



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 1, 2016 – 09:44 PM GMT

PDB ID : 4V5P
Title : The crystal structure of EF-Tu and A9C-tRNA-Trp bound to a near- cognate codon on the 70S ribosome
Authors : Schmeing, T.M.; Voorhees, R.M.; Ramakrishnan, V.
Deposited on : 2010-12-07
Resolution : 3.10 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/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 : 1.7 (RC4), CSD as536be (2015)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20026688
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : trunk26865

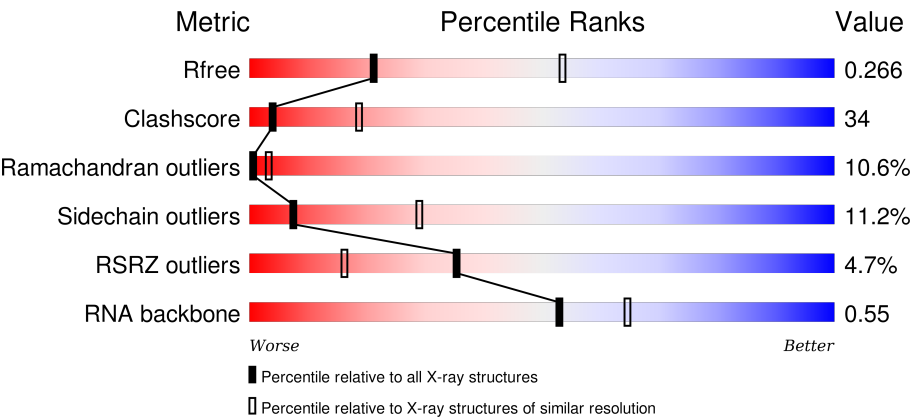
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.10 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R _{free}	91344	1114 (3.14-3.06)
Clashscore	102246	1222 (3.14-3.06)
Ramachandran outliers	100387	1174 (3.14-3.06)
Sidechain outliers	100360	1174 (3.14-3.06)
RSRZ outliers	91569	1119 (3.14-3.06)
RNA backbone	2183	1010 (3.52-2.68)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. 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><div></div><div>36%</div><div>49%</div><div>12%</div><div>••</div></div></div>
1	CA	1522	<div><div>2%</div><div><div></div><div>35%</div><div>51%</div><div>12%</div><div>••</div></div></div>
2	AB	256	<div><div>%</div><div><div></div><div>30%</div><div>49%</div><div>12%</div><div>•</div><div>9%</div></div></div>
2	CB	256	<div><div>3%</div><div><div></div><div>28%</div><div>52%</div><div>11%</div><div>•</div><div>9%</div></div></div>





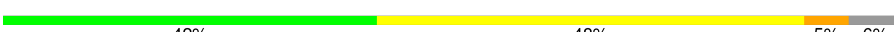
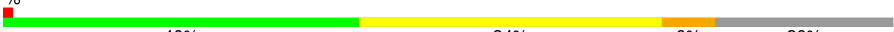
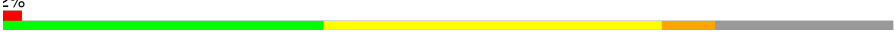





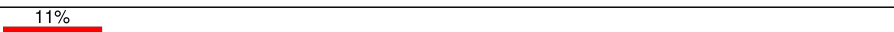

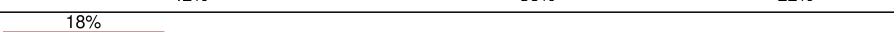

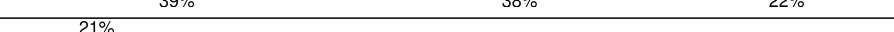



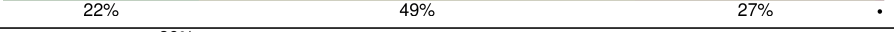
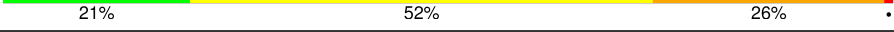


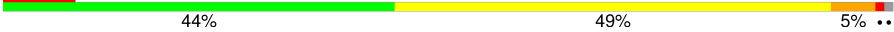
Continued on next page...

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	76	
22	AW	76	
22	CV	76	
22	CW	76	
23	AX	27	
23	CX	27	
24	AY	77	
24	CY	77	
25	AZ	405	
25	CZ	405	
26	B0	85	
26	D0	85	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
27	B1	98	
27	D1	98	
28	B2	72	
28	D2	72	
29	B3	60	
29	D3	60	
30	B4	71	
30	D4	71	
31	B5	60	
31	D5	60	
32	B6	54	
32	D6	54	
33	B7	49	
33	D7	49	
34	B8	65	
34	D8	65	
35	B9	37	
35	D9	37	
36	BA	2915	
36	DA	2915	
37	BB	122	
37	DB	122	
38	BC	229	
38	DC	229	
39	BD	276	

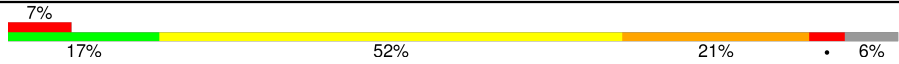
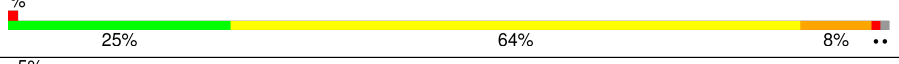
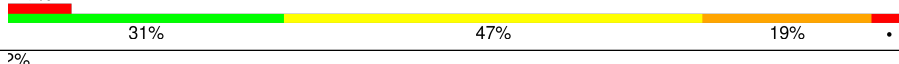
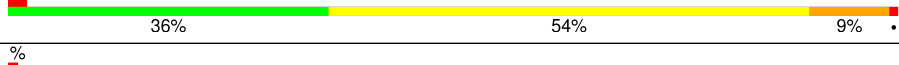
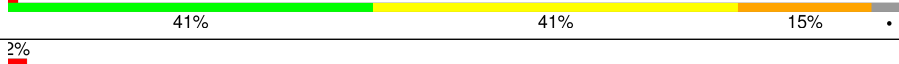

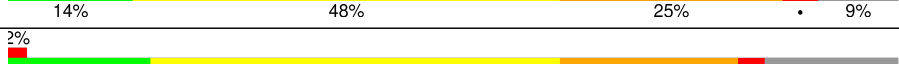
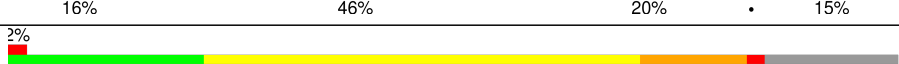
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
39	DD	276	
40	BE	206	
40	DE	206	
41	BF	210	
41	DF	210	
42	BG	182	
42	DG	182	
43	BH	180	
43	DH	180	
44	BJ	173	
44	DJ	173	
45	BK	147	
45	DK	147	
46	BN	140	
46	DN	140	
47	BO	122	
47	DO	122	
48	BP	150	
48	DP	150	
49	BQ	141	
49	DQ	141	
50	BR	118	
50	DR	118	
51	BS	112	
51	DS	112	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
52	BT	146	
52	DT	146	
53	BU	118	
53	DU	118	
54	BV	101	
54	DV	101	
55	BW	113	
55	DW	113	
56	BX	96	
56	DX	96	
57	BY	110	
57	DY	110	
58	BZ	206	
58	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
24	PSU	AY	55	X	-	-	-
24	PSU	CY	55	X	-	-	-

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 307322 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 RRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1510	Total	C	N	O	P	0	0	0
			32451	14445	6010	10487	1509			
1	CA	1510	Total	C	N	O	P	0	0	0
			32451	14445	6010	10487	1509			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	234	Total	C	N	O	S	0	0	0
			1900	1213	341	341	5			
2	CB	234	Total	C	N	O	S	0	0	0
			1900	1213	341	341	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	AC	206	Total	C	N	O	S	0	0	0
			1612	1016	314	281	1			
3	CC	206	Total	C	N	O	S	0	0	0
			1612	1016	314	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	150	Total	C	N	O	S	0	0	0
			1146	724	217	201	4			
5	CE	150	Total	C	N	O	S	0	0	0
			1146	724	217	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
			1010	639	197	174				
9	CI	127	Total	C	N	O		0	0	0
			1010	639	197	174				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	AJ	98	Total	C	N	O	S	0	0	0
			794	499	156	138	1			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	CJ	98	Total	C	N	O	S	0	0	0
			794	499	156	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	124	Total	C	N	O	S	0	0	0
			970	611	195	163	1			
12	CL	124	Total	C	N	O	S	0	0	0
			970	611	195	163	1			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AL	1	MET	-	EXPRESSION TAG	UNP Q5SHN3
AL	2	VAL	-	EXPRESSION TAG	UNP Q5SHN3
AL	3	ALA	-	EXPRESSION TAG	UNP Q5SHN3
AL	4	LEU	-	EXPRESSION TAG	UNP Q5SHN3
CL	1	MET	-	EXPRESSION TAG	UNP Q5SHN3
CL	2	VAL	-	EXPRESSION TAG	UNP Q5SHN3
CL	3	ALA	-	EXPRESSION TAG	UNP Q5SHN3
CL	4	LEU	-	EXPRESSION TAG	UNP Q5SHN3

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	124	Total	C	N	O	S	0	0	0
			987	611	205	169	2			
13	CM	124	Total	C	N	O	S	0	0	0
			987	611	205	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	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			
16	CP	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			

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

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

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	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	78	Total	C	N	O	S	0	0	0
			629	403	114	110	2			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	CS	78	Total	C	N	O	S	0	0	0
			629	403	114	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	24	Total	C	N	O	0	0	0
			208	128	50	30			
21	CU	24	Total	C	N	O	0	0	0
			208	128	50	30			

- Molecule 22 is a RNA chain called E-SITE TRNA PHE OR P-SITE TRNA PHE.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	AV	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	AW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CV	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			
22	CW	76	Total	C	N	O	P	0	0	0
			1619	723	290	531	75			

- Molecule 23 is a RNA chain called MRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	AX	17	Total	C	N	O	P	0	0	0
			361	164	68	113	16			
23	CX	17	Total	C	N	O	P	0	0	0
			361	164	68	113	16			

- Molecule 24 is a RNA chain called A-SITE TRNA A9C TRP-TRNA TRP.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
24	AY	77	Total	C	N	O	P	S	0	0	0
			1643	741	287	537	76	2			
24	CY	77	Total	C	N	O	P	S	0	0	0
			1643	741	287	537	76	2			

- Molecule 25 is a protein called ELONGATION FACTOR TU.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
25	AZ	385	Total	C	N	O	S		0	0	0
			2983	1886	522	563	12				
25	CZ	385	Total	C	N	O	S		0	0	0
			2983	1886	522	563	12				

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AZ	6	ILE	VAL	CONFLICT	UNP Q5SHN6
AZ	264	LYS	ARG	CONFLICT	UNP Q5SHN6
CZ	6	ILE	VAL	CONFLICT	UNP Q5SHN6
CZ	264	LYS	ARG	CONFLICT	UNP Q5SHN6

- Molecule 26 is a protein called 50S RIBOSOMAL PROTEIN L27.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
26	B0	84	Total	C	N	O	S		0	0	0
			662	410	140	111	1				
26	D0	84	Total	C	N	O	S		0	0	0
			662	410	140	111	1				

- Molecule 27 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
27	B1	93	Total	C	N	O	S		0	0	0
			731	460	145	125	1				
27	D1	93	Total	C	N	O	S		0	0	0
			731	460	145	125	1				

- Molecule 28 is a protein called 50S RIBOSOMAL PROTEIN L29.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
28	B2	71	Total	C	N	O	S		0	0	0
			598	370	121	106	1				

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	D2	71	Total	C	N	O	S	0	0	0
			598	370	121	106	1			

- Molecule 29 is a protein called 50S RIBOSOMAL PROTEIN L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	B3	59	Total	C	N	O	S	0	0	0
			467	298	90	78	1			
29	D3	59	Total	C	N	O	S	0	0	0
			467	298	90	78	1			

- Molecule 30 is a protein called 50S RIBOSOMAL PROTEIN L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	B4	44	Total	C	N	O	S	0	0	0
			340	218	57	61	4			
30	D4	44	Total	C	N	O	S	0	0	0
			340	218	57	61	4			

- Molecule 31 is a protein called 50S RIBOSOMAL PROTEIN L32.

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

- Molecule 32 is a protein called 50S RIBOSOMAL PROTEIN L33.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	B6	50	Total	C	N	O	S	0	0	0
			433	270	88	71	4			
32	D6	50	Total	C	N	O	S	0	0	0
			433	270	88	71	4			

- Molecule 33 is a protein called 50S RIBOSOMAL PROTEIN L34.

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

- Molecule 34 is a protein called 50S RIBOSOMAL PROTEIN L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	B8	63	Total	C	N	O	S	0	0	0
			507	326	101	78	2			
34	D8	63	Total	C	N	O	S	0	0	0
			507	326	101	78	2			

- Molecule 35 is a protein called 50S RIBOSOMAL PROTEIN L36.

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

- Molecule 36 is a RNA chain called 23S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	BA	2901	Total	C	N	O	P	0	0	0
			62477	27807	11683	20087	2900			
36	DA	2901	Total	C	N	O	P	0	0	0
			62477	27807	11683	20087	2900			

- Molecule 37 is a RNA chain called 5S RIBOSOMAL RNA.

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

- Molecule 38 is a protein called 50S RIBOSOMAL PROTEIN L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BC	228	Total	C	N	O	S	0	0	0
			1742	1101	319	319	3			
38	DC	228	Total	C	N	O	S	0	0	0
			1742	1101	319	319	3			

- Molecule 39 is a protein called 50S RIBOSOMAL PROTEIN L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BD	275	Total	C	N	O	S	0	0	0
			2145	1353	428	361	3			
39	DD	275	Total	C	N	O	S	0	0	0
			2145	1353	428	361	3			

- Molecule 40 is a protein called 50S RIBOSOMAL PROTEIN L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BE	204	Total	C	N	O	S	0	0	0
			1563	988	299	270	6			
40	DE	204	Total	C	N	O	S	0	0	0
			1563	988	299	270	6			

- Molecule 41 is a protein called 50S RIBOSOMAL PROTEIN L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BF	207	Total	C	N	O	S	0	0	0
			1623	1035	303	282	3			
41	DF	207	Total	C	N	O	S	0	0	0
			1623	1035	303	282	3			

- Molecule 42 is a protein called 50S RIBOSOMAL PROTEIN L5.

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

- Molecule 43 is a protein called 50S RIBOSOMAL PROTEIN L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BH	159	Total	C	N	O	S	0	0	0
			1222	773	228	220	1			
43	DH	159	Total	C	N	O	S	0	0	0
			1222	773	228	220	1			

- Molecule 44 is a protein called 50S RIBOSOMAL PROTEIN L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BJ	130	Total	C	N	O		0	0	0
			651	391	130	130				

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
44	DJ	130	Total	C	N	O	0	0	0
			651	391	130	130			

- Molecule 45 is a protein called 50S RIBOSOMAL PROTEIN L11.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	BK	140	Total	C	N	O	0	0	0
			700	420	140	140			
45	DK	140	Total	C	N	O	0	0	0
			700	420	140	140			

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BN	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			
46	DN	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			

- Molecule 47 is a protein called 50S RIBOSOMAL PROTEIN L14.

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

- Molecule 48 is a protein called 50S RIBOSOMAL PROTEIN L15.

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

- Molecule 49 is a protein called 50S RIBOSOMAL PROTEIN L16.

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

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

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

- Molecule 51 is a protein called 50S RIBOSOMAL PROTEIN L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
51	BS	98	Total	C	N	O	0	0	0
			770	486	154	130			
51	DS	98	Total	C	N	O	0	0	0
			770	486	154	130			

- Molecule 52 is a protein called 50S RIBOSOMAL PROTEIN L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	BT	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			
52	DT	137	Total	C	N	O	S	0	0	0
			1141	710	234	196	1			

- Molecule 53 is a protein called 50S RIBOSOMAL PROTEIN L20.

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

- Molecule 54 is a protein called 50S RIBOSOMAL PROTEIN L21.

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

- Molecule 55 is a protein called 50S RIBOSOMAL PROTEIN L22.

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

- Molecule 56 is a protein called 50S RIBOSOMAL PROTEIN L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	BX	92	Total	C	N	O	S	0	0	0
			725	471	131	123				
56	DX	92	Total	C	N	O	S	0	0	0
			725	471	131	123				

- Molecule 57 is a protein called 50S RIBOSOMAL PROTEIN L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	BY	100	Total	C	N	O	S	0	0	0
			775	500	148	123	4			
57	DY	100	Total	C	N	O	S	0	0	0
			775	500	148	123	4			

- Molecule 58 is a protein called 50S RIBOSOMAL PROTEIN L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
58	BZ	176	Total	C	N	O	S	0	0	0
			1403	897	252	252	2			
58	DZ	176	Total	C	N	O	S	0	0	0
			1403	897	252	252	2			

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

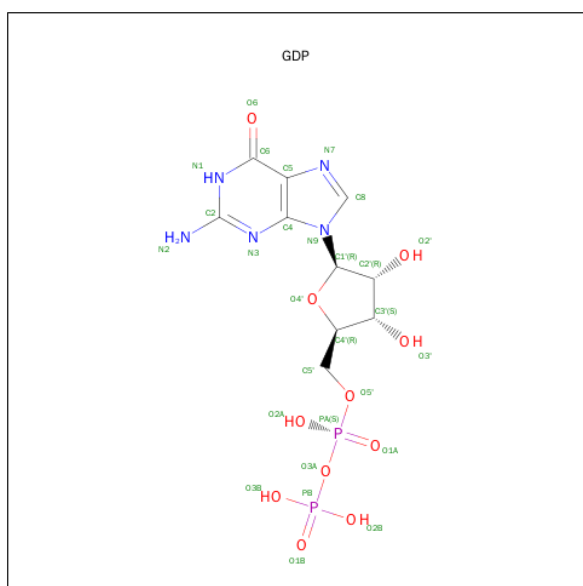
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	B4	1	Total	Zn	0	0
			1	1		
59	CN	1	Total	Zn	0	0
			1	1		
59	AN	1	Total	Zn	0	0
			1	1		
59	B9	1	Total	Zn	0	0
			1	1		
59	D9	1	Total	Zn	0	0
			1	1		

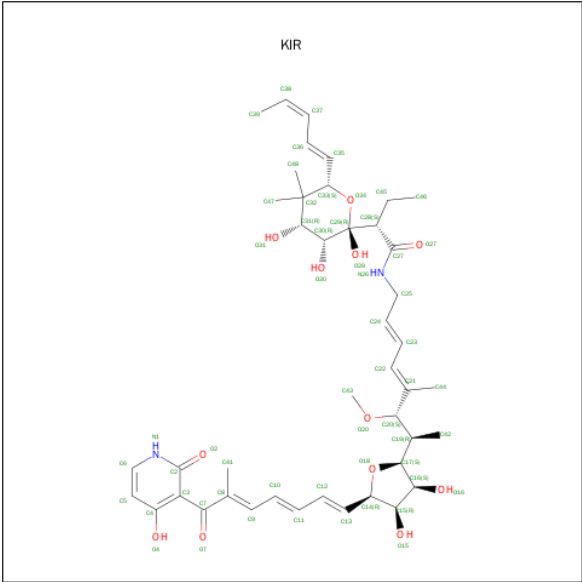
Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
59	D4	1	Total	Zn	0	0
			1	1		
59	CD	1	Total	Zn	0	0
			1	1		
59	AD	1	Total	Zn	0	0
			1	1		

- Molecule 60 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula: $C_{10}H_{15}N_5O_{11}P_2$).



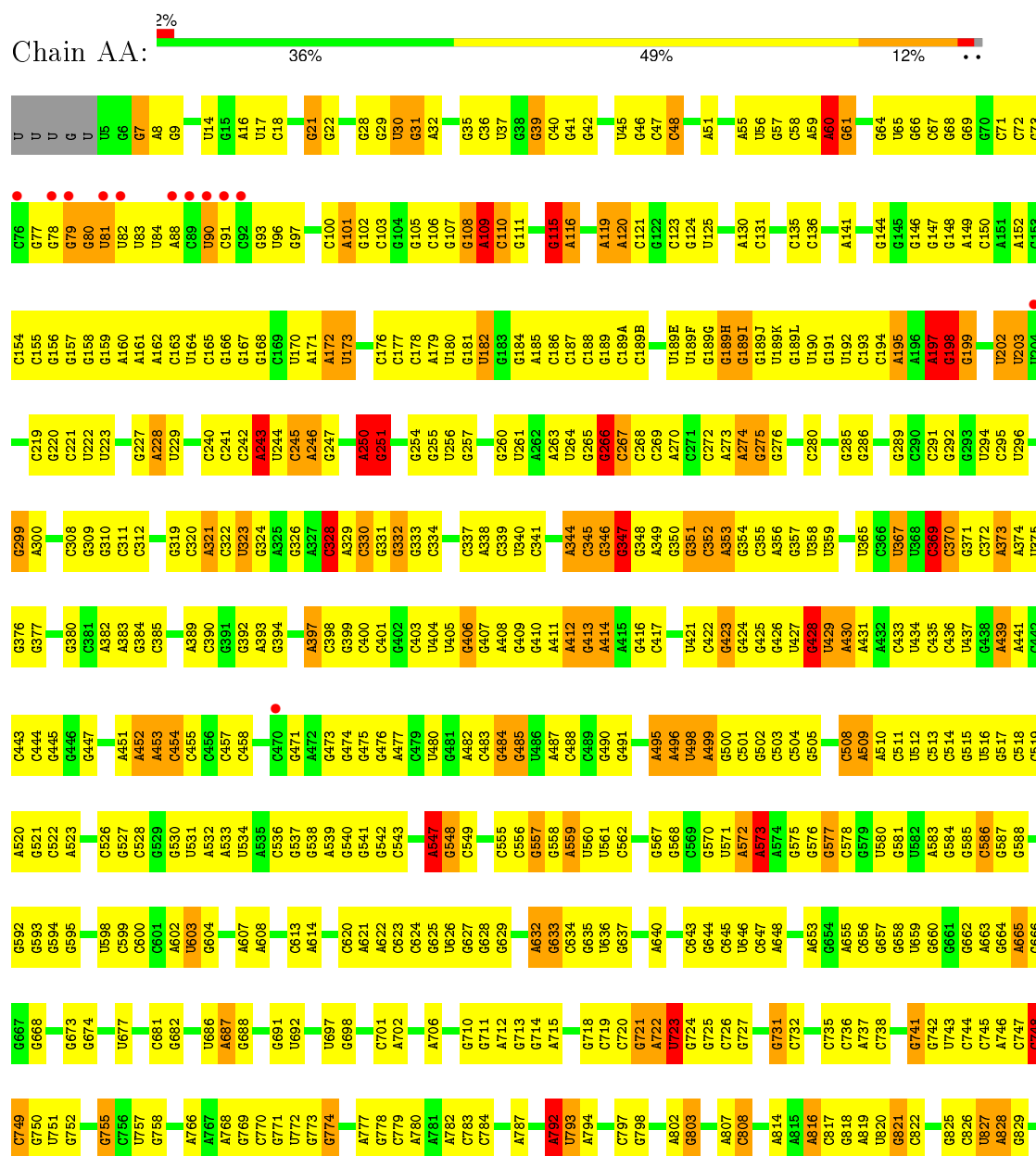


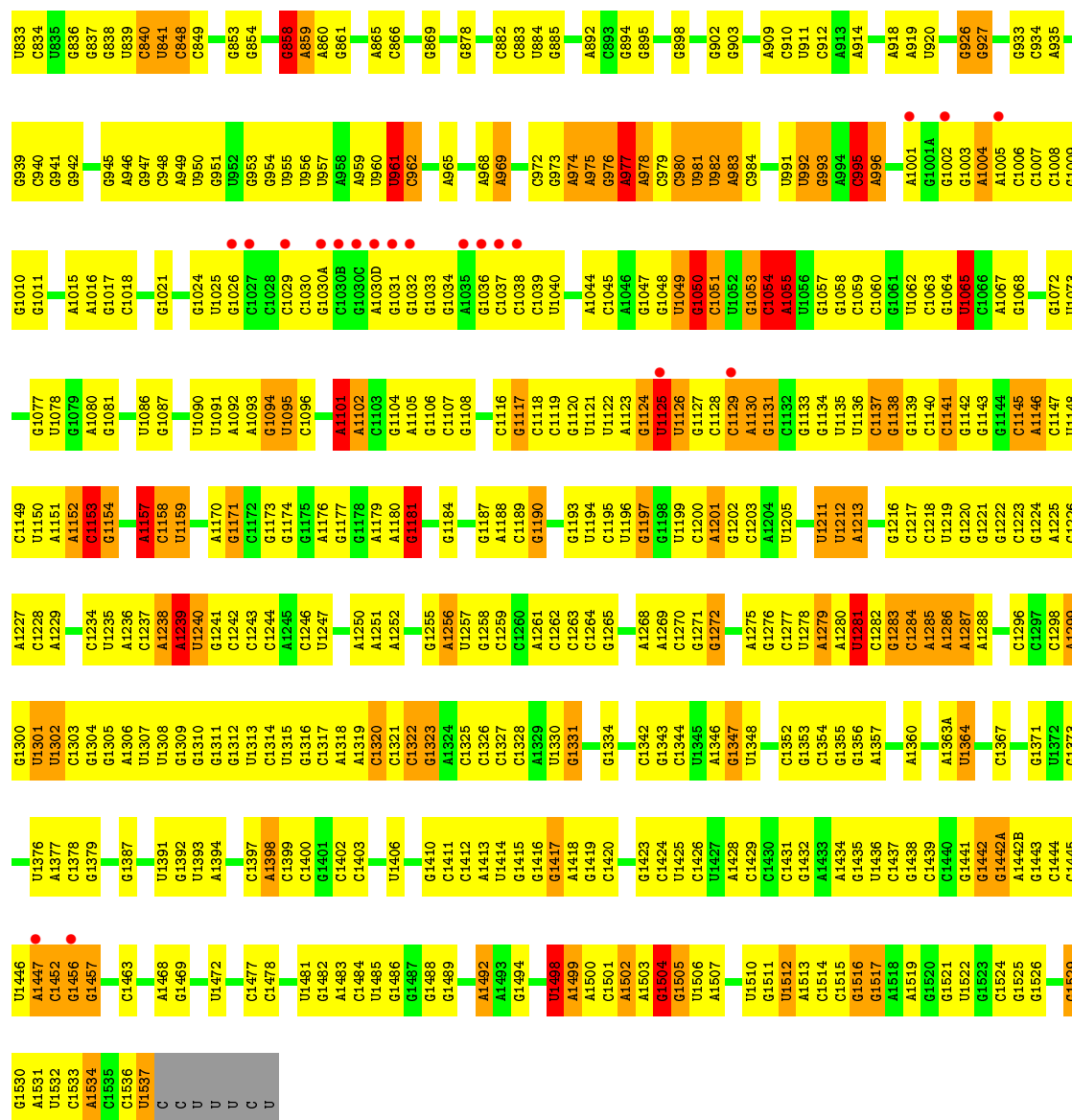
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
61	AZ	1	Total	C	N	O	0	0
			57	43	2	12		
61	CZ	1	Total	C	N	O	0	0
			57	43	2	12		

3 Residue-property plots

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

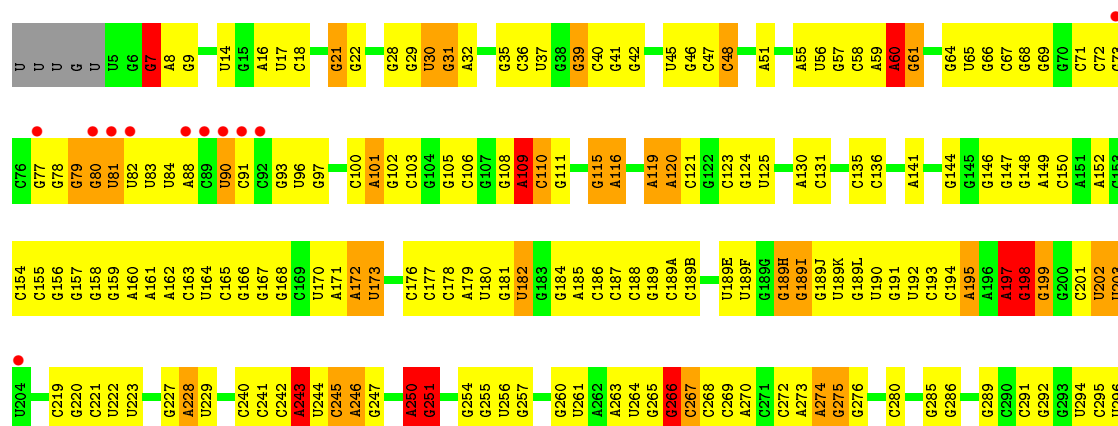
• Molecule 1: 16S rRNA



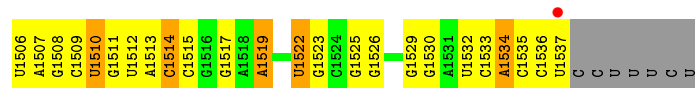


• Molecule 1: 16S rRNA

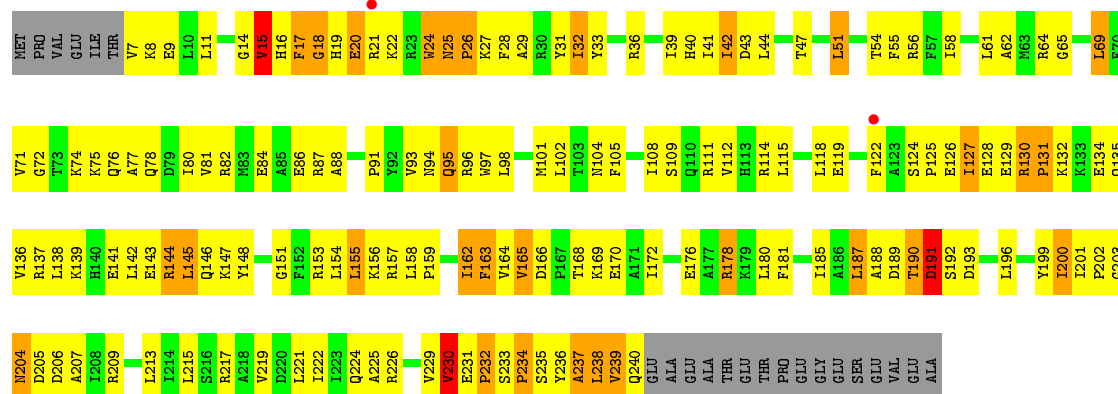
Chain CA: 2% 35% 51% 12%



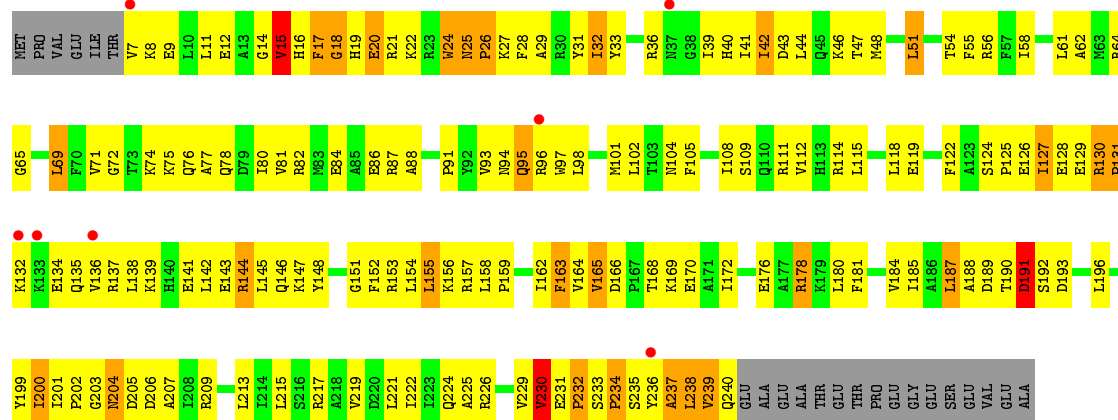
G1421	U1345	A1284	G1131	A1055	A983	A913	A819	C738	G661	G584	G515	C436	C370	G297
G1422	A1346	U1205	C1132	U1056	C984	A914	U820	G741	G662	G585	U516	U437	G371	A298
G1423	G1347	G1206	G1133	G1057			G821	G742	A663	C586	G517	G438	C372	G299
C1424	U1348		G1134	G1058	U991	A918	C822	U743	A665	G588	C519	A441	A373	A300
U1425			U1135	C1059	U992	A919	G825	C744	G666		A520	C442	U374	G301
	G1352	U1212	U1136	G1061	G993	U920	C826	C745	G667	G592	C521	C443	U375	G302
	G1353	A1213	C1137	G1062	G994		C827	C746	G668	G593	C522	C444	C376	C308
	C1354		G1138	U1063	C995	A923	U827	A748	G669	G594	A523	G445	C377	G309
	G1355	G1216	C1139	G1063	A996	C924	A828	C747		G595	A524	G446	G380	G310
	G1356	C1217	C1140	U1064		G925	G829	C748	G673		C525	G447	C311	C312
	A1357	C1218	C1141	U1065	G926	G927		C749	G674		C526	G448		
		U1219	G1142	G1066	G927		U833	G750	G675	U598	C527	G449	A382	
		G1220	G1143	A1067			C834	G751	U751	C599	G528	A451	A383	
		G1221	G1144	G1068		G933	U835			C600	G529	A452	G384	G319
		G1222	C1145			C934	G836	G756	G681	C501	G530	A453	C385	C320
		C1223	A1146	G1072	A1005	A935	G837	C757	G682	A602	U531	C454	A321	A321
		G1224	C1147	U1073	C1006	C936	U838	G758	U686	U603	A532	C455	A389	C322
		A1225	U1148	C1007	C1007	A937	U839		U687	G604	A533	C456	C390	U323
		C1226	C1149	C1008	C1008	A938	C840	A766	A687		U534	C457	G391	G324
		A1227	U1150	G1009	C1009	G939	U841		G688	A607	A535	C458	C392	A325
		C1228	A1151	U1078	G1010	C940	C848	G769		A608	A536		C393	A327
		A1229	C1152	G1080	G1011	G941	C849	C770	G691	C513	G537	G471	G394	C326
			C1153	A1081		G942		G771	U692	A614	A538	A472		
		G1234	G1154		A1015	G945	G853	G772	U697	A621	A540	G473	A397	A329
		U1235		U1086	A1016	A946	G854	U772	G698	A622	G541	G474	C398	C390
		A1236	A1157	G1087	G1017	G947	G858	G773		A623	G542	G475	C399	G331
		C1237	C1158		C1018	G948	A859	G774		C524	G543	G476	C400	G332
		A1238	U1159	U1090	G1024	C949	G860		C701	G525	G544	G477	C401	G333
		C1239	C1160	U1091	U1025	G861	A862	G777	A702	C526	A547	C479	G402	C334
		U1240	C1161	G1094	G1026	C862	C863	G778	A706	G625	G548	G481	U404	C337
		G1241	C1171	U1095		G865	A866	A780	C707	G627	G549	G482	U405	A338
		C1242	C1172	U1096		G866	C867	G781	C708	G628	G550	G483	C406	C339
		U1243	G1173	A1101	C1030	G869	A868	G782	G709	G629	G551	G484	U407	U340
		C1244	G1174	C1102	G1030A	U956	C869	G783	G710		U552	G485	A408	C341
		A1245	G1175	A1103	G1030B	U957	U870	C784	A712	A632	C555	U486	G409	
		U1246	C1176	G1103	G1030C	A958	U871		G713	G633	C556	A487	G410	A344
		C1247	G1177	G1104	A1030D	A959	G878	A787	G714	C634	G557	C488	A411	C345
		U1248	C1178	A1105	G1031	U960		A792	A715	G635	G558	C489	A412	C346
		A1250	C1179	G1106	G1032	A961	C882	U793	G716	U636	A559	G490	G413	C347
		C1251	G1180	C1107	G1033	U962	C883	A794	C717	G637	U560	G491	A414	G348
		A1252	C1181	G1108	G1034	G963	U884		G718	G638	U561	A495	A415	A349
			G1184	C1109	A1035	A964	C885	C797	G719	G639	C562	A496	G416	C350
			G1187	A1110	G1036	A965		G798	C720	A640		A498	C417	C351
			C1188	C1116	C1037		G894		G721	C643	G567	A499	U421	C352
			C1189	G1117	C1038	A968	C895	A802	A722	G644	G568	G500	C422	A353
			G1190	C1118	G1039	A969	C896	G803	U723	C645	C501	C502	G423	C354
				C1119	U1040	C897	C897	U804	G724	U646	G502	G501	G424	C355
				G1120	A1044	C898		A807	G725	C647	A572	C503	G425	A356
				U1121	C1045	C899		C808	G726	A648	A574	C504	G426	C357
				U1122	A1046	A900			G727		G575	G505	U427	U358
				G1123	G1047	A901		C811	G731	A653	G576	C508	G428	
				C1124	G1048	G902			A732	G654	G577	C509	U429	A363
				U1125	U1049	G903		A814	C733	A655	C578	A509	A430	U365
				U1126	A977	G903		A815	A734	C656	G579	A510	A431	U366
				C1127	C979			A816	G735	G657	U580	C511	A432	C366
				C1128	U1052	C980		A817	C736	G658	G581	U512	C433	U367
				C1129	C1053	U981		G818	A737	U659	U582	C513	U434	U368
				C1203	C1054	U982				G660	A583	C514	C435	C369



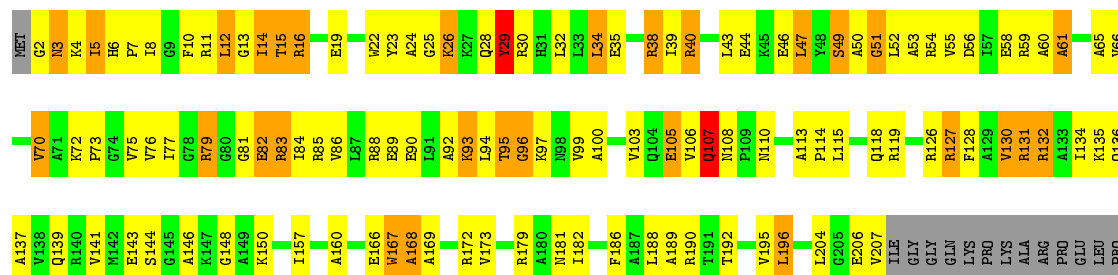
• Molecule 2: 30S RIBOSOMAL PROTEIN S2



• Molecule 2: 30S RIBOSOMAL PROTEIN S2



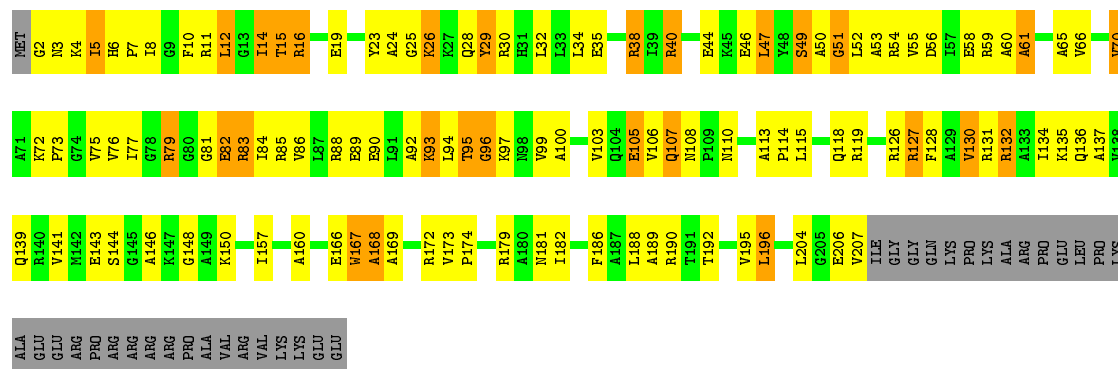
• Molecule 3: 30S RIBOSOMAL PROTEIN S3



LYS
ALA
GLU
GLU
ARG
PRO
ARG
ARG
ARG
ARG
PRO
PRO
ALA
VAL
ARG
VAL
LYS
LYS
GLU
GLU

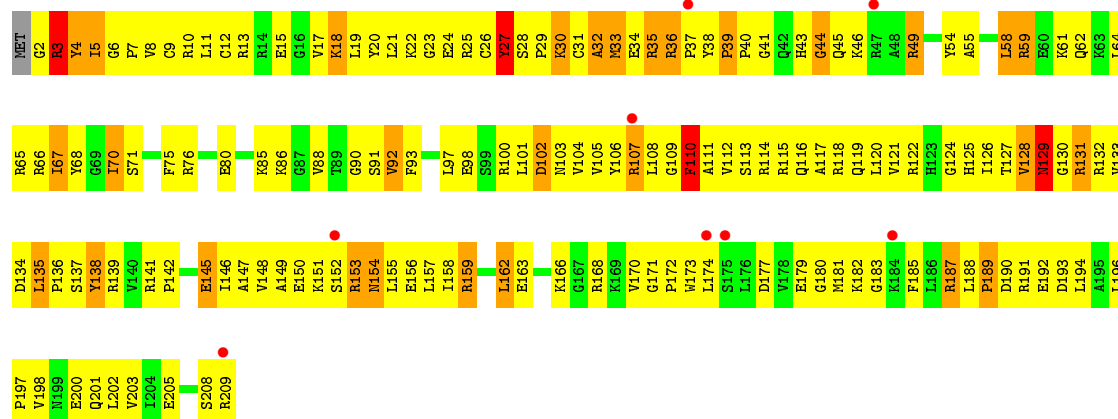
• Molecule 3: 30S RIBOSOMAL PROTEIN S3

Chain CC: 37% 37% 12% 14%



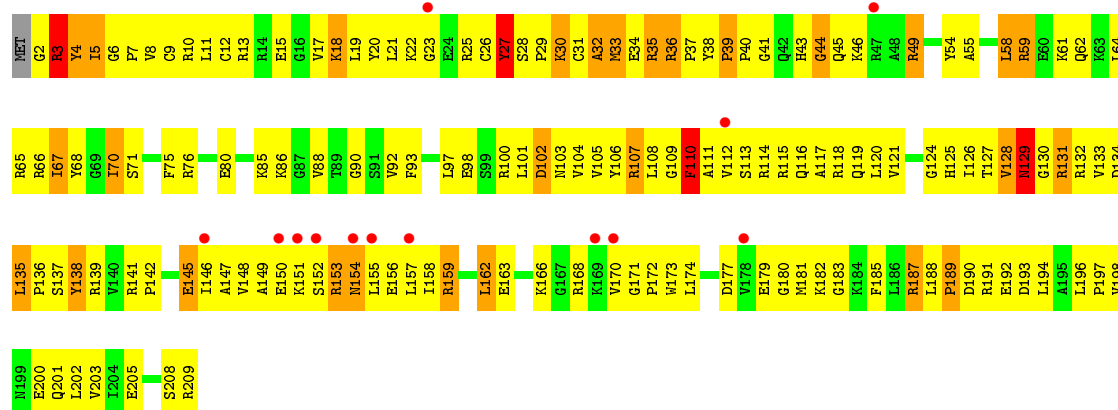
• Molecule 4: 30S RIBOSOMAL PROTEIN S4

Chain AD: 4% 24% 60% 14%

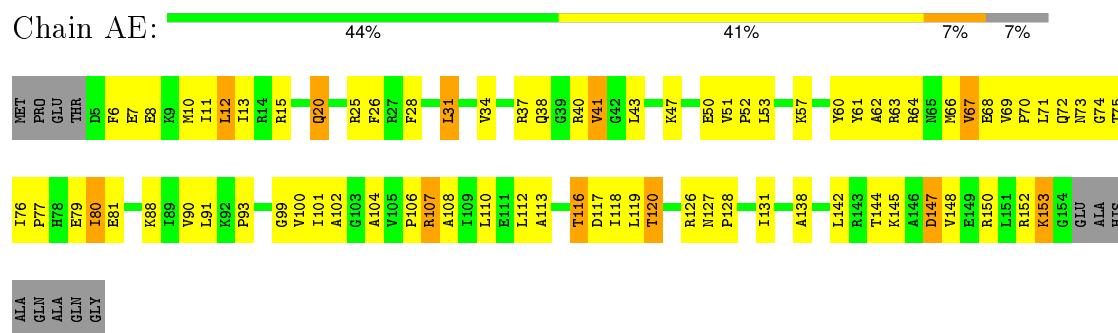


• Molecule 4: 30S RIBOSOMAL PROTEIN S4

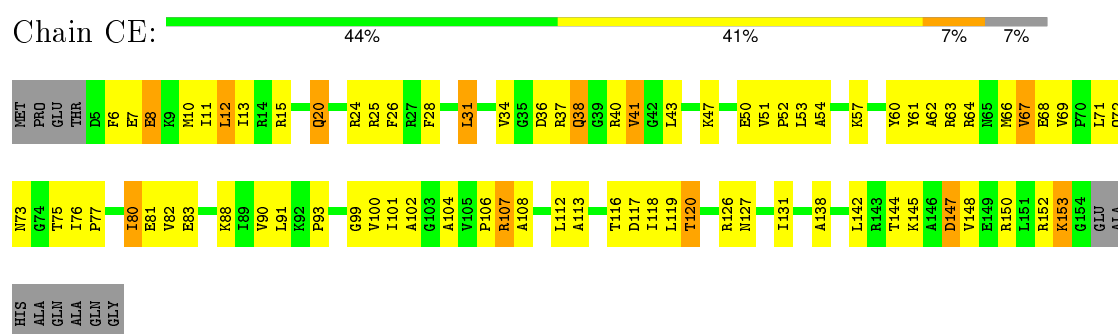
Chain CD: 6% 25% 59% 13%



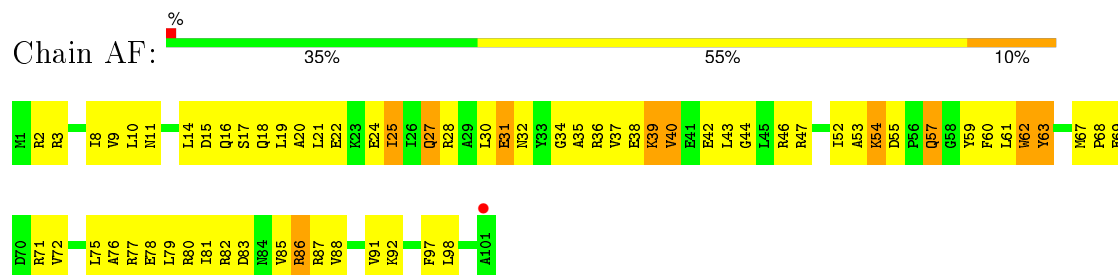
- Molecule 5: 30S RIBOSOMAL PROTEIN S5



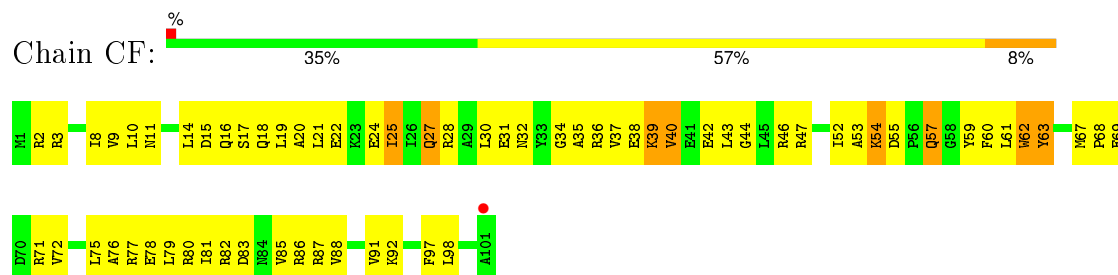
- Molecule 5: 30S RIBOSOMAL PROTEIN S5



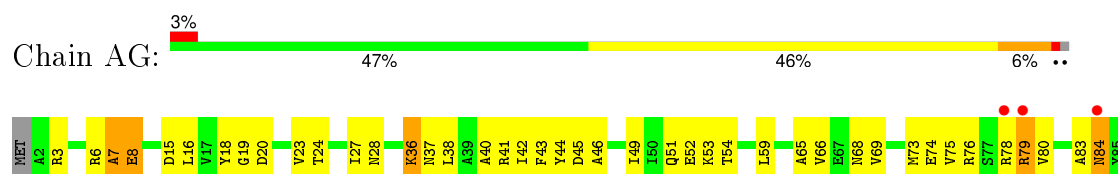
- Molecule 6: 30S RIBOSOMAL PROTEIN S6

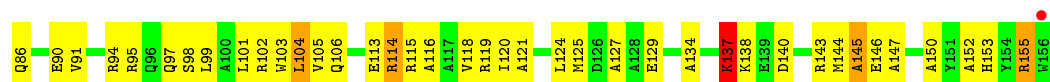


- Molecule 6: 30S RIBOSOMAL PROTEIN S6

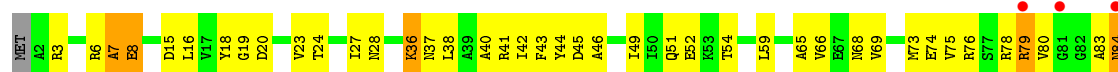


- Molecule 7: 30S RIBOSOMAL PROTEIN S7





• Molecule 7: 30S RIBOSOMAL PROTEIN S7



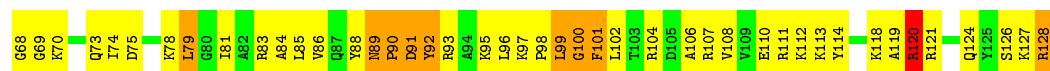
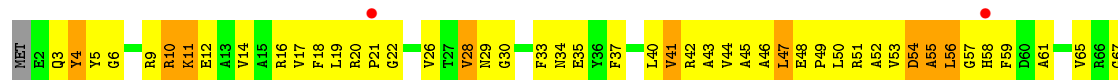
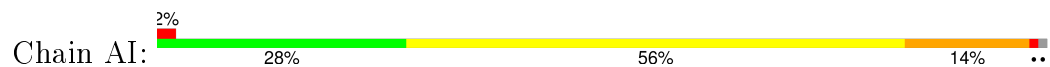
• Molecule 8: 30S RIBOSOMAL PROTEIN S8



• Molecule 8: 30S RIBOSOMAL PROTEIN S8

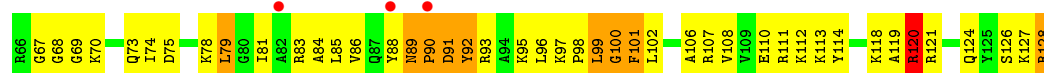


• Molecule 9: 30S RIBOSOMAL PROTEIN S9

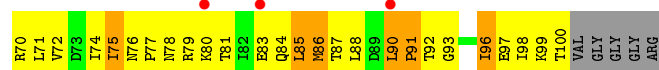


• Molecule 9: 30S RIBOSOMAL PROTEIN S9

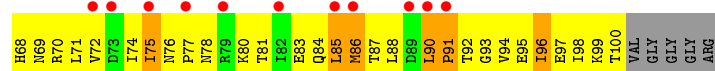
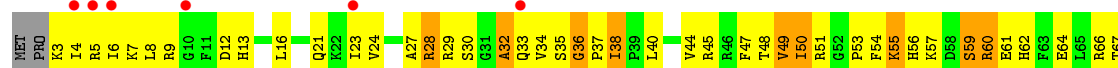




• Molecule 10: 30S RIBOSOMAL PROTEIN S10



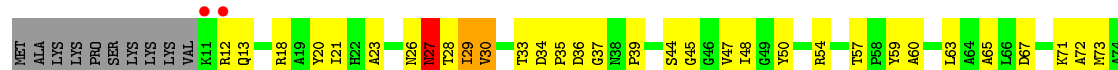
• Molecule 10: 30S RIBOSOMAL PROTEIN S10



• Molecule 11: 30S RIBOSOMAL PROTEIN S11

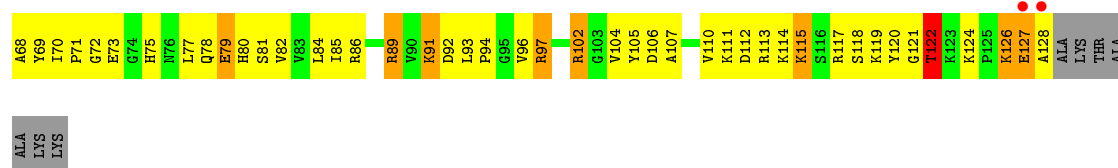


• Molecule 11: 30S RIBOSOMAL PROTEIN S11

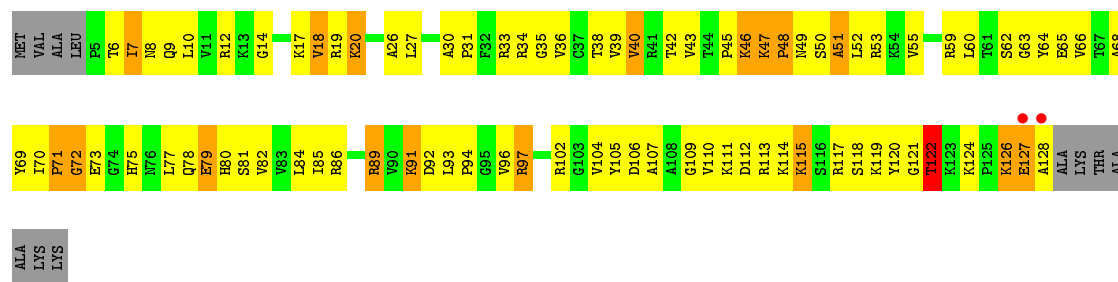


• Molecule 12: 30S RIBOSOMAL PROTEIN S12

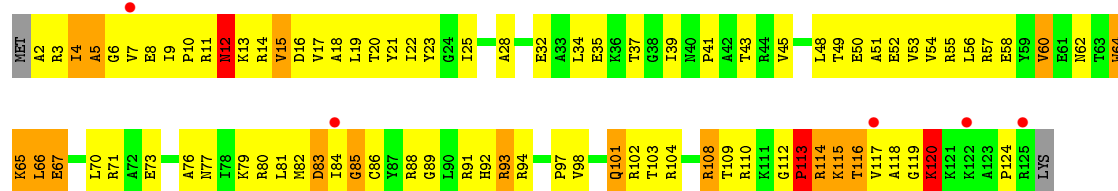




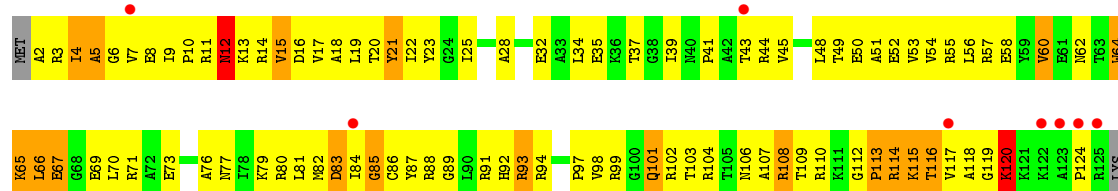
• Molecule 12: 30S RIBOSOMAL PROTEIN S12



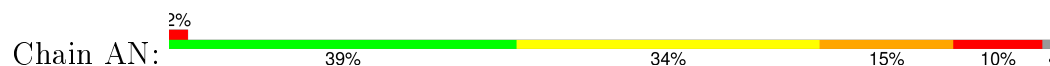
• Molecule 13: 30S RIBOSOMAL PROTEIN S13



• Molecule 13: 30S RIBOSOMAL PROTEIN S13



• Molecule 14: 30S RIBOSOMAL PROTEIN S14



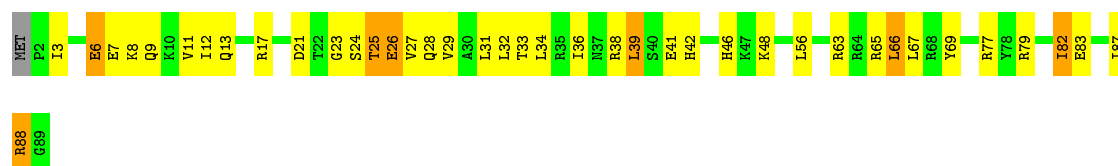
• Molecule 14: 30S RIBOSOMAL PROTEIN S14





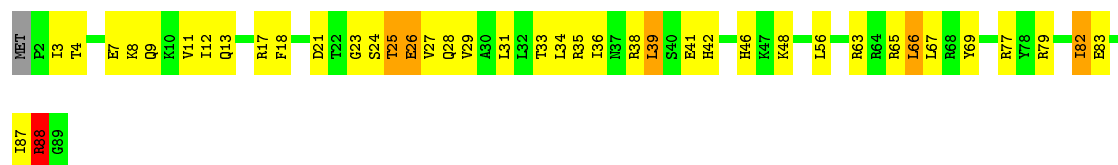
• Molecule 15: 30S RIBOSOMAL PROTEIN S15

Chain AO: 54% 37% 8%



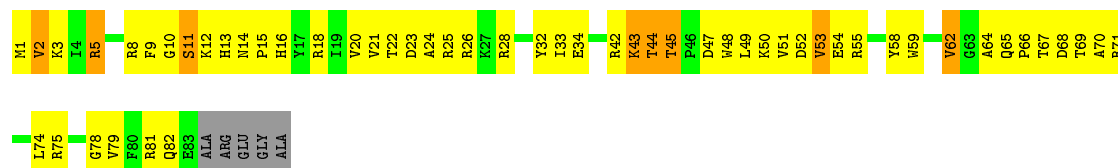
• Molecule 15: 30S RIBOSOMAL PROTEIN S15

Chain CO: 53% 39% 6%



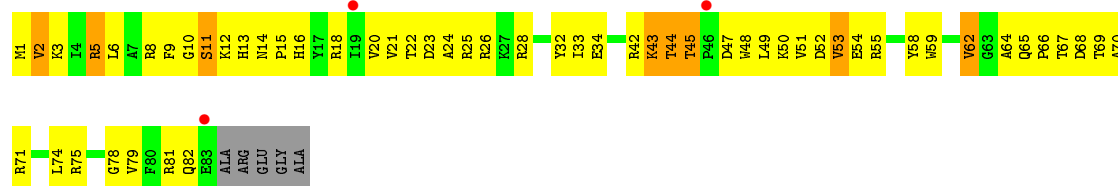
• Molecule 16: 30S RIBOSOMAL PROTEIN S16

Chain AP: 32% 53% 9% 6%



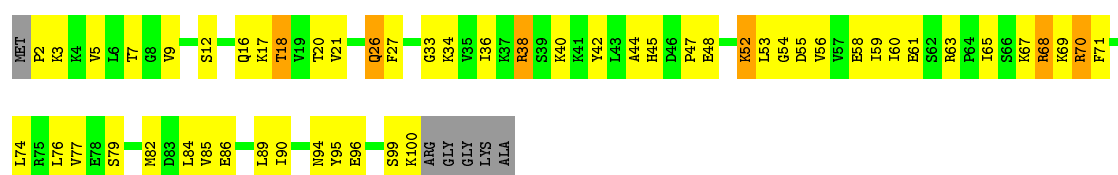
• Molecule 16: 30S RIBOSOMAL PROTEIN S16

Chain CP: 3% 31% 55% 9% 6%

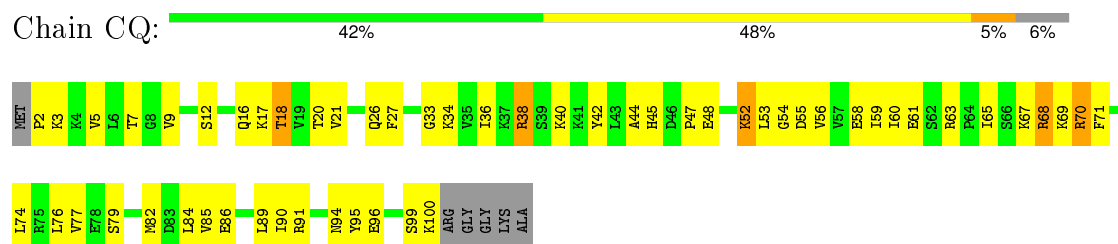


• Molecule 17: 30S RIBOSOMAL PROTEIN S17

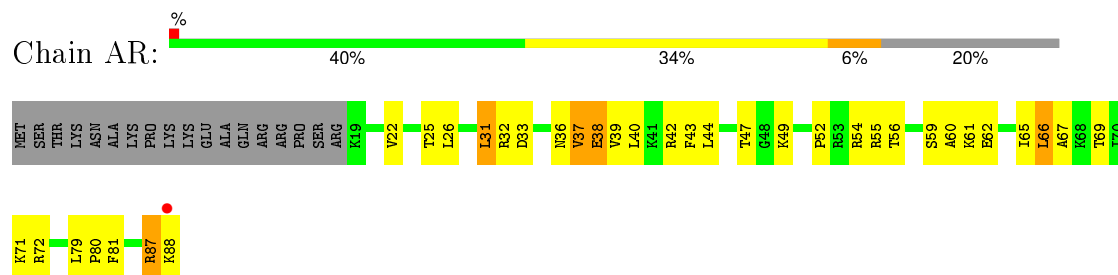
Chain AQ: 43% 46% 6% 6%



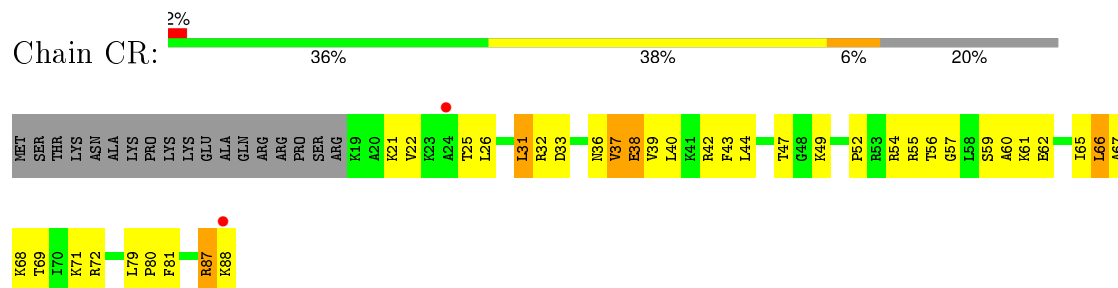
- Molecule 17: 30S RIBOSOMAL PROTEIN S17



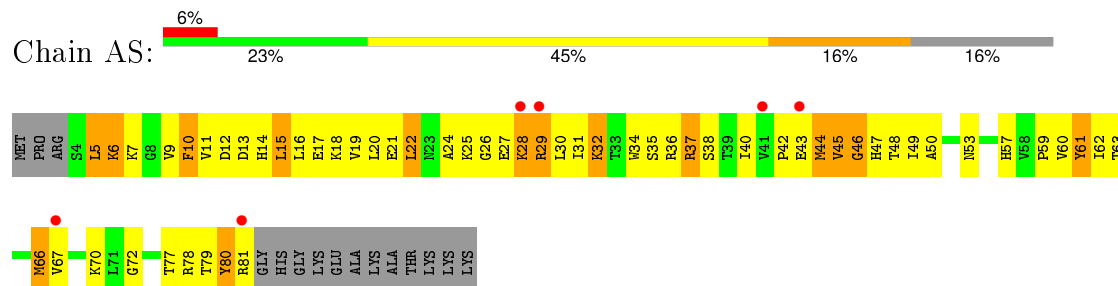
- Molecule 18: 30S RIBOSOMAL PROTEIN S18



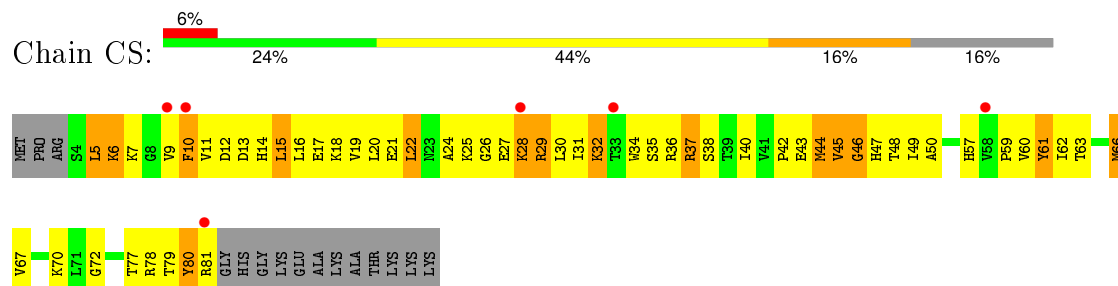
- Molecule 18: 30S RIBOSOMAL PROTEIN S18



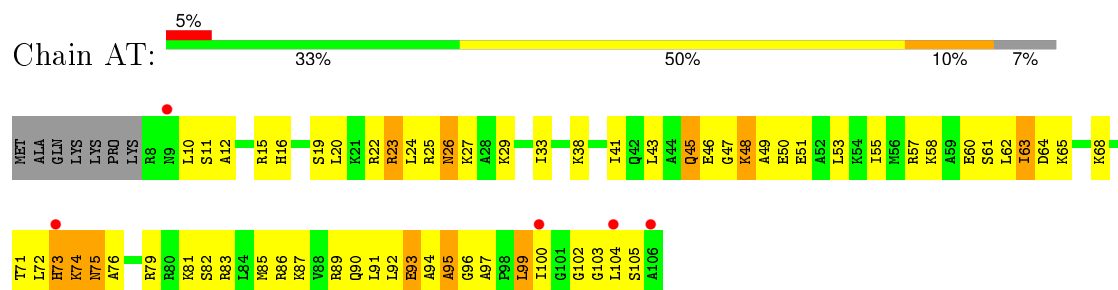
- Molecule 19: 30S RIBOSOMAL PROTEIN S19



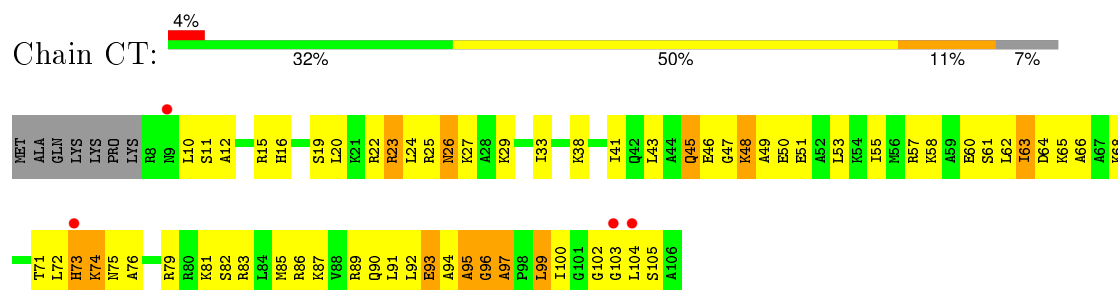
- Molecule 19: 30S RIBOSOMAL PROTEIN S19



- Molecule 20: 30S RIBOSOMAL PROTEIN S20



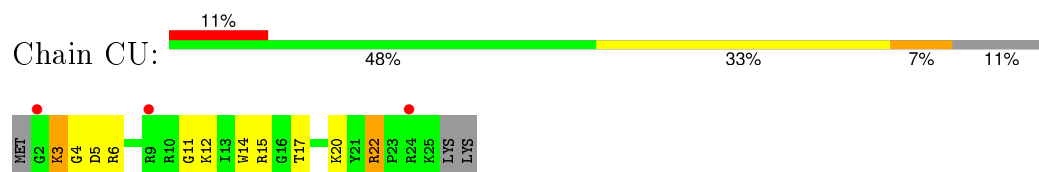
- Molecule 20: 30S RIBOSOMAL PROTEIN S20



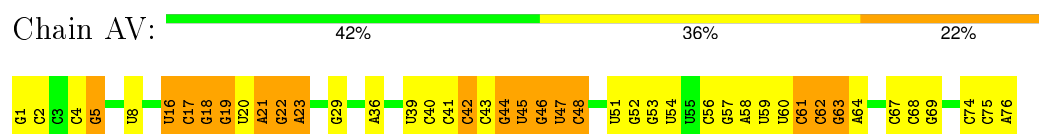
- Molecule 21: 30S RIBOSOMAL PROTEIN THX



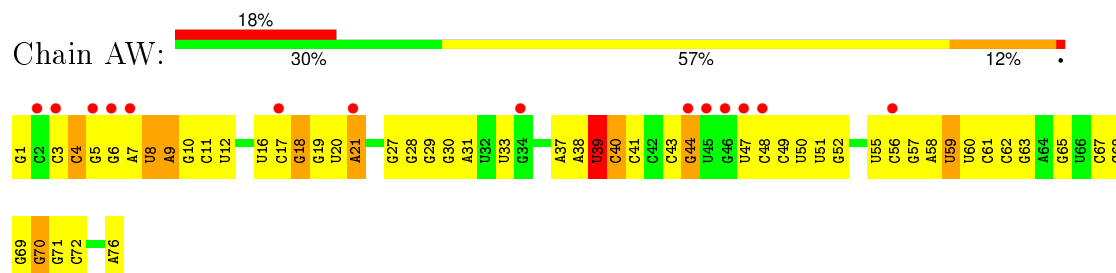
● Molecule 21: 30S RIBOSOMAL PROTEIN THX



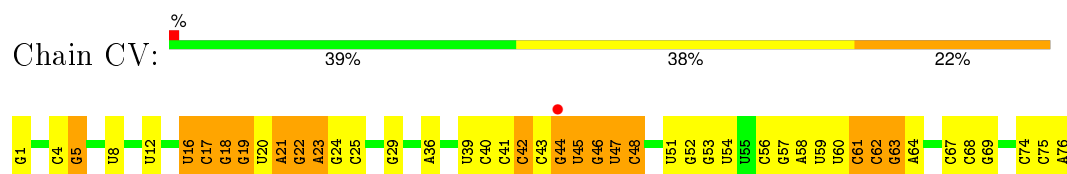
- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE



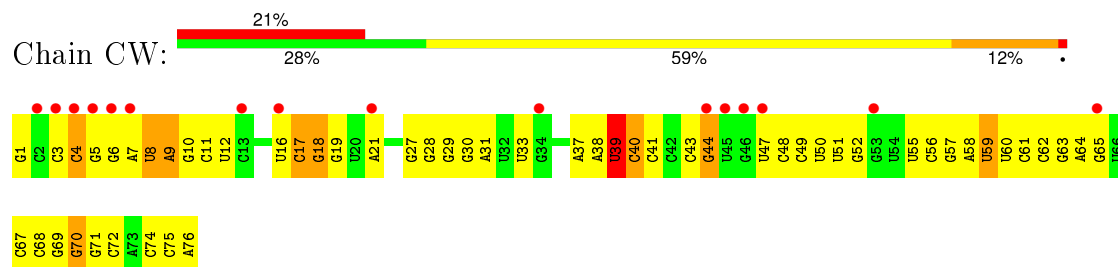
- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE



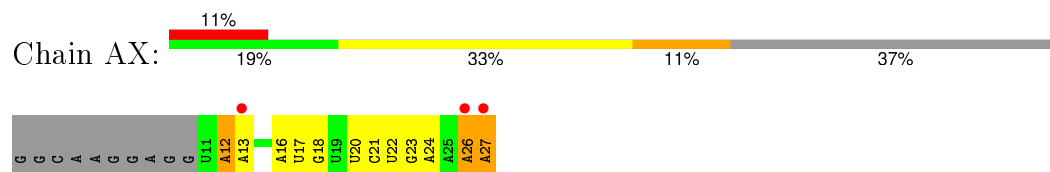
- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE



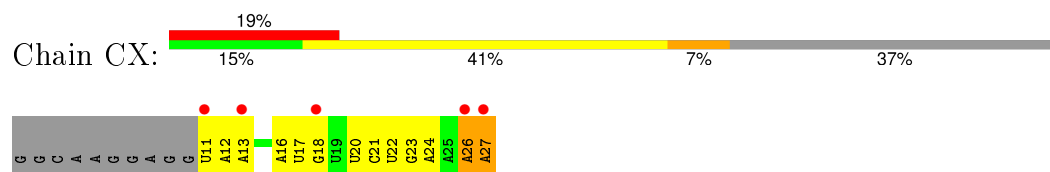
- Molecule 22: E-SITE TRNA PHE OR P-SITE TRNA PHE



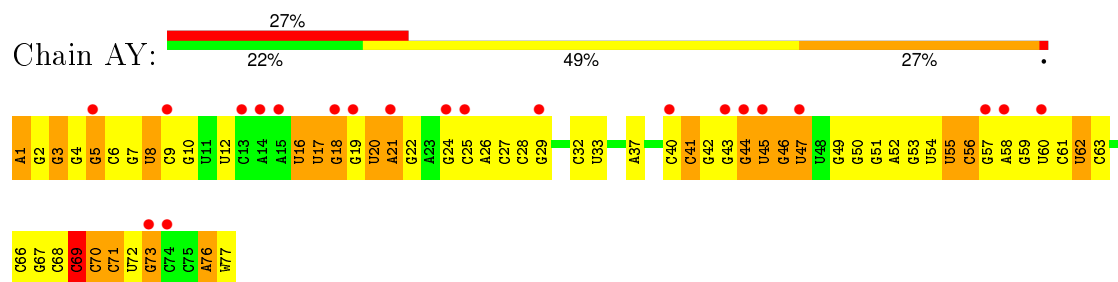
- Molecule 23: MRNA



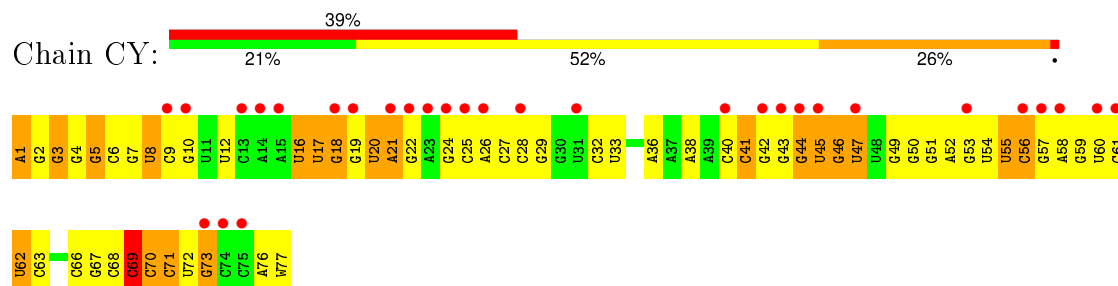
- Molecule 23: MRNA



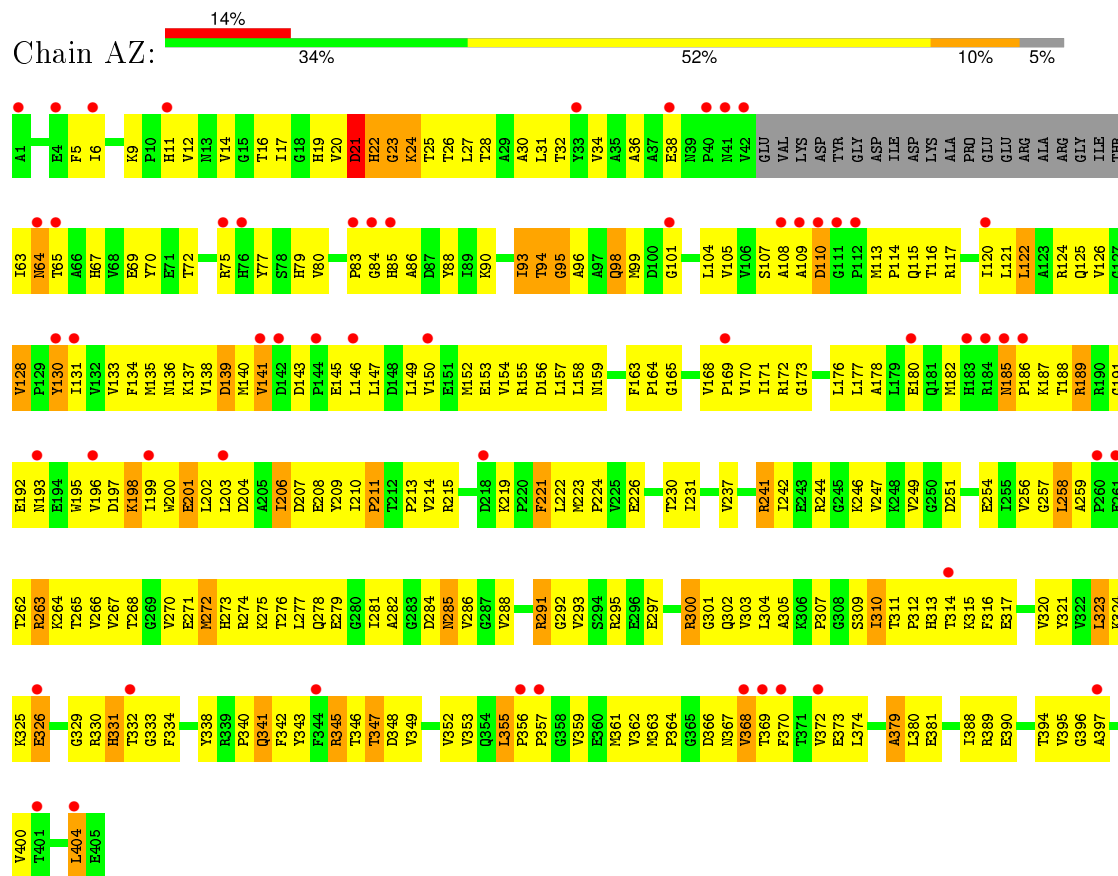
- Molecule 24: A-SITE TRNA A9C TRP-TRNA TRP



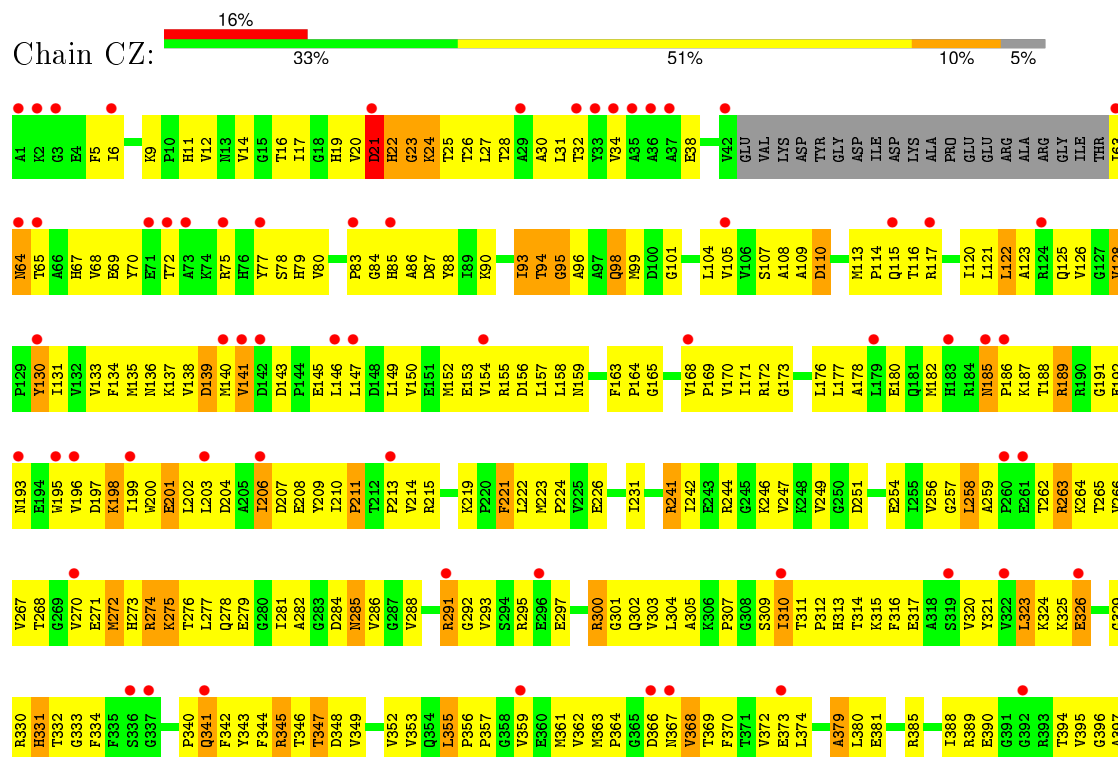
- Molecule 24: A-SITE TRNA A9C TRP-TRNA TRP

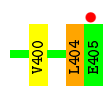


• Molecule 25: ELONGATION FACTOR TU

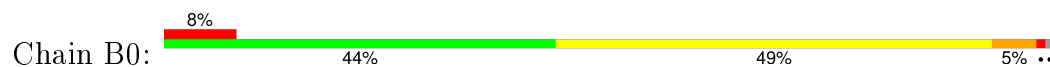


• Molecule 25: ELONGATION FACTOR TU

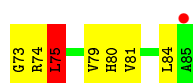




• Molecule 26: 50S RIBOSOMAL PROTEIN L27



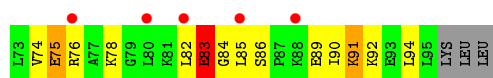
• Molecule 26: 50S RIBOSOMAL PROTEIN L27



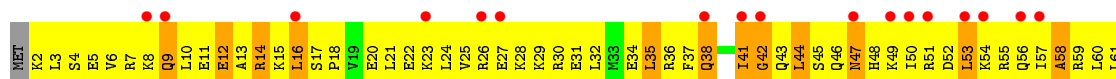
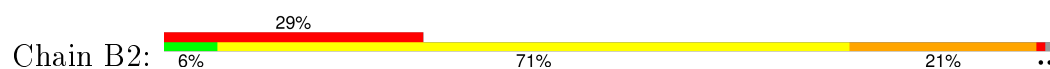
• Molecule 27: 50S RIBOSOMAL PROTEIN L28



• Molecule 27: 50S RIBOSOMAL PROTEIN L28

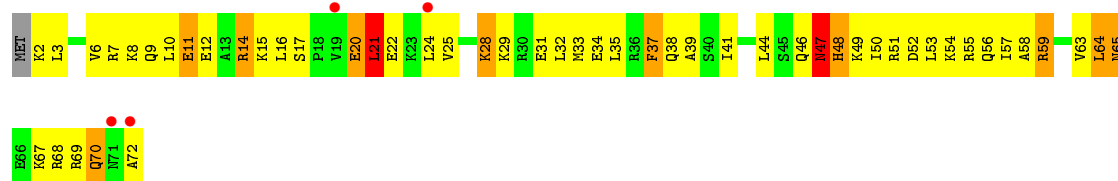


• Molecule 28: 50S RIBOSOMAL PROTEIN L29

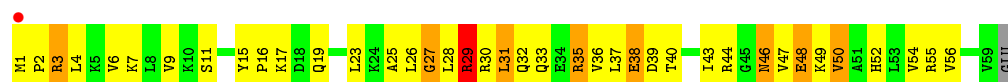




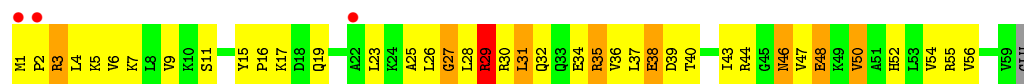
• Molecule 28: 50S RIBOSOMAL PROTEIN L29



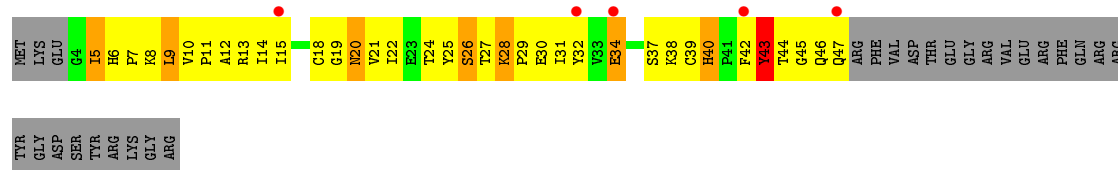
• Molecule 29: 50S RIBOSOMAL PROTEIN L30



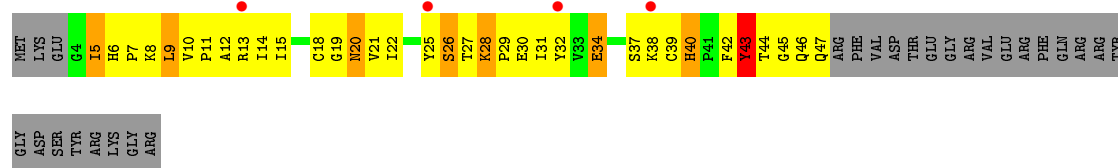
• Molecule 29: 50S RIBOSOMAL PROTEIN L30



• Molecule 30: 50S RIBOSOMAL PROTEIN L31



• Molecule 30: 50S RIBOSOMAL PROTEIN L31

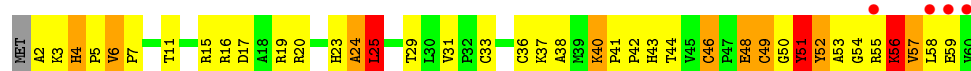


• Molecule 31: 50S RIBOSOMAL PROTEIN L32

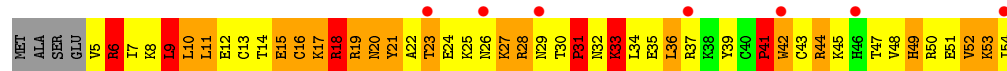




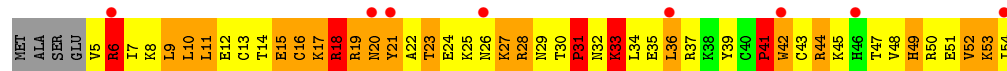
• Molecule 31: 50S RIBOSOMAL PROTEIN L32



• Molecule 32: 50S RIBOSOMAL PROTEIN L33



• Molecule 32: 50S RIBOSOMAL PROTEIN L33



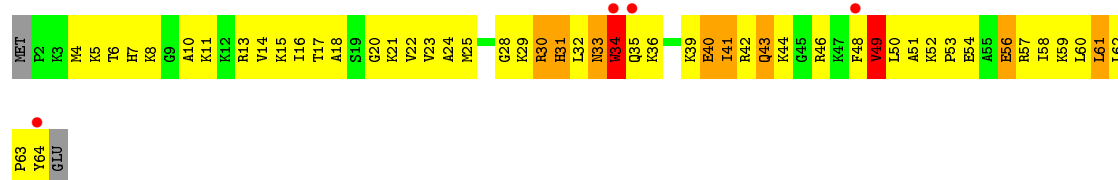
• Molecule 33: 50S RIBOSOMAL PROTEIN L34



• Molecule 33: 50S RIBOSOMAL PROTEIN L34

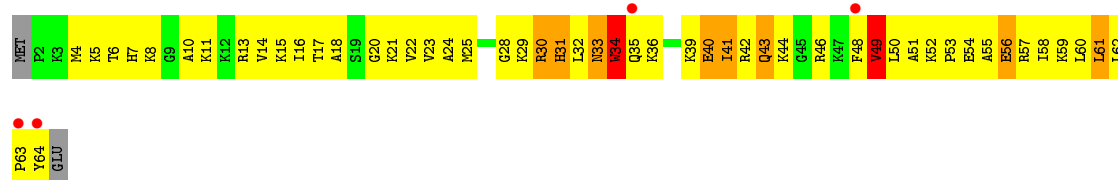


• Molecule 34: 50S RIBOSOMAL PROTEIN L35

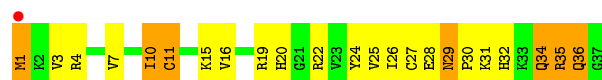


• Molecule 34: 50S RIBOSOMAL PROTEIN L35

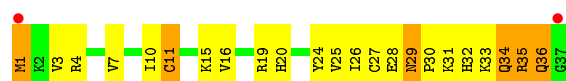




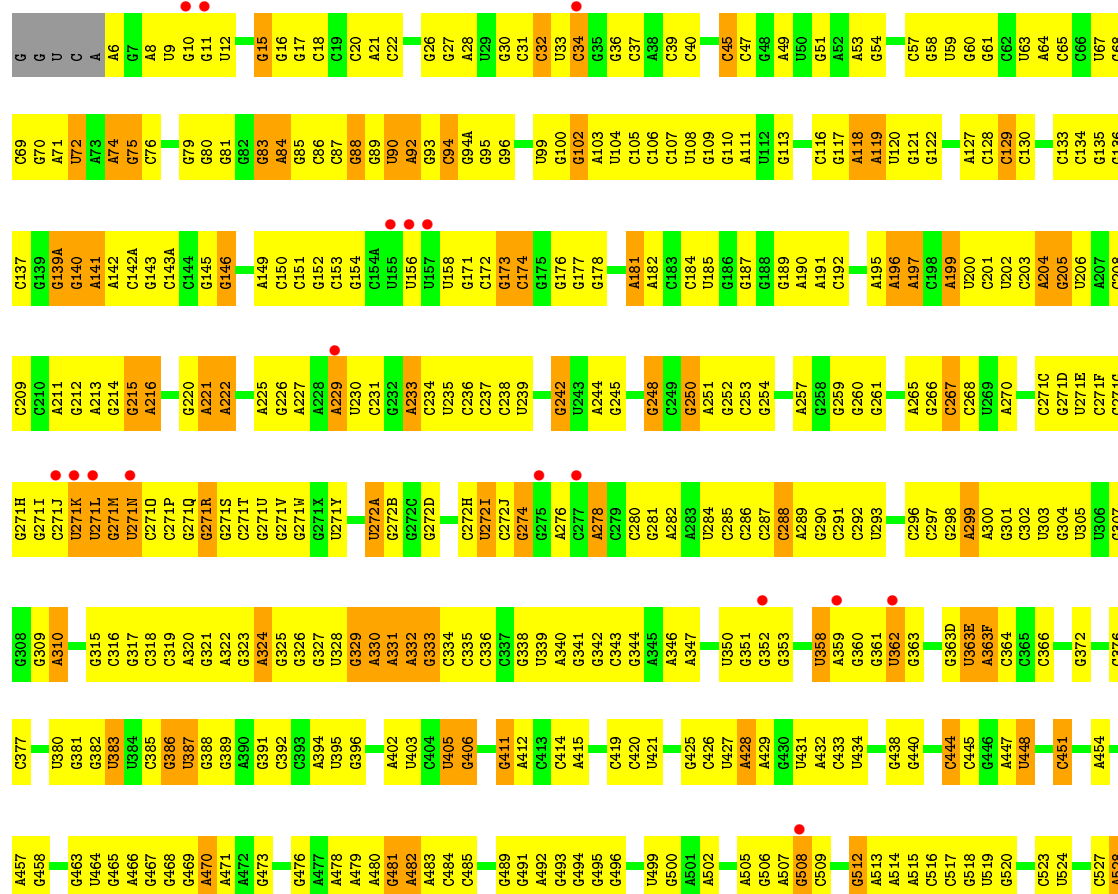
• Molecule 35: 50S RIBOSOMAL PROTEIN L36



• Molecule 35: 50S RIBOSOMAL PROTEIN L36



• Molecule 36: 23S RIBOSOMAL RNA



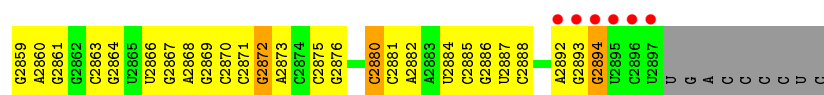
G1488	G1489	A1490	C1493	A1494	A1495	A1496	A1497	C1498	G1499	G1500	C1501	C1502	C1503	C1504	C1505	C1506	C1509	A1509A	A1509B	A1510	C1511	U1514	G1515	G1516	A1517	U1518	U1519	G1520	U1523	G1524	G1525	G1526	G1527	C1528	A1528A	G1529	C1530	C1531	C1532	C1533	U1534	A1535	C1536	G1537	G1538	G1539	U1540	G1541	A1542	G1543	A1544	C1545	C1546	C1547	C1548	G1487																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
G1418	A1419	G1420	G1421	G1424	G1425	G1426	A1427	G1428	G1429	G1430	U1431	C1432	U1433	A1434	C1435	C1437	A1445	C1445A	G1446	G1447	G1448	A1449	G1450	C1450A	C1451	A1452	U1453	U1454	G1459	G1469	A1460	G1461	G1462	C1463	C1464	G1465	G1466	C1467	C1468	A1469	G1470	A1471	A1472	G1473	G1474	G1475	C1476	A1477	G1478	G1479	G1480	U1481	G1482	G1484	G1485	A1486	G1487																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
G1344	G1348	A1349	U1352	A1353	A1354	G1355	A1359	A1360	A1361	C1362	C1363	G1364	A1365	A1366	A1367	G1368	G1369	G1374	C1375	A1378	A1379	G1380	A1384	G1385	C1386	C1387	C1388	U1390	A1395	A1396	U1397	C1398	C1399	G1400	G1401	C1402	C1403	C1404	U1405	U1406	C1407	C1408	C1409	G1410	C1411	A1412	G1413	G1414	U1415	C1416	C1417																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
U1273	A1274	A1275	A1278	G1280	G1281	U1282	G1283	A1284	G1285	A1286	A1287	U1288	C1289	C1290	C1291	U1292	C1293	C1297	C1298	G1299	U1300	A1301	A1302	C1305	C1306	G1310	G1311	C1314	U1315	U1316	A1317	C1318	G1319	G1320	A1321	C1327	G1328	U1329	C1330	A1331	G1332	C1333	G1334	U1335	A1336	G1337	C1338	U1339	U1340	U1341	G1342	G1343																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
A1204	U1205	G1206	C1207	C1208	G1210	G1211	G1212	A1213	A1214	G1215	G1216	C1221A	C1222	G1223	C1224	G1227	G1228	C1229	G1230	G1231	G1232	G1236	A1237	G1238	G1239	U1240	A1241	A1242	G1243	G1244	G1245	A1246	A1247	G1248	G1249	G1250	G1251	G1252	A1253	G1256	C1257	C1258	G1259	G1260	G1261	G1264	A1265	A1268	A1269	C1270	G1271	A1272																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
U1273	A1274	A1275	A1278	G1280	G1281	U1282	G1283	A1284	G1285	A1286	A1287	U1288	C1289	C1290	C1291	U1292	C1293	C1297	C1298	G1299	U1300	A1301	A1302	C1305	C1306	G1310	G1311	C1314	U1315	U1316	A1317	C1318	G1319	G1320	A1321	C1327	G1328	U1329	C1330	A1331	G1332	C1333	G1334	U1335	A1336	G1337	C1338	U1339	U1340	U1341	G1342	G1343																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
G1344	G1348	A1349	U1352	A1353	A1354	G1355	A1359	A1360	A1361	C1362	C1363	G1364	A1365	A1366	A1367	G1368	G1369	G1374	C1375	A1378	A1379	G1380	A1384	G1385	C1386	C1387	C1388	U1390	A1395	A1396	U1397	C1398	C1399	G1400	G1401	C1402	C1403	C1404	U1405	U1406	C1407	C1408	C1409	G1410	C1411	A1412	G1413	G1414	U1415	C1416	C1417																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
G1418	A1419	G1420	G1421	G1424	G1425	G1426	A1427	G1428	G1429	G1430	U1431	C1432	U1433	A1434	C1435	C1437	A1445	C1445A	G1446	G1447	G1448	A1449	G1450	C1450A	C1451	A1452	U1453	U1454	G1459	G1469	A1460	G1461	G1462	C1463	C1464	G1465	G1466	C1467	C1468	A1469	G1470	A1471	A1472	G1473	G1474	G1475	C1476	A1477	G1478	G1479	G1480	U1481	G1482	G1484	G1485	A1486	G1487																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
G1488	G1489	A1490	C1493	A1494	A1495	A1496	A1497	C1498	G1499	G1500	C1501	C1502	C1503	C1504	C1505	C1506	C1509	A1509A	A1509B	A1510	C1511	U1514	G1515	G1516	A1517	U1518	U1519	G1520	U1523	G1524	G1525	G1526	G1527	C1528	A1528A	G1529	C1530	C1531	C1532	C1533	U1534	A1535	C1536	G1537	G1538	G1539	U1540	G1541	A1542	G1543	A1544	C1545	C1546	C1547	C1548	G1487																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
U1549	U1550	U1551	U1552	U1553	U1554	U1555	U1556	U1557	U1558	U1559	U1560	U1561	U1562	U1563	U1564	U1565	U1566	U1567	U1568	U1569	U1570	U1571	U1572	U1573	U1574	U1575	U1576	U1577	U1578	U1579	U1580	U1581	U1582	U1583	U1584	U1585	U1586	U1587	U1588	U1589	U1590	U1591	U1592	U1593	U1594	U1595	U1596	U1597	U1598	U1599	U1600	U1601	U1602	U1603	U1604	U1605	U1606	U1607	U1608	U1609	U1610	U1611	U1612	U1613	U1614	U1615	U1616	U1617	U1618	U1619	U1620	U1621	U1622	U1623	U1624	U1625	U1626	U1627	U1628	U1629	U1630	U1631	U1632	U1633	U1634	U1635	U1636	U1637	U1638	U1639	U1640	U1641	U1642	U1643	U1644	U1645	U1646	U1647	U1648	U1649	U1650	U1651	U1652	U1653	U1654	U1655	U1656	U1657	U1658	U1659	U1660	U1661	U1662	U1663	U1664	U1665	U1666	U1667	U1668	U1669	U1670	U1671	U1672	U1673	U1674	U1675	U1676	U1677	U1678	U1679	U1680	U1681	U1682	U1683	U1684	U1685	U1686	U1687	U1688	U1689	U1690	U1691	U1692	U1693	U1694	U1695	U1696	U1697	U1698	U1699	U1700	U1701	U1702	U1703	U1704	U1705	U1706	U1707	U1708	U1709	U1710	U1711	U1712	U1713	U1714	U1715	U1716	U1717	U1718	U1719	U1720	U1721	U1722	U1723	U1724	U1725	U1726	U1727	U1728	U1729	U1730	U1731	U1732	U1733	U1734	U1735	U1736	U1737	U1738	U1739	U1740	U1741	U1742	U1743	U1744	U1745	U1746	U1747	U1748	U1749	U1750	U1751	U1752	U1753	U1754	U1755	U1756	U1757	U1758	U1759	U1760	U1761	U1762	U1763	U1764	U1765	U1766	U1767	U1768	U1769	U1770	U1771	U1772	U1773	U1774	U1775	U1776	U1777	U1778	U1779	U1780	U1781	U1782	U1783	U1784	U1785	U1786	U1787	U1788	U1789	U1790	U1791	U1792	U1793	U1794	U1795	U1796	U1797	U1798	U1799	U1800	U1801	U1802	U1803	U1804	U1805	U1806	U1807	U1808	U1809	U1810	U1811	U1812	U1813	U1814	U1815	U1816	U1817	U1818	U1819	U1820	U1821	U1822	U1823	U1824	U1825	U1826	U1827	U1828	U1829	U1830	U1831	U1832	U1833	U1834	U1835	U1836	U1837	U1838	U1839	U1840	U1841	U1842	U1843	U1844	U1845	U1846	U1847	U1848	U1849	U1850	U1851	U1852	U1853	U1854	U1855	U1856	U1857	U1858	U1859	U1860	U1861	U1862	U1863	U1864	U1865	U1866	U1867	U1868	U1869	U1870	U1871	U1872	U1873	U1874	U1875	U1876	U1877	U1878	U1879	U1880	U1881	U1882	U1883	U1884	U1885	U1886	U1887	U1888	U1889	U1890	U1891	U1892	U1893	U1894	U1895	U1896	U1897	U1898	U1899	U1900	U1901	U1902	U1903	U1904	U1905	U1906	U1907	U1908	U1909	U1910	U1911	U1912	U1913	U1914	U1915	U1916	U1917	U1918	U1919	U1920	U1921	U1922	U1923	U1924	U1925	U1926	U1927	U1928	U1929	U1930	U1931	U1932	U1933	U1934	U1935	U1936	U1937	U1938	U1939	U1940	U1941	U1942	U1943	U1944	U1945	U1946	U1947	U1948	U1949	U1950	U1951	U1952	U1953	U1954	U1955	U1956	U1957	U1958	U1959	U1960	U1961	U1962	U1963	U1964	U1965	U1966	U1967	U1968	U1969	U1970	U1971	U1972	U1973	U1974	U1975	U1976	U1977	U1978	U1979	U1980	U1981	U1982	U1983	U1984	U1985	U1986	U1987	U1988	U1989	U1990	U1991	U1992	U1993	U1994	U1995	U1996	U1997	U1998	U1999	U2000	U2001	U2002	U2003	U2004	U2005	U2006	U2007	U2008	U2009	U2010	U2011	U2012	U2013	U2014	U2015	U2016	U2017	U2018	U2019	U2020	U2021	U2022	U2023	U2024	U2025	U2026	U2027	U2028	U2029	U2030	U2031	U2032	U2033	U2034	U2035	U2036	U2037	U2038	U2039	U2040	U2041	U2042	U2043	U2044	U2045	U2046	U2047	U2048	U2049	U2050	U2051	U2052	U2053	U2054	U2055	U2056	U2057	U2058	U2059	U2060	U2061	U2062	U2063	U2064	U2065	U2066	U2067	U2068	U2069	U2070	U2071	U2072	U2073	U2074	U2075	U2076	U2077	U2078	U2079	U2080	U2081	U2082	U2083	U2084	U2085	U2086	U2087	U2088	U2089	U2090	U2091	U2092	U2093	U2094	U2095	U2096	U2097	U2098	U2099	U2100	U2101	U2102	U2103	U2104	U2105	U2106	U2107	U2108	U2109	U2110	U2111	U2112	U2113	U2114	U2115	U2116	U2117	U2118	U2119	U2120	U2121	U2122	U2123	U2124	U2125	U2126	U2127	U2128	U2129	U2130	U2131	U2132	U2133	U2134	U2135	U2136	U2137	U2138	U2139	U2140	U2141	U2142	U2143	U2144	U2145	U2146	U2147	U2148	U2149	U2150	U2151	U2152	U2153	U2154	U2155	U2156	U2157	U2158	U2159	U2160	U2161	U2162	U2163	U2164	U2165	U2166	U2167	U2168	U2169	U2170	U2171	U2172	U2173	U2174	U2175	U2176	U2177	U2178	U2179	U2180	U2181	U2182	U2183	U2184	U2185	U2186	U2187	U2188	U2189	U2190	U2191	U2192	U2193	U2194	U2195	U2196	U2197	U2198	U2199	U2200	U2201	U2202	U2203	U2204	U2205	U2206	U2207	U2208	U2209	U2210	U2211	U2212	U2213	U2214	U2215	U2216	U2217	U2218	U2219	U2220	U2221	U2222	U2223	U2224	U2225	U2226	U2227	U2228	U2229	U2230	U2231	U2232	U2233	U2234	U2235	U2236	U2237	U2238	U2239	U2240	U2241	U2242	U2243	U2244	U2245	U2246	U2247	U2248	U2249	U2250	U2251	U2252	U2253	U2254	U2255	U2256	U2257	U2258	U2259	U2260	U2261	U2262	U2263	U2264	U2265	U2266	U2267	U2268	U2269	U2270	U2271	U2272	U2273	U2274	U2275	U2276	U2277	U2278	U2279	U2280	U2281	U2282	U2283	U2284	U2285	U2286	U2287	U2288	U2289	U2290	U2291	U2292	U2293	U2294	U2295	U2296	U2297	U2298	U2299	U2300	U2301	U2302	U2303	U2304	U2305	U2306	U2307	U2308	U2309	U2310	U2311	U2312	U2313	U2314	U2315	U2316	U2317	U2318	U2319

C2659	C2660	C2661	C2662	C2665	C2666	C2667	C2668	C2669	C2672	C2673	C2681	C2682	C2683	C2685	C2686	C2687	C2688	C2689	C2690	C2691	C2692	C2693	C2694	C2695	C2696	C2697	C2698	C2699	C2700	C2701	C2702	C2703	C2704	C2710	C2711	C2712	C2713	C2714	C2715	C2716	C2717	C2718	C2719	C2720	C2721	C2722	C2723	C2724	C2725	C2726	C2732	C2733																																																											
G2428	G2429	G2430	G2431	G2432	G2433	G2434	G2438	G2439	G2440	G2441	G2442	G2443	G2444	G2448	G2454	G2455	G2456	G2457	G2458	G2461	G2462	G2463	G2464	G2465	G2466	G2467	G2468	G2469	G2470	G2471	G2472	G2473	G2474	G2475	G2476	G2477	G2478	G2485	G2486	G2487	G2488	G2489	G2490	G2491	G2492	G2493	G2499	G2502																																																															
A2503	A2504	A2505	A2506	A2507	A2508	A2509	A2511	A2512	A2513	A2514	A2515	A2518	A2519	A2520	A2523	A2524	A2525	A2526	A2527	A2528	A2529	A2530	A2533	A2534	A2537	A2538	A2539	A2542	A2543	A2544	A2545	A2546	A2552	A2553	A2554	A2555	A2556	A2557	A2558	A2562	A2563	A2564	A2565	A2566	A2567	A2568	A2569	A2570	A2571	A2572	A2573																																																												
C2355	C2358	C2359	C2360	C2361	C2364	C2365	C2366	C2367	C2369	C2370	C2371	C2372	C2373	C2374	C2375	C2376	C2377	C2378	C2383	C2384	C2385	C2386	C2387	C2388	C2389	C2390	C2391	C2392	C2393	C2394	C2395	C2396	C2397	C2398	C2402	C2403	C2406	C2407	C2408	C2409	C2410	C2413	C2414	C2415	C2416	C2417	C2418	C2419	C2420	C2421	C2422	C2423	C2424	C2425																																																									
G2285	G2286	G2287	G2288	G2289	G2290	G2291	G2292	G2293	G2294	G2295	G2296	G2297	G2298	G2299	G2303	G2304	G2305	G2306	G2307	G2308	G2309	G2310	G2311	G2312	G2313	G2314	G2315	G2316	G2317	G2318	G2319	G2320	G2327	G2328	G2329	G2330	G2331	G2332	G2333	G2334	G2340	G2341	G2342	G2343	G2344	G2345	G2346	G2347	G2348	G2349	G2350	G2351	G2352																																																										
G2192	G2193	G2194	G2195	G2196	G2197	G2198	G2199	G2200	G2201	G2202	G2206	G2207	G2208	G2209	G2210	G2211	G2212	G2213	G2214	G2215	G2216	G2217	G2218	G2219	G2220	G2221	G2222	G2223	G2224	G2225	G2226	G2227	G2228	G2229	G2230	G2231	G2232	G2233	G2234	G2235	G2236	G2237	G2238	G2239	G2240	G2241	G2242	G2243	G2244	G2245	G2246	G2247	G2248	G2249	G2257	G2258	G2259	G2260	G2261	G2262	G2263	G2264	G2265	G2266	G2267	G2268	G2269	G2270	G2271	G2272	G2273	G2274	G2275	G2276	G2277	G2278	G2279	G2280	G2281	G2282	G2283	G2284																													
C2055	C2056	A2060	A2061	A2062	C2066	C2067	C2068	C2069	G2072	C2073	C2074	C2075	C2078	C2079	C2080	C2081	C2082	C2087	C2088	C2092	C2093	C2096	C2097	C2098	C2099	C2100	C2101	C2102	C2103	C2104	C2105	C2106	C2107	C2108	C2109	C2110	C2111	C2112	C2113	C2114	C2115	C2116	C2117	C2118	C2119	C2120	C2121	C2122	C2123	C2124	C2125	C2126	C2127	C2128	C2129	C2130	C2131	C2132	C2133	C2134	C2135	C2136	C2137	C2138	C2139	C2140	C2145	C2146	C2147	C2148	C2149	C2150	C2151	C2152	C2153	C2154	C2155	C2156	C2157	C2158	C2159	C2160	C2161	C2162	C2163	C2166	C2167	C2168	C2169	C2170	C2171	C2172	C2173	C2174	C2175	C2176	C2177	C2178	C2179	C2180	C2181	C2182	C2183	C2184	C2185	C2186	C2187	C2188	C2189	C2190	C2191
G1980	A1981	G1982	G1983	G1984	G1985	G1986	G1987	G1988	G1989	G1990	G1991	G1992	G1993	G1994	G1995	G1996	G1997	G1998	G1999	G2000	G2001	G2002	G2007	G2008	G2009	G2010	G2011	G2012	G2013	G2014	G2015	G2016	G2019	G2020	G2021	G2022	G2023	G2024	G2025	G2026	G2027	G2030	G2031	G2032	G2033	G2034	G2035	G2036	G2037	G2038	G2039	G2040	G2041	G2042	G2043	G2052																																																							
C1887	G1888	A1889	G1889	G1890	A1891	G1892	G1893	G1894	A1895	G1896	G1897	G1898	G1899	G1900	G1901	G1902	G1903	G1906	G1907	G1908	G1909	G1910	G1911	G1912	G1913	G1914	G1915	G1916	G1917	G1918	G1919	G1920	G1921	G1922	G1925	G1926	G1927	G1928	G1929	G1930	G1931	G1932	G1933	A1936	A1937	A1938	A1939	A1946	G1947	G1948	G1949	A1952	G1953	G1954	G1955	G1956	G1957	G1958	G1959	G1960	G1961	G1962	G1963	G1964	G1965	G1966	G1967	G1968	G1969	G1970	G1971	G1972	G1973																																						
C1800	G1801	G1807	G1808	G1809	G1810	G1811	G1812	G1813	G1816	G1817	G1818	G1819	G1820	G1821	G1826	G1827	G1828	G1831	G1835	G1836	G1837	G1841	G1842	G1843	G1844	G1847	G1851	G1852	G1853	G1854	G1858	G1859	G1860	G1861	G1862	G1863	G1864	G1865	G1866	G1867	G1868	G1869	G1877	G1878	G1879	G1880	G1881	G1882	G1883	G1884	G1885	G1886																																																											
C1708	C1709	C1710	C1711	C1712	C1713	C1714	C1715	C1716	C1717	C1718	C1719	C1720	C1721	C1722	C1723	C1724	C1725	C1726	C1727	C1728	C1729	C1730	C1731	C1732	C1733	C1734	C1735	C1736	C1737	C1738	C1739	C1740	C1741	C1742	C1743	C1744	C1745	C1746	C1747	C1748	C1749	C1750	C1751	C1752	C1753	C1754	C1755	C1756	C1757	C1758	C1759	C1760	C1761	C1762	C1763	C1764	C1765	C1766	C1767	C1768	C1769	C1770	C1771	C1772	C1773	C1774	C1775	C1776	C1777	C1778	C1779	C1780	C1781	C1782	C1783	C1784	C1785	C1786	C1787	C1788	C1789	C1790	C1791	C1796	C1797	C1798	C1799																								
G1633	G1634	G1638	G1639	G1640	G1641	G1642	G1643	G1647	G1648	G1649	G1650	G1651	G1652	G1653	G1654	G1655	G1656	G1658	G1659	G1660	G1661	G1662	G1663	G1664	G1665	G1666	G1667	G1668	G1669	G1670	G1671	G1672	G1673	G1674	G1675	G1676	G1677	G1678	G1681	G1682	G1683	G1684	G1685	G1688	G1689	G1692	G1693	G1694	G1695	G1696	G1697	G1698	G1699	G1700	G1701																																																								
A1554	A1558	G1559	G1560	G1563	G1564	A1567	G1568	A1569	A1570	A1571	A1572	A1573	C1574	C1577	C1578	C1579	C1582	A1583	C1584	A1586	A1587	C1588	C1589	C1590	G1591	C1592	G1593	G1594	G1595	A1596	A1597	C1598	C1599	G1600	G1601	A1602	A1603	C1607	A1608	A1609	A1610	G1611	G1612	G1613	G1614	C1617	A1618	C1625	G1626	A1632																																																													



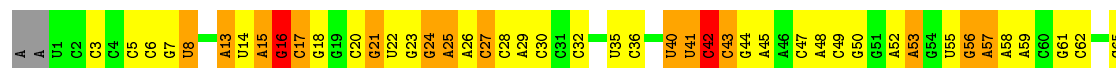
G1633	A1588	U1489	G1424	G1346	G1208	U1141	A1070	C1006	A833	A861	U787	G710	G654H
A1694	G1559	A1490	G1425	G1347	G1209	U1142	G1071	A1009	G834	G862	A788	G711	G654I
C1638	G1560	C1493	G1426	A1349	U1210	A1142A	C1072	A1010	C935	A863	A789	U714	A654J
U1639	A1494	C1493	A1427	U1352	G1212	A1143	G1074	G1011	C936	G864	C790	U715	G654K
G1640	A1495	A1495	G1428	U1352	G1213	G1146	G1075	U1012	G840	C865	G791	A716	G654L
A1641	A1496	A1496	G1429	A1353	G1214	C1147	C1076	C1013	A841	C866	C792	G717	G654M
G1642	U1497	U1497	G1430	G1354	G1215	A1148	U1077	U1014	G842	G869	A793	G717	G654N
G1643	A1498	A1498	U1431	G1355	G1216	C1149	A1078	A1019	G843	A870	C796	A722	G654O
G1644	G1500	A1287	U1432	A1359	G1221A	C1150	C1079	U1020	A844	C876	C797	A723	G654P
C1648	G1501	A1287	U1433	A1360	G1222	G1152	C1080	A1021	A845	C877	G723	U724	G654Q
A1571	C1502	G1289	G1223	G1361	G1223	C1153	U1081	G1022	A846	U877	U725		G654R
A1572	U1503	C1290	G1224	C1362	C1224	G1154	U1082	U1023	G847	A878	G801	G729	G654S
G1651	G1504	C1291		G1363		G1155	U1083	U1024	G848	G879	C730	C730	A654U
A1652	C1505	U1292	G1227	G1364	G1227	A1156	U1084	G1025	A853	G880	C732	C732	A654V
G1653	G1506	C1293	G1228	G1365	G1228	U1159	A1086	U1026	G854	G882	G733	G733	G656
A1654	C1507	C1297	G1229	A1366	G1229	G1160	G1087	A1027	C855	G883	G809	U657	U657
C1657	U1509	G1297	G1230	G1367	G1230	C1161	A1088	A1028	G856	C884	U810	C736	C658
G1658	A1509A	G1298	G1231	G1368	G1231	C1162	G1089	A1029	A857	C885	U811	C737	C659
U1659	A1509B	G1299	G1232	G1369	G1232	G1163	U1090	G1030	U858	C886	C812	C737	C660
C1660	G1510	U1300		U1301		G1164	G1091	G1031	U859	C887	U813	C739	C661
G1661	C1511	A1301	G1236	A1378	G1236	G1165	C1092	A1032	A860	C888	C814	U740	C662
C1662	U1514	A1302	G1237	G1380	G1237	U1166	U1093	U1033	C861	C889	C815	G741	C663
G1663	G1515	G1303	G1238	G1381	G1238	C1166	U1094	G1034	G862	C890	C816	G742	C664
A1664	C1516	C1304	G1239	G1382	G1239	U1167	A1095	U1035	U863	A890		G743	C665
A1665	A1517	C1305	U1240	A1384	U1240	G1168	U1096	G1036	C964	C894	A819	G744	G666
G1666	C1518	C1306	A1241	G1385	A1241	G1169	U1097	G1037		U895	U828	G745	U667
G1667	U1518	U1453	A1242	G1386	A1242	G1170	A1098	C1038	U869	A896	A824	U747	G668
A1668	G1519	G1455	G1310	C1387	G1243	G1171	U1099	G1039	C970	C897	C825	U747	G669
G1669	U1520	G1455	G1311	G1388	G1244	G1172	U1100	C1040	C971	C898	U826	G748	A670
C1670	U1523	G1459	G1314	G1389	G1245	A1174	U1101	G1041	G872	A899	U827	C751	C671
	G1524	A1460	C1315	U1390	A1246	U1175	C1102	G1042	A973	A900	U828	A751	C672
G1674	G1525	G1461	C1316	A1395	A1247	G1176	A1103	C1043	C974	A901	U829	A752	C673
A1676	G1526	C1462	U1317	U1396	G1248	A1177	C1104	G1044	C975	C902	G830	C753	G674
A1677	G1527	C1463	G1463	U1397	U1249	C1178	U1105	A1045	G877	C903	G831	C754	A675
C1678	A1528	C1464	G1465	C1398	G1250	C1179	G1106	G1046	G878	C904	G832	C755	A676
	A1528A	G1465	G1319	C1399	G1251	C1180	G1107	G1047	G879	U905	U833	C756	
G1681	G1529	G1466	C1320	C1399	G1252	C1181	U1108	A1048	A980	G906	C834	C756	
C1682	C1530	C1467	A1321	G1400	A1253	A1182	U1109	C1049	A989	U907			G684
G1682	C1531	A1468	G1401	G1402		G1183	G1110	A1050	A883	A910	C838	G760	A685
C1683	G1532	C1469	G1403	C1403	G1256	G1184	G1111	G1051	A884	A911	U839	A761	G686
C1684	U1533	G1470	C1404	C1404	C1257	C1185	G1112	C1052	C985			A764	U688
C1685	U1534	A1471	A1472	U1405	C1258	G1186	U1113	C1053	C885	C914	G843		A689
U1687	A1535	A1472	A1473	U1406	G1259	G1187	G1114	A1054	C886	C915	C844	G769	G690
A1689	C1536	C1474	G1473	U1407	G1260	U1188	G1115	G1055	G887	C916	G845	G770	C691
G1692	G1537	C1475	C1475	C1408	C1261	A1189	G1056	A1057	A888	G917	C846	G771	C692
U1693	U1538	G1476	G1476	C1409	C1262	G1190	G1057	G1058	G889	A917	U847	C772	C693
C1694	G1539	A1477	C1477	G1410	U1263	G1191	G1059	C991	A990	A918	G848	U773	U694
G1695	U1540	A1477	A1477	G1411	G1264	G1192	U1060	C992	C891	A918	A849	A774	G695
G1696	G1541	G1478	G1478	C1412	A1265	G1193	U1061	C993	C992	U922	G852	G775	G696
G1697	A1542	G1479	G1480	G1413			G1062	C994	C924	C923	G853	G776	C697
C1698	C1543	U1481	G1481	G1413	A1268	U1198	A1132	C995	C925	C924	G854	G780	G700
A1699	A1544	G1482	U1482	G1416	A1269	U1199	U1133	G1063	G855	A926	G855	A781	U703
U1699	U1545	G1483	G1483	C1417	C1270	G1203	C1135	C1064	A997	G927	C856	A782	G704
G1700	C1547	G1484	G1484	G1418	G1271	A1204	U1065	U1066	G997	G928	C857	A783	
A1701	C1548	G1485	G1485	G1419	A1272	U1205	G1136	U1067	C998	U930	C858	A784	
C1708		G1486	G1486	U1420	U1273	G1206	G1137	A1068	U999	G859	U858	G785	C708
		G1487	G1487	U1421	A1274	G1207	G1138	G1069		G931			U709
		G1488	C1345	G1421	A1275	C1207	G1139	A1069	C1005	G932	U860	C786	

U2786	C2715	G2642	G2556	G2481	G2410	C2342	A2268	G2187	U2122	C2055	A1889	G1807	U1709
C2787	U2716	G2643	G2557	G2482	G2413	C2343	A2274	C2188	G2123	G2056	G1899	G1808	C1740
C2788	G2717	G2644	C2558	G2483	G2414	U2344	C2275	U2189	G2124	A2060	G1899	U1808	U1713
C2789	G2718	G2645	C2559	G2484	G2415	G2345	G2276	G2190	G2125	G2061	A1900	A1810	G1714
C2790	U2719	C2646	U2560	G2485	G2416	G2346	G2277	G2191	A2126	A2062	G1901	G1811	G1717
C2791	U2720	G2647	U2561	G2486	G2417	U2347	A2278	G2192	C2127	C2063	G1902	A1812	G1718
C2792	A2721	U2649	A2562	G2487	C2417	U2348	G2279	G2193	C2128	G1985	G1903	G1813	G1719
C2793	U2722	U2650	A2563	G2488	A2418	G2349	G2280	G2194	G2131	C2064	G1906	G1814	U1720
C2794	G2723	C2651	A2564	G2489	U2419	G2350	G2281	C2195	U2132	C2065	G1907	G1816	G1721
C2795	C2724	C2652	A2565	G2490	G2420	G2351	C2282	C2196	U2133	C2066	G1908	G1817	A1722
C2796	U2725	G2653	G2567	U2491	G2421	A2352	C2283	U2197	G2133	G1989	C1908	G1818	U1739
C2797	U2726	A2654	C2568	U2492	A2422	A2353	C2284	A2198	A2134	U1980	G1909	U1819	G1740
C2798	G2727	G2655	G2569	U2493	U2423	C2355	C2285	A2199	A2135	G1981	G1910	A1819	A1849
C2799	U2728	U2656	C2570	U2494	U2424	C2356	A2287	C2200	C2136	G2069	U1911	U1820	G1740
A2801	G2729	A2657	C2571	C2499	C2425	G2357	A2288	C2201	C2137	C2072	A1912	A1821	C1745A
A2802	A2730	C2658	A2572	G2501	A2426	C2358	G2289	C2202	C2138	C2073	A1913	A1822	G1746
C2803	G2731	G2659	C2573	G2502	G2427	C2359	U2290	G2203	C2139	U2074	A1914	G1826	G1747
C2804	C2732	A2660	A2574	A2503	G2428	A2360	G2291	A2208	G2140	U2075	G1997	G1827	G1747A
C2805	G2733	G2661	U2575	U2504	A2430	A2361	C2292	U2218	C2141	C2076	G1998	G1828	G1748
C2806	U2734	A2662	G2576	G2505	U2431	C2364	C2293	A2209	C2142	C2077	U1917	G1829	A1749
C2807	G2735	G2663	U2577	G2506	A2432	G2365	C2294	U2219	G2143	G2078	A2001	G1831	A1750
C2808	C2736	A2664	G2578	U2507	U2433	A2366	C2295	G2220	G2144	G2080	G1921	G1835	C1751
C2809	U2737	G2665	G2579	G2508	A2434	A2367	U2296	G2221	G2145	C2081	G1922	G1836	C1752
C2810	A2738	C2666	U2580	G2509	G2435	A2368	C2297	G2222	U2146	A2082	C2007	G1837	G1753
C2811	G2739	G2667	G2581	U2510	U2436	G2370	A2298	G2223	G2147	C2083	C1925	G1838	G1754
C2812	U2740	C2668	G2582	G2511	U2437	G2371	G2299	G2224	G2148	U2086	U1926	C1839	A1755
C2813	G2741	G2669	U2583	C2512	A2438	G2372	G2300	G2225	G2149	G2087	C2008	G1841	U1762
C2814	A2742	A2670	G2584	U2513	A2439	G2373	G2301	A2226	G2150	G2088	G2010	G1842	G1763
C2815	C2743	G2671	U2585	G2514	G2440	G2374	G2302	A2227	G2151	U2089	G2011	G1843	G1764
C2816	G2744	A2672	G2586	C2515	C2441	G2375	A2303	G2228	G2152	G2090	G1931	G1844	C1765
C2817	U2745	G2673	U2587	U2516	C2442	G2376	G2304	G2229	G2153	U2091	A1932	U1766	U1766
C2818	C2746	U2682	G2588	G2517	U2443	A2377	G2305	G2230	G2154	U2092	G1933	A1847	C1771
C2819	U2747	G2683	U2589	U2518	G2444	A2378	G2306	G2231	G2155	C2093	A1936	U1851	G1772
C2820	G2748	C2684	G2590	C2519	U2445	G2379	G2307	G2232	G2156	U2094	A1937	C1852	A1773
C2821	A2749	G2685	U2591	G2520	G2446	A2380	G2308	G2233	G2157	C2095	A1938	A1853	G1774
C2822	U2750	C2686	G2592	U2521	A2447	G2381	A2309	G2234	G2158	U2096	U1946	A1854	U1775
C2823	G2751	G2687	U2593	G2522	U2448	G2382	A2310	G2235	G2159	C2097	U1947	G1858	G1776
C2824	U2752	U2688	G2594	U2523	A2449	G2383	A2311	G2236	G2160	G2100	C1948	G1859	U1777
C2825	C2753	U2689	U2595	G2524	G2450	G2384	U2312	G2237	C2161	G2101	C1949	G1860	U1778
C2826	G2754	G2690	U2596	U2525	G2451	G2385	G2313	G2238	G2162	U2102	G1948	G1861	U1779
C2827	U2755	C2691	U2597	G2526	G2452	G2386	G2314	G2239	C2163	G2103	C1949	G1862	A1780
C2828	C2756	U2692	U2598	U2527	U2453	G2387	G2315	G2240	G2164	C2104	G1949	G1863	C1781
C2829	U2757	G2693	U2599	U2528	G2454	U2388	G2316	G2241	A2167	G2105	A1952	G1864	G1782
C2830	G2758	C2694	U2600	U2529	G2455	A2389	G2317	G2242	A2168	C2030	A1953	G1865	A1783
C2831	U2759	G2695	U2601	G2530	G2456	U2390	G2318	G2243	G2169	A2031	G1954	G1866	A1784
C2832	C2760	C2696	U2602	U2531	U2457	G2391	G2319	U2244	A2170	G2032	U1955	A1877	A1786
C2833	G2761	G2697	G2603	U2532	G2458	A2392	A2320	U2245	A2171	C2033	C1958	G1878	A1787
C2834	U2762	C2698	U2604	U2533	G2459	A2393	G2321	U2246	G2172	G2034	G1959	C1879	C1790
C2835	G2763	U2699	U2605	G2534	U2460	G2394	G2322	G2247	C2173	G2035	U1963	C1880	A1791
C2836	C2764	C2700	U2606	U2535	G2461	U2395	G2323	A2247	A2174	C2036	C1967	C1881	U1796
C2837	U2765	G2701	U2607	U2536	G2462	G2396	G2324	G2248	C2175	U2037	G1968	G1882	C1797
C2838	G2766	C2702	U2608	U2537	G2463	G2397	G2325	U2249	A2176	C2038	C1969	A1883	U1798
C2839	U2767	U2703	U2609	U2538	G2464	U2398	G2326	U2257	C2177	G2039	A1970	A1884	G1799
C2840	C2768	G2704	U2610	G2539	G2465	U2399	G2327	C2258	G2178	C2040	C1971	A1885	C1800
C2841	U2769	C2705	U2611	U2540	G2466	G2402	A2328	C2259	U2179	C2041	U1963	A1886	G1801
C2842	G2770	U2706	U2612	U2541	G2467	C2403	G2329	C2260	U2180	G2042	C1967	G1887	
C2843	C2771	C2707	U2613	G2542	G2468	G2404	G2330	C2261	G2181	A2043	G1968	A1888	
U2847	U2772	G2708	U2614	U2543	G2469	G2405	G2331	C2262	G2182	C2044	C1969	A1889	
G2848	C2773	C2709	U2615	U2544	A2470	G2406	G2332	C2263	G2183	C2045	A1970	A1890	
U2849	U2774	C2710	U2616	U2545	G2471	U2407	G2333	C2264	G2184	G2046	A1971	C1891	
G2852	C2775	U2709	U2617	U2546	G2472	U2408	G2334	C2265	G2185	G2047	A1972	G1892	
C2853	U2776	G2711	U2618	U2547	U2473	G2409	G2335	C2266	G2186	G2048		G1893	
C2854	G2777	U2712	U2619	U2548	U2474		G2336	C2267	G2187	G2049		G1894	
C2855	C2778	A2711	U2620	U2549	G2475		G2337	C2268	G2188			G1895	
C2856	U2779	U2713	U2621	U2550	G2476		G2338	C2269	G2189			G1896	
C2857	G2780	A2712	U2622	U2551	A2477		G2339	C2270	G2190			G1897	
C2858	C2781	G2714	U2623	U2552	G2478		G2340	C2271	G2191			G1898	
C2859	U2782	G2715	U2624	U2553			G2341	C2272	G2192			G1899	
C2860	C2783	C2716	U2625	U2554			G2342	C2273	G2193			G1900	
C2861	G2784	G2717	U2626	U2555			G2343	C2274	G2194			G1901	
C2862	U2785	U2718	U2627	U2556			G2344	C2275	G2195			G1902	
C2863	C2786	C2719	U2628	U2557			G2345	C2276	G2196			G1903	
C2864	U2787	U2720	U2629	U2558			G2346	C2277	G2197			G1904	
C2865	G2788	G2721	U2630	U2559			G2347	C2278	G2198			G1905	
C2866	C2789	A2721	U2631	U2560			G2348	C2279	G2199			G1906	
C2867	U2790	U2722	U2632	U2561			G2349	C2280	G2200			G1907	
C2868	G2791	G2723	U2633	U2562			G2350	C2281	G2201			G1908	
C2869	C2792	C2724	U2634	U2563			G2351	C2282	G2202			G1909	
C2870	U2793	U2725	U2635	U2564			G2352	C2283	G2203			G1910	
C2871	G2794	A2726	U2636	U2565			G2353	C2284	G2204			G1911	
C2872	C2795	G2654	G2569	U2566			A2287	C2285	G2205			G1912	
C2873	U2796	U2655	C2570	U2567			A2288	C2286	G2206			A1913	
C2874	G2797	U2656	C2571	U2568			G2289	C2287	G2207			A1914	
C2875	A2798	A2657	A2572	U2569			U2290	C2288	G2208			A1915	
C2876	C2799	C2658	C2573	G2501			G2291	C2289	G2209			A1916	
C2877	U2790	G2659	A2574	A2503			C2292	C2290	G2210			A1917	
C2878	G2791	A2660	U2575	U2504			C2293	C2291	G2211			A1918	
C2879	C2792	G2661	G2576	G2505			C2294	C2292	G2212			A1919	
C2880	U2793	A2662	U2577	U2506			C2295	C2293	G2213			A1920	
C2881	G2794	G2663	U2578	G2507			U2296	C2294	G2214			A1921	
C2882	C2795	C2664	G2579	G2508			C2297	C2295	G2215			A1922	
C2883	U2796	G2665	U2580	G2509			G2298	C2296	G2216			A1923	
C2884	G2797	C2666	U2581	U2510			A2299	C2297	G2217			A1924	
C2885	U2798	G2667	G2582	G2511			G2300	C2298	G2218			A1925	
C2886	C2799	C2668	U2583	C2512			G2301	C2299	G2219			A1926	
C2887	G2790	G2669	G2584	U2513			G2302	C2300	G2220			A1927	
C2888	U2791	A2670	U2585	G2514			G2303	C2301	G2221			A1928	
C2889	C2792	G2671	U2586	C2515			G2304	C2302	G2222			A1929	
C2890	G2793	A2672	G2587	U2516			G2305	C2303	G2223			A1930	
C2891	U2794	G2673	U2588	G2517			G230						



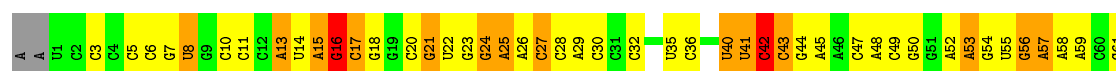
• Molecule 37: 5S RIBOSOMAL RNA

Chain BB: 33% 45% 16% . .



• Molecule 37: 5S RIBOSOMAL RNA

Chain DB: 29% 49% 16% . .



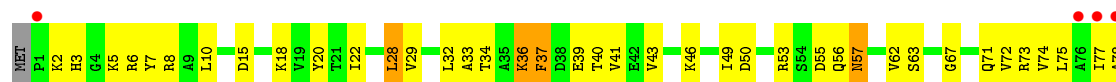
• Molecule 38: 50S RIBOSOMAL PROTEIN L1

Chain BC: 6% 48% 45% 7%

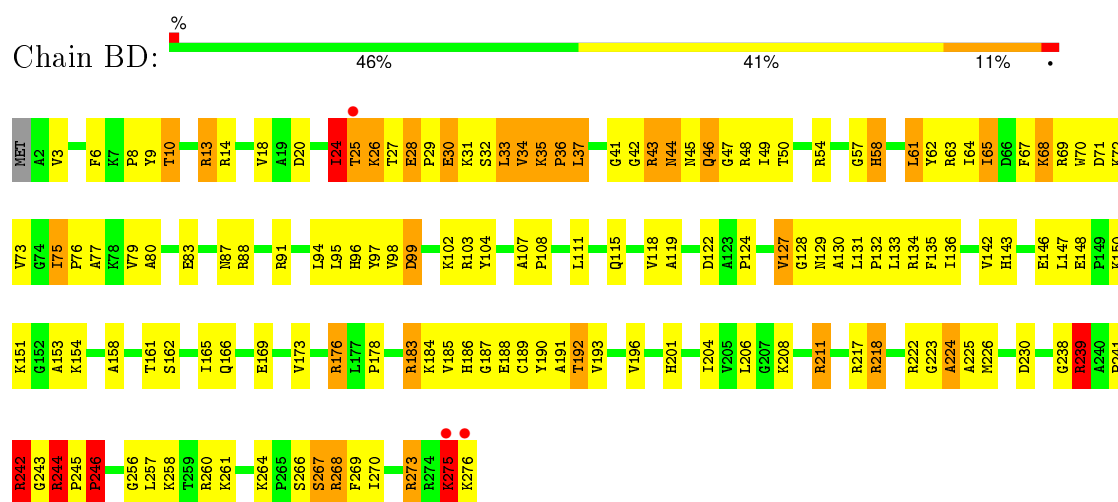


• Molecule 38: 50S RIBOSOMAL PROTEIN L1

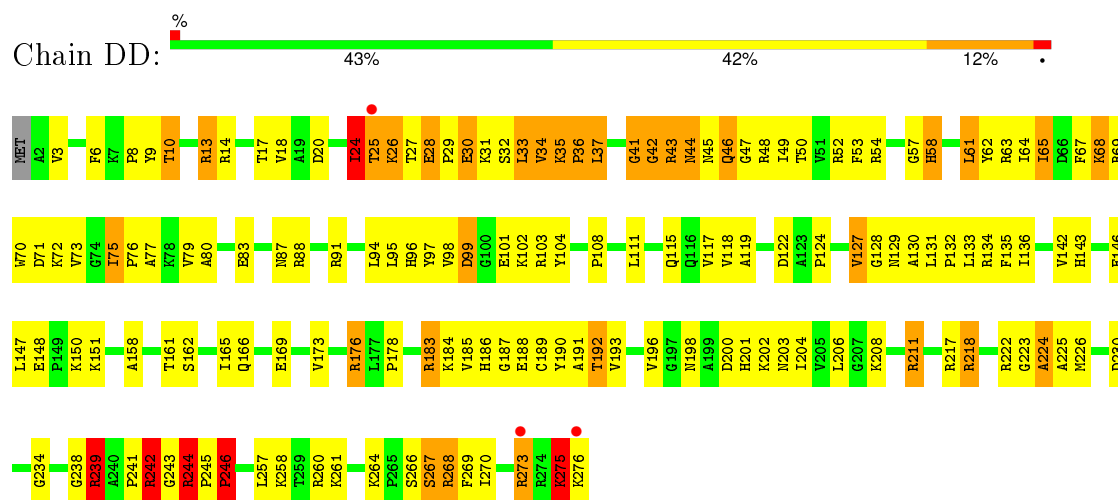
Chain DC: 13% 48% 44% 7%



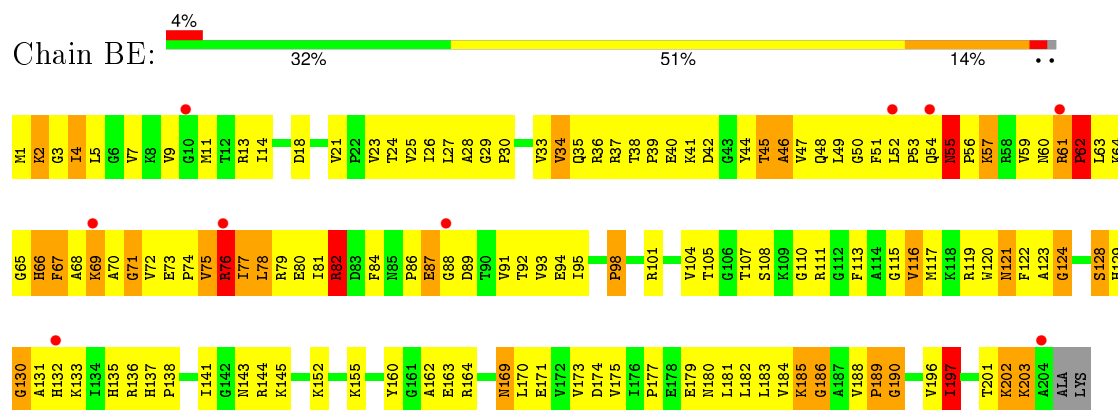
• Molecule 39: 50S RIBOSOMAL PROTEIN L2



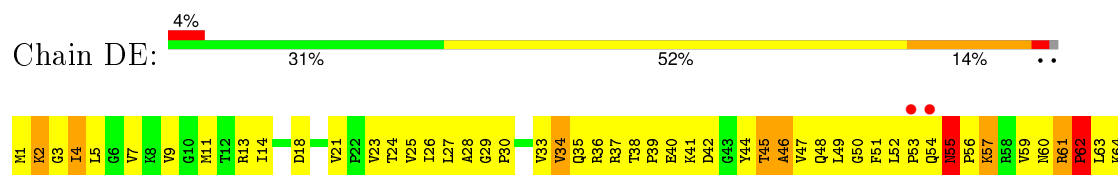
• Molecule 39: 50S RIBOSOMAL PROTEIN L2

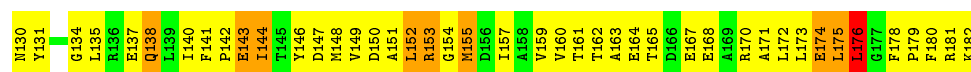


• Molecule 40: 50S RIBOSOMAL PROTEIN L3

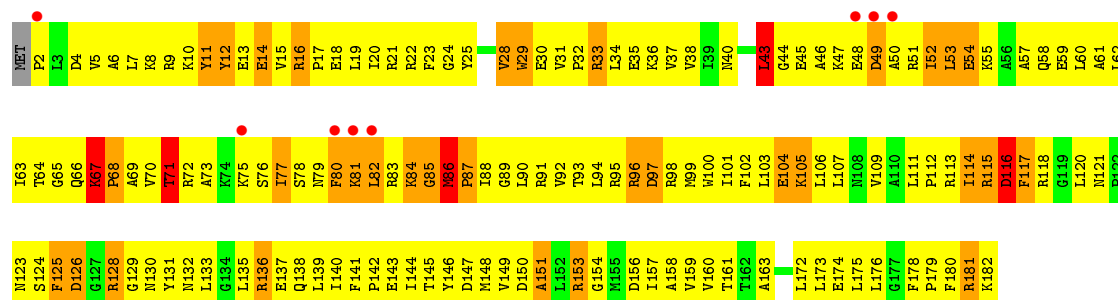


• Molecule 40: 50S RIBOSOMAL PROTEIN L3

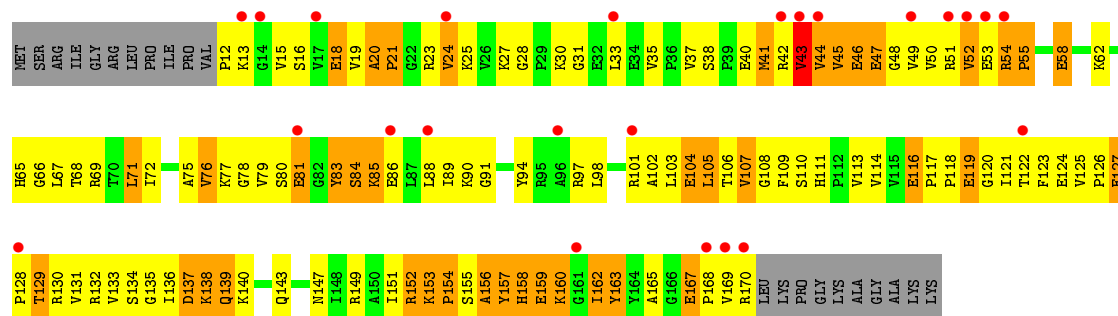
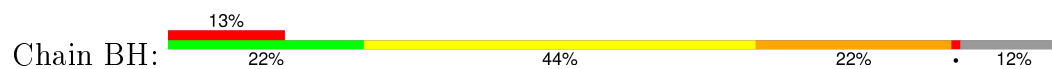




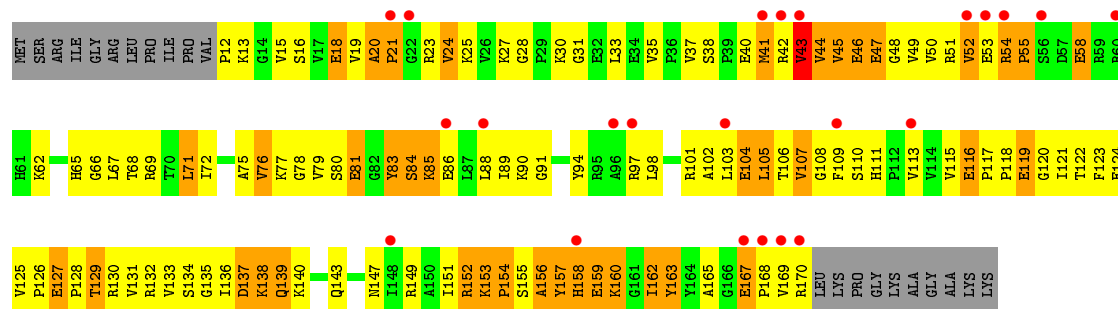
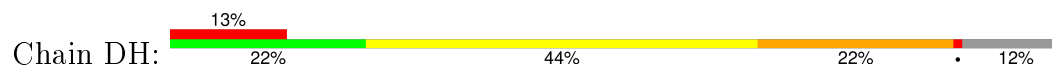
• Molecule 42: 50S RIBOSOMAL PROTEIN L5



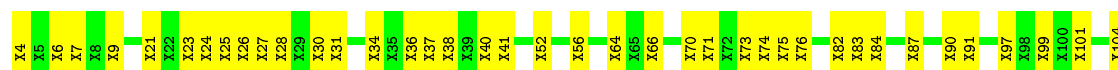
• Molecule 43: 50S RIBOSOMAL PROTEIN L6



• Molecule 43: 50S RIBOSOMAL PROTEIN L6

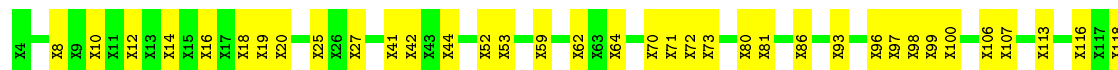


• Molecule 44: 50S RIBOSOMAL PROTEIN L10

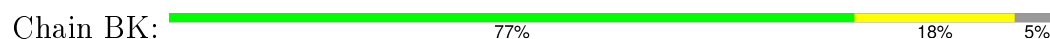




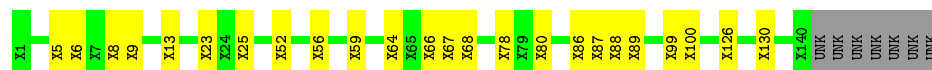
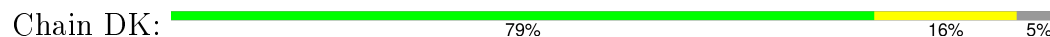
• Molecule 44: 50S RIBOSOMAL PROTEIN L10



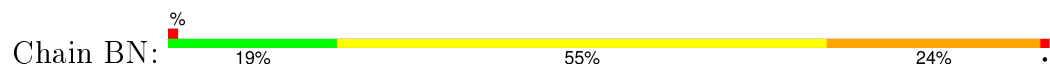
• Molecule 45: 50S RIBOSOMAL PROTEIN L11



• Molecule 45: 50S RIBOSOMAL PROTEIN L11



• Molecule 46: 50S RIBOSOMAL PROTEIN L13

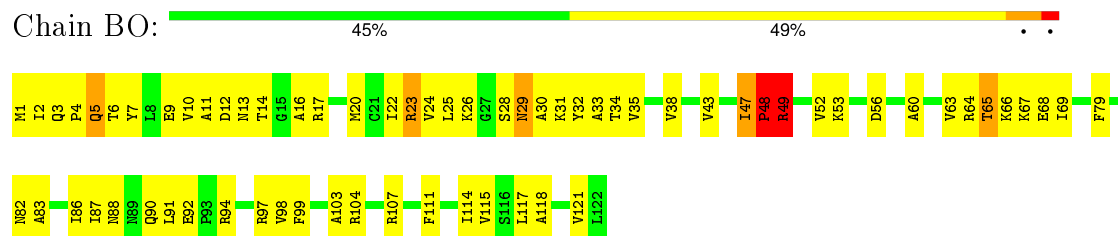


• Molecule 46: 50S RIBOSOMAL PROTEIN L13

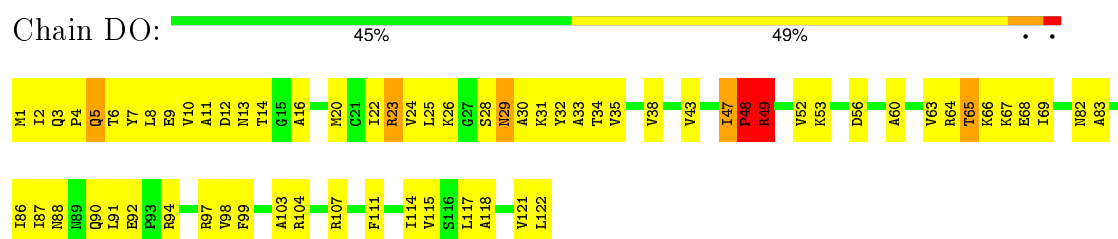




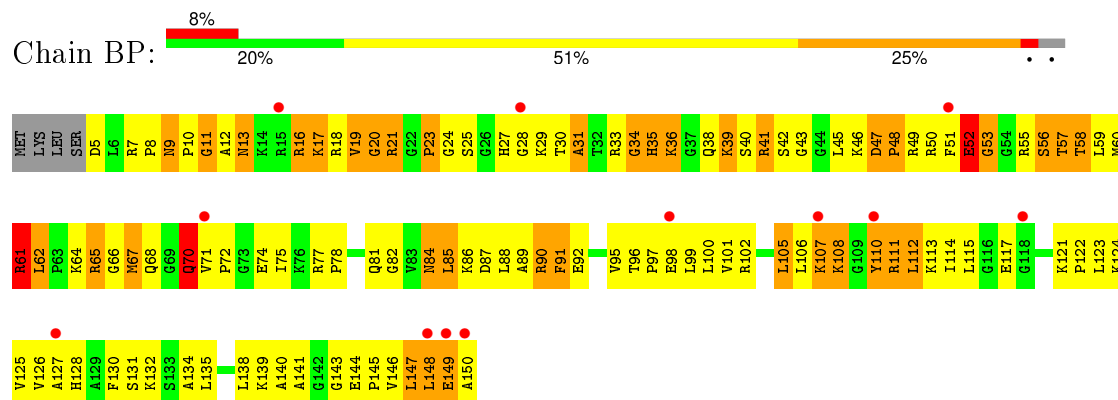
• Molecule 47: 50S RIBOSOMAL PROTEIN L14



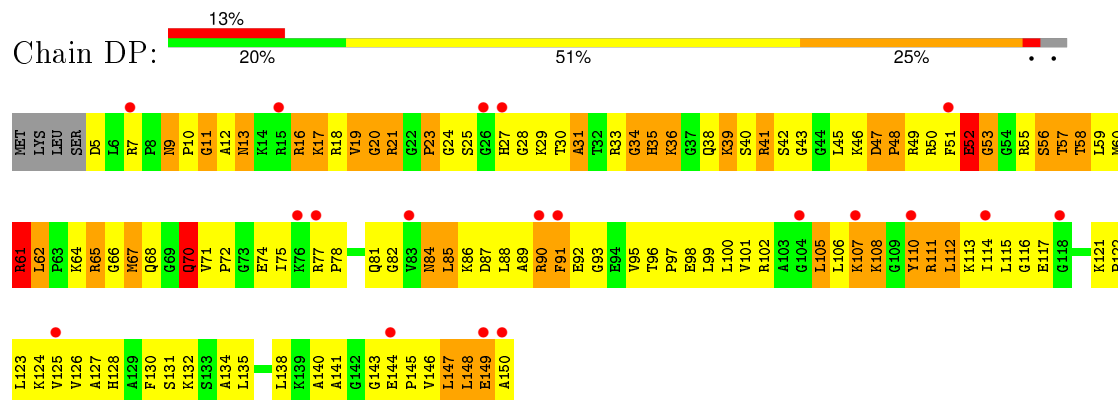
• Molecule 47: 50S RIBOSOMAL PROTEIN L14



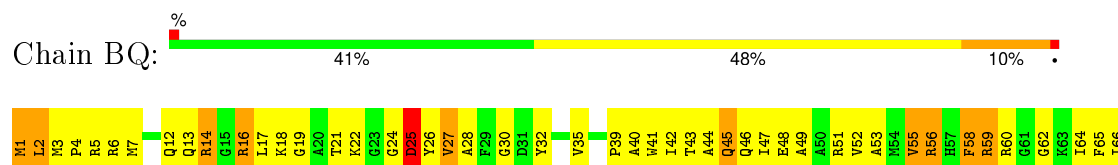
• Molecule 48: 50S RIBOSOMAL PROTEIN L15



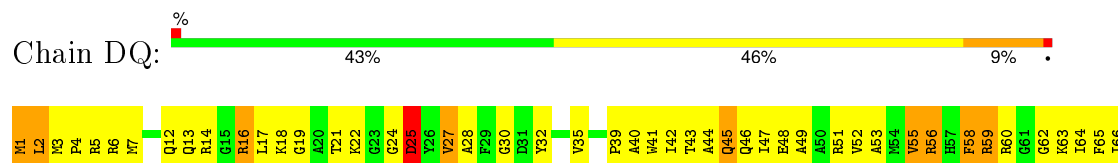
• Molecule 48: 50S RIBOSOMAL PROTEIN L15



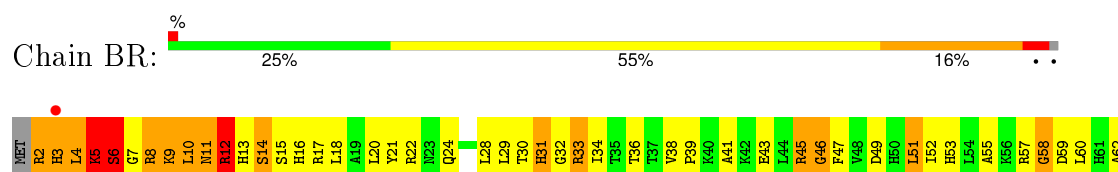
• Molecule 49: 50S RIBOSOMAL PROTEIN L16



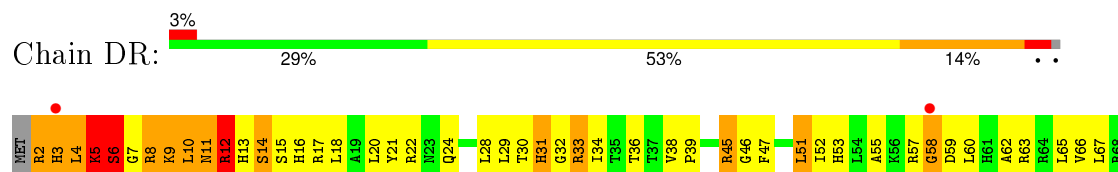
- Molecule 49: 50S RIBOSOMAL PROTEIN L16



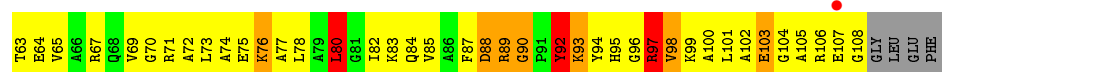
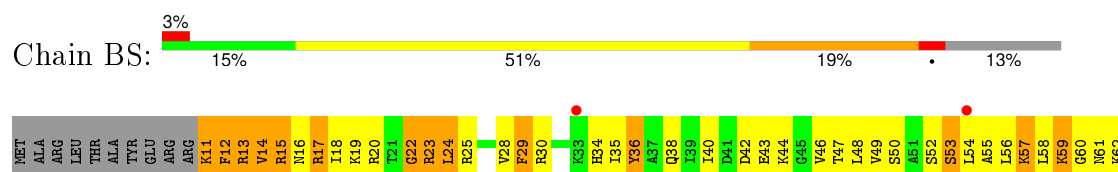
- Molecule 50: 50S RIBOSOMAL PROTEIN L17



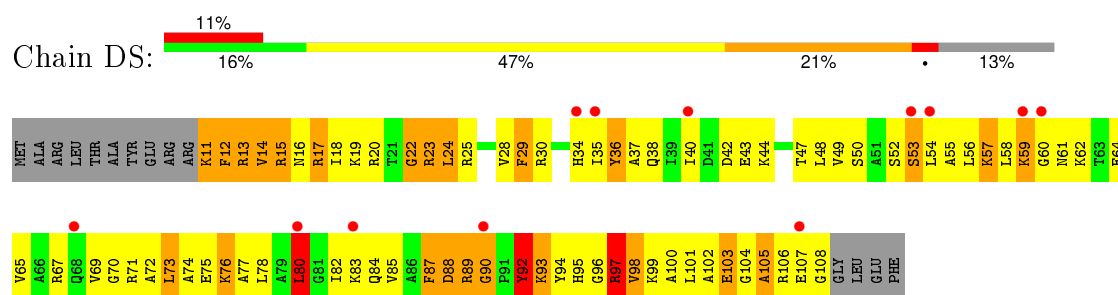
- Molecule 50: 50S RIBOSOMAL PROTEIN L17



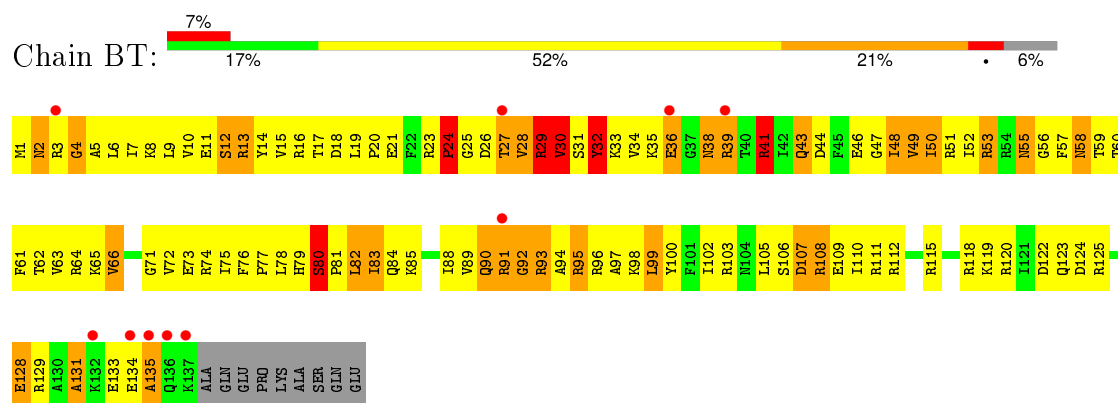
- Molecule 51: 50S RIBOSOMAL PROTEIN L18



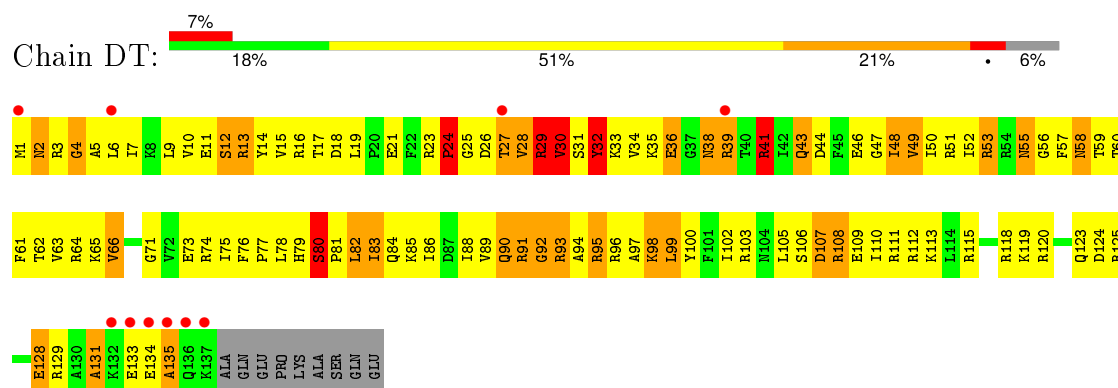
- Molecule 51: 50S RIBOSOMAL PROTEIN L18



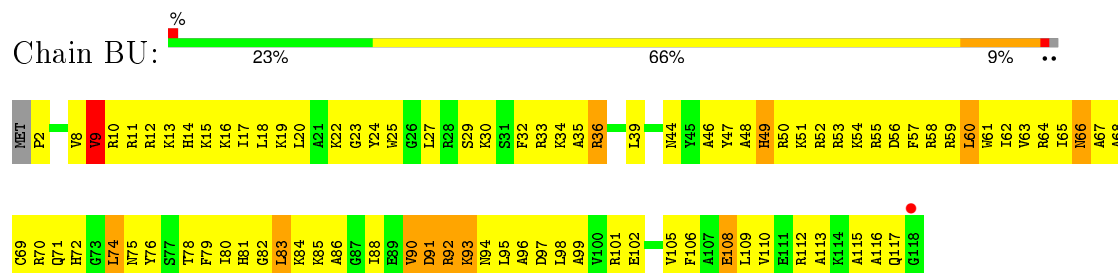
• Molecule 52: 50S RIBOSOMAL PROTEIN L19



• Molecule 52: 50S RIBOSOMAL PROTEIN L19

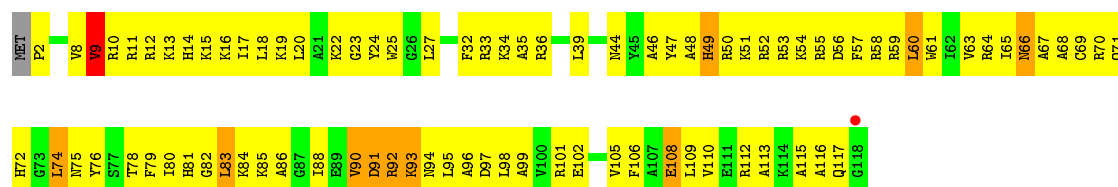


• Molecule 53: 50S RIBOSOMAL PROTEIN L20

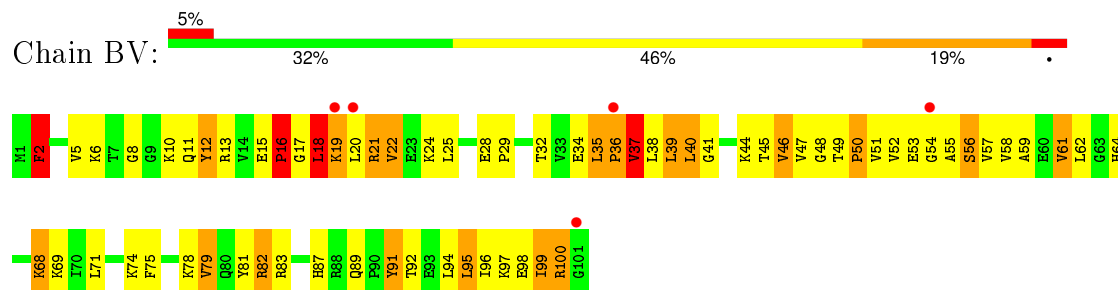


• Molecule 53: 50S RIBOSOMAL PROTEIN L20

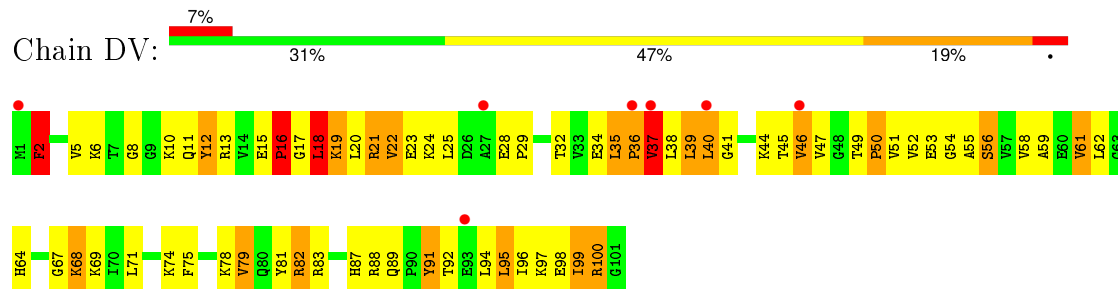




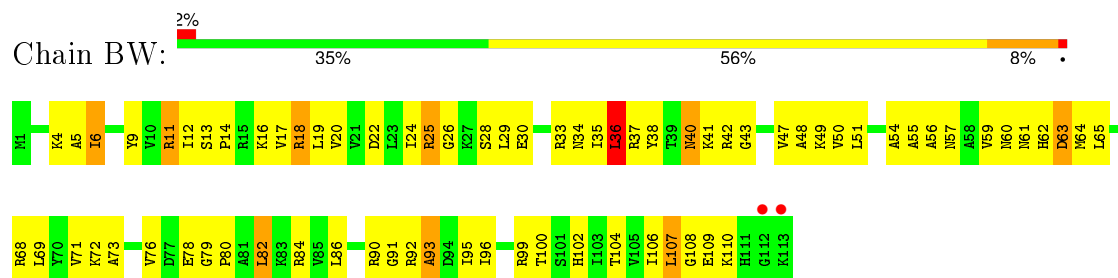
• Molecule 54: 50S RIBOSOMAL PROTEIN L21



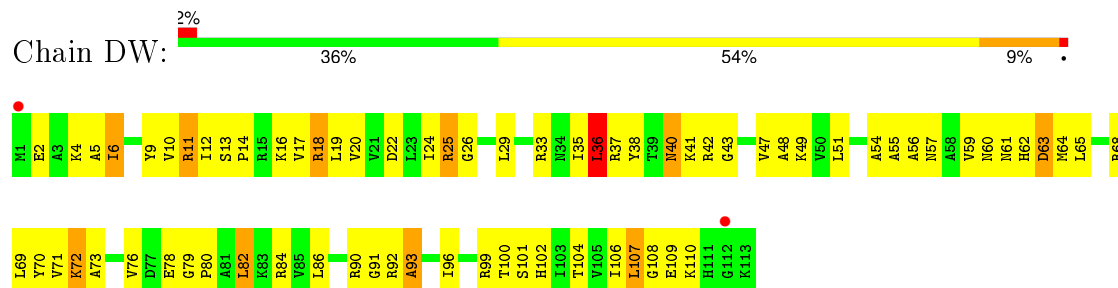
• Molecule 54: 50S RIBOSOMAL PROTEIN L21



• Molecule 55: 50S RIBOSOMAL PROTEIN L22

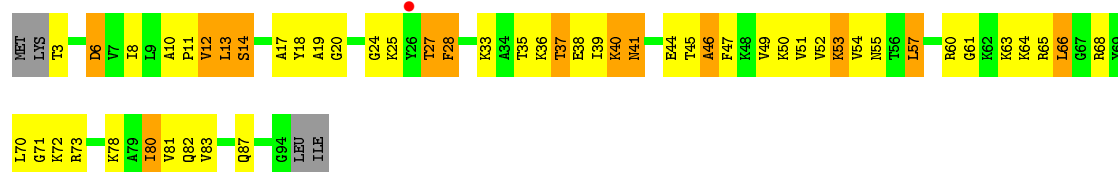


• Molecule 55: 50S RIBOSOMAL PROTEIN L22

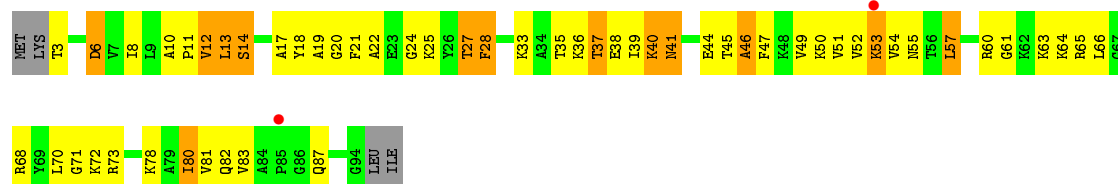


• Molecule 56: 50S RIBOSOMAL PROTEIN L23

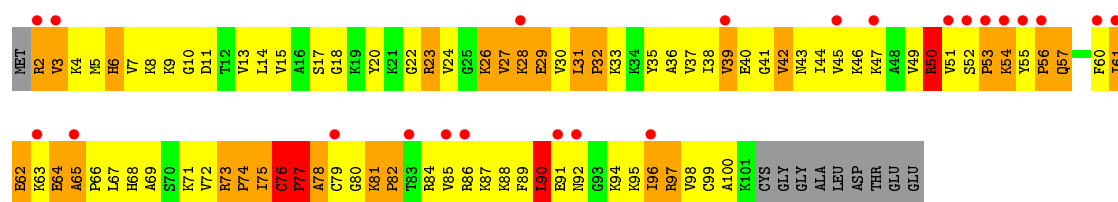
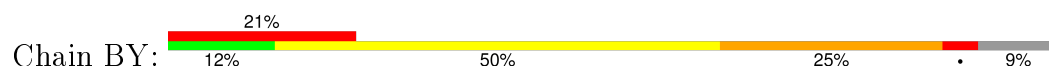




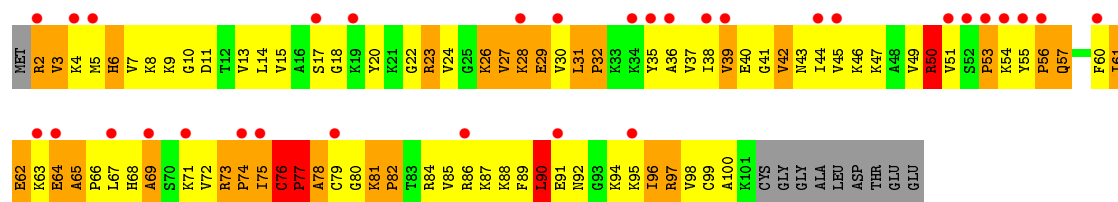
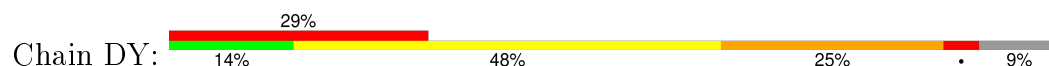
• Molecule 56: 50S RIBOSOMAL PROTEIN L23



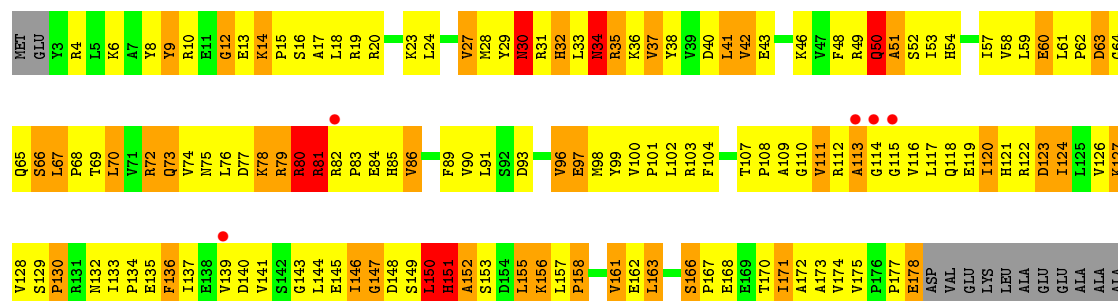
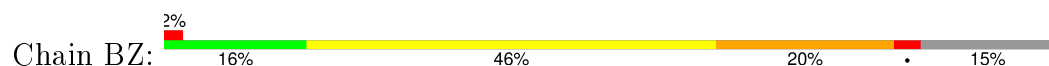
• Molecule 57: 50S RIBOSOMAL PROTEIN L24



• Molecule 57: 50S RIBOSOMAL PROTEIN L24

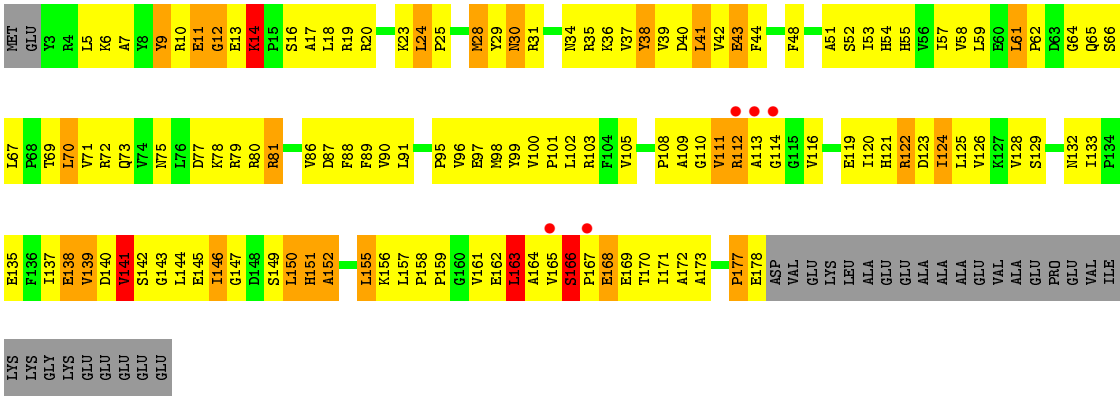


• Molecule 58: 50S RIBOSOMAL PROTEIN L25



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

• Molecule 58: 50S RIBOSOMAL PROTEIN L25



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	289.90Å 268.50Å 403.60Å 90.00° 91.62° 90.00°	Depositor
Resolution (Å)	50.00 – 3.10 49.92 – 2.93	Depositor EDS
% Data completeness (in resolution range)	98.0 (50.00-3.10) 90.5 (49.92-2.93)	Depositor EDS
R_{merge}	0.02	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.38 (at 2.91Å)	Xtriage
Refinement program	CNS 1.2	Depositor
R, R_{free}	0.243 , 0.267 0.241 , 0.266	Depositor DCC
R_{free} test set	54322 reflections (5.24%)	DCC
Wilson B-factor (Å ²)	59.1	Xtriage
Anisotropy	0.077	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 72.0	EDS
Estimated twinning fraction	0.018 for h,-k,-l	Xtriage
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.29$	Xtriage
Outliers	0 of 1195890 reflections	Xtriage
F_o, F_c correlation	0.90	EDS
Total number of atoms	307322	wwPDB-VP
Average B, all atoms (Å ²)	77.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 8.42% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.375 respectively for untwinned datasets, and 0.333, 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: OMC, GDP, ZN, H2U, KIR, MIA, 4SU, 7MG, 5MU, PSU

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	AA	0.57	4/36325 (0.0%)	0.75	46/56695 (0.1%)
1	CA	0.52	2/36325 (0.0%)	0.74	36/56695 (0.1%)
2	AB	0.44	0/1935	0.68	0/2609
2	CB	0.43	0/1935	0.69	0/2609
3	AC	0.49	0/1636	0.73	1/2205 (0.0%)
3	CC	0.45	0/1636	0.72	1/2205 (0.0%)
4	AD	0.39	0/1733	0.63	0/2318
4	CD	0.39	0/1733	0.63	0/2318
5	AE	0.54	0/1162	0.77	0/1564
5	CE	0.52	0/1162	0.76	0/1564
6	AF	0.39	0/856	0.65	0/1154
6	CF	0.39	0/856	0.66	0/1154
7	AG	0.45	0/1276	0.63	0/1709
7	CG	0.42	0/1276	0.63	1/1709 (0.1%)
8	AH	0.49	0/1136	0.73	0/1527
8	CH	0.45	0/1136	0.73	0/1527
9	AI	0.44	0/1029	0.68	0/1379
9	CI	0.42	0/1029	0.68	0/1379
10	AJ	0.41	0/807	0.68	0/1085
10	CJ	0.39	0/807	0.67	0/1085
11	AK	0.50	0/900	0.70	0/1213
11	CK	0.47	0/900	0.70	0/1213
12	AL	0.42	0/986	0.72	0/1320
12	CL	0.41	0/986	0.71	0/1320
13	AM	0.41	0/998	0.71	1/1336 (0.1%)
13	CM	0.38	0/998	0.71	1/1336 (0.1%)
14	AN	0.46	0/501	0.78	0/664
14	CN	0.45	0/501	0.79	0/664
15	AO	0.42	0/745	0.64	0/992
15	CO	0.43	0/745	0.64	0/992
16	AP	0.36	0/716	0.64	0/963
16	CP	0.35	0/716	0.64	0/963

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.45	0/836	0.67	0/1117
17	CQ	0.44	0/836	0.67	0/1117
18	AR	0.45	0/579	0.66	0/768
18	CR	0.46	0/579	0.67	0/768
19	AS	0.44	0/642	0.69	0/865
19	CS	0.41	0/642	0.69	0/865
20	AT	0.35	0/765	0.65	0/1007
20	CT	0.34	0/765	0.65	0/1007
21	AU	0.45	0/212	0.67	0/277
21	CU	0.50	0/212	0.66	0/277
22	AV	0.55	0/1809	0.73	1/2819 (0.0%)
22	AW	0.36	0/1809	0.73	2/2819 (0.1%)
22	CV	0.53	0/1809	0.73	1/2819 (0.0%)
22	CW	0.36	0/1809	0.73	2/2819 (0.1%)
23	AX	0.50	0/405	0.71	0/629
23	CX	0.49	0/405	0.70	0/629
24	AY	0.43	1/1616 (0.1%)	0.70	1/2511 (0.0%)
24	CY	0.45	1/1616 (0.1%)	0.70	1/2511 (0.0%)
25	AZ	0.31	0/3041	0.56	0/4127
25	CZ	0.32	0/3041	0.57	0/4127
26	B0	0.39	0/671	0.69	0/892
26	D0	0.41	0/671	0.70	0/892
27	B1	0.47	0/738	0.73	0/981
27	D1	0.40	0/738	0.68	0/981
28	B2	0.35	0/600	0.66	0/793
28	D2	0.33	0/600	0.64	1/793 (0.1%)
29	B3	0.37	0/472	0.61	0/634
29	D3	0.35	0/472	0.61	0/634
30	B4	0.38	0/349	0.65	0/474
30	D4	0.37	0/349	0.65	0/474
31	B5	0.38	0/473	0.72	0/639
31	D5	0.38	0/473	0.71	0/639
32	B6	0.60	0/440	0.82	0/586
32	D6	0.54	0/440	0.80	0/586
33	B7	0.42	0/426	0.68	0/561
33	D7	0.42	0/426	0.69	0/561
34	B8	0.56	0/515	0.87	1/679 (0.1%)
34	D8	0.53	0/515	0.87	1/679 (0.1%)
35	B9	0.42	0/310	0.65	0/407
35	D9	0.41	0/310	0.65	0/407
36	BA	0.51	3/69976 (0.0%)	0.72	33/109244 (0.0%)
36	DA	0.49	2/69976 (0.0%)	0.72	32/109244 (0.0%)
37	BB	0.43	0/2853	0.75	2/4451 (0.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
37	DB	0.46	0/2853	0.75	2/4451 (0.0%)
38	BC	0.39	1/1774 (0.1%)	0.60	0/2391
38	DC	0.40	2/1774 (0.1%)	0.60	0/2391
39	BD	0.51	0/2195	0.81	1/2955 (0.0%)
39	DD	0.50	0/2195	0.80	1/2955 (0.0%)
40	BE	0.43	0/1596	0.75	0/2153
40	DE	0.43	0/1596	0.74	0/2153
41	BF	0.36	0/1658	0.65	0/2244
41	DF	0.37	0/1658	0.65	0/2244
42	BG	0.40	0/1499	0.74	1/2016 (0.0%)
42	DG	0.38	0/1499	0.68	0/2016
43	BH	0.32	0/1245	0.66	0/1682
43	DH	0.32	0/1245	0.66	0/1682
46	BN	0.37	0/1131	0.70	0/1525
46	DN	0.37	0/1131	0.69	0/1525
47	BO	0.47	0/943	0.68	0/1269
47	DO	0.46	0/943	0.67	0/1269
48	BP	0.43	0/1131	0.91	2/1504 (0.1%)
48	DP	0.42	0/1131	0.91	2/1504 (0.1%)
49	BQ	0.50	0/1143	0.71	0/1527
49	DQ	0.49	0/1143	0.72	0/1527
50	BR	0.38	0/974	0.71	1/1302 (0.1%)
50	DR	0.38	0/974	0.70	1/1302 (0.1%)
51	BS	0.36	0/778	0.76	0/1036
51	DS	0.37	0/778	0.75	0/1036
52	BT	0.43	0/1155	0.76	2/1542 (0.1%)
52	DT	0.41	0/1155	0.76	2/1542 (0.1%)
53	BU	0.41	0/975	0.68	0/1297
53	DU	0.43	0/975	0.68	0/1297
54	BV	0.37	0/790	0.68	0/1057
54	DV	0.39	0/790	0.68	0/1057
55	BW	0.35	0/907	0.67	0/1216
55	DW	0.36	0/907	0.67	0/1216
56	BX	0.40	0/739	0.65	0/993
56	DX	0.40	0/739	0.65	0/993
57	BY	0.36	0/788	0.73	1/1051 (0.1%)
57	DY	0.36	0/788	0.73	1/1051 (0.1%)
58	BZ	0.46	0/1435	0.81	1/1949 (0.1%)
58	DZ	0.44	0/1435	0.74	0/1949
All	All	0.49	16/330268 (0.0%)	0.72	183/493444 (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	5	49
1	CA	4	49
22	AW	1	1
22	CW	1	1
24	AY	2	0
24	CY	2	0
36	BA	2	66
36	DA	2	67
37	BB	0	6
37	DB	0	6
All	All	19	245

