58
37:DD:172:TYR:HD1	37:DD:186:HIS:HA	1.66	0.58
40:DG:63:ILE:HA	40:DG:143:GLU:HG3	1.85	0.58
43:DN:15:LEU:HD21	43:DN:55:VAL:CG2	2.33	0.58
44:DO:4:PRO:O	44:DO:5:GLN:CB	2.50	0.58
48:DS:15:ARG:HH11	48:DS:15:ARG:HG3	1.68	0.58
49:DT:50:ILE:N	49:DT:50:ILE:CD1	2.65	0.58
51:DV:51:VAL:CG1	51:DV:52:VAL:N	2.66	0.58
54:DY:28:LYS:HD2	54:DY:37:VAL:CB	2.32	0.58
54:DY:45:VAL:HA	54:DY:62:GLU:CB	2.28	0.58
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.38	0.58
1:AA:880:C:O2'	1:AA:881:G:H5'	2.03	0.58
1:AA:1075:C:H5'	2:AB:103:THR:HG21	1.86	0.58
4:AD:168:ARG:HH11	4:AD:168:ARG:HG3	1.68	0.58
26:B1:27:GLU:HB2	26:B1:33:LYS:O	2.02	0.58
34:BA:1221(A):C:H2'	34:BA:1222:C:H6	1.68	0.58
34:BA:1301:A:O2'	34:BA:1302:A:C2'	2.48	0.58
34:BA:1510:G:H2'	34:BA:1511:C:C6	2.38	0.58
34:BA:1963:U:H4'	34:BA:1964:G:OP1	2.02	0.58
34:BA:2392:A:C8	45:BP:60:MET:HG3	2.38	0.58
34:BA:2415:G:H2'	34:BA:2416:C:H6	1.64	0.58
34:BA:585:G:C5	34:BA:1251:C:C5	2.91	0.58
34:BA:607:U:OP1	39:BF:102:PRO:HA	2.03	0.58
34:BA:64:A:H2'	34:BA:65:C:H6	1.68	0.58
36:BC:89:ALA:HB2	36:BC:153:ILE:HA	1.84	0.58
36:BC:97:GLU:HA	36:BC:100:ILE:HG12	1.85	0.58
37:BD:127:VAL:HA	37:BD:193:VAL:HG13	1.85	0.58
37:BD:129:ASN:O	37:BD:193:VAL:HG12	2.03	0.58
37:BD:94:LEU:HD22	37:BD:95:LEU:N	2.18	0.58
38:BE:57:LYS:HG3	38:BE:57:LYS:O	2.03	0.58
38:BE:6:GLY:HA2	38:BE:51:PHE:CE2	2.37	0.58
39:BF:157:VAL:CG2	39:BF:194:MET:HB3	2.33	0.58
39:BF:181:LEU:CD1	39:BF:186:ILE:HD11	2.31	0.58
41:BH:89:ILE:O	41:BH:90:LYS:HB2	2.02	0.58
42:BI:129:THR:CG2	42:BI:135:GLU:HB3	2.29	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BI:77:LEU:HB2	42:BI:140:LEU:HD13	1.84	0.58
42:BI:52:ARG:HG3	42:BI:53:ALA:N	2.17	0.58
42:BI:91:SER:HB3	42:BI:121:LYS:HE3	1.85	0.58
43:BN:99:LEU:O	43:BN:103:VAL:HG23	2.02	0.58
44:BO:63:VAL:CG2	44:BO:64:ARG:H	2.16	0.58
45:BP:62:LEU:CD1	45:BP:62:LEU:H	2.02	0.58
45:BP:91:PHE:CE2	45:BP:95:VAL:HG12	2.38	0.58
48:BS:67:ARG:O	48:BS:70:GLY:N	2.36	0.58
34:BA:310:A:OP1	54:BY:18:GLY:HA2	2.03	0.58
1:CA:1327:C:OP2	21:CU:12:LYS:NZ	2.35	0.58
1:CA:1425:U:O2'	1:CA:1426:C:H5'	2.03	0.58
1:CA:194:C:C2'	1:CA:195:A:H5''	2.33	0.58
1:CA:350:G:O2'	1:CA:351:G:H5'	2.03	0.58
2:CB:59:GLU:HB2	2:CB:221:LEU:HD11	1.85	0.58
3:CC:149:ALA:HA	3:CC:201:TYR:O	2.03	0.58
7:CG:15:ASP:HB3	7:CG:19:GLY:H	1.65	0.58
1:CA:626:U:H5''	16:CP:38:TYR:CD2	2.38	0.58
20:CT:87:LYS:HG3	20:CT:91:LEU:HD11	1.85	0.58
22:CV:70:G:O2'	22:CV:71:C:H5''	2.02	0.58
23:CW:74:C:O3'	26:D1:27:GLU:HG3	2.02	0.58
26:D1:87:PRO:HB2	26:D1:91:LYS:HZ1	1.68	0.58
27:D2:51:ARG:O	27:D2:52:ASP:HB3	2.02	0.58
31:D6:42:TRP:HA	31:D6:42:TRP:CE3	2.36	0.58
34:DA:1713:U:O2'	34:DA:1714:G:H5'	2.04	0.58
34:DA:1947:C:C3'	34:DA:1948:G:H5''	2.32	0.58
34:DA:2202:C:H1'	37:DD:151:LYS:HZ1	1.69	0.58
34:DA:2287:A:C2	34:DA:2346:A:C2	2.91	0.58
34:DA:2777:G:H5''	34:DA:2778:A:C5'	2.33	0.58
35:DB:78:A:O2'	46:DQ:21:THR:HG21	2.04	0.58
37:DD:133:LEU:HA	37:DD:136:ILE:HD13	1.84	0.58
37:DD:16:MET:HG3	37:DD:206:LEU:O	2.03	0.58
40:DG:3:LEU:O	40:DG:4:ASP:HB3	2.01	0.58
42:DI:110:ASP:C	42:DI:112:LYS:H	2.06	0.58
42:DI:71:ILE:HG13	42:DI:72:LEU:N	2.17	0.58
43:DN:77:GLY:O	43:DN:78:TYR:HB3	2.04	0.58
45:DP:127:ALA:HB3	45:DP:130:PHE:CZ	2.38	0.58
45:DP:24:GLY:HA3	45:DP:33:ARG:NH2	2.08	0.58
45:DP:50:ARG:HG3	45:DP:51:PHE:N	2.17	0.58
53:DX:76:ARG:O	53:DX:77:LYS:CB	2.50	0.58
1:AA:958:A:H2'	1:AA:959:A:C8	2.39	0.58
2:AB:74:LYS:HZ1	2:AB:76:GLN:HB2	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:5:ILE:HD13	3:AC:5:ILE:O	2.04	0.58
5:AE:101:ILE:N	5:AE:101:ILE:HD13	2.13	0.58
34:BA:1254:A:H5'	34:BA:1255:U:H5'	1.84	0.58
34:BA:128:C:H2'	34:BA:129:C:C6	2.38	0.58
34:BA:1986:A:C3'	34:BA:1987:G:H5''	2.31	0.58
34:BA:2619:C:O2'	34:BA:2620:C:H5'	2.03	0.58
38:BE:61:ARG:CG	38:BE:62:PRO:HD3	2.33	0.58
39:BF:3:GLU:CA	39:BF:24:LEU:HG	2.33	0.58
42:BI:77:LEU:CD1	42:BI:101:LEU:HB2	2.33	0.58
45:BP:5:ASP:O	45:BP:6:LEU:HB3	2.02	0.58
48:BS:36:TYR:N	48:BS:36:TYR:CD1	2.66	0.58
52:BW:86:LEU:HD12	52:BW:87:PRO:HD2	1.86	0.58
1:CA:253:U:H2'	1:CA:254:G:H8	1.68	0.58
1:CA:261:U:H2'	1:CA:263:A:OP2	2.04	0.58
1:CA:277:C:O2'	1:CA:278:G:H5'	2.03	0.58
1:CA:658:G:H2'	1:CA:659:U:H6	1.67	0.58
2:CB:74:LYS:HZ1	2:CB:76:GLN:HB2	1.69	0.58
3:CC:76:VAL:HG23	3:CC:77:ILE:H	1.66	0.58
4:CD:120:LEU:HD23	4:CD:125:HIS:HD2	1.68	0.58
4:CD:52:SER:O	4:CD:54:TYR:N	2.36	0.58
6:CF:50:TYR:CZ	18:CR:77:GLY:HA2	2.37	0.58
11:CK:38:ASN:N	11:CK:38:ASN:HD22	2.00	0.58
27:D2:28:LYS:HE2	27:D2:43:GLN:HB3	1.85	0.58
27:D2:34:GLU:O	27:D2:36:ARG:N	2.37	0.58
34:DA:1254:A:H5'	34:DA:1255:U:H5'	1.85	0.58
34:DA:142:A:H8	34:DA:1408:C:H1'	1.64	0.58
34:DA:2186:G:C2'	34:DA:2187:G:H5''	2.33	0.58
37:DD:17:THR:HG23	37:DD:205:VAL:N	2.11	0.58
37:DD:35:LYS:HA	37:DD:64:ILE:HG22	1.84	0.58
41:DH:105:LEU:HD22	41:DH:105:LEU:O	2.03	0.58
45:DP:47:ASP:OD1	45:DP:48:PRO:O	2.20	0.58
46:DQ:42:ILE:HG22	46:DQ:47:ILE:HD12	1.85	0.58
48:DS:30:ARG:NH2	48:DS:62:LYS:HD2	2.18	0.58
49:DT:80:SER:HB3	49:DT:81:PRO:CD	2.33	0.58
1:AA:163:C:H2'	1:AA:164:U:C6	2.39	0.58
1:AA:473:G:H2'	1:AA:474:G:H8	1.69	0.58
7:AG:113:GLU:HB2	7:AG:119:ARG:HG2	1.84	0.58
7:AG:15:ASP:HB3	7:AG:19:GLY:H	1.66	0.58
20:AT:81:LYS:O	20:AT:83:ARG:N	2.37	0.58
23:AW:62:C:H2'	23:AW:63:G:C8	2.32	0.58
26:B1:78:LYS:HZ1	26:B1:93:GLU:HB2	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1590:U:C3'	34:BA:1591:G:H5''	2.32	0.58
34:BA:1789:A:OP1	37:BD:222:ARG:HG3	2.03	0.58
34:BA:49:A:H4'	34:BA:50:U:C5'	2.22	0.58
36:BC:77:ILE:HD12	36:BC:123:VAL:N	2.18	0.58
36:BC:191:ALA:C	36:BC:193:ILE:H	2.05	0.58
37:BD:35:LYS:HZ3	37:BD:104:TYR:HD1	1.47	0.58
38:BE:120:TRP:CE2	38:BE:155:LYS:HB3	2.38	0.58
38:BE:201:THR:HG22	38:BE:203:LYS:N	2.05	0.58
40:BG:76:SER:CB	40:BG:83:ARG:HB3	2.30	0.58
42:BI:120:ILE:HD13	42:BI:126:TYR:CD1	2.37	0.58
43:BN:4:TYR:CD1	43:BN:4:TYR:N	2.71	0.58
45:BP:30:THR:O	45:BP:32:THR:N	2.36	0.58
49:BT:28:VAL:CG2	49:BT:47:GLY:N	2.59	0.58
51:BV:4:ILE:O	51:BV:39:LEU:HB2	2.03	0.58
52:BW:10:VAL:O	52:BW:11:ARG:CB	2.51	0.58
52:BW:84:ARG:HB2	52:BW:96:ILE:CG2	2.34	0.58
55:BZ:101:PRO:O	55:BZ:102:LEU:HD23	2.03	0.58
1:CA:766:A:H2	1:CA:1525:G:N3	2.02	0.58
3:CC:199:LYS:HB3	3:CC:201:TYR:HE1	1.68	0.58
5:CE:101:ILE:CD1	5:CE:119:LEU:HD23	2.34	0.58
11:CK:30:VAL:HG23	11:CK:68:ALA:HB2	1.85	0.58
34:DA:1040:C:H42	34:DA:1116:C:N4	2.01	0.58
34:DA:742:G:O2'	34:DA:743:G:H5'	2.03	0.58
36:DC:75:LEU:HD23	36:DC:76:ALA:N	2.18	0.58
37:DD:108:PRO:HG2	37:DD:111:LEU:HB2	1.85	0.58
45:DP:121:LYS:HB3	45:DP:122:PRO:HD2	1.83	0.58
46:DQ:7:MET:O	46:DQ:10:ARG:NE	2.36	0.58
47:DR:11:ASN:O	47:DR:12:ARG:HB2	2.03	0.58
48:DS:89:ARG:HB3	48:DS:97:ARG:HH12	1.69	0.58
49:DT:83:ILE:HG13	49:DT:84:GLN:N	2.18	0.58
52:DW:9:TYR:H	52:DW:102:HIS:HD2	1.51	0.58
55:DZ:150:LEU:N	55:DZ:150:LEU:HD13	2.18	0.58
55:DZ:23:LYS:HD2	55:DZ:38:TYR:HE1	1.68	0.58
1:AA:1316:G:O3'	14:AN:18:VAL:HG22	2.03	0.58
1:AA:1346:A:N1	1:AA:1374:A:H5''	2.19	0.58
6:AF:8:ILE:CD1	6:AF:26:ILE:HD13	2.32	0.58
7:AG:108:ALA:O	7:AG:111:ARG:HB2	2.02	0.58
9:AI:28:VAL:HA	9:AI:63:ILE:O	2.03	0.58
11:AK:18:ARG:HB3	11:AK:33:THR:OG1	2.02	0.58
12:AL:45:PRO:HB3	12:AL:49:ASN:HB2	1.85	0.58
19:AS:35:SER:C	19:AS:37:ARG:N	2.55	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:25:C:H2'	23:AW:26:A:C8	2.38	0.58
34:BA:1424:G:H2'	34:BA:1425:G:O4'	2.04	0.58
34:BA:1603:A:H5'	34:BA:1603:A:H8	1.69	0.58
34:BA:1717:G:C3'	34:BA:1718:G:H5''	2.34	0.58
34:BA:2092:U:H4'	34:BA:2093:G:O5'	2.04	0.58
34:BA:542:C:N4	34:BA:543:C:H41	2.02	0.58
34:BA:673:C:H5'	39:BF:54:ARG:NH1	2.16	0.58
34:BA:752:A:O2'	34:BA:753:C:OP2	2.18	0.58
34:BA:855:G:H2'	34:BA:856:C:C6	2.38	0.58
35:BB:40:U:H1'	35:BB:45:A:H61	1.67	0.58
38:BE:128:SER:OG	38:BE:129:HIS:N	2.34	0.58
40:BG:11:TYR:O	40:BG:15:VAL:HB	2.02	0.58
40:BG:172:LEU:O	40:BG:176:LEU:HG	2.03	0.58
41:BH:87:LEU:C	41:BH:88:LEU:HD22	2.24	0.58
43:BN:74:ARG:NH1	43:BN:101:HIS:ND1	2.52	0.58
44:BO:104:ARG:HH12	49:BT:35:LYS:HD3	1.69	0.58
50:BU:110:VAL:O	50:BU:113:ALA:HB3	2.04	0.58
50:BU:29:SER:O	50:BU:30:LYS:HD3	2.03	0.58
50:BU:34:LYS:HA	50:BU:34:LYS:CE	2.32	0.58
51:BV:51:VAL:CG1	51:BV:52:VAL:N	2.67	0.58
53:BX:57:LEU:HD13	53:BX:77:LYS:CG	2.33	0.58
2:CB:171:ALA:O	2:CB:174:VAL:HB	2.03	0.58
4:CD:175:SER:OG	4:CD:184:LYS:HB2	2.04	0.58
5:CE:47:LYS:N	5:CE:47:LYS:HD3	2.17	0.58
7:CG:137:LYS:O	7:CG:141:VAL:HG23	2.03	0.58
10:CJ:74:ILE:CD1	10:CJ:74:ILE:H	2.14	0.58
11:CK:115:PRO:C	11:CK:117:ASN:H	2.07	0.58
16:CP:45:THR:HG23	16:CP:46:PRO:HD2	1.86	0.58
16:CP:55:ARG:HE	16:CP:55:ARG:HA	1.68	0.58
30:D5:46:CYS:SG	30:D5:47:PRO:HD2	2.43	0.58
34:DA:491:G:H2'	34:DA:492:A:H8	1.69	0.58
35:DB:103:G:H1'	55:DZ:73:GLN:HE22	1.68	0.58
36:DC:77:ILE:HG21	36:DC:122:ALA:C	2.24	0.58
37:DD:127:VAL:HA	37:DD:193:VAL:HG13	1.85	0.58
37:DD:14:ARG:HH11	37:DD:14:ARG:CG	2.16	0.58
37:DD:255:LYS:N	37:DD:255:LYS:HE3	2.17	0.58
38:DE:197:ILE:HD11	38:DE:199:ARG:HH22	1.68	0.58
38:DE:27:LEU:HG	38:DE:27:LEU:O	2.03	0.58
39:DF:3:GLU:CA	39:DF:24:LEU:HG	2.33	0.58
39:DF:64:ILE:HD11	39:DF:65:TRP:CZ2	2.38	0.58
44:DO:101:PRO:C	44:DO:102:VAL:HG22	2.24	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DQ:43:THR:HG1	46:DQ:46:GLN:HG3	1.67	0.58
47:DR:54:LEU:HD21	47:DR:65:LEU:HB3	1.85	0.58
48:DS:28:VAL:CG1	48:DS:29:PHE:H	1.97	0.58
50:DU:92:ARG:O	50:DU:95:LEU:N	2.36	0.58
55:DZ:38:TYR:CG	55:DZ:38:TYR:O	2.57	0.58
1:AA:107:G:N7	20:AT:15:ARG:NH2	2.50	0.58
1:AA:959:A:C2	1:AA:1222:G:O4'	2.56	0.58
1:AA:414:A:H8	1:AA:414:A:H5'	1.69	0.58
1:AA:668:G:O2'	1:AA:669:U:H5'	2.04	0.58
3:AC:188:LEU:O	3:AC:189:ALA:HB2	2.04	0.58
6:AF:19:LEU:HD11	6:AF:59:TYR:CE2	2.39	0.58
1:AA:939:G:H5''	7:AG:102:ARG:HH12	1.68	0.58
10:AJ:4:ILE:CB	10:AJ:74:ILE:HD11	2.25	0.58
11:AK:32:ILE:HD12	11:AK:72:ALA:HB2	1.84	0.58
34:BA:1176:G:H1'	34:BA:1177:A:OP1	2.03	0.58
34:BA:2050:C:H1'	38:BE:156:MET:CE	2.33	0.58
40:BG:6:ALA:O	40:BG:7:LEU:C	2.41	0.58
44:BO:32:TYR:N	44:BO:32:TYR:HD1	2.00	0.58
45:BP:101:VAL:C	45:BP:103:ALA:N	2.56	0.58
46:BQ:42:ILE:HA	46:BQ:46:GLN:OE1	2.04	0.58
51:BV:72:VAL:O	51:BV:73:SER:HB3	2.04	0.58
1:CA:15:G:H4'	5:CE:24:ARG:HH22	1.68	0.58
1:CA:311:C:HO2'	1:CA:312:C:H5'	1.68	0.58
1:CA:430:A:H2'	1:CA:431:A:H5'	1.85	0.58
1:CA:834:C:H2'	1:CA:835:U:C6	2.35	0.58
3:CC:68:VAL:HG12	3:CC:70:VAL:HG23	1.86	0.58
6:CF:8:ILE:HG22	6:CF:9:VAL:N	2.18	0.58
8:CH:69:ARG:HD3	8:CH:75:ARG:O	2.04	0.58
9:CI:125:TYR:HD2	9:CI:126:SER:N	2.00	0.58
16:CP:34:GLU:OE2	16:CP:55:ARG:HD3	2.04	0.58
26:D1:18:ILE:HA	26:D1:44:PRO:HD2	1.85	0.58
26:D1:27:GLU:CG	26:D1:32:LYS:HB2	2.29	0.58
27:D2:51:ARG:O	27:D2:52:ASP:CB	2.51	0.58
32:D7:24:THR:OG1	32:D7:25:PRO:HD2	2.04	0.58
32:D7:47:ARG:C	32:D7:48:LYS:HD3	2.24	0.58
33:D8:34:TRP:O	33:D8:35:GLN:HB2	2.04	0.58
34:DA:1169:G:H1	34:DA:1180:C:N4	2.01	0.58
34:DA:145:G:H2'	34:DA:146:G:C5'	2.19	0.58
34:DA:2555:U:H2'	34:DA:2556:C:C5'	2.34	0.58
34:DA:2723:C:H5''	47:DR:2:ARG:HD2	1.86	0.58
34:DA:543:C:N4	34:DA:551:G:N1	2.48	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:855:G:H1	34:DA:922:U:H3	1.50	0.58
35:DB:28:C:O2'	35:DB:29:A:H5'	2.04	0.58
37:DD:235:GLY:O	37:DD:237:GLU:HG2	2.03	0.58
38:DE:201:THR:CG2	38:DE:203:LYS:H	2.07	0.58
45:DP:46:LYS:HG2	45:DP:52:GLU:CG	2.33	0.58
34:DA:2392:A:C8	45:DP:60:MET:HG3	2.38	0.58
49:DT:29:ARG:NE	49:DT:30:VAL:HG13	2.19	0.58
1:AA:430:A:H2'	1:AA:431:A:H5'	1.86	0.58
1:AA:736:C:H2'	1:AA:737:A:H8	1.66	0.58
2:AB:134:GLU:HA	2:AB:137:ARG:HB2	1.85	0.58
1:AA:1112:C:N3	3:AC:178:LEU:HD23	2.18	0.58
3:AC:23:TYR:CG	3:AC:24:ALA:N	2.72	0.58
1:AA:1297:C:O2'	7:AG:114:ARG:NH2	2.36	0.58
9:AI:56:LEU:HD23	9:AI:56:LEU:C	2.24	0.58
18:AR:37:VAL:HG23	18:AR:38:GLU:N	2.18	0.58
22:AV:17:C:H5''	22:AV:17(A):U:C5	2.39	0.58
23:AW:5:G:H2'	23:AW:6:G:O4'	2.03	0.58
34:BA:1403:C:H5''	34:BA:1471:A:H1'	1.84	0.58
34:BA:21:A:O2'	34:BA:22:C:H5'	2.04	0.58
34:BA:229:A:H3'	34:BA:230:U:C5'	2.32	0.58
34:BA:2657:A:H1'	34:BA:2665:A:N6	2.17	0.58
34:BA:646:A:C8	34:BA:647:G:H1'	2.38	0.58
34:BA:741:G:H2'	34:BA:742:G:H8	1.68	0.58
34:BA:833:U:H2'	34:BA:834:C:H6	1.67	0.58
37:BD:35:LYS:CG	37:BD:64:ILE:HG23	2.33	0.58
38:BE:117:MET:CE	38:BE:124:GLY:HA3	2.33	0.58
38:BE:93:VAL:C	38:BE:95:ILE:N	2.57	0.58
40:BG:130:ASN:OD1	40:BG:160:VAL:HG13	2.04	0.58
45:BP:45:LEU:CD2	45:BP:46:LYS:N	2.56	0.58
34:BA:2723:C:H5''	47:BR:2:ARG:NE	2.18	0.58
50:BU:55:ARG:HA	50:BU:58:ARG:HG3	1.86	0.58
53:BX:35:THR:O	53:BX:36:LYS:C	2.41	0.58
55:BZ:39:VAL:HG21	55:BZ:44:PHE:HB2	1.86	0.58
55:BZ:56:VAL:HA	55:BZ:70:LEU:HD21	1.86	0.58
1:CA:1097:C:H2'	1:CA:1098:C:C6	2.39	0.58
1:CA:1288:A:H2'	1:CA:1289:A:C8	2.38	0.58
1:CA:1374:A:H2'	1:CA:1375:A:H8	1.68	0.58
1:CA:1452:C:H4'	1:CA:1456:G:H5''	1.86	0.58
1:CA:15:G:H4'	5:CE:24:ARG:NH1	2.19	0.58
1:CA:197:A:C6	1:CA:221:C:H5'	2.37	0.58
2:CB:165:VAL:HG23	2:CB:166:ASP:N	2.19	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:11:ARG:HH11	3:CC:11:ARG:HG2	1.68	0.58
7:CG:108:ALA:O	7:CG:111:ARG:HB2	2.02	0.58
11:CK:84:VAL:CG1	11:CK:95:ILE:HD11	2.34	0.58
17:CQ:59:ILE:CG2	17:CQ:71:PHE:HB3	2.34	0.58
19:CS:62:ILE:HD12	19:CS:66:MET:SD	2.44	0.58
25:D0:60:PHE:CZ	34:DA:2365:G:H4'	2.39	0.58
27:D2:50:ILE:O	27:D2:51:ARG:HB3	2.03	0.58
34:DA:1141:U:O5'	43:DN:63:THR:HG21	2.03	0.58
34:DA:1215:G:O2'	34:DA:1216:G:H5'	2.04	0.58
34:DA:1339:G:N2	34:DA:1603:A:H1'	2.19	0.58
34:DA:1510:G:H2'	34:DA:1511:C:C6	2.38	0.58
34:DA:1603:A:H8	34:DA:1603:A:H5'	1.68	0.58
34:DA:2260:C:O2'	34:DA:2261:C:H5'	2.04	0.58
34:DA:2262:U:H2'	34:DA:2263:C:C5'	2.34	0.58
34:DA:2892:A:H2'	34:DA:2893:G:O4'	2.02	0.58
38:DE:119:ARG:HG2	38:DE:160:TYR:HB2	1.85	0.58
43:DN:4:TYR:CD1	43:DN:4:TYR:N	2.72	0.58
49:DT:80:SER:OG	49:DT:81:PRO:HD3	2.02	0.58
50:DU:74:LEU:HD12	50:DU:74:LEU:O	2.03	0.58
55:DZ:14:LYS:O	55:DZ:16:SER:N	2.35	0.58
55:DZ:30:ASN:O	55:DZ:32:HIS:N	2.37	0.58
1:AA:1221:G:O2'	1:AA:1222:G:H5'	2.04	0.58
1:AA:1238:A:C8	1:AA:1303:C:H1'	2.39	0.58
1:AA:1513:A:H2'	1:AA:1514:C:H6	1.66	0.58
3:AC:149:ALA:HA	3:AC:201:TYR:O	2.04	0.58
3:AC:152:ILE:HB	3:AC:199:LYS:HB2	1.84	0.58
4:AD:126:ILE:HG22	4:AD:127:THR:N	2.18	0.58
9:AI:114:TYR:N	9:AI:114:TYR:CD2	2.72	0.58
9:AI:78:LYS:NZ	9:AI:78:LYS:HB2	2.19	0.58
12:AL:53:ARG:HG2	12:AL:53:ARG:HH11	1.69	0.58
23:AW:5:G:O2'	23:AW:6:G:H5'	2.04	0.58
27:B2:28:LYS:HG2	27:B2:43:GLN:O	2.04	0.58
27:B2:28:LYS:O	27:B2:31:GLU:HB3	2.03	0.58
27:B2:53:LEU:O	27:B2:54:LYS:HB2	2.04	0.58
34:BA:1796:U:H2'	34:BA:1797:C:C6	2.38	0.58
34:BA:2103:C:C3'	34:BA:2104:G:H5''	2.25	0.58
34:BA:2641:G:OP1	43:BN:75:TYR:HB3	2.04	0.58
34:BA:71:A:H8	34:BA:71:A:H5'	1.67	0.58
34:BA:754:C:H2'	34:BA:755:C:H6	1.69	0.58
35:BB:74:U:H3'	35:BB:75:G:H5''	1.84	0.58
36:BC:49:ILE:CG2	36:BC:50:ASP:H	2.16	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2202:C:H1'	37:BD:151:LYS:NZ	2.19	0.58
41:BH:19:VAL:HG21	41:BH:44:VAL:CG1	2.31	0.58
42:BI:69:LYS:HA	42:BI:136:VAL:HG21	1.85	0.58
43:BN:46:VAL:CG1	43:BN:47:ALA:H	2.13	0.58
47:BR:28:LEU:CD2	47:BR:114:VAL:HG12	2.34	0.58
47:BR:28:LEU:O	47:BR:28:LEU:HD13	2.03	0.58
50:BU:66:ASN:C	50:BU:68:ALA:H	2.06	0.58
50:BU:79:PHE:C	50:BU:79:PHE:CD2	2.76	0.58
51:BV:12:TYR:N	51:BV:12:TYR:HD2	2.01	0.58
51:BV:69:LYS:HB2	51:BV:93:GLU:OE2	2.03	0.58
53:BX:36:LYS:HZ2	53:BX:39:ILE:CA	2.01	0.58
53:BX:70:LEU:HG	53:BX:71:GLY:N	2.19	0.58
54:BY:28:LYS:HD2	54:BY:37:VAL:CB	2.34	0.58
54:BY:8:LYS:HE3	54:BY:72:VAL:HG23	1.85	0.58
1:CA:1463:C:OP1	49:DT:111:ARG:HD2	2.03	0.58
1:CA:1508:G:H2'	1:CA:1509:C:C6	2.39	0.58
3:CC:156:ARG:HH21	3:CC:160:ALA:C	2.07	0.58
4:CD:17:VAL:HG11	4:CD:197:PRO:CB	2.32	0.58
5:CE:10:MET:HB2	5:CE:32:VAL:HG22	1.85	0.58
7:CG:145:ALA:O	7:CG:147:ALA:N	2.34	0.58
9:CI:56:LEU:C	9:CI:56:LEU:HD23	2.24	0.58
15:CO:82:ILE:HD13	15:CO:87:ILE:H	1.68	0.58
16:CP:15:PRO:O	16:CP:16:HIS:ND1	2.36	0.58
16:CP:53:VAL:HG23	16:CP:54:GLU:H	1.69	0.58
19:CS:16:LEU:CD1	19:CS:16:LEU:H	2.15	0.58
25:D0:72:ARG:CB	25:D0:75:LEU:HB2	2.31	0.58
31:D6:36:LEU:O	31:D6:37:ARG:HG3	2.03	0.58
34:DA:1301:A:H2'	34:DA:1302:A:H3'	1.85	0.58
34:DA:1497:U:C5'	34:DA:1498:C:H5	2.17	0.58
34:DA:2347:C:H2'	34:DA:2348:U:H6	1.69	0.58
34:DA:2472:G:H2'	34:DA:2529:G:H22	1.65	0.58
35:DB:79:C:C2'	35:DB:80:U:H5'	2.34	0.58
36:DC:50:ASP:OD1	36:DC:55:ASP:HA	2.04	0.58
41:DH:19:VAL:HG21	41:DH:44:VAL:CG1	2.31	0.58
42:DI:77:LEU:HB2	42:DI:140:LEU:HD13	1.84	0.58
43:DN:14:VAL:HA	43:DN:135:PRO:CG	2.32	0.58
44:DO:63:VAL:CG2	44:DO:64:ARG:H	2.17	0.58
47:DR:106:GLY:O	47:DR:107:ASP:HB3	2.04	0.58
50:DU:106:PHE:O	50:DU:109:LEU:HB2	2.03	0.58
55:DZ:99:TYR:CE2	55:DZ:125:LEU:HD12	2.39	0.58
1:AA:491:G:H2'	1:AA:492:G:H8	1.69	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:199:LYS:HB3	3:AC:201:TYR:HE1	1.69	0.58
3:AC:70:VAL:HG12	3:AC:71:ALA:H	1.67	0.58
12:AL:60:LEU:HD22	12:AL:60:LEU:N	2.18	0.58
16:AP:22:THR:HG22	16:AP:32:TYR:CA	2.33	0.58
25:B0:53:MET:HB3	25:B0:59:LEU:HD23	1.86	0.58
27:B2:17:SER:O	27:B2:20:GLU:HB2	2.04	0.58
30:B5:20:ARG:HH12	52:BW:15:ARG:NE	2.02	0.58
33:B8:35:GLN:NE2	33:B8:36:LYS:NZ	2.51	0.58
34:BA:1215:G:O2'	34:BA:1216:G:H5'	2.02	0.58
34:BA:1301:A:H4'	34:BA:1302:A:OP1	2.03	0.58
34:BA:1301:A:H2'	34:BA:1302:A:H3'	1.84	0.58
34:BA:1484:G:N2	34:BA:1505:C:H41	2.00	0.58
34:BA:2260:C:O2'	34:BA:2261:C:H5'	2.03	0.58
34:BA:2308:G:H21	40:BG:79:ASN:ND2	2.02	0.58
34:BA:2347:C:H2'	34:BA:2348:U:H6	1.69	0.58
34:BA:2696:U:H2'	34:BA:2697:G:H8	1.68	0.58
34:BA:485:C:O2'	34:BA:486:C:H5'	2.04	0.58
34:BA:519:U:H4'	52:BW:25:ARG:HH21	1.69	0.58
34:BA:855:G:H1	34:BA:922:U:H3	1.51	0.58
37:BD:9:TYR:CD2	37:BD:10:THR:HG22	2.38	0.58
38:BE:11:MET:HB2	38:BE:23:VAL:O	2.04	0.58
38:BE:64:LYS:HG2	38:BE:64:LYS:O	2.04	0.58
42:BI:54:GLN:HA	42:BI:57:ARG:NH1	2.19	0.58
34:BA:389:G:N2	45:BP:71:VAL:HG12	2.14	0.58
47:BR:100:LEU:HD23	47:BR:112:ALA:HA	1.85	0.58
50:BU:92:ARG:C	50:BU:94:ASN:N	2.55	0.58
34:BA:58:G:OP1	53:BX:72:LYS:HA	2.03	0.58
54:BY:32:PRO:C	54:BY:34:LYS:H	2.07	0.58
1:CA:1105:A:O2'	1:CA:1106:G:H5'	2.03	0.58
1:CA:1297:C:O2'	7:CG:114:ARG:NH2	2.37	0.58
1:CA:414:A:H5'	1:CA:414:A:H8	1.68	0.58
4:CD:142:PRO:HA	4:CD:185:PHE:HD2	1.68	0.58
12:CL:32:PHE:HB3	12:CL:84:LEU:CD2	2.31	0.58
13:CM:2:ALA:C	13:CM:9:ILE:HG23	2.24	0.58
19:CS:43:GLU:O	19:CS:43:GLU:HG2	2.03	0.58
21:CU:5:ASP:O	21:CU:11:GLY:HA3	2.02	0.58
30:D5:57:VAL:HG23	30:D5:58:LEU:N	2.19	0.58
34:DA:1208:C:C4	34:DA:1209:G:N7	2.72	0.58
34:DA:1411:C:H2'	34:DA:1412:A:H8	1.69	0.58
34:DA:1449:A:H1'	34:DA:1529:G:H8	1.68	0.58
34:DA:1590:U:C3'	34:DA:1591:G:H5''	2.33	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2290:G:H8	34:DA:2290:G:H5'	1.68	0.58
34:DA:549:G:C2'	34:DA:551:G:H5''	2.34	0.58
34:DA:74:A:O2'	34:DA:75:G:OP2	2.22	0.58
34:DA:957:A:H5'	46:DQ:76:LYS:HG3	1.84	0.58
37:DD:183:ARG:HD2	37:DD:270:ILE:HG22	1.86	0.58
38:DE:51:PHE:HD1	38:DE:52:LEU:HD12	1.68	0.58
42:DI:114:LEU:HA	42:DI:130:TYR:CD1	2.39	0.58
44:DO:105:GLU:N	44:DO:105:GLU:OE1	2.36	0.58
47:DR:87:TYR:HE1	47:DR:117:VAL:HG13	1.69	0.58
48:DS:25:ARG:HG2	48:DS:88:ASP:OD1	2.03	0.58
50:DU:62:ILE:HG13	50:DU:76:TYR:CE1	2.39	0.58
51:DV:75:PHE:HE1	51:DV:89:GLN:HB3	1.68	0.58
53:DX:24:GLY:O	53:DX:25:LYS:O	2.22	0.58
53:DX:83:VAL:O	53:DX:84:ALA:HB3	2.02	0.58
55:DZ:144:LEU:HD12	55:DZ:148:ASP:OD1	2.03	0.58
55:DZ:61:LEU:HD12	55:DZ:65:GLN:HG3	1.86	0.58
1:AA:1288:A:H2'	1:AA:1289:A:H8	1.69	0.58
1:AA:1437:C:O2'	1:AA:1438:G:H5'	2.03	0.58
2:AB:187:LEU:HA	2:AB:201:ILE:HB	1.84	0.58
5:AE:146:ALA:C	5:AE:148:VAL:H	2.07	0.58
7:AG:62:PHE:HA	7:AG:124:LEU:CD2	2.33	0.58
15:AO:3:ILE:HG12	15:AO:3:ILE:O	2.03	0.58
17:AQ:67:LYS:HA	17:AQ:70:ARG:NH1	2.17	0.58
22:AV:72:A:H2'	22:AV:73:A:H5''	1.84	0.58
26:B1:48:LYS:HG3	26:B1:49:VAL:N	2.18	0.58
27:B2:29:LYS:O	27:B2:33:MET:SD	2.62	0.58
34:BA:2030:A:H4'	34:BA:2031:A:H8	1.69	0.58
34:BA:2571:C:H5'	34:BA:2572:A:H5''	1.85	0.58
35:BB:79:C:C2'	35:BB:80:U:H5'	2.34	0.58
37:BD:31:LYS:HA	37:BD:31:LYS:HZ1	1.68	0.58
40:BG:55:LYS:C	40:BG:57:ALA:H	2.06	0.58
41:BH:85:LYS:HD2	41:BH:141:VAL:HG13	1.86	0.58
44:BO:101:PRO:C	44:BO:102:VAL:HG22	2.24	0.58
44:BO:86:ILE:N	44:BO:86:ILE:HD12	2.19	0.58
47:BR:97:VAL:HG22	47:BR:114:VAL:HG22	1.84	0.58
48:BS:35:ILE:H	48:BS:53:SER:CB	2.16	0.58
50:BU:31:SER:C	50:BU:33:ARG:H	2.07	0.58
50:BU:83:LEU:C	50:BU:88:ILE:HD11	2.24	0.58
54:BY:77:PRO:O	54:BY:78:ALA:HB2	2.03	0.58
55:BZ:19:ARG:HH12	55:BZ:84:GLU:HA	1.69	0.58
55:BZ:40:ASP:OD1	55:BZ:42:VAL:HG12	2.03	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1313:U:OP2	19:CS:6:LYS:HB3	2.04	0.58
1:CA:1250:A:C2	1:CA:1370:G:H1'	2.38	0.58
1:CA:418:C:H2'	1:CA:419:C:C6	2.39	0.58
1:CA:436:C:O2'	1:CA:437:U:P	2.61	0.58
1:CA:834:C:O2'	1:CA:835:U:H5'	2.04	0.58
1:CA:868:C:H2'	1:CA:869:G:O4'	2.04	0.58
1:CA:880:C:O2'	1:CA:881:G:H5'	2.03	0.58
4:CD:209:ARG:HH11	4:CD:209:ARG:HG3	1.69	0.58
8:CH:89:PRO:HA	8:CH:92:ARG:HH11	1.68	0.58
1:CA:1249:C:H4'	9:CI:36:TYR:OH	2.04	0.58
12:CL:45:PRO:HB3	12:CL:49:ASN:HB2	1.85	0.58
19:CS:5:LEU:HG	19:CS:10:PHE:HD1	1.67	0.58
23:CW:57:G:H2'	23:CW:58:A:H5'	1.84	0.58
33:D8:35:GLN:NE2	33:D8:36:LYS:NZ	2.52	0.58
34:DA:83:G:N1	34:DA:102:G:H2'	2.18	0.58
34:DA:1141:U:H5''	34:DA:1142(A):A:O4'	2.04	0.58
34:DA:1166:C:H2'	34:DA:1167:U:H6	1.68	0.58
34:DA:150:C:H2'	34:DA:151:C:H6	1.69	0.58
34:DA:2619:C:O2'	34:DA:2620:C:H5'	2.04	0.58
34:DA:543:C:N3	34:DA:551:G:C2	2.72	0.58
34:DA:738:G:O2'	34:DA:739:G:H5'	2.04	0.58
34:DA:892:G:N3	34:DA:892:G:H3'	2.19	0.58
36:DC:39:GLU:HG2	36:DC:180:PHE:CB	2.34	0.58
37:DD:25:THR:HG21	37:DD:82:ILE:H	1.68	0.58
37:DD:43:ARG:HB3	37:DD:54:ARG:HB2	1.86	0.58
38:DE:11:MET:H	49:DT:8:LYS:HE3	1.68	0.58
34:DA:2580:U:H5'	38:DE:131:ALA:HB2	1.85	0.58
40:DG:138:GLN:NE2	40:DG:153:ARG:HB3	2.18	0.58
40:DG:41:GLN:OE1	40:DG:43:LEU:HD11	2.03	0.58
40:DG:71:THR:HG22	40:DG:89:GLY:O	2.03	0.58
45:DP:121:LYS:O	45:DP:123:LEU:HD23	2.03	0.58
45:DP:45:LEU:CD2	45:DP:46:LYS:N	2.59	0.58
48:DS:58:LEU:HD11	48:DS:68:GLN:OE1	2.03	0.58
55:DZ:10:ARG:HG2	55:DZ:12:GLY:H	1.68	0.58
1:AA:1006:C:H42	1:AA:1024:G:H21	1.51	0.57
1:AA:1126:U:H2'	1:AA:1127:G:O4'	2.03	0.57
1:AA:356:A:H2	1:AA:368:U:O2	1.86	0.57
1:AA:868:C:H2'	1:AA:869:G:O4'	2.03	0.57
3:AC:182:ILE:HG12	3:AC:203:PHE:HD1	1.68	0.57
6:AF:1:MET:HB3	6:AF:66:GLU:HG2	1.85	0.57
11:AK:30:VAL:HG23	11:AK:68:ALA:HB2	1.86	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:59:ILE:HG22	17:AQ:71:PHE:CD1	2.39	0.57
28:B3:11:SER:OG	28:B3:13:ILE:HG12	2.04	0.57
31:B6:42:TRP:HA	31:B6:42:TRP:HE3	1.69	0.57
34:BA:1697:G:C5'	34:BA:1698:A:H5''	2.34	0.57
34:BA:319:C:O2'	34:BA:320:A:H5'	2.03	0.57
34:BA:481:G:HO2'	34:BA:482:A:P	2.27	0.57
34:BA:646:A:H2'	34:BA:647:G:O4'	2.04	0.57
36:BC:40:THR:HG21	36:BC:215:THR:CB	2.34	0.57
39:BF:206:ILE:CD1	39:BF:206:ILE:O	2.50	0.57
34:BA:615:G:OP1	39:BF:40:GLN:NE2	2.37	0.57
40:BG:110:ALA:C	40:BG:112:PRO:HD2	2.24	0.57
40:BG:63:ILE:HD12	40:BG:63:ILE:O	2.04	0.57
41:BH:41:MET:CE	41:BH:41:MET:HA	2.33	0.57
43:BN:46:VAL:O	43:BN:47:ALA:CB	2.51	0.57
48:BS:28:VAL:H	48:BS:89:ARG:HD2	1.69	0.57
51:BV:69:LYS:CG	51:BV:70:ILE:H	2.17	0.57
54:BY:76:CYS:SG	54:BY:77:PRO:CD	2.91	0.57
55:BZ:161:VAL:O	55:BZ:161:VAL:HG12	2.03	0.57
1:CA:356:A:H2	1:CA:368:U:O2	1.87	0.57
2:CB:167:PRO:O	2:CB:171:ALA:N	2.37	0.57
2:CB:24:TRP:H	2:CB:24:TRP:HD1	1.52	0.57
2:CB:69:LEU:HD13	2:CB:91:PRO:HB2	1.86	0.57
1:CA:1103:C:H4'	2:CB:98:LEU:HD13	1.86	0.57
4:CD:65:ARG:HG3	4:CD:75:PHE:CD1	2.38	0.57
8:CH:120:THR:HG23	8:CH:123:GLU:OE1	2.04	0.57
9:CI:78:LYS:HB2	9:CI:78:LYS:NZ	2.19	0.57
12:CL:82:VAL:O	12:CL:106:ASP:HB2	2.04	0.57
18:CR:64:ARG:O	18:CR:66:LEU:N	2.37	0.57
32:D7:12:ARG:HG3	32:D7:12:ARG:NH1	2.19	0.57
34:DA:1754:C:OP1	49:DT:96:ARG:NH1	2.37	0.57
34:DA:1884:A:C3'	34:DA:1885:A:H5''	2.33	0.57
34:DA:2350:C:H2'	34:DA:2351:G:O4'	2.04	0.57
34:DA:2383:G:O2'	34:DA:2384:G:H5'	2.04	0.57
34:DA:2777:G:H4'	34:DA:2778:A:H5'	1.86	0.57
34:DA:754:C:H2'	34:DA:755:C:C6	2.39	0.57
36:DC:97:GLU:HA	36:DC:100:ILE:HG12	1.85	0.57
38:DE:57:LYS:O	38:DE:57:LYS:HG3	2.03	0.57
38:DE:64:LYS:HG2	38:DE:64:LYS:O	2.03	0.57
39:DF:18:ARG:HG2	39:DF:19:GLU:N	2.17	0.57
42:DI:120:ILE:O	42:DI:121:LYS:HB3	2.03	0.57
45:DP:34:GLY:O	45:DP:35:HIS:HD2	1.86	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2707:G:H5''	47:DR:68:ARG:HH21	1.67	0.57
48:DS:42:ASP:C	48:DS:44:LYS:H	2.06	0.57
50:DU:57:PHE:O	50:DU:58:ARG:C	2.42	0.57
50:DU:66:ASN:C	50:DU:68:ALA:H	2.06	0.57
50:DU:93:LYS:CD	50:DU:93:LYS:H	2.17	0.57
51:DV:4:ILE:O	51:DV:39:LEU:HB2	2.04	0.57
54:DY:99:CYS:O	54:DY:100:ALA:HB3	2.04	0.57
1:AA:1227:A:H2'	1:AA:1228:C:O5'	2.04	0.57
1:AA:222:U:H2'	1:AA:223:U:H6	1.69	0.57
1:AA:900:A:H2'	1:AA:901:A:C8	2.39	0.57
3:AC:22:TRP:CH2	3:AC:32:LEU:HB2	2.38	0.57
5:AE:35:GLY:HA2	5:AE:40:ARG:O	2.04	0.57
10:AJ:6:ILE:HG13	10:AJ:72:VAL:O	2.04	0.57
10:AJ:74:ILE:CD1	10:AJ:74:ILE:H	2.15	0.57
33:B8:34:TRP:O	33:B8:35:GLN:HB2	2.04	0.57
34:BA:2334:G:H21	48:BS:18:ILE:CD1	2.17	0.57
25:B0:39:ARG:HH21	34:BA:2355:C:H1'	1.69	0.57
34:BA:2555:U:C2'	34:BA:2556:C:H5'	2.31	0.57
34:BA:500:G:N2	34:BA:502:A:H3'	2.18	0.57
39:BF:157:VAL:HA	39:BF:176:LEU:O	2.04	0.57
40:BG:139:LEU:C	40:BG:139:LEU:HD12	2.24	0.57
41:BH:86:GLU:N	41:BH:86:GLU:OE1	2.36	0.57
45:BP:85:LEU:HA	45:BP:88:LEU:CB	2.32	0.57
47:BR:41:ALA:O	47:BR:43:GLU:N	2.37	0.57
48:BS:15:ARG:HH11	48:BS:15:ARG:HG3	1.69	0.57
49:BT:50:ILE:H	49:BT:50:ILE:CD1	2.17	0.57
54:BY:13:VAL:HG12	54:BY:14:LEU:H	1.69	0.57
1:CA:1006:C:H42	1:CA:1024:G:H21	1.51	0.57
1:CA:1126:U:H2'	1:CA:1127:G:O4'	2.04	0.57
8:CH:1:MET:HE2	8:CH:1:MET:H3	1.69	0.57
12:CL:60:LEU:HD22	12:CL:60:LEU:N	2.18	0.57
14:CN:41:ARG:HG3	14:CN:42:ILE:H	1.69	0.57
19:CS:16:LEU:N	19:CS:16:LEU:HD12	2.19	0.57
34:DA:1040:C:H42	34:DA:1116:C:H42	1.50	0.57
34:DA:2033:A:H4'	34:DA:2034:U:OP1	2.04	0.57
34:DA:2631:G:N2	38:DE:61:ARG:HH12	2.01	0.57
34:DA:554:U:C2'	34:DA:555:U:H5'	2.35	0.57
35:DB:74:U:H3'	35:DB:75:G:H5''	1.85	0.57
36:DC:89:ALA:HB2	36:DC:153:ILE:HA	1.86	0.57
37:DD:266:SER:O	37:DD:267:SER:CB	2.51	0.57
37:DD:8:PRO:CB	37:DD:14:ARG:HB2	2.33	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DE:117:MET:O	38:DE:118:LYS:HB2	2.02	0.57
39:DF:183:VAL:O	39:DF:187:VAL:HG23	2.04	0.57
40:DG:35:GLU:OE2	40:DG:35:GLU:N	2.37	0.57
41:DH:87:LEU:CD1	41:DH:148:ILE:HG21	2.31	0.57
42:DI:37:VAL:HG12	42:DI:38:LEU:N	2.18	0.57
46:DQ:75:THR:HB	46:DQ:88:GLY:CA	2.34	0.57
48:DS:28:VAL:O	48:DS:29:PHE:HB2	2.04	0.57
53:DX:55:ASN:HB2	53:DX:77:LYS:HD3	1.85	0.57
1:AA:1097:C:H2'	1:AA:1098:C:C6	2.39	0.57
1:AA:1250:A:C2	1:AA:1370:G:H1'	2.40	0.57
1:AA:683:G:H2'	1:AA:684:A:H8	1.68	0.57
1:AA:930:C:O2'	1:AA:931:C:H5'	2.03	0.57
1:AA:966:G:H2'	1:AA:967:C:C6	2.39	0.57
2:AB:59:GLU:HB2	2:AB:221:LEU:HD11	1.85	0.57
2:AB:91:PRO:HG3	2:AB:154:LEU:HD12	1.86	0.57
5:AE:101:ILE:CD1	5:AE:119:LEU:HD23	2.34	0.57
6:AF:11:ASN:HB3	6:AF:14:LEU:HD21	1.86	0.57
7:AG:115:ARG:HB2	7:AG:118:VAL:HG22	1.86	0.57
14:AN:48:ALA:N	14:AN:53:LEU:HD12	2.20	0.57
1:AA:719:C:O2	18:AR:50:ILE:HG12	2.04	0.57
25:B0:60:PHE:CZ	34:BA:2365:G:H4'	2.38	0.57
26:B1:26:ARG:HE	26:B1:34:THR:CB	2.17	0.57
34:BA:1275:A:C4	47:BR:16:HIS:CE1	2.92	0.57
34:BA:1314:C:C6	34:BA:1314:C:H5'	2.38	0.57
34:BA:1376:C:O2'	34:BA:1377:G:H5'	2.04	0.57
34:BA:2287:A:H2	34:BA:2346:A:C2	2.22	0.57
34:BA:451:C:H4'	39:BF:52:LYS:HZ1	1.67	0.57
35:BB:78:A:C2	35:BB:100:A:C4	2.91	0.57
38:BE:24:THR:CG2	38:BE:184:VAL:HG23	2.32	0.57
34:BA:1247:A:OP1	39:BF:95:ARG:NH2	2.37	0.57
42:BI:38:LEU:O	42:BI:40:THR:N	2.36	0.57
45:BP:127:ALA:HB3	45:BP:130:PHE:CZ	2.39	0.57
46:BQ:127:ILE:HG22	46:BQ:128:LYS:N	2.15	0.57
46:BQ:17:LEU:HD21	46:BQ:41:TRP:HE1	1.69	0.57
50:BU:57:PHE:O	50:BU:58:ARG:C	2.43	0.57
53:BX:36:LYS:C	53:BX:38:GLU:N	2.57	0.57
55:BZ:150:LEU:CD2	55:BZ:171:ILE:HG13	2.34	0.57
46:BQ:140:ALA:H	55:BZ:53:ILE:CD1	2.17	0.57
1:CA:671:G:O2'	1:CA:672:U:H5'	2.04	0.57
2:CB:134:GLU:HA	2:CB:137:ARG:HB2	1.86	0.57
4:CD:134:ASP:O	4:CD:136:PRO:HD3	2.04	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:67:ILE:HG22	4:CD:68:TYR:CD1	2.38	0.57
5:CE:82:VAL:HG21	5:CE:138:ALA:HA	1.86	0.57
8:CH:103:VAL:HG21	8:CH:109:ILE:C	2.23	0.57
10:CJ:32:ALA:HB2	10:CJ:76:ASN:HB3	1.85	0.57
22:CV:56:C:O2	40:DG:78:SER:HB2	2.03	0.57
25:D0:41:ARG:HD2	25:D0:41:ARG:N	2.17	0.57
26:D1:12:PRO:CD	26:D1:13:ILE:H	2.16	0.57
34:DA:1614:A:H62	52:DW:93:ALA:CB	2.15	0.57
34:DA:1747:G:H2'	34:DA:1747(A):G:C8	2.39	0.57
36:DC:46:LYS:CE	36:DC:46:LYS:HA	2.26	0.57
34:DA:2202:C:H1'	37:DD:151:LYS:NZ	2.20	0.57
37:DD:75:ILE:HG21	37:DD:99:ASP:HB2	1.86	0.57
39:DF:122:LYS:HB3	39:DF:191:ARG:HG2	1.85	0.57
39:DF:126:VAL:O	39:DF:196:LEU:HG	2.04	0.57
41:DH:141:VAL:CG1	41:DH:142:GLY:N	2.68	0.57
41:DH:155:SER:O	41:DH:157:TYR:N	2.36	0.57
43:DN:63:THR:O	43:DN:64:GLY:O	2.22	0.57
45:DP:14:LYS:O	45:DP:15:ARG:HG3	2.05	0.57
38:DE:11:MET:N	49:DT:8:LYS:HE3	2.19	0.57
50:DU:110:VAL:O	50:DU:113:ALA:HB3	2.04	0.57
54:DY:32:PRO:C	54:DY:34:LYS:H	2.07	0.57
1:AA:1168:A:H2'	1:AA:1169:A:C8	2.39	0.57
1:AA:973:G:H3'	1:AA:974:A:H5''	1.84	0.57
2:AB:167:PRO:O	2:AB:171:ALA:N	2.37	0.57
11:AK:21:ILE:HA	11:AK:30:VAL:HG12	1.86	0.57
16:AP:53:VAL:O	16:AP:57:ARG:N	2.29	0.57
34:BA:122:G:O2'	34:BA:123:G:H5'	2.03	0.57
34:BA:1336:A:O2'	34:BA:1337:G:H5'	2.05	0.57
34:BA:2181:G:H2'	34:BA:2182:G:C8	2.39	0.57
34:BA:2481:G:HO2'	34:BA:2482:G:P	2.28	0.57
34:BA:314:A:O2'	34:BA:315:G:H5'	2.05	0.57
34:BA:671:C:O2'	34:BA:672:C:H5'	2.03	0.57
35:BB:105:A:H2'	35:BB:106:G:O4'	2.03	0.57
35:BB:60:C:O2'	35:BB:61:G:H5'	2.04	0.57
36:BC:39:GLU:HG2	36:BC:180:PHE:CB	2.34	0.57
34:BA:1828:G:O6	37:BD:222:ARG:HD3	2.05	0.57
38:BE:52:LEU:CB	38:BE:76:ARG:HB2	2.18	0.57
34:BA:2636:U:OP1	38:BE:80:GLU:N	2.37	0.57
41:BH:102:ALA:HB2	41:BH:117:PRO:CB	2.34	0.57
46:BQ:34:LEU:HD11	46:BQ:129:THR:CG2	2.33	0.57
46:BQ:8:LYS:HG3	46:BQ:9:TYR:N	2.19	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:94:LEU:C	51:BV:94:LEU:HD23	2.25	0.57
54:BY:28:LYS:O	54:BY:29:GLU:HB2	2.04	0.57
1:CA:103:C:OP2	20:CT:14:LYS:HD3	2.05	0.57
1:CA:1316:G:O3'	14:CN:18:VAL:HG22	2.04	0.57
1:CA:620:C:H2'	1:CA:621:A:O4'	2.03	0.57
1:CA:658:G:H2'	1:CA:659:U:C6	2.40	0.57
4:CD:102:ASP:HA	4:CD:121:VAL:HG21	1.86	0.57
4:CD:108:LEU:HD21	4:CD:183:GLY:HA3	1.85	0.57
6:CF:53:ALA:O	6:CF:54:LYS:HB2	2.04	0.57
32:D7:43:THR:HG23	32:D7:44:PRO:CD	2.34	0.57
34:DA:1348:G:H2'	34:DA:1349:A:C5'	2.33	0.57
34:DA:1550:C:H2'	34:DA:1551:C:H6	1.69	0.57
34:DA:2639:A:C3'	34:DA:2640:G:C5'	2.83	0.57
34:DA:30:G:H2'	34:DA:31:C:H6	1.69	0.57
37:DD:131:LEU:N	37:DD:131:LEU:HD12	2.19	0.57
40:DG:55:LYS:C	40:DG:57:ALA:N	2.56	0.57
43:DN:74:ARG:NH1	43:DN:101:HIS:ND1	2.52	0.57
55:DZ:125:LEU:O	55:DZ:164:ALA:HB3	2.03	0.57
2:AB:47:THR:HG23	2:AB:202:PRO:HG2	1.85	0.57
2:AB:75:LYS:HA	2:AB:78:GLN:HG3	1.86	0.57
11:AK:52:GLY:H	11:AK:55:LYS:HG3	1.70	0.57
19:AS:47:HIS:O	19:AS:49:ILE:HG13	2.05	0.57
22:AV:37:A:H3'	22:AV:38:A:H8	1.70	0.57
1:AA:1054:C:N4	23:AY:34:G:H1'	2.15	0.57
27:B2:41:ILE:HG22	27:B2:42:GLY:N	2.19	0.57
29:B4:5:ILE:C	40:BG:67:LYS:HE2	2.25	0.57
33:B8:6:THR:HG21	34:BA:243:U:OP1	2.04	0.57
34:BA:83:G:H1	34:BA:102:G:H2'	1.69	0.57
34:BA:1847:A:H3'	34:BA:1848:A:C5'	2.35	0.57
34:BA:2307:G:N2	34:BA:2308:G:H5''	2.19	0.57
34:BA:2350:C:H2'	34:BA:2351:G:O4'	2.04	0.57
34:BA:2491:U:O2'	34:BA:2492:U:H5'	2.04	0.57
34:BA:2735:G:H2'	34:BA:2736:G:C5'	2.35	0.57
34:BA:2886:G:H2'	34:BA:2887:U:H6	1.70	0.57
32:B7:12:ARG:HG3	34:BA:686:G:O6	2.04	0.57
34:BA:754:C:H2'	34:BA:755:C:C6	2.40	0.57
35:BB:106:G:O2'	35:BB:107:G:H5'	2.04	0.57
39:BF:84:VAL:HG12	39:BF:85:GLY:H	1.70	0.57
45:BP:24:GLY:HA3	45:BP:33:ARG:NH2	2.09	0.57
49:BT:118:ARG:O	49:BT:121:ILE:N	2.37	0.57
49:BT:50:ILE:HA	49:BT:99:LEU:CD1	2.35	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BY:8:LYS:HZ2	54:BY:74:PRO:HD3	1.70	0.57
54:BY:75:ILE:HD11	54:BY:79:CYS:N	2.18	0.57
55:BZ:25:PRO:HG2	55:BZ:84:GLU:O	2.04	0.57
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.68	0.57
1:CA:1238:A:C8	1:CA:1303:C:H1'	2.39	0.57
1:CA:1321:C:C3'	1:CA:1322:C:H5''	2.34	0.57
1:CA:1410:G:H2'	1:CA:1411:C:H6	1.69	0.57
1:CA:477:A:O2'	1:CA:479:C:H5'	2.05	0.57
2:CB:102:LEU:HD12	2:CB:102:LEU:N	2.20	0.57
3:CC:58:GLU:HB2	3:CC:65:ALA:HB2	1.86	0.57
4:CD:173:TRP:CD2	4:CD:189:PRO:HB3	2.39	0.57
8:CH:88:LYS:HB3	8:CH:89:PRO:HD2	1.84	0.57
9:CI:8:GLY:O	9:CI:15:ALA:N	2.33	0.57
10:CJ:94:VAL:HG12	10:CJ:95:GLU:H	1.69	0.57
12:CL:34:ARG:HG2	12:CL:35:GLY:N	2.19	0.57
23:CW:16:U:C3'	23:CW:17:C:H5'	2.35	0.57
31:D6:33:LYS:O	31:D6:34:LEU:HB2	2.05	0.57
34:DA:1292:U:H2'	34:DA:1293:C:C6	2.39	0.57
34:DA:1376:C:O2'	34:DA:1377:G:H5'	2.05	0.57
34:DA:1722:A:O2'	34:DA:1739:U:H5''	2.04	0.57
34:DA:1842:G:H2'	34:DA:1843:C:C6	2.39	0.57
34:DA:1847:A:H3'	34:DA:1848:A:C5'	2.34	0.57
34:DA:2348:U:C2'	34:DA:2349:G:C5'	2.74	0.57
34:DA:2838:G:O2'	34:DA:2839:G:H5'	2.05	0.57
37:DD:31:LYS:HZ1	37:DD:31:LYS:HA	1.70	0.57
38:DE:128:SER:OG	38:DE:129:HIS:N	2.36	0.57
38:DE:52:LEU:CB	38:DE:76:ARG:HB2	2.17	0.57
40:DG:41:GLN:HB2	40:DG:90:LEU:HB2	1.87	0.57
40:DG:52:ILE:HG22	40:DG:54:GLU:HG3	1.87	0.57
40:DG:87:PRO:O	40:DG:88:ILE:HB	2.04	0.57
45:DP:83:VAL:HG11	45:DP:112:LEU:HD21	1.87	0.57
46:DQ:37:LEU:O	46:DQ:99:PRO:HB3	2.05	0.57
46:DQ:74:TYR:HD2	46:DQ:91:GLU:CD	2.08	0.57
48:DS:87:PHE:CG	48:DS:88:ASP:N	2.73	0.57
53:DX:37:THR:CG2	53:DX:54:VAL:HB	2.34	0.57
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.69	0.57
1:AA:1238:A:N7	1:AA:1303:C:H1'	2.19	0.57
1:AA:194:C:C2'	1:AA:195:A:H5''	2.35	0.57
1:AA:294:U:H2'	1:AA:295:C:H6	1.69	0.57
1:AA:707:C:OP1	11:AK:85:ARG:NH1	2.35	0.57
2:AB:14:GLY:O	2:AB:15:VAL:HG13	2.04	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:182:ILE:HG12	3:AC:203:PHE:HA	1.85	0.57
3:AC:55:VAL:HG12	3:AC:55:VAL:O	2.02	0.57
33:B8:6:THR:HG21	33:B8:63:PRO:HD3	1.87	0.57
34:BA:1203:G:H4'	45:BP:7:ARG:HG2	1.86	0.57
34:BA:1884:A:C3'	34:BA:1885:A:H5''	2.34	0.57
34:BA:877:U:O2'	34:BA:878:A:H5''	2.04	0.57
34:BA:956:G:H5'	34:BA:957:A:OP2	2.05	0.57
40:BG:102:PHE:HA	40:BG:105:LYS:NZ	2.19	0.57
40:BG:121:ASN:OD1	40:BG:123:ASN:HB2	2.04	0.57
44:BO:4:PRO:O	44:BO:5:GLN:CB	2.49	0.57
51:BV:75:PHE:HE1	51:BV:89:GLN:HB3	1.69	0.57
54:BY:27:VAL:HG12	54:BY:28:LYS:N	2.20	0.57
1:CA:1221:G:O2'	1:CA:1222:G:H5'	2.04	0.57
1:CA:1238:A:N7	1:CA:1303:C:H1'	2.19	0.57
1:CA:190:U:H2'	1:CA:191:G:H8	1.69	0.57
1:CA:41:G:H2'	1:CA:42:G:H8	1.69	0.57
1:CA:458:C:H2'	1:CA:460:G:H8	1.69	0.57
3:CC:188:LEU:O	3:CC:189:ALA:HB2	2.05	0.57
3:CC:5:ILE:O	3:CC:5:ILE:HD13	2.05	0.57
4:CD:19:LEU:HD12	4:CD:19:LEU:H	1.68	0.57
10:CJ:78:ASN:O	10:CJ:82:ILE:HG12	2.04	0.57
14:CN:44:LEU:C	14:CN:44:LEU:HD12	2.24	0.57
15:CO:3:ILE:H	15:CO:3:ILE:HD13	1.68	0.57
16:CP:53:VAL:O	16:CP:57:ARG:N	2.30	0.57
18:CR:31:LEU:HG	18:CR:65:ILE:CD1	2.34	0.57
18:CR:53:ARG:HB3	18:CR:53:ARG:HH11	1.68	0.57
23:CW:5:G:O2'	23:CW:6:G:H5'	2.05	0.57
27:D2:35:LEU:N	27:D2:35:LEU:HD23	2.19	0.57
31:D6:42:TRP:HA	31:D6:42:TRP:HE3	1.70	0.57
34:DA:1345:C:O2'	34:DA:1346:G:H5'	2.05	0.57
34:DA:1750:G:O2'	34:DA:1751:C:H5'	2.04	0.57
34:DA:2098:U:H2'	34:DA:2099:U:C6	2.40	0.57
34:DA:2181:G:H2'	34:DA:2182:G:C8	2.38	0.57
34:DA:460:A:H2'	34:DA:461:C:O4'	2.05	0.57
34:DA:607:U:OP1	39:DF:102:PRO:HA	2.05	0.57
35:DB:74:U:H2'	35:DB:75:G:C5'	2.32	0.57
38:DE:36:ARG:NH2	38:DE:88:GLY:CA	2.67	0.57
40:DG:165:THR:OG1	40:DG:168:GLU:HG3	2.04	0.57
40:DG:173:LEU:O	40:DG:178:PHE:HB2	2.04	0.57
42:DI:52:ARG:HG3	42:DI:53:ALA:N	2.19	0.57
43:DN:67:LEU:O	43:DN:68:GLU:HB2	2.03	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DO:71:ARG:HH11	44:DO:71:ARG:HG3	1.69	0.57
44:DO:76:ALA:HB3	49:DT:75:ILE:HD12	1.85	0.57
45:DP:115:LEU:HB3	45:DP:131:SER:OG	2.03	0.57
1:AA:295:C:H2'	1:AA:296:U:H6	1.69	0.57
8:AH:60:ARG:HG3	8:AH:60:ARG:HH11	1.69	0.57
11:AK:34:ASP:HB2	11:AK:35:PRO:HD2	1.87	0.57
12:AL:18:VAL:O	12:AL:19:ARG:HB3	2.04	0.57
23:AY:41:C:O2'	23:AY:42:C:H5'	2.05	0.57
34:BA:1242:A:H5'	34:BA:1243:G:OP2	2.05	0.57
34:BA:1683:C:H2'	34:BA:1684:C:H6	1.70	0.57
34:BA:2262:U:H2'	34:BA:2263:C:C5'	2.33	0.57
34:BA:2321:G:H2'	34:BA:2321:G:N3	2.20	0.57
34:BA:2068:U:N3	34:BA:2430:A:H2	1.95	0.57
34:BA:408:G:O2'	34:BA:409:C:H5'	2.04	0.57
34:BA:7:G:H1	34:BA:2896:C:H42	1.52	0.57
37:BD:224:ALA:O	37:BD:225:ALA:HB2	2.05	0.57
42:BI:58:LEU:HA	42:BI:61:ARG:NH1	2.19	0.57
45:BP:131:SER:C	45:BP:133:SER:N	2.58	0.57
45:BP:47:ASP:OD1	45:BP:48:PRO:O	2.23	0.57
49:BT:121:ILE:HG22	49:BT:122:ASP:N	2.18	0.57
49:BT:83:ILE:HG13	49:BT:84:GLN:N	2.20	0.57
1:CA:1075:C:H5'	2:CB:103:THR:HG21	1.86	0.57
1:CA:1192:C:H2'	1:CA:1193:G:O4'	2.04	0.57
1:CA:790:A:C6	1:CA:791:G:C6	2.93	0.57
1:CA:975:A:C4'	1:CA:976:G:H5''	2.29	0.57
3:CC:172:ARG:HH11	3:CC:172:ARG:HB3	1.70	0.57
3:CC:182:ILE:HG12	3:CC:203:PHE:HD1	1.70	0.57
9:CI:114:TYR:HD1	10:CJ:60:ARG:HG3	1.68	0.57
11:CK:32:ILE:HD12	11:CK:72:ALA:HB2	1.87	0.57
10:CJ:64:GLU:HG2	14:CN:59:ALA:HA	1.86	0.57
15:CO:23:GLY:O	15:CO:24:SER:CB	2.53	0.57
15:CO:37:ASN:H	15:CO:37:ASN:ND2	2.02	0.57
16:CP:20:VAL:HG22	16:CP:21:VAL:H	1.70	0.57
20:CT:57:ARG:NH1	20:CT:57:ARG:HB2	2.10	0.57
23:CY:41:C:H2'	23:CY:42:C:H6	1.70	0.57
29:D4:29:PRO:C	29:D4:31:ILE:N	2.58	0.57
30:D5:52:TYR:O	30:D5:53:ALA:HB3	2.04	0.57
34:DA:128:C:H2'	34:DA:129:C:C6	2.39	0.57
34:DA:2059:A:H5'	34:DA:2060:A:OP2	2.04	0.57
34:DA:271(M):G:H2'	34:DA:271(N):U:H5'	1.87	0.57
34:DA:706:A:H2'	34:DA:707:G:O4'	2.04	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DB:29:A:H2'	35:DB:30:C:H6	1.66	0.57
39:DF:33:LEU:HD13	39:DF:112:MET:HB3	1.86	0.57
40:DG:73:ALA:HB3	40:DG:85:GLY:HA2	1.85	0.57
41:DH:153:LYS:H	41:DH:153:LYS:CD	2.16	0.57
41:DH:41:MET:HA	41:DH:41:MET:CE	2.33	0.57
42:DI:100:ALA:O	42:DI:104:GLN:HB2	2.04	0.57
42:DI:72:LEU:HD12	42:DI:138:ILE:CG2	2.34	0.57
43:DN:42:TRP:HE3	43:DN:48:MET:HE1	1.70	0.57
45:DP:101:VAL:C	45:DP:103:ALA:N	2.56	0.57
34:DA:1203:G:H4'	45:DP:7:ARG:HG2	1.87	0.57
34:DA:1010:A:H5'	50:DU:62:ILE:HG21	1.86	0.57
52:DW:10:VAL:O	52:DW:11:ARG:CB	2.53	0.57
55:DZ:151:HIS:HB2	55:DZ:169:GLU:O	2.05	0.57
55:DZ:3:TYR:CD2	55:DZ:51:ALA:HB2	2.38	0.57
1:AA:1332:A:H2'	1:AA:1333:A:C8	2.40	0.57
1:AA:1346:A:H61	1:AA:1374:A:H3'	1.69	0.57
1:AA:190:U:H2'	1:AA:191:G:H8	1.68	0.57
1:AA:254:G:O2'	1:AA:255:G:H5'	2.04	0.57
1:AA:374:A:C6	1:AA:375:U:C4	2.93	0.57
1:AA:542:G:H2'	1:AA:543:C:H6	1.69	0.57
1:AA:560:U:H4'	1:AA:561:U:H5''	1.85	0.57
2:AB:32:ILE:HA	2:AB:42:ILE:HA	1.86	0.57
8:AH:110:ALA:HB3	8:AH:121:ASP:HB3	1.86	0.57
8:AH:69:ARG:HD3	8:AH:75:ARG:O	2.05	0.57
11:AK:73:MET:O	11:AK:76:GLY:N	2.37	0.57
12:AL:119:LYS:C	12:AL:120:TYR:CD1	2.77	0.57
14:AN:21:TYR:OH	14:AN:23:ARG:NH2	2.38	0.57
19:AS:43:GLU:O	19:AS:43:GLU:HG2	2.04	0.57
20:AT:33:ILE:HD12	20:AT:63:ILE:HG12	1.87	0.57
20:AT:74:LYS:HD3	20:AT:74:LYS:H	1.69	0.57
23:AW:38:A:H2'	23:AW:39:U:C5'	2.35	0.57
23:AW:65:G:H2'	23:AW:66:U:C6	2.40	0.57
30:B5:31:VAL:HB	30:B5:32:PRO:HD2	1.86	0.57
32:B7:4:THR:OG1	32:B7:5:TRP:N	2.37	0.57
32:B7:10:ARG:HG3	34:BA:125:G:C6	2.40	0.57
34:BA:141:A:C8	34:BA:1408:C:O2'	2.55	0.57
34:BA:2186:G:C2'	34:BA:2187:G:H5''	2.34	0.57
34:BA:2196:C:O2'	34:BA:2197:U:H5'	2.05	0.57
34:BA:2531:A:N3	34:BA:2531:A:H2'	2.20	0.57
34:BA:2801(A):A:C4'	34:BA:2802:G:H5'	2.34	0.57
34:BA:2808:U:H2'	34:BA:2809:A:H5'	1.87	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BD:133:LEU:HA	37:BD:136:ILE:HD13	1.87	0.57
39:BF:163:VAL:O	39:BF:166:ALA:HB3	2.05	0.57
40:BG:57:ALA:O	40:BG:60:LEU:HB3	2.05	0.57
42:BI:60:GLU:C	42:BI:62:LYS:H	2.08	0.57
42:BI:92:VAL:O	42:BI:92:VAL:HG13	2.04	0.57
45:BP:100:LEU:HB2	45:BP:106:LEU:HD22	1.87	0.57
45:BP:83:VAL:HG11	45:BP:112:LEU:HD21	1.86	0.57
47:BR:2:ARG:HD3	47:BR:5:LYS:NZ	2.20	0.57
1:CA:1307:U:H2'	1:CA:1308:U:C6	2.40	0.57
1:CA:163:C:H2'	1:CA:164:U:C6	2.39	0.57
1:CA:947:G:H2'	1:CA:948:C:O4'	2.04	0.57
3:CC:112:SER:OG	3:CC:115:LEU:HG	2.05	0.57
3:CC:140:ARG:HG3	3:CC:140:ARG:HH11	1.70	0.57
1:CA:1112:C:N3	3:CC:178:LEU:HD23	2.18	0.57
11:CK:34:ASP:HB2	11:CK:35:PRO:CD	2.33	0.57
31:D6:11:LEU:HG	31:D6:26:ASN:ND2	2.19	0.57
33:D8:51:ALA:O	33:D8:54:GLU:HG2	2.04	0.57
34:DA:1175:U:O4'	34:DA:1176:G:H2'	2.05	0.57
34:DA:1176:G:H1'	34:DA:1177:A:OP1	2.04	0.57
34:DA:1424:G:H2'	34:DA:1425:G:O4'	2.04	0.57
34:DA:2534:A:H5'	34:DA:2534:A:H8	1.70	0.57
34:DA:2579:C:H2'	34:DA:2580:U:O4'	2.05	0.57
34:DA:64:A:H2'	34:DA:65:C:H6	1.70	0.57
37:DD:110:GLY:O	37:DD:112:GLN:HG3	2.05	0.57
37:DD:2:ALA:O	37:DD:3:VAL:HB	2.04	0.57
39:DF:163:VAL:O	39:DF:166:ALA:HB3	2.04	0.57
41:DH:102:ALA:HB2	41:DH:117:PRO:CB	2.34	0.57
49:DT:33:LYS:HB2	49:DT:41:ARG:HB3	1.86	0.57
51:DV:99:ILE:HG22	51:DV:100:ARG:N	2.20	0.57
34:DA:519:U:H4'	52:DW:25:ARG:HH21	1.69	0.57
53:DX:60:ARG:HE	53:DX:74:PRO:CG	2.13	0.57
54:DY:28:LYS:HD2	54:DY:37:VAL:HB	1.86	0.57
55:DZ:67:LEU:H	55:DZ:67:LEU:HD12	1.68	0.57
1:AA:390:C:H2'	1:AA:391:G:C8	2.40	0.57
1:AA:458:C:H2'	1:AA:460:G:H8	1.69	0.57
1:AA:783:C:O2'	1:AA:784:C:H5'	2.05	0.57
2:AB:113:HIS:O	2:AB:117:GLU:HG2	2.04	0.57
5:AE:101:ILE:HG12	5:AE:119:LEU:HA	1.86	0.57
7:AG:43:PHE:O	7:AG:46:ALA:HB3	2.05	0.57
10:AJ:50:ILE:HA	10:AJ:60:ARG:CB	2.35	0.57
12:AL:84:LEU:HD23	12:AL:85:ILE:N	2.20	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:37:ASN:N	15:AO:37:ASN:ND2	2.53	0.57
19:AS:49:ILE:HD12	19:AS:49:ILE:N	2.20	0.57
21:AU:9:ARG:HH11	21:AU:22:ARG:HG3	1.70	0.57
34:BA:2286:A:H8	34:BA:2286:A:HO2'	1.52	0.57
34:BA:2410:G:H2'	34:BA:2411:A:O4'	2.05	0.57
34:BA:549:G:C2'	34:BA:551:G:H5''	2.35	0.57
36:BC:46:LYS:HA	36:BC:46:LYS:CE	2.27	0.57
38:BE:111:ARG:NE	38:BE:160:TYR:HE1	2.02	0.57
40:BG:59:GLU:O	40:BG:63:ILE:HG23	2.05	0.57
41:BH:89:ILE:HG12	41:BH:90:LYS:N	2.19	0.57
44:BO:32:TYR:N	44:BO:32:TYR:CD1	2.71	0.57
45:BP:101:VAL:CG2	45:BP:107:LYS:HA	2.30	0.57
46:BQ:69:PHE:CD1	46:BQ:70:PRO:HD2	2.40	0.57
44:BO:104:ARG:NH1	49:BT:35:LYS:HD3	2.19	0.57
1:CA:1168:A:H2'	1:CA:1169:A:C8	2.39	0.57
1:CA:1251:A:H2'	1:CA:1252:A:H8	1.70	0.57
1:CA:664:G:H22	1:CA:741:G:H1	1.53	0.57
2:CB:70:PHE:CE2	2:CB:163:PHE:HD1	2.22	0.57
3:CC:70:VAL:CG1	3:CC:71:ALA:N	2.67	0.57
27:D2:25:VAL:C	27:D2:27:GLU:H	2.06	0.57
30:D5:6:VAL:HG13	30:D5:7:PRO:HD2	1.86	0.57
31:D6:16:CYS:O	31:D6:17:LYS:HB2	2.03	0.57
33:D8:6:THR:HG21	34:DA:243:U:OP1	2.05	0.57
34:DA:1563:G:O2'	34:DA:1564:C:H5'	2.05	0.57
26:D1:41:ARG:HH12	34:DA:189:G:P	2.28	0.57
34:DA:2103:C:H3'	34:DA:2104:G:C5'	2.26	0.57
34:DA:402:A:O2'	34:DA:403:U:H5'	2.05	0.57
34:DA:7:G:H1	34:DA:2896:C:H42	1.52	0.57
34:DA:910:A:N7	46:DQ:13:GLN:HB2	2.19	0.57
37:DD:138:VAL:HA	37:DD:165:ILE:HG21	1.85	0.57
37:DD:267:SER:O	37:DD:268:ARG:HB2	2.05	0.57
38:DE:3:GLY:HA3	38:DE:81:ILE:HG21	1.86	0.57
39:DF:51:THR:CG2	39:DF:92:PRO:HD2	2.35	0.57
40:DG:111:LEU:HB2	40:DG:112:PRO:CD	2.35	0.57
49:DT:82:LEU:O	49:DT:84:GLN:N	2.38	0.57
50:DU:92:ARG:HH22	51:DV:10:LYS:HB3	1.70	0.57
53:DX:36:LYS:O	53:DX:38:GLU:N	2.37	0.57
1:AA:296:U:H2'	1:AA:297:G:C8	2.40	0.57
1:AA:706:A:C1'	11:AK:29:ILE:HD11	2.35	0.57
2:AB:100:GLY:O	2:AB:104:ASN:N	2.38	0.57
2:AB:32:ILE:HD13	2:AB:40:HIS:HB3	1.87	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:82:VAL:HG21	5:AE:138:ALA:HA	1.87	0.57
11:AK:29:ILE:CB	11:AK:44:SER:HB3	2.30	0.57
12:AL:39:VAL:HG12	12:AL:40:VAL:N	2.20	0.57
14:AN:47:LEU:HB2	14:AN:53:LEU:HD11	1.87	0.57
16:AP:45:THR:HG23	16:AP:46:PRO:HD2	1.86	0.57
24:AX:20:U:H2'	24:AX:21:C:H6	1.69	0.57
33:B8:23:VAL:HG12	33:B8:46:ARG:NH1	2.19	0.57
34:BA:1292:U:H2'	34:BA:1293:C:C6	2.40	0.57
34:BA:1988:C:H2'	34:BA:1989:G:H8	1.70	0.57
34:BA:1991:U:O2'	34:BA:1992:G:H5''	2.05	0.57
34:BA:2025:C:H2'	34:BA:2026:C:H6	1.70	0.57
34:BA:2059:A:H5'	34:BA:2060:A:OP2	2.04	0.57
37:BD:8:PRO:CB	37:BD:14:ARG:HB2	2.32	0.57
41:BH:87:LEU:CD1	41:BH:148:ILE:HG21	2.30	0.57
43:BN:40:PRO:HA	50:BU:64:ARG:CZ	2.34	0.57
46:BQ:38:GLU:HB2	46:BQ:127:ILE:HG23	1.87	0.57
48:BS:58:LEU:HD21	48:BS:68:GLN:OE1	2.05	0.57
50:BU:92:ARG:NH2	51:BV:10:LYS:HB3	2.20	0.57
53:BX:60:ARG:HG3	53:BX:72:LYS:N	2.20	0.57
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.88	0.57
1:CA:573:A:O2'	1:CA:574:A:H5'	2.04	0.57
1:CA:748:C:H1'	1:CA:749:C:OP2	2.05	0.57
1:CA:950:U:H4'	1:CA:971:G:C2	2.40	0.57
2:CB:102:LEU:CD1	2:CB:102:LEU:N	2.66	0.57
2:CB:194:PRO:HG2	2:CB:195:ASP:H	1.70	0.57
2:CB:213:LEU:C	2:CB:213:LEU:HD23	2.25	0.57
2:CB:87:ARG:HD2	2:CB:87:ARG:O	2.04	0.57
3:CC:189:ALA:CB	3:CC:196:LEU:HB2	2.34	0.57
18:CR:37:VAL:HG23	18:CR:38:GLU:N	2.19	0.57
33:D8:4:MET:SD	33:D8:61:LEU:HD12	2.44	0.57
33:D8:6:THR:HG21	33:D8:63:PRO:HD3	1.87	0.57
34:DA:1190:G:OP1	45:DP:35:HIS:HA	2.05	0.57
34:DA:1661:G:O2'	34:DA:1662:C:H5'	2.05	0.57
34:DA:2307:G:N2	34:DA:2308:G:H5''	2.20	0.57
34:DA:266:G:H2'	34:DA:267:C:H5''	1.86	0.57
37:DD:25:THR:HG23	37:DD:27:THR:HB	1.87	0.57
39:DF:115:ALA:O	39:DF:116:ASP:C	2.43	0.57
39:DF:22:ALA:C	39:DF:24:LEU:H	2.07	0.57
40:DG:70:VAL:HA	40:DG:88:ILE:HD11	1.85	0.57
45:DP:30:THR:CG2	45:DP:31:ALA:H	2.18	0.57
46:DQ:34:LEU:HD11	46:DQ:129:THR:HB	1.85	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:28:LYS:O	54:DY:29:GLU:HB2	2.05	0.57
54:DY:39:VAL:O	54:DY:40:GLU:CD	2.43	0.57
1:AA:1321:C:H5'	1:AA:1322:C:H5'	1.87	0.56
1:AA:555:C:H2'	1:AA:556:C:H6	1.70	0.56
1:AA:620:C:H2'	1:AA:621:A:O4'	2.05	0.56
4:AD:112:VAL:HG12	4:AD:116:GLN:OE1	2.05	0.56
13:AM:91:ARG:NH1	19:AS:81:ARG:NH2	2.52	0.56
16:AP:26:ARG:HG2	16:AP:26:ARG:HH11	1.70	0.56
23:AW:2:C:H42	23:AW:71:G:H1	1.51	0.56
24:AX:17:U:H2'	24:AX:18:G:O4'	2.05	0.56
26:B1:23:LYS:HE3	26:B1:23:LYS:HA	1.87	0.56
27:B2:26:ARG:NE	27:B2:29:LYS:NZ	2.53	0.56
27:B2:51:ARG:O	27:B2:52:ASP:CB	2.53	0.56
32:B7:12:ARG:NH1	32:B7:12:ARG:HG3	2.20	0.56
34:BA:94(A):G:H2'	34:BA:95:G:O4'	2.04	0.56
36:BC:89:ALA:HB2	36:BC:153:ILE:CB	2.35	0.56
37:BD:183:ARG:HD2	37:BD:270:ILE:HG22	1.86	0.56
37:BD:267:SER:O	37:BD:268:ARG:HB2	2.04	0.56
37:BD:267:SER:O	37:BD:269:PHE:N	2.38	0.56
34:BA:1815:A:OP2	37:BD:54:ARG:NH2	2.37	0.56
40:BG:112:PRO:CB	40:BG:113:ARG:HG2	2.35	0.56
41:BH:141:VAL:CG1	41:BH:142:GLY:N	2.68	0.56
43:BN:65:LYS:CE	43:BN:65:LYS:HA	2.13	0.56
43:BN:72:TYR:N	43:BN:85:ILE:O	2.36	0.56
45:BP:115:LEU:HB3	45:BP:131:SER:OG	2.04	0.56
55:BZ:105:VAL:HG22	55:BZ:106:GLY:N	2.20	0.56
1:CA:1316:G:C2'	1:CA:1317:C:H5''	2.35	0.56
1:CA:683:G:H2'	1:CA:684:A:H8	1.67	0.56
1:CA:900:A:H2'	1:CA:901:A:C8	2.40	0.56
5:CE:147:ASP:HA	5:CE:150:ARG:HH11	1.69	0.56
12:CL:18:VAL:O	12:CL:19:ARG:HB3	2.05	0.56
26:D1:10:LYS:O	26:D1:12:PRO:HD2	2.04	0.56
26:D1:86:SER:O	26:D1:90:ILE:HG12	2.04	0.56
27:D2:12:GLU:O	27:D2:13:ALA:O	2.23	0.56
27:D2:32:LEU:O	27:D2:34:GLU:N	2.37	0.56
33:D8:60:LEU:HB3	33:D8:63:PRO:HG2	1.87	0.56
34:DA:2668:G:O2'	34:DA:2669:G:H5'	2.05	0.56
34:DA:2735:G:H2'	34:DA:2736:G:C5'	2.35	0.56
34:DA:2801(A):A:C4'	34:DA:2802:G:H5'	2.34	0.56
35:DB:105:A:H2'	35:DB:106:G:O4'	2.05	0.56
37:DD:9:TYR:CD2	37:DD:10:THR:HG22	2.40	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DE:51:PHE:CD1	38:DE:52:LEU:HD12	2.41	0.56
38:DE:55:ASN:HB2	38:DE:72:VAL:HG12	1.87	0.56
40:DG:103:LEU:O	40:DG:106:LEU:HB3	2.04	0.56
44:DO:11:ALA:O	44:DO:12:ASP:HB3	2.04	0.56
44:DO:71:ARG:NH2	44:DO:122:LEU:OXT	2.38	0.56
46:DQ:12:GLN:HG2	46:DQ:73:PRO:HD2	1.85	0.56
44:DO:107:ARG:NH2	49:DT:35:LYS:HD2	2.20	0.56
51:DV:69:LYS:CG	51:DV:70:ILE:H	2.17	0.56
53:DX:89:ILE:HD12	53:DX:89:ILE:N	2.20	0.56
1:AA:294:U:H2'	1:AA:295:C:C6	2.40	0.56
1:AA:782:A:O2'	1:AA:783:C:H5'	2.06	0.56
3:AC:102:ASN:O	3:AC:103:VAL:HG23	2.05	0.56
5:AE:36:ASP:O	5:AE:37:ARG:HB2	2.05	0.56
1:AA:973:G:H1'	10:AJ:55:LYS:HE3	1.86	0.56
10:AJ:80:LYS:HA	10:AJ:80:LYS:HZ2	1.70	0.56
12:AL:120:TYR:N	12:AL:120:TYR:CD1	2.72	0.56
15:AO:23:GLY:O	15:AO:24:SER:CB	2.52	0.56
24:AX:20:U:H2'	24:AX:21:C:C6	2.40	0.56
30:B5:20:ARG:HA	30:B5:23:HIS:CD2	2.41	0.56
34:BA:1169:G:H1	34:BA:1180:C:N4	2.01	0.56
34:BA:373:U:H2'	34:BA:374:A:H8	1.70	0.56
34:BA:27:G:N2	34:BA:512:G:C2'	2.68	0.56
37:BD:132:PRO:HG3	37:BD:190:TYR:CE1	2.40	0.56
38:BE:201:THR:CG2	38:BE:202:LYS:N	2.68	0.56
39:BF:205:ARG:C	39:BF:206:ILE:HG13	2.24	0.56
34:BA:440:G:H22	39:BF:46:ARG:HH21	1.54	0.56
44:BO:13:ASN:HD21	44:BO:97:ARG:N	2.02	0.56
53:BX:82:GLN:OE1	53:BX:83:VAL:N	2.37	0.56
54:BY:38:ILE:HG12	54:BY:66:PRO:HA	1.87	0.56
1:CA:1208:C:H2'	1:CA:1209:C:C6	2.38	0.56
1:CA:1299:A:C8	1:CA:1301:U:H1'	2.40	0.56
1:CA:47:C:H5''	1:CA:365:U:C6	2.40	0.56
1:CA:460:G:O6	1:CA:470:C:H5''	2.05	0.56
2:CB:43:ASP:OD2	2:CB:46:LYS:HB2	2.04	0.56
6:CF:33:TYR:HD1	6:CF:75:LEU:HD12	1.69	0.56
11:CK:110:ASP:O	18:CR:84:LYS:HD2	2.05	0.56
11:CK:21:ILE:HA	11:CK:30:VAL:HG12	1.86	0.56
11:CK:43:SER:OG	11:CK:47:VAL:HG11	2.04	0.56
17:CQ:25:ARG:O	17:CQ:25:ARG:HG3	2.03	0.56
34:DA:1150:C:O2'	34:DA:1151:G:H5'	2.05	0.56
34:DA:1410:G:H1	34:DA:1592:C:H42	1.53	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1963:U:H4'	34:DA:1964:G:OP1	2.02	0.56
34:DA:1987:G:O2'	34:DA:1988:C:H5'	2.05	0.56
34:DA:2025:C:H2'	34:DA:2026:C:H6	1.70	0.56
34:DA:229:A:H3'	34:DA:230:U:C5'	2.31	0.56
34:DA:2591:C:P	37:DD:239:ARG:HG3	2.45	0.56
34:DA:27:G:N2	34:DA:512:G:C2'	2.66	0.56
34:DA:751:A:H5'	52:DW:90:ARG:HA	1.87	0.56
35:DB:40:U:H1'	35:DB:45:A:N6	2.19	0.56
38:DE:11:MET:HB2	38:DE:23:VAL:O	2.05	0.56
41:DH:140:LYS:O	41:DH:144:VAL:HG23	2.06	0.56
42:DI:120:ILE:HD13	42:DI:126:TYR:CD1	2.40	0.56
42:DI:54:GLN:HA	42:DI:57:ARG:NH1	2.19	0.56
34:DA:2641:G:OP1	43:DN:75:TYR:HB3	2.04	0.56
48:DS:74:ALA:HB1	48:DS:103:GLU:CG	2.21	0.56
50:DU:112:ARG:O	50:DU:115:ALA:HB3	2.04	0.56
54:DY:8:LYS:HZ2	54:DY:74:PRO:HD3	1.70	0.56
1:AA:15:G:H4'	5:AE:24:ARG:NH1	2.20	0.56
1:AA:575:G:OP1	1:AA:575:G:H4'	2.04	0.56
3:AC:172:ARG:NH1	3:AC:172:ARG:HB3	2.21	0.56
18:AR:35:ARG:O	18:AR:37:VAL:HG13	2.05	0.56
27:B2:46:GLN:HG2	27:B2:50:ILE:CG1	2.35	0.56
30:B5:52:TYR:O	30:B5:53:ALA:HB3	2.05	0.56
34:BA:1438:U:O2'	34:BA:1439:A:H5'	2.04	0.56
34:BA:1682:G:H2'	34:BA:1683:C:C6	2.41	0.56
34:BA:2590:A:O2'	34:BA:2591:C:H5'	2.04	0.56
34:BA:38:A:H1'	39:BF:48:THR:HB	1.86	0.56
34:BA:554:U:C2'	34:BA:555:U:H5'	2.35	0.56
39:BF:2:LYS:O	39:BF:25:PRO:HG2	2.05	0.56
40:BG:153:ARG:HG2	40:BG:153:ARG:O	2.06	0.56
42:BI:72:LEU:O	42:BI:138:ILE:HA	2.04	0.56
44:BO:69:ILE:HD12	44:BO:69:ILE:H	1.69	0.56
44:BO:71:ARG:NH2	44:BO:122:LEU:OXT	2.38	0.56
45:BP:85:LEU:HD21	45:BP:117:GLU:O	2.05	0.56
45:BP:13:ASN:HD22	45:BP:13:ASN:N	2.02	0.56
48:BS:31:SER:HB3	48:BS:34:HIS:O	2.06	0.56
48:BS:87:PHE:CG	48:BS:88:ASP:N	2.73	0.56
1:CA:1074:G:H2'	1:CA:1075:C:C6	2.40	0.56
1:CA:1343:G:C1'	9:CI:121:ARG:HH12	2.17	0.56
1:CA:254:G:O2'	1:CA:255:G:H5'	2.04	0.56
3:CC:77:ILE:HA	3:CC:84:ILE:CG2	2.35	0.56
25:D0:53:MET:HB3	25:D0:59:LEU:HD23	1.86	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D0:29:GLN:O	25:D0:67:VAL:HG23	2.06	0.56
27:D2:53:LEU:O	27:D2:54:LYS:CG	2.53	0.56
32:D7:9:ARG:NH1	34:DA:1310:G:OP2	2.38	0.56
33:D8:13:ARG:HD2	45:DP:61:ARG:HH11	1.70	0.56
34:DA:2591:C:H2'	34:DA:2592:G:H8	1.70	0.56
34:DA:542:C:C4	34:DA:543:C:N4	2.74	0.56
38:DE:154:LYS:HA	38:DE:154:LYS:CE	2.34	0.56
40:DG:43:LEU:HD12	40:DG:43:LEU:N	2.21	0.56
41:DH:70:THR:HG22	41:DH:74:ASN:HD21	1.69	0.56
43:DN:99:LEU:O	43:DN:103:VAL:HG23	2.05	0.56
50:DU:34:LYS:HA	50:DU:34:LYS:CE	2.33	0.56
54:DY:26:LYS:HG2	54:DY:27:VAL:N	2.21	0.56
1:AA:1151:A:O2'	1:AA:1152:A:H8	1.88	0.56
1:AA:1202:G:C2	14:AN:42:ILE:HG21	2.40	0.56
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.41	0.56
1:AA:947:G:H2'	1:AA:948:C:O4'	2.05	0.56
2:AB:144:ARG:HA	2:AB:147:LYS:HB3	1.87	0.56
5:AE:91:LEU:HD12	5:AE:120:THR:HG22	1.87	0.56
6:AF:33:TYR:HD1	6:AF:75:LEU:HD12	1.69	0.56
11:AK:23:ALA:HB1	11:AK:88:GLY:HA3	1.87	0.56
13:AM:2:ALA:C	13:AM:9:ILE:HG23	2.25	0.56
16:AP:53:VAL:HG23	16:AP:54:GLU:H	1.69	0.56
31:B6:33:LYS:O	31:B6:34:LEU:HB2	2.05	0.56
34:BA:2387:U:H5'	34:BA:2388:A:OP2	2.05	0.56
34:BA:2472:G:H2'	34:BA:2529:G:H22	1.66	0.56
34:BA:2496:C:OP1	46:BQ:81:VAL:HG13	2.06	0.56
34:BA:993:G:N2	51:BV:91:TYR:OH	2.39	0.56
36:BC:50:ASP:OD1	36:BC:55:ASP:HA	2.04	0.56
38:BE:114:ALA:HB3	38:BE:160:TYR:HB3	1.88	0.56
39:BF:22:ALA:C	39:BF:24:LEU:H	2.07	0.56
34:BA:39:C:O2	39:BF:46:ARG:NH2	2.39	0.56
45:BP:121:LYS:O	45:BP:123:LEU:HD23	2.05	0.56
46:BQ:7:MET:O	46:BQ:10:ARG:NE	2.37	0.56
50:BU:92:ARG:HD2	51:BV:11:GLN:HG2	1.88	0.56
55:BZ:99:TYR:HE2	55:BZ:125:LEU:HD12	1.70	0.56
1:CA:1103:C:H5''	2:CB:98:LEU:HD13	1.88	0.56
4:CD:31:CYS:C	4:CD:33:MET:H	2.06	0.56
10:CJ:92:THR:HG23	10:CJ:93:GLY:N	2.20	0.56
33:D8:4:MET:HE2	34:DA:592:G:N3	2.20	0.56
34:DA:1175:U:C4'	34:DA:1176:G:H2'	2.35	0.56
34:DA:1899:G:N2	34:DA:1902:C:N4	2.46	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2410:G:H2'	34:DA:2411:A:O4'	2.05	0.56
34:DA:2496:C:OP1	46:DQ:81:VAL:HG13	2.06	0.56
34:DA:2702:U:OP1	34:DA:2702:U:O4'	2.23	0.56
34:DA:635:C:H2'	34:DA:636:G:H8	1.69	0.56
34:DA:94(A):G:H2'	34:DA:95:G:O4'	2.04	0.56
35:DB:81:G:H5'	35:DB:82:G:OP2	2.05	0.56
37:DD:159:ALA:H	37:DD:196:VAL:HG11	1.70	0.56
38:DE:9:VAL:HG13	38:DE:25:VAL:O	2.05	0.56
38:DE:60:ASN:OD1	38:DE:62:PRO:CD	2.52	0.56
38:DE:91:VAL:HG12	38:DE:91:VAL:O	2.04	0.56
40:DG:76:SER:HB3	40:DG:84:LYS:H	1.70	0.56
46:DQ:11:LYS:HE2	46:DQ:85:LYS:CG	2.25	0.56
46:DQ:30:GLY:HA2	46:DQ:107:ALA:CB	2.26	0.56
47:DR:67:LEU:H	47:DR:67:LEU:HD22	1.69	0.56
49:DT:28:VAL:CG2	49:DT:47:GLY:N	2.55	0.56
53:DX:36:LYS:C	53:DX:38:GLU:N	2.57	0.56
53:DX:70:LEU:HG	53:DX:71:GLY:N	2.21	0.56
55:DZ:22:GLY:HA2	55:DZ:41:LEU:HD12	1.87	0.56
1:AA:186:C:H5'	20:AT:78:ALA:CB	2.34	0.56
1:AA:460:G:O6	1:AA:470:C:H5''	2.05	0.56
1:AA:671:G:O2'	1:AA:672:U:H5'	2.05	0.56
2:AB:69:LEU:HD13	2:AB:91:PRO:HB2	1.87	0.56
3:AC:156:ARG:HH21	3:AC:160:ALA:C	2.08	0.56
6:AF:61:LEU:HD12	6:AF:61:LEU:N	2.21	0.56
17:AQ:59:ILE:CG2	17:AQ:71:PHE:HB3	2.35	0.56
19:AS:16:LEU:H	19:AS:16:LEU:CD1	2.16	0.56
31:B6:10:LEU:HD22	31:B6:10:LEU:N	2.21	0.56
32:B7:47:ARG:C	32:B7:48:LYS:HD3	2.25	0.56
34:BA:1257:C:H2'	34:BA:1258:C:C6	2.41	0.56
34:BA:2277:G:H2'	34:BA:2278:A:H5'	1.87	0.56
34:BA:2289:G:H2'	34:BA:2290:G:H5''	1.88	0.56
34:BA:2296:U:H2'	48:BS:13:ARG:NH2	2.21	0.56
34:BA:2514:U:H2'	34:BA:2515:C:H6	1.70	0.56
34:BA:2716:U:O2'	34:BA:2717:G:H5'	2.05	0.56
34:BA:271(M):G:H2'	34:BA:271(N):U:H5'	1.86	0.56
34:BA:402:A:O2'	34:BA:403:U:H5'	2.05	0.56
34:BA:2591:C:P	37:BD:239:ARG:HG3	2.45	0.56
39:BF:33:LEU:HD13	39:BF:112:MET:HB3	1.88	0.56
41:BH:139:GLN:O	41:BH:143:GLN:HB2	2.06	0.56
42:BI:1:MET:HB2	42:BI:21:VAL:O	2.05	0.56
42:BI:28:ASN:HA	42:BI:32:PRO:HG2	1.88	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BN:128:HIS:O	43:BN:130:HIS:N	2.38	0.56
43:BN:2:LYS:HD2	43:BN:2:LYS:N	2.20	0.56
43:BN:48:MET:O	43:BN:48:MET:SD	2.64	0.56
45:BP:34:GLY:O	45:BP:35:HIS:HD2	1.89	0.56
46:BQ:74:TYR:HD2	46:BQ:91:GLU:CD	2.09	0.56
46:BQ:75:THR:HA	46:BQ:89:ASN:N	2.20	0.56
52:BW:1:MET:HE2	52:BW:2:GLU:H	1.70	0.56
1:CA:328:C:H2'	1:CA:328:C:O2	2.05	0.56
2:CB:158:LEU:CD1	2:CB:158:LEU:H	2.18	0.56
2:CB:32:ILE:HA	2:CB:42:ILE:HA	1.88	0.56
3:CC:173:VAL:HG12	3:CC:175:LEU:HG	1.87	0.56
8:CH:134:ILE:HG22	8:CH:135:CYS:SG	2.45	0.56
9:CI:114:TYR:N	9:CI:114:TYR:CD2	2.70	0.56
12:CL:90:VAL:O	12:CL:90:VAL:HG12	2.05	0.56
22:CV:2:G:H2'	22:CV:3:C:C6	2.40	0.56
23:CY:44:G:H3'	23:CY:44:G:N3	2.20	0.56
25:D0:36:ILE:N	25:D0:36:ILE:HD13	2.21	0.56
26:D1:83:GLU:C	26:D1:85:LEU:H	2.09	0.56
27:D2:28:LYS:HG2	27:D2:43:GLN:O	2.04	0.56
32:D7:10:ARG:HG3	34:DA:125:G:C6	2.40	0.56
33:D8:25:MET:SD	45:DP:64:LYS:HG3	2.46	0.56
34:DA:2040:C:H2'	34:DA:2041:U:C6	2.38	0.56
34:DA:2703:C:H2'	34:DA:2704:C:C6	2.41	0.56
34:DA:615:G:OP1	39:DF:40:GLN:NE2	2.38	0.56
40:DG:34:LEU:HD11	40:DG:103:LEU:CD1	2.35	0.56
40:DG:48:GLU:O	40:DG:49:ASP:HB2	2.04	0.56
42:DI:38:LEU:O	42:DI:40:THR:N	2.38	0.56
46:DQ:17:LEU:HD21	46:DQ:41:TRP:HE1	1.70	0.56
46:DQ:8:LYS:HG3	46:DQ:9:TYR:N	2.20	0.56
47:DR:28:LEU:CD2	47:DR:114:VAL:HG12	2.36	0.56
50:DU:74:LEU:HD23	50:DU:114:LYS:HE3	1.87	0.56
50:DU:31:SER:C	50:DU:33:ARG:N	2.59	0.56
54:DY:13:VAL:HG11	54:DY:72:VAL:HB	1.87	0.56
1:AA:1208:C:H2'	1:AA:1209:C:C6	2.37	0.56
1:AA:175:C:O2'	1:AA:176:C:H5'	2.06	0.56
1:AA:17:U:H2'	1:AA:18:C:H6	1.65	0.56
1:AA:950:U:H4'	1:AA:971:G:C2	2.41	0.56
3:AC:173:VAL:HG12	3:AC:175:LEU:HG	1.87	0.56
3:AC:189:ALA:CB	3:AC:196:LEU:HB2	2.35	0.56
4:AD:209:ARG:HH11	4:AD:209:ARG:HG3	1.68	0.56
5:AE:150:ARG:HB2	5:AE:150:ARG:HH11	1.68	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:6:PHE:HB2	5:AE:34:VAL:CG1	2.35	0.56
8:AH:14:ARG:NH1	8:AH:14:ARG:HB3	2.20	0.56
8:AH:14:ARG:HH11	8:AH:14:ARG:HB3	1.69	0.56
10:AJ:32:ALA:HB2	10:AJ:76:ASN:HB3	1.87	0.56
18:AR:53:ARG:HB3	18:AR:53:ARG:HH11	1.71	0.56
22:AV:1:C:H42	22:AV:72:A:H61	1.53	0.56
26:B1:90:ILE:O	26:B1:94:LEU:HB2	2.05	0.56
33:B8:60:LEU:HB3	33:B8:63:PRO:HG2	1.88	0.56
34:BA:1684:C:O2'	34:BA:1685:C:H5'	2.05	0.56
34:BA:1695:G:C2'	34:BA:1696:G:H5'	2.36	0.56
34:BA:2704:C:C2	34:BA:2705:A:C8	2.94	0.56
34:BA:2777:G:H4'	34:BA:2778:A:H5'	1.86	0.56
25:B0:74:ARG:HG2	35:BB:12:C:O2'	2.05	0.56
37:BD:241:PRO:O	37:BD:243:GLY:N	2.38	0.56
34:BA:1675:C:C2	38:BE:129:HIS:HD2	2.24	0.56
38:BE:179:GLU:OE1	38:BE:179:GLU:HA	2.04	0.56
38:BE:180:ASN:O	38:BE:181:LEU:HD22	2.06	0.56
38:BE:3:GLY:O	38:BE:4:ILE:CB	2.54	0.56
38:BE:51:PHE:CD1	38:BE:52:LEU:HD12	2.40	0.56
38:BE:63:LEU:O	38:BE:63:LEU:HD23	2.05	0.56
40:BG:55:LYS:C	40:BG:57:ALA:N	2.58	0.56
42:BI:98:ALA:CA	42:BI:109:ILE:HD13	2.35	0.56
44:BO:11:ALA:O	44:BO:12:ASP:HB3	2.04	0.56
44:BO:65:THR:O	44:BO:79:PHE:HB2	2.05	0.56
45:BP:108:LYS:C	45:BP:110:TYR:H	2.06	0.56
45:BP:14:LYS:O	45:BP:15:ARG:HG3	2.05	0.56
45:BP:48:PRO:HG2	45:BP:49:ARG:N	2.19	0.56
1:CA:975:A:H5'	1:CA:975:A:C8	2.40	0.56
8:CH:60:ARG:HH11	8:CH:60:ARG:HG3	1.71	0.56
12:CL:69:TYR:C	12:CL:70:ILE:HD12	2.26	0.56
19:CS:49:ILE:O	19:CS:60:VAL:HG12	2.06	0.56
23:CW:38:A:H2'	23:CW:39:U:C4'	2.36	0.56
26:D1:54:ALA:C	26:D1:56:GLN:N	2.59	0.56
32:D7:4:THR:OG1	32:D7:5:TRP:N	2.38	0.56
34:DA:1365:A:H2'	34:DA:1366:A:C8	2.35	0.56
34:DA:2404:C:H2'	34:DA:2405:G:O4'	2.05	0.56
34:DA:2563:U:H2'	34:DA:2565:A:OP2	2.05	0.56
34:DA:2808:U:H2'	34:DA:2809:A:H5'	1.88	0.56
34:DA:877:U:O2'	34:DA:878:A:H5''	2.05	0.56
40:DG:67:LYS:CD	40:DG:67:LYS:N	2.68	0.56
41:DH:89:ILE:CD1	41:DH:129:THR:HB	2.36	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:77:LEU:CD1	42:DI:101:LEU:HB2	2.35	0.56
47:DR:2:ARG:HD3	47:DR:5:LYS:NZ	2.18	0.56
55:DZ:44:PHE:CE1	55:DZ:48:PHE:HB2	2.41	0.56
1:AA:1484:C:H2'	1:AA:1485:U:H6	1.70	0.56
1:AA:310:G:H2'	1:AA:311:C:H6	1.71	0.56
1:AA:436:C:O2'	1:AA:437:U:P	2.63	0.56
3:AC:148:GLY:CA	3:AC:203:PHE:HB3	2.21	0.56
7:AG:137:LYS:O	7:AG:141:VAL:HG23	2.05	0.56
9:AI:114:TYR:HD1	10:AJ:60:ARG:HG3	1.70	0.56
10:AJ:33:GLN:N	10:AJ:75:ILE:HD11	2.19	0.56
10:AJ:78:ASN:O	10:AJ:82:ILE:HG12	2.06	0.56
19:AS:67:VAL:C	19:AS:69:HIS:H	2.08	0.56
26:B1:66:HIS:O	26:B1:67:ILE:C	2.43	0.56
26:B1:87:PRO:HB2	26:B1:91:LYS:HD2	1.87	0.56
26:B1:94:LEU:HD22	26:B1:95:LEU:N	2.20	0.56
29:B4:29:PRO:C	29:B4:31:ILE:N	2.57	0.56
34:BA:1722:A:O2'	34:BA:1739:U:H5''	2.05	0.56
34:BA:2011:U:C2'	34:BA:2012:G:H5'	2.35	0.56
34:BA:2591:C:H2'	34:BA:2592:G:H8	1.70	0.56
34:BA:460:A:H2'	34:BA:461:C:O4'	2.06	0.56
37:BD:75:ILE:HG21	37:BD:99:ASP:HB2	1.86	0.56
39:BF:20:LEU:HD22	39:BF:23:ASP:OD2	2.06	0.56
41:BH:98:LEU:HB2	41:BH:125:VAL:HG21	1.87	0.56
43:BN:16:ILE:HG12	43:BN:17:ASP:N	2.21	0.56
44:BO:71:ARG:HH11	44:BO:71:ARG:HG3	1.70	0.56
45:BP:74:GLU:HG3	45:BP:75:ILE:N	2.20	0.56
49:BT:33:LYS:HB2	49:BT:41:ARG:HB3	1.86	0.56
50:BU:28:ARG:NH1	50:BU:38:THR:OG1	2.38	0.56
51:BV:72:VAL:C	51:BV:88:ARG:HH22	2.09	0.56
52:BW:52:GLU:O	52:BW:55:ALA:HB3	2.05	0.56
54:BY:28:LYS:O	54:BY:38:ILE:CB	2.45	0.56
55:BZ:144:LEU:N	55:BZ:144:LEU:HD22	2.20	0.56
1:CA:1346:A:H61	1:CA:1374:A:H3'	1.71	0.56
1:CA:560:U:H4'	1:CA:561:U:H5''	1.88	0.56
2:CB:236:TYR:HA	2:CB:239:VAL:HG23	1.88	0.56
3:CC:35:GLU:O	3:CC:39:ILE:HG13	2.05	0.56
5:CE:146:ALA:C	5:CE:148:VAL:H	2.09	0.56
11:CK:124:LYS:HD2	11:CK:125:PHE:HE1	1.71	0.56
12:CL:119:LYS:C	12:CL:120:TYR:CD1	2.79	0.56
18:CR:74:ARG:HG2	18:CR:81:PHE:CD1	2.40	0.56
34:DA:1688:U:H1'	34:DA:1701:A:C6	2.41	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2050:C:H1'	38:DE:156:MET:CE	2.36	0.56
34:DA:744:G:OP1	38:DE:132:HIS:HB3	2.06	0.56
37:DD:18:VAL:HG13	37:DD:19:ALA:O	2.05	0.56
38:DE:111:ARG:NE	38:DE:160:TYR:CE1	2.73	0.56
38:DE:3:GLY:CA	38:DE:81:ILE:HG21	2.35	0.56
44:DO:18:LYS:HB2	44:DO:45:GLU:CG	2.35	0.56
51:DV:19:LYS:HE2	51:DV:19:LYS:HA	1.87	0.56
52:DW:86:LEU:HD12	52:DW:87:PRO:HD2	1.87	0.56
53:DX:52:VAL:HG12	53:DX:52:VAL:O	2.05	0.56
1:AA:1003:G:C2'	1:AA:1004:A:H4'	2.35	0.56
1:AA:1105:A:O2'	1:AA:1106:G:H5'	2.06	0.56
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.41	0.56
2:AB:102:LEU:CD1	2:AB:102:LEU:N	2.68	0.56
3:AC:173:VAL:HG12	3:AC:173:VAL:O	2.05	0.56
12:AL:34:ARG:HG2	12:AL:35:GLY:H	1.71	0.56
14:AN:41:ARG:HG3	14:AN:42:ILE:H	1.70	0.56
20:AT:51:GLU:O	20:AT:55:ILE:HG12	2.06	0.56
23:AW:18:G:H22	23:AW:55:U:H6	1.53	0.56
27:B2:28:LYS:HE2	27:B2:43:GLN:CB	2.35	0.56
28:B3:8:LEU:HD12	28:B3:31:LEU:HA	1.87	0.56
33:B8:50:LEU:HD12	33:B8:51:ALA:H	1.71	0.56
34:BA:1175:U:C4'	34:BA:1176:G:H2'	2.36	0.56
34:BA:2178:C:H4'	36:BC:46:LYS:HZ3	1.69	0.56
37:BD:16:MET:HG3	37:BD:206:LEU:O	2.05	0.56
37:BD:30:GLU:CD	37:BD:63:ARG:HE	2.09	0.56
39:BF:117:ARG:NH2	45:BP:5:ASP:N	2.53	0.56
44:BO:10:VAL:HG21	44:BO:16:ALA:O	2.06	0.56
45:BP:122:PRO:HB3	45:BP:141:ALA:CB	2.35	0.56
45:BP:50:ARG:NH2	45:BP:50:ARG:HG2	2.18	0.56
48:BS:28:VAL:O	48:BS:29:PHE:HB2	2.06	0.56
49:BT:29:ARG:NE	49:BT:30:VAL:HG13	2.20	0.56
49:BT:53:ARG:O	49:BT:53:ARG:HD3	2.05	0.56
49:BT:92:GLY:C	49:BT:94:ALA:N	2.59	0.56
50:BU:64:ARG:HE	50:BU:64:ARG:N	2.04	0.56
52:BW:18:ARG:HG2	52:BW:76:VAL:CG1	2.36	0.56
53:BX:77:LYS:HD3	53:BX:78:LYS:CD	2.31	0.56
53:BX:83:VAL:O	53:BX:85:PRO:HD3	2.06	0.56
54:BY:33:LYS:O	54:BY:34:LYS:HG3	2.05	0.56
55:BZ:18:LEU:O	55:BZ:19:ARG:C	2.43	0.56
1:CA:501:C:H2'	1:CA:502:G:C8	2.40	0.56
3:CC:27:LYS:HZ3	3:CC:27:LYS:HA	1.71	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:22:LYS:O	10:CJ:22:LYS:HD2	2.06	0.56
14:CN:3:ARG:CB	14:CN:3:ARG:HH11	2.16	0.56
17:CQ:99:SER:O	17:CQ:100:LYS:HD3	2.06	0.56
34:DA:2684:U:O2'	44:DO:68:GLU:HG3	2.05	0.56
34:DA:790:C:O2'	34:DA:791:C:OP1	2.21	0.56
28:D3:13:ILE:HD12	34:DA:989:G:N7	2.20	0.56
35:DB:103:G:O2'	35:DB:104:U:H5'	2.05	0.56
35:DB:78:A:C2	35:DB:100:A:C4	2.94	0.56
37:DD:154:LYS:O	37:DD:155:LEU:HD12	2.05	0.56
37:DD:244:ARG:HG2	37:DD:245:PRO:HG3	1.87	0.56
40:DG:168:GLU:O	40:DG:171:ALA:HB3	2.05	0.56
44:DO:85:VAL:HG12	44:DO:86:ILE:O	2.06	0.56
47:DR:24:GLN:HB2	47:DR:44:LEU:HD23	1.87	0.56
48:DS:26:LEU:O	48:DS:88:ASP:HB3	2.06	0.56
48:DS:66:ALA:HA	48:DS:69:VAL:CG1	2.36	0.56
50:DU:90:VAL:HG12	50:DU:91:ASP:N	2.11	0.56
51:DV:5:VAL:HG23	51:DV:37:VAL:O	2.06	0.56
55:DZ:129:SER:C	55:DZ:131:ARG:H	2.09	0.56
1:AA:328:C:O2	1:AA:328:C:H2'	2.05	0.56
1:AA:551:U:H2'	1:AA:552:U:H6	1.67	0.56
1:AA:78:G:H22	1:AA:91:C:N4	1.93	0.56
4:AD:142:PRO:HA	4:AD:185:PHE:HD2	1.70	0.56
5:AE:100:VAL:O	5:AE:107:ARG:NH2	2.37	0.56
10:AJ:22:LYS:O	10:AJ:22:LYS:HD2	2.06	0.56
16:AP:28:ARG:NH1	16:AP:29:ASP:OD2	2.39	0.56
26:B1:88:LYS:O	26:B1:89:GLU:C	2.42	0.56
26:B1:94:LEU:CD2	26:B1:95:LEU:N	2.69	0.56
27:B2:33:MET:HG2	53:BX:11:PRO:CD	2.33	0.56
34:BA:1175:U:O4'	34:BA:1176:G:H2'	2.06	0.56
34:BA:1713:U:O2'	34:BA:1714:G:H5'	2.06	0.56
34:BA:2062:A:O2'	34:BA:2063:C:H5'	2.06	0.56
34:BA:2464:C:O2'	34:BA:2465:C:H6	1.79	0.56
34:BA:2801(A):A:C3'	34:BA:2802:G:H5'	2.36	0.56
34:BA:343:C:O2	34:BA:343:C:H2'	2.06	0.56
34:BA:543:C:N4	34:BA:551:G:H1	2.01	0.56
34:BA:790:C:O2'	34:BA:791:C:OP1	2.18	0.56
37:BD:136:ILE:HD12	37:BD:136:ILE:N	2.21	0.56
37:BD:39:LYS:HB2	37:BD:62:TYR:HB2	1.88	0.56
38:BE:55:ASN:HB2	38:BE:72:VAL:HG12	1.87	0.56
34:BA:440:G:H22	39:BF:46:ARG:NH2	2.04	0.56
40:BG:129:GLY:O	40:BG:130:ASN:HB2	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BG:114:ILE:CD1	40:BG:140:ILE:HD12	2.36	0.56
41:BH:106:THR:HG22	41:BH:112:PRO:CB	2.35	0.56
45:BP:101:VAL:O	45:BP:103:ALA:N	2.39	0.56
54:BY:99:CYS:O	54:BY:100:ALA:HB3	2.06	0.56
54:BY:76:CYS:SG	54:BY:77:PRO:HD3	2.46	0.56
2:CB:100:GLY:O	2:CB:104:ASN:N	2.38	0.56
3:CC:106:VAL:HG12	3:CC:108:ASN:H	1.71	0.56
3:CC:76:VAL:CG2	3:CC:77:ILE:N	2.68	0.56
5:CE:6:PHE:HB2	5:CE:34:VAL:CG1	2.36	0.56
1:CA:877:C:H5'	8:CH:88:LYS:HD2	1.87	0.56
19:CS:49:ILE:N	19:CS:49:ILE:HD12	2.21	0.56
27:D2:17:SER:O	27:D2:21:LEU:N	2.26	0.56
32:D7:8:ASN:ND2	32:D7:8:ASN:C	2.58	0.56
34:DA:1116:C:H2'	34:DA:1117:G:H5'	1.88	0.56
34:DA:1582:C:H2'	34:DA:1583:A:C8	2.40	0.56
34:DA:1771:C:H1'	34:DA:1786:A:C8	2.40	0.56
34:DA:2392:A:H2	34:DA:2424:C:H42	1.52	0.56
34:DA:2801(A):A:C3'	34:DA:2802:G:H5'	2.36	0.56
34:DA:622:G:C2'	34:DA:623:G:H5'	2.36	0.56
34:DA:751:A:H5'	52:DW:90:ARG:HG2	1.88	0.56
36:DC:77:ILE:HD12	36:DC:123:VAL:N	2.20	0.56
36:DC:40:THR:HG21	36:DC:215:THR:CB	2.36	0.56
36:DC:49:ILE:CG2	36:DC:50:ASP:H	2.16	0.56
38:DE:11:MET:H	49:DT:8:LYS:CE	2.18	0.56
40:DG:107:LEU:O	40:DG:108:ASN:HB2	2.06	0.56
40:DG:111:LEU:CA	40:DG:114:ILE:HD13	2.36	0.56
42:DI:38:LEU:HB2	42:DI:40:THR:HG23	1.88	0.56
45:DP:30:THR:O	45:DP:32:THR:N	2.38	0.56
34:DA:2392:A:H8	45:DP:60:MET:HG3	1.69	0.56
45:DP:71:VAL:HG13	45:DP:72:PRO:N	2.20	0.56
50:DU:101:ARG:O	50:DU:102:GLU:HG2	2.06	0.56
53:DX:60:ARG:HG3	53:DX:72:LYS:N	2.21	0.56
54:DY:42:VAL:HB	54:DY:65:ALA:HB3	1.87	0.56
1:AA:1154:G:H2'	1:AA:1155:G:C8	2.38	0.56
1:AA:146:G:N2	1:AA:147:G:H1'	2.20	0.56
1:AA:237:C:H4'	17:AQ:25:ARG:NH1	2.20	0.56
1:AA:477:A:O2'	1:AA:479:C:H5'	2.06	0.56
1:AA:748:C:H1'	1:AA:749:C:OP2	2.05	0.56
1:AA:777:A:H2'	1:AA:778:G:H8	1.70	0.56
1:AA:807:A:H2'	1:AA:808:C:C6	2.41	0.56
2:AB:236:TYR:HA	2:AB:239:VAL:CG2	2.36	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:134:ASP:O	4:AD:136:PRO:HD3	2.05	0.56
7:AG:20:ASP:HB3	7:AG:23:VAL:CG2	2.35	0.56
10:AJ:38:ILE:HD11	10:AJ:71:LEU:HB3	1.88	0.56
11:AK:115:PRO:C	11:AK:117:ASN:H	2.09	0.56
15:AO:62:GLN:O	15:AO:66:LEU:HD13	2.06	0.56
17:AQ:7:THR:O	17:AQ:23:VAL:HG13	2.06	0.56
20:AT:100:ILE:HD12	20:AT:100:ILE:N	2.21	0.56
26:B1:47:GLN:OE1	26:B1:47:GLN:O	2.24	0.56
34:BA:1756:G:H4'	34:BA:1758:G:O4'	2.05	0.56
34:BA:2102:U:C5	34:BA:2187:G:O6	2.59	0.56
34:BA:2692:C:O2'	34:BA:2693:A:H5'	2.06	0.56
34:BA:2808:U:C2'	34:BA:2809:A:H5'	2.36	0.56
34:BA:543:C:N3	34:BA:551:G:C2	2.73	0.56
37:BD:223:GLY:O	37:BD:225:ALA:N	2.39	0.56
38:BE:111:ARG:NE	38:BE:160:TYR:CE1	2.74	0.56
38:BE:9:VAL:HG13	38:BE:25:VAL:O	2.05	0.56
34:BA:2312:U:C4'	40:BG:71:THR:HG21	2.33	0.56
41:BH:155:SER:O	41:BH:157:TYR:N	2.35	0.56
41:BH:76:VAL:HG12	41:BH:77:LYS:N	2.20	0.56
47:BR:24:GLN:HB2	47:BR:44:LEU:HD23	1.88	0.56
51:BV:64:HIS:HB2	51:BV:95:LEU:O	2.06	0.56
53:BX:36:LYS:NZ	53:BX:39:ILE:CA	2.59	0.56
53:BX:40:LYS:C	53:BX:42:ALA:N	2.58	0.56
55:BZ:158:PRO:HG2	55:BZ:161:VAL:CG2	2.32	0.56
55:BZ:69:THR:CG2	55:BZ:90:VAL:HA	2.28	0.56
1:CA:1003:G:C2'	1:CA:1004:A:H4'	2.36	0.56
1:CA:140:A:O2'	1:CA:141:A:H5'	2.05	0.56
1:CA:491:G:H2'	1:CA:492:G:H8	1.69	0.56
3:CC:173:VAL:O	3:CC:173:VAL:HG12	2.04	0.56
9:CI:114:TYR:HE1	10:CJ:60:ARG:O	1.89	0.56
25:D0:36:ILE:HA	25:D0:60:PHE:HB3	1.87	0.56
27:D2:53:LEU:O	27:D2:54:LYS:CB	2.53	0.56
28:D3:46:ASN:ND2	34:DA:851:U:H5'	2.20	0.56
31:D6:10:LEU:HD12	33:D8:36:LYS:HD3	1.88	0.56
34:DA:1444:G:H2'	34:DA:1445(A):C:C5	2.40	0.56
34:DA:1550:C:O2'	34:DA:1551:C:H5'	2.06	0.56
34:DA:2064:C:H2'	34:DA:2065:C:C6	2.41	0.56
34:DA:2415:G:H2'	34:DA:2416:C:H6	1.71	0.56
34:DA:285:C:H2'	34:DA:286:C:H5''	1.88	0.56
37:DD:183:ARG:HG2	37:DD:183:ARG:HH11	1.71	0.56
40:DG:91:ARG:C	40:DG:91:ARG:HD2	2.27	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DH:103:LEU:HD23	41:DH:115:VAL:HB	1.88	0.56
48:DS:28:VAL:H	48:DS:89:ARG:HD2	1.69	0.56
52:DW:18:ARG:HG2	52:DW:76:VAL:CG1	2.35	0.56
53:DX:82:GLN:OE1	53:DX:83:VAL:HG22	2.06	0.56
53:DX:83:VAL:O	53:DX:85:PRO:HD3	2.06	0.56
1:AA:1237:C:H2'	1:AA:1336:C:C5	2.41	0.56
1:AA:1441:G:H5''	1:AA:1442:G:C5'	2.18	0.56
1:AA:1498:U:O2'	1:AA:1499:A:OP2	2.21	0.56
11:AK:84:VAL:CG1	11:AK:95:ILE:HD11	2.35	0.56
1:AA:538:G:OP2	12:AL:115:LYS:HG3	2.06	0.56
12:AL:70:ILE:HD12	12:AL:70:ILE:N	2.21	0.56
10:AJ:64:GLU:HG2	14:AN:59:ALA:HA	1.87	0.56
23:AW:53:G:O2'	23:AW:54:U:H5'	2.06	0.56
25:B0:41:ARG:N	25:B0:41:ARG:HD2	2.18	0.56
26:B1:46:LEU:O	26:B1:47:GLN:C	2.44	0.56
32:B7:9:ARG:HG3	32:B7:9:ARG:HH11	1.70	0.56
34:BA:1298:C:H2'	34:BA:1298:C:O2	2.06	0.56
34:BA:1771:C:H1'	34:BA:1786:A:C8	2.41	0.56
34:BA:1817:G:OP1	37:BD:88:ARG:NH2	2.38	0.56
34:BA:2074:U:H2'	34:BA:2075:U:C6	2.40	0.56
34:BA:2534:A:H5'	34:BA:2534:A:H8	1.69	0.56
34:BA:2822:G:O6	47:BR:4:LEU:HD12	2.06	0.56
34:BA:285:C:H2'	34:BA:286:C:H5''	1.87	0.56
37:BD:35:LYS:HG2	37:BD:64:ILE:CG2	2.35	0.56
38:BE:154:LYS:CE	38:BE:154:LYS:HA	2.34	0.56
41:BH:26:VAL:O	41:BH:32:GLU:HA	2.06	0.56
42:BI:131:LYS:HG2	42:BI:132:PRO:HA	1.87	0.56
42:BI:123:LEU:CD1	42:BI:144:VAL:HG22	2.35	0.56
44:BO:18:LYS:HB2	44:BO:45:GLU:CG	2.36	0.56
48:BS:66:ALA:HA	48:BS:69:VAL:CG1	2.36	0.56
48:BS:25:ARG:HG2	48:BS:88:ASP:OD1	2.06	0.56
50:BU:93:LYS:H	50:BU:93:LYS:CD	2.19	0.56
53:BX:21:PHE:O	53:BX:22:ALA:C	2.44	0.56
53:BX:55:ASN:HB2	53:BX:78:LYS:CD	2.36	0.56
46:BQ:62:GLY:O	55:BZ:178:GLU:HG2	2.05	0.56
1:CA:999:C:H2'	1:CA:1000:U:C6	2.40	0.56
1:CA:310:G:O2'	1:CA:311:C:H5'	2.05	0.56
8:CH:58:TYR:C	8:CH:59:LEU:HD23	2.25	0.56
9:CI:117:HIS:CD2	9:CI:123:PRO:HA	2.41	0.56
1:CA:973:G:H1'	10:CJ:55:LYS:HE3	1.86	0.56
23:CY:38:A:O2'	23:CY:39:U:H5'	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D1:63:ALA:O	26:D1:64:ALA:HB3	2.04	0.56
26:D1:67:ILE:N	26:D1:68:PRO:HD2	2.21	0.56
34:DA:585:G:C5	34:DA:1251:C:C5	2.94	0.56
34:DA:1317:A:H2'	34:DA:1318:C:H6	1.71	0.56
34:DA:1988:C:H2'	34:DA:1989:G:H8	1.72	0.56
34:DA:2320:A:N3	34:DA:2320:A:H2'	2.21	0.56
34:DA:2461:C:H2'	34:DA:2462:U:H6	1.71	0.56
34:DA:2702:U:HO2'	34:DA:2703:C:H6	1.52	0.56
34:DA:45:C:O2'	34:DA:47:C:H5'	2.06	0.56
34:DA:635:C:H2'	34:DA:636:G:C8	2.40	0.56
37:DD:138:VAL:HA	37:DD:165:ILE:CG2	2.35	0.56
37:DD:45:ASN:CG	37:DD:46:GLN:N	2.58	0.56
34:DA:7:G:H4'	43:DN:13:TRP:HH2	1.71	0.56
43:DN:55:VAL:CG1	43:DN:56:ASN:H	2.15	0.56
50:DU:92:ARG:HD2	51:DV:11:GLN:HG2	1.87	0.56
51:DV:5:VAL:HG21	51:DV:36:PRO:HG2	1.88	0.56
51:DV:69:LYS:HB2	51:DV:93:GLU:OE2	2.06	0.56
53:DX:44:GLU:HB2	53:DX:49:VAL:O	2.06	0.56
55:DZ:45:ASP:O	55:DZ:46:LYS:C	2.44	0.56
1:AA:1404:C:H2'	1:AA:1405:G:C8	2.40	0.55
1:AA:645:C:O2'	1:AA:646:U:H5'	2.05	0.55
1:AA:818:G:C3'	1:AA:819:A:C5'	2.84	0.55
2:AB:158:LEU:N	2:AB:158:LEU:HD12	2.20	0.55
2:AB:70:PHE:CE2	2:AB:163:PHE:HD1	2.24	0.55
3:AC:107:GLN:N	3:AC:107:GLN:CD	2.59	0.55
4:AD:120:LEU:HD23	4:AD:125:HIS:HD2	1.71	0.55
11:AK:34:ASP:HB2	11:AK:35:PRO:CD	2.36	0.55
18:AR:47:THR:HB	18:AR:49:LYS:HG2	1.88	0.55
34:BA:1298:C:H3'	34:BA:1299:G:C8	2.41	0.55
34:BA:2040:C:H2'	34:BA:2041:U:C6	2.41	0.55
34:BA:2726:U:H6	44:BO:67:LYS:HZ3	1.53	0.55
34:BA:2836:U:C4	34:BA:2883:A:N6	2.75	0.55
34:BA:2864:G:H2'	34:BA:2865:U:O4'	2.06	0.55
37:BD:25:THR:HG23	37:BD:27:THR:HB	1.86	0.55
37:BD:45:ASN:CG	37:BD:46:GLN:N	2.56	0.55
38:BE:119:ARG:HG2	38:BE:160:TYR:HB2	1.87	0.55
39:BF:101:LEU:HB3	39:BF:106:ARG:HD3	1.88	0.55
39:BF:107:LYS:O	39:BF:109:GLY:N	2.39	0.55
42:BI:114:LEU:HA	42:BI:130:TYR:CD1	2.42	0.55
43:BN:108:PRO:O	43:BN:113:GLY:HA3	2.07	0.55
44:BO:105:GLU:OE1	44:BO:105:GLU:N	2.37	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:587:C:C5	45:BP:33:ARG:NH1	2.73	0.55
45:BP:50:ARG:HG3	45:BP:51:PHE:N	2.20	0.55
46:BQ:34:LEU:HD12	46:BQ:35:VAL:N	2.21	0.55
47:BR:106:GLY:O	47:BR:107:ASP:HB3	2.06	0.55
47:BR:54:LEU:HD23	47:BR:66:VAL:HG22	1.88	0.55
50:BU:106:PHE:O	50:BU:109:LEU:HB2	2.05	0.55
53:BX:18:TYR:HA	53:BX:21:PHE:CD1	2.40	0.55
1:CA:127:G:O2'	1:CA:128:G:H5'	2.06	0.55
1:CA:72:C:H2'	1:CA:73:G:C8	2.40	0.55
1:CA:770:C:O2'	1:CA:771:G:H5'	2.06	0.55
3:CC:107:GLN:N	3:CC:107:GLN:CD	2.59	0.55
4:CD:196:LEU:HD12	4:CD:196:LEU:H	1.71	0.55
6:CF:22:GLU:HA	6:CF:22:GLU:OE2	2.06	0.55
7:CG:23:VAL:HG12	7:CG:27:ILE:CD1	2.36	0.55
9:CI:13:ALA:HA	9:CI:67:GLY:O	2.06	0.55
12:CL:27:LEU:N	12:CL:27:LEU:HD22	2.21	0.55
12:CL:34:ARG:HG2	12:CL:35:GLY:H	1.70	0.55
23:CW:72:C:O2'	23:CW:73:A:H5'	2.06	0.55
34:DA:1301:A:HO2'	34:DA:1302:A:P	2.29	0.55
34:DA:2514:U:H2'	34:DA:2515:C:H6	1.72	0.55
34:DA:319:C:O2'	34:DA:320:A:H5'	2.06	0.55
37:DD:150:LYS:HE3	37:DD:150:LYS:HA	1.88	0.55
38:DE:63:LEU:HD23	38:DE:63:LEU:O	2.05	0.55
39:DF:2:LYS:O	39:DF:25:PRO:HG2	2.05	0.55
41:DH:102:ALA:HB2	41:DH:117:PRO:HD3	1.88	0.55
33:D8:12:LYS:O	45:DP:65:ARG:HB3	2.07	0.55
47:DR:9:LYS:O	47:DR:10:LEU:CG	2.54	0.55
49:DT:121:ILE:HG22	49:DT:122:ASP:N	2.22	0.55
34:DA:583:G:OP2	50:DU:10:ARG:NH1	2.39	0.55
4:AD:175:SER:OG	4:AD:184:LYS:HB2	2.05	0.55
8:AH:86:ILE:CG2	8:AH:133:LEU:HD22	2.36	0.55
8:AH:88:LYS:HB3	8:AH:89:PRO:HD2	1.88	0.55
26:B1:13:ILE:CG2	26:B1:14:VAL:H	2.10	0.55
26:B1:53:VAL:HG12	26:B1:58:ILE:HB	1.87	0.55
27:B2:54:LYS:H	27:B2:56:GLN:HG2	1.70	0.55
33:B8:29:LYS:O	33:B8:30:ARG:C	2.43	0.55
34:BA:1166:C:H2'	34:BA:1167:U:H6	1.69	0.55
34:BA:1324:G:H3'	34:BA:1325:G:H4'	1.87	0.55
34:BA:1339:G:N2	34:BA:1603:A:H1'	2.21	0.55
34:BA:2111:C:H1'	34:BA:2118:U:H1'	1.88	0.55
34:BA:2777:G:H5'	34:BA:2778:A:C5'	2.36	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2828:C:O2'	34:BA:2829:C:H5'	2.05	0.55
34:BA:892:G:H3'	34:BA:892:G:N3	2.21	0.55
35:BB:40:U:H1'	35:BB:45:A:N6	2.21	0.55
35:BB:79:C:O2'	35:BB:80:U:H5'	2.06	0.55
36:BC:75:LEU:HD23	36:BC:76:ALA:N	2.21	0.55
38:BE:37:ARG:HB3	38:BE:42:ASP:HB2	1.88	0.55
39:BF:170:LEU:HD23	39:BF:172:TRP:CZ2	2.42	0.55
35:BB:57:A:H5'	40:BG:27:ASN:HD22	1.70	0.55
41:BH:43:VAL:HG11	41:BH:53:GLU:N	2.19	0.55
34:BA:559:G:H22	50:BU:49:HIS:CD2	2.24	0.55
51:BV:61:VAL:HG21	51:BV:100:ARG:HE	1.70	0.55
53:BX:24:GLY:O	53:BX:25:LYS:O	2.23	0.55
55:BZ:99:TYR:CE2	55:BZ:125:LEU:HD12	2.41	0.55
1:CA:1400:C:H4'	1:CA:1401:G:OP2	2.06	0.55
1:CA:389:A:C2'	1:CA:390:C:H5'	2.35	0.55
1:CA:777:A:H2'	1:CA:778:G:C8	2.41	0.55
1:CA:930:C:O2'	1:CA:931:C:H5'	2.06	0.55
7:CG:49:ILE:O	7:CG:49:ILE:HG22	2.07	0.55
12:CL:84:LEU:HD23	12:CL:85:ILE:N	2.21	0.55
16:CP:22:THR:HG22	16:CP:32:TYR:CA	2.34	0.55
22:CV:17:C:OP1	22:CV:61:C:H5'	2.06	0.55
26:D1:70:VAL:O	26:D1:74:VAL:HG23	2.06	0.55
34:DA:1301:A:H4'	34:DA:1302:A:OP1	2.04	0.55
34:DA:2098:U:H2'	34:DA:2099:U:H6	1.70	0.55
34:DA:2579:C:H5'	38:DE:134:ILE:HG21	1.87	0.55
34:DA:2636:U:OP1	38:DE:80:GLU:N	2.36	0.55
34:DA:2694:G:O2'	34:DA:2695:C:H5'	2.06	0.55
34:DA:38:A:H1'	39:DF:48:THR:HB	1.88	0.55
34:DA:491:G:H2'	34:DA:492:A:O4'	2.06	0.55
35:DB:65:C:N4	35:DB:109:C:H2'	2.20	0.55
35:DB:54:G:O2'	35:DB:55:U:H5'	2.06	0.55
39:DF:7:TYR:HB3	39:DF:16:GLY:C	2.26	0.55
34:DA:440:G:H22	39:DF:46:ARG:NH2	2.04	0.55
42:DI:28:ASN:HA	42:DI:32:PRO:HG2	1.88	0.55
45:DP:122:PRO:HB3	45:DP:141:ALA:CB	2.36	0.55
45:DP:144:GLU:N	45:DP:145:PRO:CD	2.69	0.55
45:DP:71:VAL:CG1	45:DP:72:PRO:CD	2.85	0.55
46:DQ:20:ALA:HB1	46:DQ:23:GLY:HA3	1.89	0.55
46:DQ:86:GLY:C	46:DQ:88:GLY:N	2.57	0.55
49:DT:33:LYS:HD2	49:DT:43:GLN:OE1	2.06	0.55
49:DT:50:ILE:HA	49:DT:99:LEU:CD1	2.36	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DV:61:VAL:HG21	51:DV:100:ARG:HE	1.70	0.55
51:DV:64:HIS:HB2	51:DV:95:LEU:O	2.06	0.55
1:AA:163:C:H2'	1:AA:164:U:H6	1.72	0.55
1:AA:266:G:H5'	1:AA:266:G:C8	2.41	0.55
1:AA:390:C:H2'	1:AA:391:G:H8	1.70	0.55
1:AA:438:G:C4'	1:AA:439:A:OP1	2.54	0.55
1:AA:999:C:H2'	1:AA:1000:U:C6	2.41	0.55
2:AB:87:ARG:HD2	2:AB:87:ARG:O	2.06	0.55
3:AC:62:ASP:O	3:AC:97:LYS:HB3	2.05	0.55
8:AH:35:ILE:HG23	8:AH:111:ILE:HD13	1.88	0.55
11:AK:61:ALA:CB	11:AK:90:GLY:HA3	2.36	0.55
12:AL:90:VAL:O	12:AL:90:VAL:HG12	2.06	0.55
34:BA:1531:C:H2'	34:BA:1532:C:H4'	1.88	0.55
34:BA:1786:A:C2	34:BA:2606:C:H1'	2.40	0.55
31:B6:27:LYS:HD2	34:BA:2285:C:OP2	2.06	0.55
34:BA:2639:A:C3'	34:BA:2640:G:C5'	2.84	0.55
35:BB:7:G:H3'	35:BB:8:U:C5'	2.26	0.55
36:BC:212:VAL:O	36:BC:213:TYR:CB	2.55	0.55
38:BE:201:THR:HG22	38:BE:202:LYS:N	2.21	0.55
38:BE:3:GLY:O	38:BE:4:ILE:HB	2.07	0.55
39:BF:65:TRP:HZ3	39:BF:75:HIS:CD2	2.18	0.55
40:BG:57:ALA:HA	40:BG:90:LEU:CD2	2.36	0.55
42:BI:101:LEU:HD12	42:BI:101:LEU:O	2.06	0.55
45:BP:107:LYS:HG3	45:BP:107:LYS:O	2.06	0.55
45:BP:30:THR:CG2	45:BP:31:ALA:H	2.18	0.55
53:BX:82:GLN:OE1	53:BX:83:VAL:HG22	2.06	0.55
55:BZ:48:PHE:CE1	55:BZ:52:SER:HA	2.42	0.55
1:CA:146:G:N2	1:CA:147:G:H1'	2.21	0.55
1:CA:189(A):C:H2'	1:CA:189(B):C:C6	2.41	0.55
1:CA:222:U:H2'	1:CA:223:U:C6	2.42	0.55
1:CA:356:A:H2'	1:CA:357:G:H8	1.70	0.55
1:CA:644:G:O2'	1:CA:645:C:H5'	2.05	0.55
1:CA:818:G:C3'	1:CA:819:A:C5'	2.84	0.55
1:CA:409:G:H5'	4:CD:25:ARG:HB2	1.88	0.55
4:CD:52:SER:C	4:CD:54:TYR:H	2.09	0.55
6:CF:45:LEU:HD11	6:CF:57:GLN:HB3	1.87	0.55
7:CG:92:SER:OG	7:CG:93:PRO:HD2	2.06	0.55
11:CK:84:VAL:HG11	11:CK:95:ILE:HD11	1.88	0.55
15:CO:37:ASN:H	15:CO:37:ASN:HD22	1.54	0.55
26:D1:78:LYS:CE	26:D1:93:GLU:HB2	2.36	0.55
31:D6:10:LEU:HD22	31:D6:10:LEU:N	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:110:G:O2'	34:DA:111:A:H5'	2.07	0.55
34:DA:1242:A:H5'	34:DA:1243:G:OP2	2.05	0.55
34:DA:1427:A:C2	34:DA:1570:A:OP2	2.59	0.55
34:DA:1717:G:C3'	34:DA:1718:G:H5''	2.35	0.55
34:DA:2270:G:H3'	34:DA:2271:G:H8	1.71	0.55
27:D2:48:HIS:NE2	34:DA:75:G:O3'	2.39	0.55
35:DB:61:G:O2'	35:DB:62:C:H5'	2.07	0.55
37:DD:44:ASN:HB3	37:DD:49:ILE:HA	1.87	0.55
34:DA:1815:A:OP2	37:DD:54:ARG:NH2	2.39	0.55
40:DG:71:THR:HG22	40:DG:89:GLY:HA3	1.88	0.55
42:DI:131:LYS:HG2	42:DI:132:PRO:HA	1.87	0.55
42:DI:88:ILE:HD11	42:DI:123:LEU:N	2.20	0.55
43:DN:2:LYS:N	43:DN:2:LYS:HD2	2.21	0.55
45:DP:101:VAL:O	45:DP:103:ALA:N	2.39	0.55
48:DS:89:ARG:CA	48:DS:89:ARG:NE	2.48	0.55
49:DT:65:LYS:HZ2	49:DT:66:VAL:H	1.52	0.55
50:DU:64:ARG:N	50:DU:64:ARG:HE	2.03	0.55
54:DY:28:LYS:O	54:DY:38:ILE:CB	2.48	0.55
54:DY:68:HIS:CE1	54:DY:70:SER:H	2.23	0.55
1:AA:1494:G:N7	57:AA:1816:PAR:N32	2.55	0.55
1:AA:963:G:H21	10:AJ:55:LYS:HD3	1.71	0.55
3:AC:106:VAL:HG12	3:AC:108:ASN:H	1.71	0.55
3:AC:155:GLY:HA3	3:AC:163:ALA:HB1	1.89	0.55
5:AE:12:LEU:HD22	5:AE:12:LEU:C	2.26	0.55
12:AL:21:LYS:HD2	12:AL:21:LYS:N	2.21	0.55
12:AL:27:LEU:HD22	12:AL:27:LEU:N	2.21	0.55
16:AP:55:ARG:HA	16:AP:55:ARG:NE	2.21	0.55
23:AW:39:U:O2	23:AW:39:U:H5'	2.06	0.55
26:B1:67:ILE:O	26:B1:70:VAL:HB	2.06	0.55
26:B1:87:PRO:HB2	26:B1:91:LYS:CE	2.36	0.55
27:B2:46:GLN:NE2	27:B2:47:ASN:N	2.54	0.55
30:B5:57:VAL:HG23	30:B5:58:LEU:N	2.18	0.55
34:BA:1021:A:H8	34:BA:1021:A:H3'	1.72	0.55
34:BA:1192:G:O2'	34:BA:1193:G:H5'	2.06	0.55
34:BA:1348:G:H2'	34:BA:1349:A:C5'	2.34	0.55
34:BA:1403:C:H2'	34:BA:1404:C:O5'	2.06	0.55
34:BA:1568:G:H4'	37:BD:59:LYS:HG2	1.89	0.55
34:BA:2703:C:H2'	34:BA:2704:C:C6	2.41	0.55
34:BA:23:G:H1	34:BA:517:C:H42	1.53	0.55
37:BD:108:PRO:CG	37:BD:111:LEU:HD23	2.37	0.55
39:BF:101:LEU:CD1	39:BF:102:PRO:HD2	2.33	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:28:ILE:O	39:BF:28:ILE:HD12	2.06	0.55
45:BP:33:ARG:O	45:BP:35:HIS:N	2.39	0.55
34:BA:2392:A:H8	45:BP:60:MET:HG3	1.70	0.55
33:B8:13:ARG:HD2	45:BP:61:ARG:HH11	1.71	0.55
47:BR:49:ASP:O	47:BR:52:ILE:N	2.40	0.55
49:BT:78:LEU:O	49:BT:79:HIS:ND1	2.40	0.55
53:BX:21:PHE:CD1	53:BX:21:PHE:N	2.75	0.55
53:BX:27:THR:OG1	53:BX:77:LYS:HA	2.05	0.55
54:BY:75:ILE:HD12	54:BY:76:CYS:H	1.72	0.55
55:BZ:152:ALA:HB2	55:BZ:168:GLU:N	2.21	0.55
55:BZ:96:VAL:HG22	55:BZ:97:GLU:N	2.22	0.55
1:CA:107:G:N7	20:CT:15:ARG:NH2	2.52	0.55
1:CA:1117:G:H4'	9:CI:104:ARG:NH2	2.21	0.55
1:CA:1468:A:H2'	1:CA:1469:G:O4'	2.06	0.55
2:CB:142:LEU:O	2:CB:142:LEU:HD23	2.06	0.55
1:CA:1106:G:OP1	3:CC:172:ARG:HD3	2.06	0.55
5:CE:35:GLY:HA2	5:CE:40:ARG:O	2.06	0.55
6:CF:8:ILE:CD1	6:CF:26:ILE:HD13	2.36	0.55
7:CG:143:ARG:O	7:CG:145:ALA:O	2.24	0.55
10:CJ:50:ILE:HA	10:CJ:60:ARG:CB	2.36	0.55
12:CL:86:ARG:HB2	12:CL:101:VAL:HG22	1.89	0.55
16:CP:26:ARG:HH11	16:CP:26:ARG:HG2	1.72	0.55
20:CT:34:LYS:O	20:CT:37:SER:N	2.39	0.55
34:DA:1887:C:C2'	34:DA:1888:G:H5''	2.35	0.55
34:DA:2307:G:N2	34:DA:2308:G:C5'	2.68	0.55
34:DA:2051:A:H5'	34:DA:2578:G:O4'	2.06	0.55
34:DA:473:G:H5''	34:DA:508:G:H22	1.70	0.55
37:DD:108:PRO:CG	37:DD:111:LEU:HD23	2.36	0.55
37:DD:44:ASN:CB	37:DD:49:ILE:HA	2.36	0.55
38:DE:111:ARG:HD2	38:DE:160:TYR:HE1	1.71	0.55
38:DE:37:ARG:HB3	38:DE:42:ASP:HB2	1.89	0.55
38:DE:77:ILE:CG2	38:DE:78:LEU:N	2.54	0.55
40:DG:55:LYS:C	40:DG:57:ALA:H	2.10	0.55
41:DH:54:ARG:HB3	41:DH:65:HIS:CD2	2.41	0.55
41:DH:85:LYS:HD3	41:DH:133:VAL:CB	2.36	0.55
45:DP:146:VAL:O	45:DP:147:LEU:O	2.25	0.55
46:DQ:140:ALA:CB	55:DZ:53:ILE:HG12	2.32	0.55
48:DS:58:LEU:HD21	48:DS:68:GLN:OE1	2.06	0.55
49:DT:23:ARG:HG2	49:DT:120:ARG:HH12	1.71	0.55
49:DT:98:LYS:HB3	49:DT:100:TYR:HE1	1.66	0.55
55:DZ:175:VAL:HB	55:DZ:176:PRO:CD	2.36	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:7:G:H5'	1:AA:298:A:O4'	2.06	0.55
2:AB:185:ILE:HG22	2:AB:199:TYR:CB	2.26	0.55
2:AB:236:TYR:HA	2:AB:239:VAL:HG23	1.88	0.55
10:AJ:45:ARG:HH11	10:AJ:45:ARG:HG3	1.72	0.55
26:B1:54:ALA:O	26:B1:55:GLY:C	2.43	0.55
31:B6:16:CYS:O	31:B6:17:LYS:HB2	2.06	0.55
34:BA:1116:C:H2'	34:BA:1117:G:H5'	1.89	0.55
34:BA:1582:C:H2'	34:BA:1583:A:C8	2.41	0.55
34:BA:612:C:C3'	34:BA:613:G:H5''	2.36	0.55
34:BA:729:G:C5	37:BD:208:LYS:HB2	2.42	0.55
35:BB:78:A:H4'	46:BQ:21:THR:HG23	1.87	0.55
37:BD:131:LEU:N	37:BD:131:LEU:HD12	2.22	0.55
34:BA:1568:G:H4'	37:BD:59:LYS:CG	2.36	0.55
39:BF:155:LEU:HD12	39:BF:174:VAL:O	2.06	0.55
34:BA:2305:A:N7	40:BG:155:MET:HA	2.22	0.55
40:BG:161:THR:CG2	40:BG:163:ALA:HB3	2.37	0.55
41:BH:89:ILE:O	41:BH:90:LYS:CB	2.54	0.55
45:BP:71:VAL:HG13	45:BP:72:PRO:N	2.21	0.55
46:BQ:48:GLU:O	46:BQ:52:VAL:HG12	2.06	0.55
34:BA:2334:G:H5'	48:BS:13:ARG:HB3	1.89	0.55
51:BV:5:VAL:HG23	51:BV:37:VAL:O	2.07	0.55
51:BV:72:VAL:CA	51:BV:88:ARG:HH22	2.19	0.55
52:BW:9:TYR:H	52:BW:102:HIS:HD2	1.54	0.55
53:BX:36:LYS:HZ3	53:BX:38:GLU:C	2.09	0.55
54:BY:26:LYS:HG2	54:BY:27:VAL:N	2.20	0.55
54:BY:42:VAL:HB	54:BY:65:ALA:HB3	1.87	0.55
1:CA:1288:A:H1'	1:CA:1352:C:O2'	2.07	0.55
1:CA:503:C:H2'	1:CA:504:C:H6	1.70	0.55
1:CA:783:C:O2'	1:CA:784:C:H5'	2.05	0.55
1:CA:7:G:H5'	1:CA:298:A:O4'	2.07	0.55
1:CA:966:G:H2'	1:CA:967:C:C6	2.41	0.55
2:CB:121:LEU:O	2:CB:127:ILE:HD11	2.07	0.55
8:CH:87:SER:HA	8:CH:93:VAL:CG2	2.36	0.55
12:CL:119:LYS:O	12:CL:120:TYR:HB2	2.07	0.55
18:CR:47:THR:HB	18:CR:49:LYS:HG2	1.88	0.55
34:DA:1298:C:H2'	34:DA:1298:C:O2	2.06	0.55
34:DA:1678:G:N2	34:DA:1989:G:N2	2.54	0.55
34:DA:2437:U:H2'	34:DA:2438:U:C6	2.40	0.55
34:DA:2529:G:OP2	34:DA:2530:A:H5''	2.07	0.55
34:DA:2787:C:O2	38:DE:61:ARG:HD3	2.07	0.55
34:DA:2810:A:C2'	38:DE:61:ARG:NH2	2.68	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:343:C:O2	34:DA:343:C:H2'	2.06	0.55
34:DA:587:C:C4	45:DP:33:ARG:HG2	2.41	0.55
34:DA:796:C:H2'	34:DA:797:C:C6	2.42	0.55
36:DC:39:GLU:HA	36:DC:180:PHE:HA	1.88	0.55
38:DE:93:VAL:C	38:DE:95:ILE:N	2.59	0.55
40:DG:133:LEU:CD1	40:DG:157:ILE:HG12	2.37	0.55
41:DH:85:LYS:HD2	41:DH:141:VAL:HG13	1.89	0.55
41:DH:89:ILE:HG12	41:DH:90:LYS:N	2.21	0.55
41:DH:89:ILE:O	41:DH:90:LYS:CB	2.54	0.55
42:DI:101:LEU:HD12	42:DI:101:LEU:O	2.06	0.55
45:DP:34:GLY:O	45:DP:35:HIS:CD2	2.60	0.55
46:DQ:106:VAL:HG13	46:DQ:118:LEU:HD21	1.89	0.55
47:DR:13:HIS:O	47:DR:14:SER:C	2.45	0.55
47:DR:49:ASP:O	47:DR:52:ILE:N	2.39	0.55
49:DT:72:VAL:HG12	49:DT:73:GLU:N	2.21	0.55
50:DU:79:PHE:O	50:DU:83:LEU:HD13	2.07	0.55
51:DV:94:LEU:C	51:DV:94:LEU:HD23	2.26	0.55
1:AA:119:A:O2'	1:AA:120:A:OP2	2.20	0.55
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.41	0.55
1:AA:377:G:OP1	16:AP:3:LYS:HD2	2.06	0.55
1:AA:790:A:C6	1:AA:791:G:C6	2.93	0.55
1:AA:793:U:H5'	1:AA:794:A:O5'	2.07	0.55
1:AA:946:A:H2'	1:AA:947:G:C8	2.41	0.55
2:AB:112:VAL:HG22	2:AB:149:LEU:HD13	1.88	0.55
2:AB:19:HIS:CE1	2:AB:206:ASP:HB2	2.42	0.55
2:AB:97:TRP:HH2	2:AB:176:GLU:CD	2.10	0.55
3:AC:68:VAL:HG12	3:AC:70:VAL:HG23	1.87	0.55
6:AF:10:LEU:CD1	6:AF:10:LEU:N	2.68	0.55
11:AK:25:TYR:H	11:AK:25:TYR:HD1	1.52	0.55
14:AN:3:ARG:HH11	14:AN:3:ARG:CB	2.14	0.55
14:AN:44:LEU:C	14:AN:44:LEU:HD12	2.27	0.55
19:AS:6:LYS:CD	19:AS:6:LYS:H	2.18	0.55
23:AW:11:C:H2'	23:AW:12:U:C6	2.41	0.55
25:B0:25:ARG:HD2	25:B0:29:GLN:NE2	2.22	0.55
26:B1:75:GLU:O	26:B1:76:ARG:HD3	2.07	0.55
26:B1:87:PRO:HG2	26:B1:88:LYS:H	1.71	0.55
31:B6:32:ASN:ND2	31:B6:33:LYS:H	2.04	0.55
34:BA:1987:G:O2'	34:BA:1988:C:H5'	2.07	0.55
34:BA:2404:C:H2'	34:BA:2405:G:O4'	2.06	0.55
34:BA:2579:C:H2'	34:BA:2580:U:O4'	2.07	0.55
34:BA:473:G:H5''	34:BA:508:G:H22	1.71	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:596:G:H2'	34:BA:597:U:O4'	2.05	0.55
34:BA:690:G:H2'	34:BA:691:C:C6	2.42	0.55
37:BD:44:ASN:HB3	37:BD:49:ILE:HG22	1.89	0.55
40:BG:136:ARG:O	40:BG:154:GLY:HA3	2.05	0.55
42:BI:44:LEU:O	42:BI:47:LEU:HB3	2.07	0.55
46:BQ:68:ILE:HD12	46:BQ:68:ILE:C	2.27	0.55
48:BS:30:ARG:HH21	48:BS:62:LYS:HD2	1.71	0.55
53:BX:23:GLU:HG3	53:BX:24:GLY:H	1.71	0.55
54:BY:17:SER:OG	54:BY:18:GLY:N	2.39	0.55
1:CA:1154:G:H2'	1:CA:1155:G:C8	2.39	0.55
1:CA:959:A:C2	1:CA:1222:G:O4'	2.59	0.55
1:CA:1253:G:H1'	1:CA:1355:G:O2'	2.07	0.55
1:CA:186:C:H2'	1:CA:187:C:H6	1.71	0.55
1:CA:514:C:O2'	1:CA:515:G:H5'	2.07	0.55
1:CA:588:G:H2'	1:CA:589:C:C6	2.41	0.55
4:CD:49:ARG:NE	4:CD:49:ARG:HA	2.21	0.55
8:CH:14:ARG:HB3	8:CH:14:ARG:NH1	2.22	0.55
1:CA:963:G:H21	10:CJ:55:LYS:HD3	1.71	0.55
10:CJ:62:HIS:H	10:CJ:62:HIS:CD2	2.25	0.55
23:CW:30:G:H2'	23:CW:31:A:C8	2.39	0.55
34:DA:141:A:C8	34:DA:1408:C:O2'	2.54	0.55
34:DA:2059:A:C5'	34:DA:2060:A:OP2	2.55	0.55
34:DA:1786:A:C2	34:DA:2606:C:H1'	2.42	0.55
34:DA:2704:C:H2'	34:DA:2705:A:H8	1.71	0.55
34:DA:2864:G:H2'	34:DA:2865:U:O4'	2.06	0.55
34:DA:523:C:C2'	34:DA:524:U:H5'	2.37	0.55
34:DA:543:C:N4	34:DA:551:G:H1	1.99	0.55
42:DI:120:ILE:HG21	42:DI:126:TYR:CE1	2.42	0.55
43:DN:46:VAL:O	43:DN:47:ALA:HB3	2.06	0.55
46:DQ:63:LYS:HZ3	46:DQ:63:LYS:HB2	1.70	0.55
47:DR:41:ALA:O	47:DR:43:GLU:N	2.39	0.55
48:DS:56:LEU:O	48:DS:57:LYS:HB2	2.06	0.55
49:DT:29:ARG:HG2	49:DT:86:ILE:H	1.72	0.55
52:DW:52:GLU:O	52:DW:55:ALA:HB3	2.06	0.55
53:DX:18:TYR:HA	53:DX:21:PHE:CD1	2.42	0.55
53:DX:82:GLN:CD	53:DX:83:VAL:H	2.10	0.55
1:AA:1321:C:C3'	1:AA:1322:C:H5''	2.37	0.55
1:AA:1405:G:O2'	1:AA:1406:U:H5'	2.07	0.55
1:AA:418:C:H2'	1:AA:419:C:C6	2.41	0.55
1:AA:67:C:H2'	1:AA:68:G:H8	1.67	0.55
2:AB:165:VAL:HG23	2:AB:166:ASP:N	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:122:ARG:NH1	8:AH:122:ARG:HB2	2.21	0.55
11:AK:95:ILE:HG21	11:AK:108:ILE:HD13	1.89	0.55
20:AT:94:ALA:O	20:AT:95:ALA:HB3	2.07	0.55
27:B2:49:LYS:CA	27:B2:53:LEU:HB3	2.36	0.55
33:B8:51:ALA:O	33:B8:54:GLU:HG2	2.07	0.55
34:BA:1108:U:H2'	34:BA:1109:C:H5'	1.89	0.55
34:BA:110:G:O2'	34:BA:111:A:H5'	2.07	0.55
34:BA:1747:G:H2'	34:BA:1747(A):G:C8	2.42	0.55
34:BA:2270:G:H3'	34:BA:2271:G:H8	1.72	0.55
34:BA:45:C:H2'	34:BA:47:C:H6	1.71	0.55
34:BA:580:C:O2'	34:BA:581:C:H5'	2.07	0.55
34:BA:585:G:H2'	34:BA:1251:C:N4	2.22	0.55
34:BA:751:A:H5'	52:BW:90:ARG:HA	1.87	0.55
34:BA:760:G:H2'	34:BA:761:A:O4'	2.07	0.55
35:BB:65:C:N4	35:BB:109:C:H2'	2.20	0.55
37:BD:231:HIS:ND1	37:BD:232:PRO:CD	2.69	0.55
37:BD:28:GLU:HB2	37:BD:29:PRO:HD3	1.89	0.55
41:BH:127:GLU:OE1	41:BH:127:GLU:HA	2.07	0.55
46:BQ:12:GLN:HG2	46:BQ:73:PRO:HD2	1.89	0.55
38:BE:109:LYS:HE2	47:BR:2:ARG:HH12	1.71	0.55
49:BT:45:PHE:CE1	49:BT:74:ARG:HG3	2.42	0.55
51:BV:64:HIS:HB3	51:BV:96:ILE:HA	1.88	0.55
54:BY:39:VAL:O	54:BY:40:GLU:CD	2.45	0.55
1:CA:1152:A:H2'	1:CA:1153:C:H6	1.72	0.55
1:CA:708:C:O2'	1:CA:709:G:H5'	2.06	0.55
5:CE:12:LEU:C	5:CE:12:LEU:HD22	2.27	0.55
7:CG:26:PHE:CE2	7:CG:30:ILE:HD11	2.41	0.55
8:CH:110:ALA:HB3	8:CH:121:ASP:HB3	1.89	0.55
9:CI:117:HIS:NE2	9:CI:123:PRO:HA	2.21	0.55
10:CJ:78:ASN:HB2	10:CJ:81:THR:HG23	1.89	0.55
11:CK:23:ALA:HB1	11:CK:88:GLY:HA3	1.87	0.55
1:CA:1202:G:C2	14:CN:42:ILE:HG21	2.42	0.55
19:CS:67:VAL:C	19:CS:69:HIS:H	2.09	0.55
20:CT:74:LYS:H	20:CT:74:LYS:HD3	1.70	0.55
22:CV:65:C:C2'	22:CV:66:C:H5'	2.37	0.55
19:CS:67:VAL:HG21	29:D4:42:PHE:CB	2.36	0.55
34:DA:122:G:O2'	34:DA:123:G:H5'	2.07	0.55
34:DA:154(A):C:H5	34:DA:171:G:N1	2.05	0.55
34:DA:23:G:H1	34:DA:517:C:H42	1.55	0.55
34:DA:2022:U:O2'	34:DA:2617:C:H5'	2.07	0.55
34:DA:2808:U:C2'	34:DA:2809:A:H5'	2.36	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:24:ILE:O	37:DD:24:ILE:CG2	2.54	0.55
37:DD:32:SER:O	37:DD:33:LEU:CB	2.55	0.55
39:DF:164:ARG:HG2	39:DF:164:ARG:HH11	1.71	0.55
40:DG:135:LEU:CD1	40:DG:157:ILE:HG23	2.37	0.55
41:DH:127:GLU:OE1	41:DH:127:GLU:HA	2.07	0.55
43:DN:121:LYS:HG3	43:DN:123:TYR:CE1	2.41	0.55
45:DP:100:LEU:HB2	45:DP:106:LEU:HD22	1.88	0.55
45:DP:95:VAL:HA	45:DP:99:LEU:CD2	2.31	0.55
54:DY:14:LEU:HD12	54:DY:15:VAL:N	2.22	0.55
34:DA:86:C:OP1	54:DY:32:PRO:HD2	2.07	0.55
54:DY:61:ILE:HG22	54:DY:61:ILE:O	2.07	0.55
1:AA:1014:A:H2'	1:AA:1015:A:C8	2.42	0.55
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.07	0.55
1:AA:1253:G:H1'	1:AA:1355:G:O2'	2.07	0.55
1:AA:186:C:H2'	1:AA:187:C:H6	1.71	0.55
1:AA:189(A):C:H2'	1:AA:189(B):C:C6	2.42	0.55
1:AA:353:A:H5'	1:AA:353:A:C8	2.35	0.55
1:AA:46:G:O2'	1:AA:365:U:H1'	2.07	0.55
1:AA:375:U:H2'	1:AA:376:G:C8	2.39	0.55
1:AA:539:A:OP1	12:AL:114:LYS:HE2	2.06	0.55
1:AA:708:C:O2'	1:AA:709:G:H5'	2.07	0.55
1:AA:828:A:H5"	1:AA:859:A:C2	2.42	0.55
2:AB:194:PRO:O	2:AB:196:LEU:N	2.40	0.55
3:AC:76:VAL:CG2	3:AC:77:ILE:N	2.69	0.55
4:AD:64:LEU:O	4:AD:67:ILE:HB	2.07	0.55
6:AF:22:GLU:O	6:AF:26:ILE:HG13	2.07	0.55
10:AJ:92:THR:HG23	10:AJ:93:GLY:N	2.21	0.55
10:AJ:9:ARG:HH21	10:AJ:95:GLU:HG2	1.71	0.55
12:AL:34:ARG:HG2	12:AL:35:GLY:N	2.22	0.55
22:AV:67:C:O2	22:AV:67:C:H2'	2.05	0.55
25:B0:36:ILE:HA	25:B0:60:PHE:HB3	1.87	0.55
34:BA:2702:U:OP1	34:BA:2702:U:O4'	2.24	0.55
34:BA:391:G:O2'	34:BA:392:C:H5'	2.06	0.55
38:BE:16:ARG:O	38:BE:18:ASP:N	2.39	0.55
38:BE:197:ILE:O	38:BE:197:ILE:HG13	2.06	0.55
38:BE:3:GLY:HA3	38:BE:81:ILE:HG21	1.87	0.55
29:B4:13:ARG:HA	40:BG:101:ILE:HD12	1.88	0.55
41:BH:89:ILE:H	41:BH:89:ILE:HD13	1.71	0.55
42:BI:66:GLU:O	42:BI:70:GLU:HG2	2.07	0.55
43:BN:55:VAL:HG22	43:BN:128:HIS:HB3	1.88	0.55
45:BP:144:GLU:N	45:BP:145:PRO:CD	2.69	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BE:109:LYS:HE2	47:BR:2:ARG:NH1	2.20	0.55
47:BR:8:ARG:HA	47:BR:8:ARG:HE	1.72	0.55
51:BV:99:ILE:HG22	51:BV:100:ARG:N	2.21	0.55
1:CA:1438:G:H2'	1:CA:1439:C:C6	2.42	0.55
1:CA:241:C:O2'	1:CA:242:C:H5'	2.07	0.55
1:CA:377:G:OP1	16:CP:3:LYS:HD2	2.07	0.55
1:CA:445:G:H2'	1:CA:446:G:H8	1.72	0.55
15:CO:62:GLN:O	15:CO:66:LEU:HD13	2.06	0.55
25:D0:41:ARG:HD3	25:D0:44:ARG:CD	2.35	0.55
26:D1:82:LEU:HD12	26:D1:84:GLY:H	1.72	0.55
34:DA:1946:U:H2'	34:DA:1947:C:H6	1.72	0.55
34:DA:2228:G:H2'	34:DA:2229:C:C6	2.42	0.55
34:DA:2498:C:O2'	34:DA:2499:C:H5'	2.06	0.55
39:DF:101:LEU:HB3	39:DF:106:ARG:HD3	1.88	0.55
39:DF:1:MET:O	39:DF:2:LYS:O	2.25	0.55
45:DP:131:SER:C	45:DP:133:SER:N	2.58	0.55
46:DQ:141:GLN:OXT	55:DZ:98:MET:HB2	2.07	0.55
48:DS:35:ILE:H	48:DS:53:SER:CB	2.18	0.55
49:DT:89:VAL:HG12	49:DT:91:ARG:HG2	1.88	0.55
51:DV:72:VAL:CA	51:DV:88:ARG:HH22	2.19	0.55
1:AA:1256:A:H5'	1:AA:1257:U:OP1	2.07	0.55
1:AA:514:C:O2'	1:AA:515:G:H5'	2.06	0.55
10:AJ:32:ALA:HB1	10:AJ:75:ILE:CG1	2.34	0.55
16:AP:28:ARG:HG2	16:AP:28:ARG:NH1	2.21	0.55
19:AS:36:ARG:NH1	19:AS:75:ALA:HB3	2.21	0.55
31:B6:25:LYS:HD3	33:B8:36:LYS:HD2	1.89	0.55
32:B7:43:THR:HG23	32:B7:44:PRO:CD	2.36	0.55
34:BA:1427:A:C2	34:BA:1570:A:OP2	2.60	0.55
34:BA:1550:C:H2'	34:BA:1551:C:H6	1.71	0.55
34:BA:1831:G:H2'	34:BA:1832:C:H6	1.72	0.55
34:BA:2855:C:H2'	34:BA:2856:C:H6	1.71	0.55
34:BA:542:C:C4	34:BA:543:C:N4	2.75	0.55
37:BD:10:THR:HG23	37:BD:13:ARG:HB3	1.88	0.55
42:BI:120:ILE:O	42:BI:121:LYS:HB3	2.07	0.55
43:BN:112:LEU:O	43:BN:115:ARG:N	2.40	0.55
53:BX:77:LYS:HE3	53:BX:78:LYS:CG	2.37	0.55
53:BX:88:LYS:O	53:BX:89:ILE:HB	2.07	0.55
55:BZ:79:ARG:H	55:BZ:79:ARG:CD	2.08	0.55
1:CA:1072:G:H2'	1:CA:1073:U:H6	1.72	0.55
1:CA:1108:G:H2'	1:CA:1109:C:H5'	1.89	0.55
1:CA:579:G:C5'	1:CA:728:A:H1'	2.32	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:963:G:H2'	1:CA:964:A:H8	1.71	0.55
3:CC:62:ASP:O	3:CC:97:LYS:HB3	2.07	0.55
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.07	0.55
12:CL:89:ARG:HE	12:CL:91:LYS:HE2	1.71	0.55
17:CQ:67:LYS:HA	17:CQ:70:ARG:NH1	2.17	0.55
20:CT:44:ALA:HB1	20:CT:91:LEU:HB2	1.88	0.55
30:D5:20:ARG:HA	30:D5:23:HIS:CD2	2.42	0.55
34:DA:1290:C:O2'	34:DA:1291:C:H5'	2.07	0.55
34:DA:2286:A:HO2'	34:DA:2286:A:H8	1.54	0.55
34:DA:2287:A:H2	34:DA:2346:A:C2	2.25	0.55
34:DA:2469:A:H2	34:DA:2481:G:H21	1.54	0.55
34:DA:2617:C:C2'	34:DA:2618:G:H5'	2.36	0.55
34:DA:2811:G:C2'	34:DA:2812:G:H5'	2.37	0.55
34:DA:612:C:C3'	34:DA:613:G:H5''	2.36	0.55
37:DD:134:ARG:HB2	37:DD:135:PHE:CD1	2.42	0.55
38:DE:117:MET:HB2	38:DE:122:PHE:HB2	1.88	0.55
38:DE:117:MET:CE	38:DE:124:GLY:HA3	2.37	0.55
43:DN:115:ARG:O	43:DN:118:LYS:HB2	2.07	0.55
43:DN:128:HIS:O	43:DN:130:HIS:N	2.40	0.55
43:DN:18:ALA:C	43:DN:20:GLY:H	2.09	0.55
44:DO:26:LYS:HB2	44:DO:30:ALA:HB2	1.88	0.55
45:DP:107:LYS:HG3	45:DP:107:LYS:O	2.07	0.55
51:DV:36:PRO:HD2	51:DV:60:GLU:O	2.07	0.55
52:DW:55:ALA:HA	52:DW:107:LEU:CD2	2.37	0.55
1:AA:235:C:H1'	17:AQ:61:GLU:OE1	2.07	0.55
1:AA:264:U:O2'	17:AQ:64:PRO:HB2	2.07	0.55
1:AA:834:C:O2'	1:AA:835:U:H5'	2.07	0.55
1:AA:955:U:O2'	1:AA:956:U:H5'	2.06	0.55
2:AB:142:LEU:HD23	2:AB:142:LEU:C	2.26	0.55
3:AC:77:ILE:HA	3:AC:84:ILE:CG2	2.37	0.55
11:AK:44:SER:H	11:AK:47:VAL:CG2	2.19	0.55
12:AL:41:ARG:HG2	12:AL:42:THR:H	1.72	0.55
19:AS:49:ILE:O	19:AS:60:VAL:HG12	2.07	0.55
20:AT:34:LYS:O	20:AT:37:SER:N	2.40	0.55
20:AT:8:ARG:HG3	20:AT:8:ARG:HH11	1.71	0.55
31:B6:10:LEU:CD1	33:B8:36:LYS:HD3	2.36	0.55
34:BA:2059:A:C5'	34:BA:2060:A:OP2	2.55	0.55
34:BA:2475:C:H42	34:BA:2529:G:H22	1.53	0.55
34:BA:491:G:H2'	34:BA:492:A:O4'	2.06	0.55
35:BB:29:A:H2'	35:BB:30:C:H6	1.68	0.55
37:BD:142:VAL:HG23	37:BD:193:VAL:N	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BD:44:ASN:CB	37:BD:49:ILE:HA	2.37	0.55
38:BE:169:ASN:HA	38:BE:201:THR:OG1	2.07	0.55
39:BF:7:TYR:HB3	39:BF:16:GLY:C	2.28	0.55
44:BO:8:LEU:N	44:BO:8:LEU:HD22	2.21	0.55
45:BP:71:VAL:CG1	45:BP:72:PRO:CD	2.84	0.55
46:BQ:137:TYR:CD1	46:BQ:138:ASP:N	2.75	0.55
46:BQ:22:LYS:HZ3	46:BQ:22:LYS:HA	1.71	0.55
49:BT:33:LYS:HD2	49:BT:43:GLN:OE1	2.07	0.55
49:BT:57:PHE:C	49:BT:59:THR:N	2.61	0.55
51:BV:64:HIS:CB	51:BV:96:ILE:HA	2.37	0.55
53:BX:60:ARG:HE	53:BX:74:PRO:CG	2.12	0.55
54:BY:20:TYR:CD1	54:BY:42:VAL:HG22	2.42	0.55
54:BY:75:ILE:HD11	54:BY:78:ALA:C	2.26	0.55
54:BY:81:LYS:HG2	54:BY:96:ILE:HB	1.89	0.55
1:CA:1006:C:H42	1:CA:1024:G:N2	2.05	0.55
1:CA:1428:A:H2'	1:CA:1429:C:C6	2.42	0.55
1:CA:749:C:O2'	1:CA:750:G:H5'	2.07	0.55
1:CA:826:C:H2'	1:CA:827:U:C6	2.41	0.55
1:CA:950:U:H2'	1:CA:951:G:C8	2.42	0.55
2:CB:97:TRP:HH2	2:CB:176:GLU:CD	2.11	0.55
2:CB:219:VAL:HA	2:CB:222:ILE:HD12	1.89	0.55
4:CD:112:VAL:HG12	4:CD:116:GLN:OE1	2.06	0.55
4:CD:12:CYS:HA	4:CD:19:LEU:HD12	1.88	0.55
7:CG:15:ASP:HB3	7:CG:19:GLY:CA	2.37	0.55
11:CK:62:GLN:O	11:CK:65:ALA:N	2.39	0.55
33:D8:29:LYS:O	33:D8:31:HIS:N	2.40	0.55
34:DA:1238:G:O2'	34:DA:1239:G:H5'	2.06	0.55
34:DA:1434:A:O2'	34:DA:1435:G:H5'	2.06	0.55
34:DA:2512:C:H4'	38:DE:122:PHE:CE2	2.41	0.55
34:DA:2704:C:C2	34:DA:2705:A:C8	2.95	0.55
36:DC:18:LYS:HD3	36:DC:19:VAL:H	1.71	0.55
34:DA:1568:G:H4'	37:DD:59:LYS:CG	2.36	0.55
38:DE:144:ARG:O	38:DE:145:LYS:C	2.46	0.55
41:DH:154:PRO:CG	41:DH:155:SER:H	2.20	0.55
43:DN:48:MET:O	43:DN:48:MET:SD	2.64	0.55
45:DP:85:LEU:HD12	45:DP:120:ALA:HB3	1.89	0.55
46:DQ:38:GLU:HB2	46:DQ:127:ILE:HG23	1.88	0.55
47:DR:3:HIS:O	47:DR:4:LEU:CB	2.55	0.55
48:DS:12:PHE:O	48:DS:12:PHE:CD1	2.60	0.55
51:DV:64:HIS:HB3	51:DV:96:ILE:HA	1.88	0.55
54:DY:27:VAL:HG12	54:DY:28:LYS:N	2.22	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:29:GLU:OE1	54:DY:29:GLU:N	2.40	0.55
1:AA:1041:A:H2'	1:AA:1042:G:C8	2.42	0.54
1:AA:1228:C:H4'	13:AM:116:THR:O	2.07	0.54
1:AA:1288:A:H1'	1:AA:1352:C:O2'	2.07	0.54
1:AA:1442:G:C2'	1:AA:1442(A):G:H5''	2.36	0.54
4:AD:52:SER:C	4:AD:54:TYR:H	2.10	0.54
9:AI:13:ALA:HA	9:AI:67:GLY:O	2.07	0.54
10:AJ:39:PRO:CA	10:AJ:70:ARG:HH12	2.19	0.54
12:AL:126:LYS:HE2	12:AL:128:ALA:H	1.71	0.54
12:AL:89:ARG:HE	12:AL:91:LYS:HE2	1.72	0.54
13:AM:97:PRO:O	13:AM:98:VAL:HG13	2.07	0.54
16:AP:74:LEU:HD22	16:AP:79:VAL:HG21	1.89	0.54
23:AW:16:U:H3'	23:AW:17:C:C5'	2.35	0.54
26:B1:34:THR:HG21	34:BA:388:G:P	2.47	0.54
28:B3:8:LEU:HD13	28:B3:31:LEU:HA	1.89	0.54
34:BA:1344:G:H4'	34:BA:1384:A:C5	2.42	0.54
34:BA:142(A):C:O2'	34:BA:143:G:H5'	2.07	0.54
34:BA:1448:G:N3	34:BA:1528(A):A:H2	2.05	0.54
34:BA:1661:G:O2'	34:BA:1662:C:H5'	2.07	0.54
34:BA:1695:G:H2'	34:BA:1696:G:H5'	1.87	0.54
34:BA:1808:U:C5	34:BA:1809:A:N7	2.75	0.54
34:BA:1952:A:C6	34:BA:1953:A:N1	2.74	0.54
34:BA:271(U):G:C2'	34:BA:271(V):G:H5'	2.37	0.54
34:BA:661:C:H5'	39:BF:38:ARG:HH12	1.72	0.54
34:BA:94(A):G:H2'	34:BA:95:G:H5''	1.89	0.54
37:BD:2:ALA:O	37:BD:3:VAL:HB	2.06	0.54
37:BD:44:ASN:HB3	37:BD:49:ILE:HA	1.89	0.54
37:BD:35:LYS:HA	37:BD:64:ILE:CG2	2.38	0.54
39:BF:126:VAL:O	39:BF:196:LEU:HG	2.07	0.54
42:BI:88:ILE:HD11	42:BI:123:LEU:N	2.21	0.54
42:BI:37:VAL:CG1	42:BI:38:LEU:N	2.70	0.54
42:BI:5:LEU:C	42:BI:6:LEU:HD23	2.27	0.54
44:BO:20:MET:O	44:BO:41:ALA:HB1	2.07	0.54
45:BP:64:LYS:O	45:BP:65:ARG:C	2.46	0.54
46:BQ:132:VAL:HG12	46:BQ:133:ARG:N	2.22	0.54
49:BT:28:VAL:CG2	49:BT:88:ILE:HD11	2.36	0.54
49:BT:50:ILE:H	49:BT:50:ILE:HD12	1.71	0.54
50:BU:62:ILE:HG13	50:BU:76:TYR:CE1	2.42	0.54
51:BV:37:VAL:HG12	51:BV:38:LEU:H	1.72	0.54
53:BX:82:GLN:CD	53:BX:83:VAL:H	2.10	0.54
54:BY:13:VAL:HG11	54:BY:72:VAL:HB	1.88	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BY:68:HIS:CE1	54:BY:70:SER:H	2.25	0.54
1:CA:1332:A:H2'	1:CA:1333:A:C8	2.42	0.54
1:CA:1458:G:H2'	1:CA:1459:C:C6	2.42	0.54
1:CA:1496:C:H1'	1:CA:1517:G:H22	1.72	0.54
1:CA:191:G:H1'	20:CT:105:SER:HB3	1.89	0.54
1:CA:200:G:H1	1:CA:217:C:H42	1.54	0.54
1:CA:299:G:H2'	1:CA:300:A:C8	2.42	0.54
1:CA:764:C:H2'	1:CA:765:G:O4'	2.06	0.54
2:CB:142:LEU:HD23	2:CB:142:LEU:C	2.27	0.54
2:CB:19:HIS:CE1	2:CB:206:ASP:HB2	2.42	0.54
1:CA:921:U:O2'	5:CE:19:MET:O	2.23	0.54
1:CA:932:C:H4'	7:CG:4:ARG:CZ	2.36	0.54
9:CI:43:ALA:HA	9:CI:74:ILE:HD13	1.89	0.54
12:CL:102:ARG:NH1	12:CL:102:ARG:CG	2.69	0.54
12:CL:126:LYS:HE2	12:CL:128:ALA:H	1.72	0.54
13:CM:68:GLY:O	13:CM:69:GLU:CB	2.55	0.54
26:D1:10:LYS:CG	26:D1:14:VAL:HA	2.37	0.54
33:D8:32:LEU:HD11	33:D8:41:ILE:CG2	2.37	0.54
34:DA:1448:G:N3	34:DA:1528(A):A:H2	2.06	0.54
34:DA:45:C:H2'	34:DA:47:C:H6	1.72	0.54
34:DA:612:C:H2'	34:DA:613:G:C5'	2.17	0.54
37:DD:12:SER:HB2	37:DD:208:LYS:HB3	1.88	0.54
37:DD:94:LEU:HD22	37:DD:95:LEU:N	2.21	0.54
38:DE:101:ARG:HD3	38:DE:169:ASN:HD22	1.72	0.54
38:DE:16:ARG:O	38:DE:18:ASP:N	2.40	0.54
38:DE:14:ILE:HG12	38:DE:21:VAL:HG23	1.89	0.54
38:DE:72:VAL:O	38:DE:73:GLU:C	2.45	0.54
34:DA:2313:C:H5"	40:DG:40:ASN:ND2	2.22	0.54
49:DT:23:ARG:HG2	49:DT:120:ARG:NH1	2.22	0.54
51:DV:96:ILE:CG2	51:DV:97:LYS:N	2.70	0.54
34:DA:106:C:C1'	54:DY:2:ARG:HE	2.16	0.54
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.42	0.54
1:AA:1371:G:O3'	9:AI:69:GLY:HA3	2.07	0.54
1:AA:1505:G:H5"	1:AA:1506:U:H5"	1.88	0.54
1:AA:47:C:H5"	1:AA:365:U:C6	2.41	0.54
1:AA:1205:U:O2'	3:AC:195:VAL:HG23	2.06	0.54
3:AC:22:TRP:NE1	3:AC:36:ASP:OD1	2.40	0.54
5:AE:78:HIS:HE1	5:AE:143:ARG:N	1.96	0.54
7:AG:15:ASP:OD2	7:AG:16:LEU:N	2.38	0.54
7:AG:88:PRO:HD2	7:AG:152:ALA:HA	1.88	0.54
8:AH:120:THR:H	8:AH:123:GLU:HB2	1.72	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:973:G:O4'	10:AJ:55:LYS:HG2	2.07	0.54
17:AQ:67:LYS:HG2	17:AQ:68:ARG:N	2.22	0.54
22:AV:15:G:N2	22:AV:48:C:H42	1.99	0.54
22:AV:72:A:C2'	22:AV:73:A:H5''	2.38	0.54
26:B1:11:ARG:O	26:B1:12:PRO:C	2.46	0.54
34:BA:2437:U:H2'	34:BA:2438:U:C6	2.43	0.54
34:BA:2818:G:O2'	34:BA:2819:G:H5'	2.07	0.54
34:BA:687:C:H42	34:BA:787:U:H4'	1.72	0.54
37:BD:110:GLY:O	37:BD:112:GLN:HG3	2.07	0.54
37:BD:231:HIS:CE1	37:BD:232:PRO:HD2	2.42	0.54
39:BF:161:GLU:HA	39:BF:164:ARG:HB2	1.89	0.54
40:BG:132:ASN:O	40:BG:133:LEU:HB3	2.07	0.54
51:BV:25:LEU:N	51:BV:94:LEU:CD1	2.71	0.54
51:BV:37:VAL:HG12	51:BV:38:LEU:N	2.21	0.54
1:CA:1308:U:H2'	1:CA:1309:G:H8	1.72	0.54
1:CA:1438:G:H2'	1:CA:1439:C:H6	1.72	0.54
1:CA:266:G:H5'	1:CA:266:G:C8	2.42	0.54
1:CA:375:U:H2'	1:CA:376:G:C8	2.40	0.54
1:CA:650:G:O2'	1:CA:651:C:H5'	2.07	0.54
1:CA:67:C:H2'	1:CA:68:G:H8	1.66	0.54
1:CA:818:G:C3'	1:CA:819:A:H5''	2.38	0.54
2:CB:113:HIS:O	2:CB:117:GLU:HG2	2.06	0.54
2:CB:236:TYR:HA	2:CB:239:VAL:CG2	2.36	0.54
2:CB:70:PHE:O	2:CB:92:TYR:HA	2.06	0.54
3:CC:79:ARG:HG3	3:CC:79:ARG:O	2.08	0.54
9:CI:112:LYS:HA	9:CI:119:ALA:HB2	1.89	0.54
10:CJ:9:ARG:HH21	10:CJ:95:GLU:HG2	1.72	0.54
13:CM:23:TYR:HB3	13:CM:67:GLU:HB2	1.89	0.54
18:CR:53:ARG:NH2	18:CR:59:SER:HA	2.22	0.54
34:DA:1344:G:H4'	34:DA:1384:A:N7	2.22	0.54
34:DA:2102:U:C5	34:DA:2187:G:O6	2.60	0.54
34:DA:2193:G:H5'	34:DA:2193:G:H8	1.72	0.54
40:DG:120:LEU:H	40:DG:181:ARG:H	1.55	0.54
40:DG:5:VAL:HG12	40:DG:6:ALA:N	2.22	0.54
41:DH:139:GLN:O	41:DH:143:GLN:HB2	2.06	0.54
43:DN:39:ARG:O	50:DU:64:ARG:NH2	2.38	0.54
43:DN:9:VAL:HG12	43:DN:10:GLU:N	2.13	0.54
46:DQ:134:ARG:C	46:DQ:136:ALA:H	2.11	0.54
46:DQ:137:TYR:CD1	46:DQ:138:ASP:N	2.75	0.54
46:DQ:75:THR:HA	46:DQ:89:ASN:N	2.21	0.54
48:DS:24:LEU:HB3	48:DS:85:VAL:HG12	1.88	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DT:118:ARG:O	49:DT:121:ILE:N	2.41	0.54
53:DX:27:THR:OG1	53:DX:77:LYS:HA	2.06	0.54
55:DZ:145:GLU:HG3	55:DZ:146:ILE:N	2.21	0.54
1:AA:1347:G:H22	1:AA:1373:G:C2'	2.11	0.54
1:AA:636:U:H2'	1:AA:637:G:H8	1.71	0.54
2:AB:102:LEU:N	2:AB:102:LEU:HD12	2.22	0.54
8:AH:1:MET:CE	8:AH:1:MET:H3	2.20	0.54
9:AI:114:TYR:HE1	10:AJ:60:ARG:O	1.88	0.54
13:AM:3:ARG:NH1	13:AM:7:VAL:HG13	2.22	0.54
16:AP:15:PRO:O	16:AP:16:HIS:ND1	2.41	0.54
18:AR:73:ALA:O	18:AR:76:LEU:N	2.40	0.54
26:B1:26:ARG:CB	26:B1:34:THR:CA	2.84	0.54
27:B2:17:SER:N	27:B2:18:PRO:CD	2.71	0.54
33:B8:25:MET:SD	45:BP:64:LYS:HG3	2.48	0.54
33:B8:29:LYS:O	33:B8:31:HIS:N	2.40	0.54
34:BA:1910:G:O2'	34:BA:1911:U:H5'	2.07	0.54
34:BA:280:C:H42	34:BA:360:G:H1	1.55	0.54
34:BA:741:G:O2'	34:BA:742:G:H5'	2.07	0.54
40:BG:136:ARG:O	40:BG:154:GLY:N	2.41	0.54
40:BG:170:ARG:HG2	40:BG:170:ARG:HH11	1.71	0.54
43:BN:28:THR:HG23	43:BN:29:LYS:N	2.18	0.54
45:BP:46:LYS:HG2	45:BP:52:GLU:CG	2.36	0.54
46:BQ:20:ALA:HB1	46:BQ:23:GLY:HA3	1.89	0.54
49:BT:27:THR:O	49:BT:28:VAL:CG2	2.45	0.54
51:BV:96:ILE:CG2	51:BV:97:LYS:N	2.71	0.54
1:CA:106:C:O2'	1:CA:107:G:H5'	2.06	0.54
1:CA:398:C:O2'	1:CA:399:G:H5'	2.07	0.54
1:CA:555:C:H2'	1:CA:556:C:H6	1.71	0.54
2:CB:158:LEU:HD12	2:CB:158:LEU:N	2.18	0.54
3:CC:155:GLY:HA3	3:CC:163:ALA:HB1	1.89	0.54
3:CC:66:VAL:HG11	3:CC:91:LEU:HD13	1.88	0.54
5:CE:78:HIS:HE1	5:CE:143:ARG:N	1.99	0.54
6:CF:61:LEU:N	6:CF:61:LEU:HD12	2.22	0.54
8:CH:73:ASP:C	8:CH:75:ARG:H	2.11	0.54
8:CH:86:ILE:HG22	8:CH:87:SER:N	2.22	0.54
10:CJ:32:ALA:HB1	10:CJ:75:ILE:CG1	2.35	0.54
16:CP:21:VAL:CG2	16:CP:21:VAL:O	2.54	0.54
20:CT:51:GLU:O	20:CT:55:ILE:HG12	2.06	0.54
25:D0:25:ARG:HD2	25:D0:29:GLN:NE2	2.22	0.54
27:D2:51:ARG:C	27:D2:51:ARG:HD3	2.28	0.54
34:DA:1456:G:H2'	34:DA:1457:A:H8	1.71	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1910:G:O2'	34:DA:1911:U:H5'	2.06	0.54
34:DA:2712:U:O2'	34:DA:2713:A:H5'	2.07	0.54
34:DA:2736:G:C8	34:DA:2736:G:H5'	2.39	0.54
34:DA:364:C:H2'	34:DA:365:C:H5''	1.88	0.54
34:DA:482:A:H4'	54:DY:47:LYS:HZ2	1.73	0.54
35:DB:79:C:O2'	35:DB:80:U:H5'	2.08	0.54
36:DC:212:VAL:O	36:DC:213:TYR:CB	2.54	0.54
40:DG:38:VAL:HG13	40:DG:92:VAL:O	2.07	0.54
41:DH:106:THR:HG22	41:DH:112:PRO:CB	2.35	0.54
42:DI:101:LEU:HD23	42:DI:109:ILE:HG12	1.88	0.54
45:DP:126:VAL:HG22	45:DP:145:PRO:HB3	1.89	0.54
46:DQ:104:PHE:HE1	46:DQ:125:LEU:HD11	1.72	0.54
46:DQ:82:ARG:HH11	46:DQ:82:ARG:CG	2.00	0.54
46:DQ:81:VAL:HG12	46:DQ:82:ARG:N	2.21	0.54
48:DS:13:ARG:HD2	48:DS:13:ARG:H	1.72	0.54
48:DS:65:VAL:O	48:DS:67:ARG:N	2.39	0.54
48:DS:66:ALA:O	48:DS:67:ARG:HG3	2.07	0.54
49:DT:29:ARG:HG3	49:DT:30:VAL:N	2.22	0.54
49:DT:63:VAL:O	49:DT:73:GLU:HA	2.07	0.54
50:DU:112:ARG:CG	50:DU:112:ARG:HH11	2.18	0.54
34:DA:534:U:O2'	50:DU:49:HIS:CD2	2.61	0.54
51:DV:96:ILE:HG22	51:DV:97:LYS:N	2.22	0.54
30:D5:20:ARG:HH12	52:DW:15:ARG:NH1	2.04	0.54
53:DX:77:LYS:HE3	53:DX:78:LYS:CG	2.38	0.54
55:DZ:33:LEU:CG	55:DZ:34:ASN:H	2.20	0.54
1:AA:1299:A:C8	1:AA:1301:U:H1'	2.41	0.54
1:AA:1320:C:OP1	19:AS:70:LYS:NZ	2.41	0.54
1:AA:15:G:H4'	5:AE:24:ARG:CZ	2.37	0.54
1:AA:186:C:H2'	1:AA:187:C:C6	2.43	0.54
1:AA:222:U:H2'	1:AA:223:U:C6	2.42	0.54
1:AA:503:C:H2'	1:AA:504:C:H6	1.72	0.54
3:AC:178:LEU:N	3:AC:178:LEU:HD22	2.22	0.54
4:AD:49:ARG:HA	4:AD:49:ARG:NE	2.21	0.54
4:AD:4:TYR:O	4:AD:5:ILE:CB	2.55	0.54
6:AF:55:ASP:HB2	6:AF:86:ARG:NH1	2.20	0.54
1:AA:932:C:H4'	7:AG:4:ARG:CZ	2.38	0.54
10:AJ:94:VAL:HG12	10:AJ:95:GLU:H	1.72	0.54
18:AR:50:ILE:CD1	18:AR:70:ILE:HG21	2.38	0.54
20:AT:16:HIS:O	20:AT:19:SER:HB3	2.07	0.54
32:B7:25:PRO:HG2	32:B7:26:GLY:H	1.73	0.54
33:B8:2:PRO:O	33:B8:3:LYS:C	2.45	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:B8:35:GLN:NE2	33:B8:36:LYS:HZ2	2.02	0.54
34:BA:1444:G:H2'	34:BA:1445(A):C:C5	2.42	0.54
34:BA:1506:C:H2'	34:BA:1507:A:H5'	1.90	0.54
34:BA:1532:C:O2	34:BA:1532:C:H2'	2.08	0.54
34:BA:2024:G:O2'	34:BA:2025:C:H5'	2.07	0.54
34:BA:2065:C:H2'	34:BA:2066:C:C6	2.43	0.54
34:BA:2320:A:H2'	34:BA:2320:A:N3	2.21	0.54
33:B8:62:LEU:CD1	34:BA:242:G:H5''	2.23	0.54
34:BA:2563:U:H2'	34:BA:2565:A:OP2	2.07	0.54
34:BA:2574:G:O2'	34:BA:2575:C:H5'	2.07	0.54
35:BB:55:U:O2'	35:BB:56:G:H5'	2.07	0.54
37:BD:210:GLY:O	37:BD:212:SER:N	2.39	0.54
34:BA:1568:G:H21	37:BD:58:HIS:HE1	1.55	0.54
38:BE:201:THR:CG2	38:BE:203:LYS:H	2.08	0.54
34:BA:2810:A:C2'	38:BE:61:ARG:NH2	2.70	0.54
38:BE:72:VAL:O	38:BE:73:GLU:C	2.45	0.54
39:BF:107:LYS:C	39:BF:109:GLY:N	2.58	0.54
41:BH:54:ARG:HB3	41:BH:65:HIS:CD2	2.42	0.54
42:BI:33:ARG:HG2	42:BI:33:ARG:HH11	1.73	0.54
42:BI:4:ILE:HG12	42:BI:18:VAL:HG22	1.90	0.54
46:BQ:82:ARG:CG	46:BQ:82:ARG:NH1	2.65	0.54
46:BQ:86:GLY:C	46:BQ:88:GLY:N	2.58	0.54
48:BS:98:VAL:O	48:BS:99:LYS:HD3	2.07	0.54
50:BU:110:VAL:O	50:BU:114:LYS:HD2	2.07	0.54
51:BV:5:VAL:HG21	51:BV:36:PRO:CB	2.37	0.54
51:BV:90:PRO:CD	51:BV:91:TYR:H	2.20	0.54
54:BY:20:TYR:CZ	54:BY:42:VAL:HA	2.42	0.54
1:CA:1068:G:OP2	1:CA:1068:G:H8	1.90	0.54
1:CA:1234:C:O2'	1:CA:1235:U:H5'	2.06	0.54
1:CA:34:C:O2'	1:CA:35:G:H5'	2.07	0.54
1:CA:539:A:H2'	1:CA:540:G:H8	1.71	0.54
1:CA:716:A:N3	11:CK:118:GLY:HA2	2.23	0.54
2:CB:194:PRO:O	2:CB:196:LEU:N	2.41	0.54
5:CE:100:VAL:O	5:CE:107:ARG:NH2	2.38	0.54
5:CE:101:ILE:N	5:CE:101:ILE:HD13	2.15	0.54
5:CE:36:ASP:O	5:CE:37:ARG:CB	2.56	0.54
8:CH:122:ARG:NH1	8:CH:122:ARG:HB2	2.20	0.54
10:CJ:45:ARG:HG3	10:CJ:45:ARG:HH11	1.72	0.54
13:CM:3:ARG:NH1	13:CM:7:VAL:HG13	2.21	0.54
23:CW:6:G:O2'	23:CW:7:A:H5'	2.08	0.54
26:D1:16:ASN:HB3	26:D1:45:ASN:HA	1.88	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:94(A):G:H2'	34:DA:95:G:H5''	1.90	0.54
34:DA:998:C:H2'	34:DA:999:U:O4'	2.08	0.54
42:DI:79:ILE:CG2	42:DI:81:VAL:HG23	2.37	0.54
45:DP:74:GLU:HG3	45:DP:75:ILE:N	2.22	0.54
45:DP:85:LEU:HA	45:DP:88:LEU:HB2	1.90	0.54
34:DA:2822:G:O6	47:DR:4:LEU:HD12	2.07	0.54
49:DT:92:GLY:C	49:DT:94:ALA:N	2.61	0.54
51:DV:21:ARG:H	51:DV:21:ARG:CD	2.12	0.54
51:DV:64:HIS:CB	51:DV:96:ILE:HA	2.38	0.54
53:DX:21:PHE:O	53:DX:22:ALA:C	2.44	0.54
53:DX:55:ASN:HB2	53:DX:78:LYS:CD	2.38	0.54
53:DX:53:LYS:H	53:DX:80:ILE:HG22	1.73	0.54
54:DY:88:LYS:O	54:DY:90:LEU:HD23	2.08	0.54
55:DZ:26:GLY:HA2	55:DZ:85:HIS:NE2	2.22	0.54
1:AA:1152:A:H2'	1:AA:1153:C:H6	1.71	0.54
1:AA:386:C:H2'	1:AA:387:U:C5'	2.38	0.54
1:AA:398:C:O2'	1:AA:399:G:H5'	2.06	0.54
1:AA:588:G:H2'	1:AA:589:C:C6	2.42	0.54
1:AA:89:C:H3'	1:AA:90:U:H5'	1.89	0.54
1:AA:950:U:H2'	1:AA:951:G:C8	2.42	0.54
3:AC:70:VAL:CG1	3:AC:71:ALA:N	2.71	0.54
5:AE:36:ASP:OD1	5:AE:40:ARG:HB2	2.07	0.54
6:AF:8:ILE:HG22	6:AF:9:VAL:N	2.21	0.54
10:AJ:47:PHE:HE1	10:AJ:63:PHE:HD2	1.56	0.54
1:AA:973:G:C4	10:AJ:55:LYS:HE2	2.42	0.54
13:AM:5:ALA:O	13:AM:6:GLY:C	2.46	0.54
19:AS:13:ASP:C	19:AS:15:LEU:H	2.10	0.54
20:AT:57:ARG:HB2	20:AT:57:ARG:NH1	2.09	0.54
20:AT:44:ALA:HB1	20:AT:91:LEU:HB2	1.88	0.54
1:AA:1327:C:P	21:AU:12:LYS:NZ	2.80	0.54
26:B1:87:PRO:CG	26:B1:88:LYS:H	2.20	0.54
30:B5:16:ARG:HG2	30:B5:16:ARG:HH11	1.72	0.54
33:B8:32:LEU:CD2	33:B8:35:GLN:O	2.56	0.54
34:BA:1037:G:H1	34:BA:1118:C:H42	1.56	0.54
34:BA:1157:G:H2'	34:BA:1158:C:H5'	1.89	0.54
34:BA:1181:C:O2'	34:BA:1182:A:H5'	2.07	0.54
34:BA:1486:A:N1	34:BA:1504:C:N4	2.55	0.54
34:BA:2461:C:H2'	34:BA:2462:U:H6	1.69	0.54
34:BA:2514:U:H2'	34:BA:2515:C:C6	2.42	0.54
34:BA:405:U:H3'	34:BA:406:G:H5'	1.88	0.54
37:BD:134:ARG:HB2	37:BD:135:PHE:CD1	2.42	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BE:131:ALA:HB3	38:BE:134:ILE:CD1	2.38	0.54
38:BE:14:ILE:HG13	38:BE:21:VAL:CG2	2.38	0.54
40:BG:33:ARG:HD3	40:BG:162:THR:HG21	1.88	0.54
46:BQ:68:ILE:CG2	46:BQ:103:MET:HA	2.36	0.54
1:CA:1121:U:H2'	1:CA:1122:U:C6	2.42	0.54
1:CA:1237:C:H2'	1:CA:1336:C:C5	2.42	0.54
1:CA:763:G:O2'	1:CA:764:C:H5'	2.07	0.54
2:CB:83:MET:O	2:CB:85:ALA:N	2.40	0.54
4:CD:4:TYR:HE2	4:CD:6:GLY:O	1.91	0.54
8:CH:10:LEU:HD23	8:CH:10:LEU:N	2.23	0.54
21:CU:9:ARG:HH11	21:CU:22:ARG:HG3	1.73	0.54
31:D6:11:LEU:O	31:D6:24:GLU:N	2.40	0.54
34:DA:1021:A:H3'	34:DA:1021:A:H8	1.71	0.54
34:DA:1157:G:H2'	34:DA:1158:C:H5'	1.89	0.54
34:DA:2277:G:H2'	34:DA:2278:A:H5'	1.90	0.54
34:DA:2475:C:H42	34:DA:2529:G:H22	1.55	0.54
34:DA:2531:A:H2'	34:DA:2531:A:N3	2.22	0.54
34:DA:2735:G:H2'	34:DA:2736:G:H5'	1.89	0.54
34:DA:2886:G:H2'	34:DA:2887:U:H6	1.70	0.54
34:DA:405:U:H3'	34:DA:406:G:H5'	1.89	0.54
34:DA:587:C:C5	45:DP:33:ARG:NH1	2.74	0.54
34:DA:661:C:H5'	39:DF:38:ARG:HH12	1.73	0.54
34:DA:84:A:H5'	54:DY:9:LYS:HB3	1.90	0.54
36:DC:22:ILE:HG22	36:DC:25:ALA:HB2	1.89	0.54
37:DD:11:PRO:O	37:DD:13:ARG:N	2.38	0.54
37:DD:35:LYS:HA	37:DD:64:ILE:CG2	2.37	0.54
38:DE:186:GLY:O	38:DE:188:VAL:HG12	2.07	0.54
38:DE:49:LEU:O	38:DE:78:LEU:HB3	2.07	0.54
42:DI:129:THR:HG21	42:DI:135:GLU:HG2	1.90	0.54
42:DI:66:GLU:O	42:DI:70:GLU:HG2	2.07	0.54
43:DN:13:TRP:HD1	43:DN:13:TRP:H	1.55	0.54
43:DN:66:LYS:HB3	43:DN:70:LYS:CB	2.36	0.54
45:DP:85:LEU:HD23	45:DP:85:LEU:N	2.18	0.54
47:DR:51:LEU:HD23	47:DR:66:VAL:HG13	1.90	0.54
51:DV:72:VAL:C	51:DV:88:ARG:HH22	2.11	0.54
52:DW:9:TYR:H	52:DW:102:HIS:CD2	2.26	0.54
53:DX:25:LYS:HG3	53:DX:26:TYR:H	1.73	0.54
1:AA:1121:U:H2'	1:AA:1122:U:C6	2.43	0.54
1:AA:200:G:H1	1:AA:217:C:H42	1.55	0.54
1:AA:458:C:H2'	1:AA:460:G:C8	2.42	0.54
1:AA:648:A:H2'	1:AA:649:G:C8	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:93:G:H2'	1:AA:96:U:H5'	1.90	0.54
2:AB:163:PHE:HA	2:AB:185:ILE:O	2.08	0.54
4:AD:31:CYS:C	4:AD:33:MET:H	2.10	0.54
5:AE:110:LEU:O	5:AE:115:VAL:HG23	2.06	0.54
5:AE:18:ARG:HE	5:AE:25:ARG:HB3	1.72	0.54
7:AG:23:VAL:HG12	7:AG:27:ILE:CD1	2.37	0.54
10:AJ:78:ASN:HB2	10:AJ:81:THR:HG23	1.88	0.54
12:AL:82:VAL:O	12:AL:106:ASP:HB2	2.08	0.54
13:AM:27:LYS:O	13:AM:30:ALA:HB3	2.08	0.54
19:AS:16:LEU:O	19:AS:20:LEU:N	2.23	0.54
1:AA:986:A:H1'	19:AS:54:GLY:O	2.06	0.54
20:AT:11:SER:HA	20:AT:13:LEU:CD1	2.37	0.54
33:B8:62:LEU:H	33:B8:63:PRO:HD2	1.72	0.54
34:BA:143:G:H2'	34:BA:143(A):C:C6	2.38	0.54
34:BA:1644:C:O2	34:BA:1644:C:H2'	2.06	0.54
34:BA:2039:C:O2'	34:BA:2040:C:H5'	2.08	0.54
34:BA:2317:C:H2'	34:BA:2318:G:C5'	2.37	0.54
34:BA:2787:C:O2	38:BE:61:ARG:HD3	2.07	0.54
34:BA:703:U:H2'	34:BA:704:G:H5'	1.88	0.54
35:BB:20:C:H2'	35:BB:21:G:C5'	2.38	0.54
36:BC:18:LYS:HD3	36:BC:19:VAL:H	1.72	0.54
37:BD:135:PHE:N	37:BD:135:PHE:CD1	2.73	0.54
37:BD:11:PRO:O	37:BD:13:ARG:N	2.41	0.54
37:BD:24:ILE:CG2	37:BD:24:ILE:O	2.55	0.54
39:BF:2:LYS:HG3	39:BF:25:PRO:O	2.08	0.54
40:BG:54:GLU:HA	40:BG:57:ALA:HB2	1.88	0.54
45:BP:126:VAL:HG22	45:BP:145:PRO:HB3	1.89	0.54
34:BA:2468:G:OP1	46:BQ:119:ARG:NH2	2.39	0.54
47:BR:9:LYS:O	47:BR:10:LEU:CG	2.56	0.54
51:BV:47:VAL:HG13	51:BV:48:GLY:H	1.71	0.54
51:BV:88:ARG:HH11	51:BV:88:ARG:HG3	1.73	0.54
54:BY:29:GLU:N	54:BY:29:GLU:OE1	2.41	0.54
1:CA:1041:A:H2'	1:CA:1042:G:C8	2.43	0.54
1:CA:1347:G:H22	1:CA:1373:G:C2'	2.10	0.54
6:CF:82:ARG:CB	6:CF:82:ARG:HH11	2.21	0.54
8:CH:14:ARG:HB3	8:CH:14:ARG:HH11	1.72	0.54
10:CJ:38:ILE:CG1	10:CJ:71:LEU:HB3	2.37	0.54
11:CK:25:TYR:H	11:CK:25:TYR:HD1	1.53	0.54
11:CK:61:ALA:CB	11:CK:90:GLY:HA3	2.37	0.54
12:CL:60:LEU:N	12:CL:64:TYR:O	2.34	0.54
13:CM:3:ARG:HA	13:CM:9:ILE:HG13	1.90	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:21:ASP:OD2	15:CO:23:GLY:O	2.26	0.54
1:CA:237:C:H4'	17:CQ:25:ARG:NH1	2.22	0.54
20:CT:11:SER:HA	20:CT:13:LEU:CD1	2.36	0.54
33:D8:30:ARG:O	33:D8:31:HIS:C	2.46	0.54
33:D8:62:LEU:H	33:D8:63:PRO:HD2	1.72	0.54
34:DA:1417:C:H2'	34:DA:1418:G:O4'	2.08	0.54
34:DA:1430:C:H2'	34:DA:1431:U:C6	2.42	0.54
34:DA:1644:C:O2	34:DA:1644:C:H2'	2.07	0.54
34:DA:1665:A:H2'	34:DA:1666:G:C5'	2.38	0.54
34:DA:2521:C:H1'	34:DA:2545:G:N2	2.23	0.54
27:D2:41:ILE:HG13	34:DA:95:G:H21	1.73	0.54
37:DD:32:SER:O	37:DD:33:LEU:HB2	2.07	0.54
34:DA:1568:G:H4'	37:DD:59:LYS:HG2	1.89	0.54
37:DD:65:ILE:HD11	37:DD:67:PHE:CE1	2.43	0.54
37:DD:92:ILE:HD12	37:DD:92:ILE:C	2.28	0.54
41:DH:85:LYS:HE3	41:DH:141:VAL:O	2.08	0.54
44:DO:86:ILE:H	44:DO:86:ILE:HD12	1.71	0.54
44:DO:86:ILE:N	44:DO:86:ILE:HD12	2.23	0.54
45:DP:90:ARG:O	45:DP:90:ARG:HD3	2.07	0.54
46:DQ:48:GLU:O	46:DQ:52:VAL:HG12	2.08	0.54
46:DQ:39:PRO:N	46:DQ:99:PRO:HD3	2.23	0.54
48:DS:17:ARG:C	48:DS:19:LYS:N	2.55	0.54
48:DS:54:LEU:HD13	48:DS:57:LYS:O	2.08	0.54
50:DU:29:SER:O	50:DU:30:LYS:HD3	2.08	0.54
51:DV:17:GLY:HA2	51:DV:98:GLU:O	2.07	0.54
53:DX:53:LYS:N	53:DX:80:ILE:HG22	2.23	0.54
54:DY:31:LEU:HD23	54:DY:36:ALA:HB3	1.89	0.54
55:DZ:18:LEU:CD1	55:DZ:18:LEU:H	2.17	0.54
1:AA:735:C:H2'	1:AA:736:C:C6	2.39	0.54
2:AB:121:LEU:O	2:AB:127:ILE:HD11	2.08	0.54
7:AG:132:GLY:H	7:AG:135:VAL:HG21	1.73	0.54
8:AH:10:LEU:N	8:AH:10:LEU:HD23	2.22	0.54
12:AL:71:PRO:HD2	12:AL:102:ARG:NH1	2.23	0.54
12:AL:119:LYS:O	12:AL:120:TYR:HB2	2.07	0.54
22:AV:8:U:H1'	22:AV:48:C:O2	2.07	0.54
25:B0:29:GLN:O	25:B0:67:VAL:HG23	2.08	0.54
32:B7:30:VAL:HG12	32:B7:31:LEU:N	2.22	0.54
34:BA:1021:A:C8	34:BA:1021:A:H3'	2.43	0.54
34:BA:2011:U:O2'	34:BA:2012:G:H5'	2.07	0.54
34:BA:2208:A:H1'	34:BA:2219:G:C2	2.43	0.54
34:BA:2313:C:H2'	34:BA:2314:C:C6	2.41	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:523:C:C2'	34:BA:524:U:H5'	2.38	0.54
34:BA:703:U:C2'	34:BA:704:G:H5'	2.38	0.54
37:BD:35:LYS:CG	37:BD:64:ILE:H	2.15	0.54
41:BH:76:VAL:O	41:BH:79:VAL:HG22	2.08	0.54
42:BI:120:ILE:HG21	42:BI:126:TYR:CE1	2.42	0.54
44:BO:88:ASN:O	44:BO:91:LEU:N	2.38	0.54
45:BP:148:LEU:N	45:BP:148:LEU:HD13	2.23	0.54
34:BA:1190:G:OP1	45:BP:35:HIS:HA	2.07	0.54
46:BQ:134:ARG:C	46:BQ:136:ALA:H	2.11	0.54
46:BQ:8:LYS:HE3	46:BQ:9:TYR:CE1	2.43	0.54
47:BR:107:ASP:C	47:BR:107:ASP:OD2	2.45	0.54
48:BS:12:PHE:CD1	48:BS:12:PHE:O	2.61	0.54
48:BS:26:LEU:O	48:BS:88:ASP:HB3	2.07	0.54
51:BV:50:PRO:O	51:BV:51:VAL:CB	2.56	0.54
53:BX:89:ILE:HD12	53:BX:89:ILE:N	2.22	0.54
54:BY:45:VAL:HA	54:BY:62:GLU:CB	2.29	0.54
54:BY:88:LYS:O	54:BY:90:LEU:HD23	2.08	0.54
55:BZ:6:LYS:CB	55:BZ:8:TYR:CE1	2.91	0.54
1:CA:1525:G:O2'	1:CA:1526:G:H5'	2.07	0.54
1:CA:310:G:H2'	1:CA:311:C:H6	1.73	0.54
1:CA:390:C:H2'	1:CA:391:G:C8	2.42	0.54
2:CB:163:PHE:HA	2:CB:185:ILE:O	2.07	0.54
6:CF:52:ILE:O	6:CF:53:ALA:HB3	2.07	0.54
6:CF:6:VAL:C	6:CF:7:ASN:HD22	2.11	0.54
8:CH:103:VAL:HG12	8:CH:108:GLY:HA3	1.90	0.54
1:CA:973:G:C4	10:CJ:55:LYS:HE2	2.43	0.54
1:CA:973:G:O4'	10:CJ:55:LYS:HG2	2.07	0.54
12:CL:120:TYR:N	12:CL:120:TYR:HD1	2.05	0.54
1:CA:1048:G:OP1	14:CN:4:LYS:HB2	2.07	0.54
15:CO:67:LEU:HD22	15:CO:78:TYR:HE1	1.72	0.54
1:CA:986:A:H1'	19:CS:54:GLY:O	2.08	0.54
20:CT:8:ARG:HH11	20:CT:8:ARG:HG3	1.73	0.54
26:D1:20:ARG:NH2	26:D1:41:ARG:HE	2.04	0.54
27:D2:14:ARG:HE	27:D2:57:ILE:HD12	1.72	0.54
34:DA:1301:A:O2'	34:DA:1302:A:C2'	2.47	0.54
34:DA:2340:G:O2'	34:DA:2341:G:H5'	2.07	0.54
34:DA:2574:G:O2'	34:DA:2575:C:H5'	2.08	0.54
34:DA:2687:U:O2'	34:DA:2688:U:H5'	2.08	0.54
34:DA:80:G:C2'	34:DA:81:G:H5'	2.37	0.54
36:DC:89:ALA:HB2	36:DC:153:ILE:CB	2.37	0.54
37:DD:67:PHE:CE1	37:DD:157:ARG:NH2	2.76	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DG:160:VAL:HG12	40:DG:161:THR:N	2.23	0.54
34:DA:528:A:C5'	43:DN:114:ARG:HH12	2.19	0.54
43:DN:16:ILE:HG12	43:DN:17:ASP:N	2.22	0.54
44:DO:8:LEU:HD22	44:DO:8:LEU:N	2.22	0.54
45:DP:148:LEU:HD13	45:DP:148:LEU:N	2.22	0.54
48:DS:24:LEU:CB	48:DS:85:VAL:HG12	2.38	0.54
49:DT:128:GLU:O	49:DT:130:ALA:N	2.41	0.54
53:DX:85:PRO:O	53:DX:86:GLY:C	2.45	0.54
55:DZ:104:PHE:CD1	55:DZ:139:VAL:HG11	2.43	0.54
1:AA:253:U:H2'	1:AA:254:G:C8	2.41	0.54
1:AA:559:A:H4'	1:AA:560:U:H5''	1.90	0.54
1:AA:573:A:O2'	1:AA:574:A:H5'	2.08	0.54
1:AA:644:G:O2'	1:AA:645:C:H5'	2.08	0.54
2:AB:188:ALA:O	2:AB:202:PRO:HA	2.08	0.54
3:AC:120:VAL:HG12	3:AC:121:ALA:N	2.22	0.54
11:AK:52:GLY:N	11:AK:55:LYS:HG3	2.22	0.54
13:AM:91:ARG:CG	13:AM:98:VAL:HG11	2.37	0.54
25:B0:1:MET:O	25:B0:2:ALA:HB3	2.08	0.54
25:B0:36:ILE:N	25:B0:36:ILE:HD13	2.21	0.54
25:B0:41:ARG:HB3	34:BA:2330:G:H1'	1.90	0.54
25:B0:41:ARG:HD3	25:B0:44:ARG:CD	2.37	0.54
33:B8:22:VAL:HB	33:B8:53:PRO:HB3	1.90	0.54
34:BA:1656:C:H2'	34:BA:1657:C:C6	2.42	0.54
34:BA:2392:A:H2'	34:BA:2393:A:O4'	2.08	0.54
34:BA:2022:U:O2'	34:BA:2617:C:H5'	2.07	0.54
34:BA:2673:G:O2'	34:BA:2674:G:H5'	2.08	0.54
34:BA:440:G:H2'	34:BA:441:U:C6	2.43	0.54
34:BA:635:C:H2'	34:BA:636:G:H8	1.73	0.54
34:BA:744:G:O2'	34:BA:745:G:H5'	2.08	0.54
34:BA:74:A:O2'	34:BA:75:G:OP2	2.25	0.54
37:BD:150:LYS:HE3	37:BD:150:LYS:HA	1.89	0.54
37:BD:76:PRO:O	37:BD:98:VAL:HG23	2.07	0.54
38:BE:117:MET:O	38:BE:118:LYS:HB2	2.08	0.54
43:BN:55:VAL:CG1	43:BN:56:ASN:N	2.71	0.54
45:BP:114:ILE:HG12	45:BP:130:PHE:CD1	2.43	0.54
34:BA:1754:C:OP1	49:BT:96:ARG:NH1	2.41	0.54
51:BV:5:VAL:HG21	51:BV:36:PRO:HG2	1.88	0.54
51:BV:89:GLN:HE21	51:BV:90:PRO:CD	2.16	0.54
52:BW:55:ALA:HA	52:BW:107:LEU:CD2	2.37	0.54
54:BY:28:LYS:HD2	54:BY:37:VAL:HB	1.88	0.54
54:BY:61:ILE:HG22	54:BY:61:ILE:O	2.07	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BZ:120:ILE:O	55:BZ:120:ILE:HG22	2.07	0.54
55:BZ:157:LEU:HB3	55:BZ:161:VAL:CG1	2.38	0.54
1:CA:1169:A:H2'	1:CA:1170:A:H8	1.67	0.54
1:CA:1307:U:H2'	1:CA:1308:U:H6	1.73	0.54
1:CA:1321:C:H5'	1:CA:1322:C:H5'	1.88	0.54
1:CA:253:U:H2'	1:CA:254:G:C8	2.43	0.54
1:CA:294:U:H2'	1:CA:295:C:C6	2.43	0.54
1:CA:542:G:H2'	1:CA:543:C:H6	1.73	0.54
1:CA:977:A:H2'	1:CA:978:A:H5'	1.90	0.54
2:CB:144:ARG:HA	2:CB:147:LYS:HB3	1.89	0.54
8:CH:120:THR:H	8:CH:123:GLU:HB2	1.73	0.54
10:CJ:38:ILE:HG13	10:CJ:71:LEU:HB3	1.90	0.54
14:CN:3:ARG:O	14:CN:7:ILE:HG23	2.08	0.54
17:CQ:59:ILE:HG22	17:CQ:71:PHE:CD1	2.42	0.54
17:CQ:83:ASP:O	17:CQ:86:GLU:HB2	2.08	0.54
18:CR:35:ARG:C	18:CR:37:VAL:H	2.12	0.54
27:D2:15:LYS:C	27:D2:17:SER:N	2.60	0.54
34:DA:1037:G:H1	34:DA:1118:C:H42	1.56	0.54
34:DA:1524:G:O2'	34:DA:1525:G:H5'	2.08	0.54
34:DA:1683:C:H2'	34:DA:1684:C:H6	1.73	0.54
34:DA:2289:G:H2'	34:DA:2290:G:H5''	1.88	0.54
34:DA:295:G:H1	34:DA:343:C:H42	1.55	0.54
34:DA:451:C:N4	34:DA:453:C:H3'	2.23	0.54
34:DA:741:G:O2'	34:DA:742:G:H5'	2.07	0.54
34:DA:797:C:H2'	34:DA:798:G:H8	1.72	0.54
37:DD:39:LYS:HB2	37:DD:62:TYR:HB2	1.90	0.54
39:DF:157:VAL:HA	39:DF:176:LEU:O	2.08	0.54
39:DF:176:LEU:HD21	39:DF:180:GLY:O	2.08	0.54
41:DH:102:ALA:HB1	41:DH:115:VAL:O	2.08	0.54
42:DI:41:GLU:O	42:DI:45:LYS:HG2	2.08	0.54
46:DQ:132:VAL:HG12	46:DQ:133:ARG:N	2.22	0.54
50:DU:21:ALA:HB1	50:DU:24:TYR:CD1	2.42	0.54
55:DZ:175:VAL:HB	55:DZ:176:PRO:HD2	1.89	0.54
55:DZ:8:TYR:H	55:DZ:8:TYR:HD1	1.53	0.54
1:AA:1006:C:H42	1:AA:1024:G:N2	2.06	0.54
1:AA:1422:G:H2'	1:AA:1423:G:C8	2.40	0.54
1:AA:191:G:H1'	20:AT:105:SER:HB3	1.90	0.54
2:AB:142:LEU:HD23	2:AB:142:LEU:O	2.07	0.54
5:AE:68:GLU:O	5:AE:68:GLU:HG3	2.08	0.54
6:AF:14:LEU:HB3	6:AF:18:GLN:HE21	1.73	0.54
8:AH:103:VAL:HG12	8:AH:108:GLY:HA3	1.90	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:48:TYR:HB2	8:AH:60:ARG:O	2.07	0.54
9:AI:43:ALA:HA	9:AI:74:ILE:HD13	1.89	0.54
10:AJ:34:VAL:HG12	10:AJ:35:SER:N	2.23	0.54
17:AQ:38:ARG:HG3	17:AQ:39:SER:H	1.73	0.54
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.26	0.54
26:B1:58:ILE:HG22	26:B1:59:THR:N	2.21	0.54
26:B1:8:SER:HA	34:BA:1365:A:OP2	2.08	0.54
27:B2:30:ARG:C	27:B2:32:LEU:N	2.59	0.54
34:BA:2419:U:O2'	34:BA:2420:C:H5'	2.08	0.54
26:B1:34:THR:CG2	34:BA:388:G:P	2.96	0.54
37:BD:17:THR:HG23	37:BD:205:VAL:N	2.15	0.54
37:BD:65:ILE:HD11	37:BD:67:PHE:CE1	2.42	0.54
37:BD:92:ILE:C	37:BD:92:ILE:HD12	2.28	0.54
38:BE:49:LEU:O	38:BE:78:LEU:HB3	2.08	0.54
39:BF:164:ARG:HH11	39:BF:164:ARG:HG2	1.73	0.54
39:BF:1:MET:O	39:BF:2:LYS:O	2.25	0.54
40:BG:136:ARG:O	40:BG:154:GLY:CA	2.56	0.54
41:BH:103:LEU:HD23	41:BH:115:VAL:HB	1.88	0.54
43:BN:115:ARG:O	43:BN:118:LYS:HB2	2.07	0.54
53:BX:64:LYS:O	53:BX:65:ARG:HB2	2.08	0.54
54:BY:95:LYS:CB	54:BY:100:ALA:HA	2.31	0.54
55:BZ:104:PHE:CD1	55:BZ:139:VAL:HG21	2.43	0.54
55:BZ:169:GLU:O	55:BZ:171:ILE:HG23	2.08	0.54
55:BZ:40:ASP:O	55:BZ:43:GLU:HB2	2.08	0.54
1:CA:1300:G:H1'	1:CA:1301:U:H5	1.71	0.54
1:CA:163:C:H2'	1:CA:164:U:H6	1.72	0.54
1:CA:392:G:H2'	1:CA:393:A:C8	2.43	0.54
5:CE:36:ASP:OD1	5:CE:40:ARG:HB2	2.08	0.54
1:CA:1329:A:P	13:CM:28:ALA:HB3	2.48	0.54
16:CP:55:ARG:NE	16:CP:55:ARG:HA	2.23	0.54
23:CW:66:U:H2'	23:CW:67:C:C6	2.43	0.54
33:D8:58:ILE:HG22	33:D8:58:ILE:O	2.07	0.54
34:DA:83:G:H1	34:DA:102:G:H2'	1.73	0.54
34:DA:1336:A:O2'	34:DA:1337:G:H5'	2.07	0.54
34:DA:2175:C:H2'	34:DA:2176:A:C5'	2.20	0.54
34:DA:2402:C:H2'	34:DA:2403:C:H5'	1.90	0.54
34:DA:604:G:H2'	34:DA:605:C:C6	2.43	0.54
34:DA:979:G:H3'	34:DA:980:A:H5''	1.89	0.54
34:DA:2178:C:O5'	36:DC:46:LYS:HD2	2.08	0.54
37:DD:106:ILE:HD13	37:DD:107:ALA:N	2.23	0.54
37:DD:25:THR:HG22	37:DD:82:ILE:C	2.28	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DH:26:VAL:O	41:DH:32:GLU:HA	2.08	0.54
42:DI:144:VAL:HG12	42:DI:145:VAL:N	2.16	0.54
42:DI:31:LEU:HB3	42:DI:32:PRO:HD3	1.90	0.54
33:D8:25:MET:HB2	45:DP:62:LEU:HD21	1.90	0.54
46:DQ:51:ARG:O	46:DQ:54:MET:HB3	2.08	0.54
47:DR:54:LEU:HD23	47:DR:66:VAL:HG22	1.88	0.54
50:DU:55:ARG:HA	50:DU:58:ARG:HG3	1.89	0.54
52:DW:25:ARG:HH11	52:DW:25:ARG:CB	2.08	0.54
53:DX:21:PHE:N	53:DX:21:PHE:CD1	2.75	0.54
54:DY:75:ILE:HD11	54:DY:78:ALA:C	2.28	0.54
55:DZ:29:TYR:O	55:DZ:89:PHE:HD2	1.90	0.54
1:AA:241:C:O2'	1:AA:242:C:H5'	2.08	0.54
1:AA:309:G:O2'	1:AA:607:A:N1	2.41	0.54
1:AA:47:C:C6	1:AA:365:U:H2'	2.42	0.54
1:AA:658:G:H2'	1:AA:659:U:C6	2.43	0.54
1:AA:977:A:C2'	1:AA:978:A:H5'	2.38	0.54
3:AC:10:PHE:HD2	3:AC:11:ARG:NH1	2.06	0.54
4:AD:100:ARG:HB3	4:AD:102:ASP:OD1	2.08	0.54
4:AD:25:ARG:O	4:AD:27:TYR:N	2.37	0.54
6:AF:52:ILE:HD11	6:AF:87:ARG:NH2	2.23	0.54
8:AH:112:LEU:CD1	8:AH:114:THR:HG22	2.38	0.54
10:AJ:38:ILE:CG1	10:AJ:71:LEU:HB3	2.38	0.54
13:AM:53:VAL:O	13:AM:56:LEU:HB3	2.08	0.54
15:AO:50:HIS:O	15:AO:53:HIS:N	2.41	0.54
17:AQ:68:ARG:HG2	17:AQ:68:ARG:NH1	2.23	0.54
17:AQ:83:ASP:O	17:AQ:86:GLU:HB2	2.08	0.54
18:AR:53:ARG:NH2	18:AR:59:SER:HA	2.22	0.54
19:AS:39:THR:CG2	19:AS:40:ILE:N	2.71	0.54
26:B1:19:GLN:HG3	26:B1:44:PRO:CG	2.34	0.54
26:B1:26:ARG:HE	26:B1:34:THR:HB	1.73	0.54
31:B6:50:ARG:HB3	31:B6:51:GLU:OE1	2.08	0.54
34:BA:1019:U:HO2'	34:BA:1021:A:H2	1.54	0.54
34:BA:1184:G:O2'	34:BA:1185:C:H5'	2.08	0.54
34:BA:1720:U:H2'	34:BA:1721:G:O4'	2.08	0.54
34:BA:2307:G:N2	34:BA:2308:G:C5'	2.68	0.54
34:BA:2485:G:O2'	34:BA:2486:G:H5'	2.08	0.54
34:BA:2735:G:H2'	34:BA:2736:G:H5'	1.90	0.54
34:BA:2746:U:O2'	34:BA:2747:G:H5'	2.08	0.54
34:BA:998:C:H2'	34:BA:999:U:O4'	2.07	0.54
34:BA:2579:C:H5'	38:BE:134:ILE:HG21	1.90	0.54
38:BE:111:ARG:HD2	38:BE:160:TYR:HE1	1.73	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BG:47:LYS:HE2	40:BG:81:LYS:HB2	1.89	0.54
41:BH:102:ALA:HB2	41:BH:117:PRO:HD3	1.89	0.54
43:BN:82:LEU:HD13	43:BN:82:LEU:O	2.08	0.54
45:BP:146:VAL:O	45:BP:147:LEU:O	2.25	0.54
34:BA:389:G:H1	45:BP:71:VAL:CG1	2.21	0.54
48:BS:13:ARG:HD2	48:BS:13:ARG:H	1.72	0.54
48:BS:56:LEU:O	48:BS:57:LYS:HB2	2.07	0.54
49:BT:23:ARG:HG2	49:BT:120:ARG:NH1	2.23	0.54
50:BU:74:LEU:HD23	50:BU:114:LYS:HE3	1.89	0.54
53:BX:25:LYS:HG3	53:BX:26:TYR:CD1	2.43	0.54
1:CA:295:C:H2'	1:CA:296:U:H6	1.70	0.54
1:CA:357:G:C2	1:CA:358:U:C5	2.95	0.54
1:CA:374:A:C6	1:CA:375:U:C4	2.95	0.54
1:CA:946:A:H2'	1:CA:947:G:C8	2.42	0.54
2:CB:112:VAL:O	2:CB:115:LEU:HB3	2.08	0.54
2:CB:178:ARG:HH22	2:CB:196:LEU:CA	2.21	0.54
6:CF:40:VAL:HA	6:CF:62:TRP:O	2.08	0.54
8:CH:1:MET:CE	8:CH:1:MET:H3	2.21	0.54
9:CI:17:VAL:HA	9:CI:63:ILE:HG13	1.89	0.54
13:CM:97:PRO:O	13:CM:98:VAL:HG13	2.08	0.54
19:CS:47:HIS:O	19:CS:49:ILE:HG13	2.07	0.54
22:CV:68:C:H2'	22:CV:69:C:C6	2.42	0.54
33:D8:22:VAL:HB	33:D8:53:PRO:HB3	1.90	0.54
34:DA:1021:A:C8	34:DA:1021:A:H3'	2.42	0.54
34:DA:1298:C:H3'	34:DA:1299:G:C8	2.43	0.54
34:DA:1438:U:O2'	34:DA:1439:A:H5'	2.07	0.54
34:DA:1464:C:O2'	34:DA:1528:A:H8	1.89	0.54
34:DA:1531:C:H2'	34:DA:1532:C:H4'	1.89	0.54
34:DA:2807:G:H2'	34:DA:2808:U:C4'	2.38	0.54
34:DA:2884:U:H2'	34:DA:2885:C:C5'	2.38	0.54
34:DA:639:U:H2'	34:DA:640:C:H6	1.72	0.54
39:DF:185:ASP:OD1	39:DF:188:ARG:NH1	2.41	0.54
39:DF:20:LEU:HD22	39:DF:23:ASP:OD2	2.07	0.54
40:DG:141:PHE:CD1	40:DG:142:PRO:HD2	2.43	0.54
42:DI:4:ILE:HG12	42:DI:18:VAL:HG22	1.88	0.54
42:DI:60:GLU:C	42:DI:62:LYS:H	2.10	0.54
34:DA:2334:G:H5'	48:DS:13:ARG:HB3	1.88	0.54
49:DT:28:VAL:CG1	49:DT:46:GLU:HA	2.38	0.54
49:DT:57:PHE:C	49:DT:59:THR:N	2.61	0.54
43:DN:42:TRP:H	50:DU:64:ARG:NH2	1.99	0.54
51:DV:47:VAL:HG13	51:DV:48:GLY:H	1.73	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DZ:33:LEU:HG	55:DZ:34:ASN:N	2.22	0.54
1:AA:418:C:H2'	1:AA:419:C:H6	1.71	0.53
1:AA:659:U:C2'	1:AA:660:G:H5'	2.38	0.53
2:AB:84:GLU:HB3	2:AB:219:VAL:CG2	2.38	0.53
4:AD:173:TRP:CD2	4:AD:189:PRO:HB3	2.43	0.53
5:AE:64:ARG:HG3	5:AE:64:ARG:HH11	1.73	0.53
8:AH:85:ARG:HG2	8:AH:86:ILE:N	2.22	0.53
1:AA:1117:G:H4'	9:AI:104:ARG:NH2	2.21	0.53
9:AI:63:ILE:CG2	9:AI:64:THR:N	2.71	0.53
10:AJ:38:ILE:HG13	10:AJ:71:LEU:HB3	1.91	0.53
13:AM:13:LYS:HA	13:AM:44:ARG:NH1	2.22	0.53
25:B0:14:ARG:O	25:B0:15:ASP:HB2	2.08	0.53
26:B1:53:VAL:CG2	26:B1:74:VAL:HG21	2.37	0.53
34:BA:1107:G:O2'	34:BA:1108:U:H5'	2.08	0.53
34:BA:1430:C:H2'	34:BA:1431:U:H6	1.73	0.53
34:BA:1434:A:H61	34:BA:1558:A:N6	2.05	0.53
34:BA:2668:G:O2'	34:BA:2669:G:H5'	2.09	0.53
34:BA:2736:G:H5'	34:BA:2736:G:C8	2.39	0.53
34:BA:343:C:H2'	34:BA:344:G:H5''	1.89	0.53
35:BB:28:C:O2'	35:BB:29:A:H5'	2.07	0.53
36:BC:39:GLU:HA	36:BC:180:PHE:HA	1.91	0.53
37:BD:35:LYS:HA	37:BD:64:ILE:HG22	1.89	0.53
39:BF:41:LEU:HD11	39:BF:184:TYR:CE1	2.43	0.53
40:BG:95:ARG:O	40:BG:96:ARG:O	2.26	0.53
41:BH:154:PRO:CG	41:BH:155:SER:H	2.20	0.53
43:BN:18:ALA:C	43:BN:20:GLY:H	2.10	0.53
46:BQ:39:PRO:N	46:BQ:99:PRO:HD3	2.22	0.53
49:BT:23:ARG:HG2	49:BT:120:ARG:HH12	1.73	0.53
49:BT:89:VAL:HG12	49:BT:91:ARG:HG2	1.90	0.53
34:BA:1010:A:H5'	50:BU:62:ILE:HG21	1.89	0.53
53:BX:44:GLU:HB2	53:BX:49:VAL:O	2.08	0.53
53:BX:76:ARG:O	53:BX:77:LYS:CB	2.52	0.53
1:CA:1014:A:H2'	1:CA:1015:A:C8	2.43	0.53
1:CA:324:G:OP1	20:CT:70:SER:HB2	2.07	0.53
1:CA:575:G:OP1	1:CA:575:G:H4'	2.07	0.53
2:CB:75:LYS:HA	2:CB:78:GLN:HG3	1.88	0.53
10:CJ:38:ILE:HD11	10:CJ:71:LEU:HB3	1.89	0.53
12:CL:41:ARG:NH1	12:CL:41:ARG:CB	2.70	0.53
19:CS:13:ASP:C	19:CS:15:LEU:H	2.12	0.53
19:CS:6:LYS:CD	19:CS:6:LYS:H	2.22	0.53
20:CT:25:ARG:HG3	20:CT:25:ARG:HH11	1.73	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:2:GLY:C	21:CU:4:GLY:H	2.12	0.53
26:D1:62:VAL:HG11	26:D1:67:ILE:HG12	1.90	0.53
30:D5:43:HIS:CD2	34:DA:2815:C:O2'	2.60	0.53
31:D6:32:ASN:ND2	31:D6:33:LYS:H	2.06	0.53
33:D8:50:LEU:HD12	33:D8:51:ALA:H	1.71	0.53
34:DA:1108:U:H2'	34:DA:1109:C:H5'	1.89	0.53
34:DA:2023:G:H4'	34:DA:2617:C:O3'	2.08	0.53
30:D5:4:HIS:O	34:DA:2056:G:N2	2.41	0.53
34:DA:235:U:H2'	34:DA:236:C:C6	2.43	0.53
34:DA:271(K):U:H3'	34:DA:271(L):U:C5'	2.37	0.53
34:DA:415:A:C2	34:DA:2409:G:C2	2.96	0.53
34:DA:440:G:H22	39:DF:46:ARG:HH21	1.55	0.53
34:DA:699:A:O2'	34:DA:700:G:H5'	2.08	0.53
34:DA:1803:A:O2'	37:DD:259:THR:HG21	2.08	0.53
38:DE:201:THR:CG2	38:DE:202:LYS:N	2.70	0.53
40:DG:16:ARG:HB3	40:DG:16:ARG:HH11	1.72	0.53
42:DI:98:ALA:CA	42:DI:109:ILE:HD13	2.38	0.53
43:DN:46:VAL:CG1	43:DN:47:ALA:H	2.16	0.53
45:DP:114:ILE:HG12	45:DP:130:PHE:CD1	2.43	0.53
47:DR:8:ARG:HE	47:DR:8:ARG:HA	1.73	0.53
49:DT:55:ASN:HD22	49:DT:58:ASN:ND2	2.02	0.53
1:AA:184:G:H2'	1:AA:185:A:C8	2.34	0.53
1:AA:20:U:H2'	1:AA:21:G:O4'	2.09	0.53
1:AA:336:C:O2'	1:AA:337:C:H5'	2.08	0.53
1:AA:766:A:H2'	1:AA:767:A:O4'	2.08	0.53
1:AA:831:U:O2'	1:AA:832:C:H5'	2.07	0.53
2:AB:114:ARG:O	2:AB:117:GLU:HB2	2.08	0.53
4:AD:12:CYS:HA	4:AD:19:LEU:HD12	1.90	0.53
26:B1:72:GLU:HA	26:B1:75:GLU:OE1	2.08	0.53
34:BA:1344:G:H4'	34:BA:1384:A:N7	2.23	0.53
34:BA:1411:C:H2'	34:BA:1412:A:H8	1.72	0.53
34:BA:150:C:H2'	34:BA:151:C:H6	1.73	0.53
34:BA:2360:A:O2'	34:BA:2361:A:O5'	2.27	0.53
34:BA:2469:A:H2	34:BA:2481:G:H21	1.55	0.53
34:BA:740:U:H2'	34:BA:741:G:C8	2.43	0.53
34:BA:796:C:H2'	34:BA:797:C:C6	2.42	0.53
34:BA:912:C:O2'	34:BA:913:U:H5'	2.08	0.53
34:BA:979:G:H3'	34:BA:980:A:H5''	1.89	0.53
35:BB:103:G:O2'	35:BB:104:U:H5'	2.08	0.53
35:BB:32:C:C2	35:BB:51:G:N2	2.76	0.53
42:BI:31:LEU:HB3	42:BI:32:PRO:HD3	1.90	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BN:25:ARG:HH11	43:BN:25:ARG:HG3	1.73	0.53
46:BQ:38:GLU:HB2	46:BQ:127:ILE:CG2	2.38	0.53
47:BR:51:LEU:HD23	47:BR:66:VAL:HG13	1.89	0.53
52:BW:1:MET:CE	52:BW:2:GLU:H	2.22	0.53
1:CA:370:C:O2'	1:CA:371:G:H5'	2.08	0.53
1:CA:458:C:H2'	1:CA:460:G:C8	2.42	0.53
1:CA:706:A:C1'	11:CK:29:ILE:HD11	2.37	0.53
1:CA:977:A:C2'	1:CA:978:A:H5'	2.38	0.53
2:CB:114:ARG:O	2:CB:117:GLU:HB2	2.08	0.53
4:CD:119:GLN:NE2	4:CD:123:HIS:NE2	2.54	0.53
7:CG:20:ASP:HB3	7:CG:23:VAL:CG2	2.38	0.53
7:CG:83:ALA:C	7:CG:84:ASN:HD22	2.11	0.53
20:CT:44:ALA:HB1	20:CT:91:LEU:CB	2.38	0.53
27:D2:14:ARG:HE	27:D2:57:ILE:HB	1.71	0.53
30:D5:16:ARG:HG2	30:D5:16:ARG:HH11	1.72	0.53
34:DA:1190:G:H5'	45:DP:35:HIS:CB	2.35	0.53
34:DA:1396:U:C2'	34:DA:1396:U:O2	2.57	0.53
34:DA:993:G:N2	51:DV:91:TYR:OH	2.41	0.53
36:DC:82:LYS:HZ1	36:DC:151:GLU:HA	1.73	0.53
39:DF:68:LYS:O	39:DF:68:LYS:HG3	2.09	0.53
41:DH:89:ILE:HG13	41:DH:129:THR:HA	1.90	0.53
34:DA:558:G:P	43:DN:111:PRO:HD2	2.49	0.53
45:DP:23:PRO:HB3	45:DP:34:GLY:H	1.73	0.53
46:DQ:140:ALA:HB3	55:DZ:53:ILE:CG1	2.36	0.53
49:DT:50:ILE:H	49:DT:50:ILE:CD1	2.22	0.53
51:DV:50:PRO:O	51:DV:51:VAL:CB	2.55	0.53
1:AA:1068:G:H8	1:AA:1068:G:OP2	1.92	0.53
1:AA:140:A:O2'	1:AA:141:A:H5'	2.08	0.53
1:AA:271:C:H2'	1:AA:272:C:C6	2.43	0.53
1:AA:376:G:H2'	1:AA:377:G:C8	2.38	0.53
1:AA:525:C:O2'	1:AA:526:C:H5'	2.07	0.53
2:AB:23:ARG:O	2:AB:23:ARG:HG2	2.08	0.53
1:AA:1106:G:OP1	3:AC:172:ARG:HD3	2.08	0.53
7:AG:49:ILE:HG22	7:AG:49:ILE:O	2.08	0.53
9:AI:95:LYS:N	9:AI:98:PRO:HD2	2.23	0.53
1:AA:974:A:OP1	14:AN:31:ARG:HD3	2.09	0.53
23:AW:72:C:O2'	23:AW:73:A:H5'	2.08	0.53
27:B2:28:LYS:HE2	27:B2:43:GLN:HB3	1.91	0.53
34:BA:1410:G:H1	34:BA:1592:C:H42	1.56	0.53
34:BA:2193:G:H8	34:BA:2193:G:H5'	1.73	0.53
34:BA:2402:C:H2'	34:BA:2403:C:H5'	1.90	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:848:G:N3	34:BA:933:A:H1'	2.23	0.53
37:BD:32:SER:O	37:BD:33:LEU:CB	2.56	0.53
37:BD:70:TRP:O	37:BD:73:VAL:HG22	2.09	0.53
38:BE:117:MET:HB2	38:BE:122:PHE:HB2	1.91	0.53
38:BE:144:ARG:O	38:BE:145:LYS:C	2.46	0.53
38:BE:111:ARG:H	38:BE:161:GLY:HA3	1.74	0.53
39:BF:20:LEU:HD12	39:BF:199:TRP:HH2	1.73	0.53
39:BF:20:LEU:HB3	39:BF:23:ASP:HB2	1.89	0.53
44:BO:100:GLY:O	44:BO:101:PRO:O	2.26	0.53
44:BO:107:ARG:CZ	49:BT:35:LYS:HD2	2.37	0.53
50:BU:69:CYS:HB3	50:BU:106:PHE:HZ	1.73	0.53
51:BV:32:THR:HB	51:BV:64:HIS:CE1	2.42	0.53
51:BV:47:VAL:CG2	51:BV:48:GLY:H	2.13	0.53
53:BX:5:TYR:O	53:BX:7:VAL:N	2.40	0.53
55:BZ:102:LEU:HG	55:BZ:122:ARG:O	2.09	0.53
55:BZ:4:ARG:O	55:BZ:5:LEU:HG	2.06	0.53
1:CA:1067:A:H1'	1:CA:1068:G:C8	2.44	0.53
1:CA:1508:G:H2'	1:CA:1509:C:H6	1.73	0.53
1:CA:385:C:O2'	1:CA:386:C:H5'	2.08	0.53
1:CA:438:G:C4'	1:CA:439:A:OP1	2.52	0.53
5:CE:57:LYS:O	5:CE:61:TYR:CD2	2.61	0.53
11:CK:52:GLY:H	11:CK:55:LYS:HG3	1.73	0.53
16:CP:67:THR:HB	16:CP:70:ALA:HB2	1.90	0.53
17:CQ:38:ARG:HG3	17:CQ:39:SER:H	1.73	0.53
26:D1:47:GLN:HA	26:D1:47:GLN:OE1	2.08	0.53
27:D2:44:LEU:C	27:D2:46:GLN:N	2.62	0.53
34:DA:343:C:H2'	34:DA:344:G:H5''	1.90	0.53
26:D1:46:LEU:HB2	34:DA:396:G:O3'	2.08	0.53
34:DA:542:C:N4	34:DA:543:C:N4	2.55	0.53
34:DA:733:G:H8	34:DA:733:G:O5'	1.91	0.53
35:DB:5:C:H2'	35:DB:6:C:H6	1.74	0.53
34:DA:1820:U:O2	37:DD:202:LYS:HB3	2.07	0.53
38:DE:48:GLN:NE2	38:DE:78:LEU:HD12	2.23	0.53
39:DF:28:ILE:O	39:DF:28:ILE:HD12	2.08	0.53
42:DI:124:GLY:O	42:DI:142:VAL:HG23	2.09	0.53
43:DN:82:LEU:O	43:DN:82:LEU:HD13	2.07	0.53
45:DP:38:GLN:CG	45:DP:39:LYS:H	2.13	0.53
50:DU:87:GLY:C	50:DU:88:ILE:HG13	2.29	0.53
34:DA:143:G:O4'	53:DX:38:GLU:HG3	2.08	0.53
1:AA:1060:C:O2'	1:AA:1061:G:H5'	2.07	0.53
1:AA:1431:C:H2'	1:AA:1432:G:C5'	2.39	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:24:ALA:HB2	3:AC:32:LEU:HD12	1.89	0.53
3:AC:52:LEU:CD2	3:AC:52:LEU:H	2.21	0.53
3:AC:76:VAL:CG2	3:AC:77:ILE:H	2.21	0.53
7:AG:148:ASN:ND2	7:AG:148:ASN:N	2.55	0.53
9:AI:117:HIS:NE2	9:AI:123:PRO:HA	2.23	0.53
11:AK:99:GLN:C	11:AK:101:SER:H	2.12	0.53
17:AQ:82:MET:O	17:AQ:85:VAL:HB	2.09	0.53
21:AU:2:GLY:C	21:AU:4:GLY:H	2.11	0.53
26:B1:49:VAL:HG11	34:BA:2091:U:O2'	2.07	0.53
33:B8:4:MET:SD	33:B8:61:LEU:HD12	2.49	0.53
34:BA:1550:C:O2'	34:BA:1551:C:H5'	2.07	0.53
34:BA:188:G:N2	34:BA:209:C:C2	2.76	0.53
34:BA:2101:G:C6	34:BA:2102:U:C5	2.96	0.53
34:BA:2189:U:C2'	34:BA:2190:G:H5''	2.39	0.53
34:BA:2273:A:H2'	34:BA:2274:A:C8	2.43	0.53
33:B8:31:HIS:CG	34:BA:2419:U:O4	2.61	0.53
34:BA:85:G:N3	34:BA:103:A:H2	2.06	0.53
37:BD:32:SER:O	37:BD:33:LEU:HB2	2.07	0.53
40:BG:101:ILE:HG12	40:BG:102:PHE:N	2.23	0.53
40:BG:45:GLU:HG2	40:BG:47:LYS:H	1.74	0.53
46:BQ:39:PRO:HA	46:BQ:97:VAL:O	2.08	0.53
49:BT:92:GLY:O	49:BT:93:ARG:HB3	2.09	0.53
51:BV:38:LEU:HD23	51:BV:39:LEU:N	2.22	0.53
53:BX:25:LYS:HG3	53:BX:26:TYR:H	1.71	0.53
1:CA:1188:A:C2'	1:CA:1189:C:H5'	2.38	0.53
1:CA:1442(A):G:C3'	1:CA:1442(B):A:H5''	2.37	0.53
1:CA:390:C:H2'	1:CA:391:G:H8	1.72	0.53
1:CA:858:G:O6	1:CA:869:G:H3'	2.09	0.53
2:CB:112:VAL:HG22	2:CB:149:LEU:HD13	1.90	0.53
3:CC:178:LEU:N	3:CC:178:LEU:HD22	2.24	0.53
10:CJ:22:LYS:NZ	10:CJ:88:LEU:HD23	2.24	0.53
10:CJ:39:PRO:CA	10:CJ:70:ARG:HH12	2.19	0.53
11:CK:95:ILE:HG21	11:CK:108:ILE:HD13	1.90	0.53
15:CO:38:ARG:HG2	15:CO:38:ARG:HH11	1.73	0.53
17:CQ:44:ALA:HB1	17:CQ:73:VAL:HG22	1.90	0.53
21:CU:6:ARG:CZ	21:CU:15:ARG:NH2	2.72	0.53
23:CW:58:A:H1'	23:CW:60:U:H5	1.73	0.53
26:D1:13:ILE:HG23	26:D1:14:VAL:H	1.73	0.53
26:D1:9:GLY:N	26:D1:48:LYS:NZ	2.56	0.53
27:D2:15:LYS:O	27:D2:17:SER:N	2.38	0.53
27:D2:49:LYS:O	27:D2:52:ASP:HB3	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D3:36:VAL:O	28:D3:37:LEU:HD23	2.08	0.53
34:DA:1573:G:H2'	34:DA:1574:C:H5'	1.90	0.53
34:DA:21:A:O2'	34:DA:22:C:H5'	2.08	0.53
34:DA:2485:G:O2'	34:DA:2486:G:H5'	2.09	0.53
34:DA:2648:C:O2'	34:DA:2649:U:H5'	2.08	0.53
34:DA:389:G:H1	45:DP:71:VAL:CG1	2.21	0.53
34:DA:409:C:O2'	34:DA:410:G:H5'	2.08	0.53
34:DA:637:A:OP2	45:DP:115:LEU:HB2	2.07	0.53
34:DA:690:G:H2'	34:DA:691:C:C6	2.43	0.53
36:DC:75:LEU:C	36:DC:75:LEU:HD23	2.29	0.53
37:DD:28:GLU:HB2	37:DD:29:PRO:HD3	1.89	0.53
37:DD:35:LYS:HB3	37:DD:63:ARG:HA	1.90	0.53
37:DD:62:TYR:CE1	37:DD:64:ILE:HA	2.43	0.53
38:DE:111:ARG:CD	38:DE:160:TYR:HE1	2.21	0.53
38:DE:201:THR:HG22	38:DE:202:LYS:N	2.24	0.53
39:DF:84:VAL:HG12	39:DF:85:GLY:H	1.72	0.53
40:DG:161:THR:HG22	40:DG:162:THR:N	2.22	0.53
40:DG:69:ALA:HB3	40:DG:91:ARG:O	2.08	0.53
42:DI:114:LEU:O	42:DI:115:ALA:HB3	2.08	0.53
43:DN:74:ARG:HH12	43:DN:101:HIS:CG	2.26	0.53
47:DR:70:LEU:HD13	47:DR:75:LEU:CD1	2.38	0.53
48:DS:31:SER:OG	48:DS:32:LEU:N	2.39	0.53
49:DT:109:GLU:O	49:DT:113:LYS:HG3	2.08	0.53
50:DU:95:LEU:CD1	51:DV:11:GLN:HG3	2.38	0.53
52:DW:79:GLY:CA	52:DW:100:THR:HG23	2.36	0.53
55:DZ:75:ASN:O	55:DZ:84:GLU:N	2.35	0.53
1:AA:1103:C:C5'	2:AB:98:LEU:HD13	2.38	0.53
1:AA:1106:G:H2'	1:AA:1107:C:H6	1.72	0.53
1:AA:1410:G:H2'	1:AA:1411:C:H6	1.72	0.53
1:AA:484:G:H4'	1:AA:485:G:O5'	2.09	0.53
1:AA:975:A:H5'	1:AA:975:A:C8	2.39	0.53
2:AB:213:LEU:C	2:AB:213:LEU:HD23	2.29	0.53
3:AC:140:ARG:HH11	3:AC:140:ARG:HG3	1.72	0.53
4:AD:102:ASP:HA	4:AD:121:VAL:HG21	1.88	0.53
6:AF:1:MET:O	6:AF:2:ARG:HG3	2.08	0.53
7:AG:83:ALA:C	7:AG:84:ASN:HD22	2.12	0.53
8:AH:137:VAL:HG12	8:AH:138:TRP:N	2.22	0.53
8:AH:73:ASP:C	8:AH:75:ARG:H	2.12	0.53
10:AJ:62:HIS:H	10:AJ:62:HIS:CD2	2.26	0.53
1:AA:716:A:N3	11:AK:118:GLY:HA2	2.23	0.53
1:AA:1329:A:P	13:AM:28:ALA:HB3	2.49	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:97:ALA:O	20:AT:99:LEU:N	2.37	0.53
27:B2:16:LEU:O	27:B2:20:GLU:HG3	2.08	0.53
34:BA:1464:C:O2'	34:BA:1528:A:H8	1.91	0.53
34:BA:2033:A:H4'	34:BA:2034:U:OP1	2.08	0.53
34:BA:2184:G:H2'	34:BA:2185:C:C6	2.43	0.53
34:BA:2694:G:O2'	34:BA:2695:C:H5'	2.08	0.53
34:BA:271(K):U:H3'	34:BA:271(L):U:C5'	2.39	0.53
34:BA:295:G:H1	34:BA:343:C:H42	1.55	0.53
34:BA:409:C:O2'	34:BA:410:G:H5'	2.09	0.53
34:BA:645:C:H3'	34:BA:645:C:O2	2.09	0.53
34:BA:680:G:H2'	34:BA:681:G:H8	1.73	0.53
34:BA:79:G:O2'	34:BA:80:G:H5'	2.09	0.53
38:BE:14:ILE:HG12	38:BE:21:VAL:HG23	1.91	0.53
39:BF:34:TRP:CD1	45:BP:11:GLY:HA2	2.43	0.53
40:BG:88:ILE:CG2	40:BG:89:GLY:N	2.71	0.53
42:BI:144:VAL:HG12	42:BI:145:VAL:N	2.14	0.53
43:BN:46:VAL:O	43:BN:47:ALA:HB3	2.08	0.53
34:BA:637:A:OP2	45:BP:115:LEU:HB2	2.08	0.53
46:BQ:106:VAL:HG13	46:BQ:118:LEU:HD21	1.90	0.53
47:BR:41:ALA:C	47:BR:43:GLU:N	2.62	0.53
48:BS:101:LEU:HD22	48:BS:102:ALA:N	2.20	0.53
48:BS:54:LEU:HD13	48:BS:57:LYS:O	2.09	0.53
49:BT:28:VAL:HG21	49:BT:88:ILE:HD11	1.90	0.53
54:BY:39:VAL:HG12	54:BY:40:GLU:N	2.23	0.53
54:BY:43:ASN:HA	54:BY:64:GLU:HA	1.91	0.53
54:BY:83:THR:HG22	54:BY:84:ARG:N	2.24	0.53
55:BZ:30:ASN:OD1	55:BZ:33:LEU:HB3	2.09	0.53
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.43	0.53
1:CA:1490:C:O2'	1:CA:1491:G:H5'	2.09	0.53
1:CA:538:G:OP2	12:CL:115:LYS:HG3	2.08	0.53
1:CA:640:A:O2'	1:CA:641:U:H5'	2.09	0.53
1:CA:690:G:H2'	1:CA:691:G:C8	2.43	0.53
1:CA:818:G:H3'	1:CA:819:A:C5'	2.39	0.53
2:CB:187:LEU:HA	2:CB:201:ILE:HB	1.89	0.53
2:CB:215:LEU:O	2:CB:218:ALA:HB3	2.08	0.53
3:CC:52:LEU:CD2	3:CC:52:LEU:H	2.19	0.53
3:CC:76:VAL:CG2	3:CC:77:ILE:H	2.21	0.53
9:CI:16:ARG:O	9:CI:63:ILE:HG23	2.08	0.53
12:CL:120:TYR:N	12:CL:120:TYR:CD1	2.76	0.53
12:CL:21:LYS:N	12:CL:21:LYS:HD2	2.22	0.53
13:CM:68:GLY:O	13:CM:69:GLU:HB2	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:235:C:H1'	17:CQ:61:GLU:OE1	2.09	0.53
26:D1:46:LEU:H	26:D1:46:LEU:CD1	2.16	0.53
27:D2:51:ARG:HD3	27:D2:51:ARG:O	2.08	0.53
31:D6:50:ARG:HB3	31:D6:51:GLU:OE1	2.08	0.53
33:D8:2:PRO:O	33:D8:3:LYS:C	2.47	0.53
34:DA:1988:C:H2'	34:DA:1989:G:C8	2.44	0.53
34:DA:2208:A:H1'	34:DA:2219:G:C2	2.44	0.53
34:DA:2673:G:O2'	34:DA:2674:G:H5'	2.08	0.53
34:DA:2831:G:H1'	34:DA:2883:A:H2'	1.90	0.53
36:DC:41:VAL:HB	36:DC:178:ALA:CB	2.38	0.53
37:DD:243:GLY:O	37:DD:244:ARG:HB3	2.08	0.53
37:DD:43:ARG:NH1	37:DD:49:ILE:HG22	2.23	0.53
34:DA:1675:C:C2	38:DE:129:HIS:HD2	2.27	0.53
34:DA:2050:C:H1'	38:DE:156:MET:HE2	1.89	0.53
41:DH:43:VAL:HG11	41:DH:53:GLU:N	2.20	0.53
43:DN:108:PRO:O	43:DN:113:GLY:HA3	2.08	0.53
52:DW:47:VAL:HA	52:DW:50:VAL:CG1	2.38	0.53
53:DX:82:GLN:OE1	53:DX:83:VAL:N	2.36	0.53
54:DY:89:PHE:C	54:DY:90:LEU:HD23	2.28	0.53
1:AA:1308:U:H2'	1:AA:1309:G:H8	1.71	0.53
1:AA:450:G:H1	1:AA:483:C:H42	1.57	0.53
1:AA:731:G:OP1	1:AA:766:A:H1'	2.08	0.53
1:AA:912:C:O2'	1:AA:913:A:H5'	2.08	0.53
1:AA:939:G:C4	1:AA:940:C:C5	2.97	0.53
3:AC:112:SER:OG	3:AC:115:LEU:HG	2.09	0.53
5:AE:18:ARG:NE	5:AE:25:ARG:HB3	2.24	0.53
7:AG:149:ARG:HD3	11:AK:59:TYR:CE1	2.44	0.53
13:AM:23:TYR:HB3	13:AM:67:GLU:HB2	1.90	0.53
20:AT:44:ALA:HB1	20:AT:91:LEU:CB	2.39	0.53
21:AU:5:ASP:HB3	21:AU:8:THR:CG2	2.38	0.53
22:AV:3:C:H2'	22:AV:4:G:H5'	1.90	0.53
27:B2:18:PRO:O	27:B2:19:VAL:C	2.46	0.53
28:B3:36:VAL:O	28:B3:37:LEU:HD23	2.09	0.53
34:BA:1049:C:H2'	34:BA:1050:A:C8	2.43	0.53
34:BA:1116:C:C2'	34:BA:1117:G:H5'	2.39	0.53
34:BA:1532:C:C2'	34:BA:1532:C:O2	2.57	0.53
34:BA:1573:G:H2'	34:BA:1574:C:H5'	1.91	0.53
34:BA:1614:A:H62	52:BW:93:ALA:CB	2.16	0.53
34:BA:1625:C:H2'	34:BA:1626:G:H5'	1.90	0.53
34:BA:1708:C:H2'	34:BA:1709:U:C6	2.38	0.53
34:BA:1744:C:C2'	34:BA:1745:C:H5'	2.38	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2023:G:H4'	34:BA:2617:C:O3'	2.08	0.53
34:BA:2305:A:H5''	40:BG:134:GLY:HA3	1.90	0.53
34:BA:2691:C:H5'	34:BA:2691:C:H6	1.74	0.53
34:BA:587:C:O2'	34:BA:588:U:OP2	2.22	0.53
36:BC:46:LYS:HB2	36:BC:209:LEU:CB	2.39	0.53
36:BC:82:LYS:HZ2	36:BC:151:GLU:HA	1.73	0.53
37:BD:154:LYS:O	37:BD:155:LEU:HD12	2.08	0.53
37:BD:35:LYS:HB3	37:BD:63:ARG:HA	1.90	0.53
38:BE:26:ILE:CG2	38:BE:27:LEU:N	2.72	0.53
40:BG:85:GLY:O	40:BG:87:PRO:HD2	2.08	0.53
41:BH:103:LEU:CD2	41:BH:115:VAL:HB	2.38	0.53
44:BO:104:ARG:C	44:BO:106:LEU:N	2.62	0.53
46:BQ:81:VAL:HG12	46:BQ:82:ARG:N	2.24	0.53
43:BN:39:ARG:O	50:BU:64:ARG:NH2	2.34	0.53
55:BZ:48:PHE:CD1	55:BZ:52:SER:HA	2.43	0.53
1:CA:1256:A:H5'	1:CA:1257:U:OP1	2.09	0.53
2:CB:30:ARG:HH21	2:CB:194:PRO:HG2	1.72	0.53
1:CA:1103:C:C5'	2:CB:98:LEU:HD13	2.39	0.53
4:CD:108:LEU:HB3	4:CD:110:PHE:CE1	2.44	0.53
5:CE:75:THR:HA	5:CE:115:VAL:HG12	1.90	0.53
8:CH:35:ILE:HG23	8:CH:111:ILE:HD13	1.90	0.53
11:CK:99:GLN:C	11:CK:101:SER:H	2.12	0.53
13:CM:53:VAL:O	13:CM:56:LEU:HB3	2.09	0.53
16:CP:20:VAL:HG22	16:CP:21:VAL:N	2.24	0.53
19:CS:36:ARG:NH1	19:CS:75:ALA:HB3	2.20	0.53
20:CT:94:ALA:O	20:CT:95:ALA:HB3	2.07	0.53
1:CA:1327:C:P	21:CU:12:LYS:NZ	2.81	0.53
1:CA:1397:C:H42	24:CX:22:A:H3'	1.74	0.53
27:D2:14:ARG:HH21	27:D2:57:ILE:HD13	1.73	0.53
34:DA:1625:C:H2'	34:DA:1626:G:H5'	1.91	0.53
34:DA:2111:C:H1'	34:DA:2118:U:H1'	1.88	0.53
34:DA:2321:G:N3	34:DA:2321:G:H2'	2.23	0.53
37:DD:94:LEU:HD13	37:DD:94:LEU:O	2.09	0.53
39:DF:167:ALA:O	39:DF:169:ASN:N	2.42	0.53
41:DH:103:LEU:CD2	41:DH:115:VAL:HB	2.38	0.53
41:DH:89:ILE:H	41:DH:89:ILE:HD13	1.72	0.53
42:DI:78:THR:HA	42:DI:141:LYS:C	2.28	0.53
42:DI:5:LEU:C	42:DI:6:LEU:HD23	2.29	0.53
44:DO:100:GLY:O	44:DO:101:PRO:O	2.26	0.53
45:DP:35:HIS:O	45:DP:36:LYS:CG	2.56	0.53
46:DQ:55:VAL:HG13	46:DQ:56:ARG:H	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DV:66:ARG:CD	51:DV:67:GLY:N	2.72	0.53
1:AA:335:C:H2'	1:AA:336:C:C6	2.44	0.53
1:AA:474:G:H2'	1:AA:475:G:C8	2.41	0.53
2:AB:70:PHE:O	2:AB:92:TYR:HA	2.09	0.53
3:AC:73:PRO:HA	3:AC:76:VAL:CG1	2.38	0.53
18:AR:86:VAL:O	18:AR:87:ARG:O	2.27	0.53
34:BA:1234:U:O2'	34:BA:1235:G:H5'	2.09	0.53
34:BA:201:C:C2'	34:BA:202:U:H5'	2.39	0.53
25:B0:36:ILE:CD1	34:BA:2355:C:H5'	2.34	0.53
34:BA:239:U:H2'	34:BA:240:G:O4'	2.09	0.53
34:BA:2562:U:C2'	34:BA:2563:U:H5'	2.38	0.53
34:BA:2562:U:H2'	34:BA:2563:U:H5'	1.91	0.53
34:BA:2704:C:H2'	34:BA:2705:A:H8	1.74	0.53
34:BA:363(E):U:O2'	34:BA:363(F):A:H4'	2.09	0.53
34:BA:451:C:N4	34:BA:453:C:H3'	2.23	0.53
34:BA:543:C:N4	34:BA:551:G:N1	2.50	0.53
34:BA:587:C:C4	45:BP:33:ARG:HG2	2.43	0.53
41:BH:106:THR:O	41:BH:107:VAL:HG13	2.09	0.53
42:BI:56:LYS:HA	42:BI:59:ALA:HB3	1.91	0.53
46:BQ:55:VAL:HG13	46:BQ:56:ARG:H	1.73	0.53
47:BR:28:LEU:HD21	47:BR:114:VAL:HG12	1.90	0.53
50:BU:55:ARG:HA	50:BU:58:ARG:CG	2.39	0.53
53:BX:85:PRO:O	53:BX:86:GLY:C	2.46	0.53
46:BQ:140:ALA:H	55:BZ:53:ILE:HD12	1.73	0.53
1:CA:186:C:H2'	1:CA:187:C:C6	2.43	0.53
1:CA:271:C:H2'	1:CA:272:C:C6	2.43	0.53
1:CA:793:U:H5'	1:CA:794:A:O5'	2.08	0.53
1:CA:939:G:C4	1:CA:940:C:C5	2.96	0.53
4:CD:60:GLU:O	4:CD:63:LYS:HB3	2.09	0.53
23:CW:27:G:H1	23:CW:43:C:H42	1.57	0.53
25:D0:1:MET:O	25:D0:2:ALA:HB3	2.08	0.53
27:D2:41:ILE:HG13	34:DA:95:G:N2	2.24	0.53
34:DA:143:G:H2'	34:DA:143(A):C:C6	2.39	0.53
34:DA:1506:C:H2'	34:DA:1507:A:H5'	1.91	0.53
34:DA:1532:C:O2	34:DA:1532:C:H2'	2.07	0.53
34:DA:1593:G:H2'	34:DA:1594:G:C5'	2.38	0.53
34:DA:2687:U:C4	34:DA:2688:U:C5	2.97	0.53
34:DA:596:G:H2'	34:DA:597:U:O4'	2.09	0.53
35:DB:14:U:H4'	35:DB:70:C:O2	2.09	0.53
37:DD:147:LEU:HG	37:DD:183:ARG:HH12	1.74	0.53
40:DG:116:ASP:O	40:DG:117:PHE:HB2	2.09	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:114:LEU:HA	42:DI:130:TYR:HD1	1.72	0.53
46:DQ:68:ILE:CG2	46:DQ:103:MET:HA	2.36	0.53
47:DR:104:ARG:CG	47:DR:104:ARG:HH11	2.22	0.53
48:DS:17:ARG:O	48:DS:19:LYS:N	2.42	0.53
49:DT:13:ARG:HD3	49:DT:13:ARG:O	2.09	0.53
50:DU:83:LEU:HD12	50:DU:83:LEU:N	2.22	0.53
50:DU:95:LEU:C	50:DU:97:ASP:N	2.61	0.53
53:DX:70:LEU:HD12	53:DX:71:GLY:H	1.74	0.53
1:AA:1053:G:C3'	1:AA:1054:C:H5'	2.38	0.53
1:AA:356:A:H2'	1:AA:357:G:H8	1.74	0.53
1:AA:749:C:O2'	1:AA:750:G:H5'	2.08	0.53
5:AE:20:GLN:HE22	5:AE:25:ARG:NH2	2.07	0.53
9:AI:111:ARG:HG3	14:AN:61:TRP:HE1	1.74	0.53
15:AO:37:ASN:H	15:AO:37:ASN:ND2	2.07	0.53
6:AF:98:LEU:HB3	18:AR:30:ASP:HA	1.89	0.53
26:B1:19:GLN:H	26:B1:44:PRO:CD	2.18	0.53
30:B5:33:CYS:SG	30:B5:40:LYS:HE3	2.49	0.53
34:BA:171:G:H2'	34:BA:172:C:H4'	1.91	0.53
25:B0:42:GLY:HA3	34:BA:2331:G:O4'	2.08	0.53
34:BA:962:G:O2'	34:BA:963:U:H5'	2.08	0.53
37:BD:174:ILE:N	37:BD:174:ILE:HD12	2.13	0.53
38:BE:91:VAL:HG12	38:BE:91:VAL:O	2.07	0.53
40:BG:40:ASN:O	40:BG:155:MET:HB2	2.09	0.53
44:BO:26:LYS:HB2	44:BO:30:ALA:HB2	1.90	0.53
45:BP:34:GLY:O	45:BP:35:HIS:CD2	2.62	0.53
47:BR:47:PHE:O	47:BR:51:LEU:HD12	2.09	0.53
47:BR:67:LEU:H	47:BR:67:LEU:HD22	1.74	0.53
50:BU:31:SER:C	50:BU:33:ARG:N	2.62	0.53
50:BU:79:PHE:O	50:BU:83:LEU:HD13	2.09	0.53
54:BY:31:LEU:HD23	54:BY:36:ALA:HB3	1.91	0.53
1:CA:1509:C:O2'	1:CA:1510:U:H5'	2.07	0.53
2:CB:184:VAL:O	2:CB:198:ASP:HB2	2.08	0.53
4:CD:100:ARG:HB3	4:CD:102:ASP:OD1	2.09	0.53
4:CD:91:SER:O	4:CD:92:VAL:C	2.47	0.53
5:CE:64:ARG:HH11	5:CE:64:ARG:HG3	1.73	0.53
6:CF:11:ASN:HB3	6:CF:14:LEU:HD21	1.91	0.53
11:CK:90:GLY:O	11:CK:94:ALA:HB2	2.08	0.53
12:CL:41:ARG:HG2	12:CL:42:THR:H	1.73	0.53
13:CM:47:ASP:O	13:CM:48:LEU:HB3	2.09	0.53
15:CO:56:LEU:HG	15:CO:60:VAL:CG2	2.39	0.53
17:CQ:7:THR:O	17:CQ:23:VAL:HG13	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:CW:11:C:O2'	23:CW:12:U:H5'	2.08	0.53
28:D3:38:GLU:O	28:D3:40:THR:HG23	2.09	0.53
34:DA:1107:G:O2'	34:DA:1108:U:H5'	2.09	0.53
34:DA:1112:G:C1'	34:DA:1113:U:OP1	2.57	0.53
34:DA:2062:A:O2'	34:DA:2063:C:H5'	2.09	0.53
34:DA:2334:G:H21	48:DS:18:ILE:CD1	2.21	0.53
37:DD:241:PRO:O	37:DD:243:GLY:N	2.41	0.53
37:DD:80:ALA:HB3	37:DD:94:LEU:CD1	2.38	0.53
43:DN:65:LYS:HE2	43:DN:65:LYS:CA	2.17	0.53
46:DQ:38:GLU:OE2	46:DQ:128:LYS:HB2	2.08	0.53
49:DT:51:ARG:HB2	49:DT:98:LYS:HG3	1.91	0.53
49:DT:65:LYS:HG3	49:DT:66:VAL:N	2.24	0.53
50:DU:93:LYS:HD3	50:DU:93:LYS:H	1.73	0.53
51:DV:88:ARG:HG3	51:DV:88:ARG:HH11	1.74	0.53
53:DX:82:GLN:CG	53:DX:83:VAL:H	2.22	0.53
55:DZ:105:VAL:HG12	55:DZ:139:VAL:O	2.09	0.53
1:AA:1307:U:H2'	1:AA:1308:U:H6	1.73	0.53
1:AA:266:G:O2'	1:AA:267:C:OP2	2.26	0.53
1:AA:324:G:OP1	20:AT:70:SER:HB2	2.09	0.53
1:AA:431:A:O2'	1:AA:432:A:H5'	2.09	0.53
3:AC:113:ALA:HA	3:AC:116:VAL:HG23	1.91	0.53
3:AC:11:ARG:O	3:AC:12:LEU:C	2.46	0.53
3:AC:61:ALA:O	3:AC:62:ASP:HB2	2.09	0.53
3:AC:58:GLU:N	3:AC:65:ALA:HB3	2.22	0.53
9:AI:112:LYS:HA	9:AI:119:ALA:HB2	1.91	0.53
12:AL:41:ARG:NH1	12:AL:41:ARG:CB	2.72	0.53
12:AL:50:SER:O	12:AL:51:ALA:HB2	2.07	0.53
14:AN:29:ARG:HD3	14:AN:40:CYS:HB2	1.90	0.53
14:AN:3:ARG:O	14:AN:7:ILE:HG23	2.09	0.53
17:AQ:67:LYS:C	17:AQ:69:LYS:H	2.13	0.53
27:B2:52:ASP:O	27:B2:55:ARG:CB	2.57	0.53
29:B4:5:ILE:O	29:B4:6:HIS:O	2.27	0.53
33:B8:25:MET:HB2	45:BP:62:LEU:HD21	1.90	0.53
33:B8:10:ALA:HB2	33:B8:59:LYS:NZ	2.24	0.53
34:BA:1208:C:C4	34:BA:1209:G:N7	2.77	0.53
34:BA:1571:A:H2'	34:BA:1572:A:C8	2.44	0.53
34:BA:198:C:H5'	34:BA:2244:U:OP1	2.09	0.53
34:BA:2811:G:C2'	34:BA:2812:G:H5'	2.38	0.53
34:BA:285:C:H2'	34:BA:286:C:O4'	2.09	0.53
35:BB:5:C:H2'	35:BB:6:C:H6	1.74	0.53
35:BB:87:G:C2'	35:BB:88:C:H5''	2.38	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BC:89:ALA:HB2	36:BC:153:ILE:CA	2.37	0.53
37:BD:62:TYR:CE1	37:BD:64:ILE:HA	2.44	0.53
38:BE:14:ILE:CD1	38:BE:173:VAL:HG11	2.33	0.53
40:BG:124:SER:HB2	40:BG:131:TYR:CE1	2.44	0.53
41:BH:153:LYS:CB	41:BH:154:PRO:CD	2.87	0.53
43:BN:14:VAL:HA	43:BN:135:PRO:CG	2.31	0.53
45:BP:48:PRO:O	45:BP:49:ARG:C	2.46	0.53
47:BR:70:LEU:HD13	47:BR:75:LEU:CD1	2.39	0.53
49:BT:51:ARG:HB2	49:BT:98:LYS:HG3	1.91	0.53
52:BW:9:TYR:H	52:BW:102:HIS:CD2	2.27	0.53
1:CA:93:G:H2'	1:CA:96:U:H5'	1.91	0.53
2:CB:23:ARG:HG2	2:CB:23:ARG:O	2.09	0.53
3:CC:23:TYR:CG	3:CC:24:ALA:N	2.77	0.53
3:CC:24:ALA:HB2	3:CC:32:LEU:HD12	1.90	0.53
9:CI:118:LYS:CB	9:CI:118:LYS:NZ	2.72	0.53
9:CI:16:ARG:O	9:CI:63:ILE:HA	2.09	0.53
11:CK:52:GLY:N	11:CK:55:LYS:HG3	2.24	0.53
13:CM:19:LEU:CD2	13:CM:19:LEU:H	2.22	0.53
9:CI:111:ARG:HG3	14:CN:61:TRP:HE1	1.74	0.53
15:CO:75:PRO:HG2	15:CO:76:GLU:H	1.73	0.53
17:CQ:52:LYS:N	17:CQ:52:LYS:HD2	2.24	0.53
17:CQ:67:LYS:C	17:CQ:69:LYS:H	2.11	0.53
19:CS:40:ILE:HD13	19:CS:62:ILE:HD11	1.91	0.53
33:D8:10:ALA:HB2	33:D8:59:LYS:NZ	2.23	0.53
34:DA:1192:G:O2'	34:DA:1193:G:H5'	2.08	0.53
34:DA:585:G:H2'	34:DA:1251:C:H42	1.73	0.53
34:DA:1354:A:H2'	34:DA:1355:G:O4'	2.09	0.53
34:DA:1486:A:N1	34:DA:1504:C:N4	2.56	0.53
34:DA:1720:U:H2'	34:DA:1721:G:O4'	2.09	0.53
34:DA:1762:A:H8	34:DA:1762:A:O5'	1.92	0.53
34:DA:1821:A:H2'	34:DA:1822:G:C5'	2.37	0.53
34:DA:1854:A:H3'	34:DA:1855:G:H8	1.73	0.53
34:DA:2313:C:H2'	34:DA:2314:C:C6	2.40	0.53
34:DA:285:C:H2'	34:DA:286:C:O4'	2.08	0.53
34:DA:310:A:P	54:DY:18:GLY:HA2	2.49	0.53
34:DA:633:A:C2'	34:DA:634:C:H5'	2.39	0.53
34:DA:744:G:O2'	34:DA:745:G:H5'	2.09	0.53
34:DA:955:C:H5''	46:DQ:14:ARG:HH21	1.73	0.53
34:DA:729:G:C5	37:DD:208:LYS:HB2	2.44	0.53
43:DN:55:VAL:HG22	43:DN:128:HIS:HB3	1.91	0.53
43:DN:65:LYS:HA	43:DN:65:LYS:CE	2.14	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DN:93:THR:O	43:DN:93:THR:HG23	2.09	0.53
44:DO:64:ARG:CD	44:DO:101:PRO:HB2	2.30	0.53
45:DP:96:THR:HB	45:DP:126:VAL:HB	1.91	0.53
48:DS:84:GLN:O	48:DS:85:VAL:HG13	2.09	0.53
49:DT:29:ARG:HE	49:DT:84:GLN:HG3	1.74	0.53
54:DY:81:LYS:HG2	54:DY:96:ILE:HB	1.90	0.53
54:DY:98:VAL:HG12	54:DY:98:VAL:O	2.08	0.53
1:AA:1017:G:H2'	1:AA:1018:C:C6	2.44	0.53
1:AA:1126:U:O2'	1:AA:1127:G:H5'	2.08	0.53
1:AA:439:A:C4	1:AA:496:A:C2	2.97	0.53
1:AA:72:C:H2'	1:AA:73:G:C8	2.40	0.53
1:AA:1103:C:H4'	2:AB:98:LEU:HD13	1.89	0.53
4:AD:91:SER:O	4:AD:92:VAL:C	2.47	0.53
13:AM:47:ASP:O	13:AM:48:LEU:HB3	2.09	0.53
13:AM:68:GLY:O	13:AM:69:GLU:CB	2.57	0.53
16:AP:39:TYR:HA	16:AP:48:TRP:O	2.09	0.53
18:AR:40:LEU:O	18:AR:43:PHE:HD1	1.92	0.53
22:AV:26:G:H1	22:AV:44:A:H61	1.57	0.53
27:B2:25:VAL:O	27:B2:27:GLU:N	2.41	0.53
33:B8:36:LYS:O	33:B8:37:SER:O	2.27	0.53
34:BA:558:G:P	43:BN:111:PRO:HD2	2.48	0.53
34:BA:815:C:H2'	34:BA:816:C:H6	1.74	0.53
38:BE:132:HIS:HA	38:BE:135:HIS:CE1	2.44	0.53
40:BG:165:THR:OG1	40:BG:168:GLU:HG3	2.08	0.53
42:BI:100:ALA:O	42:BI:104:GLN:HB2	2.08	0.53
45:BP:125:VAL:O	45:BP:145:PRO:HD2	2.09	0.53
46:BQ:29:PHE:CD1	46:BQ:29:PHE:N	2.76	0.53
46:BQ:39:PRO:HB3	46:BQ:99:PRO:CD	2.39	0.53
47:BR:107:ASP:OD2	47:BR:108:GLY:N	2.42	0.53
48:BS:24:LEU:HB3	48:BS:85:VAL:HG12	1.91	0.53
49:BT:132:LYS:C	49:BT:134:GLU:H	2.13	0.53
49:BT:65:LYS:NZ	49:BT:66:VAL:H	2.06	0.53
51:BV:2:PHE:HB3	51:BV:42:GLY:CA	2.39	0.53
52:BW:55:ALA:O	52:BW:56:ALA:C	2.47	0.53
53:BX:82:GLN:HB3	53:BX:85:PRO:HG2	1.91	0.53
55:BZ:85:HIS:HD1	55:BZ:86:VAL:N	2.05	0.53
1:CA:1441:G:H5''	1:CA:1442:G:C5'	2.33	0.53
1:CA:484:G:H4'	1:CA:485:G:O5'	2.09	0.53
2:CB:168:THR:HG21	2:CB:192:SER:HA	1.91	0.53
3:CC:73:PRO:HA	3:CC:76:VAL:CG1	2.39	0.53
1:CA:932:C:H5'	7:CG:4:ARG:HG2	1.90	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:63:ILE:CG2	9:CI:64:THR:N	2.71	0.53
13:CM:27:LYS:O	13:CM:30:ALA:HB3	2.09	0.53
19:CS:10:PHE:CZ	19:CS:70:LYS:HE2	2.44	0.53
20:CT:100:ILE:HD12	20:CT:100:ILE:N	2.23	0.53
23:CW:18:G:H1	23:CW:55:U:H1'	1.74	0.53
25:D0:14:ARG:O	25:D0:15:ASP:HB2	2.09	0.53
27:D2:49:LYS:CA	27:D2:53:LEU:HB2	2.38	0.53
31:D6:14:THR:HG22	31:D6:51:GLU:O	2.09	0.53
34:DA:132:G:H5'	34:DA:132:G:C8	2.36	0.53
34:DA:2230:G:H2'	34:DA:2231:C:C6	2.42	0.53
34:DA:2292:C:H42	34:DA:2340:G:H1	1.56	0.53
34:DA:2317:C:H2'	34:DA:2318:G:C5'	2.38	0.53
34:DA:2468:G:OP1	46:DQ:119:ARG:NH2	2.41	0.53
34:DA:7:G:H1	34:DA:2896:C:N4	2.07	0.53
34:DA:320:A:C5	39:DF:136:THR:HG21	2.44	0.53
32:D7:16:HIS:ND1	34:DA:684:G:OP1	2.41	0.53
34:DA:760:G:H2'	34:DA:761:A:O4'	2.09	0.53
35:DB:32:C:C2	35:DB:51:G:N2	2.77	0.53
40:DG:115:ARG:HH21	40:DG:136:ARG:HG3	1.73	0.53
13:CM:11:ARG:HH22	40:DG:147:ASP:HB3	1.74	0.53
45:DP:62:LEU:H	45:DP:62:LEU:CD2	2.17	0.53
47:DR:101:ALA:O	47:DR:102:GLU:HB2	2.09	0.53
34:DA:1275:A:C4	47:DR:16:HIS:CE1	2.97	0.53
50:DU:92:ARG:NH2	51:DV:10:LYS:HB3	2.24	0.53
53:DX:64:LYS:O	53:DX:65:ARG:HB2	2.07	0.53
53:DX:88:LYS:O	53:DX:89:ILE:HB	2.09	0.53
54:DY:43:ASN:HD21	54:DY:64:GLU:HG3	1.74	0.53
55:DZ:149:SER:CB	55:DZ:173:ALA:HA	2.39	0.53
1:AA:1337:G:H5''	1:AA:1338:G:OP1	2.09	0.52
1:AA:224:C:H2'	1:AA:225:C:C6	2.45	0.52
1:AA:542:G:H2'	1:AA:543:C:C6	2.43	0.52
7:AG:143:ARG:O	7:AG:145:ALA:O	2.26	0.52
7:AG:97:GLN:O	7:AG:101:LEU:HG	2.09	0.52
11:AK:20:TYR:O	11:AK:30:VAL:HA	2.09	0.52
12:AL:86:ARG:HB2	12:AL:101:VAL:HG22	1.90	0.52
13:AM:3:ARG:HA	13:AM:9:ILE:HG13	1.91	0.52
34:BA:1417:C:H2'	34:BA:1418:G:O4'	2.08	0.52
34:BA:1563:G:O2'	34:BA:1564:C:H5'	2.09	0.52
34:BA:1680:U:O2	34:BA:1763:G:H3'	2.08	0.52
34:BA:2645:G:H8	34:BA:2645:G:OP2	1.93	0.52
34:BA:2649:U:H2'	34:BA:2650:U:C6	2.43	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2705:A:H2'	34:BA:2706:G:H8	1.73	0.52
34:BA:2831:G:H1'	34:BA:2883:A:H2'	1.90	0.52
34:BA:692:C:O2'	34:BA:693:C:H5'	2.09	0.52
35:BB:14:U:H4'	35:BB:70:C:O2	2.08	0.52
36:BC:89:ALA:CB	36:BC:153:ILE:HA	2.39	0.52
36:BC:41:VAL:HB	36:BC:178:ALA:CB	2.38	0.52
38:BE:3:GLY:O	38:BE:4:ILE:HG22	2.09	0.52
38:BE:59:VAL:CG2	38:BE:63:LEU:HA	2.40	0.52
38:BE:65:GLY:C	38:BE:67:PHE:H	2.12	0.52
38:BE:52:LEU:O	38:BE:74:PRO:HA	2.10	0.52
41:BH:85:LYS:HD3	41:BH:133:VAL:CB	2.38	0.52
42:BI:72:LEU:HD12	42:BI:138:ILE:CG2	2.38	0.52
43:BN:97:ARG:HA	43:BN:100:GLU:HB2	1.91	0.52
43:BN:93:THR:HG23	43:BN:93:THR:O	2.09	0.52
45:BP:85:LEU:HA	45:BP:88:LEU:HB2	1.90	0.52
49:BT:61:PHE:CE2	49:BT:76:PHE:CB	2.92	0.52
50:BU:18:LEU:O	50:BU:19:LYS:C	2.46	0.52
54:BY:98:VAL:O	54:BY:98:VAL:HG12	2.09	0.52
55:BZ:19:ARG:NH1	55:BZ:19:ARG:HG2	2.24	0.52
1:CA:1057:G:H5''	3:CC:154:SER:OG	2.10	0.52
1:CA:1073:U:H2'	1:CA:1074:G:C8	2.43	0.52
1:CA:1074:G:H2'	1:CA:1075:C:H6	1.73	0.52
1:CA:1170:A:H2'	1:CA:1171:G:H5'	1.91	0.52
1:CA:42:G:H2'	1:CA:43:C:C6	2.44	0.52
1:CA:594:G:C2'	1:CA:595:G:H5'	2.39	0.52
3:CC:95:THR:C	3:CC:97:LYS:H	2.12	0.52
4:CD:12:CYS:HA	4:CD:19:LEU:CD1	2.39	0.52
8:CH:112:LEU:CD1	8:CH:114:THR:HG22	2.38	0.52
9:CI:118:LYS:HZ2	9:CI:118:LYS:HB2	1.74	0.52
14:CN:47:LEU:HB2	14:CN:53:LEU:HD11	1.91	0.52
21:CU:5:ASP:HB3	21:CU:8:THR:CG2	2.39	0.52
23:CW:33:U:H2'	23:CW:35:A:OP2	2.09	0.52
26:D1:20:ARG:CD	26:D1:41:ARG:HD3	2.33	0.52
26:D1:86:SER:C	26:D1:89:GLU:OE2	2.47	0.52
30:D5:7:PRO:HB2	34:DA:2016:U:O2	2.09	0.52
34:DA:1625:C:H2'	34:DA:1626:G:C5'	2.39	0.52
34:DA:2364:C:H2'	34:DA:2365:G:O4'	2.08	0.52
34:DA:2514:U:H2'	34:DA:2515:C:C6	2.43	0.52
34:DA:2531:A:H2	34:DA:2658:C:O2	1.92	0.52
34:DA:2747:G:O6	34:DA:2754:U:H2'	2.09	0.52
34:DA:703:U:H2'	34:DA:704:G:H5'	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DB:87:G:C2'	35:DB:88:C:H5''	2.39	0.52
36:DC:46:LYS:HB2	36:DC:209:LEU:CB	2.38	0.52
37:DD:218:ARG:HH11	37:DD:218:ARG:HG3	1.74	0.52
38:DE:44:TYR:O	38:DE:45:THR:CB	2.57	0.52
40:DG:139:LEU:C	40:DG:141:PHE:H	2.13	0.52
40:DG:164:GLU:N	40:DG:164:GLU:OE1	2.42	0.52
42:DI:92:VAL:HG22	42:DI:97:ILE:CG1	2.39	0.52
47:DR:24:GLN:HB2	47:DR:44:LEU:CD2	2.39	0.52
47:DR:97:VAL:HA	47:DR:113:LEU:O	2.10	0.52
49:DT:23:ARG:NH2	49:DT:120:ARG:HD3	2.23	0.52
51:DV:19:LYS:HG3	51:DV:20:LEU:O	2.08	0.52
54:DY:33:LYS:O	54:DY:34:LYS:HG3	2.09	0.52
55:DZ:22:GLY:O	55:DZ:23:LYS:HD3	2.09	0.52
1:AA:1108:G:H2'	1:AA:1109:C:H5'	1.90	0.52
1:AA:1458:G:O2'	1:AA:1459:C:H5'	2.08	0.52
2:AB:162:ILE:O	2:AB:185:ILE:HG12	2.09	0.52
6:AF:40:VAL:HA	6:AF:62:TRP:O	2.09	0.52
11:AK:84:VAL:HG11	11:AK:95:ILE:HD11	1.90	0.52
26:B1:8:SER:N	26:B1:46:LEU:HD11	2.25	0.52
30:B5:58:LEU:HD12	30:B5:58:LEU:N	2.24	0.52
34:BA:1866:C:H2'	34:BA:1876:A:O4'	2.09	0.52
34:BA:1988:C:H2'	34:BA:1989:G:C8	2.44	0.52
34:BA:1678:G:N2	34:BA:1989:G:N2	2.56	0.52
34:BA:2512:C:H4'	38:BE:122:PHE:CE2	2.45	0.52
34:BA:2599:G:C8	37:BD:236:GLY:CA	2.90	0.52
34:BA:2639:A:H2'	34:BA:2640:G:C5'	2.29	0.52
34:BA:2807:G:H2'	34:BA:2808:U:C4'	2.38	0.52
34:BA:7:G:H1	34:BA:2896:C:N4	2.07	0.52
34:BA:925:C:H2'	34:BA:926:A:O4'	2.10	0.52
34:BA:945:A:O3'	34:BA:946:G:H4'	2.10	0.52
34:BA:951:C:O2'	34:BA:952:G:H5'	2.09	0.52
37:BD:67:PHE:CE1	37:BD:157:ARG:NH2	2.77	0.52
40:BG:139:LEU:HA	40:BG:144:ILE:HG21	1.89	0.52
41:BH:102:ALA:HB1	41:BH:115:VAL:O	2.09	0.52
42:BI:8:PRO:HA	42:BI:13:GLY:O	2.09	0.52
44:BO:87:ILE:HG21	44:BO:91:LEU:HD13	1.90	0.52
45:BP:38:GLN:HG3	45:BP:39:LYS:N	2.18	0.52
46:BQ:38:GLU:OE2	46:BQ:128:LYS:HB2	2.09	0.52
46:BQ:39:PRO:HB3	46:BQ:99:PRO:HD3	1.92	0.52
47:BR:104:ARG:CG	47:BR:104:ARG:HH11	2.22	0.52
49:BT:17:THR:HG23	49:BT:17:THR:O	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BU:112:ARG:NH1	50:BU:112:ARG:HG2	2.21	0.52
53:BX:82:GLN:CG	53:BX:83:VAL:H	2.22	0.52
1:CA:1053:G:C3'	1:CA:1054:C:H5'	2.40	0.52
1:CA:1137:C:H4'	1:CA:1138:G:C2	2.45	0.52
1:CA:1337:G:H5''	1:CA:1338:G:OP1	2.10	0.52
1:CA:1288:A:O4'	1:CA:1353:G:H4'	2.08	0.52
1:CA:425:G:O2'	1:CA:426:G:H5'	2.10	0.52
1:CA:695:A:H2'	1:CA:696:A:C8	2.44	0.52
5:CE:41:VAL:HG13	5:CE:113:ALA:HA	1.90	0.52
5:CE:19:MET:SD	5:CE:24:ARG:HB3	2.50	0.52
6:CF:52:ILE:HD11	6:CF:87:ARG:NH2	2.25	0.52
7:CG:79:ARG:HH11	7:CG:79:ARG:HG3	1.74	0.52
9:CI:118:LYS:CB	9:CI:118:LYS:HZ2	2.22	0.52
1:CA:1371:G:O3'	9:CI:69:GLY:HA3	2.10	0.52
11:CK:61:ALA:HB2	11:CK:90:GLY:HA3	1.91	0.52
15:CO:74:ASP:OD2	15:CO:77:ARG:HG2	2.09	0.52
1:CA:719:C:O2	18:CR:50:ILE:HG12	2.09	0.52
19:CS:36:ARG:HB2	19:CS:72:GLY:HA2	1.91	0.52
26:D1:15:ALA:HA	26:D1:46:LEU:HG	1.90	0.52
28:D3:8:LEU:HD12	28:D3:31:LEU:HA	1.88	0.52
30:D5:55:ARG:HH21	47:DR:33:ARG:HH22	1.58	0.52
34:DA:2273:A:H2'	34:DA:2274:A:C8	2.44	0.52
34:DA:373:U:H2'	34:DA:374:A:H8	1.73	0.52
34:DA:542:C:N3	34:DA:543:C:N4	2.57	0.52
35:DB:87:G:C3'	35:DB:88:C:H5''	2.39	0.52
37:DD:160:GLY:H	37:DD:196:VAL:HB	1.74	0.52
39:DF:107:LYS:C	39:DF:109:GLY:N	2.62	0.52
39:DF:3:GLU:CB	39:DF:24:LEU:HG	2.39	0.52
40:DG:76:SER:CB	40:DG:84:LYS:H	2.23	0.52
44:DO:46:ALA:H	44:DO:54:GLU:CG	2.22	0.52
50:DU:18:LEU:O	50:DU:19:LYS:C	2.48	0.52
51:DV:22:VAL:O	51:DV:22:VAL:HG12	2.10	0.52
53:DX:30:VAL:HG12	53:DX:31:HIS:N	2.19	0.52
53:DX:76:ARG:O	53:DX:76:ARG:HD3	2.08	0.52
54:DY:26:LYS:O	54:DY:27:VAL:O	2.27	0.52
55:DZ:58:VAL:HG22	55:DZ:68:PRO:HA	1.91	0.52
1:AA:384:G:C2	1:AA:385:C:N3	2.77	0.52
1:AA:392:G:H2'	1:AA:393:A:C8	2.44	0.52
1:AA:687:A:N3	1:AA:688:G:H1'	2.24	0.52
1:AA:690:G:H2'	1:AA:691:G:C8	2.44	0.52
2:AB:98:LEU:O	2:AB:101:MET:HG3	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:95:THR:C	3:AC:97:LYS:H	2.12	0.52
5:AE:81:GLU:HG2	5:AE:90:VAL:HG13	1.92	0.52
10:AJ:22:LYS:NZ	10:AJ:88:LEU:HD23	2.23	0.52
7:AG:150:ALA:CA	11:AK:57:THR:HG21	2.39	0.52
11:AK:15:ALA:HA	11:AK:76:GLY:O	2.09	0.52
16:AP:6:LEU:HB3	16:AP:17:TYR:HD2	1.74	0.52
17:AQ:76:LEU:CG	17:AQ:77:VAL:N	2.72	0.52
23:AW:67:C:O2'	23:AW:68:C:H5'	2.09	0.52
26:B1:48:LYS:CG	26:B1:49:VAL:H	2.17	0.52
33:B8:30:ARG:O	33:B8:31:HIS:C	2.47	0.52
34:BA:1112:G:C1'	34:BA:1113:U:OP1	2.57	0.52
34:BA:2064:C:H2'	34:BA:2065:C:C6	2.45	0.52
34:BA:2360:A:O2'	34:BA:2361:A:P	2.67	0.52
34:BA:2408:U:H2'	34:BA:2409:G:C8	2.45	0.52
34:BA:2684:U:O2'	44:BO:68:GLU:HG3	2.09	0.52
34:BA:2884:U:H2'	34:BA:2885:C:C5'	2.38	0.52
34:BA:445:C:O2'	34:BA:446:G:H5'	2.09	0.52
36:BC:22:ILE:HG22	36:BC:25:ALA:HB2	1.90	0.52
34:BA:2178:C:O5'	36:BC:46:LYS:HD2	2.09	0.52
37:BD:218:ARG:HG3	37:BD:218:ARG:HH11	1.74	0.52
38:BE:7:VAL:HA	38:BE:196:VAL:HG22	1.92	0.52
39:BF:68:LYS:O	39:BF:68:LYS:HG3	2.10	0.52
43:BN:126:PRO:O	43:BN:127:ASP:CB	2.55	0.52
47:BR:12:ARG:HG3	47:BR:12:ARG:HH11	1.74	0.52
48:BS:66:ALA:O	48:BS:67:ARG:HG3	2.09	0.52
49:BT:29:ARG:HG3	49:BT:30:VAL:N	2.25	0.52
51:BV:19:LYS:HG3	51:BV:20:LEU:O	2.08	0.52
55:BZ:48:PHE:O	55:BZ:50:GLN:N	2.43	0.52
1:CA:264:U:O2'	17:CQ:64:PRO:HB2	2.09	0.52
1:CA:1205:U:O2'	3:CC:195:VAL:HG23	2.08	0.52
5:CE:68:GLU:O	5:CE:68:GLU:HG3	2.09	0.52
8:CH:85:ARG:HG2	8:CH:86:ILE:N	2.24	0.52
9:CI:95:LYS:N	9:CI:98:PRO:HD2	2.24	0.52
11:CK:52:GLY:H	11:CK:55:LYS:NZ	2.07	0.52
22:CV:17:C:H5''	22:CV:17(A):U:H6	1.73	0.52
27:D2:49:LYS:HB3	27:D2:53:LEU:HD22	1.91	0.52
28:D3:19:GLN:O	28:D3:22:ALA:HB3	2.10	0.52
31:D6:13:CYS:HB3	31:D6:49:HIS:HB3	1.90	0.52
31:D6:15:GLU:CG	31:D6:18:ARG:HG3	2.39	0.52
34:DA:1116:C:C2'	34:DA:1117:G:H5'	2.38	0.52
34:DA:1257:C:C2	34:DA:1258:C:C5	2.97	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1278:A:OP1	47:DR:36:THR:HG22	2.09	0.52
25:D0:41:ARG:HB3	34:DA:2330:G:H1'	1.92	0.52
34:DA:558:G:OP1	43:DN:111:PRO:HD2	2.10	0.52
34:DA:740:U:H2'	34:DA:741:G:C8	2.45	0.52
37:DD:30:GLU:HG3	37:DD:63:ARG:NE	2.24	0.52
39:DF:143:ALA:CA	39:DF:146:ALA:HB3	2.38	0.52
39:DF:161:GLU:HA	39:DF:164:ARG:HB2	1.90	0.52
40:DG:130:ASN:OD1	40:DG:160:VAL:HG13	2.09	0.52
40:DG:19:LEU:C	40:DG:21:ARG:H	2.13	0.52
42:DI:25:TYR:CE2	42:DI:29:TYR:CD2	2.96	0.52
42:DI:91:SER:H	42:DI:121:LYS:CE	2.21	0.52
42:DI:9:LEU:H	42:DI:13:GLY:CA	2.11	0.52
46:DQ:39:PRO:HB3	46:DQ:99:PRO:CD	2.39	0.52
49:DT:61:PHE:CE2	49:DT:76:PHE:CB	2.92	0.52
51:DV:25:LEU:N	51:DV:94:LEU:CD1	2.71	0.52
51:DV:2:PHE:HB3	51:DV:42:GLY:CA	2.38	0.52
53:DX:25:LYS:HG3	53:DX:26:TYR:CD1	2.43	0.52
53:DX:56:THR:C	53:DX:57:LEU:CD1	2.74	0.52
54:DY:20:TYR:CZ	54:DY:42:VAL:HA	2.44	0.52
55:DZ:106:GLY:HA3	55:DZ:142:SER:HB3	1.90	0.52
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.10	0.52
1:AA:291:C:O2'	1:AA:292:G:H5'	2.10	0.52
1:AA:33:A:H2'	1:AA:34:C:H6	1.74	0.52
1:AA:658:G:H2'	1:AA:659:U:H6	1.75	0.52
2:AB:68:ILE:HD12	2:AB:68:ILE:N	2.24	0.52
4:AD:150:GLU:HA	4:AD:153:ARG:HD2	1.92	0.52
5:AE:19:MET:SD	5:AE:24:ARG:HB3	2.50	0.52
8:AH:63:LEU:N	8:AH:63:LEU:HD22	2.24	0.52
1:AA:1048:G:OP1	14:AN:4:LYS:HB2	2.08	0.52
15:AO:21:ASP:OD2	15:AO:23:GLY:O	2.27	0.52
21:AU:6:ARG:CZ	21:AU:15:ARG:NH2	2.72	0.52
26:B1:18:ILE:N	26:B1:18:ILE:HD12	2.23	0.52
27:B2:60:LEU:O	27:B2:61:LEU:CB	2.57	0.52
32:B7:8:ASN:HD22	32:B7:9:ARG:N	2.07	0.52
34:BA:1238:G:O2'	34:BA:1239:G:H5'	2.10	0.52
34:BA:1257:C:H2'	34:BA:1258:C:H6	1.74	0.52
34:BA:1430:C:H2'	34:BA:1431:U:C6	2.44	0.52
34:BA:1762:A:O5'	34:BA:1762:A:H8	1.92	0.52
34:BA:570:G:H2'	34:BA:2030:A:N7	2.24	0.52
34:BA:2228:G:H2'	34:BA:2229:C:C6	2.44	0.52
34:BA:2525:G:O2'	34:BA:2526:G:H5'	2.09	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2784:C:O2'	34:BA:2785:C:H5'	2.09	0.52
34:BA:768:G:O2'	34:BA:769:G:H5'	2.10	0.52
34:BA:797:C:H2'	34:BA:798:G:H8	1.75	0.52
34:BA:827:U:H4'	34:BA:828:U:O2	2.09	0.52
34:BA:85:G:N3	34:BA:103:A:C2	2.78	0.52
35:BB:57:A:C4	40:BG:29:TRP:CB	2.93	0.52
37:BD:231:HIS:ND1	37:BD:232:PRO:N	2.58	0.52
38:BE:47:VAL:HG23	38:BE:84:PHE:O	2.10	0.52
40:BG:115:ARG:HH22	40:BG:136:ARG:HG3	1.72	0.52
42:BI:88:ILE:HG12	42:BI:122:GLU:N	2.24	0.52
42:BI:15:VAL:HG23	42:BI:16:GLY:N	2.23	0.52
43:BN:121:LYS:HG3	43:BN:123:TYR:CE1	2.44	0.52
43:BN:15:LEU:HD21	43:BN:55:VAL:HG23	1.91	0.52
46:BQ:51:ARG:O	46:BQ:54:MET:HB3	2.09	0.52
46:BQ:63:LYS:HG3	46:BQ:64:ILE:N	2.24	0.52
48:BS:31:SER:OG	48:BS:32:LEU:N	2.39	0.52
48:BS:35:ILE:N	48:BS:53:SER:HB2	2.22	0.52
49:BT:13:ARG:HD3	49:BT:13:ARG:O	2.09	0.52
51:BV:38:LEU:C	51:BV:38:LEU:HD23	2.29	0.52
1:CA:101:A:O2'	1:CA:102:G:H5'	2.10	0.52
1:CA:664:G:P	18:CR:64:ARG:HH21	2.33	0.52
2:CB:109:SER:O	2:CB:112:VAL:N	2.42	0.52
7:CG:15:ASP:OD2	7:CG:16:LEU:N	2.39	0.52
8:CH:137:VAL:HG12	8:CH:138:TRP:N	2.24	0.52
12:CL:50:SER:O	12:CL:51:ALA:HB2	2.09	0.52
12:CL:32:PHE:CB	12:CL:84:LEU:HD21	2.33	0.52
14:CN:29:ARG:HD3	14:CN:40:CYS:HB2	1.91	0.52
18:CR:19:LYS:O	18:CR:20:ALA:HB2	2.09	0.52
26:D1:27:GLU:HB2	26:D1:33:LYS:O	2.10	0.52
28:D3:8:LEU:HD22	28:D3:9:VAL:N	2.25	0.52
30:D5:20:ARG:CB	30:D5:23:HIS:HD2	2.19	0.52
34:DA:1662:C:O2'	34:DA:1663:C:H5'	2.10	0.52
34:DA:1831:G:H2'	34:DA:1832:C:H6	1.75	0.52
34:DA:2101:G:C6	34:DA:2102:U:C5	2.98	0.52
34:DA:2201:C:H2'	34:DA:2202:C:C6	2.45	0.52
34:DA:2360:A:O2'	34:DA:2361:A:P	2.68	0.52
34:DA:2408:U:H2'	34:DA:2409:G:C8	2.44	0.52
34:DA:2649:U:H2'	34:DA:2650:U:C6	2.45	0.52
34:DA:680:G:H2'	34:DA:681:G:H8	1.74	0.52
37:DD:77:ALA:CB	37:DD:97:TYR:HA	2.40	0.52
38:DE:7:VAL:HA	38:DE:196:VAL:HG22	1.92	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DG:11:TYR:HA	40:DG:15:VAL:CG2	2.39	0.52
48:DS:98:VAL:O	48:DS:99:LYS:HD3	2.09	0.52
49:DT:132:LYS:C	49:DT:134:GLU:H	2.13	0.52
50:DU:95:LEU:O	50:DU:98:LEU:HG	2.10	0.52
1:AA:1457:G:C2	1:AA:1458:G:C8	2.97	0.52
1:AA:818:G:H3'	1:AA:819:A:C5'	2.40	0.52
2:AB:158:LEU:H	2:AB:158:LEU:CD1	2.20	0.52
4:AD:170:VAL:HG22	4:AD:171:GLY:N	2.25	0.52
7:AG:102:ARG:HG2	7:AG:106:GLN:NE2	2.23	0.52
7:AG:15:ASP:OD2	7:AG:44:TYR:OH	2.27	0.52
8:AH:103:VAL:HG11	8:AH:109:ILE:O	2.08	0.52
9:AI:17:VAL:HA	9:AI:63:ILE:HG13	1.90	0.52
11:AK:62:GLN:O	11:AK:65:ALA:N	2.42	0.52
13:AM:75:ALA:HB1	13:AM:79:LYS:HE3	1.92	0.52
14:AN:26:ARG:NH1	14:AN:47:LEU:HD21	2.25	0.52
16:AP:67:THR:HB	16:AP:70:ALA:HB2	1.90	0.52
19:AS:5:LEU:HG	19:AS:10:PHE:HD1	1.70	0.52
34:BA:1591:G:O2'	34:BA:1592:C:H5'	2.09	0.52
34:BA:1821:A:H2'	34:BA:1822:G:C5'	2.39	0.52
26:B1:18:ILE:HD13	34:BA:188:G:OP1	2.09	0.52
31:B6:27:LYS:HE3	34:BA:2285:C:C5	2.44	0.52
34:BA:271(A):A:N7	34:BA:271(W):G:N2	2.57	0.52
34:BA:2779:U:H4'	34:BA:2780:G:O5'	2.09	0.52
34:BA:422:A:H2'	34:BA:423:A:C8	2.45	0.52
34:BA:585:G:H2'	34:BA:1251:C:H42	1.74	0.52
34:BA:633:A:C2'	34:BA:634:C:H5'	2.39	0.52
34:BA:729:G:H2'	34:BA:1775:U:O2	2.08	0.52
34:BA:86:C:OP1	54:BY:32:PRO:HD2	2.09	0.52
35:BB:52:A:HO2'	35:BB:53:A:H8	1.57	0.52
29:B4:5:ILE:CB	40:BG:67:LYS:HE2	2.39	0.52
40:BG:68:PRO:HB2	40:BG:90:LEU:HG	1.91	0.52
43:BN:74:ARG:HH12	43:BN:101:HIS:CG	2.27	0.52
34:BA:528:A:C5'	43:BN:114:ARG:HH12	2.21	0.52
43:BN:66:LYS:HB3	43:BN:70:LYS:CB	2.40	0.52
44:BO:121:VAL:HG12	44:BO:122:LEU:N	2.24	0.52
54:BY:26:LYS:O	54:BY:27:VAL:O	2.27	0.52
54:BY:89:PHE:C	54:BY:90:LEU:HD23	2.30	0.52
1:CA:389:A:H2'	1:CA:390:C:O4'	2.09	0.52
1:CA:89:C:H3'	1:CA:90:U:H5'	1.90	0.52
6:CF:91:VAL:CG1	6:CF:92:LYS:N	2.73	0.52
7:CG:30:ILE:HD13	7:CG:105:VAL:HG22	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:48:TYR:HB2	8:CH:60:ARG:O	2.08	0.52
11:CK:15:ALA:HA	11:CK:76:GLY:O	2.10	0.52
15:CO:82:ILE:C	15:CO:82:ILE:HD13	2.29	0.52
18:CR:59:SER:H	18:CR:62:GLU:CD	2.13	0.52
26:D1:82:LEU:CG	26:D1:83:GLU:N	2.73	0.52
34:DA:1257:C:H2'	34:DA:1258:C:C6	2.44	0.52
34:DA:1656:C:H2'	34:DA:1657:C:C6	2.44	0.52
34:DA:2189:U:C2'	34:DA:2190:G:H5''	2.39	0.52
34:DA:2392:A:H2'	34:DA:2393:A:O4'	2.10	0.52
34:DA:2605:U:H2'	34:DA:2606:C:C6	2.45	0.52
34:DA:271(A):A:N7	34:DA:271(W):G:N2	2.57	0.52
34:DA:2855:C:H2'	34:DA:2856:C:C6	2.44	0.52
34:DA:314:A:O2'	34:DA:315:G:H5'	2.09	0.52
34:DA:768:G:O2'	34:DA:769:G:H5'	2.10	0.52
34:DA:875:G:H4'	55:DZ:170:THR:CG2	2.40	0.52
34:DA:878:A:H2'	34:DA:879:G:H5'	1.92	0.52
34:DA:934:G:N3	34:DA:934:G:H2'	2.25	0.52
37:DD:4:LYS:HZ2	37:DD:20:ASP:HA	1.72	0.52
38:DE:119:ARG:HG2	38:DE:160:TYR:CB	2.40	0.52
39:DF:2:LYS:HG3	39:DF:25:PRO:O	2.08	0.52
40:DG:41:GLN:HG2	40:DG:155:MET:HG2	1.91	0.52
44:DO:10:VAL:HG21	44:DO:16:ALA:O	2.08	0.52
45:DP:96:THR:O	45:DP:100:LEU:HD22	2.09	0.52
47:DR:4:LEU:HD22	47:DR:4:LEU:O	2.10	0.52
48:DS:67:ARG:O	48:DS:70:GLY:N	2.40	0.52
49:DT:78:LEU:O	49:DT:79:HIS:ND1	2.43	0.52
43:DN:40:PRO:C	50:DU:64:ARG:NH2	2.63	0.52
51:DV:38:LEU:HD23	51:DV:38:LEU:C	2.29	0.52
51:DV:90:PRO:CD	51:DV:91:TYR:H	2.21	0.52
54:DY:77:PRO:O	54:DY:78:ALA:CB	2.58	0.52
55:DZ:42:VAL:HG13	55:DZ:43:GLU:N	2.24	0.52
1:AA:1300:G:H1'	1:AA:1301:U:H5	1.73	0.52
1:AA:1332:A:H2'	1:AA:1333:A:H8	1.72	0.52
1:AA:1288:A:O4'	1:AA:1353:G:H4'	2.09	0.52
1:AA:452:A:O2'	1:AA:453:A:H8	1.93	0.52
1:AA:662:G:H2'	1:AA:663:A:H8	1.75	0.52
1:AA:818:G:H3'	1:AA:819:A:H5'	1.92	0.52
2:AB:88:ALA:HB2	2:AB:219:VAL:CG1	2.39	0.52
3:AC:175:LEU:HD21	3:AC:201:TYR:CD2	2.45	0.52
4:AD:73:ARG:HD2	4:AD:77:ASN:HD21	1.74	0.52
5:AE:32:VAL:O	5:AE:43:LEU:HD12	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:15:ASP:HB3	7:AG:19:GLY:CA	2.39	0.52
27:B2:41:ILE:O	27:B2:42:GLY:O	2.27	0.52
32:B7:31:LEU:O	32:B7:32:LYS:C	2.48	0.52
34:BA:1053:C:N4	34:BA:1107:G:H22	2.08	0.52
34:BA:1230:C:H2'	34:BA:1231:G:C8	2.45	0.52
34:BA:1431:U:O2'	34:BA:1432:C:H5'	2.10	0.52
34:BA:2069:G:C2'	34:BA:2070:G:H5'	2.40	0.52
34:BA:2348:U:H2'	34:BA:2349:G:H5'	1.90	0.52
34:BA:2443:C:O2'	34:BA:2444:G:H5'	2.09	0.52
34:BA:30:G:H2'	34:BA:31:C:H6	1.72	0.52
34:BA:649:G:H2'	34:BA:650:C:C6	2.45	0.52
34:BA:661:C:O2'	34:BA:662:G:H5'	2.09	0.52
34:BA:729:G:C4	34:BA:1775:U:C2	2.97	0.52
35:BB:61:G:O2'	35:BB:62:C:H5'	2.09	0.52
35:BB:87:G:C3'	35:BB:88:C:H5''	2.39	0.52
37:BD:27:THR:O	37:BD:28:GLU:HB2	2.10	0.52
38:BE:60:ASN:OD1	38:BE:62:PRO:CD	2.56	0.52
42:BI:38:LEU:HB2	42:BI:40:THR:HG23	1.91	0.52
42:BI:88:ILE:CG2	42:BI:89:TYR:H	2.19	0.52
43:BN:19:GLU:HB2	43:BN:59:LYS:HB2	1.92	0.52
44:BO:76:ALA:HB3	49:BT:75:ILE:HD12	1.91	0.52
45:BP:108:LYS:C	45:BP:110:TYR:N	2.63	0.52
45:BP:71:VAL:HG13	45:BP:72:PRO:CD	2.40	0.52
46:BQ:140:ALA:O	55:BZ:53:ILE:HB	2.10	0.52
49:BT:128:GLU:O	49:BT:130:ALA:N	2.41	0.52
49:BT:78:LEU:C	49:BT:79:HIS:ND1	2.62	0.52
53:BX:70:LEU:HD12	53:BX:71:GLY:H	1.73	0.52
53:BX:53:LYS:N	53:BX:80:ILE:HG22	2.24	0.52
34:BA:106:C:C1'	54:BY:2:ARG:HE	2.18	0.52
55:BZ:10:ARG:NH2	55:BZ:26:GLY:O	2.43	0.52
1:CA:33:A:H2'	1:CA:34:C:H6	1.75	0.52
1:CA:411:A:C6	1:CA:429:U:C5	2.98	0.52
1:CA:659:U:C2'	1:CA:660:G:H5'	2.39	0.52
2:CB:162:ILE:O	2:CB:185:ILE:HG12	2.09	0.52
3:CC:58:GLU:N	3:CC:65:ALA:HB3	2.23	0.52
16:CP:28:ARG:NH1	16:CP:28:ARG:HG2	2.23	0.52
18:CR:58:LEU:HB3	18:CR:62:GLU:HB2	1.92	0.52
19:CS:39:THR:CG2	19:CS:40:ILE:N	2.72	0.52
20:CT:97:ALA:O	20:CT:99:LEU:N	2.36	0.52
22:CV:68:C:H2'	22:CV:69:C:H6	1.75	0.52
26:D1:12:PRO:HD2	26:D1:13:ILE:H	1.75	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D2:35:LEU:H	27:D2:35:LEU:CD2	2.20	0.52
28:D3:8:LEU:HD13	28:D3:31:LEU:HA	1.90	0.52
31:D6:20:ASN:HD22	31:D6:21:TYR:N	2.02	0.52
34:DA:1035:U:H2'	34:DA:1036:G:C8	2.45	0.52
34:DA:1357:U:H2'	34:DA:1358:G:O4'	2.09	0.52
34:DA:1607:C:H4'	34:DA:1608:A:O5'	2.09	0.52
34:DA:1980:G:O2'	34:DA:1982:C:OP2	2.26	0.52
31:D6:27:LYS:HE3	34:DA:2285:C:C5	2.45	0.52
34:DA:2312:U:O2'	40:DG:71:THR:HG21	2.09	0.52
34:DA:2348:U:O2'	34:DA:2349:G:H5''	2.10	0.52
34:DA:2626:C:H2'	34:DA:2627:G:O4'	2.09	0.52
34:DA:559:G:H22	50:DU:49:HIS:CD2	2.27	0.52
35:DB:55:U:O2'	35:DB:56:G:H5'	2.09	0.52
34:DA:2178:C:H4'	36:DC:46:LYS:HZ3	1.74	0.52
36:DC:89:ALA:HB2	36:DC:153:ILE:CA	2.39	0.52
34:DA:1993:U:H4'	38:DE:128:SER:HB3	1.91	0.52
38:DE:201:THR:HG21	38:DE:203:LYS:HB3	1.92	0.52
39:DF:169:ASN:OD1	39:DF:169:ASN:O	2.27	0.52
40:DG:135:LEU:HD22	40:DG:155:MET:CE	2.40	0.52
43:DN:39:ARG:HE	43:DN:41:ASP:CG	2.13	0.52
45:DP:64:LYS:O	45:DP:65:ARG:C	2.45	0.52
49:DT:90:GLN:HE22	49:DT:124:ASP:CG	2.13	0.52
49:DT:72:VAL:CG1	49:DT:73:GLU:N	2.72	0.52
50:DU:10:ARG:O	50:DU:11:ARG:C	2.47	0.52
54:DY:95:LYS:CB	54:DY:100:ALA:HA	2.32	0.52
55:DZ:20:ARG:HG3	55:DZ:20:ARG:HH11	1.75	0.52
1:AA:105:G:H2'	1:AA:106:C:C6	2.45	0.52
1:AA:585:G:C6	1:AA:586:C:C4	2.98	0.52
1:AA:639:G:O2'	1:AA:640:A:H5'	2.10	0.52
2:AB:109:SER:O	2:AB:112:VAL:N	2.42	0.52
2:AB:30:ARG:HH21	2:AB:194:PRO:HG2	1.73	0.52
4:AD:104:VAL:HG12	4:AD:105:VAL:N	2.23	0.52
5:AE:71:LEU:HD11	5:AE:114:GLY:CA	2.40	0.52
5:AE:42:GLY:HA3	5:AE:66:MET:HG2	1.91	0.52
5:AE:57:LYS:O	5:AE:61:TYR:CD2	2.63	0.52
8:AH:29:SER:HB3	8:AH:32:LYS:HB2	1.90	0.52
2:AB:178:ARG:HG3	8:AH:72:PRO:N	2.24	0.52
9:AI:16:ARG:O	9:AI:63:ILE:HG23	2.10	0.52
11:AK:41:THR:HG22	11:AK:42:TRP:N	2.25	0.52
27:B2:30:ARG:HG3	27:B2:30:ARG:NH1	2.21	0.52
28:B3:19:GLN:O	28:B3:22:ALA:HB3	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B3:38:GLU:O	28:B3:40:THR:HG23	2.10	0.52
31:B6:32:ASN:CG	31:B6:33:LYS:N	2.62	0.52
34:BA:1331:A:O2'	34:BA:1332:G:H5''	2.10	0.52
34:BA:1496:A:H8	34:BA:1577:C:HO2'	1.54	0.52
34:BA:1742:G:N7	34:BA:1743:C:C2	2.77	0.52
34:BA:235:U:H2'	34:BA:236:C:C6	2.43	0.52
34:BA:2467:C:H2'	34:BA:2468:G:O4'	2.10	0.52
34:BA:2685:G:N3	34:BA:2725:A:C2	2.77	0.52
37:BD:109:ASP:HB2	37:BD:197:GLY:HA2	1.92	0.52
37:BD:255:LYS:CE	37:BD:255:LYS:H	2.20	0.52
38:BE:63:LEU:O	38:BE:64:LYS:C	2.47	0.52
40:BG:16:ARG:NH1	40:BG:16:ARG:HG3	2.24	0.52
41:BH:89:ILE:CD1	41:BH:129:THR:HB	2.39	0.52
41:BH:85:LYS:HE3	41:BH:141:VAL:O	2.10	0.52
42:BI:129:THR:HG21	42:BI:135:GLU:HG2	1.91	0.52
42:BI:79:ILE:CG2	42:BI:81:VAL:HG23	2.40	0.52
42:BI:9:LEU:H	42:BI:13:GLY:CA	2.12	0.52
34:BA:7:G:H4'	43:BN:13:TRP:HH2	1.75	0.52
46:BQ:75:THR:HB	46:BQ:88:GLY:CA	2.35	0.52
46:BQ:81:VAL:O	46:BQ:82:ARG:NH1	2.43	0.52
49:BT:90:GLN:HE22	49:BT:124:ASP:CG	2.13	0.52
51:BV:96:ILE:HG22	51:BV:97:LYS:N	2.24	0.52
54:BY:35:TYR:HD2	54:BY:68:HIS:CE1	2.28	0.52
55:BZ:5:LEU:HD22	55:BZ:6:LYS:HE2	1.91	0.52
1:CA:152:A:N6	1:CA:170:U:C2	2.78	0.52
1:CA:582:U:H2'	1:CA:583:A:C8	2.45	0.52
1:CA:594:G:O2'	1:CA:595:G:H5'	2.09	0.52
1:CA:639:G:O2'	1:CA:640:A:H5'	2.09	0.52
4:CD:73:ARG:HD2	4:CD:77:ASN:HD21	1.75	0.52
5:CE:18:ARG:NE	5:CE:25:ARG:HB3	2.25	0.52
6:CF:7:ASN:O	6:CF:88:VAL:HA	2.10	0.52
1:CA:954:G:C4'	13:CM:120:LYS:HG3	2.34	0.52
14:CN:48:ALA:N	14:CN:53:LEU:HD12	2.24	0.52
17:CQ:76:LEU:CG	17:CQ:77:VAL:N	2.70	0.52
20:CT:94:ALA:O	20:CT:95:ALA:CB	2.58	0.52
22:CV:65:C:H2'	22:CV:66:C:H5'	1.92	0.52
32:D7:31:LEU:O	32:D7:32:LYS:C	2.48	0.52
34:DA:1184:G:O2'	34:DA:1185:C:H5'	2.10	0.52
34:DA:585:G:H2'	34:DA:1251:C:N4	2.23	0.52
34:DA:1403:C:H2'	34:DA:1404:C:O5'	2.09	0.52
34:DA:1431:U:O2'	34:DA:1432:C:H5'	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1532:C:O2	34:DA:1532:C:C2'	2.57	0.52
34:DA:729:G:C4	34:DA:1775:U:O2	2.62	0.52
34:DA:2532:G:H2'	34:DA:2533:A:C8	2.45	0.52
34:DA:361:G:C2'	34:DA:362:U:H5''	2.38	0.52
34:DA:587:C:O2'	34:DA:588:U:OP2	2.25	0.52
34:DA:614(A):U:H4'	34:DA:614(B):G:H5''	1.92	0.52
34:DA:795:C:H2'	34:DA:796:C:H6	1.74	0.52
34:DA:815:C:H2'	34:DA:816:C:H6	1.73	0.52
34:DA:962:G:O2'	34:DA:963:U:H5'	2.09	0.52
35:DB:52:A:HO2'	35:DB:53:A:H8	1.57	0.52
37:DD:132:PRO:HG3	37:DD:190:TYR:CE1	2.45	0.52
39:DF:40:GLN:O	39:DF:44:ARG:HG2	2.10	0.52
41:DH:76:VAL:O	41:DH:79:VAL:HG22	2.09	0.52
42:DI:33:ARG:HG2	42:DI:33:ARG:HH11	1.75	0.52
42:DI:93:THR:O	42:DI:97:ILE:HG13	2.10	0.52
43:DN:55:VAL:HG11	43:DN:127:ASP:H	1.74	0.52
1:CA:1423:G:H5'	44:DO:49:ARG:HH21	1.73	0.52
45:DP:10:PRO:CD	45:DP:11:GLY:N	2.73	0.52
45:DP:17:LYS:C	45:DP:19:VAL:HG22	2.30	0.52
38:DE:109:LYS:HE2	47:DR:2:ARG:NH1	2.25	0.52
49:DT:13:ARG:HE	49:DT:13:ARG:HA	1.75	0.52
50:DU:26:GLY:C	50:DU:28:ARG:H	2.12	0.52
51:DV:5:VAL:HG21	51:DV:36:PRO:CB	2.38	0.52
55:DZ:126:VAL:CG1	55:DZ:163:LEU:HA	2.31	0.52
1:AA:1391:U:H2'	1:AA:1392:G:H8	1.75	0.52
1:AA:1502:A:H2	1:AA:1505:G:N1	2.07	0.52
1:AA:695:A:H2'	1:AA:696:A:C8	2.45	0.52
1:AA:932:C:H5'	7:AG:4:ARG:HG2	1.92	0.52
6:AF:63:TYR:N	6:AF:63:TYR:CD2	2.78	0.52
7:AG:79:ARG:HH11	7:AG:79:ARG:HG3	1.74	0.52
8:AH:6:ILE:CG2	8:AH:85:ARG:HH12	2.23	0.52
13:AM:35:GLU:HG3	13:AM:36:LYS:HG2	1.92	0.52
17:AQ:81:ARG:CZ	17:AQ:84:LEU:HD11	2.39	0.52
18:AR:19:LYS:O	18:AR:20:ALA:HB2	2.09	0.52
19:AS:16:LEU:N	19:AS:16:LEU:HD12	2.21	0.52
19:AS:79:THR:O	19:AS:80:TYR:HB3	2.10	0.52
20:AT:81:LYS:C	20:AT:83:ARG:N	2.63	0.52
26:B1:34:THR:HG21	34:BA:388:G:OP2	2.09	0.52
28:B3:54:VAL:CG1	28:B3:55:ARG:N	2.72	0.52
34:BA:1141:U:C5'	34:BA:1142(A):A:O4'	2.58	0.52
34:BA:1865:G:H5'	34:BA:1866:C:OP2	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2292:C:H42	34:BA:2340:G:H1	1.57	0.52
34:BA:2362:G:C2'	34:BA:2363:C:H5'	2.40	0.52
34:BA:2723:C:H5''	47:BR:2:ARG:HD2	1.91	0.52
34:BA:45:C:O2'	34:BA:47:C:H5'	2.09	0.52
34:BA:635:C:H2'	34:BA:636:G:C8	2.45	0.52
34:BA:80:G:C2'	34:BA:81:G:H5'	2.39	0.52
34:BA:84:A:H5'	54:BY:9:LYS:HB3	1.91	0.52
34:BA:878:A:H2'	34:BA:879:G:H5'	1.92	0.52
39:BF:51:THR:CG2	39:BF:92:PRO:HD2	2.39	0.52
41:BH:55:PRO:CG	41:BH:56:SER:H	2.15	0.52
42:BI:114:LEU:HA	42:BI:130:TYR:HD1	1.75	0.52
45:BP:85:LEU:HD12	45:BP:120:ALA:HB3	1.90	0.52
48:BS:84:GLN:O	48:BS:85:VAL:HG13	2.09	0.52
50:BU:101:ARG:O	50:BU:102:GLU:HG2	2.09	0.52
1:CA:1106:G:H2'	1:CA:1107:C:H6	1.75	0.52
2:CB:124:SER:OG	2:CB:125:PRO:HD2	2.09	0.52
3:CC:113:ALA:HA	3:CC:116:VAL:HG23	1.91	0.52
8:CH:40:ALA:C	8:CH:42:GLU:N	2.62	0.52
11:CK:91:ARG:O	11:CK:94:ALA:HB3	2.10	0.52
12:CL:113:ARG:HH11	12:CL:113:ARG:HG2	1.74	0.52
1:CA:1228:C:H4'	13:CM:116:THR:O	2.10	0.52
15:CO:67:LEU:HD22	15:CO:78:TYR:CE1	2.45	0.52
17:CQ:68:ARG:HG2	17:CQ:68:ARG:NH1	2.24	0.52
6:CF:98:LEU:HB3	18:CR:30:ASP:HA	1.92	0.52
25:D0:53:MET:HA	25:D0:58:THR:O	2.10	0.52
27:D2:47:ASN:HD22	27:D2:47:ASN:C	2.09	0.52
30:D5:20:ARG:HB3	30:D5:23:HIS:CD2	2.41	0.52
34:DA:1187:G:H8	34:DA:1187:G:O5'	1.93	0.52
34:DA:1428:C:O2'	34:DA:1429:G:H5'	2.09	0.52
34:DA:1766:U:O2'	34:DA:1767:C:H5'	2.09	0.52
34:DA:2472:G:H2'	34:DA:2529:G:H21	1.72	0.52
34:DA:2522:U:H2'	34:DA:2523:G:H5''	1.92	0.52
34:DA:2562:U:H2'	34:DA:2563:U:H5'	1.92	0.52
34:DA:468:G:H2'	34:DA:469:G:O4'	2.09	0.52
34:DA:542:C:H2'	34:DA:543:C:OP1	2.10	0.52
37:DD:108:PRO:HB3	37:DD:143:HIS:CE1	2.45	0.52
38:DE:117:MET:HG3	38:DE:122:PHE:O	2.10	0.52
39:DF:53:THR:CG2	39:DF:56:GLU:HB2	2.24	0.52
40:DG:152:LEU:O	40:DG:153:ARG:HB2	2.10	0.52
40:DG:119:GLY:HA3	40:DG:181:ARG:HB2	1.92	0.52
42:DI:92:VAL:O	42:DI:92:VAL:HG13	2.10	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DN:126:PRO:O	43:DN:127:ASP:CB	2.54	0.52
34:DA:954:G:H5'	46:DQ:13:GLN:HG2	1.92	0.52
55:DZ:14:LYS:O	55:DZ:18:LEU:HD12	2.10	0.52
55:DZ:151:HIS:CA	55:DZ:171:ILE:HG12	2.33	0.52
1:AA:189(E):U:O2'	1:AA:189(F):U:H5'	2.10	0.52
1:AA:582:U:H2'	1:AA:583:A:C8	2.45	0.52
1:AA:818:G:C3'	1:AA:819:A:H5''	2.39	0.52
1:AA:832:C:O2'	1:AA:833:U:O5'	2.27	0.52
2:AB:112:VAL:O	2:AB:115:LEU:HB3	2.10	0.52
2:AB:178:ARG:HH22	2:AB:196:LEU:CA	2.22	0.52
2:AB:24:TRP:HD1	2:AB:24:TRP:H	1.55	0.52
2:AB:54:THR:HG23	2:AB:199:TYR:HB3	1.92	0.52
3:AC:126:ARG:O	3:AC:128:PHE:HD1	1.92	0.52
15:AO:17:ARG:NH1	15:AO:17:ARG:HG3	2.25	0.52
19:AS:6:LYS:CD	19:AS:6:LYS:N	2.73	0.52
19:AS:6:LYS:HG2	19:AS:7:LYS:CD	2.39	0.52
23:AW:23:A:H2'	23:AW:24:G:H8	1.75	0.52
27:B2:57:ILE:O	27:B2:57:ILE:HG23	2.09	0.52
34:BA:1822:G:H5'	34:BA:1822:G:C8	2.40	0.52
34:BA:1880:C:H6	34:BA:1880:C:H5'	1.75	0.52
34:BA:589:C:H2'	34:BA:590:A:H8	1.75	0.52
34:BA:977:G:O2'	34:BA:978:G:H5'	2.09	0.52
38:BE:201:THR:HG21	38:BE:203:LYS:HB3	1.91	0.52
38:BE:44:TYR:O	38:BE:45:THR:CB	2.57	0.52
39:BF:185:ASP:OD1	39:BF:188:ARG:NH1	2.39	0.52
40:BG:114:ILE:O	40:BG:116:ASP:N	2.43	0.52
41:BH:155:SER:C	41:BH:157:TYR:N	2.63	0.52
42:BI:78:THR:HA	42:BI:141:LYS:C	2.30	0.52
42:BI:81:VAL:CG1	42:BI:88:ILE:HD12	2.39	0.52
43:BN:55:VAL:HG11	43:BN:127:ASP:H	1.75	0.52
43:BN:3:THR:C	43:BN:4:TYR:CG	2.83	0.52
43:BN:42:TRP:H	50:BU:64:ARG:NH2	2.01	0.52
47:BR:24:GLN:HB2	47:BR:44:LEU:CD2	2.40	0.52
47:BR:3:HIS:O	47:BR:4:LEU:CB	2.58	0.52
49:BT:28:VAL:CG1	49:BT:46:GLU:HA	2.40	0.52
54:BY:26:LYS:HG2	54:BY:27:VAL:HG23	1.91	0.52
55:BZ:75:ASN:O	55:BZ:76:LEU:HD23	2.10	0.52
1:CA:1286:A:H2'	1:CA:1287:A:H4'	1.92	0.52
1:CA:1288:A:H2'	1:CA:1289:A:H8	1.72	0.52
1:CA:431:A:O2'	1:CA:432:A:H5'	2.10	0.52
1:CA:544:G:H2'	1:CA:545:C:C6	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:544:G:H2'	1:CA:545:C:H6	1.74	0.52
1:CA:814:A:N7	1:CA:816:A:C4	2.78	0.52
1:CA:857:C:H2'	1:CA:858:G:O4'	2.10	0.52
2:CB:97:TRP:CH2	2:CB:176:GLU:OE2	2.63	0.52
6:CF:18:GLN:HA	6:CF:21:LEU:HD23	1.92	0.52
7:CG:88:PRO:HD2	7:CG:152:ALA:HA	1.91	0.52
7:CG:70:LYS:HB3	7:CG:96:GLN:OE1	2.10	0.52
10:CJ:80:LYS:HA	10:CJ:80:LYS:HZ2	1.75	0.52
13:CM:96:LEU:C	13:CM:110:ARG:HE	2.13	0.52
1:CA:192:U:O4'	20:CT:103:GLY:HA2	2.10	0.52
26:D1:13:ILE:HG13	26:D1:14:VAL:N	2.24	0.52
34:DA:2184:G:H2'	34:DA:2185:C:C6	2.44	0.52
34:DA:2713:A:H3'	34:DA:2714:G:H5'	1.90	0.52
34:DA:2813:A:C2'	34:DA:2814:C:H5'	2.40	0.52
34:DA:422:A:H2'	34:DA:423:A:C8	2.44	0.52
35:DB:20:C:H2'	35:DB:21:G:C5'	2.38	0.52
36:DC:82:LYS:HZ2	36:DC:151:GLU:HA	1.75	0.52
37:DD:10:THR:HG23	37:DD:13:ARG:HB3	1.92	0.52
38:DE:132:HIS:HA	38:DE:135:HIS:CE1	2.44	0.52
38:DE:3:GLY:O	38:DE:4:ILE:CB	2.57	0.52
40:DG:125:PHE:HD1	40:DG:125:PHE:H	1.58	0.52
46:DQ:16:ARG:HB2	46:DQ:16:ARG:HH11	1.75	0.52
46:DQ:39:PRO:HA	46:DQ:97:VAL:O	2.10	0.52
46:DQ:8:LYS:HE3	46:DQ:9:TYR:CE1	2.44	0.52
50:DU:110:VAL:O	50:DU:114:LYS:HD2	2.10	0.52
51:DV:19:LYS:HG2	51:DV:96:ILE:CB	2.38	0.52
51:DV:26:ASP:C	51:DV:28:GLU:H	2.14	0.52
52:DW:1:MET:CE	52:DW:2:GLU:H	2.23	0.52
52:DW:48:ALA:O	52:DW:49:LYS:C	2.49	0.52
52:DW:70:TYR:N	52:DW:70:TYR:CD2	2.78	0.52
1:AA:1248:A:H2'	1:AA:1249:C:H5'	1.92	0.52
1:AA:1356:G:H2'	1:AA:1357:A:H8	1.73	0.52
1:AA:358:U:H2'	1:AA:359:U:C6	2.45	0.52
1:AA:390:C:O5'	1:AA:390:C:H6	1.93	0.52
1:AA:409:G:H5'	4:AD:25:ARG:HB2	1.91	0.52
1:AA:793:U:O2	1:AA:1516:G:H4'	2.09	0.52
1:AA:983:A:HO2'	1:AA:1049:U:HO2'	1.57	0.52
2:AB:144:ARG:O	2:AB:147:LYS:HB3	2.10	0.52
2:AB:194:PRO:O	2:AB:195:ASP:C	2.47	0.52
4:AD:9:CYS:SG	4:AD:31:CYS:SG	3.07	0.52
7:AG:26:PHE:CD2	7:AG:30:ILE:HD11	2.45	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:118:LYS:NZ	9:AI:118:LYS:CB	2.73	0.52
9:AI:44:VAL:HB	9:AI:51:ARG:HH22	1.75	0.52
9:AI:17:VAL:HG21	9:AI:80:GLY:HA3	1.92	0.52
9:AI:85:LEU:C	9:AI:85:LEU:HD12	2.31	0.52
19:AS:33:THR:OG1	19:AS:34:TRP:N	2.43	0.52
22:AV:5:G:O2'	22:AV:6:G:H5'	2.10	0.52
31:B6:51:GLU:O	31:B6:52:VAL:HB	2.10	0.52
33:B8:32:LEU:HD11	33:B8:41:ILE:CG2	2.39	0.52
34:BA:1290:C:O2'	34:BA:1291:C:H5'	2.10	0.52
34:BA:1947:C:H2'	34:BA:1948:G:C5'	2.36	0.52
26:B1:37:ILE:HG21	34:BA:2080:G:P	2.49	0.52
34:BA:2222:G:O2'	34:BA:2223:G:H5'	2.10	0.52
26:B1:31:GLY:O	34:BA:2397:G:H5'	2.10	0.52
34:BA:2617:C:C2'	34:BA:2618:G:H5'	2.40	0.52
34:BA:542:C:N4	34:BA:543:C:N4	2.57	0.52
34:BA:542:C:N3	34:BA:543:C:N4	2.58	0.52
34:BA:812:C:O2'	34:BA:813:U:H5'	2.10	0.52
34:BA:955:C:H5"	46:BQ:14:ARG:HH21	1.75	0.52
38:BE:47:VAL:O	38:BE:80:GLU:HA	2.10	0.52
40:BG:86:MET:CG	40:BG:87:PRO:HD2	2.35	0.52
40:BG:6:ALA:O	40:BG:9:ARG:N	2.43	0.52
43:BN:42:TRP:H	50:BU:64:ARG:CD	2.22	0.52
44:BO:36:GLY:HA3	44:BO:109:LYS:HG3	1.92	0.52
44:BO:85:VAL:HG12	44:BO:86:ILE:O	2.10	0.52
45:BP:122:PRO:HA	45:BP:141:ALA:O	2.09	0.52
47:BR:60:LEU:HD23	47:BR:61:HIS:N	2.25	0.52
48:BS:95:HIS:CG	48:BS:96:GLY:H	2.27	0.52
49:BT:29:ARG:HE	49:BT:84:GLN:HG3	1.74	0.52
49:BT:72:VAL:HG12	49:BT:73:GLU:N	2.25	0.52
50:BU:26:GLY:C	50:BU:28:ARG:H	2.13	0.52
55:BZ:67:LEU:HD12	55:BZ:67:LEU:N	2.24	0.52
1:CA:186:C:H5'	20:CT:78:ALA:CB	2.37	0.52
1:CA:439:A:C4	1:CA:496:A:C2	2.98	0.52
1:CA:625:G:C4	1:CA:626:U:C5	2.98	0.52
3:CC:167:TRP:O	3:CC:168:ALA:HB2	2.10	0.52
9:CI:44:VAL:HB	9:CI:51:ARG:HH22	1.75	0.52
12:CL:83:VAL:HG13	12:CL:84:LEU:N	2.25	0.52
19:CS:6:LYS:HG2	19:CS:7:LYS:CD	2.38	0.52
23:CW:23:A:H2'	23:CW:24:G:C8	2.44	0.52
23:CW:67:C:O2'	23:CW:68:C:H5'	2.10	0.52
26:D1:19:GLN:HG3	26:D1:44:PRO:CG	2.28	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D1:78:LYS:NZ	26:D1:90:ILE:O	2.43	0.52
27:D2:14:ARG:HE	27:D2:57:ILE:CB	2.22	0.52
31:D6:51:GLU:O	31:D6:52:VAL:HB	2.10	0.52
33:D8:36:LYS:O	33:D8:37:SER:O	2.26	0.52
34:DA:1344:G:H4'	34:DA:1384:A:C5	2.44	0.52
34:DA:1744:C:O2'	34:DA:1745:C:H5'	2.10	0.52
34:DA:2562:U:C2'	34:DA:2563:U:H5'	2.39	0.52
34:DA:2842:G:O2'	34:DA:2843:G:H5'	2.10	0.52
37:DD:186:HIS:HD2	37:DD:188:GLU:N	1.95	0.52
37:DD:106:ILE:CD1	37:DD:196:VAL:HG13	2.40	0.52
37:DD:35:LYS:CG	37:DD:64:ILE:N	2.66	0.52
38:DE:117:MET:HE3	38:DE:124:GLY:HA3	1.92	0.52
38:DE:169:ASN:HA	38:DE:201:THR:OG1	2.10	0.52
38:DE:3:GLY:O	38:DE:4:ILE:HB	2.10	0.52
39:DF:20:LEU:HB3	39:DF:23:ASP:HB2	1.91	0.52
40:DG:39:ILE:HD12	40:DG:39:ILE:C	2.30	0.52
45:DP:13:ASN:HD22	45:DP:13:ASN:N	2.02	0.52
45:DP:48:PRO:CG	45:DP:49:ARG:H	2.21	0.52
45:DP:50:ARG:CG	45:DP:51:PHE:N	2.73	0.52
46:DQ:39:PRO:O	46:DQ:40:ALA:HB2	2.10	0.52
46:DQ:69:PHE:CD1	46:DQ:70:PRO:HD2	2.45	0.52
48:DS:95:HIS:CG	48:DS:96:GLY:H	2.27	0.52
49:DT:17:THR:O	49:DT:17:THR:HG23	2.10	0.52
49:DT:33:LYS:NZ	49:DT:33:LYS:HA	2.24	0.52
49:DT:92:GLY:O	49:DT:93:ARG:HB3	2.09	0.52
51:DV:18:LEU:O	51:DV:19:LYS:HB2	2.10	0.52
51:DV:37:VAL:HG12	51:DV:38:LEU:N	2.25	0.52
51:DV:8:GLY:O	51:DV:10:LYS:HG3	2.10	0.52
53:DX:36:LYS:C	53:DX:38:GLU:H	2.13	0.52
55:DZ:14:LYS:O	55:DZ:17:ALA:N	2.42	0.52
1:AA:425:G:O2'	1:AA:426:G:H5'	2.09	0.51
3:AC:35:GLU:O	3:AC:39:ILE:HG13	2.10	0.51
3:AC:79:ARG:O	3:AC:79:ARG:HG3	2.09	0.51
5:AE:103:GLY:O	5:AE:104:ALA:C	2.48	0.51
5:AE:8:GLU:HA	5:AE:34:VAL:HG22	1.93	0.51
7:AG:100:ALA:O	7:AG:104:LEU:HD23	2.10	0.51
11:AK:66:LEU:O	11:AK:67:ASP:C	2.48	0.51
12:AL:113:ARG:HH11	12:AL:113:ARG:HG2	1.76	0.51
12:AL:83:VAL:HG13	12:AL:84:LEU:N	2.25	0.51
13:AM:106:ASN:O	13:AM:107:ALA:HB3	2.10	0.51
17:AQ:99:SER:O	17:AQ:100:LYS:HD3	2.09	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:15:LEU:O	19:AS:19:VAL:HG23	2.10	0.51
19:AS:66:MET:HB2	19:AS:74:PHE:CZ	2.45	0.51
26:B1:46:LEU:O	26:B1:48:LYS:N	2.43	0.51
31:B6:28:ARG:NH1	31:B6:28:ARG:HG2	2.23	0.51
34:BA:1270:C:H5''	34:BA:1271:G:O5'	2.10	0.51
34:BA:150:C:H2'	34:BA:151:C:C6	2.46	0.51
34:BA:1524:G:O2'	34:BA:1525:G:H5'	2.10	0.51
34:BA:2290:G:C8	34:BA:2290:G:H5'	2.43	0.51
34:BA:271(M):G:H2'	34:BA:271(N):U:H5''	1.92	0.51
34:BA:2827:C:H5'	34:BA:2828:C:OP2	2.10	0.51
37:BD:25:THR:HG22	37:BD:82:ILE:C	2.30	0.51
39:BF:115:ALA:O	39:BF:118:ALA:N	2.40	0.51
42:BI:68:LEU:O	42:BI:71:ILE:HG12	2.10	0.51
49:BT:65:LYS:HG3	49:BT:66:VAL:N	2.25	0.51
50:BU:10:ARG:O	50:BU:11:ARG:C	2.46	0.51
50:BU:21:ALA:HB1	50:BU:24:TYR:CD1	2.45	0.51
50:BU:87:GLY:C	50:BU:88:ILE:HG13	2.30	0.51
51:BV:32:THR:HB	51:BV:64:HIS:HE1	1.73	0.51
51:BV:66:ARG:CD	51:BV:67:GLY:N	2.73	0.51
51:BV:8:GLY:O	51:BV:10:LYS:HG3	2.10	0.51
53:BX:82:GLN:CG	53:BX:83:VAL:N	2.73	0.51
54:BY:81:LYS:HD2	54:BY:96:ILE:HB	1.92	0.51
55:BZ:143:GLY:C	55:BZ:144:LEU:HD22	2.29	0.51
55:BZ:27:VAL:HG12	55:BZ:87:ASP:HA	1.92	0.51
1:CA:335:C:H2'	1:CA:336:C:C6	2.45	0.51
2:CB:188:ALA:O	2:CB:202:PRO:HA	2.10	0.51
3:CC:70:VAL:CG1	3:CC:71:ALA:H	2.23	0.51
4:CD:112:VAL:O	4:CD:112:VAL:HG22	2.10	0.51
4:CD:4:TYR:O	4:CD:5:ILE:CB	2.59	0.51
5:CE:18:ARG:HE	5:CE:25:ARG:HB3	1.74	0.51
6:CF:14:LEU:HB3	6:CF:18:GLN:HE21	1.75	0.51
6:CF:1:MET:O	6:CF:2:ARG:HG3	2.10	0.51
6:CF:55:ASP:HB2	6:CF:86:ARG:NH1	2.21	0.51
8:CH:63:LEU:HD22	8:CH:63:LEU:N	2.25	0.51
9:CI:53:VAL:H	9:CI:54:ASP:N	2.08	0.51
19:CS:42:PRO:O	19:CS:44:MET:SD	2.68	0.51
26:D1:12:PRO:CD	26:D1:13:ILE:N	2.72	0.51
26:D1:41:ARG:NH2	34:DA:189:G:OP2	2.43	0.51
27:D2:33:MET:N	27:D2:33:MET:SD	2.83	0.51
34:DA:1680:U:O2	34:DA:1763:G:H3'	2.10	0.51
34:DA:1983:C:O2'	34:DA:1984:G:H5'	2.09	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2030:A:H4'	34:DA:2031:A:C8	2.45	0.51
33:D8:62:LEU:CD1	34:DA:242:G:H5''	2.23	0.51
34:DA:2063:C:O2	34:DA:2450:A:N1	2.43	0.51
34:DA:2777:G:C4'	34:DA:2778:A:H5'	2.39	0.51
34:DA:36:G:O2'	34:DA:37:C:H5'	2.10	0.51
34:DA:670:A:H4'	34:DA:671:C:OP1	2.10	0.51
34:DA:945:A:O3'	34:DA:946:G:H4'	2.10	0.51
35:DB:45:A:H2'	35:DB:45:A:N3	2.25	0.51
34:DA:39:C:O2	39:DF:46:ARG:NH2	2.43	0.51
40:DG:85:GLY:O	40:DG:87:PRO:HD2	2.08	0.51
44:DO:1:MET:HB2	44:DO:32:TYR:HD2	1.75	0.51
45:DP:125:VAL:O	45:DP:145:PRO:HD2	2.10	0.51
45:DP:16:ARG:HG2	45:DP:18:ARG:N	2.14	0.51
46:DQ:29:PHE:CD1	46:DQ:29:PHE:N	2.77	0.51
48:DS:77:ALA:O	48:DS:79:ALA:N	2.43	0.51
51:DV:38:LEU:HD23	51:DV:39:LEU:N	2.25	0.51
53:DX:40:LYS:C	53:DX:42:ALA:N	2.61	0.51
53:DX:76:ARG:CD	53:DX:76:ARG:O	2.58	0.51
54:DY:26:LYS:HG2	54:DY:27:VAL:HG23	1.92	0.51
55:DZ:126:VAL:HG12	55:DZ:163:LEU:CA	2.33	0.51
1:AA:101:A:O2'	1:AA:102:G:H5'	2.10	0.51
1:AA:1067:A:H1'	1:AA:1068:G:C8	2.46	0.51
1:AA:1286:A:H2'	1:AA:1287:A:H4'	1.91	0.51
1:AA:152:A:N6	1:AA:170:U:C2	2.78	0.51
1:AA:940:C:H2'	1:AA:941:G:H8	1.74	0.51
2:AB:124:SER:OG	2:AB:125:PRO:HD2	2.10	0.51
2:AB:216:SER:O	2:AB:218:ALA:N	2.43	0.51
3:AC:167:TRP:O	3:AC:168:ALA:HB2	2.10	0.51
3:AC:66:VAL:HG11	3:AC:91:LEU:CD1	2.40	0.51
7:AG:70:LYS:HB3	7:AG:96:GLN:OE1	2.11	0.51
22:AV:73:A:H5'	22:AV:73:A:C8	2.41	0.51
25:B0:20:ARG:NH1	34:BA:2357:U:OP1	2.43	0.51
34:BA:1195:G:C2'	34:BA:1196:C:H5'	2.40	0.51
34:BA:154(A):C:H5	34:BA:171:G:N1	2.06	0.51
34:BA:191:A:C2'	34:BA:192:C:H5'	2.41	0.51
30:B5:2:ALA:HA	34:BA:2015:A:O4'	2.09	0.51
34:BA:2025:C:H2'	34:BA:2026:C:C6	2.46	0.51
34:BA:2063:C:O2	34:BA:2450:A:N1	2.43	0.51
34:BA:2111:C:H5'	34:BA:2112:G:OP1	2.10	0.51
34:BA:2545:G:N3	34:BA:2565:A:H2	2.09	0.51
34:BA:265:A:H4'	34:BA:266:G:O5'	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2687:U:C2'	34:BA:2688:U:H5'	2.41	0.51
35:BB:45:A:N3	35:BB:45:A:H2'	2.23	0.51
35:BB:57:A:C4	40:BG:29:TRP:HB3	2.45	0.51
38:BE:142:GLY:C	38:BE:143:ASN:ND2	2.64	0.51
38:BE:176:ILE:HG22	38:BE:179:GLU:H	1.74	0.51
45:BP:95:VAL:HA	45:BP:99:LEU:CD2	2.33	0.51
34:BA:2467:C:H4'	46:BQ:123:HIS:CE1	2.45	0.51
50:BU:92:ARG:HB2	51:BV:11:GLN:HE21	1.73	0.51
51:BV:17:GLY:HA2	51:BV:98:GLU:O	2.10	0.51
51:BV:69:LYS:CB	51:BV:93:GLU:OE2	2.58	0.51
54:BY:49:VAL:CG1	54:BY:53:PRO:HG3	2.40	0.51
55:BZ:151:HIS:CB	55:BZ:170:THR:HA	2.24	0.51
1:CA:15:G:H4'	5:CE:24:ARG:CZ	2.38	0.51
1:CA:175:C:O2'	1:CA:176:C:H5'	2.11	0.51
1:CA:384:G:C2	1:CA:385:C:N3	2.78	0.51
1:CA:390:C:O5'	1:CA:390:C:H6	1.93	0.51
1:CA:893:C:H2'	1:CA:894:G:H8	1.75	0.51
2:CB:15:VAL:H	2:CB:16:HIS:CE1	2.28	0.51
3:CC:172:ARG:NH1	3:CC:172:ARG:HB3	2.25	0.51
3:CC:61:ALA:O	3:CC:62:ASP:HB2	2.10	0.51
5:CE:150:ARG:HB2	5:CE:150:ARG:NH1	2.25	0.51
7:CG:97:GLN:HG2	7:CG:101:LEU:CD1	2.39	0.51
9:CI:114:TYR:HD2	9:CI:114:TYR:N	2.08	0.51
14:CN:36:PHE:HD1	14:CN:37:PHE:CD2	2.29	0.51
17:CQ:68:ARG:HG3	17:CQ:68:ARG:O	2.09	0.51
27:D2:18:PRO:O	27:D2:22:GLU:N	2.34	0.51
34:DA:1181:C:O2'	34:DA:1182:A:H5'	2.10	0.51
34:DA:1247:A:OP1	39:DF:95:ARG:NH2	2.41	0.51
34:DA:1603:A:C8	34:DA:1603:A:H5'	2.44	0.51
34:DA:1697:G:H5'	34:DA:1698:A:H5''	1.92	0.51
34:DA:2307:G:N3	34:DA:2307:G:H3'	2.25	0.51
34:DA:2804:C:H2'	34:DA:2805:G:C8	2.45	0.51
34:DA:2873:A:N3	47:DR:6:SER:HB2	2.24	0.51
34:DA:849:A:C8	34:DA:850:C:C5	2.98	0.51
38:DE:61:ARG:HG3	38:DE:62:PRO:HD3	1.92	0.51
29:D4:1:MET:H1	40:DG:67:LYS:NZ	2.08	0.51
34:DA:2312:U:H4'	40:DG:71:THR:HG23	1.92	0.51
41:DH:38:SER:C	41:DH:40:GLU:H	2.13	0.51
45:DP:71:VAL:HG13	45:DP:72:PRO:CD	2.40	0.51
47:DR:54:LEU:HD23	47:DR:66:VAL:CG2	2.40	0.51
51:DV:2:PHE:CZ	51:DV:13:ARG:HD2	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DW:55:ALA:O	52:DW:56:ALA:C	2.48	0.51
52:DW:59:VAL:HG12	52:DW:60:ASN:H	1.70	0.51
54:DY:39:VAL:HG12	54:DY:40:GLU:N	2.25	0.51
1:AA:1073:U:H2'	1:AA:1074:G:C8	2.45	0.51
1:AA:1316:G:C2'	1:AA:1317:C:H5''	2.38	0.51
1:AA:1404:C:H6	1:AA:1404:C:O5'	1.94	0.51
1:AA:41:G:H2'	1:AA:42:G:H8	1.74	0.51
1:AA:625:G:C4	1:AA:626:U:C5	2.99	0.51
8:AH:119:LEU:CD1	8:AH:124:ALA:HA	2.40	0.51
8:AH:29:SER:HB3	8:AH:32:LYS:CD	2.36	0.51
2:AB:178:ARG:HD2	8:AH:71:GLY:CA	2.40	0.51
11:AK:61:ALA:HB2	11:AK:90:GLY:HA3	1.90	0.51
20:AT:33:ILE:HD12	20:AT:63:ILE:CG1	2.41	0.51
23:AW:18:G:H1	23:AW:55:U:H6	1.58	0.51
26:B1:87:PRO:CD	26:B1:88:LYS:H	2.24	0.51
30:B5:55:ARG:HH21	47:BR:33:ARG:HH22	1.57	0.51
34:BA:1257:C:C2	34:BA:1258:C:C5	2.99	0.51
34:BA:1625:C:H2'	34:BA:1626:G:C5'	2.40	0.51
34:BA:2186:G:C3'	34:BA:2187:G:H5''	2.41	0.51
34:BA:2202:C:H2'	34:BA:2203:U:H6	1.75	0.51
34:BA:483:A:H8	54:BY:47:LYS:NZ	2.07	0.51
34:BA:547:A:C8	34:BA:549:G:C6	2.98	0.51
34:BA:622:G:C2'	34:BA:623:G:H5'	2.39	0.51
34:BA:84:A:H2'	34:BA:99:U:O4	2.10	0.51
40:BG:115:ARG:CZ	40:BG:136:ARG:HG3	2.41	0.51
40:BG:56:ALA:HB2	40:BG:153:ARG:NH2	2.26	0.51
42:BI:41:GLU:O	42:BI:45:LYS:HG2	2.10	0.51
52:BW:47:VAL:HA	52:BW:50:VAL:CG1	2.40	0.51
54:BY:28:LYS:HA	54:BY:39:VAL:N	2.18	0.51
55:BZ:6:LYS:HB2	55:BZ:8:TYR:HE1	1.75	0.51
1:CA:1356:G:H2'	1:CA:1357:A:H8	1.76	0.51
1:CA:1478:C:H2'	1:CA:1479:C:C6	2.40	0.51
1:CA:243:A:C2	1:CA:246:A:C8	2.99	0.51
1:CA:828:A:H5''	1:CA:859:A:C2	2.45	0.51
2:CB:67:THR:HA	2:CB:90:MET:HE1	1.93	0.51
6:CF:63:TYR:N	6:CF:63:TYR:CD2	2.78	0.51
8:CH:86:ILE:CG2	8:CH:133:LEU:HD22	2.40	0.51
11:CK:44:SER:N	11:CK:47:VAL:HG21	2.24	0.51
11:CK:66:LEU:O	11:CK:67:ASP:C	2.48	0.51
12:CL:61:THR:OG1	12:CL:62:SER:N	2.42	0.51
13:CM:13:LYS:HA	13:CM:44:ARG:NH1	2.22	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:15:LEU:O	19:CS:19:VAL:HG23	2.11	0.51
23:CW:16:U:H4'	23:CW:16:U:OP1	2.10	0.51
26:D1:61:ARG:HG2	26:D1:61:ARG:NH1	2.22	0.51
26:D1:65:SER:OG	26:D1:66:HIS:HD2	1.92	0.51
26:D1:68:PRO:O	26:D1:71:TYR:N	2.38	0.51
30:D5:58:LEU:N	30:D5:58:LEU:HD12	2.25	0.51
34:DA:1159:U:O2'	34:DA:1160:G:H5'	2.11	0.51
34:DA:1230:C:H2'	34:DA:1231:G:C8	2.43	0.51
34:DA:1571:A:H2'	34:DA:1572:A:C8	2.45	0.51
34:DA:1695:G:H2'	34:DA:1696:G:C5'	2.40	0.51
34:DA:1865:G:H5'	34:DA:1866:C:OP2	2.10	0.51
34:DA:1876:A:H2'	34:DA:1877:A:C8	2.45	0.51
34:DA:1952:A:C6	34:DA:1953:A:N1	2.79	0.51
34:DA:201:C:C2'	34:DA:202:U:H5'	2.39	0.51
34:DA:570:G:H2'	34:DA:2030:A:N7	2.26	0.51
34:DA:2696:U:H2'	34:DA:2697:G:C8	2.44	0.51
37:DD:235:GLY:O	37:DD:237:GLU:N	2.43	0.51
37:DD:255:LYS:CE	37:DD:255:LYS:H	2.19	0.51
37:DD:44:ASN:HB3	37:DD:49:ILE:HG22	1.91	0.51
41:DH:85:LYS:HZ3	41:DH:145:ALA:HA	1.75	0.51
41:DH:18:GLU:HB2	41:DH:25:LYS:HB2	1.92	0.51
43:DN:25:ARG:HG3	43:DN:25:ARG:HH11	1.75	0.51
43:DN:39:ARG:HD3	43:DN:41:ASP:H	1.75	0.51
45:DP:108:LYS:C	45:DP:110:TYR:N	2.63	0.51
47:DR:47:PHE:O	47:DR:51:LEU:HD12	2.10	0.51
53:DX:23:GLU:HG3	53:DX:24:GLY:H	1.72	0.51
53:DX:77:LYS:HD3	53:DX:78:LYS:CD	2.33	0.51
53:DX:82:GLN:CG	53:DX:83:VAL:N	2.73	0.51
54:DY:81:LYS:HD2	54:DY:96:ILE:HB	1.92	0.51
1:AA:1090:U:O2'	1:AA:1091:U:H5'	2.10	0.51
1:AA:1508:G:H2'	1:AA:1509:C:C6	2.46	0.51
1:AA:1525:G:O2'	1:AA:1526:G:H5'	2.11	0.51
1:AA:389:A:H2'	1:AA:390:C:O4'	2.10	0.51
1:AA:650:G:O2'	1:AA:651:C:H5'	2.09	0.51
4:AD:108:LEU:HB3	4:AD:110:PHE:CE1	2.44	0.51
7:AG:25:ALA:O	7:AG:28:ASN:HB2	2.11	0.51
8:AH:6:ILE:HG12	8:AH:31:PHE:HE2	1.75	0.51
9:AI:117:HIS:CD2	9:AI:123:PRO:HA	2.44	0.51
12:AL:22:SER:C	12:AL:24:VAL:H	2.14	0.51
14:AN:29:ARG:HG3	14:AN:29:ARG:HH11	1.76	0.51
17:AQ:44:ALA:HB1	17:AQ:73:VAL:HG22	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:22:ARG:O	20:AT:25:ARG:HB3	2.10	0.51
26:B1:11:ARG:CB	26:B1:12:PRO:CD	2.88	0.51
26:B1:60:PHE:CD2	26:B1:91:LYS:HE2	2.44	0.51
26:B1:92:LYS:O	26:B1:94:LEU:N	2.42	0.51
29:B4:29:PRO:O	29:B4:31:ILE:N	2.43	0.51
31:B6:15:GLU:CG	31:B6:18:ARG:HG3	2.39	0.51
34:BA:1827:C:O2'	34:BA:1828:G:H5'	2.10	0.51
34:BA:1876:A:H2'	34:BA:1877:A:C8	2.46	0.51
34:BA:1924:C:O2'	34:BA:1925:C:H5'	2.11	0.51
34:BA:1980:G:O2'	34:BA:1982:C:OP2	2.25	0.51
34:BA:2306:C:C5	34:BA:2307:G:H1'	2.45	0.51
34:BA:2777:G:C4'	34:BA:2778:A:H5'	2.41	0.51
34:BA:2855:C:O2'	34:BA:2856:C:H5'	2.10	0.51
34:BA:721:C:H2'	34:BA:722:A:C8	2.46	0.51
38:BE:8:LYS:HG2	38:BE:192:ASN:HD22	1.75	0.51
40:BG:33:ARG:HB2	40:BG:162:THR:OG1	2.10	0.51
41:BH:18:GLU:HB2	41:BH:25:LYS:HB2	1.92	0.51
48:BS:45:GLY:O	48:BS:46:VAL:HG23	2.10	0.51
49:BT:13:ARG:HA	49:BT:13:ARG:HE	1.74	0.51
49:BT:29:ARG:HE	49:BT:84:GLN:CG	2.24	0.51
51:BV:5:VAL:HG22	51:BV:6:LYS:N	2.26	0.51
1:CA:1060:C:O2'	1:CA:1061:G:H5'	2.11	0.51
1:CA:294:U:H2'	1:CA:295:C:H6	1.75	0.51
1:CA:328:C:H4'	1:CA:329:A:O5'	2.09	0.51
1:CA:542:G:H2'	1:CA:543:C:C6	2.46	0.51
1:CA:782:A:H2'	1:CA:783:C:C5'	2.40	0.51
2:CB:98:LEU:O	2:CB:101:MET:HG3	2.11	0.51
3:CC:126:ARG:O	3:CC:128:PHE:HD1	1.93	0.51
3:CC:12:LEU:O	3:CC:16:ARG:O	2.28	0.51
4:CD:8:VAL:O	4:CD:11:LEU:HG	2.10	0.51
5:CE:42:GLY:HA3	5:CE:66:MET:HG2	1.92	0.51
7:CG:97:GLN:O	7:CG:101:LEU:HG	2.11	0.51
11:CK:15:ALA:HA	11:CK:77:MET:HA	1.92	0.51
14:CN:43:CYS:O	14:CN:46:GLU:HB2	2.10	0.51
18:CR:40:LEU:O	18:CR:43:PHE:HD1	1.93	0.51
18:CR:65:ILE:HD12	18:CR:65:ILE:C	2.29	0.51
20:CT:16:HIS:O	20:CT:19:SER:HB3	2.10	0.51
26:D1:41:ARG:HG3	26:D1:41:ARG:NH1	2.26	0.51
27:D2:47:ASN:O	27:D2:49:LYS:N	2.44	0.51
34:DA:1005:C:C2	34:DA:1143:A:C5	2.99	0.51
34:DA:1573:G:C2'	34:DA:1574:C:H5'	2.40	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1591:G:O2'	34:DA:1592:C:H5'	2.10	0.51
34:DA:1668:A:H4'	34:DA:1669:A:O5'	2.10	0.51
34:DA:1756:G:H4'	34:DA:1758:G:O4'	2.09	0.51
34:DA:1948:G:O2'	34:DA:1949:G:H5'	2.10	0.51
34:DA:2107:C:H42	34:DA:2182:G:H1	1.58	0.51
34:DA:265:A:H4'	34:DA:266:G:O5'	2.10	0.51
34:DA:524:U:H4'	34:DA:555:U:H4'	1.92	0.51
34:DA:661:C:O2'	34:DA:662:G:H5'	2.11	0.51
37:DD:136:ILE:N	37:DD:136:ILE:HD12	2.24	0.51
38:DE:79:ARG:NH1	38:DE:79:ARG:HG2	2.24	0.51
34:DA:2303:G:H1'	40:DG:132:ASN:HD22	1.75	0.51
41:DH:102:ALA:HB2	41:DH:117:PRO:CD	2.40	0.51
41:DH:106:THR:O	41:DH:107:VAL:HG13	2.10	0.51
41:DH:155:SER:C	41:DH:157:TYR:N	2.64	0.51
41:DH:87:LEU:HD12	41:DH:131:VAL:HG12	1.91	0.51
42:DI:131:LYS:HG3	42:DI:132:PRO:HA	1.93	0.51
42:DI:37:VAL:CG1	42:DI:38:LEU:N	2.74	0.51
42:DI:68:LEU:O	42:DI:71:ILE:HG12	2.10	0.51
42:DI:94:ALA:O	42:DI:98:ALA:N	2.43	0.51
47:DR:28:LEU:HD21	47:DR:114:VAL:HG12	1.92	0.51
44:DO:107:ARG:CZ	49:DT:35:LYS:HD2	2.40	0.51
51:DV:18:LEU:HD22	51:DV:18:LEU:C	2.31	0.51
52:DW:50:VAL:HG13	52:DW:51:LEU:N	2.21	0.51
1:AA:1132:C:O2'	1:AA:1133:G:H5'	2.11	0.51
1:AA:243:A:C2	1:AA:246:A:C8	2.99	0.51
1:AA:357:G:C2	1:AA:358:U:C5	2.98	0.51
1:AA:977:A:H2'	1:AA:978:A:H5'	1.91	0.51
2:AB:130:ARG:HA	2:AB:130:ARG:HE	1.76	0.51
2:AB:168:THR:HG21	2:AB:192:SER:HA	1.92	0.51
2:AB:215:LEU:O	2:AB:218:ALA:HB3	2.10	0.51
3:AC:16:ARG:CB	3:AC:16:ARG:HH11	2.21	0.51
1:AA:1190:G:OP1	3:AC:5:ILE:HG23	2.10	0.51
5:AE:139:LEU:O	5:AE:141:GLN:N	2.42	0.51
6:AF:22:GLU:HA	6:AF:22:GLU:OE2	2.10	0.51
8:AH:122:ARG:HH11	8:AH:122:ARG:CB	2.23	0.51
9:AI:96:LEU:HG	9:AI:102:LEU:HB2	1.92	0.51
9:AI:53:VAL:H	9:AI:54:ASP:N	2.08	0.51
11:AK:91:ARG:O	11:AK:94:ALA:HB3	2.10	0.51
13:AM:96:LEU:C	13:AM:110:ARG:HE	2.14	0.51
13:AM:68:GLY:O	13:AM:69:GLU:HB2	2.11	0.51
14:AN:36:PHE:HD1	14:AN:37:PHE:CD2	2.28	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:67:LEU:HD22	15:AO:78:TYR:HE1	1.76	0.51
18:AR:53:ARG:CG	18:AR:63:GLN:HE21	2.14	0.51
19:AS:40:ILE:HD13	19:AS:62:ILE:HD11	1.92	0.51
20:AT:94:ALA:O	20:AT:95:ALA:CB	2.58	0.51
21:AU:9:ARG:NH1	21:AU:22:ARG:HA	2.25	0.51
22:AV:35:A:O2'	22:AV:36:U:H5'	2.09	0.51
25:B0:31:VAL:HB	25:B0:35:ASN:HD22	1.75	0.51
34:BA:1140:C:H1'	34:BA:1143:A:N3	2.25	0.51
34:BA:1278:A:OP1	47:BR:36:THR:HG22	2.10	0.51
34:BA:1354:A:H2'	34:BA:1355:G:O4'	2.11	0.51
34:BA:1603:A:H5'	34:BA:1603:A:C8	2.46	0.51
34:BA:2031:A:C6	34:BA:2498:C:H1'	2.46	0.51
34:BA:2498:C:O2'	34:BA:2499:C:H5'	2.10	0.51
34:BA:2813:A:C2'	34:BA:2814:C:H5'	2.40	0.51
34:BA:320:A:C5	39:BF:136:THR:HG21	2.46	0.51
34:BA:709:U:H2'	34:BA:710:G:H8	1.76	0.51
37:BD:14:ARG:CG	37:BD:14:ARG:HH11	2.21	0.51
38:BE:111:ARG:CD	38:BE:160:TYR:HE1	2.23	0.51
38:BE:3:GLY:HA3	38:BE:81:ILE:HG13	1.92	0.51
39:BF:3:GLU:CB	39:BF:24:LEU:HG	2.40	0.51
29:B4:12:ALA:O	40:BG:101:ILE:HD11	2.11	0.51
43:BN:96:GLU:HG2	43:BN:97:ARG:N	2.25	0.51
44:BO:14:THR:HG21	44:BO:86:ILE:HG12	1.92	0.51
45:BP:96:THR:O	45:BP:100:LEU:HD22	2.09	0.51
51:BV:45:THR:HG22	51:BV:45:THR:O	2.11	0.51
52:BW:95:ILE:O	52:BW:95:ILE:HG13	2.11	0.51
34:BA:143:G:O4'	53:BX:38:GLU:HG3	2.10	0.51
1:CA:1321:C:C5'	1:CA:1322:C:C5'	2.77	0.51
1:CA:1466:C:O2'	1:CA:1467:G:H5'	2.10	0.51
1:CA:15:G:H4'	5:CE:24:ARG:HH12	1.75	0.51
1:CA:46:G:O2'	1:CA:365:U:H1'	2.10	0.51
3:CC:105:GLU:CG	3:CC:106:VAL:H	2.17	0.51
5:CE:59:GLY:O	5:CE:62:ALA:HB3	2.11	0.51
7:CG:15:ASP:OD2	7:CG:44:TYR:OH	2.29	0.51
8:CH:40:ALA:C	8:CH:42:GLU:H	2.13	0.51
9:CI:96:LEU:HG	9:CI:102:LEU:HB2	1.92	0.51
9:CI:45:ALA:O	9:CI:78:LYS:HE3	2.10	0.51
10:CJ:34:VAL:HG12	10:CJ:35:SER:N	2.24	0.51
20:CT:81:LYS:C	20:CT:83:ARG:N	2.63	0.51
20:CT:89:ARG:HB2	20:CT:104:LEU:CD1	2.40	0.51
25:D0:27:GLU:HG3	25:D0:67:VAL:O	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D1:87:PRO:CD	26:D1:88:LYS:N	2.73	0.51
28:D3:59:VAL:CG1	28:D3:60:GLU:N	2.74	0.51
29:D4:5:ILE:O	29:D4:6:HIS:O	2.28	0.51
34:DA:1331:A:C2'	34:DA:1332:G:H5''	2.41	0.51
34:DA:1771:C:O2'	34:DA:1786:A:H8	1.93	0.51
34:DA:1822:G:H5'	34:DA:1822:G:C8	2.35	0.51
34:DA:2306:C:C5	34:DA:2307:G:H1'	2.46	0.51
34:DA:2364:C:O2'	34:DA:2365:G:H5'	2.11	0.51
34:DA:2516:G:H2'	34:DA:2517:C:C6	2.45	0.51
34:DA:2691:C:H6	34:DA:2691:C:H5'	1.75	0.51
34:DA:318:C:H2'	34:DA:319:C:H6	1.75	0.51
34:DA:645:C:O2	34:DA:645:C:H3'	2.10	0.51
34:DA:977:G:O2'	34:DA:978:G:H5'	2.09	0.51
37:DD:231:HIS:CE1	37:DD:232:PRO:HD2	2.46	0.51
37:DD:27:THR:O	37:DD:28:GLU:HB2	2.10	0.51
42:DI:91:SER:HB2	42:DI:119:PRO:O	2.10	0.51
34:DA:661:C:C4'	45:DP:18:ARG:HG2	2.41	0.51
49:DT:6:LEU:HD23	49:DT:6:LEU:C	2.30	0.51
55:DZ:129:SER:O	55:DZ:131:ARG:N	2.44	0.51
55:DZ:151:HIS:HB3	55:DZ:170:THR:CA	2.29	0.51
55:DZ:29:TYR:HE2	55:DZ:87:ASP:HB2	1.75	0.51
55:DZ:56:VAL:HG22	55:DZ:70:LEU:HD21	1.91	0.51
1:AA:1221:G:OP1	19:AS:36:ARG:HD3	2.10	0.51
1:AA:1226:C:H2'	13:AM:103:THR:OG1	2.10	0.51
7:AG:23:VAL:HG12	7:AG:27:ILE:HD11	1.93	0.51
8:AH:36:LEU:O	8:AH:37:ARG:C	2.49	0.51
9:AI:41:VAL:O	9:AI:41:VAL:HG12	2.11	0.51
16:AP:20:VAL:HG22	16:AP:21:VAL:H	1.76	0.51
18:AR:58:LEU:HB3	18:AR:62:GLU:HB2	1.91	0.51
18:AR:65:ILE:HD12	18:AR:65:ILE:C	2.30	0.51
27:B2:35:LEU:HD23	27:B2:35:LEU:N	2.26	0.51
30:B5:20:ARG:CB	30:B5:23:HIS:HD2	2.23	0.51
34:BA:1456:G:H2'	34:BA:1457:A:H8	1.75	0.51
34:BA:1744:C:O2'	34:BA:1745:C:H5'	2.10	0.51
34:BA:1839:G:H5'	34:BA:1839:G:H8	1.75	0.51
34:BA:2364:C:H2'	34:BA:2365:G:O4'	2.10	0.51
34:BA:2762:G:C3'	34:BA:2763:G:H5''	2.40	0.51
34:BA:36:G:O2'	34:BA:37:C:H5'	2.11	0.51
34:BA:686:G:H21	34:BA:788:A:H61	1.59	0.51
38:BE:120:TRP:CD1	38:BE:155:LYS:HB3	2.46	0.51
41:BH:130:ARG:O	41:BH:131:VAL:HG23	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BN:9:VAL:HG12	43:BN:10:GLU:N	2.14	0.51
46:BQ:20:ALA:HA	46:BQ:98:LYS:HB3	1.92	0.51
49:BT:109:GLU:O	49:BT:113:LYS:HG3	2.09	0.51
50:BU:15:LYS:HG3	50:BU:16:LYS:N	2.26	0.51
50:BU:95:LEU:CD1	51:BV:11:GLN:HG3	2.40	0.51
52:BW:79:GLY:CA	52:BW:100:THR:HG23	2.40	0.51
54:BY:14:LEU:HD12	54:BY:15:VAL:N	2.25	0.51
1:CA:1198:G:H2'	1:CA:1199:U:C6	2.46	0.51
1:CA:160:A:H2'	1:CA:161:A:O4'	2.11	0.51
1:CA:224:C:H2'	1:CA:225:C:C6	2.45	0.51
1:CA:336:C:O2'	1:CA:337:C:H5'	2.11	0.51
1:CA:590:C:H2'	1:CA:591:U:C6	2.45	0.51
4:CD:31:CYS:SG	4:CD:31:CYS:O	2.68	0.51
6:CF:73:ASN:O	6:CF:74:ASP:C	2.49	0.51
9:CI:48:GLU:N	9:CI:49:PRO:CD	2.74	0.51
11:CK:41:THR:HG22	11:CK:42:TRP:N	2.25	0.51
13:CM:75:ALA:O	13:CM:78:ILE:N	2.44	0.51
13:CM:75:ALA:HB1	13:CM:79:LYS:HE3	1.92	0.51
16:CP:74:LEU:HD22	16:CP:79:VAL:HG21	1.92	0.51
30:D5:20:ARG:NH1	52:DW:15:ARG:NE	2.58	0.51
31:D6:27:LYS:HD2	34:DA:2285:C:OP2	2.10	0.51
34:DA:1109:C:H5	34:DA:1110:G:C5	2.29	0.51
34:DA:2065:C:H2'	34:DA:2066:C:C6	2.45	0.51
34:DA:2111:C:H5'	34:DA:2112:G:OP1	2.11	0.51
34:DA:440:G:H2'	34:DA:441:U:C6	2.45	0.51
34:DA:580:C:H2'	34:DA:581:C:C6	2.46	0.51
39:DF:153:SER:OG	39:DF:190:GLU:N	2.40	0.51
41:DH:153:LYS:CB	41:DH:154:PRO:CD	2.87	0.51
42:DI:15:VAL:HG23	42:DI:16:GLY:N	2.26	0.51
43:DN:96:GLU:HG2	43:DN:97:ARG:N	2.24	0.51
47:DR:87:TYR:O	47:DR:89:ASP:N	2.41	0.51
49:DT:65:LYS:NZ	49:DT:66:VAL:H	2.09	0.51
49:DT:6:LEU:HD23	49:DT:6:LEU:O	2.11	0.51
53:DX:14:SER:O	53:DX:15:GLU:C	2.49	0.51
55:DZ:24:LEU:HD23	55:DZ:24:LEU:C	2.30	0.51
1:AA:1170:A:H2'	1:AA:1171:G:H5'	1.93	0.51
1:AA:1207:G:O2'	1:AA:1208:C:H5'	2.11	0.51
1:AA:590:C:H2'	1:AA:591:U:C6	2.45	0.51
1:AA:858:G:O6	1:AA:869:G:H3'	2.10	0.51
1:AA:93:G:C2'	1:AA:96:U:H5'	2.40	0.51
3:AC:53:ALA:O	3:AC:54:ARG:CB	2.54	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:28:PHE:O	5:AE:47:LYS:HA	2.10	0.51
5:AE:55:VAL:O	5:AE:58:ALA:HB3	2.10	0.51
6:AF:73:ASN:O	6:AF:74:ASP:C	2.49	0.51
1:AA:877:C:H5''	8:AH:88:LYS:HD2	1.92	0.51
15:AO:25:THR:O	15:AO:26:GLU:C	2.49	0.51
15:AO:69:TYR:CE2	15:AO:73:GLU:HG3	2.46	0.51
19:AS:36:ARG:HB2	19:AS:72:GLY:HA2	1.92	0.51
26:B1:65:SER:OG	26:B1:66:HIS:HD2	1.93	0.51
28:B3:8:LEU:HD22	28:B3:9:VAL:N	2.26	0.51
30:B5:20:ARG:HH12	52:BW:15:ARG:NH1	2.06	0.51
34:BA:135:G:O2'	34:BA:136:G:H5'	2.10	0.51
34:BA:1396:U:O2	34:BA:1396:U:C2'	2.56	0.51
25:B0:2:ALA:HB1	34:BA:2494:G:P	2.51	0.51
34:BA:2636:U:C2'	34:BA:2637:U:C5'	2.88	0.51
34:BA:364:C:C2'	34:BA:365:C:H5''	2.40	0.51
34:BA:604:G:H2'	34:BA:605:C:C6	2.43	0.51
34:BA:795:C:H2'	34:BA:796:C:H6	1.75	0.51
37:BD:106:ILE:HD13	37:BD:107:ALA:N	2.25	0.51
38:BE:48:GLN:NE2	38:BE:78:LEU:HD12	2.25	0.51
38:BE:70:ALA:O	38:BE:72:VAL:N	2.44	0.51
41:BH:55:PRO:HG2	41:BH:56:SER:N	2.21	0.51
44:BO:71:ARG:HB2	44:BO:75:SER:O	2.11	0.51
45:BP:100:LEU:O	45:BP:101:VAL:C	2.49	0.51
46:BQ:34:LEU:HD11	46:BQ:129:THR:HB	1.92	0.51
50:BU:95:LEU:O	50:BU:98:LEU:HG	2.11	0.51
51:BV:26:ASP:C	51:BV:28:GLU:H	2.14	0.51
53:BX:56:THR:C	53:BX:57:LEU:CD1	2.77	0.51
54:BY:75:ILE:HD12	54:BY:76:CYS:O	2.11	0.51
55:BZ:127:LYS:HD3	55:BZ:162:GLU:OE1	2.11	0.51
1:CA:1254:C:H2'	1:CA:1255:G:C8	2.46	0.51
1:CA:1333:A:H2'	1:CA:1334:G:O4'	2.11	0.51
1:CA:1332:A:H2'	1:CA:1333:A:H8	1.76	0.51
1:CA:60:A:O3'	20:CT:10:LEU:HD21	2.11	0.51
1:CA:687:A:N3	1:CA:688:G:H1'	2.25	0.51
4:CD:28:SER:HB3	4:CD:29:PRO:HD2	1.93	0.51
5:CE:102:ALA:HB1	5:CE:106:PRO:CG	2.41	0.51
8:CH:6:ILE:H	8:CH:6:ILE:CD1	2.23	0.51
9:CI:17:VAL:HG21	9:CI:80:GLY:HA3	1.92	0.51
9:CI:85:LEU:HD12	9:CI:85:LEU:C	2.31	0.51
10:CJ:47:PHE:HE1	10:CJ:63:PHE:HD2	1.57	0.51
11:CK:58:PRO:O	11:CK:61:ALA:HB3	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:35:GLU:HG3	13:CM:36:LYS:HG2	1.93	0.51
13:CM:5:ALA:O	13:CM:6:GLY:C	2.48	0.51
18:CR:56:THR:O	18:CR:58:LEU:HD12	2.10	0.51
20:CT:26:ASN:HA	20:CT:29:LYS:HG2	1.92	0.51
34:DA:85:G:N3	34:DA:103:A:C2	2.79	0.51
34:DA:2660:A:H3'	34:DA:2661:G:O4'	2.11	0.51
37:DD:174:ILE:HD12	37:DD:174:ILE:N	2.15	0.51
39:DF:3:GLU:HB2	39:DF:20:LEU:N	2.15	0.51
40:DG:135:LEU:HD22	40:DG:155:MET:HE1	1.93	0.51
40:DG:71:THR:N	40:DG:89:GLY:O	2.37	0.51
42:DI:123:LEU:CD2	42:DI:142:VAL:HB	2.41	0.51
43:DN:15:LEU:HD21	43:DN:55:VAL:HG23	1.92	0.51
44:DO:13:ASN:ND2	44:DO:97:ARG:H	2.06	0.51
46:DQ:20:ALA:HA	46:DQ:98:LYS:HB3	1.92	0.51
46:DQ:39:PRO:HB3	46:DQ:99:PRO:HD3	1.92	0.51
47:DR:18:LEU:HD11	47:DR:22:ARG:NE	2.25	0.51
49:DT:30:VAL:HG11	49:DT:84:GLN:HG2	1.92	0.51
51:DV:89:GLN:HE21	51:DV:90:PRO:CD	2.17	0.51
54:DY:75:ILE:HD11	54:DY:79:CYS:N	2.25	0.51
55:DZ:118:GLN:N	55:DZ:173:ALA:O	2.40	0.51
1:AA:1074:G:H2'	1:AA:1075:C:C6	2.46	0.51
1:AA:1068:G:N3	1:AA:1191:A:C2	2.79	0.51
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.46	0.51
1:AA:411:A:O2'	1:AA:412:A:H5'	2.10	0.51
1:AA:430:A:O2'	1:AA:431:A:H5'	2.10	0.51
1:AA:781:A:H2'	1:AA:782:A:H5'	1.93	0.51
1:AA:802:A:H2'	1:AA:803:G:O4'	2.11	0.51
1:AA:893:C:H2'	1:AA:894:G:H8	1.76	0.51
2:AB:15:VAL:H	2:AB:16:HIS:CE1	2.28	0.51
2:AB:178:ARG:NH2	2:AB:196:LEU:HA	2.26	0.51
2:AB:184:VAL:O	2:AB:198:ASP:HB2	2.11	0.51
2:AB:67:THR:HA	2:AB:90:MET:HE1	1.92	0.51
3:AC:14:ILE:CG1	3:AC:15:THR:N	2.58	0.51
4:AD:60:GLU:O	4:AD:63:LYS:HB3	2.10	0.51
7:AG:97:GLN:HG2	7:AG:101:LEU:CD1	2.39	0.51
13:AM:93:ARG:HA	13:AM:93:ARG:HE	1.76	0.51
16:AP:19:ILE:HG22	16:AP:36:ILE:HD11	1.92	0.51
17:AQ:52:LYS:HD2	17:AQ:52:LYS:N	2.25	0.51
18:AR:59:SER:H	18:AR:62:GLU:CD	2.13	0.51
19:AS:10:PHE:CZ	19:AS:70:LYS:HE2	2.46	0.51
20:AT:24:LEU:HD13	20:AT:24:LEU:C	2.30	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:75:ASN:O	20:AT:76:ALA:C	2.48	0.51
23:AY:29:G:H2'	23:AY:30:G:C8	2.40	0.51
26:B1:62:VAL:C	26:B1:64:ALA:N	2.61	0.51
27:B2:12:GLU:C	27:B2:14:ARG:N	2.64	0.51
34:BA:1357:U:H2'	34:BA:1358:G:O4'	2.11	0.51
34:BA:2230:G:H2'	34:BA:2231:C:C6	2.44	0.51
34:BA:2307:G:H3'	34:BA:2307:G:N3	2.26	0.51
34:BA:365:C:H2'	34:BA:366:C:O4'	2.10	0.51
34:BA:814:C:H5''	51:BV:86:GLY:CA	2.37	0.51
28:B3:13:ILE:HD12	34:BA:989:G:N7	2.25	0.51
34:BA:1568:G:H21	37:BD:58:HIS:CE1	2.28	0.51
38:BE:61:ARG:HG3	38:BE:62:PRO:HD3	1.93	0.51
40:BG:129:GLY:O	40:BG:130:ASN:CB	2.59	0.51
40:BG:16:ARG:HB2	40:BG:17:PRO:CD	2.41	0.51
40:BG:47:LYS:HD3	40:BG:81:LYS:HD2	1.92	0.51
42:BI:110:ASP:HB2	42:BI:113:ARG:CB	2.31	0.51
45:BP:90:ARG:HD3	45:BP:90:ARG:O	2.11	0.51
45:BP:97:PRO:O	45:BP:99:LEU:N	2.40	0.51
34:BA:870:A:H5''	46:BQ:7:MET:CB	2.41	0.51
47:BR:54:LEU:HD23	47:BR:66:VAL:CG2	2.41	0.51
48:BS:77:ALA:O	48:BS:79:ALA:N	2.43	0.51
48:BS:24:LEU:CB	48:BS:85:VAL:HG12	2.41	0.51
48:BS:89:ARG:CA	48:BS:89:ARG:NE	2.47	0.51
49:BT:92:GLY:O	49:BT:94:ALA:N	2.36	0.51
51:BV:44:LYS:C	51:BV:46:VAL:H	2.14	0.51
53:BX:76:ARG:O	53:BX:76:ARG:HD3	2.11	0.51
1:CA:1483:A:H2'	1:CA:1484:C:O4'	2.11	0.51
1:CA:585:G:C6	1:CA:586:C:C4	2.99	0.51
2:CB:194:PRO:O	2:CB:195:ASP:C	2.49	0.51
3:CC:16:ARG:HH11	3:CC:16:ARG:CB	2.20	0.51
5:CE:20:GLN:HE22	5:CE:25:ARG:NH2	2.09	0.51
6:CF:62:TRP:CH2	6:CF:64:GLN:HB2	2.46	0.51
10:CJ:23:ILE:HG22	10:CJ:23:ILE:O	2.11	0.51
1:CA:973:G:H4'	10:CJ:54:PHE:O	2.11	0.51
26:D1:18:ILE:N	26:D1:18:ILE:HD12	2.26	0.51
33:D8:52:LYS:NZ	34:DA:834:C:H4'	2.25	0.51
34:DA:1141:U:C5'	34:DA:1142(A):A:O4'	2.59	0.51
34:DA:1158:C:O2'	34:DA:1159:U:H5''	2.11	0.51
34:DA:1771:C:C1'	34:DA:1786:A:H8	2.24	0.51
34:DA:2186:G:C3'	34:DA:2187:G:H5''	2.41	0.51
34:DA:2247:A:O2'	34:DA:2248:C:H5'	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:350:U:H2'	34:DA:351:G:O4'	2.11	0.51
27:D2:55:ARG:NH1	34:DA:72:U:OP1	2.44	0.51
34:DA:8:A:H2	34:DA:2896:C:N3	2.09	0.51
36:DC:46:LYS:HB2	36:DC:208:PHE:O	2.11	0.51
34:DA:2599:G:C8	37:DD:236:GLY:CA	2.91	0.51
38:DE:131:ALA:HB3	38:DE:134:ILE:CD1	2.41	0.51
40:DG:16:ARG:CB	40:DG:16:ARG:HH11	2.24	0.51
41:DH:144:VAL:CG1	41:DH:144:VAL:O	2.58	0.51
46:DQ:140:ALA:HB1	55:DZ:99:TYR:HB2	1.92	0.51
49:DT:101:PHE:HE2	49:DT:113:LYS:HD3	1.76	0.51
51:DV:32:THR:HB	51:DV:64:HIS:CE1	2.45	0.51
54:DY:49:VAL:CG1	54:DY:53:PRO:HG3	2.41	0.51
1:AA:1188:A:C2'	1:AA:1189:C:H5'	2.41	0.51
1:AA:127:G:O2'	1:AA:128:G:H5'	2.11	0.51
1:AA:1338:G:O2'	1:AA:1339:A:H5'	2.11	0.51
1:AA:1494:G:O6	57:AA:1816:PAR:H42	2.11	0.51
1:AA:42:G:H2'	1:AA:43:C:C6	2.46	0.51
1:AA:594:G:C2'	1:AA:595:G:H5'	2.41	0.51
4:AD:150:GLU:HG2	4:AD:151:LYS:N	2.25	0.51
1:AA:1240:U:OP2	7:AG:116:ALA:HB2	2.11	0.51
8:AH:137:VAL:HG12	8:AH:138:TRP:H	1.76	0.51
8:AH:87:SER:HA	8:AH:93:VAL:CG2	2.40	0.51
11:AK:15:ALA:HA	11:AK:77:MET:HA	1.92	0.51
18:AR:74:ARG:HE	18:AR:81:PHE:HA	1.76	0.51
25:B0:53:MET:HA	25:B0:58:THR:O	2.10	0.51
27:B2:14:ARG:NE	27:B2:57:ILE:CB	2.74	0.51
30:B5:4:HIS:O	34:BA:2056:G:N2	2.44	0.51
34:BA:2115:G:H5'	34:BA:2116:G:OP2	2.10	0.51
34:BA:2289:G:C2'	34:BA:2290:G:H5''	2.41	0.51
34:BA:271(A):A:H5'	34:BA:271(B):C:OP2	2.11	0.51
38:BE:182:LEU:O	38:BE:183:LEU:HD12	2.11	0.51
39:BF:3:GLU:HA	39:BF:24:LEU:HG	1.93	0.51
41:BH:85:LYS:HZ3	41:BH:145:ALA:HA	1.76	0.51
41:BH:155:SER:C	41:BH:157:TYR:H	2.15	0.51
43:BN:39:ARG:HE	43:BN:41:ASP:CG	2.13	0.51
45:BP:65:ARG:HH11	45:BP:65:ARG:CB	2.24	0.51
34:BA:1243:G:O2'	45:BP:9:ASN:HA	2.11	0.51
48:BS:42:ASP:O	48:BS:43:GLU:HB2	2.11	0.51
50:BU:69:CYS:HB3	50:BU:106:PHE:CZ	2.45	0.51
51:BV:36:PRO:HD2	51:BV:60:GLU:O	2.10	0.51
51:BV:66:ARG:HD2	51:BV:67:GLY:N	2.26	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BX:36:LYS:C	53:BX:38:GLU:H	2.14	0.51
55:BZ:20:ARG:HG3	55:BZ:20:ARG:HH11	1.76	0.51
1:CA:1132:C:O2'	1:CA:1133:G:H5'	2.11	0.51
1:CA:1163:C:H2'	1:CA:1164:G:H8	1.76	0.51
1:CA:1366:C:H2'	1:CA:1367:C:H6	1.72	0.51
1:CA:66:G:N2	1:CA:172:A:H2	2.09	0.51
1:CA:474:G:H2'	1:CA:475:G:C8	2.42	0.51
1:CA:709:G:H2'	1:CA:710:G:H8	1.75	0.51
1:CA:758:G:H5''	1:CA:880:C:H1'	1.93	0.51
2:CB:178:ARG:NH2	2:CB:196:LEU:HA	2.26	0.51
5:CE:32:VAL:HG12	5:CE:33:VAL:N	2.25	0.51
12:CL:71:PRO:HD2	12:CL:102:ARG:NH1	2.26	0.51
26:D1:26:ARG:HB2	26:D1:34:THR:CA	2.38	0.51
34:DA:1053:C:N4	34:DA:1107:G:H22	2.09	0.51
34:DA:1164:G:H2'	34:DA:1165:U:H6	1.76	0.51
34:DA:1684:C:O2'	34:DA:1685:C:H5'	2.10	0.51
34:DA:1697:G:H5''	34:DA:1698:A:H5''	1.92	0.51
34:DA:2289:G:C2'	34:DA:2290:G:H5''	2.40	0.51
34:DA:2348:U:H2'	34:DA:2349:G:H5'	1.87	0.51
34:DA:2467:C:H2'	34:DA:2468:G:O4'	2.11	0.51
40:DG:43:LEU:N	40:DG:43:LEU:CD1	2.74	0.51
34:DA:2747:G:P	41:DH:138:LYS:HZ3	2.33	0.51
42:DI:79:ILE:HG13	42:DI:140:LEU:HD21	1.92	0.51
42:DI:88:ILE:HD13	42:DI:123:LEU:HG	1.93	0.51
43:DN:97:ARG:HA	43:DN:100:GLU:HB2	1.92	0.51
44:DO:79:PHE:CD2	49:DT:72:VAL:HG22	2.46	0.51
46:DQ:6:ARG:O	46:DQ:7:MET:HG2	2.11	0.51
49:DT:45:PHE:CE1	49:DT:74:ARG:HG3	2.46	0.51
50:DU:55:ARG:HA	50:DU:58:ARG:CG	2.41	0.51
51:DV:70:ILE:O	51:DV:71:LEU:HB2	2.11	0.51
34:DA:1225:G:OP1	51:DV:88:ARG:HB2	2.11	0.51
55:DZ:117:LEU:HA	55:DZ:174:VAL:HA	1.93	0.51
1:AA:1052:U:H2'	1:AA:1055:A:OP1	2.11	0.51
1:AA:949:A:C2	1:AA:1233:G:N3	2.79	0.51
1:AA:296:U:H2'	1:AA:297:G:H8	1.76	0.51
1:AA:445:G:H2'	1:AA:446:G:H8	1.75	0.51
1:AA:503:C:O2'	1:AA:504:C:H5'	2.11	0.51
1:AA:661:G:O2'	1:AA:662:G:H5'	2.10	0.51
1:AA:770:C:O2'	1:AA:771:G:H5'	2.11	0.51
1:AA:857:C:H2'	1:AA:858:G:O4'	2.11	0.51
2:AB:107:THR:HG23	2:AB:110:GLN:OE1	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:68:ILE:H	2:AB:90:MET:HE2	1.75	0.51
4:AD:138:TYR:CD2	4:AD:138:TYR:C	2.84	0.51
8:AH:101:PRO:HG2	8:AH:133:LEU:HD11	1.93	0.51
12:AL:61:THR:OG1	12:AL:62:SER:N	2.44	0.51
12:AL:69:TYR:C	12:AL:70:ILE:HD12	2.31	0.51
13:AM:19:LEU:H	13:AM:19:LEU:CD2	2.23	0.51
15:AO:37:ASN:O	15:AO:40:SER:HB3	2.11	0.51
15:AO:82:ILE:HD11	15:AO:87:ILE:C	2.31	0.51
20:AT:25:ARG:HG3	20:AT:25:ARG:HH11	1.76	0.51
22:AV:66:C:H2'	22:AV:67:C:H6	1.74	0.51
23:AY:34:G:H2'	23:AY:35:A:C8	2.45	0.51
34:BA:1225:G:OP1	51:BV:88:ARG:HB2	2.11	0.51
34:BA:1573:G:C2'	34:BA:1574:C:H5'	2.41	0.51
34:BA:2522:U:H2'	34:BA:2523:G:H5''	1.92	0.51
34:BA:2605:U:H2'	34:BA:2606:C:C6	2.46	0.51
34:BA:2626:C:H2'	34:BA:2627:G:O4'	2.11	0.51
34:BA:2687:U:C4	34:BA:2688:U:C5	2.99	0.51
34:BA:2735:G:C2'	34:BA:2736:G:C5'	2.89	0.51
34:BA:285:C:C2'	34:BA:286:C:H5''	2.40	0.51
34:BA:493:G:N2	34:BA:494:G:H1'	2.26	0.51
34:BA:92:A:O2'	34:BA:93:G:H5'	2.11	0.51
36:BC:64:LEU:HD13	36:BC:65:PRO:CD	2.36	0.51
37:BD:94:LEU:HA	37:BD:104:TYR:HA	1.93	0.51
38:BE:14:ILE:CG1	38:BE:21:VAL:HG23	2.41	0.51
40:BG:81:LYS:O	40:BG:82:LEU:O	2.29	0.51
41:BH:44:VAL:CG1	41:BH:45:VAL:H	2.05	0.51
43:BN:42:TRP:HB2	50:BU:64:ARG:NH2	2.26	0.51
44:BO:10:VAL:HG23	44:BO:10:VAL:O	2.11	0.51
51:BV:79:VAL:O	51:BV:80:GLN:CB	2.59	0.51
55:BZ:163:LEU:HD23	55:BZ:163:LEU:N	2.26	0.51
46:BQ:141:GLN:O	55:BZ:70:LEU:HD22	2.10	0.51
1:CA:1017:G:H2'	1:CA:1018:C:C6	2.45	0.51
1:CA:376:G:H2'	1:CA:377:G:C8	2.40	0.51
1:CA:817:C:H1'	1:CA:819:A:H5'	1.93	0.51
2:CB:144:ARG:O	2:CB:147:LYS:HB3	2.11	0.51
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.46	0.51
2:CB:61:LEU:HA	2:CB:64:ARG:HG2	1.93	0.51
2:CB:68:ILE:N	2:CB:68:ILE:HD12	2.26	0.51
3:CC:113:ALA:O	3:CC:115:LEU:N	2.44	0.51
3:CC:172:ARG:HH12	3:CC:174:PRO:CG	2.24	0.51
4:CD:138:TYR:CD2	4:CD:138:TYR:C	2.84	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:139:LEU:O	5:CE:141:GLN:N	2.44	0.51
9:CI:128:ARG:OXT	9:CI:128:ARG:HG2	2.11	0.51
1:CA:539:A:OP1	12:CL:114:LYS:HE2	2.11	0.51
17:CQ:5:VAL:HA	17:CQ:59:ILE:O	2.11	0.51
18:CR:29:PHE:CD1	18:CR:29:PHE:O	2.64	0.51
21:CU:9:ARG:NH1	21:CU:22:ARG:HA	2.25	0.51
26:D1:26:ARG:CB	26:D1:34:THR:CA	2.88	0.51
27:D2:31:GLU:HA	27:D2:31:GLU:OE1	2.11	0.51
34:DA:1742:G:N7	34:DA:1743:C:C2	2.79	0.51
34:DA:1952:A:OP1	44:DO:44:LYS:NZ	2.38	0.51
34:DA:1991:U:O2'	34:DA:1992:G:H5''	2.10	0.51
34:DA:673:C:H5'	39:DF:54:ARG:NH1	2.16	0.51
34:DA:756:C:C2'	34:DA:757:U:H5'	2.41	0.51
34:DA:925:C:H2'	34:DA:926:A:O4'	2.11	0.51
39:DF:170:LEU:HD23	39:DF:172:TRP:CZ2	2.45	0.51
39:DF:41:LEU:HD11	39:DF:184:TYR:CE1	2.46	0.51
40:DG:167:GLU:O	40:DG:170:ARG:HB3	2.11	0.51
41:DH:41:MET:HE1	41:DH:55:PRO:HD3	1.93	0.51
44:DO:65:THR:O	44:DO:79:PHE:HB2	2.10	0.51
45:DP:10:PRO:CD	45:DP:11:GLY:H	2.23	0.51
47:DR:100:LEU:HD23	47:DR:112:ALA:CA	2.40	0.51
34:DA:1287:A:N7	47:DR:106:GLY:O	2.44	0.51
49:DT:117:ASP:OD1	49:DT:119:LYS:HB3	2.11	0.51
49:DT:28:VAL:CG2	49:DT:88:ILE:HD11	2.41	0.51
1:AA:1106:G:O2'	1:AA:1107:C:H5'	2.10	0.50
1:AA:1473:A:H2'	1:AA:1474:G:C8	2.47	0.50
1:AA:1475:G:OP1	34:BA:1689:A:H1'	2.12	0.50
1:AA:89:C:H3'	1:AA:90:U:C5'	2.41	0.50
4:AD:52:SER:C	4:AD:54:TYR:N	2.65	0.50
5:AE:12:LEU:C	5:AE:13:ILE:HD12	2.31	0.50
5:AE:62:ALA:O	5:AE:65:ASN:N	2.34	0.50
6:AF:98:LEU:H	6:AF:98:LEU:HD12	1.75	0.50
9:AI:128:ARG:HG2	9:AI:128:ARG:OXT	2.10	0.50
9:AI:48:GLU:N	9:AI:49:PRO:CD	2.73	0.50
10:AJ:63:PHE:HA	14:AN:59:ALA:H	1.75	0.50
13:AM:123:ALA:HB2	23:AY:39:U:O4'	2.11	0.50
18:AR:29:PHE:CD1	18:AR:29:PHE:O	2.64	0.50
1:AA:958:A:C8	19:AS:55:LYS:HD3	2.46	0.50
19:AS:79:THR:O	19:AS:80:TYR:CB	2.58	0.50
34:BA:1005:C:C2	34:BA:1143:A:C5	2.99	0.50
34:BA:1109:C:H5	34:BA:1110:G:C5	2.29	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1190:G:H5'	45:BP:35:HIS:CB	2.41	0.50
34:BA:1394:U:C4	34:BA:1395:A:C6	2.99	0.50
34:BA:1695:G:H2'	34:BA:1696:G:C5'	2.40	0.50
34:BA:2277:G:O2'	34:BA:2278:A:H5'	2.11	0.50
34:BA:2298:A:H62	34:BA:2318:G:H8	1.56	0.50
34:BA:542:C:H2'	34:BA:543:C:OP1	2.11	0.50
34:BA:756:C:C2'	34:BA:757:U:H5'	2.42	0.50
38:BE:176:ILE:HG22	38:BE:176:ILE:O	2.11	0.50
39:BF:89:VAL:HG12	39:BF:90:PHE:N	2.25	0.50
13:AM:3:ARG:NH2	40:BG:139:LEU:HD13	2.26	0.50
40:BG:21:ARG:HG2	40:BG:22:ARG:N	2.26	0.50
45:BP:61:ARG:H	45:BP:61:ARG:HD2	1.75	0.50
34:BA:2406:U:O4	45:BP:70:GLN:HB3	2.10	0.50
46:BQ:16:ARG:HH11	46:BQ:16:ARG:HB2	1.76	0.50
48:BS:27:SER:HA	48:BS:88:ASP:OD1	2.11	0.50
49:BT:30:VAL:HG11	49:BT:84:GLN:HG2	1.94	0.50
50:BU:95:LEU:C	50:BU:97:ASP:N	2.63	0.50
51:BV:19:LYS:HG2	51:BV:96:ILE:CB	2.38	0.50
51:BV:72:VAL:HA	51:BV:88:ARG:HH22	1.76	0.50
53:BX:56:THR:HA	53:BX:77:LYS:CB	2.40	0.50
54:BY:81:LYS:HE2	54:BY:97:ARG:CG	2.41	0.50
55:BZ:8:TYR:N	55:BZ:8:TYR:CD1	2.79	0.50
1:CA:450:G:H1	1:CA:483:C:H42	1.58	0.50
1:CA:525:C:O2'	1:CA:526:C:H5'	2.11	0.50
2:CB:130:ARG:HE	2:CB:130:ARG:HA	1.75	0.50
3:CC:19:GLU:O	3:CC:56:ASP:HA	2.11	0.50
4:CD:106:TYR:CE1	4:CD:113:SER:HA	2.46	0.50
4:CD:177:ASP:O	4:CD:179:GLU:N	2.43	0.50
12:CL:41:ARG:CG	12:CL:42:THR:N	2.73	0.50
12:CL:41:ARG:HG2	12:CL:42:THR:N	2.27	0.50
12:CL:55:VAL:HG12	12:CL:56:ALA:N	2.26	0.50
17:CQ:67:LYS:HG2	17:CQ:68:ARG:N	2.25	0.50
22:CV:4:G:O2'	22:CV:5:G:H8	1.92	0.50
26:D1:41:ARG:NH1	34:DA:189:G:P	2.84	0.50
29:D4:11:PRO:C	29:D4:13:ARG:N	2.65	0.50
33:D8:51:ALA:CA	33:D8:53:PRO:HD2	2.40	0.50
34:DA:150:C:H2'	34:DA:151:C:C6	2.45	0.50
34:DA:1744:C:C2'	34:DA:1745:C:H5'	2.41	0.50
34:DA:2636:U:C2'	34:DA:2637:U:C5'	2.89	0.50
34:DA:360:G:H2'	34:DA:361:G:C8	2.46	0.50
34:DA:365:C:H2'	34:DA:366:C:O4'	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:79:G:O2'	34:DA:80:G:H5'	2.12	0.50
34:DA:949:C:H2'	34:DA:950:G:H8	1.77	0.50
34:DA:84:A:H2'	34:DA:99:U:O4	2.11	0.50
38:DE:111:ARG:H	38:DE:161:GLY:HA3	1.75	0.50
39:DF:20:LEU:HD12	39:DF:199:TRP:HH2	1.76	0.50
40:DG:125:PHE:HB2	40:DG:166:ASP:OD2	2.10	0.50
41:DH:153:LYS:HG2	41:DH:154:PRO:N	2.27	0.50
44:DO:101:PRO:O	44:DO:102:VAL:CG1	2.53	0.50
47:DR:21:TYR:O	47:DR:22:ARG:C	2.48	0.50
54:DY:48:ALA:CB	54:DY:59:GLY:H	2.18	0.50
55:DZ:166:SER:HB2	55:DZ:167:PRO:CA	2.42	0.50
1:AA:1004:A:H2'	1:AA:1038:C:O2	2.12	0.50
1:AA:1501:C:OP2	1:AA:1504:G:H2'	2.11	0.50
1:AA:1499:A:H1'	1:AA:1520:G:H5'	1.92	0.50
1:AA:52:G:O2'	1:AA:53:A:H5'	2.11	0.50
1:AA:777:A:H2'	1:AA:778:G:C8	2.46	0.50
3:AC:127:ARG:H	3:AC:127:ARG:HD2	1.75	0.50
4:AD:12:CYS:HA	4:AD:19:LEU:CD1	2.41	0.50
9:AI:4:TYR:HA	9:AI:88:TYR:CE1	2.46	0.50
1:AA:973:G:H4'	10:AJ:54:PHE:O	2.10	0.50
10:AJ:70:ARG:NH1	10:AJ:70:ARG:CG	2.65	0.50
15:AO:37:ASN:HD22	15:AO:37:ASN:H	1.59	0.50
20:AT:89:ARG:HB2	20:AT:104:LEU:CD1	2.40	0.50
32:B7:16:HIS:ND1	34:BA:684:G:OP1	2.44	0.50
31:B6:10:LEU:HD12	33:B8:36:LYS:HD3	1.94	0.50
34:BA:1005:C:H2'	34:BA:1006:C:C6	2.46	0.50
34:BA:1131:G:OP2	34:BA:2515:C:H4'	2.11	0.50
34:BA:1990:C:H2'	34:BA:1991:U:O4'	2.11	0.50
34:BA:2408:U:H2'	34:BA:2409:G:H8	1.77	0.50
34:BA:244:A:C2	34:BA:255:A:C4	2.99	0.50
34:BA:2656:U:C4	34:BA:2657:A:H2	2.29	0.50
34:BA:2894:G:H2'	34:BA:2894:G:N3	2.26	0.50
35:BB:106:G:C2	35:BB:107:G:C8	2.99	0.50
38:BE:142:GLY:C	38:BE:143:ASN:HD22	2.15	0.50
38:BE:51:PHE:HB3	38:BE:76:ARG:CB	2.38	0.50
38:BE:56:PRO:O	38:BE:58:ARG:N	2.44	0.50
38:BE:63:LEU:O	38:BE:65:GLY:N	2.44	0.50
39:BF:143:ALA:CA	39:BF:146:ALA:HB3	2.34	0.50
40:BG:115:ARG:NH1	40:BG:136:ARG:HG3	2.27	0.50
41:BH:44:VAL:CG1	41:BH:45:VAL:N	2.69	0.50
44:BO:13:ASN:ND2	44:BO:97:ARG:H	2.08	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BT:28:VAL:O	49:BT:29:ARG:HB2	2.10	0.50
49:BT:46:GLU:O	49:BT:65:LYS:HB2	2.11	0.50
50:BU:8:VAL:HG12	50:BU:9:VAL:N	2.25	0.50
1:CA:411:A:O2'	1:CA:412:A:H5'	2.11	0.50
1:CA:559:A:H4'	1:CA:560:U:H5''	1.93	0.50
1:CA:93:G:C2'	1:CA:96:U:H5'	2.41	0.50
7:CG:132:GLY:H	7:CG:135:VAL:HG21	1.75	0.50
7:CG:85:TYR:HD1	7:CG:154:TYR:HE1	1.59	0.50
7:CG:23:VAL:HG12	7:CG:27:ILE:HD11	1.93	0.50
9:CI:113:LYS:H	9:CI:113:LYS:CD	2.25	0.50
13:CM:106:ASN:O	13:CM:107:ALA:HB3	2.11	0.50
1:CA:974:A:OP1	14:CN:31:ARG:HD3	2.11	0.50
16:CP:39:TYR:HA	16:CP:48:TRP:O	2.11	0.50
18:CR:40:LEU:O	18:CR:42:ARG:N	2.45	0.50
18:CR:86:VAL:O	18:CR:87:ARG:O	2.29	0.50
19:CS:16:LEU:O	19:CS:20:LEU:N	2.24	0.50
20:CT:26:ASN:H	20:CT:26:ASN:ND2	2.07	0.50
26:D1:10:LYS:HG2	26:D1:14:VAL:CA	2.41	0.50
28:D3:12:PRO:O	28:D3:15:TYR:HD1	1.95	0.50
30:D5:33:CYS:SG	30:D5:40:LYS:HE3	2.51	0.50
34:DA:1824:G:O2'	34:DA:1825:A:H5'	2.11	0.50
34:DA:2836:U:C4	34:DA:2883:A:N6	2.80	0.50
34:DA:528:A:C2	34:DA:2043:C:C4'	2.92	0.50
38:DE:120:TRP:CD2	38:DE:155:LYS:HD3	2.46	0.50
39:DF:39:TRP:CD1	39:DF:101:LEU:HB2	2.46	0.50
40:DG:116:ASP:O	40:DG:117:PHE:CB	2.59	0.50
40:DG:47:LYS:CE	40:DG:82:LEU:HG	2.40	0.50
40:DG:71:THR:HG22	40:DG:89:GLY:C	2.32	0.50
41:DH:144:VAL:HG22	41:DH:147:ASN:OD1	2.11	0.50
41:DH:30:LYS:HZ1	41:DH:81:GLU:HG2	1.76	0.50
42:DI:56:LYS:HA	42:DI:59:ALA:HB3	1.93	0.50
42:DI:88:ILE:CG2	42:DI:89:TYR:H	2.20	0.50
43:DN:97:ARG:O	43:DN:98:VAL:C	2.50	0.50
44:DO:87:ILE:HG21	44:DO:91:LEU:HD13	1.93	0.50
49:DT:28:VAL:HG21	49:DT:88:ILE:HD11	1.93	0.50
49:DT:89:VAL:HG21	49:DT:91:ARG:HH21	1.77	0.50
54:DY:75:ILE:HD12	54:DY:76:CYS:N	2.26	0.50
55:DZ:30:ASN:C	55:DZ:32:HIS:N	2.64	0.50
1:AA:102:G:O2'	1:AA:103:C:H5'	2.11	0.50
1:AA:1040:U:O2'	1:AA:1041:A:H5'	2.11	0.50
1:AA:1137:C:H4'	1:AA:1138:G:C2	2.45	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1163:C:H2'	1:AA:1164:G:H8	1.77	0.50
1:AA:1237:C:H3'	1:AA:1336:C:H41	1.76	0.50
1:AA:1436:U:O2'	1:AA:1437:C:H5'	2.11	0.50
1:AA:1517:G:H2'	1:AA:1518:A:C8	2.46	0.50
1:AA:411:A:C6	1:AA:429:U:C5	2.99	0.50
1:AA:791:G:C6	1:AA:792:A:N7	2.80	0.50
2:AB:166:ASP:HB2	2:AB:205:ASP:OD2	2.11	0.50
3:AC:172:ARG:HH12	3:AC:174:PRO:CG	2.24	0.50
3:AC:179:ARG:HD2	3:AC:207:VAL:HG22	1.92	0.50
3:AC:32:LEU:HD22	3:AC:59:ARG:HH11	1.76	0.50
5:AE:122:GLU:OE1	5:AE:131:ILE:HG13	2.11	0.50
6:AF:18:GLN:HA	6:AF:21:LEU:HD23	1.92	0.50
15:AO:58:MET:O	15:AO:59:MET:C	2.49	0.50
19:AS:11:VAL:HG22	19:AS:16:LEU:HD11	1.94	0.50
20:AT:26:ASN:HA	20:AT:29:LYS:HG2	1.93	0.50
25:B0:11:ARG:CB	25:B0:11:ARG:HH11	2.24	0.50
26:B1:21:ARG:HD3	26:B1:22:GLY:N	2.23	0.50
26:B1:9:GLY:O	26:B1:10:LYS:CB	2.59	0.50
31:B6:13:CYS:HB3	31:B6:49:HIS:HB3	1.93	0.50
34:BA:1713:U:O2	34:BA:1747:G:C2	2.64	0.50
34:BA:1767:C:O2'	34:BA:1768:U:H5'	2.12	0.50
34:BA:2078:C:O2'	34:BA:2079:U:H5'	2.12	0.50
34:BA:2086:U:H2'	34:BA:2087:G:C8	2.47	0.50
34:BA:256:A:H2'	34:BA:257:A:C8	2.46	0.50
34:BA:2678:C:C2	34:BA:2679:A:C8	2.99	0.50
34:BA:271(Q):G:HO2'	34:BA:271(R):G:H8	1.59	0.50
37:BD:132:PRO:O	37:BD:133:LEU:C	2.50	0.50
37:BD:12:SER:HB2	37:BD:208:LYS:HB3	1.93	0.50
39:BF:39:TRP:CD1	39:BF:101:LEU:HB2	2.47	0.50
40:BG:11:TYR:HA	40:BG:15:VAL:CG2	2.40	0.50
40:BG:162:THR:HG22	40:BG:162:THR:O	2.11	0.50
41:BH:148:ILE:O	41:BH:150:ALA:N	2.44	0.50
42:BI:123:LEU:CD2	42:BI:142:VAL:HB	2.41	0.50
45:BP:17:LYS:C	45:BP:19:VAL:HG22	2.31	0.50
49:BT:89:VAL:HG21	49:BT:91:ARG:HH21	1.76	0.50
51:BV:19:LYS:HE2	51:BV:19:LYS:HA	1.93	0.50
1:CA:1248:A:H2'	1:CA:1249:C:H5'	1.93	0.50
1:CA:1456:G:H2'	1:CA:1457:G:O4'	2.11	0.50
1:CA:1503:A:C6	24:CX:13:A:C8	2.99	0.50
1:CA:245:C:O2	1:CA:283:C:N3	2.45	0.50
1:CA:940:C:H2'	1:CA:941:G:H8	1.76	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:961:U:O2'	1:CA:962:C:H5'	2.11	0.50
2:CB:55:PHE:HE1	2:CB:218:ALA:HA	1.76	0.50
5:CE:101:ILE:CG1	5:CE:119:LEU:HA	2.42	0.50
15:CO:37:ASN:O	15:CO:40:SER:HB3	2.12	0.50
19:CS:53:ASN:HD21	19:CS:55:LYS:HB3	1.76	0.50
19:CS:40:ILE:HG21	19:CS:62:ILE:HD11	1.94	0.50
34:DA:1022:G:O2'	34:DA:1023:U:P	2.69	0.50
34:DA:1361:G:O2'	34:DA:1362:C:H5'	2.10	0.50
34:DA:1625:C:C2'	34:DA:1626:G:H5'	2.41	0.50
34:DA:1680:U:H2'	34:DA:1681:G:O4'	2.11	0.50
34:DA:1947:C:H2'	34:DA:1948:G:C5'	2.41	0.50
34:DA:2025:C:H2'	34:DA:2026:C:C6	2.46	0.50
34:DA:2115:G:H5'	34:DA:2116:G:OP2	2.11	0.50
34:DA:2779:U:H4'	34:DA:2780:G:O5'	2.11	0.50
34:DA:422:A:C6	34:DA:423:A:C6	2.99	0.50
34:DA:624:C:O2	34:DA:657:U:H4'	2.11	0.50
34:DA:680:G:H2'	34:DA:681:G:C8	2.46	0.50
28:D3:49:LYS:NZ	34:DA:851:U:OP1	2.38	0.50
34:DA:863:A:OP1	46:DQ:21:THR:HB	2.11	0.50
36:DC:89:ALA:CB	36:DC:153:ILE:HA	2.41	0.50
38:DE:120:TRP:CD1	38:DE:155:LYS:HB3	2.46	0.50
38:DE:63:LEU:O	38:DE:64:LYS:C	2.49	0.50
43:DN:3:THR:C	43:DN:4:TYR:CG	2.84	0.50
44:DO:104:ARG:C	44:DO:106:LEU:N	2.65	0.50
47:DR:3:HIS:O	47:DR:4:LEU:HB3	2.11	0.50
47:DR:5:LYS:CD	47:DR:5:LYS:H	2.24	0.50
48:DS:78:LEU:HD23	48:DS:82:ILE:O	2.11	0.50
49:DT:46:GLU:O	49:DT:65:LYS:HB2	2.11	0.50
49:DT:29:ARG:HE	49:DT:84:GLN:CG	2.23	0.50
51:DV:4:ILE:HG12	51:DV:13:ARG:CB	2.42	0.50
52:DW:13:SER:O	52:DW:16:LYS:HB2	2.10	0.50
53:DX:35:THR:O	53:DX:36:LYS:O	2.29	0.50
1:AA:245:C:O2	1:AA:283:C:N3	2.44	0.50
1:AA:544:G:H2'	1:AA:545:C:C6	2.47	0.50
5:AE:75:THR:HA	5:AE:115:VAL:HG12	1.93	0.50
10:AJ:54:PHE:CZ	10:AJ:55:LYS:NZ	2.79	0.50
10:AJ:72:VAL:O	10:AJ:73:ASP:OD1	2.30	0.50
12:AL:89:ARG:HA	12:AL:97:ARG:HA	1.92	0.50
12:AL:90:VAL:O	12:AL:92:ASP:N	2.45	0.50
16:AP:43:LYS:N	16:AP:43:LYS:HD2	2.26	0.50
19:AS:51:VAL:O	19:AS:57:HIS:HA	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:38:LYS:O	20:AT:41:ILE:HG13	2.12	0.50
23:AW:14:A:H2'	23:AW:14:A:N3	2.26	0.50
34:BA:1593:G:H2'	34:BA:1594:G:C5'	2.42	0.50
34:BA:2175:C:H1'	36:BC:215:THR:CA	2.34	0.50
23:AW:17:C:C5	34:BA:2180:U:O3'	2.61	0.50
34:BA:2340:G:O2'	34:BA:2341:G:H5'	2.10	0.50
25:B0:36:ILE:CD1	34:BA:2354:G:O2'	2.59	0.50
34:BA:2511:U:H5''	38:BE:123:ALA:CB	2.42	0.50
34:BA:583:G:OP2	50:BU:10:ARG:NH1	2.45	0.50
34:BA:8:A:H2	34:BA:2896:C:N3	2.10	0.50
34:BA:954:G:H5'	46:BQ:13:GLN:HG2	1.93	0.50
36:BC:46:LYS:HB2	36:BC:208:PHE:O	2.11	0.50
36:BC:75:LEU:HD23	36:BC:75:LEU:C	2.31	0.50
37:BD:147:LEU:HG	37:BD:183:ARG:HH12	1.76	0.50
34:BA:1820:U:O2	37:BD:202:LYS:HB3	2.11	0.50
37:BD:231:HIS:CG	37:BD:232:PRO:HD2	2.46	0.50
37:BD:243:GLY:O	37:BD:244:ARG:HB3	2.12	0.50
37:BD:43:ARG:NH1	37:BD:49:ILE:HG22	2.27	0.50
39:BF:169:ASN:OD1	39:BF:169:ASN:O	2.30	0.50
41:BH:38:SER:C	41:BH:40:GLU:H	2.14	0.50
41:BH:89:ILE:HG13	41:BH:129:THR:HA	1.92	0.50
43:BN:15:LEU:HD21	43:BN:55:VAL:HG21	1.93	0.50
43:BN:56:ASN:CG	43:BN:126:PRO:HD3	2.32	0.50
44:BO:103:ALA:HB1	44:BO:105:GLU:CD	2.32	0.50
45:BP:35:HIS:O	45:BP:36:LYS:CG	2.58	0.50
47:BR:101:ALA:O	47:BR:102:GLU:HB2	2.10	0.50
47:BR:85:PRO:O	47:BR:87:TYR:N	2.45	0.50
34:BA:1341:U:N1	53:BX:77:LYS:HE2	2.25	0.50
1:CA:1078:U:H2'	1:CA:1079:G:O4'	2.11	0.50
1:CA:1227:A:C2'	1:CA:1228:C:O5'	2.60	0.50
1:CA:1298:C:H4'	1:CA:1299:A:O4'	2.12	0.50
1:CA:1426:C:O2'	1:CA:1427:U:H5'	2.11	0.50
1:CA:158:G:O2'	1:CA:159:G:H5'	2.12	0.50
1:CA:560:U:O2'	1:CA:561:U:OP2	2.24	0.50
1:CA:582:U:H2'	1:CA:583:A:H8	1.77	0.50
2:CB:208:ILE:HA	2:CB:211:ILE:HD12	1.94	0.50
2:CB:73:THR:HG22	2:CB:95:GLN:O	2.12	0.50
1:CA:1190:G:OP1	3:CC:5:ILE:HG23	2.11	0.50
4:CD:57:ARG:NH2	5:CE:107:ARG:HH11	2.08	0.50
5:CE:71:LEU:HD11	5:CE:114:GLY:CA	2.42	0.50
8:CH:20:TYR:HA	8:CH:65:TYR:CZ	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:20:TYR:O	11:CK:30:VAL:HA	2.12	0.50
13:CM:39:ILE:O	13:CM:41:PRO:HD3	2.10	0.50
17:CQ:82:MET:O	17:CQ:85:VAL:HB	2.11	0.50
18:CR:25:THR:C	18:CR:26:LEU:HD23	2.32	0.50
23:CW:38:A:C3'	23:CW:39:U:H5''	2.39	0.50
23:CW:68:C:O2'	23:CW:69:G:H5'	2.12	0.50
32:D7:25:PRO:HG2	32:D7:26:GLY:H	1.75	0.50
33:D8:62:LEU:HD13	34:DA:242:G:C5'	2.25	0.50
34:DA:1131:G:C2	34:DA:1132:A:C5	3.00	0.50
34:DA:1132:A:C2	34:DA:1133:U:C2	3.00	0.50
34:DA:1140:C:H1'	34:DA:1143:A:N3	2.26	0.50
34:DA:1654:A:C2	38:DE:113:PHE:HD1	2.30	0.50
34:DA:1708:C:H2'	34:DA:1709:U:C6	2.40	0.50
34:DA:729:G:H2'	34:DA:1775:U:O2	2.11	0.50
34:DA:2270:G:H3'	34:DA:2271:G:C8	2.46	0.50
34:DA:2687:U:C2'	34:DA:2688:U:H5'	2.40	0.50
34:DA:2735:G:C2'	34:DA:2736:G:C5'	2.89	0.50
34:DA:2887:U:H2'	34:DA:2888:C:C6	2.45	0.50
34:DA:7:G:H4'	43:DN:13:TRP:CH2	2.47	0.50
37:DD:94:LEU:HA	37:DD:104:TYR:HA	1.93	0.50
34:DA:615:G:H5'	39:DF:40:GLN:NE2	2.26	0.50
40:DG:138:GLN:HE22	40:DG:153:ARG:N	2.09	0.50
41:DH:130:ARG:O	41:DH:131:VAL:HG23	2.11	0.50
45:DP:61:ARG:HD2	45:DP:61:ARG:N	2.26	0.50
46:DQ:38:GLU:HB2	46:DQ:127:ILE:CG2	2.42	0.50
48:DS:49:VAL:HG12	48:DS:73:LEU:CD2	2.42	0.50
34:DA:1155:A:O3'	50:DU:55:ARG:NH1	2.44	0.50
50:DU:8:VAL:HG12	50:DU:9:VAL:N	2.25	0.50
53:DX:82:GLN:HB3	53:DX:85:PRO:HG2	1.92	0.50
54:DY:28:LYS:HA	54:DY:39:VAL:N	2.19	0.50
55:DZ:151:HIS:O	55:DZ:152:ALA:HB3	2.11	0.50
55:DZ:19:ARG:HG2	55:DZ:19:ARG:NH1	2.25	0.50
1:AA:1216:G:O2'	1:AA:1217:C:H5'	2.12	0.50
1:AA:1517:G:H2'	1:AA:1518:A:H8	1.76	0.50
1:AA:256:U:O2'	1:AA:257:G:H5'	2.12	0.50
1:AA:692:U:H2'	1:AA:694:A:OP2	2.12	0.50
1:AA:826:C:H2'	1:AA:827:U:C6	2.47	0.50
1:AA:945:G:N3	1:AA:945:G:H2'	2.26	0.50
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.47	0.50
2:AB:61:LEU:HA	2:AB:64:ARG:HG2	1.94	0.50
7:AG:72:ARG:O	7:AG:73:MET:HG3	2.10	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:34:VAL:HG13	10:AJ:73:ASP:O	2.11	0.50
11:AK:72:ALA:O	11:AK:77:MET:HB2	2.11	0.50
1:AA:951:G:OP2	13:AM:102:ARG:CZ	2.60	0.50
22:AV:52:G:N3	22:AV:53:G:C8	2.80	0.50
26:B1:47:GLN:C	26:B1:47:GLN:OE1	2.50	0.50
28:B3:46:ASN:ND2	34:BA:851:U:H5'	2.26	0.50
34:BA:1141:U:H2'	43:BN:63:THR:HG21	1.93	0.50
34:BA:2127:G:N1	34:BA:2161:C:H1'	2.26	0.50
34:BA:271(Q):G:O2'	34:BA:271(R):G:H8	1.94	0.50
34:BA:733:G:H8	34:BA:733:G:O5'	1.94	0.50
38:BE:119:ARG:HG2	38:BE:160:TYR:CB	2.42	0.50
39:BF:161:GLU:O	39:BF:164:ARG:HB3	2.11	0.50
39:BF:200:GLU:O	39:BF:203:GLN:HB2	2.11	0.50
39:BF:4:VAL:HA	39:BF:18:ARG:O	2.12	0.50
40:BG:111:LEU:O	40:BG:114:ILE:HG12	2.11	0.50
40:BG:114:ILE:O	40:BG:115:ARG:C	2.50	0.50
41:BH:102:ALA:HB2	41:BH:117:PRO:CD	2.41	0.50
41:BH:88:LEU:O	41:BH:89:ILE:CG2	2.59	0.50
43:BN:112:LEU:O	43:BN:116:LEU:N	2.38	0.50
43:BN:34:LEU:HD21	43:BN:120:LEU:HD23	1.94	0.50
43:BN:13:TRP:HD1	43:BN:13:TRP:H	1.57	0.50
44:BO:103:ALA:HB1	44:BO:105:GLU:OE1	2.11	0.50
45:BP:14:LYS:O	45:BP:15:ARG:CB	2.60	0.50
45:BP:23:PRO:HB3	45:BP:34:GLY:H	1.75	0.50
45:BP:61:ARG:N	45:BP:61:ARG:HD2	2.26	0.50
48:BS:15:ARG:O	48:BS:17:ARG:O	2.29	0.50
48:BS:17:ARG:O	48:BS:19:LYS:N	2.42	0.50
49:BT:23:ARG:NH2	49:BT:120:ARG:HD3	2.26	0.50
49:BT:33:LYS:NZ	49:BT:33:LYS:HA	2.25	0.50
51:BV:3:ALA:O	51:BV:13:ARG:HA	2.12	0.50
54:BY:28:LYS:CA	54:BY:39:VAL:H	2.16	0.50
1:CA:1325:C:H2'	1:CA:1325:C:O2	2.11	0.50
1:CA:138:G:H2'	1:CA:139:G:C8	2.47	0.50
1:CA:255:G:H2'	1:CA:256:U:C6	2.46	0.50
1:CA:266:G:O2'	1:CA:267:C:OP2	2.28	0.50
1:CA:945:G:H2'	1:CA:945:G:N3	2.27	0.50
2:CB:102:LEU:HD13	2:CB:102:LEU:H	1.74	0.50
3:CC:52:LEU:HD23	3:CC:52:LEU:N	2.22	0.50
4:CD:38:TYR:CD2	4:CD:45:GLN:HB3	2.47	0.50
5:CE:12:LEU:C	5:CE:13:ILE:HD12	2.32	0.50
9:CI:88:TYR:O	9:CI:89:ASN:CG	2.50	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:17:GLY:O	11:CK:80:VAL:HA	2.11	0.50
12:CL:52:LEU:O	12:CL:54:LYS:HD2	2.11	0.50
12:CL:89:ARG:HA	12:CL:97:ARG:HA	1.94	0.50
18:CR:50:ILE:CD1	18:CR:70:ILE:HG21	2.41	0.50
19:CS:51:VAL:O	19:CS:57:HIS:HA	2.12	0.50
26:D1:23:LYS:O	26:D1:37:ILE:HB	2.11	0.50
31:D6:32:ASN:CG	31:D6:33:LYS:N	2.63	0.50
34:DA:85:G:N3	34:DA:103:A:H2	2.08	0.50
34:DA:1112:G:O2'	34:DA:1113:U:H5''	2.11	0.50
34:DA:1175:U:H4'	34:DA:1176:G:H2'	1.94	0.50
34:DA:1388:G:O2'	34:DA:1389:G:H5'	2.11	0.50
34:DA:1570:A:H2'	34:DA:1571:A:C8	2.46	0.50
34:DA:1747(A):G:H2'	34:DA:1748:G:C5'	2.37	0.50
34:DA:1866:C:H2'	34:DA:1876:A:O4'	2.10	0.50
34:DA:239:U:H2'	34:DA:240:G:O4'	2.12	0.50
34:DA:364:C:C2'	34:DA:365:C:H5''	2.41	0.50
34:DA:721:C:H2'	34:DA:722:A:C8	2.47	0.50
36:DC:64:LEU:HD13	36:DC:65:PRO:CD	2.38	0.50
37:DD:109:ASP:HB2	37:DD:197:GLY:HA2	1.94	0.50
37:DD:70:TRP:O	37:DD:73:VAL:HG22	2.11	0.50
38:DE:52:LEU:O	38:DE:74:PRO:HA	2.10	0.50
38:DE:8:LYS:HG2	38:DE:192:ASN:HD22	1.77	0.50
40:DG:60:LEU:HD13	40:DG:60:LEU:C	2.32	0.50
42:DI:115:ALA:CB	42:DI:131:LYS:HE3	2.34	0.50
42:DI:78:THR:OG1	42:DI:141:LYS:HB2	2.11	0.50
46:DQ:111:GLU:HG3	46:DQ:112:GLU:N	2.27	0.50
46:DQ:34:LEU:CD1	46:DQ:129:THR:HB	2.41	0.50
47:DR:18:LEU:HD13	47:DR:18:LEU:O	2.11	0.50
38:DE:109:LYS:HE2	47:DR:2:ARG:HH12	1.77	0.50
49:DT:129:ARG:NH1	49:DT:131:ALA:H	2.09	0.50
49:DT:58:ASN:C	49:DT:58:ASN:ND2	2.65	0.50
51:DV:32:THR:HG22	51:DV:33:VAL:N	2.27	0.50
54:DY:7:VAL:HB	54:DY:8:LYS:NZ	2.27	0.50
1:AA:1078:U:H2'	1:AA:1079:G:O4'	2.10	0.50
1:AA:1285:A:H8	1:AA:1285:A:OP1	1.94	0.50
1:AA:1436:U:H2'	1:AA:1437:C:H6	1.76	0.50
1:AA:255:G:H2'	1:AA:256:U:C6	2.47	0.50
1:AA:348:G:O2'	1:AA:349:A:H5'	2.11	0.50
1:AA:624:C:H2'	1:AA:625:G:H8	1.77	0.50
2:AB:28:PHE:O	2:AB:28:PHE:CD1	2.65	0.50
3:AC:113:ALA:O	3:AC:115:LEU:N	2.44	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:6:ILE:H	8:AH:6:ILE:CD1	2.25	0.50
9:AI:16:ARG:O	9:AI:63:ILE:HA	2.11	0.50
11:AK:124:LYS:HD2	11:AK:125:PHE:HE1	1.73	0.50
12:AL:55:VAL:HG12	12:AL:56:ALA:N	2.27	0.50
13:AM:13:LYS:O	13:AM:44:ARG:HA	2.12	0.50
13:AM:19:LEU:HA	13:AM:22:ILE:CD1	2.40	0.50
15:AO:54:ARG:HG2	15:AO:58:MET:HE1	1.93	0.50
16:AP:15:PRO:HB3	16:AP:17:TYR:HE1	1.76	0.50
18:AR:31:LEU:H	18:AR:31:LEU:CD2	2.25	0.50
26:B1:30:VAL:O	26:B1:30:VAL:HG12	2.11	0.50
26:B1:46:LEU:CD1	26:B1:46:LEU:H	2.14	0.50
34:BA:1187:G:O5'	34:BA:1187:G:H8	1.95	0.50
34:BA:2747:G:O6	34:BA:2754:U:H2'	2.12	0.50
34:BA:415:A:C2	34:BA:2409:G:C2	2.99	0.50
37:BD:158:ALA:O	37:BD:159:ALA:HB3	2.10	0.50
39:BF:21:ALA:C	39:BF:23:ASP:H	2.14	0.50
40:BG:57:ALA:HA	40:BG:90:LEU:HD21	1.93	0.50
43:BN:26:LEU:HG	43:BN:30:ILE:HD11	1.93	0.50
45:BP:88:LEU:C	45:BP:90:ARG:H	2.15	0.50
51:BV:4:ILE:HG12	51:BV:13:ARG:CB	2.42	0.50
34:BA:85:G:O5'	54:BY:30:VAL:HB	2.12	0.50
34:BA:84:A:H5"	54:BY:9:LYS:NZ	2.25	0.50
55:BZ:71:VAL:HG13	55:BZ:86:VAL:HG12	1.93	0.50
1:CA:1387:G:C6	1:CA:1388:C:N4	2.79	0.50
1:CA:1401:G:H2'	1:CA:1402:C:O4'	2.11	0.50
1:CA:256:U:O2'	1:CA:257:G:H5'	2.11	0.50
1:CA:37:U:O2'	1:CA:38:G:H5'	2.11	0.50
1:CA:710:G:O2'	1:CA:711:G:H5'	2.11	0.50
2:CB:204:ASN:C	2:CB:204:ASN:ND2	2.65	0.50
5:CE:81:GLU:HG2	5:CE:90:VAL:HG13	1.92	0.50
7:CG:101:LEU:O	7:CG:104:LEU:HB2	2.12	0.50
7:CG:113:GLU:HB2	7:CG:119:ARG:CG	2.42	0.50
13:CM:13:LYS:O	13:CM:44:ARG:HA	2.12	0.50
14:CN:4:LYS:O	14:CN:7:ILE:HG12	2.12	0.50
15:CO:17:ARG:HG3	15:CO:17:ARG:NH1	2.26	0.50
15:CO:43:LEU:C	15:CO:45:VAL:H	2.15	0.50
15:CO:36:ILE:HG23	15:CO:56:LEU:HD11	1.94	0.50
18:CR:62:GLU:O	18:CR:65:ILE:HG13	2.10	0.50
19:CS:66:MET:HB2	19:CS:74:PHE:CZ	2.47	0.50
23:CW:31:A:C2	23:CW:39:U:O4	2.65	0.50
23:CW:52:G:C2	23:CW:53:G:C4	2.99	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D0:11:ARG:CB	25:D0:11:ARG:HH11	2.25	0.50
25:D0:2:ALA:HB1	34:DA:2494:G:P	2.52	0.50
25:D0:31:VAL:HB	25:D0:35:ASN:HD22	1.77	0.50
25:D0:42:GLY:HA3	34:DA:2331:G:O4'	2.12	0.50
26:D1:82:LEU:CG	26:D1:83:GLU:H	2.25	0.50
28:D3:54:VAL:CG1	28:D3:55:ARG:N	2.74	0.50
34:DA:1049:C:H2'	34:DA:1050:A:C8	2.43	0.50
34:DA:1341:U:N1	53:DX:77:LYS:HE2	2.27	0.50
34:DA:1434:A:H61	34:DA:1558:A:N6	2.04	0.50
34:DA:1614:A:H2'	34:DA:1615:C:H5'	1.93	0.50
34:DA:2358:G:H1	45:DP:55:ARG:NH2	1.98	0.50
34:DA:945:A:C4	34:DA:2448:A:C2	2.99	0.50
34:DA:2708:G:O2'	34:DA:2709:G:H5'	2.11	0.50
34:DA:2762:G:C3'	34:DA:2763:G:H5''	2.41	0.50
34:DA:765:G:H2'	34:DA:766:C:C6	2.47	0.50
37:DD:210:GLY:O	37:DD:211:ARG:HB3	2.12	0.50
37:DD:227:ASN:CB	37:DD:228:PRO:HD2	2.31	0.50
38:DE:180:ASN:O	38:DE:181:LEU:HD22	2.11	0.50
38:DE:14:ILE:HG13	38:DE:21:VAL:CG2	2.42	0.50
39:DF:32:LEU:O	39:DF:36:VAL:HG23	2.11	0.50
40:DG:139:LEU:HD12	40:DG:140:ILE:HG23	1.94	0.50
40:DG:130:ASN:CG	40:DG:160:VAL:HG13	2.31	0.50
40:DG:67:LYS:HD2	40:DG:67:LYS:H	1.76	0.50
41:DH:88:LEU:O	41:DH:89:ILE:CG2	2.57	0.50
44:DO:121:VAL:HG12	44:DO:122:LEU:N	2.27	0.50
45:DP:138:LEU:C	45:DP:138:LEU:HD12	2.32	0.50
45:DP:29:LYS:N	45:DP:29:LYS:HD2	2.26	0.50
46:DQ:42:ILE:HG23	46:DQ:46:GLN:OE1	2.11	0.50
48:DS:65:VAL:O	48:DS:69:VAL:HG12	2.11	0.50
49:DT:78:LEU:C	49:DT:79:HIS:ND1	2.64	0.50
50:DU:69:CYS:HB3	50:DU:106:PHE:HZ	1.76	0.50
50:DU:112:ARG:HG2	50:DU:112:ARG:NH1	2.21	0.50
50:DU:15:LYS:HG3	50:DU:16:LYS:N	2.25	0.50
50:DU:18:LEU:O	50:DU:21:ALA:N	2.44	0.50
51:DV:25:LEU:C	51:DV:27:ALA:H	2.14	0.50
51:DV:44:LYS:C	51:DV:46:VAL:H	2.15	0.50
51:DV:79:VAL:O	51:DV:80:GLN:CB	2.59	0.50
53:DX:83:VAL:O	53:DX:84:ALA:CB	2.59	0.50
1:AA:597:G:H2'	1:AA:598:U:H5'	1.93	0.50
2:AB:19:HIS:HD2	2:AB:189:ASP:OD2	1.95	0.50
4:AD:28:SER:HB3	4:AD:29:PRO:HD2	1.94	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:150:ARG:HB2	5:AE:150:ARG:NH1	2.26	0.50
8:AH:39:LEU:O	8:AH:44:PHE:HB2	2.12	0.50
8:AH:40:ALA:C	8:AH:42:GLU:N	2.65	0.50
8:AH:86:ILE:CB	8:AH:133:LEU:HD22	2.41	0.50
15:AO:75:PRO:HG2	15:AO:76:GLU:H	1.76	0.50
17:AQ:5:VAL:HA	17:AQ:59:ILE:O	2.11	0.50
22:AV:34:C:H2'	22:AV:34:C:O2	2.10	0.50
26:B1:23:LYS:O	26:B1:37:ILE:HB	2.10	0.50
34:BA:1022:G:O2'	34:BA:1023:U:P	2.70	0.50
34:BA:1268:A:H2'	34:BA:1269:A:O4'	2.11	0.50
34:BA:1345:C:H2'	34:BA:1346:G:H8	1.77	0.50
34:BA:1708:C:O2'	34:BA:1709:U:H5'	2.12	0.50
34:BA:2533:A:H2'	34:BA:2534:A:C5'	2.28	0.50
34:BA:554:U:O2'	34:BA:555:U:H5'	2.11	0.50
34:BA:612:C:H2'	34:BA:613:G:C5'	2.19	0.50
34:BA:614(A):U:H4'	34:BA:614(B):G:H5''	1.93	0.50
34:BA:615:G:H5'	39:BF:40:GLN:NE2	2.27	0.50
34:BA:941:A:H2'	34:BA:942:G:C8	2.47	0.50
35:BB:4:C:H2'	35:BB:5:C:C6	2.47	0.50
38:BE:101:ARG:HD3	38:BE:169:ASN:HD22	1.76	0.50
38:BE:120:TRP:CD2	38:BE:155:LYS:HD3	2.46	0.50
34:BA:2050:C:H1'	38:BE:156:MET:HE2	1.92	0.50
39:BF:83:PHE:O	39:BF:85:GLY:N	2.44	0.50
40:BG:7:LEU:HB2	40:BG:104:GLU:CD	2.32	0.50
45:BP:96:THR:HB	45:BP:126:VAL:HB	1.94	0.50
46:BQ:104:PHE:HE1	46:BQ:125:LEU:HD11	1.77	0.50
49:BT:42:ILE:O	49:BT:43:GLN:C	2.50	0.50
49:BT:65:LYS:HZ2	49:BT:65:LYS:HA	1.77	0.50
34:BA:994:C:H1'	51:BV:10:LYS:NZ	2.26	0.50
52:BW:59:VAL:HG12	52:BW:60:ASN:H	1.74	0.50
1:CA:1412:C:H2'	1:CA:1413:A:H8	1.71	0.50
1:CA:1414:U:H2'	1:CA:1415:G:H8	1.77	0.50
1:CA:296:U:H2'	1:CA:297:G:C8	2.47	0.50
1:CA:358:U:H2'	1:CA:359:U:C6	2.47	0.50
1:CA:386:C:H2'	1:CA:387:U:C5'	2.41	0.50
1:CA:766:A:H2'	1:CA:767:A:O4'	2.12	0.50
2:CB:22:LYS:H	2:CB:40:HIS:CE1	2.30	0.50
9:CI:112:LYS:HE3	9:CI:116:LYS:O	2.11	0.50
9:CI:23:ASN:HB2	9:CI:60:ASP:OD1	2.11	0.50
13:CM:93:ARG:HE	13:CM:93:ARG:HA	1.77	0.50
15:CO:57:LEU:O	15:CO:60:VAL:HB	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:94:ASN:O	17:CQ:95:TYR:C	2.50	0.50
25:D0:20:ARG:CD	25:D0:20:ARG:N	2.61	0.50
25:D0:36:ILE:HD13	25:D0:36:ILE:H	1.77	0.50
26:D1:82:LEU:CD1	26:D1:84:GLY:H	2.24	0.50
26:D1:87:PRO:HB2	26:D1:91:LYS:CE	2.41	0.50
34:DA:1602:U:H3'	34:DA:1603:A:C5'	2.42	0.50
34:DA:1899:G:H21	34:DA:1902:C:H5	1.58	0.50
34:DA:2086:U:H2'	34:DA:2087:G:C8	2.47	0.50
34:DA:188:G:N2	34:DA:209:C:C2	2.80	0.50
34:DA:2406:U:O4	45:DP:70:GLN:HB3	2.12	0.50
34:DA:2525:G:O2'	34:DA:2526:G:H5'	2.11	0.50
34:DA:2639:A:C3'	34:DA:2640:G:H5''	2.42	0.50
34:DA:2887:U:O2'	34:DA:2888:C:H5'	2.12	0.50
34:DA:418:G:O2'	34:DA:419:C:H5'	2.11	0.50
34:DA:523:C:O2'	34:DA:524:U:H5'	2.12	0.50
34:DA:611:C:O2'	34:DA:612:C:H5'	2.12	0.50
34:DA:827:U:H4'	34:DA:828:U:O2	2.12	0.50
38:DE:3:GLY:O	38:DE:4:ILE:HG22	2.11	0.50
38:DE:70:ALA:O	38:DE:72:VAL:N	2.45	0.50
39:DF:52:LYS:HB3	39:DF:56:GLU:HB3	1.93	0.50
45:DP:140:ALA:O	45:DP:141:ALA:HB2	2.12	0.50
48:DS:30:ARG:HH21	48:DS:62:LYS:HD2	1.75	0.50
49:DT:3:ARG:C	49:DT:5:ALA:N	2.63	0.50
52:DW:95:ILE:O	52:DW:95:ILE:HG13	2.11	0.50
53:DX:31:HIS:O	53:DX:32:PRO:C	2.50	0.50
54:DY:15:VAL:O	54:DY:16:ALA:CB	2.59	0.50
55:DZ:104:PHE:HD1	55:DZ:139:VAL:HG11	1.76	0.50
1:AA:1168:A:H2'	1:AA:1169:A:H8	1.76	0.50
1:AA:1296:C:H5'	1:AA:1297:C:OP2	2.11	0.50
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.73	0.50
1:AA:227:G:H2'	1:AA:228:A:H8	1.76	0.50
1:AA:385:C:O2'	1:AA:386:C:H5'	2.12	0.50
1:AA:714:G:H2'	1:AA:715:A:C8	2.47	0.50
2:AB:84:GLU:OE1	2:AB:216:SER:HA	2.12	0.50
2:AB:97:TRP:CH2	2:AB:176:GLU:OE2	2.65	0.50
4:AD:147:ALA:HB2	4:AD:182:LYS:HB2	1.94	0.50
5:AE:36:ASP:O	5:AE:37:ARG:CB	2.59	0.50
7:AG:85:TYR:HD1	7:AG:154:TYR:HE1	1.59	0.50
13:AM:75:ALA:O	13:AM:78:ILE:N	2.45	0.50
15:AO:39:LEU:C	15:AO:39:LEU:HD13	2.32	0.50
16:AP:43:LYS:HG3	16:AP:48:TRP:CG	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:62:ILE:HD12	19:AS:66:MET:SD	2.51	0.50
26:B1:26:ARG:N	26:B1:26:ARG:HD3	2.25	0.50
28:B3:23:LEU:H	28:B3:23:LEU:HD12	1.77	0.50
30:B5:35:GLU:HB2	30:B5:49:CYS:SG	2.51	0.50
32:B7:8:ASN:C	32:B7:8:ASN:ND2	2.61	0.50
33:B8:2:PRO:O	33:B8:3:LYS:O	2.29	0.50
34:BA:1175:U:H4'	34:BA:1176:G:H2'	1.93	0.50
34:BA:118:A:H5'	34:BA:119:A:H8	1.77	0.50
34:BA:1335:U:O2'	34:BA:1336:A:H5'	2.12	0.50
34:BA:1509:C:OP1	34:BA:1509:C:H4'	2.12	0.50
34:BA:1523:U:H2'	34:BA:1524:G:C8	2.46	0.50
34:BA:1718:G:H8	34:BA:1718:G:H5'	1.77	0.50
34:BA:2160:G:H3'	34:BA:2161:C:H5''	1.94	0.50
34:BA:2531:A:H2	34:BA:2658:C:O2	1.94	0.50
34:BA:2645:G:C3'	34:BA:2646:C:H5'	2.39	0.50
30:B5:43:HIS:CD2	34:BA:2815:C:O2'	2.63	0.50
34:BA:2842:G:O2'	34:BA:2843:G:H5'	2.12	0.50
34:BA:2872:G:C2	34:BA:2873:A:N6	2.79	0.50
34:BA:360:G:H2'	34:BA:361:G:C8	2.47	0.50
38:BE:201:THR:CG2	38:BE:203:LYS:HB3	2.42	0.50
39:BF:110:LEU:O	39:BF:113:ALA:HB3	2.12	0.50
40:BG:6:ALA:O	40:BG:10:LYS:N	2.44	0.50
40:BG:145:THR:OG1	40:BG:146:TYR:N	2.45	0.50
40:BG:39:ILE:HG12	40:BG:60:LEU:HD21	1.94	0.50
41:BH:92:ILE:CG2	41:BH:93:GLY:N	2.64	0.50
42:BI:120:ILE:HG22	42:BI:121:LYS:N	2.26	0.50
45:BP:123:LEU:O	45:BP:124:LYS:C	2.50	0.50
45:BP:148:LEU:O	45:BP:148:LEU:HD22	2.12	0.50
47:BR:4:LEU:HD22	47:BR:4:LEU:O	2.11	0.50
34:BA:2873:A:N3	47:BR:6:SER:HB2	2.27	0.50
51:BV:52:VAL:O	51:BV:53:GLU:HB3	2.12	0.50
55:BZ:105:VAL:HG22	55:BZ:106:GLY:H	1.77	0.50
1:CA:107:G:H2'	1:CA:108:G:C5'	2.41	0.50
1:CA:1106:G:O2'	1:CA:1107:C:H5'	2.12	0.50
1:CA:1207:G:O2'	1:CA:1208:C:H5'	2.11	0.50
1:CA:1209:C:O2'	1:CA:1210:C:H5'	2.12	0.50
1:CA:1406:U:C2'	1:CA:1407:C:H5'	2.41	0.50
1:CA:673:G:H2'	1:CA:674:G:H8	1.74	0.50
1:CA:908:A:H2'	1:CA:909:A:H8	1.77	0.50
3:CC:175:LEU:HD21	3:CC:201:TYR:CD2	2.47	0.50
4:CD:52:SER:C	4:CD:54:TYR:N	2.65	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:71:ARG:HA	6:CF:74:ASP:OD2	2.11	0.50
8:CH:6:ILE:HG12	8:CH:31:PHE:HE2	1.76	0.50
10:CJ:39:PRO:CA	10:CJ:70:ARG:NH1	2.75	0.50
12:CL:58:VAL:O	12:CL:60:LEU:HD22	2.11	0.50
12:CL:90:VAL:O	12:CL:92:ASP:N	2.44	0.50
13:CM:15:VAL:HA	13:CM:18:ALA:HB3	1.94	0.50
1:CA:1305:G:OP1	21:CU:2:GLY:HA3	2.12	0.50
29:D4:29:PRO:O	29:D4:31:ILE:N	2.44	0.50
34:DA:1328:G:O2'	34:DA:1329:U:H5''	2.11	0.50
34:DA:1509:C:H4'	34:DA:1509:C:OP1	2.12	0.50
34:DA:2127:G:N1	34:DA:2161:C:H1'	2.26	0.50
34:DA:2777:G:H5''	34:DA:2778:A:H5''	1.94	0.50
34:DA:363(E):U:O2'	34:DA:363(F):A:H4'	2.11	0.50
34:DA:613:G:C8	34:DA:613:G:H5'	2.43	0.50
34:DA:626:U:O2	45:DP:105:LEU:HG	2.12	0.50
34:DA:687:C:H42	34:DA:787:U:H4'	1.77	0.50
36:DC:208:PHE:O	36:DC:209:LEU:CB	2.59	0.50
37:DD:246:PRO:HB2	37:DD:255:LYS:HG2	1.94	0.50
38:DE:176:ILE:HG22	38:DE:179:GLU:H	1.76	0.50
38:DE:47:VAL:O	38:DE:80:GLU:HA	2.12	0.50
38:DE:48:GLN:HE21	38:DE:78:LEU:CD1	2.25	0.50
41:DH:87:LEU:HA	41:DH:163:TYR:O	2.12	0.50
45:DP:112:LEU:HD22	45:DP:113:LYS:N	2.27	0.50
45:DP:14:LYS:O	45:DP:15:ARG:CB	2.60	0.50
46:DQ:7:MET:O	46:DQ:10:ARG:NH2	2.45	0.50
47:DR:48:VAL:O	47:DR:51:LEU:HB2	2.11	0.50
50:DU:50:ARG:CZ	51:DV:75:PHE:CE2	2.95	0.50
53:DX:44:GLU:HB3	53:DX:51:VAL:HG23	1.94	0.50
54:DY:11:ASP:N	54:DY:27:VAL:HG22	2.27	0.50
54:DY:35:TYR:HD2	54:DY:68:HIS:CE1	2.29	0.50
55:DZ:24:LEU:HB2	55:DZ:41:LEU:HD23	1.94	0.50
1:AA:1203:C:O2'	1:AA:1204:A:H5'	2.12	0.50
1:AA:192:U:O4'	20:AT:103:GLY:HA2	2.12	0.50
1:AA:26:A:H61	1:AA:558:G:H1'	1.75	0.50
1:AA:586:C:O2'	1:AA:587:G:H5'	2.12	0.50
1:AA:940:C:H2'	1:AA:941:G:C8	2.46	0.50
2:AB:208:ILE:HA	2:AB:211:ILE:HD12	1.93	0.50
4:AD:11:LEU:O	4:AD:12:CYS:C	2.49	0.50
11:AK:52:GLY:H	11:AK:55:LYS:NZ	2.10	0.50
12:AL:20:LYS:H	12:AL:20:LYS:HD3	1.77	0.50
12:AL:41:ARG:HG2	12:AL:42:THR:N	2.26	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:66:MET:HB2	19:AS:74:PHE:HZ	1.77	0.50
30:B5:7:PRO:HB2	34:BA:2016:U:O2	2.11	0.50
32:B7:27:GLY:O	32:B7:30:VAL:HB	2.11	0.50
34:BA:1203:G:H3'	34:BA:1204:A:H5''	1.94	0.50
34:BA:1388:G:O2'	34:BA:1389:G:H5'	2.11	0.50
34:BA:139:G:H1	34:BA:142(A):C:H42	1.60	0.50
34:BA:2201:C:H2'	34:BA:2202:C:C6	2.46	0.50
34:BA:2348:U:O2'	34:BA:2349:G:H5''	2.11	0.50
34:BA:2861:G:O2'	34:BA:2862:G:H5'	2.12	0.50
38:BE:101:ARG:HH11	38:BE:169:ASN:HD22	1.58	0.50
39:BF:103:LYS:O	39:BF:105:VAL:N	2.45	0.50
39:BF:41:LEU:HD23	39:BF:44:ARG:HD3	1.94	0.50
41:BH:65:HIS:C	41:BH:67:LEU:H	2.16	0.50
44:BO:46:ALA:H	44:BO:54:GLU:CG	2.23	0.50
46:BQ:137:TYR:O	46:BQ:138:ASP:CG	2.50	0.50
46:BQ:47:ILE:HD12	46:BQ:47:ILE:N	2.26	0.50
50:BU:108:GLU:O	50:BU:112:ARG:HB2	2.12	0.50
53:BX:55:ASN:HD22	53:BX:78:LYS:HE2	1.75	0.50
53:BX:53:LYS:H	53:BX:80:ILE:HG22	1.77	0.50
55:BZ:131:ARG:HH11	55:BZ:131:ARG:HG2	1.77	0.50
55:BZ:166:SER:HB2	55:BZ:167:PRO:CA	2.42	0.50
55:BZ:44:PHE:CE2	55:BZ:86:VAL:HG11	2.47	0.50
55:BZ:48:PHE:O	55:BZ:52:SER:N	2.43	0.50
1:CA:1305:G:C2	1:CA:1331:G:N3	2.80	0.50
1:CA:1502:A:C2	1:CA:1505:G:N1	2.80	0.50
1:CA:20:U:H2'	1:CA:21:G:O4'	2.12	0.50
1:CA:635:G:C6	1:CA:636:U:C4	3.00	0.50
2:CB:92:TYR:CE2	2:CB:151:GLY:CA	2.95	0.50
2:CB:197:VAL:HG12	2:CB:200:ILE:HG12	1.93	0.50
2:CB:84:GLU:HB3	2:CB:219:VAL:CG2	2.37	0.50
3:CC:95:THR:HG22	3:CC:97:LYS:H	1.77	0.50
4:CD:104:VAL:HG12	4:CD:105:VAL:N	2.27	0.50
4:CD:134:ASP:OD2	4:CD:135:LEU:HD22	2.12	0.50
4:CD:152:SER:O	4:CD:154:ASN:N	2.45	0.50
8:CH:119:LEU:CD1	8:CH:124:ALA:HA	2.41	0.50
11:CK:21:ILE:HG13	11:CK:30:VAL:HG12	1.93	0.50
18:CR:31:LEU:H	18:CR:31:LEU:CD2	2.24	0.50
19:CS:79:THR:O	19:CS:80:TYR:HB3	2.12	0.50
26:D1:78:LYS:O	26:D1:80:LEU:N	2.45	0.50
27:D2:14:ARG:NE	27:D2:57:ILE:CB	2.74	0.50
31:D6:45:LYS:HZ1	34:DA:2370:G:N2	2.06	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:D8:14:VAL:CG1	33:D8:22:VAL:HG13	2.37	0.50
33:D8:30:ARG:HH21	45:DP:62:LEU:CB	2.19	0.50
33:D8:32:LEU:HB3	33:D8:35:GLN:N	2.19	0.50
34:DA:2160:G:H3'	34:DA:2161:C:H5''	1.94	0.50
34:DA:271(M):G:H2'	34:DA:271(N):U:H5''	1.93	0.50
34:DA:2771:C:C2'	34:DA:2771:C:O2	2.60	0.50
34:DA:2807:G:H3'	34:DA:2808:U:H5''	1.94	0.50
34:DA:285:C:C2'	34:DA:286:C:H5''	2.41	0.50
34:DA:280:C:H42	34:DA:360:G:H1	1.59	0.50
34:DA:608:A:C2	34:DA:609:A:C4	2.98	0.50
34:DA:741:G:H2'	34:DA:742:G:H8	1.77	0.50
34:DA:848:G:N3	34:DA:933:A:H1'	2.27	0.50
37:DD:35:LYS:HE3	37:DD:65:ILE:N	2.27	0.50
38:DE:182:LEU:O	38:DE:183:LEU:HD12	2.12	0.50
39:DF:83:PHE:O	39:DF:84:VAL:HB	2.12	0.50
40:DG:61:ALA:O	40:DG:65:GLY:N	2.45	0.50
40:DG:39:ILE:HG13	40:DG:92:VAL:CG1	2.42	0.50
41:DH:55:PRO:HG2	41:DH:56:SER:N	2.22	0.50
43:DN:42:TRP:HB2	50:DU:64:ARG:NH2	2.25	0.50
45:DP:100:LEU:O	45:DP:101:VAL:C	2.49	0.50
45:DP:148:LEU:O	45:DP:148:LEU:HD22	2.12	0.50
47:DR:96:ARG:HE	47:DR:117:VAL:HG23	1.76	0.50
48:DS:45:GLY:O	48:DS:46:VAL:HG23	2.11	0.50
49:DT:83:ILE:HG13	49:DT:84:GLN:HG2	1.94	0.50
51:DV:40:LEU:O	51:DV:41:GLY:C	2.48	0.50
51:DV:5:VAL:HG22	51:DV:6:LYS:N	2.27	0.50
51:DV:63:GLY:O	51:DV:96:ILE:HG23	2.12	0.50
55:DZ:28:MET:HE3	55:DZ:37:VAL:HG21	1.93	0.50
55:DZ:91:LEU:HD12	55:DZ:91:LEU:H	1.77	0.50
1:AA:1392:G:N2	1:AA:1502:A:C8	2.74	0.49
1:AA:160:A:H2'	1:AA:161:A:O4'	2.11	0.49
1:AA:243:A:O2'	1:AA:244:U:OP2	2.29	0.49
1:AA:374:A:O2'	1:AA:375:U:H5'	2.12	0.49
1:AA:439:A:C5	1:AA:441:A:H1'	2.48	0.49
4:AD:80:GLU:O	4:AD:83:SER:N	2.45	0.49
5:AE:41:VAL:HG13	5:AE:113:ALA:HA	1.93	0.49
9:AI:113:LYS:H	9:AI:113:LYS:CD	2.24	0.49
9:AI:88:TYR:O	9:AI:89:ASN:CG	2.50	0.49
11:AK:58:PRO:O	11:AK:61:ALA:HB3	2.12	0.49
19:AS:16:LEU:HA	19:AS:19:VAL:HB	1.94	0.49
23:AW:23:A:H2'	23:AW:24:G:C8	2.46	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:27:G:H2'	23:AW:28:G:H8	1.72	0.49
27:B2:48:HIS:O	27:B2:49:LYS:HG2	2.11	0.49
27:B2:60:LEU:O	27:B2:61:LEU:HB2	2.12	0.49
33:B8:14:VAL:CG1	33:B8:22:VAL:HG13	2.37	0.49
34:BA:1155:A:O3'	50:BU:55:ARG:NH1	2.45	0.49
34:BA:1350:C:O2'	34:BA:1351:C:H5'	2.12	0.49
34:BA:1607:C:H4'	34:BA:1608:A:O5'	2.12	0.49
34:BA:2684:U:OP2	49:BT:53:ARG:NH2	2.43	0.49
34:BA:468:G:H2'	34:BA:469:G:O4'	2.12	0.49
34:BA:482:A:H4'	54:BY:47:LYS:HZ1	1.76	0.49
34:BA:578:A:OP1	34:BA:1255:U:O2'	2.26	0.49
34:BA:624:C:O2	34:BA:657:U:H4'	2.13	0.49
27:B2:41:ILE:CG1	34:BA:94(A):G:H22	2.25	0.49
38:BE:120:TRP:NE1	38:BE:155:LYS:HB3	2.27	0.49
38:BE:134:ILE:O	38:BE:134:ILE:HG12	2.11	0.49
34:BA:660:G:H5'	39:BF:99:TYR:CE2	2.47	0.49
42:BI:124:GLY:O	42:BI:142:VAL:HG23	2.12	0.49
47:BR:96:ARG:HE	47:BR:117:VAL:HG23	1.77	0.49
51:BV:18:LEU:HD22	51:BV:18:LEU:C	2.32	0.49
53:BX:83:VAL:O	53:BX:84:ALA:CB	2.59	0.49
54:BY:8:LYS:HZ1	54:BY:74:PRO:CD	2.22	0.49
46:BQ:140:ALA:O	55:BZ:53:ILE:HD12	2.11	0.49
1:CA:636:U:H2'	1:CA:637:G:H8	1.77	0.49
1:CA:78:G:N2	1:CA:91:C:H42	1.95	0.49
1:CA:940:C:H2'	1:CA:941:G:C8	2.47	0.49
4:CD:25:ARG:O	4:CD:27:TYR:N	2.44	0.49
7:CG:102:ARG:HG2	7:CG:106:GLN:NE2	2.24	0.49
1:CA:1240:U:OP2	7:CG:116:ALA:HB2	2.12	0.49
8:CH:122:ARG:HH11	8:CH:122:ARG:CB	2.23	0.49
20:CT:24:LEU:C	20:CT:24:LEU:HD13	2.32	0.49
20:CT:33:ILE:HD12	20:CT:63:ILE:CG1	2.40	0.49
25:D0:20:ARG:NH1	34:DA:2357:U:OP1	2.45	0.49
28:D3:59:VAL:HG12	28:D3:60:GLU:N	2.27	0.49
30:D5:4:HIS:CB	30:D5:5:PRO:CD	2.88	0.49
32:D7:5:TRP:NE1	32:D7:7:PRO:HG3	2.27	0.49
34:DA:1268:A:H2'	34:DA:1269:A:O4'	2.12	0.49
34:DA:256:A:H2'	34:DA:257:A:C8	2.47	0.49
34:DA:270:A:C2'	34:DA:271:A:H5'	2.42	0.49
34:DA:438:G:O2'	34:DA:440:G:H5'	2.12	0.49
34:DA:523:C:H2'	34:DA:524:U:H5'	1.94	0.49
34:DA:589:C:H2'	34:DA:590:A:H8	1.77	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:601:C:O2'	34:DA:605:C:H5''	2.12	0.49
34:DA:703:U:C2'	34:DA:704:G:H5'	2.41	0.49
37:DD:108:PRO:HG3	37:DD:111:LEU:HD23	1.94	0.49
37:DD:205:VAL:O	37:DD:205:VAL:HG12	2.11	0.49
38:DE:201:THR:CG2	38:DE:203:LYS:HB3	2.42	0.49
38:DE:56:PRO:O	38:DE:58:ARG:N	2.45	0.49
38:DE:59:VAL:CG2	38:DE:63:LEU:HA	2.42	0.49
40:DG:138:GLN:HE22	40:DG:152:LEU:C	2.15	0.49
40:DG:105:LYS:HE2	40:DG:143:GLU:OE1	2.11	0.49
40:DG:96:ARG:O	40:DG:99:MET:HB3	2.11	0.49
41:DH:155:SER:C	41:DH:157:TYR:H	2.16	0.49
41:DH:35:VAL:O	41:DH:37:VAL:HG23	2.11	0.49
43:DN:18:ALA:C	43:DN:20:GLY:N	2.65	0.49
44:DO:71:ARG:HB2	44:DO:75:SER:O	2.12	0.49
45:DP:48:PRO:HG2	45:DP:49:ARG:N	2.20	0.49
47:DR:48:VAL:HA	47:DR:51:LEU:HD12	1.93	0.49
47:DR:85:PRO:O	47:DR:87:TYR:N	2.45	0.49
48:DS:101:LEU:HD22	48:DS:102:ALA:N	2.21	0.49
48:DS:15:ARG:HG3	48:DS:15:ARG:NH1	2.27	0.49
49:DT:29:ARG:CG	49:DT:30:VAL:H	2.25	0.49
49:DT:89:VAL:CB	49:DT:91:ARG:HE	2.24	0.49
50:DU:106:PHE:HA	50:DU:109:LEU:HD12	1.94	0.49
50:DU:109:LEU:O	50:DU:113:ALA:N	2.42	0.49
51:DV:52:VAL:O	51:DV:53:GLU:HB3	2.11	0.49
53:DX:53:LYS:HE3	53:DX:55:ASN:ND2	2.16	0.49
54:DY:20:TYR:CD1	54:DY:42:VAL:HG22	2.46	0.49
55:DZ:167:PRO:O	55:DZ:168:GLU:HB2	2.12	0.49
1:AA:1198:G:H2'	1:AA:1199:U:C6	2.47	0.49
1:AA:1254:C:H2'	1:AA:1255:G:C8	2.47	0.49
1:AA:1271:G:H2'	1:AA:1272:G:H8	1.78	0.49
1:AA:237:C:O2'	1:AA:238:G:H5'	2.12	0.49
1:AA:299:G:H2'	1:AA:300:A:C8	2.47	0.49
1:AA:600:C:O2'	1:AA:601:C:H5'	2.13	0.49
4:AD:8:VAL:O	4:AD:11:LEU:HG	2.11	0.49
4:AD:60:GLU:OE2	4:AD:198:VAL:HA	2.13	0.49
5:AE:32:VAL:HG12	5:AE:33:VAL:N	2.27	0.49
9:AI:20:ARG:O	9:AI:60:ASP:N	2.42	0.49
9:AI:23:ASN:HB2	9:AI:60:ASP:OD1	2.12	0.49
11:AK:33:THR:HB	11:AK:38:ASN:O	2.13	0.49
13:AM:83:ASP:CG	13:AM:84:ILE:N	2.65	0.49
15:AO:38:ARG:HH11	15:AO:38:ARG:HG2	1.75	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:56:LEU:HG	15:AO:60:VAL:CG2	2.42	0.49
16:AP:39:TYR:CZ	16:AP:41:PRO:HB3	2.46	0.49
26:B1:54:ALA:C	26:B1:56:GLN:N	2.63	0.49
26:B1:54:ALA:O	26:B1:56:GLN:N	2.44	0.49
30:B5:2:ALA:N	34:BA:747:U:C4	2.80	0.49
31:B6:11:LEU:O	31:B6:24:GLU:N	2.45	0.49
34:BA:1108:U:C2'	34:BA:1109:C:H5'	2.43	0.49
34:BA:1140:C:C1'	34:BA:1143:A:C2	2.96	0.49
34:BA:1510:G:H2'	34:BA:1511:C:O4'	2.11	0.49
34:BA:1665:A:H2'	34:BA:1666:G:C5'	2.41	0.49
34:BA:1766:U:O2'	34:BA:1767:C:H5'	2.12	0.49
34:BA:2066:C:O2'	34:BA:2067:G:H5'	2.12	0.49
34:BA:2164:C:H5''	34:BA:2165:G:N7	2.27	0.49
34:BA:2529:G:OP2	34:BA:2530:A:H5''	2.12	0.49
34:BA:2776:A:C6	34:BA:2782:G:H1'	2.47	0.49
34:BA:2815:C:H2'	34:BA:2816:C:H6	1.77	0.49
39:BF:107:LYS:O	39:BF:110:LEU:N	2.45	0.49
39:BF:176:LEU:HD21	39:BF:180:GLY:O	2.12	0.49
40:BG:34:LEU:HD22	40:BG:35:GLU:N	2.27	0.49
34:BA:2747:G:P	41:BH:138:LYS:HZ3	2.35	0.49
42:BI:25:TYR:CE2	42:BI:29:TYR:CD2	3.00	0.49
42:BI:79:ILE:HG13	42:BI:140:LEU:HD21	1.94	0.49
47:BR:84:ALA:N	47:BR:85:PRO:CD	2.75	0.49
47:BR:97:VAL:CG2	47:BR:114:VAL:HG22	2.42	0.49
49:BT:101:PHE:HE2	49:BT:113:LYS:HD3	1.76	0.49
49:BT:89:VAL:CB	49:BT:91:ARG:HE	2.24	0.49
51:BV:25:LEU:C	51:BV:27:ALA:H	2.16	0.49
55:BZ:98:MET:O	55:BZ:125:LEU:HA	2.11	0.49
55:BZ:99:TYR:HD2	55:BZ:99:TYR:N	2.10	0.49
1:CA:1126:U:O2'	1:CA:1127:G:H5'	2.12	0.49
1:CA:1159:U:O4'	1:CA:1182:G:N2	2.45	0.49
1:CA:1216:G:O2'	1:CA:1217:C:H5'	2.12	0.49
2:CB:149:LEU:O	2:CB:153:ARG:HG3	2.13	0.49
4:CD:2:GLY:O	4:CD:4:TYR:N	2.45	0.49
5:CE:68:GLU:O	5:CE:70:PRO:HD3	2.12	0.49
7:CG:148:ASN:N	7:CG:148:ASN:ND2	2.58	0.49
7:CG:72:ARG:O	7:CG:73:MET:HG3	2.13	0.49
12:CL:86:ARG:HB2	12:CL:101:VAL:CG2	2.42	0.49
31:D6:25:LYS:HD3	33:D8:36:LYS:HD2	1.94	0.49
34:DA:1131:G:OP2	34:DA:2515:C:H4'	2.11	0.49
34:DA:1257:C:H2'	34:DA:1258:C:H6	1.77	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1350:C:O2'	34:DA:1351:C:H5'	2.11	0.49
34:DA:2545:G:N3	34:DA:2565:A:H2	2.10	0.49
34:DA:2801(A):A:O2'	34:DA:2803:C:H5	1.94	0.49
34:DA:2894:G:H2'	34:DA:2894:G:N3	2.27	0.49
34:DA:360:G:H2'	34:DA:361:G:H8	1.77	0.49
34:DA:614:U:H4'	34:DA:614(C):A:H62	1.77	0.49
37:DD:231:HIS:ND1	37:DD:232:PRO:CD	2.74	0.49
38:DE:96:PHE:HA	38:DE:100:GLU:OE1	2.12	0.49
39:DF:161:GLU:O	39:DF:164:ARG:HB3	2.12	0.49
42:DI:72:LEU:HD12	42:DI:138:ILE:HG23	1.93	0.49
45:DP:122:PRO:HA	45:DP:141:ALA:O	2.12	0.49
45:DP:126:VAL:HG12	45:DP:127:ALA:N	2.28	0.49
47:DR:104:ARG:O	47:DR:108:GLY:HA2	2.13	0.49
48:DS:93:LYS:HE3	48:DS:93:LYS:HA	1.94	0.49
49:DT:33:LYS:HZ3	49:DT:33:LYS:H	1.60	0.49
49:DT:89:VAL:HG12	49:DT:91:ARG:CG	2.42	0.49
50:DU:65:ILE:O	50:DU:68:ALA:HB3	2.12	0.49
50:DU:69:CYS:HB3	50:DU:106:PHE:CZ	2.48	0.49
53:DX:67:GLY:C	53:DX:68:ARG:HG2	2.31	0.49
55:DZ:8:TYR:CD1	55:DZ:8:TYR:N	2.80	0.49
1:AA:1277:C:O2'	1:AA:1279:A:H8	1.95	0.49
1:AA:227:G:H2'	1:AA:228:A:C8	2.48	0.49
1:AA:594:G:O2'	1:AA:595:G:H5'	2.13	0.49
1:AA:60:A:O3'	20:AT:10:LEU:HD21	2.12	0.49
1:AA:652:U:H1'	1:AA:653:A:H2	1.76	0.49
1:AA:782:A:H2'	1:AA:783:C:C5'	2.42	0.49
1:AA:861:G:O2'	1:AA:862:C:H5'	2.11	0.49
1:AA:963:G:H2'	1:AA:964:A:H8	1.75	0.49
2:AB:187:LEU:HD13	2:AB:187:LEU:O	2.12	0.49
3:AC:52:LEU:HD23	3:AC:52:LEU:N	2.25	0.49
5:AE:68:GLU:O	5:AE:70:PRO:HD3	2.12	0.49
6:AF:52:ILE:O	6:AF:53:ALA:HB3	2.11	0.49
11:AK:90:GLY:O	11:AK:94:ALA:HB2	2.13	0.49
12:AL:41:ARG:CG	12:AL:42:THR:N	2.73	0.49
19:AS:53:ASN:HD21	19:AS:55:LYS:HB3	1.76	0.49
20:AT:26:ASN:ND2	20:AT:26:ASN:H	2.10	0.49
26:B1:94:LEU:O	26:B1:95:LEU:HG	2.13	0.49
34:BA:2019:A:C2'	34:BA:2020:A:O5'	2.61	0.49
34:BA:2184:G:H2'	34:BA:2185:C:H6	1.77	0.49
34:BA:2189:U:H2'	34:BA:2190:G:H5''	1.95	0.49
34:BA:2392:A:H1'	45:BP:60:MET:HG2	1.93	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2632:A:O2'	38:BE:61:ARG:CZ	2.60	0.49
34:BA:2881:C:C2	34:BA:2882:A:C8	3.00	0.49
34:BA:2887:U:H2'	34:BA:2888:C:C6	2.46	0.49
34:BA:350:U:H2'	34:BA:351:G:O4'	2.12	0.49
34:BA:765:G:H2'	34:BA:766:C:C6	2.46	0.49
35:BB:7:G:H4'	48:BS:29:PHE:CD1	2.48	0.49
38:BE:25:VAL:O	38:BE:25:VAL:HG12	2.11	0.49
42:BI:110:ASP:O	42:BI:112:LYS:N	2.44	0.49
42:BI:114:LEU:O	42:BI:115:ALA:HB3	2.11	0.49
43:BN:40:PRO:C	50:BU:64:ARG:NH2	2.65	0.49
44:BO:1:MET:HB2	44:BO:32:TYR:HD2	1.77	0.49
48:BS:28:VAL:O	48:BS:89:ARG:HD2	2.11	0.49
49:BT:55:ASN:HD22	49:BT:58:ASN:ND2	1.99	0.49
51:BV:2:PHE:CZ	51:BV:13:ARG:HD2	2.47	0.49
51:BV:32:THR:HG22	51:BV:33:VAL:N	2.27	0.49
34:BA:493:G:O2'	52:BW:7:ALA:HA	2.12	0.49
55:BZ:118:GLN:O	55:BZ:120:ILE:N	2.45	0.49
55:BZ:16:SER:O	55:BZ:17:ALA:C	2.51	0.49
55:BZ:24:LEU:HD11	55:BZ:83:PRO:HB2	1.94	0.49
35:BB:76:G:C4'	55:BZ:85:HIS:HD2	2.25	0.49
1:CA:1040:U:O2'	1:CA:1041:A:H5'	2.12	0.49
1:CA:66:G:N2	1:CA:172:A:C2	2.81	0.49
1:CA:430:A:O2'	1:CA:431:A:H5'	2.11	0.49
2:CB:216:SER:O	2:CB:218:ALA:N	2.45	0.49
2:CB:88:ALA:HB2	2:CB:219:VAL:CG1	2.42	0.49
3:CC:179:ARG:HD2	3:CC:207:VAL:HG22	1.94	0.49
6:CF:21:LEU:O	6:CF:24:GLU:HB3	2.12	0.49
6:CF:98:LEU:H	6:CF:98:LEU:HD12	1.76	0.49
8:CH:101:PRO:HG2	8:CH:133:LEU:HD11	1.94	0.49
9:CI:19:LEU:HB3	9:CI:59:PHE:HD2	1.78	0.49
10:CJ:39:PRO:CB	10:CJ:70:ARG:HH12	2.24	0.49
12:CL:20:LYS:H	12:CL:20:LYS:HD3	1.78	0.49
19:CS:11:VAL:HG22	19:CS:16:LEU:HD11	1.95	0.49
23:CW:58:A:H1'	23:CW:60:U:C5	2.46	0.49
26:D1:34:THR:CG2	34:DA:388:G:P	2.99	0.49
27:D2:14:ARG:NE	27:D2:57:ILE:HG21	2.28	0.49
29:D4:28:LYS:O	40:DG:113:ARG:NH2	2.45	0.49
34:DA:1203:G:H3'	34:DA:1204:A:H5''	1.95	0.49
34:DA:1270:C:H5''	34:DA:1271:G:O5'	2.12	0.49
34:DA:1289:C:H2'	34:DA:1290:C:C6	2.47	0.49
34:DA:1880:C:H6	34:DA:1880:C:H5'	1.77	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1982:C:OP1	34:DA:1982:C:H3'	2.12	0.49
34:DA:2078:C:O2'	34:DA:2079:U:H5'	2.13	0.49
34:DA:2290:G:C8	34:DA:2290:G:H5'	2.45	0.49
34:DA:244:A:C2	34:DA:255:A:C4	3.01	0.49
34:DA:2746:U:O2'	34:DA:2747:G:H5'	2.11	0.49
34:DA:2777:G:H5''	34:DA:2778:A:H5'	1.95	0.49
34:DA:92:A:O2'	34:DA:93:G:H5'	2.12	0.49
37:DD:17:THR:CG2	37:DD:205:VAL:H	2.13	0.49
37:DD:224:ALA:O	37:DD:225:ALA:HB2	2.11	0.49
37:DD:30:GLU:CD	37:DD:63:ARG:NE	2.66	0.49
40:DG:114:ILE:O	40:DG:115:ARG:C	2.50	0.49
41:DH:19:VAL:CB	41:DH:44:VAL:HG13	2.43	0.49
42:DI:88:ILE:HG12	42:DI:122:GLU:N	2.26	0.49
46:DQ:34:LEU:HD12	46:DQ:35:VAL:N	2.26	0.49
48:DS:52:SER:O	48:DS:69:VAL:HG23	2.12	0.49
49:DT:28:VAL:O	49:DT:28:VAL:HG12	2.12	0.49
50:DU:108:GLU:O	50:DU:112:ARG:HB2	2.12	0.49
52:DW:54:ALA:C	52:DW:107:LEU:HD22	2.33	0.49
55:DZ:3:TYR:CE2	55:DZ:51:ALA:HB2	2.47	0.49
1:AA:1251:A:H2'	1:AA:1252:A:H8	1.72	0.49
1:AA:1372:U:O2'	1:AA:1373:G:H5'	2.12	0.49
1:AA:1470:G:O2'	1:AA:1471:G:H5'	2.12	0.49
1:AA:814:A:H2'	1:AA:816:A:H5''	1.95	0.49
2:AB:102:LEU:H	2:AB:102:LEU:HD13	1.76	0.49
5:AE:33:VAL:HG11	5:AE:109:ILE:HA	1.93	0.49
18:AR:55:ARG:HG3	18:AR:55:ARG:HH11	1.78	0.49
19:AS:6:LYS:N	19:AS:6:LYS:HE3	2.28	0.49
26:B1:62:VAL:HG13	26:B1:64:ALA:N	2.27	0.49
33:B8:32:LEU:HD23	33:B8:35:GLN:C	2.32	0.49
34:BA:1158:C:O2'	34:BA:1159:U:H5''	2.12	0.49
34:BA:1365:A:H2'	34:BA:1366:A:C8	2.37	0.49
34:BA:1771:C:C1'	34:BA:1786:A:H8	2.24	0.49
34:BA:2580:U:H4'	38:BE:130:GLY:CA	2.41	0.49
34:BA:2696:U:H2'	34:BA:2697:G:C8	2.45	0.49
34:BA:2720:U:C2	34:BA:2721:A:C8	3.00	0.49
34:BA:524:U:H4'	34:BA:555:U:H4'	1.94	0.49
34:BA:670:A:H4'	34:BA:671:C:OP1	2.10	0.49
34:BA:813:U:H2'	34:BA:814:C:C6	2.47	0.49
34:BA:860:U:O4'	34:BA:860:U:O2	2.30	0.49
34:BA:910:A:C8	46:BQ:13:GLN:HB2	2.47	0.49
34:BA:934:G:N3	34:BA:934:G:H2'	2.28	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BD:108:PRO:HB3	37:BD:143:HIS:CE1	2.47	0.49
39:BF:60:SER:OG	39:BF:61:GLY:N	2.46	0.49
45:BP:126:VAL:HG12	45:BP:127:ALA:N	2.26	0.49
45:BP:85:LEU:HA	45:BP:88:LEU:HB3	1.93	0.49
51:BV:40:LEU:O	51:BV:41:GLY:C	2.50	0.49
51:BV:61:VAL:O	51:BV:62:LEU:HD23	2.12	0.49
52:BW:48:ALA:O	52:BW:49:LYS:C	2.50	0.49
53:BX:14:SER:H	53:BX:17:ALA:CB	2.25	0.49
53:BX:44:GLU:HB3	53:BX:51:VAL:HG23	1.94	0.49
54:BY:81:LYS:CG	54:BY:96:ILE:HB	2.42	0.49
54:BY:96:ILE:HG13	54:BY:99:CYS:HB2	1.93	0.49
55:BZ:29:TYR:CZ	55:BZ:87:ASP:HB2	2.47	0.49
1:CA:16:A:N1	1:CA:919:A:H2	2.10	0.49
1:CA:189(E):U:O2'	1:CA:189(F):U:H5'	2.12	0.49
1:CA:22:G:H2'	1:CA:23:C:C6	2.48	0.49
1:CA:379:C:O2'	1:CA:380:G:H5'	2.12	0.49
1:CA:545:C:O2'	1:CA:546:G:H5'	2.12	0.49
1:CA:652:U:H1'	1:CA:653:A:H2	1.78	0.49
1:CA:775:G:O2'	1:CA:776:G:H5'	2.12	0.49
1:CA:819:A:N7	1:CA:1529:G:C2	2.81	0.49
1:CA:861:G:O2'	1:CA:862:C:H5'	2.12	0.49
1:CA:92:C:H2'	1:CA:93:G:C8	2.48	0.49
10:CJ:63:PHE:HA	14:CN:59:ALA:H	1.76	0.49
13:CM:98:VAL:C	13:CM:99:ARG:HG3	2.32	0.49
16:CP:39:TYR:CZ	16:CP:41:PRO:HB3	2.47	0.49
34:DA:118:A:H5'	34:DA:119:A:H8	1.76	0.49
34:DA:1510:G:H2'	34:DA:1511:C:O4'	2.12	0.49
34:DA:1526:G:H1	34:DA:1546:C:H42	1.59	0.49
34:DA:1773:A:H2'	34:DA:1774:C:C5'	2.42	0.49
34:DA:2263:C:C2'	34:DA:2264:C:H5'	2.41	0.49
34:DA:2408:U:H2'	34:DA:2409:G:H8	1.78	0.49
34:DA:2282:G:C4	34:DA:2425:A:N6	2.81	0.49
34:DA:2443:C:O2'	34:DA:2444:G:H5'	2.11	0.49
34:DA:2839:G:H2'	34:DA:2840:C:C6	2.47	0.49
34:DA:84:A:H5''	54:DY:9:LYS:NZ	2.27	0.49
35:DB:75:G:H1'	55:DZ:27:VAL:CG2	2.36	0.49
36:DC:49:ILE:CG2	36:DC:50:ASP:N	2.75	0.49
39:DF:62:ARG:HH21	39:DF:64:ILE:HA	1.77	0.49
41:DH:65:HIS:C	41:DH:67:LEU:H	2.15	0.49
42:DI:61:ARG:HD2	42:DI:61:ARG:H	1.77	0.49
47:DR:84:ALA:N	47:DR:85:PRO:CD	2.75	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DT:28:VAL:O	49:DT:29:ARG:HB2	2.12	0.49
50:DU:92:ARG:NH1	51:DV:11:GLN:H	2.10	0.49
51:DV:4:ILE:HD12	51:DV:40:LEU:HD21	1.94	0.49
52:DW:17:VAL:O	52:DW:18:ARG:C	2.49	0.49
54:DY:43:ASN:HA	54:DY:64:GLU:HA	1.92	0.49
54:DY:76:CYS:SG	54:DY:77:PRO:HD2	2.53	0.49
55:DZ:156:LYS:O	55:DZ:157:LEU:C	2.51	0.49
55:DZ:68:PRO:O	55:DZ:91:LEU:HD12	2.12	0.49
1:AA:166:G:O2'	1:AA:167:G:H5'	2.12	0.49
1:AA:123:C:OP1	1:AA:312:C:H5'	2.12	0.49
1:AA:545:C:O2'	1:AA:546:G:H5'	2.13	0.49
1:AA:881:G:OP2	12:AL:12:ARG:NH2	2.45	0.49
2:AB:144:ARG:HG3	2:AB:145:LEU:H	1.78	0.49
4:AD:57:ARG:NH2	5:AE:107:ARG:HH11	2.10	0.49
5:AE:87:SER:HB3	5:AE:131:ILE:CD1	2.40	0.49
6:AF:71:ARG:HA	6:AF:74:ASP:OD2	2.13	0.49
8:AH:137:VAL:O	8:AH:138:TRP:CB	2.61	0.49
8:AH:86:ILE:HG22	8:AH:87:SER:N	2.27	0.49
9:AI:50:LEU:C	9:AI:52:ALA:H	2.16	0.49
11:AK:34:ASP:OD2	11:AK:34:ASP:C	2.51	0.49
13:AM:38:GLY:C	13:AM:39:ILE:HG13	2.33	0.49
15:AO:43:LEU:C	15:AO:45:VAL:H	2.15	0.49
16:AP:17:TYR:N	16:AP:17:TYR:CD1	2.79	0.49
18:AR:62:GLU:O	18:AR:65:ILE:HG13	2.12	0.49
19:AS:9:VAL:C	19:AS:11:VAL:H	2.16	0.49
26:B1:41:ARG:HG3	26:B1:41:ARG:NH1	2.27	0.49
34:BA:1131:G:C2	34:BA:1132:A:C5	3.00	0.49
34:BA:1131:G:H4'	43:BN:82:LEU:HG	1.95	0.49
34:BA:1020:A:N1	34:BA:1141:U:H1'	2.27	0.49
34:BA:1803:A:C2	34:BA:1822:G:N3	2.79	0.49
34:BA:188:G:C6	34:BA:189:G:C4	3.00	0.49
34:BA:2240:C:O2'	34:BA:2241:A:H5'	2.12	0.49
34:BA:2713:A:H3'	34:BA:2714:G:H5'	1.94	0.49
34:BA:680:G:H2'	34:BA:681:G:C8	2.46	0.49
36:BC:82:LYS:HZ1	36:BC:151:GLU:HA	1.76	0.49
37:BD:145:VAL:HG12	37:BD:146:GLU:N	2.27	0.49
37:BD:159:ALA:H	37:BD:196:VAL:HG11	1.77	0.49
37:BD:30:GLU:HG3	37:BD:63:ARG:NE	2.28	0.49
39:BF:3:GLU:HB2	39:BF:20:LEU:N	2.14	0.49
39:BF:63:LYS:HE3	39:BF:67:GLN:HB2	1.94	0.49
45:BP:101:VAL:HG23	45:BP:107:LYS:CA	2.35	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BP:140:ALA:O	45:BP:141:ALA:HB2	2.12	0.49
49:BT:50:ILE:HD11	49:BT:64:ARG:HB3	1.94	0.49
51:BV:63:GLY:O	51:BV:64:HIS:CB	2.60	0.49
52:BW:17:VAL:O	52:BW:18:ARG:C	2.49	0.49
53:BX:18:TYR:O	53:BX:19:ALA:C	2.49	0.49
53:BX:30:VAL:HG12	53:BX:31:HIS:N	2.18	0.49
53:BX:35:THR:O	53:BX:36:LYS:O	2.30	0.49
54:BY:43:ASN:HD21	54:BY:64:GLU:HG3	1.75	0.49
46:BQ:141:GLN:N	55:BZ:53:ILE:O	2.46	0.49
1:CA:1237:C:H3'	1:CA:1336:C:H41	1.76	0.49
1:CA:448:A:P	1:CA:485:G:H22	2.36	0.49
1:CA:648:A:H2'	1:CA:649:G:C8	2.45	0.49
1:CA:679:C:O2'	1:CA:680:C:H5'	2.11	0.49
3:CC:120:VAL:HG12	3:CC:121:ALA:N	2.27	0.49
3:CC:18:TRP:NE1	14:CN:55:GLY:N	2.61	0.49
4:CD:80:GLU:O	4:CD:83:SER:N	2.45	0.49
5:CE:33:VAL:HG11	5:CE:109:ILE:HA	1.93	0.49
5:CE:51:VAL:HB	5:CE:52:PRO:CD	2.37	0.49
7:CG:26:PHE:CD2	7:CG:30:ILE:HD11	2.48	0.49
10:CJ:54:PHE:CZ	10:CJ:55:LYS:NZ	2.78	0.49
10:CJ:70:ARG:CG	10:CJ:70:ARG:NH1	2.66	0.49
11:CK:44:SER:N	11:CK:47:VAL:CG2	2.76	0.49
11:CK:44:SER:H	11:CK:47:VAL:HG21	1.76	0.49
22:CV:17:C:H5''	22:CV:17(A):U:C5	2.47	0.49
26:D1:53:VAL:HG13	26:D1:55:GLY:H	1.78	0.49
26:D1:78:LYS:HZ3	26:D1:93:GLU:HB2	1.70	0.49
27:D2:14:ARG:NE	27:D2:57:ILE:CG2	2.75	0.49
27:D2:14:ARG:CD	27:D2:57:ILE:HB	2.42	0.49
34:DA:1803:A:C2	34:DA:1822:G:N3	2.80	0.49
34:DA:2011:U:H2'	34:DA:2012:G:H5'	1.95	0.49
34:DA:2164:C:H5''	34:DA:2165:G:N7	2.27	0.49
34:DA:2175:C:H1'	36:DC:215:THR:CA	2.33	0.49
34:DA:2392:A:H1'	45:DP:60:MET:HG2	1.94	0.49
33:D8:31:HIS:CG	34:DA:2419:U:O4	2.66	0.49
34:DA:2656:U:C4	34:DA:2657:A:H2	2.30	0.49
34:DA:511:U:O4	34:DA:512:G:C2	2.65	0.49
34:DA:951:C:O2'	34:DA:952:G:H5'	2.13	0.49
38:DE:5:LEU:HB2	38:DE:51:PHE:CD2	2.44	0.49
34:DA:660:G:H5'	39:DF:99:TYR:CE2	2.47	0.49
43:DN:43:THR:HG21	43:DN:46:VAL:HB	1.94	0.49
43:DN:90:MET:O	43:DN:93:THR:O	2.31	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DP:85:LEU:HD12	45:DP:120:ALA:CB	2.42	0.49
45:DP:61:ARG:HD2	45:DP:61:ARG:H	1.77	0.49
50:DU:6:THR:O	50:DU:9:VAL:HG23	2.13	0.49
51:DV:32:THR:HB	51:DV:64:HIS:HE1	1.76	0.49
51:DV:66:ARG:HD2	51:DV:67:GLY:N	2.27	0.49
53:DX:67:GLY:O	53:DX:68:ARG:HG2	2.12	0.49
54:DY:28:LYS:CA	54:DY:39:VAL:H	2.17	0.49
1:AA:1072:G:H2'	1:AA:1073:U:H6	1.76	0.49
1:AA:1478:C:O2'	1:AA:1479:C:H5'	2.13	0.49
1:AA:151:A:C2'	1:AA:152:A:H5'	2.43	0.49
1:AA:522:C:H2'	1:AA:523:A:C8	2.47	0.49
1:AA:505:G:C6	1:AA:535:A:C2	3.01	0.49
1:AA:784:C:H2'	1:AA:785:G:H8	1.77	0.49
1:AA:961:U:O2'	1:AA:962:C:H5'	2.12	0.49
4:AD:119:GLN:NE2	4:AD:123:HIS:NE2	2.57	0.49
4:AD:30:LYS:C	4:AD:32:ALA:N	2.66	0.49
10:AJ:51:ARG:HE	10:AJ:61:GLU:HB2	1.77	0.49
11:AK:17:GLY:O	11:AK:80:VAL:HA	2.12	0.49
12:AL:52:LEU:O	12:AL:54:LYS:HD2	2.12	0.49
16:AP:43:LYS:HG3	16:AP:48:TRP:CD2	2.47	0.49
19:AS:42:PRO:O	19:AS:44:MET:SD	2.70	0.49
20:AT:73:HIS:O	20:AT:74:LYS:C	2.51	0.49
25:B0:84:LEU:N	25:B0:84:LEU:HD12	2.27	0.49
31:B6:14:THR:HG22	31:B6:51:GLU:O	2.12	0.49
34:BA:1035:U:H2'	34:BA:1036:G:C8	2.48	0.49
34:BA:1385:G:C4	34:BA:1386:C:C5	3.01	0.49
34:BA:1403:C:C2'	34:BA:1404:C:O5'	2.61	0.49
34:BA:2270:G:H3'	34:BA:2271:G:C8	2.47	0.49
34:BA:2329:G:H2'	34:BA:2330:G:C8	2.48	0.49
34:BA:2521:C:H1'	34:BA:2545:G:N2	2.28	0.49
34:BA:2555:U:H2'	34:BA:2556:C:C5'	2.39	0.49
34:BA:2584:U:O5'	34:BA:2584:U:O2	2.30	0.49
34:BA:2660:A:H3'	34:BA:2661:G:O4'	2.11	0.49
34:BA:2804:C:H2'	34:BA:2805:G:C8	2.47	0.49
34:BA:318:C:H2'	34:BA:319:C:H6	1.76	0.49
34:BA:558:G:OP1	43:BN:111:PRO:HD2	2.13	0.49
34:BA:608:A:H3'	34:BA:609:A:H8	1.77	0.49
28:B3:49:LYS:NZ	34:BA:851:U:OP1	2.39	0.49
34:BA:863:A:OP1	46:BQ:21:THR:HB	2.12	0.49
37:BD:108:PRO:HG3	37:BD:111:LEU:HD23	1.95	0.49
38:BE:119:ARG:HH11	38:BE:160:TYR:HB2	1.78	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:52:LYS:HB3	39:BF:56:GLU:HB3	1.94	0.49
41:BH:41:MET:HB3	41:BH:43:VAL:CG1	2.28	0.49
47:BR:13:HIS:O	47:BR:14:SER:C	2.51	0.49
49:BT:6:LEU:HD23	49:BT:6:LEU:C	2.32	0.49
43:BN:38:HIS:O	50:BU:67:ALA:O	2.31	0.49
50:BU:50:ARG:CZ	51:BV:75:PHE:CE2	2.96	0.49
53:BX:64:LYS:CG	53:BX:65:ARG:N	2.60	0.49
1:CA:102:G:O2'	1:CA:103:C:H5'	2.12	0.49
1:CA:1090:U:O2'	1:CA:1091:U:H5'	2.12	0.49
1:CA:348:G:O2'	1:CA:349:A:H5'	2.12	0.49
1:CA:524:G:H2'	1:CA:525:C:C5	2.48	0.49
1:CA:831:U:O2'	1:CA:832:C:H5'	2.12	0.49
2:CB:166:ASP:HB2	2:CB:205:ASP:OD2	2.13	0.49
9:CI:4:TYR:HA	9:CI:88:TYR:CE1	2.48	0.49
9:CI:63:ILE:HD12	9:CI:63:ILE:N	2.28	0.49
10:CJ:55:LYS:O	10:CJ:56:HIS:CG	2.65	0.49
11:CK:34:ASP:OD2	11:CK:34:ASP:C	2.51	0.49
15:CO:50:HIS:O	15:CO:53:HIS:N	2.45	0.49
17:CQ:79:SER:O	17:CQ:81:ARG:HG3	2.13	0.49
30:D5:2:ALA:HA	34:DA:2015:A:O4'	2.12	0.49
30:D5:2:ALA:N	34:DA:747:U:C4	2.81	0.49
34:DA:1899:G:N2	34:DA:1902:C:C5	2.79	0.49
34:DA:2184:G:H2'	34:DA:2185:C:H6	1.78	0.49
34:DA:2645:G:OP2	34:DA:2645:G:H8	1.95	0.49
34:DA:271(Q):G:HO2'	34:DA:271(R):G:H8	1.55	0.49
34:DA:2762:G:H2'	34:DA:2763:G:C5'	2.25	0.49
34:DA:649:G:H2'	34:DA:650:C:C6	2.48	0.49
37:DD:36:PRO:O	37:DD:37:LEU:HD23	2.11	0.49
38:DE:54:GLN:O	38:DE:55:ASN:CG	2.51	0.49
38:DE:65:GLY:C	38:DE:67:PHE:H	2.15	0.49
40:DG:138:GLN:NE2	40:DG:153:ARG:N	2.61	0.49
42:DI:140:LEU:HD12	42:DI:141:LYS:N	2.27	0.49
42:DI:38:LEU:HD12	42:DI:38:LEU:N	2.15	0.49
43:DN:28:THR:HG23	43:DN:29:LYS:N	2.22	0.49
34:DA:1190:G:C5'	45:DP:35:HIS:HB3	2.40	0.49
39:DF:117:ARG:NH2	45:DP:5:ASP:N	2.61	0.49
45:DP:97:PRO:O	45:DP:99:LEU:N	2.43	0.49
34:DA:2467:C:H4'	46:DQ:123:HIS:CE1	2.47	0.49
49:DT:50:ILE:HD11	49:DT:64:ARG:HB3	1.94	0.49
34:DA:2847:U:OP1	49:DT:98:LYS:HD3	2.13	0.49
51:DV:45:THR:O	51:DV:45:THR:HG22	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DW:55:ALA:O	52:DW:58:ALA:HB3	2.13	0.49
54:DY:83:THR:HG22	54:DY:84:ARG:N	2.28	0.49
55:DZ:125:LEU:HD23	55:DZ:125:LEU:C	2.32	0.49
1:AA:1159:U:O4'	1:AA:1182:G:N2	2.45	0.49
1:AA:1402:C:H2'	1:AA:1403:C:H6	1.78	0.49
1:AA:1433:A:C6	1:AA:1468:A:C4	3.00	0.49
1:AA:333:G:H4'	20:AT:16:HIS:CE1	2.48	0.49
1:AA:522:C:H2'	1:AA:523:A:O4'	2.13	0.49
1:AA:640:A:O2'	1:AA:641:U:H5'	2.13	0.49
2:AB:19:HIS:HE1	2:AB:206:ASP:HB2	1.77	0.49
3:AC:95:THR:HG22	3:AC:97:LYS:H	1.77	0.49
1:AA:619:U:C2	4:AD:135:LEU:HD21	2.47	0.49
4:AD:38:TYR:CD2	4:AD:45:GLN:HB3	2.48	0.49
4:AD:2:GLY:O	4:AD:4:TYR:N	2.45	0.49
5:AE:107:ARG:O	5:AE:110:LEU:N	2.45	0.49
5:AE:101:ILE:CG1	5:AE:119:LEU:HA	2.43	0.49
8:AH:23:SER:HB3	8:AH:62:TYR:CD1	2.48	0.49
12:AL:58:VAL:O	12:AL:60:LEU:HD22	2.13	0.49
15:AO:33:THR:O	15:AO:34:LEU:C	2.51	0.49
15:AO:74:ASP:OD2	15:AO:77:ARG:HG2	2.12	0.49
16:AP:26:ARG:NH1	16:AP:26:ARG:HG2	2.27	0.49
20:AT:23:ARG:O	20:AT:24:LEU:C	2.51	0.49
20:AT:53:LEU:O	20:AT:57:ARG:N	2.36	0.49
26:B1:85:LEU:HB2	26:B1:87:PRO:HD3	1.95	0.49
33:B8:30:ARG:HH21	45:BP:62:LEU:CB	2.20	0.49
34:BA:1602:U:H3'	34:BA:1603:A:C5'	2.42	0.49
34:BA:2041:U:C2	34:BA:2042:A:C8	3.01	0.49
34:BA:2855:C:H2'	34:BA:2856:C:C6	2.48	0.49
34:BA:614:U:O4'	34:BA:614:U:O2	2.31	0.49
37:BD:209:ALA:C	37:BD:210:GLY:O	2.47	0.49
38:BE:61:ARG:HG2	38:BE:62:PRO:HD3	1.93	0.49
40:BG:43:LEU:CD2	40:BG:88:ILE:HG22	2.36	0.49
45:BP:48:PRO:CG	45:BP:49:ARG:H	2.21	0.49
47:BR:48:VAL:O	47:BR:51:LEU:HB2	2.12	0.49
47:BR:75:LEU:C	47:BR:75:LEU:HD13	2.33	0.49
48:BS:89:ARG:HE	48:BS:89:ARG:N	2.10	0.49
49:BT:72:VAL:CG1	49:BT:73:GLU:N	2.75	0.49
50:BU:112:ARG:CG	50:BU:112:ARG:HH11	2.19	0.49
50:BU:40:PHE:CD1	51:BV:78:LYS:NZ	2.81	0.49
51:BV:25:LEU:H	51:BV:94:LEU:CD1	2.25	0.49
51:BV:63:GLY:O	51:BV:96:ILE:HG23	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:13:SER:O	52:BW:16:LYS:HB2	2.12	0.49
55:BZ:99:TYR:CD2	55:BZ:99:TYR:N	2.81	0.49
1:CA:1001(A):G:O2'	1:CA:1002:G:H5'	2.13	0.49
1:CA:125:U:H2'	1:CA:126:G:C8	2.47	0.49
1:CA:346:G:OP1	49:DT:35:LYS:HE3	2.12	0.49
1:CA:503:C:O2'	1:CA:504:C:H5'	2.13	0.49
1:CA:829:G:O2'	1:CA:830:G:H5'	2.11	0.49
2:CB:144:ARG:HG3	2:CB:145:LEU:H	1.77	0.49
1:CA:619:U:N3	4:CD:135:LEU:HD21	2.28	0.49
5:CE:105:VAL:HB	5:CE:106:PRO:CD	2.43	0.49
6:CF:5:GLU:HG2	6:CF:62:TRP:CZ2	2.47	0.49
10:CJ:51:ARG:HE	10:CJ:61:GLU:HB2	1.77	0.49
1:CA:1490:C:O2'	12:CL:94:PRO:HG2	2.12	0.49
15:CO:82:ILE:HD11	15:CO:87:ILE:C	2.33	0.49
1:CA:1220:G:O3'	19:CS:36:ARG:HD3	2.12	0.49
19:CS:6:LYS:N	19:CS:6:LYS:CD	2.75	0.49
20:CT:85:MET:HA	20:CT:88:VAL:HG23	1.94	0.49
23:CY:34:G:H2'	23:CY:35:A:C8	2.48	0.49
27:D2:15:LYS:CA	27:D2:18:PRO:HD2	2.42	0.49
27:D2:46:GLN:HE21	27:D2:47:ASN:HA	1.77	0.49
34:DA:2019:A:H2'	34:DA:2020:A:O5'	2.13	0.49
34:DA:203:C:C3'	34:DA:204:A:H5''	2.42	0.49
34:DA:2127:G:H2'	34:DA:2128:C:N1	2.28	0.49
34:DA:2469:A:H3'	34:DA:2470:G:O4'	2.13	0.49
34:DA:2491:U:O2'	34:DA:2492:U:H5'	2.12	0.49
34:DA:2705:A:H2'	34:DA:2706:G:H8	1.77	0.49
34:DA:2762:G:C3'	34:DA:2763:G:C5'	2.91	0.49
34:DA:2876:G:H4'	49:DT:3:ARG:CD	2.41	0.49
34:DA:996:A:C4'	50:DU:92:ARG:HH21	2.26	0.49
38:DE:63:LEU:O	38:DE:65:GLY:N	2.45	0.49
41:DH:148:ILE:O	41:DH:150:ALA:N	2.45	0.49
43:DN:42:TRP:H	50:DU:64:ARG:CD	2.25	0.49
44:DO:120:GLU:HG2	49:DT:67:SER:OG	2.12	0.49
45:DP:85:LEU:HA	45:DP:88:LEU:HB3	1.93	0.49
46:DQ:39:PRO:CD	46:DQ:99:PRO:HD3	2.43	0.49
48:DS:46:VAL:HG12	48:DS:47:THR:N	2.27	0.49
49:DT:29:ARG:HG3	49:DT:30:VAL:H	1.76	0.49
50:DU:64:ARG:O	50:DU:68:ALA:HB2	2.13	0.49
50:DU:95:LEU:HD12	51:DV:11:GLN:NE2	2.27	0.49
51:DV:37:VAL:HG12	51:DV:38:LEU:H	1.76	0.49
52:DW:47:VAL:O	52:DW:48:ALA:O	2.30	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:61:ILE:N	54:DY:61:ILE:HD12	2.28	0.49
55:DZ:128:VAL:HG21	55:DZ:161:VAL:HG22	1.93	0.49
55:DZ:79:ARG:HG3	55:DZ:79:ARG:HH11	1.77	0.49
1:AA:1325:C:H2'	1:AA:1325:C:O2	2.11	0.49
1:AA:1459:C:O2'	1:AA:1460:A:H5'	2.11	0.49
1:AA:1514:C:O2'	1:AA:1515:C:H5'	2.13	0.49
1:AA:310:G:O2'	1:AA:311:C:H5'	2.12	0.49
1:AA:673:G:H2'	1:AA:674:G:H8	1.74	0.49
1:AA:764:C:H2'	1:AA:765:G:O4'	2.12	0.49
2:AB:75:LYS:C	2:AB:77:ALA:H	2.16	0.49
4:AD:112:VAL:O	4:AD:112:VAL:HG22	2.13	0.49
4:AD:157:LEU:O	4:AD:159:ARG:N	2.46	0.49
5:AE:102:ALA:HB1	5:AE:106:PRO:CG	2.42	0.49
6:AF:7:ASN:O	6:AF:88:VAL:HA	2.13	0.49
13:AM:15:VAL:HA	13:AM:18:ALA:HB3	1.93	0.49
13:AM:91:ARG:O	13:AM:95:GLY:N	2.45	0.49
33:B8:52:LYS:NZ	34:BA:834:C:H4'	2.28	0.49
34:BA:839:U:H1'	34:BA:1191:G:H1'	1.94	0.49
34:BA:132:G:C8	34:BA:132:G:H5'	2.41	0.49
34:BA:2349:G:H5'	34:BA:2349:G:H8	1.78	0.49
34:BA:2574:G:H2'	34:BA:2575:C:C6	2.48	0.49
36:BC:49:ILE:CG2	36:BC:50:ASP:N	2.75	0.49
37:BD:35:LYS:CG	37:BD:64:ILE:N	2.65	0.49
41:BH:136:ILE:HD12	41:BH:136:ILE:N	2.28	0.49
43:BN:97:ARG:O	43:BN:98:VAL:C	2.51	0.49
44:BO:91:LEU:N	44:BO:91:LEU:CD2	2.75	0.49
47:BR:3:HIS:O	47:BR:4:LEU:HB3	2.12	0.49
50:BU:93:LYS:H	50:BU:93:LYS:HD3	1.76	0.49
51:BV:18:LEU:O	51:BV:19:LYS:HB2	2.12	0.49
53:BX:73:ARG:O	53:BX:74:PRO:C	2.51	0.49
53:BX:82:GLN:CD	53:BX:83:VAL:HG22	2.33	0.49
34:BA:310:A:OP1	54:BY:17:SER:O	2.31	0.49
1:CA:1391:U:H2'	1:CA:1392:G:H8	1.74	0.49
1:CA:237:C:O2'	1:CA:238:G:H5'	2.13	0.49
1:CA:662:G:H2'	1:CA:663:A:H8	1.76	0.49
1:CA:818:G:H3'	1:CA:819:A:H5'	1.95	0.49
1:CA:89:C:H3'	1:CA:90:U:C5'	2.41	0.49
2:CB:187:LEU:HD13	2:CB:187:LEU:O	2.13	0.49
2:CB:22:LYS:HA	2:CB:22:LYS:HZ2	1.71	0.49
2:CB:75:LYS:C	2:CB:77:ALA:H	2.17	0.49
3:CC:91:LEU:O	3:CC:95:THR:HB	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:137:VAL:O	8:CH:138:TRP:CB	2.61	0.49
10:CJ:50:ILE:N	10:CJ:50:ILE:HD13	2.28	0.49
10:CJ:72:VAL:O	10:CJ:73:ASP:OD1	2.31	0.49
10:CJ:80:LYS:HB2	10:CJ:80:LYS:NZ	2.28	0.49
14:CN:29:ARG:HH11	14:CN:29:ARG:HG3	1.78	0.49
15:CO:58:MET:O	15:CO:59:MET:C	2.51	0.49
1:CA:472:A:H4'	16:CP:82:GLN:HE22	1.78	0.49
17:CQ:38:ARG:CA	17:CQ:38:ARG:HE	2.25	0.49
27:D2:22:GLU:O	27:D2:23:LYS:C	2.49	0.49
32:D7:27:GLY:O	32:D7:30:VAL:HB	2.13	0.49
34:DA:1108:U:C2'	34:DA:1109:C:H5'	2.42	0.49
34:DA:142:A:N6	34:DA:1596:A:H5'	2.27	0.49
34:DA:188:G:C6	34:DA:189:G:C4	3.01	0.49
34:DA:1990:C:H2'	34:DA:1991:U:O4'	2.12	0.49
34:DA:564:C:O2'	34:DA:565:C:H5'	2.12	0.49
34:DA:84:A:H5''	54:DY:9:LYS:HZ2	1.76	0.49
35:DB:106:G:C2	35:DB:107:G:C8	3.01	0.49
38:DE:61:ARG:HG2	38:DE:62:PRO:HD3	1.93	0.49
38:DE:47:VAL:HG23	38:DE:84:PHE:O	2.11	0.49
39:DF:103:LYS:O	39:DF:105:VAL:N	2.45	0.49
39:DF:206:ILE:CD1	39:DF:206:ILE:O	2.55	0.49
39:DF:63:LYS:HE2	39:DF:67:GLN:HB2	1.94	0.49
42:DI:88:ILE:CG2	42:DI:89:TYR:N	2.75	0.49
46:DQ:63:LYS:HG3	46:DQ:64:ILE:N	2.26	0.49
47:DR:17:ARG:O	47:DR:20:LEU:HB3	2.13	0.49
50:DU:110:VAL:O	50:DU:113:ALA:N	2.46	0.49
34:DA:493:G:O2'	52:DW:7:ALA:HA	2.12	0.49
53:DX:76:ARG:CD	53:DX:76:ARG:C	2.80	0.49
53:DX:80:ILE:HG23	53:DX:81:VAL:N	2.27	0.49
55:DZ:125:LEU:HD22	55:DZ:164:ALA:CB	2.43	0.49
1:AA:1267:C:O2	21:AU:20:LYS:HD2	2.12	0.49
1:AA:636:U:H2'	1:AA:637:G:C8	2.48	0.49
1:AA:817:C:H1'	1:AA:819:A:H5'	1.95	0.49
2:AB:23:ARG:HG3	2:AB:23:ARG:NH1	2.27	0.49
2:AB:8:LYS:O	2:AB:9:GLU:C	2.51	0.49
9:AI:5:TYR:HB2	9:AI:18:PHE:CE2	2.48	0.49
9:AI:79:LEU:O	9:AI:79:LEU:HD13	2.13	0.49
12:AL:62:SER:O	12:AL:64:TYR:HD1	1.95	0.49
15:AO:57:LEU:O	15:AO:60:VAL:HB	2.12	0.49
18:AR:37:VAL:HG23	18:AR:38:GLU:H	1.78	0.49
19:AS:52:TYR:HB2	19:AS:57:HIS:CE1	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1510:G:O2'	34:BA:1511:C:H5'	2.13	0.49
34:BA:2087:G:C2'	34:BA:2088:G:H5'	2.43	0.49
34:BA:2107:C:H42	34:BA:2182:G:H1	1.59	0.49
34:BA:2807:G:H3'	34:BA:2808:U:H5''	1.94	0.49
34:BA:422:A:C6	34:BA:423:A:C6	3.00	0.49
35:BB:84:C:H2'	35:BB:85:G:H8	1.77	0.49
37:BD:257:LEU:C	37:BD:257:LEU:HD23	2.33	0.49
40:BG:13:GLU:O	40:BG:14:GLU:HB2	2.13	0.49
40:BG:127:GLY:CA	40:BG:166:ASP:HB3	2.43	0.49
45:BP:8:PRO:C	45:BP:10:PRO:HD3	2.33	0.49
45:BP:138:LEU:C	45:BP:138:LEU:HD12	2.33	0.49
46:BQ:39:PRO:CD	46:BQ:99:PRO:HD3	2.43	0.49
48:BS:13:ARG:O	48:BS:14:VAL:C	2.50	0.49
51:BV:13:ARG:HG3	51:BV:13:ARG:HH11	1.78	0.49
27:B2:33:MET:CG	53:BX:11:PRO:HD2	2.38	0.49
1:CA:1321:C:H3'	1:CA:1322:C:H6	1.77	0.49
1:CA:1392:G:N2	1:CA:1502:A:H8	2.11	0.49
1:CA:166:G:O2'	1:CA:167:G:H5'	2.13	0.49
1:CA:404:U:H2'	1:CA:405:U:C6	2.48	0.49
1:CA:429:U:H1'	1:CA:430:A:H5''	1.95	0.49
1:CA:555:C:H2'	1:CA:556:C:C6	2.48	0.49
1:CA:878:G:C5'	8:CH:89:PRO:HG2	2.42	0.49
4:CD:150:GLU:HG2	4:CD:151:LYS:N	2.27	0.49
5:CE:55:VAL:O	5:CE:58:ALA:HB3	2.13	0.49
7:CG:149:ARG:O	7:CG:152:ALA:HB3	2.13	0.49
8:CH:30:ARG:CB	8:CH:30:ARG:HH11	2.25	0.49
9:CI:41:VAL:HG12	9:CI:41:VAL:O	2.13	0.49
11:CK:127:LYS:CA	11:CK:127:LYS:HE2	2.27	0.49
11:CK:92:GLU:C	11:CK:94:ALA:H	2.16	0.49
20:CT:23:ARG:O	20:CT:24:LEU:C	2.51	0.49
20:CT:81:LYS:C	20:CT:83:ARG:H	2.16	0.49
27:D2:56:GLN:O	27:D2:57:ILE:O	2.30	0.49
33:D8:48:PHE:CD1	33:D8:48:PHE:N	2.77	0.49
34:DA:1005:C:H2'	34:DA:1006:C:C6	2.48	0.49
34:DA:1051:G:C2	34:DA:1052:C:N4	2.81	0.49
34:DA:1862:G:O2'	34:DA:1863:G:H5'	2.13	0.49
34:DA:1878:G:H2'	34:DA:1879:C:C6	2.48	0.49
34:DA:2282:G:O2'	34:DA:2283:C:OP2	2.29	0.49
25:D0:36:ILE:CD1	34:DA:2355:C:H5'	2.36	0.49
34:DA:2464:C:O2'	34:DA:2465:C:H6	1.81	0.49
34:DA:2713:A:H3'	34:DA:2714:G:C5'	2.42	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:470:A:OP1	39:DF:59:TYR:HE2	1.96	0.49
34:DA:729:G:C4	34:DA:1775:U:C2	3.01	0.49
34:DA:836:G:H2'	34:DA:837:C:C6	2.48	0.49
34:DA:8:A:C2	34:DA:2896:C:N3	2.81	0.49
34:DA:1568:G:H21	37:DD:58:HIS:CE1	2.31	0.49
38:DE:120:TRP:NE1	38:DE:155:LYS:HB3	2.28	0.49
38:DE:101:ARG:HH11	38:DE:169:ASN:HD22	1.61	0.49
41:DH:44:VAL:O	41:DH:46:GLU:OE2	2.31	0.49
45:DP:48:PRO:O	45:DP:49:ARG:C	2.51	0.49
46:DQ:134:ARG:HG2	46:DQ:135:ASP:N	2.27	0.49
47:DR:14:SER:O	47:DR:15:SER:C	2.51	0.49
48:DS:92:TYR:CG	48:DS:93:LYS:N	2.81	0.49
49:DT:55:ASN:H	49:DT:59:THR:HB	1.78	0.49
54:DY:81:LYS:CG	54:DY:96:ILE:HB	2.43	0.49
55:DZ:119:GLU:O	55:DZ:120:ILE:C	2.51	0.49
55:DZ:37:VAL:O	55:DZ:38:TYR:HB3	2.12	0.49
1:AA:1152:A:H2'	1:AA:1153:C:C6	2.47	0.49
1:AA:1181:G:O2'	1:AA:1182:G:H5'	2.13	0.49
1:AA:1305:G:OP1	21:AU:2:GLY:HA3	2.13	0.49
1:AA:138:G:H2'	1:AA:139:G:C8	2.47	0.49
4:AD:110:PHE:CD2	4:AD:148:VAL:HG23	2.47	0.49
8:AH:35:ILE:HG23	8:AH:111:ILE:CD1	2.43	0.49
1:AA:1060:C:H4'	10:AJ:52:GLY:N	2.28	0.49
1:AA:664:G:P	18:AR:64:ARG:HH21	2.36	0.49
34:BA:1024:G:H8	34:BA:1024:G:O5'	1.96	0.49
34:BA:2197:U:H1'	34:BA:2198:A:C8	2.48	0.49
34:BA:2247:A:O2'	34:BA:2248:C:H5'	2.13	0.49
34:BA:2287:A:C2	34:BA:2346:A:H2	2.30	0.49
34:BA:271(H):G:C6	34:BA:271(Q):G:N1	2.81	0.49
34:BA:2838:G:O2'	34:BA:2839:G:H5'	2.13	0.49
37:BD:8:PRO:C	37:BD:10:THR:H	2.15	0.49
37:BD:130:ALA:HA	37:BD:191:ALA:O	2.13	0.49
37:BD:183:ARG:HG2	37:BD:183:ARG:HH11	1.77	0.49
34:BA:1569:A:O2'	37:BD:38:LYS:HE2	2.13	0.49
37:BD:70:TRP:O	37:BD:71:ASP:C	2.51	0.49
38:BE:117:MET:HG3	38:BE:122:PHE:O	2.13	0.49
38:BE:4:ILE:CG1	38:BE:28:ALA:HB1	2.43	0.49
40:BG:111:LEU:C	40:BG:114:ILE:HG12	2.33	0.49
40:BG:95:ARG:O	40:BG:96:ARG:C	2.51	0.49
41:BH:87:LEU:HD12	41:BH:131:VAL:HG12	1.95	0.49
42:BI:115:ALA:CB	42:BI:131:LYS:HE3	2.36	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BI:94:ALA:O	42:BI:98:ALA:N	2.46	0.49
44:BO:16:ALA:HB1	44:BO:43:VAL:HG13	1.95	0.49
45:BP:112:LEU:HD22	45:BP:113:LYS:N	2.27	0.49
45:BP:50:ARG:CG	45:BP:51:PHE:N	2.75	0.49
39:BF:117:ARG:HH22	45:BP:5:ASP:N	2.09	0.49
46:BQ:111:GLU:HG3	46:BQ:112:GLU:N	2.27	0.49
46:BQ:43:THR:HG23	46:BQ:46:GLN:CD	2.33	0.49
46:BQ:6:ARG:O	46:BQ:7:MET:HG2	2.13	0.49
48:BS:92:TYR:CG	48:BS:93:LYS:N	2.81	0.49
49:BT:117:ASP:OD1	49:BT:119:LYS:HB3	2.13	0.49
49:BT:76:PHE:HA	49:BT:77:PRO:HD3	1.68	0.49
51:BV:85:LYS:O	51:BV:87:HIS:N	2.39	0.49
54:BY:77:PRO:O	54:BY:78:ALA:CB	2.60	0.49
1:CA:1004:A:H2'	1:CA:1038:C:O2	2.12	0.49
1:CA:1227:A:OP2	13:CM:111:LYS:HE2	2.12	0.49
1:CA:1232:U:O3'	9:CI:124:GLN:HB2	2.13	0.49
1:CA:853:G:H2'	1:CA:854:G:H8	1.78	0.49
2:CB:54:THR:HG23	2:CB:199:TYR:HB3	1.94	0.49
4:CD:114:ARG:O	4:CD:117:ALA:HB3	2.12	0.49
5:CE:103:GLY:O	5:CE:106:PRO:HD2	2.13	0.49
6:CF:10:LEU:N	6:CF:10:LEU:CD1	2.66	0.49
6:CF:21:LEU:O	6:CF:24:GLU:N	2.46	0.49
16:CP:26:ARG:NH1	16:CP:26:ARG:HG2	2.28	0.49
18:CR:73:ALA:O	18:CR:76:LEU:N	2.46	0.49
1:CA:958:A:C8	19:CS:55:LYS:HD3	2.48	0.49
23:CW:12:U:H3	23:CW:23:A:N6	2.06	0.49
26:D1:21:ARG:O	26:D1:22:GLY:C	2.51	0.49
26:D1:41:ARG:HH11	26:D1:41:ARG:CG	2.26	0.49
26:D1:46:LEU:CD2	26:D1:46:LEU:C	2.78	0.49
26:D1:94:LEU:CD2	26:D1:95:LEU:N	2.75	0.49
28:D3:17:LYS:O	28:D3:20:LYS:HB2	2.12	0.49
28:D3:44:ARG:O	28:D3:48:GLU:HG2	2.13	0.49
34:DA:1040:C:N4	34:DA:1116:C:H42	2.10	0.49
34:DA:1368:G:O2'	34:DA:1369:G:H5'	2.13	0.49
34:DA:2723:C:H5''	47:DR:2:ARG:HD3	1.88	0.49
34:DA:2861:G:O2'	34:DA:2862:G:H5'	2.12	0.49
34:DA:554:U:O2'	34:DA:555:U:H5'	2.12	0.49
34:DA:991:C:H2'	34:DA:992:C:H6	1.76	0.49
36:DC:20:TYR:CG	36:DC:21:THR:N	2.81	0.49
38:DE:34:VAL:O	38:DE:35:GLN:HB2	2.13	0.49
41:DH:106:THR:CG2	41:DH:112:PRO:HB3	2.41	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:81:VAL:CG1	42:DI:88:ILE:HD12	2.35	0.49
46:DQ:137:TYR:O	46:DQ:138:ASP:CG	2.51	0.49
47:DR:104:ARG:HB3	47:DR:107:ASP:OD2	2.13	0.49
49:DT:33:LYS:N	49:DT:33:LYS:HZ3	2.11	0.49
52:DW:1:MET:HG3	52:DW:2:GLU:N	2.28	0.49
53:DX:82:GLN:CD	53:DX:83:VAL:HG22	2.34	0.49
55:DZ:130:PRO:C	55:DZ:133:ILE:HD11	2.33	0.49
55:DZ:53:ILE:HG12	55:DZ:53:ILE:O	2.13	0.49
55:DZ:96:VAL:HG22	55:DZ:97:GLU:H	1.75	0.49
1:AA:959:A:H2	1:AA:1222:G:O4'	1.95	0.48
1:AA:190:U:O2'	1:AA:191:G:H5'	2.13	0.48
1:AA:582:U:H2'	1:AA:583:A:H8	1.78	0.48
1:AA:709:G:H2'	1:AA:710:G:H8	1.77	0.48
1:AA:740:U:O2'	1:AA:741:G:H5'	2.13	0.48
2:AB:216:SER:C	2:AB:218:ALA:H	2.17	0.48
4:AD:114:ARG:O	4:AD:117:ALA:HB3	2.12	0.48
4:AD:4:TYR:HE2	4:AD:6:GLY:O	1.96	0.48
4:AD:88:VAL:O	4:AD:92:VAL:HG23	2.13	0.48
9:AI:45:ALA:O	9:AI:78:LYS:HE3	2.13	0.48
19:AS:42:PRO:O	19:AS:43:GLU:CB	2.59	0.48
20:AT:81:LYS:C	20:AT:83:ARG:H	2.16	0.48
20:AT:85:MET:HA	20:AT:88:VAL:HG23	1.95	0.48
20:AT:8:ARG:NH1	20:AT:8:ARG:HG3	2.28	0.48
27:B2:52:ASP:C	27:B2:56:GLN:NE2	2.66	0.48
29:B4:6:HIS:HA	40:BG:67:LYS:CE	2.39	0.48
34:BA:2162:G:H3'	34:BA:2162:G:OP2	2.13	0.48
34:BA:2298:A:N6	34:BA:2318:G:C8	2.81	0.48
34:BA:826:U:OP1	34:BA:2428:G:H3'	2.12	0.48
34:BA:2687:U:O2'	34:BA:2688:U:H5'	2.13	0.48
34:BA:335:C:H2'	34:BA:336:C:C6	2.48	0.48
34:BA:523:C:O2'	34:BA:524:U:H5'	2.13	0.48
34:BA:692:C:H2'	34:BA:693:C:H6	1.78	0.48
34:BA:8:A:C2	34:BA:2896:C:N3	2.81	0.48
36:BC:20:TYR:CG	36:BC:21:THR:N	2.81	0.48
37:BD:160:GLY:H	37:BD:196:VAL:HB	1.78	0.48
38:BE:54:GLN:O	38:BE:55:ASN:CG	2.50	0.48
41:BH:148:ILE:HG22	41:BH:149:ARG:N	2.28	0.48
41:BH:41:MET:HE1	41:BH:55:PRO:HD3	1.95	0.48
42:BI:131:LYS:HG3	42:BI:132:PRO:HA	1.95	0.48
42:BI:123:LEU:HD23	42:BI:142:VAL:HB	1.94	0.48
46:BQ:26:TYR:O	46:BQ:26:TYR:CD1	2.63	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BQ:39:PRO:O	46:BQ:40:ALA:HB2	2.13	0.48
46:BQ:73:PRO:HG3	46:BQ:93:TYR:CE2	2.48	0.48
47:BR:79:LEU:HA	47:BR:83:ILE:HB	1.95	0.48
48:BS:14:VAL:HG12	48:BS:16:ASN:H	1.78	0.48
49:BT:121:ILE:CG2	49:BT:122:ASP:N	2.76	0.48
53:BX:82:GLN:HG3	53:BX:83:VAL:N	2.28	0.48
1:CA:1203:C:O2'	1:CA:1204:A:H5'	2.12	0.48
1:CA:1338:G:H2'	1:CA:1339:A:C8	2.48	0.48
1:CA:1350:A:C6	1:CA:1351:U:C4	3.01	0.48
1:CA:1514:C:H2'	1:CA:1515:C:H6	1.77	0.48
1:CA:393:A:C2	1:CA:394:G:C8	3.01	0.48
1:CA:41:G:H2'	1:CA:42:G:C8	2.48	0.48
1:CA:731:G:OP1	1:CA:766:A:H1'	2.13	0.48
1:CA:878:G:H5''	8:CH:89:PRO:HG2	1.95	0.48
1:CA:947:G:O3'	13:CM:109:THR:OG1	2.31	0.48
2:CB:80:ILE:HG13	2:CB:81:VAL:H	1.77	0.48
4:CD:73:ARG:HA	4:CD:73:ARG:NH1	2.14	0.48
5:CE:91:LEU:HD12	5:CE:120:THR:HG22	1.95	0.48
8:CH:86:ILE:CB	8:CH:133:LEU:HD22	2.43	0.48
13:CM:19:LEU:HD22	13:CM:19:LEU:H	1.77	0.48
1:CA:994:A:H2'	14:CN:8:GLU:OE1	2.12	0.48
19:CS:53:ASN:OD1	19:CS:56:GLN:O	2.30	0.48
19:CS:79:THR:O	19:CS:80:TYR:CB	2.60	0.48
23:CW:39:U:C3'	23:CW:40:C:H5'	2.43	0.48
23:CY:39:U:H2'	23:CY:40:C:H6	1.78	0.48
34:DA:1569:A:O2'	37:DD:38:LYS:HE2	2.13	0.48
34:DA:1718:G:H5'	34:DA:1718:G:H8	1.78	0.48
34:DA:1767:C:O2'	34:DA:1768:U:H5'	2.13	0.48
25:D0:36:ILE:CD1	34:DA:2354:G:O2'	2.61	0.48
34:DA:2533:A:H2'	34:DA:2534:A:C5'	2.29	0.48
34:DA:2680:C:OP1	38:DE:109:LYS:HG3	2.12	0.48
34:DA:364:C:H2'	34:DA:365:C:C5'	2.43	0.48
34:DA:493:G:N2	34:DA:494:G:H1'	2.27	0.48
34:DA:874:G:O2'	34:DA:875:G:H5'	2.12	0.48
34:DA:927:G:H3'	34:DA:928:G:H8	1.78	0.48
37:DD:210:GLY:O	37:DD:211:ARG:CB	2.60	0.48
37:DD:25:THR:O	37:DD:25:THR:CG2	2.61	0.48
38:DE:134:ILE:HG12	38:DE:134:ILE:O	2.13	0.48
38:DE:142:GLY:C	38:DE:143:ASN:ND2	2.67	0.48
38:DE:75:VAL:O	38:DE:77:ILE:HG12	2.13	0.48
40:DG:39:ILE:O	40:DG:39:ILE:HG13	2.11	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2312:U:H4'	40:DG:71:THR:CG2	2.42	0.48
41:DH:148:ILE:HG22	41:DH:149:ARG:N	2.28	0.48
43:DN:56:ASN:CG	43:DN:126:PRO:HD3	2.33	0.48
43:DN:17:ASP:OD1	43:DN:19:GLU:HG3	2.12	0.48
45:DP:23:PRO:O	45:DP:33:ARG:NE	2.46	0.48
45:DP:88:LEU:C	45:DP:90:ARG:H	2.14	0.48
46:DQ:65:PHE:HB2	46:DQ:105:GLU:HG3	1.94	0.48
48:DS:14:VAL:HG12	48:DS:16:ASN:H	1.78	0.48
51:DV:63:GLY:O	51:DV:64:HIS:CB	2.61	0.48
51:DV:69:LYS:CB	51:DV:93:GLU:OE2	2.61	0.48
53:DX:5:TYR:O	53:DX:7:VAL:N	2.43	0.48
55:DZ:58:VAL:HG13	55:DZ:67:LEU:C	2.33	0.48
1:AA:109:A:H2'	1:AA:326:G:N2	2.28	0.48
1:AA:138:G:H2'	1:AA:139:G:H8	1.78	0.48
1:AA:274:A:H4'	1:AA:275:G:OP1	2.13	0.48
1:AA:378:G:O2'	1:AA:379:C:H5'	2.13	0.48
1:AA:860:A:H2'	1:AA:861:G:O4'	2.13	0.48
2:AB:55:PHE:HE1	2:AB:218:ALA:HA	1.78	0.48
3:AC:12:LEU:O	3:AC:16:ARG:O	2.30	0.48
4:AD:150:GLU:HG2	4:AD:151:LYS:H	1.78	0.48
4:AD:197:PRO:HD3	6:CF:16:GLN:HG3	1.95	0.48
5:AE:59:GLY:O	5:AE:62:ALA:HB3	2.12	0.48
1:AA:954:G:C4'	13:AM:120:LYS:HG3	2.33	0.48
16:AP:22:THR:CG2	16:AP:32:TYR:HA	2.38	0.48
1:AA:472:A:H4'	16:AP:82:GLN:HE22	1.78	0.48
17:AQ:68:ARG:O	17:AQ:68:ARG:HG3	2.13	0.48
20:AT:37:SER:O	20:AT:40:ALA:HB3	2.14	0.48
20:AT:84:LEU:HD13	20:AT:84:LEU:C	2.33	0.48
27:B2:50:ILE:H	27:B2:50:ILE:HD13	1.77	0.48
34:BA:1115:G:H8	34:BA:1115:G:H5'	1.77	0.48
34:BA:1227:G:C2'	34:BA:1228:G:H5'	2.43	0.48
34:BA:1312:U:H4'	34:BA:1313:U:O5'	2.14	0.48
34:BA:1697:G:H5''	34:BA:1698:A:H5''	1.94	0.48
34:BA:1848:A:C4	34:BA:1849:G:C8	3.01	0.48
34:BA:201:C:H2'	34:BA:202:U:H5'	1.94	0.48
34:BA:2469:A:H3'	34:BA:2470:G:O4'	2.12	0.48
34:BA:2638:G:P	38:BE:82:ARG:HH21	2.36	0.48
34:BA:2708:G:O2'	34:BA:2709:G:H5'	2.13	0.48
34:BA:2759:G:O2'	34:BA:2760:C:H5'	2.13	0.48
34:BA:2783:G:H2'	34:BA:2784:C:H6	1.78	0.48
34:BA:440:G:H2'	34:BA:441:U:H6	1.77	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:699:A:O2'	34:BA:700:G:H5'	2.13	0.48
34:BA:740:U:H2'	34:BA:741:G:H8	1.78	0.48
37:BD:235:GLY:O	37:BD:237:GLU:N	2.47	0.48
38:BE:69:LYS:N	38:BE:69:LYS:HE2	2.27	0.48
39:BF:7:TYR:HE1	39:BF:196:LEU:HD11	1.78	0.48
43:BN:27:ALA:HA	43:BN:30:ILE:HD12	1.94	0.48
34:BA:814:C:H5	45:BP:27:HIS:CD2	2.31	0.48
49:BT:89:VAL:HG12	49:BT:91:ARG:CG	2.44	0.48
50:BU:37:GLU:O	50:BU:40:PHE:HB2	2.13	0.48
50:BU:83:LEU:HD12	50:BU:83:LEU:N	2.29	0.48
50:BU:92:ARG:NH1	51:BV:11:GLN:O	2.42	0.48
53:BX:14:SER:O	53:BX:17:ALA:HB3	2.12	0.48
53:BX:80:ILE:HG23	53:BX:81:VAL:N	2.28	0.48
55:BZ:150:LEU:HD22	55:BZ:150:LEU:O	2.13	0.48
55:BZ:7:ALA:HB3	55:BZ:61:LEU:HD23	1.95	0.48
46:BQ:141:GLN:NE2	55:BZ:72:ARG:HG2	2.28	0.48
55:BZ:7:ALA:O	55:BZ:8:TYR:O	2.32	0.48
1:CA:184:G:H2'	1:CA:185:A:C8	2.34	0.48
1:CA:404:U:H2'	1:CA:405:U:H6	1.77	0.48
1:CA:540:G:O2'	1:CA:541:G:H5'	2.13	0.48
1:CA:26:A:H61	1:CA:558:G:H1'	1.76	0.48
1:CA:802:A:H2'	1:CA:803:G:O4'	2.12	0.48
3:CC:174:PRO:HB2	3:CC:177:THR:HB	1.94	0.48
4:CD:127:THR:OG1	4:CD:128:VAL:N	2.45	0.48
10:CJ:74:ILE:N	10:CJ:74:ILE:HD13	2.20	0.48
16:CP:6:LEU:HB3	16:CP:17:TYR:HD2	1.77	0.48
20:CT:38:LYS:O	20:CT:41:ILE:HG13	2.13	0.48
23:CW:39:U:O4'	23:CW:39:U:O2	2.31	0.48
23:CY:39:U:H2'	23:CY:40:C:C6	2.47	0.48
26:D1:74:VAL:C	26:D1:76:ARG:H	2.16	0.48
30:D5:35:GLU:HB2	30:D5:49:CYS:SG	2.54	0.48
33:D8:18:ALA:C	33:D8:20:GLY:H	2.16	0.48
34:DA:1188:U:H2'	34:DA:1189:A:C5'	2.44	0.48
34:DA:1653:G:O2'	34:DA:1654:A:OP2	2.27	0.48
34:DA:310:A:OP1	54:DY:17:SER:O	2.31	0.48
34:DA:547:A:C8	34:DA:549:G:C6	3.00	0.48
34:DA:709:U:H2'	34:DA:710:G:H8	1.77	0.48
37:DD:268:ARG:HH12	37:DD:269:PHE:HE1	1.58	0.48
37:DD:76:PRO:O	37:DD:98:VAL:HG23	2.14	0.48
39:DF:3:GLU:HA	39:DF:24:LEU:HG	1.94	0.48
40:DG:7:LEU:HD12	40:DG:104:GLU:HB2	1.93	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DH:158:HIS:NE2	41:DH:169:VAL:O	2.46	0.48
43:DN:34:LEU:HD21	43:DN:120:LEU:HD23	1.94	0.48
43:DN:38:HIS:O	50:DU:67:ALA:O	2.30	0.48
45:DP:123:LEU:O	45:DP:124:LYS:C	2.50	0.48
45:DP:65:ARG:HH11	45:DP:65:ARG:CB	2.25	0.48
46:DQ:39:PRO:CB	46:DQ:99:PRO:HD3	2.43	0.48
48:DS:88:ASP:OD1	48:DS:89:ARG:NH2	2.46	0.48
49:DT:100:TYR:CD2	49:DT:103:ARG:NH2	2.81	0.48
50:DU:83:LEU:CB	50:DU:88:ILE:HG12	2.39	0.48
51:DV:13:ARG:HG3	51:DV:13:ARG:HH11	1.78	0.48
53:DX:23:GLU:CG	53:DX:24:GLY:N	2.76	0.48
55:DZ:16:SER:HA	55:DZ:19:ARG:HD2	1.95	0.48
55:DZ:5:LEU:CG	55:DZ:47:VAL:HG21	2.41	0.48
1:AA:1106:G:H2'	1:AA:1107:C:C6	2.49	0.48
1:AA:1387:G:C6	1:AA:1388:C:N4	2.81	0.48
1:AA:1431:C:H42	1:AA:1469:G:H1	1.61	0.48
1:AA:36:C:O2'	1:AA:37:U:H5'	2.12	0.48
1:AA:560:U:H4'	1:AA:561:U:C5'	2.43	0.48
1:AA:560:U:O2'	1:AA:561:U:OP2	2.24	0.48
1:AA:814:A:N7	1:AA:816:A:C4	2.82	0.48
1:AA:946:A:C2	1:AA:1236:A:C2	3.01	0.48
7:AG:30:ILE:HD13	7:AG:105:VAL:HG22	1.94	0.48
7:AG:71:PRO:HD3	7:AG:103:TRP:CZ3	2.49	0.48
9:AI:19:LEU:HB3	9:AI:59:PHE:HD2	1.78	0.48
15:AO:9:GLN:O	15:AO:10:LYS:C	2.51	0.48
1:AA:636:U:H5'	17:AQ:2:PRO:HG3	1.95	0.48
17:AQ:67:LYS:HG2	17:AQ:68:ARG:H	1.79	0.48
23:AW:29:G:O2'	23:AW:30:G:H5'	2.14	0.48
25:B0:42:GLY:HA2	25:B0:57:PHE:CE2	2.49	0.48
34:BA:2580:U:C5'	38:BE:131:ALA:N	2.76	0.48
38:BE:197:ILE:HG13	38:BE:199:ARG:NH1	2.28	0.48
38:BE:52:LEU:N	38:BE:76:ARG:HB3	2.28	0.48
46:BQ:121:ALA:O	46:BQ:124:LYS:N	2.43	0.48
46:BQ:134:ARG:HG2	46:BQ:135:ASP:N	2.26	0.48
47:BR:87:TYR:O	47:BR:89:ASP:N	2.43	0.48
48:BS:52:SER:CB	48:BS:55:ALA:HB3	2.43	0.48
49:BT:83:ILE:HG13	49:BT:84:GLN:HG2	1.94	0.48
50:BU:25:TRP:CD1	50:BU:26:GLY:N	2.82	0.48
51:BV:15:GLU:CB	51:BV:16:PRO:CD	2.82	0.48
54:BY:61:ILE:N	54:BY:61:ILE:HD12	2.28	0.48
54:BY:75:ILE:HD11	54:BY:79:CYS:HA	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:105:G:H2'	1:CA:106:C:C6	2.48	0.48
1:CA:1152:A:H2'	1:CA:1153:C:C6	2.48	0.48
1:CA:1239:A:H2'	1:CA:1298:C:H42	1.78	0.48
1:CA:1321:C:H3'	1:CA:1322:C:H5''	1.94	0.48
1:CA:893:C:H2'	1:CA:894:G:C8	2.48	0.48
3:CC:11:ARG:O	3:CC:12:LEU:C	2.51	0.48
7:CG:100:ALA:O	7:CG:104:LEU:HD23	2.13	0.48
13:CM:116:THR:O	13:CM:117:VAL:HB	2.13	0.48
16:CP:19:ILE:HG22	16:CP:36:ILE:HD11	1.95	0.48
19:CS:6:LYS:N	19:CS:6:LYS:HD2	2.27	0.48
20:CT:37:SER:O	20:CT:40:ALA:HB3	2.13	0.48
21:CU:9:ARG:O	21:CU:13:ILE:HG13	2.13	0.48
26:D1:40:ARG:HH11	26:D1:42:GLN:HA	1.75	0.48
31:D6:15:GLU:HG2	31:D6:18:ARG:HG3	1.96	0.48
34:DA:1355:G:H2'	34:DA:1356:G:H8	1.78	0.48
34:DA:1602:U:H3'	34:DA:1603:A:H5''	1.95	0.48
34:DA:1719:G:O2'	34:DA:1720:U:H5'	2.14	0.48
34:DA:2014:A:C2	34:DA:2015:A:N1	2.81	0.48
34:DA:2087:G:C2'	34:DA:2088:G:H5'	2.43	0.48
34:DA:2296:U:H2'	48:DS:13:ARG:HH22	1.77	0.48
34:DA:2580:U:H4'	38:DE:130:GLY:CA	2.44	0.48
34:DA:2783:G:H2'	34:DA:2784:C:H6	1.78	0.48
34:DA:608:A:H3'	34:DA:609:A:H8	1.78	0.48
34:DA:814:C:H5	45:DP:27:HIS:CD2	2.31	0.48
38:DE:26:ILE:CG2	38:DE:27:LEU:N	2.75	0.48
41:DH:41:MET:CE	41:DH:55:PRO:HD3	2.43	0.48
43:DN:43:THR:CG2	43:DN:46:VAL:HB	2.42	0.48
45:DP:101:VAL:CG1	45:DP:102:ARG:H	2.18	0.48
47:DR:104:ARG:HG2	47:DR:104:ARG:NH1	2.28	0.48
47:DR:41:ALA:C	47:DR:43:GLU:N	2.64	0.48
49:DT:50:ILE:H	49:DT:50:ILE:HD12	1.75	0.48
50:DU:92:ARG:NH1	51:DV:11:GLN:O	2.44	0.48
53:DX:82:GLN:HG3	53:DX:83:VAL:N	2.28	0.48
55:DZ:135:GLU:O	55:DZ:136:PHE:HB3	2.12	0.48
55:DZ:149:SER:HB3	55:DZ:173:ALA:HA	1.95	0.48
1:AA:1060:C:C5	3:AC:2:GLY:HA3	2.48	0.48
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.48	0.48
1:AA:1096:C:H2'	1:AA:1097:C:H6	1.77	0.48
1:AA:1227:A:C2'	1:AA:1228:C:O5'	2.61	0.48
1:AA:1436:U:H2'	1:AA:1437:C:C6	2.48	0.48
1:AA:853:G:H2'	1:AA:854:G:H8	1.79	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:12:GLU:C	2:AB:14:GLY:N	2.66	0.48
10:AJ:39:PRO:CB	10:AJ:70:ARG:HH12	2.25	0.48
13:AM:19:LEU:HD22	13:AM:19:LEU:H	1.78	0.48
19:AS:53:ASN:OD1	19:AS:56:GLN:O	2.31	0.48
25:B0:53:MET:CE	25:B0:57:PHE:HD1	2.26	0.48
27:B2:53:LEU:HD12	34:BA:76:C:O3'	2.13	0.48
34:BA:1680:U:H2'	34:BA:1681:G:O4'	2.13	0.48
34:BA:1939:U:OP1	34:BA:2604:U:O2'	2.31	0.48
34:BA:2762:G:C3'	34:BA:2763:G:C5'	2.92	0.48
34:BA:364:C:H2'	34:BA:365:C:C5'	2.42	0.48
34:BA:774:A:HO2'	34:BA:775:G:P	2.33	0.48
37:BD:211:ARG:O	37:BD:212:SER:C	2.50	0.48
38:BE:104:VAL:HG11	38:BE:188:VAL:HG23	1.94	0.48
39:BF:37:VAL:O	39:BF:38:ARG:C	2.51	0.48
41:BH:153:LYS:HG2	41:BH:154:PRO:N	2.28	0.48
41:BH:37:VAL:HG11	41:BH:68:THR:HG21	1.95	0.48
41:BH:58:GLU:C	41:BH:60:ARG:N	2.67	0.48
42:BI:75:LEU:HD11	42:BI:105:HIS:HE1	1.79	0.48
43:BN:19:GLU:HB2	43:BN:59:LYS:CB	2.43	0.48
43:BN:38:HIS:CE1	43:BN:50:ASP:OD2	2.66	0.48
50:BU:64:ARG:NH1	50:BU:67:ALA:HB3	2.29	0.48
54:BY:27:VAL:HG12	54:BY:29:GLU:N	2.25	0.48
1:CA:1096:C:H2'	1:CA:1097:C:H6	1.78	0.48
1:CA:284:G:H2'	1:CA:285:G:H8	1.77	0.48
1:CA:291:C:O2'	1:CA:292:G:H5'	2.14	0.48
1:CA:586:C:H1'	1:CA:878:G:O2'	2.13	0.48
1:CA:912:C:O2'	1:CA:913:A:H5'	2.14	0.48
3:CC:127:ARG:HD2	3:CC:127:ARG:H	1.78	0.48
3:CC:95:THR:HG21	3:CC:99:VAL:HG11	1.96	0.48
4:CD:159:ARG:O	4:CD:161:ASN:N	2.46	0.48
5:CE:28:PHE:O	5:CE:47:LYS:HA	2.14	0.48
5:CE:8:GLU:HA	5:CE:34:VAL:HG22	1.94	0.48
8:CH:4:ASP:OD2	8:CH:7:ALA:HB2	2.14	0.48
16:CP:17:TYR:N	16:CP:17:TYR:CD1	2.81	0.48
16:CP:43:LYS:HG3	16:CP:48:TRP:CD2	2.48	0.48
18:CR:66:LEU:O	18:CR:70:ILE:HG12	2.13	0.48
31:D6:28:ARG:NH1	31:D6:28:ARG:HG2	2.24	0.48
34:DA:1339:G:H21	34:DA:1603:A:H1'	1.78	0.48
34:DA:1712:C:O2'	34:DA:1713:U:H5'	2.14	0.48
34:DA:826:U:OP1	34:DA:2428:G:H3'	2.13	0.48
34:DA:2692:C:O2'	34:DA:2693:A:H5'	2.12	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2720:U:C2	34:DA:2721:A:C8	3.01	0.48
34:DA:2759:G:O2'	34:DA:2760:C:H5'	2.13	0.48
34:DA:494:G:OP1	52:DW:8:ARG:NH1	2.46	0.48
34:DA:593:G:O2'	34:DA:594:U:H5'	2.12	0.48
34:DA:675:A:O2'	34:DA:676:A:H5'	2.13	0.48
34:DA:917:A:H2'	34:DA:918:A:O4'	2.13	0.48
37:DD:144:ALA:HB3	37:DD:192:THR:CG2	2.43	0.48
37:DD:271:ILE:N	37:DD:271:ILE:HD12	2.28	0.48
39:DF:107:LYS:O	39:DF:109:GLY:N	2.47	0.48
39:DF:7:TYR:HE1	39:DF:196:LEU:HD11	1.78	0.48
40:DG:76:SER:HB2	40:DG:83:ARG:HB2	1.96	0.48
41:DH:92:ILE:CG2	41:DH:93:GLY:N	2.66	0.48
44:DO:36:GLY:HA3	44:DO:109:LYS:HG3	1.94	0.48
45:DP:46:LYS:CG	45:DP:52:GLU:HG2	2.43	0.48
49:DT:57:PHE:O	49:DT:58:ASN:ND2	2.46	0.48
51:DV:69:LYS:CG	51:DV:70:ILE:N	2.72	0.48
52:DW:66:GLU:O	52:DW:69:LEU:HG	2.12	0.48
54:DY:90:LEU:CG	54:DY:91:GLU:N	2.70	0.48
55:DZ:77:ASP:HB2	55:DZ:84:GLU:OE2	2.12	0.48
1:AA:107:G:H2'	1:AA:108:G:C5'	2.41	0.48
1:AA:1209:C:O2'	1:AA:1210:C:H5'	2.13	0.48
1:AA:15:G:H4'	5:AE:24:ARG:HH12	1.77	0.48
1:AA:555:C:H2'	1:AA:556:C:C6	2.47	0.48
1:AA:723:U:H2'	1:AA:723:U:O2	2.14	0.48
2:AB:197:VAL:HG12	2:AB:200:ILE:HG12	1.94	0.48
4:AD:152:SER:O	4:AD:154:ASN:N	2.47	0.48
5:AE:105:VAL:HB	5:AE:106:PRO:CD	2.42	0.48
8:AH:40:ALA:C	8:AH:42:GLU:H	2.16	0.48
12:AL:102:ARG:NH1	12:AL:102:ARG:CG	2.73	0.48
12:AL:71:PRO:HD2	12:AL:102:ARG:HH11	1.78	0.48
17:AQ:74:LEU:HD13	17:AQ:74:LEU:C	2.34	0.48
25:B0:2:ALA:HB1	34:BA:2494:G:OP2	2.13	0.48
27:B2:32:LEU:CG	27:B2:33:MET:N	2.62	0.48
33:B8:58:ILE:HG22	33:B8:58:ILE:O	2.12	0.48
34:BA:1697:G:H5'	34:BA:1698:A:H5''	1.95	0.48
34:BA:2114:A:H2'	34:BA:2114:A:N3	2.29	0.48
34:BA:2199:A:H5'	34:BA:2200:C:OP2	2.14	0.48
34:BA:2200:C:H42	34:BA:2223:G:H1	1.61	0.48
34:BA:2347:C:H2'	34:BA:2348:U:C6	2.48	0.48
34:BA:2677:G:H2'	34:BA:2678:C:C6	2.48	0.48
34:BA:266:G:H2'	34:BA:267:C:C5'	2.44	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:661:C:C4'	45:BP:18:ARG:HG2	2.43	0.48
34:BA:719:C:O2'	34:BA:720:C:H5'	2.13	0.48
37:BD:33:LEU:O	37:BD:35:LYS:N	2.46	0.48
38:BE:34:VAL:HG23	38:BE:34:VAL:O	2.12	0.48
38:BE:36:ARG:NH2	38:BE:88:GLY:H	2.11	0.48
42:BI:29:TYR:C	42:BI:32:PRO:HD2	2.33	0.48
43:BN:13:TRP:O	43:BN:135:PRO:HG3	2.14	0.48
45:BP:24:GLY:CA	45:BP:33:ARG:NH2	2.74	0.48
46:BQ:39:PRO:CB	46:BQ:99:PRO:HD3	2.43	0.48
49:BT:50:ILE:O	49:BT:99:LEU:HD12	2.14	0.48
34:BA:2683:C:P	49:BT:53:ARG:HH22	2.36	0.48
52:BW:1:MET:HG3	52:BW:2:GLU:N	2.27	0.48
53:BX:40:LYS:HG3	53:BX:41:ASN:N	2.28	0.48
53:BX:67:GLY:C	53:BX:68:ARG:HG2	2.32	0.48
53:BX:8:ILE:HG12	53:BX:43:VAL:HG23	1.95	0.48
55:BZ:4:ARG:CG	55:BZ:58:VAL:HB	2.34	0.48
1:CA:1251:A:O2'	1:CA:1252:A:H5'	2.13	0.48
1:CA:148:G:O2'	1:CA:149:A:H5'	2.14	0.48
1:CA:235:C:H2'	1:CA:236:G:H8	1.79	0.48
1:CA:487:A:H2'	1:CA:488:C:O4'	2.14	0.48
1:CA:791:G:C6	1:CA:792:A:N7	2.81	0.48
3:CC:137:ALA:O	3:CC:141:VAL:HG23	2.13	0.48
4:CD:160:GLN:O	4:CD:163:GLU:HB3	2.13	0.48
5:CE:101:ILE:HG13	5:CE:119:LEU:CD2	2.33	0.48
5:CE:142:LEU:O	5:CE:143:ARG:NE	2.46	0.48
6:CF:91:VAL:HG12	6:CF:92:LYS:N	2.29	0.48
6:CF:91:VAL:HG12	6:CF:92:LYS:O	2.14	0.48
18:CR:59:SER:HB3	18:CR:62:GLU:OE2	2.14	0.48
28:D3:52:HIS:ND1	28:D3:53:LEU:HG	2.27	0.48
34:DA:1020:A:N1	34:DA:1141:U:H1'	2.28	0.48
34:DA:1385:G:H1'	34:DA:1386:C:C6	2.48	0.48
34:DA:1815:A:H8	34:DA:1815:A:OP1	1.96	0.48
34:DA:2202:C:H2'	34:DA:2203:U:H6	1.78	0.48
34:DA:2240:C:O2'	34:DA:2241:A:H5'	2.14	0.48
34:DA:272:G:H1'	34:DA:272(B):G:O5'	2.14	0.48
34:DA:2737:G:O2'	34:DA:2738:A:H5'	2.14	0.48
34:DA:2855:C:O2'	34:DA:2856:C:H5'	2.12	0.48
34:DA:813:U:H2'	34:DA:814:C:C6	2.48	0.48
36:DC:99:ILE:O	36:DC:99:ILE:HG22	2.14	0.48
37:DD:133:LEU:CA	37:DD:136:ILE:HD13	2.44	0.48
38:DE:4:ILE:CG1	38:DE:28:ALA:HB1	2.43	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DE:51:PHE:HB3	38:DE:76:ARG:CB	2.35	0.48
40:DG:22:ARG:NH1	40:DG:22:ARG:HG2	2.27	0.48
42:DI:127:VAL:HA	42:DI:139:GLN:HA	1.96	0.48
42:DI:44:LEU:O	42:DI:47:LEU:HB3	2.13	0.48
42:DI:81:VAL:CG1	42:DI:88:ILE:HG23	2.44	0.48
43:DN:19:GLU:HB2	43:DN:59:LYS:HB2	1.94	0.48
43:DN:18:ALA:CB	43:DN:21:LYS:HG2	2.43	0.48
46:DQ:82:ARG:NH1	46:DQ:82:ARG:CG	2.67	0.48
47:DR:38:VAL:O	47:DR:41:ALA:N	2.44	0.48
48:DS:13:ARG:O	48:DS:14:VAL:C	2.51	0.48
48:DS:15:ARG:O	48:DS:17:ARG:O	2.30	0.48
48:DS:76:LYS:O	48:DS:79:ALA:HB3	2.14	0.48
51:DV:62:LEU:HD22	51:DV:98:GLU:CA	2.41	0.48
30:D5:25:LEU:HB3	52:DW:23:LEU:HD13	1.96	0.48
54:DY:81:LYS:HE2	54:DY:97:ARG:CG	2.43	0.48
1:AA:1041:A:H2'	1:AA:1042:G:H8	1.78	0.48
1:AA:785:G:N2	1:AA:798:G:C4	2.81	0.48
2:AB:194:PRO:O	2:AB:197:VAL:N	2.46	0.48
2:AB:204:ASN:ND2	2:AB:204:ASN:C	2.67	0.48
4:AD:160:GLN:O	4:AD:163:GLU:HB3	2.14	0.48
5:AE:103:GLY:O	5:AE:106:PRO:HD2	2.12	0.48
6:AF:28:ARG:NH1	6:AF:28:ARG:HG3	2.27	0.48
10:AJ:38:ILE:CD1	10:AJ:71:LEU:HB3	2.43	0.48
1:AA:951:G:OP2	13:AM:102:ARG:NH2	2.46	0.48
33:B8:13:ARG:NE	45:BP:61:ARG:NH1	2.61	0.48
33:B8:51:ALA:CA	33:B8:53:PRO:HD2	2.43	0.48
34:BA:1266:G:C8	52:BW:15:ARG:NH2	2.82	0.48
34:BA:1331:A:C2'	34:BA:1332:G:H5''	2.43	0.48
34:BA:2646:C:OP2	34:BA:2732:G:O2'	2.31	0.48
37:BD:106:ILE:CD1	37:BD:196:VAL:HG13	2.39	0.48
38:BE:75:VAL:O	38:BE:77:ILE:HG12	2.13	0.48
39:BF:157:VAL:HG12	39:BF:176:LEU:HB3	1.95	0.48
48:BS:88:ASP:OD1	48:BS:89:ARG:NH2	2.47	0.48
51:BV:19:LYS:HD3	51:BV:22:VAL:CG2	2.43	0.48
52:BW:26:GLY:HA2	52:BW:71:VAL:O	2.12	0.48
53:BX:76:ARG:CD	53:BX:76:ARG:O	2.62	0.48
1:CA:1242:C:O2'	1:CA:1243:C:H5'	2.13	0.48
1:CA:1392:G:H21	1:CA:1502:A:H8	1.61	0.48
1:CA:378:G:O2'	1:CA:379:C:H5'	2.13	0.48
1:CA:651:C:H2'	1:CA:652:U:C6	2.48	0.48
1:CA:782:A:O2'	1:CA:783:C:H5'	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:784:C:H2'	1:CA:785:G:H8	1.78	0.48
1:CA:785:G:N2	1:CA:798:G:C4	2.82	0.48
1:CA:989:C:O2'	1:CA:990:C:H5'	2.13	0.48
2:CB:44:LEU:H	2:CB:44:LEU:CD1	2.22	0.48
7:CG:99:LEU:O	7:CG:100:ALA:C	2.51	0.48
10:CJ:38:ILE:CD1	10:CJ:71:LEU:HB3	2.44	0.48
13:CM:38:GLY:C	13:CM:39:ILE:HG13	2.33	0.48
16:CP:43:LYS:HD2	16:CP:43:LYS:N	2.28	0.48
18:CR:74:ARG:HE	18:CR:81:PHE:HA	1.79	0.48
1:CA:192:U:C1'	20:CT:103:GLY:HA2	2.44	0.48
1:CA:61:G:OP1	20:CT:10:LEU:HD11	2.14	0.48
26:D1:82:LEU:HD12	26:D1:83:GLU:H	1.78	0.48
34:DA:1234:U:O2'	34:DA:1235:G:H5'	2.13	0.48
34:DA:1341:U:P	34:DA:1397:U:H3	2.36	0.48
34:DA:171:G:H2'	34:DA:172:C:H4'	1.91	0.48
34:DA:1854:A:H3'	34:DA:1855:G:C8	2.49	0.48
34:DA:191:A:C2'	34:DA:192:C:H5'	2.43	0.48
34:DA:2189:U:H2'	34:DA:2190:G:H5''	1.95	0.48
34:DA:2347:C:H2'	34:DA:2348:U:C6	2.48	0.48
34:DA:2631:G:N3	34:DA:2810:A:H2	2.12	0.48
34:DA:290:G:O2'	34:DA:291:C:H5'	2.13	0.48
34:DA:535:C:O3'	50:DU:53:ARG:NH1	2.46	0.48
35:DB:84:C:H2'	35:DB:85:G:H8	1.78	0.48
37:DD:35:LYS:CG	37:DD:64:ILE:H	2.17	0.48
44:DO:14:THR:HG21	44:DO:86:ILE:HG12	1.94	0.48
47:DR:75:LEU:HD13	47:DR:75:LEU:C	2.34	0.48
52:DW:35:ILE:CG2	52:DW:36:LEU:N	2.74	0.48
34:DA:329:G:OP2	54:DY:71:LYS:HE3	2.14	0.48
55:DZ:145:GLU:CG	55:DZ:146:ILE:N	2.76	0.48
1:AA:1220:G:O3'	19:AS:36:ARG:HD3	2.13	0.48
1:AA:1285:A:H1'	1:AA:1286:A:OP2	2.14	0.48
1:AA:177:C:H2'	1:AA:178:C:H6	1.79	0.48
2:AB:187:LEU:HA	2:AB:201:ILE:O	2.14	0.48
2:AB:213:LEU:HD22	2:AB:214:ILE:HD13	1.94	0.48
2:AB:22:LYS:H	2:AB:40:HIS:CE1	2.32	0.48
3:AC:120:VAL:HG13	3:AC:124:ILE:HD11	1.96	0.48
3:AC:174:PRO:HB2	3:AC:177:THR:HB	1.95	0.48
6:AF:21:LEU:O	6:AF:24:GLU:HB3	2.13	0.48
8:AH:134:ILE:HG22	8:AH:135:CYS:SG	2.54	0.48
10:AJ:80:LYS:NZ	10:AJ:80:LYS:HB2	2.28	0.48
11:AK:92:GLU:C	11:AK:94:ALA:H	2.17	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:58:GLU:OE1	13:AM:58:GLU:HA	2.14	0.48
16:AP:82:GLN:NE2	16:AP:82:GLN:N	2.61	0.48
17:AQ:4:LYS:HG3	17:AQ:5:VAL:N	2.29	0.48
34:BA:1773:A:H2'	34:BA:1774:C:C5'	2.43	0.48
34:BA:2162:G:H5'	34:BA:2171:A:C5'	2.43	0.48
34:BA:2263:C:C2'	34:BA:2264:C:H5'	2.44	0.48
34:BA:2363:C:O2'	34:BA:2364:C:H5'	2.13	0.48
34:BA:2847:U:C2'	34:BA:2848:G:H5'	2.43	0.48
34:BA:360:G:H2'	34:BA:361:G:H8	1.78	0.48
34:BA:608:A:C2	34:BA:609:A:C4	3.02	0.48
34:BA:901:A:H2'	34:BA:901:A:N3	2.28	0.48
34:BA:900:A:H3'	34:BA:901:A:H8	1.79	0.48
34:BA:912:C:H2'	34:BA:913:U:H6	1.78	0.48
35:BB:11:C:OP2	35:BB:12:C:H5	1.97	0.48
36:BC:208:PHE:O	36:BC:209:LEU:CB	2.61	0.48
39:BF:32:LEU:O	39:BF:36:VAL:HG23	2.14	0.48
39:BF:40:GLN:O	39:BF:44:ARG:HG2	2.13	0.48
39:BF:83:PHE:O	39:BF:84:VAL:HB	2.13	0.48
41:BH:158:HIS:NE2	41:BH:169:VAL:O	2.46	0.48
41:BH:159:GLU:OE1	41:BH:159:GLU:HA	2.13	0.48
42:BI:91:SER:HB2	42:BI:119:PRO:O	2.14	0.48
42:BI:133:HIS:O	42:BI:134:PRO:C	2.52	0.48
42:BI:91:SER:H	42:BI:121:LYS:CE	2.26	0.48
43:BN:33:LEU:O	43:BN:34:LEU:C	2.52	0.48
43:BN:43:THR:CG2	43:BN:46:VAL:HB	2.44	0.48
45:BP:126:VAL:HG22	45:BP:145:PRO:CB	2.44	0.48
48:BS:98:VAL:HG13	48:BS:100:ALA:N	2.18	0.48
49:BT:36:GLU:HG2	49:BT:36:GLU:O	2.13	0.48
51:BV:70:ILE:O	51:BV:71:LEU:HB2	2.14	0.48
51:BV:83:ARG:CG	51:BV:83:ARG:NH1	2.77	0.48
52:BW:27:LYS:H	52:BW:71:VAL:HB	1.77	0.48
1:CA:439:A:C5	1:CA:441:A:H1'	2.48	0.48
1:CA:723:U:O2	1:CA:723:U:H2'	2.14	0.48
2:CB:12:GLU:C	2:CB:14:GLY:N	2.65	0.48
3:CC:70:VAL:C	3:CC:106:VAL:HG23	2.33	0.48
4:CD:56:VAL:O	4:CD:58:LEU:N	2.47	0.48
5:CE:103:GLY:O	5:CE:104:ALA:C	2.52	0.48
8:CH:6:ILE:CG2	8:CH:85:ARG:HH12	2.25	0.48
10:CJ:28:ARG:HG2	10:CJ:28:ARG:HH11	1.79	0.48
10:CJ:34:VAL:HG13	10:CJ:73:ASP:O	2.14	0.48
13:CM:7:VAL:HG12	13:CM:7:VAL:O	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:91:ARG:O	13:CM:95:GLY:N	2.47	0.48
16:CP:39:TYR:CD2	16:CP:73:LEU:HD11	2.49	0.48
1:CA:1221:G:OP1	19:CS:36:ARG:HD3	2.13	0.48
20:CT:75:ASN:O	20:CT:76:ALA:C	2.50	0.48
25:D0:53:MET:CE	25:D0:57:PHE:HD1	2.26	0.48
26:D1:19:GLN:CD	26:D1:44:PRO:HB3	2.32	0.48
28:D3:35:ARG:NE	28:D3:37:LEU:HD21	2.28	0.48
34:DA:839:U:H1'	34:DA:1191:G:H1'	1.95	0.48
34:DA:1201:C:O2'	34:DA:1202:C:H5'	2.13	0.48
34:DA:1523:U:H2'	34:DA:1524:G:C8	2.48	0.48
34:DA:1300:U:O2'	34:DA:1626:G:C2	2.61	0.48
34:DA:2230:G:C4	34:DA:2231:C:C5	3.01	0.48
34:DA:2349:G:H8	34:DA:2349:G:H5'	1.78	0.48
34:DA:2363:C:O2'	34:DA:2364:C:H5'	2.14	0.48
34:DA:2653:U:H5'	34:DA:2654:A:C5'	2.44	0.48
34:DA:2872:G:C2	34:DA:2873:A:N6	2.82	0.48
34:DA:307:G:H21	34:DA:330:A:N6	2.12	0.48
34:DA:378:C:C2'	34:DA:379:G:H5'	2.44	0.48
36:DC:168:THR:CA	36:DC:173:ALA:HB2	2.33	0.48
38:DE:69:LYS:N	38:DE:69:LYS:HE2	2.28	0.48
39:DF:25:PRO:HB3	39:DF:119:ARG:HD3	1.96	0.48
40:DG:77:ILE:HG22	40:DG:80:PHE:H	1.78	0.48
42:DI:86:THR:HG22	42:DI:122:GLU:HG2	1.95	0.48
44:DO:79:PHE:HD2	49:DT:72:VAL:HG22	1.78	0.48
50:DU:15:LYS:CG	50:DU:16:LYS:N	2.76	0.48
52:DW:1:MET:HG3	52:DW:2:GLU:H	1.79	0.48
55:DZ:117:LEU:CB	55:DZ:174:VAL:HG22	2.44	0.48
55:DZ:29:TYR:CE2	55:DZ:87:ASP:HB2	2.48	0.48
55:DZ:6:LYS:HD3	55:DZ:6:LYS:N	2.29	0.48
1:AA:1001(A):G:O2'	1:AA:1002:G:H5'	2.12	0.48
1:AA:651:C:H2'	1:AA:652:U:C6	2.49	0.48
1:AA:92:C:H2'	1:AA:93:G:C8	2.49	0.48
2:AB:83:MET:O	2:AB:85:ALA:N	2.46	0.48
5:AE:77:PRO:HG2	5:AE:142:LEU:HD22	1.96	0.48
6:AF:26:ILE:O	6:AF:30:LEU:HG	2.13	0.48
1:AA:1347:G:H8	9:AI:107:ARG:HB3	1.76	0.48
10:AJ:47:PHE:HE1	10:AJ:63:PHE:CD2	2.32	0.48
15:AO:67:LEU:HD22	15:AO:78:TYR:CE1	2.48	0.48
22:AV:14:A:C6	22:AV:22:G:C5	3.02	0.48
26:B1:74:VAL:C	26:B1:76:ARG:H	2.17	0.48
34:BA:1040:C:H42	34:BA:1116:C:H42	1.61	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1526:G:H1	34:BA:1546:C:H42	1.62	0.48
34:BA:1602:U:H3'	34:BA:1603:A:H5''	1.96	0.48
34:BA:1625:C:C2'	34:BA:1626:G:H5'	2.43	0.48
34:BA:1747(A):G:H2'	34:BA:1748:G:C5'	2.38	0.48
34:BA:1899:G:N2	34:BA:1902:C:C5	2.81	0.48
34:BA:2377:A:H4'	48:BS:107:GLU:CG	2.43	0.48
34:BA:614:U:H4'	34:BA:614(C):A:H62	1.79	0.48
34:BA:657:U:C2	34:BA:658:C:C5	3.02	0.48
35:BB:61:G:C6	35:BB:62:C:C4	3.02	0.48
39:BF:10:PRO:HG2	39:BF:11:VAL:N	2.28	0.48
40:BG:112:PRO:C	40:BG:113:ARG:HG2	2.34	0.48
40:BG:130:ASN:OD1	40:BG:161:THR:N	2.41	0.48
40:BG:8:LYS:O	40:BG:11:TYR:HB3	2.14	0.48
41:BH:137:ASP:HB3	41:BH:140:LYS:HB2	1.96	0.48
41:BH:87:LEU:HA	41:BH:163:TYR:O	2.13	0.48
43:BN:120:LEU:HD13	43:BN:121:LYS:N	2.28	0.48
46:BQ:65:PHE:HB2	46:BQ:105:GLU:HG3	1.95	0.48
47:BR:18:LEU:HD11	47:BR:22:ARG:NE	2.29	0.48
54:BY:3:VAL:HG12	54:BY:3:VAL:O	2.14	0.48
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.47	0.48
1:CA:1308:U:H2'	1:CA:1309:G:C8	2.48	0.48
1:CA:1308:U:OP1	13:CM:98:VAL:N	2.47	0.48
1:CA:976:G:N2	1:CA:1362:C:H2'	2.29	0.48
1:CA:138:G:H2'	1:CA:139:G:H8	1.78	0.48
1:CA:544:G:C4	1:CA:545:C:C5	3.02	0.48
4:CD:11:LEU:O	4:CD:12:CYS:C	2.52	0.48
8:CH:29:SER:HB3	8:CH:32:LYS:CD	2.38	0.48
8:CH:29:SER:HB3	8:CH:32:LYS:HB2	1.96	0.48
8:CH:45:ILE:HB	8:CH:62:TYR:O	2.13	0.48
9:CI:50:LEU:O	9:CI:54:ASP:N	2.46	0.48
1:CA:963:G:N2	10:CJ:55:LYS:HZ3	2.11	0.48
10:CJ:40:LEU:HD21	10:CJ:69:ASN:C	2.34	0.48
19:CS:41:VAL:O	19:CS:44:MET:HB2	2.14	0.48
20:CT:34:LYS:O	20:CT:35:THR:C	2.51	0.48
20:CT:63:ILE:O	20:CT:66:ALA:N	2.45	0.48
25:D0:42:GLY:HA2	25:D0:57:PHE:CE2	2.48	0.48
26:D1:64:ALA:HA	26:D1:67:ILE:HG13	1.96	0.48
34:DA:1165:U:O2'	34:DA:1166:C:H5'	2.13	0.48
34:DA:1195:G:C2'	34:DA:1196:C:H5'	2.44	0.48
34:DA:1243:G:O2'	45:DP:9:ASN:HA	2.13	0.48
34:DA:2228:G:H2'	34:DA:2229:C:H6	1.78	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2362:G:C2'	34:DA:2363:C:H5'	2.43	0.48
34:DA:2639:A:C2'	34:DA:2640:G:C5'	2.89	0.48
34:DA:2671:A:H2'	34:DA:2672:G:H8	1.77	0.48
34:DA:271(A):A:H5'	34:DA:271(B):C:OP2	2.14	0.48
34:DA:2847:U:C2'	34:DA:2848:G:H5'	2.43	0.48
34:DA:39:C:H2'	34:DA:40:C:C6	2.49	0.48
34:DA:723:G:H2'	34:DA:724:U:O4'	2.13	0.48
34:DA:784:A:N6	34:DA:2072:G:O2'	2.46	0.48
34:DA:812:C:O2'	34:DA:813:U:H5'	2.13	0.48
34:DA:901:A:H2'	34:DA:901:A:N3	2.29	0.48
34:DA:994:C:H1'	51:DV:10:LYS:NZ	2.28	0.48
35:DB:97:G:C2	35:DB:98:G:C8	3.02	0.48
36:DC:183:GLU:CB	36:DC:186:ALA:HB3	2.44	0.48
37:DD:166:GLN:HE21	37:DD:166:GLN:CA	2.27	0.48
39:DF:110:LEU:O	39:DF:113:ALA:HB3	2.14	0.48
39:DF:200:GLU:O	39:DF:203:GLN:HB2	2.14	0.48
40:DG:34:LEU:HD21	40:DG:159:VAL:HG23	1.95	0.48
42:DI:93:THR:CG2	42:DI:119:PRO:HB3	2.40	0.48
42:DI:123:LEU:HD23	42:DI:142:VAL:HB	1.95	0.48
42:DI:8:PRO:HA	42:DI:13:GLY:O	2.13	0.48
42:DI:145:VAL:CG1	42:DI:146:ALA:N	2.76	0.48
46:DQ:114:ALA:O	46:DQ:117:ALA:HB3	2.13	0.48
47:DR:79:LEU:HA	47:DR:83:ILE:HB	1.95	0.48
49:DT:101:PHE:CE2	49:DT:113:LYS:HD3	2.49	0.48
50:DU:35:ALA:O	50:DU:36:ARG:C	2.52	0.48
53:DX:56:THR:HA	53:DX:77:LYS:CB	2.40	0.48
46:DQ:26:TYR:HA	55:DZ:81:ARG:HH21	1.78	0.48
1:AA:106:C:O2'	1:AA:107:G:H5'	2.14	0.48
1:AA:1162:C:H2'	1:AA:1163:C:C6	2.48	0.48
1:AA:125:U:H2'	1:AA:126:G:C8	2.49	0.48
1:AA:1321:C:H3'	1:AA:1322:C:H6	1.78	0.48
1:AA:1442:G:N9	1:AA:1442:G:H5'	2.28	0.48
1:AA:1526:G:C6	1:AA:1527:C:N4	2.82	0.48
1:AA:237:C:H4'	17:AQ:25:ARG:HH12	1.78	0.48
1:AA:487:A:H2'	1:AA:488:C:O4'	2.14	0.48
1:AA:501:C:O2'	1:AA:502:G:H5'	2.13	0.48
1:AA:573:A:C2	1:AA:574:A:C2	3.02	0.48
1:AA:738:C:H5'	6:AF:72:VAL:HG11	1.96	0.48
10:AJ:48:THR:CB	10:AJ:62:HIS:HB3	2.43	0.48
10:AJ:39:PRO:CA	10:AJ:70:ARG:NH1	2.74	0.48
12:AL:45:PRO:HG2	12:AL:51:ALA:N	2.28	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:47:U:H3'	22:AV:48:C:C5'	2.44	0.48
34:BA:1146:C:O2'	34:BA:1147:C:H5'	2.14	0.48
34:BA:1668:A:H4'	34:BA:1669:A:O5'	2.13	0.48
34:BA:1952:A:N3	34:BA:2560:C:O2'	2.38	0.48
34:BA:2127:G:H2'	34:BA:2128:C:N1	2.27	0.48
34:BA:2192:G:C2	34:BA:2193:G:C8	3.02	0.48
34:BA:2801(A):A:O2'	34:BA:2803:C:H5	1.93	0.48
34:BA:64:A:H2'	34:BA:65:C:C6	2.47	0.48
34:BA:869:G:O2'	34:BA:870:A:H5'	2.13	0.48
37:BD:80:ALA:HB3	37:BD:94:LEU:CD1	2.44	0.48
38:BE:117:MET:HE1	38:BE:124:GLY:HA3	1.96	0.48
40:BG:112:PRO:HB2	40:BG:113:ARG:HG2	1.96	0.48
40:BG:131:TYR:HB3	40:BG:159:VAL:HG13	1.95	0.48
40:BG:86:MET:HG3	40:BG:87:PRO:CD	2.38	0.48
45:BP:47:ASP:CB	45:BP:48:PRO:CA	2.89	0.48
33:B8:12:LYS:HA	45:BP:65:ARG:HD2	1.96	0.48
45:BP:70:GLN:HG3	45:BP:71:VAL:H	1.79	0.48
48:BS:15:ARG:HG3	48:BS:15:ARG:NH1	2.28	0.48
44:BO:120:GLU:HG2	49:BT:67:SER:OG	2.13	0.48
52:BW:1:MET:HG3	52:BW:2:GLU:H	1.79	0.48
53:BX:70:LEU:CG	53:BX:71:GLY:N	2.77	0.48
34:BA:295:G:OP1	54:BY:2:ARG:HD3	2.14	0.48
54:BY:9:LYS:HA	54:BY:30:VAL:HG21	1.95	0.48
55:BZ:104:PHE:HA	55:BZ:139:VAL:HB	1.96	0.48
1:CA:1162:C:H2'	1:CA:1163:C:C6	2.48	0.48
1:CA:674:G:O2'	1:CA:675:A:H5'	2.14	0.48
1:CA:951:G:OP2	13:CM:102:ARG:CZ	2.61	0.48
2:CB:19:HIS:HE1	2:CB:206:ASP:HB2	1.78	0.48
5:CE:147:ASP:HA	5:CE:150:ARG:CB	2.42	0.48
5:CE:71:LEU:HD22	5:CE:115:VAL:HG13	1.95	0.48
9:CI:50:LEU:C	9:CI:52:ALA:H	2.17	0.48
10:CJ:45:ARG:HG3	10:CJ:45:ARG:NH1	2.28	0.48
13:CM:13:LYS:CA	13:CM:44:ARG:HH11	2.23	0.48
15:CO:69:TYR:CE2	15:CO:73:GLU:HG3	2.48	0.48
19:CS:16:LEU:HA	19:CS:19:VAL:HB	1.96	0.48
26:D1:47:GLN:O	26:D1:48:LYS:C	2.51	0.48
26:D1:85:LEU:HB3	26:D1:87:PRO:CD	2.39	0.48
26:D1:73:LEU:CD1	26:D1:90:ILE:HG22	2.42	0.48
26:D1:9:GLY:O	26:D1:10:LYS:CG	2.47	0.48
27:D2:45:SER:O	27:D2:48:HIS:HB3	2.14	0.48
27:D2:14:ARG:HD3	27:D2:57:ILE:HB	1.96	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:D6:10:LEU:HD13	33:D8:36:LYS:HD3	1.96	0.48
33:D8:2:PRO:O	33:D8:3:LYS:O	2.31	0.48
34:DA:1445:A:C5'	34:DA:1445(A):C:H5	2.27	0.48
34:DA:1948:G:H8	34:DA:1948:G:C5'	2.17	0.48
34:DA:2019:A:C2'	34:DA:2020:A:O5'	2.60	0.48
34:DA:537:C:C2	34:DA:538:G:C8	3.02	0.48
34:DA:719:C:O2'	34:DA:720:C:H5'	2.14	0.48
37:DD:45:ASN:OD1	37:DD:46:GLN:N	2.47	0.48
34:DA:1568:G:H21	37:DD:58:HIS:HE1	1.60	0.48
39:DF:115:ALA:O	39:DF:118:ALA:N	2.47	0.48
29:D4:1:MET:H2	40:DG:67:LYS:NZ	2.12	0.48
41:DH:85:LYS:HE3	41:DH:144:VAL:C	2.34	0.48
42:DI:29:TYR:C	42:DI:32:PRO:HD2	2.34	0.48
42:DI:79:ILE:CG1	42:DI:140:LEU:HD21	2.44	0.48
43:DN:112:LEU:O	43:DN:116:LEU:N	2.37	0.48
33:D8:13:ARG:HB3	45:DP:63:PRO:CA	2.42	0.48
46:DQ:34:LEU:HD11	46:DQ:129:THR:CB	2.44	0.48
46:DQ:26:TYR:O	46:DQ:67:ARG:NH1	2.47	0.48
47:DR:10:LEU:CB	47:DR:17:ARG:HD2	2.36	0.48
48:DS:15:ARG:C	48:DS:17:ARG:N	2.66	0.48
50:DU:50:ARG:CZ	51:DV:75:PHE:HE2	2.27	0.48
54:DY:17:SER:OG	54:DY:18:GLY:N	2.41	0.48
54:DY:2:ARG:HH11	54:DY:2:ARG:HG2	1.79	0.48
55:DZ:145:GLU:HG3	55:DZ:146:ILE:HG12	1.96	0.48
46:DQ:141:GLN:NE2	55:DZ:70:LEU:HB2	2.28	0.48
1:AA:1065:U:H5''	1:AA:1190:G:N2	2.29	0.48
1:AA:1298:C:H4'	1:AA:1299:A:O4'	2.13	0.48
1:AA:1495:U:H2'	1:AA:1496:C:H6	1.79	0.48
1:AA:34:C:HO2'	1:AA:35:G:H5'	1.79	0.48
2:AB:80:ILE:HG13	2:AB:81:VAL:H	1.78	0.48
3:AC:18:TRP:NE1	14:AN:55:GLY:N	2.62	0.48
3:AC:19:GLU:O	3:AC:56:ASP:HA	2.14	0.48
3:AC:70:VAL:CG1	3:AC:71:ALA:H	2.26	0.48
5:AE:50:GLU:HG3	5:AE:52:PRO:CD	2.41	0.48
6:AF:100:ASN:HD21	18:AR:23:LYS:HE3	1.78	0.48
7:AG:101:LEU:O	7:AG:104:LEU:HB2	2.13	0.48
8:AH:36:LEU:O	8:AH:39:LEU:N	2.47	0.48
13:AM:97:PRO:HA	13:AM:110:ARG:HD3	1.95	0.48
17:AQ:38:ARG:HE	17:AQ:38:ARG:CA	2.24	0.48
18:AR:36:ASN:HD22	18:AR:39:VAL:CG2	2.26	0.48
18:AR:35:ARG:C	18:AR:37:VAL:H	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:24:G:O2'	23:AW:25:C:H5'	2.13	0.48
33:B8:31:HIS:O	33:B8:33:ASN:N	2.47	0.48
34:BA:1112:G:O2'	34:BA:1113:U:H5''	2.14	0.48
34:BA:2030:A:H4'	34:BA:2031:A:C8	2.47	0.48
34:BA:2065:C:H2'	34:BA:2066:C:H6	1.79	0.48
34:BA:2306:C:OP2	34:BA:2307:G:C8	2.67	0.48
34:BA:235:U:O2'	34:BA:236:C:H5'	2.14	0.48
34:BA:2707:G:H2'	34:BA:2708:G:H8	1.79	0.48
34:BA:2886:G:H2'	34:BA:2887:U:C6	2.49	0.48
34:BA:863:A:O2'	34:BA:864:G:H5'	2.14	0.48
36:BC:77:ILE:HG21	36:BC:122:ALA:CA	2.44	0.48
38:BE:35:GLN:NE2	38:BE:37:ARG:HH21	2.11	0.48
39:BF:107:LYS:C	39:BF:109:GLY:H	2.16	0.48
40:BG:120:LEU:HB2	40:BG:179:PRO:O	2.14	0.48
46:BQ:22:LYS:HE2	46:BQ:22:LYS:HA	1.96	0.48
46:BQ:8:LYS:HE3	46:BQ:9:TYR:CD1	2.49	0.48
48:BS:15:ARG:C	48:BS:17:ARG:N	2.64	0.48
48:BS:77:ALA:O	48:BS:78:LEU:C	2.53	0.48
48:BS:78:LEU:HD23	48:BS:82:ILE:O	2.13	0.48
48:BS:97:ARG:HG3	48:BS:97:ARG:O	2.14	0.48
54:BY:48:ALA:CB	54:BY:59:GLY:H	2.16	0.48
1:CA:1168:A:H2'	1:CA:1169:A:H8	1.76	0.48
1:CA:1285:A:H8	1:CA:1285:A:OP1	1.96	0.48
1:CA:824:C:H4'	8:CH:1:MET:H1	1.78	0.48
1:CA:908:A:H2'	1:CA:909:A:C8	2.49	0.48
3:CC:111:LEU:HD21	3:CC:145:GLY:O	2.14	0.48
4:CD:30:LYS:C	4:CD:32:ALA:N	2.66	0.48
5:CE:122:GLU:OE1	5:CE:131:ILE:HG13	2.14	0.48
8:CH:23:SER:HB3	8:CH:62:TYR:CD1	2.49	0.48
10:CJ:96:ILE:N	10:CJ:96:ILE:CD1	2.76	0.48
13:CM:91:ARG:CG	13:CM:98:VAL:HG11	2.39	0.48
15:CO:54:ARG:HG2	15:CO:58:MET:HE2	1.96	0.48
19:CS:29:ARG:O	19:CS:30:LEU:C	2.52	0.48
19:CS:31:ILE:O	19:CS:31:ILE:HG23	2.14	0.48
20:CT:73:HIS:O	20:CT:74:LYS:C	2.52	0.48
27:D2:47:ASN:O	27:D2:51:ARG:O	2.32	0.48
28:D3:23:LEU:H	28:D3:23:LEU:HD12	1.78	0.48
28:D3:26:LEU:HD21	28:D3:46:ASN:HB2	1.96	0.48
34:DA:1115:G:H8	34:DA:1115:G:H5'	1.77	0.48
34:DA:1449:A:N3	34:DA:1529:G:H1'	2.29	0.48
34:DA:2277:G:O2'	34:DA:2278:A:H5'	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:D6:27:LYS:HE3	34:DA:2285:C:H5	1.79	0.48
34:DA:2646:C:OP2	34:DA:2732:G:O2'	2.32	0.48
34:DA:578:A:OP1	34:DA:1255:U:O2'	2.26	0.48
34:DA:646:A:H3'	34:DA:647:G:C8	2.48	0.48
34:DA:813:U:C2	34:DA:814:C:C5	3.02	0.48
34:DA:826:U:H2'	34:DA:828:U:O4'	2.13	0.48
37:DD:69:ARG:HD2	37:DD:119:ALA:HB2	1.96	0.48
37:DD:149:PRO:O	37:DD:150:LYS:HB2	2.14	0.48
38:DE:52:LEU:N	38:DE:76:ARG:HB3	2.27	0.48
40:DG:110:ALA:O	40:DG:113:ARG:N	2.47	0.48
45:DP:101:VAL:HG23	45:DP:107:LYS:CA	2.33	0.48
46:DQ:82:ARG:O	46:DQ:83:MET:CB	2.62	0.48
47:DR:60:LEU:HD23	47:DR:61:HIS:N	2.29	0.48
48:DS:89:ARG:N	48:DS:89:ARG:HE	2.10	0.48
53:DX:40:LYS:HG3	53:DX:41:ASN:N	2.28	0.48
54:DY:86:ARG:NH2	54:DY:95:LYS:HZ3	2.12	0.48
55:DZ:60:GLU:HA	55:DZ:65:GLN:O	2.13	0.48
1:AA:1157:A:H4'	1:AA:1158:C:O5'	2.14	0.47
1:AA:1300:G:O2'	1:AA:1301:U:P	2.72	0.47
1:AA:1308:U:H2'	1:AA:1309:G:C8	2.48	0.47
1:AA:1469:G:H2'	1:AA:1470:G:H8	1.79	0.47
1:AA:1511:G:O2'	1:AA:1512:U:H5'	2.14	0.47
1:AA:158:G:O2'	1:AA:159:G:H5'	2.12	0.47
1:AA:16:A:C2'	1:AA:17:U:H5'	2.44	0.47
1:AA:218:C:O2'	1:AA:219:C:H5'	2.14	0.47
1:AA:482:A:H2'	1:AA:483:C:O4'	2.14	0.47
1:AA:830:G:O2'	1:AA:831:U:H5'	2.14	0.47
1:AA:832:C:O2'	1:AA:833:U:P	2.71	0.47
2:AB:73:THR:HG22	2:AB:95:GLN:O	2.14	0.47
4:AD:150:GLU:H	4:AD:150:GLU:CD	2.18	0.47
4:AD:157:LEU:C	4:AD:159:ARG:N	2.66	0.47
10:AJ:63:PHE:HZ	14:AN:45:ARG:HG3	1.79	0.47
13:AM:39:ILE:O	13:AM:41:PRO:HD3	2.13	0.47
14:AN:4:LYS:O	14:AN:7:ILE:HG12	2.14	0.47
25:B0:36:ILE:H	25:B0:36:ILE:HD13	1.78	0.47
28:B3:59:VAL:CG1	28:B3:60:GLU:N	2.77	0.47
30:B5:57:VAL:C	30:B5:58:LEU:HD12	2.34	0.47
34:BA:1341:U:P	34:BA:1397:U:H3	2.37	0.47
34:BA:1439:A:H2'	34:BA:1440:G:O4'	2.14	0.47
34:BA:1445:A:C5'	34:BA:1445(A):C:H5	2.27	0.47
34:BA:1614:A:H2'	34:BA:1615:C:H5'	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1662:C:O2'	34:BA:1663:C:H5'	2.14	0.47
34:BA:256:A:H2'	34:BA:257:A:H8	1.79	0.47
34:BA:2636:U:H2'	34:BA:2637:U:C5'	2.44	0.47
34:BA:2639:A:C3'	34:BA:2640:G:H5''	2.43	0.47
34:BA:2648:C:O2'	34:BA:2649:U:H5'	2.13	0.47
34:BA:2748:A:H2'	34:BA:2749:A:O4'	2.14	0.47
37:BD:174:ILE:CD1	37:BD:174:ILE:H	2.07	0.47
37:BD:210:GLY:O	37:BD:211:ARG:HB3	2.13	0.47
37:BD:224:ALA:O	37:BD:225:ALA:CB	2.62	0.47
38:BE:96:PHE:HA	38:BE:100:GLU:OE1	2.14	0.47
39:BF:192:LEU:HD23	39:BF:192:LEU:C	2.34	0.47
29:B4:6:HIS:N	40:BG:67:LYS:CE	2.76	0.47
40:BG:71:THR:HB	40:BG:89:GLY:C	2.35	0.47
40:BG:5:VAL:O	40:BG:8:LYS:HB3	2.14	0.47
43:BN:39:ARG:HD3	43:BN:41:ASP:H	1.79	0.47
47:BR:104:ARG:HG2	47:BR:104:ARG:NH1	2.28	0.47
47:BR:5:LYS:H	47:BR:5:LYS:CD	2.24	0.47
48:BS:89:ARG:O	48:BS:92:TYR:CB	2.59	0.47
49:BT:101:PHE:CE2	49:BT:113:LYS:HD3	2.49	0.47
51:BV:13:ARG:HG3	51:BV:13:ARG:NH1	2.30	0.47
51:BV:66:ARG:HG3	51:BV:66:ARG:HH11	1.79	0.47
53:BX:67:GLY:O	53:BX:68:ARG:HG2	2.12	0.47
53:BX:77:LYS:CE	53:BX:78:LYS:HD2	2.44	0.47
54:BY:31:LEU:CB	54:BY:32:PRO:HA	2.42	0.47
55:BZ:120:ILE:O	55:BZ:121:HIS:HB2	2.14	0.47
1:CA:1000:U:H2'	1:CA:1001:A:H8	1.79	0.47
1:CA:946:A:C2	1:CA:1236:A:C2	3.02	0.47
1:CA:1285:A:H1'	1:CA:1286:A:OP2	2.14	0.47
1:CA:1402:C:O2	1:CA:1500:A:N1	2.47	0.47
1:CA:16:A:C2'	1:CA:17:U:H5'	2.43	0.47
1:CA:600:C:O2'	1:CA:601:C:H5'	2.13	0.47
1:CA:692:U:H2'	1:CA:694:A:OP2	2.14	0.47
2:CB:12:GLU:O	2:CB:14:GLY:N	2.47	0.47
3:CC:121:ALA:O	3:CC:125:GLU:HG3	2.14	0.47
4:CD:150:GLU:H	4:CD:150:GLU:CD	2.16	0.47
5:CE:6:PHE:HB3	5:CE:35:GLY:O	2.14	0.47
6:CF:13:ASN:O	6:CF:14:LEU:HD23	2.14	0.47
10:CJ:79:ARG:HH11	10:CJ:79:ARG:HG2	1.79	0.47
11:CK:44:SER:OG	11:CK:47:VAL:HG23	2.13	0.47
13:CM:82:MET:O	13:CM:83:ASP:C	2.52	0.47
13:CM:83:ASP:CG	13:CM:84:ILE:N	2.66	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D4:13:ARG:HA	40:DG:101:ILE:HD12	1.95	0.47
34:DA:1024:G:O5'	34:DA:1024:G:H8	1.96	0.47
34:DA:2576:G:O2'	34:DA:2579:C:OP2	2.31	0.47
38:DE:14:ILE:CG1	38:DE:21:VAL:HG23	2.43	0.47
38:DE:201:THR:HG22	38:DE:203:LYS:N	2.05	0.47
38:DE:35:GLN:NE2	38:DE:37:ARG:HH21	2.11	0.47
40:DG:35:GLU:HG2	40:DG:36:LYS:N	2.28	0.47
41:DH:130:ARG:HB3	41:DH:130:ARG:NH1	2.28	0.47
41:DH:72:ILE:O	41:DH:75:ALA:N	2.46	0.47
43:DN:38:HIS:CE1	43:DN:50:ASP:OD2	2.67	0.47
44:DO:103:ALA:HB1	44:DO:105:GLU:CD	2.33	0.47
46:DQ:17:LEU:N	46:DQ:17:LEU:HD23	2.29	0.47
49:DT:36:GLU:O	49:DT:36:GLU:HG2	2.13	0.47
54:DY:28:LYS:CB	54:DY:37:VAL:HB	2.44	0.47
55:DZ:24:LEU:CD2	55:DZ:86:VAL:HG23	2.43	0.47
1:AA:107:G:O2'	1:AA:108:G:H5'	2.15	0.47
1:AA:1423:G:O2'	1:AA:1424:C:H5'	2.14	0.47
1:AA:22:G:H2'	1:AA:23:C:C6	2.49	0.47
1:AA:601:C:H2'	1:AA:602:A:C8	2.49	0.47
1:AA:802:A:H2'	1:AA:803:G:C5'	2.44	0.47
1:AA:81:U:H2'	1:AA:82:U:C6	2.50	0.47
2:AB:164:VAL:CG1	2:AB:165:VAL:N	2.76	0.47
2:AB:19:HIS:CG	2:AB:20:GLU:H	2.32	0.47
2:AB:49:GLU:O	2:AB:52:GLU:HB3	2.14	0.47
3:AC:188:LEU:CD2	3:AC:188:LEU:N	2.76	0.47
5:AE:139:LEU:C	5:AE:141:GLN:H	2.16	0.47
5:AE:40:ARG:HH11	5:AE:40:ARG:HG2	1.80	0.47
7:AG:147:ALA:C	7:AG:148:ASN:HD22	2.16	0.47
10:AJ:45:ARG:NH1	10:AJ:45:ARG:HG3	2.28	0.47
13:AM:108:ARG:HH11	13:AM:108:ARG:HG3	1.79	0.47
13:AM:38:GLY:O	13:AM:39:ILE:HG13	2.14	0.47
13:AM:82:MET:O	13:AM:83:ASP:C	2.52	0.47
17:AQ:94:ASN:O	17:AQ:95:TYR:C	2.51	0.47
19:AS:15:LEU:N	19:AS:15:LEU:HD22	2.30	0.47
19:AS:31:ILE:HG23	19:AS:31:ILE:O	2.14	0.47
20:AT:92:LEU:C	20:AT:94:ALA:H	2.17	0.47
25:B0:36:ILE:HD13	34:BA:2354:G:O2'	2.14	0.47
26:B1:37:ILE:HG22	26:B1:38:SER:N	2.29	0.47
27:B2:31:GLU:OE1	27:B2:31:GLU:HA	2.14	0.47
34:BA:1011:G:OP1	50:BU:75:ASN:HB3	2.13	0.47
34:BA:1131:G:N3	34:BA:1132:A:C8	2.82	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1386:C:OP2	34:BA:1396:U:H5	1.97	0.47
34:BA:1449:A:N3	34:BA:1529:G:H1'	2.29	0.47
34:BA:1475:G:H2'	34:BA:1475:G:N3	2.30	0.47
34:BA:1572:A:O2'	34:BA:1573:G:H5'	2.14	0.47
34:BA:1718:G:C8	34:BA:1718:G:H5'	2.49	0.47
34:BA:1952:A:C5	44:BO:22:ILE:HD12	2.49	0.47
34:BA:1983:C:O2'	34:BA:1984:G:H5'	2.13	0.47
34:BA:1993:U:H4'	38:BE:128:SER:HB3	1.95	0.47
34:BA:310:A:P	54:BY:18:GLY:HA2	2.54	0.47
34:BA:521:G:H2'	34:BA:522:G:H8	1.79	0.47
34:BA:523:C:H2'	34:BA:524:U:H5'	1.96	0.47
34:BA:626:U:O2	45:BP:105:LEU:HG	2.13	0.47
36:BC:99:ILE:O	36:BC:99:ILE:HG22	2.13	0.47
37:BD:210:GLY:O	37:BD:211:ARG:CB	2.62	0.47
42:BI:12:LEU:N	42:BI:12:LEU:HD23	2.30	0.47
42:BI:78:THR:OG1	42:BI:141:LYS:HB2	2.13	0.47
42:BI:92:VAL:HG22	42:BI:97:ILE:CG1	2.44	0.47
43:BN:67:LEU:O	43:BN:68:GLU:CB	2.62	0.47
34:BA:811:U:C3'	45:BP:25:SER:O	2.58	0.47
45:BP:29:LYS:HD2	45:BP:29:LYS:N	2.28	0.47
46:BQ:103:MET:HE1	46:BQ:125:LEU:HD13	1.95	0.47
47:BR:60:LEU:O	47:BR:61:HIS:C	2.52	0.47
49:BT:129:ARG:NH1	49:BT:131:ALA:H	2.11	0.47
49:BT:29:ARG:HG3	49:BT:30:VAL:H	1.79	0.47
49:BT:29:ARG:HG2	49:BT:86:ILE:N	2.29	0.47
51:BV:4:ILE:HD12	51:BV:40:LEU:HD21	1.95	0.47
52:BW:55:ALA:O	52:BW:58:ALA:HB3	2.15	0.47
52:BW:66:GLU:O	52:BW:69:LEU:HG	2.14	0.47
55:BZ:141:VAL:CG2	55:BZ:144:LEU:HD23	2.42	0.47
55:BZ:75:ASN:C	55:BZ:76:LEU:HD23	2.34	0.47
1:CA:218:C:O2'	1:CA:219:C:H5'	2.14	0.47
1:CA:452:A:O2'	1:CA:453:A:H8	1.96	0.47
1:CA:522:C:H2'	1:CA:523:A:C8	2.48	0.47
1:CA:958:A:C6	1:CA:959:A:C6	3.02	0.47
1:CA:995:C:O2'	1:CA:996:A:H5'	2.14	0.47
2:CB:19:HIS:HD2	2:CB:189:ASP:OD2	1.97	0.47
3:CC:53:ALA:O	3:CC:54:ARG:CB	2.54	0.47
4:CD:147:ALA:HB2	4:CD:182:LYS:HB2	1.95	0.47
7:CG:84:ASN:HD22	7:CG:84:ASN:N	2.12	0.47
9:CI:118:LYS:HB3	9:CI:118:LYS:NZ	2.29	0.47
12:CL:62:SER:O	12:CL:64:TYR:HD1	1.97	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:19:LEU:HA	13:CM:22:ILE:CD1	2.40	0.47
15:CO:9:GLN:O	15:CO:10:LYS:C	2.52	0.47
15:CO:56:LEU:C	15:CO:60:VAL:HG23	2.35	0.47
17:CQ:74:LEU:HD13	17:CQ:74:LEU:C	2.34	0.47
19:CS:33:THR:OG1	19:CS:34:TRP:N	2.46	0.47
22:CV:70:G:C2'	22:CV:71:C:C5'	2.73	0.47
26:D1:42:GLN:HG3	26:D1:43:TYR:N	2.29	0.47
27:D2:49:LYS:HA	27:D2:53:LEU:HB2	1.96	0.47
31:D6:30:THR:O	31:D6:31:PRO:C	2.52	0.47
33:D8:32:LEU:CD2	33:D8:35:GLN:O	2.61	0.47
34:DA:1141:U:H2'	43:DN:63:THR:HG21	1.91	0.47
34:DA:1142(A):A:C4	34:DA:1144:G:N7	2.83	0.47
34:DA:1496:A:H5'	34:DA:1497:U:OP2	2.14	0.47
34:DA:1713:U:O2	34:DA:1747:G:C2	2.67	0.47
34:DA:1991:U:H2'	34:DA:1992:G:H5'	1.96	0.47
34:DA:2011:U:H2'	34:DA:2012:G:C5'	2.44	0.47
34:DA:2200:C:H42	34:DA:2223:G:H1	1.62	0.47
34:DA:2684:U:O2'	34:DA:2685:G:H5'	2.14	0.47
34:DA:2776:A:C6	34:DA:2782:G:H1'	2.48	0.47
34:DA:322:A:H5'	34:DA:340:A:H1'	1.97	0.47
35:DB:41:U:C4	40:DG:70:VAL:O	2.67	0.47
37:DD:70:TRP:O	37:DD:71:ASP:C	2.51	0.47
40:DG:115:ARG:HH21	40:DG:136:ARG:CB	2.27	0.47
40:DG:81:LYS:O	40:DG:82:LEU:O	2.32	0.47
41:DH:32:GLU:O	41:DH:33:LEU:HD23	2.13	0.47
42:DI:139:GLN:HG2	42:DI:140:LEU:N	2.29	0.47
43:DN:39:ARG:HD3	43:DN:39:ARG:O	2.14	0.47
45:DP:149:GLU:O	45:DP:149:GLU:HG3	2.14	0.47
34:DA:2495:G:H5''	46:DQ:81:VAL:HG22	1.96	0.47
48:DS:27:SER:HA	48:DS:88:ASP:OD1	2.14	0.47
48:DS:72:ALA:O	48:DS:76:LYS:HB2	2.14	0.47
49:DT:28:VAL:HG22	49:DT:46:GLU:HA	1.96	0.47
1:AA:1057:G:O2'	1:AA:1058:G:H5'	2.15	0.47
1:AA:1068:G:N7	1:AA:1094:G:C8	2.82	0.47
1:AA:824:C:H4'	8:AH:1:MET:H1	1.77	0.47
1:AA:878:G:H5''	8:AH:89:PRO:HG2	1.96	0.47
1:AA:976:G:N2	1:AA:1362:C:H2'	2.29	0.47
2:AB:98:LEU:H	2:AB:101:MET:HE3	1.79	0.47
3:AC:79:ARG:C	3:AC:81:GLY:H	2.17	0.47
6:AF:62:TRP:CH2	6:AF:64:GLN:HB2	2.49	0.47
10:AJ:70:ARG:HG3	10:AJ:70:ARG:NH1	2.09	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:75:HIS:CG	12:AL:76:ASN:N	2.80	0.47
1:AA:585:G:C4'	12:AL:8:ASN:HD21	2.11	0.47
14:AN:26:ARG:HH11	14:AN:47:LEU:HD21	1.79	0.47
16:AP:20:VAL:HG22	16:AP:21:VAL:N	2.28	0.47
19:AS:29:ARG:O	19:AS:30:LEU:C	2.52	0.47
22:AV:64:G:H2'	22:AV:65:C:C6	2.48	0.47
22:AV:75:C:H2'	22:AV:76:A:O4'	2.15	0.47
23:AY:30:G:O2'	23:AY:31:A:H5'	2.14	0.47
26:B1:87:PRO:CG	26:B1:88:LYS:N	2.76	0.47
27:B2:30:ARG:HB3	27:B2:30:ARG:CZ	2.43	0.47
27:B2:40:SER:OG	27:B2:41:ILE:N	2.45	0.47
27:B2:45:SER:O	27:B2:48:HIS:HB2	2.13	0.47
31:B6:33:LYS:HA	31:B6:33:LYS:CE	2.35	0.47
34:BA:1467:C:H42	34:BA:1525:G:H1	1.61	0.47
34:BA:1484:G:H8	34:BA:1484:G:O5'	1.97	0.47
34:BA:1712:C:O2'	34:BA:1713:U:H5'	2.14	0.47
34:BA:1992:G:O2'	34:BA:1993:U:P	2.73	0.47
34:BA:2011:U:H2'	34:BA:2012:G:C5'	2.44	0.47
31:B6:27:LYS:HE3	34:BA:2285:C:H5	1.78	0.47
34:BA:2713:A:H3'	34:BA:2714:G:C5'	2.44	0.47
34:BA:418:G:O2'	34:BA:419:C:H5'	2.14	0.47
34:BA:528:A:C2	34:BA:2043:C:C4'	2.94	0.47
34:BA:686:G:N2	34:BA:788:A:N6	2.62	0.47
35:BB:78:A:H2'	35:BB:79:C:O4'	2.14	0.47
37:BD:166:GLN:CA	37:BD:166:GLN:HE21	2.25	0.47
34:BA:2580:U:H5'	38:BE:131:ALA:CB	2.44	0.47
38:BE:132:HIS:CD2	38:BE:135:HIS:NE2	2.82	0.47
38:BE:49:LEU:HD22	38:BE:49:LEU:N	2.29	0.47
34:BA:323:G:H2'	39:BF:169:ASN:OD1	2.14	0.47
13:AM:7:VAL:CG2	40:BG:115:ARG:HA	2.44	0.47
40:BG:63:ILE:HD12	40:BG:63:ILE:C	2.35	0.47
41:BH:35:VAL:O	41:BH:37:VAL:HG23	2.14	0.47
45:BP:14:LYS:O	45:BP:15:ARG:CG	2.63	0.47
33:B8:13:ARG:HB3	45:BP:63:PRO:CA	2.44	0.47
45:BP:91:PHE:N	45:BP:91:PHE:CD1	2.82	0.47
46:BQ:78:PRO:O	46:BQ:79:LEU:CG	2.62	0.47
48:BS:93:LYS:HE3	48:BS:93:LYS:HA	1.96	0.47
49:BT:115:ARG:HD3	49:BT:115:ARG:HA	1.67	0.47
52:BW:56:ALA:O	52:BW:57:ASN:C	2.50	0.47
54:BY:15:VAL:O	54:BY:16:ALA:CB	2.62	0.47
54:BY:28:LYS:O	54:BY:37:VAL:O	2.32	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1410:G:H2'	1:CA:1411:C:C6	2.49	0.47
1:CA:1502:A:N3	1:CA:1502:A:C2'	2.76	0.47
1:CA:274:A:H4'	1:CA:275:G:OP1	2.14	0.47
1:CA:81:U:H2'	1:CA:82:U:C6	2.49	0.47
1:CA:865:A:H5'	1:CA:1078:U:C4	2.49	0.47
1:CA:993:G:N3	1:CA:993:G:H2'	2.30	0.47
2:CB:43:ASP:OD1	2:CB:45:GLN:HB3	2.14	0.47
5:CE:128:PRO:O	5:CE:129:ILE:C	2.53	0.47
6:CF:59:TYR:HD2	6:CF:61:LEU:HD11	1.80	0.47
7:CG:140:ASP:HA	7:CG:143:ARG:NH1	2.28	0.47
7:CG:71:PRO:HD3	7:CG:103:TRP:CZ3	2.49	0.47
8:CH:64:LYS:HD2	8:CH:79:VAL:HG21	1.96	0.47
1:CA:1128:C:H5'	9:CI:16:ARG:NH1	2.28	0.47
9:CI:5:TYR:HB2	9:CI:18:PHE:CE2	2.48	0.47
12:CL:45:PRO:HG2	12:CL:51:ALA:N	2.30	0.47
19:CS:9:VAL:C	19:CS:11:VAL:H	2.16	0.47
26:D1:53:VAL:CG1	26:D1:55:GLY:H	2.27	0.47
34:DA:1024:G:C3'	34:DA:1025:G:H5''	2.34	0.47
34:DA:1284:A:H2'	34:DA:1285:G:O4'	2.15	0.47
34:DA:1449:A:OP2	34:DA:1449:A:H8	1.97	0.47
34:DA:1476:C:H2'	34:DA:1477:A:H8	1.80	0.47
34:DA:1902:C:H4'	37:DD:244:ARG:HA	1.95	0.47
34:DA:2114:A:N3	34:DA:2114:A:H2'	2.29	0.47
34:DA:2312:U:C2'	34:DA:2313:C:C5'	2.90	0.47
34:DA:271(H):G:C6	34:DA:271(Q):G:N1	2.83	0.47
34:DA:2784:C:O2'	34:DA:2785:C:H5'	2.13	0.47
34:DA:2886:G:H2'	34:DA:2887:U:C6	2.50	0.47
37:DD:209:ALA:C	37:DD:210:GLY:O	2.50	0.47
37:DD:35:LYS:CE	37:DD:64:ILE:C	2.81	0.47
39:DF:157:VAL:HG12	39:DF:176:LEU:HB3	1.95	0.47
39:DF:21:ALA:C	39:DF:23:ASP:H	2.18	0.47
41:DH:159:GLU:HA	41:DH:159:GLU:OE1	2.13	0.47
43:DN:28:THR:O	43:DN:31:ALA:N	2.48	0.47
46:DQ:81:VAL:HG12	46:DQ:82:ARG:HG2	1.96	0.47
51:DV:47:VAL:CG2	51:DV:48:GLY:H	2.13	0.47
51:DV:72:VAL:HA	51:DV:88:ARG:HH22	1.75	0.47
52:DW:73:ALA:HB3	52:DW:106:ILE:HD11	1.96	0.47
52:DW:26:GLY:HA2	52:DW:71:VAL:O	2.15	0.47
52:DW:4:LYS:HE3	52:DW:6:ILE:HD11	1.95	0.47
54:DY:3:VAL:HG12	54:DY:3:VAL:O	2.14	0.47
54:DY:88:LYS:NZ	54:DY:93:GLY:O	2.48	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:86:ARG:NH1	54:DY:95:LYS:HZ2	2.12	0.47
55:DZ:10:ARG:HD3	55:DZ:12:GLY:HA2	1.95	0.47
1:AA:524:G:H2'	1:AA:525:C:C5	2.48	0.47
1:AA:544:G:H2'	1:AA:545:C:H6	1.79	0.47
1:AA:635:G:C6	1:AA:636:U:C4	3.02	0.47
1:AA:66:G:N2	1:AA:172:A:H2	2.13	0.47
2:AB:124:SER:O	2:AB:127:ILE:HG12	2.14	0.47
3:AC:121:ALA:O	3:AC:125:GLU:HG3	2.14	0.47
4:AD:14:ARG:C	4:AD:16:GLY:N	2.67	0.47
4:AD:56:VAL:O	4:AD:58:LEU:N	2.47	0.47
6:AF:5:GLU:HG2	6:AF:62:TRP:CZ2	2.49	0.47
9:AI:112:LYS:HE3	9:AI:116:LYS:O	2.14	0.47
10:AJ:22:LYS:C	10:AJ:22:LYS:HD2	2.34	0.47
12:AL:88:GLY:O	12:AL:99:HIS:ND1	2.48	0.47
15:AO:36:ILE:HG23	15:AO:56:LEU:HD11	1.96	0.47
15:AO:70:LEU:O	15:AO:71:GLN:C	2.52	0.47
18:AR:25:THR:C	18:AR:26:LEU:HD23	2.34	0.47
20:AT:34:LYS:O	20:AT:35:THR:C	2.52	0.47
23:AW:10:G:N2	23:AW:26:A:H1'	2.29	0.47
34:BA:1051:G:C2	34:BA:1052:C:N4	2.81	0.47
34:BA:1040:C:H42	34:BA:1116:C:N4	2.11	0.47
34:BA:1352:U:O2'	34:BA:1353:A:H5'	2.15	0.47
34:BA:2571:C:H5''	34:BA:2572:A:H5''	1.97	0.47
34:BA:2631:G:N3	34:BA:2810:A:H2	2.12	0.47
34:BA:614(C):A:O2'	34:BA:615:G:O4'	2.32	0.47
34:BA:744:G:OP1	38:BE:132:HIS:HB3	2.14	0.47
34:BA:996:A:H2'	34:BA:997:G:H8	1.78	0.47
37:BD:133:LEU:CA	37:BD:136:ILE:HD13	2.45	0.47
37:BD:247:ALA:HA	37:BD:254:THR:HG22	1.96	0.47
46:BQ:17:LEU:HD21	46:BQ:41:TRP:NE1	2.29	0.47
48:BS:75:GLU:O	48:BS:76:LYS:C	2.53	0.47
49:BT:58:ASN:C	49:BT:58:ASN:ND2	2.67	0.47
50:BU:15:LYS:CG	50:BU:16:LYS:N	2.77	0.47
53:BX:76:ARG:CD	53:BX:76:ARG:C	2.82	0.47
53:BX:92:LEU:O	53:BX:93:GLU:CB	2.62	0.47
54:BY:83:THR:HG22	54:BY:84:ARG:H	1.79	0.47
1:CA:1030(D):A:H2'	1:CA:1031:G:H5'	1.97	0.47
1:CA:1225:A:H2'	1:CA:1225:A:N3	2.30	0.47
1:CA:1442(A):G:C8	49:DT:118:ARG:NH1	2.83	0.47
1:CA:1522:U:O2'	1:CA:1523:G:H5'	2.14	0.47
1:CA:18:C:H4'	1:CA:1078:U:O2	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:951:G:OP2	13:CM:102:ARG:NH2	2.48	0.47
2:CB:41:ILE:N	2:CB:41:ILE:CD1	2.78	0.47
3:CC:79:ARG:C	3:CC:81:GLY:H	2.18	0.47
5:CE:32:VAL:O	5:CE:43:LEU:HD12	2.14	0.47
7:CG:93:PRO:O	7:CG:94:ARG:C	2.53	0.47
10:CJ:22:LYS:C	10:CJ:22:LYS:HD2	2.34	0.47
11:CK:24:SER:O	11:CK:26:ASN:N	2.48	0.47
16:CP:82:GLN:NE2	16:CP:82:GLN:N	2.62	0.47
18:CR:61:LYS:O	18:CR:65:ILE:HG13	2.14	0.47
19:CS:62:ILE:HD12	19:CS:66:MET:HG3	1.96	0.47
20:CT:84:LEU:HD13	20:CT:84:LEU:C	2.35	0.47
23:CW:39:U:C2'	23:CW:40:C:H5'	2.44	0.47
25:D0:36:ILE:HD13	34:DA:2354:G:O2'	2.14	0.47
27:D2:28:LYS:O	27:D2:31:GLU:HB3	2.15	0.47
30:D5:15:ARG:HA	30:D5:18:ALA:HB3	1.97	0.47
33:D8:40:GLU:OE1	33:D8:44:LYS:HE3	2.14	0.47
33:D8:53:PRO:HA	33:D8:56:GLU:HB2	1.96	0.47
34:DA:1272:A:H3'	34:DA:1273:U:C5'	2.44	0.47
34:DA:2124:G:C2'	34:DA:2125:G:H5'	2.44	0.47
34:DA:2329:G:H2'	34:DA:2330:G:C8	2.48	0.47
34:DA:271(Q):G:O2'	34:DA:271(R):G:H8	1.97	0.47
34:DA:71:A:O2'	34:DA:72:U:OP2	2.26	0.47
34:DA:859:G:O3'	34:DA:860:U:O2	2.32	0.47
37:DD:158:ALA:O	37:DD:159:ALA:HB3	2.15	0.47
38:DE:34:VAL:HG23	38:DE:34:VAL:O	2.15	0.47
39:DF:83:PHE:O	39:DF:85:GLY:N	2.47	0.47
41:DH:61:HIS:O	41:DH:62:LYS:C	2.51	0.47
45:DP:88:LEU:C	45:DP:90:ARG:N	2.67	0.47
47:DR:44:LEU:HD13	47:DR:44:LEU:O	2.15	0.47
48:DS:64:GLU:N	48:DS:64:GLU:OE2	2.48	0.47
55:DZ:150:LEU:HD23	55:DZ:171:ILE:HG13	1.96	0.47
1:AA:1000:U:H2'	1:AA:1001:A:H8	1.79	0.47
1:AA:1466:C:H2'	1:AA:1467:G:H5'	1.97	0.47
1:AA:719:C:C2	18:AR:50:ILE:HG12	2.49	0.47
1:AA:908:A:H2'	1:AA:909:A:H8	1.78	0.47
1:AA:951:G:OP2	13:AM:102:ARG:NH1	2.47	0.47
1:AA:953:G:H5'	1:AA:965:A:H61	1.80	0.47
1:AA:993:G:N3	1:AA:993:G:H2'	2.30	0.47
2:AB:185:ILE:HG22	2:AB:199:TYR:CD1	2.49	0.47
1:AA:1057:G:H5"	3:AC:154:SER:OG	2.15	0.47
4:AD:92:VAL:CG1	4:AD:96:LEU:HD21	2.44	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:113:GLU:HB2	7:AG:119:ARG:CG	2.44	0.47
7:AG:99:LEU:O	7:AG:100:ALA:C	2.52	0.47
8:AH:63:LEU:H	8:AH:63:LEU:HD22	1.79	0.47
11:AK:61:ALA:O	11:AK:65:ALA:HB2	2.14	0.47
1:AA:522:C:H41	12:AL:53:ARG:NH2	2.12	0.47
1:AA:759:A:H61	17:AQ:94:ASN:HD22	1.61	0.47
21:AU:2:GLY:O	21:AU:4:GLY:N	2.47	0.47
34:BA:1132:A:C2	34:BA:1133:U:C2	3.02	0.47
34:BA:1272:A:H3'	34:BA:1273:U:H5'	1.96	0.47
34:BA:1428:C:O2'	34:BA:1429:G:H5'	2.15	0.47
34:BA:1719:G:O2'	34:BA:1720:U:H5'	2.14	0.47
34:BA:2312:U:C2'	34:BA:2313:C:C5'	2.89	0.47
27:B2:40:SER:HB2	34:BA:61:G:H1'	1.96	0.47
34:BA:667:U:H2'	34:BA:668:G:O4'	2.13	0.47
35:BB:21:G:N3	35:BB:21:G:H2'	2.30	0.47
37:BD:242:ARG:HD2	37:BD:242:ARG:N	2.29	0.47
37:BD:246:PRO:HB2	37:BD:255:LYS:HG2	1.96	0.47
38:BE:197:ILE:CG1	38:BE:199:ARG:HH12	2.27	0.47
38:BE:197:ILE:HD11	38:BE:199:ARG:HH12	1.78	0.47
38:BE:48:GLN:HE21	38:BE:78:LEU:CD1	2.28	0.47
38:BE:68:ALA:O	38:BE:70:ALA:N	2.48	0.47
41:BH:19:VAL:CB	41:BH:44:VAL:HG13	2.44	0.47
42:BI:101:LEU:HD12	42:BI:101:LEU:C	2.35	0.47
42:BI:101:LEU:HD23	42:BI:109:ILE:HG12	1.95	0.47
43:BN:47:ALA:HB2	43:BN:112:LEU:HD11	1.96	0.47
43:BN:83:LYS:CE	43:BN:85:ILE:HD11	2.41	0.47
47:BR:104:ARG:O	47:BR:108:GLY:HA2	2.13	0.47
48:BS:65:VAL:O	48:BS:69:VAL:HG12	2.15	0.47
50:BU:55:ARG:HA	50:BU:58:ARG:CD	2.44	0.47
51:BV:62:LEU:HD22	51:BV:98:GLU:CA	2.39	0.47
53:BX:60:ARG:NE	53:BX:74:PRO:CG	2.74	0.47
53:BX:63:LYS:HE3	53:BX:70:LEU:CD2	2.36	0.47
54:BY:2:ARG:HG2	54:BY:2:ARG:HH11	1.79	0.47
54:BY:86:ARG:NH1	54:BY:95:LYS:HZ2	2.13	0.47
55:BZ:102:LEU:HG	55:BZ:123:ASP:HA	1.97	0.47
55:BZ:14:LYS:O	55:BZ:17:ALA:HB3	2.15	0.47
1:CA:1060:C:H4'	10:CJ:52:GLY:N	2.28	0.47
1:CA:1068:G:N7	1:CA:1094:G:C8	2.82	0.47
1:CA:189(J):G:O2'	1:CA:189(K):U:H5'	2.15	0.47
1:CA:601:C:H2'	1:CA:602:A:C8	2.48	0.47
1:CA:992:U:H4'	1:CA:993:G:O5'	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:26:ILE:O	6:CF:30:LEU:HG	2.14	0.47
9:CI:79:LEU:HD13	9:CI:79:LEU:O	2.14	0.47
12:CL:54:LYS:O	12:CL:70:ILE:HD13	2.13	0.47
13:CM:8:GLU:C	13:CM:9:ILE:HD12	2.35	0.47
16:CP:15:PRO:HB3	16:CP:17:TYR:HE1	1.79	0.47
16:CP:67:THR:HG22	16:CP:68:ASP:N	2.30	0.47
19:CS:6:LYS:HE3	19:CS:6:LYS:N	2.30	0.47
23:CW:74:C:C2'	23:CW:75:C:H5'	2.44	0.47
26:D1:92:LYS:C	26:D1:94:LEU:H	2.18	0.47
29:D4:1:MET:N	40:DG:67:LYS:HZ3	2.12	0.47
29:D4:6:HIS:HA	40:DG:67:LYS:HE3	1.96	0.47
33:D8:31:HIS:O	33:D8:33:ASN:N	2.47	0.47
34:DA:1914:C:O4'	34:DA:1914:C:O2	2.32	0.47
34:DA:2584:U:O5'	34:DA:2584:U:O2	2.32	0.47
34:DA:614:U:O2	34:DA:614:U:O4'	2.31	0.47
34:DA:667:U:H2'	34:DA:668:G:O4'	2.15	0.47
34:DA:870:A:H5''	46:DQ:7:MET:CB	2.42	0.47
37:DD:211:ARG:O	37:DD:212:SER:C	2.50	0.47
34:DA:2599:G:OP2	37:DD:236:GLY:N	2.47	0.47
37:DD:35:LYS:HG2	37:DD:64:ILE:CA	2.44	0.47
40:DG:41:GLN:NE2	40:DG:155:MET:HB3	2.30	0.47
41:DH:138:LYS:C	41:DH:140:LYS:N	2.65	0.47
42:DI:101:LEU:HD12	42:DI:101:LEU:C	2.35	0.47
34:DA:832:G:OP1	45:DP:40:SER:HB3	2.15	0.47
46:DQ:47:ILE:N	46:DQ:47:ILE:HD12	2.27	0.47
47:DR:16:HIS:O	47:DR:17:ARG:C	2.53	0.47
48:DS:75:GLU:O	48:DS:76:LYS:C	2.52	0.47
51:DV:3:ALA:O	51:DV:13:ARG:HA	2.14	0.47
34:DA:295:G:OP1	54:DY:2:ARG:HD3	2.14	0.47
1:AA:1232:U:O3'	9:AI:124:GLN:HB2	2.15	0.47
1:AA:1323:G:H4'	1:AA:1363:C:N3	2.29	0.47
1:AA:146:G:C2	1:AA:147:G:H1'	2.49	0.47
1:AA:448:A:P	1:AA:485:G:H22	2.37	0.47
1:AA:78:G:N2	1:AA:91:C:H42	1.96	0.47
4:AD:76:ARG:HH11	4:AD:76:ARG:HG2	1.79	0.47
4:AD:8:VAL:C	4:AD:10:ARG:N	2.68	0.47
6:AF:75:LEU:O	6:AF:76:ALA:C	2.53	0.47
7:AG:155:ARG:O	7:AG:156:TRP:HD1	1.98	0.47
8:AH:109:ILE:CG1	8:AH:110:ALA:N	2.74	0.47
10:AJ:15:THR:OG1	10:AJ:16:LEU:N	2.48	0.47
10:AJ:40:LEU:HD21	10:AJ:69:ASN:C	2.35	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:60:LEU:H	12:AL:60:LEU:HD22	1.79	0.47
13:AM:49:THR:HG22	13:AM:51:ALA:N	2.29	0.47
13:AM:98:VAL:C	13:AM:99:ARG:HG3	2.35	0.47
15:AO:82:ILE:HD13	15:AO:82:ILE:C	2.34	0.47
1:AA:375:U:C4'	16:AP:17:TYR:CE2	2.97	0.47
20:AT:63:ILE:O	20:AT:66:ALA:N	2.46	0.47
24:AX:14:A:H8	24:AX:14:A:OP2	1.97	0.47
25:B0:68:GLU:O	25:B0:80:HIS:HD2	1.96	0.47
34:BA:1188:U:H2'	34:BA:1189:A:C5'	2.42	0.47
34:BA:1272:A:H3'	34:BA:1273:U:C5'	2.44	0.47
34:BA:1970:A:H5''	34:BA:1971:A:OP1	2.14	0.47
34:BA:2019:A:H2'	34:BA:2020:A:O5'	2.13	0.47
34:BA:2639:A:H3'	34:BA:2640:G:H5'	1.97	0.47
34:BA:2651:C:O2'	34:BA:2652:C:H5'	2.13	0.47
34:BA:2671:A:H2'	34:BA:2672:G:H8	1.79	0.47
34:BA:39:C:H2'	34:BA:40:C:C6	2.50	0.47
34:BA:601:C:O2'	34:BA:605:C:H5''	2.14	0.47
34:BA:836:G:H2'	34:BA:837:C:C6	2.50	0.47
34:BA:927:G:H3'	34:BA:928:G:H8	1.79	0.47
34:BA:1902:C:H4'	37:BD:244:ARG:HA	1.95	0.47
38:BE:84:PHE:HE1	38:BE:91:VAL:HG21	1.79	0.47
43:BN:18:ALA:CB	43:BN:21:LYS:HG2	2.43	0.47
43:BN:18:ALA:C	43:BN:20:GLY:N	2.68	0.47
44:BO:113:LYS:HA	44:BO:116:SER:OG	2.14	0.47
46:BQ:20:ALA:HB2	46:BQ:99:PRO:CD	2.45	0.47
47:BR:97:VAL:HA	47:BR:113:LEU:O	2.13	0.47
47:BR:116:LEU:O	47:BR:117:VAL:CB	2.60	0.47
47:BR:14:SER:O	47:BR:15:SER:C	2.52	0.47
47:BR:21:TYR:O	47:BR:22:ARG:C	2.50	0.47
49:BT:57:PHE:O	49:BT:58:ASN:ND2	2.47	0.47
51:BV:5:VAL:CG2	51:BV:6:LYS:N	2.78	0.47
46:BQ:55:VAL:CG2	55:BZ:178:GLU:HB3	2.45	0.47
1:CA:1181:G:O2'	1:CA:1182:G:H5'	2.15	0.47
1:CA:151:A:C2'	1:CA:152:A:H5'	2.44	0.47
1:CA:198:G:H2'	1:CA:199:G:C8	2.49	0.47
1:CA:243:A:H4'	1:CA:244:U:O5'	2.14	0.47
1:CA:502:G:O2'	1:CA:503:C:H5'	2.14	0.47
1:CA:725:G:O2'	1:CA:726:C:H5'	2.14	0.47
1:CA:1060:C:C5	3:CC:2:GLY:HA3	2.49	0.47
6:CF:100:ASN:HD21	18:CR:23:LYS:HE3	1.80	0.47
8:CH:63:LEU:HD22	8:CH:63:LEU:H	1.80	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:CR:53:ARG:HH11	18:CR:53:ARG:CB	2.28	0.47
19:CS:61:TYR:HE2	19:CS:63:THR:HB	1.80	0.47
23:CW:12:U:O2	23:CW:24:G:N2	2.48	0.47
25:D0:84:LEU:N	25:D0:84:LEU:HD12	2.29	0.47
34:DA:1011:G:OP1	50:DU:75:ASN:HB3	2.14	0.47
34:DA:135:G:O2'	34:DA:136:G:H5'	2.14	0.47
34:DA:1385:G:C4	34:DA:1386:C:C5	3.02	0.47
34:DA:1510:G:O2'	34:DA:1511:C:H5'	2.15	0.47
34:DA:1822:G:O2'	34:DA:1823:G:H5'	2.15	0.47
34:DA:528:A:H2	34:DA:2043:C:H4'	1.76	0.47
34:DA:2658:C:C2'	34:DA:2658:C:O2	2.62	0.47
37:DD:106:ILE:CD1	37:DD:106:ILE:C	2.81	0.47
37:DD:224:ALA:HB2	37:DD:233:HIS:HB3	1.96	0.47
38:DE:55:ASN:ND2	38:DE:75:VAL:HG13	2.29	0.47
38:DE:89:ASP:O	38:DE:90:THR:HB	2.14	0.47
38:DE:84:PHE:HE1	38:DE:91:VAL:HG21	1.79	0.47
39:DF:77:ASP:C	39:DF:79:GLY:H	2.18	0.47
40:DG:126:ASP:O	40:DG:128:ARG:N	2.40	0.47
43:DN:26:LEU:HG	43:DN:30:ILE:HD11	1.97	0.47
44:DO:1:MET:CB	44:DO:32:TYR:HD2	2.27	0.47
44:DO:77:ILE:HD12	49:DT:74:ARG:HG2	1.96	0.47
46:DQ:37:LEU:HB2	46:DQ:128:LYS:O	2.15	0.47
47:DR:13:HIS:HE1	47:DR:15:SER:OG	1.97	0.47
48:DS:42:ASP:O	48:DS:43:GLU:HB2	2.13	0.47
35:DB:50:G:OP1	48:DS:63:THR:HG23	2.13	0.47
48:DS:28:VAL:O	48:DS:89:ARG:HD2	2.15	0.47
49:DT:92:GLY:O	49:DT:94:ALA:N	2.37	0.47
51:DV:13:ARG:HG3	51:DV:13:ARG:NH1	2.29	0.47
53:DX:29:TRP:CE3	53:DX:76:ARG:HB3	2.49	0.47
55:DZ:99:TYR:N	55:DZ:99:TYR:CD2	2.83	0.47
1:AA:1128:C:H5'	9:AI:16:ARG:NH1	2.29	0.47
1:AA:148:G:O2'	1:AA:149:A:H5'	2.15	0.47
1:AA:300:A:H1'	1:AA:565:U:O2	2.15	0.47
1:AA:995:C:O2'	1:AA:996:A:H5'	2.14	0.47
2:AB:92:TYR:CE2	2:AB:151:GLY:CA	2.97	0.47
3:AC:71:ALA:HA	3:AC:106:VAL:HB	1.96	0.47
3:AC:174:PRO:HB3	3:AC:177:THR:OG1	2.14	0.47
5:AE:110:LEU:O	5:AE:113:ALA:HB3	2.15	0.47
5:AE:146:ALA:C	5:AE:148:VAL:N	2.68	0.47
6:AF:21:LEU:O	6:AF:24:GLU:N	2.48	0.47
7:AG:146:GLU:O	7:AG:149:ARG:HB2	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:41:ARG:O	7:AG:42:ILE:C	2.53	0.47
13:AM:34:LEU:HA	13:AM:37:THR:OG1	2.15	0.47
1:AA:564:C:C5	17:AQ:31:LEU:HD11	2.49	0.47
19:AS:41:VAL:O	19:AS:44:MET:HB2	2.15	0.47
20:AT:13:LEU:O	20:AT:16:HIS:N	2.48	0.47
26:B1:67:ILE:N	26:B1:68:PRO:CD	2.77	0.47
27:B2:33:MET:SD	27:B2:33:MET:N	2.86	0.47
28:B3:26:LEU:HD21	28:B3:46:ASN:HB2	1.96	0.47
31:B6:14:THR:HG23	31:B6:14:THR:O	2.15	0.47
31:B6:30:THR:O	31:B6:31:PRO:C	2.53	0.47
34:BA:1657:C:H2'	34:BA:1658:C:C6	2.49	0.47
34:BA:1703:G:H2'	34:BA:1704:G:H8	1.78	0.47
34:BA:1878:G:H2'	34:BA:1879:C:C6	2.49	0.47
34:BA:1982:C:H3'	34:BA:1982:C:OP1	2.15	0.47
34:BA:1652:A:C2	34:BA:2006:C:N3	2.82	0.47
34:BA:2011:U:H2'	34:BA:2012:G:H5'	1.96	0.47
34:BA:2777:G:H5''	34:BA:2778:A:H5''	1.96	0.47
34:BA:303:U:H2'	34:BA:304:G:C8	2.50	0.47
34:BA:613:G:C6	34:BA:614:U:C5	3.02	0.47
34:BA:708:C:H5'	34:BA:709:U:OP2	2.15	0.47
37:BD:255:LYS:HE3	37:BD:255:LYS:C	2.35	0.47
37:BD:25:THR:CG2	37:BD:25:THR:O	2.61	0.47
38:BE:169:ASN:HD21	38:BE:203:LYS:HB3	1.80	0.47
40:BG:99:MET:O	40:BG:100:TRP:C	2.53	0.47
40:BG:124:SER:HB2	40:BG:131:TYR:HE1	1.78	0.47
13:AM:3:ARG:HH22	40:BG:139:LEU:CD1	2.27	0.47
40:BG:56:ALA:HA	40:BG:59:GLU:HB3	1.97	0.47
41:BH:92:ILE:CD1	41:BH:92:ILE:N	2.78	0.47
42:BI:61:ARG:HD2	42:BI:61:ARG:H	1.80	0.47
44:BO:64:ARG:HD3	44:BO:101:PRO:CB	2.31	0.47
45:BP:81:GLN:HE21	45:BP:81:GLN:HA	1.78	0.47
49:BT:28:VAL:HG22	49:BT:46:GLU:HA	1.97	0.47
51:BV:73:SER:CB	51:BV:75:PHE:CE1	2.97	0.47
53:BX:53:LYS:HE3	53:BX:55:ASN:ND2	2.13	0.47
55:BZ:145:GLU:C	55:BZ:147:GLY:H	2.17	0.47
55:BZ:56:VAL:HA	55:BZ:70:LEU:CD2	2.44	0.47
2:CB:100:GLY:O	2:CB:104:ASN:HB3	2.15	0.47
2:CB:172:ILE:HD12	2:CB:172:ILE:N	2.30	0.47
4:CD:105:VAL:HG12	4:CD:105:VAL:O	2.15	0.47
7:CG:146:GLU:O	7:CG:149:ARG:HB2	2.15	0.47
8:CH:134:ILE:O	8:CH:135:CYS:HB3	2.15	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:75:HIS:CG	12:CL:76:ASN:N	2.79	0.47
13:CM:110:ARG:HH11	13:CM:110:ARG:HG2	1.80	0.47
25:D0:68:GLU:O	25:D0:80:HIS:HD2	1.97	0.47
34:DA:1131:G:N3	34:DA:1132:A:C8	2.83	0.47
34:DA:1335:U:O2'	34:DA:1336:A:H5'	2.15	0.47
34:DA:1362:C:C2'	34:DA:1363:C:H5'	2.44	0.47
34:DA:1668:A:N3	34:DA:1670:C:C4	2.83	0.47
34:DA:2033:A:H2'	34:DA:2035:G:OP2	2.15	0.47
34:DA:2176:A:H2'	34:DA:2177:C:C6	2.49	0.47
34:DA:2346:A:H5'	34:DA:2383:G:O4'	2.14	0.47
34:DA:2742:C:N3	34:DA:2763:G:N2	2.62	0.47
34:DA:2818:G:O2'	34:DA:2819:G:H5'	2.13	0.47
34:DA:2881:C:C2	34:DA:2882:A:C8	3.02	0.47
34:DA:440:G:H2'	34:DA:441:U:H6	1.78	0.47
34:DA:686:G:H21	34:DA:788:A:H61	1.63	0.47
34:DA:941:A:H2'	34:DA:942:G:C8	2.49	0.47
35:DB:4:C:H2'	35:DB:5:C:C6	2.49	0.47
37:DD:267:SER:O	37:DD:269:PHE:HD1	1.98	0.47
38:DE:97:LYS:N	38:DE:100:GLU:OE1	2.48	0.47
38:DE:17:ASP:O	38:DE:18:ASP:CG	2.53	0.47
38:DE:55:ASN:ND2	38:DE:75:VAL:CG1	2.78	0.47
39:DF:41:LEU:HD23	39:DF:44:ARG:HD3	1.96	0.47
40:DG:120:LEU:HG	40:DG:179:PRO:HG2	1.96	0.47
42:DI:94:ALA:HA	42:DI:97:ILE:HB	1.95	0.47
43:DN:42:TRP:HA	43:DN:42:TRP:HE3	1.80	0.47
43:DN:38:HIS:NE2	43:DN:50:ASP:OD2	2.48	0.47
46:DQ:42:ILE:HD11	46:DQ:127:ILE:HD11	1.97	0.47
46:DQ:78:PRO:O	46:DQ:79:LEU:CG	2.63	0.47
48:DS:69:VAL:O	48:DS:72:ALA:HB3	2.15	0.47
49:DT:115:ARG:HA	49:DT:115:ARG:HD3	1.67	0.47
49:DT:26:ASP:HB3	49:DT:89:VAL:O	2.15	0.47
50:DU:92:ARG:HB2	51:DV:11:GLN:HE21	1.72	0.47
51:DV:61:VAL:O	51:DV:99:ILE:HB	2.14	0.47
52:DW:28:SER:OG	52:DW:31:GLU:HB2	2.14	0.47
54:DY:31:LEU:HD11	54:DY:34:LYS:HD3	1.96	0.47
54:DY:75:ILE:HD11	54:DY:79:CYS:HA	1.97	0.47
55:DZ:14:LYS:C	55:DZ:16:SER:N	2.68	0.47
55:DZ:99:TYR:N	55:DZ:99:TYR:HD2	2.13	0.47
1:AA:1251:A:O2'	1:AA:1252:A:H5'	2.15	0.47
1:AA:1350:A:C6	1:AA:1351:U:C4	3.03	0.47
1:AA:679:C:O2'	1:AA:680:C:H5'	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:588:G:O6	1:AA:753:A:H2'	2.14	0.47
4:AD:92:VAL:HG12	4:AD:96:LEU:CD2	2.45	0.47
7:AG:155:ARG:O	7:AG:156:TRP:CD1	2.68	0.47
8:AH:64:LYS:HD2	8:AH:79:VAL:HG21	1.96	0.47
1:AA:878:G:C5'	8:AH:89:PRO:HG2	2.45	0.47
9:AI:114:TYR:N	9:AI:114:TYR:HD2	2.09	0.47
11:AK:95:ILE:O	11:AK:98:LEU:N	2.48	0.47
13:AM:108:ARG:HG3	13:AM:108:ARG:NH1	2.29	0.47
13:AM:112:GLY:C	13:AM:113:PRO:HG2	2.35	0.47
14:AN:48:ALA:CA	14:AN:53:LEU:HD12	2.45	0.47
20:AT:71:THR:HG22	20:AT:72:LEU:HG	1.97	0.47
21:AU:5:ASP:HB3	21:AU:8:THR:HG23	1.95	0.47
22:AV:25:C:H2'	22:AV:26:G:O4'	2.15	0.47
22:AV:49:G:H1	22:AV:65:C:H42	1.63	0.47
22:AV:53:G:C8	22:AV:54:5MU:H72	2.49	0.47
28:B3:35:ARG:NE	28:B3:37:LEU:HD21	2.29	0.47
30:B5:50:GLY:HA3	30:B5:56:LYS:CG	2.45	0.47
34:BA:1024:G:C3'	34:BA:1025:G:H5''	2.35	0.47
34:BA:1385:G:H1'	34:BA:1386:C:C6	2.49	0.47
34:BA:221:A:H4'	34:BA:222:A:O5'	2.15	0.47
34:BA:2312:U:O2'	34:BA:2313:C:H5''	2.14	0.47
34:BA:2416:C:OP1	45:BP:64:LYS:O	2.33	0.47
34:BA:2061:G:H5''	34:BA:2503:A:C2	2.50	0.47
33:B8:4:MET:HE2	34:BA:592:G:N3	2.29	0.47
36:BC:183:GLU:CB	36:BC:186:ALA:HB3	2.45	0.47
36:BC:64:LEU:HD12	36:BC:66:HIS:HB2	1.96	0.47
37:BD:84:TYR:CD2	37:BD:84:TYR:C	2.88	0.47
37:BD:77:ALA:HB2	37:BD:97:TYR:HA	1.96	0.47
40:BG:10:LYS:HD3	40:BG:14:GLU:OE1	2.15	0.47
41:BH:130:ARG:NH1	41:BH:130:ARG:HB3	2.29	0.47
42:BI:140:LEU:HD12	42:BI:141:LYS:N	2.29	0.47
42:BI:81:VAL:CG1	42:BI:88:ILE:HG23	2.44	0.47
43:BN:38:HIS:NE2	43:BN:50:ASP:OD2	2.46	0.47
43:BN:58:ASP:O	43:BN:59:LYS:HB2	2.15	0.47
43:BN:90:MET:O	43:BN:93:THR:O	2.32	0.47
44:BO:1:MET:CB	44:BO:32:TYR:HD2	2.28	0.47
44:BO:87:ILE:HD12	44:BO:91:LEU:O	2.15	0.47
45:BP:101:VAL:CG1	45:BP:102:ARG:H	2.18	0.47
47:BR:38:VAL:O	47:BR:41:ALA:N	2.48	0.47
48:BS:72:ALA:O	48:BS:76:LYS:HB2	2.15	0.47
51:BV:20:LEU:HB3	51:BV:21:ARG:HD3	1.97	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BW:28:SER:OG	52:BW:31:GLU:HB2	2.15	0.47
54:BY:7:VAL:HB	54:BY:8:LYS:NZ	2.30	0.47
1:CA:1267:C:O2	21:CU:20:LYS:HD2	2.15	0.47
1:CA:1354:C:O2'	1:CA:1355:G:H5'	2.14	0.47
1:CA:198:G:H2'	1:CA:199:G:H8	1.80	0.47
1:CA:227:G:H2'	1:CA:228:A:C8	2.50	0.47
1:CA:22:G:H2'	1:CA:23:C:H6	1.80	0.47
1:CA:735:C:H2'	1:CA:736:C:C6	2.42	0.47
1:CA:802:A:H2'	1:CA:803:G:C5'	2.44	0.47
2:CB:194:PRO:O	2:CB:197:VAL:N	2.48	0.47
2:CB:185:ILE:HG22	2:CB:199:TYR:CD1	2.50	0.47
2:CB:80:ILE:HG13	2:CB:81:VAL:N	2.30	0.47
3:CC:32:LEU:HD22	3:CC:59:ARG:HH11	1.76	0.47
3:CC:66:VAL:HG11	3:CC:91:LEU:CD1	2.45	0.47
5:CE:132:ALA:O	5:CE:134:ALA:N	2.48	0.47
1:CA:738:C:H5'	6:CF:72:VAL:HG11	1.96	0.47
7:CG:134:ALA:O	7:CG:135:VAL:C	2.52	0.47
7:CG:147:ALA:C	7:CG:148:ASN:HD22	2.18	0.47
7:CG:32:ARG:HH11	7:CG:32:ARG:HG2	1.80	0.47
13:CM:40:ASN:O	13:CM:43:THR:HG23	2.14	0.47
16:CP:43:LYS:HG3	16:CP:48:TRP:CG	2.49	0.47
17:CQ:81:ARG:CZ	17:CQ:84:LEU:HD11	2.45	0.47
18:CR:36:ASN:HD22	18:CR:39:VAL:CG2	2.24	0.47
19:CS:52:TYR:HB2	19:CS:57:HIS:CE1	2.49	0.47
23:CW:17:C:O2	23:CW:17:C:O2'	2.30	0.47
27:D2:44:LEU:O	27:D2:46:GLN:N	2.47	0.47
33:D8:13:ARG:NE	45:DP:61:ARG:NH1	2.63	0.47
34:DA:1036:G:O2'	34:DA:1037:G:H5'	2.15	0.47
34:DA:1763:G:OP1	34:DA:1763:G:H4'	2.15	0.47
34:DA:1860:G:H2'	34:DA:1861:G:H8	1.80	0.47
34:DA:201:C:H2'	34:DA:202:U:H5'	1.95	0.47
34:DA:2066:C:O2'	34:DA:2067:G:H5'	2.14	0.47
34:DA:2199:A:H5'	34:DA:2200:C:OP2	2.15	0.47
34:DA:2360:A:O2'	34:DA:2361:A:O5'	2.32	0.47
34:DA:2464:C:O2'	34:DA:2465:C:P	2.73	0.47
34:DA:2545:G:H2'	34:DA:2546:U:O4'	2.15	0.47
34:DA:2552:U:H3'	34:DA:2554:U:OP2	2.15	0.47
34:DA:2639:A:H3'	34:DA:2640:G:H5'	1.96	0.47
34:DA:583:G:H5''	50:DU:10:ARG:HH12	1.79	0.47
34:DA:848:G:H2'	34:DA:849:A:C8	2.50	0.47
34:DA:912:C:O2'	34:DA:913:U:H5'	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:979:G:H3'	34:DA:980:A:C5'	2.45	0.47
36:DC:77:ILE:HG21	36:DC:122:ALA:CA	2.45	0.47
36:DC:64:LEU:HD12	36:DC:66:HIS:HB2	1.95	0.47
38:DE:68:ALA:O	38:DE:70:ALA:N	2.48	0.47
39:DF:108:LYS:O	39:DF:111:ALA:HB3	2.15	0.47
39:DF:4:VAL:HA	39:DF:18:ARG:O	2.14	0.47
39:DF:20:LEU:HD12	39:DF:199:TRP:CH2	2.50	0.47
39:DF:89:VAL:HG12	39:DF:90:PHE:N	2.29	0.47
41:DH:37:VAL:HG11	41:DH:68:THR:HG21	1.96	0.47
42:DI:47:LEU:HD12	42:DI:50:ARG:HH21	1.80	0.47
43:DN:120:LEU:HD13	43:DN:121:LYS:N	2.29	0.47
43:DN:27:ALA:HA	43:DN:30:ILE:HD12	1.96	0.47
44:DO:103:ALA:HB1	44:DO:105:GLU:OE1	2.14	0.47
34:DA:1952:A:C5	44:DO:22:ILE:HD12	2.49	0.47
44:DO:31:LYS:C	44:DO:32:TYR:HD1	2.18	0.47
46:DQ:51:ARG:O	46:DQ:54:MET:CB	2.62	0.47
49:DT:27:THR:HG23	49:DT:28:VAL:N	2.30	0.47
49:DT:62:THR:HG22	49:DT:75:ILE:HG12	1.97	0.47
50:DU:55:ARG:HA	50:DU:58:ARG:CD	2.45	0.47
51:DV:32:THR:O	51:DV:63:GLY:HA2	2.15	0.47
52:DW:27:LYS:H	52:DW:71:VAL:HB	1.79	0.47
53:DX:14:SER:H	53:DX:17:ALA:CB	2.26	0.47
54:DY:71:LYS:CB	54:DY:71:LYS:NZ	2.77	0.47
54:DY:76:CYS:CB	54:DY:77:PRO:CD	2.93	0.47
55:DZ:30:ASN:HA	55:DZ:89:PHE:HE2	1.80	0.47
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.80	0.47
1:AA:59:A:H3'	1:AA:331:G:H22	1.80	0.47
2:AB:238:LEU:HD23	2:AB:238:LEU:N	2.29	0.47
3:AC:137:ALA:O	3:AC:141:VAL:HG23	2.15	0.47
4:AD:106:TYR:CE1	4:AD:113:SER:HA	2.50	0.47
4:AD:61:LYS:HE3	4:AD:207:TYR:OH	2.15	0.47
5:AE:142:LEU:O	5:AE:143:ARG:NE	2.48	0.47
8:AH:30:ARG:CB	8:AH:30:ARG:HH11	2.26	0.47
8:AH:60:ARG:NH1	8:AH:60:ARG:HG3	2.29	0.47
14:AN:43:CYS:O	14:AN:46:GLU:HB2	2.14	0.47
27:B2:39:ALA:O	27:B2:40:SER:C	2.53	0.47
32:B7:34:ARG:O	32:B7:35:ARG:C	2.52	0.47
34:BA:1019:U:N3	34:BA:1142(A):A:N6	2.57	0.47
34:BA:1215:G:C2'	34:BA:1216:G:H5'	2.45	0.47
34:BA:142:A:N6	34:BA:1596:A:H5'	2.29	0.47
34:BA:1562:A:O2'	34:BA:1563:G:H5'	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1948:G:O2'	34:BA:1949:G:H5'	2.14	0.47
34:BA:1951:U:H2'	34:BA:1953:A:OP2	2.15	0.47
34:BA:271(A):A:N1	34:BA:272(D):G:O2'	2.43	0.47
34:BA:272:G:H1'	34:BA:272(B):G:O5'	2.14	0.47
34:BA:2859:G:O2'	34:BA:2860:A:C5'	2.63	0.47
34:BA:442:G:O4'	39:BF:46:ARG:HD3	2.15	0.47
34:BA:848:G:H2'	34:BA:849:A:C8	2.49	0.47
34:BA:979:G:H3'	34:BA:980:A:C5'	2.44	0.47
35:BB:48:A:H2'	35:BB:49:C:C6	2.49	0.47
38:BE:8:LYS:HA	38:BE:26:ILE:HD13	1.96	0.47
39:BF:11:VAL:HG12	39:BF:12:LEU:HG	1.97	0.47
39:BF:77:ASP:C	39:BF:79:GLY:H	2.18	0.47
41:BH:30:LYS:HZ3	41:BH:81:GLU:HG2	1.78	0.47
42:BI:120:ILE:HD13	42:BI:126:TYR:CE1	2.49	0.47
42:BI:72:LEU:HD12	42:BI:138:ILE:HG23	1.95	0.47
42:BI:60:GLU:C	42:BI:62:LYS:N	2.68	0.47
43:BN:97:ARG:O	43:BN:100:GLU:N	2.47	0.47
46:BQ:118:LEU:O	46:BQ:119:ARG:C	2.53	0.47
49:BT:62:THR:HG22	49:BT:75:ILE:HG12	1.97	0.47
50:BU:61:TRP:O	50:BU:62:ILE:C	2.52	0.47
1:CA:1052:U:H2'	1:CA:1055:A:OP1	2.15	0.47
1:CA:601:C:H2'	1:CA:602:A:H8	1.80	0.47
1:CA:630:G:C3'	1:CA:631:G:H5''	2.45	0.47
1:CA:796:C:O2'	1:CA:797:C:H5'	2.15	0.47
4:CD:110:PHE:CD2	4:CD:148:VAL:HG23	2.49	0.47
4:CD:65:ARG:NH1	4:CD:70:ILE:O	2.47	0.47
8:CH:137:VAL:HG12	8:CH:138:TRP:H	1.80	0.47
8:CH:35:ILE:HG23	8:CH:111:ILE:CD1	2.44	0.47
11:CK:61:ALA:O	11:CK:65:ALA:HB2	2.15	0.47
12:CL:22:SER:C	12:CL:24:VAL:H	2.17	0.47
1:CA:522:C:H41	12:CL:53:ARG:NH2	2.12	0.47
13:CM:112:GLY:C	13:CM:113:PRO:HG2	2.36	0.47
15:CO:33:THR:O	15:CO:34:LEU:C	2.52	0.47
16:CP:80:PHE:O	16:CP:82:GLN:NE2	2.48	0.47
19:CS:10:PHE:HZ	19:CS:70:LYS:CE	2.26	0.47
20:CT:8:ARG:HG3	20:CT:8:ARG:NH1	2.29	0.47
28:D3:32:GLN:HB2	34:DA:1158:C:H4'	1.97	0.47
34:DA:1140:C:C1'	34:DA:1143:A:C2	2.96	0.47
34:DA:1215:G:C2'	34:DA:1216:G:H5'	2.44	0.47
34:DA:2511:U:H5''	38:DE:123:ALA:CB	2.44	0.47
34:DA:2638:G:P	38:DE:82:ARG:HH21	2.38	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2642:G:O2'	34:DA:2643:G:H5'	2.15	0.47
34:DA:49:A:C4'	34:DA:50:U:H5'	2.25	0.47
28:D3:46:ASN:ND2	34:DA:851:U:C4'	2.78	0.47
35:DB:11:C:OP2	35:DB:12:C:H5	1.98	0.47
38:DE:173:VAL:HG12	38:DE:174:ASP:H	1.78	0.47
38:DE:49:LEU:N	38:DE:49:LEU:HD22	2.29	0.47
38:DE:3:GLY:C	38:DE:4:ILE:HG22	2.35	0.47
34:DA:2632:A:O2'	38:DE:61:ARG:CZ	2.62	0.47
39:DF:107:LYS:O	39:DF:110:LEU:N	2.48	0.47
39:DF:57:VAL:HG11	39:DF:59:TYR:CD1	2.50	0.47
29:D4:1:MET:H1	40:DG:67:LYS:HZ1	1.60	0.47
42:DI:121:LYS:O	42:DI:122:GLU:HB2	2.15	0.47
44:DO:16:ALA:HB1	44:DO:43:VAL:HG13	1.97	0.47
34:DA:2683:C:P	49:DT:53:ARG:HH22	2.38	0.47
50:DU:92:ARG:HB2	51:DV:11:GLN:CD	2.35	0.47
1:AA:1030(D):A:H2'	1:AA:1031:G:H5'	1.97	0.47
1:AA:1088:G:N1	1:AA:1089:G:C5	2.83	0.47
1:AA:1271:G:H2'	1:AA:1272:G:C8	2.50	0.47
1:AA:1287:A:N6	1:AA:1288:A:N6	2.62	0.47
1:AA:192:U:C1'	20:AT:103:GLY:HA2	2.45	0.47
1:AA:37:U:O2'	1:AA:38:G:H5'	2.14	0.47
1:AA:397:A:H5'	1:AA:398:C:OP1	2.14	0.47
1:AA:796:C:O2'	1:AA:797:C:H5'	2.15	0.47
1:AA:959:A:C2	1:AA:1222:G:C4'	2.98	0.47
2:AB:100:GLY:O	2:AB:104:ASN:HB3	2.15	0.47
2:AB:149:LEU:O	2:AB:153:ARG:HG3	2.14	0.47
2:AB:178:ARG:HH11	2:AB:178:ARG:CB	2.24	0.47
3:AC:22:TRP:CZ2	14:AN:54:PRO:HG2	2.50	0.47
6:AF:69:GLU:O	6:AF:72:VAL:HG12	2.14	0.47
6:AF:82:ARG:HH11	6:AF:82:ARG:CB	2.27	0.47
11:AK:44:SER:N	11:AK:47:VAL:HG21	2.29	0.47
12:AL:7:ILE:O	12:AL:10:LEU:N	2.48	0.47
13:AM:118:ALA:O	13:AM:119:GLY:N	2.48	0.47
13:AM:70:LEU:CD2	13:AM:70:LEU:C	2.83	0.47
13:AM:7:VAL:HG12	13:AM:7:VAL:O	2.14	0.47
15:AO:3:ILE:H	15:AO:3:ILE:HD13	1.80	0.47
18:AR:68:LYS:O	18:AR:69:THR:C	2.53	0.47
28:B3:32:GLN:HB2	34:BA:1158:C:H4'	1.96	0.47
34:BA:1361:G:O2'	34:BA:1362:C:H5'	2.15	0.47
34:BA:1653:G:O2'	34:BA:1654:A:OP2	2.28	0.47
34:BA:224:G:N2	34:BA:225:A:H1'	2.30	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2312:U:H2'	34:BA:2313:C:H5'	1.97	0.47
34:BA:270:A:C2'	34:BA:271:A:H5'	2.45	0.47
34:BA:27:G:O2'	34:BA:28:A:P	2.72	0.47
34:BA:737:C:O2'	34:BA:738:G:H5'	2.15	0.47
34:BA:7:G:H4'	43:BN:13:TRP:CH2	2.49	0.47
36:BC:191:ALA:C	36:BC:193:ILE:N	2.68	0.47
37:BD:117:VAL:HG22	37:BD:118:VAL:N	2.29	0.47
37:BD:142:VAL:HG23	37:BD:192:THR:O	2.15	0.47
37:BD:271:ILE:N	37:BD:271:ILE:HD12	2.30	0.47
38:BE:17:ASP:O	38:BE:18:ASP:CG	2.53	0.47
38:BE:4:ILE:HD11	38:BE:28:ALA:HB1	1.96	0.47
38:BE:55:ASN:ND2	38:BE:75:VAL:HG13	2.30	0.47
38:BE:36:ARG:NH2	38:BE:88:GLY:N	2.63	0.47
38:BE:89:ASP:O	38:BE:90:THR:HB	2.15	0.47
41:BH:54:ARG:HB3	41:BH:65:HIS:HD2	1.80	0.47
42:BI:128:LEU:HB3	42:BI:129:THR:H	1.50	0.47
43:BN:9:VAL:CG1	43:BN:39:ARG:HH22	2.28	0.47
45:BP:136:GLU:O	45:BP:139:LYS:HB3	2.14	0.47
48:BS:39:ILE:O	48:BS:47:THR:HG23	2.15	0.47
48:BS:67:ARG:C	48:BS:69:VAL:N	2.69	0.47
34:BA:996:A:C4'	50:BU:92:ARG:HH21	2.28	0.47
53:BX:31:HIS:O	53:BX:32:PRO:C	2.50	0.47
55:BZ:29:TYR:HA	55:BZ:33:LEU:O	2.15	0.47
1:CA:949:A:C2	1:CA:1233:G:N3	2.83	0.47
1:CA:1338:G:O2'	1:CA:1339:A:H5'	2.15	0.47
1:CA:227:G:H2'	1:CA:228:A:H8	1.79	0.47
1:CA:588:G:H2'	1:CA:589:C:H6	1.80	0.47
2:CB:221:LEU:O	2:CB:221:LEU:HD13	2.15	0.47
2:CB:78:GLN:HB3	2:CB:94:ASN:HD21	1.80	0.47
3:CC:71:ALA:HA	3:CC:106:VAL:HB	1.97	0.47
3:CC:77:ILE:C	3:CC:83:ARG:HB3	2.35	0.47
4:CD:60:GLU:OE2	4:CD:198:VAL:HA	2.15	0.47
6:CF:42:GLU:C	6:CF:44:GLY:H	2.18	0.47
8:CH:109:ILE:CG1	8:CH:110:ALA:N	2.77	0.47
1:CA:1349:A:P	9:CI:118:LYS:HZ3	2.38	0.47
12:CL:60:LEU:HD22	12:CL:60:LEU:H	1.78	0.47
12:CL:88:GLY:O	12:CL:99:HIS:ND1	2.46	0.47
13:CM:108:ARG:HG3	13:CM:108:ARG:NH1	2.30	0.47
13:CM:91:ARG:CB	13:CM:98:VAL:HG11	2.45	0.47
16:CP:49:LEU:HD12	16:CP:50:LYS:H	1.79	0.47
26:D1:87:PRO:O	26:D1:90:ILE:HB	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1572:A:O2'	34:DA:1573:G:H5'	2.15	0.47
34:DA:1718:G:H5'	34:DA:1718:G:C8	2.50	0.47
34:DA:1808:U:C5	34:DA:1809:A:N7	2.82	0.47
34:DA:1827:C:O2'	34:DA:1828:G:H5'	2.15	0.47
34:DA:2291:U:H2'	34:DA:2292:C:H6	1.80	0.47
34:DA:2306:C:OP2	34:DA:2307:G:C8	2.67	0.47
34:DA:2617:C:H2'	34:DA:2618:G:H5'	1.97	0.47
34:DA:2653:U:C3'	34:DA:2654:A:H5''	2.44	0.47
34:DA:2678:C:C2	34:DA:2679:A:C8	3.02	0.47
34:DA:2736:G:O2'	34:DA:2737:G:H5'	2.15	0.47
34:DA:2748:A:H2'	34:DA:2749:A:O4'	2.14	0.47
34:DA:752:A:HO2'	34:DA:753:C:P	2.37	0.47
34:DA:910:A:C8	46:DQ:13:GLN:HB2	2.50	0.47
35:DB:20:C:O2'	35:DB:21:G:H5''	2.15	0.47
37:DD:142:VAL:HG23	37:DD:193:VAL:CA	2.44	0.47
37:DD:53:PHE:CE1	37:DD:220:HIS:HA	2.50	0.47
38:DE:169:ASN:OD1	38:DE:201:THR:HG23	2.14	0.47
38:DE:87:GLU:HG3	38:DE:87:GLU:O	2.15	0.47
39:DF:118:ALA:HA	39:DF:123:LEU:HB3	1.96	0.47
39:DF:67:GLN:O	39:DF:67:GLN:HG3	2.14	0.47
40:DG:107:LEU:HD22	40:DG:178:PHE:HA	1.96	0.47
40:DG:19:LEU:C	40:DG:21:ARG:N	2.68	0.47
43:DN:70:LYS:HG3	43:DN:72:TYR:CE1	2.45	0.47
44:DO:87:ILE:HD12	44:DO:91:LEU:O	2.15	0.47
34:DA:811:U:C3'	45:DP:25:SER:O	2.61	0.47
45:DP:81:GLN:HE21	45:DP:81:GLN:HA	1.79	0.47
48:DS:58:LEU:HD22	48:DS:68:GLN:HB2	1.97	0.47
50:DU:101:ARG:HB3	50:DU:102:GLU:OE2	2.15	0.47
52:DW:21:VAL:HG23	52:DW:47:VAL:HG21	1.97	0.47
53:DX:70:LEU:O	53:DX:71:GLY:C	2.53	0.47
53:DX:89:ILE:CD1	53:DX:89:ILE:N	2.78	0.47
35:DB:103:G:H1'	55:DZ:73:GLN:NE2	2.29	0.47
1:AA:1155:G:O2'	1:AA:1156:G:H5'	2.15	0.47
1:AA:1327:C:P	21:AU:12:LYS:HZ1	2.38	0.47
1:AA:1501:C:H5''	1:AA:1502:A:OP2	2.14	0.47
1:AA:189(J):G:O2'	1:AA:189(K):U:H5'	2.15	0.47
1:AA:360:A:O2'	1:AA:361:G:H5'	2.15	0.47
1:AA:992:U:H4'	1:AA:993:G:O5'	2.15	0.47
2:AB:178:ARG:HD2	8:AH:71:GLY:HA2	1.97	0.47
2:AB:78:GLN:HB3	2:AB:94:ASN:HD21	1.80	0.47
3:AC:33:LEU:HD21	14:AN:39:LEU:HD11	1.95	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:31:LEU:CD2	5:AE:43:LEU:HD11	2.45	0.47
8:AH:63:LEU:HB2	8:AH:65:TYR:CE1	2.50	0.47
10:AJ:23:ILE:HG22	10:AJ:23:ILE:O	2.14	0.47
10:AJ:79:ARG:HH11	10:AJ:79:ARG:HG2	1.80	0.47
12:AL:70:ILE:HA	12:AL:71:PRO:HD3	1.75	0.47
13:AM:91:ARG:CB	13:AM:98:VAL:HG11	2.45	0.47
17:AQ:67:LYS:CA	17:AQ:70:ARG:NH1	2.76	0.47
19:AS:61:TYR:HE2	19:AS:63:THR:HB	1.80	0.47
22:AV:4:G:O2'	22:AV:5:G:OP2	2.32	0.47
25:B0:27:GLU:HG3	25:B0:67:VAL:O	2.14	0.47
27:B2:30:ARG:CG	27:B2:30:ARG:NH1	2.74	0.47
33:B8:53:PRO:HA	33:B8:56:GLU:HB2	1.96	0.47
34:BA:149:A:H2'	34:BA:150:C:O4'	2.15	0.47
34:BA:1675:C:C2	38:BE:129:HIS:CD2	3.03	0.47
34:BA:1854:A:H3'	34:BA:1855:G:H8	1.80	0.47
34:BA:2298:A:N6	34:BA:2318:G:H8	2.12	0.47
34:BA:2306:C:H5	34:BA:2307:G:H1'	1.80	0.47
34:BA:2712:U:O2'	34:BA:2713:A:H5'	2.15	0.47
34:BA:361:G:C2'	34:BA:362:U:H5''	2.39	0.47
34:BA:723:G:H2'	34:BA:724:U:O4'	2.14	0.47
34:BA:974:G:C5	34:BA:989:G:C2	3.03	0.47
37:BD:267:SER:O	37:BD:269:PHE:HD1	1.97	0.47
37:BD:35:LYS:HE3	37:BD:65:ILE:N	2.29	0.47
42:BI:127:VAL:HA	42:BI:139:GLN:HA	1.96	0.47
42:BI:94:ALA:CB	42:BI:114:LEU:HD12	2.45	0.47
45:BP:149:GLU:HG3	45:BP:149:GLU:O	2.15	0.47
46:BQ:42:ILE:HG23	46:BQ:46:GLN:OE1	2.15	0.47
46:BQ:47:ILE:HG13	46:BQ:68:ILE:HD11	1.95	0.47
46:BQ:81:VAL:HG12	46:BQ:82:ARG:HG2	1.96	0.47
34:BA:1287:A:N7	47:BR:106:GLY:O	2.48	0.47
49:BT:26:ASP:HB3	49:BT:89:VAL:O	2.15	0.47
49:BT:55:ASN:H	49:BT:59:THR:HB	1.80	0.47
49:BT:50:ILE:HA	49:BT:99:LEU:HD11	1.97	0.47
34:BA:1225:G:OP1	51:BV:88:ARG:HD2	2.15	0.47
54:BY:87:LYS:HG3	54:BY:88:LYS:N	2.30	0.47
54:BY:81:LYS:CE	54:BY:97:ARG:HG3	2.45	0.47
55:BZ:30:ASN:HD21	55:BZ:32:HIS:HB2	1.80	0.47
1:CA:1073:U:O2'	1:CA:1074:G:H5'	2.16	0.47
1:CA:243:A:O2'	1:CA:244:U:OP2	2.29	0.47
1:CA:59:A:H3'	1:CA:331:G:H22	1.80	0.47
1:CA:918:A:H2'	1:CA:919:A:O4'	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:19:HIS:CD2	2:CB:205:ASP:OD1	2.68	0.47
2:CB:84:GLU:OE1	2:CB:216:SER:HA	2.14	0.47
4:CD:10:ARG:C	4:CD:11:LEU:HD23	2.35	0.47
5:CE:139:LEU:HA	5:CE:142:LEU:HD12	1.97	0.47
7:CG:25:ALA:O	7:CG:28:ASN:HB2	2.14	0.47
7:CG:36:LYS:HA	7:CG:39:ALA:HB3	1.95	0.47
8:CH:97:VAL:HB	8:CH:129:VAL:O	2.15	0.47
10:CJ:33:GLN:N	10:CJ:75:ILE:HD11	2.23	0.47
11:CK:114:VAL:O	11:CK:114:VAL:HG13	2.15	0.47
13:CM:97:PRO:HA	13:CM:110:ARG:HD3	1.97	0.47
23:CW:25:C:H2'	23:CW:26:A:H8	1.78	0.47
23:CW:2:C:N4	23:CW:71:G:H1	2.13	0.47
34:DA:1260:G:C6	34:DA:1261:C:C4	3.03	0.47
34:DA:1484:G:H8	34:DA:1484:G:O5'	1.98	0.47
34:DA:1748:G:H2'	34:DA:1749:A:O4'	2.16	0.47
34:DA:1803:A:H4'	37:DD:259:THR:HG21	1.97	0.47
34:DA:2170:A:HO2'	34:DA:2171:A:H8	1.56	0.47
34:DA:2201:C:H2'	34:DA:2202:C:H6	1.79	0.47
34:DA:2481:G:HO2'	34:DA:2482:G:P	2.38	0.47
34:DA:500:G:H22	34:DA:502:A:H3'	1.79	0.47
34:DA:521:G:H2'	34:DA:522:G:H8	1.80	0.47
34:DA:900:A:H3'	34:DA:901:A:H8	1.78	0.47
37:DD:69:ARG:NH2	37:DD:105:ILE:CD1	2.78	0.47
37:DD:85:ASP:OD2	37:DD:88:ARG:NH1	2.42	0.47
34:DA:323:G:H2'	39:DF:169:ASN:OD1	2.15	0.47
45:DP:96:THR:HG22	45:DP:126:VAL:HG23	1.97	0.47
46:DQ:121:ALA:O	46:DQ:124:LYS:N	2.42	0.47
48:DS:52:SER:CB	48:DS:55:ALA:HB3	2.45	0.47
49:DT:106:SER:O	49:DT:107:ASP:HB3	2.15	0.47
49:DT:31:SER:CA	49:DT:32:TYR:HD2	2.28	0.47
50:DU:8:VAL:O	50:DU:9:VAL:C	2.53	0.47
51:DV:25:LEU:H	51:DV:94:LEU:CD1	2.25	0.47
50:DU:40:PHE:CD1	51:DV:78:LYS:NZ	2.83	0.47
53:DX:92:LEU:O	53:DX:93:GLU:CB	2.63	0.47
1:AA:1030(A):G:H1'	1:AA:1031:G:H22	1.81	0.46
1:AA:1411:C:O2'	1:AA:1412:C:H5'	2.14	0.46
1:AA:1507:A:C2	1:AA:1508:G:C4	3.03	0.46
1:AA:627:G:O2'	1:AA:628:G:H5'	2.15	0.46
1:AA:973:G:OP1	10:AJ:57:LYS:NZ	2.48	0.46
2:AB:204:ASN:C	2:AB:204:ASN:HD22	2.19	0.46
3:AC:70:VAL:C	3:AC:106:VAL:HG23	2.34	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:86:VAL:O	3:AC:89:GLU:HB3	2.15	0.46
4:AD:92:VAL:O	4:AD:93:PHE:C	2.54	0.46
9:AI:47:LEU:N	9:AI:47:LEU:HD12	2.30	0.46
26:B1:26:ARG:NE	26:B1:34:THR:OG1	2.48	0.46
26:B1:33:LYS:C	26:B1:34:THR:HG22	2.34	0.46
33:B8:40:GLU:OE1	33:B8:44:LYS:HE3	2.15	0.46
34:BA:1231:G:O2'	34:BA:1232:G:H5'	2.15	0.46
34:BA:1748:G:H2'	34:BA:1749:A:O4'	2.15	0.46
34:BA:1811:G:H2'	34:BA:1812:A:H8	1.79	0.46
34:BA:2201:C:H2'	34:BA:2202:C:H6	1.80	0.46
34:BA:2370:G:H2'	34:BA:2371:G:C8	2.50	0.46
34:BA:2516:G:H2'	34:BA:2517:C:C6	2.50	0.46
34:BA:1783:A:C2	34:BA:2587:A:C4	3.03	0.46
34:BA:2705:A:H2'	34:BA:2706:G:C8	2.50	0.46
34:BA:709:U:H2'	34:BA:710:G:C8	2.51	0.46
34:BA:810:U:O2'	45:BP:33:ARG:CZ	2.63	0.46
34:BA:827:U:H5'	34:BA:828:U:O5'	2.15	0.46
35:BB:21:G:O6	35:BB:62:C:N3	2.48	0.46
35:BB:97:G:C2	35:BB:98:G:C8	3.02	0.46
36:BC:40:THR:O	36:BC:40:THR:HG23	2.15	0.46
36:BC:68:LEU:CD2	36:BC:179:SER:HA	2.45	0.46
34:BA:1799:G:H2'	37:BD:181:GLU:OE2	2.15	0.46
37:BD:35:LYS:HD3	37:BD:63:ARG:CA	2.45	0.46
43:BN:43:THR:HG21	43:BN:46:VAL:HB	1.97	0.46
45:BP:131:SER:C	45:BP:133:SER:H	2.18	0.46
45:BP:16:ARG:HG2	45:BP:18:ARG:N	2.14	0.46
47:BR:2:ARG:HG2	47:BR:5:LYS:HZ1	1.80	0.46
48:BS:90:GLY:C	48:BS:92:TYR:N	2.65	0.46
49:BT:29:ARG:CG	49:BT:30:VAL:H	2.27	0.46
53:BX:14:SER:O	53:BX:17:ALA:N	2.48	0.46
53:BX:37:THR:C	53:BX:39:ILE:H	2.18	0.46
34:BA:482:A:C4'	54:BY:47:LYS:HZ2	2.25	0.46
55:BZ:178:GLU:OE2	55:BZ:178:GLU:HA	2.15	0.46
1:CA:114:U:H2'	1:CA:115:G:H8	1.77	0.46
1:CA:1065:U:H5''	1:CA:1190:G:N2	2.30	0.46
1:CA:1068:G:N3	1:CA:1191:A:C2	2.83	0.46
1:CA:1226:C:H2'	13:CM:103:THR:OG1	2.14	0.46
1:CA:1296:C:H5'	1:CA:1297:C:OP2	2.15	0.46
1:CA:424:G:H2'	1:CA:425:G:H8	1.80	0.46
1:CA:597:G:H2'	1:CA:598:U:H5'	1.97	0.46
2:CB:164:VAL:CG1	2:CB:165:VAL:N	2.78	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:178:ARG:HH11	2:CB:178:ARG:CB	2.23	0.46
2:CB:239:VAL:O	2:CB:241:GLU:N	2.48	0.46
8:CH:36:LEU:O	8:CH:37:ARG:C	2.51	0.46
9:CI:20:ARG:O	9:CI:60:ASP:N	2.42	0.46
10:CJ:38:ILE:HG13	10:CJ:38:ILE:O	2.15	0.46
13:CM:34:LEU:HA	13:CM:37:THR:OG1	2.15	0.46
15:CO:65:ARG:O	15:CO:68:ARG:HB3	2.15	0.46
16:CP:28:ARG:HG2	16:CP:29:ASP:OD2	2.15	0.46
20:CT:26:ASN:N	20:CT:26:ASN:ND2	2.61	0.46
22:CV:72:A:C2'	22:CV:73:A:H5'	2.44	0.46
23:CW:16:U:H6	23:CW:17:C:H5'	1.80	0.46
27:D2:49:LYS:O	27:D2:51:ARG:C	2.54	0.46
34:DA:1162:G:N3	51:DV:91:TYR:CE1	2.81	0.46
34:DA:2308:G:C8	34:DA:2309:A:H3'	2.50	0.46
34:DA:235:U:O2'	34:DA:236:C:H5'	2.15	0.46
34:DA:2651:C:O2'	34:DA:2652:C:H5'	2.15	0.46
34:DA:266:G:H2'	34:DA:267:C:C5'	2.45	0.46
34:DA:2713:A:C3'	34:DA:2714:G:C5'	2.93	0.46
34:DA:860:U:O2	34:DA:860:U:O4'	2.32	0.46
34:DA:941:A:H4'	45:DP:35:HIS:HE1	1.78	0.46
35:DB:38:C:O2	35:DB:48:A:H1'	2.15	0.46
35:DB:75:G:H2'	35:DB:76:G:H5'	1.97	0.46
38:DE:142:GLY:C	38:DE:143:ASN:HD22	2.18	0.46
38:DE:36:ARG:NH2	38:DE:88:GLY:H	2.14	0.46
40:DG:91:ARG:HH11	40:DG:91:ARG:HG3	1.80	0.46
41:DH:137:ASP:HB3	41:DH:140:LYS:HB2	1.97	0.46
41:DH:57:ASP:O	41:DH:62:LYS:HE3	2.15	0.46
42:DI:79:ILE:HG22	42:DI:81:VAL:HG23	1.97	0.46
43:DN:47:ALA:HB2	43:DN:112:LEU:HD11	1.97	0.46
43:DN:9:VAL:CG1	43:DN:39:ARG:HH22	2.28	0.46
34:DA:389:G:H1	45:DP:71:VAL:HG12	1.79	0.46
46:DQ:141:GLN:N	55:DZ:53:ILE:O	2.49	0.46
50:DU:102:GLU:HB2	50:DU:105:VAL:CG2	2.42	0.46
50:DU:64:ARG:O	50:DU:68:ALA:CB	2.63	0.46
53:DX:27:THR:CB	53:DX:77:LYS:HA	2.45	0.46
53:DX:70:LEU:CG	53:DX:71:GLY:N	2.78	0.46
54:DY:65:ALA:O	54:DY:67:LEU:N	2.48	0.46
55:DZ:24:LEU:HD23	55:DZ:25:PRO:O	2.16	0.46
1:AA:1484:C:H2'	1:AA:1485:U:C6	2.47	0.46
1:AA:617:G:H1	1:AA:623:C:H42	1.63	0.46
2:AB:10:LEU:CD2	2:AB:10:LEU:H	2.21	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:162:ILE:O	2:AB:162:ILE:HG13	2.14	0.46
2:AB:211:ILE:O	2:AB:215:LEU:HB2	2.15	0.46
3:AC:111:LEU:HD21	3:AC:145:GLY:O	2.14	0.46
4:AD:105:VAL:O	4:AD:105:VAL:HG12	2.15	0.46
4:AD:127:THR:OG1	4:AD:128:VAL:N	2.48	0.46
4:AD:92:VAL:O	4:AD:95:GLY:N	2.48	0.46
9:AI:118:LYS:NZ	9:AI:118:LYS:HB3	2.30	0.46
11:AK:34:ASP:HB3	11:AK:40:ILE:HD11	1.96	0.46
16:AP:19:ILE:HG22	16:AP:36:ILE:CG1	2.45	0.46
17:AQ:79:SER:O	17:AQ:81:ARG:HG3	2.16	0.46
18:AR:56:THR:O	18:AR:58:LEU:HD12	2.15	0.46
26:B1:87:PRO:HG2	26:B1:88:LYS:N	2.31	0.46
26:B1:88:LYS:O	26:B1:92:LYS:CB	2.63	0.46
26:B1:73:LEU:HG	26:B1:94:LEU:HG	1.95	0.46
27:B2:52:ASP:C	27:B2:56:GLN:HE22	2.18	0.46
34:BA:1339:G:H21	34:BA:1603:A:H1'	1.79	0.46
34:BA:1596:A:O2'	34:BA:1597:A:H5'	2.15	0.46
34:BA:1767:C:H2'	34:BA:1768:U:O4'	2.15	0.46
34:BA:1848:A:C5	34:BA:1849:G:C8	3.03	0.46
34:BA:184:C:H2'	34:BA:185:U:C6	2.50	0.46
34:BA:2004:G:H2'	34:BA:2005:A:O4'	2.15	0.46
34:BA:945:A:C4	34:BA:2448:A:C2	3.03	0.46
34:BA:2653:U:C3'	34:BA:2654:A:H5''	2.45	0.46
34:BA:2883:A:C5'	34:BA:2884:U:H5'	2.45	0.46
34:BA:292:C:C2	34:BA:349:G:C2	3.03	0.46
34:BA:922:U:H2'	34:BA:923:C:C6	2.50	0.46
37:BD:30:GLU:CD	37:BD:63:ARG:NE	2.68	0.46
38:BE:134:ILE:H	38:BE:134:ILE:CD1	2.26	0.46
39:BF:165:ARG:HG2	39:BF:165:ARG:H	1.59	0.46
39:BF:83:PHE:O	39:BF:84:VAL:C	2.52	0.46
40:BG:121:ASN:OD1	40:BG:123:ASN:N	2.39	0.46
40:BG:173:LEU:HB3	40:BG:178:PHE:CD1	2.49	0.46
40:BG:58:GLN:O	40:BG:62:LEU:HD12	2.15	0.46
42:BI:29:TYR:HE1	42:BI:33:ARG:HE	1.55	0.46
48:BS:33:LYS:HA	48:BS:62:LYS:NZ	2.30	0.46
54:BY:11:ASP:N	54:BY:27:VAL:HG22	2.29	0.46
1:CA:1522:U:H2'	1:CA:1523:G:H8	1.79	0.46
1:CA:951:G:OP2	13:CM:102:ARG:NH1	2.48	0.46
2:CB:124:SER:O	2:CB:127:ILE:HG12	2.15	0.46
2:CB:59:GLU:C	2:CB:61:LEU:H	2.18	0.46
3:CC:120:VAL:HG13	3:CC:124:ILE:HD11	1.96	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:150:GLU:HG2	4:CD:151:LYS:H	1.80	0.46
4:CD:173:TRP:CE3	4:CD:189:PRO:HB3	2.50	0.46
4:CD:68:TYR:CD2	4:CD:97:LEU:HD22	2.50	0.46
8:CH:29:SER:O	8:CH:32:LYS:N	2.49	0.46
10:CJ:15:THR:OG1	10:CJ:16:LEU:N	2.48	0.46
12:CL:53:ARG:HG2	12:CL:53:ARG:NH1	2.30	0.46
12:CL:60:LEU:HD23	12:CL:64:TYR:HB3	1.97	0.46
12:CL:5:PRO:HA	12:CL:9:GLN:NE2	2.31	0.46
18:CR:55:ARG:HH11	18:CR:55:ARG:HG3	1.79	0.46
19:CS:66:MET:HB2	19:CS:74:PHE:HZ	1.80	0.46
26:D1:82:LEU:CD1	26:D1:83:GLU:H	2.29	0.46
27:D2:17:SER:HB3	27:D2:18:PRO:HD3	1.97	0.46
30:D5:57:VAL:C	30:D5:58:LEU:HD12	2.35	0.46
34:DA:1301:A:HO2'	34:DA:1302:A:H2'	1.75	0.46
34:DA:1312:U:H4'	34:DA:1313:U:O5'	2.14	0.46
34:DA:2162:G:H3'	34:DA:2162:G:OP2	2.14	0.46
34:DA:2382:G:O5'	34:DA:2382:G:H8	1.99	0.46
34:DA:256:A:H2'	34:DA:257:A:H8	1.80	0.46
34:DA:2808:U:O2'	34:DA:2809:A:H5'	2.16	0.46
34:DA:2811:G:O2'	34:DA:2812:G:H5'	2.16	0.46
34:DA:335:C:H2'	34:DA:336:C:C6	2.51	0.46
34:DA:507:A:O4'	34:DA:509:C:C2	2.67	0.46
35:DB:79:C:H2'	35:DB:80:U:H5'	1.97	0.46
37:DD:231:HIS:ND1	37:DD:232:PRO:N	2.63	0.46
37:DD:61:LEU:O	37:DD:63:ARG:NH1	2.48	0.46
38:DE:119:ARG:HH11	38:DE:160:TYR:HB2	1.79	0.46
38:DE:45:THR:HG22	38:DE:45:THR:O	2.15	0.46
39:DF:167:ALA:C	39:DF:169:ASN:H	2.18	0.46
34:DA:322:A:H3'	39:DF:169:ASN:ND2	2.27	0.46
39:DF:68:LYS:O	39:DF:69:HIS:CD2	2.68	0.46
41:DH:136:ILE:HD12	41:DH:136:ILE:N	2.28	0.46
43:DN:33:LEU:O	43:DN:34:LEU:C	2.53	0.46
44:DO:113:LYS:HA	44:DO:116:SER:OG	2.15	0.46
44:DO:3:GLN:HG3	44:DO:4:PRO:HD2	1.96	0.46
33:D8:13:ARG:HD2	45:DP:61:ARG:NH1	2.30	0.46
46:DQ:47:ILE:HG13	46:DQ:68:ILE:HD11	1.97	0.46
47:DR:12:ARG:HH11	47:DR:12:ARG:HG3	1.79	0.46
51:DV:1:MET:HE3	51:DV:44:LYS:HB3	1.98	0.46
51:DV:21:ARG:HG3	51:DV:93:GLU:OE1	2.15	0.46
52:DW:40:ASN:C	52:DW:41:LYS:HG2	2.36	0.46
53:DX:65:ARG:NE	53:DX:66:LEU:N	2.63	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:7:VAL:HB	54:DY:8:LYS:HD2	1.96	0.46
54:DY:91:GLU:HB3	54:DY:92:ASN:H	1.44	0.46
55:DZ:71:VAL:CG1	55:DZ:74:VAL:HG23	2.45	0.46
1:AA:101:A:C2	1:AA:102:G:C8	3.04	0.46
1:AA:15:G:C4'	5:AE:24:ARG:NH2	2.77	0.46
1:AA:198:G:H2'	1:AA:199:G:C8	2.50	0.46
1:AA:250:A:HO2'	1:AA:251:G:P	2.38	0.46
1:AA:630:G:C3'	1:AA:631:G:H5''	2.45	0.46
2:AB:198:ASP:N	2:AB:198:ASP:OD2	2.48	0.46
2:AB:43:ASP:OD1	2:AB:45:GLN:HB3	2.14	0.46
4:AD:67:ILE:HG22	4:AD:68:TYR:N	2.29	0.46
5:AE:107:ARG:HG2	5:AE:108:ALA:N	2.30	0.46
5:AE:95:ALA:O	5:AE:98:THR:OG1	2.26	0.46
8:AH:20:TYR:HA	8:AH:65:TYR:CZ	2.49	0.46
9:AI:9:ARG:HA	9:AI:13:ALA:O	2.16	0.46
12:AL:86:ARG:HB2	12:AL:101:VAL:CG2	2.45	0.46
13:AM:110:ARG:HH11	13:AM:110:ARG:HG2	1.80	0.46
17:AQ:91:ARG:O	17:AQ:94:ASN:HB2	2.16	0.46
20:AT:73:HIS:O	20:AT:74:LYS:O	2.33	0.46
26:B1:37:ILE:O	26:B1:38:SER:HB2	2.14	0.46
27:B2:26:ARG:NE	27:B2:29:LYS:HZ1	2.13	0.46
27:B2:51:ARG:HD3	27:B2:51:ARG:C	2.36	0.46
34:BA:1158:C:O2'	34:BA:1159:U:P	2.73	0.46
34:BA:1337:G:H2'	34:BA:1338:G:O4'	2.15	0.46
34:BA:1428:C:C5	34:BA:1569:A:H5''	2.51	0.46
34:BA:242:G:N2	34:BA:254:G:H2'	2.30	0.46
34:BA:271(A):A:H62	34:BA:271(W):G:H21	1.63	0.46
34:BA:2876:G:H4'	49:BT:3:ARG:CD	2.40	0.46
26:B1:47:GLN:CB	34:BA:397:G:H5''	2.37	0.46
34:BA:42:G:H2'	34:BA:43:A:O4'	2.16	0.46
34:BA:589:C:H2'	34:BA:590:A:C8	2.50	0.46
37:BD:144:ALA:HB3	37:BD:192:THR:CG2	2.45	0.46
37:BD:35:LYS:HG2	37:BD:64:ILE:CA	2.45	0.46
39:BF:173:VAL:HG12	39:BF:174:VAL:N	2.31	0.46
39:BF:185:ASP:HA	39:BF:188:ARG:HB3	1.97	0.46
40:BG:143:GLU:H	40:BG:143:GLU:HG2	1.31	0.46
40:BG:145:THR:HG23	40:BG:148:MET:CB	2.38	0.46
41:BH:146:ALA:C	41:BH:148:ILE:N	2.69	0.46
42:BI:121:LYS:O	42:BI:122:GLU:HB2	2.15	0.46
45:BP:23:PRO:O	45:BP:33:ARG:NE	2.48	0.46
46:BQ:52:VAL:O	46:BQ:55:VAL:HG13	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BE:109:LYS:CB	47:BR:2:ARG:NH1	2.72	0.46
47:BR:75:LEU:O	47:BR:75:LEU:HD13	2.15	0.46
50:BU:102:GLU:HB2	50:BU:105:VAL:CG2	2.42	0.46
50:BU:66:ASN:O	50:BU:68:ALA:N	2.48	0.46
53:BX:5:TYR:C	53:BX:7:VAL:N	2.69	0.46
55:BZ:152:ALA:CB	55:BZ:167:PRO:HB2	2.33	0.46
55:BZ:7:ALA:HB2	55:BZ:59:LEU:HB3	1.98	0.46
1:CA:1041:A:H2'	1:CA:1042:G:H8	1.79	0.46
1:CA:1221:G:P	19:CS:36:ARG:HD3	2.54	0.46
1:CA:624:C:H2'	1:CA:625:G:H8	1.81	0.46
1:CA:627:G:O2'	1:CA:628:G:H5'	2.16	0.46
1:CA:719:C:C2	18:CR:50:ILE:HG12	2.50	0.46
2:CB:91:PRO:CG	2:CB:154:LEU:HD12	2.44	0.46
2:CB:238:LEU:N	2:CB:238:LEU:HD23	2.30	0.46
2:CB:28:PHE:CD1	2:CB:28:PHE:O	2.69	0.46
2:CB:68:ILE:H	2:CB:90:MET:HE2	1.80	0.46
3:CC:194:GLY:O	3:CC:195:VAL:HG23	2.15	0.46
5:CE:139:LEU:C	5:CE:141:GLN:H	2.17	0.46
7:CG:71:PRO:HG3	7:CG:103:TRP:CH2	2.51	0.46
8:CH:40:ALA:O	8:CH:43:GLY:N	2.30	0.46
8:CH:97:VAL:CB	8:CH:129:VAL:O	2.64	0.46
9:CI:124:GLN:HB3	9:CI:125:TYR:H	1.61	0.46
17:CQ:33:GLY:O	17:CQ:34:LYS:C	2.53	0.46
18:CR:37:VAL:HG23	18:CR:38:GLU:H	1.80	0.46
20:CT:89:ARG:HH21	20:CT:89:ARG:HG3	1.80	0.46
27:D2:29:LYS:O	27:D2:32:LEU:HB3	2.16	0.46
29:D4:30:GLU:O	29:D4:31:ILE:CB	2.62	0.46
30:D5:44:THR:HG21	47:DR:101:ALA:CA	2.45	0.46
31:D6:14:THR:O	31:D6:14:THR:HG23	2.15	0.46
34:DA:1121:C:H2'	34:DA:1122:G:O4'	2.15	0.46
34:DA:1227:G:C2'	34:DA:1228:G:H5'	2.45	0.46
34:DA:1775:U:C2'	34:DA:1776:G:O5'	2.63	0.46
34:DA:1811:G:H2'	34:DA:1812:A:H8	1.80	0.46
34:DA:1839:G:H8	34:DA:1839:G:H5'	1.80	0.46
34:DA:197:A:H5'	34:DA:197:A:C8	2.51	0.46
34:DA:2681:C:O4'	34:DA:2681:C:O2	2.33	0.46
34:DA:2707:G:H2'	34:DA:2708:G:H8	1.81	0.46
34:DA:2815:C:H2'	34:DA:2816:C:H6	1.79	0.46
34:DA:575:A:O2'	34:DA:576:U:H5'	2.15	0.46
36:DC:97:GLU:CA	36:DC:100:ILE:HG12	2.46	0.46
37:DD:118:VAL:CG2	37:DD:119:ALA:H	2.22	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:231:HIS:CG	37:DD:232:PRO:HD2	2.50	0.46
38:DE:169:ASN:HD21	38:DE:203:LYS:HB3	1.80	0.46
34:DA:2060:A:OP1	39:DF:68:LYS:O	2.33	0.46
40:DG:111:LEU:O	40:DG:112:PRO:C	2.53	0.46
41:DH:58:GLU:C	41:DH:60:ARG:N	2.66	0.46
41:DH:92:ILE:CD1	41:DH:92:ILE:N	2.78	0.46
43:DN:15:LEU:HD21	43:DN:55:VAL:HG21	1.97	0.46
44:DO:61:VAL:O	44:DO:61:VAL:HG13	2.15	0.46
45:DP:14:LYS:O	45:DP:15:ARG:CG	2.63	0.46
45:DP:38:GLN:HG3	45:DP:39:LYS:N	2.17	0.46
45:DP:58:THR:O	45:DP:58:THR:HG22	2.15	0.46
34:DA:910:A:H62	46:DQ:12:GLN:HA	1.81	0.46
46:DQ:22:LYS:HA	46:DQ:22:LYS:HE2	1.97	0.46
47:DR:106:GLY:O	47:DR:107:ASP:CB	2.62	0.46
51:DV:70:ILE:HG12	51:DV:71:LEU:H	1.76	0.46
55:DZ:149:SER:HB2	55:DZ:172:ALA:O	2.15	0.46
55:DZ:15:PRO:HA	55:DZ:18:LEU:HD13	1.97	0.46
55:DZ:33:LEU:CG	55:DZ:34:ASN:N	2.79	0.46
55:DZ:6:LYS:HB3	55:DZ:8:TYR:HE1	1.79	0.46
1:AA:1225:A:N3	1:AA:1225:A:H2'	2.31	0.46
1:AA:1321:C:H3'	1:AA:1322:C:H5''	1.96	0.46
1:AA:321:A:C2	1:AA:333:G:C2	3.04	0.46
1:AA:511:C:HO2'	1:AA:512:U:H6	1.62	0.46
1:AA:61:G:OP1	20:AT:10:LEU:HD11	2.15	0.46
1:AA:758:G:H5''	1:AA:880:C:H1'	1.98	0.46
1:AA:887:G:H2'	1:AA:888:G:H5'	1.97	0.46
2:AB:80:ILE:HG13	2:AB:81:VAL:N	2.30	0.46
4:AD:73:ARG:NH1	4:AD:73:ARG:HA	2.15	0.46
4:AD:92:VAL:HG12	4:AD:96:LEU:HD21	1.97	0.46
5:AE:101:ILE:HG13	5:AE:119:LEU:CD2	2.34	0.46
12:AL:53:ARG:NH1	12:AL:53:ARG:HG2	2.29	0.46
17:AQ:59:ILE:HG23	17:AQ:71:PHE:HB3	1.96	0.46
20:AT:73:HIS:HB3	20:AT:74:LYS:H	1.42	0.46
22:AV:4:G:O2'	22:AV:5:G:P	2.74	0.46
22:AV:35:A:C2	24:AX:18:G:C2	3.04	0.46
34:BA:1121:C:H2'	34:BA:1122:G:O4'	2.16	0.46
34:BA:1164:G:H2'	34:BA:1165:U:H6	1.79	0.46
34:BA:1165:U:O2'	34:BA:1166:C:H5'	2.15	0.46
34:BA:1289:C:H2'	34:BA:1290:C:C6	2.50	0.46
34:BA:2881:C:H2'	34:BA:2882:A:H8	1.80	0.46
34:BA:343:C:C2'	34:BA:344:G:H5''	2.45	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:564:C:O2'	34:BA:565:C:H5'	2.15	0.46
34:BA:570:G:H2'	34:BA:2030:A:C5	2.50	0.46
34:BA:575:A:O2'	34:BA:576:U:H5'	2.15	0.46
34:BA:580:C:H2'	34:BA:581:C:C6	2.50	0.46
34:BA:849:A:C8	34:BA:850:C:C5	3.03	0.46
38:BE:169:ASN:OD1	38:BE:201:THR:HG23	2.14	0.46
39:BF:103:LYS:C	39:BF:105:VAL:H	2.19	0.46
41:BH:30:LYS:HZ1	41:BH:81:GLU:HG2	1.78	0.46
41:BH:41:MET:CE	41:BH:55:PRO:HD3	2.45	0.46
42:BI:9:LEU:N	42:BI:13:GLY:HA2	2.09	0.46
43:BN:42:TRP:HE3	43:BN:42:TRP:HA	1.81	0.46
44:BO:21:CYS:SG	44:BO:22:ILE:N	2.88	0.46
45:BP:85:LEU:HD12	45:BP:120:ALA:CB	2.45	0.46
33:B8:13:ARG:HD2	45:BP:61:ARG:NH1	2.30	0.46
47:BR:17:ARG:O	47:BR:20:LEU:HB3	2.16	0.46
47:BR:48:VAL:HA	47:BR:51:LEU:HD12	1.97	0.46
34:BA:2869:G:O3'	47:BR:61:HIS:HE1	1.98	0.46
50:BU:92:ARG:NH1	51:BV:11:GLN:H	2.12	0.46
1:CA:146:G:C2	1:CA:147:G:H1'	2.50	0.46
1:CA:190:U:O2'	1:CA:191:G:H5'	2.15	0.46
1:CA:197:A:C5	1:CA:221:C:H4'	2.50	0.46
1:CA:308:C:H2'	1:CA:309:G:H8	1.80	0.46
1:CA:689:C:C2'	1:CA:690:G:H5'	2.46	0.46
1:CA:714:G:H2'	1:CA:715:A:C8	2.50	0.46
1:CA:974:A:P	14:CN:41:ARG:HH12	2.39	0.46
2:CB:189:ASP:OD1	2:CB:205:ASP:HB3	2.15	0.46
2:CB:204:ASN:C	2:CB:204:ASN:HD22	2.18	0.46
4:CD:150:GLU:HA	4:CD:153:ARG:HD2	1.97	0.46
4:CD:14:ARG:C	4:CD:16:GLY:N	2.68	0.46
5:CE:41:VAL:CG1	5:CE:113:ALA:HA	2.45	0.46
6:CF:69:GLU:O	6:CF:72:VAL:HG12	2.15	0.46
7:CG:155:ARG:O	7:CG:156:TRP:HD1	1.99	0.46
11:CK:18:ARG:HG2	11:CK:20:TYR:CE1	2.51	0.46
12:CL:113:ARG:NH1	12:CL:120:TYR:CD2	2.83	0.46
13:CM:65:LYS:HA	13:CM:66:LEU:CD1	2.44	0.46
15:CO:33:THR:O	15:CO:36:ILE:N	2.49	0.46
16:CP:82:GLN:O	16:CP:84:ALA:N	2.49	0.46
1:CA:564:C:C5	17:CQ:31:LEU:HD11	2.51	0.46
17:CQ:59:ILE:HG23	17:CQ:71:PHE:HB3	1.98	0.46
20:CT:53:LEU:O	20:CT:57:ARG:N	2.37	0.46
20:CT:60:GLU:O	20:CT:63:ILE:HB	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:8:U:O2	22:CV:21:A:H2	1.98	0.46
23:CW:16:U:H3'	23:CW:17:C:C5'	2.41	0.46
26:D1:78:LYS:HZ1	26:D1:90:ILE:HA	1.80	0.46
27:D2:41:ILE:O	27:D2:42:GLY:C	2.54	0.46
28:D3:5:LYS:HE2	28:D3:34:GLU:OE1	2.14	0.46
30:D5:8:LYS:O	30:D5:8:LYS:HG3	2.15	0.46
33:D8:42:ARG:O	33:D8:44:LYS:N	2.47	0.46
34:DA:1146:C:O2'	34:DA:1147:C:H5'	2.14	0.46
34:DA:1272:A:H3'	34:DA:1273:U:H5'	1.97	0.46
34:DA:1657:C:H2'	34:DA:1658:C:C6	2.50	0.46
34:DA:1694:C:O2'	34:DA:1695:G:C4	2.66	0.46
34:DA:2069:G:C2'	34:DA:2070:G:H5'	2.45	0.46
34:DA:2222:G:O2'	34:DA:2223:G:H5'	2.16	0.46
34:DA:2291:U:H2'	34:DA:2292:C:C6	2.49	0.46
34:DA:303:U:H2'	34:DA:304:G:C8	2.50	0.46
34:DA:408:G:O2'	34:DA:409:C:H5'	2.15	0.46
35:DB:21:G:O6	35:DB:62:C:N3	2.48	0.46
35:DB:5:C:H2'	35:DB:6:C:C6	2.50	0.46
37:DD:130:ALA:HA	37:DD:191:ALA:O	2.15	0.46
37:DD:142:VAL:CG2	37:DD:192:THR:C	2.80	0.46
38:DE:52:LEU:HD22	38:DE:76:ARG:HD2	1.97	0.46
41:DH:35:VAL:HG12	41:DH:35:VAL:O	2.14	0.46
41:DH:89:ILE:CG1	41:DH:90:LYS:N	2.79	0.46
42:DI:88:ILE:HD11	42:DI:123:LEU:HG	1.98	0.46
42:DI:72:LEU:HD12	42:DI:138:ILE:HG21	1.98	0.46
44:DO:40:VAL:HG12	44:DO:41:ALA:N	2.29	0.46
46:DQ:134:ARG:CG	46:DQ:135:ASP:H	2.23	0.46
46:DQ:8:LYS:HE3	46:DQ:9:TYR:CD1	2.51	0.46
47:DR:2:ARG:HG2	47:DR:5:LYS:HZ1	1.80	0.46
50:DU:61:TRP:O	50:DU:62:ILE:C	2.54	0.46
52:DW:92:ARG:HG2	52:DW:92:ARG:HH11	1.81	0.46
53:DX:8:ILE:HG12	53:DX:43:VAL:HG23	1.97	0.46
53:DX:89:ILE:HG22	53:DX:89:ILE:O	2.16	0.46
1:AA:1385:G:O2'	1:AA:1386:G:H5'	2.15	0.46
1:AA:1430:C:O2'	1:AA:1431:C:H5'	2.15	0.46
1:AA:197:A:N6	1:AA:221:C:H5'	2.30	0.46
1:AA:318:G:O2'	1:AA:319:G:H5'	2.16	0.46
1:AA:66:G:N2	1:AA:172:A:C2	2.84	0.46
1:AA:735:C:O2'	1:AA:736:C:C5'	2.59	0.46
2:AB:41:ILE:CD1	2:AB:41:ILE:N	2.77	0.46
4:AD:10:ARG:C	4:AD:11:LEU:HD23	2.35	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:177:ASP:O	4:AD:179:GLU:N	2.48	0.46
5:AE:147:ASP:HA	5:AE:150:ARG:CB	2.41	0.46
5:AE:16:THR:OG1	5:AE:17:ALA:N	2.49	0.46
5:AE:10:MET:HA	5:AE:32:VAL:HA	1.98	0.46
6:AF:91:VAL:CG1	6:AF:92:LYS:N	2.78	0.46
1:AA:1346:A:C4	7:AG:10:ARG:NH1	2.84	0.46
7:AG:134:ALA:O	7:AG:135:VAL:C	2.53	0.46
1:AA:1308:U:OP1	13:AM:98:VAL:N	2.48	0.46
15:AO:66:LEU:O	15:AO:67:LEU:C	2.53	0.46
16:AP:39:TYR:CD2	16:AP:73:LEU:HD11	2.50	0.46
16:AP:67:THR:HG22	16:AP:68:ASP:N	2.30	0.46
18:AR:59:SER:HB3	18:AR:62:GLU:OE2	2.15	0.46
19:AS:40:ILE:HG21	19:AS:62:ILE:HD11	1.95	0.46
19:AS:10:PHE:HZ	19:AS:70:LYS:CE	2.26	0.46
22:AV:25:C:H2'	22:AV:26:G:C8	2.50	0.46
23:AW:28:G:H2'	23:AW:29:G:H8	1.80	0.46
26:B1:17:SER:OG	26:B1:44:PRO:HG3	2.15	0.46
34:BA:1159:U:O2'	34:BA:1160:G:H5'	2.16	0.46
34:BA:1275:A:N1	34:BA:1295:C:O2'	2.41	0.46
34:BA:1803:A:O2'	37:BD:259:THR:HG21	2.16	0.46
34:BA:2287:A:C2	34:BA:2346:A:N1	2.84	0.46
34:BA:2678:C:O2'	34:BA:2679:A:H5'	2.15	0.46
34:BA:813:U:C2	34:BA:814:C:C5	3.02	0.46
36:BC:62:VAL:O	36:BC:63:SER:C	2.53	0.46
37:BD:69:ARG:HD2	37:BD:119:ALA:HB2	1.98	0.46
38:BE:37:ARG:HD3	38:BE:44:TYR:CE2	2.51	0.46
38:BE:59:VAL:HG21	38:BE:63:LEU:HA	1.98	0.46
39:BF:20:LEU:HD12	39:BF:199:TRP:CH2	2.49	0.46
40:BG:23:PHE:CZ	40:BG:171:ALA:CB	2.97	0.46
41:BH:61:HIS:O	41:BH:62:LYS:C	2.54	0.46
43:BN:40:PRO:CA	50:BU:64:ARG:NH2	2.79	0.46
46:BQ:63:LYS:HA	55:BZ:178:GLU:OE1	2.15	0.46
46:BQ:82:ARG:O	46:BQ:83:MET:CB	2.58	0.46
49:BT:106:SER:O	49:BT:107:ASP:HB3	2.16	0.46
34:BA:534:U:O2'	50:BU:49:HIS:CD2	2.68	0.46
50:BU:92:ARG:C	50:BU:94:ASN:H	2.19	0.46
51:BV:70:ILE:HG12	51:BV:71:LEU:H	1.75	0.46
50:BU:50:ARG:CZ	51:BV:75:PHE:HE2	2.29	0.46
54:BY:15:VAL:CG1	54:BY:16:ALA:N	2.59	0.46
54:BY:90:LEU:CG	54:BY:91:GLU:N	2.72	0.46
34:BA:84:A:H5''	54:BY:9:LYS:HZ2	1.81	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:766:A:C2	1:CA:1525:G:N3	2.83	0.46
1:CA:302:G:H21	1:CA:556:C:H4'	1.79	0.46
1:CA:109:A:H2'	1:CA:326:G:N2	2.30	0.46
1:CA:453:A:H2'	1:CA:454:C:C6	2.51	0.46
1:CA:519:C:O2'	1:CA:520:A:H5'	2.15	0.46
1:CA:661:G:O2'	1:CA:662:G:H5'	2.16	0.46
2:CB:216:SER:C	2:CB:218:ALA:H	2.18	0.46
5:CE:87:SER:HB3	5:CE:131:ILE:CD1	2.46	0.46
6:CF:15:ASP:OD1	6:CF:17:SER:HB2	2.16	0.46
6:CF:28:ARG:HG3	6:CF:28:ARG:NH1	2.27	0.46
8:CH:120:THR:O	8:CH:122:ARG:N	2.49	0.46
8:CH:60:ARG:HG3	8:CH:60:ARG:NH1	2.30	0.46
9:CI:36:TYR:CD2	9:CI:37:PHE:CE2	3.04	0.46
13:CM:38:GLY:O	13:CM:39:ILE:HG13	2.15	0.46
13:CM:67:GLU:HG3	13:CM:68:GLY:N	2.31	0.46
14:CN:51:GLY:C	14:CN:53:LEU:H	2.18	0.46
15:CO:27:VAL:O	15:CO:28:GLN:C	2.54	0.46
17:CQ:83:ASP:CG	17:CQ:84:LEU:H	2.18	0.46
22:CV:25:C:O2'	22:CV:26:G:H5'	2.15	0.46
22:CV:75:C:H2'	22:CV:76:A:O4'	2.15	0.46
25:D0:43:THR:O	25:D0:43:THR:HG23	2.15	0.46
34:DA:1019:U:O2'	34:DA:1021:A:H2	1.97	0.46
34:DA:1653:G:HO2'	34:DA:1654:A:P	2.39	0.46
34:DA:1657:C:O2'	34:DA:1658:C:H5'	2.15	0.46
34:DA:1722:A:H2'	34:DA:1739:U:C5'	2.42	0.46
34:DA:198:C:H5'	34:DA:2244:U:OP1	2.15	0.46
34:DA:2827:C:H5'	34:DA:2828:C:OP2	2.16	0.46
34:DA:343:C:C2'	34:DA:344:G:H5''	2.45	0.46
34:DA:692:C:H2'	34:DA:693:C:H6	1.81	0.46
28:D3:46:ASN:HD21	34:DA:851:U:H5'	1.79	0.46
34:DA:996:A:H2'	34:DA:997:G:H8	1.80	0.46
26:D1:71:TYR:CE1	42:DI:27:ARG:HD3	2.50	0.46
42:DI:92:VAL:HG22	42:DI:97:ILE:HG13	1.98	0.46
43:DN:18:ALA:O	43:DN:20:GLY:N	2.49	0.46
43:DN:40:PRO:C	50:DU:64:ARG:HH21	2.19	0.46
45:DP:93:GLY:O	45:DP:123:LEU:HB2	2.15	0.46
48:DS:89:ARG:O	48:DS:92:TYR:CB	2.62	0.46
51:DV:5:VAL:CG2	51:DV:6:LYS:N	2.78	0.46
53:DX:73:ARG:O	53:DX:74:PRO:C	2.54	0.46
54:DY:28:LYS:O	54:DY:37:VAL:O	2.33	0.46
55:DZ:39:VAL:HG21	55:DZ:44:PHE:HD2	1.74	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DZ:96:VAL:CG2	55:DZ:97:GLU:N	2.77	0.46
1:AA:1074:G:H2'	1:AA:1075:C:H6	1.80	0.46
1:AA:1221:G:P	19:AS:36:ARG:HD3	2.56	0.46
1:AA:1305:G:C2	1:AA:1331:G:N3	2.84	0.46
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.16	0.46
1:AA:270:A:C5	1:AA:271:C:C4	3.04	0.46
3:AC:11:ARG:HG2	3:AC:11:ARG:NH1	2.31	0.46
3:AC:95:THR:HG21	3:AC:99:VAL:HG11	1.96	0.46
4:AD:179:GLU:C	4:AD:181:MET:H	2.19	0.46
1:AA:10:A:OP2	5:AE:126:ARG:HD3	2.15	0.46
6:AF:91:VAL:HG12	6:AF:92:LYS:O	2.16	0.46
7:AG:32:ARG:HH11	7:AG:32:ARG:HG2	1.80	0.46
9:AI:48:GLU:HA	9:AI:51:ARG:HD2	1.97	0.46
10:AJ:55:LYS:O	10:AJ:56:HIS:CG	2.69	0.46
10:AJ:90:LEU:N	10:AJ:91:PRO:HD3	2.30	0.46
11:AK:44:SER:OG	11:AK:47:VAL:HG23	2.15	0.46
13:AM:40:ASN:O	13:AM:43:THR:HG23	2.16	0.46
14:AN:51:GLY:C	14:AN:53:LEU:H	2.19	0.46
15:AO:56:LEU:C	15:AO:60:VAL:HG23	2.35	0.46
20:AT:87:LYS:HG3	20:AT:91:LEU:CD1	2.45	0.46
23:AW:59:U:H3'	23:AW:60:U:C6	2.51	0.46
26:B1:87:PRO:HB2	26:B1:91:LYS:CD	2.45	0.46
34:BA:1021:A:C3'	34:BA:1021:A:C8	2.98	0.46
34:BA:2050:C:H1'	38:BE:156:MET:HE1	1.96	0.46
34:BA:2256:G:O2'	34:BA:2257:U:H5'	2.16	0.46
34:BA:2532:G:H2'	34:BA:2533:A:C8	2.51	0.46
34:BA:2707:G:O2'	34:BA:2708:G:H5'	2.16	0.46
34:BA:481:G:C2'	34:BA:482:A:OP2	2.63	0.46
34:BA:494:G:OP1	52:BW:8:ARG:NH1	2.48	0.46
34:BA:949:C:H2'	34:BA:950:G:H8	1.80	0.46
34:BA:991:C:H2'	34:BA:992:C:H6	1.79	0.46
39:BF:103:LYS:C	39:BF:105:VAL:N	2.67	0.46
42:BI:86:THR:HG22	42:BI:122:GLU:HG2	1.96	0.46
44:BO:121:VAL:O	44:BO:122:LEU:HD23	2.15	0.46
45:BP:88:LEU:C	45:BP:90:ARG:N	2.68	0.46
47:BR:13:HIS:HE1	47:BR:15:SER:OG	1.98	0.46
48:BS:58:LEU:HD22	48:BS:68:GLN:HB2	1.97	0.46
49:BT:43:GLN:NE2	49:BT:74:ARG:HH21	2.14	0.46
54:BY:54:LYS:O	54:BY:55:TYR:CD1	2.69	0.46
54:BY:7:VAL:HB	54:BY:8:LYS:HD2	1.97	0.46
1:CA:1030(A):G:H1'	1:CA:1031:G:H22	1.81	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1155:G:O2'	1:CA:1156:G:H5'	2.15	0.46
1:CA:1228:C:P	13:CM:108:ARG:HH22	2.38	0.46
1:CA:1493:A:H2	23:CY:36:A:N3	2.14	0.46
1:CA:781:A:H2'	1:CA:782:A:H5'	1.98	0.46
2:CB:178:ARG:HH22	2:CB:196:LEU:HA	1.80	0.46
3:CC:21:ARG:HG3	3:CC:58:GLU:HG2	1.97	0.46
4:CD:179:GLU:C	4:CD:181:MET:H	2.17	0.46
4:CD:78:LEU:O	4:CD:79:PHE:C	2.54	0.46
5:CE:31:LEU:CD2	5:CE:43:LEU:HD11	2.46	0.46
8:CH:1:MET:O	8:CH:2:LEU:HB2	2.16	0.46
10:CJ:39:PRO:HB3	10:CJ:70:ARG:NH1	2.31	0.46
12:CL:47:LYS:CB	12:CL:48:PRO:CD	2.93	0.46
23:CW:62:C:H2'	23:CW:63:G:C8	2.41	0.46
34:DA:1149:G:O2'	34:DA:1150:C:H5'	2.16	0.46
34:DA:1290:C:H2'	34:DA:1291:C:H6	1.81	0.46
34:DA:1317:A:H2'	34:DA:1318:C:C6	2.51	0.46
34:DA:1345:C:H2'	34:DA:1346:G:H8	1.80	0.46
34:DA:1562:A:O2'	34:DA:1563:G:H5'	2.16	0.46
34:DA:1639:U:H2'	34:DA:1640:C:C5'	2.43	0.46
34:DA:2571:C:H5''	34:DA:2572:A:H5''	1.98	0.46
34:DA:2704:C:H2'	34:DA:2705:A:C8	2.51	0.46
34:DA:2779:U:H4'	34:DA:2780:G:C5'	2.45	0.46
34:DA:2779:U:O4'	34:DA:2779:U:O2	2.32	0.46
34:DA:557:U:H2'	34:DA:558:G:H8	1.81	0.46
34:DA:589:C:H2'	34:DA:590:A:C8	2.50	0.46
34:DA:643:A:O2'	34:DA:644:A:H5'	2.15	0.46
34:DA:606:U:H4'	34:DA:658:C:H4'	1.98	0.46
34:DA:737:C:O2'	34:DA:738:G:H5'	2.15	0.46
34:DA:978:G:C2	34:DA:986:C:C2	3.03	0.46
38:DE:114:ALA:CB	38:DE:160:TYR:HB3	2.45	0.46
38:DE:136:ARG:O	38:DE:137:HIS:CD2	2.69	0.46
40:DG:123:ASN:O	40:DG:126:ASP:HB2	2.16	0.46
41:DH:54:ARG:HB3	41:DH:65:HIS:HD2	1.78	0.46
42:DI:60:GLU:C	42:DI:62:LYS:N	2.69	0.46
43:DN:42:TRP:HA	43:DN:42:TRP:CE3	2.50	0.46
44:DO:91:LEU:N	44:DO:91:LEU:CD2	2.77	0.46
45:DP:91:PHE:N	45:DP:91:PHE:CD1	2.83	0.46
34:DA:2377:A:H4'	48:DS:107:GLU:CG	2.44	0.46
50:DU:64:ARG:NH1	50:DU:67:ALA:HB3	2.31	0.46
51:DV:46:VAL:O	51:DV:47:VAL:HB	2.16	0.46
52:DW:51:LEU:C	52:DW:51:LEU:HD13	2.35	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:40:GLU:HA	54:DY:40:GLU:OE2	2.16	0.46
55:DZ:141:VAL:HG21	55:DZ:150:LEU:HD11	1.96	0.46
1:AA:1178:G:N2	1:AA:1180:A:H3'	2.30	0.46
1:AA:1502:A:H2	1:AA:1505:G:H1	1.63	0.46
1:AA:537:G:OP1	12:AL:113:ARG:NH2	2.48	0.46
1:AA:867:G:N2	1:AA:868:C:C2	2.84	0.46
2:AB:195:ASP:O	8:AH:68:ARG:NH2	2.44	0.46
3:AC:179:ARG:HG3	3:AC:179:ARG:O	2.16	0.46
4:AD:14:ARG:O	4:AD:16:GLY:N	2.48	0.46
4:AD:187:ARG:HH11	4:AD:187:ARG:HG2	1.80	0.46
4:AD:68:TYR:CD2	4:AD:97:LEU:HD22	2.51	0.46
5:AE:51:VAL:HB	5:AE:52:PRO:CD	2.36	0.46
6:AF:61:LEU:HB3	6:AF:63:TYR:HE2	1.81	0.46
9:AI:18:PHE:O	9:AI:61:ALA:HA	2.16	0.46
9:AI:50:LEU:O	9:AI:54:ASP:N	2.48	0.46
9:AI:63:ILE:N	9:AI:63:ILE:HD12	2.31	0.46
1:AA:1227:A:OP2	13:AM:111:LYS:HE2	2.16	0.46
13:AM:29:ARG:HA	13:AM:32:GLU:HB3	1.97	0.46
20:AT:84:LEU:O	20:AT:88:VAL:HG23	2.15	0.46
27:B2:17:SER:HB3	27:B2:18:PRO:HD3	1.97	0.46
27:B2:34:GLU:O	27:B2:34:GLU:HG2	2.15	0.46
28:B3:12:PRO:O	28:B3:14:GLY:N	2.49	0.46
28:B3:17:LYS:O	28:B3:20:LYS:HB2	2.15	0.46
28:B3:5:LYS:HE2	28:B3:34:GLU:OE1	2.16	0.46
31:B6:15:GLU:HG2	31:B6:18:ARG:HG3	1.96	0.46
33:B8:39:LYS:HE3	33:B8:39:LYS:O	2.15	0.46
34:BA:1036:G:O2'	34:BA:1037:G:H5'	2.15	0.46
34:BA:1301:A:O2'	34:BA:1302:A:O5'	2.34	0.46
34:BA:1742:G:N7	34:BA:1743:C:N3	2.63	0.46
34:BA:2282:G:C4	34:BA:2425:A:N6	2.83	0.46
34:BA:2637:U:O2'	34:BA:2638:G:H5'	2.16	0.46
34:BA:2779:U:H4'	34:BA:2780:G:C5'	2.46	0.46
34:BA:593:G:O2'	34:BA:594:U:H5'	2.15	0.46
34:BA:629:G:H4'	34:BA:650:C:O2	2.16	0.46
27:B2:55:ARG:CZ	34:BA:72:U:H5'	2.43	0.46
34:BA:826:U:H2'	34:BA:828:U:O4'	2.16	0.46
34:BA:925:C:H2'	34:BA:926:A:C5'	2.37	0.46
35:BB:5:C:H2'	35:BB:6:C:C6	2.51	0.46
38:BE:79:ARG:NH1	38:BE:79:ARG:HG2	2.25	0.46
40:BG:106:LEU:HD12	40:BG:110:ALA:CB	2.46	0.46
40:BG:14:GLU:O	40:BG:17:PRO:HG2	2.15	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BG:35:GLU:OE2	40:BG:35:GLU:N	2.49	0.46
40:BG:60:LEU:O	40:BG:60:LEU:HD22	2.16	0.46
46:BQ:51:ARG:O	46:BQ:54:MET:CB	2.63	0.46
47:BR:11:ASN:O	47:BR:12:ARG:CB	2.64	0.46
48:BS:64:GLU:N	48:BS:64:GLU:OE2	2.49	0.46
49:BT:38:ASN:ND2	49:BT:40:THR:OG1	2.46	0.46
49:BT:48:ILE:HD12	49:BT:48:ILE:N	2.31	0.46
50:BU:8:VAL:O	50:BU:9:VAL:C	2.53	0.46
54:BY:8:LYS:HG2	54:BY:13:VAL:HG13	1.97	0.46
54:BY:2:ARG:HG2	54:BY:2:ARG:NH1	2.31	0.46
1:CA:1178:G:N2	1:CA:1180:A:H3'	2.31	0.46
1:CA:1271:G:H2'	1:CA:1272:G:H8	1.81	0.46
1:CA:360:A:O2'	1:CA:361:G:H5'	2.15	0.46
1:CA:300:A:H1'	1:CA:565:U:O2	2.16	0.46
1:CA:588:G:O6	1:CA:753:A:H2'	2.16	0.46
1:CA:979:C:C2'	1:CA:980:C:H5''	2.46	0.46
2:CB:155:LEU:N	2:CB:155:LEU:HD22	2.31	0.46
2:CB:46:LYS:HA	2:CB:49:GLU:OE1	2.16	0.46
4:CD:98:GLU:HG3	4:CD:103:ASN:HD21	1.81	0.46
4:CD:92:VAL:O	4:CD:93:PHE:C	2.54	0.46
6:CF:61:LEU:HB3	6:CF:63:TYR:HE2	1.81	0.46
8:CH:103:VAL:HG11	8:CH:109:ILE:O	2.16	0.46
11:CK:34:ASP:HB3	11:CK:40:ILE:HD11	1.98	0.46
14:CN:36:PHE:CG	14:CN:37:PHE:N	2.83	0.46
18:CR:44:LEU:O	18:CR:45:SER:C	2.50	0.46
21:CU:5:ASP:HB3	21:CU:8:THR:HG23	1.97	0.46
32:D7:30:VAL:O	32:D7:33:ARG:N	2.48	0.46
34:DA:1157:G:C2'	34:DA:1158:C:H5'	2.46	0.46
34:DA:1341:U:OP1	34:DA:1397:U:N3	2.43	0.46
34:DA:139:G:H1	34:DA:142(A):C:H42	1.61	0.46
34:DA:859:G:O4'	34:DA:2268:A:H1'	2.16	0.46
34:DA:2312:U:O2'	34:DA:2313:C:H5''	2.15	0.46
34:DA:2418:A:H2'	34:DA:2419:U:C6	2.50	0.46
34:DA:2721:A:C4	34:DA:2722:G:C8	3.04	0.46
34:DA:42:G:H2'	34:DA:43:A:O4'	2.16	0.46
34:DA:751:A:H8	34:DA:751:A:O5'	1.99	0.46
35:DB:78:A:H2'	35:DB:79:C:O4'	2.15	0.46
37:DD:145:VAL:HG12	37:DD:146:GLU:N	2.30	0.46
38:DE:104:VAL:HG11	38:DE:188:VAL:HG23	1.96	0.46
43:DN:67:LEU:O	43:DN:68:GLU:CB	2.63	0.46
45:DP:108:LYS:O	45:DP:110:TYR:N	2.48	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DP:70:GLN:HA	45:DP:70:GLN:OE1	2.16	0.46
45:DP:70:GLN:HG3	45:DP:71:VAL:H	1.80	0.46
46:DQ:26:TYR:O	46:DQ:26:TYR:CD1	2.65	0.46
46:DQ:81:VAL:O	46:DQ:82:ARG:NH1	2.47	0.46
48:DS:35:ILE:N	48:DS:53:SER:HB2	2.23	0.46
51:DV:19:LYS:HD3	51:DV:22:VAL:CG2	2.46	0.46
34:DA:1341:U:O4'	53:DX:57:LEU:HD11	2.16	0.46
53:DX:88:LYS:HB3	53:DX:89:ILE:HD13	1.97	0.46
54:DY:27:VAL:HG12	54:DY:29:GLU:N	2.26	0.46
54:DY:87:LYS:HG3	54:DY:88:LYS:N	2.31	0.46
54:DY:7:VAL:HB	54:DY:8:LYS:H	1.57	0.46
1:AA:1354:C:O2'	1:AA:1355:G:H5'	2.15	0.46
1:AA:426:G:H2'	1:AA:427:U:C6	2.50	0.46
1:AA:918:A:N6	1:AA:919:A:C6	2.84	0.46
2:AB:216:SER:C	2:AB:218:ALA:N	2.68	0.46
2:AB:239:VAL:O	2:AB:241:GLU:N	2.49	0.46
3:AC:12:LEU:O	3:AC:13:GLY:C	2.53	0.46
3:AC:40:ARG:O	3:AC:44:GLU:HG3	2.15	0.46
5:AE:106:PRO:O	5:AE:110:LEU:HG	2.16	0.46
9:AI:124:GLN:HB3	9:AI:125:TYR:H	1.61	0.46
10:AJ:28:ARG:HH11	10:AJ:28:ARG:HG2	1.79	0.46
13:AM:16:ASP:N	13:AM:16:ASP:OD2	2.49	0.46
23:AW:26:A:H61	23:AW:44:G:H1	1.62	0.46
1:AA:1054:C:N4	23:AY:34:G:C1'	2.77	0.46
27:B2:56:GLN:NE2	27:B2:56:GLN:N	2.64	0.46
33:B8:8:LYS:HE3	34:BA:245:G:O6	2.16	0.46
34:BA:116:C:O2'	34:BA:117:G:H5'	2.16	0.46
34:BA:129:C:O2'	34:BA:130:C:H5'	2.16	0.46
34:BA:1485:G:H1'	34:BA:1505:C:H42	1.79	0.46
34:BA:1502:C:C2'	34:BA:1502:C:O2	2.60	0.46
34:BA:1464:C:O2'	34:BA:1528:A:C8	2.62	0.46
34:BA:1803:A:H4'	37:BD:259:THR:HG21	1.97	0.46
34:BA:2346:A:H5'	34:BA:2383:G:O4'	2.15	0.46
34:BA:2732:G:C3'	34:BA:2733:A:H5'	2.46	0.46
34:BA:2807:G:C3'	34:BA:2808:U:H5''	2.46	0.46
34:BA:827:U:N3	34:BA:2430:A:C6	2.84	0.46
34:BA:917:A:H2'	34:BA:918:A:O4'	2.15	0.46
37:BD:206:LEU:HD23	37:BD:206:LEU:HA	1.76	0.46
37:BD:24:ILE:HD11	37:BD:84:TYR:N	2.31	0.46
37:BD:94:LEU:O	37:BD:94:LEU:HD13	2.16	0.46
39:BF:25:PRO:HB3	39:BF:119:ARG:CB	2.43	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:25:PRO:HB3	39:BF:119:ARG:HD3	1.97	0.46
40:BG:25:TYR:O	40:BG:26:GLN:HG2	2.15	0.46
41:BH:138:LYS:C	41:BH:140:LYS:N	2.65	0.46
41:BH:89:ILE:HG12	41:BH:90:LYS:H	1.80	0.46
43:BN:17:ASP:OD1	43:BN:19:GLU:HG3	2.15	0.46
46:BQ:42:ILE:HD11	46:BQ:127:ILE:HD11	1.97	0.46
47:BR:16:HIS:O	47:BR:17:ARG:C	2.54	0.46
49:BT:32:TYR:O	49:BT:41:ARG:O	2.34	0.46
51:BV:1:MET:HE3	51:BV:44:LYS:HB3	1.96	0.46
52:BW:34:ASN:O	52:BW:35:ILE:C	2.54	0.46
53:BX:65:ARG:NE	53:BX:66:LEU:N	2.63	0.46
54:BY:81:LYS:HG2	54:BY:96:ILE:CB	2.46	0.46
54:BY:88:LYS:NZ	54:BY:93:GLY:O	2.49	0.46
55:BZ:108:PRO:O	55:BZ:109:ALA:C	2.54	0.46
55:BZ:29:TYR:OH	55:BZ:87:ASP:HB2	2.15	0.46
55:BZ:53:ILE:HG22	55:BZ:71:VAL:CB	2.42	0.46
1:CA:223:U:H2'	1:CA:224:C:H6	1.81	0.46
1:CA:560:U:H4'	1:CA:561:U:C5'	2.45	0.46
2:CB:19:HIS:CG	2:CB:20:GLU:H	2.32	0.46
2:CB:187:LEU:HA	2:CB:201:ILE:O	2.15	0.46
2:CB:211:ILE:O	2:CB:215:LEU:HB2	2.16	0.46
2:CB:219:VAL:O	2:CB:222:ILE:HB	2.15	0.46
2:CB:49:GLU:O	2:CB:52:GLU:HB3	2.16	0.46
4:CD:76:ARG:HH11	4:CD:76:ARG:HG2	1.80	0.46
1:CA:1081:G:P	5:CE:16:THR:HG1	2.39	0.46
7:CG:155:ARG:O	7:CG:156:TRP:CD1	2.68	0.46
10:CJ:90:LEU:N	10:CJ:91:PRO:HD3	2.31	0.46
18:CR:50:ILE:HG22	18:CR:51:LEU:N	2.31	0.46
23:CW:9:A:C4	23:CW:46:G:N2	2.83	0.46
34:DA:1439:A:H2'	34:DA:1440:G:O4'	2.16	0.46
34:DA:1475:G:N3	34:DA:1475:G:H2'	2.31	0.46
34:DA:2870:C:O2'	34:DA:2871:C:H5'	2.16	0.46
34:DA:537:C:O2	34:DA:537:C:H2'	2.15	0.46
34:DA:629:G:H4'	34:DA:650:C:O2	2.15	0.46
38:DE:51:PHE:C	38:DE:74:PRO:HB2	2.36	0.46
42:DI:133:HIS:O	42:DI:134:PRO:C	2.53	0.46
42:DI:94:ALA:HB1	42:DI:114:LEU:CD1	2.45	0.46
43:DN:83:LYS:CE	43:DN:85:ILE:HD11	2.42	0.46
45:DP:136:GLU:O	45:DP:139:LYS:HB3	2.16	0.46
46:DQ:58:PHE:O	46:DQ:59:ARG:C	2.54	0.46
47:DR:39:PRO:O	47:DR:40:LYS:C	2.54	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DR:97:VAL:CG2	47:DR:114:VAL:HG22	2.46	0.46
48:DS:14:VAL:HG11	48:DS:90:GLY:C	2.36	0.46
49:DT:22:PHE:N	49:DT:22:PHE:CD2	2.84	0.46
54:DY:10:GLY:C	54:DY:27:VAL:HG22	2.36	0.46
55:DZ:143:GLY:C	55:DZ:144:LEU:HD22	2.36	0.46
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.78	0.46
1:AA:171:A:C2	1:AA:172:A:C2	3.04	0.46
1:AA:243:A:H4'	1:AA:244:U:O5'	2.15	0.46
1:AA:621:A:O2'	1:AA:622:A:H5'	2.16	0.46
2:AB:19:HIS:CD2	2:AB:205:ASP:OD1	2.68	0.46
8:AH:4:ASP:OD2	8:AH:7:ALA:HB2	2.16	0.46
9:AI:113:LYS:N	9:AI:113:LYS:CD	2.79	0.46
1:AA:947:G:O3'	13:AM:109:THR:OG1	2.32	0.46
16:AP:80:PHE:O	16:AP:82:GLN:NE2	2.48	0.46
19:AS:36:ARG:NH1	19:AS:52:TYR:O	2.49	0.46
23:AW:15:G:O5'	23:AW:15:G:H8	1.99	0.46
26:B1:48:LYS:O	26:B1:49:VAL:HB	2.15	0.46
29:B4:30:GLU:O	29:B4:31:ILE:CB	2.64	0.46
33:B8:34:TRP:O	33:B8:35:GLN:CB	2.64	0.46
34:BA:1204:A:C2	34:BA:1241:A:N1	2.84	0.46
34:BA:1284:A:H2'	34:BA:1285:G:O4'	2.15	0.46
34:BA:1301:A:O2'	34:BA:1302:A:P	2.74	0.46
34:BA:1326:U:O2'	34:BA:1327:C:H5'	2.16	0.46
34:BA:1476:C:H2'	34:BA:1477:A:H8	1.79	0.46
34:BA:271(G):C:O2'	34:BA:271(H):G:H5'	2.15	0.46
34:BA:751:A:C5'	52:BW:90:ARG:HA	2.45	0.46
38:BE:186:GLY:O	38:BE:188:VAL:N	2.48	0.46
39:BF:153:SER:OG	39:BF:190:GLU:N	2.42	0.46
42:BI:15:VAL:O	42:BI:17:GLN:N	2.49	0.46
42:BI:38:LEU:H	42:BI:38:LEU:CD1	2.14	0.46
42:BI:94:ALA:HB1	42:BI:114:LEU:CD1	2.46	0.46
43:BN:13:TRP:CD1	43:BN:13:TRP:N	2.84	0.46
45:BP:57:THR:HB	45:BP:58:THR:H	1.33	0.46
45:BP:58:THR:O	45:BP:58:THR:HG22	2.15	0.46
46:BQ:37:LEU:HB2	46:BQ:128:LYS:O	2.15	0.46
46:BQ:42:ILE:HG22	46:BQ:47:ILE:HD11	1.98	0.46
34:BA:2296:U:H2'	48:BS:13:ARG:HH22	1.80	0.46
52:BW:70:TYR:N	52:BW:70:TYR:CD2	2.83	0.46
1:CA:1157:A:H4'	1:CA:1158:C:O5'	2.16	0.46
1:CA:634:C:O2'	1:CA:635:G:H5'	2.16	0.46
1:CA:715:A:H2'	1:CA:716:A:C8	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:758:G:C5'	1:CA:880:C:H1'	2.46	0.46
1:CA:832:C:O2'	1:CA:833:U:O5'	2.30	0.46
2:CB:8:LYS:O	2:CB:9:GLU:C	2.54	0.46
3:CC:86:VAL:O	3:CC:89:GLU:HB3	2.15	0.46
5:CE:107:ARG:O	5:CE:110:LEU:N	2.49	0.46
5:CE:26:PHE:N	5:CE:26:PHE:CD1	2.84	0.46
7:CG:45:ASP:O	7:CG:49:ILE:HG12	2.16	0.46
11:CK:115:PRO:C	11:CK:117:ASN:N	2.70	0.46
17:CQ:66:SER:OG	17:CQ:69:LYS:CB	2.64	0.46
17:CQ:83:ASP:CG	17:CQ:84:LEU:N	2.69	0.46
17:CQ:91:ARG:O	17:CQ:94:ASN:HB2	2.16	0.46
20:CT:13:LEU:O	20:CT:16:HIS:N	2.49	0.46
23:CW:10:G:H2'	23:CW:10:G:N3	2.31	0.46
26:D1:62:VAL:HG22	26:D1:63:ALA:N	2.30	0.46
26:D1:88:LYS:O	26:D1:89:GLU:C	2.54	0.46
33:D8:53:PRO:HG2	33:D8:54:GLU:N	2.31	0.46
34:DA:1028:A:N6	34:DA:1125:G:H2'	2.31	0.46
34:DA:1771:C:C1'	34:DA:1786:A:C8	2.99	0.46
34:DA:1924:C:O2'	34:DA:1925:C:H5'	2.15	0.46
34:DA:1992:G:O2'	34:DA:1993:U:OP2	2.33	0.46
34:DA:2031:A:C6	34:DA:2498:C:H1'	2.50	0.46
34:DA:221:A:H4'	34:DA:222:A:O5'	2.16	0.46
34:DA:2298:A:H62	34:DA:2318:G:H8	1.59	0.46
34:DA:657:U:C2	34:DA:658:C:C5	3.03	0.46
34:DA:830:G:H4'	34:DA:831:G:OP2	2.16	0.46
34:DA:863:A:O2'	34:DA:864:G:H5'	2.15	0.46
37:DD:35:LYS:NZ	37:DD:104:TYR:CD1	2.79	0.46
37:DD:134:ARG:HB2	37:DD:135:PHE:HD1	1.81	0.46
39:DF:34:TRP:CD1	45:DP:11:GLY:HA2	2.51	0.46
41:DH:146:ALA:C	41:DH:148:ILE:N	2.68	0.46
41:DH:44:VAL:CG1	41:DH:45:VAL:N	2.71	0.46
43:DN:13:TRP:O	43:DN:135:PRO:HG3	2.16	0.46
43:DN:18:ALA:O	43:DN:21:LYS:HG2	2.16	0.46
44:DO:112:MET:O	44:DO:115:VAL:N	2.49	0.46
48:DS:77:ALA:O	48:DS:78:LEU:C	2.53	0.46
48:DS:97:ARG:HG3	48:DS:97:ARG:O	2.16	0.46
49:DT:57:PHE:CG	49:DT:58:ASN:N	2.84	0.46
50:DU:83:LEU:CD1	50:DU:83:LEU:N	2.79	0.46
52:DW:70:TYR:HD2	52:DW:70:TYR:N	2.12	0.46
54:DY:9:LYS:HA	54:DY:30:VAL:HG21	1.97	0.46
55:DZ:137:ILE:HG22	55:DZ:138:GLU:N	2.29	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:124:G:C6	1:AA:125:U:C4	3.05	0.46
1:AA:1416:G:H2'	1:AA:1417:G:O4'	2.16	0.46
1:AA:453:A:H2'	1:AA:454:C:C6	2.51	0.46
1:AA:908:A:H2'	1:AA:909:A:C8	2.51	0.46
1:AA:974:A:P	14:AN:41:ARG:HH12	2.39	0.46
1:AA:977:A:O2'	1:AA:978:A:H5'	2.16	0.46
2:AB:189:ASP:OD1	2:AB:205:ASP:HB3	2.16	0.46
7:AG:36:LYS:HA	7:AG:39:ALA:HB3	1.97	0.46
7:AG:40:ALA:O	7:AG:41:ARG:C	2.52	0.46
12:AL:42:THR:O	12:AL:42:THR:HG23	2.15	0.46
20:AT:26:ASN:ND2	20:AT:26:ASN:N	2.64	0.46
26:B1:71:TYR:O	26:B1:72:GLU:C	2.54	0.46
26:B1:73:LEU:HD21	26:B1:90:ILE:O	2.16	0.46
28:B3:52:HIS:ND1	28:B3:53:LEU:HG	2.31	0.46
34:BA:1226:A:OP1	51:BV:85:LYS:NZ	2.44	0.46
34:BA:1496:A:H5'	34:BA:1497:U:OP2	2.16	0.46
34:BA:1991:U:H2'	34:BA:1992:G:H5'	1.96	0.46
34:BA:2014:A:C2	34:BA:2015:A:N1	2.84	0.46
34:BA:203:C:C3'	34:BA:204:A:H5''	2.43	0.46
34:BA:2603:G:C6	34:BA:2604:U:C5	3.04	0.46
34:BA:27:G:C2'	34:BA:28:A:OP2	2.63	0.46
37:BD:238:GLY:O	37:BD:239:ARG:O	2.34	0.46
37:BD:232:PRO:HG2	37:BD:248:SER:O	2.16	0.46
38:BE:55:ASN:ND2	38:BE:75:VAL:CG1	2.78	0.46
42:BI:11:ASN:C	42:BI:12:LEU:HD23	2.36	0.46
42:BI:99:GLU:C	42:BI:101:LEU:H	2.19	0.46
43:BN:18:ALA:HB1	43:BN:21:LYS:CG	2.46	0.46
45:BP:107:LYS:C	45:BP:109:GLY:H	2.20	0.46
45:BP:126:VAL:CA	45:BP:145:PRO:HB2	2.18	0.46
30:B5:44:THR:HG21	47:BR:101:ALA:CA	2.46	0.46
47:BR:104:ARG:HB3	47:BR:107:ASP:OD2	2.16	0.46
44:BO:77:ILE:HD12	49:BT:74:ARG:HG2	1.98	0.46
51:BV:43:GLU:CA	51:BV:48:GLY:CA	2.91	0.46
52:BW:1:MET:O	52:BW:2:GLU:HB3	2.16	0.46
52:BW:4:LYS:HE3	52:BW:6:ILE:HD11	1.97	0.46
52:BW:92:ARG:HH11	52:BW:92:ARG:HG2	1.81	0.46
54:BY:64:GLU:H	54:BY:64:GLU:CD	2.20	0.46
54:BY:76:CYS:SG	54:BY:77:PRO:HD2	2.57	0.46
1:CA:114:U:O2'	1:CA:115:G:H5'	2.15	0.46
1:CA:1218:C:OP2	14:CN:9:LYS:NZ	2.43	0.46
1:CA:959:A:H2	1:CA:1222:G:O4'	1.98	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1374:A:O2'	1:CA:1375:A:H5'	2.16	0.46
1:CA:1460:A:H2'	1:CA:1461:G:O4'	2.16	0.46
1:CA:333:G:H4'	20:CT:16:HIS:CE1	2.51	0.46
1:CA:706:A:C5	1:CA:707:C:H5	2.33	0.46
1:CA:790:A:H2'	1:CA:791:G:C8	2.51	0.46
1:CA:9:G:OP1	5:CE:122:GLU:HG3	2.15	0.46
2:CB:129:GLU:O	2:CB:130:ARG:HB2	2.16	0.46
7:CG:40:ALA:O	7:CG:41:ARG:C	2.54	0.46
7:CG:41:ARG:O	7:CG:42:ILE:C	2.53	0.46
8:CH:6:ILE:N	8:CH:6:ILE:CD1	2.80	0.46
9:CI:48:GLU:HA	9:CI:51:ARG:HD2	1.98	0.46
14:CN:26:ARG:NH1	14:CN:47:LEU:HD21	2.30	0.46
15:CO:66:LEU:N	15:CO:66:LEU:CD1	2.79	0.46
20:CT:71:THR:HG22	20:CT:72:LEU:HG	1.97	0.46
25:D0:53:MET:HE1	25:D0:57:PHE:HD1	1.81	0.46
26:D1:82:LEU:HG	26:D1:83:GLU:H	1.78	0.46
33:D8:9:GLY:O	33:D8:13:ARG:HG2	2.16	0.46
34:DA:819:A:C4	34:DA:1189:A:C2	3.04	0.46
34:DA:2162:G:H5'	34:DA:2171:A:C5'	2.44	0.46
34:DA:2508:G:H2'	34:DA:2509:G:H8	1.80	0.46
34:DA:271(C):C:H2'	34:DA:271(D):G:H8	1.81	0.46
34:DA:614:U:H4'	34:DA:614(C):A:N6	2.31	0.46
34:DA:613:G:C6	34:DA:614:U:C5	3.04	0.46
34:DA:774:A:O2'	34:DA:775:G:P	2.73	0.46
37:DD:257:LEU:C	37:DD:257:LEU:HD23	2.36	0.46
37:DD:35:LYS:HD3	37:DD:63:ARG:CA	2.44	0.46
38:DE:113:PHE:CE2	38:DE:158:GLY:HA2	2.51	0.46
38:DE:179:GLU:HB3	38:DE:181:LEU:CD2	2.46	0.46
39:DF:192:LEU:C	39:DF:192:LEU:HD23	2.36	0.46
41:DH:55:PRO:CG	41:DH:56:SER:N	2.79	0.46
41:DH:72:ILE:O	41:DH:74:ASN:N	2.49	0.46
43:DN:104:LYS:HG3	43:DN:117:PHE:CD1	2.51	0.46
44:DO:64:ARG:HD3	44:DO:101:PRO:CB	2.30	0.46
45:DP:113:LYS:HA	45:DP:129:ALA:O	2.16	0.46
46:DQ:20:ALA:HB2	46:DQ:99:PRO:CD	2.46	0.46
47:DR:11:ASN:CG	47:DR:12:ARG:H	2.18	0.46
50:DU:57:PHE:HB3	50:DU:61:TRP:CZ2	2.51	0.46
50:DU:62:ILE:HG13	50:DU:76:TYR:CZ	2.51	0.46
43:DN:40:PRO:CA	50:DU:64:ARG:NH2	2.78	0.46
52:DW:1:MET:HE2	52:DW:2:GLU:H	1.81	0.46
53:DX:55:ASN:HD22	53:DX:78:LYS:HE2	1.81	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DY:96:ILE:HG13	54:DY:99:CYS:HB2	1.96	0.46
55:DZ:33:LEU:O	55:DZ:34:ASN:HB2	2.15	0.46
1:AA:1064:G:OP2	1:AA:1386:G:H4'	2.15	0.45
1:AA:1239:A:H2'	1:AA:1298:C:H42	1.80	0.45
1:AA:135:C:H6	1:AA:135:C:O5'	1.99	0.45
1:AA:198:G:H2'	1:AA:199:G:H8	1.81	0.45
1:AA:285:G:O2'	1:AA:286:G:H5'	2.15	0.45
1:AA:358:U:H2'	1:AA:359:U:H6	1.82	0.45
1:AA:601:C:H2'	1:AA:602:A:H8	1.80	0.45
2:AB:153:ARG:O	2:AB:154:LEU:C	2.54	0.45
3:AC:77:ILE:C	3:AC:83:ARG:HB3	2.35	0.45
1:AA:619:U:C2	4:AD:135:LEU:CD2	2.99	0.45
6:AF:15:ASP:OD1	6:AF:17:SER:HB2	2.16	0.45
7:AG:109:ASN:HA	7:AG:119:ARG:HE	1.81	0.45
7:AG:140:ASP:HA	7:AG:143:ARG:NH1	2.28	0.45
8:AH:38:ILE:HG21	8:AH:111:ILE:HG12	1.98	0.45
10:AJ:36:GLY:O	10:AJ:38:ILE:HG23	2.16	0.45
15:AO:27:VAL:O	15:AO:28:GLN:C	2.54	0.45
22:AV:15:G:H22	22:AV:48:C:N4	2.03	0.45
22:AV:39:C:O2'	22:AV:40:C:H5'	2.16	0.45
28:B3:44:ARG:O	28:B3:48:GLU:HG2	2.15	0.45
32:B7:5:TRP:NE1	32:B7:7:PRO:HG3	2.31	0.45
34:BA:1028:A:N6	34:BA:1125:G:H2'	2.31	0.45
34:BA:1478:G:O2'	34:BA:1558:A:H2	1.99	0.45
34:BA:1763:G:H4'	34:BA:1763:G:OP1	2.16	0.45
34:BA:1899:G:H21	34:BA:1902:C:H5	1.63	0.45
34:BA:2545:G:H2'	34:BA:2546:U:O4'	2.15	0.45
34:BA:2610:C:O2'	34:BA:2611:U:P	2.74	0.45
34:BA:2779:U:O2	34:BA:2779:U:O4'	2.33	0.45
34:BA:27:G:H22	34:BA:512:G:C2'	2.16	0.45
34:BA:784:A:N6	34:BA:2072:G:O2'	2.49	0.45
34:BA:94:C:O2	34:BA:94:C:H2'	2.15	0.45
35:BB:32:C:C2	35:BB:51:G:C2	3.04	0.45
38:BE:51:PHE:C	38:BE:74:PRO:HB2	2.36	0.45
38:BE:52:LEU:HD22	38:BE:76:ARG:HD2	1.98	0.45
38:BE:87:GLU:O	38:BE:87:GLU:HG3	2.17	0.45
39:BF:62:ARG:HH21	39:BF:64:ILE:HA	1.81	0.45
40:BG:153:ARG:CZ	40:BG:153:ARG:HB3	2.45	0.45
40:BG:154:GLY:O	40:BG:155:MET:HB3	2.16	0.45
40:BG:15:VAL:HG12	40:BG:19:LEU:CD1	2.46	0.45
42:BI:79:ILE:CG1	42:BI:140:LEU:HD21	2.46	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BI:47:LEU:HD12	42:BI:50:ARG:HH21	1.81	0.45
43:BN:39:ARG:HD3	43:BN:39:ARG:O	2.16	0.45
48:BS:46:VAL:HG12	48:BS:47:THR:N	2.31	0.45
48:BS:76:LYS:O	48:BS:79:ALA:HB3	2.16	0.45
49:BT:3:ARG:C	49:BT:5:ALA:N	2.68	0.45
52:BW:73:ALA:HB3	52:BW:106:ILE:HD11	1.97	0.45
1:CA:1064:G:H21	1:CA:1190:G:H2'	1.79	0.45
1:CA:1372:U:O2'	1:CA:1373:G:H5'	2.16	0.45
1:CA:15:G:C4'	5:CE:24:ARG:NH2	2.79	0.45
1:CA:360:A:H2'	1:CA:361:G:O4'	2.16	0.45
1:CA:397:A:H5'	1:CA:398:C:OP1	2.16	0.45
1:CA:537:G:OP1	12:CL:113:ARG:NH2	2.48	0.45
1:CA:693:G:H1'	7:CG:82:GLY:HA3	1.98	0.45
1:CA:980:C:H3'	1:CA:981:U:H6	1.80	0.45
2:CB:162:ILE:O	2:CB:162:ILE:HG13	2.16	0.45
2:CB:213:LEU:HD22	2:CB:214:ILE:HD13	1.98	0.45
4:CD:126:ILE:CG2	4:CD:127:THR:N	2.79	0.45
1:CA:1348:U:H4'	9:CI:120:ARG:HH11	1.80	0.45
10:CJ:36:GLY:O	10:CJ:38:ILE:HG23	2.16	0.45
11:CK:33:THR:HB	11:CK:38:ASN:O	2.16	0.45
11:CK:87:THR:HG22	11:CK:88:GLY:N	2.32	0.45
16:CP:58:TYR:O	16:CP:61:SER:N	2.49	0.45
17:CQ:36:ILE:HG13	17:CQ:36:ILE:O	2.16	0.45
1:CA:192:U:C4'	20:CT:103:GLY:HA2	2.46	0.45
22:CV:39:C:H2'	22:CV:40:C:H6	1.81	0.45
34:DA:1435:G:H2'	34:DA:1436:G:O4'	2.16	0.45
34:DA:1495:A:C2	34:DA:1496:A:C2	3.04	0.45
34:DA:1508:A:H2'	34:DA:1509:C:OP1	2.16	0.45
34:DA:149:A:H2'	34:DA:150:C:O4'	2.16	0.45
34:DA:1992:G:O2'	34:DA:1993:U:P	2.75	0.45
34:DA:2193:G:C4	34:DA:2194:G:C8	3.04	0.45
34:DA:2328:A:H2'	34:DA:2329:G:C8	2.51	0.45
34:DA:2723:C:O2'	34:DA:2724:C:H5'	2.16	0.45
34:DA:2881:C:H2'	34:DA:2882:A:H8	1.81	0.45
34:DA:708:C:H42	34:DA:723:G:H1	1.63	0.45
35:DB:48:A:H2'	35:DB:49:C:C6	2.50	0.45
36:DC:18:LYS:HD3	36:DC:19:VAL:N	2.31	0.45
36:DC:40:THR:HG23	36:DC:40:THR:O	2.15	0.45
36:DC:62:VAL:O	36:DC:63:SER:C	2.54	0.45
37:DD:24:ILE:HD11	37:DD:84:TYR:N	2.31	0.45
38:DE:197:ILE:CG1	38:DE:199:ARG:HH12	2.29	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DE:197:ILE:HG13	38:DE:199:ARG:NH1	2.31	0.45
38:DE:74:PRO:O	38:DE:76:ARG:N	2.49	0.45
42:DI:29:TYR:CE1	42:DI:33:ARG:NE	2.78	0.45
43:DN:104:LYS:C	43:DN:106:MET:H	2.19	0.45
43:DN:15:LEU:CB	43:DN:134:ARG:HB2	2.41	0.45
43:DN:66:LYS:HB2	43:DN:87:LEU:HD12	1.98	0.45
33:D8:12:LYS:HA	45:DP:65:ARG:HD2	1.98	0.45
46:DQ:32:TYR:N	46:DQ:32:TYR:CD1	2.85	0.45
46:DQ:43:THR:HG23	46:DQ:46:GLN:CD	2.36	0.45
47:DR:107:ASP:C	47:DR:107:ASP:OD2	2.53	0.45
48:DS:90:GLY:C	48:DS:92:TYR:N	2.66	0.45
49:DT:42:ILE:O	49:DT:43:GLN:C	2.52	0.45
50:DU:92:ARG:C	50:DU:94:ASN:H	2.19	0.45
53:DX:36:LYS:NZ	53:DX:38:GLU:O	2.37	0.45
55:DZ:61:LEU:HD12	55:DZ:65:GLN:CG	2.47	0.45
1:AA:1084:G:H5'	1:AA:1102:A:OP2	2.16	0.45
1:AA:192:U:C4'	20:AT:103:GLY:HA2	2.47	0.45
1:AA:197:A:N6	1:AA:221:C:C5'	2.79	0.45
1:AA:197:A:C5	1:AA:221:C:H4'	2.50	0.45
2:AB:172:ILE:HD12	2:AB:172:ILE:N	2.31	0.45
3:AC:127:ARG:HH11	3:AC:127:ARG:HG2	1.81	0.45
3:AC:70:VAL:O	3:AC:105:GLU:HA	2.16	0.45
4:AD:159:ARG:O	4:AD:161:ASN:N	2.49	0.45
7:AG:45:ASP:O	7:AG:49:ILE:HG12	2.16	0.45
8:AH:45:ILE:HB	8:AH:62:TYR:O	2.17	0.45
12:AL:60:LEU:HD23	12:AL:64:TYR:HB3	1.98	0.45
13:AM:83:ASP:OD2	13:AM:84:ILE:N	2.48	0.45
14:AN:6:LEU:HB3	14:AN:23:ARG:HH22	1.81	0.45
1:AA:1218:C:OP1	14:AN:9:LYS:HE3	2.16	0.45
16:AP:21:VAL:HG23	16:AP:21:VAL:O	2.16	0.45
28:B3:59:VAL:HG12	28:B3:60:GLU:N	2.31	0.45
33:B8:18:ALA:C	33:B8:20:GLY:H	2.20	0.45
34:BA:1262:A:OP1	52:BW:99:ARG:NH1	2.46	0.45
34:BA:1570:A:H2'	34:BA:1571:A:C8	2.51	0.45
34:BA:528:A:H2	34:BA:2043:C:H4'	1.75	0.45
34:BA:2468:G:H5'	46:BQ:120:ILE:HD12	1.98	0.45
34:BA:2531:A:C2	34:BA:2658:C:O2	2.70	0.45
34:BA:2711:A:H5''	34:BA:2712:U:H5'	1.97	0.45
34:BA:2808:U:H2'	34:BA:2809:A:C5'	2.46	0.45
34:BA:303:U:H2'	34:BA:304:G:H8	1.82	0.45
34:BA:535:C:O3'	50:BU:53:ARG:NH1	2.49	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:118:ALA:HA	39:BF:123:LEU:HB3	1.97	0.45
41:BH:106:THR:CG2	41:BH:112:PRO:HB3	2.41	0.45
41:BH:158:HIS:NE2	41:BH:169:VAL:C	2.70	0.45
42:BI:94:ALA:HA	42:BI:97:ILE:HB	1.98	0.45
43:BN:42:TRP:HA	43:BN:42:TRP:CE3	2.52	0.45
45:BP:10:PRO:CD	45:BP:11:GLY:H	2.29	0.45
45:BP:93:GLY:O	45:BP:123:LEU:HB2	2.16	0.45
46:BQ:7:MET:O	46:BQ:10:ARG:NH2	2.48	0.45
46:BQ:127:ILE:CG2	46:BQ:128:LYS:H	2.16	0.45
46:BQ:8:LYS:HG3	46:BQ:9:TYR:H	1.81	0.45
48:BS:28:VAL:C	48:BS:89:ARG:HD2	2.37	0.45
50:BU:79:PHE:HE1	50:BU:106:PHE:CZ	2.34	0.45
50:BU:74:LEU:HD12	50:BU:74:LEU:C	2.37	0.45
51:BV:88:ARG:NH1	51:BV:88:ARG:HG3	2.32	0.45
52:BW:54:ALA:C	52:BW:107:LEU:HD22	2.37	0.45
52:BW:62:HIS:O	52:BW:63:ASP:C	2.54	0.45
46:BQ:141:GLN:OXT	55:BZ:98:MET:HB2	2.16	0.45
1:CA:1121:U:O2'	1:CA:1122:U:H5'	2.16	0.45
1:CA:505:G:C6	1:CA:535:A:C2	3.04	0.45
5:CE:78:HIS:CE1	5:CE:142:LEU:HD23	2.52	0.45
5:CE:94:ALA:CB	5:CE:98:THR:HG21	2.46	0.45
7:CG:69:VAL:CA	7:CG:138:LYS:HD2	2.39	0.45
7:CG:36:LYS:O	7:CG:39:ALA:N	2.49	0.45
10:CJ:48:THR:CB	10:CJ:62:HIS:HB3	2.45	0.45
13:CM:70:LEU:C	13:CM:70:LEU:CD2	2.85	0.45
15:CO:18:PHE:HD1	15:CO:19:PRO:O	1.98	0.45
17:CQ:52:LYS:O	17:CQ:55:ASP:OD2	2.34	0.45
20:CT:23:ARG:O	20:CT:26:ASN:ND2	2.49	0.45
20:CT:84:LEU:O	20:CT:88:VAL:HG23	2.15	0.45
20:CT:87:LYS:HG3	20:CT:91:LEU:CD1	2.46	0.45
26:D1:28:GLY:C	26:D1:30:VAL:N	2.69	0.45
34:DA:1019:U:N3	34:DA:1142(A):A:N6	2.58	0.45
34:DA:1394:U:C4	34:DA:1395:A:C6	3.04	0.45
34:DA:1467:C:H42	34:DA:1525:G:H1	1.63	0.45
34:DA:1596:A:O2'	34:DA:1597:A:H5'	2.16	0.45
34:DA:2124:G:O2'	34:DA:2125:G:H5'	2.16	0.45
34:DA:221:A:O2'	34:DA:222:A:OP2	2.34	0.45
34:DA:2287:A:C2	34:DA:2346:A:H2	2.33	0.45
34:DA:2406:U:C2	45:DP:72:PRO:HB2	2.50	0.45
34:DA:2574:G:H2'	34:DA:2575:C:C6	2.51	0.45
34:DA:2586:C:C5	34:DA:2608:G:N2	2.84	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2853:C:O2'	34:DA:2854:G:H5'	2.16	0.45
34:DA:71:A:C8	34:DA:71:A:H5'	2.49	0.45
34:DA:795:C:H2'	34:DA:796:C:C6	2.51	0.45
34:DA:974:G:C5	34:DA:989:G:C2	3.04	0.45
35:DB:21:G:O2'	35:DB:22:U:P	2.74	0.45
36:DC:68:LEU:CD2	36:DC:179:SER:HA	2.45	0.45
38:DE:197:ILE:HG13	38:DE:199:ARG:HH12	1.81	0.45
34:DA:322:A:P	39:DF:169:ASN:HD22	2.39	0.45
39:DF:18:ARG:O	39:DF:19:GLU:HB3	2.17	0.45
39:DF:63:LYS:HE3	39:DF:67:GLN:HB2	1.98	0.45
39:DF:68:LYS:O	39:DF:69:HIS:HD2	2.00	0.45
34:DA:2313:C:C4'	40:DG:40:ASN:ND2	2.79	0.45
40:DG:63:ILE:HD12	40:DG:63:ILE:C	2.37	0.45
42:DI:5:LEU:HD11	42:DI:12:LEU:HB2	1.97	0.45
48:DS:89:ARG:HB3	48:DS:92:TYR:HB3	1.97	0.45
50:DU:37:GLU:O	50:DU:40:PHE:HB2	2.16	0.45
51:DV:22:VAL:O	51:DV:22:VAL:CG1	2.64	0.45
52:DW:62:HIS:O	52:DW:63:ASP:C	2.54	0.45
52:DW:86:LEU:HD12	52:DW:87:PRO:CD	2.46	0.45
53:DX:21:PHE:CE1	53:DX:26:TYR:HB3	2.52	0.45
34:DA:329:G:N1	54:DY:19:LYS:HE3	2.17	0.45
54:DY:28:LYS:C	54:DY:29:GLU:OE1	2.55	0.45
34:DA:85:G:O5'	54:DY:30:VAL:HB	2.15	0.45
35:DB:75:G:N2	55:DZ:87:ASP:OD2	2.49	0.45
1:AA:1496:C:H2'	1:AA:1497:G:C8	2.51	0.45
1:AA:200:G:H1	1:AA:217:C:N4	2.14	0.45
1:AA:423:G:H2'	1:AA:424:G:O4'	2.16	0.45
1:AA:967:C:H2'	1:AA:968:A:N7	2.31	0.45
2:AB:129:GLU:O	2:AB:130:ARG:HB2	2.16	0.45
2:AB:155:LEU:HD22	2:AB:155:LEU:N	2.32	0.45
3:AC:105:GLU:CG	3:AC:106:VAL:H	2.17	0.45
3:AC:91:LEU:O	3:AC:95:THR:HB	2.15	0.45
8:AH:6:ILE:HB	8:AH:85:ARG:HH12	1.82	0.45
9:AI:36:TYR:CD2	9:AI:37:PHE:CE2	3.05	0.45
13:AM:67:GLU:CG	13:AM:68:GLY:N	2.79	0.45
13:AM:75:ALA:CB	13:AM:79:LYS:HE3	2.46	0.45
16:AP:19:ILE:HG22	16:AP:36:ILE:HG13	1.97	0.45
17:AQ:18:THR:HG22	17:AQ:19:VAL:N	2.31	0.45
18:AR:31:LEU:H	18:AR:31:LEU:HD23	1.82	0.45
26:B1:27:GLU:OE2	26:B1:33:LYS:N	2.50	0.45
30:B5:57:VAL:CG2	30:B5:58:LEU:H	2.18	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B5:4:HIS:CB	30:B5:5:PRO:CD	2.90	0.45
34:BA:1435:G:H2'	34:BA:1436:G:O4'	2.16	0.45
34:BA:1708:C:C2	34:BA:1709:U:C5	3.05	0.45
34:BA:1967:C:H2'	34:BA:1968:G:H5'	1.98	0.45
34:BA:1678:G:H22	34:BA:1989:G:H22	1.63	0.45
34:BA:2839:G:H2'	34:BA:2840:C:C6	2.51	0.45
34:BA:329:G:OP2	54:BY:71:LYS:HE3	2.16	0.45
34:BA:407:G:O2'	34:BA:408:G:H5'	2.16	0.45
34:BA:613:G:H5'	34:BA:613:G:C8	2.45	0.45
34:BA:756:C:O2'	34:BA:757:U:H5'	2.16	0.45
37:BD:106:ILE:CD1	37:BD:106:ILE:C	2.83	0.45
34:BA:2599:G:OP2	37:BD:236:GLY:N	2.50	0.45
38:BE:117:MET:HE3	38:BE:124:GLY:HA3	1.99	0.45
40:BG:173:LEU:O	40:BG:178:PHE:HB2	2.17	0.45
41:BH:118:PRO:CG	41:BH:121:ILE:HB	2.38	0.45
42:BI:139:GLN:HG2	42:BI:140:LEU:N	2.31	0.45
44:BO:101:PRO:O	44:BO:102:VAL:CG1	2.52	0.45
45:BP:46:LYS:CG	45:BP:52:GLU:HG2	2.46	0.45
47:BR:104:ARG:HD3	47:BR:111:LEU:HD11	1.99	0.45
47:BR:100:LEU:HD23	47:BR:112:ALA:CA	2.45	0.45
51:BV:32:THR:O	51:BV:63:GLY:HA2	2.17	0.45
54:BY:28:LYS:CB	54:BY:37:VAL:HB	2.46	0.45
1:CA:1079:G:H2'	1:CA:1080:A:C8	2.51	0.45
1:CA:1191:A:H2'	1:CA:1192:C:C6	2.52	0.45
1:CA:1456:G:H3'	1:CA:1456:G:N3	2.31	0.45
1:CA:433:C:O2'	1:CA:434:U:H5'	2.16	0.45
1:CA:445:G:H2'	1:CA:446:G:C8	2.50	0.45
1:CA:763:G:H2'	1:CA:764:C:H6	1.81	0.45
1:CA:824:C:O2'	1:CA:825:G:H5'	2.17	0.45
1:CA:830:G:O2'	1:CA:831:U:H5'	2.17	0.45
1:CA:832:C:O2'	1:CA:833:U:P	2.74	0.45
1:CA:9:G:O2'	1:CA:10:A:H5'	2.17	0.45
2:CB:153:ARG:O	2:CB:154:LEU:C	2.54	0.45
5:CE:146:ALA:C	5:CE:148:VAL:N	2.69	0.45
5:CE:145:LYS:O	5:CE:149:GLU:HG2	2.16	0.45
8:CH:119:LEU:HB3	8:CH:123:GLU:HB2	1.99	0.45
12:CL:42:THR:HG23	12:CL:42:THR:O	2.15	0.45
13:CM:75:ALA:CB	13:CM:79:LYS:HE3	2.47	0.45
1:CA:1202:G:C4	14:CN:42:ILE:HG21	2.52	0.45
3:CC:22:TRP:CZ2	14:CN:54:PRO:HG2	2.52	0.45
15:CO:3:ILE:N	15:CO:3:ILE:HD13	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:92:LEU:C	20:CT:94:ALA:H	2.19	0.45
21:CU:2:GLY:O	21:CU:4:GLY:N	2.48	0.45
26:D1:44:PRO:O	26:D1:44:PRO:HG2	2.15	0.45
27:D2:49:LYS:HE3	27:D2:53:LEU:HD13	1.98	0.45
34:DA:1021:A:C3'	34:DA:1021:A:C8	2.98	0.45
34:DA:1365:A:C4	34:DA:1366:A:C8	3.04	0.45
34:DA:1494:A:OP1	34:DA:1494:A:H4'	2.17	0.45
34:DA:2004:G:H2'	34:DA:2005:A:O4'	2.16	0.45
34:DA:2531:A:C2	34:DA:2658:C:O2	2.68	0.45
34:DA:2869:G:O3'	47:DR:61:HIS:HE1	1.98	0.45
34:DA:292:C:C2	34:DA:349:G:C2	3.04	0.45
34:DA:440:G:N2	39:DF:46:ARG:NH2	2.64	0.45
34:DA:912:C:H2'	34:DA:913:U:H6	1.79	0.45
37:DD:255:LYS:C	37:DD:255:LYS:HE3	2.37	0.45
38:DE:197:ILE:HD11	38:DE:199:ARG:HH12	1.80	0.45
39:DF:103:LYS:C	39:DF:105:VAL:N	2.68	0.45
40:DG:86:MET:CB	40:DG:87:PRO:CD	2.91	0.45
42:DI:120:ILE:HG22	42:DI:121:LYS:N	2.31	0.45
42:DI:115:ALA:HB3	42:DI:129:THR:O	2.16	0.45
43:DN:31:ALA:O	43:DN:34:LEU:HB2	2.16	0.45
44:DO:1:MET:HB2	44:DO:32:TYR:CD2	2.51	0.45
46:DQ:36:ALA:O	46:DQ:100:GLY:N	2.49	0.45
49:DT:38:ASN:ND2	49:DT:40:THR:OG1	2.48	0.45
54:DY:31:LEU:CB	54:DY:32:PRO:HA	2.42	0.45
54:DY:81:LYS:CE	54:DY:97:ARG:HG3	2.46	0.45
55:DZ:177:PRO:C	55:DZ:178:GLU:HG2	2.37	0.45
55:DZ:5:LEU:HA	55:DZ:5:LEU:HD23	1.76	0.45
1:AA:1057:G:C5	1:AA:1204:A:C2	3.04	0.45
1:AA:1226:C:OP2	13:AM:103:THR:HG21	2.16	0.45
1:AA:1228:C:P	13:AM:108:ARG:HH22	2.39	0.45
1:AA:328:C:H4'	1:AA:329:A:O5'	2.15	0.45
1:AA:404:U:H2'	1:AA:405:U:C6	2.52	0.45
1:AA:588:G:H2'	1:AA:589:C:H6	1.81	0.45
2:AB:77:ALA:HB2	2:AB:211:ILE:CD1	2.44	0.45
3:AC:180:ALA:HB1	3:AC:182:ILE:HG13	1.98	0.45
3:AC:48:TYR:C	3:AC:50:ALA:H	2.19	0.45
3:AC:58:GLU:H	3:AC:65:ALA:CB	2.25	0.45
7:AG:71:PRO:HG3	7:AG:103:TRP:CH2	2.52	0.45
11:AK:18:ARG:HG2	11:AK:20:TYR:CE1	2.51	0.45
12:AL:58:VAL:N	12:AL:66:VAL:O	2.48	0.45
12:AL:89:ARG:HB2	12:AL:89:ARG:CZ	2.47	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:72:A:H3'	22:AV:73:A:H5''	1.99	0.45
26:B1:47:GLN:NE2	34:BA:2090:G:N3	2.65	0.45
31:B6:20:ASN:HD22	31:B6:21:TYR:N	2.04	0.45
33:B8:39:LYS:HG2	33:B8:39:LYS:O	2.17	0.45
33:B8:53:PRO:HG2	33:B8:54:GLU:N	2.30	0.45
34:BA:1232:G:H2'	34:BA:1233:C:C6	2.52	0.45
34:BA:1317:A:H2'	34:BA:1318:C:C6	2.46	0.45
34:BA:1341:U:C1'	53:BX:77:LYS:HE2	2.46	0.45
34:BA:1365:A:C4	34:BA:1366:A:C8	3.04	0.45
34:BA:1446:C:O2'	34:BA:1447:G:H5'	2.16	0.45
34:BA:1748:G:C8	34:BA:1748:G:H5'	2.47	0.45
34:BA:1775:U:C2'	34:BA:1776:G:O5'	2.65	0.45
34:BA:1783:A:C2	34:BA:2587:A:C5	3.04	0.45
34:BA:528:A:C2	34:BA:2043:C:C5'	3.00	0.45
34:BA:2193:G:C4	34:BA:2194:G:C8	3.05	0.45
34:BA:2508:G:H2'	34:BA:2509:G:H8	1.82	0.45
34:BA:2516:G:C5	34:BA:2517:C:C4	3.04	0.45
34:BA:2658:C:O2	34:BA:2658:C:C2'	2.63	0.45
34:BA:2702:U:HO2'	34:BA:2703:C:H6	1.63	0.45
34:BA:2723:C:H5''	47:BR:2:ARG:HD3	1.91	0.45
34:BA:2808:U:O2'	34:BA:2809:A:H5'	2.16	0.45
34:BA:2821:A:O2'	34:BA:2822:G:H5'	2.17	0.45
34:BA:322:A:H3'	39:BF:169:ASN:ND2	2.28	0.45
37:BD:105:ILE:O	37:BD:106:ILE:C	2.55	0.45
37:BD:25:THR:CB	37:BD:82:ILE:H	2.30	0.45
38:BE:97:LYS:N	38:BE:100:GLU:OE1	2.47	0.45
41:BH:44:VAL:O	41:BH:46:GLU:OE2	2.35	0.45
42:BI:92:VAL:HG22	42:BI:97:ILE:HG13	1.98	0.45
43:BN:33:LEU:HD23	43:BN:52:VAL:HG21	1.95	0.45
34:BA:2393:A:O5'	45:BP:62:LEU:HD12	2.17	0.45
45:BP:66:GLY:O	45:BP:68:GLN:N	2.49	0.45
45:BP:95:VAL:HG23	45:BP:95:VAL:O	2.15	0.45
46:BQ:114:ALA:O	46:BQ:117:ALA:HB3	2.16	0.45
48:BS:53:SER:O	48:BS:56:LEU:HB3	2.16	0.45
49:BT:65:LYS:NZ	49:BT:66:VAL:HG23	2.32	0.45
53:BX:14:SER:O	53:BX:15:GLU:C	2.55	0.45
54:BY:11:ASP:O	54:BY:27:VAL:HA	2.16	0.45
55:BZ:97:GLU:CB	55:BZ:125:LEU:HD21	2.47	0.45
1:CA:1204:A:H2'	1:CA:1205:U:O4'	2.16	0.45
1:CA:1226:C:OP2	13:CM:103:THR:HG21	2.17	0.45
1:CA:1287:A:N6	1:CA:1288:A:N6	2.64	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1300:G:O2'	1:CA:1301:U:P	2.73	0.45
1:CA:1349:A:C4	1:CA:1350:A:C8	3.05	0.45
1:CA:1470:G:O2'	1:CA:1471:G:H5'	2.15	0.45
1:CA:197:A:N6	1:CA:221:C:C5'	2.80	0.45
1:CA:287:U:O2'	1:CA:288:A:H5'	2.16	0.45
1:CA:860:A:H2'	1:CA:861:G:O4'	2.17	0.45
1:CA:953:G:H5'	1:CA:965:A:H61	1.81	0.45
2:CB:27:LYS:C	2:CB:29:ALA:H	2.20	0.45
3:CC:48:TYR:C	3:CC:50:ALA:H	2.19	0.45
4:CD:187:ARG:HH11	4:CD:187:ARG:HG2	1.81	0.45
4:CD:61:LYS:HE3	4:CD:207:TYR:OH	2.17	0.45
1:CA:737:A:O2'	6:CF:72:VAL:HG11	2.15	0.45
9:CI:115:GLY:C	9:CI:116:LYS:HG2	2.37	0.45
13:CM:8:GLU:OE1	13:CM:22:ILE:HA	2.17	0.45
13:CM:58:GLU:HA	13:CM:58:GLU:OE1	2.16	0.45
22:CV:17:C:H3'	22:CV:17(A):U:C6	2.52	0.45
25:D0:2:ALA:HB1	34:DA:2494:G:OP2	2.15	0.45
27:D2:49:LYS:HG2	27:D2:53:LEU:HB2	1.99	0.45
33:D8:32:LEU:HD23	33:D8:35:GLN:C	2.37	0.45
33:D8:39:LYS:HG2	33:D8:39:LYS:O	2.16	0.45
34:DA:1703:G:H2'	34:DA:1704:G:H8	1.79	0.45
34:DA:2040:C:C2	34:DA:2041:U:C6	3.05	0.45
34:DA:2041:U:C2	34:DA:2042:A:C8	3.05	0.45
34:DA:2087:G:O2'	34:DA:2088:G:H5'	2.16	0.45
34:DA:271(G):C:O2'	34:DA:271(H):G:H5'	2.15	0.45
34:DA:570:G:H2'	34:DA:2030:A:C5	2.52	0.45
34:DA:986:C:O2'	34:DA:987:G:H5'	2.17	0.45
35:DB:38:C:H42	35:DB:44:G:H1	1.64	0.45
35:DB:52:A:O2'	35:DB:53:A:H8	2.00	0.45
36:DC:196:LEU:C	36:DC:198:ALA:N	2.70	0.45
37:DD:117:VAL:HG22	37:DD:118:VAL:N	2.32	0.45
38:DE:132:HIS:CD2	38:DE:135:HIS:NE2	2.84	0.45
39:DF:11:VAL:HG12	39:DF:12:LEU:HG	1.99	0.45
34:DA:320:A:C4	39:DF:136:THR:HG21	2.52	0.45
40:DG:135:LEU:HB2	40:DG:155:MET:O	2.17	0.45
40:DG:11:TYR:HA	40:DG:15:VAL:HG23	1.98	0.45
40:DG:125:PHE:CB	40:DG:166:ASP:HB2	2.38	0.45
40:DG:125:PHE:CZ	40:DG:173:LEU:HD12	2.51	0.45
41:DH:47:GLU:C	41:DH:49:VAL:H	2.19	0.45
41:DH:70:THR:O	41:DH:73:ALA:HB3	2.16	0.45
43:DN:128:HIS:O	43:DN:128:HIS:CG	2.69	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DN:19:GLU:HB2	43:DN:59:LYS:CB	2.46	0.45
30:D5:44:THR:HG21	47:DR:101:ALA:HB2	1.99	0.45
47:DR:75:LEU:HD13	47:DR:75:LEU:O	2.17	0.45
48:DS:56:LEU:HD23	48:DS:56:LEU:C	2.37	0.45
49:DT:29:ARG:CG	49:DT:30:VAL:N	2.79	0.45
50:DU:66:ASN:O	50:DU:68:ALA:N	2.49	0.45
51:DV:66:ARG:HH11	51:DV:66:ARG:HG3	1.81	0.45
51:DV:67:GLY:O	51:DV:68:LYS:C	2.55	0.45
52:DW:24:ILE:HD12	52:DW:24:ILE:C	2.37	0.45
52:DW:29:LEU:CD2	52:DW:33:ARG:HH21	2.24	0.45
53:DX:14:SER:O	53:DX:17:ALA:HB3	2.16	0.45
54:DY:14:LEU:HD11	54:DY:22:GLY:HA2	1.98	0.45
1:AA:1466:C:C2'	1:AA:1467:G:H5'	2.46	0.45
1:AA:1471:G:O2'	1:AA:1472:U:H5'	2.17	0.45
1:AA:389:A:C2'	1:AA:390:C:C5'	2.94	0.45
1:AA:938:A:C6	1:AA:939:G:C5	3.04	0.45
2:AB:219:VAL:O	2:AB:222:ILE:HB	2.16	0.45
2:AB:74:LYS:HG3	2:AB:77:ALA:HB3	1.99	0.45
3:AC:195:VAL:C	3:AC:196:LEU:HD22	2.36	0.45
4:AD:110:PHE:N	4:AD:110:PHE:CD1	2.84	0.45
4:AD:134:ASP:OD2	4:AD:135:LEU:HD22	2.16	0.45
7:AG:84:ASN:N	7:AG:84:ASN:HD22	2.13	0.45
11:AK:114:VAL:O	11:AK:114:VAL:HG13	2.17	0.45
14:AN:36:PHE:CG	14:AN:37:PHE:N	2.84	0.45
16:AP:49:LEU:HD12	16:AP:50:LYS:H	1.80	0.45
18:AR:40:LEU:O	18:AR:42:ARG:N	2.50	0.45
20:AT:89:ARG:HH21	20:AT:89:ARG:HG3	1.81	0.45
31:B6:19:ARG:O	31:B6:20:ASN:HB3	2.16	0.45
33:B8:32:LEU:HB3	33:B8:35:GLN:N	2.18	0.45
34:BA:1484:G:H2'	34:BA:1485:G:C4'	2.46	0.45
34:BA:1622:G:C2	34:BA:1623:G:C8	3.04	0.45
34:BA:1639:U:H2'	34:BA:1640:C:C5'	2.46	0.45
34:BA:2291:U:H2'	34:BA:2292:C:C6	2.51	0.45
34:BA:2588:G:O6	34:BA:2607:G:C6	2.69	0.45
34:BA:271(C):C:H2'	34:BA:271(D):G:H8	1.82	0.45
34:BA:290:G:O2'	34:BA:291:C:H5'	2.16	0.45
34:BA:440:G:N2	39:BF:46:ARG:NH2	2.64	0.45
35:BB:38:C:O2	35:BB:48:A:H1'	2.17	0.45
36:BC:168:THR:CA	36:BC:173:ALA:HB2	2.31	0.45
36:BC:18:LYS:HD3	36:BC:19:VAL:N	2.31	0.45
37:BD:34:VAL:O	37:BD:35:LYS:CB	2.64	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BD:85:ASP:OD1	37:BD:87:ASN:ND2	2.49	0.45
38:BE:107:THR:O	38:BE:190:GLY:HA2	2.16	0.45
39:BF:108:LYS:HD3	39:BF:108:LYS:HA	1.82	0.45
40:BG:149:VAL:HG23	40:BG:149:VAL:O	2.15	0.45
43:BN:46:VAL:CG1	43:BN:47:ALA:N	2.69	0.45
44:BO:79:PHE:CD2	49:BT:72:VAL:HG22	2.52	0.45
45:BP:108:LYS:O	45:BP:110:TYR:N	2.50	0.45
34:BA:832:G:OP1	45:BP:40:SER:HB3	2.16	0.45
49:BT:10:VAL:O	49:BT:11:GLU:C	2.54	0.45
49:BT:28:VAL:O	49:BT:28:VAL:HG12	2.15	0.45
49:BT:6:LEU:HD23	49:BT:6:LEU:O	2.17	0.45
30:B5:20:ARG:NH1	52:BW:15:ARG:NE	2.64	0.45
54:BY:86:ARG:NH2	54:BY:95:LYS:HZ3	2.15	0.45
55:BZ:121:HIS:O	55:BZ:122:ARG:C	2.54	0.45
55:BZ:19:ARG:HH11	55:BZ:19:ARG:HG2	1.80	0.45
1:CA:1057:G:O2'	1:CA:1058:G:H5'	2.17	0.45
1:CA:1119:C:O2'	1:CA:1120:G:H5'	2.17	0.45
1:CA:636:U:H2'	1:CA:637:G:C8	2.51	0.45
1:CA:977:A:HO2'	1:CA:978:A:H5'	1.82	0.45
2:CB:216:SER:C	2:CB:218:ALA:N	2.69	0.45
3:CC:206:GLU:HG2	3:CC:207:VAL:CG2	2.45	0.45
6:CF:13:ASN:ND2	6:CF:55:ASP:OD1	2.50	0.45
9:CI:10:ARG:HG2	9:CI:104:ARG:O	2.16	0.45
11:CK:95:ILE:O	11:CK:98:LEU:N	2.50	0.45
13:CM:49:THR:HG22	13:CM:51:ALA:N	2.30	0.45
14:CN:48:ALA:CA	14:CN:53:LEU:HD12	2.47	0.45
15:CO:25:THR:O	15:CO:26:GLU:C	2.54	0.45
15:CO:43:LEU:C	15:CO:45:VAL:N	2.70	0.45
20:CT:73:HIS:O	20:CT:74:LYS:O	2.34	0.45
22:CV:44:A:H2'	22:CV:45:G:O4'	2.17	0.45
1:CA:1397:C:N4	24:CX:22:A:H3'	2.31	0.45
32:D7:34:ARG:O	32:D7:35:ARG:C	2.55	0.45
34:DA:9:U:HO2'	34:DA:10:G:P	2.40	0.45
34:DA:1122:G:C2	34:DA:1123:C:C6	3.04	0.45
34:DA:1262:A:OP1	52:DW:99:ARG:NH1	2.48	0.45
34:DA:1484:G:H2'	34:DA:1485:G:C4'	2.46	0.45
34:DA:157:U:H5''	34:DA:171:G:H22	1.81	0.45
34:DA:2312:U:H2'	34:DA:2313:C:H5'	1.98	0.45
34:DA:2475:C:H42	34:DA:2529:G:N2	2.15	0.45
34:DA:2685:G:N3	34:DA:2725:A:C2	2.84	0.45
34:DA:1629:U:O2	34:DA:2698:U:H5''	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2869:G:H2'	34:DA:2870:C:O4'	2.16	0.45
34:DA:503:A:H4'	34:DA:505:A:H5''	1.98	0.45
34:DA:825:C:H42	34:DA:832:G:H1	1.65	0.45
37:DD:35:LYS:CD	37:DD:104:TYR:CD1	2.98	0.45
38:DE:109:LYS:CB	47:DR:2:ARG:NH1	2.72	0.45
39:DF:25:PRO:CB	39:DF:119:ARG:HD3	2.46	0.45
39:DF:74:ARG:HG2	39:DF:74:ARG:O	2.15	0.45
40:DG:8:LYS:HZ2	40:DG:12:TYR:HE1	1.60	0.45
40:DG:48:GLU:CG	40:DG:49:ASP:N	2.76	0.45
41:DH:118:PRO:CG	41:DH:121:ILE:HB	2.37	0.45
41:DH:158:HIS:NE2	41:DH:169:VAL:C	2.70	0.45
42:DI:29:TYR:HE1	42:DI:33:ARG:HE	1.54	0.45
45:DP:126:VAL:HG22	45:DP:145:PRO:CB	2.47	0.45
45:DP:131:SER:C	45:DP:133:SER:H	2.19	0.45
51:DV:61:VAL:O	51:DV:62:LEU:HD23	2.16	0.45
54:DY:31:LEU:HA	54:DY:31:LEU:HD22	1.65	0.45
55:DZ:132:ASN:O	55:DZ:134:PRO:CD	2.64	0.45
46:DQ:55:VAL:CG2	55:DZ:178:GLU:HB3	2.46	0.45
1:AA:1242:C:O2'	1:AA:1243:C:H5'	2.17	0.45
1:AA:393:A:C2	1:AA:394:G:C8	3.04	0.45
1:AA:533:A:O2'	1:AA:534:U:H5''	2.16	0.45
1:AA:710:G:O2'	1:AA:711:G:H5'	2.16	0.45
2:AB:114:ARG:HA	2:AB:117:GLU:CG	2.46	0.45
2:AB:16:HIS:HB3	2:AB:210:SER:CB	2.47	0.45
2:AB:220:ASP:O	2:AB:223:ILE:N	2.49	0.45
2:AB:91:PRO:CG	2:AB:154:LEU:HD12	2.47	0.45
5:AE:150:ARG:CB	5:AE:150:ARG:HH11	2.30	0.45
8:AH:29:SER:O	8:AH:32:LYS:HB2	2.16	0.45
13:AM:48:LEU:N	13:AM:48:LEU:HD23	2.32	0.45
15:AO:43:LEU:C	15:AO:45:VAL:N	2.70	0.45
19:AS:62:ILE:HD12	19:AS:66:MET:HG3	1.97	0.45
20:AT:27:LYS:O	20:AT:27:LYS:HD3	2.16	0.45
27:B2:21:LEU:O	27:B2:24:LEU:HB3	2.16	0.45
33:B8:8:LYS:O	33:B8:12:LYS:HG3	2.16	0.45
34:BA:1109:C:C5	34:BA:1110:G:C5	3.05	0.45
34:BA:1122:G:C2	34:BA:1123:C:C6	3.05	0.45
34:BA:1270:C:H5''	34:BA:1271:G:C5'	2.46	0.45
34:BA:2170:A:O2'	34:BA:2171:A:C8	2.67	0.45
34:BA:2228:G:H2'	34:BA:2229:C:H6	1.81	0.45
34:BA:2382:G:O5'	34:BA:2382:G:H8	2.00	0.45
34:BA:874:G:O2'	34:BA:875:G:H5'	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BE:179:GLU:HB3	38:BE:181:LEU:CD2	2.46	0.45
38:BE:28:ALA:O	38:BE:180:ASN:OD1	2.35	0.45
38:BE:34:VAL:O	38:BE:35:GLN:HB2	2.16	0.45
42:BI:132:PRO:O	42:BI:133:HIS:O	2.35	0.45
45:BP:62:LEU:CD2	45:BP:62:LEU:H	2.19	0.45
48:BS:89:ARG:HB3	48:BS:92:TYR:HB3	1.99	0.45
49:BT:29:ARG:HD3	49:BT:86:ILE:CG2	2.29	0.45
50:BU:110:VAL:O	50:BU:113:ALA:N	2.49	0.45
50:BU:61:TRP:O	50:BU:64:ARG:N	2.50	0.45
52:BW:86:LEU:HD12	52:BW:87:PRO:CD	2.46	0.45
54:BY:49:VAL:O	54:BY:50:ARG:HB2	2.17	0.45
55:BZ:145:GLU:C	55:BZ:147:GLY:N	2.70	0.45
1:CA:1106:G:H2'	1:CA:1107:C:C6	2.51	0.45
1:CA:1505:G:H4'	1:CA:1506:U:H5'	1.99	0.45
1:CA:171:A:C2	1:CA:172:A:C2	3.04	0.45
1:CA:404:U:C2	1:CA:405:U:C5	3.05	0.45
1:CA:482:A:H2'	1:CA:483:C:O4'	2.17	0.45
1:CA:908:A:C2	1:CA:909:A:C5	3.05	0.45
1:CA:864:A:H2	1:CA:917:G:N3	2.15	0.45
1:CA:950:U:H3'	13:CM:102:ARG:CZ	2.45	0.45
3:CC:40:ARG:O	3:CC:44:GLU:HG3	2.17	0.45
4:CD:170:VAL:HG22	4:CD:171:GLY:N	2.32	0.45
5:CE:127:ASN:O	5:CE:131:ILE:HG12	2.17	0.45
8:CH:39:LEU:O	8:CH:44:PHE:HB2	2.17	0.45
13:CM:108:ARG:HG3	13:CM:108:ARG:HH11	1.81	0.45
16:CP:41:PRO:O	16:CP:42:ARG:HG2	2.16	0.45
17:CQ:4:LYS:HG3	17:CQ:5:VAL:N	2.31	0.45
18:CR:56:THR:C	18:CR:58:LEU:HD12	2.37	0.45
20:CT:22:ARG:O	20:CT:25:ARG:HB3	2.16	0.45
27:D2:14:ARG:HH21	27:D2:57:ILE:CD1	2.30	0.45
34:DA:1951:U:H2'	34:DA:1953:A:OP2	2.16	0.45
34:DA:2313:C:C6	34:DA:2314:C:H5	2.34	0.45
34:DA:2617:C:O2'	34:DA:2618:G:H5'	2.17	0.45
34:DA:2677:G:H2'	34:DA:2678:C:C6	2.49	0.45
34:DA:2693:A:H2'	34:DA:2694:G:C8	2.46	0.45
34:DA:927:G:H3'	34:DA:928:G:C8	2.52	0.45
37:DD:206:LEU:HD23	37:DD:206:LEU:HA	1.72	0.45
37:DD:36:PRO:HG3	37:DD:61:LEU:HD23	1.98	0.45
38:DE:48:GLN:HE21	38:DE:78:LEU:HD12	1.81	0.45
39:DF:25:PRO:HB3	39:DF:119:ARG:CB	2.43	0.45
42:DI:84:GLY:O	42:DI:85:GLU:HB2	2.17	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DQ:140:ALA:O	55:DZ:53:ILE:HB	2.16	0.45
47:DR:56:LYS:HE2	47:DR:88:ARG:H	1.80	0.45
48:DS:37:ALA:HB1	48:DS:73:LEU:HD11	1.98	0.45
48:DS:37:ALA:CB	48:DS:73:LEU:HD11	2.47	0.45
50:DU:101:ARG:C	50:DU:102:GLU:HG2	2.37	0.45
52:DW:1:MET:O	52:DW:2:GLU:HB3	2.16	0.45
52:DW:70:TYR:H	52:DW:70:TYR:HD2	1.63	0.45
1:AA:1065:U:OP2	1:AA:1190:G:N2	2.40	0.45
1:AA:389:A:O2'	1:AA:390:C:H5'	2.17	0.45
1:AA:784:C:H2'	1:AA:785:G:C8	2.52	0.45
1:AA:9:G:OP1	5:AE:122:GLU:HG3	2.16	0.45
2:AB:239:VAL:HG12	2:AB:239:VAL:O	2.17	0.45
2:AB:68:ILE:H	2:AB:90:MET:CE	2.29	0.45
3:AC:35:GLU:O	3:AC:37:GLN:N	2.50	0.45
4:AD:70:ILE:HD11	4:AD:74:GLN:HB3	1.98	0.45
5:AE:30:ALA:O	5:AE:46:GLY:N	2.42	0.45
8:AH:97:VAL:CB	8:AH:129:VAL:O	2.65	0.45
13:AM:116:THR:O	13:AM:117:VAL:HB	2.16	0.45
13:AM:8:GLU:C	13:AM:9:ILE:HD12	2.37	0.45
20:AT:14:LYS:O	20:AT:18:GLN:HG3	2.16	0.45
23:AW:38:A:H2'	23:AW:39:U:O4'	2.17	0.45
25:B0:1:MET:H3	34:BA:2602:A:H61	1.63	0.45
26:B1:42:GLN:HG2	26:B1:43:TYR:H	1.81	0.45
30:B5:40:LYS:HD3	30:B5:46:CYS:CB	2.45	0.45
34:BA:1668:A:N3	34:BA:1670:C:C4	2.83	0.45
34:BA:1914:C:O4'	34:BA:1914:C:O2	2.34	0.45
34:BA:2308:G:C8	34:BA:2309:A:H3'	2.52	0.45
34:BA:2313:C:C6	34:BA:2314:C:H5	2.35	0.45
34:BA:2680:C:OP1	38:BE:109:LYS:HG3	2.17	0.45
34:BA:2697:G:C2	34:BA:2711:A:C2	3.05	0.45
34:BA:2713:A:C3'	34:BA:2714:G:C5'	2.94	0.45
34:BA:2766:G:N3	34:BA:2766:G:H2'	2.32	0.45
34:BA:335:C:H2'	34:BA:336:C:H6	1.82	0.45
34:BA:686:G:H21	34:BA:788:A:N6	2.15	0.45
34:BA:896:A:H5''	55:BZ:146:ILE:CD1	2.45	0.45
34:BA:977:G:O6	34:BA:987:G:C6	2.70	0.45
35:BB:21:G:O2'	35:BB:22:U:P	2.75	0.45
36:BC:47:LEU:HD21	36:BC:172:HIS:CA	2.47	0.45
36:BC:97:GLU:CA	36:BC:100:ILE:HG12	2.46	0.45
37:BD:142:VAL:CG2	37:BD:192:THR:C	2.83	0.45
38:BE:57:LYS:C	38:BE:59:VAL:N	2.69	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:33:LEU:O	39:BF:37:VAL:HG23	2.16	0.45
42:BI:77:LEU:O	42:BI:78:THR:CB	2.65	0.45
43:BN:78:TYR:H	43:BN:79:PRO:HD2	1.81	0.45
44:BO:104:ARG:C	44:BO:106:LEU:H	2.18	0.45
45:BP:112:LEU:HD13	45:BP:112:LEU:O	2.17	0.45
47:BR:56:LYS:HE2	47:BR:88:ARG:H	1.82	0.45
47:BR:99:LYS:HB3	47:BR:99:LYS:HE3	1.83	0.45
48:BS:57:LYS:O	48:BS:58:LEU:O	2.34	0.45
53:BX:89:ILE:O	53:BX:89:ILE:HG22	2.17	0.45
55:BZ:163:LEU:CD1	55:BZ:167:PRO:HB3	2.47	0.45
55:BZ:23:LYS:HD2	55:BZ:38:TYR:CD1	2.52	0.45
1:CA:1271:G:H2'	1:CA:1272:G:C8	2.52	0.45
1:CA:1064:G:OP2	1:CA:1386:G:H4'	2.16	0.45
1:CA:67:C:HO2'	1:CA:171:A:H1'	1.81	0.45
1:CA:177:C:H2'	1:CA:178:C:H6	1.82	0.45
1:CA:270:A:C5	1:CA:271:C:C4	3.05	0.45
1:CA:328:C:O2'	1:CA:329:A:OP2	2.35	0.45
1:CA:918:A:N6	1:CA:919:A:C6	2.85	0.45
2:CB:111:ARG:HG2	2:CB:111:ARG:HH11	1.81	0.45
2:CB:19:HIS:CD2	2:CB:20:GLU:HG2	2.51	0.45
3:CC:127:ARG:HG2	3:CC:127:ARG:HH11	1.81	0.45
4:CD:110:PHE:HE2	4:CD:148:VAL:HG23	1.81	0.45
4:CD:58:LEU:HD23	4:CD:206:PHE:CZ	2.51	0.45
7:CG:22:LEU:HG	7:CG:22:LEU:O	2.16	0.45
8:CH:29:SER:O	8:CH:32:LYS:HB2	2.17	0.45
12:CL:71:PRO:HD2	12:CL:102:ARG:HH11	1.82	0.45
13:CM:16:ASP:OD2	13:CM:16:ASP:N	2.50	0.45
1:CA:1218:C:OP1	14:CN:9:LYS:HE3	2.16	0.45
19:CS:64:GLU:O	19:CS:67:VAL:HG23	2.17	0.45
20:CT:85:MET:HA	20:CT:88:VAL:CG2	2.46	0.45
27:D2:30:ARG:HH11	27:D2:30:ARG:CG	2.25	0.45
31:D6:46:HIS:HB3	31:D6:47:THR:N	2.32	0.45
34:DA:1266:G:C8	52:DW:15:ARG:NH2	2.84	0.45
34:DA:1558:A:H1'	34:DA:1559:G:OP2	2.16	0.45
34:DA:2298:A:N6	34:DA:2318:G:H8	2.15	0.45
34:DA:2464:C:O2'	34:DA:2465:C:O5'	2.35	0.45
34:DA:2472:G:H2'	34:DA:2475:C:H42	1.82	0.45
34:DA:2637:U:H5'	34:DA:2637:U:C6	2.48	0.45
34:DA:2808:U:H2'	34:DA:2809:A:C5'	2.46	0.45
34:DA:614(C):A:O2'	34:DA:615:G:O4'	2.35	0.45
35:DB:32:C:C2	35:DB:51:G:C2	3.04	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:211:ARG:O	37:DD:214:TRP:N	2.50	0.45
37:DD:36:PRO:C	37:DD:37:LEU:HD23	2.37	0.45
38:DE:37:ARG:HD3	38:DE:44:TYR:CE2	2.51	0.45
40:DG:55:LYS:HD3	40:DG:55:LYS:C	2.36	0.45
42:DI:120:ILE:HD13	42:DI:126:TYR:CE1	2.52	0.45
42:DI:15:VAL:O	42:DI:17:GLN:N	2.49	0.45
44:DO:20:MET:O	44:DO:41:ALA:CB	2.63	0.45
45:DP:107:LYS:C	45:DP:109:GLY:H	2.20	0.45
45:DP:135:LEU:HA	45:DP:135:LEU:HD22	1.72	0.45
50:DU:79:PHE:HE1	50:DU:106:PHE:CZ	2.34	0.45
50:DU:31:SER:HB3	50:DU:34:LYS:CB	2.35	0.45
34:DA:1225:G:P	51:DV:88:ARG:HB3	2.57	0.45
55:DZ:52:SER:O	55:DZ:54:HIS:N	2.47	0.45
1:AA:1089:G:O2'	1:AA:1090:U:H5'	2.16	0.45
1:AA:674:G:O2'	1:AA:675:A:H5'	2.17	0.45
1:AA:980:C:H3'	1:AA:981:U:H6	1.81	0.45
3:AC:21:ARG:HG3	3:AC:58:GLU:HG2	1.97	0.45
3:AC:34:LEU:HD23	3:AC:34:LEU:C	2.38	0.45
5:AE:78:HIS:CE1	5:AE:143:ARG:N	2.76	0.45
7:AG:26:PHE:O	7:AG:27:ILE:C	2.54	0.45
9:AI:47:LEU:CD1	9:AI:47:LEU:N	2.79	0.45
13:AM:67:GLU:HG3	13:AM:68:GLY:N	2.31	0.45
16:AP:28:ARG:HG2	16:AP:29:ASP:OD2	2.17	0.45
17:AQ:83:ASP:CG	17:AQ:84:LEU:H	2.20	0.45
18:AR:82:THR:HG23	18:AR:83:GLU:N	2.31	0.45
30:B5:26:THR:O	30:B5:26:THR:HG23	2.17	0.45
34:BA:1328:G:O2'	34:BA:1329:U:H5''	2.16	0.45
34:BA:1493:C:C2'	34:BA:1493:C:O2	2.62	0.45
34:BA:1860:G:H2'	34:BA:1861:G:H8	1.82	0.45
34:BA:1925:C:H2'	34:BA:1926:U:H5'	1.96	0.45
34:BA:1947:C:C3'	34:BA:1948:G:C5'	2.95	0.45
34:BA:2087:G:O2'	34:BA:2088:G:H5'	2.17	0.45
34:BA:964:C:O2'	34:BA:2273:A:N3	2.41	0.45
34:BA:2259:G:H1'	34:BA:2427:C:C2	2.51	0.45
34:BA:2574:G:H2'	34:BA:2575:C:H6	1.81	0.45
34:BA:2637:U:C2'	34:BA:2638:G:H5'	2.46	0.45
34:BA:2522:U:O2'	34:BA:2647:U:H5''	2.16	0.45
34:BA:2653:U:H5'	34:BA:2654:A:C5'	2.44	0.45
34:BA:2732:G:C2'	34:BA:2733:A:H5'	2.45	0.45
34:BA:2870:C:C2'	34:BA:2871:C:H5'	2.47	0.45
34:BA:389:G:H1	45:BP:71:VAL:HG12	1.80	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BC:34:THR:O	36:BC:35:ALA:HB2	2.17	0.45
37:BD:35:LYS:NZ	37:BD:104:TYR:CD1	2.79	0.45
34:BA:1797:C:O2'	37:BD:259:THR:HB	2.17	0.45
38:BE:129:HIS:O	38:BE:130:GLY:O	2.34	0.45
39:BF:25:PRO:CB	39:BF:119:ARG:HD3	2.47	0.45
41:BH:94:TYR:CG	41:BH:107:VAL:HG12	2.52	0.45
46:BQ:55:VAL:HG13	46:BQ:56:ARG:N	2.31	0.45
46:BQ:58:PHE:O	46:BQ:59:ARG:C	2.55	0.45
34:BA:911:A:C2'	46:BQ:9:TYR:OH	2.63	0.45
48:BS:52:SER:O	48:BS:69:VAL:HG23	2.16	0.45
48:BS:69:VAL:O	48:BS:72:ALA:HB3	2.16	0.45
48:BS:14:VAL:HG11	48:BS:90:GLY:C	2.37	0.45
49:BT:31:SER:CA	49:BT:32:TYR:HD2	2.30	0.45
50:BU:83:LEU:CB	50:BU:88:ILE:HG12	2.41	0.45
51:BV:46:VAL:O	51:BV:47:VAL:HB	2.17	0.45
52:BW:14:PRO:O	52:BW:15:ARG:C	2.54	0.45
52:BW:28:SER:OG	52:BW:31:GLU:CB	2.64	0.45
34:BA:1341:U:O4'	53:BX:57:LEU:HD11	2.17	0.45
53:BX:88:LYS:HB3	53:BX:89:ILE:HD13	1.98	0.45
1:CA:1088:G:N1	1:CA:1089:G:C5	2.85	0.45
1:CA:10:A:H2'	1:CA:11:G:H8	1.82	0.45
1:CA:375:U:C4'	16:CP:17:TYR:CE2	2.97	0.45
1:CA:96:U:HO2'	1:CA:97:G:P	2.40	0.45
2:CB:220:ASP:O	2:CB:223:ILE:N	2.49	0.45
4:CD:67:ILE:HG22	4:CD:68:TYR:N	2.32	0.45
1:CA:10:A:OP2	5:CE:126:ARG:HD3	2.17	0.45
10:CJ:47:PHE:HE1	10:CJ:63:PHE:CD2	2.34	0.45
7:CG:150:ALA:HA	11:CK:57:THR:HG21	1.98	0.45
13:CM:19:LEU:CA	13:CM:22:ILE:HD12	2.45	0.45
22:CV:74:C:O5'	22:CV:74:C:H6	2.00	0.45
27:D2:47:ASN:C	27:D2:47:ASN:ND2	2.70	0.45
33:D8:6:THR:CG2	34:DA:243:U:OP1	2.64	0.45
34:DA:1754:C:H4'	49:DT:101:PHE:CD2	2.52	0.45
34:DA:2256:G:O2'	34:DA:2257:U:H5'	2.17	0.45
34:DA:2263:C:O2'	34:DA:2264:C:H5'	2.17	0.45
34:DA:2339:G:O2'	34:DA:2340:G:H5'	2.16	0.45
34:DA:2637:U:C2'	34:DA:2638:G:H5'	2.47	0.45
34:DA:2684:U:OP2	49:DT:53:ARG:NH2	2.43	0.45
34:DA:271(U):G:HO2'	34:DA:271(V):G:H5'	1.81	0.45
34:DA:27:G:C2'	34:DA:28:A:OP2	2.65	0.45
34:DA:2837:G:H2'	34:DA:2838:G:H8	1.82	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:708:C:H5'	34:DA:709:U:OP2	2.17	0.45
34:DA:766:C:H2'	34:DA:767:U:C6	2.52	0.45
34:DA:1791:A:O3'	37:DD:206:LEU:HB2	2.17	0.45
34:DA:1797:C:O2'	37:DD:259:THR:HB	2.17	0.45
38:DE:25:VAL:O	38:DE:25:VAL:HG12	2.16	0.45
39:DF:103:LYS:C	39:DF:105:VAL:H	2.20	0.45
39:DF:167:ALA:C	39:DF:169:ASN:N	2.69	0.45
34:DA:440:G:N2	39:DF:46:ARG:HH21	2.15	0.45
40:DG:140:ILE:HD12	40:DG:140:ILE:C	2.37	0.45
40:DG:15:VAL:O	40:DG:16:ARG:C	2.55	0.45
41:DH:130:ARG:HB3	41:DH:130:ARG:HH11	1.81	0.45
43:DN:18:ALA:HB1	43:DN:21:LYS:CG	2.46	0.45
43:DN:28:THR:O	43:DN:29:LYS:C	2.54	0.45
44:DO:10:VAL:O	44:DO:10:VAL:HG23	2.17	0.45
35:DB:78:A:H4'	46:DQ:21:THR:HG23	1.98	0.45
46:DQ:39:PRO:CA	46:DQ:99:PRO:HD3	2.47	0.45
48:DS:16:ASN:HB2	48:DS:90:GLY:HA2	1.99	0.45
51:DV:82:ARG:CD	51:DV:82:ARG:C	2.85	0.45
52:DW:28:SER:OG	52:DW:31:GLU:CB	2.65	0.45
54:DY:13:VAL:HG12	54:DY:14:LEU:N	2.31	0.45
54:DY:37:VAL:HG21	54:DY:72:VAL:HG11	1.99	0.45
54:DY:64:GLU:H	54:DY:64:GLU:CD	2.20	0.45
1:AA:1229:A:H2'	1:AA:1230:C:C6	2.52	0.45
1:AA:223:U:H2'	1:AA:224:C:H6	1.82	0.45
1:AA:429:U:H1'	1:AA:430:A:H5''	1.97	0.45
1:AA:540:G:O2'	1:AA:541:G:H5'	2.16	0.45
1:AA:552:U:C2'	1:AA:553:A:H5'	2.47	0.45
1:AA:689:C:C2'	1:AA:690:G:H5'	2.47	0.45
1:AA:715:A:H2'	1:AA:716:A:C8	2.52	0.45
1:AA:773:G:O2'	1:AA:774:G:H5'	2.17	0.45
1:AA:918:A:H2'	1:AA:919:A:O4'	2.17	0.45
4:AD:19:LEU:HD12	4:AD:19:LEU:N	2.31	0.45
5:AE:41:VAL:CG1	5:AE:113:ALA:HA	2.47	0.45
5:AE:26:PHE:CD1	5:AE:26:PHE:N	2.85	0.45
8:AH:86:ILE:HG13	8:AH:133:LEU:CD2	2.47	0.45
10:AJ:50:ILE:N	10:AJ:50:ILE:HD13	2.31	0.45
16:AP:82:GLN:O	16:AP:84:ALA:N	2.48	0.45
17:AQ:9:VAL:HG12	17:AQ:10:VAL:N	2.31	0.45
22:AV:27:U:H2'	22:AV:28:C:H6	1.81	0.45
26:B1:78:LYS:NZ	26:B1:89:GLU:O	2.50	0.45
27:B2:18:PRO:C	27:B2:20:GLU:N	2.68	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B3:15:TYR:HB3	28:B3:19:GLN:NE2	2.32	0.45
28:B3:26:LEU:HD21	28:B3:46:ASN:CB	2.46	0.45
30:B5:15:ARG:HA	30:B5:18:ALA:HB3	1.99	0.45
34:BA:1935:G:H1'	34:BA:1964:G:N2	2.32	0.45
34:BA:2475:C:H42	34:BA:2529:G:N2	2.14	0.45
34:BA:2705:A:C4	34:BA:2706:G:C8	3.05	0.45
34:BA:2732:G:H3'	34:BA:2733:A:C5'	2.47	0.45
34:BA:2777:G:H5''	34:BA:2778:A:H5'	1.98	0.45
34:BA:438:G:O2'	34:BA:440:G:H5'	2.17	0.45
34:BA:507:A:O4'	34:BA:509:C:C2	2.70	0.45
34:BA:49:A:C4'	34:BA:50:U:H5'	2.26	0.45
34:BA:614:U:H4'	34:BA:614(C):A:N6	2.32	0.45
35:BB:37:C:H2'	35:BB:38:C:O4'	2.16	0.45
36:BC:41:VAL:O	36:BC:178:ALA:HB3	2.17	0.45
36:BC:51:PRO:HB2	36:BC:202:GLU:CB	2.47	0.45
37:BD:238:GLY:C	37:BD:239:ARG:O	2.53	0.45
37:BD:76:PRO:HG2	37:BD:98:VAL:HG23	1.94	0.45
38:BE:45:THR:O	38:BE:45:THR:HG22	2.17	0.45
38:BE:51:PHE:HD1	38:BE:52:LEU:N	2.15	0.45
39:BF:63:LYS:HE2	39:BF:67:GLN:HB2	1.95	0.45
40:BG:33:ARG:HB2	40:BG:162:THR:CB	2.47	0.45
41:BH:55:PRO:CG	41:BH:56:SER:N	2.78	0.45
43:BN:128:HIS:O	43:BN:128:HIS:CG	2.70	0.45
45:BP:10:PRO:CD	45:BP:11:GLY:N	2.78	0.45
34:BA:1190:G:C5'	45:BP:35:HIS:HB3	2.44	0.45
47:BR:11:ASN:CG	47:BR:12:ARG:H	2.19	0.45
47:BR:10:LEU:CB	47:BR:17:ARG:HD2	2.39	0.45
50:BU:9:VAL:O	50:BU:13:LYS:HG2	2.17	0.45
50:BU:6:THR:O	50:BU:9:VAL:HG23	2.17	0.45
51:BV:61:VAL:C	51:BV:62:LEU:HD23	2.37	0.45
1:CA:1030(A):G:O2'	1:CA:1030(C):G:N7	2.49	0.45
1:CA:1277:C:C2'	1:CA:1278:U:H5'	2.45	0.45
1:CA:1236:A:O2'	1:CA:1304:G:H4'	2.17	0.45
1:CA:36:C:O2'	1:CA:37:U:H5'	2.17	0.45
1:CA:55:A:C6	1:CA:56:U:C2	3.05	0.45
1:CA:786:G:C2	1:CA:787:A:C4	3.05	0.45
1:CA:826:C:H2'	1:CA:827:U:H6	1.82	0.45
1:CA:854:G:H3'	1:CA:871:U:O4	2.17	0.45
1:CA:963:G:H1	1:CA:972:C:N4	2.10	0.45
2:CB:114:ARG:HA	2:CB:117:GLU:CG	2.47	0.45
3:CC:179:ARG:O	3:CC:179:ARG:HG3	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:199:LYS:HB3	3:CC:201:TYR:CE1	2.50	0.45
4:CD:70:ILE:HD11	4:CD:74:GLN:HB3	1.98	0.45
6:CF:2:ARG:O	6:CF:66:GLU:HA	2.17	0.45
10:CJ:8:LEU:HB3	10:CJ:16:LEU:CD2	2.40	0.45
12:CL:119:LYS:O	12:CL:120:TYR:CB	2.64	0.45
13:CM:48:LEU:N	13:CM:48:LEU:HD23	2.31	0.45
13:CM:67:GLU:CG	13:CM:68:GLY:N	2.79	0.45
15:CO:82:ILE:HG23	15:CO:83:GLU:N	2.32	0.45
18:CR:35:ARG:O	18:CR:37:VAL:N	2.37	0.45
22:CV:20:U:H5'	22:CV:21:A:OP2	2.16	0.45
23:CY:30:G:O2'	23:CY:31:A:H5'	2.17	0.45
33:D8:31:HIS:O	33:D8:32:LEU:C	2.55	0.45
34:DA:1002:G:H2'	34:DA:1003:G:O4'	2.17	0.45
34:DA:1109:C:C5	34:DA:1110:G:C5	3.05	0.45
34:DA:139:G:H2'	34:DA:139(A):G:H5''	1.98	0.45
34:DA:2170:A:O2'	34:DA:2171:A:C8	2.67	0.45
34:DA:2192:G:H2'	34:DA:2193:G:H5''	1.98	0.45
34:DA:2197:U:H1'	34:DA:2198:A:C8	2.52	0.45
34:DA:2732:G:C2'	34:DA:2733:A:H5'	2.47	0.45
34:DA:2739:U:O2'	34:DA:2740:A:H5'	2.17	0.45
34:DA:649:G:C5	34:DA:650:C:C4	3.05	0.45
34:DA:810:U:O2'	45:DP:33:ARG:CZ	2.65	0.45
34:DA:910:A:C6	34:DA:911:A:C6	3.04	0.45
34:DA:935:C:H2'	34:DA:936:C:H6	1.81	0.45
34:DA:955:C:C5'	46:DQ:14:ARG:HH21	2.29	0.45
37:DD:84:TYR:CD2	37:DD:84:TYR:C	2.91	0.45
38:DE:47:VAL:O	38:DE:49:LEU:HD22	2.17	0.45
39:DF:84:VAL:O	39:DF:85:GLY:C	2.54	0.45
40:DG:172:LEU:HG	40:DG:176:LEU:HD11	1.98	0.45
42:DI:22:LYS:O	42:DI:23:PRO:C	2.55	0.45
42:DI:83:ALA:HA	42:DI:89:TYR:HD1	1.81	0.45
34:DA:1131:G:H4'	43:DN:82:LEU:HG	1.98	0.45
44:DO:21:CYS:SG	44:DO:22:ILE:N	2.89	0.45
34:DA:661:C:O3'	45:DP:18:ARG:HA	2.17	0.45
46:DQ:77:LYS:HA	46:DQ:78:PRO:HD3	1.70	0.45
46:DQ:93:TYR:CD1	46:DQ:93:TYR:N	2.85	0.45
47:DR:4:LEU:C	47:DR:6:SER:N	2.69	0.45
49:DT:48:ILE:HD12	49:DT:48:ILE:N	2.31	0.45
49:DT:65:LYS:HA	49:DT:65:LYS:HZ2	1.77	0.45
49:DT:96:ARG:HG2	49:DT:96:ARG:HH11	1.82	0.45
54:DY:54:LYS:O	54:DY:55:TYR:CD1	2.70	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DZ:102:LEU:CD2	55:DZ:137:ILE:HB	2.47	0.45
1:AA:1038:C:H2'	1:AA:1039:C:H6	1.81	0.45
1:AA:1121:U:O2'	1:AA:1122:U:H5'	2.17	0.45
1:AA:149:A:HO2'	1:AA:150:C:H6	1.62	0.45
1:AA:35:G:H21	12:AL:118:SER:HB2	1.82	0.45
1:AA:617:G:H4'	16:AP:44:THR:HB	1.98	0.45
1:AA:689:C:P	11:AK:46:GLY:HA3	2.57	0.45
1:AA:829:G:O2'	1:AA:830:G:H5'	2.16	0.45
2:AB:97:TRP:CZ3	2:AB:173:ALA:HA	2.51	0.45
3:AC:206:GLU:HG2	3:AC:207:VAL:CG2	2.43	0.45
4:AD:135:LEU:O	4:AD:136:PRO:C	2.54	0.45
4:AD:65:ARG:NH1	4:AD:70:ILE:O	2.49	0.45
6:AF:33:TYR:CD1	6:AF:75:LEU:HB2	2.51	0.45
7:AG:36:LYS:O	7:AG:39:ALA:N	2.50	0.45
9:AI:72:GLY:O	9:AI:75:ASP:HB2	2.17	0.45
11:AK:44:SER:N	11:AK:47:VAL:CG2	2.80	0.45
17:AQ:66:SER:OG	17:AQ:69:LYS:CB	2.64	0.45
18:AR:72:ARG:O	18:AR:75:ILE:HB	2.17	0.45
20:AT:74:LYS:HB2	20:AT:75:ASN:H	1.49	0.45
27:B2:44:LEU:HD13	27:B2:44:LEU:HA	1.71	0.45
28:B3:43:ILE:HG22	28:B3:47:VAL:CG2	2.47	0.45
33:B8:31:HIS:O	33:B8:32:LEU:C	2.55	0.45
33:B8:4:MET:O	33:B8:62:LEU:HD12	2.17	0.45
34:BA:1401:G:H2'	34:BA:1402:C:C6	2.52	0.45
13:AM:125:ARG:NH1	34:BA:1913:A:N7	2.65	0.45
34:BA:1952:A:C2	34:BA:1953:A:C2	3.05	0.45
34:BA:206:U:O2	34:BA:206:U:H2'	2.16	0.45
34:BA:2124:G:C2'	34:BA:2125:G:H5'	2.46	0.45
34:BA:2192:G:H2'	34:BA:2193:G:H5''	1.98	0.45
34:BA:2368:C:O2'	34:BA:2369:A:H5'	2.16	0.45
34:BA:2418:A:H2'	34:BA:2419:U:C6	2.52	0.45
34:BA:2464:C:O2'	34:BA:2465:C:O5'	2.35	0.45
34:BA:1629:U:O2	34:BA:2698:U:H5''	2.16	0.45
34:BA:319:C:C2'	34:BA:320:A:H5'	2.47	0.45
34:BA:606:U:H4'	34:BA:658:C:H4'	1.99	0.45
34:BA:661:C:O3'	45:BP:18:ARG:HG2	2.16	0.45
34:BA:675:A:O2'	34:BA:676:A:H5'	2.17	0.45
34:BA:825:C:H42	34:BA:832:G:H1	1.63	0.45
34:BA:949:C:O2'	34:BA:950:G:H5'	2.17	0.45
35:BB:20:C:O2'	35:BB:21:G:H5''	2.15	0.45
37:BD:118:VAL:CG2	37:BD:119:ALA:H	2.24	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BD:11:PRO:C	37:BD:13:ARG:N	2.70	0.45
37:BD:268:ARG:HH12	37:BD:269:PHE:HE1	1.62	0.45
38:BE:110:GLY:HA2	38:BE:162:ALA:N	2.32	0.45
38:BE:197:ILE:O	38:BE:197:ILE:CG1	2.65	0.45
38:BE:197:ILE:HG13	38:BE:199:ARG:HH12	1.82	0.45
41:BH:12:PRO:O	41:BH:14:GLY:N	2.50	0.45
43:BN:15:LEU:CB	43:BN:134:ARG:HB2	2.44	0.45
44:BO:101:PRO:O	44:BO:102:VAL:HG22	2.17	0.45
44:BO:86:ILE:CD1	44:BO:86:ILE:H	2.29	0.45
46:BQ:77:LYS:HA	46:BQ:78:PRO:HD3	1.68	0.45
47:BR:70:LEU:HD13	47:BR:75:LEU:HD11	1.98	0.45
47:BR:55:ALA:HA	47:BR:80:PHE:CE1	2.52	0.45
48:BS:67:ARG:N	48:BS:69:VAL:HG12	2.23	0.45
48:BS:78:LEU:HD11	48:BS:103:GLU:CB	2.42	0.45
49:BT:57:PHE:CG	49:BT:58:ASN:N	2.84	0.45
49:BT:6:LEU:HA	49:BT:9:LEU:HD12	1.98	0.45
52:BW:12:ILE:HD13	52:BW:17:VAL:CG1	2.47	0.45
30:B5:25:LEU:HB3	52:BW:23:LEU:HD13	1.99	0.45
54:BY:31:LEU:HD11	54:BY:34:LYS:HD3	1.99	0.45
1:CA:1427:U:O2'	1:CA:1428:A:H5'	2.17	0.45
1:CA:1461:G:O2'	1:CA:1462:G:H5'	2.17	0.45
1:CA:273:A:N6	1:CA:274:A:C6	2.85	0.45
1:CA:741:G:H2'	1:CA:742:G:O4'	2.17	0.45
1:CA:805:C:O2'	1:CA:806:C:H5'	2.17	0.45
1:CA:891:U:O2'	1:CA:892:A:H5'	2.16	0.45
1:CA:963:G:H2'	1:CA:964:A:C8	2.50	0.45
3:CC:77:ILE:O	3:CC:84:ILE:HG22	2.17	0.45
4:CD:104:VAL:O	4:CD:106:TYR:N	2.50	0.45
10:CJ:44:VAL:HG12	10:CJ:45:ARG:N	2.32	0.45
13:CM:27:LYS:HD2	13:CM:27:LYS:HA	1.80	0.45
15:CO:56:LEU:HD12	15:CO:56:LEU:HA	1.72	0.45
15:CO:87:ILE:HG22	15:CO:88:ARG:N	2.25	0.45
1:CA:453:A:H4'	16:CP:72:ARG:HG3	1.99	0.45
17:CQ:14:LYS:HB2	17:CQ:14:LYS:HZ2	1.82	0.45
18:CR:58:LEU:N	18:CR:58:LEU:HD12	2.32	0.45
22:CV:22:G:O2'	22:CV:23:C:H5'	2.17	0.45
26:D1:91:LYS:O	26:D1:94:LEU:HB2	2.17	0.45
34:DA:1232:G:H2'	34:DA:1233:C:C6	2.52	0.45
34:DA:1204:A:C2	34:DA:1241:A:N1	2.85	0.45
34:DA:1403:C:C2'	34:DA:1404:C:O5'	2.64	0.45
34:DA:184:C:H2'	34:DA:185:U:C6	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:D8:8:LYS:HE3	34:DA:245:G:O6	2.17	0.45
34:DA:2678:C:O2'	34:DA:2679:A:H5'	2.17	0.45
34:DA:2807:G:C3'	34:DA:2808:U:H5''	2.46	0.45
34:DA:64:A:H2'	34:DA:65:C:C6	2.49	0.45
36:DC:41:VAL:O	36:DC:178:ALA:HB3	2.18	0.45
37:DD:11:PRO:C	37:DD:13:ARG:N	2.70	0.45
37:DD:17:THR:HG21	37:DD:205:VAL:HB	1.92	0.45
37:DD:85:ASP:OD1	37:DD:87:ASN:ND2	2.46	0.45
38:DE:51:PHE:HD1	38:DE:52:LEU:N	2.15	0.45
38:DE:36:ARG:NH2	38:DE:88:GLY:N	2.65	0.45
41:DH:41:MET:HE1	41:DH:55:PRO:CD	2.47	0.45
41:DH:30:LYS:HG2	41:DH:79:VAL:O	2.17	0.45
42:DI:75:LEU:HD11	42:DI:105:HIS:HE1	1.82	0.45
34:DA:2642:G:H5''	43:DN:79:PRO:HG3	1.99	0.45
44:DO:87:ILE:HD13	44:DO:93:PRO:HA	1.99	0.45
45:DP:46:LYS:HB3	45:DP:52:GLU:HG2	1.99	0.45
46:DQ:17:LEU:HD21	46:DQ:41:TRP:NE1	2.31	0.45
49:DT:3:ARG:O	49:DT:4:GLY:C	2.56	0.45
49:DT:32:TYR:O	49:DT:41:ARG:O	2.35	0.45
51:DV:15:GLU:CB	51:DV:16:PRO:CD	2.81	0.45
51:DV:20:LEU:HB3	51:DV:21:ARG:HD3	1.98	0.45
53:DX:27:THR:HA	53:DX:78:LYS:HA	1.99	0.45
53:DX:88:LYS:N	53:DX:88:LYS:HD2	2.32	0.45
54:DY:2:ARG:HG2	54:DY:2:ARG:NH1	2.31	0.45
34:DA:875:G:C4'	55:DZ:170:THR:HG21	2.47	0.45
1:AA:1374:A:O2'	1:AA:1375:A:H5'	2.17	0.44
1:AA:1484:C:O2'	1:AA:1485:U:H5'	2.18	0.44
1:AA:235:C:H2'	1:AA:236:G:H8	1.81	0.44
1:AA:511:C:C2	1:AA:512:U:C5	3.05	0.44
1:AA:864:A:H2	1:AA:917:G:N3	2.15	0.44
1:AA:984:C:H2'	1:AA:985:C:H6	1.81	0.44
3:AC:120:VAL:HG13	3:AC:124:ILE:CD1	2.47	0.44
8:AH:109:ILE:HG12	8:AH:110:ALA:H	1.80	0.44
1:AA:538:G:OP2	12:AL:115:LYS:CG	2.65	0.44
12:AL:119:LYS:O	12:AL:120:TYR:CB	2.64	0.44
12:AL:60:LEU:N	12:AL:64:TYR:O	2.36	0.44
1:AA:1202:G:C4	14:AN:42:ILE:HG21	2.51	0.44
16:AP:3:LYS:O	16:AP:21:VAL:HA	2.16	0.44
19:AS:64:GLU:O	19:AS:67:VAL:HG23	2.17	0.44
22:AV:11:A:O2'	22:AV:12:G:H5'	2.16	0.44
23:AW:15:G:N2	23:AW:59:U:C2	2.85	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:24:G:H2'	23:AW:25:C:H6	1.81	0.44
27:B2:30:ARG:O	27:B2:32:LEU:O	2.36	0.44
30:B5:2:ALA:HB3	34:BA:747:U:N1	2.31	0.44
34:BA:1142(A):A:C4	34:BA:1144:G:N7	2.85	0.44
34:BA:1771:C:O2'	34:BA:1786:A:H8	2.00	0.44
34:BA:1798:U:H5'	37:BD:259:THR:CG2	2.42	0.44
34:BA:1843:C:O2'	34:BA:1844:C:H5'	2.16	0.44
30:B5:2:ALA:CA	34:BA:2015:A:H1'	2.43	0.44
34:BA:2084:C:O2'	34:BA:2085:C:H5'	2.17	0.44
34:BA:2292:C:N4	34:BA:2340:G:H1	2.15	0.44
34:BA:2377:A:H2'	34:BA:2378:A:C8	2.52	0.44
34:BA:2455:G:H2'	34:BA:2456:C:H6	1.82	0.44
34:BA:2464:C:O2'	34:BA:2465:C:P	2.74	0.44
34:BA:250:G:H2'	34:BA:251:A:C8	2.52	0.44
34:BA:2625:G:H2'	34:BA:2626:C:O4'	2.18	0.44
34:BA:2734:A:H5'	34:BA:2735:G:OP2	2.17	0.44
34:BA:2742:C:N3	34:BA:2763:G:N2	2.65	0.44
34:BA:2771:C:C2'	34:BA:2771:C:O2	2.62	0.44
34:BA:2811:G:O2'	34:BA:2812:G:H5'	2.17	0.44
34:BA:378:C:C2'	34:BA:379:G:H5'	2.47	0.44
34:BA:817:C:H2'	34:BA:818:G:O4'	2.18	0.44
34:BA:859:G:O4'	34:BA:2268:A:H1'	2.16	0.44
35:BB:17:C:O2'	35:BB:18:G:H5'	2.17	0.44
37:BD:53:PHE:CE1	37:BD:220:HIS:HA	2.53	0.44
39:BF:21:ALA:C	39:BF:23:ASP:N	2.71	0.44
39:BF:24:LEU:HD12	39:BF:25:PRO:HD2	1.98	0.44
34:BA:2060:A:OP1	39:BF:68:LYS:O	2.35	0.44
43:BN:128:HIS:HD2	43:BN:131:GLN:HB2	1.80	0.44
43:BN:18:ALA:O	43:BN:21:LYS:HG2	2.17	0.44
43:BN:19:GLU:O	43:BN:59:LYS:O	2.35	0.44
34:BA:814:C:C5	45:BP:27:HIS:CD2	3.05	0.44
46:BQ:32:TYR:CD1	46:BQ:32:TYR:N	2.85	0.44
50:BU:106:PHE:HA	50:BU:109:LEU:HD12	1.98	0.44
50:BU:109:LEU:O	50:BU:113:ALA:N	2.42	0.44
50:BU:38:THR:C	50:BU:40:PHE:N	2.70	0.44
50:BU:64:ARG:O	50:BU:65:ILE:C	2.55	0.44
51:BV:19:LYS:CE	51:BV:20:LEU:H	2.30	0.44
53:BX:40:LYS:O	53:BX:44:GLU:HG2	2.17	0.44
55:BZ:121:HIS:CE1	55:BZ:124:ILE:HG22	2.52	0.44
1:CA:135:C:H6	1:CA:135:C:O5'	2.00	0.44
1:CA:1457:G:O2'	1:CA:1458:G:H5'	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:197:A:N6	1:CA:221:C:H5'	2.31	0.44
1:CA:522:C:H2'	1:CA:523:A:O4'	2.18	0.44
1:CA:743:U:O2'	1:CA:744:C:H5'	2.16	0.44
2:CB:163:PHE:O	2:CB:164:VAL:HG23	2.17	0.44
2:CB:95:GLN:HB3	2:CB:96:ARG:H	1.65	0.44
4:CD:100:ARG:O	4:CD:103:ASN:HB3	2.18	0.44
5:CE:139:LEU:HA	5:CE:142:LEU:CD1	2.47	0.44
5:CE:77:PRO:HG2	5:CE:142:LEU:HD22	1.98	0.44
6:CF:53:ALA:O	6:CF:54:LYS:CB	2.65	0.44
12:CL:38:THR:HG21	12:CL:65:GLU:OE2	2.18	0.44
13:CM:17:VAL:O	13:CM:20:THR:HB	2.17	0.44
16:CP:59:TRP:CE3	16:CP:59:TRP:HA	2.52	0.44
20:CT:73:HIS:HB3	20:CT:74:LYS:H	1.42	0.44
26:D1:27:GLU:OE2	26:D1:33:LYS:N	2.50	0.44
27:D2:41:ILE:O	27:D2:42:GLY:O	2.34	0.44
31:D6:19:ARG:O	31:D6:20:ASN:HB3	2.17	0.44
33:D8:32:LEU:O	33:D8:34:TRP:N	2.49	0.44
34:DA:1156:A:H4'	34:DA:1157:G:OP2	2.16	0.44
34:DA:1368:G:C2	34:DA:1369:G:C8	3.05	0.44
34:DA:142(A):C:O2'	34:DA:143:G:H5'	2.17	0.44
34:DA:1446:C:O2'	34:DA:1447:G:H5'	2.17	0.44
34:DA:1593:G:C2'	34:DA:1594:G:C5'	2.93	0.44
34:DA:1742:G:N7	34:DA:1743:C:N3	2.65	0.44
34:DA:189:G:H2'	34:DA:205:G:H22	1.80	0.44
34:DA:2306:C:H5	34:DA:2307:G:H1'	1.81	0.44
34:DA:2319:G:H4'	34:DA:2319:G:OP2	2.17	0.44
34:DA:2455:G:H2'	34:DA:2456:C:H6	1.79	0.44
34:DA:2532:G:H2'	34:DA:2533:A:H8	1.83	0.44
34:DA:2713:A:C3'	34:DA:2714:G:H5'	2.47	0.44
34:DA:2734:A:H5'	34:DA:2735:G:OP2	2.18	0.44
34:DA:2777:G:C5'	34:DA:2778:A:H5'	2.46	0.44
34:DA:2849:U:N3	34:DA:2867:G:N3	2.65	0.44
34:DA:332:A:H4'	34:DA:333:G:OP1	2.16	0.44
34:DA:686:G:N2	34:DA:788:A:N6	2.65	0.44
37:DD:252:TRP:O	37:DD:253:GLN:C	2.54	0.44
37:DD:53:PHE:CD1	37:DD:220:HIS:HA	2.52	0.44
37:DD:80:ALA:HB3	37:DD:94:LEU:HD11	1.99	0.44
34:DA:2632:A:C1'	38:DE:61:ARG:NH1	2.79	0.44
39:DF:36:VAL:HA	39:DF:101:LEU:CD2	2.47	0.44
40:DG:76:SER:HA	40:DG:83:ARG:HA	1.99	0.44
41:DH:44:VAL:C	41:DH:46:GLU:OE2	2.56	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DH:30:LYS:HZ3	41:DH:81:GLU:HG2	1.82	0.44
41:DH:89:ILE:HG12	41:DH:90:LYS:H	1.81	0.44
42:DI:94:ALA:CB	42:DI:114:LEU:HD12	2.45	0.44
43:DN:58:ASP:O	43:DN:60:ILE:N	2.50	0.44
45:DP:112:LEU:O	45:DP:112:LEU:HD13	2.16	0.44
48:DS:53:SER:O	48:DS:56:LEU:HB3	2.17	0.44
50:DU:25:TRP:CD1	50:DU:26:GLY:N	2.85	0.44
51:DV:2:PHE:O	51:DV:3:ALA:CB	2.64	0.44
54:DY:44:ILE:HG22	54:DY:45:VAL:N	2.32	0.44
55:DZ:59:LEU:O	55:DZ:66:SER:HA	2.16	0.44
46:DQ:132:VAL:HG11	55:DZ:81:ARG:NH1	2.32	0.44
1:AA:154:C:O2'	1:AA:155:C:H5'	2.17	0.44
1:AA:22:G:H2'	1:AA:23:C:H6	1.82	0.44
1:AA:556:C:H2'	1:AA:557:G:H5'	1.99	0.44
1:AA:741:G:H2'	1:AA:742:G:O4'	2.17	0.44
1:AA:758:G:C5'	1:AA:880:C:H1'	2.47	0.44
3:AC:95:THR:HG21	3:AC:99:VAL:HG13	2.00	0.44
4:AD:157:LEU:O	4:AD:158:ILE:C	2.54	0.44
4:AD:50:ARG:NH1	4:AD:52:SER:HA	2.33	0.44
5:AE:128:PRO:O	5:AE:129:ILE:C	2.55	0.44
6:AF:14:LEU:HA	6:AF:18:GLN:NE2	2.33	0.44
6:AF:53:ALA:O	6:AF:54:LYS:CB	2.65	0.44
7:AG:155:ARG:O	7:AG:156:TRP:O	2.35	0.44
9:AI:43:ALA:C	9:AI:45:ALA:H	2.20	0.44
9:AI:17:VAL:CG2	9:AI:80:GLY:HA3	2.47	0.44
17:AQ:67:LYS:C	17:AQ:69:LYS:N	2.71	0.44
18:AR:35:ARG:O	18:AR:37:VAL:N	2.41	0.44
19:AS:13:ASP:C	19:AS:15:LEU:N	2.71	0.44
19:AS:62:ILE:HG23	19:AS:62:ILE:O	2.17	0.44
1:AA:263:A:OP2	20:AT:79:ARG:NH1	2.50	0.44
21:AU:2:GLY:C	21:AU:4:GLY:N	2.71	0.44
26:B1:46:LEU:HD13	26:B1:48:LYS:HE3	1.99	0.44
34:BA:1120:G:C6	34:BA:1121:C:C4	3.05	0.44
34:BA:1209:G:O2'	34:BA:1237:A:N1	2.49	0.44
34:BA:1254:A:H5'	34:BA:1255:U:C5'	2.46	0.44
34:BA:1260:G:C6	34:BA:1261:C:C4	3.05	0.44
34:BA:143(A):C:C2'	34:BA:143(A):C:O2	2.62	0.44
34:BA:1448:G:H21	34:BA:1528(A):A:H2	1.65	0.44
34:BA:1844:C:C2'	34:BA:1845:G:H5'	2.47	0.44
34:BA:2339:G:O2'	34:BA:2340:G:H5'	2.17	0.44
34:BA:2364:C:O2'	34:BA:2365:G:H5'	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2737:G:O2'	34:BA:2738:A:H5'	2.17	0.44
34:BA:2756:U:H1'	34:BA:2757:A:H5''	1.99	0.44
34:BA:2849:U:N3	34:BA:2867:G:N3	2.65	0.44
34:BA:461:C:O2'	34:BA:462:C:H5'	2.17	0.44
34:BA:627:A:C6	34:BA:637:A:C8	3.06	0.44
34:BA:978:G:C2	34:BA:986:C:C2	3.05	0.44
36:BC:67:GLY:O	36:BC:68:LEU:HB2	2.18	0.44
37:BD:35:LYS:CD	37:BD:104:TYR:CD1	3.00	0.44
37:BD:239:ARG:HG3	37:BD:239:ARG:HH21	1.83	0.44
37:BD:70:TRP:CD2	37:BD:150:LYS:HE2	2.53	0.44
38:BE:24:THR:HG21	38:BE:188:VAL:CG1	2.47	0.44
38:BE:3:GLY:C	38:BE:4:ILE:HG22	2.37	0.44
40:BG:131:TYR:CE2	40:BG:133:LEU:HD23	2.52	0.44
40:BG:139:LEU:HB3	40:BG:149:VAL:HG11	1.99	0.44
41:BH:144:VAL:HG22	41:BH:147:ASN:OD1	2.17	0.44
41:BH:47:GLU:C	41:BH:49:VAL:H	2.20	0.44
41:BH:70:THR:O	41:BH:73:ALA:HB3	2.18	0.44
42:BI:5:LEU:HD11	42:BI:12:LEU:HB2	1.98	0.44
43:BN:13:TRP:HZ3	43:BN:130:HIS:CE1	2.36	0.44
45:BP:102:ARG:HH21	45:BP:102:ARG:HG3	1.82	0.44
45:BP:105:LEU:O	45:BP:106:LEU:CB	2.59	0.44
45:BP:30:THR:CG2	45:BP:31:ALA:N	2.73	0.44
46:BQ:39:PRO:CA	46:BQ:99:PRO:HD3	2.46	0.44
34:BA:2847:U:OP1	49:BT:98:LYS:HD3	2.17	0.44
52:BW:72:LYS:HB3	52:BW:106:ILE:O	2.18	0.44
53:BX:27:THR:CB	53:BX:77:LYS:HA	2.47	0.44
53:BX:89:ILE:N	53:BX:89:ILE:CD1	2.80	0.44
54:BY:76:CYS:CB	54:BY:77:PRO:CD	2.96	0.44
1:CA:519:C:H2'	1:CA:520:A:O4'	2.18	0.44
4:CD:194:LEU:N	4:CD:194:LEU:HD22	2.32	0.44
5:CE:76:ILE:HG23	5:CE:78:HIS:H	1.82	0.44
7:CG:155:ARG:O	7:CG:156:TRP:O	2.36	0.44
8:CH:125:ARG:HH11	8:CH:125:ARG:HG3	1.81	0.44
8:CH:8:ASP:O	8:CH:9:MET:C	2.56	0.44
1:CA:1347:G:H8	9:CI:107:ARG:HB3	1.76	0.44
12:CL:89:ARG:CZ	12:CL:89:ARG:HB2	2.46	0.44
10:CJ:63:PHE:HZ	14:CN:45:ARG:HG3	1.82	0.44
16:CP:3:LYS:O	16:CP:21:VAL:HA	2.17	0.44
1:CA:636:U:H5'	17:CQ:2:PRO:HG3	2.00	0.44
26:D1:56:GLN:O	26:D1:57:GLU:HG2	2.17	0.44
27:D2:29:LYS:O	27:D2:33:MET:SD	2.75	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:D5:56:LYS:CD	30:D5:57:VAL:N	2.80	0.44
34:DA:1485:G:H1'	34:DA:1505:C:H42	1.79	0.44
34:DA:1935:G:H1'	34:DA:1964:G:N2	2.33	0.44
34:DA:2126:A:O2'	34:DA:2127:G:P	2.76	0.44
34:DA:2192:G:C2	34:DA:2193:G:C8	3.04	0.44
34:DA:2436:G:C6	34:DA:2437:U:C4	3.06	0.44
34:DA:2700:C:O2'	34:DA:2701:C:H5'	2.17	0.44
34:DA:2821:A:O2'	34:DA:2822:G:H5'	2.17	0.44
34:DA:613:G:C2	34:DA:615:G:C5	3.06	0.44
34:DA:740:U:H2'	34:DA:741:G:H8	1.81	0.44
37:DD:193:VAL:HG13	37:DD:193:VAL:O	2.18	0.44
37:DD:69:ARG:HG2	37:DD:69:ARG:O	2.17	0.44
38:DE:134:ILE:H	38:DE:134:ILE:CD1	2.29	0.44
40:DG:25:TYR:CD2	40:DG:31:VAL:HG22	2.52	0.44
34:DA:2312:U:OP1	40:DG:73:ALA:HA	2.17	0.44
40:DG:72:ARG:HG2	40:DG:86:MET:O	2.16	0.44
41:DH:12:PRO:O	41:DH:14:GLY:N	2.50	0.44
42:DI:132:PRO:O	42:DI:133:HIS:O	2.34	0.44
43:DN:41:ASP:N	43:DN:41:ASP:OD1	2.50	0.44
46:DQ:103:MET:HE1	46:DQ:125:LEU:HD13	1.99	0.44
47:DR:18:LEU:CD1	47:DR:18:LEU:C	2.81	0.44
48:DS:14:VAL:O	48:DS:15:ARG:C	2.55	0.44
49:DT:29:ARG:CG	49:DT:30:VAL:HG13	2.47	0.44
53:DX:37:THR:C	53:DX:39:ILE:H	2.21	0.44
54:DY:29:GLU:O	54:DY:30:VAL:O	2.36	0.44
54:DY:49:VAL:HG12	54:DY:53:PRO:HG3	1.99	0.44
1:AA:1064:G:H21	1:AA:1190:G:H2'	1.80	0.44
1:AA:1446:U:H4'	1:AA:1447:A:N7	2.32	0.44
1:AA:1488:G:H2'	1:AA:1489:G:H8	1.82	0.44
1:AA:174:C:H2'	1:AA:175:C:C6	2.53	0.44
1:AA:57:G:O2'	1:AA:58:C:H5'	2.17	0.44
1:AA:706:A:C5	1:AA:707:C:H5	2.34	0.44
1:AA:893:C:H2'	1:AA:894:G:C8	2.51	0.44
3:AC:23:TYR:CD2	3:AC:24:ALA:N	2.85	0.44
4:AD:57:ARG:CZ	5:AE:107:ARG:NH1	2.80	0.44
5:AE:132:ALA:O	5:AE:134:ALA:N	2.51	0.44
5:AE:94:ALA:CB	5:AE:98:THR:HG21	2.48	0.44
7:AG:93:PRO:O	7:AG:94:ARG:C	2.56	0.44
9:AI:96:LEU:HG	9:AI:102:LEU:HD12	1.99	0.44
1:AA:1349:A:P	9:AI:118:LYS:HZ3	2.40	0.44
18:AR:24:ALA:O	18:AR:26:LEU:N	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AR:61:LYS:O	18:AR:65:ILE:HG13	2.17	0.44
18:AR:73:ALA:O	18:AR:74:ARG:C	2.55	0.44
23:AW:5:G:C2'	23:AW:6:G:H5'	2.47	0.44
27:B2:40:SER:O	27:B2:41:ILE:O	2.35	0.44
33:B8:6:THR:CG2	34:BA:243:U:OP1	2.65	0.44
34:BA:1047:G:H2'	34:BA:1110:G:N1	2.32	0.44
34:BA:1159:U:C2'	34:BA:1160:G:H5'	2.47	0.44
34:BA:139:G:H2'	34:BA:139(A):G:H5''	1.99	0.44
34:BA:1508:A:H2'	34:BA:1509:C:OP1	2.18	0.44
34:BA:1577:C:H2'	34:BA:1578:U:H6	1.78	0.44
34:BA:1771:C:C1'	34:BA:1786:A:C8	2.99	0.44
34:BA:614(C):A:H4'	34:BA:615:G:OP1	2.17	0.44
34:BA:795:C:H2'	34:BA:796:C:C6	2.51	0.44
34:BA:879:G:N1	34:BA:898:C:N4	2.63	0.44
34:BA:935:C:H2'	34:BA:936:C:C6	2.53	0.44
36:BC:68:LEU:HD22	36:BC:179:SER:HA	2.00	0.44
38:BE:173:VAL:HG12	38:BE:174:ASP:H	1.80	0.44
39:BF:3:GLU:HB2	39:BF:24:LEU:HG	1.99	0.44
40:BG:138:GLN:OE1	40:BG:152:LEU:HA	2.16	0.44
41:BH:20:ALA:CB	41:BH:21:PRO:CD	2.92	0.44
42:BI:88:ILE:HD13	42:BI:123:LEU:HG	1.98	0.44
43:BN:57:ALA:O	43:BN:58:ASP:C	2.55	0.44
34:BA:941:A:H4'	45:BP:35:HIS:HE1	1.77	0.44
46:BQ:10:ARG:HH11	46:BQ:10:ARG:CB	2.31	0.44
48:BS:101:LEU:HD13	48:BS:102:ALA:O	2.17	0.44
49:BT:100:TYR:CD1	49:BT:100:TYR:N	2.84	0.44
49:BT:15:VAL:O	49:BT:16:ARG:HG2	2.17	0.44
49:BT:96:ARG:HG2	49:BT:96:ARG:HH11	1.83	0.44
50:BU:26:GLY:O	50:BU:30:LYS:HG2	2.17	0.44
52:BW:89:ALA:O	52:BW:90:ARG:HB2	2.17	0.44
55:BZ:28:MET:CE	55:BZ:37:VAL:HG11	2.48	0.44
1:CA:1030(A):G:H2'	1:CA:1030(C):G:OP2	2.18	0.44
1:CA:1321:C:O2	19:CS:77:THR:HG21	2.18	0.44
1:CA:1502:A:H2	1:CA:1505:G:C2	2.35	0.44
1:CA:44:G:H2'	1:CA:45:U:O4'	2.17	0.44
1:CA:689:C:O2'	1:CA:690:G:H5'	2.17	0.44
1:CA:782:A:N7	1:CA:783:C:C2	2.85	0.44
1:CA:957:U:H2'	1:CA:959:A:OP2	2.18	0.44
1:CA:967:C:H2'	1:CA:968:A:N7	2.32	0.44
2:CB:198:ASP:N	2:CB:198:ASP:OD2	2.49	0.44
2:CB:16:HIS:HB3	2:CB:210:SER:CB	2.46	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:120:VAL:HG13	3:CC:124:ILE:CD1	2.47	0.44
4:CD:20:TYR:N	4:CD:20:TYR:CD1	2.85	0.44
5:CE:110:LEU:O	5:CE:113:ALA:HB3	2.17	0.44
6:CF:19:LEU:HD21	6:CF:23:LYS:HD2	1.99	0.44
8:CH:36:LEU:O	8:CH:39:LEU:N	2.50	0.44
13:CM:118:ALA:O	13:CM:119:GLY:N	2.51	0.44
13:CM:75:ALA:O	13:CM:76:ALA:C	2.55	0.44
19:CS:15:LEU:HD22	19:CS:15:LEU:N	2.31	0.44
22:CV:41:C:O2'	22:CV:42:G:H5'	2.17	0.44
26:D1:34:THR:HG21	34:DA:388:G:OP2	2.18	0.44
34:DA:1120:G:C6	34:DA:1121:C:C4	3.05	0.44
34:DA:1239:G:H2'	34:DA:1240:U:O4'	2.17	0.44
34:DA:1337:G:H2'	34:DA:1338:G:O4'	2.18	0.44
34:DA:1510:G:H2'	34:DA:1511:C:H6	1.80	0.44
34:DA:2259:G:H1'	34:DA:2427:C:C2	2.51	0.44
34:DA:250:G:C6	34:DA:251:A:C6	3.05	0.44
34:DA:271(A):A:H62	34:DA:271(W):G:H21	1.65	0.44
34:DA:896:A:C2	34:DA:898:C:H5''	2.52	0.44
37:DD:25:THR:CG2	37:DD:82:ILE:N	2.77	0.44
38:DE:186:GLY:O	38:DE:188:VAL:N	2.50	0.44
39:DF:24:LEU:HD12	39:DF:25:PRO:HD2	1.99	0.44
39:DF:3:GLU:HB2	39:DF:24:LEU:HG	1.98	0.44
40:DG:39:ILE:HA	40:DG:157:ILE:HA	2.00	0.44
43:DN:18:ALA:O	43:DN:21:LYS:N	2.44	0.44
43:DN:58:ASP:O	43:DN:59:LYS:HB2	2.17	0.44
45:DP:125:VAL:O	45:DP:125:VAL:HG13	2.16	0.44
34:DA:814:C:C5	45:DP:27:HIS:CD2	3.05	0.44
47:DR:107:ASP:OD2	47:DR:108:GLY:N	2.49	0.44
47:DR:67:LEU:N	47:DR:67:LEU:HD22	2.33	0.44
48:DS:18:ILE:HD12	48:DS:18:ILE:HA	1.76	0.44
48:DS:35:ILE:C	48:DS:36:TYR:HD1	2.21	0.44
50:DU:66:ASN:C	50:DU:68:ALA:N	2.70	0.44
51:DV:82:ARG:HD2	51:DV:82:ARG:O	2.17	0.44
34:DA:751:A:C5'	52:DW:90:ARG:HA	2.47	0.44
1:AA:1119:C:O2'	1:AA:1120:G:H5'	2.18	0.44
1:AA:277:C:P	17:AQ:41:LYS:HZ1	2.40	0.44
1:AA:368:U:C5	42:DI:89:TYR:HB3	2.52	0.44
1:AA:891:U:O2'	1:AA:892:A:H5'	2.17	0.44
1:AA:958:A:C6	1:AA:959:A:C6	3.06	0.44
2:AB:27:LYS:C	2:AB:29:ALA:H	2.19	0.44
4:AD:138:TYR:HD2	4:AD:138:TYR:C	2.21	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:25:ARG:C	4:AD:27:TYR:N	2.68	0.44
5:AE:102:ALA:HB2	5:AE:120:THR:OG1	2.17	0.44
6:AF:61:LEU:HB3	6:AF:63:TYR:CE2	2.52	0.44
14:AN:33:VAL:HG12	14:AN:34:TYR:H	1.82	0.44
16:AP:53:VAL:O	16:AP:54:GLU:C	2.56	0.44
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.98	0.44
31:B6:32:ASN:O	31:B6:33:LYS:HB2	2.17	0.44
34:BA:1509(B):A:H2'	34:BA:1510:G:O4'	2.17	0.44
34:BA:1815:A:H8	34:BA:1815:A:OP1	1.99	0.44
34:BA:2103:C:H5'	34:BA:2104:G:OP2	2.18	0.44
34:BA:2176:A:H2'	34:BA:2177:C:C6	2.52	0.44
34:BA:2287:A:H2	34:BA:2346:A:N1	2.15	0.44
34:BA:2319:G:OP2	34:BA:2319:G:H4'	2.18	0.44
34:BA:2343:C:H2'	34:BA:2344:U:H6	1.82	0.44
34:BA:2681:C:O2	34:BA:2681:C:O4'	2.32	0.44
34:BA:2745:C:O2'	34:BA:2746:U:H5'	2.17	0.44
34:BA:2853:C:O2'	34:BA:2854:G:H5'	2.18	0.44
34:BA:676:A:C8	34:BA:2069:G:N2	2.67	0.44
36:BC:51:PRO:HB3	36:BC:203:GLY:C	2.38	0.44
38:BE:55:ASN:HD21	38:BE:75:VAL:HG21	1.82	0.44
40:BG:16:ARG:HH11	40:BG:16:ARG:HG3	1.82	0.44
42:BI:84:GLY:O	42:BI:85:GLU:HB2	2.17	0.44
46:BQ:93:TYR:N	46:BQ:93:TYR:CD1	2.85	0.44
53:BX:40:LYS:CG	53:BX:41:ASN:N	2.81	0.44
53:BX:29:TRP:CE3	53:BX:76:ARG:HB3	2.52	0.44
53:BX:88:LYS:HD2	53:BX:88:LYS:N	2.32	0.44
1:CA:1065:U:O2'	1:CA:1066:C:OP2	2.31	0.44
1:CA:865:A:H5'	1:CA:1078:U:O4	2.17	0.44
1:CA:1305:G:N2	1:CA:1331:G:O2'	2.43	0.44
1:CA:624:C:H4'	16:CP:10:GLY:HA2	2.00	0.44
1:CA:711:G:O2'	1:CA:712:A:H5'	2.17	0.44
1:CA:939:G:C6	1:CA:940:C:N4	2.85	0.44
2:CB:239:VAL:O	2:CB:239:VAL:HG12	2.17	0.44
2:CB:74:LYS:HG3	2:CB:77:ALA:HB3	2.00	0.44
5:CE:106:PRO:O	5:CE:110:LEU:HG	2.17	0.44
4:CD:57:ARG:CZ	5:CE:107:ARG:NH1	2.81	0.44
17:CQ:12:SER:HB3	17:CQ:20:THR:OG1	2.17	0.44
18:CR:24:ALA:O	18:CR:26:LEU:N	2.50	0.44
18:CR:72:ARG:O	18:CR:76:LEU:HD23	2.18	0.44
18:CR:82:THR:HG23	18:CR:83:GLU:N	2.32	0.44
1:CA:1327:C:P	21:CU:12:LYS:HZ1	2.40	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:CW:60:U:H2'	23:CW:61:C:H5	1.83	0.44
26:D1:26:ARG:HB3	26:D1:35:THR:N	2.28	0.44
32:D7:9:ARG:CG	32:D7:9:ARG:HH11	2.29	0.44
34:DA:770:G:N3	34:DA:1354:A:H2	2.16	0.44
34:DA:1355:G:C4	34:DA:1356:G:C8	3.05	0.44
34:DA:1428:C:C5	34:DA:1569:A:H5''	2.52	0.44
34:DA:2081:C:O2'	34:DA:2082:A:H5'	2.17	0.44
34:DA:2335:A:C8	34:DA:2337:G:C5	3.06	0.44
34:DA:271(K):U:H3'	34:DA:271(L):U:H5'	1.99	0.44
34:DA:2732:G:H3'	34:DA:2733:A:C5'	2.48	0.44
34:DA:2758:A:C3'	34:DA:2759:G:C5'	2.95	0.44
32:D7:12:ARG:NH2	34:DA:465:G:OP1	2.49	0.44
34:DA:483:A:C4'	54:DY:47:LYS:HD3	2.47	0.44
35:DB:61:G:C6	35:DB:62:C:C4	3.05	0.44
38:DE:129:HIS:O	38:DE:130:GLY:O	2.36	0.44
38:DE:24:THR:HG21	38:DE:188:VAL:CG1	2.47	0.44
39:DF:101:LEU:CD1	39:DF:102:PRO:HD2	2.36	0.44
42:DI:13:GLY:O	42:DI:14:ASP:C	2.56	0.44
43:DN:74:ARG:HH22	43:DN:101:HIS:HB3	1.82	0.44
43:DN:87:LEU:O	43:DN:88:GLU:C	2.56	0.44
48:DS:84:GLN:HE21	48:DS:105:ALA:HB1	1.82	0.44
44:DO:119:PRO:O	49:DT:68:TYR:HE1	2.01	0.44
50:DU:114:LYS:HE2	50:DU:114:LYS:HB3	1.89	0.44
34:DA:1225:G:OP1	51:DV:88:ARG:HD2	2.17	0.44
53:DX:77:LYS:CE	53:DX:78:LYS:HD2	2.46	0.44
55:DZ:117:LEU:HD23	55:DZ:117:LEU:H	1.82	0.44
1:AA:1160:G:N3	1:AA:1160:G:H2'	2.33	0.44
1:AA:1328:C:O2'	1:AA:1329:A:H5'	2.17	0.44
1:AA:1491:G:C5	57:AA:1816:PAR:H21	2.52	0.44
1:AA:316:G:H2'	1:AA:317:G:H8	1.82	0.44
1:AA:743:U:O2'	1:AA:744:C:H5'	2.17	0.44
2:AB:101:MET:O	2:AB:105:PHE:N	2.51	0.44
2:AB:59:GLU:C	2:AB:61:LEU:H	2.20	0.44
3:AC:50:ALA:HB1	3:AC:70:VAL:HG11	1.98	0.44
3:AC:75:VAL:O	3:AC:83:ARG:HG2	2.17	0.44
4:AD:118:ARG:HG3	4:AD:118:ARG:HH21	1.82	0.44
4:AD:133:VAL:HG12	4:AD:134:ASP:N	2.32	0.44
4:AD:60:GLU:HG2	4:AD:202:LEU:HD12	1.99	0.44
4:AD:80:GLU:O	4:AD:81:GLU:C	2.54	0.44
5:AE:145:LYS:O	5:AE:149:GLU:HG2	2.17	0.44
5:AE:73:ASN:ND2	5:AE:73:ASN:O	2.51	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:71:PRO:HD3	7:AG:103:TRP:HZ3	1.83	0.44
7:AG:27:ILE:N	7:AG:27:ILE:HD12	2.31	0.44
1:AA:1279:A:H2	10:AJ:43:ARG:HH12	1.65	0.44
13:AM:8:GLU:OE1	13:AM:22:ILE:HA	2.17	0.44
13:AM:19:LEU:CA	13:AM:22:ILE:HD12	2.44	0.44
13:AM:27:LYS:HD2	13:AM:27:LYS:HA	1.79	0.44
15:AO:66:LEU:N	15:AO:66:LEU:CD1	2.79	0.44
22:AV:29:G:O2'	22:AV:30:G:H5'	2.17	0.44
34:BA:1157:G:C2'	34:BA:1158:C:H5'	2.47	0.44
34:BA:1341:U:OP1	34:BA:1397:U:N3	2.45	0.44
34:BA:1474:C:H3'	34:BA:1475:G:H8	1.82	0.44
34:BA:1494:A:OP1	34:BA:1494:A:H4'	2.17	0.44
23:AW:17:C:H6	34:BA:2180:U:HO2'	1.62	0.44
34:BA:2308:G:N7	34:BA:2310:A:H5'	2.32	0.44
34:BA:271(P):C:O2'	34:BA:271(Q):G:H5'	2.17	0.44
34:BA:314:A:C2'	34:BA:315:G:H5'	2.47	0.44
34:BA:649:G:C5	34:BA:650:C:C4	3.06	0.44
34:BA:741:G:H2'	34:BA:742:G:C8	2.50	0.44
34:BA:861:A:C2	34:BA:917:A:C4	3.06	0.44
36:BC:77:ILE:HD12	36:BC:123:VAL:H	1.81	0.44
37:BD:77:ALA:HB2	37:BD:97:TYR:CG	2.52	0.44
41:BH:32:GLU:O	41:BH:33:LEU:HD23	2.17	0.44
41:BH:57:ASP:O	41:BH:62:LYS:HE3	2.17	0.44
42:BI:3:VAL:HG12	42:BI:38:LEU:HA	1.99	0.44
44:BO:17:ARG:O	44:BO:18:LYS:HG3	2.16	0.44
45:BP:96:THR:HG22	45:BP:126:VAL:HG23	1.99	0.44
48:BS:49:VAL:HG12	48:BS:73:LEU:CD2	2.47	0.44
49:BT:33:LYS:H	49:BT:33:LYS:HZ3	1.66	0.44
50:BU:62:ILE:HG13	50:BU:76:TYR:CZ	2.52	0.44
50:BU:66:ASN:C	50:BU:68:ALA:N	2.70	0.44
52:BW:88:ARG:HD2	52:BW:88:ARG:HA	1.46	0.44
54:BY:40:GLU:HA	54:BY:40:GLU:OE2	2.16	0.44
54:BY:37:VAL:HG11	54:BY:72:VAL:HG21	1.98	0.44
55:BZ:120:ILE:HG21	55:BZ:170:THR:OG1	2.17	0.44
46:BQ:140:ALA:HA	55:BZ:99:TYR:CG	2.53	0.44
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.17	0.44
1:CA:1250:A:H2'	1:CA:1251:A:C8	2.53	0.44
1:CA:1342:C:H2'	1:CA:1343:G:C8	2.52	0.44
1:CA:1480:G:O2'	1:CA:1481:U:H5'	2.17	0.44
1:CA:1502:A:C2	1:CA:1505:G:N2	2.85	0.44
1:CA:200:G:H1	1:CA:217:C:N4	2.14	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:713:G:H2'	1:CA:714:G:C8	2.52	0.44
1:CA:887:G:H2'	1:CA:888:G:H5'	1.99	0.44
2:CB:164:VAL:O	2:CB:186:ALA:HB1	2.17	0.44
3:CC:12:LEU:O	3:CC:13:GLY:C	2.56	0.44
5:CE:147:ASP:O	5:CE:151:LEU:HG	2.17	0.44
7:CG:105:VAL:O	7:CG:108:ALA:HB3	2.18	0.44
7:CG:27:ILE:HD12	7:CG:27:ILE:N	2.31	0.44
8:CH:87:SER:HB2	8:CH:93:VAL:HB	2.00	0.44
9:CI:43:ALA:C	9:CI:45:ALA:H	2.20	0.44
10:CJ:4:ILE:O	10:CJ:74:ILE:HD13	2.17	0.44
1:CA:35:G:H21	12:CL:118:SER:HB2	1.82	0.44
12:CL:32:PHE:HD1	12:CL:86:ARG:HA	1.81	0.44
13:CM:18:ALA:O	13:CM:20:THR:N	2.51	0.44
13:CM:29:ARG:HA	13:CM:32:GLU:HB3	1.99	0.44
17:CQ:9:VAL:HG12	17:CQ:10:VAL:N	2.33	0.44
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.98	0.44
20:CT:16:HIS:O	20:CT:17:ARG:C	2.56	0.44
23:CW:25:C:H2'	23:CW:26:A:C8	2.52	0.44
25:D0:60:PHE:CE2	34:DA:2365:G:H4'	2.51	0.44
30:D5:26:THR:O	30:D5:26:THR:HG23	2.17	0.44
33:D8:34:TRP:O	33:D8:35:GLN:CB	2.64	0.44
34:DA:1675:C:C2	38:DE:129:HIS:CD2	3.06	0.44
34:DA:1771:C:HO2'	34:DA:1786:A:H8	1.65	0.44
34:DA:179:G:O2'	34:DA:180:G:H5'	2.17	0.44
34:DA:2521:C:C4	34:DA:2522:U:C4	3.05	0.44
34:DA:271(A):A:N1	34:DA:272(D):G:O2'	2.43	0.44
34:DA:2838:G:H2'	34:DA:2839:G:H8	1.82	0.44
34:DA:2842:G:C6	34:DA:2876:G:C6	3.06	0.44
34:DA:480:A:H3'	34:DA:481:G:H5''	1.99	0.44
34:DA:631:A:O2'	45:DP:67:MET:HB3	2.18	0.44
34:DA:90:U:H1'	34:DA:92:A:H8	1.81	0.44
35:DB:21:G:O2'	35:DB:22:U:C5'	2.66	0.44
36:DC:51:PRO:HB2	36:DC:202:GLU:CB	2.48	0.44
38:DE:55:ASN:HD21	38:DE:75:VAL:HG22	1.82	0.44
39:DF:83:PHE:O	39:DF:84:VAL:C	2.54	0.44
41:DH:94:TYR:CG	41:DH:107:VAL:HG12	2.51	0.44
43:DN:65:LYS:C	43:DN:66:LYS:HD3	2.38	0.44
48:DS:67:ARG:C	48:DS:69:VAL:N	2.71	0.44
48:DS:95:HIS:CD2	48:DS:96:GLY:H	2.35	0.44
49:DT:29:ARG:HD3	49:DT:86:ILE:CG2	2.30	0.44
50:DU:92:ARG:NH1	51:DV:11:GLN:N	2.66	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:360:A:H2'	1:AA:361:G:O4'	2.17	0.44
1:AA:519:C:O2'	1:AA:520:A:H5'	2.18	0.44
1:AA:612:C:O2'	1:AA:613:C:H5'	2.17	0.44
1:AA:713:G:H2'	1:AA:714:G:C8	2.52	0.44
1:AA:763:G:H2'	1:AA:764:C:H6	1.82	0.44
1:AA:967:C:H2'	1:AA:968:A:C8	2.52	0.44
2:AB:19:HIS:CD2	2:AB:20:GLU:HG2	2.52	0.44
5:AE:31:LEU:HD22	5:AE:43:LEU:HD11	1.99	0.44
1:AA:1348:U:H4'	9:AI:120:ARG:HH11	1.82	0.44
9:AI:5:TYR:CG	9:AI:6:GLY:N	2.85	0.44
9:AI:77:ILE:O	9:AI:81:ILE:HG12	2.16	0.44
10:AJ:38:ILE:O	10:AJ:38:ILE:HG13	2.16	0.44
1:AA:973:G:H5''	10:AJ:57:LYS:NZ	2.33	0.44
11:AK:38:ASN:ND2	11:AK:38:ASN:N	2.64	0.44
11:AK:44:SER:H	11:AK:47:VAL:HG21	1.82	0.44
14:AN:22:THR:O	14:AN:23:ARG:HB2	2.17	0.44
18:AR:53:ARG:C	18:AR:55:ARG:H	2.21	0.44
18:AR:79:LEU:HD23	18:AR:80:PRO:CD	2.46	0.44
26:B1:80:LEU:HA	26:B1:80:LEU:HD23	1.84	0.44
29:B4:11:PRO:C	29:B4:13:ARG:N	2.65	0.44
30:B5:34:PRO:O	30:B5:35:GLU:C	2.56	0.44
33:B8:32:LEU:O	33:B8:34:TRP:N	2.50	0.44
34:BA:1201:C:O2'	34:BA:1202:C:H5'	2.17	0.44
34:BA:1449:A:H8	34:BA:1449:A:OP2	1.99	0.44
34:BA:2287:A:N6	34:BA:2344:U:N3	2.63	0.44
34:BA:2837:G:H2'	34:BA:2838:G:H8	1.81	0.44
34:BA:322:A:P	39:BF:169:ASN:HD22	2.40	0.44
34:BA:503:A:H4'	34:BA:505:A:H5''	1.99	0.44
34:BA:910:A:H62	46:BQ:12:GLN:HA	1.83	0.44
34:BA:977:G:C6	34:BA:987:G:C6	3.06	0.44
38:BE:113:PHE:CE2	38:BE:158:GLY:HA2	2.53	0.44
38:BE:116:VAL:HG22	38:BE:122:PHE:CG	2.53	0.44
38:BE:3:GLY:O	38:BE:4:ILE:CG2	2.66	0.44
40:BG:155:MET:SD	40:BG:156:ASP:N	2.91	0.44
41:BH:144:VAL:O	41:BH:144:VAL:CG1	2.61	0.44
42:BI:53:ALA:O	42:BI:57:ARG:HB2	2.17	0.44
42:BI:88:ILE:CG2	42:BI:89:TYR:N	2.71	0.44
43:BN:104:LYS:C	43:BN:106:MET:H	2.21	0.44
43:BN:30:ILE:O	43:BN:33:LEU:HB3	2.18	0.44
45:BP:95:VAL:HG23	45:BP:125:VAL:CG2	2.42	0.44
46:BQ:47:ILE:H	46:BQ:47:ILE:CD1	2.28	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BR:49:ASP:O	47:BR:51:LEU:N	2.51	0.44
47:BR:78:LYS:O	47:BR:83:ILE:N	2.50	0.44
48:BS:56:LEU:C	48:BS:56:LEU:HD23	2.38	0.44
48:BS:95:HIS:CD2	48:BS:96:GLY:H	2.35	0.44
34:BA:1754:C:H4'	49:BT:101:PHE:CD2	2.53	0.44
50:BU:18:LEU:O	50:BU:21:ALA:N	2.47	0.44
34:BA:71:A:H2	53:BX:31:HIS:HE1	1.66	0.44
1:CA:1169:A:C2	1:CA:1170:A:C4	3.05	0.44
1:CA:1306:A:O2'	1:CA:1307:U:H5'	2.18	0.44
1:CA:1323:G:H4'	1:CA:1363:C:N3	2.32	0.44
1:CA:1428:A:C2	1:CA:1473:A:C2	3.05	0.44
1:CA:311:C:O2'	1:CA:312:C:H5'	2.18	0.44
1:CA:423:G:H2'	1:CA:424:G:O4'	2.18	0.44
1:CA:426:G:H2'	1:CA:427:U:C6	2.52	0.44
1:CA:707:C:O2'	1:CA:708:C:C5'	2.64	0.44
1:CA:81:U:H2'	1:CA:82:U:C5	2.53	0.44
2:CB:165:VAL:O	2:CB:187:LEU:O	2.35	0.44
2:CB:42:ILE:CD1	2:CB:202:PRO:HB2	2.48	0.44
2:CB:75:LYS:HG2	2:CB:78:GLN:HE21	1.82	0.44
6:CF:61:LEU:HD23	6:CF:63:TYR:OH	2.17	0.44
8:CH:38:ILE:HD11	8:CH:118:VAL:O	2.18	0.44
9:CI:5:TYR:CG	9:CI:6:GLY:N	2.85	0.44
11:CK:115:PRO:O	11:CK:117:ASN:N	2.43	0.44
13:CM:66:LEU:O	13:CM:67:GLU:O	2.35	0.44
14:CN:42:ILE:O	14:CN:46:GLU:HG3	2.18	0.44
17:CQ:18:THR:HG22	17:CQ:19:VAL:N	2.32	0.44
20:CT:71:THR:CG2	20:CT:72:LEU:H	2.29	0.44
21:CU:2:GLY:C	21:CU:4:GLY:N	2.71	0.44
25:D0:72:ARG:HB2	25:D0:76:GLY:O	2.17	0.44
27:D2:49:LYS:O	27:D2:51:ARG:N	2.50	0.44
33:D8:4:MET:O	33:D8:62:LEU:HD12	2.18	0.44
34:DA:1159:U:C2'	34:DA:1160:G:H5'	2.47	0.44
34:DA:1274:A:H2	34:DA:1644:C:O2	2.00	0.44
34:DA:1678:G:H22	34:DA:1989:G:H22	1.63	0.44
34:DA:2124:G:H2'	34:DA:2125:G:O4'	2.17	0.44
34:DA:2368:C:O2'	34:DA:2369:A:H5'	2.17	0.44
34:DA:2567:G:H2'	34:DA:2568:C:C6	2.52	0.44
34:DA:2707:G:O2'	34:DA:2708:G:H5'	2.17	0.44
34:DA:271(C):C:H2'	34:DA:271(D):G:C8	2.52	0.44
34:DA:2732:G:C3'	34:DA:2733:A:H5'	2.48	0.44
34:DA:2870:C:C2'	34:DA:2871:C:H5'	2.47	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:442:G:O4'	39:DF:46:ARG:HD3	2.18	0.44
34:DA:709:U:O2'	34:DA:710:G:H5'	2.18	0.44
34:DA:94:C:O2	34:DA:94:C:H2'	2.17	0.44
35:DB:21:G:N3	35:DB:21:G:H2'	2.32	0.44
35:DB:37:C:H2'	35:DB:38:C:O4'	2.17	0.44
36:DC:38:ASP:O	36:DC:180:PHE:HA	2.18	0.44
37:DD:242:ARG:N	37:DD:242:ARG:HD2	2.32	0.44
37:DD:30:GLU:HG3	37:DD:63:ARG:NH2	2.32	0.44
38:DE:107:THR:O	38:DE:190:GLY:HA2	2.17	0.44
38:DE:116:VAL:HG22	38:DE:122:PHE:CG	2.52	0.44
38:DE:77:ILE:C	38:DE:78:LEU:HD23	2.38	0.44
40:DG:48:GLU:CG	40:DG:49:ASP:H	2.24	0.44
41:DH:58:GLU:O	41:DH:60:ARG:N	2.51	0.44
43:DN:13:TRP:N	43:DN:13:TRP:CD1	2.83	0.44
46:DQ:88:GLY:O	46:DQ:89:ASN:CB	2.64	0.44
48:DS:33:LYS:HA	48:DS:62:LYS:NZ	2.33	0.44
48:DS:39:ILE:O	48:DS:47:THR:HG23	2.17	0.44
49:DT:121:ILE:CG2	49:DT:122:ASP:N	2.80	0.44
34:DA:560:C:H4'	50:DU:52:ARG:CZ	2.48	0.44
50:DU:74:LEU:HD12	50:DU:74:LEU:C	2.38	0.44
50:DU:74:LEU:HD23	50:DU:114:LYS:CE	2.47	0.44
52:DW:88:ARG:HA	52:DW:88:ARG:HD2	1.48	0.44
53:DX:40:LYS:CG	53:DX:41:ASN:N	2.81	0.44
53:DX:57:LEU:CD1	53:DX:57:LEU:N	2.81	0.44
53:DX:68:ARG:HB2	53:DX:69:TYR:H	1.63	0.44
54:DY:81:LYS:HD3	54:DY:97:ARG:N	2.33	0.44
55:DZ:116:VAL:HG12	55:DZ:117:LEU:HD23	1.99	0.44
1:AA:1358:U:H3'	1:AA:1359:C:C6	2.53	0.44
1:AA:1365:G:O2'	1:AA:1366:C:H5'	2.18	0.44
1:AA:1368:G:O2'	1:AA:1369:C:H5'	2.18	0.44
1:AA:135:C:C2'	1:AA:136:C:H5'	2.46	0.44
1:AA:1431:C:O2'	1:AA:1432:G:H5'	2.17	0.44
1:AA:1443:G:H22	1:AA:1460:A:H1'	1.76	0.44
1:AA:302:G:H21	1:AA:556:C:H4'	1.81	0.44
1:AA:785:G:C2'	1:AA:786:G:H5'	2.48	0.44
1:AA:848:C:H2'	1:AA:849:C:C6	2.52	0.44
1:AA:980:C:H5'	1:AA:980:C:H6	1.83	0.44
2:AB:12:GLU:O	2:AB:14:GLY:N	2.50	0.44
2:AB:71:VAL:HG13	2:AB:93:VAL:HB	2.00	0.44
6:AF:99:ALA:HB1	18:AR:23:LYS:HZ3	1.81	0.44
7:AG:21:VAL:HG23	7:AG:22:LEU:N	2.32	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:125:ARG:HG3	8:AH:125:ARG:HH11	1.82	0.44
8:AH:86:ILE:HG13	8:AH:133:LEU:HD22	2.00	0.44
9:AI:5:TYR:HB2	9:AI:18:PHE:CD2	2.53	0.44
13:AM:20:THR:C	13:AM:22:ILE:H	2.21	0.44
1:AA:1331:G:OP2	13:AM:23:TYR:CD2	2.70	0.44
13:AM:3:ARG:HG2	13:AM:9:ILE:HG13	1.97	0.44
15:AO:18:PHE:HD1	15:AO:19:PRO:O	2.00	0.44
15:AO:27:VAL:O	15:AO:29:VAL:N	2.51	0.44
18:AR:50:ILE:HG22	18:AR:51:LEU:N	2.32	0.44
18:AR:59:SER:O	18:AR:60:ALA:C	2.56	0.44
23:AW:18:G:N1	23:AW:55:U:H1'	2.29	0.44
23:AW:58:A:O2'	23:AW:60:U:OP2	2.35	0.44
25:B0:40:GLN:NE2	25:B0:43:THR:HA	2.33	0.44
27:B2:37:PHE:O	27:B2:37:PHE:CD2	2.71	0.44
32:B7:30:VAL:O	32:B7:33:ARG:N	2.51	0.44
34:BA:1683:C:H2'	34:BA:1684:C:C6	2.52	0.44
34:BA:688:U:H5'	34:BA:1780:A:C2	2.53	0.44
34:BA:2691:C:H2'	34:BA:2692:C:H6	1.83	0.44
34:BA:2699:C:O2'	34:BA:2700:C:H5'	2.18	0.44
34:BA:2870:C:O2'	34:BA:2871:C:H5'	2.18	0.44
34:BA:332:A:H4'	34:BA:333:G:OP1	2.17	0.44
34:BA:372:G:N2	34:BA:400:G:H2'	2.33	0.44
34:BA:511:U:O4	34:BA:512:G:C2	2.70	0.44
34:BA:643:A:O2'	34:BA:644:A:H5'	2.17	0.44
35:BB:38:C:H42	35:BB:44:G:H1	1.66	0.44
37:BD:45:ASN:OD1	37:BD:46:GLN:N	2.51	0.44
38:BE:141:ILE:HG13	38:BE:150:VAL:HG22	2.00	0.44
38:BE:14:ILE:CG1	38:BE:21:VAL:CG2	2.96	0.44
38:BE:36:ARG:O	38:BE:37:ARG:HG3	2.18	0.44
39:BF:36:VAL:HA	39:BF:101:LEU:CD2	2.48	0.44
39:BF:64:ILE:HG22	39:BF:76:GLY:O	2.18	0.44
40:BG:23:PHE:CZ	40:BG:168:GLU:HA	2.53	0.44
40:BG:94:LEU:N	40:BG:94:LEU:CD2	2.75	0.44
44:BO:103:ALA:C	44:BO:105:GLU:N	2.70	0.44
44:BO:40:VAL:HG12	44:BO:41:ALA:N	2.33	0.44
39:BF:38:ARG:NH1	45:BP:16:ARG:HH22	2.16	0.44
46:BQ:17:LEU:HD23	46:BQ:17:LEU:N	2.33	0.44
47:BR:8:ARG:NE	47:BR:8:ARG:CA	2.80	0.44
48:BS:66:ALA:HA	48:BS:69:VAL:HG11	1.99	0.44
49:BT:25:GLY:O	49:BT:48:ILE:HG23	2.18	0.44
51:BV:82:ARG:CD	51:BV:82:ARG:C	2.86	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1065:U:OP2	1:CA:1190:G:N2	2.40	0.44
1:CA:409:G:C5'	4:CD:25:ARG:HB2	2.47	0.44
1:CA:621:A:O2'	1:CA:622:A:H5'	2.17	0.44
1:CA:937:A:C5	1:CA:938:A:N7	2.85	0.44
3:CC:180:ALA:HB1	3:CC:182:ILE:HG13	1.99	0.44
4:CD:199:ASN:O	4:CD:201:GLN:N	2.51	0.44
5:CE:10:MET:HA	5:CE:32:VAL:HA	1.98	0.44
5:CE:50:GLU:HG3	5:CE:52:PRO:CD	2.40	0.44
6:CF:16:GLN:H	6:CF:16:GLN:CD	2.20	0.44
7:CG:115:ARG:HB2	7:CG:118:VAL:CG2	2.48	0.44
7:CG:139:GLU:O	7:CG:142:GLU:HB2	2.18	0.44
8:CH:53:VAL:O	8:CH:54:ASP:HB2	2.18	0.44
9:CI:96:LEU:HG	9:CI:102:LEU:HD12	1.99	0.44
9:CI:47:LEU:N	9:CI:47:LEU:HD12	2.32	0.44
13:CM:56:LEU:C	13:CM:56:LEU:HD13	2.37	0.44
13:CM:91:ARG:CB	13:CM:98:VAL:HG21	2.41	0.44
15:CO:70:LEU:O	15:CO:71:GLN:C	2.55	0.44
1:CA:237:C:H4'	17:CQ:25:ARG:HH12	1.82	0.44
18:CR:59:SER:O	18:CR:60:ALA:C	2.56	0.44
1:CA:1014:A:H4'	19:CS:14:HIS:CD2	2.53	0.44
22:CV:43:A:O2'	22:CV:44:A:H5'	2.17	0.44
32:D7:5:TRP:HE1	32:D7:7:PRO:HG3	1.82	0.44
34:DA:1038:C:N4	34:DA:1117:G:H1	2.09	0.44
34:DA:2084:C:O2'	34:DA:2085:C:H5'	2.17	0.44
34:DA:2292:C:N4	34:DA:2340:G:H1	2.15	0.44
34:DA:2408:U:O5'	34:DA:2408:U:H6	2.00	0.44
34:DA:271(J):C:C3'	34:DA:271(K):U:H5''	2.48	0.44
34:DA:2839:G:H2'	34:DA:2840:C:H6	1.82	0.44
34:DA:2863:C:C3'	34:DA:2864:G:C5'	2.95	0.44
34:DA:809:G:O2'	34:DA:810:U:H5'	2.18	0.44
34:DA:935:C:H2'	34:DA:936:C:C6	2.52	0.44
34:DA:956:G:C5'	34:DA:957:A:OP2	2.65	0.44
37:DD:105:ILE:O	37:DD:106:ILE:C	2.56	0.44
37:DD:8:PRO:C	37:DD:10:THR:H	2.21	0.44
39:DF:39:TRP:CB	39:DF:101:LEU:HD22	2.48	0.44
40:DG:73:ALA:O	40:DG:85:GLY:HA2	2.17	0.44
44:DO:23:ARG:NH1	44:DO:23:ARG:HG2	2.30	0.44
45:DP:115:LEU:HD12	45:DP:115:LEU:C	2.38	0.44
46:DQ:42:ILE:HD13	46:DQ:97:VAL:HG23	1.99	0.44
50:DU:36:ARG:HG2	50:DU:40:PHE:CZ	2.53	0.44
51:DV:85:LYS:O	51:DV:87:HIS:N	2.45	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DZ:163:LEU:HD12	55:DZ:163:LEU:O	2.18	0.44
1:AA:1312:G:C2	1:AA:1326:C:C2	3.06	0.44
1:AA:1349:A:C4	1:AA:1350:A:C8	3.06	0.44
1:AA:926:G:C6	1:AA:1505:G:C6	3.06	0.44
1:AA:176:C:H2'	1:AA:177:C:C6	2.53	0.44
1:AA:379:C:O2'	1:AA:380:G:H5'	2.18	0.44
1:AA:445:G:H2'	1:AA:446:G:C8	2.53	0.44
1:AA:528:C:H5'	1:AA:535:A:C6	2.53	0.44
2:AB:175:ARG:O	2:AB:176:GLU:C	2.55	0.44
2:AB:46:LYS:HA	2:AB:49:GLU:OE1	2.17	0.44
2:AB:46:LYS:O	2:AB:47:THR:C	2.55	0.44
4:AD:58:LEU:HA	4:AD:206:PHE:CE1	2.52	0.44
5:AE:71:LEU:HD22	5:AE:115:VAL:HG13	1.98	0.44
6:AF:42:GLU:C	6:AF:44:GLY:H	2.20	0.44
8:AH:97:VAL:HB	8:AH:129:VAL:O	2.18	0.44
11:AK:120:ARG:HA	11:AK:121:PRO:HD3	1.79	0.44
13:AM:63:THR:HG22	13:AM:64:TRP:N	2.33	0.44
13:AM:23:TYR:CZ	13:AM:71:ARG:HD3	2.53	0.44
18:AR:64:ARG:O	18:AR:65:ILE:C	2.56	0.44
20:AT:99:LEU:HB2	20:AT:100:ILE:HD12	2.00	0.44
23:AY:31:A:H2'	23:AY:32:U:O4'	2.18	0.44
25:B0:36:ILE:HA	25:B0:60:PHE:CB	2.48	0.44
26:B1:26:ARG:HG2	26:B1:34:THR:C	2.38	0.44
34:BA:1414:G:H1	34:BA:1588:C:H42	1.65	0.44
34:BA:2092:U:H4'	34:BA:2093:G:C5'	2.48	0.44
34:BA:280:C:N4	34:BA:360:G:H1	2.15	0.44
34:BA:2887:U:O2'	34:BA:2888:C:H5'	2.18	0.44
34:BA:631:A:O2'	45:BP:67:MET:HB3	2.17	0.44
34:BA:896:A:C2	34:BA:898:C:H5''	2.52	0.44
36:BC:18:LYS:CD	36:BC:19:VAL:HG23	2.41	0.44
34:BA:2175:C:C1'	36:BC:215:THR:HA	2.38	0.44
37:BD:109:ASP:HB2	37:BD:197:GLY:CA	2.47	0.44
39:BF:18:ARG:O	39:BF:19:GLU:HB3	2.18	0.44
40:BG:103:LEU:O	40:BG:106:LEU:HB3	2.18	0.44
41:BH:72:ILE:O	41:BH:75:ALA:N	2.50	0.44
42:BI:89:TYR:N	42:BI:89:TYR:CD1	2.86	0.44
43:BN:65:LYS:C	43:BN:66:LYS:HD3	2.38	0.44
45:BP:70:GLN:HA	45:BP:70:GLN:OE1	2.17	0.44
46:BQ:36:ALA:O	46:BQ:100:GLY:N	2.50	0.44
48:BS:35:ILE:C	48:BS:36:TYR:HD1	2.21	0.44
49:BT:29:ARG:CG	49:BT:30:VAL:N	2.81	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:67:GLY:O	51:BV:68:LYS:C	2.56	0.44
51:BV:69:LYS:CG	51:BV:70:ILE:N	2.73	0.44
54:BY:31:LEU:HD22	54:BY:31:LEU:HA	1.64	0.44
55:BZ:130:PRO:O	55:BZ:133:ILE:HG13	2.18	0.44
55:BZ:64:GLY:O	55:BZ:65:GLN:O	2.36	0.44
1:CA:1226:C:N4	13:CM:104:ARG:HD2	2.33	0.44
1:CA:1229:A:H2'	1:CA:1230:C:C6	2.52	0.44
1:CA:1294:G:O2'	1:CA:1295:G:H5'	2.17	0.44
1:CA:819:A:H4'	1:CA:820:U:OP2	2.17	0.44
2:CB:101:MET:O	2:CB:105:PHE:N	2.51	0.44
2:CB:107:THR:HG23	2:CB:110:GLN:OE1	2.18	0.44
3:CC:34:LEU:HD23	3:CC:34:LEU:C	2.39	0.44
3:CC:95:THR:HG22	3:CC:97:LYS:HB2	2.00	0.44
4:CD:107:ARG:O	4:CD:170:VAL:HG21	2.18	0.44
4:CD:135:LEU:O	4:CD:136:PRO:C	2.53	0.44
4:CD:168:ARG:NH1	4:CD:168:ARG:HG3	2.33	0.44
4:CD:8:VAL:C	4:CD:10:ARG:N	2.68	0.44
4:CD:94:LEU:O	4:CD:98:GLU:N	2.51	0.44
9:CI:116:LYS:O	9:CI:117:HIS:C	2.55	0.44
13:CM:50:GLU:O	13:CM:54:VAL:HG23	2.18	0.44
18:CR:35:ARG:C	18:CR:37:VAL:N	2.72	0.44
20:CT:57:ARG:CZ	20:CT:102:GLY:HA2	2.48	0.44
22:CV:65:C:O2'	22:CV:66:C:H5'	2.17	0.44
27:D2:20:GLU:O	27:D2:24:LEU:HD13	2.17	0.44
27:D2:30:ARG:CZ	27:D2:30:ARG:HB3	2.46	0.44
34:DA:1047:G:H2'	34:DA:1110:G:N1	2.33	0.44
34:DA:1158:C:O2'	34:DA:1159:U:C5'	2.66	0.44
34:DA:1254:A:H5'	34:DA:1255:U:C5'	2.47	0.44
34:DA:143(A):C:C2'	34:DA:143(A):C:O2	2.64	0.44
30:D5:2:ALA:CA	34:DA:2015:A:H1'	2.45	0.44
34:DA:206:U:O2	34:DA:206:U:H2'	2.16	0.44
34:DA:2243:U:H2'	34:DA:2244:U:C6	2.52	0.44
34:DA:231:C:H2'	34:DA:232:G:O4'	2.17	0.44
34:DA:2476:A:N3	34:DA:2476:A:H3'	2.32	0.44
34:DA:2711:A:H5''	34:DA:2712:U:H5'	2.00	0.44
34:DA:2722:G:H2'	34:DA:2723:C:H6	1.81	0.44
34:DA:285:C:H2'	34:DA:286:C:C4'	2.48	0.44
34:DA:709:U:H2'	34:DA:710:G:C8	2.51	0.44
34:DA:987:G:H2'	34:DA:988:A:O4'	2.18	0.44
37:DD:197:GLY:O	37:DD:198:ASN:HB3	2.18	0.44
37:DD:76:PRO:HG2	37:DD:98:VAL:HG23	1.97	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:80:ALA:O	37:DD:81:ALA:HB2	2.18	0.44
38:DE:131:ALA:HB3	38:DE:134:ILE:HD12	2.00	0.44
38:DE:69:LYS:O	38:DE:71:GLY:N	2.51	0.44
38:DE:70:ALA:O	38:DE:71:GLY:C	2.56	0.44
39:DF:37:VAL:O	39:DF:38:ARG:C	2.56	0.44
40:DG:115:ARG:HB2	40:DG:116:ASP:H	1.42	0.44
41:DH:12:PRO:HB2	41:DH:15:VAL:CG2	2.47	0.44
41:DH:94:TYR:N	41:DH:94:TYR:CD1	2.86	0.44
42:DI:102:SER:HA	42:DI:107:VAL:O	2.18	0.44
43:DN:57:ALA:O	43:DN:58:ASP:C	2.55	0.44
44:DO:112:MET:O	44:DO:113:LYS:C	2.56	0.44
44:DO:87:ILE:HD12	44:DO:91:LEU:C	2.38	0.44
45:DP:102:ARG:HH21	45:DP:102:ARG:HG3	1.83	0.44
45:DP:47:ASP:CB	45:DP:48:PRO:CA	2.90	0.44
46:DQ:52:VAL:O	46:DQ:55:VAL:HG13	2.18	0.44
47:DR:103:ARG:HB3	47:DR:109:ALA:C	2.37	0.44
47:DR:11:ASN:O	47:DR:12:ARG:CB	2.66	0.44
51:DV:25:LEU:HG	51:DV:94:LEU:HD13	1.98	0.44
53:DX:28:PHE:CD1	53:DX:28:PHE:N	2.85	0.44
53:DX:83:VAL:C	53:DX:85:PRO:HD3	2.38	0.44
54:DY:11:ASP:O	54:DY:27:VAL:HA	2.18	0.44
55:DZ:151:HIS:HA	55:DZ:171:ILE:CD1	2.47	0.44
55:DZ:48:PHE:CZ	55:DZ:53:ILE:HG23	2.52	0.44
55:DZ:80:ARG:O	55:DZ:81:ARG:C	2.56	0.44
1:AA:119:A:C5	1:AA:288:A:C2	3.05	0.44
1:AA:1313:U:P	19:AS:6:LYS:HG3	2.58	0.44
1:AA:13:U:O2	1:AA:914:A:H3'	2.17	0.44
1:AA:1423:G:H2'	1:AA:1424:C:H6	1.82	0.44
1:AA:66:G:H4'	1:AA:173:U:C5	2.52	0.44
1:AA:192:U:O3'	20:AT:57:ARG:HD2	2.17	0.44
1:AA:284:G:H2'	1:AA:285:G:H8	1.83	0.44
1:AA:502:G:O2'	1:AA:503:C:H5'	2.18	0.44
1:AA:55:A:C6	1:AA:56:U:C2	3.06	0.44
1:AA:625:G:OP1	16:AP:9:PHE:HB3	2.18	0.44
1:AA:586:C:H1'	1:AA:878:G:O2'	2.18	0.44
1:AA:887:G:C2'	1:AA:888:G:H5'	2.48	0.44
1:AA:939:G:C6	1:AA:940:C:N4	2.86	0.44
1:AA:979:C:C2'	1:AA:980:C:H5''	2.47	0.44
2:AB:97:TRP:CH2	2:AB:176:GLU:CD	2.91	0.44
2:AB:39:ILE:CG2	2:AB:40:HIS:N	2.80	0.44
4:AD:194:LEU:N	4:AD:194:LEU:HD22	2.33	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:131:ARG:HD3	5:AE:50:GLU:HG2	1.99	0.44
7:AG:149:ARG:O	7:AG:152:ALA:HB3	2.18	0.44
17:AQ:45:HIS:CB	17:AQ:69:LYS:HE2	2.46	0.44
20:AT:57:ARG:CZ	20:AT:102:GLY:HA2	2.48	0.44
20:AT:71:THR:CG2	20:AT:72:LEU:H	2.26	0.44
20:AT:85:MET:HA	20:AT:88:VAL:CG2	2.48	0.44
31:B6:39:TYR:HB3	31:B6:49:HIS:CE1	2.53	0.44
32:B7:9:ARG:CG	32:B7:9:ARG:HH11	2.30	0.44
33:B8:9:GLY:O	33:B8:13:ARG:HG2	2.18	0.44
34:BA:1144:G:C4	34:BA:1145:C:C5	3.06	0.44
34:BA:1362:C:O2'	34:BA:1363:C:H5'	2.17	0.44
34:BA:154:G:H2'	34:BA:154(A):C:O2	2.18	0.44
34:BA:1614:A:N1	52:BW:91:GLY:HA2	2.33	0.44
34:BA:1744:C:H2'	34:BA:1745:C:H5'	2.00	0.44
34:BA:2313:C:C5	34:BA:2314:C:H5	2.36	0.44
34:BA:285:C:H2'	34:BA:286:C:C4'	2.48	0.44
34:BA:90:U:H1'	34:BA:92:A:H8	1.83	0.44
35:BB:35:U:O2'	35:BB:36:C:H5'	2.18	0.44
36:BC:169:GLY:O	36:BC:170:ALA:HB3	2.18	0.44
37:BD:205:VAL:HG12	37:BD:205:VAL:O	2.18	0.44
37:BD:30:GLU:HG3	37:BD:63:ARG:NH2	2.33	0.44
39:BF:163:VAL:O	39:BF:164:ARG:C	2.56	0.44
40:BG:161:THR:HG21	40:BG:163:ALA:HB3	2.00	0.44
41:BH:12:PRO:HB2	41:BH:15:VAL:CG2	2.48	0.44
41:BH:130:ARG:HB3	41:BH:130:ARG:HH11	1.83	0.44
41:BH:85:LYS:HE3	41:BH:144:VAL:C	2.38	0.44
42:BI:2:LYS:HB2	42:BI:39:ALA:HB3	1.99	0.44
43:BN:18:ALA:O	43:BN:20:GLY:N	2.51	0.44
43:BN:74:ARG:HH22	43:BN:101:HIS:HB3	1.82	0.44
43:BN:93:THR:O	43:BN:94:HIS:HD2	2.00	0.44
45:BP:75:ILE:N	45:BP:75:ILE:CD1	2.56	0.44
50:BU:112:ARG:NH1	50:BU:112:ARG:CG	2.77	0.44
50:BU:57:PHE:HB3	50:BU:61:TRP:CZ2	2.52	0.44
52:BW:17:VAL:C	52:BW:19:LEU:N	2.68	0.44
54:BY:49:VAL:HG12	54:BY:53:PRO:HG3	1.99	0.44
54:BY:85:VAL:HG13	54:BY:92:ASN:OD1	2.18	0.44
1:CA:119:A:C5	1:CA:288:A:C2	3.06	0.44
1:CA:1270:C:O2'	1:CA:1271:G:H5'	2.17	0.44
1:CA:1401:G:C2	1:CA:1402:C:H1'	2.52	0.44
1:CA:848:C:H2'	1:CA:849:C:C6	2.53	0.44
1:CA:974:A:OP2	14:CN:41:ARG:NH1	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:97:TRP:CZ3	2:CB:173:ALA:HA	2.53	0.44
2:CB:39:ILE:CG2	2:CB:40:HIS:N	2.81	0.44
2:CB:46:LYS:O	2:CB:47:THR:C	2.56	0.44
2:CB:77:ALA:HB2	2:CB:211:ILE:CD1	2.42	0.44
3:CC:124:ILE:C	3:CC:126:ARG:N	2.71	0.44
3:CC:188:LEU:N	3:CC:188:LEU:CD2	2.81	0.44
4:CD:120:LEU:HD23	4:CD:125:HIS:CD2	2.50	0.44
1:CA:963:G:H21	10:CJ:55:LYS:CD	2.31	0.44
11:CK:34:ASP:CB	11:CK:35:PRO:CD	2.96	0.44
20:CT:74:LYS:HB2	20:CT:75:ASN:H	1.49	0.44
25:D0:11:ARG:NH1	25:D0:11:ARG:CB	2.81	0.44
25:D0:36:ILE:HA	25:D0:60:PHE:CB	2.48	0.44
26:D1:23:LYS:HB3	26:D1:23:LYS:HE3	1.79	0.44
27:D2:40:SER:O	27:D2:41:ILE:C	2.57	0.44
34:DA:1142(A):A:C5	34:DA:1144:G:C5	3.06	0.44
34:DA:1352:U:O2'	34:DA:1353:A:H5'	2.18	0.44
34:DA:146:G:H5'	34:DA:146:G:H8	1.83	0.44
34:DA:1885:A:C8	34:DA:1885:A:H5'	2.52	0.44
34:DA:2702:U:O2'	34:DA:2703:C:H6	2.00	0.44
34:DA:271(P):C:O2'	34:DA:271(Q):G:H5'	2.18	0.44
34:DA:627:A:N7	45:DP:84:ASN:ND2	2.66	0.44
34:DA:907:U:O2'	46:DQ:101:ARG:NH2	2.51	0.44
36:DC:191:ALA:C	36:DC:193:ILE:N	2.70	0.44
37:DD:144:ALA:HB3	37:DD:192:THR:HG22	2.00	0.44
38:DE:103:ASP:OD2	38:DE:201:THR:HA	2.18	0.44
38:DE:14:ILE:CG1	38:DE:21:VAL:CG2	2.96	0.44
39:DF:65:TRP:CZ3	39:DF:75:HIS:CD2	2.90	0.44
39:DF:9:ILE:O	39:DF:128:ALA:HB2	2.18	0.44
41:DH:12:PRO:HB2	41:DH:15:VAL:CG1	2.48	0.44
42:DI:99:GLU:C	42:DI:101:LEU:H	2.20	0.44
43:DN:119:ARG:HH11	43:DN:119:ARG:HG3	1.82	0.44
43:DN:30:ILE:O	43:DN:33:LEU:HB3	2.18	0.44
44:DO:104:ARG:C	44:DO:106:LEU:H	2.19	0.44
45:DP:110:TYR:CD2	45:DP:111:ARG:HD3	2.53	0.44
45:DP:6:LEU:O	45:DP:6:LEU:HG	2.18	0.44
45:DP:95:VAL:HG22	45:DP:123:LEU:HD12	2.00	0.44
47:DR:85:PRO:C	47:DR:87:TYR:N	2.72	0.44
48:DS:46:VAL:CG1	48:DS:47:THR:N	2.80	0.44
49:DT:23:ARG:O	49:DT:25:GLY:N	2.50	0.44
54:DY:13:VAL:CG1	54:DY:72:VAL:HB	2.48	0.44
55:DZ:108:PRO:HA	55:DZ:142:SER:O	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1079:G:H2'	1:AA:1080:A:C8	2.52	0.43
1:AA:1342:C:H2'	1:AA:1343:G:C8	2.53	0.43
1:AA:136:C:H42	1:AA:227:G:H1	1.66	0.43
1:AA:1388:C:O2'	1:AA:1389:C:H5'	2.18	0.43
1:AA:404:U:H2'	1:AA:405:U:H6	1.83	0.43
1:AA:81:U:H2'	1:AA:82:U:C5	2.52	0.43
1:AA:824:C:O2'	1:AA:825:G:H5'	2.17	0.43
1:AA:881:G:P	12:AL:12:ARG:HH22	2.40	0.43
1:AA:619:U:N3	4:AD:134:ASP:OD2	2.47	0.43
7:AG:153:HIS:O	7:AG:154:TYR:HD2	2.00	0.43
8:AH:134:ILE:O	8:AH:135:CYS:HB3	2.18	0.43
9:AI:102:LEU:O	9:AI:103:THR:OG1	2.31	0.43
10:AJ:39:PRO:HB3	10:AJ:70:ARG:NH1	2.33	0.43
10:AJ:30:SER:CB	10:AJ:80:LYS:HG3	2.48	0.43
1:AA:1331:G:OP2	13:AM:23:TYR:HD2	2.01	0.43
30:B5:56:LYS:CD	30:B5:57:VAL:N	2.81	0.43
34:BA:1239:G:H2'	34:BA:1240:U:O4'	2.17	0.43
34:BA:1381:G:O2'	34:BA:1382:G:H5'	2.18	0.43
34:BA:2023:G:C2	34:BA:2024:G:C8	3.05	0.43
34:BA:2476:A:N3	34:BA:2476:A:H3'	2.32	0.43
34:BA:2635:C:H2'	34:BA:2636:U:O5'	2.18	0.43
34:BA:751:A:O5'	34:BA:751:A:H8	2.00	0.43
35:BB:52:A:O2'	35:BB:53:A:H8	2.00	0.43
36:BC:76:ALA:HB3	36:BC:94:VAL:HG11	2.00	0.43
37:BD:69:ARG:NH2	37:BD:105:ILE:CD1	2.81	0.43
37:BD:25:THR:CG2	37:BD:82:ILE:N	2.75	0.43
37:BD:266:SER:O	37:BD:267:SER:OG	2.31	0.43
37:BD:270:ILE:C	37:BD:270:ILE:HD12	2.39	0.43
38:BE:131:ALA:HB3	38:BE:134:ILE:HD12	1.99	0.43
39:BF:57:VAL:HG11	39:BF:59:TYR:CD1	2.53	0.43
40:BG:112:PRO:C	40:BG:113:ARG:CA	2.83	0.43
40:BG:111:LEU:HD22	40:BG:117:PHE:HE1	1.82	0.43
40:BG:139:LEU:HA	40:BG:144:ILE:CG2	2.48	0.43
40:BG:48:GLU:O	40:BG:51:ARG:HG2	2.18	0.43
42:BI:22:LYS:O	42:BI:23:PRO:C	2.56	0.43
43:BN:56:ASN:HA	43:BN:125:GLY:C	2.39	0.43
44:BO:119:PRO:O	49:BT:68:TYR:HE1	2.02	0.43
45:BP:113:LYS:HA	45:BP:129:ALA:O	2.18	0.43
45:BP:48:PRO:CG	45:BP:49:ARG:N	2.81	0.43
45:BP:74:GLU:HG3	45:BP:75:ILE:H	1.83	0.43
49:BT:23:ARG:O	49:BT:25:GLY:N	2.51	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BT:27:THR:HG23	49:BT:28:VAL:N	2.32	0.43
52:BW:51:LEU:C	52:BW:51:LEU:HD13	2.38	0.43
52:BW:82:LEU:N	52:BW:82:LEU:CD1	2.80	0.43
55:BZ:48:PHE:O	55:BZ:49:ARG:C	2.56	0.43
55:BZ:7:ALA:O	55:BZ:8:TYR:C	2.55	0.43
1:CA:1109:C:O2'	1:CA:1110:A:H5'	2.18	0.43
1:CA:1331:G:OP2	13:CM:23:TYR:CD2	2.71	0.43
1:CA:1358:U:H3'	1:CA:1359:C:C6	2.53	0.43
1:CA:1436:U:O2'	1:CA:1437:C:H5'	2.18	0.43
1:CA:176:C:H2'	1:CA:177:C:C6	2.53	0.43
1:CA:285:G:O2'	1:CA:286:G:H5'	2.18	0.43
1:CA:123:C:OP1	1:CA:312:C:H5'	2.17	0.43
1:CA:312:C:O2'	1:CA:313:A:H5'	2.18	0.43
1:CA:359:U:O2'	1:CA:360:A:H5'	2.18	0.43
1:CA:511:C:HO2'	1:CA:512:U:H6	1.60	0.43
1:CA:807:A:H2'	1:CA:808:C:H6	1.81	0.43
2:CB:174:VAL:O	2:CB:177:ALA:HB3	2.18	0.43
2:CB:58:ILE:HD11	2:CB:185:ILE:HD12	2.00	0.43
2:CB:23:ARG:HG3	2:CB:23:ARG:NH1	2.28	0.43
2:CB:68:ILE:H	2:CB:90:MET:CE	2.31	0.43
4:CD:80:GLU:O	4:CD:81:GLU:C	2.56	0.43
5:CE:32:VAL:CG1	5:CE:33:VAL:N	2.81	0.43
5:CE:36:ASP:OD2	5:CE:38:GLN:CB	2.66	0.43
5:CE:40:ARG:HH11	5:CE:40:ARG:HG2	1.82	0.43
6:CF:72:VAL:HG13	6:CF:73:ASN:N	2.33	0.43
8:CH:63:LEU:HB2	8:CH:65:TYR:CE1	2.52	0.43
11:CK:82:VAL:HG12	11:CK:108:ILE:HG23	1.99	0.43
15:CO:26:GLU:HA	15:CO:81:LEU:HD22	2.00	0.43
16:CP:19:ILE:HG22	16:CP:36:ILE:HG13	2.00	0.43
20:CT:50:GLU:CG	20:CT:51:GLU:N	2.80	0.43
28:D3:43:ILE:HG22	28:D3:47:VAL:CG2	2.47	0.43
33:D8:8:LYS:O	33:D8:12:LYS:HG3	2.18	0.43
34:DA:1301:A:O2'	34:DA:1302:A:P	2.76	0.43
34:DA:1401:G:H2'	34:DA:1402:C:C6	2.53	0.43
34:DA:1493:C:O2	34:DA:1493:C:C2'	2.63	0.43
34:DA:1844:C:C2'	34:DA:1845:G:H5'	2.48	0.43
34:DA:2359:C:H2'	34:DA:2360:A:C8	2.53	0.43
34:DA:2370:G:H2'	34:DA:2371:G:C8	2.53	0.43
26:D1:32:LYS:HA	34:DA:2396:G:O2'	2.18	0.43
34:DA:2625:G:H2'	34:DA:2626:C:O4'	2.18	0.43
34:DA:2642:G:N2	34:DA:2773:C:C2	2.85	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2783:G:H2'	34:DA:2784:C:C6	2.53	0.43
34:DA:344:G:C8	34:DA:344:G:H5'	2.44	0.43
34:DA:554:U:H2'	34:DA:555:U:H5'	2.00	0.43
36:DC:68:LEU:HD22	36:DC:179:SER:HA	2.00	0.43
36:DC:49:ILE:O	36:DC:51:PRO:HD3	2.17	0.43
37:DD:9:TYR:CZ	37:DD:13:ARG:HD3	2.53	0.43
37:DD:25:THR:CB	37:DD:82:ILE:H	2.31	0.43
39:DF:139:PHE:C	39:DF:139:PHE:CD2	2.91	0.43
40:DG:138:GLN:OE1	40:DG:152:LEU:HA	2.18	0.43
40:DG:66:GLN:NE2	40:DG:93:THR:O	2.45	0.43
41:DH:105:LEU:H	41:DH:105:LEU:CD1	2.24	0.43
42:DI:77:LEU:O	42:DI:78:THR:CB	2.66	0.43
43:DN:13:TRP:HZ3	43:DN:130:HIS:CE1	2.36	0.43
43:DN:55:VAL:CG1	43:DN:56:ASN:N	2.71	0.43
43:DN:78:TYR:H	43:DN:79:PRO:HD2	1.83	0.43
44:DO:87:ILE:HD13	44:DO:93:PRO:N	2.33	0.43
46:DQ:63:LYS:NZ	46:DQ:63:LYS:HB2	2.33	0.43
46:DQ:73:PRO:HG3	46:DQ:93:TYR:CE2	2.53	0.43
47:DR:11:ASN:CG	47:DR:12:ARG:N	2.71	0.43
48:DS:78:LEU:HD11	48:DS:103:GLU:CB	2.40	0.43
54:DY:85:VAL:HG13	54:DY:92:ASN:OD1	2.18	0.43
55:DZ:99:TYR:HE2	55:DZ:125:LEU:HD12	1.79	0.43
1:AA:1095:U:H5''	1:AA:1109:C:O2	2.19	0.43
1:AA:1133:G:H2'	1:AA:1134:G:C8	2.53	0.43
1:AA:1232:U:H2'	1:AA:1233:G:O4'	2.18	0.43
1:AA:1250:A:H2'	1:AA:1251:A:C8	2.52	0.43
1:AA:1500:A:OP2	1:AA:1505:G:OP1	2.37	0.43
1:AA:676:A:O2'	1:AA:677:U:H5'	2.17	0.43
3:AC:175:LEU:HD21	3:AC:201:TYR:CE2	2.53	0.43
6:AF:19:LEU:HD23	6:AF:19:LEU:C	2.39	0.43
7:AG:139:GLU:O	7:AG:142:GLU:HB2	2.18	0.43
8:AH:1:MET:O	8:AH:2:LEU:HB2	2.17	0.43
8:AH:53:VAL:O	8:AH:54:ASP:HB2	2.18	0.43
9:AI:53:VAL:HB	9:AI:92:TYR:HE2	1.83	0.43
11:AK:27:ASN:HB2	11:AK:55:LYS:HB3	1.99	0.43
12:AL:89:ARG:NH2	12:AL:91:LYS:HD3	2.33	0.43
13:AM:13:LYS:CA	13:AM:44:ARG:HH11	2.24	0.43
20:AT:12:ALA:O	20:AT:15:ARG:HB2	2.18	0.43
22:AV:53:G:C5	22:AV:54:5MU:H72	2.53	0.43
34:BA:1464:C:O2'	34:BA:1465:G:H5'	2.18	0.43
34:BA:152:G:H1	34:BA:174:C:N4	2.14	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1707:G:N2	34:BA:1708:C:C2	2.86	0.43
34:BA:157:U:H5''	34:BA:171:G:H22	1.83	0.43
34:BA:2033:A:H2'	34:BA:2035:G:OP2	2.18	0.43
34:BA:209:C:O2'	34:BA:210:C:H5'	2.18	0.43
34:BA:2086:U:O2	34:BA:2234:G:C2	2.72	0.43
34:BA:2472:G:H2'	34:BA:2475:C:H42	1.82	0.43
34:BA:307:G:H21	34:BA:330:A:N6	2.13	0.43
34:BA:859:G:O3'	34:BA:860:U:O2	2.36	0.43
35:BB:79:C:H2'	35:BB:80:U:H5'	1.99	0.43
37:BD:36:PRO:HG3	37:BD:61:LEU:HD23	2.00	0.43
38:BE:116:VAL:HG21	38:BE:122:PHE:CD2	2.53	0.43
38:BE:5:LEU:HB2	38:BE:51:PHE:CD2	2.46	0.43
40:BG:51:ARG:HA	40:BG:51:ARG:HE	1.83	0.43
41:BH:41:MET:HE1	41:BH:55:PRO:CD	2.48	0.43
39:BF:116:ASP:OD2	45:BP:5:ASP:HA	2.18	0.43
45:BP:79:ARG:C	45:BP:80:TYR:HD2	2.21	0.43
46:BQ:17:LEU:CD2	46:BQ:41:TRP:HE1	2.29	0.43
48:BS:52:SER:OG	48:BS:55:ALA:HB3	2.17	0.43
49:BT:29:ARG:CG	49:BT:30:VAL:HG13	2.48	0.43
49:BT:65:LYS:HZ2	49:BT:66:VAL:HG23	1.82	0.43
50:BU:92:ARG:HB2	51:BV:11:GLN:CD	2.36	0.43
53:BX:23:GLU:CG	53:BX:24:GLY:N	2.75	0.43
53:BX:36:LYS:O	53:BX:37:THR:C	2.56	0.43
53:BX:65:ARG:NE	53:BX:66:LEU:H	2.15	0.43
53:BX:70:LEU:O	53:BX:71:GLY:C	2.56	0.43
1:CA:1160:G:N3	1:CA:1160:G:H2'	2.32	0.43
1:CA:1313:U:P	19:CS:6:LYS:HG3	2.58	0.43
1:CA:1328:C:O2'	1:CA:1329:A:H5'	2.18	0.43
1:CA:1369:C:H2'	1:CA:1370:G:C8	2.53	0.43
1:CA:528:C:H5'	1:CA:535:A:C6	2.53	0.43
1:CA:586:C:O2'	1:CA:587:G:H5'	2.18	0.43
1:CA:782:A:N6	1:CA:801:U:C5	2.86	0.43
1:CA:979:C:C3'	1:CA:980:C:C5'	2.88	0.43
6:CF:33:TYR:CD1	6:CF:75:LEU:HB2	2.53	0.43
13:CM:83:ASP:OD2	13:CM:84:ILE:N	2.51	0.43
17:CQ:40:LYS:HD2	17:CQ:42:TYR:CE1	2.53	0.43
17:CQ:67:LYS:HG2	17:CQ:68:ARG:H	1.83	0.43
18:CR:43:PHE:HA	18:CR:51:LEU:HD12	1.99	0.43
18:CR:74:ARG:O	18:CR:81:PHE:HE1	2.01	0.43
23:CW:16:U:C4	23:CW:18:G:H3'	2.53	0.43
26:D1:88:LYS:O	26:D1:91:LYS:N	2.51	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1353:A:H2'	34:DA:1354:A:C8	2.53	0.43
34:DA:1362:C:O2'	34:DA:1363:C:H5'	2.18	0.43
34:DA:1474:C:H3'	34:DA:1475:G:H8	1.82	0.43
34:DA:1708:C:O2'	34:DA:1709:U:H5'	2.18	0.43
34:DA:2189:U:H3'	34:DA:2190:G:C5'	2.41	0.43
34:DA:2419:U:O2'	34:DA:2420:C:H5'	2.17	0.43
34:DA:2588:G:O6	34:DA:2607:G:C6	2.71	0.43
34:DA:2723:C:H4'	47:DR:2:ARG:O	2.18	0.43
34:DA:2883:A:H3'	34:DA:2884:U:H5'	1.98	0.43
34:DA:827:U:H5'	34:DA:828:U:O5'	2.18	0.43
34:DA:947:G:N3	34:DA:984:A:H2	2.16	0.43
36:DC:67:GLY:O	36:DC:68:LEU:HB2	2.17	0.43
37:DD:14:ARG:CG	37:DD:14:ARG:NH1	2.79	0.43
37:DD:237:GLU:OE2	37:DD:239:ARG:N	2.48	0.43
38:DE:176:ILE:HG22	38:DE:176:ILE:O	2.16	0.43
38:DE:199:ARG:HH11	38:DE:199:ARG:HG3	1.83	0.43
39:DF:163:VAL:O	39:DF:164:ARG:C	2.56	0.43
39:DF:203:GLN:O	39:DF:206:ILE:C	2.56	0.43
40:DG:83:ARG:O	40:DG:85:GLY:N	2.51	0.43
42:DI:2:LYS:HB2	42:DI:39:ALA:HB3	2.00	0.43
42:DI:47:LEU:O	42:DI:51:ILE:HG12	2.18	0.43
43:DN:33:LEU:HD23	43:DN:52:VAL:HG21	1.95	0.43
44:DO:16:ALA:HA	44:DO:46:ALA:CA	2.45	0.43
44:DO:86:ILE:HG22	44:DO:87:ILE:N	2.33	0.43
51:DV:19:LYS:CE	51:DV:20:LEU:H	2.29	0.43
52:DW:21:VAL:C	52:DW:23:LEU:N	2.71	0.43
52:DW:88:ARG:HB3	52:DW:92:ARG:CB	2.47	0.43
53:DX:5:TYR:C	53:DX:7:VAL:N	2.69	0.43
34:DA:480:A:P	54:DY:46:LYS:HE2	2.59	0.43
55:DZ:14:LYS:C	55:DZ:16:SER:H	2.21	0.43
55:DZ:30:ASN:ND2	55:DZ:32:HIS:HB2	2.31	0.43
1:AA:1229:A:H2'	1:AA:1230:C:H6	1.83	0.43
1:AA:41:G:H2'	1:AA:42:G:C8	2.53	0.43
1:AA:503:C:O2	1:AA:510:A:H2	2.01	0.43
1:AA:957:U:H2'	1:AA:959:A:OP2	2.18	0.43
2:AB:100:GLY:N	2:AB:176:GLU:OE2	2.36	0.43
2:AB:22:LYS:HA	2:AB:22:LYS:HZ2	1.75	0.43
3:AC:124:ILE:C	3:AC:126:ARG:N	2.71	0.43
3:AC:148:GLY:O	3:AC:203:PHE:N	2.51	0.43
4:AD:100:ARG:O	4:AD:103:ASN:HB3	2.19	0.43
4:AD:173:TRP:CE3	4:AD:189:PRO:HB3	2.52	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:6:G:C4	5:AE:119:LEU:HD11	2.54	0.43
5:AE:139:LEU:HA	5:AE:142:LEU:HD12	2.01	0.43
5:AE:144:THR:O	5:AE:147:ASP:OD2	2.36	0.43
5:AE:147:ASP:O	5:AE:151:LEU:HG	2.17	0.43
6:AF:13:ASN:ND2	6:AF:55:ASP:OD1	2.50	0.43
7:AG:20:ASP:O	7:AG:23:VAL:HB	2.18	0.43
1:AA:642:A:C5	8:AH:115:SER:HA	2.54	0.43
8:AH:29:SER:O	8:AH:32:LYS:N	2.52	0.43
9:AI:33:PHE:HD2	9:AI:34:ASN:OD1	2.01	0.43
11:AK:21:ILE:HG13	11:AK:30:VAL:HG12	2.00	0.43
17:AQ:33:GLY:O	17:AQ:34:LYS:C	2.56	0.43
17:AQ:83:ASP:CG	17:AQ:84:LEU:N	2.71	0.43
20:AT:78:ALA:O	20:AT:81:LYS:N	2.51	0.43
26:B1:20:ARG:CD	26:B1:41:ARG:HD3	2.23	0.43
28:B3:12:PRO:O	28:B3:15:TYR:HD1	2.00	0.43
31:B6:45:LYS:HZ1	34:BA:2370:G:N2	2.09	0.43
33:B8:35:GLN:CB	34:BA:2420:C:OP1	2.66	0.43
34:BA:1018:C:O2'	34:BA:1019:U:H5'	2.18	0.43
34:BA:1176:G:O2'	34:BA:1177:A:O5'	2.34	0.43
34:BA:1177:A:H5''	34:BA:1178:C:O5'	2.19	0.43
34:BA:1210:A:H5'	34:BA:1211:U:H2'	2.00	0.43
34:BA:1722:A:C6	34:BA:1741:A:N1	2.86	0.43
34:BA:188:G:H2'	34:BA:189:G:H5'	2.00	0.43
34:BA:2126:A:O2'	34:BA:2127:G:P	2.76	0.43
34:BA:2291:U:H2'	34:BA:2292:C:H6	1.82	0.43
34:BA:231:C:H2'	34:BA:232:G:O4'	2.18	0.43
34:BA:2617:C:H2'	34:BA:2618:G:H5'	1.99	0.43
34:BA:2684:U:O2'	34:BA:2685:G:H5'	2.18	0.43
34:BA:344:G:C8	34:BA:344:G:H5'	2.43	0.43
34:BA:611:C:O2'	34:BA:612:C:H5'	2.18	0.43
34:BA:646:A:H3'	34:BA:647:G:C8	2.50	0.43
34:BA:66:C:O2'	34:BA:67:U:H5'	2.18	0.43
34:BA:738:G:HO2'	34:BA:739:G:H5'	1.83	0.43
34:BA:869:G:H2'	34:BA:870:A:O4'	2.19	0.43
36:BC:49:ILE:O	36:BC:51:PRO:HD3	2.19	0.43
37:BD:35:LYS:CE	37:BD:104:TYR:HB2	2.48	0.43
37:BD:218:ARG:HB3	37:BD:219:PRO:HD2	2.00	0.43
37:BD:63:ARG:CG	37:BD:63:ARG:HH11	2.24	0.43
38:BE:24:THR:HB	38:BE:186:GLY:HA2	2.01	0.43
39:BF:139:PHE:C	39:BF:139:PHE:CD2	2.91	0.43
40:BG:86:MET:CB	40:BG:87:PRO:CD	2.96	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BH:116:GLU:HG2	41:BH:117:PRO:N	2.33	0.43
41:BH:53:GLU:CD	41:BH:54:ARG:H	2.22	0.43
34:BA:2642:G:H5''	43:BN:79:PRO:HG3	2.00	0.43
44:BO:16:ALA:HA	44:BO:46:ALA:CA	2.46	0.43
44:BO:1:MET:HB2	44:BO:32:TYR:CD2	2.52	0.43
44:BO:86:ILE:HG22	44:BO:87:ILE:N	2.32	0.43
44:BO:87:ILE:HD13	44:BO:93:PRO:HA	1.99	0.43
46:BQ:34:LEU:CD1	46:BQ:129:THR:HB	2.48	0.43
34:BA:955:C:C5'	46:BQ:14:ARG:HH21	2.31	0.43
46:BQ:51:ARG:O	46:BQ:52:VAL:C	2.55	0.43
47:BR:39:PRO:O	47:BR:40:LYS:C	2.56	0.43
47:BR:69:ASP:C	47:BR:70:LEU:O	2.56	0.43
47:BR:76:VAL:CG1	47:BR:77:ARG:N	2.80	0.43
48:BS:14:VAL:O	48:BS:15:ARG:C	2.55	0.43
50:BU:35:ALA:O	50:BU:36:ARG:C	2.57	0.43
34:BA:483:A:C4'	54:BY:47:LYS:HD3	2.47	0.43
55:BZ:108:PRO:CA	55:BZ:142:SER:HA	2.48	0.43
55:BZ:116:VAL:HG12	55:BZ:117:LEU:O	2.18	0.43
55:BZ:100:VAL:HG21	55:BZ:134:PRO:HG2	2.00	0.43
55:BZ:6:LYS:CB	55:BZ:8:TYR:HE1	2.29	0.43
1:CA:101:A:C2	1:CA:102:G:C8	3.05	0.43
1:CA:1089:G:O2'	1:CA:1090:U:H5'	2.17	0.43
1:CA:1293:G:O2'	1:CA:1294:G:P	2.76	0.43
1:CA:1422:G:H2'	1:CA:1423:G:H8	1.83	0.43
1:CA:1508:G:O2'	1:CA:1509:C:H5'	2.18	0.43
1:CA:918:A:C6	1:CA:919:A:C5	3.06	0.43
1:CA:973:G:H5''	10:CJ:57:LYS:NZ	2.34	0.43
2:CB:163:PHE:CD2	2:CB:186:ALA:HA	2.53	0.43
2:CB:168:THR:HG23	2:CB:192:SER:OG	2.19	0.43
4:CD:157:LEU:C	4:CD:159:ARG:N	2.71	0.43
4:CD:60:GLU:HG2	4:CD:202:LEU:HD12	2.00	0.43
7:CG:109:ASN:HA	7:CG:119:ARG:HE	1.83	0.43
7:CG:153:HIS:O	7:CG:154:TYR:HD2	2.01	0.43
8:CH:19:VAL:O	8:CH:20:TYR:HB2	2.18	0.43
9:CI:33:PHE:HD2	9:CI:34:ASN:OD1	2.01	0.43
11:CK:124:LYS:HD2	11:CK:125:PHE:CD1	2.54	0.43
18:CR:30:ASP:C	18:CR:32:ARG:H	2.21	0.43
18:CR:53:ARG:CG	18:CR:63:GLN:HE21	2.18	0.43
23:CW:31:A:N1	23:CW:39:U:O4	2.51	0.43
26:D1:11:ARG:HG2	26:D1:61:ARG:HB3	2.00	0.43
34:DA:1331:A:O2'	34:DA:1332:G:H5''	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1478:G:O2'	34:DA:1558:A:H2	2.00	0.43
34:DA:1614:A:N1	52:DW:91:GLY:HA2	2.32	0.43
34:DA:1767:C:H2'	34:DA:1768:U:O4'	2.18	0.43
34:DA:1775:U:H2'	34:DA:1776:G:O5'	2.18	0.43
34:DA:1970:A:H5''	34:DA:1971:A:OP1	2.19	0.43
34:DA:251:A:H2'	34:DA:252:G:O4'	2.18	0.43
34:DA:464:U:H2'	34:DA:465:G:O4'	2.18	0.43
34:DA:922:U:H2'	34:DA:923:C:C6	2.53	0.43
37:DD:70:TRP:CD2	37:DD:150:LYS:HE2	2.53	0.43
39:DF:84:VAL:C	39:DF:86:GLY:N	2.71	0.43
41:DH:102:ALA:CB	41:DH:117:PRO:HD3	2.47	0.43
41:DH:70:THR:O	41:DH:71:LEU:C	2.55	0.43
42:DI:15:VAL:C	42:DI:17:GLN:N	2.72	0.43
43:DN:43:THR:HB	43:DN:46:VAL:CG1	2.47	0.43
43:DN:58:ASP:CA	43:DN:60:ILE:HG13	2.49	0.43
43:DN:70:LYS:CG	43:DN:72:TYR:HE1	2.30	0.43
34:DA:626:U:N3	45:DP:105:LEU:HG	2.33	0.43
45:DP:23:PRO:HB3	45:DP:33:ARG:HG3	1.98	0.43
45:DP:55:ARG:HG2	45:DP:56:SER:N	2.33	0.43
45:DP:95:VAL:HG23	45:DP:95:VAL:O	2.17	0.43
48:DS:57:LYS:O	48:DS:58:LEU:O	2.36	0.43
50:DU:18:LEU:HD23	50:DU:18:LEU:HA	1.81	0.43
51:DV:43:GLU:CA	51:DV:48:GLY:CA	2.91	0.43
53:DX:14:SER:O	53:DX:17:ALA:N	2.50	0.43
55:DZ:61:LEU:HD12	55:DZ:65:GLN:CB	2.48	0.43
1:AA:1134:G:N2	1:AA:1141:C:C2	2.87	0.43
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.53	0.43
1:AA:1472:U:O2'	1:AA:1473:A:H5'	2.18	0.43
1:AA:1495:U:H2'	1:AA:1496:C:C6	2.53	0.43
1:AA:34:C:H2'	1:AA:35:G:H8	1.84	0.43
1:AA:977:A:HO2'	1:AA:978:A:H5'	1.83	0.43
3:AC:185:GLY:O	3:AC:200:ALA:N	2.48	0.43
3:AC:77:ILE:O	3:AC:84:ILE:HG22	2.18	0.43
4:AD:173:TRP:CZ3	4:AD:193:ASP:HB3	2.54	0.43
5:AE:146:ALA:O	5:AE:148:VAL:N	2.51	0.43
5:AE:59:GLY:O	5:AE:63:ARG:HG3	2.19	0.43
8:AH:5:PRO:O	8:AH:8:ASP:HB3	2.18	0.43
10:AJ:51:ARG:HG3	10:AJ:60:ARG:HA	2.00	0.43
12:AL:5:PRO:HA	12:AL:9:GLN:NE2	2.33	0.43
13:AM:56:LEU:HD13	13:AM:56:LEU:C	2.38	0.43
16:AP:39:TYR:OH	16:AP:41:PRO:HB3	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:60:GLU:O	20:AT:63:ILE:HB	2.19	0.43
22:AV:39:C:H2'	22:AV:40:C:H6	1.82	0.43
25:B0:43:THR:HG23	25:B0:43:THR:O	2.18	0.43
27:B2:52:ASP:O	27:B2:55:ARG:HB2	2.19	0.43
30:B5:12:SER:C	30:B5:14:ALA:N	2.70	0.43
31:B6:40:CYS:HB2	31:B6:46:HIS:CE1	2.53	0.43
34:BA:1156:A:H4'	34:BA:1157:G:OP2	2.18	0.43
34:BA:1231:G:H2'	34:BA:1232:G:C8	2.46	0.43
34:BA:1362:C:C2'	34:BA:1363:C:H5'	2.48	0.43
34:BA:1775:U:H2'	34:BA:1776:G:O5'	2.19	0.43
34:BA:1831:G:H2'	34:BA:1832:C:C6	2.51	0.43
34:BA:223:A:C2	34:BA:422:A:C8	3.06	0.43
34:BA:2472:G:H2'	34:BA:2529:G:H21	1.75	0.43
25:B0:1:MET:N	34:BA:2602:A:N6	2.67	0.43
34:BA:2642:G:O2'	34:BA:2643:G:H5'	2.19	0.43
34:BA:2689:U:H4'	34:BA:2690:C:C6	2.47	0.43
34:BA:271(C):C:H2'	34:BA:271(D):G:C8	2.52	0.43
34:BA:332:A:O2'	34:BA:333:G:P	2.76	0.43
34:BA:521:G:H2'	34:BA:522:G:C8	2.53	0.43
34:BA:855:G:C6	34:BA:856:C:N4	2.86	0.43
34:BA:910:A:C6	34:BA:911:A:C6	3.06	0.43
39:BF:10:PRO:CG	39:BF:11:VAL:H	2.30	0.43
39:BF:170:LEU:HD23	39:BF:172:TRP:CE2	2.54	0.43
40:BG:139:LEU:C	40:BG:139:LEU:CD1	2.87	0.43
40:BG:23:PHE:CZ	40:BG:171:ALA:HB3	2.41	0.43
42:BI:102:SER:HA	42:BI:107:VAL:O	2.19	0.43
43:BN:58:ASP:O	43:BN:60:ILE:N	2.51	0.43
44:BO:27:GLY:C	44:BO:29:ASN:H	2.22	0.43
46:BQ:63:LYS:HB2	46:BQ:63:LYS:HZ3	1.83	0.43
51:BV:61:VAL:O	51:BV:99:ILE:HB	2.17	0.43
51:BV:78:LYS:C	51:BV:78:LYS:CD	2.83	0.43
51:BV:66:ARG:NE	51:BV:94:LEU:HG	2.33	0.43
52:BW:21:VAL:C	52:BW:23:LEU:N	2.71	0.43
54:BY:81:LYS:HA	54:BY:82:PRO:HD3	1.82	0.43
55:BZ:48:PHE:C	55:BZ:48:PHE:CD1	2.92	0.43
35:BB:76:G:O4'	55:BZ:85:HIS:CD2	2.71	0.43
1:CA:174:C:H2'	1:CA:175:C:C6	2.53	0.43
1:CA:967:C:H2'	1:CA:968:A:C8	2.53	0.43
1:CA:977:A:O2'	1:CA:978:A:H5'	2.17	0.43
2:CB:165:VAL:CG2	2:CB:166:ASP:H	2.24	0.43
3:CC:33:LEU:HD21	14:CN:39:LEU:HD11	1.99	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:118:ARG:O	4:CD:119:GLN:C	2.56	0.43
9:CI:112:LYS:HA	9:CI:119:ALA:CB	2.49	0.43
9:CI:47:LEU:N	9:CI:47:LEU:CD1	2.80	0.43
9:CI:18:PHE:O	9:CI:61:ALA:HA	2.18	0.43
9:CI:72:GLY:O	9:CI:75:ASP:HB2	2.17	0.43
9:CI:46:ALA:HA	9:CI:78:LYS:HZ2	1.83	0.43
9:CI:77:ILE:O	9:CI:81:ILE:HG12	2.18	0.43
9:CI:9:ARG:HA	9:CI:13:ALA:O	2.18	0.43
13:CM:52:GLU:O	13:CM:56:LEU:HB2	2.18	0.43
14:CN:22:THR:O	14:CN:23:ARG:HB2	2.18	0.43
17:CQ:58:GLU:C	17:CQ:59:ILE:HD13	2.38	0.43
17:CQ:67:LYS:CA	17:CQ:70:ARG:NH1	2.78	0.43
18:CR:31:LEU:HD23	18:CR:31:LEU:H	1.82	0.43
20:CT:20:LEU:O	20:CT:23:ARG:HB3	2.18	0.43
23:CW:39:U:C2'	23:CW:40:C:H5''	2.31	0.43
26:D1:68:PRO:C	26:D1:70:VAL:N	2.72	0.43
30:D5:12:SER:C	30:D5:14:ALA:N	2.72	0.43
30:D5:2:ALA:HB3	34:DA:747:U:N1	2.33	0.43
31:D6:32:ASN:O	31:D6:33:LYS:HB2	2.18	0.43
34:DA:1177:A:H5''	34:DA:1178:C:O5'	2.18	0.43
34:DA:1464:C:O2'	34:DA:1465:G:H5'	2.19	0.43
34:DA:1707:G:N2	34:DA:1708:C:C2	2.86	0.43
34:DA:1748:G:H5'	34:DA:1748:G:C8	2.47	0.43
34:DA:1813:G:H1'	37:DD:50:THR:OG1	2.19	0.43
34:DA:1843:C:O2'	34:DA:1844:C:H5'	2.19	0.43
34:DA:1851:U:C2'	34:DA:1852:C:H5'	2.47	0.43
34:DA:1967:C:H2'	34:DA:1968:G:H5'	1.98	0.43
34:DA:198:C:O5'	34:DA:198:C:H6	2.01	0.43
34:DA:528:A:C2	34:DA:2043:C:C5'	3.01	0.43
34:DA:224:G:N2	34:DA:225:A:H1'	2.33	0.43
34:DA:2534:A:H2'	34:DA:2535:G:O4'	2.18	0.43
34:DA:910:A:H2'	34:DA:911:A:C8	2.53	0.43
37:DD:132:PRO:O	37:DD:133:LEU:C	2.55	0.43
37:DD:142:VAL:HG23	37:DD:192:THR:O	2.17	0.43
37:DD:185:VAL:HG12	37:DD:186:HIS:N	2.34	0.43
38:DE:14:ILE:CD1	38:DE:173:VAL:HG11	2.35	0.43
39:DF:127:GLU:HA	39:DF:127:GLU:OE1	2.18	0.43
40:DG:125:PHE:CD1	40:DG:125:PHE:N	2.85	0.43
40:DG:16:ARG:O	40:DG:17:PRO:C	2.57	0.43
41:DH:20:ALA:CB	41:DH:21:PRO:CD	2.92	0.43
41:DH:53:GLU:CD	41:DH:54:ARG:H	2.21	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DI:69:LYS:HB2	42:DI:136:VAL:HB	2.00	0.43
42:DI:15:VAL:C	42:DI:17:GLN:H	2.22	0.43
42:DI:89:TYR:CD1	42:DI:89:TYR:N	2.87	0.43
43:DN:16:ILE:N	43:DN:53:VAL:O	2.50	0.43
45:DP:71:VAL:O	45:DP:72:PRO:C	2.55	0.43
46:DQ:104:PHE:CD1	46:DQ:104:PHE:N	2.87	0.43
47:DR:116:LEU:O	47:DR:117:VAL:CB	2.59	0.43
48:DS:52:SER:OG	48:DS:55:ALA:HB3	2.19	0.43
49:DT:3:ARG:HB2	49:DT:6:LEU:HB3	1.99	0.43
50:DU:90:VAL:C	50:DU:92:ARG:H	2.21	0.43
53:DX:65:ARG:NE	53:DX:66:LEU:H	2.15	0.43
53:DX:7:VAL:HG11	53:DX:39:ILE:HG22	2.00	0.43
54:DY:31:LEU:CD2	54:DY:36:ALA:HB3	2.48	0.43
1:AA:1030(A):G:H2'	1:AA:1030(C):G:OP2	2.18	0.43
1:AA:1236:A:O2'	1:AA:1304:G:H4'	2.18	0.43
1:AA:189(D):C:H1'	1:AA:189(H):G:N2	2.34	0.43
1:AA:790:A:H2'	1:AA:791:G:C8	2.53	0.43
3:AC:115:LEU:O	3:AC:116:VAL:C	2.57	0.43
4:AD:138:TYR:CD2	4:AD:139:ARG:N	2.79	0.43
4:AD:148:VAL:HG12	4:AD:149:ALA:N	2.33	0.43
6:AF:100:ASN:N	6:AF:100:ASN:HD22	2.15	0.43
6:AF:2:ARG:O	6:AF:66:GLU:HA	2.17	0.43
6:AF:98:LEU:HB3	18:AR:30:ASP:CA	2.48	0.43
7:AG:131:LYS:N	7:AG:135:VAL:HG21	2.34	0.43
7:AG:22:LEU:HG	7:AG:22:LEU:O	2.19	0.43
10:AJ:56:HIS:O	10:AJ:58:ASP:N	2.52	0.43
19:AS:16:LEU:C	19:AS:20:LEU:HG	2.38	0.43
26:B1:17:SER:O	26:B1:44:PRO:HD2	2.18	0.43
34:BA:1885:A:C8	34:BA:1885:A:H5'	2.54	0.43
34:BA:189:G:H2'	34:BA:205:G:H22	1.82	0.43
34:BA:2189:U:H3'	34:BA:2190:G:C5'	2.40	0.43
34:BA:2286:A:O2'	34:BA:2286:A:C8	2.72	0.43
34:BA:2385:C:H2'	34:BA:2386:C:C6	2.53	0.43
34:BA:2580:U:H4'	38:BE:130:GLY:HA2	2.00	0.43
34:BA:271(J):C:C3'	34:BA:271(K):U:H5''	2.48	0.43
34:BA:2851:A:C4	34:BA:2852:G:C8	3.06	0.43
34:BA:2869:G:H2'	34:BA:2870:C:O4'	2.18	0.43
34:BA:537:C:C2	34:BA:538:G:C8	3.07	0.43
36:BC:38:ASP:O	36:BC:180:PHE:HA	2.19	0.43
36:BC:196:LEU:C	36:BC:198:ALA:N	2.72	0.43
37:BD:247:ALA:CA	37:BD:254:THR:HG22	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BD:9:TYR:C	37:BD:10:THR:HG22	2.38	0.43
38:BE:77:ILE:C	38:BE:78:LEU:HD23	2.38	0.43
39:BF:16:GLY:O	39:BF:17:ARG:CG	2.67	0.43
39:BF:8:GLN:HB3	39:BF:126:VAL:CA	2.43	0.43
40:BG:21:ARG:O	40:BG:22:ARG:C	2.57	0.43
40:BG:71:THR:HG22	40:BG:72:ARG:N	2.33	0.43
41:BH:70:THR:O	41:BH:71:LEU:C	2.56	0.43
43:BN:130:HIS:O	43:BN:130:HIS:CG	2.71	0.43
45:BP:110:TYR:CD2	45:BP:111:ARG:HD3	2.53	0.43
46:BQ:43:THR:N	46:BQ:46:GLN:OE1	2.51	0.43
48:BS:28:VAL:HB	48:BS:97:ARG:NH1	2.34	0.43
49:BT:3:ARG:HB2	49:BT:6:LEU:HB3	1.99	0.43
50:BU:26:GLY:O	50:BU:27:LEU:C	2.57	0.43
51:BV:82:ARG:HD2	51:BV:82:ARG:O	2.19	0.43
52:BW:21:VAL:C	52:BW:23:LEU:H	2.22	0.43
27:B2:30:ARG:HB3	53:BX:11:PRO:HD3	2.00	0.43
55:BZ:11:GLU:H	55:BZ:11:GLU:CD	2.21	0.43
1:CA:1057:G:H2'	1:CA:1058:G:O4'	2.18	0.43
1:CA:1104:G:O5'	2:CB:111:ARG:HD2	2.18	0.43
1:CA:1269:A:C2	1:CA:1313:U:O4'	2.71	0.43
1:CA:928:G:N2	1:CA:1390:U:H1'	2.33	0.43
1:CA:1476:G:H2'	1:CA:1477:C:C6	2.54	0.43
1:CA:436:C:O2'	1:CA:437:U:O5'	2.36	0.43
1:CA:511:C:C2	1:CA:512:U:C5	3.07	0.43
1:CA:622:A:C8	1:CA:623:C:C6	3.07	0.43
2:CB:175:ARG:O	2:CB:176:GLU:C	2.55	0.43
1:CA:921:U:O2	5:CE:19:MET:HB2	2.18	0.43
1:CA:972:C:H4'	10:CJ:57:LYS:HG3	2.00	0.43
12:CL:46:LYS:HB2	12:CL:92:ASP:O	2.18	0.43
18:CR:79:LEU:HD23	18:CR:80:PRO:CD	2.46	0.43
19:CS:13:ASP:C	19:CS:15:LEU:N	2.72	0.43
19:CS:16:LEU:C	19:CS:20:LEU:HG	2.38	0.43
19:CS:62:ILE:O	19:CS:62:ILE:HG23	2.19	0.43
19:CS:67:VAL:C	19:CS:69:HIS:N	2.71	0.43
20:CT:83:ARG:O	20:CT:86:ARG:HB3	2.18	0.43
27:D2:49:LYS:CB	27:D2:53:LEU:HD22	2.48	0.43
30:D5:50:GLY:HA3	30:D5:56:LYS:CG	2.47	0.43
34:DA:1326:U:O2'	34:DA:1327:C:H5'	2.18	0.43
34:DA:134:C:O2'	34:DA:135:G:H5'	2.19	0.43
34:DA:1622:G:C2	34:DA:1623:G:C8	3.07	0.43
34:DA:1670:C:H2'	34:DA:1671:U:O4'	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2377:A:H2'	34:DA:2378:A:C8	2.53	0.43
34:DA:2399:G:O6	34:DA:2417:C:N3	2.50	0.43
34:DA:2565:A:H5''	34:DA:2566:A:OP2	2.18	0.43
34:DA:2636:U:H2'	34:DA:2637:U:C5'	2.48	0.43
34:DA:2697:G:C2	34:DA:2711:A:C2	3.07	0.43
34:DA:344:G:O2'	34:DA:345:A:H5'	2.19	0.43
34:DA:402:A:C2'	34:DA:403:U:H5'	2.49	0.43
34:DA:528:A:H2	34:DA:2043:C:C4'	2.31	0.43
34:DA:590:A:H2'	34:DA:591:C:C6	2.54	0.43
36:DC:47:LEU:HD21	36:DC:172:HIS:CA	2.47	0.43
37:DD:167:GLY:O	37:DD:173:VAL:HG23	2.19	0.43
37:DD:142:VAL:HG23	37:DD:193:VAL:HA	2.00	0.43
37:DD:263:ARG:O	37:DD:264:LYS:C	2.57	0.43
37:DD:264:LYS:CG	37:DD:265:PRO:HD2	2.49	0.43
38:DE:36:ARG:O	38:DE:37:ARG:HG3	2.18	0.43
38:DE:59:VAL:HG21	38:DE:63:LEU:HA	2.00	0.43
38:DE:8:LYS:HA	38:DE:26:ILE:HD13	2.00	0.43
41:DH:65:HIS:ND1	41:DH:66:GLY:N	2.66	0.43
42:DI:53:ALA:O	42:DI:57:ARG:HB2	2.18	0.43
44:DO:101:PRO:O	44:DO:102:VAL:HG22	2.18	0.43
44:DO:19:ILE:HD12	44:DO:41:ALA:HB3	2.01	0.43
46:DQ:17:LEU:CD2	46:DQ:41:TRP:HE1	2.31	0.43
46:DQ:23:GLY:HA3	46:DQ:99:PRO:O	2.19	0.43
47:DR:70:LEU:HD13	47:DR:75:LEU:HD11	1.99	0.43
50:DU:79:PHE:HE2	50:DU:83:LEU:HD21	1.83	0.43
51:DV:51:VAL:CG1	51:DV:52:VAL:H	2.31	0.43
53:DX:57:LEU:HB2	53:DX:76:ARG:HD2	2.01	0.43
54:DY:49:VAL:O	54:DY:50:ARG:HB2	2.18	0.43
55:DZ:150:LEU:HD22	55:DZ:171:ILE:HG13	1.99	0.43
55:DZ:96:VAL:CG2	55:DZ:97:GLU:H	2.32	0.43
1:AA:1319:A:OP2	19:AS:5:LEU:HD21	2.18	0.43
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.53	0.43
1:AA:1401:G:C2	1:AA:1402:C:H1'	2.54	0.43
1:AA:1505:G:H4'	1:AA:1506:U:H5'	2.01	0.43
1:AA:370:C:O2'	1:AA:371:G:H5'	2.19	0.43
1:AA:596:C:O2'	1:AA:597:G:H5'	2.19	0.43
1:AA:59:A:N3	1:AA:59:A:H2'	2.33	0.43
1:AA:60:A:H8	1:AA:60:A:O5'	2.02	0.43
1:AA:712:A:O2'	1:AA:713:G:H5'	2.18	0.43
1:AA:937:A:C5	1:AA:938:A:N7	2.87	0.43
3:AC:95:THR:HG22	3:AC:97:LYS:HB2	2.01	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:80:ILE:HG13	5:AE:91:LEU:HB2	2.01	0.43
9:AI:89:ASN:HB3	9:AI:92:TYR:CD1	2.54	0.43
11:AK:127:LYS:HE2	11:AK:127:LYS:CA	2.27	0.43
11:AK:87:THR:HG22	11:AK:88:GLY:N	2.34	0.43
13:AM:75:ALA:O	13:AM:76:ALA:C	2.57	0.43
15:AO:39:LEU:HD13	15:AO:39:LEU:O	2.19	0.43
17:AQ:12:SER:HB3	17:AQ:20:THR:CB	2.49	0.43
17:AQ:21:VAL:O	17:AQ:41:LYS:HA	2.19	0.43
6:AF:99:ALA:O	18:AR:28:GLU:HA	2.18	0.43
30:B5:50:GLY:HA3	30:B5:56:LYS:CB	2.49	0.43
31:B6:19:ARG:HB2	31:B6:20:ASN:H	1.64	0.43
34:BA:1013:C:O2'	34:BA:1014:U:H5'	2.18	0.43
34:BA:1350:C:H2'	34:BA:1351:C:H6	1.84	0.43
34:BA:1368:G:O2'	34:BA:1369:G:H5'	2.19	0.43
34:BA:1578:U:OP2	34:BA:1578:U:H6	2.01	0.43
34:BA:1822:G:O2'	34:BA:1823:G:H5'	2.18	0.43
34:BA:1851:U:C2'	34:BA:1852:C:H5'	2.48	0.43
34:BA:2236:C:C2'	34:BA:2237:G:H5'	2.49	0.43
34:BA:2543:G:C2	34:BA:2544:G:C4	3.07	0.43
34:BA:2859:G:O2'	34:BA:2860:A:O5'	2.37	0.43
34:BA:2861:G:C2'	34:BA:2862:G:H5'	2.48	0.43
34:BA:2883:A:H3'	34:BA:2884:U:H5'	2.01	0.43
34:BA:616:G:H2'	34:BA:618:C:O4'	2.18	0.43
37:BD:71:ASP:CB	37:BD:103:ARG:HH22	2.29	0.43
37:BD:80:ALA:O	37:BD:81:ALA:HB2	2.19	0.43
38:BE:149:ARG:HG3	38:BE:149:ARG:HH11	1.83	0.43
38:BE:108:SER:OG	38:BE:163:GLU:HG2	2.18	0.43
39:BF:68:LYS:O	39:BF:69:HIS:CD2	2.71	0.43
40:BG:39:ILE:C	40:BG:39:ILE:HD12	2.39	0.43
41:BH:82:GLY:O	41:BH:135:GLY:O	2.37	0.43
42:BI:145:VAL:CG1	42:BI:146:ALA:N	2.76	0.43
34:BA:627:A:N7	45:BP:84:ASN:ND2	2.64	0.43
46:BQ:41:TRP:C	46:BQ:42:ILE:HD12	2.39	0.43
48:BS:18:ILE:HD12	48:BS:18:ILE:HA	1.80	0.43
50:BU:90:VAL:C	50:BU:92:ARG:H	2.22	0.43
51:BV:70:ILE:CG1	51:BV:71:LEU:N	2.70	0.43
51:BV:25:LEU:HG	51:BV:94:LEU:HD13	2.00	0.43
52:BW:24:ILE:O	52:BW:25:ARG:C	2.56	0.43
54:BY:68:HIS:ND1	54:BY:69:ALA:N	2.67	0.43
55:BZ:130:PRO:HA	55:BZ:133:ILE:HD11	2.01	0.43
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1434:A:C2'	1:CA:1435:G:H5'	2.49	0.43
1:CA:1460:A:C2	1:CA:1461:G:H1'	2.53	0.43
1:CA:36:C:C2'	1:CA:37:U:H5'	2.49	0.43
1:CA:57:G:O2'	1:CA:58:C:H5'	2.19	0.43
1:CA:644:G:H2'	1:CA:645:C:C5'	2.46	0.43
4:CD:157:LEU:O	4:CD:158:ILE:C	2.57	0.43
4:CD:2:GLY:O	4:CD:3:ARG:C	2.56	0.43
4:CD:50:ARG:NH1	4:CD:52:SER:HA	2.33	0.43
5:CE:80:ILE:HG13	5:CE:91:LEU:HB2	2.01	0.43
6:CF:33:TYR:CD1	6:CF:75:LEU:HA	2.53	0.43
9:CI:102:LEU:O	9:CI:103:THR:OG1	2.31	0.43
9:CI:5:TYR:HB2	9:CI:18:PHE:CD2	2.53	0.43
11:CK:91:ARG:C	11:CK:91:ARG:HD2	2.39	0.43
13:CM:3:ARG:HG2	13:CM:9:ILE:HG13	1.97	0.43
16:CP:52:ASP:OD2	16:CP:52:ASP:C	2.57	0.43
16:CP:53:VAL:CG2	16:CP:54:GLU:N	2.81	0.43
18:CR:21:LYS:HD3	18:CR:21:LYS:HA	1.86	0.43
23:CW:18:G:N1	23:CW:55:U:H1'	2.33	0.43
25:D0:25:ARG:HA	25:D0:29:GLN:NE2	2.34	0.43
27:D2:53:LEU:O	27:D2:54:LYS:HB2	2.18	0.43
33:D8:39:LYS:HE3	33:D8:39:LYS:O	2.19	0.43
32:D7:7:PRO:CB	34:DA:1309:G:H4'	2.45	0.43
34:DA:154:G:H2'	34:DA:154(A):C:O2	2.19	0.43
34:DA:1925:C:H2'	34:DA:1926:U:H5'	1.99	0.43
1:CA:1483:A:H2	34:DA:1959:G:N3	2.17	0.43
34:DA:2705:A:C4	34:DA:2706:G:C8	3.06	0.43
34:DA:481:G:C2'	34:DA:482:A:OP2	2.66	0.43
34:DA:613:G:H8	34:DA:613:G:C5'	2.27	0.43
34:DA:767:U:O2'	34:DA:768:G:H5'	2.18	0.43
34:DA:827:U:N3	34:DA:2430:A:C6	2.87	0.43
37:DD:9:TYR:C	37:DD:10:THR:HG22	2.38	0.43
37:DD:218:ARG:HB3	37:DD:219:PRO:HD2	2.00	0.43
37:DD:33:LEU:O	37:DD:35:LYS:N	2.51	0.43
38:DE:1:MET:O	38:DE:2:LYS:C	2.57	0.43
39:DF:107:LYS:C	39:DF:109:GLY:H	2.22	0.43
39:DF:64:ILE:HG22	39:DF:76:GLY:O	2.19	0.43
40:DG:106:LEU:HD23	40:DG:107:LEU:HG	2.00	0.43
40:DG:31:VAL:HG13	40:DG:32:PRO:HD2	2.00	0.43
41:DH:105:LEU:HD13	41:DH:105:LEU:N	2.24	0.43
42:DI:86:THR:HA	42:DI:122:GLU:OE2	2.18	0.43
43:DN:97:ARG:O	43:DN:100:GLU:N	2.50	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DQ:89:ASN:N	46:DQ:89:ASN:ND2	2.66	0.43
49:DT:50:ILE:HA	49:DT:99:LEU:HD11	2.00	0.43
49:DT:89:VAL:HB	49:DT:91:ARG:HE	1.84	0.43
51:DV:88:ARG:HG3	51:DV:88:ARG:NH1	2.32	0.43
52:DW:14:PRO:O	52:DW:15:ARG:C	2.56	0.43
52:DW:17:VAL:C	52:DW:19:LEU:N	2.71	0.43
34:DA:495:G:H21	52:DW:61:ASN:HD21	1.66	0.43
53:DX:77:LYS:HE3	53:DX:78:LYS:HG3	2.00	0.43
46:DQ:141:GLN:CA	55:DZ:53:ILE:O	2.67	0.43
1:AA:1288:A:O2'	1:AA:1289:A:H5'	2.18	0.43
1:AA:1366:C:O2'	1:AA:1367:C:H5'	2.19	0.43
1:AA:1503:A:O2'	1:AA:1504:G:O5'	2.28	0.43
1:AA:177:C:H2'	1:AA:178:C:C6	2.54	0.43
1:AA:123:C:N4	1:AA:238:G:H1	2.15	0.43
1:AA:308:C:H2'	1:AA:309:G:H8	1.82	0.43
2:AB:17:PHE:N	2:AB:17:PHE:HD2	2.17	0.43
3:AC:178:LEU:O	3:AC:180:ALA:N	2.48	0.43
3:AC:182:ILE:HG12	3:AC:203:PHE:CD1	2.52	0.43
5:AE:18:ARG:HH21	5:AE:25:ARG:HG2	1.83	0.43
9:AI:10:ARG:HG2	9:AI:104:ARG:O	2.17	0.43
1:AA:1060:C:O4'	10:AJ:52:GLY:HA2	2.19	0.43
11:AK:82:VAL:HG12	11:AK:108:ILE:HG23	1.99	0.43
11:AK:115:PRO:C	11:AK:117:ASN:N	2.72	0.43
15:AO:87:ILE:HG22	15:AO:88:ARG:N	2.23	0.43
19:AS:67:VAL:O	19:AS:69:HIS:N	2.51	0.43
20:AT:16:HIS:O	20:AT:17:ARG:C	2.57	0.43
23:AY:35:A:H2'	23:AY:36:A:O4'	2.19	0.43
25:B0:11:ARG:CB	25:B0:11:ARG:NH1	2.81	0.43
25:B0:60:PHE:CE2	34:BA:2365:G:H4'	2.54	0.43
26:B1:78:LYS:HZ2	26:B1:90:ILE:HA	1.84	0.43
34:BA:1243:G:H4'	45:BP:9:ASN:HD22	1.83	0.43
34:BA:1380:G:C2	34:BA:1381:G:C8	3.07	0.43
34:BA:2702:U:O2'	34:BA:2703:C:H6	2.02	0.43
34:BA:2850:A:H2'	34:BA:2851:A:C8	2.53	0.43
34:BA:2691:C:C6	34:BA:2872:G:N1	2.87	0.43
34:BA:2841:C:C2	34:BA:2877:G:C2	3.07	0.43
34:BA:344:G:O2'	34:BA:345:A:H5'	2.19	0.43
34:BA:470:A:OP1	39:BF:59:TYR:HE2	2.01	0.43
34:BA:687:C:H2'	34:BA:687:C:O2	2.19	0.43
34:BA:994:C:H3'	50:BU:54:LYS:HE2	2.00	0.43
35:BB:15:A:C3'	35:BB:16:G:C5'	2.94	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BC:79:LYS:O	36:BC:96:GLY:HA3	2.19	0.43
37:BD:34:VAL:O	37:BD:35:LYS:HB2	2.19	0.43
34:BA:2572:A:C8	38:BE:144:ARG:NE	2.87	0.43
38:BE:70:ALA:O	38:BE:71:GLY:C	2.57	0.43
38:BE:79:ARG:NH1	38:BE:79:ARG:CG	2.80	0.43
39:BF:201:VAL:HG13	39:BF:202:PHE:N	2.34	0.43
39:BF:67:GLN:HG3	39:BF:67:GLN:O	2.15	0.43
41:BH:102:ALA:CB	41:BH:117:PRO:HD3	2.49	0.43
41:BH:65:HIS:ND1	41:BH:66:GLY:N	2.67	0.43
43:BN:43:THR:HB	43:BN:46:VAL:CG1	2.49	0.43
44:BO:119:PRO:O	44:BO:120:GLU:CB	2.66	0.43
44:BO:31:LYS:C	44:BO:32:TYR:HD1	2.22	0.43
46:BQ:141:GLN:HE22	55:BZ:89:PHE:HB2	1.83	0.43
47:BR:11:ASN:CG	47:BR:12:ARG:N	2.72	0.43
49:BT:120:ARG:HA	49:BT:123:GLN:CD	2.38	0.43
50:BU:101:ARG:HB3	50:BU:102:GLU:OE2	2.18	0.43
51:BV:76:LYS:HG2	51:BV:85:LYS:HG2	2.01	0.43
53:BX:57:LEU:HB2	53:BX:76:ARG:HD2	2.00	0.43
54:BY:81:LYS:HD3	54:BY:97:ARG:N	2.32	0.43
1:CA:119:A:O2'	1:CA:120:A:OP2	2.24	0.43
1:CA:1473:A:H2'	1:CA:1474:G:C8	2.53	0.43
1:CA:233:C:O2'	1:CA:234:C:H5'	2.18	0.43
1:CA:358:U:H2'	1:CA:359:U:H6	1.83	0.43
1:CA:66:G:H4'	1:CA:173:U:C5	2.53	0.43
1:CA:709:G:H2'	1:CA:710:G:C8	2.52	0.43
1:CA:666:G:H5'	1:CA:726:C:H1'	2.00	0.43
1:CA:938:A:C6	1:CA:939:G:C5	3.06	0.43
1:CA:980:C:H5'	1:CA:980:C:H6	1.83	0.43
3:CC:66:VAL:O	3:CC:66:VAL:HG12	2.19	0.43
4:CD:110:PHE:CD1	4:CD:110:PHE:N	2.84	0.43
4:CD:133:VAL:HG12	4:CD:134:ASP:N	2.32	0.43
5:CE:62:ALA:O	5:CE:65:ASN:N	2.37	0.43
5:CE:94:ALA:HB1	5:CE:98:THR:HG21	2.01	0.43
6:CF:14:LEU:HA	6:CF:18:GLN:NE2	2.33	0.43
6:CF:61:LEU:HB3	6:CF:63:TYR:CE2	2.53	0.43
7:CG:71:PRO:HD3	7:CG:103:TRP:HZ3	1.82	0.43
9:CI:17:VAL:CG2	9:CI:80:GLY:HA3	2.48	0.43
12:CL:39:VAL:CG1	12:CL:40:VAL:N	2.82	0.43
15:CO:11:VAL:O	15:CO:14:GLU:N	2.51	0.43
17:CQ:45:HIS:CB	17:CQ:69:LYS:HE2	2.49	0.43
25:D0:25:ARG:HA	25:D0:29:GLN:HE22	1.83	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D0:36:ILE:HD11	34:DA:2355:C:O4'	2.19	0.43
26:D1:10:LYS:HE2	26:D1:15:ALA:H	1.84	0.43
26:D1:89:GLU:O	26:D1:93:GLU:CG	2.61	0.43
27:D2:26:ARG:NE	27:D2:29:LYS:HZ3	2.17	0.43
34:DA:1588:C:O2	34:DA:1588:C:H2'	2.18	0.43
34:DA:20:C:O2'	34:DA:21:A:H5'	2.19	0.43
34:DA:272(D):G:O2'	34:DA:272(E):G:H5'	2.19	0.43
34:DA:2737:G:H2'	34:DA:2738:A:H8	1.83	0.43
34:DA:303:U:H2'	34:DA:304:G:H8	1.84	0.43
34:DA:813:U:H2'	34:DA:814:C:H6	1.84	0.43
38:DE:141:ILE:HG13	38:DE:150:VAL:HG22	2.00	0.43
38:DE:24:THR:HB	38:DE:186:GLY:HA2	2.00	0.43
38:DE:203:LYS:HD2	38:DE:203:LYS:C	2.38	0.43
40:DG:111:LEU:HD22	40:DG:117:PHE:HZ	1.82	0.43
40:DG:58:GLN:NE2	40:DG:59:GLU:N	2.67	0.43
41:DH:153:LYS:CD	41:DH:153:LYS:N	2.80	0.43
43:DN:135:PRO:O	43:DN:136:GLU:C	2.56	0.43
44:DO:103:ALA:C	44:DO:105:GLU:N	2.72	0.43
45:DP:79:ARG:C	45:DP:80:TYR:HD2	2.22	0.43
46:DQ:80:GLU:HB3	46:DQ:81:VAL:H	1.61	0.43
55:DZ:69:THR:HA	55:DZ:91:LEU:HD12	2.01	0.43
1:AA:114:U:O2'	1:AA:115:G:H5'	2.19	0.43
1:AA:1204:A:H2'	1:AA:1205:U:O4'	2.18	0.43
1:AA:283:C:C2	1:AA:284:G:C8	3.07	0.43
1:AA:36:C:C2'	1:AA:37:U:H5'	2.48	0.43
1:AA:437:U:C5	1:AA:438:G:N7	2.87	0.43
1:AA:62:U:O2'	1:AA:379:C:H1'	2.18	0.43
1:AA:666:G:H5'	1:AA:726:C:H1'	2.01	0.43
1:AA:9:G:OP1	5:AE:122:GLU:N	2.37	0.43
2:AB:21:ARG:HB2	2:AB:39:ILE:HA	1.99	0.43
3:AC:64:VAL:HB	3:AC:99:VAL:HG12	2.00	0.43
4:AD:94:LEU:O	4:AD:98:GLU:N	2.51	0.43
1:AA:972:C:H4'	10:AJ:57:LYS:HG3	2.00	0.43
11:AK:92:GLU:C	11:AK:94:ALA:N	2.72	0.43
12:AL:22:SER:C	12:AL:24:VAL:N	2.71	0.43
13:AM:96:LEU:HB3	13:AM:97:PRO:HD2	1.99	0.43
15:AO:54:ARG:HG2	15:AO:58:MET:CE	2.49	0.43
16:AP:12:LYS:HG2	16:AP:13:HIS:N	2.34	0.43
18:AR:53:ARG:HH11	18:AR:53:ARG:CB	2.31	0.43
18:AR:76:LEU:HD22	18:AR:76:LEU:N	2.34	0.43
21:AU:22:ARG:N	21:AU:23:PRO:HD3	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B6:46:HIS:HB3	31:B6:47:THR:N	2.34	0.43
34:BA:1288:U:C2	34:BA:1327:C:O2	2.72	0.43
34:BA:1862:G:O2'	34:BA:1863:G:H5'	2.19	0.43
34:BA:214:G:H1'	34:BA:216:A:O2'	2.19	0.43
34:BA:2517:C:N3	34:BA:2542:A:N6	2.66	0.43
34:BA:2550:G:O2'	34:BA:2551:C:H5'	2.19	0.43
34:BA:743:G:C2'	34:BA:744:G:H5'	2.48	0.43
34:BA:800:A:H4'	34:BA:801:G:O5'	2.19	0.43
34:BA:813:U:H2'	34:BA:814:C:H6	1.83	0.43
34:BA:7:G:O2'	34:BA:8:A:H5'	2.19	0.43
34:BA:907:U:O2'	46:BQ:101:ARG:NH2	2.50	0.43
37:BD:224:ALA:HB2	37:BD:233:HIS:HB3	2.01	0.43
37:BD:248:SER:HB2	37:BD:249:PRO:CD	2.49	0.43
40:BG:7:LEU:H	40:BG:104:GLU:CD	2.22	0.43
34:BA:2312:U:C3'	40:BG:71:THR:HG21	2.49	0.43
42:BI:127:VAL:C	42:BI:128:LEU:HD12	2.39	0.43
42:BI:79:ILE:HA	42:BI:80:PRO:HD3	1.76	0.43
45:BP:115:LEU:C	45:BP:115:LEU:HD12	2.39	0.43
34:BA:631:A:OP1	45:BP:64:LYS:CE	2.67	0.43
46:BQ:22:LYS:NZ	46:BQ:22:LYS:CA	2.81	0.43
46:BQ:43:THR:O	46:BQ:44:ALA:C	2.55	0.43
46:BQ:71:ASP:O	46:BQ:73:PRO:HD3	2.18	0.43
47:BR:85:PRO:C	47:BR:87:TYR:N	2.72	0.43
50:BU:95:LEU:HD12	51:BV:11:GLN:NE2	2.29	0.43
51:BV:2:PHE:O	51:BV:3:ALA:CB	2.65	0.43
54:BY:71:LYS:CB	54:BY:71:LYS:NZ	2.80	0.43
54:BY:95:LYS:HD3	54:BY:100:ALA:HB1	2.01	0.43
55:BZ:129:SER:HA	55:BZ:130:PRO:HD3	1.89	0.43
1:CA:1166:G:H2'	1:CA:1169:A:OP2	2.18	0.43
1:CA:1057:G:C5	1:CA:1204:A:C2	3.07	0.43
1:CA:316:G:H2'	1:CA:317:G:H8	1.84	0.43
1:CA:777:A:O2'	1:CA:778:G:H5'	2.19	0.43
1:CA:806:C:O2'	1:CA:807:A:H5'	2.19	0.43
2:CB:97:TRP:CH2	2:CB:176:GLU:CD	2.91	0.43
3:CC:11:ARG:NH1	3:CC:11:ARG:HG2	2.33	0.43
4:CD:92:VAL:O	4:CD:95:GLY:N	2.52	0.43
11:CK:24:SER:C	11:CK:26:ASN:N	2.72	0.43
17:CQ:81:ARG:NH2	17:CQ:83:ASP:OD2	2.46	0.43
27:D2:40:SER:O	27:D2:44:LEU:HB2	2.19	0.43
30:D5:6:VAL:HG13	30:D5:7:PRO:CD	2.49	0.43
34:DA:109:G:O2'	34:DA:110:G:H5'	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1848:A:C4	34:DA:1849:G:C8	3.07	0.43
34:DA:1932:A:H2'	34:DA:1933:G:O4'	2.19	0.43
34:DA:2637:U:O2'	34:DA:2638:G:H5'	2.18	0.43
34:DA:2647:U:O2'	34:DA:2648:C:H5'	2.19	0.43
34:DA:743:G:C2'	34:DA:744:G:H5'	2.49	0.43
38:DE:101:ARG:HD3	38:DE:169:ASN:ND2	2.33	0.43
38:DE:197:ILE:CD1	38:DE:199:ARG:HH12	2.32	0.43
38:DE:57:LYS:C	38:DE:59:VAL:N	2.69	0.43
40:DG:111:LEU:HD22	40:DG:117:PHE:CZ	2.53	0.43
42:DI:110:ASP:O	42:DI:112:LYS:N	2.49	0.43
42:DI:127:VAL:C	42:DI:128:LEU:HD12	2.38	0.43
43:DN:112:LEU:C	43:DN:114:ARG:N	2.71	0.43
43:DN:56:ASN:HA	43:DN:125:GLY:C	2.38	0.43
43:DN:5:VAL:HG13	43:DN:6:PRO:HD2	2.01	0.43
43:DN:89:LYS:C	43:DN:93:THR:HG22	2.37	0.43
33:D8:13:ARG:CD	45:DP:61:ARG:NH1	2.82	0.43
46:DQ:88:GLY:O	46:DQ:89:ASN:HB2	2.18	0.43
46:DQ:8:LYS:HG3	46:DQ:9:TYR:H	1.82	0.43
48:DS:59:LYS:HB3	48:DS:60:GLY:H	1.54	0.43
48:DS:66:ALA:HA	48:DS:69:VAL:HG11	2.01	0.43
49:DT:106:SER:O	49:DT:107:ASP:CB	2.66	0.43
49:DT:134:GLU:O	49:DT:135:ALA:HB3	2.19	0.43
49:DT:34:VAL:O	49:DT:35:LYS:HB3	2.19	0.43
49:DT:48:ILE:HG22	49:DT:49:VAL:N	2.34	0.43
50:DU:69:CYS:HB2	50:DU:74:LEU:HD11	2.00	0.43
51:DV:18:LEU:O	51:DV:98:GLU:HB3	2.19	0.43
53:DX:58:HIS:O	53:DX:59:VAL:CG1	2.62	0.43
54:DY:75:ILE:HD12	54:DY:76:CYS:O	2.18	0.43
55:DZ:122:ARG:O	55:DZ:122:ARG:HG2	2.18	0.43
1:AA:1030(A):G:O2'	1:AA:1030(C):G:N7	2.48	0.43
1:AA:10:A:H2'	1:AA:11:G:H8	1.84	0.43
1:AA:1452:C:H4'	1:AA:1456:G:C5'	2.48	0.43
1:AA:237:C:H2'	1:AA:238:G:H8	1.84	0.43
1:AA:509:A:H2'	1:AA:510:A:C8	2.54	0.43
1:AA:544:G:C4	1:AA:545:C:C5	3.06	0.43
1:AA:764:C:C2	1:AA:765:G:C8	3.07	0.43
1:AA:805:C:O2'	1:AA:806:C:H5'	2.19	0.43
5:AE:80:ILE:HG13	5:AE:80:ILE:O	2.19	0.43
6:AF:16:GLN:CD	6:AF:16:GLN:H	2.22	0.43
6:AF:6:VAL:HA	6:AF:90:VAL:HA	2.00	0.43
6:AF:91:VAL:HG12	6:AF:92:LYS:N	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:46:LYS:CG	13:AM:47:ASP:N	2.81	0.43
13:AM:91:ARG:CB	13:AM:98:VAL:HG21	2.41	0.43
16:AP:33:ILE:O	16:AP:34:GLU:HB2	2.18	0.43
1:AA:1321:C:O2	19:AS:77:THR:HG21	2.19	0.43
21:AU:6:ARG:NH2	21:AU:15:ARG:HH22	2.17	0.43
1:AA:790:A:H5'	22:AV:39:C:OP1	2.18	0.43
23:AW:19:G:H4'	23:AW:20:U:OP2	2.18	0.43
23:AY:44:G:H3'	23:AY:44:G:N3	2.34	0.43
26:B1:47:GLN:NE2	34:BA:2090:G:H21	2.16	0.43
33:B8:48:PHE:N	33:B8:48:PHE:CD1	2.78	0.43
34:BA:1643:G:H2'	34:BA:1644:C:H6	1.83	0.43
34:BA:16:G:O2'	34:BA:17:G:H5'	2.19	0.43
34:BA:1863:G:H2'	34:BA:1864:U:O4'	2.18	0.43
34:BA:2013:A:O2'	34:BA:2014:A:H5'	2.18	0.43
34:BA:2243:U:H2'	34:BA:2244:U:C6	2.54	0.43
34:BA:2263:C:H2'	34:BA:2264:C:H5'	2.01	0.43
34:BA:271(K):U:H3'	34:BA:271(L):U:H5'	2.00	0.43
34:BA:2736:G:O2'	34:BA:2737:G:H5'	2.17	0.43
34:BA:280:C:H2'	34:BA:281:G:O5'	2.19	0.43
34:BA:527:C:H4'	34:BA:528:A:O4'	2.19	0.43
34:BA:537:C:H2'	34:BA:537:C:O2	2.19	0.43
34:BA:709:U:O2'	34:BA:710:G:H5'	2.19	0.43
34:BA:902:C:H2'	34:BA:903:C:H6	1.84	0.43
34:BA:935:C:H2'	34:BA:936:C:H6	1.83	0.43
37:BD:193:VAL:HG13	37:BD:193:VAL:O	2.17	0.43
38:BE:203:LYS:C	38:BE:203:LYS:HD2	2.38	0.43
38:BE:69:LYS:O	38:BE:71:GLY:N	2.51	0.43
38:BE:71:GLY:O	38:BE:72:VAL:HB	2.19	0.43
39:BF:143:ALA:HA	39:BF:146:ALA:CB	2.41	0.43
39:BF:13:SER:HA	39:BF:14:PRO:HD3	1.89	0.43
40:BG:85:GLY:O	40:BG:87:PRO:CD	2.66	0.43
40:BG:98:ARG:O	40:BG:101:ILE:HG23	2.19	0.43
41:BH:12:PRO:HB2	41:BH:15:VAL:CG1	2.49	0.43
42:BI:126:TYR:O	42:BI:139:GLN:HG3	2.19	0.43
42:BI:45:LYS:HG3	42:BI:46:ALA:N	2.34	0.43
46:BQ:104:PHE:N	46:BQ:104:PHE:CD1	2.86	0.43
47:BR:44:LEU:O	47:BR:44:LEU:HD13	2.18	0.43
48:BS:28:VAL:O	48:BS:89:ARG:CD	2.67	0.43
48:BS:57:LYS:HG2	48:BS:58:LEU:N	2.33	0.43
49:BT:100:TYR:H	49:BT:100:TYR:HD1	1.63	0.43
49:BT:22:PHE:CD2	49:BT:22:PHE:N	2.85	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BU:31:SER:HB3	50:BU:34:LYS:CB	2.37	0.43
52:BW:82:LEU:H	52:BW:82:LEU:HD12	1.83	0.43
52:BW:88:ARG:HH11	52:BW:88:ARG:HG2	1.84	0.43
55:BZ:155:LEU:HB2	55:BZ:157:LEU:HD21	2.01	0.43
1:CA:1026:G:H2'	1:CA:1027:C:H5'	2.01	0.43
1:CA:435:C:N4	1:CA:436:C:H41	2.16	0.43
1:CA:522:C:H41	12:CL:53:ARG:HH21	1.67	0.43
1:CA:932:C:H4'	7:CG:4:ARG:NH2	2.34	0.43
2:CB:17:PHE:N	2:CB:17:PHE:CD2	2.87	0.43
3:CC:195:VAL:C	3:CC:196:LEU:HD22	2.38	0.43
3:CC:75:VAL:O	3:CC:83:ARG:HG2	2.19	0.43
4:CD:173:TRP:CD1	4:CD:174:LEU:HG	2.54	0.43
4:CD:173:TRP:CZ3	4:CD:193:ASP:HB3	2.53	0.43
5:CE:150:ARG:CB	5:CE:150:ARG:HH11	2.29	0.43
7:CG:4:ARG:HG2	7:CG:4:ARG:HH11	1.83	0.43
10:CJ:50:ILE:O	10:CJ:51:ARG:C	2.57	0.43
11:CK:27:ASN:HB2	11:CK:55:LYS:HB3	2.00	0.43
15:CO:79:ARG:O	15:CO:82:ILE:HG22	2.18	0.43
1:CA:130:A:C8	17:CQ:63:ARG:HG3	2.54	0.43
18:CR:72:ARG:O	18:CR:75:ILE:HB	2.18	0.43
23:CW:41:C:C2'	23:CW:42:C:H5'	2.48	0.43
33:D8:55:ALA:O	33:D8:56:GLU:C	2.57	0.43
34:DA:188:G:H2'	34:DA:189:G:H5'	2.00	0.43
34:DA:194:G:H2'	34:DA:195:A:O4'	2.17	0.43
34:DA:2178:C:C5'	36:DC:46:LYS:HD2	2.49	0.43
34:DA:2308:G:N7	34:DA:2310:A:H5'	2.33	0.43
34:DA:2298:A:N6	34:DA:2318:G:C8	2.84	0.43
34:DA:2400:G:N2	34:DA:2417:C:C2	2.87	0.43
33:D8:5:LYS:HG2	34:DA:242:G:C8	2.54	0.43
34:DA:2635:C:H2'	34:DA:2636:U:O5'	2.19	0.43
34:DA:2655:G:H2'	34:DA:2655:G:N3	2.33	0.43
34:DA:2684:U:C2'	34:DA:2685:G:H5'	2.49	0.43
34:DA:2705:A:H2'	34:DA:2706:G:C8	2.52	0.43
34:DA:319:C:C2'	34:DA:320:A:H5'	2.49	0.43
34:DA:817:C:H2'	34:DA:818:G:O4'	2.19	0.43
34:DA:7:G:O2'	34:DA:8:A:H5'	2.19	0.43
35:DB:85:G:H1	35:DB:92:C:H42	1.66	0.43
36:DC:19:VAL:HB	36:DC:20:TYR:HD1	1.84	0.43
36:DC:79:LYS:O	36:DC:96:GLY:HA3	2.18	0.43
37:DD:92:ILE:C	37:DD:92:ILE:CD1	2.88	0.43
39:DF:157:VAL:CG1	39:DF:176:LEU:HB3	2.49	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DF:38:ARG:NH1	45:DP:16:ARG:HH22	2.16	0.43
40:DG:86:MET:O	40:DG:87:PRO:O	2.36	0.43
40:DG:86:MET:CB	40:DG:87:PRO:HD3	2.40	0.43
41:DH:55:PRO:CG	41:DH:56:SER:H	2.15	0.43
42:DI:14:ASP:O	42:DI:17:GLN:CB	2.66	0.43
44:DO:3:GLN:CG	44:DO:4:PRO:HD2	2.48	0.43
45:DP:10:PRO:HD2	45:DP:11:GLY:H	1.84	0.43
48:DS:28:VAL:C	48:DS:89:ARG:HD2	2.40	0.43
51:DV:43:GLU:CA	51:DV:48:GLY:HA2	2.48	0.43
54:DY:84:ARG:HH11	54:DY:97:ARG:HA	1.84	0.43
1:AA:1191:A:H2'	1:AA:1192:C:C6	2.54	0.43
1:AA:1270:C:O2'	1:AA:1271:G:H5'	2.19	0.43
1:AA:1293:G:O2'	1:AA:1294:G:P	2.77	0.43
1:AA:1330:U:H5'	1:AA:1331:G:OP2	2.19	0.43
1:AA:1376:U:O2'	1:AA:1377:A:H5'	2.19	0.43
1:AA:189(L):G:H2'	1:AA:190:U:C6	2.54	0.43
1:AA:273:A:N6	1:AA:274:A:C6	2.87	0.43
1:AA:599:C:O2'	1:AA:600:C:H5'	2.19	0.43
2:AB:68:ILE:CD1	2:AB:68:ILE:N	2.82	0.43
3:AC:188:LEU:O	3:AC:189:ALA:CB	2.67	0.43
4:AD:110:PHE:HE2	4:AD:148:VAL:HG23	1.81	0.43
4:AD:201:GLN:O	4:AD:204:ILE:HB	2.19	0.43
1:AA:1346:A:C5	7:AG:10:ARG:CZ	3.02	0.43
9:AI:118:LYS:HZ2	9:AI:118:LYS:HB2	1.84	0.43
1:AA:277:C:H5'	17:AQ:68:ARG:NH2	2.34	0.43
1:AA:1305:G:C5'	21:AU:4:GLY:HA3	2.48	0.43
22:AV:72:A:H3'	22:AV:73:A:C5'	2.49	0.43
25:B0:51:VAL:HG23	25:B0:80:HIS:HA	1.98	0.43
27:B2:15:LYS:O	27:B2:15:LYS:HG3	2.19	0.43
34:BA:1050:A:C2	34:BA:2751:G:C4	3.07	0.43
34:BA:1221(A):C:C2	34:BA:1229:G:C2	3.07	0.43
34:BA:146:G:H5'	34:BA:146:G:H8	1.84	0.43
34:BA:1798:U:C4	34:BA:1819:A:C2	3.06	0.43
34:BA:1946:U:H2'	34:BA:1947:C:H6	1.82	0.43
34:BA:226:G:C2	34:BA:227:A:C6	3.06	0.43
34:BA:2721:A:C4	34:BA:2722:G:C8	3.06	0.43
34:BA:2723:C:O2'	34:BA:2724:C:H5'	2.18	0.43
34:BA:2795:G:N2	34:BA:2796:U:HO2'	2.16	0.43
34:BA:528:A:H2	34:BA:2043:C:C4'	2.31	0.43
34:BA:557:U:H2'	34:BA:558:G:H8	1.84	0.43
34:BA:692:C:H2'	34:BA:693:C:C6	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:987:G:H2'	34:BA:988:A:O4'	2.19	0.43
35:BB:66:A:O2'	35:BB:67:G:O5'	2.37	0.43
37:BD:149:PRO:O	37:BD:150:LYS:HB2	2.19	0.43
37:BD:92:ILE:CD1	37:BD:92:ILE:C	2.88	0.43
38:BE:51:PHE:CD1	38:BE:52:LEU:N	2.87	0.43
38:BE:69:LYS:CA	38:BE:69:LYS:HE2	2.49	0.43
40:BG:103:LEU:O	40:BG:106:LEU:N	2.52	0.43
40:BG:172:LEU:HD12	40:BG:172:LEU:O	2.19	0.43
35:BB:56:G:H5''	40:BG:27:ASN:ND2	2.34	0.43
41:BH:121:ILE:HD11	41:BH:140:LYS:HB3	2.00	0.43
41:BH:30:LYS:HG2	41:BH:79:VAL:O	2.18	0.43
42:BI:15:VAL:C	42:BI:17:GLN:H	2.22	0.43
44:BO:119:PRO:O	44:BO:120:GLU:HB2	2.19	0.43
45:BP:107:LYS:C	45:BP:109:GLY:N	2.72	0.43
45:BP:95:VAL:HG22	45:BP:123:LEU:HD12	2.01	0.43
45:BP:46:LYS:HB3	45:BP:52:GLU:HG2	2.00	0.43
46:BQ:10:ARG:HH11	46:BQ:10:ARG:HB2	1.82	0.43
47:BR:27:SER:O	47:BR:30:THR:N	2.52	0.43
54:BY:14:LEU:HD11	54:BY:22:GLY:HA2	2.01	0.43
54:BY:65:ALA:O	54:BY:67:LEU:N	2.51	0.43
54:BY:84:ARG:NH1	54:BY:97:ARG:HB2	2.34	0.43
1:CA:1349:A:H2'	1:CA:1350:A:H8	1.83	0.43
1:CA:1502:A:H2	1:CA:1505:G:N1	2.17	0.43
1:CA:767:A:O2'	1:CA:1524:C:O2	2.31	0.43
1:CA:612:C:O2'	1:CA:613:C:H5'	2.18	0.43
1:CA:619:U:C4	4:CD:135:LEU:HD21	2.53	0.43
1:CA:959:A:C2	1:CA:1222:G:C4'	3.02	0.43
1:CA:984:C:H2'	1:CA:985:C:H6	1.84	0.43
3:CC:174:PRO:HB3	3:CC:177:THR:OG1	2.19	0.43
4:CD:14:ARG:O	4:CD:16:GLY:N	2.52	0.43
6:CF:63:TYR:N	6:CF:63:TYR:HD2	2.17	0.43
6:CF:8:ILE:HG22	6:CF:9:VAL:H	1.84	0.43
8:CH:109:ILE:HG12	8:CH:110:ALA:H	1.84	0.43
11:CK:120:ARG:HA	11:CK:121:PRO:HD3	1.77	0.43
11:CK:92:GLU:C	11:CK:94:ALA:N	2.72	0.43
13:CM:64:TRP:HB2	13:CM:65:LYS:H	1.60	0.43
13:CM:78:ILE:HG23	13:CM:92:HIS:CD2	2.54	0.43
16:CP:12:LYS:HG2	16:CP:13:HIS:N	2.34	0.43
16:CP:19:ILE:HG22	16:CP:36:ILE:CG1	2.49	0.43
18:CR:25:THR:O	18:CR:25:THR:HG22	2.19	0.43
21:CU:24:ARG:HG2	21:CU:24:ARG:HH11	1.84	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:30:G:H1	22:CV:40:C:H42	1.67	0.43
26:D1:11:ARG:HE	26:D1:61:ARG:H	1.65	0.43
26:D1:77:ALA:C	26:D1:79:GLY:H	2.21	0.43
27:D2:30:ARG:NH1	27:D2:30:ARG:CG	2.82	0.43
27:D2:49:LYS:HE3	27:D2:53:LEU:CD1	2.49	0.43
34:DA:1029:A:H2'	34:DA:1030:G:O4'	2.19	0.43
34:DA:1144:G:C4	34:DA:1145:C:C5	3.07	0.43
34:DA:1209:G:O2'	34:DA:1237:A:N1	2.48	0.43
34:DA:1270:C:H5''	34:DA:1271:G:C5'	2.49	0.43
34:DA:1414:G:H1	34:DA:1588:C:H42	1.66	0.43
34:DA:1509(B):A:H2'	34:DA:1510:G:O4'	2.18	0.43
32:D7:2:LYS:HG2	34:DA:1620:G:O2'	2.18	0.43
34:DA:1885:A:H8	34:DA:1885:A:H5'	1.83	0.43
34:DA:197:A:C2	34:DA:198:C:C1'	3.02	0.43
34:DA:2097:C:O2'	34:DA:2098:U:H5'	2.19	0.43
34:DA:306:U:O2'	34:DA:307:G:H5'	2.19	0.43
34:DA:485:C:N3	34:DA:496:G:C2	2.87	0.43
34:DA:950:G:H2'	34:DA:951:C:C6	2.54	0.43
35:DB:17:C:O2'	35:DB:18:G:H5'	2.18	0.43
36:DC:34:THR:O	36:DC:35:ALA:HB2	2.19	0.43
36:DC:51:PRO:HB3	36:DC:203:GLY:C	2.38	0.43
37:DD:161:THR:OG1	37:DD:196:VAL:HG21	2.19	0.43
38:DE:35:GLN:HB3	38:DE:48:GLN:HB3	2.01	0.43
39:DF:102:PRO:O	39:DF:106:ARG:HG2	2.19	0.43
39:DF:108:LYS:HD3	39:DF:108:LYS:HA	1.83	0.43
39:DF:117:ARG:HH22	45:DP:5:ASP:N	2.17	0.43
39:DF:185:ASP:HA	39:DF:188:ARG:HB3	2.00	0.43
40:DG:120:LEU:O	40:DG:121:ASN:C	2.57	0.43
40:DG:62:LEU:HD12	40:DG:62:LEU:N	2.34	0.43
41:DH:13:LYS:CA	41:DH:13:LYS:HE2	2.31	0.43
41:DH:27:LYS:HG2	41:DH:32:GLU:OE1	2.19	0.43
42:DI:11:ASN:C	42:DI:12:LEU:HD23	2.39	0.43
42:DI:140:LEU:HD12	42:DI:141:LYS:H	1.83	0.43
34:DA:2416:C:OP1	45:DP:64:LYS:O	2.37	0.43
46:DQ:43:THR:N	46:DQ:46:GLN:OE1	2.51	0.43
46:DQ:72:LYS:HA	46:DQ:73:PRO:HD3	1.85	0.43
47:DR:78:LYS:O	47:DR:83:ILE:N	2.52	0.43
47:DR:92:GLY:HA2	47:DR:94:TYR:CE1	2.54	0.43
49:DT:100:TYR:HD1	49:DT:100:TYR:H	1.67	0.43
49:DT:15:VAL:O	49:DT:16:ARG:HG2	2.18	0.43
49:DT:43:GLN:NE2	49:DT:74:ARG:HH21	2.17	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:DX:26:TYR:HD1	53:DX:26:TYR:H	1.66	0.43
54:DY:20:TYR:O	54:DY:21:LYS:C	2.56	0.43
55:DZ:150:LEU:HD23	55:DZ:171:ILE:CD1	2.49	0.43
55:DZ:165:VAL:HG11	55:DZ:169:GLU:HB3	2.00	0.43
55:DZ:171:ILE:O	55:DZ:172:ALA:HB2	2.17	0.43
1:AA:1057:G:C4	1:AA:1204:A:C2	3.07	0.42
1:AA:1169:A:C2	1:AA:1170:A:C4	3.06	0.42
1:AA:1166:G:H2'	1:AA:1169:A:OP2	2.19	0.42
1:AA:1446:U:O2'	1:AA:1447:A:H3'	2.19	0.42
1:AA:453:A:H4'	16:AP:72:ARG:HG3	2.00	0.42
1:AA:737:A:O2'	6:AF:72:VAL:HG11	2.19	0.42
1:AA:775:G:O2'	1:AA:776:G:H5'	2.19	0.42
1:AA:922:G:N3	1:AA:1398:A:C2	2.78	0.42
1:AA:974:A:OP2	14:AN:41:ARG:NH1	2.50	0.42
2:AB:221:LEU:O	2:AB:221:LEU:HD13	2.18	0.42
4:AD:98:GLU:HG3	4:AD:103:ASN:HD21	1.84	0.42
8:AH:109:ILE:CG2	8:AH:137:VAL:HB	2.48	0.42
8:AH:6:ILE:HB	8:AH:85:ARG:NH1	2.34	0.42
8:AH:87:SER:HB2	8:AH:93:VAL:HB	2.02	0.42
1:AA:1343:G:C1'	9:AI:121:ARG:NH1	2.81	0.42
10:AJ:47:PHE:CE1	10:AJ:63:PHE:HD2	2.37	0.42
13:AM:50:GLU:O	13:AM:54:VAL:HG23	2.19	0.42
17:AQ:81:ARG:NH2	17:AQ:83:ASP:OD2	2.47	0.42
18:AR:30:ASP:C	18:AR:32:ARG:H	2.22	0.42
20:AT:71:THR:CG2	20:AT:72:LEU:N	2.69	0.42
25:B0:36:ILE:HD11	34:BA:2355:C:O4'	2.18	0.42
31:B6:47:THR:HG22	31:B6:48:VAL:N	2.33	0.42
33:B8:58:ILE:O	33:B8:61:LEU:HG	2.19	0.42
34:BA:1019:U:O2'	34:BA:1021:A:H2	2.01	0.42
34:BA:1491:G:O4'	37:BD:99:ASP:OD2	2.37	0.42
34:BA:1494:A:O2'	34:BA:1495:A:OP1	2.36	0.42
34:BA:1496:A:H8	34:BA:1577:C:O2'	2.02	0.42
34:BA:1657:C:H2'	34:BA:1658:C:H6	1.83	0.42
34:BA:1809:A:H2'	34:BA:1810:A:C8	2.54	0.42
34:BA:1932:A:H2'	34:BA:1933:G:O4'	2.19	0.42
34:BA:2313:C:O2'	34:BA:2314:C:H5'	2.19	0.42
34:BA:2528:U:O2'	34:BA:2529:G:H3'	2.19	0.42
34:BA:2693:A:H2'	34:BA:2694:G:C8	2.47	0.42
34:BA:2762:G:H2'	34:BA:2763:G:C5'	2.27	0.42
34:BA:2740:A:C6	34:BA:2764:A:C8	3.07	0.42
34:BA:311:A:O4'	34:BA:332:A:C4	2.72	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:220:G:H2'	34:BA:427:U:O4	2.19	0.42
34:BA:571:A:O2'	34:BA:573:G:O5'	2.36	0.42
34:BA:613:G:C2	34:BA:615:G:C5	3.06	0.42
34:BA:708:C:H42	34:BA:723:G:H1	1.66	0.42
37:BD:4:LYS:HZ2	37:BD:20:ASP:HA	1.80	0.42
39:BF:203:GLN:O	39:BF:206:ILE:C	2.57	0.42
39:BF:77:ASP:C	39:BF:79:GLY:N	2.73	0.42
40:BG:39:ILE:CD1	40:BG:155:MET:SD	3.06	0.42
40:BG:16:ARG:CG	40:BG:16:ARG:HH11	2.32	0.42
42:BI:14:ASP:O	42:BI:17:GLN:CB	2.66	0.42
44:BO:19:ILE:HD12	44:BO:41:ALA:HB3	2.01	0.42
44:BO:3:GLN:HG3	44:BO:4:PRO:HD2	2.01	0.42
46:BQ:52:VAL:O	46:BQ:55:VAL:CG1	2.67	0.42
48:BS:37:ALA:HB1	48:BS:73:LEU:HD11	2.00	0.42
49:BT:106:SER:O	49:BT:107:ASP:CB	2.67	0.42
49:BT:89:VAL:HB	49:BT:91:ARG:HE	1.83	0.42
50:BU:92:ARG:NH1	51:BV:11:GLN:N	2.67	0.42
54:BY:10:GLY:C	54:BY:27:VAL:HG22	2.39	0.42
54:BY:27:VAL:HG12	54:BY:29:GLU:OE1	2.19	0.42
54:BY:32:PRO:C	54:BY:34:LYS:N	2.73	0.42
54:BY:37:VAL:HG21	54:BY:72:VAL:HG11	2.00	0.42
54:BY:87:LYS:HG3	54:BY:88:LYS:H	1.84	0.42
1:CA:1105:A:N3	1:CA:1106:G:C8	2.88	0.42
1:CA:1229:A:O2'	1:CA:1230:C:H5'	2.18	0.42
1:CA:1376:U:O2'	1:CA:1377:A:H5'	2.19	0.42
1:CA:328:C:C2'	1:CA:328:C:O2	2.66	0.42
1:CA:556:C:H2'	1:CA:557:G:H5'	2.01	0.42
1:CA:756:C:H2'	1:CA:757:U:O4'	2.19	0.42
2:CB:75:LYS:HA	2:CB:78:GLN:HE21	1.84	0.42
3:CC:141:VAL:O	3:CC:141:VAL:HG12	2.19	0.42
4:CD:50:ARG:HD2	4:CD:50:ARG:C	2.39	0.42
5:CE:11:ILE:N	5:CE:31:LEU:O	2.52	0.42
6:CF:100:ASN:N	6:CF:100:ASN:HD22	2.16	0.42
9:CI:113:LYS:CD	9:CI:113:LYS:N	2.80	0.42
1:CA:1349:A:P	9:CI:118:LYS:NZ	2.92	0.42
11:CK:117:ASN:HD22	11:CK:117:ASN:HA	1.59	0.42
14:CN:31:ARG:HG3	14:CN:31:ARG:HH11	1.84	0.42
3:CC:9:GLY:N	14:CN:49:HIS:O	2.52	0.42
15:CO:16:ALA:HB1	15:CO:21:ASP:HB3	2.01	0.42
11:CK:54:ARG:HH22	23:CW:40:C:P	2.41	0.42
24:CX:14:A:H2'	24:CX:15:A:C8	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:D0:1:MET:N	34:DA:2602:A:N6	2.67	0.42
26:D1:10:LYS:CD	26:D1:14:VAL:HA	2.48	0.42
34:DA:1048:A:H2'	34:DA:1048:A:N3	2.34	0.42
34:DA:2065:C:H2'	34:DA:2066:C:H6	1.83	0.42
34:DA:954:G:O2'	34:DA:2274:A:N1	2.40	0.42
34:DA:2287:A:N6	34:DA:2344:U:N3	2.63	0.42
34:DA:2635:C:C2'	34:DA:2636:U:O5'	2.67	0.42
34:DA:661:C:O3'	45:DP:18:ARG:HG2	2.19	0.42
34:DA:686:G:H21	34:DA:788:A:N6	2.17	0.42
34:DA:980:A:C6	34:DA:981:A:N1	2.87	0.42
36:DC:124:GLY:O	36:DC:125:SER:CB	2.67	0.42
36:DC:76:ALA:HB3	36:DC:94:VAL:HG11	2.01	0.42
36:DC:77:ILE:HD12	36:DC:123:VAL:H	1.84	0.42
37:DD:135:PHE:HD1	37:DD:135:PHE:N	2.13	0.42
37:DD:247:ALA:HA	37:DD:254:THR:HG22	2.00	0.42
37:DD:268:ARG:HB3	37:DD:268:ARG:CZ	2.49	0.42
38:DE:149:ARG:HH11	38:DE:149:ARG:HG3	1.84	0.42
38:DE:29:GLY:O	38:DE:30:PRO:C	2.57	0.42
40:DG:9:ARG:C	40:DG:11:TYR:H	2.21	0.42
40:DG:34:LEU:HD12	40:DG:100:TRP:CZ3	2.54	0.42
42:DI:120:ILE:HG21	42:DI:126:TYR:HE1	1.82	0.42
46:DQ:120:ILE:O	46:DQ:121:ALA:C	2.57	0.42
46:DQ:55:VAL:HG13	46:DQ:56:ARG:N	2.34	0.42
47:DR:76:VAL:CG1	47:DR:77:ARG:N	2.82	0.42
48:DS:101:LEU:HD13	48:DS:102:ALA:O	2.18	0.42
49:DT:65:LYS:NZ	49:DT:66:VAL:HG23	2.33	0.42
52:DW:34:ASN:O	52:DW:35:ILE:C	2.58	0.42
1:AA:1261:A:H2'	1:AA:1262:C:H5'	2.01	0.42
1:AA:1321:C:C5'	1:AA:1322:C:C5'	2.77	0.42
1:AA:1469:G:H2'	1:AA:1470:G:C8	2.54	0.42
1:AA:756:C:H2'	1:AA:757:U:O4'	2.20	0.42
1:AA:865:A:C2	1:AA:918:A:H4'	2.54	0.42
1:AA:93:G:O2'	1:AA:96:U:H5'	2.19	0.42
1:AA:963:G:H21	10:AJ:55:LYS:CD	2.31	0.42
2:AB:163:PHE:O	2:AB:164:VAL:HG23	2.19	0.42
3:AC:134:ILE:HG22	3:AC:168:ALA:HB3	2.01	0.42
3:AC:132:ARG:O	3:AC:134:ILE:N	2.52	0.42
6:AF:13:ASN:O	6:AF:14:LEU:HD23	2.20	0.42
6:AF:50:TYR:HE2	6:AF:52:ILE:HD11	1.83	0.42
8:AH:39:LEU:HD13	8:AH:111:ILE:HD11	2.01	0.42
1:AA:1349:A:P	9:AI:118:LYS:NZ	2.92	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:15:THR:O	10:AJ:18:ALA:N	2.52	0.42
10:AJ:90:LEU:N	10:AJ:91:PRO:CD	2.82	0.42
11:AK:69:ALA:O	11:AK:73:MET:HG2	2.19	0.42
13:AM:65:LYS:HA	13:AM:66:LEU:CD1	2.43	0.42
13:AM:90:LEU:C	13:AM:92:HIS:N	2.73	0.42
17:AQ:73:VAL:O	17:AQ:74:LEU:C	2.56	0.42
18:AR:25:THR:O	18:AR:25:THR:HG22	2.18	0.42
20:AT:57:ARG:HD3	20:AT:103:GLY:N	2.34	0.42
27:B2:30:ARG:H	27:B2:30:ARG:CD	2.14	0.42
28:B3:4:LEU:HB2	28:B3:39:ASP:HB2	2.01	0.42
30:B5:6:VAL:HG13	30:B5:7:PRO:CD	2.47	0.42
33:B8:13:ARG:CD	45:BP:61:ARG:NH1	2.82	0.42
34:BA:1141:U:OP1	43:BN:25:ARG:NH1	2.52	0.42
34:BA:1355:G:C4	34:BA:1356:G:C8	3.07	0.42
34:BA:1510:G:H2'	34:BA:1511:C:H6	1.81	0.42
32:B7:2:LYS:HG2	34:BA:1620:G:O2'	2.19	0.42
34:BA:1697:G:OP2	34:BA:1698:A:H2'	2.19	0.42
34:BA:2124:G:O2'	34:BA:2125:G:H5'	2.18	0.42
34:BA:2385:C:H2'	34:BA:2386:C:H6	1.84	0.42
34:BA:2496:C:P	46:BQ:81:VAL:HG13	2.58	0.42
34:BA:322:A:H5'	34:BA:340:A:H1'	2.00	0.42
34:BA:947:G:N3	34:BA:984:A:H2	2.17	0.42
36:BC:180:PHE:O	36:BC:182:PRO:N	2.51	0.42
34:BA:1819:A:H5''	37:BD:158:ALA:HB3	2.00	0.42
37:BD:186:HIS:HD2	37:BD:188:GLU:N	1.99	0.42
37:BD:68:LYS:HB2	37:BD:70:TRP:CH2	2.54	0.42
39:BF:68:LYS:O	39:BF:69:HIS:HD2	2.02	0.42
40:BG:90:LEU:HD12	40:BG:90:LEU:HA	1.77	0.42
42:BI:133:HIS:CD2	42:BI:133:HIS:N	2.87	0.42
45:BP:105:LEU:H	45:BP:105:LEU:HD12	1.83	0.42
45:BP:55:ARG:HG2	45:BP:56:SER:N	2.34	0.42
46:BQ:42:ILE:CD1	46:BQ:42:ILE:N	2.82	0.42
47:BR:104:ARG:CG	47:BR:104:ARG:NH1	2.80	0.42
47:BR:18:LEU:CD1	47:BR:18:LEU:C	2.84	0.42
47:BR:18:LEU:HD13	47:BR:18:LEU:O	2.19	0.42
35:BB:9:G:P	48:BS:17:ARG:HH11	2.42	0.42
48:BS:54:LEU:HD22	48:BS:57:LYS:O	2.18	0.42
48:BS:66:ALA:O	48:BS:67:ARG:CB	2.68	0.42
49:BT:13:ARG:NH2	49:BT:15:VAL:HG22	2.33	0.42
53:BX:27:THR:HA	53:BX:78:LYS:HA	2.01	0.42
55:BZ:10:ARG:HB3	55:BZ:36:LYS:C	2.39	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BZ:118:GLN:HG2	55:BZ:120:ILE:HD13	2.01	0.42
1:CA:1061:G:O2'	1:CA:1062:U:H5'	2.19	0.42
1:CA:1275:A:O2'	1:CA:1276:G:H5'	2.20	0.42
1:CA:1319:A:OP2	19:CS:5:LEU:HD21	2.20	0.42
1:CA:556:C:H2'	1:CA:557:G:C5'	2.49	0.42
1:CA:573:A:C2	1:CA:574:A:C2	3.07	0.42
1:CA:616:G:H2'	1:CA:616:G:N3	2.34	0.42
1:CA:718:G:H5'	11:CK:117:ASN:HB2	2.01	0.42
1:CA:943:U:O2'	1:CA:944:G:H5'	2.19	0.42
2:CB:191:ASP:O	2:CB:191:ASP:OD1	2.38	0.42
2:CB:80:ILE:HD13	2:CB:208:ILE:HG23	2.00	0.42
2:CB:22:LYS:HZ3	2:CB:40:HIS:HE1	1.67	0.42
3:CC:70:VAL:O	3:CC:105:GLU:HA	2.19	0.42
4:CD:207:TYR:HD2	4:CD:207:TYR:HA	1.66	0.42
5:CE:73:ASN:O	5:CE:73:ASN:ND2	2.52	0.42
8:CH:11:THR:HG23	8:CH:14:ARG:HH12	1.84	0.42
8:CH:5:PRO:O	8:CH:8:ASP:HB3	2.19	0.42
12:CL:21:LYS:HD2	12:CL:21:LYS:H	1.82	0.42
13:CM:47:ASP:C	13:CM:48:LEU:HD23	2.40	0.42
14:CN:44:LEU:HD12	14:CN:44:LEU:O	2.19	0.42
15:CO:80:ALA:O	15:CO:84:LYS:HG3	2.19	0.42
16:CP:22:THR:CG2	16:CP:32:TYR:HA	2.39	0.42
17:CQ:12:SER:HB3	17:CQ:20:THR:CB	2.49	0.42
17:CQ:73:VAL:O	17:CQ:74:LEU:C	2.57	0.42
19:CS:36:ARG:NH1	19:CS:52:TYR:O	2.52	0.42
23:CW:74:C:O2'	23:CW:75:C:H5'	2.19	0.42
26:D1:33:LYS:C	26:D1:34:THR:HG22	2.39	0.42
26:D1:49:VAL:HG13	26:D1:50:ARG:N	2.34	0.42
26:D1:72:GLU:O	26:D1:75:GLU:HB2	2.19	0.42
26:D1:78:LYS:O	26:D1:79:GLY:C	2.58	0.42
28:D3:26:LEU:HD21	28:D3:46:ASN:CB	2.49	0.42
30:D5:34:PRO:O	30:D5:35:GLU:C	2.56	0.42
34:DA:152:G:H1	34:DA:174:C:N4	2.16	0.42
1:CA:1409:C:H4'	34:DA:1915:U:O4	2.19	0.42
34:DA:2092:U:H4'	34:DA:2093:G:C5'	2.49	0.42
34:DA:2263:C:H2'	34:DA:2264:C:H5'	2.00	0.42
34:DA:2330:G:C2'	34:DA:2331:G:H5'	2.49	0.42
34:DA:2287:A:C2	34:DA:2346:A:N1	2.86	0.42
34:DA:2610:C:O2'	34:DA:2611:U:P	2.76	0.42
34:DA:27:G:O2'	34:DA:28:A:P	2.77	0.42
34:DA:759:G:O2'	34:DA:760:G:H5'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:923:C:H2'	34:DA:924:C:H6	1.83	0.42
37:DD:248:SER:HB2	37:DD:249:PRO:CD	2.49	0.42
39:DF:103:LYS:O	39:DF:106:ARG:N	2.52	0.42
39:DF:37:VAL:HG12	39:DF:41:LEU:HD12	2.01	0.42
39:DF:77:ASP:C	39:DF:79:GLY:N	2.72	0.42
41:DH:146:ALA:O	41:DH:148:ILE:N	2.51	0.42
42:DI:72:LEU:HB2	42:DI:136:VAL:CG2	2.48	0.42
1:AA:368:U:O4	42:DI:89:TYR:HD2	2.02	0.42
43:DN:93:THR:O	43:DN:94:HIS:HD2	2.02	0.42
44:DO:104:ARG:CZ	44:DO:104:ARG:HB3	2.49	0.42
44:DO:17:ARG:HA	44:DO:17:ARG:HD3	1.82	0.42
1:CA:1423:G:C5'	44:DO:49:ARG:HH21	2.31	0.42
44:DO:53:LYS:O	44:DO:56:ASP:CG	2.57	0.42
44:DO:69:ILE:HB	44:DO:77:ILE:HG22	2.02	0.42
47:DR:85:PRO:C	47:DR:87:TYR:H	2.22	0.42
50:DU:111:GLU:HA	50:DU:114:LYS:HD3	2.01	0.42
51:DV:40:LEU:O	51:DV:42:GLY:N	2.52	0.42
51:DV:82:ARG:CG	51:DV:82:ARG:HH11	2.33	0.42
52:DW:47:VAL:O	52:DW:50:VAL:HG13	2.19	0.42
54:DY:28:LYS:HB2	54:DY:37:VAL:HB	2.00	0.42
55:DZ:55:HIS:HE1	55:DZ:135:GLU:HA	1.83	0.42
1:AA:1495:U:C2	1:AA:1496:C:C5	3.07	0.42
1:AA:156:G:N1	1:AA:166:G:C6	2.87	0.42
1:AA:644:G:H2'	1:AA:645:C:C5'	2.48	0.42
1:AA:707:C:O2'	1:AA:708:C:C5'	2.67	0.42
2:AB:111:ARG:HG2	2:AB:111:ARG:HH11	1.84	0.42
2:AB:144:ARG:O	2:AB:147:LYS:N	2.52	0.42
2:AB:168:THR:HG23	2:AB:192:SER:OG	2.19	0.42
2:AB:178:ARG:HH22	2:AB:196:LEU:HA	1.82	0.42
4:AD:50:ARG:C	4:AD:50:ARG:HD2	2.39	0.42
5:AE:78:HIS:CE1	5:AE:142:LEU:HD23	2.54	0.42
7:AG:4:ARG:HH11	7:AG:4:ARG:HG2	1.83	0.42
7:AG:64:GLN:O	7:AG:65:ALA:C	2.57	0.42
8:AH:119:LEU:HB3	8:AH:123:GLU:HB2	2.00	0.42
10:AJ:80:LYS:NZ	10:AJ:80:LYS:CB	2.82	0.42
12:AL:21:LYS:HD2	12:AL:21:LYS:H	1.83	0.42
14:AN:33:VAL:C	14:AN:34:TYR:CD1	2.92	0.42
15:AO:78:TYR:O	15:AO:79:ARG:C	2.56	0.42
16:AP:41:PRO:O	16:AP:42:ARG:HG2	2.19	0.42
16:AP:59:TRP:HA	16:AP:59:TRP:CE3	2.54	0.42
17:AQ:11:VAL:HB	17:AQ:88:TYR:CD2	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:83:ARG:O	20:AT:86:ARG:HB3	2.19	0.42
21:AU:24:ARG:HG2	21:AU:24:ARG:HH11	1.84	0.42
23:AW:38:A:H2'	23:AW:39:U:C4'	2.49	0.42
26:B1:62:VAL:O	26:B1:64:ALA:N	2.52	0.42
27:B2:36:ARG:HD3	27:B2:36:ARG:O	2.17	0.42
28:B3:20:LYS:C	28:B3:22:ALA:N	2.72	0.42
30:B5:20:ARG:O	30:B5:21:SER:C	2.57	0.42
30:B5:41:PRO:HG2	30:B5:44:THR:OG1	2.19	0.42
34:BA:1158:C:O2'	34:BA:1159:U:C5'	2.66	0.42
34:BA:819:A:C4	34:BA:1189:A:C2	3.07	0.42
34:BA:1286:A:C6	34:BA:1289:C:C2	3.06	0.42
34:BA:1379:A:O2'	34:BA:1380:G:OP1	2.38	0.42
34:BA:1722:A:H2'	34:BA:1739:U:C5'	2.41	0.42
34:BA:2128:C:C3'	34:BA:2129:C:H5''	2.49	0.42
34:BA:2222:G:C4	34:BA:2223:G:C8	3.08	0.42
34:BA:2308:G:N7	34:BA:2310:A:O5'	2.51	0.42
34:BA:2639:A:C2'	34:BA:2640:G:C5'	2.91	0.42
34:BA:2802:G:O2'	34:BA:2803:C:H5''	2.18	0.42
34:BA:298:G:C5'	34:BA:299:A:OP1	2.65	0.42
34:BA:320:A:C4	39:BF:136:THR:HG21	2.53	0.42
34:BA:414:C:O2	34:BA:1864:U:O2'	2.29	0.42
34:BA:419:C:H2'	34:BA:420:C:C6	2.45	0.42
34:BA:554:U:H2'	34:BA:555:U:H5'	2.02	0.42
34:BA:925:C:H3'	34:BA:926:A:H5''	2.00	0.42
35:BB:95:C:H2'	35:BB:96:U:H6	1.84	0.42
37:BD:222:ARG:O	37:BD:223:GLY:O	2.37	0.42
37:BD:35:LYS:CE	37:BD:64:ILE:C	2.83	0.42
38:BE:197:ILE:CD1	38:BE:199:ARG:HH12	2.32	0.42
38:BE:200:GLU:O	38:BE:201:THR:O	2.37	0.42
39:BF:57:VAL:HG12	39:BF:58:ALA:H	1.73	0.42
40:BG:10:LYS:O	40:BG:11:TYR:C	2.57	0.42
42:BI:136:VAL:O	42:BI:136:VAL:HG22	2.19	0.42
42:BI:15:VAL:C	42:BI:17:GLN:N	2.73	0.42
42:BI:83:ALA:HA	42:BI:89:TYR:HD1	1.81	0.42
43:BN:119:ARG:HG3	43:BN:119:ARG:HH11	1.84	0.42
44:BO:89:ASN:C	44:BO:91:LEU:H	2.22	0.42
44:BO:87:ILE:HD13	44:BO:93:PRO:N	2.35	0.42
46:BQ:23:GLY:O	55:BZ:78:LYS:HB3	2.18	0.42
46:BQ:42:ILE:HD13	46:BQ:97:VAL:CG2	2.50	0.42
48:BS:97:ARG:O	48:BS:97:ARG:CG	2.66	0.42
50:BU:74:LEU:HD23	50:BU:114:LYS:CE	2.49	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:18:LEU:O	51:BV:98:GLU:HB3	2.19	0.42
34:BA:747:U:O2'	52:BW:88:ARG:HG3	2.19	0.42
53:BX:21:PHE:CE1	53:BX:26:TYR:HB3	2.54	0.42
53:BX:58:HIS:O	53:BX:59:VAL:HG22	2.19	0.42
53:BX:83:VAL:C	53:BX:85:PRO:HD3	2.40	0.42
55:BZ:97:GLU:HB3	55:BZ:125:LEU:HD21	2.01	0.42
55:BZ:39:VAL:CG2	55:BZ:40:ASP:H	2.06	0.42
55:BZ:61:LEU:O	55:BZ:63:ASP:N	2.52	0.42
1:CA:1230:C:O2'	1:CA:1231:G:H5'	2.19	0.42
1:CA:1291:G:O2'	1:CA:1292:U:H5'	2.19	0.42
1:CA:975:A:H5''	1:CA:1363(A):A:N6	2.34	0.42
1:CA:1475:G:OP1	34:DA:1689:A:H1'	2.19	0.42
1:CA:59:A:H2'	1:CA:59:A:N3	2.34	0.42
3:CC:132:ARG:O	3:CC:134:ILE:N	2.52	0.42
4:CD:138:TYR:CD2	4:CD:139:ARG:N	2.81	0.42
5:CE:110:LEU:HA	5:CE:113:ALA:HB2	2.02	0.42
5:CE:132:ALA:C	5:CE:134:ALA:N	2.71	0.42
6:CF:6:VAL:HA	6:CF:90:VAL:HA	2.01	0.42
7:CG:131:LYS:N	7:CG:135:VAL:HG21	2.34	0.42
9:CI:37:PHE:CE1	9:CI:74:ILE:HG12	2.53	0.42
9:CI:89:ASN:HB3	9:CI:92:TYR:CD1	2.54	0.42
10:CJ:80:LYS:CB	10:CJ:80:LYS:NZ	2.82	0.42
11:CK:105:VAL:O	11:CK:106:LYS:C	2.58	0.42
13:CM:91:ARG:HB2	13:CM:98:VAL:CG2	2.44	0.42
15:CO:11:VAL:O	15:CO:14:GLU:HB3	2.20	0.42
20:CT:57:ARG:HD3	20:CT:103:GLY:N	2.34	0.42
31:D6:39:TYR:HB3	31:D6:49:HIS:CE1	2.53	0.42
34:DA:1210:A:H4'	34:DA:1211:U:O5'	2.19	0.42
34:DA:1341:U:C1'	53:DX:77:LYS:HE2	2.49	0.42
34:DA:1491:G:C6	34:DA:1500:G:C2	3.07	0.42
34:DA:1722:A:C6	34:DA:1741:A:N1	2.87	0.42
34:DA:16:G:O2'	34:DA:17:G:H5'	2.19	0.42
34:DA:1843:C:HO2'	34:DA:1844:C:H5'	1.84	0.42
34:DA:237:C:H2'	34:DA:238:C:H6	1.83	0.42
34:DA:253:C:C2'	34:DA:254:G:H5'	2.49	0.42
34:DA:220:G:H2'	34:DA:427:U:O4	2.18	0.42
34:DA:708:C:O2	34:DA:708:C:H2'	2.18	0.42
36:DC:180:PHE:O	36:DC:182:PRO:N	2.52	0.42
34:DA:2580:U:H5'	38:DE:131:ALA:CB	2.48	0.42
38:DE:108:SER:HB3	38:DE:165:VAL:HG21	2.01	0.42
38:DE:28:ALA:O	38:DE:180:ASN:OD1	2.36	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DF:192:LEU:HD21	39:DF:194:MET:CE	2.49	0.42
39:DF:32:LEU:HD21	39:DF:105:VAL:CG1	2.36	0.42
40:DG:141:PHE:HA	40:DG:142:PRO:HD2	1.71	0.42
40:DG:125:PHE:HZ	40:DG:180:PHE:CZ	2.37	0.42
40:DG:55:LYS:O	40:DG:57:ALA:N	2.53	0.42
44:DO:47:ILE:HG13	44:DO:48:PRO:CD	2.29	0.42
45:DP:89:ALA:HB1	45:DP:121:LYS:HZ3	1.77	0.42
49:DT:32:TYR:HB3	49:DT:81:PRO:HB3	2.01	0.42
34:DA:994:C:H3'	50:DU:54:LYS:HE2	2.01	0.42
34:DA:71:A:H2	53:DX:31:HIS:HE1	1.65	0.42
54:DY:81:LYS:HE2	54:DY:97:ARG:HG2	2.01	0.42
55:DZ:149:SER:HB2	55:DZ:173:ALA:HA	2.00	0.42
55:DZ:10:ARG:NH2	55:DZ:26:GLY:H	2.09	0.42
1:AA:377:G:P	16:AP:5:ARG:HH11	2.42	0.42
1:AA:503:C:H2'	1:AA:504:C:C6	2.54	0.42
1:AA:568:G:O6	12:AL:5:PRO:HD3	2.20	0.42
1:AA:959:A:H2'	1:AA:960:U:O4'	2.20	0.42
1:AA:973:G:C4	10:AJ:55:LYS:CE	3.02	0.42
2:AB:116:GLU:HA	2:AB:119:GLU:CB	2.48	0.42
2:AB:165:VAL:O	2:AB:187:LEU:O	2.37	0.42
2:AB:17:PHE:N	2:AB:17:PHE:CD2	2.86	0.42
2:AB:189:ASP:OD1	2:AB:189:ASP:N	2.50	0.42
7:AG:36:LYS:NZ	7:AG:36:LYS:HB2	2.34	0.42
7:AG:85:TYR:CD1	7:AG:154:TYR:HE1	2.36	0.42
8:AH:38:ILE:HD11	8:AH:118:VAL:O	2.20	0.42
1:AA:1060:C:H5''	10:AJ:51:ARG:HB3	2.02	0.42
10:AJ:62:HIS:N	10:AJ:62:HIS:CD2	2.88	0.42
17:AQ:14:LYS:HB2	17:AQ:14:LYS:HZ3	1.82	0.42
18:AR:62:GLU:O	18:AR:64:ARG:N	2.52	0.42
19:AS:9:VAL:C	19:AS:10:PHE:CD1	2.93	0.42
19:AS:67:VAL:C	19:AS:69:HIS:N	2.70	0.42
22:AV:71:C:H2'	22:AV:72:A:H8	1.84	0.42
26:B1:9:GLY:O	26:B1:10:LYS:HD3	2.20	0.42
26:B1:66:HIS:C	26:B1:68:PRO:CD	2.87	0.42
27:B2:41:ILE:O	27:B2:44:LEU:N	2.50	0.42
33:B8:41:ILE:HG13	33:B8:42:ARG:N	2.34	0.42
34:BA:1245:G:H5''	45:BP:16:ARG:HH21	1.84	0.42
34:BA:1290:C:H2'	34:BA:1291:C:H6	1.82	0.42
32:B7:9:ARG:HD2	34:BA:1309:G:OP2	2.20	0.42
34:BA:1657:C:H5''	38:BE:133:LYS:O	2.19	0.42
34:BA:1755:A:H2'	34:BA:1756:G:H5'	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1992:G:O2'	34:BA:1993:U:OP2	2.32	0.42
34:BA:2020:A:C2	34:BA:2035:G:N1	2.86	0.42
34:BA:2178:C:C5'	36:BC:46:LYS:HD2	2.50	0.42
34:BA:2399:G:O6	34:BA:2417:C:N3	2.53	0.42
34:BA:2552:U:H3'	34:BA:2554:U:OP2	2.19	0.42
34:BA:2558:C:H2'	34:BA:2559:C:O4'	2.19	0.42
34:BA:2777:G:C5'	34:BA:2778:A:H5'	2.49	0.42
34:BA:2863:C:C3'	34:BA:2864:G:C5'	2.96	0.42
34:BA:512:G:C2'	34:BA:513:A:OP2	2.67	0.42
34:BA:703:U:H2'	34:BA:704:G:C5'	2.48	0.42
35:BB:66:A:HO2'	35:BB:67:G:P	2.42	0.42
35:BB:85:G:H1	35:BB:92:C:H42	1.66	0.42
36:BC:19:VAL:HB	36:BC:20:TYR:HD1	1.83	0.42
37:BD:117:VAL:HG22	37:BD:118:VAL:H	1.85	0.42
37:BD:27:THR:O	37:BD:28:GLU:CB	2.66	0.42
38:BE:1:MET:O	38:BE:2:LYS:C	2.57	0.42
43:BN:13:TRP:HZ3	43:BN:130:HIS:HE1	1.66	0.42
43:BN:31:ALA:O	43:BN:34:LEU:HB2	2.18	0.42
44:BO:20:MET:O	44:BO:41:ALA:CB	2.68	0.42
44:BO:45:GLU:O	44:BO:45:GLU:HG3	2.19	0.42
45:BP:32:THR:O	45:BP:33:ARG:HB2	2.19	0.42
48:BS:89:ARG:C	48:BS:92:TYR:HB3	2.40	0.42
34:BA:583:G:H5''	50:BU:10:ARG:HH12	1.84	0.42
51:BV:39:LEU:HD13	51:BV:39:LEU:HA	1.87	0.42
51:BV:72:VAL:O	51:BV:73:SER:CB	2.67	0.42
53:BX:36:LYS:HZ3	53:BX:39:ILE:HA	1.73	0.42
55:BZ:141:VAL:HG13	55:BZ:141:VAL:O	2.17	0.42
55:BZ:58:VAL:HA	55:BZ:67:LEU:O	2.19	0.42
55:BZ:9:TYR:HD2	55:BZ:9:TYR:HA	1.74	0.42
1:CA:1133:G:H2'	1:CA:1134:G:C8	2.54	0.42
1:CA:1261:A:H2'	1:CA:1262:C:H5'	2.00	0.42
1:CA:1320:C:C2	19:CS:72:GLY:HA3	2.54	0.42
1:CA:1320:C:H5'	19:CS:70:LYS:HG2	2.01	0.42
1:CA:1341:U:H3'	1:CA:1341:U:H6	1.85	0.42
1:CA:539:A:OP2	12:CL:115:LYS:HE3	2.18	0.42
1:CA:814:A:H2'	1:CA:816:A:H5''	2.01	0.42
1:CA:954:G:H21	1:CA:1227:A:H62	1.67	0.42
2:CB:80:ILE:O	2:CB:83:MET:HB2	2.19	0.42
4:CD:101:LEU:O	4:CD:102:ASP:C	2.57	0.42
5:CE:146:ALA:O	5:CE:148:VAL:N	2.53	0.42
5:CE:31:LEU:HD22	5:CE:43:LEU:HD11	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:8:ILE:HD12	6:CF:26:ILE:HG21	2.01	0.42
7:CG:24:THR:O	7:CG:25:ALA:C	2.58	0.42
8:CH:39:LEU:HD12	8:CH:39:LEU:HA	1.89	0.42
9:CI:78:LYS:HB2	9:CI:78:LYS:HZ2	1.84	0.42
10:CJ:90:LEU:N	10:CJ:91:PRO:CD	2.82	0.42
13:CM:96:LEU:HB3	13:CM:97:PRO:HD2	2.01	0.42
15:CO:24:SER:O	15:CO:28:GLN:HG3	2.20	0.42
17:CQ:63:ARG:HG2	17:CQ:64:PRO:CD	2.47	0.42
18:CR:62:GLU:O	18:CR:65:ILE:CD1	2.67	0.42
26:D1:62:VAL:HG13	26:D1:64:ALA:N	2.15	0.42
27:D2:25:VAL:C	27:D2:27:GLU:N	2.72	0.42
28:D3:12:PRO:O	28:D3:14:GLY:N	2.52	0.42
31:D6:45:LYS:HG3	34:DA:2371:G:C4'	2.50	0.42
33:D8:18:ALA:O	33:D8:20:GLY:N	2.53	0.42
34:DA:1158:C:O2'	34:DA:1159:U:P	2.77	0.42
34:DA:1188:U:C2'	34:DA:1189:A:C5'	2.95	0.42
34:DA:1260:G:O2'	34:DA:1261:C:H5'	2.18	0.42
34:DA:1410:G:N1	34:DA:1593:G:C6	2.88	0.42
34:DA:1778:U:H2'	34:DA:1784:A:N6	2.34	0.42
34:DA:1790:C:O2'	37:DD:209:ALA:HB2	2.20	0.42
34:DA:2689:U:H4'	34:DA:2690:C:C6	2.46	0.42
34:DA:2735:G:HO2'	34:DA:2736:G:H5''	1.82	0.42
34:DA:2802:G:O2'	34:DA:2803:C:H5''	2.19	0.42
34:DA:2870:C:H5''	47:DR:65:LEU:HD21	2.00	0.42
34:DA:614(C):A:H4'	34:DA:615:G:OP1	2.18	0.42
34:DA:756:C:H2'	34:DA:757:U:H5'	2.02	0.42
38:DE:67:PHE:O	38:DE:68:ALA:C	2.58	0.42
39:DF:116:ASP:OD2	45:DP:5:ASP:HA	2.20	0.42
34:DA:615:G:P	39:DF:40:GLN:NE2	2.92	0.42
40:DG:119:GLY:HA3	40:DG:181:ARG:CB	2.49	0.42
40:DG:76:SER:CA	40:DG:84:LYS:H	2.31	0.42
41:DH:44:VAL:CG1	41:DH:45:VAL:H	2.08	0.42
45:DP:98:GLU:HA	45:DP:101:VAL:CG1	2.49	0.42
45:DP:127:ALA:HB3	45:DP:130:PHE:CE2	2.55	0.42
34:DA:597:U:O2'	45:DP:15:ARG:HD3	2.18	0.42
45:DP:71:VAL:C	45:DP:73:GLY:N	2.70	0.42
46:DQ:17:LEU:HD12	46:DQ:39:PRO:HB2	2.02	0.42
46:DQ:51:ARG:O	46:DQ:52:VAL:C	2.57	0.42
47:DR:104:ARG:HD3	47:DR:111:LEU:HD11	2.02	0.42
49:DT:100:TYR:CD1	49:DT:100:TYR:N	2.86	0.42
49:DT:65:LYS:HZ2	49:DT:66:VAL:HG23	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DU:112:ARG:CG	50:DU:112:ARG:NH1	2.77	0.42
51:DV:82:ARG:HH11	51:DV:82:ARG:HG2	1.85	0.42
53:DX:25:LYS:HA	53:DX:25:LYS:HD2	1.80	0.42
54:DY:84:ARG:NH1	54:DY:97:ARG:HB2	2.34	0.42
1:AA:1026:G:H2'	1:AA:1027:C:H5'	2.01	0.42
1:AA:414:A:H5'	1:AA:414:A:C8	2.52	0.42
1:AA:556:C:H2'	1:AA:557:G:C5'	2.48	0.42
1:AA:689:C:OP2	11:AK:46:GLY:HA3	2.20	0.42
1:AA:568:G:N2	1:AA:883:C:C2	2.87	0.42
1:AA:1104:G:O5'	2:AB:111:ARG:HD2	2.20	0.42
2:AB:143:GLU:O	2:AB:147:LYS:HB2	2.19	0.42
2:AB:142:LEU:CD2	2:AB:146:GLN:NE2	2.83	0.42
2:AB:42:ILE:CD1	2:AB:202:PRO:HB2	2.47	0.42
3:AC:124:ILE:H	3:AC:124:ILE:HD12	1.83	0.42
4:AD:2:GLY:O	4:AD:3:ARG:C	2.56	0.42
4:AD:31:CYS:O	4:AD:31:CYS:SG	2.78	0.42
5:AE:11:ILE:N	5:AE:31:LEU:O	2.52	0.42
5:AE:32:VAL:CG1	5:AE:33:VAL:N	2.83	0.42
5:AE:6:PHE:HB3	5:AE:35:GLY:O	2.20	0.42
6:AF:44:GLY:HA2	6:AF:59:TYR:CE1	2.55	0.42
6:AF:59:TYR:HD2	6:AF:61:LEU:HD11	1.83	0.42
9:AI:19:LEU:HB3	9:AI:59:PHE:CD2	2.55	0.42
9:AI:4:TYR:CD1	9:AI:4:TYR:N	2.88	0.42
10:AJ:44:VAL:HG12	10:AJ:45:ARG:N	2.33	0.42
12:AL:7:ILE:O	12:AL:10:LEU:HB2	2.20	0.42
20:AT:20:LEU:O	20:AT:23:ARG:HB3	2.18	0.42
22:AV:41:C:C2	22:AV:42:G:C8	3.06	0.42
23:AW:6:G:C2'	23:AW:7:A:H5'	2.48	0.42
25:B0:72:ARG:HB2	25:B0:76:GLY:O	2.20	0.42
34:BA:1043:C:H6	34:BA:1043:C:O5'	2.02	0.42
34:BA:1048:A:H2'	34:BA:1048:A:N3	2.35	0.42
34:BA:1210:A:H4'	34:BA:1211:U:O5'	2.18	0.42
34:BA:1495:A:H2'	34:BA:1495:A:N3	2.35	0.42
34:BA:1691:C:O2'	34:BA:1692:U:H5'	2.20	0.42
34:BA:1854:A:H3'	34:BA:1855:G:C8	2.54	0.42
34:BA:2038:G:H2'	34:BA:2039:C:O4'	2.19	0.42
34:BA:2408:U:O5'	34:BA:2408:U:H6	2.02	0.42
34:BA:676:A:C8	34:BA:2443:C:H1'	2.54	0.42
34:BA:271(C):C:O2'	34:BA:271(D):G:H5'	2.20	0.42
34:BA:2748:A:H2'	34:BA:2749:A:C8	2.55	0.42
34:BA:2754:U:H2'	34:BA:2755:C:H5''	2.02	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:309:G:N3	34:BA:329:G:O2'	2.52	0.42
34:BA:396:G:O2'	34:BA:397:G:H5'	2.19	0.42
34:BA:402:A:C2'	34:BA:403:U:H5'	2.49	0.42
32:B7:12:ARG:NH2	34:BA:465:G:OP1	2.49	0.42
34:BA:759:G:O2'	34:BA:760:G:H5'	2.20	0.42
34:BA:858:U:C2	34:BA:2268:A:C2	3.07	0.42
34:BA:893:C:C2'	34:BA:894:C:H5'	2.46	0.42
37:BD:118:VAL:CG2	37:BD:119:ALA:N	2.78	0.42
37:BD:237:GLU:OE2	37:BD:239:ARG:N	2.51	0.42
38:BE:36:ARG:C	38:BE:37:ARG:HG3	2.40	0.42
40:BG:31:VAL:HG13	40:BG:32:PRO:N	2.33	0.42
42:BI:140:LEU:HD12	42:BI:141:LYS:H	1.84	0.42
42:BI:47:LEU:O	42:BI:51:ILE:HG12	2.19	0.42
44:BO:2:ILE:HG13	44:BO:8:LEU:HD11	2.01	0.42
45:BP:29:LYS:H	45:BP:29:LYS:HD2	1.85	0.42
33:B8:25:MET:HG2	45:BP:64:LYS:HB2	2.01	0.42
50:BU:111:GLU:HA	50:BU:114:LYS:HD3	2.01	0.42
53:BX:39:ILE:C	53:BX:42:ALA:HB3	2.39	0.42
55:BZ:44:PHE:CZ	55:BZ:86:VAL:HG11	2.54	0.42
1:CA:1081:G:P	5:CE:16:THR:OG1	2.78	0.42
1:CA:107:G:O2'	1:CA:108:G:H5'	2.19	0.42
1:CA:1192:C:O5'	1:CA:1192:C:H6	2.02	0.42
1:CA:1053:G:N7	1:CA:1199:U:H2'	2.35	0.42
1:CA:181:G:O6	1:CA:194:C:H2'	2.20	0.42
1:CA:444:C:H2'	1:CA:445:G:H8	1.84	0.42
1:CA:578:C:O2'	1:CA:579:G:H5'	2.20	0.42
1:CA:784:C:H2'	1:CA:785:G:C8	2.53	0.42
1:CA:887:G:C2'	1:CA:888:G:H5'	2.49	0.42
1:CA:902:G:O2'	1:CA:903:G:H5'	2.19	0.42
2:CB:116:GLU:HA	2:CB:119:GLU:CB	2.49	0.42
2:CB:71:VAL:HG13	2:CB:93:VAL:HB	2.00	0.42
2:CB:98:LEU:H	2:CB:101:MET:HE3	1.84	0.42
6:CF:2:ARG:HB2	6:CF:4:TYR:CE2	2.54	0.42
1:CA:1346:A:C4	7:CG:10:ARG:NH1	2.87	0.42
7:CG:21:VAL:HG23	7:CG:22:LEU:N	2.34	0.42
8:CH:39:LEU:HD13	8:CH:111:ILE:HD11	2.00	0.42
9:CI:4:TYR:CD1	9:CI:4:TYR:N	2.88	0.42
12:CL:46:LYS:CG	12:CL:47:LYS:N	2.72	0.42
13:CM:90:LEU:C	13:CM:92:HIS:N	2.72	0.42
22:CV:52:G:O2'	22:CV:53:G:O5'	2.38	0.42
23:CW:24:G:C6	23:CW:25:C:C4	3.07	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D1:11:ARG:HG3	26:D1:61:ARG:H	1.83	0.42
26:D1:54:ALA:O	26:D1:55:GLY:C	2.56	0.42
26:D1:64:ALA:HA	26:D1:67:ILE:CG1	2.49	0.42
27:D2:22:GLU:HA	27:D2:25:VAL:HG12	2.02	0.42
33:D8:41:ILE:HG13	33:D8:42:ARG:N	2.35	0.42
34:DA:1268:A:C5	34:DA:1269:A:C8	3.08	0.42
34:DA:1386:C:OP2	34:DA:1396:U:H5	2.01	0.42
34:DA:1708:C:C2	34:DA:1709:U:C5	3.07	0.42
34:DA:1772:G:N2	34:DA:1774:C:H5'	2.33	0.42
34:DA:1798:U:H5'	37:DD:259:THR:CG2	2.44	0.42
34:DA:1863:G:H2'	34:DA:1864:U:O4'	2.19	0.42
34:DA:207:A:C8	34:DA:208:C:C5	3.08	0.42
34:DA:2308:G:N7	34:DA:2310:A:O5'	2.53	0.42
34:DA:2454:G:C2'	34:DA:2455:G:H5'	2.49	0.42
34:DA:2516:G:C5	34:DA:2517:C:C4	3.08	0.42
34:DA:2740:A:C6	34:DA:2764:A:C8	3.06	0.42
34:DA:488:G:H1'	34:DA:492:A:H62	1.85	0.42
34:DA:756:C:O2'	34:DA:757:U:H5'	2.19	0.42
34:DA:797:C:O2'	34:DA:798:G:H5'	2.19	0.42
34:DA:955:C:H5'	34:DA:956:G:P	2.59	0.42
34:DA:994:C:H1'	51:DV:10:LYS:HZ1	1.84	0.42
35:DB:51:G:H2'	35:DB:52:A:O4'	2.19	0.42
37:DD:77:ALA:HB2	37:DD:97:TYR:CG	2.54	0.42
39:DF:21:ALA:C	39:DF:23:ASP:N	2.73	0.42
40:DG:7:LEU:HD22	40:DG:100:TRP:CZ3	2.55	0.42
42:DI:93:THR:N	42:DI:96:ASP:OD2	2.51	0.42
44:DO:103:ALA:HA	44:DO:122:LEU:O	2.20	0.42
44:DO:27:GLY:C	44:DO:29:ASN:H	2.23	0.42
46:DQ:66:ILE:O	46:DQ:66:ILE:HG13	2.19	0.42
48:DS:57:LYS:HG2	48:DS:58:LEU:N	2.34	0.42
51:DV:4:ILE:HG13	51:DV:40:LEU:HD11	2.02	0.42
51:DV:44:LYS:HG2	51:DV:45:THR:H	1.85	0.42
34:DA:747:U:O2'	52:DW:88:ARG:HG3	2.20	0.42
53:DX:18:TYR:O	53:DX:19:ALA:C	2.56	0.42
54:DY:81:LYS:HG2	54:DY:96:ILE:CB	2.48	0.42
55:DZ:4:ARG:HG2	55:DZ:58:VAL:HB	2.00	0.42
1:AA:1105:A:N3	1:AA:1106:G:C8	2.87	0.42
1:AA:1360:A:C2'	1:AA:1361:G:H5'	2.49	0.42
1:AA:433:C:O2'	1:AA:434:U:H5'	2.20	0.42
1:AA:519:C:H2'	1:AA:520:A:O4'	2.19	0.42
1:AA:709:G:H2'	1:AA:710:G:C8	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:777:A:O2'	1:AA:778:G:H5'	2.19	0.42
1:AA:918:A:C6	1:AA:919:A:C5	3.08	0.42
1:AA:950:U:H3'	13:AM:102:ARG:CZ	2.45	0.42
1:AA:985:C:H2'	1:AA:986:A:C8	2.55	0.42
1:AA:97:G:O2'	1:AA:98:G:P	2.77	0.42
4:AD:107:ARG:C	4:AD:109:GLY:H	2.23	0.42
4:AD:168:ARG:HG3	4:AD:168:ARG:NH1	2.34	0.42
8:AH:100:ILE:HA	8:AH:101:PRO:HD3	1.78	0.42
9:AI:115:GLY:C	9:AI:116:LYS:HG2	2.39	0.42
10:AJ:94:VAL:CG1	10:AJ:95:GLU:N	2.81	0.42
12:AL:30:ALA:HA	12:AL:31:PRO:HD3	1.98	0.42
13:AM:47:ASP:C	13:AM:48:LEU:HD23	2.39	0.42
16:AP:53:VAL:CG2	16:AP:54:GLU:N	2.81	0.42
16:AP:58:TYR:O	16:AP:61:SER:N	2.52	0.42
6:AF:46:ARG:NH1	18:AR:37:VAL:HG21	2.31	0.42
18:AR:62:GLU:O	18:AR:63:GLN:C	2.55	0.42
21:AU:9:ARG:O	21:AU:13:ILE:HG13	2.19	0.42
23:AW:21:A:C6	23:AW:46:G:C2	3.06	0.42
27:B2:55:ARG:HB3	27:B2:56:GLN:NE2	2.34	0.42
34:BA:1002:G:H2'	34:BA:1003:G:O4'	2.19	0.42
34:BA:1029:A:H2'	34:BA:1030:G:O4'	2.19	0.42
34:BA:1216:G:N2	34:BA:1234:U:H1'	2.35	0.42
34:BA:1256:G:C4	34:BA:1257:C:C5	3.08	0.42
34:BA:154:G:N1	34:BA:154(A):C:N4	2.67	0.42
34:BA:2230:G:C4	34:BA:2231:C:C5	3.08	0.42
34:BA:2256:G:H2'	34:BA:2257:U:O4'	2.20	0.42
34:BA:2360:A:O2'	34:BA:2361:A:C5'	2.68	0.42
34:BA:2639:A:H3'	34:BA:2640:G:C5'	2.49	0.42
34:BA:2783:G:H2'	34:BA:2784:C:C6	2.54	0.42
34:BA:432:A:H2'	34:BA:433:C:C6	2.54	0.42
34:BA:480:A:H3'	34:BA:481:G:H5''	2.01	0.42
34:BA:485:C:N3	34:BA:496:G:C2	2.87	0.42
34:BA:548:A:O2'	34:BA:549:G:OP1	2.31	0.42
34:BA:560:C:H4'	50:BU:52:ARG:CZ	2.49	0.42
34:BA:607:U:H5	34:BA:619:G:C5	2.37	0.42
34:BA:635:C:O2'	34:BA:639:U:OP1	2.37	0.42
35:BB:94:C:O2'	35:BB:95:C:H5'	2.20	0.42
37:BD:134:ARG:HB2	37:BD:135:PHE:HD1	1.83	0.42
38:BE:66:HIS:CG	38:BE:66:HIS:O	2.72	0.42
38:BE:93:VAL:O	38:BE:95:ILE:N	2.53	0.42
39:BF:180:GLY:O	39:BF:181:LEU:C	2.58	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:93:LYS:HD3	39:BF:93:LYS:HA	1.87	0.42
40:BG:170:ARG:HG2	40:BG:170:ARG:NH1	2.33	0.42
41:BH:13:LYS:CA	41:BH:13:LYS:HE2	2.31	0.42
41:BH:46:GLU:O	41:BH:47:GLU:CB	2.62	0.42
48:BS:58:LEU:HD12	48:BS:59:LYS:H	1.84	0.42
48:BS:89:ARG:HB3	48:BS:97:ARG:NH1	2.32	0.42
49:BT:109:GLU:O	49:BT:112:ARG:CG	2.60	0.42
51:BV:82:ARG:CG	51:BV:82:ARG:HH11	2.33	0.42
52:BW:17:VAL:HG23	52:BW:18:ARG:N	2.34	0.42
54:BY:15:VAL:CG1	54:BY:17:SER:H	2.28	0.42
55:BZ:65:GLN:HB3	55:BZ:67:LEU:HD11	2.01	0.42
55:BZ:68:PRO:O	55:BZ:91:LEU:N	2.49	0.42
1:CA:374:A:O2'	1:CA:375:U:H5'	2.20	0.42
1:CA:642:A:C5	8:CH:115:SER:HA	2.55	0.42
1:CA:778:G:O2'	1:CA:779:C:H5'	2.19	0.42
2:CB:21:ARG:HB2	2:CB:39:ILE:HA	2.00	0.42
4:CD:101:LEU:HD12	4:CD:105:VAL:HG23	2.00	0.42
4:CD:201:GLN:O	4:CD:204:ILE:HB	2.20	0.42
8:CH:7:ALA:HB2	8:CH:85:ARG:HD2	2.01	0.42
1:CA:1131:G:H5'	9:CI:3:GLN:NE2	2.35	0.42
10:CJ:56:HIS:O	10:CJ:58:ASP:N	2.53	0.42
10:CJ:40:LEU:HD21	10:CJ:70:ARG:N	2.34	0.42
11:CK:72:ALA:O	11:CK:77:MET:HB2	2.19	0.42
12:CL:89:ARG:NH1	12:CL:91:LYS:N	2.68	0.42
13:CM:124:PRO:O	13:CM:126:LYS:N	2.53	0.42
18:CR:76:LEU:HD22	18:CR:76:LEU:N	2.34	0.42
25:D0:49:LYS:O	25:D0:80:HIS:HB3	2.19	0.42
26:D1:15:ALA:HB1	26:D1:46:LEU:HD11	2.01	0.42
26:D1:41:ARG:NH1	26:D1:41:ARG:CG	2.82	0.42
26:D1:19:GLN:CD	26:D1:44:PRO:CB	2.88	0.42
30:D5:36:CYS:C	30:D5:38:ALA:H	2.22	0.42
32:D7:34:ARG:NH1	32:D7:41:ARG:O	2.53	0.42
34:DA:1332:G:H22	34:DA:1609:A:C1'	2.32	0.42
34:DA:1350:C:H2'	34:DA:1351:C:H6	1.83	0.42
34:DA:1707:G:H2'	34:DA:1708:C:C6	2.54	0.42
34:DA:1721:G:C2	34:DA:1739:U:OP2	2.73	0.42
34:DA:1952:A:N3	34:DA:2560:C:O2'	2.39	0.42
34:DA:2128:C:C3'	34:DA:2129:C:H5''	2.49	0.42
34:DA:365:C:C5'	34:DA:365:C:H6	2.23	0.42
34:DA:521:G:H2'	34:DA:522:G:C8	2.54	0.42
38:DE:199:ARG:HB3	38:DE:200:GLU:OE2	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DE:12:THR:O	38:DE:23:VAL:HG22	2.19	0.42
38:DE:57:LYS:O	38:DE:59:VAL:N	2.53	0.42
38:DE:71:GLY:O	38:DE:72:VAL:HB	2.20	0.42
39:DF:113:ALA:HB1	39:DF:186:ILE:HG21	2.02	0.42
40:DG:37:VAL:HG22	40:DG:159:VAL:CB	2.50	0.42
41:DH:85:LYS:NZ	41:DH:144:VAL:O	2.48	0.42
41:DH:94:TYR:N	41:DH:94:TYR:HD1	2.17	0.42
42:DI:51:ILE:O	42:DI:55:ALA:HB2	2.20	0.42
43:DN:69:GLN:OE1	43:DN:69:GLN:HA	2.19	0.42
43:DN:95:PRO:O	43:DN:96:GLU:HG2	2.20	0.42
45:DP:32:THR:O	45:DP:33:ARG:HB2	2.18	0.42
46:DQ:10:ARG:CB	46:DQ:10:ARG:HH11	2.33	0.42
46:DQ:118:LEU:O	46:DQ:119:ARG:C	2.56	0.42
48:DS:12:PHE:HB2	48:DS:14:VAL:HG23	2.02	0.42
48:DS:38:GLN:OE1	48:DS:47:THR:HG21	2.19	0.42
48:DS:84:GLN:O	48:DS:85:VAL:CG1	2.68	0.42
49:DT:16:ARG:HD3	49:DT:16:ARG:HA	1.81	0.42
50:DU:26:GLY:O	50:DU:30:LYS:HG2	2.20	0.42
52:DW:56:ALA:O	52:DW:57:ASN:C	2.56	0.42
53:DX:40:LYS:CG	53:DX:41:ASN:H	2.32	0.42
54:DY:8:LYS:HG2	54:DY:13:VAL:HG13	2.01	0.42
54:DY:87:LYS:HG3	54:DY:88:LYS:H	1.85	0.42
55:DZ:5:LEU:HD11	55:DZ:43:GLU:O	2.19	0.42
1:AA:1071:C:H2'	1:AA:1072:G:H8	1.85	0.42
1:AA:1073:U:O2'	1:AA:1074:G:H5'	2.19	0.42
1:AA:1217:C:H2'	1:AA:1218:C:O4'	2.20	0.42
1:AA:1499:A:C4	1:AA:1500:A:C8	3.08	0.42
1:AA:515:G:N2	1:AA:537:G:C4	2.87	0.42
1:AA:667:G:H2'	1:AA:668:G:C8	2.55	0.42
1:AA:674:G:H2'	1:AA:675:A:C8	2.45	0.42
1:AA:725:G:O2'	1:AA:726:C:H5'	2.20	0.42
1:AA:943:U:O2'	1:AA:944:G:H5'	2.20	0.42
4:AD:20:TYR:N	4:AD:20:TYR:CD1	2.87	0.42
4:AD:4:TYR:CG	4:AD:5:ILE:N	2.88	0.42
6:AF:52:ILE:HD13	6:AF:52:ILE:HA	1.91	0.42
7:AG:6:ARG:O	7:AG:6:ARG:HG2	2.20	0.42
7:AG:76:ARG:NH1	7:AG:76:ARG:HG2	2.31	0.42
9:AI:94:ALA:O	9:AI:95:LYS:HB3	2.20	0.42
1:AA:963:G:H21	10:AJ:55:LYS:CE	2.33	0.42
11:AK:122:LYS:O	11:AK:126:ARG:HB2	2.20	0.42
13:AM:18:ALA:O	13:AM:20:THR:N	2.52	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:67:GLU:CD	13:AM:68:GLY:H	2.23	0.42
15:AO:53:HIS:CE1	15:AO:57:LEU:HD21	2.54	0.42
17:AQ:12:SER:HB3	17:AQ:20:THR:OG1	2.19	0.42
18:AR:64:ARG:C	18:AR:66:LEU:N	2.72	0.42
20:AT:78:ALA:O	20:AT:79:ARG:C	2.58	0.42
23:AW:42:C:H2'	23:AW:43:C:C1'	2.50	0.42
25:B0:49:LYS:O	25:B0:80:HIS:HB3	2.19	0.42
26:B1:62:VAL:HG11	26:B1:67:ILE:HA	2.02	0.42
30:B5:50:GLY:HA3	30:B5:56:LYS:HB3	2.01	0.42
32:B7:19:ARG:NH1	32:B7:19:ARG:CG	2.81	0.42
33:B8:35:GLN:HB3	34:BA:2420:C:OP1	2.20	0.42
34:BA:247:G:H4'	34:BA:386:G:C6	2.54	0.42
25:B0:1:MET:N	34:BA:2602:A:H61	2.17	0.42
34:BA:912:C:H2'	34:BA:913:U:C6	2.54	0.42
34:BA:927:G:H3'	34:BA:928:G:C8	2.53	0.42
34:BA:955:C:H5'	34:BA:956:G:P	2.59	0.42
34:BA:981:A:H2	34:BA:2027:G:N3	2.18	0.42
35:BB:9:G:OP1	48:BS:17:ARG:NH1	2.41	0.42
36:BC:92:ASP:CG	36:BC:93:TYR:N	2.73	0.42
34:BA:1813:G:H1'	37:BD:50:THR:OG1	2.19	0.42
38:BE:12:THR:O	38:BE:23:VAL:HG22	2.19	0.42
38:BE:74:PRO:O	38:BE:76:ARG:N	2.52	0.42
39:BF:107:LYS:O	39:BF:108:LYS:C	2.58	0.42
39:BF:127:GLU:OE1	39:BF:127:GLU:HA	2.19	0.42
40:BG:115:ARG:NH2	40:BG:136:ARG:CG	2.80	0.42
41:BH:27:LYS:HG2	41:BH:32:GLU:OE1	2.20	0.42
42:BI:98:ALA:HA	42:BI:109:ILE:HD13	2.00	0.42
43:BN:40:PRO:C	50:BU:64:ARG:HH21	2.21	0.42
47:BR:27:SER:O	47:BR:29:LEU:N	2.52	0.42
48:BS:34:HIS:CE1	48:BS:54:LEU:HB2	2.55	0.42
49:BT:10:VAL:O	49:BT:12:SER:N	2.52	0.42
51:BV:22:VAL:O	51:BV:22:VAL:HG12	2.19	0.42
53:BX:12:VAL:O	53:BX:13:LEU:HD23	2.20	0.42
53:BX:8:ILE:HD12	53:BX:8:ILE:N	2.35	0.42
54:BY:44:ILE:HG22	54:BY:45:VAL:N	2.34	0.42
54:BY:81:LYS:HE2	54:BY:97:ARG:HG3	2.01	0.42
55:BZ:45:ASP:OD2	55:BZ:49:ARG:HG2	2.20	0.42
1:CA:124:G:C6	1:CA:125:U:C4	3.07	0.42
1:CA:1288:A:O2'	1:CA:1289:A:H5'	2.18	0.42
1:CA:137:C:H2'	1:CA:137:C:O2	2.19	0.42
1:CA:1385:G:O2'	1:CA:1386:G:H5'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1407:C:O2'	1:CA:1408:A:H5'	2.19	0.42
1:CA:769:G:O2'	1:CA:770:C:H5'	2.19	0.42
1:CA:93:G:O2'	1:CA:96:U:H5'	2.20	0.42
1:CA:973:G:C4	10:CJ:55:LYS:CE	3.03	0.42
2:CB:115:LEU:HD23	2:CB:153:ARG:NE	2.35	0.42
2:CB:223:ILE:C	2:CB:225:ALA:N	2.71	0.42
4:CD:38:TYR:HD1	4:CD:38:TYR:O	2.03	0.42
5:CE:144:THR:O	5:CE:147:ASP:OD2	2.37	0.42
13:CM:20:THR:C	13:CM:22:ILE:H	2.22	0.42
15:CO:55:GLY:HA2	15:CO:58:MET:HE3	2.02	0.42
15:CO:66:LEU:CD1	15:CO:66:LEU:H	2.33	0.42
15:CO:78:TYR:O	15:CO:79:ARG:C	2.58	0.42
17:CQ:21:VAL:O	17:CQ:41:LYS:HA	2.20	0.42
11:CK:109:VAL:HG13	18:CR:85:LEU:O	2.19	0.42
20:CT:63:ILE:HG22	20:CT:64:ASP:N	2.35	0.42
26:D1:68:PRO:C	26:D1:70:VAL:H	2.22	0.42
27:D2:56:GLN:C	27:D2:57:ILE:HG22	2.39	0.42
27:D2:59:ARG:O	27:D2:60:LEU:C	2.57	0.42
27:D2:60:LEU:O	27:D2:61:LEU:HB2	2.20	0.42
30:D5:41:PRO:HG2	30:D5:44:THR:OG1	2.20	0.42
34:DA:1013:C:O2'	34:DA:1014:U:H5'	2.19	0.42
34:DA:1043:C:H6	34:DA:1043:C:O5'	2.01	0.42
34:DA:1164:G:H2'	34:DA:1165:U:C6	2.54	0.42
34:DA:116:C:O2'	34:DA:117:G:H5'	2.19	0.42
34:DA:1231:G:O2'	34:DA:1232:G:H5'	2.20	0.42
34:DA:1243:G:H4'	45:DP:9:ASN:HD22	1.85	0.42
34:DA:1324:G:H3'	34:DA:1325:G:C4'	2.49	0.42
34:DA:2097:C:H2'	34:DA:2098:U:O4'	2.20	0.42
34:DA:2359:C:C4	34:DA:2360:A:C5	3.07	0.42
34:DA:676:A:C8	34:DA:2443:C:H1'	2.55	0.42
34:DA:2550:G:O2'	34:DA:2551:C:H5'	2.20	0.42
34:DA:2859:G:O2'	34:DA:2860:A:C5'	2.68	0.42
34:DA:2883:A:C5'	34:DA:2884:U:H5'	2.49	0.42
34:DA:752:A:H4'	34:DA:753:C:O5'	2.19	0.42
34:DA:869:G:H2'	34:DA:870:A:O4'	2.19	0.42
34:DA:925:C:H2'	34:DA:926:A:C5'	2.38	0.42
36:DC:41:VAL:CB	36:DC:178:ALA:HB3	2.50	0.42
37:DD:109:ASP:HB2	37:DD:197:GLY:CA	2.50	0.42
37:DD:34:VAL:O	37:DD:35:LYS:CB	2.68	0.42
38:DE:120:TRP:HB2	38:DE:122:PHE:CD1	2.55	0.42
38:DE:3:GLY:HA3	38:DE:81:ILE:HG13	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DF:9:ILE:HG12	39:DF:14:PRO:O	2.20	0.42
40:DG:18:GLU:O	40:DG:21:ARG:HB3	2.19	0.42
40:DG:20:ILE:O	40:DG:20:ILE:HG22	2.18	0.42
41:DH:141:VAL:HG12	41:DH:142:GLY:H	1.83	0.42
42:DI:12:LEU:N	42:DI:12:LEU:HD23	2.35	0.42
42:DI:133:HIS:N	42:DI:133:HIS:CD2	2.88	0.42
43:DN:61:ARG:HH11	43:DN:61:ARG:HG3	1.85	0.42
43:DN:78:TYR:H	43:DN:79:PRO:CD	2.33	0.42
44:DO:71:ARG:HG3	44:DO:71:ARG:NH1	2.34	0.42
46:DQ:42:ILE:HD13	46:DQ:97:VAL:CG2	2.49	0.42
46:DQ:47:ILE:CD1	46:DQ:47:ILE:H	2.30	0.42
47:DR:60:LEU:O	47:DR:61:HIS:C	2.55	0.42
48:DS:14:VAL:HG11	48:DS:90:GLY:HA3	2.00	0.42
49:DT:22:PHE:CZ	49:DT:85:LYS:NZ	2.85	0.42
49:DT:55:ASN:N	49:DT:59:THR:HB	2.34	0.42
50:DU:26:GLY:O	50:DU:28:ARG:N	2.52	0.42
50:DU:44:ASN:O	50:DU:45:TYR:C	2.58	0.42
51:DV:13:ARG:HG3	51:DV:13:ARG:O	2.19	0.42
51:DV:56:SER:O	51:DV:57:VAL:HB	2.19	0.42
51:DV:76:LYS:HG2	51:DV:85:LYS:HG2	2.01	0.42
34:DA:1225:G:OP1	51:DV:88:ARG:CB	2.67	0.42
52:DW:47:VAL:HA	52:DW:50:VAL:HG12	2.01	0.42
52:DW:82:LEU:HD12	52:DW:82:LEU:H	1.84	0.42
53:DX:40:LYS:O	53:DX:44:GLU:HG2	2.20	0.42
54:DY:15:VAL:CG1	54:DY:16:ALA:N	2.58	0.42
54:DY:37:VAL:CG2	54:DY:38:ILE:N	2.70	0.42
1:AA:1306:A:O2'	1:AA:1307:U:H5'	2.19	0.42
1:AA:1332:A:C2	1:AA:1333:A:C5	3.07	0.42
1:AA:181:G:O6	1:AA:194:C:H2'	2.20	0.42
1:AA:424:G:H2'	1:AA:425:G:H8	1.85	0.42
1:AA:539:A:OP2	12:AL:115:LYS:HE3	2.19	0.42
1:AA:802:A:C2'	1:AA:803:G:H5'	2.50	0.42
1:AA:836:G:C6	1:AA:851:G:C6	3.08	0.42
2:AB:116:GLU:HA	2:AB:119:GLU:HB2	2.02	0.42
2:AB:174:VAL:O	2:AB:177:ALA:HB3	2.20	0.42
2:AB:223:ILE:C	2:AB:225:ALA:N	2.70	0.42
3:AC:134:ILE:CG2	3:AC:168:ALA:HB3	2.50	0.42
4:AD:58:LEU:HD23	4:AD:206:PHE:CZ	2.55	0.42
5:AE:15:ARG:CZ	5:AE:26:PHE:CE2	3.02	0.42
5:AE:54:ALA:O	5:AE:55:VAL:C	2.58	0.42
6:AF:61:LEU:HD23	6:AF:63:TYR:OH	2.19	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:63:TYR:N	6:AF:63:TYR:HD2	2.17	0.42
10:AJ:40:LEU:HD21	10:AJ:70:ARG:N	2.34	0.42
11:AK:97:ALA:C	11:AK:99:GLN:H	2.23	0.42
13:AM:66:LEU:O	13:AM:67:GLU:O	2.38	0.42
14:AN:29:ARG:NH1	14:AN:29:ARG:HG3	2.34	0.42
15:AO:24:SER:O	15:AO:28:GLN:HG3	2.20	0.42
15:AO:33:THR:O	15:AO:36:ILE:N	2.53	0.42
1:AA:375:U:OP1	16:AP:69:THR:HG21	2.20	0.42
17:AQ:36:ILE:HG13	17:AQ:36:ILE:O	2.18	0.42
17:AQ:63:ARG:HG2	17:AQ:64:PRO:CD	2.47	0.42
18:AR:74:ARG:HG2	18:AR:81:PHE:CE1	2.54	0.42
1:AA:261:U:OP2	20:AT:79:ARG:NH2	2.53	0.42
23:AW:39:U:C3'	23:AW:40:C:C5'	2.98	0.42
27:B2:12:GLU:C	27:B2:14:ARG:H	2.22	0.42
30:B5:36:CYS:C	30:B5:38:ALA:H	2.23	0.42
33:B8:13:ARG:HD2	45:BP:61:ARG:HD3	2.01	0.42
34:BA:1149:G:O2'	34:BA:1150:C:H5'	2.19	0.42
34:BA:1317:A:H2'	34:BA:1318:C:O4'	2.20	0.42
34:BA:1594:G:H2'	34:BA:1595:G:O4'	2.20	0.42
34:BA:2012:G:H4'	52:BW:96:ILE:CD1	2.38	0.42
34:BA:2073:C:H42	34:BA:2436:G:H1	1.67	0.42
34:BA:2124:G:H2'	34:BA:2125:G:O4'	2.18	0.42
34:BA:2328:A:H2'	34:BA:2329:G:C8	2.55	0.42
34:BA:2406:U:C2	45:BP:72:PRO:HB2	2.55	0.42
34:BA:2511:U:H5''	38:BE:123:ALA:HB1	2.02	0.42
34:BA:271(Q):G:O2'	34:BA:271(R):G:P	2.77	0.42
34:BA:2810:A:C4	38:BE:61:ARG:NH2	2.88	0.42
34:BA:306:U:O2'	34:BA:307:G:H5'	2.20	0.42
34:BA:535:C:O2'	34:BA:536:A:H5'	2.19	0.42
34:BA:66:C:C2'	34:BA:67:U:H5'	2.49	0.42
34:BA:878:A:H2'	34:BA:879:G:C5'	2.50	0.42
35:BB:75:G:H2'	35:BB:76:G:H5'	2.00	0.42
36:BC:51:PRO:HB3	36:BC:204:ALA:HB2	2.02	0.42
37:BD:175:LEU:HA	37:BD:175:LEU:HD23	1.85	0.42
37:BD:133:LEU:HG	37:BD:189:CYS:O	2.20	0.42
37:BD:263:ARG:O	37:BD:264:LYS:C	2.57	0.42
37:BD:268:ARG:HB3	37:BD:268:ARG:CZ	2.50	0.42
37:BD:53:PHE:CD1	37:BD:220:HIS:HA	2.55	0.42
39:BF:164:ARG:HG2	39:BF:164:ARG:NH1	2.35	0.42
34:BA:440:G:N2	39:BF:46:ARG:HH21	2.15	0.42
41:BH:94:TYR:CD1	41:BH:94:TYR:N	2.87	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BI:33:ARG:NH1	42:BI:33:ARG:HG2	2.33	0.42
42:BI:79:ILE:HG22	42:BI:81:VAL:HG23	2.00	0.42
43:BN:78:TYR:H	43:BN:79:PRO:CD	2.33	0.42
43:BN:87:LEU:O	43:BN:88:GLU:C	2.57	0.42
44:BO:44:LYS:O	44:BO:45:GLU:HB3	2.20	0.42
48:BS:37:ALA:CB	48:BS:73:LEU:HD11	2.49	0.42
50:BU:101:ARG:C	50:BU:102:GLU:HG2	2.40	0.42
50:BU:26:GLY:O	50:BU:28:ARG:N	2.53	0.42
51:BV:43:GLU:CA	51:BV:48:GLY:HA2	2.49	0.42
54:BY:13:VAL:CG1	54:BY:72:VAL:HB	2.50	0.42
1:CA:1057:G:C4	1:CA:1204:A:C2	3.08	0.42
1:CA:1095:U:H5''	1:CA:1109:C:O2	2.19	0.42
1:CA:29:G:O2'	1:CA:30:U:H5'	2.19	0.42
1:CA:318:G:O2'	1:CA:319:G:H5'	2.20	0.42
1:CA:403:C:O2'	1:CA:404:U:C5'	2.67	0.42
1:CA:780:A:C2	1:CA:803:G:N1	2.88	0.42
3:CC:184:TYR:HA	3:CC:200:ALA:O	2.20	0.42
3:CC:175:LEU:HD21	3:CC:201:TYR:CE2	2.55	0.42
4:CD:104:VAL:C	4:CD:106:TYR:N	2.73	0.42
5:CE:101:ILE:H	5:CE:101:ILE:CD1	2.10	0.42
6:CF:59:TYR:CD2	6:CF:61:LEU:HD11	2.54	0.42
8:CH:86:ILE:HG13	8:CH:133:LEU:CD2	2.50	0.42
8:CH:34:GLU:HA	8:CH:34:GLU:OE1	2.19	0.42
8:CH:73:ASP:O	8:CH:75:ARG:N	2.50	0.42
12:CL:89:ARG:NH2	12:CL:91:LYS:HD3	2.34	0.42
13:CM:23:TYR:CZ	13:CM:71:ARG:HD3	2.54	0.42
13:CM:9:ILE:N	13:CM:9:ILE:CD1	2.79	0.42
14:CN:33:VAL:HG12	14:CN:34:TYR:H	1.84	0.42
17:CQ:21:VAL:HG12	17:CQ:23:VAL:CG2	2.50	0.42
18:CR:53:ARG:C	18:CR:55:ARG:H	2.21	0.42
23:CW:43:C:O2'	23:CW:44:G:H5'	2.19	0.42
27:D2:29:LYS:O	27:D2:32:LEU:N	2.53	0.42
27:D2:32:LEU:CG	27:D2:33:MET:H	2.10	0.42
33:D8:23:VAL:CG1	33:D8:46:ARG:HB3	2.50	0.42
33:D8:53:PRO:O	33:D8:54:GLU:C	2.57	0.42
33:D8:62:LEU:N	33:D8:63:PRO:CD	2.82	0.42
34:DA:1258:C:O2'	34:DA:1259:G:H5'	2.19	0.42
34:DA:1317:A:H2'	34:DA:1318:C:O4'	2.20	0.42
34:DA:1496:A:H8	34:DA:1577:C:O2'	2.02	0.42
34:DA:1578:U:OP2	34:DA:1578:U:H6	2.03	0.42
34:DA:1594:G:H2'	34:DA:1595:G:O4'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1697:G:OP2	34:DA:1698:A:H2'	2.19	0.42
34:DA:1809:A:C6	34:DA:1810:A:C6	3.08	0.42
34:DA:1819:A:H5''	37:DD:158:ALA:HB3	2.01	0.42
34:DA:1930:G:N2	34:DA:1968:G:H2'	2.35	0.42
34:DA:2034:U:H2'	34:DA:2035:G:H5'	2.02	0.42
34:DA:2376:A:H2'	34:DA:2377:A:O4'	2.20	0.42
34:DA:2439:A:H1'	34:DA:2587:A:OP1	2.20	0.42
34:DA:2468:G:H5'	46:DQ:120:ILE:HD12	2.00	0.42
34:DA:2745:C:O2'	34:DA:2746:U:H5'	2.19	0.42
34:DA:247:G:H4'	34:DA:386:G:C6	2.55	0.42
34:DA:703:U:H2'	34:DA:704:G:C5'	2.50	0.42
34:DA:875:G:H4'	55:DZ:170:THR:HG22	2.02	0.42
34:DA:892:G:H2'	34:DA:893:C:O4'	2.20	0.42
34:DA:893:C:C2'	34:DA:894:C:H5'	2.45	0.42
37:DD:98:VAL:C	37:DD:100:GLY:N	2.72	0.42
37:DD:27:THR:O	37:DD:28:GLU:CB	2.67	0.42
39:DF:173:VAL:HG12	39:DF:174:VAL:N	2.35	0.42
41:DH:154:PRO:CG	41:DH:155:SER:N	2.82	0.42
43:DN:130:HIS:CG	43:DN:130:HIS:O	2.72	0.42
45:DP:47:ASP:HB2	45:DP:51:PHE:HB2	2.02	0.42
47:DR:45:ARG:O	47:DR:46:GLY:C	2.58	0.42
48:DS:28:VAL:CG1	48:DS:29:PHE:N	2.66	0.42
48:DS:58:LEU:HD12	48:DS:59:LYS:H	1.84	0.42
48:DS:51:ALA:HB3	48:DS:73:LEU:HG	2.02	0.42
49:DT:6:LEU:HA	49:DT:9:LEU:HD12	2.01	0.42
51:DV:61:VAL:C	51:DV:62:LEU:HD23	2.40	0.42
51:DV:72:VAL:CG1	51:DV:73:SER:H	2.23	0.42
52:DW:23:LEU:HD22	52:DW:39:THR:HG21	2.02	0.42
53:DX:89:ILE:O	53:DX:89:ILE:CG2	2.67	0.42
53:DX:93:GLU:HG3	53:DX:93:GLU:O	2.19	0.42
54:DY:15:VAL:CG1	54:DY:17:SER:H	2.25	0.42
54:DY:83:THR:HG22	54:DY:84:ARG:H	1.85	0.42
55:DZ:117:LEU:HD23	55:DZ:117:LEU:O	2.20	0.42
55:DZ:98:MET:C	55:DZ:125:LEU:HA	2.40	0.42
55:DZ:38:TYR:CD1	55:DZ:38:TYR:O	2.73	0.42
1:AA:1320:C:C2	19:AS:72:GLY:HA3	2.54	0.42
1:AA:1341:U:H6	1:AA:1341:U:H3'	1.84	0.42
1:AA:1349:A:H2'	1:AA:1350:A:H8	1.85	0.42
1:AA:96:U:HO2'	1:AA:97:G:P	2.42	0.42
2:AB:52:GLU:O	2:AB:54:THR:N	2.52	0.42
4:AD:126:ILE:CG2	4:AD:127:THR:N	2.82	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:76:ILE:HB	5:AE:118:ILE:HD13	2.00	0.42
9:AI:99:LEU:O	9:AI:100:GLY:C	2.58	0.42
1:AA:1131:G:H5'	9:AI:3:GLN:NE2	2.35	0.42
10:AJ:8:LEU:HG	10:AJ:96:ILE:HG22	2.01	0.42
12:AL:113:ARG:NH1	12:AL:120:TYR:CD2	2.88	0.42
13:AM:124:PRO:HG2	13:AM:125:ARG:H	1.85	0.42
13:AM:54:VAL:C	13:AM:56:LEU:N	2.73	0.42
15:AO:11:VAL:O	15:AO:14:GLU:N	2.51	0.42
15:AO:53:HIS:HE1	15:AO:57:LEU:HD21	1.84	0.42
15:AO:65:ARG:O	15:AO:68:ARG:HB3	2.20	0.42
23:AW:66:U:H2'	23:AW:67:C:H6	1.81	0.42
26:B1:60:PHE:CD1	26:B1:70:VAL:HG22	2.43	0.42
30:B5:3:LYS:HA	30:B5:3:LYS:HD2	1.88	0.42
33:B8:62:LEU:HD13	34:BA:242:G:C5'	2.24	0.42
34:BA:1050:A:O2'	34:BA:2752:C:H1'	2.20	0.42
34:BA:1119:C:O2'	34:BA:1120:G:H5'	2.20	0.42
34:BA:1140:C:OP1	43:BN:23:LEU:HD23	2.19	0.42
34:BA:1842:G:H2'	34:BA:1843:C:H6	1.81	0.42
34:BA:2097:C:O2'	34:BA:2098:U:H5'	2.19	0.42
34:BA:2640:G:C2'	34:BA:2641:G:O5'	2.68	0.42
34:BA:2813:A:H2'	34:BA:2814:C:H5'	2.02	0.42
34:BA:425:G:O2'	34:BA:426:C:H5'	2.20	0.42
34:BA:978:G:C2	34:BA:986:C:N3	2.88	0.42
34:BA:993:G:C4	34:BA:994:C:C5	3.08	0.42
36:BC:20:TYR:N	36:BC:20:TYR:CD1	2.88	0.42
37:BD:252:TRP:O	37:BD:253:GLN:C	2.57	0.42
38:BE:48:GLN:HE21	38:BE:78:LEU:HD12	1.85	0.42
41:BH:146:ALA:O	41:BH:148:ILE:N	2.53	0.42
43:BN:35:ARG:O	43:BN:37:LYS:N	2.53	0.42
44:BO:87:ILE:HD12	44:BO:91:LEU:C	2.40	0.42
34:BA:2723:C:OP1	47:BR:2:ARG:NH1	2.53	0.42
47:BR:85:PRO:C	47:BR:87:TYR:H	2.23	0.42
48:BS:84:GLN:HE21	48:BS:105:ALA:HB1	1.84	0.42
34:BA:536:A:H5'	50:BU:53:ARG:HD3	2.01	0.42
54:BY:61:ILE:O	54:BY:62:GLU:O	2.37	0.42
1:CA:937:A:C2	1:CA:1379:G:O6	2.73	0.42
1:CA:156:G:N1	1:CA:166:G:C6	2.88	0.42
1:CA:332:G:O2'	1:CA:333:G:H5'	2.20	0.42
1:CA:34:C:H2'	1:CA:35:G:H8	1.84	0.42
1:CA:44:G:N2	1:CA:399:G:C4	2.88	0.42
1:CA:568:G:N2	1:CA:883:C:C2	2.87	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:107:THR:O	2:CB:110:GLN:HB2	2.20	0.42
3:CC:134:ILE:CG2	3:CC:168:ALA:HB3	2.50	0.42
3:CC:75:VAL:O	3:CC:75:VAL:HG12	2.20	0.42
4:CD:132:ARG:NH1	4:CD:132:ARG:HG2	2.35	0.42
4:CD:79:PHE:O	4:CD:82:ALA:HB3	2.20	0.42
6:CF:52:ILE:HA	6:CF:52:ILE:HD13	1.89	0.42
1:CA:1117:G:O2'	9:CI:104:ARG:NH2	2.53	0.42
10:CJ:28:ARG:NH1	10:CJ:28:ARG:HG2	2.35	0.42
1:CA:689:C:P	11:CK:46:GLY:HA3	2.59	0.42
13:CM:124:PRO:HG2	13:CM:125:ARG:H	1.85	0.42
15:CO:66:LEU:O	15:CO:67:LEU:C	2.56	0.42
16:CP:21:VAL:HG23	16:CP:21:VAL:O	2.19	0.42
16:CP:76:GLN:HB2	16:CP:76:GLN:HE21	1.63	0.42
6:CF:46:ARG:NH1	18:CR:37:VAL:HG21	2.31	0.42
18:CR:40:LEU:C	18:CR:42:ARG:N	2.71	0.42
19:CS:64:GLU:O	19:CS:65:ASN:C	2.58	0.42
20:CT:26:ASN:O	20:CT:27:LYS:C	2.58	0.42
21:CU:6:ARG:NH2	21:CU:15:ARG:HH22	2.16	0.42
23:CW:48:C:C2	23:CW:59:U:H1'	2.55	0.42
25:D0:51:VAL:HG23	25:D0:80:HIS:HA	1.98	0.42
30:D5:2:ALA:O	30:D5:3:LYS:HD2	2.20	0.42
31:D6:47:THR:HG22	31:D6:48:VAL:N	2.33	0.42
34:DA:1313:U:C2'	34:DA:1313:U:O2	2.67	0.42
34:DA:1578:U:H2'	34:DA:1579:A:C5'	2.30	0.42
34:DA:1882:C:H2'	34:DA:1882:C:O2	2.20	0.42
34:DA:1948:G:C2'	34:DA:1949:G:H5'	2.50	0.42
34:DA:1969:A:O2'	34:DA:1972:A:N3	2.46	0.42
34:DA:2241:A:O2'	34:DA:2242:G:H5'	2.18	0.42
34:DA:2528:U:O2'	34:DA:2529:G:H3'	2.20	0.42
34:DA:2639:A:H3'	34:DA:2640:G:C5'	2.49	0.42
34:DA:2645:G:C3'	34:DA:2646:C:H5'	2.41	0.42
34:DA:2564:A:OP1	34:DA:2648:C:H4'	2.19	0.42
34:DA:2720:U:O2	34:DA:2720:U:C2'	2.63	0.42
34:DA:2756:U:H1'	34:DA:2757:A:H5''	2.02	0.42
34:DA:2807:G:H2'	34:DA:2808:U:H5''	2.02	0.42
34:DA:28:A:N6	34:DA:512:G:H1'	2.35	0.42
34:DA:445:C:O2'	34:DA:446:G:H5'	2.20	0.42
34:DA:688:U:H5'	34:DA:1780:A:C2	2.55	0.42
34:DA:851:U:O2'	34:DA:852:G:H5'	2.20	0.42
35:DB:95:C:H2'	35:DB:96:U:H6	1.84	0.42
34:DA:1799:G:H2'	37:DD:181:GLU:OE2	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:25:THR:CG2	37:DD:81:ALA:HB1	2.41	0.42
38:DE:148:GLY:O	38:DE:149:ARG:HB3	2.20	0.42
38:DE:184:VAL:HB	38:DE:185:LYS:H	1.72	0.42
38:DE:197:ILE:O	38:DE:197:ILE:CG1	2.65	0.42
38:DE:69:LYS:CA	38:DE:69:LYS:HE2	2.50	0.42
40:DG:5:VAL:O	40:DG:6:ALA:C	2.57	0.42
44:DO:11:ALA:O	44:DO:12:ASP:CB	2.67	0.42
46:DQ:43:THR:O	46:DQ:44:ALA:C	2.56	0.42
49:DT:10:VAL:O	49:DT:11:GLU:C	2.57	0.42
49:DT:54:ARG:HG2	49:DT:54:ARG:HH11	1.85	0.42
49:DT:56:GLY:C	49:DT:59:THR:CG2	2.88	0.42
52:DW:1:MET:HA	52:DW:1:MET:HE3	2.02	0.42
53:DX:72:LYS:HB2	53:DX:73:ARG:H	1.62	0.42
53:DX:80:ILE:CG2	53:DX:81:VAL:N	2.82	0.42
55:DZ:99:TYR:CD2	55:DZ:125:LEU:HB2	2.55	0.42
55:DZ:175:VAL:CB	55:DZ:176:PRO:CD	2.97	0.42
1:AA:1310:G:HO2'	1:AA:1311:G:H5'	1.85	0.42
1:AA:149:A:O2'	1:AA:150:C:P	2.78	0.42
1:AA:287:U:O2'	1:AA:288:A:H5'	2.20	0.42
1:AA:538:G:O2'	1:AA:539:A:H5'	2.20	0.42
1:AA:757:U:H2'	1:AA:758:G:O4'	2.19	0.42
2:AB:54:THR:O	2:AB:57:PHE:HB3	2.20	0.42
3:AC:11:ARG:O	3:AC:14:ILE:O	2.38	0.42
1:AA:1060:C:H5	3:AC:2:GLY:HA3	1.84	0.42
3:AC:35:GLU:C	3:AC:37:GLN:N	2.74	0.42
4:AD:101:LEU:HD12	4:AD:105:VAL:HG23	2.01	0.42
4:AD:104:VAL:O	4:AD:106:TYR:N	2.53	0.42
5:AE:127:ASN:O	5:AE:131:ILE:HG12	2.20	0.42
11:AK:25:TYR:CD1	11:AK:25:TYR:N	2.77	0.42
11:AK:77:MET:O	11:AK:78:GLN:HG2	2.20	0.42
1:AA:522:C:H41	12:AL:53:ARG:HH21	1.68	0.42
13:AM:116:THR:CG2	13:AM:117:VAL:N	2.74	0.42
14:AN:42:ILE:O	14:AN:46:GLU:HG3	2.19	0.42
15:AO:82:ILE:HG23	15:AO:83:GLU:N	2.35	0.42
19:AS:24:ALA:C	19:AS:26:GLY:H	2.24	0.42
23:AW:39:U:O2	23:AW:39:U:C5'	2.67	0.42
27:B2:15:LYS:O	27:B2:16:LEU:HB2	2.20	0.42
30:B5:40:LYS:HE2	30:B5:48:GLU:OE2	2.20	0.42
30:B5:47:PRO:C	30:B5:48:GLU:HG3	2.40	0.42
31:B6:10:LEU:CD2	31:B6:10:LEU:H	2.32	0.42
31:B6:10:LEU:HD13	33:B8:36:LYS:HD3	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B6:51:GLU:HG2	31:B6:52:VAL:N	2.34	0.42
34:BA:1006:C:O2'	34:BA:1007:C:H5'	2.20	0.42
34:BA:1106:A:O2'	34:BA:1107:G:O4'	2.32	0.42
34:BA:1252:G:C2	34:BA:1253:A:C2	3.08	0.42
34:BA:1473:G:C6	34:BA:1474:C:C4	3.07	0.42
34:BA:1517:G:C2'	34:BA:1518:U:H5'	2.50	0.42
34:BA:1528:A:O2'	34:BA:1528(A):A:P	2.78	0.42
34:BA:1593:G:C2'	34:BA:1594:G:C5'	2.96	0.42
34:BA:1899:G:HO2'	34:BA:1900:A:H5''	1.85	0.42
34:BA:194:G:H2'	34:BA:195:A:O4'	2.19	0.42
34:BA:2713:A:C3'	34:BA:2714:G:H5'	2.50	0.42
34:BA:2723:C:OP1	47:BR:2:ARG:CZ	2.68	0.42
34:BA:464:U:H2'	34:BA:465:G:O4'	2.20	0.42
34:BA:572:A:H5''	34:BA:573:G:OP2	2.20	0.42
34:BA:581:C:OP1	50:BU:33:ARG:HG2	2.20	0.42
34:BA:848:G:C2	34:BA:933:A:H1'	2.54	0.42
35:BB:21:G:O2'	35:BB:22:U:C5'	2.67	0.42
37:BD:142:VAL:HG22	37:BD:143:HIS:N	2.34	0.42
38:BE:35:GLN:HE22	38:BE:37:ARG:HH21	1.67	0.42
41:BH:147:ASN:N	41:BH:147:ASN:HD22	2.18	0.42
41:BH:152:ARG:HB3	41:BH:161:GLY:CA	2.32	0.42
41:BH:94:TYR:N	41:BH:94:TYR:HD1	2.18	0.42
42:BI:120:ILE:HG21	42:BI:126:TYR:HE1	1.81	0.42
43:BN:28:THR:O	43:BN:31:ALA:N	2.52	0.42
44:BO:47:ILE:HD12	44:BO:47:ILE:HA	1.92	0.42
44:BO:53:LYS:O	44:BO:56:ASP:CG	2.58	0.42
34:BA:2495:G:H5''	46:BQ:81:VAL:HG22	2.02	0.42
47:BR:54:LEU:C	47:BR:56:LYS:N	2.73	0.42
48:BS:84:GLN:O	48:BS:85:VAL:CG1	2.68	0.42
49:BT:28:VAL:HG21	49:BT:46:GLU:HA	2.01	0.42
50:BU:65:ILE:O	50:BU:68:ALA:HB3	2.20	0.42
52:BW:106:ILE:HG13	52:BW:106:ILE:O	2.20	0.42
52:BW:40:ASN:C	52:BW:41:LYS:HG2	2.38	0.42
53:BX:57:LEU:HD21	53:BX:77:LYS:NZ	2.35	0.42
54:BY:28:LYS:HB2	54:BY:37:VAL:HB	2.02	0.42
55:BZ:131:ARG:NH1	55:BZ:131:ARG:HG2	2.35	0.42
1:CA:1071:C:H2'	1:CA:1072:G:H8	1.84	0.42
1:CA:1486:G:C6	1:CA:1487:G:C6	3.08	0.42
1:CA:17:U:C2	1:CA:18:C:C5	3.08	0.42
1:CA:189(D):C:H1'	1:CA:189(H):G:N2	2.35	0.42
1:CA:285:G:H2'	1:CA:286:G:O4'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:617:G:H1	1:CA:623:C:H42	1.67	0.42
1:CA:674:G:H2'	1:CA:675:A:C8	2.46	0.42
1:CA:760:G:N2	17:CQ:97:SER:OG	2.52	0.42
1:CA:779:C:C2'	1:CA:780:A:H5'	2.50	0.42
4:CD:30:LYS:HB3	4:CD:35:ARG:HD2	2.02	0.42
7:CG:149:ARG:O	7:CG:152:ALA:CB	2.68	0.42
7:CG:20:ASP:OD1	7:CG:22:LEU:HB3	2.20	0.42
7:CG:36:LYS:HB2	7:CG:36:LYS:NZ	2.34	0.42
8:CH:38:ILE:HG21	8:CH:111:ILE:HG12	2.01	0.42
10:CJ:15:THR:O	10:CJ:18:ALA:N	2.53	0.42
1:CA:973:G:OP1	10:CJ:57:LYS:NZ	2.53	0.42
13:CM:46:LYS:CG	13:CM:47:ASP:N	2.81	0.42
16:CP:39:TYR:CD1	16:CP:40:ASP:N	2.87	0.42
16:CP:53:VAL:O	16:CP:54:GLU:C	2.56	0.42
1:CA:277:C:H5''	17:CQ:68:ARG:NH2	2.34	0.42
17:CQ:78:GLU:OE1	17:CQ:81:ARG:HD2	2.20	0.42
23:CW:23:A:C6	23:CW:24:G:C6	3.07	0.42
26:D1:77:ALA:O	26:D1:79:GLY:N	2.41	0.42
34:DA:1229:G:C6	34:DA:1230:C:C4	3.07	0.42
34:DA:1709:U:H2'	34:DA:1710:C:C6	2.55	0.42
34:DA:1755:A:H2'	34:DA:1756:G:H5'	2.00	0.42
34:DA:16:G:H2'	34:DA:17:G:H8	1.84	0.42
34:DA:1947:C:C3'	34:DA:1948:G:C5'	2.96	0.42
34:DA:201:C:O2'	34:DA:202:U:H5'	2.19	0.42
34:DA:2038:G:H2'	34:DA:2039:C:O4'	2.19	0.42
34:DA:2222:G:C4	34:DA:2223:G:C8	3.07	0.42
34:DA:2691:C:C6	34:DA:2872:G:N1	2.88	0.42
34:DA:2726:U:O2'	34:DA:2727:G:H5'	2.20	0.42
34:DA:2742:C:C4	34:DA:2763:G:N2	2.88	0.42
34:DA:27:G:N2	34:DA:512:G:O2'	2.53	0.42
34:DA:332:A:O2'	34:DA:333:G:P	2.77	0.42
34:DA:556:G:C6	34:DA:557:U:C4	3.08	0.42
34:DA:61:G:H1	34:DA:94:C:N4	2.07	0.42
34:DA:693:C:O2'	34:DA:694:U:H5'	2.20	0.42
36:DC:169:GLY:O	36:DC:170:ALA:HB3	2.20	0.42
36:DC:51:PRO:O	36:DC:52:ARG:HB2	2.20	0.42
37:DD:175:LEU:O	37:DD:182:LEU:HA	2.19	0.42
38:DE:167:VAL:CG2	38:DE:170:LEU:HD11	2.46	0.42
38:DE:1:MET:HB3	38:DE:200:GLU:OE1	2.20	0.42
40:DG:70:VAL:HG12	40:DG:88:ILE:HD11	2.02	0.42
41:DH:109:PHE:N	41:DH:109:PHE:CD1	2.88	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DN:125:GLY:HA3	43:DN:126:PRO:C	2.39	0.42
44:DO:119:PRO:O	44:DO:120:GLU:HB2	2.19	0.42
45:DP:24:GLY:CA	45:DP:33:ARG:HE	2.29	0.42
46:DQ:24:GLY:HA2	46:DQ:100:GLY:O	2.20	0.42
46:DQ:8:LYS:CG	46:DQ:9:TYR:N	2.83	0.42
47:DR:104:ARG:HG2	47:DR:104:ARG:HH11	1.84	0.42
47:DR:37:THR:O	47:DR:38:VAL:C	2.59	0.42
49:DT:89:VAL:HB	49:DT:91:ARG:NE	2.35	0.42
50:DU:109:LEU:HA	50:DU:112:ARG:HB2	2.02	0.42
50:DU:38:THR:C	50:DU:40:PHE:N	2.72	0.42
53:DX:27:THR:HB	53:DX:77:LYS:HA	2.02	0.42
54:DY:66:PRO:O	54:DY:67:LEU:HB3	2.20	0.42
55:DZ:24:LEU:CD2	55:DZ:24:LEU:C	2.88	0.42
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.20	0.41
1:AA:1275:A:O2'	1:AA:1276:G:H5'	2.20	0.41
1:AA:1375:A:H2'	1:AA:1376:U:H6	1.85	0.41
1:AA:285:G:H2'	1:AA:286:G:O4'	2.20	0.41
1:AA:44:G:H2'	1:AA:45:U:O4'	2.19	0.41
1:AA:616:G:H2'	1:AA:616:G:N3	2.35	0.41
1:AA:728:A:C2	1:AA:729:A:C5	3.08	0.41
4:AD:170:VAL:O	4:AD:171:GLY:C	2.58	0.41
10:AJ:45:ARG:CB	10:AJ:65:LEU:HB3	2.48	0.41
12:AL:32:PHE:HD1	12:AL:86:ARG:HA	1.85	0.41
13:AM:124:PRO:O	13:AM:126:LYS:N	2.53	0.41
13:AM:90:LEU:C	13:AM:92:HIS:H	2.21	0.41
19:AS:15:LEU:CD2	19:AS:15:LEU:N	2.83	0.41
20:AT:23:ARG:O	20:AT:26:ASN:ND2	2.53	0.41
24:AX:19:U:N3	23:AY:37:A:C2	2.88	0.41
26:B1:48:LYS:O	26:B1:49:VAL:CB	2.68	0.41
26:B1:87:PRO:N	26:B1:89:GLU:OE2	2.53	0.41
29:B4:42:PHE:C	29:B4:44:THR:N	2.73	0.41
34:BA:1031:G:N2	34:BA:1124:C:C2	2.88	0.41
34:BA:1353:A:H2'	34:BA:1354:A:C8	2.55	0.41
34:BA:1399:C:O2'	34:BA:1400:G:H5'	2.20	0.41
34:BA:2359:C:H2'	34:BA:2360:A:C8	2.55	0.41
34:BA:2567:G:H2'	34:BA:2568:C:C6	2.54	0.41
34:BA:261:G:C2	34:BA:262:A:C8	3.08	0.41
34:BA:2880:C:O2	47:BR:93:GLY:N	2.53	0.41
34:BA:389:G:O5'	34:BA:389:G:H8	2.02	0.41
34:BA:495:G:H21	52:BW:61:ASN:HD21	1.68	0.41
34:BA:528:A:H5'	43:BN:111:PRO:HG3	2.01	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:590:A:H2'	34:BA:591:C:C6	2.55	0.41
34:BA:901:A:H5'	34:BA:902:C:OP2	2.20	0.41
35:BB:6:C:H4'	35:BB:28:C:H5'	2.02	0.41
36:BC:168:THR:HA	36:BC:173:ALA:CB	2.32	0.41
38:BE:120:TRP:HB2	38:BE:122:PHE:CD1	2.55	0.41
38:BE:153:GLY:O	38:BE:154:LYS:C	2.56	0.41
38:BE:176:ILE:N	38:BE:176:ILE:CD1	2.81	0.41
38:BE:29:GLY:O	38:BE:30:PRO:C	2.57	0.41
40:BG:120:LEU:H	40:BG:181:ARG:H	1.67	0.41
40:BG:66:GLN:OE1	40:BG:94:LEU:HD22	2.20	0.41
41:BH:141:VAL:HG12	41:BH:142:GLY:H	1.84	0.41
41:BH:153:LYS:CD	41:BH:153:LYS:N	2.79	0.41
41:BH:60:ARG:O	41:BH:64:LEU:HG	2.20	0.41
42:BI:86:THR:HA	42:BI:122:GLU:OE2	2.20	0.41
42:BI:115:ALA:HB3	42:BI:129:THR:O	2.20	0.41
44:BO:119:PRO:O	49:BT:68:TYR:CE1	2.73	0.41
44:BO:89:ASN:O	44:BO:91:LEU:CD2	2.66	0.41
45:BP:68:GLN:HG3	45:BP:68:GLN:O	2.20	0.41
45:BP:71:VAL:C	45:BP:73:GLY:N	2.73	0.41
35:BB:9:G:P	48:BS:17:ARG:NH1	2.93	0.41
49:BT:91:ARG:HB3	49:BT:115:ARG:O	2.20	0.41
49:BT:134:GLU:O	49:BT:135:ALA:HB3	2.19	0.41
44:BO:119:PRO:HB2	49:BT:68:TYR:HE1	1.85	0.41
51:BV:44:LYS:HG2	51:BV:45:THR:H	1.85	0.41
52:BW:57:ASN:O	52:BW:58:ALA:C	2.57	0.41
54:BY:6:HIS:HE1	54:BY:30:VAL:HG11	1.85	0.41
55:BZ:165:VAL:HG12	55:BZ:166:SER:N	2.35	0.41
1:CA:1229:A:H2'	1:CA:1230:C:H6	1.85	0.41
1:CA:1360:A:C2'	1:CA:1361:G:H5'	2.50	0.41
1:CA:189(L):G:H2'	1:CA:190:U:C6	2.55	0.41
1:CA:364:A:H2'	1:CA:365:U:O2	2.20	0.41
1:CA:62:U:O2'	1:CA:379:C:H1'	2.19	0.41
2:CB:17:PHE:N	2:CB:17:PHE:HD2	2.18	0.41
2:CB:79:ASP:O	2:CB:82:ARG:HB3	2.19	0.41
3:CC:124:ILE:HD12	3:CC:124:ILE:H	1.86	0.41
4:CD:56:VAL:C	4:CD:58:LEU:N	2.72	0.41
5:CE:107:ARG:HG2	5:CE:108:ALA:N	2.35	0.41
5:CE:15:ARG:CZ	5:CE:26:PHE:CE2	3.03	0.41
5:CE:79:GLU:OE1	5:CE:79:GLU:N	2.52	0.41
8:CH:109:ILE:CG2	8:CH:137:VAL:HB	2.50	0.41
8:CH:29:SER:O	8:CH:30:ARG:C	2.59	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:49:PRO:HA	9:CI:101:PHE:HE1	1.85	0.41
11:CK:60:ALA:C	11:CK:62:GLN:N	2.73	0.41
15:CO:75:PRO:HG2	15:CO:76:GLU:N	2.35	0.41
17:CQ:18:THR:HG23	17:CQ:69:LYS:HE3	2.01	0.41
19:CS:42:PRO:O	19:CS:43:GLU:CB	2.60	0.41
20:CT:28:ALA:O	20:CT:29:LYS:C	2.57	0.41
20:CT:99:LEU:HB2	20:CT:100:ILE:HD12	2.01	0.41
22:CV:4:G:O2'	22:CV:5:G:P	2.77	0.41
23:CW:21:A:N6	23:CW:46:G:N3	2.67	0.41
25:D0:40:GLN:NE2	25:D0:43:THR:HA	2.35	0.41
31:D6:51:GLU:HG2	31:D6:52:VAL:N	2.35	0.41
34:DA:82:G:N1	34:DA:103:A:OP2	2.48	0.41
34:DA:2103:C:H5'	34:DA:2104:G:OP2	2.20	0.41
34:DA:2309:A:C2	34:DA:2310:A:H2	2.38	0.41
34:DA:2558:C:H2'	34:DA:2559:C:O4'	2.20	0.41
34:DA:2580:U:C5'	38:DE:131:ALA:N	2.80	0.41
34:DA:2661:G:O4'	34:DA:2661:G:P	2.78	0.41
34:DA:271(C):C:O2'	34:DA:271(D):G:H5'	2.18	0.41
34:DA:523:C:H2'	34:DA:524:U:C5'	2.50	0.41
34:DA:815:C:H2'	34:DA:816:C:C6	2.53	0.41
34:DA:975:C:H4'	34:DA:975:C:OP2	2.20	0.41
35:DB:35:U:O2'	35:DB:36:C:H5'	2.20	0.41
37:DD:177:LEU:O	37:DD:180:GLY:N	2.52	0.41
38:DE:34:VAL:HA	38:DE:67:PHE:CD1	2.54	0.41
38:DE:38:THR:CG2	38:DE:39:PRO:HD2	2.45	0.41
38:DE:55:ASN:OD1	38:DE:75:VAL:HG13	2.19	0.41
39:DF:16:GLY:O	39:DF:17:ARG:CG	2.68	0.41
39:DF:84:VAL:CG1	39:DF:85:GLY:H	2.31	0.41
41:DH:116:GLU:HG2	41:DH:117:PRO:N	2.34	0.41
41:DH:118:PRO:CB	41:DH:121:ILE:HD12	2.47	0.41
41:DH:85:LYS:CD	41:DH:133:VAL:HB	2.43	0.41
41:DH:147:ASN:N	41:DH:147:ASN:HD22	2.17	0.41
42:DI:69:LYS:CB	42:DI:136:VAL:HB	2.50	0.41
43:DN:46:VAL:CG1	43:DN:47:ALA:N	2.71	0.41
44:DO:86:ILE:H	44:DO:86:ILE:CD1	2.33	0.41
47:DR:17:ARG:HH11	47:DR:17:ARG:HG2	1.85	0.41
47:DR:55:ALA:HA	47:DR:80:PHE:CE1	2.55	0.41
47:DR:8:ARG:CA	47:DR:8:ARG:NE	2.80	0.41
50:DU:61:TRP:O	50:DU:64:ARG:N	2.53	0.41
50:DU:64:ARG:O	50:DU:65:ILE:C	2.58	0.41
1:AA:1324:A:C5	1:AA:1325:C:C5	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1499:A:C2	1:AA:1500:A:C8	3.08	0.41
1:AA:1521:G:O2'	1:AA:1522:U:H5'	2.20	0.41
1:AA:322:C:H41	1:AA:328:C:H6	1.68	0.41
1:AA:405:U:H3'	1:AA:406:G:H5'	2.02	0.41
1:AA:449:C:C5	1:AA:450:G:C4	3.08	0.41
1:AA:963:G:H2'	1:AA:964:A:C8	2.53	0.41
2:AB:58:ILE:HD11	2:AB:185:ILE:HD12	2.01	0.41
2:AB:39:ILE:HG22	2:AB:40:HIS:N	2.35	0.41
3:AC:64:VAL:CB	3:AC:99:VAL:HG12	2.50	0.41
5:AE:102:ALA:CB	5:AE:120:THR:OG1	2.69	0.41
6:AF:19:LEU:HD21	6:AF:23:LYS:HD2	2.03	0.41
9:AI:3:GLN:C	9:AI:4:TYR:CD1	2.85	0.41
9:AI:40:LEU:HD11	9:AI:70:LYS:HG2	2.03	0.41
10:AJ:4:ILE:HG12	10:AJ:100:THR:HG22	2.02	0.41
12:AL:117:ARG:O	12:AL:118:SER:C	2.59	0.41
12:AL:7:ILE:HD13	12:AL:7:ILE:HA	1.83	0.41
13:AM:81:LEU:HD21	13:AM:88:ARG:HH12	1.84	0.41
14:AN:43:CYS:O	14:AN:44:LEU:C	2.58	0.41
18:AR:62:GLU:O	18:AR:65:ILE:CD1	2.68	0.41
18:AR:74:ARG:O	18:AR:81:PHE:HE1	2.03	0.41
26:B1:33:LYS:HB3	34:BA:2395:C:O2'	2.19	0.41
34:BA:1014:U:C2	34:BA:1149:G:N2	2.88	0.41
34:BA:1039:G:O2'	34:BA:1040:C:H5'	2.19	0.41
34:BA:1482:G:H2'	34:BA:1484:G:C8	2.55	0.41
34:BA:1478:G:O2'	34:BA:1558:A:C2	2.74	0.41
34:BA:1410:G:N1	34:BA:1593:G:C6	2.88	0.41
34:BA:2729:G:C4	34:BA:2730:C:C5	3.08	0.41
34:BA:65:C:O2'	34:BA:66:C:H5'	2.20	0.41
34:BA:710:G:O2'	34:BA:711:G:H5'	2.20	0.41
34:BA:986:C:O2'	34:BA:987:G:H5'	2.21	0.41
37:BD:257:LEU:CD2	37:BD:257:LEU:C	2.89	0.41
38:BE:35:GLN:HB3	38:BE:48:GLN:HB3	2.01	0.41
39:BF:53:THR:HG23	39:BF:56:GLU:H	1.85	0.41
40:BG:51:ARG:NE	40:BG:51:ARG:HA	2.34	0.41
42:BI:72:LEU:HD12	42:BI:138:ILE:HG21	2.02	0.41
44:BO:104:ARG:HB3	44:BO:104:ARG:CZ	2.50	0.41
46:BQ:11:LYS:CE	46:BQ:86:GLY:O	2.68	0.41
46:BQ:34:LEU:HD11	46:BQ:129:THR:CB	2.50	0.41
47:BR:65:LEU:HD12	47:BR:65:LEU:HA	1.87	0.41
54:BY:54:LYS:HG2	54:BY:55:TYR:N	2.35	0.41
54:BY:84:ARG:HH11	54:BY:97:ARG:HA	1.84	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1514:C:C2	1:CA:1515:C:C6	3.07	0.41
1:CA:261:U:OP2	20:CT:79:ARG:NH2	2.53	0.41
1:CA:97:G:O2'	1:CA:98:G:P	2.78	0.41
1:CA:985:C:H2'	1:CA:986:A:C8	2.54	0.41
2:CB:97:TRP:CZ2	2:CB:102:LEU:HD13	2.50	0.41
3:CC:156:ARG:NH2	3:CC:159:GLY:O	2.54	0.41
3:CC:64:VAL:HB	3:CC:99:VAL:HG12	2.01	0.41
4:CD:10:ARG:HH11	4:CD:10:ARG:HG2	1.85	0.41
4:CD:177:ASP:O	4:CD:178:VAL:C	2.58	0.41
6:CF:75:LEU:O	6:CF:76:ALA:C	2.57	0.41
9:CI:19:LEU:HB3	9:CI:59:PHE:CD2	2.55	0.41
9:CI:99:LEU:O	9:CI:100:GLY:C	2.57	0.41
10:CJ:6:ILE:CD1	10:CJ:72:VAL:O	2.69	0.41
11:CK:38:ASN:N	11:CK:38:ASN:ND2	2.67	0.41
13:CM:117:VAL:O	13:CM:118:ALA:CB	2.67	0.41
13:CM:25:ILE:N	13:CM:25:ILE:HD12	2.34	0.41
15:CO:61:GLY:O	15:CO:64:ARG:HB3	2.19	0.41
15:CO:67:LEU:HA	15:CO:67:LEU:HD23	1.84	0.41
19:CS:27:GLU:HB3	19:CS:28:LYS:H	1.64	0.41
29:D4:20:ASN:C	29:D4:22:ILE:N	2.73	0.41
34:DA:1464:C:O2'	34:DA:1528:A:C8	2.61	0.41
34:DA:1653:G:H4'	34:DA:1654:A:O5'	2.19	0.41
26:D1:47:GLN:CD	34:DA:2090:G:H21	2.23	0.41
34:DA:2110:G:H1	34:DA:2179:C:N4	2.09	0.41
34:DA:2192:G:C2'	34:DA:2193:G:H5''	2.51	0.41
34:DA:2454:G:HO2'	34:DA:2455:G:H5'	1.82	0.41
34:DA:2807:G:H2'	34:DA:2808:U:C5'	2.49	0.41
34:DA:314:A:C2'	34:DA:315:G:H5'	2.50	0.41
34:DA:335:C:H2'	34:DA:336:C:H6	1.84	0.41
34:DA:412:A:C2'	34:DA:413:C:H5'	2.49	0.41
34:DA:894:C:H2'	34:DA:895:U:C6	2.55	0.41
35:DB:104:U:O2'	35:DB:105:A:H5'	2.19	0.41
35:DB:6:C:H4'	35:DB:28:C:H5'	2.02	0.41
38:DE:9:VAL:HG22	38:DE:25:VAL:HB	2.01	0.41
40:DG:105:LYS:HG2	40:DG:142:PRO:HG3	2.02	0.41
40:DG:88:ILE:CG1	40:DG:89:GLY:N	2.71	0.41
42:DI:9:LEU:N	42:DI:13:GLY:HA2	2.09	0.41
43:DN:102:ALA:O	43:DN:106:MET:HG3	2.20	0.41
45:DP:107:LYS:C	45:DP:109:GLY:N	2.73	0.41
48:DS:49:VAL:HG12	48:DS:73:LEU:HD22	2.02	0.41
49:DT:13:ARG:NH2	49:DT:15:VAL:HG22	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DT:24:PRO:HA	49:DT:49:VAL:HG13	2.02	0.41
54:DY:73:ARG:HH22	54:DY:82:PRO:HD3	1.85	0.41
55:DZ:101:PRO:O	55:DZ:102:LEU:HG	2.19	0.41
1:AA:137:C:H2'	1:AA:137:C:O2	2.20	0.41
1:AA:1415:G:H2'	1:AA:1416:G:H8	1.84	0.41
1:AA:444:C:H2'	1:AA:445:G:H8	1.84	0.41
1:AA:451:A:N6	1:AA:480:U:H2'	2.35	0.41
1:AA:864:A:C2	1:AA:917:G:N3	2.88	0.41
1:AA:938:A:O2'	1:AA:939:G:H5'	2.20	0.41
1:AA:946:A:H2'	1:AA:947:G:H8	1.83	0.41
3:AC:101:LEU:C	3:AC:101:LEU:HD23	2.41	0.41
3:AC:42:LEU:O	3:AC:45:LYS:HB2	2.21	0.41
4:AD:112:VAL:HG12	4:AD:116:GLN:CD	2.40	0.41
4:AD:94:LEU:O	4:AD:95:GLY:C	2.57	0.41
5:AE:36:ASP:OD2	5:AE:38:GLN:CB	2.66	0.41
6:AF:78:GLU:O	6:AF:81:ILE:HG13	2.20	0.41
7:AG:15:ASP:CB	7:AG:20:ASP:H	2.34	0.41
7:AG:78:ARG:NH1	7:AG:156:TRP:CE3	2.88	0.41
8:AH:81:HIS:N	8:AH:81:HIS:ND1	2.69	0.41
9:AI:69:GLY:O	9:AI:72:GLY:N	2.54	0.41
10:AJ:5:ARG:HG3	10:AJ:73:ASP:OD2	2.20	0.41
11:AK:24:SER:O	11:AK:26:ASN:N	2.53	0.41
11:AK:41:THR:HG22	11:AK:42:TRP:H	1.86	0.41
13:AM:25:ILE:N	13:AM:25:ILE:HD12	2.36	0.41
15:AO:64:ARG:O	15:AO:65:ARG:C	2.58	0.41
16:AP:19:ILE:HG22	16:AP:36:ILE:CD1	2.49	0.41
17:AQ:19:VAL:HG22	17:AQ:44:ALA:HB3	2.00	0.41
27:B2:35:LEU:HD23	27:B2:35:LEU:H	1.85	0.41
30:B5:20:ARG:HB3	30:B5:23:HIS:CD2	2.48	0.41
30:B5:46:CYS:SG	30:B5:47:PRO:CD	3.08	0.41
31:B6:45:LYS:HG3	34:BA:2371:G:C4'	2.50	0.41
34:BA:1142(A):A:C5	34:BA:1144:G:C5	3.08	0.41
34:BA:1229:G:C6	34:BA:1230:C:C4	3.08	0.41
34:BA:1261:C:C2'	34:BA:1262:A:O5'	2.68	0.41
34:BA:131:G:H2'	34:BA:132:G:H5'	2.02	0.41
34:BA:1378:A:C8	34:BA:1380:G:C6	3.08	0.41
34:BA:1719:G:C6	34:BA:1720:U:C4	3.09	0.41
34:BA:1817:G:H2'	34:BA:1818:U:H5'	2.02	0.41
34:BA:1824:G:O2'	34:BA:1825:A:H5'	2.20	0.41
34:BA:188:G:C2'	34:BA:189:G:H5'	2.51	0.41
34:BA:2013:A:C2'	34:BA:2014:A:H5'	2.50	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:2040:C:C2	34:BA:2041:U:C6	3.08	0.41
34:BA:2462:U:O2'	34:BA:2463:C:H5'	2.20	0.41
34:BA:354:G:H2'	34:BA:355:G:O4'	2.20	0.41
34:BA:412:A:C2'	34:BA:413:C:H5'	2.49	0.41
38:BE:47:VAL:O	38:BE:49:LEU:HD22	2.21	0.41
38:BE:55:ASN:HD21	38:BE:75:VAL:HG22	1.83	0.41
41:BH:92:ILE:O	41:BH:94:TYR:N	2.48	0.41
42:BI:52:ARG:O	42:BI:55:ALA:N	2.54	0.41
44:BO:73:ASP:OD1	44:BO:73:ASP:C	2.59	0.41
34:BA:626:U:N3	45:BP:105:LEU:HG	2.35	0.41
45:BP:24:GLY:CA	45:BP:33:ARG:HE	2.30	0.41
45:BP:68:GLN:CG	45:BP:68:GLN:O	2.69	0.41
49:BT:61:PHE:CZ	49:BT:85:LYS:HE2	2.55	0.41
53:BX:58:HIS:O	53:BX:59:VAL:CG1	2.62	0.41
53:BX:89:ILE:O	53:BX:89:ILE:CG2	2.67	0.41
54:BY:13:VAL:HG12	54:BY:14:LEU:N	2.33	0.41
54:BY:81:LYS:HE2	54:BY:97:ARG:HG2	2.01	0.41
55:BZ:97:GLU:O	55:BZ:98:MET:HB3	2.20	0.41
1:CA:1029:C:H2'	1:CA:1030:C:C5	2.55	0.41
1:CA:1509:C:H2'	1:CA:1510:U:O4'	2.20	0.41
1:CA:262:A:C6	1:CA:263:A:C6	3.09	0.41
1:CA:32:A:C2	1:CA:33:A:C4	3.08	0.41
1:CA:669:U:H2'	1:CA:670:G:H8	1.84	0.41
1:CA:6:G:C4	5:CE:119:LEU:HD11	2.56	0.41
1:CA:746:A:H2'	1:CA:747:C:C6	2.56	0.41
3:CC:11:ARG:O	3:CC:14:ILE:O	2.39	0.41
3:CC:188:LEU:O	3:CC:189:ALA:CB	2.69	0.41
3:CC:50:ALA:HB1	3:CC:70:VAL:HG11	2.03	0.41
5:CE:18:ARG:HH21	5:CE:25:ARG:HG2	1.85	0.41
5:CE:56:GLN:O	5:CE:59:GLY:N	2.54	0.41
6:CF:50:TYR:HE2	6:CF:52:ILE:HD11	1.85	0.41
7:CG:6:ARG:HG2	7:CG:6:ARG:O	2.19	0.41
12:CL:22:SER:C	12:CL:24:VAL:N	2.73	0.41
1:CA:808:C:OP2	15:CO:48:LYS:HE3	2.20	0.41
15:CO:75:PRO:O	15:CO:76:GLU:C	2.57	0.41
17:CQ:21:VAL:HG12	17:CQ:23:VAL:HG23	2.01	0.41
26:D1:14:VAL:CG2	26:D1:15:ALA:N	2.83	0.41
31:D6:19:ARG:HB2	31:D6:20:ASN:H	1.63	0.41
31:D6:26:ASN:O	31:D6:27:LYS:HD3	2.20	0.41
31:D6:33:LYS:HA	31:D6:33:LYS:CE	2.36	0.41
33:D8:35:GLN:CB	34:DA:2420:C:OP1	2.68	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1278:A:H2'	34:DA:1279:G:C8	2.56	0.41
34:DA:1298:C:H3'	34:DA:1299:G:H8	1.85	0.41
34:DA:1379:A:O2'	34:DA:1380:G:OP1	2.37	0.41
34:DA:1691:C:O2'	34:DA:1692:U:H5'	2.20	0.41
34:DA:1791:A:C8	34:DA:1792:G:C8	3.08	0.41
34:DA:186:G:C2	34:DA:211:A:C2	3.09	0.41
34:DA:2292:C:C2'	34:DA:2293:C:H5'	2.51	0.41
34:DA:2313:C:C5	34:DA:2314:C:H5	2.37	0.41
34:DA:2313:C:O2'	34:DA:2314:C:H5'	2.20	0.41
34:DA:197:A:H62	34:DA:2430:A:H2'	1.83	0.41
34:DA:2580:U:H4'	38:DE:130:GLY:HA2	2.02	0.41
34:DA:2730:C:C2'	34:DA:2731:G:H5'	2.49	0.41
34:DA:2766:G:N3	34:DA:2766:G:H2'	2.34	0.41
34:DA:868:U:C4	34:DA:869:G:N7	2.88	0.41
34:DA:878:A:H2'	34:DA:879:G:C5'	2.50	0.41
37:DD:259:THR:O	37:DD:260:ARG:C	2.58	0.41
37:DD:25:THR:HB	37:DD:82:ILE:H	1.85	0.41
38:DE:110:GLY:HA2	38:DE:162:ALA:N	2.36	0.41
38:DE:51:PHE:CD1	38:DE:52:LEU:N	2.88	0.41
39:DF:10:PRO:CG	39:DF:11:VAL:H	2.31	0.41
42:DI:45:LYS:HG3	42:DI:46:ALA:N	2.36	0.41
45:DP:100:LEU:O	45:DP:103:ALA:N	2.54	0.41
45:DP:62:LEU:N	45:DP:62:LEU:CD2	2.69	0.41
46:DQ:50:ALA:HA	46:DQ:124:LYS:HG3	2.01	0.41
47:DR:21:TYR:CD2	47:DR:21:TYR:N	2.88	0.41
47:DR:49:ASP:O	47:DR:51:LEU:N	2.52	0.41
48:DS:17:ARG:HG3	48:DS:18:ILE:H	1.83	0.41
48:DS:54:LEU:HD22	48:DS:57:LYS:O	2.19	0.41
49:DT:50:ILE:O	49:DT:99:LEU:HD12	2.20	0.41
49:DT:91:ARG:C	49:DT:93:ARG:H	2.24	0.41
50:DU:9:VAL:O	50:DU:13:LYS:HG2	2.19	0.41
50:DU:90:VAL:HG13	51:DV:39:LEU:HG	2.02	0.41
53:DX:83:VAL:O	53:DX:83:VAL:HG23	2.20	0.41
1:AA:1229:A:O2'	1:AA:1230:C:H5'	2.20	0.41
1:AA:339:C:H2'	1:AA:340:U:C6	2.55	0.41
1:AA:562:C:H4'	1:AA:563:A:O5'	2.20	0.41
1:AA:634:C:O2'	1:AA:635:G:H5'	2.20	0.41
1:AA:734:G:O2'	1:AA:735:C:H5'	2.20	0.41
1:AA:799:G:C6	1:AA:800:G:C4	3.08	0.41
2:AB:80:ILE:HD13	2:AB:208:ILE:HG23	2.01	0.41
2:AB:52:GLU:O	2:AB:53:ARG:C	2.57	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:143:GLY:N	4:AD:185:PHE:O	2.53	0.41
4:AD:199:ASN:O	4:AD:201:GLN:N	2.54	0.41
5:AE:107:ARG:O	5:AE:108:ALA:C	2.57	0.41
7:AG:105:VAL:O	7:AG:108:ALA:HB3	2.21	0.41
7:AG:115:ARG:HB2	7:AG:118:VAL:CG2	2.50	0.41
7:AG:20:ASP:OD1	7:AG:22:LEU:HB3	2.20	0.41
7:AG:36:LYS:O	7:AG:37:ASN:C	2.59	0.41
1:AA:824:C:C4'	8:AH:1:MET:H1	2.33	0.41
9:AI:49:PRO:HA	9:AI:101:PHE:HE1	1.85	0.41
11:AK:111:ASP:HA	18:AR:84:LYS:HG3	2.02	0.41
17:AQ:74:LEU:HA	17:AQ:74:LEU:HD22	1.83	0.41
26:B1:62:VAL:HG21	26:B1:67:ILE:CA	2.50	0.41
34:BA:1022:G:O2'	34:BA:1023:U:OP2	2.37	0.41
34:BA:1204:A:H2	34:BA:1241:A:N1	2.17	0.41
34:BA:1355:G:H2'	34:BA:1356:G:H8	1.84	0.41
34:BA:1588:C:O2	34:BA:1588:C:H2'	2.19	0.41
34:BA:1969:A:O2'	34:BA:1972:A:N3	2.45	0.41
34:BA:2097:C:H2'	34:BA:2098:U:O4'	2.20	0.41
34:BA:237:C:H2'	34:BA:238:C:H6	1.85	0.41
34:BA:2691:C:H2'	34:BA:2692:C:C6	2.56	0.41
34:BA:2870:C:H5''	47:BR:65:LEU:HD21	2.02	0.41
34:BA:484:C:O2'	34:BA:485:C:H5'	2.21	0.41
34:BA:868:U:C4	34:BA:869:G:N7	2.88	0.41
34:BA:892:G:H2'	34:BA:893:C:O4'	2.20	0.41
34:BA:894:C:H2'	34:BA:895:U:C6	2.55	0.41
34:BA:923:C:H2'	34:BA:924:C:H6	1.86	0.41
34:BA:971:C:H2'	34:BA:972:G:O4'	2.20	0.41
36:BC:56:GLN:O	36:BC:57:ASN:CB	2.68	0.41
37:BD:14:ARG:NH1	37:BD:14:ARG:CG	2.83	0.41
38:BE:101:ARG:HH11	38:BE:169:ASN:ND2	2.19	0.41
38:BE:143:ASN:ND2	38:BE:143:ASN:N	2.67	0.41
39:BF:178:PRO:HG2	39:BF:179:GLU:CD	2.41	0.41
39:BF:9:ILE:HG12	39:BF:14:PRO:O	2.21	0.41
40:BG:169:ALA:O	40:BG:173:LEU:HG	2.20	0.41
41:BH:88:LEU:C	41:BH:89:ILE:HG23	2.41	0.41
42:BI:13:GLY:O	42:BI:14:ASP:C	2.58	0.41
42:BI:51:ILE:O	42:BI:55:ALA:HB2	2.20	0.41
42:BI:99:GLU:C	42:BI:101:LEU:N	2.72	0.41
44:BO:17:ARG:HD3	44:BO:17:ARG:HA	1.82	0.41
44:BO:3:GLN:CG	44:BO:4:PRO:HD2	2.51	0.41
45:BP:127:ALA:HB3	45:BP:130:PHE:CE2	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BQ:42:ILE:HD13	46:BQ:97:VAL:HG23	2.02	0.41
47:BR:106:GLY:O	47:BR:107:ASP:CB	2.68	0.41
47:BR:117:VAL:HG22	47:BR:118:GLU:N	2.36	0.41
47:BR:28:LEU:HD13	47:BR:29:LEU:HD12	2.01	0.41
47:BR:92:GLY:HA2	47:BR:94:TYR:CE1	2.56	0.41
48:BS:51:ALA:HB3	48:BS:73:LEU:HG	2.02	0.41
49:BT:89:VAL:HB	49:BT:91:ARG:NE	2.35	0.41
50:BU:57:PHE:CD2	50:BU:60:LEU:HD12	2.55	0.41
34:BA:1225:G:OP1	51:BV:88:ARG:CB	2.68	0.41
34:BA:1225:G:P	51:BV:88:ARG:HB3	2.59	0.41
53:BX:26:TYR:H	53:BX:26:TYR:HD1	1.67	0.41
53:BX:57:LEU:N	53:BX:57:LEU:CD1	2.83	0.41
1:CA:961:U:OP2	1:CA:1223:C:H4'	2.20	0.41
1:CA:1375:A:H2'	1:CA:1376:U:H6	1.86	0.41
1:CA:1424:C:C4	1:CA:1425:U:C5	3.08	0.41
1:CA:1434:A:N6	1:CA:1435:G:C2	2.89	0.41
1:CA:538:G:OP2	12:CL:115:LYS:CG	2.68	0.41
1:CA:52:G:O2'	1:CA:53:A:H5'	2.20	0.41
1:CA:712:A:O2'	1:CA:713:G:H5'	2.20	0.41
3:CC:155:GLY:O	3:CC:156:ARG:CB	2.68	0.41
4:CD:147:ALA:HB2	4:CD:182:LYS:HB3	2.02	0.41
4:CD:170:VAL:O	4:CD:171:GLY:C	2.59	0.41
4:CD:190:ASP:O	4:CD:193:ASP:N	2.51	0.41
4:CD:79:PHE:CD1	4:CD:207:TYR:HD1	2.39	0.41
7:CG:64:GLN:O	7:CG:65:ALA:C	2.59	0.41
9:CI:69:GLY:O	9:CI:72:GLY:N	2.53	0.41
10:CJ:62:HIS:CD2	10:CJ:62:HIS:N	2.87	0.41
10:CJ:45:ARG:CB	10:CJ:65:LEU:HB3	2.49	0.41
12:CL:84:LEU:HB3	12:CL:101:VAL:HB	2.03	0.41
1:CA:952:U:C4	13:CM:104:ARG:NH2	2.89	0.41
13:CM:86:CYS:O	13:CM:89:GLY:N	2.53	0.41
1:CA:995:C:O4'	14:CN:8:GLU:OE1	2.37	0.41
17:CQ:9:VAL:CG2	17:CQ:84:LEU:HD13	2.47	0.41
19:CS:24:ALA:C	19:CS:26:GLY:H	2.23	0.41
20:CT:14:LYS:HA	20:CT:17:ARG:NE	2.36	0.41
20:CT:38:LYS:O	20:CT:39:LYS:C	2.59	0.41
22:CV:54:5MU:O2'	22:CV:55:U:H5'	2.20	0.41
26:D1:10:LYS:CG	26:D1:15:ALA:H	2.27	0.41
34:DA:1204:A:H2	34:DA:1241:A:N1	2.18	0.41
34:DA:1544:A:O2'	34:DA:1545:A:P	2.78	0.41
34:DA:1657:C:H2'	34:DA:1658:C:H6	1.85	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:1722:A:HO2'	34:DA:1739:U:H5''	1.84	0.41
34:DA:2201:C:C2'	34:DA:2202:C:H5'	2.49	0.41
34:DA:229:A:H5''	34:DA:230:U:H5'	2.01	0.41
34:DA:2313:C:H5''	40:DG:40:ASN:HD21	1.85	0.41
34:DA:2522:U:H2'	34:DA:2523:G:C5'	2.51	0.41
34:DA:252:G:O2'	34:DA:253:C:H5'	2.21	0.41
34:DA:2572:A:C8	38:DE:144:ARG:NE	2.88	0.41
34:DA:2687:U:H2'	34:DA:2688:U:H5'	2.02	0.41
34:DA:657:U:H2'	34:DA:658:C:C6	2.55	0.41
34:DA:768:G:C4	34:DA:769:G:C8	3.08	0.41
34:DA:869:G:O2'	34:DA:870:A:H5'	2.21	0.41
36:DC:42:GLU:HG2	36:DC:176:GLY:O	2.21	0.41
38:DE:176:ILE:N	38:DE:176:ILE:CD1	2.80	0.41
38:DE:27:LEU:HD12	38:DE:180:ASN:O	2.19	0.41
39:DF:10:PRO:HG2	39:DF:11:VAL:N	2.30	0.41
39:DF:197:ASP:O	39:DF:200:GLU:HB3	2.20	0.41
48:DS:17:ARG:CG	48:DS:18:ILE:N	2.79	0.41
49:DT:120:ARG:HA	49:DT:123:GLN:CD	2.41	0.41
44:DO:119:PRO:HB2	49:DT:68:TYR:HE1	1.85	0.41
49:DT:85:LYS:HG2	49:DT:85:LYS:O	2.20	0.41
51:DV:43:GLU:H	51:DV:48:GLY:CA	2.28	0.41
51:DV:1:MET:HE3	51:DV:46:VAL:HB	2.01	0.41
51:DV:62:LEU:HB3	51:DV:96:ILE:CG2	2.50	0.41
51:DV:66:ARG:NE	51:DV:94:LEU:HG	2.36	0.41
53:DX:57:LEU:CD1	53:DX:77:LYS:CD	2.98	0.41
53:DX:67:GLY:C	53:DX:68:ARG:CG	2.89	0.41
55:DZ:10:ARG:CD	55:DZ:12:GLY:HA2	2.51	0.41
55:DZ:10:ARG:H	55:DZ:37:VAL:HA	1.85	0.41
55:DZ:70:LEU:HD11	55:DZ:91:LEU:HD21	2.01	0.41
1:AA:1188:A:H2'	1:AA:1189:C:O4'	2.20	0.41
1:AA:1419:G:C2	1:AA:1420:C:C2	3.08	0.41
1:AA:627:G:H2'	1:AA:628:G:C8	2.48	0.41
1:AA:720:C:H6	1:AA:720:C:O5'	2.02	0.41
2:AB:136:VAL:O	2:AB:140:HIS:HB2	2.21	0.41
2:AB:19:HIS:O	2:AB:20:GLU:C	2.59	0.41
2:AB:75:LYS:HA	2:AB:78:GLN:HE21	1.85	0.41
4:AD:75:PHE:CE2	4:AD:93:PHE:HZ	2.39	0.41
1:AA:15:G:C4'	5:AE:24:ARG:HH22	2.30	0.41
9:AI:23:ASN:N	9:AI:23:ASN:HD22	2.18	0.41
9:AI:78:LYS:HG2	9:AI:78:LYS:O	2.20	0.41
10:AJ:96:ILE:CD1	10:AJ:96:ILE:N	2.79	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:30:ALA:O	12:AL:31:PRO:C	2.59	0.41
18:AR:43:PHE:HA	18:AR:51:LEU:HD12	2.01	0.41
18:AR:56:THR:C	18:AR:58:LEU:HD12	2.40	0.41
19:AS:35:SER:O	19:AS:37:ARG:N	2.53	0.41
22:AV:56:C:O2'	40:BG:78:SER:N	2.46	0.41
22:AV:6:G:H1	22:AV:67:C:H42	1.69	0.41
26:B1:11:ARG:NH1	26:B1:60:PHE:HA	2.33	0.41
27:B2:18:PRO:O	27:B2:20:GLU:N	2.54	0.41
30:B5:44:THR:HG21	47:BR:101:ALA:HB2	2.02	0.41
34:BA:1114:G:C2'	34:BA:1115:G:C5'	2.96	0.41
34:BA:1175:U:H5''	34:BA:1176:G:C8	2.56	0.41
34:BA:1260:G:O2'	34:BA:1261:C:H5'	2.21	0.41
32:B7:7:PRO:CB	34:BA:1309:G:H4'	2.47	0.41
34:BA:1313:U:C2'	34:BA:1313:U:O2	2.68	0.41
34:BA:1324:G:H3'	34:BA:1325:G:C4'	2.49	0.41
34:BA:134:C:O2'	34:BA:135:G:H5'	2.19	0.41
34:BA:1544:A:O2'	34:BA:1545:A:P	2.78	0.41
34:BA:1817:G:C2'	34:BA:1818:U:H5'	2.50	0.41
34:BA:2334:G:C4	48:BS:15:ARG:NH1	2.84	0.41
34:BA:2463:C:C2'	34:BA:2464:C:H5'	2.50	0.41
34:BA:2655:G:H2'	34:BA:2655:G:N3	2.35	0.41
34:BA:2767:C:H2'	34:BA:2768:C:H6	1.85	0.41
34:BA:2791:C:H4'	34:BA:2792:G:O5'	2.20	0.41
34:BA:2842:G:C6	34:BA:2876:G:C6	3.08	0.41
34:BA:363(E):U:C2'	34:BA:363(F):A:H4'	2.51	0.41
34:BA:657:U:H2'	34:BA:658:C:C6	2.56	0.41
34:BA:776:G:H4'	34:BA:777:A:O5'	2.20	0.41
36:BC:86:ALA:HB1	36:BC:94:VAL:HG11	2.02	0.41
37:BD:166:GLN:HA	37:BD:166:GLN:HE21	1.85	0.41
37:BD:255:LYS:HE3	37:BD:255:LYS:CA	2.50	0.41
38:BE:103:ASP:OD2	38:BE:201:THR:HA	2.21	0.41
38:BE:59:VAL:HG22	38:BE:63:LEU:HA	2.02	0.41
39:BF:160:ASN:C	39:BF:160:ASN:HD22	2.22	0.41
39:BF:84:VAL:O	39:BF:85:GLY:C	2.59	0.41
29:B4:6:HIS:CA	40:BG:67:LYS:HE3	2.41	0.41
41:BH:83:TYR:O	41:BH:84:SER:O	2.38	0.41
43:BN:89:LYS:C	43:BN:93:THR:HG22	2.39	0.41
45:BP:98:GLU:HA	45:BP:101:VAL:CG1	2.50	0.41
45:BP:71:VAL:CG1	45:BP:72:PRO:N	2.84	0.41
46:BQ:120:ILE:O	46:BQ:121:ALA:C	2.58	0.41
46:BQ:66:ILE:HG13	46:BQ:66:ILE:O	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BS:34:HIS:CG	48:BS:54:LEU:HB2	2.56	0.41
50:BU:36:ARG:HG2	50:BU:40:PHE:CZ	2.55	0.41
54:BY:31:LEU:CD2	54:BY:36:ALA:HB3	2.49	0.41
54:BY:91:GLU:HB3	54:BY:92:ASN:H	1.46	0.41
55:BZ:14:LYS:HB2	55:BZ:17:ALA:CB	2.49	0.41
55:BZ:52:SER:OG	55:BZ:53:ILE:HG12	2.21	0.41
1:CA:1392:G:N2	1:CA:1502:A:C8	2.89	0.41
1:CA:221:C:H2'	1:CA:222:U:H6	1.86	0.41
1:CA:614:A:H2'	1:CA:615:C:O4'	2.21	0.41
1:CA:867:G:N2	1:CA:868:C:C2	2.88	0.41
2:CB:17:PHE:CD1	2:CB:44:LEU:HD21	2.55	0.41
2:CB:69:LEU:HD12	2:CB:92:TYR:HA	2.02	0.41
2:CB:68:ILE:HB	2:CB:90:MET:SD	2.61	0.41
4:CD:133:VAL:HG13	4:CD:135:LEU:HD23	2.01	0.41
4:CD:25:ARG:C	4:CD:27:TYR:N	2.72	0.41
7:CG:76:ARG:NH1	7:CG:76:ARG:HG2	2.30	0.41
9:CI:23:ASN:N	9:CI:23:ASN:HD22	2.18	0.41
13:CM:78:ILE:HA	13:CM:81:LEU:HD12	2.03	0.41
14:CN:29:ARG:HG3	14:CN:29:ARG:NH1	2.35	0.41
15:CO:53:HIS:CE1	15:CO:57:LEU:HD21	2.55	0.41
15:CO:53:HIS:HE1	15:CO:57:LEU:HD21	1.85	0.41
17:CQ:74:LEU:HD22	17:CQ:74:LEU:HA	1.83	0.41
23:CW:39:U:H3'	23:CW:40:C:H5'	2.02	0.41
25:D0:84:LEU:HB2	25:D0:85:ALA:H	1.68	0.41
26:D1:67:ILE:O	26:D1:68:PRO:C	2.58	0.41
27:D2:30:ARG:O	27:D2:31:GLU:C	2.59	0.41
30:D5:44:THR:CG2	47:DR:101:ALA:HB2	2.50	0.41
33:D8:35:GLN:HB3	34:DA:2420:C:OP1	2.20	0.41
34:DA:1168:G:O2'	34:DA:1169:G:H5'	2.20	0.41
34:DA:1485:G:H1'	34:DA:1505:C:H41	1.80	0.41
34:DA:1651:G:H2'	34:DA:1652:A:O4'	2.21	0.41
34:DA:158:U:O3'	34:DA:171:G:O4'	2.38	0.41
34:DA:223:A:C2	34:DA:422:A:C8	3.08	0.41
34:DA:2286:A:C5'	34:DA:2287:A:O4'	2.67	0.41
34:DA:2359:C:H2'	34:DA:2360:A:H8	1.86	0.41
34:DA:542:C:C2'	34:DA:543:C:OP1	2.68	0.41
34:DA:659:C:H5'	34:DA:659:C:C6	2.50	0.41
34:DA:753:C:H2'	34:DA:754:C:C6	2.55	0.41
36:DC:20:TYR:CD1	36:DC:20:TYR:N	2.88	0.41
37:DD:238:GLY:C	37:DD:239:ARG:O	2.58	0.41
37:DD:266:SER:O	37:DD:267:SER:OG	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DB:57:A:C4	40:DG:29:TRP:HB2	2.56	0.41
41:DH:121:ILE:HD11	41:DH:140:LYS:HB3	2.02	0.41
45:DP:47:ASP:CB	45:DP:48:PRO:O	2.65	0.41
47:DR:87:TYR:CE1	47:DR:117:VAL:HG13	2.53	0.41
47:DR:47:PHE:CE2	47:DR:51:LEU:HD11	2.55	0.41
47:DR:84:ALA:HB3	47:DR:85:PRO:HD3	2.03	0.41
47:DR:92:GLY:CA	47:DR:94:TYR:CE1	3.03	0.41
48:DS:28:VAL:HB	48:DS:97:ARG:NH1	2.35	0.41
51:DV:38:LEU:HD21	51:DV:41:GLY:H	1.85	0.41
52:DW:21:VAL:C	52:DW:23:LEU:H	2.23	0.41
52:DW:55:ALA:HA	52:DW:107:LEU:HD23	2.03	0.41
52:DW:57:ASN:O	52:DW:58:ALA:C	2.59	0.41
52:DW:60:ASN:OD1	52:DW:61:ASN:ND2	2.53	0.41
53:DX:8:ILE:N	53:DX:8:ILE:HD12	2.35	0.41
54:DY:61:ILE:O	54:DY:62:GLU:O	2.39	0.41
1:AA:1125:U:H2'	1:AA:1126:U:OP2	2.20	0.41
1:AA:1422:G:C2	1:AA:1423:G:C5	3.08	0.41
1:AA:436:C:O2'	1:AA:437:U:O5'	2.38	0.41
1:AA:711:G:O2'	1:AA:712:A:H5'	2.20	0.41
1:AA:579:G:C5'	1:AA:728:A:H1'	2.36	0.41
1:AA:819:A:H4'	1:AA:820:U:OP2	2.20	0.41
1:AA:854:G:H3'	1:AA:871:U:O4	2.20	0.41
2:AB:79:ASP:O	2:AB:82:ARG:HB3	2.20	0.41
3:AC:113:ALA:C	3:AC:115:LEU:N	2.74	0.41
3:AC:194:GLY:O	3:AC:195:VAL:HG23	2.20	0.41
4:AD:207:TYR:HD2	4:AD:207:TYR:HA	1.65	0.41
8:AH:6:ILE:N	8:AH:6:ILE:CD1	2.80	0.41
10:AJ:34:VAL:CG1	10:AJ:35:SER:N	2.83	0.41
10:AJ:50:ILE:O	10:AJ:51:ARG:C	2.58	0.41
11:AK:38:ASN:HA	11:AK:39:PRO:HD3	1.87	0.41
12:AL:48:PRO:C	12:AL:49:ASN:HD22	2.24	0.41
1:AA:1226:C:N4	13:AM:104:ARG:HD2	2.36	0.41
13:AM:52:GLU:O	13:AM:56:LEU:HB2	2.20	0.41
16:AP:23:ASP:O	16:AP:24:ALA:C	2.58	0.41
17:AQ:40:LYS:HD2	17:AQ:42:TYR:CE1	2.56	0.41
20:AT:38:LYS:O	20:AT:39:LYS:C	2.58	0.41
22:AV:19:G:C2	22:AV:57:A:N3	2.88	0.41
23:AW:40:C:H5'	23:AW:40:C:C6	2.47	0.41
27:B2:49:LYS:HD3	34:BA:76:C:H5''	2.03	0.41
28:B3:43:ILE:O	28:B3:47:VAL:HG23	2.20	0.41
33:B8:27:THR:HA	45:BP:62:LEU:CD1	2.45	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1106:A:H1'	34:BA:1107:G:C5	2.56	0.41
34:BA:1164:G:H2'	34:BA:1165:U:C6	2.55	0.41
34:BA:1406:U:H2'	34:BA:1407:C:C6	2.55	0.41
34:BA:1778:U:H2'	34:BA:1784:A:N6	2.35	0.41
34:BA:1885:A:H5'	34:BA:1885:A:H8	1.86	0.41
34:BA:1902:C:H5'	37:BD:246:PRO:HD3	2.02	0.41
1:AA:1494:G:H4'	34:BA:1913:A:C8	2.55	0.41
34:BA:2635:C:C2'	34:BA:2636:U:O5'	2.68	0.41
34:BA:2711:A:OP1	34:BA:2712(A):A:P	2.78	0.41
34:BA:2739:U:O2'	34:BA:2740:A:H5'	2.20	0.41
34:BA:2754:U:H1'	34:BA:2756:U:OP1	2.21	0.41
34:BA:2807:G:H2'	34:BA:2808:U:H5''	2.03	0.41
34:BA:52:A:O2'	34:BA:53:A:H5'	2.21	0.41
34:BA:615:G:P	39:BF:40:GLN:NE2	2.93	0.41
34:BA:639:U:H2'	34:BA:640:C:H6	1.74	0.41
34:BA:64:A:H5'	53:BX:63:LYS:HB2	2.02	0.41
34:BA:766:C:H2'	34:BA:767:U:C6	2.55	0.41
28:B3:46:ASN:HD21	34:BA:851:U:H5'	1.85	0.41
34:BA:952:G:C6	34:BA:953:A:N7	2.89	0.41
34:BA:956:G:C5'	34:BA:957:A:OP2	2.68	0.41
37:BD:135:PHE:N	37:BD:135:PHE:HD1	2.17	0.41
38:BE:125:GLY:O	38:BE:126:PRO:C	2.57	0.41
39:BF:16:GLY:O	39:BF:17:ARG:HG3	2.20	0.41
39:BF:39:TRP:CB	39:BF:101:LEU:HD22	2.49	0.41
39:BF:9:ILE:O	39:BF:128:ALA:HB2	2.20	0.41
35:BB:57:A:N9	40:BG:29:TRP:HB2	2.34	0.41
40:BG:72:ARG:HD3	40:BG:86:MET:HA	2.01	0.41
43:BN:125:GLY:HA3	43:BN:126:PRO:C	2.39	0.41
43:BN:46:VAL:HG13	43:BN:48:MET:HG3	2.00	0.41
43:BN:5:VAL:HG13	43:BN:6:PRO:HD2	2.02	0.41
44:BO:23:ARG:HD2	44:BO:23:ARG:HA	1.87	0.41
45:BP:112:LEU:C	45:BP:112:LEU:HD13	2.41	0.41
49:BT:53:ARG:NH1	49:BT:53:ARG:CG	2.84	0.41
50:BU:49:HIS:O	50:BU:52:ARG:N	2.53	0.41
52:BW:24:ILE:HD12	52:BW:24:ILE:C	2.41	0.41
52:BW:47:VAL:HA	52:BW:50:VAL:HG12	2.02	0.41
52:BW:21:VAL:HG23	52:BW:47:VAL:HG21	2.02	0.41
55:BZ:17:ALA:O	55:BZ:18:LEU:O	2.38	0.41
1:CA:1188:A:H2'	1:CA:1189:C:O4'	2.19	0.41
1:CA:60:A:O5'	1:CA:60:A:H8	2.03	0.41
1:CA:97:G:HO2'	1:CA:98:G:P	2.43	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:991:U:O2	1:CA:991:U:H2'	2.21	0.41
2:CB:144:ARG:O	2:CB:147:LYS:N	2.53	0.41
2:CB:71:VAL:HB	2:CB:164:VAL:HG22	2.03	0.41
3:CC:156:ARG:H	3:CC:163:ALA:HA	1.85	0.41
3:CC:42:LEU:O	3:CC:45:LYS:HB2	2.21	0.41
5:CE:132:ALA:O	5:CE:135:THR:N	2.54	0.41
6:CF:44:GLY:HA2	6:CF:59:TYR:CE1	2.55	0.41
6:CF:89:MET:HG2	6:CF:89:MET:O	2.20	0.41
6:CF:99:ALA:O	18:CR:28:GLU:HA	2.20	0.41
7:CG:107:ALA:O	7:CG:110:GLN:HB2	2.20	0.41
7:CG:27:ILE:H	7:CG:27:ILE:CD1	2.32	0.41
1:CA:824:C:C4'	8:CH:1:MET:H1	2.32	0.41
11:CK:69:ALA:O	11:CK:73:MET:HG2	2.20	0.41
12:CL:117:ARG:O	12:CL:118:SER:C	2.57	0.41
12:CL:58:VAL:N	12:CL:66:VAL:O	2.50	0.41
13:CM:18:ALA:O	13:CM:19:LEU:C	2.59	0.41
17:CQ:52:LYS:HB3	17:CQ:52:LYS:HE3	1.94	0.41
19:CS:67:VAL:O	19:CS:69:HIS:N	2.53	0.41
20:CT:14:LYS:O	20:CT:18:GLN:HG3	2.21	0.41
25:D0:1:MET:N	34:DA:2602:A:H61	2.17	0.41
26:D1:14:VAL:HG22	26:D1:15:ALA:N	2.34	0.41
28:D3:35:ARG:HE	28:D3:37:LEU:HD21	1.85	0.41
28:D3:44:ARG:O	28:D3:45:GLY:C	2.58	0.41
30:D5:40:LYS:HD3	30:D5:46:CYS:CB	2.48	0.41
33:D8:4:MET:CE	34:DA:593:G:O4'	2.69	0.41
34:DA:1042:G:H3'	34:DA:1043:C:O4'	2.21	0.41
34:DA:1054:A:H1'	34:DA:1107:G:C5	2.55	0.41
34:DA:1119:C:O2'	34:DA:1120:G:H5'	2.20	0.41
34:DA:1210:A:H5'	34:DA:1211:U:H2'	2.02	0.41
34:DA:1286:A:C6	34:DA:1289:C:C2	3.09	0.41
34:DA:154:G:N1	34:DA:154(A):C:N4	2.68	0.41
34:DA:2178:C:H4'	36:DC:46:LYS:HZ2	1.82	0.41
34:DA:2248:C:H2'	34:DA:2249:U:H5'	2.03	0.41
34:DA:2454:G:C5	34:DA:2455:G:C8	3.08	0.41
34:DA:2661:G:N7	34:DA:2662:A:C2	2.89	0.41
34:DA:2680:C:H5'	38:DE:189:PRO:HA	2.03	0.41
34:DA:2754:U:H1'	34:DA:2756:U:OP1	2.20	0.41
34:DA:2791:C:H4'	34:DA:2792:G:O5'	2.20	0.41
34:DA:2633:G:H5'	34:DA:2811:G:O2'	2.21	0.41
34:DA:2859:G:O2'	34:DA:2860:A:O5'	2.38	0.41
34:DA:376:C:H2'	34:DA:377:C:H6	1.85	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:945:A:C5	34:DA:2448:A:N3	2.88	0.41
35:DB:7:G:C2'	35:DB:8:U:H5''	2.51	0.41
37:DD:169:GLU:HB2	37:DD:172:TYR:HB2	2.03	0.41
37:DD:239:ARG:HH21	37:DD:239:ARG:HG3	1.86	0.41
39:DF:147:GLY:O	39:DF:148:LEU:HD23	2.20	0.41
41:DH:83:TYR:O	41:DH:84:SER:O	2.38	0.41
42:DI:126:TYR:O	42:DI:139:GLN:HG3	2.20	0.41
33:D8:13:ARG:HD2	45:DP:61:ARG:HD3	2.02	0.41
46:DQ:20:ALA:C	46:DQ:22:LYS:N	2.74	0.41
47:DR:13:HIS:O	47:DR:14:SER:O	2.39	0.41
48:DS:24:LEU:HB3	48:DS:85:VAL:CG1	2.50	0.41
48:DS:93:LYS:HE3	48:DS:93:LYS:CA	2.50	0.41
49:DT:3:ARG:O	49:DT:5:ALA:N	2.54	0.41
49:DT:76:PHE:HA	49:DT:77:PRO:HD3	1.69	0.41
51:DV:68:LYS:HG3	51:DV:68:LYS:O	2.20	0.41
53:DX:57:LEU:HD22	53:DX:76:ARG:CD	2.46	0.41
53:DX:60:ARG:NE	53:DX:74:PRO:CG	2.76	0.41
54:DY:54:LYS:HG2	54:DY:55:TYR:N	2.35	0.41
55:DZ:89:PHE:HE1	55:DZ:96:VAL:HG21	1.86	0.41
1:AA:1313:U:H2'	1:AA:1314:C:C6	2.55	0.41
1:AA:186:C:C2	1:AA:187:C:C5	3.08	0.41
1:AA:277:C:H5''	17:AQ:68:ARG:HH22	1.86	0.41
1:AA:375:U:C4'	16:AP:17:TYR:HE2	2.34	0.41
1:AA:42:G:H2'	1:AA:43:C:H6	1.85	0.41
1:AA:577:G:C8	1:AA:816:A:C6	3.09	0.41
1:AA:832:C:HO2'	1:AA:833:U:P	2.42	0.41
2:AB:109:SER:HA	2:AB:112:VAL:HG23	2.03	0.41
2:AB:71:VAL:HB	2:AB:164:VAL:HG22	2.03	0.41
2:AB:163:PHE:CD2	2:AB:186:ALA:HA	2.55	0.41
3:AC:40:ARG:CZ	14:AN:52:GLN:HG2	2.51	0.41
4:AD:118:ARG:O	4:AD:119:GLN:C	2.58	0.41
5:AE:110:LEU:HA	5:AE:113:ALA:HB2	2.02	0.41
9:AI:66:ARG:HH11	9:AI:66:ARG:HG2	1.85	0.41
13:AM:18:ALA:O	13:AM:19:LEU:C	2.59	0.41
13:AM:78:ILE:HA	13:AM:81:LEU:HD12	2.02	0.41
14:AN:57:ARG:O	14:AN:59:ALA:N	2.53	0.41
15:AO:16:ALA:HB1	15:AO:21:ASP:HB3	2.02	0.41
15:AO:55:GLY:HA2	15:AO:58:MET:HE2	2.03	0.41
17:AQ:66:SER:O	17:AQ:70:ARG:NH1	2.54	0.41
18:AR:79:LEU:HA	18:AR:80:PRO:HD3	1.84	0.41
20:AT:76:ALA:O	20:AT:80:ARG:HG2	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:73:LEU:HD13	26:B1:90:ILE:HG22	2.02	0.41
28:B3:5:LYS:HA	28:B3:36:VAL:HG12	2.03	0.41
31:B6:28:ARG:CG	31:B6:28:ARG:NH1	2.84	0.41
31:B6:48:VAL:HG23	31:B6:49:HIS:N	2.36	0.41
34:BA:1707:G:H2'	34:BA:1708:C:C6	2.56	0.41
34:BA:1753:G:N2	34:BA:1755:A:H3'	2.35	0.41
34:BA:1888:G:N3	34:BA:1888:G:H5'	2.36	0.41
34:BA:251:A:H2'	34:BA:252:G:O4'	2.19	0.41
34:BA:2565:A:H5''	34:BA:2566:A:OP2	2.20	0.41
34:BA:2023:G:C5'	34:BA:2617:C:H4'	2.46	0.41
34:BA:2669:G:C2	34:BA:2670:A:C8	3.09	0.41
34:BA:2726:U:H6	44:BO:67:LYS:NZ	2.19	0.41
34:BA:2838:G:H2'	34:BA:2839:G:H8	1.85	0.41
34:BA:2881:C:O2'	34:BA:2882:A:H5'	2.20	0.41
34:BA:474:G:H4'	34:BA:475:U:OP1	2.20	0.41
34:BA:815:C:H2'	34:BA:816:C:C6	2.54	0.41
34:BA:980:A:C6	34:BA:981:A:N1	2.89	0.41
34:BA:997:G:N3	34:BA:997:G:H2'	2.36	0.41
37:BD:175:LEU:O	37:BD:182:LEU:HA	2.20	0.41
37:BD:197:GLY:O	37:BD:198:ASN:HB3	2.21	0.41
37:BD:222:ARG:H	37:BD:222:ARG:HG3	1.59	0.41
38:BE:57:LYS:O	38:BE:59:VAL:N	2.53	0.41
38:BE:55:ASN:OD1	38:BE:75:VAL:HG13	2.21	0.41
39:BF:108:LYS:O	39:BF:111:ALA:HB3	2.20	0.41
40:BG:164:GLU:O	40:BG:165:THR:C	2.59	0.41
40:BG:45:GLU:HG2	40:BG:46:ALA:N	2.36	0.41
42:BI:12:LEU:HG	42:BI:12:LEU:O	2.21	0.41
45:BP:7:ARG:HA	45:BP:7:ARG:HD2	1.71	0.41
46:BQ:35:VAL:HG13	46:BQ:130:LYS:HB3	2.02	0.41
48:BS:54:LEU:O	48:BS:56:LEU:N	2.53	0.41
49:BT:34:VAL:O	49:BT:35:LYS:HB3	2.20	0.41
49:BT:32:TYR:HB3	49:BT:81:PRO:HB3	2.01	0.41
50:BU:44:ASN:O	50:BU:45:TYR:C	2.56	0.41
51:BV:38:LEU:HD21	51:BV:41:GLY:H	1.86	0.41
51:BV:82:ARG:HG2	51:BV:82:ARG:HH11	1.85	0.41
53:BX:77:LYS:HE3	53:BX:78:LYS:HG3	2.01	0.41
55:BZ:99:TYR:HA	55:BZ:125:LEU:HA	2.02	0.41
1:CA:1093:A:N3	1:CA:1095:U:H5'	2.35	0.41
1:CA:1188:A:H2'	1:CA:1189:C:H5'	2.02	0.41
1:CA:130:A:N1	1:CA:233:C:H1'	2.35	0.41
1:CA:1368:G:O2'	1:CA:1369:C:H5'	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:327:A:C4	1:CA:329:A:C8	3.09	0.41
1:CA:706:A:C5	1:CA:707:C:C5	3.09	0.41
1:CA:864:A:C2	1:CA:917:G:N3	2.89	0.41
1:CA:980:C:H3'	1:CA:981:U:C6	2.56	0.41
2:CB:143:GLU:O	2:CB:147:LYS:HB2	2.20	0.41
3:CC:34:LEU:O	3:CC:38:ARG:HG2	2.21	0.41
3:CC:58:GLU:H	3:CC:65:ALA:CB	2.27	0.41
4:CD:135:LEU:N	4:CD:135:LEU:HD22	2.36	0.41
4:CD:31:CYS:C	4:CD:33:MET:N	2.73	0.41
4:CD:50:ARG:HD2	4:CD:51:PRO:O	2.21	0.41
11:CK:21:ILE:CD1	11:CK:21:ILE:N	2.80	0.41
1:CA:689:C:OP2	11:CK:46:GLY:HA3	2.20	0.41
13:CM:63:THR:HG22	13:CM:64:TRP:N	2.35	0.41
14:CN:44:LEU:HG	14:CN:45:ARG:N	2.36	0.41
3:CC:18:TRP:CD1	14:CN:54:PRO:HA	2.55	0.41
1:CA:277:C:H5''	17:CQ:68:ARG:HH22	1.86	0.41
18:CR:53:ARG:HA	18:CR:56:THR:HG1	1.82	0.41
19:CS:36:ARG:HB2	19:CS:72:GLY:CA	2.51	0.41
26:D1:21:ARG:NH1	34:DA:380:U:OP1	2.53	0.41
30:D5:52:TYR:O	30:D5:53:ALA:CB	2.68	0.41
34:DA:1406:U:H2'	34:DA:1407:C:C6	2.55	0.41
34:DA:1593:G:C3'	34:DA:1594:G:H5''	2.50	0.41
34:DA:1888:G:N3	34:DA:1888:G:H5'	2.36	0.41
34:DA:2082:A:H2'	34:DA:2083:G:O4'	2.21	0.41
34:DA:271(L):U:H4'	34:DA:271(M):G:C6	2.56	0.41
34:DA:2754:U:H2'	34:DA:2755:C:H5''	2.02	0.41
34:DA:2838:G:C4	34:DA:2839:G:C8	3.09	0.41
34:DA:2881:C:O2'	34:DA:2882:A:H5'	2.21	0.41
34:DA:271(A):A:H1'	34:DA:365:C:O4'	2.21	0.41
34:DA:373:U:H2'	34:DA:374:A:C8	2.54	0.41
34:DA:396:G:O2'	34:DA:397:G:H5'	2.21	0.41
34:DA:991:C:H2'	34:DA:992:C:C6	2.55	0.41
34:DA:993:G:C4	34:DA:994:C:C5	3.08	0.41
35:DB:94:C:O2'	35:DB:95:C:H5'	2.20	0.41
34:DA:2810:A:C4	38:DE:61:ARG:NH2	2.88	0.41
40:DG:119:GLY:O	40:DG:120:LEU:HD23	2.21	0.41
40:DG:159:VAL:O	40:DG:159:VAL:HG13	2.21	0.41
41:DH:138:LYS:O	41:DH:140:LYS:N	2.54	0.41
41:DH:141:VAL:O	41:DH:144:VAL:N	2.52	0.41
41:DH:46:GLU:O	41:DH:47:GLU:CB	2.62	0.41
44:DO:45:GLU:HG3	44:DO:45:GLU:O	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DQ:23:GLY:HA3	46:DQ:98:LYS:O	2.21	0.41
48:DS:34:HIS:CE1	48:DS:54:LEU:HB2	2.56	0.41
48:DS:38:GLN:CG	48:DS:47:THR:HG21	2.51	0.41
48:DS:58:LEU:HD21	48:DS:68:GLN:HB2	2.01	0.41
44:DO:119:PRO:O	49:DT:68:TYR:CE1	2.74	0.41
50:DU:87:GLY:O	50:DU:88:ILE:HG13	2.20	0.41
52:DW:72:LYS:HB3	52:DW:106:ILE:O	2.20	0.41
55:DZ:74:VAL:CG2	55:DZ:86:VAL:HG13	2.49	0.41
1:AA:1068:G:N2	1:AA:1191:A:N3	2.62	0.41
1:AA:192:U:H2'	1:AA:193:C:C6	2.48	0.41
1:AA:222:U:C2	1:AA:223:U:C5	3.09	0.41
1:AA:29:G:O2'	1:AA:30:U:H5'	2.21	0.41
1:AA:520:A:N1	1:AA:536:C:H1'	2.35	0.41
1:AA:677:U:H3	1:AA:713:G:H22	1.67	0.41
1:AA:781:A:C3'	1:AA:782:A:H5'	2.51	0.41
1:AA:865:A:H2	1:AA:918:A:H4'	1.86	0.41
2:AB:97:TRP:CZ2	2:AB:102:LEU:HD13	2.50	0.41
2:AB:69:LEU:HD12	2:AB:92:TYR:HA	2.03	0.41
3:AC:35:GLU:CG	3:AC:59:ARG:HH22	2.34	0.41
1:AA:1190:G:OP2	3:AC:5:ILE:HG23	2.18	0.41
4:AD:209:ARG:HG3	4:AD:209:ARG:NH1	2.35	0.41
7:AG:23:VAL:O	7:AG:24:THR:C	2.58	0.41
1:AA:963:G:N2	10:AJ:55:LYS:HZ3	2.17	0.41
10:AJ:8:LEU:HB3	10:AJ:16:LEU:CD2	2.42	0.41
11:AK:34:ASP:CB	11:AK:35:PRO:CD	2.97	0.41
14:AN:44:LEU:HD12	14:AN:44:LEU:O	2.19	0.41
15:AO:61:GLY:O	15:AO:64:ARG:HB3	2.20	0.41
17:AQ:65:ILE:N	17:AQ:65:ILE:CD1	2.82	0.41
17:AQ:67:LYS:C	17:AQ:70:ARG:NH1	2.74	0.41
17:AQ:80:GLY:O	17:AQ:81:ARG:HG2	2.20	0.41
22:AV:61:C:O2'	22:AV:62:C:H5'	2.20	0.41
26:B1:84:GLY:C	26:B1:85:LEU:HD23	2.41	0.41
34:BA:1274:A:H2	34:BA:1644:C:O2	2.03	0.41
34:BA:1316:U:O2'	34:BA:1317:A:H5'	2.21	0.41
34:BA:1497:U:H5'	34:BA:1498:C:C5	2.51	0.41
34:BA:1709:U:H2'	34:BA:1710:C:C6	2.55	0.41
34:BA:1721:G:C2	34:BA:1739:U:OP2	2.74	0.41
34:BA:1948:G:C5'	34:BA:1948:G:C8	2.95	0.41
34:BA:1992:G:HO2'	34:BA:1993:U:P	2.42	0.41
26:B1:25:LYS:NZ	34:BA:2079:U:H5''	2.35	0.41
34:BA:2222:G:H2'	34:BA:2223:G:H8	1.85	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:B8:5:LYS:HG2	34:BA:242:G:C8	2.56	0.41
34:BA:197:A:H62	34:BA:2430:A:H2'	1.86	0.41
34:BA:2637:U:C6	34:BA:2637:U:H5'	2.50	0.41
34:BA:2687:U:H2'	34:BA:2688:U:H5'	2.02	0.41
34:BA:340:A:H2'	34:BA:341:G:O4'	2.21	0.41
34:BA:648:G:O2'	34:BA:649:G:H5'	2.21	0.41
34:BA:2591:C:OP2	37:BD:239:ARG:HB2	2.21	0.41
38:BE:4:ILE:HG21	38:BE:96:PHE:HE2	1.86	0.41
40:BG:133:LEU:CD1	40:BG:157:ILE:HG12	2.51	0.41
40:BG:41:GLN:HB3	40:BG:43:LEU:HD13	2.03	0.41
42:BI:40:THR:O	42:BI:41:GLU:C	2.59	0.41
44:BO:103:ALA:C	44:BO:105:GLU:H	2.24	0.41
45:BP:131:SER:H	45:BP:134:ALA:CB	2.19	0.41
46:BQ:27:VAL:HG12	46:BQ:29:PHE:O	2.20	0.41
48:BS:63:THR:O	48:BS:64:GLU:C	2.59	0.41
48:BS:16:ASN:HB2	48:BS:90:GLY:HA2	2.02	0.41
49:BT:100:TYR:CD2	49:BT:103:ARG:NH2	2.84	0.41
49:BT:19:LEU:HA	49:BT:20:PRO:HD3	1.91	0.41
34:BA:2684:U:P	49:BT:53:ARG:HE	2.44	0.41
49:BT:53:ARG:HH11	49:BT:53:ARG:CG	2.28	0.41
50:BU:17:ILE:HG23	50:BU:39:LEU:CD1	2.46	0.41
50:BU:65:ILE:H	50:BU:65:ILE:HG13	1.74	0.41
51:BV:17:GLY:O	51:BV:18:LEU:HB3	2.21	0.41
53:BX:40:LYS:CG	53:BX:41:ASN:H	2.32	0.41
53:BX:63:LYS:CD	53:BX:70:LEU:HD13	2.43	0.41
55:BZ:162:GLU:O	55:BZ:163:LEU:C	2.59	0.41
55:BZ:3:TYR:CD1	55:BZ:3:TYR:N	2.89	0.41
55:BZ:8:TYR:HA	55:BZ:62:PRO:HG2	2.02	0.41
1:CA:1034:G:N2	1:CA:1035:A:N6	2.69	0.41
1:CA:1311:G:H2'	1:CA:1312:G:O5'	2.21	0.41
1:CA:1320:C:H2'	1:CA:1321:C:O4'	2.20	0.41
1:CA:20:U:O2'	1:CA:21:G:H5'	2.21	0.41
1:CA:322:C:H41	1:CA:328:C:H6	1.67	0.41
1:CA:321:A:C2	1:CA:333:G:C2	3.08	0.41
1:CA:953:G:H2'	1:CA:954:G:O4'	2.21	0.41
2:CB:204:ASN:ND2	2:CB:206:ASP:H	2.19	0.41
2:CB:74:LYS:O	2:CB:78:GLN:HG3	2.20	0.41
3:CC:182:ILE:HG12	3:CC:203:PHE:CD1	2.54	0.41
4:CD:4:TYR:CG	4:CD:5:ILE:N	2.88	0.41
4:CD:92:VAL:CG1	4:CD:96:LEU:HD21	2.50	0.41
5:CE:63:ARG:HG2	5:CE:63:ARG:HH11	1.86	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:16:LEU:CD1	9:CI:42:ARG:HA	2.51	0.41
7:CG:20:ASP:O	7:CG:23:VAL:HB	2.21	0.41
7:CG:26:PHE:O	7:CG:27:ILE:C	2.58	0.41
9:CI:40:LEU:HD11	9:CI:70:LYS:HG2	2.01	0.41
10:CJ:4:ILE:HG12	10:CJ:100:THR:HG22	2.02	0.41
10:CJ:8:LEU:CD2	10:CJ:20:ALA:HB2	2.49	0.41
1:CA:963:G:H21	10:CJ:55:LYS:CE	2.34	0.41
10:CJ:8:LEU:HD22	10:CJ:20:ALA:CB	2.49	0.41
11:CK:58:PRO:HA	11:CK:90:GLY:HA3	2.03	0.41
17:CQ:19:VAL:HG22	17:CQ:44:ALA:HB3	2.01	0.41
21:CU:22:ARG:N	21:CU:23:PRO:HD3	2.35	0.41
21:CU:6:ARG:HG2	21:CU:15:ARG:NH1	2.35	0.41
26:D1:26:ARG:HB2	26:D1:34:THR:CB	2.51	0.41
26:D1:58:ILE:CG2	26:D1:59:THR:N	2.84	0.41
26:D1:87:PRO:C	26:D1:89:GLU:OE2	2.59	0.41
28:D3:5:LYS:HA	28:D3:36:VAL:HG12	2.03	0.41
30:D5:16:ARG:HG2	30:D5:16:ARG:NH1	2.35	0.41
30:D5:47:PRO:C	30:D5:48:GLU:HG3	2.41	0.41
34:DA:1261:C:C2'	34:DA:1262:A:O5'	2.69	0.41
34:DA:1272:A:C3'	34:DA:1273:U:C5'	2.98	0.41
34:DA:1445:A:H5''	34:DA:1445(A):C:H5	1.85	0.41
34:DA:1773:A:O2'	34:DA:1774:C:H5'	2.20	0.41
34:DA:1848:A:C5	34:DA:1849:G:C8	3.09	0.41
34:DA:1860:G:H2'	34:DA:1861:G:C8	2.56	0.41
34:DA:1991:U:H2'	34:DA:1992:G:C5'	2.51	0.41
34:DA:2111:C:H4'	34:DA:2118:U:O2'	2.21	0.41
34:DA:2181:G:C2	34:DA:2182:G:C5	3.09	0.41
34:DA:2230:G:C5	34:DA:2231:C:C5	3.08	0.41
34:DA:2462:U:O2'	34:DA:2463:C:H5'	2.21	0.41
34:DA:2781:A:C4'	34:DA:2782:G:H5'	2.49	0.41
34:DA:528:A:H5'	43:DN:111:PRO:HG3	2.02	0.41
34:DA:631:A:OP1	45:DP:64:LYS:CE	2.69	0.41
34:DA:687:C:H2'	34:DA:687:C:O2	2.19	0.41
34:DA:855:G:C6	34:DA:856:C:N4	2.89	0.41
34:DA:861:A:C2	34:DA:917:A:C4	3.08	0.41
37:DD:61:LEU:HA	37:DD:61:LEU:HD12	1.86	0.41
38:DE:175:VAL:O	38:DE:177:PRO:HD3	2.21	0.41
38:DE:188:VAL:HA	38:DE:189:PRO:HD2	1.81	0.41
38:DE:66:HIS:CG	38:DE:66:HIS:O	2.73	0.41
39:DF:63:LYS:HA	39:DF:76:GLY:O	2.20	0.41
40:DG:115:ARG:HH21	40:DG:136:ARG:CG	2.33	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DG:71:THR:O	40:DG:88:ILE:HA	2.20	0.41
40:DG:90:LEU:HD13	40:DG:90:LEU:HA	1.81	0.41
40:DG:91:ARG:HG3	40:DG:91:ARG:NH1	2.36	0.41
43:DN:134:ARG:O	43:DN:134:ARG:CG	2.67	0.41
34:DA:2563:U:O2'	44:DO:28:SER:HB3	2.21	0.41
45:DP:46:LYS:HG2	45:DP:52:GLU:OE2	2.21	0.41
45:DP:71:VAL:CG1	45:DP:72:PRO:N	2.83	0.41
46:DQ:11:LYS:CE	46:DQ:86:GLY:O	2.69	0.41
48:DS:66:ALA:O	48:DS:67:ARG:CB	2.69	0.41
51:DV:4:ILE:O	51:DV:39:LEU:N	2.54	0.41
55:DZ:165:VAL:CG1	55:DZ:169:GLU:HB3	2.51	0.41
55:DZ:31:ARG:HD3	55:DZ:32:HIS:CE1	2.56	0.41
55:DZ:64:GLY:O	55:DZ:65:GLN:C	2.58	0.41
1:AA:622:A:C8	1:AA:623:C:C6	3.09	0.41
1:AA:989:C:O2'	1:AA:990:C:H5'	2.21	0.41
2:AB:102:LEU:H	2:AB:102:LEU:HD12	1.80	0.41
2:AB:109:SER:O	2:AB:111:ARG:N	2.54	0.41
2:AB:203:GLY:O	2:AB:204:ASN:C	2.60	0.41
3:AC:18:TRP:CD1	14:AN:54:PRO:HA	2.56	0.41
3:AC:34:LEU:O	3:AC:38:ARG:HG2	2.20	0.41
4:AD:132:ARG:NH1	4:AD:132:ARG:HG2	2.35	0.41
4:AD:173:TRP:CD1	4:AD:174:LEU:HG	2.56	0.41
4:AD:73:ARG:CD	4:AD:77:ASN:HD21	2.34	0.41
5:AE:101:ILE:CD1	5:AE:118:ILE:O	2.68	0.41
5:AE:64:ARG:NH1	5:AE:64:ARG:HG3	2.35	0.41
6:AF:33:TYR:CD1	6:AF:75:LEU:HA	2.56	0.41
8:AH:6:ILE:HG21	8:AH:85:ARG:HH12	1.86	0.41
9:AI:37:PHE:CE1	9:AI:74:ILE:HG12	2.55	0.41
7:AG:16:LEU:CD1	9:AI:42:ARG:HA	2.51	0.41
10:AJ:28:ARG:NH1	10:AJ:28:ARG:HG2	2.35	0.41
13:AM:17:VAL:O	13:AM:20:THR:HB	2.21	0.41
3:AC:9:GLY:N	14:AN:49:HIS:O	2.53	0.41
15:AO:26:GLU:HA	15:AO:81:LEU:HD22	2.01	0.41
15:AO:2:PRO:HB2	15:AO:3:ILE:H	1.63	0.41
17:AQ:76:LEU:HD12	17:AQ:77:VAL:H	1.86	0.41
19:AS:49:ILE:CD1	19:AS:49:ILE:N	2.83	0.41
20:AT:20:LEU:O	20:AT:21:LYS:C	2.59	0.41
20:AT:44:ALA:HB3	20:AT:91:LEU:HD13	2.03	0.41
20:AT:63:ILE:HG22	20:AT:64:ASP:N	2.36	0.41
22:AV:75:C:H5'	22:AV:75:C:H6	1.86	0.41
23:AW:76:A:N6	34:BA:2422:A:O4'	2.54	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B1:10:LYS:O	26:B1:13:ILE:HG22	2.20	0.41
27:B2:25:VAL:C	27:B2:27:GLU:N	2.61	0.41
27:B2:47:ASN:HB2	27:B2:51:ARG:HD2	2.02	0.41
28:B3:46:ASN:ND2	34:BA:851:U:C4'	2.84	0.41
30:B5:8:LYS:O	30:B5:8:LYS:HG3	2.21	0.41
34:BA:818:G:N1	34:BA:1188:U:OP2	2.36	0.41
34:BA:1298:C:H3'	34:BA:1299:G:H8	1.83	0.41
34:BA:1386:C:OP2	34:BA:1396:U:C5	2.74	0.41
34:BA:2172:U:H2'	34:BA:2174:C:O4'	2.21	0.41
34:BA:2277:G:H2'	34:BA:2278:A:C5'	2.51	0.41
34:BA:2335:A:C8	34:BA:2337:G:C5	3.09	0.41
34:BA:271(A):A:H1'	34:BA:365:C:O4'	2.20	0.41
34:BA:272(C):G:H2'	34:BA:272(D):G:H8	1.85	0.41
34:BA:2807:G:H2'	34:BA:2808:U:C5'	2.50	0.41
34:BA:2807:G:N2	34:BA:2808:U:H1'	2.35	0.41
34:BA:312:G:C2	34:BA:313:C:C2	3.09	0.41
36:BC:124:GLY:O	36:BC:125:SER:CB	2.68	0.41
37:BD:28:GLU:CB	37:BD:29:PRO:CD	2.98	0.41
37:BD:36:PRO:O	37:BD:37:LEU:HD23	2.21	0.41
37:BD:68:LYS:HB2	37:BD:70:TRP:CZ2	2.56	0.41
38:BE:199:ARG:HG3	38:BE:199:ARG:HH11	1.84	0.41
38:BE:1:MET:HB3	38:BE:200:GLU:OE1	2.21	0.41
40:BG:123:ASN:O	40:BG:126:ASP:HB2	2.21	0.41
40:BG:43:LEU:HD13	40:BG:43:LEU:N	2.35	0.41
40:BG:5:VAL:O	40:BG:6:ALA:C	2.59	0.41
43:BN:23:LEU:O	43:BN:23:LEU:HD23	2.21	0.41
43:BN:28:THR:CG2	43:BN:29:LYS:H	2.25	0.41
45:BP:47:ASP:HB2	45:BP:51:PHE:HB2	2.02	0.41
46:BQ:70:PRO:N	46:BQ:95:ALA:HB2	2.36	0.41
34:BA:1275:A:C4	47:BR:16:HIS:ND1	2.89	0.41
47:BR:87:TYR:O	47:BR:88:ARG:HB3	2.20	0.41
48:BS:48:LEU:N	48:BS:48:LEU:CD1	2.84	0.41
48:BS:90:GLY:O	48:BS:91:PRO:C	2.57	0.41
49:BT:53:ARG:NH1	49:BT:53:ARG:HG2	2.32	0.41
51:BV:13:ARG:HG3	51:BV:13:ARG:O	2.21	0.41
51:BV:4:ILE:HG13	51:BV:40:LEU:HD11	2.03	0.41
52:BW:70:TYR:N	52:BW:70:TYR:HD2	2.18	0.41
55:BZ:8:TYR:HB2	55:BZ:38:TYR:CE1	2.56	0.41
1:CA:1331:G:OP2	13:CM:23:TYR:HD2	2.03	0.41
1:CA:1388:C:O2'	1:CA:1389:C:H5'	2.20	0.41
1:CA:1503:A:C2'	1:CA:1503:A:N3	2.84	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:627:G:H2'	1:CA:628:G:C8	2.47	0.41
1:CA:724:G:C2	1:CA:725:G:C8	3.09	0.41
1:CA:836:G:C6	1:CA:851:G:C6	3.09	0.41
1:CA:952:U:O2'	1:CA:953:G:H5'	2.21	0.41
2:CB:142:LEU:CD2	2:CB:146:GLN:NE2	2.84	0.41
2:CB:165:VAL:CG2	2:CB:166:ASP:N	2.83	0.41
1:CA:1060:C:H5	3:CC:2:GLY:HA3	1.86	0.41
4:CD:158:ILE:HD13	4:CD:158:ILE:HA	1.88	0.41
4:CD:209:ARG:NH1	4:CD:209:ARG:HG3	2.35	0.41
4:CD:72:GLU:O	4:CD:73:ARG:C	2.59	0.41
5:CE:59:GLY:O	5:CE:63:ARG:HG3	2.21	0.41
6:CF:98:LEU:HB3	18:CR:30:ASP:CA	2.50	0.41
7:CG:102:ARG:O	7:CG:103:TRP:C	2.59	0.41
9:CI:53:VAL:HB	9:CI:92:TYR:HE2	1.81	0.41
10:CJ:30:SER:CB	10:CJ:80:LYS:HG3	2.48	0.41
13:CM:81:LEU:HD21	13:CM:88:ARG:HH12	1.85	0.41
17:CQ:76:LEU:HD12	17:CQ:77:VAL:H	1.85	0.41
17:CQ:11:VAL:HB	17:CQ:88:TYR:CD2	2.55	0.41
20:CT:28:ALA:O	20:CT:31:SER:N	2.54	0.41
1:CA:192:U:O3'	20:CT:57:ARG:HD2	2.21	0.41
23:CW:17:C:N4	34:DA:2180:U:H5''	2.35	0.41
26:D1:41:ARG:NH1	34:DA:189:G:OP1	2.52	0.41
26:D1:86:SER:O	26:D1:90:ILE:CG1	2.69	0.41
26:D1:87:PRO:CG	26:D1:88:LYS:N	2.84	0.41
34:DA:1050:A:C2	34:DA:2751:G:C4	3.09	0.41
34:DA:1497:U:H3	34:DA:1578:U:P	2.43	0.41
34:DA:1827:C:H2'	34:DA:1828:G:O4'	2.21	0.41
34:DA:1904:G:O2'	34:DA:1905:C:H5'	2.21	0.41
34:DA:2172:U:H2'	34:DA:2174:C:O4'	2.21	0.41
34:DA:2248:C:C2'	34:DA:2249:U:H5'	2.51	0.41
34:DA:2574:G:H2'	34:DA:2575:C:H6	1.85	0.41
34:DA:2785:C:H1'	38:DE:64:LYS:NZ	2.36	0.41
34:DA:2841:C:O2'	34:DA:2842:G:H5'	2.21	0.41
34:DA:285:C:H2'	34:DA:286:C:C5'	2.51	0.41
34:DA:527:C:H4'	34:DA:528:A:O4'	2.20	0.41
34:DA:553:G:H2'	34:DA:554:U:O4'	2.21	0.41
34:DA:589:C:O2'	34:DA:590:A:H5'	2.21	0.41
34:DA:84:A:N1	34:DA:98:G:O2'	2.45	0.41
34:DA:912:C:H2'	34:DA:913:U:C6	2.55	0.41
34:DA:997:G:N3	34:DA:997:G:H2'	2.36	0.41
36:DC:64:LEU:HD22	36:DC:193:ILE:CB	2.50	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DD:28:GLU:CB	37:DD:29:PRO:CD	2.99	0.41
34:DA:1491:G:O4'	37:DD:99:ASP:OD2	2.38	0.41
38:DE:35:GLN:HE22	38:DE:37:ARG:HH21	1.69	0.41
39:DF:160:ASN:C	39:DF:160:ASN:HD22	2.23	0.41
39:DF:176:LEU:HD21	39:DF:180:GLY:C	2.41	0.41
45:DP:112:LEU:C	45:DP:112:LEU:HD22	2.40	0.41
45:DP:13:ASN:ND2	45:DP:13:ASN:N	2.69	0.41
45:DP:66:GLY:O	45:DP:68:GLN:N	2.52	0.41
45:DP:90:ARG:HD3	45:DP:90:ARG:C	2.40	0.41
47:DR:117:VAL:HG22	47:DR:118:GLU:N	2.36	0.41
48:DS:26:LEU:HD21	48:DS:37:ALA:HB1	2.03	0.41
52:DW:23:LEU:CD2	52:DW:39:THR:HG21	2.51	0.41
54:DY:87:LYS:O	54:DY:88:LYS:CB	2.64	0.41
55:DZ:29:TYR:O	55:DZ:89:PHE:CD2	2.72	0.41
1:AA:1240:U:H3'	1:AA:1241:G:H5'	2.03	0.41
1:AA:1277:C:C2'	1:AA:1278:U:H5'	2.45	0.41
1:AA:1300:G:O2'	1:AA:1301:U:O5'	2.38	0.41
1:AA:149:A:O2'	1:AA:150:C:H6	2.04	0.41
1:AA:1518:A:C2	1:AA:1519:A:C2	3.09	0.41
1:AA:283:C:H2'	1:AA:284:G:H8	1.86	0.41
1:AA:489:C:H2'	1:AA:490:G:H8	1.86	0.41
1:AA:25:C:C5	1:AA:558:G:N2	2.89	0.41
2:AB:167:PRO:O	2:AB:170:GLU:N	2.54	0.41
3:AC:156:ARG:H	3:AC:163:ALA:HA	1.85	0.41
3:AC:14:ILE:O	3:AC:16:ARG:N	2.54	0.41
4:AD:141:ARG:N	4:AD:144:ASP:OD2	2.54	0.41
9:AI:10:ARG:HD3	9:AI:75:ASP:CB	2.51	0.41
9:AI:116:LYS:O	9:AI:117:HIS:C	2.59	0.41
11:AK:91:ARG:C	11:AK:91:ARG:HD2	2.41	0.41
12:AL:46:LYS:HB2	12:AL:92:ASP:O	2.21	0.41
14:AN:15:LYS:O	14:AN:16:PHE:C	2.59	0.41
15:AO:11:VAL:O	15:AO:14:GLU:HB3	2.20	0.41
16:AP:19:ILE:CG2	16:AP:36:ILE:HG13	2.51	0.41
18:AR:35:ARG:C	18:AR:37:VAL:N	2.74	0.41
23:AW:39:U:OP1	23:AW:39:U:H4'	2.21	0.41
23:AW:7:A:C2	23:AW:67:C:N3	2.89	0.41
26:B1:23:LYS:O	26:B1:37:ILE:N	2.53	0.41
28:B3:44:ARG:O	28:B3:45:GLY:C	2.59	0.41
29:B4:20:ASN:C	29:B4:22:ILE:N	2.73	0.41
34:BA:83:G:N2	34:BA:103:A:OP2	2.48	0.41
34:BA:1268:A:C5	34:BA:1269:A:C8	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1291:C:H2'	34:BA:1292:U:C6	2.56	0.41
34:BA:1445:A:H5''	34:BA:1445(A):C:H5	1.85	0.41
34:BA:1653:G:H4'	34:BA:1654:A:O5'	2.21	0.41
34:BA:2241:A:O2'	34:BA:2242:G:H5'	2.21	0.41
34:BA:2259:G:C8	34:BA:2427:C:C4	3.09	0.41
34:BA:2758:A:C3'	34:BA:2759:G:C5'	2.97	0.41
34:BA:2850:A:H2'	34:BA:2851:A:H8	1.86	0.41
34:BA:774:A:O2'	34:BA:775:G:P	2.78	0.41
37:BD:17:THR:HG21	37:BD:205:VAL:HB	1.94	0.41
38:BE:115:GLY:C	38:BE:116:VAL:O	2.59	0.41
38:BE:55:ASN:OD1	38:BE:75:VAL:HG22	2.21	0.41
39:BF:22:ALA:HA	39:BF:26:ALA:CB	2.33	0.41
41:BH:141:VAL:O	41:BH:144:VAL:N	2.51	0.41
43:BN:41:ASP:OD1	43:BN:41:ASP:N	2.54	0.41
43:BN:78:TYR:N	43:BN:79:PRO:CD	2.84	0.41
44:BO:88:ASN:OD1	44:BO:89:ASN:N	2.54	0.41
44:BO:8:LEU:N	44:BO:8:LEU:CD2	2.83	0.41
46:BQ:134:ARG:O	46:BQ:136:ALA:N	2.53	0.41
46:BQ:16:ARG:HH11	46:BQ:16:ARG:CB	2.34	0.41
46:BQ:63:LYS:NZ	46:BQ:63:LYS:HB2	2.36	0.41
48:BS:38:GLN:OE1	48:BS:47:THR:HG21	2.21	0.41
49:BT:24:PRO:HA	49:BT:49:VAL:HG13	2.02	0.41
50:BU:69:CYS:HB2	50:BU:74:LEU:HD11	2.02	0.41
51:BV:62:LEU:HB3	51:BV:96:ILE:CG2	2.51	0.41
52:BW:52:GLU:HA	52:BW:52:GLU:OE2	2.21	0.41
52:BW:60:ASN:OD1	52:BW:61:ASN:ND2	2.54	0.41
55:BZ:119:GLU:HG3	55:BZ:119:GLU:O	2.21	0.41
55:BZ:102:LEU:HD11	55:BZ:124:ILE:HG23	2.02	0.41
55:BZ:125:LEU:C	55:BZ:125:LEU:HD23	2.41	0.41
55:BZ:8:TYR:HA	55:BZ:62:PRO:CG	2.51	0.41
1:CA:1170:A:C2'	1:CA:1171:G:H5'	2.51	0.41
1:CA:990:C:C2	1:CA:1216:G:C2	3.09	0.41
1:CA:1232:U:H2'	1:CA:1233:G:O4'	2.20	0.41
1:CA:1486:G:O6	1:CA:1487:G:C6	2.74	0.41
1:CA:424:G:C2	1:CA:425:G:C8	3.08	0.41
1:CA:938:A:O2'	1:CA:939:G:H5'	2.20	0.41
2:CB:20:GLU:HG2	2:CB:20:GLU:H	1.65	0.41
3:CC:113:ALA:C	3:CC:115:LEU:N	2.73	0.41
3:CC:172:ARG:HH12	3:CC:174:PRO:HG2	1.86	0.41
3:CC:148:GLY:CA	3:CC:203:PHE:HB3	2.23	0.41
5:CE:101:ILE:HD11	5:CE:119:LEU:HD23	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:85:TYR:CD1	7:CG:154:TYR:HE1	2.36	0.41
13:CM:73:GLU:O	13:CM:74:VAL:C	2.59	0.41
19:CS:9:VAL:C	19:CS:10:PHE:CD1	2.94	0.41
19:CS:15:LEU:CD2	19:CS:15:LEU:N	2.84	0.41
21:CU:24:ARG:HD2	21:CU:24:ARG:N	2.36	0.41
25:D0:36:ILE:H	25:D0:36:ILE:CD1	2.34	0.41
26:D1:10:LYS:HA	26:D1:48:LYS:HE2	2.01	0.41
26:D1:20:ARG:HB3	26:D1:21:ARG:H	1.71	0.41
27:D2:47:ASN:HD22	27:D2:48:HIS:H	1.62	0.41
31:D6:28:ARG:O	31:D6:29:ASN:C	2.59	0.41
34:DA:1608:A:C5	34:DA:1611:C:C4	3.08	0.41
34:DA:1676:A:O2'	34:DA:1677:A:H5'	2.20	0.41
34:DA:2025:C:C2	34:DA:2026:C:C6	3.09	0.41
34:DA:2036:C:O2'	34:DA:2037:G:H5'	2.21	0.41
34:DA:2053:G:C2	34:DA:2054:A:C8	3.09	0.41
34:DA:2236:C:C2'	34:DA:2237:G:H5'	2.51	0.41
34:DA:2287:A:H2	34:DA:2346:A:N1	2.18	0.41
34:DA:2402:C:C2'	34:DA:2403:C:H5'	2.51	0.41
34:DA:2530:A:C2'	34:DA:2531:A:H5'	2.42	0.41
34:DA:2640:G:C2'	34:DA:2641:G:O5'	2.68	0.41
34:DA:2669:G:C2	34:DA:2670:A:C8	3.09	0.41
34:DA:332:A:O2'	34:DA:333:G:O5'	2.39	0.41
34:DA:613:G:N2	34:DA:615:G:C4	2.89	0.41
34:DA:635:C:O2'	34:DA:639:U:OP1	2.38	0.41
34:DA:915:C:O2'	34:DA:916:G:H5'	2.21	0.41
34:DA:978:G:C2	34:DA:986:C:N3	2.88	0.41
37:DD:166:GLN:HE21	37:DD:166:GLN:HA	1.86	0.41
37:DD:232:PRO:HG2	37:DD:248:SER:O	2.21	0.41
40:DG:133:LEU:C	40:DG:133:LEU:HD12	2.41	0.41
42:DI:98:ALA:HA	42:DI:109:ILE:HD13	2.03	0.41
43:DN:17:ASP:OD2	43:DN:56:ASN:O	2.39	0.41
47:DR:87:TYR:O	47:DR:88:ARG:HB3	2.21	0.41
48:DS:34:HIS:NE2	48:DS:54:LEU:HB2	2.35	0.41
48:DS:63:THR:O	48:DS:64:GLU:C	2.60	0.41
48:DS:97:ARG:O	48:DS:97:ARG:CG	2.68	0.41
53:DX:63:LYS:HE3	53:DX:70:LEU:CD2	2.36	0.41
1:AA:1290:G:N3	1:AA:1290:G:H2'	2.35	0.41
1:AA:1342:C:H1'	9:AI:124:GLN:NE2	2.33	0.41
1:AA:1346:A:C8	7:AG:10:ARG:NH2	2.89	0.41
1:AA:377:G:C2	1:AA:387:U:O2	2.74	0.41
1:AA:652:U:H1'	1:AA:653:A:C2	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:782:A:N7	1:AA:783:C:C2	2.89	0.41
1:AA:782:A:N6	1:AA:801:U:C5	2.89	0.41
7:AG:76:ARG:HH11	7:AG:76:ARG:CG	2.30	0.41
8:AH:34:GLU:OE1	8:AH:34:GLU:HA	2.20	0.41
9:AI:78:LYS:HZ3	9:AI:78:LYS:HB2	1.85	0.41
10:AJ:54:PHE:C	10:AJ:55:LYS:HG3	2.41	0.41
11:AK:124:LYS:HD2	11:AK:125:PHE:CD1	2.55	0.41
11:AK:21:ILE:CB	11:AK:84:VAL:HG12	2.46	0.41
15:AO:32:LEU:O	15:AO:36:ILE:HG13	2.21	0.41
1:AA:808:C:OP2	15:AO:48:LYS:HE3	2.21	0.41
17:AQ:68:ARG:CG	17:AQ:68:ARG:NH1	2.84	0.41
26:B1:64:ALA:C	26:B1:67:ILE:HD11	2.41	0.41
30:B5:11:THR:OG1	34:BA:1263:U:O3'	2.39	0.41
30:B5:50:GLY:CA	30:B5:56:LYS:HB3	2.51	0.41
34:BA:1272:A:C3'	34:BA:1273:U:C5'	2.99	0.41
34:BA:1366:A:C2	34:BA:1367:A:H1'	2.56	0.41
34:BA:1569:A:H2'	34:BA:1570:A:C8	2.56	0.41
22:AV:12:G:H4'	34:BA:1908:C:O2	2.21	0.41
34:BA:250:G:C6	34:BA:251:A:C6	3.09	0.41
34:BA:271(L):U:H4'	34:BA:271(M):G:C6	2.56	0.41
34:BA:2732:G:C3'	34:BA:2733:A:C5'	2.99	0.41
34:BA:725:G:C6	34:BA:726:G:N1	2.89	0.41
34:BA:803:U:O2'	34:BA:804:A:H5'	2.21	0.41
34:BA:945:A:H5"	34:BA:946:G:P	2.61	0.41
37:BD:177:LEU:O	37:BD:180:GLY:N	2.52	0.41
37:BD:161:THR:OG1	37:BD:196:VAL:HG21	2.21	0.41
39:BF:165:ARG:O	39:BF:166:ALA:C	2.58	0.41
39:BF:173:VAL:CG1	39:BF:174:VAL:N	2.84	0.41
39:BF:183:VAL:HG23	39:BF:184:TYR:N	2.36	0.41
40:BG:5:VAL:HG12	40:BG:104:GLU:OE2	2.21	0.41
44:BO:103:ALA:HA	44:BO:122:LEU:O	2.21	0.41
44:BO:2:ILE:HD11	44:BO:82:ASN:CG	2.40	0.41
34:BA:1245:G:O3'	45:BP:16:ARG:NH2	2.53	0.41
46:BQ:109:VAL:CG1	46:BQ:110:THR:N	2.83	0.41
46:BQ:8:LYS:CG	46:BQ:9:TYR:N	2.82	0.41
47:BR:13:HIS:C	47:BR:13:HIS:ND1	2.74	0.41
48:BS:98:VAL:HG13	48:BS:99:LYS:N	2.35	0.41
49:BT:28:VAL:HB	49:BT:88:ILE:HD11	2.02	0.41
52:BW:6:ILE:HA	52:BW:103:ILE:O	2.21	0.41
53:BX:83:VAL:O	53:BX:83:VAL:HG23	2.21	0.41
54:BY:28:LYS:C	54:BY:29:GLU:OE1	2.60	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BZ:65:GLN:HB3	55:BZ:67:LEU:CD1	2.51	0.41
1:CA:1015:A:N3	1:CA:1218:C:O2'	2.51	0.41
1:CA:1324:A:C5	1:CA:1325:C:C5	3.09	0.41
1:CA:1413:A:H2'	1:CA:1414:U:O4'	2.21	0.41
1:CA:142:G:H2'	1:CA:143:A:H8	1.86	0.41
1:CA:147:G:C2	1:CA:148:G:C8	3.09	0.41
1:CA:154:C:O2'	1:CA:155:C:H5'	2.21	0.41
1:CA:284:G:H2'	1:CA:285:G:C8	2.56	0.41
1:CA:377:G:P	16:CP:5:ARG:HH11	2.44	0.41
1:CA:411:A:C5	1:CA:429:U:C5	3.09	0.41
1:CA:544:G:C5	1:CA:545:C:C5	3.09	0.41
1:CA:690:G:C6	1:CA:691:G:N1	2.89	0.41
1:CA:768:A:N3	1:CA:1512:U:O2'	2.48	0.41
1:CA:865:A:O5'	1:CA:865:A:H8	2.04	0.41
2:CB:111:ARG:O	2:CB:114:ARG:N	2.54	0.41
2:CB:178:ARG:HG3	8:CH:72:PRO:N	2.36	0.41
4:CD:132:ARG:HH11	4:CD:132:ARG:HG2	1.86	0.41
4:CD:3:ARG:HD3	4:CD:5:ILE:HG13	2.03	0.41
5:CE:88:LYS:HB3	5:CE:123:LEU:HB2	2.03	0.41
5:CE:20:GLN:HB3	5:CE:20:GLN:HE21	1.55	0.41
6:CF:19:LEU:HD23	6:CF:19:LEU:C	2.42	0.41
6:CF:73:ASN:O	6:CF:76:ALA:N	2.54	0.41
7:CG:15:ASP:CB	7:CG:20:ASP:H	2.33	0.41
7:CG:47:CYS:C	7:CG:49:ILE:N	2.74	0.41
8:CH:86:ILE:HG13	8:CH:133:LEU:HD22	2.02	0.41
10:CJ:34:VAL:CG1	10:CJ:35:SER:N	2.84	0.41
10:CJ:22:LYS:HZ3	10:CJ:88:LEU:HD23	1.86	0.41
12:CL:30:ALA:O	12:CL:31:PRO:C	2.59	0.41
14:CN:33:VAL:C	14:CN:34:TYR:CD1	2.94	0.41
14:CN:43:CYS:O	14:CN:44:LEU:C	2.59	0.41
14:CN:53:LEU:HB3	14:CN:56:VAL:HG21	2.03	0.41
26:D1:81:LYS:HB3	26:D1:82:LEU:H	1.46	0.41
27:D2:50:ILE:O	27:D2:51:ARG:CB	2.68	0.41
28:D3:4:LEU:HB2	28:D3:39:ASP:HB2	2.02	0.41
29:D4:20:ASN:C	29:D4:22:ILE:H	2.25	0.41
31:D6:40:CYS:HB2	31:D6:46:HIS:CE1	2.56	0.41
34:DA:1022:G:HO2'	34:DA:1023:U:P	2.42	0.41
34:DA:1142(A):A:C5	34:DA:1144:G:N7	2.89	0.41
34:DA:1301:A:C2'	34:DA:1302:A:H3'	2.51	0.41
34:DA:1388:G:N2	34:DA:1400:G:C4	2.89	0.41
34:DA:151:C:O2'	34:DA:152:G:H5'	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2203:U:H2'	34:DA:2203:U:O2	2.21	0.41
34:DA:2243:U:O2'	34:DA:2244:U:H5'	2.21	0.41
34:DA:2286:A:O2'	34:DA:2286:A:C8	2.73	0.41
34:DA:1783:A:C2	34:DA:2587:A:C4	3.09	0.41
34:DA:2731:G:C6	34:DA:2732:G:O6	2.74	0.41
34:DA:2795:G:N2	34:DA:2796:U:HO2'	2.18	0.41
34:DA:2850:A:C8	34:DA:2869:G:O4'	2.74	0.41
26:D1:47:GLN:HB2	34:DA:397:G:H5''	2.02	0.41
34:DA:606:U:H2'	34:DA:607:U:O4'	2.21	0.41
34:DA:699:A:C2'	34:DA:700:G:H5'	2.51	0.41
34:DA:814:C:H5''	51:DV:86:GLY:CA	2.35	0.41
34:DA:870:A:C2	34:DA:908:C:C2	3.09	0.41
34:DA:892:G:N3	34:DA:892:G:C3'	2.84	0.41
34:DA:925:C:H3'	34:DA:926:A:H5''	2.03	0.41
34:DA:949:C:O2'	34:DA:950:G:H5'	2.21	0.41
37:DD:169:GLU:HG2	37:DD:174:ILE:HD11	2.02	0.41
39:DF:183:VAL:HG23	39:DF:184:TYR:N	2.35	0.41
40:DG:45:GLU:OE1	40:DG:45:GLU:N	2.54	0.41
45:DP:131:SER:H	45:DP:134:ALA:CB	2.19	0.41
45:DP:17:LYS:HA	45:DP:19:VAL:HG22	2.03	0.41
46:DQ:132:VAL:CG1	46:DQ:133:ARG:N	2.84	0.41
48:DS:54:LEU:O	48:DS:56:LEU:N	2.54	0.41
48:DS:90:GLY:O	48:DS:91:PRO:C	2.57	0.41
49:DT:91:ARG:HB3	49:DT:115:ARG:O	2.21	0.41
50:DU:59:ARG:O	50:DU:61:TRP:N	2.54	0.41
54:DY:99:CYS:O	54:DY:100:ALA:CB	2.69	0.41
55:DZ:22:GLY:HA2	55:DZ:41:LEU:CD1	2.51	0.41
1:AA:1003:G:H2'	1:AA:1004:A:O4'	2.20	0.40
1:AA:115:G:H1'	1:AA:116:A:N7	2.36	0.40
1:AA:1311:G:H2'	1:AA:1312:G:O5'	2.21	0.40
1:AA:1320:C:H2'	1:AA:1321:C:O4'	2.21	0.40
1:AA:1530:G:OP1	1:AA:1530:G:H4'	2.21	0.40
1:AA:443:C:H2'	1:AA:444:C:C6	2.56	0.40
1:AA:583:A:H2'	1:AA:584:G:O4'	2.21	0.40
1:AA:70:G:H2'	1:AA:71:C:C6	2.56	0.40
1:AA:774:G:O2'	1:AA:775:G:H5'	2.21	0.40
1:AA:786:G:C2	1:AA:787:A:C4	3.08	0.40
1:AA:941:G:C2'	1:AA:942:G:O5'	2.69	0.40
2:AB:68:ILE:HB	2:AB:90:MET:SD	2.61	0.40
3:AC:124:ILE:O	3:AC:126:ARG:N	2.54	0.40
4:AD:133:VAL:HG13	4:AD:135:LEU:HD23	2.03	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:198:VAL:CG1	4:AD:199:ASN:N	2.84	0.40
9:AI:91:ASP:C	9:AI:93:ARG:H	2.25	0.40
11:AK:44:SER:H	11:AK:47:VAL:HB	1.86	0.40
14:AN:47:LEU:HB2	14:AN:53:LEU:CD1	2.49	0.40
17:AQ:52:LYS:O	17:AQ:55:ASP:OD2	2.39	0.40
17:AQ:58:GLU:C	17:AQ:59:ILE:HD13	2.41	0.40
19:AS:27:GLU:HB3	19:AS:28:LYS:H	1.63	0.40
19:AS:36:ARG:HB2	19:AS:72:GLY:CA	2.51	0.40
20:AT:53:LEU:O	20:AT:54:LYS:C	2.58	0.40
21:AU:10:ARG:O	21:AU:11:GLY:C	2.59	0.40
22:AV:52:G:C2	22:AV:53:G:C8	3.09	0.40
26:B1:8:SER:HB2	26:B1:48:LYS:NZ	2.36	0.40
29:B4:23:GLU:O	29:B4:24:THR:CB	2.70	0.40
31:B6:28:ARG:O	31:B6:29:ASN:C	2.59	0.40
33:B8:62:LEU:N	33:B8:63:PRO:CD	2.82	0.40
34:BA:1042:G:H3'	34:BA:1043:C:O4'	2.22	0.40
34:BA:107:C:H2'	34:BA:108:U:H6	1.86	0.40
34:BA:1270:C:H5''	34:BA:1271:G:H5'	2.03	0.40
34:BA:1315:C:H2'	34:BA:1316:U:H6	1.87	0.40
34:BA:1497:U:H3	34:BA:1578:U:P	2.44	0.40
34:BA:150:C:O2'	34:BA:151:C:H5'	2.21	0.40
34:BA:1544:A:N3	34:BA:1544:A:O3'	2.55	0.40
34:BA:1886:C:H2'	34:BA:1887:C:H6	1.86	0.40
34:BA:49:A:O2'	34:BA:50:U:OP2	2.29	0.40
34:BA:608:A:H3'	34:BA:609:A:C8	2.54	0.40
34:BA:71:A:O2'	34:BA:72:U:OP2	2.26	0.40
34:BA:917:A:N1	35:BB:80:U:H4'	2.37	0.40
35:BB:25:A:C2	35:BB:26:A:H1'	2.56	0.40
38:BE:4:ILE:HG13	38:BE:28:ALA:HB1	2.03	0.40
39:BF:201:VAL:CG1	39:BF:202:PHE:N	2.84	0.40
42:BI:88:ILE:HD11	42:BI:123:LEU:HG	2.00	0.40
42:BI:69:LYS:HA	42:BI:136:VAL:HG23	2.01	0.40
42:BI:96:ASP:C	42:BI:98:ALA:H	2.23	0.40
34:BA:810:U:O2'	45:BP:33:ARG:NE	2.54	0.40
45:BP:97:PRO:C	45:BP:99:LEU:N	2.75	0.40
46:BQ:28:ALA:HB3	46:BQ:29:PHE:CD1	2.56	0.40
46:BQ:55:VAL:HG23	55:BZ:178:GLU:CB	2.49	0.40
46:BQ:89:ASN:N	46:BQ:89:ASN:ND2	2.66	0.40
47:BR:104:ARG:HG2	47:BR:104:ARG:HH11	1.86	0.40
49:BT:35:LYS:O	49:BT:37:GLY:N	2.54	0.40
52:BW:3:ALA:O	52:BW:106:ILE:HA	2.21	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BX:50:LYS:HD3	53:BX:82:GLN:HE21	1.87	0.40
54:BY:32:PRO:O	54:BY:34:LYS:N	2.53	0.40
1:CA:1003:G:H2'	1:CA:1004:A:O4'	2.21	0.40
1:CA:1217:C:H2'	1:CA:1218:C:O4'	2.20	0.40
1:CA:1246:C:H2'	1:CA:1247:U:C6	2.56	0.40
1:CA:1260:C:O2'	1:CA:1261:A:H5'	2.21	0.40
1:CA:16:A:N1	1:CA:919:A:C2	2.88	0.40
1:CA:177:C:H2'	1:CA:178:C:C6	2.56	0.40
1:CA:273:A:N6	1:CA:274:A:N6	2.69	0.40
1:CA:356:A:H2'	1:CA:357:G:C8	2.54	0.40
1:CA:594:G:H2'	1:CA:595:G:H5'	2.03	0.40
1:CA:774:G:O2'	1:CA:775:G:H5'	2.21	0.40
3:CC:115:LEU:O	3:CC:116:VAL:C	2.59	0.40
4:CD:11:LEU:N	4:CD:11:LEU:HD23	2.36	0.40
4:CD:126:ILE:HG22	4:CD:127:THR:H	1.86	0.40
4:CD:3:ARG:HG2	4:CD:3:ARG:HH21	1.87	0.40
5:CE:101:ILE:CD1	5:CE:118:ILE:O	2.70	0.40
9:CI:125:TYR:CE2	9:CI:127:LYS:HB2	2.56	0.40
9:CI:3:GLN:C	9:CI:4:TYR:CD1	2.87	0.40
9:CI:66:ARG:HH11	9:CI:66:ARG:HG2	1.86	0.40
13:CM:19:LEU:HD11	13:CM:56:LEU:HD11	2.04	0.40
13:CM:65:LYS:HA	13:CM:66:LEU:HB2	2.03	0.40
14:CN:57:ARG:O	14:CN:59:ALA:N	2.54	0.40
17:CQ:80:GLY:O	17:CQ:81:ARG:HG2	2.21	0.40
19:CS:45:VAL:HA	19:CS:62:ILE:O	2.22	0.40
1:CA:1439:C:H5''	20:CT:38:LYS:HZ2	1.85	0.40
22:CV:5:G:O2'	22:CV:6:G:H5'	2.20	0.40
23:CW:76:A:C2	33:D8:33:ASN:ND2	2.89	0.40
22:CV:35:A:C2	24:CX:18:G:C2	3.09	0.40
26:D1:58:ILE:HG22	26:D1:59:THR:N	2.35	0.40
27:D2:42:GLY:C	27:D2:44:LEU:H	2.25	0.40
28:D3:8:LEU:HD13	28:D3:31:LEU:HD23	1.96	0.40
30:D5:20:ARG:O	30:D5:21:SER:C	2.59	0.40
34:DA:1245:G:H5''	45:DP:16:ARG:HH21	1.86	0.40
34:DA:1683:C:H2'	34:DA:1684:C:C6	2.53	0.40
34:DA:1817:G:H2'	34:DA:1818:U:H5'	2.03	0.40
34:DA:2033:A:O2'	34:DA:2034:U:P	2.78	0.40
34:DA:2020:A:C2	34:DA:2035:G:N1	2.89	0.40
34:DA:2061:G:H5''	34:DA:2503:A:C2	2.56	0.40
34:DA:271(X):G:C2	34:DA:271(Y):U:O4	2.74	0.40
34:DA:2776:A:H4'	34:DA:2777:G:H5''	2.02	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2807:G:N2	34:DA:2808:U:H1'	2.36	0.40
34:DA:2850:A:C2	34:DA:2851:A:C4	3.08	0.40
34:DA:354:G:H2'	34:DA:355:G:O4'	2.21	0.40
34:DA:407:G:O2'	34:DA:408:G:H5'	2.21	0.40
34:DA:450:G:OP1	34:DA:1248:G:N1	2.53	0.40
34:DA:754:C:O2'	34:DA:755:C:H5'	2.20	0.40
34:DA:901:A:H5'	34:DA:902:C:OP2	2.21	0.40
37:DD:131:LEU:HB2	37:DD:136:ILE:CD1	2.47	0.40
38:DE:4:ILE:HD11	38:DE:28:ALA:HB1	2.02	0.40
38:DE:36:ARG:C	38:DE:37:ARG:HG3	2.41	0.40
39:DF:16:GLY:O	39:DF:17:ARG:HG3	2.21	0.40
40:DG:44:GLY:O	40:DG:45:GLU:HB3	2.21	0.40
41:DH:82:GLY:O	41:DH:135:GLY:O	2.38	0.40
41:DH:152:ARG:HB3	41:DH:161:GLY:CA	2.34	0.40
42:DI:83:ALA:HB3	42:DI:123:LEU:HD11	2.02	0.40
44:DO:113:LYS:O	44:DO:114:ILE:C	2.58	0.40
44:DO:121:VAL:O	44:DO:122:LEU:HD23	2.21	0.40
44:DO:26:LYS:HB3	44:DO:27:GLY:H	1.67	0.40
44:DO:87:ILE:HD13	44:DO:93:PRO:CA	2.51	0.40
46:DQ:42:ILE:HG22	46:DQ:47:ILE:HD11	2.01	0.40
46:DQ:65:PHE:HB2	46:DQ:105:GLU:CG	2.52	0.40
46:DQ:71:ASP:O	46:DQ:73:PRO:HD3	2.22	0.40
47:DR:60:LEU:O	47:DR:63:ARG:HB3	2.20	0.40
48:DS:28:VAL:HA	48:DS:37:ALA:HA	2.03	0.40
49:DT:10:VAL:O	49:DT:12:SER:N	2.54	0.40
49:DT:50:ILE:HD11	49:DT:64:ARG:HB2	2.03	0.40
49:DT:53:ARG:CG	49:DT:53:ARG:NH1	2.83	0.40
49:DT:57:PHE:O	49:DT:59:THR:HG22	2.21	0.40
51:DV:73:SER:CB	51:DV:75:PHE:CE1	2.98	0.40
54:DY:27:VAL:HG12	54:DY:29:GLU:OE1	2.21	0.40
1:AA:1034:G:N2	1:AA:1035:A:N6	2.69	0.40
1:AA:1277:C:HO2'	1:AA:1279:A:H1'	1.87	0.40
1:AA:147:G:C2	1:AA:148:G:C8	3.09	0.40
1:AA:288:A:H2'	1:AA:289:G:H4'	2.04	0.40
1:AA:409:G:C5'	4:AD:25:ARG:HB2	2.50	0.40
1:AA:411:A:C5	1:AA:429:U:C5	3.09	0.40
2:AB:213:LEU:CD2	2:AB:214:ILE:HD13	2.51	0.40
3:AC:172:ARG:HH12	3:AC:174:PRO:HG2	1.86	0.40
4:AD:104:VAL:C	4:AD:106:TYR:N	2.74	0.40
4:AD:132:ARG:HH11	4:AD:132:ARG:HG2	1.86	0.40
4:AD:147:ALA:HB2	4:AD:182:LYS:HB3	2.03	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:38:TYR:HD1	4:AD:38:TYR:O	2.03	0.40
5:AE:99:GLY:O	5:AE:117:ASP:HA	2.20	0.40
5:AE:132:ALA:O	5:AE:133:TYR:C	2.59	0.40
5:AE:139:LEU:C	5:AE:141:GLN:N	2.74	0.40
6:AF:59:TYR:CD2	6:AF:61:LEU:HD11	2.56	0.40
7:AG:65:ALA:CB	7:AG:124:LEU:HD23	2.52	0.40
9:AI:111:ARG:O	9:AI:113:LYS:HD2	2.22	0.40
9:AI:46:ALA:HA	9:AI:78:LYS:HZ2	1.87	0.40
11:AK:24:SER:C	11:AK:26:ASN:N	2.74	0.40
7:AG:149:ARG:HD3	11:AK:59:TYR:CZ	2.56	0.40
11:AK:69:ALA:O	11:AK:72:ALA:N	2.54	0.40
12:AL:39:VAL:CG1	12:AL:40:VAL:N	2.85	0.40
13:AM:86:CYS:O	13:AM:89:GLY:N	2.54	0.40
1:AA:624:C:H4'	16:AP:10:GLY:C	2.42	0.40
16:AP:1:MET:HG2	16:AP:2:VAL:N	2.37	0.40
16:AP:52:ASP:C	16:AP:52:ASP:OD2	2.60	0.40
17:AQ:12:SER:HB3	17:AQ:20:THR:HB	2.03	0.40
18:AR:72:ARG:O	18:AR:76:LEU:HD23	2.21	0.40
11:AK:111:ASP:HA	18:AR:84:LYS:HE2	2.02	0.40
20:AT:26:ASN:HD22	20:AT:27:LYS:H	1.69	0.40
23:AW:50:U:C2	23:AW:65:G:N2	2.89	0.40
23:AW:2:C:N4	23:AW:71:G:H1	2.17	0.40
26:B1:13:ILE:CG2	26:B1:63:ALA:CB	2.85	0.40
30:B5:2:ALA:O	30:B5:3:LYS:HD2	2.22	0.40
34:BA:108:U:C2	34:BA:109:G:C8	3.09	0.40
34:BA:1839:G:C8	34:BA:1839:G:H5'	2.56	0.40
34:BA:2082:A:H2'	34:BA:2083:G:O4'	2.21	0.40
34:BA:207:A:C8	34:BA:208:C:C5	3.09	0.40
34:BA:2439:A:H1'	34:BA:2587:A:OP1	2.21	0.40
34:BA:2534:A:H2'	34:BA:2535:G:O4'	2.21	0.40
34:BA:2776:A:H4'	34:BA:2777:G:H5''	2.03	0.40
34:BA:332:A:C5	34:BA:335:C:C4	3.09	0.40
34:BA:601:C:H2'	34:BA:602:G:O4'	2.22	0.40
34:BA:71:A:C8	34:BA:71:A:H5'	2.52	0.40
34:BA:742:G:H2'	34:BA:743:G:C8	2.56	0.40
35:BB:4:C:H2'	35:BB:5:C:H6	1.86	0.40
36:BC:42:GLU:HG2	36:BC:176:GLY:O	2.22	0.40
36:BC:51:PRO:O	36:BC:52:ARG:HB2	2.21	0.40
37:BD:142:VAL:HG23	37:BD:193:VAL:CA	2.51	0.40
38:BE:70:ALA:C	38:BE:72:VAL:N	2.73	0.40
39:BF:158:THR:HG23	39:BF:160:ASN:H	1.86	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BF:31:HIS:O	39:BF:32:LEU:C	2.59	0.40
40:BG:133:LEU:HD11	40:BG:157:ILE:HG12	2.02	0.40
13:AM:3:ARG:NH2	40:BG:139:LEU:HD22	2.36	0.40
44:BO:11:ALA:O	44:BO:12:ASP:CB	2.68	0.40
45:BP:14:LYS:O	45:BP:15:ARG:HB2	2.22	0.40
47:BR:77:ARG:O	47:BR:78:LYS:C	2.59	0.40
49:BT:118:ARG:O	49:BT:119:LYS:C	2.60	0.40
49:BT:124:ASP:O	49:BT:127:ALA:HB3	2.22	0.40
49:BT:3:ARG:O	49:BT:4:GLY:C	2.60	0.40
50:BU:8:VAL:HG22	50:BU:11:ARG:NH2	2.36	0.40
51:BV:15:GLU:O	51:BV:98:GLU:CD	2.60	0.40
51:BV:71:LEU:HD22	51:BV:71:LEU:HA	1.91	0.40
53:BX:28:PHE:N	53:BX:28:PHE:CD1	2.89	0.40
54:BY:62:GLU:HB3	54:BY:63:LYS:H	1.43	0.40
1:CA:1125:U:H2'	1:CA:1126:U:OP2	2.21	0.40
1:CA:1494:G:C2	1:CA:1495:U:C6	3.10	0.40
1:CA:199:G:O2'	1:CA:200:G:H5'	2.21	0.40
1:CA:263:A:OP2	20:CT:79:ARG:NH1	2.53	0.40
1:CA:638:G:O2'	1:CA:639:G:H5'	2.21	0.40
1:CA:667:G:H4'	15:CO:51:HIS:ND1	2.37	0.40
1:CA:70:G:H2'	1:CA:71:C:C6	2.57	0.40
1:CA:734:G:O2'	1:CA:735:C:H5'	2.21	0.40
1:CA:1103:C:C4'	2:CB:98:LEU:HD13	2.50	0.40
3:CC:148:GLY:O	3:CC:203:PHE:N	2.54	0.40
3:CC:64:VAL:CB	3:CC:99:VAL:HG12	2.51	0.40
4:CD:58:LEU:HA	4:CD:206:PHE:CE1	2.56	0.40
5:CE:64:ARG:NH1	5:CE:64:ARG:HG3	2.35	0.40
8:CH:40:ALA:O	8:CH:42:GLU:N	2.54	0.40
8:CH:6:ILE:HB	8:CH:85:ARG:HH12	1.86	0.40
9:CI:111:ARG:HG2	9:CI:112:LYS:N	2.35	0.40
10:CJ:47:PHE:CD1	10:CJ:47:PHE:O	2.74	0.40
10:CJ:94:VAL:CG1	10:CJ:95:GLU:N	2.80	0.40
15:CO:64:ARG:O	15:CO:65:ARG:C	2.59	0.40
23:CW:55:U:O2	23:CW:55:U:O5'	2.38	0.40
26:D1:47:GLN:OE1	34:DA:2230:G:C1'	2.68	0.40
26:D1:9:GLY:N	26:D1:48:LYS:HZ3	2.18	0.40
27:D2:28:LYS:HD2	27:D2:28:LYS:HA	1.80	0.40
29:D4:23:GLU:O	29:D4:24:THR:CB	2.69	0.40
29:D4:42:PHE:C	29:D4:44:THR:N	2.74	0.40
34:DA:83:G:N2	34:DA:103:A:OP2	2.46	0.40
34:DA:1847:A:H2'	34:DA:1847:A:N3	2.36	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:2052:G:C8	38:DE:141:ILE:HD11	2.57	0.40
34:DA:2378:A:H2	48:DS:20:ARG:NH1	2.19	0.40
34:DA:2721:A:H2'	34:DA:2722:G:H8	1.86	0.40
34:DA:2748:A:H2'	34:DA:2749:A:C8	2.56	0.40
34:DA:2767:C:H2'	34:DA:2768:C:H6	1.86	0.40
34:DA:2813:A:H2'	34:DA:2814:C:H5'	2.03	0.40
34:DA:495:G:N3	52:DW:61:ASN:OD1	2.55	0.40
34:DA:765:G:H2'	34:DA:766:C:H6	1.85	0.40
34:DA:774:A:HO2'	34:DA:775:G:P	2.37	0.40
35:DB:45:A:C2	35:DB:46:A:C1'	3.05	0.40
37:DD:143:HIS:HB2	37:DD:156:ALA:O	2.22	0.40
38:DE:115:GLY:C	38:DE:116:VAL:O	2.57	0.40
39:DF:164:ARG:HG2	39:DF:164:ARG:NH1	2.34	0.40
39:DF:201:VAL:HG13	39:DF:202:PHE:N	2.35	0.40
40:DG:146:TYR:O	40:DG:149:VAL:HG22	2.21	0.40
40:DG:41:GLN:HE21	40:DG:155:MET:CB	2.34	0.40
41:DH:142:GLY:C	41:DH:144:VAL:N	2.74	0.40
41:DH:158:HIS:O	41:DH:159:GLU:CB	2.68	0.40
43:DN:128:HIS:CE1	43:DN:134:ARG:HD3	2.57	0.40
45:DP:110:TYR:CZ	45:DP:111:ARG:NH2	2.89	0.40
45:DP:85:LEU:CD2	45:DP:85:LEU:N	2.71	0.40
46:DQ:37:LEU:HD23	46:DQ:37:LEU:HA	1.89	0.40
49:DT:124:ASP:O	49:DT:127:ALA:HB3	2.20	0.40
49:DT:33:LYS:CB	49:DT:41:ARG:HB3	2.50	0.40
52:DW:12:ILE:HD13	52:DW:17:VAL:CG1	2.50	0.40
54:DY:86:ARG:CZ	54:DY:95:LYS:HZ2	2.34	0.40
1:AA:865:A:H5'	1:AA:1078:U:C4	2.56	0.40
1:AA:1079:G:C6	1:AA:1080:A:N6	2.89	0.40
1:AA:1109:C:O2'	1:AA:1110:A:H5'	2.21	0.40
1:AA:347:G:H2'	1:AA:348:G:O4'	2.21	0.40
1:AA:373:A:C2	1:AA:374:A:C8	3.09	0.40
1:AA:477:A:H2'	1:AA:479:C:H6	1.86	0.40
5:AE:88:LYS:HB3	5:AE:123:LEU:HB2	2.04	0.40
5:AE:129:ILE:H	5:AE:129:ILE:HG13	1.73	0.40
5:AE:132:ALA:C	5:AE:134:ALA:N	2.73	0.40
6:AF:100:ASN:N	6:AF:100:ASN:ND2	2.69	0.40
7:AG:18:TYR:CD1	7:AG:18:TYR:N	2.89	0.40
7:AG:24:THR:O	7:AG:25:ALA:C	2.58	0.40
8:AH:42:GLU:HG3	8:AH:109:ILE:HD12	2.03	0.40
9:AI:112:LYS:HA	9:AI:119:ALA:CB	2.51	0.40
10:AJ:8:LEU:CD2	10:AJ:20:ALA:HB2	2.49	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:105:VAL:O	11:AK:106:LYS:C	2.59	0.40
11:AK:69:ALA:O	11:AK:70:LYS:C	2.58	0.40
12:AL:62:SER:C	12:AL:64:TYR:H	2.24	0.40
13:AM:65:LYS:C	13:AM:66:LEU:HB2	2.42	0.40
13:AM:70:LEU:O	13:AM:72:ALA:N	2.54	0.40
19:AS:58:VAL:O	19:AS:60:VAL:N	2.54	0.40
20:AT:56:MET:HG2	20:AT:84:LEU:CD1	2.52	0.40
27:B2:46:GLN:HE21	27:B2:50:ILE:HG12	1.87	0.40
34:BA:1657:C:O2'	34:BA:1658:C:H5'	2.21	0.40
34:BA:197:A:C8	34:BA:197:A:H5'	2.57	0.40
34:BA:2276:G:O2'	34:BA:2277:G:H5'	2.20	0.40
34:BA:2358:G:H1	45:BP:55:ARG:NH2	2.01	0.40
34:BA:2627:G:H21	34:BA:2781:A:H2	1.69	0.40
34:BA:2684:U:C2'	34:BA:2685:G:H5'	2.50	0.40
34:BA:2783:G:O2'	34:BA:2784:C:H5'	2.21	0.40
34:BA:480:A:P	54:BY:46:LYS:HE2	2.61	0.40
34:BA:675:A:N6	34:BA:676:A:N6	2.69	0.40
34:BA:687:C:C2'	34:BA:687:C:O2	2.69	0.40
34:BA:88:G:N3	34:BA:88:G:H2'	2.36	0.40
35:BB:104:U:O2'	35:BB:105:A:H5'	2.22	0.40
35:BB:51:G:H2'	35:BB:52:A:O4'	2.22	0.40
36:BC:64:LEU:HD22	36:BC:193:ILE:CB	2.51	0.40
37:BD:211:ARG:O	37:BD:214:TRP:N	2.55	0.40
37:BD:241:PRO:C	37:BD:242:ARG:HD2	2.41	0.40
38:BE:24:THR:HG21	38:BE:188:VAL:HG12	2.04	0.40
38:BE:37:ARG:HD3	38:BE:44:TYR:HE2	1.87	0.40
34:BA:2785:C:H1'	38:BE:64:LYS:NZ	2.36	0.40
39:BF:20:LEU:O	39:BF:21:ALA:O	2.39	0.40
39:BF:3:GLU:HA	39:BF:24:LEU:CG	2.51	0.40
39:BF:37:VAL:HG12	39:BF:41:LEU:HD12	2.03	0.40
39:BF:74:ARG:O	39:BF:74:ARG:HG2	2.20	0.40
40:BG:31:VAL:CG2	40:BG:32:PRO:CD	2.88	0.40
41:BH:121:ILE:HD13	41:BH:144:VAL:HG21	2.03	0.40
42:BI:72:LEU:HB2	42:BI:136:VAL:CG2	2.51	0.40
43:BN:24:GLY:C	43:BN:26:LEU:N	2.73	0.40
45:BP:112:LEU:C	45:BP:112:LEU:HD22	2.41	0.40
46:BQ:24:GLY:HA2	46:BQ:100:GLY:O	2.21	0.40
46:BQ:37:LEU:HA	46:BQ:37:LEU:HD23	1.88	0.40
47:BR:60:LEU:O	47:BR:63:ARG:HB3	2.21	0.40
48:BS:77:ALA:C	48:BS:79:ALA:N	2.74	0.40
51:BV:56:SER:O	51:BV:57:VAL:HB	2.20	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BV:68:LYS:HG3	51:BV:68:LYS:O	2.21	0.40
54:BY:8:LYS:HE3	54:BY:73:ARG:HA	2.03	0.40
1:CA:1170:A:H2'	1:CA:1171:G:C5'	2.51	0.40
1:CA:1375:A:O2'	1:CA:1376:U:H5'	2.22	0.40
1:CA:1406:U:H2'	1:CA:1407:C:C5'	2.51	0.40
1:CA:339:C:H2'	1:CA:340:U:C6	2.56	0.40
1:CA:676:A:O2'	1:CA:677:U:H5'	2.21	0.40
1:CA:926:G:H2'	1:CA:1505:G:N3	2.36	0.40
1:CA:946:A:H2'	1:CA:947:G:H8	1.84	0.40
2:CB:103:THR:O	2:CB:103:THR:HG22	2.20	0.40
2:CB:39:ILE:HG22	2:CB:40:HIS:N	2.36	0.40
3:CC:48:TYR:C	3:CC:50:ALA:N	2.74	0.40
4:CD:112:VAL:HG12	4:CD:116:GLN:CD	2.41	0.40
4:CD:49:ARG:O	4:CD:51:PRO:HD3	2.21	0.40
7:CG:47:CYS:C	7:CG:49:ILE:H	2.24	0.40
9:CI:4:TYR:HD1	9:CI:4:TYR:N	2.18	0.40
9:CI:78:LYS:CB	9:CI:78:LYS:NZ	2.84	0.40
10:CJ:54:PHE:C	10:CJ:55:LYS:HG3	2.42	0.40
10:CJ:51:ARG:HG3	10:CJ:60:ARG:HA	2.02	0.40
12:CL:113:ARG:NH1	12:CL:120:TYR:CE2	2.90	0.40
12:CL:7:ILE:HA	12:CL:7:ILE:HD13	1.83	0.40
15:CO:66:LEU:H	15:CO:66:LEU:HD13	1.86	0.40
18:CR:68:LYS:O	18:CR:69:THR:C	2.59	0.40
20:CT:97:ALA:O	20:CT:99:LEU:HG	2.21	0.40
25:D0:37:LEU:N	25:D0:59:LEU:O	2.45	0.40
26:D1:47:GLN:O	26:D1:47:GLN:NE2	2.55	0.40
28:D3:15:TYR:HB3	28:D3:19:GLN:NE2	2.35	0.40
34:DA:1221(A):C:C2	34:DA:1229:G:C2	3.09	0.40
34:DA:1245:G:OP1	45:DP:16:ARG:CD	2.69	0.40
34:DA:12:U:O5'	34:DA:12:U:H6	2.05	0.40
34:DA:1301:A:HO2'	34:DA:1302:A:C5'	2.32	0.40
34:DA:1366:A:C2	34:DA:1367:A:H1'	2.56	0.40
34:DA:1380:G:C2	34:DA:1381:G:C8	3.10	0.40
34:DA:1495:A:N3	34:DA:1495:A:H2'	2.36	0.40
34:DA:1853:A:H2'	34:DA:1854:A:C8	2.56	0.40
34:DA:1987:G:C8	34:DA:1987:G:C5'	3.03	0.40
34:DA:214:G:H1'	34:DA:216:A:O2'	2.21	0.40
34:DA:2256:G:H2'	34:DA:2257:U:O4'	2.21	0.40
34:DA:226:G:C2	34:DA:227:A:C6	3.09	0.40
34:DA:2339:G:H2'	34:DA:2340:G:H8	1.86	0.40
34:DA:2378:A:C2	48:DS:20:ARG:NH1	2.90	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DA:280:C:N4	34:DA:360:G:H1	2.18	0.40
34:DA:372:G:N2	34:DA:400:G:H2'	2.36	0.40
36:DC:18:LYS:CD	36:DC:19:VAL:HG23	2.42	0.40
36:DC:92:ASP:CG	36:DC:93:TYR:N	2.75	0.40
38:DE:4:ILE:HG21	38:DE:96:PHE:HE2	1.86	0.40
39:DF:110:LEU:HD23	39:DF:110:LEU:HA	1.87	0.40
39:DF:132:VAL:HG12	39:DF:138:GLU:OE1	2.22	0.40
40:DG:15:VAL:C	40:DG:17:PRO:HD2	2.41	0.40
41:DH:47:GLU:HB3	41:DH:48:GLY:H	1.71	0.40
41:DH:85:LYS:HB3	41:DH:133:VAL:HB	2.04	0.40
42:DI:91:SER:N	42:DI:121:LYS:HE3	2.26	0.40
42:DI:99:GLU:C	42:DI:101:LEU:N	2.74	0.40
43:DN:15:LEU:HD13	43:DN:16:ILE:N	2.36	0.40
43:DN:23:LEU:O	43:DN:23:LEU:HD23	2.22	0.40
46:DQ:134:ARG:O	46:DQ:136:ALA:N	2.54	0.40
49:DT:25:GLY:O	49:DT:48:ILE:HG23	2.21	0.40
49:DT:35:LYS:O	49:DT:37:GLY:N	2.54	0.40
53:DX:83:VAL:C	53:DX:85:PRO:CD	2.90	0.40
55:DZ:79:ARG:NH1	55:DZ:79:ARG:HG3	2.35	0.40
1:AA:1061:G:O4'	10:AJ:56:HIS:CE1	2.74	0.40
1:AA:1117:G:O2'	9:AI:104:ARG:NH2	2.54	0.40
1:AA:1202:G:C2	14:AN:42:ILE:CG2	3.04	0.40
1:AA:1246:C:H2'	1:AA:1247:U:C6	2.57	0.40
1:AA:1360:A:O2'	1:AA:1361:G:H5'	2.22	0.40
1:AA:1379:G:O2'	1:AA:1380:U:H5'	2.21	0.40
1:AA:1437:C:H2'	1:AA:1438:G:C8	2.56	0.40
1:AA:1508:G:H2'	1:AA:1509:C:O4'	2.21	0.40
1:AA:683:G:C6	1:AA:684:A:C5	3.10	0.40
1:AA:746:A:H2'	1:AA:747:C:C6	2.55	0.40
1:AA:944:G:C4	1:AA:1340:A:N1	2.89	0.40
1:AA:998:G:O2'	1:AA:999:C:H5'	2.21	0.40
2:AB:191:ASP:O	2:AB:191:ASP:OD1	2.39	0.40
2:AB:80:ILE:O	2:AB:83:MET:HB2	2.21	0.40
4:AD:118:ARG:HG3	4:AD:118:ARG:NH2	2.37	0.40
4:AD:128:VAL:O	4:AD:129:ASN:C	2.59	0.40
4:AD:135:LEU:HD22	4:AD:135:LEU:N	2.36	0.40
4:AD:25:ARG:NH1	4:AD:30:LYS:O	2.55	0.40
4:AD:78:LEU:O	4:AD:79:PHE:C	2.59	0.40
6:AF:7:ASN:HD22	6:AF:7:ASN:N	2.19	0.40
7:AG:13:GLN:HA	7:AG:14:PRO:HD3	1.95	0.40
8:AH:120:THR:O	8:AH:122:ARG:N	2.54	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:11:VAL:O	19:AS:11:VAL:HG13	2.21	0.40
19:AS:11:VAL:CG2	19:AS:16:LEU:HD11	2.52	0.40
20:AT:43:LEU:HB3	20:AT:48:LYS:HG3	2.02	0.40
21:AU:6:ARG:HG2	21:AU:15:ARG:NH1	2.36	0.40
26:B1:37:ILE:HD13	26:B1:37:ILE:HA	1.89	0.40
26:B1:87:PRO:CD	26:B1:88:LYS:N	2.84	0.40
27:B2:34:GLU:N	27:B2:34:GLU:OE2	2.39	0.40
31:B6:48:VAL:O	31:B6:49:HIS:HB2	2.22	0.40
34:BA:1345:C:H2'	34:BA:1346:G:C8	2.54	0.40
34:BA:1351:C:H4'	34:BA:1572:A:O4'	2.21	0.40
34:BA:14:A:H8	34:BA:14:A:O5'	2.05	0.40
34:BA:1882:C:H2'	34:BA:1882:C:O2	2.21	0.40
34:BA:252:G:O2'	34:BA:253:C:H5'	2.22	0.40
34:BA:2628:C:O2'	34:BA:2781:A:H3'	2.22	0.40
34:BA:2677:G:C4	34:BA:2678:C:C5	3.09	0.40
34:BA:429:A:H2'	34:BA:430:G:C8	2.57	0.40
34:BA:962:G:C2'	34:BA:963:U:H5'	2.50	0.40
35:BB:82:G:H2'	35:BB:83:G:H8	1.86	0.40
37:BD:126:GLN:C	37:BD:193:VAL:HG11	2.42	0.40
37:BD:169:GLU:HB2	37:BD:172:TYR:HB2	2.02	0.40
38:BE:140:SER:OG	38:BE:141:ILE:N	2.55	0.40
38:BE:31:CYS:O	38:BE:32:PRO:C	2.60	0.40
39:BF:197:ASP:O	39:BF:200:GLU:HB3	2.22	0.40
40:BG:56:ALA:HB2	40:BG:153:ARG:HH21	1.85	0.40
41:BH:146:ALA:O	41:BH:150:ALA:HB3	2.21	0.40
41:BH:58:GLU:O	41:BH:60:ARG:N	2.54	0.40
43:BN:102:ALA:O	43:BN:106:MET:HG3	2.21	0.40
46:BQ:23:GLY:HA3	46:BQ:99:PRO:O	2.21	0.40
47:BR:104:ARG:CB	47:BR:104:ARG:HH11	2.35	0.40
47:BR:84:ALA:HB3	47:BR:85:PRO:HD3	2.01	0.40
48:BS:89:ARG:CG	48:BS:97:ARG:HH12	2.33	0.40
50:BU:79:PHE:HE2	50:BU:83:LEU:HD21	1.86	0.40
52:BW:61:ASN:N	52:BW:61:ASN:HD22	2.19	0.40
53:BX:36:LYS:HD3	53:BX:38:GLU:CB	2.45	0.40
54:BY:98:VAL:O	54:BY:99:CYS:SG	2.75	0.40
55:BZ:163:LEU:HD11	55:BZ:167:PRO:HB3	2.03	0.40
55:BZ:120:ILE:HB	55:BZ:172:ALA:N	2.37	0.40
55:BZ:77:ASP:O	55:BZ:78:LYS:C	2.59	0.40
1:CA:1009:G:N2	1:CA:1010:G:H1'	2.37	0.40
1:CA:1240:U:H3'	1:CA:1241:G:H5'	2.04	0.40
1:CA:1347:G:C8	9:CI:107:ARG:CB	2.99	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:562:C:H4'	1:CA:563:A:O5'	2.21	0.40
1:CA:943:U:C2'	1:CA:944:G:H5'	2.51	0.40
2:CB:136:VAL:O	2:CB:140:HIS:HB2	2.21	0.40
2:CB:169:LYS:HB3	2:CB:170:GLU:OE2	2.21	0.40
3:CC:14:ILE:O	3:CC:16:ARG:N	2.54	0.40
4:CD:177:ASP:O	4:CD:177:ASP:OD1	2.40	0.40
10:CJ:94:VAL:CG1	10:CJ:95:GLU:H	2.34	0.40
11:CK:77:MET:O	11:CK:78:GLN:HG2	2.21	0.40
1:CA:1308:U:C5'	13:CM:98:VAL:N	2.81	0.40
15:CO:18:PHE:O	15:CO:19:PRO:C	2.60	0.40
20:CT:43:LEU:HB3	20:CT:48:LYS:HG3	2.03	0.40
23:CW:14:A:N3	23:CW:14:A:H2'	2.36	0.40
23:CW:21:A:N6	23:CW:46:G:C4	2.90	0.40
23:CW:50:U:C4	23:CW:51:U:C5	3.09	0.40
25:D0:26:TYR:HB3	34:DA:856:C:O2	2.21	0.40
27:D2:53:LEU:CD1	34:DA:77:C:OP1	2.70	0.40
33:D8:18:ALA:C	33:D8:20:GLY:N	2.74	0.40
34:DA:1175:U:H5''	34:DA:1176:G:H8	1.87	0.40
34:DA:1652:A:C2	34:DA:2006:C:N3	2.89	0.40
34:DA:1740:G:H4'	34:DA:1741:A:OP1	2.21	0.40
34:DA:2170:A:O2'	34:DA:2171:A:H8	2.04	0.40
34:DA:2222:G:H2'	34:DA:2223:G:H8	1.86	0.40
34:DA:2463:C:C2'	34:DA:2464:C:H5'	2.51	0.40
34:DA:2667:C:C5	34:DA:2668:G:N7	2.90	0.40
34:DA:2627:G:N3	34:DA:2781:A:H2	2.19	0.40
34:DA:2628:C:O2'	34:DA:2781:A:H3'	2.21	0.40
34:DA:376:C:H2'	34:DA:377:C:C6	2.56	0.40
34:DA:581:C:OP1	50:DU:33:ARG:HG2	2.22	0.40
35:DB:82:G:H2'	35:DB:83:G:H8	1.86	0.40
37:DD:9:TYR:CE2	37:DD:13:ARG:HD3	2.55	0.40
37:DD:238:GLY:O	37:DD:239:ARG:HB2	2.22	0.40
37:DD:247:ALA:CA	37:DD:254:THR:HG22	2.51	0.40
38:DE:116:VAL:HG21	38:DE:122:PHE:CD2	2.56	0.40
39:DF:141:ALA:O	39:DF:144:LYS:HB3	2.21	0.40
40:DG:172:LEU:HG	40:DG:176:LEU:CD1	2.52	0.40
40:DG:35:GLU:CG	40:DG:36:LYS:N	2.84	0.40
41:DH:149:ARG:HG3	41:DH:150:ALA:N	2.36	0.40
41:DH:65:HIS:O	41:DH:67:LEU:N	2.50	0.40
42:DI:33:ARG:HG2	42:DI:33:ARG:NH1	2.35	0.40
45:DP:112:LEU:HD13	45:DP:112:LEU:C	2.42	0.40
45:DP:88:LEU:O	45:DP:90:ARG:N	2.54	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DR:94:TYR:HA	47:DR:117:VAL:HG11	2.03	0.40
48:DS:95:HIS:CG	48:DS:96:GLY:N	2.90	0.40
49:DT:128:GLU:OE1	49:DT:128:GLU:C	2.60	0.40
49:DT:19:LEU:HD23	49:DT:19:LEU:N	2.36	0.40
51:DV:17:GLY:O	51:DV:18:LEU:HB3	2.21	0.40
51:DV:54:GLY:O	51:DV:56:SER:N	2.51	0.40
53:DX:39:ILE:C	53:DX:42:ALA:HB3	2.41	0.40
55:DZ:163:LEU:C	55:DZ:163:LEU:HD12	2.42	0.40
1:AA:116:A:H8	1:AA:116:A:O5'	2.03	0.40
1:AA:1302:U:C5	13:AM:17:VAL:CG2	3.00	0.40
1:AA:975:A:H5''	1:AA:1363(A):A:N6	2.36	0.40
1:AA:937:A:C2	1:AA:1379:G:O6	2.74	0.40
1:AA:149:A:C2	1:AA:150:C:C2	3.09	0.40
1:AA:199:G:O2'	1:AA:200:G:H5'	2.22	0.40
1:AA:339:C:OP2	44:BO:97:ARG:NH1	2.54	0.40
1:AA:383:A:H2'	1:AA:384:G:C5'	2.44	0.40
1:AA:779:C:C2'	1:AA:780:A:H5'	2.51	0.40
1:AA:781:A:C2'	1:AA:782:A:H5'	2.51	0.40
1:AA:908:A:C2	1:AA:909:A:C5	3.10	0.40
1:AA:1103:C:C4'	2:AB:98:LEU:HD13	2.51	0.40
3:AC:178:LEU:CD2	3:AC:178:LEU:N	2.83	0.40
4:AD:177:ASP:O	4:AD:177:ASP:OD1	2.40	0.40
4:AD:182:LYS:HG3	4:AD:182:LYS:O	2.22	0.40
4:AD:79:PHE:CD1	4:AD:207:TYR:HD1	2.40	0.40
4:AD:31:CYS:O	4:AD:32:ALA:HB3	2.22	0.40
4:AD:56:VAL:C	4:AD:58:LEU:N	2.73	0.40
7:AG:107:ALA:O	7:AG:110:GLN:HB2	2.21	0.40
10:AJ:13:HIS:HB3	10:AJ:68:HIS:CD2	2.57	0.40
1:AA:718:G:H5'	11:AK:117:ASN:HB2	2.02	0.40
11:AK:29:ILE:HG22	11:AK:44:SER:HB2	2.03	0.40
13:AM:115:LYS:O	13:AM:116:THR:C	2.60	0.40
13:AM:15:VAL:HG23	13:AM:16:ASP:N	2.36	0.40
13:AM:94:ARG:HD3	19:AS:82:GLY:N	2.36	0.40
16:AP:15:PRO:HB3	16:AP:17:TYR:CE1	2.57	0.40
17:AQ:90:ILE:O	17:AQ:91:ARG:C	2.60	0.40
26:B1:89:GLU:O	26:B1:93:GLU:HB2	2.22	0.40
28:B3:23:LEU:HD12	28:B3:50:VAL:HG11	2.02	0.40
29:B4:6:HIS:CA	40:BG:67:LYS:CE	3.00	0.40
31:B6:27:LYS:HA	31:B6:27:LYS:HD3	1.90	0.40
34:BA:1360:A:N7	34:BA:1361:G:N7	2.69	0.40
34:BA:1409:C:H2'	34:BA:1410:G:C8	2.56	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BA:1803:A:C2	34:BA:1822:G:H1'	2.57	0.40
34:BA:1902:C:H2'	34:BA:1903:G:O5'	2.22	0.40
34:BA:2192:G:C2'	34:BA:2193:G:H5''	2.51	0.40
34:BA:21:A:H2'	34:BA:22:C:C6	2.56	0.40
34:BA:2292:C:C2'	34:BA:2293:C:H5'	2.50	0.40
34:BA:2521:C:C4	34:BA:2522:U:C4	3.09	0.40
34:BA:45:C:H2'	34:BA:47:C:C6	2.54	0.40
34:BA:809:G:O2'	34:BA:810:U:H5'	2.21	0.40
34:BA:851:U:O2'	34:BA:852:G:H5'	2.20	0.40
34:BA:993:G:H21	51:BV:91:TYR:HH	1.68	0.40
37:BD:17:THR:CG2	37:BD:205:VAL:H	2.19	0.40
38:BE:175:VAL:O	38:BE:177:PRO:HD3	2.21	0.40
38:BE:6:GLY:HA2	38:BE:51:PHE:HE2	1.85	0.40
39:BF:179:GLU:OE1	39:BF:179:GLU:N	2.31	0.40
40:BG:177:GLY:O	40:BG:179:PRO:HD3	2.21	0.40
40:BG:55:LYS:O	40:BG:57:ALA:N	2.54	0.40
40:BG:82:LEU:C	40:BG:83:ARG:HG3	2.41	0.40
41:BH:154:PRO:CG	41:BH:155:SER:N	2.83	0.40
41:BH:72:ILE:O	41:BH:74:ASN:N	2.54	0.40
42:BI:66:GLU:HA	42:BI:66:GLU:OE1	2.21	0.40
42:BI:75:LEU:HD11	42:BI:105:HIS:CE1	2.57	0.40
43:BN:61:ARG:HH11	43:BN:61:ARG:HG3	1.85	0.40
44:BO:23:ARG:HG2	44:BO:23:ARG:NH1	2.31	0.40
45:BP:75:ILE:O	45:BP:77:ARG:HG2	2.22	0.40
46:BQ:141:GLN:HE21	55:BZ:71:VAL:C	2.24	0.40
46:BQ:80:GLU:HB3	46:BQ:81:VAL:H	1.62	0.40
48:BS:93:LYS:CA	48:BS:93:LYS:HE3	2.52	0.40
51:BV:47:VAL:CG1	51:BV:48:GLY:H	2.32	0.40
52:BW:88:ARG:HB3	52:BW:92:ARG:CB	2.47	0.40
53:BX:62:LYS:O	53:BX:63:LYS:HG3	2.21	0.40
53:BX:93:GLU:O	53:BX:93:GLU:HG3	2.21	0.40
1:CA:1030(D):A:C2'	1:CA:1031:G:H5'	2.51	0.40
1:CA:1134:G:N2	1:CA:1141:C:C2	2.89	0.40
1:CA:1300:G:H1'	1:CA:1301:U:C5	2.55	0.40
1:CA:1349:A:OP1	9:CI:118:LYS:O	2.40	0.40
1:CA:1516:G:H2'	1:CA:1518:A:OP2	2.22	0.40
1:CA:157:G:C2	1:CA:165:C:N3	2.90	0.40
1:CA:283:C:H2'	1:CA:284:G:H8	1.86	0.40
1:CA:414:A:H5'	1:CA:414:A:C8	2.52	0.40
1:CA:423:G:H2'	1:CA:424:G:C4'	2.52	0.40
3:CC:178:LEU:N	3:CC:178:LEU:CD2	2.84	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:104:VAL:C	4:CD:106:TYR:H	2.25	0.40
4:CD:157:LEU:O	4:CD:159:ARG:N	2.54	0.40
4:CD:63:LYS:O	4:CD:64:LEU:C	2.60	0.40
4:CD:98:GLU:O	4:CD:103:ASN:ND2	2.46	0.40
7:CG:36:LYS:O	7:CG:37:ASN:C	2.60	0.40
1:CA:875:C:O2'	8:CH:14:ARG:NH1	2.55	0.40
10:CJ:6:ILE:CG1	10:CJ:72:VAL:O	2.68	0.40
15:CO:82:ILE:CD1	15:CO:82:ILE:C	2.90	0.40
26:D1:13:ILE:HG13	26:D1:14:VAL:HG12	2.03	0.40
27:D2:30:ARG:NH1	27:D2:30:ARG:HG3	2.32	0.40
31:D6:45:LYS:HG3	34:DA:2371:G:O4'	2.22	0.40
34:DA:1291:C:H2'	34:DA:1292:U:C6	2.56	0.40
34:DA:1305:C:O2'	34:DA:1306:C:H5'	2.21	0.40
34:DA:1494:A:O2'	34:DA:1495:A:OP1	2.37	0.40
34:DA:1544:A:O3'	34:DA:1544:A:N3	2.54	0.40
34:DA:1688:U:O2	34:DA:1700:A:H8	2.04	0.40
34:DA:181:A:C2	34:DA:182:A:C4	3.09	0.40
34:DA:2039:C:C4	34:DA:2040:C:C5	3.10	0.40
34:DA:242:G:N2	34:DA:254:G:H2'	2.36	0.40
34:DA:271(Q):G:O2'	34:DA:271(R):G:P	2.79	0.40
34:DA:311:A:O4'	34:DA:332:A:C4	2.74	0.40
34:DA:389:G:O5'	34:DA:389:G:H8	2.04	0.40
34:DA:848:G:N9	34:DA:933:A:H8	2.20	0.40
35:DB:66:A:O2'	35:DB:67:G:O5'	2.38	0.40
37:DD:35:LYS:CE	37:DD:104:TYR:HB2	2.51	0.40
37:DD:141:VAL:O	37:DD:141:VAL:HG23	2.21	0.40
37:DD:255:LYS:CA	37:DD:255:LYS:HE3	2.52	0.40
37:DD:35:LYS:CA	37:DD:64:ILE:CG2	2.99	0.40
38:DE:149:ARG:NH1	38:DE:149:ARG:HG3	2.36	0.40
38:DE:55:ASN:HD21	38:DE:75:VAL:HG21	1.83	0.40
39:DF:165:ARG:HG2	39:DF:165:ARG:H	1.57	0.40
39:DF:53:THR:HG23	39:DF:56:GLU:H	1.85	0.40
41:DH:103:LEU:HG	41:DH:105:LEU:HD12	2.04	0.40
41:DH:146:ALA:O	41:DH:150:ALA:HB3	2.21	0.40
42:DI:10:GLU:O	42:DI:12:LEU:HD23	2.21	0.40
42:DI:123:LEU:HD11	42:DI:144:VAL:HG22	2.01	0.40
44:DO:119:PRO:O	44:DO:120:GLU:CB	2.68	0.40
44:DO:79:PHE:HD2	49:DT:72:VAL:CG2	2.35	0.40
45:DP:68:GLN:HG3	45:DP:68:GLN:O	2.21	0.40
34:DA:2496:C:P	46:DQ:81:VAL:HG13	2.61	0.40
34:DA:911:A:C2'	46:DQ:9:TYR:OH	2.66	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DS:63:THR:O	48:DS:66:ALA:O	2.39	0.40
49:DT:28:VAL:HG21	49:DT:46:GLU:HA	2.00	0.40
1:CA:345:C:H5'	49:DT:36:GLU:HG3	2.02	0.40
34:DA:1227:G:P	50:DU:16:LYS:NZ	2.95	0.40
51:DV:78:LYS:C	51:DV:78:LYS:CD	2.83	0.40
53:DX:58:HIS:O	53:DX:59:VAL:HG22	2.21	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	233/256 (91%)	147 (63%)	54 (23%)	32 (14%)	0	0
2	CB	233/256 (91%)	149 (64%)	52 (22%)	32 (14%)	0	0
3	AC	205/239 (86%)	130 (63%)	55 (27%)	20 (10%)	0	1
3	CC	205/239 (86%)	130 (63%)	57 (28%)	18 (9%)	1	1
4	AD	206/209 (99%)	130 (63%)	51 (25%)	25 (12%)	0	1
4	CD	206/209 (99%)	128 (62%)	54 (26%)	24 (12%)	0	1
5	AE	149/162 (92%)	108 (72%)	28 (19%)	13 (9%)	1	1
5	CE	149/162 (92%)	107 (72%)	30 (20%)	12 (8%)	1	2
6	AF	99/101 (98%)	72 (73%)	21 (21%)	6 (6%)	1	4
6	CF	99/101 (98%)	72 (73%)	22 (22%)	5 (5%)	2	6
7	AG	153/156 (98%)	100 (65%)	41 (27%)	12 (8%)	1	2
7	CG	153/156 (98%)	100 (65%)	42 (28%)	11 (7%)	1	2
8	AH	136/138 (99%)	103 (76%)	28 (21%)	5 (4%)	3	11
8	CH	136/138 (99%)	102 (75%)	29 (21%)	5 (4%)	3	11
9	AI	121/128 (94%)	80 (66%)	30 (25%)	11 (9%)	1	1

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	CI	121/128 (94%)	81 (67%)	28 (23%)	12 (10%)	0	1
10	AJ	97/105 (92%)	70 (72%)	18 (19%)	9 (9%)	0	1
10	CJ	97/105 (92%)	70 (72%)	18 (19%)	9 (9%)	0	1
11	AK	117/129 (91%)	87 (74%)	25 (21%)	5 (4%)	2	8
11	CK	117/129 (91%)	88 (75%)	24 (20%)	5 (4%)	2	8
12	AL	123/135 (91%)	83 (68%)	22 (18%)	18 (15%)	0	0
12	CL	123/135 (91%)	84 (68%)	20 (16%)	19 (15%)	0	0
13	AM	113/126 (90%)	68 (60%)	26 (23%)	19 (17%)	0	0
13	CM	113/126 (90%)	69 (61%)	23 (20%)	21 (19%)	0	0
14	AN	58/61 (95%)	35 (60%)	17 (29%)	6 (10%)	0	1
14	CN	58/61 (95%)	35 (60%)	17 (29%)	6 (10%)	0	1
15	AO	86/89 (97%)	48 (56%)	34 (40%)	4 (5%)	2	7
15	CO	86/89 (97%)	50 (58%)	31 (36%)	5 (6%)	1	4
16	AP	82/88 (93%)	53 (65%)	24 (29%)	5 (6%)	1	4
16	CP	82/88 (93%)	53 (65%)	25 (30%)	4 (5%)	2	7
17	AQ	98/105 (93%)	74 (76%)	15 (15%)	9 (9%)	1	1
17	CQ	98/105 (93%)	75 (76%)	15 (15%)	8 (8%)	1	2
18	AR	68/88 (77%)	38 (56%)	21 (31%)	9 (13%)	0	0
18	CR	68/88 (77%)	38 (56%)	21 (31%)	9 (13%)	0	0
19	AS	77/93 (83%)	52 (68%)	14 (18%)	11 (14%)	0	0
19	CS	77/93 (83%)	51 (66%)	15 (20%)	11 (14%)	0	0
20	AT	97/106 (92%)	54 (56%)	29 (30%)	14 (14%)	0	0
20	CT	97/106 (92%)	56 (58%)	27 (28%)	14 (14%)	0	0
21	AU	23/27 (85%)	18 (78%)	4 (17%)	1 (4%)	2	8
21	CU	23/27 (85%)	18 (78%)	4 (17%)	1 (4%)	2	8
25	B0	83/85 (98%)	62 (75%)	16 (19%)	5 (6%)	1	4
25	D0	83/85 (98%)	63 (76%)	15 (18%)	5 (6%)	1	4
26	B1	87/98 (89%)	43 (49%)	25 (29%)	19 (22%)	0	0
26	D1	87/98 (89%)	42 (48%)	21 (24%)	24 (28%)	0	0
27	B2	49/72 (68%)	16 (33%)	16 (33%)	17 (35%)	0	0
27	D2	49/72 (68%)	15 (31%)	15 (31%)	19 (39%)	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
28	B3	58/60 (97%)	42 (72%)	12 (21%)	4 (7%)	1	3
28	D3	58/60 (97%)	42 (72%)	12 (21%)	4 (7%)	1	3
29	B4	48/71 (68%)	14 (29%)	11 (23%)	23 (48%)	0	0
29	D4	48/71 (68%)	14 (29%)	11 (23%)	23 (48%)	0	0
30	B5	57/60 (95%)	37 (65%)	13 (23%)	7 (12%)	0	1
30	D5	57/60 (95%)	38 (67%)	12 (21%)	7 (12%)	0	1
31	B6	41/54 (76%)	18 (44%)	16 (39%)	7 (17%)	0	0
31	D6	41/54 (76%)	18 (44%)	16 (39%)	7 (17%)	0	0
32	B7	47/49 (96%)	36 (77%)	10 (21%)	1 (2%)	7	23
32	D7	47/49 (96%)	37 (79%)	8 (17%)	2 (4%)	2	8
33	B8	62/65 (95%)	38 (61%)	13 (21%)	11 (18%)	0	0
33	D8	62/65 (95%)	37 (60%)	14 (23%)	11 (18%)	0	0
36	BC	183/229 (80%)	88 (48%)	52 (28%)	43 (24%)	0	0
36	DC	183/229 (80%)	87 (48%)	53 (29%)	43 (24%)	0	0
37	BD	270/276 (98%)	193 (72%)	51 (19%)	26 (10%)	0	1
37	DD	270/276 (98%)	194 (72%)	50 (18%)	26 (10%)	0	1
38	BE	203/206 (98%)	116 (57%)	49 (24%)	38 (19%)	0	0
38	DE	203/206 (98%)	116 (57%)	49 (24%)	38 (19%)	0	0
39	BF	206/210 (98%)	142 (69%)	40 (19%)	24 (12%)	0	1
39	DF	206/210 (98%)	142 (69%)	41 (20%)	23 (11%)	0	1
40	BG	177/182 (97%)	93 (52%)	56 (32%)	28 (16%)	0	0
40	DG	177/182 (97%)	101 (57%)	45 (25%)	31 (18%)	0	0
41	BH	158/180 (88%)	100 (63%)	31 (20%)	27 (17%)	0	0
41	DH	158/180 (88%)	100 (63%)	31 (20%)	27 (17%)	0	0
42	BI	144/148 (97%)	98 (68%)	36 (25%)	10 (7%)	1	3
42	DI	144/148 (97%)	97 (67%)	36 (25%)	11 (8%)	1	2
43	BN	137/140 (98%)	75 (55%)	35 (26%)	27 (20%)	0	0
43	DN	137/140 (98%)	77 (56%)	33 (24%)	27 (20%)	0	0
44	BO	120/122 (98%)	92 (77%)	17 (14%)	11 (9%)	1	1
44	DO	120/122 (98%)	90 (75%)	18 (15%)	12 (10%)	0	1
45	BP	144/150 (96%)	72 (50%)	37 (26%)	35 (24%)	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
45	DP	144/150 (96%)	72 (50%)	38 (26%)	34 (24%)	0	0
46	BQ	134/141 (95%)	81 (60%)	34 (25%)	19 (14%)	0	0
46	DQ	134/141 (95%)	79 (59%)	35 (26%)	20 (15%)	0	0
47	BR	115/118 (98%)	74 (64%)	20 (17%)	21 (18%)	0	0
47	DR	115/118 (98%)	72 (63%)	23 (20%)	20 (17%)	0	0
48	BS	97/112 (87%)	49 (50%)	19 (20%)	29 (30%)	0	0
48	DS	97/112 (87%)	49 (50%)	18 (19%)	30 (31%)	0	0
49	BT	136/146 (93%)	77 (57%)	34 (25%)	25 (18%)	0	0
49	DT	136/146 (93%)	79 (58%)	33 (24%)	24 (18%)	0	0
50	BU	115/118 (98%)	61 (53%)	42 (36%)	12 (10%)	0	1
50	DU	115/118 (98%)	61 (53%)	40 (35%)	14 (12%)	0	1
51	BV	97/101 (96%)	47 (48%)	23 (24%)	27 (28%)	0	0
51	DV	97/101 (96%)	47 (48%)	23 (24%)	27 (28%)	0	0
52	BW	111/113 (98%)	74 (67%)	23 (21%)	14 (13%)	0	1
52	DW	111/113 (98%)	77 (69%)	19 (17%)	15 (14%)	0	0
53	BX	91/96 (95%)	45 (50%)	23 (25%)	23 (25%)	0	0
53	DX	91/96 (95%)	45 (50%)	23 (25%)	23 (25%)	0	0
54	BY	99/110 (90%)	41 (41%)	24 (24%)	34 (34%)	0	0
54	DY	99/110 (90%)	41 (41%)	24 (24%)	34 (34%)	0	0
55	BZ	175/206 (85%)	99 (57%)	48 (27%)	28 (16%)	0	0
55	DZ	175/206 (85%)	109 (62%)	33 (19%)	33 (19%)	0	0
All	All	11570/12518 (92%)	7170 (62%)	2726 (24%)	1674 (14%)	0	0