All (16) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	BA	761	A	C5-C6	-10.36	1.31	1.41
36	DA	761	A	C5-C6	-10.14	1.31	1.41
36	BA	2506	U	N1-C2	8.65	1.46	1.38
36	DA	2506	U	N1-C2	8.34	1.46	1.38
1	AA	858	G	C5-C6	-7.88	1.34	1.42
24	AY	1	A	OP3-P	-7.15	1.52	1.61
24	CY	1	A	OP3-P	-6.99	1.52	1.61
1	CA	858	G	C5-C6	-6.87	1.35	1.42
38	DC	218	MET	CG-SD	6.24	1.97	1.81
1	AA	299	G	C6-O6	5.62	1.29	1.24
38	DC	120	MET	CG-SD	5.48	1.95	1.81
38	BC	120	MET	CG-SD	5.46	1.95	1.81
36	BA	1899	G	N9-C4	-5.36	1.33	1.38
1	AA	1281	U	N1-C2	5.25	1.43	1.38
1	AA	1125	U	C3'-O3'	5.17	1.49	1.42
1	CA	858	G	N1-C2	5.11	1.41	1.37

All (183) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
39	BD	244	ARG	C-N-CD	-11.04	96.32	120.60
39	DD	244	ARG	C-N-CD	-10.91	96.59	120.60
1	CA	1498	U	C2'-C3'-O3'	10.87	133.42	109.50
1	AA	1498	U	C2'-C3'-O3'	10.68	132.99	109.50
1	AA	508	C	C2'-C3'-O3'	9.74	130.93	109.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	DA	1820	U	C2'-C3'-O3'	9.56	130.53	109.50
1	CA	508	C	C2'-C3'-O3'	9.55	130.51	109.50
36	BA	1820	U	C2'-C3'-O3'	9.38	130.13	109.50
1	AA	1239	A	C2'-C3'-O3'	8.82	128.90	109.50
1	CA	1239	A	C2'-C3'-O3'	8.81	128.89	109.50
1	CA	243	A	C2'-C3'-O3'	8.74	128.72	109.50
36	BA	1786	A	N9-C1'-C2'	8.69	125.30	114.00
1	CA	1399	C	C2'-C3'-O3'	8.69	128.62	109.50
36	DA	1786	A	N9-C1'-C2'	8.61	125.20	114.00
22	AW	76	A	C4'-C3'-O3'	8.58	130.16	113.00
36	BA	1992	G	C2'-C3'-O3'	8.54	128.29	109.50
36	DA	1819	A	C2'-C3'-O3'	8.49	128.18	109.50
1	AA	687	A	C2'-C3'-O3'	8.49	128.17	109.50
1	AA	792	A	C2'-C3'-O3'	8.44	128.07	109.50
1	AA	1049	U	C2'-C3'-O3'	8.39	127.95	109.50
22	CW	76	A	C4'-C3'-O3'	8.38	129.77	113.00
1	AA	243	A	C2'-C3'-O3'	8.35	127.88	109.50
36	BA	1819	A	C2'-C3'-O3'	8.34	127.86	109.50
36	DA	1992	G	C2'-C3'-O3'	8.28	127.73	109.50
1	CA	687	A	C2'-C3'-O3'	8.19	127.51	109.50
48	DP	53	GLY	N-CA-C	-8.11	92.84	113.10
48	BP	53	GLY	N-CA-C	-8.08	92.89	113.10
1	CA	1049	U	C2'-C3'-O3'	8.08	127.27	109.50
1	AA	109	A	C2'-C3'-O3'	8.06	127.24	109.50
36	DA	945	A	N9-C1'-C2'	8.02	124.42	114.00
1	CA	109	A	C2'-C3'-O3'	8.00	127.10	109.50
24	AY	69	C	C2'-C3'-O3'	7.99	127.07	109.50
24	CY	69	C	C2'-C3'-O3'	7.95	126.99	109.50
1	CA	792	A	C2'-C3'-O3'	7.93	126.94	109.50
1	AA	1504	G	C2'-C3'-O3'	7.88	126.83	109.50
1	CA	1050	G	N9-C1'-C2'	-7.80	103.42	112.00
36	BA	945	A	N9-C1'-C2'	7.74	124.06	114.00
1	AA	1101	A	C2'-C3'-O3'	7.64	126.32	109.50
1	CA	1101	A	C2'-C3'-O3'	7.63	126.29	109.50
1	CA	961	U	N1-C1'-C2'	-7.57	103.67	112.00
1	CA	347	G	N9-C1'-C2'	-7.50	103.75	112.00
36	BA	1799	G	C2'-C3'-O3'	7.50	125.99	109.50
1	AA	961	U	N1-C1'-C2'	-7.42	103.84	112.00
36	DA	1799	G	C2'-C3'-O3'	7.29	125.53	109.50
1	AA	347	G	N9-C1'-C2'	-7.26	104.01	112.00
48	BP	52	GLU	N-CA-C	7.24	130.55	111.00
48	DP	52	GLU	N-CA-C	7.12	130.21	111.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	CW	76	A	C2'-C3'-O3'	7.09	125.10	109.50
22	AW	76	A	C2'-C3'-O3'	7.08	125.07	109.50
1	AA	1050	G	N9-C1'-C2'	-7.02	104.27	112.00
36	BA	1653	G	C2'-C3'-O3'	7.01	124.91	109.50
37	DB	67	G	N9-C1'-C2'	-6.94	104.36	112.00
1	CA	1054	C	N1-C1'-C2'	6.87	122.92	114.00
36	BA	1970	A	C5'-C4'-O4'	6.85	117.33	109.10
37	BB	67	G	N9-C1'-C2'	-6.78	104.54	112.00
36	DA	527	C	O4'-C1'-N1	6.77	113.62	108.20
36	BA	2360	A	N9-C1'-C2'	-6.74	104.58	112.00
1	AA	369	C	N1-C1'-C2'	-6.72	104.61	112.00
52	BT	29	ARG	N-CA-C	6.69	129.05	111.00
52	DT	29	ARG	N-CA-C	6.65	128.94	111.00
36	DA	1970	A	C5'-C4'-O4'	6.61	117.03	109.10
1	CA	60	A	C2'-C3'-O3'	6.60	124.26	113.70
1	AA	1054	C	N1-C1'-C2'	6.56	122.53	114.00
1	AA	772	U	C5'-C4'-C3'	-6.55	105.51	116.00
1	AA	1504	G	C4'-C3'-O3'	6.55	126.10	113.00
1	CA	772	U	C5'-C4'-C3'	-6.54	105.54	116.00
1	CA	369	C	N1-C1'-C2'	-6.53	104.82	112.00
36	DA	2360	A	N9-C1'-C2'	-6.51	104.83	112.00
36	BA	2756	U	C2'-C3'-O3'	6.51	124.12	113.70
1	AA	60	A	C2'-C3'-O3'	6.42	123.97	113.70
37	DB	16	G	N9-C1'-C2'	-6.36	105.00	112.00
36	BA	527	C	O4'-C1'-N1	6.33	113.26	108.20
36	BA	856	C	C2'-C3'-O3'	6.32	123.81	113.70
50	BR	12	ARG	N-CA-C	-6.31	93.97	111.00
36	DA	2756	U	C2'-C3'-O3'	6.30	123.78	113.70
36	DA	1653	G	C2'-C3'-O3'	6.30	123.78	113.70
1	AA	1181	G	N9-C1'-C2'	6.26	122.14	114.00
36	BA	1948	G	C5'-C4'-O4'	-6.23	101.63	109.10
37	BB	16	G	N9-C1'-C2'	-6.20	105.18	112.00
36	DA	1987	G	C5'-C4'-C3'	-6.11	106.22	116.00
50	DR	12	ARG	N-CA-C	-6.11	94.51	111.00
1	AA	995	C	N1-C1'-C2'	-6.07	105.32	112.00
1	CA	723	U	N1-C1'-C2'	6.07	121.89	114.00
1	AA	1502	A	N9-C1'-C2'	6.07	121.89	114.00
36	DA	856	C	C2'-C3'-O3'	6.05	123.38	113.70
36	DA	1970	A	C1'-O4'-C4'	-6.04	105.07	109.90
1	CA	1181	G	N9-C1'-C2'	6.04	121.85	114.00
1	AA	982	U	C2'-C3'-O3'	6.03	123.35	113.70
1	CA	428	G	N9-C1'-C2'	6.03	121.84	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	DA	1948	G	C5'-C4'-O4'	-5.99	101.91	109.10
36	DA	2654	A	N9-C1'-C2'	5.99	121.78	114.00
1	AA	1054	C	C2'-C3'-O3'	5.99	123.28	113.70
1	CA	1054	C	C2'-C3'-O3'	5.99	123.28	113.70
1	AA	428	G	N9-C1'-C2'	5.96	121.75	114.00
1	AA	723	U	N1-C1'-C2'	5.95	121.74	114.00
36	BA	1698	A	O4'-C1'-N9	5.95	112.96	108.20
36	BA	2464	C	N1-C1'-C2'	-5.87	105.55	112.00
34	D8	49	VAL	N-CA-C	-5.86	95.17	111.00
36	BA	2654	A	N9-C1'-C2'	5.85	121.61	114.00
36	BA	1987	G	C5'-C4'-C3'	-5.85	106.64	116.00
1	AA	1498	U	N1-C1'-C2'	5.84	121.59	114.00
36	BA	387	U	C2'-C3'-O3'	5.75	122.90	113.70
36	BA	1819	A	C4'-C3'-O3'	5.74	124.47	113.00
1	CA	1399	C	C4'-C3'-O3'	5.73	124.46	113.00
36	BA	1970	A	C1'-O4'-C4'	-5.64	105.39	109.90
36	BA	958	U	N1-C1'-C2'	5.64	121.33	114.00
52	DT	80	SER	N-CA-C	5.60	126.12	111.00
1	AA	197	A	N9-C1'-C2'	5.59	121.26	114.00
36	DA	387	U	C2'-C3'-O3'	5.58	122.62	113.70
1	CA	748	C	N1-C1'-C2'	5.58	121.25	114.00
36	DA	2278	A	C5'-C4'-C3'	5.57	124.91	116.00
1	CA	197	A	N9-C1'-C2'	5.56	121.22	114.00
1	CA	982	U	C2'-C3'-O3'	5.56	122.59	113.70
34	B8	49	VAL	N-CA-C	-5.55	96.02	111.00
52	BT	80	SER	N-CA-C	5.54	125.96	111.00
1	AA	1504	G	OP2-P-O3'	5.54	117.38	105.20
42	BG	88	ILE	N-CA-C	5.51	125.87	111.00
1	CA	995	C	N1-C1'-C2'	-5.50	105.95	112.00
36	BA	242	G	N9-C1'-C2'	5.47	121.11	114.00
36	BA	2278	A	C5'-C4'-C3'	5.46	124.74	116.00
36	BA	2111	C	N1-C1'-C2'	5.46	121.10	114.00
36	DA	1819	A	C4'-C3'-O3'	5.45	123.90	113.00
1	AA	328	C	N1-C1'-C2'	5.45	121.09	114.00
36	DA	1493	C	N1-C1'-C2'	5.45	121.08	114.00
3	AC	196	LEU	CA-CB-CG	5.44	127.82	115.30
1	CA	1514	C	C5'-C4'-C3'	-5.44	107.30	116.00
36	DA	242	G	N9-C1'-C2'	5.43	121.06	114.00
1	AA	977	A	C5'-C4'-C3'	-5.43	107.32	116.00
36	DA	1698	A	O4'-C1'-N9	5.41	112.53	108.20
3	CC	196	LEU	CA-CB-CG	5.41	127.73	115.30
1	CA	1502	A	N9-C1'-C2'	5.38	121.00	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BA	1427	A	N9-C1'-C2'	5.38	121.00	114.00
1	AA	1299	A	N9-C1'-C2'	5.38	120.99	114.00
36	DA	2221	G	C5'-C4'-C3'	-5.37	107.42	116.00
36	BA	2286	A	N9-C1'-C2'	5.35	120.96	114.00
36	BA	1781	C	N1-C1'-C2'	5.35	120.95	114.00
36	BA	1493	C	N1-C1'-C2'	5.34	120.95	114.00
36	DA	2111	C	N1-C1'-C2'	5.34	120.95	114.00
1	CA	266	G	C2'-C3'-O3'	5.33	122.23	113.70
36	BA	2221	G	C5'-C4'-C3'	-5.32	107.48	116.00
1	AA	1153	C	N1-C1'-C2'	-5.32	106.15	112.00
36	DA	1781	C	N1-C1'-C2'	5.31	120.91	114.00
36	DA	906	G	C5'-C4'-C3'	-5.30	107.52	116.00
1	AA	748	C	N1-C1'-C2'	5.29	120.88	114.00
57	BY	54	LYS	N-CA-C	-5.29	96.72	111.00
36	DA	2464	C	N1-C1'-C2'	-5.29	106.19	112.00
1	CA	547	A	N9-C1'-C2'	5.28	120.86	114.00
36	DA	2286	A	N9-C1'-C2'	5.27	120.85	114.00
1	AA	1190	G	N9-C1'-C2'	5.27	120.85	114.00
28	D2	28	LYS	N-CA-C	-5.27	96.78	111.00
1	AA	1387	G	C5'-C4'-C3'	-5.25	107.59	116.00
36	BA	2572	A	OP1-P-O3'	5.25	116.76	105.20
57	DY	54	LYS	N-CA-C	-5.24	96.84	111.00
1	CA	1153	C	N1-C1'-C2'	-5.22	106.25	112.00
58	BZ	50	GLN	N-CA-C	-5.22	96.91	111.00
1	CA	328	C	N1-C1'-C2'	5.22	120.78	114.00
22	CV	36	A	C5'-C4'-C3'	-5.19	107.70	116.00
1	AA	547	A	N9-C1'-C2'	5.18	120.74	114.00
1	CA	1299	A	N9-C1'-C2'	5.17	120.72	114.00
13	AM	12	ASN	N-CA-C	5.17	124.96	111.00
1	AA	1279	A	N9-C1'-C2'	5.15	120.69	114.00
13	CM	12	ASN	N-CA-C	5.13	124.84	111.00
1	AA	1065	U	O4'-C1'-N1	5.12	112.30	108.20
1	CA	977	A	C5'-C4'-C3'	-5.12	107.81	116.00
36	BA	1970	A	C5'-C4'-C3'	5.11	124.18	116.00
1	AA	266	G	C2'-C3'-O3'	5.11	121.88	113.70
1	AA	1239	A	C4'-C3'-O3'	5.09	123.19	113.00
36	DA	1159	U	C5'-C4'-C3'	-5.09	107.86	116.00
1	AA	1529	G	C5'-C4'-O4'	5.05	115.16	109.10
1	CA	686	U	N1-C1'-C2'	5.05	120.57	114.00
1	AA	1502	A	O5'-P-OP1	-5.04	101.16	105.70
7	CG	145	ALA	N-CA-C	-5.04	97.39	111.00
1	AA	1420	C	C5'-C4'-C3'	-5.03	107.95	116.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	772	U	C2'-C3'-O3'	5.03	121.74	113.70
1	AA	686	U	N1-C1'-C2'	5.03	120.53	114.00
22	AV	36	A	C5'-C4'-C3'	-5.02	107.96	116.00
1	AA	772	U	C2'-C3'-O3'	5.02	121.73	113.70
36	DA	1970	A	C5'-C4'-C3'	5.02	124.03	116.00
1	AA	115	G	N9-C1'-C2'	5.02	120.52	114.00
36	DA	2405	G	N9-C1'-C2'	5.02	120.52	114.00
36	BA	906	G	C5'-C4'-C3'	-5.01	107.98	116.00
36	BA	1159	U	C5'-C4'-C3'	-5.01	107.99	116.00
36	DA	857	C	C5'-C4'-C3'	-5.00	108.00	116.00

All (19) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	508	C	C3'
1	AA	1239	A	C3'
1	AA	1498	U	C3'
1	AA	1504	G	C3'
1	AA	1531	A	C3'
22	AW	76	A	C3'
24	AY	55	PSU	C3'
24	AY	69	C	C3'
36	BA	1819	A	C3'
36	BA	1820	U	C3'
1	CA	508	C	C3'
1	CA	1239	A	C3'
1	CA	1399	C	C3'
1	CA	1498	U	C3'
22	CW	76	A	C3'
24	CY	55	PSU	C3'
24	CY	69	C	C3'
36	DA	1819	A	C3'
36	DA	1820	U	C3'

All (245) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1050	G	Sidechain
1	AA	1055	A	Sidechain
1	AA	1077	G	Sidechain
1	AA	108	G	Sidechain
1	AA	1153	C	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	1157	A	Sidechain
1	AA	1181	G	Sidechain
1	AA	1278	U	Sidechain
1	AA	1281	U	Sidechain
1	AA	1283	G	Sidechain
1	AA	1299	A	Sidechain
1	AA	1348	U	Sidechain
1	AA	1397	C	Sidechain
1	AA	1398	A	Sidechain
1	AA	14	U	Sidechain
1	AA	1406	U	Sidechain
1	AA	1414	U	Sidechain
1	AA	1472	U	Sidechain
1	AA	1494	G	Sidechain
1	AA	1512	U	Sidechain
1	AA	1516	G	Sidechain
1	AA	189(G)	G	Sidechain
1	AA	189(H)	G	Sidechain
1	AA	197	A	Sidechain
1	AA	198	G	Sidechain
1	AA	21	G	Sidechain
1	AA	245	C	Sidechain
1	AA	250	A	Sidechain
1	AA	251	G	Sidechain
1	AA	323	U	Sidechain
1	AA	347	G	Sidechain
1	AA	369	C	Sidechain
1	AA	428	G	Sidechain
1	AA	498	U	Sidechain
1	AA	557	G	Sidechain
1	AA	570	G	Sidechain
1	AA	571	U	Sidechain
1	AA	573	A	Sidechain
1	AA	586	C	Sidechain
1	AA	603	U	Sidechain
1	AA	727	G	Sidechain
1	AA	741	G	Sidechain
1	AA	774	G	Sidechain
1	AA	803	G	Sidechain
1	AA	808	C	Sidechain
1	AA	898	G	Sidechain
1	AA	961	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	AA	977	A	Sidechain
1	AA	995	C	Sidechain
22	AW	39	U	Sidechain
36	BA	1133	U	Sidechain
36	BA	1162	G	Sidechain
36	BA	1215	G	Sidechain
36	BA	1238	G	Sidechain
36	BA	1379	A	Sidechain
36	BA	140	G	Sidechain
36	BA	1416	G	Sidechain
36	BA	1427	A	Sidechain
36	BA	15	G	Sidechain
36	BA	1647	G	Sidechain
36	BA	1649	G	Sidechain
36	BA	1766	U	Sidechain
36	BA	1772	G	Sidechain
36	BA	1773	A	Sidechain
36	BA	1801	G	Sidechain
36	BA	1807	G	Sidechain
36	BA	1831	G	Sidechain
36	BA	1841	U	Sidechain
36	BA	1900	A	Sidechain
36	BA	1928	A	Sidechain
36	BA	1938	A	Sidechain
36	BA	1973	G	Sidechain
36	BA	1985	G	Sidechain
36	BA	2031	A	Sidechain
36	BA	2061	G	Sidechain
36	BA	2073	C	Sidechain
36	BA	2074	U	Sidechain
36	BA	2173	A	Sidechain
36	BA	2266	A	Sidechain
36	BA	2320	A	Sidechain
36	BA	2335	A	Sidechain
36	BA	2344	U	Sidechain
36	BA	2360	A	Sidechain
36	BA	2413	G	Sidechain
36	BA	2438	U	Sidechain
36	BA	2464	C	Sidechain
36	BA	250	G	Sidechain
36	BA	2506	U	Sidechain
36	BA	2508	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	BA	2542	A	Sidechain
36	BA	2564	A	Sidechain
36	BA	2569	G	Sidechain
36	BA	2581	G	Sidechain
36	BA	2582	G	Sidechain
36	BA	2595	G	Sidechain
36	BA	2609	U	Sidechain
36	BA	2685	G	Sidechain
36	BA	2746	U	Sidechain
36	BA	2758	A	Sidechain
36	BA	2779	U	Sidechain
36	BA	2848	G	Sidechain
36	BA	383	U	Sidechain
36	BA	463	G	Sidechain
36	BA	532	A	Sidechain
36	BA	630	G	Sidechain
36	BA	670	A	Sidechain
36	BA	675	A	Sidechain
36	BA	684	G	Sidechain
36	BA	700	G	Sidechain
36	BA	760	G	Sidechain
36	BA	763	G	Sidechain
36	BA	792	G	Sidechain
36	BA	945	A	Sidechain
36	BA	946	G	Sidechain
36	BA	958	U	Sidechain
36	BA	995	C	Sidechain
37	BB	16	G	Sidechain
37	BB	24	G	Sidechain
37	BB	40	U	Sidechain
37	BB	42	C	Sidechain
37	BB	66	A	Sidechain
37	BB	67	G	Sidechain
1	CA	1050	G	Sidechain
1	CA	1077	G	Sidechain
1	CA	1079	G	Sidechain
1	CA	1153	C	Sidechain
1	CA	1157	A	Sidechain
1	CA	1181	G	Sidechain
1	CA	1278	U	Sidechain
1	CA	1281	U	Sidechain
1	CA	1283	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	CA	1299	A	Sidechain
1	CA	1338	G	Sidechain
1	CA	1348	U	Sidechain
1	CA	1370	G	Sidechain
1	CA	1380	U	Sidechain
1	CA	1386	G	Sidechain
1	CA	14	U	Sidechain
1	CA	1414	U	Sidechain
1	CA	1428	A	Sidechain
1	CA	1442	G	Sidechain
1	CA	1498	U	Sidechain
1	CA	1505	G	Sidechain
1	CA	1510	U	Sidechain
1	CA	1522	U	Sidechain
1	CA	189(H)	G	Sidechain
1	CA	197	A	Sidechain
1	CA	198	G	Sidechain
1	CA	21	G	Sidechain
1	CA	245	C	Sidechain
1	CA	250	A	Sidechain
1	CA	251	G	Sidechain
1	CA	323	U	Sidechain
1	CA	347	G	Sidechain
1	CA	369	C	Sidechain
1	CA	428	G	Sidechain
1	CA	498	U	Sidechain
1	CA	557	G	Sidechain
1	CA	573	A	Sidechain
1	CA	586	C	Sidechain
1	CA	7	G	Sidechain
1	CA	727	G	Sidechain
1	CA	741	G	Sidechain
1	CA	773	G	Sidechain
1	CA	808	C	Sidechain
1	CA	898	G	Sidechain
1	CA	940	C	Sidechain
1	CA	952	U	Sidechain
1	CA	961	U	Sidechain
1	CA	977	A	Sidechain
1	CA	995	C	Sidechain
22	CW	39	U	Sidechain
36	DA	1133	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	DA	1156	A	Sidechain
36	DA	1162	G	Sidechain
36	DA	1215	G	Sidechain
36	DA	1238	G	Sidechain
36	DA	1379	A	Sidechain
36	DA	140	G	Sidechain
36	DA	1416	G	Sidechain
36	DA	1427	A	Sidechain
36	DA	15	G	Sidechain
36	DA	1647	G	Sidechain
36	DA	1766	U	Sidechain
36	DA	1772	G	Sidechain
36	DA	1773	A	Sidechain
36	DA	1801	G	Sidechain
36	DA	1807	G	Sidechain
36	DA	1831	G	Sidechain
36	DA	1841	U	Sidechain
36	DA	1907	G	Sidechain
36	DA	1940	U	Sidechain
36	DA	1952	A	Sidechain
36	DA	1985	G	Sidechain
36	DA	2010	G	Sidechain
36	DA	2011	U	Sidechain
36	DA	202	U	Sidechain
36	DA	2031	A	Sidechain
36	DA	2073	C	Sidechain
36	DA	2074	U	Sidechain
36	DA	2176	A	Sidechain
36	DA	2266	A	Sidechain
36	DA	2320	A	Sidechain
36	DA	2344	U	Sidechain
36	DA	2360	A	Sidechain
36	DA	2413	G	Sidechain
36	DA	2422	A	Sidechain
36	DA	2438	U	Sidechain
36	DA	2464	C	Sidechain
36	DA	2491	U	Sidechain
36	DA	2504	U	Sidechain
36	DA	2506	U	Sidechain
36	DA	2508	G	Sidechain
36	DA	2542	A	Sidechain
36	DA	2564	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
36	DA	2569	G	Sidechain
36	DA	2581	G	Sidechain
36	DA	2582	G	Sidechain
36	DA	2595	G	Sidechain
36	DA	2726	U	Sidechain
36	DA	2746	U	Sidechain
36	DA	2758	A	Sidechain
36	DA	2779	U	Sidechain
36	DA	463	G	Sidechain
36	DA	532	A	Sidechain
36	DA	555	U	Sidechain
36	DA	630	G	Sidechain
36	DA	670	A	Sidechain
36	DA	675	A	Sidechain
36	DA	684	G	Sidechain
36	DA	686	G	Sidechain
36	DA	700	G	Sidechain
36	DA	742	G	Sidechain
36	DA	760	G	Sidechain
36	DA	792	G	Sidechain
36	DA	945	A	Sidechain
36	DA	946	G	Sidechain
36	DA	958	U	Sidechain
36	DA	995	C	Sidechain
37	DB	16	G	Sidechain
37	DB	24	G	Sidechain
37	DB	40	U	Sidechain
37	DB	42	C	Sidechain
37	DB	66	A	Sidechain
37	DB	67	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	32451	0	16382	1017	0
1	CA	32451	0	16382	1043	0
2	AB	1900	0	1951	209	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	CB	1900	0	1951	211	0
3	AC	1612	0	1677	148	0
3	CC	1612	0	1677	155	0
4	AD	1703	0	1764	221	0
4	CD	1703	0	1763	226	0
5	AE	1146	0	1207	78	0
5	CE	1146	0	1207	89	0
6	AF	843	0	857	78	0
6	CF	843	0	857	77	0
7	AG	1257	0	1296	94	0
7	CG	1257	0	1296	89	0
8	AH	1116	0	1177	50	0
8	CH	1116	0	1177	52	0
9	AI	1010	0	1037	143	0
9	CI	1010	0	1037	142	0
10	AJ	794	0	840	113	0
10	CJ	794	0	840	118	0
11	AK	885	0	904	59	0
11	CK	885	0	904	61	0
12	AL	970	0	1057	112	0
12	CL	970	0	1057	111	0
13	AM	987	0	1059	136	0
13	CM	987	0	1059	139	0
14	AN	492	0	529	58	0
14	CN	492	0	529	61	0
15	AO	734	0	771	42	0
15	CO	734	0	771	43	0
16	AP	700	0	720	72	0
16	CP	700	0	720	73	0
17	AQ	823	0	891	56	0
17	CQ	823	0	891	58	0
18	AR	574	0	644	35	0
18	CR	574	0	644	39	0
19	AS	629	0	652	77	0
19	CS	629	0	652	79	0
20	AT	763	0	861	78	0
20	CT	763	0	861	79	0
21	AU	208	0	221	12	0
21	CU	208	0	221	13	0
22	AV	1619	0	822	60	0
22	AW	1619	0	822	67	0
22	CV	1619	0	822	63	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	CW	1619	0	822	71	0
23	AX	361	0	184	7	0
23	CX	361	0	184	11	0
24	AY	1643	0	853	75	0
24	CY	1643	0	853	74	0
25	AZ	2983	0	2999	284	0
25	CZ	2983	0	2999	287	0
26	B0	662	0	688	63	0
26	D0	662	0	688	65	0
27	B1	731	0	808	69	0
27	D1	731	0	808	69	0
28	B2	598	0	653	158	0
28	D2	598	0	653	67	0
29	B3	467	0	523	49	0
29	D3	467	0	523	47	0
30	B4	340	0	336	51	0
30	D4	340	0	336	53	0
31	B5	459	0	480	62	0
31	D5	459	0	480	65	0
32	B6	433	0	461	135	0
32	D6	433	0	461	133	0
33	B7	418	0	467	29	0
33	D7	418	0	467	28	0
34	B8	507	0	576	124	0
34	D8	507	0	576	123	0
35	B9	307	0	336	39	0
35	D9	307	0	335	42	0
36	BA	62477	0	31497	2141	0
36	DA	62477	0	31497	2212	0
37	BB	2551	0	1295	85	0
37	DB	2551	0	1295	97	0
38	BC	1742	0	1800	141	0
38	DC	1742	0	1800	132	0
39	BD	2145	0	2234	221	0
39	DD	2145	0	2234	234	0
40	BE	1563	0	1629	225	0
40	DE	1563	0	1629	222	0
41	BF	1623	0	1677	193	0
41	DF	1623	0	1677	197	0
42	BG	1474	0	1535	247	0
42	DG	1474	0	1535	232	0
43	BH	1222	0	1282	178	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	DH	1222	0	1282	184	0
44	BJ	651	0	164	27	0
44	DJ	651	0	164	31	0
45	BK	700	0	173	18	0
45	DK	700	0	173	15	0
46	BN	1104	0	1180	176	0
46	DN	1104	0	1180	171	0
47	BO	933	0	996	77	0
47	DO	933	0	996	78	0
48	BP	1114	0	1187	263	0
48	DP	1114	0	1187	265	0
49	BQ	1122	0	1179	112	0
49	DQ	1122	0	1179	106	0
50	BR	960	0	1021	133	0
50	DR	960	0	1021	128	0
51	BS	770	0	832	152	0
51	DS	770	0	832	150	0
52	BT	1141	0	1202	229	0
52	DT	1141	0	1202	223	0
53	BU	958	0	1015	132	0
53	DU	958	0	1015	130	0
54	BV	779	0	852	117	0
54	DV	779	0	852	120	0
55	BW	896	0	953	87	0
55	DW	896	0	953	86	0
56	BX	725	0	778	82	0
56	DX	725	0	778	84	0
57	BY	775	0	870	162	0
57	DY	775	0	870	156	0
58	BZ	1403	0	1432	216	0
58	DZ	1403	0	1432	200	0
59	AD	1	0	0	0	0
59	AN	1	0	0	0	0
59	B4	1	0	0	0	0
59	B9	1	0	0	0	0
59	CD	1	0	0	0	0
59	CN	1	0	0	0	0
59	D4	1	0	0	0	0
59	D9	1	0	0	0	0
60	AZ	28	0	12	2	0
60	CZ	28	0	12	6	0
61	AZ	57	0	58	3	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
61	CZ	57	0	59	2	0
All	All	307322	0	208715	17683	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 34.

All (17683) 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)
38:DC:123:VAL:CG2	38:DC:127:LEU:HD23	1.33	1.53
38:BC:123:VAL:CG2	38:BC:127:LEU:HD23	1.33	1.51
38:DC:123:VAL:HG23	38:DC:127:LEU:CD2	1.50	1.42
38:BC:123:VAL:HG23	38:BC:127:LEU:CD2	1.50	1.41
36:DA:1899:G:N2	36:DA:1902:C:H41	1.34	1.24
36:BA:1899:G:N2	36:BA:1902:C:H41	1.36	1.24
22:CV:41:C:H2'	22:CV:42:C:H5''	1.22	1.19
36:DA:2645:G:H3'	36:DA:2646:C:H5'	1.21	1.18
13:AM:10:PRO:HB2	13:AM:18:ALA:HB1	1.21	1.18
1:CA:1149:C:H2'	1:CA:1150:U:O2	1.41	1.17
56:BX:40:LYS:HG2	56:BX:51:VAL:HB	1.21	1.17
1:AA:1149:C:H2'	1:AA:1150:U:O2	1.42	1.17
1:AA:227:G:H2'	1:AA:228:A:H5''	1.22	1.17
36:BA:2645:G:H3'	36:BA:2646:C:H5'	1.22	1.17
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.25	1.17
13:CM:10:PRO:HB2	13:CM:18:ALA:HB1	1.22	1.16
1:CA:227:G:H2'	1:CA:228:A:H5''	1.21	1.16
42:BG:7:LEU:HD21	42:BG:176:LEU:HD21	1.24	1.16
52:DT:33:LYS:HE3	52:DT:43:GLN:HE21	1.06	1.16
28:B2:47:ASN:HA	28:B2:50:ILE:HB	1.29	1.15
41:DF:24:LEU:HB3	41:DF:25:PRO:HD2	1.28	1.14
22:AV:41:C:H2'	22:AV:42:C:H5''	1.21	1.14
43:BH:85:LYS:HE2	43:BH:133:VAL:N	1.61	1.13
43:DH:85:LYS:HE2	43:DH:133:VAL:N	1.61	1.13
41:BF:24:LEU:HB3	41:BF:25:PRO:HD2	1.29	1.13
7:AG:79:ARG:HG2	7:AG:84:ASN:HA	1.23	1.13
1:CA:1053:G:H4'	1:CA:1054:C:H5'	1.28	1.13
7:CG:79:ARG:HG2	7:CG:84:ASN:HA	1.22	1.13
41:DF:167:ALA:HB1	41:DF:173:VAL:HG11	1.30	1.13
49:BQ:141:GLN:HE21	58:BZ:72:ARG:HA	0.99	1.13
52:DT:53:ARG:HH11	52:DT:53:ARG:HB3	1.12	1.12
39:DD:30:GLU:HB2	39:DD:35:LYS:HD2	1.28	1.12