All (1674) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	52	GLU
2	AB	77	ALA
2	AB	84	GLU
2	AB	154	LEU
2	AB	165	VAL
2	AB	195	ASP
2	AB	226	ARG
3	AC	12	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	47	LEU
3	AC	54	ARG
3	AC	189	ALA
4	AD	3	ARG
4	AD	14	ARG
4	AD	44	GLY
4	AD	92	VAL
4	AD	178	VAL
5	AE	37	ARG
6	AF	40	VAL
7	AG	4	ARG
7	AG	121	ALA
9	AI	23	ASN
9	AI	95	LYS
9	AI	100	GLY
9	AI	117	HIS
9	AI	124	GLN
12	AL	28	LYS
12	AL	47	LYS
12	AL	91	LYS
12	AL	92	ASP
13	AM	12	ASN
13	AM	67	GLU
13	AM	83	ASP
13	AM	106	ASN
13	AM	116	THR
14	AN	37	PHE
15	AO	24	SER
17	AQ	68	ARG
17	AQ	99	SER
18	AR	20	ALA
18	AR	87	ARG
19	AS	10	PHE
19	AS	80	TYR
20	AT	11	SER
20	AT	28	ALA
20	AT	74	LYS
20	AT	95	ALA
26	B1	10	LYS
26	B1	12	PRO
26	B1	13	ILE
26	B1	14	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	B1	15	ALA
26	B1	33	LYS
26	B1	47	GLN
26	B1	48	LYS
26	B1	49	VAL
26	B1	90	ILE
26	B1	94	LEU
27	B2	16	LEU
27	B2	35	LEU
27	B2	40	SER
27	B2	41	ILE
27	B2	43	GLN
27	B2	48	HIS
27	B2	52	ASP
27	B2	61	LEU
28	B3	13	ILE
29	B4	3	GLU
29	B4	6	HIS
29	B4	7	PRO
29	B4	10	VAL
29	B4	11	PRO
29	B4	16	CYS
29	B4	29	PRO
29	B4	31	ILE
29	B4	37	SER
30	B5	4	HIS
30	B5	34	PRO
30	B5	56	LYS
31	B6	31	PRO
33	B8	17	THR
33	B8	32	LEU
33	B8	37	SER
33	B8	51	ALA
36	BC	19	VAL
36	BC	35	ALA
36	BC	46	LYS
36	BC	57	ASN
36	BC	63	SER
36	BC	160	ARG
36	BC	161	ILE
36	BC	166	ASP
36	BC	172	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BC	173	ALA
36	BC	174	PRO
36	BC	179	SER
36	BC	182	PRO
36	BC	191	ALA
36	BC	192	PHE
36	BC	201	PRO
36	BC	205	LYS
36	BC	209	LEU
36	BC	213	TYR
36	BC	216	THR
36	BC	220	PRO
37	BD	25	THR
37	BD	26	LYS
37	BD	28	GLU
37	BD	45	ASN
37	BD	225	ALA
37	BD	267	SER
38	BE	2	LYS
38	BE	4	ILE
38	BE	45	THR
38	BE	53	PRO
38	BE	54	GLN
38	BE	57	LYS
38	BE	77	ILE
38	BE	82	ARG
38	BE	92	THR
38	BE	93	VAL
38	BE	118	LYS
38	BE	131	ALA
38	BE	173	VAL
38	BE	187	ALA
38	BE	201	THR
39	BF	2	LYS
39	BF	14	PRO
39	BF	21	ALA
39	BF	115	ALA
39	BF	133	ASN
39	BF	206	ILE
40	BG	47	LYS
40	BG	81	LYS
40	BG	82	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BG	86	MET
40	BG	87	PRO
40	BG	96	ARG
40	BG	97	ASP
40	BG	115	ARG
40	BG	153	ARG
41	BH	13	LYS
41	BH	47	GLU
41	BH	55	PRO
41	BH	84	SER
41	BH	85	LYS
41	BH	89	ILE
41	BH	90	LYS
41	BH	92	ILE
41	BH	137	ASP
41	BH	138	LYS
41	BH	153	LYS
41	BH	154	PRO
41	BH	158	HIS
41	BH	159	GLU
42	BI	133	HIS
42	BI	145	VAL
43	BN	13	TRP
43	BN	47	ALA
43	BN	57	ALA
43	BN	62	VAL
43	BN	63	THR
43	BN	74	ARG
43	BN	78	TYR
43	BN	96	GLU
44	BO	5	GLN
44	BO	12	ASP
44	BO	26	LYS
44	BO	29	ASN
44	BO	100	GLY
44	BO	101	PRO
44	BO	102	VAL
44	BO	120	GLU
45	BP	12	ALA
45	BP	15	ARG
45	BP	34	GLY
45	BP	35	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	BP	36	LYS
45	BP	47	ASP
45	BP	58	THR
45	BP	101	VAL
45	BP	106	LEU
45	BP	123	LEU
45	BP	146	VAL
45	BP	147	LEU
46	BQ	11	LYS
46	BQ	30	GLY
46	BQ	79	LEU
46	BQ	83	MET
46	BQ	134	ARG
47	BR	5	LYS
47	BR	8	ARG
47	BR	9	LYS
47	BR	14	SER
47	BR	45	ARG
47	BR	107	ASP
47	BR	116	LEU
47	BR	117	VAL
48	BS	14	VAL
48	BS	29	PHE
48	BS	57	LYS
48	BS	58	LEU
48	BS	59	LYS
48	BS	67	ARG
48	BS	74	ALA
48	BS	87	PHE
48	BS	89	ARG
48	BS	100	ALA
48	BS	102	ALA
49	BT	24	PRO
49	BT	28	VAL
49	BT	30	VAL
49	BT	41	ARG
49	BT	58	ASN
49	BT	80	SER
49	BT	97	ALA
49	BT	103	ARG
49	BT	107	ASP
49	BT	115	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
50	BU	9	VAL
50	BU	88	ILE
50	BU	92	ARG
50	BU	93	LYS
51	BV	15	GLU
51	BV	28	GLU
51	BV	47	VAL
51	BV	51	VAL
51	BV	52	VAL
51	BV	73	SER
52	BW	11	ARG
52	BW	48	ALA
53	BX	25	LYS
53	BX	59	VAL
53	BX	60	ARG
53	BX	69	TYR
53	BX	81	VAL
53	BX	84	ALA
53	BX	88	LYS
53	BX	89	ILE
54	BY	7	VAL
54	BY	16	ALA
54	BY	17	SER
54	BY	27	VAL
54	BY	30	VAL
54	BY	38	ILE
54	BY	55	TYR
54	BY	56	PRO
54	BY	62	GLU
54	BY	66	PRO
54	BY	77	PRO
54	BY	78	ALA
54	BY	90	LEU
55	BZ	8	TYR
55	BZ	18	LEU
55	BZ	19	ARG
55	BZ	65	GLN
55	BZ	78	LYS
55	BZ	119	GLU
55	BZ	142	SER
55	BZ	148	ASP
55	BZ	168	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	CB	15	VAL
2	CB	52	GLU
2	CB	77	ALA
2	CB	84	GLU
2	CB	154	LEU
2	CB	165	VAL
2	CB	195	ASP
2	CB	226	ARG
3	CC	12	LEU
3	CC	47	LEU
3	CC	189	ALA
4	CD	3	ARG
4	CD	14	ARG
4	CD	44	GLY
4	CD	92	VAL
4	CD	178	VAL
5	CE	37	ARG
6	CF	40	VAL
7	CG	4	ARG
7	CG	121	ALA
9	CI	23	ASN
9	CI	95	LYS
9	CI	100	GLY
9	CI	117	HIS
9	CI	124	GLN
12	CL	28	LYS
12	CL	47	LYS
12	CL	91	LYS
12	CL	92	ASP
13	CM	12	ASN
13	CM	67	GLU
13	CM	83	ASP
13	CM	106	ASN
13	CM	116	THR
14	CN	37	PHE
15	CO	24	SER
17	CQ	68	ARG
17	CQ	80	GLY
17	CQ	99	SER
18	CR	20	ALA
18	CR	87	ARG
19	CS	10	PHE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
19	CS	80	TYR
20	CT	11	SER
20	CT	28	ALA
20	CT	74	LYS
20	CT	95	ALA
26	D1	10	LYS
26	D1	11	ARG
26	D1	16	ASN
26	D1	27	GLU
26	D1	47	GLN
26	D1	69	LYS
26	D1	81	LYS
26	D1	83	GLU
26	D1	88	LYS
27	D2	13	ALA
27	D2	15	LYS
27	D2	32	LEU
27	D2	35	LEU
27	D2	42	GLY
27	D2	52	ASP
27	D2	54	LYS
27	D2	55	ARG
27	D2	57	ILE
28	D3	13	ILE
29	D4	3	GLU
29	D4	6	HIS
29	D4	7	PRO
29	D4	10	VAL
29	D4	11	PRO
29	D4	16	CYS
29	D4	29	PRO
29	D4	31	ILE
29	D4	37	SER
30	D5	4	HIS
30	D5	34	PRO
30	D5	56	LYS
31	D6	31	PRO
33	D8	17	THR
33	D8	32	LEU
33	D8	37	SER
33	D8	51	ALA
36	DC	19	VAL