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:55:ASN:H	52:DT:59:THR:HG22	1.12	1.12
1:CA:1003:G:H2'	1:CA:1004:A:H4'	1.32	1.12
28:B2:53:LEU:HA	28:B2:56:GLN:HG2	1.31	1.12
40:DE:47:VAL:HG21	40:DE:86:PRO:HD2	1.32	1.12
36:DA:1301:A:O2'	36:DA:1302:A:H2'	1.50	1.11
36:DA:31:C:H2'	36:DA:32:C:H5''	1.33	1.11
36:BA:2092:U:H4'	36:BA:2093:G:H5''	1.32	1.11
56:DX:12:VAL:HB	56:DX:17:ALA:HB1	1.16	1.11
56:BX:12:VAL:HB	56:BX:17:ALA:HB1	1.15	1.11
52:BT:53:ARG:HH11	52:BT:53:ARG:HB3	1.11	1.11
36:BA:1301:A:O2'	36:BA:1302:A:H2'	1.50	1.11
56:DX:12:VAL:HG23	56:DX:13:LEU:H	1.16	1.10
36:BA:1543:C:H3'	36:BA:1544:A:H5''	1.33	1.10
56:DX:40:LYS:HG2	56:DX:51:VAL:HB	1.18	1.10
42:BG:82:LEU:HD13	42:BG:87:PRO:HB3	1.30	1.10
1:AA:1003:G:H2'	1:AA:1004:A:H4'	1.33	1.10
36:DA:1543:C:H3'	36:DA:1544:A:H5''	1.32	1.10
41:BF:25:PRO:HB3	41:BF:119:ARG:HB2	1.32	1.10
32:B6:33:LYS:HA	32:B6:33:LYS:HE2	1.31	1.10
36:BA:628:G:H2'	36:BA:629:G:H5''	1.32	1.09
40:BE:47:VAL:HG21	40:BE:86:PRO:HD2	1.33	1.09
46:DN:9:VAL:HG12	46:DN:10:GLU:H	1.16	1.09
42:BG:67:LYS:H	42:BG:67:LYS:HD3	0.96	1.09
36:DA:1887:C:H2'	36:DA:1888:G:H5''	1.34	1.09
9:AI:53:VAL:HG22	9:AI:95:LYS:HZ3	1.04	1.09
32:B6:35:GLU:HB3	32:B6:51:GLU:HB2	1.35	1.09
1:AA:1305:G:H22	1:AA:1331:G:H2'	1.07	1.09
49:BQ:141:GLN:NE2	58:BZ:72:ARG:HA	1.66	1.09
34:B8:62:LEU:HD13	36:BA:242:G:H5''	1.33	1.09
41:DF:37:VAL:HG11	48:DP:7:ARG:HH12	1.16	1.09
41:DF:25:PRO:HB3	41:DF:119:ARG:HB2	1.32	1.08
36:BA:1484:G:H2'	36:BA:1485:G:H5''	1.09	1.08
39:BD:30:GLU:HB2	39:BD:35:LYS:HD2	1.24	1.08
22:CV:46:G:H3'	22:CV:47:U:C5'	1.83	1.08
34:D8:62:LEU:HD13	36:DA:242:G:H5''	1.33	1.08
1:AA:954:G:H4'	13:AM:120:LYS:HD2	1.35	1.08
46:BN:9:VAL:HG12	46:BN:10:GLU:H	1.18	1.08
1:CA:1305:G:H22	1:CA:1331:G:H2'	1.06	1.08
1:CA:1305:G:N2	1:CA:1331:G:H2'	1.69	1.08
32:D6:35:GLU:HB3	32:D6:51:GLU:HB2	1.35	1.08
39:BD:71:ASP:HB2	39:BD:103:ARG:HH22	1.19	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:168:ARG:HG3	41:BF:175:THR:HG21	1.35	1.08
36:DA:628:G:H2'	36:DA:629:G:H5''	1.31	1.08
1:AA:1417:G:H5'	1:AA:1417:G:H8	0.97	1.08
36:DA:1484:G:H2'	36:DA:1485:G:H5''	1.09	1.07
36:DA:925:C:H2'	36:DA:926:A:H5''	1.36	1.07
9:AI:53:VAL:HG22	9:AI:95:LYS:NZ	1.67	1.07
31:B5:4:HIS:HB3	31:B5:5:PRO:HD3	1.35	1.07
58:BZ:151:HIS:HA	58:BZ:171:ILE:HD12	1.30	1.07
26:B0:10:THR:HG22	26:B0:12:ASN:H	1.18	1.07
41:BF:143:ALA:HB1	41:BF:148:LEU:HB2	1.32	1.07
36:BA:2187:G:H2'	36:BA:2188:C:H5'	1.32	1.07
43:BH:85:LYS:CE	43:BH:133:VAL:H	1.68	1.07
9:CI:53:VAL:HG22	9:CI:95:LYS:NZ	1.69	1.07
58:DZ:51:ALA:HB1	58:DZ:57:ILE:HD11	1.35	1.07
43:DH:85:LYS:CE	43:DH:133:VAL:H	1.68	1.06
1:AA:1417:G:C8	1:AA:1417:G:H5'	1.89	1.06
52:BT:33:LYS:HE3	52:BT:43:GLN:HE21	1.06	1.06
1:CA:954:G:H4'	13:CM:120:LYS:HD2	1.33	1.06
40:DE:57:LYS:HA	40:DE:57:LYS:HE3	1.32	1.06
28:B2:57:ILE:HG22	28:B2:61:LEU:HG	1.36	1.06
36:BA:925:C:H2'	36:BA:926:A:H5''	1.36	1.06
28:B2:2:LYS:HD3	28:B2:59:ARG:HH12	0.94	1.06
22:AV:46:G:H3'	22:AV:47:U:C5'	1.83	1.06
32:D6:33:LYS:HA	32:D6:33:LYS:HE2	1.31	1.06
36:BA:31:C:H2'	36:BA:32:C:H5''	1.34	1.06
41:BF:37:VAL:HG11	48:BP:7:ARG:HH12	1.17	1.06
43:BH:85:LYS:HZ3	43:BH:132:ARG:HA	1.21	1.05
42:BG:72:ARG:HH21	42:BG:86:MET:HG3	1.17	1.05
1:AA:1305:G:N2	1:AA:1331:G:H2'	1.69	1.05
39:DD:71:ASP:HB2	39:DD:103:ARG:HH22	1.16	1.05
41:DF:143:ALA:HB1	41:DF:148:LEU:HB2	1.32	1.05
36:BA:271(L):U:H5''	36:BA:271(M):G:H5'	1.38	1.05
22:AW:71:G:H2'	22:AW:72:C:H5'	1.38	1.05
7:CG:79:ARG:HE	7:CG:84:ASN:HB2	1.22	1.05
42:DG:63:ILE:HA	42:DG:143:GLU:HG3	1.39	1.05
51:DS:59:LYS:HG2	51:DS:60:GLY:H	1.20	1.05
36:DA:2187:G:H2'	36:DA:2188:C:H5'	1.36	1.05
40:BE:57:LYS:HA	40:BE:57:LYS:HE3	1.33	1.05
36:DA:271(L):U:H5''	36:DA:271(M):G:H5'	1.37	1.04
36:DA:1024:G:H3'	36:DA:1025:G:H5''	1.38	1.04
41:DF:168:ARG:HG3	41:DF:175:THR:HG21	1.35	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:227:G:C2'	1:CA:228:A:H5''	1.88	1.04
31:D5:4:HIS:HB3	31:D5:5:PRO:HD3	1.35	1.04
10:AJ:55:LYS:HZ2	10:AJ:55:LYS:HB2	1.16	1.04
38:BC:27:ARG:HD3	38:BC:182:PRO:CG	1.87	1.04
51:BS:59:LYS:HG2	51:BS:60:GLY:H	1.18	1.04
52:BT:55:ASN:H	52:BT:59:THR:HG22	1.13	1.04
36:BA:2101:G:H2'	36:BA:2102:U:H5''	1.38	1.04
36:BA:1887:C:H2'	36:BA:1888:G:H5''	1.38	1.04
29:B3:35:ARG:HB2	29:B3:35:ARG:HH11	1.21	1.04
24:AY:45:U:H3'	24:AY:46:7MG:C5'	1.86	1.04
43:DH:85:LYS:HZ3	43:DH:132:ARG:HA	1.23	1.03
21:AU:6:ARG:HD3	21:AU:15:ARG:CZ	1.88	1.03
1:CA:1271:G:H2'	1:CA:1272:G:H5''	1.39	1.03
12:AL:18:VAL:HG23	12:AL:19:ARG:H	1.19	1.03
36:BA:654(E):G:H22	36:BA:654(Q):C:H1'	1.21	1.03
43:DH:153:LYS:HD3	43:DH:153:LYS:H	1.21	1.03
43:DH:16:SER:HB2	43:DH:27:LYS:HB2	1.41	1.03
10:CJ:55:LYS:HZ2	10:CJ:55:LYS:HB2	1.23	1.03
43:DH:85:LYS:HE2	43:DH:133:VAL:H	0.88	1.03
56:BX:12:VAL:HG23	56:BX:13:LEU:H	1.18	1.03
36:BA:1024:G:H3'	36:BA:1025:G:H5''	1.40	1.03
24:CY:45:U:H3'	24:CY:46:7MG:C5'	1.87	1.03
43:BH:16:SER:HB2	43:BH:27:LYS:HB2	1.40	1.03
22:CV:41:C:C2'	22:CV:42:C:H5''	1.89	1.03
36:DA:1484:G:C2'	36:DA:1485:G:H5''	1.89	1.03
43:BH:153:LYS:H	43:BH:153:LYS:HD3	1.23	1.03
1:CA:1533:C:H3'	1:CA:1534:A:H5''	1.37	1.03
5:CE:12:LEU:CD1	5:CE:31:LEU:HB2	1.89	1.03
22:AV:41:C:C2'	22:AV:42:C:H5''	1.88	1.03
50:BR:99:LYS:H	50:BR:99:LYS:HD2	1.20	1.02
36:BA:774:A:H2	36:BA:787:U:HO2'	1.04	1.02
25:CZ:355:LEU:HB3	25:CZ:370:PHE:HB3	1.41	1.02
42:BG:51:ARG:HA	42:BG:51:ARG:HE	1.20	1.02
29:D3:35:ARG:HB2	29:D3:35:ARG:HH11	1.19	1.02
24:CY:4:G:H2'	24:CY:5:G:H5''	1.38	1.02
58:BZ:96:VAL:HG22	58:BZ:97:GLU:H	1.25	1.02
41:BF:167:ALA:HB1	41:BF:173:VAL:HG11	1.33	1.02
36:DA:2101:G:H2'	36:DA:2102:U:H5''	1.37	1.02
36:BA:2833:G:H3'	36:BA:2834:G:C5'	1.89	1.02
36:DA:2833:G:H3'	36:DA:2834:G:C5'	1.88	1.02
26:D0:10:THR:HG22	26:D0:12:ASN:H	1.18	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2092:U:H4'	36:DA:2093:G:H5''	1.36	1.02
36:BA:628:G:C2'	36:BA:629:G:H5''	1.90	1.02
40:BE:38:THR:HG22	40:BE:40:GLU:H	1.24	1.02
22:CW:71:G:H2'	22:CW:72:C:H5'	1.38	1.02
10:CJ:61:GLU:HG3	14:CN:58:LYS:HE2	1.41	1.02
52:BT:2:ASN:HD22	52:BT:7:ILE:HD11	1.23	1.02
36:BA:272(H):C:H2'	36:BA:272(I):U:H5''	1.41	1.02
1:AA:227:G:C2'	1:AA:228:A:H5''	1.89	1.01
27:B1:3:LYS:N	27:B1:3:LYS:HZ3	1.57	1.01
24:AY:4:G:H2'	24:AY:5:G:H5''	1.37	1.01
42:DG:144:ILE:HD11	42:DG:149:VAL:HG11	1.42	1.01
25:AZ:355:LEU:HB3	25:AZ:370:PHE:HB3	1.42	1.01
43:BH:85:LYS:HE2	43:BH:133:VAL:H	0.88	1.01
36:DA:628:G:C2'	36:DA:629:G:H5''	1.89	1.01
42:DG:73:ALA:HB3	42:DG:87:PRO:HG3	1.42	1.01
32:D6:18:ARG:HG2	32:D6:18:ARG:HH11	1.25	1.01
52:DT:2:ASN:HD22	52:DT:7:ILE:HD11	1.21	1.01
12:CL:18:VAL:HG23	12:CL:19:ARG:H	1.22	1.01
57:DY:76:CYS:SG	57:DY:77:PRO:HD2	2.01	1.01
12:AL:20:LYS:H	12:AL:20:LYS:HD3	1.23	1.01
36:BA:612:C:H2'	36:BA:613:G:H5''	1.42	1.01
40:DE:38:THR:HG22	40:DE:40:GLU:H	1.25	1.01
36:DA:272(H):C:H2'	36:DA:272(I):U:H5''	1.42	1.01
10:AJ:61:GLU:HG3	14:AN:58:LYS:HE2	1.43	1.01
54:BV:15:GLU:HB3	54:BV:16:PRO:HD2	1.40	1.01
1:AA:1271:G:H2'	1:AA:1272:G:H5''	1.38	1.01
36:BA:1884:A:H2'	36:BA:1885:A:H5''	1.43	1.01
57:BY:9:LYS:HG2	57:BY:10:GLY:H	1.25	1.01
4:AD:189:PRO:HB2	4:AD:194:LEU:HD21	1.40	1.00
50:DR:99:LYS:H	50:DR:99:LYS:HD2	1.21	1.00
36:BA:1484:G:C2'	36:BA:1485:G:H5''	1.89	1.00
36:DA:654(E):G:H22	36:DA:654(Q):C:H1'	1.21	1.00
36:DA:31:C:C2'	36:DA:32:C:H5''	1.91	1.00
5:CE:76:ILE:HD11	5:CE:142:LEU:HD21	1.43	1.00
54:DV:15:GLU:HB3	54:DV:16:PRO:HD2	1.41	1.00
34:B8:32:LEU:HG	34:B8:36:LYS:HZ3	1.22	1.00
4:CD:189:PRO:HB2	4:CD:194:LEU:HD21	1.41	1.00
5:AE:76:ILE:HD11	5:AE:142:LEU:HD21	1.43	1.00
34:B8:23:VAL:HG12	34:B8:46:ARG:HH11	1.27	1.00
36:BA:2310:A:O2'	36:BA:2311:A:H5'	1.62	1.00
10:AJ:50:ILE:H	10:AJ:50:ILE:HD13	1.27	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2310:A:O2'	36:DA:2311:A:H5'	1.61	0.99
48:BP:146:VAL:HG22	48:BP:147:LEU:H	1.21	0.99
1:AA:1053:G:H4'	1:AA:1054:C:C5'	1.91	0.99
42:BG:67:LYS:H	42:BG:67:LYS:CD	1.75	0.99
34:D8:61:LEU:HD22	34:D8:62:LEU:HG	1.45	0.99
11:CK:108:ILE:HG21	18:CR:88:LYS:HB2	1.44	0.99
27:D1:34:THR:HG21	27:D1:37:ILE:HD11	1.45	0.99
36:BA:1499:C:H6	36:BA:1499:C:H5'	1.27	0.99
21:CU:6:ARG:HD3	21:CU:15:ARG:CZ	1.92	0.99
4:AD:28:SER:HB3	4:AD:29:PRO:HD2	1.43	0.99
1:CA:1053:G:H4'	1:CA:1054:C:C5'	1.92	0.99
38:DC:72:VAL:HG23	38:DC:111:ASP:HB3	1.45	0.99
36:DA:612:C:H2'	36:DA:613:G:H5''	1.41	0.99
34:D8:23:VAL:HG12	34:D8:46:ARG:HH11	1.28	0.99
25:AZ:241:ARG:HH11	25:AZ:241:ARG:HB3	1.27	0.98
36:BA:1279:G:H4'	50:BR:31:HIS:CD2	1.98	0.98
11:AK:108:ILE:HG21	18:AR:88:LYS:HB2	1.44	0.98
48:DP:146:VAL:HG22	48:DP:147:LEU:H	1.23	0.98
58:BZ:69:THR:HG22	58:BZ:90:VAL:HA	1.43	0.98
42:BG:67:LYS:HD3	42:BG:67:LYS:N	1.77	0.98
12:CL:20:LYS:H	12:CL:20:LYS:HD3	1.25	0.98
28:B2:62:THR:HG21	36:BA:76:C:O2'	1.62	0.98
1:CA:1271:G:C2'	1:CA:1272:G:H5''	1.94	0.98
17:AQ:52:LYS:HD3	17:AQ:52:LYS:H	1.28	0.98
36:DA:1279:G:H4'	50:DR:31:HIS:CD2	1.98	0.98
22:CV:23:A:H8	22:CV:23:A:H5'	1.28	0.98
38:DC:123:VAL:CG2	38:DC:127:LEU:CD2	2.23	0.98
17:CQ:52:LYS:H	17:CQ:52:LYS:HD3	1.26	0.98
10:CJ:50:ILE:HD13	10:CJ:50:ILE:H	1.29	0.98
22:AV:46:G:H3'	22:AV:47:U:H5''	0.98	0.97
1:AA:1271:G:C2'	1:AA:1272:G:H5''	1.94	0.97
22:AV:23:A:H5'	22:AV:23:A:H8	1.29	0.97
57:BY:76:CYS:SG	57:BY:77:PRO:HD2	2.03	0.97
53:DU:85:LYS:HD3	53:DU:117:GLN:HE22	1.29	0.97
14:CN:59:ALA:O	14:CN:60:SER:HB2	1.61	0.97
34:B8:13:ARG:HD2	48:BP:61:ARG:HD2	1.46	0.97
2:AB:131:PRO:HG2	2:AB:134:GLU:HG2	1.44	0.97
5:AE:12:LEU:CD1	5:AE:31:LEU:HB2	1.93	0.97
3:CC:79:ARG:HB2	3:CC:79:ARG:HH11	1.30	0.97
36:DA:1899:G:H22	36:DA:1902:C:N4	1.61	0.97
22:CV:46:G:H3'	22:CV:47:U:H5''	0.98	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:123:VAL:CG2	38:BC:127:LEU:CD2	2.24	0.97
34:B8:61:LEU:HD22	34:B8:62:LEU:HG	1.44	0.97
22:CV:46:G:C3'	22:CV:47:U:H5''	1.94	0.97
36:BA:259:G:H21	36:BA:621:A:H8	1.06	0.97
32:B6:18:ARG:HG2	32:B6:18:ARG:HH11	1.28	0.97
36:DA:1884:A:H2'	36:DA:1885:A:H5''	1.43	0.97
7:AG:79:ARG:HE	7:AG:84:ASN:HB2	1.24	0.97
36:BA:31:C:C2'	36:BA:32:C:H5''	1.93	0.97
51:DS:98:VAL:HG12	51:DS:100:ALA:H	1.30	0.97
57:DY:9:LYS:HG2	57:DY:10:GLY:H	1.26	0.97
32:B6:15:GLU:CD	32:B6:18:ARG:CZ	2.32	0.97
14:AN:59:ALA:O	14:AN:60:SER:HB2	1.64	0.97
48:BP:126:VAL:HA	48:BP:145:PRO:HB2	1.47	0.97
48:DP:126:VAL:HA	48:DP:145:PRO:HB2	1.47	0.97
36:DA:655:A:H4'	36:DA:656:G:H5'	1.45	0.97
2:AB:165:VAL:HG23	2:AB:166:ASP:H	1.29	0.97
20:CT:57:ARG:HH11	20:CT:102:GLY:HA2	1.30	0.96
25:CZ:241:ARG:HH11	25:CZ:241:ARG:HB3	1.29	0.96
54:BV:99:ILE:H	54:BV:99:ILE:HD13	1.28	0.96
36:BA:1899:G:H22	36:BA:1902:C:N4	1.64	0.96
1:AA:1502:A:H2	1:AA:1505:G:H1	1.08	0.96
36:DA:1141:U:H2'	46:DN:63:THR:HG21	1.43	0.96
48:BP:41:ARG:HD3	48:BP:45:LEU:HD23	1.47	0.96
53:BU:85:LYS:HD3	53:BU:117:GLN:HE22	1.30	0.96
22:AV:46:G:C3'	22:AV:47:U:H5''	1.94	0.96
4:CD:28:SER:HB3	4:CD:29:PRO:HD2	1.45	0.96
28:B2:2:LYS:HD3	28:B2:59:ARG:NH1	1.79	0.96
36:DA:2833:G:H3'	36:DA:2834:G:H5''	1.47	0.96
51:BS:98:VAL:HG12	51:BS:100:ALA:H	1.30	0.96
2:CB:131:PRO:HG2	2:CB:134:GLU:HG2	1.46	0.96
36:BA:2801(A):A:H4'	36:BA:2802:G:H5'	1.47	0.96
52:DT:53:ARG:HB3	52:DT:53:ARG:NH1	1.80	0.96
36:BA:27:G:H22	36:BA:512:G:H2'	1.29	0.96
36:DA:1499:C:H6	36:DA:1499:C:H5'	1.28	0.96
42:BG:77:ILE:HD12	42:BG:82:LEU:O	1.66	0.96
34:B8:32:LEU:HG	34:B8:36:LYS:NZ	1.80	0.96
36:DA:2801(A):A:H4'	36:DA:2802:G:H5'	1.47	0.95
1:CA:975:A:H4'	1:CA:976:G:H5''	1.46	0.95
20:AT:62:LEU:H	20:AT:62:LEU:HD12	1.30	0.95
36:BA:1948:G:H8	36:BA:1948:G:H5'	1.31	0.95
36:BA:266:G:H2'	36:BA:267:C:H5''	1.48	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:72:VAL:HG23	38:BC:111:ASP:HB3	1.47	0.95
36:BA:1141:U:H2'	46:BN:63:THR:HG21	1.45	0.95
52:BT:53:ARG:NH1	52:BT:53:ARG:HB3	1.80	0.95
36:BA:2189:U:H2'	36:BA:2190:G:H4'	1.47	0.95
2:CB:155:LEU:HD21	2:CB:159:PRO:HG3	1.46	0.95
37:BB:20:C:H2'	37:BB:21:G:H5''	1.48	0.95
39:BD:44:ASN:HB3	39:BD:49:ILE:HA	1.46	0.95
54:DV:99:ILE:H	54:DV:99:ILE:HD13	1.27	0.95
55:DW:5:ALA:HB2	55:DW:54:ALA:HB2	1.46	0.95
36:BA:655:A:H4'	36:BA:656:G:H5'	1.45	0.95
37:DB:20:C:H2'	37:DB:21:G:H5''	1.48	0.95
13:AM:120:LYS:HE3	13:AM:120:LYS:HA	1.49	0.95
26:D0:49:LYS:H	26:D0:80:HIS:HD1	1.04	0.95
51:DS:30:ARG:HH22	51:DS:62:LYS:HD3	1.30	0.95
43:BH:50:VAL:HG12	43:BH:51:ARG:H	1.31	0.95
13:AM:10:PRO:CB	13:AM:18:ALA:HB1	1.97	0.95
46:DN:47:ALA:HB2	46:DN:112:LEU:HD11	1.49	0.95
34:D8:13:ARG:HD2	48:DP:61:ARG:HD2	1.46	0.95
2:CB:71:VAL:HB	2:CB:164:VAL:HG12	1.47	0.95
29:B3:9:VAL:HG11	29:B3:55:ARG:HD3	1.47	0.95
48:BP:23:PRO:HB2	48:BP:33:ARG:HG3	1.46	0.95
41:DF:132:VAL:HG22	41:DF:133:ASN:H	1.30	0.95
42:DG:67:LYS:N	42:DG:67:LYS:HD3	1.82	0.95
51:BS:83:LYS:HG2	51:BS:105:ALA:HB3	1.49	0.95
1:AA:1003:G:C2'	1:AA:1004:A:H4'	1.97	0.94
39:DD:44:ASN:HB3	39:DD:49:ILE:HA	1.49	0.94
3:AC:79:ARG:HB2	3:AC:79:ARG:HH11	1.31	0.94
36:DA:27:G:H22	36:DA:512:G:H2'	1.32	0.94
41:BF:6:VAL:HG12	41:BF:7:TYR:H	1.30	0.94
36:BA:2185:C:H2'	36:BA:2186:G:H5'	1.48	0.94
41:DF:6:VAL:HG12	41:DF:7:TYR:H	1.30	0.94
36:DA:1022:G:H22	36:DA:1142(A):A:H2	1.12	0.94
51:DS:83:LYS:HG2	51:DS:105:ALA:HB3	1.50	0.94
40:BE:34:VAL:HG11	40:BE:78:LEU:HD22	1.50	0.94
13:CM:120:LYS:HE3	13:CM:120:LYS:HA	1.47	0.94
1:AA:1452:C:H4'	1:AA:1456:G:N2	1.82	0.94
3:CC:132:ARG:HH11	3:CC:136:GLN:HE22	1.16	0.94
51:BS:78:LEU:HD11	51:BS:103:GLU:HG3	1.49	0.94
36:DA:676:A:H8	36:DA:2069:G:H21	1.16	0.94
1:CA:1003:G:C2'	1:CA:1004:A:H4'	1.97	0.94
52:BT:28:VAL:HG22	52:BT:47:GLY:N	1.83	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:165:VAL:HG23	2:CB:166:ASP:H	1.31	0.94
36:DA:1494:A:H2'	36:DA:1495:A:H5''	1.49	0.94
43:DH:50:VAL:HG12	43:DH:51:ARG:H	1.31	0.94
4:AD:194:LEU:HB3	4:AD:196:LEU:HD13	1.50	0.94
36:DA:880:G:H1	36:DA:897:C:H42	1.14	0.94
48:DP:59:LEU:HA	48:DP:61:ARG:NE	1.82	0.94
48:DP:23:PRO:HB2	48:DP:33:ARG:HG3	1.46	0.93
20:CT:62:LEU:H	20:CT:62:LEU:HD12	1.33	0.93
36:DA:1948:G:H5'	36:DA:1948:G:H8	1.31	0.93
1:CA:980:C:H5'	1:CA:980:C:H6	1.31	0.93
4:CD:128:VAL:HG12	4:CD:129:ASN:H	1.34	0.93
42:DG:67:LYS:H	42:DG:67:LYS:HD3	1.33	0.93
36:BA:2317:C:H2'	36:BA:2318:G:H5'	1.49	0.93
36:BA:676:A:H8	36:BA:2069:G:H21	1.14	0.93
36:BA:673:C:H6	36:BA:673:C:H5'	1.34	0.93
48:DP:41:ARG:HD3	48:DP:45:LEU:HD23	1.50	0.93
1:AA:980:C:H5'	1:AA:980:C:H6	1.33	0.93
1:AA:1314:C:H5	1:AA:1323:G:H1	1.15	0.93
58:BZ:108:PRO:HB3	58:BZ:141:VAL:HG12	1.49	0.93
26:B0:49:LYS:H	26:B0:80:HIS:HD1	1.04	0.93
4:AD:128:VAL:HG12	4:AD:129:ASN:H	1.33	0.93
28:B2:25:VAL:HB	28:B2:64:LEU:HD12	1.48	0.93
36:DA:259:G:H21	36:DA:621:A:H8	1.08	0.93
4:CD:18:LYS:HB2	4:CD:33:MET:HG2	1.46	0.93
36:BA:1494:A:H2'	36:BA:1495:A:H5''	1.49	0.93
55:BW:5:ALA:HB2	55:BW:54:ALA:HB2	1.50	0.93
32:D6:15:GLU:CD	32:D6:18:ARG:CZ	2.38	0.93
36:BA:1689:A:H62	36:BA:1698:A:H2	1.17	0.93
29:D3:9:VAL:HG11	29:D3:55:ARG:HD3	1.49	0.93
56:DX:52:VAL:HG12	56:DX:53:LYS:H	1.33	0.93
2:AB:71:VAL:HB	2:AB:164:VAL:HG12	1.50	0.93
36:DA:2756:U:H1'	36:DA:2757:A:H5''	1.47	0.93
36:DA:2178:C:H2'	36:DA:2179:C:H5'	1.50	0.93
36:DA:2189:U:H2'	36:DA:2190:G:H4'	1.47	0.93
36:BA:2756:U:H1'	36:BA:2757:A:H5''	1.48	0.93
27:B1:80:LEU:HB3	27:B1:82:LEU:HD13	1.50	0.93
48:BP:47:ASP:HB3	48:BP:48:PRO:HA	1.50	0.93
13:CM:10:PRO:CB	13:CM:18:ALA:HB1	1.98	0.93
52:DT:28:VAL:HG22	52:DT:47:GLY:N	1.84	0.93
49:BQ:135:ASP:H	49:BQ:137:TYR:HD1	1.14	0.93
34:D8:61:LEU:HD12	34:D8:61:LEU:H	1.32	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2317:C:H2'	36:DA:2318:G:H5'	1.51	0.93
34:B8:61:LEU:HD12	34:B8:61:LEU:H	1.32	0.92
36:BA:1019:U:H3	36:BA:1142(A):A:H62	1.17	0.92
41:BF:29:ASN:HD22	41:BF:32:LEU:HB2	1.31	0.92
32:D6:6:ARG:HH11	32:D6:6:ARG:HB3	1.33	0.92
1:AA:1277:C:HO2'	1:AA:1279:A:H8	0.97	0.92
36:DA:1779:U:H5	36:DA:1784:A:N7	1.67	0.92
36:BA:2833:G:H3'	36:BA:2834:G:H5''	1.49	0.92
1:AA:858:G:C6	1:AA:869:G:N7	2.37	0.92
36:DA:2893:G:H5'	36:DA:2894:G:H5'	1.51	0.92
58:BZ:123:ASP:O	58:BZ:124:ILE:HG12	1.68	0.92
52:BT:13:ARG:HA	52:BT:13:ARG:NH1	1.83	0.92
48:BP:81:GLN:OE1	48:BP:106:LEU:HA	1.69	0.92
4:AD:18:LYS:HB2	4:AD:33:MET:HG2	1.48	0.92
1:AA:975:A:H4'	1:AA:976:G:H5''	1.48	0.92
36:DA:1747(A):G:C2'	36:DA:1748:G:H5''	1.99	0.92
4:CD:194:LEU:HB3	4:CD:196:LEU:HD13	1.52	0.92
46:DN:67:LEU:O	46:DN:88:GLU:HG3	1.70	0.92
36:DA:1540:U:H3'	36:DA:1541:G:H3'	1.51	0.92
41:DF:29:ASN:HD22	41:DF:32:LEU:HB2	1.32	0.92
34:D8:32:LEU:HG	34:D8:36:LYS:NZ	1.84	0.92
48:BP:23:PRO:HD2	48:BP:33:ARG:HE	1.35	0.92
36:BA:1865:G:H5'	36:BA:1866:C:OP2	1.69	0.92
2:AB:155:LEU:HD21	2:AB:159:PRO:HG3	1.49	0.92
41:BF:132:VAL:HG22	41:BF:133:ASN:H	1.31	0.92
1:AA:1416:G:H2'	1:AA:1417:G:H5''	1.52	0.92
36:DA:2185:C:H2'	36:DA:2186:G:H5'	1.48	0.92
36:DA:1747(A):G:H2'	36:DA:1748:G:H5''	1.51	0.92
30:D4:14:ILE:HG13	30:D4:31:ILE:HB	1.51	0.92
36:DA:27:G:N2	36:DA:512:G:H2'	1.85	0.92
36:DA:266:G:H2'	36:DA:267:C:H5''	1.50	0.92
52:DT:55:ASN:N	52:DT:59:THR:HG22	1.83	0.92
46:BN:47:ALA:HB2	46:BN:112:LEU:HD11	1.49	0.92
48:DP:47:ASP:HB3	48:DP:48:PRO:HA	1.51	0.92
20:AT:57:ARG:HH11	20:AT:102:GLY:HA2	1.32	0.92
51:DS:15:ARG:HH11	51:DS:15:ARG:HB2	1.35	0.92
36:BA:2178:C:H2'	36:BA:2179:C:H5'	1.50	0.92
52:BT:50:ILE:HD11	52:BT:102:ILE:HD11	1.52	0.92
36:BA:27:G:N2	36:BA:512:G:H2'	1.84	0.92
36:BA:2036:C:H5'	36:BA:2036:C:H6	1.34	0.92
28:B2:54:LYS:O	28:B2:58:ALA:HB2	1.70	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:72:ARG:NE	42:BG:86:MET:HA	1.84	0.91
46:DN:13:TRP:O	46:DN:135:PRO:HD2	1.68	0.91
52:BT:33:LYS:HE3	52:BT:43:GLN:NE2	1.85	0.91
5:CE:50:GLU:HB2	5:CE:53:LEU:HD13	1.51	0.91
27:B1:75:GLU:O	27:B1:78:LYS:HG2	1.69	0.91
36:DA:1865:G:H5'	36:DA:1866:C:OP2	1.68	0.91
13:AM:11:ARG:HG2	13:AM:12:ASN:H	1.35	0.91
36:BA:650:C:H3'	36:BA:651:G:H5''	1.53	0.91
46:BN:13:TRP:O	46:BN:135:PRO:HD2	1.70	0.91
4:CD:120:LEU:HB3	4:CD:126:ILE:HD11	1.52	0.91
51:BS:30:ARG:HH22	51:BS:62:LYS:HD3	1.31	0.91
56:BX:52:VAL:HG12	56:BX:53:LYS:H	1.35	0.91
52:BT:55:ASN:N	52:BT:59:THR:HG22	1.85	0.91
42:DG:139:LEU:HA	42:DG:144:ILE:HD13	1.51	0.91
42:DG:52:ILE:HD13	42:DG:52:ILE:H	1.33	0.91
36:DA:2415:G:O3'	48:DP:66:GLY:HA3	1.71	0.91
1:CA:1502:A:H2	1:CA:1505:G:H1	1.08	0.91
4:AD:120:LEU:HB3	4:AD:126:ILE:HD11	1.51	0.91
36:BA:2893:G:H5'	36:BA:2894:G:H5'	1.53	0.91
41:BF:28:ILE:HD13	41:BF:28:ILE:H	1.35	0.91
24:CY:45:U:H3'	24:CY:46:7MG:H5''	1.52	0.91
1:AA:1367:C:H5'	10:AJ:60:ARG:HH11	1.35	0.91
10:AJ:33:GLN:HB2	10:AJ:75:ILE:HD11	1.53	0.91
51:BS:15:ARG:HH11	51:BS:15:ARG:HB2	1.33	0.91
9:CI:53:VAL:HG13	9:CI:95:LYS:HD3	1.53	0.91
36:BA:2287:A:H62	36:BA:2344:U:H3	1.17	0.91
48:BP:16:ARG:HB2	48:BP:16:ARG:NH1	1.86	0.91
39:DD:147:LEU:HD11	39:DD:183:ARG:HH12	1.34	0.91
36:BA:1540:U:H3'	36:BA:1541:G:H3'	1.52	0.91
42:BG:44:GLY:H	42:BG:88:ILE:CG2	1.82	0.91
36:BA:1747(A):G:C2'	36:BA:1748:G:H5''	2.00	0.91
36:BA:2187:G:C2'	36:BA:2188:C:H5'	2.00	0.91
9:CI:53:VAL:HG22	9:CI:95:LYS:HZ1	1.31	0.91
36:BA:612:C:H2'	36:BA:613:G:C5'	2.01	0.91
36:DA:1517:G:H8	36:DA:1517:G:H5'	1.36	0.91
24:CY:72:U:H2'	24:CY:73:G:H5''	1.53	0.91
36:BA:1022:G:H22	36:BA:1142(A):A:H2	1.16	0.90
46:BN:67:LEU:O	46:BN:88:GLU:HG3	1.68	0.90
36:DA:2138:C:H2'	36:DA:2139:C:H6	1.36	0.90
51:DS:78:LEU:HD11	51:DS:103:GLU:HG3	1.49	0.90
25:CZ:93:ILE:HG12	25:CZ:122:LEU:HD11	1.53	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B0:27:GLU:HB2	26:B0:68:GLU:HA	1.53	0.90
36:BA:2183:C:H2'	36:BA:2184:G:C8	2.07	0.90
52:BT:85:LYS:HB3	52:BT:85:LYS:NZ	1.87	0.90
24:AY:45:U:H3'	24:AY:46:7MG:H5''	1.51	0.90
48:BP:59:LEU:HA	48:BP:61:ARG:NE	1.86	0.90
36:DA:612:C:H2'	36:DA:613:G:C5'	2.01	0.90
36:BA:1779:U:H5	36:BA:1784:A:N7	1.70	0.90
36:DA:31:C:H2'	36:DA:32:C:C5'	2.01	0.90
9:AI:53:VAL:HG13	9:AI:95:LYS:HD3	1.53	0.90
14:AN:13:THR:N	14:AN:14:PRO:HD2	1.84	0.90
51:BS:106:ARG:HH12	51:BS:108:GLY:CA	1.84	0.90
52:DT:13:ARG:NH1	52:DT:13:ARG:HA	1.86	0.90
39:BD:43:ARG:NH1	39:BD:44:ASN:HD21	1.68	0.90
9:AI:28:VAL:HG12	9:AI:29:ASN:H	1.36	0.90
58:BZ:29:TYR:HB3	58:BZ:34:ASN:HB2	1.53	0.90
36:BA:2312:U:O3'	42:BG:71:THR:HG21	1.71	0.90
9:CI:17:VAL:HG11	9:CI:81:ILE:HD13	1.52	0.90
36:DA:1689:A:H62	36:DA:1698:A:H2	1.19	0.90
58:DZ:73:GLN:HE21	58:DZ:75:ASN:HD21	1.16	0.90
43:DH:19:VAL:HG12	43:DH:20:ALA:H	1.33	0.90
1:CA:1314:C:H5	1:CA:1323:G:H1	1.15	0.90
36:BA:2139:C:H2'	36:BA:2140:C:H6	1.36	0.90
39:DD:70:TRP:CH2	39:DD:150:LYS:HA	2.07	0.90
38:DC:175:VAL:HG12	38:DC:188:ASN:HB3	1.54	0.90
3:CC:46:GLU:O	3:CC:47:LEU:HB2	1.72	0.90
52:DT:85:LYS:NZ	52:DT:85:LYS:HB3	1.86	0.90
57:DY:10:GLY:HA2	57:DY:27:VAL:HG13	1.54	0.90
51:BS:89:ARG:O	51:BS:92:TYR:HB3	1.72	0.90
12:AL:7:ILE:HD12	12:AL:8:ASN:H	1.37	0.90
25:AZ:263:ARG:HH21	25:AZ:297:GLU:HG2	1.37	0.90
39:DD:26:LYS:O	39:DD:27:THR:HG22	1.72	0.90
36:DA:2287:A:H62	36:DA:2344:U:H3	1.18	0.90
48:BP:47:ASP:HB3	48:BP:48:PRO:CA	2.02	0.90
1:AA:1238:A:H8	1:AA:1241:G:HO2'	0.91	0.90
36:DA:2036:C:H6	36:DA:2036:C:H5'	1.33	0.90
40:DE:34:VAL:HG11	40:DE:78:LEU:HD22	1.51	0.90
48:DP:81:GLN:OE1	48:DP:106:LEU:HA	1.69	0.90
39:DD:43:ARG:NH1	39:DD:44:ASN:HD21	1.70	0.90
52:BT:129:ARG:CZ	52:BT:131:ALA:HB3	2.01	0.90
47:DO:65:THR:HG23	47:DO:67:LYS:H	1.35	0.90
30:B4:14:ILE:HG13	30:B4:31:ILE:HB	1.52	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2138:C:H2'	36:BA:2139:C:H6	1.37	0.89
36:DA:2177:C:H4'	38:DC:46:LYS:HD3	1.52	0.89
43:BH:19:VAL:HG12	43:BH:20:ALA:H	1.33	0.89
6:AF:30:LEU:O	6:AF:35:ALA:HB3	1.72	0.89
12:AL:110:VAL:H	12:AL:122:THR:HG22	1.36	0.89
36:DA:2183:C:H2'	36:DA:2184:G:C8	2.08	0.89
36:BA:1517:G:H8	36:BA:1517:G:H5'	1.36	0.89
52:DT:33:LYS:HE3	52:DT:43:GLN:NE2	1.85	0.89
42:BG:46:ALA:H	42:BG:47:LYS:HD2	1.37	0.89
48:DP:47:ASP:HB3	48:DP:48:PRO:CA	2.00	0.89
36:BA:2177:C:H4'	38:BC:46:LYS:HD3	1.54	0.89
36:DA:2134:A:N6	36:DA:2157:G:H1'	1.87	0.89
3:AC:46:GLU:O	3:AC:47:LEU:HB2	1.71	0.89
51:BS:49:VAL:HG12	51:BS:50:SER:H	1.38	0.89
12:AL:6:THR:OG1	12:AL:9:GLN:HG3	1.73	0.89
36:BA:1602:U:H3'	36:BA:1603:A:C5'	2.02	0.89
26:D0:27:GLU:HB2	26:D0:68:GLU:HA	1.54	0.89
36:BA:1019:U:HO2'	36:BA:1021:A:H2	0.89	0.89
36:BA:2317:C:C2'	36:BA:2318:G:H5'	2.02	0.89
51:DS:106:ARG:HH12	51:DS:108:GLY:CA	1.85	0.89
36:BA:880:G:H1	36:BA:897:C:H42	1.16	0.89
42:BG:85:GLY:C	42:BG:87:PRO:HD3	1.91	0.89
57:BY:10:GLY:HA2	57:BY:27:VAL:HG13	1.54	0.89
36:DA:1019:U:H3	36:DA:1142(A):A:H62	1.18	0.89
1:CA:1277:C:HO2'	1:CA:1279:A:H8	0.96	0.89
36:DA:860:U:H5	36:DA:917:A:N7	1.70	0.89
2:AB:87:ARG:HH22	2:AB:232:PRO:C	1.76	0.89
52:BT:27:THR:O	52:BT:28:VAL:HB	1.72	0.89
38:BC:27:ARG:CD	38:BC:182:PRO:HG2	2.03	0.89
51:DS:106:ARG:HH12	51:DS:108:GLY:HA3	1.35	0.89
50:DR:45:ARG:HG3	50:DR:46:GLY:H	1.38	0.89
5:AE:50:GLU:HB2	5:AE:53:LEU:HD13	1.54	0.89
39:BD:70:TRP:CH2	39:BD:150:LYS:HA	2.08	0.89
12:CL:110:VAL:H	12:CL:122:THR:HG22	1.38	0.89
36:BA:2657:A:H2'	36:BA:2658:C:H5'	1.55	0.89
32:B6:16:CYS:SG	32:B6:48:VAL:HG22	2.13	0.89
36:DA:2068:U:H3	36:DA:2430:A:H2	1.17	0.89
9:CI:28:VAL:HG12	9:CI:29:ASN:H	1.38	0.89
52:DT:3:ARG:HD2	52:DT:6:LEU:HD12	1.55	0.89
39:DD:132:PRO:HG3	39:DD:190:TYR:CE1	2.08	0.89
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.06	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:925:C:C2'	36:BA:926:A:H5''	2.03	0.88
57:BY:73:ARG:HH22	57:BY:82:PRO:HA	1.38	0.88
41:DF:28:ILE:HD13	41:DF:28:ILE:H	1.35	0.88
1:CA:1320:C:H6	1:CA:1320:C:H5'	1.38	0.88
51:DS:89:ARG:O	51:DS:92:TYR:HB3	1.72	0.88
48:DP:23:PRO:HD2	48:DP:33:ARG:HE	1.38	0.88
24:AY:72:U:H2'	24:AY:73:G:H5''	1.53	0.88
10:CJ:5:ARG:HB3	10:CJ:99:LYS:HB2	1.53	0.88
28:B2:53:LEU:HA	28:B2:56:GLN:CG	2.04	0.88
1:CA:1367:C:H5'	10:CJ:60:ARG:HH11	1.36	0.88
36:BA:1747(A):G:H2'	36:BA:1748:G:H5''	1.54	0.88
1:AA:452:A:HO2'	1:AA:453:A:H8	0.92	0.88
27:B1:50:ARG:HG3	27:B1:59:THR:HG22	1.53	0.88
1:CA:1238:A:H8	1:CA:1241:G:HO2'	0.93	0.88
36:DA:925:C:C2'	36:DA:926:A:H5''	2.02	0.88
42:DG:139:LEU:HA	42:DG:144:ILE:HG21	1.53	0.88
1:CA:858:G:C6	1:CA:869:G:N7	2.41	0.88
36:DA:650:C:H3'	36:DA:651:G:H5''	1.53	0.88
49:DQ:135:ASP:H	49:DQ:137:TYR:HD1	1.12	0.88
16:CP:20:VAL:HG21	16:CP:32:TYR:HB2	1.55	0.88
32:D6:15:GLU:HB2	32:D6:20:ASN:HB3	1.55	0.88
36:BA:860:U:H5	36:BA:917:A:N7	1.72	0.88
42:BG:165:THR:OG1	42:BG:168:GLU:HG3	1.74	0.88
38:BC:78:ALA:HA	38:BC:116:THR:H	1.39	0.88
32:B6:15:GLU:HG2	32:B6:18:ARG:NH1	1.88	0.88
36:DA:673:C:H5'	36:DA:673:C:H6	1.33	0.88
36:DA:1602:U:H3'	36:DA:1603:A:C5'	2.03	0.88
6:CF:30:LEU:O	6:CF:35:ALA:HB3	1.73	0.88
9:AI:4:TYR:CD2	9:AI:88:TYR:HB2	2.08	0.88
10:AJ:96:ILE:HD13	10:AJ:96:ILE:H	1.38	0.88
36:BA:1516:C:C2'	36:BA:1517:G:H5''	2.04	0.88
36:BA:2415:G:O3'	48:BP:66:GLY:HA3	1.73	0.88
2:CB:204:ASN:ND2	2:CB:206:ASP:H	1.71	0.88
4:AD:114:ARG:HG3	4:AD:114:ARG:HH11	1.38	0.88
10:CJ:33:GLN:HB2	10:CJ:75:ILE:HD11	1.54	0.88
12:AL:36:VAL:HG22	12:AL:82:VAL:HG22	1.54	0.88
36:DA:1049:C:H2'	36:DA:1050:A:H8	1.39	0.88
33:D7:34:ARG:HG3	33:D7:34:ARG:HH11	1.39	0.88
36:BA:2189:U:C2'	36:BA:2190:G:H4'	2.04	0.88
36:DA:2317:C:C2'	36:DA:2318:G:H5'	2.03	0.88
51:BS:106:ARG:HH12	51:BS:108:GLY:HA3	1.37	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:132:PRO:HG3	39:BD:190:TYR:CE1	2.09	0.88
56:DX:11:PRO:HA	56:DX:28:PHE:HB3	1.56	0.88
2:CB:44:LEU:H	2:CB:44:LEU:HD12	1.39	0.88
25:AZ:93:ILE:HG12	25:AZ:122:LEU:HD11	1.53	0.88
38:BC:175:VAL:HG12	38:BC:188:ASN:HB3	1.55	0.88
36:BA:31:C:H2'	36:BA:32:C:C5'	2.03	0.87
36:BA:654(E):G:N2	36:BA:654(Q):C:H1'	1.89	0.87
57:DY:73:ARG:HH22	57:DY:82:PRO:HA	1.38	0.87
52:DT:129:ARG:CZ	52:DT:131:ALA:HB3	2.03	0.87
36:BA:2134:A:N6	36:BA:2157:G:H1'	1.89	0.87
36:BA:2068:U:H3	36:BA:2430:A:H2	1.18	0.87
25:AZ:193:ASN:HB2	25:AZ:196:VAL:HG12	1.56	0.87
36:BA:1899:G:N2	36:BA:1902:C:N4	2.21	0.87
42:DG:47:LYS:HE3	42:DG:81:LYS:HB2	1.55	0.87
36:DA:2139:C:H2'	36:DA:2140:C:H6	1.36	0.87
1:CA:265:G:H2'	1:CA:266:G:H5''	1.56	0.87
42:DG:114:ILE:HG23	42:DG:116:ASP:O	1.74	0.87
36:DA:1403:C:H5''	36:DA:1471:A:H1'	1.56	0.87
1:CA:228:A:H5'	1:CA:228:A:H8	1.38	0.87
36:BA:2572:A:C8	40:BE:144:ARG:HG2	2.10	0.87
14:CN:13:THR:N	14:CN:14:PRO:HD2	1.86	0.87
3:CC:8:ILE:HG23	3:CC:16:ARG:HG2	1.56	0.87
42:BG:44:GLY:H	42:BG:88:ILE:HG21	1.38	0.87
48:DP:16:ARG:NH1	48:DP:16:ARG:HB2	1.88	0.87
25:CZ:263:ARG:HH21	25:CZ:297:GLU:HG2	1.38	0.87
39:BD:10:THR:HG23	39:BD:13:ARG:HB2	1.56	0.87
52:BT:56:GLY:O	52:BT:59:THR:HG23	1.75	0.87
49:DQ:133:ARG:HH11	49:DQ:133:ARG:HB2	1.38	0.87
12:CL:7:ILE:HD12	12:CL:8:ASN:H	1.35	0.87
5:AE:10:MET:SD	5:AE:13:ILE:HD11	2.15	0.87
36:BA:1678:G:N2	36:BA:1989:G:H22	1.73	0.87
36:BA:1050:A:H2'	36:BA:1051:G:H5'	1.56	0.87
41:BF:3:GLU:HA	41:BF:24:LEU:HG	1.55	0.87
36:DA:2187:G:C2'	36:DA:2188:C:H5'	2.05	0.87
36:DA:2657:A:H2'	36:DA:2658:C:H5'	1.56	0.87
36:DA:657:U:H2'	36:DA:658:C:C6	2.10	0.87
47:BO:65:THR:HG23	47:BO:67:LYS:H	1.36	0.87
36:DA:2864:G:OP1	52:DT:119:LYS:HD2	1.74	0.87
25:AZ:198:LYS:HA	25:AZ:198:LYS:HE3	1.56	0.87
9:CI:4:TYR:CD2	9:CI:88:TYR:HB2	2.09	0.87
35:D9:7:VAL:HG13	35:D9:34:GLN:HG2	1.57	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DC:78:ALA:HA	38:DC:116:THR:H	1.40	0.87
38:BC:123:VAL:HG23	38:BC:127:LEU:HD23	0.87	0.87
28:B2:2:LYS:CD	28:B2:59:ARG:HH12	1.86	0.87
41:DF:3:GLU:HA	41:DF:24:LEU:HG	1.54	0.87
39:DD:35:LYS:HG3	39:DD:63:ARG:HG2	1.57	0.87
57:BY:28:LYS:HG2	57:BY:39:VAL:HG22	1.54	0.87
36:DA:1516:C:C2'	36:DA:1517:G:H5''	2.05	0.87
33:B7:34:ARG:HG3	33:B7:34:ARG:HH11	1.39	0.87
50:BR:3:HIS:O	50:BR:5:LYS:N	2.07	0.87
31:B5:24:ALA:O	31:B5:25:LEU:HB2	1.74	0.87
13:CM:11:ARG:HG2	13:CM:12:ASN:H	1.36	0.87
39:BD:147:LEU:HD11	39:BD:183:ARG:HH12	1.38	0.87
50:DR:3:HIS:O	50:DR:5:LYS:N	2.07	0.87
56:BX:11:PRO:HA	56:BX:28:PHE:HB3	1.56	0.87
43:BH:105:LEU:HD23	43:BH:105:LEU:H	1.40	0.87
3:AC:132:ARG:HH11	3:AC:136:GLN:HE22	1.22	0.87
1:AA:265:G:H2'	1:AA:266:G:H5''	1.56	0.87
39:DD:30:GLU:HB2	39:DD:35:LYS:CD	2.05	0.87
42:BG:76:SER:HA	42:BG:83:ARG:HB3	1.57	0.87
51:DS:49:VAL:HG12	51:DS:50:SER:H	1.38	0.87
2:AB:204:ASN:ND2	2:AB:206:ASP:H	1.73	0.87
10:CJ:96:ILE:H	10:CJ:96:ILE:HD13	1.39	0.87
4:CD:114:ARG:HG3	4:CD:114:ARG:HH11	1.37	0.87
32:B6:6:ARG:HH11	32:B6:6:ARG:HB3	1.37	0.87
36:BA:1494:A:C2'	36:BA:1495:A:H5''	2.05	0.86
2:AB:44:LEU:HD12	2:AB:44:LEU:H	1.39	0.86
4:AD:59:ARG:HA	4:AD:59:ARG:HE	1.40	0.86
40:BE:116:VAL:HG21	40:BE:122:PHE:CD2	2.10	0.86
36:DA:1899:G:N2	36:DA:1902:C:N4	2.19	0.86
52:DT:27:THR:O	52:DT:28:VAL:HB	1.72	0.86
36:DA:2189:U:C2'	36:DA:2190:G:H4'	2.05	0.86
36:DA:654(E):G:N2	36:DA:654(Q):C:H1'	1.89	0.86
36:DA:2464:C:HO2'	36:DA:2465:C:H6	1.22	0.86
25:AZ:246:LYS:HB3	25:AZ:281:ILE:HG22	1.56	0.86
12:CL:6:THR:OG1	12:CL:9:GLN:HG3	1.75	0.86
57:DY:28:LYS:HG2	57:DY:39:VAL:HG22	1.55	0.86
48:BP:30:THR:HG22	48:BP:31:ALA:N	1.89	0.86
36:BA:1516:C:H2'	36:BA:1517:G:H5''	1.57	0.86
12:CL:36:VAL:HG22	12:CL:82:VAL:HG22	1.56	0.86
38:DC:123:VAL:HG23	38:DC:127:LEU:HD23	0.88	0.86
39:BD:30:GLU:HB2	39:BD:35:LYS:CD	2.03	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:151:HIS:CB	58:BZ:170:THR:HA	2.05	0.86
57:DY:96:ILE:HG12	57:DY:99:CYS:HB2	1.55	0.86
1:AA:979:C:C3'	1:AA:980:C:H5''	2.05	0.86
39:DD:76:PRO:HG2	39:DD:98:VAL:HG21	1.57	0.86
57:DY:53:PRO:HB3	57:DY:56:PRO:HG3	1.57	0.86
58:BZ:130:PRO:HA	58:BZ:133:ILE:HD11	1.56	0.86
16:AP:20:VAL:HG21	16:AP:32:TYR:HB2	1.55	0.86
31:D5:24:ALA:O	31:D5:25:LEU:HB2	1.75	0.86
56:BX:27:THR:HG23	56:BX:80:ILE:HB	1.57	0.86
42:BG:47:LYS:HG2	42:BG:81:LYS:HD2	1.55	0.86
51:BS:54:LEU:HD13	51:BS:58:LEU:H	1.39	0.86
54:DV:18:LEU:HD23	54:DV:19:LYS:H	1.38	0.86
36:DA:1494:A:C2'	36:DA:1495:A:H5''	2.05	0.86
58:BZ:15:PRO:HA	58:BZ:18:LEU:HD23	1.57	0.86
54:BV:24:LYS:HA	54:BV:92:THR:HG23	1.56	0.86
1:CA:1086:U:H2'	1:CA:1087:G:H5'	1.58	0.86
32:D6:16:CYS:SG	32:D6:48:VAL:HG22	2.16	0.86
50:BR:45:ARG:HG3	50:BR:46:GLY:H	1.38	0.86
36:DA:271(C):C:H2'	36:DA:271(D):G:H8	1.40	0.86
36:BA:330:A:H2	36:BA:1210:A:H2'	1.39	0.86
52:BT:3:ARG:HD2	52:BT:6:LEU:HD12	1.57	0.86
1:AA:228:A:H8	1:AA:228:A:H5'	1.39	0.86
9:AI:17:VAL:HG11	9:AI:81:ILE:HD13	1.57	0.86
41:DF:110:LEU:HD12	41:DF:206:ILE:HD11	1.57	0.86
4:AD:138:TYR:HD1	4:AD:139:ARG:N	1.73	0.86
52:DT:80:SER:HB3	52:DT:81:PRO:HD3	1.56	0.86
49:BQ:133:ARG:HB2	49:BQ:133:ARG:HH11	1.38	0.86
42:DG:47:LYS:HD3	42:DG:81:LYS:HG3	1.57	0.86
54:BV:18:LEU:HD23	54:BV:19:LYS:H	1.40	0.86
54:DV:24:LYS:HA	54:DV:92:THR:HG23	1.57	0.86
36:DA:1887:C:C2'	36:DA:1888:G:H5''	2.05	0.86
31:D5:33:CYS:HB3	31:D5:36:CYS:O	1.76	0.86
10:AJ:5:ARG:HB3	10:AJ:99:LYS:HB2	1.56	0.86
36:DA:1050:A:H2'	36:DA:1051:G:H5'	1.56	0.86
31:D5:41:PRO:HG2	31:D5:44:THR:OG1	1.75	0.86
1:CA:452:A:HO2'	1:CA:453:A:H8	0.91	0.86
47:DO:111:PHE:HB3	47:DO:114:ILE:HD13	1.58	0.86
39:DD:10:THR:HG23	39:DD:13:ARG:HB2	1.57	0.86
46:BN:51:PHE:CZ	46:BN:119:ARG:HD2	2.11	0.86
56:DX:27:THR:HG23	56:DX:80:ILE:HB	1.58	0.85
36:DA:1190:G:H5'	48:DP:35:HIS:H	1.41	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1536:C:H2'	1:CA:1537:U:O4'	1.75	0.85
25:CZ:277:LEU:HD13	25:CZ:278:GLN:N	1.91	0.85
35:B9:7:VAL:HG13	35:B9:34:GLN:HG2	1.58	0.85
53:DU:92:ARG:NH1	53:DU:94:ASN:HD22	1.72	0.85
53:DU:92:ARG:O	53:DU:94:ASN:N	2.09	0.85
58:BZ:126:VAL:HA	58:BZ:163:LEU:HA	1.57	0.85
43:DH:105:LEU:H	43:DH:105:LEU:HD23	1.40	0.85
36:DA:244:A:H4'	48:DP:74:GLU:HG3	1.58	0.85
7:CG:79:ARG:CZ	22:CW:33:U:H4'	2.06	0.85
38:BC:77:ILE:HD13	38:BC:95:GLY:HA3	1.58	0.85
40:DE:61:ARG:HB3	40:DE:62:PRO:HD3	1.58	0.85
38:DC:77:ILE:HD13	38:DC:95:GLY:HA3	1.58	0.85
25:CZ:246:LYS:HB3	25:CZ:281:ILE:HG22	1.55	0.85
51:DS:54:LEU:HD13	51:DS:58:LEU:H	1.40	0.85
36:DA:2159:G:H2'	36:DA:2160:G:H5''	1.58	0.85
27:D1:67:ILE:O	27:D1:70:VAL:HG12	1.76	0.85
36:BA:2864:G:OP1	52:BT:119:LYS:HD2	1.75	0.85
4:CD:59:ARG:HA	4:CD:59:ARG:HE	1.39	0.85
40:DE:50:GLY:HA2	40:DE:78:LEU:HB3	1.58	0.85
56:DX:12:VAL:HG23	56:DX:13:LEU:N	1.91	0.85
36:BA:1543:C:H3'	36:BA:1544:A:C5'	2.05	0.85
57:BY:53:PRO:HB3	57:BY:56:PRO:HG3	1.58	0.85
2:CB:87:ARG:HH22	2:CB:232:PRO:C	1.78	0.85
36:BA:271(C):C:H2'	36:BA:271(D):G:H8	1.41	0.85
58:DZ:40:ASP:HB3	58:DZ:43:GLU:HG3	1.58	0.85
25:CZ:19:HIS:CD2	25:CZ:113:MET:HB3	2.12	0.85
36:DA:1543:C:H3'	36:DA:1544:A:C5'	2.05	0.85
13:AM:65:LYS:HD3	13:AM:65:LYS:H	1.42	0.85
57:DY:13:VAL:HG21	57:DY:72:VAL:HB	1.56	0.85
41:BF:25:PRO:CB	41:BF:119:ARG:HB2	2.06	0.85
42:BG:72:ARG:NH2	42:BG:86:MET:HG3	1.92	0.85
52:BT:80:SER:HB3	52:BT:81:PRO:HD3	1.57	0.85
36:DA:2101:G:C2'	36:DA:2102:U:H5''	2.06	0.85
32:D6:36:LEU:HD12	32:D6:50:ARG:CZ	2.07	0.85
20:CT:45:GLN:NE2	20:CT:46:GLU:HG3	1.92	0.85
48:DP:30:THR:HG22	48:DP:31:ALA:N	1.89	0.85
1:CA:979:C:C3'	1:CA:980:C:H5''	2.05	0.85
53:BU:92:ARG:NH1	53:BU:94:ASN:HD22	1.75	0.85
36:DA:64:A:H5'	56:DX:64:LYS:HD3	1.57	0.85
32:B6:28:ARG:HA	32:B6:32:ASN:ND2	1.91	0.85
1:CA:1367:C:H5'	10:CJ:60:ARG:NH1	1.91	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:657:U:H2'	36:BA:658:C:C6	2.12	0.85
15:AO:87:ILE:HG22	15:AO:88:ARG:H	1.41	0.85
2:CB:185:ILE:HG22	2:CB:199:TYR:HB2	1.59	0.85
36:DA:654(H):G:H2'	36:DA:654(I):C:H5'	1.59	0.85
36:DA:997:G:OP1	53:DU:93:LYS:HD3	1.77	0.85
25:CZ:193:ASN:HB2	25:CZ:196:VAL:HG12	1.56	0.85
25:AZ:145:GLU:HG2	25:AZ:149:LEU:HB2	1.57	0.85
29:D3:29:ARG:HB2	29:D3:29:ARG:HH11	1.42	0.85
36:DA:330:A:H2	36:DA:1210:A:H2'	1.40	0.85
38:BC:79:LYS:HD3	38:BC:119:VAL:HB	1.59	0.85
41:DF:25:PRO:CB	41:DF:119:ARG:HB2	2.07	0.85
25:CZ:198:LYS:HE3	25:CZ:198:LYS:HA	1.57	0.85
36:BA:244:A:H4'	48:BP:74:GLU:HG3	1.57	0.85
1:AA:1152:A:H5"	10:AJ:13:HIS:CD2	2.12	0.85
28:B2:28:LYS:NZ	28:B2:31:GLU:HG3	1.90	0.85
57:BY:13:VAL:HG21	57:BY:72:VAL:HB	1.58	0.85
32:B6:15:GLU:HB2	32:B6:20:ASN:HB3	1.57	0.85
36:BA:1190:G:H5'	48:BP:35:HIS:H	1.41	0.85
36:DA:1047:G:H2'	36:DA:1110:G:H21	1.42	0.85
4:CD:138:TYR:HD1	4:CD:139:ARG:N	1.73	0.85
25:CZ:323:LEU:HD13	25:CZ:396:GLY:HA2	1.57	0.85
43:DH:103:LEU:HB2	43:DH:123:PHE:HD2	1.40	0.85
52:DT:28:VAL:HG13	52:DT:46:GLU:HA	1.57	0.84
39:BD:35:LYS:HG3	39:BD:63:ARG:HG2	1.59	0.84
20:AT:45:GLN:NE2	20:AT:46:GLU:HG3	1.92	0.84
51:DS:13:ARG:HG3	51:DS:14:VAL:H	1.42	0.84
36:BA:1067:A:H3'	36:BA:1068:G:H5"	1.58	0.84
31:B5:33:CYS:HB3	31:B5:36:CYS:O	1.77	0.84
38:DC:79:LYS:HD3	38:DC:119:VAL:HB	1.60	0.84
40:BE:61:ARG:HB3	40:BE:62:PRO:HD3	1.59	0.84
31:D5:49:CYS:O	31:D5:56:LYS:HG3	1.77	0.84
10:CJ:55:LYS:HZ2	10:CJ:55:LYS:CB	1.90	0.84
36:BA:1049:C:H2'	36:BA:1050:A:H8	1.40	0.84
25:AZ:323:LEU:HD13	25:AZ:396:GLY:HA2	1.57	0.84
40:BE:111:ARG:HG3	40:BE:160:TYR:CD2	2.12	0.84
2:CB:80:ILE:H	2:CB:80:ILE:HD12	1.41	0.84
36:BA:2092:U:C4'	36:BA:2093:G:H5"	2.07	0.84
56:DX:27:THR:CG2	56:DX:80:ILE:HB	2.07	0.84
42:BG:47:LYS:NZ	42:BG:88:ILE:HD11	1.92	0.84
32:D6:28:ARG:HA	32:D6:32:ASN:ND2	1.93	0.84
31:D5:4:HIS:CB	31:D5:5:PRO:HD3	2.08	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2131:G:H1'	36:BA:2133:G:N2	1.92	0.84
43:BH:98:LEU:HB2	43:BH:125:VAL:HG21	1.60	0.84
25:AZ:277:LEU:HD13	25:AZ:278:GLN:N	1.91	0.84
36:BA:1539:G:C2	36:BA:1540:U:H1'	2.13	0.84
39:BD:26:LYS:O	39:BD:27:THR:HG22	1.76	0.84
37:BB:48:A:H4'	51:BS:95:HIS:CD2	2.12	0.84
58:DZ:73:GLN:NE2	58:DZ:75:ASN:HD21	1.75	0.84
46:DN:51:PHE:CZ	46:DN:119:ARG:HD2	2.13	0.84
1:AA:1086:U:H2'	1:AA:1087:G:H5'	1.57	0.84
1:CA:1363(A):A:H4'	1:CA:1364:U:H5''	1.59	0.84
1:AA:1417:G:C5'	1:AA:1417:G:H8	1.88	0.84
40:BE:38:THR:HB	40:BE:41:LYS:HG2	1.57	0.84
26:B0:49:LYS:HG3	26:B0:80:HIS:ND1	1.93	0.84
42:DG:16:ARG:HH22	42:DG:28:VAL:HG13	1.43	0.84
36:DA:1067:A:H3'	36:DA:1068:G:H5''	1.58	0.84
43:BH:103:LEU:HB2	43:BH:123:PHE:HD2	1.40	0.84
52:DT:56:GLY:O	52:DT:59:THR:HG23	1.78	0.84
13:CM:65:LYS:HD3	13:CM:65:LYS:H	1.42	0.84
42:DG:73:ALA:H	42:DG:87:PRO:HG2	1.43	0.84
36:BA:1887:C:C2'	36:BA:1888:G:H5''	2.07	0.84
36:DA:2131:G:H1'	36:DA:2133:G:N2	1.93	0.84
36:DA:2656:U:H3	36:DA:2665:A:H2	1.24	0.84
28:D2:17:SER:OG	28:D2:20:GLU:HG2	1.78	0.84
52:DT:90:GLN:O	52:DT:92:GLY:N	2.10	0.84
42:BG:119:GLY:HA3	42:BG:181:ARG:HB3	1.57	0.84
36:DA:2572:A:C8	40:DE:144:ARG:HG2	2.11	0.84
40:DE:111:ARG:HG3	40:DE:160:TYR:CD2	2.13	0.84
2:CB:172:ILE:H	2:CB:172:ILE:HD12	1.41	0.84
36:DA:2245:U:H5'	36:DA:2246:G:H5'	1.60	0.84
1:CA:1442(B):A:H5'	52:DT:118:ARG:NH1	1.92	0.84
38:DC:123:VAL:HG22	38:DC:127:LEU:HD23	1.59	0.84
41:DF:24:LEU:HB3	41:DF:25:PRO:CD	2.08	0.84
58:BZ:33:LEU:O	58:BZ:34:ASN:HB3	1.78	0.84
31:B5:41:PRO:HG2	31:B5:44:THR:OG1	1.77	0.84
52:DT:50:ILE:HD11	52:DT:102:ILE:HD11	1.58	0.84
40:BE:36:ARG:NH2	40:BE:88:GLY:HA2	1.92	0.84
29:B3:29:ARG:HB2	29:B3:29:ARG:HH11	1.43	0.84
36:BA:2159:G:H2'	36:BA:2160:G:H5''	1.58	0.84
1:AA:1416:G:C2'	1:AA:1417:G:H5''	2.08	0.84
26:D0:49:LYS:HG3	26:D0:80:HIS:ND1	1.93	0.84
50:BR:38:VAL:HB	50:BR:39:PRO:HD3	1.59	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:39:ARG:HD2	52:BT:39:ARG:H	1.43	0.84
36:BA:1403:C:H5''	36:BA:1471:A:H1'	1.56	0.84
36:BA:1434:A:H61	36:BA:1558:A:H62	1.26	0.84
36:DA:1826:G:H4'	39:DD:242:ARG:HH21	1.42	0.83
36:BA:1899:G:H22	36:BA:1902:C:H41	0.84	0.83
28:B2:41:ILE:HG13	28:B2:42:GLY:H	1.42	0.83
36:DA:1539:G:C2	36:DA:1540:U:H1'	2.12	0.83
52:BT:28:VAL:HG13	52:BT:46:GLU:HA	1.59	0.83
40:DE:38:THR:HB	40:DE:41:LYS:HG2	1.58	0.83
32:D6:10:LEU:H	32:D6:10:LEU:CD2	1.91	0.83
48:BP:23:PRO:O	48:BP:33:ARG:HD2	1.78	0.83
48:BP:24:GLY:HA3	48:BP:33:ARG:NH1	1.92	0.83
1:CA:979:C:H3'	1:CA:980:C:H5''	1.58	0.83
36:BA:1378:A:O2'	36:BA:1379:A:H5'	1.77	0.83
1:AA:573:A:H8	1:AA:573:A:H5'	1.43	0.83
1:CA:573:A:H8	1:CA:573:A:H5'	1.43	0.83
10:AJ:55:LYS:HZ2	10:AJ:55:LYS:CB	1.90	0.83
5:CE:31:LEU:HD22	5:CE:43:LEU:HD11	1.60	0.83
36:BA:2131:G:N3	36:BA:2133:G:N2	2.25	0.83
40:DE:116:VAL:HG21	40:DE:122:PHE:CD2	2.13	0.83
16:CP:74:LEU:O	16:CP:79:VAL:HG23	1.78	0.83
36:BA:2645:G:H3'	36:BA:2646:C:C5'	2.07	0.83
31:B5:4:HIS:CB	31:B5:5:PRO:HD3	2.09	0.83
58:DZ:123:ASP:O	58:DZ:124:ILE:HG23	1.79	0.83
38:BC:27:ARG:HD3	38:BC:182:PRO:HG2	1.56	0.83
57:BY:96:ILE:HG12	57:BY:99:CYS:HB2	1.60	0.83
43:BH:44:VAL:HG12	43:BH:45:VAL:H	1.43	0.83
41:BF:110:LEU:HD12	41:BF:206:ILE:HD11	1.60	0.83
3:AC:8:ILE:HG23	3:AC:16:ARG:HG2	1.59	0.83
38:DC:100:ILE:HG23	38:DC:127:LEU:HD13	1.60	0.83
1:AA:1152:A:O2'	1:AA:1153:C:H5'	1.78	0.83
42:BG:47:LYS:HZ2	42:BG:82:LEU:HD12	1.40	0.83
1:CA:1533:C:C3'	1:CA:1534:A:H5''	2.08	0.83
32:B6:10:LEU:CD2	32:B6:10:LEU:H	1.91	0.83
10:CJ:38:ILE:HG13	10:CJ:71:LEU:HB3	1.58	0.83
56:DX:35:THR:HG22	56:DX:37:THR:H	1.42	0.83
36:BA:2656:U:H3	36:BA:2665:A:H2	1.26	0.83
56:BX:35:THR:HG22	56:BX:37:THR:H	1.43	0.83
41:BF:24:LEU:HB3	41:BF:25:PRO:CD	2.09	0.83
57:BY:95:LYS:HG3	57:BY:100:ALA:HA	1.59	0.83
42:DG:38:VAL:HG23	42:DG:158:ALA:HB3	1.60	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:10:ARG:HE	58:DZ:36:LYS:HD3	1.43	0.83
53:BU:92:ARG:O	53:BU:94:ASN:N	2.11	0.83
27:B1:61:ARG:HG2	27:B1:61:ARG:HH11	1.44	0.83
40:DE:36:ARG:NH2	40:DE:88:GLY:HA2	1.92	0.83
40:BE:50:GLY:HA2	40:BE:78:LEU:HB3	1.58	0.83
4:CD:3:ARG:NH1	4:CD:118:ARG:HD3	1.93	0.83
36:BA:1053:C:H2'	36:BA:1054:A:H8	1.44	0.83
1:AA:1320:C:H5'	1:AA:1320:C:H6	1.39	0.83
6:CF:11:ASN:HB3	6:CF:14:LEU:HG	1.60	0.83
36:BA:1884:A:C2'	36:BA:1885:A:H5''	2.09	0.83
58:DZ:152:ALA:HB2	58:DZ:168:GLU:HA	1.58	0.83
28:D2:51:ARG:HD3	28:D2:55:ARG:HH12	1.42	0.83
46:DN:23:LEU:HB3	46:DN:60:ILE:HG21	1.60	0.83
6:AF:11:ASN:HB3	6:AF:14:LEU:HG	1.58	0.83
36:DA:2762:G:H8	36:DA:2762:G:H5'	1.43	0.83
1:CA:942:G:H21	9:CI:124:GLN:NE2	1.76	0.83
1:CA:1152:A:O2'	1:CA:1153:C:H5'	1.77	0.83
57:DY:97:ARG:HH21	57:DY:98:VAL:HB	1.43	0.83
36:DA:1019:U:HO2'	36:DA:1021:A:H2	0.84	0.83
30:B4:12:ALA:CB	30:B4:29:PRO:HA	2.09	0.83
10:AJ:38:ILE:HG13	10:AJ:71:LEU:HB3	1.59	0.83
31:B5:49:CYS:O	31:B5:56:LYS:HG3	1.78	0.83
25:CZ:145:GLU:HG2	25:CZ:149:LEU:HB2	1.59	0.83
36:DA:761:A:H8	36:DA:761:A:O5'	1.61	0.83
36:DA:2645:G:H3'	36:DA:2646:C:C5'	2.07	0.83
28:B2:47:ASN:HA	28:B2:50:ILE:CB	2.08	0.83
29:D3:35:ARG:NH1	29:D3:35:ARG:HB2	1.94	0.83
36:BA:2875:C:H4'	52:BT:5:ALA:HB2	1.60	0.83
19:AS:78:ARG:HB2	19:AS:81:ARG:HH11	1.44	0.83
5:CE:10:MET:SD	5:CE:13:ILE:HD11	2.18	0.83
7:AG:45:ASP:O	7:AG:49:ILE:HG12	1.78	0.83
52:BT:90:GLN:O	52:BT:92:GLY:N	2.11	0.83
36:DA:1087:G:H8	36:DA:1088:A:H4'	1.44	0.83
49:BQ:56:ARG:HG3	49:BQ:56:ARG:HH11	1.44	0.83
36:DA:89:G:OP2	36:DA:90:U:H2'	1.79	0.83
28:B2:18:PRO:CB	28:B2:72:ALA:HA	2.07	0.83
39:DD:32:SER:O	39:DD:36:PRO:HG3	1.79	0.82
36:BA:321:G:N2	41:BF:165:ARG:HE	1.76	0.82
49:DQ:141:GLN:HE21	58:DZ:72:ARG:HA	1.44	0.82
32:B6:44:ARG:O	32:B6:45:LYS:HE3	1.78	0.82
14:AN:12:ARG:NH1	14:AN:14:PRO:HG2	1.94	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:98:LEU:HB2	43:DH:125:VAL:HG21	1.60	0.82
2:AB:229:VAL:HG12	2:AB:230:VAL:H	1.44	0.82
46:DN:30:ILE:O	46:DN:34:LEU:HB2	1.79	0.82
46:BN:133:GLN:HG2	46:BN:135:PRO:HD3	1.61	0.82
4:AD:18:LYS:H	4:AD:33:MET:HE2	1.42	0.82
57:BY:50:ARG:HD2	57:BY:53:PRO:HA	1.60	0.82
4:AD:34:GLU:O	4:AD:35:ARG:HB2	1.78	0.82
1:AA:1128:C:O2'	1:AA:1129:C:H5''	1.78	0.82
58:BZ:72:ARG:HG3	58:BZ:89:PHE:HB2	1.61	0.82
34:D8:8:LYS:HA	34:D8:11:LYS:HD3	1.59	0.82
36:BA:2101:G:C2'	36:BA:2102:U:H5''	2.08	0.82
58:DZ:73:GLN:HE21	58:DZ:75:ASN:ND2	1.76	0.82
7:CG:45:ASP:O	7:CG:49:ILE:HG12	1.79	0.82
36:BA:89:G:OP2	36:BA:90:U:H2'	1.79	0.82
43:DH:137:ASP:O	43:DH:138:LYS:HB2	1.78	0.82
57:DY:28:LYS:O	57:DY:38:ILE:HG22	1.79	0.82
5:AE:31:LEU:HD22	5:AE:43:LEU:HD11	1.59	0.82
51:DS:99:LYS:NZ	51:DS:99:LYS:HB3	1.94	0.82
36:DA:1207:C:H2'	36:DA:1208:C:H6	1.44	0.82
47:BO:111:PHE:HB3	47:BO:114:ILE:HD13	1.60	0.82
12:AL:33:ARG:HD3	12:AL:62:SER:OG	1.78	0.82
20:AT:50:GLU:HG3	20:AT:100:ILE:HD13	1.60	0.82
1:CA:1128:C:O2'	1:CA:1129:C:H5''	1.80	0.82
36:DA:2305:A:H3'	36:DA:2306:C:H5''	1.61	0.82
25:AZ:271:GLU:HG2	25:AZ:276:THR:HA	1.62	0.82
57:BY:97:ARG:HH21	57:BY:98:VAL:HB	1.43	0.82
25:AZ:241:ARG:NH1	25:AZ:241:ARG:HB3	1.93	0.82
36:DA:1516:C:H2'	36:DA:1517:G:H5''	1.58	0.82
36:DA:2131:G:N3	36:DA:2133:G:N2	2.27	0.82
46:BN:23:LEU:HB3	46:BN:60:ILE:HG21	1.62	0.82
1:AA:1363(A):A:H4'	1:AA:1364:U:H5''	1.61	0.82
1:AA:1442(B):A:OP2	1:AA:1442(B):A:H3'	1.78	0.82
20:AT:16:HIS:O	20:AT:19:SER:HB3	1.79	0.82
38:BC:123:VAL:HG22	38:BC:127:LEU:HD23	1.59	0.82
1:CA:1152:A:H5''	10:CJ:13:HIS:CD2	2.14	0.82
32:D6:44:ARG:O	32:D6:45:LYS:HE3	1.78	0.82
36:DA:621:A:H2'	36:DA:622:G:H5'	1.62	0.82
36:DA:1058:G:H2'	36:DA:1059:G:H5''	1.61	0.82
2:AB:178:ARG:NH1	8:AH:71:GLY:O	2.12	0.82
50:DR:38:VAL:HB	50:DR:39:PRO:HD3	1.60	0.82
36:BA:612:C:C2'	36:BA:613:G:H5''	2.09	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:13:ARG:HG3	51:BS:14:VAL:H	1.44	0.82
36:BA:997:G:OP1	53:BU:93:LYS:HD3	1.79	0.82
55:DW:26:GLY:H	55:DW:71:VAL:HG23	1.44	0.82
2:AB:200:ILE:HD12	2:AB:200:ILE:H	1.44	0.82
2:AB:80:ILE:HD12	2:AB:80:ILE:H	1.42	0.82
41:DF:192:LEU:HD21	41:DF:194:MET:HG3	1.60	0.82
58:BZ:96:VAL:HG22	58:BZ:97:GLU:N	1.94	0.82
48:DP:125:VAL:O	48:DP:145:PRO:HD2	1.79	0.82
58:DZ:149:SER:HB3	58:DZ:173:ALA:HA	1.61	0.82
1:AA:547:A:H4'	1:AA:548:G:O5'	1.80	0.82
25:CZ:271:GLU:HG2	25:CZ:276:THR:HA	1.62	0.82
36:BA:2511:U:H4'	40:BE:124:GLY:HA2	1.62	0.82
20:CT:50:GLU:HG3	20:CT:100:ILE:HD13	1.59	0.82
2:AB:172:ILE:HD12	2:AB:172:ILE:H	1.44	0.82
36:BA:2464:C:HO2'	36:BA:2465:C:H6	1.27	0.82
56:BX:27:THR:CG2	56:BX:80:ILE:HB	2.09	0.82
46:DN:133:GLN:HG2	46:DN:135:PRO:HD3	1.62	0.82
1:AA:1367:C:H5'	10:AJ:60:ARG:NH1	1.93	0.82
36:DA:612:C:C2'	36:DA:613:G:H5''	2.08	0.82
48:DP:64:LYS:O	48:DP:66:GLY:N	2.13	0.82
36:BA:1207:C:H2'	36:BA:1208:C:H6	1.44	0.82
15:AO:17:ARG:HH11	15:AO:17:ARG:HG3	1.43	0.82
1:AA:538:G:H2'	1:AA:539:A:H8	1.44	0.82
36:DA:1378:A:O2'	36:DA:1379:A:H5'	1.80	0.82
36:DA:1899:G:H22	36:DA:1902:C:H41	0.83	0.82
34:B8:61:LEU:CD2	34:B8:62:LEU:HG	2.10	0.82
57:DY:8:LYS:HD2	57:DY:8:LYS:N	1.95	0.82
36:BA:621:A:H2'	36:BA:622:G:H5'	1.62	0.82
43:BH:66:GLY:HA2	43:BH:69:ARG:HB3	1.61	0.82
36:BA:1697:G:H3'	36:BA:1698:A:H5''	1.60	0.82
18:AR:31:LEU:H	18:AR:31:LEU:HD23	1.45	0.82
43:DH:44:VAL:HG12	43:DH:45:VAL:H	1.44	0.82
1:AA:80:G:N2	1:AA:90:U:H5'	1.93	0.82
4:CD:150:GLU:CD	4:CD:151:LYS:H	1.82	0.82
58:DZ:103:ARG:HD3	58:DZ:138:GLU:HG3	1.62	0.82
38:BC:100:ILE:HG23	38:BC:127:LEU:HD13	1.60	0.81
32:D6:15:GLU:HG2	32:D6:18:ARG:NH1	1.94	0.81
57:DY:17:SER:HB2	57:DY:71:LYS:HE2	1.61	0.81
36:DA:272(H):C:C2'	36:DA:272(I):U:H5''	2.10	0.81
5:CE:76:ILE:HD11	5:CE:142:LEU:CD2	2.09	0.81
36:DA:2392:A:H2	36:DA:2424:C:H42	1.24	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:614(A):U:H4'	36:DA:614(B):G:H5''	1.62	0.81
54:BV:62:LEU:HD21	54:BV:95:LEU:HB2	1.62	0.81
28:B2:4:SER:HA	28:B2:7:ARG:HD3	1.61	0.81
36:DA:2511:U:H4'	40:DE:124:GLY:HA2	1.62	0.81
36:DA:2645:G:C3'	36:DA:2646:C:H5'	2.09	0.81
43:DH:156:ALA:HB3	43:DH:159:GLU:HB3	1.62	0.81
50:BR:24:GLN:NE2	50:BR:36:THR:HG21	1.95	0.81
36:DA:2138:C:H2'	36:DA:2139:C:C6	2.15	0.81
25:CZ:20:VAL:O	25:CZ:21:ASP:HB2	1.80	0.81
4:AD:150:GLU:CD	4:AD:151:LYS:H	1.82	0.81
1:CA:939:G:H5''	7:CG:102:ARG:HH12	1.45	0.81
38:DC:123:VAL:HG21	38:DC:127:LEU:HD23	1.61	0.81
28:B2:28:LYS:HZ3	28:B2:31:GLU:HG3	1.44	0.81
28:B2:47:ASN:HB2	36:BA:94(A):G:O2'	1.80	0.81
34:B8:8:LYS:HA	34:B8:11:LYS:HD3	1.61	0.81
9:CI:52:ALA:HB3	9:CI:95:LYS:HZ2	1.44	0.81
22:CW:71:G:C2'	22:CW:72:C:H5'	2.11	0.81
36:BA:272(H):C:C2'	36:BA:272(I):U:H5''	2.10	0.81
1:CA:1203:C:OP1	14:CN:3:ARG:HD3	1.80	0.81
13:AM:11:ARG:HG2	13:AM:12:ASN:ND2	1.95	0.81
43:BH:156:ALA:HB3	43:BH:159:GLU:HB3	1.62	0.81
43:BH:158:HIS:ND1	43:BH:168:PRO:HB2	1.95	0.81
36:DA:1053:C:H2'	36:DA:1054:A:H8	1.44	0.81
36:BA:1058:G:H2'	36:BA:1059:G:H5''	1.62	0.81
1:AA:538:G:H2'	1:AA:539:A:C8	2.15	0.81
2:AB:25:ASN:C	2:AB:25:ASN:HD22	1.83	0.81
36:BA:654(H):G:H2'	36:BA:654(I):C:H5'	1.60	0.81
15:CO:87:ILE:HG22	15:CO:88:ARG:H	1.44	0.81
41:BF:192:LEU:HD21	41:BF:194:MET:HG3	1.62	0.81
36:DA:2784:C:H1'	40:DE:37:ARG:HH12	1.43	0.81
4:CD:34:GLU:O	4:CD:35:ARG:HB2	1.79	0.81
4:CD:163:GLU:O	4:CD:166:LYS:HG2	1.81	0.81
3:CC:113:ALA:HB3	3:CC:114:PRO:HD3	1.63	0.81
57:BY:8:LYS:HD2	57:BY:8:LYS:N	1.95	0.81
48:BP:125:VAL:O	48:BP:145:PRO:HD2	1.80	0.81
36:BA:2138:C:H2'	36:BA:2139:C:C6	2.15	0.81
57:DY:50:ARG:HD2	57:DY:53:PRO:HA	1.61	0.81
40:BE:36:ARG:HH21	40:BE:88:GLY:HA2	1.45	0.81
9:CI:52:ALA:HB1	9:CI:95:LYS:HD2	1.62	0.81
36:BA:2287:A:H2	36:BA:2346:A:N1	1.79	0.81
1:CA:538:G:H2'	1:CA:539:A:H8	1.46	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:76:ILE:HD11	5:AE:142:LEU:CD2	2.10	0.81
36:BA:1948:G:C8	36:BA:1948:G:H5'	2.16	0.81
14:AN:26:ARG:HH11	14:AN:47:LEU:HD21	1.45	0.81
12:CL:33:ARG:HD3	12:CL:62:SER:OG	1.81	0.81
34:B8:11:LYS:HZ1	34:B8:63:PRO:HG3	1.45	0.81
32:D6:18:ARG:NH1	32:D6:18:ARG:HG2	1.93	0.81
50:DR:24:GLN:NE2	50:DR:36:THR:HG21	1.95	0.81
36:DA:1019:U:O2'	36:DA:1021:A:H2	1.63	0.81
36:BA:1019:U:O2'	36:BA:1021:A:H2	1.63	0.81
36:DA:321:G:N2	41:DF:165:ARG:HE	1.78	0.81
1:AA:979:C:H3'	1:AA:980:C:H5''	1.63	0.81
36:DA:2875:C:H4'	52:DT:5:ALA:HB2	1.61	0.81
36:BA:1047:G:H2'	36:BA:1110:G:H21	1.43	0.81
55:BW:26:GLY:H	55:BW:71:VAL:HG23	1.46	0.81
49:DQ:56:ARG:HG3	49:DQ:56:ARG:HH11	1.45	0.81
2:CB:33:TYR:HB2	2:CB:43:ASP:HB2	1.62	0.81
46:BN:30:ILE:O	46:BN:34:LEU:HB2	1.78	0.81
55:BW:107:LEU:H	55:BW:107:LEU:HD12	1.45	0.81
1:AA:353:A:H5'	1:AA:353:A:H8	1.44	0.81
55:DW:107:LEU:H	55:DW:107:LEU:HD12	1.46	0.81
1:AA:1533:C:H3'	1:AA:1534:A:H5''	1.61	0.81
56:BX:55:ASN:HB2	56:BX:80:ILE:HG23	1.63	0.81
36:DA:1543:C:C3'	36:DA:1544:A:H5''	2.10	0.81
58:DZ:98:MET:HG2	58:DZ:99:TYR:N	1.94	0.81
22:AW:71:G:C2'	22:AW:72:C:H5'	2.09	0.81
57:DY:49:VAL:O	57:DY:50:ARG:HB2	1.80	0.81
1:AA:541:G:H2'	1:AA:542:G:H8	1.44	0.81
36:DA:2524:G:H8	36:DA:2524:G:H5'	1.45	0.81
47:BO:35:VAL:HG21	47:BO:103:ALA:HB3	1.62	0.81
36:BA:761:A:H8	36:BA:761:A:O5'	1.62	0.81
36:DA:1434:A:H61	36:DA:1558:A:H62	1.27	0.81
36:BA:2305:A:H3'	36:BA:2306:C:H5''	1.61	0.81
48:DP:24:GLY:HA3	48:DP:33:ARG:NH1	1.95	0.81
27:B1:79:GLY:O	27:B1:80:LEU:HG	1.80	0.81
36:DA:271(C):C:H2'	36:DA:271(D):G:C8	2.16	0.81
36:BA:2762:G:H8	36:BA:2762:G:H5'	1.44	0.81
54:DV:36:PRO:O	54:DV:37:VAL:HG13	1.80	0.81
1:CA:80:G:N2	1:CA:90:U:H5'	1.94	0.81
36:BA:896:A:C8	58:BZ:146:ILE:HD12	2.16	0.81
36:BA:64:A:H5'	56:BX:64:LYS:HD3	1.61	0.81
36:DA:34:C:H41	36:DA:447:A:H61	1.29	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:17:ARG:HG3	15:CO:17:ARG:HH11	1.45	0.81
1:CA:1003:G:H2'	1:CA:1004:A:C4'	2.10	0.81
9:AI:52:ALA:HB1	9:AI:95:LYS:HD2	1.62	0.81
36:DA:2185:C:C2'	36:DA:2186:G:H5'	2.10	0.81
4:AD:3:ARG:NH1	4:AD:118:ARG:HD3	1.95	0.81
32:B6:36:LEU:HD12	32:B6:50:ARG:CZ	2.10	0.81
51:BS:99:LYS:HB3	51:BS:99:LYS:NZ	1.93	0.81
43:DH:66:GLY:HA2	43:DH:69:ARG:HB3	1.61	0.81
26:B0:50:ASN:HD22	26:B0:63:VAL:HG21	1.46	0.81
58:BZ:40:ASP:HB3	58:BZ:43:GLU:HB3	1.61	0.81
25:AZ:23:GLY:O	25:AZ:26:THR:HG22	1.81	0.81
55:BW:11:ARG:HG2	55:BW:11:ARG:HH11	1.46	0.81
52:DT:23:ARG:O	52:DT:25:GLY:N	2.14	0.81
1:AA:1003:G:H2'	1:AA:1004:A:C4'	2.10	0.81
31:B5:4:HIS:HB3	31:B5:5:PRO:CD	2.11	0.81
58:DZ:89:PHE:HE2	58:DZ:96:VAL:HG21	1.46	0.81
57:BY:17:SER:HB2	57:BY:71:LYS:HE2	1.62	0.81
39:DD:43:ARG:HB2	39:DD:54:ARG:HB2	1.61	0.81
41:BF:10:PRO:HD2	41:BF:13:SER:O	1.81	0.81
36:BA:1087:G:H8	36:BA:1088:A:H4'	1.44	0.81
20:AT:26:ASN:HB2	20:AT:71:THR:HG23	1.63	0.81
25:AZ:20:VAL:O	25:AZ:21:ASP:HB2	1.79	0.81
2:CB:200:ILE:HD12	2:CB:200:ILE:H	1.46	0.81
55:BW:82:LEU:H	55:BW:82:LEU:HD12	1.46	0.81
36:BA:1826:G:H4'	39:BD:242:ARG:HH21	1.46	0.80
48:DP:7:ARG:O	48:DP:10:PRO:HD3	1.81	0.80
39:BD:32:SER:O	39:BD:36:PRO:HG3	1.81	0.80
36:BA:2185:C:C2'	36:BA:2186:G:H5'	2.10	0.80
26:D0:50:ASN:HD22	26:D0:63:VAL:HG21	1.46	0.80
48:DP:64:LYS:C	48:DP:66:GLY:H	1.84	0.80
39:BD:183:ARG:HG2	39:BD:183:ARG:HH11	1.45	0.80
16:AP:74:LEU:O	16:AP:79:VAL:HG23	1.80	0.80
20:CT:16:HIS:O	20:CT:19:SER:HB3	1.82	0.80
3:AC:5:ILE:CD1	3:AC:5:ILE:H	1.94	0.80
22:AW:57:G:C2'	22:AW:58:A:H5'	2.11	0.80
43:DH:118:PRO:HG2	43:DH:121:ILE:HD12	1.63	0.80
21:AU:6:ARG:HD3	21:AU:15:ARG:NH1	1.95	0.80
34:B8:61:LEU:CD1	34:B8:61:LEU:H	1.94	0.80
48:BP:7:ARG:O	48:BP:10:PRO:HD3	1.81	0.80
25:CZ:241:ARG:NH1	25:CZ:241:ARG:HB3	1.95	0.80
36:DA:1697:G:H3'	36:DA:1698:A:H5''	1.60	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:64:LYS:O	48:BP:66:GLY:N	2.13	0.80
20:AT:23:ARG:O	20:AT:27:LYS:HB2	1.81	0.80
2:CB:229:VAL:HG12	2:CB:230:VAL:H	1.46	0.80
36:BA:2668:G:O2'	36:BA:2669:G:H5'	1.79	0.80
16:CP:53:VAL:HG23	16:CP:54:GLU:H	1.46	0.80
10:AJ:90:LEU:H	10:AJ:91:PRO:HD3	1.46	0.80
52:DT:39:ARG:H	52:DT:39:ARG:HD2	1.44	0.80
36:DA:1678:G:N2	36:DA:1989:G:H22	1.80	0.80
46:DN:70:LYS:HG2	46:DN:87:LEU:HD23	1.64	0.80
39:BD:43:ARG:HB2	39:BD:54:ARG:HB2	1.63	0.80
1:CA:1157:A:H4'	1:CA:1158:C:O5'	1.80	0.80
39:DD:30:GLU:HG3	39:DD:63:ARG:NE	1.97	0.80
36:BA:1543:C:C3'	36:BA:1544:A:H5''	2.10	0.80
42:DG:86:MET:HG2	42:DG:86:MET:O	1.79	0.80
36:BA:2392:A:H2	36:BA:2424:C:H42	1.27	0.80
36:DA:1884:A:C2'	36:DA:1885:A:H5''	2.10	0.80
4:CD:18:LYS:H	4:CD:33:MET:HE2	1.44	0.80
48:BP:64:LYS:C	48:BP:66:GLY:H	1.83	0.80
13:CM:11:ARG:HG2	13:CM:12:ASN:ND2	1.95	0.80
36:DA:2668:G:O2'	36:DA:2669:G:H5'	1.82	0.80
49:DQ:60:ARG:HB3	49:DQ:60:ARG:NH1	1.96	0.80
36:BA:614(A):U:H4'	36:BA:614(B):G:H5''	1.61	0.80
56:DX:40:LYS:HB2	56:DX:54:VAL:HG21	1.61	0.80
43:DH:158:HIS:ND1	43:DH:168:PRO:HB2	1.96	0.80
37:BB:8:U:H5'	37:BB:8:U:H6	1.47	0.80
36:DA:2801(A):A:C4'	36:DA:2802:G:H5'	2.12	0.80
56:DX:35:THR:HG22	56:DX:38:GLU:H	1.45	0.80
36:BA:89:G:H3'	36:BA:90:U:H5'	1.61	0.80
1:CA:547:A:H4'	1:CA:548:G:O5'	1.80	0.80
44:DJ:42:UNK:C	44:DJ:44:UNK:H	1.92	0.80
49:BQ:60:ARG:HB3	49:BQ:60:ARG:NH1	1.97	0.80
42:BG:44:GLY:N	42:BG:88:ILE:HG21	1.96	0.80
57:BY:49:VAL:O	57:BY:50:ARG:HB2	1.80	0.80
47:DO:35:VAL:HG21	47:DO:103:ALA:HB3	1.61	0.80
27:D1:69:LYS:HZ1	27:D1:76:ARG:HH22	1.27	0.80
36:DA:958:U:H5''	49:DQ:14:ARG:HD2	1.63	0.80
36:BA:1227:G:OP1	53:BU:13:LYS:HD2	1.82	0.80
52:DT:55:ASN:H	52:DT:59:THR:CG2	1.94	0.80
56:BX:12:VAL:HG23	56:BX:13:LEU:N	1.94	0.80
46:DN:9:VAL:HG12	46:DN:10:GLU:N	1.96	0.80
34:D8:11:LYS:HZ1	34:D8:63:PRO:HG3	1.45	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D8:61:LEU:CD2	34:D8:62:LEU:HG	2.10	0.80
24:CY:4:G:C2'	24:CY:5:G:H5''	2.12	0.80
50:DR:24:GLN:HE22	50:DR:36:THR:HG21	1.47	0.80
36:BA:2298:A:H62	36:BA:2318:G:H8	1.30	0.80
30:D4:12:ALA:CB	30:D4:29:PRO:HA	2.10	0.80
25:CZ:34:VAL:HG21	25:CZ:199:ILE:HG21	1.64	0.80
4:AD:163:GLU:O	4:AD:166:LYS:HG2	1.82	0.80
27:D1:86:SER:O	27:D1:90:ILE:HG12	1.80	0.80
1:CA:1318:A:H4'	19:CS:10:PHE:CE2	2.16	0.80
47:DO:104:ARG:HE	52:DT:33:LYS:NZ	1.80	0.80
42:DG:51:ARG:HD3	42:DG:53:LEU:HD21	1.64	0.80
36:DA:2092:U:C4'	36:DA:2093:G:H5''	2.10	0.80
24:AY:4:G:C2'	24:AY:5:G:H5''	2.12	0.80
26:B0:49:LYS:HG3	26:B0:80:HIS:HD1	1.47	0.80
31:B5:2:ALA:HA	36:BA:2015:A:H1'	1.64	0.80
49:DQ:141:GLN:NE2	58:DZ:72:ARG:HA	1.97	0.80
36:DA:2099:U:H2'	36:DA:2100:G:C8	2.17	0.80
5:CE:12:LEU:HD13	5:CE:31:LEU:HB2	1.63	0.80
36:DA:89:G:H3'	36:DA:90:U:H5'	1.62	0.80
2:CB:25:ASN:HD22	2:CB:25:ASN:C	1.83	0.80
7:AG:145:ALA:O	7:AG:147:ALA:N	2.15	0.80
1:AA:939:G:H5''	7:AG:102:ARG:HH12	1.46	0.80
42:BG:115:ARG:HG2	42:BG:115:ARG:HH11	1.47	0.80
36:BA:2784:C:H1'	40:BE:37:ARG:HH12	1.45	0.80
53:DU:59:ARG:HH11	53:DU:59:ARG:HG2	1.47	0.80
55:DW:82:LEU:HD12	55:DW:82:LEU:H	1.47	0.80
38:BC:123:VAL:HG23	38:BC:127:LEU:HD22	1.61	0.79
40:BE:34:VAL:HG11	40:BE:78:LEU:CD2	2.12	0.79
13:CM:4:ILE:HG22	13:CM:5:ALA:H	1.46	0.79
47:BO:104:ARG:HE	52:BT:33:LYS:NZ	1.78	0.79
36:DA:910:A:H62	49:DQ:12:GLN:HA	1.47	0.79
57:DY:26:LYS:HG2	57:DY:27:VAL:H	1.45	0.79
57:BY:28:LYS:O	57:BY:38:ILE:HG22	1.80	0.79
53:BU:59:ARG:HH11	53:BU:59:ARG:HG2	1.47	0.79
37:DB:80:U:H2'	37:DB:81:G:H21	1.47	0.79
51:BS:52:SER:HB3	51:BS:55:ALA:HB3	1.63	0.79
18:CR:31:LEU:HD23	18:CR:31:LEU:H	1.45	0.79
9:AI:52:ALA:HB3	9:AI:95:LYS:NZ	1.97	0.79
13:CM:4:ILE:HG22	13:CM:5:ALA:N	1.98	0.79
49:DQ:141:GLN:HB3	58:DZ:99:TYR:CE1	2.18	0.79
57:BY:26:LYS:HG2	57:BY:27:VAL:H	1.44	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:538:G:H2'	1:CA:539:A:C8	2.17	0.79
4:CD:189:PRO:HB2	4:CD:194:LEU:CD2	2.12	0.79
10:CJ:50:ILE:N	10:CJ:50:ILE:HD13	1.97	0.79
36:DA:2287:A:H2	36:DA:2346:A:N1	1.80	0.79
36:DA:1948:G:H5'	36:DA:1948:G:C8	2.17	0.79
43:BH:94:TYR:HD1	43:BH:107:VAL:HA	1.46	0.79
1:CA:1321:C:H3'	1:CA:1322:C:H5''	1.63	0.79
10:CJ:24:VAL:HG12	10:CJ:28:ARG:HD2	1.64	0.79
9:CI:20:ARG:NH1	9:CI:20:ARG:HB2	1.96	0.79
56:BX:35:THR:HG22	56:BX:38:GLU:H	1.46	0.79
29:B3:17:LYS:HG2	36:BA:969:U:OP1	1.82	0.79
1:CA:353:A:H5'	1:CA:353:A:H8	1.45	0.79
39:DD:147:LEU:HD11	39:DD:183:ARG:NH1	1.97	0.79
49:DQ:134:ARG:HD2	58:DZ:122:ARG:NH2	1.97	0.79
1:CA:706:A:O4'	11:CK:29:ILE:HD11	1.82	0.79
36:BA:2524:G:H8	36:BA:2524:G:H5'	1.47	0.79
46:DN:22:THR:HG22	46:DN:61:ARG:HB2	1.63	0.79
9:CI:52:ALA:HB3	9:CI:95:LYS:NZ	1.98	0.79
29:B3:35:ARG:NH1	29:B3:35:ARG:HB2	1.96	0.79
32:B6:15:GLU:CG	32:B6:47:THR:HG21	2.13	0.79
48:BP:39:LYS:HD2	48:BP:40:SER:H	1.48	0.79
36:BA:2801(A):A:C4'	36:BA:2802:G:H5'	2.12	0.79
42:DG:131:TYR:HB3	42:DG:159:VAL:CG1	2.12	0.79
24:CY:16:H2U:H5'	24:CY:17:H2U:H5'	1.64	0.79
36:DA:302:C:H2'	36:DA:303:U:C6	2.18	0.79
28:B2:62:THR:HG22	28:B2:66:GLU:HB3	1.63	0.79
34:D8:61:LEU:CD1	34:D8:61:LEU:H	1.94	0.79
32:D6:14:THR:O	32:D6:49:HIS:HA	1.82	0.79
57:DY:95:LYS:HG3	57:DY:100:ALA:HA	1.62	0.79
48:DP:105:LEU:H	48:DP:105:LEU:HD12	1.47	0.79
37:DB:8:U:H5'	37:DB:8:U:H6	1.46	0.79
48:BP:30:THR:CG2	48:BP:31:ALA:H	1.95	0.79
36:BA:271(C):C:H2'	36:BA:271(D):G:C8	2.17	0.79
1:AA:1321:C:H3'	1:AA:1322:C:H5''	1.64	0.79
22:AW:18:G:H1	22:AW:55:U:H1'	1.48	0.79
22:CW:57:G:C2'	22:CW:58:A:H5'	2.11	0.79
1:AA:1285:A:H4'	1:AA:1286:A:O5'	1.81	0.79
19:AS:43:GLU:O	19:AS:45:VAL:N	2.16	0.79
56:BX:12:VAL:CG2	56:BX:13:LEU:H	1.92	0.79
39:BD:30:GLU:HG3	39:BD:63:ARG:NE	1.97	0.79
32:B6:14:THR:O	32:B6:49:HIS:HA	1.83	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:51:VAL:HG12	54:BV:52:VAL:H	1.47	0.79
1:AA:1157:A:H4'	1:AA:1158:C:O5'	1.82	0.79
36:BA:654(A):G:H2'	36:BA:654(B):C:H5'	1.64	0.79
43:BH:137:ASP:O	43:BH:138:LYS:HB2	1.80	0.79
13:AM:119:GLY:O	13:AM:120:LYS:HB2	1.83	0.79
42:BG:51:ARG:NE	42:BG:51:ARG:HA	1.98	0.79
40:DE:36:ARG:HH21	40:DE:88:GLY:HA2	1.45	0.79
36:BA:733:G:N7	36:BA:761:A:C6	2.50	0.79
42:BG:28:VAL:O	42:BG:31:VAL:HG12	1.81	0.79
14:CN:26:ARG:HH11	14:CN:47:LEU:HD21	1.47	0.79
12:AL:18:VAL:HG23	12:AL:19:ARG:N	1.95	0.79
43:BH:42:ARG:O	43:BH:43:VAL:HG13	1.83	0.79
41:DF:160:ASN:ND2	41:DF:162:LEU:H	1.81	0.79
48:DP:30:THR:CG2	48:DP:31:ALA:H	1.95	0.79
14:CN:12:ARG:NH1	14:CN:14:PRO:HG2	1.98	0.79
20:CT:50:GLU:HB2	20:CT:99:LEU:HD12	1.63	0.79
52:BT:23:ARG:O	52:BT:25:GLY:N	2.16	0.79
20:CT:26:ASN:HB2	20:CT:71:THR:HG23	1.63	0.79
39:BD:76:PRO:HG2	39:BD:98:VAL:HG21	1.64	0.79
28:B2:38:GLN:OE1	28:B2:44:LEU:HD22	1.82	0.79
43:BH:85:LYS:HZ1	43:BH:86:GLU:HA	1.48	0.79
39:BD:24:ILE:O	39:BD:26:LYS:N	2.13	0.79
48:BP:101:VAL:HA	48:BP:105:LEU:O	1.83	0.79
48:BP:30:THR:HG22	48:BP:31:ALA:H	1.47	0.79
51:BS:15:ARG:NH1	51:BS:15:ARG:HB2	1.97	0.79
9:AI:20:ARG:NH1	9:AI:20:ARG:HB2	1.97	0.79
53:BU:92:ARG:NH2	54:BV:10:LYS:HB3	1.97	0.79
42:BG:102:PHE:O	42:BG:103:LEU:HB2	1.83	0.79
1:CA:176:C:H2'	1:CA:177:C:H6	1.48	0.79
36:BA:2245:U:H5'	36:BA:2246:G:H5'	1.64	0.79
58:DZ:7:ALA:HB3	58:DZ:61:LEU:HD23	1.64	0.79
39:BD:206:LEU:HD22	39:BD:211:ARG:HG2	1.64	0.79
36:DA:2502:G:H5''	36:DA:2503:A:H5''	1.65	0.79
1:AA:424:G:H2'	1:AA:425:G:H8	1.48	0.79
34:B8:11:LYS:NZ	34:B8:63:PRO:HG3	1.98	0.79
41:BF:160:ASN:ND2	41:BF:162:LEU:H	1.80	0.79
43:DH:156:ALA:C	43:DH:158:HIS:H	1.86	0.79
40:BE:14:ILE:HD11	40:BE:173:VAL:HG11	1.65	0.79
1:CA:541:G:H2'	1:CA:542:G:H8	1.48	0.79
41:DF:10:PRO:HD2	41:DF:13:SER:O	1.82	0.79
36:DA:605:C:H5	36:DA:623:G:H1	1.31	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:376:G:H4'	16:CP:5:ARG:NH1	1.97	0.79
40:BE:107:THR:O	40:BE:190:GLY:HA2	1.83	0.79
54:BV:36:PRO:O	54:BV:37:VAL:HG13	1.81	0.79
56:BX:40:LYS:HB2	56:BX:54:VAL:HG21	1.63	0.78
36:BA:2099:U:H2'	36:BA:2100:G:C8	2.18	0.78
3:AC:79:ARG:NH1	3:AC:79:ARG:HB2	1.98	0.78
28:B2:18:PRO:HB3	28:B2:71:ASN:O	1.83	0.78
20:AT:50:GLU:HB2	20:AT:99:LEU:HD12	1.64	0.78
36:BA:991:C:H6	36:BA:991:C:H5'	1.48	0.78
42:BG:146:TYR:O	42:BG:149:VAL:HG22	1.83	0.78
3:CC:5:ILE:CD1	3:CC:5:ILE:H	1.95	0.78
28:B2:46:GLN:HB3	28:B2:48:HIS:HD1	1.47	0.78
43:BH:118:PRO:HG2	43:BH:121:ILE:HD12	1.65	0.78
12:CL:18:VAL:HG23	12:CL:19:ARG:N	1.98	0.78
4:AD:100:ARG:HH21	4:AD:118:ARG:HH12	1.30	0.78
22:CV:23:A:H5'	22:CV:23:A:C8	2.17	0.78
48:DP:101:VAL:HA	48:DP:105:LEU:O	1.83	0.78
46:DN:62:VAL:CG2	46:DN:66:LYS:HD2	2.12	0.78
26:D0:50:ASN:HD22	26:D0:63:VAL:CG2	1.96	0.78
51:BS:101:LEU:O	51:BS:101:LEU:HD12	1.84	0.78
36:DA:2298:A:H62	36:DA:2318:G:H8	1.31	0.78
25:AZ:34:VAL:HG21	25:AZ:199:ILE:HG21	1.65	0.78
36:BA:1567:A:H5'	39:BD:58:HIS:CD2	2.18	0.78
29:D3:43:ILE:O	29:D3:47:VAL:HG23	1.84	0.78
1:CA:1285:A:H4'	1:CA:1286:A:O5'	1.82	0.78
24:AY:16:H2U:H5'	24:AY:17:H2U:H5'	1.64	0.78
51:DS:52:SER:HB3	51:DS:55:ALA:HB3	1.65	0.78
55:DW:22:ASP:HA	55:DW:25:ARG:HH12	1.48	0.78
10:CJ:90:LEU:H	10:CJ:91:PRO:HD3	1.47	0.78
9:CI:95:LYS:HG3	9:CI:96:LEU:HD13	1.64	0.78
1:CA:1367:C:C5'	10:CJ:60:ARG:HH11	1.95	0.78
46:BN:70:LYS:HG2	46:BN:87:LEU:HD23	1.65	0.78
56:DX:35:THR:O	56:DX:39:ILE:HG12	1.84	0.78
58:DZ:24:LEU:HD12	58:DZ:41:LEU:HG	1.65	0.78
46:BN:22:THR:HG22	46:BN:61:ARG:HB2	1.65	0.78
36:DA:1227:G:OP1	53:DU:13:LYS:HD2	1.83	0.78
36:DA:654(A):G:H2'	36:DA:654(B):C:H5'	1.64	0.78
46:BN:9:VAL:HG12	46:BN:10:GLU:N	1.98	0.78
27:B1:3:LYS:HB2	36:BA:1365:A:OP2	1.82	0.78
1:AA:1203:C:OP1	14:AN:3:ARG:HD3	1.83	0.78
46:BN:62:VAL:CG2	46:BN:66:LYS:HD2	2.13	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:76:PRO:HG2	39:DD:98:VAL:CG2	2.13	0.78
22:CW:18:G:H1	22:CW:55:U:H1'	1.48	0.78
31:D5:2:ALA:HA	36:DA:2015:A:H1'	1.63	0.78
36:BA:958:U:H5''	49:BQ:14:ARG:HD2	1.66	0.78
19:AS:10:PHE:CG	19:AS:10:PHE:O	2.35	0.78
7:CG:79:ARG:NE	7:CG:84:ASN:HB2	1.97	0.78
54:DV:19:LYS:NZ	54:DV:20:LEU:H	1.80	0.78
48:DP:47:ASP:HB2	48:DP:51:PHE:HB2	1.65	0.78
36:DA:2787:C:H1'	40:DE:61:ARG:HD3	1.65	0.78
25:CZ:23:GLY:O	25:CZ:26:THR:HG22	1.83	0.78
58:DZ:166:SER:HB2	58:DZ:168:GLU:HG3	1.64	0.78
1:AA:376:G:H5''	16:AP:5:ARG:HB2	1.65	0.78
20:CT:23:ARG:O	20:CT:27:LYS:HB2	1.83	0.78
37:BB:80:U:H2'	37:BB:81:G:H21	1.48	0.78
15:AO:39:LEU:HD13	15:AO:56:LEU:HB2	1.65	0.78
36:BA:2098:U:H3	36:BA:2191:G:H1	1.31	0.78
36:BA:2312:U:H4'	42:BG:71:THR:HG21	1.65	0.78
13:AM:4:ILE:HG22	13:AM:5:ALA:H	1.48	0.78
26:B0:10:THR:HG22	26:B0:12:ASN:N	1.98	0.78
10:AJ:50:ILE:N	10:AJ:50:ILE:HD13	1.97	0.78
50:BR:24:GLN:HE22	50:BR:36:THR:HG21	1.47	0.78
58:BZ:141:VAL:HA	58:BZ:144:LEU:HD23	1.66	0.78
26:B0:50:ASN:HD22	26:B0:63:VAL:CG2	1.97	0.78
10:CJ:32:ALA:HB2	10:CJ:76:ASN:HB2	1.65	0.78
11:AK:27:ASN:HD22	11:AK:28:THR:N	1.82	0.78
54:DV:62:LEU:HD21	54:DV:95:LEU:HB2	1.63	0.78
13:CM:49:THR:HG22	13:CM:51:ALA:H	1.49	0.78
38:DC:123:VAL:HG23	38:DC:127:LEU:HD22	1.60	0.78
56:DX:55:ASN:HB2	56:DX:80:ILE:HG23	1.64	0.78
34:B8:61:LEU:HD13	34:B8:62:LEU:H	1.49	0.78
34:B8:32:LEU:CG	34:B8:36:LYS:HZ3	1.94	0.78
32:D6:10:LEU:H	32:D6:10:LEU:HD23	1.49	0.78
43:DH:42:ARG:O	43:DH:43:VAL:HG13	1.82	0.78
48:BP:47:ASP:HB2	48:BP:51:PHE:HB2	1.66	0.78
4:AD:19:LEU:O	4:AD:26:CYS:SG	2.42	0.78
26:D0:27:GLU:HB3	26:D0:69:PHE:HD1	1.49	0.78
12:CL:7:ILE:HD12	12:CL:8:ASN:N	1.98	0.78
53:DU:92:ARG:NH2	54:DV:10:LYS:HB3	1.98	0.78
58:DZ:18:LEU:HD12	58:DZ:18:LEU:H	1.49	0.78
13:CM:53:VAL:HG12	13:CM:57:ARG:HH21	1.48	0.78
25:AZ:222:LEU:HD13	25:AZ:305:ALA:HB2	1.66	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:50:LEU:HD12	34:B8:51:ALA:N	1.99	0.78
19:CS:43:GLU:O	19:CS:45:VAL:N	2.15	0.78
3:CC:40:ARG:HH11	3:CC:40:ARG:HG3	1.49	0.78
19:CS:78:ARG:HB2	19:CS:81:ARG:HH11	1.48	0.78
7:AG:79:ARG:NE	7:AG:84:ASN:HB2	1.99	0.78
47:BO:104:ARG:HE	52:BT:33:LYS:HZ2	1.30	0.78
3:CC:79:ARG:HB2	3:CC:79:ARG:NH1	1.98	0.78
34:D8:32:LEU:HG	34:D8:36:LYS:HZ1	1.49	0.78
36:DA:654(H):G:C2'	36:DA:654(I):C:H5'	2.14	0.78
36:DA:1210:A:H5''	36:DA:1212:G:O4'	1.83	0.78
36:BA:654(H):G:C2'	36:BA:654(I):C:H5'	2.14	0.78
36:DA:145:G:H2'	36:DA:146:G:H5''	1.64	0.78
36:BA:302:C:H2'	36:BA:303:U:C6	2.19	0.78
36:DA:631:A:H5''	48:DP:65:ARG:HH11	1.49	0.78
27:D1:45:ASN:HD21	36:DA:2090:G:H21	1.32	0.78
9:AI:95:LYS:HG3	9:AI:96:LEU:HD13	1.64	0.78
36:BA:2147:G:H2'	36:BA:2148:G:O4'	1.84	0.78
36:BA:2787:C:H1'	40:BE:61:ARG:HD3	1.66	0.78
36:BA:2334:G:H21	51:BS:18:ILE:HG23	1.49	0.78
58:BZ:30:ASN:C	58:BZ:30:ASN:HD22	1.86	0.78
38:DC:43:VAL:HG23	38:DC:175:VAL:HG21	1.63	0.78
58:DZ:152:ALA:CB	58:DZ:168:GLU:HA	2.13	0.78
36:DA:733:G:N7	36:DA:761:A:C6	2.52	0.78
43:DH:30:LYS:HB2	43:DH:79:VAL:HA	1.66	0.78
36:DA:1076:C:H5''	58:DZ:111:VAL:HG12	1.64	0.78
36:BA:2726:U:O2	36:BA:2726:U:H5'	1.84	0.78
9:CI:40:LEU:HD11	9:CI:70:LYS:HG2	1.65	0.78
13:AM:4:ILE:HG22	13:AM:5:ALA:N	1.99	0.78
43:DH:94:TYR:HD1	43:DH:107:VAL:HA	1.48	0.78
36:BA:811:U:OP2	48:BP:30:THR:HG23	1.84	0.78
36:DA:657:U:H2'	36:DA:658:C:H6	1.49	0.78
27:B1:80:LEU:HB3	27:B1:82:LEU:CD1	2.14	0.78
39:DD:183:ARG:HG2	39:DD:183:ARG:HH11	1.46	0.78
1:CA:939:G:H5''	7:CG:102:ARG:HH22	1.48	0.78
1:AA:1318:A:H4'	19:AS:10:PHE:CE2	2.19	0.78
54:DV:51:VAL:HG12	54:DV:52:VAL:H	1.48	0.78
22:AW:38:A:H2'	22:AW:39:U:H5''	1.66	0.78
28:B2:25:VAL:CB	28:B2:64:LEU:HD12	2.12	0.77
28:B2:62:THR:O	28:B2:66:GLU:HG3	1.84	0.77
54:BV:19:LYS:NZ	54:BV:20:LEU:H	1.81	0.77
36:BA:259:G:N2	36:BA:621:A:H8	1.81	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:54:ARG:HG2	43:DH:54:ARG:HH11	1.49	0.77
51:DS:15:ARG:HB2	51:DS:15:ARG:NH1	1.99	0.77
2:AB:229:VAL:HG12	2:AB:230:VAL:N	1.99	0.77
19:CS:48:THR:HG22	19:CS:61:TYR:HA	1.66	0.77
46:BN:55:VAL:HG22	46:BN:126:PRO:HA	1.65	0.77
58:BZ:149:SER:CB	58:BZ:173:ALA:HA	2.14	0.77
55:DW:11:ARG:HG2	55:DW:11:ARG:HH11	1.48	0.77
36:BA:1314:C:H5'	36:BA:1314:C:H6	1.46	0.77
34:D8:11:LYS:NZ	34:D8:63:PRO:HG3	1.99	0.77
13:CM:119:GLY:O	13:CM:120:LYS:HB2	1.83	0.77
4:CD:101:LEU:HD23	4:CD:121:VAL:HG11	1.66	0.77
4:CD:11:LEU:HD13	4:CD:66:ARG:HD3	1.66	0.77
4:AD:67:ILE:HG22	4:AD:68:TYR:CD1	2.19	0.77
26:B0:27:GLU:HB3	26:B0:69:PHE:HD1	1.48	0.77
36:BA:34:C:H41	36:BA:447:A:H61	1.32	0.77
1:CA:269:C:H2'	1:CA:270:A:H8	1.49	0.77
31:B5:29:THR:HG21	36:BA:2814:C:O2'	1.85	0.77
49:DQ:74:TYR:HD2	49:DQ:91:GLU:HB2	1.48	0.77
43:BH:18:GLU:HB2	43:BH:25:LYS:HB2	1.66	0.77
28:B2:67:LYS:O	28:B2:70:GLN:HG2	1.84	0.77
39:DD:24:ILE:O	39:DD:26:LYS:N	2.14	0.77
40:DE:14:ILE:HD11	40:DE:173:VAL:HG11	1.66	0.77
48:BP:105:LEU:H	48:BP:105:LEU:HD12	1.48	0.77
26:D0:49:LYS:HG3	26:D0:80:HIS:HD1	1.48	0.77
48:DP:23:PRO:O	48:DP:33:ARG:HD2	1.83	0.77
48:DP:30:THR:HG22	48:DP:31:ALA:H	1.47	0.77
48:DP:39:LYS:HD2	48:DP:40:SER:H	1.48	0.77
41:BF:28:ILE:HG21	41:BF:116:ASP:HB2	1.66	0.77
10:AJ:80:LYS:O	10:AJ:83:GLU:HB3	1.85	0.77
49:BQ:74:TYR:HD2	49:BQ:91:GLU:HB2	1.48	0.77
36:BA:910:A:H62	49:BQ:12:GLN:HA	1.49	0.77
54:DV:19:LYS:HG2	54:DV:94:LEU:HB2	1.67	0.77
34:B8:32:LEU:HD23	34:B8:36:LYS:HE2	1.65	0.77
9:CI:19:LEU:HD21	9:CI:59:PHE:CD2	2.19	0.77
36:BA:1087:G:H2'	36:BA:1088:A:H4'	1.66	0.77
56:BX:35:THR:O	56:BX:39:ILE:HG12	1.84	0.77
34:D8:52:LYS:N	34:D8:53:PRO:HD2	2.00	0.77
1:CA:424:G:H2'	1:CA:425:G:H8	1.49	0.77
17:CQ:69:LYS:C	17:CQ:70:ARG:HD2	2.05	0.77
36:BA:2645:G:C3'	36:BA:2646:C:H5'	2.09	0.77
42:DG:73:ALA:H	42:DG:87:PRO:CG	1.97	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:23:A:H5'	22:AV:23:A:C8	2.18	0.77
1:CA:1238:A:H2	1:CA:1301:U:H3	1.31	0.77
1:AA:1533:C:C3'	1:AA:1534:A:H5''	2.14	0.77
7:CG:145:ALA:O	7:CG:147:ALA:N	2.17	0.77
2:CB:75:LYS:HA	2:CB:78:GLN:HE21	1.49	0.77
16:AP:53:VAL:HG23	16:AP:54:GLU:H	1.48	0.77
58:DZ:108:PRO:HD3	58:DZ:141:VAL:HB	1.67	0.77
2:AB:185:ILE:HG22	2:AB:199:TYR:HB2	1.66	0.77
36:DA:1348:G:H2'	36:DA:1349:A:H5''	1.66	0.77
1:AA:1003:G:N2	1:AA:1039:C:H42	1.82	0.77
32:D6:15:GLU:CG	32:D6:47:THR:HG21	2.15	0.77
36:BA:1210:A:H5''	36:BA:1212:G:O4'	1.84	0.77
35:B9:34:GLN:O	35:B9:35:ARG:HB2	1.84	0.77
36:DA:1567:A:H5'	39:DD:58:HIS:CD2	2.20	0.77
36:BA:1681:G:O2'	36:BA:1762:A:H2'	1.84	0.77
2:AB:22:LYS:HE2	2:AB:22:LYS:HA	1.67	0.77
25:CZ:331:HIS:HA	25:CZ:364:PRO:HG2	1.67	0.77
52:DT:60:THR:HG22	52:DT:77:PRO:HA	1.67	0.77
40:DE:34:VAL:HG11	40:DE:78:LEU:CD2	2.14	0.77
52:BT:60:THR:HG22	52:BT:77:PRO:HA	1.66	0.77
49:DQ:56:ARG:CG	49:DQ:56:ARG:HH11	1.97	0.77
1:AA:706:A:O4'	11:AK:29:ILE:HD11	1.84	0.77
52:BT:16:ARG:HD2	52:BT:18:ASP:OD1	1.85	0.77
36:DA:280:C:H3'	36:DA:281:G:H8	1.49	0.77
36:BA:181:A:H5'	36:BA:181:A:H8	1.49	0.77
41:BF:3:GLU:CA	41:BF:24:LEU:HG	2.15	0.77
49:BQ:141:GLN:HE21	58:BZ:72:ARG:CA	1.91	0.77
36:BA:658:C:H2'	36:BA:659:C:C6	2.19	0.77
43:BH:54:ARG:HG2	43:BH:54:ARG:HH11	1.50	0.77
36:DA:658:C:H2'	36:DA:659:C:C6	2.19	0.77
41:DF:28:ILE:HG21	41:DF:116:ASP:HB2	1.65	0.77
1:AA:542:G:OP1	4:AD:10:ARG:NH2	2.18	0.77
15:CO:39:LEU:HD13	15:CO:56:LEU:HB2	1.66	0.77
34:B8:54:GLU:O	34:B8:58:ILE:HG12	1.85	0.77
44:BJ:56:UNK:HA	44:BJ:83:UNK:HA	1.66	0.77
28:B2:20:GLU:OE1	28:B2:23:LYS:HB2	1.84	0.77
58:BZ:128:VAL:HG22	58:BZ:129:SER:H	1.50	0.77
36:BA:1301:A:H4'	36:BA:1302:A:OP1	1.83	0.77
25:CZ:355:LEU:HB3	25:CZ:370:PHE:CB	2.15	0.77
1:CA:542:G:OP1	4:CD:10:ARG:NH2	2.17	0.77
32:B6:36:LEU:HD12	32:B6:50:ARG:NH1	2.00	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:979:C:H3'	1:CA:980:C:C5'	2.15	0.77
36:BA:307:G:H21	36:BA:330:A:H62	1.33	0.77
58:DZ:151:HIS:HB2	58:DZ:170:THR:HA	1.67	0.77
27:D1:76:ARG:HB3	36:DA:271(R):G:H5''	1.66	0.77
34:B8:52:LYS:N	34:B8:53:PRO:HD2	2.00	0.77
13:AM:49:THR:HG22	13:AM:51:ALA:H	1.49	0.77
41:DF:185:ASP:HA	41:DF:188:ARG:HG2	1.67	0.77
54:BV:15:GLU:HB3	54:BV:16:PRO:CD	2.15	0.77
36:DA:2147:G:H2'	36:DA:2148:G:O4'	1.85	0.77
41:DF:164:ARG:HG2	41:DF:164:ARG:HH11	1.50	0.77
25:AZ:20:VAL:HG12	25:AZ:115:GLN:HG3	1.67	0.77
42:BG:153:ARG:HH11	42:BG:153:ARG:HB3	1.50	0.77
1:CA:376:G:H5''	16:CP:5:ARG:HB2	1.65	0.77
39:DD:134:ARG:HG3	39:DD:187:GLY:HA3	1.67	0.77
40:DE:107:THR:O	40:DE:190:GLY:HA2	1.84	0.77
37:BB:17:C:H2'	37:BB:18:G:O4'	1.85	0.77
36:BA:1038:C:H2'	36:BA:1039:G:H5''	1.67	0.77
36:BA:886:C:H2'	36:BA:887:A:H4'	1.65	0.77
50:BR:99:LYS:HD2	50:BR:99:LYS:N	1.99	0.76
39:BD:147:LEU:HD11	39:BD:183:ARG:NH1	1.99	0.76
53:DU:90:VAL:O	53:DU:92:ARG:N	2.19	0.76
36:DA:1209:G:H21	36:DA:1210:A:H62	1.30	0.76
31:B5:36:CYS:O	31:B5:38:ALA:N	2.19	0.76
36:DA:1880:C:C3'	36:DA:1881:C:H5''	2.16	0.76
36:DA:1314:C:H6	36:DA:1314:C:H5'	1.49	0.76
36:DA:2098:U:H3	36:DA:2191:G:H1	1.31	0.76
43:BH:30:LYS:HB2	43:BH:79:VAL:HA	1.67	0.76
2:CB:22:LYS:HE2	2:CB:22:LYS:HA	1.67	0.76
28:B2:48:HIS:HA	36:BA:95:G:O3'	1.85	0.76
32:D6:11:LEU:HD12	32:D6:26:ASN:HB2	1.67	0.76
4:CD:187:ARG:HH11	4:CD:187:ARG:HB3	1.49	0.76
36:BA:605:C:H5	36:BA:623:G:H1	1.30	0.76
48:DP:106:LEU:HD21	48:DP:112:LEU:HB2	1.65	0.76
2:CB:130:ARG:HH21	2:CB:134:GLU:HG3	1.50	0.76
19:CS:10:PHE:O	19:CS:10:PHE:CG	2.36	0.76
58:DZ:14:LYS:HE2	58:DZ:17:ALA:HB2	1.65	0.76
36:DA:991:C:H5'	36:DA:991:C:H6	1.50	0.76
6:CF:8:ILE:HD11	6:CF:79:LEU:HD23	1.67	0.76
25:CZ:222:LEU:HD13	25:CZ:305:ALA:HB2	1.67	0.76
22:AW:8:U:O2'	22:AW:9:A:H5''	1.85	0.76
36:DA:654:A:H3'	36:DA:654:A:OP1	1.85	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:214:G:H1'	36:DA:216:A:O2'	1.85	0.76
28:B2:46:GLN:HB3	28:B2:48:HIS:ND1	1.99	0.76
49:BQ:141:GLN:HB3	58:BZ:99:TYR:HE1	1.48	0.76
43:DH:46:GLU:OE1	43:DH:50:VAL:HG13	1.85	0.76
31:D5:54:GLY:H	31:D5:56:LYS:NZ	1.83	0.76
36:DA:1087:G:H2'	36:DA:1088:A:H4'	1.66	0.76
1:CA:624:C:H2'	1:CA:625:G:H8	1.50	0.76
10:AJ:34:VAL:HG22	10:AJ:74:ILE:HG22	1.67	0.76
2:AB:75:LYS:HA	2:AB:78:GLN:HE21	1.47	0.76
39:DD:270:ILE:O	39:DD:270:ILE:HD12	1.85	0.76
36:BA:1880:C:C3'	36:BA:1881:C:H5''	2.15	0.76
39:BD:270:ILE:HD12	39:BD:270:ILE:O	1.86	0.76
13:AM:8:GLU:OE1	13:AM:22:ILE:HA	1.86	0.76
34:B8:62:LEU:CD1	36:BA:242:G:H5''	2.13	0.76
36:BA:2189:U:C3'	36:BA:2190:G:H4'	2.14	0.76
25:AZ:355:LEU:HB3	25:AZ:370:PHE:CB	2.15	0.76
2:CB:134:GLU:C	2:CB:136:VAL:H	1.88	0.76
43:BH:50:VAL:HG12	43:BH:51:ARG:N	2.00	0.76
36:DA:811:U:OP2	48:DP:30:THR:HG23	1.85	0.76
36:BA:1209:G:H21	36:BA:1210:A:H62	1.33	0.76
50:BR:2:ARG:HG3	50:BR:2:ARG:HH11	1.49	0.76
19:AS:78:ARG:HB2	19:AS:81:ARG:NH1	2.00	0.76
2:CB:25:ASN:HD22	2:CB:27:LYS:H	1.34	0.76
13:AM:82:MET:HG3	13:AM:83:ASP:N	1.99	0.76
1:AA:274:A:O2'	1:AA:275:G:H8	1.69	0.76
36:DA:2726:U:H5'	36:DA:2726:U:O2	1.85	0.76
36:BA:145:G:H2'	36:BA:146:G:H5''	1.64	0.76
11:CK:79:SER:OG	11:CK:106:LYS:HD2	1.85	0.76
1:AA:269:C:H2'	1:AA:270:A:H8	1.50	0.76
1:AA:176:C:H2'	1:AA:177:C:H6	1.48	0.76
57:DY:10:GLY:CA	57:DY:27:VAL:HG13	2.15	0.76
36:DA:259:G:N2	36:DA:621:A:H8	1.83	0.76
12:AL:7:ILE:HD12	12:AL:8:ASN:N	1.99	0.76
55:BW:20:VAL:HG23	55:BW:47:VAL:HG21	1.67	0.76
2:AB:33:TYR:HB2	2:AB:43:ASP:HB2	1.65	0.76
46:DN:55:VAL:HG22	46:DN:126:PRO:HA	1.68	0.76
1:AA:627:G:O2'	1:AA:628:G:H5'	1.86	0.76
1:CA:1003:G:N2	1:CA:1039:C:H42	1.83	0.76
57:BY:95:LYS:HE3	57:BY:99:CYS:O	1.85	0.76
51:DS:96:GLY:O	51:DS:98:VAL:N	2.19	0.76
41:DF:160:ASN:HD21	41:DF:162:LEU:HD13	1.50	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:50:VAL:HG12	43:DH:51:ARG:N	2.00	0.76
1:AA:979:C:H3'	1:AA:980:C:C5'	2.16	0.76
4:CD:17:VAL:HG11	4:CD:197:PRO:HB2	1.68	0.76
9:AI:40:LEU:HD11	9:AI:70:LYS:HG2	1.67	0.76
2:AB:87:ARG:HH22	2:AB:233:SER:N	1.84	0.76
10:AJ:24:VAL:HG12	10:AJ:28:ARG:HD2	1.67	0.76
51:BS:36:TYR:HD1	51:BS:36:TYR:N	1.84	0.76
36:BA:1880:C:H3'	36:BA:1881:C:H5''	1.67	0.76
40:DE:4:ILE:HD13	40:DE:28:ALA:HB1	1.68	0.76
19:CS:17:GLU:O	19:CS:21:GLU:HG2	1.86	0.76
36:BA:482:A:H4'	57:BY:47:LYS:HG2	1.68	0.76
36:BA:581:C:H2'	36:BA:582:G:H8	1.51	0.76
52:BT:55:ASN:H	52:BT:59:THR:CG2	1.95	0.76
1:AA:1271:G:H2'	1:AA:1272:G:C5'	2.16	0.76
2:AB:134:GLU:C	2:AB:136:VAL:H	1.89	0.76
36:DA:2137:C:H2'	36:DA:2138:C:C6	2.20	0.76
58:BZ:37:VAL:HG23	58:BZ:38:TYR:N	1.98	0.76
33:D7:34:ARG:HH11	33:D7:34:ARG:CG	1.99	0.76
25:AZ:19:HIS:ND1	25:AZ:113:MET:HB3	2.00	0.76
10:CJ:34:VAL:HG22	10:CJ:74:ILE:HG22	1.67	0.76
38:BC:100:ILE:HG22	38:BC:104:LEU:HD23	1.68	0.76
52:DT:85:LYS:HZ2	52:DT:85:LYS:HB3	1.48	0.76
13:CM:23:TYR:HB3	13:CM:67:GLU:HB3	1.65	0.76
42:DG:139:LEU:CA	42:DG:144:ILE:HD13	2.16	0.76
4:AD:189:PRO:HB2	4:AD:194:LEU:CD2	2.13	0.76
36:BA:607:U:OP1	41:BF:102:PRO:HA	1.86	0.76
1:AA:376:G:H4'	16:AP:5:ARG:NH1	1.99	0.76
19:CS:62:ILE:HA	19:CS:66:MET:HE2	1.68	0.76
34:D8:50:LEU:HD12	34:D8:51:ALA:N	2.01	0.76
13:AM:53:VAL:HG12	13:AM:57:ARG:HH21	1.49	0.76
1:CA:627:G:O2'	1:CA:628:G:H5'	1.85	0.76
39:DD:206:LEU:HD22	39:DD:211:ARG:HG2	1.66	0.76
36:DA:2712:U:H1'	36:DA:2712(A):A:C8	2.21	0.76
44:BJ:36:UNK:HA	44:BJ:40:UNK:CB	2.15	0.76
36:DA:845:G:H8	36:DA:845:G:OP2	1.69	0.76
36:BA:325:G:H2'	36:BA:326:G:H8	1.51	0.76
58:DZ:70:LEU:HG	58:DZ:91:LEU:HD11	1.68	0.76
38:DC:100:ILE:HG22	38:DC:104:LEU:HD23	1.68	0.76
32:B6:11:LEU:HD12	32:B6:26:ASN:HB2	1.68	0.76
13:AM:23:TYR:HB3	13:AM:67:GLU:HB3	1.68	0.76
5:AE:76:ILE:HG13	5:AE:142:LEU:HD13	1.67	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:17:VAL:HG11	4:AD:197:PRO:HB2	1.68	0.76
58:DZ:37:VAL:HG23	58:DZ:38:TYR:N	2.01	0.76
9:AI:19:LEU:HD21	9:AI:59:PHE:CD2	2.20	0.76
36:BA:2712:U:H1'	36:BA:2712(A):A:C8	2.21	0.76
48:BP:146:VAL:HG22	48:BP:147:LEU:N	2.00	0.76
32:B6:18:ARG:HG2	32:B6:18:ARG:NH1	1.96	0.76
36:BA:1602:U:H3'	36:BA:1603:A:H5'	1.68	0.76
36:DA:2159:G:C2'	36:DA:2160:G:H5''	2.15	0.76
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.21	0.76
36:DA:888:C:H2'	36:DA:889:C:H4'	1.68	0.76
58:BZ:59:LEU:O	58:BZ:66:SER:HA	1.86	0.76
43:BH:33:LEU:HD21	43:BH:136:ILE:HG22	1.67	0.76
36:DA:363(F):A:HO2'	36:DA:364:C:H5	1.34	0.76
50:DR:58:GLY:HA2	50:DR:80:PHE:HE2	1.50	0.76
27:D1:30:VAL:HG23	27:D1:31:GLY:H	1.49	0.76
39:BD:30:GLU:H	39:BD:35:LYS:HZ1	1.32	0.75
34:D8:62:LEU:CD1	36:DA:242:G:H5''	2.12	0.75
32:D6:17:LYS:HB3	32:D6:18:ARG:HH12	1.50	0.75
40:DE:38:THR:HG22	40:DE:40:GLU:N	2.00	0.75
54:BV:19:LYS:HG2	54:BV:94:LEU:HB2	1.68	0.75
5:CE:76:ILE:HG13	5:CE:142:LEU:HD13	1.68	0.75
1:AA:1367:C:C5'	10:AJ:60:ARG:HH11	1.99	0.75
10:AJ:32:ALA:HB2	10:AJ:76:ASN:HB2	1.67	0.75
35:D9:34:GLN:O	35:D9:35:ARG:HB2	1.84	0.75
31:B5:54:GLY:H	31:B5:56:LYS:NZ	1.83	0.75
41:BF:164:ARG:HH11	41:BF:164:ARG:HG2	1.52	0.75
22:CW:8:U:O2'	22:CW:9:A:H5''	1.86	0.75
36:BA:280:C:H3'	36:BA:281:G:H8	1.50	0.75
13:CM:64:TRP:O	13:CM:66:LEU:HD13	1.86	0.75
43:DH:167:GLU:HB3	43:DH:168:PRO:HD2	1.68	0.75
4:CD:67:ILE:HG22	4:CD:68:TYR:CD1	2.22	0.75
36:DA:2334:G:H21	51:DS:18:ILE:HG23	1.51	0.75
47:DO:114:ILE:HD12	47:DO:114:ILE:H	1.50	0.75
36:DA:1057:A:O2'	36:DA:1058:G:H5'	1.87	0.75
58:DZ:139:VAL:HG12	58:DZ:140:ASP:H	1.51	0.75
22:CV:52:G:H1	22:CV:62:C:H42	1.35	0.75
1:CA:367:U:H4'	25:CZ:291:ARG:HE	1.51	0.75
50:BR:58:GLY:HA2	50:BR:80:PHE:HE2	1.50	0.75
47:BO:4:PRO:O	47:BO:5:GLN:HB2	1.84	0.75
41:DF:3:GLU:CA	41:DF:24:LEU:HG	2.15	0.75
6:AF:35:ALA:HA	6:AF:67:MET:HB3	1.67	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1442(B):A:H5'	52:DT:118:ARG:HH11	1.50	0.75
51:DS:36:TYR:HD1	51:DS:36:TYR:N	1.84	0.75
13:CM:82:MET:HG3	13:CM:83:ASP:N	2.00	0.75
36:BA:284:U:H2'	36:BA:285:C:C6	2.22	0.75
8:CH:64:LYS:HG2	8:CH:79:VAL:HG21	1.66	0.75
36:BA:1348:G:H2'	36:BA:1349:A:H5''	1.67	0.75
22:CW:38:A:H2'	22:CW:39:U:H5''	1.68	0.75
36:DA:1681:G:O2'	36:DA:1762:A:H2'	1.87	0.75
36:DA:581:C:H2'	36:DA:582:G:C8	2.21	0.75
57:BY:10:GLY:CA	57:BY:27:VAL:HG13	2.16	0.75
4:AD:101:LEU:HD23	4:AD:121:VAL:HG11	1.67	0.75
4:CD:100:ARG:HH21	4:CD:118:ARG:HH12	1.32	0.75
32:B6:15:GLU:HG2	32:B6:47:THR:HG21	1.69	0.75
51:BS:42:ASP:O	51:BS:43:GLU:HB3	1.85	0.75
6:CF:35:ALA:HA	6:CF:67:MET:HB3	1.67	0.75
9:AI:4:TYR:CE2	9:AI:88:TYR:HB2	2.20	0.75
36:BA:2131:G:H1'	36:BA:2133:G:H21	1.51	0.75
36:BA:2159:G:C2'	36:BA:2160:G:H5''	2.16	0.75
19:AS:48:THR:HG22	19:AS:61:TYR:HA	1.68	0.75
36:BA:631:A:H5''	48:BP:65:ARG:HH11	1.50	0.75
39:BD:134:ARG:HG3	39:BD:187:GLY:HA3	1.67	0.75
50:DR:116:LEU:O	50:DR:117:VAL:HG12	1.85	0.75
37:DB:17:C:H2'	37:DB:18:G:O4'	1.85	0.75
36:DA:1720:U:H3'	36:DA:1721:G:H5''	1.69	0.75
36:BA:654:A:H3'	36:BA:654:A:OP1	1.86	0.75
25:AZ:331:HIS:HA	25:AZ:364:PRO:HG2	1.67	0.75
36:BA:1498:C:C2'	36:BA:1499:C:H5''	2.17	0.75
5:AE:12:LEU:HD13	5:AE:31:LEU:HB2	1.67	0.75
51:DS:42:ASP:O	51:DS:43:GLU:HB3	1.85	0.75
36:DA:1022:G:N2	36:DA:1142(A):A:C2	2.53	0.75
43:BH:46:GLU:OE1	43:BH:50:VAL:HG13	1.86	0.75
51:DS:101:LEU:O	51:DS:101:LEU:HD12	1.86	0.75
9:AI:28:VAL:HG12	9:AI:29:ASN:N	1.99	0.75
38:BC:43:VAL:HG23	38:BC:175:VAL:HG21	1.67	0.75
2:CB:229:VAL:HG12	2:CB:230:VAL:N	2.02	0.75
1:AA:939:G:H5''	7:AG:102:ARG:HH22	1.52	0.75
36:DA:1880:C:H3'	36:DA:1881:C:H5''	1.69	0.75
36:DA:581:C:H2'	36:DA:582:G:H8	1.50	0.75
2:AB:8:LYS:HB2	2:AB:9:GLU:OE1	1.87	0.75
29:B3:43:ILE:O	29:B3:47:VAL:HG23	1.86	0.75
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.12	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:27:THR:CG2	39:BD:83:GLU:HG2	2.17	0.75
36:BA:1498:C:H2'	36:BA:1499:C:H5''	1.68	0.75
4:AD:18:LYS:N	4:AD:33:MET:HE2	2.00	0.75
27:B1:58:ILE:HD12	27:B1:59:THR:H	1.52	0.75
3:CC:15:THR:HG21	3:CC:181:ASN:HA	1.68	0.75
27:D1:67:ILE:HB	27:D1:68:PRO:HD3	1.69	0.75
8:AH:64:LYS:HG2	8:AH:79:VAL:HG21	1.69	0.75
43:DH:18:GLU:HB2	43:DH:25:LYS:HB2	1.67	0.75
1:CA:358:U:H2'	1:CA:359:U:C6	2.22	0.75
1:CA:274:A:O2'	1:CA:275:G:H8	1.70	0.75
52:DT:16:ARG:HD2	52:DT:18:ASP:OD1	1.87	0.75
36:DA:2208:A:H1'	36:DA:2219:G:C5	2.22	0.75
15:AO:25:THR:O	15:AO:29:VAL:HG23	1.86	0.75
36:DA:1039:G:H1	36:DA:1116:C:H42	1.35	0.75
52:DT:28:VAL:HG11	52:DT:46:GLU:HG3	1.69	0.75
7:CG:79:ARG:HG2	7:CG:84:ASN:CA	2.11	0.75
39:DD:31:LYS:O	39:DD:35:LYS:HB3	1.86	0.75
42:DG:43:LEU:HB3	42:DG:45:GLU:HG2	1.67	0.75
36:DA:2189:U:C3'	36:DA:2190:G:H4'	2.15	0.75
4:AD:187:ARG:HH11	4:AD:187:ARG:HB3	1.50	0.75
54:DV:15:GLU:HB3	54:DV:16:PRO:CD	2.16	0.75
48:BP:112:LEU:H	48:BP:128:HIS:HD2	1.34	0.75
1:AA:1392:G:N2	1:AA:1502:A:H8	1.85	0.75
4:CD:19:LEU:O	4:CD:26:CYS:SG	2.44	0.75
53:BU:90:VAL:O	53:BU:92:ARG:N	2.19	0.75
2:CB:25:ASN:ND2	2:CB:27:LYS:H	1.85	0.75
36:BA:886:C:C2'	36:BA:887:A:H4'	2.16	0.75
36:DA:1331:A:O2'	36:DA:1332:G:H8	1.69	0.75
8:AH:114:THR:HG22	8:AH:130:GLY:O	1.87	0.75
3:AC:113:ALA:HB3	3:AC:114:PRO:HD3	1.67	0.75
17:AQ:69:LYS:C	17:AQ:70:ARG:HD2	2.07	0.75
53:DU:16:LYS:O	53:DU:20:LEU:HD23	1.86	0.75
14:CN:22:THR:HB	14:CN:33:VAL:HG21	1.68	0.75
42:BG:7:LEU:CD2	42:BG:176:LEU:HD21	2.12	0.75
39:BD:31:LYS:O	39:BD:35:LYS:HB3	1.87	0.75
58:BZ:151:HIS:HB3	58:BZ:170:THR:HA	1.69	0.75
41:BF:185:ASP:HA	41:BF:188:ARG:HG2	1.67	0.75
40:BE:38:THR:HG22	40:BE:40:GLU:N	2.00	0.75
48:DP:146:VAL:HG22	48:DP:147:LEU:N	2.02	0.75
1:AA:1238:A:H2	1:AA:1301:U:H3	1.32	0.75
42:BG:144:ILE:O	42:BG:144:ILE:HG23	1.87	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:624:C:H2'	1:AA:625:G:H8	1.50	0.75
50:BR:55:ALA:HB2	50:BR:79:LEU:HD11	1.69	0.75
36:DA:300:A:H2'	36:DA:334:C:O2'	1.87	0.75
3:AC:40:ARG:HH11	3:AC:40:ARG:HG3	1.50	0.75
3:AC:52:LEU:HD23	3:AC:52:LEU:H	1.51	0.75
36:DA:543:C:H42	36:DA:549:G:H1	1.34	0.75
1:AA:723:U:O4	1:AA:1537:U:H2'	1.85	0.75
36:BA:657:U:H2'	36:BA:658:C:H6	1.52	0.75
32:B6:15:GLU:OE1	32:B6:18:ARG:NE	2.20	0.75
48:DP:112:LEU:H	48:DP:128:HIS:HD2	1.35	0.75
16:CP:21:VAL:O	16:CP:33:ILE:HB	1.87	0.75
49:BQ:56:ARG:CG	49:BQ:56:ARG:HH11	2.00	0.75
1:CA:176:C:H2'	1:CA:177:C:C6	2.22	0.75
34:D8:52:LYS:H	34:D8:53:PRO:HD2	1.52	0.75
49:BQ:66:ILE:HA	49:BQ:104:PHE:HB3	1.68	0.75
1:AA:1104:G:O5'	2:AB:111:ARG:HD2	1.86	0.75
36:BA:585:G:H2'	36:BA:1251:C:H42	1.52	0.75
36:DA:2189:U:H2'	36:DA:2190:G:C4'	2.17	0.74
32:D6:36:LEU:HD12	32:D6:50:ARG:NH1	2.01	0.74
48:BP:106:LEU:HD21	48:BP:112:LEU:HB2	1.66	0.74
33:B7:34:ARG:CG	33:B7:34:ARG:HH11	2.00	0.74
36:DA:325:G:H2'	36:DA:326:G:H8	1.52	0.74
36:DA:886:C:C2'	36:DA:887:A:H4'	2.17	0.74
36:BA:1331:A:O2'	36:BA:1332:G:H8	1.69	0.74
36:DA:1301:A:H4'	36:DA:1302:A:OP1	1.86	0.74
42:BG:79:ASN:O	42:BG:80:PHE:HB2	1.85	0.74
39:BD:30:GLU:CB	39:BD:35:LYS:HD2	2.13	0.74
34:D8:61:LEU:HD13	34:D8:62:LEU:H	1.52	0.74
34:D8:62:LEU:HD13	36:DA:242:G:C5'	2.15	0.74
32:D6:15:GLU:HG2	32:D6:47:THR:HG21	1.68	0.74
11:CK:110:ASP:HB2	18:CR:88:LYS:HE2	1.69	0.74
58:BZ:108:PRO:O	58:BZ:111:VAL:HG23	1.88	0.74
36:DA:1602:U:H3'	36:DA:1603:A:H5'	1.67	0.74
36:BA:1057:A:O2'	36:BA:1058:G:H5'	1.87	0.74
25:AZ:110:ASP:HB3	25:AZ:113:MET:CE	2.18	0.74
34:B8:49:VAL:HB	34:B8:53:PRO:HD3	1.68	0.74
36:DA:886:C:H2'	36:DA:887:A:H4'	1.66	0.74
29:D3:17:LYS:HG2	36:DA:969:U:OP1	1.86	0.74
3:AC:188:LEU:HD12	3:AC:195:VAL:CG1	2.15	0.74
28:B2:30:ARG:O	28:B2:34:GLU:HB2	1.87	0.74
12:CL:55:VAL:HG23	12:CL:68:ALA:O	1.87	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:28:A:N6	36:DA:512:G:H1'	2.00	0.74
1:AA:1432:G:OP1	52:BT:107:ASP:HB2	1.87	0.74
36:DA:1115:G:H2'	36:DA:1116:C:O4'	1.85	0.74
7:AG:73:MET:HG2	7:AG:90:GLU:HA	1.69	0.74
58:BZ:63:ASP:HB3	58:BZ:65:GLN:HG3	1.70	0.74
36:BA:2853:C:H2'	36:BA:2854:G:C8	2.22	0.74
1:CA:192:U:H2'	1:CA:193:C:H6	1.52	0.74
12:AL:55:VAL:HG23	12:AL:68:ALA:O	1.87	0.74
36:BA:845:G:H8	36:BA:845:G:OP2	1.70	0.74
51:BS:59:LYS:HG2	51:BS:60:GLY:N	1.99	0.74
36:DA:83:G:N2	36:DA:102:G:H2'	2.03	0.74
54:DV:99:ILE:CD1	54:DV:99:ILE:H	2.01	0.74
43:BH:40:GLU:OE1	43:BH:55:PRO:HG3	1.87	0.74
34:D8:32:LEU:HD23	34:D8:36:LYS:HE2	1.68	0.74
2:CB:87:ARG:HH22	2:CB:233:SER:N	1.83	0.74
58:DZ:150:LEU:HD21	58:DZ:172:ALA:HB3	1.68	0.74
1:AA:1286:A:O2'	1:AA:1287:A:H5''	1.87	0.74
36:BA:1039:G:H1	36:BA:1116:C:H42	1.35	0.74
52:DT:58:ASN:ND2	52:DT:58:ASN:H	1.84	0.74
36:DA:181:A:H5'	36:DA:181:A:H8	1.52	0.74
36:BA:1970:A:H5''	36:BA:1971:A:OP1	1.87	0.74
52:DT:28:VAL:HG22	52:DT:47:GLY:H	1.51	0.74
58:BZ:81:ARG:HB2	58:BZ:81:ARG:CZ	2.16	0.74
39:DD:30:GLU:CD	39:DD:63:ARG:HE	1.91	0.74
34:B8:4:MET:O	34:B8:62:LEU:HD12	1.87	0.74
9:CI:85:LEU:HD11	9:CI:96:LEU:HD21	1.68	0.74
54:BV:29:PRO:HA	54:BV:61:VAL:HG22	1.69	0.74
58:BZ:108:PRO:HB3	58:BZ:141:VAL:CG1	2.17	0.74
36:DA:2415:G:H4'	48:DP:66:GLY:C	2.06	0.74
33:D7:34:ARG:HG3	33:D7:34:ARG:NH1	1.98	0.74
53:BU:91:ASP:O	53:BU:95:LEU:HB2	1.88	0.74
36:DA:307:G:H21	36:DA:330:A:H62	1.32	0.74
41:DF:157:VAL:HG12	41:DF:176:LEU:HB3	1.68	0.74
36:BA:2463:C:O2'	36:BA:2464:C:H5'	1.87	0.74
41:BF:84:VAL:C	41:BF:86:GLY:H	1.91	0.74
36:DA:482:A:H4'	57:DY:47:LYS:HG2	1.69	0.74
50:BR:116:LEU:O	50:BR:117:VAL:HG12	1.86	0.74
36:BA:214:G:H1'	36:BA:216:A:O2'	1.87	0.74
39:DD:71:ASP:CB	39:DD:103:ARG:HH22	2.00	0.74
11:AK:110:ASP:HB2	18:AR:88:LYS:HE2	1.68	0.74
48:DP:61:ARG:O	48:DP:62:LEU:HB3	1.88	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:18:LYS:N	4:CD:33:MET:HE2	2.01	0.74
51:DS:74:ALA:HB1	51:DS:103:GLU:HG2	1.69	0.74
16:AP:21:VAL:O	16:AP:33:ILE:HB	1.88	0.74
36:DA:996:A:H4'	53:DU:92:ARG:NE	2.02	0.74
31:D5:29:THR:HG21	36:DA:2814:C:O2'	1.87	0.74
43:DH:33:LEU:HD21	43:DH:136:ILE:HG22	1.67	0.74
36:BA:203:C:H3'	36:BA:204:A:H5''	1.69	0.74
34:D8:54:GLU:O	34:D8:58:ILE:HG12	1.86	0.74
26:D0:10:THR:HG22	26:D0:12:ASN:N	2.00	0.74
36:DA:1279:G:H4'	50:DR:31:HIS:HD2	1.50	0.74
43:BH:156:ALA:C	43:BH:158:HIS:H	1.87	0.74
36:BA:1051:G:H2'	36:BA:1052:C:C5	2.23	0.74
34:D8:49:VAL:HB	34:D8:53:PRO:HD3	1.68	0.74
40:DE:51:PHE:O	40:DE:74:PRO:HB2	1.87	0.74
38:BC:79:LYS:HA	38:BC:97:GLU:OE1	1.88	0.74
36:DA:1528(A):A:H62	36:DA:1541:G:N2	1.85	0.74
36:DA:99:U:H4'	36:DA:102:G:H1'	1.70	0.74
27:D1:34:THR:HG21	27:D1:37:ILE:CD1	2.16	0.74
36:DA:607:U:OP1	41:DF:102:PRO:HA	1.88	0.74
55:DW:20:VAL:HG23	55:DW:47:VAL:HG21	1.69	0.74
20:AT:26:ASN:ND2	20:AT:26:ASN:H	1.85	0.74
1:AA:176:C:H2'	1:AA:177:C:C6	2.22	0.74
24:CY:6:C:H42	24:CY:67:G:H1	1.35	0.74
34:B8:43:GLN:O	34:B8:44:LYS:HD2	1.87	0.74
36:BA:1450(A):C:H2'	36:BA:1451:C:C6	2.23	0.74
47:DO:4:PRO:O	47:DO:5:GLN:HB2	1.88	0.74
58:DZ:29:TYR:HB3	58:DZ:34:ASN:HB2	1.68	0.74
36:BA:2126:A:H4'	36:BA:2127:G:O5'	1.88	0.74
36:BA:654(C):G:H2'	36:BA:654(D):G:H5'	1.70	0.74
53:BU:56:ASP:O	53:BU:60:LEU:HG	1.87	0.74
58:BZ:9:TYR:HE1	58:BZ:35:ARG:HG3	1.52	0.74
43:DH:85:LYS:HZ1	43:DH:86:GLU:HA	1.52	0.74
13:AM:120:LYS:HA	13:AM:120:LYS:CE	2.18	0.74
43:DH:40:GLU:OE1	43:DH:55:PRO:HG3	1.87	0.74
36:DA:2131:G:H1'	36:DA:2133:G:H21	1.52	0.74
31:D5:36:CYS:O	31:D5:38:ALA:N	2.21	0.74
25:CZ:20:VAL:HG12	25:CZ:115:GLN:HG3	1.69	0.74
51:BS:36:TYR:N	51:BS:36:TYR:CD1	2.56	0.74
36:BA:481:G:OP2	57:BY:47:LYS:HD3	1.88	0.74
22:CV:61:C:H5'	22:CV:62:C:OP2	1.87	0.74
53:BU:16:LYS:O	53:BU:20:LEU:HD23	1.88	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:113:GLU:HG2	7:CG:119:ARG:HG2	1.69	0.74
40:BE:51:PHE:O	40:BE:74:PRO:HB2	1.87	0.74
41:DF:84:VAL:C	41:DF:86:GLY:H	1.91	0.74
36:BA:888:C:H2'	36:BA:889:C:H4'	1.68	0.74
36:BA:300:A:H2'	36:BA:334:C:O2'	1.87	0.74
24:AY:6:C:H42	24:AY:67:G:H1	1.36	0.74
28:B2:46:GLN:O	28:B2:50:ILE:HD13	1.87	0.74
43:DH:83:TYR:HB2	43:DH:134:SER:HA	1.70	0.74
21:CU:6:ARG:HD3	21:CU:15:ARG:NH1	2.01	0.74
4:AD:23:GLY:HA3	4:AD:112:VAL:HG22	1.68	0.74
32:B6:10:LEU:H	32:B6:10:LEU:HD23	1.51	0.74
51:DS:19:LYS:HB3	51:DS:20:ARG:HH22	1.53	0.74
16:AP:20:VAL:HG21	16:AP:32:TYR:CG	2.23	0.74
36:BA:1434:A:H61	36:BA:1558:A:N6	1.85	0.74
2:CB:61:LEU:O	2:CB:64:ARG:HG2	1.87	0.74
13:AM:112:GLY:O	13:AM:114:ARG:N	2.21	0.74
36:DA:203:C:H3'	36:DA:204:A:H5''	1.69	0.74
34:D8:4:MET:O	34:D8:62:LEU:HD12	1.88	0.73
54:BV:99:ILE:H	54:BV:99:ILE:CD1	2.01	0.73
36:DA:1516:C:H2'	36:DA:1517:G:C5'	2.17	0.73
36:DA:2134:A:H62	36:DA:2157:G:H1'	1.53	0.73
10:CJ:75:ILE:HG13	10:CJ:76:ASN:H	1.53	0.73
9:CI:4:TYR:CE2	9:CI:88:TYR:HB2	2.22	0.73
25:CZ:110:ASP:HB3	25:CZ:113:MET:CE	2.18	0.73
56:DX:35:THR:HG22	56:DX:37:THR:N	2.02	0.73
28:B2:7:ARG:HA	28:B2:10:LEU:CD1	2.18	0.73
13:AM:82:MET:CG	13:AM:83:ASP:N	2.50	0.73
42:BG:95:ARG:O	42:BG:96:ARG:O	2.05	0.73
7:CG:73:MET:HG2	7:CG:90:GLU:HA	1.68	0.73
11:AK:79:SER:OG	11:AK:106:LYS:HD2	1.87	0.73
36:DA:284:U:H2'	36:DA:285:C:C6	2.23	0.73
41:BF:25:PRO:HB3	41:BF:119:ARG:CB	2.16	0.73
41:BF:4:VAL:HA	41:BF:19:GLU:HB3	1.69	0.73
36:BA:2189:U:H2'	36:BA:2190:G:C4'	2.17	0.73
9:CI:53:VAL:HG22	9:CI:95:LYS:HZ3	1.52	0.73
54:DV:29:PRO:HA	54:DV:61:VAL:HG22	1.69	0.73
13:AM:12:ASN:H	13:AM:12:ASN:HD22	1.36	0.73
43:BH:167:GLU:HB3	43:BH:168:PRO:HD2	1.68	0.73
36:DA:330:A:O2'	36:DA:331:A:H8	1.71	0.73
36:BA:760:G:C2'	36:BA:761:A:H5'	2.18	0.73
24:AY:26:A:H2'	24:AY:27:C:O4'	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DQ:66:ILE:HA	49:DQ:104:PHE:HB3	1.69	0.73
36:DA:2303:G:O2'	42:DG:132:ASN:HB2	1.88	0.73
13:AM:88:ARG:HH11	13:AM:88:ARG:HG2	1.53	0.73
38:BC:79:LYS:HG2	38:BC:118:ASP:OD2	1.88	0.73
32:B6:17:LYS:HB3	32:B6:18:ARG:HH12	1.53	0.73
48:DP:23:PRO:HB2	48:DP:33:ARG:CG	2.18	0.73
36:BA:330:A:O2'	36:BA:331:A:H8	1.72	0.73
1:CA:572:A:H5'	1:CA:573:A:OP2	1.89	0.73
3:CC:5:ILE:HD13	3:CC:5:ILE:N	2.03	0.73
39:BD:134:ARG:HH12	39:BD:135:PHE:HE1	1.36	0.73
15:CO:25:THR:O	15:CO:29:VAL:HG23	1.88	0.73
38:BC:120:MET:HA	38:BC:123:VAL:HG12	1.70	0.73
42:BG:46:ALA:HB3	42:BG:88:ILE:CD1	2.18	0.73
51:BS:49:VAL:HG12	51:BS:50:SER:N	2.04	0.73
36:BA:760:G:H2'	36:BA:761:A:H5'	1.69	0.73
22:AW:38:A:H3'	22:AW:39:U:H5''	1.71	0.73
36:BA:1720:U:H3'	36:BA:1721:G:H5''	1.70	0.73
2:CB:8:LYS:HB2	2:CB:9:GLU:OE1	1.88	0.73
26:B0:40:GLN:HE22	26:B0:45:PHE:H	1.33	0.73
34:D8:43:GLN:O	34:D8:44:LYS:HD2	1.88	0.73
6:CF:87:ARG:HG2	6:CF:87:ARG:HH11	1.53	0.73
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.23	0.73
42:BG:47:LYS:CG	42:BG:81:LYS:HD2	2.18	0.73
41:DF:185:ASP:HA	41:DF:188:ARG:CG	2.19	0.73
32:D6:11:LEU:CD1	32:D6:26:ASN:HB2	2.18	0.73
38:BC:27:ARG:CD	38:BC:182:PRO:CG	2.61	0.73
57:DY:95:LYS:HE3	57:DY:99:CYS:O	1.87	0.73
57:BY:42:VAL:HG12	57:BY:65:ALA:HB3	1.70	0.73
48:BP:58:THR:O	48:BP:61:ARG:NE	2.21	0.73
51:BS:92:TYR:CG	51:BS:93:LYS:N	2.57	0.73
51:BS:96:GLY:O	51:BS:98:VAL:N	2.20	0.73
36:DA:2287:A:C2	36:DA:2346:A:N1	2.57	0.73
16:AP:20:VAL:HG21	16:AP:32:TYR:CB	2.18	0.73
36:BA:89:G:H3'	36:BA:90:U:C5'	2.18	0.73
36:BA:969:U:H2'	36:BA:970:C:C6	2.23	0.73
34:D8:14:VAL:HG23	34:D8:24:ALA:HB2	1.71	0.73
40:BE:4:ILE:HD13	40:BE:28:ALA:HB1	1.70	0.73
36:BA:363(F):A:HO2'	36:BA:364:C:H5	1.34	0.73
40:DE:128:SER:OG	40:DE:129:HIS:N	2.22	0.73
36:DA:2491:U:H5'	36:DA:2570:G:H5''	1.69	0.73
39:DD:30:GLU:CG	39:DD:63:ARG:HE	2.01	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:82:LEU:HD13	42:BG:87:PRO:CB	2.12	0.73
9:AI:85:LEU:HD11	9:AI:96:LEU:HD21	1.71	0.73
13:AM:64:TRP:O	13:AM:66:LEU:HD13	1.88	0.73
51:DS:59:LYS:HG2	51:DS:60:GLY:N	2.01	0.73
43:DH:91:GLY:HA3	43:DH:94:TYR:CD2	2.23	0.73
48:DP:105:LEU:HD12	48:DP:105:LEU:N	2.03	0.73
48:BP:23:PRO:HB2	48:BP:33:ARG:CG	2.17	0.73
36:DA:1747(A):G:H2'	36:DA:1748:G:C5'	2.19	0.73
36:BA:2137:C:H2'	36:BA:2138:C:C6	2.24	0.73
36:BA:2415:G:H4'	48:BP:66:GLY:C	2.09	0.73
58:DZ:151:HIS:CB	58:DZ:170:THR:HA	2.18	0.73
36:DA:1434:A:H61	36:DA:1558:A:N6	1.85	0.73
28:B2:57:ILE:O	28:B2:61:LEU:HG	1.89	0.73
34:B8:62:LEU:HD13	36:BA:242:G:C5'	2.15	0.73
42:DG:79:ASN:O	42:DG:80:PHE:HB2	1.89	0.73
36:BA:83:G:N2	36:BA:102:G:H2'	2.03	0.73
2:AB:130:ARG:HH21	2:AB:134:GLU:HG3	1.52	0.73
36:DA:1779:U:C5	36:DA:1784:A:N7	2.56	0.73
3:AC:5:ILE:HD13	3:AC:5:ILE:N	2.03	0.73
36:DA:1038:C:H2'	36:DA:1039:G:H5''	1.68	0.73
29:D3:6:VAL:HG12	29:D3:56:VAL:HG22	1.71	0.73
36:BA:320:A:C5	41:BF:136:THR:HG21	2.24	0.73
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.23	0.73
36:DA:585:G:H2'	36:DA:1251:C:H42	1.53	0.73
56:DX:44:GLU:HG3	56:DX:50:LYS:HA	1.71	0.73
52:BT:28:VAL:HG11	52:BT:46:GLU:HG3	1.70	0.73
36:BA:2287:A:C2	36:BA:2346:A:N1	2.56	0.73
36:DA:1051:G:H2'	36:DA:1052:C:C5	2.23	0.73
28:B2:6:VAL:O	28:B2:10:LEU:HG	1.89	0.73
36:BA:761:A:O5'	36:BA:761:A:C8	2.41	0.73
47:BO:87:ILE:CG2	47:BO:91:LEU:HA	2.18	0.73
36:BA:2502:G:H5''	36:BA:2503:A:H5''	1.69	0.73
1:CA:1104:G:O5'	2:CB:111:ARG:HD2	1.87	0.73
43:BH:85:LYS:NZ	43:BH:86:GLU:HA	2.04	0.73
7:AG:79:ARG:HG2	7:AG:84:ASN:CA	2.12	0.73
52:BT:28:VAL:HG22	52:BT:47:GLY:H	1.50	0.73
13:CM:120:LYS:CE	13:CM:120:LYS:HA	2.18	0.73
42:DG:84:LYS:HD2	42:DG:84:LYS:H	1.53	0.73
3:CC:83:ARG:O	3:CC:86:VAL:HG22	1.88	0.73
42:BG:153:ARG:HB3	42:BG:153:ARG:NH1	2.04	0.73
34:B8:52:LYS:H	34:B8:53:PRO:HD2	1.51	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:DU:56:ASP:O	53:DU:60:LEU:HG	1.88	0.73
36:DA:2853:C:H2'	36:DA:2854:G:C8	2.22	0.73
55:BW:22:ASP:HA	55:BW:25:ARG:HH12	1.54	0.73
36:DA:1450(A):C:H2'	36:DA:1451:C:C6	2.22	0.73
6:AF:43:LEU:HD22	6:AF:43:LEU:H	1.54	0.73
10:CJ:80:LYS:O	10:CJ:83:GLU:HB3	1.87	0.73
41:DF:185:ASP:OD1	41:DF:188:ARG:HD3	1.89	0.73
39:BD:30:GLU:HG3	39:BD:63:ARG:HE	1.52	0.73
36:DA:654(C):G:H2'	36:DA:654(D):G:H5'	1.70	0.73
48:BP:112:LEU:H	48:BP:128:HIS:CD2	2.07	0.73
36:BA:1022:G:N2	36:BA:1142(A):A:H2	1.87	0.73
53:DU:91:ASP:O	53:DU:95:LEU:HB2	1.89	0.73
50:DR:2:ARG:HG3	50:DR:2:ARG:HH11	1.53	0.73
36:DA:761:A:C8	36:DA:761:A:O5'	2.41	0.73
2:CB:14:GLY:O	2:CB:15:VAL:HG13	1.88	0.73
11:CK:33:THR:HG22	11:CK:39:PRO:HA	1.69	0.73
36:DA:328:U:H4'	57:DY:68:HIS:ND1	2.04	0.73
1:AA:977:A:H2'	1:AA:977:A:N3	2.04	0.73
1:CA:977:A:N3	1:CA:977:A:H2'	2.03	0.73
32:B6:30:THR:O	32:B6:31:PRO:C	2.26	0.72
57:DY:28:LYS:HB3	57:DY:37:VAL:HB	1.71	0.72
50:DR:99:LYS:N	50:DR:99:LYS:HD2	2.01	0.72
48:DP:112:LEU:H	48:DP:128:HIS:CD2	2.07	0.72
48:DP:30:THR:CG2	48:DP:31:ALA:N	2.51	0.72
1:CA:1502:A:H2	1:CA:1505:G:N1	1.84	0.72
42:DG:9:ARG:HG3	42:DG:13:GLU:OE2	1.89	0.72
36:DA:760:G:C2'	36:DA:761:A:H5'	2.19	0.72
42:BG:106:LEU:O	42:BG:110:ALA:HB3	1.88	0.72
34:B8:14:VAL:HG23	34:B8:24:ALA:HB2	1.69	0.72
36:BA:581:C:H2'	36:BA:582:G:C8	2.22	0.72
58:BZ:102:LEU:HD23	58:BZ:137:ILE:HB	1.69	0.72
9:AI:118:LYS:O	9:AI:119:ALA:HB3	1.89	0.72
8:CH:114:THR:HG22	8:CH:130:GLY:O	1.89	0.72
36:DA:1368:G:O2'	36:DA:1369:G:H5'	1.89	0.72
24:AY:8:4SU:H5''	24:AY:8:4SU:H6	1.70	0.72
24:CY:8:4SU:H6	24:CY:8:4SU:H5''	1.71	0.72
3:CC:58:GLU:H	3:CC:65:ALA:HB3	1.54	0.72
40:BE:105:THR:HB	40:BE:197:ILE:HG23	1.71	0.72
24:CY:26:A:H2'	24:CY:27:C:O4'	1.89	0.72
38:BC:123:VAL:HG21	38:BC:127:LEU:HD23	1.61	0.72
22:AV:42:C:H6	22:AV:42:C:H5'	1.54	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:67:LEU:HD23	58:BZ:90:VAL:HG11	1.71	0.72
41:BF:160:ASN:HD21	41:BF:162:LEU:HD13	1.53	0.72
1:CA:1271:G:H2'	1:CA:1272:G:C5'	2.17	0.72
4:CD:121:VAL:O	4:CD:134:ASP:HA	1.89	0.72
36:BA:28:A:N6	36:BA:512:G:H1'	2.03	0.72
9:CI:28:VAL:HG12	9:CI:29:ASN:N	2.02	0.72
36:DA:89:G:H3'	36:DA:90:U:C5'	2.18	0.72
19:CS:78:ARG:HB2	19:CS:81:ARG:NH1	2.04	0.72
1:AA:624:C:H4'	16:AP:11:SER:H	1.54	0.72
28:D2:8:LYS:HG2	28:D2:11:GLU:OE2	1.89	0.72
1:CA:520:A:N1	1:CA:536:C:H1'	2.04	0.72
53:DU:66:ASN:ND2	53:DU:76:TYR:H	1.87	0.72
8:CH:112:LEU:HD23	8:CH:112:LEU:N	2.04	0.72
36:DA:1639:U:C2'	36:DA:1640:C:H5''	2.19	0.72
46:DN:86:PRO:HG2	46:DN:89:LYS:HG2	1.70	0.72
22:AV:61:C:H5'	22:AV:62:C:OP2	1.89	0.72
28:B2:25:VAL:CG2	28:B2:64:LEU:HD12	2.18	0.72
49:BQ:141:GLN:HB3	58:BZ:99:TYR:CE1	2.24	0.72
58:BZ:69:THR:CG2	58:BZ:90:VAL:HA	2.19	0.72
39:DD:71:ASP:HB2	39:DD:103:ARG:NH2	2.00	0.72
36:DA:84:A:H2'	57:DY:9:LYS:HZ3	1.54	0.72
54:DV:19:LYS:HB2	54:DV:96:ILE:HD11	1.72	0.72
1:CA:538:G:OP2	12:CL:115:LYS:HG3	1.90	0.72
2:AB:165:VAL:HG23	2:AB:166:ASP:N	2.04	0.72
36:DA:1022:G:N2	36:DA:1142(A):A:H2	1.84	0.72
36:DA:1087:G:O2'	36:DA:1089:G:H5'	1.89	0.72
56:BX:35:THR:HG22	56:BX:37:THR:N	2.03	0.72
28:B2:18:PRO:HB2	28:B2:72:ALA:HA	1.68	0.72
36:BA:543:C:H42	36:BA:549:G:H1	1.36	0.72
16:AP:14:ASN:N	16:AP:15:PRO:HD3	2.04	0.72
19:AS:17:GLU:O	19:AS:21:GLU:HG2	1.90	0.72
13:CM:101:GLN:HE21	13:CM:101:GLN:N	1.87	0.72
13:AM:91:ARG:HD3	13:AM:97:PRO:O	1.89	0.72
32:B6:28:ARG:HA	32:B6:32:ASN:HD22	1.54	0.72
57:BY:73:ARG:NH2	57:BY:82:PRO:HA	2.04	0.72
4:AD:11:LEU:HD13	4:AD:66:ARG:HD3	1.70	0.72
9:CI:19:LEU:HD23	9:CI:20:ARG:N	2.04	0.72
9:CI:58:HIS:CD2	9:CI:58:HIS:O	2.42	0.72
56:BX:10:ALA:O	56:BX:28:PHE:HB2	1.89	0.72
22:CW:38:A:H3'	22:CW:39:U:H5''	1.71	0.72
22:CV:41:C:H2'	22:CV:42:C:C5'	2.13	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:27:THR:CG2	39:DD:83:GLU:HG2	2.19	0.72
32:D6:15:GLU:HB2	32:D6:20:ASN:CB	2.19	0.72
1:AA:407:G:O2'	4:AD:116:GLN:HG3	1.89	0.72
51:BS:89:ARG:CG	51:BS:92:TYR:HA	2.19	0.72
41:DF:132:VAL:HG13	41:DF:133:ASN:ND2	2.05	0.72
36:BA:1517:G:H5'	36:BA:1517:G:C8	2.24	0.72
47:BO:1:MET:HG3	47:BO:67:LYS:HG2	1.72	0.72
36:DA:481:G:OP2	57:DY:47:LYS:HD3	1.90	0.72
53:DU:108:GLU:HG3	54:DV:44:LYS:HD3	1.70	0.72
36:DA:2126:A:H4'	36:DA:2127:G:O5'	1.89	0.72
56:DX:57:LEU:HD22	56:DX:57:LEU:O	1.89	0.72
36:BA:1104:C:H2'	36:BA:1105:U:H6	1.53	0.72
3:CC:188:LEU:HD12	3:CC:195:VAL:CG1	2.18	0.72
47:DO:87:ILE:CG2	47:DO:91:LEU:HA	2.19	0.72
13:CM:88:ARG:HH11	13:CM:88:ARG:HG2	1.55	0.72
36:BA:328:U:H4'	57:BY:68:HIS:ND1	2.04	0.72
20:AT:57:ARG:HH11	20:AT:102:GLY:CA	2.02	0.72
6:CF:61:LEU:HB3	6:CF:63:TYR:HE1	1.54	0.72
36:BA:1210:A:H8	36:BA:1210:A:H5'	1.54	0.72
28:D2:21:LEU:HB3	28:D2:64:LEU:HD12	1.69	0.72
54:BV:47:VAL:HG12	54:BV:52:VAL:HB	1.71	0.72
36:DA:2579:C:O2'	40:DE:131:ALA:HB2	1.88	0.72
29:B3:6:VAL:HG12	29:B3:56:VAL:HG22	1.70	0.72
40:DE:54:GLN:O	40:DE:75:VAL:HG23	1.88	0.72
57:BY:28:LYS:HB3	57:BY:37:VAL:HB	1.72	0.72
32:B6:15:GLU:HB2	32:B6:20:ASN:CB	2.20	0.72
36:DA:1498:C:H2'	36:DA:1499:C:H5''	1.71	0.72
7:CG:16:LEU:CD1	9:CI:42:ARG:HA	2.19	0.72
50:DR:52:ILE:HB	50:DR:94:TYR:HD2	1.54	0.72
50:DR:117:VAL:O	50:DR:118:GLU:HB2	1.89	0.72
36:BA:328:U:H4'	57:BY:68:HIS:CE1	2.23	0.72
36:DA:774:A:H2	36:DA:787:U:HO2'	1.37	0.72
36:DA:500:G:N2	36:DA:502:A:H3'	2.05	0.72
53:BU:108:GLU:HG3	54:BV:44:LYS:HD3	1.70	0.72
5:AE:101:ILE:O	5:AE:120:THR:HB	1.89	0.72
38:DC:79:LYS:HA	38:DC:97:GLU:OE1	1.90	0.72
48:BP:56:SER:O	48:BP:58:THR:N	2.22	0.72
9:CI:114:TYR:HE1	10:CJ:59:SER:HA	1.55	0.72
36:DA:1498:C:C2'	36:DA:1499:C:H5''	2.18	0.72
9:AI:19:LEU:HD23	9:AI:20:ARG:N	2.03	0.72
36:DA:760:G:H2'	36:DA:761:A:H5'	1.70	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:537:G:H2'	1:AA:538:G:C8	2.25	0.72
50:BR:117:VAL:O	50:BR:118:GLU:HB2	1.89	0.72
22:AV:52:G:H1	22:AV:62:C:H42	1.37	0.72
13:CM:81:LEU:HD12	13:CM:86:CYS:SG	2.29	0.72
43:BH:85:LYS:HD3	43:BH:133:VAL:HB	1.71	0.72
34:D8:61:LEU:HD22	34:D8:62:LEU:H	1.55	0.72
51:DS:17:ARG:HA	51:DS:20:ARG:NH1	2.05	0.72
48:DP:97:PRO:O	48:DP:98:GLU:HB3	1.89	0.72
51:BS:19:LYS:HB3	51:BS:20:ARG:HH22	1.55	0.72
36:BA:1747(A):G:H2'	36:BA:1748:G:C5'	2.20	0.72
26:B0:27:GLU:HB3	26:B0:69:PHE:CD1	2.25	0.72
36:BA:1516:C:H2'	36:BA:1517:G:C5'	2.18	0.72
26:D0:27:GLU:HB3	26:D0:69:PHE:CD1	2.25	0.72
49:DQ:134:ARG:HD2	58:DZ:122:ARG:HH22	1.52	0.72
10:AJ:6:ILE:HG22	10:AJ:98:ILE:HD12	1.72	0.72
36:DA:958:U:H5''	49:DQ:14:ARG:CD	2.18	0.72
13:AM:97:PRO:HA	13:AM:110:ARG:HD3	1.72	0.72
43:BH:89:ILE:O	43:BH:89:ILE:HG13	1.88	0.72
40:BE:24:THR:HG22	40:BE:186:GLY:HA2	1.72	0.72
1:AA:280:C:O2	17:AQ:38:ARG:HG3	1.88	0.72
6:AF:46:ARG:HH22	18:AR:37:VAL:CG1	2.03	0.72
48:BP:84:ASN:HD22	48:BP:84:ASN:N	1.88	0.72
34:B8:6:THR:HB	34:B8:11:LYS:NZ	2.05	0.72
32:D6:33:LYS:HA	32:D6:33:LYS:CE	2.14	0.72
36:DA:611:C:H2'	36:DA:612:C:H6	1.55	0.72
48:BP:30:THR:CG2	48:BP:31:ALA:N	2.52	0.72
58:BZ:29:TYR:HB3	58:BZ:34:ASN:CB	2.18	0.72
16:CP:20:VAL:HG21	16:CP:32:TYR:CB	2.19	0.72
36:DA:969:U:H2'	36:DA:970:C:C6	2.25	0.72
11:AK:33:THR:HG22	11:AK:39:PRO:HA	1.71	0.72
36:DA:1104:C:H2'	36:DA:1105:U:H6	1.52	0.72
36:BA:2208:A:H1'	36:BA:2219:G:C5	2.24	0.72
11:AK:57:THR:HG23	11:AK:60:ALA:H	1.55	0.72
40:BE:101:ARG:NE	40:BE:171:GLU:HB2	2.05	0.72
12:AL:38:THR:HG21	12:AL:59:ARG:HG3	1.70	0.72
1:CA:1504:G:OP1	1:CA:1507:A:H4'	1.90	0.72
1:CA:1053:G:C4'	1:CA:1054:C:H5'	2.15	0.71
36:BA:1528(A):A:H62	36:BA:1541:G:N2	1.88	0.71
22:AW:69:G:H2'	22:AW:70:G:H5''	1.71	0.71
39:BD:35:LYS:HG2	39:BD:36:PRO:N	2.04	0.71
41:BF:185:ASP:HA	41:BF:188:ARG:CG	2.20	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:17:ARG:HA	51:BS:20:ARG:NH1	2.05	0.71
48:BP:24:GLY:CA	48:BP:33:ARG:NH1	2.53	0.71
46:DN:58:ASP:O	46:DN:60:ILE:N	2.21	0.71
36:DA:1378:A:H4'	36:DA:1379:A:OP1	1.88	0.71
31:D5:2:ALA:N	36:DA:747:U:C4	2.58	0.71
1:CA:192:U:C1'	20:CT:103:GLY:HA2	2.20	0.71
58:BZ:101:PRO:O	58:BZ:136:PHE:HA	1.89	0.71
8:AH:7:ALA:HB2	8:AH:85:ARG:HD3	1.71	0.71
40:DE:105:THR:HB	40:DE:197:ILE:HG23	1.72	0.71
1:AA:192:U:C1'	20:AT:103:GLY:HA2	2.19	0.71
8:CH:7:ALA:HB2	8:CH:85:ARG:HD3	1.70	0.71
1:AA:942:G:H21	9:AI:124:GLN:NE2	1.86	0.71
26:D0:7:LEU:HD13	49:DQ:85:LYS:HG3	1.71	0.71
42:BG:76:SER:CA	42:BG:83:ARG:HB3	2.19	0.71
9:AI:91:ASP:C	9:AI:93:ARG:H	1.94	0.71
5:CE:12:LEU:HD12	5:CE:31:LEU:HB2	1.70	0.71
52:DT:3:ARG:O	52:DT:5:ALA:N	2.23	0.71
56:DX:10:ALA:O	56:DX:28:PHE:HB2	1.89	0.71
9:CI:19:LEU:HD21	9:CI:59:PHE:HD2	1.53	0.71
4:AD:59:ARG:HH21	4:AD:62:GLN:HG3	1.54	0.71
3:CC:134:ILE:HG22	3:CC:168:ALA:HB3	1.71	0.71
8:AH:112:LEU:N	8:AH:112:LEU:HD23	2.04	0.71
25:AZ:295:ARG:HH11	25:AZ:295:ARG:HG2	1.54	0.71
1:AA:358:U:H2'	1:AA:359:U:C6	2.25	0.71
1:CA:228:A:H5'	1:CA:228:A:C8	2.24	0.71
41:DF:4:VAL:HA	41:DF:19:GLU:HB3	1.70	0.71
39:DD:30:GLU:HG3	39:DD:63:ARG:HE	1.53	0.71
40:BE:54:GLN:O	40:BE:75:VAL:HG23	1.89	0.71
42:DG:77:ILE:HG12	42:DG:82:LEU:O	1.89	0.71
48:DP:105:LEU:O	48:DP:106:LEU:HB2	1.90	0.71
43:BH:91:GLY:HA3	43:BH:94:TYR:CD2	2.25	0.71
2:CB:204:ASN:HD22	2:CB:205:ASP:N	1.87	0.71
52:BT:3:ARG:O	52:BT:5:ALA:N	2.22	0.71
25:CZ:188:THR:HG21	25:CZ:193:ASN:HD22	1.55	0.71
36:DA:143:G:O4'	56:DX:37:THR:HG21	1.89	0.71
31:B5:2:ALA:N	36:BA:747:U:C4	2.58	0.71
56:BX:57:LEU:HD22	56:BX:57:LEU:O	1.90	0.71
22:CW:56:C:O4'	38:DC:132:GLY:HA3	1.91	0.71
1:CA:405:U:H3'	1:CA:406:G:H5'	1.72	0.71
36:DA:1970:A:H5''	36:DA:1971:A:OP1	1.90	0.71
13:CM:8:GLU:OE1	13:CM:22:ILE:HA	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:30:GLU:CG	39:BD:63:ARG:HE	2.03	0.71
52:DT:2:ASN:ND2	52:DT:7:ILE:HD11	2.03	0.71
57:DY:13:VAL:HG23	57:DY:73:ARG:O	1.91	0.71
41:BF:36:VAL:O	41:BF:40:GLN:HG3	1.91	0.71
10:AJ:75:ILE:HG13	10:AJ:76:ASN:H	1.54	0.71
7:AG:16:LEU:CD1	9:AI:42:ARG:HA	2.20	0.71
16:CP:20:VAL:HG21	16:CP:32:TYR:CG	2.25	0.71
52:DT:58:ASN:H	52:DT:58:ASN:HD22	1.37	0.71
1:AA:192:U:H2'	1:AA:193:C:H6	1.52	0.71
13:CM:91:ARG:HD3	13:CM:97:PRO:O	1.90	0.71
54:DV:21:ARG:O	54:DV:22:VAL:HG13	1.89	0.71
57:DY:42:VAL:HG12	57:DY:65:ALA:HB3	1.73	0.71
13:AM:101:GLN:HE21	13:AM:101:GLN:N	1.87	0.71
38:DC:79:LYS:HG2	38:DC:118:ASP:OD2	1.90	0.71
28:B2:35:LEU:CD2	28:B2:50:ILE:HG13	2.20	0.71
43:DH:85:LYS:NZ	43:DH:86:GLU:HA	2.05	0.71
5:AE:12:LEU:HD12	5:AE:31:LEU:HB2	1.70	0.71
48:BP:105:LEU:O	48:BP:106:LEU:HB2	1.90	0.71
48:BP:97:PRO:O	48:BP:98:GLU:HB3	1.91	0.71
20:CT:45:GLN:HE22	20:CT:46:GLU:HG3	1.55	0.71
20:CT:57:ARG:HH11	20:CT:102:GLY:CA	2.02	0.71
51:DS:49:VAL:HG12	51:DS:50:SER:N	2.05	0.71
41:BF:157:VAL:HG12	41:BF:176:LEU:HB3	1.69	0.71
11:AK:27:ASN:HD22	11:AK:28:THR:H	1.35	0.71
50:DR:55:ALA:HB2	50:DR:79:LEU:HD11	1.71	0.71
41:DF:84:VAL:O	41:DF:86:GLY:N	2.23	0.71
13:AM:89:GLY:O	13:AM:93:ARG:HD2	1.89	0.71
36:DA:328:U:H4'	57:DY:68:HIS:CE1	2.25	0.71
36:DA:1409:C:H2'	36:DA:1410:G:C8	2.26	0.71
11:CK:27:ASN:HD22	11:CK:28:THR:N	1.88	0.71
4:CD:23:GLY:HA3	4:CD:112:VAL:HG22	1.73	0.71
43:BH:121:ILE:HG23	43:BH:133:VAL:HG13	1.72	0.71
43:DH:85:LYS:HD3	43:DH:133:VAL:HB	1.71	0.71
42:BG:44:GLY:CA	42:BG:88:ILE:HG21	2.20	0.71
38:BC:27:ARG:HE	38:BC:182:PRO:CB	2.03	0.71
48:BP:105:LEU:HD12	48:BP:105:LEU:N	2.04	0.71
1:AA:1392:G:N2	1:AA:1502:A:C8	2.59	0.71
4:CD:30:LYS:C	4:CD:32:ALA:H	1.93	0.71
2:AB:204:ASN:HD22	2:AB:205:ASP:N	1.89	0.71
36:DA:1210:A:H5'	36:DA:1210:A:H8	1.55	0.71
58:DZ:152:ALA:O	58:DZ:155:LEU:HD22	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BO:114:ILE:HD12	47:BO:114:ILE:H	1.54	0.71
27:D1:89:GLU:HA	27:D1:92:LYS:HE2	1.70	0.71
50:BR:14:SER:HA	50:BR:17:ARG:HH12	1.55	0.71
13:CM:97:PRO:HA	13:CM:110:ARG:HD3	1.72	0.71
3:AC:58:GLU:H	3:AC:65:ALA:HB3	1.54	0.71
39:DD:35:LYS:HG2	39:DD:36:PRO:N	2.06	0.71
42:DG:69:ALA:O	42:DG:71:THR:HG22	1.91	0.71
36:BA:99:U:H4'	36:BA:102:G:H1'	1.73	0.71
51:BS:40:ILE:HG22	51:BS:47:THR:HA	1.72	0.71
3:AC:83:ARG:O	3:AC:86:VAL:HG22	1.91	0.71
51:BS:74:ALA:HB1	51:BS:103:GLU:HG2	1.71	0.71
32:D6:6:ARG:HB3	32:D6:6:ARG:NH1	2.05	0.71
36:DA:2139:C:H2'	36:DA:2140:C:C6	2.24	0.71
30:B4:12:ALA:HB2	30:B4:29:PRO:HA	1.73	0.71
2:AB:87:ARG:NH2	2:AB:232:PRO:HA	2.06	0.71
36:BA:1087:G:O2'	36:BA:1089:G:H5'	1.89	0.71
3:AC:15:THR:HG21	3:AC:181:ASN:HA	1.72	0.71
36:BA:143:G:O4'	56:BX:37:THR:HG21	1.90	0.71
46:DN:58:ASP:C	46:DN:60:ILE:H	1.93	0.71
40:DE:4:ILE:CD1	40:DE:28:ALA:HB1	2.20	0.71
50:DR:14:SER:HA	50:DR:17:ARG:HH12	1.54	0.71
3:CC:134:ILE:HG21	3:CC:167:TRP:O	1.89	0.71
1:CA:407:G:O2'	4:CD:116:GLN:HG3	1.91	0.71
36:BA:914:C:H2'	36:BA:915:C:H5'	1.72	0.71
36:DA:523:C:C2'	36:DA:524:U:H5'	2.21	0.71
40:DE:7:VAL:HG12	40:DE:27:LEU:HB3	1.71	0.71
56:BX:44:GLU:HG3	56:BX:50:LYS:HA	1.73	0.71
38:DC:120:MET:HA	38:DC:123:VAL:HG12	1.71	0.71
39:DD:30:GLU:H	39:DD:35:LYS:HZ1	1.37	0.71
22:CW:69:G:H2'	22:CW:70:G:H5''	1.71	0.71
52:BT:85:LYS:HB3	52:BT:85:LYS:HZ2	1.55	0.71
4:CD:5:ILE:HA	4:CD:115:ARG:HH12	1.54	0.71
36:DA:833:U:H5''	48:DP:48:PRO:HB3	1.73	0.71
7:AG:113:GLU:HG2	7:AG:119:ARG:HG2	1.72	0.71
36:DA:1221(A):C:H2'	36:DA:1222:C:H6	1.55	0.71
54:BV:21:ARG:O	54:BV:22:VAL:HG13	1.90	0.71
1:CA:280:C:O2	17:CQ:38:ARG:HG3	1.90	0.71
1:CA:194:C:H2'	1:CA:195:A:H5''	1.73	0.71
36:DA:2577:A:H5''	36:DA:2578:G:H5'	1.73	0.71
31:D5:4:HIS:HB3	31:D5:5:PRO:CD	2.12	0.71
48:DP:147:LEU:HG	48:DP:148:LEU:H	1.55	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:126:VAL:HA	48:BP:145:PRO:CB	2.21	0.71
36:BA:266:G:C2'	36:BA:267:C:H5''	2.19	0.71
48:DP:58:THR:O	48:DP:58:THR:HG22	1.91	0.71
25:AZ:263:ARG:HB2	25:AZ:263:ARG:NH1	2.06	0.71
20:CT:26:ASN:ND2	20:CT:26:ASN:H	1.88	0.71
37:BB:91:C:H5'	49:BQ:17:LEU:O	1.90	0.71
13:CM:82:MET:CG	13:CM:83:ASP:N	2.53	0.71
40:BE:105:THR:HG21	40:BE:164:ARG:NH1	2.05	0.71
43:DH:89:ILE:O	43:DH:89:ILE:HG13	1.89	0.71
1:CA:1218:C:H2'	1:CA:1219:U:C6	2.25	0.71
28:B2:47:ASN:CA	28:B2:50:ILE:HB	2.14	0.71
13:CM:23:TYR:CE2	13:CM:70:LEU:HD22	2.26	0.71
58:BZ:152:ALA:HB1	58:BZ:167:PRO:HB2	1.72	0.71
9:CI:91:ASP:C	9:CI:93:ARG:H	1.94	0.71
51:DS:89:ARG:CG	51:DS:92:TYR:HA	2.21	0.71
2:CB:165:VAL:HG23	2:CB:166:ASP:N	2.06	0.71
36:DA:2145:C:H5''	36:DA:2146:C:OP2	1.91	0.71
41:BF:29:ASN:ND2	41:BF:32:LEU:HB2	2.06	0.71
54:BV:25:LEU:H	54:BV:92:THR:HG21	1.55	0.71
46:BN:86:PRO:HG2	46:BN:89:LYS:HG2	1.71	0.71
40:BE:7:VAL:HG12	40:BE:27:LEU:HB3	1.73	0.71
50:DR:7:GLY:O	50:DR:8:ARG:NE	2.24	0.71
22:CV:42:C:H6	22:CV:42:C:H5'	1.54	0.70
28:B2:43:GLN:C	28:B2:45:SER:H	1.94	0.70
43:BH:83:TYR:HB2	43:BH:134:SER:HA	1.72	0.70
34:D8:6:THR:HB	34:D8:11:LYS:NZ	2.06	0.70
39:BD:71:ASP:CB	39:BD:103:ARG:HH22	2.02	0.70
36:BA:611:C:H2'	36:BA:612:C:H6	1.55	0.70
54:DV:19:LYS:HG3	54:DV:20:LEU:N	2.05	0.70
48:BP:147:LEU:HG	48:BP:148:LEU:H	1.56	0.70
48:BP:96:THR:HG22	48:BP:126:VAL:HB	1.71	0.70
37:BB:20:C:C2'	37:BB:21:G:H5''	2.21	0.70
51:DS:12:PHE:C	51:DS:12:PHE:HD1	1.94	0.70
36:DA:2136:C:H2'	36:DA:2137:C:C6	2.25	0.70
30:B4:30:GLU:C	30:B4:31:ILE:HD12	2.10	0.70
36:DA:637:A:OP2	48:DP:115:LEU:HB2	1.91	0.70
33:B7:34:ARG:NH1	33:B7:34:ARG:HG3	1.99	0.70
41:BF:84:VAL:O	41:BF:86:GLY:N	2.24	0.70
8:AH:55:GLY:C	8:AH:56:LYS:HD2	2.12	0.70
6:CF:91:VAL:HG11	18:CR:72:ARG:NH1	2.05	0.70
36:DA:2779:U:H1'	36:DA:2781:A:C5	2.26	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:292:C:H2'	36:DA:293:U:C6	2.26	0.70
16:CP:14:ASN:N	16:CP:15:PRO:HD3	2.05	0.70
36:BA:1301:A:HO2'	36:BA:1302:A:H2'	1.52	0.70
41:BF:185:ASP:OD1	41:BF:188:ARG:HD3	1.91	0.70
46:BN:62:VAL:HG22	46:BN:66:LYS:HD2	1.72	0.70
30:D4:25:TYR:CE2	42:DG:2:PRO:HB3	2.26	0.70
48:BP:16:ARG:HD3	48:BP:16:ARG:O	1.91	0.70
43:BH:94:TYR:CD1	43:BH:107:VAL:HA	2.27	0.70
48:DP:84:ASN:HD22	48:DP:84:ASN:N	1.88	0.70
58:BZ:157:LEU:HD21	58:BZ:163:LEU:HD22	1.73	0.70
19:CS:11:VAL:CG1	19:CS:16:LEU:HD11	2.22	0.70
57:DY:45:VAL:HG12	57:DY:60:PHE:CD1	2.26	0.70
36:DA:1103:A:H5'	36:DA:1104:C:OP2	1.91	0.70
1:CA:498:U:HO2'	1:CA:499:A:H8	1.39	0.70
40:BE:81:ILE:O	40:BE:81:ILE:HG22	1.90	0.70
1:AA:59:A:H3'	1:AA:331:G:H22	1.55	0.70
6:CF:46:ARG:HH22	18:CR:37:VAL:CG1	2.03	0.70
36:BA:2455:G:H2'	36:BA:2456:C:C6	2.25	0.70
36:BA:1223:G:H5'	36:BA:1223:G:H8	1.56	0.70
22:AV:41:C:H2'	22:AV:42:C:C5'	2.12	0.70
41:BF:132:VAL:HG13	41:BF:133:ASN:ND2	2.05	0.70
51:DS:92:TYR:CG	51:DS:93:LYS:N	2.58	0.70
30:D4:30:GLU:C	30:D4:31:ILE:HD12	2.11	0.70
36:DA:1517:G:C8	36:DA:1517:G:H5'	2.23	0.70
30:B4:12:ALA:HB1	30:B4:29:PRO:HA	1.72	0.70
51:DS:106:ARG:NH1	51:DS:108:GLY:HA3	2.06	0.70
1:AA:572:A:H5'	1:AA:573:A:OP2	1.90	0.70
22:CW:57:G:H2'	22:CW:58:A:H5'	1.71	0.70
1:CA:1286:A:O2'	1:CA:1287:A:H5''	1.91	0.70
3:AC:40:ARG:O	3:AC:44:GLU:HG3	1.91	0.70
36:BA:363(F):A:O2'	36:BA:364:C:H5	1.75	0.70
1:CA:59:A:H3'	1:CA:331:G:H22	1.55	0.70
58:BZ:70:LEU:H	58:BZ:70:LEU:HD23	1.56	0.70
53:DU:34:LYS:HA	53:DU:34:LYS:HE2	1.72	0.70
36:BA:523:C:C2'	36:BA:524:U:H5'	2.20	0.70
52:DT:53:ARG:HH11	52:DT:53:ARG:CB	1.99	0.70
28:B2:57:ILE:HG22	28:B2:61:LEU:CG	2.19	0.70
46:DN:62:VAL:HG22	46:DN:66:LYS:HD2	1.72	0.70
36:BA:1141:U:C2'	46:BN:63:THR:HG21	2.20	0.70
36:BA:833:U:H5''	48:BP:48:PRO:HB3	1.72	0.70
30:D4:12:ALA:HB1	30:D4:29:PRO:HA	1.73	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:87:ILE:HG22	15:AO:88:ARG:N	2.05	0.70
31:B5:40:LYS:HE2	31:B5:44:THR:O	1.92	0.70
36:BA:1378:A:H4'	36:BA:1379:A:OP1	1.91	0.70
36:DA:548:A:H2'	36:DA:549:G:H5'	1.73	0.70
46:DN:3:THR:HG22	46:DN:4:TYR:H	1.55	0.70
3:CC:52:LEU:HD23	3:CC:52:LEU:H	1.54	0.70
26:B0:7:LEU:HD13	49:BQ:85:LYS:HG3	1.72	0.70
6:AF:55:ASP:HB3	6:AF:57:GLN:NE2	2.05	0.70
41:BF:178:PRO:HG2	41:BF:179:GLU:OE1	1.91	0.70
11:CK:57:THR:HG23	11:CK:60:ALA:H	1.56	0.70
1:AA:520:A:N1	1:AA:536:C:H1'	2.07	0.70
12:CL:38:THR:HG21	12:CL:59:ARG:HG3	1.71	0.70
13:AM:10:PRO:HB2	13:AM:18:ALA:CB	2.13	0.70
41:DF:25:PRO:HB3	41:DF:119:ARG:CB	2.17	0.70
36:BA:271(L):U:H5''	36:BA:271(M):G:C5'	2.19	0.70
48:DP:147:LEU:HG	48:DP:148:LEU:N	2.06	0.70
37:BB:48:A:H4'	51:BS:95:HIS:HD2	1.54	0.70
51:BS:89:ARG:HH11	51:BS:89:ARG:HG2	1.55	0.70
25:AZ:188:THR:HG21	25:AZ:193:ASN:HD22	1.55	0.70
2:CB:25:ASN:HD21	2:CB:27:LYS:HG3	1.54	0.70
36:BA:1103:A:H5'	36:BA:1104:C:OP2	1.92	0.70
1:AA:299:G:H2'	1:AA:300:A:C8	2.27	0.70
25:CZ:150:VAL:O	25:CZ:154:VAL:HG23	1.92	0.70
39:DD:24:ILE:HD13	39:DD:25:THR:H	1.57	0.70
36:BA:1301:A:O2'	36:BA:1302:A:C2'	2.34	0.70
54:BV:19:LYS:HG3	54:BV:20:LEU:N	2.06	0.70
55:BW:6:ILE:HG12	55:BW:104:THR:CG2	2.21	0.70
42:DG:28:VAL:O	42:DG:31:VAL:HG12	1.91	0.70
1:AA:1129:C:O5'	1:AA:1130:A:H5'	1.92	0.70
1:AA:80:G:O2'	1:AA:81:U:H5'	1.90	0.70
51:DS:36:TYR:N	51:DS:36:TYR:CD1	2.56	0.70
1:CA:358:U:H2'	1:CA:359:U:H6	1.54	0.70
42:BG:55:LYS:O	42:BG:59:GLU:HG3	1.92	0.70
36:BA:500:G:N2	36:BA:502:A:H3'	2.07	0.70
36:BA:935:C:H2'	36:BA:936:C:C6	2.27	0.70
36:DA:708:C:H42	36:DA:723:G:H1	1.39	0.70
1:CA:1015:A:H2'	1:CA:1016:A:C8	2.26	0.70
58:BZ:155:LEU:HD23	58:BZ:155:LEU:H	1.56	0.70
53:BU:69:CYS:O	53:BU:74:LEU:HD12	1.90	0.70
28:B2:47:ASN:O	28:B2:51:ARG:HB3	1.92	0.70
32:D6:28:ARG:HA	32:D6:32:ASN:HD22	1.56	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:27:THR:O	52:BT:28:VAL:CB	2.39	0.70
4:AD:109:GLY:O	4:AD:111:ALA:N	2.24	0.70
10:CJ:50:ILE:CD1	10:CJ:50:ILE:H	1.96	0.70
36:DA:1141:U:C2'	46:DN:63:THR:HG21	2.20	0.70
36:BA:2145:C:H5''	36:BA:2146:C:OP2	1.92	0.70
48:DP:16:ARG:O	48:DP:16:ARG:HD3	1.92	0.70
13:CM:12:ASN:H	13:CM:12:ASN:HD22	1.39	0.70
31:D5:48:GLU:O	31:D5:49:CYS:SG	2.50	0.70
31:D5:54:GLY:H	31:D5:56:LYS:HZ1	1.37	0.70
31:B5:48:GLU:O	31:B5:49:CYS:SG	2.49	0.70
46:BN:61:ARG:HG3	46:BN:61:ARG:HH11	1.56	0.70
36:DA:363(F):A:O2'	36:DA:364:C:H5	1.72	0.70
47:BO:86:ILE:HG22	47:BO:94:ARG:HB2	1.73	0.70
36:BA:1169:G:H1	36:BA:1180:C:H42	1.40	0.70
1:AA:498:U:HO2'	1:AA:499:A:H8	1.40	0.70
1:CA:434:U:H2'	1:CA:435:C:C6	2.27	0.70
36:BA:292:C:H2'	36:BA:293:U:C6	2.26	0.70
20:AT:63:ILE:HG21	20:AT:81:LYS:HG3	1.74	0.70
37:BB:13:A:O2'	37:BB:14:U:H3'	1.92	0.70
52:BT:58:ASN:ND2	52:BT:58:ASN:H	1.88	0.70
2:AB:14:GLY:O	2:AB:15:VAL:HG13	1.90	0.70
52:DT:27:THR:O	52:DT:28:VAL:CB	2.39	0.70
43:DH:121:ILE:HG23	43:DH:133:VAL:HG13	1.73	0.70
42:BG:47:LYS:HZ3	42:BG:88:ILE:HD11	1.53	0.70
36:BA:628:G:H2'	36:BA:629:G:C5'	2.18	0.70
39:BD:30:GLU:CD	39:BD:63:ARG:HE	1.94	0.70
41:BF:37:VAL:HG11	48:BP:7:ARG:NH1	2.01	0.70
1:CA:537:G:H2'	1:CA:538:G:C8	2.25	0.70
4:CD:12:CYS:HA	4:CD:19:LEU:HD13	1.73	0.70
30:D4:26:SER:HB3	42:DG:105:LYS:HZ1	1.57	0.70
36:BA:2139:C:H2'	36:BA:2140:C:C6	2.25	0.70
16:CP:67:THR:HB	16:CP:70:ALA:HB2	1.72	0.70
3:CC:40:ARG:O	3:CC:44:GLU:HG3	1.92	0.70
13:CM:112:GLY:O	13:CM:114:ARG:N	2.24	0.70
36:DA:1223:G:H5'	36:DA:1223:G:H8	1.56	0.70
36:BA:935:C:H2'	36:BA:936:C:H6	1.57	0.70
40:BE:128:SER:OG	40:BE:129:HIS:N	2.23	0.70
7:AG:78:ARG:O	7:AG:78:ARG:HG3	1.92	0.70
13:CM:89:GLY:O	13:CM:93:ARG:HD2	1.92	0.70
35:B9:10:ILE:O	35:B9:10:ILE:HG22	1.92	0.70
39:DD:176:ARG:HH11	39:DD:176:ARG:HG2	1.56	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:108:PRO:HG2	39:BD:111:LEU:HB2	1.72	0.70
7:AG:79:ARG:CZ	22:AW:33:U:H4'	2.22	0.70
1:CA:1305:G:H5'	21:CU:4:GLY:HA3	1.73	0.70
2:AB:118:LEU:HB3	2:AB:142:LEU:HD12	1.74	0.70
2:CB:118:LEU:HB3	2:CB:142:LEU:HD12	1.72	0.70
3:CC:7:PRO:O	3:CC:11:ARG:HG2	1.92	0.70
25:CZ:263:ARG:NH1	25:CZ:263:ARG:HB2	2.07	0.70
31:B5:55:ARG:O	31:B5:56:LYS:HD3	1.92	0.70
36:DA:1058:G:C2'	36:DA:1059:G:H5''	2.22	0.70
1:CA:80:G:O2'	1:CA:81:U:H5'	1.91	0.70
57:BY:45:VAL:HG12	57:BY:60:PHE:CD1	2.27	0.70
36:DA:18:C:O3'	53:DU:23:GLY:HA2	1.92	0.70
49:BQ:22:LYS:H	58:BZ:78:LYS:HZ1	1.37	0.70
3:CC:95:THR:HG23	3:CC:97:LYS:HD2	1.73	0.70
6:CF:43:LEU:H	6:CF:43:LEU:HD22	1.55	0.70
6:AF:61:LEU:HB3	6:AF:63:TYR:HE1	1.56	0.70
13:CM:15:VAL:O	13:CM:19:LEU:HD23	1.92	0.70
58:BZ:96:VAL:CG2	58:BZ:97:GLU:H	1.98	0.70
1:AA:1036:G:H5''	1:AA:1037:C:C5	2.26	0.70
58:BZ:151:HIS:HB2	58:BZ:170:THR:HA	1.74	0.70
24:CY:2:G:C2'	24:CY:3:G:H5''	2.22	0.70
36:DA:272(J):C:H2'	36:DA:274:G:H5'	1.74	0.70
36:BA:1279:G:H4'	50:BR:31:HIS:HD2	1.51	0.70
58:BZ:17:ALA:O	58:BZ:20:ARG:HG2	1.91	0.70
4:AD:59:ARG:NH2	4:AD:62:GLN:HG3	2.06	0.70
1:AA:538:G:OP2	12:AL:115:LYS:HG3	1.92	0.70
36:DA:631:A:H5''	48:DP:65:ARG:NH1	2.07	0.70
54:DV:47:VAL:HG12	54:DV:52:VAL:HB	1.71	0.70
22:AW:38:A:C3'	22:AW:39:U:H5''	2.22	0.70
36:DA:1639:U:H2'	36:DA:1640:C:H5''	1.73	0.70
9:CI:118:LYS:O	9:CI:119:ALA:HB3	1.92	0.70
40:DE:101:ARG:NE	40:DE:171:GLU:HB2	2.07	0.70
39:BD:129:ASN:O	39:BD:193:VAL:HG12	1.92	0.70
1:CA:227:G:H2'	1:CA:228:A:C5'	2.13	0.69
52:DT:28:VAL:HG21	52:DT:46:GLU:HG3	1.74	0.69
1:CA:1036:G:H5''	1:CA:1037:C:C5	2.27	0.69
57:DY:73:ARG:NH2	57:DY:82:PRO:HA	2.06	0.69
57:BY:9:LYS:CG	57:BY:10:GLY:H	2.04	0.69
4:AD:121:VAL:O	4:AD:134:ASP:HA	1.92	0.69
48:BP:147:LEU:HG	48:BP:148:LEU:N	2.06	0.69
48:DP:126:VAL:HA	48:DP:145:PRO:CB	2.20	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DS:85:VAL:HG23	51:DS:106:ARG:HD3	1.72	0.69
36:BA:244:A:H4'	48:BP:74:GLU:CG	2.22	0.69
1:CA:940:C:P	7:CG:102:ARG:HH21	2.15	0.69
39:BD:76:PRO:HG2	39:BD:98:VAL:CG2	2.21	0.69
19:AS:11:VAL:CG1	19:AS:16:LEU:HD11	2.22	0.69
5:CE:101:ILE:O	5:CE:120:THR:HB	1.92	0.69
41:BF:89:VAL:HG12	41:BF:90:PHE:N	2.07	0.69
36:DA:1169:G:H1	36:DA:1180:C:H42	1.39	0.69
53:BU:34:LYS:HA	53:BU:34:LYS:HE2	1.73	0.69
37:DB:13:A:O2'	37:DB:14:U:H3'	1.91	0.69
26:D0:40:GLN:HE22	26:D0:45:PHE:H	1.39	0.69
1:CA:841:U:H3'	1:CA:848:C:O4'	1.91	0.69
39:BD:176:ARG:HG2	39:BD:176:ARG:HH11	1.57	0.69
24:AY:2:G:C2'	24:AY:3:G:H5''	2.22	0.69
34:B8:4:MET:HE3	34:B8:61:LEU:HG	1.73	0.69
36:BA:272(J):C:H2'	36:BA:274:G:H5'	1.74	0.69
36:DA:310:A:P	57:DY:18:GLY:HA2	2.32	0.69
48:BP:61:ARG:O	48:BP:62:LEU:HB3	1.92	0.69
51:BS:106:ARG:NH1	51:BS:108:GLY:HA3	2.06	0.69
9:AI:19:LEU:HD21	9:AI:59:PHE:HD2	1.56	0.69
36:DA:1403:C:H5''	36:DA:1471:A:C1'	2.22	0.69
13:CM:53:VAL:CG1	13:CM:57:ARG:HH21	2.03	0.69
1:AA:405:U:H3'	1:AA:406:G:H5'	1.73	0.69
5:CE:100:VAL:HG12	5:CE:118:ILE:HG22	1.75	0.69
1:AA:434:U:H2'	1:AA:435:C:C6	2.27	0.69
36:DA:1796:U:H2'	36:DA:1797:C:C6	2.27	0.69
4:CD:133:VAL:HG12	4:CD:135:LEU:H	1.55	0.69
36:DA:1107:G:H4'	44:DJ:81:UNK:CB	2.22	0.69
50:BR:7:GLY:O	50:BR:8:ARG:NE	2.25	0.69
28:B2:12:GLU:HA	28:B2:15:LYS:HE3	1.73	0.69
36:BA:1396:U:H2'	36:BA:1396:U:O2	1.93	0.69
2:AB:82:ARG:O	2:AB:86:GLU:HG3	1.92	0.69
14:AN:44:LEU:HD12	14:AN:44:LEU:O	1.91	0.69
10:CJ:86:MET:HG2	10:CJ:86:MET:O	1.92	0.69
36:BA:2377:A:H4'	51:BS:107:GLU:O	1.91	0.69
5:AE:80:ILE:HD12	5:AE:138:ALA:HB1	1.75	0.69
36:BA:1022:G:N2	36:BA:1142(A):A:C2	2.55	0.69
37:DB:20:C:C2'	37:DB:21:G:H5''	2.21	0.69
41:DF:39:TRP:CH2	41:DF:106:ARG:HD3	2.28	0.69
36:DA:266:G:C2'	36:DA:267:C:H5''	2.20	0.69
5:CE:51:VAL:HB	5:CE:52:PRO:HD3	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:85:VAL:HG23	51:BS:106:ARG:HD3	1.72	0.69
1:AA:1238:A:H8	1:AA:1241:G:O2'	1.70	0.69
36:BA:2134:A:H62	36:BA:2157:G:H1'	1.55	0.69
31:D5:36:CYS:C	31:D5:38:ALA:H	1.95	0.69
1:CA:1129:C:O5'	1:CA:1130:A:H5'	1.92	0.69
40:BE:4:ILE:CD1	40:BE:28:ALA:HB1	2.22	0.69
56:DX:49:VAL:HG12	56:DX:87:GLN:HE21	1.57	0.69
1:AA:191:G:N3	20:AT:105:SER:HB3	2.08	0.69
41:DF:178:PRO:HG2	41:DF:179:GLU:OE1	1.92	0.69
1:AA:841:U:H3'	1:AA:848:C:O4'	1.91	0.69
39:BD:267:SER:C	39:BD:269:PHE:H	1.95	0.69
4:AD:64:LEU:HB2	4:AD:198:VAL:HG11	1.74	0.69
6:AF:8:ILE:HD11	6:AF:79:LEU:HD23	1.74	0.69
24:AY:57:G:H2'	24:AY:58:A:H5'	1.73	0.69
34:B8:61:LEU:HD22	34:B8:62:LEU:H	1.57	0.69
36:BA:2136:C:H2'	36:BA:2137:C:C6	2.27	0.69
47:DO:65:THR:HG23	47:DO:67:LYS:N	2.07	0.69
36:BA:2160:G:H8	36:BA:2160:G:H5'	1.56	0.69
36:BA:1403:C:H5''	36:BA:1471:A:C1'	2.23	0.69
40:DE:116:VAL:HG22	40:DE:117:MET:N	2.06	0.69
17:CQ:70:ARG:HD2	17:CQ:70:ARG:N	2.07	0.69
36:BA:1331:A:HO2'	36:BA:1332:G:H8	1.40	0.69
39:BD:69:ARG:NH2	39:BD:128:GLY:O	2.24	0.69
36:BA:1639:U:H2'	36:BA:1640:C:H5''	1.73	0.69
36:BA:1639:U:C2'	36:BA:1640:C:H5''	2.21	0.69
36:DA:935:C:H2'	36:DA:936:C:C6	2.28	0.69
36:DA:2377:A:O2'	36:DA:2378:A:H5'	1.93	0.69
47:BO:24:VAL:HG12	47:BO:33:ALA:HB2	1.75	0.69
14:AN:57:ARG:HH11	14:AN:57:ARG:HB2	1.57	0.69
2:CB:82:ARG:O	2:CB:86:GLU:HG3	1.92	0.69
42:DG:82:LEU:HD13	42:DG:87:PRO:HB2	1.75	0.69
46:DN:66:LYS:O	46:DN:70:LYS:HB3	1.91	0.69
2:CB:44:LEU:HA	2:CB:47:THR:HB	1.75	0.69
47:DO:114:ILE:HD12	47:DO:114:ILE:N	2.07	0.69
36:BA:548:A:H2'	36:BA:549:G:H5'	1.73	0.69
25:CZ:251:ASP:O	25:CZ:267:VAL:HG12	1.92	0.69
36:BA:1932:A:H2'	36:BA:1933:G:O4'	1.92	0.69
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.27	0.69
51:DS:40:ILE:HG22	51:DS:47:THR:HA	1.74	0.69
36:BA:1771:C:H1'	36:BA:1786:A:C8	2.28	0.69
13:AM:23:TYR:CE2	13:AM:70:LEU:HD22	2.27	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DY:9:LYS:HG2	57:DY:10:GLY:N	2.04	0.69
38:DC:73:ARG:HE	38:DC:110:PHE:HD1	1.40	0.69
36:BA:672:C:O2'	36:BA:673:C:H5''	1.93	0.69
51:DS:15:ARG:O	51:DS:18:ILE:HG13	1.93	0.69
40:BE:117:MET:O	40:BE:121:ASN:HA	1.93	0.69
36:BA:1060:U:C1'	36:BA:1061:U:H5''	2.22	0.69
4:CD:149:ALA:HB3	4:CD:152:SER:OG	1.92	0.69
22:AW:57:G:H2'	22:AW:58:A:H5'	1.71	0.69
42:BG:173:LEU:HB3	42:BG:178:PHE:CD2	2.27	0.69
46:BN:126:PRO:O	46:BN:127:ASP:HB2	1.93	0.69
13:AM:53:VAL:CG1	13:AM:57:ARG:HH21	2.05	0.69
34:D8:42:ARG:O	34:D8:44:LYS:N	2.25	0.69
47:DO:86:ILE:HG22	47:DO:94:ARG:HB2	1.75	0.69
39:DD:108:PRO:HG2	39:DD:111:LEU:HB2	1.72	0.69
36:DA:1932:A:H2'	36:DA:1933:G:O4'	1.92	0.69
17:CQ:67:LYS:O	17:CQ:68:ARG:HB2	1.91	0.69
36:DA:1480:G:H2'	36:DA:1481:U:H5'	1.73	0.69
36:DA:559:G:H22	53:DU:49:HIS:CD2	2.10	0.69
3:AC:95:THR:HG23	3:AC:97:LYS:HD2	1.74	0.69
38:BC:81:GLU:O	38:BC:84:LYS:HD3	1.92	0.69
36:BA:2312:U:H4'	42:BG:71:THR:CG2	2.21	0.69
32:B6:11:LEU:CD1	32:B6:26:ASN:HB2	2.21	0.69
39:BD:30:GLU:N	39:BD:35:LYS:NZ	2.40	0.69
32:D6:30:THR:O	32:D6:31:PRO:C	2.28	0.69
48:DP:56:SER:O	48:DP:58:THR:N	2.25	0.69
36:DA:604:G:H2'	36:DA:605:C:O2	1.92	0.69
3:CC:14:ILE:CG1	3:CC:15:THR:N	2.56	0.69
2:CB:87:ARG:NH2	2:CB:232:PRO:HA	2.08	0.69
31:B5:36:CYS:C	31:B5:38:ALA:H	1.94	0.69
15:CO:87:ILE:HG22	15:CO:88:ARG:N	2.07	0.69
1:AA:664:G:H22	1:AA:741:G:H1	1.40	0.69
39:BD:45:ASN:CG	39:BD:46:GLN:H	1.95	0.69
6:AF:87:ARG:HH11	6:AF:87:ARG:HG2	1.56	0.69
44:BJ:97:UNK:HA	44:BJ:132:UNK:HA	1.73	0.69
38:DC:5:LYS:HA	38:DC:8:ARG:HE	1.57	0.69
1:AA:1306:A:H61	1:AA:1331:G:H1'	1.58	0.69
41:DF:37:VAL:HG11	48:DP:7:ARG:NH1	2.00	0.69
39:BD:27:THR:HG23	39:BD:83:GLU:HG2	1.74	0.69
46:BN:46:VAL:HG13	46:BN:48:MET:HG3	1.75	0.69
41:BF:132:VAL:HG22	41:BF:133:ASN:N	2.07	0.69
52:BT:28:VAL:HG12	52:BT:29:ARG:HD3	1.75	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2304:G:H22	36:DA:2312:U:H3	1.39	0.69
42:DG:51:ARG:NE	42:DG:51:ARG:HA	2.07	0.69
12:AL:18:VAL:CG2	12:AL:19:ARG:H	2.02	0.69
43:DH:94:TYR:CD1	43:DH:107:VAL:HA	2.28	0.69
32:D6:42:TRP:HA	32:D6:42:TRP:CE3	2.26	0.69
32:D6:15:GLU:OE1	32:D6:18:ARG:NE	2.25	0.69
57:DY:8:LYS:HE2	57:DY:72:VAL:HG23	1.74	0.69
10:AJ:61:GLU:CG	14:AN:58:LYS:HE2	2.22	0.69
37:BB:7:G:H2'	37:BB:8:U:H5''	1.75	0.69
48:DP:58:THR:O	48:DP:61:ARG:NE	2.22	0.69
30:D4:12:ALA:HB2	30:D4:29:PRO:HA	1.74	0.69
20:AT:45:GLN:HE22	20:AT:46:GLU:HG3	1.55	0.69
1:CA:858:G:H8	1:CA:858:G:C5'	2.06	0.69
33:D7:34:ARG:HD2	33:D7:39:ARG:HG3	1.74	0.69
50:BR:3:HIS:C	50:BR:5:LYS:H	1.97	0.69
54:DV:25:LEU:H	54:DV:92:THR:HG21	1.56	0.69
35:B9:25:VAL:HB	35:B9:34:GLN:HB2	1.75	0.69
40:BE:111:ARG:HB3	50:BR:2:ARG:HH12	1.58	0.69
40:DE:111:ARG:HB3	50:DR:2:ARG:NH1	2.08	0.69
36:DA:359:A:H2'	36:DA:360:G:O4'	1.93	0.69
40:DE:105:THR:HG21	40:DE:164:ARG:NH1	2.07	0.69
6:CF:91:VAL:HG11	18:CR:72:ARG:HH12	1.57	0.69
25:AZ:251:ASP:O	25:AZ:267:VAL:HG12	1.93	0.69
41:DF:53:THR:HG23	41:DF:55:GLY:H	1.57	0.69
36:DA:914:C:H2'	36:DA:915:C:H5'	1.74	0.69
52:DT:38:ASN:ND2	52:DT:38:ASN:O	2.26	0.69
6:AF:77:ARG:HG2	6:AF:77:ARG:HH11	1.57	0.69
39:DD:129:ASN:O	39:DD:193:VAL:HG12	1.93	0.69
39:DD:45:ASN:CG	39:DD:46:GLN:H	1.95	0.69
1:AA:194:C:H2'	1:AA:195:A:H5''	1.74	0.69
38:DC:81:GLU:O	38:DC:84:LYS:HD3	1.91	0.69
3:AC:32:LEU:HD22	3:AC:59:ARG:NH1	2.08	0.69
36:BA:197:A:C8	36:BA:197:A:H5'	2.27	0.69
1:CA:664:G:H22	1:CA:741:G:H1	1.40	0.69
24:AY:41:C:H6	24:AY:41:C:H5'	1.58	0.69
1:CA:197:A:H4'	1:CA:198:G:O5'	1.93	0.69
36:DA:590:A:H2'	36:DA:591:C:C6	2.27	0.69
41:DF:32:LEU:O	41:DF:36:VAL:HG23	1.93	0.69
4:AD:5:ILE:HA	4:AD:115:ARG:HH12	1.57	0.69
32:B6:42:TRP:CE3	32:B6:42:TRP:HA	2.26	0.69
16:AP:20:VAL:CG2	16:AP:32:TYR:HB2	2.23	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:452:A:O2'	1:CA:453:A:H8	1.71	0.69
36:BA:1071:G:H1'	36:BA:1089:G:H2'	1.75	0.69
40:DE:111:ARG:HB3	50:DR:2:ARG:HH12	1.58	0.69
40:DE:117:MET:O	40:DE:121:ASN:HA	1.93	0.69
22:CW:38:A:C3'	22:CW:39:U:H5''	2.23	0.69
49:BQ:32:TYR:O	49:BQ:105:GLU:HB2	1.92	0.69
36:BA:271(J):C:H2'	36:BA:271(J):C:O2	1.92	0.69
36:DA:999:U:H5''	36:DA:1154:G:O6	1.93	0.69
2:AB:61:LEU:O	2:AB:64:ARG:HG2	1.91	0.69
25:CZ:295:ARG:HG2	25:CZ:295:ARG:HH11	1.57	0.69
36:BA:419:C:H2'	36:BA:420:C:H6	1.58	0.69
36:BA:708:C:H42	36:BA:723:G:H1	1.41	0.69
36:BA:2304:G:H22	36:BA:2312:U:H3	1.39	0.69
38:BC:27:ARG:HD3	38:BC:182:PRO:HG3	1.73	0.69
24:CY:2:G:H2'	24:CY:3:G:H5''	1.73	0.69
54:BV:19:LYS:HB2	54:BV:96:ILE:HD11	1.74	0.69
48:DP:96:THR:HG22	48:DP:126:VAL:HB	1.74	0.69
36:BA:1141:U:H2'	46:BN:63:THR:CG2	2.23	0.69
43:BH:42:ARG:HG2	43:BH:43:VAL:H	1.57	0.69
48:DP:24:GLY:CA	48:DP:33:ARG:NH1	2.56	0.69
4:AD:12:CYS:HA	4:AD:19:LEU:HD13	1.73	0.69
51:BS:12:PHE:C	51:BS:12:PHE:HD1	1.97	0.69
16:CP:20:VAL:CG2	16:CP:32:TYR:HB2	2.23	0.69
35:D9:25:VAL:HB	35:D9:34:GLN:HB2	1.75	0.69
31:D5:55:ARG:O	31:D5:56:LYS:HD3	1.92	0.69
40:BE:111:ARG:HB3	50:BR:2:ARG:NH1	2.08	0.69
1:CA:1234:C:H1'	1:CA:1364:U:O2	1.93	0.69
36:BA:1314:C:C6	36:BA:1314:C:H5'	2.28	0.69
34:B8:42:ARG:O	34:B8:44:LYS:N	2.25	0.69
36:DA:2852:G:H2'	36:DA:2853:C:C6	2.28	0.69
6:CF:34:GLY:N	6:CF:71:ARG:HH21	1.91	0.69
36:DA:2291:U:H2'	36:DA:2292:C:C6	2.27	0.69
52:BT:62:THR:HG22	52:BT:75:ILE:HG13	1.73	0.69
28:D2:10:LEU:HD11	28:D2:14:ARG:NH2	2.08	0.69
36:BA:1409:C:H2'	36:BA:1410:G:C8	2.27	0.69
50:DR:75:LEU:HD13	50:DR:75:LEU:O	1.92	0.69
46:DN:46:VAL:HG13	46:DN:48:MET:HG3	1.75	0.68
1:AA:1305:G:H5'	21:AU:4:GLY:HA3	1.75	0.68
36:BA:310:A:P	57:BY:18:GLY:HA2	2.33	0.68
4:CD:3:ARG:HG2	4:CD:118:ARG:HE	1.58	0.68
25:AZ:150:VAL:O	25:AZ:154:VAL:HG23	1.92	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:271(J):C:H2'	36:DA:271(J):C:O2	1.92	0.68
36:DA:2160:G:H8	36:DA:2160:G:H5'	1.57	0.68
2:CB:87:ARG:HH22	2:CB:232:PRO:HA	1.58	0.68
25:AZ:271:GLU:O	25:AZ:286:VAL:HG23	1.93	0.68
46:BN:58:ASP:O	46:BN:60:ILE:N	2.24	0.68
25:CZ:271:GLU:O	25:CZ:286:VAL:HG23	1.92	0.68
1:AA:1190:G:OP1	3:AC:5:ILE:HD12	1.93	0.68
27:D1:69:LYS:NZ	27:D1:76:ARG:HH22	1.91	0.68
34:D8:50:LEU:C	34:D8:52:LYS:H	1.95	0.68
47:BO:88:ASN:HD21	47:BO:92:GLU:HB2	1.58	0.68
43:BH:89:ILE:HG12	43:BH:129:THR:O	1.93	0.68
36:BA:1221(A):C:H2'	36:BA:1222:C:H6	1.58	0.68
36:BA:106:C:H2'	36:BA:107:C:C6	2.28	0.68
24:CY:41:C:H6	24:CY:41:C:H5'	1.58	0.68
36:BA:18:C:O3'	53:BU:23:GLY:HA2	1.93	0.68
39:DD:69:ARG:NH2	39:DD:128:GLY:O	2.27	0.68
3:AC:73:PRO:HG3	3:AC:105:GLU:HB2	1.75	0.68
4:AD:133:VAL:HG12	4:AD:135:LEU:H	1.57	0.68
41:DF:36:VAL:O	41:DF:40:GLN:HG3	1.93	0.68
36:BA:296:C:O2'	36:BA:297:C:H5'	1.92	0.68
57:BY:75:ILE:HG23	57:BY:76:CYS:N	2.07	0.68
2:AB:87:ARG:HH22	2:AB:232:PRO:HA	1.57	0.68
31:B5:40:LYS:HE3	31:B5:46:CYS:HB3	1.75	0.68
27:D1:84:GLY:O	27:D1:86:SER:N	2.22	0.68
42:BG:11:TYR:OH	42:BG:33:ARG:HG3	1.91	0.68
50:BR:52:ILE:HB	50:BR:94:TYR:HD2	1.58	0.68
36:DA:1762:A:H8	36:DA:1762:A:O5'	1.74	0.68
50:DR:4:LEU:C	50:DR:6:SER:H	1.96	0.68
36:BA:1170:G:H1	36:BA:1179:C:H42	1.40	0.68
36:DA:2377:A:H4'	51:DS:107:GLU:O	1.93	0.68
5:CE:107:ARG:HG3	5:CE:108:ALA:N	2.07	0.68
40:DE:81:ILE:O	40:DE:81:ILE:HG22	1.93	0.68
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.08	0.68
6:AF:91:VAL:HG11	18:AR:72:ARG:NH1	2.08	0.68
50:DR:100:LEU:HD11	50:DR:113:LEU:HB2	1.75	0.68
50:BR:62:ALA:O	50:BR:66:VAL:HG23	1.93	0.68
40:DE:33:VAL:HG12	40:DE:89:ASP:O	1.94	0.68
36:DA:1301:A:O2'	36:DA:1302:A:C2'	2.35	0.68
39:BD:24:ILE:HD13	39:BD:25:THR:H	1.58	0.68
39:BD:34:VAL:HG23	39:BD:35:LYS:H	1.58	0.68
52:BT:13:ARG:HA	52:BT:13:ARG:CZ	2.24	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:80:ILE:HD12	5:CE:138:ALA:HB1	1.74	0.68
9:AI:114:TYR:HE1	10:AJ:59:SER:HA	1.57	0.68
55:DW:6:ILE:HG12	55:DW:104:THR:CG2	2.23	0.68
43:DH:42:ARG:HG2	43:DH:43:VAL:H	1.58	0.68
51:DS:13:ARG:CG	51:DS:14:VAL:H	2.06	0.68
36:DA:2463:C:O2'	36:DA:2464:C:H5'	1.92	0.68
36:BA:1058:G:C2'	36:BA:1059:G:H5''	2.22	0.68
54:BV:39:LEU:HD12	54:BV:47:VAL:HG11	1.75	0.68
34:B8:50:LEU:C	34:B8:52:LYS:H	1.95	0.68
36:BA:359:A:H2'	36:BA:360:G:O4'	1.94	0.68
36:BA:2852:G:H2'	36:BA:2853:C:C6	2.28	0.68
43:DH:89:ILE:HG12	43:DH:129:THR:O	1.92	0.68
24:AY:2:G:H2'	24:AY:3:G:H5''	1.73	0.68
50:BR:4:LEU:C	50:BR:6:SER:H	1.96	0.68
6:CF:55:ASP:HB3	6:CF:57:GLN:NE2	2.09	0.68
36:DA:419:C:H2'	36:DA:420:C:H6	1.59	0.68
22:AV:56:C:O2'	42:BG:78:SER:HB2	1.93	0.68
36:DA:1396:U:H2'	36:DA:1396:U:O2	1.92	0.68
14:AN:22:THR:HB	14:AN:33:VAL:HG21	1.73	0.68
7:CG:7:ALA:O	7:CG:8:GLU:HB2	1.92	0.68
10:AJ:86:MET:O	10:AJ:86:MET:HG2	1.91	0.68
1:CA:953:G:H5'	1:CA:965:A:H61	1.57	0.68
3:CC:73:PRO:HG3	3:CC:105:GLU:HB2	1.75	0.68
36:BA:1541:G:H1'	36:BA:1542:A:C4	2.28	0.68
41:BF:160:ASN:OD1	41:BF:163:VAL:HG23	1.93	0.68
4:AD:126:ILE:HD12	4:AD:126:ILE:N	2.08	0.68
34:D8:33:ASN:CG	34:D8:34:TRP:H	1.97	0.68
36:DA:259:G:H1'	36:DA:621:A:O2'	1.93	0.68
25:CZ:277:LEU:HD13	25:CZ:278:GLN:H	1.56	0.68
36:DA:2305:A:C3'	36:DA:2306:C:H5''	2.23	0.68
46:BN:58:ASP:C	46:BN:60:ILE:H	1.95	0.68
24:AY:16:H2U:H5'	24:AY:17:H2U:C5'	2.23	0.68
39:DD:134:ARG:HH12	39:DD:135:PHE:HE1	1.41	0.68
25:CZ:143:ASP:HB3	25:CZ:146:LEU:HB3	1.74	0.68
53:BU:66:ASN:O	53:BU:70:ARG:HB2	1.92	0.68
17:AQ:67:LYS:O	17:AQ:68:ARG:HB2	1.93	0.68
4:CD:64:LEU:HB2	4:CD:198:VAL:HG11	1.74	0.68
37:DB:25:A:H2'	37:DB:25:A:N3	2.07	0.68
58:BZ:115:GLY:HA3	58:BZ:174:VAL:HG12	1.76	0.68
5:AE:107:ARG:HG3	5:AE:108:ALA:N	2.07	0.68
39:DD:30:GLU:N	39:DD:35:LYS:NZ	2.41	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:30:GLU:HB3	39:DD:83:GLU:OE1	1.93	0.68
36:DA:271(L):U:H5''	36:DA:271(M):G:C5'	2.19	0.68
57:BY:13:VAL:CG2	57:BY:72:VAL:HB	2.23	0.68
36:BA:672:C:H2'	36:BA:673:C:H5'	1.75	0.68
36:DA:296:C:O2'	36:DA:297:C:H5'	1.93	0.68
36:DA:2178:C:H2'	36:DA:2179:C:C5'	2.23	0.68
41:BF:32:LEU:O	41:BF:36:VAL:HG23	1.94	0.68
4:AD:30:LYS:C	4:AD:32:ALA:H	1.95	0.68
1:AA:540:G:H2'	1:AA:541:G:H8	1.58	0.68
2:AB:25:ASN:HD21	2:AB:27:LYS:HG3	1.58	0.68
15:CO:82:ILE:HD11	15:CO:88:ARG:HB2	1.74	0.68
3:CC:5:ILE:CD1	3:CC:5:ILE:N	2.56	0.68
34:D8:14:VAL:HG21	34:D8:22:VAL:CG1	2.23	0.68
1:AA:625:G:H2'	1:AA:626:U:C6	2.28	0.68
36:BA:2853:C:H2'	36:BA:2854:G:H8	1.58	0.68
58:BZ:54:HIS:HB3	58:BZ:101:PRO:HD3	1.73	0.68
56:BX:49:VAL:HG12	56:BX:87:GLN:HE21	1.57	0.68
1:CA:351:G:H4'	1:CA:352:C:OP2	1.93	0.68
36:BA:2779:U:H1'	36:BA:2781:A:C5	2.27	0.68
49:DQ:51:ARG:O	49:DQ:55:VAL:HG12	1.94	0.68
36:DA:2455:G:H2'	36:DA:2456:C:C6	2.28	0.68
46:BN:3:THR:HG22	46:BN:4:TYR:H	1.58	0.68
39:DD:34:VAL:HG23	39:DD:35:LYS:H	1.58	0.68
9:AI:83:ARG:O	9:AI:86:VAL:HG12	1.93	0.68
13:AM:5:ALA:HB2	13:AM:66:LEU:HD23	1.76	0.68
36:BA:654(P):C:H2'	36:BA:654(Q):C:O4'	1.94	0.68
57:DY:13:VAL:CG2	57:DY:72:VAL:HB	2.23	0.68
50:DR:3:HIS:C	50:DR:5:LYS:H	1.97	0.68
43:BH:103:LEU:HB2	43:BH:123:PHE:CD2	2.27	0.68
36:BA:958:U:H5''	49:BQ:14:ARG:CD	2.23	0.68
25:CZ:265:THR:HG21	25:CZ:293:VAL:CG2	2.23	0.68
50:BR:58:GLY:HA2	50:BR:80:PHE:CE2	2.29	0.68
57:DY:46:LYS:HB3	57:DY:62:GLU:HG2	1.76	0.68
11:CK:27:ASN:HD22	11:CK:28:THR:H	1.41	0.68
36:BA:2377:A:O2'	36:BA:2378:A:H5'	1.93	0.68
22:CV:63:G:H2'	22:CV:64:A:O4'	1.94	0.68
36:DA:320:A:C5	41:DF:136:THR:HG21	2.28	0.68
3:AC:134:ILE:HG21	3:AC:167:TRP:O	1.94	0.68
38:DC:75:LEU:HD11	38:DC:113:VAL:HG13	1.76	0.68
36:BA:74:A:H5''	36:BA:75:G:O4'	1.93	0.68
39:DD:158:ALA:HB3	39:DD:161:THR:HG21	1.75	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:62:ALA:O	50:DR:66:VAL:HG23	1.93	0.68
42:BG:34:LEU:HD12	42:BG:34:LEU:O	1.93	0.68
52:DT:62:THR:HG22	52:DT:75:ILE:HG13	1.74	0.68
28:B2:25:VAL:O	28:B2:29:LYS:HG2	1.94	0.68
13:AM:5:ALA:CB	13:AM:66:LEU:HD23	2.24	0.68
22:CW:7:A:C5	22:CW:49:C:H5	2.12	0.68
22:CW:65:G:H4'	32:D6:28:ARG:NH2	2.09	0.68
36:BA:321:G:H21	41:BF:165:ARG:HE	1.37	0.68
36:DA:2188:C:H2'	36:DA:2189:U:C5	2.29	0.68
4:AD:3:ARG:HG2	4:AD:118:ARG:HE	1.58	0.68
36:DA:1188:U:O2'	36:DA:1189:A:H5'	1.93	0.68
10:AJ:32:ALA:H	10:AJ:78:ASN:ND2	1.92	0.68
43:BH:117:PRO:HB3	43:BH:123:PHE:CE1	2.28	0.68
34:B8:50:LEU:O	34:B8:51:ALA:HB3	1.93	0.68
36:DA:2396:G:O2'	36:DA:2397:G:H5'	1.93	0.68
47:DO:88:ASN:HD21	47:DO:92:GLU:HB2	1.59	0.68
53:BU:66:ASN:ND2	53:BU:76:TYR:H	1.90	0.68
24:CY:57:G:H2'	24:CY:58:A:H5'	1.75	0.68
35:D9:10:ILE:HG22	35:D9:10:ILE:O	1.93	0.68
36:BA:1589:C:H2'	36:BA:1590:U:C6	2.28	0.68
19:CS:32:LYS:N	19:CS:32:LYS:HZ3	1.91	0.68
9:CI:79:LEU:HD23	9:CI:101:PHE:O	1.94	0.68
22:AW:7:A:C5	22:AW:49:C:H5	2.11	0.68
9:AI:53:VAL:N	9:AI:95:LYS:HZ2	1.92	0.68
57:DY:75:ILE:HG23	57:DY:76:CYS:N	2.07	0.68
41:BF:39:TRP:CH2	41:BF:106:ARG:HD3	2.28	0.68
10:CJ:32:ALA:CB	10:CJ:76:ASN:HB2	2.23	0.68
25:AZ:277:LEU:HD13	25:AZ:278:GLN:H	1.56	0.68
2:AB:25:ASN:HD22	2:AB:27:LYS:H	1.40	0.68
36:BA:2305:A:C3'	36:BA:2306:C:H5''	2.22	0.68
34:B8:50:LEU:HD12	34:B8:51:ALA:H	1.59	0.68
36:BA:631:A:H5''	48:BP:65:ARG:NH1	2.08	0.68
22:AW:38:A:C2'	22:AW:39:U:H5''	2.24	0.68
37:BB:16:G:HO2'	37:BB:17:C:H6	1.39	0.68
1:CA:625:G:H2'	1:CA:626:U:C6	2.28	0.68
12:CL:80:HIS:HB2	24:CY:68:C:H4'	1.75	0.68
16:AP:43:LYS:HA	16:AP:48:TRP:CB	2.24	0.68
36:DA:1170:G:H1	36:DA:1179:C:H42	1.40	0.68
1:CA:1490:C:O2'	1:CA:1491:G:H5'	1.92	0.68
50:BR:75:LEU:O	50:BR:75:LEU:HD13	1.94	0.68
36:DA:191:A:O2'	36:DA:192:C:H5'	1.94	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2777:G:H5''	36:DA:2778:A:H5'	1.76	0.68
27:D1:18:ILE:HD12	36:DA:380:U:H5'	1.75	0.68
30:B4:39:CYS:O	30:B4:40:HIS:HB2	1.92	0.68
34:D8:61:LEU:N	34:D8:61:LEU:CD1	2.56	0.68
10:AJ:32:ALA:CB	10:AJ:76:ASN:HB2	2.24	0.68
36:BA:1748:G:H8	36:BA:1748:G:H5'	1.59	0.68
10:CJ:6:ILE:HG22	10:CJ:98:ILE:HD12	1.74	0.68
36:BA:996:A:H4'	53:BU:92:ARG:NE	2.08	0.68
46:DN:61:ARG:HG3	46:DN:61:ARG:HH11	1.58	0.68
16:AP:67:THR:HB	16:AP:70:ALA:HB2	1.74	0.68
13:CM:83:ASP:CG	13:CM:84:ILE:H	1.97	0.68
37:DB:16:G:HO2'	37:DB:17:C:H6	1.42	0.68
52:DT:35:LYS:HZ3	52:DT:41:ARG:HD2	1.59	0.68
49:DQ:32:TYR:O	49:DQ:105:GLU:HB2	1.94	0.68
24:AY:1:A:H5'	25:AZ:300:ARG:NH1	2.09	0.68
14:CN:44:LEU:HD12	14:CN:44:LEU:O	1.94	0.68
1:CA:784:C:H4'	36:DA:1837:C:OP1	1.93	0.68
2:AB:96:ARG:HD3	2:AB:148:TYR:CE1	2.29	0.68
43:BH:118:PRO:CG	43:BH:121:ILE:HD12	2.24	0.68
43:BH:16:SER:CB	43:BH:27:LYS:HB2	2.22	0.68
27:D1:16:ASN:HD22	27:D1:37:ILE:CG2	2.07	0.68
36:BA:604:G:H2'	36:BA:605:C:O2	1.94	0.68
55:DW:4:LYS:HG2	55:DW:5:ALA:N	2.09	0.68
36:DA:2111:C:H1'	36:DA:2118:U:C4'	2.24	0.68
43:BH:158:HIS:HD1	43:BH:168:PRO:HB2	1.59	0.68
31:D5:16:ARG:HD2	31:D5:20:ARG:HH12	1.58	0.68
58:DZ:151:HIS:HA	58:DZ:171:ILE:HG12	1.76	0.68
2:AB:25:ASN:ND2	2:AB:27:LYS:H	1.91	0.68
3:CC:5:ILE:HG12	3:CC:10:PHE:HB2	1.76	0.68
50:DR:58:GLY:HA2	50:DR:80:PHE:CE2	2.29	0.68
36:BA:139(A):G:N2	56:BX:44:GLU:OE1	2.27	0.68
19:CS:32:LYS:H	19:CS:32:LYS:HZ3	1.42	0.68
25:AZ:64:ASN:H	25:AZ:64:ASN:HD22	1.41	0.68
36:BA:1005:C:H2'	36:BA:1006:C:C6	2.29	0.68
36:BA:1005:C:H2'	36:BA:1006:C:H6	1.59	0.68
36:DA:2485:G:H5''	49:DQ:46:GLN:HE21	1.59	0.68
7:CG:78:ARG:NH1	7:CG:80:VAL:HG21	2.07	0.68
36:DA:813:U:H2'	36:DA:814:C:C6	2.29	0.68
1:AA:953:G:H5'	1:AA:965:A:H61	1.59	0.68
1:AA:187:C:H2'	1:AA:188:C:C6	2.29	0.68
14:CN:57:ARG:HB2	14:CN:57:ARG:HH11	1.59	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1589:C:H2'	36:DA:1590:U:C6	2.28	0.68
32:B6:33:LYS:HA	32:B6:33:LYS:CE	2.14	0.67
9:CI:83:ARG:O	9:CI:86:VAL:HG12	1.94	0.67
36:DA:654(P):C:H2'	36:DA:654(Q):C:O4'	1.94	0.67
51:BS:99:LYS:HZ2	51:BS:99:LYS:HB3	1.57	0.67
36:DA:672:C:O2'	36:DA:673:C:H5''	1.93	0.67
1:CA:585:G:H4'	12:CL:8:ASN:HD21	1.58	0.67
2:CB:80:ILE:HD12	2:CB:80:ILE:N	2.09	0.67
36:DA:1071:G:H1'	36:DA:1089:G:H2'	1.75	0.67
36:DA:614(A):U:H4'	36:DA:614(B):G:C5'	2.25	0.67
1:CA:939:G:H5''	7:CG:102:ARG:NH1	2.09	0.67
1:CA:1316:G:N2	1:CA:1318:A:H3'	2.09	0.67
51:BS:34:HIS:HB3	51:BS:53:SER:HB3	1.76	0.67
13:AM:83:ASP:CG	13:AM:84:ILE:H	1.97	0.67
1:CA:628:G:O2'	1:CA:629:G:H5'	1.94	0.67
53:DU:66:ASN:O	53:DU:70:ARG:HB2	1.93	0.67
36:DA:1242:A:H5'	36:DA:1243:G:OP2	1.93	0.67
36:BA:2491:U:H5'	36:BA:2570:G:H5''	1.74	0.67
39:DD:267:SER:C	39:DD:269:PHE:H	1.94	0.67
25:CZ:64:ASN:HD22	25:CZ:64:ASN:H	1.41	0.67
20:CT:63:ILE:HG21	20:CT:81:LYS:HG3	1.75	0.67
40:BE:33:VAL:HG12	40:BE:89:ASP:O	1.93	0.67
46:DN:134:ARG:O	46:DN:136:GLU:N	2.28	0.67
39:BD:71:ASP:HB2	39:BD:103:ARG:NH2	2.02	0.67
57:BY:13:VAL:HG23	57:BY:73:ARG:O	1.94	0.67
51:DS:89:ARG:HH11	51:DS:89:ARG:HG2	1.57	0.67
36:DA:2118:U:H5'	36:DA:2147:G:H21	1.60	0.67
36:BA:2133:G:H2'	36:BA:2157:G:N2	2.09	0.67
28:B2:3:LEU:HD23	28:B2:3:LEU:O	1.94	0.67
4:AD:149:ALA:HB3	4:AD:152:SER:OG	1.94	0.67
51:BS:52:SER:CB	51:BS:55:ALA:HB3	2.24	0.67
34:D8:15:LYS:HB2	48:DP:65:ARG:HH21	1.59	0.67
36:DA:1314:C:C6	36:DA:1314:C:H5'	2.30	0.67
1:AA:624:C:H2'	1:AA:625:G:C8	2.29	0.67
40:BE:101:ARG:HH11	40:BE:169:ASN:ND2	1.93	0.67
3:AC:95:THR:HG22	3:AC:95:THR:O	1.94	0.67
3:AC:50:ALA:HA	3:AC:72:LYS:HB2	1.75	0.67
36:BA:172:C:H2'	36:BA:173:G:O4'	1.95	0.67
1:AA:1468:A:H2'	1:AA:1469:G:O4'	1.94	0.67
16:CP:49:LEU:HD12	16:CP:50:LYS:N	2.09	0.67
36:BA:1242:A:H5'	36:BA:1243:G:OP2	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:53:THR:HG23	41:BF:55:GLY:H	1.59	0.67
36:BA:1899:G:O2'	36:BA:1900:A:H5''	1.94	0.67
13:CM:65:LYS:H	13:CM:65:LYS:CD	2.07	0.67
37:DB:66:A:H61	37:DB:108:U:H2'	1.59	0.67
43:BH:153:LYS:N	43:BH:153:LYS:HD3	2.04	0.67
4:AD:18:LYS:H	4:AD:33:MET:CE	2.07	0.67
24:AY:72:U:C2'	24:AY:73:G:H5''	2.23	0.67
47:BO:65:THR:HG23	47:BO:67:LYS:N	2.09	0.67
36:DA:476:G:H4'	36:DA:502:A:N1	2.09	0.67
7:CG:78:ARG:HG3	7:CG:78:ARG:O	1.94	0.67
25:CZ:24:LYS:HG3	25:CZ:25:THR:H	1.59	0.67
36:BA:2485:G:H5''	49:BQ:46:GLN:HE21	1.59	0.67
36:BA:2200:C:H42	36:BA:2223:G:H1	1.42	0.67
26:D0:16:SER:HB2	36:DA:2262:U:H5	1.59	0.67
22:AV:44:G:C3'	22:AV:45:U:H5'	2.25	0.67
36:DA:491:G:H2'	36:DA:492:A:H8	1.57	0.67
7:AG:7:ALA:O	7:AG:8:GLU:HB2	1.94	0.67
52:DT:28:VAL:HG12	52:DT:29:ARG:HD3	1.75	0.67
40:BE:77:ILE:HG22	40:BE:78:LEU:H	1.60	0.67
39:BD:62:TYR:HE1	39:BD:64:ILE:HA	1.60	0.67
57:BY:81:LYS:HD2	57:BY:96:ILE:CG1	2.24	0.67
46:BN:66:LYS:O	46:BN:70:LYS:HB3	1.93	0.67
36:DA:321:G:H21	41:DF:165:ARG:HE	1.40	0.67
47:DO:1:MET:HG3	47:DO:67:LYS:HG2	1.77	0.67
42:DG:16:ARG:HH22	42:DG:28:VAL:CG1	2.07	0.67
15:CO:79:ARG:O	15:CO:82:ILE:HG22	1.95	0.67
24:CY:16:H2U:H5'	24:CY:17:H2U:C5'	2.23	0.67
36:BA:1762:A:H8	36:BA:1762:A:O5'	1.77	0.67
25:AZ:265:THR:HG21	25:AZ:293:VAL:CG2	2.23	0.67
49:BQ:51:ARG:O	49:BQ:55:VAL:HG12	1.95	0.67
38:DC:10:LEU:HD12	38:DC:32:LEU:HA	1.77	0.67
31:B5:16:ARG:NH1	31:B5:17:ASP:OD1	2.28	0.67
1:CA:1211:U:H5'	1:CA:1212:U:OP1	1.95	0.67
11:CK:127:LYS:O	11:CK:129:SER:N	2.27	0.67
37:BB:42:C:H4'	42:BG:67:LYS:HG2	1.76	0.67
34:D8:61:LEU:HD22	34:D8:62:LEU:N	2.09	0.67
36:BA:271(K):U:H3'	36:BA:271(L):U:H5'	1.77	0.67
48:BP:23:PRO:CD	48:BP:33:ARG:HE	2.08	0.67
27:B1:81:LYS:O	27:B1:81:LYS:HG2	1.94	0.67
1:AA:858:G:C5'	1:AA:858:G:H8	2.07	0.67
40:BE:63:LEU:HD23	40:BE:63:LEU:O	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:13:ARG:CG	51:BS:14:VAL:H	2.07	0.67
36:DA:2133:G:H2'	36:DA:2157:G:N2	2.09	0.67
2:CB:204:ASN:HD22	2:CB:206:ASP:H	1.42	0.67
58:DZ:126:VAL:HA	58:DZ:163:LEU:HA	1.76	0.67
24:AY:6:C:O2'	24:AY:7:G:H5'	1.94	0.67
24:CY:40:C:H2'	24:CY:41:C:H5''	1.76	0.67
2:CB:96:ARG:HD3	2:CB:148:TYR:CE1	2.28	0.67
38:BC:75:LEU:HD11	38:BC:113:VAL:HG13	1.77	0.67
12:CL:89:ARG:NH1	12:CL:91:LYS:HG2	2.10	0.67
36:BA:287:C:H2'	36:BA:288:C:C6	2.30	0.67
46:DN:74:ARG:HH21	46:DN:83:LYS:HD2	1.59	0.67
1:CA:1486:G:H2'	1:CA:1487:G:O4'	1.95	0.67
36:DA:1005:C:H2'	36:DA:1006:C:C6	2.30	0.67
58:BZ:178:GLU:N	58:BZ:178:GLU:OE1	2.28	0.67
1:CA:1513:A:H2'	1:CA:1514:C:C6	2.30	0.67
16:AP:49:LEU:HD12	16:AP:50:LYS:N	2.09	0.67
1:AA:197:A:H4'	1:AA:198:G:O5'	1.94	0.67
52:BT:78:LEU:O	52:BT:79:HIS:HD2	1.77	0.67
9:AI:53:VAL:H	9:AI:95:LYS:HZ2	1.43	0.67
1:AA:1416:G:H2'	1:AA:1417:G:C5'	2.23	0.67
9:CI:53:VAL:H	9:CI:95:LYS:HZ3	1.43	0.67
52:BT:28:VAL:HG21	52:BT:46:GLU:HG3	1.74	0.67
30:D4:26:SER:HB3	42:DG:105:LYS:NZ	2.09	0.67
48:DP:64:LYS:C	48:DP:66:GLY:N	2.48	0.67
36:DA:1060:U:C1'	36:DA:1061:U:H5''	2.23	0.67
1:CA:624:C:H4'	16:CP:11:SER:H	1.60	0.67
36:DA:2853:C:H2'	36:DA:2854:G:H8	1.59	0.67
53:DU:76:TYR:CE1	53:DU:80:ILE:HG13	2.30	0.67
16:CP:43:LYS:HA	16:CP:48:TRP:CB	2.25	0.67
36:DA:935:C:H2'	36:DA:936:C:H6	1.58	0.67
46:BN:3:THR:CG2	46:BN:5:VAL:HG23	2.24	0.67
42:BG:34:LEU:HB3	42:BG:161:THR:HG22	1.76	0.67
2:AB:96:ARG:HD3	2:AB:148:TYR:HE1	1.59	0.67
36:BA:559:G:H22	53:BU:49:HIS:CD2	2.13	0.67
27:D1:75:GLU:O	27:D1:78:LYS:HG2	1.93	0.67
36:DA:2563:U:H4'	47:DO:28:SER:HA	1.77	0.67
38:BC:5:LYS:HA	38:BC:8:ARG:HE	1.59	0.67
22:AV:63:G:H2'	22:AV:64:A:O4'	1.95	0.67
13:CM:5:ALA:CB	13:CM:66:LEU:HD23	2.25	0.67
36:DA:1484:G:H2'	36:DA:1485:G:C5'	2.05	0.67
1:CA:1272:G:H5'	1:CA:1272:G:H8	1.60	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DY:81:LYS:HD2	57:DY:96:ILE:HG13	1.75	0.67
57:BY:8:LYS:HE2	57:BY:72:VAL:HG23	1.75	0.67
57:BY:9:LYS:HG2	57:BY:10:GLY:N	2.03	0.67
20:CT:47:GLY:O	20:CT:49:ALA:N	2.24	0.67
4:CD:28:SER:HB3	4:CD:29:PRO:CD	2.23	0.67
36:DA:2110:G:N1	36:DA:2178:C:H5	1.93	0.67
41:BF:28:ILE:CD1	41:BF:28:ILE:H	2.06	0.67
51:BS:12:PHE:CD1	51:BS:12:PHE:C	2.67	0.67
36:DA:860:U:C5	36:DA:917:A:N7	2.60	0.67
1:CA:80:G:C2	1:CA:90:U:H5'	2.30	0.67
51:DS:52:SER:CB	51:DS:55:ALA:HB3	2.24	0.67
53:DU:69:CYS:O	53:DU:74:LEU:HD12	1.94	0.67
8:CH:55:GLY:C	8:CH:56:LYS:HD2	2.15	0.67
12:AL:47:LYS:O	12:AL:49:ASN:N	2.27	0.67
36:BA:1480:G:H2'	36:BA:1481:U:H5'	1.74	0.67
36:BA:491:G:H2'	36:BA:492:A:H8	1.60	0.67
1:AA:344:A:H4'	1:AA:345:C:OP1	1.93	0.67
49:BQ:27:VAL:H	49:BQ:137:TYR:HD2	1.41	0.67
58:BZ:128:VAL:HG22	58:BZ:129:SER:N	2.08	0.67
34:D8:4:MET:HE3	34:D8:61:LEU:HG	1.75	0.67
52:DT:13:ARG:CZ	52:DT:13:ARG:HA	2.25	0.67
1:CA:975:A:H4'	1:CA:976:G:C5'	2.21	0.67
4:CD:18:LYS:H	4:CD:33:MET:CE	2.07	0.67
52:DT:6:LEU:HD23	52:DT:9:LEU:HD12	1.76	0.67
2:AB:44:LEU:HA	2:AB:47:THR:HB	1.76	0.67
32:B6:6:ARG:NH1	32:B6:6:ARG:HB3	2.10	0.67
31:D5:25:LEU:HD12	55:DW:19:LEU:HG	1.76	0.67
15:AO:82:ILE:HD11	15:AO:88:ARG:HB2	1.75	0.67
43:BH:98:LEU:HB2	43:BH:125:VAL:CG2	2.25	0.67
52:DT:89:VAL:CG1	52:DT:91:ARG:HG3	2.25	0.67
1:CA:376:G:H4'	16:CP:5:ARG:HH11	1.59	0.67
58:DZ:23:LYS:O	58:DZ:24:LEU:HB3	1.95	0.67
22:CW:37:A:H3'	22:CW:38:A:C8	2.30	0.67
3:CC:32:LEU:HD22	3:CC:59:ARG:NH1	2.10	0.67
41:BF:65:TRP:CZ3	41:BF:75:HIS:HD2	2.13	0.67
36:DA:796:C:H2'	36:DA:797:C:C6	2.29	0.67
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.30	0.67
1:CA:191:G:N3	20:CT:105:SER:HB3	2.10	0.67
52:BT:82:LEU:N	52:BT:82:LEU:HD12	2.09	0.67
13:AM:81:LEU:HD12	13:AM:86:CYS:SG	2.35	0.67
13:AM:15:VAL:O	13:AM:19:LEU:HD23	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:118:PRO:CG	43:DH:121:ILE:HD12	2.23	0.67
36:DA:1541:G:H1'	36:DA:1542:A:C4	2.29	0.67
36:BA:637:A:OP2	48:BP:115:LEU:HB2	1.95	0.67
34:B8:61:LEU:HD22	34:B8:62:LEU:N	2.10	0.67
41:DF:29:ASN:ND2	41:DF:32:LEU:HB2	2.07	0.67
34:B8:33:ASN:CG	34:B8:34:TRP:N	2.49	0.67
1:AA:1502:A:H2	1:AA:1505:G:N1	1.87	0.67
1:AA:979:C:C2'	1:AA:980:C:H5''	2.25	0.67
2:CB:47:THR:HA	2:CB:202:PRO:HG2	1.76	0.67
31:D5:40:LYS:HE2	31:D5:44:THR:O	1.94	0.67
42:DG:12:TYR:HA	42:DG:16:ARG:HG2	1.77	0.67
1:CA:1442(A):G:H3'	1:CA:1442(B):A:C5'	2.24	0.67
42:BG:106:LEU:HD12	42:BG:141:PHE:HE1	1.59	0.67
1:CA:423:G:H2'	1:CA:424:G:H5'	1.77	0.67
46:DN:126:PRO:O	46:DN:127:ASP:HB2	1.93	0.67
58:DZ:29:TYR:HB3	58:DZ:34:ASN:CB	2.25	0.67
1:AA:190:U:H2'	1:AA:191:G:H8	1.60	0.67
46:DN:3:THR:HG22	46:DN:4:TYR:N	2.09	0.67
41:DF:65:TRP:CZ3	41:DF:75:HIS:HD2	2.13	0.67
1:AA:403:C:O2'	1:AA:404:U:H5'	1.94	0.67
25:AZ:153:GLU:O	25:AZ:157:LEU:HD13	1.95	0.67
36:DA:197:A:H5'	36:DA:197:A:C8	2.30	0.67
38:DC:214:VAL:CG2	38:DC:224:ILE:HD13	2.25	0.67
39:DD:27:THR:HG23	39:DD:83:GLU:HG2	1.76	0.67
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.09	0.67
1:CA:1306:A:N6	1:CA:1331:G:H1'	2.10	0.67
58:DZ:99:TYR:HD2	58:DZ:123:ASP:HB3	1.59	0.67
1:AA:1272:G:H5'	1:AA:1272:G:H8	1.60	0.67
37:DB:7:G:H2'	37:DB:8:U:H5''	1.77	0.67
48:DP:59:LEU:HA	48:DP:61:ARG:HE	1.60	0.67
41:DF:133:ASN:O	41:DF:135:LYS:N	2.28	0.67
36:DA:1190:G:H5'	48:DP:35:HIS:N	2.09	0.67
55:BW:4:LYS:HG2	55:BW:5:ALA:N	2.09	0.67
36:BA:2178:C:H2'	36:BA:2179:C:C5'	2.24	0.67
25:AZ:143:ASP:HB3	25:AZ:146:LEU:HB3	1.75	0.67
40:BE:116:VAL:HG22	40:BE:117:MET:N	2.09	0.67
52:BT:6:LEU:HD23	52:BT:9:LEU:HD12	1.76	0.67
53:DU:92:ARG:NH2	54:DV:11:GLN:H	1.93	0.67
53:BU:90:VAL:HG12	53:BU:91:ASP:N	2.10	0.67
25:AZ:145:GLU:OE2	25:AZ:149:LEU:HD22	1.95	0.67
25:CZ:145:GLU:OE2	25:CZ:149:LEU:HD22	1.95	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:80:G:C2	1:AA:90:U:H5'	2.29	0.67
54:BV:39:LEU:HA	54:BV:47:VAL:CG1	2.25	0.67
34:D8:50:LEU:HD12	34:D8:51:ALA:H	1.60	0.67
1:AA:628:G:O2'	1:AA:629:G:H5'	1.95	0.67
27:D1:26:ARG:HG2	27:D1:27:GLU:HG3	1.75	0.67
36:DA:1331:A:HO2'	36:DA:1332:G:H8	1.41	0.67
17:AQ:70:ARG:N	17:AQ:70:ARG:HD2	2.09	0.67
36:BA:272(D):G:H1	36:BA:364:C:H42	1.41	0.67
47:BO:88:ASN:ND2	47:BO:92:GLU:HB2	2.10	0.67
3:CC:50:ALA:HA	3:CC:72:LYS:HB2	1.77	0.67
3:AC:134:ILE:HG22	3:AC:168:ALA:HB3	1.76	0.67
1:CA:190:U:H2'	1:CA:191:G:H8	1.60	0.67
46:BN:74:ARG:HH21	46:BN:83:LYS:HD2	1.60	0.67
17:CQ:58:GLU:HB2	17:CQ:74:LEU:HB3	1.77	0.67
36:BA:1796:U:H2'	36:BA:1797:C:C6	2.30	0.67
1:AA:1039:C:H2'	1:AA:1040:U:C5	2.30	0.66
39:BD:30:GLU:HB3	39:BD:83:GLU:OE1	1.95	0.66
46:BN:46:VAL:O	46:BN:47:ALA:HB3	1.95	0.66
41:BF:133:ASN:O	41:BF:135:LYS:N	2.29	0.66
36:DA:628:G:H2'	36:DA:629:G:C5'	2.18	0.66
37:DB:40:U:H3'	37:DB:41:U:H5''	1.78	0.66
42:DG:51:ARG:HH11	42:DG:53:LEU:CD2	2.08	0.66
52:BT:2:ASN:ND2	52:BT:7:ILE:HD11	2.05	0.66
57:DY:81:LYS:HD2	57:DY:96:ILE:CG1	2.24	0.66
54:DV:18:LEU:CD2	54:DV:19:LYS:H	2.07	0.66
36:BA:2308:G:O6	36:BA:2310:A:H2'	1.95	0.66
1:CA:975:A:H5'	1:CA:975:A:H8	1.60	0.66
51:BS:89:ARG:HG2	51:BS:92:TYR:HA	1.76	0.66
34:D8:33:ASN:CG	34:D8:34:TRP:N	2.48	0.66
20:AT:49:ALA:O	20:AT:53:LEU:HD13	1.95	0.66
51:DS:12:PHE:CD1	51:DS:12:PHE:C	2.66	0.66
14:AN:12:ARG:HH11	14:AN:14:PRO:HG2	1.57	0.66
36:DA:862:G:H2'	36:DA:863:A:O4'	1.95	0.66
10:CJ:24:VAL:HG21	10:CJ:37:PRO:HG3	1.76	0.66
40:DE:63:LEU:O	40:DE:63:LEU:HD23	1.94	0.66
3:AC:7:PRO:O	3:AC:11:ARG:HG2	1.95	0.66
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.10	0.66
54:DV:39:LEU:HD12	54:DV:47:VAL:HG11	1.78	0.66
46:DN:3:THR:CG2	46:DN:5:VAL:HG23	2.25	0.66
57:BY:2:ARG:CD	57:BY:3:VAL:HG23	2.24	0.66
58:BZ:115:GLY:HA2	58:BZ:175:VAL:O	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1161:C:H1'	54:BV:8:GLY:O	1.95	0.66
47:DO:24:VAL:HG12	47:DO:33:ALA:HB2	1.77	0.66
1:CA:250:A:H4'	1:CA:251:G:O5'	1.95	0.66
5:AE:100:VAL:HG12	5:AE:118:ILE:HG22	1.77	0.66
20:CT:10:LEU:HD12	20:CT:11:SER:H	1.59	0.66
40:DE:137:HIS:HB3	40:DE:138:PRO:HD2	1.77	0.66
39:BD:118:VAL:HG22	39:BD:119:ALA:N	2.10	0.66
38:BC:82:LYS:HE2	38:BC:82:LYS:HA	1.77	0.66
28:B2:35:LEU:CG	28:B2:53:LEU:HD13	2.25	0.66
58:BZ:119:GLU:HG2	58:BZ:122:ARG:NH1	2.10	0.66
56:DX:13:LEU:HA	56:DX:18:TYR:CE1	2.30	0.66
10:CJ:61:GLU:CG	14:CN:58:LYS:HE2	2.22	0.66
57:BY:81:LYS:HD2	57:BY:96:ILE:HG13	1.76	0.66
26:B0:49:LYS:N	26:B0:80:HIS:HD1	1.87	0.66
13:AM:11:ARG:HG2	13:AM:12:ASN:HD22	1.58	0.66
14:CN:12:ARG:HH11	14:CN:14:PRO:HG2	1.59	0.66
53:BU:88:ILE:C	53:BU:90:VAL:H	1.99	0.66
1:CA:1432:G:OP1	52:DT:107:ASP:HB2	1.95	0.66
3:AC:14:ILE:CG1	3:AC:15:THR:N	2.58	0.66
36:BA:2758:A:N6	43:BH:67:LEU:HD11	2.10	0.66
19:AS:16:LEU:O	19:AS:19:VAL:N	2.28	0.66
36:BA:2577:A:H5''	36:BA:2578:G:H5'	1.77	0.66
27:D1:25:LYS:HG3	36:DA:388:G:OP1	1.94	0.66
25:CZ:317:GLU:HG3	25:CZ:404:LEU:HD21	1.78	0.66
36:BA:2174:C:H1'	38:BC:217:THR:O	1.95	0.66
1:AA:227:G:H2'	1:AA:228:A:C5'	2.14	0.66
36:DA:271(K):U:H3'	36:DA:271(L):U:H5'	1.77	0.66
27:B1:73:LEU:HD22	27:B1:94:LEU:HB3	1.77	0.66
54:BV:18:LEU:CD2	54:BV:19:LYS:H	2.09	0.66
36:DA:672:C:C2'	36:DA:673:C:H5''	2.25	0.66
1:AA:979:C:H2'	1:AA:980:C:H5''	1.77	0.66
43:DH:19:VAL:HG12	43:DH:20:ALA:N	2.09	0.66
1:CA:722:A:N3	1:CA:722:A:H2'	2.10	0.66
25:CZ:16:THR:HG23	25:CZ:79:HIS:NE2	2.10	0.66
31:B5:36:CYS:SG	31:B5:48:GLU:O	2.53	0.66
36:DA:272(D):G:H1	36:DA:364:C:H42	1.42	0.66
22:CW:31:A:N1	22:CW:39:U:O4	2.28	0.66
1:AA:977:A:O2'	1:AA:978:A:C5'	2.42	0.66
1:CA:977:A:O2'	1:CA:978:A:C5'	2.43	0.66
36:DA:523:C:H2'	36:DA:524:U:H5'	1.78	0.66
39:BD:118:VAL:HG22	39:BD:119:ALA:H	1.60	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2174:C:H1'	38:DC:217:THR:O	1.94	0.66
17:CQ:59:ILE:HG23	17:CQ:71:PHE:HB3	1.76	0.66
57:DY:2:ARG:CD	57:DY:3:VAL:HG23	2.24	0.66
3:CC:189:ALA:HB3	3:CC:196:LEU:HB2	1.77	0.66
5:AE:51:VAL:HB	5:AE:52:PRO:HD3	1.76	0.66
1:CA:946:A:H2'	1:CA:947:G:C8	2.29	0.66
36:BA:877:U:O2'	36:BA:878:A:H5''	1.95	0.66
28:B2:9:GLN:OE1	28:B2:60:LEU:HD21	1.95	0.66
4:CD:126:ILE:HD12	4:CD:126:ILE:N	2.11	0.66
48:DP:146:VAL:O	48:DP:148:LEU:HG	1.96	0.66
6:CF:67:MET:HB2	6:CF:68:PRO:HD2	1.77	0.66
36:BA:729:G:OP2	39:BD:13:ARG:NH1	2.28	0.66
1:CA:1086:U:H2'	1:CA:1087:G:C5'	2.25	0.66
42:BG:103:LEU:O	42:BG:107:LEU:HD22	1.94	0.66
36:DA:1076:C:H5''	58:DZ:111:VAL:CG1	2.26	0.66
1:AA:848:C:O2'	1:AA:849:C:H5'	1.94	0.66
24:CY:51:G:H1	24:CY:63:C:H42	1.43	0.66
1:AA:1211:U:H5'	1:AA:1212:U:OP1	1.95	0.66
39:BD:28:GLU:HB2	39:BD:29:PRO:CD	2.26	0.66
42:BG:154:GLY:O	42:BG:155:MET:HB3	1.95	0.66
2:AB:151:GLY:O	2:AB:153:ARG:N	2.27	0.66
41:DF:89:VAL:HG12	41:DF:90:PHE:N	2.10	0.66
1:AA:351:G:H4'	1:AA:352:C:OP2	1.95	0.66
22:AW:69:G:C2'	22:AW:70:G:H5''	2.26	0.66
42:DG:51:ARG:CZ	42:DG:51:ARG:HA	2.26	0.66
51:DS:54:LEU:CD1	51:DS:58:LEU:H	2.09	0.66
4:AD:129:ASN:N	4:AD:129:ASN:HD22	1.94	0.66
32:B6:25:LYS:HE2	34:B8:34:TRP:HE1	1.61	0.66
51:DS:88:ASP:OD1	51:DS:89:ARG:N	2.28	0.66
51:BS:15:ARG:O	51:BS:18:ILE:HG13	1.95	0.66
31:D5:16:ARG:HD2	31:D5:20:ARG:NH1	2.10	0.66
53:BU:92:ARG:NH2	54:BV:11:GLN:H	1.92	0.66
25:AZ:24:LYS:HG3	25:AZ:25:THR:H	1.60	0.66
36:BA:614(A):U:H4'	36:BA:614(B):G:C5'	2.24	0.66
42:BG:20:ILE:C	42:BG:22:ARG:H	1.98	0.66
13:AM:57:ARG:NH1	30:B4:34:GLU:HG3	2.11	0.66
22:CV:51:U:H2'	22:CV:52:G:C8	2.30	0.66
2:AB:215:LEU:O	2:AB:219:VAL:HG23	1.96	0.66
36:DA:2485:G:H5''	49:DQ:46:GLN:NE2	2.11	0.66
36:BA:2563:U:H4'	47:BO:28:SER:HA	1.77	0.66
36:DA:709:U:H2'	36:DA:710:G:C8	2.31	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:172:C:H2'	36:DA:173:G:O4'	1.95	0.66
36:DA:287:C:H2'	36:DA:288:C:C6	2.30	0.66
50:BR:100:LEU:HD11	50:BR:113:LEU:HB2	1.77	0.66
9:CI:9:ARG:CG	9:CI:14:VAL:HG13	2.26	0.66
37:BB:25:A:H2'	37:BB:25:A:N3	2.09	0.66
28:D2:38:GLN:OE1	28:D2:44:LEU:HD13	1.95	0.66
36:BA:709:U:H2'	36:BA:710:G:C8	2.29	0.66
39:DD:62:TYR:HE1	39:DD:64:ILE:HA	1.60	0.66
32:B6:35:GLU:CB	32:B6:51:GLU:HB2	2.21	0.66
13:AM:65:LYS:H	13:AM:65:LYS:CD	2.07	0.66
9:CI:53:VAL:N	9:CI:95:LYS:HZ3	1.92	0.66
42:DG:82:LEU:HD13	42:DG:87:PRO:CB	2.25	0.66
36:DA:2308:G:O6	36:DA:2310:A:H2'	1.96	0.66
38:BC:73:ARG:HE	38:BC:110:PHE:HD1	1.41	0.66
41:DF:132:VAL:HG22	41:DF:133:ASN:N	2.07	0.66
41:DF:160:ASN:ND2	41:DF:162:LEU:HD13	2.09	0.66
48:DP:66:GLY:O	48:DP:67:MET:HB2	1.96	0.66
1:AA:452:A:O2'	1:AA:453:A:H8	1.72	0.66
58:DZ:40:ASP:HB3	58:DZ:43:GLU:CG	2.24	0.66
43:DH:117:PRO:HB3	43:DH:123:PHE:CE1	2.31	0.66
31:B5:40:LYS:HG2	31:B5:46:CYS:HB2	1.78	0.66
6:CF:82:ARG:HB2	6:CF:85:VAL:HG23	1.76	0.66
1:CA:8:A:H62	4:CD:208:SER:HB2	1.60	0.66
17:AQ:58:GLU:HB2	17:AQ:74:LEU:HB3	1.78	0.66
36:BA:2291:U:H2'	36:BA:2292:C:C6	2.30	0.66
1:AA:149:A:H2'	1:AA:150:C:C6	2.30	0.66
36:DA:2472:G:H5'	36:DA:2473:U:H5''	1.77	0.66
11:AK:127:LYS:O	11:AK:129:SER:N	2.28	0.66
36:BA:2108:C:O2	36:BA:2108:C:H2'	1.94	0.66
22:CV:44:G:C3'	22:CV:45:U:H5'	2.26	0.66
36:BA:1600:C:O2'	36:BA:1601:G:H5'	1.95	0.66
36:DA:212:G:O2'	36:DA:213:A:H5'	1.96	0.66
38:DC:82:LYS:HA	38:DC:82:LYS:HE2	1.78	0.66
1:AA:228:A:H5'	1:AA:228:A:C8	2.25	0.66
32:D6:19:ARG:HD3	32:D6:20:ASN:H	1.59	0.66
54:BV:17:GLY:C	54:BV:18:LEU:HD13	2.16	0.66
57:BY:95:LYS:HE3	57:BY:100:ALA:HB2	1.76	0.66
48:BP:114:ILE:HD13	48:BP:127:ALA:HB2	1.78	0.66
20:CT:49:ALA:O	20:CT:53:LEU:HD13	1.96	0.66
41:DF:160:ASN:OD1	41:DF:163:VAL:HG23	1.94	0.66
55:BW:6:ILE:HG12	55:BW:104:THR:HG22	1.75	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:82:VAL:H	12:AL:106:ASP:CG	1.99	0.66
31:D5:36:CYS:SG	31:D5:48:GLU:O	2.54	0.66
36:BA:1059:G:H1'	45:BK:126:UNK:O	1.96	0.66
43:BH:98:LEU:HD12	43:BH:102:ALA:O	1.96	0.66
1:CA:426:G:P	4:CD:36:ARG:HH21	2.19	0.66
3:AC:5:ILE:HG12	3:AC:10:PHE:HB2	1.76	0.66
6:AF:46:ARG:HH22	18:AR:37:VAL:HG11	1.61	0.66
7:AG:78:ARG:NH1	7:AG:80:VAL:HG21	2.11	0.66
35:B9:10:ILE:O	35:B9:11:CYS:HB3	1.95	0.66
36:DA:1005:C:H2'	36:DA:1006:C:H6	1.61	0.66
36:DA:106:C:H2'	36:DA:107:C:C6	2.30	0.66
25:CZ:163:PHE:HD1	25:CZ:164:PRO:HD2	1.61	0.66
1:AA:426:G:P	4:AD:36:ARG:HH21	2.18	0.66
36:BA:2206:G:N2	36:BA:2207:G:H5'	2.10	0.66
48:BP:124:LYS:HD3	48:BP:143:GLY:HA3	1.77	0.66
3:AC:76:VAL:HG21	3:AC:103:VAL:HG21	1.78	0.66
25:CZ:153:GLU:O	25:CZ:157:LEU:HD13	1.96	0.66
13:CM:10:PRO:HB2	13:CM:18:ALA:CB	2.14	0.66
42:BG:42:GLY:O	42:BG:44:GLY:N	2.28	0.66
13:CM:5:ALA:HB2	13:CM:66:LEU:HD23	1.77	0.66
36:BA:271(L):U:C5'	36:BA:271(M):G:H5'	2.21	0.66
29:B3:35:ARG:CB	29:B3:35:ARG:HH11	2.05	0.66
57:DY:17:SER:HB2	57:DY:71:LYS:CE	2.25	0.66
10:AJ:50:ILE:CD1	10:AJ:50:ILE:H	1.95	0.66
48:BP:146:VAL:O	48:BP:148:LEU:HG	1.96	0.66
36:BA:1190:G:H5'	48:BP:35:HIS:N	2.10	0.66
52:BT:89:VAL:CG1	52:BT:91:ARG:HG3	2.26	0.66
51:BS:106:ARG:HH12	51:BS:108:GLY:N	1.94	0.66
47:BO:114:ILE:HD12	47:BO:114:ILE:N	2.09	0.66
58:BZ:114:GLY:O	58:BZ:146:ILE:HG22	1.96	0.66
19:AS:43:GLU:O	19:AS:45:VAL:HG13	1.95	0.66
49:BQ:12:GLN:HG2	49:BQ:73:PRO:HD2	1.78	0.66
1:CA:624:C:H2'	1:CA:625:G:C8	2.30	0.66
3:AC:58:GLU:HB2	3:AC:65:ALA:HB2	1.78	0.66
39:BD:267:SER:O	39:BD:269:PHE:N	2.29	0.66
3:AC:94:LEU:O	3:AC:95:THR:HB	1.95	0.66
17:AQ:5:VAL:HG22	17:AQ:60:ILE:HD12	1.77	0.66
15:CO:3:ILE:O	15:CO:3:ILE:HG13	1.95	0.66
36:DA:74:A:H5''	36:DA:75:G:O4'	1.96	0.66
36:BA:2777:G:H5''	36:BA:2778:A:H5'	1.78	0.66
39:DD:28:GLU:HB2	39:DD:29:PRO:CD	2.26	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:55:ARG:HG3	28:B2:55:ARG:HH11	1.61	0.66
42:BG:46:ALA:HB3	42:BG:88:ILE:HD13	1.78	0.66
42:DG:70:VAL:HG11	42:DG:72:ARG:HH21	1.61	0.66
4:AD:28:SER:HB3	4:AD:29:PRO:CD	2.22	0.66
51:DS:99:LYS:HB3	51:DS:99:LYS:HZ2	1.58	0.66
52:BT:109:GLU:HG2	52:BT:112:ARG:NH2	2.10	0.66
42:DG:5:VAL:HB	42:DG:8:LYS:HB2	1.76	0.66
42:BG:138:GLN:NE2	42:BG:152:LEU:HA	2.10	0.66
36:BA:1598:C:H5'	56:BX:36:LYS:HG2	1.78	0.66
22:CW:38:A:C2'	22:CW:39:U:H5''	2.26	0.66
36:BA:1332:G:H21	36:BA:1610:A:H8	1.40	0.66
56:BX:24:GLY:O	56:BX:82:GLN:HA	1.96	0.66
1:CA:848:C:O2'	1:CA:849:C:H5'	1.96	0.66
36:BA:2579:C:O2'	40:BE:131:ALA:HB2	1.96	0.66
53:BU:15:LYS:O	53:BU:19:LYS:HG2	1.96	0.66
36:DA:1534:U:H2'	36:DA:1535:A:O4'	1.96	0.66
14:AN:29:ARG:HG3	14:AN:29:ARG:HH11	1.61	0.66
21:CU:12:LYS:HG2	21:CU:22:ARG:HB3	1.77	0.66
36:DA:2108:C:O2	36:DA:2108:C:H2'	1.94	0.66
36:DA:1902:C:H4'	39:DD:244:ARG:HA	1.78	0.66
52:DT:80:SER:CB	52:DT:81:PRO:HD3	2.26	0.66
43:DH:85:LYS:NZ	43:DH:132:ARG:HA	2.07	0.66
58:BZ:96:VAL:HG13	58:BZ:97:GLU:N	2.10	0.66
1:AA:1330:U:H5'	1:AA:1331:G:OP2	1.96	0.66
41:BF:156:LEU:HD21	41:BF:163:VAL:HG12	1.78	0.66
40:DE:57:LYS:HA	40:DE:57:LYS:CE	2.18	0.66
43:DH:12:PRO:O	43:DH:15:VAL:HG22	1.96	0.66
36:BA:1278:A:OP1	50:BR:36:THR:HG22	1.95	0.66
32:B6:19:ARG:HD3	32:B6:20:ASN:H	1.60	0.66
1:AA:1256:A:H2	1:AA:1277:C:C6	2.14	0.66
1:AA:975:A:H5'	1:AA:975:A:H8	1.59	0.66
51:DS:106:ARG:HG2	51:DS:106:ARG:HH11	1.61	0.66
43:DH:103:LEU:HB2	43:DH:123:PHE:CD2	2.28	0.66
1:AA:1533:C:H2'	1:AA:1534:A:H5''	1.78	0.66
52:DT:23:ARG:HH21	52:DT:120:ARG:HD3	1.61	0.66
36:DA:280:C:H3'	36:DA:281:G:C8	2.30	0.66
36:DA:2219:G:O2'	36:DA:2220:G:H5'	1.96	0.66
1:AA:187:C:H2'	1:AA:188:C:H6	1.61	0.66
13:CM:54:VAL:O	13:CM:58:GLU:HG2	1.95	0.66
36:DA:402:A:O2'	36:DA:403:U:H5'	1.96	0.66
30:D4:39:CYS:O	30:D4:40:HIS:HB2	1.94	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:17:C:H2'	22:AV:18:G:H5''	1.78	0.66
36:BA:1192:G:N7	48:BP:29:LYS:NZ	2.39	0.66
29:D3:19:GLN:HE22	29:D3:52:HIS:HE1	1.44	0.66
42:DG:106:LEU:O	42:DG:111:LEU:HG	1.96	0.66
36:DA:2206:G:N2	36:DA:2207:G:H5'	2.11	0.66
36:BA:862:G:H2'	36:BA:863:A:O4'	1.95	0.66
22:CV:17:C:H2'	22:CV:18:G:H5''	1.78	0.66
38:BC:27:ARG:NE	38:BC:182:PRO:HG2	2.10	0.65
49:DQ:12:GLN:HG2	49:DQ:73:PRO:HD2	1.77	0.65
57:BY:14:LEU:HD12	57:BY:15:VAL:H	1.59	0.65
4:CD:109:GLY:O	4:CD:111:ALA:N	2.28	0.65
51:BS:88:ASP:OD1	51:BS:89:ARG:N	2.28	0.65
36:BA:672:C:C2'	36:BA:673:C:H5''	2.26	0.65
36:DA:2111:C:H1'	36:DA:2118:U:H4'	1.77	0.65
58:BZ:28:MET:CE	58:BZ:37:VAL:HG11	2.26	0.65
10:AJ:24:VAL:HG21	10:AJ:37:PRO:HG3	1.77	0.65
42:BG:120:LEU:HB2	42:BG:179:PRO:O	1.95	0.65
42:BG:137:GLU:HG3	42:BG:138:GLN:H	1.61	0.65
54:BV:35:LEU:O	54:BV:37:VAL:N	2.28	0.65
58:DZ:18:LEU:CD1	58:DZ:18:LEU:H	2.08	0.65
36:DA:886:C:O2'	36:DA:887:A:H4'	1.97	0.65
24:AY:27:C:O2'	24:AY:28:C:H5'	1.97	0.65
56:DX:24:GLY:O	56:DX:82:GLN:HA	1.96	0.65
36:BA:476:G:H4'	36:BA:502:A:N1	2.11	0.65
24:AY:40:C:C2'	24:AY:41:C:H5''	2.26	0.65
3:CC:49:SER:C	3:CC:51:GLY:H	1.99	0.65
36:BA:813:U:H2'	36:BA:814:C:C6	2.31	0.65
1:CA:444:C:H2'	1:CA:445:G:H8	1.60	0.65
36:BA:944:G:H5'	36:BA:945:A:O5'	1.95	0.65
36:DA:2672:G:H2'	36:DA:2673:G:H5''	1.78	0.65
53:BU:52:ARG:HB3	53:BU:52:ARG:NH1	2.11	0.65
41:DF:43:LYS:HA	41:DF:98:SER:HB3	1.78	0.65
1:AA:444:C:H2'	1:AA:445:G:H8	1.61	0.65
52:BT:53:ARG:HH11	52:BT:53:ARG:CB	1.97	0.65
22:CW:69:G:C2'	22:CW:70:G:H5''	2.25	0.65
43:DH:158:HIS:HD1	43:DH:168:PRO:HB2	1.61	0.65
4:CD:3:ARG:HG2	4:CD:118:ARG:NE	2.12	0.65
1:CA:1412:C:H2'	1:CA:1413:A:H8	1.58	0.65
1:CA:961:U:HO2'	1:CA:962:C:H6	1.45	0.65
9:CI:20:ARG:O	9:CI:22:GLY:N	2.29	0.65
1:CA:1535:C:H2'	1:CA:1536:C:C5	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:166:SER:CB	58:DZ:168:GLU:HG3	2.26	0.65
1:AA:1234:C:H1'	1:AA:1364:U:O2	1.96	0.65
36:DA:654(A):G:C2'	36:DA:654(B):C:H5'	2.25	0.65
48:BP:65:ARG:HB3	48:BP:68:GLN:HE22	1.61	0.65
57:BY:46:LYS:HB3	57:BY:62:GLU:HG2	1.79	0.65
36:DA:195:A:H5''	36:DA:196:A:OP2	1.95	0.65
1:CA:149:A:H2'	1:CA:150:C:C6	2.31	0.65
17:CQ:27:PHE:CZ	17:CQ:36:ILE:HD11	2.31	0.65
9:AI:9:ARG:CG	9:AI:14:VAL:HG13	2.26	0.65
39:BD:158:ALA:HB3	39:BD:161:THR:HG21	1.77	0.65
1:CA:299:G:H2'	1:CA:300:A:C8	2.31	0.65
36:DA:391:G:O2'	36:DA:392:C:H5'	1.97	0.65
1:AA:1512:U:H2'	1:AA:1513:A:C8	2.30	0.65
52:DT:82:LEU:HD12	52:DT:82:LEU:N	2.12	0.65
41:DF:125:LEU:HD23	41:DF:125:LEU:N	2.12	0.65
36:BA:796:C:H2'	36:BA:797:C:C6	2.31	0.65
28:B2:51:ARG:HD2	36:BA:94(A):G:H21	1.60	0.65
39:DD:24:ILE:C	39:DD:26:LYS:H	1.99	0.65
52:BT:80:SER:CB	52:BT:81:PRO:HD3	2.26	0.65
36:DA:2313:C:H5'	36:DA:2313:C:H6	1.60	0.65
57:DY:14:LEU:HD12	57:DY:15:VAL:H	1.60	0.65
4:AD:128:VAL:HG12	4:AD:129:ASN:N	2.08	0.65
48:BP:58:THR:O	48:BP:58:THR:HG22	1.95	0.65
48:DP:115:LEU:HA	48:DP:134:ALA:HB3	1.76	0.65
25:AZ:16:THR:HG23	25:AZ:79:HIS:NE2	2.10	0.65
53:DU:90:VAL:HG12	53:DU:91:ASP:N	2.11	0.65
58:DZ:40:ASP:OD1	58:DZ:42:VAL:HG12	1.96	0.65
36:BA:2523:G:H2'	36:BA:2524:G:H5'	1.78	0.65
36:BA:654(A):G:C2'	36:BA:654(B):C:H5'	2.25	0.65
34:B8:15:LYS:HB2	48:BP:65:ARG:HH21	1.60	0.65
36:BA:328:U:H4'	57:BY:68:HIS:HD1	1.59	0.65
25:CZ:143:ASP:HB3	25:CZ:146:LEU:CB	2.26	0.65
46:BN:3:THR:HG22	46:BN:4:TYR:N	2.11	0.65
39:DD:267:SER:O	39:DD:269:PHE:N	2.30	0.65
2:CB:96:ARG:HD3	2:CB:148:TYR:HE1	1.59	0.65
25:AZ:152:MET:CE	25:AZ:156:ASP:HB2	2.26	0.65
49:DQ:19:GLY:HA3	58:DZ:79:ARG:HH12	1.60	0.65
25:AZ:163:PHE:HD1	25:AZ:164:PRO:HD2	1.62	0.65
36:DA:2201:C:O2'	36:DA:2202:C:H5'	1.96	0.65
36:BA:234:C:H2'	36:BA:235:U:C6	2.31	0.65
19:AS:32:LYS:N	19:AS:32:LYS:HZ3	1.94	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:95:GLN:HE21	2:AB:147:LYS:HE2	1.60	0.65
52:DT:19:LEU:HD22	52:DT:85:LYS:HD3	1.78	0.65
7:AG:79:ARG:NH2	22:AW:33:U:H4'	2.11	0.65
1:CA:1039:C:H2'	1:CA:1040:U:C5	2.30	0.65
40:BE:77:ILE:HG22	40:BE:78:LEU:HD12	1.79	0.65
36:BA:272(I):U:H6	36:BA:272(I):U:H5'	1.61	0.65
57:BY:27:VAL:HG12	57:BY:29:GLU:OE1	1.95	0.65
32:B6:43:CYS:O	32:B6:44:ARG:HB2	1.96	0.65
36:DA:1141:U:H2'	46:DN:63:THR:CG2	2.21	0.65
36:BA:2110:G:N1	36:BA:2178:C:H5	1.94	0.65
31:D5:16:ARG:NH1	31:D5:17:ASP:OD1	2.30	0.65
36:DA:244:A:H4'	48:DP:74:GLU:CG	2.24	0.65
1:AA:1443:G:H5'	1:AA:1444:C:OP2	1.96	0.65
36:DA:614(B):G:H1'	41:DF:44:ARG:HG3	1.79	0.65
54:DV:34:GLU:O	54:DV:36:PRO:HD3	1.96	0.65
54:DV:35:LEU:O	54:DV:37:VAL:N	2.30	0.65
54:DV:39:LEU:HA	54:DV:47:VAL:CG1	2.26	0.65
36:DA:328:U:H4'	57:DY:68:HIS:HD1	1.61	0.65
6:CF:46:ARG:HH22	18:CR:37:VAL:HG11	1.59	0.65
49:BQ:21:THR:O	49:BQ:22:LYS:HB3	1.95	0.65
36:BA:1786:A:C2	36:BA:2606:C:H1'	2.32	0.65
52:BT:62:THR:CG2	52:BT:75:ILE:HG13	2.27	0.65
6:AF:91:VAL:HG11	18:AR:72:ARG:HH12	1.61	0.65
52:BT:38:ASN:ND2	52:BT:38:ASN:O	2.28	0.65
42:BG:52:ILE:HG12	42:BG:54:GLU:HB2	1.79	0.65
36:DA:2195:C:O2'	36:DA:2196:C:H5'	1.96	0.65
25:CZ:215:ARG:HH11	25:CZ:215:ARG:HG3	1.60	0.65
36:DA:45:C:H2'	36:DA:47:C:C6	2.31	0.65
36:BA:402:A:O2'	36:BA:403:U:H5'	1.96	0.65
3:AC:166:GLU:HA	3:AC:166:GLU:OE1	1.96	0.65
36:DA:1592:C:H2'	36:DA:1593:G:H8	1.61	0.65
40:DE:24:THR:HG22	40:DE:186:GLY:HA2	1.79	0.65
39:BD:242:ARG:CG	39:BD:242:ARG:HH11	2.09	0.65
37:DB:106:G:H5''	58:DZ:31:ARG:HG2	1.77	0.65
4:AD:3:ARG:HG2	4:AD:118:ARG:NE	2.11	0.65
51:DS:89:ARG:HG2	51:DS:92:TYR:HA	1.78	0.65
36:BA:2111:C:H1'	36:BA:2118:U:C4'	2.27	0.65
1:CA:1313:U:H2'	1:CA:1314:C:O2	1.96	0.65
1:CA:1277:C:O2'	1:CA:1279:A:H8	1.75	0.65
25:AZ:143:ASP:HB3	25:AZ:146:LEU:CB	2.26	0.65
4:CD:59:ARG:NH2	4:CD:62:GLN:HG3	2.10	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:16:ILE:HD12	34:B8:57:ARG:HG2	1.79	0.65
58:BZ:156:LYS:O	58:BZ:158:PRO:HD3	1.95	0.65
40:BE:11:MET:HB2	40:BE:23:VAL:O	1.96	0.65
53:BU:76:TYR:CE1	53:BU:80:ILE:HG13	2.31	0.65
12:AL:119:LYS:O	12:AL:120:TYR:HB2	1.97	0.65
19:CS:32:LYS:NZ	19:CS:32:LYS:H	1.94	0.65
40:DE:11:MET:HB2	40:DE:23:VAL:O	1.97	0.65
28:D2:47:ASN:O	28:D2:49:LYS:N	2.30	0.65
1:CA:344:A:H4'	1:CA:345:C:OP1	1.96	0.65
18:CR:36:ASN:OD1	18:CR:38:GLU:HG2	1.96	0.65
11:CK:30:VAL:HG21	11:CK:65:ALA:HA	1.77	0.65
36:DA:1352:U:O2'	36:DA:1353:A:H5'	1.96	0.65
36:DA:2580:U:O3'	40:DE:130:GLY:HA3	1.97	0.65
48:DP:124:LYS:HD3	48:DP:143:GLY:HA3	1.77	0.65
38:DC:96:GLY:H	38:DC:99:ILE:CG1	2.09	0.65
36:DA:1971:A:C4	39:DD:241:PRO:HD3	2.32	0.65
28:B2:2:LYS:HE3	28:B2:59:ARG:HH22	1.61	0.65
40:DE:77:ILE:HG22	40:DE:78:LEU:H	1.62	0.65
46:DN:132:ALA:O	46:DN:133:GLN:HB3	1.96	0.65
39:BD:24:ILE:HD13	39:BD:25:THR:N	2.11	0.65
36:DA:1278:A:OP1	50:DR:36:THR:HG22	1.96	0.65
39:BD:43:ARG:NH1	39:BD:44:ASN:ND2	2.44	0.65
36:BA:833:U:H5''	48:BP:48:PRO:CB	2.26	0.65
48:BP:16:ARG:HH11	48:BP:16:ARG:HB2	1.62	0.65
51:DS:24:LEU:HB3	51:DS:85:VAL:HG12	1.77	0.65
36:DA:1051:G:H2'	36:DA:1052:C:C6	2.32	0.65
36:BA:1053:C:H2'	36:BA:1054:A:C8	2.31	0.65
1:CA:1124:G:H5'	10:CJ:35:SER:HB2	1.77	0.65
1:AA:353:A:H5'	1:AA:353:A:C8	2.31	0.65
36:BA:970:C:H2'	36:BA:971:C:H6	1.62	0.65
2:CB:22:LYS:HE2	2:CB:22:LYS:CA	2.27	0.65
50:DR:14:SER:HA	50:DR:17:ARG:NH1	2.11	0.65
40:BE:4:ILE:HD12	40:BE:92:THR:O	1.96	0.65
3:CC:58:GLU:HB2	3:CC:65:ALA:HB2	1.79	0.65
25:AZ:295:ARG:NH1	25:AZ:295:ARG:HG2	2.11	0.65
52:BT:75:ILE:N	52:BT:75:ILE:HD12	2.12	0.65
38:DC:114:VAL:HG23	38:DC:149:ILE:HD11	1.79	0.65
36:BA:1352:U:O2'	36:BA:1353:A:H5'	1.97	0.65
21:AU:12:LYS:HG2	21:AU:22:ARG:HB3	1.77	0.65
1:AA:657:G:O2'	1:AA:658:G:H5'	1.97	0.65
17:CQ:40:LYS:HD3	17:CQ:42:TYR:CZ	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:26:VAL:HG22	9:CI:61:ALA:HB3	1.78	0.65
17:AQ:40:LYS:HD3	17:AQ:42:TYR:CZ	2.32	0.65
28:B2:21:LEU:HB3	28:B2:64:LEU:HG	1.78	0.65
58:BZ:119:GLU:O	58:BZ:121:HIS:N	2.30	0.65
39:DD:24:ILE:HD13	39:DD:25:THR:N	2.12	0.65
41:BF:160:ASN:ND2	41:BF:162:LEU:HD13	2.11	0.65
36:DA:644:A:C2	36:DA:2369:A:H1'	2.32	0.65
36:BA:259:G:H1'	36:BA:621:A:O2'	1.96	0.65
51:BS:98:VAL:CG1	51:BS:100:ALA:H	2.08	0.65
36:DA:672:C:H2'	36:DA:673:C:H5'	1.77	0.65
32:B6:5:VAL:N	32:B6:8:LYS:HB3	2.12	0.65
31:D5:40:LYS:HE3	31:D5:46:CYS:HB3	1.78	0.65
1:AA:940:C:P	7:AG:102:ARG:HH21	2.20	0.65
54:DV:49:THR:HB	54:DV:50:PRO:CD	2.27	0.65
2:AB:22:LYS:HE2	2:AB:22:LYS:CA	2.26	0.65
1:AA:437:U:OP1	4:AD:155:LEU:HD22	1.96	0.65
36:DA:106:C:H1'	57:DY:2:ARG:NH2	2.11	0.65
36:DA:234:C:H2'	36:DA:235:U:C6	2.31	0.65
39:DD:118:VAL:HG22	39:DD:119:ALA:H	1.62	0.65
4:AD:145:GLU:H	4:AD:145:GLU:CD	2.00	0.65
36:BA:1952:A:C6	47:BO:22:ILE:HD12	2.31	0.65
2:CB:97:TRP:HZ3	2:CB:176:GLU:OE2	1.80	0.65
36:DA:1771:C:H1'	36:DA:1786:A:C8	2.30	0.65
36:DA:1301:A:HO2'	36:DA:1302:A:H2'	1.59	0.65
31:B5:4:HIS:CB	31:B5:5:PRO:CD	2.72	0.65
58:DZ:69:THR:HG22	58:DZ:90:VAL:HA	1.78	0.65
5:CE:31:LEU:CD2	5:CE:43:LEU:HD11	2.27	0.65
3:CC:76:VAL:HG21	3:CC:103:VAL:HG21	1.79	0.65
48:DP:114:ILE:HD13	48:DP:127:ALA:HB2	1.78	0.65
30:B4:13:ARG:C	30:B4:14:ILE:HD12	2.17	0.65
1:CA:1255:G:H3'	1:CA:1279:A:N6	2.12	0.65
56:DX:35:THR:CG2	56:DX:37:THR:H	2.09	0.65
58:DZ:166:SER:H	58:DZ:167:PRO:HA	1.61	0.65
1:CA:939:G:H5''	7:CG:102:ARG:NH2	2.12	0.65
36:BA:280:C:H3'	36:BA:281:G:C8	2.30	0.65
36:DA:479:A:O2'	36:DA:481:G:H5'	1.96	0.65
36:DA:2758:A:C2	36:DA:2759:G:H1'	2.32	0.65
2:AB:84:GLU:HB3	2:AB:219:VAL:HG21	1.79	0.65
3:AC:49:SER:O	3:AC:50:ALA:HB3	1.97	0.65
35:D9:10:ILE:O	35:D9:11:CYS:HB3	1.94	0.65
36:BA:1810:A:H2'	36:BA:1811:G:O4'	1.97	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BB:40:U:H3'	37:BB:41:U:H5''	1.79	0.65
1:AA:309:G:H1'	1:AA:608:A:C2	2.31	0.65
53:DU:15:LYS:O	53:DU:19:LYS:HG2	1.97	0.65
42:BG:131:TYR:HB3	42:BG:159:VAL:CG1	2.26	0.65
12:CL:47:LYS:O	12:CL:49:ASN:N	2.30	0.65
36:BA:1042:G:H1'	36:BA:1114:G:H22	1.61	0.65
28:B2:28:LYS:C	28:B2:57:ILE:HD11	2.16	0.65
39:DD:35:LYS:HA	39:DD:63:ARG:HA	1.79	0.65
58:DZ:72:ARG:CG	58:DZ:89:PHE:HB2	2.26	0.65
36:BA:1779:U:C5	36:BA:1784:A:N7	2.59	0.65
43:BH:19:VAL:HG12	43:BH:20:ALA:N	2.09	0.65
4:CD:59:ARG:HH21	4:CD:62:GLN:HG3	1.59	0.65
48:DP:65:ARG:HB3	48:DP:68:GLN:HE22	1.61	0.65
36:DA:1348:G:C2'	36:DA:1349:A:H5''	2.25	0.65
36:BA:479:A:O2'	36:BA:481:G:H5'	1.97	0.65
36:DA:1332:G:H21	36:DA:1610:A:H8	1.42	0.65
40:BE:202:LYS:HD2	40:BE:202:LYS:N	2.12	0.65
12:AL:38:THR:CG2	12:AL:59:ARG:HG3	2.26	0.65
19:AS:32:LYS:H	19:AS:32:LYS:NZ	1.94	0.65
36:DA:1786:A:C2	36:DA:2606:C:H1'	2.32	0.65
22:CW:59:U:H2'	22:CW:60:U:H5'	1.79	0.65
2:CB:95:GLN:HE21	2:CB:147:LYS:HE2	1.62	0.65
5:CE:63:ARG:HA	5:CE:66:MET:HE3	1.79	0.65
40:BE:137:HIS:HB3	40:BE:138:PRO:HD2	1.79	0.65
2:CB:151:GLY:O	2:CB:153:ARG:N	2.27	0.65
1:AA:946:A:H2'	1:AA:947:G:C8	2.32	0.65
4:CD:180:GLY:O	4:CD:182:LYS:HG3	1.96	0.65
1:AA:250:A:H4'	1:AA:251:G:O5'	1.95	0.65
37:DB:3:C:H42	37:DB:118:G:H1	1.45	0.65
36:BA:2649:U:H2'	36:BA:2650:U:C6	2.31	0.65
42:BG:170:ARG:O	42:BG:174:GLU:HB2	1.97	0.65
42:BG:7:LEU:HD22	42:BG:100:TRP:CE3	2.32	0.65
43:BH:120:GLY:O	43:BH:135:GLY:HA2	1.97	0.65
49:BQ:137:TYR:CE2	58:BZ:81:ARG:NH2	2.65	0.65
39:DD:30:GLU:HG3	39:DD:63:ARG:CZ	2.27	0.65
39:BD:35:LYS:HA	39:BD:63:ARG:HA	1.78	0.65
53:DU:85:LYS:HD3	53:DU:117:GLN:NE2	2.06	0.65
36:BA:2801(A):A:H5'	36:BA:2802:G:H8	1.62	0.65
36:BA:267:C:H2'	36:BA:268:C:H6	1.62	0.65
32:D6:5:VAL:N	32:D6:8:LYS:HB3	2.12	0.65
36:DA:1748:G:H5'	36:DA:1748:G:H8	1.60	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2111:C:H1'	36:BA:2118:U:H4'	1.78	0.65
1:AA:585:G:H4'	12:AL:8:ASN:HD21	1.61	0.65
25:AZ:27:LEU:O	25:AZ:31:LEU:HG	1.97	0.65
14:CN:13:THR:N	14:CN:14:PRO:CD	2.60	0.65
40:DE:59:VAL:HG13	40:DE:60:ASN:H	1.62	0.65
36:DA:1087:G:H2'	36:DA:1088:A:C4'	2.26	0.65
1:AA:540:G:H2'	1:AA:541:G:C8	2.32	0.65
1:AA:1117:G:H5'	1:AA:1117:G:H8	1.62	0.65
1:AA:423:G:H2'	1:AA:424:G:H5'	1.77	0.65
54:BV:5:VAL:HG21	54:BV:35:LEU:HD23	1.79	0.65
50:BR:14:SER:HA	50:BR:17:ARG:NH1	2.12	0.65
36:DA:886:C:H2'	36:DA:887:A:C4'	2.27	0.65
22:AV:51:U:H2'	22:AV:52:G:C8	2.32	0.65
1:CA:1216:G:O2'	1:CA:1217:C:H5'	1.97	0.65
24:AY:40:C:H2'	24:AY:41:C:H5''	1.77	0.65
42:BG:34:LEU:CB	42:BG:161:THR:HG22	2.26	0.65
1:AA:8:A:H62	4:AD:208:SER:HB2	1.62	0.65
17:CQ:59:ILE:HG22	17:CQ:71:PHE:CD2	2.31	0.65
25:CZ:152:MET:CE	25:CZ:156:ASP:HB2	2.27	0.65
36:DA:1042:G:H1'	36:DA:1114:G:H22	1.61	0.65
36:DA:1877:A:H5'	36:DA:1878:G:OP2	1.97	0.65
36:BA:1534:U:H2'	36:BA:1535:A:O4'	1.96	0.65
36:DA:1161:C:H1'	54:DV:8:GLY:O	1.97	0.65
36:BA:1642:G:O2'	36:BA:1643:G:H5'	1.97	0.65
36:BA:191:A:O2'	36:BA:192:C:H5'	1.97	0.65
36:DA:225:A:O2'	36:DA:257:A:H4'	1.96	0.65
42:BG:171:ALA:O	42:BG:175:LEU:HG	1.95	0.65
1:CA:187:C:H2'	1:CA:188:C:C6	2.31	0.65
49:BQ:111:GLU:OE1	49:BQ:133:ARG:NH2	2.29	0.64
1:CA:1306:A:H61	1:CA:1331:G:H1'	1.60	0.64
43:DH:16:SER:CB	43:DH:27:LYS:HB2	2.23	0.64
36:BA:2287:A:N6	36:BA:2344:U:H3	1.92	0.64
26:D0:49:LYS:N	26:D0:80:HIS:HD1	1.87	0.64
58:DZ:81:ARG:NH1	58:DZ:81:ARG:HB3	2.11	0.64
10:CJ:32:ALA:H	10:CJ:78:ASN:ND2	1.94	0.64
15:AO:79:ARG:O	15:AO:82:ILE:HG22	1.97	0.64
36:BA:2886:G:H2'	36:BA:2887:U:H6	1.62	0.64
58:DZ:157:LEU:HD11	58:DZ:163:LEU:HD22	1.78	0.64
12:AL:33:ARG:HG2	12:AL:60:LEU:HD12	1.78	0.64
1:AA:1442(B):A:H3'	1:AA:1442(B):A:P	2.37	0.64
2:AB:80:ILE:HD12	2:AB:80:ILE:N	2.11	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:33:ARG:HG2	12:CL:60:LEU:HD12	1.78	0.64
22:AW:37:A:H3'	22:AW:38:A:C8	2.31	0.64
19:CS:11:VAL:HG11	19:CS:16:LEU:HD11	1.79	0.64
36:DA:1221(A):C:H2'	36:DA:1222:C:C6	2.31	0.64
39:BD:131:LEU:HB2	39:BD:136:ILE:HD11	1.79	0.64
24:CY:40:C:H2'	24:CY:41:C:C5'	2.27	0.64
1:AA:1124:G:H5'	10:AJ:35:SER:HB2	1.79	0.64
25:CZ:385:ARG:HD3	61:CZ:502:KIR:H301	1.79	0.64
4:CD:155:LEU:O	4:CD:159:ARG:HG2	1.97	0.64
36:BA:271(Q):G:H1'	36:BA:271(R):G:C8	2.32	0.64
36:DA:496:G:H1'	55:DW:61:ASN:ND2	2.12	0.64
1:AA:522:C:H41	12:AL:53:ARG:HH22	1.46	0.64
36:BA:1902:C:H1'	39:BD:244:ARG:HG3	1.80	0.64
46:DN:46:VAL:O	46:DN:47:ALA:HB3	1.97	0.64
46:BN:134:ARG:O	46:BN:136:GLU:N	2.29	0.64
42:DG:46:ALA:HB2	42:DG:88:ILE:HG13	1.79	0.64
57:DY:95:LYS:HE3	57:DY:100:ALA:HB2	1.78	0.64
4:CD:129:ASN:N	4:CD:129:ASN:HD22	1.95	0.64
36:BA:654(V):A:OP2	36:BA:655:A:H3'	1.97	0.64
30:D4:13:ARG:C	30:D4:14:ILE:HD12	2.17	0.64
30:D4:7:PRO:CG	42:DG:61:ALA:HB1	2.27	0.64
36:DA:267:C:H2'	36:DA:268:C:H6	1.62	0.64
3:CC:135:LYS:HZ3	5:CE:53:LEU:HD11	1.62	0.64
51:BS:106:ARG:HH11	51:BS:106:ARG:HG2	1.62	0.64
42:DG:114:ILE:O	42:DG:116:ASP:N	2.30	0.64
12:CL:7:ILE:CD1	12:CL:8:ASN:N	2.60	0.64
25:AZ:198:LYS:HA	25:AZ:198:LYS:CE	2.26	0.64
36:BA:1087:G:H2'	36:BA:1088:A:C4'	2.26	0.64
36:DA:1059:G:H1'	45:DK:126:UNK:O	1.97	0.64
43:DH:98:LEU:HB2	43:DH:125:VAL:CG2	2.26	0.64
1:AA:939:G:H5''	7:AG:102:ARG:NH1	2.12	0.64
19:AS:40:ILE:HG23	19:AS:62:ILE:HD11	1.78	0.64
1:CA:1190:G:OP1	3:CC:5:ILE:HD12	1.98	0.64
36:BA:2852:G:H2'	36:BA:2853:C:H6	1.63	0.64
47:DO:88:ASN:ND2	47:DO:92:GLU:HB2	2.12	0.64
58:BZ:70:LEU:HD22	58:BZ:91:LEU:HD11	1.78	0.64
26:D0:40:GLN:HE22	26:D0:44:ARG:N	1.95	0.64
12:AL:47:LYS:C	12:AL:49:ASN:H	2.00	0.64
1:AA:666:G:H5'	1:AA:726:C:H1'	1.80	0.64
5:CE:7:GLU:HG2	5:CE:112:LEU:HD21	1.78	0.64
1:AA:645:C:H2'	1:AA:646:U:H6	1.63	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:225:A:O2'	36:BA:257:A:H4'	1.96	0.64
36:BA:1579:A:H8	36:BA:1579:A:H5'	1.61	0.64
36:BA:1980:G:O2'	36:BA:1982:C:OP2	2.14	0.64
43:DH:120:GLY:O	43:DH:135:GLY:HA2	1.97	0.64
58:BZ:119:GLU:HG3	58:BZ:122:ARG:HD3	1.78	0.64
56:DX:12:VAL:HB	56:DX:17:ALA:CB	2.10	0.64
41:BF:148:LEU:HD23	41:BF:191:ARG:NH1	2.12	0.64
51:BS:54:LEU:CD1	51:BS:58:LEU:H	2.09	0.64
51:DS:98:VAL:CG1	51:DS:100:ALA:H	2.08	0.64
55:DW:6:ILE:HG12	55:DW:104:THR:HG22	1.79	0.64
26:B0:50:ASN:ND2	26:B0:63:VAL:HG21	2.12	0.64
14:AN:13:THR:N	14:AN:14:PRO:CD	2.58	0.64
1:CA:723:U:C4	1:CA:1537:U:H2'	2.32	0.64
1:AA:1086:U:H2'	1:AA:1087:G:C5'	2.25	0.64
49:BQ:60:ARG:HH11	49:BQ:60:ARG:HB3	1.63	0.64
36:DA:2758:A:N6	43:DH:67:LEU:HD11	2.12	0.64
24:CY:27:C:O2'	24:CY:28:C:H5'	1.97	0.64
42:BG:55:LYS:HA	42:BG:58:GLN:HG2	1.79	0.64
35:B9:19:ARG:O	35:B9:20:HIS:HB2	1.97	0.64
1:CA:1442:G:H1	1:CA:1461:G:H21	1.45	0.64
36:DA:2113:U:H2'	36:DA:2114:A:H8	1.63	0.64
47:DO:98:VAL:HG12	47:DO:117:LEU:HB3	1.79	0.64
5:CE:20:GLN:NE2	5:CE:25:ARG:NH2	2.44	0.64
3:CC:34:LEU:HD22	3:CC:38:ARG:NE	2.12	0.64
36:BA:496:G:H1'	55:BW:61:ASN:ND2	2.12	0.64
20:AT:10:LEU:HD12	20:AT:11:SER:H	1.61	0.64
14:CN:29:ARG:HH11	14:CN:29:ARG:HG3	1.60	0.64
38:BC:96:GLY:H	38:BC:99:ILE:CG1	2.10	0.64
36:BA:2312:U:C4'	42:BG:71:THR:HG21	2.27	0.64
48:BP:115:LEU:HA	48:BP:134:ALA:HB3	1.78	0.64
46:BN:10:GLU:OE2	46:BN:11:PRO:HD2	1.96	0.64
58:DZ:124:ILE:HG13	58:DZ:124:ILE:O	1.98	0.64
43:DH:94:TYR:HE1	43:DH:108:GLY:N	1.96	0.64
57:BY:97:ARG:HH21	57:BY:98:VAL:CB	2.10	0.64
32:B6:15:GLU:OE2	32:B6:18:ARG:NH2	2.30	0.64
36:DA:654(V):A:OP2	36:DA:655:A:H3'	1.97	0.64
1:AA:975:A:H4'	1:AA:976:G:C5'	2.25	0.64
24:CY:72:U:C2'	24:CY:73:G:H5''	2.23	0.64
6:AF:67:MET:HB2	6:AF:68:PRO:HD2	1.79	0.64
36:DA:271(Q):G:H1'	36:DA:271(R):G:C8	2.32	0.64
51:DS:34:HIS:HB3	51:DS:53:SER:HB3	1.78	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:269:C:H2'	1:CA:270:A:C8	2.32	0.64
36:BA:886:C:O2'	36:BA:887:A:H4'	1.97	0.64
58:BZ:9:TYR:CE1	58:BZ:35:ARG:HG3	2.33	0.64
12:CL:59:ARG:HG2	12:CL:65:GLU:HG3	1.79	0.64
40:DE:101:ARG:HD2	40:DE:169:ASN:O	1.97	0.64
24:AY:40:C:H2'	24:AY:41:C:C5'	2.28	0.64
24:CY:40:C:C2'	24:CY:41:C:H5''	2.26	0.64
31:B5:16:ARG:HD2	31:B5:20:ARG:HH12	1.61	0.64
36:BA:2228:G:OP2	39:BD:261:LYS:HE3	1.97	0.64
5:AE:41:VAL:HG13	5:AE:113:ALA:HA	1.79	0.64
36:DA:877:U:O2'	36:DA:878:A:H5''	1.97	0.64
9:AI:79:LEU:HD23	9:AI:101:PHE:O	1.97	0.64
36:DA:944:G:H5'	36:DA:945:A:O5'	1.97	0.64
24:AY:51:G:H1	24:AY:63:C:H42	1.43	0.64
1:CA:540:G:H2'	1:CA:541:G:H8	1.61	0.64
36:BA:1499:C:H5'	36:BA:1499:C:C6	2.20	0.64
36:BA:672:C:H2'	36:BA:673:C:C5'	2.28	0.64
30:B4:10:VAL:HG23	30:B4:11:PRO:HD2	1.78	0.64
3:AC:135:LYS:NZ	5:AE:50:GLU:HG2	2.12	0.64
43:BH:94:TYR:HE1	43:BH:108:GLY:N	1.96	0.64
1:AA:1127:G:O2'	1:AA:1128:C:H5'	1.98	0.64
36:BA:614(B):G:H1'	41:BF:44:ARG:HG3	1.80	0.64
3:CC:5:ILE:H	3:CC:5:ILE:HD13	1.60	0.64
51:DS:38:GLN:O	51:DS:40:ILE:HG23	1.97	0.64
25:AZ:98:GLN:HE22	25:AZ:346:THR:HG22	1.62	0.64
5:CE:20:GLN:HE21	5:CE:25:ARG:NH2	1.95	0.64
17:AQ:59:ILE:HG23	17:AQ:71:PHE:HB3	1.79	0.64
42:DG:181:ARG:HG2	42:DG:181:ARG:O	1.97	0.64
22:AW:59:U:H2'	22:AW:60:U:H5'	1.79	0.64
36:DA:1192:G:N7	48:DP:29:LYS:NZ	2.41	0.64
47:BO:47:ILE:O	47:BO:48:PRO:O	2.15	0.64
41:DF:24:LEU:O	41:DF:26:ALA:N	2.31	0.64
43:BH:85:LYS:HZ3	43:BH:132:ARG:CA	2.06	0.64
32:D6:17:LYS:HE2	32:D6:17:LYS:HA	1.79	0.64
36:DA:99:U:C4'	36:DA:102:G:H1'	2.27	0.64
57:BY:17:SER:HB2	57:BY:71:LYS:CE	2.26	0.64
54:DV:19:LYS:HB3	54:DV:94:LEU:O	1.96	0.64
34:B8:33:ASN:CG	34:B8:34:TRP:H	1.98	0.64
4:CD:5:ILE:HA	4:CD:115:ARG:NH1	2.12	0.64
36:DA:833:U:H5''	48:DP:48:PRO:CB	2.27	0.64
30:D4:10:VAL:HG23	30:D4:11:PRO:HD2	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BE:59:VAL:HG13	40:BE:60:ASN:H	1.62	0.64
1:CA:1221:G:H4'	19:CS:77:THR:HG21	1.79	0.64
6:CF:19:LEU:HD23	6:CF:19:LEU:O	1.97	0.64
13:CM:12:ASN:ND2	13:CM:12:ASN:H	1.95	0.64
2:AB:204:ASN:HD22	2:AB:206:ASP:H	1.44	0.64
25:CZ:198:LYS:CE	25:CZ:198:LYS:HA	2.27	0.64
36:DA:2523:G:H2'	36:DA:2524:G:H5'	1.80	0.64
54:DV:5:VAL:HG23	54:DV:37:VAL:O	1.98	0.64
54:BV:34:GLU:O	54:BV:36:PRO:HD3	1.97	0.64
36:BA:2758:A:C2	36:BA:2759:G:H1'	2.32	0.64
1:CA:192:U:H2'	1:CA:193:C:C6	2.32	0.64
1:AA:358:U:H2'	1:AA:359:U:H6	1.59	0.64
1:CA:1228:C:OP1	13:CM:115:LYS:HE3	1.98	0.64
40:DE:202:LYS:HD2	40:DE:202:LYS:N	2.12	0.64
42:BG:34:LEU:HA	42:BG:161:THR:HG22	1.79	0.64
39:DD:118:VAL:HG22	39:DD:119:ALA:N	2.12	0.64
36:BA:999:U:H5''	36:BA:1154:G:O6	1.97	0.64
25:AZ:317:GLU:HG3	25:AZ:404:LEU:HD21	1.78	0.64
1:CA:45:U:H2'	1:CA:46:G:C8	2.32	0.64
22:AW:51:U:H2'	22:AW:52:G:H8	1.62	0.64
36:DA:1286:A:H2'	36:DA:1288:U:OP2	1.97	0.64
53:DU:64:ARG:HG2	53:DU:64:ARG:HH11	1.63	0.64
41:BF:125:LEU:HD23	41:BF:125:LEU:N	2.13	0.64
7:CG:79:ARG:NH2	22:CW:33:U:H4'	2.12	0.64
36:DA:613:G:H8	36:DA:613:G:H5'	1.62	0.64
5:AE:31:LEU:CD2	5:AE:43:LEU:HD11	2.28	0.64
20:AT:47:GLY:O	20:AT:49:ALA:N	2.24	0.64
9:AI:20:ARG:O	9:AI:22:GLY:N	2.30	0.64
25:AZ:171:ILE:HG22	25:AZ:172:ARG:H	1.63	0.64
42:DG:25:TYR:CE2	42:DG:32:PRO:HD2	2.32	0.64
36:DA:1058:G:H3'	36:DA:1059:G:C5'	2.28	0.64
52:DT:94:ALA:O	52:DT:96:ARG:N	2.30	0.64
3:AC:5:ILE:HD13	3:AC:5:ILE:H	1.58	0.64
27:D1:69:LYS:NZ	27:D1:76:ARG:NH2	2.46	0.64
1:AA:376:G:H4'	16:AP:5:ARG:HH11	1.62	0.64
19:CS:43:GLU:O	19:CS:45:VAL:HG13	1.96	0.64
36:DA:1598:C:H5'	56:DX:36:LYS:HG2	1.78	0.64
36:BA:886:C:H2'	36:BA:887:A:C4'	2.27	0.64
36:BA:523:C:H2'	36:BA:524:U:H5'	1.78	0.64
1:AA:72:C:H2'	1:AA:73:G:C8	2.33	0.64
29:B3:19:GLN:HE22	29:B3:52:HIS:HE1	1.44	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:54:VAL:O	13:AM:58:GLU:HG2	1.97	0.64
15:AO:3:ILE:O	15:AO:3:ILE:HG13	1.96	0.64
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.32	0.64
5:CE:41:VAL:HG13	5:CE:113:ALA:HA	1.80	0.64
36:DA:1899:G:O2'	36:DA:1900:A:H5''	1.97	0.64
39:DD:242:ARG:HH11	39:DD:242:ARG:CG	2.11	0.64
42:DG:85:GLY:C	42:DG:87:PRO:HD3	2.18	0.64
43:BH:12:PRO:O	43:BH:15:VAL:HG22	1.97	0.64
36:DA:2308:G:N7	36:DA:2310:A:H5'	2.13	0.64
36:DA:298:G:H5'	36:DA:299:A:OP1	1.98	0.64
36:BA:2036:C:H5'	36:BA:2036:C:C6	2.25	0.64
41:DF:28:ILE:CD1	41:DF:28:ILE:H	2.06	0.64
1:AA:266:G:C5'	1:AA:267:C:C5	2.81	0.64
2:AB:17:PHE:CD2	2:AB:44:LEU:HD11	2.32	0.64
55:DW:29:LEU:HG	55:DW:33:ARG:HD2	1.80	0.64
36:BA:2762:G:H5'	36:BA:2762:G:C8	2.30	0.64
28:B2:7:ARG:HA	28:B2:10:LEU:HD12	1.78	0.64
34:D8:50:LEU:O	34:D8:51:ALA:HB3	1.98	0.64
1:AA:192:U:H2'	1:AA:193:C:C6	2.33	0.64
1:CA:254:G:OP1	17:CQ:67:LYS:O	2.15	0.64
36:DA:1264:G:H3'	36:DA:1265:A:H5''	1.80	0.64
36:DA:2886:G:H2'	36:DA:2887:U:H6	1.62	0.64
4:AD:180:GLY:O	4:AD:182:LYS:HG3	1.98	0.64
25:CZ:98:GLN:HE22	25:CZ:346:THR:HG22	1.61	0.64
39:DD:30:GLU:CB	39:DD:35:LYS:HD2	2.16	0.64
56:BX:13:LEU:HA	56:BX:18:TYR:CE1	2.32	0.64
40:BE:33:VAL:HG23	40:BE:47:VAL:HG13	1.80	0.64
46:BN:132:ALA:O	46:BN:133:GLN:HB3	1.96	0.64
36:BA:2184:G:H2'	36:BA:2185:C:C1'	2.28	0.64
37:DB:106:G:C5'	58:DZ:31:ARG:HG2	2.28	0.64
17:CQ:52:LYS:N	17:CQ:52:LYS:HD3	2.07	0.64
36:BA:644:A:C2	36:BA:2369:A:H1'	2.33	0.64
36:BA:2110:G:H1	36:BA:2178:C:H5	1.46	0.64
3:AC:135:LYS:HZ2	5:AE:50:GLU:HG2	1.61	0.64
36:DA:1053:C:H2'	36:DA:1054:A:C8	2.31	0.64
33:B7:34:ARG:HD2	33:B7:39:ARG:HG3	1.79	0.64
13:CM:11:ARG:HG2	13:CM:12:ASN:HD22	1.60	0.64
2:AB:47:THR:HA	2:AB:202:PRO:HG2	1.79	0.64
56:BX:35:THR:CG2	56:BX:37:THR:H	2.10	0.64
4:CD:148:VAL:HG12	4:CD:149:ALA:H	1.63	0.64
9:CI:42:ARG:HH22	9:CI:75:ASP:CG	2.02	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:139:VAL:HG12	58:DZ:140:ASP:N	2.13	0.64
36:BA:1348:G:C2'	36:BA:1349:A:H5''	2.27	0.64
36:DA:547:A:H2'	36:DA:548:A:C8	2.32	0.64
40:DE:101:ARG:CZ	40:DE:171:GLU:HB2	2.28	0.64
2:CB:215:LEU:O	2:CB:219:VAL:HG23	1.97	0.64
52:DT:62:THR:CG2	52:DT:75:ILE:HG13	2.28	0.64
1:AA:797:C:OP1	11:AK:124:LYS:HE2	1.97	0.64
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.33	0.64
4:AD:145:GLU:HA	4:AD:183:GLY:O	1.97	0.64
36:BA:1991:U:H2'	36:BA:1992:G:H5''	1.80	0.64
36:BA:2472:G:H5'	36:BA:2473:U:H5''	1.79	0.64
36:DA:2443:C:O2'	36:DA:2444:G:H5'	1.97	0.64
1:CA:72:C:H2'	1:CA:73:G:C8	2.33	0.64
36:BA:1368:G:O2'	36:BA:1369:G:H5'	1.96	0.64
49:BQ:68:ILE:HG23	49:BQ:103:MET:HA	1.80	0.64
36:BA:45:C:H2'	36:BA:47:C:C6	2.32	0.64
22:AW:43:C:H2'	22:AW:44:G:H1'	1.80	0.64
49:DQ:109:VAL:HG12	49:DQ:113:GLN:HB2	1.78	0.64
1:CA:1047:G:H5''	14:CN:4:LYS:HE2	1.80	0.64
22:CW:43:C:H2'	22:CW:44:G:H1'	1.80	0.64
36:BA:1902:C:H4'	39:BD:244:ARG:HA	1.79	0.64
43:BH:85:LYS:NZ	43:BH:132:ARG:HA	2.06	0.64
38:BC:27:ARG:HE	38:BC:182:PRO:HB2	1.63	0.64
29:D3:35:ARG:HD3	29:D3:37:LEU:HD11	1.80	0.64
54:BV:19:LYS:HB3	54:BV:94:LEU:O	1.98	0.64
54:BV:19:LYS:HZ3	54:BV:20:LEU:H	1.44	0.64
12:CL:112:ASP:O	12:CL:114:LYS:HG2	1.98	0.64
1:CA:1442(B):A:C8	52:DT:118:ARG:HD3	2.33	0.64
1:AA:1533:C:C2'	1:AA:1534:A:H5''	2.27	0.64
19:AS:45:VAL:HG23	19:AS:46:GLY:N	2.13	0.64
36:DA:2713:A:OP1	50:DR:14:SER:HB3	1.98	0.64
36:BA:278:A:H61	36:BA:362:U:H3	1.45	0.64
37:DB:67:G:HO2'	37:DB:68:C:H6	1.45	0.64
4:AD:155:LEU:O	4:AD:159:ARG:HG2	1.98	0.64
3:CC:49:SER:O	3:CC:50:ALA:HB3	1.98	0.64
17:CQ:5:VAL:HG22	17:CQ:60:ILE:HD12	1.79	0.64
36:DA:2200:C:H42	36:DA:2223:G:H1	1.44	0.64
5:AE:20:GLN:NE2	5:AE:25:ARG:NH2	2.46	0.64
46:DN:129:PRO:O	46:DN:130:HIS:HB3	1.98	0.64
38:BC:214:VAL:CG2	38:BC:224:ILE:HD13	2.28	0.64
52:DT:109:GLU:HG2	52:DT:112: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:1054:C:O2'	1:CA:1055:A:C5'	2.45	0.63
42:BG:82:LEU:HD23	42:BG:83:ARG:H	1.63	0.63
22:CW:65:G:H4'	32:D6:28:ARG:HH21	1.61	0.63
58:DZ:123:ASP:O	58:DZ:124:ILE:HG12	1.99	0.63
36:DA:1188:U:H4'	54:DV:79:VAL:CG2	2.28	0.63
36:DA:2110:G:H1	36:DA:2178:C:H5	1.44	0.63
25:CZ:93:ILE:CG1	25:CZ:122:LEU:HD11	2.27	0.63
51:DS:106:ARG:O	51:DS:106:ARG:HG2	1.98	0.63
9:CI:4:TYR:HB2	9:CI:19:LEU:HB3	1.80	0.63
1:AA:961:U:HO2'	1:AA:962:C:H6	1.44	0.63
22:AW:31:A:N1	22:AW:39:U:O4	2.30	0.63
57:BY:46:LYS:HD3	57:BY:47:LYS:N	2.12	0.63
58:BZ:70:LEU:HD11	58:BZ:98:MET:HG2	1.79	0.63
40:DE:101:ARG:HB3	40:DE:201:THR:HG21	1.79	0.63
39:DD:161:THR:O	39:DD:196:VAL:HG23	1.99	0.63
36:BA:1187:G:H5''	54:BV:81:TYR:CE1	2.33	0.63
1:CA:865:A:H5'	1:CA:1078:U:O4	1.98	0.63
36:BA:533:G:H5'	53:BU:24:TYR:CE1	2.33	0.63
9:CI:51:ARG:HG2	9:CI:56:LEU:HD22	1.78	0.63
36:BA:1264:G:H3'	36:BA:1265:A:H5''	1.80	0.63
4:CD:145:GLU:H	4:CD:145:GLU:CD	2.00	0.63
22:CW:1:G:N3	22:CW:1:G:H2'	2.13	0.63
26:B0:20:ARG:HH11	26:B0:20:ARG:HG2	1.63	0.63
8:CH:89:PRO:HA	8:CH:92:ARG:NH1	2.13	0.63
1:AA:447:G:H2'	1:AA:485:G:N2	2.14	0.63
47:DO:104:ARG:HE	52:DT:33:LYS:HZ2	1.45	0.63
30:B4:5:ILE:O	30:B4:5:ILE:HG12	1.98	0.63
27:B1:41:ARG:NH2	36:BA:1365:A:OP1	2.30	0.63
4:CD:128:VAL:HG12	4:CD:129:ASN:N	2.09	0.63
41:DF:6:VAL:HG12	41:DF:7:TYR:N	2.09	0.63
12:AL:112:ASP:O	12:AL:114:LYS:HG2	1.98	0.63
42:DG:116:ASP:O	42:DG:117:PHE:HB2	1.97	0.63
36:BA:1058:G:H3'	36:BA:1059:G:C5'	2.28	0.63
50:BR:2:ARG:HG3	50:BR:2:ARG:NH1	2.14	0.63
3:AC:16:ARG:NH1	3:AC:16:ARG:HB2	2.13	0.63
36:BA:970:C:H2'	36:BA:971:C:C6	2.34	0.63
24:AY:18:G:H3'	24:AY:18:G:OP2	1.98	0.63
2:AB:75:LYS:HA	2:AB:78:GLN:NE2	2.13	0.63
50:DR:10:LEU:O	50:DR:11:ASN:HB2	1.99	0.63
52:DT:75:ILE:HD12	52:DT:75:ILE:N	2.12	0.63
52:BT:82:LEU:HD12	52:BT:82:LEU:H	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2396:G:O2'	36:BA:2397:G:H5'	1.99	0.63
38:BC:10:LEU:HD12	38:BC:32:LEU:HA	1.80	0.63
48:DP:77:ARG:HD3	48:DP:78:PRO:HD2	1.80	0.63
46:DN:26:LEU:HD12	46:DN:26:LEU:O	1.96	0.63
6:CF:77:ARG:HG2	6:CF:77:ARG:HH11	1.61	0.63
22:AW:1:G:H2'	22:AW:1:G:N3	2.13	0.63
1:CA:403:C:O2'	1:CA:404:U:H5'	1.97	0.63
40:DE:77:ILE:HG22	40:DE:78:LEU:HD12	1.80	0.63
39:BD:30:GLU:HG3	39:BD:63:ARG:CZ	2.27	0.63
36:DA:1024:G:C3'	36:DA:1025:G:H5''	2.21	0.63
32:D6:17:LYS:HB3	32:D6:18:ARG:NH1	2.13	0.63
32:D6:43:CYS:O	32:D6:44:ARG:HB2	1.98	0.63
4:AD:5:ILE:HA	4:AD:115:ARG:NH1	2.14	0.63
36:DA:1499:C:C6	36:DA:1499:C:H5'	2.21	0.63
32:D6:25:LYS:HD2	36:DA:2285:C:H41	1.64	0.63
36:DA:672:C:H2'	36:DA:673:C:C5'	2.28	0.63
51:BS:106:ARG:O	51:BS:106:ARG:HG2	1.98	0.63
48:BP:64:LYS:C	48:BP:66:GLY:N	2.47	0.63
36:BA:1051:G:H2'	36:BA:1052:C:C6	2.32	0.63
2:AB:44:LEU:HA	2:AB:47:THR:CB	2.28	0.63
19:CS:62:ILE:HA	19:CS:66:MET:CE	2.28	0.63
36:BA:302:C:H2'	36:BA:303:U:H6	1.63	0.63
13:CM:101:GLN:HE21	13:CM:101:GLN:H	1.46	0.63
40:BE:101:ARG:HD2	40:BE:169:ASN:O	1.97	0.63
6:AF:82:ARG:HB2	6:AF:85:VAL:HG23	1.80	0.63
36:BA:195:A:H5''	36:BA:196:A:OP2	1.99	0.63
31:B5:16:ARG:HD2	31:B5:20:ARG:NH1	2.12	0.63
13:AM:17:VAL:O	13:AM:20:THR:HB	1.99	0.63
50:BR:103:ARG:HG3	55:BW:40:ASN:OD1	1.97	0.63
1:CA:447:G:H2'	1:CA:485:G:N2	2.13	0.63
36:DA:1718:G:H2'	36:DA:1719:G:H8	1.63	0.63
39:DD:148:GLU:HB2	39:DD:151:LYS:HD2	1.80	0.63
1:AA:521:G:H4'	12:AL:73:GLU:HG2	1.80	0.63
48:BP:102:ARG:HH11	48:BP:102:ARG:HB2	1.64	0.63
36:DA:1952:A:C6	47:DO:22:ILE:HD12	2.33	0.63
39:BD:99:ASP:OD1	39:BD:99:ASP:C	2.37	0.63
43:DH:91:GLY:HA3	43:DH:94:TYR:HD2	1.64	0.63
29:D3:35:ARG:HH11	29:D3:35:ARG:CB	2.03	0.63
57:DY:27:VAL:HG12	57:DY:29:GLU:OE1	1.98	0.63
57:BY:74:PRO:O	57:BY:75:ILE:HB	1.99	0.63
51:DS:20:ARG:HH11	51:DS:20:ARG:HG2	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:D6:25:LYS:HE2	34:D8:34:TRP:HE1	1.63	0.63
30:D4:27:THR:O	30:D4:28:LYS:HB3	1.98	0.63
53:BU:88:ILE:HD12	53:BU:109:LEU:HD22	1.80	0.63
52:DT:94:ALA:C	52:DT:96:ARG:H	2.01	0.63
24:CY:18:G:H3'	24:CY:18:G:OP2	1.98	0.63
19:CS:40:ILE:HG23	19:CS:62:ILE:HD11	1.80	0.63
10:CJ:4:ILE:HB	10:CJ:74:ILE:CG1	2.28	0.63
24:CY:6:C:O2'	24:CY:7:G:H5'	1.96	0.63
19:AS:11:VAL:HG11	19:AS:16:LEU:HD11	1.80	0.63
12:AL:59:ARG:HG2	12:AL:65:GLU:HG3	1.80	0.63
16:CP:43:LYS:HG3	16:CP:48:TRP:CE3	2.33	0.63
22:CW:51:U:H2'	22:CW:52:G:H8	1.62	0.63
36:DA:221:A:H4'	36:DA:222:A:O5'	1.97	0.63
36:BA:1718:G:H2'	36:BA:1719:G:H8	1.63	0.63
11:AK:30:VAL:HG21	11:AK:65:ALA:HA	1.80	0.63
9:AI:26:VAL:HG22	9:AI:61:ALA:HB3	1.79	0.63
25:AZ:215:ARG:HG3	25:AZ:215:ARG:HH11	1.63	0.63
38:BC:161:ILE:HG21	38:BC:174:PRO:HG2	1.80	0.63
36:DA:2389:G:H5''	36:DA:2390:U:H5'	1.80	0.63
36:BA:2790:A:H2'	36:BA:2791:C:H5''	1.81	0.63
36:BA:590:A:H2'	36:BA:591:C:C6	2.33	0.63
48:DP:102:ARG:HH11	48:DP:102:ARG:HB2	1.64	0.63
26:D0:20:ARG:HG2	26:D0:20:ARG:HH11	1.63	0.63
39:DD:275:LYS:O	39:DD:276:LYS:HB2	1.97	0.63
1:CA:35:G:H2'	1:CA:36:C:C6	2.34	0.63
22:AW:65:G:H4'	32:B6:28:ARG:HH21	1.64	0.63
22:AV:47:U:H3'	22:AV:48:C:H5'	1.81	0.63
36:BA:32:C:O2'	36:BA:33:U:H5'	1.98	0.63
36:BA:84:A:H2'	57:BY:9:LYS:HZ3	1.64	0.63
43:BH:41:MET:HG3	43:BH:42:ARG:O	1.99	0.63
9:AI:4:TYR:HB2	9:AI:19:LEU:HB3	1.80	0.63
42:DG:6:ALA:HB3	42:DG:104:GLU:OE2	1.99	0.63
4:CD:158:ILE:O	4:CD:162:LEU:HB2	1.99	0.63
54:DV:5:VAL:HG21	54:DV:35:LEU:HD23	1.81	0.63
55:BW:82:LEU:HD12	55:BW:82:LEU:N	2.12	0.63
37:DB:82:G:O2'	37:DB:83:G:H5'	1.97	0.63
36:DA:2502:G:H5''	36:DA:2503:A:C5'	2.28	0.63
34:B8:14:VAL:HG21	34:B8:22:VAL:CG1	2.27	0.63
36:DA:278:A:H61	36:DA:362:U:H3	1.47	0.63
1:AA:269:C:H2'	1:AA:270:A:C8	2.33	0.63
1:CA:977:A:N3	1:CA:977:A:C2'	2.62	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:814:C:H2'	36:DA:815:C:H6	1.64	0.63
1:CA:797:C:OP1	11:CK:124:LYS:HE2	1.99	0.63
38:BC:114:VAL:HG23	38:BC:149:ILE:HD11	1.81	0.63
4:CD:145:GLU:HA	4:CD:183:GLY:O	1.96	0.63
36:DA:414:C:H1'	36:DA:1864:U:O2'	1.99	0.63
9:AI:51:ARG:HG2	9:AI:56:LEU:HD22	1.79	0.63
36:DA:2228:G:OP2	39:DD:261:LYS:HE3	1.99	0.63
1:CA:677:U:H3	1:CA:713:G:H22	1.46	0.63
1:CA:645:C:H2'	1:CA:646:U:H6	1.64	0.63
2:CB:178:ARG:NH1	8:CH:71:GLY:O	2.32	0.63
49:DQ:35:VAL:HG12	49:DQ:130:LYS:O	1.99	0.63
47:DO:104:ARG:NH2	52:DT:33:LYS:HD3	2.14	0.63
28:B2:60:LEU:HA	28:B2:63:VAL:HG21	1.81	0.63
28:B2:60:LEU:O	28:B2:63:VAL:HB	1.97	0.63
41:DF:32:LEU:HD23	41:DF:32:LEU:O	1.99	0.63
39:BD:24:ILE:C	39:BD:26:LYS:H	2.00	0.63
58:BZ:151:HIS:HA	58:BZ:171:ILE:CD1	2.17	0.63
36:BA:654(E):G:H22	36:BA:654(Q):C:C1'	2.06	0.63
43:DH:153:LYS:HD3	43:DH:153:LYS:N	2.02	0.63
22:CW:71:G:H2'	22:CW:72:C:C5'	2.23	0.63
36:DA:272(I):U:H5'	36:DA:272(I):U:H6	1.64	0.63
54:DV:17:GLY:C	54:DV:18:LEU:HD13	2.18	0.63
55:DW:4:LYS:HA	55:DW:106:ILE:HG22	1.80	0.63
41:DF:156:LEU:HD21	41:DF:163:VAL:HG12	1.79	0.63
48:DP:23:PRO:CD	48:DP:33:ARG:HE	2.10	0.63
13:AM:12:ASN:ND2	13:AM:12:ASN:H	1.95	0.63
51:BS:24:LEU:HB3	51:BS:85:VAL:HG12	1.79	0.63
25:AZ:263:ARG:HH21	25:AZ:297:GLU:CG	2.10	0.63
1:CA:1256:A:H2	1:CA:1277:C:C6	2.16	0.63
48:BP:66:GLY:O	48:BP:67:MET:HB2	1.96	0.63
47:BO:60:ALA:HA	47:BO:87:ILE:HG12	1.81	0.63
12:CL:38:THR:CG2	12:CL:59:ARG:HG3	2.27	0.63
36:BA:2580:U:O3'	40:BE:130:GLY:HA3	1.98	0.63
6:CF:43:LEU:HD22	6:CF:43:LEU:N	2.14	0.63
1:CA:1048:G:H5''	14:CN:2:ALA:HB1	1.79	0.63
49:BQ:42:ILE:HD13	49:BQ:97:VAL:CG2	2.29	0.63
47:BO:98:VAL:HG12	47:BO:117:LEU:HB3	1.79	0.63
36:DA:2649:U:H2'	36:DA:2650:U:C6	2.33	0.63
42:BG:134:GLY:O	42:BG:135:LEU:HD12	1.97	0.63
11:CK:67:ASP:OD2	11:CK:71:LYS:HE3	1.99	0.63
1:CA:657:G:O2'	1:CA:658:G:H5'	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:26:LEU:HD12	46:BN:26:LEU:O	1.98	0.63
1:AA:17:U:H2'	1:AA:18:C:C6	2.33	0.63
56:BX:40:LYS:O	56:BX:40:LYS:HD2	1.98	0.63
46:DN:10:GLU:OE2	46:DN:11:PRO:HD2	1.98	0.63
34:B8:61:LEU:HD13	34:B8:62:LEU:N	2.12	0.63
36:DA:2100:G:H2'	36:DA:2101:G:C8	2.33	0.63
36:DA:654(E):G:H2'	36:DA:654(F):C:H5'	1.81	0.63
48:DP:148:LEU:O	48:DP:149:GLU:HB2	1.98	0.63
48:BP:24:GLY:N	48:BP:33:ARG:CZ	2.61	0.63
52:BT:94:ALA:O	52:BT:96:ARG:N	2.31	0.63
36:DA:661:C:O3'	48:DP:18:ARG:HD2	1.98	0.63
1:CA:1127:G:O2'	1:CA:1128:C:H5'	1.99	0.63
1:AA:1116:C:H2'	1:AA:1117:G:C5'	2.29	0.63
1:AA:1116:C:H2'	1:AA:1117:G:H5''	1.81	0.63
42:BG:11:TYR:O	42:BG:15:VAL:HB	1.98	0.63
54:BV:5:VAL:HG23	54:BV:37:VAL:O	1.97	0.63
43:DH:76:VAL:C	43:DH:78:GLY:H	2.02	0.63
1:CA:274:A:O2'	1:CA:275:G:C8	2.51	0.63
3:AC:114:PRO:O	3:AC:118:GLN:HG3	1.99	0.63
36:BA:547:A:H2'	36:BA:548:A:C8	2.33	0.63
36:DA:1103:A:H5''	36:DA:1104:C:H5	1.63	0.63
49:BQ:109:VAL:HG12	49:BQ:113:GLN:HB2	1.79	0.63
54:DV:74:LYS:HB2	54:DV:83:ARG:HB2	1.79	0.63
35:D9:29:ASN:H	35:D9:29:ASN:HD22	1.46	0.63
36:DA:1398:C:O2'	36:DA:1399:C:H5'	1.98	0.63
20:CT:25:ARG:HG3	20:CT:25:ARG:HH11	1.64	0.63
28:B2:35:LEU:HD21	28:B2:50:ILE:HG13	1.79	0.63
52:BT:85:LYS:HB3	52:BT:85:LYS:HZ3	1.61	0.63
48:BP:101:VAL:HG12	48:BP:106:LEU:CB	2.29	0.63
26:D0:50:ASN:ND2	26:D0:63:VAL:HG21	2.12	0.63
58:BZ:28:MET:HE2	58:BZ:37:VAL:HG11	1.80	0.63
50:DR:45:ARG:HG3	50:DR:46:GLY:N	2.12	0.63
49:DQ:111:GLU:OE1	49:DQ:133:ARG:NH2	2.32	0.63
42:DG:116:ASP:O	42:DG:117:PHE:CB	2.46	0.63
10:CJ:96:ILE:H	10:CJ:96:ILE:CD1	2.10	0.63
25:CZ:27:LEU:O	25:CZ:31:LEU:HG	1.97	0.63
36:DA:2762:G:H5'	36:DA:2762:G:C8	2.29	0.63
1:CA:77:G:H5'	1:CA:78:G:OP2	1.98	0.63
1:CA:1065:U:C5	1:CA:1190:G:H1'	2.33	0.63
40:DE:4:ILE:HD12	40:DE:92:THR:O	1.99	0.63
57:BY:46:LYS:HD3	57:BY:47:LYS:H	1.63	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:722:A:H2'	1:AA:722:A:N3	2.13	0.63
1:AA:722:A:HO2'	1:AA:724:G:H8	1.46	0.63
57:DY:46:LYS:HD3	57:DY:47:LYS:H	1.64	0.63
36:BA:2061:G:H5''	36:BA:2503:A:C2	2.34	0.63
36:BA:2502:G:H5''	36:BA:2503:A:C5'	2.29	0.63
6:AF:46:ARG:NH2	18:AR:37:VAL:HG11	2.14	0.63
54:BV:74:LYS:HB2	54:BV:83:ARG:HB2	1.80	0.63
44:BJ:25:UNK:HA	44:BJ:116:UNK:HA	1.79	0.63
49:DQ:21:THR:O	49:DQ:22:LYS:HB3	1.99	0.63
36:BA:8:A:H2'	36:BA:9:U:C5	2.34	0.63
35:D9:19:ARG:O	35:D9:20:HIS:HB2	1.97	0.63
37:BB:3:C:H42	37:BB:118:G:H1	1.45	0.63
36:BA:1592:C:H2'	36:BA:1593:G:H8	1.63	0.63
36:BA:2023:G:H5'	36:BA:2617:C:H4'	1.81	0.63
36:BA:221:A:H4'	36:BA:222:A:O5'	1.98	0.63
41:BF:24:LEU:O	41:BF:26:ALA:N	2.31	0.63
52:BT:57:PHE:HE1	52:BT:79:HIS:HD1	1.47	0.63
46:DN:43:THR:HB	46:DN:46:VAL:CG1	2.29	0.63
47:BO:104:ARG:NH2	52:BT:33:LYS:HD3	2.13	0.63
36:DA:2307:G:H21	36:DA:2308:G:H5''	1.64	0.63
48:DP:101:VAL:HG12	48:DP:106:LEU:CB	2.29	0.63
36:BA:674:G:H1'	41:BF:74:ARG:HD2	1.80	0.63
55:BW:4:LYS:HA	55:BW:106:ILE:HG22	1.81	0.63
2:CB:44:LEU:HA	2:CB:47:THR:CB	2.28	0.63
25:AZ:93:ILE:CG1	25:AZ:122:LEU:HD11	2.28	0.63
1:AA:266:G:H5'	1:AA:267:C:C5	2.34	0.63
53:BU:83:LEU:HG	53:BU:88:ILE:CD1	2.28	0.63
25:CZ:171:ILE:HG22	25:CZ:172:ARG:H	1.64	0.63
43:DH:98:LEU:HD12	43:DH:102:ALA:O	1.98	0.63
2:AB:80:ILE:CD1	2:AB:80:ILE:H	2.11	0.63
37:BB:66:A:H61	37:BB:108:U:H2'	1.62	0.63
1:AA:1016:A:H2'	1:AA:1017:G:O4'	1.99	0.63
6:AF:43:LEU:HD22	6:AF:43:LEU:N	2.13	0.63
40:BE:101:ARG:HB3	40:BE:201:THR:HG21	1.80	0.63
16:AP:49:LEU:HD12	16:AP:50:LYS:H	1.64	0.63
36:DA:106:C:H2'	36:DA:107:C:H6	1.64	0.63
11:CK:97:ALA:O	11:CK:101:SER:HB3	1.98	0.63
2:AB:29:ALA:HA	2:AB:32:ILE:CG2	2.29	0.63
50:DR:103:ARG:HG3	55:DW:40:ASN:OD1	1.99	0.63
46:BN:96:GLU:H	46:BN:96:GLU:CD	2.02	0.63
18:AR:32:ARG:HA	18:AR:69:THR:HG21	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2672:G:H2'	36:BA:2673:G:H5''	1.81	0.63
1:CA:1250:A:H4'	9:CI:68:GLY:N	2.14	0.63
1:CA:108:G:H5'	1:CA:109:A:C5'	2.28	0.63
55:BW:29:LEU:HG	55:BW:33:ARG:HD2	1.81	0.63
28:B2:57:ILE:CG2	28:B2:61:LEU:HG	2.22	0.62
37:DB:65:C:O2'	37:DB:66:A:H5'	1.99	0.62
1:CA:979:C:C2'	1:CA:980:C:H5''	2.28	0.62
27:B1:78:LYS:HE2	27:B1:78:LYS:HA	1.81	0.62
36:BA:650:C:C3'	36:BA:651:G:H5''	2.28	0.62
36:DA:2036:C:C6	36:DA:2036:C:H5'	2.24	0.62
10:AJ:96:ILE:H	10:AJ:96:ILE:CD1	2.09	0.62
43:BH:76:VAL:C	43:BH:78:GLY:H	2.02	0.62
46:DN:72:TYR:CD2	46:DN:90:MET:HG3	2.34	0.62
36:DA:1409:C:H2'	36:DA:1410:G:H8	1.63	0.62
6:CF:46:ARG:NH2	18:CR:37:VAL:HG11	2.13	0.62
3:CC:94:LEU:O	3:CC:95:THR:HB	1.99	0.62
49:DQ:43:THR:OG1	49:DQ:45:GLN:HG2	1.99	0.62
36:DA:1786:A:H2	36:DA:2606:C:H1'	1.64	0.62
1:CA:437:U:OP1	4:CD:155:LEU:HD22	1.99	0.62
22:AW:59:U:H5'	22:AW:60:U:C5	2.34	0.62
3:AC:34:LEU:O	3:AC:38:ARG:HG2	1.99	0.62