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	DC	35	ALA
36	DC	46	LYS
36	DC	57	ASN
36	DC	63	SER
36	DC	160	ARG
36	DC	161	ILE
36	DC	166	ASP
36	DC	172	HIS
36	DC	173	ALA
36	DC	174	PRO
36	DC	179	SER
36	DC	182	PRO
36	DC	191	ALA
36	DC	192	PHE
36	DC	201	PRO
36	DC	205	LYS
36	DC	209	LEU
36	DC	213	TYR
36	DC	216	THR
36	DC	220	PRO
37	DD	25	THR
37	DD	26	LYS
37	DD	28	GLU
37	DD	225	ALA
37	DD	267	SER
38	DE	2	LYS
38	DE	4	ILE
38	DE	45	THR
38	DE	53	PRO
38	DE	54	GLN
38	DE	57	LYS
38	DE	77	ILE
38	DE	82	ARG
38	DE	92	THR
38	DE	93	VAL
38	DE	118	LYS
38	DE	131	ALA
38	DE	173	VAL
38	DE	187	ALA
38	DE	201	THR
39	DF	2	LYS
39	DF	14	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	DF	21	ALA
39	DF	115	ALA
39	DF	133	ASN
39	DF	206	ILE
40	DG	3	LEU
40	DG	4	ASP
40	DG	14	GLU
40	DG	47	LYS
40	DG	82	LEU
40	DG	84	LYS
40	DG	86	MET
40	DG	87	PRO
40	DG	108	ASN
40	DG	110	ALA
40	DG	129	GLY
40	DG	153	ARG
40	DG	159	VAL
41	DH	13	LYS
41	DH	47	GLU
41	DH	55	PRO
41	DH	84	SER
41	DH	85	LYS
41	DH	89	ILE
41	DH	90	LYS
41	DH	92	ILE
41	DH	137	ASP
41	DH	138	LYS
41	DH	153	LYS
41	DH	154	PRO
41	DH	158	HIS
41	DH	159	GLU
42	DI	133	HIS
42	DI	145	VAL
43	DN	13	TRP
43	DN	47	ALA
43	DN	57	ALA
43	DN	62	VAL
43	DN	63	THR
43	DN	74	ARG
43	DN	78	TYR
43	DN	96	GLU
43	DN	130	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	DO	5	GLN
44	DO	12	ASP
44	DO	29	ASN
44	DO	100	GLY
44	DO	101	PRO
44	DO	102	VAL
44	DO	120	GLU
45	DP	12	ALA
45	DP	15	ARG
45	DP	34	GLY
45	DP	35	HIS
45	DP	36	LYS
45	DP	47	ASP
45	DP	58	THR
45	DP	101	VAL
45	DP	106	LEU
45	DP	123	LEU
45	DP	146	VAL
45	DP	147	LEU
46	DQ	11	LYS
46	DQ	30	GLY
46	DQ	79	LEU
46	DQ	83	MET
46	DQ	134	ARG
47	DR	5	LYS
47	DR	8	ARG
47	DR	9	LYS
47	DR	14	SER
47	DR	45	ARG
47	DR	107	ASP
47	DR	116	LEU
47	DR	117	VAL
48	DS	14	VAL
48	DS	29	PHE
48	DS	57	LYS
48	DS	58	LEU
48	DS	59	LYS
48	DS	67	ARG
48	DS	74	ALA
48	DS	87	PHE
48	DS	89	ARG
48	DS	100	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	DS	102	ALA
49	DT	24	PRO
49	DT	28	VAL
49	DT	30	VAL
49	DT	41	ARG
49	DT	58	ASN
49	DT	80	SER
49	DT	97	ALA
49	DT	107	ASP
49	DT	115	ARG
50	DU	9	VAL
50	DU	88	ILE
50	DU	92	ARG
50	DU	93	LYS
51	DV	15	GLU
51	DV	28	GLU
51	DV	47	VAL
51	DV	51	VAL
51	DV	52	VAL
51	DV	64	HIS
51	DV	73	SER
52	DW	11	ARG
52	DW	48	ALA
53	DX	25	LYS
53	DX	59	VAL
53	DX	60	ARG
53	DX	69	TYR
53	DX	81	VAL
53	DX	84	ALA
53	DX	89	ILE
54	DY	7	VAL
54	DY	16	ALA
54	DY	17	SER
54	DY	27	VAL
54	DY	30	VAL
54	DY	38	ILE
54	DY	55	TYR
54	DY	56	PRO
54	DY	62	GLU
54	DY	66	PRO
54	DY	77	PRO
54	DY	78	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	DY	90	LEU
55	DZ	34	ASN
55	DZ	41	LEU
55	DZ	45	ASP
55	DZ	53	ILE
55	DZ	168	GLU
2	AB	8	LYS
2	AB	9	GLU
2	AB	32	ILE
2	AB	78	GLN
2	AB	88	ALA
2	AB	110	GLN
2	AB	194	PRO
2	AB	204	ASN
2	AB	238	LEU
3	AC	60	ALA
3	AC	127	ARG
3	AC	145	GLY
3	AC	168	ALA
4	AD	5	ILE
4	AD	53	ASP
4	AD	153	ARG
4	AD	160	GLN
4	AD	171	GLY
4	AD	179	GLU
4	AD	200	GLU
5	AE	55	VAL
5	AE	128	PRO
5	AE	129	ILE
5	AE	140	ARG
6	AF	69	GLU
7	AG	36	LYS
7	AG	77	SER
7	AG	90	GLU
7	AG	155	ARG
8	AH	121	ASP
10	AJ	57	LYS
10	AJ	60	ARG
10	AJ	84	GLN
12	AL	12	ARG
12	AL	29	GLY
12	AL	62	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	AL	72	GLY
13	AM	6	GLY
13	AM	18	ALA
13	AM	48	LEU
13	AM	60	VAL
13	AM	63	THR
13	AM	100	GLY
13	AM	117	VAL
14	AN	13	THR
14	AN	16	PHE
14	AN	23	ARG
15	AO	76	GLU
16	AP	72	ARG
17	AQ	34	LYS
17	AQ	80	GLY
17	AQ	95	TYR
18	AR	25	THR
18	AR	41	LYS
18	AR	65	ILE
19	AS	26	GLY
19	AS	28	LYS
20	AT	49	ALA
20	AT	82	SER
21	AU	3	LYS
25	B0	5	LYS
25	B0	20	ARG
26	B1	11	ARG
26	B1	81	LYS
26	B1	87	PRO
27	B2	14	ARG
27	B2	42	GLY
27	B2	53	LEU
27	B2	59	ARG
28	B3	39	ASP
29	B4	23	GLU
29	B4	24	THR
30	B5	35	GLU
33	B8	3	LYS
33	B8	30	ARG
33	B8	35	GLN
33	B8	36	LYS
33	B8	43	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
36	BC	62	VAL
36	BC	125	SER
36	BC	133	PRO
36	BC	148	ASN
36	BC	211	SER
36	BC	214	VAL
37	BD	3	VAL
37	BD	32	SER
37	BD	33	LEU
37	BD	223	GLY
37	BD	236	GLY
38	BE	64	LYS
38	BE	69	LYS
38	BE	70	ALA
38	BE	71	GLY
38	BE	76	ARG
38	BE	88	GLY
38	BE	89	ASP
38	BE	130	GLY
38	BE	135	HIS
38	BE	184	VAL
38	BE	186	GLY
39	BF	64	ILE
39	BF	85	GLY
39	BF	86	GLY
39	BF	113	ALA
39	BF	134	GLY
40	BG	14	GLU
40	BG	84	LYS
40	BG	107	LEU
40	BG	110	ALA
40	BG	155	MET
41	BH	41	MET
41	BH	76	VAL
41	BH	149	ARG
41	BH	160	LYS
42	BI	120	ILE
42	BI	121	LYS
42	BI	122	GLU
43	BN	19	GLU
43	BN	34	LEU
43	BN	52	VAL