53:DU:17:ILE:HG23	53:DU:39:LEU:HD12	1.80	0.62
38:DC:18:LYS:HD3	38:DC:20:TYR:CE2	2.34	0.62
49:DQ:79:LEU:HD23	49:DQ:80:GLU:H	1.64	0.62
36:BA:1877:A:H5'	36:BA:1878:G:OP2	1.98	0.62
8:CH:17:THR:HB	8:CH:78:GLN:OE1	2.00	0.62
36:BA:2313:C:H5'	36:BA:2313:C:H6	1.63	0.62
36:DA:1540:U:H3'	36:DA:1541:G:C3'	2.29	0.62
22:AW:71:G:H2'	22:AW:72:C:C5'	2.23	0.62
29:B3:35:ARG:HD3	29:B3:37:LEU:HD11	1.81	0.62
26:D0:12:ASN:O	26:D0:14:ARG:N	2.31	0.62
32:B6:15:GLU:HG3	32:B6:47:THR:HG21	1.81	0.62
51:BS:30:ARG:NH2	51:BS:62:LYS:HD3	2.11	0.62
20:AT:92:LEU:C	20:AT:94:ALA:H	2.02	0.62
40:BE:117:MET:CE	40:BE:136:ARG:HA	2.29	0.62
25:AZ:145:GLU:O	25:AZ:149:LEU:N	2.32	0.62
4:CD:138:TYR:CD1	4:CD:139:ARG:N	2.64	0.62
37:BB:65:C:O2'	37:BB:66:A:H5'	1.99	0.62
38:DC:132:GLY:N	38:DC:133:PRO:HD2	2.14	0.62
42:BG:159:VAL:HG13	42:BG:159:VAL:O	2.00	0.62
12:CL:47:LYS:C	12:CL:49:ASN:H	2.01	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B5:11:THR:OG1	36:BA:1264:G:H5'	1.99	0.62
49:BQ:109:VAL:HG12	49:BQ:110:THR:N	2.12	0.62
1:AA:108:G:H5'	1:AA:109:A:C5'	2.29	0.62
36:DA:1187:G:H5''	54:DV:81:TYR:CE1	2.33	0.62
2:CB:29:ALA:HA	2:CB:32:ILE:CG2	2.30	0.62
36:DA:2790:A:H2'	36:DA:2791:C:H5''	1.81	0.62
36:BA:1335:U:H2'	36:BA:1336:A:H8	1.64	0.62
52:DT:78:LEU:O	52:DT:79:HIS:HD2	1.81	0.62
1:CA:1005:A:H4'	1:CA:1037:C:O2'	1.99	0.62
42:BG:76:SER:CB	42:BG:83:ARG:HB3	2.29	0.62
40:BE:52:LEU:HD23	40:BE:75:VAL:HB	1.81	0.62
34:D8:10:ALA:HB3	34:D8:60:LEU:HD21	1.81	0.62
36:BA:2187:G:H2'	36:BA:2188:C:C5'	2.19	0.62
58:DZ:72:ARG:HG3	58:DZ:89:PHE:HB2	1.80	0.62
57:DY:28:LYS:CB	57:DY:37:VAL:HB	2.29	0.62
1:CA:537:G:H2'	1:CA:538:G:H8	1.64	0.62
32:B6:17:LYS:HB3	32:B6:18:ARG:NH1	2.13	0.62
1:AA:1255:G:H3'	1:AA:1279:A:N6	2.14	0.62
49:DQ:27:VAL:H	49:DQ:137:TYR:HD2	1.46	0.62
1:CA:266:G:C5'	1:CA:267:C:C5	2.82	0.62
41:BF:206:ILE:HG22	41:BF:207:GLY:H	1.63	0.62
36:DA:2523:G:H2'	36:DA:2524:G:C5'	2.29	0.62
19:AS:45:VAL:O	19:AS:47:HIS:N	2.26	0.62
37:BB:82:G:O2'	37:BB:83:G:H5'	1.98	0.62
36:BA:1038:C:C2'	36:BA:1039:G:H5''	2.29	0.62
2:AB:111:ARG:HG2	2:AB:111:ARG:HH11	1.65	0.62
36:DA:970:C:H2'	36:DA:971:C:H6	1.64	0.62
36:DA:2852:G:H2'	36:DA:2853:C:H6	1.64	0.62
53:BU:14:HIS:CD2	53:BU:36:ARG:HH22	2.17	0.62
1:CA:187:C:H2'	1:CA:188:C:H6	1.63	0.62
17:AQ:59:ILE:HG22	17:AQ:71:PHE:CD2	2.35	0.62
3:AC:3:ASN:CG	3:AC:4:LYS:H	2.02	0.62
36:DA:1810:A:H2'	36:DA:1811:G:O4'	1.99	0.62
36:DA:1579:A:H5'	36:DA:1579:A:H8	1.64	0.62
36:BA:2422:A:H4'	36:BA:2423:U:OP1	1.99	0.62
2:CB:77:ALA:O	2:CB:81:VAL:HG23	1.99	0.62
1:AA:1003:G:H21	1:AA:1039:C:H42	1.47	0.62
34:D8:61:LEU:HD13	34:D8:62:LEU:N	2.14	0.62
57:DY:9:LYS:CG	57:DY:10:GLY:H	2.04	0.62
57:DY:17:SER:CB	57:DY:71:LYS:HE2	2.29	0.62
1:CA:539:A:H2'	1:CA:540:G:C8	2.35	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:943:U:OP2	48:BP:38:GLN:CD	2.38	0.62
48:DP:66:GLY:O	48:DP:67:MET:CB	2.47	0.62
36:DA:2068:U:N3	36:DA:2430:A:H2	1.93	0.62
2:CB:80:ILE:H	2:CB:80:ILE:CD1	2.09	0.62
43:BH:44:VAL:HG12	43:BH:45:VAL:N	2.13	0.62
27:D1:82:LEU:HD21	27:D1:90:ILE:HG23	1.80	0.62
1:CA:376:G:OP2	16:CP:67:THR:HG21	1.98	0.62
19:CS:16:LEU:O	19:CS:19:VAL:N	2.32	0.62
57:DY:46:LYS:HD3	57:DY:47:LYS:N	2.14	0.62
1:AA:192:U:H1'	20:AT:103:GLY:HA2	1.81	0.62
40:DE:201:THR:C	40:DE:202:LYS:HD2	2.19	0.62
25:AZ:291:ARG:HH11	25:AZ:291:ARG:HB2	1.64	0.62
2:CB:97:TRP:CZ3	2:CB:176:GLU:OE2	2.52	0.62
3:CC:34:LEU:O	3:CC:38:ARG:HG2	1.98	0.62
14:AN:25:VAL:HG23	14:AN:38:GLY:O	1.99	0.62
54:BV:2:PHE:C	54:BV:2:PHE:CD1	2.73	0.62
36:DA:1092:C:H42	36:DA:1100:C:H42	1.47	0.62
1:CA:17:U:H2'	1:CA:18:C:C6	2.33	0.62
8:CH:2:LEU:HD21	8:CH:5:PRO:HA	1.80	0.62
39:BD:275:LYS:O	39:BD:276:LYS:HB2	1.98	0.62
53:DU:101:ARG:HG3	53:DU:101:ARG:HH11	1.64	0.62
36:DA:8:A:H2'	36:DA:9:U:C5	2.34	0.62
36:DA:2184:G:H2'	36:DA:2185:C:C1'	2.28	0.62
4:CD:189:PRO:CB	4:CD:194:LEU:HD21	2.22	0.62
51:BS:38:GLN:O	51:BS:40:ILE:HG23	1.98	0.62
48:DP:24:GLY:N	48:DP:33:ARG:CZ	2.63	0.62
58:BZ:108:PRO:CB	58:BZ:141:VAL:HG12	2.27	0.62
36:DA:603:A:H1'	36:DA:604:G:OP1	1.99	0.62
52:BT:94:ALA:C	52:BT:96:ARG:H	2.03	0.62
12:AL:7:ILE:CD1	12:AL:8:ASN:N	2.62	0.62
6:CF:62:TRP:C	6:CF:63:TYR:HD1	2.03	0.62
53:DU:83:LEU:HG	53:DU:88:ILE:CD1	2.28	0.62
1:AA:1221:G:H4'	19:AS:77:THR:HG21	1.81	0.62
1:AA:537:G:H2'	1:AA:538:G:H8	1.63	0.62
43:DH:44:VAL:HG12	43:DH:45:VAL:N	2.14	0.62
46:BN:32:THR:C	46:BN:34:LEU:H	2.03	0.62
52:DT:23:ARG:HG2	52:DT:120:ARG:NH1	2.14	0.62
36:DA:302:C:H2'	36:DA:303:U:H6	1.63	0.62
13:AM:3:ARG:HD3	42:BG:113:ARG:NH1	2.14	0.62
36:BA:2712:U:O2'	36:BA:2713:A:H5'	1.98	0.62
36:BA:1221(A):C:H2'	36:BA:1222:C:C6	2.34	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:106:C:H1'	57:BY:2:ARG:NH2	2.14	0.62
36:BA:2485:G:H5''	49:BQ:46:GLN:NE2	2.13	0.62
36:BA:2199:A:H3'	36:BA:2200:C:H6	1.64	0.62
57:DY:2:ARG:HD3	57:DY:3:VAL:HG23	1.81	0.62
53:BU:64:ARG:HG2	53:BU:64:ARG:HH11	1.63	0.62
47:DO:47:ILE:O	47:DO:48:PRO:O	2.18	0.62
38:DC:139:ASN:OD1	38:DC:140:PRO:HD2	1.99	0.62
5:AE:63:ARG:HA	5:AE:66:MET:HE3	1.79	0.62
6:AF:28:ARG:HH11	6:AF:28:ARG:HG3	1.64	0.62
25:CZ:69:GLU:HG2	25:CZ:70:TYR:N	2.14	0.62
38:BC:132:GLY:N	38:BC:133:PRO:HD2	2.15	0.62
13:CM:17:VAL:O	13:CM:20:THR:HB	1.99	0.62
52:DT:28:VAL:O	52:DT:29:ARG:CB	2.47	0.62
9:AI:53:VAL:O	9:AI:55:ALA:N	2.33	0.62
34:B8:61:LEU:CD1	34:B8:61:LEU:N	2.57	0.62
46:BN:45:ASN:HD22	46:BN:45:ASN:H	1.47	0.62
36:BA:298:G:H5'	36:BA:299:A:OP1	1.99	0.62
1:CA:1532:U:H2'	1:CA:1533:C:O4'	1.99	0.62
32:D6:42:TRP:HA	32:D6:42:TRP:HE3	1.64	0.62
57:DY:97:ARG:HH21	57:DY:98:VAL:CB	2.12	0.62
50:DR:30:THR:HG22	50:DR:31:HIS:ND1	2.14	0.62
48:BP:95:VAL:HG23	48:BP:125:VAL:HA	1.81	0.62
43:DH:41:MET:HG3	43:DH:42:ARG:O	2.00	0.62
12:CL:8:ASN:O	12:CL:12:ARG:HG3	1.99	0.62
36:BA:2009:G:O2'	36:BA:2010:G:H5'	2.00	0.62
50:BR:45:ARG:HG3	50:BR:46:GLY:N	2.12	0.62
53:BU:92:ARG:HH21	54:BV:10:LYS:HB3	1.63	0.62
36:BA:2162:G:O2'	36:BA:2163:C:H5'	2.00	0.62
16:AP:43:LYS:HG3	16:AP:48:TRP:CE3	2.35	0.62
36:DA:16:G:O2'	36:DA:17:G:H5'	2.00	0.62
2:CB:84:GLU:HB3	2:CB:219:VAL:HG21	1.80	0.62
22:CW:59:U:H5'	22:CW:60:U:C5	2.33	0.62
26:D0:73:GLY:O	26:D0:75:LEU:N	2.32	0.62
39:BD:223:GLY:C	39:BD:224:ALA:O	2.36	0.62
36:BA:2019:A:H2'	36:BA:2020:A:O5'	2.00	0.62
39:BD:148:GLU:HB2	39:BD:151:LYS:HD2	1.81	0.62
1:CA:1296:C:H4'	1:CA:1302:U:C5	2.35	0.62
1:CA:950:U:H2'	1:CA:951:G:H8	1.64	0.62
36:DA:2152:G:O2'	36:DA:2153:G:H5'	1.99	0.62
40:DE:33:VAL:HG23	40:DE:47:VAL:HG13	1.82	0.62
36:BA:2099:U:H2'	36:BA:2100:G:H8	1.64	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:45:GLU:O	42:DG:51:ARG:HG3	2.00	0.62
36:BA:99:U:C4'	36:BA:102:G:H1'	2.30	0.62
36:DA:2801(A):A:H5'	36:DA:2802:G:H8	1.64	0.62
43:DH:50:VAL:CG1	43:DH:51:ARG:H	2.10	0.62
55:BW:5:ALA:O	55:BW:6:ILE:HB	2.00	0.62
4:AD:19:LEU:HD12	4:AD:19:LEU:N	2.14	0.62
36:BA:2118:U:H5'	36:BA:2147:G:H21	1.64	0.62
30:B4:27:THR:O	30:B4:28:LYS:HB3	1.99	0.62
10:CJ:28:ARG:HB3	10:CJ:28:ARG:HH11	1.64	0.62
48:BP:66:GLY:O	48:BP:67:MET:CB	2.47	0.62
36:DA:661:C:H4'	48:DP:16:ARG:NH1	2.14	0.62
53:DU:88:ILE:C	53:DU:90:VAL:H	2.02	0.62
3:AC:16:ARG:HH11	3:AC:16:ARG:HB2	1.65	0.62
51:BS:35:ILE:H	51:BS:53:SER:HB2	1.62	0.62
16:CP:67:THR:HB	16:CP:70:ALA:CB	2.30	0.62
36:DA:848:G:N3	36:DA:933:A:H1'	2.14	0.62
36:BA:1332:G:N2	36:BA:1610:A:C8	2.67	0.62
3:AC:49:SER:C	3:AC:51:GLY:H	2.01	0.62
42:BG:52:ILE:HD13	42:BG:53:LEU:N	2.14	0.62
49:DQ:109:VAL:HG12	49:DQ:110:THR:N	2.15	0.62
36:DA:2199:A:H3'	36:DA:2200:C:H6	1.65	0.62
5:AE:20:GLN:HE21	5:AE:25:ARG:NH2	1.96	0.62
49:BQ:109:VAL:HG13	49:BQ:113:GLN:OE1	2.00	0.62
1:AA:45:U:H2'	1:AA:46:G:C8	2.34	0.62
36:BA:2201:C:O2'	36:BA:2202:C:H5'	2.00	0.62
36:DA:1064:C:H2'	36:DA:1065:U:H5''	1.81	0.62
1:CA:180:U:H2'	1:CA:181:G:H5'	1.82	0.62
35:B9:1:MET:HE2	35:B9:31:LYS:HB3	1.81	0.62
36:BA:2443:C:O2'	36:BA:2444:G:H5'	2.00	0.62
1:CA:1142:G:H2'	1:CA:1143:G:O4'	2.00	0.62
1:AA:1005:A:H4'	1:AA:1037:C:O2'	1.99	0.62
39:BD:70:TRP:O	39:BD:73:VAL:HG23	1.99	0.62
40:DE:57:LYS:HE3	40:DE:57:LYS:CA	2.19	0.62
39:DD:70:TRP:O	39:DD:73:VAL:HG23	1.99	0.62
36:BA:654(E):G:H2'	36:BA:654(F):C:H5'	1.82	0.62
57:BY:81:LYS:HD3	57:BY:97:ARG:O	1.99	0.62
36:BA:2308:G:N7	36:BA:2310:A:H5'	2.14	0.62
36:DA:943:U:OP2	48:DP:38:GLN:CD	2.38	0.62
52:BT:93:ARG:NH2	52:BT:95:ARG:HD3	2.14	0.62
12:AL:6:THR:H	12:AL:9:GLN:HE21	1.48	0.62
28:D2:68:ARG:HG3	28:D2:72:ALA:HB2	1.81	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:BW:11:ARG:HG2	55:BW:11:ARG:NH1	2.13	0.62
19:AS:62:ILE:HA	19:AS:66:MET:HE2	1.80	0.62
1:AA:1116:C:C2'	1:AA:1117:G:H5''	2.30	0.62
22:AW:38:A:H2'	22:AW:39:U:C5'	2.29	0.62
36:DA:582:G:H2'	36:DA:583:G:C8	2.35	0.62
17:CQ:67:LYS:O	17:CQ:68:ARG:CB	2.47	0.62
14:CN:25:VAL:HG23	14:CN:38:GLY:O	1.99	0.62
49:BQ:109:VAL:CG1	49:BQ:113:GLN:HB2	2.30	0.62
36:DA:1991:U:H2'	36:DA:1992:G:H5''	1.82	0.62
49:DQ:68:ILE:HG23	49:DQ:103:MET:HA	1.81	0.62
1:CA:393:A:O2'	1:CA:394:G:H5'	1.99	0.62
35:B9:30:PRO:HB2	36:BA:2527:C:H5'	1.81	0.62
27:D1:7:ILE:HG22	27:D1:8:SER:N	2.14	0.62
52:DT:28:VAL:O	52:DT:29:ARG:CG	2.48	0.62
56:DX:12:VAL:CG2	56:DX:13:LEU:H	1.90	0.62
36:BA:1024:G:C3'	36:BA:1025:G:H5''	2.22	0.62
57:DY:81:LYS:HD3	57:DY:97:ARG:O	2.00	0.62
57:BY:73:ARG:HH22	57:BY:82:PRO:CA	2.12	0.62
4:AD:189:PRO:CB	4:AD:194:LEU:HD21	2.23	0.62
54:DV:19:LYS:HZ3	54:DV:20:LEU:H	1.46	0.62
36:BA:2309:A:H2'	36:BA:2310:A:C5'	2.30	0.62
20:CT:92:LEU:C	20:CT:94:ALA:H	2.02	0.62
36:DA:693:C:O2'	36:DA:694:U:H5'	2.00	0.62
58:BZ:33:LEU:HD12	58:BZ:34:ASN:H	1.64	0.62
48:DP:16:ARG:HB2	48:DP:16:ARG:HH11	1.65	0.62
36:DA:2811:G:OP1	40:DE:60:ASN:HB2	1.99	0.62
50:BR:2:ARG:HD2	50:BR:2:ARG:O	2.00	0.62
36:DA:1058:G:C3'	36:DA:1059:G:C5'	2.78	0.62
28:B2:3:LEU:O	28:B2:7:ARG:HG3	1.99	0.62
10:AJ:90:LEU:N	10:AJ:91:PRO:HD3	2.15	0.62
54:BV:49:THR:HB	54:BV:50:PRO:CD	2.28	0.62
42:BG:10:LYS:O	42:BG:15:VAL:HG23	1.99	0.62
36:BA:956:G:OP2	49:BQ:14:ARG:NH2	2.32	0.62
3:CC:40:ARG:NH1	3:CC:40:ARG:HG3	2.14	0.62
1:CA:423:G:C2'	1:CA:424:G:H5'	2.29	0.62
40:BE:201:THR:C	40:BE:202:LYS:HD2	2.20	0.62
25:CZ:295:ARG:HG2	25:CZ:295:ARG:NH1	2.12	0.62
25:AZ:104:LEU:HD23	25:AZ:133:VAL:HG22	1.82	0.62
50:BR:21:TYR:HB3	50:BR:47:PHE:CD2	2.35	0.62
36:DA:1419:A:O2'	36:DA:1420:U:H5''	1.99	0.62
36:DA:1335:U:H2'	36:DA:1336:A:H8	1.65	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:99:LEU:O	46:BN:103:VAL:HG23	2.00	0.62
26:B0:73:GLY:O	26:B0:75:LEU:N	2.32	0.62
2:AB:7:VAL:O	2:AB:11:LEU:HB2	2.00	0.62
28:B2:35:LEU:HG	28:B2:53:LEU:HD13	1.82	0.62
1:CA:1006:C:N4	1:CA:1024:G:H21	1.98	0.62
56:DX:40:LYS:HG2	56:DX:51:VAL:CB	2.12	0.62
56:DX:40:LYS:HD2	56:DX:40:LYS:O	2.00	0.62
41:BF:139:PHE:HB2	41:BF:166:ALA:HB1	1.82	0.62
10:CJ:61:GLU:OE2	14:CN:49:HIS:HE1	1.82	0.62
32:B6:15:GLU:OE1	32:B6:18:ARG:CG	2.48	0.62
41:DF:139:PHE:HB2	41:DF:166:ALA:HB1	1.82	0.62
2:AB:47:THR:O	2:AB:51:LEU:HB2	2.00	0.62
36:DA:90:U:O4'	36:DA:92:A:H8	1.83	0.62
1:AA:77:G:H5'	1:AA:78:G:OP2	1.99	0.62
40:DE:37:ARG:HA	40:DE:42:ASP:OD2	1.99	0.62
47:DO:35:VAL:HG21	47:DO:103:ALA:CB	2.28	0.62
34:D8:16:ILE:HD12	34:D8:57:ARG:HG2	1.80	0.62
40:BE:101:ARG:CZ	40:BE:171:GLU:HB2	2.29	0.62
36:BA:1771:C:C1'	36:BA:1786:A:H8	2.11	0.62
57:BY:2:ARG:HD3	57:BY:3:VAL:HG23	1.81	0.62
3:CC:70:VAL:HG13	3:CC:72:LYS:H	1.65	0.62
36:DA:1771:C:C1'	36:DA:1786:A:H8	2.13	0.62
36:BA:495:G:H21	55:BW:61:ASN:HD21	1.46	0.62
49:DQ:109:VAL:HG13	49:DQ:113:GLN:OE1	2.00	0.62
36:BA:2195:C:O2'	36:BA:2196:C:H5'	1.99	0.62
46:BN:129:PRO:O	46:BN:130:HIS:HB3	1.99	0.62
13:AM:116:THR:O	13:AM:118:ALA:N	2.33	0.62
58:BZ:19:ARG:NH1	58:BZ:84:GLU:O	2.33	0.62
36:BA:212:G:O2'	36:BA:213:A:H5'	1.99	0.62
1:CA:731:G:OP1	1:CA:766:A:H1'	2.00	0.62
36:BA:1064:C:H2'	36:BA:1065:U:H5''	1.82	0.62
36:BA:528:A:H2	36:BA:2043:C:C5'	2.13	0.62
34:B8:6:THR:CG2	34:B8:63:PRO:HD3	2.29	0.61
22:CV:47:U:H3'	22:CV:48:C:H5'	1.81	0.61
2:CB:204:ASN:C	2:CB:204:ASN:HD22	2.02	0.61
2:AB:204:ASN:C	2:AB:204:ASN:HD22	2.02	0.61
41:DF:206:ILE:HG22	41:DF:207:GLY:H	1.64	0.61
31:D5:40:LYS:HG2	31:D5:46:CYS:HB2	1.81	0.61
58:BZ:162:GLU:O	58:BZ:163:LEU:O	2.17	0.61
1:AA:541:G:H2'	1:AA:542:G:C8	2.32	0.61
4:AD:148:VAL:HG12	4:AD:149:ALA:H	1.63	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:627:G:H2'	1:AA:628:G:H8	1.65	0.61
10:CJ:4:ILE:HB	10:CJ:74:ILE:HD11	1.82	0.61
36:BA:1598:C:H5'	56:BX:36:LYS:CG	2.30	0.61
36:BA:2219:G:O2'	36:BA:2220:G:H5'	2.00	0.61
40:DE:101:ARG:HH11	40:DE:169:ASN:ND2	1.98	0.61
36:BA:1409:C:H2'	36:BA:1410:G:H8	1.64	0.61
40:DE:44:TYR:O	40:DE:45:THR:HB	1.99	0.61
28:D2:69:ARG:HB2	28:D2:70:GLN:HE22	1.64	0.61
53:DU:14:HIS:CD2	53:DU:36:ARG:HH22	2.18	0.61
22:AW:43:C:H2'	22:AW:44:G:C1'	2.29	0.61
35:D9:30:PRO:HB2	36:DA:2527:C:H5'	1.81	0.61
36:BA:1188:U:O2'	36:BA:1189:A:H5'	2.00	0.61
1:CA:633:G:H5'	1:CA:634:C:OP2	2.00	0.61
50:DR:21:TYR:HB3	50:DR:47:PHE:CD2	2.35	0.61
36:BA:1286:A:H2'	36:BA:1288:U:OP2	2.00	0.61
40:DE:120:TRP:CE3	40:DE:155:LYS:HE3	2.34	0.61
36:BA:1782:C:H1'	36:BA:2609:U:H5''	1.81	0.61
26:B0:16:SER:HB2	36:BA:2262:U:H5	1.65	0.61
2:CB:7:VAL:O	2:CB:11:LEU:HB2	2.00	0.61
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.15	0.61
13:CM:15:VAL:HG22	13:CM:43:THR:O	2.00	0.61
39:BD:24:ILE:HG23	39:BD:25:THR:H	1.65	0.61
10:CJ:55:LYS:NZ	10:CJ:55:LYS:CB	2.63	0.61
57:BY:28:LYS:CB	57:BY:37:VAL:HB	2.29	0.61
36:DA:2309:A:H2'	36:DA:2310:A:C5'	2.29	0.61
32:B6:17:LYS:HA	32:B6:17:LYS:HE2	1.82	0.61
55:DW:5:ALA:O	55:DW:6:ILE:HB	2.00	0.61
36:DA:1747(A):G:O2'	36:DA:1748:G:H5''	2.00	0.61
9:AI:65:VAL:HG21	9:AI:73:GLN:HB3	1.82	0.61
36:DA:2009:G:O2'	36:DA:2010:G:H5'	2.00	0.61
1:CA:666:G:H5'	1:CA:726:C:H1'	1.82	0.61
36:BA:2523:G:H2'	36:BA:2524:G:C5'	2.30	0.61
52:BT:58:ASN:HD22	52:BT:58:ASN:H	1.45	0.61
36:BA:197:A:H5'	36:BA:197:A:H8	1.65	0.61
22:CW:43:C:H2'	22:CW:44:G:C1'	2.30	0.61
36:DA:1782:C:H1'	36:DA:2609:U:H5''	1.82	0.61
1:AA:1463:C:H5'	52:BT:115:ARG:HH12	1.65	0.61
1:AA:1250:A:H4'	9:AI:68:GLY:N	2.15	0.61
36:DA:1614:A:N1	55:DW:91:GLY:HA2	2.15	0.61
5:CE:81:GLU:OE1	5:CE:88:LYS:HE3	2.01	0.61
25:AZ:309:SER:O	25:AZ:310:ILE:HG22	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BU:47:TYR:HA	53:BU:50:ARG:NH1	2.14	0.61
12:AL:89:ARG:NH1	12:AL:91:LYS:HG2	2.14	0.61
41:BF:43:LYS:HA	41:BF:98:SER:HB3	1.83	0.61
36:DA:2422:A:H4'	36:DA:2423:U:OP1	1.99	0.61
53:DU:47:TYR:HA	53:DU:50:ARG:NH1	2.15	0.61
53:DU:55:ARG:HA	53:DU:58:ARG:HD2	1.82	0.61
39:DD:30:GLU:H	39:DD:35:LYS:NZ	1.98	0.61
41:DF:148:LEU:HD23	41:DF:191:ARG:NH1	2.15	0.61
43:BH:50:VAL:CG1	43:BH:51:ARG:H	2.10	0.61
9:CI:28:VAL:CG2	9:CI:33:PHE:HA	2.30	0.61
1:CA:573:A:H5'	1:CA:573:A:C8	2.31	0.61
25:CZ:145:GLU:O	25:CZ:149:LEU:N	2.33	0.61
49:DQ:56:ARG:CG	49:DQ:56:ARG:NH1	2.62	0.61
1:AA:423:G:C2'	1:AA:424:G:H5'	2.29	0.61
19:CS:16:LEU:HD12	19:CS:16:LEU:H	1.64	0.61
2:CB:9:GLU:OE1	2:CB:9:GLU:N	2.32	0.61
36:BA:1103:A:H5''	36:BA:1104:C:H5	1.63	0.61
47:DO:60:ALA:HA	47:DO:87:ILE:HG12	1.80	0.61
13:AM:101:GLN:H	13:AM:101:GLN:HE21	1.46	0.61
1:CA:1016:A:H2'	1:CA:1017:G:O4'	2.00	0.61
3:CC:95:THR:HG22	3:CC:95:THR:O	1.99	0.61
26:D0:40:GLN:NE2	26:D0:44:ARG:H	1.98	0.61
35:D9:10:ILE:HG23	36:DA:2477:C:N4	2.14	0.61
53:BU:55:ARG:HA	53:BU:58:ARG:HD2	1.81	0.61
12:AL:45:PRO:HG3	12:AL:53:ARG:HD3	1.83	0.61
12:CL:119:LYS:O	12:CL:120:TYR:HB2	2.01	0.61
36:DA:2153:G:O2'	36:DA:2154:G:H5'	2.01	0.61
7:CG:150:ALA:HB2	11:CK:50:TYR:OH	2.00	0.61
1:CA:256:U:H2'	1:CA:257:G:C8	2.35	0.61
36:DA:1600:C:O2'	36:DA:1601:G:H5'	1.99	0.61
6:AF:25:ILE:O	6:AF:25:ILE:HD13	1.99	0.61
22:AV:4:C:H2'	22:AV:5:G:H5''	1.82	0.61
38:DC:40:THR:HG22	38:DC:177:LYS:HD2	1.81	0.61
5:AE:7:GLU:HG2	5:AE:112:LEU:HD21	1.81	0.61
1:AA:1423:G:H5'	47:BO:49:ARG:HH22	1.65	0.61
22:AW:65:G:H4'	32:B6:28:ARG:NH2	2.15	0.61
1:CA:1331:G:OP2	13:CM:23:TYR:HD1	1.83	0.61
57:DY:74:PRO:O	57:DY:75:ILE:HB	1.99	0.61
36:BA:2307:G:H21	36:BA:2308:G:H5''	1.66	0.61
32:B6:53:LYS:CD	32:B6:54:ILE:H	2.13	0.61
54:BV:99:ILE:O	54:BV:99:ILE:HG12	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1313:U:H2'	1:AA:1314:C:O2	2.00	0.61
36:BA:860:U:C5	36:BA:917:A:N7	2.62	0.61
2:CB:44:LEU:HD12	2:CB:44:LEU:N	2.13	0.61
4:AD:114:ARG:HG3	4:AD:114:ARG:NH1	2.14	0.61
12:CL:82:VAL:H	12:CL:106:ASP:CG	2.04	0.61
36:DA:996:A:O3'	53:DU:92:ARG:HG2	2.00	0.61
36:DA:1061:U:H4'	36:DA:1070:A:O4'	2.00	0.61
36:BA:2464:C:O2'	36:BA:2465:C:H6	1.82	0.61
2:CB:75:LYS:HA	2:CB:78:GLN:NE2	2.14	0.61
22:CW:38:A:H2'	22:CW:39:U:C5'	2.30	0.61
41:DF:177:ALA:HB1	41:DF:178:PRO:HD2	1.82	0.61
1:AA:444:C:H2'	1:AA:445:G:C8	2.35	0.61
18:CR:36:ASN:HD21	18:CR:39:VAL:HG21	1.66	0.61
36:DA:1718:G:H2'	36:DA:1719:G:C8	2.35	0.61
36:BA:1335:U:H2'	36:BA:1336:A:C8	2.35	0.61
1:CA:673:G:H2'	1:CA:674:G:C8	2.35	0.61
1:CA:521:G:H4'	12:CL:73:GLU:HG2	1.81	0.61
36:BA:1813:G:H1'	39:BD:50:THR:OG1	1.99	0.61
1:AA:382:A:H2'	1:AA:383:A:H8	1.65	0.61
36:BA:855:G:H1	36:BA:922:U:H3	1.46	0.61
1:AA:673:G:H2'	1:AA:674:G:C8	2.36	0.61
9:CI:106:ALA:O	9:CI:108:VAL:HG23	2.01	0.61
36:BA:2537:U:H2'	36:BA:2538:C:C6	2.35	0.61
37:BB:61:G:O2'	37:BB:62:C:H5'	2.00	0.61
1:AA:96:U:H2'	1:AA:97:G:N7	2.16	0.61
1:AA:1142:G:H2'	1:AA:1143:G:O4'	2.00	0.61
17:AQ:27:PHE:CZ	17:AQ:36:ILE:HD11	2.35	0.61
39:DD:99:ASP:OD1	39:DD:99:ASP:C	2.37	0.61
48:BP:148:LEU:O	48:BP:149:GLU:HB2	1.98	0.61
36:BA:1019:U:H3	36:BA:1142(A):A:N6	1.93	0.61
4:AD:11:LEU:HD22	4:AD:66:ARG:NH1	2.15	0.61
36:BA:1747(A):G:O2'	36:BA:1748:G:H5''	1.99	0.61
51:DS:106:ARG:HH12	51:DS:108:GLY:N	1.98	0.61
25:CZ:263:ARG:HH21	25:CZ:297:GLU:CG	2.11	0.61
36:DA:729:G:OP2	39:DD:13:ARG:NH1	2.33	0.61
25:CZ:193:ASN:HB2	25:CZ:196:VAL:CG1	2.30	0.61
52:DT:93:ARG:NH2	52:DT:95:ARG:HD3	2.15	0.61
54:BV:39:LEU:HA	54:BV:47:VAL:HG13	1.82	0.61
36:DA:896:A:N1	58:DZ:113:ALA:O	2.34	0.61
36:BA:145:G:C2'	36:BA:146:G:H5''	2.30	0.61
37:DB:68:C:H2'	37:DB:69:G:O4'	2.01	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1720:U:C3'	36:DA:1721:G:H5''	2.30	0.61
36:DA:1332:G:N2	36:DA:1609:A:O2'	2.33	0.61
46:BN:72:TYR:CD2	46:BN:90:MET:HG3	2.36	0.61
50:BR:4:LEU:HG	50:BR:4:LEU:O	2.01	0.61
36:BA:106:C:H2'	36:BA:107:C:H6	1.63	0.61
49:BQ:43:THR:OG1	49:BQ:45:GLN:HG2	1.99	0.61
1:CA:191:G:C4	20:CT:105:SER:HB3	2.36	0.61
39:DD:94:LEU:HB2	39:DD:104:TYR:HE1	1.65	0.61
36:BA:1092:C:H42	36:BA:1100:C:H42	1.49	0.61
11:AK:97:ALA:O	11:AK:101:SER:HB3	2.00	0.61
6:AF:34:GLY:N	6:AF:71:ARG:HH21	1.97	0.61
4:AD:131:ARG:HD3	4:AD:131:ARG:H	1.66	0.61
3:CC:166:GLU:OE1	3:CC:166:GLU:HA	2.00	0.61
36:BA:1419:A:O2'	36:BA:1420:U:H5''	2.00	0.61
36:DA:2512:C:H2'	36:DA:2513:G:O4'	2.00	0.61
38:BC:139:ASN:OD1	38:BC:140:PRO:HD2	2.00	0.61
52:DT:57:PHE:HE1	52:DT:79:HIS:HD1	1.47	0.61
41:DF:22:ALA:HB1	41:DF:26:ALA:HB2	1.81	0.61
51:DS:54:LEU:HD13	51:DS:57:LYS:HA	1.83	0.61
12:CL:20:LYS:H	12:CL:20:LYS:CD	2.04	0.61
3:AC:81:GLY:HA3	3:AC:85:ARG:CZ	2.31	0.61
41:BF:6:VAL:HG12	41:BF:7:TYR:N	2.09	0.61
48:DP:40:SER:O	48:DP:41:ARG:HD3	2.00	0.61
2:CB:42:ILE:HD11	2:CB:202:PRO:HB2	1.83	0.61
3:CC:15:THR:CG2	3:CC:181:ASN:HA	2.28	0.61
36:BA:2886:G:H2'	36:BA:2887:U:C6	2.36	0.61
36:DA:2533:A:H2'	36:DA:2534:A:O4'	2.00	0.61
3:CC:114:PRO:O	3:CC:118:GLN:HG3	2.01	0.61
46:BN:32:THR:HG22	46:BN:37:LYS:HD3	1.83	0.61
30:B4:24:THR:HB	42:BG:104:GLU:OE2	2.01	0.61
19:CS:45:VAL:HG23	19:CS:46:GLY:N	2.15	0.61
36:DA:1598:C:H5'	56:DX:36:LYS:CG	2.30	0.61
36:BA:325:G:H2'	36:BA:326:G:C8	2.35	0.61
36:BA:2713:A:OP1	50:BR:14:SER:HB3	2.00	0.61
19:AS:16:LEU:H	19:AS:16:LEU:HD12	1.65	0.61
6:AF:19:LEU:O	6:AF:19:LEU:HD23	1.99	0.61
38:DC:29:VAL:HG11	38:DC:214:VAL:HG12	1.81	0.61
36:DA:1592:C:H2'	36:DA:1593:G:C8	2.35	0.61
9:AI:99:LEU:HD22	9:AI:99:LEU:N	2.16	0.61
36:DA:2537:U:H2'	36:DA:2538:C:C6	2.36	0.61
36:BA:1013:C:O2'	36:BA:1014:U:H5'	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:855:G:H1	36:DA:922:U:H3	1.48	0.61
41:DF:167:ALA:HB1	41:DF:173:VAL:CG1	2.20	0.61
56:DX:12:VAL:HG12	56:DX:27:THR:O	2.01	0.61
36:BA:1503:U:H2'	36:BA:1504:C:C6	2.36	0.61
57:BY:84:ARG:CZ	57:BY:97:ARG:HB3	2.31	0.61
39:BD:43:ARG:HB2	39:BD:54:ARG:CB	2.30	0.61
48:BP:24:GLY:HA3	48:BP:33:ARG:HH12	1.65	0.61
48:BP:23:PRO:CB	48:BP:33:ARG:HG3	2.25	0.61
48:BP:34:GLY:O	48:BP:35:HIS:HB2	2.01	0.61
58:BZ:108:PRO:HA	58:BZ:141:VAL:O	2.00	0.61
36:BA:2148:G:O2'	36:BA:2149:G:H5'	2.01	0.61
36:BA:2068:U:N3	36:BA:2430:A:H2	1.94	0.61
1:CA:266:G:H5'	1:CA:267:C:C5	2.35	0.61
3:CC:11:ARG:NH2	3:CC:182:ILE:HD12	2.16	0.61
36:DA:141:A:H1'	36:DA:1408:C:O2'	2.00	0.61
1:AA:1442(B):A:H2'	1:AA:1442(B):A:N3	2.15	0.61
1:AA:539:A:H2'	1:AA:540:G:C8	2.35	0.61
1:CA:353:A:H5'	1:CA:353:A:C8	2.31	0.61
46:BN:18:ALA:HB3	46:BN:56:ASN:O	2.01	0.61
36:BA:582:G:H2'	36:BA:583:G:C8	2.36	0.61
36:BA:361:G:N2	36:BA:362:U:H1'	2.15	0.61
19:AS:32:LYS:H	19:AS:32:LYS:HZ3	1.46	0.61
1:AA:382:A:H2'	1:AA:383:A:C8	2.36	0.61
36:DA:136:G:H2'	36:DA:137:C:H6	1.65	0.61
4:CD:88:VAL:O	4:CD:92:VAL:HG23	2.01	0.61
3:AC:189:ALA:HB3	3:AC:196:LEU:HB2	1.82	0.61
38:BC:18:LYS:HD3	38:BC:20:TYR:CE2	2.36	0.61
1:AA:950:U:H2'	1:AA:951:G:H8	1.66	0.61
56:DX:63:LYS:HG3	56:DX:72:LYS:HG2	1.82	0.61
3:CC:23:TYR:CD1	3:CC:24:ALA:N	2.69	0.61
37:BB:112:U:H2'	37:BB:113:G:H8	1.64	0.61
8:AH:102:ARG:N	8:AH:102:ARG:HD3	2.15	0.61
36:DA:59:U:H3	36:DA:68:G:H1	1.48	0.61
1:AA:992:U:H4'	1:AA:993:G:O5'	1.99	0.61
36:DA:674:G:H1'	41:DF:74:ARG:HD2	1.81	0.61
7:CG:27:ILE:HD13	7:CG:40:ALA:HA	1.82	0.61
36:BA:2555:U:H2'	36:BA:2556:C:H5'	1.82	0.61
41:BF:22:ALA:HB1	41:BF:26:ALA:HB2	1.82	0.61
46:DN:9:VAL:HG21	46:DN:48:MET:HB2	1.80	0.61
39:DD:102:LYS:O	39:DD:103:ARG:HG2	2.01	0.61
36:BA:271(K):U:H3'	36:BA:271(L):U:C5'	2.30	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BY:13:VAL:HG11	57:BY:28:LYS:HD3	1.83	0.61
3:CC:79:ARG:CB	3:CC:79:ARG:HH11	2.09	0.61
36:BA:671:C:H2'	36:BA:672:C:C6	2.35	0.61
13:AM:11:ARG:O	13:AM:13:LYS:N	2.33	0.61
53:BU:95:LEU:O	53:BU:98:LEU:HG	2.01	0.61
36:BA:1058:G:C3'	36:BA:1059:G:C5'	2.78	0.61
42:BG:121:ASN:HB3	42:BG:124:SER:HB2	1.81	0.61
46:DN:32:THR:HG22	46:DN:37:LYS:HD3	1.82	0.61
40:BE:37:ARG:HA	40:BE:42:ASP:OD2	2.00	0.61
18:CR:31:LEU:H	18:CR:31:LEU:CD2	2.12	0.61
10:CJ:90:LEU:N	10:CJ:91:PRO:HD3	2.16	0.61
50:DR:4:LEU:HG	50:DR:4:LEU:O	2.00	0.61
36:DA:1385:G:H4'	36:DA:1386:C:OP1	2.00	0.61
36:DA:491:G:H2'	36:DA:492:A:C8	2.36	0.61
36:BA:1718:G:H2'	36:BA:1719:G:C8	2.36	0.61
35:B9:1:MET:CE	35:B9:31:LYS:HB3	2.30	0.61
13:CM:116:THR:O	13:CM:118:ALA:N	2.34	0.61
25:AZ:69:GLU:HG2	25:AZ:70:TYR:N	2.15	0.61
40:BE:94:GLU:OE2	40:BE:177:PRO:HB3	2.01	0.61
8:AH:89:PRO:HA	8:AH:92:ARG:NH1	2.15	0.61
25:CZ:200:TRP:O	25:CZ:204:ASP:HB2	2.00	0.61
36:DA:2591:C:H2'	36:DA:2592:G:C8	2.35	0.61
30:D4:5:ILE:HG12	30:D4:5:ILE:O	1.99	0.61
52:DT:30:VAL:CG2	52:DT:83:ILE:HG12	2.31	0.61
39:DD:62:TYR:CE1	39:DD:64:ILE:HA	2.36	0.61
41:DF:187:VAL:HG12	48:DP:7:ARG:HA	1.83	0.61
51:DS:93:LYS:O	51:DS:95:HIS:N	2.34	0.61
53:BU:85:LYS:HD3	53:BU:117:GLN:NE2	2.08	0.61
51:BS:20:ARG:HG2	51:BS:20:ARG:HH11	1.66	0.61
4:CD:22:LYS:HB2	4:CD:26:CYS:CB	2.30	0.61
58:BZ:23:LYS:HD3	58:BZ:38:TYR:CE1	2.34	0.61
25:AZ:193:ASN:HB2	25:AZ:196:VAL:CG1	2.29	0.61
3:AC:15:THR:CG2	3:AC:181:ASN:HA	2.30	0.61
1:CA:1116:C:H2'	1:CA:1117:G:C5'	2.31	0.61
1:AA:939:G:H5''	7:AG:102:ARG:NH2	2.16	0.61
25:CZ:291:ARG:HH11	25:CZ:291:ARG:HB2	1.65	0.61
58:BZ:10:ARG:NH2	58:BZ:36:LYS:HB2	2.16	0.61
40:BE:44:TYR:O	40:BE:45:THR:HB	2.00	0.61
36:BA:1786:A:H2	36:BA:2606:C:H1'	1.64	0.61
52:DT:35:LYS:NZ	52:DT:41:ARG:HD2	2.16	0.61
52:DT:82:LEU:H	52:DT:82:LEU:HD12	1.66	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:72:C:H2'	1:CA:73:G:H8	1.66	0.61
49:DQ:109:VAL:CG1	49:DQ:113:GLN:HB2	2.30	0.61
17:AQ:85:VAL:O	17:AQ:89:LEU:HG	2.01	0.61
4:CD:70:ILE:HG22	4:CD:71:SER:O	2.00	0.61
36:BA:470:A:OP1	41:BF:59:TYR:HE1	1.83	0.61
36:DA:2019:A:H2'	36:DA:2020:A:O5'	2.00	0.61
36:DA:2023:G:H5'	36:DA:2617:C:H4'	1.82	0.61
43:BH:83:TYR:CB	43:BH:135:GLY:H	2.14	0.61
46:DN:43:THR:HB	46:DN:46:VAL:HG11	1.82	0.61
34:D8:6:THR:CG2	34:D8:63:PRO:HD3	2.31	0.61
36:BA:611:C:H2'	36:BA:612:C:C6	2.36	0.61
36:BA:613:G:H5'	36:BA:613:G:H8	1.65	0.61
36:DA:654(C):G:C2'	36:DA:654(D):G:H5'	2.31	0.61
36:DA:611:C:H2'	36:DA:612:C:C6	2.36	0.61
32:B6:15:GLU:CD	32:B6:18:ARG:NE	2.55	0.61
48:DP:126:VAL:HG22	48:DP:145:PRO:HG2	1.82	0.61
37:BB:7:G:C2'	37:BB:8:U:H5''	2.31	0.61
58:DZ:10:ARG:HB3	58:DZ:36:LYS:HG3	1.82	0.61
2:AB:87:ARG:HH22	2:AB:232:PRO:CA	2.14	0.61
1:CA:1536:C:H42	23:CX:11:U:H3	1.47	0.61
58:DZ:163:LEU:HD12	58:DZ:165:VAL:HG21	1.83	0.61
1:CA:939:G:O3'	7:CG:102:ARG:NH2	2.34	0.61
1:AA:376:G:OP2	16:AP:67:THR:HG21	2.01	0.61
19:CS:49:ILE:O	19:CS:60:VAL:HG12	2.01	0.61
3:CC:52:LEU:HD12	3:CC:55:VAL:CG2	2.31	0.61
1:CA:433:C:H2'	1:CA:434:U:C6	2.36	0.61
17:AQ:67:LYS:O	17:AQ:68:ARG:CB	2.48	0.61
36:DA:496:G:H1'	55:DW:61:ASN:HD22	1.66	0.61
36:BA:1592:C:H2'	36:BA:1593:G:C8	2.36	0.61
36:DA:528:A:H2	36:DA:2043:C:C5'	2.13	0.61
1:CA:155:C:H2'	1:CA:156:G:H8	1.66	0.61
36:DA:1013:C:O2'	36:DA:1014:U:H5'	2.00	0.61
1:CA:382:A:H2'	1:CA:383:A:H8	1.66	0.61
1:AA:1048:G:H5''	14:AN:2:ALA:HB1	1.83	0.61
55:DW:59:VAL:HG12	55:DW:59:VAL:O	2.01	0.61
3:CC:60:ALA:O	3:CC:61:ALA:HB2	2.01	0.61
38:DC:50:ASP:OD2	38:DC:53:ARG:HG3	2.01	0.61
29:D3:39:ASP:OD1	29:D3:44:ARG:HD2	2.01	0.61
36:DA:1503:U:H2'	36:DA:1504:C:C6	2.35	0.60
31:D5:4:HIS:CB	31:D5:5:PRO:CD	2.72	0.60
4:CD:124:GLY:O	4:CD:126:ILE:N	2.33	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:26:G:OP1	55:DW:80:PRO:HB3	2.01	0.60
36:DA:671:C:H2'	36:DA:672:C:C6	2.36	0.60
48:DP:23:PRO:CB	48:DP:33:ARG:HG3	2.25	0.60
36:DA:658:C:H2'	36:DA:659:C:H6	1.64	0.60
36:BA:661:C:O3'	48:BP:18:ARG:HD2	2.01	0.60
30:B4:9:LEU:HD13	30:B4:10:VAL:H	1.65	0.60
36:DA:1109:C:H2'	36:DA:1110:G:O4'	2.01	0.60
13:CM:11:ARG:O	13:CM:13:LYS:N	2.33	0.60
53:DU:88:ILE:HD12	53:DU:109:LEU:HD22	1.83	0.60
40:DE:61:ARG:CB	40:DE:62:PRO:HD3	2.30	0.60
36:BA:141:A:H1'	36:BA:1408:C:O2'	2.01	0.60
36:DA:2784:C:H1'	40:DE:37:ARG:NH1	2.16	0.60
1:CA:1117:G:H5'	1:CA:1117:G:H8	1.64	0.60
36:DA:1077:A:OP2	58:DZ:111:VAL:HG11	2.01	0.60
54:DV:39:LEU:HA	54:DV:47:VAL:HG13	1.82	0.60
36:DA:361:G:N2	36:DA:362:U:H1'	2.16	0.60
3:AC:40:ARG:NH1	3:AC:40:ARG:HG3	2.16	0.60
1:AA:390:C:O3'	16:AP:28:ARG:NH2	2.34	0.60
36:DA:495:G:H21	55:DW:61:ASN:HD21	1.47	0.60
54:DV:2:PHE:CD1	54:DV:2:PHE:C	2.74	0.60
19:AS:49:ILE:O	19:AS:60:VAL:HG12	2.01	0.60
1:CA:992:U:H4'	1:CA:993:G:O5'	2.00	0.60
1:CA:1258:G:O2'	1:CA:1259:C:H5'	2.00	0.60
1:AA:56:U:H2'	1:AA:57:G:C8	2.36	0.60
25:AZ:258:LEU:O	25:AZ:259:ALA:HB3	2.01	0.60
1:AA:882:C:O2'	1:AA:883:C:H5'	2.00	0.60
44:DJ:118:UNK:O	44:DJ:119:UNK:C	2.48	0.60
49:DQ:42:ILE:HD13	49:DQ:97:VAL:CG2	2.31	0.60
37:DB:112:U:H2'	37:DB:113:G:H8	1.66	0.60
42:BG:7:LEU:HD22	42:BG:100:TRP:CZ3	2.36	0.60
1:CA:1004:A:H5'	1:CA:1005:A:OP2	2.02	0.60
36:BA:1540:U:H3'	36:BA:1541:G:C3'	2.29	0.60
22:AW:7:A:C4	22:AW:49:C:H5	2.19	0.60
46:BN:9:VAL:HG21	46:BN:48:MET:HB2	1.83	0.60
51:DS:54:LEU:HD13	51:DS:58:LEU:N	2.15	0.60
36:DA:271(K):U:H3'	36:DA:271(L):U:C5'	2.30	0.60
12:CL:18:VAL:CG2	12:CL:19:ARG:H	2.04	0.60
48:BP:59:LEU:HA	48:BP:61:ARG:HE	1.64	0.60
32:B6:42:TRP:HA	32:B6:42:TRP:HE3	1.64	0.60
48:DP:57:THR:OG1	48:DP:59:LEU:HB3	2.02	0.60
41:BF:32:LEU:O	41:BF:32:LEU:HD23	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1517:G:H2'	36:BA:1518:U:O4'	2.02	0.60
1:CA:1238:A:H8	1:CA:1241:G:O2'	1.74	0.60
3:CC:14:ILE:HD11	3:CC:179:ARG:HA	1.83	0.60
4:AD:138:TYR:HD1	4:AD:138:TYR:C	2.04	0.60
4:AD:138:TYR:CD1	4:AD:139:ARG:N	2.64	0.60
31:D5:48:GLU:O	31:D5:49:CYS:CB	2.48	0.60
1:AA:1125:U:O4	10:AJ:5:ARG:HG3	2.00	0.60
36:BA:1061:U:H4'	36:BA:1070:A:O4'	2.00	0.60
1:AA:1221:G:O2'	1:AA:1222:G:H5'	2.01	0.60
46:DN:32:THR:C	46:DN:34:LEU:H	2.05	0.60
41:DF:164:ARG:HG2	41:DF:164:ARG:NH1	2.15	0.60
36:DA:2854:G:H2'	36:DA:2855:C:C6	2.36	0.60
39:DD:130:ALA:C	39:DD:131:LEU:HD12	2.21	0.60
1:AA:346:G:N3	1:AA:346:G:H2'	2.16	0.60
36:DA:197:A:H8	36:DA:197:A:H5'	1.66	0.60
22:AW:44:G:H2'	22:AW:44:G:N3	2.16	0.60
36:DA:1335:U:H2'	36:DA:1336:A:C8	2.36	0.60
36:BA:469:G:C2'	36:BA:470:A:H5''	2.31	0.60
36:DA:2733:A:O2'	36:DA:2734:A:H5'	2.01	0.60
35:B9:29:ASN:HD22	35:B9:29:ASN:H	1.47	0.60
18:CR:59:SER:OG	18:CR:62:GLU:HG3	2.01	0.60
36:BA:852:G:O2'	36:BA:853:G:H5'	2.02	0.60
27:B1:51:VAL:O	27:B1:57:GLU:HA	2.01	0.60
58:DZ:162:GLU:O	58:DZ:162:GLU:HG3	1.99	0.60
8:CH:102:ARG:N	8:CH:102:ARG:HD3	2.15	0.60
18:AR:36:ASN:OD1	18:AR:38:GLU:HG2	2.01	0.60
42:BG:40:ASN:HB2	42:BG:91:ARG:HB2	1.81	0.60
43:DH:83:TYR:CB	43:DH:135:GLY:H	2.13	0.60
46:DN:9:VAL:CG1	46:DN:10:GLU:H	2.01	0.60
46:DN:133:GLN:CG	46:DN:135:PRO:HD3	2.30	0.60
1:AA:1417:G:C5'	1:AA:1417:G:C8	2.74	0.60
36:DA:2101:G:H2'	36:DA:2102:U:C5'	2.24	0.60
1:CA:542:G:H2'	1:CA:543:C:H6	1.67	0.60
48:DP:34:GLY:O	48:DP:35:HIS:HB2	2.00	0.60
43:BH:91:GLY:HA3	43:BH:94:TYR:HD2	1.65	0.60
1:CA:1221:G:O2'	1:CA:1222:G:H5'	2.01	0.60
36:DA:650:C:C3'	36:DA:651:G:H5''	2.29	0.60
2:CB:47:THR:O	2:CB:51:LEU:HB2	2.02	0.60
35:B9:35:ARG:O	35:B9:36:GLN:O	2.19	0.60
31:B5:56:LYS:O	31:B5:57:VAL:C	2.40	0.60
4:AD:158:ILE:O	4:AD:162:LEU:HB2	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:102:PHE:CD1	42:BG:102:PHE:O	2.54	0.60
1:AA:274:A:O2'	1:AA:275:G:C8	2.50	0.60
36:DA:2208:A:H1'	36:DA:2219:G:C4	2.36	0.60
36:DA:1332:G:N2	36:DA:1610:A:C8	2.69	0.60
1:AA:433:C:H2'	1:AA:434:U:C6	2.36	0.60
36:BA:2206:G:H21	36:BA:2207:G:H4'	1.66	0.60
36:BA:1363:C:H2'	36:BA:1364:G:H8	1.67	0.60
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.36	0.60
43:BH:58:GLU:O	43:BH:62:LYS:HB2	2.02	0.60
35:D9:1:MET:CE	35:D9:31:LYS:HB3	2.31	0.60
1:CA:1003:G:H21	1:CA:1039:C:H42	1.47	0.60
40:DE:52:LEU:HD23	40:DE:75:VAL:HB	1.83	0.60
36:DA:1448:G:N3	36:DA:1528(A):A:H2	1.99	0.60
41:BF:187:VAL:HG12	48:BP:7:ARG:HA	1.83	0.60
32:D6:53:LYS:CD	32:D6:54:ILE:H	2.14	0.60
57:BY:27:VAL:HG12	57:BY:29:GLU:H	1.66	0.60
57:BY:79:CYS:SG	57:BY:80:GLY:N	2.74	0.60
36:DA:654(U):A:H2'	36:DA:654(V):A:C8	2.36	0.60
48:DP:58:THR:C	48:DP:61:ARG:HE	2.05	0.60
3:AC:79:ARG:CB	3:AC:79:ARG:HH11	2.10	0.60
25:AZ:263:ARG:HB2	25:AZ:263:ARG:CZ	2.31	0.60
25:CZ:263:ARG:CZ	25:CZ:263:ARG:HB2	2.32	0.60
16:CP:53:VAL:HG23	16:CP:54:GLU:HG2	1.82	0.60
58:DZ:18:LEU:HD12	58:DZ:18:LEU:N	2.14	0.60
54:DV:40:LEU:HD22	54:DV:46:VAL:HA	1.84	0.60
54:DV:49:THR:HB	54:DV:50:PRO:HD2	1.83	0.60
57:DY:44:ILE:HD12	57:DY:44:ILE:N	2.16	0.60
12:CL:80:HIS:CB	24:CY:68:C:H4'	2.32	0.60
53:DU:66:ASN:HD21	53:DU:76:TYR:H	1.48	0.60
46:DN:72:TYR:HD2	46:DN:90:MET:HG3	1.65	0.60
26:D0:16:SER:HB2	36:DA:2262:U:C5	2.36	0.60
1:CA:346:G:H2'	1:CA:346:G:N3	2.17	0.60
5:CE:40:ARG:NH2	5:CE:66:MET:HG2	2.16	0.60
24:AY:61:C:O2'	24:AY:62:U:H5''	2.01	0.60
53:BU:17:ILE:HG23	53:BU:39:LEU:HD12	1.84	0.60
39:DD:224:ALA:O	39:DD:226:MET:N	2.34	0.60
36:DA:1363:C:H2'	36:DA:1364:G:H8	1.66	0.60
48:DP:85:LEU:HA	48:DP:88:LEU:CB	2.31	0.60
22:CV:56:C:C1'	42:DG:76:SER:HB2	2.31	0.60
1:CA:882:C:O2'	1:CA:883:C:H5'	2.01	0.60
38:BC:96:GLY:HA3	38:BC:99:ILE:HD11	1.84	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:32:TYR:CD1	52:DT:32:TYR:N	2.69	0.60
28:B2:65:ASN:O	28:B2:67:LYS:N	2.34	0.60
36:BA:2092:U:H4'	36:BA:2093:G:C5'	2.20	0.60
36:BA:636:G:OP1	48:BP:132:LYS:HE2	2.01	0.60
41:DF:185:ASP:HA	41:DF:188:ARG:HD3	1.83	0.60
24:CY:70:C:O2'	24:CY:71:C:H5'	2.02	0.60
57:DY:84:ARG:CZ	57:DY:97:ARG:HB3	2.32	0.60
57:BY:17:SER:CB	57:BY:71:LYS:HE2	2.30	0.60
1:CA:540:G:H2'	1:CA:541:G:C8	2.35	0.60
48:BP:40:SER:O	48:BP:41:ARG:HD3	2.00	0.60
32:D6:5:VAL:HB	36:DA:2284:C:OP2	2.01	0.60
51:BS:85:VAL:O	51:BS:106:ARG:HG3	1.99	0.60
7:AG:37:ASN:O	7:AG:41:ARG:HG3	2.01	0.60
1:CA:1125:U:O4	10:CJ:5:ARG:HG3	2.02	0.60
2:CB:42:ILE:CD1	2:CB:202:PRO:HB2	2.31	0.60
10:AJ:28:ARG:HH11	10:AJ:28:ARG:HB3	1.66	0.60
1:AA:961:U:O2'	1:AA:962:C:O5'	2.19	0.60
28:B2:18:PRO:CG	28:B2:72:ALA:HA	2.31	0.60
36:DA:271(R):G:O2'	36:DA:271(S):G:H5'	2.01	0.60
36:DA:2061:G:H5''	36:DA:2503:A:C2	2.37	0.60
54:DV:55:ALA:O	54:DV:56:SER:HB3	2.01	0.60
36:DA:970:C:H2'	36:DA:971:C:C6	2.36	0.60
58:DZ:34:ASN:O	58:DZ:35:ARG:HD2	2.01	0.60
34:D8:39:LYS:HG3	34:D8:43:GLN:NE2	2.17	0.60
39:DD:142:VAL:HG21	39:DD:191:ALA:HB1	1.84	0.60
25:CZ:104:LEU:HD23	25:CZ:133:VAL:HG22	1.83	0.60
1:CA:444:C:H2'	1:CA:445:G:C8	2.35	0.60
36:BA:496:G:H1'	55:BW:61:ASN:HD22	1.67	0.60
1:CA:522:C:H41	12:CL:53:ARG:HH22	1.48	0.60
12:CL:69:TYR:HB2	12:CL:96:VAL:HG11	1.84	0.60
36:DA:898:C:H2'	36:DA:899:A:O4'	2.02	0.60
24:CY:61:C:O2'	24:CY:62:U:H5''	2.02	0.60
5:CE:147:ASP:HB3	5:CE:150:ARG:HH12	1.66	0.60
14:CN:19:ARG:O	14:CN:20:ALA:C	2.40	0.60
36:BA:136:G:H2'	36:BA:137:C:H6	1.65	0.60
38:DC:96:GLY:HA3	38:DC:99:ILE:HD11	1.83	0.60
46:BN:133:GLN:CG	46:BN:135:PRO:HD3	2.30	0.60
42:DG:57:ALA:HA	42:DG:90:LEU:HD21	1.83	0.60
42:DG:87:PRO:O	42:DG:88:ILE:HG12	2.01	0.60
4:AD:100:ARG:O	4:AD:104:VAL:HG23	2.01	0.60
36:BA:1499:C:H6	36:BA:1499:C:C5'	2.10	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:30:THR:HG22	50:BR:31:HIS:ND1	2.16	0.60
2:AB:142:LEU:HD21	2:AB:146:GLN:NE2	2.16	0.60
48:BP:97:PRO:HD3	48:BP:126:VAL:O	2.02	0.60
36:DA:1499:C:H6	36:DA:1499:C:C5'	2.11	0.60
58:BZ:28:MET:O	58:BZ:34:ASN:HA	2.01	0.60
43:DH:105:LEU:N	43:DH:105:LEU:HD23	2.14	0.60
36:DA:2523:G:C2'	36:DA:2524:G:H5''	2.32	0.60
51:DS:35:ILE:H	51:DS:53:SER:HB2	1.67	0.60
1:CA:627:G:H2'	1:CA:628:G:H8	1.66	0.60
36:BA:654(C):G:C2'	36:BA:654(D):G:H5'	2.32	0.60
19:AS:16:LEU:N	19:AS:16:LEU:HD12	2.17	0.60
1:CA:194:C:C2'	1:CA:195:A:H5''	2.31	0.60
52:BT:35:LYS:HZ3	52:BT:41:ARG:HD2	1.67	0.60
49:DQ:19:GLY:O	49:DQ:98:LYS:HD3	2.02	0.60
39:DD:223:GLY:C	39:DD:224:ALA:O	2.39	0.60
16:AP:75:ARG:O	16:AP:78:GLY:N	2.26	0.60
44:DJ:97:UNK:HA	44:DJ:131:UNK:O	2.02	0.60
46:DN:96:GLU:H	46:DN:96:GLU:CD	2.05	0.60
40:BE:120:TRP:CE3	40:BE:155:LYS:HE3	2.36	0.60
5:AE:64:ARG:CZ	5:AE:64:ARG:HB2	2.30	0.60
1:CA:736:C:H2'	1:CA:737:A:C8	2.36	0.60
1:CA:927:G:OP2	1:CA:927:G:H4'	2.01	0.60
1:CA:56:U:H2'	1:CA:57:G:C8	2.36	0.60
36:DA:1921:G:O2'	36:DA:1922:G:H5'	2.02	0.60
7:AG:38:LEU:O	7:AG:38:LEU:HD12	2.01	0.60
49:BQ:5:ARG:HB2	49:BQ:5:ARG:CZ	2.30	0.60
6:CF:25:ILE:HD13	6:CF:25:ILE:O	2.01	0.60
36:DA:2248:C:H2'	36:DA:2249:U:H5'	1.83	0.60
1:CA:96:U:H2'	1:CA:97:G:N7	2.17	0.60
28:B2:35:LEU:HD13	28:B2:36:ARG:N	2.16	0.60
9:AI:90:PRO:HG2	9:AI:91:ASP:H	1.67	0.60
9:CI:53:VAL:O	9:CI:55:ALA:N	2.34	0.60
52:BT:28:VAL:O	52:BT:29:ARG:CB	2.48	0.60
5:AE:80:ILE:HG13	5:AE:91:LEU:HB2	1.83	0.60
36:BA:603:A:H1'	36:BA:604:G:OP1	2.01	0.60
36:BA:1678:G:H22	36:BA:1989:G:H22	1.45	0.60
29:B3:29:ARG:HH22	36:BA:1183:G:H4'	1.66	0.60
52:DT:23:ARG:HG2	52:DT:120:ARG:HH12	1.65	0.60
58:DZ:58:VAL:HA	58:DZ:67:LEU:O	2.02	0.60
34:D8:15:LYS:HB2	48:DP:65:ARG:NH2	2.17	0.60
13:AM:3:ARG:NH2	13:AM:7:VAL:HG13	2.16	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1038:C:C2'	36:DA:1039:G:H5''	2.31	0.60
1:CA:390:C:O3'	16:CP:28:ARG:NH2	2.35	0.60
6:AF:10:LEU:HD11	6:AF:61:LEU:HD11	1.84	0.60
22:CW:44:G:H2'	22:CW:44:G:N3	2.17	0.60
36:BA:2074:U:H2'	36:BA:2075:U:C6	2.37	0.60
36:DA:2681:C:H5	36:DA:2725:A:H62	1.49	0.60
36:BA:1398:C:O2'	36:BA:1399:C:H5'	2.02	0.60
29:B3:39:ASP:OD1	29:B3:44:ARG:HD2	2.02	0.60
1:AA:1096:C:H5''	2:AB:137:ARG:HH21	1.66	0.60
56:DX:8:ILE:H	56:DX:8:ILE:HD12	1.66	0.60
53:BU:101:ARG:HH11	53:BU:101:ARG:HG3	1.67	0.60
38:DC:116:THR:HG22	38:DC:147:PHE:HA	1.84	0.60
40:DE:33:VAL:HG13	40:DE:33:VAL:O	2.02	0.60
56:BX:12:VAL:HG12	56:BX:27:THR:O	2.01	0.60
36:BA:1448:G:N3	36:BA:1528(A):A:H2	2.00	0.60
39:BD:62:TYR:CE1	39:BD:64:ILE:HA	2.36	0.60
52:BT:19:LEU:HD22	52:BT:85:LYS:HD3	1.82	0.60
52:BT:33:LYS:CE	52:BT:43:GLN:HE21	1.98	0.60
52:BT:28:VAL:HG22	52:BT:46:GLU:HA	1.84	0.60
36:DA:2312:U:H2'	36:DA:2313:C:H5''	1.84	0.60
32:B6:53:LYS:O	32:B6:54:ILE:OXT	2.20	0.60
36:BA:28:A:H61	36:BA:512:G:H1'	1.67	0.60
26:D0:70:GLN:NE2	26:D0:80:HIS:NE2	2.50	0.60
36:BA:676:A:H8	36:BA:2069:G:N2	1.94	0.60
36:BA:996:A:O3'	53:BU:92:ARG:HG2	2.02	0.60
36:BA:140:G:H1'	36:BA:141:A:H2	1.67	0.60
12:AL:26:ALA:HA	12:AL:64:TYR:CD2	2.37	0.60
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.02	0.60
41:BF:157:VAL:CG2	41:BF:194:MET:HG2	2.32	0.60
1:AA:1065:U:C5	1:AA:1190:G:H1'	2.37	0.60
54:BV:55:ALA:O	54:BV:56:SER:HB3	2.00	0.60
36:DA:848:G:N9	36:DA:933:A:H8	2.00	0.60
10:AJ:4:ILE:HB	10:AJ:74:ILE:CG1	2.31	0.60
1:CA:59:A:H5'	1:CA:60:A:H5''	1.83	0.60
7:CG:78:ARG:O	7:CG:80:VAL:N	2.35	0.60
36:BA:814:C:H2'	36:BA:815:C:H6	1.66	0.60
36:BA:271(R):G:O2'	36:BA:271(S):G:H5'	2.01	0.60
36:BA:1188:U:H4'	54:BV:79:VAL:CG2	2.31	0.60
53:DU:48:ALA:O	53:DU:52:ARG:HG3	2.02	0.60
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.36	0.60
58:BZ:6:LYS:HD3	58:BZ:60:GLU:HB2	1.84	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2866:U:C6	36:BA:2868:A:H1'	2.36	0.60
49:BQ:35:VAL:HG12	49:BQ:130:LYS:O	2.02	0.60
20:AT:74:LYS:HD3	20:AT:74:LYS:N	2.16	0.60
18:CR:32:ARG:HA	18:CR:69:THR:HG21	1.83	0.60
36:BA:2113:U:H2'	36:BA:2114:A:H8	1.66	0.60
36:BA:2115:G:N3	36:BA:2117:A:N7	2.50	0.60
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.02	0.60
38:BC:128:GLY:HA2	38:BC:137:LEU:HD23	1.83	0.60
52:DT:65:LYS:HG3	52:DT:66:VAL:N	2.17	0.60
25:CZ:258:LEU:O	25:CZ:259:ALA:HB3	2.00	0.60
52:DT:29:ARG:CB	52:DT:85:LYS:HA	2.32	0.60
42:DG:54:GLU:OE1	42:DG:55:LYS:N	2.35	0.60
42:DG:77:ILE:HB	42:DG:80:PHE:O	2.02	0.60
32:D6:15:GLU:OE2	32:D6:18:ARG:NH2	2.35	0.60
5:CE:80:ILE:HG13	5:CE:91:LEU:HB2	1.82	0.60
32:B6:25:LYS:HD2	36:BA:2285:C:H41	1.67	0.60
1:AA:1456:G:C2	1:AA:1457:G:H1'	2.37	0.60
25:AZ:263:ARG:HG3	25:AZ:264:LYS:N	2.17	0.60
2:AB:17:PHE:HD2	2:AB:44:LEU:HD11	1.66	0.60
2:AB:42:ILE:HD11	2:AB:202:PRO:HB2	1.83	0.60
47:BO:35:VAL:HG21	47:BO:103:ALA:CB	2.31	0.60
42:BG:111:LEU:O	42:BG:114:ILE:HG22	2.01	0.60
54:BV:40:LEU:HD22	54:BV:46:VAL:HA	1.83	0.60
16:AP:67:THR:HB	16:AP:70:ALA:CB	2.32	0.60
10:CJ:34:VAL:CG2	10:CJ:74:ILE:HG22	2.32	0.60
22:CW:30:G:H2'	22:CW:31:A:H8	1.67	0.60
36:BA:1332:G:N2	36:BA:1609:A:O2'	2.34	0.60
16:AP:43:LYS:O	16:AP:45:THR:N	2.35	0.60
12:AL:77:LEU:HD11	12:AL:107:ALA:HA	1.82	0.60
36:DA:2779:U:H1'	36:DA:2781:A:C6	2.37	0.60
40:BE:44:TYR:O	40:BE:45:THR:CB	2.49	0.60
46:DN:2:LYS:HZ1	54:DV:13:ARG:H	1.50	0.60
36:BA:16:G:O2'	36:BA:17:G:H5'	2.01	0.60
1:AA:254:G:OP1	17:AQ:67:LYS:O	2.20	0.60
36:DA:2886:G:H2'	36:DA:2887:U:C6	2.37	0.60
25:CZ:226:GLU:O	25:CZ:300:ARG:HD2	2.02	0.60
38:BC:29:VAL:HG11	38:BC:214:VAL:HG12	1.84	0.60
27:D1:8:SER:OG	27:D1:10:LYS:HG3	2.01	0.60
18:AR:26:LEU:CD2	18:AR:39:VAL:HG13	2.31	0.60
1:CA:57:G:H2'	1:CA:58:C:C6	2.37	0.60
1:AA:748:C:H4'	1:AA:749:C:O5'	2.02	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:77:ARG:HD3	48:BP:78:PRO:HD2	1.81	0.60
38:BC:40:THR:HG22	38:BC:177:LYS:HD2	1.84	0.60
48:BP:85:LEU:HA	48:BP:88:LEU:HB2	1.84	0.60
36:BA:1750:G:O2'	36:BA:1751:C:H5'	2.01	0.60
36:BA:391:G:O2'	36:BA:392:C:H5'	2.02	0.60
53:BU:44:ASN:ND2	54:BV:75:PHE:HB3	2.17	0.60
20:AT:25:ARG:HG3	20:AT:25:ARG:HH11	1.65	0.60
28:B2:52:ASP:O	28:B2:56:GLN:HG2	2.02	0.60
1:CA:1039:C:H2'	1:CA:1040:U:C6	2.37	0.60
13:CM:65:LYS:O	13:CM:70:LEU:HD12	2.02	0.60
58:BZ:150:LEU:HD23	58:BZ:171:ILE:HD11	1.82	0.60
9:CI:90:PRO:HG2	9:CI:91:ASP:H	1.67	0.60
36:DA:2099:U:H2'	36:DA:2100:G:H8	1.62	0.60
51:BS:58:LEU:HG	51:BS:59:LYS:H	1.66	0.60
57:DY:27:VAL:HG12	57:DY:29:GLU:H	1.67	0.60
51:BS:89:ARG:HG3	51:BS:92:TYR:CA	2.31	0.60
36:BA:654(U):A:H2'	36:BA:654(V):A:C8	2.37	0.60
41:DF:100:THR:O	41:DF:100:THR:HG22	2.00	0.60
41:DF:101:LEU:HD12	41:DF:102:PRO:HD2	1.83	0.60
42:DG:114:ILE:C	42:DG:116:ASP:H	2.04	0.60
29:D3:29:ARG:HH22	36:DA:1183:G:H4'	1.67	0.60
36:DA:2572:A:N7	40:DE:145:LYS:HB2	2.16	0.60
13:AM:57:ARG:HH12	30:B4:34:GLU:HG3	1.66	0.60
22:CW:30:G:H2'	22:CW:31:A:C8	2.37	0.60
1:CA:192:U:H1'	20:CT:103:GLY:HA2	1.82	0.60
2:CB:111:ARG:HG2	2:CB:111:ARG:HH11	1.67	0.60
36:DA:2162:G:O2'	36:DA:2163:C:H5'	2.01	0.60
1:AA:339:C:OP2	47:BO:97:ARG:NH1	2.35	0.60
50:BR:103:ARG:O	50:BR:104:ARG:HB2	2.02	0.60
1:CA:382:A:H2'	1:CA:383:A:C8	2.37	0.60
19:AS:44:MET:SD	19:AS:44:MET:N	2.75	0.60
4:AD:70:ILE:HG22	4:AD:71:SER:O	2.01	0.60
17:CQ:45:HIS:CD2	17:CQ:47:PRO:HD3	2.37	0.60
1:CA:559:A:P	5:CE:126:ARG:HH22	2.24	0.60
12:CL:51:ALA:C	12:CL:52:LEU:HD22	2.22	0.60
25:CZ:121:LEU:O	25:CZ:125:GLN:HG2	2.02	0.60
7:AG:27:ILE:HD13	7:AG:40:ALA:HA	1.83	0.60
27:B1:60:PHE:CE1	27:B1:91:LYS:HG3	2.37	0.60
22:CV:4:C:H2'	22:CV:5:G:H5''	1.84	0.60
13:AM:15:VAL:HG22	13:AM:43:THR:O	2.02	0.59
1:CA:227:G:C3'	1:CA:228:A:H5''	2.31	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:228:A:C5'	1:CA:228:A:H8	2.14	0.59
52:DT:28:VAL:HG22	52:DT:46:GLU:HA	1.84	0.59
36:BA:2312:U:H2'	36:BA:2313:C:C5'	2.32	0.59
42:BG:47:LYS:HE3	42:BG:81:LYS:HB3	1.84	0.59
22:CW:7:A:C4	22:CW:49:C:H5	2.20	0.59
42:DG:77:ILE:HG22	42:DG:79:ASN:O	2.02	0.59
25:CZ:355:LEU:HD23	25:CZ:368:VAL:HG11	1.84	0.59
57:BY:98:VAL:O	57:BY:99:CYS:SG	2.59	0.59
14:CN:59:ALA:O	14:CN:60:SER:CB	2.45	0.59
54:DV:99:ILE:O	54:DV:99:ILE:HG12	2.01	0.59
39:DD:43:ARG:HB2	39:DD:54:ARG:CB	2.32	0.59
6:CF:10:LEU:HD11	6:CF:61:LEU:HD11	1.84	0.59
4:CD:138:TYR:HD1	4:CD:138:TYR:C	2.04	0.59
52:DT:50:ILE:HD13	52:DT:64:ARG:HB3	1.84	0.59
50:DR:2:ARG:HG3	50:DR:2:ARG:NH1	2.17	0.59
49:DQ:60:ARG:HB3	49:DQ:60:ARG:HH11	1.63	0.59
13:CM:49:THR:HB	13:CM:52:GLU:HG3	1.84	0.59
22:CW:74:C:H4'	27:D1:23:LYS:HE2	1.84	0.59
36:DA:325:G:H2'	36:DA:326:G:C8	2.35	0.59
36:DA:774:A:H2	36:DA:787:U:O2'	1.84	0.59
1:AA:191:G:C4	20:AT:105:SER:HB3	2.35	0.59
49:BQ:22:LYS:H	58:BZ:78:LYS:NZ	1.99	0.59
24:AY:70:C:O2'	24:AY:71:C:H5'	2.02	0.59
16:CP:49:LEU:HD12	16:CP:50:LYS:H	1.66	0.59
38:BC:10:LEU:HD11	38:BC:34:THR:OG1	2.02	0.59
8:AH:12:ARG:NH1	8:AH:27:PRO:HD3	2.17	0.59
1:CA:1429:C:H2'	1:CA:1430:C:C6	2.37	0.59
5:CE:64:ARG:HB2	5:CE:64:ARG:CZ	2.32	0.59
25:AZ:200:TRP:O	25:AZ:204:ASP:HB2	2.02	0.59
58:BZ:62:PRO:C	58:BZ:64:GLY:H	2.04	0.59
58:BZ:76:LEU:HD23	58:BZ:83:PRO:HA	1.84	0.59
36:DA:118:A:N3	36:DA:178:G:H1'	2.17	0.59
46:BN:12:ARG:HB3	46:BN:50:ASP:OD1	2.02	0.59
36:DA:1642:G:O2'	36:DA:1643:G:H5'	2.02	0.59
46:DN:12:ARG:HB3	46:DN:50:ASP:OD1	2.02	0.59
1:AA:559:A:P	5:AE:126:ARG:HH22	2.24	0.59
1:CA:1005:A:H5'	1:CA:1037:C:O2	2.02	0.59
1:AA:1004:A:H5'	1:AA:1005:A:OP2	2.01	0.59
1:AA:1006:C:N4	1:AA:1024:G:H21	1.99	0.59
34:B8:6:THR:HG21	34:B8:63:PRO:HD3	1.84	0.59
41:DF:185:ASP:HA	41:DF:188:ARG:CD	2.31	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1330:U:H5'	1:CA:1331:G:OP2	2.02	0.59
36:DA:2312:U:H2'	36:DA:2313:C:C5'	2.32	0.59
50:BR:99:LYS:CD	50:BR:99:LYS:H	2.01	0.59
57:DY:81:LYS:O	57:DY:82:PRO:O	2.20	0.59
32:B6:9:LEU:HD22	32:B6:10:LEU:N	2.17	0.59
51:BS:89:ARG:HG3	51:BS:92:TYR:HA	1.83	0.59
36:DA:1188:U:H4'	54:DV:79:VAL:HG22	1.84	0.59
1:CA:979:C:H2'	1:CA:980:C:H5''	1.83	0.59
20:AT:57:ARG:HD3	20:AT:102:GLY:HA2	1.83	0.59
2:CB:17:PHE:CD2	2:CB:44:LEU:HD11	2.36	0.59
39:BD:183:ARG:HG2	39:BD:183:ARG:NH1	2.16	0.59
31:D5:56:LYS:O	31:D5:57:VAL:C	2.39	0.59
50:DR:2:ARG:HD2	50:DR:2:ARG:O	2.00	0.59
36:DA:145:G:C2'	36:DA:146:G:H5''	2.30	0.59
36:BA:848:G:N3	36:BA:933:A:H1'	2.17	0.59
28:B2:27:GLU:O	28:B2:30:ARG:HB3	2.01	0.59
36:BA:1720:U:C3'	36:BA:1721:G:H5''	2.31	0.59
1:AA:977:A:C2'	1:AA:977:A:N3	2.64	0.59
6:AF:62:TRP:C	6:AF:63:TYR:HD1	2.04	0.59
9:CI:99:LEU:HD22	9:CI:99:LEU:N	2.16	0.59
31:D5:11:THR:OG1	36:DA:1264:G:H5'	2.01	0.59
8:AH:2:LEU:HD21	8:AH:5:PRO:HA	1.84	0.59
27:D1:62:VAL:HG22	27:D1:63:ALA:O	2.02	0.59
38:DC:128:GLY:HA2	38:DC:137:LEU:HD23	1.84	0.59
3:CC:3:ASN:CG	3:CC:4:LYS:H	2.04	0.59
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.02	0.59
38:BC:116:THR:HG22	38:BC:147:PHE:HA	1.84	0.59
36:DA:32:C:O2'	36:DA:33:U:H5'	2.02	0.59
1:AA:1039:C:H2'	1:AA:1040:U:C6	2.37	0.59
32:D6:15:GLU:OE1	32:D6:18:ARG:CG	2.50	0.59
57:DY:77:PRO:O	57:DY:99:CYS:SG	2.61	0.59
57:DY:81:LYS:HD3	57:DY:97:ARG:HG3	1.85	0.59
3:CC:81:GLY:HA3	3:CC:85:ARG:CZ	2.31	0.59
48:DP:95:VAL:HG23	48:DP:125:VAL:HA	1.83	0.59
36:DA:1019:U:H3	36:DA:1142(A):A:N6	1.94	0.59
51:DS:30:ARG:NH2	51:DS:62:LYS:HD3	2.11	0.59
36:DA:512:G:HO2'	36:DA:513:A:H8	1.49	0.59
43:DH:54:ARG:HG2	43:DH:54:ARG:NH1	2.17	0.59
1:AA:858:G:C5	1:AA:869:G:N7	2.70	0.59
12:AL:81:SER:HA	12:AL:106:ASP:OD2	2.02	0.59
31:B5:25:LEU:HD12	55:BW:19:LEU:HG	1.83	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:138:TYR:CD1	4:AD:138:TYR:C	2.76	0.59
3:AC:14:ILE:HG12	3:AC:15:THR:N	2.17	0.59
1:AA:1319:A:H5'	1:AA:1320:C:OP1	2.02	0.59
28:B2:6:VAL:HG12	28:B2:10:LEU:HD21	1.83	0.59
20:AT:26:ASN:HD22	20:AT:26:ASN:N	2.00	0.59
36:DA:848:G:H8	36:DA:848:G:H5'	1.67	0.59
36:DA:2712:U:O2'	36:DA:2713:A:H5'	2.01	0.59
24:AY:57:G:C2'	24:AY:58:A:H5'	2.33	0.59
1:CA:198:G:O2'	1:CA:199:G:H8	1.85	0.59
41:BF:114:VAL:HG21	41:BF:202:PHE:CE1	2.37	0.59
1:CA:1354:C:H2'	1:CA:1355:G:H8	1.66	0.59
36:DA:2555:U:H2'	36:DA:2556:C:H5'	1.83	0.59
36:BA:2032:G:OP2	36:BA:2454:G:O2'	2.20	0.59
1:CA:1096:C:H5''	2:CB:137:ARG:HH21	1.67	0.59
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.37	0.59
22:AV:1:G:H1'	26:B0:5:LYS:NZ	2.16	0.59
21:CU:3:LYS:HB3	21:CU:14:TRP:CD1	2.37	0.59
36:BA:898:C:H2'	36:BA:899:A:O4'	2.02	0.59
1:AA:1054:C:O2'	1:AA:1055:A:C5'	2.50	0.59
39:DD:24:ILE:HG23	39:DD:25:THR:H	1.67	0.59
46:DN:45:ASN:HD22	46:DN:45:ASN:H	1.50	0.59
36:DA:2101:G:C3'	36:DA:2102:U:H5''	2.32	0.59
36:DA:271(L):U:C5'	36:DA:271(M):G:H5'	2.21	0.59
32:D6:13:CYS:O	32:D6:21:TYR:HA	2.02	0.59
57:BY:77:PRO:O	57:BY:99:CYS:SG	2.61	0.59
4:AD:4:TYR:O	4:AD:5:ILE:HB	2.01	0.59
34:B8:41:ILE:HD12	36:BA:2419:U:OP1	2.02	0.59
34:D8:32:LEU:HG	34:D8:36:LYS:HZ3	1.65	0.59
4:CD:19:LEU:HD12	4:CD:19:LEU:N	2.16	0.59
36:BA:661:C:H4'	48:BP:16:ARG:NH1	2.18	0.59
39:DD:183:ARG:HG2	39:DD:183:ARG:NH1	2.17	0.59
1:CA:1319:A:H5'	1:CA:1320:C:OP1	2.02	0.59
1:CA:265:G:C2'	1:CA:266:G:H5''	2.31	0.59
25:CZ:26:THR:HG21	60:CZ:501:GDP:C8	2.37	0.59
36:BA:140:G:H1'	36:BA:141:A:C2	2.37	0.59
1:AA:542:G:H2'	1:AA:543:C:H6	1.68	0.59
16:AP:53:VAL:HG23	16:AP:54:GLU:HG2	1.85	0.59
22:CV:51:U:H2'	22:CV:52:G:H8	1.66	0.59
16:AP:8:ARG:NH2	16:AP:15:PRO:HG3	2.17	0.59
36:DA:1480:G:H2'	36:DA:1481:U:C5'	2.30	0.59
25:AZ:226:GLU:O	25:AZ:300:ARG:HD2	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1480:G:H2'	36:BA:1481:U:C5'	2.31	0.59
25:AZ:131:ILE:O	25:AZ:168:VAL:HG13	2.02	0.59
36:DA:2115:G:N3	36:DA:2117:A:N7	2.50	0.59
36:DA:1192:G:O2'	36:DA:1193:G:H5'	2.02	0.59
49:BQ:19:GLY:HA3	58:BZ:79:ARG:HH22	1.68	0.59
1:CA:1030(D):A:H2'	1:CA:1031:G:H5'	1.84	0.59
1:CA:665:A:H2'	1:CA:732:C:O2	2.02	0.59
38:DC:161:ILE:HG21	38:DC:174:PRO:HG2	1.83	0.59
6:CF:28:ARG:HG3	6:CF:28:ARG:HH11	1.67	0.59
28:B2:22:GLU:O	28:B2:26:ARG:HB2	2.03	0.59
43:DH:84:SER:O	43:DH:85:LYS:HB3	2.02	0.59
36:BA:2186:G:H2'	36:BA:2187:G:C8	2.38	0.59
36:BA:30:G:H2'	36:BA:31:C:C6	2.38	0.59
10:AJ:61:GLU:OE2	14:AN:49:HIS:HE1	1.86	0.59
32:B6:52:VAL:HG12	32:B6:53:LYS:H	1.68	0.59
36:DA:2148:G:O2'	36:DA:2149:G:H5'	2.02	0.59
42:DG:37:VAL:HG21	42:DG:103:LEU:HD11	1.84	0.59
48:BP:16:ARG:CB	48:BP:16:ARG:HH11	2.16	0.59
36:BA:1678:G:N2	36:BA:1989:G:N2	2.47	0.59
36:BA:1210:A:C8	36:BA:1210:A:H5'	2.37	0.59
53:DU:92:ARG:HH21	54:DV:10:LYS:HB3	1.65	0.59
53:BU:92:ARG:HH21	54:BV:10:LYS:CB	2.16	0.59
36:DA:1207:C:H2'	36:DA:1208:C:C6	2.33	0.59
36:DA:330:A:HO2'	36:DA:331:A:H8	1.49	0.59
36:BA:1058:G:C3'	36:BA:1059:G:H5''	2.32	0.59
31:B5:48:GLU:O	31:B5:49:CYS:CB	2.50	0.59
36:BA:2884:U:H2'	36:BA:2885:C:H5'	1.84	0.59
36:DA:34:C:H41	36:DA:447:A:N6	2.00	0.59
55:DW:82:LEU:N	55:DW:82:LEU:HD12	2.14	0.59
1:AA:1158:C:C2'	1:AA:1158:C:O2	2.49	0.59
46:DN:18:ALA:HB3	46:DN:56:ASN:O	2.02	0.59
36:DA:1450(A):C:H2'	36:DA:1451:C:C5	2.38	0.59
50:DR:72:ASP:HB3	50:DR:75:LEU:HB3	1.84	0.59
40:DE:44:TYR:O	40:DE:45:THR:CB	2.51	0.59
36:BA:693:C:O2'	36:BA:694:U:H5'	2.03	0.59
36:BA:1082:U:O2'	44:BJ:38:UNK:HA	2.03	0.59
36:BA:1270:C:H5''	36:BA:1271:G:O5'	2.03	0.59
25:AZ:126:VAL:HG13	61:AZ:502:KIR:C47	2.33	0.59
1:CA:178:C:O2'	1:CA:179:A:H5'	2.03	0.59
36:BA:2591:C:H2'	36:BA:2592:G:C8	2.37	0.59
17:CQ:9:VAL:HG11	17:CQ:84:LEU:HD12	1.85	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:60:ALA:O	3:AC:61:ALA:HB2	2.01	0.59
13:CM:3:ARG:NH2	13:CM:7:VAL:HG13	2.17	0.59
28:B2:60:LEU:HA	28:B2:63:VAL:CG2	2.33	0.59
36:BA:297:C:H2'	36:BA:298:G:O4'	2.02	0.59
41:BF:168:ARG:CG	41:BF:175:THR:HG21	2.23	0.59
52:BT:32:TYR:N	52:BT:32:TYR:CD1	2.70	0.59
36:DA:2833:G:H3'	36:DA:2834:G:H5'	1.82	0.59
36:DA:2631:G:N2	40:DE:61:ARG:NH1	2.50	0.59
36:DA:2632:A:O2'	40:DE:61:ARG:NH2	2.35	0.59
4:CD:55:ALA:O	4:CD:59:ARG:HG2	2.03	0.59
36:DA:1058:G:C3'	36:DA:1059:G:H5''	2.32	0.59
40:DE:117:MET:CE	40:DE:136:ARG:HA	2.32	0.59
41:BF:206:ILE:HG22	41:BF:207:GLY:N	2.17	0.59
19:AS:78:ARG:O	19:AS:81:ARG:HD3	2.02	0.59
55:DW:11:ARG:HG2	55:DW:11:ARG:NH1	2.15	0.59
7:CG:113:GLU:O	7:CG:119:ARG:HD3	2.03	0.59
36:DA:139(A):G:N2	56:DX:44:GLU:OE1	2.30	0.59
16:CP:8:ARG:NH2	16:CP:15:PRO:HG3	2.18	0.59
22:CV:44:G:H2'	22:CV:45:U:H5'	1.85	0.59
5:CE:64:ARG:HH11	5:CE:64:ARG:HG3	1.68	0.59
1:AA:180:U:H2'	1:AA:181:G:H5'	1.82	0.59
36:BA:176:G:O2'	36:BA:177:G:H5'	2.03	0.59
36:BA:2389:G:H5''	36:BA:2390:U:H5'	1.84	0.59
3:AC:23:TYR:CD1	3:AC:24:ALA:N	2.71	0.59
36:BA:1095:A:H2'	36:BA:1096:A:H8	1.67	0.59
1:AA:393:A:O2'	1:AA:394:G:H5'	2.03	0.59
36:BA:2681:C:H5	36:BA:2725:A:H62	1.51	0.59
36:DA:2358:G:H22	48:DP:55:ARG:HH21	1.49	0.59
33:B7:9:ARG:NE	36:BA:1310:G:OP2	2.31	0.59
36:DA:852:G:O2'	36:DA:853:G:H5'	2.02	0.59
20:CT:74:LYS:HD3	20:CT:74:LYS:N	2.17	0.59
1:AA:1151:A:HO2'	1:AA:1152:A:H8	1.49	0.59
13:CM:15:VAL:HG11	13:CM:48:LEU:HD11	1.84	0.59
28:B2:69:ARG:H	28:B2:69:ARG:HD2	1.68	0.59
36:BA:2312:U:C3'	42:BG:71:THR:HG21	2.32	0.59
36:DA:925:C:H2'	36:DA:926:A:C5'	2.24	0.59
9:CI:53:VAL:HG13	9:CI:95:LYS:CD	2.30	0.59
52:BT:30:VAL:CG2	52:BT:83:ILE:HG12	2.32	0.59
57:BY:81:LYS:O	57:BY:82:PRO:O	2.20	0.59
48:DP:97:PRO:HD3	48:DP:126:VAL:O	2.02	0.59
34:D8:33:ASN:HD22	36:DA:2419:U:H5''	1.66	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:59:VAL:CG2	40:DE:63:LEU:HA	2.33	0.59
42:DG:32:PRO:HB2	42:DG:172:LEU:HD12	1.84	0.59
27:B1:61:ARG:NH1	27:B1:61:ARG:HG2	2.15	0.59
58:DZ:163:LEU:HD12	58:DZ:165:VAL:CG2	2.32	0.59
28:D2:31:GLU:HB3	28:D2:53:LEU:HD11	1.84	0.59
6:AF:11:ASN:HB3	6:AF:14:LEU:CG	2.31	0.59
20:AT:26:ASN:HD22	20:AT:26:ASN:H	1.50	0.59
48:DP:65:ARG:CB	48:DP:68:GLN:HE22	2.16	0.59
22:AW:30:G:H2'	22:AW:31:A:C8	2.38	0.59
58:BZ:149:SER:HB3	58:BZ:173:ALA:HA	1.84	0.59
52:DT:58:ASN:N	52:DT:58:ASN:HD22	1.96	0.59
13:CM:108:ARG:HG3	13:CM:108:ARG:HH11	1.68	0.59
1:AA:437:U:C5'	4:AD:155:LEU:HD13	2.32	0.59
38:DC:10:LEU:HD11	38:DC:34:THR:OG1	2.02	0.59
5:AE:40:ARG:NH2	5:AE:66:MET:HG2	2.17	0.59
48:DP:85:LEU:HA	48:DP:88:LEU:HB2	1.84	0.59
1:AA:633:G:H5'	1:AA:634:C:OP2	2.03	0.59
17:CQ:85:VAL:O	17:CQ:89:LEU:HG	2.03	0.59
1:CA:37:U:OP1	12:CL:124:LYS:HB3	2.02	0.59
17:CQ:3:LYS:HB3	17:CQ:61:GLU:HB3	1.84	0.59
36:DA:2840:C:H2'	36:DA:2841:C:C6	2.37	0.59
1:CA:748:C:H4'	1:CA:749:C:O5'	2.02	0.59
25:CZ:126:VAL:O	25:CZ:128:VAL:HG23	2.02	0.59
36:BA:2153:G:O2'	36:BA:2154:G:H5'	2.02	0.59
44:DJ:120:UNK:O	44:DJ:121:UNK:CB	2.50	0.59
36:DA:1902:C:H1'	39:DD:244:ARG:HG3	1.84	0.59
42:BG:86:MET:N	42:BG:87:PRO:HD3	2.18	0.59
36:DA:1887:C:C3'	36:DA:1888:G:H5''	2.33	0.59
34:B8:10:ALA:HB3	34:B8:60:LEU:HD21	1.83	0.59
32:D6:15:GLU:OE2	32:D6:41:PRO:HB2	2.03	0.59
57:DY:13:VAL:HG11	57:DY:28:LYS:HD3	1.85	0.59
36:DA:272(I):U:H2'	36:DA:272(J):C:H6	1.66	0.59
4:AD:124:GLY:O	4:AD:126:ILE:N	2.35	0.59
20:CT:57:ARG:HD3	20:CT:102:GLY:HA2	1.84	0.59
48:DP:24:GLY:HA3	48:DP:33:ARG:HH12	1.68	0.59
36:DA:832:G:OP1	48:DP:40:SER:HB3	2.01	0.59
4:CD:11:LEU:HD22	4:CD:66:ARG:NH1	2.18	0.59
27:B1:80:LEU:CB	27:B1:82:LEU:HD13	2.29	0.59
52:DT:3:ARG:HB2	52:DT:6:LEU:HB2	1.85	0.59
36:BA:1109:C:H2'	36:BA:1110:G:O4'	2.02	0.59
13:CM:12:ASN:N	13:CM:12:ASN:HD22	1.96	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:55:ALA:O	4:AD:59:ARG:HG2	2.03	0.59
36:DA:2464:C:O2'	36:DA:2465:C:H6	1.84	0.59
12:CL:6:THR:H	12:CL:9:GLN:HE21	1.49	0.59
36:BA:331:A:H1'	36:BA:332:A:OP1	2.03	0.59
1:CA:722:A:HO2'	1:CA:724:G:H8	1.50	0.59
36:BA:1009:A:H1'	53:BU:59:ARG:NH1	2.18	0.59
36:DA:1060:U:H1'	36:DA:1061:U:OP2	2.02	0.59
1:CA:1158:C:O2	1:CA:1158:C:C2'	2.50	0.59
27:D1:82:LEU:HD11	27:D1:90:ILE:CD1	2.33	0.59
19:AS:62:ILE:HA	19:AS:66:MET:CE	2.32	0.59
52:BT:23:ARG:HG2	52:BT:120:ARG:NH1	2.17	0.59
37:BB:68:C:H2'	37:BB:69:G:O4'	2.02	0.59
19:CS:16:LEU:N	19:CS:16:LEU:HD12	2.17	0.59
9:CI:111:ARG:O	9:CI:119:ALA:HB2	2.03	0.59
6:CF:57:GLN:H	6:CF:57:GLN:HE21	1.51	0.59
50:BR:72:ASP:HB3	50:BR:75:LEU:HB3	1.84	0.59
36:DA:1809:A:H2'	36:DA:1810:A:C8	2.38	0.59
2:AB:7:VAL:O	2:AB:11:LEU:HD12	2.03	0.59
48:BP:85:LEU:HA	48:BP:88:LEU:CB	2.32	0.59
36:BA:2152:G:O2'	36:BA:2153:G:H5'	2.01	0.59
1:AA:731:G:OP1	1:AA:766:A:H1'	2.03	0.59
1:CA:613:C:H2'	1:CA:614:A:H8	1.68	0.59
39:DD:65:ILE:H	39:DD:65:ILE:HD13	1.67	0.59
17:AQ:9:VAL:HG11	17:AQ:84:LEU:HD12	1.85	0.59
12:AL:51:ALA:C	12:AL:52:LEU:HD22	2.23	0.59
37:DB:56:G:H4'	37:DB:57:A:O5'	2.03	0.59
36:BA:414:C:H1'	36:BA:1864:U:O2'	2.01	0.59
30:B4:42:PHE:O	30:B4:43:TYR:O	2.21	0.59
17:AQ:45:HIS:CD2	17:AQ:47:PRO:HD3	2.38	0.59
1:CA:1151:A:HO2'	1:CA:1152:A:H8	1.50	0.59
58:BZ:72:ARG:CG	58:BZ:89:PHE:HB2	2.31	0.59
40:BE:52:LEU:HD21	52:BT:1:MET:HE3	1.83	0.59
41:BF:127:GLU:OE1	41:BF:196:LEU:HD12	2.02	0.59
58:DZ:98:MET:O	58:DZ:125:LEU:HA	2.03	0.59
52:BT:13:ARG:HH11	52:BT:13:ARG:HA	1.62	0.59
57:BY:29:GLU:N	57:BY:29:GLU:OE1	2.36	0.59
51:DS:89:ARG:HG3	51:DS:92:TYR:CA	2.33	0.59
26:B0:70:GLN:NE2	26:B0:80:HIS:NE2	2.50	0.59
15:AO:82:ILE:CD1	15:AO:87:ILE:HB	2.32	0.59
42:BG:121:ASN:C	42:BG:121:ASN:HD22	2.05	0.59
1:CA:1116:C:C2'	1:CA:1117:G:H5''	2.32	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:84:ALA:HB3	50:DR:85:PRO:HD3	1.85	0.59
28:B2:27:GLU:O	28:B2:30:ARG:CB	2.51	0.59
53:DU:70:ARG:HA	53:DU:74:LEU:O	2.03	0.59
42:BG:52:ILE:HG12	42:BG:54:GLU:H	1.68	0.59
1:AA:37:U:OP1	12:AL:124:LYS:HB3	2.02	0.59
36:DA:1510:G:O2'	36:DA:1511:C:H5'	2.03	0.59
36:BA:2248:C:H2'	36:BA:2249:U:H5'	1.85	0.59
29:B3:31:LEU:HD23	29:B3:32:GLN:H	1.67	0.59
44:BJ:28:UNK:HA	44:BJ:82:UNK:HA	1.85	0.59
56:BX:8:ILE:H	56:BX:8:ILE:HD12	1.68	0.59
4:AD:88:VAL:O	4:AD:92:VAL:HG23	2.02	0.59
38:BC:118:ASP:C	38:BC:120:MET:H	2.04	0.59
28:B2:62:THR:HG21	36:BA:76:C:HO2'	1.68	0.59
42:BG:42:GLY:HA2	42:BG:89:GLY:HA2	1.85	0.59
42:BG:45:GLU:OE1	42:BG:45:GLU:N	2.36	0.59
27:B1:3:LYS:N	27:B1:3:LYS:NZ	2.43	0.59
25:AZ:355:LEU:HD23	25:AZ:368:VAL:HG11	1.84	0.59
34:B8:33:ASN:HD22	36:BA:2419:U:H5''	1.67	0.59
4:CD:4:TYR:O	4:CD:5:ILE:HB	2.02	0.59
2:AB:114:ARG:HH12	2:AB:118:LEU:HD21	1.66	0.59
1:AA:858:G:C6	1:AA:869:G:C8	2.89	0.59
42:DG:93:THR:O	42:DG:94:LEU:HD23	2.02	0.59
36:BA:2811:G:OP1	40:BE:60:ASN:HB2	2.03	0.59
41:BF:28:ILE:HD13	41:BF:28:ILE:N	2.12	0.59
36:DA:1208:C:O2	36:DA:1208:C:H2'	2.03	0.59
36:BA:1060:U:H1'	36:BA:1061:U:OP2	2.02	0.59
52:DT:96:ARG:CZ	52:DT:96:ARG:HB2	2.33	0.59
36:BA:2533:A:H2'	36:BA:2534:A:O4'	2.02	0.59
2:AB:229:VAL:CG1	2:AB:230:VAL:H	2.15	0.59
36:DA:848:G:O6	36:DA:928:G:H2'	2.02	0.59
10:CJ:4:ILE:N	10:CJ:4:ILE:HD12	2.18	0.59
36:BA:848:G:H8	36:BA:848:G:H5'	1.68	0.59
40:BE:5:LEU:HD12	40:BE:51:PHE:HB2	1.84	0.59
1:AA:1228:C:OP1	13:AM:115:LYS:HE3	2.02	0.59
1:AA:35:G:H2'	1:AA:36:C:C6	2.37	0.59
52:BT:58:ASN:N	52:BT:58:ASN:HD22	2.01	0.59
39:BD:142:VAL:HG21	39:BD:191:ALA:HB1	1.85	0.59
52:BT:35:LYS:NZ	52:BT:41:ARG:HD2	2.18	0.59
25:CZ:131:ILE:O	25:CZ:168:VAL:HG13	2.03	0.59
36:DA:528:A:C2	36:DA:2042:A:H2'	2.38	0.59
41:DF:21:ALA:HB3	41:DF:23:ASP:OD1	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:155:C:H2'	1:AA:156:G:H8	1.67	0.59
40:DE:9:VAL:HG12	40:DE:25:VAL:O	2.02	0.59
41:DF:114:VAL:HG21	41:DF:202:PHE:CE1	2.38	0.59
11:CK:18:ARG:HH21	11:CK:37:GLY:N	2.01	0.59
36:DA:1095:A:H2'	36:DA:1096:A:H8	1.67	0.59
47:BO:10:VAL:HG21	47:BO:16:ALA:O	2.03	0.59
48:DP:92:GLU:HG2	48:DP:121:LYS:NZ	2.18	0.59
26:D0:36:ILE:HD11	36:DA:2355:C:H4'	1.84	0.59
36:DA:469:G:C2'	36:DA:470:A:H5''	2.32	0.59
54:DV:12:TYR:N	54:DV:12:TYR:CD1	2.70	0.59
39:BD:65:ILE:HD13	39:BD:65:ILE:H	1.66	0.59
6:AF:75:LEU:O	6:AF:78:GLU:HB3	2.03	0.59
52:DT:28:VAL:HG13	52:DT:46:GLU:CA	2.32	0.58
36:BA:2312:U:H2'	36:BA:2313:C:H5''	1.85	0.58
40:BE:75:VAL:O	40:BE:77:ILE:N	2.36	0.58
52:BT:32:TYR:CD2	52:BT:81:PRO:HB2	2.38	0.58
41:BF:185:ASP:HA	41:BF:188:ARG:HD3	1.84	0.58
10:AJ:55:LYS:NZ	10:AJ:55:LYS:CB	2.58	0.58
36:BA:1023:U:H5'	36:BA:1023:U:H6	1.67	0.58
48:BP:58:THR:C	48:BP:61:ARG:HE	2.05	0.58
51:BS:20:ARG:HA	51:BS:20:ARG:NE	2.18	0.58
37:DB:7:G:C2'	37:DB:8:U:H5''	2.33	0.58
36:DA:2753:A:O2'	36:DA:2754:U:H5'	2.02	0.58
4:AD:22:LYS:HB2	4:AD:26:CYS:CB	2.31	0.58
56:BX:52:VAL:HG12	56:BX:53:LYS:N	2.13	0.58
36:BA:2632:A:O2'	40:BE:61:ARG:NH2	2.36	0.58
40:BE:59:VAL:CG2	40:BE:63:LEU:HA	2.33	0.58
9:AI:42:ARG:HH22	9:AI:75:ASP:CG	2.05	0.58
43:BH:105:LEU:HD23	43:BH:105:LEU:N	2.13	0.58
53:DU:65:ILE:HG12	53:DU:96:ALA:HB1	1.85	0.58
53:DU:92:ARG:HH21	54:DV:10:LYS:CB	2.16	0.58
25:CZ:113:MET:HG3	25:CZ:114:PRO:HD2	1.84	0.58
36:DA:1071:G:H2'	36:DA:1072:C:O4'	2.03	0.58
28:D2:51:ARG:HB2	28:D2:55:ARG:NH1	2.17	0.58
36:BA:90:U:O4'	36:BA:92:A:H8	1.86	0.58
50:BR:10:LEU:O	50:BR:11:ASN:HB2	2.02	0.58
50:DR:94:TYR:CD1	50:DR:94:TYR:N	2.69	0.58
2:AB:109:SER:C	2:AB:111:ARG:H	2.06	0.58
53:BU:108:GLU:CG	54:BV:44:LYS:HD3	2.33	0.58
16:CP:43:LYS:O	16:CP:45:THR:N	2.36	0.58
6:AF:61:LEU:O	6:AF:62:TRP:HB3	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:419:C:H2'	36:DA:420:C:C6	2.38	0.58
12:CL:91:LYS:HB3	12:CL:91:LYS:NZ	2.18	0.58
55:BW:84:ARG:HB2	55:BW:96:ILE:HG22	1.85	0.58
25:AZ:121:LEU:O	25:AZ:125:GLN:HG2	2.03	0.58
1:CA:1309:G:OP1	13:CM:92:HIS:HE1	1.86	0.58
1:CA:592:G:H2'	1:CA:593:G:H8	1.67	0.58
53:DU:44:ASN:ND2	54:DV:75:PHE:HB3	2.18	0.58
36:DA:953:A:O2'	36:DA:954:G:H5'	2.02	0.58
46:BN:43:THR:HB	46:BN:46:VAL:CG1	2.33	0.58
36:DA:636:G:OP1	48:DP:132:LYS:HE2	2.03	0.58
36:BA:2101:G:H2'	36:BA:2102:U:C5'	2.25	0.58
36:BA:272(I):U:H2'	36:BA:272(J):C:H6	1.66	0.58
34:B8:41:ILE:HD12	36:BA:2419:U:P	2.43	0.58
32:B6:13:CYS:O	32:B6:21:TYR:HA	2.03	0.58
36:DA:297:C:H2'	36:DA:298:G:O4'	2.03	0.58
36:DA:322:A:OP2	41:DF:169:ASN:HB2	2.03	0.58
36:BA:2753:A:O2'	36:BA:2754:U:H5'	2.03	0.58
52:BT:96:ARG:HB2	52:BT:96:ARG:CZ	2.33	0.58
36:DA:1517:G:H2'	36:DA:1518:U:O4'	2.02	0.58
36:DA:1311:G:N2	36:DA:1603:A:H62	2.01	0.58
46:DN:58:ASP:O	46:DN:60:ILE:HG13	2.03	0.58
36:DA:2524:G:C8	36:DA:2524:G:H5'	2.32	0.58
27:D1:86:SER:OG	27:D1:89:GLU:HB2	2.02	0.58
48:BP:65:ARG:CB	48:BP:68:GLN:HE22	2.15	0.58
19:CS:31:ILE:HG23	19:CS:49:ILE:HG23	1.83	0.58
7:CG:37:ASN:O	7:CG:41:ARG:HG3	2.03	0.58
58:DZ:113:ALA:HB1	58:DZ:146:ILE:HD13	1.84	0.58
57:BY:44:ILE:HD12	57:BY:44:ILE:N	2.17	0.58
36:DA:2206:G:H21	36:DA:2207:G:H4'	1.67	0.58
36:BA:1809:A:H2'	36:BA:1810:A:C8	2.37	0.58
2:CB:189:ASP:HB3	2:CB:203:GLY:O	2.03	0.58
5:CE:148:VAL:HG21	8:CH:107:LEU:HD13	1.85	0.58
9:CI:48:GLU:N	9:CI:49:PRO:CD	2.66	0.58
36:BA:2688:U:H1'	36:BA:2721:A:N6	2.19	0.58
36:BA:1040:C:H2'	36:BA:1041:G:C8	2.38	0.58
1:AA:1309:G:OP1	13:AM:92:HIS:HE1	1.86	0.58
36:DA:189:G:H2'	36:DA:205:G:N2	2.17	0.58
40:BE:179:GLU:O	40:BE:180:ASN:HB2	2.03	0.58
36:BA:2512:C:H2'	36:BA:2513:G:O4'	2.03	0.58
41:BF:21:ALA:HB3	41:BF:23:ASP:OD1	2.03	0.58
49:DQ:5:ARG:CZ	49:DQ:5:ARG:HB2	2.32	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:81:GLU:OE1	5:AE:88:LYS:HE3	2.03	0.58
38:DC:118:ASP:C	38:DC:120:MET:H	2.04	0.58
52:DT:78:LEU:C	52:DT:79:HIS:HD2	2.07	0.58
43:BH:84:SER:O	43:BH:85:LYS:HB3	2.02	0.58
34:D8:6:THR:HB	34:D8:11:LYS:HZ1	1.67	0.58
36:DA:2187:G:H2'	36:DA:2188:C:C5'	2.23	0.58
36:DA:2092:U:H4'	36:DA:2093:G:C5'	2.23	0.58
22:CW:71:G:O2'	36:DA:1851:U:H1'	2.03	0.58
32:D6:53:LYS:HD3	32:D6:53:LYS:H	1.69	0.58
57:BY:95:LYS:CE	57:BY:100:ALA:HB2	2.33	0.58
36:DA:654(E):G:H22	36:DA:654(Q):C:C1'	2.07	0.58
36:BA:621:A:H2'	36:BA:622:G:C5'	2.32	0.58
36:BA:657:U:C2	36:BA:658:C:C5	2.91	0.58
48:DP:101:VAL:HG12	48:DP:106:LEU:HB3	1.85	0.58
39:BD:43:ARG:HH11	39:BD:44:ASN:HD21	1.49	0.58
36:DA:28:A:H61	36:DA:512:G:H1'	1.65	0.58
1:CA:980:C:H5'	1:CA:980:C:C6	2.23	0.58
30:D4:9:LEU:HD13	30:D4:10:VAL:H	1.67	0.58
52:BT:50:ILE:HD13	52:BT:64:ARG:HB3	1.85	0.58
6:CF:61:LEU:O	6:CF:62:TRP:HB3	2.03	0.58
1:AA:266:G:H5''	1:AA:267:C:H5	1.67	0.58
31:D5:49:CYS:O	31:D5:56:LYS:HE2	2.02	0.58
58:DZ:166:SER:N	58:DZ:167:PRO:HA	2.17	0.58
41:DF:157:VAL:CG2	41:DF:194:MET:HG2	2.33	0.58
3:AC:5:ILE:CD1	3:AC:5:ILE:N	2.56	0.58
36:DA:956:G:OP2	49:DQ:14:ARG:NH2	2.36	0.58
52:BT:23:ARG:HH21	52:BT:120:ARG:HD3	1.67	0.58
36:DA:1720:U:H2'	36:DA:1721:G:C4'	2.32	0.58
3:AC:52:LEU:HD12	3:AC:55:VAL:CG2	2.33	0.58
36:DA:548:A:C2'	36:DA:549:G:H5'	2.34	0.58
36:BA:1331:A:O2'	36:BA:1332:G:H5''	2.03	0.58
53:DU:108:GLU:CG	54:DV:44:LYS:HD3	2.33	0.58
36:BA:1385:G:H4'	36:BA:1386:C:OP1	2.02	0.58
3:AC:95:THR:O	3:AC:97:LYS:N	2.36	0.58
42:DG:111:LEU:N	42:DG:112:PRO:HD2	2.17	0.58
36:BA:2720:U:H2'	36:BA:2720:U:O2	2.03	0.58
36:BA:1614:A:N1	55:BW:91:GLY:HA2	2.18	0.58
1:CA:662:G:H2'	1:CA:663:A:C8	2.38	0.58
8:AH:17:THR:HB	8:AH:78:GLN:OE1	2.03	0.58
56:DX:33:LYS:HE2	56:DX:33:LYS:HA	1.85	0.58
54:DV:68:LYS:HA	54:DV:68:LYS:HE2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:12:TYR:N	54:BV:12:TYR:CD1	2.71	0.58
52:DT:28:VAL:CG1	52:DT:46:GLU:HG3	2.33	0.58
52:DT:32:TYR:CD2	52:DT:81:PRO:HB2	2.38	0.58
52:DT:33:LYS:CE	52:DT:43:GLN:HE21	1.98	0.58
28:B2:62:THR:HG22	28:B2:66:GLU:CB	2.32	0.58
39:DD:61:LEU:O	39:DD:63:ARG:NH1	2.36	0.58
36:DA:2636:U:H4'	40:DE:80:GLU:OE1	2.04	0.58
34:B8:6:THR:HB	34:B8:11:LYS:HZ1	1.68	0.58
52:BT:31:SER:HG	52:BT:32:TYR:HE1	1.49	0.58
41:BF:185:ASP:HA	41:BF:188:ARG:CD	2.33	0.58
36:DA:2186:G:H2'	36:DA:2187:G:C8	2.38	0.58
51:BS:54:LEU:HD13	51:BS:57:LYS:HA	1.85	0.58
25:CZ:366:ASP:HB3	25:CZ:368:VAL:HG23	1.84	0.58
57:BY:17:SER:OG	57:BY:18:GLY:N	2.37	0.58
48:BP:57:THR:OG1	48:BP:59:LEU:HB3	2.03	0.58
1:CA:1201:A:H5'	1:CA:1203:C:OP2	2.03	0.58
41:BF:101:LEU:HD12	41:BF:102:PRO:HD2	1.84	0.58
51:DS:20:ARG:HA	51:DS:20:ARG:NE	2.17	0.58
2:CB:114:ARG:HH12	2:CB:118:LEU:HD21	1.68	0.58
2:CB:142:LEU:HD21	2:CB:146:GLN:NE2	2.17	0.58
36:BA:811:U:O2'	36:BA:812:C:H5"	2.03	0.58
4:CD:22:LYS:HB2	4:CD:26:CYS:HB3	1.85	0.58
36:DA:2179:C:H1'	36:DA:2180:U:C5	2.39	0.58
52:BT:106:SER:O	52:BT:107:ASP:CB	2.51	0.58
31:D5:54:GLY:N	31:D5:56:LYS:NZ	2.51	0.58
53:DU:95:LEU:O	53:DU:98:LEU:HG	2.02	0.58
53:BU:91:ASP:OD1	53:BU:96:ALA:HB2	2.04	0.58
25:CZ:137:LYS:HG2	60:CZ:501:GDP:C2	2.38	0.58
42:DG:16:ARG:O	42:DG:20:ILE:HG13	2.04	0.58
13:AM:49:THR:HB	13:AM:52:GLU:HG3	1.83	0.58
36:DA:335:C:H2'	36:DA:336:C:C6	2.38	0.58
43:DH:67:LEU:O	43:DH:71:LEU:HB2	2.03	0.58
19:AS:12:ASP:HB2	19:AS:38:SER:OG	2.04	0.58
1:CA:443:C:H2'	1:CA:444:C:H6	1.69	0.58
1:AA:1512:U:H2'	1:AA:1513:A:H8	1.65	0.58
36:DA:2115:G:C2	36:DA:2117:A:N7	2.72	0.58
18:AR:36:ASN:HD21	18:AR:39:VAL:HG21	1.67	0.58
1:CA:309:G:H1'	1:CA:608:A:C2	2.38	0.58
58:DZ:109:ALA:CB	58:DZ:145:GLU:OE1	2.51	0.58
25:CZ:309:SER:O	25:CZ:310:ILE:HG22	2.03	0.58
43:BH:149:ARG:HA	43:BH:162:ILE:CD1	2.32	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:153:C:H2'	36:BA:154:G:C8	2.39	0.58
36:BA:2733:A:O2'	36:BA:2734:A:H5'	2.03	0.58
29:D3:31:LEU:HD23	29:D3:32:GLN:H	1.68	0.58
13:AM:15:VAL:HG11	13:AM:48:LEU:HD11	1.86	0.58
42:BG:7:LEU:HD13	42:BG:100:TRP:HE3	1.69	0.58
42:BG:172:LEU:CD2	42:BG:176:LEU:HD12	2.33	0.58
58:BZ:81:ARG:HB2	58:BZ:81:ARG:NH1	2.19	0.58
36:DA:30:G:H2'	36:DA:31:C:C6	2.38	0.58
9:AI:52:ALA:HB3	9:AI:95:LYS:HZ2	1.66	0.58
39:BD:102:LYS:O	39:BD:103:ARG:HG2	2.04	0.58
51:DS:58:LEU:HG	51:DS:59:LYS:H	1.67	0.58
36:BA:1887:C:C3'	36:BA:1888:G:H5''	2.33	0.58
32:D6:53:LYS:N	32:D6:53:LYS:HD3	2.18	0.58
52:DT:4:GLY:O	52:DT:7:ILE:HB	2.04	0.58
36:DA:84:A:H5''	57:DY:9:LYS:HD2	1.85	0.58
57:BY:81:LYS:HD3	57:BY:97:ARG:HG3	1.85	0.58
4:CD:121:VAL:HA	4:CD:126:ILE:HD13	1.86	0.58
4:CD:128:VAL:O	4:CD:130:GLY:N	2.37	0.58
32:B6:15:GLU:CG	32:B6:18:ARG:CZ	2.81	0.58
51:DS:17:ARG:O	51:DS:20:ARG:HG2	2.03	0.58
36:DA:1141:U:H6	46:DN:63:THR:HB	1.69	0.58
41:DF:160:ASN:HD21	41:DF:162:LEU:CD1	2.15	0.58
1:AA:1452:C:C4'	1:AA:1456:G:N2	2.61	0.58
36:DA:2314:C:H5'	42:DG:38:VAL:HG21	1.85	0.58
7:AG:113:GLU:O	7:AG:119:ARG:HD3	2.03	0.58
3:CC:14:ILE:HG12	3:CC:15:THR:N	2.19	0.58
2:CB:87:ARG:HH22	2:CB:232:PRO:CA	2.16	0.58
36:BA:1071:G:H2'	36:BA:1072:C:O4'	2.03	0.58
42:DG:172:LEU:O	42:DG:172:LEU:HD23	2.03	0.58
52:DT:106:SER:O	52:DT:107:ASP:CB	2.51	0.58
28:D2:29:LYS:HE2	28:D2:57:ILE:HG21	1.84	0.58
15:AO:26:GLU:OE2	15:AO:77:ARG:NH1	2.36	0.58
18:AR:31:LEU:H	18:AR:31:LEU:CD2	2.14	0.58
36:DA:2867:G:C5	52:DT:23:ARG:NH1	2.72	0.58
19:CS:29:ARG:HD2	19:CS:29:ARG:N	2.19	0.58
19:CS:12:ASP:HB2	19:CS:38:SER:OG	2.02	0.58
35:B9:10:ILE:N	35:B9:10:ILE:HD12	2.18	0.58
24:AY:70:C:H2'	24:AY:71:C:C6	2.38	0.58
39:DD:136:ILE:HB	39:DD:165:ILE:CD1	2.34	0.58
46:BN:1:MET:C	46:BN:2:LYS:HD2	2.23	0.58
36:DA:2777:G:H5''	36:DA:2778:A:C5'	2.32	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1047:G:H5''	14:AN:4:LYS:HE2	1.84	0.58
37:BB:56:G:H4'	37:BB:57:A:O5'	2.04	0.58
15:AO:27:VAL:O	15:AO:31:LEU:HD13	2.03	0.58
40:BE:9:VAL:HG12	40:BE:25:VAL:O	2.04	0.58
30:B4:20:ASN:HD22	30:B4:21:VAL:N	2.02	0.58
36:DA:2866:U:C6	36:DA:2868:A:H1'	2.38	0.58
47:DO:10:VAL:HG21	47:DO:16:ALA:O	2.04	0.58
47:BO:2:ILE:HD12	47:BO:6:THR:HG21	1.85	0.58
36:BA:1902:C:O2'	39:BD:244:ARG:HB2	2.03	0.58
1:CA:1038:C:H6	1:CA:1038:C:O5'	1.87	0.58
36:BA:323:G:H2'	41:BF:169:ASN:ND2	2.19	0.58
58:DZ:102:LEU:HD21	58:DZ:124:ILE:HD13	1.85	0.58
4:AD:190:ASP:HB3	4:AD:193:ASP:OD2	2.04	0.58
1:CA:542:G:P	4:CD:10:ARG:HH21	2.27	0.58
48:BP:126:VAL:HG22	48:BP:145:PRO:HG2	1.84	0.58
20:CT:45:GLN:HB3	20:CT:91:LEU:HD22	1.84	0.58
36:DA:252:G:OP2	48:DP:50:ARG:NH2	2.34	0.58
36:DA:323:G:H2'	41:DF:169:ASN:ND2	2.19	0.58
36:DA:811:U:O2'	36:DA:812:C:H5''	2.03	0.58
36:BA:2298:A:H2'	36:BA:2299:G:O4'	2.03	0.58
30:D4:7:PRO:HG2	42:DG:61:ALA:HB1	1.85	0.58
51:DS:15:ARG:HH12	51:DS:18:ILE:HD11	1.67	0.58
16:CP:20:VAL:HG22	16:CP:21:VAL:N	2.18	0.58
3:CC:181:ASN:ND2	3:CC:204:LEU:HB2	2.19	0.58
53:DU:91:ASP:OD1	53:DU:96:ALA:HB2	2.03	0.58
28:D2:53:LEU:O	28:D2:57:ILE:HG12	2.03	0.58
52:DT:39:ARG:CD	52:DT:39:ARG:H	2.13	0.58
42:BG:115:ARG:NH2	42:BG:137:GLU:OE1	2.37	0.58
36:DA:1009:A:H1'	53:DU:59:ARG:NH1	2.18	0.58
22:AW:38:A:H2'	22:AW:39:U:C4'	2.34	0.58
25:CZ:222:LEU:HD11	25:CZ:303:VAL:HB	1.84	0.58
36:DA:2712:U:OP1	36:DA:2714:G:H4'	2.04	0.58
22:CV:52:G:H1	22:CV:62:C:N4	2.00	0.58
36:BA:2854:G:H2'	36:BA:2855:C:C6	2.38	0.58
34:B8:39:LYS:HG3	34:B8:43:GLN:NE2	2.19	0.58
7:CG:113:GLU:CG	7:CG:119:ARG:HG2	2.34	0.58
6:AF:57:GLN:HE21	6:AF:57:GLN:H	1.51	0.58
3:CC:32:LEU:HD22	3:CC:59:ARG:HH11	1.68	0.58
36:DA:590:A:H2'	36:DA:591:C:H6	1.69	0.58
53:BU:48:ALA:O	53:BU:52:ARG:HG3	2.02	0.58
20:AT:12:ALA:O	20:AT:15:ARG:HB2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:41:VAL:HG23	5:CE:67:VAL:HG13	1.86	0.58
43:DH:149:ARG:HA	43:DH:162:ILE:CD1	2.33	0.58
36:DA:2688:U:H1'	36:DA:2721:A:N6	2.19	0.58
2:AB:97:TRP:HZ3	2:AB:176:GLU:OE2	1.86	0.58
1:AA:1030(D):A:H2'	1:AA:1031:G:H5'	1.85	0.58
1:CA:681:C:O2'	1:CA:682:G:H5'	2.03	0.58
1:AA:1216:G:O2'	1:AA:1217:C:H5'	2.03	0.58
4:CD:131:ARG:H	4:CD:131:ARG:HD3	1.69	0.58
40:DE:203:LYS:HD2	40:DE:203:LYS:O	2.03	0.58
36:DA:1683:C:H2'	36:DA:1684:C:H6	1.68	0.58
1:CA:1236:A:H2'	1:CA:1237:C:C6	2.38	0.58
39:BD:30:GLU:HG3	39:BD:63:ARG:NH2	2.19	0.58
52:BT:28:VAL:O	52:BT:29:ARG:CG	2.51	0.58
4:CD:100:ARG:O	4:CD:104:VAL:HG23	2.03	0.58
41:DF:126:VAL:HG11	41:DF:142:TRP:HH2	1.69	0.58
41:DF:127:GLU:OE1	41:DF:196:LEU:HD12	2.04	0.58
40:BE:61:ARG:HB3	40:BE:62:PRO:CD	2.33	0.58
36:BA:2631:G:N2	40:BE:61:ARG:NH1	2.51	0.58
1:CA:1255:G:H5''	3:CC:26:LYS:HE2	1.85	0.58
25:AZ:202:LEU:O	25:AZ:206:ILE:HB	2.04	0.58
36:DA:1210:A:C8	36:DA:1210:A:H5'	2.37	0.58
36:DA:331:A:H1'	36:DA:332:A:OP1	2.03	0.58
4:CD:138:TYR:C	4:CD:138:TYR:CD1	2.77	0.58
36:BA:1060:U:O4'	36:BA:1061:U:H5''	2.04	0.58
36:DA:1087:G:H2'	36:DA:1088:A:C5'	2.33	0.58
36:DA:140:G:H1'	36:DA:141:A:C2	2.39	0.58
25:AZ:222:LEU:HD11	25:AZ:303:VAL:HB	1.85	0.58
34:B8:15:LYS:HB2	48:BP:65:ARG:NH2	2.17	0.58
37:BB:67:G:HO2'	37:BB:68:C:H6	1.52	0.58
50:DR:55:ALA:HB2	50:DR:79:LEU:CD1	2.34	0.58
58:BZ:10:ARG:HH21	58:BZ:36:LYS:HB2	1.69	0.58
2:CB:109:SER:C	2:CB:111:ARG:H	2.07	0.58
36:BA:1056:G:N2	36:BA:1104:C:H42	2.02	0.58
1:CA:1226:C:H4'	1:CA:1227:A:OP1	2.04	0.58
46:DN:1:MET:C	46:DN:2:LYS:HD2	2.24	0.58
46:DN:3:THR:C	46:DN:4:TYR:CG	2.77	0.58
53:BU:70:ARG:HA	53:BU:74:LEU:O	2.03	0.58
53:BU:66:ASN:HD21	53:BU:76:TYR:H	1.51	0.58
3:CC:95:THR:O	3:CC:97:LYS:N	2.37	0.58
1:CA:180:U:C2'	1:CA:181:G:H5'	2.34	0.58
36:BA:2248:C:C2'	36:BA:2249:U:H5'	2.34	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:565:C:H4'	36:DA:1253:A:C6	2.39	0.58
58:BZ:80:ARG:O	58:BZ:82:ARG:N	2.37	0.58
1:AA:681:C:O2'	1:AA:682:G:H5'	2.04	0.58
36:DA:1817:G:H2'	36:DA:1818:U:H5'	1.85	0.58
39:DD:8:PRO:HB3	39:DD:14:ARG:HB3	1.85	0.58
1:AA:711:G:O2'	1:AA:712:A:H5'	2.03	0.58
37:DB:61:G:O2'	37:DB:62:C:H5'	2.03	0.58
28:B2:55:ARG:HA	28:B2:58:ALA:HB3	1.86	0.58
1:AA:1005:A:H5'	1:AA:1037:C:O2	2.04	0.58
58:BZ:152:ALA:CA	58:BZ:167:PRO:HB2	2.34	0.58
36:BA:2188:C:H2'	36:BA:2189:U:C6	2.39	0.58
52:BT:28:VAL:CG1	52:BT:46:GLU:HG3	2.34	0.58
51:BS:54:LEU:HD13	51:BS:58:LEU:N	2.15	0.58
29:D3:35:ARG:HD3	29:D3:37:LEU:HD21	1.86	0.58
25:AZ:366:ASP:HB3	25:AZ:368:VAL:HG23	1.85	0.58
57:DY:29:GLU:N	57:DY:29:GLU:OE1	2.37	0.58
57:DY:8:LYS:CD	57:DY:8:LYS:N	2.66	0.58
2:AB:130:ARG:NH1	2:AB:138:LEU:HD11	2.18	0.58
41:DF:101:LEU:HD12	41:DF:102:PRO:CD	2.34	0.58
14:AN:12:ARG:HB3	14:AN:12:ARG:HH11	1.68	0.58
2:AB:42:ILE:CD1	2:AB:202:PRO:HB2	2.33	0.58
53:DU:95:LEU:CD1	54:DV:11:GLN:HG3	2.33	0.58
52:DT:106:SER:O	52:DT:107:ASP:CG	2.42	0.58
36:DA:140:G:H1'	36:DA:141:A:H2	1.69	0.58
58:DZ:163:LEU:CD2	58:DZ:163:LEU:H	2.17	0.58
15:CO:26:GLU:OE2	15:CO:77:ARG:NH1	2.37	0.58
11:AK:27:ASN:ND2	11:AK:28:THR:N	2.48	0.58
19:CS:16:LEU:HA	19:CS:19:VAL:HB	1.85	0.58
2:AB:9:GLU:N	2:AB:9:GLU:OE1	2.32	0.58
1:AA:1536:C:H2'	1:AA:1537:U:O4'	2.03	0.58
36:DA:2303:G:H4'	42:DG:124:SER:O	2.04	0.58
19:AS:16:LEU:HA	19:AS:19:VAL:HB	1.85	0.58
36:DA:2162:G:O2'	36:DA:2173:A:N6	2.37	0.58
36:DA:2579:C:O2'	40:DE:131:ALA:CB	2.52	0.58
7:AG:78:ARG:O	7:AG:80:VAL:N	2.36	0.58
35:B9:10:ILE:HG23	36:BA:2477:C:N4	2.19	0.58
36:BA:110:G:O2'	36:BA:111:A:H5'	2.03	0.58
36:DA:110:G:O2'	36:DA:111:A:H5'	2.03	0.58
53:DU:52:ARG:HB3	53:DU:52:ARG:NH1	2.19	0.58
36:DA:2248:C:C2'	36:DA:2249:U:H5'	2.33	0.58
1:AA:559:A:OP1	5:AE:126:ARG:NH2	2.36	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:470:A:OP1	41:DF:59:TYR:HE1	1.87	0.58
44:BJ:27:UNK:HA	44:BJ:113:UNK:CB	2.34	0.58
55:DW:64:MET:O	55:DW:65:LEU:HB3	2.04	0.58
44:DJ:12:UNK:C	44:DJ:14:UNK:N	2.67	0.58
36:DA:1813:G:H1'	39:DD:50:THR:OG1	2.04	0.58
29:B3:1:MET:O	29:B3:3:ARG:N	2.37	0.58
1:CA:202:U:H4'	1:CA:203:U:OP2	2.03	0.58
55:BW:59:VAL:HG12	55:BW:59:VAL:O	2.04	0.58
33:B7:19:ARG:HG2	33:B7:19:ARG:HH11	1.69	0.58
42:DG:145:THR:HB	42:DG:148:MET:HB2	1.84	0.58
1:CA:697:U:H2'	1:CA:698:G:H5'	1.86	0.58
52:DT:28:VAL:CG1	52:DT:46:GLU:HA	2.31	0.58
43:DH:85:LYS:HE3	43:DH:85:LYS:O	2.04	0.58
36:BA:1023:U:H2'	36:BA:1024:G:H5'	1.86	0.58
32:D6:53:LYS:O	32:D6:54:ILE:OXT	2.22	0.58
17:AQ:52:LYS:N	17:AQ:52:LYS:HD3	2.09	0.58
1:CA:975:A:C4'	1:CA:976:G:H5''	2.28	0.58
51:DS:89:ARG:HG3	51:DS:92:TYR:HA	1.85	0.58
2:CB:130:ARG:NH1	2:CB:138:LEU:HD11	2.18	0.58
36:DA:657:U:C2	36:DA:658:C:C5	2.92	0.58
36:BA:2756:U:H1'	36:BA:2757:A:C5'	2.30	0.58
52:BT:106:SER:O	52:BT:107:ASP:CG	2.42	0.58
1:CA:1269:A:C2	1:CA:1313:U:O4'	2.57	0.58
1:CA:961:U:O2'	1:CA:962:C:O5'	2.21	0.58
36:DA:1209:G:H21	36:DA:1210:A:N6	2.01	0.58
36:BA:1060:U:H1'	36:BA:1061:U:H5''	1.84	0.58
31:B5:54:GLY:H	31:B5:56:LYS:HZ1	1.49	0.58
4:AD:34:GLU:O	4:AD:35:ARG:CB	2.50	0.58
2:AB:25:ASN:C	2:AB:25:ASN:ND2	2.57	0.58
25:AZ:113:MET:HG3	25:AZ:114:PRO:HD2	1.84	0.58
53:DU:59:ARG:HG2	53:DU:59:ARG:NH1	2.17	0.58
19:CS:78:ARG:O	19:CS:81:ARG:HD3	2.04	0.58
50:BR:87:TYR:O	50:BR:89:ASP:N	2.37	0.58
36:BA:2162:G:O2'	36:BA:2173:A:N6	2.37	0.58
36:BA:1721:G:C6	36:BA:1739:U:H5'	2.39	0.58
40:BE:185:LYS:O	40:BE:186:GLY:O	2.22	0.58
36:DA:1056:G:N2	36:DA:1104:C:H42	2.02	0.58
12:CL:77:LEU:HD11	12:CL:107:ALA:HA	1.86	0.58
1:CA:433:C:H2'	1:CA:434:U:H6	1.69	0.58
46:BN:3:THR:C	46:BN:4:TYR:CG	2.77	0.58
36:DA:2884:U:H2'	36:DA:2885:C:H5'	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:B1:29:GLY:HA3	36:BA:2396:G:O2'	2.02	0.58
3:AC:34:LEU:HD22	3:AC:38:ARG:NE	2.19	0.58
54:DV:82:ARG:HD2	54:DV:82:ARG:N	2.19	0.58
36:DA:2020:A:O2'	36:DA:2021:C:H5'	2.03	0.58
25:AZ:126:VAL:O	25:AZ:128:VAL:HG23	2.02	0.58
55:DW:37:ARG:HG3	55:DW:37:ARG:HH11	1.69	0.58
36:DA:1040:C:H2'	36:DA:1041:G:C8	2.38	0.58
36:BA:189:G:H2'	36:BA:205:G:N2	2.19	0.58
55:DW:69:LEU:HA	55:DW:108:GLY:O	2.04	0.58
58:BZ:74:VAL:HG22	58:BZ:86:VAL:HG12	1.86	0.58
36:DA:1268:A:H2'	36:DA:1269:A:O4'	2.03	0.58
7:CG:65:ALA:HB1	7:CG:127:ALA:HB3	1.85	0.58
36:DA:2492:U:O2'	36:DA:2493:U:H5'	2.03	0.58
52:BT:65:LYS:HG3	52:BT:66:VAL:N	2.18	0.58
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.38	0.58
39:DD:30:GLU:N	39:DD:35:LYS:HZ2	2.02	0.58
32:B6:28:ARG:CA	32:B6:32:ASN:HD22	2.16	0.58
58:DZ:98:MET:O	58:DZ:125:LEU:HD12	2.03	0.58
32:B6:13:CYS:HA	32:B6:50:ARG:O	2.04	0.58
36:BA:26:G:OP1	55:BW:80:PRO:HB3	2.04	0.58
36:DA:2287:A:N6	36:DA:2344:U:H3	1.94	0.58
1:AA:1314:C:OP2	19:AS:6:LYS:HG3	2.04	0.58
4:AD:22:LYS:HB2	4:AD:26:CYS:HB3	1.85	0.58
36:DA:266:G:H2'	36:DA:267:C:C5'	2.29	0.58
36:BA:2179:C:H1'	36:BA:2180:U:C5	2.39	0.58
36:BA:2807:G:H3'	36:BA:2808:U:H5''	1.85	0.58
43:DH:19:VAL:O	43:DH:20:ALA:HB2	2.04	0.58
36:DA:1051:G:H2'	36:DA:1052:C:C4	2.39	0.58
36:BA:2572:A:N7	40:BE:145:LYS:HB2	2.18	0.58
3:CC:16:ARG:NH1	3:CC:16:ARG:HB2	2.18	0.58
4:CD:114:ARG:HG3	4:CD:114:ARG:NH1	2.13	0.58
36:DA:271(E):U:H2'	36:DA:271(F):C:C6	2.39	0.58
36:DA:1060:U:H1'	36:DA:1061:U:H5''	1.85	0.58
36:DA:2712:U:O2	36:DA:2712:U:H5'	2.04	0.58
36:DA:1331:A:O2'	36:DA:1332:G:H5''	2.04	0.58
36:BA:1720:U:H2'	36:BA:1721:G:C4'	2.33	0.58
16:AP:43:LYS:HA	16:AP:48:TRP:HB2	1.85	0.58
16:AP:43:LYS:HA	16:AP:48:TRP:HB3	1.85	0.58
6:AF:55:ASP:HB3	6:AF:57:GLN:HE22	1.68	0.58
18:CR:36:ASN:HD21	18:CR:39:VAL:CG2	2.17	0.58
2:CB:97:TRP:CZ2	2:CB:102:LEU:HD13	2.39	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:437:U:C5'	4:CD:155:LEU:HD13	2.34	0.58
1:CA:865:A:C2	1:CA:918:A:H4'	2.38	0.58
1:CA:108:G:H5'	1:CA:109:A:H5''	1.86	0.58
36:BA:1336:A:H2'	36:BA:1337:G:C8	2.39	0.58
1:CA:950:U:H2'	1:CA:951:G:C8	2.39	0.58
36:BA:2115:G:C2	36:BA:2117:A:N7	2.72	0.58
36:DA:2840:C:H2'	36:DA:2841:C:H6	1.67	0.58
58:BZ:48:PHE:CZ	58:BZ:74:VAL:HG21	2.39	0.58
11:AK:18:ARG:HH21	11:AK:37:GLY:N	2.02	0.58
36:BA:1198:U:H2'	36:BA:1199:U:C6	2.39	0.58
36:DA:1257:C:H2'	36:DA:1258:C:H6	1.69	0.58
36:BA:565:C:H4'	36:BA:1253:A:C6	2.38	0.58
36:DA:533:G:H5'	53:DU:24:TYR:CE1	2.39	0.58
46:DN:121:LYS:HB3	46:DN:123:TYR:HE1	1.69	0.58
1:CA:1120:G:H2'	1:CA:1121:U:C6	2.39	0.58
55:BW:14:PRO:HG2	55:BW:78:GLU:HG3	1.86	0.58
43:DH:58:GLU:O	43:DH:62:LYS:HB2	2.02	0.58
36:BA:1510:G:O2'	36:BA:1511:C:H5'	2.04	0.58
1:AA:227:G:C3'	1:AA:228:A:H5''	2.33	0.57
43:DH:85:LYS:HZ3	43:DH:132:ARG:CA	2.08	0.57
58:BZ:67:LEU:N	58:BZ:67:LEU:HD12	2.19	0.57
40:BE:33:VAL:HG13	40:BE:33:VAL:O	2.04	0.57
39:BD:30:GLU:HG2	39:BD:35:LYS:HZ1	1.68	0.57
32:B6:15:GLU:OE1	32:B6:18:ARG:CD	2.52	0.57
32:B6:20:ASN:O	32:B6:21:TYR:CD2	2.57	0.57
51:BS:17:ARG:O	51:BS:20:ARG:HG2	2.03	0.57
36:DA:621:A:H2'	36:DA:622:G:C5'	2.32	0.57
36:DA:2111:C:N3	36:DA:2145:C:H2'	2.19	0.57
20:AT:53:LEU:O	20:AT:57:ARG:HB2	2.04	0.57
9:AI:28:VAL:CG2	9:AI:33:PHE:HA	2.33	0.57
43:BH:19:VAL:O	43:BH:20:ALA:HB2	2.04	0.57
51:DS:85:VAL:O	51:DS:106:ARG:HG3	2.03	0.57
52:BT:3:ARG:HB2	52:BT:6:LEU:HB2	1.85	0.57
58:DZ:165:VAL:HG12	58:DZ:166:SER:N	2.18	0.57
16:AP:67:THR:HG22	16:AP:68:ASP:N	2.19	0.57
19:CS:45:VAL:O	19:CS:47:HIS:N	2.28	0.57
50:BR:84:ALA:HB3	50:BR:85:PRO:HD3	1.85	0.57
36:BA:1450(A):C:H2'	36:BA:1451:C:C5	2.38	0.57
36:DA:2327:A:H2'	36:DA:2328:A:C8	2.39	0.57
36:BA:491:G:H2'	36:BA:492:A:C8	2.38	0.57
36:BA:814:C:H2'	36:BA:815:C:C6	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:224:ALA:C	39:DD:226:MET:H	2.07	0.57
20:AT:29:LYS:O	20:AT:33:ILE:HG13	2.04	0.57
17:AQ:3:LYS:HB3	17:AQ:61:GLU:HB3	1.84	0.57
56:BX:63:LYS:HG3	56:BX:72:LYS:HG2	1.85	0.57
47:DO:43:VAL:HG21	47:DO:52:VAL:CG1	2.34	0.57
48:DP:71:VAL:HG12	48:DP:72:PRO:HD3	1.86	0.57
25:CZ:84:GLY:O	25:CZ:85:HIS:HB3	2.04	0.57
30:D4:22:ILE:HD12	30:D4:22:ILE:N	2.20	0.57
27:D1:41:ARG:HH22	36:DA:1365:A:H5''	1.68	0.57
55:BW:64:MET:O	55:BW:65:LEU:HB3	2.04	0.57
1:AA:228:A:H8	1:AA:228:A:C5'	2.14	0.57
28:B2:53:LEU:HG	28:B2:56:GLN:HG3	1.85	0.57
41:BF:25:PRO:CG	41:BF:119:ARG:HB2	2.34	0.57
1:AA:1331:G:OP2	13:AM:23:TYR:HD1	1.87	0.57
32:D6:35:GLU:CB	32:D6:51:GLU:HB2	2.20	0.57
52:BT:85:LYS:NZ	52:BT:85:LYS:CB	2.66	0.57
12:AL:20:LYS:CD	12:AL:20:LYS:H	2.02	0.57
48:BP:101:VAL:HG12	48:BP:106:LEU:HB3	1.85	0.57
2:CB:134:GLU:C	2:CB:136:VAL:N	2.57	0.57
36:BA:672:C:C2'	36:BA:673:C:C5'	2.82	0.57
39:DD:43:ARG:NH1	39:DD:44:ASN:ND2	2.47	0.57
40:BE:61:ARG:CB	40:BE:62:PRO:HD3	2.31	0.57
31:D5:36:CYS:SG	31:D5:46:CYS:SG	3.01	0.57
1:AA:1442(B):A:O2'	1:AA:1443:G:C8	2.58	0.57
2:CB:229:VAL:CG1	2:CB:230:VAL:H	2.16	0.57
1:CA:1116:C:H2'	1:CA:1117:G:H5''	1.84	0.57
13:AM:83:ASP:CG	13:AM:84:ILE:N	2.58	0.57
36:BA:2712:U:O2	36:BA:2712:U:H5'	2.04	0.57
50:BR:79:LEU:HA	50:BR:83:ILE:HG13	1.86	0.57
58:BZ:101:PRO:HG2	58:BZ:136:PHE:H	1.68	0.57
11:CK:124:LYS:HD2	11:CK:125:PHE:CZ	2.39	0.57
57:DY:2:ARG:N	57:DY:4:LYS:HE3	2.18	0.57
46:DN:14:VAL:HG13	46:DN:137:LYS:HG3	1.86	0.57
1:AA:632:A:C8	1:AA:633:G:C8	2.93	0.57
36:DA:2074:U:H2'	36:DA:2075:U:C6	2.39	0.57
8:CH:12:ARG:NH1	8:CH:27:PRO:HD3	2.19	0.57
52:DT:134:GLU:O	52:DT:135:ALA:HB3	2.04	0.57
11:AK:67:ASP:OD2	11:AK:71:LYS:HE3	2.05	0.57
36:DA:752:A:O2'	36:DA:753:C:OP2	2.19	0.57
41:DF:64:ILE:HG22	41:DF:76:GLY:O	2.04	0.57
38:BC:50:ASP:OD2	38:BC:53:ARG:HG3	2.03	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DY:87:LYS:O	57:DY:88:LYS:HB2	2.03	0.57
1:AA:613:C:H2'	1:AA:614:A:H8	1.70	0.57
1:CA:135:C:H2'	1:CA:136:C:H5'	1.86	0.57
56:BX:3:THR:HA	56:BX:6:ASP:OD1	2.05	0.57
28:B2:49:LYS:HB2	28:B2:49:LYS:NZ	2.20	0.57
46:DN:111:PRO:HA	46:DN:114:ARG:NH1	2.19	0.57
4:AD:128:VAL:O	4:AD:130:GLY:N	2.37	0.57
36:BA:2310:A:HO2'	36:BA:2311:A:H5'	1.68	0.57
32:B6:36:LEU:HD23	32:B6:36:LEU:C	2.24	0.57
48:DP:127:ALA:HB3	48:DP:130:PHE:CZ	2.39	0.57
43:BH:54:ARG:HG2	43:BH:54:ARG:NH1	2.18	0.57
34:D8:33:ASN:ND2	36:DA:2419:U:H5''	2.19	0.57
36:BA:2111:C:N3	36:BA:2145:C:H2'	2.20	0.57
1:CA:266:G:H5''	1:CA:267:C:H5	1.69	0.57
36:BA:1051:G:H2'	36:BA:1052:C:C4	2.38	0.57
25:AZ:171:ILE:HG22	25:AZ:172:ARG:N	2.19	0.57
10:AJ:6:ILE:HG13	10:AJ:72:VAL:HB	1.86	0.57
25:CZ:19:HIS:HD2	25:CZ:113:MET:HB3	1.65	0.57
1:CA:939:G:H2'	1:CA:940:C:C6	2.39	0.57
4:CD:34:GLU:O	4:CD:35:ARG:CB	2.52	0.57
52:DT:23:ARG:NH2	52:DT:120:ARG:HD3	2.19	0.57
36:BA:2523:G:C2'	36:BA:2524:G:H5''	2.34	0.57
52:BT:23:ARG:HG2	52:BT:120:ARG:HH12	1.68	0.57
11:AK:26:ASN:O	11:AK:27:ASN:HB2	2.04	0.57
19:CS:47:HIS:O	19:CS:62:ILE:HG22	2.04	0.57
22:CW:38:A:H2'	22:CW:39:U:C4'	2.33	0.57
36:BA:848:G:N9	36:BA:933:A:H8	2.03	0.57
36:BA:548:A:C2'	36:BA:549:G:H5'	2.34	0.57
36:BA:2208:A:H1'	36:BA:2219:G:C4	2.38	0.57
47:DO:23:ARG:HG3	47:DO:24:VAL:N	2.19	0.57
36:BA:1192:G:O2'	36:BA:1193:G:H5'	2.04	0.57
9:AI:79:LEU:HD22	9:AI:79:LEU:O	2.04	0.57
39:BD:224:ALA:O	39:BD:226:MET:N	2.38	0.57
2:CB:7:VAL:O	2:CB:11:LEU:HD12	2.04	0.57
12:AL:91:LYS:NZ	12:AL:91:LYS:HB3	2.19	0.57
5:AE:64:ARG:HG3	5:AE:64:ARG:HH11	1.68	0.57
36:BA:1268:A:H2'	36:BA:1269:A:O4'	2.04	0.57
9:AI:126:SER:O	9:AI:127:LYS:HB3	2.04	0.57
1:CA:189(A):C:H2'	1:CA:189(B):C:C6	2.39	0.57
36:BA:59:U:H3	36:BA:68:G:H1	1.49	0.57
23:AX:20:U:O2'	23:AX:21:C:H5'	2.03	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:476:G:H2'	1:CA:477:A:H8	1.70	0.57
2:AB:77:ALA:O	2:AB:81:VAL:HG23	2.03	0.57
43:DH:83:TYR:HB2	43:DH:134:SER:CA	2.33	0.57
1:CA:1003:G:C3'	1:CA:1004:A:H4'	2.34	0.57
1:AA:1038:C:O5'	1:AA:1038:C:H6	1.87	0.57
41:BF:37:VAL:CG1	48:BP:7:ARG:HH12	2.04	0.57
42:DG:52:ILE:CD1	42:DG:52:ILE:H	2.12	0.57
32:D6:36:LEU:HD23	32:D6:36:LEU:C	2.24	0.57
57:BY:14:LEU:HD13	57:BY:24:VAL:HG22	1.85	0.57
36:BA:1498:C:H2'	36:BA:1499:C:C5'	2.34	0.57
36:DA:612:C:C2'	36:DA:613:G:C5'	2.77	0.57
20:CT:62:LEU:CD1	20:CT:62:LEU:H	2.14	0.57
1:CA:1221:G:H4'	19:CS:77:THR:CG2	2.34	0.57
27:B1:58:ILE:HD12	27:B1:59:THR:N	2.18	0.57
36:BA:2133:G:H2'	36:BA:2157:G:H22	1.68	0.57
53:BU:59:ARG:NH1	53:BU:59:ARG:HG2	2.19	0.57
1:AA:542:G:P	4:AD:10:ARG:NH2	2.77	0.57
54:DV:52:VAL:HG13	54:DV:55:ALA:HB3	1.85	0.57
36:DA:1762:A:C8	36:DA:1762:A:O5'	2.57	0.57
3:CC:95:THR:CG2	3:CC:97:LYS:HD2	2.34	0.57
14:AN:57:ARG:HH11	14:AN:57:ARG:CB	2.16	0.57
24:CY:43:G:H5'	24:CY:44:G:OP2	2.04	0.57
24:CY:57:G:C2'	24:CY:58:A:H5'	2.34	0.57
1:CA:1487:G:O2'	1:CA:1488:G:H5'	2.04	0.57
1:CA:161:A:H2'	1:CA:162:A:C8	2.38	0.57
12:AL:69:TYR:HB2	12:AL:96:VAL:HG11	1.85	0.57
1:AA:72:C:H2'	1:AA:73:G:H8	1.66	0.57
54:BV:82:ARG:HD2	54:BV:82:ARG:N	2.19	0.57
56:DX:8:ILE:N	56:DX:8:ILE:HD12	2.18	0.57
36:DA:2720:U:O2	36:DA:2720:U:H2'	2.04	0.57
36:BA:1257:C:H2'	36:BA:1258:C:H6	1.69	0.57
52:BT:11:GLU:H	52:BT:11:GLU:CD	2.07	0.57
19:CS:24:ALA:O	19:CS:25:LYS:HB2	2.05	0.57
37:BB:35:U:O2'	37:BB:36:C:H5'	2.05	0.57
1:CA:457:C:H2'	1:CA:458:C:C6	2.40	0.57
57:BY:88:LYS:O	57:BY:90:LEU:HD23	2.04	0.57
36:DA:1709:U:H2'	36:DA:1710:C:C6	2.39	0.57
26:B0:56:ASP:OD2	36:BA:2364:C:H5'	2.04	0.57
27:D1:44:PRO:HG2	27:D1:46:LEU:HD23	1.86	0.57
39:BD:218:ARG:HG3	39:BD:218:ARG:HH11	1.69	0.57
55:BW:69:LEU:HA	55:BW:108:GLY:O	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.38	0.57
15:CO:27:VAL:O	15:CO:31:LEU:HD13	2.04	0.57
1:AA:178:C:O2'	1:AA:179:A:H5'	2.03	0.57
1:CA:1508:G:O2'	1:CA:1509:C:H5'	2.05	0.57
43:DH:85:LYS:CD	43:DH:133:VAL:HB	2.34	0.57
52:BT:78:LEU:C	52:BT:79:HIS:HD2	2.07	0.57
9:AI:52:ALA:HB3	9:AI:95:LYS:HZ1	1.68	0.57
36:BA:322:A:OP2	41:BF:169:ASN:HB2	2.04	0.57
9:CI:53:VAL:C	9:CI:55:ALA:H	2.08	0.57
1:CA:1533:C:H3'	1:CA:1534:A:C5'	2.24	0.57
20:CT:57:ARG:NH1	20:CT:102:GLY:HA2	2.12	0.57
36:BA:832:G:OP1	48:BP:40:SER:HB3	2.04	0.57
34:D8:25:MET:HG3	48:DP:64:LYS:HB2	1.86	0.57
36:BA:1748:G:C8	36:BA:1748:G:H5'	2.40	0.57
9:AI:33:PHE:C	9:AI:35:GLU:H	2.07	0.57
58:BZ:14:LYS:HB2	58:BZ:17:ALA:CB	2.34	0.57
16:AP:20:VAL:HG22	16:AP:21:VAL:N	2.19	0.57
1:CA:1086:U:C2'	1:CA:1087:G:H5'	2.33	0.57
25:CZ:202:LEU:O	25:CZ:206:ILE:HB	2.04	0.57
42:DG:20:ILE:O	42:DG:24:GLY:HA2	2.05	0.57
1:CA:1127:G:H1'	1:CA:1147:C:H42	1.70	0.57
4:CD:150:GLU:CG	4:CD:151:LYS:N	2.68	0.57
1:AA:1158:C:H2'	1:AA:1158:C:O2	2.03	0.57
36:BA:2867:G:C5	52:BT:23:ARG:NH1	2.72	0.57
58:DZ:105:VAL:O	58:DZ:140:ASP:HA	2.04	0.57
50:DR:55:ALA:HB1	50:DR:84:ALA:HB2	1.86	0.57
22:AV:52:G:H1	22:AV:62:C:N4	2.02	0.57
36:DA:1104:C:H2'	36:DA:1105:U:C6	2.36	0.57
1:CA:390:C:H4'	16:CP:28:ARG:HH21	1.69	0.57
58:BZ:155:LEU:HD23	58:BZ:155:LEU:N	2.19	0.57
1:AA:194:C:C2'	1:AA:195:A:H5''	2.33	0.57
3:AC:32:LEU:HD22	3:AC:59:ARG:HH11	1.66	0.57
36:BA:2779:U:H1'	36:BA:2781:A:C6	2.37	0.57
36:DA:814:C:H2'	36:DA:815:C:C6	2.39	0.57
22:AV:44:G:H2'	22:AV:45:U:H5'	1.85	0.57
22:CV:44:G:H2'	22:CV:44:G:N3	2.19	0.57
36:BA:2777:G:H5''	36:BA:2778:A:C5'	2.33	0.57
12:CL:47:LYS:C	12:CL:49:ASN:N	2.58	0.57
36:DA:528:A:H2	36:DA:2043:C:O5'	1.87	0.57
29:D3:1:MET:O	29:D3:3:ARG:N	2.38	0.57
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:173:VAL:O	3:CC:173:VAL:HG12	2.04	0.57
1:AA:1296:C:H4'	1:AA:1302:U:C5	2.39	0.57
40:BE:2:LYS:HD3	40:BE:95:ILE:HG22	1.86	0.57
47:BO:64:ARG:NH1	47:BO:83:ALA:HB2	2.19	0.57
36:DA:1750:G:O2'	36:DA:1751:C:H5'	2.04	0.57
1:AA:677:U:H3	1:AA:713:G:H22	1.52	0.57
14:AN:19:ARG:O	14:AN:20:ALA:C	2.40	0.57
36:DA:2691:C:H6	36:DA:2691:C:H5'	1.67	0.57
36:BA:118:A:N3	36:BA:178:G:H1'	2.19	0.57
40:DE:94:GLU:OE2	40:DE:177:PRO:HB3	2.03	0.57
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.39	0.57
38:BC:120:MET:O	38:BC:124:GLY:N	2.35	0.57
28:B2:25:VAL:HB	28:B2:64:LEU:CD1	2.29	0.57
39:DD:30:GLU:HG3	39:DD:63:ARG:NH2	2.19	0.57
42:BG:47:LYS:NZ	42:BG:82:LEU:HD12	2.15	0.57
32:D6:52:VAL:HG12	32:D6:53:LYS:H	1.69	0.57
36:BA:612:C:C2'	36:BA:613:G:C5'	2.77	0.57
43:DH:66:GLY:CA	43:DH:69:ARG:HB3	2.34	0.57
1:AA:980:C:H5'	1:AA:980:C:C6	2.25	0.57
4:AD:9:CYS:O	4:AD:12:CYS:HB2	2.05	0.57
58:DZ:10:ARG:NE	58:DZ:36:LYS:HB2	2.19	0.57
12:AL:113:ARG:HB3	12:AL:122:THR:HG21	1.87	0.57
2:AB:17:PHE:O	2:AB:18:GLY:O	2.22	0.57
36:BA:1087:G:H2'	36:BA:1088:A:C5'	2.33	0.57
58:DZ:166:SER:HB2	58:DZ:168:GLU:N	2.20	0.57
54:BV:49:THR:HB	54:BV:50:PRO:HD2	1.84	0.57
42:BG:9:ARG:O	42:BG:12:TYR:N	2.38	0.57
35:D9:10:ILE:N	35:D9:10:ILE:HD12	2.19	0.57
19:CS:32:LYS:O	19:CS:32:LYS:HG2	2.04	0.57
20:CT:12:ALA:O	20:CT:15:ARG:HB2	2.04	0.57
36:BA:1188:U:H4'	54:BV:79:VAL:HG22	1.86	0.57
56:BX:8:ILE:HD12	56:BX:8:ILE:N	2.19	0.57
9:AI:48:GLU:N	9:AI:49:PRO:CD	2.68	0.57
40:DE:26:ILE:HG23	40:DE:196:VAL:HG21	1.87	0.57
36:BA:1106:G:H2'	36:BA:1107:G:O4'	2.05	0.57
1:AA:1120:G:H2'	1:AA:1121:U:C6	2.39	0.57
50:DR:101:ALA:O	50:DR:102:GLU:HB2	2.05	0.57
36:DA:1523:U:H2'	36:DA:1524:G:C8	2.39	0.57
19:AS:24:ALA:O	19:AS:25:LYS:HB2	2.05	0.57
34:D8:6:THR:OG1	34:D8:11:LYS:HE3	2.05	0.57
36:DA:2188:C:H2'	36:DA:2189:U:C6	2.39	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1023:U:H6	36:DA:1023:U:H5'	1.68	0.57
41:DF:168:ARG:CG	41:DF:175:THR:HG21	2.23	0.57
1:CA:1270:C:H2'	1:CA:1271:G:H8	1.70	0.57
34:D8:23:VAL:CG1	34:D8:46:ARG:HB3	2.35	0.57
36:BA:266:G:H2'	36:BA:267:C:C5'	2.28	0.57
4:CD:9:CYS:O	4:CD:12:CYS:HB2	2.05	0.57
56:DX:52:VAL:HG12	56:DX:53:LYS:N	2.11	0.57
30:D4:7:PRO:HG2	42:DG:65:GLY:HA2	1.87	0.57
10:AJ:32:ALA:H	10:AJ:78:ASN:HD21	1.52	0.57
2:CB:31:TYR:O	2:CB:42:ILE:HG13	2.05	0.57
57:DY:53:PRO:CB	57:DY:56:PRO:HG3	2.31	0.57
36:BA:271(E):U:H2'	36:BA:271(F):C:C6	2.39	0.57
36:DA:330:A:C2	36:DA:1210:A:H2'	2.32	0.57
4:AD:150:GLU:CG	4:AD:151:LYS:N	2.68	0.57
25:AZ:19:HIS:CE1	25:AZ:113:MET:HB3	2.39	0.57
36:DA:1677:A:H2'	36:DA:1678:G:C8	2.40	0.57
43:BH:67:LEU:O	43:BH:71:LEU:HB2	2.03	0.57
36:BA:848:G:O6	36:BA:928:G:H2'	2.04	0.57
2:AB:109:SER:C	2:AB:111:ARG:N	2.58	0.57
58:BZ:10:ARG:HG2	58:BZ:12:GLY:H	1.69	0.57
47:DO:87:ILE:HG21	47:DO:91:LEU:HA	1.85	0.57
3:CC:134:ILE:CG2	3:CC:168:ALA:HB3	2.34	0.57
46:BN:72:TYR:HD2	46:BN:90:MET:HG3	1.68	0.57
16:CP:43:LYS:HA	16:CP:48:TRP:HB2	1.86	0.57
16:CP:43:LYS:HA	16:CP:48:TRP:HB3	1.85	0.57
1:CA:1347:G:C6	9:CI:107:ARG:NH2	2.73	0.57
9:CI:97:LYS:HB3	9:CI:98:PRO:HD3	1.85	0.57
1:AA:198:G:O2'	1:AA:199:G:H8	1.87	0.57
38:DC:214:VAL:HG23	38:DC:224:ILE:HD13	1.86	0.57
1:AA:57:G:H2'	1:AA:58:C:C6	2.40	0.57
2:AB:97:TRP:CZ2	2:AB:102:LEU:HD13	2.40	0.57
36:BA:2358:G:H22	48:BP:55:ARG:HH21	1.52	0.57
36:BA:1523:U:H2'	36:BA:1524:G:C8	2.39	0.57
39:BD:8:PRO:HB3	39:BD:14:ARG:HB3	1.86	0.57
48:BP:92:GLU:HG2	48:BP:121:LYS:NZ	2.20	0.57
15:AO:21:ASP:OD2	15:AO:24:SER:HB3	2.05	0.57
40:BE:203:LYS:O	40:BE:203:LYS:HD2	2.05	0.57
33:D7:19:ARG:HG2	33:D7:19:ARG:HH11	1.69	0.57
38:DC:106:GLY:O	38:DC:107:TRP:HB3	2.05	0.57
39:BD:35:LYS:HG3	39:BD:63:ARG:CG	2.34	0.57
39:BD:72:LYS:HG3	39:BD:103:ARG:NH2	2.20	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2833:G:C3'	36:DA:2834:G:H5''	2.31	0.57
52:DT:13:ARG:HH11	52:DT:13:ARG:HA	1.65	0.57
57:DY:14:LEU:HD13	57:DY:24:VAL:HG22	1.85	0.57
1:CA:542:G:P	4:CD:10:ARG:NH2	2.77	0.57
34:D8:13:ARG:HD2	48:DP:61:ARG:CD	2.28	0.57
30:B4:14:ILE:HG13	30:B4:31:ILE:CB	2.32	0.57
36:BA:1207:C:H2'	36:BA:1208:C:C6	2.34	0.57
31:B5:31:VAL:HG13	31:B5:42:PRO:HG3	1.86	0.57
31:B5:49:CYS:O	31:B5:56:LYS:HE2	2.05	0.57
40:DE:117:MET:HE1	40:DE:136:ARG:HA	1.86	0.57
37:DB:91:C:OP1	49:DQ:16:ARG:HD2	2.05	0.57
1:AA:1286:A:O2'	1:AA:1287:A:C5'	2.53	0.57
42:BG:32:PRO:HA	42:BG:162:THR:OG1	2.05	0.57
36:DA:1861:G:O2'	36:DA:1862:G:H5'	2.05	0.57
36:BA:326:G:H2'	36:BA:327:G:H8	1.69	0.57
36:DA:1721:G:C6	36:DA:1739:U:H5'	2.40	0.57
57:DY:47:LYS:HE3	57:DY:60:PHE:HZ	1.70	0.57
13:AM:91:ARG:CB	13:AM:98:VAL:HG12	2.35	0.57
41:BF:177:ALA:HB1	41:BF:178:PRO:HD2	1.85	0.57
1:AA:433:C:H2'	1:AA:434:U:H6	1.70	0.57
19:AS:32:LYS:O	19:AS:32:LYS:HG2	2.04	0.57
36:BA:2020:A:O2'	36:BA:2021:C:H5'	2.05	0.57
46:BN:14:VAL:HG13	46:BN:137:LYS:HG3	1.87	0.57
11:CK:84:VAL:HG11	11:CK:95:ILE:HD11	1.87	0.57
36:BA:1184:G:O2'	36:BA:1185:C:H5'	2.04	0.57
44:DJ:106:UNK:O	44:DJ:107:UNK:CB	2.53	0.57
22:AW:27:G:O2'	22:AW:28:G:H5'	2.05	0.57
1:AA:135:C:H2'	1:AA:136:C:H5'	1.86	0.57
36:BA:1417:C:H2'	36:BA:1418:G:O4'	2.04	0.57
1:AA:256:U:H2'	1:AA:257:G:C8	2.39	0.57
40:DE:179:GLU:O	40:DE:180:ASN:HB2	2.03	0.57
43:BH:85:LYS:CD	43:BH:133:VAL:HB	2.34	0.57
39:DD:35:LYS:HG3	39:DD:63:ARG:CG	2.33	0.57
56:BX:12:VAL:HB	56:BX:17:ALA:CB	2.10	0.57
42:BG:46:ALA:C	42:BG:47:LYS:HD2	2.24	0.57
52:BT:28:VAL:CG1	52:BT:46:GLU:HA	2.32	0.57
24:CY:70:C:H2'	24:CY:71:C:C6	2.39	0.57
52:DT:10:VAL:O	52:DT:13:ARG:NE	2.35	0.57
36:BA:1858:G:H1'	36:BA:1884:A:N6	2.20	0.57
1:AA:1201:A:H5'	1:AA:1203:C:OP2	2.04	0.57
36:DA:1858:G:H1'	36:DA:1884:A:N6	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:53:LEU:O	20:CT:57:ARG:HB2	2.05	0.57
36:DA:2298:A:H2'	36:DA:2299:G:O4'	2.05	0.57
52:BT:50:ILE:HA	52:BT:99:LEU:CD1	2.35	0.57
1:CA:858:G:H5''	1:CA:858:G:H8	1.70	0.57
36:BA:1677:A:H2'	36:BA:1678:G:C8	2.40	0.57
9:CI:4:TYR:CG	9:CI:88:TYR:HB2	2.40	0.57
36:BA:1208:C:O2	36:BA:1208:C:H2'	2.03	0.57
1:AA:573:A:H5'	1:AA:573:A:C8	2.32	0.57
36:DA:93:G:H2'	36:DA:94:C:C6	2.40	0.57
15:CO:17:ARG:HD3	15:CO:26:GLU:CD	2.25	0.57
42:BG:115:ARG:HG2	42:BG:115:ARG:NH1	2.11	0.57
54:BV:38:LEU:O	54:BV:39:LEU:HD13	2.05	0.57
58:DZ:23:LYS:O	58:DZ:24:LEU:CB	2.51	0.57
10:AJ:4:ILE:HB	10:AJ:74:ILE:HD11	1.87	0.57
36:BA:2712:U:OP1	36:BA:2714:G:H4'	2.05	0.57
36:DA:326:G:H2'	36:DA:327:G:H8	1.69	0.57
47:BO:87:ILE:HG21	47:BO:91:LEU:HA	1.86	0.57
9:CI:99:LEU:HD22	9:CI:99:LEU:H	1.70	0.57
53:DU:32:PHE:CB	53:DU:36:ARG:NH2	2.68	0.57
1:CA:1428:A:H2'	1:CA:1429:C:C6	2.40	0.57
36:BA:1166:C:H2'	36:BA:1167:U:C6	2.40	0.57
5:CE:6:PHE:CB	5:CE:34:VAL:HG22	2.35	0.57
58:DZ:77:ASP:HB3	58:DZ:80:ARG:O	2.05	0.57
30:D4:42:PHE:O	30:D4:43:TYR:O	2.22	0.57
24:CY:55:PSU:H2'	24:CY:56:C:OP2	2.05	0.57
1:AA:490:G:H2'	1:AA:491:G:C8	2.40	0.57
36:DA:176:G:O2'	36:DA:177:G:H5'	2.05	0.57
36:BA:882:G:H2'	36:BA:883:G:H8	1.70	0.57
28:B2:51:ARG:CD	36:BA:94(A):G:H21	2.17	0.57
28:B2:67:LYS:HA	28:B2:70:GLN:HG2	1.87	0.57
36:BA:1464:C:HO2'	36:BA:1528:A:H8	1.52	0.57
34:D8:6:THR:HG21	34:D8:63:PRO:HD3	1.86	0.57
52:BT:28:VAL:HG13	52:BT:46:GLU:CA	2.32	0.57
57:BY:28:LYS:HB3	57:BY:39:VAL:H	1.69	0.57
57:BY:86:ARG:NH2	57:BY:95:LYS:HE2	2.19	0.57
32:B6:9:LEU:O	32:B6:9:LEU:HD13	2.04	0.57
34:B8:23:VAL:CG1	34:B8:46:ARG:HB3	2.34	0.57
42:DG:68:PRO:HG3	42:DG:92:VAL:HB	1.85	0.57
20:CT:62:LEU:HA	20:CT:65:LYS:HB2	1.86	0.57
42:DG:131:TYR:HB3	42:DG:159:VAL:HG13	1.84	0.57
49:DQ:134:ARG:CD	58:DZ:122:ARG:NH2	2.68	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:45:ARG:CG	50:BR:46:GLY:H	2.13	0.57
20:CT:50:GLU:HB2	20:CT:99:LEU:CD1	2.33	0.57
54:BV:47:VAL:O	54:BV:47:VAL:HG23	2.05	0.57
58:DZ:142:SER:C	58:DZ:144:LEU:H	2.06	0.57
40:DE:5:LEU:HD12	40:DE:51:PHE:HB2	1.86	0.57
10:CJ:3:LYS:HD2	10:CJ:77:PRO:HG3	1.87	0.57
36:DA:1722:A:O2'	36:DA:1739:U:C5'	2.53	0.57
42:BG:36:LYS:HD3	42:BG:95:ARG:HH12	1.70	0.57
57:DY:31:LEU:HB2	57:DY:32:PRO:HA	1.87	0.57
39:BD:111:LEU:HD22	39:BD:115:GLN:OE1	2.05	0.57
3:CC:70:VAL:O	3:CC:105:GLU:HA	2.04	0.57
1:AA:161:A:H2'	1:AA:162:A:C8	2.40	0.57
1:AA:413:G:H1'	1:AA:428:G:H21	1.70	0.57
5:CE:60:TYR:CE1	5:CE:64:ARG:NH2	2.73	0.57
39:BD:94:LEU:HB2	39:BD:104:TYR:HE1	1.69	0.57
18:AR:59:SER:OG	18:AR:62:GLU:HG3	2.05	0.57
46:DN:99:LEU:O	46:DN:103:VAL:HG23	2.04	0.57
11:CK:80:VAL:HG13	11:CK:103:LEU:HD11	1.86	0.57
25:CZ:315:LYS:HA	25:CZ:372:VAL:O	2.04	0.57
2:AB:139:LYS:O	2:AB:143:GLU:HG3	2.04	0.57
55:DW:84:ARG:HB2	55:DW:96:ILE:HG22	1.85	0.57
40:BE:26:ILE:HG23	40:BE:196:VAL:HG21	1.85	0.57
1:AA:697:U:H2'	1:AA:698:G:H5'	1.86	0.57
27:D1:53:VAL:HG22	27:D1:74:VAL:HG13	1.85	0.57
56:BX:33:LYS:HA	56:BX:33:LYS:HE2	1.86	0.57
51:DS:11:LYS:HG2	51:DS:11:LYS:O	2.05	0.57
42:BG:86:MET:O	42:BG:86:MET:HG2	2.05	0.56
9:AI:53:VAL:CG2	9:AI:95:LYS:HZ3	1.97	0.56
42:BG:51:ARG:CA	42:BG:51:ARG:HE	2.08	0.56
32:D6:15:GLU:O	32:D6:17:LYS:N	2.38	0.56
57:DY:86:ARG:NH2	57:DY:95:LYS:HE2	2.18	0.56
34:D8:30:ARG:HA	34:D8:30:ARG:HE	1.70	0.56
36:BA:672:C:O3'	41:BF:81:PRO:HG3	2.05	0.56
2:CB:72:GLY:O	2:CB:94:ASN:HA	2.04	0.56
3:CC:135:LYS:NZ	5:CE:50:GLU:HG2	2.20	0.56
51:BS:106:ARG:CZ	51:BS:106:ARG:HB3	2.35	0.56
10:CJ:33:GLN:O	10:CJ:75:ILE:HG12	2.05	0.56
36:BA:2761:G:C2'	36:BA:2762:G:H5''	2.35	0.56
36:DA:2807:G:H3'	36:DA:2808:U:H5''	1.86	0.56
40:DE:61:ARG:HB3	40:DE:62:PRO:CD	2.33	0.56
25:CZ:108:ALA:HB3	25:CZ:137:LYS:O	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B5:54:GLY:N	31:B5:56:LYS:NZ	2.51	0.56
1:AA:961:U:O2'	1:AA:962:C:P	2.63	0.56
36:DA:769:G:H4'	36:DA:1379:A:N1	2.20	0.56
25:AZ:26:THR:HB	60:AZ:501:GDP:O2A	2.05	0.56
42:BG:152:LEU:HD23	42:BG:152:LEU:H	1.70	0.56
36:BA:2524:G:C8	36:BA:2524:G:H5'	2.35	0.56
50:BR:55:ALA:HB1	50:BR:84:ALA:HB2	1.85	0.56
1:AA:390:C:H4'	16:AP:28:ARG:HH21	1.70	0.56
36:DA:1106:G:H2'	36:DA:1107:G:O4'	2.04	0.56
39:DD:131:LEU:HB2	39:DD:136:ILE:HD11	1.86	0.56
1:AA:1378:C:H4'	7:AG:94:ARG:HH22	1.70	0.56
1:AA:443:C:H2'	1:AA:444:C:H6	1.70	0.56
9:AI:9:ARG:HG3	9:AI:14:VAL:HG13	1.87	0.56
18:CR:26:LEU:CD2	18:CR:39:VAL:HG13	2.35	0.56
36:BA:533:G:H5'	53:BU:24:TYR:CD1	2.40	0.56
36:DA:530:G:C5	36:DA:2022:U:H5''	2.40	0.56
1:AA:457:C:H2'	1:AA:458:C:C6	2.40	0.56
1:AA:189(A):C:H2'	1:AA:189(B):C:C6	2.40	0.56
2:CB:139:LYS:O	2:CB:143:GLU:HG3	2.04	0.56
40:BE:182:LEU:C	40:BE:183:LEU:HD12	2.24	0.56
36:BA:2691:C:H6	36:BA:2691:C:H5'	1.69	0.56
26:D0:56:ASP:OD1	26:D0:58:THR:OG1	2.20	0.56
23:CX:20:U:O2'	23:CX:21:C:H5'	2.05	0.56
38:BC:106:GLY:O	38:BC:107:TRP:HB3	2.05	0.56
28:B2:28:LYS:O	28:B2:57:ILE:HD11	2.05	0.56
28:B2:69:ARG:HD2	28:B2:69:ARG:N	2.19	0.56
40:DE:87:GLU:OE2	40:DE:89:ASP:HB3	2.05	0.56
1:AA:1003:G:C3'	1:AA:1004:A:H4'	2.34	0.56
9:AI:53:VAL:C	9:AI:55:ALA:H	2.07	0.56
22:CW:67:C:H2'	22:CW:68:C:C6	2.40	0.56
41:BF:160:ASN:HD21	41:BF:162:LEU:CD1	2.17	0.56
52:BT:29:ARG:CB	52:BT:85:LYS:HA	2.36	0.56
40:BE:38:THR:HB	40:BE:41:LYS:CG	2.32	0.56
27:B1:7:ILE:HG22	27:B1:8:SER:N	2.20	0.56
57:DY:27:VAL:HA	57:DY:28:LYS:HE2	1.88	0.56
36:DA:691:C:O2'	36:DA:692:C:H5'	2.05	0.56
36:DA:672:C:O3'	41:DF:81:PRO:HG3	2.05	0.56
1:AA:975:A:H5'	1:AA:975:A:C8	2.40	0.56
10:AJ:33:GLN:O	10:AJ:75:ILE:HG12	2.05	0.56
7:AG:113:GLU:CG	7:AG:119:ARG:HG2	2.35	0.56
1:CA:1242:C:O2'	1:CA:1243:C:H5'	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:858:G:C5	1:CA:869:G:N7	2.73	0.56
9:AI:4:TYR:CG	9:AI:88:TYR:HB2	2.39	0.56
9:CI:88:TYR:O	9:CI:89:ASN:HB2	2.05	0.56
57:BY:51:VAL:O	57:BY:53:PRO:HD3	2.05	0.56
6:CF:11:ASN:HB3	6:CF:14:LEU:CG	2.32	0.56
47:BO:35:VAL:HG11	47:BO:69:ILE:HD13	1.87	0.56
54:BV:52:VAL:HG13	54:BV:55:ALA:HB3	1.86	0.56
36:BA:1683:C:H2'	36:BA:1684:C:C6	2.40	0.56
36:BA:1683:C:H2'	36:BA:1684:C:H6	1.70	0.56
50:BR:94:TYR:CD1	50:BR:94:TYR:N	2.70	0.56
36:DA:2376:A:H2'	36:DA:2377:A:O4'	2.05	0.56
47:BO:23:ARG:HG3	47:BO:24:VAL:N	2.18	0.56
1:CA:953:G:C5'	1:CA:965:A:H61	2.18	0.56
1:AA:345:C:H4'	52:BT:41:ARG:HH21	1.70	0.56
14:CN:27:CYS:SG	14:CN:29:ARG:HB2	2.46	0.56
39:BD:224:ALA:C	39:BD:226:MET:H	2.08	0.56
26:B0:16:SER:HB2	36:BA:2262:U:C5	2.39	0.56
18:AR:36:ASN:HD21	18:AR:39:VAL:CG2	2.18	0.56
46:DN:96:GLU:O	46:DN:100:GLU:HG3	2.04	0.56
57:DY:90:LEU:HG	57:DY:91:GLU:H	1.70	0.56
36:DA:1523:U:H2'	36:DA:1524:G:H8	1.70	0.56
33:D7:9:ARG:NE	36:DA:1310:G:OP2	2.30	0.56
56:DX:3:THR:HA	56:DX:6:ASP:OD1	2.04	0.56
47:DO:2:ILE:HD12	47:DO:6:THR:HG21	1.87	0.56
48:DP:135:LEU:HD13	48:DP:135:LEU:O	2.05	0.56
38:DC:190:ARG:O	38:DC:194:ARG:HG3	2.05	0.56
52:BT:134:GLU:O	52:BT:135:ALA:HB3	2.04	0.56
1:AA:1354:C:H2'	1:AA:1355:G:H8	1.69	0.56
36:DA:2544:G:H8	36:DA:2544:G:O5'	1.88	0.56
39:DD:30:GLU:HG2	39:DD:35:LYS:HZ1	1.70	0.56
39:DD:31:LYS:HG3	39:DD:33:LEU:HG	1.87	0.56
40:DE:75:VAL:O	40:DE:77:ILE:N	2.38	0.56
36:DA:31:C:O2'	36:DA:32:C:H5''	2.05	0.56
36:DA:1464:C:HO2'	36:DA:1528:A:H8	1.49	0.56
9:AI:53:VAL:HG13	9:AI:95:LYS:CD	2.31	0.56
39:BD:36:PRO:O	39:BD:37:LEU:HB2	2.04	0.56
46:BN:43:THR:HB	46:BN:46:VAL:HG11	1.86	0.56
42:DG:51:ARG:NH1	42:DG:53:LEU:HD22	2.21	0.56
36:BA:2101:G:C3'	36:BA:2102:U:H5''	2.34	0.56
52:BT:4:GLY:O	52:BT:7:ILE:HB	2.05	0.56
32:D6:15:GLU:CD	32:D6:18:ARG:NE	2.58	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DY:95:LYS:CE	57:DY:100:ALA:HB2	2.35	0.56
57:DY:81:LYS:HD2	57:DY:96:ILE:HD11	1.87	0.56
57:BY:27:VAL:HA	57:BY:28:LYS:HE2	1.87	0.56
57:BY:81:LYS:HD2	57:BY:96:ILE:HD11	1.86	0.56
34:D8:23:VAL:HG12	34:D8:46:ARG:NH1	2.11	0.56
9:CI:114:TYR:CE1	10:CJ:59:SER:HA	2.39	0.56
3:CC:76:VAL:HG21	3:CC:103:VAL:CG2	2.35	0.56
32:D6:9:LEU:HD22	32:D6:10:LEU:N	2.20	0.56
48:BP:23:PRO:HD2	48:BP:33:ARG:NE	2.14	0.56
3:AC:82:GLU:O	3:AC:86:VAL:HG13	2.05	0.56
36:DA:621:A:C2'	36:DA:622:G:H5'	2.35	0.56
36:DA:2297:C:O2'	36:DA:2298:A:H5'	2.05	0.56
48:BP:16:ARG:CZ	48:BP:16:ARG:HB2	2.35	0.56
16:CP:21:VAL:HG12	16:CP:34:GLU:O	2.05	0.56
1:CA:858:G:C6	1:CA:869:G:C8	2.94	0.56
2:CB:18:GLY:H	2:CB:42:ILE:HG23	1.69	0.56
36:DA:1112:G:O2'	36:DA:1113:U:H5'	2.04	0.56
35:D9:35:ARG:O	35:D9:36:GLN:O	2.22	0.56
2:AB:18:GLY:H	2:AB:42:ILE:HG23	1.70	0.56
2:AB:31:TYR:O	2:AB:42:ILE:HG13	2.06	0.56
47:DO:114:ILE:H	47:DO:114:ILE:CD1	2.18	0.56
36:BA:2761:G:H2'	36:BA:2762:G:H5''	1.87	0.56
25:CZ:171:ILE:HG22	25:CZ:172:ARG:N	2.19	0.56
40:DE:116:VAL:O	40:DE:117:MET:CB	2.52	0.56
40:DE:116:VAL:CG2	40:DE:117:MET:N	2.68	0.56
36:BA:93:G:H2'	36:BA:94:C:C6	2.41	0.56
41:BF:164:ARG:HG2	41:BF:164:ARG:NH1	2.17	0.56
4:CD:36:ARG:C	4:CD:38:TYR:H	2.07	0.56
1:CA:1158:C:H2'	1:CA:1158:C:O2	2.04	0.56
7:AG:99:LEU:O	7:AG:102:ARG:HG2	2.06	0.56
42:BG:6:ALA:O	42:BG:10:LYS:HD3	2.05	0.56
54:DV:59:ALA:HA	54:DV:95:LEU:O	2.05	0.56
34:B8:50:LEU:N	34:B8:53:PRO:HD3	2.20	0.56
34:D8:14:VAL:HG21	34:D8:22:VAL:HG13	1.87	0.56
9:CI:65:VAL:HG21	9:CI:73:GLN:HB3	1.86	0.56
22:AW:30:G:H2'	22:AW:31:A:H8	1.69	0.56
50:DR:79:LEU:HA	50:DR:83:ILE:HG13	1.86	0.56
27:D1:29:GLY:O	27:D1:31:GLY:N	2.38	0.56
36:DA:549:G:O2'	36:DA:551:G:H5'	2.05	0.56
7:CG:113:GLU:HG3	7:CG:118:VAL:HG23	1.86	0.56
53:DU:76:TYR:O	53:DU:80:ILE:HG12	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DO:88:ASN:OD1	47:DO:90:GLN:N	2.38	0.56
57:BY:31:LEU:HB2	57:BY:32:PRO:HA	1.86	0.56
56:BX:57:LEU:HD13	56:BX:57:LEU:N	2.19	0.56
1:CA:498:U:O2'	1:CA:499:A:H8	1.88	0.56
1:AA:59:A:H5'	1:AA:60:A:H5''	1.85	0.56
40:DE:101:ARG:NH2	40:DE:171:GLU:HB2	2.20	0.56
38:DC:5:LYS:HB3	38:DC:8:ARG:HH21	1.70	0.56
38:DC:75:LEU:HD12	38:DC:75:LEU:C	2.24	0.56
22:AV:44:G:N3	22:AV:44:G:H2'	2.20	0.56
2:AB:95:GLN:NE2	2:AB:147:LYS:HE2	2.20	0.56
5:CE:41:VAL:HG23	5:CE:67:VAL:CG1	2.34	0.56
26:B0:20:ARG:HH11	26:B0:20:ARG:CG	2.18	0.56
50:DR:103:ARG:NH1	50:DR:110:PRO:HB3	2.20	0.56
25:CZ:11:HIS:O	25:CZ:12:VAL:HG13	2.05	0.56
36:BA:528:A:H2	36:BA:2043:C:O5'	1.88	0.56
36:DA:1013:C:H2'	36:DA:1014:U:C6	2.41	0.56
19:AS:29:ARG:HD2	19:AS:29:ARG:N	2.19	0.56
37:BB:56:G:O2'	37:BB:57:A:OP2	2.21	0.56
36:BA:2836:U:O5'	36:BA:2836:U:H6	1.88	0.56
36:BA:1709:U:H2'	36:BA:1710:C:C6	2.40	0.56
31:B5:7:PRO:HG2	36:BA:2016:U:O2	2.05	0.56
36:DA:648:G:H2'	36:DA:649:G:H8	1.71	0.56
7:AG:137:LYS:O	7:AG:138:LYS:C	2.44	0.56
25:AZ:84:GLY:O	25:AZ:85:HIS:HB3	2.04	0.56
50:BR:101:ALA:O	50:BR:102:GLU:HB2	2.04	0.56
25:CZ:320:VAL:HG13	25:CZ:397:ALA:O	2.05	0.56
36:BA:108:U:H2'	36:BA:109:G:H8	1.70	0.56
36:DA:1184:G:O2'	36:DA:1185:C:H5'	2.05	0.56
46:DN:94:HIS:N	46:DN:95:PRO:CD	2.68	0.56
36:DA:1827:C:O2'	36:DA:1828:G:H5'	2.06	0.56
4:AD:191:ARG:HD3	4:AD:200:GLU:OE2	2.05	0.56
52:DT:11:GLU:H	52:DT:11:GLU:CD	2.09	0.56
36:DA:1417:C:H2'	36:DA:1418:G:O4'	2.04	0.56
1:CA:580:U:H2'	1:CA:581:G:O4'	2.05	0.56
36:DA:1231:G:H2'	36:DA:1232:G:C8	2.41	0.56
9:AI:106:ALA:O	9:AI:108:VAL:HG23	2.05	0.56
24:CY:49:G:O2'	24:CY:50:G:H5'	2.06	0.56
1:CA:260:G:H2'	1:CA:261:U:C6	2.40	0.56
46:DN:71:ILE:HG21	46:DN:84:LYS:HB3	1.87	0.56
35:D9:16:VAL:HG11	36:DA:1032:A:O3'	2.05	0.56
42:BG:150:ASP:O	42:BG:151:ALA:HB3	2.04	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DQ:116:GLU:O	49:DQ:120:ILE:HG12	2.05	0.56
6:AF:3:ARG:HH11	6:AF:3:ARG:HG3	1.70	0.56
1:CA:751:U:H4'	15:CO:24:SER:HA	1.87	0.56
1:AA:260:G:H2'	1:AA:261:U:C6	2.40	0.56
42:BG:41:GLN:CD	42:BG:60:LEU:HD21	2.25	0.56
22:AV:41:C:C3'	22:AV:42:C:H5''	2.36	0.56
56:DX:18:TYR:O	56:DX:20:GLY:N	2.38	0.56
36:DA:1542:A:C8	36:DA:1544:A:H5'	2.40	0.56
36:BA:926:A:H5'	36:BA:926:A:H8	1.71	0.56
42:DG:86:MET:N	42:DG:87:PRO:CD	2.68	0.56
32:D6:15:GLU:HG3	32:D6:47:THR:HG21	1.86	0.56
57:BY:8:LYS:N	57:BY:8:LYS:CD	2.65	0.56
36:BA:84:A:H5''	57:BY:9:LYS:HD2	1.87	0.56
32:B6:10:LEU:CD2	32:B6:10:LEU:N	2.67	0.56
36:BA:1947:C:C2'	36:BA:1948:G:H5''	2.35	0.56
36:BA:1784:A:H4'	36:BA:1785:A:O5'	2.05	0.56
12:AL:8:ASN:O	12:AL:12:ARG:HG3	2.05	0.56
30:B4:7:PRO:CG	42:BG:61:ALA:HB1	2.36	0.56
36:BA:1049:C:H2'	36:BA:1050:A:C8	2.30	0.56
57:DY:51:VAL:O	57:DY:53:PRO:HD3	2.05	0.56
58:BZ:114:GLY:H	58:BZ:146:ILE:CG2	2.18	0.56
47:DO:35:VAL:HG11	47:DO:69:ILE:HD13	1.87	0.56
13:CM:83:ASP:CG	13:CM:84:ILE:N	2.58	0.56
43:BH:76:VAL:O	43:BH:79:VAL:HG22	2.06	0.56
36:BA:335:C:H2'	36:BA:336:C:C6	2.40	0.56
8:AH:56:LYS:HD2	8:AH:56:LYS:N	2.20	0.56
36:BA:419:C:H2'	36:BA:420:C:C6	2.39	0.56
1:CA:1378:C:H4'	7:CG:94:ARG:HH22	1.71	0.56
58:BZ:115:GLY:HA3	58:BZ:174:VAL:CG1	2.35	0.56
4:AD:36:ARG:C	4:AD:38:TYR:H	2.07	0.56
1:CA:443:C:H2'	1:CA:444:C:C6	2.40	0.56
28:D2:46:GLN:HB3	28:D2:48:HIS:HE1	1.71	0.56
36:BA:137:C:O2	36:BA:137:C:H2'	2.04	0.56
58:BZ:6:LYS:HG2	58:BZ:8:TYR:OH	2.06	0.56
36:DA:2703:C:O2'	36:DA:2704:C:H5'	2.05	0.56
36:DA:2341:G:H2'	36:DA:2342:C:C6	2.39	0.56
1:AA:736:C:H2'	1:AA:737:A:C8	2.39	0.56
8:AH:20:TYR:CE2	8:AH:76:PRO:HG2	2.40	0.56
36:DA:153:C:H2'	36:DA:154:G:C8	2.40	0.56
36:DA:1166:C:H2'	36:DA:1167:U:C6	2.40	0.56
1:AA:580:U:H2'	1:AA:581:G:O4'	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2240:C:O2'	36:BA:2241:A:H5'	2.05	0.56
36:DA:744:G:OP1	40:DE:132:HIS:HB3	2.06	0.56
25:AZ:315:LYS:HA	25:AZ:372:VAL:O	2.04	0.56
1:CA:1148:U:H2'	1:CA:1149:C:O4'	2.05	0.56
52:DT:31:SER:OG	52:DT:32:TYR:CE1	2.59	0.56
28:B2:65:ASN:HB3	36:BA:72:U:C5	2.41	0.56
39:BD:31:LYS:HG3	39:BD:33:LEU:HG	1.88	0.56
41:BF:126:VAL:HG11	41:BF:142:TRP:HH2	1.69	0.56
43:DH:159:GLU:C	43:DH:159:GLU:CD	2.63	0.56
36:DA:2657:A:O2'	43:DH:160:LYS:HE2	2.06	0.56
57:DY:17:SER:OG	57:DY:18:GLY:N	2.37	0.56
54:BV:28:GLU:HB3	54:BV:29:PRO:HD2	1.87	0.56
36:BA:658:C:H2'	36:BA:659:C:H6	1.66	0.56
41:BF:101:LEU:HD12	41:BF:102:PRO:CD	2.35	0.56
32:B6:53:LYS:N	32:B6:53:LYS:HD3	2.19	0.56
48:BP:135:LEU:HD13	48:BP:135:LEU:O	2.06	0.56
9:CI:33:PHE:C	9:CI:35:GLU:H	2.08	0.56
34:B8:25:MET:HG3	48:BP:64:LYS:HB2	1.88	0.56
25:CZ:263:ARG:HG3	25:CZ:264:LYS:N	2.20	0.56
2:AB:44:LEU:HD12	2:AB:44:LEU:N	2.14	0.56
53:DU:92:ARG:HD3	53:DU:94:ASN:HB3	1.87	0.56
28:D2:64:LEU:O	28:D2:68:ARG:HB2	2.06	0.56
20:AT:50:GLU:HB2	20:AT:99:LEU:CD1	2.34	0.56
46:DN:25:ARG:HG2	46:DN:25:ARG:HH11	1.71	0.56
2:CB:109:SER:C	2:CB:111:ARG:N	2.58	0.56
56:DX:57:LEU:HD13	56:DX:57:LEU:N	2.20	0.56
2:AB:88:ALA:HB2	2:AB:219:VAL:HG13	1.86	0.56
38:DC:32:LEU:HD13	38:DC:220:PRO:HG2	1.86	0.56
38:BC:149:ILE:HG23	38:BC:150:GLY:N	2.20	0.56
39:BD:161:THR:O	39:BD:196:VAL:HG23	2.06	0.56
49:BQ:19:GLY:O	49:BQ:98:LYS:HD3	2.05	0.56
20:CT:73:HIS:HB3	20:CT:74:LYS:HD3	1.87	0.56
2:AB:97:TRP:CZ3	2:AB:176:GLU:OE2	2.58	0.56
36:DA:882:G:H2'	36:DA:883:G:H8	1.70	0.56
36:DA:2836:U:O5'	36:DA:2836:U:H6	1.88	0.56
36:DA:1572:A:O2'	36:DA:1573:G:H5'	2.05	0.56
1:CA:659:U:O2'	1:CA:660:G:H5'	2.06	0.56
6:CF:21:LEU:HD13	6:CF:21:LEU:C	2.26	0.56
49:BQ:59:ARG:HD2	49:BQ:59:ARG:O	2.06	0.56
26:D0:43:THR:HG22	36:DA:2331:G:O2'	2.05	0.56
52:DT:30:VAL:HG12	52:DT:44:ASP:CG	2.26	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:32:TYR:HB3	52:BT:81:PRO:HB3	1.87	0.56
38:BC:27:ARG:NE	38:BC:182:PRO:CB	2.68	0.56
57:BY:7:VAL:HB	57:BY:8:LYS:HZ3	1.71	0.56
51:DS:97:ARG:C	51:DS:97:ARG:NE	2.59	0.56
36:BA:1077:A:P	58:BZ:111:VAL:HG11	2.45	0.56
36:BA:252:G:OP2	48:BP:50:ARG:NH2	2.34	0.56
52:BT:96:ARG:HB2	52:BT:96:ARG:NH1	2.21	0.56
36:DA:2133:G:H2'	36:DA:2157:G:H22	1.68	0.56
6:CF:63:TYR:N	6:CF:63:TYR:HD1	2.04	0.56
14:CN:15:LYS:HB3	14:CN:16:PHE:CE2	2.41	0.56
41:DF:206:ILE:HG22	41:DF:207:GLY:N	2.19	0.56
28:B2:10:LEU:O	28:B2:14:ARG:HG3	2.06	0.56
4:AD:152:SER:O	4:AD:154:ASN:N	2.39	0.56
25:AZ:110:ASP:HB3	25:AZ:113:MET:HE1	1.86	0.56
20:CT:26:ASN:N	20:CT:26:ASN:HD22	2.04	0.56
13:CM:49:THR:O	13:CM:53:VAL:HG23	2.05	0.56
10:AJ:34:VAL:CG2	10:AJ:74:ILE:HG22	2.34	0.56
50:DR:87:TYR:O	50:DR:89:ASP:N	2.38	0.56
50:BR:55:ALA:HB2	50:BR:79:LEU:CD1	2.33	0.56
39:BD:134:ARG:NH1	39:BD:135:PHE:CE1	2.73	0.56
1:AA:192:U:O4'	20:AT:103:GLY:HA2	2.06	0.56
36:BA:2376:A:H2'	36:BA:2377:A:O4'	2.05	0.56
3:AC:95:THR:CG2	3:AC:97:LYS:HD2	2.35	0.56
25:CZ:64:ASN:ND2	25:CZ:64:ASN:H	2.02	0.56
12:AL:47:LYS:C	12:AL:49:ASN:N	2.57	0.56
1:CA:946:A:H2'	1:CA:947:G:H8	1.68	0.56
36:DA:2206:G:N3	36:DA:2206:G:H3'	2.21	0.56
42:BG:131:TYR:HB3	42:BG:159:VAL:HG12	1.88	0.56
31:D5:31:VAL:HG13	31:D5:42:PRO:HG3	1.87	0.56
39:BD:223:GLY:O	39:BD:224:ALA:O	2.24	0.56
13:CM:3:ARG:HH21	13:CM:7:VAL:HG22	1.71	0.56
2:CB:154:LEU:O	2:CB:156:LYS:HG3	2.04	0.56
1:CA:1264:C:H2'	1:CA:1265:G:C8	2.40	0.56
36:DA:519:U:H2'	36:DA:520:G:H8	1.70	0.56
1:AA:202:U:H4'	1:AA:203:U:OP2	2.04	0.56
1:CA:490:G:H2'	1:CA:491:G:C8	2.40	0.56
33:D7:43:THR:HG23	33:D7:44:PRO:HD2	1.87	0.56
1:CA:115:G:H1'	1:CA:116:A:N7	2.21	0.56
30:B4:22:ILE:N	30:B4:22:ILE:HD12	2.19	0.56
29:D3:26:LEU:HB2	29:D3:28:LEU:CD2	2.36	0.56
36:BA:2544:G:O5'	36:BA:2544:G:H8	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:66:GLU:OE2	28:B2:67:LYS:HB2	2.06	0.56
58:BZ:4:ARG:HG2	58:BZ:58:VAL:HB	1.87	0.56
36:DA:2310:A:O2'	36:DA:2311:A:C5'	2.47	0.56
36:DA:1498:C:H2'	36:DA:1499:C:C5'	2.35	0.56
36:DA:321:G:N3	41:DF:165:ARG:HD3	2.21	0.56
36:DA:1494:A:C3'	36:DA:1495:A:H5''	2.36	0.56
36:DA:672:C:C2'	36:DA:673:C:C5'	2.83	0.56
30:D4:14:ILE:HG13	30:D4:31:ILE:CB	2.31	0.56
1:CA:961:U:O2'	1:CA:962:C:P	2.64	0.56
48:DP:16:ARG:CZ	48:DP:16:ARG:HB2	2.35	0.56
35:D9:4:ARG:O	35:D9:36:GLN:HA	2.05	0.56
36:DA:2466:C:O2'	36:DA:2467:C:H5'	2.06	0.56
25:CZ:182:MET:SD	25:CZ:196:VAL:HG21	2.46	0.56
36:DA:1060:U:O4'	36:DA:1061:U:H5''	2.04	0.56
58:DZ:163:LEU:HD23	58:DZ:163:LEU:N	2.21	0.56
1:CA:940:C:P	7:CG:102:ARG:NH2	2.78	0.56
46:BN:24:GLY:O	46:BN:28:THR:HB	2.05	0.56
13:AM:108:ARG:HH11	13:AM:108:ARG:HG3	1.71	0.56
36:BA:363(E):U:H2'	36:BA:363(F):A:H1'	1.87	0.56
36:BA:2822:G:H2'	36:BA:2823:A:H5''	1.87	0.56
24:AY:43:G:H5'	24:AY:44:G:OP2	2.05	0.56
2:AB:151:GLY:C	2:AB:153:ARG:H	2.09	0.56
40:DE:185:LYS:O	40:DE:186:GLY:O	2.23	0.56
36:BA:1013:C:H2'	36:BA:1014:U:C6	2.41	0.56
1:AA:950:U:H2'	1:AA:951:G:C8	2.40	0.56
26:B0:56:ASP:OD1	26:B0:58:THR:OG1	2.21	0.56
1:AA:713:G:H2'	1:AA:714:G:C8	2.40	0.56
54:DV:58:VAL:O	54:DV:97:LYS:HB2	2.06	0.56
1:AA:476:G:H2'	1:AA:477:A:H8	1.69	0.56
1:AA:476:G:H2'	1:AA:477:A:C8	2.41	0.56
36:DA:1328:G:H2'	36:DA:1330:C:C5	2.41	0.56
1:AA:662:G:H2'	1:AA:663:A:C8	2.41	0.56
55:DW:14:PRO:HG2	55:DW:78:GLU:HG3	1.87	0.56
38:BC:189:ILE:O	38:BC:193:ILE:HG13	2.05	0.56
36:DA:1270:C:H5''	36:DA:1271:G:O5'	2.06	0.56
5:CE:152:ARG:O	5:CE:153:LYS:C	2.43	0.56
36:BA:1412:A:O2'	36:BA:1413:G:H5'	2.05	0.56
44:DJ:41:UNK:O	44:DJ:53:UNK:HA	2.06	0.56
36:BA:1328:G:H2'	36:BA:1330:C:C5	2.40	0.56
1:AA:865:A:C2	1:AA:918:A:H4'	2.41	0.56
32:D6:15:GLU:OE1	32:D6:18:ARG:CD	2.54	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:D6:53:LYS:CG	32:D6:54:ILE:H	2.19	0.56
34:B8:23:VAL:HG13	34:B8:46:ARG:HB3	1.86	0.56
32:B6:53:LYS:CG	32:B6:54:ILE:H	2.19	0.56
36:DA:1858:G:HO2'	36:DA:1859:A:H8	1.54	0.56
20:AT:62:LEU:HA	20:AT:65:LYS:HB2	1.87	0.56
12:AL:34:ARG:HG2	12:AL:35:GLY:N	2.21	0.56
36:BA:330:A:HO2'	36:BA:331:A:H8	1.54	0.56
1:CA:1536:C:O2'	1:CA:1537:U:H5'	2.05	0.56
2:CB:233:SER:O	2:CB:235:SER:N	2.38	0.56
53:BU:95:LEU:CD1	54:BV:11:GLN:HG3	2.35	0.56
29:D3:29:ARG:NH1	29:D3:29:ARG:HB2	2.18	0.56
52:DT:50:ILE:HA	52:DT:99:LEU:CD1	2.36	0.56
19:CS:48:THR:HG22	19:CS:61:TYR:CA	2.34	0.56
9:CI:40:LEU:O	9:CI:42:ARG:N	2.38	0.56
1:AA:625:G:H2'	1:AA:626:U:H6	1.71	0.56
22:CW:37:A:H3'	22:CW:38:A:H8	1.71	0.56
22:AV:51:U:H2'	22:AV:52:G:H8	1.69	0.56
12:CL:75:HIS:HD2	12:CL:77:LEU:HB2	1.70	0.56
1:AA:437:U:H5''	4:AD:155:LEU:HD13	1.87	0.56
25:AZ:64:ASN:H	25:AZ:64:ASN:ND2	2.03	0.56
36:BA:2327:A:H2'	36:BA:2328:A:C8	2.40	0.56
36:DA:137:C:O2	36:DA:137:C:H2'	2.04	0.56
17:AQ:53:LEU:HD21	17:AQ:85:VAL:HG11	1.88	0.56
35:D9:1:MET:HE2	35:D9:31:LYS:HB3	1.87	0.56
24:AY:62:U:H5'	24:AY:62:U:H6	1.71	0.56
17:AQ:45:HIS:HB2	17:AQ:65:ILE:CD1	2.36	0.56
36:DA:1683:C:H2'	36:DA:1684:C:C6	2.41	0.56
36:BA:1523:U:H2'	36:BA:1524:G:H8	1.70	0.56
40:BE:65:GLY:O	40:BE:67:PHE:N	2.39	0.56
1:AA:189(H):G:O2'	1:AA:189(I):G:H8	1.89	0.56
37:BB:52:A:O2'	37:BB:53:A:C8	2.53	0.56
33:D7:12:ARG:HG2	33:D7:46:VAL:HG22	1.88	0.56
1:AA:416:G:O2'	1:AA:417:C:H5'	2.06	0.56
25:CZ:313:HIS:HB2	25:CZ:380:LEU:HB2	1.88	0.56
7:CG:38:LEU:HD12	7:CG:38:LEU:O	2.05	0.56
30:D4:20:ASN:HD22	30:D4:21:VAL:N	2.03	0.56
28:B2:62:THR:OG1	36:BA:76:C:H4'	2.06	0.56
41:DF:25:PRO:CG	41:DF:119:ARG:HB2	2.36	0.56
46:BN:9:VAL:CG1	46:BN:10:GLU:H	2.03	0.56
36:DA:1485:G:H22	36:DA:1505:C:H5'	1.71	0.56
58:DZ:99:TYR:CE1	58:DZ:125:LEU:HD13	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2833:G:H3'	36:BA:2834:G:H5'	1.82	0.56
32:D6:15:GLU:OE1	32:D6:18:ARG:HG3	2.06	0.56
57:BY:13:VAL:CG1	57:BY:28:LYS:HD3	2.36	0.56
11:CK:108:ILE:CG2	18:CR:88:LYS:HB2	2.29	0.56
32:B6:53:LYS:H	32:B6:53:LYS:HD3	1.71	0.56
52:BT:106:SER:O	52:BT:107:ASP:OD1	2.24	0.56
16:CP:20:VAL:HG23	16:CP:34:GLU:O	2.05	0.56
9:AI:88:TYR:O	9:AI:89:ASN:HB2	2.06	0.56
48:DP:16:ARG:CB	48:DP:16:ARG:HH11	2.18	0.56
35:D9:7:VAL:HG22	35:D9:34:GLN:HG2	1.88	0.56
2:AB:188:ALA:O	2:AB:202:PRO:HA	2.06	0.56
54:DV:24:LYS:HA	54:DV:92:THR:CG2	2.33	0.56
36:BA:1060:U:H1'	36:BA:1061:U:C5'	2.36	0.56
36:DA:1069:A:H1'	36:DA:1070:A:OP1	2.06	0.56
36:DA:2685:G:HO2'	36:DA:2726:U:H5	1.54	0.56
25:AZ:324:LYS:HA	25:AZ:364:PRO:HB3	1.88	0.56
11:CK:33:THR:HG22	11:CK:39:PRO:CA	2.36	0.56
53:DU:76:TYR:CZ	53:DU:80:ILE:HG13	2.40	0.56
5:CE:102:ALA:HB1	5:CE:106:PRO:HG2	1.88	0.56
36:DA:1169:G:H1	36:DA:1180:C:N4	2.04	0.56
38:DC:149:ILE:HG23	38:DC:150:GLY:N	2.20	0.56
3:AC:76:VAL:HG21	3:AC:103:VAL:CG2	2.35	0.56
22:AV:16:U:H3	22:AV:59:U:H3	1.53	0.56
36:DA:2206:G:H21	36:DA:2207:G:C5'	2.19	0.56
1:AA:443:C:H2'	1:AA:444:C:C6	2.41	0.56
1:CA:865:A:H2	1:CA:918:A:H4'	1.71	0.56
50:BR:103:ARG:NH1	50:BR:110:PRO:HB3	2.21	0.56
12:CL:45:PRO:HG3	12:CL:53:ARG:HD3	1.87	0.56
1:CA:475:G:O2'	1:CA:476:G:H5'	2.06	0.56
15:AO:24:SER:O	15:AO:28:GLN:HG3	2.06	0.56
36:BA:1163:G:O2'	36:BA:1164:G:H5'	2.06	0.56
58:DZ:77:ASP:O	58:DZ:78:LYS:HB2	2.05	0.56
36:BA:108:U:H2'	36:BA:109:G:C8	2.41	0.56
44:DJ:8:UNK:C	44:DJ:10:UNK:H	2.18	0.56
46:BN:121:LYS:HB3	46:BN:123:TYR:HE1	1.71	0.56
2:CB:236:TYR:O	2:CB:238:LEU:N	2.39	0.56
7:AG:65:ALA:HB1	7:AG:127:ALA:HB3	1.88	0.56
36:BA:1817:G:H2'	36:BA:1818:U:H5'	1.86	0.56
36:DA:1151:G:H5''	53:DU:81:HIS:CE1	2.41	0.56
25:AZ:320:VAL:HG13	25:AZ:397:ALA:O	2.06	0.56
21:AU:3:LYS:HB3	21:AU:14:TRP:CD1	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:80:VAL:HG13	11:AK:103:LEU:HD11	1.87	0.56
12:AL:126:LYS:HA	12:AL:126:LYS:HE2	1.88	0.56
54:BV:68:LYS:HA	54:BV:68:LYS:HE2	1.88	0.56
7:AG:69:VAL:HG23	7:AG:134:ALA:O	2.06	0.56
47:BO:43:VAL:HG21	47:BO:52:VAL:CG1	2.36	0.56
43:BH:83:TYR:HB2	43:BH:134:SER:CA	2.35	0.56
7:CG:79:ARG:CG	7:CG:84:ASN:HA	2.15	0.56
56:DX:13:LEU:HA	56:DX:18:TYR:CZ	2.40	0.56
32:D6:13:CYS:HA	32:D6:50:ARG:O	2.06	0.56
5:AE:76:ILE:HG23	5:AE:93:PRO:HG3	1.88	0.56
32:B6:15:GLU:O	32:B6:17:LYS:N	2.39	0.56
36:BA:1141:U:H6	46:BN:63:THR:HB	1.71	0.56
36:DA:1947:C:C2'	36:DA:1948:G:H5''	2.36	0.56
58:DZ:10:ARG:CZ	58:DZ:36:LYS:HB2	2.36	0.56
2:AB:233:SER:O	2:AB:235:SER:N	2.38	0.56
43:BH:159:GLU:C	43:BH:159:GLU:CD	2.64	0.56
10:CJ:24:VAL:HG21	10:CJ:37:PRO:CG	2.35	0.56
1:CA:1241:G:H2'	1:CA:1242:C:C6	2.41	0.56
14:CN:12:ARG:HB3	14:CN:12:ARG:HH11	1.71	0.56
1:AA:265:G:C2'	1:AA:266:G:H5''	2.32	0.56
53:DU:79:PHE:CE1	53:DU:83:LEU:HD11	2.41	0.56
25:AZ:270:VAL:HG12	25:AZ:286:VAL:HG21	1.88	0.56
15:CO:82:ILE:CD1	15:CO:87:ILE:HB	2.35	0.56
36:DA:1678:G:N2	36:DA:1989:G:N2	2.53	0.56
36:BA:2096:U:H2'	36:BA:2097:C:C6	2.41	0.56
25:CZ:326:GLU:CD	25:CZ:326:GLU:H	2.09	0.56
30:B4:34:GLU:HG2	42:BG:113:ARG:NH1	2.21	0.56
36:BA:549:G:O2'	36:BA:551:G:H5'	2.06	0.56
36:DA:2776:A:H4'	36:DA:2777:G:H5''	1.88	0.56
11:AK:21:ILE:HG13	11:AK:30:VAL:HG12	1.88	0.56
38:DC:40:THR:HG22	38:DC:177:LYS:CE	2.36	0.56
1:AA:180:U:C2'	1:AA:181:G:H5'	2.35	0.56
1:CA:490:G:H2'	1:CA:491:G:H8	1.71	0.56
22:CW:27:G:O2'	22:CW:28:G:H5'	2.06	0.56
5:AE:147:ASP:HB3	5:AE:150:ARG:HH12	1.71	0.56
46:BN:76:SER:HB3	46:BN:81:GLY:HA3	1.88	0.56
36:BA:2840:C:H2'	36:BA:2841:C:C6	2.41	0.56
54:BV:58:VAL:O	54:BV:97:LYS:HB2	2.06	0.56
29:B3:26:LEU:HB2	29:B3:28:LEU:CD2	2.36	0.56
36:DA:2590:A:H5''	39:DD:239:ARG:HE	1.70	0.56
22:AV:67:C:H2'	22:AV:68:C:C6	2.41	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:3:ARG:HH11	6:CF:3:ARG:HG3	1.71	0.56
1:CA:1001:A:N3	1:CA:1001:A:H2'	2.21	0.56
58:BZ:119:GLU:C	58:BZ:121:HIS:H	2.08	0.55
36:BA:1528:A:N1	36:BA:1542:A:H2	2.03	0.55
40:BE:87:GLU:OE2	40:BE:89:ASP:HB3	2.05	0.55
30:B4:5:ILE:O	42:BG:67:LYS:HD2	2.05	0.55
9:AI:91:ASP:O	9:AI:93:ARG:N	2.39	0.55
13:AM:65:LYS:O	13:AM:70:LEU:HD12	2.06	0.55
39:BD:32:SER:O	39:BD:36:PRO:CG	2.53	0.55
39:BD:31:LYS:HZ1	39:BD:33:LEU:HD11	1.69	0.55
58:BZ:152:ALA:CB	58:BZ:167:PRO:HB2	2.36	0.55
4:CD:190:ASP:HB3	4:CD:193:ASP:OD2	2.06	0.55
41:BF:100:THR:O	41:BF:100:THR:HG22	2.04	0.55
48:BP:23:PRO:HB2	48:BP:33:ARG:CD	2.36	0.55
41:BF:7:TYR:OH	41:BF:10:PRO:HB3	2.06	0.55
36:DA:1311:G:H21	36:DA:1603:A:H62	1.53	0.55
55:BW:43:GLY:O	55:BW:47:VAL:HG23	2.06	0.55
32:B6:5:VAL:HB	36:BA:2284:C:OP2	2.06	0.55
16:AP:20:VAL:HG23	16:AP:34:GLU:O	2.06	0.55
36:BA:1209:G:H21	36:BA:1210:A:N6	2.03	0.55
31:D5:36:CYS:C	31:D5:38:ALA:N	2.60	0.55
52:DT:96:ARG:HB2	52:DT:96:ARG:NH1	2.21	0.55
36:DA:1678:G:H22	36:DA:1989:G:H22	1.52	0.55
25:CZ:361:MET:HG3	25:CZ:363:MET:HG3	1.87	0.55
25:AZ:361:MET:HG3	25:AZ:363:MET:HG3	1.87	0.55
36:BA:1056:G:H22	36:BA:1104:C:H42	1.54	0.55
36:BA:1104:C:H2'	36:BA:1105:U:C6	2.37	0.55
56:BX:50:LYS:H	56:BX:87:GLN:HE22	1.54	0.55
46:BN:2:LYS:HZ1	54:BV:13:ARG:H	1.54	0.55
11:CK:21:ILE:HG13	11:CK:30:VAL:CG1	2.35	0.55
4:AD:145:GLU:OE1	4:AD:145:GLU:O	2.25	0.55
11:AK:21:ILE:HG13	11:AK:30:VAL:CG1	2.36	0.55
26:D0:20:ARG:CG	26:D0:20:ARG:HH11	2.19	0.55
1:CA:713:G:H2'	1:CA:714:G:C8	2.40	0.55
38:DC:40:THR:HG22	38:DC:177:LYS:CD	2.35	0.55
24:CY:62:U:H6	24:CY:62:U:H5'	1.70	0.55
57:BY:90:LEU:HG	57:BY:91:GLU:H	1.72	0.55
7:CG:152:ALA:O	7:CG:155:ARG:HG3	2.06	0.55
1:CA:711:G:O2'	1:CA:712:A:H5'	2.06	0.55
25:AZ:108:ALA:HB3	25:AZ:137:LYS:O	2.06	0.55
48:DP:87:ASP:O	48:DP:90:ARG:HB2	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:184:C:H2'	36:DA:185:U:C6	2.41	0.55
51:BS:11:LYS:O	51:BS:11:LYS:HG2	2.06	0.55
2:CB:119:GLU:O	2:CB:122:PHE:HB3	2.06	0.55
46:DN:24:GLY:O	46:DN:28:THR:HB	2.06	0.55
24:AY:55:PSU:H2'	24:AY:56:C:OP2	2.05	0.55
39:DD:36:PRO:O	39:DD:37:LEU:HB2	2.06	0.55
41:DF:183:VAL:O	41:DF:187:VAL:HG23	2.06	0.55
46:BN:111:PRO:HA	46:BN:114:ARG:NH1	2.22	0.55
41:BF:183:VAL:O	41:BF:187:VAL:HG23	2.07	0.55
40:BE:57:LYS:HE3	40:BE:57:LYS:CA	2.21	0.55
10:AJ:55:LYS:NZ	10:AJ:55:LYS:HB2	1.99	0.55
29:B3:35:ARG:HD3	29:B3:37:LEU:HD21	1.89	0.55
36:DA:84:A:H2'	57:DY:9:LYS:NZ	2.19	0.55
57:BY:81:LYS:HD2	57:BY:96:ILE:CD1	2.37	0.55
4:AD:121:VAL:HA	4:AD:126:ILE:HD13	1.86	0.55
32:B6:15:GLU:OE1	32:B6:18:ARG:HG3	2.06	0.55
32:B6:15:GLU:OE2	32:B6:41:PRO:HB2	2.06	0.55
37:DB:48:A:H4'	51:DS:95:HIS:CD2	2.41	0.55
3:CC:136:GLN:O	3:CC:139:GLN:HB3	2.07	0.55
36:DA:2756:U:H1'	36:DA:2757:A:C5'	2.29	0.55
52:BT:106:SER:C	52:BT:107:ASP:OD1	2.44	0.55
51:BS:15:ARG:HH12	51:BS:18:ILE:HD11	1.71	0.55
48:BP:16:ARG:CZ	48:BP:18:ARG:HG2	2.36	0.55
36:BA:1246:A:OP1	48:BP:16:ARG:NH2	2.39	0.55
53:DU:95:LEU:HD12	54:DV:11:GLN:HG3	1.88	0.55
1:AA:1442(B):A:H5'	52:BT:122:ASP:OD1	2.06	0.55
54:BV:59:ALA:HA	54:BV:95:LEU:O	2.05	0.55
36:BA:654(I):C:H5''	36:BA:654(J):A:OP1	2.06	0.55
42:BG:11:TYR:HA	42:BG:15:VAL:CG2	2.35	0.55
9:CI:46:ALA:HB2	9:CI:74:ILE:HG23	1.88	0.55
9:CI:40:LEU:CD1	9:CI:70:LYS:HG2	2.34	0.55
36:BA:181:A:H5'	36:BA:181:A:C8	2.38	0.55
27:D1:29:GLY:HA3	36:DA:2396:G:O2'	2.06	0.55
25:AZ:324:LYS:HE3	25:AZ:326:GLU:OE2	2.07	0.55
36:DA:2822:G:O6	50:DR:4:LEU:HB3	2.05	0.55
14:CN:57:ARG:CB	14:CN:57:ARG:HH11	2.19	0.55
25:CZ:24:LYS:H	25:CZ:105:VAL:HG11	1.72	0.55
2:AB:21:ARG:HB3	2:AB:39:ILE:HG12	1.88	0.55
50:DR:103:ARG:O	50:DR:104:ARG:HB2	2.06	0.55
44:DJ:96:UNK:O	44:DJ:100:UNK:N	2.39	0.55
36:BA:2720:U:H5'	36:BA:2721:A:OP2	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DH:126:PRO:O	43:DH:127:GLU:HB2	2.07	0.55
1:AA:141:A:H1'	1:AA:182:U:O2	2.07	0.55
50:DR:34:ILE:HB	50:DR:114:VAL:CG2	2.37	0.55
1:AA:592:G:H2'	1:AA:593:G:H8	1.70	0.55
7:CG:137:LYS:O	7:CG:138:LYS:C	2.45	0.55
41:BF:4:VAL:HG11	41:BF:17:ARG:NE	2.21	0.55
22:AW:67:C:H2'	22:AW:68:C:C6	2.41	0.55
41:DF:37:VAL:CG1	48:DP:7:ARG:HH12	2.03	0.55
42:DG:77:ILE:HB	42:DG:81:LYS:O	2.06	0.55
42:DG:88:ILE:HG22	42:DG:89:GLY:N	2.22	0.55
40:BE:57:LYS:HA	40:BE:57:LYS:CE	2.21	0.55
43:BH:16:SER:HB2	43:BH:27:LYS:CB	2.27	0.55
57:BY:77:PRO:O	57:BY:78:ALA:HB2	2.06	0.55
2:AB:118:LEU:HD13	2:AB:142:LEU:HB2	1.88	0.55
39:BD:44:ASN:N	39:BD:44:ASN:OD1	2.38	0.55
43:BH:66:GLY:CA	43:BH:69:ARG:HB3	2.34	0.55
37:DB:44:G:H1'	37:DB:47:C:N4	2.22	0.55
36:DA:1494:A:H3'	36:DA:1494:A:N3	2.20	0.55
1:AA:1269:A:C2	1:AA:1313:U:O4'	2.58	0.55
27:B1:78:LYS:CA	27:B1:78:LYS:HE2	2.36	0.55
1:CA:1282:C:O2'	1:CA:1283:G:H5'	2.06	0.55
9:CI:28:VAL:CG1	9:CI:29:ASN:H	2.10	0.55
1:CA:266:G:H5'	1:CA:268:C:H41	1.71	0.55
3:CC:16:ARG:HB2	3:CC:16:ARG:HH11	1.71	0.55
43:BH:105:LEU:CD2	43:BH:113:VAL:HB	2.35	0.55
12:CL:81:SER:HA	12:CL:106:ASP:OD2	2.06	0.55
35:B9:4:ARG:O	35:B9:36:GLN:HA	2.06	0.55
36:DA:1060:U:H1'	36:DA:1061:U:C5'	2.36	0.55
1:CA:1157:A:H1'	1:CA:1181:G:N2	2.20	0.55
58:DZ:65:GLN:HB3	58:DZ:67:LEU:CD1	2.36	0.55
16:CP:67:THR:HG22	16:CP:68:ASP:N	2.20	0.55
1:CA:424:G:O2'	1:CA:425:G:H5'	2.06	0.55
36:DA:1567:A:C5'	39:DD:58:HIS:CD2	2.89	0.55
36:DA:282:A:N6	36:DA:359:A:H1'	2.22	0.55
1:CA:626:U:H2'	1:CA:627:G:H8	1.70	0.55
22:CW:39:U:H4'	22:CW:39:U:OP2	2.07	0.55
11:CK:27:ASN:ND2	11:CK:28:THR:N	2.55	0.55
53:BU:76:TYR:CZ	53:BU:80:ILE:HG13	2.41	0.55
3:CC:50:ALA:HB1	3:CC:70:VAL:CG1	2.37	0.55
38:BC:5:LYS:HB3	38:BC:8:ARG:HH21	1.72	0.55
9:AI:97:LYS:HB3	9:AI:98:PRO:HD3	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:96:GLU:O	46:BN:100:GLU:HG3	2.06	0.55
57:DY:88:LYS:O	57:DY:90:LEU:HD23	2.05	0.55
57:BY:87:LYS:O	57:BY:88:LYS:HB2	2.04	0.55
38:DC:181:PRO:HB2	38:DC:183:GLU:OE2	2.06	0.55
36:DA:1790:C:H5''	36:DA:1791:A:OP1	2.06	0.55
1:CA:189(I):G:O2'	1:CA:189(J):G:H5'	2.06	0.55
42:BG:130:ASN:OD1	42:BG:160:VAL:HA	2.06	0.55
42:DG:36:LYS:HD3	42:DG:95:ARG:HH12	1.69	0.55
10:AJ:92:THR:HG23	10:AJ:93:GLY:N	2.22	0.55
36:DA:2870:C:H5''	50:DR:65:LEU:HD21	1.89	0.55
25:CZ:262:THR:HG21	25:CZ:312:PRO:HD3	1.89	0.55
22:AW:3:C:H2'	22:AW:4:C:O4'	2.06	0.55
36:BA:1131:G:HO2'	36:BA:1132:A:H8	1.52	0.55
58:BZ:69:THR:HB	58:BZ:89:PHE:O	2.07	0.55
56:DX:27:THR:HG22	56:DX:80:ILE:HB	1.88	0.55
34:D8:11:LYS:H	34:D8:11:LYS:HD2	1.71	0.55
34:D8:18:ALA:HB2	36:DA:628:G:H5''	1.88	0.55
25:CZ:368:VAL:HG12	25:CZ:369:THR:N	2.20	0.55
57:DY:73:ARG:HH22	57:DY:82:PRO:CA	2.14	0.55
54:DV:61:VAL:O	54:DV:61:VAL:HG22	2.06	0.55
48:DP:147:LEU:O	48:DP:148:LEU:HB2	2.07	0.55
32:B6:41:PRO:HG2	32:B6:44:ARG:O	2.06	0.55
43:BH:52:VAL:HB	43:BH:69:ARG:HD3	1.88	0.55
34:D8:41:ILE:HD12	36:DA:2419:U:OP1	2.07	0.55
36:DA:1784:A:H4'	36:DA:1785:A:O5'	2.06	0.55
20:AT:45:GLN:HB3	20:AT:91:LEU:HD22	1.87	0.55
48:DP:86:LYS:HB2	48:DP:117:GLU:O	2.07	0.55
49:DQ:133:ARG:CB	49:DQ:133:ARG:HH11	2.16	0.55
12:CL:34:ARG:HG2	12:CL:35:GLY:N	2.21	0.55
36:DA:2160:G:H5'	36:DA:2160:G:C8	2.40	0.55
36:BA:1069:A:H1'	36:BA:1070:A:OP1	2.05	0.55
4:CD:152:SER:O	4:CD:154:ASN:N	2.39	0.55
1:AA:939:G:H2'	1:AA:940:C:C6	2.41	0.55
15:AO:36:ILE:HG23	15:AO:56:LEU:HD11	1.89	0.55
36:DA:363(E):U:H2'	36:DA:363(F):A:H1'	1.87	0.55
57:DY:47:LYS:HG3	57:DY:60:PHE:CZ	2.41	0.55
53:DU:27:LEU:O	53:DU:34:LYS:HB2	2.06	0.55
36:BA:523:C:O2'	36:BA:524:U:H5'	2.06	0.55
36:BA:1169:G:H1	36:BA:1180:C:N4	2.05	0.55
39:DD:108:PRO:HB3	39:DD:143:HIS:CE1	2.41	0.55
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:95:GLN:NE2	2:CB:147:LYS:HE2	2.22	0.55
49:BQ:42:ILE:HD13	49:BQ:97:VAL:HG21	1.87	0.55
11:CK:48:ILE:HD11	11:CK:67:ASP:CB	2.36	0.55
36:DA:134:C:H2'	36:DA:135:G:H8	1.71	0.55
20:AT:73:HIS:HB3	20:AT:74:LYS:HD3	1.87	0.55
13:CM:2:ALA:HB3	13:CM:9:ILE:HG23	1.88	0.55
1:AA:475:G:O2'	1:AA:476:G:H5'	2.06	0.55
22:CV:67:C:H2'	22:CV:68:C:C6	2.42	0.55
42:DG:18:GLU:HG2	42:DG:175:LEU:HD13	1.88	0.55
46:BN:94:HIS:N	46:BN:95:PRO:CD	2.69	0.55
50:BR:111:LEU:N	50:BR:111:LEU:HD12	2.21	0.55
38:DC:167:LYS:HD2	38:DC:167:LYS:O	2.06	0.55
36:BA:227:A:C2	36:BA:2407:G:H1'	2.41	0.55
2:AB:154:LEU:O	2:AB:156:LYS:HG3	2.07	0.55
36:BA:2360:A:O2'	36:BA:2361:A:O4'	2.20	0.55
7:AG:79:ARG:CG	7:AG:84:ASN:HA	2.16	0.55
37:BB:106:G:O2'	37:BB:107:G:H5'	2.06	0.55
40:DE:65:GLY:O	40:DE:67:PHE:N	2.38	0.55
42:BG:77:ILE:HG22	42:BG:79:ASN:O	2.06	0.55
36:BA:84:A:H2'	57:BY:9:LYS:NZ	2.21	0.55
48:BP:97:PRO:O	48:BP:98:GLU:CB	2.55	0.55
37:DB:7:G:C3'	37:DB:8:U:H5''	2.37	0.55
36:BA:2807:G:C3'	36:BA:2808:U:H5''	2.36	0.55
9:AI:40:LEU:O	9:AI:42:ARG:N	2.40	0.55
12:CL:113:ARG:HB3	12:CL:122:THR:HG21	1.88	0.55
36:BA:1112:G:O2'	36:BA:1113:U:H5'	2.06	0.55
25:CZ:19:HIS:HA	25:CZ:115:GLN:HB2	1.89	0.55
52:DT:106:SER:C	52:DT:107:ASP:OD1	2.44	0.55
3:AC:14:ILE:HD11	3:AC:179:ARG:HA	1.88	0.55
54:DV:34:GLU:O	54:DV:36:PRO:CD	2.54	0.55
1:CA:1065:U:C4	1:CA:1190:G:H1'	2.41	0.55
55:DW:22:ASP:HA	55:DW:25:ARG:NH1	2.19	0.55
13:AM:2:ALA:HB3	13:AM:9:ILE:HG23	1.88	0.55
41:DF:84:VAL:C	41:DF:86:GLY:N	2.59	0.55
1:AA:977:A:O2'	1:AA:978:A:H5''	2.06	0.55
3:AC:167:TRP:O	3:AC:168:ALA:HB3	2.06	0.55
38:DC:75:LEU:HG	38:DC:112:ALA:O	2.06	0.55
5:CE:41:VAL:O	5:CE:67:VAL:HG12	2.07	0.55
53:DU:101:ARG:NH1	53:DU:101:ARG:HG3	2.21	0.55
1:AA:166:G:O2'	1:AA:167:G:H5'	2.07	0.55
1:AA:16:A:N1	1:AA:919:A:H2	2.03	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2078:C:H2'	36:DA:2079:U:C6	2.41	0.55
39:DD:218:ARG:HG3	39:DD:218:ARG:HH11	1.71	0.55
25:AZ:262:THR:HG21	25:AZ:312:PRO:HD3	1.88	0.55
36:DA:2386:C:H2'	36:DA:2387:U:C6	2.42	0.55
19:CS:44:MET:N	19:CS:44:MET:SD	2.79	0.55
36:BA:675:A:OP1	41:BF:63:LYS:HE2	2.07	0.55
48:BP:17:LYS:HG2	48:BP:17:LYS:O	2.07	0.55
4:AD:157:LEU:HD12	4:AD:157:LEU:H	1.71	0.55
49:DQ:59:ARG:O	49:DQ:59:ARG:HD2	2.07	0.55
12:CL:70:ILE:HG22	12:CL:102:ARG:HH12	1.72	0.55
36:BA:519:U:H2'	36:BA:520:G:H8	1.71	0.55
1:AA:516:U:C4	1:AA:517:G:C6	2.94	0.55
38:DC:96:GLY:H	38:DC:99:ILE:HG13	1.71	0.55
1:AA:1150:U:O2	1:AA:1150:U:O4'	2.23	0.55
28:B2:48:HIS:NE2	28:B2:49:LYS:HE3	2.22	0.55
43:BH:85:LYS:O	43:BH:85:LYS:HE3	2.06	0.55
49:BQ:141:GLN:CD	58:BZ:72:ARG:NE	2.60	0.55
56:BX:13:LEU:HA	56:BX:18:TYR:CZ	2.42	0.55
36:BA:1485:G:H22	36:BA:1505:C:H5'	1.72	0.55
36:BA:1503:U:C4	36:BA:1504:C:N4	2.74	0.55
39:BD:61:LEU:O	39:BD:63:ARG:NH1	2.40	0.55
32:D6:28:ARG:CA	32:D6:32:ASN:HD22	2.19	0.55
9:CI:53:VAL:CG1	9:CI:95:LYS:HD3	2.32	0.55
57:DY:28:LYS:HB3	57:DY:39:VAL:H	1.70	0.55
36:BA:310:A:OP1	57:BY:17:SER:O	2.25	0.55
48:BP:56:SER:HB3	48:BP:60:MET:HG2	1.89	0.55
48:BP:62:LEU:HD23	48:BP:62:LEU:N	2.22	0.55
36:DA:654(T):C:O2'	36:DA:654(U):A:O4'	2.17	0.55
48:BP:39:LYS:CD	48:BP:40:SER:H	2.18	0.55
48:BP:45:LEU:CD1	48:BP:46:LYS:H	2.20	0.55
37:BB:7:G:C3'	37:BB:8:U:H5''	2.36	0.55
36:DA:1496:A:H8	36:DA:1577:C:HO2'	1.55	0.55
34:D8:41:ILE:HD12	36:DA:2419:U:P	2.46	0.55
48:DP:56:SER:HB3	48:DP:60:MET:HG2	1.88	0.55
39:DD:44:ASN:OD1	39:DD:44:ASN:N	2.38	0.55
4:CD:9:CYS:SG	4:CD:31:CYS:O	2.64	0.55
1:CA:1535:C:H2'	1:CA:1536:C:C6	2.42	0.55
25:CZ:178:ALA:HB1	25:CZ:199:ILE:CD1	2.37	0.55
56:DX:35:THR:HB	56:DX:38:GLU:HB3	1.87	0.55
54:DV:38:LEU:HD23	54:DV:39:LEU:N	2.21	0.55
54:DV:47:VAL:O	54:DV:47:VAL:HG23	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:141:VAL:HA	58:DZ:144:LEU:HD23	1.89	0.55
36:DA:2096:U:H2'	36:DA:2097:C:C6	2.41	0.55
6:CF:8:ILE:HG23	6:CF:85:VAL:HG13	1.89	0.55
36:BA:324:A:H2'	36:BA:325:G:O4'	2.07	0.55
26:B0:40:GLN:HE22	26:B0:45:PHE:N	2.02	0.55
56:DX:50:LYS:H	56:DX:87:GLN:HE22	1.55	0.55
39:BD:142:VAL:HG22	39:BD:143:HIS:N	2.20	0.55
36:BA:2822:G:O6	50:BR:4:LEU:HB3	2.06	0.55
2:AB:86:GLU:C	2:AB:88:ALA:H	2.09	0.55
9:AI:99:LEU:H	9:AI:99:LEU:HD22	1.70	0.55
25:CZ:69:GLU:HB2	25:CZ:273:HIS:CE1	2.42	0.55
13:AM:116:THR:HG22	13:AM:116:THR:O	2.07	0.55
36:BA:134:C:H2'	36:BA:135:G:H8	1.72	0.55
1:AA:392:G:H2'	1:AA:393:A:H8	1.72	0.55
1:AA:490:G:H2'	1:AA:491:G:H8	1.70	0.55
2:CB:124:SER:O	2:CB:127:ILE:HG12	2.07	0.55
50:DR:28:LEU:CD2	50:DR:29:LEU:HD12	2.37	0.55
1:CA:189(H):G:O2'	1:CA:189(I):G:H8	1.89	0.55
36:DA:1411:C:H2'	36:DA:1412:A:C8	2.41	0.55
36:DA:2373:G:H2'	36:DA:2374:C:C6	2.42	0.55
1:AA:784:C:H4'	36:BA:1837:C:OP1	2.07	0.55
37:DB:35:U:O2'	37:DB:36:C:H5'	2.06	0.55
9:CI:126:SER:O	9:CI:127:LYS:HB3	2.06	0.55
36:BA:2341:G:H2'	36:BA:2342:C:C6	2.41	0.55
36:DA:2408:U:H2'	36:DA:2409:G:C8	2.42	0.55
36:BA:1971:A:C4	39:BD:241:PRO:HD3	2.42	0.55
42:BG:43:LEU:N	42:BG:43:LEU:HD22	2.21	0.55
36:BA:321:G:N3	41:BF:165:ARG:HD3	2.22	0.55
52:BT:30:VAL:HG21	52:BT:83:ILE:HG12	1.88	0.55
25:AZ:368:VAL:HG12	25:AZ:369:THR:N	2.21	0.55
57:DY:81:LYS:HD2	57:DY:96:ILE:CD1	2.36	0.55
36:DA:612:C:H2'	36:DA:613:G:H5'	1.86	0.55
17:CQ:52:LYS:HD3	17:CQ:55:ASP:OD2	2.07	0.55
41:BF:103:LYS:HG3	41:BF:106:ARG:HH21	1.71	0.55
36:BA:643:A:H2'	36:BA:644:A:O4'	2.07	0.55
48:DP:144:GLU:N	48:DP:145:PRO:HD3	2.22	0.55
51:BS:93:LYS:O	51:BS:95:HIS:N	2.40	0.55
41:DF:39:TRP:CB	41:DF:101:LEU:HD22	2.37	0.55
13:AM:12:ASN:N	13:AM:12:ASN:HD22	1.95	0.55
1:CA:1314:C:OP2	19:CS:6:LYS:HG3	2.06	0.55
36:BA:1516:C:O2'	36:BA:1517:G:H5''	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DP:16:ARG:CZ	48:DP:18:ARG:HG2	2.37	0.55
9:CI:20:ARG:CZ	9:CI:20:ARG:HB2	2.36	0.55
36:DA:483:A:H5''	57:DY:49:VAL:HG22	1.89	0.55
35:B9:7:VAL:HG22	35:B9:34:GLN:HG2	1.88	0.55
53:BU:65:ILE:HG12	53:BU:96:ALA:HB1	1.87	0.55
42:DG:6:ALA:O	42:DG:10:LYS:HD3	2.07	0.55
36:BA:2160:G:C8	36:BA:2160:G:H5'	2.38	0.55
1:AA:542:G:P	4:AD:10:ARG:HH21	2.28	0.55
25:AZ:24:LYS:H	25:AZ:105:VAL:HG11	1.71	0.55
19:AS:48:THR:HG22	19:AS:61:TYR:CA	2.36	0.55
19:CS:40:ILE:O	19:CS:40:ILE:HG22	2.06	0.55
34:D8:50:LEU:N	34:D8:53:PRO:HD3	2.21	0.55
36:BA:910:A:H2'	36:BA:911:A:C8	2.42	0.55
40:DE:107:THR:O	40:DE:190:GLY:CA	2.54	0.55
22:CV:62:C:O2	22:CV:62:C:H2'	2.06	0.55
37:DB:67:G:O2'	37:DB:68:C:H6	1.89	0.55
47:DO:4:PRO:O	47:DO:5:GLN:CB	2.55	0.55
36:BA:888:C:H2'	36:BA:889:C:C4'	2.36	0.55
36:BA:1722:A:O2'	36:BA:1739:U:C5'	2.54	0.55
36:BA:1385:G:O2'	36:BA:1396:U:C6	2.60	0.55
39:BD:267:SER:C	39:BD:269:PHE:N	2.59	0.55
39:BD:130:ALA:C	39:BD:131:LEU:HD12	2.27	0.55
2:CB:86:GLU:C	2:CB:88:ALA:H	2.10	0.55
3:AC:50:ALA:HB1	3:AC:70:VAL:CG1	2.37	0.55
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.89	0.55
36:BA:1493:C:O2	36:BA:1493:C:H2'	2.07	0.55
36:BA:1493:C:C4	36:BA:2206:G:O2'	2.59	0.55
37:BB:111:G:O2'	37:BB:112:U:H5'	2.07	0.55
35:B9:29:ASN:N	35:B9:29:ASN:HD22	2.03	0.55
36:BA:2125:G:OP1	38:BC:40:THR:HG21	2.07	0.55
43:BH:149:ARG:HG3	43:BH:162:ILE:HG12	1.87	0.55
36:DA:1708:C:O2'	36:DA:1709:U:H5'	2.06	0.55
36:DA:1412:A:O2'	36:DA:1413:G:H5'	2.07	0.55
36:DA:1400:G:H2'	36:DA:1401:G:C8	2.42	0.55
1:CA:516:U:C4	1:CA:517:G:C6	2.95	0.55
58:DZ:11:GLU:OE1	58:DZ:12:GLY:N	2.38	0.55
49:BQ:79:LEU:HD23	49:BQ:80:GLU:H	1.70	0.55
7:AG:152:ALA:O	7:AG:155:ARG:HG3	2.06	0.55
48:BP:87:ASP:O	48:BP:90:ARG:HB2	2.07	0.55
25:AZ:330:ARG:NH1	25:AZ:334:PHE:HB3	2.22	0.55
39:DD:6:PHE:HE1	39:DD:18:VAL:HG12	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D1:3:LYS:HB2	27:D1:3:LYS:NZ	2.21	0.55
25:AZ:349:VAL:HG21	25:AZ:374:LEU:HD13	1.89	0.55
28:B2:9:GLN:OE1	28:B2:60:LEU:HD11	2.07	0.55
41:DF:4:VAL:HG11	41:DF:17:ARG:NE	2.22	0.55
43:DH:155:SER:O	43:DH:157:TYR:N	2.38	0.55
43:DH:157:TYR:HD1	43:DH:157:TYR:O	1.90	0.55
5:CE:76:ILE:HG23	5:CE:93:PRO:HG3	1.89	0.55
34:B8:23:VAL:HG12	34:B8:46:ARG:NH1	2.10	0.55
32:B6:15:GLU:CD	32:B6:18:ARG:NH2	2.60	0.55
32:B6:15:GLU:HG2	32:B6:18:ARG:CZ	2.36	0.55
48:BP:127:ALA:HB3	48:BP:130:PHE:CZ	2.42	0.55
51:BS:28:VAL:HG12	51:BS:29:PHE:N	2.22	0.55
36:DA:676:A:H8	36:DA:2069:G:N2	1.97	0.55
36:BA:1494:A:C3'	36:BA:1495:A:H5''	2.36	0.55
36:DA:2414:G:H21	48:DP:67:MET:CE	2.20	0.55
34:D8:25:MET:CG	48:DP:64:LYS:HB2	2.36	0.55
39:DD:147:LEU:CD1	39:DD:183:ARG:HH12	2.15	0.55
7:AG:113:GLU:HG3	7:AG:118:VAL:HG23	1.88	0.55
43:BH:155:SER:O	43:BH:157:TYR:N	2.37	0.55
16:AP:21:VAL:HG12	16:AP:34:GLU:O	2.07	0.55
54:BV:24:LYS:HA	54:BV:92:THR:CG2	2.32	0.55
50:BR:2:ARG:HD2	50:BR:2:ARG:C	2.26	0.55
1:AA:1221:G:H4'	19:AS:77:THR:CG2	2.37	0.55
12:CL:26:ALA:HA	12:CL:64:TYR:CD2	2.41	0.55
25:AZ:25:THR:HB	60:AZ:501:GDP:O2B	2.06	0.55
54:BV:38:LEU:HD23	54:BV:39:LEU:N	2.21	0.55
1:AA:1157:A:H1'	1:AA:1181:G:N2	2.22	0.55
57:BY:62:GLU:OE1	57:BY:62:GLU:N	2.40	0.55
50:DR:96:ARG:NH2	50:DR:117:VAL:HG23	2.22	0.55
3:CC:167:TRP:O	3:CC:168:ALA:HB3	2.07	0.55
6:AF:61:LEU:O	6:AF:62:TRP:CB	2.55	0.55
3:AC:70:VAL:HG13	3:AC:72:LYS:H	1.71	0.55
36:BA:2206:G:H21	36:BA:2207:G:C5'	2.19	0.55
5:AE:41:VAL:HG23	5:AE:67:VAL:CG1	2.36	0.55
50:BR:103:ARG:HG3	55:BW:40:ASN:CG	2.27	0.55
36:BA:8:A:H2'	36:BA:9:U:C6	2.41	0.55
36:BA:530:G:C5	36:BA:2022:U:H5''	2.41	0.55
1:CA:1030(A):G:H1'	1:CA:1031:G:H1	1.71	0.55
11:AK:48:ILE:HD11	11:AK:67:ASP:CB	2.37	0.55
22:CW:3:C:H2'	22:CW:4:C:O4'	2.06	0.55
47:DO:26:LYS:HB3	47:DO:30:ALA:HB2	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1547:C:O2'	36:BA:1548:C:H5'	2.07	0.55
33:B7:12:ARG:HG2	33:B7:46:VAL:HG22	1.89	0.55
36:DA:1980:G:O2'	36:DA:1982:C:OP2	2.20	0.55
2:AB:119:GLU:O	2:AB:122:PHE:HB3	2.07	0.55
2:AB:124:SER:O	2:AB:127:ILE:HG12	2.06	0.55
45:BK:66:UNK:O	45:BK:67:UNK:C	2.55	0.55
36:DA:1198:U:H2'	36:DA:1199:U:C6	2.41	0.55
25:CZ:343:TYR:CE1	25:CZ:389:ARG:HD3	2.42	0.55
38:DC:120:MET:HA	38:DC:123:VAL:CG1	2.37	0.55
38:BC:96:GLY:H	38:BC:99:ILE:HG13	1.71	0.55
58:BZ:96:VAL:HG12	58:BZ:128:VAL:O	2.06	0.55
32:B6:28:ARG:CA	32:B6:32:ASN:ND2	2.68	0.55
41:BF:160:ASN:HD21	41:BF:162:LEU:HB2	1.72	0.55
36:DA:1503:U:C4	36:DA:1504:C:N4	2.75	0.55
32:D6:41:PRO:HG2	32:D6:44:ARG:O	2.06	0.55
40:DE:21:VAL:HG23	40:DE:21:VAL:O	2.06	0.55
36:DA:272(I):U:O2'	36:DA:272(J):C:H5'	2.07	0.55
9:AI:114:TYR:CE1	10:AJ:59:SER:HA	2.39	0.55
32:B6:15:GLU:CG	32:B6:18:ARG:NH1	2.65	0.55
48:BP:23:PRO:C	48:BP:33:ARG:NE	2.60	0.55
36:BA:2317:C:H2'	36:BA:2318:G:C5'	2.30	0.55
1:AA:1255:G:H5''	3:AC:26:LYS:HE2	1.89	0.55
36:DA:2893:G:H5'	36:DA:2894:G:C5'	2.33	0.55
36:BA:2892:A:H62	36:BA:2893:G:N2	2.05	0.55
10:CJ:6:ILE:HG13	10:CJ:72:VAL:HB	1.87	0.55
10:CJ:6:ILE:O	10:CJ:6:ILE:HG13	2.07	0.55
1:CA:255:G:O6	1:CA:266:G:O6	2.25	0.55
50:DR:3:HIS:C	50:DR:3:HIS:HD1	2.10	0.55
36:DA:2010:G:H5''	55:DW:42:ARG:HB2	1.89	0.55
36:DA:2761:G:H2'	36:DA:2762:G:H5''	1.88	0.55
42:BG:103:LEU:HA	42:BG:106:LEU:HB3	1.89	0.55
1:AA:424:G:O2'	1:AA:425:G:H5'	2.07	0.55
34:B8:52:LYS:N	34:B8:53:PRO:CD	2.70	0.55
25:CZ:324:LYS:HA	25:CZ:364:PRO:HB3	1.89	0.55
47:BO:88:ASN:OD1	47:BO:90:GLN:N	2.38	0.55
6:AF:19:LEU:HD11	6:AF:59:TYR:CZ	2.42	0.55
26:D0:40:GLN:NE2	26:D0:44:ARG:HB2	2.22	0.55
9:CI:9:ARG:HG3	9:CI:14:VAL:HG13	1.88	0.55
36:BA:234:C:H2'	36:BA:235:U:H6	1.69	0.55
5:AE:40:ARG:HH11	5:AE:40:ARG:HG2	1.71	0.55
36:DA:2125:G:OP1	38:DC:40:THR:HG21	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:11:HIS:O	25:AZ:12:VAL:HG13	2.06	0.55
4:AD:70:ILE:HG22	4:AD:71:SER:N	2.22	0.55
36:DA:2720:U:H5'	36:DA:2721:A:OP2	2.07	0.55
36:BA:2025:C:H2'	36:BA:2026:C:H6	1.71	0.55
36:BA:2037:G:H2'	36:BA:2038:G:C8	2.41	0.55
25:CZ:72:THR:HG22	25:CZ:203:LEU:HD21	1.89	0.55
36:DA:1820:U:O2	39:DD:201:HIS:HB3	2.06	0.55
55:BW:37:ARG:HG3	55:BW:37:ARG:HH11	1.72	0.55
22:CV:1:G:H1'	26:D0:5:LYS:NZ	2.21	0.55
36:DA:2240:C:O2'	36:DA:2241:A:H5'	2.06	0.55
38:DC:119:VAL:HG22	38:DC:119:VAL:O	2.07	0.55
36:BA:1542:A:C8	36:BA:1544:A:H5'	2.41	0.55
36:DA:1528:A:N1	36:DA:1542:A:H2	2.04	0.55
32:B6:26:ASN:ND2	32:B6:32:ASN:OD1	2.39	0.55
30:B4:5:ILE:H	30:B4:5:ILE:HD13	1.72	0.55
57:DY:79:CYS:SG	57:DY:80:GLY:N	2.80	0.55
36:BA:612:C:H2'	36:BA:613:G:H5'	1.86	0.55
34:B8:33:ASN:ND2	36:BA:2419:U:H5''	2.22	0.55
36:BA:2393:A:H4'	48:BP:61:ARG:O	2.07	0.55
36:BA:1496:A:H8	36:BA:1577:C:HO2'	1.53	0.55
30:D4:12:ALA:HB1	30:D4:29:PRO:O	2.07	0.55
48:DP:16:ARG:CB	48:DP:16:ARG:NH1	2.67	0.55
25:AZ:171:ILE:HD12	25:AZ:201:GLU:OE1	2.07	0.55
1:AA:266:G:H5'	1:AA:268:C:H41	1.72	0.55
2:AB:18:GLY:H	2:AB:42:ILE:CG2	2.20	0.55
53:BU:92:ARG:HD3	53:BU:94:ASN:HB3	1.89	0.55
36:BA:1059:G:H2'	36:BA:1060:U:H5	1.72	0.55
58:DZ:150:LEU:CD2	58:DZ:172:ALA:HB3	2.36	0.55
28:D2:31:GLU:CB	28:D2:53:LEU:HD11	2.37	0.55
54:BV:38:LEU:C	54:BV:39:LEU:HD13	2.27	0.55
53:DU:112:ARG:NH1	54:DV:46:VAL:HG11	2.22	0.55
57:DY:62:GLU:OE1	57:DY:62:GLU:N	2.40	0.55
36:BA:1451:C:N4	36:BA:1461:G:H1	2.05	0.55
1:CA:66:G:H4'	1:CA:173:U:C5	2.42	0.55
25:AZ:69:GLU:HB2	25:AZ:273:HIS:CE1	2.42	0.55
50:DR:59:ASP:O	50:DR:60:LEU:HB3	2.07	0.55
35:B9:16:VAL:HG11	36:BA:1032:A:O3'	2.07	0.55
36:BA:2870:C:H5''	50:BR:65:LEU:HD21	1.88	0.55
36:DA:1547:C:O2'	36:DA:1548:C:H5'	2.07	0.55
58:DZ:54:HIS:HB2	58:DZ:55:HIS:CD2	2.42	0.55
36:BA:1427:A:O2'	36:BA:1428:C:OP2	2.24	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:B0:12:ASN:O	26:B0:14:ARG:N	2.36	0.54
51:DS:58:LEU:CG	51:DS:59:LYS:H	2.20	0.54
51:BS:58:LEU:CG	51:BS:59:LYS:H	2.20	0.54
51:DS:97:ARG:NH2	51:DS:98:VAL:HA	2.22	0.54
9:AI:33:PHE:O	9:AI:35:GLU:N	2.40	0.54
2:AB:236:TYR:O	2:AB:238:LEU:N	2.40	0.54
43:BH:94:TYR:HE2	43:BH:160:LYS:HB3	1.72	0.54
36:BA:2657:A:O2'	43:BH:160:LYS:HE2	2.07	0.54
1:CA:1125:U:C5'	1:CA:1126:U:H5	2.21	0.54
27:B1:48:LYS:HG2	27:B1:50:ARG:NH2	2.22	0.54
6:CF:63:TYR:N	6:CF:63:TYR:CD1	2.75	0.54
1:CA:585:G:H4'	12:CL:8:ASN:ND2	2.22	0.54
33:B7:34:ARG:HD3	36:BA:467:G:OP2	2.07	0.54
36:BA:332:A:O2'	36:BA:333:G:O5'	2.24	0.54
31:D5:57:VAL:O	31:D5:58:LEU:HD12	2.07	0.54
43:DH:105:LEU:CD2	43:DH:113:VAL:HB	2.37	0.54
50:DR:2:ARG:HD2	50:DR:2:ARG:C	2.28	0.54
36:DA:2761:G:C2'	36:DA:2762:G:H5''	2.36	0.54
1:CA:939:G:C5'	7:CG:102:ARG:HH22	2.19	0.54
2:CB:25:ASN:C	2:CB:25:ASN:ND2	2.56	0.54
13:AM:83:ASP:C	13:AM:85:GLY:H	2.10	0.54
46:BN:61:ARG:HG3	46:BN:61:ARG:NH1	2.21	0.54
43:DH:76:VAL:O	43:DH:79:VAL:HG22	2.08	0.54
58:DZ:14:LYS:O	58:DZ:14:LYS:HD2	2.08	0.54
1:AA:626:U:H2'	1:AA:627:G:H8	1.71	0.54
36:DA:583:G:OP2	53:DU:10:ARG:HD2	2.06	0.54
26:B0:40:GLN:HE22	26:B0:44:ARG:N	2.05	0.54
26:B0:40:GLN:NE2	26:B0:44:ARG:HB2	2.21	0.54
57:BY:36:ALA:HB1	57:BY:67:LEU:O	2.07	0.54
20:AT:64:ASP:OD1	20:AT:81:LYS:HD2	2.07	0.54
2:CB:88:ALA:HB2	2:CB:219:VAL:HG13	1.87	0.54
36:BA:2776:A:H4'	36:BA:2777:G:H5''	1.89	0.54
42:BG:52:ILE:HD13	42:BG:52:ILE:H	1.73	0.54
36:DA:234:C:H2'	36:DA:235:U:H6	1.71	0.54
1:CA:437:U:H5''	4:CD:155:LEU:HD13	1.88	0.54
9:CI:50:LEU:HB3	9:CI:56:LEU:HA	1.88	0.54
9:AI:50:LEU:HB3	9:AI:56:LEU:HA	1.88	0.54
30:D4:5:ILE:H	30:D4:5:ILE:HD13	1.72	0.54
1:CA:992:U:H1'	1:CA:993:G:C2	2.43	0.54
39:DD:223:GLY:O	39:DD:224:ALA:O	2.25	0.54
17:CQ:53:LEU:HD21	17:CQ:85:VAL:HG11	1.89	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:53:LEU:HD23	17:CQ:54:GLY:N	2.22	0.54
36:BA:414:C:O2'	36:BA:415:A:H5'	2.06	0.54
36:BA:2358:G:H22	48:BP:55:ARG:NH2	2.05	0.54
36:BA:1411:C:H2'	36:BA:1412:A:C8	2.42	0.54
36:DA:1411:C:H2'	36:DA:1412:A:H8	1.72	0.54
50:BR:28:LEU:CD2	50:BR:29:LEU:HD12	2.37	0.54
25:AZ:72:THR:HG22	25:AZ:203:LEU:HD21	1.88	0.54
1:AA:115:G:H1'	1:AA:116:A:N7	2.21	0.54
42:BG:64:THR:CG2	42:BG:94:LEU:HD11	2.37	0.54
4:AD:43:HIS:O	4:AD:45:GLN:N	2.40	0.54
36:DA:270:A:N1	36:DA:366:C:O2'	2.36	0.54
36:DA:2319:G:OP1	36:DA:2319:G:H4'	2.07	0.54
1:AA:1148:U:H2'	1:AA:1149:C:O4'	2.06	0.54
42:BG:7:LEU:O	42:BG:8:LYS:C	2.45	0.54
49:BQ:133:ARG:HB2	49:BQ:133:ARG:NH1	2.17	0.54
58:BZ:61:LEU:HD12	58:BZ:67:LEU:HD13	1.88	0.54
42:BG:46:ALA:N	42:BG:47:LYS:HD2	2.16	0.54
42:BG:72:ARG:HE	42:BG:86:MET:HA	1.68	0.54
36:BA:925:C:H2'	36:BA:926:A:C5'	2.25	0.54
42:DG:43:LEU:HD21	42:DG:90:LEU:HB2	1.88	0.54
24:AY:45:U:H3'	24:AY:46:7MG:H5'	1.84	0.54
10:CJ:61:GLU:HG3	14:CN:58:LYS:CE	2.27	0.54
54:DV:28:GLU:HB3	54:DV:29:PRO:HD2	1.89	0.54
32:B6:20:ASN:C	32:B6:21:TYR:CG	2.80	0.54
51:DS:42:ASP:C	51:DS:44:LYS:H	2.11	0.54
34:D8:32:LEU:HD13	36:DA:2392:A:OP1	2.07	0.54
41:DF:126:VAL:O	41:DF:196:LEU:HG	2.07	0.54
36:DA:2317:C:H2'	36:DA:2318:G:C5'	2.30	0.54
30:D4:11:PRO:HB3	30:D4:25:TYR:CE2	2.42	0.54
30:B4:12:ALA:HB1	30:B4:29:PRO:O	2.07	0.54
43:BH:157:TYR:O	43:BH:157:TYR:HD1	1.90	0.54
2:CB:17:PHE:O	2:CB:18:GLY:O	2.25	0.54
2:CB:188:ALA:O	2:CB:202:PRO:HA	2.07	0.54
2:CB:17:PHE:HD2	2:CB:44:LEU:HD11	1.71	0.54
9:CI:58:HIS:CG	9:CI:58:HIS:O	2.61	0.54
1:AA:1127:G:H1'	1:AA:1147:C:H42	1.72	0.54
52:DT:24:PRO:HD3	52:DT:52:ILE:HD12	1.90	0.54
46:BN:25:ARG:HG2	46:BN:25:ARG:HH11	1.73	0.54
16:AP:14:ASN:N	16:AP:15:PRO:CD	2.70	0.54
6:AF:63:TYR:HD1	6:AF:63:TYR:N	2.05	0.54
39:BD:45:ASN:OD1	39:BD:46:GLN:N	2.40	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:75:LEU:C	38:BC:75:LEU:HD12	2.27	0.54
11:AK:124:LYS:HD2	11:AK:125:PHE:CZ	2.43	0.54
35:D9:29:ASN:N	35:D9:29:ASN:HD22	2.03	0.54
58:BZ:77:ASP:O	58:BZ:79:ARG:N	2.40	0.54
36:DA:470:A:H2'	36:DA:471:A:O4'	2.07	0.54
36:DA:2693:A:H2'	36:DA:2694:G:H8	1.72	0.54
36:DA:1469:A:H2'	36:DA:1470:G:C8	2.42	0.54
39:DD:6:PHE:CE1	39:DD:18:VAL:HG12	2.42	0.54
42:BG:39:ILE:HD11	42:BG:64:THR:HG21	1.88	0.54
4:CD:191:ARG:HD3	4:CD:200:GLU:OE2	2.06	0.54
12:CL:126:LYS:HA	12:CL:126:LYS:HE2	1.88	0.54
44:DJ:127:UNK:HA	44:DJ:130:UNK:CB	2.38	0.54
46:DN:76:SER:N	46:DN:81:GLY:O	2.35	0.54
36:DA:984:A:H5''	36:DA:985:C:H5	1.71	0.54
50:BR:59:ASP:O	50:BR:60:LEU:HB3	2.08	0.54
36:DA:108:U:H2'	36:DA:109:G:C8	2.42	0.54
5:AE:28:PHE:O	5:AE:47:LYS:HA	2.07	0.54
36:BA:573:G:O2'	36:BA:574:C:H3'	2.07	0.54
1:CA:487:A:H2'	1:CA:488:C:O4'	2.07	0.54
4:CD:110:PHE:CD1	4:CD:110:PHE:N	2.75	0.54
1:CA:416:G:O2'	1:CA:417:C:H5'	2.07	0.54
38:DC:116:THR:HB	38:DC:147:PHE:CD1	2.43	0.54
38:BC:120:MET:HA	38:BC:123:VAL:CG1	2.36	0.54
37:BB:105:A:H2'	37:BB:106:G:O4'	2.07	0.54
56:BX:18:TYR:O	56:BX:20:GLY:N	2.40	0.54
46:DN:46:VAL:CG1	46:DN:48:MET:HG3	2.38	0.54
34:B8:62:LEU:N	34:B8:63:PRO:HD2	2.23	0.54
22:CV:48:C:OP2	22:CV:48:C:H6	1.91	0.54
50:DR:99:LYS:H	50:DR:99:LYS:CD	2.03	0.54
4:CD:126:ILE:HG22	4:CD:127:THR:N	2.21	0.54
51:BS:17:ARG:HA	51:BS:20:ARG:HH11	1.72	0.54
36:BA:267:C:H2'	36:BA:268:C:C6	2.43	0.54
36:DA:2392:A:H2	36:DA:2424:C:N4	1.99	0.54
36:BA:1494:A:N3	36:BA:1494:A:H3'	2.21	0.54
42:DG:125:PHE:O	42:DG:126:ASP:O	2.26	0.54
36:DA:267:C:H2'	36:DA:268:C:C6	2.42	0.54
51:DS:106:ARG:CZ	51:DS:106:ARG:HB3	2.37	0.54
43:BH:158:HIS:CE1	43:BH:169:VAL:HG12	2.42	0.54
25:AZ:172:ARG:O	25:AZ:198:LYS:HD3	2.07	0.54
25:CZ:137:LYS:HA	60:CZ:501:GDP:N1	2.22	0.54
2:CB:172:ILE:HD12	2:CB:172:ILE:N	2.19	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:151:HIS:O	58:DZ:152:ALA:HB3	2.08	0.54
7:CG:99:LEU:O	7:CG:102:ARG:HG2	2.07	0.54
1:CA:429:U:H1'	1:CA:430:A:H5''	1.90	0.54
25:AZ:19:HIS:HA	25:AZ:115:GLN:HB2	1.90	0.54
37:DB:81:G:O6	37:DB:96:U:O2	2.25	0.54
54:BV:5:VAL:HG21	54:BV:35:LEU:CD2	2.37	0.54
16:AP:5:ARG:HG3	16:AP:5:ARG:HH11	1.71	0.54
57:BY:47:LYS:HG3	57:BY:60:PHE:CZ	2.43	0.54
47:BO:4:PRO:O	47:BO:5:GLN:CB	2.52	0.54
24:AY:10:G:N2	24:AY:26:A:H1'	2.22	0.54
1:CA:977:A:O2'	1:CA:978:A:H5''	2.08	0.54
36:DA:708:C:N4	36:DA:723:G:H1	2.04	0.54
1:CA:1017:G:H2'	1:CA:1018:C:C6	2.43	0.54
36:DA:559:G:N2	53:DU:49:HIS:CD2	2.75	0.54
36:DA:191:A:H2'	36:DA:192:C:C6	2.42	0.54
36:BA:2199:A:H3'	36:BA:2200:C:C6	2.43	0.54
1:AA:1211:U:H1'	1:AA:1213:A:C2	2.42	0.54
1:AA:645:C:H2'	1:AA:646:U:C6	2.41	0.54
29:B3:15:TYR:HD2	29:B3:19:GLN:HE22	1.55	0.54
36:DA:8:A:H2'	36:DA:9:U:C6	2.41	0.54
1:AA:992:U:H1'	1:AA:993:G:C2	2.42	0.54
36:BA:470:A:H2'	36:BA:471:A:O4'	2.08	0.54
49:DQ:42:ILE:HD13	49:DQ:97:VAL:HG21	1.90	0.54
17:CQ:45:HIS:HB2	17:CQ:65:ILE:CD1	2.37	0.54
48:DP:17:LYS:C	48:DP:19:VAL:H	2.09	0.54
36:BA:2386:C:H2'	36:BA:2387:U:C6	2.42	0.54
36:BA:1354:A:H2'	36:BA:1355:G:O4'	2.07	0.54
2:CB:144:ARG:HG3	2:CB:145:LEU:N	2.21	0.54
36:BA:1171:G:N7	36:BA:1173:G:H1'	2.22	0.54
29:D3:4:LEU:O	29:D3:36:VAL:HA	2.08	0.54
25:CZ:189:ARG:HG2	25:CZ:189:ARG:HH11	1.72	0.54
1:AA:665:A:H2'	1:AA:732:C:O2	2.06	0.54
2:AB:144:ARG:HG3	2:AB:145:LEU:N	2.22	0.54
36:BA:2408:U:H2'	36:BA:2409:G:C8	2.42	0.54
51:DS:22:GLY:O	51:DS:23:ARG:O	2.25	0.54
3:AC:19:GLU:O	3:AC:56:ASP:HA	2.07	0.54
3:CC:19:GLU:O	3:CC:56:ASP:HA	2.08	0.54
1:AA:1225:A:H2'	1:AA:1226:C:C5	2.43	0.54
36:DA:39:C:H2'	36:DA:40:C:C6	2.42	0.54
36:DA:2001:A:H4'	36:DA:2689:U:H2'	1.90	0.54
1:AA:1001:A:H2'	1:AA:1001:A:N3	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1310:G:O2'	1:CA:1311:G:H5'	2.07	0.54
36:BA:984:A:H5''	36:BA:985:C:H5	1.72	0.54
39:DD:32:SER:O	39:DD:36:PRO:CG	2.53	0.54
40:BE:49:LEU:O	40:BE:78:LEU:CB	2.56	0.54
40:BE:77:ILE:HG22	40:BE:78:LEU:N	2.22	0.54
41:BF:167:ALA:HB1	41:BF:173:VAL:CG1	2.23	0.54
58:BZ:152:ALA:C	58:BZ:167:PRO:HB2	2.28	0.54
9:CI:91:ASP:O	9:CI:93:ARG:N	2.40	0.54
43:DH:94:TYR:HE2	43:DH:160:LYS:HB3	1.73	0.54
32:D6:15:GLU:CG	32:D6:18:ARG:CZ	2.85	0.54
51:DS:19:LYS:HB3	51:DS:20:ARG:NH2	2.21	0.54
48:DP:112:LEU:O	48:DP:112:LEU:HD13	2.07	0.54
43:DH:52:VAL:HB	43:DH:69:ARG:HD3	1.89	0.54
36:DA:1748:G:C8	36:DA:1748:G:H5'	2.40	0.54
42:DG:38:VAL:CG2	42:DG:158:ALA:HB3	2.36	0.54
10:AJ:33:GLN:HB2	10:AJ:75:ILE:CD1	2.33	0.54
51:DS:49:VAL:CG1	51:DS:50:SER:H	2.16	0.54
9:AI:20:ARG:CZ	9:AI:20:ARG:HB2	2.37	0.54
40:BE:116:VAL:O	40:BE:117:MET:CB	2.54	0.54
36:BA:2784:C:H1'	40:BE:37:ARG:NH1	2.18	0.54
22:CW:55:U:H5	22:CW:58:A:OP1	1.91	0.54
36:BA:1567:A:C5'	39:BD:58:HIS:CD2	2.89	0.54
36:DA:1314:C:C2	36:DA:1339:G:N2	2.76	0.54
1:CA:625:G:H2'	1:CA:626:U:H6	1.72	0.54
10:AJ:4:ILE:HD12	10:AJ:4:ILE:N	2.21	0.54
40:BE:101:ARG:HE	40:BE:171:GLU:HB2	1.71	0.54
11:CK:26:ASN:O	11:CK:27:ASN:HB2	2.07	0.54
24:AY:70:C:H2'	24:AY:71:C:H6	1.72	0.54
39:DD:45:ASN:OD1	39:DD:46:GLN:N	2.41	0.54
22:AV:44:G:C2'	22:AV:45:U:H5'	2.36	0.54
36:BA:2206:G:N3	36:BA:2206:G:H3'	2.22	0.54
1:CA:187:C:H4'	20:CT:85:MET:O	2.08	0.54
8:CH:89:PRO:HA	8:CH:92:ARG:HH11	1.71	0.54
12:CL:117:ARG:O	12:CL:119:LYS:O	2.26	0.54
36:DA:414:C:O2'	36:DA:415:A:H5'	2.08	0.54
36:BA:2019:A:C2'	36:BA:2020:A:O5'	2.54	0.54
36:BA:528:A:C2	36:BA:2042:A:H2'	2.41	0.54
1:AA:1347:G:C6	9:AI:107:ARG:NH2	2.76	0.54
35:D9:1:MET:CG	36:DA:2478:A:OP2	2.56	0.54
42:DG:173:LEU:O	42:DG:178:PHE:HB2	2.07	0.54
36:DA:2360:A:C2	36:DA:2361:A:H1'	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:39:C:H2'	36:BA:40:C:C6	2.42	0.54
26:B0:36:ILE:HD11	36:BA:2355:C:H4'	1.88	0.54
6:CF:75:LEU:O	6:CF:78:GLU:HB3	2.06	0.54
43:BH:126:PRO:O	43:BH:127:GLU:CB	2.56	0.54
36:BA:1572:A:O2'	36:BA:1573:G:H5'	2.07	0.54
40:DE:2:LYS:HD3	40:DE:95:ILE:HG22	1.88	0.54
26:B0:43:THR:HG22	36:BA:2331:G:O2'	2.08	0.54
11:AK:84:VAL:HG11	11:AK:95:ILE:HD11	1.88	0.54
25:CZ:221:PHE:HA	25:CZ:244:ARG:O	2.07	0.54
36:DA:227:A:C2	36:DA:2407:G:H1'	2.42	0.54
41:DF:19:GLU:O	41:DF:20:LEU:HG	2.08	0.54
34:D8:61:LEU:C	34:D8:63:PRO:HD2	2.28	0.54
36:DA:2312:U:OP1	42:DG:73:ALA:HB1	2.08	0.54
36:DA:1023:U:H2'	36:DA:1024:G:H5'	1.89	0.54
22:CW:71:G:N3	36:DA:1851:U:H4'	2.23	0.54
57:DY:13:VAL:CG1	57:DY:28:LYS:HD3	2.37	0.54
4:AD:126:ILE:HG22	4:AD:127:THR:N	2.23	0.54
1:CA:541:G:H2'	1:CA:542:G:C8	2.35	0.54
48:BP:147:LEU:O	48:BP:148:LEU:HB2	2.08	0.54
51:BS:42:ASP:C	51:BS:44:LYS:H	2.11	0.54
48:DP:50:ARG:HG2	48:DP:50:ARG:HH11	1.72	0.54
41:DF:103:LYS:HG3	41:DF:106:ARG:HH21	1.72	0.54
4:AD:12:CYS:HA	4:AD:19:LEU:CD1	2.38	0.54
9:AI:40:LEU:CD1	9:AI:70:LYS:HG2	2.37	0.54
1:AA:585:G:H4'	12:AL:8:ASN:ND2	2.21	0.54
1:AA:266:G:H5''	1:AA:267:C:C5	2.42	0.54
36:DA:332:A:O2'	36:DA:333:G:O5'	2.25	0.54
42:DG:172:LEU:HD23	42:DG:176:LEU:HD12	1.90	0.54
52:DT:50:ILE:CD1	52:DT:64:ARG:HB3	2.37	0.54
1:CA:413:G:H1'	1:CA:428:G:H21	1.71	0.54
54:DV:38:LEU:O	54:DV:39:LEU:HD13	2.08	0.54
22:AW:39:U:OP2	22:AW:39:U:H4'	2.07	0.54
36:BA:282:A:N6	36:BA:359:A:H1'	2.22	0.54
24:CY:10:G:N2	24:CY:26:A:H1'	2.22	0.54
20:AT:104:LEU:C	20:AT:104:LEU:HD23	2.28	0.54
40:BE:45:THR:O	40:BE:46:ALA:HB2	2.07	0.54
40:BE:81:ILE:O	40:BE:82:ARG:O	2.26	0.54
39:BD:136:ILE:HB	39:BD:165:ILE:CD1	2.36	0.54
16:AP:50:LYS:HD3	16:AP:51:VAL:N	2.22	0.54
18:CR:22:VAL:O	18:CR:25:THR:HB	2.08	0.54
1:CA:186:C:H2'	1:CA:187:C:C6	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:41:VAL:HG23	5:AE:67:VAL:HG13	1.89	0.54
31:D5:7:PRO:HG2	36:DA:2016:U:O2	2.07	0.54
36:DA:1336:A:H2'	36:DA:1337:G:C8	2.41	0.54
1:CA:735:C:H2'	1:CA:736:C:H6	1.72	0.54
53:BU:101:ARG:HG3	53:BU:101:ARG:NH1	2.23	0.54
58:BZ:51:ALA:CB	58:BZ:57:ILE:HD11	2.37	0.54
17:AQ:82:MET:O	17:AQ:86:GLU:HG2	2.07	0.54
36:BA:744:G:OP1	40:BE:132:HIS:HB3	2.07	0.54
38:BC:167:LYS:O	38:BC:167:LYS:HD2	2.07	0.54
57:DY:6:HIS:N	57:DY:6:HIS:CD2	2.75	0.54
1:CA:1150:U:O4'	1:CA:1150:U:O2	2.25	0.54
28:B2:48:HIS:HA	36:BA:95:G:H4'	1.90	0.54
40:DE:52:LEU:HB3	40:DE:75:VAL:HB	1.90	0.54
1:AA:1007:C:O2'	1:AA:1008:C:H5'	2.08	0.54
54:DV:18:LEU:HD23	54:DV:19:LYS:N	2.18	0.54
34:D8:23:VAL:HG11	34:D8:46:ARG:HD3	1.90	0.54
32:B6:45:LYS:HG3	36:BA:2371:G:H4'	1.89	0.54
39:BD:48:ARG:HH11	39:BD:48:ARG:HG3	1.73	0.54
55:DW:5:ALA:HB2	55:DW:54:ALA:CB	2.29	0.54
36:DA:2892:A:H62	36:DA:2893:G:N2	2.05	0.54
36:DA:1516:C:O2'	36:DA:1517:G:H5''	2.06	0.54
30:B4:28:LYS:O	30:B4:31:ILE:HD11	2.07	0.54
50:BR:3:HIS:HD1	50:BR:3:HIS:C	2.10	0.54
36:DA:654(H):G:C3'	36:DA:654(I):C:H5'	2.37	0.54
1:AA:1320:C:O2'	1:AA:1321:C:H5'	2.08	0.54
15:CO:82:ILE:CD1	15:CO:88:ARG:HB2	2.37	0.54
41:BF:157:VAL:HG21	41:BF:194:MET:HG2	1.89	0.54
14:CN:39:LEU:HD11	14:CN:47:LEU:HD12	1.90	0.54
37:BB:81:G:O6	37:BB:96:U:O2	2.25	0.54
14:AN:15:LYS:HB3	14:AN:16:PHE:CE2	2.41	0.54
36:BA:1341:U:H4'	56:BX:57:LEU:HB3	1.90	0.54
40:DE:45:THR:O	40:DE:46:ALA:HB2	2.08	0.54
36:DA:2030:A:H4'	36:DA:2031:A:H8	1.72	0.54
39:DD:267:SER:C	39:DD:269:PHE:N	2.60	0.54
25:CZ:64:ASN:N	25:CZ:64:ASN:ND2	2.55	0.54
20:CT:64:ASP:OD1	20:CT:81:LYS:HD2	2.08	0.54
16:CP:50:LYS:HD3	16:CP:51:VAL:N	2.22	0.54
11:CK:21:ILE:HG13	11:CK:30:VAL:HG12	1.90	0.54
36:DA:1771:C:C1'	36:DA:1786:A:C8	2.90	0.54
8:CH:2:LEU:HD23	8:CH:2:LEU:O	2.08	0.54
35:B9:1:MET:CG	36:BA:2478:A:OP2	2.55	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1030(A):G:H1'	1:AA:1031:G:H1	1.72	0.54
36:BA:1469:A:H2'	36:BA:1470:G:C8	2.43	0.54
36:DA:108:U:H2'	36:DA:109:G:H8	1.71	0.54
8:AH:10:LEU:HD22	8:AH:83:ILE:HD11	1.90	0.54
4:AD:76:ARG:O	4:AD:80:GLU:HG2	2.07	0.54
1:CA:818:G:O2'	1:CA:819:A:H5'	2.07	0.54
36:BA:2693:A:H2'	36:BA:2694:G:H8	1.71	0.54
52:DT:30:VAL:HG21	52:DT:83:ILE:HG12	1.89	0.54
52:DT:32:TYR:HB3	52:DT:81:PRO:HB3	1.88	0.54
40:BE:48:GLN:HE21	40:BE:78:LEU:HD22	1.72	0.54
9:AI:53:VAL:CG1	9:AI:95:LYS:HD3	2.32	0.54
39:BD:35:LYS:CB	39:BD:36:PRO:CD	2.85	0.54
58:DZ:98:MET:HG2	58:DZ:99:TYR:H	1.68	0.54
52:BT:27:THR:OG1	52:BT:28:VAL:N	2.40	0.54
42:DG:83:ARG:HB2	42:DG:84:LYS:HD2	1.90	0.54
36:BA:607:U:H3	36:BA:621:A:H2	1.56	0.54
41:BF:39:TRP:CB	41:BF:101:LEU:HD22	2.38	0.54
32:D6:9:LEU:HD13	32:D6:9:LEU:O	2.07	0.54
36:BA:2179:C:H4'	36:BA:2180:U:N3	2.22	0.54
52:BT:129:ARG:NE	52:BT:131:ALA:HB3	2.22	0.54
51:BS:49:VAL:CG1	51:BS:50:SER:H	2.15	0.54
48:DP:131:SER:OG	48:DP:134:ALA:HB3	2.08	0.54
32:B6:5:VAL:O	32:B6:6:ARG:CB	2.56	0.54
36:BA:1210:A:H4'	36:BA:1211:U:O5'	2.08	0.54
31:D5:54:GLY:C	31:D5:56:LYS:HZ2	2.11	0.54
53:BU:61:TRP:CH2	53:BU:94:ASN:HB2	2.43	0.54
36:DA:654(I):C:H5''	36:DA:654(J):A:OP1	2.07	0.54
36:BA:1068:G:H1'	36:BA:1069:A:H5'	1.90	0.54
36:BA:2466:C:O2'	36:BA:2467:C:H5'	2.08	0.54
36:BA:2523:G:O2'	36:BA:2524:G:H5''	2.07	0.54
22:AW:37:A:H3'	22:AW:38:A:H8	1.72	0.54
50:BR:83:ILE:HG22	50:BR:87:TYR:HE2	1.73	0.54
28:D2:8:LYS:HA	28:D2:11:GLU:HG3	1.90	0.54
40:BE:101:ARG:NH2	40:BE:171:GLU:HB2	2.22	0.54
12:AL:39:VAL:HG12	12:AL:40:VAL:N	2.23	0.54
36:DA:15:G:O2'	36:DA:16:G:H5'	2.08	0.54
6:AF:63:TYR:CD1	6:AF:63:TYR:N	2.76	0.54
57:BY:2:ARG:N	57:BY:4:LYS:HE3	2.22	0.54
49:DQ:43:THR:OG1	49:DQ:46:GLN:HG3	2.08	0.54
22:CV:44:G:C2'	22:CV:45:U:H5'	2.37	0.54
25:AZ:133:VAL:HG23	25:AZ:168:VAL:HG11	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:189:ASP:HB3	2:AB:203:GLY:O	2.08	0.54
36:DA:674:G:N3	41:DF:74:ARG:NH1	2.55	0.54
38:BC:40:THR:HG22	38:BC:177:LYS:CD	2.38	0.54
36:DA:2358:G:H22	48:DP:55:ARG:NH2	2.04	0.54
36:DA:1163:G:O2'	36:DA:1164:G:H5'	2.07	0.54
30:D4:18:CYS:SG	30:D4:19:GLY:N	2.81	0.54
36:BA:2360:A:O2'	36:BA:2361:A:P	2.66	0.54
48:BP:17:LYS:C	48:BP:19:VAL:H	2.10	0.54
43:BH:126:PRO:O	43:BH:127:GLU:HB2	2.07	0.54
25:CZ:139:ASP:CG	25:CZ:177:LEU:HD11	2.28	0.54
38:DC:41:VAL:HG21	38:DC:185:LEU:HD22	1.88	0.54
36:BA:1361:G:O2'	36:BA:1362:C:H5'	2.08	0.54
49:DQ:30:GLY:HA2	49:DQ:107:ALA:HB2	1.90	0.54
25:AZ:139:ASP:CG	25:AZ:177:LEU:HD11	2.27	0.54
36:DA:1171:G:N7	36:DA:1173:G:H1'	2.22	0.54
50:DR:111:LEU:HD12	50:DR:111:LEU:N	2.23	0.54
36:BA:2319:G:H4'	36:BA:2319:G:OP1	2.07	0.54
24:AY:49:G:O2'	24:AY:50:G:H5'	2.07	0.54
1:AA:1264:C:H2'	1:AA:1265:G:C8	2.42	0.54
41:BF:19:GLU:O	41:BF:20:LEU:HG	2.06	0.54
39:DD:27:THR:HG23	39:DD:27:THR:O	2.08	0.54
34:D8:62:LEU:N	34:D8:63:PRO:HD2	2.23	0.54
39:BD:72:LYS:HZ2	39:BD:75:ILE:HG13	1.73	0.54
40:BE:21:VAL:HG23	40:BE:21:VAL:O	2.08	0.54
36:BA:272(I):U:O2'	36:BA:272(J):C:H5'	2.08	0.54
36:BA:84:A:H3'	57:BY:9:LYS:HG3	1.90	0.54
54:DV:19:LYS:HE2	54:DV:19:LYS:HA	1.90	0.54
34:B8:32:LEU:HD13	36:BA:2392:A:OP1	2.07	0.54
36:BA:621:A:C2'	36:BA:622:G:H5'	2.36	0.54
41:DF:7:TYR:OH	41:DF:10:PRO:HB3	2.08	0.54
48:DP:23:PRO:HB2	48:DP:33:ARG:CD	2.37	0.54
36:DA:2179:C:H1'	36:DA:2180:U:C4	2.42	0.54
58:BZ:14:LYS:O	58:BZ:17:ALA:HB3	2.07	0.54
58:BZ:29:TYR:O	58:BZ:30:ASN:HB3	2.08	0.54
1:AA:267:C:H2'	1:AA:268:C:H6	1.73	0.54
53:BU:79:PHE:CE1	53:BU:83:LEU:HD11	2.42	0.54
31:B5:33:CYS:HG	31:B5:36:CYS:HG	1.55	0.54
1:AA:961:U:O2'	1:AA:962:C:H6	1.90	0.54
19:AS:40:ILE:HG23	19:AS:62:ILE:CD1	2.38	0.54
53:BU:112:ARG:NH1	54:BV:46:VAL:HG11	2.22	0.54
54:BV:34:GLU:O	54:BV:36:PRO:CD	2.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:324:LYS:HE3	25:CZ:326:GLU:OE2	2.08	0.54
8:CH:85:ARG:HH11	8:CH:85:ARG:HG3	1.73	0.54
1:AA:1342:C:O2'	9:AI:124:GLN:HG3	2.08	0.54
53:BU:76:TYR:O	53:BU:80:ILE:HG12	2.08	0.54
6:AF:79:LEU:H	6:AF:79:LEU:HD12	1.72	0.54
46:BN:4:TYR:CD1	46:BN:4:TYR:N	2.75	0.54
1:CA:476:G:H2'	1:CA:477:A:C8	2.41	0.54
26:D0:56:ASP:OD2	36:DA:2364:C:H5'	2.08	0.54
25:AZ:313:HIS:HB2	25:AZ:380:LEU:HB2	1.89	0.54
36:BA:752:A:O2'	36:BA:753:C:OP2	2.25	0.54
36:DA:2025:C:H2'	36:DA:2026:C:H6	1.72	0.54
4:CD:157:LEU:HD12	4:CD:157:LEU:H	1.71	0.54
36:DA:1826:G:H4'	39:DD:242:ARG:NH2	2.19	0.54
52:DT:85:LYS:HZ3	52:DT:85:LYS:HB3	1.68	0.54
7:CG:79:ARG:NE	22:CW:33:U:H4'	2.23	0.54
58:BZ:119:GLU:HG2	58:BZ:122:ARG:HH11	1.72	0.54
36:BA:2636:U:H4'	40:BE:80:GLU:OE1	2.07	0.54
30:B4:5:ILE:N	30:B4:5:ILE:HD13	2.23	0.54
34:B8:11:LYS:HD2	34:B8:11:LYS:H	1.72	0.54
34:B8:6:THR:OG1	34:B8:11:LYS:HE3	2.07	0.54
36:DA:910:A:H2'	36:DA:911:A:C8	2.42	0.54
42:DG:149:VAL:HG23	42:DG:149:VAL:O	2.08	0.54
32:D6:20:ASN:O	32:D6:21:TYR:CD2	2.61	0.54
6:CF:19:LEU:HD11	6:CF:59:TYR:CZ	2.43	0.54
31:B5:54:GLY:N	31:B5:56:LYS:HZ2	2.06	0.54
28:D2:35:LEU:O	28:D2:39:ALA:N	2.41	0.54
28:D2:35:LEU:HB3	28:D2:50:ILE:HG13	1.90	0.54
47:BO:114:ILE:H	47:BO:114:ILE:CD1	2.21	0.54
19:AS:47:HIS:O	19:AS:62:ILE:HG22	2.07	0.54
42:BG:9:ARG:O	42:BG:10:LYS:C	2.47	0.54
49:DQ:74:TYR:CD2	49:DQ:91:GLU:HB2	2.38	0.54
7:CG:75:VAL:O	7:CG:75:VAL:HG23	2.08	0.54
40:DE:107:THR:HA	40:DE:163:GLU:O	2.08	0.54
36:DA:1880:C:H2'	36:DA:1881:C:H5''	1.90	0.54
36:DA:363(E):U:H2'	36:DA:363(F):A:C1'	2.38	0.54
1:CA:192:U:O4'	20:CT:103:GLY:HA2	2.08	0.54
41:DF:85:GLY:O	41:DF:86:GLY:O	2.26	0.54
22:AV:62:C:H2'	22:AV:62:C:O2	2.06	0.54
40:BE:23:VAL:HA	40:BE:186:GLY:H	1.73	0.54
54:DV:91:TYR:H	54:DV:91:TYR:HD1	1.56	0.54
28:D2:69:ARG:HB2	28:D2:70:GLN:NE2	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D3:15:TYR:HD2	29:D3:19:GLN:HE22	1.56	0.54
39:DD:148:GLU:CB	39:DD:151:LYS:HD2	2.38	0.54
1:CA:392:G:H2'	1:CA:393:A:H8	1.72	0.54
36:DA:2019:A:C2'	36:DA:2020:A:O5'	2.55	0.54
12:CL:92:ASP:O	12:CL:94:PRO:HD3	2.08	0.54
46:DN:76:SER:HB3	46:DN:81:GLY:HA3	1.90	0.54
48:DP:17:LYS:O	48:DP:17:LYS:HG2	2.07	0.54
58:BZ:49:ARG:O	58:BZ:50:GLN:HB2	2.07	0.54
36:BA:1827:C:O2'	36:BA:1828:G:H5'	2.08	0.54
36:BA:918:A:H5''	37:BB:98:G:O2'	2.08	0.54
20:CT:29:LYS:O	20:CT:33:ILE:HG13	2.08	0.54
19:CS:50:ALA:HB1	19:CS:57:HIS:HB3	1.89	0.54
36:DA:2682:U:H6	36:DA:2682:U:H5'	1.73	0.54
1:CA:1397:C:OP2	5:CE:24:ARG:NH2	2.39	0.54
38:BC:87:GLU:CG	38:BC:94:VAL:HG11	2.38	0.54
38:BC:119:VAL:O	38:BC:119:VAL:HG22	2.08	0.54
52:DT:27:THR:HG23	52:DT:28:VAL:H	1.73	0.54
52:DT:28:VAL:CG2	52:DT:46:GLU:HG3	2.38	0.54
42:BG:44:GLY:HA2	42:BG:88:ILE:HG21	1.90	0.54
36:BA:629:G:H1'	36:BA:639:U:O2'	2.08	0.54
37:BB:44:G:H1'	37:BB:47:C:N4	2.23	0.54
39:BD:77:ALA:HA	39:BD:97:TYR:HA	1.90	0.54
9:CI:91:ASP:C	9:CI:93:ARG:N	2.60	0.54
39:DD:68:LYS:HD3	39:DD:70:TRP:CZ2	2.42	0.54
51:BS:58:LEU:O	51:BS:59:LYS:O	2.26	0.54
24:CY:70:C:H2'	24:CY:71:C:H6	1.73	0.54
36:DA:310:A:OP1	57:DY:17:SER:O	2.26	0.54
36:BA:1142(A):A:H8	36:BA:1142(A):A:H5'	1.73	0.54
36:DA:832:G:H21	48:DP:53:GLY:CA	2.21	0.54
36:DA:2179:C:H4'	36:DA:2180:U:N3	2.23	0.54
48:BP:50:ARG:HH11	48:BP:50:ARG:HG2	1.73	0.54
4:AD:18:LYS:HE3	4:AD:31:CYS:SG	2.48	0.54
30:D4:28:LYS:O	30:D4:31:ILE:HD11	2.07	0.54
58:BZ:30:ASN:C	58:BZ:30:ASN:ND2	2.57	0.54
1:CA:266:G:H5''	1:CA:267:C:C5	2.43	0.54
55:BW:12:ILE:HD13	55:BW:17:VAL:HG22	1.90	0.54
53:DU:61:TRP:CH2	53:DU:94:ASN:HB2	2.43	0.54
15:AO:82:ILE:CD1	15:AO:88:ARG:HB2	2.38	0.54
25:CZ:178:ALA:CB	25:CZ:199:ILE:HD11	2.38	0.54
31:B5:49:CYS:SG	31:B5:50:GLY:N	2.81	0.54
36:DA:1059:G:H2'	36:DA:1060:U:H5	1.71	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:142(A):C:O2'	36:BA:143:G:H5'	2.08	0.54
15:AO:17:ARG:NH1	15:AO:17:ARG:HG3	2.19	0.54
1:AA:78:G:N2	1:AA:91:C:H41	2.06	0.54
55:BW:71:VAL:HG23	55:BW:71:VAL:O	2.08	0.54
1:CA:78:G:N2	1:CA:91:C:H41	2.06	0.54
13:AM:83:ASP:OD1	13:AM:84:ILE:N	2.40	0.54
43:DH:30:LYS:HA	43:DH:30:LYS:HE2	1.90	0.54
36:BA:1314:C:C2	36:BA:1339:G:N2	2.76	0.54
57:BY:47:LYS:HE3	57:BY:60:PHE:HZ	1.73	0.54
36:DA:1453:U:H5'	50:DR:63:ARG:NE	2.23	0.54
7:CG:115:ARG:O	7:CG:118:VAL:HG22	2.08	0.54
26:B0:40:GLN:NE2	26:B0:44:ARG:H	2.06	0.54
36:DA:1451:C:N4	36:DA:1461:G:H1	2.05	0.54
36:BA:15:G:O2'	36:BA:16:G:H5'	2.07	0.54
3:AC:134:ILE:CG2	3:AC:168:ALA:HB3	2.38	0.54
9:CI:79:LEU:O	9:CI:79:LEU:HD22	2.08	0.54
1:AA:186:C:H2'	1:AA:187:C:C6	2.43	0.54
41:BF:53:THR:O	41:BF:57:VAL:HG23	2.08	0.54
47:BO:97:ARG:HG3	47:BO:97:ARG:HH11	1.73	0.54
22:CV:45:U:H2'	22:CV:45:U:OP2	2.08	0.54
25:CZ:152:MET:HE2	25:CZ:156:ASP:HB2	1.89	0.54
14:AN:27:CYS:SG	14:AN:29:ARG:HB2	2.48	0.54
4:CD:145:GLU:OE1	4:CD:145:GLU:O	2.26	0.54
1:AA:108:G:H5'	1:AA:109:A:H5''	1.89	0.54
1:AA:1423:G:C5'	47:BO:49:ARG:HH22	2.20	0.54
43:DH:149:ARG:HG3	43:DH:162:ILE:HG12	1.90	0.54
36:BA:1573:G:H2'	36:BA:1574:C:H5'	1.90	0.54
1:AA:31:G:N1	1:AA:48:C:H5''	2.23	0.54
36:BA:2750:A:H4'	36:BA:2751:G:OP1	2.08	0.54
36:BA:2406:U:N3	48:BP:72:PRO:HB2	2.23	0.54
24:CY:38:A:H5'	36:DA:1913:A:C6	2.43	0.54
36:DA:1652:A:C2'	36:DA:1653:G:H5'	2.38	0.54
5:AE:6:PHE:CB	5:AE:34:VAL:HG22	2.37	0.54
36:BA:1400:G:H2'	36:BA:1401:G:C8	2.43	0.54
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.73	0.54
1:CA:1402:C:O2	1:CA:1500:A:N1	2.40	0.54
17:CQ:82:MET:O	17:CQ:86:GLU:HG2	2.08	0.54
29:D3:25:ALA:C	29:D3:27:GLY:H	2.10	0.54
25:AZ:189:ARG:HG2	25:AZ:189:ARG:HH11	1.73	0.54
52:DT:29:ARG:HB3	52:DT:85:LYS:HA	1.89	0.53
41:DF:3:GLU:HA	41:DF:24:LEU:CG	2.35	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:72:ARG:HB3	42:BG:86:MET:H	1.73	0.53
48:DP:9:ASN:H	48:DP:10:PRO:CD	2.22	0.53
37:DB:106:G:O2'	37:DB:107:G:H5'	2.07	0.53
42:DG:73:ALA:CB	42:DG:87:PRO:HG3	2.28	0.53
36:BA:99:U:C6	36:BA:102:G:N2	2.76	0.53
10:AJ:50:ILE:HG23	10:AJ:60:ARG:HH21	1.73	0.53
11:AK:108:ILE:CG2	18:AR:88:LYS:HB2	2.28	0.53
51:DS:17:ARG:HA	51:DS:20:ARG:HH11	1.73	0.53
48:BP:144:GLU:N	48:BP:145:PRO:HD3	2.23	0.53
36:DA:2392:A:H1'	48:DP:60:MET:HB3	1.90	0.53
1:AA:858:G:H5''	1:AA:858:G:H8	1.71	0.53
30:D4:28:LYS:HA	30:D4:28:LYS:HE3	1.90	0.53
1:AA:1242:C:O2'	1:AA:1243:C:H5'	2.08	0.53
41:DF:28:ILE:N	41:DF:28:ILE:HD13	2.13	0.53
36:DA:1049:C:H2'	36:DA:1050:A:C8	2.29	0.53
31:B5:24:ALA:O	31:B5:25:LEU:CB	2.53	0.53
55:DW:17:VAL:O	55:DW:20:VAL:HG22	2.08	0.53
25:CZ:171:ILE:HD12	25:CZ:201:GLU:OE1	2.07	0.53
52:DT:92:GLY:O	52:DT:93:ARG:C	2.47	0.53
36:DA:142:A:H5''	36:DA:142(A):C:H5	1.72	0.53
41:DF:157:VAL:HG21	41:DF:194:MET:HG2	1.90	0.53
22:AW:57:G:O2'	22:AW:58:A:H5'	2.08	0.53
7:AG:102:ARG:O	7:AG:106:GLN:HG3	2.08	0.53
1:CA:1371:G:O3'	9:CI:69:GLY:HA3	2.08	0.53
36:DA:1880:C:C2'	36:DA:1881:C:H5''	2.38	0.53
50:BR:13:HIS:HE1	50:BR:15:SER:OG	1.91	0.53
36:DA:335:C:H2'	36:DA:336:C:H6	1.74	0.53
36:DA:324:A:H2'	36:DA:325:G:O4'	2.07	0.53
50:BR:96:ARG:NH2	50:BR:117:VAL:HG23	2.23	0.53
13:CM:91:ARG:CB	13:CM:98:VAL:HG12	2.38	0.53
12:CL:40:VAL:HG11	12:CL:77:LEU:O	2.08	0.53
39:DD:111:LEU:HD22	39:DD:115:GLN:OE1	2.07	0.53
7:CG:6:ARG:HH21	7:CG:94:ARG:HH12	1.56	0.53
42:BG:34:LEU:CA	42:BG:161:THR:HG22	2.38	0.53
57:DY:2:ARG:C	57:DY:4:LYS:H	2.12	0.53
25:AZ:168:VAL:O	25:AZ:170:VAL:HG23	2.07	0.53
36:DA:1354:A:H2'	36:DA:1355:G:O4'	2.08	0.53
36:DA:222:A:H5''	36:DA:421:U:OP1	2.08	0.53
36:BA:1013:C:H2'	36:BA:1014:U:H6	1.72	0.53
25:AZ:70:TYR:O	25:AZ:77:TYR:HB2	2.07	0.53
1:CA:559:A:OP1	5:CE:126:ARG:NH2	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BQ:19:GLY:HA3	58:BZ:79:ARG:NH2	2.22	0.53
15:CO:21:ASP:OD2	15:CO:24:SER:HB3	2.07	0.53
4:CD:157:LEU:HD12	4:CD:157:LEU:N	2.23	0.53
1:CA:755:G:OP2	15:CO:65:ARG:HD2	2.07	0.53
36:BA:1820:U:O2	39:BD:201:HIS:HB3	2.08	0.53
7:CG:69:VAL:HG23	7:CG:134:ALA:O	2.08	0.53
36:DA:341:G:O2'	36:DA:342:G:H5'	2.08	0.53
38:DC:87:GLU:CG	38:DC:94:VAL:HG11	2.38	0.53
7:AG:15:ASP:OD1	7:AG:44:TYR:OH	2.26	0.53
10:CJ:40:LEU:HB2	10:CJ:69:ASN:HB2	1.90	0.53
42:DG:118:ARG:HG2	42:DG:118:ARG:HH11	1.73	0.53
36:DA:1860:G:H1	36:DA:1882:C:H42	1.54	0.53
40:DE:48:GLN:HE21	40:DE:78:LEU:HD22	1.73	0.53
37:BB:42:C:O2'	37:BB:43:C:P	2.66	0.53
39:BD:34:VAL:HG23	39:BD:35:LYS:N	2.24	0.53
37:DB:105:A:H2'	37:DB:106:G:O4'	2.08	0.53
57:DY:98:VAL:O	57:DY:99:CYS:SG	2.66	0.53
5:CE:90:VAL:C	5:CE:91:LEU:HD22	2.29	0.53
4:CD:121:VAL:N	4:CD:126:ILE:HD13	2.23	0.53
58:BZ:37:VAL:CG2	58:BZ:38:TYR:N	2.68	0.53
43:DH:20:ALA:HB1	43:DH:21:PRO:CD	2.39	0.53
10:CJ:16:LEU:HD11	10:CJ:70:ARG:HG2	1.90	0.53
2:CB:18:GLY:H	2:CB:42:ILE:CG2	2.20	0.53
36:BA:330:A:C2	36:BA:1210:A:H2'	2.31	0.53
1:CA:725:G:O2'	1:CA:726:C:H5'	2.08	0.53
40:DE:59:VAL:HG23	40:DE:63:LEU:HA	1.90	0.53
2:CB:162:ILE:O	2:CB:185:ILE:HG12	2.07	0.53
47:BO:115:VAL:HG13	47:BO:121:VAL:HG21	1.88	0.53
42:BG:111:LEU:N	42:BG:112:PRO:HD2	2.23	0.53
42:BG:138:GLN:CG	42:BG:153:ARG:O	2.56	0.53
34:D8:52:LYS:N	34:D8:53:PRO:CD	2.70	0.53
36:BA:1039:G:H1	36:BA:1116:C:N4	2.05	0.53
43:BH:30:LYS:HA	43:BH:30:LYS:HE2	1.91	0.53
10:CJ:4:ILE:HD11	10:CJ:77:PRO:HB3	1.91	0.53
36:DA:1722:A:O2'	36:DA:1739:U:H5''	2.08	0.53
36:DA:1331:A:O2'	36:DA:1332:G:C8	2.58	0.53
36:BA:1608:A:H1'	36:BA:1610:A:OP2	2.08	0.53
12:AL:40:VAL:HG11	12:AL:77:LEU:O	2.08	0.53
4:AD:205:GLU:OE2	5:AE:100:VAL:HG22	2.08	0.53
36:DA:1493:C:O2	36:DA:1493:C:H2'	2.07	0.53
2:CB:151:GLY:C	2:CB:153:ARG:H	2.10	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1013:C:H2'	36:DA:1014:U:H6	1.72	0.53
1:CA:738:C:H5''	6:CF:69:GLU:HB2	1.90	0.53
36:DA:1586:A:H5''	36:DA:1587:A:C8	2.44	0.53
1:AA:377:G:OP1	16:AP:3:LYS:HD2	2.08	0.53
36:BA:184:C:H2'	36:BA:185:U:C6	2.43	0.53
1:CA:377:G:OP1	16:CP:3:LYS:HD2	2.09	0.53
36:DA:1999:C:H4'	36:DA:2723:C:O2	2.08	0.53
36:BA:1292:U:H2'	36:BA:1293:C:C6	2.43	0.53
49:DQ:63:LYS:HB2	58:DZ:116:VAL:HG11	1.90	0.53
36:BA:1231:G:H2'	36:BA:1232:G:C8	2.42	0.53
39:DD:91:ARG:HG2	39:DD:91:ARG:HH11	1.73	0.53
50:DR:67:LEU:HD13	50:DR:76:VAL:HG21	1.91	0.53
36:BA:2735:G:H2'	36:BA:2736:G:H8	1.73	0.53
38:BC:99:ILE:O	38:BC:99:ILE:HG22	2.08	0.53
28:B2:35:LEU:HB2	28:B2:53:LEU:HD13	1.90	0.53
28:B2:43:GLN:C	28:B2:45:SER:N	2.61	0.53
41:BF:3:GLU:HB2	41:BF:24:LEU:HD23	1.90	0.53
34:D8:61:LEU:CD1	34:D8:62:LEU:H	2.21	0.53
32:D6:14:THR:HG23	32:D6:16:CYS:H	1.73	0.53
32:D6:20:ASN:C	32:D6:21:TYR:CG	2.82	0.53
36:DA:99:U:C6	36:DA:102:G:N2	2.77	0.53
34:B8:23:VAL:HG11	34:B8:46:ARG:HD3	1.90	0.53
3:CC:81:GLY:HA3	3:CC:85:ARG:NE	2.23	0.53
14:AN:59:ALA:O	14:AN:60:SER:CB	2.46	0.53
36:BA:673:C:H5'	36:BA:673:C:C6	2.27	0.53
55:BW:5:ALA:HB2	55:BW:54:ALA:CB	2.32	0.53
9:AI:40:LEU:C	9:AI:42:ARG:H	2.12	0.53
58:BZ:30:ASN:ND2	58:BZ:33:LEU:H	2.07	0.53
36:BA:1602:U:H3'	36:BA:1603:A:H5''	1.88	0.53
10:CJ:32:ALA:H	10:CJ:78:ASN:HD21	1.54	0.53
9:CI:20:ARG:CB	9:CI:20:ARG:HH11	2.21	0.53
36:DA:2741:A:H2'	36:DA:2742:C:O4'	2.08	0.53
36:BA:142:A:H5''	36:BA:142(A):C:H5	1.73	0.53
1:AA:1320:C:H5''	19:AS:70:LYS:HG3	1.90	0.53
58:DZ:166:SER:HB2	58:DZ:167:PRO:C	2.29	0.53
15:AO:17:ARG:HD3	15:AO:26:GLU:CD	2.29	0.53
54:DV:5:VAL:HG21	54:DV:35:LEU:CD2	2.38	0.53
13:CM:83:ASP:C	13:CM:85:GLY:H	2.11	0.53
34:D8:15:LYS:HD2	34:D8:16:ILE:H	1.73	0.53
9:CI:46:ALA:O	9:CI:78:LYS:HA	2.08	0.53
1:CA:401:C:H1'	1:CA:622:A:H1'	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1880:C:H2'	36:BA:1881:C:H5''	1.91	0.53
36:BA:480:A:H3'	36:BA:481:G:H5''	1.90	0.53
25:AZ:326:GLU:H	25:AZ:326:GLU:CD	2.10	0.53
36:DA:2219:G:C2'	36:DA:2220:G:H5'	2.39	0.53
13:AM:93:ARG:HG3	36:BA:888:C:OP2	2.09	0.53
36:DA:1056:G:H22	36:DA:1104:C:H42	1.54	0.53
25:CZ:168:VAL:O	25:CZ:170:VAL:HG23	2.09	0.53
53:BU:102:GLU:HB2	53:BU:105:VAL:HB	1.89	0.53
19:AS:31:ILE:HG23	19:AS:49:ILE:HG23	1.90	0.53
4:AD:200:GLU:HG2	4:AD:201:GLN:N	2.24	0.53
36:BA:2840:C:H2'	36:BA:2841:C:H6	1.73	0.53
54:BV:58:VAL:HG12	54:BV:97:LYS:HB2	1.89	0.53
38:BC:87:GLU:HG3	38:BC:94:VAL:HG11	1.91	0.53
38:DC:87:GLU:HG3	38:DC:94:VAL:HG11	1.91	0.53
46:BN:71:ILE:HG21	46:BN:84:LYS:HB3	1.89	0.53
41:BF:64:ILE:HG22	41:BF:76:GLY:O	2.08	0.53
1:AA:825:G:O2'	1:AA:826:C:H5'	2.08	0.53
36:BA:2492:U:O2'	36:BA:2493:U:H5'	2.09	0.53
36:BA:686:G:N2	36:BA:788:A:H61	2.07	0.53
58:BZ:116:VAL:O	58:BZ:117:LEU:HB3	2.08	0.53
49:DQ:6:ARG:O	49:DQ:7:MET:HG3	2.07	0.53
36:DA:1506:C:H2'	36:DA:1506:C:O2	2.09	0.53
40:DE:182:LEU:C	40:DE:183:LEU:HD12	2.29	0.53
56:BX:40:LYS:HG2	56:BX:51:VAL:CB	2.15	0.53
47:DO:104:ARG:HE	52:DT:33:LYS:HZ3	1.54	0.53
49:BQ:133:ARG:HG2	49:BQ:134:ARG:N	2.23	0.53
42:BG:85:GLY:C	42:BG:87:PRO:CD	2.73	0.53
46:DN:48:MET:HE3	46:DN:48:MET:C	2.29	0.53
34:B8:61:LEU:CD1	34:B8:62:LEU:H	2.18	0.53
34:D8:23:VAL:HG13	34:D8:46:ARG:HB3	1.89	0.53
34:D8:33:ASN:OD1	34:D8:35:GLN:N	2.41	0.53
4:CD:12:CYS:HA	4:CD:19:LEU:CD1	2.38	0.53
36:BA:2179:C:H1'	36:BA:2180:U:C4	2.43	0.53
58:DZ:10:ARG:NH2	58:DZ:36:LYS:HB2	2.23	0.53
9:AI:58:HIS:CG	9:AI:58:HIS:O	2.61	0.53
36:DA:1404:C:O2'	36:DA:1405:U:H5'	2.08	0.53
1:CA:1536:C:C2'	1:CA:1537:U:H5'	2.39	0.53
1:AA:77:G:H2'	1:AA:77:G:N3	2.23	0.53
36:DA:2523:G:O2'	36:DA:2524:G:H5''	2.09	0.53
42:BG:109:VAL:O	42:BG:112:PRO:HG2	2.08	0.53
42:BG:138:GLN:HE21	42:BG:152:LEU:CB	2.21	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:16:ARG:O	42:BG:20:ILE:HG13	2.08	0.53
10:AJ:3:LYS:HD2	10:AJ:77:PRO:HG3	1.89	0.53
36:DA:480:A:H3'	36:DA:481:G:H5''	1.90	0.53
12:AL:75:HIS:HD2	12:AL:77:LEU:HB2	1.73	0.53
39:BD:108:PRO:HB3	39:BD:143:HIS:CE1	2.44	0.53
39:BD:264:LYS:HG2	39:BD:266:SER:HB3	1.90	0.53
1:CA:1211:U:H1'	1:CA:1213:A:C2	2.44	0.53
36:DA:796:C:H2'	36:DA:797:C:H6	1.72	0.53
42:DG:109:VAL:O	42:DG:112:PRO:HG2	2.09	0.53
1:AA:189(I):G:O2'	1:AA:189(J):G:H5'	2.08	0.53
29:B3:28:LEU:HD23	29:B3:28:LEU:H	1.73	0.53
36:DA:2360:A:O2'	36:DA:2361:A:O4'	2.22	0.53
36:DA:2360:A:O2'	36:DA:2361:A:P	2.67	0.53
6:CF:15:ASP:OD1	6:CF:18:GLN:NE2	2.41	0.53
36:DA:2545:G:N3	36:DA:2565:A:H2	2.06	0.53
6:AF:15:ASP:OD1	6:AF:18:GLN:NE2	2.41	0.53
15:AO:9:GLN:O	15:AO:13:GLN:HG3	2.08	0.53
36:BA:2695:C:H2'	36:BA:2696:U:C6	2.43	0.53
22:CV:16:U:H3	22:CV:59:U:H3	1.54	0.53
36:BA:1861:G:O2'	36:BA:1862:G:H5'	2.08	0.53
1:AA:1050:G:O2'	1:AA:1051:C:P	2.65	0.53
36:DA:2320:A:N3	36:DA:2320:A:H2'	2.22	0.53
36:BA:2682:U:H6	36:BA:2682:U:H5'	1.74	0.53
4:AD:110:PHE:N	4:AD:110:PHE:CD1	2.75	0.53
1:AA:1525:G:O2'	1:AA:1526:G:H5'	2.09	0.53
43:DH:88:LEU:HD13	43:DH:130:ARG:HG2	1.90	0.53
45:DK:66:UNK:O	45:DK:67:UNK:C	2.55	0.53
1:CA:1053:G:H4'	1:CA:1054:C:H5''	1.85	0.53
58:BZ:104:PHE:CE2	58:BZ:119:GLU:HB3	2.43	0.53
58:BZ:99:TYR:HB3	58:BZ:123:ASP:OD2	2.09	0.53
34:D8:61:LEU:CD2	34:D8:62:LEU:H	2.21	0.53
57:DY:7:VAL:HB	57:DY:8:LYS:HZ3	1.74	0.53
57:BY:43:ASN:CB	57:BY:64:GLU:HA	2.38	0.53
3:CC:82:GLU:O	3:CC:86:VAL:HG13	2.07	0.53
36:BA:832:G:O2'	48:BP:52:GLU:HB3	2.09	0.53
51:BS:95:HIS:CG	51:BS:96:GLY:N	2.76	0.53
36:BA:512:G:HO2'	36:BA:513:A:H8	1.55	0.53
48:DP:23:PRO:C	48:DP:33:ARG:NE	2.62	0.53
36:DA:607:U:H3	36:DA:621:A:H2	1.57	0.53
36:DA:622:G:O2'	36:DA:623:G:H5'	2.09	0.53
36:DA:2179:C:H4'	36:DA:2180:U:C2	2.44	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:263:ARG:NH2	25:AZ:297:GLU:HG2	2.14	0.53
3:AC:136:GLN:O	3:AC:139:GLN:HB3	2.08	0.53
57:BY:53:PRO:CB	57:BY:56:PRO:HG3	2.32	0.53
25:CZ:110:ASP:HB3	25:CZ:113:MET:HE1	1.87	0.53
36:DA:1058:G:H3'	36:DA:1059:G:H5'	1.91	0.53
25:CZ:270:VAL:HG12	25:CZ:286:VAL:HG21	1.89	0.53
1:AA:939:G:O3'	7:AG:102:ARG:NH2	2.40	0.53
54:BV:39:LEU:HD22	54:BV:39:LEU:N	2.24	0.53
54:BV:6:LYS:O	54:BV:37:VAL:HG21	2.09	0.53
17:CQ:18:THR:HG23	17:CQ:69:LYS:HE3	1.91	0.53
58:DZ:108:PRO:HB3	58:DZ:141:VAL:HG12	1.90	0.53
9:AI:118:LYS:O	9:AI:119:ALA:CB	2.56	0.53
12:AL:70:ILE:HG22	12:AL:102:ARG:HH12	1.73	0.53
54:BV:91:TYR:HD1	54:BV:91:TYR:H	1.57	0.53
46:DN:4:TYR:N	46:DN:4:TYR:CD1	2.76	0.53
35:B9:10:ILE:HD12	35:B9:10:ILE:H	1.72	0.53
39:BD:79:VAL:HG21	39:BD:111:LEU:HD11	1.90	0.53
36:DA:2777:G:C5'	36:DA:2778:A:H5'	2.38	0.53
17:CQ:21:VAL:HG21	17:CQ:59:ILE:HD11	1.90	0.53
36:BA:2579:C:O2'	40:BE:131:ALA:CB	2.56	0.53
53:BU:32:PHE:CB	53:BU:36:ARG:NH2	2.72	0.53
5:AE:41:VAL:O	5:AE:67:VAL:HG12	2.08	0.53
1:CA:645:C:H2'	1:CA:646:U:C6	2.42	0.53
36:DA:67:U:H2'	36:DA:68:G:H8	1.73	0.53
13:CM:116:THR:O	13:CM:116:THR:HG22	2.09	0.53
17:AQ:53:LEU:HD23	17:AQ:54:GLY:N	2.24	0.53
36:BA:2116:G:N7	36:BA:2117:A:C2	2.76	0.53
46:DN:12:ARG:O	46:DN:14:VAL:HG23	2.09	0.53
17:AQ:45:HIS:HB2	17:AQ:65:ILE:HD13	1.90	0.53
55:BW:86:LEU:HD22	55:BW:96:ILE:HD12	1.91	0.53
36:DA:2406:U:N3	48:DP:72:PRO:HB2	2.24	0.53
22:CV:68:C:O2'	22:CV:69:G:H5'	2.08	0.53
42:BG:39:ILE:HG12	42:BG:92:VAL:CG1	2.38	0.53
36:BA:2590:A:H5''	39:BD:239:ARG:HE	1.74	0.53
36:BA:1925:C:O2'	36:BA:1926:U:H5'	2.08	0.53
36:DA:49:A:H5''	36:DA:51:G:O4'	2.07	0.53
36:BA:953:A:O2'	36:BA:954:G:H5'	2.09	0.53
1:AA:321:A:O2'	1:AA:322:C:H5'	2.09	0.53
7:AG:43:PHE:O	7:AG:46:ALA:HB3	2.09	0.53
36:BA:2320:A:H2'	36:BA:2320:A:N3	2.23	0.53
43:BH:85:LYS:NZ	43:BH:86:GLU:CA	2.72	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:47:LYS:HZ2	42:BG:82:LEU:CD1	2.18	0.53
36:DA:1528(A):A:H62	36:DA:1541:G:H21	1.57	0.53
34:B8:18:ALA:HB2	36:BA:628:G:H5''	1.90	0.53
36:BA:1888:G:H5'	36:BA:1888:G:N3	2.23	0.53
36:BA:654(N):G:H2'	36:BA:654(O):G:O4'	2.08	0.53
43:DH:156:ALA:C	43:DH:158:HIS:N	2.61	0.53
36:DA:84:A:H3'	57:DY:9:LYS:HG3	1.91	0.53
17:AQ:52:LYS:HD3	17:AQ:55:ASP:OD2	2.09	0.53
51:DS:95:HIS:CG	51:DS:96:GLY:N	2.76	0.53
36:BA:1947:C:H2'	36:BA:1948:G:H5''	1.90	0.53
48:DP:57:THR:OG1	48:DP:59:LEU:CB	2.56	0.53
3:AC:79:ARG:O	3:AC:82:GLU:OE1	2.26	0.53
1:CA:979:C:C3'	1:CA:980:C:C5'	2.80	0.53
40:BE:59:VAL:HG23	40:BE:63:LEU:HA	1.91	0.53
36:BA:1050:A:H2'	36:BA:1051:G:C5'	2.35	0.53
35:B9:7:VAL:HG13	35:B9:34:GLN:CG	2.36	0.53
25:CZ:27:LEU:O	25:CZ:30:ALA:HB3	2.09	0.53
36:BA:1058:G:H3'	36:BA:1059:G:H5'	1.91	0.53
31:B5:57:VAL:C	31:B5:58:LEU:HD12	2.29	0.53
1:CA:1234:C:O2'	1:CA:1235:U:H5'	2.07	0.53
28:D2:20:GLU:HG3	28:D2:21:LEU:N	2.23	0.53
47:BO:111:PHE:O	47:BO:115:VAL:HG23	2.08	0.53
36:BA:654(H):G:C3'	36:BA:654(I):C:H5'	2.38	0.53
36:DA:2523:G:C2'	36:DA:2524:G:C5'	2.87	0.53
16:AP:71:ARG:HA	16:AP:74:LEU:HD23	1.91	0.53
37:DB:80:U:H2'	37:DB:81:G:N2	2.21	0.53
37:DB:96:U:H2'	37:DB:97:G:C8	2.44	0.53
13:AM:49:THR:O	13:AM:53:VAL:HG23	2.07	0.53
36:BA:1331:A:O2'	36:BA:1332:G:C8	2.58	0.53
41:BF:84:VAL:C	41:BF:86:GLY:N	2.61	0.53
9:CI:111:ARG:O	9:CI:119:ALA:CB	2.57	0.53
36:BA:1771:C:C1'	36:BA:1786:A:C8	2.89	0.53
36:DA:710:G:H2'	36:DA:711:G:C8	2.43	0.53
25:CZ:133:VAL:HG23	25:CZ:168:VAL:HG11	1.89	0.53
1:AA:429:U:H1'	1:AA:430:A:H5''	1.90	0.53
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.44	0.53
12:AL:92:ASP:O	12:AL:94:PRO:HD3	2.09	0.53
37:BB:3:C:N4	37:BB:118:G:H1	2.07	0.53
25:CZ:70:TYR:O	25:CZ:77:TYR:HB2	2.08	0.53
8:AH:89:PRO:HA	8:AH:92:ARG:HH11	1.73	0.53
30:B4:22:ILE:H	30:B4:22:ILE:HD12	1.73	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:D1:3:LYS:NZ	27:D1:3:LYS:CB	2.71	0.53
41:DF:197:ASP:O	41:DF:200:GLU:HB3	2.08	0.53
1:CA:1176:A:H2'	1:CA:1177:G:C8	2.44	0.53
1:AA:1009:G:H2'	1:AA:1010:G:H8	1.73	0.53
36:BA:1245:G:H5''	41:BF:34:TRP:HZ2	1.74	0.53
36:BA:1389:G:H2'	36:BA:1390:U:C6	2.43	0.53
57:BY:23:ARG:HG2	57:BY:23:ARG:HH11	1.74	0.53
47:DO:97:ARG:HG3	47:DO:97:ARG:HH11	1.74	0.53
36:BA:2848:G:C8	52:BT:97:ALA:HB2	2.43	0.53
6:CF:37:VAL:HG12	6:CF:38:GLU:O	2.08	0.53
25:CZ:349:VAL:HG21	25:CZ:374:LEU:HD13	1.91	0.53
1:CA:1327:C:O2'	1:CA:1328:C:H5'	2.09	0.53
52:DT:85:LYS:HZ2	52:DT:85:LYS:CB	2.20	0.53
36:DA:31:C:C2'	36:DA:32:C:C5'	2.72	0.53
41:BF:126:VAL:O	41:BF:196:LEU:HG	2.09	0.53
10:CJ:55:LYS:HG3	10:CJ:56:HIS:H	1.74	0.53
54:BV:61:VAL:HG22	54:BV:61:VAL:O	2.08	0.53
34:B8:33:ASN:OD1	34:B8:35:GLN:N	2.41	0.53
32:B6:14:THR:HG23	32:B6:16:CYS:H	1.74	0.53
32:B6:41:PRO:HD2	32:B6:45:LYS:HA	1.91	0.53
2:CB:118:LEU:HD13	2:CB:142:LEU:HB2	1.89	0.53
46:BN:63:THR:O	46:BN:66:LYS:HE3	2.08	0.53
36:BA:654(T):C:O2'	36:BA:654(U):A:O4'	2.17	0.53
36:DA:239:U:H1'	36:DA:259:G:N2	2.24	0.53
5:CE:50:GLU:HB2	5:CE:53:LEU:CD1	2.33	0.53
36:BA:2787:C:H1'	40:BE:61:ARG:CD	2.37	0.53
44:BJ:30:UNK:O	44:BJ:31:UNK:CB	2.56	0.53
25:AZ:206:ILE:C	25:AZ:208:GLU:H	2.12	0.53
36:DA:1210:A:H4'	36:DA:1211:U:O5'	2.09	0.53
31:B5:54:GLY:C	31:B5:56:LYS:HZ2	2.12	0.53
56:DX:35:THR:HG22	56:DX:38:GLU:N	2.21	0.53
46:DN:61:ARG:NH1	46:DN:61:ARG:HG3	2.22	0.53
37:BB:67:G:O2'	37:BB:68:C:H6	1.92	0.53
6:CF:79:LEU:HD12	6:CF:79:LEU:H	1.74	0.53
36:BA:361:G:H2'	36:BA:362:U:H4'	1.90	0.53
3:AC:70:VAL:O	3:AC:105:GLU:HA	2.09	0.53
54:BV:81:TYR:C	54:BV:82:ARG:HD2	2.28	0.53
49:BQ:110:THR:HG23	49:BQ:113:GLN:OE1	2.09	0.53
1:CA:632:A:C8	1:CA:633:G:C8	2.96	0.53
30:D4:5:ILE:N	30:D4:5:ILE:HD13	2.23	0.53
53:DU:102:GLU:HB2	53:DU:105:VAL:HB	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:690:G:H2'	36:BA:691:C:C6	2.44	0.53
57:BY:89:PHE:C	57:BY:90:LEU:HD23	2.29	0.53
36:BA:118:A:OP2	36:BA:119:A:H5''	2.09	0.53
36:BA:1708:C:O2'	36:BA:1709:U:H5'	2.08	0.53
36:DA:1582:C:O2'	36:DA:1586:A:C8	2.62	0.53
6:AF:69:GLU:O	6:AF:72:VAL:HG12	2.09	0.53
48:BP:71:VAL:HG12	48:BP:72:PRO:HD3	1.91	0.53
51:BS:22:GLY:O	51:BS:23:ARG:O	2.26	0.53
49:BQ:81:VAL:HG22	49:BQ:82:ARG:N	2.24	0.53
8:CH:20:TYR:CE2	8:CH:76:PRO:HG2	2.44	0.53
49:DQ:81:VAL:HG22	49:DQ:82:ARG:N	2.23	0.53
8:CH:10:LEU:HD22	8:CH:83:ILE:HD11	1.89	0.53
38:BC:116:THR:HB	38:BC:147:PHE:CD1	2.44	0.53
58:BZ:58:VAL:HA	58:BZ:67:LEU:O	2.08	0.53
56:BX:27:THR:HG22	56:BX:80:ILE:HB	1.91	0.53
40:BE:52:LEU:HB3	40:BE:75:VAL:HB	1.90	0.53
49:DQ:140:ALA:HB1	58:DZ:99:TYR:CE2	2.43	0.53
58:DZ:123:ASP:O	58:DZ:124:ILE:CG2	2.53	0.53
39:DD:72:LYS:HG3	39:DD:103:ARG:NH2	2.24	0.53
42:DG:77:ILE:O	42:DG:78:SER:C	2.46	0.53
57:DY:77:PRO:O	57:DY:78:ALA:HB2	2.07	0.53
4:AD:121:VAL:N	4:AD:126:ILE:HD13	2.24	0.53
36:DA:654(N):G:H2'	36:DA:654(O):G:O4'	2.09	0.53
2:AB:134:GLU:C	2:AB:136:VAL:N	2.58	0.53
3:AC:81:GLY:HA3	3:AC:85:ARG:NE	2.23	0.53
36:BA:2754:U:H2'	36:BA:2756:U:OP1	2.09	0.53
36:BA:2892:A:H62	36:BA:2893:G:H21	1.57	0.53
9:AI:46:ALA:O	9:AI:78:LYS:HA	2.09	0.53
36:DA:1050:A:H2'	36:DA:1051:G:C5'	2.35	0.53
25:AZ:178:ALA:HB1	25:AZ:199:ILE:CD1	2.38	0.53
1:CA:267:C:H2'	1:CA:268:C:H6	1.73	0.53
36:BA:1054:A:O2'	44:BJ:31:UNK:HA	2.09	0.53
9:CI:3:GLN:HA	9:CI:19:LEU:O	2.08	0.53
39:BD:147:LEU:CD1	39:BD:183:ARG:HH12	2.18	0.53
36:DA:2807:G:C3'	36:DA:2808:U:H5''	2.38	0.53
56:DX:64:LYS:HG2	56:DX:65:ARG:N	2.24	0.53
42:DG:31:VAL:O	42:DG:33:ARG:HG3	2.09	0.53
52:DT:106:SER:O	52:DT:107:ASP:OD1	2.27	0.53
36:DA:142(A):C:O2'	36:DA:143:G:H5'	2.08	0.53
46:BN:58:ASP:O	46:BN:60:ILE:HG13	2.08	0.53
4:CD:150:GLU:CD	4:CD:151:LYS:N	2.58	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:39:LEU:CD1	54:BV:47:VAL:HG11	2.37	0.53
9:CI:40:LEU:C	9:CI:42:ARG:H	2.10	0.53
36:BA:1762:A:C8	36:BA:1762:A:O5'	2.59	0.53
36:DA:2097:C:O2'	36:DA:2098:U:H5'	2.09	0.53
1:CA:367:U:H4'	25:CZ:291:ARG:NE	2.23	0.53
1:AA:1434:A:H2'	1:AA:1435:G:O4'	2.08	0.53
1:CA:1225:A:H2'	1:CA:1226:C:C5	2.44	0.53
39:DD:142:VAL:HG22	39:DD:143:HIS:N	2.24	0.53
57:BY:2:ARG:C	57:BY:4:LYS:H	2.12	0.53
36:BA:2649:U:O2'	36:BA:2650:U:H5'	2.08	0.53
25:CZ:98:GLN:HE22	25:CZ:346:THR:CG2	2.22	0.53
54:DV:81:TYR:C	54:DV:82:ARG:HD2	2.28	0.53
6:AF:27:GLN:CA	6:AF:27:GLN:HE21	2.20	0.53
18:AR:22:VAL:O	18:AR:25:THR:HB	2.09	0.53
36:DA:1573:G:H2'	36:DA:1574:C:H5'	1.90	0.53
43:DH:126:PRO:O	43:DH:127:GLU:CB	2.56	0.53
50:DR:28:LEU:HD12	50:DR:114:VAL:CG2	2.39	0.53
1:AA:512:U:H2'	1:AA:513:C:H6	1.74	0.53
58:DZ:11:GLU:H	58:DZ:11:GLU:CD	2.12	0.53
27:B1:13:ILE:HD12	27:B1:14:VAL:N	2.24	0.53
1:CA:532:A:N6	1:CA:1206:G:O2'	2.41	0.53
36:DA:2750:A:H4'	36:DA:2751:G:OP1	2.08	0.53
26:D0:26:TYR:CE2	36:DA:857:C:H1'	2.44	0.53
25:AZ:221:PHE:HA	25:AZ:244:ARG:O	2.09	0.53
58:DZ:119:GLU:O	58:DZ:121:HIS:N	2.39	0.53
1:AA:995:C:HO2'	1:AA:996:A:H8	1.57	0.53
25:CZ:330:ARG:NH1	25:CZ:334:PHE:HB3	2.23	0.53
36:BA:2373:G:H2'	36:BA:2374:C:C6	2.43	0.53
52:DT:27:THR:OG1	52:DT:28:VAL:N	2.41	0.53
13:CM:23:TYR:HD2	13:CM:67:GLU:HA	1.72	0.53
52:BT:10:VAL:O	52:BT:13:ARG:NE	2.37	0.53
48:DP:147:LEU:CG	48:DP:148:LEU:N	2.70	0.53
43:BH:50:VAL:CG1	43:BH:52:VAL:HG23	2.39	0.53
4:CD:11:LEU:O	4:CD:12:CYS:C	2.47	0.53
42:DG:64:THR:HG23	42:DG:65:GLY:N	2.24	0.53
42:DG:61:ALA:O	42:DG:65:GLY:N	2.42	0.53
36:BA:2334:G:H21	51:BS:18:ILE:CG2	2.20	0.53
34:B8:25:MET:CG	48:BP:64:LYS:HB2	2.39	0.53
40:BE:117:MET:HE1	40:BE:136:ARG:HA	1.90	0.53
10:AJ:24:VAL:HG21	10:AJ:37:PRO:CG	2.38	0.53
36:BA:1087:G:C8	36:BA:1088:A:H4'	2.35	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B5:36:CYS:C	31:B5:38:ALA:N	2.59	0.53
31:B5:57:VAL:O	31:B5:58:LEU:HD12	2.08	0.53
58:DZ:155:LEU:CD2	58:DZ:155:LEU:H	2.22	0.53
36:DA:88:G:H5'	36:DA:89:G:OP2	2.09	0.53
58:BZ:114:GLY:H	58:BZ:146:ILE:HG22	1.72	0.53
1:CA:1157:A:H1'	1:CA:1181:G:C2	2.44	0.53
42:BG:9:ARG:O	42:BG:11:TYR:N	2.41	0.53
58:DZ:65:GLN:HB3	58:DZ:67:LEU:HD11	1.90	0.53
40:BE:107:THR:HA	40:BE:163:GLU:O	2.09	0.53
46:BN:126:PRO:O	46:BN:127:ASP:CB	2.57	0.53
10:AJ:4:ILE:HD11	10:AJ:77:PRO:HB3	1.91	0.53
25:AZ:333:GLY:HA3	25:AZ:363:MET:HA	1.91	0.53
6:CF:87:ARG:CG	6:CF:87:ARG:HH11	2.21	0.53
46:DN:1:MET:C	46:DN:1:MET:SD	2.87	0.53
24:AY:2:G:O2'	24:AY:3:G:H5''	2.09	0.53
39:DD:79:VAL:HG21	39:DD:111:LEU:HD11	1.89	0.53
41:DF:53:THR:O	41:DF:57:VAL:HG23	2.08	0.53
36:DA:2199:A:H3'	36:DA:2200:C:C6	2.43	0.53
38:BC:214:VAL:HG23	38:BC:224:ILE:HD13	1.91	0.53
50:DR:103:ARG:HG3	55:DW:40:ASN:CG	2.29	0.53
6:CF:69:GLU:O	6:CF:72:VAL:HG12	2.09	0.53
13:CM:7:VAL:O	13:CM:9:ILE:HG13	2.09	0.53
3:CC:172:ARG:O	3:CC:173:VAL:HG23	2.09	0.53
36:BA:1411:C:H2'	36:BA:1412:A:H8	1.73	0.53
2:CB:141:GLU:O	2:CB:144:ARG:HG2	2.09	0.53
12:AL:10:LEU:O	12:AL:14:GLY:N	2.42	0.53
3:CC:92:ALA:O	3:CC:96:GLY:HA2	2.09	0.53
38:BC:190:ARG:O	38:BC:194:ARG:HG3	2.08	0.53
1:CA:28:G:O2'	1:CA:296:U:OP1	2.25	0.53
1:CA:1010:G:O2'	1:CA:1011:G:H5'	2.09	0.53
36:BA:2703:C:O2'	36:BA:2704:C:H5'	2.09	0.53
4:CD:43:HIS:O	4:CD:45:GLN:N	2.41	0.53
38:DC:49:ILE:HB	38:DC:56:GLN:HB3	1.91	0.53
32:B6:12:GLU:HA	32:B6:23:THR:HA	1.91	0.53
1:CA:1007:C:O2'	1:CA:1008:C:H5'	2.09	0.53
40:DE:49:LEU:O	40:DE:78:LEU:CB	2.57	0.53
40:DE:52:LEU:HD21	52:DT:1:MET:HE3	1.90	0.53
42:BG:83:ARG:HB2	42:BG:84:LYS:HD2	1.91	0.53
34:B8:4:MET:HE2	34:B8:61:LEU:HD23	1.91	0.53
39:DD:77:ALA:HA	39:DD:97:TYR:HA	1.91	0.53
1:CA:1270:C:H2'	1:CA:1271:G:C8	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:50:ILE:HG23	10:CJ:60:ARG:HH21	1.72	0.53
3:CC:76:VAL:CG2	3:CC:103:VAL:HG21	2.38	0.53
51:BS:89:ARG:NH1	51:BS:89:ARG:HG2	2.24	0.53
48:DP:33:ARG:O	48:DP:34:GLY:C	2.47	0.53
36:BA:2179:C:H4'	36:BA:2180:U:C2	2.43	0.53
36:DA:2133:G:C5	36:DA:2157:G:N1	2.77	0.53
2:AB:209:ARG:NH1	2:AB:239:VAL:HG11	2.24	0.53
36:DA:1246:A:OP1	48:DP:16:ARG:NH2	2.41	0.53
55:DW:43:GLY:O	55:DW:47:VAL:HG23	2.08	0.53
31:D5:57:VAL:C	31:D5:58:LEU:HD12	2.29	0.53
10:AJ:6:ILE:HG13	10:AJ:6:ILE:O	2.09	0.53
56:BX:35:THR:HB	56:BX:38:GLU:HB3	1.90	0.53
3:CC:5:ILE:H	3:CC:5:ILE:HD12	1.72	0.53
37:BB:80:U:H2'	37:BB:81:G:N2	2.21	0.53
36:BA:1682:G:H5'	36:BA:1762:A:O2'	2.08	0.53
10:CJ:3:LYS:C	10:CJ:4:ILE:HD12	2.29	0.53
36:DA:888:C:H2'	36:DA:889:C:C4'	2.36	0.53
29:B3:43:ILE:HD11	36:BA:927:G:O2'	2.09	0.53
13:AM:108:ARG:HG3	13:AM:108:ARG:NH1	2.24	0.53
5:AE:102:ALA:HB1	5:AE:106:PRO:HG2	1.91	0.53
1:AA:953:G:C5'	1:AA:965:A:H61	2.22	0.53
8:CH:56:LYS:HD2	8:CH:56:LYS:N	2.24	0.53
28:D2:69:ARG:NH2	36:DA:111:A:H4'	2.24	0.53
14:AN:29:ARG:CG	14:AN:29:ARG:HH11	2.21	0.53
29:D3:19:GLN:NE2	29:D3:52:HIS:HE1	2.07	0.53
36:DA:2672:G:C2'	36:DA:2673:G:H5''	2.38	0.53
53:BU:52:ARG:HH11	53:BU:52:ARG:HB3	1.74	0.53
37:DB:3:C:N4	37:DB:118:G:H1	2.07	0.53
36:DA:902:C:H2'	36:DA:903:C:C6	2.44	0.53
27:B1:30:VAL:O	27:B1:30:VAL:HG23	2.09	0.53
36:DA:2649:U:H2'	36:DA:2650:U:H6	1.73	0.53
36:BA:469:G:H2'	36:BA:470:A:H5''	1.91	0.53
1:CA:166:G:O2'	1:CA:167:G:H5'	2.09	0.53
44:DJ:96:UNK:C	44:DJ:98:UNK:N	2.70	0.53
37:DB:56:G:O2'	37:DB:57:A:OP2	2.25	0.53
44:DJ:18:UNK:O	44:DJ:19:UNK:C	2.57	0.53
50:BR:28:LEU:HD23	50:BR:28:LEU:C	2.30	0.53
25:AZ:189:ARG:HB2	25:AZ:192:GLU:OE2	2.09	0.53
36:BA:341:G:O2'	36:BA:342:G:H5'	2.09	0.53
32:D6:12:GLU:HA	32:D6:23:THR:HA	1.91	0.53
47:DO:64:ARG:NH1	47:DO:83:ALA:HB2	2.23	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:825:G:O2'	1:CA:826:C:H5'	2.09	0.53
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.44	0.53
47:BO:26:LYS:HB3	47:BO:30:ALA:HB2	1.91	0.53
10:AJ:29:ARG:HH11	10:AJ:29:ARG:HG2	1.74	0.53
49:BQ:30:GLY:HA2	49:BQ:107:ALA:HB2	1.90	0.53
52:DT:28:VAL:HG22	52:DT:46:GLU:C	2.30	0.52
41:DF:27:GLU:N	41:DF:27:GLU:OE1	2.42	0.52
1:CA:1054:C:O2'	1:CA:1055:A:H5''	2.09	0.52
13:AM:23:TYR:HD2	13:AM:67:GLU:HA	1.74	0.52
48:DP:9:ASN:H	48:DP:10:PRO:HD3	1.74	0.52
36:DA:926:A:H8	36:DA:926:A:H5'	1.73	0.52
24:CY:2:G:H4'	25:CZ:88:TYR:CE1	2.44	0.52
1:AA:1270:C:H2'	1:AA:1271:G:H8	1.74	0.52
36:DA:654(M):C:H2'	36:DA:654(N):G:N7	2.24	0.52
1:CA:975:A:H5'	1:CA:975:A:C8	2.42	0.52
46:DN:63:THR:O	46:DN:66:LYS:HE3	2.09	0.52
36:DA:2393:A:H4'	48:DP:61:ARG:O	2.09	0.52
41:DF:129:PHE:O	41:DF:132:VAL:HB	2.09	0.52
42:DG:91:ARG:HD2	42:DG:92:VAL:N	2.24	0.52
43:DH:50:VAL:CG1	43:DH:52:VAL:HG23	2.39	0.52
4:AD:12:CYS:CA	4:AD:19:LEU:HD13	2.39	0.52
4:AD:30:LYS:C	4:AD:32:ALA:N	2.62	0.52
36:DA:2416:C:H2'	36:DA:2417:C:C6	2.44	0.52
30:B4:11:PRO:HB3	30:B4:25:TYR:CE2	2.44	0.52
40:BE:116:VAL:CG2	40:BE:117:MET:N	2.72	0.52
40:BE:117:MET:HE3	40:BE:136:ARG:HA	1.90	0.52
53:DU:92:ARG:NH1	53:DU:94:ASN:ND2	2.50	0.52
4:CD:59:ARG:CA	4:CD:59:ARG:HE	2.11	0.52
36:BA:769:G:H4'	36:BA:1379:A:N1	2.24	0.52
3:AC:11:ARG:NH2	3:AC:182:ILE:HD12	2.24	0.52
1:AA:78:G:O2'	1:AA:79:G:H4'	2.08	0.52
1:CA:78:G:O2'	1:CA:79:G:H4'	2.08	0.52
10:AJ:90:LEU:H	10:AJ:91:PRO:CD	2.21	0.52
18:CR:31:LEU:HD23	18:CR:31:LEU:N	2.21	0.52
36:DA:848:G:C4	36:DA:933:A:H8	2.27	0.52
34:B8:50:LEU:O	34:B8:51:ALA:CB	2.57	0.52
54:DV:39:LEU:CD1	54:DV:47:VAL:HG11	2.39	0.52
46:DN:126:PRO:O	46:DN:127:ASP:CB	2.57	0.52
46:DN:55:VAL:HG22	46:DN:56:ASN:N	2.24	0.52
50:BR:67:LEU:HD13	50:BR:76:VAL:HG21	1.91	0.52
36:BA:2854:G:H1	36:BA:2863:C:H42	1.57	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:90:MET:HA	46:DN:90:MET:CE	2.39	0.52
36:DA:1341:U:H4'	56:DX:57:LEU:HB3	1.90	0.52
50:DR:4:LEU:CG	50:DR:4:LEU:O	2.57	0.52
25:AZ:64:ASN:N	25:AZ:64:ASN:ND2	2.56	0.52
1:AA:187:C:H4'	20:AT:85:MET:O	2.09	0.52
2:CB:98:LEU:O	2:CB:101:MET:HG3	2.09	0.52
36:BA:2472:G:H5'	36:BA:2473:U:C5'	2.40	0.52
38:BC:6:ARG:HH11	38:BC:34:THR:HB	1.74	0.52
55:BW:40:ASN:O	55:BW:41:LYS:HG2	2.09	0.52
25:CZ:12:VAL:HG23	25:CZ:77:TYR:CD1	2.44	0.52
36:BA:2508:G:O3'	36:BA:2555:U:H5'	2.09	0.52
18:AR:26:LEU:HD21	18:AR:39:VAL:HG13	1.90	0.52
1:AA:1226:C:H4'	1:AA:1227:A:OP1	2.10	0.52
36:BA:1910:G:O2'	36:BA:1911:U:H5'	2.09	0.52
8:AH:41:ARG:HH12	8:AH:123:GLU:CD	2.13	0.52
36:DA:1843:C:H2'	36:DA:1844:C:C6	2.44	0.52
36:BA:648:G:H2'	36:BA:649:G:H8	1.73	0.52
39:DD:268:ARG:NH1	39:DD:268:ARG:HB3	2.24	0.52
13:CM:56:LEU:C	13:CM:56:LEU:HD13	2.28	0.52
37:DB:52:A:O2'	37:DB:53:A:C8	2.54	0.52
36:DA:1034:G:H2'	36:DA:1035:U:O4'	2.09	0.52
38:DC:120:MET:O	38:DC:124:GLY:N	2.35	0.52
13:AM:22:ILE:HB	13:AM:25:ILE:HD12	1.91	0.52
43:BH:122:THR:HB	43:BH:134:SER:HB2	1.91	0.52
36:DA:1541:G:O3'	36:DA:1541:G:OP2	2.28	0.52
40:BE:52:LEU:HD23	40:BE:75:VAL:CB	2.38	0.52
34:B8:62:LEU:N	34:B8:63:PRO:CD	2.72	0.52
52:BT:28:VAL:HG22	52:BT:46:GLU:C	2.29	0.52
22:AV:47:U:H3'	22:AV:48:C:C5'	2.39	0.52
42:DG:73:ALA:O	42:DG:85:GLY:HA2	2.09	0.52
10:AJ:55:LYS:HG3	10:AJ:56:HIS:H	1.74	0.52
54:BV:19:LYS:HE2	54:BV:19:LYS:HA	1.91	0.52
36:DA:654(E):G:C2'	36:DA:654(F):C:H5'	2.38	0.52
2:AB:114:ARG:NH1	2:AB:118:LEU:HG	2.25	0.52
48:BP:45:LEU:HD12	48:BP:46:LYS:H	1.74	0.52
51:BS:99:LYS:HZ3	51:BS:99:LYS:HB3	1.73	0.52
36:DA:832:G:O2'	48:DP:52:GLU:HB3	2.10	0.52
4:CD:17:VAL:HG12	4:CD:17:VAL:O	2.08	0.52
51:DS:12:PHE:HD1	51:DS:13:ARG:N	2.06	0.52
52:BT:26:ASP:HB3	52:BT:89:VAL:O	2.10	0.52
13:AM:11:ARG:HG2	13:AM:12:ASN:N	2.16	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:90:LYS:O	43:BH:94:TYR:HD2	1.92	0.52
9:CI:28:VAL:HG23	9:CI:33:PHE:HA	1.91	0.52
25:CZ:206:ILE:C	25:CZ:208:GLU:H	2.12	0.52
42:BG:119:GLY:HA3	42:BG:181:ARG:CB	2.35	0.52
3:AC:181:ASN:ND2	3:AC:204:LEU:HB2	2.24	0.52
56:BX:38:GLU:HG2	56:BX:38:GLU:O	2.07	0.52
28:B2:8:LYS:C	28:B2:10:LEU:H	2.10	0.52
1:CA:77:G:H2'	1:CA:77:G:N3	2.24	0.52
10:AJ:90:LEU:N	10:AJ:91:PRO:CD	2.72	0.52
9:AI:111:ARG:O	9:AI:119:ALA:HB2	2.10	0.52
36:DA:523:C:O2'	36:DA:524:U:H5'	2.08	0.52
28:B2:15:LYS:HG3	28:B2:16:LEU:N	2.25	0.52
39:DD:45:ASN:CG	39:DD:46:GLN:N	2.63	0.52
46:BN:1:MET:C	46:BN:1:MET:SD	2.88	0.52
36:DA:2485:G:O2'	36:DA:2486:G:H5'	2.10	0.52
36:DA:814:C:H4'	36:DA:1224:C:O2	2.09	0.52
36:DA:710:G:H2'	36:DA:711:G:H8	1.74	0.52
36:DA:1493:C:C4	36:DA:2206:G:O2'	2.62	0.52
5:CE:7:GLU:HG2	5:CE:112:LEU:CD2	2.39	0.52
14:CN:29:ARG:HH11	14:CN:29:ARG:CG	2.21	0.52
1:CA:45:U:H2'	1:CA:46:G:H8	1.75	0.52
27:B1:25:LYS:HE2	36:BA:2396:G:OP1	2.09	0.52
36:DA:221:A:O2'	36:DA:222:A:OP2	2.26	0.52
36:DA:2060:A:N6	41:DF:74:ARG:HH21	2.07	0.52
5:AE:60:TYR:CE1	5:AE:64:ARG:NH2	2.74	0.52
37:DB:27:C:H5'	37:DB:28:C:OP2	2.09	0.52
2:CB:236:TYR:O	2:CB:237:ALA:C	2.46	0.52
36:DA:1652:A:O2'	36:DA:1653:G:H5'	2.09	0.52
36:DA:199:A:N6	36:DA:2433:A:H2'	2.24	0.52
36:BA:49:A:H5''	36:BA:51:G:O4'	2.09	0.52
36:DA:535:C:O2'	36:DA:536:A:H5'	2.09	0.52
10:CJ:45:ARG:O	10:CJ:64:GLU:HA	2.09	0.52
36:DA:2037:G:H2'	36:DA:2038:G:C8	2.44	0.52
8:AH:30:ARG:HB3	8:AH:30:ARG:NH1	2.25	0.52
36:BA:2078:C:H2'	36:BA:2079:U:C6	2.45	0.52
50:DR:74:LYS:CD	50:DR:77:ARG:HH11	2.21	0.52
41:BF:197:ASP:O	41:BF:200:GLU:HB3	2.09	0.52
28:B2:46:GLN:HB3	28:B2:48:HIS:CE1	2.45	0.52
28:B2:47:ASN:HB3	28:B2:51:ARG:HB2	1.91	0.52
36:BA:1484:G:H2'	36:BA:1485:G:C5'	2.06	0.52
39:BD:72:LYS:NZ	39:BD:75:ILE:HG13	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:629:G:H1'	36:DA:639:U:O2'	2.10	0.52
27:B1:68:PRO:O	27:B1:70:VAL:N	2.43	0.52
34:B8:32:LEU:CB	34:B8:36:LYS:HZ3	2.22	0.52
4:CD:111:ALA:HB2	4:CD:120:LEU:HD12	1.92	0.52
48:BP:114:ILE:HD13	48:BP:127:ALA:CB	2.39	0.52
48:BP:38:GLN:HG3	48:BP:39:LYS:H	1.74	0.52
41:DF:160:ASN:HD21	41:DF:162:LEU:HB2	1.74	0.52
36:BA:2297:C:O2'	36:BA:2298:A:H5'	2.09	0.52
36:DA:2892:A:H62	36:DA:2893:G:H21	1.56	0.52
36:DA:1518:U:H2'	36:DA:1519:G:O4'	2.09	0.52
41:DF:116:ASP:OD2	48:DP:5:ASP:N	2.43	0.52
1:CA:1320:C:H5''	19:CS:70:LYS:HG3	1.91	0.52
52:DT:129:ARG:NE	52:DT:131:ALA:HB3	2.23	0.52
1:AA:255:G:O6	1:AA:266:G:O6	2.26	0.52
57:DY:57:GLN:HA	57:DY:57:GLN:OE1	2.09	0.52
31:D5:49:CYS:SG	31:D5:50:GLY:N	2.82	0.52
1:AA:1533:C:H3'	1:AA:1534:A:C5'	2.35	0.52
36:BA:747:U:O2	36:BA:2014:A:H1'	2.09	0.52
2:CB:24:TRP:CZ3	2:CB:26:PRO:HA	2.44	0.52
37:DB:93:G:H2'	37:DB:94:C:H6	1.74	0.52
42:BG:107:LEU:H	42:BG:107:LEU:HD22	1.73	0.52
42:BG:107:LEU:HD23	42:BG:108:ASN:N	2.24	0.52
52:BT:23:ARG:HA	52:BT:52:ILE:CD1	2.39	0.52
54:DV:39:LEU:HD22	54:DV:39:LEU:N	2.25	0.52
1:AA:624:C:H4'	16:AP:11:SER:N	2.22	0.52
36:BA:1453:U:H5'	50:BR:63:ARG:NE	2.24	0.52
36:BA:1722:A:O2'	36:BA:1739:U:H5''	2.09	0.52
13:CM:108:ARG:HG3	13:CM:108:ARG:NH1	2.24	0.52
3:AC:58:GLU:HB2	3:AC:65:ALA:CB	2.39	0.52
16:CP:14:ASN:N	16:CP:15:PRO:CD	2.71	0.52
39:BD:45:ASN:CG	39:BD:46:GLN:N	2.62	0.52
1:CA:1513:A:H2'	1:CA:1514:C:H6	1.72	0.52
36:BA:710:G:H2'	36:BA:711:G:C8	2.44	0.52
22:AW:59:U:C2'	22:AW:60:U:H5'	2.40	0.52
1:CA:256:U:H2'	1:CA:257:G:H8	1.74	0.52
53:DU:102:GLU:HG3	54:DV:2:PHE:HE2	1.74	0.52
36:DA:2840:C:H5''	50:DR:53:HIS:CD2	2.44	0.52
44:DJ:121:UNK:O	44:DJ:123:UNK:N	2.43	0.52
1:CA:1452:C:H4'	1:CA:1456:G:N2	2.25	0.52
51:BS:61:ASN:OD1	51:BS:64:GLU:HB2	2.09	0.52
8:CH:41:ARG:HH12	8:CH:123:GLU:CD	2.12	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1120:G:H2'	36:BA:1121:C:C6	2.44	0.52
27:D1:61:ARG:HG2	27:D1:61:ARG:HH11	1.74	0.52
58:DZ:44:PHE:C	58:DZ:44:PHE:CD1	2.83	0.52
39:BD:268:ARG:HB3	39:BD:268:ARG:NH1	2.25	0.52
3:AC:92:ALA:O	3:AC:96:GLY:HA2	2.08	0.52
36:DA:947:G:H2'	36:DA:948:G:C8	2.44	0.52
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.44	0.52
13:CM:22:ILE:HB	13:CM:25:ILE:HD12	1.91	0.52
39:DD:35:LYS:CB	39:DD:36:PRO:CD	2.87	0.52
39:DD:34:VAL:HG23	39:DD:35:LYS:N	2.23	0.52
46:BN:46:VAL:CG1	46:BN:48:MET:HG3	2.38	0.52
52:BT:30:VAL:HG12	52:BT:44:ASP:CG	2.29	0.52
36:BA:31:C:O2'	36:BA:32:C:H5''	2.08	0.52
48:BP:9:ASN:H	48:BP:10:PRO:HD3	1.74	0.52
39:DD:70:TRP:CZ3	39:DD:150:LYS:HA	2.44	0.52
43:DH:158:HIS:CE1	43:DH:169:VAL:HG12	2.44	0.52
32:D6:41:PRO:HD2	32:D6:45:LYS:HA	1.91	0.52
36:DA:643:A:H2'	36:DA:644:A:O4'	2.08	0.52
36:BA:610:G:N2	36:BA:619:G:H1'	2.25	0.52
34:B8:13:ARG:HD2	48:BP:61:ARG:CD	2.31	0.52
5:AE:90:VAL:C	5:AE:91:LEU:HD22	2.30	0.52
36:BA:2060:A:N6	41:BF:74:ARG:HH21	2.07	0.52
7:AG:16:LEU:HD12	9:AI:42:ARG:HA	1.92	0.52
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.44	0.52
43:BH:156:ALA:C	43:BH:158:HIS:N	2.62	0.52
1:CA:961:U:H5'	1:CA:984:C:H1'	1.91	0.52
36:BA:1068:G:H1'	36:BA:1069:A:C5'	2.40	0.52
58:DZ:163:LEU:CD2	58:DZ:163:LEU:N	2.73	0.52
55:DW:71:VAL:HG23	55:DW:71:VAL:O	2.10	0.52
56:BX:64:LYS:HG2	56:BX:65:ARG:N	2.24	0.52
52:DT:23:ARG:HA	52:DT:52:ILE:CD1	2.39	0.52
1:AA:626:U:H2'	1:AA:627:G:C8	2.45	0.52
19:CS:13:ASP:O	19:CS:15:LEU:N	2.42	0.52
3:AC:188:LEU:HD12	3:AC:195:VAL:HG11	1.91	0.52
57:DY:36:ALA:HB1	57:DY:67:LEU:O	2.09	0.52
1:CA:1308:U:OP1	13:CM:98:VAL:HG22	2.10	0.52
57:DY:43:ASN:CB	57:DY:64:GLU:HA	2.39	0.52
1:AA:498:U:O2'	1:AA:499:A:H8	1.91	0.52
2:AB:15:VAL:H	2:AB:16:HIS:CE1	2.27	0.52
50:BR:4:LEU:C	50:BR:6:SER:N	2.62	0.52
36:BA:902:C:H2'	36:BA:903:C:C6	2.44	0.52