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
43	BN	58	ASP
43	BN	64	GLY
43	BN	94	HIS
43	BN	95	PRO
43	BN	127	ASP
43	BN	130	HIS
45	BP	6	LEU
45	BP	10	PRO
45	BP	18	ARG
45	BP	31	ALA
45	BP	52	GLU
45	BP	65	ARG
45	BP	67	MET
45	BP	69	GLY
45	BP	102	ARG
45	BP	115	LEU
45	BP	141	ALA
46	BQ	24	GLY
46	BQ	59	ARG
46	BQ	71	ASP
46	BQ	90	VAL
46	BQ	136	ALA
47	BR	4	LEU
47	BR	7	GLY
47	BR	12	ARG
47	BR	42	LYS
47	BR	86	ARG
48	BS	18	ILE
48	BS	23	ARG
48	BS	24	LEU
48	BS	45	GLY
48	BS	62	LYS
48	BS	66	ALA
48	BS	88	ASP
48	BS	92	TYR
49	BT	18	ASP
49	BT	83	ILE
49	BT	85	LYS
50	BU	7	GLY
50	BU	25	TRP
50	BU	32	PHE
50	BU	67	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	BV	3	ALA
51	BV	23	GLU
51	BV	44	LYS
51	BV	50	PRO
51	BV	64	HIS
51	BV	68	LYS
51	BV	72	VAL
51	BV	91	TYR
52	BW	6	ILE
52	BW	35	ILE
52	BW	93	ALA
53	BX	6	ASP
53	BX	34	ALA
53	BX	36	LYS
53	BX	65	ARG
53	BX	77	LYS
53	BX	86	GLY
53	BX	90	GLU
54	BY	15	VAL
54	BY	80	GLY
55	BZ	49	ARG
55	BZ	110	GLY
55	BZ	121	HIS
55	BZ	122	ARG
55	BZ	147	GLY
55	BZ	158	PRO
55	BZ	165	VAL
2	CB	8	LYS
2	CB	9	GLU
2	CB	32	ILE
2	CB	78	GLN
2	CB	88	ALA
2	CB	101	MET
2	CB	194	PRO
2	CB	204	ASN
2	CB	238	LEU
3	CC	54	ARG
3	CC	60	ALA
3	CC	127	ARG
3	CC	145	GLY
3	CC	168	ALA
4	CD	5	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	53	ASP
4	CD	153	ARG
4	CD	160	GLN
4	CD	171	GLY
4	CD	179	GLU
4	CD	200	GLU
5	CE	55	VAL
5	CE	128	PRO
5	CE	129	ILE
5	CE	132	ALA
5	CE	140	ARG
7	CG	36	LYS
7	CG	77	SER
7	CG	90	GLU
7	CG	155	ARG
8	CH	121	ASP
10	CJ	57	LYS
10	CJ	60	ARG
10	CJ	84	GLN
12	CL	12	ARG
12	CL	29	GLY
12	CL	62	SER
12	CL	72	GLY
13	CM	6	GLY
13	CM	18	ALA
13	CM	19	LEU
13	CM	60	VAL
13	CM	63	THR
13	CM	100	GLY
13	CM	117	VAL
14	CN	13	THR
14	CN	16	PHE
14	CN	58	LYS
15	CO	76	GLU
16	CP	72	ARG
17	CQ	34	LYS
17	CQ	95	TYR
18	CR	25	THR
18	CR	41	LYS
18	CR	65	ILE
19	CS	26	GLY
19	CS	28	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
20	CT	49	ALA
20	CT	82	SER
21	CU	3	LYS
25	D0	20	ARG
26	D1	22	GLY
26	D1	48	LYS
26	D1	79	GLY
27	D2	33	MET
27	D2	37	PHE
27	D2	40	SER
27	D2	41	ILE
27	D2	43	GLN
28	D3	39	ASP
29	D4	8	LYS
29	D4	23	GLU
29	D4	24	THR
30	D5	35	GLU
33	D8	3	LYS
33	D8	30	ARG
33	D8	35	GLN
33	D8	36	LYS
33	D8	43	GLN
36	DC	62	VAL
36	DC	125	SER
36	DC	133	PRO
36	DC	148	ASN
36	DC	211	SER
36	DC	214	VAL
37	DD	3	VAL
37	DD	33	LEU
37	DD	45	ASN
37	DD	223	GLY
37	DD	236	GLY
38	DE	64	LYS
38	DE	69	LYS
38	DE	70	ALA
38	DE	76	ARG
38	DE	88	GLY
38	DE	89	ASP
38	DE	130	GLY
38	DE	169	ASN
38	DE	186	GLY

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
39	DF	64	ILE
39	DF	85	GLY
39	DF	86	GLY
39	DF	134	GLY
39	DF	168	ARG
40	DG	24	GLY
40	DG	43	LEU
40	DG	48	GLU
40	DG	88	ILE
40	DG	96	ARG
40	DG	181	ARG
41	DH	41	MET
41	DH	73	ALA
41	DH	76	VAL
41	DH	149	ARG
42	DI	120	ILE
42	DI	122	GLU
43	DN	34	LEU
43	DN	52	VAL
43	DN	58	ASP
43	DN	64	GLY
43	DN	94	HIS
43	DN	95	PRO
43	DN	127	ASP
44	DO	26	LYS
44	DO	35	VAL
45	DP	6	LEU
45	DP	10	PRO
45	DP	18	ARG
45	DP	31	ALA
45	DP	39	LYS
45	DP	52	GLU
45	DP	65	ARG
45	DP	67	MET
45	DP	69	GLY
45	DP	102	ARG
45	DP	115	LEU
45	DP	141	ALA
46	DQ	24	GLY
46	DQ	59	ARG
46	DQ	71	ASP
46	DQ	90	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	DQ	136	ALA
47	DR	4	LEU
47	DR	7	GLY
47	DR	12	ARG
47	DR	42	LYS
47	DR	86	ARG
48	DS	18	ILE
48	DS	23	ARG
48	DS	24	LEU
48	DS	45	GLY
48	DS	62	LYS
48	DS	66	ALA
48	DS	88	ASP
48	DS	92	TYR
49	DT	18	ASP
49	DT	83	ILE
49	DT	85	LYS
49	DT	103	ARG
50	DU	7	GLY
50	DU	25	TRP
50	DU	32	PHE
50	DU	67	ALA
51	DV	3	ALA
51	DV	23	GLU
51	DV	44	LYS
51	DV	50	PRO
51	DV	68	LYS
51	DV	72	VAL
51	DV	91	TYR
52	DW	6	ILE
52	DW	35	ILE
52	DW	44	ALA
52	DW	59	VAL
52	DW	60	ASN
52	DW	93	ALA
53	DX	6	ASP
53	DX	34	ALA
53	DX	36	LYS
53	DX	65	ARG
53	DX	77	LYS
53	DX	86	GLY
53	DX	88	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
53	DX	90	GLU
54	DY	15	VAL
54	DY	80	GLY
55	DZ	31	ARG
55	DZ	64	GLY
55	DZ	65	GLN
55	DZ	101	PRO
55	DZ	111	VAL
55	DZ	120	ILE
55	DZ	142	SER
55	DZ	147	GLY
55	DZ	177	PRO
2	AB	20	GLU
2	AB	28	PHE
2	AB	79	ASP
2	AB	83	MET
2	AB	101	MET
2	AB	150	SER
2	AB	217	ARG
2	AB	237	ALA
3	AC	4	LYS
3	AC	15	THR
3	AC	45	LYS
3	AC	46	GLU
3	AC	133	ALA
4	AD	15	GLU
4	AD	26	CYS
4	AD	57	ARG
4	AD	63	LYS
5	AE	104	ALA
5	AE	132	ALA
5	AE	147	ASP
6	AF	54	LYS
7	AG	7	ALA
7	AG	131	LYS
8	AH	135	CYS
9	AI	29	ASN
9	AI	51	ARG
9	AI	120	ARG
10	AJ	23	ILE
10	AJ	32	ALA
10	AJ	36	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	AK	25	TYR
12	AL	45	PRO
12	AL	96	VAL
12	AL	115	LYS
13	AM	19	LEU
13	AM	71	ARG
13	AM	90	LEU
14	AN	58	LYS
19	AS	12	ASP
19	AS	64	GLU
20	AT	96	GLY
26	B1	27	GLU
26	B1	75	GLU
26	B1	83	GLU
27	B2	33	MET
27	B2	37	PHE
27	B2	49	LYS
29	B4	8	LYS
29	B4	9	LEU
29	B4	30	GLU
29	B4	36	CYS
36	BC	49	ILE
36	BC	140	PRO
36	BC	198	ALA
36	BC	204	ALA
36	BC	210	ARG
36	BC	217	THR
37	BD	133	LEU
37	BD	242	ARG
37	BD	246	PRO
38	BE	169	ASN
39	BF	5	ALA
39	BF	84	VAL
39	BF	89	VAL
39	BF	116	ASP
39	BF	127	GLU
39	BF	184	TYR
41	BH	21	PRO
41	BH	71	LEU
41	BH	73	ALA
42	BI	39	ALA
43	BN	80	GLY