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	2.09	0.52
36:BA:2649:U:H2'	36:BA:2650:U:H6	1.71	0.52
36:DA:901:A:H5'	36:DA:902:C:OP2	2.09	0.52
48:BP:102:ARG:NH1	48:BP:102:ARG:CB	2.73	0.52
53:DU:52:ARG:O	53:DU:55:ARG:N	2.43	0.52
6:CF:27:GLN:HE21	6:CF:27:GLN:CA	2.22	0.52
1:AA:751:U:H4'	15:AO:24:SER:HA	1.91	0.52
54:DV:58:VAL:HB	54:DV:98:GLU:HG2	1.91	0.52
1:CA:512:U:H2'	1:CA:513:C:H6	1.74	0.52
36:DA:2000:G:O2'	36:DA:2001:A:H5'	2.10	0.52
1:CA:1402:C:H2'	1:CA:1403:C:O4'	2.10	0.52
13:CM:35:GLU:C	13:CM:37:THR:H	2.12	0.52
1:CA:1510:U:H2'	1:CA:1511:G:C8	2.43	0.52
10:AJ:44:VAL:HG21	10:AJ:66:ARG:HH21	1.73	0.52
36:BA:36:G:H2'	36:BA:37:C:H6	1.74	0.52
1:CA:1261:A:C2'	1:CA:1262:C:H5'	2.40	0.52
36:BA:1651:G:H2'	36:BA:1652:A:O4'	2.10	0.52
48:DP:107:LYS:HG3	48:DP:107:LYS:O	2.10	0.52
13:CM:14:ARG:NH2	13:CM:16:ASP:OD2	2.41	0.52
36:DA:484:C:H2'	36:DA:485:C:C6	2.45	0.52
36:BA:1506:C:O2	36:BA:1506:C:H2'	2.09	0.52
25:CZ:388:ILE:HB	25:CZ:395:VAL:HG23	1.91	0.52
1:CA:509:A:H5'	4:CD:54:TYR:HD2	1.74	0.52
22:CV:41:C:C3'	22:CV:42:C:H5''	2.37	0.52
28:B2:25:VAL:CG1	28:B2:29:LYS:HE2	2.40	0.52
40:DE:77:ILE:HG22	40:DE:78:LEU:N	2.24	0.52
9:AI:91:ASP:C	9:AI:93:ARG:N	2.60	0.52
42:DG:150:ASP:O	42:DG:151:ALA:HB2	2.09	0.52
48:BP:57:THR:OG1	48:BP:59:LEU:CB	2.58	0.52
20:CT:91:LEU:O	20:CT:94:ALA:HB3	2.10	0.52
46:DN:87:LEU:CD1	46:DN:91:LEU:HG	2.40	0.52
48:DP:23:PRO:HD2	48:DP:33:ARG:NE	2.16	0.52
9:CI:33:PHE:O	9:CI:35:GLU:N	2.41	0.52
10:CJ:33:GLN:HB2	10:CJ:75:ILE:CD1	2.33	0.52
25:AZ:178:ALA:CB	25:AZ:199:ILE:HD11	2.40	0.52
2:AB:204:ASN:HD21	2:AB:206:ASP:H	1.56	0.52
47:DO:115:VAL:HG13	47:DO:121:VAL:HG21	1.90	0.52
1:CA:1442(A):G:H3'	1:CA:1442(B):A:H5''	1.90	0.52
7:CG:102:ARG:O	7:CG:106:GLN:HG3	2.09	0.52
1:CA:80:G:H22	1:CA:90:U:H5'	1.74	0.52
1:AA:940:C:P	7:AG:102:ARG:NH2	2.82	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:23:ARG:NH2	52:BT:120:ARG:HD3	2.24	0.52
36:BA:2097:C:O2'	36:BA:2098:U:H5'	2.09	0.52
1:CA:626:U:H2'	1:CA:627:G:C8	2.44	0.52
36:BA:583:G:OP2	53:BU:10:ARG:HD2	2.10	0.52
24:AY:68:C:H2'	24:AY:69:C:C6	2.44	0.52
42:BG:2:PRO:HG2	42:BG:98:ARG:HH12	1.74	0.52
1:CA:977:A:O2'	1:CA:978:A:H5'	2.09	0.52
46:BN:90:MET:CE	46:BN:90:MET:HA	2.40	0.52
28:D2:7:ARG:O	28:D2:10:LEU:HB3	2.10	0.52
25:AZ:63:ILE:HG13	25:AZ:64:ASN:N	2.25	0.52
20:CT:104:LEU:C	20:CT:104:LEU:HD23	2.29	0.52
1:CA:148:G:H2'	1:CA:149:A:H8	1.75	0.52
25:CZ:213:PRO:HG2	25:CZ:215:ARG:HE	1.74	0.52
1:AA:946:A:H2'	1:AA:947:G:H8	1.73	0.52
39:BD:148:GLU:CB	39:BD:151:LYS:HD2	2.40	0.52
58:BZ:75:ASN:O	58:BZ:84:GLU:HB3	2.09	0.52
5:AE:7:GLU:HG2	5:AE:112:LEU:CD2	2.39	0.52
4:CD:70:ILE:HG22	4:CD:71:SER:N	2.25	0.52
22:CV:56:C:H1'	42:DG:76:SER:HB2	1.90	0.52
1:AA:154:C:H2'	1:AA:155:C:C6	2.44	0.52
1:AA:1030(D):A:N7	1:AA:1031:G:N3	2.57	0.52
1:CA:1120:G:H2'	1:CA:1121:U:H6	1.75	0.52
36:BA:67:U:H2'	36:BA:68:G:H8	1.75	0.52
1:AA:865:A:H2'	1:AA:866:C:C6	2.43	0.52
8:AH:116:LYS:HD3	8:AH:127:LEU:HD12	1.92	0.52
1:CA:158:G:O2'	1:CA:159:G:H5'	2.09	0.52
1:CA:807:A:H2'	1:CA:808:C:C6	2.44	0.52
36:DA:2848:G:C8	52:DT:97:ALA:HB2	2.45	0.52
7:AG:101:LEU:O	7:AG:105:VAL:HG23	2.09	0.52
38:BC:49:ILE:HB	38:BC:56:GLN:HB3	1.90	0.52
25:AZ:388:ILE:HB	25:AZ:395:VAL:HG23	1.91	0.52
36:DA:1389:G:H2'	36:DA:1390:U:C6	2.44	0.52
28:D2:33:MET:O	28:D2:37:PHE:HB2	2.08	0.52
1:AA:755:G:OP2	15:AO:65:ARG:HD2	2.10	0.52
1:AA:1498:U:H4'	1:AA:1519:A:C2	2.44	0.52
25:CZ:345:ARG:NH1	25:CZ:379:ALA:O	2.43	0.52
11:CK:88:GLY:O	11:CK:89:ALA:C	2.48	0.52
41:DF:22:ALA:HB1	41:DF:26:ALA:CB	2.39	0.52
52:BT:28:VAL:HG11	52:BT:46:GLU:CG	2.39	0.52
52:BT:2:ASN:HB2	52:BT:7:ILE:HD11	1.92	0.52
32:D6:52:VAL:HG12	32:D6:53:LYS:CD	2.39	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:190:ASP:O	4:AD:194:LEU:HD23	2.10	0.52
1:CA:973:G:O3'	14:CN:41:ARG:NH1	2.42	0.52
51:BS:97:ARG:C	51:BS:97:ARG:NE	2.63	0.52
48:BP:33:ARG:O	48:BP:34:GLY:C	2.47	0.52
43:DH:41:MET:HG3	43:DH:42:ARG:N	2.24	0.52
1:AA:975:A:C4'	1:AA:976:G:H5''	2.31	0.52
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.45	0.52
36:BA:2807:G:H2'	36:BA:2808:U:H5''	1.90	0.52
9:AI:65:VAL:HG21	9:AI:73:GLN:CG	2.40	0.52
30:B4:28:LYS:HE3	30:B4:28:LYS:HA	1.91	0.52
1:CA:1320:C:O2'	1:CA:1321:C:H5'	2.10	0.52
1:CA:1321:C:C3'	1:CA:1322:C:H5''	2.38	0.52
1:CA:961:U:O2'	1:CA:962:C:H6	1.92	0.52
19:CS:36:ARG:HB2	19:CS:72:GLY:HA3	1.92	0.52
25:AZ:27:LEU:O	25:AZ:30:ALA:HB3	2.10	0.52
3:AC:139:GLN:NE2	3:AC:143:GLU:OE2	2.42	0.52
58:BZ:132:ASN:C	58:BZ:134:PRO:HD3	2.30	0.52
31:D5:54:GLY:N	31:D5:56:LYS:HZ1	2.04	0.52
36:BA:2741:A:H2'	36:BA:2742:C:O4'	2.09	0.52
53:BU:92:ARG:NH1	53:BU:94:ASN:ND2	2.52	0.52
53:BU:95:LEU:HD12	54:BV:11:GLN:HG3	1.90	0.52
46:BN:57:ALA:HB3	46:BN:124:ALA:HA	1.90	0.52
22:AW:55:U:H5	22:AW:58:A:OP1	1.92	0.52
29:D3:43:ILE:HD11	36:DA:927:G:O2'	2.10	0.52
34:D8:22:VAL:HB	34:D8:53:PRO:HB3	1.92	0.52
9:CI:65:VAL:HG21	9:CI:73:GLN:CG	2.39	0.52
36:BA:1681:G:O2'	36:BA:1762:A:C2'	2.57	0.52
36:BA:278:A:N6	36:BA:362:U:H3	2.08	0.52
26:B0:40:GLN:HE21	26:B0:44:ARG:HB2	1.74	0.52
19:AS:15:LEU:O	19:AS:19:VAL:HG23	2.09	0.52
12:AL:59:ARG:NH2	12:AL:63:GLY:HA2	2.24	0.52
36:DA:2822:G:H2'	36:DA:2823:A:H5''	1.90	0.52
36:DA:588:U:H2'	36:DA:589:C:C6	2.45	0.52
3:AC:50:ALA:HA	3:AC:72:LYS:CB	2.39	0.52
28:D2:38:GLN:HA	28:D2:41:ILE:HG12	1.92	0.52
36:DA:1771:C:H1'	36:DA:1786:A:H8	1.70	0.52
29:B3:19:GLN:NE2	29:B3:52:HIS:HE1	2.07	0.52
2:CB:21:ARG:HB3	2:CB:39:ILE:HG12	1.90	0.52
53:BU:102:GLU:HG3	54:BV:2:PHE:HE2	1.74	0.52
22:AW:56:C:O4'	38:BC:132:GLY:HA3	2.10	0.52
36:DA:2508:G:O3'	36:DA:2555:U:H5'	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DV:58:VAL:HG12	54:DV:97:LYS:HB2	1.90	0.52
1:AA:865:A:H2	1:AA:918:A:H4'	1.74	0.52
36:DA:780:G:OP1	39:DD:218:ARG:NH2	2.41	0.52
4:AD:157:LEU:N	4:AD:157:LEU:HD12	2.23	0.52
50:BR:28:LEU:HD12	50:BR:114:VAL:CG2	2.39	0.52
25:AZ:343:TYR:CE1	25:AZ:389:ARG:HD3	2.44	0.52
3:AC:173:VAL:HG12	3:AC:173:VAL:O	2.09	0.52
36:DA:1445(A):C:O2'	36:DA:1446:C:H5'	2.10	0.52
36:BA:2314:C:O2'	36:BA:2315:G:H5'	2.10	0.52
25:CZ:185:ASN:N	25:CZ:185:ASN:HD22	2.07	0.52
11:CK:115:PRO:C	11:CK:117:ASN:H	2.13	0.52
36:BA:801:G:O4'	41:BF:54:ARG:HD3	2.09	0.52
52:DT:84:GLN:O	52:DT:85:LYS:HG3	2.10	0.52
28:B2:48:HIS:CG	28:B2:49:LYS:H	2.27	0.52
43:BH:85:LYS:HG2	43:BH:86:GLU:N	2.25	0.52
46:BN:10:GLU:CD	46:BN:11:PRO:HD2	2.30	0.52
46:BN:48:MET:C	46:BN:48:MET:HE3	2.30	0.52
43:DH:90:LYS:O	43:DH:94:TYR:HD2	1.92	0.52
24:CY:45:U:H3'	24:CY:46:7MG:H5'	1.84	0.52
12:AL:20:LYS:N	12:AL:20:LYS:HD3	2.08	0.52
36:BA:1499:C:C2'	36:BA:1500:G:H5'	2.40	0.52
48:DP:98:GLU:HA	48:DP:101:VAL:HG22	1.92	0.52
51:BS:89:ARG:CG	51:BS:92:TYR:CA	2.88	0.52
36:DA:1947:C:H2'	36:DA:1948:G:H5''	1.91	0.52
2:AB:69:LEU:HD23	2:AB:91:PRO:HB2	1.92	0.52
1:CA:1392:G:N2	1:CA:1502:A:C8	2.78	0.52
25:AZ:208:GLU:O	25:AZ:209:TYR:HB3	2.10	0.52
31:D5:57:VAL:HG12	31:D5:58:LEU:N	2.25	0.52
36:DA:2807:G:H2'	36:DA:2808:U:H5''	1.92	0.52
42:BG:31:VAL:O	42:BG:33:ARG:HD3	2.10	0.52
10:CJ:90:LEU:N	10:CJ:91:PRO:CD	2.73	0.52
9:CI:69:GLY:O	9:CI:73:GLN:HG3	2.10	0.52
50:DR:83:ILE:HG22	50:DR:87:TYR:HE2	1.74	0.52
24:CY:28:C:H2'	24:CY:29:G:C8	2.45	0.52
19:AS:13:ASP:O	19:AS:15:LEU:N	2.43	0.52
36:DA:1103:A:H5''	36:DA:1104:C:C5	2.43	0.52
3:AC:50:ALA:HB2	3:AC:75:VAL:HB	1.92	0.52
7:CG:7:ALA:O	7:CG:8:GLU:CB	2.57	0.52
3:CC:50:ALA:HB2	3:CC:75:VAL:HB	1.91	0.52
3:AC:76:VAL:CG2	3:AC:103:VAL:HG21	2.39	0.52
1:CA:436:C:H2'	1:CA:437:U:C6	2.44	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:20:TYR:O	11:AK:30:VAL:HA	2.10	0.52
55:BW:68:ARG:O	55:BW:109:GLU:HA	2.10	0.52
57:DY:89:PHE:C	57:DY:90:LEU:HD23	2.30	0.52
36:BA:1466:G:H2'	36:BA:1547:C:N4	2.25	0.52
39:DD:201:HIS:O	39:DD:204:ILE:HG12	2.10	0.52
50:BR:34:ILE:HB	50:BR:114:VAL:CG2	2.40	0.52
39:DD:91:ARG:HG2	39:DD:91:ARG:NH1	2.25	0.52
42:DG:19:LEU:O	42:DG:22:ARG:HB2	2.10	0.52
36:DA:1245:G:H5''	41:DF:34:TRP:HZ2	1.74	0.52
15:CO:9:GLN:O	15:CO:13:GLN:HG3	2.09	0.52
1:AA:927:G:H4'	1:AA:927:G:OP2	2.10	0.52
1:AA:158:G:O2'	1:AA:159:G:H5'	2.10	0.52
36:DA:2735:G:H2'	36:DA:2736:G:H8	1.75	0.52
1:AA:328:C:H4'	1:AA:329:A:H5'	1.92	0.52
36:BA:405:U:H3'	36:BA:406:G:H5'	1.91	0.52
6:AF:21:LEU:C	6:AF:21:LEU:HD13	2.29	0.52
7:CG:15:ASP:OD1	7:CG:44:TYR:OH	2.26	0.52
36:DA:1902:C:O2'	39:DD:244:ARG:HB2	2.09	0.52
52:DT:83:ILE:HG13	52:DT:84:GLN:N	2.24	0.52
28:B2:24:LEU:O	28:B2:28:LYS:HB2	2.10	0.52
48:BP:86:LYS:HB2	48:BP:117:GLU:O	2.10	0.52
39:BD:68:LYS:HD3	39:BD:70:TRP:CZ2	2.45	0.52
51:DS:61:ASN:OD1	51:DS:64:GLU:HB2	2.09	0.52
26:D0:11:ARG:O	26:D0:14:ARG:NH2	2.42	0.52
57:DY:74:PRO:HG2	57:DY:81:LYS:O	2.10	0.52
57:BY:7:VAL:HB	57:BY:8:LYS:NZ	2.25	0.52
48:DP:146:VAL:HG13	48:DP:147:LEU:N	2.25	0.52
36:BA:832:G:H21	48:BP:53:GLY:CA	2.22	0.52
2:CB:69:LEU:HD23	2:CB:91:PRO:HB2	1.92	0.52
42:DG:64:THR:HG23	42:DG:65:GLY:H	1.74	0.52
40:BE:63:LEU:O	40:BE:64:LYS:C	2.47	0.52
41:BF:116:ASP:OD2	48:BP:5:ASP:N	2.43	0.52
1:CA:1268:A:H2'	1:CA:1269:A:C8	2.45	0.52
3:AC:46:GLU:O	3:AC:47:LEU:CB	2.52	0.52
2:AB:87:ARG:NH2	2:AB:232:PRO:C	2.56	0.52
16:CP:20:VAL:HG23	16:CP:34:GLU:C	2.30	0.52
16:CP:59:TRP:HA	16:CP:62:VAL:HG23	1.91	0.52
25:AZ:209:TYR:O	25:AZ:211:PRO:HD3	2.10	0.52
35:D9:7:VAL:HG13	35:D9:34:GLN:CG	2.34	0.52
13:CM:11:ARG:CG	13:CM:12:ASN:H	2.11	0.52
1:CA:1342:C:O2'	9:CI:124:GLN:HG3	2.08	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2523:G:C2'	36:BA:2524:G:C5'	2.87	0.52
42:BG:9:ARG:HD3	42:BG:13:GLU:OE2	2.09	0.52
36:DA:747:U:O2	36:DA:2014:A:H1'	2.10	0.52
36:DA:361:G:H2'	36:DA:362:U:H4'	1.91	0.52
36:BA:335:C:H2'	36:BA:336:C:H6	1.75	0.52
1:AA:1017:G:H2'	1:AA:1018:C:C6	2.44	0.52
36:DA:291:C:H2'	36:DA:292:C:C6	2.44	0.52
38:DC:6:ARG:HH11	38:DC:34:THR:HB	1.74	0.52
36:BA:814:C:H4'	36:BA:1224:C:O2	2.10	0.52
39:DD:275:LYS:HD2	39:DD:276:LYS:N	2.25	0.52
36:BA:1363:C:H2'	36:BA:1364:G:C8	2.45	0.52
30:D4:22:ILE:H	30:D4:22:ILE:HD12	1.73	0.52
36:DA:1751:C:O2'	36:DA:1752:C:H5'	2.09	0.52
2:CB:141:GLU:O	2:CB:145:LEU:HD23	2.10	0.52
2:AB:141:GLU:O	2:AB:144:ARG:HG2	2.09	0.52
47:DO:31:LYS:HB3	47:DO:32:TYR:CE1	2.45	0.52
36:BA:271(U):G:O2'	36:BA:271(V):G:H5'	2.10	0.52
5:AE:152:ARG:O	5:AE:153:LYS:C	2.48	0.52
36:DA:1204:A:N1	36:DA:1241:A:H2	2.08	0.52
1:CA:67:C:O2'	1:CA:171:A:H1'	2.10	0.52
36:BA:2001:A:H4'	36:BA:2689:U:H2'	1.92	0.52
36:BA:1479:G:H5''	36:BA:1560:G:H4'	1.92	0.52
50:DR:33:ARG:HG3	50:DR:115:GLU:HG3	1.92	0.52
1:CA:291:C:O2'	1:CA:292:G:H5'	2.10	0.52
1:AA:1327:C:O2'	1:AA:1328:C:H5'	2.10	0.52
57:BY:6:HIS:N	57:BY:6:HIS:CD2	2.75	0.52
5:CE:28:PHE:O	5:CE:47:LYS:HA	2.09	0.52
36:BA:2461:C:H2'	36:BA:2462:U:C6	2.45	0.52
41:BF:22:ALA:HB1	41:BF:26:ALA:CB	2.40	0.52
40:BE:54:GLN:O	40:BE:55:ASN:HB2	2.10	0.52
51:DS:58:LEU:O	51:DS:59:LYS:O	2.28	0.52
36:BA:654(E):G:C2'	36:BA:654(F):C:H5'	2.39	0.52
57:BY:41:GLY:O	57:BY:42:VAL:O	2.28	0.52
4:AD:126:ILE:CD1	4:AD:126:ILE:N	2.72	0.52
4:CD:111:ALA:HB2	4:CD:120:LEU:CD1	2.40	0.52
4:CD:127:THR:HG23	4:CD:130:GLY:O	2.10	0.52
2:AB:72:GLY:O	2:AB:94:ASN:HA	2.10	0.52
36:DA:1139:G:H5''	46:DN:70:LYS:NZ	2.25	0.52
48:BP:23:PRO:C	48:BP:33:ARG:CZ	2.77	0.52
6:CF:61:LEU:O	6:CF:62:TRP:CB	2.57	0.52
39:BD:10:THR:HG23	39:BD:13:ARG:CB	2.36	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:114:ARG:CG	4:CD:114:ARG:HH11	2.14	0.52
48:BP:75:ILE:N	48:BP:75:ILE:HD12	2.25	0.52
1:AA:1086:U:C2'	1:AA:1087:G:H5'	2.33	0.52
36:DA:1754:C:OP1	52:DT:96:ARG:NH1	2.42	0.52
29:B3:29:ARG:NH1	29:B3:29:ARG:HB2	2.19	0.52
58:DZ:152:ALA:HB2	58:DZ:168:GLU:CA	2.35	0.52
46:BN:58:ASP:C	46:BN:60:ILE:N	2.62	0.52
42:BG:20:ILE:O	42:BG:22:ARG:N	2.43	0.52
10:CJ:90:LEU:H	10:CJ:91:PRO:CD	2.21	0.52
34:B8:22:VAL:HB	34:B8:53:PRO:HB3	1.91	0.52
39:DD:134:ARG:NH1	39:DD:135:PHE:CE1	2.77	0.52
36:BA:1450(A):C:H2'	36:BA:1451:C:H6	1.75	0.52
24:AY:28:C:H2'	24:AY:29:G:C8	2.45	0.52
6:CF:43:LEU:H	6:CF:43:LEU:CD2	2.23	0.52
36:DA:1385:G:O2'	36:DA:1396:U:C6	2.62	0.52
36:BA:2199:A:H5'	36:BA:2200:C:OP2	2.10	0.52
36:DA:2672:G:C3'	36:DA:2673:G:H5''	2.40	0.52
36:DA:2022:U:O2'	36:DA:2617:C:H5'	2.10	0.52
36:DA:1231:G:H2'	36:DA:1232:G:H8	1.75	0.52
46:BN:76:SER:N	46:BN:81:GLY:O	2.35	0.52
25:CZ:244:ARG:HA	25:CZ:282:ALA:HB2	1.92	0.52
43:BH:37:VAL:HG12	43:BH:38:SER:N	2.25	0.52
25:AZ:231:ILE:HD12	25:AZ:231:ILE:N	2.25	0.52
48:BP:107:LYS:HG3	48:BP:107:LYS:O	2.10	0.52
1:CA:995:C:HO2'	1:CA:996:A:H8	1.57	0.52
33:B7:43:THR:HG23	33:B7:44:PRO:HD2	1.90	0.52
1:AA:757:U:O2'	1:AA:758:G:H5'	2.10	0.52
1:CA:272:C:O2'	1:CA:273:A:H5'	2.10	0.52
49:BQ:116:GLU:O	49:BQ:120:ILE:HG12	2.10	0.52
36:BA:518:G:H4'	55:BW:18:ARG:NH1	2.25	0.52
42:DG:59:GLU:HA	42:DG:62:LEU:HD13	1.92	0.52
36:DA:575:A:OP2	36:DA:2499:C:O2'	2.28	0.52
36:DA:36:G:H2'	36:DA:37:C:H6	1.74	0.52
13:AM:56:LEU:HD13	13:AM:56:LEU:C	2.30	0.52
36:DA:57:C:H2'	36:DA:58:G:O4'	2.10	0.52
36:DA:1539:G:H2'	36:DA:1540:U:O4'	2.10	0.52
46:DN:10:GLU:CD	46:DN:11:PRO:HD2	2.31	0.52
32:D6:26:ASN:ND2	32:D6:32:ASN:OD1	2.42	0.52
58:BZ:150:LEU:C	58:BZ:150:LEU:HD23	2.30	0.52
58:DZ:100:VAL:O	58:DZ:124:ILE:HG12	2.10	0.52
41:BF:185:ASP:CA	41:BF:188:ARG:HG2	2.40	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:BS:20:ARG:HG2	51:BS:20:ARG:NH1	2.25	0.52
43:BH:20:ALA:HB1	43:BH:21:PRO:CD	2.39	0.52
36:BA:1311:G:N2	36:BA:1603:A:H62	2.06	0.52
36:DA:1049:C:O2	36:DA:1113:U:H4'	2.11	0.52
1:AA:266:G:C5'	1:AA:267:C:H5	2.22	0.52
36:DA:2631:G:N2	40:DE:61:ARG:HH12	2.08	0.52
27:D1:66:HIS:O	27:D1:67:ILE:C	2.49	0.52
28:D2:68:ARG:HG3	28:D2:72:ALA:CB	2.40	0.52
29:B3:29:ARG:NH2	36:BA:1183:G:H4'	2.25	0.52
15:CO:17:ARG:HG3	15:CO:17:ARG:NH1	2.21	0.52
25:AZ:19:HIS:CG	25:AZ:115:GLN:HB2	2.45	0.52
3:AC:5:ILE:H	3:AC:5:ILE:HD12	1.72	0.52
27:D1:72:GLU:CG	27:D1:76:ARG:HH21	2.23	0.52
51:BS:53:SER:C	51:BS:55:ALA:H	2.14	0.52
42:BG:33:ARG:O	42:BG:162:THR:HG23	2.10	0.52
13:CM:83:ASP:OD1	13:CM:84:ILE:N	2.43	0.52
25:CZ:333:GLY:HA3	25:CZ:363:MET:HA	1.92	0.52
43:BH:136:ILE:HD12	43:BH:136:ILE:N	2.25	0.52
36:DA:1450(A):C:H2'	36:DA:1451:C:H6	1.73	0.52
24:AY:2:G:H2'	24:AY:3:G:C5'	2.40	0.52
36:BA:1771:C:H1'	36:BA:1786:A:H8	1.68	0.52
3:AC:50:ALA:HB1	3:AC:70:VAL:HG13	1.92	0.52
36:DA:320:A:H2'	41:DF:136:THR:OG1	2.09	0.52
49:BQ:43:THR:OG1	49:BQ:46:GLN:HG3	2.10	0.52
1:AA:427:U:OP1	4:AD:13:ARG:NH2	2.43	0.52
15:CO:7:GLU:O	15:CO:11:VAL:HG23	2.10	0.52
21:AU:17:THR:O	21:AU:22:ARG:NH1	2.43	0.52
38:DC:40:THR:HA	38:DC:177:LYS:HA	1.92	0.52
36:DA:118:A:H1'	36:DA:178:G:O4'	2.10	0.52
36:BA:1270:C:H5''	36:BA:1271:G:C5'	2.39	0.52
36:DA:2695:C:H2'	36:DA:2696:U:C6	2.45	0.52
2:CB:209:ARG:NH1	2:CB:239:VAL:HG11	2.24	0.52
36:DA:1203:G:H3'	36:DA:1204:A:H5''	1.91	0.52
48:DP:20:GLY:O	48:DP:21:ARG:HB2	2.10	0.52
36:DA:979:G:H3'	36:DA:980:A:C5'	2.40	0.52
1:AA:487:A:H2'	1:AA:488:C:O4'	2.09	0.52
8:CH:23:SER:HA	8:CH:63:LEU:HD22	1.91	0.52
10:CJ:44:VAL:HG21	10:CJ:66:ARG:HH21	1.75	0.52
36:DA:1910:G:O2'	36:DA:1911:U:H5'	2.10	0.52
42:BG:125:PHE:CZ	42:BG:170:ARG:HA	2.45	0.51
42:BG:172:LEU:HD23	42:BG:176:LEU:HD12	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:3:GLU:HB2	41:DF:24:LEU:HD23	1.91	0.51
43:DH:124:GLU:HG3	43:DH:132:ARG:HG3	1.92	0.51
34:B8:61:LEU:C	34:B8:63:PRO:HD2	2.31	0.51
36:DA:2092:U:H5	36:DA:2226:C:OP2	1.94	0.51
42:DG:144:ILE:HD11	42:DG:149:VAL:CG1	2.29	0.51
36:DA:2369:A:O2'	36:DA:2370:G:H5'	2.10	0.51
51:BS:90:GLY:C	51:BS:92:TYR:H	2.14	0.51
40:BE:59:VAL:O	40:BE:60:ASN:CG	2.49	0.51
58:BZ:14:LYS:O	58:BZ:18:LEU:HD22	2.10	0.51
36:BA:1518:U:H2'	36:BA:1519:G:O4'	2.09	0.51
9:AI:20:ARG:HH11	9:AI:20:ARG:CB	2.22	0.51
36:BA:2414:G:H21	48:BP:67:MET:CE	2.23	0.51
48:DP:16:ARG:HD3	48:DP:16:ARG:C	2.30	0.51
16:AP:59:TRP:HA	16:AP:62:VAL:HG23	1.91	0.51
40:DE:63:LEU:O	40:DE:64:LYS:C	2.49	0.51
57:BY:57:GLN:HA	57:BY:57:GLN:OE1	2.09	0.51
42:DG:172:LEU:O	42:DG:176:LEU:HB2	2.10	0.51
58:DZ:165:VAL:HG12	58:DZ:168:GLU:H	1.76	0.51
58:DZ:149:SER:CB	58:DZ:173:ALA:HA	2.37	0.51
36:DA:92:A:H2'	36:DA:92:A:N3	2.25	0.51
54:DV:6:LYS:O	54:DV:37:VAL:HG21	2.10	0.51
1:CA:1158:C:O2'	1:CA:1159:U:H4'	2.10	0.51
16:AP:5:ARG:NE	16:AP:22:THR:CG2	2.73	0.51
57:DY:60:PHE:O	57:DY:61:ILE:HG13	2.10	0.51
36:BA:363(E):U:H2'	36:BA:363(F):A:C1'	2.39	0.51
58:BZ:70:LEU:HD23	58:BZ:70:LEU:N	2.23	0.51
7:AG:78:ARG:CG	7:AG:78:ARG:O	2.57	0.51
26:D0:40:GLN:HE21	26:D0:44:ARG:HB2	1.75	0.51
10:CJ:85:LEU:O	10:CJ:87:THR:N	2.43	0.51
25:AZ:98:GLN:HE22	25:AZ:346:THR:CG2	2.23	0.51
49:BQ:43:THR:HB	49:BQ:45:GLN:HE21	1.75	0.51
22:AV:45:U:H2'	22:AV:45:U:OP2	2.09	0.51
20:CT:86:ARG:O	20:CT:90:GLN:HG3	2.09	0.51
37:DB:111:G:O2'	37:DB:112:U:H5'	2.10	0.51
1:CA:1429:C:H2'	1:CA:1430:C:H6	1.74	0.51
58:BZ:62:PRO:C	58:BZ:64:GLY:N	2.63	0.51
25:AZ:126:VAL:HG12	25:AZ:126:VAL:O	2.10	0.51
2:AB:98:LEU:O	2:AB:101:MET:HG3	2.10	0.51
36:DA:389:G:H1	48:DP:72:PRO:HD3	1.75	0.51
27:D1:52:ARG:NH2	36:DA:2218:U:O4'	2.43	0.51
29:D3:28:LEU:HD23	29:D3:28:LEU:H	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2840:C:H5''	50:BR:53:HIS:CD2	2.45	0.51
10:AJ:92:THR:HG23	10:AJ:93:GLY:H	1.74	0.51
36:BA:753:C:O2'	36:BA:754:C:H5'	2.10	0.51
36:BA:1259:G:O2'	36:BA:1260:G:H5'	2.11	0.51
36:DA:405:U:H3'	36:DA:406:G:H5'	1.92	0.51
36:DA:1638:C:H4'	36:DA:2710:C:O2	2.10	0.51
1:AA:1063:C:H5	1:AA:1064:G:HO2'	1.56	0.51
55:DW:9:TYR:CD1	55:DW:9:TYR:N	2.77	0.51
36:BA:838:C:O2'	36:BA:839:U:H5'	2.10	0.51
36:BA:57:C:H2'	36:BA:58:G:O4'	2.10	0.51
40:BE:104:VAL:HG11	40:BE:188:VAL:HG21	1.92	0.51
20:AT:60:GLU:O	20:AT:60:GLU:HG2	2.09	0.51
55:BW:9:TYR:N	55:BW:9:TYR:CD1	2.78	0.51
25:AZ:345:ARG:NH1	25:AZ:379:ALA:O	2.44	0.51
28:B2:32:LEU:O	28:B2:35:LEU:HB3	2.10	0.51
39:BD:30:GLU:N	39:BD:35:LYS:HZ2	2.06	0.51
22:CV:47:U:H3'	22:CV:48:C:C5'	2.40	0.51
58:BZ:151:HIS:ND1	58:BZ:152:ALA:N	2.53	0.51
42:DG:71:THR:HG23	42:DG:89:GLY:C	2.30	0.51
36:DA:910:A:C5	49:DQ:13:GLN:HG3	2.45	0.51
57:DY:7:VAL:HB	57:DY:8:LYS:NZ	2.26	0.51
2:AB:114:ARG:NH1	2:AB:118:LEU:HD21	2.25	0.51
48:DP:114:ILE:HD13	48:DP:127:ALA:CB	2.39	0.51
39:BD:48:ARG:NH1	39:BD:48:ARG:HG3	2.25	0.51
51:DS:28:VAL:HG12	51:DS:29:PHE:N	2.25	0.51
1:AA:979:C:C3'	1:AA:980:C:C5'	2.78	0.51
41:BF:29:ASN:HD22	41:BF:32:LEU:CB	2.14	0.51
4:AD:17:VAL:O	4:AD:17:VAL:HG12	2.10	0.51
48:BP:16:ARG:CB	48:BP:16:ARG:NH1	2.65	0.51
53:DU:90:VAL:HG12	53:DU:91:ASP:H	1.74	0.51
2:CB:87:ARG:NH2	2:CB:232:PRO:C	2.58	0.51
36:BA:271(F):C:O2'	36:BA:271(G):C:H5'	2.10	0.51
25:CZ:19:HIS:CG	25:CZ:115:GLN:HB2	2.45	0.51
53:BU:83:LEU:HG	53:BU:88:ILE:HD11	1.92	0.51
36:DA:1068:G:H1'	36:DA:1069:A:H5'	1.91	0.51
46:DN:57:ALA:HB3	46:DN:124:ALA:HA	1.92	0.51
2:AB:172:ILE:HD12	2:AB:172:ILE:N	2.21	0.51
4:CD:149:ALA:O	4:CD:153:ARG:HG3	2.10	0.51
4:AD:150:GLU:CD	4:AD:151:LYS:N	2.58	0.51
42:BG:16:ARG:CD	42:BG:31:VAL:HG11	2.40	0.51
54:DV:38:LEU:C	54:DV:39:LEU:HD13	2.30	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1880:C:C2'	36:BA:1881:C:H5''	2.39	0.51
27:D1:27:GLU:O	27:D1:28:GLY:C	2.48	0.51
24:CY:68:C:H2'	24:CY:69:C:C6	2.44	0.51
13:AM:88:ARG:NH1	13:AM:88:ARG:HG2	2.24	0.51
56:DX:49:VAL:CG1	56:DX:87:GLN:HE21	2.23	0.51
11:AK:33:THR:HG22	11:AK:39:PRO:CA	2.38	0.51
36:BA:2219:G:C2'	36:BA:2220:G:H5'	2.40	0.51
1:AA:501:C:OP1	12:AL:117:ARG:NH2	2.43	0.51
36:BA:291:C:H2'	36:BA:292:C:C6	2.45	0.51
36:BA:1638:C:H4'	36:BA:2710:C:O2	2.10	0.51
1:AA:108:G:H5'	1:AA:109:A:H5'	1.92	0.51
38:BC:40:THR:HG22	38:BC:177:LYS:CE	2.39	0.51
40:BE:183:LEU:HD12	40:BE:183:LEU:N	2.25	0.51
43:DH:88:LEU:CD1	43:DH:130:ARG:HG2	2.40	0.51
1:AA:1010:G:O2'	1:AA:1011:G:H5'	2.10	0.51
50:DR:74:LYS:HD2	50:DR:77:ARG:HD2	1.92	0.51
13:CM:16:ASP:HA	13:CM:34:LEU:HD11	1.92	0.51
36:BA:2000:G:O2'	36:BA:2001:A:H5'	2.09	0.51
36:DA:979:G:H3'	36:DA:980:A:H5''	1.92	0.51
9:AI:11:LYS:O	9:AI:12:GLU:HB2	2.10	0.51
19:AS:50:ALA:HB1	19:AS:57:HIS:HB3	1.92	0.51
36:DA:2520:C:C6	36:DA:2567:G:H1'	2.46	0.51
36:DA:576:U:H2'	36:DA:577:G:C8	2.45	0.51
29:B3:4:LEU:O	29:B3:36:VAL:HA	2.10	0.51
28:B2:23:LYS:HA	28:B2:26:ARG:HB3	1.93	0.51
42:BG:47:LYS:CD	42:BG:81:LYS:HD2	2.39	0.51
31:B5:3:LYS:O	31:B5:4:HIS:C	2.49	0.51
43:DH:163:TYR:N	43:DH:163:TYR:CD1	2.79	0.51
40:DE:38:THR:HB	40:DE:41:LYS:CG	2.34	0.51
4:AD:173:TRP:CD1	4:AD:174:LEU:HG	2.45	0.51
4:AD:188:LEU:O	4:AD:189:PRO:O	2.28	0.51
34:B8:30:ARG:HA	34:B8:30:ARG:HE	1.75	0.51
36:DA:610:G:N2	36:DA:619:G:H1'	2.24	0.51
32:B6:52:VAL:HG12	32:B6:53:LYS:CD	2.41	0.51
51:BS:97:ARG:NH2	51:BS:98:VAL:HA	2.25	0.51
39:BD:44:ASN:HB2	39:BD:48:ARG:O	2.11	0.51
43:BH:42:ARG:HG2	43:BH:43:VAL:N	2.25	0.51
34:D8:36:LYS:HE3	34:D8:40:GLU:OE2	2.10	0.51
36:DA:265:A:H1'	36:DA:266:G:O4'	2.10	0.51
51:DS:15:ARG:NH1	51:DS:18:ILE:HD11	2.25	0.51
1:CA:1269:A:H2	1:CA:1312:G:N3	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B4:8:LYS:O	30:B4:9:LEU:CB	2.59	0.51
2:AB:239:VAL:O	2:AB:240:GLN:HB3	2.11	0.51
9:AI:3:GLN:HA	9:AI:19:LEU:O	2.10	0.51
53:BU:90:VAL:HG12	53:BU:91:ASP:H	1.72	0.51
36:BA:2469:A:O2'	49:BQ:56:ARG:HD2	2.10	0.51
2:CB:33:TYR:HB3	2:CB:41:ILE:HG22	1.91	0.51
1:AA:1534:A:N7	23:AX:12:A:H2	2.09	0.51
2:CB:229:VAL:O	2:CB:230:VAL:HG13	2.09	0.51
34:D8:48:PHE:O	34:D8:49:VAL:HG22	2.10	0.51
34:D8:50:LEU:C	34:D8:52:LYS:N	2.63	0.51
6:AF:43:LEU:CD2	6:AF:43:LEU:H	2.22	0.51
36:DA:1639:U:O2'	36:DA:1640:C:H5''	2.08	0.51
42:BG:58:GLN:O	42:BG:62:LEU:HD13	2.10	0.51
53:BU:69:CYS:HB2	53:BU:74:LEU:HD11	1.92	0.51
6:CF:55:ASP:HB3	6:CF:57:GLN:HE22	1.73	0.51
1:AA:66:G:H4'	1:AA:173:U:C5	2.45	0.51
27:D1:75:GLU:OE1	27:D1:75:GLU:HA	2.10	0.51
36:DA:2472:G:H5'	36:DA:2473:U:C5'	2.38	0.51
41:DF:125:LEU:HD23	41:DF:125:LEU:H	1.75	0.51
40:DE:23:VAL:HA	40:DE:186:GLY:H	1.76	0.51
36:BA:191:A:H2'	36:BA:192:C:C6	2.45	0.51
36:DA:1265:A:OP2	36:DA:2615:U:OP1	2.29	0.51
49:DQ:110:THR:HG23	49:DQ:113:GLN:HG3	1.92	0.51
9:CI:54:ASP:C	9:CI:56:LEU:H	2.14	0.51
50:DR:103:ARG:HH11	50:DR:110:PRO:HB3	1.75	0.51
20:CT:74:LYS:C	20:CT:76:ALA:H	2.13	0.51
1:AA:632:A:H8	1:AA:633:G:C8	2.28	0.51
39:DD:65:ILE:HD11	39:DD:67:PHE:CE2	2.45	0.51
46:DN:121:LYS:HB3	46:DN:123:TYR:CE1	2.46	0.51
1:AA:738:C:H5''	6:AF:69:GLU:HB2	1.93	0.51
36:DA:465:G:H2'	36:DA:466:A:C8	2.45	0.51
54:BV:58:VAL:HB	54:BV:98:GLU:HG2	1.92	0.51
22:AV:68:C:O2'	22:AV:69:G:H5'	2.10	0.51
36:BA:39:C:O2'	36:BA:40:C:H5'	2.10	0.51
55:DW:9:TYR:HD1	55:DW:9:TYR:N	2.08	0.51
3:CC:84:ILE:O	3:CC:88:ARG:HG3	2.09	0.51
53:DU:110:VAL:O	53:DU:113:ALA:HB3	2.10	0.51
36:DA:2087:G:O2'	36:DA:2088:G:H5'	2.10	0.51
36:BA:745:G:OP1	40:BE:133:LYS:HE3	2.11	0.51
41:BF:82:ILE:O	41:BF:83:PHE:HB2	2.09	0.51
36:DA:433:C:O2'	36:DA:434:U:H5'	2.09	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1921:G:O2'	36:BA:1922:G:H5'	2.10	0.51
1:CA:22:G:H4'	1:CA:885:G:C8	2.45	0.51
1:CA:924:C:H5'	1:CA:1399:C:OP2	2.10	0.51
36:BA:1316:U:O2'	36:BA:1317:A:H5'	2.10	0.51
9:CI:128:ARG:H	9:CI:128:ARG:HD2	1.76	0.51
1:AA:421:U:C6	3:AC:127:ARG:NH1	2.78	0.51
4:AD:75:PHE:CE1	4:AD:93:PHE:HZ	2.28	0.51
38:DC:99:ILE:O	38:DC:99:ILE:HG22	2.11	0.51
1:AA:228:A:H2'	1:AA:229:U:O4'	2.11	0.51
28:B2:20:GLU:O	28:B2:23:LYS:N	2.44	0.51
39:DD:30:GLU:HG3	39:DD:35:LYS:HE3	1.93	0.51
32:B6:30:THR:CG2	32:B6:31:PRO:HD2	2.40	0.51
52:BT:27:THR:HG22	52:BT:49:VAL:HB	1.92	0.51
27:B1:11:ARG:HB2	27:B1:12:PRO:HD2	1.92	0.51
57:DY:85:VAL:HG12	57:DY:86:ARG:N	2.25	0.51
4:AD:101:LEU:O	4:AD:103:ASN:N	2.43	0.51
4:CD:3:ARG:HH11	4:CD:118:ARG:HD3	1.74	0.51
32:B6:18:ARG:HH11	32:B6:18:ARG:CG	2.09	0.51
20:AT:58:LYS:O	20:AT:61:SER:HB3	2.10	0.51
55:DW:73:ALA:HB3	55:DW:106:ILE:HD11	1.92	0.51
48:DP:59:LEU:CA	48:DP:61:ARG:HE	2.23	0.51
4:CD:12:CYS:CA	4:CD:19:LEU:HD13	2.39	0.51
36:DA:266:G:C3'	36:DA:267:C:H5''	2.40	0.51
36:BA:652:C:HO2'	36:BA:653:A:P	2.34	0.51
43:BH:163:TYR:CD1	43:BH:163:TYR:N	2.78	0.51
2:CB:44:LEU:H	2:CB:44:LEU:CD1	2.18	0.51
3:CC:14:ILE:HG13	3:CC:15:THR:H	1.76	0.51
55:BW:17:VAL:O	55:BW:20:VAL:HG22	2.10	0.51
16:AP:20:VAL:HG23	16:AP:34:GLU:C	2.31	0.51
36:DA:2811:G:H4'	40:DE:61:ARG:HH21	1.75	0.51
40:BE:35:GLN:HG2	40:BE:36:ARG:N	2.26	0.51
36:DA:142:A:H1'	36:DA:1408:C:H1'	1.93	0.51
36:BA:92:A:H2'	36:BA:92:A:N3	2.25	0.51
1:AA:80:G:C2'	1:AA:81:U:H5'	2.41	0.51
58:BZ:145:GLU:O	58:BZ:147:GLY:N	2.43	0.51
7:AG:75:VAL:HG23	7:AG:75:VAL:O	2.09	0.51
52:BT:24:PRO:HD3	52:BT:52:ILE:HD12	1.92	0.51
16:CP:5:ARG:HH11	16:CP:5:ARG:HG3	1.74	0.51
16:AP:5:ARG:NE	16:AP:22:THR:HG21	2.25	0.51
34:B8:15:LYS:HD2	34:B8:16:ILE:H	1.75	0.51
13:CM:83:ASP:OD1	13:CM:85:GLY:N	2.43	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:114:GLY:HA3	58:DZ:146:ILE:HG21	1.91	0.51
13:AM:3:ARG:HH21	13:AM:7:VAL:HG22	1.74	0.51
50:DR:79:LEU:HA	50:DR:83:ILE:CG1	2.41	0.51
1:AA:977:A:O2'	1:AA:978:A:H5'	2.09	0.51
5:AE:102:ALA:CB	5:AE:120:THR:HG21	2.39	0.51
36:DA:523:C:H5''	36:DA:540:C:O2'	2.10	0.51
1:AA:502:G:OP1	12:AL:118:SER:HB3	2.10	0.51
50:BR:4:LEU:O	50:BR:4:LEU:CG	2.58	0.51
36:DA:2031:A:O2'	36:DA:2455:G:H4'	2.11	0.51
25:CZ:163:PHE:CD1	25:CZ:164:PRO:HD2	2.44	0.51
21:CU:17:THR:O	21:CU:22:ARG:NH1	2.44	0.51
38:BC:32:LEU:HD13	38:BC:220:PRO:HG2	1.92	0.51
39:BD:275:LYS:HD2	39:BD:276:LYS:N	2.26	0.51
39:BD:222:ARG:O	39:BD:224:ALA:O	2.29	0.51
46:BN:12:ARG:O	46:BN:50:ASP:HB3	2.11	0.51
1:CA:1030(D):A:N7	1:CA:1031:G:N3	2.58	0.51
36:DA:469:G:H2'	36:DA:470:A:H5''	1.92	0.51
29:D3:31:LEU:HD12	36:DA:989:G:P	2.51	0.51
55:BW:65:LEU:HD23	55:BW:68:ARG:NE	2.26	0.51
15:CO:24:SER:O	15:CO:28:GLN:HG3	2.10	0.51
1:CA:1009:G:H2'	1:CA:1010:G:H8	1.75	0.51
1:AA:421:U:H6	3:AC:127:ARG:NH1	2.08	0.51
36:BA:1997:G:OP1	40:BE:123:ALA:HB1	2.09	0.51
36:BA:1999:C:H4'	36:BA:2723:C:O2	2.09	0.51
54:BV:69:LYS:HA	54:BV:87:HIS:O	2.10	0.51
36:BA:2383:G:O2'	36:BA:2384:G:H5'	2.11	0.51
25:AZ:9:LYS:HB3	25:AZ:75:ARG:HA	1.93	0.51
13:AM:73:GLU:O	13:AM:76:ALA:HB3	2.10	0.51
36:DA:675:A:OP1	41:DF:63:LYS:HE2	2.10	0.51
38:BC:41:VAL:HG21	38:BC:185:LEU:HD22	1.92	0.51
2:AB:54:THR:HG21	2:AB:201:ILE:HD11	1.92	0.51
36:DA:1361:G:O2'	36:DA:1362:C:H5'	2.10	0.51
39:BD:133:LEU:HB3	39:BD:173:VAL:HG11	1.93	0.51
29:B3:25:ALA:C	29:B3:27:GLY:H	2.12	0.51
10:CJ:48:THR:HG23	10:CJ:62:HIS:CE1	2.45	0.51
20:CT:60:GLU:HG2	20:CT:60:GLU:O	2.11	0.51
8:CH:30:ARG:CB	8:CH:30:ARG:HH11	2.24	0.51
40:DE:104:VAL:HG11	40:DE:188:VAL:HG21	1.91	0.51
22:CV:42:C:H6	22:CV:42:C:C5'	2.23	0.51
49:BQ:137:TYR:CE2	58:BZ:81:ARG:CZ	2.93	0.51
41:DF:188:ARG:HA	48:DP:7:ARG:HB2	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:126:VAL:HG21	41:BF:129:PHE:CZ	2.46	0.51
52:BT:28:VAL:HG11	52:BT:88:ILE:HD11	1.93	0.51
38:BC:27:ARG:HD3	38:BC:182:PRO:CB	2.40	0.51
36:BA:654(M):C:H2'	36:BA:654(N):G:N7	2.25	0.51
36:BA:84:A:H61	36:BA:102:G:C2'	2.24	0.51
1:CA:542:G:H5'	4:CD:41:GLY:HA2	1.93	0.51
51:DS:20:ARG:NH1	51:DS:20:ARG:HG2	2.23	0.51
34:D8:13:ARG:CD	48:DP:61:ARG:HD2	2.31	0.51
43:DH:51:ARG:HG3	43:DH:52:VAL:H	1.75	0.51
30:D4:31:ILE:HD12	30:D4:31:ILE:N	2.26	0.51
36:BA:2010:G:H5''	55:BW:42:ARG:HB2	1.91	0.51
31:D5:24:ALA:O	31:D5:25:LEU:CB	2.54	0.51
36:DA:2811:G:C4'	40:DE:61:ARG:HH21	2.24	0.51
31:B5:40:LYS:HG2	31:B5:46:CYS:CB	2.40	0.51
36:DA:1068:G:H1'	36:DA:1069:A:C5'	2.40	0.51
43:BH:103:LEU:CB	43:BH:123:PHE:HD2	2.19	0.51
19:CS:20:LEU:C	19:CS:22:LEU:H	2.14	0.51
57:BY:60:PHE:O	57:BY:61:ILE:HG13	2.11	0.51
10:CJ:4:ILE:HB	10:CJ:74:ILE:CD1	2.40	0.51
40:BE:3:GLY:O	40:BE:4:ILE:HB	2.10	0.51
14:AN:15:LYS:O	14:AN:16:PHE:O	2.29	0.51
36:BA:2031:A:O2'	36:BA:2455:G:H4'	2.10	0.51
11:CK:54:ARG:O	11:CK:57:THR:HG22	2.10	0.51
12:CL:39:VAL:HG12	12:CL:40:VAL:N	2.25	0.51
41:DF:178:PRO:HG2	41:DF:179:GLU:H	1.75	0.51
14:AN:57:ARG:CB	14:AN:57:ARG:NH1	2.73	0.51
1:AA:186:C:O3'	20:AT:82:SER:HB3	2.09	0.51
38:BC:75:LEU:HG	38:BC:112:ALA:O	2.10	0.51
49:DQ:110:THR:HG23	49:DQ:113:GLN:OE1	2.10	0.51
1:CA:154:C:H2'	1:CA:155:C:C6	2.45	0.51
35:D9:1:MET:HG3	36:DA:2478:A:OP2	2.11	0.51
36:BA:564:C:O2'	36:BA:565:C:H5'	2.11	0.51
1:AA:735:C:H2'	1:AA:736:C:H6	1.76	0.51
1:AA:737:A:H2'	1:AA:738:C:C6	2.46	0.51
18:AR:52:PRO:O	18:AR:56:THR:HG23	2.11	0.51
36:BA:2771:C:H2'	36:BA:2772:C:C6	2.46	0.51
9:CI:100:GLY:O	9:CI:102:LEU:N	2.43	0.51
36:DA:2052:G:H4'	40:DE:143:ASN:O	2.09	0.51
36:DA:1292:U:H2'	36:DA:1293:C:C6	2.45	0.51
36:BA:1203:G:H3'	36:BA:1204:A:H5''	1.91	0.51
36:DA:1120:G:H2'	36:DA:1121:C:C6	2.45	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:92:THR:HG23	10:CJ:93:GLY:N	2.25	0.51
43:DH:85:LYS:NZ	43:DH:86:GLU:CA	2.73	0.51
36:BA:1541:G:O3'	36:BA:1541:G:OP2	2.28	0.51
46:DN:10:GLU:CG	46:DN:11:PRO:HD2	2.41	0.51
34:D8:10:ALA:CB	34:D8:60:LEU:HD21	2.40	0.51
32:D6:28:ARG:CA	32:D6:32:ASN:ND2	2.71	0.51
41:BF:139:PHE:O	41:BF:142:TRP:HB3	2.10	0.51
58:BZ:166:SER:OG	58:BZ:167:PRO:HA	2.09	0.51
9:CI:85:LEU:HD12	9:CI:86:VAL:N	2.26	0.51
42:DG:52:ILE:HB	42:DG:54:GLU:HG3	1.92	0.51
42:DG:83:ARG:O	42:DG:85:GLY:N	2.43	0.51
32:D6:16:CYS:SG	32:D6:49:HIS:N	2.84	0.51
48:BP:146:VAL:HG13	48:BP:147:LEU:N	2.24	0.51
51:DS:92:TYR:O	51:DS:93:LYS:CB	2.59	0.51
36:DA:1142(A):A:H8	36:DA:1142(A):A:H5'	1.75	0.51
55:BW:73:ALA:HB3	55:BW:106:ILE:HD11	1.93	0.51
1:AA:858:G:N1	1:AA:869:G:C8	2.78	0.51
49:DQ:133:ARG:HG2	49:DQ:134:ARG:N	2.26	0.51
25:AZ:182:MET:SD	25:AZ:196:VAL:HG21	2.50	0.51
36:BA:467:G:O2'	36:BA:468:G:H5'	2.10	0.51
36:DA:2159:G:H2'	36:DA:2160:G:C5'	2.36	0.51
25:CZ:208:GLU:O	25:CZ:209:TYR:HB3	2.10	0.51
4:AD:149:ALA:O	4:AD:153:ARG:HG3	2.11	0.51
1:CA:1316:G:O3'	14:CN:18:VAL:HG22	2.10	0.51
19:AS:40:ILE:O	19:AS:40:ILE:HG22	2.09	0.51
40:BE:107:THR:O	40:BE:190:GLY:CA	2.54	0.51
19:CS:16:LEU:CD1	19:CS:16:LEU:H	2.23	0.51
47:BO:86:ILE:O	47:BO:87:ILE:HD13	2.10	0.51
11:AK:54:ARG:O	11:AK:57:THR:HG22	2.11	0.51
36:BA:1222:C:H2'	36:BA:1223:G:C5'	2.40	0.51
26:D0:40:GLN:HE22	26:D0:45:PHE:N	2.08	0.51
1:CA:797:C:O2'	1:CA:798:G:H5'	2.11	0.51
36:DA:2116:G:N7	36:DA:2117:A:C2	2.78	0.51
48:DP:102:ARG:NH1	48:DP:102:ARG:CB	2.74	0.51
36:DA:2649:U:O2'	36:DA:2650:U:H5'	2.10	0.51
36:BA:221:A:O2'	36:BA:222:A:OP2	2.27	0.51
25:AZ:12:VAL:HG23	25:AZ:77:TYR:CD1	2.45	0.51
11:AK:18:ARG:HH21	11:AK:36:ASP:C	2.14	0.51
36:DA:1260:G:H2'	36:DA:1261:C:C6	2.45	0.51
40:BE:26:ILE:CG2	40:BE:196:VAL:HG21	2.40	0.51
50:DR:28:LEU:HD23	50:DR:28:LEU:C	2.30	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:189:ARG:HB2	25:CZ:192:GLU:OE2	2.11	0.51
1:AA:1050:G:O2'	1:AA:1051:C:H6	1.94	0.51
1:AA:272:C:O2'	1:AA:273:A:H5'	2.10	0.51
1:AA:1282:C:O2'	1:AA:1283:G:H5'	2.11	0.51
36:DA:230:U:H2'	36:DA:231:C:H6	1.74	0.51
49:BQ:1:MET:O	49:BQ:2:LEU:CB	2.58	0.51
43:BH:88:LEU:HD13	43:BH:130:ARG:HG2	1.92	0.51
42:DG:136:ARG:HH11	42:DG:136:ARG:HB3	1.74	0.51
1:CA:323:U:H2'	1:CA:324:G:O4'	2.10	0.51
56:BX:40:LYS:HB2	56:BX:54:VAL:CG2	2.39	0.51
22:AV:42:C:C5'	22:AV:42:C:H6	2.22	0.51
7:CG:79:ARG:HA	7:CG:83:ALA:O	2.11	0.51
58:BZ:72:ARG:NH2	58:BZ:97:GLU:O	2.44	0.51
36:BA:299:A:N1	36:BA:322:A:O2'	2.37	0.51
31:B5:4:HIS:O	36:BA:2056:G:N2	2.44	0.51
48:BP:9:ASN:H	48:BP:10:PRO:CD	2.22	0.51
52:DT:2:ASN:HB2	52:DT:7:ILE:HD11	1.92	0.51
4:AD:101:LEU:C	4:AD:103:ASN:N	2.63	0.51
1:AA:407:G:HO2'	4:AD:116:GLN:HG3	1.75	0.51
32:B6:10:LEU:HD12	34:B8:34:TRP:HB2	1.93	0.51
36:BA:659:C:H4'	41:BF:100:THR:O	2.10	0.51
32:B6:16:CYS:SG	32:B6:49:HIS:N	2.84	0.51
43:BH:52:VAL:HB	43:BH:69:ARG:CD	2.40	0.51
32:D6:10:LEU:HD12	34:D8:34:TRP:HB2	1.93	0.51
36:BA:2060:A:H62	41:BF:74:ARG:HH21	1.59	0.51
41:DF:139:PHE:O	41:DF:142:TRP:HB3	2.11	0.51
4:CD:18:LYS:HE3	4:CD:31:CYS:SG	2.51	0.51
42:DG:130:ASN:OD1	42:DG:160:VAL:HA	2.10	0.51
30:B4:7:PRO:O	30:B4:8:LYS:HB3	2.11	0.51
10:CJ:6:ILE:CG1	10:CJ:72:VAL:HB	2.40	0.51
10:CJ:7:LYS:HB2	10:CJ:97:GLU:HB2	1.92	0.51
48:DP:16:ARG:HD3	48:DP:18:ARG:H	1.75	0.51
10:AJ:6:ILE:CG1	10:AJ:72:VAL:HB	2.40	0.51
25:CZ:172:ARG:O	25:CZ:198:LYS:HD3	2.09	0.51
1:AA:539:A:OP2	12:AL:115:LYS:HE3	2.11	0.51
1:AA:939:G:C5'	7:AG:102:ARG:HH22	2.22	0.51
22:CW:57:G:O2'	22:CW:58:A:H5'	2.10	0.51
54:BV:39:LEU:CD1	54:BV:51:VAL:HA	2.40	0.51
34:B8:15:LYS:CG	48:BP:65:ARG:NH2	2.74	0.51
19:CS:43:GLU:O	19:CS:45:VAL:HG22	2.10	0.51
9:CI:43:ALA:HA	9:CI:74:ILE:HD13	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:114:GLY:HA3	58:DZ:146:ILE:CG2	2.41	0.51
1:AA:624:C:H4'	16:AP:10:GLY:HA2	1.92	0.51
36:BA:580:C:H2'	36:BA:581:C:H6	1.75	0.51
36:DA:1682:G:H5'	36:DA:1762:A:O2'	2.10	0.51
3:AC:54:ARG:HG2	3:AC:55:VAL:N	2.26	0.51
53:DU:69:CYS:HB2	53:DU:74:LEU:HD11	1.93	0.51
39:BD:267:SER:O	39:BD:269:PHE:HD1	1.94	0.51
52:BT:62:THR:HA	52:BT:74:ARG:O	2.10	0.51
6:CF:57:GLN:N	6:CF:57:GLN:HE21	2.09	0.51
1:AA:337:C:H2'	1:AA:338:A:H8	1.75	0.51
2:CB:97:TRP:HZ2	2:CB:102:LEU:HD13	1.76	0.51
31:D5:43:HIS:HD2	36:DA:2815:C:O2'	1.93	0.51
36:DA:2200:C:N4	36:DA:2223:G:H1	2.08	0.51
1:CA:865:A:H2'	1:CA:866:C:C6	2.46	0.51
36:BA:1265:A:OP2	36:BA:2615:U:OP1	2.28	0.51
35:B9:29:ASN:HD21	35:B9:32:HIS:CG	2.29	0.51
22:AV:1:G:H1'	26:B0:5:LYS:HZ1	1.74	0.51
36:BA:1204:A:N1	36:BA:1241:A:H2	2.08	0.51
36:BA:11:G:H2'	36:BA:12:U:C6	2.46	0.51
38:BC:181:PRO:HB2	38:BC:183:GLU:OE2	2.10	0.51
36:DA:838:C:O2'	36:DA:839:U:H5'	2.10	0.51
58:BZ:27:VAL:O	58:BZ:27:VAL:HG13	2.10	0.51
1:CA:328:C:C2'	1:CA:328:C:O2	2.58	0.51
1:AA:1123:A:H2	1:AA:1150:U:C5	2.29	0.51
28:B2:62:THR:HG22	28:B2:66:GLU:CG	2.40	0.51
43:DH:122:THR:HB	43:DH:134:SER:HB2	1.93	0.51
41:DF:185:ASP:CA	41:DF:188:ARG:HG2	2.39	0.51
39:BD:27:THR:HG23	39:BD:27:THR:O	2.11	0.51
39:BD:30:GLU:HG3	39:BD:35:LYS:HE3	1.93	0.51
34:D8:62:LEU:N	34:D8:63:PRO:CD	2.73	0.51
41:BF:129:PHE:O	41:BF:132:VAL:HB	2.11	0.51
36:BA:2107:C:C1'	36:BA:2182:G:H22	2.23	0.51
52:BT:28:VAL:O	52:BT:29:ARG:HB2	2.10	0.51
36:DA:2107:C:C1'	36:DA:2182:G:H22	2.24	0.51
31:D5:3:LYS:O	31:D5:4:HIS:C	2.48	0.51
31:D5:4:HIS:O	36:DA:2056:G:N2	2.43	0.51
36:BA:2286:A:H4'	36:BA:2287:A:O4'	2.10	0.51
17:CQ:55:ASP:HB3	17:CQ:76:LEU:CD1	2.41	0.51
43:BH:51:ARG:HG3	43:BH:52:VAL:H	1.76	0.51
48:DP:62:LEU:N	48:DP:62:LEU:HD23	2.26	0.51
20:CT:58:LYS:O	20:CT:61:SER:HB3	2.10	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:980:C:C5'	1:CA:980:C:H6	2.14	0.51
1:AA:1269:A:H2	1:AA:1312:G:N3	2.09	0.51
36:DA:2754:U:H2'	36:DA:2756:U:OP1	2.11	0.51
48:BP:16:ARG:HD3	48:BP:16:ARG:C	2.30	0.51
48:BP:16:ARG:HD3	48:BP:18:ARG:H	1.76	0.51
25:CZ:26:THR:HB	60:CZ:501:GDP:O2A	2.11	0.51
31:B5:57:VAL:HG12	31:B5:58:LEU:N	2.26	0.51
52:DT:26:ASP:HB3	52:DT:89:VAL:O	2.11	0.51
36:DA:88:G:H2'	36:DA:88:G:N3	2.25	0.51
36:BA:88:G:N3	36:BA:88:G:H2'	2.25	0.51
36:DA:2469:A:H2	36:DA:2481:G:H21	1.58	0.51
13:AM:83:ASP:OD1	13:AM:85:GLY:N	2.44	0.51
54:BV:38:LEU:O	54:BV:52:VAL:HG12	2.11	0.51
36:BA:34:C:H41	36:BA:447:A:N6	2.04	0.51
8:CH:64:LYS:CG	8:CH:79:VAL:HG21	2.39	0.51
2:CB:15:VAL:H	2:CB:16:HIS:CE1	2.29	0.51
3:CC:188:LEU:HD12	3:CC:195:VAL:HG11	1.93	0.51
50:DR:4:LEU:C	50:DR:6:SER:N	2.63	0.51
36:BA:1344:G:H4'	36:BA:1384:A:C5	2.45	0.51
10:AJ:85:LEU:O	10:AJ:87:THR:N	2.41	0.51
36:DA:171:G:O2'	36:DA:172:C:H5'	2.11	0.51
1:AA:797:C:O2'	1:AA:798:G:H5'	2.10	0.51
17:CQ:27:PHE:CE2	17:CQ:36:ILE:HD11	2.45	0.51
1:CA:35:G:H2'	1:CA:36:C:H6	1.75	0.51
1:CA:523:A:N1	12:CL:92:ASP:OD2	2.44	0.51
1:CA:1029:C:H2'	1:CA:1030(A):G:N7	2.26	0.51
36:BA:118:A:H1'	36:BA:178:G:O4'	2.11	0.51
36:BA:2837:G:H2'	36:BA:2838:G:H8	1.75	0.51
30:D4:15:ILE:HD13	30:D4:21:VAL:HG13	1.93	0.51
49:DQ:81:VAL:HG22	49:DQ:82:ARG:H	1.76	0.51
8:CH:30:ARG:NH1	8:CH:30:ARG:HB3	2.25	0.51
36:BA:1445(A):C:O2'	36:BA:1446:C:H5'	2.10	0.51
41:DF:113:ALA:HB1	41:DF:186:ILE:HG21	1.93	0.51
22:CV:75:C:H2'	22:CV:76:A:C1'	2.41	0.51
36:DA:518:G:H4'	55:DW:18:ARG:NH1	2.25	0.51
33:D7:5:TRP:CZ3	36:DA:464:U:H4'	2.45	0.51
36:DA:2461:C:H2'	36:DA:2462:U:C6	2.46	0.51
10:AJ:16:LEU:HD11	10:AJ:70:ARG:HG2	1.93	0.51
1:CA:471:G:H21	16:CP:82:GLN:NE2	2.09	0.51
27:B1:53:VAL:O	27:B1:54:ALA:HB3	2.10	0.51
2:CB:54:THR:HG21	2:CB:201:ILE:HD11	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:B2:48:HIS:CG	28:B2:49:LYS:N	2.79	0.51
28:B2:47:ASN:HB3	28:B2:51:ARG:CB	2.40	0.51
28:B2:67:LYS:O	28:B2:69:ARG:N	2.44	0.51
43:BH:121:ILE:HG23	43:BH:133:VAL:CG1	2.40	0.51
43:BH:124:GLU:HG3	43:BH:132:ARG:HG3	1.93	0.51
7:AG:79:ARG:HA	7:AG:83:ALA:O	2.11	0.51
40:DE:52:LEU:HD23	40:DE:75:VAL:CB	2.41	0.51
13:AM:65:LYS:HD3	13:AM:65:LYS:N	2.21	0.51
32:D6:30:THR:CG2	32:D6:31:PRO:HD2	2.41	0.51
32:D6:18:ARG:CG	32:D6:18:ARG:HH11	2.06	0.51
57:DY:86:ARG:HH22	57:DY:95:LYS:HE2	1.75	0.51
57:BY:74:PRO:HG2	57:BY:81:LYS:O	2.11	0.51
48:DP:147:LEU:O	48:DP:148:LEU:CB	2.57	0.51
51:BS:19:LYS:HB3	51:BS:20:ARG:NH2	2.22	0.51
2:CB:130:ARG:NH2	2:CB:134:GLU:HG3	2.23	0.51
36:BA:266:G:C3'	36:BA:267:C:H5''	2.41	0.51
26:D0:49:LYS:O	26:D0:50:ASN:HB2	2.09	0.51
48:DP:47:ASP:OD2	48:DP:50:ARG:HG2	2.10	0.51
30:D4:6:HIS:HB3	42:DG:67:LYS:NZ	2.26	0.51
36:DA:673:C:H6	36:DA:673:C:C5'	2.16	0.51
51:BS:85:VAL:C	51:BS:106:ARG:HG3	2.31	0.51
30:B4:9:LEU:HD13	30:B4:10:VAL:N	2.25	0.51
2:AB:236:TYR:O	2:AB:237:ALA:C	2.48	0.51
36:DA:996:A:H4'	53:DU:92:ARG:CD	2.40	0.51
36:DA:332:A:H4'	36:DA:333:G:OP1	2.11	0.51
36:BA:1059:G:H22	45:BK:130:UNK:CB	2.24	0.51
36:DA:1087:G:C8	36:DA:1088:A:H4'	2.35	0.51
36:DA:1059:G:H22	45:DK:130:UNK:CB	2.24	0.51
1:AA:1320:C:H5'	1:AA:1320:C:C6	2.31	0.51
1:AA:1321:C:C3'	1:AA:1322:C:H5''	2.38	0.51
1:AA:542:G:H2'	1:AA:543:C:C6	2.46	0.51
27:D1:82:LEU:HD11	27:D1:90:ILE:HD12	1.92	0.51
42:BG:114:ILE:O	42:BG:114:ILE:HG23	2.11	0.51
42:BG:173:LEU:HD13	42:BG:178:PHE:CD2	2.45	0.51
42:BG:20:ILE:C	42:BG:22:ARG:N	2.64	0.51
1:CA:1286:A:O2'	1:CA:1287:A:C5'	2.57	0.51
37:BB:96:U:H2'	37:BB:97:G:C8	2.45	0.51
50:DR:9:LYS:C	50:DR:10:LEU:HG	2.30	0.51
27:D1:27:GLU:O	27:D1:29:GLY:N	2.44	0.51
34:B8:39:LYS:HG3	34:B8:43:GLN:HE21	1.75	0.51
9:CI:112:LYS:HA	9:CI:119:ALA:HB2	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:86:ALA:C	25:AZ:88:TYR:H	2.14	0.51
36:DA:1344:G:H4'	36:DA:1384:A:C5	2.46	0.51
25:CZ:64:ASN:N	25:CZ:64:ASN:HD22	2.04	0.51
36:BA:2200:C:N4	36:BA:2223:G:H1	2.07	0.51
57:DY:3:VAL:C	57:DY:5:MET:H	2.14	0.51
36:BA:901:A:H5'	36:BA:902:C:OP2	2.11	0.51
28:D2:44:LEU:HD23	28:D2:44:LEU:O	2.10	0.51
36:BA:863:A:O2'	36:BA:864:G:H5'	2.10	0.51
11:CK:67:ASP:O	11:CK:71:LYS:HG3	2.10	0.51
25:CZ:32:THR:HG22	25:CZ:70:TYR:HB3	1.93	0.51
36:DA:1064:C:H4'	45:DK:87:UNK:CB	2.41	0.51
55:DW:69:LEU:HD23	55:DW:108:GLY:O	2.11	0.51
36:BA:1586:A:H5''	36:BA:1587:A:C8	2.46	0.51
36:BA:2360:A:C2	36:BA:2361:A:H1'	2.46	0.51
4:CD:200:GLU:HG2	4:CD:201:GLN:N	2.25	0.51
7:CG:15:ASP:HB3	7:CG:20:ASP:H	1.76	0.51
43:DH:152:ARG:HH11	43:DH:152:ARG:HG3	1.76	0.51
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.46	0.51
36:BA:270:A:N1	36:BA:366:C:O2'	2.38	0.51
1:AA:471:G:H21	16:AP:82:GLN:NE2	2.09	0.51
47:BO:31:LYS:HB3	47:BO:32:TYR:CE1	2.46	0.51
1:AA:594:G:C2'	1:AA:595:G:H5'	2.41	0.51
1:AA:779:C:H2'	1:AA:780:A:O4'	2.10	0.51
12:CL:27:LEU:HD23	12:CL:30:ALA:O	2.10	0.51
36:BA:1688:U:H1'	36:BA:1701:A:C6	2.46	0.51
11:AK:88:GLY:O	11:AK:89:ALA:C	2.49	0.51
36:DA:2880:C:H1'	50:DR:92:GLY:O	2.10	0.51
39:BD:241:PRO:O	39:BD:243:GLY:N	2.43	0.51
52:DT:28:VAL:O	52:DT:29:ARG:HB2	2.10	0.51
43:DH:121:ILE:HG23	43:DH:133:VAL:CG1	2.40	0.51
41:DF:167:ALA:HA	41:DF:170:LEU:HD23	1.92	0.51
1:CA:1005:A:H2'	1:CA:1006:C:H5'	1.92	0.51
48:BP:131:SER:OG	48:BP:134:ALA:HB3	2.11	0.51
9:AI:83:ARG:C	9:AI:86:VAL:HG12	2.31	0.51
22:CW:5:G:N2	22:CW:69:G:C5	2.79	0.51
52:BT:27:THR:HG23	52:BT:28:VAL:H	1.75	0.51
42:DG:141:PHE:HB3	42:DG:142:PRO:HD2	1.93	0.51
51:BS:54:LEU:HD21	51:BS:58:LEU:O	2.11	0.51
24:AY:45:U:C3'	24:AY:46:7MG:H5''	2.33	0.51
32:D6:45:LYS:HG3	36:DA:2371:G:H4'	1.91	0.51
4:CD:101:LEU:C	4:CD:103:ASN:N	2.63	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:117:ALA:O	4:CD:121:VAL:HG23	2.11	0.51
48:BP:147:LEU:O	48:BP:148:LEU:CB	2.58	0.51
53:DU:85:LYS:CD	53:DU:117:GLN:HE22	2.14	0.51
46:DN:91:LEU:CD2	46:DN:98:VAL:HG21	2.41	0.51
55:BW:6:ILE:HG12	55:BW:104:THR:HB	1.93	0.51
36:DA:2111:C:H1'	36:DA:2118:U:O4'	2.11	0.51
42:DG:125:PHE:CB	42:DG:130:ASN:O	2.59	0.51
56:BX:52:VAL:O	56:BX:53:LYS:C	2.49	0.51
36:BA:2811:G:H4'	40:BE:61:ARG:HH21	1.76	0.51
51:BS:48:LEU:HD23	51:BS:82:ILE:HD11	1.93	0.51
36:DA:467:G:O2'	36:DA:468:G:H5'	2.11	0.51
31:D5:36:CYS:SG	31:D5:48:GLU:HB2	2.51	0.51
36:DA:2632:A:C2	40:DE:61:ARG:HD2	2.46	0.51
36:BA:483:A:H5''	57:BY:49:VAL:HG22	1.91	0.51
36:BA:142:A:H1'	36:BA:1408:C:H1'	1.92	0.51
40:DE:35:GLN:HG2	40:DE:36:ARG:N	2.26	0.51
9:AI:111:ARG:O	9:AI:113:LYS:HD2	2.10	0.51
36:BA:2475:C:H42	36:BA:2529:G:H22	1.60	0.51
39:BD:130:ALA:HA	39:BD:192:THR:HA	1.92	0.51
39:DD:124:PRO:HG2	39:DD:129:ASN:ND2	2.26	0.51
39:DD:130:ALA:HA	39:DD:192:THR:HA	1.92	0.51
40:DE:81:ILE:O	40:DE:82:ARG:O	2.28	0.51
39:DD:267:SER:O	39:DD:269:PHE:HD1	1.93	0.51
36:BA:171:G:O2'	36:BA:172:C:H5'	2.11	0.51
22:AV:44:G:H3'	22:AV:45:U:H5'	1.92	0.51
1:CA:190:U:H2'	1:CA:191:G:C8	2.43	0.51
25:AZ:152:MET:HE2	25:AZ:156:ASP:HB2	1.93	0.51
25:CZ:404:LEU:HD22	25:CZ:404:LEU:H	1.76	0.51
36:BA:2672:G:C2'	36:BA:2673:G:H5''	2.41	0.51
36:DA:2790:A:H2'	36:DA:2791:C:C5'	2.41	0.51
35:B9:1:MET:HG3	36:BA:2478:A:OP2	2.11	0.51
1:AA:1250:A:H4'	9:AI:68:GLY:H	1.76	0.51
36:DA:118:A:OP2	36:DA:119:A:H5''	2.11	0.51
33:B7:19:ARG:NH1	33:B7:19:ARG:HG2	2.26	0.51
55:DW:86:LEU:HD22	55:DW:96:ILE:HD12	1.93	0.51
2:CB:239:VAL:O	2:CB:240:GLN:HB3	2.10	0.51
36:BA:1231:G:H2'	36:BA:1232:G:H8	1.76	0.51
6:CF:15:ASP:OD2	6:CF:17:SER:HB2	2.11	0.51
47:DO:63:VAL:HG23	47:DO:64:ARG:HG3	1.92	0.51
36:BA:405:U:H3'	36:BA:406:G:C5'	2.41	0.51
25:CZ:249:VAL:HG13	25:CZ:268:THR:HA	1.94	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DV:69:LYS:HA	54:DV:87:HIS:O	2.11	0.51
12:AL:27:LEU:HD23	12:AL:30:ALA:O	2.11	0.51
36:BA:575:A:OP2	36:BA:2499:C:O2'	2.28	0.51
36:DA:11:G:H2'	36:DA:12:U:C6	2.45	0.51
3:CC:150:LYS:HG3	3:CC:169:ALA:HB2	1.92	0.51
1:CA:1466:C:H2'	1:CA:1467:G:O4'	2.11	0.51
1:CA:373:A:O2'	1:CA:374:A:H5'	2.11	0.51
1:AA:1394:A:C5	1:AA:1501:C:H4'	2.46	0.51
25:CZ:231:ILE:N	25:CZ:231:ILE:HD12	2.26	0.51
10:CJ:29:ARG:HH11	10:CJ:29:ARG:HG2	1.75	0.51
36:BA:1151:G:H5''	53:BU:81:HIS:CE1	2.47	0.51
22:CV:53:G:O2'	22:CV:54:U:H5'	2.10	0.51
38:BC:127:LEU:O	38:BC:129:ARG:N	2.44	0.50
41:BF:160:ASN:ND2	41:BF:160:ASN:C	2.63	0.50
39:DD:72:LYS:HZ2	39:DD:75:ILE:HG13	1.76	0.50
42:DG:87:PRO:C	42:DG:88:ILE:HG12	2.32	0.50
36:DA:84:A:H61	36:DA:102:G:C2'	2.23	0.50
36:BA:1884:A:C3'	36:BA:1885:A:H5''	2.40	0.50
4:AD:98:GLU:HG2	4:AD:189:PRO:HG3	1.93	0.50
4:CD:101:LEU:O	4:CD:103:ASN:N	2.44	0.50
36:DA:2307:G:N2	36:DA:2308:G:H5''	2.26	0.50
36:BA:1499:C:O2'	36:BA:1500:G:H5'	2.11	0.50
36:BA:2369:A:O2'	36:BA:2370:G:H5'	2.10	0.50
36:BA:643:A:O2'	36:BA:644:A:H5'	2.11	0.50
37:BB:48:A:H2'	37:BB:49:C:C6	2.46	0.50
43:BH:41:MET:SD	43:BH:53:GLU:O	2.68	0.50
39:DD:43:ARG:HH11	39:DD:44:ASN:HD21	1.55	0.50
36:DA:832:G:H21	48:DP:53:GLY:HA2	1.76	0.50
27:B1:81:LYS:O	27:B1:83:GLU:HG3	2.10	0.50
52:BT:92:GLY:O	52:BT:93:ARG:C	2.48	0.50
9:AI:46:ALA:HB2	9:AI:74:ILE:HG23	1.93	0.50
37:DB:75:G:O3'	58:DZ:10:ARG:NH2	2.43	0.50
36:BA:2131:G:H1'	36:BA:2133:G:C2	2.46	0.50
55:DW:29:LEU:CG	55:DW:33:ARG:HD2	2.41	0.50
54:BV:5:VAL:HG22	54:BV:6:LYS:N	2.27	0.50
58:DZ:18:LEU:O	58:DZ:23:LYS:HB2	2.11	0.50
25:AZ:222:LEU:HA	25:AZ:304:LEU:O	2.11	0.50
34:B8:14:VAL:HG21	34:B8:22:VAL:HG13	1.93	0.50
54:DV:39:LEU:CD1	54:DV:51:VAL:HA	2.41	0.50
36:DA:1664:A:H1'	36:DA:2726:U:C5	2.46	0.50
50:BR:9:LYS:C	50:BR:10:LEU:HG	2.31	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BE:197:ILE:O	40:BE:197:ILE:HG12	2.11	0.50
36:BA:1103:A:H5''	36:BA:1104:C:C5	2.44	0.50
1:CA:1226:C:C5	13:CM:104:ARG:HB2	2.46	0.50
41:BF:178:PRO:HG2	41:BF:179:GLU:H	1.75	0.50
25:AZ:300:ARG:HH11	25:AZ:300:ARG:HG2	1.76	0.50
36:BA:534:U:O2'	53:BU:49:HIS:CD2	2.64	0.50
38:DC:18:LYS:HD3	38:DC:20:TYR:CZ	2.46	0.50
13:AM:118:ALA:HB3	22:AV:29:G:C5'	2.42	0.50
58:DZ:145:GLU:HA	58:DZ:145:GLU:OE1	2.10	0.50
40:DE:26:ILE:CG2	40:DE:196:VAL:HG21	2.41	0.50
36:BA:2360:A:O2'	36:BA:2361:A:C5'	2.59	0.50
39:BD:201:HIS:O	39:BD:204:ILE:HG12	2.11	0.50
58:DZ:95:PRO:HA	58:DZ:129:SER:HA	1.93	0.50
42:BG:129:GLY:HA3	42:BG:163:ALA:HB3	1.92	0.50
36:DA:1997:G:OP1	40:DE:123:ALA:HB1	2.10	0.50
36:BA:2402:C:H2'	36:BA:2403:C:H5'	1.93	0.50
36:BA:1843:C:H2'	36:BA:1844:C:C6	2.46	0.50
36:DA:2659:G:H2'	36:DA:2660:A:H5''	1.93	0.50
22:AV:53:G:O2'	22:AV:54:U:H5'	2.11	0.50
7:CG:101:LEU:O	7:CG:105:VAL:HG23	2.12	0.50
36:BA:1860:G:H1	36:BA:1882:C:H42	1.58	0.50
36:DA:383:U:H2'	36:DA:385:C:H5	1.76	0.50
36:BA:1799:G:H5'	36:BA:1819:A:N6	2.26	0.50
52:DT:27:THR:HG23	52:DT:28:VAL:N	2.26	0.50
28:B2:41:ILE:HG13	28:B2:42:GLY:N	2.19	0.50
40:DE:47:VAL:HG12	40:DE:49:LEU:HD22	1.92	0.50
1:AA:1005:A:H2'	1:AA:1006:C:H5'	1.93	0.50
22:AW:69:G:H2'	22:AW:70:G:C5'	2.41	0.50
40:BE:48:GLN:NE2	40:BE:78:LEU:HD22	2.26	0.50
36:DA:1888:G:N3	36:DA:1888:G:H5'	2.26	0.50
49:DQ:141:GLN:OXT	58:DZ:53:ILE:HD12	2.11	0.50
25:CZ:86:ALA:C	25:CZ:88:TYR:H	2.14	0.50
10:AJ:61:GLU:HG3	14:AN:58:LYS:CE	2.28	0.50
1:AA:1202:G:C2	14:AN:42:ILE:HG21	2.45	0.50
32:B6:53:LYS:CG	32:B6:54:ILE:N	2.74	0.50
48:DP:112:LEU:HD22	48:DP:113:LYS:N	2.26	0.50
1:AA:1392:G:H21	1:AA:1502:A:H8	1.41	0.50
32:D6:25:LYS:HD2	36:DA:2285:C:N4	2.25	0.50
26:B0:49:LYS:O	26:B0:50:ASN:HB2	2.11	0.50
36:DA:260:G:H1'	36:DA:621:A:H1'	1.93	0.50
58:BZ:18:LEU:HB3	58:BZ:23:LYS:HB2	1.92	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:B4:10:VAL:CG2	30:B4:11:PRO:HD2	2.41	0.50
2:CB:204:ASN:ND2	2:CB:207:ALA:H	2.10	0.50
36:BA:2133:G:H4'	36:BA:2133:G:OP1	2.12	0.50
48:DP:75:ILE:HD12	48:DP:75:ILE:N	2.25	0.50
40:DE:59:VAL:O	40:DE:60:ASN:CG	2.50	0.50
29:D3:29:ARG:NH2	36:DA:1183:G:H4'	2.26	0.50
56:BX:35:THR:HG22	56:BX:38:GLU:N	2.21	0.50
41:DF:155:LEU:HD23	41:DF:192:LEU:HD12	1.92	0.50
54:DV:5:VAL:HG22	54:DV:6:LYS:N	2.26	0.50
42:BG:106:LEU:HG	42:BG:106:LEU:O	2.11	0.50
24:AY:17:H2U:O2'	24:AY:18:G:OP2	2.30	0.50
54:DV:62:LEU:CD2	54:DV:95:LEU:HB2	2.39	0.50
34:D8:15:LYS:CG	48:DP:65:ARG:NH2	2.74	0.50
58:BZ:136:PHE:O	58:BZ:137:ILE:HD13	2.12	0.50
13:AM:91:ARG:HB3	13:AM:98:VAL:HG12	1.93	0.50
7:CG:78:ARG:CG	7:CG:78:ARG:O	2.58	0.50
36:DA:2206:G:N2	36:DA:2207:G:H4'	2.27	0.50
36:DA:45:C:H2'	36:DA:47:C:H6	1.72	0.50
52:DT:109:GLU:O	52:DT:112:ARG:HG2	2.12	0.50
35:D9:29:ASN:HD21	35:D9:32:HIS:CG	2.28	0.50
17:CQ:45:HIS:HB2	17:CQ:65:ILE:HD13	1.92	0.50
1:AA:1217:C:OP1	14:AN:9:LYS:HE3	2.11	0.50
48:BP:122:PRO:HA	48:BP:141:ALA:O	2.12	0.50
2:AB:141:GLU:O	2:AB:145:LEU:HD23	2.11	0.50
13:CM:34:LEU:HD13	13:CM:41:PRO:HA	1.93	0.50
58:DZ:128:VAL:HG22	58:DZ:129:SER:N	2.25	0.50
36:DA:782:A:H5'	36:DA:783:A:C2	2.46	0.50
4:CD:76:ARG:O	4:CD:80:GLU:HG2	2.11	0.50
57:DY:23:ARG:HH11	57:DY:23:ARG:HG2	1.76	0.50
36:DA:1799:G:H5'	36:DA:1819:A:N6	2.26	0.50
9:AI:100:GLY:O	9:AI:102:LEU:N	2.45	0.50
36:DA:1430:C:H2'	36:DA:1431:U:C6	2.46	0.50
42:DG:49:ASP:CG	42:DG:50:ALA:H	2.13	0.50
8:CH:116:LYS:HD3	8:CH:127:LEU:HD12	1.92	0.50
36:DA:1479:G:H5''	36:DA:1560:G:H4'	1.94	0.50
42:DG:30:GLU:HG2	42:DG:30:GLU:O	2.11	0.50
1:CA:397:A:H3'	1:CA:397:A:N3	2.27	0.50
36:BA:1149:G:H2'	36:BA:1150:C:C6	2.46	0.50
1:CA:1050:G:O2'	1:CA:1051:C:H6	1.94	0.50
13:AM:34:LEU:HD13	13:AM:41:PRO:HA	1.92	0.50
52:DT:28:VAL:HG11	52:DT:88:ILE:HD11	1.94	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:62:TYR:HA	39:DD:87:ASN:HD21	1.76	0.50
52:BT:28:VAL:CG2	52:BT:46:GLU:HG3	2.38	0.50
42:DG:47:LYS:HD3	42:DG:81:LYS:CG	2.37	0.50
42:DG:51:ARG:NH1	42:DG:53:LEU:CD2	2.75	0.50
10:AJ:55:LYS:NZ	10:AJ:55:LYS:CA	2.75	0.50
32:D6:15:GLU:HG2	32:D6:18:ARG:CZ	2.40	0.50
32:D6:15:GLU:CD	32:D6:18:ARG:NH2	2.64	0.50
32:D6:53:LYS:CG	32:D6:54:ILE:N	2.75	0.50
4:AD:117:ALA:O	4:AD:121:VAL:HG23	2.12	0.50
34:B8:30:ARG:NH2	36:BA:2419:U:O4	2.44	0.50
4:CD:188:LEU:O	4:CD:189:PRO:O	2.28	0.50
25:AZ:224:PRO:HD2	25:AZ:241:ARG:O	2.11	0.50
36:BA:1279:G:H4'	50:BR:31:HIS:NE2	2.26	0.50
32:B6:52:VAL:HG12	32:B6:53:LYS:N	2.26	0.50
37:DB:48:A:H2'	37:DB:49:C:C6	2.45	0.50
32:D6:10:LEU:N	32:D6:10:LEU:CD2	2.67	0.50
34:D8:33:ASN:HB2	34:D8:36:LYS:HD2	1.93	0.50
41:DF:160:ASN:C	41:DF:160:ASN:ND2	2.65	0.50
48:DP:39:LYS:CD	48:DP:40:SER:H	2.21	0.50
4:AD:11:LEU:O	4:AD:12:CYS:C	2.49	0.50
4:AD:17:VAL:O	4:AD:18:LYS:C	2.48	0.50
30:D4:8:LYS:O	30:D4:9:LEU:CB	2.59	0.50
30:B4:31:ILE:HD12	30:B4:31:ILE:N	2.25	0.50
3:CC:14:ILE:HG13	3:CC:15:THR:N	2.26	0.50
25:AZ:130:TYR:CD2	25:AZ:211:PRO:HD2	2.46	0.50
2:AB:204:ASN:ND2	2:AB:207:ALA:H	2.10	0.50
36:DA:729:G:C5	39:DD:208:LYS:HB2	2.46	0.50
36:BA:2469:A:H2	36:BA:2481:G:H21	1.59	0.50
46:DN:29:LYS:C	46:DN:31:ALA:N	2.65	0.50
46:BN:57:ALA:O	46:BN:58:ASP:C	2.50	0.50
36:DA:1378:A:C4'	36:DA:1379:A:OP1	2.57	0.50
1:CA:427:U:OP1	4:CD:13:ARG:NH2	2.45	0.50
1:AA:1065:U:C4	1:AA:1190:G:H1'	2.46	0.50
34:B8:48:PHE:O	34:B8:49:VAL:HG22	2.11	0.50
46:BN:55:VAL:HG22	46:BN:56:ASN:N	2.26	0.50
36:BA:1038:C:C3'	36:BA:1039:G:H5''	2.42	0.50
57:DY:44:ILE:HG22	57:DY:45:VAL:N	2.26	0.50
19:AS:20:LEU:C	19:AS:22:LEU:H	2.14	0.50
39:BD:142:VAL:HG22	39:BD:143:HIS:H	1.76	0.50
40:DE:101:ARG:HE	40:DE:171:GLU:HB2	1.74	0.50
47:BO:24:VAL:CG1	47:BO:33:ALA:HB2	2.40	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:69:ARG:HG3	39:DD:130:ALA:CB	2.42	0.50
3:CC:50:ALA:HA	3:CC:72:LYS:CB	2.40	0.50
36:DA:1243:G:H2'	36:DA:1244:G:O4'	2.11	0.50
36:DA:2475:C:H42	36:DA:2529:G:H22	1.59	0.50
36:BA:2206:G:N2	36:BA:2207:G:H4'	2.26	0.50
36:BA:2791:C:H4'	36:BA:2792:G:O5'	2.12	0.50
9:AI:54:ASP:C	9:AI:56:LEU:H	2.14	0.50
1:CA:883:C:O2'	1:CA:884:U:H5'	2.11	0.50
20:AT:74:LYS:C	20:AT:76:ALA:H	2.15	0.50
11:AK:48:ILE:HD11	11:AK:67:ASP:HB2	1.94	0.50
36:DA:2837:G:H2'	36:DA:2838:G:H8	1.76	0.50
36:DA:1270:C:H5''	36:DA:1271:G:C5'	2.41	0.50
36:BA:1999:C:H5''	36:BA:2723:C:O2'	2.12	0.50
40:DE:188:VAL:HG23	40:DE:189:PRO:HD2	1.92	0.50
44:BJ:21:UNK:C	44:BJ:23:UNK:H	2.24	0.50
36:DA:151:C:H2'	36:DA:152:G:C8	2.46	0.50
42:DG:40:ASN:HB3	42:DG:156:ASP:HB2	1.92	0.50
10:AJ:40:LEU:HB2	10:AJ:69:ASN:HB2	1.92	0.50
1:CA:31:G:N1	1:CA:48:C:H5''	2.25	0.50
50:BR:74:LYS:HD2	50:BR:77:ARG:HD2	1.92	0.50
1:AA:718:G:H5'	11:AK:117:ASN:OD1	2.11	0.50
36:DA:826:U:H2'	36:DA:828:U:O4'	2.11	0.50
26:B0:26:TYR:CE2	36:BA:857:C:H1'	2.46	0.50
49:BQ:101:ARG:HG3	49:BQ:101:ARG:HH11	1.77	0.50
16:AP:64:ALA:O	16:AP:66:PRO:HD3	2.11	0.50
36:DA:2402:C:H2'	36:DA:2403:C:H5'	1.94	0.50
38:DC:96:GLY:H	38:DC:99:ILE:HG12	1.76	0.50
41:BF:27:GLU:N	41:BF:27:GLU:OE1	2.44	0.50
58:BZ:119:GLU:C	58:BZ:121:HIS:N	2.64	0.50
40:DE:52:LEU:HD11	52:DT:1:MET:HE2	1.94	0.50
36:DA:628:G:C3'	36:DA:629:G:H5''	2.41	0.50
58:DZ:89:PHE:CE2	58:DZ:96:VAL:HG21	2.36	0.50
36:BA:31:C:C2'	36:BA:32:C:C5'	2.74	0.50
51:DS:90:GLY:C	51:DS:92:TYR:H	2.14	0.50
25:CZ:224:PRO:HD2	25:CZ:241:ARG:O	2.11	0.50
37:BB:48:A:OP1	51:BS:93:LYS:HB3	2.11	0.50
3:CC:139:GLN:NE2	3:CC:143:GLU:OE2	2.44	0.50
4:AD:20:TYR:HA	4:AD:26:CYS:SG	2.52	0.50
36:BA:2036:C:H6	36:BA:2036:C:C5'	2.17	0.50
36:BA:2811:G:C4'	40:BE:61:ARG:HH21	2.25	0.50
37:DB:75:G:H22	58:DZ:73:GLN:NE2	2.09	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:267:C:H2'	1:CA:268:C:C6	2.46	0.50
36:BA:729:G:C5	39:BD:208:LYS:HB2	2.46	0.50
36:BA:1049:C:O2	36:BA:1113:U:H4'	2.11	0.50
53:DU:83:LEU:HG	53:DU:88:ILE:HD11	1.92	0.50
25:CZ:209:TYR:O	25:CZ:211:PRO:HD3	2.11	0.50
42:BG:120:LEU:H	42:BG:181:ARG:H	1.60	0.50
4:AD:162:LEU:HG	4:AD:181:MET:HE3	1.92	0.50
1:CA:939:G:C5'	7:CG:102:ARG:HH12	2.21	0.50
19:AS:43:GLU:O	19:AS:45:VAL:HG22	2.12	0.50
36:DA:990:A:OP2	36:DA:991:C:OP2	2.29	0.50
37:DB:68:C:O2'	37:DB:69:G:H5'	2.12	0.50
43:DH:24:VAL:O	43:DH:24:VAL:HG12	2.12	0.50
34:D8:39:LYS:HG3	34:D8:43:GLN:HE21	1.76	0.50
16:AP:44:THR:O	16:AP:45:THR:CB	2.59	0.50
8:AH:7:ALA:HB2	8:AH:85:ARG:CD	2.41	0.50
46:BN:90:MET:HE2	46:BN:90:MET:HA	1.93	0.50
5:CE:102:ALA:CB	5:CE:120:THR:HG21	2.42	0.50
4:CD:205:GLU:OE2	5:CE:100:VAL:HG22	2.11	0.50
22:CW:59:U:C2'	22:CW:60:U:H5'	2.40	0.50
15:AO:7:GLU:O	15:AO:11:VAL:HG23	2.11	0.50
47:DO:12:ASP:C	47:DO:14:THR:H	2.13	0.50
36:DA:564:C:O2'	36:DA:565:C:H5'	2.12	0.50
36:DA:1466:G:H2'	36:DA:1547:C:N4	2.27	0.50
58:DZ:54:HIS:HB3	58:DZ:101:PRO:HD3	1.93	0.50
49:BQ:81:VAL:HG22	49:BQ:82:ARG:H	1.77	0.50
25:AZ:244:ARG:HA	25:AZ:282:ALA:HB2	1.92	0.50
55:BW:9:TYR:N	55:BW:9:TYR:HD1	2.09	0.50
12:CL:85:ILE:HG23	12:CL:86:ARG:N	2.27	0.50
50:BR:33:ARG:HG3	50:BR:115:GLU:HG3	1.93	0.50
16:CP:23:ASP:O	16:CP:24:ALA:C	2.49	0.50
46:DN:65:LYS:NZ	46:DN:65:LYS:HB3	2.27	0.50
33:B7:5:TRP:CZ3	36:BA:464:U:H4'	2.46	0.50
24:AY:20:H2U:H4'	24:AY:21:A:O5'	2.12	0.50
36:BA:230:U:H2'	36:BA:231:C:H6	1.76	0.50
25:AZ:185:ASN:HD22	25:AZ:185:ASN:N	2.08	0.50
31:B5:52:TYR:CD1	31:B5:52:TYR:N	2.80	0.50
49:DQ:101:ARG:HH11	49:DQ:101:ARG:HG3	1.77	0.50
38:DC:103:ILE:O	38:DC:104:LEU:C	2.49	0.50
38:BC:103:ILE:O	38:BC:104:LEU:C	2.50	0.50
13:AM:14:ARG:NH2	13:AM:16:ASP:OD2	2.44	0.50
42:BG:174:GLU:O	42:BG:176:LEU:N	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:35:LYS:O	39:DD:62:TYR:O	2.30	0.50
52:BT:30:VAL:O	52:BT:31:SER:HB3	2.11	0.50
48:BP:10:PRO:O	48:BP:11:GLY:O	2.30	0.50
32:D6:15:GLU:OE2	32:D6:41:PRO:CB	2.58	0.50
36:BA:1885:A:H8	36:BA:1885:A:H5'	1.76	0.50
17:AQ:55:ASP:HB3	17:AQ:76:LEU:CD1	2.42	0.50
36:DA:1885:A:H5'	36:DA:1885:A:H8	1.75	0.50
43:BH:41:MET:O	43:BH:42:ARG:HB3	2.11	0.50
39:DD:43:ARG:O	39:DD:43:ARG:HG2	2.12	0.50
43:DH:41:MET:O	43:DH:42:ARG:HB3	2.12	0.50
48:DP:45:LEU:CD1	48:DP:46:LYS:H	2.24	0.50
4:CD:17:VAL:O	4:CD:18:LYS:C	2.50	0.50
4:AD:31:CYS:O	4:AD:32:ALA:HB3	2.11	0.50
25:CZ:122:LEU:HD13	25:CZ:122:LEU:O	2.12	0.50
36:BA:1311:G:H21	36:BA:1603:A:H62	1.60	0.50
10:CJ:16:LEU:CD1	10:CJ:70:ARG:HG2	2.41	0.50
49:DQ:134:ARG:HA	49:DQ:137:TYR:CD1	2.46	0.50
36:DA:1051:G:C4	36:DA:1052:C:N4	2.80	0.50
36:BA:2464:C:O2'	36:BA:2465:C:O5'	2.29	0.50
4:AD:150:GLU:C	4:AD:152:SER:H	2.14	0.50
36:DA:2096:U:H2'	36:DA:2097:C:H6	1.77	0.50
6:CF:82:ARG:HB2	6:CF:85:VAL:CG2	2.42	0.50
36:DA:363(E):U:H3'	36:DA:363(F):A:O4'	2.12	0.50
1:CA:59:A:H3'	1:CA:331:G:N2	2.25	0.50
25:AZ:64:ASN:N	25:AZ:64:ASN:HD22	2.04	0.50
49:DQ:43:THR:HB	49:DQ:45:GLN:HE21	1.76	0.50
20:AT:86:ARG:O	20:AT:90:GLN:HG3	2.12	0.50
1:AA:659:U:O2'	1:AA:660:G:H5'	2.11	0.50
1:CA:737:A:H2'	1:CA:738:C:C6	2.46	0.50
8:AH:2:LEU:HD23	8:AH:2:LEU:O	2.11	0.50
47:BO:12:ASP:C	47:BO:14:THR:H	2.13	0.50
57:BY:87:LYS:HG3	57:BY:88:LYS:H	1.77	0.50
1:AA:735:C:O2'	1:AA:736:C:H5'	2.12	0.50
26:D0:43:THR:O	26:D0:43:THR:HG23	2.12	0.50
29:D3:26:LEU:HB2	29:D3:28:LEU:HD22	1.94	0.50
36:DA:1171:G:C8	36:DA:1173:G:H1'	2.47	0.50
1:CA:328:C:H4'	1:CA:329:A:H5'	1.92	0.50
1:CA:983:A:O2'	1:CA:1050:G:OP2	2.29	0.50
36:DA:686:G:N2	36:DA:788:A:H61	2.10	0.50
15:CO:8:LYS:O	15:CO:12:ILE:HG13	2.11	0.50
56:BX:70:LEU:HD23	56:BX:71:GLY:N	2.27	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BQ:3:MET:HB2	49:BQ:4:PRO:HD2	1.93	0.50
38:DC:189:ILE:O	38:DC:193:ILE:HG13	2.10	0.50
33:D7:10:ARG:NH1	36:DA:771:G:OP1	2.44	0.50
1:CA:719:C:O2'	18:CR:49:LYS:HB3	2.11	0.50
39:DD:133:LEU:HB3	39:DD:173:VAL:HG11	1.93	0.50
2:CB:168:THR:CG2	2:CB:192:SER:HA	2.42	0.50
36:BA:2175:C:N3	36:BA:2176:A:C2	2.80	0.50
22:AV:75:C:H2'	22:AV:76:A:C1'	2.41	0.50
1:AA:1310:G:O2'	1:AA:1311:G:H5'	2.12	0.50
36:BA:1029:A:H2'	36:BA:1030:G:O4'	2.12	0.50
52:BT:100:TYR:O	52:BT:103:ARG:HG3	2.12	0.50
36:DA:1274:A:N3	36:DA:1297:C:H1'	2.26	0.50
36:BA:2087:G:O2'	36:BA:2088:G:H5'	2.11	0.50
2:CB:56:ARG:HG3	2:CB:56:ARG:HH11	1.75	0.50
52:DT:100:TYR:O	52:DT:103:ARG:HG3	2.11	0.50
36:BA:979:G:H3'	36:BA:980:A:H5''	1.94	0.50
36:BA:151:C:H2'	36:BA:152:G:C8	2.46	0.50
52:DT:31:SER:HG	52:DT:32:TYR:HE1	1.56	0.50
28:B2:52:ASP:O	28:B2:56:GLN:NE2	2.45	0.50
49:BQ:133:ARG:CB	49:BQ:133:ARG:HH11	2.17	0.50
36:BA:558:G:OP2	46:BN:111:PRO:HD2	2.11	0.50
36:BA:2188:C:H2'	36:BA:2189:U:C5	2.47	0.50
39:DD:75:ILE:HG21	39:DD:99:ASP:HB3	1.92	0.50
57:DY:13:VAL:HG22	57:DY:14:LEU:N	2.27	0.50
57:BY:85:VAL:HG12	57:BY:86:ARG:N	2.25	0.50
36:DA:654(O):G:H2'	36:DA:654(P):C:C5	2.47	0.50
36:BA:2310:A:O2'	36:BA:2311:A:C5'	2.48	0.50
48:BP:98:GLU:HA	48:BP:101:VAL:HG22	1.92	0.50
36:DA:1021:A:H3'	36:DA:1021:A:C8	2.47	0.50
36:BA:832:G:H21	48:BP:53:GLY:HA2	1.76	0.50
51:BS:97:ARG:NH1	51:BS:98:VAL:O	2.45	0.50
36:BA:1021:A:C8	36:BA:1021:A:H3'	2.47	0.50
3:AC:81:GLY:O	3:AC:82:GLU:C	2.50	0.50
48:DP:23:PRO:C	48:DP:33:ARG:CZ	2.80	0.50
36:DA:1948:G:O2'	36:DA:1949:G:H5'	2.11	0.50
36:BA:2631:G:N2	40:BE:61:ARG:HH12	2.09	0.50
48:BP:16:ARG:NE	48:BP:18:ARG:HG2	2.26	0.50
42:BG:61:ALA:O	42:BG:65:GLY:N	2.42	0.50
12:AL:6:THR:HG1	12:AL:9:GLN:HG3	1.74	0.50
36:BA:2416:C:H2'	36:BA:2417:C:C6	2.47	0.50
52:DT:129:ARG:HG3	52:DT:129:ARG:O	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B5:43:HIS:HD2	36:BA:2815:C:O2'	1.94	0.50
40:DE:144:ARG:CG	40:DE:145:LYS:H	2.25	0.50
1:CA:1442(A):G:H5'	1:CA:1442(B):A:OP1	2.12	0.50
56:BX:41:ASN:O	56:BX:45:THR:HG23	2.12	0.50
2:AB:25:ASN:O	2:AB:27:LYS:N	2.45	0.50
36:BA:733:G:C8	36:BA:761:A:N1	2.80	0.50
49:DQ:16:ARG:HG3	49:DQ:17:LEU:N	2.26	0.50
1:AA:1158:C:O2'	1:AA:1159:U:H4'	2.11	0.50
49:BQ:16:ARG:HG3	49:BQ:17:LEU:N	2.26	0.50
19:CS:31:ILE:HG23	19:CS:49:ILE:HA	1.93	0.50
7:CG:16:LEU:HD12	9:CI:42:ARG:HA	1.91	0.50
46:DN:56:ASN:H	46:DN:125:GLY:HA3	1.77	0.50
36:BA:481:G:P	57:BY:47:LYS:HD3	2.51	0.50
25:CZ:265:THR:HG21	25:CZ:293:VAL:HG22	1.93	0.50
36:DA:547:A:H2'	36:DA:548:A:H8	1.75	0.50
1:AA:190:U:H2'	1:AA:191:G:C8	2.43	0.50
36:BA:2030:A:H4'	36:BA:2031:A:H8	1.77	0.50
12:CL:59:ARG:NH2	12:CL:63:GLY:HA2	2.25	0.50
1:AA:436:C:H2'	1:AA:437:U:C6	2.47	0.50
28:D2:14:ARG:O	28:D2:14:ARG:HG2	2.12	0.50
25:CZ:63:ILE:HG13	25:CZ:64:ASN:N	2.26	0.50
36:BA:1243:G:H2'	36:BA:1244:G:O4'	2.11	0.50
26:D0:15:ASP:OD1	26:D0:16:SER:N	2.42	0.50
7:AG:6:ARG:HH21	7:AG:94:ARG:HH12	1.57	0.50
36:BA:710:G:H2'	36:BA:711:G:H8	1.77	0.50
53:BU:52:ARG:O	53:BU:55:ARG:N	2.45	0.50
36:BA:796:C:H2'	36:BA:797:C:H6	1.75	0.50
46:DN:129:PRO:O	46:DN:130:HIS:CB	2.60	0.50
39:BD:65:ILE:HD11	39:BD:67:PHE:CE2	2.47	0.50
1:AA:1029:C:H2'	1:AA:1030(A):G:N7	2.27	0.50
55:BW:69:LEU:HD23	55:BW:108:GLY:O	2.11	0.50
48:BP:122:PRO:HB3	48:BP:141:ALA:CB	2.42	0.50
33:D7:19:ARG:HG2	33:D7:19:ARG:NH1	2.26	0.50
36:DA:1012:U:C5	46:DN:28:THR:HG21	2.47	0.50
25:CZ:256:VAL:HA	25:CZ:262:THR:HG22	1.94	0.50
36:DA:1360:A:H5'	36:DA:1361:G:OP2	2.11	0.50
16:CP:1:MET:O	16:CP:24:ALA:HB2	2.11	0.50
50:BR:18:LEU:HD13	50:BR:18:LEU:C	2.32	0.50
3:CC:126:ARG:O	3:CC:128:PHE:HD1	1.95	0.50
36:BA:2545:G:N3	36:BA:2565:A:H2	2.08	0.50
36:DA:696:G:O2'	36:DA:697:C:H5'	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2032:G:OP2	36:DA:2454:G:O2'	2.22	0.50
39:BD:162:SER:O	39:BD:178:PRO:HG3	2.11	0.50
36:DA:801:G:O4'	41:DF:54:ARG:HD3	2.11	0.50
36:DA:2771:C:H2'	36:DA:2772:C:C6	2.47	0.50
20:AT:93:GLU:OE1	20:AT:93:GLU:N	2.45	0.50
1:AA:397:A:H3'	1:AA:397:A:N3	2.27	0.50
1:CA:310:G:H2'	1:CA:311:C:H6	1.77	0.50
47:DO:11:ALA:HB1	47:DO:99:PHE:O	2.12	0.50
1:AA:719:C:O2'	18:AR:49:LYS:HB3	2.12	0.50
28:B2:62:THR:CG2	28:B2:66:GLU:HB3	2.38	0.50
58:BZ:123:ASP:O	58:BZ:124:ILE:CG1	2.50	0.50
40:DE:48:GLN:NE2	40:DE:78:LEU:HD22	2.27	0.50
42:BG:89:GLY:O	42:BG:90:LEU:HB3	2.12	0.50
40:BE:47:VAL:HG12	40:BE:49:LEU:HD22	1.94	0.50
13:CM:4:ILE:O	13:CM:5:ALA:C	2.50	0.50
37:DB:65:C:C2'	37:DB:66:A:H5'	2.42	0.50
24:CY:2:G:H2'	24:CY:3:G:C5'	2.40	0.50
27:B1:4:VAL:HG23	27:B1:5:CYS:N	2.26	0.50
34:B8:33:ASN:HB2	34:B8:36:LYS:HD2	1.93	0.50
1:AA:973:G:O3'	14:AN:41:ARG:NH1	2.45	0.50
36:BA:239:U:H1'	36:BA:259:G:N2	2.27	0.50
43:BH:41:MET:HG3	43:BH:42:ARG:N	2.26	0.50
41:DF:126:VAL:HG21	41:DF:129:PHE:CZ	2.47	0.50
43:DH:52:VAL:HB	43:DH:69:ARG:CD	2.41	0.50
30:D4:7:PRO:O	30:D4:8:LYS:HB3	2.12	0.50
30:D4:9:LEU:HD13	30:D4:10:VAL:N	2.26	0.50
52:BT:50:ILE:CD1	52:BT:64:ARG:HB3	2.41	0.50
36:DA:2414:G:H21	48:DP:67:MET:HE1	1.76	0.50
9:AI:69:GLY:O	9:AI:73:GLN:HG3	2.12	0.50
58:BZ:33:LEU:HD12	58:BZ:34:ASN:N	2.26	0.50
52:BT:129:ARG:O	52:BT:129:ARG:HG3	2.12	0.50
36:DA:2131:G:H1'	36:DA:2133:G:C2	2.47	0.50
52:DT:3:ARG:CB	52:DT:6:LEU:HB2	2.42	0.50
25:AZ:14:VAL:HG23	25:AZ:79:HIS:HA	1.94	0.50
25:AZ:28:THR:HG23	25:AZ:79:HIS:CE1	2.46	0.50
14:CN:15:LYS:O	14:CN:16:PHE:O	2.29	0.50
27:B1:6:GLU:OE1	27:B1:61:ARG:N	2.43	0.50
1:CA:80:G:C2'	1:CA:81:U:H5'	2.41	0.50
27:D1:69:LYS:O	27:D1:69:LYS:HD3	2.11	0.50
37:DB:91:C:H5'	49:DQ:17:LEU:O	2.10	0.50
1:AA:1157:A:H1'	1:AA:1181:G:C2	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:31:VAL:HG23	42:BG:32:PRO:HD2	1.93	0.50
36:BA:481:G:H1'	36:BA:506:G:H21	1.76	0.50
43:BH:24:VAL:O	43:BH:24:VAL:HG12	2.11	0.50
36:DA:2881:C:H2'	36:DA:2882:A:H8	1.77	0.50
36:DA:2882:A:H5'	50:DR:96:ARG:HG3	1.94	0.50
36:DA:2854:G:H1	36:DA:2863:C:H42	1.58	0.50
58:BZ:102:LEU:CD2	58:BZ:137:ILE:HB	2.42	0.50
19:AS:18:LYS:O	19:AS:22:LEU:HB2	2.12	0.50
36:DA:1168:G:H2'	36:DA:1169:G:C8	2.46	0.50
28:B2:13:ALA:C	28:B2:15:LYS:H	2.15	0.50
35:D9:10:ILE:H	35:D9:10:ILE:HD12	1.74	0.50
1:CA:783:C:O2'	1:CA:784:C:H5'	2.11	0.50
36:BA:2777:G:C5'	36:BA:2778:A:H5'	2.39	0.50
50:BR:103:ARG:HH11	50:BR:110:PRO:HB3	1.77	0.50
25:AZ:213:PRO:HG2	25:AZ:215:ARG:HE	1.77	0.50
1:CA:655:A:H2'	1:CA:656:C:H6	1.76	0.50
39:BD:226:MET:HB3	39:BD:230:ASP:HB2	1.94	0.50
1:AA:45:U:H2'	1:AA:46:G:H8	1.77	0.50
36:DA:1363:C:H2'	36:DA:1364:G:C8	2.45	0.50
11:CK:18:ARG:HH21	11:CK:36:ASP:C	2.14	0.50
40:BE:30:PRO:HD3	40:BE:180:ASN:ND2	2.26	0.50
57:DY:87:LYS:HG3	57:DY:88:LYS:H	1.77	0.50
36:DA:2869:G:H2'	36:DA:2870:C:H6	1.76	0.50
36:BA:2870:C:H2'	36:BA:2871:C:O4'	2.12	0.50
36:BA:1171:G:C8	36:BA:1173:G:H1'	2.47	0.50
36:DA:57:C:O2'	36:DA:58:G:H5'	2.11	0.50
36:DA:2052:G:C8	40:DE:141:ILE:HD11	2.47	0.50
43:BH:88:LEU:CD1	43:BH:130:ARG:HG2	2.42	0.50
1:CA:668:G:O2'	15:CO:46:HIS:HD2	1.95	0.50
52:DT:61:PHE:CE1	52:DT:76:PHE:HB2	2.47	0.50
36:BA:696:G:O2'	36:BA:697:C:H5'	2.11	0.50
36:DA:2081:C:H2'	36:DA:2082:A:H8	1.76	0.50
36:DA:1427:A:O2'	36:DA:1428:C:OP2	2.25	0.50
1:CA:264:U:H4'	17:CQ:63:ARG:HD3	1.94	0.50
36:DA:1908:C:H2'	36:DA:1909:C:H6	1.77	0.50
56:DX:70:LEU:HD23	56:DX:71:GLY:N	2.27	0.50
1:AA:323:U:H2'	1:AA:324:G:O4'	2.12	0.50
43:BH:109:PHE:CZ	43:BH:152:ARG:NH1	2.79	0.50
36:DA:1029:A:H2'	36:DA:1030:G:O4'	2.11	0.50
1:AA:264:U:H4'	17:AQ:63:ARG:HD3	1.94	0.50
36:DA:1688:U:H1'	36:DA:1701:A:C6	2.47	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:431:U:O2'	36:BA:432:A:H5'	2.12	0.50
28:B2:49:LYS:HZ2	28:B2:49:LYS:HB2	1.76	0.50
28:B2:48:HIS:CD2	28:B2:49:LYS:HG3	2.46	0.50
42:BG:43:LEU:H	42:BG:43:LEU:HD22	1.77	0.50
42:BG:72:ARG:CD	42:BG:86:MET:HA	2.42	0.50
13:AM:4:ILE:CG2	13:AM:5:ALA:N	2.68	0.50
46:BN:134:ARG:N	46:BN:135:PRO:HD3	2.27	0.50
22:AV:48:C:OP2	22:AV:48:C:H6	1.94	0.50
41:BF:188:ARG:HA	48:BP:7:ARG:HB2	1.93	0.50
1:AA:1270:C:H2'	1:AA:1271:G:C8	2.46	0.50
4:CD:98:GLU:HG2	4:CD:189:PRO:HG3	1.93	0.50
2:AB:142:LEU:HD23	2:AB:142:LEU:C	2.32	0.50
37:DB:42:C:O2'	37:DB:43:C:P	2.69	0.50
36:BA:2747:G:C2	36:BA:2756:U:C5	3.00	0.50
27:B1:79:GLY:O	27:B1:80:LEU:CG	2.55	0.50
48:BP:47:ASP:OD2	48:BP:50:ARG:HG2	2.11	0.50
36:DA:2314:C:O2'	36:DA:2315:G:H5'	2.11	0.50
5:AE:50:GLU:HB2	5:AE:53:LEU:CD1	2.35	0.50
1:CA:858:G:C8	1:CA:858:G:C5'	2.93	0.50
36:BA:2133:G:C5	36:BA:2157:G:N1	2.80	0.50
55:DW:29:LEU:CD1	55:DW:33:ARG:HD2	2.42	0.50
36:DA:271(F):C:O2'	36:DA:271(G):C:H5'	2.10	0.50
10:AJ:7:LYS:HB2	10:AJ:97:GLU:HB2	1.94	0.50
1:CA:453:A:O2'	1:CA:454:C:O4'	2.30	0.50
25:CZ:19:HIS:CD2	25:CZ:115:GLN:HB2	2.47	0.50
53:BU:83:LEU:CD1	53:BU:83:LEU:H	2.25	0.50
3:AC:11:ARG:O	3:AC:14:ILE:O	2.29	0.50
4:CD:150:GLU:C	4:CD:152:SER:H	2.13	0.50
4:AD:152:SER:C	4:AD:154:ASN:H	2.15	0.50
25:AZ:113:MET:HG3	25:AZ:114:PRO:CD	2.42	0.50
50:DR:55:ALA:HA	50:DR:80:PHE:CE2	2.46	0.50
36:BA:848:G:C4	36:BA:933:A:H8	2.30	0.50
36:DA:1459:G:N7	36:DA:1461:G:N3	2.60	0.50
3:CC:54:ARG:HG2	3:CC:55:VAL:N	2.26	0.50
39:BD:124:PRO:HG2	39:BD:129:ASN:ND2	2.27	0.50
36:BA:708:C:N4	36:BA:723:G:H1	2.06	0.50
57:BY:3:VAL:C	57:BY:5:MET:H	2.14	0.50
36:BA:17:G:H2'	36:BA:18:C:C6	2.47	0.50
3:CC:50:ALA:HB1	3:CC:70:VAL:HG13	1.93	0.50
36:DA:2562:U:H1'	47:DO:23:ARG:HH11	1.76	0.50
25:AZ:163:PHE:CD1	25:AZ:164:PRO:HD2	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:215:ARG:NH1	25:CZ:215:ARG:HG3	2.25	0.50
36:BA:2672:G:C3'	36:BA:2673:G:H5''	2.41	0.50
46:BN:12:ARG:O	46:BN:14:VAL:HG23	2.12	0.50
46:DN:12:ARG:O	46:DN:50:ASP:HB3	2.12	0.50
22:AV:1:G:C1'	26:B0:5:LYS:HZ1	2.24	0.50
44:DJ:14:UNK:C	44:DJ:16:UNK:N	2.75	0.50
36:DA:648:G:H2'	36:DA:649:G:C8	2.46	0.50
1:AA:865:A:H5'	1:AA:1078:U:O4	2.12	0.50
36:DA:2659:G:C3'	36:DA:2660:A:H5''	2.42	0.50
1:AA:245:C:O2'	1:AA:246:A:P	2.69	0.50
7:CG:43:PHE:O	7:CG:46:ALA:HB3	2.12	0.50
36:BA:576:U:H2'	36:BA:577:G:C8	2.46	0.50
6:AF:53:ALA:O	6:AF:54:LYS:HB2	2.11	0.50
6:AF:37:VAL:HG12	6:AF:38:GLU:O	2.12	0.50
25:CZ:223:MET:CB	25:CZ:242:ILE:HA	2.42	0.50
52:BT:48:ILE:C	52:BT:48:ILE:HD12	2.32	0.50
38:DC:127:LEU:O	38:DC:129:ARG:N	2.44	0.50
28:B2:63:VAL:HG12	28:B2:64:LEU:N	2.26	0.50
43:DH:83:TYR:CB	43:DH:135:GLY:N	2.75	0.50
42:BG:71:THR:HG22	42:BG:72:ARG:N	2.26	0.50
36:DA:558:G:OP2	46:DN:111:PRO:HD2	2.12	0.50
36:DA:1853:A:H2'	36:DA:1854:A:C8	2.47	0.50
58:BZ:150:LEU:CD2	58:BZ:171:ILE:HD11	2.42	0.50
36:BA:2182:G:O2'	36:BA:2183:C:H5'	2.12	0.50
42:DG:82:LEU:HD22	42:DG:87:PRO:HA	1.94	0.50
51:DS:65:VAL:O	51:DS:69:VAL:HG12	2.12	0.50
12:AL:17:LYS:HD3	12:AL:18:VAL:H	1.77	0.50
36:BA:272(H):C:C3'	36:BA:272(I):U:H5''	2.42	0.50
32:D6:52:VAL:HG12	32:D6:53:LYS:N	2.27	0.50
36:BA:2392:A:H2	36:BA:2424:C:N4	2.03	0.50
1:CA:1202:G:N2	14:CN:46:GLU:OE2	2.43	0.50
43:DH:42:ARG:HG2	43:DH:43:VAL:N	2.26	0.50
56:DX:52:VAL:O	56:DX:53:LYS:C	2.50	0.50
20:AT:91:LEU:O	20:AT:94:ALA:HB3	2.11	0.50
36:BA:1754:C:OP1	52:BT:96:ARG:NH1	2.42	0.50
3:CC:14:ILE:O	3:CC:16:ARG:N	2.45	0.50
1:AA:267:C:H2'	1:AA:268:C:C6	2.46	0.50
46:BN:51:PHE:CE1	46:BN:119:ARG:HD2	2.46	0.50
53:DU:90:VAL:CG1	53:DU:91:ASP:H	2.23	0.50
36:BA:1403:C:C2'	36:BA:1404:C:O5'	2.60	0.50
46:DN:57:ALA:O	46:DN:58:ASP:C	2.50	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1127:G:H1	1:AA:1145:C:N4	2.10	0.50
27:D1:72:GLU:HG3	27:D1:76:ARG:HH21	1.76	0.50
54:BV:5:VAL:CG2	54:BV:35:LEU:HD23	2.41	0.50
19:CS:40:ILE:HG23	19:CS:62:ILE:CD1	2.40	0.50
36:DA:1608:A:H1'	36:DA:1610:A:OP2	2.12	0.50
36:DA:481:G:H1'	36:DA:506:G:H21	1.77	0.50
13:CM:97:PRO:CA	13:CM:110:ARG:HD3	2.39	0.50
36:BA:914:C:C2'	36:BA:915:C:H5'	2.40	0.50
56:BX:24:GLY:O	56:BX:83:VAL:N	2.45	0.50
1:CA:1217:C:OP1	14:CN:9:LYS:HE3	2.12	0.50
39:DD:142:VAL:CG2	39:DD:191:ALA:HB1	2.42	0.50
52:DT:62:THR:HG22	52:DT:75:ILE:HG23	1.94	0.50
1:CA:186:C:O3'	20:CT:82:SER:HB3	2.12	0.50
25:CZ:344:PHE:O	61:CZ:502:KIR:H482	2.12	0.50
36:DA:2887:U:O2'	36:DA:2888:C:H5'	2.12	0.50
1:CA:501:C:OP1	12:CL:117:ARG:NH2	2.45	0.50
36:BA:2022:U:O2'	36:BA:2617:C:H5'	2.12	0.50
37:BB:112:U:H2'	37:BB:113:G:C8	2.45	0.50
36:DA:2247:A:O2'	36:DA:2248:C:H5'	2.12	0.50
36:BA:691:C:O2'	36:BA:692:C:H5'	2.11	0.50
29:B3:7:LYS:HE2	29:B3:32:GLN:OE1	2.12	0.50
1:CA:1497:G:C2'	1:CA:1498:U:H5'	2.42	0.50
1:AA:189(J):G:O2'	1:AA:189(K):U:H5'	2.11	0.50
1:CA:189(K):U:H2'	1:CA:189(L):G:C8	2.46	0.50
36:DA:2722:G:H2'	36:DA:2723:C:C6	2.46	0.50
1:CA:1452:C:H4'	1:CA:1456:G:C2	2.46	0.50
1:AA:1283:G:O2'	1:AA:1284:C:P	2.69	0.50
1:CA:1050:G:O2'	1:CA:1051:C:P	2.70	0.50
50:BR:74:LYS:CD	50:BR:77:ARG:HH11	2.24	0.50
1:AA:636:U:H2'	1:AA:637:G:C8	2.47	0.50
1:AA:557:G:H2'	1:AA:558:G:O4'	2.12	0.50
36:DA:271(U):G:O2'	36:DA:271(V):G:H5'	2.11	0.50
4:AD:106:TYR:HD2	4:AD:113:SER:O	1.95	0.50
41:BF:31:HIS:ND1	48:BP:13:ASN:HB2	2.27	0.50
42:DG:137:GLU:O	42:DG:140:ILE:HG23	2.11	0.50
1:CA:1150:U:C5	1:CA:1151:A:C5	3.00	0.49
28:B2:28:LYS:HZ2	28:B2:31:GLU:HG3	1.75	0.49
1:AA:1004:A:H5''	1:AA:1025:U:C2	2.47	0.49
36:DA:1536:C:H2'	36:DA:1537:G:H4'	1.94	0.49
36:BA:628:G:C3'	36:BA:629:G:H5''	2.41	0.49
46:DN:46:VAL:O	46:DN:47:ALA:CB	2.60	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:27:THR:HG23	52:BT:28:VAL:N	2.27	0.49
52:BT:83:ILE:HG13	52:BT:84:GLN:N	2.26	0.49
4:AD:111:ALA:HB2	4:AD:120:LEU:HD12	1.94	0.49
4:CD:190:ASP:O	4:CD:194:LEU:HD23	2.12	0.49
48:BP:112:LEU:HD13	48:BP:112:LEU:O	2.12	0.49
20:CT:92:LEU:C	20:CT:94:ALA:N	2.66	0.49
36:DA:2286:A:H4'	36:DA:2287:A:O4'	2.12	0.49
48:BP:34:GLY:O	48:BP:35:HIS:CB	2.60	0.49
4:CD:30:LYS:C	4:CD:32:ALA:N	2.62	0.49
36:BA:652:C:O2'	36:BA:653:A:O5'	2.29	0.49
36:DA:2415:G:H2'	36:DA:2416:C:C6	2.47	0.49
3:CC:25:GLY:O	3:CC:26:LYS:C	2.51	0.49
36:DA:863:A:O2'	36:DA:864:G:H5'	2.11	0.49
36:BA:1051:G:C4	36:BA:1052:C:N4	2.80	0.49
2:AB:44:LEU:HA	2:AB:47:THR:OG1	2.12	0.49
43:DH:103:LEU:CB	43:DH:123:PHE:HD2	2.19	0.49
42:DG:15:VAL:C	42:DG:17:PRO:HD2	2.33	0.49
52:DT:89:VAL:HG12	52:DT:91:ARG:HG3	1.93	0.49
41:BF:107:LYS:O	41:BF:110:LEU:N	2.44	0.49
36:BA:88:G:H5'	36:BA:89:G:OP2	2.11	0.49
36:DA:2685:G:N2	36:DA:2724:C:O2	2.44	0.49
36:DA:2690:C:H5	50:DR:14:SER:HG	1.59	0.49
16:CP:44:THR:O	16:CP:45:THR:CB	2.60	0.49
12:AL:117:ARG:O	12:AL:118:SER:C	2.51	0.49
39:BD:131:LEU:HB2	39:BD:136:ILE:CD1	2.42	0.49
6:AF:77:ARG:CG	6:AF:77:ARG:HH11	2.24	0.49
1:CA:337:C:H2'	1:CA:338:A:H8	1.78	0.49
36:DA:2791:C:H4'	36:DA:2792:G:O5'	2.12	0.49
55:DW:37:ARG:HG3	55:DW:37:ARG:NH1	2.27	0.49
8:AH:20:TYR:HE2	8:AH:76:PRO:HG2	1.77	0.49
36:DA:1999:C:H5''	36:DA:2723:C:O2'	2.11	0.49
1:AA:1050:G:O2'	1:AA:1051:C:C6	2.65	0.49
4:CD:43:HIS:O	4:CD:45:GLN:HG2	2.12	0.49
36:DA:405:U:H3'	36:DA:406:G:C5'	2.42	0.49
11:AK:115:PRO:C	11:AK:117:ASN:H	2.14	0.49
1:CA:152:A:N6	1:CA:170:U:C2	2.80	0.49
56:DX:41:ASN:O	56:DX:45:THR:HG23	2.12	0.49
50:DR:18:LEU:HD11	50:DR:22:ARG:CZ	2.42	0.49
53:BU:86:ALA:HB2	53:BU:116:ALA:HB2	1.94	0.49
36:BA:755:C:H2'	36:BA:756:C:C6	2.46	0.49
58:DZ:5:LEU:O	58:DZ:59:LEU:HA	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:99:VAL:HG23	3:AC:99:VAL:O	2.12	0.49
36:DA:122:G:H1	36:DA:129:C:H42	1.60	0.49
43:DH:85:LYS:HG2	43:DH:86:GLU:N	2.26	0.49
39:DD:34:VAL:CG2	39:DD:35:LYS:H	2.21	0.49
52:BT:78:LEU:O	52:BT:78:LEU:HD23	2.13	0.49
46:BN:10:GLU:CG	46:BN:11:PRO:HD2	2.42	0.49
1:AA:1481:U:H2'	1:AA:1482:G:C8	2.47	0.49
42:DG:46:ALA:O	42:DG:82:LEU:HD11	2.12	0.49
42:DG:79:ASN:O	42:DG:80:PHE:CB	2.59	0.49
25:CZ:355:LEU:HB2	25:CZ:356:PRO:HD2	1.94	0.49
49:DQ:12:GLN:CG	49:DQ:73:PRO:HD2	2.42	0.49
25:AZ:355:LEU:HB2	25:AZ:356:PRO:HD2	1.94	0.49
57:BY:86:ARG:HH22	57:BY:95:LYS:HE2	1.76	0.49
37:BB:8:U:O3'	51:BS:25:ARG:NH2	2.46	0.49
51:BS:92:TYR:O	51:BS:93:LYS:CB	2.60	0.49
2:CB:114:ARG:NH1	2:CB:118:LEU:HD21	2.26	0.49
36:DA:673:C:H5'	36:DA:673:C:C6	2.26	0.49
36:BA:1076:C:H5''	58:BZ:111:VAL:CG1	2.42	0.49
55:BW:6:ILE:HG12	55:BW:104:THR:CB	2.42	0.49
52:BT:106:SER:HA	52:BT:110:ILE:HG12	1.94	0.49
52:BT:109:GLU:O	52:BT:112:ARG:HG2	2.12	0.49
7:AG:118:VAL:CG2	7:AG:119:ARG:N	2.75	0.49
36:BA:2414:G:H21	48:BP:67:MET:HE1	1.75	0.49
41:DF:107:LYS:O	41:DF:110:LEU:N	2.44	0.49
36:DA:994:C:O2'	36:DA:996:A:OP1	2.30	0.49
36:DA:654(H):G:H2'	36:DA:654(I):C:C5'	2.38	0.49
36:BA:2887:U:O2'	36:BA:2888:C:H5'	2.12	0.49
3:AC:16:ARG:HH11	3:AC:16:ARG:CB	2.24	0.49
58:DZ:167:PRO:O	58:DZ:168:GLU:HB3	2.11	0.49
36:DA:2668:G:HO2'	36:DA:2669:G:H5'	1.77	0.49
1:CA:1317:C:H2'	1:CA:1318:A:O4'	2.11	0.49
37:DB:78:A:H2'	37:DB:79:C:O4'	2.12	0.49
51:BS:34:HIS:HB2	51:BS:36:TYR:HE1	1.76	0.49
13:AM:82:MET:CG	13:AM:83:ASP:H	2.25	0.49
46:BN:22:THR:HG22	46:BN:61:ARG:CB	2.40	0.49
34:B8:15:LYS:CB	48:BP:65:ARG:HH21	2.25	0.49
2:AB:162:ILE:O	2:AB:185:ILE:HG12	2.12	0.49
19:CS:18:LYS:O	19:CS:22:LEU:HB2	2.11	0.49
50:BR:55:ALA:HA	50:BR:80:PHE:CE2	2.47	0.49
17:AQ:18:THR:HG23	17:AQ:69:LYS:HE3	1.93	0.49
3:CC:58:GLU:HB2	3:CC:65:ALA:CB	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
56:BX:49:VAL:CG1	56:BX:87:GLN:HE21	2.24	0.49
36:DA:1222:C:H2'	36:DA:1223:G:C5'	2.42	0.49
6:AF:57:GLN:N	6:AF:57:GLN:HE21	2.10	0.49
1:CA:337:C:H2'	1:CA:338:A:C8	2.48	0.49
41:BF:53:THR:HG22	41:BF:56:GLU:HG3	1.93	0.49
36:BA:492:A:H2'	36:BA:493:G:O4'	2.12	0.49
20:CT:89:ARG:HD2	20:CT:104:LEU:HD11	1.94	0.49
1:AA:148:G:H2'	1:AA:149:A:H8	1.75	0.49
36:DA:2475:C:H5'	36:DA:2476:A:OP2	2.11	0.49
36:BA:2790:A:H2'	36:BA:2791:C:C5'	2.41	0.49
35:D9:19:ARG:O	35:D9:20:HIS:CB	2.60	0.49
46:BN:96:GLU:OE1	46:BN:96:GLU:N	2.41	0.49
1:AA:1423:G:OP1	47:BO:49:ARG:NH2	2.45	0.49
55:DW:65:LEU:HD23	55:DW:68:ARG:NE	2.27	0.49
36:DA:533:G:H5'	53:DU:24:TYR:CD1	2.47	0.49
39:DD:238:GLY:O	39:DD:239:ARG:O	2.30	0.49
25:CZ:341:GLN:HE22	25:CZ:390:GLU:HA	1.77	0.49
58:DZ:54:HIS:HB2	58:DZ:55:HIS:HD2	1.76	0.49
36:DA:2360:A:O2'	36:DA:2361:A:C5'	2.60	0.49
51:BS:65:VAL:O	51:BS:69:VAL:HG12	2.12	0.49
36:BA:57:C:O2'	36:BA:58:G:H5'	2.11	0.49
36:BA:2175:C:N3	36:BA:2176:A:N1	2.60	0.49
13:CM:73:GLU:O	13:CM:76:ALA:HB3	2.12	0.49
37:DB:54:G:H21	42:DG:29:TRP:HE1	1.61	0.49
1:AA:285:G:O2'	1:AA:286:G:H5'	2.13	0.49
1:CA:636:U:H5''	17:CQ:2:PRO:HG3	1.93	0.49
10:AJ:45:ARG:O	10:AJ:64:GLU:HA	2.12	0.49
25:CZ:9:LYS:HB3	25:CZ:75:ARG:HA	1.94	0.49
38:DC:63:SER:HA	38:DC:160:ARG:HA	1.94	0.49
48:DP:122:PRO:HB3	48:DP:141:ALA:CB	2.42	0.49
25:AZ:90:LYS:HB2	25:AZ:90:LYS:NZ	2.27	0.49
6:AF:40:VAL:O	6:AF:40:VAL:HG13	2.12	0.49
37:BB:93:G:H2'	37:BB:94:C:H6	1.76	0.49
1:AA:1446:U:O2'	1:AA:1447:A:H3'	2.12	0.49
8:AH:23:SER:HA	8:AH:63:LEU:HD22	1.93	0.49
36:DA:1773:A:C2'	36:DA:1774:C:H5'	2.42	0.49
52:DT:30:VAL:O	52:DT:31:SER:HB3	2.12	0.49
43:BH:83:TYR:CB	43:BH:135:GLY:N	2.75	0.49
36:BA:1539:G:H2'	36:BA:1540:U:O4'	2.11	0.49
9:AI:85:LEU:HD12	9:AI:86:VAL:N	2.28	0.49
1:CA:1330:U:H3'	1:CA:1331:G:O4'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:23:TYR:HE2	13:CM:70:LEU:HD22	1.75	0.49
22:AW:71:G:O2'	36:BA:1851:U:H1'	2.12	0.49
36:BA:654(O):G:H2'	36:BA:654(P):C:C5	2.47	0.49
10:CJ:55:LYS:NZ	10:CJ:55:LYS:CA	2.76	0.49
42:DG:138:GLN:HE21	42:DG:144:ILE:HD12	1.76	0.49
32:D6:48:VAL:O	32:D6:49:HIS:O	2.30	0.49
10:CJ:57:LYS:NZ	10:CJ:60:ARG:HH22	2.10	0.49
5:AE:11:ILE:HB	5:AE:31:LEU:HB3	1.94	0.49
51:DS:98:VAL:HG12	51:DS:99:LYS:N	2.27	0.49
51:BS:98:VAL:HG12	51:BS:99:LYS:N	2.25	0.49
2:CB:114:ARG:NH1	2:CB:118:LEU:HG	2.26	0.49
41:DF:7:TYR:HD2	41:DF:16:GLY:HA3	1.76	0.49
51:BS:74:ALA:CB	51:BS:103:GLU:HG2	2.42	0.49
48:DP:34:GLY:O	48:DP:35:HIS:CB	2.60	0.49
4:CD:31:CYS:O	4:CD:32:ALA:HB3	2.12	0.49
30:D4:9:LEU:HD13	30:D4:26:SER:O	2.13	0.49
36:DA:1515:G:H2'	36:DA:1516:C:C6	2.47	0.49
36:DA:2134:A:H61	36:DA:2157:G:H1'	1.74	0.49
25:AZ:122:LEU:O	25:AZ:122:LEU:HD13	2.12	0.49
55:BW:12:ILE:HB	55:BW:42:ARG:HH12	1.76	0.49
55:BW:17:VAL:O	55:BW:19:LEU:N	2.44	0.49
31:D5:40:LYS:HG2	31:D5:46:CYS:CB	2.41	0.49
36:DA:2787:C:H1'	40:DE:61:ARG:CD	2.38	0.49
36:BA:994:C:O2'	36:BA:996:A:OP1	2.31	0.49
42:DG:101:ILE:O	42:DG:104:GLU:HB3	2.12	0.49
46:DN:34:LEU:C	46:DN:34:LEU:HD13	2.32	0.49
14:AN:39:LEU:HD11	14:AN:47:LEU:HD12	1.94	0.49
36:BA:1012:U:C5	46:BN:28:THR:HG21	2.47	0.49
34:B8:50:LEU:C	34:B8:52:LYS:N	2.63	0.49
36:BA:1664:A:H1'	36:BA:2726:U:C5	2.48	0.49
54:DV:52:VAL:O	54:DV:52:VAL:HG22	2.11	0.49
13:AM:7:VAL:O	13:AM:9:ILE:HG13	2.11	0.49
2:AB:33:TYR:HB3	2:AB:41:ILE:HG22	1.93	0.49
43:BH:35:VAL:HG13	43:BH:71:LEU:HD22	1.93	0.49
8:CH:46:LYS:HG3	8:CH:64:LYS:HB2	1.94	0.49
43:DH:35:VAL:HG13	43:DH:71:LEU:HD22	1.93	0.49
36:BA:1459:G:N7	36:BA:1461:G:N3	2.60	0.49
19:AS:16:LEU:H	19:AS:16:LEU:CD1	2.24	0.49
1:CA:1229:A:OP2	13:CM:114:ARG:HD3	2.12	0.49
57:DY:41:GLY:O	57:DY:42:VAL:O	2.30	0.49
39:DD:176:ARG:NH1	39:DD:176:ARG:HG2	2.26	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CV:44:G:H3'	22:CV:45:U:H5'	1.93	0.49
36:DA:2199:A:H5'	36:DA:2200:C:OP2	2.13	0.49
55:DW:68:ARG:O	55:DW:109:GLU:HA	2.12	0.49
7:AG:137:LYS:O	7:AG:140:ASP:N	2.45	0.49
25:AZ:107:SER:HB2	25:AZ:137:LYS:HD2	1.94	0.49
36:BA:465:G:H2'	36:BA:466:A:C8	2.46	0.49
36:BA:380:U:H2'	36:BA:381:G:H8	1.76	0.49
36:DA:1651:G:H2'	36:DA:1652:A:O4'	2.12	0.49
1:CA:1262:C:H2'	1:CA:1263:C:H6	1.77	0.49
36:BA:2722:G:H2'	36:BA:2723:C:C6	2.48	0.49
1:CA:636:U:H2'	1:CA:637:G:C8	2.47	0.49
48:DP:122:PRO:HA	48:DP:141:ALA:O	2.12	0.49
1:AA:333:G:O2'	1:AA:334:C:H5'	2.11	0.49
36:DA:1316:U:O2'	36:DA:1317:A:H5'	2.13	0.49
28:D2:9:GLN:HG2	28:D2:56:GLN:NE2	2.27	0.49
36:DA:1149:G:H2'	36:DA:1150:C:C6	2.46	0.49
36:DA:977:G:C6	36:DA:987:G:C6	3.01	0.49
36:DA:1713:U:O2'	36:DA:1714:G:H5'	2.13	0.49
13:AM:35:GLU:C	13:AM:37:THR:H	2.15	0.49
33:D7:32:LYS:O	33:D7:36:GLN:HB2	2.12	0.49
36:BA:1034:G:H2'	36:BA:1035:U:O4'	2.11	0.49
20:AT:83:ARG:O	20:AT:87:LYS:HB2	2.12	0.49
36:DA:2033:A:O2'	36:DA:2034:U:P	2.70	0.49
2:CB:221:LEU:O	2:CB:221:LEU:HD13	2.12	0.49
36:BA:1790:C:H5'	36:BA:1791:A:OP1	2.12	0.49
1:AA:349:A:O2'	1:AA:350:G:H5'	2.12	0.49
1:CA:779:C:H2'	1:CA:780:A:O4'	2.11	0.49
13:AM:16:ASP:HA	13:AM:34:LEU:HD11	1.94	0.49
1:CA:1152:A:H2'	1:CA:1153:C:C6	2.47	0.49
28:B2:43:GLN:O	28:B2:45:SER:N	2.45	0.49
39:DD:30:GLU:CA	39:DD:35:LYS:HZ2	2.25	0.49
56:DX:40:LYS:HB2	56:DX:54:VAL:CG2	2.38	0.49
22:AW:5:G:N2	22:AW:69:G:C5	2.80	0.49
32:B6:29:ASN:O	32:B6:30:THR:C	2.50	0.49
9:AI:53:VAL:H	9:AI:95:LYS:NZ	2.09	0.49
48:DP:10:PRO:O	48:DP:11:GLY:O	2.31	0.49
1:AA:1483:A:H2'	1:AA:1484:C:O4'	2.12	0.49
39:DD:70:TRP:HZ3	39:DD:146:GLU:OE2	1.95	0.49
36:BA:1853:A:H2'	36:BA:1854:A:C8	2.47	0.49
36:BA:2392:A:H1'	48:BP:60:MET:HB3	1.94	0.49
4:CD:173:TRP:CD1	4:CD:174:LEU:HG	2.46	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1202:G:C2	14:CN:42:ILE:HG21	2.47	0.49
2:AB:166:ASP:HB3	2:AB:169:LYS:HB2	1.94	0.49
55:DW:6:ILE:HG12	55:DW:104:THR:HB	1.93	0.49
2:AB:238:LEU:HD23	2:AB:239:VAL:H	1.77	0.49
1:CA:1320:C:H6	1:CA:1320:C:C5'	2.18	0.49
25:AZ:31:LEU:HD23	25:AZ:199:ILE:HG23	1.95	0.49
36:BA:332:A:H4'	36:BA:333:G:OP1	2.12	0.49
15:AO:87:ILE:CG2	15:AO:88:ARG:H	2.17	0.49
25:CZ:30:ALA:O	25:CZ:34:VAL:HG23	2.12	0.49
42:BG:121:ASN:ND2	42:BG:123:ASN:H	2.09	0.49
1:AA:1190:G:OP1	3:AC:5:ILE:N	2.44	0.49
22:CW:57:G:H2'	22:CW:58:A:C5'	2.41	0.49
1:AA:424:G:H2'	1:AA:425:G:C8	2.37	0.49
51:DS:34:HIS:HB2	51:DS:36:TYR:HE1	1.76	0.49
36:BA:301:G:H1'	36:BA:302:C:C6	2.47	0.49
7:CG:144:MET:C	7:CG:145:ALA:O	2.50	0.49
3:AC:52:LEU:CD2	3:AC:52:LEU:H	2.23	0.49
49:BQ:66:ILE:HD12	49:BQ:66:ILE:C	2.33	0.49
58:DZ:9:TYR:OH	58:DZ:35:ARG:HG3	2.13	0.49
57:DY:64:GLU:O	57:DY:65:ALA:HB2	2.12	0.49
46:DN:1:MET:HE1	46:DN:2:LYS:C	2.32	0.49
5:CE:107:ARG:HH11	5:CE:107:ARG:HG2	1.77	0.49
36:BA:559:G:N2	53:BU:49:HIS:CD2	2.80	0.49
17:CQ:59:ILE:CG2	17:CQ:71:PHE:HB3	2.40	0.49
1:CA:502:G:OP1	12:CL:118:SER:HB3	2.12	0.49
2:CB:178:ARG:HH11	2:CB:178:ARG:CG	2.25	0.49
2:AB:189:ASP:O	2:AB:191:ASP:N	2.45	0.49
17:AQ:27:PHE:CE2	17:AQ:36:ILE:HD11	2.47	0.49
38:BC:40:THR:HA	38:BC:177:LYS:HA	1.94	0.49
3:AC:23:TYR:CD1	3:AC:23:TYR:C	2.86	0.49
30:B4:15:ILE:HD13	30:B4:21:VAL:HG13	1.94	0.49
2:AB:97:TRP:HZ2	2:AB:102:LEU:HD13	1.76	0.49
36:DA:753:C:H2'	36:DA:754:C:H6	1.78	0.49
26:D0:47:PRO:HG3	26:D0:53:MET:HB2	1.94	0.49
36:DA:2330:G:O2'	36:DA:2331:G:H5'	2.12	0.49
25:AZ:330:ARG:HH21	25:AZ:332:THR:HG1	1.60	0.49
58:DZ:54:HIS:CG	58:DZ:101:PRO:HD3	2.48	0.49
36:DA:2001:A:H2'	36:DA:2002:G:C8	2.47	0.49
36:BA:1360:A:H5'	36:BA:1361:G:OP2	2.12	0.49
1:AA:983:A:O2'	1:AA:1050:G:OP2	2.30	0.49
10:CJ:47:PHE:CE2	14:CN:37:PHE:HE2	2.30	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:328:C:H2'	1:CA:328:C:O2	2.11	0.49
43:DH:152:ARG:NH1	43:DH:152:ARG:HG3	2.26	0.49
36:DA:271(V):G:H2'	36:DA:271(W):G:O4'	2.13	0.49
1:CA:603:U:H2'	1:CA:604:G:C8	2.47	0.49
36:BA:21:A:O2'	36:BA:22:C:H5'	2.12	0.49
36:DA:473:G:P	36:DA:508:G:H22	2.36	0.49
36:BA:634:C:H2'	36:BA:635:C:C6	2.48	0.49
36:BA:645:C:H5'	36:BA:646:A:OP2	2.13	0.49
11:CK:12:ARG:HG2	11:CK:13:GLN:N	2.27	0.49
36:DA:755:C:H2'	36:DA:756:C:C6	2.48	0.49
18:CR:52:PRO:O	18:CR:56:THR:HG23	2.12	0.49
36:DA:633:A:H2'	36:DA:634:C:H5'	1.94	0.49
44:BJ:74:UNK:O	44:BJ:76:UNK:N	2.45	0.49
36:DA:2175:C:N3	36:DA:2176:A:N1	2.61	0.49
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.12	0.49
30:B4:45:GLY:O	30:B4:46:GLN:HB2	2.12	0.49
1:CA:399:G:H2'	1:CA:400:C:C6	2.47	0.49
16:AP:52:ASP:OD2	16:AP:55:ARG:HG3	2.13	0.49
24:CY:20:H2U:H4'	24:CY:21:A:O5'	2.12	0.49
11:AK:12:ARG:HG2	11:AK:13:GLN:N	2.27	0.49
1:CA:1057:G:H2'	1:CA:1058:G:O4'	2.12	0.49
1:AA:1153:C:O2'	1:AA:1154:G:C5'	2.60	0.49
36:BA:2543:G:H2'	36:BA:2544:G:C8	2.48	0.49
1:CA:228:A:H2'	1:CA:229:U:O4'	2.13	0.49
52:DT:27:THR:HG22	52:DT:49:VAL:HB	1.93	0.49
28:B2:29:LYS:HA	28:B2:57:ILE:HD12	1.93	0.49
43:DH:85:LYS:HE3	43:DH:85:LYS:C	2.32	0.49
30:B4:5:ILE:O	30:B4:5:ILE:CG1	2.61	0.49
32:D6:29:ASN:O	32:D6:30:THR:C	2.50	0.49
52:BT:29:ARG:HB3	52:BT:85:LYS:HA	1.92	0.49
24:CY:2:G:O2'	24:CY:3:G:H5''	2.11	0.49
32:D6:52:VAL:HG12	32:D6:53:LYS:HD3	1.94	0.49
5:CE:76:ILE:CG1	5:CE:77:PRO:HD2	2.43	0.49
34:B8:36:LYS:HE3	34:B8:40:GLU:OE2	2.12	0.49
37:BB:50:G:OP2	51:BS:62:LYS:HB2	2.12	0.49
36:DA:323:G:H2'	41:DF:169:ASN:HD21	1.78	0.49
4:CD:20:TYR:HA	4:CD:26:CYS:SG	2.52	0.49
51:DS:74:ALA:CB	51:DS:103:GLU:HG2	2.40	0.49
1:CA:1238:A:C2	1:CA:1301:U:N3	2.58	0.49
25:AZ:27:LEU:C	25:AZ:27:LEU:HD12	2.33	0.49
47:DO:111:PHE:O	47:DO:115:VAL:HG23	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BU:90:VAL:CG1	53:BU:91:ASP:H	2.21	0.49
25:CZ:134:PHE:CG	25:CZ:202:LEU:HD22	2.48	0.49
25:CZ:130:TYR:CD2	25:CZ:211:PRO:HD2	2.47	0.49
28:D2:52:ASP:O	28:D2:55:ARG:N	2.45	0.49
49:BQ:56:ARG:CG	49:BQ:56:ARG:NH1	2.63	0.49
1:AA:542:G:H5'	4:AD:41:GLY:HA2	1.93	0.49
1:CA:1190:G:OP1	3:CC:5:ILE:N	2.42	0.49
51:DS:53:SER:C	51:DS:55:ALA:H	2.14	0.49
54:DV:38:LEU:HD23	54:DV:38:LEU:C	2.33	0.49
13:AM:94:ARG:NH2	36:BA:887:A:H5''	2.27	0.49
58:DZ:17:ALA:O	58:DZ:20:ARG:HG2	2.11	0.49
36:DA:2822:G:O6	50:DR:4:LEU:HD23	2.11	0.49
36:BA:1168:G:H2'	36:BA:1169:G:C8	2.46	0.49
36:BA:2822:G:O6	50:BR:4:LEU:HD23	2.12	0.49
6:AF:8:ILE:HG23	6:AF:85:VAL:HG13	1.95	0.49
41:DF:53:THR:HG22	41:DF:56:GLU:HG3	1.95	0.49
2:AB:61:LEU:HD23	2:AB:61:LEU:C	2.33	0.49
3:CC:51:GLY:O	3:CC:115:LEU:HD21	2.13	0.49
52:DT:62:THR:HA	52:DT:74:ARG:O	2.12	0.49
36:DA:2777:G:C4'	36:DA:2778:A:H5'	2.43	0.49
1:AA:337:C:H2'	1:AA:338:A:C8	2.47	0.49
1:AA:426:G:H2'	1:AA:427:U:C6	2.48	0.49
2:CB:101:MET:C	2:CB:102:LEU:HD12	2.33	0.49
47:BO:98:VAL:HG11	47:BO:118:ALA:N	2.27	0.49
36:BA:222:A:H5''	36:BA:421:U:OP1	2.13	0.49
36:BA:1064:C:H4'	45:BK:87:UNK:CB	2.42	0.49
36:DA:68:G:H2'	36:DA:69:C:C6	2.47	0.49
46:DN:14:VAL:CG1	46:DN:137:LYS:HG3	2.43	0.49
47:BO:11:ALA:HB1	47:BO:99:PHE:O	2.13	0.49
56:DX:33:LYS:CA	56:DX:33:LYS:HE2	2.42	0.49
36:DA:2687:U:C4	36:DA:2688:U:C5	3.00	0.49
40:BE:68:ALA:C	40:BE:70:ALA:H	2.16	0.49
25:CZ:311:THR:HB	25:CZ:312:PRO:HD2	1.95	0.49
25:AZ:330:ARG:HH12	25:AZ:334:PHE:HB3	1.77	0.49
25:AZ:219:LYS:HB2	25:AZ:244:ARG:HB2	1.95	0.49
36:DA:536:A:H2'	36:DA:537:C:C6	2.47	0.49
36:DA:1290:C:H2'	36:DA:1291:C:C6	2.48	0.49
1:CA:636:U:H2'	1:CA:637:G:H8	1.77	0.49
1:CA:603:U:H2'	1:CA:604:G:H8	1.78	0.49
36:BA:2659:G:C3'	36:BA:2660:A:H5''	2.42	0.49
36:BA:751:A:H5'	55:BW:90:ARG:HA	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:DQ:1:MET:O	49:DQ:2:LEU:CB	2.60	0.49
36:BA:947:G:H2'	36:BA:948:G:C8	2.47	0.49
8:CH:108:GLY:HA3	8:CH:138:TRP:HB3	1.94	0.49
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.47	0.49
1:AA:1261:A:C2'	1:AA:1262:C:H5'	2.42	0.49
1:CA:792:A:H4'	1:CA:793:U:O5'	2.12	0.49
56:DX:12:VAL:CG2	56:DX:13:LEU:N	2.61	0.49
42:BG:73:ALA:H	42:BG:87:PRO:HD2	1.77	0.49
42:DG:52:ILE:HG12	42:DG:53:LEU:N	2.26	0.49
36:DA:272(H):C:C3'	36:DA:272(I):U:H5''	2.43	0.49
57:BY:73:ARG:HE	57:BY:73:ARG:HA	1.78	0.49
4:AD:127:THR:HG23	4:AD:130:GLY:O	2.11	0.49
32:B6:25:LYS:HE3	34:B8:35:GLN:OE1	2.13	0.49
32:B6:15:GLU:HG2	32:B6:18:ARG:HH12	1.75	0.49
36:DA:1499:C:C2'	36:DA:1500:G:H5'	2.41	0.49
42:DG:125:PHE:HB2	42:DG:130:ASN:O	2.13	0.49
51:DS:74:ALA:HB2	51:DS:101:LEU:HD13	1.95	0.49
51:BS:106:ARG:CG	51:BS:106:ARG:HH11	2.24	0.49
7:AG:115:ARG:O	7:AG:118:VAL:HG22	2.13	0.49
49:DQ:133:ARG:HB2	49:DQ:133:ARG:NH1	2.17	0.49
42:BG:165:THR:HG1	42:BG:168:GLU:HG3	1.72	0.49
25:CZ:263:ARG:NH2	25:CZ:297:GLU:HG2	2.16	0.49
36:DA:2464:C:O2'	36:DA:2465:C:O5'	2.31	0.49
55:DW:17:VAL:O	55:DW:19:LEU:N	2.45	0.49
25:AZ:5:PHE:C	25:AZ:5:PHE:CD1	2.85	0.49
52:DT:106:SER:HA	52:DT:110:ILE:HG12	1.93	0.49
36:BA:143:G:H4'	56:BX:35:THR:HG21	1.94	0.49
36:DA:733:G:C8	36:DA:761:A:N1	2.80	0.49
1:AA:1442(B):A:C2	52:BT:118:ARG:NH2	2.80	0.49
54:DV:5:VAL:CG2	54:DV:35:LEU:HD23	2.43	0.49
36:DA:848:G:C8	36:DA:848:G:H5'	2.46	0.49
1:CA:1286:A:O2'	1:CA:1287:A:OP2	2.29	0.49
54:DV:38:LEU:O	54:DV:52:VAL:HG12	2.12	0.49
22:AW:39:U:O2	22:AW:39:U:H5'	2.12	0.49
36:DA:1862:G:O2'	36:DA:1863:G:H5'	2.12	0.49
25:CZ:222:LEU:CD1	25:CZ:303:VAL:HB	2.42	0.49
36:DA:1039:G:H1	36:DA:1116:C:N4	2.04	0.49
50:BR:86:ARG:HB3	50:BR:118:GLU:OE2	2.12	0.49
24:AY:41:C:H2'	24:AY:42:G:O4'	2.13	0.49
14:CN:57:ARG:NH1	14:CN:57:ARG:CB	2.75	0.49
1:CA:1488:G:H2'	1:CA:1489:G:H8	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:404:LEU:HD22	25:AZ:404:LEU:H	1.77	0.49
25:AZ:215:ARG:NH1	25:AZ:215:ARG:HG3	2.28	0.49
4:CD:75:PHE:CE1	4:CD:93:PHE:HZ	2.29	0.49
40:DE:9:VAL:HG13	40:DE:25:VAL:HB	1.94	0.49
36:BA:2241:A:H2'	36:BA:2242:G:C8	2.47	0.49
58:DZ:11:GLU:OE1	58:DZ:13:GLU:N	2.41	0.49
36:DA:39:C:O2'	36:DA:40:C:H5'	2.13	0.49
17:CQ:86:GLU:O	17:CQ:90:ILE:HG12	2.12	0.49
4:CD:45:GLN:O	4:CD:46:LYS:HG2	2.13	0.49
47:DO:9:GLU:O	47:DO:83:ALA:HA	2.12	0.49
33:D7:4:THR:CG2	36:DA:788:A:H1'	2.43	0.49
36:DA:315:G:H2'	36:DA:316:C:C6	2.48	0.49
1:CA:349:A:O2'	1:CA:350:G:H5'	2.12	0.49
1:CA:41:G:H2'	1:CA:42:G:C8	2.47	0.49
25:AZ:249:VAL:HG13	25:AZ:268:THR:HA	1.94	0.49
41:DF:82:ILE:O	41:DF:83:PHE:HB2	2.13	0.49
12:CL:79:GLU:O	12:CL:79:GLU:HG2	2.13	0.49
58:DZ:156:LYS:O	58:DZ:156:LYS:HG2	2.11	0.49
12:AL:79:GLU:HG2	12:AL:79:GLU:O	2.11	0.49
28:B2:41:ILE:HD11	28:B2:44:LEU:CD1	2.43	0.49
58:BZ:67:LEU:HD23	58:BZ:90:VAL:CG1	2.40	0.49
40:DE:87:GLU:OE1	40:DE:89:ASP:N	2.46	0.49
22:AW:6:G:O2'	22:AW:7:A:H5'	2.13	0.49
32:B6:30:THR:O	32:B6:32:ASN:N	2.46	0.49
9:AI:95:LYS:HG3	9:AI:96:LEU:CD1	2.39	0.49
13:AM:4:ILE:CG2	13:AM:5:ALA:H	2.15	0.49
13:AM:4:ILE:O	13:AM:5:ALA:C	2.51	0.49
41:BF:167:ALA:HA	41:BF:170:LEU:HD23	1.95	0.49
51:DS:54:LEU:HD21	51:DS:58:LEU:O	2.13	0.49
34:B8:13:ARG:CD	48:BP:61:ARG:HD2	2.32	0.49
48:BP:61:ARG:O	48:BP:62:LEU:CB	2.60	0.49
4:CD:102:ASP:OD2	4:CD:136:PRO:HB3	2.12	0.49
36:DA:610:G:H2'	36:DA:611:C:C6	2.48	0.49
43:BH:50:VAL:HG12	43:BH:52:VAL:HG23	1.95	0.49
51:BS:12:PHE:HD1	51:BS:13:ARG:N	2.10	0.49
43:DH:19:VAL:CG1	43:DH:20:ALA:H	2.15	0.49
48:DP:84:ASN:ND2	48:DP:84:ASN:N	2.59	0.49
49:DQ:27:VAL:HG21	49:DQ:134:ARG:HG3	1.94	0.49
42:DG:114:ILE:HG12	42:DG:114:ILE:O	2.13	0.49
48:DP:16:ARG:NE	48:DP:18:ARG:HG2	2.28	0.49
35:D9:7:VAL:CG1	35:D9:34:GLN:HG2	2.37	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:D9:7:VAL:HG21	35:D9:36:GLN:H	1.78	0.49
46:DN:51:PHE:CE1	46:DN:119:ARG:HD2	2.47	0.49
46:BN:19:GLU:O	46:BN:59:LYS:HB3	2.13	0.49
4:CD:162:LEU:HG	4:CD:181:MET:HE3	1.94	0.49
55:BW:107:LEU:N	55:BW:107:LEU:HD12	2.22	0.49
1:CA:1286:A:H1'	1:CA:1287:A:H4'	1.95	0.49
34:D8:15:LYS:CB	48:DP:65:ARG:HH21	2.24	0.49
58:DZ:141:VAL:CG1	58:DZ:144:LEU:HG	2.43	0.49
10:CJ:3:LYS:O	10:CJ:100:THR:HA	2.12	0.49
43:BH:35:VAL:HG21	43:BH:75:ALA:HB2	1.94	0.49
50:BR:79:LEU:HA	50:BR:83:ILE:CG1	2.43	0.49
43:DH:65:HIS:O	43:DH:67:LEU:N	2.42	0.49
36:DA:2491:U:H4'	36:DA:2570:G:OP1	2.12	0.49
40:BE:105:THR:HG21	40:BE:164:ARG:HH12	1.76	0.49
1:CA:1228:C:OP1	13:CM:108:ARG:NH2	2.46	0.49
40:BE:46:ALA:HB2	40:BE:82:ARG:HA	1.95	0.49
52:BT:62:THR:HG22	52:BT:75:ILE:HG23	1.94	0.49
36:BA:2206:G:N2	36:BA:2207:G:C5'	2.76	0.49
28:D2:47:ASN:ND2	36:DA:94(A):G:H21	2.11	0.49
18:CR:26:LEU:HD21	18:CR:39:VAL:HG13	1.95	0.49
25:CZ:300:ARG:HH11	25:CZ:300:ARG:HG2	1.78	0.49
42:BG:91:ARG:C	42:BG:91:ARG:HD2	2.33	0.49
1:CA:735:C:O2'	1:CA:736:C:H5'	2.12	0.49
12:CL:50:SER:O	12:CL:51:ALA:HB2	2.13	0.49
30:B4:18:CYS:SG	30:B4:19:GLY:N	2.85	0.49
36:BA:1582:C:O2'	36:BA:1586:A:C8	2.64	0.49
1:CA:1497:G:H2'	1:CA:1498:U:H5'	1.95	0.49
40:DE:132:HIS:ND1	40:DE:132:HIS:O	2.45	0.49
1:AA:189(K):U:H2'	1:AA:189(L):G:C8	2.48	0.49
36:BA:1427:A:H4'	36:BA:1428:C:O5'	2.13	0.49
4:AD:43:HIS:O	4:AD:45:GLN:HG2	2.12	0.49
36:BA:39:C:H2'	36:BA:40:C:H6	1.78	0.49
8:CH:30:ARG:HH11	8:CH:30:ARG:HB2	1.77	0.49
36:DA:1290:C:H2'	36:DA:1291:C:H6	1.77	0.49
36:BA:904:C:H2'	36:BA:905:U:C6	2.47	0.49
39:DD:264:LYS:HG2	39:DD:266:SER:HB3	1.92	0.49
36:DA:253:C:H2'	36:DA:254:G:O4'	2.12	0.49
1:AA:603:U:H2'	1:AA:604:G:C8	2.47	0.49
9:CI:10:ARG:HG3	9:CI:10:ARG:HH11	1.76	0.49
42:BG:47:LYS:HZ1	42:BG:88:ILE:HD11	1.75	0.49
34:B8:10:ALA:CB	34:B8:60:LEU:HD21	2.43	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:75:ILE:HG21	39:BD:99:ASP:HB3	1.93	0.49
41:BF:160:ASN:HD22	41:BF:160:ASN:C	2.16	0.49
52:BT:28:VAL:HG23	52:BT:47:GLY:O	2.13	0.49
42:DG:53:LEU:N	42:DG:53:LEU:HD22	2.27	0.49
38:BC:27:ARG:NE	38:BC:182:PRO:CG	2.74	0.49
48:BP:147:LEU:CG	48:BP:148:LEU:N	2.70	0.49
36:DA:1884:A:C3'	36:DA:1885:A:H5''	2.41	0.49
37:DB:49:C:H2'	37:DB:50:G:C8	2.48	0.49
48:DP:45:LEU:HD12	48:DP:46:LYS:H	1.78	0.49
1:AA:1268:A:H2'	1:AA:1269:A:C8	2.48	0.49
36:BA:1076:C:O3'	58:BZ:111:VAL:HG11	2.12	0.49
58:BZ:111:VAL:HG12	58:BZ:112:ARG:N	2.26	0.49
36:DA:2747:G:C2	36:DA:2756:U:C5	3.00	0.49
4:AD:18:LYS:HE3	4:AD:31:CYS:CB	2.43	0.49
4:AD:19:LEU:HD23	4:AD:67:ILE:HD12	1.93	0.49
13:AM:12:ASN:ND2	13:AM:12:ASN:N	2.59	0.49
36:DA:1403:C:C2'	36:DA:1404:C:O5'	2.61	0.49
55:BW:36:LEU:HD11	55:BW:47:VAL:HG12	1.95	0.49
53:DU:83:LEU:H	53:DU:83:LEU:CD1	2.26	0.49
36:BA:142:A:H8	36:BA:1595:G:H21	1.60	0.49
41:BF:155:LEU:HD23	41:BF:192:LEU:HD12	1.93	0.49
36:DA:301:G:H1'	36:DA:302:C:C6	2.48	0.49
49:BQ:14:ARG:HG2	49:BQ:41:TRP:HH2	1.78	0.49
58:DZ:139:VAL:O	58:DZ:140:ASP:HB3	2.13	0.49
37:BB:65:C:C2'	37:BB:66:A:H5'	2.43	0.49
1:AA:723:U:C4	1:AA:1537:U:H2'	2.47	0.49
49:BQ:25:ASP:HA	49:BQ:100:GLY:O	2.12	0.49
36:BA:17:G:H4'	53:BU:25:TRP:CH2	2.48	0.49
17:AQ:21:VAL:HG21	17:AQ:59:ILE:HD11	1.95	0.49
1:AA:484:G:H4'	1:AA:485:G:O5'	2.13	0.49
27:B1:30:VAL:H	36:BA:2396:G:H4'	1.77	0.49
6:CF:77:ARG:CG	6:CF:77:ARG:HH11	2.26	0.49
54:DV:82:ARG:HH11	54:DV:82:ARG:HG2	1.78	0.49
36:DA:2023:G:H4'	36:DA:2617:C:O3'	2.12	0.49
36:DA:824:A:H1'	36:DA:2358:G:N7	2.28	0.49
36:DA:753:C:O2'	36:DA:754:C:H5'	2.13	0.49
29:D3:3:ARG:HG2	29:D3:38:GLU:OE2	2.12	0.49
5:CE:6:PHE:HB2	5:CE:34:VAL:HG22	1.94	0.49
25:AZ:314:THR:HG23	25:AZ:374:LEU:O	2.13	0.49
36:BA:753:C:H2'	36:BA:754:C:H6	1.78	0.49
4:AD:110:PHE:N	4:AD:110:PHE:HD1	2.10	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:38:GLU:O	6:CF:39:LYS:O	2.30	0.49
1:CA:718:G:H5'	11:CK:117:ASN:OD1	2.13	0.49
8:CH:30:ARG:CB	8:CH:30:ARG:NH1	2.76	0.49
36:BA:979:G:H3'	36:BA:980:A:C5'	2.42	0.49
1:AA:373:A:O2'	1:AA:374:A:H5'	2.12	0.49
43:DH:37:VAL:HG12	43:DH:38:SER:N	2.26	0.49
1:CA:141:A:H1'	1:CA:182:U:O2	2.12	0.49
39:BD:6:PHE:CE1	39:BD:18:VAL:HG12	2.48	0.49
36:DA:2383:G:O2'	36:DA:2384:G:H5'	2.13	0.49
41:DF:199:TRP:HZ3	41:DF:203:GLN:OE1	1.96	0.49
36:DA:572:A:H5''	36:DA:573:G:OP2	2.13	0.49
36:DA:573:G:O2'	36:DA:574:C:H3'	2.12	0.49
25:AZ:155:ARG:O	25:AZ:159:ASN:ND2	2.46	0.49
1:CA:1095:U:P	1:CA:1108:G:H1	2.36	0.49
49:DQ:64:ILE:HG22	49:DQ:65:PHE:N	2.28	0.49
53:BU:99:ALA:HB2	53:BU:106:PHE:CE1	2.47	0.49
9:AI:128:ARG:H	9:AI:128:ARG:HD2	1.77	0.49
45:DK:59:UNK:HA	45:DK:64:UNK:O	2.13	0.49
55:BW:55:ALA:C	55:BW:57:ASN:H	2.15	0.49
2:AB:168:THR:CG2	2:AB:192:SER:HA	2.43	0.49
20:CT:83:ARG:O	20:CT:87:LYS:HB2	2.12	0.49
39:BD:242:ARG:CG	39:BD:242:ARG:NH1	2.72	0.49
13:CM:15:VAL:HG12	13:CM:45:VAL:HG22	1.95	0.49
28:B2:51:ARG:HG3	28:B2:51:ARG:O	2.13	0.49
43:BH:85:LYS:C	43:BH:85:LYS:HE3	2.33	0.49
1:CA:1004:A:H5''	1:CA:1025:U:C2	2.47	0.49
52:BT:78:LEU:C	52:BT:79:HIS:CD2	2.86	0.49
46:DN:11:PRO:O	46:DN:13:TRP:N	2.45	0.49
58:DZ:48:PHE:CE1	58:DZ:52:SER:HA	2.48	0.49
49:DQ:141:GLN:NE2	58:DZ:72:ARG:HD3	2.28	0.49
52:BT:28:VAL:O	52:BT:28:VAL:HG12	2.12	0.49
36:DA:2182:G:O2'	36:DA:2183:C:H5'	2.13	0.49
1:CA:539:A:OP2	12:CL:115:LYS:HE3	2.13	0.49
10:AJ:48:THR:HG23	10:AJ:62:HIS:CE1	2.47	0.49
48:DP:101:VAL:HG12	48:DP:106:LEU:HB2	1.95	0.49
37:BB:49:C:H2'	37:BB:50:G:C8	2.48	0.49
2:CB:142:LEU:HD23	2:CB:142:LEU:C	2.33	0.49
34:D8:32:LEU:CG	34:D8:36:LYS:NZ	2.67	0.49
43:DH:50:VAL:HG12	43:DH:52:VAL:HG23	1.95	0.49
51:DS:49:VAL:CG1	51:DS:50:SER:N	2.76	0.49
58:BZ:14:LYS:HB2	58:BZ:17:ALA:HB2	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:D0:23:VAL:HG11	26:D0:69:PHE:HZ	1.78	0.49
1:CA:1221:G:OP1	1:CA:1321:C:N3	2.46	0.49
36:DA:1602:U:H3'	36:DA:1603:A:H5''	1.90	0.49
2:CB:44:LEU:HA	2:CB:47:THR:OG1	2.13	0.49
36:DA:1052:C:H2'	36:DA:1053:C:C6	2.48	0.49
25:AZ:101:GLY:HA3	25:AZ:210:ILE:HD12	1.95	0.49
55:BW:17:VAL:C	55:BW:19:LEU:N	2.66	0.49
12:CL:35:GLY:O	12:CL:82:VAL:HG13	2.13	0.49
55:DW:12:ILE:HB	55:DW:42:ARG:HH12	1.77	0.49
52:BT:3:ARG:CB	52:BT:6:LEU:HB2	2.43	0.49
36:DA:2533:A:OP1	36:DA:2665:A:H1'	2.12	0.49
36:BA:1404:C:O2'	36:BA:1405:U:H5'	2.12	0.49
16:CP:71:ARG:HA	16:CP:74:LEU:HD23	1.94	0.49
36:BA:92:A:H3'	36:BA:93:G:H8	1.78	0.49
4:CD:152:SER:C	4:CD:154:ASN:H	2.16	0.49
46:BN:29:LYS:C	46:BN:31:ALA:N	2.65	0.49
55:BW:82:LEU:H	55:BW:82:LEU:CD1	2.22	0.49
7:AG:144:MET:C	7:AG:145:ALA:O	2.50	0.49
20:CT:26:ASN:H	20:CT:26:ASN:HD22	1.55	0.49
34:B8:50:LEU:C	34:B8:53:PRO:HD2	2.33	0.49
58:DZ:108:PRO:C	58:DZ:110:GLY:H	2.15	0.49
50:DR:96:ARG:CZ	50:DR:117:VAL:HG23	2.43	0.49
5:AE:104:ALA:HA	5:AE:107:ARG:HG2	1.95	0.49
11:AK:124:LYS:HD2	11:AK:125:PHE:CE2	2.47	0.49
36:DA:1771:C:O2'	36:DA:1786:A:H8	1.95	0.49
49:BQ:42:ILE:HD13	49:BQ:97:VAL:HG22	1.93	0.49
1:CA:108:G:H5'	1:CA:109:A:H5'	1.92	0.49
38:BC:132:GLY:N	38:BC:133:PRO:CD	2.76	0.49
3:CC:23:TYR:CD1	3:CC:23:TYR:C	2.85	0.49
49:DQ:42:ILE:HD13	49:DQ:97:VAL:HG22	1.94	0.49
47:BO:63:VAL:HG23	47:BO:64:ARG:HG3	1.94	0.49
42:BG:41:GLN:OE1	42:BG:60:LEU:HD21	2.13	0.49
33:B7:21:ARG:HB3	33:B7:27:GLY:O	2.13	0.49
53:DU:86:ALA:HB2	53:DU:116:ALA:HB2	1.93	0.49
33:D7:21:ARG:HB3	33:D7:27:GLY:O	2.12	0.49
1:CA:1459:C:O2'	1:CA:1460:A:H5'	2.13	0.49
56:DX:61:GLY:HA3	56:DX:73:ARG:O	2.13	0.49
41:BF:150:GLY:HA2	41:BF:172:TRP:CE3	2.47	0.49
36:BA:2880:C:H1'	50:BR:92:GLY:O	2.13	0.49
20:CT:48:LYS:HB3	20:CT:51:GLU:HG2	1.95	0.49
1:AA:1515:C:O2'	1:AA:1516:G:H5'	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:54:GLN:O	40:DE:55:ASN:HB2	2.12	0.49
43:DH:16:SER:HB2	43:DH:27:LYS:CB	2.27	0.49
36:BA:610:G:H2'	36:BA:611:C:C6	2.48	0.49
57:BY:28:LYS:N	57:BY:28:LYS:CE	2.76	0.49
36:BA:2307:G:N2	36:BA:2308:G:H5''	2.27	0.49
36:BA:260:G:H1'	36:BA:621:A:H1'	1.94	0.49
36:DA:1499:C:O2'	36:DA:1500:G:H5'	2.12	0.49
2:CB:71:VAL:HG13	2:CB:93:VAL:HG13	1.94	0.49
39:DD:48:ARG:HG3	39:DD:48:ARG:HH11	1.78	0.49
36:DA:1747(A):G:C2'	36:DA:1748:G:C5'	2.81	0.49
9:AI:28:VAL:HG23	9:AI:33:PHE:HA	1.93	0.49
9:AI:41:VAL:O	9:AI:41:VAL:HG12	2.13	0.49
12:AL:8:ASN:HD22	17:AQ:34:LYS:NZ	2.11	0.49
36:BA:1515:G:H2'	36:BA:1516:C:C6	2.48	0.49
1:CA:1283:G:O2'	1:CA:1284:C:P	2.71	0.49
10:CJ:24:VAL:CG2	10:CJ:37:PRO:HG3	2.42	0.49
36:BA:2762:G:C2'	36:BA:2763:G:H5'	2.42	0.49
25:CZ:101:GLY:HA3	25:CZ:210:ILE:HD12	1.95	0.49
31:B5:54:GLY:H	31:B5:56:LYS:HZ2	1.56	0.49
29:B3:29:ARG:HH11	29:B3:29:ARG:CB	2.19	0.49
36:BA:2159:G:H2'	36:BA:2160:G:C5'	2.37	0.49
58:DZ:165:VAL:HG12	58:DZ:167:PRO:HA	1.95	0.49
28:D2:35:LEU:HB3	28:D2:50:ILE:CD1	2.43	0.49
50:DR:38:VAL:HB	50:DR:39:PRO:CD	2.39	0.49
2:AB:24:TRP:CZ3	2:AB:26:PRO:HA	2.48	0.49
41:BF:44:ARG:O	41:BF:44:ARG:HG2	2.12	0.49
49:BQ:74:TYR:CD2	49:BQ:91:GLU:HB2	2.39	0.49
49:BQ:12:GLN:CG	49:BQ:73:PRO:HD2	2.43	0.49
57:DY:62:GLU:CD	57:DY:62:GLU:N	2.67	0.49
57:DY:31:LEU:HD22	57:DY:31:LEU:N	2.28	0.49
16:CP:44:THR:O	16:CP:45:THR:HB	2.13	0.49
36:BA:523:C:H2'	36:BA:524:U:C5'	2.43	0.49
6:AF:87:ARG:CG	6:AF:87:ARG:HH11	2.25	0.49
25:AZ:300:ARG:NH1	25:AZ:300:ARG:HG2	2.28	0.49
36:BA:2472:G:C5'	36:BA:2473:U:H5''	2.42	0.49
27:D1:41:ARG:NH2	36:DA:1365:A:H5''	2.26	0.49
36:BA:2818:G:H4'	36:BA:2837:G:O4'	2.13	0.49
36:DA:1827:C:C2'	36:DA:1828:G:H5'	2.43	0.49
2:CB:122:PHE:O	2:CB:127:ILE:HD11	2.13	0.49
36:BA:752:A:H4'	36:BA:753:C:O5'	2.13	0.49
58:DZ:128:VAL:HG21	58:DZ:132:ASN:O	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:39:G:O2'	1:AA:40:C:H5'	2.12	0.49
9:CI:11:LYS:O	9:CI:12:GLU:HB2	2.13	0.49
1:AA:836:G:H2'	1:AA:837:G:H8	1.78	0.49
1:CA:285:G:O2'	1:CA:286:G:H5'	2.12	0.49
48:BP:20:GLY:O	48:BP:21:ARG:HB2	2.12	0.49
44:BJ:73:UNK:C	44:BJ:75:UNK:N	2.75	0.49
43:BH:147:ASN:N	43:BH:147:ASN:HD22	2.09	0.49
36:BA:2081:C:H2'	36:BA:2082:A:H8	1.77	0.49
12:AL:97:ARG:CB	12:AL:97:ARG:HH11	2.26	0.49
36:DA:158:U:H3'	36:DA:158:U:O2	2.13	0.49
31:D5:52:TYR:N	31:D5:52:TYR:CD1	2.80	0.49
36:DA:2230:G:H2'	36:DA:2231:C:H6	1.77	0.49
11:CK:72:ALA:O	11:CK:75:TYR:HB2	2.13	0.49
36:BA:616:G:H2'	36:BA:618:C:O4'	2.13	0.49
36:DA:2543:G:H2'	36:DA:2544:G:C8	2.48	0.48
52:DT:27:THR:H	52:DT:49:VAL:HG12	1.78	0.48
52:DT:78:LEU:O	52:DT:78:LEU:HD23	2.13	0.48
41:DF:119:ARG:HH11	41:DF:119:ARG:HG2	1.77	0.48
41:BF:118:ALA:HA	41:BF:123:LEU:HB3	1.95	0.48
58:BZ:120:ILE:O	58:BZ:120:ILE:HG22	2.12	0.48
36:BA:1540:U:C3'	36:BA:1541:G:H3'	2.35	0.48
48:BP:84:ASN:HA	48:BP:115:LEU:O	2.12	0.48
40:BE:75:VAL:HG12	40:BE:76:ARG:N	2.27	0.48
40:BE:50:GLY:CA	40:BE:78:LEU:HB3	2.36	0.48
34:B8:61:LEU:CD2	34:B8:62:LEU:H	2.23	0.48
36:DA:1504:C:O2'	36:DA:1505:C:C5'	2.61	0.48
39:DD:70:TRP:O	39:DD:71:ASP:C	2.49	0.48
27:B1:3:LYS:HG2	27:B1:4:VAL:HG12	1.94	0.48
4:AD:111:ALA:HB2	4:AD:120:LEU:CD1	2.43	0.48
4:CD:126:ILE:CD1	4:CD:126:ILE:N	2.75	0.48
51:DS:89:ARG:CG	51:DS:92:TYR:CA	2.89	0.48
51:DS:97:ARG:NH1	51:DS:98:VAL:O	2.46	0.48
36:BA:1139:G:H5''	46:BN:70:LYS:NZ	2.27	0.48
55:DW:6:ILE:HG12	55:DW:104:THR:CB	2.43	0.48
43:BH:40:GLU:O	43:BH:41:MET:HB3	2.13	0.48
43:DH:41:MET:SD	43:DH:53:GLU:O	2.70	0.48
51:DS:16:ASN:O	51:DS:18:ILE:N	2.46	0.48
9:AI:65:VAL:HG21	9:AI:73:GLN:CB	2.43	0.48
1:AA:1371:G:O3'	9:AI:69:GLY:HA3	2.12	0.48
9:AI:43:ALA:HA	9:AI:74:ILE:HD13	1.94	0.48
36:DA:860:U:O2	36:DA:860:U:O4'	2.31	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1052:C:H2'	36:BA:1053:C:C6	2.48	0.48
53:DU:95:LEU:C	53:DU:97:ASP:H	2.17	0.48
15:AO:82:ILE:HD13	15:AO:87:ILE:HB	1.94	0.48
28:D2:68:ARG:CZ	28:D2:72:ALA:HB1	2.42	0.48
2:CB:172:ILE:CD1	2:CB:172:ILE:H	2.21	0.48
3:AC:14:ILE:O	3:AC:16:ARG:N	2.46	0.48
36:DA:142:A:H8	36:DA:1595:G:H21	1.59	0.48
2:AB:229:VAL:O	2:AB:230:VAL:HG13	2.13	0.48
25:AZ:270:VAL:CG1	25:AZ:286:VAL:HG21	2.43	0.48
1:AA:542:G:H5'	4:AD:41:GLY:CA	2.43	0.48
46:BN:34:LEU:HD13	46:BN:34:LEU:C	2.33	0.48
54:BV:51:VAL:HG12	54:BV:52:VAL:N	2.23	0.48
36:BA:848:G:H5'	36:BA:848:G:C8	2.47	0.48
36:DA:1038:C:C3'	36:DA:1039:G:H5''	2.43	0.48
58:BZ:103:ARG:NH2	58:BZ:136:PHE:CE1	2.81	0.48
46:DN:89:LYS:O	46:DN:93:THR:HG22	2.13	0.48
57:BY:2:ARG:HG2	57:BY:2:ARG:HH11	1.78	0.48
1:AA:346:G:O2'	1:AA:347:G:P	2.71	0.48
36:BA:2641:G:OP1	46:BN:74:ARG:NE	2.46	0.48
35:B9:19:ARG:O	35:B9:20:HIS:CB	2.60	0.48
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.77	0.48
53:DU:47:TYR:O	53:DU:51:LYS:HG2	2.12	0.48
29:B3:31:LEU:HD12	36:BA:989:G:P	2.52	0.48
3:CC:148:GLY:HA3	3:CC:172:ARG:O	2.13	0.48
56:BX:33:LYS:HE2	56:BX:33:LYS:CA	2.43	0.48
2:AB:127:ILE:HG22	2:AB:128:GLU:N	2.28	0.48
36:BA:1658:C:H2'	36:BA:1659:U:C6	2.48	0.48
36:DA:1651:G:C2	36:DA:2007:C:N3	2.81	0.48
1:AA:328:C:H2'	1:AA:328:C:O2	2.13	0.48
1:AA:328:C:O2	1:AA:328:C:C2'	2.60	0.48
43:DH:147:ASN:N	43:DH:147:ASN:HD22	2.11	0.48
36:BA:714:U:H2'	36:BA:716:A:OP2	2.13	0.48
44:BJ:37:UNK:HA	44:BJ:41:UNK:CB	2.42	0.48
16:CP:52:ASP:OD2	16:CP:55:ARG:HG3	2.13	0.48
4:AD:170:VAL:HG12	4:AD:171:GLY:N	2.27	0.48
36:DA:438:G:H2'	36:DA:440:G:H8	1.78	0.48
45:DK:13:UNK:O	45:DK:52:UNK:HA	2.14	0.48
36:DA:2842:G:O2'	36:DA:2843:G:H5'	2.13	0.48
49:DQ:3:MET:HB2	49:DQ:4:PRO:HD2	1.95	0.48
41:DF:150:GLY:HA2	41:DF:172:TRP:CE3	2.48	0.48
20:CT:93:GLU:OE1	20:CT:93:GLU:N	2.46	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:99:VAL:O	3:CC:99:VAL:HG23	2.13	0.48
44:DJ:27:UNK:CB	44:DJ:113:UNK:HA	2.42	0.48
36:BA:1899:G:C2'	36:BA:1900:A:OP2	2.62	0.48
52:DT:78:LEU:C	52:DT:79:HIS:CD2	2.86	0.48
28:B2:20:GLU:O	28:B2:21:LEU:C	2.51	0.48
1:CA:1002:G:H2'	1:CA:1003:G:O4'	2.13	0.48
32:D6:7:ILE:HG21	32:D6:29:ASN:HD22	1.78	0.48
5:CE:11:ILE:HB	5:CE:31:LEU:HB3	1.95	0.48
52:BT:13:ARG:HH12	52:BT:15:VAL:CG1	2.26	0.48
36:DA:643:A:O2'	36:DA:644:A:H5'	2.13	0.48
57:DY:39:VAL:HG12	57:DY:40:GLU:N	2.29	0.48
51:DS:87:PHE:CG	51:DS:88:ASP:N	2.81	0.48
20:CT:94:ALA:O	20:CT:95:ALA:HB3	2.13	0.48
36:BA:806:C:OP2	48:BP:39:LYS:HD2	2.13	0.48
2:CB:155:LEU:HD13	2:CB:157:ARG:H	1.77	0.48
55:DW:5:ALA:O	55:DW:6:ILE:CB	2.61	0.48
36:DA:690:G:H2'	36:DA:691:C:C6	2.48	0.48
55:BW:5:ALA:O	55:BW:6:ILE:CB	2.61	0.48
30:D4:10:VAL:CG2	30:D4:11:PRO:HD2	2.42	0.48
20:AT:92:LEU:C	20:AT:94:ALA:N	2.66	0.48
36:BA:2632:A:C2	40:BE:61:ARG:HD2	2.48	0.48
58:BZ:15:PRO:C	58:BZ:17:ALA:H	2.15	0.48
38:DC:175:VAL:HG12	38:DC:188:ASN:CB	2.37	0.48
51:DS:48:LEU:HD23	51:DS:82:ILE:HD11	1.94	0.48
9:CI:28:VAL:HG21	9:CI:33:PHE:HA	1.94	0.48
36:DA:652:C:O2'	36:DA:653:A:O5'	2.31	0.48
9:CI:20:ARG:HB2	9:CI:20:ARG:HH11	1.72	0.48
1:CA:1536:C:N4	23:CX:11:U:H3	2.10	0.48
53:BU:79:PHE:O	53:BU:83:LEU:HD13	2.13	0.48
36:BA:1061:U:H4'	36:BA:1070:A:C1'	2.44	0.48
36:BA:1378:A:C4'	36:BA:1379:A:OP1	2.59	0.48
42:BG:6:ALA:HB3	42:BG:104:GLU:OE1	2.13	0.48
36:BA:2096:U:H2'	36:BA:2097:C:H6	1.77	0.48
15:CO:36:ILE:HG23	15:CO:56:LEU:HD11	1.95	0.48
10:AJ:3:LYS:C	10:AJ:4:ILE:HD12	2.33	0.48
46:DN:55:VAL:HG22	46:DN:56:ASN:H	1.78	0.48
19:CS:15:LEU:O	19:CS:19:VAL:HG23	2.13	0.48
1:CA:977:A:N6	1:CA:1224:G:O5'	2.46	0.48
8:AH:85:ARG:HH11	8:AH:85:ARG:HG3	1.78	0.48
38:DC:132:GLY:N	38:DC:133:PRO:CD	2.75	0.48
36:DA:380:U:H2'	36:DA:381:G:H8	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2206:G:N2	36:DA:2207:G:C5'	2.76	0.48
36:BA:590:A:H2'	36:BA:591:C:H6	1.78	0.48
17:CQ:9:VAL:HG11	17:CQ:84:LEU:CD1	2.43	0.48
48:DP:92:GLU:HG2	48:DP:121:LYS:HZ3	1.78	0.48
29:B3:3:ARG:HG2	29:B3:38:GLU:OE2	2.13	0.48
36:DA:519:U:H2'	36:DA:520:G:C8	2.48	0.48
46:BN:121:LYS:HB3	46:BN:123:TYR:CE1	2.48	0.48
2:CB:238:LEU:HD23	2:CB:239:VAL:H	1.77	0.48
25:CZ:330:ARG:HH12	25:CZ:334:PHE:HB3	1.78	0.48
25:AZ:341:GLN:NE2	25:AZ:389:ARG:O	2.46	0.48
36:BA:271(V):G:H2'	36:BA:271(W):G:O4'	2.13	0.48
36:DA:1638:C:H5''	36:DA:2710:C:O2'	2.13	0.48
36:DA:152:G:H1	36:DA:174:C:H42	1.60	0.48
36:BA:2123:G:O2'	36:BA:2124:G:H5'	2.13	0.48
36:BA:2659:G:H2'	36:BA:2660:A:H5''	1.93	0.48
56:BX:61:GLY:HA3	56:BX:73:ARG:O	2.12	0.48
12:AL:85:ILE:HG23	12:AL:86:ARG:N	2.27	0.48
12:CL:10:LEU:O	12:CL:14:GLY:N	2.45	0.48
7:AG:150:ALA:HB2	11:AK:50:TYR:OH	2.12	0.48
1:CA:745:C:O2'	1:CA:746:A:H5'	2.13	0.48
25:AZ:223:MET:CB	25:AZ:242:ILE:HA	2.43	0.48
1:AA:310:G:H2'	1:AA:311:C:H6	1.77	0.48
11:AK:76:GLY:O	11:AK:78:GLN:HG3	2.12	0.48
1:AA:319:G:O2'	1:AA:320:C:H5'	2.13	0.48
1:CA:933:G:OP2	7:CG:3:ARG:HB3	2.12	0.48
16:AP:1:MET:O	16:AP:24:ALA:HB2	2.12	0.48
1:AA:1504:G:OP1	1:AA:1507:A:H4'	2.12	0.48
3:AC:126:ARG:O	3:AC:128:PHE:HD1	1.96	0.48
46:DN:128:HIS:O	46:DN:128:HIS:CG	2.66	0.48
39:DD:241:PRO:O	39:DD:243:GLY:N	2.46	0.48
1:AA:1053:G:H4'	1:AA:1054:C:H5''	1.85	0.48
52:DT:28:VAL:HB	52:DT:88:ILE:HG12	1.94	0.48
41:BF:3:GLU:HA	41:BF:24:LEU:CG	2.35	0.48
40:DE:75:VAL:HG12	40:DE:76:ARG:N	2.29	0.48
36:DA:1542:A:H5'	36:DA:1543:C:OP2	2.13	0.48
34:D8:4:MET:HE2	34:D8:61:LEU:HD23	1.95	0.48
13:AM:119:GLY:O	13:AM:120:LYS:CB	2.60	0.48
58:BZ:171:ILE:HD13	58:BZ:171:ILE:H	1.77	0.48
9:CI:86:VAL:CG2	9:CI:93:ARG:HG2	2.42	0.48
42:DG:85:GLY:C	42:DG:87:PRO:CD	2.81	0.48
52:DT:13:ARG:HH12	52:DT:15:VAL:CG1	2.26	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:B8:32:LEU:CG	34:B8:36:LYS:NZ	2.63	0.48
48:BP:61:ARG:C	48:BP:62:LEU:CD2	2.81	0.48
4:CD:107:ARG:HH21	4:CD:194:LEU:HD12	1.79	0.48
32:B6:15:GLU:OE2	32:B6:41:PRO:CB	2.61	0.48
36:BA:1142(A):A:C8	36:BA:1142(A):A:H5'	2.49	0.48
36:DA:2746:U:O2'	36:DA:2747:G:H5'	2.13	0.48
4:AD:17:VAL:HG11	4:AD:197:PRO:CB	2.42	0.48
51:DS:12:PHE:CD1	51:DS:13:ARG:N	2.81	0.48
1:AA:453:A:O2'	1:AA:454:C:O4'	2.30	0.48
2:CB:204:ASN:HD21	2:CB:206:ASP:H	1.54	0.48
3:CC:11:ARG:O	3:CC:14:ILE:O	2.30	0.48
25:AZ:130:TYR:CE2	25:AZ:211:PRO:HD2	2.49	0.48
4:AD:59:ARG:CA	4:AD:59:ARG:HE	2.10	0.48
40:BE:116:VAL:CG2	40:BE:122:PHE:CG	2.96	0.48
50:BR:38:VAL:HB	50:BR:39:PRO:CD	2.38	0.48
28:D2:35:LEU:HB3	28:D2:50:ILE:HD11	1.95	0.48
47:DO:35:VAL:CG1	47:DO:69:ILE:HD13	2.44	0.48
27:D1:72:GLU:HA	27:D1:72:GLU:OE1	2.13	0.48
42:BG:11:TYR:HA	42:BG:15:VAL:HG21	1.95	0.48
58:DZ:24:LEU:HD23	58:DZ:24:LEU:C	2.33	0.48
50:DR:13:HIS:HE1	50:DR:15:SER:OG	1.96	0.48
36:DA:580:C:H2'	36:DA:581:C:H6	1.78	0.48
36:DA:1331:A:C2'	36:DA:1332:G:H5''	2.43	0.48
43:DH:35:VAL:HG21	43:DH:75:ALA:HB2	1.94	0.48
7:CG:118:VAL:O	7:CG:121:ALA:HB3	2.14	0.48
13:AM:97:PRO:CA	13:AM:110:ARG:HD3	2.41	0.48
36:DA:17:G:H2'	36:DA:18:C:C6	2.47	0.48
53:BU:27:LEU:O	53:BU:34:LYS:HB2	2.13	0.48
3:AC:94:LEU:O	3:AC:95:THR:CB	2.62	0.48
36:BA:195:A:C8	36:BA:197:A:OP1	2.66	0.48
24:CY:41:C:H2'	24:CY:42:G:O4'	2.13	0.48
25:AZ:265:THR:HG21	25:AZ:293:VAL:HG22	1.93	0.48
20:CT:89:ARG:HB2	20:CT:104:LEU:HD12	1.96	0.48
1:CA:945:G:H2'	1:CA:945:G:N3	2.29	0.48
12:AL:46:LYS:H	12:AL:92:ASP:HB3	1.77	0.48
2:CB:189:ASP:O	2:CB:191:ASP:N	2.47	0.48
1:CA:926:G:H5''	1:CA:927:G:O5'	2.13	0.48
4:AD:70:ILE:CG2	4:AD:71:SER:N	2.76	0.48
36:BA:2839:G:H2'	36:BA:2840:C:C6	2.48	0.48
36:DA:2870:C:H2'	36:DA:2871:C:O4'	2.13	0.48
27:D1:3:LYS:HB2	27:D1:3:LYS:HZ2	1.77	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1131:G:HO2'	36:DA:1132:A:H8	1.62	0.48
25:CZ:139:ASP:O	25:CZ:139:ASP:CG	2.51	0.48
1:AA:1437:C:H2'	1:AA:1438:G:C8	2.48	0.48
33:B7:4:THR:CG2	36:BA:788:A:H1'	2.43	0.48
1:CA:826:C:H2'	1:CA:827:U:H6	1.78	0.48
36:BA:648:G:H2'	36:BA:649:G:C8	2.48	0.48
36:BA:1120:G:H2'	36:BA:1121:C:H6	1.78	0.48
36:BA:1651:G:C2	36:BA:2007:C:N3	2.81	0.48
36:BA:1260:G:H2'	36:BA:1261:C:C6	2.49	0.48
1:AA:636:U:H2'	1:AA:637:G:H8	1.77	0.48
39:BD:6:PHE:HE1	39:BD:18:VAL:HG12	1.77	0.48
41:DF:150:GLY:HA2	41:DF:172:TRP:CD2	2.49	0.48
1:CA:1424:C:H2'	1:CA:1425:U:O4'	2.13	0.48
1:CA:333:G:O2'	1:CA:334:C:H5'	2.13	0.48
36:BA:438:G:O2'	36:BA:440:G:H5'	2.13	0.48
36:BA:1908:C:H2'	36:BA:1909:C:H6	1.78	0.48
47:DO:53:LYS:O	47:DO:56:ASP:HB2	2.13	0.48
1:CA:1090:U:H2'	1:CA:1091:U:C6	2.49	0.48
43:DH:80:SER:O	43:DH:81:GLU:HB2	2.13	0.48
36:BA:1215:G:O2'	36:BA:1216:G:H5'	2.13	0.48
6:CF:47:ARG:O	6:CF:47:ARG:HG3	2.14	0.48
4:CD:106:TYR:HD2	4:CD:113:SER:O	1.97	0.48
13:AM:22:ILE:CB	13:AM:25:ILE:HD12	2.43	0.48
1:AA:1150:U:C5	1:AA:1151:A:C5	3.02	0.48
36:BA:2102:U:C5	36:BA:2103:C:N3	2.81	0.48
36:BA:2419:U:O2'	36:BA:2420:C:H5'	2.13	0.48
10:AJ:57:LYS:NZ	10:AJ:60:ARG:HH22	2.11	0.48
20:AT:62:LEU:N	20:AT:62:LEU:HD12	2.12	0.48
34:D8:30:ARG:NH2	36:DA:2419:U:O4	2.46	0.48
48:DP:38:GLN:HG3	48:DP:39:LYS:H	1.78	0.48
30:D4:25:TYR:O	30:D4:26:SER:HB3	2.12	0.48
36:DA:2416:C:H2'	36:DA:2417:C:H6	1.78	0.48
51:DS:106:ARG:CG	51:DS:106:ARG:HH11	2.23	0.48
1:CA:1320:C:C6	1:CA:1320:C:H5'	2.31	0.48
48:DP:84:ASN:C	48:DP:86:LYS:N	2.67	0.48
9:AI:4:TYR:CE2	9:AI:88:TYR:CB	2.95	0.48
3:CC:181:ASN:HD22	3:CC:204:LEU:HB2	1.77	0.48
35:D9:35:ARG:O	35:D9:35:ARG:HG2	2.13	0.48
53:DU:92:ARG:HB2	54:DV:11:GLN:NE2	2.28	0.48
25:CZ:130:TYR:CE2	25:CZ:211:PRO:HD2	2.49	0.48
40:DE:116:VAL:CG2	40:DE:122:PHE:CG	2.97	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:62:LEU:CD2	54:BV:95:LEU:HB2	2.39	0.48
22:AW:57:G:H2'	22:AW:58:A:C5'	2.41	0.48
25:CZ:222:LEU:HA	25:CZ:304:LEU:O	2.13	0.48
57:BY:44:ILE:HG22	57:BY:45:VAL:N	2.27	0.48
36:BA:2475:C:H5'	36:BA:2476:A:OP2	2.13	0.48
1:AA:434:U:H2'	1:AA:435:C:H6	1.78	0.48
1:AA:437:U:H5''	4:AD:155:LEU:CD1	2.42	0.48
7:AG:7:ALA:O	7:AG:8:GLU:CB	2.59	0.48
1:AA:1124:G:C5'	10:AJ:35:SER:HB2	2.43	0.48
1:CA:484:G:H4'	1:CA:485:G:O5'	2.12	0.48
36:BA:588:U:H2'	36:BA:589:C:C6	2.49	0.48
26:D0:72:ARG:HD3	26:D0:75:LEU:HD13	1.95	0.48
53:BU:47:TYR:O	53:BU:51:LYS:HG2	2.13	0.48
37:BB:27:C:H5'	37:BB:28:C:OP2	2.12	0.48
36:BA:68:G:H2'	36:BA:69:C:C6	2.48	0.48
26:B0:47:PRO:HG3	26:B0:53:MET:HB2	1.95	0.48
40:BE:65:GLY:HA2	40:BE:70:ALA:CB	2.44	0.48
33:D7:12:ARG:NH2	36:DA:465:G:OP1	2.45	0.48
7:CG:137:LYS:O	7:CG:140:ASP:N	2.46	0.48
40:BE:132:HIS:O	40:BE:132:HIS:ND1	2.46	0.48
36:BA:1652:A:C2'	36:BA:1653:G:H5'	2.42	0.48
10:CJ:92:THR:HG23	10:CJ:93:GLY:H	1.77	0.48
42:DG:48:GLU:O	42:DG:49:ASP:HB3	2.13	0.48
36:BA:633:A:H2'	36:BA:634:C:H5'	1.95	0.48
36:DA:2123:G:O2'	36:DA:2124:G:H5'	2.12	0.48
36:DA:86:C:H2'	36:DA:87:C:C6	2.48	0.48
36:BA:1713:U:O2'	36:BA:1714:G:H5'	2.14	0.48
52:BT:61:PHE:CE1	52:BT:76:PHE:HB2	2.48	0.48
36:DA:616:G:H2'	36:DA:618:C:O4'	2.12	0.48
8:CH:101:PRO:HG2	8:CH:133:LEU:HD21	1.95	0.48
36:BA:484:C:H2'	36:BA:485:C:C6	2.48	0.48
8:CH:87:SER:HB2	8:CH:93:VAL:HB	1.95	0.48
1:AA:509:A:H5'	4:AD:54:TYR:HD2	1.79	0.48
36:DA:1675:C:H2'	36:DA:1676:A:O4'	2.13	0.48
1:AA:22:G:H4'	1:AA:885:G:C8	2.48	0.48
30:B4:6:HIS:HB3	42:BG:67:LYS:NZ	2.28	0.48
34:B8:7:HIS:N	34:B8:11:LYS:HE2	2.28	0.48
41:BF:160:ASN:HD21	41:BF:162:LEU:H	1.58	0.48
57:BY:64:GLU:O	57:BY:65:ALA:HB2	2.13	0.48
4:AD:102:ASP:OD2	4:AD:136:PRO:HB3	2.14	0.48
54:DV:19:LYS:HB2	54:DV:96:ILE:CD1	2.42	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:114:TYR:CD1	10:CJ:60:ARG:HG2	2.49	0.48
48:DP:97:PRO:O	48:DP:98:GLU:CB	2.54	0.48
36:BA:1948:G:O2'	36:BA:1949:G:H5'	2.14	0.48
39:DD:44:ASN:HB2	39:DD:48:ARG:O	2.13	0.48
36:DA:811:U:O2'	36:DA:812:C:C5'	2.61	0.48
36:DA:605:C:H1'	36:DA:657:U:O2'	2.14	0.48
4:CD:22:LYS:HB2	4:CD:26:CYS:HB2	1.95	0.48
24:AY:72:U:C3'	24:AY:73:G:H5''	2.44	0.48
33:D7:34:ARG:HD3	36:DA:467:G:OP2	2.12	0.48
25:AZ:30:ALA:O	25:AZ:34:VAL:HG23	2.14	0.48
35:B9:35:ARG:HG2	35:B9:35:ARG:O	2.13	0.48
25:CZ:31:LEU:HD23	25:CZ:199:ILE:HG23	1.95	0.48
56:DX:38:GLU:O	56:DX:38:GLU:HG2	2.12	0.48
58:DZ:151:HIS:HB2	58:DZ:170:THR:CA	2.42	0.48
18:AR:31:LEU:N	18:AR:31:LEU:HD23	2.22	0.48
41:DF:44:ARG:O	41:DF:44:ARG:HG2	2.13	0.48
42:BG:114:ILE:CG2	42:BG:117:PHE:HB2	2.44	0.48
37:DB:93:G:H2'	37:DB:94:C:C6	2.48	0.48
1:AA:1286:A:O2'	1:AA:1287:A:OP2	2.27	0.48
42:BG:107:LEU:HD12	42:BG:178:PHE:CD1	2.47	0.48
1:AA:624:C:O3'	16:AP:10:GLY:HA2	2.13	0.48
3:CC:186:PHE:CE2	3:CC:188:LEU:HD22	2.48	0.48
57:BY:31:LEU:HD22	57:BY:31:LEU:N	2.28	0.48
12:AL:75:HIS:CD2	12:AL:77:LEU:H	2.31	0.48
36:DA:17:G:H4'	53:DU:25:TRP:CH2	2.48	0.48
36:BA:1342:A:H2	36:BA:1396:U:HO2'	1.61	0.48
25:AZ:267:VAL:HG23	25:AZ:288:VAL:HG13	1.94	0.48
36:DA:2472:G:C5'	36:DA:2473:U:H5''	2.42	0.48
36:DA:2201:C:H2'	36:DA:2202:C:C6	2.49	0.48
20:CT:72:LEU:O	20:CT:74:LYS:N	2.46	0.48
17:AQ:9:VAL:HG11	17:AQ:84:LEU:CD1	2.43	0.48
12:AL:50:SER:O	12:AL:51:ALA:HB2	2.13	0.48
1:AA:1120:G:H2'	1:AA:1121:U:H6	1.76	0.48
48:BP:92:GLU:HG2	48:BP:121:LYS:HZ1	1.78	0.48
30:D4:19:GLY:O	30:D4:21:VAL:HG23	2.14	0.48
1:CA:189(J):G:O2'	1:CA:189(K):U:H5'	2.13	0.48
42:BG:39:ILE:HG12	42:BG:92:VAL:HG12	1.96	0.48
36:BA:389:G:H1	48:BP:72:PRO:HD3	1.78	0.48
7:CG:66:VAL:O	7:CG:69:VAL:HG12	2.13	0.48
36:BA:755:C:H2'	36:BA:756:C:H6	1.78	0.48
36:DA:1773:A:H2'	36:DA:1774:C:H5'	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:223:MET:O	25:AZ:223:MET:HG3	2.14	0.48
7:CG:28:ASN:OD1	7:CG:36:LYS:HE2	2.14	0.48
25:CZ:352:VAL:HG12	25:CZ:353:VAL:N	2.28	0.48
36:BA:2052:G:H4'	40:BE:143:ASN:O	2.12	0.48
1:CA:911:U:O2'	1:CA:912:C:H5'	2.13	0.48
15:AO:33:THR:HG23	15:AO:63:ARG:NH1	2.27	0.48
1:CA:853:G:O2'	1:CA:854:G:H5'	2.13	0.48
37:BB:78:A:H2'	37:BB:79:C:O4'	2.14	0.48
12:CL:97:ARG:CB	12:CL:97:ARG:HH11	2.26	0.48
27:B1:19:GLN:OE1	27:B1:19:GLN:HA	2.14	0.48
9:CI:41:VAL:HG12	9:CI:41:VAL:O	2.14	0.48
42:BG:167:GLU:H	42:BG:167:GLU:CD	2.17	0.48
25:CZ:155:ARG:O	25:CZ:159:ASN:ND2	2.45	0.48
1:AA:67:C:O2'	1:AA:171:A:H1'	2.13	0.48
1:CA:1305:G:C5'	21:CU:4:GLY:HA3	2.42	0.48
39:BD:70:TRP:O	39:BD:71:ASP:C	2.51	0.48
52:BT:31:SER:OG	52:BT:32:TYR:CE1	2.60	0.48
22:AW:71:G:N3	36:BA:1851:U:H4'	2.29	0.48
27:B1:68:PRO:C	27:B1:70:VAL:N	2.66	0.48
17:CQ:52:LYS:H	17:CQ:52:LYS:CD	2.10	0.48
2:AB:132:LYS:HA	2:AB:135:GLN:OE1	2.14	0.48
48:DP:105:LEU:H	48:DP:105:LEU:CD1	2.24	0.48
32:D6:25:LYS:HE3	34:D8:35:GLN:OE1	2.14	0.48
36:BA:674:G:N3	41:BF:74:ARG:NH1	2.62	0.48
36:DA:664:C:O4'	36:DA:940:G:H5''	2.14	0.48
36:DA:623:G:H2'	36:DA:624:C:C6	2.49	0.48
42:DG:38:VAL:HG12	42:DG:93:THR:HA	1.96	0.48
30:B4:9:LEU:HD13	30:B4:26:SER:O	2.13	0.48
25:AZ:138:VAL:C	25:AZ:140:MET:H	2.17	0.48
25:AZ:134:PHE:HD1	25:AZ:171:ILE:HB	1.77	0.48
36:BA:2762:G:H2'	36:BA:2763:G:H5'	1.94	0.48
58:BZ:126:VAL:O	58:BZ:126:VAL:HG23	2.12	0.48
25:CZ:28:THR:HG23	25:CZ:79:HIS:CE1	2.48	0.48
40:DE:144:ARG:HG3	40:DE:145:LYS:N	2.29	0.48
36:DA:92:A:H3'	36:DA:93:G:H8	1.79	0.48
20:AT:50:GLU:CB	20:AT:99:LEU:HD12	2.41	0.48
36:BA:761:A:C8	36:BA:761:A:H3'	2.49	0.48
49:DQ:60:ARG:HB3	49:DQ:60:ARG:CZ	2.43	0.48
54:BV:52:VAL:HG22	54:BV:52:VAL:O	2.14	0.48
36:BA:990:A:OP2	36:BA:991:C:OP2	2.31	0.48
1:AA:1316:G:O3'	14:AN:18:VAL:HG22	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:D8:50:LEU:C	34:D8:53:PRO:HD2	2.34	0.48
7:CG:37:ASN:HD21	9:CI:40:LEU:HA	1.77	0.48
40:DE:3:GLY:O	40:DE:4:ILE:HB	2.13	0.48
57:BY:62:GLU:CD	57:BY:62:GLU:N	2.66	0.48
36:DA:481:G:P	57:DY:47:LYS:HD3	2.52	0.48
7:CG:118:VAL:CG2	7:CG:119:ARG:N	2.77	0.48
55:BW:22:ASP:HA	55:BW:25:ARG:NH1	2.23	0.48
20:AT:89:ARG:HD2	20:AT:104:LEU:HD11	1.94	0.48
41:BF:89:VAL:HG12	41:BF:90:PHE:H	1.76	0.48
40:DE:81:ILE:CG2	40:DE:81:ILE:O	2.61	0.48
36:DA:492:A:H2'	36:DA:493:G:O4'	2.14	0.48
47:DO:24:VAL:CG1	47:DO:33:ALA:HB2	2.43	0.48
1:AA:8:A:C5	4:AD:209:ARG:HB2	2.48	0.48
41:BF:125:LEU:H	41:BF:125:LEU:HD23	1.76	0.48
1:AA:1410:G:H2'	1:AA:1411:C:C6	2.49	0.48
48:DP:102:ARG:NH1	48:DP:102:ARG:HB2	2.28	0.48
36:BA:2023:G:H4'	36:BA:2617:C:O3'	2.13	0.48
1:CA:1250:A:H4'	9:CI:68:GLY:H	1.78	0.48
36:BA:1336:A:H2'	36:BA:1337:G:H8	1.78	0.48
36:BA:1782:C:H1'	36:BA:2609:U:C5'	2.44	0.48
36:BA:780:G:OP1	39:BD:218:ARG:NH2	2.44	0.48
36:DA:2692:C:H1'	36:DA:2847:U:O2'	2.13	0.48
25:AZ:256:VAL:HA	25:AZ:262:THR:HG22	1.95	0.48
48:BP:17:LYS:C	48:BP:19:VAL:N	2.67	0.48
55:BW:37:ARG:HG2	55:BW:38:TYR:CD2	2.49	0.48
17:AQ:86:GLU:O	17:AQ:90:ILE:HG12	2.14	0.48
16:AP:3:LYS:HG2	16:AP:65:GLN:O	2.13	0.48
43:BH:130:ARG:O	43:BH:131:VAL:HG23	2.13	0.48
16:AP:23:ASP:O	16:AP:24:ALA:C	2.50	0.48
36:BA:438:G:H2'	36:BA:440:G:H8	1.78	0.48
36:DA:2257:U:O2'	36:DA:2258:C:H5'	2.14	0.48
36:BA:2842:G:O2'	36:BA:2843:G:H5'	2.14	0.48
32:D6:22:ALA:HB2	32:D6:39:TYR:CZ	2.49	0.48
1:CA:814:A:H2'	1:CA:816:A:C5'	2.44	0.48
36:BA:566:U:O4	54:BV:78:LYS:HE2	2.14	0.48
36:BA:1274:A:N3	36:BA:1297:C:H1'	2.28	0.48
36:BA:425:G:O2'	36:BA:426:C:H5'	2.14	0.48
36:BA:978:G:C2	36:BA:986:C:N3	2.81	0.48
28:B2:62:THR:O	28:B2:66:GLU:N	2.47	0.48
1:CA:1005:A:C3'	1:CA:1006:C:H5'	2.44	0.48
1:AA:1002:G:H2'	1:AA:1003:G:O4'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:134:ARG:N	46:DN:135:PRO:HD3	2.28	0.48
46:DN:15:LEU:O	46:DN:136:GLU:HA	2.14	0.48
36:BA:1504:C:O2'	36:BA:1505:C:C5'	2.61	0.48
22:CW:6:G:O2'	22:CW:7:A:H5'	2.13	0.48
9:CI:83:ARG:C	9:CI:86:VAL:HG12	2.32	0.48
37:DB:73:A:C4	37:DB:105:A:C2	3.01	0.48
36:DA:2312:U:C2'	36:DA:2313:C:H5''	2.42	0.48
57:DY:28:LYS:N	57:DY:28:LYS:CE	2.76	0.48
2:AB:130:ARG:NH2	2:AB:134:GLU:HG3	2.24	0.48
3:CC:79:ARG:O	3:CC:82:GLU:OE1	2.31	0.48
48:DP:114:ILE:HB	48:DP:130:PHE:CD2	2.48	0.48
2:CB:142:LEU:CD2	2:CB:146:GLN:NE2	2.77	0.48
20:AT:62:LEU:H	20:AT:62:LEU:CD1	2.12	0.48
46:BN:87:LEU:CD1	46:BN:91:LEU:HG	2.43	0.48
52:BT:94:ALA:HB1	52:BT:99:LEU:HD23	1.96	0.48
9:AI:20:ARG:HH11	9:AI:20:ARG:HB2	1.72	0.48
2:AB:47:THR:HG23	2:AB:202:PRO:O	2.12	0.48
36:BA:2887:U:H2'	36:BA:2888:C:C6	2.49	0.48
36:BA:1403:C:H2'	36:BA:1404:C:O5'	2.14	0.48
1:CA:939:G:H5''	7:CG:102:ARG:CZ	2.42	0.48
34:B8:15:LYS:HD3	48:BP:65:ARG:HH21	1.78	0.48
22:CW:39:U:H5'	22:CW:39:U:O2	2.12	0.48
50:DR:86:ARG:HB3	50:DR:118:GLU:OE2	2.14	0.48
41:BF:85:GLY:O	41:BF:86:GLY:O	2.31	0.48
36:BA:2881:C:H2'	36:BA:2882:A:H8	1.79	0.48
36:BA:363(E):U:H3'	36:BA:363(F):A:O4'	2.14	0.48
1:CA:405:U:O2	1:CA:498:U:H2'	2.14	0.48
40:BE:81:ILE:O	40:BE:81:ILE:CG2	2.59	0.48
36:DA:1342:A:H2	36:DA:1396:U:HO2'	1.61	0.48
10:AJ:86:MET:O	10:AJ:87:THR:HG23	2.13	0.48
1:AA:276:G:O2'	17:AQ:68:ARG:NH1	2.47	0.48
38:DC:74:VAL:HG11	38:DC:153:ILE:HG23	1.94	0.48
47:DO:25:LEU:HB2	47:DO:38:VAL:HG23	1.96	0.48
1:CA:345:C:H1'	1:CA:346:G:N2	2.29	0.48
1:AA:945:G:N3	1:AA:945:G:H2'	2.27	0.48
1:CA:46:G:O2'	1:CA:365:U:H1'	2.13	0.48
1:CA:632:A:H8	1:CA:633:G:C8	2.32	0.48
39:DD:222:ARG:O	39:DD:224:ALA:O	2.32	0.48
20:AT:74:LYS:HB2	20:AT:75:ASN:H	1.44	0.48
13:CM:9:ILE:HD13	42:DG:146:TYR:CE2	2.49	0.48
36:DA:189:G:H2'	36:DA:205:G:H22	1.77	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:145:THR:HB	42:DG:148:MET:CB	2.44	0.48
36:DA:1750:G:H2'	36:DA:1751:C:C6	2.48	0.48
50:BR:28:LEU:HD12	50:BR:114:VAL:HG21	1.95	0.48
4:CD:110:PHE:HD1	4:CD:110:PHE:N	2.11	0.48
8:AH:30:ARG:CB	8:AH:30:ARG:HH11	2.25	0.48
36:BA:1315:C:O2'	36:BA:1316:U:H5'	2.13	0.48
36:BA:152:G:H1	36:BA:174:C:H42	1.60	0.48
41:BF:150:GLY:HA2	41:BF:172:TRP:CD2	2.48	0.48
1:AA:369:C:O2'	1:AA:370:C:O5'	2.32	0.48
3:AC:84:ILE:O	3:AC:88:ARG:HG3	2.12	0.48
1:AA:1485:U:O2'	1:AA:1486:G:H5'	2.13	0.48
13:AM:28:ALA:O	13:AM:32:GLU:HB2	2.14	0.48
44:BJ:99:UNK:C	44:BJ:101:UNK:N	2.71	0.48
36:BA:86:C:H2'	36:BA:87:C:C6	2.48	0.48
25:AZ:187:LYS:HD2	25:AZ:187:LYS:N	2.29	0.48
2:AB:56:ARG:HH11	2:AB:56:ARG:HG3	1.78	0.48
2:AB:221:LEU:O	2:AB:221:LEU:HD13	2.13	0.48
1:AA:807:A:H2'	1:AA:808:C:C6	2.49	0.48
52:DT:28:VAL:HG22	52:DT:46:GLU:CA	2.43	0.48
52:DT:77:PRO:C	52:DT:79:HIS:H	2.17	0.48
7:AG:84:ASN:ND2	7:AG:84:ASN:C	2.67	0.48
1:CA:1003:G:H21	1:CA:1039:C:N4	2.11	0.48
36:BA:1537:G:H2'	36:BA:1538:G:H8	1.79	0.48
36:BA:2312:U:C2'	36:BA:2313:C:H5''	2.43	0.48
1:AA:1003:G:H21	1:AA:1039:C:N4	2.10	0.48
36:DA:2105:C:N3	36:DA:2184:G:N2	2.61	0.48
52:DT:13:ARG:HH12	52:DT:15:VAL:HG12	1.79	0.48
57:BY:13:VAL:HG22	57:BY:14:LEU:N	2.29	0.48
55:DW:4:LYS:HG2	55:DW:5:ALA:H	1.78	0.48
41:BF:7:TYR:HD2	41:BF:16:GLY:HA3	1.78	0.48
55:BW:4:LYS:HG2	55:BW:5:ALA:H	1.76	0.48
1:AA:1277:C:O2'	1:AA:1279:A:H8	1.78	0.48
13:AM:11:ARG:CG	13:AM:12:ASN:H	2.10	0.48
51:DS:74:ALA:O	51:DS:76:LYS:N	2.46	0.48
48:DP:16:ARG:O	48:DP:18:ARG:N	2.47	0.48
4:CD:114:ARG:NH1	4:CD:114:ARG:CG	2.75	0.48
55:DW:36:LEU:HD11	55:DW:47:VAL:HG12	1.96	0.48
36:BA:332:A:O2'	36:BA:333:G:P	2.72	0.48
36:DA:64:A:O2'	36:DA:65:C:H5'	2.14	0.48
29:D3:29:ARG:CB	29:D3:29:ARG:HH11	2.19	0.48
46:DN:34:LEU:O	46:DN:34:LEU:HD13	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:50:GLU:CB	20:CT:99:LEU:HD12	2.40	0.48
27:D1:90:ILE:O	27:D1:94:LEU:HD13	2.14	0.48
13:CM:57:ARG:HH12	30:D4:34:GLU:HG3	1.78	0.48
36:DA:845:G:C8	36:DA:845:G:OP2	2.59	0.48
15:AO:29:VAL:HG11	15:AO:67:LEU:HD21	1.96	0.48
1:AA:1536:C:C2'	1:AA:1537:U:O4'	2.60	0.48
36:DA:326:G:H2'	36:DA:327:G:C8	2.47	0.48
1:AA:1229:A:OP2	13:AM:114:ARG:HD3	2.13	0.48
13:CM:88:ARG:HG2	13:CM:88:ARG:NH1	2.25	0.48
36:DA:500:G:H22	36:DA:502:A:H3'	1.79	0.48
1:CA:499:A:H4'	1:CA:500:G:H5'	1.95	0.48
36:DA:723:G:H2'	36:DA:724:U:C6	2.49	0.48
1:AA:499:A:H4'	1:AA:500:G:H5'	1.96	0.48
12:AL:119:LYS:O	12:AL:120:TYR:CB	2.62	0.48
3:CC:49:SER:C	3:CC:51:GLY:N	2.66	0.48
22:CV:63:G:H8	22:CV:63:G:H5'	1.79	0.48
53:BU:19:LYS:O	53:BU:22:LYS:HG2	2.14	0.48
1:AA:1511:G:C2'	1:AA:1512:U:H5'	2.44	0.48
1:AA:1410:G:H2'	1:AA:1411:C:H6	1.78	0.48
35:D9:29:ASN:O	35:D9:29:ASN:ND2	2.46	0.48
26:B0:15:ASP:OD1	26:B0:16:SER:N	2.42	0.48
19:AS:31:ILE:HG23	19:AS:49:ILE:HA	1.96	0.48
39:DD:226:MET:HB3	39:DD:230:ASP:HB2	1.94	0.48
6:CF:22:GLU:O	6:CF:25:ILE:HG22	2.13	0.48
36:BA:1751:C:O2'	36:BA:1752:C:H5'	2.13	0.48
58:BZ:48:PHE:O	58:BZ:52:SER:N	2.47	0.48
36:DA:1259:G:O2'	36:DA:1260:G:H5'	2.14	0.48
36:BA:2869:G:H2'	36:BA:2870:C:H6	1.78	0.48
25:CZ:219:LYS:HB2	25:CZ:244:ARG:HB2	1.96	0.48
36:DA:1652:A:H2'	36:DA:1653:G:H5'	1.95	0.48
1:CA:995:C:O2'	1:CA:996:A:H8	1.97	0.48
10:AJ:16:LEU:CD1	10:AJ:70:ARG:HG2	2.44	0.48
42:DG:34:LEU:HA	42:DG:161:THR:HA	1.95	0.48
29:D3:11:SER:HB3	36:DA:988:A:P	2.53	0.48
36:DA:20:C:O2'	36:DA:21:A:H5'	2.14	0.48
1:AA:770:C:O2'	1:AA:771:G:H5'	2.14	0.48
36:DA:630:G:H4'	36:DA:640:C:H4'	1.94	0.48
36:DA:645:C:H5'	36:DA:646:A:OP2	2.14	0.48
36:DA:566:U:O4	54:DV:78:LYS:HE2	2.13	0.48
36:DA:1899:G:C2'	36:DA:1900:A:OP2	2.61	0.48
36:BA:1826:G:H4'	39:BD:242:ARG:NH2	2.24	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BQ:134:ARG:HA	49:BQ:137:TYR:CD1	2.49	0.48
40:DE:33:VAL:HG12	40:DE:69:LYS:HD2	1.95	0.48
36:DA:558:G:P	46:DN:111:PRO:HD2	2.53	0.48
1:AA:1330:U:H3'	1:AA:1331:G:O4'	2.14	0.48
39:BD:35:LYS:O	39:BD:62:TYR:O	2.32	0.48
39:BD:35:LYS:HB3	39:BD:36:PRO:CD	2.42	0.48
46:BN:46:VAL:O	46:BN:47:ALA:CB	2.60	0.48
58:DZ:123:ASP:C	58:DZ:124:ILE:HG12	2.34	0.48
52:BT:27:THR:H	52:BT:49:VAL:HG12	1.78	0.48
52:BT:84:GLN:O	52:BT:85:LYS:HG3	2.13	0.48
42:DG:46:ALA:HB2	42:DG:88:ILE:CG1	2.42	0.48
42:DG:51:ARG:HH11	42:DG:53:LEU:HD21	1.79	0.48
36:BA:654(N):G:N7	36:BA:654(O):G:C4	2.81	0.48
36:DA:102:G:H4'	36:DA:102:G:OP1	2.14	0.48
57:DY:73:ARG:O	57:DY:74:PRO:O	2.31	0.48
48:BP:59:LEU:CA	48:BP:61:ARG:HE	2.27	0.48
11:CK:108:ILE:O	18:CR:87:ARG:N	2.47	0.48
32:B6:48:VAL:O	32:B6:49:HIS:O	2.32	0.48
48:DP:98:GLU:H	48:DP:101:VAL:HG13	1.79	0.48
51:BS:99:LYS:NZ	51:BS:99:LYS:CB	2.70	0.48
55:DW:4:LYS:CG	55:DW:5:ALA:N	2.77	0.48
2:CB:166:ASP:HB3	2:CB:169:LYS:HB2	1.95	0.48
32:D6:5:VAL:O	32:D6:6:ARG:CB	2.61	0.48
42:DG:128:ARG:O	42:DG:130:ASN:N	2.47	0.48
1:CA:1255:G:C5'	3:CC:26:LYS:HE2	2.43	0.48
2:AB:231:GLU:HA	2:AB:232:PRO:HD3	1.68	0.48
12:CL:111:LYS:O	12:CL:112:ASP:HB2	2.14	0.48
10:CJ:7:LYS:O	10:CJ:8:LEU:HD12	2.13	0.48
36:BA:2415:G:H2'	36:BA:2416:C:C6	2.49	0.48
36:BA:1677:A:H2'	36:BA:1678:G:H8	1.79	0.48
25:AZ:134:PHE:CG	25:AZ:202:LEU:HD22	2.49	0.48
53:BU:88:ILE:C	53:BU:90:VAL:N	2.64	0.48
36:DA:90:U:O4'	36:DA:92:A:C8	2.67	0.48
27:D1:58:ILE:HD12	27:D1:59:THR:H	1.79	0.48
42:BG:107:LEU:HD12	42:BG:178:PHE:CE1	2.49	0.48
37:BB:91:C:OP1	49:BQ:16:ARG:HD2	2.14	0.48
13:CM:52:GLU:HG2	13:CM:55:ARG:NH1	2.29	0.48
34:D8:50:LEU:O	34:D8:51:ALA:CB	2.62	0.48
46:BN:56:ASN:H	46:BN:125:GLY:HA3	1.79	0.48
46:BN:55:VAL:HG22	46:BN:56:ASN:H	1.78	0.48
36:DA:278:A:N6	36:DA:362:U:H3	2.09	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:57:ARG:HH12	30:B4:34:GLU:CG	2.27	0.48
37:BB:68:C:O2'	37:BB:69:G:H5'	2.14	0.48
36:BA:359:A:C2	36:BA:360:G:H1'	2.48	0.48
36:DA:1607:C:H4'	36:DA:1608:A:O5'	2.14	0.48
2:CB:61:LEU:C	2:CB:61:LEU:HD23	2.35	0.48
9:AI:111:ARG:HG2	9:AI:112:LYS:N	2.29	0.48
16:AP:44:THR:O	16:AP:45:THR:HB	2.13	0.48
19:AS:21:GLU:O	19:AS:21:GLU:HG3	2.14	0.48
8:CH:7:ALA:HB2	8:CH:85:ARG:CD	2.39	0.48
36:BA:523:C:H5''	36:BA:540:C:O2'	2.14	0.48
1:CA:173:U:H5''	1:CA:197:A:O4'	2.14	0.48
3:AC:49:SER:C	3:AC:51:GLY:N	2.67	0.48
9:CI:99:LEU:O	9:CI:101:PHE:N	2.47	0.48
42:DG:181:ARG:O	42:DG:182:LYS:OXT	2.32	0.48
36:DA:2248:C:H2'	36:DA:2249:U:C5'	2.44	0.48
20:AT:72:LEU:O	20:AT:74:LYS:N	2.47	0.48
36:DA:2555:U:C2'	36:DA:2556:C:H5'	2.44	0.48
22:AV:1:G:C1'	26:B0:5:LYS:NZ	2.76	0.48
13:CM:2:ALA:N	13:CM:9:ILE:HG23	2.29	0.48
36:BA:1257:C:H2'	36:BA:1258:C:C6	2.47	0.48
40:DE:30:PRO:HD3	40:DE:180:ASN:ND2	2.29	0.48
25:AZ:349:VAL:HG23	25:AZ:374:LEU:HD22	1.96	0.48
43:BH:126:PRO:O	43:BH:127:GLU:HG3	2.13	0.48
57:DY:6:HIS:CD2	57:DY:6:HIS:H	2.32	0.48
36:BA:2692:C:H1'	36:BA:2847:U:O2'	2.14	0.48
36:BA:383:U:H2'	36:BA:385:C:H5	1.78	0.48
36:BA:1290:C:H2'	36:BA:1291:C:C6	2.49	0.48
6:AF:15:ASP:OD2	6:AF:17:SER:HB2	2.14	0.48
25:CZ:314:THR:HG23	25:CZ:374:LEU:O	2.13	0.48
24:AY:76:A:H5''	25:AZ:231:ILE:HD11	1.94	0.48
43:DH:109:PHE:CZ	43:DH:152:ARG:NH1	2.82	0.48
24:AY:21:A:H5'	24:AY:22:G:OP1	2.13	0.48
36:DA:1315:C:O2'	36:DA:1316:U:H5'	2.13	0.48
36:DA:2175:C:N3	36:DA:2176:A:C2	2.82	0.48
36:DA:438:G:O2'	36:DA:440:G:H5'	2.13	0.48
19:AS:36:ARG:HB2	19:AS:72:GLY:HA3	1.94	0.48
1:AA:640:A:O2'	8:AH:115:SER:HB2	2.14	0.48
36:BA:199:A:N6	36:BA:2433:A:H2'	2.28	0.48
1:AA:1137:C:O2'	1:AA:1138:G:N2	2.45	0.48
45:BK:59:UNK:HA	45:BK:64:UNK:O	2.14	0.48
1:CA:319:G:O2'	1:CA:320:C:H5'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AO:66:LEU:O	15:AO:69:TYR:HB3	2.13	0.48
36:BA:433:C:O2'	36:BA:434:U:H5'	2.14	0.48
36:DA:1902:C:C5'	39:DD:246:PRO:HD3	2.44	0.48
28:B2:51:ARG:HH21	28:B2:55:ARG:NH1	2.11	0.48
46:BN:15:LEU:O	46:BN:136:GLU:HA	2.14	0.48
39:BD:70:TRP:CZ3	39:BD:150:LYS:HA	2.48	0.48
39:BD:146:GLU:HB2	39:BD:189:CYS:HB3	1.95	0.48
36:BA:2184:G:H2'	36:BA:2185:C:O4'	2.14	0.48
54:BV:18:LEU:HD23	54:BV:19:LYS:N	2.18	0.48
4:AD:107:ARG:HH21	4:AD:194:LEU:HD12	1.79	0.48
1:CA:542:G:H2'	1:CA:543:C:C6	2.45	0.48
4:CD:121:VAL:CA	4:CD:126:ILE:HD13	2.44	0.48
3:CC:79:ARG:O	3:CC:82:GLU:OE2	2.32	0.48
51:DS:99:LYS:NZ	51:DS:99:LYS:CB	2.72	0.48
36:DA:1498:C:O4'	36:DA:1577:C:H4'	2.14	0.48
51:BS:74:ALA:O	51:BS:76:LYS:N	2.47	0.48
48:DP:46:LYS:HG2	48:DP:52:GLU:OE2	2.14	0.48
30:B4:25:TYR:O	30:B4:26:SER:HB3	2.13	0.48
16:AP:58:TYR:O	16:AP:62:VAL:HG22	2.14	0.48
35:B9:7:VAL:HG21	35:B9:36:GLN:H	1.78	0.48
53:DU:88:ILE:C	53:DU:90:VAL:N	2.67	0.48
25:CZ:134:PHE:HD1	25:CZ:171:ILE:HB	1.78	0.48
42:DG:8:LYS:O	42:DG:11:TYR:HB3	2.13	0.48
42:DG:32:PRO:HB3	42:DG:163:ALA:HA	1.96	0.48
36:DA:1061:U:H4'	36:DA:1070:A:C1'	2.43	0.48
36:BA:654(H):G:H2'	36:BA:654(I):C:C5'	2.39	0.48
36:BA:2651:C:O2'	36:BA:2652:C:H5'	2.13	0.48
54:BV:38:LEU:C	54:BV:38:LEU:HD23	2.34	0.48
1:AA:1116:C:H2'	1:AA:1117:G:H5'	1.96	0.48
1:AA:1117:G:C8	1:AA:1117:G:H5'	2.46	0.48
42:BG:9:ARG:HB3	42:BG:13:GLU:OE2	2.14	0.48
46:BN:22:THR:O	46:BN:25:ARG:HB2	2.14	0.48
50:BR:78:LYS:O	50:BR:83:ILE:HG12	2.14	0.48
36:BA:320:A:H2'	41:BF:136:THR:OG1	2.14	0.48
56:DX:24:GLY:O	56:DX:83:VAL:N	2.47	0.48
47:BO:87:ILE:HG22	47:BO:88:ASN:O	2.14	0.48
36:BA:548:A:H2'	36:BA:549:G:C5'	2.44	0.48
54:DV:21:ARG:HB3	54:DV:91:TYR:HB2	1.96	0.48
25:CZ:146:LEU:O	25:CZ:150:VAL:HG23	2.14	0.48
3:CC:35:GLU:CG	3:CC:59:ARG:HH22	2.27	0.48
22:AV:63:G:H5'	22:AV:63:G:H8	1.78	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:345:C:H1'	1:AA:346:G:N2	2.29	0.48
36:DA:288:C:H2'	36:DA:289:A:H8	1.79	0.48
1:AA:109:A:O3'	1:AA:110:C:H6	1.96	0.48
1:AA:46:G:O2'	1:AA:365:U:H1'	2.14	0.48
1:CA:155:C:H2'	1:CA:156:G:C8	2.49	0.48
35:D9:31:LYS:HE2	36:DA:2478:A:H5'	1.95	0.48
41:BF:114:VAL:HG21	41:BF:202:PHE:HE1	1.78	0.48
36:DA:2839:G:H2'	36:DA:2840:C:C6	2.48	0.48
40:BE:30:PRO:HD3	40:BE:180:ASN:CG	2.34	0.48
40:BE:9:VAL:HG13	40:BE:25:VAL:HB	1.95	0.48
48:DP:17:LYS:C	48:DP:19:VAL:N	2.66	0.48
36:BA:1658:C:H2'	36:BA:1659:U:H6	1.79	0.48
36:DA:1842:G:H2'	36:DA:1843:C:C6	2.48	0.48
27:D1:20:ARG:HB2	27:D1:32:LYS:HG3	1.96	0.48
36:BA:2520:C:C6	36:BA:2567:G:H1'	2.49	0.48
1:AA:41:G:H2'	1:AA:42:G:C8	2.49	0.48
1:AA:933:G:OP2	7:AG:3:ARG:HB3	2.14	0.48
36:BA:473:G:P	36:BA:508:G:H22	2.37	0.48
37:BB:5:C:O2'	37:BB:6:C:H5'	2.13	0.48
45:BK:78:UNK:C	45:BK:80:UNK:N	2.76	0.48
57:DY:94:LYS:HG3	57:DY:94:LYS:O	2.14	0.48
3:CC:190:ARG:HH11	3:CC:190:ARG:HG3	1.78	0.48
1:CA:1152:A:HO2'	1:CA:1153:C:H5'	1.78	0.47
28:B2:58:ALA:O	28:B2:61:LEU:HB2	2.13	0.47
36:BA:1529:G:C2	36:BA:1541:G:N2	2.81	0.47
40:BE:87:GLU:OE1	40:BE:87:GLU:O	2.32	0.47
9:AI:53:VAL:O	9:AI:53:VAL:HG23	2.14	0.47
4:AD:120:LEU:HB3	4:AD:126:ILE:CD1	2.33	0.47
1:AA:1202:G:O2'	1:AA:1203:C:H5'	2.13	0.47
36:DA:2309:A:H2'	36:DA:2310:A:H5'	1.96	0.47
2:AB:142:LEU:CD2	2:AB:146:GLN:NE2	2.76	0.47
48:BP:112:LEU:HD22	48:BP:113:LYS:N	2.29	0.47
46:BN:91:LEU:CD2	46:BN:98:VAL:HG21	2.43	0.47
36:DA:605:C:H5	36:DA:623:G:N1	2.08	0.47
22:CW:17:C:H42	36:DA:2110:G:H21	1.61	0.47
7:AG:118:VAL:HG23	7:AG:119:ARG:N	2.28	0.47
12:AL:111:LYS:O	12:AL:112:ASP:HB2	2.13	0.47
36:BA:1517:G:O2'	36:BA:1518:U:H5'	2.14	0.47
36:DA:2133:G:H4'	36:DA:2133:G:OP1	2.13	0.47
1:CA:1222:G:O2'	1:CA:1223:C:H5'	2.14	0.47
16:CP:58:TYR:O	16:CP:62:VAL:HG22	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BO:66:LYS:H	47:BO:82:ASN:ND2	2.12	0.47
53:BU:92:ARG:NH1	54:BV:11:GLN:O	2.47	0.47
25:CZ:134:PHE:CD1	25:CZ:202:LEU:HD22	2.49	0.47
27:D1:82:LEU:HD12	27:D1:83:GLU:H	1.78	0.47
1:AA:1286:A:H1'	1:AA:1287:A:H4'	1.95	0.47
42:BG:106:LEU:HD12	42:BG:141:PHE:CE1	2.44	0.47
1:AA:1317:C:H2'	1:AA:1318:A:O4'	2.14	0.47
1:CA:424:G:H2'	1:CA:425:G:C8	2.38	0.47
7:CG:143:ARG:O	7:CG:145:ALA:O	2.32	0.47
19:CS:12:ASP:O	19:CS:15:LEU:HB2	2.14	0.47
36:BA:480:A:H1'	57:BY:44:ILE:HG21	1.95	0.47
36:BA:326:G:H2'	36:BA:327:G:C8	2.47	0.47
36:BA:2882:A:H5'	50:BR:96:ARG:HG3	1.96	0.47
1:AA:1228:C:OP1	13:AM:108:ARG:NH2	2.47	0.47
19:AS:16:LEU:O	19:AS:17:GLU:C	2.51	0.47
13:CM:77:ASN:O	13:CM:81:LEU:CD2	2.62	0.47
56:BX:49:VAL:HG12	56:BX:87:GLN:NE2	2.28	0.47
50:DR:7:GLY:O	50:DR:8:ARG:CZ	2.62	0.47
25:AZ:98:GLN:HG2	25:AZ:226:GLU:OE2	2.13	0.47
36:BA:2206:G:H21	36:BA:2207:G:C4'	2.27	0.47
36:BA:2777:G:C4'	36:BA:2778:A:H5'	2.43	0.47
5:CE:83:GLU:HG2	5:CE:88:LYS:HB2	1.96	0.47
1:AA:1142:G:C8	1:AA:1143:G:C8	3.02	0.47
13:CM:118:ALA:HB3	22:CV:29:G:C5'	2.44	0.47
25:AZ:32:THR:HG22	25:AZ:70:TYR:HB3	1.95	0.47
30:D4:5:ILE:CG1	30:D4:5:ILE:O	2.62	0.47
25:CZ:126:VAL:O	25:CZ:126:VAL:HG12	2.13	0.47
30:B4:19:GLY:O	30:B4:21:VAL:HG23	2.14	0.47
1:AA:1029:C:H4'	1:AA:1033:G:N2	2.29	0.47
36:DA:2818:G:H4'	36:DA:2837:G:O4'	2.14	0.47
36:BA:519:U:H2'	36:BA:520:G:C8	2.48	0.47
2:AB:122:PHE:O	2:AB:127:ILE:HD11	2.14	0.47
7:AG:15:ASP:HB3	7:AG:20:ASP:H	1.78	0.47
1:CA:21:G:H2'	1:CA:22:G:C8	2.49	0.47
36:DA:2121:G:H2'	36:DA:2122:U:C6	2.49	0.47
1:AA:814:A:H2'	1:AA:816:A:C5'	2.44	0.47
9:AI:5:TYR:O	9:AI:84:ALA:HA	2.14	0.47
36:DA:431:U:O2'	36:DA:432:A:H5'	2.14	0.47
16:CP:64:ALA:O	16:CP:66:PRO:HD3	2.13	0.47
36:DA:745:G:OP1	40:DE:133:LYS:HE3	2.13	0.47
36:DA:1097:U:H2'	36:DA:1098:A:C8	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:170:VAL:HG12	4:CD:171:GLY:N	2.29	0.47
28:D2:16:LEU:N	28:D2:67:LYS:NZ	2.62	0.47
36:DA:1472:A:C2'	36:DA:1473:G:H5'	2.44	0.47
36:DA:669:G:N3	36:DA:669:G:H2'	2.29	0.47
41:BF:124:LEU:O	41:BF:193:VAL:HA	2.14	0.47
1:AA:1153:C:O2'	1:AA:1154:G:H5''	2.14	0.47
58:BZ:97:GLU:HA	58:BZ:127:LYS:HA	1.96	0.47
56:BX:25:LYS:HD3	56:BX:80:ILE:HD11	1.96	0.47
36:DA:1537:G:H2'	36:DA:1538:G:H8	1.79	0.47
36:BA:1485:G:O6	36:BA:1504:C:N3	2.46	0.47
36:BA:558:G:P	46:BN:111:PRO:HD2	2.54	0.47
36:DA:1485:G:O6	36:DA:1504:C:N3	2.47	0.47
36:BA:2187:G:C3'	36:BA:2188:C:H5'	2.44	0.47
43:DH:94:TYR:CE1	43:DH:108:GLY:N	2.79	0.47
52:BT:12:SER:C	52:BT:13:ARG:CZ	2.83	0.47
32:D6:15:GLU:CG	32:D6:18:ARG:NH1	2.71	0.47
36:BA:102:G:OP1	36:BA:102:G:H4'	2.14	0.47
57:BY:73:ARG:O	57:BY:74:PRO:O	2.31	0.47
36:DA:654(N):G:N7	36:DA:654(O):G:C4	2.82	0.47
4:CD:121:VAL:HG22	4:CD:126:ILE:HG12	1.95	0.47
36:DA:609:A:H2'	36:DA:610:G:O4'	2.15	0.47
2:AB:142:LEU:HD21	2:AB:146:GLN:HE21	1.79	0.47
37:BB:115:G:O4'	51:BS:47:THR:HB	2.14	0.47
34:D8:30:ARG:NE	34:D8:30:ARG:HA	2.27	0.47
36:DA:2282:G:H5''	36:DA:2283:C:O4'	2.12	0.47
43:BH:94:TYR:CE1	43:BH:108:GLY:N	2.80	0.47
49:DQ:135:ASP:N	49:DQ:137:TYR:CD1	2.78	0.47
36:DA:2742:C:O2'	36:DA:2743:C:H5'	2.14	0.47
36:BA:2742:C:O2'	36:BA:2743:C:H5'	2.13	0.47
36:DA:2632:A:H2	40:DE:61:ARG:HD2	1.79	0.47
25:CZ:113:MET:HG3	25:CZ:114:PRO:CD	2.43	0.47
31:B5:41:PRO:O	31:B5:44:THR:OG1	2.29	0.47
36:DA:2762:G:H2'	36:DA:2763:G:H5'	1.96	0.47
25:AZ:222:LEU:CD1	25:AZ:303:VAL:HB	2.44	0.47
36:DA:2208:A:O2'	36:DA:2219:G:C8	2.63	0.47
36:BA:1607:C:H4'	36:BA:1608:A:O5'	2.14	0.47
36:BA:1720:U:H2'	36:BA:1721:G:O4'	2.14	0.47
40:DE:105:THR:HG21	40:DE:164:ARG:HH12	1.78	0.47
36:BA:1771:C:HO2'	36:BA:1786:A:H8	1.61	0.47
14:AN:22:THR:O	14:AN:23:ARG:HB3	2.14	0.47
1:CA:437:U:H5''	4:CD:155:LEU:CD1	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:27:CYS:SG	14:CN:28:GLY:N	2.87	0.47
36:DA:2060:A:H62	41:DF:74:ARG:HH21	1.62	0.47
37:DB:112:U:H2'	37:DB:113:G:C8	2.47	0.47
27:B1:56:GLN:HA	27:B1:56:GLN:OE1	2.13	0.47
36:BA:391:G:C2'	36:BA:392:C:H5'	2.44	0.47
6:CF:28:ARG:O	6:CF:31:GLU:HB3	2.13	0.47
1:CA:473:G:H2'	1:CA:474:G:H8	1.79	0.47
36:BA:2692:C:H2'	36:BA:2693:A:H8	1.79	0.47
36:DA:2700:C:O2'	36:DA:2701:C:H5'	2.13	0.47
41:DF:31:HIS:ND1	48:DP:13:ASN:HB2	2.29	0.47
9:CI:5:TYR:CG	9:CI:6:GLY:N	2.81	0.47
30:D4:45:GLY:O	30:D4:46:GLN:HB2	2.13	0.47
47:DO:49:ARG:CD	47:DO:49:ARG:H	2.27	0.47
38:BC:63:SER:HA	38:BC:160:ARG:HA	1.95	0.47
41:BF:113:ALA:HB1	41:BF:186:ILE:HG21	1.95	0.47
36:BA:1675:C:H2'	36:BA:1676:A:O4'	2.13	0.47
18:CR:67:ALA:O	18:CR:71:LYS:HG3	2.14	0.47
27:B1:85:LEU:O	27:B1:86:SER:HB3	2.14	0.47
36:BA:907:U:OP1	49:BQ:24:GLY:N	2.47	0.47
41:BF:119:ARG:HH11	41:BF:119:ARG:HG2	1.80	0.47
1:CA:1003:G:N2	1:CA:1039:C:N4	2.59	0.47
40:DE:68:ALA:C	40:DE:70:ALA:H	2.16	0.47
52:BT:78:LEU:O	52:BT:79:HIS:CD2	2.62	0.47
22:AW:6:G:N2	22:AW:67:C:N3	2.56	0.47
32:B6:7:ILE:HG21	32:B6:29:ASN:HD22	1.80	0.47
46:DN:132:ALA:O	46:DN:133:GLN:CB	2.62	0.47
58:DZ:51:ALA:HB1	58:DZ:57:ILE:CD1	2.26	0.47
39:DD:72:LYS:NZ	39:DD:75:ILE:HG13	2.29	0.47
42:DG:88:ILE:CG2	42:DG:89:GLY:N	2.77	0.47
36:DA:83:G:H22	36:DA:102:G:H2'	1.79	0.47
57:DY:73:ARG:HA	57:DY:73:ARG:HE	1.79	0.47
1:CA:542:G:H5'	4:CD:41:GLY:CA	2.44	0.47
10:AJ:57:LYS:HZ3	10:AJ:60:ARG:HH22	1.62	0.47
38:DC:72:VAL:HG23	38:DC:111:ASP:CB	2.31	0.47
14:CN:41:ARG:HG2	14:CN:42:ILE:N	2.29	0.47
32:B6:52:VAL:HG12	32:B6:53:LYS:HD3	1.95	0.47
36:BA:2801(A):A:H5'	36:BA:2802:G:C8	2.47	0.47
42:DG:91:ARG:C	42:DG:91:ARG:HD2	2.35	0.47
36:DA:512:G:O2'	36:DA:513:A:H8	1.98	0.47
51:BS:74:ALA:HB2	51:BS:101:LEU:HD13	1.94	0.47
43:DH:40:GLU:O	43:DH:41:MET:HB3	2.13	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1314:C:O4'	1:AA:1314:C:O2	2.33	0.47
1:AA:858:G:C5'	1:AA:858:G:C8	2.94	0.47
36:BA:2111:C:H1'	36:BA:2118:U:O4'	2.14	0.47
52:BT:102:ILE:HB	52:BT:110:ILE:CD1	2.45	0.47
1:CA:1314:C:C5	1:CA:1315:U:C4	3.03	0.47
1:CA:1221:G:C2'	1:CA:1222:G:H5'	2.44	0.47
31:D5:56:LYS:NZ	31:D5:59:GLU:OE2	2.48	0.47
39:DD:10:THR:HG23	39:DD:13:ARG:CB	2.39	0.47
40:DE:144:ARG:HG3	40:DE:145:LYS:H	1.80	0.47
28:D2:32:LEU:HA	28:D2:53:LEU:HD13	1.95	0.47
1:CA:1124:G:C5'	10:CJ:35:SER:HB2	2.41	0.47
1:AA:539:A:H2'	1:AA:540:G:H8	1.79	0.47
14:AN:26:ARG:NH1	14:AN:47:LEU:HD21	2.22	0.47
1:CA:1116:C:H2'	1:CA:1117:G:H5'	1.96	0.47
53:DU:59:ARG:CG	53:DU:59:ARG:HH11	2.21	0.47
46:DN:22:THR:O	46:DN:25:ARG:HB2	2.14	0.47
16:AP:5:ARG:HG3	16:AP:5:ARG:NH1	2.28	0.47
34:D8:15:LYS:CG	48:DP:65:ARG:HH21	2.28	0.47
36:DA:359:A:C2	36:DA:360:G:H1'	2.48	0.47
13:AM:2:ALA:N	13:AM:9:ILE:HG23	2.29	0.47
25:AZ:363:MET:HB3	25:AZ:364:PRO:HD2	1.96	0.47
43:DH:136:ILE:HD12	43:DH:136:ILE:N	2.29	0.47
42:BG:96:ARG:O	42:BG:98:ARG:N	2.48	0.47
36:BA:547:A:H2'	36:BA:548:A:H8	1.76	0.47
1:AA:1308:U:OP1	13:AM:98:VAL:HG22	2.14	0.47
12:AL:59:ARG:HH22	12:AL:63:GLY:HA2	1.79	0.47
36:BA:1222:C:C2'	36:BA:1223:G:H5''	2.43	0.47
1:AA:519:C:H2'	1:AA:520:A:O4'	2.14	0.47
11:CK:124:LYS:HD2	11:CK:125:PHE:CE2	2.48	0.47
57:DY:2:ARG:HH11	57:DY:2:ARG:HG2	1.79	0.47
17:CQ:40:LYS:HD3	17:CQ:42:TYR:OH	2.14	0.47
42:DG:180:PHE:C	42:DG:182:LYS:H	2.18	0.47
12:CL:117:ARG:O	12:CL:118:SER:C	2.50	0.47
11:CK:48:ILE:HD11	11:CK:67:ASP:HB2	1.96	0.47
55:BW:29:LEU:CD1	55:BW:33:ARG:HD2	2.44	0.47
1:AA:1250:A:H5'	9:AI:67:GLY:HA2	1.95	0.47
36:DA:752:A:H4'	36:DA:753:C:O5'	2.14	0.47
42:DG:18:GLU:CG	42:DG:175:LEU:HD13	2.44	0.47
36:DA:2241:A:H2'	36:DA:2242:G:C8	2.50	0.47
42:DG:107:LEU:HD21	42:DG:178:PHE:CD1	2.49	0.47
36:DA:2025:C:H2'	36:DA:2026:C:C6	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:75:PHE:CE1	4:AD:93:PHE:CZ	3.02	0.47
16:AP:2:VAL:O	16:AP:64:ALA:HA	2.14	0.47
36:DA:1907:G:O2'	36:DA:1908:C:H5'	2.14	0.47
43:BH:152:ARG:HH11	43:BH:152:ARG:HG3	1.79	0.47
1:AA:603:U:H2'	1:AA:604:G:H8	1.78	0.47
42:DG:34:LEU:HD11	42:DG:99:MET:HE3	1.96	0.47
6:CF:53:ALA:O	6:CF:54:LYS:HB2	2.13	0.47
6:CF:9:VAL:HG22	6:CF:60:PHE:CE2	2.50	0.47
45:BK:13:UNK:O	45:BK:52:UNK:HA	2.14	0.47
38:DC:122:ALA:O	38:DC:126:LYS:HB2	2.14	0.47
36:DA:904:C:H2'	36:DA:905:U:C6	2.49	0.47
36:DA:907:U:OP1	49:DQ:24:GLY:N	2.46	0.47
36:DA:1925:C:O2'	36:DA:1926:U:H5'	2.15	0.47
44:BJ:26:UNK:HA	44:BJ:84:UNK:HA	1.95	0.47
9:AI:16:ARG:HG3	9:AI:16:ARG:HH11	1.78	0.47
25:CZ:187:LYS:HD2	25:CZ:187:LYS:N	2.29	0.47
42:BG:48:GLU:O	42:BG:50:ALA:N	2.47	0.47
58:BZ:128:VAL:CG2	58:BZ:129:SER:H	2.23	0.47
56:BX:13:LEU:HD23	56:BX:18:TYR:HE1	1.80	0.47
36:BA:1536:C:H2'	36:BA:1537:G:H4'	1.94	0.47
36:DA:1529:G:C2	36:DA:1541:G:N2	2.82	0.47
48:BP:84:ASN:C	48:BP:86:LYS:N	2.66	0.47
39:BD:62:TYR:HA	39:BD:87:ASN:HD21	1.80	0.47
34:D8:59:LYS:HE3	34:D8:59:LYS:HB2	1.67	0.47
46:BN:45:ASN:CG	46:BN:45:ASN:O	2.52	0.47
36:BA:926:A:C8	36:BA:926:A:H5'	2.50	0.47
40:DE:14:ILE:HD11	40:DE:173:VAL:CG1	2.41	0.47
4:CD:120:LEU:HB3	4:CD:126:ILE:CD1	2.34	0.47
34:B8:23:VAL:CG1	34:B8:46:ARG:HD3	2.44	0.47
12:CL:20:LYS:N	12:CL:20:LYS:HD3	2.10	0.47
10:CJ:57:LYS:HZ2	10:CJ:60:ARG:HH22	1.63	0.47
1:AA:1399:C:H4'	1:AA:1400:C:O5'	2.14	0.47
51:BS:87:PHE:CG	51:BS:88:ASP:N	2.82	0.47
36:BA:265:A:H1'	36:BA:266:G:O4'	2.13	0.47
36:DA:2334:G:H5'	51:DS:13:ARG:HD3	1.97	0.47
51:BS:16:ASN:O	51:BS:18:ILE:N	2.47	0.47
43:BH:19:VAL:CG1	43:BH:20:ALA:H	2.15	0.47
36:BA:1477:A:C2	36:BA:1515:G:C2	3.03	0.47
36:DA:652:C:HO2'	36:DA:653:A:P	2.36	0.47
49:DQ:134:ARG:HA	49:DQ:137:TYR:CE1	2.49	0.47
36:BA:2131:G:O4'	36:BA:2133:G:N3	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:17:PHE:HB3	2:AB:44:LEU:HD21	1.97	0.47
53:DU:92:ARG:NH1	54:DV:11:GLN:O	2.48	0.47
43:DH:104:GLU:HA	43:DH:113:VAL:O	2.14	0.47
36:BA:996:A:H4'	53:BU:92:ARG:CD	2.44	0.47
53:BU:92:ARG:CZ	54:BV:11:GLN:H	2.27	0.47
25:CZ:27:LEU:HD12	25:CZ:27:LEU:C	2.34	0.47
31:B5:43:HIS:HE1	36:BA:2884:U:OP2	1.98	0.47
52:DT:93:ARG:HA	52:DT:93:ARG:HD2	1.63	0.47
43:DH:98:LEU:CB	43:DH:125:VAL:HG21	2.40	0.47
47:BO:35:VAL:CG1	47:BO:69:ILE:HD13	2.43	0.47
16:CP:5:ARG:NE	16:CP:22:THR:CG2	2.77	0.47
19:CS:16:LEU:O	19:CS:17:GLU:C	2.53	0.47
57:BY:47:LYS:HD2	57:BY:60:PHE:HE1	1.79	0.47
36:DA:272(D):G:H1	36:DA:364:C:N4	2.11	0.47
36:DA:1720:U:H2'	36:DA:1721:G:O4'	2.13	0.47
25:AZ:325:LYS:HB2	25:AZ:331:HIS:HB3	1.97	0.47
58:BZ:103:ARG:NH2	58:BZ:136:PHE:CZ	2.82	0.47
16:AP:44:THR:O	16:AP:45:THR:HG22	2.14	0.47
1:AA:35:G:H2'	1:AA:36:C:H6	1.78	0.47
39:BD:176:ARG:HG2	39:BD:176:ARG:NH1	2.28	0.47
25:CZ:267:VAL:HG23	25:CZ:288:VAL:HG13	1.95	0.47
10:AJ:85:LEU:C	10:AJ:87:THR:H	2.17	0.47
36:DA:2262:U:O2'	36:DA:2263:C:H5'	2.13	0.47
11:CK:125:PHE:C	11:CK:127:LYS:H	2.18	0.47
1:AA:345:C:O5'	52:BT:41:ARG:NH2	2.47	0.47
36:BA:2292:C:H2'	36:BA:2293:C:H6	1.79	0.47
36:BA:2777:G:H4'	36:BA:2778:A:H5'	1.97	0.47
1:CA:1325:C:H4'	21:CU:17:THR:HG21	1.97	0.47
9:AI:99:LEU:O	9:AI:101:PHE:N	2.47	0.47
36:BA:45:C:H2'	36:BA:47:C:H6	1.74	0.47
1:CA:1250:A:H5'	9:CI:67:GLY:HA2	1.96	0.47
1:CA:731:G:H5'	1:CA:766:A:H4'	1.95	0.47
42:BG:91:ARG:C	42:BG:91:ARG:CD	2.83	0.47
12:CL:46:LYS:H	12:CL:92:ASP:HB3	1.80	0.47
17:CQ:47:PRO:HG2	17:CQ:48:GLU:H	1.79	0.47
36:BA:1166:C:H2'	36:BA:1167:U:H6	1.80	0.47
1:AA:473:G:H2'	1:AA:474:G:H8	1.79	0.47
29:B3:26:LEU:HB2	29:B3:28:LEU:HD22	1.97	0.47
22:CV:75:C:H2'	22:CV:76:A:O4'	2.14	0.47
22:AV:75:C:H2'	22:AV:76:A:O4'	2.14	0.47
25:CZ:176:LEU:O	25:CZ:180:GLU:HG3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DN:39:ARG:C	46:DN:41:ASP:H	2.17	0.47
36:DA:793:A:OP2	36:DA:2072:G:H5'	2.14	0.47
36:BA:1632:A:C5	36:BA:1633:G:C6	3.02	0.47
3:AC:29:TYR:O	3:AC:30:ARG:C	2.53	0.47
36:BA:826:U:H2'	36:BA:828:U:O4'	2.13	0.47
20:AT:43:LEU:HB3	20:AT:48:LYS:HB2	1.97	0.47
41:DF:108:LYS:HB3	41:DF:112:MET:HE3	1.95	0.47
36:DA:1668:A:N3	36:DA:1670:C:C4	2.82	0.47
26:B0:51:VAL:CG2	26:B0:81:VAL:HG23	2.44	0.47
1:CA:1101:A:H4'	1:CA:1102:A:O5'	2.15	0.47
32:B6:22:ALA:HB2	32:B6:39:TYR:CZ	2.49	0.47
1:AA:1152:A:H2'	1:AA:1153:C:C6	2.50	0.47
42:BG:97:ASP:H	42:BG:100:TRP:HD1	1.63	0.47
52:DT:78:LEU:O	52:DT:79:HIS:CD2	2.65	0.47
41:DF:118:ALA:HA	41:DF:123:LEU:HB3	1.96	0.47
41:BF:3:GLU:O	41:BF:19:GLU:HG3	2.15	0.47
39:DD:24:ILE:C	39:DD:26:LYS:N	2.66	0.47
39:DD:35:LYS:HB3	39:DD:36:PRO:CD	2.45	0.47
56:BX:14:SER:H	56:BX:17:ALA:HB3	1.79	0.47
36:BA:1528(A):A:H62	36:BA:1541:G:H21	1.59	0.47
32:B6:32:ASN:O	32:B6:33:LYS:HB2	2.14	0.47
46:BN:11:PRO:O	46:BN:13:TRP:N	2.47	0.47
32:D6:11:LEU:HD11	32:D6:26:ASN:HB2	1.97	0.47
9:CI:90:PRO:O	9:CI:91:ASP:O	2.32	0.47
58:DZ:57:ILE:N	58:DZ:69:THR:O	2.41	0.47
36:DA:2833:G:C3'	36:DA:2834:G:C5'	2.78	0.47
27:B1:7:ILE:CD1	27:B1:70:VAL:HG22	2.45	0.47
32:D6:20:ASN:OD1	32:D6:21:TYR:N	2.48	0.47
57:BY:39:VAL:HG12	57:BY:40:GLU:N	2.28	0.47
57:BY:75:ILE:HG13	57:BY:76:CYS:H	1.79	0.47
4:AD:194:LEU:HB3	4:AD:196:LEU:CD1	2.35	0.47
48:DP:95:VAL:CG2	48:DP:125:VAL:HA	2.45	0.47
36:DA:2801(A):A:H5'	36:DA:2802:G:C8	2.49	0.47
38:BC:73:ARG:H	38:BC:111:ASP:CG	2.18	0.47
36:BA:664:C:O2'	36:BA:665:C:H5'	2.15	0.47
2:CB:72:GLY:HA2	2:CB:165:VAL:HG22	1.95	0.47
58:BZ:112:ARG:O	58:BZ:113:ALA:O	2.32	0.47
4:CD:19:LEU:HD23	4:CD:67:ILE:HD12	1.96	0.47
36:BA:253:C:H2'	36:BA:254:G:O4'	2.15	0.47
3:AC:25:GLY:O	3:AC:26:LYS:C	2.52	0.47
36:DA:1747:G:H2'	36:DA:1747(A):G:C8	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2131:G:O4'	36:DA:2133:G:N3	2.47	0.47
51:DS:85:VAL:C	51:DS:106:ARG:HG3	2.34	0.47
43:BH:104:GLU:HA	43:BH:113:VAL:O	2.14	0.47
1:AA:1125:U:C5'	1:AA:1126:U:H5	2.27	0.47
25:CZ:107:SER:HB2	25:CZ:137:LYS:HD2	1.95	0.47
36:DA:142:A:H1'	36:DA:1408:C:C1'	2.45	0.47
36:BA:90:U:O3'	36:BA:92:A:O4'	2.33	0.47
49:BQ:60:ARG:CZ	49:BQ:60:ARG:HB3	2.44	0.47
47:DO:35:VAL:CG2	47:DO:103:ALA:HB3	2.40	0.47
6:CF:97:PHE:O	18:CR:31:LEU:HD23	2.14	0.47
43:BH:137:ASP:OD2	43:BH:140:LYS:HE3	2.14	0.47
58:DZ:108:PRO:C	58:DZ:110:GLY:N	2.67	0.47
36:BA:580:C:H2'	36:BA:581:C:C6	2.48	0.47
36:DA:1681:G:O2'	36:DA:1762:A:C2'	2.59	0.47
13:AM:91:ARG:HB2	13:AM:98:VAL:HG12	1.95	0.47
20:AT:89:ARG:HB2	20:AT:104:LEU:HD12	1.96	0.47
13:CM:108:ARG:NH2	13:CM:114:ARG:HA	2.30	0.47
1:CA:408:A:H4'	4:CD:112:VAL:HG11	1.96	0.47
12:CL:75:HIS:CD2	12:CL:77:LEU:H	2.32	0.47
1:AA:405:U:O2	1:AA:498:U:H2'	2.15	0.47
39:BD:142:VAL:HG21	39:BD:191:ALA:CB	2.45	0.47
9:CI:111:ARG:HG2	9:CI:112:LYS:N	2.29	0.47
1:AA:173:U:H5''	1:AA:197:A:O4'	2.15	0.47
18:CR:25:THR:HG22	18:CR:42:ARG:HH11	1.79	0.47
5:CE:40:ARG:HH11	5:CE:40:ARG:HG2	1.79	0.47
36:DA:1288:U:C2	36:DA:1327:C:O2	2.67	0.47
35:D9:19:ARG:HG3	35:D9:20:HIS:ND1	2.30	0.47
36:BA:852:G:H2'	36:BA:853:G:C8	2.49	0.47
12:CL:45:PRO:O	12:CL:46:LYS:O	2.33	0.47
37:DB:28:C:O2'	37:DB:29:A:H5'	2.15	0.47
29:D3:7:LYS:HE2	29:D3:32:GLN:OE1	2.14	0.47
29:B3:1:MET:CE	29:B3:40:THR:HG22	2.44	0.47
9:AI:126:SER:O	9:AI:127:LYS:CB	2.62	0.47
25:AZ:107:SER:CB	25:AZ:137:LYS:HD2	2.44	0.47
1:CA:189(K):U:H2'	1:CA:189(L):G:H8	1.79	0.47
25:AZ:311:THR:HB	25:AZ:312:PRO:HD2	1.96	0.47
55:BW:37:ARG:HG3	55:BW:37:ARG:NH1	2.29	0.47
40:DE:98:PRO:HG3	40:DE:175:VAL:HG12	1.96	0.47
8:AH:30:ARG:CB	8:AH:30:ARG:NH1	2.77	0.47
36:BA:2052:G:C8	40:BE:141:ILE:HD11	2.49	0.47
53:DU:99:ALA:HB2	53:DU:106:PHE:CE1	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:148:VAL:HG21	8:AH:107:LEU:HD13	1.97	0.47
36:BA:535:C:O2'	36:BA:536:A:H5'	2.14	0.47
40:DE:108:SER:O	40:DE:162:ALA:HA	2.14	0.47
36:DA:425:G:O2'	36:DA:426:C:H5'	2.14	0.47
34:D8:17:THR:OG1	34:D8:21:LYS:HB2	2.14	0.47
8:AH:86:ILE:HG12	8:AH:135:CYS:HA	1.96	0.47
1:AA:1492:A:H1'	23:AX:23:G:O2'	2.15	0.47
1:AA:399:G:H2'	1:AA:400:C:C6	2.49	0.47
1:CA:770:C:O2'	1:CA:771:G:H5'	2.13	0.47
36:BA:2347:C:H2'	36:BA:2348:U:C6	2.50	0.47
25:CZ:90:LYS:NZ	25:CZ:90:LYS:HB2	2.29	0.47
42:BG:182:LYS:N	42:BG:182:LYS:HD2	2.29	0.47
39:DD:61:LEU:HA	39:DD:61:LEU:HD12	1.74	0.47
36:DA:2636:U:O5'	40:DE:80:GLU:HG3	2.14	0.47
40:DE:48:GLN:HA	40:DE:80:GLU:HA	1.96	0.47
1:AA:1006:C:H2'	1:AA:1007:C:C5	2.50	0.47
34:D8:7:HIS:N	34:D8:11:LYS:HE2	2.29	0.47
36:BA:2056:G:H2'	36:BA:2056:G:N3	2.29	0.47
58:DZ:72:ARG:HG2	58:DZ:89:PHE:HB2	1.95	0.47
40:DE:14:ILE:HB	52:DT:14:TYR:CZ	2.50	0.47
5:AE:80:ILE:CD1	5:AE:142:LEU:HD21	2.44	0.47
36:BA:1498:C:O4'	36:BA:1577:C:H4'	2.14	0.47
2:AB:131:PRO:CG	2:AB:134:GLU:HG2	2.31	0.47
36:BA:605:C:H1'	36:BA:657:U:O2'	2.15	0.47
2:AB:72:GLY:HA2	2:AB:165:VAL:HG22	1.96	0.47
51:BS:25:ARG:HD2	51:BS:88:ASP:OD2	2.14	0.47
38:BC:72:VAL:HG11	38:BC:156:ILE:O	2.14	0.47
37:BB:22:U:H2'	37:BB:23:G:C8	2.50	0.47
34:D8:28:GLY:C	34:D8:32:LEU:HD22	2.35	0.47
48:DP:61:ARG:H	48:DP:61:ARG:HG3	1.46	0.47
51:BS:75:GLU:O	51:BS:76:LYS:HB2	2.14	0.47
36:BA:2717:G:O2'	52:BT:96:ARG:HD3	2.15	0.47
36:DA:1517:G:O2'	36:DA:1518:U:H5'	2.14	0.47
51:DS:75:GLU:O	51:DS:76:LYS:HB2	2.15	0.47
36:DA:1108:U:H3'	36:DA:1109:C:H6	1.80	0.47
53:BU:92:ARG:HB2	54:BV:11:GLN:NE2	2.29	0.47
25:CZ:14:VAL:HG23	25:CZ:79:HIS:HA	1.96	0.47
36:DA:331:A:C1'	36:DA:332:A:OP1	2.63	0.47
36:BA:142:A:H1'	36:BA:1408:C:C1'	2.44	0.47
2:AB:229:VAL:CG1	2:AB:230:VAL:N	2.69	0.47
4:CD:177:ASP:O	4:CD:181:MET:N	2.47	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:64:A:O2'	36:BA:65:C:H5'	2.15	0.47
36:DA:958:U:H5''	49:DQ:14:ARG:HD3	1.94	0.47
1:AA:940:C:O2'	1:AA:941:G:H5'	2.14	0.47
1:AA:1286:A:O2'	1:AA:1287:A:P	2.72	0.47
25:CZ:333:GLY:CA	25:CZ:363:MET:HA	2.45	0.47
10:AJ:3:LYS:O	10:AJ:100:THR:HA	2.14	0.47
1:AA:977:A:N6	1:AA:1224:G:O5'	2.47	0.47
36:DA:2126:A:O2'	36:DA:2127:G:OP2	2.30	0.47
42:BG:55:LYS:HG3	42:BG:58:GLN:NE2	2.29	0.47
36:DA:2292:C:H2'	36:DA:2293:C:C6	2.49	0.47
36:DA:2292:C:H2'	36:DA:2293:C:H6	1.78	0.47
1:CA:1485:U:O2'	1:CA:1486:G:H5'	2.15	0.47
57:DY:2:ARG:HD2	57:DY:3:VAL:HG23	1.97	0.47
1:CA:160:A:H1'	1:CA:344:A:C5	2.50	0.47
36:BA:1952:A:C2	47:BO:22:ILE:HG23	2.49	0.47
20:CT:82:SER:O	20:CT:86:ARG:HB2	2.14	0.47
1:AA:71:C:H2'	1:AA:72:C:C6	2.49	0.47
55:BW:29:LEU:CG	55:BW:33:ARG:HD2	2.43	0.47
36:BA:6:A:O2'	46:BN:130:HIS:HB2	2.15	0.47
46:BN:129:PRO:O	46:BN:130:HIS:CB	2.60	0.47
4:CD:85:LYS:HD3	4:CD:92:VAL:HG11	1.97	0.47
19:AS:29:ARG:O	19:AS:31:ILE:HG22	2.13	0.47
5:CE:144:THR:N	5:CE:147:ASP:OD1	2.42	0.47
6:CF:2:ARG:HD2	6:CF:69:GLU:HB3	1.97	0.47
36:BA:189:G:H2'	36:BA:205:G:H22	1.80	0.47
36:DA:1257:C:H2'	36:DA:1258:C:C6	2.47	0.47
29:D3:1:MET:CE	29:D3:40:THR:HG22	2.44	0.47
40:BE:70:ALA:O	40:BE:71:GLY:C	2.53	0.47
26:B0:43:THR:O	26:B0:43:THR:HG23	2.15	0.47
25:AZ:139:ASP:OD2	25:AZ:177:LEU:HD11	2.15	0.47
16:CP:3:LYS:HG2	16:CP:65:GLN:O	2.15	0.47
1:AA:995:C:O2'	1:AA:996:A:H8	1.97	0.47
1:CA:1261:A:H2'	1:CA:1262:C:H5'	1.97	0.47
50:BR:18:LEU:HD11	50:BR:22:ARG:CZ	2.43	0.47
1:AA:635:G:O2'	1:AA:636:U:H5'	2.13	0.47
32:D6:22:ALA:HB2	32:D6:39:TYR:CE2	2.50	0.47
26:B0:51:VAL:HG22	26:B0:81:VAL:HG23	1.97	0.47
1:CA:495:A:O2'	1:CA:496:A:P	2.73	0.47
3:CC:130:VAL:HG21	3:CC:157:ILE:HG23	1.97	0.47
36:DA:2352:A:C4	36:DA:2366:A:C2	3.02	0.47
36:DA:236:C:H2'	36:DA:237:C:C6	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:69:G:H1	1:AA:100:C:H42	1.63	0.47
53:BU:110:VAL:O	53:BU:113:ALA:HB3	2.14	0.47
1:AA:1303:C:H2'	1:AA:1304:G:H5'	1.95	0.47
36:BA:201:C:C2'	36:BA:202:U:H5'	2.45	0.47
3:AC:137:ALA:O	3:AC:141:VAL:HG23	2.14	0.47
36:BA:1773:A:H2'	36:BA:1774:C:H5'	1.97	0.47
36:BA:773:U:H4'	39:BD:47:GLY:HA3	1.96	0.47
36:BA:688:U:H5'	36:BA:1780:A:C2	2.49	0.47
39:DD:169:GLU:OE1	39:DD:184:LYS:HD3	2.14	0.47
5:CE:36:ASP:OD1	5:CE:38:GLN:N	2.46	0.47
38:DC:195:ALA:O	38:DC:198:ALA:HB3	2.15	0.47
25:AZ:352:VAL:HG12	25:AZ:353:VAL:N	2.29	0.47
1:CA:263:A:OP2	20:CT:79:ARG:NH1	2.47	0.47
52:DT:33:LYS:HD2	52:DT:43:GLN:CB	2.45	0.47
40:DE:49:LEU:HD11	40:DE:91:VAL:HG21	1.97	0.47
40:DE:65:GLY:HA2	40:DE:70:ALA:CB	2.44	0.47
36:DA:32:C:H6	36:DA:32:C:H5'	1.78	0.47
56:DX:13:LEU:HD23	56:DX:18:TYR:HE1	1.79	0.47
36:DA:1543:C:C3'	36:DA:1544:A:C5'	2.81	0.47
34:B8:59:LYS:O	34:B8:61:LEU:HD12	2.15	0.47
39:BD:30:GLU:CA	39:BD:35:LYS:HZ2	2.28	0.47
46:BN:43:THR:HG22	46:BN:45:ASN:HD22	1.80	0.47
36:BA:323:G:H2'	41:BF:169:ASN:HD21	1.77	0.47
1:AA:1417:G:N2	1:AA:1482:G:H2'	2.30	0.47
58:BZ:171:ILE:HD13	58:BZ:172:ALA:N	2.30	0.47
1:CA:955:U:O2'	1:CA:956:U:H5'	2.14	0.47
36:DA:2186:G:H2'	36:DA:2187:G:N9	2.29	0.47
40:BE:14:ILE:HD11	40:BE:173:VAL:CG1	2.40	0.47
12:CL:17:LYS:HD3	12:CL:18:VAL:H	1.78	0.47
57:BY:17:SER:HA	57:BY:71:LYS:HD2	1.96	0.47
32:B6:10:LEU:HD22	32:B6:10:LEU:H	1.76	0.47
32:B6:9:LEU:C	32:B6:9:LEU:HD13	2.35	0.47
4:CD:6:GLY:O	4:CD:8:VAL:HG13	2.15	0.47
3:CC:81:GLY:O	3:CC:82:GLU:C	2.52	0.47
36:BA:623:G:H2'	36:BA:624:C:C6	2.49	0.47
51:DS:99:LYS:HZ3	51:DS:99:LYS:HB3	1.77	0.47
48:BP:101:VAL:HG12	48:BP:106:LEU:HB2	1.95	0.47
20:CT:47:GLY:C	20:CT:49:ALA:H	2.12	0.47
46:DN:62:VAL:HG13	46:DN:62:VAL:O	2.15	0.47
36:DA:1142(A):A:C8	36:DA:1142(A):A:H5'	2.50	0.47
46:DN:62:VAL:HG23	46:DN:66:LYS:HD2	1.93	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:71:VAL:O	2:CB:164:VAL:HA	2.15	0.47
36:BA:664:C:O4'	36:BA:940:G:H5''	2.15	0.47
41:DF:132:VAL:HG13	41:DF:133:ASN:N	2.30	0.47
39:DD:48:ARG:NH1	39:DD:48:ARG:HG3	2.29	0.47
36:DA:27:G:N2	36:DA:512:G:C2'	2.69	0.47
3:CC:132:ARG:O	3:CC:136:GLN:HB2	2.14	0.47
36:DA:664:C:O2'	36:DA:665:C:H5'	2.15	0.47
30:D4:25:TYR:HE2	42:DG:2:PRO:HB3	1.79	0.47
20:AT:57:ARG:NH1	20:AT:102:GLY:HA2	2.13	0.47
36:BA:2811:G:C2'	36:BA:2812:G:H5'	2.44	0.47
24:CY:72:U:C3'	24:CY:73:G:H5''	2.44	0.47
47:DO:66:LYS:H	47:DO:82:ASN:ND2	2.13	0.47
12:AL:35:GLY:O	12:AL:82:VAL:HG13	2.15	0.47
25:AZ:135:MET:HE1	25:AZ:150:VAL:HB	1.97	0.47
3:CC:16:ARG:HH11	3:CC:16:ARG:CB	2.28	0.47
36:BA:1665:A:H2'	36:BA:1666:G:O4'	2.15	0.47
25:AZ:171:ILE:HG13	25:AZ:202:LEU:HA	1.97	0.47
36:BA:2282:G:H5''	36:BA:2283:C:O4'	2.14	0.47
31:D5:41:PRO:O	31:D5:44:THR:OG1	2.29	0.47
43:DH:104:GLU:OE1	43:DH:106:THR:HG23	2.15	0.47
43:DH:101:ARG:O	43:DH:117:PRO:HG3	2.14	0.47
3:AC:206:GLU:O	3:AC:207:VAL:C	2.52	0.47
58:DZ:150:LEU:O	58:DZ:151:HIS:HB3	2.15	0.47
36:DA:2762:G:H2'	36:DA:2763:G:C5'	2.45	0.47
36:DA:2762:G:C2'	36:DA:2763:G:H5'	2.44	0.47
46:BN:34:LEU:O	46:BN:34:LEU:HD13	2.14	0.47
36:BA:733:G:N7	36:BA:761:A:C5	2.83	0.47
36:BA:896:A:H5''	58:BZ:146:ILE:HG13	1.97	0.47
20:AT:22:ARG:O	20:AT:26:ASN:ND2	2.48	0.47
36:DA:2651:C:O2'	36:DA:2652:C:H5'	2.15	0.47
1:CA:1316:G:O2'	14:CN:18:VAL:HG21	2.14	0.47
42:BG:146:TYR:C	42:BG:148:MET:H	2.18	0.47
54:DV:49:THR:CB	54:DV:50:PRO:CD	2.92	0.47
22:AW:39:U:H2'	22:AW:40:C:H5'	1.96	0.47
50:DR:17:ARG:O	50:DR:20:LEU:HB3	2.14	0.47
36:DA:580:C:H2'	36:DA:581:C:C6	2.50	0.47
50:DR:118:GLU:HA	50:DR:118:GLU:OE1	2.15	0.47
36:DA:480:A:H1'	57:DY:44:ILE:HG21	1.97	0.47
58:DZ:29:TYR:CB	58:DZ:34:ASN:CB	2.92	0.47
1:AA:59:A:H3'	1:AA:331:G:N2	2.25	0.47
36:BA:1222:C:H2'	36:BA:1223:G:H5'	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:59:ARG:HH22	12:CL:63:GLY:HA2	1.80	0.47
46:DN:3:THR:CG2	46:DN:4:TYR:N	2.78	0.47
1:CA:434:U:H2'	1:CA:435:C:H6	1.77	0.47
1:AA:405:U:O2	1:AA:498:U:C6	2.68	0.47
9:CI:118:LYS:O	9:CI:119:ALA:CB	2.59	0.47
28:B2:12:GLU:O	28:B2:15:LYS:HG2	2.14	0.47
1:CA:276:G:O3'	17:CQ:68:ARG:NH1	2.45	0.47
24:CY:40:C:H2'	24:CY:41:C:H5'	1.96	0.47
39:DD:130:ALA:HB2	39:DD:192:THR:HB	1.97	0.47
50:BR:51:LEU:HG	50:BR:66:VAL:HG13	1.95	0.47
36:BA:2485:G:O2'	36:BA:2486:G:H5'	2.15	0.47
1:AA:160:A:H1'	1:AA:344:A:C5	2.50	0.47
18:CR:26:LEU:N	18:CR:26:LEU:HD12	2.30	0.47
2:CB:97:TRP:HH2	2:CB:176:GLU:CD	2.18	0.47
22:CW:59:U:H3'	22:CW:60:U:C6	2.50	0.47
36:DA:2887:U:H2'	36:DA:2888:C:C6	2.49	0.47
25:CZ:98:GLN:HG2	25:CZ:226:GLU:OE2	2.14	0.47
1:CA:71:C:H2'	1:CA:72:C:C6	2.49	0.47
1:CA:920:U:O4'	1:CA:1080:A:C2	2.67	0.47
39:DD:275:LYS:HD2	39:DD:275:LYS:C	2.34	0.47
2:CB:178:ARG:NH1	2:CB:178:ARG:HG3	2.29	0.47
6:AF:22:GLU:O	6:AF:25:ILE:HG22	2.15	0.47
1:CA:674:G:H4'	18:CR:81:PHE:CD2	2.50	0.47
36:DA:2554:U:H2'	36:DA:2555:U:C6	2.50	0.47
36:BA:2247:A:O2'	36:BA:2248:C:H5'	2.14	0.47
48:DP:71:VAL:CG1	48:DP:72:PRO:HD3	2.44	0.47
36:BA:118:A:H5'	36:BA:119:A:H8	1.79	0.47
40:BE:93:VAL:C	40:BE:95:ILE:H	2.18	0.47
36:BA:824:A:H1'	36:BA:2358:G:N7	2.28	0.47
36:DA:2364:C:H2'	36:DA:2365:G:O4'	2.15	0.47
36:DA:1658:C:H2'	36:DA:1659:U:C6	2.50	0.47
36:DA:2818:G:O2'	36:DA:2837:G:H5'	2.15	0.47
50:DR:28:LEU:HD12	50:DR:114:VAL:HG21	1.95	0.47
25:CZ:341:GLN:NE2	25:CZ:389:ARG:O	2.47	0.47
50:BR:28:LEU:HD23	50:BR:29:LEU:HD12	1.97	0.47
1:AA:1226:C:C5	13:AM:104:ARG:HB2	2.49	0.47
36:BA:742:G:O2'	36:BA:743:G:H5'	2.15	0.47
8:CH:10:LEU:CD2	8:CH:83:ILE:HD11	2.45	0.47
1:CA:825:G:N2	8:CH:11:THR:HG21	2.30	0.47
1:CA:828:A:H4'	1:CA:828:A:OP1	2.15	0.47
13:CM:37:THR:O	13:CM:39:ILE:HG13	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:152:ARG:NH1	43:BH:152:ARG:HG3	2.29	0.47
1:AA:1262:C:H2'	1:AA:1263:C:H6	1.79	0.47
1:AA:21:G:H2'	1:AA:22:G:C8	2.49	0.47
36:DA:21:A:O2'	36:DA:22:C:H5'	2.14	0.47
55:DW:62:HIS:O	55:DW:63:ASP:C	2.53	0.47
36:BA:2033:A:O2'	36:BA:2034:U:P	2.73	0.47
29:B3:11:SER:HB3	36:BA:988:A:P	2.54	0.47
1:AA:222:U:H2'	1:AA:223:U:C6	2.50	0.47
13:CM:28:ALA:O	13:CM:32:GLU:HB2	2.14	0.47
36:BA:1963:U:H2'	36:BA:1963:U:O2	2.14	0.47
54:DV:100:ARG:HG3	54:DV:100:ARG:O	2.15	0.47
33:D7:1:MET:H3	33:D7:1:MET:HE3	1.79	0.47
5:CE:15:ARG:HD2	5:CE:26:PHE:CG	2.50	0.47
2:CB:126:GLU:O	2:CB:129:GLU:HB2	2.15	0.47
46:BN:65:LYS:NZ	46:BN:65:LYS:HB3	2.29	0.47
36:DA:80:G:O2'	36:DA:81:G:H5'	2.14	0.47
49:BQ:6:ARG:O	49:BQ:7:MET:HG3	2.15	0.47
1:AA:28:G:O2'	1:AA:296:U:OP1	2.28	0.47
42:DG:133:LEU:CD2	42:DG:157:ILE:HB	2.44	0.47
36:DA:1632:A:C5	36:DA:1633:G:C6	3.03	0.47
3:AC:108:ASN:ND2	3:AC:144:SER:OG	2.48	0.47
16:AP:12:LYS:HG2	16:AP:13:HIS:CD2	2.50	0.47
1:CA:69:G:H1	1:CA:100:C:H42	1.63	0.47
1:CA:577:G:O2'	1:CA:578:C:H5'	2.14	0.47
1:AA:792:A:H4'	1:AA:793:U:O5'	2.15	0.47
8:CH:86:ILE:HG12	8:CH:135:CYS:HA	1.97	0.47
1:CA:1118:C:H1'	1:CA:1179:A:C4	2.50	0.47
52:DT:48:ILE:HD12	52:DT:48:ILE:C	2.34	0.47
6:AF:47:ARG:O	6:AF:47:ARG:HG3	2.15	0.47
36:DA:208:C:H2'	36:DA:209:C:C6	2.50	0.47
6:AF:9:VAL:HG22	6:AF:60:PHE:CE2	2.50	0.47
36:BA:315:G:H2'	36:BA:316:C:C6	2.50	0.47
3:AC:150:LYS:HG3	3:AC:169:ALA:HB2	1.97	0.47
36:DA:2543:G:H5'	36:DA:2543:G:H8	1.80	0.47
58:BZ:128:VAL:CG2	58:BZ:129:SER:N	2.78	0.47
40:BE:13:ARG:O	52:BT:57:PHE:HE2	1.98	0.47
1:AA:1005:A:C3'	1:AA:1006:C:H5'	2.44	0.47
22:AW:5:G:N2	22:AW:68:C:C2	2.83	0.47
36:BA:1484:G:C3'	36:BA:1485:G:H5''	2.43	0.47
41:BF:129:PHE:CD2	41:BF:163:VAL:HG21	2.50	0.47
36:DA:1485:G:H1'	36:DA:1505:C:N4	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2186:G:H2'	36:BA:2187:G:N9	2.29	0.47
52:BT:28:VAL:HB	52:BT:88:ILE:HG12	1.95	0.47
51:DS:54:LEU:HD11	51:DS:58:LEU:O	2.15	0.47
36:DA:2100:G:H1	36:DA:2189:U:H3	1.62	0.47
10:CJ:55:LYS:HZ2	10:CJ:55:LYS:CA	2.27	0.47
48:BP:62:LEU:O	48:BP:62:LEU:HG	2.15	0.47
4:CD:126:ILE:CG2	4:CD:127:THR:N	2.78	0.47
4:CD:5:ILE:O	4:CD:5:ILE:HG22	2.13	0.47
32:B6:15:GLU:OE1	32:B6:18:ARG:CZ	2.58	0.47
37:DB:22:U:H2'	37:DB:23:G:C8	2.50	0.47
41:DF:162:LEU:HA	41:DF:165:ARG:NH1	2.30	0.47
3:AC:86:VAL:O	3:AC:89:GLU:HB3	2.15	0.47
36:DA:603:A:N3	36:DA:604:G:H1'	2.29	0.47
36:BA:2746:U:O2'	36:BA:2747:G:H5'	2.14	0.47
27:B1:81:LYS:HE2	36:BA:156:U:H5'	1.97	0.47
20:AT:94:ALA:O	20:AT:95:ALA:HB3	2.15	0.47
52:BT:89:VAL:HG12	52:BT:91:ARG:HG3	1.94	0.47
36:BA:2632:A:H2	40:BE:61:ARG:HD2	1.80	0.47
51:BS:15:ARG:NH1	51:BS:18:ILE:HD11	2.29	0.47
58:BZ:14:LYS:HB2	58:BZ:17:ALA:HB3	1.97	0.47
10:CJ:71:LEU:HD12	10:CJ:72:VAL:H	1.78	0.47
25:AZ:146:LEU:O	25:AZ:150:VAL:HG23	2.15	0.47
25:CZ:5:PHE:CD1	25:CZ:5:PHE:C	2.88	0.47
53:DU:93:LYS:O	53:DU:96:ALA:HB3	2.15	0.47
25:CZ:22:HIS:O	25:CZ:137:LYS:HE2	2.15	0.47
1:AA:961:U:H5'	1:AA:984:C:H1'	1.97	0.47
46:DN:19:GLU:O	46:DN:59:LYS:HB3	2.14	0.47
25:CZ:270:VAL:CG1	25:CZ:286:VAL:HG21	2.44	0.47
4:AD:6:GLY:O	4:AD:8:VAL:HG13	2.15	0.47
15:CO:82:ILE:HD13	15:CO:87:ILE:HB	1.96	0.47
1:CA:426:G:P	4:CD:36:ARG:NH2	2.86	0.47
2:CB:27:LYS:HD2	2:CB:193:ASP:OD1	2.15	0.47
14:CN:39:LEU:CD1	14:CN:47:LEU:HD12	2.44	0.47
58:DZ:66:SER:C	58:DZ:67:LEU:HD12	2.35	0.47
1:AA:401:C:H1'	1:AA:622:A:H1'	1.96	0.47
1:CA:59:A:C5'	1:CA:60:A:H5''	2.45	0.47
20:AT:82:SER:O	20:AT:86:ARG:HB2	2.14	0.47
36:BA:2292:C:H2'	36:BA:2293:C:C6	2.50	0.47
36:DA:391:G:C2'	36:DA:392:C:H5'	2.45	0.47
25:AZ:133:VAL:O	25:AZ:170:VAL:HA	2.14	0.47
25:AZ:164:PRO:O	25:AZ:168:VAL:HG23	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:D5:43:HIS:CD2	36:DA:2815:C:O2'	2.68	0.47
48:BP:102:ARG:NH1	48:BP:102:ARG:HB2	2.28	0.47
48:BP:102:ARG:HH11	48:BP:102:ARG:CB	2.28	0.47
36:BA:2262:U:H4'	36:BA:2328:A:C2	2.50	0.47
36:BA:855:G:H2'	36:BA:856:C:C6	2.50	0.47
38:BC:18:LYS:HD3	38:BC:20:TYR:CZ	2.49	0.47
36:BA:2555:U:C2'	36:BA:2556:C:H5'	2.44	0.47
27:B1:52:ARG:NH1	27:B1:57:GLU:HB2	2.29	0.47
18:AR:26:LEU:HD12	18:AR:26:LEU:N	2.30	0.47
24:CY:61:C:C2'	24:CY:62:U:H5''	2.45	0.47
29:B3:48:GLU:H	29:B3:48:GLU:HG2	1.52	0.47
12:CL:127:GLU:O	12:CL:128:ALA:C	2.53	0.47
48:DP:108:LYS:HD2	48:DP:108:LYS:N	2.30	0.47
57:BY:6:HIS:H	57:BY:6:HIS:CD2	2.33	0.47
36:BA:2772:C:H2'	36:BA:2773:C:H6	1.80	0.47
7:CG:97:GLN:O	7:CG:101:LEU:HG	2.15	0.47
37:BB:93:G:H2'	37:BB:94:C:C6	2.50	0.47
36:DA:978:G:C2	36:DA:986:C:N3	2.83	0.47
36:DA:1097:U:H2'	36:DA:1098:A:H8	1.80	0.47
36:BA:1773:A:C2'	36:BA:1774:C:H5'	2.45	0.47
1:CA:245:C:O2'	1:CA:246:A:P	2.73	0.47
1:AA:821:G:H2'	1:AA:822:C:H6	1.80	0.47
1:CA:1522:U:O2'	1:CA:1523:G:H5'	2.15	0.47
37:BB:114:C:O2'	51:BS:46:VAL:HG13	2.15	0.47
36:BA:1472:A:C2'	36:BA:1473:G:H5'	2.45	0.47
1:CA:39:G:O2'	1:CA:40:C:H5'	2.14	0.47
26:D0:55:ARG:HE	26:D0:55:ARG:HB3	1.34	0.47
46:BN:128:HIS:O	46:BN:128:HIS:CG	2.68	0.47
5:AE:72:GLN:O	5:AE:75:THR:HG22	2.15	0.47
36:DA:1902:C:H5'	39:DD:246:PRO:HD3	1.97	0.47
36:BA:2543:G:H8	36:BA:2543:G:H5'	1.80	0.47
52:DT:28:VAL:HG11	52:DT:46:GLU:CG	2.39	0.47
28:B2:46:GLN:O	28:B2:48:HIS:ND1	2.48	0.47
28:B2:63:VAL:O	28:B2:66:GLU:OE2	2.33	0.47
36:BA:1542:A:H5'	36:BA:1543:C:OP2	2.15	0.47
9:AI:53:VAL:C	9:AI:55:ALA:N	2.68	0.47
34:B8:61:LEU:N	34:B8:63:PRO:HD2	2.30	0.47
58:BZ:150:LEU:O	58:BZ:150:LEU:HD23	2.14	0.47
37:DB:105:A:H4'	58:DZ:89:PHE:CE1	2.49	0.47
52:BT:28:VAL:HG22	52:BT:46:GLU:CA	2.44	0.47
36:BA:83:G:H22	36:BA:102:G:H2'	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:B6:25:LYS:HD2	36:BA:2285:C:N4	2.28	0.47
4:CD:3:ARG:HH12	4:CD:118:ARG:HD3	1.78	0.47
3:CC:86:VAL:O	3:CC:89:GLU:HB3	2.15	0.47
48:BP:114:ILE:HB	48:BP:130:PHE:CD2	2.50	0.47
36:DA:2392:A:H2'	36:DA:2393:A:O4'	2.15	0.47
48:DP:61:ARG:C	48:DP:62:LEU:CD2	2.83	0.47
41:DF:127:GLU:HB2	41:DF:196:LEU:HD12	1.96	0.47
51:DS:13:ARG:CG	51:DS:14:VAL:N	2.77	0.47
48:BP:16:ARG:O	48:BP:18:ARG:N	2.47	0.47
7:AG:37:ASN:HD21	9:AI:40:LEU:HA	1.79	0.47
36:DA:2131:G:H4'	36:DA:2132:U:OP2	2.15	0.47
51:BS:49:VAL:HG22	51:BS:80:LEU:HD13	1.96	0.47
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.49	0.47
16:CP:20:VAL:HG21	16:CP:32:TYR:CD1	2.50	0.47
52:DT:125:ARG:O	52:DT:128:GLU:HG3	2.15	0.47
43:BH:101:ARG:O	43:BH:117:PRO:HG3	2.15	0.47
40:DE:116:VAL:HG22	40:DE:117:MET:H	1.79	0.47
1:AA:1320:C:C5'	1:AA:1320:C:H6	2.18	0.47
46:DN:29:LYS:C	46:DN:31:ALA:H	2.19	0.47
43:DH:137:ASP:OD2	43:DH:140:LYS:HE3	2.15	0.47
27:D1:84:GLY:O	27:D1:90:ILE:HD11	2.14	0.47
42:BG:109:VAL:HG12	42:BG:142:PRO:HD3	1.97	0.47
24:CY:17:H2U:O2'	24:CY:18:G:OP2	2.30	0.47
19:CS:31:ILE:O	19:CS:31:ILE:HG23	2.15	0.47
36:DA:130:C:O3'	36:DA:1349:A:H1'	2.15	0.47
36:DA:1722:A:O2'	36:DA:1739:U:H5'	2.15	0.47
26:B0:40:GLN:NE2	26:B0:44:ARG:N	2.63	0.47
29:D3:6:VAL:HB	29:D3:54:VAL:HG11	1.97	0.47
3:CC:65:ALA:O	3:CC:100:ALA:O	2.33	0.47
3:CC:52:LEU:CD2	3:CC:52:LEU:H	2.26	0.47
36:BA:2477:C:H6	36:BA:2477:C:O5'	1.97	0.47
36:DA:2477:C:O5'	36:DA:2477:C:H6	1.98	0.47
52:BT:35:LYS:HZ1	52:BT:41:ARG:HE	1.63	0.47
36:BA:876:C:H2'	36:BA:877:U:O4'	2.14	0.47
9:CI:9:ARG:HG2	9:CI:14:VAL:HG22	1.97	0.47
25:CZ:164:PRO:O	25:CZ:168:VAL:HG23	2.15	0.47
17:AQ:59:ILE:CG2	17:AQ:71:PHE:HB3	2.45	0.47
36:BA:2473:U:H5	36:BA:2474:C:C5	2.33	0.47
55:DW:40:ASN:O	55:DW:41:LYS:HG2	2.15	0.47
5:AE:40:ARG:NH1	5:AE:40:ARG:HG2	2.30	0.47
1:CA:1296:C:H4'	1:CA:1302:U:C4	2.50	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:526:C:OP2	12:AL:91:LYS:HE3	2.15	0.47
35:B9:29:ASN:ND2	35:B9:29:ASN:O	2.48	0.47
20:CT:73:HIS:HB3	20:CT:74:LYS:NZ	2.30	0.47
36:BA:2687:U:C4	36:BA:2688:U:C5	3.03	0.47
11:AK:67:ASP:O	11:AK:71:LYS:HG3	2.14	0.47
1:AA:714:G:H2'	1:AA:715:A:C8	2.50	0.47
36:BA:1817:G:OP1	39:BD:88:ARG:NH2	2.42	0.47
36:BA:2025:C:H2'	36:BA:2026:C:C6	2.48	0.47
4:AD:45:GLN:O	4:AD:46:LYS:HG2	2.15	0.47
36:DA:1843:C:H2'	36:DA:1844:C:H6	1.80	0.47
25:CZ:185:ASN:ND2	25:CZ:185:ASN:O	2.48	0.47
36:DA:11:G:H2'	36:DA:12:U:H6	1.80	0.47
1:AA:1261:A:H2'	1:AA:1262:C:H5'	1.97	0.47
9:AI:5:TYR:CG	9:AI:6:GLY:N	2.83	0.47
1:AA:1095:U:P	1:AA:1108:G:H1	2.38	0.47
8:AH:108:GLY:HA3	8:AH:138:TRP:HB3	1.96	0.47
1:AA:152:A:N6	1:AA:170:U:C2	2.83	0.47
30:B4:37:SER:O	30:B4:38:LYS:CB	2.63	0.47
36:BA:2488:A:O2'	36:BA:2489:G:H5'	2.15	0.47
1:CA:556:C:O2'	1:CA:557:G:H5'	2.15	0.47
36:DA:2666:C:H5'	36:DA:2667:C:OP2	2.14	0.47
26:B0:38:VAL:HB	26:B0:59:LEU:HD12	1.96	0.47
37:BB:58:A:H2'	37:BB:59:A:O4'	2.15	0.47
39:BD:169:GLU:OE1	39:BD:184:LYS:HD3	2.15	0.47
36:BA:1668:A:N3	36:BA:1670:C:C4	2.83	0.47
35:D9:27:CYS:SG	35:D9:28:GLU:N	2.88	0.47
1:CA:294:U:H2'	1:CA:295:C:C6	2.50	0.47
36:BA:2352:A:C4	36:BA:2366:A:C2	3.02	0.47
22:CV:39:U:H2'	22:CV:40:C:H6	1.80	0.47
36:BA:158:U:H3'	36:BA:158:U:O2	2.15	0.47
6:CF:40:VAL:HG13	6:CF:40:VAL:O	2.15	0.47
6:AF:86:ARG:H	6:AF:86:ARG:HG2	1.39	0.47
5:CE:68:GLU:O	5:CE:68:GLU:HG3	2.15	0.47
35:D9:15:LYS:HB3	35:D9:15:LYS:NZ	2.30	0.47
57:BY:94:LYS:O	57:BY:94:LYS:HG3	2.15	0.47
41:BF:199:TRP:HZ3	41:BF:203:GLN:OE1	1.97	0.47
1:CA:409:G:H3'	1:CA:410:G:H8	1.80	0.47
1:CA:503:C:O2'	1:CA:504:C:H5'	2.15	0.47
36:DA:1036:G:O2'	36:DA:1037:G:H5'	2.15	0.47
40:DE:13:ARG:O	52:DT:57:PHE:HE2	1.98	0.47
28:B2:55:ARG:NH1	28:B2:55:ARG:HG3	2.28	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:4:VAL:HA	41:DF:19:GLU:CB	2.43	0.47
7:CG:84:ASN:C	7:CG:84:ASN:ND2	2.68	0.47
42:BG:45:GLU:CD	42:BG:45:GLU:N	2.68	0.47
40:BE:77:ILE:CG2	40:BE:78:LEU:H	2.23	0.47
31:B5:3:LYS:O	31:B5:4:HIS:O	2.33	0.47
36:BA:2105:C:N3	36:BA:2184:G:N2	2.61	0.47
51:BS:54:LEU:HD11	51:BS:58:LEU:O	2.15	0.47
43:DH:169:VAL:HG22	43:DH:170:ARG:N	2.30	0.47
5:CE:80:ILE:CD1	5:CE:142:LEU:HD21	2.45	0.47
54:DV:16:PRO:O	54:DV:96:ILE:O	2.33	0.47
34:B8:32:LEU:CD2	34:B8:36:LYS:HE2	2.41	0.47
34:D8:23:VAL:CG1	34:D8:46:ARG:HD3	2.44	0.47
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.49	0.47
36:BA:512:G:O2'	36:BA:513:A:H8	1.97	0.47
16:AP:20:VAL:HG21	16:AP:32:TYR:CD1	2.49	0.47
1:AA:1126:U:OP2	1:AA:1281:U:O2	2.33	0.47
43:DH:105:LEU:CD2	43:DH:105:LEU:N	2.78	0.47
36:DA:2808:U:O2'	36:DA:2809:A:H5'	2.15	0.47
25:CZ:107:SER:CB	25:CZ:137:LYS:HD2	2.45	0.47
25:CZ:138:VAL:C	25:CZ:140:MET:H	2.18	0.47
36:DA:143:G:H2'	36:DA:143(A):C:H6	1.80	0.47
36:DA:143:G:H4'	56:DX:35:THR:HG21	1.97	0.47
49:BQ:52:VAL:O	49:BQ:56:ARG:HB2	2.14	0.47
46:BN:23:LEU:HB3	46:BN:60:ILE:CG2	2.41	0.47
49:DQ:52:VAL:O	49:DQ:56:ARG:HB2	2.15	0.47
42:BG:114:ILE:O	42:BG:115:ARG:C	2.54	0.47
36:DA:747:U:C5	36:DA:2613:U:C5	3.03	0.47
36:BA:304:G:O2'	36:BA:305:U:H5'	2.15	0.47
58:DZ:110:GLY:HA2	58:DZ:114:GLY:O	2.14	0.47
49:DQ:66:ILE:HD12	49:DQ:66:ILE:C	2.36	0.47
16:CP:45:THR:HG23	16:CP:45:THR:O	2.15	0.47
12:AL:117:ARG:O	12:AL:119:LYS:O	2.32	0.47
36:BA:1639:U:O2'	36:BA:1640:C:H5''	2.15	0.47
39:DD:142:VAL:HG21	39:DD:191:ALA:CB	2.43	0.47
36:DA:914:C:C2'	36:DA:915:C:H5'	2.43	0.47
36:DA:2262:U:H4'	36:DA:2328:A:C2	2.50	0.47
1:AA:367:U:H4'	25:AZ:291:ARG:HE	1.80	0.47
1:AA:338:A:H2	1:AA:351:G:H22	1.61	0.47
1:CA:1326:C:P	21:CU:12:LYS:HZ2	2.38	0.47
49:BQ:110:THR:HG23	49:BQ:113:GLN:HG3	1.96	0.47
1:AA:384:G:O2'	1:AA:385:C:H5'	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:D3:44:ARG:O	29:D3:48:GLU:HG2	2.15	0.47
29:B3:44:ARG:O	29:B3:48:GLU:HG2	2.15	0.47
36:BA:1750:G:H2'	36:BA:1751:C:C6	2.49	0.47
2:AB:101:MET:C	2:AB:102:LEU:HD12	2.35	0.47
1:CA:1508:G:H2'	1:CA:1509:C:C6	2.50	0.47
36:DA:2836:U:H2'	36:DA:2837:G:C8	2.50	0.47
39:DD:238:GLY:O	39:DD:239:ARG:C	2.52	0.47
48:BP:90:ARG:HB3	48:BP:91:PHE:CD1	2.50	0.47
25:AZ:139:ASP:CG	25:AZ:139:ASP:O	2.52	0.47
23:CX:26:A:H3'	23:CX:27:A:O4'	2.14	0.47
36:BA:1389:G:H2'	36:BA:1390:U:H6	1.79	0.47
3:CC:77:ILE:HA	3:CC:84:ILE:HB	1.96	0.47
36:BA:2567:G:H2'	36:BA:2568:C:C6	2.50	0.47
30:D4:37:SER:O	30:D4:38:LYS:CB	2.63	0.47
5:CE:72:GLN:O	5:CE:73:ASN:HB2	2.15	0.47
5:CE:72:GLN:O	5:CE:75:THR:HG22	2.15	0.47
1:AA:291:C:O2'	1:AA:292:G:H5'	2.15	0.47
1:CA:836:G:H2'	1:CA:837:G:H8	1.80	0.47
2:AB:224:GLN:O	2:AB:226:ARG:N	2.48	0.47
5:AE:57:LYS:HG2	5:AE:61:TYR:CE2	2.50	0.47
36:DA:2064:C:H2'	36:DA:2065:C:C6	2.50	0.47
19:AS:27:GLU:O	19:AS:28:LYS:O	2.33	0.47
39:DD:242:ARG:HH11	39:DD:242:ARG:HG3	1.78	0.46
52:DT:28:VAL:O	52:DT:28:VAL:HG12	2.15	0.46
28:B2:35:LEU:HD23	28:B2:50:ILE:HG13	1.94	0.46
52:BT:77:PRO:C	52:BT:79:HIS:H	2.18	0.46
42:BG:85:GLY:O	42:BG:87:PRO:HG3	2.15	0.46
39:BD:30:GLU:C	39:BD:35:LYS:HD2	2.36	0.46
36:DA:2184:G:H2'	36:DA:2185:C:O4'	2.14	0.46
36:DA:2657:A:N3	36:DA:2657:A:H5'	2.31	0.46
36:BA:1858:G:H2'	36:BA:1883:G:H22	1.80	0.46
1:CA:539:A:H2'	1:CA:540:G:H8	1.79	0.46
4:CD:3:ARG:HH21	4:CD:5:ILE:CG1	2.28	0.46
14:AN:3:ARG:NE	14:AN:3:ARG:O	2.47	0.46
32:B6:53:LYS:HD3	32:B6:54:ILE:H	1.78	0.46
32:D6:9:LEU:HD13	32:D6:9:LEU:C	2.35	0.46
36:BA:2110:G:H5''	36:BA:2145:C:N4	2.31	0.46
52:BT:91:ARG:O	52:BT:92:GLY:C	2.53	0.46
36:BA:2808:U:O2'	36:BA:2809:A:H5'	2.15	0.46
52:BT:128:GLU:O	52:BT:129:ARG:C	2.54	0.46
43:BH:159:GLU:HG3	43:BH:160:LYS:HG3	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:3:ARG:CD	52:DT:6:LEU:HD12	2.36	0.46
10:CJ:6:ILE:HG12	10:CJ:72:VAL:O	2.16	0.46
48:DP:84:ASN:HA	48:DP:115:LEU:O	2.14	0.46
1:CA:266:G:C5'	1:CA:267:C:H5	2.24	0.46
58:BZ:132:ASN:O	58:BZ:133:ILE:HD13	2.16	0.46
55:DW:12:ILE:HD13	55:DW:17:VAL:HG22	1.96	0.46
28:D2:64:LEU:O	28:D2:64:LEU:HD23	2.15	0.46
52:DT:102:ILE:HB	52:DT:110:ILE:CD1	2.45	0.46
1:AA:542:G:N2	1:AA:543:C:C2	2.83	0.46
4:AD:8:VAL:C	4:AD:10:ARG:N	2.68	0.46
4:CD:148:VAL:HG12	4:CD:149:ALA:N	2.29	0.46
4:AD:148:VAL:HG12	4:AD:149:ALA:N	2.29	0.46
15:CO:87:ILE:CG2	15:CO:88:ARG:H	2.19	0.46
36:DA:2481:G:O2'	36:DA:2482:G:P	2.73	0.46
1:CA:1318:A:H1'	19:CS:37:ARG:HH21	1.80	0.46
46:BN:21:LYS:HD3	46:BN:22:THR:H	1.80	0.46
53:DU:112:ARG:HH11	54:DV:46:VAL:HG11	1.80	0.46
50:DR:117:VAL:HG22	50:DR:118:GLU:H	1.80	0.46
2:AB:111:ARG:NH1	2:AB:111:ARG:HG2	2.29	0.46
50:BR:96:ARG:CZ	50:BR:117:VAL:HG23	2.45	0.46
36:DA:2872:G:C2	36:DA:2873:A:N6	2.84	0.46
1:CA:59:A:H1'	1:CA:354:G:N2	2.30	0.46
26:D0:40:GLN:NE2	26:D0:44:ARG:N	2.57	0.46
51:DS:40:ILE:HG22	51:DS:47:THR:HG23	1.96	0.46
36:DA:534:U:O2'	53:DU:49:HIS:CD2	2.68	0.46
25:CZ:133:VAL:O	25:CZ:170:VAL:HA	2.15	0.46
36:BA:2206:G:H21	36:BA:2207:G:H5'	1.76	0.46
36:BA:815:C:H41	48:BP:27:HIS:CE1	2.33	0.46
36:BA:1952:A:C5	47:BO:22:ILE:HD12	2.50	0.46
1:CA:501:C:H2'	1:CA:502:G:H8	1.80	0.46
49:BQ:109:VAL:CG1	49:BQ:110:THR:N	2.77	0.46
1:CA:109:A:O3'	1:CA:110:C:H6	1.98	0.46
24:CY:77:TRP:O	25:CZ:273:HIS:HA	2.14	0.46
53:BU:51:LYS:HA	53:BU:54:LYS:HE2	1.97	0.46
36:DA:2537:U:H2'	36:DA:2538:C:H6	1.80	0.46
41:DF:114:VAL:HG21	41:DF:202:PHE:HE1	1.79	0.46
29:B3:28:LEU:N	29:B3:28:LEU:HD23	2.30	0.46
36:BA:1827:C:C2'	36:BA:1828:G:H5'	2.45	0.46
1:AA:926:G:H5''	1:AA:927:G:O5'	2.16	0.46
36:DA:1563:G:H2'	36:DA:1564:C:O4'	2.15	0.46
1:CA:720:C:H2'	1:CA:721:G:C8	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:39:U:H2'	22:AV:40:C:H6	1.81	0.46
36:BA:1010:A:H1'	36:BA:1153:C:H1'	1.97	0.46
36:BA:2700:C:O2'	36:BA:2701:C:H5'	2.14	0.46
36:BA:80:G:O2'	36:BA:81:G:H5'	2.15	0.46
36:BA:669:G:N3	36:BA:669:G:H2'	2.30	0.46
36:BA:1902:C:H2'	36:BA:1903:G:O5'	2.14	0.46
28:B2:51:ARG:HH21	28:B2:55:ARG:HH12	1.64	0.46
37:BB:73:A:C4	37:BB:105:A:C2	3.02	0.46
39:DD:62:TYR:HA	39:DD:87:ASN:ND2	2.30	0.46
1:CA:1006:C:H2'	1:CA:1007:C:C5	2.50	0.46
40:DE:49:LEU:N	40:DE:49:LEU:HD22	2.31	0.46
40:DE:52:LEU:HD21	52:DT:1:MET:CE	2.45	0.46
36:BA:1543:C:C3'	36:BA:1544:A:C5'	2.81	0.46
1:AA:1003:G:N2	1:AA:1039:C:N4	2.58	0.46
42:DG:52:ILE:N	42:DG:52:ILE:HD13	2.15	0.46
32:D6:53:LYS:HG2	32:D6:54:ILE:N	2.31	0.46
10:AJ:53:PRO:HA	14:AN:42:ILE:HD11	1.98	0.46
36:DA:1279:G:H4'	50:DR:31:HIS:NE2	2.26	0.46
2:CB:132:LYS:O	2:CB:136:VAL:HG23	2.14	0.46
38:BC:72:VAL:HG23	38:BC:111:ASP:CB	2.33	0.46
36:DA:605:C:H2'	36:DA:606:U:H6	1.79	0.46
36:DA:2149:G:O2'	36:DA:2150:U:H5'	2.16	0.46
36:DA:2109:U:O2	36:DA:2180:U:H5	1.97	0.46
20:AT:47:GLY:C	20:AT:49:ALA:H	2.14	0.46
36:DA:2334:G:H21	51:DS:18:ILE:CG2	2.22	0.46
1:AA:1238:A:C2	1:AA:1301:U:N3	2.60	0.46
43:BH:94:TYR:CD1	43:BH:107:VAL:CA	2.98	0.46
1:CA:1126:U:OP2	1:CA:1281:U:O2	2.34	0.46
25:AZ:28:THR:C	25:AZ:30:ALA:H	2.19	0.46
36:DA:1403:C:H2'	36:DA:1404:C:O5'	2.15	0.46
2:AB:19:HIS:NE2	2:AB:206:ASP:HB2	2.31	0.46
4:CD:58:LEU:HD23	4:CD:62:GLN:HG2	1.98	0.46
36:BA:994:C:OP1	53:BU:53:ARG:NH2	2.48	0.46
53:BU:88:ILE:CD1	53:BU:109:LEU:HD22	2.44	0.46
56:DX:65:ARG:HH11	56:DX:65:ARG:HG2	1.79	0.46
25:CZ:195:TRP:C	25:CZ:197:ASP:H	2.19	0.46
42:DG:16:ARG:N	42:DG:17:PRO:HD2	2.30	0.46
52:DT:94:ALA:C	52:DT:96:ARG:N	2.68	0.46
36:BA:143:G:H2'	36:BA:143(A):C:C6	2.50	0.46
12:AL:26:ALA:O	12:AL:33:ARG:HD2	2.15	0.46
1:CA:940:C:O2'	1:CA:941:G:H5'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:761:A:C8	36:BA:761:A:C3'	2.98	0.46
1:CA:77:G:H3'	1:CA:78:G:C8	2.50	0.46
42:BG:137:GLU:CG	42:BG:138:GLN:H	2.25	0.46
46:DN:22:THR:HG22	46:DN:61:ARG:CB	2.38	0.46
53:BU:112:ARG:HH11	54:BV:46:VAL:HG11	1.80	0.46
19:AS:37:ARG:HG3	19:AS:37:ARG:H	1.39	0.46
58:DZ:140:ASP:C	58:DZ:141:VAL:HG22	2.36	0.46
25:CZ:325:LYS:HB2	25:CZ:331:HIS:HB3	1.96	0.46
25:CZ:363:MET:HB3	25:CZ:364:PRO:HD2	1.96	0.46
36:DA:990:A:C6	36:DA:1186:G:H1'	2.50	0.46
36:BA:1331:A:C2'	36:BA:1332:G:H5''	2.44	0.46
12:CL:78:GLN:O	12:CL:80:HIS:N	2.48	0.46
58:DZ:29:TYR:CB	58:DZ:34:ASN:HB3	2.45	0.46
36:BA:1722:A:O2'	36:BA:1739:U:H5'	2.16	0.46
26:D0:7:LEU:HD13	49:DQ:85:LYS:CG	2.42	0.46
50:BR:4:LEU:O	50:BR:6:SER:N	2.48	0.46
47:BO:24:VAL:HG23	47:BO:24:VAL:O	2.15	0.46
36:BA:1771:C:O2'	36:BA:1786:A:H8	1.99	0.46
39:DD:131:LEU:HB2	39:DD:136:ILE:CD1	2.45	0.46
3:CC:53:ALA:HB2	3:CC:115:LEU:HG	1.98	0.46
1:CA:338:A:H2	1:CA:351:G:H22	1.63	0.46
38:DC:114:VAL:CG2	38:DC:149:ILE:HD11	2.44	0.46
36:DA:2777:G:H4'	36:DA:2778:A:H5'	1.97	0.46
38:BC:114:VAL:CG2	38:BC:149:ILE:HD11	2.45	0.46
36:BA:288:C:H2'	36:BA:289:A:H8	1.80	0.46
36:DA:2473:U:H5	36:DA:2474:C:C5	2.33	0.46
36:BA:2108:C:O2	36:BA:2108:C:C2'	2.63	0.46
2:CB:95:GLN:HA	2:CB:95:GLN:OE1	2.14	0.46
15:AO:11:VAL:HG21	15:AO:34:LEU:HD22	1.96	0.46
39:BD:275:LYS:C	39:BD:275:LYS:HD2	2.35	0.46
46:BN:14:VAL:CG1	46:BN:137:LYS:HG3	2.45	0.46
13:CM:9:ILE:HG21	42:DG:146:TYR:CZ	2.50	0.46
55:BW:13:SER:HA	55:BW:99:ARG:HB2	1.97	0.46
36:DA:2860:A:C8	36:DA:2861:G:H1'	2.50	0.46
36:BA:2039:C:O2'	36:BA:2040:C:H5'	2.15	0.46
36:BA:572:A:H5''	36:BA:573:G:OP2	2.16	0.46
2:CB:112:VAL:O	2:CB:115:LEU:HB3	2.16	0.46
5:AE:6:PHE:HB2	5:AE:34:VAL:HG22	1.97	0.46
1:AA:636:U:H5''	17:AQ:2:PRO:HG3	1.97	0.46
36:DA:2122:U:H2'	36:DA:2123:G:C8	2.50	0.46
36:DA:1472:A:O2'	36:DA:1473:G:H5'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:5:TYR:O	9:CI:84:ALA:HA	2.14	0.46
46:DN:42:TRP:CD1	53:DU:63:VAL:HG11	2.50	0.46
20:AT:48:LYS:HB3	20:AT:51:GLU:HG2	1.96	0.46
32:B6:22:ALA:HB2	32:B6:39:TYR:CE2	2.50	0.46
1:CA:242:C:H2'	1:CA:243:A:H5'	1.98	0.46
33:B7:32:LYS:O	33:B7:36:GLN:HB2	2.14	0.46
36:DA:2265:U:H3'	36:DA:2266:A:H5''	1.97	0.46
1:AA:892:A:O2'	1:AA:1415:G:H4'	2.15	0.46
36:BA:1097:U:H2'	36:BA:1098:A:C8	2.48	0.46
58:DZ:178:GLU:OE1	58:DZ:178:GLU:N	2.48	0.46
8:AH:87:SER:HB2	8:AH:93:VAL:HB	1.97	0.46
2:AB:126:GLU:O	2:AB:129:GLU:HB2	2.15	0.46
54:BV:100:ARG:O	54:BV:100:ARG:HG3	2.14	0.46
10:CJ:84:GLN:O	10:CJ:88:LEU:N	2.45	0.46
55:BW:62:HIS:O	55:BW:63:ASP:C	2.53	0.46
38:BC:96:GLY:H	38:BC:99:ILE:HG12	1.78	0.46
36:BA:1902:C:C5'	39:BD:246:PRO:HD3	2.45	0.46
39:BD:243:GLY:O	39:BD:244:ARG:HB3	2.15	0.46
1:CA:1152:A:OP1	10:CJ:68:HIS:CD2	2.68	0.46
9:AI:86:VAL:CG2	9:AI:93:ARG:HG2	2.45	0.46
39:BD:30:GLU:HG2	39:BD:30:GLU:H	1.42	0.46
41:BF:160:ASN:HD22	41:BF:161:GLU:N	2.12	0.46
10:AJ:54:PHE:O	10:AJ:55:LYS:HB3	2.16	0.46
4:AD:101:LEU:HD23	4:AD:121:VAL:CG1	2.43	0.46
38:DC:72:VAL:HG11	38:DC:156:ILE:O	2.16	0.46
36:BA:605:C:C4	36:BA:606:U:C5	3.03	0.46
20:CT:58:LYS:O	20:CT:62:LEU:HD12	2.15	0.46
55:BW:4:LYS:CG	55:BW:5:ALA:N	2.76	0.46
36:DA:2131:G:H5'	36:DA:2133:G:O4'	2.15	0.46
43:BH:159:GLU:CG	43:BH:160:LYS:N	2.78	0.46
2:CB:17:PHE:HB3	2:CB:44:LEU:HD21	1.96	0.46
25:AZ:34:VAL:HA	25:AZ:182:MET:HE2	1.97	0.46
39:BD:9:TYR:CD1	39:BD:10:THR:HG22	2.51	0.46
35:D9:35:ARG:HD3	36:DA:2742:C:OP1	2.16	0.46
55:DW:24:ILE:HG21	55:DW:36:LEU:HD21	1.96	0.46
36:DA:2811:G:C2'	36:DA:2812:G:H5'	2.44	0.46
36:DA:332:A:O2'	36:DA:333:G:P	2.73	0.46
31:B5:36:CYS:SG	31:B5:48:GLU:HB2	2.55	0.46
36:DA:143:G:H2'	36:DA:143(A):C:C6	2.50	0.46
6:AF:97:PHE:O	18:AR:31:LEU:HD23	2.14	0.46
4:AD:177:ASP:O	4:AD:181:MET:N	2.48	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:426:G:H2'	1:CA:427:U:C6	2.50	0.46
56:BX:65:ARG:HH11	56:BX:65:ARG:HG2	1.80	0.46
34:D8:15:LYS:HD3	48:DP:65:ARG:HH21	1.81	0.46
6:CF:87:ARG:CG	6:CF:87:ARG:NH1	2.78	0.46
58:BZ:137:ILE:HD12	58:BZ:158:PRO:HG2	1.98	0.46
16:AP:8:ARG:HB3	16:AP:28:ARG:HH12	1.80	0.46
36:DA:523:C:H2'	36:DA:524:U:C5'	2.42	0.46
1:CA:59:A:H2'	1:CA:59:A:N3	2.31	0.46
36:DA:1480:G:C2'	36:DA:1481:U:C5'	2.93	0.46
20:CT:89:ARG:HD2	20:CT:104:LEU:CD1	2.45	0.46
36:DA:195:A:C8	36:DA:197:A:OP1	2.69	0.46
1:AA:428:G:O2'	1:AA:429:U:P	2.74	0.46
22:AV:16:U:HO2'	22:AV:17:C:H5	1.59	0.46
36:DA:876:C:H2'	36:DA:877:U:O4'	2.15	0.46
31:D5:43:HIS:HE1	36:DA:2884:U:OP2	1.98	0.46
11:AK:20:TYR:CZ	11:AK:83:ILE:HD12	2.50	0.46
36:BA:2201:C:H2'	36:BA:2202:C:C6	2.51	0.46
37:BB:111:G:C2'	37:BB:112:U:H5'	2.45	0.46
4:CD:70:ILE:CG2	4:CD:71:SER:N	2.78	0.46
36:DA:2733:A:H2'	36:DA:2734:A:O4'	2.15	0.46
36:BA:852:G:H2'	36:BA:853:G:H8	1.80	0.46
36:DA:1658:C:OP1	40:DE:132:HIS:CE1	2.69	0.46
42:DG:35:GLU:HG2	42:DG:36:LYS:N	2.30	0.46
46:DN:75:TYR:O	46:DN:76:SER:O	2.33	0.46
4:CD:45:GLN:C	4:CD:46:LYS:CG	2.84	0.46
1:CA:1511:G:H8	1:CA:1511:G:O5'	1.99	0.46
40:BE:188:VAL:HG23	40:BE:189:PRO:HD2	1.97	0.46
36:DA:1889:A:O2'	36:DA:2087:G:H5'	2.16	0.46
58:DZ:132:ASN:O	58:DZ:133:ILE:HD13	2.14	0.46
36:DA:755:C:H2'	36:DA:756:C:H6	1.81	0.46
20:CT:43:LEU:HB3	20:CT:48:LYS:HB2	1.97	0.46
1:CA:746:A:O2'	1:CA:747:C:H5'	2.15	0.46
28:D2:3:LEU:HB3	36:DA:98:G:OP1	2.15	0.46
36:DA:869:G:C2'	36:DA:870:A:H5'	2.45	0.46
1:CA:1063:C:H5	1:CA:1064:G:HO2'	1.64	0.46
29:D3:23:LEU:CD2	29:D3:50:VAL:HG11	2.45	0.46
36:DA:2457:U:C2'	36:DA:2458:G:H5'	2.46	0.46
24:CY:52:A:C2'	24:CY:53:G:H5'	2.46	0.46
1:CA:583:A:H2'	1:CA:584:G:O4'	2.16	0.46
45:BK:8:UNK:O	45:BK:9:UNK:C	2.63	0.46
23:AX:26:A:H3'	23:AX:27:A:O4'	2.16	0.46