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
43	BN	136	GLU
44	BO	48	PRO
45	BP	39	LYS
45	BP	41	ARG
45	BP	43	GLY
45	BP	110	TYR
46	BQ	8	LYS
46	BQ	49	ALA
47	BR	80	PHE
47	BR	82	GLU
48	BS	17	ARG
48	BS	78	LEU
48	BS	83	LYS
48	BS	94	TYR
48	BS	103	GLU
49	BT	33	LYS
49	BT	35	LYS
49	BT	68	TYR
49	BT	94	ALA
50	BU	89	GLU
51	BV	19	LYS
51	BV	26	ASP
51	BV	45	THR
51	BV	90	PRO
52	BW	44	ALA
52	BW	60	ASN
53	BX	37	THR
53	BX	48	LYS
53	BX	68	ARG
53	BX	71	GLY
54	BY	31	LEU
54	BY	39	VAL
54	BY	41	GLY
54	BY	48	ALA
54	BY	49	VAL
54	BY	81	LYS
55	BZ	46	LYS
55	BZ	111	VAL
55	BZ	117	LEU
2	CB	28	PHE
2	CB	79	ASP
2	CB	83	MET

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	CB	97	TRP
2	CB	110	GLN
2	CB	217	ARG
2	CB	237	ALA
3	CC	4	LYS
3	CC	15	THR
3	CC	45	LYS
3	CC	46	GLU
3	CC	133	ALA
4	CD	4	TYR
4	CD	26	CYS
4	CD	63	LYS
5	CE	11	ILE
5	CE	104	ALA
5	CE	147	ASP
6	CF	54	LYS
6	CF	69	GLU
7	CG	7	ALA
7	CG	131	LYS
8	CH	135	CYS
9	CI	29	ASN
9	CI	51	ARG
9	CI	120	ARG
10	CJ	23	ILE
10	CJ	32	ALA
10	CJ	36	GLY
11	CK	25	TYR
12	CL	96	VAL
12	CL	115	LYS
13	CM	48	LEU
13	CM	90	LEU
14	CN	23	ARG
19	CS	12	ASP
19	CS	29	ARG
19	CS	64	GLU
20	CT	34	LYS
20	CT	96	GLY
25	D0	5	LYS
25	D0	55	ARG
26	D1	13	ILE
26	D1	31	GLY
26	D1	33	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	D1	56	GLN
26	D1	87	PRO
27	D2	45	SER
27	D2	49	LYS
29	D4	9	LEU
29	D4	36	CYS
33	D8	19	SER
36	DC	49	ILE
36	DC	140	PRO
36	DC	198	ALA
36	DC	204	ALA
36	DC	210	ARG
36	DC	217	THR
37	DD	32	SER
37	DD	133	LEU
37	DD	193	VAL
37	DD	224	ALA
37	DD	246	PRO
38	DE	71	GLY
38	DE	135	HIS
38	DE	178	GLU
38	DE	184	VAL
39	DF	84	VAL
39	DF	113	ALA
39	DF	116	ASP
39	DF	184	TYR
40	DG	7	LEU
40	DG	46	ALA
40	DG	97	ASP
40	DG	140	ILE
40	DG	142	PRO
41	DH	21	PRO
41	DH	160	LYS
42	DI	39	ALA
42	DI	114	LEU
42	DI	121	LYS
43	DN	19	GLU
43	DN	80	GLY
43	DN	136	GLU
44	DO	48	PRO
45	DP	41	ARG
45	DP	43	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	DP	110	TYR
46	DQ	8	LYS
46	DQ	49	ALA
46	DQ	89	ASN
47	DR	80	PHE
47	DR	82	GLU
48	DS	78	LEU
48	DS	83	LYS
48	DS	94	TYR
48	DS	103	GLU
49	DT	33	LYS
49	DT	35	LYS
49	DT	68	TYR
49	DT	94	ALA
50	DU	89	GLU
51	DV	19	LYS
51	DV	26	ASP
51	DV	45	THR
51	DV	79	VAL
51	DV	90	PRO
52	DW	45	TYR
52	DW	49	LYS
53	DX	37	THR
53	DX	48	LYS
53	DX	68	ARG
53	DX	71	GLY
54	DY	39	VAL
54	DY	41	GLY
54	DY	48	ALA
54	DY	49	VAL
54	DY	81	LYS
55	DZ	38	TYR
55	DZ	46	LYS
55	DZ	78	LYS
55	DZ	130	PRO
55	DZ	136	PHE
55	DZ	152	ALA
2	AB	18	GLY
2	AB	53	ARG
2	AB	97	TRP
2	AB	130	ARG
2	AB	216	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	36	ASP
4	AD	4	TYR
4	AD	12	CYS
4	AD	56	VAL
5	AE	11	ILE
5	AE	108	ALA
6	AF	96	PRO
7	AG	33	ASP
9	AI	24	GLY
12	AL	51	ALA
12	AL	79	GLU
13	AM	21	TYR
13	AM	75	ALA
13	AM	115	LYS
14	AN	14	PRO
16	AP	28	ARG
16	AP	34	GLU
16	AP	64	ALA
17	AQ	31	LEU
17	AQ	74	LEU
18	AR	39	VAL
18	AR	54	ARG
19	AS	29	ARG
20	AT	34	LYS
20	AT	60	GLU
20	AT	77	ALA
20	AT	97	ALA
25	B0	15	ASP
25	B0	55	ARG
25	B0	83	PRO
26	B1	56	GLN
26	B1	63	ALA
29	B4	2	LYS
29	B4	40	HIS
29	B4	47	GLN
31	B6	24	GLU
31	B6	28	ARG
31	B6	33	LYS
31	B6	52	VAL
33	B8	64	TYR
36	BC	55	ASP
36	BC	64	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
36	BC	77	ILE
36	BC	183	GLU
36	BC	202	GLU
37	BD	12	SER
37	BD	127	VAL
37	BD	156	ALA
37	BD	193	VAL
37	BD	224	ALA
37	BD	245	PRO
37	BD	264	LYS
38	BE	80	GLU
38	BE	94	GLU
38	BE	178	GLU
39	BF	10	PRO
39	BF	11	VAL
39	BF	104	LYS
39	BF	108	LYS
39	BF	168	ARG
40	BG	9	ARG
40	BG	49	ASP
40	BG	90	LEU
40	BG	130	ASN
41	BH	44	VAL
41	BH	56	SER
41	BH	107	VAL
41	BH	155	SER
42	BI	15	VAL
42	BI	91	SER
43	BN	98	VAL
43	BN	129	PRO
44	BO	35	VAL
44	BO	45	GLU
45	BP	26	GLY
45	BP	48	PRO
45	BP	49	ARG
45	BP	71	VAL
45	BP	100	LEU
46	BQ	89	ASN
46	BQ	135	ASP
47	BR	28	LEU
47	BR	50	HIS
48	BS	33	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	BT	11	GLU
49	BT	26	ASP
49	BT	81	PRO
49	BT	82	LEU
49	BT	129	ARG
50	BU	113	ALA
51	BV	42	GLY
51	BV	79	VAL
51	BV	86	GLY
52	BW	2	GLU
52	BW	49	LYS
52	BW	59	VAL
53	BX	74	PRO
54	BY	33	LYS
54	BY	34	LYS
54	BY	40	GLU
54	BY	57	GLN
54	BY	67	LEU
55	BZ	43	GLU
55	BZ	166	SER
2	CB	20	GLU
2	CB	130	ARG
2	CB	150	SER
2	CB	216	SER
4	CD	56	VAL
4	CD	57	ARG
4	CD	159	ARG
4	CD	163	GLU
5	CE	121	LYS
6	CF	96	PRO
7	CG	33	ASP
9	CI	24	GLY
11	CK	105	VAL
12	CL	45	PRO
12	CL	51	ALA
12	CL	79	GLU
13	CM	21	TYR
13	CM	71	ARG
13	CM	75	ALA
14	CN	14	PRO
15	CO	40	SER
15	CO	88	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	CP	28	ARG
16	CP	59	TRP
16	CP	64	ALA
17	CQ	74	LEU
18	CR	54	ARG
20	CT	60	GLU
20	CT	97	ALA
25	D0	15	ASP
25	D0	83	PRO
26	D1	12	PRO
26	D1	28	GLY
26	D1	78	LYS
26	D1	90	ILE
29	D4	2	LYS
29	D4	30	GLU
29	D4	40	HIS
29	D4	47	GLN
31	D6	28	ARG
31	D6	33	LYS
31	D6	52	VAL
33	D8	64	TYR
36	DC	55	ASP
36	DC	64	LEU
36	DC	77	ILE
36	DC	183	GLU
36	DC	202	GLU
37	DD	12	SER
37	DD	156	ALA
37	DD	242	ARG
37	DD	245	PRO
37	DD	264	LYS
38	DE	80	GLU
38	DE	94	GLU
39	DF	5	ALA
39	DF	10	PRO
39	DF	11	VAL
39	DF	89	VAL
39	DF	104	LYS
39	DF	127	GLU
40	DG	6	ALA
40	DG	61	ALA
40	DG	70	VAL

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
40	DG	115	ARG
40	DG	117	PHE
40	DG	124	SER
41	DH	44	VAL
41	DH	56	SER
41	DH	71	LEU
41	DH	107	VAL
41	DH	155	SER
42	DI	15	VAL
42	DI	85	GLU
43	DN	40	PRO
43	DN	77	GLY
43	DN	98	VAL
44	DO	45	GLU
45	DP	26	GLY
45	DP	48	PRO
45	DP	49	ARG
45	DP	51	PHE
45	DP	71	VAL
45	DP	100	LEU
46	DQ	135	ASP
47	DR	50	HIS
48	DS	17	ARG
48	DS	33	LYS
49	DT	26	ASP
49	DT	82	LEU
49	DT	129	ARG
50	DU	113	ALA
51	DV	41	GLY
51	DV	42	GLY
51	DV	86	GLY
52	DW	2	GLU
54	DY	31	LEU
54	DY	40	GLU
54	DY	57	GLN
54	DY	67	LEU
55	DZ	81	ARG
55	DZ	134	PRO
55	DZ	153	SER
55	DZ	172	ALA
2	AB	239	VAL
3	AC	61	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AC	188	LEU
4	AD	91	SER
4	AD	93	PHE
4	AD	159	ARG
4	AD	163	GLU
5	AE	136	MET
7	AG	100	ALA
8	AH	2	LEU
9	AI	44	VAL
10	AJ	24	VAL
10	AJ	91	PRO
11	AK	27	ASN
11	AK	49	GLY
11	AK	105	VAL
12	AL	13	LYS
12	AL	18	VAL
15	AO	28	GLN
15	AO	88	ARG
16	AP	59	TRP
17	AQ	4	LYS
17	AQ	30	PRO
18	AR	64	ARG
20	AT	29	LYS
20	AT	101	GLY
27	B2	15	LYS
27	B2	26	ARG
29	B4	12	ALA
29	B4	27	THR
30	B5	33	CYS
31	B6	38	LYS
31	B6	49	HIS
33	B8	19	SER
36	BC	159	GLY
38	BE	56	PRO
38	BE	58	ARG
38	BE	72	VAL
38	BE	73	GLU
38	BE	90	THR
38	BE	180	ASN
39	BF	25	PRO
40	BG	3	LEU
40	BG	6	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BG	17	PRO
40	BG	22	ARG
40	BG	43	LEU
40	BG	181	ARG
41	BH	129	THR
42	BI	85	GLU
43	BN	9	VAL
43	BN	40	PRO
43	BN	77	GLY
43	BN	88	GLU
45	BP	135	LEU
46	BQ	54	MET
47	BR	17	ARG
48	BS	95	HIS
49	BT	88	ILE
49	BT	119	LYS
51	BV	37	VAL
51	BV	41	GLY
52	BW	45	TYR
52	BW	56	ALA
53	BX	38	GLU
54	BY	50	ARG
54	BY	76	CYS
54	BY	99	CYS
55	BZ	41	LEU
55	BZ	45	ASP
55	BZ	62	PRO
55	BZ	177	PRO
2	CB	18	GLY
2	CB	239	VAL
3	CC	61	ALA
4	CD	105	VAL
5	CE	136	MET
8	CH	2	LEU
8	CH	18	ARG
9	CI	44	VAL
9	CI	123	PRO
10	CJ	24	VAL
10	CJ	91	PRO
11	CK	116	HIS
12	CL	13	LYS
13	CM	115	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
17	CQ	30	PRO
17	CQ	31	LEU
18	CR	37	VAL
18	CR	39	VAL
19	CS	9	VAL
20	CT	29	LYS
20	CT	77	ALA
20	CT	101	GLY
26	D1	21	ARG
26	D1	89	GLU
27	D2	26	ARG
29	D4	12	ALA
29	D4	27	THR
30	D5	33	CYS
31	D6	24	GLU
31	D6	49	HIS
36	DC	159	GLY
37	DD	99	ASP
37	DD	127	VAL
37	DD	211	ARG
38	DE	56	PRO
38	DE	58	ARG
38	DE	72	VAL
38	DE	73	GLU
38	DE	75	VAL
38	DE	90	THR
39	DF	25	PRO
40	DG	49	ASP
41	DH	129	THR
42	DI	91	SER
43	DN	9	VAL
43	DN	88	GLU
43	DN	129	PRO
44	DO	112	MET
46	DQ	18	LYS
46	DQ	54	MET
46	DQ	88	GLY
47	DR	10	LEU
47	DR	17	ARG
48	DS	95	HIS
49	DT	55	ASN
49	DT	81	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	DT	88	ILE
49	DT	101	PHE
50	DU	13	LYS
50	DU	60	LEU
52	DW	63	ASP
53	DX	74	PRO
54	DY	33	LYS
54	DY	34	LYS
54	DY	76	CYS
54	DY	99	CYS
55	DZ	15	PRO
55	DZ	110	GLY
55	DZ	157	LEU
55	DZ	159	PRO
2	AB	181	PHE
3	AC	49	SER
5	AE	121	LYS
7	AG	130	GLY
8	AH	18	ARG
11	AK	126	ARG
13	AM	28	ALA
18	AR	37	VAL
19	AS	5	LEU
19	AS	9	VAL
19	AS	67	VAL
19	AS	68	GLY
20	AT	98	PRO
37	BD	211	ARG
37	BD	239	ARG
37	BD	244	ARG
39	BF	6	VAL
40	BG	109	VAL
45	BP	38	GLN
47	BR	10	LEU
47	BR	102	GLU
52	BW	63	ASP
54	BY	3	VAL
55	BZ	39	VAL
2	CB	13	ALA
2	CB	53	ARG
4	CD	12	CYS
4	CD	91	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	93	PHE
6	CF	43	LEU
8	CH	129	VAL
9	CI	119	ALA
11	CK	27	ASN
11	CK	49	GLY
12	CL	18	VAL
13	CM	76	ALA
13	CM	125	ARG
15	CO	41	GLU
18	CR	64	ARG
19	CS	5	LEU
19	CS	67	VAL
20	CT	98	PRO
26	D1	68	PRO
27	D2	51	ARG
31	D6	38	LYS
32	D7	31	LEU
37	DD	244	ARG
38	DE	180	ASN
39	DF	6	VAL
46	DQ	99	PRO
47	DR	102	GLU
48	DS	28	VAL
48	DS	75	GLU
52	DW	66	GLU
53	DX	38	GLU
54	DY	3	VAL
54	DY	18	GLY
54	DY	50	ARG
55	DZ	115	GLY
55	DZ	133	ILE
5	AE	49	PRO
7	AG	42	ILE
8	AH	129	VAL
28	B3	41	PRO
30	B5	57	VAL
36	BC	175	VAL
38	BE	75	VAL
45	BP	97	PRO
47	BR	38	VAL
48	BS	28	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	BS	96	GLY
50	BU	65	ILE
51	BV	70	ILE
54	BY	18	GLY
54	BY	22	GLY
55	BZ	22	GLY
7	CG	42	ILE
7	CG	130	GLY
10	CJ	37	PRO
12	CL	74	GLY
12	CL	121	GLY
28	D3	41	PRO
30	D5	57	VAL
36	DC	175	VAL
43	DN	11	PRO
51	DV	22	VAL
51	DV	37	VAL
51	DV	70	ILE
54	DY	22	GLY
4	AD	105	VAL
9	AI	123	PRO
10	AJ	37	PRO
29	B4	19	GLY
36	BC	130	ILE
36	BC	149	ILE
37	BD	35	LYS
42	BI	111	PRO
43	BN	11	PRO
46	BQ	47	ILE
46	BQ	99	PRO
51	BV	22	VAL
52	BW	112	GLY
54	BY	96	ILE
3	CC	114	PRO
12	CL	43	VAL
27	D2	19	VAL
32	D7	30	VAL
36	DC	130	ILE
36	DC	149	ILE
46	DQ	47	ILE
47	DR	38	VAL
48	DS	85	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
48	DS	96	GLY
50	DU	65	ILE
52	DW	112	GLY
53	DX	32	PRO
53	DX	49	VAL
54	DY	96	ILE
3	AC	13	GLY
3	AC	114	PRO
6	AF	72	VAL
12	AL	43	VAL
12	AL	48	PRO
28	B3	50	VAL
29	B4	15	ILE
30	B5	47	PRO
32	B7	30	VAL
36	BC	103	ILE
38	BE	81	ILE
43	BN	135	PRO
46	BQ	81	VAL
46	BQ	88	GLY
48	BS	85	VAL
51	BV	17	GLY
53	BX	49	VAL
54	BY	24	VAL
12	CL	48	PRO
19	CS	68	GLY
28	D3	50	VAL
29	D4	19	GLY
30	D5	47	PRO
36	DC	103	ILE
37	DD	35	LYS
38	DE	81	ILE
42	DI	111	PRO
45	DP	97	PRO
46	DQ	81	VAL
51	DV	17	GLY
55	DZ	165	VAL
3	AC	66	VAL
4	AD	158	ILE
6	AF	25	ILE
29	B4	14	ILE
40	BG	28	VAL

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
40	BG	129	GLY
40	BG	140	ILE
49	BT	7	ILE
50	BU	90	VAL
53	BX	32	PRO
3	CC	13	GLY
3	CC	66	VAL
4	CD	28	SER
5	CE	49	PRO
13	CM	74	VAL
29	D4	15	ILE
37	DD	8	PRO
50	DU	90	VAL
51	DV	54	GLY
12	AL	74	GLY
37	BD	8	PRO
41	BH	49	VAL
51	BV	54	GLY
55	BZ	12	GLY
3	CC	55	VAL
29	D4	14	ILE
41	DH	49	VAL
43	DN	135	PRO
52	DW	14	PRO
54	DY	24	VAL
55	DZ	39	VAL
55	DZ	47	VAL

### 5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AB	202/220 (92%)	182 (90%)	20 (10%)	8	23
2	CB	202/220 (92%)	182 (90%)	20 (10%)	8	23
3	AC	160/188 (85%)	151 (94%)	9 (6%)	21	51

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	CC	160/188 (85%)	150 (94%)	10 (6%)	18	46
4	AD	180/181 (99%)	159 (88%)	21 (12%)	5	16
4	CD	180/181 (99%)	161 (89%)	19 (11%)	6	20
5	AE	115/123 (94%)	102 (89%)	13 (11%)	6	18
5	CE	115/123 (94%)	103 (90%)	12 (10%)	7	21
6	AF	90/90 (100%)	84 (93%)	6 (7%)	16	43
6	CF	90/90 (100%)	84 (93%)	6 (7%)	16	43
7	AG	126/127 (99%)	122 (97%)	4 (3%)	39	73
7	CG	126/127 (99%)	122 (97%)	4 (3%)	39	73
8	AH	119/119 (100%)	114 (96%)	5 (4%)	30	63
8	CH	119/119 (100%)	114 (96%)	5 (4%)	30	63
9	AI	98/99 (99%)	88 (90%)	10 (10%)	7	22
9	CI	98/99 (99%)	88 (90%)	10 (10%)	7	22
10	AJ	88/92 (96%)	82 (93%)	6 (7%)	16	42
10	CJ	88/92 (96%)	82 (93%)	6 (7%)	16	42
11	AK	90/99 (91%)	85 (94%)	5 (6%)	21	51
11	CK	90/99 (91%)	86 (96%)	4 (4%)	28	61
12	AL	104/111 (94%)	95 (91%)	9 (9%)	10	30
12	CL	104/111 (94%)	96 (92%)	8 (8%)	13	35
13	AM	99/101 (98%)	93 (94%)	6 (6%)	18	48
13	CM	99/101 (98%)	93 (94%)	6 (6%)	18	48
14	AN	49/50 (98%)	47 (96%)	2 (4%)	30	64
14	CN	49/50 (98%)	47 (96%)	2 (4%)	30	64
15	AO	79/80 (99%)	74 (94%)	5 (6%)	18	46
15	CO	79/80 (99%)	74 (94%)	5 (6%)	18	46
16	AP	72/74 (97%)	65 (90%)	7 (10%)	8	24
16	CP	72/74 (97%)	65 (90%)	7 (10%)	8	24
17	AQ	94/97 (97%)	92 (98%)	2 (2%)	53	84
17	CQ	94/97 (97%)	92 (98%)	2 (2%)	53	84
18	AR	61/77 (79%)	55 (90%)	6 (10%)	8	24
18	CR	61/77 (79%)	55 (90%)	6 (10%)	8	24

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
19	AS	69/80 (86%)	62 (90%)	7 (10%)	7	22
19	CS	69/80 (86%)	62 (90%)	7 (10%)	7	22
20	AT	76/82 (93%)	65 (86%)	11 (14%)	3	9
20	CT	76/82 (93%)	65 (86%)	11 (14%)	3	9
21	AU	19/22 (86%)	17 (90%)	2 (10%)	7	20
21	CU	19/22 (86%)	17 (90%)	2 (10%)	7	20
25	B0	61/67 (91%)	54 (88%)	7 (12%)	5	17
25	D0	61/67 (91%)	54 (88%)	7 (12%)	5	17
26	B1	73/83 (88%)	62 (85%)	11 (15%)	3	9
26	D1	73/83 (88%)	63 (86%)	10 (14%)	3	11
27	B2	46/67 (69%)	35 (76%)	11 (24%)	0	2
27	D2	46/67 (69%)	35 (76%)	11 (24%)	0	2
28	B3	51/52 (98%)	49 (96%)	2 (4%)	32	66
28	D3	51/52 (98%)	49 (96%)	2 (4%)	32	66
30	B5	51/52 (98%)	41 (80%)	10 (20%)	1	4
30	D5	51/52 (98%)	41 (80%)	10 (20%)	1	4
31	B6	43/52 (83%)	36 (84%)	7 (16%)	2	7
31	D6	43/52 (83%)	36 (84%)	7 (16%)	2	7
32	B7	41/42 (98%)	37 (90%)	4 (10%)	8	24
32	D7	41/42 (98%)	37 (90%)	4 (10%)	8	24
33	B8	53/55 (96%)	45 (85%)	8 (15%)	3	9
33	D8	53/55 (96%)	45 (85%)	8 (15%)	3	9
36	BC	61/181 (34%)	54 (88%)	7 (12%)	5	17
36	DC	61/181 (34%)	54 (88%)	7 (12%)	5	17
37	BD	213/218 (98%)	179 (84%)	34 (16%)	2	7
37	DD	213/218 (98%)	181 (85%)	32 (15%)	3	9
38	BE	165/166 (99%)	145 (88%)	20 (12%)	5	15
38	DE	165/166 (99%)	145 (88%)	20 (12%)	5	15
39	BF	165/166 (99%)	153 (93%)	12 (7%)	14	38
39	DF	165/166 (99%)	153 (93%)	12 (7%)	14	38
40	BG	155/156 (99%)	135 (87%)	20 (13%)	4	13

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
40	DG	155/156 (99%)	132 (85%)	23 (15%)	3	9
41	BH	132/148 (89%)	117 (89%)	15 (11%)	5	18
41	DH	132/148 (89%)	117 (89%)	15 (11%)	5	18
42	BI	122/124 (98%)	113 (93%)	9 (7%)	13	37
42	DI	122/124 (98%)	113 (93%)	9 (7%)	13	37
43	BN	117/119 (98%)	98 (84%)	19 (16%)	2	7
43	DN	117/119 (98%)	97 (83%)	20 (17%)	2	6
44	BO	100/100 (100%)	92 (92%)	8 (8%)	12	34
44	DO	100/100 (100%)	91 (91%)	9 (9%)	9	28
45	BP	112/116 (97%)	92 (82%)	20 (18%)	2	5
45	DP	112/116 (97%)	91 (81%)	21 (19%)	1	5
46	BQ	106/111 (96%)	93 (88%)	13 (12%)	4	15
46	DQ	106/111 (96%)	93 (88%)	13 (12%)	4	15
47	BR	100/101 (99%)	91 (91%)	9 (9%)	9	28
47	DR	100/101 (99%)	91 (91%)	9 (9%)	9	28
48	BS	77/88 (88%)	65 (84%)	12 (16%)	2	8
48	DS	77/88 (88%)	65 (84%)	12 (16%)	2	8
49	BT	120/127 (94%)	99 (82%)	21 (18%)	2	6
49	DT	120/127 (94%)	99 (82%)	21 (18%)	2	6
50	BU	92/94 (98%)	85 (92%)	7 (8%)	13	36
50	DU	92/94 (98%)	85 (92%)	7 (8%)	13	36
51	BV	82/82 (100%)	64 (78%)	18 (22%)	1	2
51	DV	82/82 (100%)	64 (78%)	18 (22%)	1	2
52	BW	91/92 (99%)	85 (93%)	6 (7%)	16	44
52	DW	91/92 (99%)	84 (92%)	7 (8%)	13	35
53	BX	74/78 (95%)	59 (80%)	15 (20%)	1	4
53	DX	74/78 (95%)	60 (81%)	14 (19%)	1	5
54	BY	84/91 (92%)	67 (80%)	17 (20%)	1	4
54	DY	84/91 (92%)	67 (80%)	17 (20%)	1	4
55	BZ	155/179 (87%)	144 (93%)	11 (7%)	14	39
55	DZ	155/179 (87%)	141 (91%)	14 (9%)	9	28

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	9464/10238 (92%)	8444 (89%)	1020 (11%)	<b>6</b> <b>19</b>

All (1020) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	10	LEU
2	AB	15	VAL
2	AB	16	HIS
2	AB	17	PHE
2	AB	22	LYS
2	AB	24	TRP
2	AB	36	ARG
2	AB	44	LEU
2	AB	59	GLU
2	AB	79	ASP
2	AB	102	LEU
2	AB	130	ARG
2	AB	137	ARG
2	AB	145	LEU
2	AB	178	ARG
2	AB	187	LEU
2	AB	196	LEU
2	AB	204	ASN
2	AB	215	LEU
2	AB	221	LEU
3	AC	5	ILE
3	AC	12	LEU
3	AC	16	ARG
3	AC	27	LYS
3	AC	84	ILE
3	AC	104	GLN
3	AC	120	VAL
3	AC	127	ARG
3	AC	156	ARG
4	AD	3	ARG
4	AD	8	VAL
4	AD	9	CYS
4	AD	11	LEU
4	AD	12	CYS
4	AD	19	LEU
4	AD	36	ARG
4	AD	38	TYR

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
4	AD	53	ASP
4	AD	73	ARG
4	AD	96	LEU
4	AD	97	LEU
4	AD	110	PHE
4	AD	119	GLN
4	AD	122	ARG
4	AD	127	THR
4	AD	131	ARG
4	AD	132	ARG
4	AD	138	TYR
4	AD	158	ILE
4	AD	196	LEU
5	AE	10	MET
5	AE	12	LEU
5	AE	16	THR
5	AE	20	GLN
5	AE	31	LEU
5	AE	47	LYS
5	AE	73	ASN
5	AE	79	GLU
5	AE	90	VAL
5	AE	91	LEU
5	AE	101	ILE
5	AE	112	LEU
5	AE	115	VAL
6	AF	46	ARG
6	AF	63	TYR
6	AF	69	GLU
6	AF	82	ARG
6	AF	87	ARG
6	AF	98	LEU
7	AG	79	ARG
7	AG	137	LYS
7	AG	148	ASN
7	AG	156	TRP
8	AH	1	MET
8	AH	24	THR
8	AH	81	HIS
8	AH	102	ARG
8	AH	105	ARG
9	AI	10	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	AI	95	LYS
9	AI	99	LEU
9	AI	102	LEU
9	AI	104	ARG
9	AI	113	LYS
9	AI	114	TYR
9	AI	121	ARG
9	AI	125	TYR
9	AI	128	ARG
10	AJ	22	LYS
10	AJ	50	ILE
10	AJ	62	HIS
10	AJ	74	ILE
10	AJ	80	LYS
10	AJ	96	ILE
11	AK	25	TYR
11	AK	29	ILE
11	AK	38	ASN
11	AK	116	HIS
11	AK	117	ASN
12	AL	20	LYS
12	AL	41	ARG
12	AL	53	ARG
12	AL	62	SER
12	AL	83	VAL
12	AL	84	LEU
12	AL	89	ARG
12	AL	102	ARG
12	AL	120	TYR
13	AM	47	ASP
13	AM	64	TRP
13	AM	82	MET
13	AM	93	ARG
13	AM	108	ARG
13	AM	120	LYS
14	AN	41	ARG
14	AN	44	LEU
15	AO	3	ILE
15	AO	37	ASN
15	AO	38	ARG
15	AO	65	ARG
15	AO	82	ILE

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
16	AP	1	MET
16	AP	21	VAL
16	AP	27	LYS
16	AP	39	TYR
16	AP	65	GLN
16	AP	69	THR
16	AP	82	GLN
17	AQ	38	ARG
17	AQ	52	LYS
18	AR	26	LEU
18	AR	31	LEU
18	AR	32	ARG
18	AR	53	ARG
18	AR	79	LEU
18	AR	82	THR
19	AS	6	LYS
19	AS	7	LYS
19	AS	22	LEU
19	AS	27	GLU
19	AS	37	ARG
19	AS	44	MET
19	AS	49	ILE
20	AT	13	LEU
20	AT	24	LEU
20	AT	26	ASN
20	AT	27	LYS
20	AT	36	LEU
20	AT	41	ILE
20	AT	56	MET
20	AT	57	ARG
20	AT	62	LEU
20	AT	73	HIS
20	AT	93	GLU
21	AU	15	ARG
21	AU	24	ARG
25	B0	20	ARG
25	B0	25	ARG
25	B0	31	VAL
25	B0	36	ILE
25	B0	64	ASP
25	B0	80	HIS
25	B0	84	LEU

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
26	B1	12	PRO
26	B1	20	ARG
26	B1	21	ARG
26	B1	26	ARG
26	B1	34	THR
26	B1	46	LEU
26	B1	47	GLN
26	B1	48	LYS
26	B1	53	VAL
26	B1	73	LEU
26	B1	94	LEU
27	B2	23	LYS
27	B2	30	ARG
27	B2	33	MET
27	B2	44	LEU
27	B2	46	GLN
27	B2	47	ASN
27	B2	50	ILE
27	B2	51	ARG
27	B2	53	LEU
27	B2	56	GLN
27	B2	57	ILE
28	B3	4	LEU
28	B3	8	LEU
30	B5	3	LYS
30	B5	4	HIS
30	B5	25	LEU
30	B5	32	PRO
30	B5	33	CYS
30	B5	37	LYS
30	B5	44	THR
30	B5	51	TYR
30	B5	56	LYS
30	B5	58	LEU
31	B6	10	LEU
31	B6	18	ARG
31	B6	19	ARG
31	B6	30	THR
31	B6	31	PRO
31	B6	42	TRP
31	B6	44	ARG
32	B7	8	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
32	B7	10	ARG
32	B7	43	THR
32	B7	48	LYS
33	B8	6	THR
33	B8	13	ARG
33	B8	16	ILE
33	B8	34	TRP
33	B8	40	GLU
33	B8	44	LYS
33	B8	47	LYS
33	B8	48	PHE
36	BC	20	TYR
36	BC	36	LYS
36	BC	41	VAL
36	BC	58	VAL
36	BC	64	LEU
36	BC	77	ILE
36	BC	101	GLN
37	BD	10	THR
37	BD	14	ARG
37	BD	17	THR
37	BD	18	VAL
37	BD	20	ASP
37	BD	24	ILE
37	BD	26	LYS
37	BD	31	LYS
37	BD	36	PRO
37	BD	54	ARG
37	BD	64	ILE
37	BD	65	ILE
37	BD	73	VAL
37	BD	84	TYR
37	BD	91	ARG
37	BD	94	LEU
37	BD	95	LEU
37	BD	106	ILE
37	BD	111	LEU
37	BD	131	LEU
37	BD	135	PHE
37	BD	138	VAL
37	BD	150	LYS
37	BD	166	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	BD	183	ARG
37	BD	192	THR
37	BD	211	ARG
37	BD	212	SER
37	BD	221	VAL
37	BD	242	ARG
37	BD	253	GLN
37	BD	255	LYS
37	BD	259	THR
37	BD	260	ARG
38	BE	9	VAL
38	BE	21	VAL
38	BE	33	VAL
38	BE	44	TYR
38	BE	66	HIS
38	BE	67	PHE
38	BE	73	GLU
38	BE	78	LEU
38	BE	79	ARG
38	BE	89	ASP
38	BE	113	PHE
38	BE	117	MET
38	BE	118	LYS
38	BE	119	ARG
38	BE	134	ILE
38	BE	154	LYS
38	BE	160	TYR
38	BE	184	VAL
38	BE	202	LYS
38	BE	203	LYS
39	BF	15	SER
39	BF	64	ILE
39	BF	66	PRO
39	BF	74	ARG
39	BF	78	ILE
39	BF	100	THR
39	BF	110	LEU
39	BF	112	MET
39	BF	160	ASN
39	BF	165	ARG
39	BF	191	ARG
39	BF	202	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BG	7	LEU
40	BG	22	ARG
40	BG	31	VAL
40	BG	34	LEU
40	BG	39	ILE
40	BG	40	ASN
40	BG	43	LEU
40	BG	45	GLU
40	BG	63	ILE
40	BG	67	LYS
40	BG	87	PRO
40	BG	90	LEU
40	BG	94	LEU
40	BG	101	ILE
40	BG	112	PRO
40	BG	125	PHE
40	BG	143	GLU
40	BG	145	THR
40	BG	155	MET
40	BG	166	ASP
41	BH	41	MET
41	BH	53	GLU
41	BH	86	GLU
41	BH	89	ILE
41	BH	105	LEU
41	BH	123	PHE
41	BH	136	ILE
41	BH	143	GLN
41	BH	149	ARG
41	BH	152	ARG
41	BH	153	LYS
41	BH	157	TYR
41	BH	159	GLU
41	BH	163	TYR
41	BH	170	ARG
42	BI	12	LEU
42	BI	15	VAL
42	BI	38	LEU
42	BI	109	ILE
42	BI	129	THR
42	BI	130	TYR
42	BI	133	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
42	BI	134	PRO
42	BI	142	VAL
43	BN	4	TYR
43	BN	19	GLU
43	BN	22	THR
43	BN	28	THR
43	BN	39	ARG
43	BN	41	ASP
43	BN	42	TRP
43	BN	48	MET
43	BN	51	PHE
43	BN	56	ASN
43	BN	63	THR
43	BN	65	LYS
43	BN	78	TYR
43	BN	79	PRO
43	BN	82	LEU
43	BN	94	HIS
43	BN	120	LEU
43	BN	127	ASP
43	BN	130	HIS
44	BO	17	ARG
44	BO	32	TYR
44	BO	48	PRO
44	BO	52	VAL
44	BO	101	PRO
44	BO	102	VAL
44	BO	115	VAL
44	BO	119	PRO
45	BP	10	PRO
45	BP	13	ASN
45	BP	16	ARG
45	BP	18	ARG
45	BP	21	ARG
45	BP	33	ARG
45	BP	35	HIS
45	BP	40	SER
45	BP	59	LEU
45	BP	61	ARG
45	BP	62	LEU
45	BP	64	LYS
45	BP	75	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
45	BP	81	GLN
45	BP	85	LEU
45	BP	105	LEU
45	BP	123	LEU
45	BP	135	LEU
45	BP	144	GLU
45	BP	148	LEU
46	BQ	13	GLN
46	BQ	17	LEU
46	BQ	22	LYS
46	BQ	26	TYR
46	BQ	29	PHE
46	BQ	34	LEU
46	BQ	58	PHE
46	BQ	63	LYS
46	BQ	75	THR
46	BQ	80	GLU
46	BQ	82	ARG
46	BQ	91	GLU
46	BQ	111	GLU
47	BR	2	ARG
47	BR	5	LYS
47	BR	17	ARG
47	BR	40	LYS
47	BR	49	ASP
47	BR	60	LEU
47	BR	76	VAL
47	BR	79	LEU
47	BR	104	ARG
48	BS	13	ARG
48	BS	16	ASN
48	BS	26	LEU
48	BS	36	TYR
48	BS	54	LEU
48	BS	61	ASN
48	BS	68	GLN
48	BS	80	LEU
48	BS	89	ARG
48	BS	92	TYR
48	BS	93	LYS
48	BS	98	VAL
49	BT	13	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	BT	24	PRO
49	BT	32	TYR
49	BT	33	LYS
49	BT	41	ARG
49	BT	51	ARG
49	BT	53	ARG
49	BT	58	ASN
49	BT	59	THR
49	BT	65	LYS
49	BT	78	LEU
49	BT	82	LEU
49	BT	87	ASP
49	BT	96	ARG
49	BT	99	LEU
49	BT	100	TYR
49	BT	108	ARG
49	BT	112	ARG
49	BT	115	ARG
49	BT	121	ILE
49	BT	128	GLU
50	BU	64	ARG
50	BU	76	TYR
50	BU	79	PHE
50	BU	88	ILE
50	BU	89	GLU
50	BU	112	ARG
50	BU	114	LYS
51	BV	1	MET
51	BV	2	PHE
51	BV	12	TYR
51	BV	14	VAL
51	BV	18	LEU
51	BV	19	LYS
51	BV	21	ARG
51	BV	39	LEU
51	BV	40	LEU
51	BV	66	ARG
51	BV	70	ILE
51	BV	78	LYS
51	BV	80	GLN
51	BV	82	ARG
51	BV	88	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	BV	90	PRO
51	BV	92	THR
51	BV	93	GLU
52	BW	11	ARG
52	BW	25	ARG
52	BW	70	TYR
52	BW	75	TYR
52	BW	88	ARG
52	BW	107	LEU
53	BX	21	PHE
53	BX	27	THR
53	BX	28	PHE
53	BX	33	LYS
53	BX	35	THR
53	BX	36	LYS
53	BX	40	LYS
53	BX	43	VAL
53	BX	49	VAL
53	BX	59	VAL
53	BX	65	ARG
53	BX	68	ARG
53	BX	76	ARG
53	BX	78	LYS
53	BX	81	VAL
54	BY	6	HIS
54	BY	7	VAL
54	BY	9	LYS
54	BY	14	LEU
54	BY	29	GLU
54	BY	31	LEU
54	BY	32	PRO
54	BY	35	TYR
54	BY	38	ILE
54	BY	56	PRO
54	BY	62	GLU
54	BY	66	PRO
54	BY	75	ILE
54	BY	76	CYS
54	BY	77	PRO
54	BY	90	LEU
54	BY	97	ARG
55	BZ	6	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
55	BZ	9	TYR
55	BZ	79	ARG
55	BZ	86	VAL
55	BZ	87	ASP
55	BZ	89	PHE
55	BZ	97	GLU
55	BZ	99	TYR
55	BZ	144	LEU
55	BZ	150	LEU
55	BZ	163	LEU
2	CB	10	LEU
2	CB	15	VAL
2	CB	16	HIS
2	CB	17	PHE
2	CB	22	LYS
2	CB	24	TRP
2	CB	36	ARG
2	CB	44	LEU
2	CB	59	GLU
2	CB	79	ASP
2	CB	102	LEU
2	CB	130	ARG
2	CB	137	ARG
2	CB	145	LEU
2	CB	178	ARG
2	CB	187	LEU
2	CB	196	LEU
2	CB	204	ASN
2	CB	215	LEU
2	CB	221	LEU
3	CC	5	ILE
3	CC	12	LEU
3	CC	16	ARG
3	CC	27	LYS
3	CC	84	ILE
3	CC	104	GLN
3	CC	120	VAL
3	CC	127	ARG
3	CC	156	ARG
3	CC	196	LEU
4	CD	3	ARG
4	CD	8	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	9	CYS
4	CD	12	CYS
4	CD	19	LEU
4	CD	36	ARG
4	CD	38	TYR
4	CD	53	ASP
4	CD	73	ARG
4	CD	97	LEU
4	CD	110	PHE
4	CD	119	GLN
4	CD	122	ARG
4	CD	127	THR
4	CD	131	ARG
4	CD	132	ARG
4	CD	138	TYR
4	CD	158	ILE
4	CD	196	LEU
5	CE	10	MET
5	CE	12	LEU
5	CE	16	THR
5	CE	20	GLN
5	CE	31	LEU
5	CE	73	ASN
5	CE	79	GLU
5	CE	90	VAL
5	CE	91	LEU
5	CE	101	ILE
5	CE	112	LEU
5	CE	115	VAL
6	CF	46	ARG
6	CF	63	TYR
6	CF	69	GLU
6	CF	82	ARG
6	CF	87	ARG
6	CF	98	LEU
7	CG	79	ARG
7	CG	137	LYS
7	CG	148	ASN
7	CG	156	TRP
8	CH	1	MET
8	CH	24	THR
8	CH	81	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	CH	102	ARG
8	CH	105	ARG
9	CI	10	ARG
9	CI	95	LYS
9	CI	99	LEU
9	CI	102	LEU
9	CI	104	ARG
9	CI	113	LYS
9	CI	114	TYR
9	CI	121	ARG
9	CI	125	TYR
9	CI	128	ARG
10	CJ	22	LYS
10	CJ	50	ILE
10	CJ	62	HIS
10	CJ	74	ILE
10	CJ	80	LYS
10	CJ	96	ILE
11	CK	25	TYR
11	CK	29	ILE
11	CK	116	HIS
11	CK	117	ASN
12	CL	20	LYS
12	CL	41	ARG
12	CL	53	ARG
12	CL	62	SER
12	CL	84	LEU
12	CL	89	ARG
12	CL	102	ARG
12	CL	120	TYR
13	CM	47	ASP
13	CM	64	TRP
13	CM	82	MET
13	CM	93	ARG
13	CM	108	ARG
13	CM	120	LYS
14	CN	41	ARG
14	CN	44	LEU
15	CO	3	ILE
15	CO	37	ASN
15	CO	38	ARG
15	CO	65	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
15	CO	82	ILE
16	CP	1	MET
16	CP	21	VAL
16	CP	27	LYS
16	CP	39	TYR
16	CP	65	GLN
16	CP	69	THR
16	CP	82	GLN
17	CQ	38	ARG
17	CQ	52	LYS
18	CR	26	LEU
18	CR	31	LEU
18	CR	32	ARG
18	CR	53	ARG
18	CR	79	LEU
18	CR	82	THR
19	CS	6	LYS
19	CS	7	LYS
19	CS	22	LEU
19	CS	27	GLU
19	CS	37	ARG
19	CS	44	MET
19	CS	49	ILE
20	CT	13	LEU
20	CT	24	LEU
20	CT	26	ASN
20	CT	27	LYS
20	CT	36	LEU
20	CT	41	ILE
20	CT	56	MET
20	CT	57	ARG
20	CT	62	LEU
20	CT	73	HIS
20	CT	93	GLU
21	CU	15	ARG
21	CU	24	ARG
25	D0	20	ARG
25	D0	25	ARG
25	D0	31	VAL
25	D0	36	ILE
25	D0	64	ASP
25	D0	80	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
25	D0	84	LEU
26	D1	12	PRO
26	D1	26	ARG
26	D1	34	THR
26	D1	41	ARG
26	D1	46	LEU
26	D1	47	GLN
26	D1	49	VAL
26	D1	53	VAL
26	D1	61	ARG
26	D1	89	GLU
27	D2	17	SER
27	D2	22	GLU
27	D2	26	ARG
27	D2	30	ARG
27	D2	33	MET
27	D2	35	LEU
27	D2	44	LEU
27	D2	46	GLN
27	D2	47	ASN
27	D2	51	ARG
27	D2	52	ASP
28	D3	4	LEU
28	D3	8	LEU
30	D5	3	LYS
30	D5	4	HIS
30	D5	25	LEU
30	D5	32	PRO
30	D5	33	CYS
30	D5	37	LYS
30	D5	51	TYR
30	D5	52	TYR
30	D5	56	LYS
30	D5	58	LEU
31	D6	10	LEU
31	D6	18	ARG
31	D6	19	ARG
31	D6	30	THR
31	D6	31	PRO
31	D6	42	TRP
31	D6	44	ARG
32	D7	8	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
32	D7	10	ARG
32	D7	43	THR
32	D7	48	LYS
33	D8	6	THR
33	D8	13	ARG
33	D8	16	ILE
33	D8	34	TRP
33	D8	40	GLU
33	D8	44	LYS
33	D8	47	LYS
33	D8	48	PHE
36	DC	20	TYR
36	DC	36	LYS
36	DC	41	VAL
36	DC	58	VAL
36	DC	64	LEU
36	DC	77	ILE
36	DC	101	GLN
37	DD	10	THR
37	DD	14	ARG
37	DD	17	THR
37	DD	18	VAL
37	DD	20	ASP
37	DD	24	ILE
37	DD	26	LYS
37	DD	31	LYS
37	DD	54	ARG
37	DD	64	ILE
37	DD	65	ILE
37	DD	73	VAL
37	DD	84	TYR
37	DD	91	ARG
37	DD	94	LEU
37	DD	95	LEU
37	DD	106	ILE
37	DD	111	LEU
37	DD	131	LEU
37	DD	135	PHE
37	DD	150	LYS
37	DD	166	GLN
37	DD	183	ARG
37	DD	205	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
37	DD	211	ARG
37	DD	212	SER
37	DD	221	VAL
37	DD	242	ARG
37	DD	253	GLN
37	DD	255	LYS
37	DD	259	THR
37	DD	260	ARG
38	DE	9	VAL
38	DE	21	VAL
38	DE	33	VAL
38	DE	44	TYR
38	DE	66	HIS
38	DE	67	PHE
38	DE	73	GLU
38	DE	78	LEU
38	DE	79	ARG
38	DE	89	ASP
38	DE	113	PHE
38	DE	117	MET
38	DE	118	LYS
38	DE	119	ARG
38	DE	134	ILE
38	DE	154	LYS
38	DE	160	TYR
38	DE	184	VAL
38	DE	202	LYS
38	DE	203	LYS
39	DF	15	SER
39	DF	64	ILE
39	DF	66	PRO
39	DF	74	ARG
39	DF	78	ILE
39	DF	100	THR
39	DF	110	LEU
39	DF	112	MET
39	DF	160	ASN
39	DF	165	ARG
39	DF	191	ARG
39	DF	202	PHE
40	DG	16	ARG
40	DG	34	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	DG	39	ILE
40	DG	45	GLU
40	DG	49	ASP
40	DG	53	LEU
40	DG	70	VAL
40	DG	87	PRO
40	DG	90	LEU
40	DG	101	ILE
40	DG	108	ASN
40	DG	112	PRO
40	DG	117	PHE
40	DG	125	PHE
40	DG	130	ASN
40	DG	139	LEU
40	DG	141	PHE
40	DG	143	GLU
40	DG	145	THR
40	DG	155	MET
40	DG	157	ILE
40	DG	166	ASP
40	DG	167	GLU
41	DH	41	MET
41	DH	53	GLU
41	DH	86	GLU
41	DH	89	ILE
41	DH	105	LEU
41	DH	123	PHE
41	DH	136	ILE
41	DH	143	GLN
41	DH	149	ARG
41	DH	152	ARG
41	DH	153	LYS
41	DH	157	TYR
41	DH	159	GLU
41	DH	163	TYR
41	DH	170	ARG
42	DI	12	LEU
42	DI	15	VAL
42	DI	38	LEU
42	DI	109	ILE
42	DI	129	THR
42	DI	130	TYR

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
42	DI	133	HIS
42	DI	134	PRO
42	DI	142	VAL
43	DN	4	TYR
43	DN	19	GLU
43	DN	22	THR
43	DN	28	THR
43	DN	35	ARG
43	DN	39	ARG
43	DN	41	ASP
43	DN	42	TRP
43	DN	48	MET
43	DN	51	PHE
43	DN	56	ASN
43	DN	63	THR
43	DN	65	LYS
43	DN	78	TYR
43	DN	79	PRO
43	DN	82	LEU
43	DN	94	HIS
43	DN	120	LEU
43	DN	127	ASP
43	DN	130	HIS
44	DO	8	LEU
44	DO	17	ARG
44	DO	32	TYR
44	DO	48	PRO
44	DO	52	VAL
44	DO	101	PRO
44	DO	102	VAL
44	DO	115	VAL
44	DO	119	PRO
45	DP	10	PRO
45	DP	13	ASN
45	DP	16	ARG
45	DP	18	ARG
45	DP	21	ARG
45	DP	33	ARG
45	DP	35	HIS
45	DP	40	SER
45	DP	51	PHE
45	DP	59	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
45	DP	61	ARG
45	DP	62	LEU
45	DP	64	LYS
45	DP	75	ILE
45	DP	81	GLN
45	DP	85	LEU
45	DP	105	LEU
45	DP	123	LEU
45	DP	135	LEU
45	DP	144	GLU
45	DP	148	LEU
46	DQ	13	GLN
46	DQ	17	LEU
46	DQ	22	LYS
46	DQ	26	TYR
46	DQ	29	PHE
46	DQ	34	LEU
46	DQ	58	PHE
46	DQ	63	LYS
46	DQ	75	THR
46	DQ	80	GLU
46	DQ	82	ARG
46	DQ	91	GLU
46	DQ	111	GLU
47	DR	2	ARG
47	DR	5	LYS
47	DR	17	ARG
47	DR	40	LYS
47	DR	49	ASP
47	DR	60	LEU
47	DR	76	VAL
47	DR	79	LEU
47	DR	104	ARG
48	DS	13	ARG
48	DS	16	ASN
48	DS	26	LEU
48	DS	36	TYR
48	DS	54	LEU
48	DS	61	ASN
48	DS	68	GLN
48	DS	80	LEU
48	DS	89	ARG

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
48	DS	92	TYR
48	DS	93	LYS
48	DS	98	VAL
49	DT	13	ARG
49	DT	24	PRO
49	DT	32	TYR
49	DT	33	LYS
49	DT	41	ARG
49	DT	51	ARG
49	DT	53	ARG
49	DT	58	ASN
49	DT	59	THR
49	DT	65	LYS
49	DT	78	LEU
49	DT	82	LEU
49	DT	87	ASP
49	DT	96	ARG
49	DT	99	LEU
49	DT	100	TYR
49	DT	108	ARG
49	DT	112	ARG
49	DT	115	ARG
49	DT	121	ILE
49	DT	128	GLU
50	DU	64	ARG
50	DU	76	TYR
50	DU	79	PHE
50	DU	88	ILE
50	DU	89	GLU
50	DU	112	ARG
50	DU	114	LYS
51	DV	1	MET
51	DV	2	PHE
51	DV	12	TYR
51	DV	14	VAL
51	DV	18	LEU
51	DV	19	LYS
51	DV	21	ARG
51	DV	39	LEU
51	DV	40	LEU
51	DV	66	ARG
51	DV	70	ILE

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
51	DV	78	LYS
51	DV	80	GLN
51	DV	82	ARG
51	DV	88	ARG
51	DV	90	PRO
51	DV	92	THR
51	DV	93	GLU
52	DW	11	ARG
52	DW	25	ARG
52	DW	51	LEU
52	DW	70	TYR
52	DW	75	TYR
52	DW	88	ARG
52	DW	107	LEU
53	DX	21	PHE
53	DX	27	THR
53	DX	28	PHE
53	DX	33	LYS
53	DX	36	LYS
53	DX	40	LYS
53	DX	43	VAL
53	DX	49	VAL
53	DX	59	VAL
53	DX	65	ARG
53	DX	68	ARG
53	DX	76	ARG
53	DX	78	LYS
53	DX	81	VAL
54	DY	6	HIS
54	DY	7	VAL
54	DY	9	LYS
54	DY	14	LEU
54	DY	29	GLU
54	DY	31	LEU
54	DY	32	PRO
54	DY	35	TYR
54	DY	38	ILE
54	DY	56	PRO
54	DY	62	GLU
54	DY	66	PRO
54	DY	75	ILE
54	DY	76	CYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
54	DY	77	PRO
54	DY	90	LEU
54	DY	97	ARG
55	DZ	6	LYS
55	DZ	8	TYR
55	DZ	9	TYR
55	DZ	18	LEU
55	DZ	31	ARG
55	DZ	37	VAL
55	DZ	45	ASP
55	DZ	53	ILE
55	DZ	67	LEU
55	DZ	79	ARG
55	DZ	99	TYR
55	DZ	150	LEU
55	DZ	151	HIS
55	DZ	169	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (275) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	37	ASN
2	AB	40	HIS
2	AB	78	GLN
2	AB	146	GLN
2	AB	204	ASN
3	AC	3	ASN
3	AC	28	GLN
3	AC	170	GLN
3	AC	181	ASN
4	AD	62	GLN
4	AD	77	ASN
5	AE	20	GLN
5	AE	56	GLN
5	AE	73	ASN
5	AE	78	HIS
6	AF	7	ASN
6	AF	13	ASN
6	AF	18	GLN
6	AF	27	GLN
6	AF	32	ASN
6	AF	64	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	AF	100	ASN
7	AG	13	GLN
7	AG	64	GLN
7	AG	68	ASN
7	AG	84	ASN
7	AG	106	GLN
7	AG	148	ASN
8	AH	82	HIS
9	AI	23	ASN
9	AI	124	GLN
10	AJ	13	HIS
10	AJ	56	HIS
10	AJ	78	ASN
11	AK	38	ASN
11	AK	117	ASN
12	AL	8	ASN
12	AL	9	GLN
12	AL	49	ASN
12	AL	75	HIS
13	AM	40	ASN
15	AO	37	ASN
15	AO	53	HIS
16	AP	76	GLN
16	AP	82	GLN
17	AQ	16	GLN
17	AQ	94	ASN
18	AR	63	GLN
19	AS	57	HIS
20	AT	16	HIS
20	AT	26	ASN
25	B0	29	GLN
25	B0	35	ASN
26	B1	19	GLN
26	B1	66	HIS
27	B2	46	GLN
27	B2	47	ASN
27	B2	56	GLN
28	B3	19	GLN
28	B3	46	ASN
30	B5	4	HIS
30	B5	23	HIS
30	B5	43	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
31	B6	20	ASN
31	B6	26	ASN
32	B7	8	ASN
33	B8	35	GLN
37	BD	58	HIS
37	BD	126	GLN
37	BD	164	GLN
37	BD	166	GLN
37	BD	186	HIS
37	BD	198	ASN
38	BE	48	GLN
38	BE	54	GLN
38	BE	66	HIS
38	BE	132	HIS
38	BE	143	ASN
38	BE	169	ASN
38	BE	192	ASN
39	BF	69	HIS
39	BF	75	HIS
39	BF	160	ASN
39	BF	169	ASN
40	BG	27	ASN
40	BG	40	ASN
40	BG	79	ASN
41	BH	74	ASN
41	BH	147	ASN
42	BI	43	ASN
42	BI	105	HIS
42	BI	133	HIS
43	BN	56	ASN
43	BN	94	HIS
43	BN	128	HIS
44	BO	3	GLN
44	BO	13	ASN
45	BP	9	ASN
45	BP	13	ASN
45	BP	38	GLN
45	BP	81	GLN
45	BP	128	HIS
46	BQ	12	GLN
46	BQ	13	GLN
46	BQ	89	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	BQ	141	GLN
47	BR	13	HIS
47	BR	16	HIS
47	BR	23	ASN
47	BR	61	HIS
47	BR	91	GLN
48	BS	16	ASN
48	BS	34	HIS
48	BS	61	ASN
48	BS	84	GLN
49	BT	58	ASN
49	BT	84	GLN
49	BT	90	GLN
49	BT	123	GLN
50	BU	14	HIS
50	BU	49	HIS
50	BU	75	ASN
50	BU	81	HIS
51	BV	11	GLN
51	BV	89	GLN
52	BW	57	ASN
52	BW	60	ASN
52	BW	61	ASN
52	BW	62	HIS
53	BX	41	ASN
53	BX	55	ASN
53	BX	87	GLN
54	BY	6	HIS
55	BZ	73	GLN
55	BZ	75	ASN
55	BZ	118	GLN
55	BZ	151	HIS
2	CB	37	ASN
2	CB	40	HIS
2	CB	78	GLN
2	CB	146	GLN
2	CB	204	ASN
3	CC	3	ASN
3	CC	28	GLN
3	CC	170	GLN
3	CC	181	ASN
4	CD	62	GLN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
4	CD	77	ASN
5	CE	20	GLN
5	CE	56	GLN
5	CE	73	ASN
5	CE	78	HIS
6	CF	7	ASN
6	CF	13	ASN
6	CF	18	GLN
6	CF	27	GLN
6	CF	32	ASN
6	CF	64	GLN
6	CF	100	ASN
7	CG	13	GLN
7	CG	64	GLN
7	CG	68	ASN
7	CG	84	ASN
7	CG	106	GLN
7	CG	148	ASN
8	CH	82	HIS
9	CI	23	ASN
9	CI	124	GLN
10	CJ	13	HIS
10	CJ	56	HIS
10	CJ	78	ASN
11	CK	38	ASN
11	CK	117	ASN
12	CL	8	ASN
12	CL	9	GLN
12	CL	49	ASN
12	CL	75	HIS
13	CM	40	ASN
15	CO	37	ASN
16	CP	76	GLN
16	CP	82	GLN
17	CQ	16	GLN
17	CQ	94	ASN
18	CR	63	GLN
19	CS	57	HIS
20	CT	16	HIS
20	CT	26	ASN
25	D0	29	GLN
25	D0	35	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	D1	16	ASN
26	D1	19	GLN
26	D1	66	HIS
27	D2	46	GLN
27	D2	47	ASN
27	D2	56	GLN
28	D3	19	GLN
28	D3	46	ASN
30	D5	4	HIS
30	D5	23	HIS
30	D5	43	HIS
31	D6	20	ASN
31	D6	26	ASN
32	D7	8	ASN
33	D8	35	GLN
37	DD	58	HIS
37	DD	126	GLN
37	DD	164	GLN
37	DD	166	GLN
37	DD	186	HIS
37	DD	198	ASN
38	DE	48	GLN
38	DE	54	GLN
38	DE	66	HIS
38	DE	132	HIS
38	DE	143	ASN
38	DE	169	ASN
38	DE	192	ASN
39	DF	69	HIS
39	DF	75	HIS
39	DF	160	ASN
39	DF	169	ASN
40	DG	40	ASN
40	DG	58	GLN
40	DG	79	ASN
40	DG	108	ASN
40	DG	123	ASN
40	DG	132	ASN
41	DH	74	ASN
41	DH	147	ASN
42	DI	43	ASN
42	DI	105	HIS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
42	DI	133	HIS
43	DN	56	ASN
43	DN	94	HIS
43	DN	128	HIS
44	DO	3	GLN
44	DO	13	ASN
45	DP	9	ASN
45	DP	13	ASN
45	DP	38	GLN
45	DP	81	GLN
45	DP	128	HIS
46	DQ	12	GLN
46	DQ	13	GLN
46	DQ	89	ASN
46	DQ	141	GLN
47	DR	13	HIS
47	DR	16	HIS
47	DR	23	ASN
47	DR	61	HIS
47	DR	91	GLN
48	DS	16	ASN
48	DS	34	HIS
48	DS	61	ASN
48	DS	84	GLN
49	DT	58	ASN
49	DT	84	GLN
49	DT	90	GLN
49	DT	123	GLN
50	DU	49	HIS
50	DU	75	ASN
50	DU	81	HIS
51	DV	11	GLN
51	DV	89	GLN
52	DW	57	ASN
52	DW	60	ASN
52	DW	61	ASN
52	DW	62	HIS
53	DX	41	ASN
53	DX	55	ASN
53	DX	87	GLN
54	DY	6	HIS
55	DZ	34	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
55	DZ	55	HIS
55	DZ	118	GLN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1503/1522 (98%)	200 (13%)	36 (2%)
1	CA	1503/1522 (98%)	204 (13%)	36 (2%)
22	AV	76/77 (98%)	18 (23%)	0
22	CV	76/77 (98%)	20 (26%)	0
23	AW	75/76 (98%)	15 (20%)	3 (4%)
23	AY	18/76 (23%)	2 (11%)	0
23	CW	75/76 (98%)	16 (21%)	3 (4%)
23	CY	18/76 (23%)	3 (16%)	0
24	AX	10/24 (41%)	2 (20%)	0
24	CX	10/24 (41%)	2 (20%)	0
34	BA	2771/2787 (99%)	563 (20%)	76 (2%)
34	DA	2771/2787 (99%)	560 (20%)	76 (2%)
35	BB	118/122 (96%)	14 (11%)	1 (0%)
35	DB	118/122 (96%)	14 (11%)	1 (0%)
All	All	9142/9368 (97%)	1633 (17%)	232 (2%)

All (1633) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	31	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	51	A
1	AA	60	A
1	AA	61	G
1	AA	80	G
1	AA	81	U
1	AA	90	U
1	AA	97	G
1	AA	98	G
1	AA	101	A
1	AA	116	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	120	A
1	AA	121	C
1	AA	131	C
1	AA	144	G
1	AA	150	C
1	AA	172	A
1	AA	189(H)	G
1	AA	195	A
1	AA	197	A
1	AA	220	G
1	AA	244	U
1	AA	247	G
1	AA	251	G
1	AA	266	G
1	AA	267	C
1	AA	289	G
1	AA	301	G
1	AA	321	A
1	AA	328	C
1	AA	329	A
1	AA	332	G
1	AA	345	C
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	367	U
1	AA	372	C
1	AA	397	A
1	AA	406	G
1	AA	410	G
1	AA	411	A
1	AA	412	A
1	AA	414	A
1	AA	422	C
1	AA	423	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	437	U
1	AA	439	A
1	AA	442	C
1	AA	452	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	470	C
1	AA	484	G
1	AA	485	G
1	AA	496	A
1	AA	498	U
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	518	C
1	AA	524	G
1	AA	527	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	547	A
1	AA	561	U
1	AA	562	C
1	AA	566	G
1	AA	572	A
1	AA	573	A
1	AA	575	G
1	AA	576	G
1	AA	577	G
1	AA	588	G
1	AA	616	G
1	AA	631	G
1	AA	632	A
1	AA	653	A
1	AA	665	A
1	AA	687	A
1	AA	688	G
1	AA	723	U
1	AA	731	G
1	AA	749	C
1	AA	755	G
1	AA	794	A
1	AA	816	A
1	AA	817	C
1	AA	819	A
1	AA	821	G
1	AA	828	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	833	U
1	AA	839	U
1	AA	840	C
1	AA	841	U
1	AA	848	C
1	AA	859	A
1	AA	885	G
1	AA	902	G
1	AA	913	A
1	AA	914	A
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	960	U
1	AA	961	U
1	AA	966	G
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	980	C
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	1026	G
1	AA	1050	G
1	AA	1054	C
1	AA	1065	U
1	AA	1066	C
1	AA	1068	G
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1117	G
1	AA	1118	C
1	AA	1124	G
1	AA	1126	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1129	C
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1146	A
1	AA	1152	A
1	AA	1159	U
1	AA	1196	U
1	AA	1197	G
1	AA	1201	A
1	AA	1202	G
1	AA	1212	U
1	AA	1213	A
1	AA	1214	C
1	AA	1225	A
1	AA	1238	A
1	AA	1249	C
1	AA	1255	G
1	AA	1256	A
1	AA	1257	U
1	AA	1280	A
1	AA	1281	U
1	AA	1282	C
1	AA	1286	A
1	AA	1287	A
1	AA	1294	G
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1317	C
1	AA	1322	C
1	AA	1323	G
1	AA	1331	G
1	AA	1335	C
1	AA	1338	G
1	AA	1347	G
1	AA	1364	U
1	AA	1365	G
1	AA	1419	G
1	AA	1442	G
1	AA	1442(A)	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1442(B)	A
1	AA	1443	G
1	AA	1447	A
1	AA	1452	C
1	AA	1487	G
1	AA	1492	A
1	AA	1498	U
1	AA	1499	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1517	G
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G
22	AV	4	G
22	AV	5	G
22	AV	8	U
22	AV	17	C
22	AV	17(A)	U
22	AV	18	G
22	AV	19	G
22	AV	20	U
22	AV	21	A
22	AV	47	U
22	AV	48	C
22	AV	49	G
22	AV	53	G
22	AV	67	C
22	AV	71	C
22	AV	73	A
22	AV	75	C
22	AV	76	A
23	AW	15	G
23	AW	16	U
23	AW	17	C
23	AW	18	G
23	AW	19	G
23	AW	21	A
23	AW	39	U
23	AW	40	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	AW	43	C
23	AW	48	C
23	AW	52	G
23	AW	59	U
23	AW	61	C
23	AW	70	G
23	AW	71	G
24	AX	13	A
24	AX	14	A
23	AY	34	G
23	AY	36	A
34	BA	10	G
34	BA	28	A
34	BA	35	G
34	BA	45	C
34	BA	49	A
34	BA	50	U
34	BA	51	G
34	BA	64	A
34	BA	69	C
34	BA	71	A
34	BA	72	U
34	BA	73	A
34	BA	75	G
34	BA	84	A
34	BA	88	G
34	BA	90	U
34	BA	92	A
34	BA	94	C
34	BA	95	G
34	BA	99	U
34	BA	100	G
34	BA	102	G
34	BA	118	A
34	BA	119	A
34	BA	120	U
34	BA	129	C
34	BA	132	G
34	BA	139	G
34	BA	139(A)	G
34	BA	141	A
34	BA	142(A)	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	143(A)	C
34	BA	146	G
34	BA	149	A
34	BA	154	G
34	BA	154(A)	C
34	BA	157	U
34	BA	158	U
34	BA	171	G
34	BA	196	A
34	BA	197	A
34	BA	199	A
34	BA	204	A
34	BA	205	G
34	BA	216	A
34	BA	221	A
34	BA	222	A
34	BA	228	A
34	BA	229	A
34	BA	230	U
34	BA	248	G
34	BA	261	G
34	BA	267	C
34	BA	271(I)	G
34	BA	271(K)	U
34	BA	271(L)	U
34	BA	271(M)	G
34	BA	271(N)	U
34	BA	271(O)	C
34	BA	271(P)	C
34	BA	271(R)	G
34	BA	271(Y)	U
34	BA	272	G
34	BA	272(B)	G
34	BA	272(H)	C
34	BA	274	G
34	BA	275	G
34	BA	279	C
34	BA	283	A
34	BA	284	U
34	BA	286	C
34	BA	287	C
34	BA	329	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	BA	330	A
34	BA	332	A
34	BA	333	G
34	BA	344	G
34	BA	352	G
34	BA	362	U
34	BA	363(F)	A
34	BA	364	C
34	BA	365	C
34	BA	372	G
34	BA	386	G
34	BA	388	G
34	BA	396	G
34	BA	405	U
34	BA	411	G
34	BA	412	A
34	BA	428	A
34	BA	444	C
34	BA	448	U
34	BA	456	C
34	BA	457	A
34	BA	470	A
34	BA	472	A
34	BA	473	G
34	BA	475	U
34	BA	481	G
34	BA	505	A
34	BA	508	G
34	BA	509	C
34	BA	513	A
34	BA	531	C
34	BA	532	A
34	BA	533	G
34	BA	537	C
34	BA	542	C
34	BA	543	C
34	BA	547	A
34	BA	548	A
34	BA	549	G
34	BA	551	G
34	BA	563	G
34	BA	572	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	573	G
34	BA	575	A
34	BA	586	A
34	BA	588	U
34	BA	604	G
34	BA	607	U
34	BA	613	G
34	BA	614(A)	U
34	BA	614(B)	G
34	BA	614(C)	A
34	BA	615	G
34	BA	621	A
34	BA	622	G
34	BA	627	A
34	BA	637	A
34	BA	645	C
34	BA	646	A
34	BA	652	C
34	BA	656	G
34	BA	659	C
34	BA	669	G
34	BA	670	A
34	BA	671	C
34	BA	686	G
34	BA	687	C
34	BA	708	C
34	BA	722	A
34	BA	730	C
34	BA	753	C
34	BA	775	G
34	BA	776	G
34	BA	782	A
34	BA	784	A
34	BA	790	C
34	BA	791	C
34	BA	792	G
34	BA	805	G
34	BA	812	C
34	BA	819	A
34	BA	827	U
34	BA	828	U
34	BA	830	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	848	G
34	BA	856	C
34	BA	857	C
34	BA	859	G
34	BA	866	A
34	BA	878	A
34	BA	883	G
34	BA	892	G
34	BA	894	C
34	BA	897	C
34	BA	898	C
34	BA	901	A
34	BA	910	A
34	BA	914	C
34	BA	917	A
34	BA	926	A
34	BA	932	G
34	BA	941	A
34	BA	946	G
34	BA	955	C
34	BA	956	G
34	BA	957	A
34	BA	958	U
34	BA	959	A
34	BA	961	C
34	BA	965	C
34	BA	974	G
34	BA	975	C
34	BA	983	A
34	BA	991	C
34	BA	996	A
34	BA	1005	C
34	BA	1011	G
34	BA	1012	U
34	BA	1013	C
34	BA	1022	G
34	BA	1023	U
34	BA	1025	G
34	BA	1026	U
34	BA	1034	G
34	BA	1041	C
34	BA	1044	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	1045	A
34	BA	1047	G
34	BA	1049	C
34	BA	1052	C
34	BA	1106	A
34	BA	1107	G
34	BA	1110	G
34	BA	1112	G
34	BA	1113	U
34	BA	1115	G
34	BA	1129	A
34	BA	1130	U
34	BA	1135	C
34	BA	1136	G
34	BA	1142	U
34	BA	1143	A
34	BA	1155	A
34	BA	1156	A
34	BA	1159	U
34	BA	1175	U
34	BA	1176	G
34	BA	1177	A
34	BA	1178	C
34	BA	1195	G
34	BA	1205	U
34	BA	1206	G
34	BA	1210	A
34	BA	1211	U
34	BA	1220	A
34	BA	1221	C
34	BA	1241	A
34	BA	1247	A
34	BA	1248	G
34	BA	1251	C
34	BA	1253	A
34	BA	1254	A
34	BA	1255	U
34	BA	1256	G
34	BA	1265	A
34	BA	1271	G
34	BA	1272	A
34	BA	1276	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	1281	G
34	BA	1300	U
34	BA	1301	A
34	BA	1302	A
34	BA	1314	C
34	BA	1319	G
34	BA	1329	U
34	BA	1332	G
34	BA	1345	C
34	BA	1349	A
34	BA	1352	U
34	BA	1359	A
34	BA	1368	G
34	BA	1379	A
34	BA	1380	G
34	BA	1384	A
34	BA	1385	G
34	BA	1398	C
34	BA	1407	C
34	BA	1416	G
34	BA	1417	C
34	BA	1419	A
34	BA	1420	U
34	BA	1421	G
34	BA	1427	A
34	BA	1428	C
34	BA	1437	C
34	BA	1445	A
34	BA	1449	A
34	BA	1450	G
34	BA	1455	G
34	BA	1458	C
34	BA	1459	G
34	BA	1461	G
34	BA	1467	C
34	BA	1471	A
34	BA	1475	G
34	BA	1478	G
34	BA	1481	U
34	BA	1482	G
34	BA	1484	G
34	BA	1485	G

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	1490	A
34	BA	1493	C
34	BA	1494	A
34	BA	1495	A
34	BA	1497	U
34	BA	1498	C
34	BA	1501	C
34	BA	1502	C
34	BA	1505	C
34	BA	1509	C
34	BA	1509(A)	A
34	BA	1520	G
34	BA	1528(A)	A
34	BA	1529	G
34	BA	1530	C
34	BA	1531	C
34	BA	1532	C
34	BA	1533	G
34	BA	1543	C
34	BA	1545	A
34	BA	1554	A
34	BA	1558	A
34	BA	1559	G
34	BA	1569	A
34	BA	1578	U
34	BA	1579	A
34	BA	1584	C
34	BA	1586	A
34	BA	1588	C
34	BA	1591	G
34	BA	1594	G
34	BA	1603	A
34	BA	1608	A
34	BA	1610	A
34	BA	1616	A
34	BA	1617	C
34	BA	1618	A
34	BA	1635	G
34	BA	1636	C
34	BA	1640	C
34	BA	1648	C
34	BA	1652	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	1653	G
34	BA	1654	A
34	BA	1674	G
34	BA	1694	C
34	BA	1695	G
34	BA	1697	G
34	BA	1698	A
34	BA	1699	G
34	BA	1718	G
34	BA	1722	A
34	BA	1739	U
34	BA	1742	G
34	BA	1744	C
34	BA	1746	G
34	BA	1748	G
34	BA	1763	G
34	BA	1764	G
34	BA	1773	A
34	BA	1780	A
34	BA	1791	A
34	BA	1799	G
34	BA	1800	C
34	BA	1816	G
34	BA	1820	U
34	BA	1821	A
34	BA	1822	G
34	BA	1829	A
34	BA	1835	G
34	BA	1847	A
34	BA	1858	G
34	BA	1865	G
34	BA	1866	C
34	BA	1877	A
34	BA	1878	G
34	BA	1880	C
34	BA	1882	C
34	BA	1885	A
34	BA	1886	C
34	BA	1888	G
34	BA	1889	A
34	BA	1900	A
34	BA	1903	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	1906	G
34	BA	1929	G
34	BA	1934	C
34	BA	1935	G
34	BA	1936	A
34	BA	1938	A
34	BA	1948	G
34	BA	1955	U
34	BA	1962	C
34	BA	1963	U
34	BA	1967	C
34	BA	1969	A
34	BA	1970	A
34	BA	1971	A
34	BA	1972	A
34	BA	1987	G
34	BA	1991	U
34	BA	1993	U
34	BA	2020	A
34	BA	2023	G
34	BA	2027	G
34	BA	2031	A
34	BA	2033	A
34	BA	2034	U
34	BA	2036	C
34	BA	2043	C
34	BA	2051	A
34	BA	2055	C
34	BA	2056	G
34	BA	2060	A
34	BA	2061	G
34	BA	2062	A
34	BA	2069	G
34	BA	2093	G
34	BA	2099	U
34	BA	2103	C
34	BA	2104	G
34	BA	2110	G
34	BA	2111	C
34	BA	2112	G
34	BA	2116	G
34	BA	2118	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	BA	2119	A
34	BA	2120	G
34	BA	2122	U
34	BA	2127	G
34	BA	2128	C
34	BA	2129	C
34	BA	2130	U
34	BA	2159	G
34	BA	2161	C
34	BA	2162	G
34	BA	2164	C
34	BA	2165	G
34	BA	2170	A
34	BA	2171	A
34	BA	2172	U
34	BA	2176	A
34	BA	2187	G
34	BA	2190	G
34	BA	2191	G
34	BA	2192	G
34	BA	2193	G
34	BA	2198	A
34	BA	2199	A
34	BA	2200	C
34	BA	2207	G
34	BA	2208	A
34	BA	2218	U
34	BA	2219	G
34	BA	2225	A
34	BA	2226	C
34	BA	2238	G
34	BA	2239	G
34	BA	2263	C
34	BA	2275	C
34	BA	2276	G
34	BA	2283	C
34	BA	2286	A
34	BA	2287	A
34	BA	2288	A
34	BA	2290	G
34	BA	2305	A
34	BA	2307	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	BA	2308	G
34	BA	2309	A
34	BA	2311	A
34	BA	2313	C
34	BA	2319	G
34	BA	2320	A
34	BA	2325	G
34	BA	2334	G
34	BA	2336	A
34	BA	2345	G
34	BA	2347	C
34	BA	2349	G
34	BA	2360	A
34	BA	2361	A
34	BA	2383	G
34	BA	2385	C
34	BA	2388	A
34	BA	2399	G
34	BA	2402	C
34	BA	2422	A
34	BA	2423	U
34	BA	2425	A
34	BA	2427	C
34	BA	2429	G
34	BA	2430	A
34	BA	2435	A
34	BA	2439	A
34	BA	2441	C
34	BA	2448	A
34	BA	2465	C
34	BA	2469	A
34	BA	2470	G
34	BA	2476	A
34	BA	2477	C
34	BA	2478	A
34	BA	2482	G
34	BA	2484	G
34	BA	2502	G
34	BA	2505	G
34	BA	2518	A
34	BA	2520	C
34	BA	2523	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	BA	2529	G
34	BA	2531	A
34	BA	2534	A
34	BA	2543	G
34	BA	2554	U
34	BA	2566	A
34	BA	2567	G
34	BA	2573	C
34	BA	2582	G
34	BA	2585	U
34	BA	2586	C
34	BA	2602	A
34	BA	2611	U
34	BA	2612	C
34	BA	2615	U
34	BA	2630	G
34	BA	2637	U
34	BA	2640	G
34	BA	2646	C
34	BA	2654	A
34	BA	2655	G
34	BA	2660	A
34	BA	2661	G
34	BA	2662	A
34	BA	2663	G
34	BA	2673	G
34	BA	2682	U
34	BA	2690	C
34	BA	2691	C
34	BA	2702	U
34	BA	2703	C
34	BA	2712	U
34	BA	2712(A)	A
34	BA	2713	A
34	BA	2720	U
34	BA	2733	A
34	BA	2736	G
34	BA	2751	G
34	BA	2752	C
34	BA	2754	U
34	BA	2755	C
34	BA	2757	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	BA	2759	G
34	BA	2762	G
34	BA	2763	G
34	BA	2765	A
34	BA	2778	A
34	BA	2779	U
34	BA	2780	G
34	BA	2781	A
34	BA	2789	C
34	BA	2790	A
34	BA	2791	C
34	BA	2794	C
34	BA	2795	G
34	BA	2801(A)	A
34	BA	2802	G
34	BA	2803	C
34	BA	2808	U
34	BA	2820	A
34	BA	2821	A
34	BA	2827	C
34	BA	2833	G
34	BA	2834	G
34	BA	2835	A
34	BA	2849	U
34	BA	2860	A
34	BA	2864	G
34	BA	2872	G
34	BA	2880	C
35	BB	8	U
35	BB	15	A
35	BB	16	G
35	BB	22	U
35	BB	27	C
35	BB	40	U
35	BB	42	C
35	BB	45	A
35	BB	53	A
35	BB	67	G
35	BB	73	A
35	BB	75	G
35	BB	88	C
35	BB	110	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	9	G
1	CA	31	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	60	A
1	CA	61	G
1	CA	80	G
1	CA	81	U
1	CA	90	U
1	CA	97	G
1	CA	98	G
1	CA	101	A
1	CA	116	A
1	CA	120	A
1	CA	121	C
1	CA	131	C
1	CA	144	G
1	CA	150	C
1	CA	172	A
1	CA	189(H)	G
1	CA	195	A
1	CA	197	A
1	CA	220	G
1	CA	244	U
1	CA	247	G
1	CA	251	G
1	CA	266	G
1	CA	267	C
1	CA	289	G
1	CA	301	G
1	CA	321	A
1	CA	328	C
1	CA	329	A
1	CA	332	G
1	CA	345	C
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	367	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	372	C
1	CA	397	A
1	CA	406	G
1	CA	410	G
1	CA	411	A
1	CA	412	A
1	CA	414	A
1	CA	422	C
1	CA	423	G
1	CA	428	G
1	CA	429	U
1	CA	430	A
1	CA	437	U
1	CA	439	A
1	CA	442	C
1	CA	452	A
1	CA	470	C
1	CA	484	G
1	CA	485	G
1	CA	496	A
1	CA	498	U
1	CA	509	A
1	CA	510	A
1	CA	511	C
1	CA	518	C
1	CA	524	G
1	CA	527	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	534	U
1	CA	547	A
1	CA	559	A
1	CA	561	U
1	CA	562	C
1	CA	566	G
1	CA	572	A
1	CA	573	A
1	CA	575	G
1	CA	576	G
1	CA	577	G
1	CA	588	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	616	G
1	CA	631	G
1	CA	632	A
1	CA	653	A
1	CA	665	A
1	CA	687	A
1	CA	688	G
1	CA	723	U
1	CA	731	G
1	CA	749	C
1	CA	755	G
1	CA	794	A
1	CA	816	A
1	CA	817	C
1	CA	819	A
1	CA	821	G
1	CA	828	A
1	CA	833	U
1	CA	839	U
1	CA	840	C
1	CA	841	U
1	CA	848	C
1	CA	859	A
1	CA	874	G
1	CA	885	G
1	CA	902	G
1	CA	913	A
1	CA	914	A
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	935	A
1	CA	960	U
1	CA	961	U
1	CA	966	G
1	CA	968	A
1	CA	969	A
1	CA	971	G
1	CA	974	A
1	CA	975	A
1	CA	976	G
1	CA	977	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	978	A
1	CA	980	C
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	1026	G
1	CA	1050	G
1	CA	1054	C
1	CA	1065	U
1	CA	1066	C
1	CA	1068	G
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1117	G
1	CA	1118	C
1	CA	1124	G
1	CA	1126	U
1	CA	1129	C
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1146	A
1	CA	1152	A
1	CA	1159	U
1	CA	1196	U
1	CA	1197	G
1	CA	1201	A
1	CA	1202	G
1	CA	1212	U
1	CA	1213	A
1	CA	1214	C
1	CA	1225	A
1	CA	1238	A
1	CA	1249	C
1	CA	1255	G
1	CA	1256	A
1	CA	1257	U
1	CA	1280	A
1	CA	1281	U
1	CA	1282	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1286	A
1	CA	1287	A
1	CA	1294	G
1	CA	1300	G
1	CA	1301	U
1	CA	1302	U
1	CA	1317	C
1	CA	1322	C
1	CA	1323	G
1	CA	1331	G
1	CA	1335	C
1	CA	1338	G
1	CA	1347	G
1	CA	1364	U
1	CA	1365	G
1	CA	1419	G
1	CA	1442	G
1	CA	1442(A)	G
1	CA	1442(B)	A
1	CA	1443	G
1	CA	1452	C
1	CA	1487	G
1	CA	1492	A
1	CA	1497	G
1	CA	1498	U
1	CA	1499	A
1	CA	1503	A
1	CA	1504	G
1	CA	1505	G
1	CA	1506	U
1	CA	1507	A
1	CA	1517	G
1	CA	1519	A
1	CA	1520	G
1	CA	1529	G
1	CA	1530	G
22	CV	3	C
22	CV	4	G
22	CV	5	G
22	CV	8	U
22	CV	17	C
22	CV	17(A)	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	CV	18	G
22	CV	19	G
22	CV	20	U
22	CV	21	A
22	CV	47	U
22	CV	48	C
22	CV	49	G
22	CV	53	G
22	CV	63	G
22	CV	71	C
22	CV	72	A
22	CV	73	A
22	CV	75	C
22	CV	76	A
23	CW	8	U
23	CW	16	U
23	CW	17	C
23	CW	18	G
23	CW	19	G
23	CW	20	U
23	CW	21	A
23	CW	39	U
23	CW	40	C
23	CW	44	G
23	CW	46	G
23	CW	47	U
23	CW	48	C
23	CW	61	C
23	CW	70	G
23	CW	71	G
24	CX	13	A
24	CX	14	A
23	CY	27	G
23	CY	34	G
23	CY	36	A
34	DA	10	G
34	DA	28	A
34	DA	35	G
34	DA	45	C
34	DA	49	A
34	DA	50	U
34	DA	51	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	64	A
34	DA	69	C
34	DA	71	A
34	DA	72	U
34	DA	73	A
34	DA	75	G
34	DA	84	A
34	DA	88	G
34	DA	90	U
34	DA	92	A
34	DA	94	C
34	DA	95	G
34	DA	99	U
34	DA	100	G
34	DA	102	G
34	DA	118	A
34	DA	119	A
34	DA	120	U
34	DA	129	C
34	DA	132	G
34	DA	139	G
34	DA	139(A)	G
34	DA	141	A
34	DA	142(A)	C
34	DA	143(A)	C
34	DA	146	G
34	DA	149	A
34	DA	154	G
34	DA	154(A)	C
34	DA	157	U
34	DA	158	U
34	DA	171	G
34	DA	196	A
34	DA	197	A
34	DA	204	A
34	DA	205	G
34	DA	216	A
34	DA	221	A
34	DA	222	A
34	DA	228	A
34	DA	229	A
34	DA	230	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	DA	248	G
34	DA	261	G
34	DA	267	C
34	DA	271(I)	G
34	DA	271(K)	U
34	DA	271(L)	U
34	DA	271(M)	G
34	DA	271(N)	U
34	DA	271(O)	C
34	DA	271(P)	C
34	DA	271(R)	G
34	DA	271(Y)	U
34	DA	272	G
34	DA	272(B)	G
34	DA	272(H)	C
34	DA	274	G
34	DA	275	G
34	DA	279	C
34	DA	283	A
34	DA	284	U
34	DA	286	C
34	DA	287	C
34	DA	329	G
34	DA	330	A
34	DA	332	A
34	DA	333	G
34	DA	344	G
34	DA	352	G
34	DA	362	U
34	DA	363(F)	A
34	DA	364	C
34	DA	365	C
34	DA	372	G
34	DA	386	G
34	DA	388	G
34	DA	396	G
34	DA	405	U
34	DA	411	G
34	DA	412	A
34	DA	428	A
34	DA	444	C
34	DA	448	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	456	C
34	DA	457	A
34	DA	470	A
34	DA	472	A
34	DA	473	G
34	DA	475	U
34	DA	481	G
34	DA	505	A
34	DA	508	G
34	DA	509	C
34	DA	513	A
34	DA	531	C
34	DA	532	A
34	DA	533	G
34	DA	537	C
34	DA	542	C
34	DA	543	C
34	DA	547	A
34	DA	548	A
34	DA	549	G
34	DA	551	G
34	DA	563	G
34	DA	572	A
34	DA	573	G
34	DA	575	A
34	DA	586	A
34	DA	588	U
34	DA	604	G
34	DA	607	U
34	DA	613	G
34	DA	614(A)	U
34	DA	614(B)	G
34	DA	614(C)	A
34	DA	615	G
34	DA	622	G
34	DA	627	A
34	DA	637	A
34	DA	645	C
34	DA	646	A
34	DA	652	C
34	DA	656	G
34	DA	659	C

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	669	G
34	DA	670	A
34	DA	671	C
34	DA	686	G
34	DA	687	C
34	DA	708	C
34	DA	722	A
34	DA	730	C
34	DA	753	C
34	DA	775	G
34	DA	776	G
34	DA	782	A
34	DA	784	A
34	DA	790	C
34	DA	791	C
34	DA	792	G
34	DA	805	G
34	DA	812	C
34	DA	819	A
34	DA	827	U
34	DA	828	U
34	DA	830	G
34	DA	848	G
34	DA	856	C
34	DA	857	C
34	DA	859	G
34	DA	866	A
34	DA	878	A
34	DA	883	G
34	DA	892	G
34	DA	894	C
34	DA	897	C
34	DA	898	C
34	DA	901	A
34	DA	910	A
34	DA	914	C
34	DA	917	A
34	DA	926	A
34	DA	932	G
34	DA	933	A
34	DA	941	A
34	DA	946	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	955	C
34	DA	956	G
34	DA	957	A
34	DA	958	U
34	DA	959	A
34	DA	961	C
34	DA	965	C
34	DA	974	G
34	DA	975	C
34	DA	983	A
34	DA	991	C
34	DA	996	A
34	DA	1005	C
34	DA	1011	G
34	DA	1012	U
34	DA	1013	C
34	DA	1022	G
34	DA	1023	U
34	DA	1025	G
34	DA	1026	U
34	DA	1034	G
34	DA	1041	C
34	DA	1044	G
34	DA	1045	A
34	DA	1047	G
34	DA	1049	C
34	DA	1052	C
34	DA	1054	A
34	DA	1107	G
34	DA	1110	G
34	DA	1112	G
34	DA	1113	U
34	DA	1115	G
34	DA	1129	A
34	DA	1130	U
34	DA	1135	C
34	DA	1136	G
34	DA	1142	U
34	DA	1143	A
34	DA	1155	A
34	DA	1156	A
34	DA	1159	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	1175	U
34	DA	1176	G
34	DA	1177	A
34	DA	1178	C
34	DA	1195	G
34	DA	1205	U
34	DA	1206	G
34	DA	1210	A
34	DA	1211	U
34	DA	1220	A
34	DA	1221	C
34	DA	1241	A
34	DA	1247	A
34	DA	1248	G
34	DA	1251	C
34	DA	1253	A
34	DA	1254	A
34	DA	1255	U
34	DA	1256	G
34	DA	1265	A
34	DA	1271	G
34	DA	1272	A
34	DA	1276	A
34	DA	1281	G
34	DA	1300	U
34	DA	1301	A
34	DA	1302	A
34	DA	1314	C
34	DA	1319	G
34	DA	1329	U
34	DA	1332	G
34	DA	1345	C
34	DA	1349	A
34	DA	1352	U
34	DA	1359	A
34	DA	1368	G
34	DA	1379	A
34	DA	1380	G
34	DA	1384	A
34	DA	1385	G
34	DA	1398	C
34	DA	1407	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	1416	G
34	DA	1417	C
34	DA	1419	A
34	DA	1420	U
34	DA	1421	G
34	DA	1427	A
34	DA	1428	C
34	DA	1437	C
34	DA	1445	A
34	DA	1449	A
34	DA	1450	G
34	DA	1455	G
34	DA	1458	C
34	DA	1459	G
34	DA	1461	G
34	DA	1467	C
34	DA	1471	A
34	DA	1475	G
34	DA	1478	G
34	DA	1481	U
34	DA	1482	G
34	DA	1484	G
34	DA	1485	G
34	DA	1490	A
34	DA	1493	C
34	DA	1494	A
34	DA	1495	A
34	DA	1497	U
34	DA	1498	C
34	DA	1501	C
34	DA	1502	C
34	DA	1505	C
34	DA	1509	C
34	DA	1509(A)	A
34	DA	1520	G
34	DA	1528(A)	A
34	DA	1529	G
34	DA	1530	C
34	DA	1531	C
34	DA	1532	C
34	DA	1533	G
34	DA	1543	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	1545	A
34	DA	1554	A
34	DA	1558	A
34	DA	1559	G
34	DA	1569	A
34	DA	1578	U
34	DA	1579	A
34	DA	1584	C
34	DA	1586	A
34	DA	1588	C
34	DA	1591	G
34	DA	1594	G
34	DA	1603	A
34	DA	1608	A
34	DA	1610	A
34	DA	1616	A
34	DA	1617	C
34	DA	1618	A
34	DA	1635	G
34	DA	1636	C
34	DA	1640	C
34	DA	1648	C
34	DA	1652	A
34	DA	1653	G
34	DA	1654	A
34	DA	1674	G
34	DA	1694	C
34	DA	1695	G
34	DA	1697	G
34	DA	1698	A
34	DA	1699	G
34	DA	1718	G
34	DA	1722	A
34	DA	1739	U
34	DA	1742	G
34	DA	1744	C
34	DA	1746	G
34	DA	1748	G
34	DA	1763	G
34	DA	1764	G
34	DA	1773	A
34	DA	1780	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	1791	A
34	DA	1799	G
34	DA	1800	C
34	DA	1816	G
34	DA	1820	U
34	DA	1821	A
34	DA	1822	G
34	DA	1835	G
34	DA	1847	A
34	DA	1858	G
34	DA	1865	G
34	DA	1866	C
34	DA	1877	A
34	DA	1878	G
34	DA	1880	C
34	DA	1882	C
34	DA	1885	A
34	DA	1886	C
34	DA	1888	G
34	DA	1889	A
34	DA	1900	A
34	DA	1903	G
34	DA	1906	G
34	DA	1929	G
34	DA	1934	C
34	DA	1935	G
34	DA	1936	A
34	DA	1938	A
34	DA	1948	G
34	DA	1955	U
34	DA	1962	C
34	DA	1963	U
34	DA	1967	C
34	DA	1969	A
34	DA	1970	A
34	DA	1971	A
34	DA	1972	A
34	DA	1987	G
34	DA	1991	U
34	DA	1993	U
34	DA	2020	A
34	DA	2023	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	2027	G
34	DA	2031	A
34	DA	2033	A
34	DA	2034	U
34	DA	2036	C
34	DA	2043	C
34	DA	2051	A
34	DA	2055	C
34	DA	2056	G
34	DA	2060	A
34	DA	2061	G
34	DA	2062	A
34	DA	2069	G
34	DA	2093	G
34	DA	2099	U
34	DA	2103	C
34	DA	2104	G
34	DA	2110	G
34	DA	2111	C
34	DA	2112	G
34	DA	2116	G
34	DA	2118	U
34	DA	2119	A
34	DA	2120	G
34	DA	2122	U
34	DA	2127	G
34	DA	2128	C
34	DA	2129	C
34	DA	2130	U
34	DA	2159	G
34	DA	2161	C
34	DA	2162	G
34	DA	2164	C
34	DA	2165	G
34	DA	2170	A
34	DA	2171	A
34	DA	2172	U
34	DA	2176	A
34	DA	2187	G
34	DA	2190	G
34	DA	2191	G
34	DA	2192	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	2193	G
34	DA	2198	A
34	DA	2199	A
34	DA	2200	C
34	DA	2207	G
34	DA	2208	A
34	DA	2218	U
34	DA	2219	G
34	DA	2225	A
34	DA	2226	C
34	DA	2238	G
34	DA	2239	G
34	DA	2251	G
34	DA	2263	C
34	DA	2275	C
34	DA	2276	G
34	DA	2283	C
34	DA	2286	A
34	DA	2287	A
34	DA	2288	A
34	DA	2290	G
34	DA	2305	A
34	DA	2307	G
34	DA	2308	G
34	DA	2309	A
34	DA	2311	A
34	DA	2313	C
34	DA	2319	G
34	DA	2320	A
34	DA	2325	G
34	DA	2334	G
34	DA	2336	A
34	DA	2345	G
34	DA	2347	C
34	DA	2349	G
34	DA	2360	A
34	DA	2361	A
34	DA	2383	G
34	DA	2385	C
34	DA	2399	G
34	DA	2402	C
34	DA	2422	A

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	2423	U
34	DA	2425	A
34	DA	2427	C
34	DA	2429	G
34	DA	2430	A
34	DA	2435	A
34	DA	2439	A
34	DA	2441	C
34	DA	2448	A
34	DA	2465	C
34	DA	2469	A
34	DA	2470	G
34	DA	2476	A
34	DA	2477	C
34	DA	2478	A
34	DA	2482	G
34	DA	2491	U
34	DA	2502	G
34	DA	2505	G
34	DA	2518	A
34	DA	2520	C
34	DA	2523	G
34	DA	2529	G
34	DA	2531	A
34	DA	2534	A
34	DA	2543	G
34	DA	2554	U
34	DA	2566	A
34	DA	2567	G
34	DA	2573	C
34	DA	2582	G
34	DA	2586	C
34	DA	2602	A
34	DA	2611	U
34	DA	2612	C
34	DA	2615	U
34	DA	2630	G
34	DA	2637	U
34	DA	2640	G
34	DA	2646	C
34	DA	2654	A
34	DA	2655	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	DA	2660	A
34	DA	2661	G
34	DA	2662	A
34	DA	2663	G
34	DA	2673	G
34	DA	2682	U
34	DA	2690	C
34	DA	2691	C
34	DA	2702	U
34	DA	2703	C
34	DA	2712	U
34	DA	2712(A)	A
34	DA	2713	A
34	DA	2720	U
34	DA	2733	A
34	DA	2736	G
34	DA	2751	G
34	DA	2752	C
34	DA	2754	U
34	DA	2755	C
34	DA	2757	A
34	DA	2759	G
34	DA	2762	G
34	DA	2763	G
34	DA	2765	A
34	DA	2778	A
34	DA	2779	U
34	DA	2780	G
34	DA	2781	A
34	DA	2789	C
34	DA	2790	A
34	DA	2791	C
34	DA	2794	C
34	DA	2795	G
34	DA	2801(A)	A
34	DA	2802	G
34	DA	2803	C
34	DA	2808	U
34	DA	2820	A
34	DA	2821	A
34	DA	2827	C
34	DA	2833	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	DA	2834	G
34	DA	2835	A
34	DA	2849	U
34	DA	2860	A
34	DA	2864	G
34	DA	2872	G
34	DA	2880	C
35	DB	8	U
35	DB	15	A
35	DB	16	G
35	DB	22	U
35	DB	27	C
35	DB	40	U
35	DB	42	C
35	DB	45	A
35	DB	53	A
35	DB	67	G
35	DB	73	A
35	DB	75	G
35	DB	88	C
35	DB	110	G

All (232) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	30	U
1	AA	60	A
1	AA	79	G
1	AA	115	G
1	AA	119	A
1	AA	243	A
1	AA	250	A
1	AA	266	G
1	AA	328	C
1	AA	366	C
1	AA	410	G
1	AA	412	A
1	AA	428	G
1	AA	429	U
1	AA	438	G
1	AA	484	G
1	AA	509	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	533	A
1	AA	560	U
1	AA	575	G
1	AA	687	A
1	AA	748	C
1	AA	793	U
1	AA	913	A
1	AA	992	U
1	AA	1049	U
1	AA	1064	G
1	AA	1065	U
1	AA	1067	A
1	AA	1201	A
1	AA	1281	U
1	AA	1285	A
1	AA	1300	G
1	AA	1442	G
1	AA	1498	U
1	AA	1504	G
23	AW	15	G
23	AW	47	U
23	AW	70	G
34	BA	27	G
34	BA	49	A
34	BA	71	A
34	BA	74	A
34	BA	128	C
34	BA	196	A
34	BA	197	A
34	BA	221	A
34	BA	272	G
34	BA	283	A
34	BA	331	A
34	BA	332	A
34	BA	387	U
34	BA	472	A
34	BA	474	G
34	BA	512	G
34	BA	587	C
34	BA	603	A
34	BA	614(C)	A
34	BA	669	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	BA	670	A
34	BA	752	A
34	BA	790	C
34	BA	856	C
34	BA	1022	G
34	BA	1112	G
34	BA	1176	G
34	BA	1210	A
34	BA	1250	G
34	BA	1275	A
34	BA	1300	U
34	BA	1301	A
34	BA	1378	A
34	BA	1397	U
34	BA	1427	A
34	BA	1458	C
34	BA	1484	G
34	BA	1494	A
34	BA	1544	A
34	BA	1558	A
34	BA	1608	A
34	BA	1635	G
34	BA	1652	A
34	BA	1653	G
34	BA	1694	C
34	BA	1697	G
34	BA	1722	A
34	BA	1799	G
34	BA	1819	A
34	BA	1820	U
34	BA	1885	A
34	BA	1912	A
34	BA	1934	C
34	BA	1937	A
34	BA	1962	C
34	BA	1970	A
34	BA	1987	G
34	BA	1992	G
34	BA	2031	A
34	BA	2033	A
34	BA	2126	A
34	BA	2191	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
34	BA	2225	A
34	BA	2282	G
34	BA	2290	G
34	BA	2422	A
34	BA	2481	G
34	BA	2610	C
34	BA	2637	U
34	BA	2662	A
34	BA	2689	U
34	BA	2756	U
34	BA	2779	U
34	BA	2796	U
34	BA	2859	G
34	BA	2864	G
35	BB	66	A
1	CA	30	U
1	CA	60	A
1	CA	79	G
1	CA	115	G
1	CA	119	A
1	CA	243	A
1	CA	250	A
1	CA	266	G
1	CA	328	C
1	CA	366	C
1	CA	410	G
1	CA	412	A
1	CA	428	G
1	CA	429	U
1	CA	438	G
1	CA	484	G
1	CA	509	A
1	CA	533	A
1	CA	560	U
1	CA	575	G
1	CA	687	A
1	CA	748	C
1	CA	793	U
1	CA	913	A
1	CA	992	U
1	CA	1049	U
1	CA	1064	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1065	U
1	CA	1067	A
1	CA	1201	A
1	CA	1281	U
1	CA	1285	A
1	CA	1300	G
1	CA	1442	G
1	CA	1498	U
1	CA	1504	G
23	CW	15	G
23	CW	17	C
23	CW	70	G
34	DA	27	G
34	DA	49	A
34	DA	71	A
34	DA	74	A
34	DA	128	C
34	DA	196	A
34	DA	221	A
34	DA	272	G
34	DA	283	A
34	DA	331	A
34	DA	332	A
34	DA	387	U
34	DA	472	A
34	DA	474	G
34	DA	512	G
34	DA	542	C
34	DA	587	C
34	DA	603	A
34	DA	614(C)	A
34	DA	669	G
34	DA	670	A
34	DA	752	A
34	DA	790	C
34	DA	856	C
34	DA	1022	G
34	DA	1112	G
34	DA	1176	G
34	DA	1210	A
34	DA	1250	G
34	DA	1275	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	DA	1300	U
34	DA	1301	A
34	DA	1378	A
34	DA	1397	U
34	DA	1427	A
34	DA	1458	C
34	DA	1484	G
34	DA	1494	A
34	DA	1544	A
34	DA	1558	A
34	DA	1608	A
34	DA	1635	G
34	DA	1652	A
34	DA	1653	G
34	DA	1694	C
34	DA	1697	G
34	DA	1722	A
34	DA	1799	G
34	DA	1819	A
34	DA	1820	U
34	DA	1885	A
34	DA	1912	A
34	DA	1934	C
34	DA	1937	A
34	DA	1948	G
34	DA	1962	C
34	DA	1970	A
34	DA	1987	G
34	DA	1992	G
34	DA	2031	A
34	DA	2033	A
34	DA	2126	A
34	DA	2191	G
34	DA	2225	A
34	DA	2282	G
34	DA	2422	A
34	DA	2481	G
34	DA	2610	C
34	DA	2637	U
34	DA	2662	A
34	DA	2689	U
34	DA	2756	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
34	DA	2779	U
34	DA	2796	U
34	DA	2859	G
34	DA	2864	G
35	DB	66	A

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

2 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
22	5MU	CV	54	22	15,22,23	1.21	2 (13%)	16,32,35	3.69	1 (6%)
22	5MU	AV	54	22	15,22,23	1.10	2 (13%)	16,32,35	3.69	2 (12%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	5MU	CV	54	22	-	0/5/25/26	0/2/2/2
22	5MU	AV	54	22	-	0/5/25/26	0/2/2/2

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	CV	54	5MU	C4-N3	3.46	1.39	1.33
22	AV	54	5MU	C4-N3	3.19	1.38	1.33
22	AV	54	5MU	C6-C5	-2.12	1.34	1.40
22	CV	54	5MU	C6-C5	-2.08	1.34	1.40

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	CV	54	5MU	C4-N3-C2	14.39	127.29	115.14
22	AV	54	5MU	C4-N3-C2	14.37	127.27	115.14
22	AV	54	5MU	C5M-C5-C6	2.01	122.92	118.68

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

2 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	CV	54	5MU	2	0
22	AV	54	5MU	2	0

## 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 5.6 Ligand geometry [i](#)

Of 1385 ligands modelled in this entry, 1383 are monoatomic - leaving 2 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# $ Z  > 2$	Counts	RMSZ	# $ Z  > 2$
57	PAR	AA	1816	-	45,45,45	1.59	8 (17%)	64,67,67	1.20	4 (6%)
57	PAR	CA	1790	-	45,45,45	1.56	10 (22%)	64,67,67	1.30	7 (10%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	PAR	AA	1816	-	-	5/18/94/94	0/4/4/4

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
57	PAR	CA	1790	-	-	4/18/94/94	0/4/4/4

All (18) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	AA	1816	PAR	C64-C54	5.15	1.59	1.52
57	CA	1790	PAR	C64-C54	4.38	1.58	1.52
57	CA	1790	PAR	C34-C24	4.37	1.59	1.53
57	AA	1816	PAR	C52-C42	3.08	1.58	1.52
57	AA	1816	PAR	O54-C14	2.82	1.49	1.41
57	AA	1816	PAR	C11-C21	2.67	1.57	1.52
57	AA	1816	PAR	C14-C24	2.61	1.57	1.52
57	AA	1816	PAR	O51-C11	2.51	1.48	1.41
57	CA	1790	PAR	O51-C11	2.40	1.48	1.41
57	CA	1790	PAR	C11-C21	2.38	1.57	1.52
57	CA	1790	PAR	O54-C54	2.35	1.50	1.44
57	AA	1816	PAR	C31-C21	2.32	1.56	1.53
57	CA	1790	PAR	C14-C24	2.24	1.56	1.52
57	CA	1790	PAR	O54-C14	2.24	1.47	1.41
57	CA	1790	PAR	C52-C42	2.23	1.56	1.52
57	CA	1790	PAR	C42-C32	2.15	1.57	1.53
57	AA	1816	PAR	C44-C54	2.08	1.57	1.53
57	CA	1790	PAR	C31-C21	2.05	1.56	1.53

All (11) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
57	AA	1816	PAR	O33-C14-C24	4.79	116.47	108.22
57	CA	1790	PAR	O33-C14-C24	4.44	115.86	108.22
57	CA	1790	PAR	O54-C54-C64	3.85	113.18	106.01
57	CA	1790	PAR	C14-O54-C54	3.51	120.57	113.69
57	AA	1816	PAR	O52-C13-C23	3.34	114.89	107.96
57	CA	1790	PAR	O52-C13-C23	2.98	114.13	107.96
57	CA	1790	PAR	O52-C13-O43	-2.96	108.22	111.43
57	AA	1816	PAR	C14-O54-C54	2.96	119.50	113.69
57	AA	1816	PAR	O54-C54-C64	2.90	111.40	106.01
57	CA	1790	PAR	O11-C11-C21	2.54	112.60	108.22
57	CA	1790	PAR	C11-O51-C51	2.39	118.38	113.69

There are no chirality outliers.

All (9) torsion outliers are listed below:

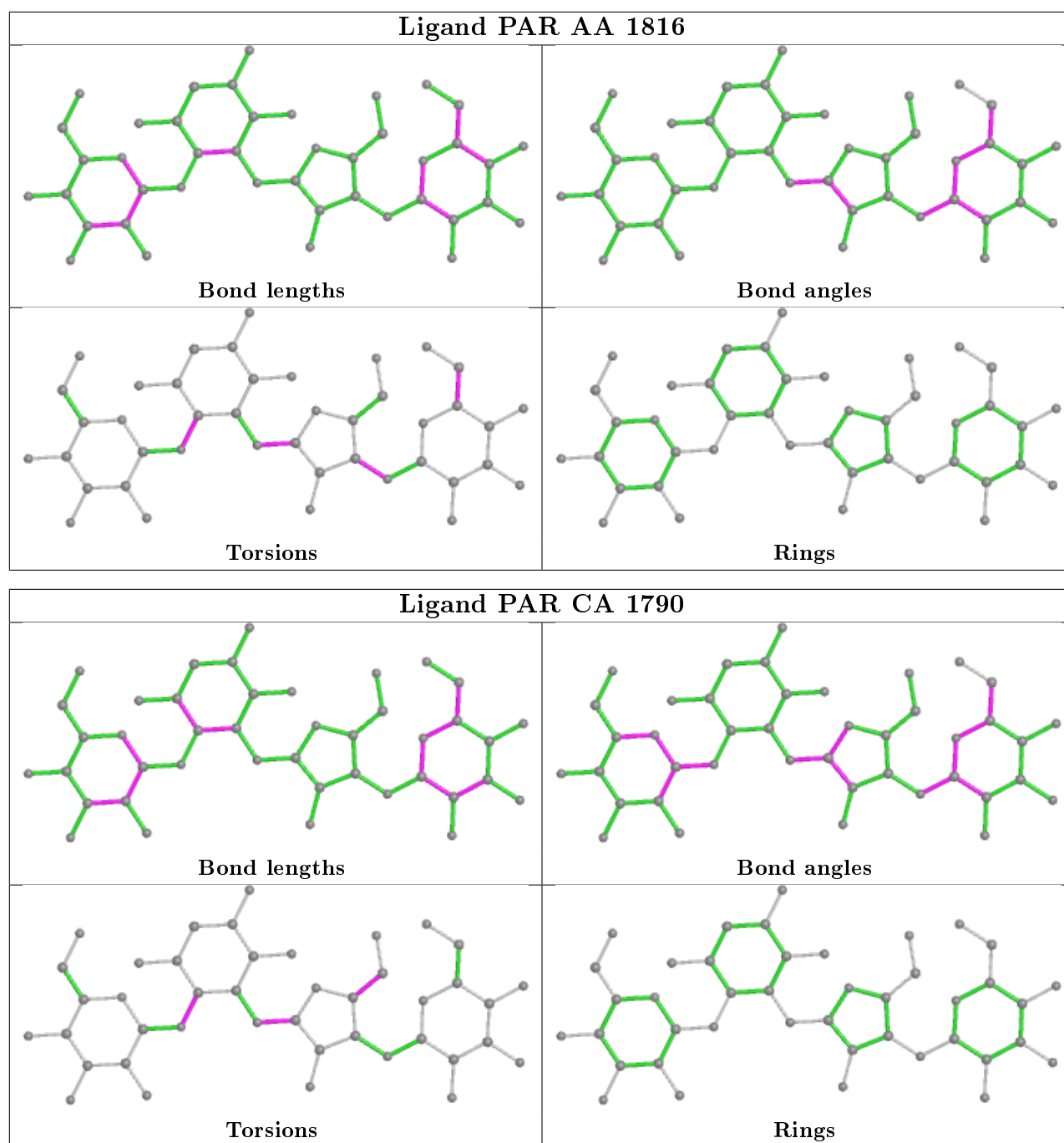
Mol	Chain	Res	Type	Atoms
57	CA	1790	PAR	O43-C43-C53-O53
57	CA	1790	PAR	C33-C43-C53-O53
57	AA	1816	PAR	O43-C13-O52-C52
57	AA	1816	PAR	C23-C13-O52-C52
57	AA	1816	PAR	O54-C54-C64-N64
57	CA	1790	PAR	C52-C42-O11-C11
57	AA	1816	PAR	C43-C33-O33-C14
57	AA	1816	PAR	C52-C42-O11-C11
57	CA	1790	PAR	C23-C13-O52-C52

There are no ring outliers.

1 monomer is involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
57	AA	1816	PAR	3	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
13	CM	5
13	AM	5
9	AI	2
9	CI	2
51	DV	1
40	DG	1
40	BG	1
51	BV	1
31	D6	1
31	B6	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B6	46:HIS	C	47:THR	N	4.89
1	D6	46:HIS	C	47:THR	N	4.87
1	AM	69:GLU	C	70:LEU	N	4.66
1	CM	69:GLU	C	70:LEU	N	4.66
1	CI	53:VAL	C	54:ASP	N	4.02
1	AI	53:VAL	C	54:ASP	N	4.01
1	BG	112:PRO	C	113:ARG	N	4.01
1	CM	97:PRO	C	98:VAL	N	3.75
1	AM	97:PRO	C	98:VAL	N	3.73
1	DG	112:PRO	C	113:ARG	N	3.15
1	AM	112:GLY	C	113:PRO	N	3.07
1	CM	112:GLY	C	113:PRO	N	3.06
1	BV	80:GLN	C	81:TYR	N	3.01
1	DV	80:GLN	C	81:TYR	N	3.00
1	AI	104:ARG	C	105:ASP	N	2.95
1	CM	118:ALA	C	119:GLY	N	2.95
1	AM	118:ALA	C	119:GLY	N	2.93
1	CI	104:ARG	C	105:ASP	N	2.92
1	AM	65:LYS	C	66:LEU	N	2.77
1	CM	65:LYS	C	66:LEU	N	2.76

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	AA	1504/1522 (98%)	-0.41	23 (1%) 73 68	2, 42, 165, 200	0
1	CA	1504/1522 (98%)	-0.33	32 (2%) 63 54	3, 50, 172, 200	0
2	AB	235/256 (91%)	0.26	28 (11%) 4 2	17, 94, 183, 200	0
2	CB	235/256 (91%)	0.38	28 (11%) 4 2	17, 104, 187, 200	0
3	AC	207/239 (86%)	-0.15	6 (2%) 51 41	17, 70, 156, 200	0
3	CC	207/239 (86%)	0.14	12 (5%) 23 15	19, 84, 149, 190	0
4	AD	208/209 (99%)	-0.32	1 (0%) 91 88	1, 43, 127, 198	0
4	CD	208/209 (99%)	-0.25	4 (1%) 66 59	4, 51, 133, 182	0
5	AE	151/162 (93%)	-0.32	1 (0%) 87 84	4, 51, 128, 177	0
5	CE	151/162 (93%)	-0.09	2 (1%) 77 72	3, 56, 140, 185	0
6	AF	101/101 (100%)	-0.36	3 (2%) 50 40	5, 48, 131, 156	0
6	CF	101/101 (100%)	-0.37	2 (1%) 65 56	2, 54, 130, 151	0
7	AG	155/156 (99%)	0.07	12 (7%) 13 7	8, 68, 151, 184	0
7	CG	155/156 (99%)	0.61	23 (14%) 2 1	15, 87, 155, 190	0
8	AH	138/138 (100%)	-0.24	3 (2%) 62 52	3, 52, 120, 173	0
8	CH	138/138 (100%)	-0.14	4 (2%) 51 41	16, 58, 138, 152	0
9	AI	127/128 (99%)	0.66	15 (11%) 4 2	26, 97, 171, 200	0
9	CI	127/128 (99%)	0.66	21 (16%) 1 1	28, 111, 175, 200	0
10	AJ	99/105 (94%)	0.75	17 (17%) 1 1	17, 105, 178, 200	0
10	CJ	99/105 (94%)	1.11	22 (22%) 0 0	34, 123, 176, 197	0
11	AK	119/129 (92%)	-0.29	3 (2%) 57 47	8, 46, 151, 192	0
11	CK	119/129 (92%)	0.06	6 (5%) 28 19	16, 61, 147, 200	0
12	AL	125/135 (92%)	-0.12	4 (3%) 47 37	5, 38, 133, 200	0
12	CL	125/135 (92%)	-0.08	4 (3%) 47 37	1, 38, 132, 200	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	AM	125/126 (99%)	0.37	15 (12%) 4 2	13, 74, 159, 196	0
13	CM	125/126 (99%)	0.43	15 (12%) 4 2	19, 91, 160, 191	0
14	AN	60/61 (98%)	0.47	6 (10%) 7 4	14, 66, 161, 184	0
14	CN	60/61 (98%)	0.20	4 (6%) 17 10	19, 73, 143, 182	0
15	AO	88/89 (98%)	-0.54	0 100 100	2, 42, 129, 141	0
15	CO	88/89 (98%)	-0.36	1 (1%) 80 75	2, 56, 124, 167	0
16	AP	84/88 (95%)	-0.21	1 (1%) 79 73	6, 36, 104, 190	0
16	CP	84/88 (95%)	-0.06	1 (1%) 79 73	6, 49, 121, 199	0
17	AQ	100/105 (95%)	-0.33	2 (2%) 65 56	1, 45, 110, 193	0
17	CQ	100/105 (95%)	0.17	2 (2%) 65 56	18, 60, 105, 194	0
18	AR	70/88 (79%)	-0.13	1 (1%) 75 70	10, 50, 140, 172	0
18	CR	70/88 (79%)	0.19	3 (4%) 35 25	7, 56, 144, 179	0
19	AS	79/93 (84%)	0.26	8 (10%) 7 4	22, 79, 186, 200	0
19	CS	79/93 (84%)	0.68	11 (13%) 2 1	25, 83, 175, 197	0
20	AT	99/106 (93%)	0.30	9 (9%) 9 5	5, 60, 152, 180	0
20	CT	99/106 (93%)	0.21	6 (6%) 21 13	17, 77, 141, 183	0
21	AU	25/27 (92%)	1.42	8 (32%) 0 0	27, 72, 128, 141	0
21	CU	25/27 (92%)	2.31	11 (44%) 0 0	40, 74, 127, 139	0
22	AV	76/77 (98%)	-0.64	0 100 100	14, 53, 143, 194	0
22	CV	76/77 (98%)	-0.53	0 100 100	21, 55, 146, 198	0
23	AW	76/76 (100%)	-0.23	5 (6%) 18 11	30, 103, 164, 199	0
23	AY	19/76 (25%)	-0.27	0 100 100	23, 72, 190, 196	0
23	CW	76/76 (100%)	-0.03	5 (6%) 18 11	35, 116, 165, 196	0
23	CY	19/76 (25%)	-0.28	0 100 100	26, 76, 186, 196	0
24	AX	11/24 (45%)	-0.11	1 (9%) 9 5	12, 33, 170, 190	0
24	CX	11/24 (45%)	0.28	2 (18%) 1 1	14, 39, 167, 197	0
25	B0	85/85 (100%)	0.44	7 (8%) 11 6	8, 43, 138, 196	0
25	D0	85/85 (100%)	0.54	9 (10%) 6 3	18, 57, 137, 179	0
26	B1	89/98 (90%)	0.05	4 (4%) 33 23	1, 35, 143, 157	0
26	D1	89/98 (90%)	-0.06	2 (2%) 62 52	1, 44, 145, 200	0
27	B2	51/72 (70%)	0.03	5 (9%) 7 4	5, 66, 145, 200	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
27	D2	51/72 (70%)	0.53	7 (13%) 3 1	13, 79, 154, 200	0
28	B3	60/60 (100%)	0.24	4 (6%) 17 10	5, 57, 140, 190	0
28	D3	60/60 (100%)	0.28	2 (3%) 46 36	5, 58, 146, 198	0
29	B4	50/71 (70%)	-0.49	1 (2%) 65 56	38, 90, 158, 173	0
29	D4	50/71 (70%)	0.07	5 (10%) 7 4	54, 117, 160, 198	0
30	B5	59/60 (98%)	0.59	10 (16%) 1 1	5, 51, 192, 200	0
30	D5	59/60 (98%)	0.38	7 (11%) 4 2	1, 65, 179, 200	0
31	B6	45/54 (83%)	1.92	21 (46%) 0 0	54, 103, 171, 180	0
31	D6	45/54 (83%)	2.77	26 (57%) 0 0	64, 139, 171, 189	0
32	B7	49/49 (100%)	-0.15	3 (6%) 21 13	1, 19, 115, 165	0
32	D7	49/49 (100%)	-0.16	4 (8%) 11 6	1, 19, 88, 174	0
33	B8	64/65 (98%)	0.37	5 (7%) 13 7	4, 44, 140, 195	0
33	D8	64/65 (98%)	0.28	4 (6%) 20 12	5, 52, 155, 192	0
34	BA	2772/2787 (99%)	-0.52	33 (1%) 79 73	1, 29, 145, 200	0
34	DA	2772/2787 (99%)	-0.49	25 (0%) 84 80	1, 30, 152, 200	0
35	BB	119/122 (97%)	-0.54	0 100 100	22, 64, 108, 197	0
35	DB	119/122 (97%)	-0.38	0 100 100	34, 76, 127, 188	0
36	BC	191/229 (83%)	1.99	73 (38%) 0 0	51, 144, 186, 200	0
36	DC	191/229 (83%)	2.54	97 (50%) 0 0	61, 146, 186, 200	0
37	BD	272/276 (98%)	-0.52	2 (0%) 87 84	1, 19, 89, 196	0
37	DD	272/276 (98%)	-0.49	2 (0%) 87 84	1, 21, 89, 200	0
38	BE	205/206 (99%)	0.04	7 (3%) 45 35	1, 46, 141, 193	0
38	DE	205/206 (99%)	-0.15	7 (3%) 45 35	1, 43, 144, 199	0
39	BF	208/210 (99%)	-0.26	9 (4%) 35 25	1, 44, 155, 200	0
39	DF	208/210 (99%)	0.07	13 (6%) 20 12	1, 44, 160, 200	0
40	BG	181/182 (99%)	-0.09	8 (4%) 34 24	8, 65, 142, 188	0
40	DG	181/182 (99%)	0.15	13 (7%) 15 8	10, 82, 149, 195	0
41	BH	160/180 (88%)	1.07	35 (21%) 0 0	51, 124, 175, 200	0
41	DH	160/180 (88%)	0.80	28 (17%) 1 1	10, 102, 174, 194	0
42	BI	146/148 (98%)	0.25	13 (8%) 9 5	5, 78, 148, 187	0
42	DI	146/148 (98%)	2.60	56 (38%) 0 0	9, 124, 184, 200	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
43	BN	139/140 (99%)	-0.04	5 (3%) 42 32	10, 68, 144, 163	0
43	DN	139/140 (99%)	0.11	9 (6%) 18 11	15, 63, 141, 165	0
44	BO	122/122 (100%)	-0.44	0 100 100	3, 32, 103, 177	0
44	DO	122/122 (100%)	-0.49	0 100 100	1, 33, 102, 126	0
45	BP	146/150 (97%)	0.12	3 (2%) 63 54	1, 61, 159, 193	0
45	DP	146/150 (97%)	0.25	10 (6%) 17 10	2, 71, 165, 198	0
46	BQ	136/141 (96%)	0.46	9 (6%) 18 11	7, 58, 171, 200	0
46	DQ	136/141 (96%)	0.16	11 (8%) 12 6	7, 54, 164, 200	0
47	BR	117/118 (99%)	-0.20	1 (0%) 84 80	3, 32, 132, 146	0
47	DR	117/118 (99%)	-0.11	0 100 100	3, 42, 126, 166	0
48	BS	99/112 (88%)	0.33	8 (8%) 12 6	21, 76, 134, 173	0
48	DS	99/112 (88%)	0.81	15 (15%) 2 1	24, 89, 143, 171	0
49	BT	138/146 (94%)	0.02	9 (6%) 18 11	3, 67, 169, 190	0
49	DT	138/146 (94%)	-0.00	7 (5%) 28 19	7, 65, 171, 200	0
50	BU	117/118 (99%)	-0.04	4 (3%) 45 35	5, 50, 142, 200	0
50	DU	117/118 (99%)	-0.14	2 (1%) 70 63	1, 46, 145, 190	0
51	BV	101/101 (100%)	0.25	5 (4%) 28 19	14, 96, 174, 192	0
51	DV	101/101 (100%)	0.16	4 (3%) 38 28	11, 93, 172, 193	0
52	BW	113/113 (100%)	-0.46	0 100 100	1, 26, 121, 161	0
52	DW	113/113 (100%)	-0.37	0 100 100	3, 28, 126, 200	0
53	BX	93/96 (96%)	-0.22	4 (4%) 35 25	1, 46, 137, 168	0
53	DX	93/96 (96%)	-0.02	4 (4%) 35 25	8, 54, 138, 157	0
54	BY	101/110 (91%)	0.95	15 (14%) 2 1	1, 79, 170, 195	0
54	DY	101/110 (91%)	1.38	25 (24%) 0 0	1, 79, 177, 196	0
55	BZ	177/206 (85%)	0.20	11 (6%) 20 13	19, 96, 177, 200	0
55	DZ	177/206 (85%)	0.26	14 (7%) 12 7	18, 98, 178, 198	0
All	All	20972/21886 (95%)	-0.08	1115 (5%) 26 17	1, 51, 163, 200	0

All (1115) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
42	DI	84	GLY	32.2
46	BQ	140	ALA	23.1

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
42	DI	120	ILE	21.9
42	DI	88	ILE	21.5
17	CQ	101	ARG	20.9
42	DI	143	SER	20.2
36	DC	179	SER	19.7
54	DY	61	ILE	19.4
36	DC	145	VAL	16.8
42	DI	130	TYR	16.0
42	DI	90	GLY	15.7
38	BE	205	ALA	15.6
13	AM	84	ILE	15.5
54	DY	52	SER	15.4
39	DF	133	ASN	15.4
12	CL	129	ALA	15.2
1	AA	82	U	14.6
42	DI	92	VAL	13.8
46	BQ	141	GLN	13.0
42	DI	144	VAL	12.4
36	BC	110	PHE	12.1
42	DI	125	GLU	11.8
36	BC	80	GLY	11.7
46	BQ	139	GLU	11.7
36	BC	90	GLY	11.6
1	CA	88	A	11.6
54	DY	50	ARG	11.0
55	BZ	113	ALA	10.8
28	D3	1	MET	10.7
13	CM	84	ILE	10.5
36	DC	178	ALA	10.4
42	DI	85	GLU	10.4
54	DY	51	VAL	10.3
36	DC	84	LYS	10.3
46	DQ	140	ALA	10.3
19	CS	82	GLY	10.2
36	BC	145	VAL	9.9
1	CA	80	G	9.9
26	D1	96	LYS	9.9
36	DC	108	MET	9.9
54	BY	50	ARG	9.8
54	BY	60	PHE	9.8
31	D6	42	TRP	9.7
1	AA	83	U	9.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	CB	7	VAL	9.4
46	DQ	141	GLN	9.2
39	BF	1	MET	8.9
36	DC	120	MET	8.9
1	CA	89	C	8.8
39	DF	25	PRO	8.8
36	DC	110	PHE	8.8
12	AL	129	ALA	8.6
25	D0	3	HIS	8.5
36	DC	45	ALA	8.5
1	AA	89	C	8.5
19	AS	81	ARG	8.5
46	DQ	139	GLU	8.3
36	DC	106	GLY	8.3
10	CJ	24	VAL	8.3
36	BC	148	ASN	8.3
55	BZ	112	ARG	8.2
30	D5	60	VAL	8.2
36	BC	52	ARG	8.2
36	DC	149	ILE	8.2
36	BC	92	ASP	8.2
54	DY	49	VAL	8.0
25	D0	2	ALA	8.0
1	AA	80	G	7.9
36	DC	176	GLY	7.9
42	DI	134	PRO	7.8
36	DC	51	PRO	7.8
36	DC	43	VAL	7.8
42	DI	53	ALA	7.7
54	DY	55	TYR	7.6
39	DF	208	GLY	7.6
49	DT	92	GLY	7.6
41	BH	52	VAL	7.6
11	CK	129	SER	7.6
30	B5	54	GLY	7.5
34	DA	2802	G	7.5
54	BY	61	ILE	7.5
31	D6	49	HIS	7.5
41	DH	158	HIS	7.5
39	DF	24	LEU	7.5
34	DA	652	C	7.4
36	BC	94	VAL	7.4

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
54	DY	60	PHE	7.4
34	BA	2802	G	7.4
12	AL	28	LYS	7.3
2	CB	128	GLU	7.3
43	DN	1	MET	7.2
51	BV	68	LYS	7.2
45	BP	150	ALA	7.2
41	DH	114	VAL	7.1
33	B8	65	GLU	7.1
36	BC	78	ALA	7.1
42	DI	89	TYR	7.0
46	BQ	24	GLY	7.0
37	DD	26	LYS	7.0
36	BC	91	ALA	6.9
38	BE	204	ALA	6.9
42	BI	58	LEU	6.9
30	D5	53	ALA	6.9
34	DA	897	C	6.9
34	DA	2476	A	6.7
36	DC	121	GLY	6.7
36	BC	158	ALA	6.7
42	DI	86	THR	6.7
2	AB	138	LEU	6.7
10	AJ	83	GLU	6.7
42	DI	145	VAL	6.6
2	CB	132	LYS	6.6
51	BV	46	VAL	6.6
1	CA	1032	G	6.6
31	D6	10	LEU	6.6
55	DZ	113	ALA	6.6
2	AB	128	GLU	6.6
31	D6	25	LYS	6.6
42	DI	80	PRO	6.5
7	CG	83	ALA	6.4
36	BC	19	VAL	6.4
11	AK	128	ALA	6.4
31	D6	39	TYR	6.4
36	BC	56	GLN	6.3
42	BI	109	ILE	6.3
42	DI	119	PRO	6.3
30	D5	59	GLU	6.3
10	AJ	85	LEU	6.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
30	B5	60	VAL	6.3
31	B6	13	CYS	6.2
31	B6	19	ARG	6.2
36	DC	148	ASN	6.2
41	BH	96	ALA	6.2
41	BH	169	VAL	6.2
2	AB	132	LYS	6.2
25	B0	1	MET	6.1
36	BC	76	ALA	6.1
10	AJ	29	ARG	6.1
11	AK	129	SER	6.1
36	DC	80	GLY	6.0
30	B5	59	GLU	6.0
36	BC	95	GLY	6.0
31	D6	20	ASN	6.0
39	DF	1	MET	6.0
51	DV	43	GLU	6.0
45	DP	107	LYS	5.9
42	DI	67	ARG	5.9
36	BC	79	LYS	5.9
36	BC	87	GLU	5.9
43	DN	68	GLU	5.9
33	B8	63	PRO	5.9
2	CB	232	PRO	5.9
10	CJ	71	LEU	5.8
41	DH	171	LEU	5.8
36	DC	83	ILE	5.8
3	CC	208	ILE	5.8
27	D2	43	GLN	5.8
23	CW	20	U	5.8
25	D0	4	LYS	5.7
53	DX	95	LEU	5.7
1	AA	81	U	5.7
39	DF	23	ASP	5.7
25	B0	6	GLY	5.7
1	AA	88	A	5.7
13	CM	126	LYS	5.7
13	AM	126	LYS	5.7
41	DH	42	ARG	5.7
54	BY	51	VAL	5.6
7	CG	5	ARG	5.6
25	D0	76	GLY	5.6

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
36	DC	20	TYR	5.6
49	DT	39	ARG	5.6
1	CA	1001(A)	G	5.6
1	CA	1030(B)	C	5.6
36	DC	69	GLY	5.5
13	AM	125	ARG	5.5
23	AW	17	C	5.5
36	DC	216	THR	5.5
55	DZ	112	ARG	5.5
34	BA	897	C	5.5
2	AB	129	GLU	5.5
39	DF	207	GLY	5.5
36	BC	84	LYS	5.5
36	BC	83	ILE	5.5
36	BC	71	GLN	5.4
36	BC	108	MET	5.4
54	BY	44	ILE	5.4
54	BY	45	VAL	5.4
36	DC	38	ASP	5.4
36	DC	71	GLN	5.4
9	AI	53	VAL	5.4
13	AM	7	VAL	5.4
36	BC	162	GLU	5.3
41	BH	53	GLU	5.3
54	DY	2	ARG	5.3
42	DI	63	ALA	5.3
21	CU	24	ARG	5.3
36	BC	93	TYR	5.3
38	DE	76	ARG	5.3
48	DS	54	LEU	5.3
34	DA	363(F)	A	5.3
1	CA	1129	C	5.3
1	AA	79	G	5.3
41	DH	168	PRO	5.2
1	CA	79	G	5.2
42	DI	71	ILE	5.2
36	DC	68	LEU	5.2
7	AG	83	ALA	5.2
36	DC	19	VAL	5.2
1	CA	1002	G	5.2
42	DI	87	LYS	5.2
54	DY	59	GLY	5.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
25	D0	1	MET	5.1
41	BH	101	ARG	5.1
36	BC	176	GLY	5.1
46	DQ	24	GLY	5.1
38	DE	204	ALA	5.1
36	BC	69	GLY	5.1
21	CU	18	TYR	5.1
12	CL	28	LYS	5.1
36	DC	53	ARG	5.1
50	BU	118	GLY	5.1
31	D6	37	ARG	5.0
54	DY	53	PRO	5.0
42	BI	61	ARG	5.0
9	CI	126	SER	5.0
7	CG	82	GLY	5.0
36	BC	53	ARG	5.0
10	CJ	27	ALA	5.0
40	DG	88	ILE	5.0
36	DC	35	ALA	5.0
41	DH	147	ASN	5.0
30	B5	53	ALA	5.0
42	DI	94	ALA	5.0
21	AU	11	GLY	4.9
10	AJ	34	VAL	4.9
49	BT	92	GLY	4.9
3	CC	207	VAL	4.9
31	D6	26	ASN	4.9
39	DF	14	PRO	4.9
51	DV	45	THR	4.9
55	BZ	111	VAL	4.9
41	DH	167	GLU	4.8
1	CA	1030	C	4.8
36	DC	172	HIS	4.8
20	AT	100	ILE	4.8
36	BC	75	LEU	4.8
2	CB	130	ARG	4.8
31	D6	50	ARG	4.8
42	DI	107	VAL	4.8
13	AM	124	PRO	4.8
31	B6	9	LEU	4.8
36	DC	136	LEU	4.8
9	CI	128	ARG	4.8

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
54	DY	46	LYS	4.8
42	DI	56	LYS	4.8
36	BC	165	ASN	4.8
36	DC	63	SER	4.8
36	DC	37	PHE	4.8
42	BI	72	LEU	4.8
36	DC	52	ARG	4.7
42	DI	113	ARG	4.7
34	BA	652	C	4.7
55	DZ	80	ARG	4.7
54	BY	46	LYS	4.7
42	DI	74	ASN	4.7
36	DC	107	TRP	4.7
41	BH	29	PRO	4.7
23	CW	16	U	4.7
7	AG	85	TYR	4.7
11	CK	128	ALA	4.7
39	DF	12	LEU	4.6
10	AJ	74	ILE	4.6
13	AM	119	GLY	4.6
42	DI	66	GLU	4.6
55	BZ	175	VAL	4.6
36	DC	154	ARG	4.6
14	CN	61	TRP	4.6
7	CG	16	LEU	4.6
9	AI	126	SER	4.6
7	CG	42	ILE	4.6
36	BC	45	ALA	4.6
36	DC	122	ALA	4.6
34	BA	2477	C	4.6
12	AL	128	ALA	4.6
34	BA	1173	G	4.6
48	DS	109	GLY	4.6
21	CU	23	PRO	4.5
2	CB	222	ILE	4.5
7	CG	8	GLU	4.5
21	CU	25	LYS	4.5
2	CB	125	PRO	4.5
31	B6	31	PRO	4.5
36	DC	95	GLY	4.5
1	CA	81	U	4.5
30	B5	2	ALA	4.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
1	CA	1033	G	4.5
31	D6	9	LEU	4.4
36	DC	85	GLU	4.4
54	BY	2	ARG	4.4
33	B8	64	TYR	4.4
36	BC	166	ASP	4.4
32	D7	48	LYS	4.4
10	CJ	5	ARG	4.4
51	DV	46	VAL	4.4
13	AM	4	ILE	4.4
5	AE	113	ALA	4.4
36	DC	70	LYS	4.4
32	D7	49	ARG	4.4
48	BS	54	LEU	4.4
1	AA	1030(B)	C	4.4
2	AB	127	ILE	4.4
2	AB	130	ARG	4.4
42	DI	108	THR	4.4
21	CU	22	ARG	4.3
34	BA	1046	A	4.3
13	CM	94	ARG	4.3
49	BT	39	ARG	4.3
34	BA	1174	A	4.3
36	BC	68	LEU	4.3
40	BG	88	ILE	4.3
3	CC	2	GLY	4.3
13	AM	69	GLU	4.3
36	BC	107	TRP	4.3
49	DT	2	ASN	4.3
34	DA	275	G	4.3
36	BC	43	VAL	4.3
41	DH	169	VAL	4.3
31	D6	14	THR	4.3
42	BI	11	ASN	4.3
1	CA	91	C	4.3
4	CD	3	ARG	4.2
19	AS	28	LYS	4.2
36	BC	157	LYS	4.2
2	CB	127	ILE	4.2
36	BC	77	ILE	4.2
13	CM	4	ILE	4.2
31	B6	42	TRP	4.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
34	DA	1174	A	4.2
34	DA	2799	C	4.2
10	CJ	75	ILE	4.2
1	CA	1030(D)	A	4.2
36	BC	146	GLY	4.2
1	CA	202	U	4.2
27	D2	61	LEU	4.1
26	D1	95	LEU	4.1
19	CS	4	SER	4.1
10	CJ	39	PRO	4.1
48	BS	43	GLU	4.1
39	BF	21	ALA	4.1
21	CU	11	GLY	4.1
34	BA	275	G	4.1
36	BC	109	ASP	4.1
36	BC	139	ASN	4.1
9	CI	6	GLY	4.1
14	AN	8	GLU	4.1
31	B6	26	ASN	4.1
1	AA	84	U	4.1
36	BC	55	ASP	4.1
42	DI	121	LYS	4.0
18	CR	29	PHE	4.0
36	DC	93	TYR	4.0
41	BH	47	GLU	4.0
48	DS	82	ILE	4.0
19	CS	71	LEU	4.0
1	AA	1001(A)	G	4.0
12	AL	29	GLY	4.0
41	BH	170	ARG	4.0
36	BC	72	VAL	4.0
42	DI	118	LYS	4.0
28	B3	1	MET	4.0
32	B7	49	ARG	4.0
45	DP	150	ALA	4.0
38	BE	69	LYS	3.9
20	AT	104	LEU	3.9
43	BN	75	TYR	3.9
1	CA	83	U	3.9
34	DA	2801	A	3.9
49	BT	115	ARG	3.9
30	B5	58	LEU	3.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
54	BY	28	LYS	3.9
36	DC	76	ALA	3.9
41	BH	70	THR	3.9
11	CK	12	ARG	3.9
42	DI	110	ASP	3.9
40	DG	43	LEU	3.9
28	B3	2	PRO	3.9
7	CG	156	TRP	3.9
2	CB	133	LYS	3.9
45	DP	121	LYS	3.9
31	D6	13	CYS	3.9
54	BY	49	VAL	3.9
30	D5	54	GLY	3.9
36	BC	177	LYS	3.9
36	DC	73	ARG	3.9
54	DY	97	ARG	3.9
36	BC	81	GLU	3.9
41	DH	170	ARG	3.9
36	DC	213	TYR	3.8
41	DH	98	LEU	3.8
21	CU	14	TRP	3.8
36	BC	135	GLY	3.8
53	BX	91	ALA	3.8
39	BF	12	LEU	3.8
20	AT	98	PRO	3.8
42	DI	127	VAL	3.8
42	DI	95	LYS	3.8
38	BE	90	THR	3.8
9	AI	128	ARG	3.8
25	D0	6	GLY	3.8
9	CI	102	LEU	3.8
36	DC	81	GLU	3.8
41	BH	105	LEU	3.7
19	CS	81	ARG	3.7
36	DC	132	GLY	3.7
19	CS	40	ILE	3.7
36	DC	105	ASP	3.7
36	DC	170	ALA	3.7
1	CA	1034	G	3.7
10	AJ	35	SER	3.7
2	AB	152	PHE	3.7
10	CJ	25	GLU	3.7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
36	BC	70	LYS	3.7
7	CG	78	ARG	3.7
36	DC	64	LEU	3.7
36	BC	155	GLU	3.7
36	BC	89	ALA	3.7
55	BZ	104	PHE	3.7
2	CB	228	GLY	3.7
31	B6	40	CYS	3.7
12	CL	64	TYR	3.7
54	DY	83	THR	3.7
42	DI	122	GLU	3.7
1	CA	92	C	3.6
41	DH	113	VAL	3.6
31	D6	47	THR	3.6
34	BA	2795	G	3.6
1	AA	91	C	3.6
36	BC	178	ALA	3.6
6	AF	39	LYS	3.6
38	DE	53	PRO	3.6
9	CI	104	ARG	3.6
45	BP	18	ARG	3.6
46	DQ	135	ASP	3.6
2	CB	96	ARG	3.6
36	BC	149	ILE	3.6
27	D2	35	LEU	3.6
36	BC	96	GLY	3.6
32	B7	48	LYS	3.6
41	BH	168	PRO	3.6
36	BC	46	LYS	3.6
2	AB	231	GLU	3.6
45	DP	7	ARG	3.6
1	CA	1138	G	3.6
13	AM	120	LYS	3.6
24	CX	13	A	3.6
20	AT	106	ALA	3.5
34	DA	1046	A	3.5
10	CJ	23	ILE	3.5
20	CT	41	ILE	3.5
21	CU	6	ARG	3.5
34	BA	1177	A	3.5
41	DH	116	GLU	3.5
21	AU	19	GLY	3.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
13	CM	7	VAL	3.5
24	AX	13	A	3.5
36	BC	150	GLY	3.5
45	DP	108	LYS	3.5
29	D4	16	CYS	3.5
41	DH	99	VAL	3.5
33	B8	34	TRP	3.5
17	AQ	101	ARG	3.5
41	BH	35	VAL	3.5
48	DS	60	GLY	3.5
40	DG	176	LEU	3.5
19	CS	49	ILE	3.5
42	BI	4	ILE	3.5
34	DA	2477	C	3.5
9	AI	46	ALA	3.4
36	DC	92	ASP	3.4
9	CI	42	ARG	3.4
5	CE	154	GLY	3.4
41	DH	124	GLU	3.4
49	BT	91	ARG	3.4
27	B2	48	HIS	3.4
36	DC	44	HIS	3.4
38	DE	52	LEU	3.4
42	DI	70	GLU	3.4
21	AU	18	TYR	3.4
31	D6	40	CYS	3.4
7	CG	84	ASN	3.4
33	D8	34	TRP	3.4
33	B8	37	SER	3.4
36	DC	177	LYS	3.4
36	BC	57	ASN	3.4
54	BY	47	LYS	3.4
31	B6	47	THR	3.4
20	AT	99	LEU	3.4
30	D5	58	LEU	3.4
20	CT	98	PRO	3.4
19	CS	67	VAL	3.4
25	B0	85	ALA	3.4
41	BH	49	VAL	3.4
40	DG	141	PHE	3.4
41	BH	56	SER	3.4
36	DC	109	ASP	3.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
41	BH	129	THR	3.4
27	B2	43	GLN	3.3
46	BQ	23	GLY	3.3
42	DI	11	ASN	3.3
48	DS	23	ARG	3.3
54	DY	89	PHE	3.3
40	BG	49	ASP	3.3
41	DH	53	GLU	3.3
41	BH	33	LEU	3.3
45	DP	120	ALA	3.3
36	DC	24	GLU	3.3
38	DE	54	GLN	3.3
45	BP	110	TYR	3.3
7	CG	53	LYS	3.3
10	CJ	46	ARG	3.3
43	DN	74	ARG	3.3
34	DA	1509	C	3.3
39	BF	11	VAL	3.3
2	CB	131	PRO	3.3
13	CM	124	PRO	3.3
49	DT	1	MET	3.3
54	DY	54	LYS	3.3
7	CG	62	PHE	3.3
36	BC	85	GLU	3.3
14	AN	60	SER	3.2
34	BA	363(F)	A	3.2
2	AB	21	ARG	3.2
20	AT	103	GLY	3.2
41	DH	123	PHE	3.2
10	AJ	32	ALA	3.2
41	BH	24	VAL	3.2
36	DC	67	GLY	3.2
39	BF	133	ASN	3.2
41	DH	101	ARG	3.2
7	AG	80	VAL	3.2
2	CB	129	GLU	3.2
26	B1	91	LYS	3.2
4	AD	209	ARG	3.2
10	AJ	38	ILE	3.2
20	CT	100	ILE	3.2
6	CF	101	ALA	3.2
36	DC	125	SER	3.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
42	DI	136	VAL	3.2
54	BY	65	ALA	3.2
7	CG	4	ARG	3.2
10	CJ	43	ARG	3.2
10	AJ	3	LYS	3.2
30	B5	56	LYS	3.2
9	CI	41	VAL	3.2
36	DC	72	VAL	3.2
10	CJ	35	SER	3.2
41	DH	41	MET	3.2
36	DC	78	ALA	3.2
19	AS	80	TYR	3.2
36	DC	82	LYS	3.2
2	CB	122	PHE	3.2
7	AG	78	ARG	3.2
36	BC	86	ALA	3.2
54	DY	98	VAL	3.2
42	DI	83	ALA	3.1
29	D4	48	ARG	3.1
36	DC	156	ILE	3.1
3	AC	76	VAL	3.1
13	AM	123	ALA	3.1
21	CU	21	TYR	3.1
31	D6	24	GLU	3.1
41	BH	26	VAL	3.1
2	AB	126	GLU	3.1
1	CA	93	G	3.1
36	DC	189	ILE	3.1
2	AB	131	PRO	3.1
36	DC	50	ASP	3.1
36	DC	146	GLY	3.1
48	DS	108	GLY	3.1
1	CA	1003	G	3.1
9	CI	12	GLU	3.1
33	D8	32	LEU	3.1
19	CS	38	SER	3.1
42	DI	139	GLN	3.1
54	BY	59	GLY	3.1
1	AA	1030	C	3.1
36	BC	133	PRO	3.1
36	DC	157	LYS	3.1
34	BA	2796	U	3.1

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
31	D6	36	LEU	3.1
42	BI	114	LEU	3.1
1	CA	1030(A)	G	3.1
3	CC	98	ASN	3.1
36	DC	133	PRO	3.1
36	DC	74	VAL	3.1
2	CB	152	PHE	3.1
9	CI	96	LEU	3.1
36	DC	36	LYS	3.1
2	CB	231	GLU	3.1
24	CX	12	A	3.0
7	AG	151	TYR	3.0
33	D8	64	TYR	3.0
9	AI	30	GLY	3.0
1	AA	1129	C	3.0
36	DC	140	PRO	3.0
39	BF	14	PRO	3.0
14	AN	2	ALA	3.0
34	BA	352	G	3.0
8	CH	35	ILE	3.0
9	AI	19	LEU	3.0
42	DI	12	LEU	3.0
42	DI	97	ILE	3.0
7	AG	5	ARG	3.0
19	AS	5	LEU	3.0
41	DH	52	VAL	3.0
3	CC	91	LEU	3.0
40	BG	139	LEU	3.0
42	DI	78	THR	3.0
36	DC	77	ILE	3.0
31	B6	21	TYR	3.0
48	BS	60	GLY	3.0
37	BD	26	LYS	3.0
36	DC	41	VAL	3.0
36	DC	212	VAL	3.0
2	AB	232	PRO	3.0
40	DG	50	ALA	3.0
1	CA	1030(C)	G	3.0
36	BC	59	ARG	3.0
2	CB	126	GLU	3.0
55	DZ	111	VAL	3.0
9	AI	101	PHE	2.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
48	DS	51	ALA	2.9
3	CC	206	GLU	2.9
36	DC	42	GLU	2.9
4	CD	209	ARG	2.9
11	CK	11	LYS	2.9
7	CG	85	TYR	2.9
3	AC	208	ILE	2.9
46	DQ	21	THR	2.9
43	BN	1	MET	2.9
54	BY	102	CYS	2.9
26	B1	95	LEU	2.9
36	BC	74	VAL	2.9
55	DZ	114	GLY	2.9
34	DA	2473	U	2.9
49	BT	11	GLU	2.9
31	B6	32	ASN	2.9
41	BH	51	ARG	2.9
8	AH	2	LEU	2.9
38	DE	205	ALA	2.9
1	AA	204	U	2.9
31	D6	12	GLU	2.9
36	BC	61	THR	2.9
7	AG	74	GLU	2.9
13	CM	35	GLU	2.9
55	BZ	114	GLY	2.9
11	AK	127	LYS	2.9
32	D7	47	ARG	2.9
1	AA	1002	G	2.9
14	AN	37	PHE	2.9
53	BX	93	GLU	2.9
3	CC	87	LEU	2.9
38	BE	54	GLN	2.9
40	DG	178	PHE	2.9
40	BG	43	LEU	2.9
31	B6	14	THR	2.9
1	CA	1286	A	2.9
9	AI	20	ARG	2.8
10	AJ	76	ASN	2.8
36	DC	96	GLY	2.8
41	DH	97	ARG	2.8
2	AB	125	PRO	2.8
42	DI	82	ARG	2.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
42	DI	109	ILE	2.8
19	CS	12	ASP	2.8
46	DQ	23	GLY	2.8
42	DI	114	LEU	2.8
34	BA	1026	U	2.8
36	BC	88	GLU	2.8
34	DA	2803	C	2.8
36	BC	163	PHE	2.8
10	CJ	72	VAL	2.8
30	D5	57	VAL	2.8
13	CM	66	LEU	2.8
31	B6	20	ASN	2.8
36	DC	39	GLU	2.8
31	B6	17	LYS	2.8
9	CI	93	ARG	2.8
27	D2	12	GLU	2.8
1	AA	1031	G	2.8
2	CB	215	LEU	2.8
21	AU	6	ARG	2.8
42	DI	91	SER	2.8
53	BX	94	GLY	2.8
1	AA	1030(D)	A	2.8
45	DP	5	ASP	2.8
36	BC	24	GLU	2.8
38	BE	68	ALA	2.8
36	DC	163	PHE	2.8
21	AU	9	ARG	2.8
49	DT	125	ARG	2.8
54	DY	28	LYS	2.8
41	BH	147	ASN	2.8
2	AB	137	ARG	2.7
20	AT	86	ARG	2.7
10	CJ	77	PRO	2.7
2	CB	81	VAL	2.7
43	DN	75	TYR	2.7
34	DA	2796	U	2.7
8	AH	1	MET	2.7
10	CJ	22	LYS	2.7
36	DC	155	GLU	2.7
13	CM	64	TRP	2.7
8	CH	25	ASP	2.7
9	CI	20	ARG	2.7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
13	CM	69	GLU	2.7
34	DA	1173	G	2.7
10	CJ	4	ILE	2.7
34	DA	2172	U	2.7
7	CG	124	LEU	2.7
48	DS	33	LYS	2.7
46	DQ	136	ALA	2.7
46	DQ	91	GLU	2.7
51	DV	86	GLY	2.7
42	DI	73	GLU	2.7
1	CA	90	U	2.7
1	CA	78	G	2.7
41	DH	159	GLU	2.7
32	D7	1	MET	2.7
54	DY	86	ARG	2.7
41	BH	103	LEU	2.7
21	CU	19	GLY	2.7
42	DI	141	LYS	2.7
2	AB	112	VAL	2.7
41	BH	98	LEU	2.7
7	CG	132	GLY	2.7
6	AF	101	ALA	2.7
13	CM	121	LYS	2.6
18	CR	23	LYS	2.6
2	AB	229	VAL	2.6
50	BU	91	ASP	2.6
2	AB	139	LYS	2.6
9	AI	81	ILE	2.6
10	AJ	4	ILE	2.6
13	AM	122	LYS	2.6
23	AW	19	G	2.6
55	DZ	150	LEU	2.6
36	DC	210	ARG	2.6
49	DT	91	ARG	2.6
36	DC	88	GLU	2.6
54	DY	4	LYS	2.6
19	AS	4	SER	2.6
29	D4	32	TYR	2.6
48	BS	33	LYS	2.6
28	D3	23	LEU	2.6
42	DI	116	LEU	2.6
48	DS	30	ARG	2.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
26	B1	96	LYS	2.6
34	BA	1176	G	2.6
39	DF	22	ALA	2.6
9	AI	85	LEU	2.6
25	B0	7	LEU	2.6
36	DC	169	GLY	2.6
2	AB	86	GLU	2.6
10	AJ	25	GLU	2.6
41	BH	167	GLU	2.6
1	AA	1030(C)	G	2.6
21	AU	25	LYS	2.6
42	DI	1	MET	2.6
48	BS	108	GLY	2.6
55	DZ	144	LEU	2.6
31	B6	12	GLU	2.6
43	DN	11	PRO	2.6
7	CG	131	LYS	2.6
34	DA	2795	G	2.6
50	DU	117	GLN	2.6
34	BA	2473	U	2.6
39	DF	11	VAL	2.6
46	BQ	91	GLU	2.6
46	DQ	90	VAL	2.6
50	BU	89	GLU	2.6
31	B6	41	PRO	2.6
36	DC	129	ARG	2.6
21	AU	2	GLY	2.6
34	BA	2476	A	2.6
36	DC	150	GLY	2.6
40	BG	48	GLU	2.6
13	CM	65	LYS	2.6
32	B7	47	ARG	2.6
55	DZ	107	THR	2.5
7	CG	61	VAL	2.5
1	CA	1031	G	2.5
29	D4	49	PHE	2.5
54	DY	56	PRO	2.5
2	AB	240	GLN	2.5
9	AI	87	GLN	2.5
13	AM	85	GLY	2.5
51	BV	60	GLU	2.5
55	DZ	88	PHE	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	CB	66	GLY	2.5
4	CD	2	GLY	2.5
31	D6	35	GLU	2.5
55	DZ	97	GLU	2.5
55	DZ	171	ILE	2.5
6	CF	99	ALA	2.5
36	BC	51	PRO	2.5
34	BA	354	G	2.5
36	DC	131	LEU	2.5
40	DG	49	ASP	2.5
34	BA	2790	A	2.5
41	BH	55	PRO	2.5
9	CI	21	PRO	2.5
13	CM	60	VAL	2.5
41	BH	41	MET	2.5
2	AB	36	ARG	2.5
40	DG	30	GLU	2.5
48	DS	97	ARG	2.5
10	AJ	84	GLN	2.5
3	AC	42	LEU	2.5
7	CG	77	SER	2.5
25	B0	9	SER	2.5
36	DC	153	ILE	2.5
49	BT	104	ASN	2.5
3	CC	76	VAL	2.5
46	BQ	135	ASP	2.5
42	BI	65	ALA	2.5
41	DH	105	LEU	2.5
29	B4	50	VAL	2.5
31	D6	52	VAL	2.5
1	AA	1183	A	2.5
1	CA	412	A	2.5
12	CL	128	ALA	2.5
50	DU	118	GLY	2.5
10	CJ	8	LEU	2.5
36	DC	65	PRO	2.4
29	D4	42	PHE	2.4
36	DC	180	PHE	2.4
41	BH	85	LYS	2.4
25	B0	3	HIS	2.4
27	D2	62	THR	2.4
8	AH	118	VAL	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
54	DY	3	VAL	2.4
10	CJ	36	GLY	2.4
43	DN	131	GLN	2.4
6	AF	38	GLU	2.4
27	D2	51	ARG	2.4
27	B2	62	THR	2.4
36	BC	47	LEU	2.4
23	CW	47	U	2.4
34	BA	1171	G	2.4
34	DA	2896	C	2.4
30	B5	55	ARG	2.4
3	CC	93	LYS	2.4
7	CG	66	VAL	2.4
4	CD	12	CYS	2.4
9	CI	43	ALA	2.4
23	AW	34	G	2.4
31	D6	11	LEU	2.4
36	BC	156	ILE	2.4
53	BX	26	TYR	2.4
37	DD	272	ALA	2.4
48	DS	32	LEU	2.4
13	CM	102	ARG	2.4
34	BA	2892	A	2.4
34	DA	2660	A	2.4
37	BD	34	VAL	2.4
54	DY	85	VAL	2.4
36	DC	46	LYS	2.4
14	CN	60	SER	2.4
36	DC	26	ALA	2.4
34	BA	2474	C	2.4
2	CB	230	VAL	2.4
9	CI	4	TYR	2.4
25	D0	5	LYS	2.4
33	D8	30	ARG	2.4
20	CT	64	ASP	2.4
34	BA	229	A	2.4
46	BQ	138	ASP	2.4
20	CT	84	LEU	2.4
34	DA	2794	C	2.4
31	D6	38	LYS	2.4
41	BH	149	ARG	2.4
41	DH	111	HIS	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
7	CG	130	GLY	2.4
9	CI	44	VAL	2.4
13	CM	32	GLU	2.4
55	BZ	97	GLU	2.4
31	D6	32	ASN	2.4
42	BI	140	LEU	2.4
46	BQ	37	LEU	2.4
9	CI	30	GLY	2.3
1	AA	90	U	2.3
31	B6	39	TYR	2.3
36	BC	105	ASP	2.3
34	BA	2894	G	2.3
41	BH	72	ILE	2.3
36	DC	208	PHE	2.3
5	CE	69	VAL	2.3
1	CA	82	U	2.3
34	BA	2897	U	2.3
16	CP	7	ALA	2.3
2	CB	124	SER	2.3
20	CT	99	LEU	2.3
41	BH	124	GLU	2.3
48	BS	82	ILE	2.3
1	CA	1183	A	2.3
2	AB	135	GLN	2.3
25	B0	81	VAL	2.3
34	BA	2896	C	2.3
10	AJ	39	PRO	2.3
43	BN	74	ARG	2.3
47	BR	2	ARG	2.3
21	AU	8	THR	2.3
36	DC	130	ILE	2.3
9	AI	127	LYS	2.3
34	BA	883	G	2.3
2	CB	229	VAL	2.3
10	AJ	33	GLN	2.3
11	CK	82	VAL	2.3
36	BC	73	ARG	2.3
41	BH	19	VAL	2.3
3	AC	206	GLU	2.3
31	B6	22	ALA	2.3
42	DI	79	ILE	2.3
9	AI	51	ARG	2.3

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
31	D6	46	HIS	2.3
55	BZ	135	GLU	2.3
13	AM	121	LYS	2.3
41	DH	85	LYS	2.3
42	BI	100	ALA	2.3
10	CJ	3	LYS	2.3
31	D6	51	GLU	2.3
34	DA	2402	C	2.3
30	D5	51	TYR	2.3
36	BC	136	LEU	2.3
7	AG	81	GLY	2.3
50	BU	111	GLU	2.3
54	DY	95	LYS	2.3
2	CB	121	LEU	2.3
19	AS	29	ARG	2.3
27	D2	60	LEU	2.3
2	AB	39	ILE	2.3
7	CG	120	ILE	2.3
40	BG	146	TYR	2.3
25	D0	69	PHE	2.3
49	DT	85	LYS	2.3
36	BC	58	VAL	2.3
51	BV	47	VAL	2.3
55	DZ	69	THR	2.3
9	CI	101	PHE	2.3
27	B2	37	PHE	2.3
31	D6	48	VAL	2.2
34	BA	1033	U	2.2
10	AJ	77	PRO	2.2
36	DC	86	ALA	2.2
36	DC	89	ALA	2.2
42	DI	77	LEU	2.2
45	DP	88	LEU	2.2
10	CJ	47	PHE	2.2
10	CJ	63	PHE	2.2
40	DG	164	GLU	2.2
48	DS	84	GLN	2.2
7	AG	87	VAL	2.2
34	DA	1508	A	2.2
13	AM	16	ASP	2.2
10	AJ	31	GLY	2.2
9	CI	81	ILE	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
2	AB	153	ARG	2.2
2	AB	156	LYS	2.2
1	AA	1117	G	2.2
41	BH	171	LEU	2.2
43	BN	139	GLU	2.2
31	D6	21	TYR	2.2
31	B6	29	ASN	2.2
3	AC	91	LEU	2.2
39	BF	24	LEU	2.2
42	DI	55	ALA	2.2
42	DI	135	GLU	2.2
36	DC	174	PRO	2.2
15	CO	62	GLN	2.2
48	DS	49	VAL	2.2
3	CC	101	LEU	2.2
10	CJ	73	ASP	2.2
28	B3	57	GLU	2.2
48	DS	45	GLY	2.2
55	BZ	115	GLY	2.2
49	BT	8	LYS	2.2
40	BG	13	GLU	2.2
10	CJ	76	ASN	2.2
19	CS	9	VAL	2.2
2	AB	133	LYS	2.2
18	AR	54	ARG	2.2
55	BZ	14	LYS	2.2
2	AB	118	LEU	2.2
42	BI	77	LEU	2.2
43	DN	67	LEU	2.2
54	DY	5	MET	2.2
2	AB	136	VAL	2.2
21	CU	3	LYS	2.2
36	DC	102	LYS	2.2
39	DF	161	GLU	2.2
43	DN	46	VAL	2.2
49	BT	113	LYS	2.2
3	CC	10	PHE	2.2
9	AI	96	LEU	2.2
20	AT	49	ALA	2.2
23	AW	16	U	2.2
23	CW	17	C	2.2
43	DN	15	LEU	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
34	BA	2895	U	2.2
49	BT	1	MET	2.2
17	CQ	100	LYS	2.2
25	D0	41	ARG	2.2
43	BN	68	GLU	2.2
45	DP	117	GLU	2.2
18	CR	48	GLY	2.1
30	B5	51	TYR	2.2
40	DG	42	GLY	2.1
40	DG	34	LEU	2.1
42	DI	140	LEU	2.1
1	CA	204	U	2.1
55	DZ	104	PHE	2.1
36	DC	188	ASN	2.1
34	DA	1740	G	2.1
41	BH	13	LYS	2.1
9	AI	104	ARG	2.1
7	AG	156	TRP	2.1
7	AG	8	GLU	2.1
34	BA	1530	C	2.1
23	AW	44	G	2.1
34	BA	2168	G	2.1
36	BC	179	SER	2.1
2	CB	33	TYR	2.1
16	AP	73	LEU	2.1
1	AA	412	A	2.1
34	BA	1106	A	2.1
39	BF	128	ALA	2.1
55	DZ	149	SER	2.1
19	CS	18	LYS	2.1
8	CH	39	LEU	2.1
17	AQ	74	LEU	2.1
48	BS	24	LEU	2.1
14	AN	35	ARG	2.1
36	BC	50	ASP	2.1
38	DE	18	ASP	2.1
45	DP	18	ARG	2.1
36	DC	49	ILE	2.1
36	DC	135	GLY	2.1
53	DX	26	TYR	2.1
14	AN	7	ILE	2.1
41	DH	72	ILE	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
36	BC	174	PRO	2.1
2	CB	136	VAL	2.1
19	AS	10	PHE	2.1
2	CB	41	ILE	2.1
3	AC	39	ILE	2.1
14	CN	2	ALA	2.1
26	B1	58	ILE	2.1
54	DY	48	ALA	2.1
38	BE	10	GLY	2.1
28	B3	3	ARG	2.1
48	BS	97	ARG	2.1
31	B6	11	LEU	2.1
14	CN	34	TYR	2.1
41	BH	27	LYS	2.1
23	CW	32	U	2.1
36	DC	158	ALA	2.1
53	DX	34	ALA	2.1
1	CA	77	G	2.1
30	B5	57	VAL	2.1
1	AA	1037	C	2.1
9	CI	127	LYS	2.1
41	DH	13	LYS	2.1
40	DG	26	GLN	2.1
48	DS	27	SER	2.1
9	CI	7	THR	2.1
36	BC	20	TYR	2.1
39	BF	7	TYR	2.1
46	DQ	8	LYS	2.1
9	CI	85	LEU	2.0
41	DH	103	LEU	2.0
36	BC	63	SER	2.0
7	AG	3	ARG	2.0
42	DI	36	ALA	2.0
39	DF	202	PHE	2.0
2	AB	113	HIS	2.0
8	CH	45	ILE	2.0
34	BA	2801	A	2.0
40	BG	47	LYS	2.0
3	CC	66	VAL	2.0
40	DG	86	MET	2.0
41	DH	133	VAL	2.0
20	AT	72	LEU	2.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
27	B2	51	ARG	2.0
42	BI	138	ILE	2.0
19	AS	27	GLU	2.0
34	DA	2108	C	2.0
36	DC	87	GLU	2.0
53	DX	69	TYR	2.0
42	BI	136	VAL	2.0
7	CG	38	LEU	2.0
31	B6	50	ARG	2.0
31	B6	16	CYS	2.0
36	DC	128	GLY	2.0
2	CB	71	VAL	2.0
7	CG	135	VAL	2.0
11	CK	14	VAL	2.0
13	AM	45	VAL	2.0
41	BH	95	ARG	2.0
54	BY	3	VAL	2.0
55	BZ	31	ARG	2.0
36	DC	47	LEU	2.0
41	BH	87	LEU	2.0
51	BV	95	LEU	2.0

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
22	5MU	AV	54	21/22	0.92	0.14	75,83,108,108	0
22	5MU	CV	54	21/22	0.93	0.12	64,75,79,79	0

## 6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

## 6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum,

median, 95<sup>th</sup> percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3261	1/1	0.23	0.80	94,94,94,94	0
56	MG	BB	213	1/1	0.27	0.60	71,71,71,71	0
56	MG	DA	3187	1/1	0.41	0.41	86,86,86,86	0
56	MG	CV	103	1/1	0.46	0.18	56,56,56,56	0
56	MG	CA	1637	1/1	0.51	0.46	81,81,81,81	0
56	MG	CW	111	1/1	0.54	0.22	77,77,77,77	0
56	MG	BA	3233	1/1	0.55	0.33	77,77,77,77	0
56	MG	CA	1685	1/1	0.56	0.47	82,82,82,82	0
56	MG	DA	3255	1/1	0.57	0.47	92,92,92,92	0
56	MG	CA	1719	1/1	0.58	1.11	99,99,99,99	0
56	MG	AA	1633	1/1	0.58	0.44	90,90,90,90	0
56	MG	CA	1622	1/1	0.60	0.81	123,123,123,123	0
56	MG	BA	3043	1/1	0.61	0.33	82,82,82,82	0
56	MG	BA	3403	1/1	0.62	0.48	78,78,78,78	0
56	MG	CA	1725	1/1	0.62	0.26	56,56,56,56	0
56	MG	DA	3168	1/1	0.65	0.38	56,56,56,56	0
56	MG	BA	3004	1/1	0.67	0.41	77,77,77,77	0
56	MG	BA	3408	1/1	0.67	0.17	46,46,46,46	0
56	MG	CA	1646	1/1	0.68	0.42	62,62,62,62	0
56	MG	BB	201	1/1	0.69	0.42	54,54,54,54	1
56	MG	DA	3213	1/1	0.69	0.35	84,84,84,84	0
56	MG	DA	3208	1/1	0.69	0.21	40,40,40,40	0
56	MG	BA	3413	1/1	0.69	0.47	63,63,63,63	0
56	MG	BA	3433	1/1	0.70	0.17	74,74,74,74	0
56	MG	CA	1729	1/1	0.70	0.51	71,71,71,71	0
56	MG	CA	1673	1/1	0.71	0.21	80,80,80,80	1
56	MG	AA	1697	1/1	0.72	0.45	88,88,88,88	0
56	MG	BA	3353	1/1	0.72	0.39	42,42,42,42	1
56	MG	DA	3231	1/1	0.72	0.40	72,72,72,72	0
56	MG	DA	3219	1/1	0.72	0.56	75,75,75,75	0
56	MG	DA	3275	1/1	0.73	0.36	75,75,75,75	0
56	MG	CA	1706	1/1	0.73	0.19	54,54,54,54	0
56	MG	DA	3217	1/1	0.73	0.14	62,62,62,62	0
56	MG	CW	107	1/1	0.73	0.27	63,63,63,63	1
56	MG	DA	3273	1/1	0.74	0.60	59,59,59,59	0
56	MG	BA	3278	1/1	0.74	0.37	90,90,90,90	0
56	MG	CA	1752	1/1	0.74	0.51	83,83,83,83	0
56	MG	DA	3169	1/1	0.75	0.23	27,27,27,27	0
56	MG	DA	3238	1/1	0.75	0.26	54,54,54,54	0
56	MG	DA	3155	1/1	0.75	0.09	50,50,50,50	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3323	1/1	0.75	0.13	79,79,79,79	0
56	MG	DA	3002	1/1	0.76	0.28	38,38,38,38	0
56	MG	CA	1751	1/1	0.76	0.18	81,81,81,81	0
56	MG	DA	3320	1/1	0.76	0.17	70,70,70,70	0
56	MG	AA	1618	1/1	0.76	0.41	66,66,66,66	0
56	MG	AA	1748	1/1	0.77	0.26	59,59,59,59	0
56	MG	CA	1675	1/1	0.77	0.24	57,57,57,57	0
56	MG	BA	3296	1/1	0.78	0.34	75,75,75,75	0
56	MG	DA	3268	1/1	0.78	0.21	51,51,51,51	0
56	MG	DA	3004	1/1	0.78	0.41	90,90,90,90	0
56	MG	DA	3358	1/1	0.79	0.36	54,54,54,54	0
56	MG	AA	1651	1/1	0.79	0.22	35,35,35,35	0
56	MG	CA	1739	1/1	0.79	0.15	66,66,66,66	0
56	MG	DA	3380	1/1	0.79	0.33	55,55,55,55	0
56	MG	CA	1722	1/1	0.79	0.31	70,70,70,70	0
56	MG	DH	201	1/1	0.79	0.19	36,36,36,36	0
56	MG	DA	3138	1/1	0.80	0.27	40,40,40,40	0
56	MG	AA	1698	1/1	0.80	0.15	38,38,38,38	0
56	MG	CA	1695	1/1	0.80	0.14	70,70,70,70	0
56	MG	DA	3250	1/1	0.80	0.08	57,57,57,57	0
56	MG	AA	1733	1/1	0.80	0.40	63,63,63,63	0
56	MG	AA	1647	1/1	0.80	0.18	71,71,71,71	0
56	MG	BA	3212	1/1	0.80	0.17	47,47,47,47	0
56	MG	CW	109	1/1	0.81	0.11	81,81,81,81	0
56	MG	AA	1661	1/1	0.81	0.30	60,60,60,60	0
56	MG	DA	3342	1/1	0.81	0.27	49,49,49,49	0
56	MG	CA	1716	1/1	0.81	0.31	67,67,67,67	0
56	MG	BA	3376	1/1	0.81	0.20	47,47,47,47	0
56	MG	AA	1714	1/1	0.81	0.25	28,28,28,28	0
56	MG	AY	101	1/1	0.81	0.18	56,56,56,56	0
56	MG	AA	1782	1/1	0.81	0.28	68,68,68,68	0
56	MG	BA	3285	1/1	0.81	0.51	74,74,74,74	0
56	MG	DA	3310	1/1	0.81	0.30	50,50,50,50	0
56	MG	CA	1691	1/1	0.82	0.23	56,56,56,56	0
56	MG	CA	1750	1/1	0.82	0.10	50,50,50,50	0
56	MG	AA	1750	1/1	0.82	0.12	57,57,57,57	0
56	MG	DA	3258	1/1	0.82	0.49	80,80,80,80	0
56	MG	DA	3248	1/1	0.82	0.94	82,82,82,82	0
56	MG	DB	204	1/1	0.82	0.16	48,48,48,48	0
56	MG	CA	1745	1/1	0.82	0.42	77,77,77,77	0
56	MG	AA	1677	1/1	0.82	0.12	41,41,41,41	0
56	MG	AW	110	1/1	0.82	0.26	46,46,46,46	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3277	1/1	0.82	0.20	55,55,55,55	0
56	MG	DA	3262	1/1	0.82	0.33	72,72,72,72	0
56	MG	BA	3227	1/1	0.82	0.27	49,49,49,49	0
56	MG	AA	1660	1/1	0.82	0.30	61,61,61,61	0
56	MG	DA	3274	1/1	0.82	0.10	53,53,53,53	0
56	MG	AW	116	1/1	0.82	0.12	58,58,58,58	0
56	MG	DA	3394	1/1	0.83	0.32	66,66,66,66	0
56	MG	DA	3067	1/1	0.83	0.13	26,26,26,26	0
56	MG	AA	1794	1/1	0.83	0.28	56,56,56,56	0
56	MG	DA	3391	1/1	0.83	0.21	62,62,62,62	1
56	MG	CA	1696	1/1	0.83	0.25	51,51,51,51	0
56	MG	BA	3257	1/1	0.83	0.15	55,55,55,55	0
56	MG	AA	1694	1/1	0.83	0.35	58,58,58,58	0
56	MG	BA	3279	1/1	0.83	0.21	55,55,55,55	0
56	MG	AW	113	1/1	0.83	0.26	46,46,46,46	1
56	MG	AX	102	1/1	0.83	0.09	32,32,32,32	0
56	MG	DA	3312	1/1	0.83	0.20	44,44,44,44	0
56	MG	CA	1647	1/1	0.83	0.39	57,57,57,57	0
56	MG	DA	3036	1/1	0.83	0.19	43,43,43,43	0
56	MG	CW	112	1/1	0.83	0.08	53,53,53,53	0
56	MG	BA	3152	1/1	0.84	0.21	45,45,45,45	0
56	MG	BA	3147	1/1	0.84	0.20	20,20,20,20	0
56	MG	BA	3109	1/1	0.84	0.28	34,34,34,34	0
56	MG	CA	1645	1/1	0.84	0.14	74,74,74,74	0
56	MG	AA	1693	1/1	0.84	0.42	43,43,43,43	0
56	MG	BA	3216	1/1	0.84	0.23	50,50,50,50	0
56	MG	DA	3319	1/1	0.84	0.24	52,52,52,52	0
56	MG	DA	3381	1/1	0.84	0.23	77,77,77,77	0
56	MG	DA	3016	1/1	0.84	0.12	52,52,52,52	0
56	MG	AA	1658	1/1	0.84	0.21	37,37,37,37	0
56	MG	AW	103	1/1	0.85	0.18	51,51,51,51	0
56	MG	BA	3103	1/1	0.85	0.18	55,55,55,55	0
56	MG	AA	1716	1/1	0.85	0.39	73,73,73,73	0
56	MG	D5	102	1/1	0.85	0.11	6,6,6,6	1
56	MG	BA	3375	1/1	0.85	0.26	42,42,42,42	1
56	MG	CA	1688	1/1	0.85	0.07	46,46,46,46	0
56	MG	BA	3377	1/1	0.85	0.21	43,43,43,43	0
56	MG	BA	3261	1/1	0.85	0.11	24,24,24,24	0
56	MG	BA	3275	1/1	0.85	0.17	19,19,19,19	0
56	MG	AA	1799	1/1	0.85	0.09	71,71,71,71	0
56	MG	AA	1670	1/1	0.85	0.17	52,52,52,52	0
56	MG	DA	3330	1/1	0.85	0.49	81,81,81,81	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1615	1/1	0.85	0.34	61,61,61,61	0
56	MG	BB	205	1/1	0.85	0.36	35,35,35,35	1
56	MG	AA	1727	1/1	0.85	0.16	40,40,40,40	0
56	MG	BA	3393	1/1	0.85	0.60	60,60,60,60	0
56	MG	BA	3451	1/1	0.85	0.09	43,43,43,43	0
56	MG	BA	3422	1/1	0.85	0.22	39,39,39,39	0
56	MG	BA	3346	1/1	0.85	0.22	60,60,60,60	0
56	MG	DA	3357	1/1	0.85	0.17	26,26,26,26	0
56	MG	DA	3334	1/1	0.85	0.09	34,34,34,34	1
56	MG	DA	3024	1/1	0.85	0.16	20,20,20,20	0
56	MG	CA	1642	1/1	0.85	0.15	56,56,56,56	0
56	MG	BA	3178	1/1	0.85	0.12	54,54,54,54	0
56	MG	CA	1767	1/1	0.85	0.27	67,67,67,67	0
56	MG	BA	3332	1/1	0.86	0.20	53,53,53,53	1
56	MG	DO	201	1/1	0.86	0.13	67,67,67,67	0
56	MG	BA	3237	1/1	0.86	0.32	35,35,35,35	0
56	MG	AA	1730	1/1	0.86	0.36	82,82,82,82	0
56	MG	BA	3143	1/1	0.86	0.26	21,21,21,21	0
56	MG	AA	1747	1/1	0.86	0.14	37,37,37,37	0
56	MG	AE	201	1/1	0.86	0.09	47,47,47,47	0
56	MG	BA	3412	1/1	0.86	0.21	48,48,48,48	0
56	MG	DA	3353	1/1	0.86	0.35	42,42,42,42	0
56	MG	CA	1753	1/1	0.86	0.23	33,33,33,33	0
56	MG	CX	102	1/1	0.86	0.40	75,75,75,75	0
56	MG	BA	3329	1/1	0.86	0.12	34,34,34,34	0
56	MG	CA	1742	1/1	0.86	0.15	76,76,76,76	0
56	MG	CA	1730	1/1	0.86	0.18	56,56,56,56	0
56	MG	AA	1626	1/1	0.86	0.25	50,50,50,50	0
56	MG	DA	3149	1/1	0.86	0.48	84,84,84,84	0
56	MG	BA	3425	1/1	0.86	0.22	61,61,61,61	0
56	MG	CA	1744	1/1	0.86	0.16	64,64,64,64	0
56	MG	DA	3048	1/1	0.86	0.27	53,53,53,53	0
56	MG	BB	203	1/1	0.86	0.15	52,52,52,52	0
56	MG	DA	3022	1/1	0.86	0.19	37,37,37,37	0
56	MG	DA	3276	1/1	0.86	0.37	45,45,45,45	0
56	MG	CA	1644	1/1	0.86	0.22	59,59,59,59	0
56	MG	BA	3107	1/1	0.87	0.17	53,53,53,53	0
56	MG	DA	3193	1/1	0.87	0.22	35,35,35,35	0
56	MG	BA	3293	1/1	0.87	0.19	51,51,51,51	0
56	MG	AA	1795	1/1	0.87	0.25	30,30,30,30	0
56	MG	AW	120	1/1	0.87	0.10	52,52,52,52	0
56	MG	BA	3247	1/1	0.87	0.14	0,0,0,0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3212	1/1	0.87	0.24	61,61,61,61	0
56	MG	AA	1802	1/1	0.87	0.13	44,44,44,44	0
56	MG	DA	3160	1/1	0.87	0.17	37,37,37,37	0
56	MG	AA	1657	1/1	0.87	0.16	50,50,50,50	0
56	MG	B3	101	1/1	0.87	0.24	48,48,48,48	1
56	MG	AA	1663	1/1	0.87	0.13	24,24,24,24	0
56	MG	CW	104	1/1	0.87	0.08	46,46,46,46	0
56	MG	DA	3329	1/1	0.87	0.17	45,45,45,45	0
56	MG	CA	1763	1/1	0.87	0.18	32,32,32,32	0
56	MG	BA	3372	1/1	0.87	0.11	43,43,43,43	1
56	MG	DB	202	1/1	0.87	0.18	57,57,57,57	0
56	MG	DA	3283	1/1	0.87	0.20	35,35,35,35	0
56	MG	BA	3342	1/1	0.87	0.35	52,52,52,52	1
56	MG	BA	3383	1/1	0.87	0.09	37,37,37,37	0
56	MG	BB	209	1/1	0.88	0.12	49,49,49,49	0
56	MG	DA	3249	1/1	0.88	0.47	57,57,57,57	0
56	MG	CA	1697	1/1	0.88	0.14	49,49,49,49	0
56	MG	CA	1619	1/1	0.88	0.17	55,55,55,55	0
56	MG	BA	3258	1/1	0.88	0.11	70,70,70,70	0
56	MG	BA	3400	1/1	0.88	0.14	46,46,46,46	0
56	MG	BA	3419	1/1	0.88	0.24	39,39,39,39	0
56	MG	AA	1688	1/1	0.88	0.29	39,39,39,39	0
56	MG	DA	3246	1/1	0.88	0.15	38,38,38,38	0
56	MG	BA	3265	1/1	0.88	0.23	37,37,37,37	0
56	MG	AA	1734	1/1	0.88	0.20	48,48,48,48	1
56	MG	CA	1714	1/1	0.88	0.16	81,81,81,81	0
56	MG	CA	1726	1/1	0.88	0.12	29,29,29,29	0
56	MG	BA	3070	1/1	0.88	0.21	24,24,24,24	0
56	MG	DB	209	1/1	0.88	0.16	20,20,20,20	0
56	MG	DA	3137	1/1	0.88	0.15	62,62,62,62	0
56	MG	BA	3374	1/1	0.88	0.26	48,48,48,48	0
56	MG	BA	3414	1/1	0.88	0.32	44,44,44,44	0
56	MG	BA	3222	1/1	0.88	0.21	41,41,41,41	0
56	MG	BA	3181	1/1	0.88	0.07	36,36,36,36	0
56	MG	CX	103	1/1	0.88	0.23	40,40,40,40	0
56	MG	CA	1680	1/1	0.88	0.19	51,51,51,51	0
56	MG	BA	3064	1/1	0.88	0.20	30,30,30,30	0
56	MG	DA	3171	1/1	0.88	0.20	37,37,37,37	0
56	MG	CA	1618	1/1	0.88	0.12	25,25,25,25	0
56	MG	CV	102	1/1	0.88	0.08	56,56,56,56	0
56	MG	DA	3153	1/1	0.89	0.31	40,40,40,40	0
56	MG	BA	3379	1/1	0.89	0.11	39,39,39,39	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3124	1/1	0.89	0.19	17,17,17,17	0
56	MG	BA	3206	1/1	0.89	0.19	25,25,25,25	0
56	MG	BA	3018	1/1	0.89	0.24	22,22,22,22	0
56	MG	DA	3278	1/1	0.89	0.17	38,38,38,38	0
56	MG	BA	3254	1/1	0.89	0.11	48,48,48,48	0
56	MG	BA	3282	1/1	0.89	0.31	49,49,49,49	0
56	MG	BN	201	1/1	0.89	0.31	25,25,25,25	0
56	MG	DA	3008	1/1	0.89	0.17	23,23,23,23	0
56	MG	DA	3159	1/1	0.89	0.23	57,57,57,57	0
56	MG	CA	1759	1/1	0.89	0.20	68,68,68,68	0
56	MG	AA	1665	1/1	0.89	0.21	27,27,27,27	0
56	MG	BA	3166	1/1	0.89	0.06	39,39,39,39	0
56	MG	BA	3001	1/1	0.89	0.18	38,38,38,38	0
56	MG	BA	3415	1/1	0.89	0.32	38,38,38,38	0
56	MG	CJ	201	1/1	0.89	0.10	44,44,44,44	0
56	MG	CA	1789	1/1	0.89	0.18	33,33,33,33	0
56	MG	DA	3272	1/1	0.89	0.41	47,47,47,47	0
56	MG	CA	1761	1/1	0.89	0.26	26,26,26,26	0
56	MG	BA	3142	1/1	0.89	0.26	66,66,66,66	0
56	MG	DA	3111	1/1	0.89	0.24	1,1,1,1	0
56	MG	CA	1786	1/1	0.89	0.23	29,29,29,29	0
56	MG	BA	3009	1/1	0.89	0.23	20,20,20,20	0
56	MG	CA	1663	1/1	0.89	0.16	32,32,32,32	0
56	MG	AA	1643	1/1	0.89	0.17	22,22,22,22	0
56	MG	BA	3300	1/1	0.89	0.10	6,6,6,6	0
56	MG	CV	104	1/1	0.89	0.21	36,36,36,36	0
56	MG	BA	3333	1/1	0.89	0.17	41,41,41,41	0
56	MG	B2	102	1/1	0.89	0.20	44,44,44,44	0
56	MG	DN	201	1/1	0.89	0.09	16,16,16,16	0
56	MG	DA	3173	1/1	0.89	0.13	41,41,41,41	0
56	MG	DA	3368	1/1	0.90	0.67	71,71,71,71	0
56	MG	AA	1620	1/1	0.90	0.14	28,28,28,28	0
56	MG	BA	3140	1/1	0.90	0.11	10,10,10,10	0
56	MG	AA	1708	1/1	0.90	0.20	41,41,41,41	0
56	MG	CA	1732	1/1	0.90	0.23	43,43,43,43	0
56	MG	AW	118	1/1	0.90	0.16	46,46,46,46	0
56	MG	DA	3057	1/1	0.90	0.30	35,35,35,35	0
56	MG	BA	3367	1/1	0.90	0.26	50,50,50,50	0
56	MG	AA	1745	1/1	0.90	0.17	56,56,56,56	0
56	MG	DA	3009	1/1	0.90	0.18	3,3,3,3	0
56	MG	BA	3241	1/1	0.90	0.19	43,43,43,43	0
56	MG	CX	106	1/1	0.90	0.37	47,47,47,47	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3330	1/1	0.90	0.06	33,33,33,33	0
56	MG	BA	3230	1/1	0.90	0.16	36,36,36,36	0
56	MG	B2	103	1/1	0.90	0.29	46,46,46,46	0
56	MG	AA	1768	1/1	0.90	0.15	14,14,14,14	1
56	MG	DA	3369	1/1	0.90	0.15	46,46,46,46	0
56	MG	BA	3409	1/1	0.90	0.13	53,53,53,53	0
56	MG	DA	3132	1/1	0.90	0.09	13,13,13,13	0
56	MG	DA	3165	1/1	0.90	0.17	38,38,38,38	0
56	MG	BA	3154	1/1	0.90	0.14	28,28,28,28	1
56	MG	DA	3371	1/1	0.90	0.12	40,40,40,40	0
56	MG	BB	212	1/1	0.90	0.11	18,18,18,18	1
56	MG	AA	1810	1/1	0.90	0.26	47,47,47,47	0
56	MG	AA	1749	1/1	0.90	0.15	38,38,38,38	0
56	MG	BA	3331	1/1	0.90	0.08	45,45,45,45	0
56	MG	BA	3435	1/1	0.90	0.09	52,52,52,52	1
56	MG	DA	3387	1/1	0.90	0.11	11,11,11,11	0
56	MG	CA	1627	1/1	0.90	0.14	34,34,34,34	0
56	MG	CA	1734	1/1	0.90	0.14	59,59,59,59	0
56	MG	CA	1723	1/1	0.90	0.34	65,65,65,65	0
56	MG	BA	3429	1/1	0.90	0.16	41,41,41,41	0
56	MG	CA	1643	1/1	0.90	0.42	48,48,48,48	0
56	MG	AA	1763	1/1	0.90	0.43	58,58,58,58	1
56	MG	AA	1772	1/1	0.90	0.23	73,73,73,73	0
56	MG	DA	3240	1/1	0.90	0.11	43,43,43,43	0
56	MG	AW	121	1/1	0.90	0.09	36,36,36,36	0
56	MG	BA	3446	1/1	0.90	0.13	43,43,43,43	0
56	MG	AA	1776	1/1	0.90	0.10	30,30,30,30	0
56	MG	CW	110	1/1	0.90	0.12	38,38,38,38	0
56	MG	BA	3286	1/1	0.90	0.19	38,38,38,38	0
56	MG	BA	3345	1/1	0.90	0.18	59,59,59,59	0
56	MG	BA	3129	1/1	0.91	0.14	21,21,21,21	0
56	MG	BA	3349	1/1	0.91	0.16	28,28,28,28	1
56	MG	DA	3389	1/1	0.91	0.11	22,22,22,22	0
56	MG	AV	107	1/1	0.91	0.10	25,25,25,25	0
56	MG	AA	1767	1/1	0.91	0.22	48,48,48,48	0
56	MG	DZ	301	1/1	0.91	0.12	27,27,27,27	0
56	MG	BA	3219	1/1	0.91	0.06	45,45,45,45	0
56	MG	CX	104	1/1	0.91	0.17	31,31,31,31	1
56	MG	BA	3002	1/1	0.91	0.17	21,21,21,21	0
56	MG	DA	3133	1/1	0.91	0.11	39,39,39,39	0
56	MG	BB	204	1/1	0.91	0.14	42,42,42,42	0
56	MG	DA	3344	1/1	0.91	0.31	32,32,32,32	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DU	201	1/1	0.91	0.13	45,45,45,45	0
56	MG	DA	3245	1/1	0.91	0.15	38,38,38,38	0
56	MG	AA	1743	1/1	0.91	0.10	44,44,44,44	0
56	MG	BA	3016	1/1	0.91	0.21	37,37,37,37	0
56	MG	AA	1738	1/1	0.91	0.20	49,49,49,49	0
56	MG	DA	3233	1/1	0.91	0.12	0,0,0,0	0
56	MG	AA	1629	1/1	0.91	0.13	29,29,29,29	0
56	MG	BB	218	1/1	0.91	0.12	36,36,36,36	1
56	MG	DA	3197	1/1	0.91	0.16	13,13,13,13	0
56	MG	AA	1729	1/1	0.91	0.09	45,45,45,45	0
56	MG	BA	3111	1/1	0.91	0.16	27,27,27,27	0
56	MG	BA	3167	1/1	0.91	0.14	33,33,33,33	0
56	MG	AA	1796	1/1	0.91	0.10	10,10,10,10	1
56	MG	CA	1737	1/1	0.91	0.15	35,35,35,35	0
56	MG	AV	106	1/1	0.91	0.07	40,40,40,40	0
56	MG	AA	1792	1/1	0.91	0.19	74,74,74,74	0
56	MG	BA	3231	1/1	0.91	0.42	45,45,45,45	0
56	MG	BA	3160	1/1	0.91	0.12	17,17,17,17	0
56	MG	BA	3448	1/1	0.91	0.07	35,35,35,35	0
56	MG	BB	214	1/1	0.91	0.20	46,46,46,46	0
56	MG	BA	3358	1/1	0.91	0.19	42,42,42,42	0
56	MG	AA	1780	1/1	0.91	0.13	60,60,60,60	0
56	MG	AA	1627	1/1	0.91	0.45	39,39,39,39	0
56	MG	DA	3298	1/1	0.91	0.14	5,5,5,5	0
56	MG	DA	3069	1/1	0.91	0.21	45,45,45,45	0
56	MG	BB	206	1/1	0.91	0.38	78,78,78,78	0
56	MG	BA	3294	1/1	0.91	0.10	6,6,6,6	0
56	MG	CA	1711	1/1	0.91	0.29	63,63,63,63	0
56	MG	CA	1760	1/1	0.91	0.15	33,33,33,33	0
56	MG	AA	1638	1/1	0.91	0.24	24,24,24,24	0
56	MG	BA	3343	1/1	0.91	0.30	34,34,34,34	0
56	MG	BA	3051	1/1	0.91	0.12	56,56,56,56	0
56	MG	AA	1808	1/1	0.91	0.08	33,33,33,33	0
56	MG	CA	1772	1/1	0.91	0.18	37,37,37,37	0
56	MG	BA	3322	1/1	0.91	0.14	35,35,35,35	0
56	MG	DA	3393	1/1	0.91	0.13	80,80,80,80	0
56	MG	DF	301	1/1	0.91	0.13	29,29,29,29	0
56	MG	BA	3410	1/1	0.91	0.09	41,41,41,41	0
56	MG	CA	1633	1/1	0.91	0.27	19,19,19,19	0
56	MG	DA	3201	1/1	0.91	0.18	7,7,7,7	0
56	MG	DA	3392	1/1	0.92	0.15	47,47,47,47	0
56	MG	BA	3388	1/1	0.92	0.22	22,22,22,22	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3277	1/1	0.92	0.19	38,38,38,38	0
56	MG	BA	3308	1/1	0.92	0.20	25,25,25,25	0
56	MG	CA	1694	1/1	0.92	0.17	33,33,33,33	0
56	MG	CA	1661	1/1	0.92	0.17	13,13,13,13	0
56	MG	AA	1601	1/1	0.92	0.11	35,35,35,35	0
56	MG	B2	101	1/1	0.92	0.12	36,36,36,36	0
56	MG	BA	3071	1/1	0.92	0.24	20,20,20,20	0
56	MG	AA	1635	1/1	0.92	0.09	16,16,16,16	0
56	MG	AA	1809	1/1	0.92	0.17	40,40,40,40	1
56	MG	CA	1775	1/1	0.92	0.22	35,35,35,35	0
56	MG	DA	3270	1/1	0.92	0.09	47,47,47,47	0
56	MG	DA	3383	1/1	0.92	0.09	32,32,32,32	0
56	MG	DA	3116	1/1	0.92	0.11	10,10,10,10	0
56	MG	AA	1640	1/1	0.92	0.29	18,18,18,18	0
56	MG	AA	1615	1/1	0.92	0.12	33,33,33,33	0
56	MG	AA	1731	1/1	0.92	0.14	56,56,56,56	0
56	MG	BA	3157	1/1	0.92	0.28	39,39,39,39	0
56	MG	BA	3431	1/1	0.92	0.09	51,51,51,51	0
56	MG	AA	1755	1/1	0.92	0.26	47,47,47,47	0
56	MG	AA	1632	1/1	0.92	0.10	24,24,24,24	0
56	MG	DA	3350	1/1	0.92	0.19	37,37,37,37	0
56	MG	DA	3040	1/1	0.92	0.04	45,45,45,45	0
56	MG	DA	3267	1/1	0.92	0.13	13,13,13,13	0
56	MG	AA	1686	1/1	0.92	0.18	52,52,52,52	0
56	MG	CA	1700	1/1	0.92	0.14	20,20,20,20	0
56	MG	CA	1682	1/1	0.92	0.12	32,32,32,32	0
56	MG	BA	3180	1/1	0.92	0.10	33,33,33,33	0
56	MG	AA	1715	1/1	0.92	0.09	24,24,24,24	0
56	MG	DA	3379	1/1	0.92	0.22	31,31,31,31	0
56	MG	BA	3450	1/1	0.92	0.09	55,55,55,55	0
56	MG	DA	3172	1/1	0.92	0.22	25,25,25,25	0
56	MG	BA	3158	1/1	0.92	0.26	44,44,44,44	0
56	MG	AA	1783	1/1	0.92	0.37	46,46,46,46	0
56	MG	DA	3228	1/1	0.92	0.15	19,19,19,19	0
56	MG	BV	201	1/1	0.92	0.12	23,23,23,23	0
56	MG	CA	1769	1/1	0.92	0.11	18,18,18,18	0
56	MG	BA	3150	1/1	0.92	0.12	35,35,35,35	0
56	MG	DA	3279	1/1	0.92	0.19	15,15,15,15	0
56	MG	BA	3316	1/1	0.92	0.27	49,49,49,49	0
56	MG	BA	3052	1/1	0.92	0.24	0,0,0,0	0
56	MG	BA	3190	1/1	0.92	0.21	49,49,49,49	0
56	MG	CA	1788	1/1	0.92	0.21	42,42,42,42	1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1807	1/1	0.92	0.12	19,19,19,19	1
56	MG	BA	3318	1/1	0.92	0.18	30,30,30,30	0
56	MG	CA	1665	1/1	0.92	0.43	71,71,71,71	0
56	MG	DA	3296	1/1	0.92	0.10	59,59,59,59	0
56	MG	DA	3333	1/1	0.92	0.23	67,67,67,67	0
56	MG	DA	3188	1/1	0.92	0.32	42,42,42,42	0
56	MG	BA	3250	1/1	0.92	0.19	22,22,22,22	1
56	MG	CA	1776	1/1	0.92	0.18	44,44,44,44	0
56	MG	BA	3439	1/1	0.92	0.23	31,31,31,31	0
56	MG	BA	3214	1/1	0.92	0.39	44,44,44,44	0
56	MG	CA	1639	1/1	0.92	0.23	71,71,71,71	0
56	MG	CV	101	1/1	0.92	0.13	32,32,32,32	0
56	MG	AA	1737	1/1	0.92	0.13	60,60,60,60	0
56	MG	CA	1758	1/1	0.92	0.15	44,44,44,44	0
56	MG	BA	3061	1/1	0.92	0.16	0,0,0,0	0
56	MG	DA	3257	1/1	0.92	0.19	27,27,27,27	0
56	MG	BA	3362	1/1	0.93	0.18	58,58,58,58	0
56	MG	BA	3370	1/1	0.93	0.28	28,28,28,28	1
56	MG	BA	3253	1/1	0.93	0.11	38,38,38,38	0
56	MG	AA	1791	1/1	0.93	0.45	22,22,22,22	1
56	MG	CA	1698	1/1	0.93	0.37	42,42,42,42	0
56	MG	AW	101	1/1	0.93	0.35	35,35,35,35	0
56	MG	DA	3324	1/1	0.93	0.21	56,56,56,56	0
56	MG	CA	1721	1/1	0.93	0.27	57,57,57,57	0
56	MG	AA	1764	1/1	0.93	0.10	6,6,6,6	0
56	MG	BA	3215	1/1	0.93	0.14	30,30,30,30	0
56	MG	BA	3269	1/1	0.93	0.32	43,43,43,43	0
56	MG	CA	1674	1/1	0.93	0.09	58,58,58,58	0
56	MG	AA	1811	1/1	0.93	0.12	16,16,16,16	0
56	MG	DA	3325	1/1	0.93	0.11	35,35,35,35	0
56	MG	CA	1672	1/1	0.93	0.15	32,32,32,32	0
56	MG	AA	1758	1/1	0.93	0.13	62,62,62,62	0
56	MG	AA	1678	1/1	0.93	0.10	43,43,43,43	0
56	MG	BB	210	1/1	0.93	0.10	33,33,33,33	1
56	MG	CA	1671	1/1	0.93	0.26	42,42,42,42	0
56	MG	AA	1695	1/1	0.93	0.18	13,13,13,13	1
56	MG	CW	102	1/1	0.93	0.07	52,52,52,52	0
56	MG	DA	3230	1/1	0.93	0.17	20,20,20,20	0
56	MG	DA	3120	1/1	0.93	0.13	25,25,25,25	0
56	MG	DA	3318	1/1	0.93	0.28	45,45,45,45	0
56	MG	CA	1611	1/1	0.93	0.27	67,67,67,67	0
56	MG	DA	3313	1/1	0.93	0.12	35,35,35,35	1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3309	1/1	0.93	0.13	6,6,6,6	0
56	MG	AA	1648	1/1	0.93	0.19	86,86,86,86	0
56	MG	AA	1681	1/1	0.93	0.13	21,21,21,21	0
57	PAR	AA	1816	42/42	0.93	0.16	15,20,38,42	0
56	MG	BA	3155	1/1	0.93	0.44	66,66,66,66	0
56	MG	DA	3339	1/1	0.93	0.07	17,17,17,17	0
56	MG	BA	3299	1/1	0.93	0.19	22,22,22,22	0
56	MG	DA	3106	1/1	0.93	0.15	15,15,15,15	0
56	MG	BA	3228	1/1	0.93	0.13	46,46,46,46	0
56	MG	DA	3321	1/1	0.93	0.11	45,45,45,45	1
56	MG	CA	1741	1/1	0.93	0.31	40,40,40,40	0
56	MG	CA	1702	1/1	0.93	0.14	36,36,36,36	0
56	MG	AA	1674	1/1	0.93	0.24	33,33,33,33	0
56	MG	AA	1769	1/1	0.93	0.20	61,61,61,61	0
56	MG	AA	1785	1/1	0.93	0.15	32,32,32,32	0
56	MG	DA	3341	1/1	0.93	0.11	26,26,26,26	0
56	MG	BA	3268	1/1	0.93	0.14	24,24,24,24	0
56	MG	DA	3140	1/1	0.93	0.14	22,22,22,22	0
56	MG	CA	1718	1/1	0.93	0.22	47,47,47,47	0
56	MG	DA	3148	1/1	0.93	0.14	5,5,5,5	0
56	MG	DA	3214	1/1	0.93	0.10	32,32,32,32	0
56	MG	DA	3367	1/1	0.93	0.11	19,19,19,19	0
56	MG	DA	3348	1/1	0.93	0.14	46,46,46,46	0
56	MG	CA	1787	1/1	0.93	0.29	39,39,39,39	1
56	MG	DA	3006	1/1	0.93	0.17	41,41,41,41	0
56	MG	CA	1762	1/1	0.93	0.25	39,39,39,39	0
56	MG	BA	3168	1/1	0.93	0.10	22,22,22,22	0
56	MG	CA	1713	1/1	0.93	0.19	93,93,93,93	0
56	MG	CA	1738	1/1	0.93	0.11	23,23,23,23	0
56	MG	BA	3428	1/1	0.93	0.49	72,72,72,72	1
56	MG	DA	3096	1/1	0.93	0.24	21,21,21,21	0
56	MG	BA	3144	1/1	0.93	0.16	8,8,8,8	0
56	MG	BA	3288	1/1	0.93	0.23	32,32,32,32	1
56	MG	DB	205	1/1	0.93	0.20	51,51,51,51	0
56	MG	DB	207	1/1	0.93	0.21	52,52,52,52	1
56	MG	AA	1786	1/1	0.93	0.14	31,31,31,31	0
56	MG	AA	1784	1/1	0.93	0.29	41,41,41,41	0
56	MG	BA	3407	1/1	0.93	0.11	40,40,40,40	0
56	MG	AA	1765	1/1	0.93	0.05	43,43,43,43	0
56	MG	CA	1670	1/1	0.93	0.13	23,23,23,23	0
56	MG	DA	3058	1/1	0.93	0.20	6,6,6,6	0
56	MG	AW	111	1/1	0.93	0.25	32,32,32,32	1

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3447	1/1	0.93	0.09	37,37,37,37	0
56	MG	BA	3003	1/1	0.93	0.20	28,28,28,28	0
56	MG	CA	1708	1/1	0.93	0.30	43,43,43,43	0
56	MG	BA	3442	1/1	0.93	0.09	29,29,29,29	0
56	MG	DA	3360	1/1	0.93	0.34	39,39,39,39	0
56	MG	DA	3216	1/1	0.93	0.12	34,34,34,34	0
56	MG	BA	3454	1/1	0.93	0.13	44,44,44,44	0
56	MG	BA	3263	1/1	0.93	0.07	4,4,4,4	0
56	MG	CA	1612	1/1	0.93	0.09	17,17,17,17	0
56	MG	DA	3218	1/1	0.93	0.07	27,27,27,27	0
56	MG	AA	1654	1/1	0.93	0.20	50,50,50,50	0
56	MG	BA	3390	1/1	0.93	0.11	20,20,20,20	1
56	MG	BA	3276	1/1	0.93	0.09	6,6,6,6	0
56	MG	BA	3259	1/1	0.93	0.10	32,32,32,32	0
56	MG	DA	3375	1/1	0.93	0.10	42,42,42,42	1
56	MG	AA	1735	1/1	0.93	0.18	84,84,84,84	0
56	MG	DA	3053	1/1	0.93	0.17	24,24,24,24	0
56	MG	DA	3351	1/1	0.93	0.18	16,16,16,16	0
56	MG	AV	103	1/1	0.93	0.08	28,28,28,28	0
56	MG	AA	1803	1/1	0.93	0.17	48,48,48,48	0
56	MG	BA	3126	1/1	0.93	0.09	1,1,1,1	0
57	PAR	CA	1790	42/42	0.93	0.17	7,11,29,33	0
56	MG	BA	3119	1/1	0.93	0.25	16,16,16,16	0
56	MG	BA	3320	1/1	0.93	0.09	37,37,37,37	0
56	MG	BA	3153	1/1	0.93	0.12	37,37,37,37	0
56	MG	DA	3027	1/1	0.93	0.28	39,39,39,39	0
56	MG	BA	3146	1/1	0.93	0.24	0,0,0,0	0
56	MG	BA	3199	1/1	0.94	0.14	9,9,9,9	0
56	MG	BA	3266	1/1	0.94	0.28	28,28,28,28	0
56	MG	DA	3297	1/1	0.94	0.15	23,23,23,23	0
56	MG	DA	3307	1/1	0.94	0.11	34,34,34,34	1
56	MG	CA	1601	1/1	0.94	0.17	26,26,26,26	0
56	MG	DA	3144	1/1	0.94	0.14	31,31,31,31	0
56	MG	BA	3030	1/1	0.94	0.11	0,0,0,0	0
56	MG	DB	208	1/1	0.94	0.17	9,9,9,9	0
56	MG	AA	1683	1/1	0.94	0.13	17,17,17,17	0
56	MG	BA	3373	1/1	0.94	0.04	39,39,39,39	0
56	MG	AA	1655	1/1	0.94	0.17	32,32,32,32	0
56	MG	AA	1701	1/1	0.94	0.12	18,18,18,18	0
56	MG	BA	3221	1/1	0.94	0.13	49,49,49,49	0
56	MG	DA	3143	1/1	0.94	0.22	36,36,36,36	0
56	MG	AA	1676	1/1	0.94	0.07	7,7,7,7	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3335	1/1	0.94	0.13	45,45,45,45	0
56	MG	CA	1649	1/1	0.94	0.12	37,37,37,37	0
56	MG	CF	201	1/1	0.94	0.10	44,44,44,44	0
56	MG	BA	3088	1/1	0.94	0.30	35,35,35,35	0
56	MG	CA	1638	1/1	0.94	0.13	42,42,42,42	0
56	MG	CA	1720	1/1	0.94	0.15	69,69,69,69	0
56	MG	AW	102	1/1	0.94	0.26	51,51,51,51	0
56	MG	DD	302	1/1	0.94	0.09	7,7,7,7	0
56	MG	BA	3354	1/1	0.94	0.09	35,35,35,35	0
56	MG	CA	1736	1/1	0.94	0.14	30,30,30,30	0
56	MG	CA	1650	1/1	0.94	0.24	68,68,68,68	0
56	MG	DA	3180	1/1	0.94	0.26	0,0,0,0	0
56	MG	BA	3366	1/1	0.94	0.14	27,27,27,27	0
56	MG	DA	3086	1/1	0.94	0.21	0,0,0,0	0
56	MG	CA	1617	1/1	0.94	0.09	25,25,25,25	0
56	MG	BA	3314	1/1	0.94	0.45	47,47,47,47	1
56	MG	DA	3363	1/1	0.94	0.12	30,30,30,30	0
56	MG	CA	1779	1/1	0.94	0.20	31,31,31,31	0
56	MG	BA	3217	1/1	0.94	0.16	37,37,37,37	0
56	MG	AA	1609	1/1	0.94	0.15	44,44,44,44	0
56	MG	BA	3256	1/1	0.94	0.09	22,22,22,22	0
56	MG	AA	1790	1/1	0.94	0.08	65,65,65,65	0
56	MG	BA	3301	1/1	0.94	0.20	19,19,19,19	0
56	MG	DA	3189	1/1	0.94	0.23	34,34,34,34	0
56	MG	DA	3161	1/1	0.94	0.13	39,39,39,39	0
56	MG	DA	3056	1/1	0.94	0.16	9,9,9,9	0
56	MG	AA	1616	1/1	0.94	0.14	18,18,18,18	0
56	MG	DA	3396	1/1	0.94	0.16	27,27,27,27	1
56	MG	BA	3452	1/1	0.94	0.11	39,39,39,39	0
56	MG	CA	1654	1/1	0.94	0.08	41,41,41,41	0
56	MG	BA	3384	1/1	0.94	0.13	36,36,36,36	0
56	MG	BA	3102	1/1	0.94	0.11	15,15,15,15	0
56	MG	AA	1709	1/1	0.94	0.15	33,33,33,33	0
56	MG	DA	3175	1/1	0.94	0.19	30,30,30,30	0
56	MG	BA	3229	1/1	0.94	0.15	36,36,36,36	0
56	MG	CA	1676	1/1	0.94	0.36	46,46,46,46	0
56	MG	B2	104	1/1	0.94	0.09	34,34,34,34	0
56	MG	BA	3436	1/1	0.94	0.11	39,39,39,39	1
56	MG	AA	1604	1/1	0.94	0.17	52,52,52,52	0
56	MG	CA	1731	1/1	0.94	0.10	32,32,32,32	0
56	MG	DA	3152	1/1	0.94	0.10	17,17,17,17	0
56	MG	DA	3088	1/1	0.94	0.20	4,4,4,4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3282	1/1	0.94	0.15	41,41,41,41	0
56	MG	AW	115	1/1	0.94	0.12	42,42,42,42	0
56	MG	BA	3344	1/1	0.94	0.15	17,17,17,17	0
56	MG	DA	3068	1/1	0.94	0.14	14,14,14,14	0
56	MG	AA	1619	1/1	0.94	0.33	41,41,41,41	0
56	MG	BA	3028	1/1	0.94	0.30	36,36,36,36	0
56	MG	BA	3255	1/1	0.94	0.14	28,28,28,28	0
56	MG	DB	210	1/1	0.94	0.05	15,15,15,15	0
56	MG	BA	3361	1/1	0.94	0.24	53,53,53,53	0
56	MG	BA	3117	1/1	0.94	0.24	3,3,3,3	0
56	MG	BA	3218	1/1	0.94	0.07	56,56,56,56	0
56	MG	BA	3223	1/1	0.94	0.13	8,8,8,8	0
56	MG	BA	3149	1/1	0.94	0.10	10,10,10,10	0
56	MG	DA	3232	1/1	0.94	0.12	13,13,13,13	0
56	MG	BA	3141	1/1	0.94	0.10	20,20,20,20	0
56	MG	DA	3203	1/1	0.94	0.10	58,58,58,58	0
56	MG	DA	3347	1/1	0.94	0.08	34,34,34,34	0
56	MG	DA	3204	1/1	0.94	0.12	8,8,8,8	0
56	MG	CA	1657	1/1	0.94	0.15	24,24,24,24	0
56	MG	BA	3226	1/1	0.94	0.10	20,20,20,20	0
56	MG	DA	3331	1/1	0.94	0.26	42,42,42,42	0
56	MG	DA	3122	1/1	0.94	0.18	43,43,43,43	0
56	MG	DA	3304	1/1	0.94	0.06	9,9,9,9	0
56	MG	BA	3135	1/1	0.94	0.13	18,18,18,18	0
56	MG	DA	3010	1/1	0.94	0.14	44,44,44,44	0
56	MG	B7	102	1/1	0.94	0.10	11,11,11,11	1
56	MG	DA	3074	1/1	0.94	0.22	11,11,11,11	0
56	MG	DA	3012	1/1	0.94	0.16	27,27,27,27	0
56	MG	BA	3243	1/1	0.94	0.13	18,18,18,18	0
56	MG	CA	1652	1/1	0.94	0.18	52,52,52,52	0
56	MG	BA	3174	1/1	0.94	0.11	0,0,0,0	0
56	MG	CA	1757	1/1	0.94	0.12	56,56,56,56	0
56	MG	BA	3204	1/1	0.94	0.11	0,0,0,0	0
56	MG	BA	3272	1/1	0.94	0.40	49,49,49,49	0
56	MG	DA	3151	1/1	0.94	0.21	46,46,46,46	0
56	MG	AA	1653	1/1	0.94	0.12	39,39,39,39	0
56	MG	DA	3170	1/1	0.94	0.09	54,54,54,54	0
56	MG	DA	3235	1/1	0.94	0.08	39,39,39,39	0
56	MG	CA	1768	1/1	0.94	0.14	37,37,37,37	0
56	MG	CA	1717	1/1	0.94	0.07	16,16,16,16	0
56	MG	BA	3395	1/1	0.94	0.20	54,54,54,54	1
56	MG	AA	1690	1/1	0.94	0.12	48,48,48,48	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1606	1/1	0.94	0.36	53,53,53,53	0
56	MG	CA	1609	1/1	0.94	0.10	33,33,33,33	0
56	MG	AA	1622	1/1	0.94	0.10	8,8,8,8	0
56	MG	AA	1630	1/1	0.94	0.10	13,13,13,13	0
56	MG	DA	3130	1/1	0.94	0.15	14,14,14,14	0
56	MG	CA	1684	1/1	0.94	0.23	30,30,30,30	0
56	MG	AA	1717	1/1	0.94	0.08	21,21,21,21	0
56	MG	AA	1736	1/1	0.94	0.10	19,19,19,19	0
56	MG	DA	3185	1/1	0.94	0.12	8,8,8,8	1
56	MG	CA	1724	1/1	0.94	0.08	38,38,38,38	0
56	MG	DB	211	1/1	0.95	0.07	45,45,45,45	0
56	MG	BA	3309	1/1	0.95	0.15	14,14,14,14	0
56	MG	AA	1650	1/1	0.95	0.11	31,31,31,31	0
56	MG	CA	1667	1/1	0.95	0.20	41,41,41,41	0
56	MG	CA	1610	1/1	0.95	0.22	15,15,15,15	0
56	MG	AW	105	1/1	0.95	0.09	64,64,64,64	0
56	MG	BA	3380	1/1	0.95	0.33	77,77,77,77	0
56	MG	BA	3072	1/1	0.95	0.20	13,13,13,13	0
56	MG	DA	3142	1/1	0.95	0.08	52,52,52,52	0
56	MG	AA	1773	1/1	0.95	0.09	41,41,41,41	0
56	MG	BA	3406	1/1	0.95	0.16	18,18,18,18	0
56	MG	CA	1658	1/1	0.95	0.10	40,40,40,40	0
56	MG	BA	3179	1/1	0.95	0.09	28,28,28,28	0
56	MG	DA	3314	1/1	0.95	0.10	16,16,16,16	0
56	MG	CA	1620	1/1	0.95	0.16	32,32,32,32	0
56	MG	BA	3069	1/1	0.95	0.15	36,36,36,36	0
56	MG	AA	1673	1/1	0.95	0.10	26,26,26,26	0
56	MG	BA	3317	1/1	0.95	0.16	50,50,50,50	0
56	MG	CA	1765	1/1	0.95	0.08	38,38,38,38	0
56	MG	DA	3019	1/1	0.95	0.24	0,0,0,0	0
56	MG	AA	1789	1/1	0.95	0.13	18,18,18,18	0
56	MG	DA	3229	1/1	0.95	0.21	1,1,1,1	0
56	MG	BA	3148	1/1	0.95	0.17	37,37,37,37	0
56	MG	DA	3082	1/1	0.95	0.18	10,10,10,10	0
56	MG	CA	1616	1/1	0.95	0.24	24,24,24,24	0
56	MG	DA	3346	1/1	0.95	0.08	29,29,29,29	0
56	MG	BA	3005	1/1	0.95	0.11	26,26,26,26	0
56	MG	DA	3177	1/1	0.95	0.18	22,22,22,22	0
56	MG	BA	3114	1/1	0.95	0.21	0,0,0,0	0
56	MG	AA	1612	1/1	0.95	0.12	31,31,31,31	0
56	MG	CA	1626	1/1	0.95	0.14	11,11,11,11	0
56	MG	DA	3162	1/1	0.95	0.21	35,35,35,35	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3336	1/1	0.95	0.11	45,45,45,45	0
56	MG	BA	3449	1/1	0.95	0.14	27,27,27,27	0
56	MG	BA	3033	1/1	0.95	0.20	30,30,30,30	0
56	MG	AA	1770	1/1	0.95	0.12	16,16,16,16	0
56	MG	BA	3347	1/1	0.95	0.17	22,22,22,22	1
56	MG	BA	3287	1/1	0.95	0.21	46,46,46,46	0
56	MG	AA	1725	1/1	0.95	0.15	53,53,53,53	0
56	MG	CA	1764	1/1	0.95	0.11	15,15,15,15	0
56	MG	CA	1781	1/1	0.95	0.17	29,29,29,29	0
56	MG	DA	3361	1/1	0.95	0.27	5,5,5,5	0
56	MG	BA	3438	1/1	0.95	0.10	25,25,25,25	0
56	MG	DA	3373	1/1	0.95	0.11	28,28,28,28	0
56	MG	BA	3091	1/1	0.95	0.15	20,20,20,20	0
56	MG	DA	3207	1/1	0.95	0.11	8,8,8,8	0
56	MG	BA	3351	1/1	0.95	0.28	78,78,78,78	0
56	MG	BA	3430	1/1	0.95	0.21	30,30,30,30	0
56	MG	BA	3012	1/1	0.95	0.13	20,20,20,20	0
56	MG	AA	1634	1/1	0.95	0.22	34,34,34,34	0
56	MG	AA	1668	1/1	0.95	0.07	23,23,23,23	0
56	MG	BA	3405	1/1	0.95	0.09	11,11,11,11	0
56	MG	BA	3252	1/1	0.95	0.14	25,25,25,25	0
56	MG	AA	1607	1/1	0.95	0.07	12,12,12,12	0
56	MG	BA	3195	1/1	0.95	0.19	16,16,16,16	0
56	MG	AX	104	1/1	0.95	0.16	44,44,44,44	0
56	MG	BA	3392	1/1	0.95	0.11	8,8,8,8	0
56	MG	BA	3075	1/1	0.95	0.19	0,0,0,0	0
56	MG	DA	3145	1/1	0.95	0.11	27,27,27,27	0
56	MG	CA	1785	1/1	0.95	0.14	44,44,44,44	0
56	MG	DA	3084	1/1	0.95	0.10	29,29,29,29	0
56	MG	CA	1636	1/1	0.95	0.13	36,36,36,36	0
56	MG	AA	1726	1/1	0.95	0.11	12,12,12,12	0
56	MG	AA	1777	1/1	0.95	0.11	55,55,55,55	0
56	MG	DA	3037	1/1	0.95	0.12	4,4,4,4	0
56	MG	BA	3441	1/1	0.95	0.10	33,33,33,33	0
56	MG	BA	3402	1/1	0.95	0.18	19,19,19,19	0
56	MG	AA	1684	1/1	0.95	0.13	17,17,17,17	0
56	MG	BA	3207	1/1	0.95	0.14	0,0,0,0	0
56	MG	DA	3328	1/1	0.95	0.10	27,27,27,27	0
56	MG	AA	1781	1/1	0.95	0.23	27,27,27,27	0
56	MG	DA	3191	1/1	0.95	0.16	25,25,25,25	0
56	MG	BA	3240	1/1	0.95	0.23	15,15,15,15	0
56	MG	BA	3034	1/1	0.95	0.09	0,0,0,0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3401	1/1	0.95	0.22	48,48,48,48	0
56	MG	BA	3292	1/1	0.95	0.12	14,14,14,14	0
56	MG	BF	302	1/1	0.95	0.24	46,46,46,46	0
56	MG	AA	1706	1/1	0.95	0.09	10,10,10,10	0
56	MG	BA	3416	1/1	0.95	0.15	16,16,16,16	0
56	MG	DB	203	1/1	0.95	0.14	33,33,33,33	0
56	MG	DA	3186	1/1	0.95	0.24	24,24,24,24	0
56	MG	DA	3241	1/1	0.95	0.10	12,12,12,12	0
56	MG	DA	3211	1/1	0.95	0.10	1,1,1,1	0
56	MG	AA	1687	1/1	0.95	0.12	10,10,10,10	0
56	MG	BA	3364	1/1	0.95	0.13	35,35,35,35	0
56	MG	DA	3374	1/1	0.95	0.17	50,50,50,50	0
56	MG	DA	3147	1/1	0.95	0.12	19,19,19,19	0
56	MG	BA	3112	1/1	0.95	0.13	31,31,31,31	0
56	MG	DA	3115	1/1	0.95	0.11	16,16,16,16	0
56	MG	DA	3014	1/1	0.95	0.18	4,4,4,4	0
56	MG	CA	1625	1/1	0.95	0.20	19,19,19,19	0
56	MG	DA	3364	1/1	0.95	0.11	57,57,57,57	0
56	MG	BA	3426	1/1	0.95	0.09	3,3,3,3	0
56	MG	CA	1690	1/1	0.95	0.09	19,19,19,19	0
56	MG	BA	3205	1/1	0.95	0.11	0,0,0,0	0
56	MG	DA	3093	1/1	0.95	0.08	16,16,16,16	0
56	MG	CA	1602	1/1	0.95	0.12	14,14,14,14	0
56	MG	BA	3139	1/1	0.95	0.11	9,9,9,9	0
56	MG	BA	3201	1/1	0.95	0.20	21,21,21,21	0
56	MG	DA	3001	1/1	0.95	0.15	20,20,20,20	0
56	MG	AA	1804	1/1	0.95	0.12	31,31,31,31	0
56	MG	CA	1746	1/1	0.95	0.26	18,18,18,18	0
56	MG	AA	1685	1/1	0.95	0.07	38,38,38,38	0
56	MG	DA	3236	1/1	0.95	0.13	54,54,54,54	0
56	MG	DE	301	1/1	0.95	0.23	18,18,18,18	0
56	MG	AA	1602	1/1	0.95	0.12	39,39,39,39	0
56	MG	BA	3093	1/1	0.95	0.13	15,15,15,15	0
56	MG	BA	3248	1/1	0.95	0.21	33,33,33,33	0
56	MG	AW	106	1/1	0.95	0.06	26,26,26,26	0
56	MG	BA	3019	1/1	0.95	0.32	0,0,0,0	0
56	MG	BA	3122	1/1	0.95	0.13	8,8,8,8	0
56	MG	AA	1721	1/1	0.95	0.10	28,28,28,28	0
56	MG	DA	3146	1/1	0.95	0.15	22,22,22,22	0
56	MG	AW	112	1/1	0.95	0.16	29,29,29,29	0
56	MG	BX	101	1/1	0.95	0.13	26,26,26,26	0
56	MG	BA	3197	1/1	0.95	0.12	18,18,18,18	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1631	1/1	0.95	0.28	21,21,21,21	0
56	MG	DA	3253	1/1	0.95	0.15	71,71,71,71	0
56	MG	DA	3354	1/1	0.95	0.06	2,2,2,2	0
56	MG	BA	3026	1/1	0.95	0.22	0,0,0,0	0
56	MG	DA	3007	1/1	0.95	0.31	39,39,39,39	0
56	MG	AA	1812	1/1	0.95	0.12	50,50,50,50	0
56	MG	AA	1814	1/1	0.95	0.12	25,25,25,25	0
56	MG	BA	3399	1/1	0.95	0.19	27,27,27,27	0
56	MG	DA	3061	1/1	0.95	0.25	0,0,0,0	0
56	MG	BA	3035	1/1	0.95	0.28	10,10,10,10	0
56	MG	BA	3311	1/1	0.95	0.08	2,2,2,2	0
56	MG	AA	1666	1/1	0.95	0.18	1,1,1,1	0
56	MG	CA	1683	1/1	0.95	0.10	2,2,2,2	0
56	MG	DA	3150	1/1	0.95	0.18	40,40,40,40	0
56	MG	BB	219	1/1	0.95	0.08	24,24,24,24	0
56	MG	CA	1692	1/1	0.95	0.09	19,19,19,19	0
56	MG	AA	1756	1/1	0.95	0.22	15,15,15,15	0
56	MG	BB	215	1/1	0.95	0.10	40,40,40,40	0
56	MG	CA	1727	1/1	0.95	0.23	37,37,37,37	0
56	MG	BA	3183	1/1	0.95	0.07	18,18,18,18	0
56	MG	DA	3384	1/1	0.95	0.08	25,25,25,25	0
56	MG	DA	3285	1/1	0.95	0.20	15,15,15,15	0
56	MG	CA	1705	1/1	0.95	0.15	22,22,22,22	0
56	MG	BA	3234	1/1	0.95	0.26	29,29,29,29	0
56	MG	BA	3163	1/1	0.96	0.13	17,17,17,17	0
56	MG	DA	3338	1/1	0.96	0.08	53,53,53,53	0
56	MG	CU	101	1/1	0.96	0.11	38,38,38,38	0
56	MG	AW	109	1/1	0.96	0.06	34,34,34,34	1
56	MG	BA	3242	1/1	0.96	0.08	4,4,4,4	0
56	MG	DA	3102	1/1	0.96	0.11	0,0,0,0	0
56	MG	AA	1671	1/1	0.96	0.12	19,19,19,19	0
56	MG	BA	3305	1/1	0.96	0.20	30,30,30,30	0
56	MG	BA	3417	1/1	0.96	0.30	29,29,29,29	0
56	MG	CA	1766	1/1	0.96	0.23	18,18,18,18	0
56	MG	BA	3324	1/1	0.96	0.15	18,18,18,18	1
56	MG	BA	3389	1/1	0.96	0.09	0,0,0,0	0
56	MG	AA	1760	1/1	0.96	0.08	48,48,48,48	0
56	MG	BA	3065	1/1	0.96	0.09	1,1,1,1	0
56	MG	DA	3370	1/1	0.96	0.10	22,22,22,22	0
56	MG	DA	3081	1/1	0.96	0.20	4,4,4,4	0
56	MG	BA	3191	1/1	0.96	0.23	23,23,23,23	0
56	MG	DA	3337	1/1	0.96	0.06	4,4,4,4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1669	1/1	0.96	0.40	38,38,38,38	0
56	MG	DA	3071	1/1	0.96	0.10	18,18,18,18	0
56	MG	AA	1667	1/1	0.96	0.23	50,50,50,50	0
56	MG	AA	1752	1/1	0.96	0.22	25,25,25,25	0
56	MG	CA	1656	1/1	0.96	0.08	14,14,14,14	0
56	MG	BA	3038	1/1	0.96	0.22	10,10,10,10	0
56	MG	DA	3018	1/1	0.96	0.09	3,3,3,3	0
56	MG	DA	3365	1/1	0.96	0.09	29,29,29,29	0
56	MG	DA	3305	1/1	0.96	0.12	28,28,28,28	0
56	MG	CA	1693	1/1	0.96	0.15	18,18,18,18	1
56	MG	BA	3029	1/1	0.96	0.22	30,30,30,30	0
56	MG	CA	1756	1/1	0.96	0.14	41,41,41,41	0
56	MG	DA	3234	1/1	0.96	0.10	33,33,33,33	0
56	MG	DA	3100	1/1	0.96	0.22	21,21,21,21	0
56	MG	AA	1617	1/1	0.96	0.28	24,24,24,24	0
56	MG	AA	1815	1/1	0.96	0.13	36,36,36,36	0
56	MG	CA	1632	1/1	0.96	0.06	11,11,11,11	0
56	MG	DA	3215	1/1	0.96	0.05	31,31,31,31	0
56	MG	CA	1780	1/1	0.96	0.14	38,38,38,38	0
56	MG	BA	3022	1/1	0.96	0.14	25,25,25,25	0
56	MG	DA	3271	1/1	0.96	0.32	7,7,7,7	0
56	MG	BA	3280	1/1	0.96	0.12	10,10,10,10	0
56	MG	CA	1748	1/1	0.96	0.07	7,7,7,7	0
56	MG	BA	3128	1/1	0.96	0.16	18,18,18,18	0
56	MG	AA	1623	1/1	0.96	0.11	32,32,32,32	0
56	MG	AA	1628	1/1	0.96	0.14	2,2,2,2	0
56	MG	BA	3193	1/1	0.96	0.22	8,8,8,8	0
56	MG	DA	3011	1/1	0.96	0.20	11,11,11,11	0
56	MG	CA	1648	1/1	0.96	0.13	34,34,34,34	0
56	MG	BA	3371	1/1	0.96	0.09	15,15,15,15	0
56	MG	BA	3411	1/1	0.96	0.18	62,62,62,62	0
56	MG	DA	3052	1/1	0.96	0.16	0,0,0,0	0
56	MG	DA	3192	1/1	0.96	0.13	17,17,17,17	0
56	MG	DA	3311	1/1	0.96	0.16	53,53,53,53	0
56	MG	BA	3315	1/1	0.96	0.13	43,43,43,43	0
56	MG	BA	3104	1/1	0.96	0.18	12,12,12,12	0
56	MG	DA	3183	1/1	0.96	0.06	0,0,0,0	0
56	MG	DA	3199	1/1	0.96	0.09	26,26,26,26	0
56	MG	DA	3200	1/1	0.96	0.17	26,26,26,26	0
56	MG	AV	101	1/1	0.96	0.06	5,5,5,5	0
56	MG	BA	3049	1/1	0.96	0.28	36,36,36,36	0
56	MG	B5	102	1/1	0.96	0.29	24,24,24,24	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3308	1/1	0.96	0.07	20,20,20,20	0
56	MG	DA	3098	1/1	0.96	0.09	19,19,19,19	0
56	MG	DA	3066	1/1	0.96	0.23	0,0,0,0	0
56	MG	BA	3394	1/1	0.96	0.10	26,26,26,26	0
56	MG	CA	1641	1/1	0.96	0.16	13,13,13,13	0
56	MG	CA	1715	1/1	0.96	0.09	55,55,55,55	0
56	MG	BA	3156	1/1	0.96	0.06	28,28,28,28	0
56	MG	AA	1793	1/1	0.96	0.13	71,71,71,71	0
56	MG	DA	3247	1/1	0.96	0.21	18,18,18,18	0
56	MG	AA	1779	1/1	0.96	0.16	46,46,46,46	0
56	MG	BA	3165	1/1	0.96	0.17	0,0,0,0	0
56	MG	BO	201	1/1	0.96	0.18	13,13,13,13	0
56	MG	DA	3243	1/1	0.96	0.08	3,3,3,3	0
56	MG	BA	3015	1/1	0.96	0.15	0,0,0,0	0
56	MG	BA	3162	1/1	0.96	0.19	12,12,12,12	0
56	MG	CA	1747	1/1	0.96	0.09	28,28,28,28	0
56	MG	DA	3167	1/1	0.96	0.11	101,101,101,101	0
56	MG	DA	3264	1/1	0.96	0.10	11,11,11,11	0
56	MG	AA	1788	1/1	0.96	0.09	16,16,16,16	0
56	MG	DA	3113	1/1	0.96	0.09	11,11,11,11	0
56	MG	DA	3377	1/1	0.96	0.10	6,6,6,6	1
56	MG	DA	3349	1/1	0.96	0.12	27,27,27,27	0
56	MG	DA	3291	1/1	0.96	0.10	0,0,0,0	0
56	MG	BA	3423	1/1	0.96	0.16	21,21,21,21	0
56	MG	DA	3316	1/1	0.96	0.12	7,7,7,7	0
56	MG	CA	1735	1/1	0.96	0.16	17,17,17,17	0
56	MG	DA	3293	1/1	0.96	0.10	2,2,2,2	0
56	MG	DA	3222	1/1	0.96	0.23	24,24,24,24	0
56	MG	BA	3116	1/1	0.96	0.30	12,12,12,12	0
56	MG	BA	3125	1/1	0.96	0.31	18,18,18,18	0
56	MG	DA	3126	1/1	0.96	0.08	29,29,29,29	0
56	MG	BA	3090	1/1	0.96	0.15	0,0,0,0	0
56	MG	BB	211	1/1	0.96	0.10	40,40,40,40	1
56	MG	BA	3396	1/1	0.96	0.18	15,15,15,15	0
56	MG	BA	3021	1/1	0.96	0.23	17,17,17,17	0
56	MG	CA	1607	1/1	0.96	0.19	15,15,15,15	0
56	MG	BA	3337	1/1	0.96	0.05	57,57,57,57	0
56	MG	BA	3348	1/1	0.96	0.18	26,26,26,26	0
56	MG	DA	3398	1/1	0.96	0.13	7,7,7,7	0
56	MG	BA	3420	1/1	0.96	0.25	59,59,59,59	1
56	MG	BA	3326	1/1	0.96	0.11	49,49,49,49	0
56	MG	BA	3339	1/1	0.96	0.10	0,0,0,0	1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3269	1/1	0.96	0.35	33,33,33,33	0
56	MG	AA	1611	1/1	0.96	0.15	18,18,18,18	0
56	MG	DA	3300	1/1	0.96	0.14	13,13,13,13	0
56	MG	BA	3120	1/1	0.96	0.08	23,23,23,23	0
56	MG	DA	3280	1/1	0.96	0.06	16,16,16,16	0
56	MG	BA	3186	1/1	0.96	0.16	25,25,25,25	0
56	MG	DA	3251	1/1	0.96	0.16	20,20,20,20	0
56	MG	CA	1677	1/1	0.96	0.10	28,28,28,28	0
56	MG	AA	1778	1/1	0.96	0.14	0,0,0,0	0
56	MG	CW	106	1/1	0.96	0.06	50,50,50,50	1
56	MG	CA	1605	1/1	0.96	0.07	10,10,10,10	0
56	MG	BA	3381	1/1	0.96	0.10	21,21,21,21	0
56	MG	AA	1689	1/1	0.96	0.06	50,50,50,50	0
56	MG	DA	3289	1/1	0.96	0.09	18,18,18,18	0
56	MG	DA	3044	1/1	0.96	0.14	15,15,15,15	0
56	MG	AA	1703	1/1	0.96	0.22	23,23,23,23	0
56	MG	AW	108	1/1	0.96	0.12	35,35,35,35	0
56	MG	DA	3206	1/1	0.96	0.09	47,47,47,47	0
56	MG	BA	3151	1/1	0.96	0.07	2,2,2,2	0
56	MG	BA	3220	1/1	0.96	0.14	29,29,29,29	0
56	MG	CA	1668	1/1	0.96	0.09	42,42,42,42	0
56	MG	BA	3101	1/1	0.96	0.12	3,3,3,3	0
56	MG	BA	3017	1/1	0.96	0.09	19,19,19,19	0
56	MG	AA	1680	1/1	0.96	0.18	30,30,30,30	0
56	MG	DA	3184	1/1	0.96	0.09	10,10,10,10	0
56	MG	DA	3101	1/1	0.96	0.13	38,38,38,38	0
56	MG	BA	3184	1/1	0.96	0.16	1,1,1,1	0
56	MG	BA	3267	1/1	0.96	0.11	43,43,43,43	0
56	MG	DA	3352	1/1	0.96	0.11	9,9,9,9	0
56	MG	DA	3112	1/1	0.96	0.07	0,0,0,0	0
56	MG	BA	3453	1/1	0.96	0.15	49,49,49,49	0
56	MG	BA	3006	1/1	0.96	0.26	24,24,24,24	0
56	MG	AA	1742	1/1	0.96	0.40	45,45,45,45	0
56	MG	BA	3236	1/1	0.96	0.10	3,3,3,3	0
56	MG	CA	1635	1/1	0.96	0.21	19,19,19,19	0
56	MG	DA	3202	1/1	0.96	0.20	37,37,37,37	0
56	MG	DA	3109	1/1	0.96	0.15	0,0,0,0	0
56	MG	AA	1775	1/1	0.96	0.10	29,29,29,29	0
56	MG	AA	1741	1/1	0.96	0.06	38,38,38,38	0
56	MG	CA	1681	1/1	0.96	0.07	40,40,40,40	0
56	MG	BA	3421	1/1	0.96	0.05	44,44,44,44	0
56	MG	CA	1728	1/1	0.96	0.14	42,42,42,42	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3032	1/1	0.96	0.07	17,17,17,17	0
56	MG	CA	1608	1/1	0.96	0.12	0,0,0,0	0
56	MG	DB	212	1/1	0.96	0.08	27,27,27,27	0
56	MG	BA	3057	1/1	0.96	0.27	17,17,17,17	0
56	MG	DA	3094	1/1	0.96	0.09	10,10,10,10	0
56	MG	AA	1787	1/1	0.96	0.09	15,15,15,15	0
56	MG	DA	3376	1/1	0.96	0.09	25,25,25,25	0
56	MG	CA	1782	1/1	0.96	0.10	29,29,29,29	0
56	MG	DA	3340	1/1	0.96	0.10	30,30,30,30	0
56	MG	BA	3327	1/1	0.96	0.09	30,30,30,30	0
56	MG	BA	3040	1/1	0.96	0.05	22,22,22,22	0
56	MG	BA	3304	1/1	0.96	0.10	35,35,35,35	0
56	MG	DA	3063	1/1	0.96	0.13	0,0,0,0	0
56	MG	DA	3205	1/1	0.96	0.09	19,19,19,19	0
56	MG	DA	3105	1/1	0.96	0.18	6,6,6,6	0
56	MG	BA	3350	1/1	0.96	0.16	32,32,32,32	0
56	MG	BA	3055	1/1	0.96	0.12	0,0,0,0	0
56	MG	DA	3288	1/1	0.96	0.08	25,25,25,25	1
56	MG	CA	1704	1/1	0.96	0.10	5,5,5,5	0
56	MG	CA	1603	1/1	0.96	0.09	25,25,25,25	0
56	MG	DA	3054	1/1	0.96	0.13	5,5,5,5	0
56	MG	DA	3359	1/1	0.97	0.25	15,15,15,15	0
56	MG	BA	3110	1/1	0.97	0.11	0,0,0,0	0
56	MG	AA	1603	1/1	0.97	0.13	47,47,47,47	0
56	MG	BA	3264	1/1	0.97	0.24	0,0,0,0	0
56	MG	BA	3023	1/1	0.97	0.28	0,0,0,0	0
56	MG	DA	3302	1/1	0.97	0.09	11,11,11,11	0
56	MG	BA	3246	1/1	0.97	0.14	15,15,15,15	0
56	MG	DA	3287	1/1	0.97	0.25	17,17,17,17	0
56	MG	AV	104	1/1	0.97	0.17	27,27,27,27	0
56	MG	AA	1614	1/1	0.97	0.07	19,19,19,19	0
56	MG	D5	101	1/1	0.97	0.07	7,7,7,7	0
56	MG	AA	1710	1/1	0.97	0.19	29,29,29,29	0
56	MG	DA	3099	1/1	0.97	0.12	10,10,10,10	0
56	MG	DA	3041	1/1	0.97	0.19	8,8,8,8	0
56	MG	AA	1644	1/1	0.97	0.16	17,17,17,17	0
56	MG	AW	114	1/1	0.97	0.10	25,25,25,25	1
56	MG	BA	3387	1/1	0.97	0.10	38,38,38,38	0
56	MG	DA	3260	1/1	0.97	0.37	44,44,44,44	0
56	MG	DA	3020	1/1	0.97	0.30	1,1,1,1	0
56	MG	DA	3157	1/1	0.97	0.25	34,34,34,34	0
56	MG	BA	3136	1/1	0.97	0.21	8,8,8,8	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	AA	1801	1/1	0.97	0.20	34,34,34,34	0
56	MG	AA	1700	1/1	0.97	0.16	31,31,31,31	0
56	MG	BA	3118	1/1	0.97	0.11	0,0,0,0	0
56	MG	AA	1739	1/1	0.97	0.11	23,23,23,23	0
56	MG	CA	1655	1/1	0.97	0.12	0,0,0,0	0
56	MG	BA	3073	1/1	0.97	0.08	4,4,4,4	0
56	MG	DA	3166	1/1	0.97	0.08	0,0,0,0	0
56	MG	DA	3254	1/1	0.97	0.10	1,1,1,1	0
56	MG	AA	1754	1/1	0.97	0.12	16,16,16,16	0
56	MG	DA	3139	1/1	0.97	0.09	28,28,28,28	0
56	MG	BA	3283	1/1	0.97	0.05	36,36,36,36	0
56	MG	DA	3033	1/1	0.97	0.20	17,17,17,17	1
56	MG	DA	3114	1/1	0.97	0.09	8,8,8,8	0
56	MG	DA	3194	1/1	0.97	0.10	0,0,0,0	1
56	MG	DA	3226	1/1	0.97	0.08	5,5,5,5	0
56	MG	BA	3194	1/1	0.97	0.13	30,30,30,30	0
56	MG	BA	3208	1/1	0.97	0.11	8,8,8,8	0
56	MG	DA	3026	1/1	0.97	0.26	0,0,0,0	0
56	MG	CW	105	1/1	0.97	0.08	30,30,30,30	0
56	MG	AX	103	1/1	0.97	0.08	29,29,29,29	0
56	MG	BA	3440	1/1	0.97	0.19	33,33,33,33	0
56	MG	BA	3189	1/1	0.97	0.10	3,3,3,3	0
56	MG	AW	119	1/1	0.97	0.06	19,19,19,19	0
56	MG	DA	3266	1/1	0.97	0.07	11,11,11,11	0
56	MG	BA	3203	1/1	0.97	0.21	14,14,14,14	0
56	MG	BA	3164	1/1	0.97	0.06	9,9,9,9	0
56	MG	BA	3008	1/1	0.97	0.38	22,22,22,22	0
56	MG	DA	3220	1/1	0.97	0.10	3,3,3,3	0
56	MG	BB	208	1/1	0.97	0.08	27,27,27,27	0
56	MG	CA	1640	1/1	0.97	0.08	43,43,43,43	0
56	MG	DA	3323	1/1	0.97	0.20	31,31,31,31	0
56	MG	BA	3010	1/1	0.97	0.06	30,30,30,30	0
56	MG	AA	1645	1/1	0.97	0.18	25,25,25,25	0
56	MG	AA	1636	1/1	0.97	0.20	27,27,27,27	1
56	MG	DA	3388	1/1	0.97	0.16	15,15,15,15	0
56	MG	CW	103	1/1	0.97	0.05	45,45,45,45	0
56	MG	DA	3080	1/1	0.97	0.17	0,0,0,0	0
56	MG	CA	1660	1/1	0.97	0.23	22,22,22,22	0
56	MG	DA	3042	1/1	0.97	0.56	58,58,58,58	0
56	MG	AA	1621	1/1	0.97	0.10	14,14,14,14	0
56	MG	DA	3076	1/1	0.97	0.13	0,0,0,0	0
56	MG	CA	1634	1/1	0.97	0.11	17,17,17,17	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3024	1/1	0.97	0.13	0,0,0,0	0
56	MG	BA	3302	1/1	0.97	0.18	14,14,14,14	0
56	MG	CA	1712	1/1	0.97	0.16	19,19,19,19	0
56	MG	DA	3301	1/1	0.97	0.08	18,18,18,18	0
56	MG	BF	301	1/1	0.97	0.16	17,17,17,17	0
56	MG	BA	3087	1/1	0.97	0.20	16,16,16,16	0
56	MG	AV	102	1/1	0.97	0.05	28,28,28,28	0
56	MG	BA	3200	1/1	0.97	0.07	5,5,5,5	1
56	MG	BA	3271	1/1	0.97	0.11	33,33,33,33	0
56	MG	DA	3209	1/1	0.97	0.31	31,31,31,31	0
56	MG	BA	3172	1/1	0.97	0.16	22,22,22,22	0
56	MG	DA	3103	1/1	0.97	0.13	9,9,9,9	0
56	MG	BA	3211	1/1	0.97	0.16	42,42,42,42	0
56	MG	AA	1608	1/1	0.97	0.13	47,47,47,47	0
56	MG	BA	3063	1/1	0.97	0.25	0,0,0,0	0
56	MG	CA	1686	1/1	0.97	0.11	57,57,57,57	0
56	MG	BA	3235	1/1	0.97	0.06	7,7,7,7	0
56	MG	DA	3195	1/1	0.97	0.14	0,0,0,0	1
56	MG	DA	3332	1/1	0.97	0.06	45,45,45,45	0
56	MG	AA	1664	1/1	0.97	0.11	0,0,0,0	0
56	MG	CW	108	1/1	0.97	0.04	10,10,10,10	1
56	MG	BA	3173	1/1	0.97	0.16	14,14,14,14	0
56	MG	AA	1766	1/1	0.97	0.11	23,23,23,23	0
56	MG	CA	1710	1/1	0.97	0.09	22,22,22,22	0
56	MG	CA	1755	1/1	0.97	0.16	26,26,26,26	1
56	MG	DA	3060	1/1	0.97	0.31	0,0,0,0	0
56	MG	BA	3418	1/1	0.97	0.11	64,64,64,64	0
56	MG	BA	3138	1/1	0.97	0.17	12,12,12,12	0
56	MG	CA	1651	1/1	0.97	0.20	31,31,31,31	0
56	MG	DA	3083	1/1	0.97	0.24	13,13,13,13	0
56	MG	AA	1605	1/1	0.97	0.09	16,16,16,16	0
56	MG	AW	122	1/1	0.97	0.10	37,37,37,37	0
56	MG	BA	3108	1/1	0.97	0.11	0,0,0,0	0
56	MG	AA	1798	1/1	0.97	0.14	36,36,36,36	0
56	MG	DA	3182	1/1	0.97	0.09	5,5,5,5	0
56	MG	BA	3260	1/1	0.97	0.07	23,23,23,23	0
56	MG	DA	3382	1/1	0.97	0.09	6,6,6,6	0
56	MG	CA	1749	1/1	0.97	0.08	7,7,7,7	0
56	MG	CW	113	1/1	0.97	0.05	24,24,24,24	0
56	MG	BA	3434	1/1	0.97	0.07	28,28,28,28	0
56	MG	AA	1720	1/1	0.97	0.19	29,29,29,29	0
56	MG	BB	217	1/1	0.97	0.11	34,34,34,34	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1709	1/1	0.97	0.07	9,9,9,9	0
56	MG	AA	1691	1/1	0.97	0.07	11,11,11,11	0
56	MG	DA	3136	1/1	0.97	0.21	3,3,3,3	0
56	MG	BA	3432	1/1	0.97	0.07	15,15,15,15	0
56	MG	AA	1702	1/1	0.97	0.21	23,23,23,23	0
56	MG	BA	3086	1/1	0.97	0.13	2,2,2,2	0
56	MG	BA	3011	1/1	0.97	0.20	0,0,0,0	0
56	MG	DA	3070	1/1	0.97	0.18	0,0,0,0	0
56	MG	DA	3223	1/1	0.97	0.31	11,11,11,11	0
56	MG	DA	3210	1/1	0.97	0.11	0,0,0,0	0
56	MG	BA	3068	1/1	0.97	0.18	0,0,0,0	0
56	MG	BA	3368	1/1	0.97	0.07	32,32,32,32	0
56	MG	BA	3298	1/1	0.97	0.31	25,25,25,25	0
56	MG	AA	1762	1/1	0.97	0.14	18,18,18,18	0
56	MG	BA	3363	1/1	0.97	0.09	8,8,8,8	0
56	MG	AA	1682	1/1	0.97	0.19	17,17,17,17	0
56	MG	DA	3118	1/1	0.97	0.09	6,6,6,6	0
56	MG	DA	3256	1/1	0.97	0.09	22,22,22,22	0
56	MG	DA	3164	1/1	0.97	0.07	8,8,8,8	0
56	MG	BA	3245	1/1	0.97	0.11	9,9,9,9	0
56	MG	DA	3034	1/1	0.97	0.07	7,7,7,7	0
56	MG	DA	3031	1/1	0.97	0.08	0,0,0,0	0
56	MG	DA	3322	1/1	0.97	0.08	27,27,27,27	0
56	MG	CA	1662	1/1	0.97	0.09	18,18,18,18	0
56	MG	DA	3290	1/1	0.97	0.07	0,0,0,0	0
56	MG	AA	1723	1/1	0.97	0.07	9,9,9,9	0
56	MG	BA	3171	1/1	0.97	0.10	0,0,0,0	1
56	MG	DA	3029	1/1	0.97	0.15	36,36,36,36	0
56	MG	AA	1753	1/1	0.97	0.11	26,26,26,26	0
56	MG	CA	1733	1/1	0.97	0.14	31,31,31,31	0
56	MG	DA	3045	1/1	0.97	0.14	1,1,1,1	0
56	MG	BA	3185	1/1	0.97	0.04	9,9,9,9	0
56	MG	AA	1642	1/1	0.97	0.14	8,8,8,8	0
56	MG	BA	3313	1/1	0.97	0.11	21,21,21,21	0
56	MG	BA	3306	1/1	0.97	0.20	20,20,20,20	0
56	MG	DA	3284	1/1	0.97	0.13	12,12,12,12	0
56	MG	B1	101	1/1	0.97	0.17	0,0,0,0	0
56	MG	BA	3239	1/1	0.97	0.25	12,12,12,12	0
56	MG	DA	3123	1/1	0.97	0.10	20,20,20,20	0
56	MG	BA	3319	1/1	0.97	0.06	0,0,0,0	0
56	MG	BA	3105	1/1	0.97	0.19	13,13,13,13	0
56	MG	DA	3104	1/1	0.97	0.12	9,9,9,9	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3080	1/1	0.97	0.12	0,0,0,0	0
56	MG	DA	3281	1/1	0.97	0.20	14,14,14,14	1
56	MG	BB	207	1/1	0.97	0.08	23,23,23,23	0
56	MG	BA	3291	1/1	0.97	0.05	12,12,12,12	0
58	ZN	AN	101	1/1	0.97	0.05	50,50,50,50	0
56	MG	BA	3297	1/1	0.97	0.24	7,7,7,7	0
56	MG	DA	3196	1/1	0.97	0.24	18,18,18,18	0
56	MG	AA	1722	1/1	0.97	0.14	20,20,20,20	0
56	MG	DA	3317	1/1	0.97	0.06	11,11,11,11	1
56	MG	BA	3303	1/1	0.97	0.17	15,15,15,15	0
56	MG	AA	1641	1/1	0.97	0.06	0,0,0,0	0
56	MG	AA	1740	1/1	0.97	0.14	40,40,40,40	0
56	MG	DA	3345	1/1	0.97	0.21	17,17,17,17	0
56	MG	CA	1771	1/1	0.97	0.13	28,28,28,28	0
56	MG	DA	3244	1/1	0.97	0.29	0,0,0,0	0
56	MG	AA	1806	1/1	0.97	0.23	24,24,24,24	0
56	MG	AA	1711	1/1	0.97	0.09	8,8,8,8	0
56	MG	AA	1774	1/1	0.97	0.08	9,9,9,9	0
56	MG	DA	3117	1/1	0.97	0.06	1,1,1,1	0
56	MG	BA	3115	1/1	0.97	0.09	0,0,0,0	0
56	MG	DA	3336	1/1	0.97	0.17	3,3,3,3	1
56	MG	DA	3355	1/1	0.97	0.07	7,7,7,7	0
56	MG	DA	3046	1/1	0.97	0.26	0,0,0,0	0
56	MG	AA	1724	1/1	0.97	0.07	0,0,0,0	0
56	MG	BA	3085	1/1	0.97	0.16	0,0,0,0	0
56	MG	BA	3209	1/1	0.97	0.15	15,15,15,15	0
56	MG	DA	3190	1/1	0.97	0.07	2,2,2,2	0
56	MG	AV	105	1/1	0.97	0.13	12,12,12,12	0
56	MG	BA	3424	1/1	0.97	0.15	38,38,38,38	0
56	MG	CA	1631	1/1	0.97	0.37	48,48,48,48	0
56	MG	AA	1662	1/1	0.97	0.10	31,31,31,31	0
56	MG	DA	3362	1/1	0.97	0.21	10,10,10,10	1
56	MG	CA	1669	1/1	0.97	0.06	0,0,0,0	0
56	MG	B2	105	1/1	0.97	0.16	0,0,0,0	0
56	MG	DB	206	1/1	0.97	0.09	0,0,0,0	1
56	MG	CA	1629	1/1	0.97	0.14	10,10,10,10	0
56	MG	CA	1754	1/1	0.97	0.14	6,6,6,6	0
56	MG	CA	1624	1/1	0.97	0.08	16,16,16,16	0
56	MG	DS	201	1/1	0.97	0.45	14,14,14,14	1
56	MG	DA	3397	1/1	0.97	0.20	31,31,31,31	0
56	MG	DA	3225	1/1	0.97	0.25	22,22,22,22	0
56	MG	BA	3325	1/1	0.97	0.07	28,28,28,28	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CW	101	1/1	0.97	0.08	36,36,36,36	0
56	MG	CA	1770	1/1	0.98	0.08	14,14,14,14	0
56	MG	DA	3097	1/1	0.98	0.12	12,12,12,12	0
56	MG	DA	3035	1/1	0.98	0.09	0,0,0,0	0
56	MG	BA	3079	1/1	0.98	0.17	0,0,0,0	0
56	MG	DA	3077	1/1	0.98	0.17	0,0,0,0	0
56	MG	CA	1664	1/1	0.98	0.14	28,28,28,28	0
56	MG	DA	3079	1/1	0.98	0.14	13,13,13,13	0
56	MG	BA	3077	1/1	0.98	0.22	6,6,6,6	0
56	MG	DA	3028	1/1	0.98	0.13	0,0,0,0	0
56	MG	CA	1621	1/1	0.98	0.18	0,0,0,0	0
56	MG	DA	3119	1/1	0.98	0.12	7,7,7,7	0
56	MG	AA	1707	1/1	0.98	0.08	2,2,2,2	0
56	MG	BA	3013	1/1	0.98	0.15	0,0,0,0	0
56	MG	DA	3003	1/1	0.98	0.07	26,26,26,26	0
56	MG	BA	3041	1/1	0.98	0.14	0,0,0,0	0
56	MG	BA	3177	1/1	0.98	0.07	7,7,7,7	0
56	MG	DA	3263	1/1	0.98	0.16	30,30,30,30	0
58	ZN	CD	301	1/1	0.98	0.19	24,24,24,24	0
56	MG	BB	202	1/1	0.98	0.10	14,14,14,14	0
56	MG	DA	3075	1/1	0.98	0.22	0,0,0,0	0
56	MG	BA	3202	1/1	0.98	0.07	0,0,0,0	0
56	MG	BA	3037	1/1	0.98	0.17	0,0,0,0	0
56	MG	BA	3133	1/1	0.98	0.07	11,11,11,11	0
56	MG	BA	3054	1/1	0.98	0.12	0,0,0,0	0
56	MG	DA	3141	1/1	0.98	0.07	0,0,0,0	0
56	MG	DA	3092	1/1	0.98	0.10	4,4,4,4	0
56	MG	AA	1649	1/1	0.98	0.20	0,0,0,0	0
56	MG	BA	3036	1/1	0.98	0.13	25,25,25,25	0
56	MG	DA	3127	1/1	0.98	0.11	0,0,0,0	0
56	MG	DA	3124	1/1	0.98	0.17	0,0,0,0	0
56	MG	AA	1759	1/1	0.98	0.11	5,5,5,5	1
56	MG	BA	3096	1/1	0.98	0.09	0,0,0,0	0
56	MG	BA	3196	1/1	0.98	0.06	0,0,0,0	0
56	MG	BA	3159	1/1	0.98	0.18	12,12,12,12	0
56	MG	DA	3335	1/1	0.98	0.06	10,10,10,10	0
56	MG	BA	3098	1/1	0.98	0.07	5,5,5,5	0
56	MG	DA	3178	1/1	0.98	0.10	19,19,19,19	0
56	MG	AA	1713	1/1	0.98	0.13	7,7,7,7	0
56	MG	DA	3131	1/1	0.98	0.17	0,0,0,0	0
56	MG	DA	3107	1/1	0.98	0.27	12,12,12,12	0
56	MG	DA	3179	1/1	0.98	0.05	10,10,10,10	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3357	1/1	0.98	0.07	19,19,19,19	0
56	MG	DA	3221	1/1	0.98	0.10	11,11,11,11	0
56	MG	CA	1743	1/1	0.98	0.18	1,1,1,1	0
56	MG	CA	1613	1/1	0.98	0.21	4,4,4,4	0
56	MG	BA	3027	1/1	0.98	0.07	8,8,8,8	0
56	MG	DA	3252	1/1	0.98	0.08	0,0,0,0	1
56	MG	BA	3083	1/1	0.98	0.13	20,20,20,20	0
56	MG	AA	1705	1/1	0.98	0.06	21,21,21,21	0
56	MG	DA	3021	1/1	0.98	0.19	0,0,0,0	0
56	MG	DA	3265	1/1	0.98	0.08	0,0,0,0	0
56	MG	BA	3045	1/1	0.98	0.12	0,0,0,0	0
56	MG	BA	3123	1/1	0.98	0.12	6,6,6,6	0
56	MG	CA	1678	1/1	0.98	0.15	0,0,0,0	0
56	MG	BA	3161	1/1	0.98	0.08	11,11,11,11	0
56	MG	BA	3445	1/1	0.98	0.14	52,52,52,52	0
56	MG	AA	1652	1/1	0.98	0.09	7,7,7,7	0
56	MG	DA	3227	1/1	0.98	0.06	8,8,8,8	0
56	MG	BA	3295	1/1	0.98	0.17	16,16,16,16	0
56	MG	BA	3310	1/1	0.98	0.17	22,22,22,22	0
56	MG	CA	1699	1/1	0.98	0.12	0,0,0,0	0
56	MG	DA	3089	1/1	0.98	0.11	4,4,4,4	0
56	MG	BA	3130	1/1	0.98	0.05	4,4,4,4	0
56	MG	BA	3131	1/1	0.98	0.18	0,0,0,0	0
56	MG	CA	1689	1/1	0.98	0.07	0,0,0,0	0
56	MG	BA	3238	1/1	0.98	0.20	0,0,0,0	0
56	MG	BA	3176	1/1	0.98	0.07	11,11,11,11	0
56	MG	BA	3076	1/1	0.98	0.15	4,4,4,4	0
56	MG	CX	105	1/1	0.98	0.08	41,41,41,41	0
56	MG	CM	201	1/1	0.98	0.06	21,21,21,21	0
56	MG	AA	1719	1/1	0.98	0.11	65,65,65,65	0
56	MG	BA	3137	1/1	0.98	0.17	6,6,6,6	0
56	MG	DA	3064	1/1	0.98	0.20	0,0,0,0	0
56	MG	CA	1604	1/1	0.98	0.23	45,45,45,45	0
56	MG	DA	3181	1/1	0.98	0.10	17,17,17,17	0
56	MG	DA	3326	1/1	0.98	0.34	25,25,25,25	0
56	MG	BA	3321	1/1	0.98	0.20	4,4,4,4	0
56	MG	AA	1732	1/1	0.98	0.07	3,3,3,3	0
56	MG	BA	3360	1/1	0.98	0.07	25,25,25,25	0
56	MG	CA	1623	1/1	0.98	0.09	9,9,9,9	0
56	MG	BA	3334	1/1	0.98	0.17	40,40,40,40	0
56	MG	DA	3315	1/1	0.98	0.06	4,4,4,4	0
56	MG	BA	3097	1/1	0.98	0.07	2,2,2,2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1666	1/1	0.98	0.06	41,41,41,41	0
56	MG	DA	3110	1/1	0.98	0.21	1,1,1,1	0
56	MG	CA	1630	1/1	0.98	0.10	0,0,0,0	0
56	MG	DA	3385	1/1	0.98	0.07	29,29,29,29	0
56	MG	BA	3312	1/1	0.98	0.19	0,0,0,0	0
56	MG	CA	1773	1/1	0.98	0.09	13,13,13,13	0
56	MG	BA	3386	1/1	0.98	0.07	85,85,85,85	0
56	MG	DA	3017	1/1	0.98	0.13	6,6,6,6	0
56	MG	BA	3182	1/1	0.98	0.09	16,16,16,16	0
56	MG	BA	3127	1/1	0.98	0.11	8,8,8,8	0
56	MG	CA	1614	1/1	0.98	0.12	20,20,20,20	0
56	MG	BA	3443	1/1	0.98	0.04	20,20,20,20	0
56	MG	AA	1800	1/1	0.98	0.06	36,36,36,36	0
56	MG	DA	3005	1/1	0.98	0.07	13,13,13,13	0
56	MG	BA	3082	1/1	0.98	0.09	22,22,22,22	0
58	ZN	AD	301	1/1	0.98	0.18	21,21,21,21	0
56	MG	DA	3292	1/1	0.98	0.08	5,5,5,5	0
56	MG	DA	3286	1/1	0.98	0.10	0,0,0,0	0
56	MG	DA	3158	1/1	0.98	0.10	5,5,5,5	0
56	MG	CA	1783	1/1	0.98	0.17	13,13,13,13	0
56	MG	BA	3307	1/1	0.98	0.04	7,7,7,7	0
56	MG	BA	3398	1/1	0.98	0.07	9,9,9,9	1
56	MG	BE	301	1/1	0.98	0.15	8,8,8,8	0
56	MG	BA	3089	1/1	0.98	0.17	6,6,6,6	0
56	MG	BA	3078	1/1	0.98	0.20	11,11,11,11	0
56	MG	BA	3170	1/1	0.98	0.14	0,0,0,0	0
56	MG	BA	3031	1/1	0.98	0.20	11,11,11,11	0
56	MG	BA	3249	1/1	0.98	0.08	11,11,11,11	0
56	MG	CA	1606	1/1	0.98	0.18	16,16,16,16	0
56	MG	DA	3343	1/1	0.98	0.11	4,4,4,4	0
56	MG	CA	1687	1/1	0.98	0.08	0,0,0,0	0
56	MG	BA	3014	1/1	0.98	0.24	7,7,7,7	0
56	MG	BA	3262	1/1	0.98	0.06	20,20,20,20	0
56	MG	AX	101	1/1	0.98	0.05	0,0,0,0	0
56	MG	DA	3043	1/1	0.98	0.16	2,2,2,2	0
56	MG	BA	3044	1/1	0.98	0.18	5,5,5,5	0
56	MG	BA	3007	1/1	0.98	0.24	0,0,0,0	0
56	MG	AA	1797	1/1	0.98	0.08	26,26,26,26	0
56	MG	DA	3135	1/1	0.98	0.19	7,7,7,7	0
56	MG	BA	3113	1/1	0.98	0.24	14,14,14,14	0
56	MG	DA	3134	1/1	0.98	0.21	4,4,4,4	0
56	MG	BA	3042	1/1	0.98	0.08	13,13,13,13	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	BA	3025	1/1	0.98	0.14	0,0,0,0	0
56	MG	DA	3050	1/1	0.98	0.31	0,0,0,0	0
56	MG	AA	1761	1/1	0.98	0.15	16,16,16,16	0
56	MG	BA	3444	1/1	0.98	0.09	7,7,7,7	0
56	MG	BA	3359	1/1	0.98	0.05	75,75,75,75	0
56	MG	DA	3163	1/1	0.98	0.13	51,51,51,51	0
56	MG	BA	3020	1/1	0.98	0.26	1,1,1,1	0
56	MG	AA	1744	1/1	0.98	0.30	18,18,18,18	0
56	MG	DA	3121	1/1	0.98	0.10	12,12,12,12	0
56	MG	BA	3169	1/1	0.98	0.07	8,8,8,8	0
56	MG	AA	1813	1/1	0.98	0.14	25,25,25,25	0
56	MG	DA	3154	1/1	0.98	0.19	31,31,31,31	0
56	MG	BA	3132	1/1	0.98	0.13	2,2,2,2	0
56	MG	AA	1692	1/1	0.98	0.19	0,0,0,0	0
56	MG	DA	3299	1/1	0.98	0.10	0,0,0,0	0
56	MG	BA	3100	1/1	0.98	0.21	3,3,3,3	0
56	MG	DA	3091	1/1	0.98	0.13	0,0,0,0	0
56	MG	BA	3270	1/1	0.98	0.07	0,0,0,0	0
56	MG	DA	3065	1/1	0.98	0.25	0,0,0,0	0
56	MG	BA	3067	1/1	0.98	0.11	5,5,5,5	0
56	MG	CA	1784	1/1	0.98	0.10	15,15,15,15	0
56	MG	BA	3355	1/1	0.98	0.12	20,20,20,20	0
56	MG	CA	1701	1/1	0.98	0.10	16,16,16,16	0
56	MG	AW	104	1/1	0.98	0.04	28,28,28,28	0
56	MG	DA	3073	1/1	0.98	0.10	0,0,0,0	0
56	MG	DA	3239	1/1	0.98	0.13	39,39,39,39	0
56	MG	BA	3369	1/1	0.98	0.12	30,30,30,30	0
56	MG	DA	3303	1/1	0.98	0.10	11,11,11,11	0
56	MG	AA	1718	1/1	0.98	0.15	0,0,0,0	0
56	MG	DA	3087	1/1	0.98	0.30	23,23,23,23	0
56	MG	AW	107	1/1	0.98	0.07	28,28,28,28	0
56	MG	DA	3366	1/1	0.98	0.10	3,3,3,3	0
56	MG	AW	117	1/1	0.98	0.21	24,24,24,24	0
56	MG	DA	3030	1/1	0.98	0.10	0,0,0,0	0
56	MG	BA	3210	1/1	0.98	0.15	11,11,11,11	0
56	MG	DA	3395	1/1	0.98	0.18	45,45,45,45	0
56	MG	BA	3340	1/1	0.98	0.08	28,28,28,28	0
56	MG	DA	3090	1/1	0.98	0.11	0,0,0,0	0
56	MG	DA	3038	1/1	0.98	0.13	17,17,17,17	0
56	MG	BA	3059	1/1	0.98	0.10	16,16,16,16	0
56	MG	DA	3095	1/1	0.98	0.22	0,0,0,0	0
56	MG	BA	3094	1/1	0.98	0.22	0,0,0,0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CA	1774	1/1	0.98	0.16	21,21,21,21	0
56	MG	BA	3391	1/1	0.98	0.05	26,26,26,26	0
56	MG	DA	3108	1/1	0.98	0.25	0,0,0,0	0
56	MG	DA	3224	1/1	0.98	0.29	2,2,2,2	0
56	MG	DA	3386	1/1	0.98	0.28	0,0,0,0	0
56	MG	DA	3125	1/1	0.98	0.13	0,0,0,0	0
56	MG	DA	3032	1/1	0.98	0.15	59,59,59,59	0
56	MG	BA	3427	1/1	0.98	0.06	12,12,12,12	0
56	MG	AA	1675	1/1	0.98	0.23	4,4,4,4	0
56	MG	DA	3049	1/1	0.98	0.18	0,0,0,0	0
56	MG	CA	1707	1/1	0.98	0.19	6,6,6,6	0
56	MG	AA	1746	1/1	0.98	0.11	11,11,11,11	0
56	MG	BA	3273	1/1	0.98	0.14	20,20,20,20	0
56	MG	B5	101	1/1	0.98	0.15	6,6,6,6	0
56	MG	DA	3306	1/1	0.98	0.22	6,6,6,6	0
56	MG	BA	3244	1/1	0.98	0.11	19,19,19,19	0
56	MG	AA	1757	1/1	0.98	0.06	0,0,0,0	0
56	MG	AA	1679	1/1	0.98	0.07	5,5,5,5	1
56	MG	BA	3232	1/1	0.98	0.10	23,23,23,23	0
56	MG	AA	1639	1/1	0.98	0.14	30,30,30,30	0
56	MG	DA	3237	1/1	0.98	0.06	15,15,15,15	0
56	MG	AA	1624	1/1	0.98	0.07	33,33,33,33	0
56	MG	BA	3198	1/1	0.98	0.08	0,0,0,0	0
56	MG	DA	3156	1/1	0.98	0.15	36,36,36,36	0
56	MG	DA	3128	1/1	0.98	0.09	0,0,0,0	0
56	MG	CA	1653	1/1	0.98	0.05	60,60,60,60	0
56	MG	BA	3145	1/1	0.98	0.15	0,0,0,0	0
56	MG	BA	3251	1/1	0.98	0.15	11,11,11,11	0
56	MG	BA	3328	1/1	0.98	0.06	30,30,30,30	0
56	MG	DA	3198	1/1	0.98	0.09	10,10,10,10	0
56	MG	BA	3213	1/1	0.98	0.23	19,19,19,19	0
56	MG	DA	3072	1/1	0.98	0.05	0,0,0,0	0
56	MG	BA	3338	1/1	0.98	0.06	22,22,22,22	1
56	MG	BA	3437	1/1	0.98	0.06	4,4,4,4	0
56	MG	CA	1703	1/1	0.98	0.06	19,19,19,19	0
56	MG	AA	1625	1/1	0.99	0.09	3,3,3,3	0
56	MG	DA	3378	1/1	0.99	0.10	8,8,8,8	0
56	MG	CA	1740	1/1	0.99	0.07	19,19,19,19	0
56	MG	BA	3188	1/1	0.99	0.21	13,13,13,13	0
56	MG	B7	101	1/1	0.99	0.07	7,7,7,7	0
56	MG	AA	1704	1/1	0.99	0.07	0,0,0,0	0
56	MG	AA	1613	1/1	0.99	0.22	2,2,2,2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	CX	101	1/1	0.99	0.15	3,3,3,3	0
56	MG	BA	3385	1/1	0.99	0.06	12,12,12,12	0
56	MG	BB	216	1/1	0.99	0.27	11,11,11,11	1
56	MG	DA	3356	1/1	0.99	0.08	12,12,12,12	0
56	MG	BA	3289	1/1	0.99	0.17	41,41,41,41	0
56	MG	BA	3175	1/1	0.99	0.07	0,0,0,0	0
56	MG	BA	3404	1/1	0.99	0.29	17,17,17,17	0
56	MG	AA	1712	1/1	0.99	0.06	22,22,22,22	0
56	MG	BA	3081	1/1	0.99	0.13	10,10,10,10	0
56	MG	BA	3274	1/1	0.99	0.06	0,0,0,0	0
56	MG	BA	3192	1/1	0.99	0.11	0,0,0,0	0
56	MG	AA	1771	1/1	0.99	0.07	6,6,6,6	0
56	MG	DA	3025	1/1	0.99	0.15	6,6,6,6	0
56	MG	AA	1659	1/1	0.99	0.10	14,14,14,14	1
56	MG	DA	3055	1/1	0.99	0.20	0,0,0,0	0
56	MG	AA	1672	1/1	0.99	0.14	0,0,0,0	0
56	MG	BA	3290	1/1	0.99	0.08	2,2,2,2	0
56	MG	DA	3372	1/1	0.99	0.09	12,12,12,12	0
56	MG	BA	3066	1/1	0.99	0.08	0,0,0,0	0
56	MG	DA	3013	1/1	0.99	0.12	1,1,1,1	0
56	MG	BA	3053	1/1	0.99	0.16	0,0,0,0	0
56	MG	AA	1696	1/1	0.99	0.09	0,0,0,0	0
56	MG	DA	3294	1/1	0.99	0.19	0,0,0,0	0
56	MG	DD	301	1/1	0.99	0.14	1,1,1,1	0
56	MG	DA	3259	1/1	0.99	0.17	14,14,14,14	0
56	MG	DA	3051	1/1	0.99	0.17	0,0,0,0	0
56	MG	BA	3356	1/1	0.99	0.08	37,37,37,37	0
56	MG	BA	3224	1/1	0.99	0.21	2,2,2,2	0
56	MG	DA	3062	1/1	0.99	0.27	13,13,13,13	0
56	MG	AA	1646	1/1	0.99	0.17	3,3,3,3	0
56	MG	BA	3352	1/1	0.99	0.10	30,30,30,30	1
56	MG	BA	3397	1/1	0.99	0.10	32,32,32,32	0
56	MG	AA	1728	1/1	0.99	0.08	2,2,2,2	0
56	MG	BA	3084	1/1	0.99	0.19	0,0,0,0	0
56	MG	DA	3078	1/1	0.99	0.20	2,2,2,2	0
56	MG	DA	3023	1/1	0.99	0.26	0,0,0,0	0
56	MG	AA	1610	1/1	0.99	0.15	0,0,0,0	0
56	MG	BA	3092	1/1	0.99	0.19	0,0,0,0	0
56	MG	CA	1679	1/1	0.99	0.05	4,4,4,4	0
56	MG	BA	3095	1/1	0.99	0.12	0,0,0,0	0
56	MG	DA	3390	1/1	0.99	0.08	73,73,73,73	0
56	MG	BA	3074	1/1	0.99	0.19	10,10,10,10	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3176	1/1	0.99	0.20	13,13,13,13	0
56	MG	BA	3047	1/1	0.99	0.27	0,0,0,0	0
56	MG	CA	1778	1/1	0.99	0.11	3,3,3,3	0
56	MG	AA	1751	1/1	0.99	0.08	19,19,19,19	0
56	MG	BA	3062	1/1	0.99	0.23	0,0,0,0	0
56	MG	CA	1777	1/1	0.99	0.19	0,0,0,0	0
56	MG	DA	3047	1/1	0.99	0.20	0,0,0,0	0
56	MG	AA	1656	1/1	0.99	0.16	12,12,12,12	0
56	MG	DA	3174	1/1	0.99	0.23	26,26,26,26	0
56	MG	BA	3134	1/1	0.99	0.11	1,1,1,1	0
56	MG	BA	3225	1/1	0.99	0.17	0,0,0,0	0
56	MG	BA	3378	1/1	0.99	0.04	54,54,54,54	1
56	MG	DA	3327	1/1	0.99	0.08	6,6,6,6	0
56	MG	AA	1805	1/1	0.99	0.23	0,0,0,0	0
56	MG	BA	3056	1/1	0.99	0.17	0,0,0,0	0
56	MG	DA	3015	1/1	0.99	0.10	0,0,0,0	0
56	MG	BA	3050	1/1	0.99	0.14	0,0,0,0	0
56	MG	DA	3059	1/1	0.99	0.21	0,0,0,0	0
56	MG	BA	3121	1/1	0.99	0.12	2,2,2,2	0
56	MG	CA	1628	1/1	0.99	0.11	35,35,35,35	0
56	MG	AA	1699	1/1	0.99	0.14	0,0,0,0	0
56	MG	BA	3382	1/1	0.99	0.10	63,63,63,63	0
56	MG	BA	3099	1/1	0.99	0.21	1,1,1,1	0
56	MG	DA	3129	1/1	0.99	0.17	6,6,6,6	0
56	MG	BA	3106	1/1	0.99	0.18	0,0,0,0	0
56	MG	BA	3058	1/1	0.99	0.20	0,0,0,0	0
56	MG	CA	1659	1/1	0.99	0.06	9,9,9,9	0
58	ZN	CN	101	1/1	0.99	0.10	53,53,53,53	0
56	MG	BA	3284	1/1	0.99	0.19	14,14,14,14	0
56	MG	BA	3046	1/1	0.99	0.25	0,0,0,0	0
56	MG	DA	3295	1/1	0.99	0.06	6,6,6,6	0
56	MG	BA	3060	1/1	0.99	0.22	0,0,0,0	0
56	MG	AA	1637	1/1	0.99	0.15	0,0,0,0	0
56	MG	DA	3085	1/1	0.99	0.20	0,0,0,0	0
56	MG	DA	3242	1/1	0.99	0.14	9,9,9,9	0
56	MG	BA	3281	1/1	0.99	0.13	0,0,0,0	0
56	MG	BA	3039	1/1	0.99	0.31	31,31,31,31	0
56	MG	BA	3187	1/1	0.99	0.15	2,2,2,2	0
56	MG	BA	3341	1/1	0.99	0.17	21,21,21,21	0
56	MG	BA	3365	1/1	0.99	0.13	60,60,60,60	0
56	MG	DB	201	1/1	0.99	0.06	19,19,19,19	0
56	MG	BA	3048	1/1	1.00	0.19	0,0,0,0	0

*Continued on next page...*

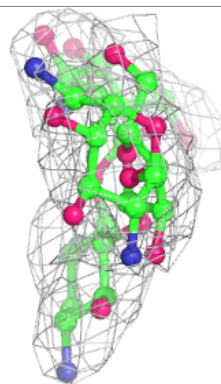
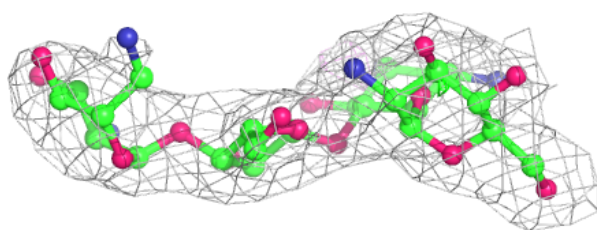
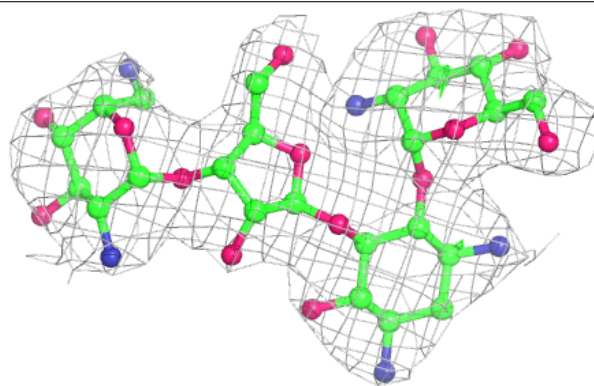
*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
56	MG	DA	3039	1/1	1.00	0.17	10,10,10,10	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

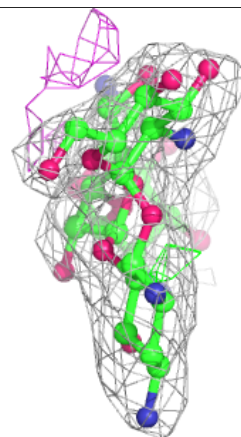
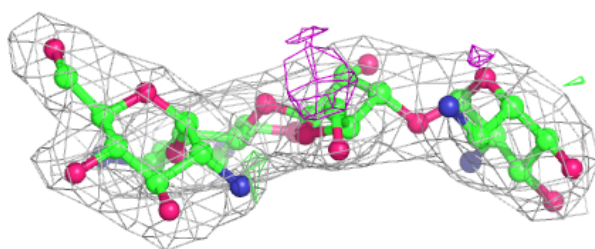
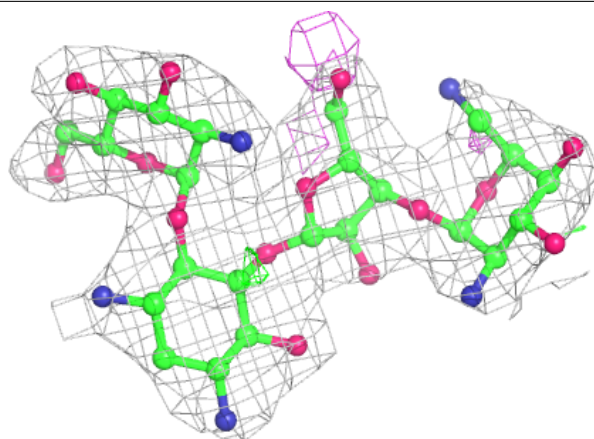
**Electron density around PAR AA 1816:**

2mF<sub>o</sub>-DF<sub>c</sub> (at 0.7 rmsd) in gray  
mF<sub>o</sub>-DF<sub>c</sub> (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around PAR CA 1790:**

$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



## 6.5 Other polymers [i](#)

There are no such residues in this entry.