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	2.49	0.46
36:BA:1213:A:N3	36:BA:1238:G:H1'	2.30	0.46
36:BA:122:G:H1	36:BA:129:C:H42	1.63	0.46
48:DP:99:LEU:C	48:DP:99:LEU:HD23	2.36	0.46
48:DP:99:LEU:HD23	48:DP:99:LEU:O	2.15	0.46
38:DC:2:LYS:O	38:DC:2:LYS:HG2	2.16	0.46
26:D0:37:LEU:N	26:D0:59:LEU:O	2.35	0.46
38:DC:78:ALA:HA	38:DC:116:THR:N	2.21	0.46
13:CM:22:ILE:CB	13:CM:25:ILE:HD12	2.45	0.46
41:DF:3:GLU:O	41:DF:19:GLU:HG3	2.15	0.46
41:DF:24:LEU:HD12	41:DF:118:ALA:HB1	1.97	0.46
43:DH:83:TYR:HB3	43:DH:135:GLY:N	2.29	0.46
36:BA:1301:A:HO2'	36:BA:1302:A:P	2.38	0.46
36:BA:2312:U:H2'	36:BA:2313:C:H5'	1.98	0.46
34:D8:11:LYS:HZ3	34:D8:60:LEU:HA	1.81	0.46
13:CM:65:LYS:HD3	13:CM:65:LYS:N	2.20	0.46
22:CW:5:G:N2	22:CW:68:C:C2	2.84	0.46
22:CW:69:G:H2'	22:CW:70:G:C5'	2.41	0.46
41:BF:132:VAL:HG13	41:BF:133:ASN:N	2.30	0.46
37:DB:66:A:H61	37:DB:108:U:C2'	2.27	0.46
36:BA:32:C:H5'	36:BA:32:C:H6	1.80	0.46
51:DS:56:LEU:O	51:DS:57:LYS:O	2.34	0.46
36:DA:2102:U:C5	36:DA:2103:C:N3	2.83	0.46
36:BA:654(N):G:H2'	36:BA:654(O):G:H5'	1.98	0.46
27:B1:68:PRO:C	27:B1:70:VAL:H	2.18	0.46
57:BY:27:VAL:HG12	57:BY:28:LYS:N	2.31	0.46
38:DC:73:ARG:H	38:DC:111:ASP:CG	2.19	0.46
48:BP:40:SER:O	48:BP:41:ARG:CD	2.64	0.46
36:BA:1142(A):A:OP1	36:BA:1142(A):A:H3'	2.15	0.46
51:DS:29:PHE:HD1	51:DS:30:ARG:N	2.13	0.46
42:DG:66:GLN:HB3	42:DG:92:VAL:HG21	1.97	0.46
36:BA:2715:C:O2'	36:BA:2716:U:H5'	2.15	0.46
51:BS:24:LEU:HD11	51:BS:48:LEU:HD22	1.97	0.46
9:AI:28:VAL:CG1	9:AI:29:ASN:H	2.08	0.46
58:BZ:28:MET:HE3	58:BZ:37:VAL:HG11	1.96	0.46
51:DS:24:LEU:HD11	51:DS:48:LEU:HD22	1.97	0.46
52:DT:128:GLU:O	52:DT:129:ARG:C	2.54	0.46
40:BE:144:ARG:CG	40:BE:145:LYS:H	2.27	0.46
12:CL:8:ASN:HD22	17:CQ:34:LYS:NZ	2.14	0.46
32:B6:5:VAL:O	32:B6:6:ARG:HB2	2.16	0.46
10:AJ:9:ARG:HH21	10:AJ:97:GLU:HG3	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:996:A:H4'	53:DU:92:ARG:HE	1.79	0.46
25:CZ:107:SER:OG	25:CZ:137:LYS:HD2	2.15	0.46
42:DG:7:LEU:HD22	42:DG:176:LEU:CD2	2.45	0.46
1:CA:1431:C:C2'	1:CA:1432:G:H5'	2.46	0.46
52:DT:94:ALA:HB1	52:DT:99:LEU:HD23	1.98	0.46
58:DZ:120:ILE:HG13	58:DZ:170:THR:HG22	1.97	0.46
36:DA:304:G:O2'	36:DA:305:U:H5'	2.14	0.46
42:BG:144:ILE:O	42:BG:144:ILE:CG2	2.60	0.46
42:BG:16:ARG:NH1	42:BG:16:ARG:HG3	2.29	0.46
42:BG:16:ARG:N	42:BG:17:PRO:HD2	2.29	0.46
42:BG:146:TYR:O	42:BG:148:MET:N	2.49	0.46
3:CC:5:ILE:O	3:CC:6:HIS:C	2.52	0.46
10:AJ:4:ILE:HB	10:AJ:74:ILE:HG13	1.98	0.46
50:DR:11:ASN:OD1	50:DR:11:ASN:O	2.32	0.46
22:CW:39:U:C5'	22:CW:39:U:O2	2.63	0.46
36:DA:181:A:C8	36:DA:181:A:H5'	2.41	0.46
42:BG:2:PRO:HG2	42:BG:98:ARG:NH1	2.31	0.46
36:DA:1107:G:OP1	44:DJ:59:UNK:N	2.49	0.46
6:AF:82:ARG:HB2	6:AF:85:VAL:CG2	2.43	0.46
38:DC:10:LEU:CD1	38:DC:32:LEU:HA	2.45	0.46
17:CQ:44:ALA:HB2	17:CQ:59:ILE:HD12	1.96	0.46
47:BO:28:SER:O	47:BO:29:ASN:HB3	2.14	0.46
39:BD:196:VAL:HG12	39:BD:196:VAL:O	2.14	0.46
42:BG:52:ILE:O	42:BG:53:LEU:C	2.53	0.46
3:CC:34:LEU:HD22	3:CC:38:ARG:HE	1.80	0.46
25:CZ:300:ARG:NH1	25:CZ:300:ARG:HG2	2.30	0.46
1:AA:1423:G:C5	1:AA:1424:C:C5	3.03	0.46
36:DA:855:G:H2'	36:DA:856:C:C6	2.49	0.46
35:D9:1:MET:HB2	35:D9:31:LYS:O	2.15	0.46
24:AY:61:C:C2'	24:AY:62:U:H5''	2.45	0.46
36:DA:118:A:H5'	36:DA:119:A:H8	1.80	0.46
36:DA:1684:C:O2'	36:DA:1685:C:H5'	2.15	0.46
47:BO:9:GLU:O	47:BO:83:ALA:HA	2.15	0.46
36:DA:1166:C:H2'	36:DA:1167:U:H6	1.80	0.46
55:DW:14:PRO:HG2	55:DW:78:GLU:CG	2.45	0.46
36:BA:2360:A:O2'	36:BA:2361:A:O5'	2.34	0.46
36:BA:1652:A:H2'	36:BA:1653:G:H5'	1.98	0.46
36:DA:1389:G:H2'	36:DA:1390:U:H6	1.79	0.46
25:AZ:341:GLN:HE22	25:AZ:390:GLU:HA	1.79	0.46
33:D7:5:TRP:O	36:DA:1612:C:H4'	2.15	0.46
33:D7:4:THR:HG21	36:DA:788:A:H1'	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:21:A:H5'	24:CY:22:G:OP1	2.15	0.46
1:CA:557:G:H2'	1:CA:558:G:O4'	2.16	0.46
1:AA:720:C:H2'	1:AA:721:G:C8	2.51	0.46
45:DK:78:UNK:C	45:DK:80:UNK:N	2.77	0.46
25:AZ:176:LEU:O	25:AZ:180:GLU:HG3	2.15	0.46
34:B8:17:THR:OG1	34:B8:21:LYS:HB2	2.14	0.46
36:DA:1010:A:H1'	36:DA:1153:C:H1'	1.96	0.46
24:AY:37:MIA:O2'	36:BA:1913:A:N1	2.42	0.46
36:DA:2557:G:H2'	36:DA:2558:C:C6	2.51	0.46
8:CH:9:MET:O	8:CH:13:ILE:HG12	2.16	0.46
36:DA:1281:G:H2'	36:DA:1282:U:H6	1.81	0.46
26:D0:51:VAL:HG21	26:D0:79:VAL:O	2.16	0.46
36:BA:2685:G:N2	36:BA:2724:C:O2	2.48	0.46
33:B7:10:ARG:NH1	36:BA:771:G:OP1	2.48	0.46
36:DA:1902:C:OP1	39:DD:242:ARG:NH1	2.49	0.46
13:CM:15:VAL:CG1	13:CM:45:VAL:HG22	2.46	0.46
40:DE:70:ALA:O	40:DE:71:GLY:C	2.54	0.46
36:BA:2092:U:H5	36:BA:2226:C:OP2	1.97	0.46
32:B6:27:LYS:O	32:B6:29:ASN:N	2.48	0.46
46:DN:45:ASN:O	46:DN:45:ASN:CG	2.53	0.46
13:AM:5:ALA:HB1	13:AM:66:LEU:HD23	1.98	0.46
39:BD:24:ILE:CG1	39:BD:25:THR:N	2.77	0.46
52:BT:13:ARG:HH12	52:BT:15:VAL:HG12	1.79	0.46
32:D6:53:LYS:HD3	32:D6:54:ILE:H	1.80	0.46
36:BA:609:A:H2'	36:BA:610:G:O4'	2.15	0.46
1:AA:408:A:H4'	4:AD:112:VAL:HG11	1.97	0.46
4:AD:121:VAL:CA	4:AD:126:ILE:HD13	2.44	0.46
2:AB:114:ARG:NH1	2:AB:118:LEU:CG	2.78	0.46
36:BA:603:A:N3	36:BA:604:G:H1'	2.31	0.46
36:BA:27:G:N2	36:BA:512:G:C2'	2.68	0.46
43:BH:66:GLY:HA2	43:BH:69:ARG:CB	2.41	0.46
2:AB:71:VAL:HG13	2:AB:93:VAL:HG13	1.98	0.46
6:CF:10:LEU:HB2	6:CF:59:TYR:HB3	1.98	0.46
9:AI:18:PHE:O	9:AI:19:LEU:HB2	2.15	0.46
25:AZ:134:PHE:CD1	25:AZ:202:LEU:HD22	2.50	0.46
36:BA:331:A:C1'	36:BA:332:A:OP1	2.63	0.46
10:AJ:71:LEU:HD12	10:AJ:72:VAL:H	1.79	0.46
40:BE:111:ARG:HG2	40:BE:160:TYR:O	2.16	0.46
1:AA:1442(B):A:C2	52:BT:118:ARG:CZ	2.98	0.46
1:AA:77:G:H3'	1:AA:78:G:C8	2.50	0.46
1:CA:430:A:H2'	1:CA:431:A:O4'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:41:GLY:HA3	54:BV:45:THR:OG1	2.16	0.46
54:BV:49:THR:CB	54:BV:50:PRO:CD	2.93	0.46
20:CT:20:LEU:O	20:CT:23:ARG:HB3	2.16	0.46
13:CM:79:LYS:O	13:CM:82:MET:HG2	2.16	0.46
34:D8:15:LYS:HG2	48:DP:65:ARG:NH2	2.31	0.46
34:D8:22:VAL:HB	34:D8:53:PRO:CB	2.46	0.46
50:DR:78:LYS:O	50:DR:83:ILE:HG12	2.15	0.46
50:BR:117:VAL:HG22	50:BR:118:GLU:H	1.81	0.46
24:AY:6:C:N4	24:AY:67:G:H1	2.10	0.46
40:BE:101:ARG:HD3	40:BE:101:ARG:HA	1.68	0.46
16:CP:8:ARG:HB3	16:CP:28:ARG:HH12	1.81	0.46
36:DA:16:G:H2'	36:DA:17:G:H8	1.80	0.46
50:DR:97:VAL:HA	50:DR:113:LEU:O	2.16	0.46
41:BF:53:THR:HG22	41:BF:56:GLU:CG	2.45	0.46
53:DU:14:HIS:CD2	53:DU:36:ARG:NH2	2.84	0.46
12:AL:43:VAL:HG23	12:AL:93:LEU:HD22	1.98	0.46
46:BN:39:ARG:C	46:BN:41:ASP:H	2.18	0.46
46:BN:16:ILE:CG2	46:BN:54:VAL:HG22	2.46	0.46
36:BA:528:A:H2	36:BA:2043:C:H5'	1.81	0.46
17:CQ:16:GLN:O	17:CQ:17:LYS:HB2	2.15	0.46
12:CL:93:LEU:HD13	12:CL:96:VAL:HG21	1.98	0.46
40:DE:132:HIS:HA	40:DE:135:HIS:CE1	2.51	0.46
36:DA:894:C:O2'	36:DA:895:U:H5'	2.15	0.46
55:DW:13:SER:HA	55:DW:99:ARG:HB2	1.97	0.46
40:DE:183:LEU:N	40:DE:183:LEU:HD12	2.30	0.46
47:BO:32:TYR:N	47:BO:32:TYR:CD1	2.83	0.46
36:BA:2121:G:H2'	36:BA:2122:U:C6	2.50	0.46
25:CZ:223:MET:HG3	25:CZ:223:MET:O	2.15	0.46
43:DH:147:ASN:O	43:DH:151:ILE:HG12	2.16	0.46
3:AC:77:ILE:HA	3:AC:84:ILE:HB	1.96	0.46
29:D3:11:SER:HB3	36:DA:988:A:OP2	2.16	0.46
46:DN:41:ASP:O	46:DN:42:TRP:C	2.54	0.46
58:DZ:177:PRO:O	58:DZ:178:GLU:HB3	2.16	0.46
1:AA:647:C:O2'	1:AA:648:A:H5'	2.16	0.46
8:AH:44:PHE:HB3	8:AH:80:ILE:HG12	1.98	0.46
1:AA:853:G:O2'	1:AA:854:G:H5'	2.15	0.46
1:AA:583:A:H2'	1:AA:584:G:O4'	2.16	0.46
1:CA:640:A:O2'	8:CH:115:SER:HB2	2.16	0.46
1:CA:371:G:H1'	1:CA:482:A:H1'	1.97	0.46
1:AA:263:A:OP2	20:AT:79:ARG:NH1	2.49	0.46
1:CA:1417:G:C6	1:CA:1482:G:C6	3.03	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1415:G:O2'	1:CA:1416:G:H5'	2.16	0.46
38:DC:118:ASP:C	38:DC:120:MET:N	2.69	0.46
38:BC:83:ILE:HD11	38:BC:97:GLU:CG	2.45	0.46
1:CA:1123:A:H2	1:CA:1150:U:C5	2.33	0.46
41:DF:4:VAL:HG13	41:DF:19:GLU:OE1	2.16	0.46
41:DF:24:LEU:O	41:DF:115:ALA:HB1	2.15	0.46
49:BQ:134:ARG:HA	49:BQ:137:TYR:CE1	2.51	0.46
40:BE:33:VAL:HG12	40:BE:69:LYS:HD2	1.96	0.46
40:BE:52:LEU:HD11	52:BT:1:MET:HE2	1.97	0.46
39:BD:24:ILE:C	39:BD:26:LYS:N	2.66	0.46
22:CW:49:C:H42	22:CW:65:G:H1	1.63	0.46
25:AZ:355:LEU:HB2	25:AZ:356:PRO:CD	2.45	0.46
2:AB:132:LYS:O	2:AB:136:VAL:HG23	2.15	0.46
48:DP:126:VAL:HG22	48:DP:145:PRO:CG	2.46	0.46
41:DF:129:PHE:CD2	41:DF:163:VAL:HG21	2.51	0.46
41:DF:160:ASN:HD22	41:DF:161:GLU:N	2.14	0.46
36:DA:673:C:P	41:DF:81:PRO:HG3	2.56	0.46
36:DA:832:G:P	48:DP:40:SER:HB3	2.56	0.46
41:DF:103:LYS:CG	41:DF:106:ARG:HH21	2.28	0.46
36:DA:2178:C:O2	36:DA:2178:C:O4'	2.34	0.46
42:DG:125:PHE:HD1	42:DG:126:ASP:N	2.13	0.46
36:BA:2893:G:H5'	36:BA:2894:G:C5'	2.34	0.46
52:BT:125:ARG:O	52:BT:128:GLU:HG3	2.15	0.46
47:DO:65:THR:HA	47:DO:82:ASN:HD22	1.79	0.46
19:CS:36:ARG:HB2	19:CS:72:GLY:CA	2.45	0.46
9:AI:4:TYR:HA	9:AI:88:TYR:CD1	2.51	0.46
55:DW:17:VAL:C	55:DW:19:LEU:N	2.67	0.46
36:BA:2762:G:H2'	36:BA:2763:G:C5'	2.45	0.46
36:DA:2809:A:H2'	36:DA:2810:A:C8	2.49	0.46
36:BA:271(D):G:O2'	36:BA:271(E):U:H5'	2.16	0.46
36:BA:2533:A:OP1	36:BA:2665:A:H1'	2.16	0.46
40:DE:35:GLN:CG	40:DE:36:ARG:N	2.79	0.46
36:DA:2469:A:H2'	36:DA:2470:G:H5'	1.98	0.46
36:DA:958:U:OP2	49:DQ:14:ARG:HD3	2.16	0.46
2:CB:25:ASN:O	2:CB:27:LYS:N	2.48	0.46
46:DN:21:LYS:HD3	46:DN:22:THR:H	1.80	0.46
34:D8:15:LYS:HD2	34:D8:16:ILE:N	2.31	0.46
10:AJ:81:THR:C	10:AJ:83:GLU:N	2.68	0.46
19:CS:13:ASP:C	19:CS:15:LEU:N	2.69	0.46
43:BH:23:ARG:O	43:BH:24:VAL:HG23	2.16	0.46
43:BH:65:HIS:C	43:BH:67:LEU:H	2.19	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:333:GLY:CA	25:AZ:363:MET:HA	2.45	0.46
57:BY:30:VAL:HG12	57:BY:31:LEU:N	2.31	0.46
13:CM:91:ARG:HB2	13:CM:98:VAL:HG12	1.96	0.46
9:CI:113:LYS:HD3	9:CI:119:ALA:HA	1.97	0.46
36:DA:2031:A:N3	36:DA:2455:G:O2'	2.44	0.46
46:BN:3:THR:HG22	46:BN:5:VAL:H	1.81	0.46
1:AA:219:C:H2'	1:AA:220:G:O4'	2.15	0.46
1:AA:945:G:C2	1:AA:946:A:C8	3.04	0.46
1:AA:523:A:N1	12:AL:92:ASP:OD2	2.49	0.46
22:AW:59:U:H3'	22:AW:60:U:C6	2.51	0.46
2:AB:191:ASP:C	2:AB:191:ASP:OD1	2.54	0.46
36:BA:1337:G:H2'	36:BA:1338:G:C8	2.50	0.46
1:CA:392:G:H2'	1:CA:393:A:C8	2.50	0.46
36:BA:1288:U:C2	36:BA:1327:C:O2	2.68	0.46
53:BU:46:ALA:O	53:BU:50:ARG:HG3	2.15	0.46
1:AA:674:G:H4'	18:AR:81:PHE:CD2	2.50	0.46
27:B1:56:GLN:O	27:B1:57:GLU:CB	2.63	0.46
1:CA:93:G:H2'	1:CA:96:U:O4'	2.16	0.46
19:AS:42:PRO:O	19:AS:44:MET:SD	2.73	0.46
25:AZ:124:ARG:HG2	61:AZ:502:KIR:H421	1.98	0.46
36:DA:852:G:H2'	36:DA:853:G:C8	2.51	0.46
36:DA:2405:G:HO2'	36:DA:2406:U:P	2.39	0.46
5:CE:6:PHE:HB2	5:CE:34:VAL:CG2	2.46	0.46
46:DN:16:ILE:CG2	46:DN:54:VAL:HG22	2.46	0.46
36:BA:2836:U:H2'	36:BA:2837:G:C8	2.51	0.46
36:BA:2860:A:C8	36:BA:2861:G:H1'	2.50	0.46
31:B5:6:VAL:HG13	36:BA:2016:U:H1'	1.96	0.46
2:CB:127:ILE:HG22	2:CB:128:GLU:N	2.30	0.46
40:DE:1:MET:O	40:DE:2:LYS:O	2.34	0.46
36:BA:1657:C:H2'	36:BA:1658:C:C6	2.51	0.46
1:AA:828:A:OP1	1:AA:828:A:H4'	2.15	0.46
48:BP:108:LYS:HD2	48:BP:108:LYS:N	2.30	0.46
36:BA:1240:U:O2'	36:BA:1241:A:H5'	2.15	0.46
36:DA:1427:A:H4'	36:DA:1428:C:O5'	2.16	0.46
1:AA:319:G:C2'	1:AA:320:C:H5'	2.46	0.46
36:BA:1097:U:H2'	36:BA:1098:A:H8	1.80	0.46
55:DW:55:ALA:C	55:DW:57:ASN:H	2.18	0.46
27:B1:37:ILE:HG13	27:B1:37:ILE:O	2.14	0.46
49:DQ:39:PRO:O	49:DQ:40:ALA:HB2	2.16	0.46
1:CA:1365:G:O2'	1:CA:1366:C:H5'	2.16	0.46
19:AS:79:THR:O	19:AS:80:TYR:CB	2.63	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:116:C:H2'	36:BA:117:G:O4'	2.16	0.46
1:CA:123:C:OP1	1:CA:312:C:H5'	2.16	0.46
1:AA:503:C:O2'	1:AA:504:C:H5'	2.16	0.46
35:B9:15:LYS:HB3	35:B9:15:LYS:NZ	2.31	0.46
7:CG:76:ARG:HH11	7:CG:76:ARG:HG2	1.81	0.46
48:BP:99:LEU:O	48:BP:99:LEU:HD23	2.15	0.46
36:BA:236:C:H2'	36:BA:237:C:C6	2.50	0.46
36:BA:869:G:C2'	36:BA:870:A:H5'	2.46	0.46
36:DA:201:C:C2'	36:DA:202:U:H5'	2.46	0.46
38:DC:83:ILE:HD11	38:DC:97:GLU:CG	2.45	0.46
39:BD:242:ARG:NH1	39:BD:242:ARG:HG2	2.30	0.46
1:CA:1152:A:H2'	1:CA:1153:C:H6	1.79	0.46
36:BA:2303:G:H4'	42:BG:125:PHE:O	2.15	0.46
39:DD:31:LYS:HZ1	39:DD:33:LEU:HD11	1.80	0.46
9:AI:90:PRO:O	9:AI:91:ASP:O	2.34	0.46
32:D6:32:ASN:O	32:D6:33:LYS:HB2	2.16	0.46
42:DG:44:GLY:C	42:DG:47:LYS:HZ3	2.19	0.46
51:BS:56:LEU:O	51:BS:57:LYS:O	2.34	0.46
10:CJ:54:PHE:O	10:CJ:55:LYS:HB3	2.15	0.46
52:DT:12:SER:C	52:DT:13:ARG:CZ	2.84	0.46
36:BA:605:C:H2'	36:BA:606:U:H6	1.79	0.46
36:BA:622:G:O2'	36:BA:623:G:H5'	2.14	0.46
51:DS:89:ARG:NH1	51:DS:89:ARG:HG2	2.27	0.46
51:BS:19:LYS:HG2	51:BS:19:LYS:O	2.15	0.46
48:BP:23:PRO:O	48:BP:33:ARG:CD	2.57	0.46
48:DP:40:SER:O	48:DP:41:ARG:CD	2.63	0.46
30:D4:26:SER:OG	30:D4:27:THR:N	2.48	0.46
36:BA:2809:A:H2'	36:BA:2810:A:C8	2.50	0.46
1:CA:1314:C:O2'	1:CA:1315:U:H5'	2.15	0.46
30:B4:7:PRO:HG3	42:BG:61:ALA:HB1	1.97	0.46
43:BH:104:GLU:OE1	43:BH:106:THR:HG23	2.16	0.46
43:BH:105:LEU:HD21	43:BH:113:VAL:HB	1.97	0.46
53:DU:88:ILE:CD1	53:DU:109:LEU:HD22	2.46	0.46
27:D1:67:ILE:N	27:D1:68:PRO:CD	2.78	0.46
36:BA:1069:A:H1'	36:BA:1070:A:P	2.56	0.46
52:DT:26:ASP:C	52:DT:26:ASP:OD1	2.53	0.46
36:DA:90:U:O3'	36:DA:92:A:O4'	2.33	0.46
1:AA:542:G:C2	1:AA:543:C:C5	3.04	0.46
4:CD:147:ALA:HA	4:CD:181:MET:O	2.16	0.46
42:BG:116:ASP:O	42:BG:117:PHE:HB3	2.15	0.46
42:BG:16:ARG:NE	42:BG:31:VAL:HG11	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:113:ALA:HB1	58:DZ:146:ILE:CD1	2.45	0.46
36:DA:360:G:O2'	36:DA:361:G:H5'	2.16	0.46
25:CZ:291:ARG:O	25:CZ:293:VAL:HG23	2.16	0.46
36:DA:581:C:OP1	53:DU:33:ARG:HG3	2.15	0.46
8:AH:46:LYS:HG3	8:AH:64:LYS:HB2	1.97	0.46
43:DH:23:ARG:O	43:DH:24:VAL:HG23	2.16	0.46
36:BA:2126:A:O2'	36:BA:2127:G:OP2	2.34	0.46
57:DY:30:VAL:HG12	57:DY:31:LEU:N	2.30	0.46
47:DO:86:ILE:O	47:DO:87:ILE:HD13	2.15	0.46
36:DA:1222:C:C2'	36:DA:1223:G:H5''	2.45	0.46
1:AA:59:A:N3	1:AA:59:A:H2'	2.30	0.46
1:AA:59:A:C5'	1:AA:60:A:H5''	2.45	0.46
39:BD:130:ALA:HB2	39:BD:192:THR:HB	1.97	0.46
24:AY:1:A:H5'	25:AZ:300:ARG:HH12	1.78	0.46
1:AA:655:A:H2'	1:AA:656:C:H6	1.81	0.46
20:CT:82:SER:O	20:CT:86:ARG:CB	2.64	0.46
31:D5:42:PRO:O	31:D5:43:HIS:HB2	2.16	0.46
1:CA:383:A:H2'	1:CA:384:G:H5'	1.97	0.46
1:AA:883:C:O2'	1:AA:884:U:H5'	2.16	0.46
25:CZ:258:LEU:O	25:CZ:259:ALA:CB	2.64	0.46
17:AQ:47:PRO:HG2	17:AQ:48:GLU:H	1.81	0.46
1:AA:156:G:C6	1:AA:166:G:C6	3.04	0.46
36:DA:1164:G:H2'	36:DA:1165:U:C6	2.51	0.46
1:CA:1264:C:H2'	1:CA:1265:G:H8	1.79	0.46
4:AD:45:GLN:C	4:AD:46:LYS:CG	2.84	0.46
51:BS:61:ASN:O	51:BS:65:VAL:HG23	2.15	0.46
3:AC:148:GLY:HA3	3:AC:172:ARG:O	2.14	0.46
50:BR:22:ARG:NE	50:BR:69:ASP:HA	2.31	0.46
36:BA:2545:G:O2'	36:BA:2546:U:H5'	2.16	0.46
42:DG:29:TRP:HA	42:DG:29:TRP:CE3	2.51	0.46
1:AA:371:G:H1'	1:AA:482:A:H1'	1.97	0.46
30:B4:37:SER:O	30:B4:38:LYS:HB3	2.15	0.46
30:D4:37:SER:O	30:D4:38:LYS:HB3	2.15	0.46
1:AA:746:A:O2'	1:AA:747:C:H5'	2.15	0.46
55:DW:10:VAL:HG23	55:DW:101:SER:O	2.16	0.46
1:AA:409:G:H3'	1:AA:410:G:H8	1.80	0.46
22:AV:20:U:H2'	22:AV:21:A:C5'	2.46	0.46
46:DN:120:LEU:HD13	46:DN:120:LEU:C	2.36	0.46
1:AA:495:A:O2'	1:AA:496:A:P	2.74	0.46
36:BA:208:C:H2'	36:BA:209:C:C6	2.51	0.46
11:AK:72:ALA:O	11:AK:75:TYR:HB2	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DV:71:LEU:HD23	54:DV:71:LEU:HA	1.75	0.46
1:CA:599:C:O2'	1:CA:600:C:H5'	2.16	0.46
37:DB:58:A:H2'	37:DB:59:A:O4'	2.15	0.46
36:BA:2639:A:H2'	36:BA:2640:G:O4'	2.16	0.46
38:DC:103:ILE:O	38:DC:106:GLY:N	2.48	0.46
38:BC:103:ILE:O	38:BC:106:GLY:N	2.48	0.46
52:DT:28:VAL:HG23	52:DT:47:GLY:O	2.16	0.46
1:AA:1006:C:H2'	1:AA:1007:C:C6	2.50	0.46
36:DA:1542:A:H2'	36:DA:1544:A:C4'	2.46	0.46
32:B6:32:ASN:O	32:B6:33:LYS:CB	2.64	0.46
40:BE:48:GLN:HA	40:BE:80:GLU:HA	1.97	0.46
46:DN:9:VAL:HG21	46:DN:48:MET:CB	2.45	0.46
41:BF:127:GLU:HB2	41:BF:196:LEU:HD12	1.97	0.46
26:B0:11:ARG:O	26:B0:14:ARG:NH2	2.47	0.46
36:BA:2100:G:H1	36:BA:2189:U:H3	1.62	0.46
9:CI:53:VAL:O	9:CI:53:VAL:HG23	2.14	0.46
31:D5:3:LYS:O	31:D5:4:HIS:O	2.34	0.46
43:DH:159:GLU:HG3	43:DH:160:LYS:HG3	1.98	0.46
48:BP:112:LEU:HD11	48:BP:114:ILE:CD1	2.46	0.46
48:BP:98:GLU:H	48:BP:101:VAL:HG13	1.80	0.46
48:DP:105:LEU:N	48:DP:105:LEU:CD1	2.75	0.46
2:CB:105:PHE:CE1	2:CB:155:LEU:HD12	2.51	0.46
48:DP:61:ARG:O	48:DP:62:LEU:CB	2.57	0.46
2:CB:69:LEU:HD13	2:CB:71:VAL:CG2	2.46	0.46
36:DA:26:G:C6	36:DA:27:G:N1	2.84	0.46
1:AA:1314:C:C5	1:AA:1315:U:C4	3.03	0.46
26:B0:49:LYS:HG3	26:B0:49:LYS:H	1.55	0.46
36:DA:605:C:C4	36:DA:606:U:C5	3.04	0.46
4:CD:18:LYS:HE3	4:CD:31:CYS:CB	2.45	0.46
36:DA:2756:U:C1'	36:DA:2757:A:H5''	2.34	0.46
36:BA:2109:U:O2	36:BA:2180:U:H5	1.99	0.46
52:BT:26:ASP:OD1	52:BT:26:ASP:C	2.54	0.46
1:CA:1243:C:H2'	1:CA:1244:C:H6	1.81	0.46
2:CB:51:LEU:HD21	2:CB:55:PHE:CZ	2.51	0.46
43:BH:105:LEU:CD2	43:BH:105:LEU:N	2.78	0.46
36:DA:2715:C:O2'	36:DA:2716:U:H5'	2.16	0.46
58:DZ:172:ALA:O	58:DZ:173:ALA:HB2	2.16	0.46
36:BA:2469:A:H2'	36:BA:2470:G:H5'	1.96	0.46
4:CD:151:LYS:O	4:CD:151:LYS:HG2	2.16	0.46
12:CL:26:ALA:O	12:CL:33:ARG:HD2	2.16	0.46
46:BN:34:LEU:CD1	46:BN:116:LEU:HB3	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2652:C:H42	36:DA:2668:G:H1	1.64	0.46
55:DW:82:LEU:CD1	55:DW:82:LEU:H	2.23	0.46
1:AA:1180:A:H5''	1:AA:1181:G:OP2	2.15	0.46
42:BG:102:PHE:CZ	42:BG:106:LEU:HD13	2.50	0.46
58:DZ:62:PRO:C	58:DZ:64:GLY:N	2.69	0.46
34:B8:22:VAL:HB	34:B8:53:PRO:CB	2.45	0.46
19:CS:29:ARG:O	19:CS:31:ILE:HG22	2.15	0.46
13:AM:52:GLU:HG2	13:AM:55:ARG:NH1	2.31	0.46
13:AM:3:ARG:HH21	13:AM:7:VAL:HG13	1.79	0.46
10:AJ:4:ILE:HB	10:AJ:74:ILE:CD1	2.45	0.46
22:CW:39:U:H2'	22:CW:40:C:H5'	1.97	0.46
14:CN:22:THR:O	14:CN:23:ARG:HB3	2.14	0.46
12:AL:78:GLN:O	12:AL:80:HIS:N	2.48	0.46
56:DX:49:VAL:HG12	56:DX:87:GLN:HB3	1.98	0.46
1:CA:519:C:H2'	1:CA:520:A:O4'	2.15	0.46
50:DR:4:LEU:O	50:DR:6:SER:N	2.49	0.46
1:CA:59:A:H5'	1:CA:60:A:C5'	2.46	0.46
40:DE:101:ARG:CB	40:DE:201:THR:HG21	2.45	0.46
36:DA:589:C:H2'	36:DA:590:A:C8	2.50	0.46
46:BN:1:MET:HE1	46:BN:3:THR:OG1	2.16	0.46
1:AA:338:A:H2'	1:AA:339:C:C6	2.50	0.46
1:AA:426:G:P	4:AD:36:ARG:NH2	2.87	0.46
36:DA:2196:C:H2'	36:DA:2197:U:C6	2.50	0.46
17:AQ:40:LYS:HD3	17:AQ:42:TYR:OH	2.16	0.46
53:DU:19:LYS:O	53:DU:22:LYS:HG2	2.15	0.46
36:DA:1286:A:OP1	50:DR:105:ARG:NH1	2.48	0.46
31:D5:6:VAL:HG13	36:DA:2016:U:H1'	1.98	0.46
35:B9:1:MET:HB2	35:B9:31:LYS:O	2.15	0.46
36:BA:1286:A:OP1	50:BR:105:ARG:NH1	2.49	0.46
4:CD:75:PHE:CE1	4:CD:93:PHE:CZ	3.04	0.46
18:AR:22:VAL:HG23	18:AR:55:ARG:O	2.16	0.46
36:DA:963:U:H2'	36:DA:964:C:C6	2.51	0.46
25:CZ:313:HIS:CB	25:CZ:380:LEU:HD12	2.46	0.46
25:AZ:22:HIS:O	25:AZ:137:LYS:HE2	2.15	0.46
43:DH:130:ARG:O	43:DH:131:VAL:HG23	2.15	0.46
48:DP:140:ALA:O	48:DP:141:ALA:HB3	2.16	0.46
36:DA:634:C:H2'	36:DA:635:C:C6	2.51	0.46
36:BA:1472:A:O2'	36:BA:1473:G:H5'	2.15	0.46
2:CB:224:GLN:O	2:CB:226:ARG:N	2.49	0.46
1:AA:909:A:H2'	1:AA:910:C:O4'	2.16	0.46
8:AH:9:MET:O	8:AH:13:ILE:HG12	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1090:U:H2'	1:AA:1091:U:C6	2.51	0.46
35:D9:3:VAL:HG21	36:DA:2539:C:H4'	1.98	0.46
15:CO:66:LEU:O	15:CO:69:TYR:HB3	2.15	0.46
36:BA:843:G:O2'	36:BA:844:C:H5'	2.15	0.46
1:AA:119:A:O2'	1:AA:120:A:OP2	2.30	0.46
43:BH:80:SER:O	43:BH:81:GLU:HB2	2.15	0.46
1:CA:1105:A:O2'	1:CA:1106:G:H5'	2.15	0.46
1:CA:957:U:O2	1:CA:959:A:H8	1.99	0.46
36:DA:1902:C:H2'	36:DA:1903:G:O5'	2.16	0.46
39:DD:243:GLY:O	39:DD:244:ARG:HB3	2.15	0.46
1:CA:1153:C:O2'	1:CA:1154:G:C5'	2.64	0.46
1:AA:1152:A:OP1	10:AJ:68:HIS:CD2	2.69	0.46
1:AA:1054:C:O2'	1:AA:1055:A:P	2.74	0.46
43:BH:83:TYR:HB3	43:BH:135:GLY:N	2.31	0.46
41:BF:4:VAL:HA	41:BF:19:GLU:CB	2.42	0.46
41:DF:171:PRO:C	41:DF:173:VAL:H	2.20	0.46
37:BB:105:A:OP1	58:BZ:72:ARG:NH1	2.49	0.46
40:DE:34:VAL:CG1	40:DE:48:GLN:HE21	2.28	0.46
46:BN:9:VAL:O	46:BN:10:GLU:OE1	2.34	0.46
58:DZ:98:MET:CG	58:DZ:99:TYR:N	2.69	0.46
42:DG:87:PRO:O	42:DG:88:ILE:CG1	2.63	0.46
51:DS:61:ASN:O	51:DS:65:VAL:HG23	2.16	0.46
43:DH:157:TYR:O	43:DH:158:HIS:CG	2.68	0.46
52:BT:12:SER:C	52:BT:14:TYR:H	2.19	0.46
4:AD:174:LEU:HD23	4:AD:185:PHE:HA	1.98	0.46
5:AE:76:ILE:CG1	5:AE:77:PRO:HD2	2.46	0.46
11:CK:110:ASP:HB2	18:CR:88:LYS:CE	2.44	0.46
36:BA:658:C:C2	36:BA:659:C:C5	3.04	0.46
36:BA:673:C:P	41:BF:81:PRO:HG3	2.56	0.46
2:CB:169:LYS:HD3	2:CB:169:LYS:O	2.16	0.46
36:DA:2110:G:H5''	36:DA:2145:C:N4	2.31	0.46
14:AN:12:ARG:CB	14:AN:12:ARG:HH11	2.29	0.46
7:AG:118:VAL:O	7:AG:121:ALA:HB3	2.16	0.46
1:CA:1220:G:O2'	1:CA:1221:G:H5'	2.15	0.46
10:AJ:96:ILE:HD13	10:AJ:96:ILE:N	2.17	0.46
2:CB:47:THR:HG23	2:CB:202:PRO:O	2.16	0.46
36:BA:2875:C:O2'	52:BT:5:ALA:HB3	2.15	0.46
53:BU:95:LEU:C	53:BU:97:ASP:H	2.18	0.46
53:BU:95:LEU:HD11	54:BV:11:GLN:O	2.16	0.46
36:BA:143:G:H2'	36:BA:143(A):C:H6	1.81	0.46
36:DA:761:A:C3'	36:DA:761:A:C8	2.99	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:761:A:H3'	36:DA:761:A:C8	2.51	0.46
1:AA:1127:G:C2'	1:AA:1128:C:H5'	2.46	0.46
1:AA:540:G:O2'	1:AA:541:G:H5'	2.16	0.46
43:DH:45:VAL:C	43:DH:47:GLU:H	2.19	0.46
53:DU:59:ARG:CG	53:DU:59:ARG:NH1	2.79	0.46
16:CP:5:ARG:NE	16:CP:22:THR:HG21	2.31	0.46
58:DZ:23:LYS:O	58:DZ:39:VAL:O	2.34	0.46
34:B8:15:LYS:CG	48:BP:65:ARG:HH21	2.28	0.46
13:CM:84:ILE:HG13	19:CS:66:MET:SD	2.55	0.46
9:CI:65:VAL:HG21	9:CI:73:GLN:CB	2.45	0.46
22:AW:39:U:C5'	22:AW:39:U:O2	2.64	0.46
46:BN:55:VAL:CG2	46:BN:126:PRO:HA	2.40	0.46
19:CS:21:GLU:HG3	19:CS:21:GLU:O	2.14	0.46
58:DZ:29:TYR:O	58:DZ:30:ASN:HB3	2.15	0.46
10:CJ:81:THR:C	10:CJ:83:GLU:N	2.67	0.46
1:AA:375:U:O2'	16:AP:28:ARG:HD2	2.16	0.46
40:BE:24:THR:HG22	40:BE:186:GLY:CA	2.45	0.46
36:DA:1222:C:H2'	36:DA:1223:G:H5'	1.98	0.46
10:CJ:85:LEU:C	10:CJ:87:THR:H	2.18	0.46
39:DD:131:LEU:N	39:DD:131:LEU:HD12	2.30	0.46
40:DE:46:ALA:HB2	40:DE:82:ARG:HA	1.96	0.46
36:DA:815:C:H41	48:DP:27:HIS:CE1	2.33	0.46
36:BA:1480:G:C2'	36:BA:1481:U:C5'	2.94	0.46
53:BU:14:HIS:CD2	53:BU:36:ARG:NH2	2.83	0.46
1:CA:346:G:N3	1:CA:346:G:C2'	2.79	0.46
1:AA:1326:C:P	21:AU:12:LYS:HZ2	2.39	0.46
3:AC:34:LEU:HG	14:AN:25:VAL:HG11	1.98	0.46
2:CB:191:ASP:OD1	2:CB:191:ASP:C	2.55	0.46
40:DE:120:TRP:HB3	40:DE:155:LYS:HD3	1.98	0.46
1:AA:1133:G:C4	1:AA:1142:G:N2	2.84	0.46
1:CA:156:G:O2'	1:CA:157:G:H5'	2.16	0.46
25:AZ:258:LEU:O	25:AZ:259:ALA:CB	2.64	0.46
36:BA:176:G:C2'	36:BA:177:G:H5'	2.45	0.46
1:CA:308:C:H2'	1:CA:309:G:H8	1.81	0.46
55:BW:78:GLU:OE2	55:BW:99:ARG:HD2	2.15	0.46
1:AA:256:U:H2'	1:AA:257:G:H8	1.80	0.46
36:DA:1658:C:OP1	40:DE:132:HIS:ND1	2.49	0.46
33:B7:12:ARG:NH2	36:BA:465:G:OP1	2.46	0.46
36:BA:2330:G:O2'	36:BA:2331:G:H5'	2.15	0.46
1:AA:826:C:H2'	1:AA:827:U:H6	1.81	0.46
36:BA:1862:G:O2'	36:BA:1863:G:H5'	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:37:PHE:CE1	14:CN:53:LEU:HD13	2.51	0.46
36:DA:1889:A:H1'	36:DA:2087:G:O4'	2.16	0.46
29:B3:11:SER:HB3	36:BA:988:A:OP2	2.15	0.46
36:DA:687:C:H2'	36:DA:688:U:O4'	2.15	0.46
36:BA:2666:C:H5'	36:BA:2667:C:OP2	2.16	0.46
36:DA:2819:G:H2'	36:DA:2821:A:N7	2.30	0.46
40:BE:108:SER:O	40:BE:162:ALA:HA	2.16	0.46
7:CG:120:ILE:HG22	7:CG:124:LEU:HD12	1.98	0.46
22:CV:20:U:H2'	22:CV:21:A:C5'	2.46	0.46
36:BA:2562:U:H4'	47:BO:25:LEU:HD21	1.98	0.46
1:CA:778:G:H1'	11:CK:119:CYS:HB3	1.98	0.46
36:BA:2257:U:O2'	36:BA:2258:C:H5'	2.15	0.46
49:BQ:58:PHE:HD1	49:BQ:58:PHE:O	1.99	0.46
38:DC:196:LEU:O	38:DC:199:HIS:N	2.49	0.46
36:DA:1215:G:O2'	36:DA:1216:G:H5'	2.15	0.46
28:B2:51:ARG:CD	36:BA:94(A):G:N2	2.79	0.46
28:B2:51:ARG:HD3	36:BA:94(A):G:N2	2.30	0.46
58:BZ:104:PHE:CE2	58:BZ:119:GLU:CB	2.98	0.46
42:BG:42:GLY:O	42:BG:88:ILE:HG22	2.16	0.46
22:AW:49:C:H42	22:AW:65:G:H1	1.64	0.46
40:BE:52:LEU:HD21	52:BT:1:MET:CE	2.46	0.46
40:BE:87:GLU:OE1	40:BE:89:ASP:N	2.46	0.46
36:DA:1484:G:C3'	36:DA:1485:G:H5''	2.43	0.46
9:CI:53:VAL:H	9:CI:95:LYS:NZ	2.11	0.46
52:BT:14:TYR:CD1	52:BT:14:TYR:N	2.84	0.46
36:DA:644:A:N1	36:DA:2369:A:H1'	2.30	0.46
57:BY:10:GLY:C	57:BY:27:VAL:HG22	2.36	0.46
4:AD:3:ARG:HE	4:AD:5:ILE:HG13	1.81	0.46
36:BA:2309:A:H2'	36:BA:2310:A:H5'	1.96	0.46
32:B6:14:THR:C	32:B6:16:CYS:H	2.19	0.46
51:DS:25:ARG:HD2	51:DS:88:ASP:OD2	2.16	0.46
48:BP:105:LEU:H	48:BP:105:LEU:CD1	2.25	0.46
48:BP:95:VAL:CG2	48:BP:125:VAL:HA	2.44	0.46
51:BS:40:ILE:HG22	51:BS:47:THR:HG23	1.97	0.46
46:BN:62:VAL:HG23	46:BN:66:LYS:HD2	1.95	0.46
2:CB:166:ASP:HB3	2:CB:169:LYS:CB	2.46	0.46
4:AD:22:LYS:HB2	4:AD:26:CYS:HB2	1.97	0.46
36:BA:2110:G:C2	36:BA:2178:C:H5	2.34	0.46
25:CZ:93:ILE:HD11	25:CZ:122:LEU:HD21	1.97	0.46
36:DA:2036:C:C5'	36:DA:2036:C:H6	2.15	0.46
30:B4:26:SER:OG	30:B4:27:THR:N	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:24:VAL:CG2	10:AJ:37:PRO:HG3	2.45	0.46
25:CZ:171:ILE:HG13	25:CZ:202:LEU:HA	1.97	0.46
31:B5:50:GLY:O	31:B5:51:TYR:C	2.54	0.46
40:BE:35:GLN:CG	40:BE:36:ARG:N	2.78	0.46
28:D2:53:LEU:O	28:D2:53:LEU:HD23	2.16	0.46
2:AB:178:ARG:CG	2:AB:178:ARG:HH11	2.29	0.46
34:B8:15:LYS:HG2	48:BP:65:ARG:NH2	2.31	0.46
34:D8:20:GLY:O	34:D8:57:ARG:HD3	2.16	0.46
1:CA:628:G:C2'	1:CA:629:G:H5'	2.46	0.46
50:BR:17:ARG:O	50:BR:20:LEU:HB3	2.16	0.46
36:DA:334:C:P	36:DA:335:C:H41	2.38	0.46
57:DY:47:LYS:HE3	57:DY:60:PHE:CZ	2.51	0.46
36:BA:2208:A:O2'	36:BA:2219:G:C8	2.64	0.46
40:DE:197:ILE:O	40:DE:197:ILE:HG12	2.15	0.46
40:BE:7:VAL:CG1	40:BE:27:LEU:HB3	2.45	0.46
39:BD:69:ARG:HG3	39:BD:130:ALA:CB	2.46	0.46
1:CA:276:G:O2'	17:CQ:68:ARG:NH1	2.49	0.46
52:DT:35:LYS:HZ1	52:DT:41:ARG:HE	1.63	0.46
1:AA:725:G:O2'	1:AA:726:C:H5'	2.16	0.46
25:CZ:69:GLU:CG	25:CZ:70:TYR:N	2.80	0.46
36:DA:1782:C:H1'	36:DA:2609:U:C5'	2.45	0.46
53:DU:51:LYS:HA	53:DU:54:LYS:HE2	1.97	0.46
47:BO:49:ARG:CD	47:BO:49:ARG:H	2.28	0.46
1:CA:384:G:O2'	1:CA:385:C:H5'	2.15	0.46
1:AA:392:G:H2'	1:AA:393:A:C8	2.49	0.46
1:AA:156:G:O2'	1:AA:157:G:H5'	2.16	0.46
40:BE:1:MET:O	40:BE:2:LYS:O	2.33	0.46
36:DA:176:G:C2'	36:DA:177:G:H5'	2.46	0.46
25:AZ:107:SER:OG	25:AZ:137:LYS:HD2	2.15	0.46
33:B7:47:ARG:NH2	56:BX:60:ARG:NH1	2.65	0.46
4:AD:45:GLN:C	4:AD:46:LYS:HG3	2.37	0.46
1:CA:1397:C:O2	1:CA:1397:C:O4'	2.33	0.46
36:BA:2848:G:H8	52:BT:97:ALA:HB2	1.81	0.46
7:AG:97:GLN:O	7:AG:101:LEU:HG	2.16	0.46
46:DN:65:LYS:HD3	46:DN:69:GLN:NE2	2.30	0.46
43:DH:80:SER:O	43:DH:81:GLU:CB	2.63	0.46
1:AA:100:C:H2'	1:AA:101:A:O4'	2.16	0.46
1:AA:1067:A:N1	1:AA:1108:G:O2'	2.40	0.46
1:AA:911:U:O2'	1:AA:912:C:H5'	2.16	0.46
37:DB:76:G:O3'	58:DZ:19:ARG:NH2	2.49	0.46
36:DA:444:C:H2'	36:DA:445:C:C6	2.50	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:736:C:O2'	36:DA:737:C:H5'	2.16	0.46
1:CA:1394:A:C5	1:CA:1501:C:H4'	2.51	0.46
36:BA:127:A:H5''	36:BA:128:C:O4'	2.15	0.46
27:B1:92:LYS:HG3	27:B1:92:LYS:O	2.16	0.46
2:AB:213:LEU:C	2:AB:213:LEU:HD23	2.36	0.46
13:AM:15:VAL:HG12	13:AM:45:VAL:HG22	1.98	0.45
1:AA:1054:C:O2'	1:AA:1055:A:H5''	2.16	0.45
13:CM:25:ILE:HD11	13:CM:60:VAL:CG1	2.46	0.45
28:B2:23:LYS:HA	28:B2:26:ARG:CB	2.46	0.45
49:BQ:135:ASP:O	49:BQ:138:ASP:OD2	2.33	0.45
56:DX:14:SER:H	56:DX:17:ALA:HB3	1.81	0.45
42:BG:42:GLY:CA	42:BG:89:GLY:HA2	2.46	0.45
36:BA:1485:G:H1'	36:BA:1505:C:N4	2.32	0.45
41:BF:162:LEU:HA	41:BF:165:ARG:NH1	2.31	0.45
9:CI:95:LYS:HG3	9:CI:96:LEU:CD1	2.39	0.45
58:DZ:51:ALA:CB	58:DZ:57:ILE:HD11	2.26	0.45
1:CA:954:G:H4'	13:CM:120:LYS:CD	2.25	0.45
4:AD:107:ARG:HD2	4:AD:173:TRP:CZ2	2.51	0.45
4:CD:105:VAL:HG21	4:CD:121:VAL:CG2	2.46	0.45
5:AE:76:ILE:HG13	5:AE:142:LEU:CD1	2.44	0.45
1:AA:1399:C:C2	1:AA:1502:A:N6	2.84	0.45
36:BA:811:U:O2'	36:BA:812:C:C5'	2.63	0.45
4:AD:9:CYS:HA	4:AD:12:CYS:HB2	1.99	0.45
26:B0:23:VAL:HG11	26:B0:69:PHE:HZ	1.81	0.45
1:CA:858:G:C8	1:CA:869:G:O6	2.69	0.45
16:CP:20:VAL:CG2	16:CP:21:VAL:N	2.78	0.45
40:BE:116:VAL:CG2	40:BE:122:PHE:CD2	2.90	0.45
25:CZ:277:LEU:HD13	25:CZ:279:GLU:N	2.31	0.45
58:BZ:162:GLU:C	58:BZ:163:LEU:HD23	2.36	0.45
25:CZ:28:THR:C	25:CZ:30:ALA:H	2.18	0.45
36:DA:1059:G:H2'	36:DA:1060:U:C5	2.50	0.45
36:BA:2653:U:H3'	36:BA:2654:A:C8	2.51	0.45
1:AA:1221:G:C2'	1:AA:1222:G:H5'	2.46	0.45
42:BG:138:GLN:HG2	42:BG:153:ARG:H	1.80	0.45
34:B8:48:PHE:CD1	34:B8:48:PHE:N	2.85	0.45
7:CG:75:VAL:CG1	7:CG:145:ALA:HA	2.45	0.45
37:BB:66:A:H61	37:BB:108:U:C2'	2.28	0.45
22:CW:29:G:O2'	22:CW:30:G:H5'	2.16	0.45
19:AS:13:ASP:C	19:AS:15:LEU:N	2.69	0.45
47:DO:87:ILE:HG22	47:DO:88:ASN:O	2.16	0.45
40:BE:101:ARG:HD3	40:BE:170:LEU:O	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:89:ARG:HD2	20:AT:104:LEU:CD1	2.46	0.45
11:CK:27:ASN:HD21	11:CK:45:GLY:H	1.64	0.45
9:CI:111:ARG:O	9:CI:113:LYS:HD2	2.15	0.45
24:AY:2:G:H4'	25:AZ:88:TYR:CE1	2.51	0.45
3:CC:70:VAL:O	3:CC:106:VAL:N	2.44	0.45
38:DC:149:ILE:CG2	38:DC:150:GLY:N	2.80	0.45
38:BC:74:VAL:HG11	38:BC:153:ILE:HG23	1.98	0.45
1:CA:945:G:C2	1:CA:946:A:C8	3.04	0.45
25:AZ:17:ILE:HG13	25:AZ:104:LEU:HA	1.98	0.45
36:DA:1952:A:C5	47:DO:22:ILE:HD12	2.51	0.45
36:BA:589:C:H2'	36:BA:590:A:C8	2.51	0.45
36:DA:2154:G:C2	36:DA:2155:G:C4	3.04	0.45
1:CA:1142:G:C8	1:CA:1143:G:C8	3.04	0.45
39:DD:94:LEU:HB2	39:DD:104:TYR:CE1	2.49	0.45
29:D3:48:GLU:H	29:D3:48:GLU:HG2	1.54	0.45
18:AR:25:THR:HG22	18:AR:42:ARG:HH11	1.80	0.45
1:CA:1029:C:H4'	1:CA:1033:G:N2	2.30	0.45
1:CA:1031:G:O2'	1:CA:1032:G:H5'	2.16	0.45
40:DE:9:VAL:CG1	40:DE:25:VAL:O	2.64	0.45
15:CO:31:LEU:O	15:CO:35:ARG:HG3	2.16	0.45
36:DA:1659:U:C4	36:DA:1660:C:C5	3.04	0.45
33:D7:47:ARG:NH2	56:DX:60:ARG:NH1	2.64	0.45
36:DA:2408:U:H2'	36:DA:2409:G:H8	1.81	0.45
25:AZ:203:LEU:HD23	25:AZ:203:LEU:O	2.16	0.45
36:BA:1842:G:H2'	36:BA:1843:C:C6	2.51	0.45
50:DR:18:LEU:HD13	50:DR:18:LEU:C	2.37	0.45
55:BW:55:ALA:O	55:BW:57:ASN:N	2.50	0.45
9:CI:11:LYS:O	9:CI:11:LYS:HG2	2.16	0.45
1:CA:243:A:C2	1:CA:246:A:C8	3.05	0.45
36:DA:2348:U:O2'	36:DA:2349:G:H5'	2.16	0.45
5:AE:99:GLY:O	5:AE:117:ASP:HA	2.16	0.45
46:BN:120:LEU:C	46:BN:120:LEU:HD13	2.37	0.45
41:DF:124:LEU:O	41:DF:193:VAL:HA	2.16	0.45
49:DQ:25:ASP:HA	49:DQ:100:GLY:O	2.16	0.45
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.15	0.45
1:CA:909:A:H2'	1:CA:910:C:O4'	2.16	0.45
44:BJ:64:UNK:C	44:BJ:66:UNK:N	2.77	0.45
7:AG:28:ASN:OD1	7:AG:36:LYS:HE2	2.16	0.45
1:CA:124:G:C6	1:CA:125:U:C4	3.04	0.45
1:AA:163:C:O2'	1:AA:164:U:H5'	2.16	0.45
24:CY:24:G:H2'	24:CY:25:C:O4'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:96:GLY:C	38:BC:98:GLU:H	2.20	0.45
28:B2:2:LYS:HG2	28:B2:5:GLU:OE2	2.16	0.45
28:B2:35:LEU:O	28:B2:35:LEU:HD22	2.17	0.45
1:CA:1193:G:O2'	1:CA:1194:U:H5'	2.16	0.45
58:BZ:118:GLN:HG2	58:BZ:120:ILE:HD13	1.98	0.45
36:BA:1544:A:O2'	36:BA:1545:A:H5'	2.17	0.45
9:AI:81:ILE:O	9:AI:85:LEU:HG	2.16	0.45
36:BA:2181:G:N2	36:BA:2182:G:C2	2.84	0.45
32:D6:18:ARG:HE	32:D6:43:CYS:HB3	1.81	0.45
57:DY:75:ILE:HG13	57:DY:76:CYS:H	1.81	0.45
4:AD:121:VAL:HG22	4:AD:126:ILE:HG12	1.98	0.45
4:CD:104:VAL:HA	4:CD:107:ARG:HB2	1.98	0.45
1:AA:1202:G:N2	14:AN:46:GLU:OE2	2.44	0.45
51:DS:25:ARG:NH1	51:DS:42:ASP:OD2	2.49	0.45
48:BP:38:GLN:HG3	48:BP:39:LYS:N	2.31	0.45
2:CB:114:ARG:NH1	2:CB:118:LEU:CG	2.80	0.45
36:BA:2801(A):A:C3'	36:BA:2802:G:H5'	2.46	0.45
36:DA:606:U:H4'	36:DA:658:C:H4'	1.98	0.45
52:BT:50:ILE:HA	52:BT:99:LEU:HD11	1.98	0.45
36:DA:1697:G:C3'	36:DA:1698:A:H5''	2.38	0.45
1:CA:858:G:N1	1:CA:869:G:C8	2.84	0.45
6:CF:44:GLY:HA2	6:CF:59:TYR:CE1	2.51	0.45
1:CA:265:G:H2'	1:CA:267:C:H5	1.81	0.45
9:CI:20:ARG:CB	9:CI:20:ARG:NH1	2.72	0.45
9:CI:4:TYR:HA	9:CI:88:TYR:CD1	2.51	0.45
40:BE:115:GLY:C	40:BE:116:VAL:O	2.52	0.45
57:DY:50:ARG:O	57:DY:53:PRO:HG3	2.16	0.45
36:BA:1206:G:C6	36:BA:1207:C:C4	3.04	0.45
43:BH:45:VAL:C	43:BH:47:GLU:H	2.19	0.45
58:DZ:155:LEU:HD23	58:DZ:155:LEU:H	1.80	0.45
43:DH:139:GLN:HE21	43:DH:140:LYS:HA	1.81	0.45
1:AA:542:G:N3	1:AA:543:C:C6	2.84	0.45
14:AN:26:ARG:HH11	14:AN:47:LEU:CD2	2.23	0.45
58:BZ:114:GLY:C	58:BZ:146:ILE:HG22	2.35	0.45
24:CY:16:H2U:C5'	24:CY:17:H2U:H5'	2.42	0.45
43:BH:76:VAL:C	43:BH:78:GLY:N	2.68	0.45
36:DA:580:C:O2'	36:DA:581:C:H5'	2.16	0.45
2:AB:109:SER:O	2:AB:111:ARG:N	2.49	0.45
50:BR:118:GLU:HA	50:BR:118:GLU:OE1	2.16	0.45
16:AP:9:PHE:CE2	16:AP:18:ARG:CZ	2.99	0.45
36:DA:2127:G:H2'	36:DA:2128:C:C6	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:89:LYS:O	46:BN:93:THR:HG22	2.16	0.45
36:DA:1106:G:C2'	36:DA:1107:G:H5'	2.46	0.45
50:BR:7:GLY:O	50:BR:8:ARG:CZ	2.64	0.45
1:CA:782:A:H2'	1:CA:783:C:H5'	1.98	0.45
47:DO:98:VAL:HG11	47:DO:118:ALA:N	2.31	0.45
3:CC:34:LEU:HG	14:CN:25:VAL:HG11	1.97	0.45
5:CE:41:VAL:HG13	5:CE:113:ALA:CA	2.45	0.45
36:DA:6:A:O2'	46:DN:130:HIS:HB2	2.16	0.45
27:B1:30:VAL:O	27:B1:31:GLY:O	2.35	0.45
53:BU:102:GLU:HG3	54:BV:2:PHE:CE2	2.51	0.45
6:AF:28:ARG:O	6:AF:31:GLU:HB3	2.16	0.45
36:BA:922:U:H2'	36:BA:923:C:C6	2.52	0.45
1:CA:56:U:H2'	1:CA:57:G:H8	1.79	0.45
13:CM:3:ARG:HH21	13:CM:7:VAL:HG13	1.80	0.45
9:CI:48:GLU:N	9:CI:49:PRO:HD3	2.31	0.45
52:BT:66:VAL:HA	52:BT:71:GLY:HA2	1.98	0.45
36:DA:2692:C:H2'	36:DA:2693:A:H8	1.80	0.45
12:AL:127:GLU:O	12:AL:128:ALA:C	2.53	0.45
29:B3:26:LEU:O	29:B3:28:LEU:HD22	2.16	0.45
3:AC:172:ARG:O	3:AC:173:VAL:HG23	2.15	0.45
1:AA:814:A:H2'	1:AA:816:A:H5''	1.99	0.45
48:BP:99:LEU:HD23	48:BP:99:LEU:C	2.36	0.45
1:AA:818:G:HO2'	1:AA:820:U:H6	1.62	0.45
8:AH:101:PRO:HG2	8:AH:133:LEU:HD21	1.98	0.45
33:B7:31:LEU:O	33:B7:35:ARG:HB2	2.17	0.45
16:CP:75:ARG:O	16:CP:78:GLY:N	2.28	0.45
36:DA:667:U:H2'	36:DA:668:G:O4'	2.15	0.45
36:BA:2514:U:H2'	36:BA:2515:C:C6	2.52	0.45
39:DD:162:SER:O	39:DD:178:PRO:HG3	2.16	0.45
48:DP:138:LEU:N	48:DP:138:LEU:HD12	2.31	0.45
1:CA:594:G:C2'	1:CA:595:G:H5'	2.45	0.45
45:DK:5:UNK:O	45:DK:6:UNK:C	2.64	0.45
45:DK:8:UNK:O	45:DK:9:UNK:C	2.63	0.45
36:BA:2824:C:H2'	36:BA:2825:C:O4'	2.17	0.45
36:DA:127:A:H5''	36:DA:128:C:O4'	2.16	0.45
36:DA:773:U:H4'	39:DD:47:GLY:HA3	1.98	0.45
2:CB:58:ILE:CG2	2:CB:222:ILE:CD1	2.94	0.45
1:CA:1151:A:O2'	1:CA:1152:A:H8	1.98	0.45
52:DT:19:LEU:HD22	52:DT:85:LYS:CD	2.46	0.45
49:BQ:27:VAL:O	49:BQ:28:ALA:HB3	2.17	0.45
58:BZ:119:GLU:CG	58:BZ:122:ARG:NH1	2.78	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1300:U:H4'	36:BA:1301:A:O5'	2.17	0.45
36:DA:1528:A:O2'	36:DA:1528(A):A:H5'	2.17	0.45
36:DA:1541:G:O2'	36:DA:1542:A:H5''	2.17	0.45
48:BP:84:ASN:C	48:BP:86:LYS:H	2.19	0.45
46:DN:112:LEU:O	46:DN:115:ARG:N	2.49	0.45
34:B8:11:LYS:CD	34:B8:11:LYS:H	2.29	0.45
25:CZ:355:LEU:HB2	25:CZ:356:PRO:CD	2.46	0.45
57:DY:10:GLY:C	57:DY:27:VAL:HG22	2.37	0.45
2:AB:114:ARG:HH11	2:AB:118:LEU:HG	1.81	0.45
36:BA:644:A:N1	36:BA:2369:A:H1'	2.31	0.45
2:AB:166:ASP:HB3	2:AB:169:LYS:CB	2.46	0.45
20:AT:65:LYS:O	20:AT:68:LYS:HB2	2.17	0.45
43:BH:54:ARG:HB2	43:BH:55:PRO:HD2	1.98	0.45
36:DA:2392:A:N3	36:DA:2392:A:H5'	2.31	0.45
48:BP:33:ARG:O	48:BP:34:GLY:O	2.35	0.45
51:BS:84:GLN:HB3	51:BS:105:ALA:O	2.15	0.45
48:DP:38:GLN:CG	48:DP:39:LYS:H	2.30	0.45
36:DA:659:C:H4'	41:DF:100:THR:O	2.16	0.45
52:BT:105:LEU:HD22	52:BT:109:GLU:OE2	2.17	0.45
51:DS:49:VAL:HG22	51:DS:80:LEU:HD13	1.99	0.45
1:CA:1277:C:H1'	1:CA:1282:C:O2	2.16	0.45
13:CM:11:ARG:HG2	13:CM:12:ASN:N	2.17	0.45
36:BA:2740:A:H2'	36:BA:2741:A:C8	2.51	0.45
31:B5:56:LYS:NZ	31:B5:59:GLU:OE2	2.49	0.45
25:AZ:5:PHE:CD1	25:AZ:277:LEU:HD23	2.51	0.45
42:DG:5:VAL:HG12	42:DG:7:LEU:H	1.81	0.45
52:BT:39:ARG:CD	52:BT:39:ARG:H	2.12	0.45
58:BZ:42:VAL:HG22	58:BZ:43:GLU:N	2.31	0.45
47:DO:34:THR:O	47:DO:35:VAL:C	2.54	0.45
36:DA:271(Q):G:H1'	36:DA:271(R):G:H8	1.81	0.45
1:CA:706:A:C5	1:CA:707:C:C5	3.05	0.45
54:BV:49:THR:O	54:BV:50:PRO:C	2.54	0.45
1:CA:624:C:H4'	16:CP:11:SER:N	2.30	0.45
22:CW:8:U:C6	22:CW:8:U:OP2	2.69	0.45
40:BE:4:ILE:HG12	40:BE:5:LEU:O	2.17	0.45
36:BA:272(D):G:H1	36:BA:364:C:N4	2.10	0.45
40:BE:105:THR:HB	40:BE:197:ILE:CG2	2.43	0.45
29:B3:6:VAL:HB	29:B3:54:VAL:HG11	1.97	0.45
54:BV:21:ARG:HB3	54:BV:91:TYR:HB2	1.98	0.45
36:BA:524:U:H4'	36:BA:555:U:H4'	1.98	0.45
6:AF:87:ARG:NH1	6:AF:87:ARG:HG2	2.29	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:219:C:H2'	1:CA:220:G:O4'	2.16	0.45
3:AC:167:TRP:O	3:AC:168:ALA:CB	2.63	0.45
38:DC:113:VAL:O	38:DC:138:PRO:HG3	2.17	0.45
53:BU:57:PHE:O	53:BU:58:ARG:C	2.53	0.45
5:AE:41:VAL:HG13	5:AE:113:ALA:CA	2.45	0.45
42:BG:134:GLY:C	42:BG:135:LEU:HD12	2.37	0.45
1:CA:655:A:H2'	1:CA:656:C:C6	2.51	0.45
35:B9:31:LYS:HE2	36:BA:2478:A:H5'	1.99	0.45
12:CL:43:VAL:HG23	12:CL:93:LEU:HD22	1.98	0.45
36:DA:2552:U:C2	36:DA:2554:U:H5'	2.51	0.45
1:AA:256:U:H5'	17:AQ:17:LYS:HZ1	1.81	0.45
36:DA:742:G:O2'	36:DA:743:G:H5'	2.15	0.45
33:B7:46:VAL:HG12	33:B7:47:ARG:H	1.82	0.45
36:BA:2693:A:H2'	36:BA:2694:G:C8	2.50	0.45
38:DC:41:VAL:HG21	38:DC:185:LEU:CD2	2.47	0.45
7:CG:69:VAL:HG11	7:CG:104:LEU:HD22	1.99	0.45
36:BA:2001:A:H2'	36:BA:2002:G:C8	2.51	0.45
36:BA:1204:A:N1	36:BA:1241:A:C2	2.84	0.45
1:CA:814:A:H2'	1:CA:816:A:H5''	1.98	0.45
42:DG:34:LEU:O	42:DG:34:LEU:HD12	2.17	0.45
55:DW:62:HIS:O	55:DW:63:ASP:O	2.33	0.45
1:AA:1193:G:O2'	1:AA:1194:U:H5'	2.16	0.45
41:DF:42:ALA:O	41:DF:45:ARG:HB2	2.16	0.45
53:DU:82:GLY:O	53:DU:84:LYS:N	2.50	0.45
1:AA:1488:G:H2'	1:AA:1489:G:C8	2.52	0.45
3:AC:130:VAL:O	3:AC:131:ARG:C	2.55	0.45
36:BA:2230:G:H2'	36:BA:2231:C:H6	1.81	0.45
36:DA:1916:A:H2'	36:DA:1917:U:O4'	2.17	0.45
39:BD:91:ARG:HH11	39:BD:91:ARG:HG2	1.82	0.45
36:DA:2585:U:O2	36:DA:2585:U:H5'	2.16	0.45
38:BC:117:PRO:O	38:BC:118:ASP:HB3	2.16	0.45
49:BQ:132:VAL:HG11	58:BZ:81:ARG:HD2	1.97	0.45
1:CA:1006:C:H2'	1:CA:1007:C:C6	2.50	0.45
36:DA:1463:C:H2'	36:DA:1464:C:H6	1.81	0.45
34:D8:61:LEU:N	34:D8:63:PRO:HD2	2.31	0.45
46:BN:112:LEU:O	46:BN:115:ARG:N	2.50	0.45
9:CI:17:VAL:HG11	9:CI:81:ILE:CD1	2.36	0.45
43:DH:163:TYR:CE2	43:DH:168:PRO:HD3	2.52	0.45
49:DQ:12:GLN:NE2	49:DQ:72:LYS:HG3	2.31	0.45
34:B8:30:ARG:HA	34:B8:30:ARG:NE	2.31	0.45
22:CV:22:G:C2'	22:CV:23:A:H5''	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:BP:46:LYS:HB3	48:BP:52:GLU:HG2	1.98	0.45
2:CB:132:LYS:HA	2:CB:135:GLN:OE1	2.16	0.45
39:BD:43:ARG:HG2	39:BD:43:ARG:O	2.15	0.45
48:BP:24:GLY:CA	48:BP:33:ARG:CZ	2.95	0.45
36:DA:2110:G:C2	36:DA:2178:C:H5	2.32	0.45
52:BT:128:GLU:CD	52:BT:129:ARG:N	2.69	0.45
36:DA:1666:G:C2'	36:DA:1667:G:H5'	2.46	0.45
49:DQ:135:ASP:O	49:DQ:138:ASP:OD2	2.34	0.45
2:AB:44:LEU:CD1	2:AB:44:LEU:H	2.18	0.45
42:DG:172:LEU:C	42:DG:172:LEU:HD23	2.36	0.45
36:BA:2656:U:N3	36:BA:2665:A:H2	2.04	0.45
58:DZ:169:GLU:O	58:DZ:171:ILE:HG23	2.17	0.45
28:D2:35:LEU:HB3	28:D2:50:ILE:CG1	2.46	0.45
25:AZ:24:LYS:HG3	25:AZ:25:THR:N	2.30	0.45
42:BG:138:GLN:HG2	42:BG:153:ARG:O	2.16	0.45
1:CA:706:A:C1'	11:CK:29:ILE:HD11	2.45	0.45
36:DA:301:G:C6	36:DA:317:G:C6	3.05	0.45
19:AS:61:TYR:HD1	19:AS:62:ILE:N	2.14	0.45
36:DA:847:U:OP2	36:DA:928:G:O6	2.35	0.45
43:BH:28:GLY:HA3	43:BH:79:VAL:HB	1.98	0.45
36:BA:2128:C:P	38:BC:36:LYS:HB2	2.56	0.45
57:DY:35:TYR:HD2	57:DY:68:HIS:NE2	2.14	0.45
22:AV:60:U:H5''	22:AV:61:C:H5	1.81	0.45
13:AM:101:GLN:HB3	13:AM:102:ARG:H	1.58	0.45
46:DN:3:THR:HG22	46:DN:5:VAL:H	1.81	0.45
36:DA:1107:G:H4'	44:DJ:81:UNK:CA	2.45	0.45
31:B5:20:ARG:HA	31:B5:23:HIS:ND1	2.32	0.45
38:BC:74:VAL:HG12	38:BC:75:LEU:N	2.31	0.45
50:BR:97:VAL:HA	50:BR:113:LEU:O	2.15	0.45
36:BA:1982:C:C5'	36:BA:1983:C:OP2	2.65	0.45
49:DQ:109:VAL:CG1	49:DQ:110:THR:N	2.79	0.45
1:CA:865:A:H5'	1:CA:1078:U:C4	2.50	0.45
53:DU:57:PHE:O	53:DU:58:ARG:C	2.53	0.45
36:DA:2553:G:H3'	36:DA:2554:U:H5''	1.98	0.45
6:CF:27:GLN:O	6:CF:31:GLU:HB2	2.16	0.45
36:BA:1270:C:H5''	36:BA:1271:G:H5'	1.98	0.45
36:DA:1710:C:H1'	36:DA:2859:G:N2	2.31	0.45
36:BA:2364:C:H2'	36:BA:2365:G:O4'	2.17	0.45
48:BP:123:LEU:HD23	48:BP:123:LEU:N	2.31	0.45
25:CZ:315:LYS:HG2	25:CZ:373:GLU:HG3	1.98	0.45
36:BA:1709:U:H1'	36:BA:2860:A:N3	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1131:G:O6	36:BA:2040:C:H1'	2.17	0.45
22:CV:1:G:H1'	26:D0:5:LYS:HZ1	1.80	0.45
36:DA:39:C:H2'	36:DA:40:C:H6	1.80	0.45
26:B0:43:THR:CG2	36:BA:2336:A:H61	2.29	0.45
36:BA:1290:C:H2'	36:BA:1291:C:H6	1.81	0.45
1:AA:825:G:N2	8:AH:11:THR:HG21	2.31	0.45
58:DZ:137:ILE:HD12	58:DZ:158:PRO:CD	2.47	0.45
36:DA:1213:A:N3	36:DA:1238:G:H1'	2.31	0.45
36:DA:2488:A:O2'	36:DA:2489:G:H5'	2.16	0.45
18:CR:61:LYS:O	18:CR:65:ILE:HG13	2.16	0.45
36:DA:825:C:H4'	36:DA:2428:G:N7	2.32	0.45
1:AA:668:G:O2'	15:AO:46:HIS:HD2	1.99	0.45
9:CI:16:ARG:HH11	9:CI:16:ARG:HG3	1.82	0.45
7:AG:76:ARG:HH11	7:AG:76:ARG:HG2	1.80	0.45
7:CG:51:GLN:HA	7:CG:51:GLN:OE1	2.16	0.45
11:CK:76:GLY:O	11:CK:78:GLN:HG3	2.16	0.45
28:B2:35:LEU:C	28:B2:35:LEU:HD22	2.37	0.45
28:B2:67:LYS:CA	28:B2:70:GLN:HG2	2.47	0.45
41:BF:4:VAL:HG13	41:BF:19:GLU:OE1	2.16	0.45
41:DF:170:LEU:HB2	41:DF:173:VAL:HB	1.99	0.45
39:DD:24:ILE:CG1	39:DD:25:THR:N	2.78	0.45
39:DD:30:GLU:C	39:DD:35:LYS:HD2	2.37	0.45
40:BE:49:LEU:HD11	40:BE:91:VAL:HG21	1.97	0.45
32:D6:35:GLU:HB3	32:D6:51:GLU:CB	2.26	0.45
41:BF:160:ASN:ND2	41:BF:162:LEU:N	2.58	0.45
36:DA:2056:G:H2'	36:DA:2056:G:N3	2.30	0.45
43:DH:13:LYS:C	43:DH:15:VAL:H	2.19	0.45
5:CE:12:LEU:O	5:CE:12:LEU:HD13	2.17	0.45
57:DY:27:VAL:HG12	57:DY:28:LYS:N	2.32	0.45
57:BY:26:LYS:HG2	57:BY:27:VAL:N	2.24	0.45
48:BP:147:LEU:CG	48:BP:148:LEU:H	2.21	0.45
10:CJ:50:ILE:HG12	14:CN:41:ARG:CD	2.46	0.45
36:DA:1858:G:H2'	36:DA:1883:G:H22	1.82	0.45
20:AT:58:LYS:O	20:AT:62:LEU:HD12	2.16	0.45
3:CC:132:ARG:NH1	3:CC:136:GLN:HE22	1.98	0.45
20:CT:62:LEU:N	20:CT:62:LEU:HD12	2.16	0.45
36:BA:2334:G:H5'	51:BS:13:ARG:HD3	1.98	0.45
9:AI:28:VAL:HG21	9:AI:33:PHE:HA	1.97	0.45
36:DA:1665:A:H2'	36:DA:1666:G:O4'	2.16	0.45
1:CA:1275:A:O2'	1:CA:1276:G:H5'	2.17	0.45
36:BA:860:U:O4'	36:BA:860:U:O2	2.34	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:93:ILE:HD11	25:AZ:122:LEU:HD21	1.99	0.45
36:DA:662:G:P	48:DP:18:ARG:HD2	2.57	0.45
35:D9:24:TYR:CE2	35:D9:35:ARG:HG3	2.52	0.45
1:AA:265:G:H2'	1:AA:267:C:H5	1.82	0.45
10:AJ:6:ILE:HG12	10:AJ:72:VAL:O	2.16	0.45
43:DH:105:LEU:HD21	43:DH:113:VAL:HB	1.99	0.45
36:BA:1059:G:H2'	36:BA:1060:U:C5	2.51	0.45
52:DT:50:ILE:HG22	52:DT:51:ARG:N	2.31	0.45
42:BG:121:ASN:HD22	42:BG:122:PRO:N	2.13	0.45
1:CA:1127:G:H1	1:CA:1145:C:N4	2.14	0.45
2:AB:27:LYS:HD2	2:AB:193:ASP:OD1	2.17	0.45
58:BZ:146:ILE:HG13	58:BZ:147:GLY:N	2.31	0.45
1:CA:1117:G:H5'	1:CA:1117:G:C8	2.49	0.45
43:BH:139:GLN:HE21	43:BH:140:LYS:HA	1.81	0.45
36:BA:958:U:O4	49:BQ:17:LEU:HG	2.17	0.45
40:DE:4:ILE:HG12	40:DE:5:LEU:O	2.17	0.45
36:BA:1275:A:C8	50:BR:16:HIS:CD2	3.04	0.45
22:CV:60:U:H5''	22:CV:61:C:H5	1.81	0.45
36:BA:130:C:O3'	36:BA:1349:A:H1'	2.15	0.45
43:DH:65:HIS:C	43:DH:67:LEU:H	2.19	0.45
58:BZ:101:PRO:HG2	58:BZ:136:PHE:N	2.30	0.45
39:BD:142:VAL:CG2	39:BD:191:ALA:HB1	2.45	0.45
49:BQ:21:THR:O	49:BQ:22:LYS:CB	2.63	0.45
39:BD:127:VAL:HA	39:BD:193:VAL:HG13	1.97	0.45
36:BA:1638:C:H5''	36:BA:2710:C:O2'	2.16	0.45
51:DS:37:ALA:O	51:DS:38:GLN:HG3	2.17	0.45
3:AC:35:GLU:CG	3:AC:59:ARG:HH22	2.29	0.45
36:DA:1344:G:O2'	36:DA:1385:G:H2'	2.17	0.45
10:AJ:86:MET:O	10:AJ:86:MET:CG	2.62	0.45
54:BV:82:ARG:HG2	54:BV:82:ARG:HH11	1.81	0.45
26:B0:72:ARG:HD3	26:B0:75:LEU:HD13	1.97	0.45
36:DA:134:C:H2'	36:DA:135:G:C8	2.50	0.45
36:BA:2554:U:H2'	36:BA:2555:U:C6	2.51	0.45
25:AZ:258:LEU:HD12	25:AZ:258:LEU:N	2.32	0.45
1:CA:1031:G:H2'	1:CA:1032:G:O4'	2.16	0.45
36:BA:2733:A:H2'	36:BA:2734:A:O4'	2.16	0.45
36:DA:1817:G:OP1	39:DD:88:ARG:NH2	2.46	0.45
55:BW:14:PRO:HG2	55:BW:78:GLU:CG	2.45	0.45
36:BA:894:C:O2'	36:BA:895:U:H5'	2.16	0.45
12:AL:126:LYS:HE2	12:AL:127:GLU:N	2.32	0.45
48:DP:90:ARG:HB3	48:DP:91:PHE:CD1	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1573:G:C2'	36:BA:1574:C:H5'	2.46	0.45
6:CF:38:GLU:O	6:CF:39:LYS:C	2.52	0.45
1:CA:1328:C:O2'	1:CA:1329:A:H5'	2.17	0.45
36:BA:2122:U:H2'	36:BA:2123:G:C8	2.52	0.45
26:D0:38:VAL:HB	26:D0:59:LEU:HD12	1.97	0.45
36:DA:825:C:H4'	36:DA:2428:G:C5	2.52	0.45
49:BQ:39:PRO:O	49:BQ:40:ALA:HB2	2.15	0.45
41:BF:108:LYS:HB3	41:BF:112:MET:HE3	1.99	0.45
14:AN:37:PHE:CE1	14:AN:53:LEU:HD13	2.52	0.45
46:DN:108:PRO:O	46:DN:113:GLY:HA3	2.16	0.45
36:DA:2639:A:H2'	36:DA:2640:G:O4'	2.16	0.45
44:BJ:90:UNK:O	44:BJ:91:UNK:C	2.64	0.45
4:AD:61:LYS:HB2	4:AD:203:VAL:HG13	1.97	0.45
36:DA:2506:U:H5'	36:DA:2506:U:C6	2.52	0.45
26:D0:24:LYS:HD3	26:D0:24:LYS:HA	1.84	0.45
38:BC:2:LYS:O	38:BC:2:LYS:HG2	2.17	0.45
1:AA:902:G:H2'	1:AA:903:G:H8	1.81	0.45
52:DT:28:VAL:C	52:DT:29:ARG:HD3	2.37	0.45
28:B2:35:LEU:CB	28:B2:53:LEU:HD13	2.45	0.45
41:BF:24:LEU:HD12	41:BF:118:ALA:HB1	1.98	0.45
42:BG:82:LEU:HD22	42:BG:87:PRO:HG3	1.99	0.45
42:BG:88:ILE:HG22	42:BG:89:GLY:N	2.31	0.45
36:DA:1536:C:H2'	36:DA:1537:G:C4'	2.47	0.45
46:DN:9:VAL:O	46:DN:10:GLU:OE1	2.34	0.45
13:CM:4:ILE:CG2	13:CM:5:ALA:H	2.14	0.45
13:CM:66:LEU:O	13:CM:67:GLU:O	2.35	0.45
36:DA:925:C:C3'	36:DA:926:A:H5''	2.46	0.45
58:DZ:57:ILE:N	58:DZ:57:ILE:HD12	2.30	0.45
36:BA:654(L):G:H2'	36:BA:654(M):C:H4'	1.99	0.45
4:AD:126:ILE:CG2	4:AD:127:THR:N	2.79	0.45
4:AD:5:ILE:O	4:AD:5:ILE:HG22	2.16	0.45
48:DP:149:GLU:O	48:DP:150:ALA:HB2	2.17	0.45
36:BA:806:C:C5	48:BP:39:LYS:HE2	2.51	0.45
53:BU:85:LYS:CD	53:BU:117:GLN:HE22	2.16	0.45
36:BA:1142:U:H5'	36:BA:1142(A):A:C8	2.51	0.45
36:BA:654(U):A:C6	36:BA:654(V):A:N6	2.85	0.45
42:DG:125:PHE:CD2	42:DG:131:TYR:HD1	2.34	0.45
14:CN:15:LYS:HB3	14:CN:16:PHE:CD2	2.52	0.45
36:BA:1108:U:H3'	36:BA:1109:C:H6	1.80	0.45
25:CZ:5:PHE:CD1	25:CZ:277:LEU:HD23	2.52	0.45
42:DG:7:LEU:HB3	42:DG:100:TRP:CE3	2.51	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:D2:51:ARG:HD3	28:D2:55:ARG:NH1	2.22	0.45
36:BA:2463:C:C2'	36:BA:2464:C:H5'	2.46	0.45
1:AA:80:G:H22	1:AA:90:U:H5'	1.74	0.45
2:CB:33:TYR:HB2	2:CB:43:ASP:CB	2.41	0.45
49:DQ:14:ARG:HG2	49:DQ:41:TRP:HH2	1.80	0.45
13:AM:82:MET:HG2	13:AM:83:ASP:H	1.80	0.45
13:CM:82:MET:CG	13:CM:83:ASP:H	2.27	0.45
53:DU:8:VAL:O	53:DU:9:VAL:C	2.54	0.45
42:DG:121:ASN:HB3	42:DG:124:SER:OG	2.16	0.45
40:BE:184:VAL:O	40:BE:186:GLY:N	2.50	0.45
3:CC:167:TRP:O	3:CC:168:ALA:CB	2.64	0.45
1:AA:501:C:H2'	1:AA:502:G:H8	1.80	0.45
20:AT:82:SER:O	20:AT:86:ARG:CB	2.65	0.45
36:DA:2261:C:O2'	36:DA:2262:U:H5'	2.17	0.45
38:BC:149:ILE:CG2	38:BC:150:GLY:N	2.79	0.45
47:BO:107:ARG:NH1	52:BT:36:GLU:HG2	2.31	0.45
25:CZ:17:ILE:HG13	25:CZ:104:LEU:HA	1.99	0.45
14:AN:28:GLY:O	14:AN:29:ARG:C	2.54	0.45
2:CB:97:TRP:CH2	2:CB:176:GLU:CD	2.90	0.45
3:AC:3:ASN:ND2	3:AC:4:LYS:H	2.14	0.45
58:BZ:73:GLN:OE1	58:BZ:75:ASN:OD1	2.35	0.45
36:BA:1289:C:H2'	36:BA:1289:C:O2	2.16	0.45
1:AA:1031:G:H2'	1:AA:1032:G:O4'	2.17	0.45
36:BA:1106:G:C2'	36:BA:1107:G:H5'	2.47	0.45
36:BA:1710:C:H1'	36:BA:2859:G:N2	2.32	0.45
40:BE:132:HIS:HA	40:BE:135:HIS:CE1	2.52	0.45
36:DA:1204:A:N1	36:DA:1241:A:C2	2.85	0.45
36:DA:2567:G:H2'	36:DA:2568:C:C6	2.51	0.45
1:CA:332:G:H2'	1:CA:333:G:H8	1.82	0.45
1:CA:319:G:C2'	1:CA:320:C:H5'	2.47	0.45
48:DP:12:ALA:O	48:DP:13:ASN:O	2.35	0.45
1:CA:100:C:H2'	1:CA:101:A:O4'	2.16	0.45
1:CA:369:C:O2'	1:CA:370:C:O5'	2.35	0.45
36:DA:2347:C:H2'	36:DA:2348:U:C6	2.51	0.45
36:BA:1563:G:H2'	36:BA:1564:C:O4'	2.15	0.45
1:CA:421:U:C6	3:CC:127:ARG:NH1	2.84	0.45
36:BA:444:C:H2'	36:BA:445:C:C6	2.52	0.45
36:DA:2824:C:H2'	36:DA:2825:C:O4'	2.16	0.45
55:BW:48:ALA:O	55:BW:49:LYS:C	2.55	0.45
1:CA:1303:C:H2'	1:CA:1304:G:H5'	1.97	0.45
2:AB:104:ASN:O	2:AB:108:ILE:HG12	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1468:A:H2'	1:CA:1469:G:O4'	2.15	0.45
36:BA:1036:G:O2'	36:BA:1037:G:H5'	2.17	0.45
36:BA:133:C:H6	36:BA:133:C:O5'	2.00	0.45
9:AI:10:ARG:HH11	9:AI:10:ARG:HG3	1.81	0.45
39:DD:186:HIS:CD2	39:DD:188:GLU:HB2	2.52	0.45
24:AY:52:A:C2'	24:AY:53:G:H5'	2.46	0.45
36:BA:703:U:C2'	36:BA:704:G:H5'	2.47	0.45
38:DC:117:PRO:HG3	38:DC:145:VAL:HG12	1.99	0.45
52:DT:28:VAL:O	52:DT:29:ARG:HG2	2.17	0.45
43:DH:83:TYR:HB3	43:DH:135:GLY:O	2.17	0.45
49:BQ:140:ALA:O	49:BQ:141:GLN:HB2	2.17	0.45
40:BE:34:VAL:CG1	40:BE:48:GLN:HE21	2.30	0.45
36:BA:2636:U:O5'	40:BE:80:GLU:HG3	2.17	0.45
34:D8:59:LYS:O	34:D8:61:LEU:HD12	2.17	0.45
32:D6:30:THR:O	32:D6:32:ASN:N	2.50	0.45
41:BF:162:LEU:HD12	41:BF:162:LEU:N	2.32	0.45
36:DA:638:G:C6	36:DA:639:U:N3	2.85	0.45
49:DQ:140:ALA:O	49:DQ:141:GLN:HB2	2.17	0.45
42:DG:45:GLU:OE1	42:DG:45:GLU:HA	2.16	0.45
24:CY:45:U:C3'	24:CY:46:7MG:H5''	2.34	0.45
32:D6:17:LYS:O	32:D6:18:ARG:HB3	2.17	0.45
40:DE:14:ILE:HG12	40:DE:21:VAL:HG23	1.98	0.45
57:DY:80:GLY:O	57:DY:81:LYS:O	2.35	0.45
4:AD:104:VAL:HA	4:AD:107:ARG:HB2	1.97	0.45
36:DA:654(C):G:C3'	36:DA:654(D):G:H5'	2.47	0.45
1:CA:542:G:C2	1:CA:543:C:C5	3.05	0.45
36:DA:1278:A:O2'	36:DA:1279:G:H5'	2.17	0.45
32:B6:17:LYS:O	32:B6:17:LYS:HD3	2.16	0.45
32:B6:53:LYS:HG2	32:B6:54:ILE:N	2.31	0.45
51:DS:19:LYS:O	51:DS:19:LYS:HG2	2.16	0.45
54:BV:99:ILE:N	54:BV:99:ILE:CD1	2.73	0.45
2:CB:131:PRO:CG	2:CB:134:GLU:HG2	2.33	0.45
36:DA:2801(A):A:C3'	36:DA:2802:G:H5'	2.47	0.45
37:DB:7:G:H4'	51:DS:29:PHE:CD2	2.52	0.45
41:DF:160:ASN:C	41:DF:160:ASN:HD22	2.19	0.45
36:DA:1188:U:C2'	36:DA:1189:A:H5'	2.47	0.45
1:AA:980:C:H2'	1:AA:981:U:H5'	1.99	0.45
36:DA:604:G:C6	36:DA:605:C:N4	2.85	0.45
20:AT:53:LEU:HD11	20:AT:92:LEU:HD11	1.99	0.45
51:BS:12:PHE:CD1	51:BS:13:ARG:N	2.83	0.45
36:BA:2657:A:C2'	36:BA:2658:C:H5'	2.38	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2131:G:H5'	36:BA:2133:G:O4'	2.17	0.45
3:AC:132:ARG:O	3:AC:136:GLN:HB2	2.16	0.45
52:BT:3:ARG:CD	52:BT:6:LEU:HD12	2.37	0.45
1:CA:723:U:O2'	1:CA:724:G:H5'	2.17	0.45
36:DA:994:C:OP1	53:DU:53:ARG:NH2	2.49	0.45
40:DE:59:VAL:HG13	40:DE:60:ASN:N	2.30	0.45
25:CZ:19:HIS:HA	25:CZ:115:GLN:CB	2.47	0.45
1:CA:1431:C:H2'	1:CA:1432:G:H5'	1.97	0.45
40:DE:116:VAL:CG2	40:DE:117:MET:H	2.29	0.45
4:AD:151:LYS:HG2	4:AD:151:LYS:O	2.17	0.45
55:DW:107:LEU:N	55:DW:107:LEU:HD12	2.23	0.45
37:DB:91:C:O2'	37:DB:92:C:H5'	2.17	0.45
15:AO:39:LEU:HD13	15:AO:56:LEU:CB	2.43	0.45
34:B8:50:LEU:N	34:B8:53:PRO:CD	2.80	0.45
36:DA:1349:A:N6	36:DA:1598:C:N4	2.64	0.45
37:BB:16:G:O2'	37:BB:17:C:H6	1.98	0.45
10:CJ:4:ILE:HB	10:CJ:74:ILE:HG13	1.96	0.45
27:D1:30:VAL:HG23	27:D1:31:GLY:N	2.23	0.45
3:CC:32:LEU:O	3:CC:35:GLU:HB3	2.17	0.45
3:CC:35:GLU:CD	3:CC:95:THR:HG23	2.37	0.45
1:AA:436:C:OP1	4:AD:156:GLU:OE2	2.33	0.45
47:DO:107:ARG:NH1	52:DT:36:GLU:HG2	2.32	0.45
5:CE:104:ALA:HA	5:CE:107:ARG:HG2	1.99	0.45
39:DD:158:ALA:HB3	39:DD:161:THR:CG2	2.45	0.45
1:CA:190:U:O2'	1:CA:191:G:H5'	2.16	0.45
47:DO:24:VAL:O	47:DO:24:VAL:HG23	2.17	0.45
36:DA:1289:C:H2'	36:DA:1289:C:O2	2.16	0.45
36:DA:1288:U:C2	36:DA:1327:C:C2	3.04	0.45
36:DA:528:A:H2	36:DA:2043:C:H5'	1.80	0.45
5:CE:64:ARG:HH11	5:CE:64:ARG:CG	2.29	0.45
36:BA:2688:U:H1'	36:BA:2721:A:H62	1.82	0.45
36:DA:1165:U:H2'	36:DA:1166:C:C6	2.52	0.45
36:DA:2869:G:H2'	36:DA:2870:C:C6	2.51	0.45
9:CI:126:SER:O	9:CI:127:LYS:CB	2.65	0.45
10:CJ:45:ARG:HD3	10:CJ:47:PHE:CZ	2.51	0.45
55:DW:9:TYR:H	55:DW:102:HIS:HD2	1.65	0.45
55:BW:9:TYR:H	55:BW:102:HIS:HD2	1.65	0.45
6:AF:38:GLU:O	6:AF:39:LYS:C	2.54	0.45
48:BP:12:ALA:O	48:BP:13:ASN:O	2.34	0.45
1:CA:635:G:O2'	1:CA:636:U:H5'	2.16	0.45
1:AA:341:C:O2	1:AA:349:A:C2	2.70	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:745:C:O2'	1:AA:746:A:H5'	2.17	0.45
22:CV:19:G:H4'	22:CV:20:U:OP1	2.17	0.45
36:DA:736:C:H2'	36:DA:737:C:H6	1.81	0.45
1:CA:1062:U:O4	3:CC:2:GLY:HA3	2.16	0.45
36:DA:2626:C:H2'	36:DA:2627:G:O4'	2.16	0.45
1:AA:1477:C:H2'	1:AA:1478:C:H6	1.81	0.45
36:BA:2169:A:O2'	36:BA:2170:A:H5'	2.17	0.45
1:CA:1170:A:H2'	1:CA:1171:G:O4'	2.16	0.45
2:CB:104:ASN:O	2:CB:108:ILE:HG12	2.16	0.45
1:CA:567:G:H2'	1:CA:568:G:O4'	2.17	0.45
1:AA:691:G:H2'	1:AA:692:U:C6	2.52	0.45
36:BA:963:U:H2'	36:BA:964:C:C6	2.51	0.45
25:AZ:254:GLU:HG3	25:AZ:307:PRO:HA	1.97	0.45
58:DZ:28:MET:HB3	58:DZ:88:PHE:HB2	1.98	0.45
3:CC:108:ASN:ND2	3:CC:144:SER:OG	2.50	0.45
1:CA:82:U:O2'	1:CA:83:U:H5'	2.17	0.45
38:BC:122:ALA:O	38:BC:126:LYS:HB2	2.16	0.45
36:DA:2514:U:H2'	36:DA:2515:C:C6	2.51	0.45
3:CC:206:GLU:O	3:CC:207:VAL:C	2.55	0.45
1:AA:1428:A:H2'	1:AA:1429:C:C6	2.51	0.45
47:BO:53:LYS:O	47:BO:56:ASP:HB2	2.17	0.45
38:BC:99:ILE:HG22	38:BC:102:LYS:HB2	1.99	0.45
41:DF:2:LYS:O	41:DF:25:PRO:HG2	2.17	0.45
41:BF:24:LEU:O	41:BF:115:ALA:HB1	2.17	0.45
58:BZ:96:VAL:CG2	58:BZ:97:GLU:N	2.64	0.45
36:DA:1540:U:C3'	36:DA:1541:G:H3'	2.35	0.45
39:BD:30:GLU:HG3	39:BD:63:ARG:HH21	1.82	0.45
39:DD:68:LYS:O	39:DD:68:LYS:HG3	2.17	0.45
51:DS:57:LYS:C	51:DS:57:LYS:HD2	2.37	0.45
36:BA:2833:G:C3'	36:BA:2834:G:H5''	2.32	0.45
32:D6:37:ARG:HD3	32:D6:37:ARG:HA	1.78	0.45
57:DY:17:SER:HA	57:DY:71:LYS:HD2	1.97	0.45
4:AD:3:ARG:HH21	4:AD:5:ILE:CG1	2.29	0.45
48:DP:98:GLU:O	48:DP:101:VAL:HG22	2.16	0.45
36:DA:1141:U:OP2	46:DN:63:THR:OG1	2.31	0.45
37:BB:49:C:OP1	51:BS:96:GLY:HA3	2.16	0.45
36:BA:655:A:C4'	36:BA:656:G:H5'	2.32	0.45
48:DP:50:ARG:NH1	48:DP:50:ARG:HG2	2.32	0.45
48:DP:31:ALA:C	48:DP:33:ARG:N	2.70	0.45
52:BT:93:ARG:HA	52:BT:93:ARG:HD2	1.60	0.45
51:BS:13:ARG:O	51:BS:15:ARG:HG3	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1747:G:H2'	36:BA:1747(A):G:C8	2.52	0.45
25:AZ:263:ARG:HG3	25:AZ:264:LYS:H	1.81	0.45
48:DP:84:ASN:C	48:DP:86:LYS:H	2.20	0.45
36:BA:1053:C:H42	36:BA:1108:U:H3	1.64	0.45
50:DR:3:HIS:C	50:DR:5:LYS:N	2.63	0.45
54:BV:64:HIS:ND1	54:BV:92:THR:HG22	2.32	0.45
36:DA:330:A:O2'	36:DA:331:A:C8	2.61	0.45
25:AZ:277:LEU:HD13	25:AZ:279:GLU:N	2.31	0.45
42:DG:4:ASP:HA	42:DG:8:LYS:HD3	1.98	0.45
52:DT:107:ASP:CG	52:DT:108:ARG:H	2.20	0.45
36:DA:142:A:N6	36:DA:1596:A:H5'	2.31	0.45
46:DN:34:LEU:CD1	46:DN:116:LEU:HB3	2.47	0.45
46:BN:57:ALA:O	46:BN:58:ASP:O	2.35	0.45
1:CA:1180:A:H5''	1:CA:1181:G:OP2	2.17	0.45
16:CP:5:ARG:NH1	16:CP:5:ARG:HG3	2.31	0.45
1:AA:1316:G:O2'	14:AN:18:VAL:HG21	2.17	0.45
13:CM:57:ARG:NH1	30:D4:34:GLU:HG3	2.32	0.45
37:DB:16:G:O2'	37:DB:17:C:H6	1.99	0.45
7:CG:118:VAL:HG23	7:CG:119:ARG:N	2.30	0.45
36:DA:2863:C:O2	36:DA:2863:C:H2'	2.16	0.45
56:BX:49:VAL:HG12	56:BX:87:GLN:HB3	1.98	0.45
52:DT:38:ASN:C	52:DT:38:ASN:HD22	2.16	0.45
39:DD:117:VAL:HG21	39:DD:128:GLY:O	2.17	0.45
50:DR:51:LEU:HG	50:DR:66:VAL:HG13	1.97	0.45
38:BC:151:GLU:HA	38:BC:154:ARG:HH11	1.82	0.45
1:AA:346:G:N3	1:AA:346:G:C2'	2.80	0.45
36:BA:856:C:H5''	36:BA:856:C:H6	1.82	0.45
39:DD:224:ALA:C	39:DD:226:MET:N	2.70	0.45
46:DN:96:GLU:OE1	46:DN:96:GLU:N	2.46	0.45
46:DN:14:VAL:HG21	46:DN:137:LYS:HE3	1.98	0.45
40:DE:30:PRO:HD3	40:DE:180:ASN:CG	2.37	0.45
1:CA:751:U:C4'	15:CO:24:SER:HA	2.46	0.45
2:CB:236:TYR:HA	2:CB:239:VAL:HG23	1.98	0.45
25:CZ:203:LEU:HD23	25:CZ:203:LEU:O	2.16	0.45
25:CZ:139:ASP:OD2	25:CZ:177:LEU:HD11	2.16	0.45
1:AA:1264:C:H2'	1:AA:1265:G:H8	1.81	0.45
36:BA:2695:C:H2'	36:BA:2696:U:H6	1.81	0.45
8:AH:30:ARG:HH11	8:AH:30:ARG:HB2	1.82	0.45
36:BA:1652:A:O2'	36:BA:1653:G:H5'	2.17	0.45
36:BA:1213:A:H1'	36:BA:1238:G:N3	2.31	0.45
36:DA:1248:G:OP1	53:DU:2:PRO:HD2	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:130:VAL:HG21	3:AC:157:ILE:HG23	1.99	0.45
1:AA:1188:A:H2'	1:AA:1189:C:H5'	1.98	0.45
36:BA:2661:G:H2'	36:BA:2662:A:C8	2.52	0.45
1:CA:163:C:O2'	1:CA:164:U:H5'	2.17	0.45
19:CS:27:GLU:O	19:CS:28:LYS:O	2.35	0.45
44:BJ:7:UNK:C	44:BJ:9:UNK:N	2.80	0.45
49:BQ:119:ARG:O	49:BQ:123:HIS:HD2	2.00	0.45
1:CA:1463:C:H5'	52:DT:115:ARG:HH12	1.82	0.45
1:CA:833:U:H2'	1:CA:834:C:C6	2.52	0.45
36:BA:2585:U:O2	36:BA:2585:U:H5'	2.16	0.45
39:DD:241:PRO:C	39:DD:242:ARG:HG2	2.36	0.45
34:B8:11:LYS:HZ3	34:B8:60:LEU:HA	1.81	0.45
39:BD:30:GLU:H	39:BD:35:LYS:NZ	1.97	0.45
39:BD:70:TRP:HZ3	39:BD:146:GLU:OE2	1.99	0.45
52:BT:28:VAL:HG12	52:BT:29:ARG:CD	2.45	0.45
36:BA:925:C:C3'	36:BA:926:A:H5''	2.47	0.45
39:DD:146:GLU:HB2	39:DD:189:CYS:HB3	1.98	0.45
10:CJ:55:LYS:HB2	10:CJ:55:LYS:NZ	2.07	0.45
40:DE:38:THR:HG23	40:DE:39:PRO:HD2	1.98	0.45
57:BY:11:ASP:H	57:BY:28:LYS:NZ	2.15	0.45
36:DA:654(N):G:H2'	36:DA:654(O):G:H5'	1.98	0.45
34:B8:28:GLY:C	34:B8:32:LEU:HD22	2.37	0.45
10:AJ:50:ILE:HG12	14:AN:41:ARG:CD	2.47	0.45
10:CJ:53:PRO:HA	14:CN:42:ILE:HD11	1.99	0.45
36:BA:606:U:H4'	36:BA:658:C:H4'	1.97	0.45
48:DP:112:LEU:C	48:DP:112:LEU:HD22	2.38	0.45
36:DA:1142:U:H5'	36:DA:1142(A):A:C8	2.52	0.45
36:DA:1142(A):A:H3'	36:DA:1142(A):A:OP1	2.17	0.45
36:BA:2060:A:N6	41:BF:74:ARG:NH2	2.65	0.45
36:BA:941:A:H4'	48:BP:35:HIS:CE1	2.52	0.45
1:CA:980:C:H2'	1:CA:981:U:H5'	1.99	0.45
36:DA:806:C:OP2	48:DP:39:LYS:HD2	2.16	0.45
36:BA:2716:U:O2'	36:BA:2717:G:H5'	2.17	0.45
52:BT:50:ILE:HA	52:BT:99:LEU:HD12	1.98	0.45
25:AZ:193:ASN:C	25:AZ:195:TRP:H	2.20	0.45
50:BR:3:HIS:C	50:BR:3:HIS:ND1	2.69	0.45
36:DA:1069:A:H1'	36:DA:1070:A:P	2.56	0.45
40:DE:116:VAL:CG2	40:DE:122:PHE:CD2	2.94	0.45
58:DZ:163:LEU:HB2	58:DZ:165:VAL:HG23	1.98	0.45
41:DF:157:VAL:O	41:DF:157:VAL:HG23	2.17	0.45
1:CA:411:A:H62	1:CA:413:G:N2	2.15	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BO:34:THR:OG1	47:BO:35:VAL:N	2.49	0.45
1:CA:1117:G:H21	1:CA:1180:A:H1'	1.81	0.45
27:D1:49:VAL:O	27:D1:59:THR:HA	2.16	0.45
19:CS:10:PHE:O	19:CS:10:PHE:CD2	2.70	0.45
36:BA:958:U:OP2	49:BQ:14:ARG:HD3	2.17	0.45
19:AS:10:PHE:O	19:AS:10:PHE:CD2	2.69	0.45
36:BA:910:A:C5	49:BQ:13:GLN:HG3	2.52	0.45
36:BA:1684:C:O2'	36:BA:1685:C:H5'	2.17	0.45
13:CM:101:GLN:HB3	13:CM:102:ARG:H	1.56	0.45
10:CJ:86:MET:O	10:CJ:87:THR:HG23	2.16	0.45
36:BA:1299:G:H3'	36:BA:1639:U:O4	2.16	0.45
1:AA:741:G:H2'	1:AA:742:G:O4'	2.17	0.45
25:AZ:291:ARG:O	25:AZ:293:VAL:HG23	2.16	0.45
17:CQ:59:ILE:HG22	17:CQ:71:PHE:HD2	1.80	0.45
9:AI:9:ARG:HG2	9:AI:14:VAL:HG22	1.98	0.45
19:AS:32:LYS:H	19:AS:32:LYS:CE	2.30	0.45
1:AA:1325:C:H4'	21:AU:17:THR:HG21	1.98	0.45
1:CA:436:C:OP1	4:CD:156:GLU:OE2	2.35	0.45
36:BA:2444:G:OP2	41:BF:68:LYS:NZ	2.48	0.45
36:BA:2262:U:O2'	36:BA:2263:C:H5'	2.16	0.45
53:DU:46:ALA:O	53:DU:50:ARG:HG3	2.17	0.45
7:CG:150:ALA:HB2	11:CK:50:TYR:CZ	2.52	0.45
20:AT:73:HIS:HB3	20:AT:74:LYS:NZ	2.32	0.45
25:CZ:258:LEU:HD12	25:CZ:258:LEU:N	2.31	0.45
27:D1:62:VAL:HG22	27:D1:63:ALA:N	2.32	0.45
37:DB:30:C:H1'	37:DB:57:A:H61	1.82	0.45
3:CC:173:VAL:N	3:CC:174:PRO:HD3	2.32	0.45
36:DA:2692:C:H2'	36:DA:2693:A:C8	2.52	0.45
36:BA:1165:U:H2'	36:BA:1166:C:C6	2.52	0.45
38:DC:22:ILE:HD13	38:DC:190:ARG:HG2	1.98	0.45
36:DA:648:G:O4'	36:DA:2351:G:H5''	2.16	0.45
36:DA:2340:G:H2'	36:DA:2341:G:H8	1.82	0.45
40:DE:132:HIS:CG	40:DE:135:HIS:CE1	3.05	0.45
7:AG:66:VAL:O	7:AG:69:VAL:HG12	2.17	0.45
43:DH:126:PRO:O	43:DH:127:GLU:HG3	2.17	0.45
36:BA:2869:G:H2'	36:BA:2870:C:O4'	2.17	0.45
36:BA:2692:C:H2'	36:BA:2693:A:C8	2.52	0.45
24:AY:47:U:O2'	24:AY:50:G:H5''	2.17	0.45
50:DR:74:LYS:CD	50:DR:77:ARG:NH1	2.80	0.45
28:D2:16:LEU:H	28:D2:67:LYS:NZ	2.15	0.45
1:CA:811:C:H4'	1:CA:900:A:N6	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:125:MET:O	7:CG:129:GLU:HG3	2.17	0.45
36:BA:309:G:N3	36:BA:329:G:O2'	2.50	0.45
15:AO:8:LYS:O	15:AO:12:ILE:HG13	2.16	0.45
6:AF:98:LEU:O	6:AF:98:LEU:HD12	2.16	0.45
17:CQ:12:SER:HB3	17:CQ:20:THR:HB	1.98	0.45
38:BC:83:ILE:HD11	38:BC:97:GLU:HG2	1.99	0.45
52:DT:29:ARG:HG2	52:DT:86:ILE:O	2.17	0.45
28:B2:35:LEU:O	28:B2:36:ARG:C	2.54	0.45
36:BA:1463:C:H2'	36:BA:1464:C:H6	1.81	0.45
40:BE:49:LEU:O	40:BE:78:LEU:HB2	2.17	0.45
34:B8:8:LYS:CA	34:B8:11:LYS:HD3	2.41	0.45
34:B8:59:LYS:HE3	34:B8:59:LYS:HB2	1.68	0.45
1:CA:1305:G:N2	1:CA:1331:G:C2'	2.60	0.45
42:DG:83:ARG:CB	42:DG:84:LYS:HD2	2.47	0.45
36:DA:2181:G:N2	36:DA:2182:G:C2	2.85	0.45
57:DY:28:LYS:C	57:DY:38:ILE:HG22	2.37	0.45
34:B8:33:ASN:OD1	34:B8:34:TRP:N	2.33	0.45
36:BA:2392:A:H2'	36:BA:2393:A:O4'	2.17	0.45
1:CA:542:G:N3	1:CA:543:C:C6	2.84	0.45
32:B6:20:ASN:OD1	32:B6:21:TYR:N	2.50	0.45
48:DP:112:LEU:HD11	48:DP:114:ILE:CD1	2.46	0.45
2:CB:142:LEU:HD21	2:CB:146:GLN:HE21	1.81	0.45
3:AC:79:ARG:O	3:AC:82:GLU:OE2	2.34	0.45
48:DP:46:LYS:HB3	48:DP:52:GLU:HG2	1.98	0.45
4:CD:9:CYS:HA	4:CD:12:CYS:HB2	1.99	0.45
36:DA:2747:G:C2	36:DA:2756:U:H5	2.35	0.45
36:BA:2136:C:H2'	36:BA:2137:C:H6	1.81	0.45
2:AB:236:TYR:HA	2:AB:239:VAL:HG23	1.99	0.45
43:BH:169:VAL:HG22	43:BH:170:ARG:N	2.32	0.45
36:DA:2875:C:O2'	52:DT:5:ALA:HB3	2.17	0.45
25:AZ:195:TRP:C	25:AZ:197:ASP:H	2.19	0.45
36:BA:2572:A:N7	40:BE:144:ARG:HG2	2.28	0.45
36:BA:2572:A:O2'	40:BE:144:ARG:NH1	2.50	0.45
36:DA:662:G:OP1	48:DP:18:ARG:HD2	2.17	0.45
47:BO:65:THR:HA	47:BO:82:ASN:HD22	1.80	0.45
50:BR:5:LYS:HD2	50:BR:5:LYS:N	2.32	0.45
2:AB:19:HIS:O	2:AB:20:GLU:O	2.35	0.45
36:BA:330:A:O2'	36:BA:331:A:C8	2.61	0.45
41:DF:107:LYS:HE3	41:DF:205:ARG:HG2	1.99	0.45
53:DU:92:ARG:CZ	54:DV:11:GLN:H	2.29	0.45
25:CZ:193:ASN:C	25:CZ:195:TRP:H	2.20	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:B5:54:GLY:CA	31:B5:56:LYS:HZ2	2.30	0.45
36:DA:2717:G:O2'	52:DT:96:ARG:HD3	2.17	0.45
36:DA:1654:A:OP1	50:DR:2:ARG:HA	2.17	0.45
36:BA:141:A:H8	36:BA:1408:C:HO2'	1.55	0.45
36:BA:142:A:N6	36:BA:1596:A:H5'	2.32	0.45
1:AA:1220:G:O2'	1:AA:1221:G:H5'	2.16	0.45
36:DA:61:G:O5'	36:DA:61:G:H8	1.99	0.45
36:DA:732:C:O2'	36:DA:733:G:H5'	2.17	0.45
4:AD:147:ALA:HA	4:AD:181:MET:O	2.16	0.45
52:DT:23:ARG:HA	52:DT:52:ILE:HD12	1.98	0.45
42:BG:143:GLU:O	42:BG:144:ILE:C	2.55	0.45
9:CI:42:ARG:NH2	9:CI:75:ASP:OD1	2.50	0.45
2:AB:163:PHE:HA	2:AB:185:ILE:O	2.17	0.45
13:AM:94:ARG:HD2	13:AM:94:ARG:N	2.32	0.45
3:AC:52:LEU:HD23	3:AC:52:LEU:N	2.26	0.45
31:D5:29:THR:CG2	36:DA:2814:C:O2'	2.63	0.45
36:DA:203:C:C3'	36:DA:204:A:H5''	2.44	0.45
36:DA:1223:G:H5'	36:DA:1223:G:C8	2.45	0.45
58:BZ:155:LEU:N	58:BZ:155:LEU:CD2	2.80	0.45
1:CA:8:A:C5	4:CD:209:ARG:HB2	2.52	0.45
24:AY:42:G:N2	24:AY:43:G:H1'	2.32	0.45
3:AC:51:GLY:O	3:AC:115:LEU:HD21	2.17	0.45
1:CA:526:C:OP2	12:CL:91:LYS:HE3	2.16	0.45
1:AA:430:A:H2'	1:AA:431:A:O4'	2.16	0.45
40:DE:184:VAL:O	40:DE:186:GLY:N	2.50	0.45
42:BG:131:TYR:O	42:BG:159:VAL:HG12	2.17	0.45
2:CB:178:ARG:NH1	2:CB:178:ARG:CG	2.79	0.45
36:BA:1337:G:H2'	36:BA:1338:G:H8	1.82	0.45
36:BA:1288:U:C2	36:BA:1327:C:C2	3.05	0.45
36:DA:2732:G:O2'	36:DA:2733:A:H5'	2.17	0.45
12:AL:52:LEU:HD22	12:AL:52:LEU:N	2.32	0.45
36:BA:2012:G:OP2	55:BW:16:LYS:HE3	2.17	0.45
40:BE:9:VAL:CG1	40:BE:25:VAL:O	2.64	0.45
39:BD:94:LEU:HB2	39:BD:104:TYR:CE1	2.51	0.45
19:AS:50:ALA:HA	19:AS:59:PRO:HA	1.99	0.45
36:DA:382:G:C2'	36:DA:383:U:H5'	2.47	0.45
33:D7:10:ARG:O	33:D7:14:LYS:HG2	2.17	0.45
36:DA:2770:G:H5''	36:DA:2771:C:OP2	2.16	0.45
1:AA:556:C:O2'	1:AA:557:G:H5'	2.16	0.45
36:BA:438:G:H2'	36:BA:440:G:C8	2.52	0.45
26:D0:51:VAL:CG2	26:D0:81:VAL:HG23	2.47	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:242:C:H2'	1:AA:243:A:H5'	1.98	0.45
55:DW:48:ALA:O	55:DW:49:LYS:C	2.55	0.45
1:CA:1525:G:O2'	1:CA:1526:G:H5'	2.17	0.45
36:DA:918:A:H5''	37:DB:98:G:O2'	2.17	0.45
45:BK:23:UNK:C	45:BK:25:UNK:N	2.80	0.45
18:AR:67:ALA:O	18:AR:71:LYS:HG3	2.17	0.45
36:DA:714:U:H2'	36:DA:716:A:OP2	2.17	0.45
36:BA:2626:C:H2'	36:BA:2627:G:O4'	2.17	0.45
1:AA:1044:A:H2'	1:AA:1045:C:O5'	2.17	0.45
3:AC:190:ARG:HH11	3:AC:190:ARG:HG3	1.80	0.45
36:DA:363(D):G:N3	36:DA:363(D):G:H2'	2.31	0.45
37:DB:5:C:O2'	37:DB:6:C:H5'	2.16	0.45
36:BA:220:G:H2'	36:BA:427:U:O4	2.16	0.45
25:CZ:254:GLU:HG3	25:CZ:307:PRO:HA	1.98	0.45
17:AQ:12:SER:HB3	17:AQ:20:THR:HB	1.98	0.45
38:BC:118:ASP:C	38:BC:120:MET:N	2.69	0.44
52:DT:83:ILE:CG1	52:DT:84:GLN:N	2.80	0.44
28:B2:17:SER:HB2	28:B2:20:GLU:HB3	1.99	0.44
36:BA:61:G:O5'	36:BA:61:G:H8	1.99	0.44
40:DE:47:VAL:HG21	40:DE:86:PRO:CD	2.24	0.44
56:BX:27:THR:HG23	56:BX:80:ILE:CB	2.39	0.44
40:BE:69:LYS:HD3	40:BE:89:ASP:C	2.37	0.44
46:DN:43:THR:HG22	46:DN:45:ASN:HD22	1.82	0.44
39:BD:35:LYS:O	39:BD:36:PRO:C	2.55	0.44
13:CM:4:ILE:O	13:CM:6:GLY:N	2.51	0.44
36:BA:321:G:O2'	36:BA:340:A:N3	2.47	0.44
41:BF:171:PRO:C	41:BF:173:VAL:H	2.21	0.44
36:BA:2107:C:H1'	36:BA:2182:G:N2	2.32	0.44
39:DD:101:GLU:OE2	39:DD:103:ARG:HD3	2.18	0.44
40:BE:14:ILE:HB	52:BT:14:TYR:CZ	2.52	0.44
48:BP:61:ARG:C	48:BP:62:LEU:HD23	2.38	0.44
36:BA:659:C:O2'	36:BA:660:G:H5'	2.17	0.44
32:B6:45:LYS:CB	36:BA:2371:G:H4'	2.47	0.44
48:BP:38:GLN:CG	48:BP:39:LYS:H	2.28	0.44
51:BS:30:ARG:NH2	51:BS:62:LYS:HB3	2.32	0.44
36:BA:2807:G:C2'	36:BA:2808:U:H5''	2.46	0.44
58:DZ:10:ARG:HD3	58:DZ:37:VAL:O	2.18	0.44
43:BH:157:TYR:O	43:BH:158:HIS:CG	2.71	0.44
10:CJ:8:LEU:HB3	10:CJ:16:LEU:HD21	1.99	0.44
3:AC:132:ARG:HH11	3:AC:136:GLN:NE2	2.02	0.44
2:CB:87:ARG:CZ	2:CB:233:SER:HB3	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:19:HIS:CE1	36:DA:2661:G:OP1	2.70	0.44
25:CZ:210:ILE:HG23	25:CZ:210:ILE:O	2.17	0.44
36:DA:1596:A:O2'	36:DA:1597:A:H5'	2.17	0.44
28:D2:34:GLU:HA	28:D2:34:GLU:OE1	2.17	0.44
15:AO:17:ARG:NH1	15:AO:77:ARG:NH1	2.64	0.44
36:DA:769:G:O2'	36:DA:770:G:H5'	2.17	0.44
30:D4:34:GLU:HB2	42:DG:113:ARG:HD2	1.99	0.44
43:DH:28:GLY:HA3	43:DH:79:VAL:HB	1.99	0.44
17:CQ:70:ARG:HH11	17:CQ:70:ARG:HG2	1.81	0.44
36:BA:654(C):G:C3'	36:BA:654(D):G:H5'	2.47	0.44
36:DA:1367:A:H2'	36:DA:1368:G:H5'	1.99	0.44
13:CM:108:ARG:CG	13:CM:108:ARG:HH11	2.29	0.44
46:DN:4:TYR:O	46:DN:5:VAL:C	2.55	0.44
39:DD:127:VAL:HA	39:DD:193:VAL:HG13	1.99	0.44
1:CA:1378:C:OP1	7:CG:7:ALA:HB2	2.17	0.44
52:BT:82:LEU:N	52:BT:82:LEU:CD1	2.80	0.44
41:DF:89:VAL:HG12	41:DF:90:PHE:H	1.80	0.44
42:DG:102:PHE:CE2	42:DG:106:LEU:HD22	2.51	0.44
20:CT:25:ARG:HG3	20:CT:25:ARG:NH1	2.32	0.44
36:DA:1419:A:H2'	36:DA:1421:G:N7	2.32	0.44
36:DA:1337:G:H2'	36:DA:1338:G:C8	2.52	0.44
36:DA:2617:C:O2'	36:DA:2618:G:H5'	2.16	0.44
53:DU:102:GLU:HG3	54:DV:2:PHE:CE2	2.52	0.44
1:AA:56:U:H2'	1:AA:57:G:H8	1.78	0.44
17:CQ:9:VAL:HG12	17:CQ:56:VAL:HG22	1.98	0.44
36:BA:2248:C:H2'	36:BA:2249:U:C5'	2.47	0.44
1:CA:1508:G:H2'	1:CA:1509:C:H6	1.82	0.44
36:DA:1469:A:H2'	36:DA:1470:G:H8	1.82	0.44
24:CY:47:U:O2'	24:CY:50:G:H5''	2.17	0.44
40:DE:132:HIS:ND1	40:DE:135:HIS:HE1	2.16	0.44
36:DA:2869:G:H2'	36:DA:2870:C:O4'	2.17	0.44
19:CS:42:PRO:O	19:CS:44:MET:SD	2.75	0.44
36:DA:2039:C:O2'	36:DA:2040:C:H5'	2.17	0.44
1:CA:1397:C:H1'	23:CX:26:A:H62	1.82	0.44
25:CZ:330:ARG:HH21	25:CZ:332:THR:HG1	1.65	0.44
36:BA:648:G:O4'	36:BA:2351:G:H5''	2.17	0.44
36:DA:1240:U:O2'	36:DA:1241:A:H5'	2.17	0.44
49:BQ:1:MET:HE1	49:BQ:44:ALA:C	2.37	0.44
36:BA:11:G:H2'	36:BA:12:U:H6	1.82	0.44
36:DA:1688:U:O2	36:DA:1700:A:H5''	2.17	0.44
41:DF:108:LYS:HB3	41:DF:112:MET:CE	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:72:GLN:O	5:AE:73:ASN:HB2	2.17	0.44
2:AB:224:GLN:C	2:AB:226:ARG:N	2.70	0.44
1:AA:184:G:O2'	1:AA:185:A:H5'	2.17	0.44
28:D2:2:LYS:O	28:D2:6:VAL:HG23	2.18	0.44
36:DA:220:G:H2'	36:DA:427:U:O4	2.17	0.44
1:CA:1445:C:O2'	1:CA:1446:U:H5'	2.17	0.44
36:BA:248:G:H5''	36:BA:386:G:N2	2.31	0.44
1:CA:647:C:O2'	1:CA:648:A:H5'	2.17	0.44
38:BC:33:ALA:HA	38:BC:39:GLU:OE2	2.17	0.44
27:B1:44:PRO:HB2	27:B1:46:LEU:HD21	1.98	0.44
1:AA:82:U:O2'	1:AA:83:U:H5'	2.16	0.44
1:CA:1385:G:O2'	1:CA:1386:G:H5'	2.17	0.44
28:D2:24:LEU:HD23	28:D2:24:LEU:C	2.38	0.44
13:CM:94:ARG:N	13:CM:94:ARG:HD2	2.31	0.44
44:DJ:62:UNK:C	44:DJ:64:UNK:N	2.78	0.44
23:CX:22:U:O2'	23:CX:23:G:H5'	2.17	0.44
38:DC:78:ALA:O	38:DC:79:LYS:HB2	2.17	0.44
38:DC:99:ILE:HG22	38:DC:102:LYS:HB2	1.99	0.44
40:DE:50:GLY:CA	40:DE:78:LEU:HB3	2.37	0.44
36:BA:1540:U:H3'	36:BA:1541:G:O3'	2.18	0.44
36:BA:1542:A:H2'	36:BA:1544:A:C4'	2.47	0.44
46:DN:133:GLN:HG2	46:DN:135:PRO:CD	2.40	0.44
1:CA:1306:A:OP2	21:CU:6:ARG:NH2	2.49	0.44
43:DH:157:TYR:O	43:DH:158:HIS:CD2	2.71	0.44
26:D0:10:THR:CG2	26:D0:12:ASN:HB2	2.47	0.44
32:D6:19:ARG:CD	32:D6:20:ASN:H	2.27	0.44
57:DY:11:ASP:H	57:DY:28:LYS:NZ	2.15	0.44
54:BV:18:LEU:CD2	54:BV:19:LYS:N	2.79	0.44
54:BV:19:LYS:HB2	54:BV:96:ILE:CD1	2.45	0.44
57:BY:85:VAL:HG12	57:BY:86:ARG:H	1.82	0.44
36:DA:654(L):G:H2'	36:DA:654(M):C:H4'	1.98	0.44
4:CD:8:VAL:C	4:CD:10:ARG:N	2.69	0.44
36:DA:2307:G:N3	36:DA:2307:G:H3'	2.32	0.44
17:CQ:76:LEU:HG	17:CQ:77:VAL:N	2.31	0.44
32:B6:54:ILE:HD13	36:BA:2398:U:O2	2.17	0.44
48:BP:126:VAL:HG22	48:BP:145:PRO:CG	2.47	0.44
51:BS:17:ARG:NH2	51:BS:90:GLY:H	2.16	0.44
48:DP:58:THR:O	48:DP:58:THR:CG2	2.63	0.44
51:BS:103:GLU:OE1	51:BS:103:GLU:N	2.38	0.44
48:DP:24:GLY:CA	48:DP:33:ARG:CZ	2.95	0.44
36:DA:658:C:C2	36:DA:659:C:C5	3.04	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1697:G:C3'	36:BA:1698:A:H5''	2.38	0.44
36:DA:2315:G:O2'	42:DG:128:ARG:HD2	2.17	0.44
12:AL:113:ARG:CB	12:AL:122:THR:HG21	2.48	0.44
36:BA:1517:G:C2'	36:BA:1518:U:H5'	2.47	0.44
43:BH:163:TYR:CE2	43:BH:168:PRO:HD3	2.52	0.44
58:DZ:81:ARG:CZ	58:DZ:81:ARG:HB3	2.47	0.44
9:AI:20:ARG:NH1	9:AI:20:ARG:CB	2.72	0.44
50:DR:5:LYS:HD2	50:DR:5:LYS:N	2.32	0.44
52:DT:91:ARG:O	52:DT:92:GLY:C	2.54	0.44
15:AO:17:ARG:CG	15:AO:17:ARG:HH11	2.21	0.44
4:CD:150:GLU:N	4:CD:150:GLU:OE1	2.50	0.44
46:BN:56:ASN:HA	46:BN:56:ASN:HD22	1.57	0.44
19:CS:16:LEU:O	19:CS:20:LEU:N	2.50	0.44
1:AA:723:U:C4	1:AA:1537:U:O2	2.70	0.44
16:CP:44:THR:O	16:CP:45:THR:HG22	2.17	0.44
36:BA:1222:C:H2'	36:BA:1223:G:H5''	1.99	0.44
58:BZ:70:LEU:HD21	58:BZ:91:LEU:HD21	1.99	0.44
25:CZ:143:ASP:HB3	25:CZ:146:LEU:HB2	1.97	0.44
24:AY:40:C:H2'	24:AY:41:C:H5'	1.98	0.44
36:BA:2199:A:N3	36:BA:2199:A:H2'	2.32	0.44
14:AN:27:CYS:SG	14:AN:28:GLY:N	2.88	0.44
36:DA:2206:G:H21	36:DA:2207:G:C4'	2.28	0.44
1:CA:160:A:O2'	1:CA:161:A:H5'	2.18	0.44
36:DA:2199:A:N3	36:DA:2199:A:H2'	2.33	0.44
36:DA:1952:A:C2	47:DO:22:ILE:HG23	2.52	0.44
1:CA:502:G:OP1	12:CL:118:SER:N	2.47	0.44
37:DB:111:G:C2'	37:DB:112:U:H5'	2.47	0.44
1:CA:748:C:OP2	1:CA:748:C:H6	2.00	0.44
4:AD:85:LYS:HD3	4:AD:92:VAL:HG11	2.00	0.44
25:CZ:316:PHE:CE1	25:CZ:372:VAL:HB	2.52	0.44
7:AG:140:ASP:C	7:AG:140:ASP:OD1	2.55	0.44
33:D7:43:THR:HG23	33:D7:44:PRO:CD	2.47	0.44
1:CA:115:G:H4'	1:CA:116:A:O5'	2.17	0.44
58:DZ:101:PRO:HG2	58:DZ:135:GLU:O	2.17	0.44
25:CZ:221:PHE:CG	25:CZ:247:VAL:HG13	2.52	0.44
25:CZ:334:PHE:CD1	25:CZ:334:PHE:N	2.85	0.44
47:DO:32:TYR:CD1	47:DO:32:TYR:N	2.85	0.44
48:BP:107:LYS:O	48:BP:108:LYS:HB2	2.17	0.44
36:DA:36:G:C5	36:DA:37:C:C5	3.05	0.44
25:AZ:185:ASN:HD22	25:AZ:185:ASN:H	1.65	0.44
25:AZ:185:ASN:ND2	25:AZ:185:ASN:O	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:38:GLU:O	6:AF:39:LYS:O	2.35	0.44
36:DA:438:G:H2'	36:DA:440:G:C8	2.52	0.44
36:DA:236:C:H2'	36:DA:237:C:H6	1.82	0.44
3:AC:108:ASN:OD1	3:AC:110:ASN:N	2.50	0.44
1:CA:836:G:H2'	1:CA:837:G:C8	2.53	0.44
36:DA:1213:A:H1'	36:DA:1238:G:N3	2.32	0.44
36:DA:1570:A:H2'	36:DA:1571:A:C8	2.53	0.44
36:BA:53:A:H2'	36:BA:54:G:H5'	1.99	0.44
27:B1:34:THR:HG22	27:B1:36:GLY:H	1.82	0.44
36:BA:2413:G:N3	48:BP:70:GLN:NE2	2.65	0.44
1:CA:948:C:O2'	1:CA:949:A:H5'	2.16	0.44
36:BA:363(D):G:N3	36:BA:363(D):G:H2'	2.32	0.44
25:AZ:214:VAL:O	25:AZ:214:VAL:HG13	2.16	0.44
44:DJ:72:UNK:O	44:DJ:73:UNK:CB	2.64	0.44
36:DA:2066:C:O2'	36:DA:2067:G:H5'	2.18	0.44
36:DA:1755:A:P	52:DT:113:LYS:HZ1	2.40	0.44
36:BA:1526:G:O2'	36:BA:1527:G:H5'	2.17	0.44
4:AD:141:ARG:HB3	4:AD:142:PRO:CD	2.47	0.44
38:BC:79:LYS:HA	38:BC:97:GLU:CD	2.38	0.44
38:BC:78:ALA:O	38:BC:79:LYS:HB2	2.16	0.44
52:DT:32:TYR:O	52:DT:33:LYS:HB2	2.17	0.44
40:BE:76:ARG:HG2	40:BE:76:ARG:HH11	1.82	0.44
1:AA:1305:G:O2'	1:AA:1331:G:N2	2.49	0.44
22:CW:6:G:N2	22:CW:67:C:N3	2.56	0.44
39:BD:68:LYS:HG3	39:BD:68:LYS:O	2.17	0.44
36:DA:1485:G:O2'	36:DA:1486:A:H5'	2.17	0.44
13:CM:119:GLY:O	13:CM:120:LYS:CB	2.61	0.44
48:BP:9:ASN:N	48:BP:10:PRO:CD	2.80	0.44
43:DH:154:PRO:HB2	43:DH:155:SER:H	1.64	0.44
43:DH:159:GLU:CG	43:DH:160:LYS:N	2.77	0.44
40:BE:14:ILE:HG12	40:BE:21:VAL:HG23	1.99	0.44
42:DG:144:ILE:CD1	42:DG:149:VAL:HG11	2.31	0.44
32:D6:54:ILE:HD13	36:DA:2398:U:O2	2.16	0.44
4:AD:3:ARG:HH11	4:AD:118:ARG:HD3	1.73	0.44
34:B8:23:VAL:CG1	34:B8:46:ARG:HH11	2.15	0.44
51:DS:17:ARG:NH2	51:DS:90:GLY:H	2.15	0.44
36:DA:664:C:H4'	36:DA:941:A:OP1	2.18	0.44
36:BA:1076:C:H5''	58:BZ:111:VAL:HG12	1.99	0.44
2:AB:238:LEU:O	2:AB:239:VAL:C	2.56	0.44
57:BY:50:ARG:O	57:BY:53:PRO:HG3	2.17	0.44
25:CZ:26:THR:HG21	60:CZ:501:GDP:H8	1.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1127:G:C2'	1:CA:1128:C:H5'	2.48	0.44
20:AT:26:ASN:HB3	20:AT:71:THR:OG1	2.18	0.44
25:AZ:115:GLN:HE21	25:AZ:115:GLN:HA	1.81	0.44
3:AC:5:ILE:O	3:AC:6:HIS:C	2.54	0.44
36:BA:2652:C:H42	36:BA:2668:G:H1	1.66	0.44
1:AA:939:G:H5''	7:AG:102:ARG:CZ	2.46	0.44
1:CA:376:G:H5''	16:CP:5:ARG:CB	2.41	0.44
34:D8:14:VAL:CG2	34:D8:22:VAL:HG13	2.47	0.44
1:CA:624:C:H4'	16:CP:10:GLY:HA2	1.99	0.44
50:BR:10:LEU:HB3	50:BR:17:ARG:HE	1.82	0.44
13:AM:108:ARG:N	13:AM:108:ARG:HD2	2.32	0.44
14:AN:15:LYS:HB3	14:AN:16:PHE:CD2	2.52	0.44
2:CB:111:ARG:NH1	2:CB:111:ARG:HG2	2.32	0.44
19:AS:12:ASP:O	19:AS:15:LEU:HB2	2.16	0.44
13:CM:91:ARG:HB3	13:CM:98:VAL:HG12	1.98	0.44
36:DA:524:U:H4'	36:DA:555:U:H4'	2.00	0.44
58:BZ:70:LEU:CD2	58:BZ:91:LEU:HD21	2.47	0.44
39:DD:79:VAL:CG2	39:DD:111:LEU:HD11	2.47	0.44
41:DF:53:THR:HG22	41:DF:56:GLU:CG	2.47	0.44
50:DR:75:LEU:HD13	50:DR:75:LEU:C	2.37	0.44
46:BN:1:MET:HE1	46:BN:2:LYS:C	2.37	0.44
22:AV:43:C:H5'	22:AV:44:G:OP2	2.17	0.44
1:CA:149:A:H2'	1:CA:150:C:H6	1.81	0.44
25:AZ:158:LEU:O	25:AZ:163:PHE:HB2	2.17	0.44
18:CR:55:ARG:HH11	18:CR:55:ARG:HG3	1.83	0.44
18:CR:22:VAL:HG23	18:CR:55:ARG:O	2.17	0.44
36:DA:877:U:C2'	36:DA:878:A:H5''	2.48	0.44
1:CA:714:G:H2'	1:CA:715:A:C8	2.52	0.44
24:AY:61:C:H2'	24:AY:62:U:H5'	1.99	0.44
24:CY:61:C:H2'	24:CY:62:U:H5'	2.00	0.44
44:DJ:93:UNK:HA	44:DJ:96:UNK:CB	2.47	0.44
36:BA:2114:A:C2'	36:BA:2115:G:H5'	2.48	0.44
20:AT:25:ARG:HG3	20:AT:25:ARG:NH1	2.32	0.44
48:DP:123:LEU:HD23	48:DP:123:LEU:N	2.32	0.44
37:BB:28:C:O2'	37:BB:29:A:H5'	2.16	0.44
37:BB:55:U:H2'	37:BB:56:G:C8	2.53	0.44
2:AB:97:TRP:HH2	2:AB:176:GLU:CD	2.21	0.44
44:DJ:18:UNK:O	44:DJ:20:UNK:N	2.50	0.44
29:B3:38:GLU:HB3	29:B3:40:THR:HG23	1.99	0.44
11:AK:34:ASP:O	11:AK:36:ASP:N	2.50	0.44
48:BP:140:ALA:O	48:BP:141:ALA:HB3	2.16	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1573:G:C2'	36:DA:1574:C:H5'	2.46	0.44
36:DA:1270:C:H5''	36:DA:1271:G:H5'	1.99	0.44
36:DA:1790:C:H2'	36:DA:1791:A:C5	2.53	0.44
36:BA:1659:U:C4	36:BA:1660:C:C5	3.05	0.44
1:CA:827:U:H5'	1:CA:828:A:OP2	2.18	0.44
27:D1:61:ARG:HG2	27:D1:61:ARG:NH1	2.32	0.44
22:CV:76:A:N7	26:D0:2:ALA:HB1	2.32	0.44
36:DA:2772:C:H2'	36:DA:2773:C:H6	1.83	0.44
36:BA:20:C:O2'	36:BA:21:A:H5'	2.16	0.44
36:BA:748:G:O6	36:BA:751:A:H4'	2.17	0.44
36:DA:237:C:H2'	36:DA:238:C:H6	1.82	0.44
26:D0:51:VAL:HG22	26:D0:81:VAL:HG23	1.99	0.44
1:CA:370:C:O2'	1:CA:371:G:H5'	2.17	0.44
43:BH:80:SER:O	43:BH:81:GLU:CB	2.65	0.44
25:CZ:357:PRO:O	25:CZ:359:VAL:HG23	2.18	0.44
36:BA:1281:G:H2'	36:BA:1282:U:H6	1.82	0.44
36:DA:703:U:C2'	36:DA:704:G:H5'	2.47	0.44
55:DW:70:TYR:OH	55:DW:72:LYS:HG2	2.18	0.44
44:DJ:25:UNK:HA	44:DJ:116:UNK:CB	2.47	0.44
36:BA:667:U:H2'	36:BA:668:G:O4'	2.17	0.44
45:BK:5:UNK:O	45:BK:6:UNK:C	2.65	0.44
45:DK:23:UNK:C	45:DK:25:UNK:N	2.80	0.44
40:DE:152:LYS:HG2	46:DN:78:TYR:CE1	2.52	0.44
36:BA:793:A:OP2	36:BA:2072:G:H5'	2.17	0.44
5:AE:131:ILE:HD13	5:AE:131:ILE:HA	1.89	0.44
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.52	0.44
1:AA:1152:A:H2'	1:AA:1153:C:H6	1.82	0.44
13:CM:15:VAL:HA	13:CM:18:ALA:HB3	1.98	0.44
28:B2:53:LEU:CG	28:B2:56:GLN:HG3	2.47	0.44
43:DH:83:TYR:HB3	43:DH:135:GLY:H	1.83	0.44
41:BF:17:ARG:HG3	41:BF:17:ARG:HH11	1.82	0.44
49:BQ:27:VAL:HG21	49:BQ:134:ARG:HG3	1.99	0.44
40:DE:77:ILE:CG2	40:DE:78:LEU:H	2.25	0.44
36:BA:1528:A:O2'	36:BA:1528(A):A:H5'	2.18	0.44
36:BA:1528:A:N1	36:BA:1542:A:C2	2.85	0.44
36:BA:1536:C:H2'	36:BA:1537:G:C4'	2.47	0.44
36:BA:636:G:H4'	36:BA:638:G:O3'	2.17	0.44
40:BE:77:ILE:HG22	40:BE:78:LEU:CD1	2.47	0.44
1:AA:1305:G:C5'	21:AU:4:GLY:HA3	2.44	0.44
13:CM:70:LEU:C	13:CM:70:LEU:HD23	2.38	0.44
32:D6:27:LYS:O	32:D6:29:ASN:N	2.50	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:52:ILE:O	42:DG:54:GLU:N	2.50	0.44
36:DA:2312:U:OP1	42:DG:73:ALA:CB	2.65	0.44
36:DA:2184:G:H2'	36:DA:2185:C:C6	2.53	0.44
32:D6:36:LEU:HD23	32:D6:37:ARG:N	2.32	0.44
32:B6:25:LYS:O	36:BA:2286:A:N1	2.50	0.44
4:CD:174:LEU:HD23	4:CD:185:PHE:HA	1.99	0.44
48:BP:111:ARG:HA	48:BP:128:HIS:CD2	2.53	0.44
2:CB:118:LEU:HD21	2:CB:138:LEU:HD22	1.98	0.44
43:BH:43:VAL:HG11	43:BH:46:GLU:OE2	2.18	0.44
48:DP:59:LEU:CA	48:DP:61:ARG:NE	2.68	0.44
48:DP:23:PRO:O	48:DP:33:ARG:CD	2.61	0.44
26:B0:50:ASN:ND2	26:B0:63:VAL:CG2	2.75	0.44
1:AA:1255:G:C5'	3:AC:26:LYS:HE2	2.46	0.44
2:AB:158:LEU:HA	2:AB:159:PRO:HD3	1.86	0.44
42:DG:125:PHE:HB3	42:DG:131:TYR:HD1	1.83	0.44
42:DG:123:ASN:O	42:DG:126:ASP:HB2	2.18	0.44
36:DA:1514:U:H2'	36:DA:1515:G:C8	2.53	0.44
51:DS:106:ARG:CG	51:DS:106:ARG:NH1	2.80	0.44
12:AL:104:VAL:HG12	12:AL:105:TYR:CD1	2.53	0.44
17:CQ:33:GLY:O	17:CQ:34:LYS:C	2.56	0.44
36:BA:1666:G:C2'	36:BA:1667:G:H5'	2.47	0.44
16:AP:20:VAL:CG2	16:AP:21:VAL:N	2.80	0.44
31:D5:50:GLY:O	31:D5:51:TYR:C	2.56	0.44
50:BR:2:ARG:CD	50:BR:2:ARG:C	2.85	0.44
36:DA:2653:U:H3'	36:DA:2654:A:C8	2.53	0.44
40:DE:111:ARG:HG2	40:DE:160:TYR:O	2.17	0.44
2:AB:172:ILE:H	2:AB:172:ILE:CD1	2.23	0.44
4:CD:148:VAL:HG23	4:CD:181:MET:HB3	1.99	0.44
7:CG:99:LEU:HA	7:CG:102:ARG:HD2	1.99	0.44
36:DA:2469:A:O2'	49:DQ:56:ARG:HD2	2.17	0.44
42:BG:114:ILE:O	42:BG:114:ILE:CG2	2.64	0.44
37:BB:91:C:O2'	37:BB:92:C:H5'	2.17	0.44
58:DZ:142:SER:OG	58:DZ:143:GLY:N	2.50	0.44
50:BR:11:ASN:OD1	50:BR:11:ASN:O	2.35	0.44
36:BA:2863:C:O2	36:BA:2863:C:H2'	2.18	0.44
43:DH:23:ARG:O	43:DH:24:VAL:CG2	2.66	0.44
13:AM:108:ARG:NH2	13:AM:114:ARG:HA	2.32	0.44
53:DU:68:ALA:C	53:DU:70:ARG:H	2.20	0.44
8:CH:112:LEU:CD2	8:CH:112:LEU:N	2.75	0.44
4:CD:112:VAL:HG12	4:CD:116:GLN:CD	2.38	0.44
1:CA:222:U:H2'	1:CA:223:U:C6	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:49:SER:O	3:AC:50:ALA:CB	2.63	0.44
1:CA:338:A:H2'	1:CA:339:C:C6	2.52	0.44
39:BD:28:GLU:HB2	39:BD:29:PRO:HD3	1.99	0.44
14:AN:29:ARG:CG	14:AN:29:ARG:NH1	2.80	0.44
1:CA:346:G:O2'	1:CA:347:G:P	2.75	0.44
17:AQ:44:ALA:HB2	17:AQ:59:ILE:HD12	2.00	0.44
2:CB:28:PHE:CZ	2:CB:189:ASP:HA	2.52	0.44
53:DU:52:ARG:HB3	53:DU:52:ARG:HH11	1.83	0.44
1:AA:710:G:O2'	1:AA:711:G:H5'	2.16	0.44
29:D3:38:GLU:HB3	29:D3:40:THR:HG23	1.99	0.44
48:BP:121:LYS:O	48:BP:123:LEU:HD23	2.18	0.44
36:BA:2818:G:O2'	36:BA:2837:G:H5'	2.17	0.44
36:DA:2330:G:C2'	36:DA:2331:G:H5'	2.47	0.44
54:BV:97:LYS:HD3	54:BV:97:LYS:HA	1.83	0.44
50:DR:28:LEU:HD23	50:DR:29:LEU:HD12	1.98	0.44
1:AA:514:C:H2'	1:AA:515:G:H8	1.83	0.44
36:BA:2869:G:H2'	36:BA:2870:C:C6	2.52	0.44
5:AE:6:PHE:HB2	5:AE:34:VAL:CG2	2.47	0.44
36:BA:36:G:C5	36:BA:37:C:C5	3.06	0.44
25:AZ:343:TYR:CE2	25:AZ:348:ASP:HB3	2.53	0.44
36:BA:1688:U:O2	36:BA:1700:A:H5''	2.17	0.44
33:D7:10:ARG:HH11	33:D7:10:ARG:HG2	1.82	0.44
39:DD:173:VAL:HG12	39:DD:185:VAL:O	2.16	0.44
36:BA:2348:U:O2'	36:BA:2349:G:H5'	2.18	0.44
1:AA:743:U:H2'	1:AA:744:C:C6	2.53	0.44
1:AA:105:G:H2'	1:AA:106:C:C6	2.52	0.44
1:AA:948:C:O2'	1:AA:949:A:H5'	2.17	0.44
36:DA:1275:A:C8	50:DR:16:HIS:CD2	3.06	0.44
24:AY:24:G:H2'	24:AY:25:C:O4'	2.17	0.44
36:DA:748:G:O6	36:DA:751:A:H4'	2.16	0.44
1:CA:974:A:OP1	1:CA:974:A:H8	2.00	0.44
29:B3:23:LEU:CD2	29:B3:50:VAL:HG11	2.47	0.44
29:B3:46:ASN:O	29:B3:50:VAL:HG22	2.17	0.44
7:AG:51:GLN:HA	7:AG:51:GLN:OE1	2.17	0.44
38:DC:83:ILE:HD11	38:DC:97:GLU:HG2	1.99	0.44
1:AA:1123:A:C2	1:AA:1150:U:C5	3.06	0.44
1:AA:1053:G:C4'	1:AA:1054:C:C5'	2.80	0.44
41:DF:17:ARG:HH11	41:DF:17:ARG:HG3	1.82	0.44
43:DH:85:LYS:CE	43:DH:85:LYS:C	2.86	0.44
1:CA:1053:G:O6	1:CA:1199:U:H2'	2.17	0.44
36:BA:1541:G:O2'	36:BA:1542:A:H5''	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BD:34:VAL:O	39:BD:35:LYS:C	2.55	0.44
46:BN:133:GLN:HG2	46:BN:135:PRO:CD	2.40	0.44
52:BT:28:VAL:C	52:BT:29:ARG:HD3	2.37	0.44
52:BT:32:TYR:O	52:BT:33:LYS:HB2	2.18	0.44
43:BH:13:LYS:C	43:BH:15:VAL:H	2.20	0.44
42:DG:139:LEU:HA	42:DG:144:ILE:CG2	2.37	0.44
36:DA:274:G:OP1	36:DA:274:G:H3'	2.18	0.44
4:AD:100:ARG:HG2	4:AD:102:ASP:OD1	2.18	0.44
4:AD:128:VAL:CG1	4:AD:129:ASN:H	2.11	0.44
9:AI:114:TYR:CD1	10:AJ:60:ARG:HG2	2.53	0.44
1:CA:972:C:OP2	10:CJ:57:LYS:HG2	2.16	0.44
42:DG:130:ASN:OD1	42:DG:160:VAL:HG13	2.18	0.44
20:AT:45:GLN:OE1	20:AT:45:GLN:N	2.45	0.44
38:DC:43:VAL:HG23	38:DC:175:VAL:CG2	2.40	0.44
25:AZ:141:VAL:HG23	25:AZ:146:LEU:CD2	2.47	0.44
25:AZ:173:GLY:HA2	25:AZ:195:TRP:HZ3	1.82	0.44
3:CC:11:ARG:HH22	3:CC:182:ILE:HD12	1.81	0.44
40:BE:116:VAL:HG22	40:BE:117:MET:H	1.81	0.44
10:AJ:7:LYS:HG2	10:AJ:71:LEU:HD13	1.98	0.44
25:CZ:115:GLN:HA	25:CZ:115:GLN:HE21	1.82	0.44
36:BA:2654:A:H1'	36:BA:2656:U:C6	2.52	0.44
36:BA:2481:G:C2'	36:BA:2482:G:OP2	2.66	0.44
1:CA:80:G:C3'	1:CA:81:U:H5'	2.48	0.44
25:AZ:19:HIS:HA	25:AZ:115:GLN:CB	2.47	0.44
7:AG:75:VAL:CG1	7:AG:145:ALA:HA	2.48	0.44
36:DA:303:U:H2'	36:DA:304:G:C8	2.53	0.44
14:CN:26:ARG:NH1	14:CN:47:LEU:HD21	2.23	0.44
54:DV:32:THR:HG23	54:DV:59:ALA:O	2.18	0.44
34:D8:50:LEU:N	34:D8:53:PRO:CD	2.81	0.44
54:DV:49:THR:O	54:DV:50:PRO:C	2.55	0.44
43:BH:18:GLU:CB	43:BH:25:LYS:HB2	2.43	0.44
2:AB:33:TYR:HB2	2:AB:43:ASP:CB	2.43	0.44
50:BR:12:ARG:CG	50:BR:12:ARG:HH11	2.30	0.44
22:CW:38:A:H2'	22:CW:39:U:O4'	2.18	0.44
8:AH:64:LYS:CG	8:AH:79:VAL:HG21	2.42	0.44
24:CY:67:G:H2'	24:CY:68:C:C6	2.52	0.44
10:CJ:81:THR:O	10:CJ:83:GLU:N	2.50	0.44
19:AS:11:VAL:HG13	19:AS:16:LEU:HD11	2.00	0.44
3:CC:52:LEU:HD12	3:CC:55:VAL:HG23	2.00	0.44
1:CA:1015:A:C6	1:CA:1016:A:C6	3.06	0.44
53:BU:62:ILE:HG23	53:BU:76:TYR:CE2	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DD:142:VAL:HG22	39:DD:143:HIS:H	1.82	0.44
36:BA:878:A:H2'	36:BA:879:G:O4'	2.17	0.44
1:AA:411:A:H62	1:AA:413:G:N2	2.15	0.44
39:DD:28:GLU:HB2	39:DD:29:PRO:HD3	1.99	0.44
36:DA:2389:G:C5'	36:DA:2390:U:H5'	2.45	0.44
46:BN:41:ASP:O	46:BN:42:TRP:C	2.55	0.44
36:DA:1336:A:H2'	36:DA:1337:G:H8	1.80	0.44
1:AA:383:A:H2'	1:AA:384:G:H5'	2.00	0.44
36:BA:1419:A:H2'	36:BA:1421:G:N7	2.33	0.44
36:BA:2552:U:C2	36:BA:2554:U:H5'	2.53	0.44
40:BE:120:TRP:HB3	40:BE:155:LYS:HD3	1.99	0.44
36:DA:852:G:H2'	36:DA:853:G:H8	1.82	0.44
1:AA:1032:G:H2'	1:AA:1033:G:C8	2.52	0.44
48:BP:89:ALA:HB1	48:BP:121:LYS:HD3	1.99	0.44
36:DA:1658:C:H2'	36:DA:1659:U:H6	1.81	0.44
33:D7:46:VAL:HG12	33:D7:47:ARG:H	1.81	0.44
2:CB:239:VAL:O	2:CB:240:GLN:CB	2.65	0.44
5:AE:144:THR:N	5:AE:147:ASP:OD1	2.44	0.44
25:AZ:334:PHE:CD1	25:AZ:334:PHE:N	2.85	0.44
2:AB:124:SER:OG	2:AB:125:PRO:HD2	2.17	0.44
42:BG:64:THR:HG22	42:BG:94:LEU:HD11	2.00	0.44
40:DE:93:VAL:C	40:DE:95:ILE:H	2.19	0.44
1:CA:340:U:C2	1:CA:350:G:N2	2.85	0.44
36:BA:1907:G:O2'	36:BA:1908:C:H5'	2.18	0.44
19:AS:36:ARG:HB2	19:AS:72:GLY:CA	2.47	0.44
36:BA:687:C:H2'	36:BA:688:U:O4'	2.18	0.44
5:CE:36:ASP:O	5:CE:38:GLN:N	2.50	0.44
35:D9:26:ILE:HG22	35:D9:27:CYS:N	2.33	0.44
36:BA:1430:C:H2'	36:BA:1431:U:C6	2.52	0.44
33:B7:37:LYS:O	36:BA:458:G:H8	2.01	0.44
36:DA:514:A:O2'	36:DA:515:A:H5'	2.18	0.44
40:BE:98:PRO:HG3	40:BE:175:VAL:HG12	1.98	0.44
1:AA:1517:G:H1'	36:BA:1919:A:O3'	2.18	0.44
36:BA:1661:G:H2'	36:BA:1662:C:H6	1.83	0.44
1:CA:743:U:H2'	1:CA:744:C:C6	2.53	0.44
37:DB:24:G:H1'	37:DB:26:A:H62	1.83	0.44
1:CA:860:A:H2'	1:CA:861:G:O4'	2.17	0.44
36:DA:1283:G:N2	36:DA:1285:G:H3'	2.32	0.44
53:BU:8:VAL:CG1	53:BU:12:ARG:HE	2.30	0.44
26:D0:25:ARG:HH11	26:D0:25:ARG:HG2	1.83	0.44
36:DA:116:C:H2'	36:DA:117:G:C8	2.52	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2457:U:C2'	36:BA:2458:G:H5'	2.47	0.44
47:BO:7:TYR:CE1	47:BO:20:MET:HB2	2.52	0.44
36:BA:1788:C:O2'	36:BA:1789:A:H5'	2.17	0.44
1:CA:228:A:C5'	1:CA:228:A:C8	2.96	0.44
39:DD:35:LYS:CG	39:DD:63:ARG:HG2	2.38	0.44
56:DX:25:LYS:HD3	56:DX:80:ILE:HD11	1.99	0.44
13:AM:4:ILE:O	13:AM:6:GLY:N	2.50	0.44
34:B8:4:MET:O	34:B8:62:LEU:CD1	2.62	0.44
34:D8:11:LYS:H	34:D8:11:LYS:CD	2.30	0.44
42:DG:52:ILE:HB	42:DG:54:GLU:CG	2.47	0.44
36:DA:2107:C:H1'	36:DA:2182:G:N2	2.32	0.44
32:D6:14:THR:C	32:D6:16:CYS:H	2.20	0.44
32:D6:36:LEU:O	32:D6:37:ARG:NE	2.51	0.44
54:BV:61:VAL:HA	54:BV:94:LEU:HD23	2.00	0.44
5:CE:76:ILE:HG13	5:CE:77:PRO:HD2	1.98	0.44
36:BA:2392:A:H5'	36:BA:2392:A:N3	2.33	0.44
4:CD:3:ARG:HE	4:CD:5:ILE:HG13	1.82	0.44
51:DS:17:ARG:C	51:DS:19:LYS:H	2.21	0.44
51:DS:67:ARG:O	51:DS:71:ARG:HG3	2.18	0.44
36:BA:26:G:C6	36:BA:27:G:N1	2.85	0.44
36:BA:1946:U:H2'	36:BA:1947:C:C6	2.53	0.44
37:BB:21:G:H2'	37:BB:22:U:H5'	1.99	0.44
36:DA:833:U:H2'	36:DA:834:C:C6	2.53	0.44
37:DB:43:C:H3'	37:DB:44:G:C5'	2.47	0.44
51:DS:84:GLN:HB3	51:DS:105:ALA:O	2.18	0.44
36:DA:671:C:C5	48:DP:36:LYS:NZ	2.85	0.44
36:BA:1495:A:H2'	36:BA:1495:A:N3	2.32	0.44
48:BP:48:PRO:O	48:BP:49:ARG:C	2.56	0.44
36:DA:2317:C:O2'	36:DA:2318:G:H5'	2.17	0.44
2:AB:105:PHE:CE1	2:AB:155:LEU:HD12	2.52	0.44
42:DG:64:THR:OG1	42:DG:94:LEU:HD11	2.16	0.44
9:AI:28:VAL:O	9:AI:30:GLY:N	2.48	0.44
36:DA:562:U:C4	36:DA:2036:C:O4'	2.70	0.44
2:AB:51:LEU:HD21	2:AB:55:PHE:CZ	2.53	0.44
10:AJ:6:ILE:HD12	10:AJ:23:ILE:HG21	2.00	0.44
53:DU:79:PHE:O	53:DU:83:LEU:HD13	2.17	0.44
36:BA:1654:A:OP1	50:BR:2:ARG:HA	2.18	0.44
3:AC:14:ILE:HG13	3:AC:15:THR:N	2.32	0.44
1:AA:1129:C:O3'	1:AA:1131:G:OP2	2.36	0.44
36:BA:90:U:O4'	36:BA:92:A:C8	2.69	0.44
36:BA:1012:U:C4	46:BN:28:THR:HG21	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:143:ARG:O	7:AG:145:ALA:O	2.36	0.44
1:AA:939:G:C5'	7:AG:102:ARG:HH12	2.24	0.44
43:BH:139:GLN:HG3	43:BH:140:LYS:N	2.33	0.44
58:DZ:24:LEU:HA	58:DZ:25:PRO:HD2	1.73	0.44
9:CI:40:LEU:C	9:CI:42:ARG:N	2.70	0.44
1:CA:624:C:O3'	16:CP:10:GLY:HA2	2.17	0.44
36:DA:548:A:H2'	36:DA:549:G:C5'	2.43	0.44
24:CY:6:C:N4	24:CY:67:G:H1	2.09	0.44
24:AY:67:G:H2'	24:AY:68:C:C6	2.53	0.44
1:AA:1015:A:O3'	14:AN:15:LYS:NZ	2.48	0.44
36:DA:2128:C:P	38:DC:36:LYS:HB2	2.58	0.44
56:BX:57:LEU:N	56:BX:57:LEU:CD1	2.80	0.44
24:AY:3:G:O6	24:AY:70:C:N3	2.50	0.44
1:CA:198:G:O2'	1:CA:199:G:O5'	2.34	0.44
1:AA:276:G:O3'	17:AQ:68:ARG:NH1	2.48	0.44
38:DC:151:GLU:HA	38:DC:154:ARG:HH11	1.82	0.44
38:DC:75:LEU:HD21	38:DC:113:VAL:HG22	1.99	0.44
1:AA:160:A:O2'	1:AA:161:A:H5'	2.17	0.44
35:B9:19:ARG:HG3	35:B9:20:HIS:ND1	2.32	0.44
52:DT:105:LEU:HD22	52:DT:109:GLU:OE2	2.18	0.44
53:DU:17:ILE:HG23	53:DU:39:LEU:CD1	2.47	0.44
2:CB:11:LEU:CD1	2:CB:217:ARG:NH2	2.81	0.44
1:CA:256:U:P	17:CQ:17:LYS:HZ2	2.41	0.44
36:DA:922:U:H2'	36:DA:923:C:C6	2.52	0.44
1:CA:156:G:C6	1:CA:166:G:C6	3.05	0.44
19:AS:31:ILE:O	19:AS:31:ILE:HG23	2.18	0.44
24:AY:60:U:H2'	24:AY:61:C:C5	2.53	0.44
1:CA:1030(D):A:C2'	1:CA:1031:G:H5'	2.47	0.44
17:AQ:9:VAL:HG12	17:AQ:56:VAL:HG22	1.99	0.44
26:D0:36:ILE:HD11	36:DA:2355:C:C4'	2.46	0.44
44:DJ:16:UNK:C	44:DJ:18:UNK:H	2.29	0.44
1:AA:115:G:H4'	1:AA:116:A:O5'	2.16	0.44
36:DA:2360:A:O2'	36:DA:2361:A:O5'	2.36	0.44
40:DE:174:ASP:OD1	40:DE:175:VAL:N	2.51	0.44
1:CA:1050:G:O2'	1:CA:1051:C:C6	2.66	0.44
1:AA:836:G:H2'	1:AA:837:G:C8	2.53	0.44
36:DA:1473:G:H2'	36:DA:1474:C:O4'	2.18	0.44
55:BW:62:HIS:O	55:BW:63:ASP:O	2.36	0.44
22:AV:20:U:H2'	22:AV:21:A:H5'	1.98	0.44
25:AZ:254:GLU:CD	25:AZ:307:PRO:HA	2.37	0.44
36:DA:751:A:H5'	55:DW:90:ARG:HA	1.98	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:57:LYS:HG2	5:CE:61:TYR:CE2	2.52	0.44
1:CA:439:A:H2'	1:CA:441:A:O4'	2.18	0.44
38:DC:33:ALA:HA	38:DC:39:GLU:OE2	2.17	0.44
35:B9:26:ILE:HG22	35:B9:27:CYS:N	2.33	0.44
8:CH:44:PHE:HB3	8:CH:80:ILE:HG12	2.00	0.44
49:BQ:64:ILE:HG22	49:BQ:65:PHE:N	2.32	0.44
36:DA:992:C:H2'	36:DA:993:G:H8	1.83	0.44
1:CA:1188:A:H2'	1:CA:1189:C:H5'	2.00	0.44
36:DA:1914:C:H2'	36:DA:1915:U:O4'	2.17	0.44
1:CA:102:G:O2'	1:CA:103:C:H5'	2.18	0.44
24:AY:32:OMC:HM22	24:AY:33:U:H5'	2.00	0.44
38:DC:100:ILE:O	38:DC:104:LEU:HB2	2.18	0.44
13:AM:19:LEU:O	13:AM:22:ILE:HD13	2.17	0.44
28:B2:31:GLU:OE1	28:B2:31:GLU:HA	2.18	0.44
41:BF:2:LYS:O	41:BF:25:PRO:HG2	2.18	0.44
58:BZ:123:ASP:O	58:BZ:124:ILE:HG23	2.18	0.44
40:BE:33:VAL:CG1	40:BE:69:LYS:HE3	2.48	0.44
13:AM:70:LEU:HD23	13:AM:70:LEU:C	2.37	0.44
46:BN:132:ALA:O	46:BN:133:GLN:CB	2.62	0.44
22:CW:68:C:H2'	22:CW:69:G:C8	2.53	0.44
36:DA:926:A:C8	36:DA:926:A:H5'	2.52	0.44
42:DG:63:ILE:HG21	42:DG:141:PHE:CD2	2.53	0.44
43:DH:94:TYR:CD1	43:DH:107:VAL:CA	2.99	0.44
42:DG:151:ALA:HB3	42:DG:153:ARG:NH1	2.32	0.44
52:DT:12:SER:C	52:DT:14:TYR:H	2.21	0.44
36:BA:611:C:O5'	36:BA:611:C:H6	2.00	0.44
4:AD:105:VAL:HG21	4:AD:121:VAL:CG2	2.48	0.44
4:CD:100:ARG:HG2	4:CD:102:ASP:OD1	2.17	0.44
42:DG:67:LYS:O	42:DG:68:PRO:O	2.36	0.44
36:DA:1495:A:N3	36:DA:1495:A:H2'	2.33	0.44
1:AA:1275:A:O2'	1:AA:1276:G:H5'	2.18	0.44
36:BA:651:G:H2'	36:BA:652:C:H5'	2.00	0.44
27:B1:50:ARG:CG	27:B1:59:THR:HG22	2.38	0.44
25:AZ:143:ASP:HB3	25:AZ:146:LEU:HB2	1.97	0.44
14:CN:12:ARG:CB	14:CN:12:ARG:HH11	2.29	0.44
47:BO:66:LYS:H	47:BO:82:ASN:HD21	1.65	0.44
25:AZ:210:ILE:O	25:AZ:210:ILE:HG23	2.18	0.44
12:CL:34:ARG:HG3	12:CL:105:TYR:CE2	2.53	0.44
36:DA:1206:G:C6	36:DA:1207:C:C4	3.05	0.44
36:DA:2716:U:O2'	36:DA:2717:G:H5'	2.17	0.44
3:AC:14:ILE:HG13	3:AC:15:THR:H	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1145:C:O2'	1:AA:1146:A:O5'	2.34	0.44
1:CA:1129:C:O2'	1:CA:1131:G:C8	2.71	0.44
54:BV:38:LEU:HD22	54:BV:52:VAL:HG11	2.00	0.44
58:DZ:140:ASP:C	58:DZ:141:VAL:CG2	2.85	0.44
36:BA:848:G:H2'	36:BA:849:A:C8	2.53	0.44
1:AA:722:A:O3'	1:AA:723:U:H2'	2.18	0.44
57:DY:47:LYS:HD2	57:DY:60:PHE:HE1	1.83	0.44
2:CB:109:SER:O	2:CB:111:ARG:N	2.51	0.44
11:AK:57:THR:CG2	11:AK:60:ALA:H	2.27	0.44
1:AA:190:U:O2'	1:AA:191:G:H5'	2.18	0.44
40:DE:7:VAL:CG1	40:DE:27:LEU:HB3	2.44	0.44
52:DT:35:LYS:O	52:DT:38:ASN:ND2	2.51	0.44
3:CC:50:ALA:CA	3:CC:72:LYS:HB2	2.46	0.44
46:BN:3:THR:CG2	46:BN:4:TYR:N	2.80	0.44
36:DA:492:A:C2	36:DA:493:G:H1'	2.53	0.44
36:BA:2206:G:C2	36:BA:2207:G:H5'	2.51	0.44
2:AB:95:GLN:HA	2:AB:95:GLN:OE1	2.18	0.44
2:CB:151:GLY:C	2:CB:153:ARG:N	2.71	0.44
36:DA:878:A:H2'	36:DA:879:G:O4'	2.17	0.44
29:B3:15:TYR:CD2	29:B3:19:GLN:NE2	2.85	0.44
39:DD:275:LYS:CD	39:DD:276:LYS:N	2.81	0.44
55:BW:29:LEU:CD1	55:BW:51:LEU:HD11	2.48	0.44
1:CA:1133:G:C4	1:CA:1142:G:N2	2.85	0.44
36:BA:856:C:H5''	36:BA:856:C:C6	2.53	0.44
36:BA:2553:G:H3'	36:BA:2554:U:H5''	2.00	0.44
1:CA:1044:A:H2'	1:CA:1045:C:O5'	2.17	0.44
12:CL:52:LEU:N	12:CL:52:LEU:HD22	2.32	0.44
1:AA:731:G:H5'	1:AA:766:A:H4'	1.99	0.44
17:AQ:45:HIS:CB	17:AQ:65:ILE:HD13	2.47	0.44
47:BO:10:VAL:HG23	47:BO:10:VAL:O	2.18	0.44
48:DP:121:LYS:O	48:DP:123:LEU:HD23	2.17	0.44
36:BA:1164:G:H2'	36:BA:1165:U:C6	2.52	0.44
12:AL:126:LYS:HZ3	12:AL:128:ALA:H	1.66	0.44
36:DA:185:U:H2'	36:DA:186:G:C8	2.53	0.44
36:DA:2319:G:OP1	36:DA:2319:G:C4'	2.65	0.44
36:DA:1131:G:O6	36:DA:2040:C:H1'	2.18	0.44
2:CB:115:LEU:HD13	2:CB:145:LEU:HB3	2.00	0.44
57:BY:20:TYR:C	57:BY:22:GLY:H	2.21	0.44
27:B1:13:ILE:HD12	27:B1:14:VAL:C	2.38	0.44
50:DR:74:LYS:HE3	50:DR:77:ARG:HH11	1.83	0.44
33:B7:43:THR:CG2	33:B7:44:PRO:N	2.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:BR:32:GLY:O	50:BR:115:GLU:HA	2.18	0.44
50:DR:22:ARG:NE	50:DR:69:ASP:HA	2.33	0.44
1:AA:340:U:C2	1:AA:350:G:N2	2.85	0.44
1:CA:83:U:H2'	1:CA:84:U:C5	2.53	0.44
1:AA:83:U:H2'	1:AA:84:U:C5	2.53	0.44
1:CA:894:G:O2'	1:CA:895:G:H5'	2.18	0.44
1:CA:184:G:O2'	1:CA:185:A:H5'	2.17	0.44
11:CK:23:ALA:O	11:CK:86:GLY:HA3	2.18	0.44
33:D7:31:LEU:O	33:D7:35:ARG:HB2	2.18	0.44
36:BA:2506:U:C6	36:BA:2506:U:H5'	2.53	0.44
51:DS:70:GLY:C	51:DS:72:ALA:N	2.71	0.44
54:DV:41:GLY:HA3	54:DV:45:THR:OG1	2.18	0.44
52:DT:53:ARG:O	52:DT:59:THR:HB	2.18	0.44
49:BQ:137:TYR:CZ	58:BZ:81:ARG:CZ	3.00	0.44
52:BT:33:LYS:HD2	52:BT:43:GLN:CB	2.48	0.44
42:DG:47:LYS:CE	42:DG:81:LYS:HB2	2.37	0.44
36:DA:2189:U:H3'	36:DA:2190:G:H4'	1.99	0.44
36:DA:910:A:N1	36:DA:2277:G:H1'	2.33	0.44
5:AE:80:ILE:HG12	5:AE:142:LEU:HD21	2.00	0.44
48:BP:146:VAL:CG2	48:BP:147:LEU:H	1.99	0.44
32:B6:15:GLU:O	32:B6:15:GLU:HG2	2.18	0.44
1:AA:1392:G:O2'	1:AA:1393:U:H5'	2.18	0.44
37:DB:21:G:H2'	37:DB:22:U:H5'	1.99	0.44
36:DA:321:G:O2'	36:DA:340:A:N3	2.46	0.44
42:DG:66:GLN:O	42:DG:92:VAL:HG21	2.18	0.44
4:AD:18:LYS:CA	4:AD:33:MET:HE2	2.48	0.44
1:CA:1392:G:N2	1:CA:1502:A:H8	2.16	0.44
51:DS:103:GLU:OE1	51:DS:103:GLU:N	2.39	0.44
3:CC:46:GLU:O	3:CC:47:LEU:CB	2.54	0.44
10:CJ:6:ILE:CD1	10:CJ:23:ILE:HG21	2.47	0.44
36:BA:2416:C:H2'	36:BA:2417:C:H6	1.83	0.44
40:BE:144:ARG:HG3	40:BE:145:LYS:N	2.32	0.44
36:BA:1052:C:O2'	36:BA:1053:C:P	2.76	0.44
50:DR:3:HIS:C	50:DR:3:HIS:ND1	2.69	0.44
39:DD:9:TYR:CD1	39:DD:10:THR:HG22	2.52	0.44
52:DT:95:ARG:NH1	52:DT:95:ARG:HB3	2.32	0.44
36:DA:2572:A:N7	40:DE:144:ARG:HG2	2.31	0.44
1:CA:1442(B):A:H2'	52:DT:118:ARG:HH12	1.83	0.44
1:AA:1222:G:O2'	1:AA:1223:C:H5'	2.17	0.44
4:AD:10:ARG:HH11	4:AD:10:ARG:HG2	1.83	0.44
54:BV:32:THR:HG23	54:BV:59:ALA:O	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BF:157:VAL:HG23	41:BF:157:VAL:O	2.17	0.44
46:BN:29:LYS:C	46:BN:31:ALA:H	2.19	0.44
27:D1:91:LYS:O	27:D1:92:LYS:C	2.55	0.44
22:AW:8:U:OP2	22:AW:8:U:C6	2.70	0.44
36:DA:2724:C:OP1	40:DE:118:LYS:NZ	2.51	0.44
1:AA:628:G:C2'	1:AA:629:G:H5'	2.48	0.44
36:BA:580:C:O2'	36:BA:581:C:H5'	2.18	0.44
36:BA:360:G:O2'	36:BA:361:G:H5'	2.18	0.44
36:DA:1299:G:H3'	36:DA:1639:U:O4	2.18	0.44
16:AP:14:ASN:OD1	16:AP:16:HIS:CE1	2.71	0.44
25:CZ:141:VAL:HG23	25:CZ:146:LEU:CD2	2.47	0.44
14:AN:44:LEU:C	14:AN:44:LEU:HD12	2.39	0.44
36:BA:723:G:H2'	36:BA:724:U:C6	2.53	0.44
57:BY:2:ARG:HD2	57:BY:3:VAL:HG23	1.97	0.44
36:BA:2491:U:H4'	36:BA:2570:G:OP1	2.18	0.44
25:CZ:404:LEU:CD2	25:CZ:404:LEU:H	2.30	0.44
36:DA:104:U:H2'	36:DA:105:C:H5'	2.00	0.44
1:AA:411:A:H62	1:AA:413:G:H21	1.66	0.44
36:DA:2206:G:C2	36:DA:2207:G:H5'	2.52	0.44
2:AB:39:ILE:CG2	2:AB:40:HIS:N	2.81	0.44
1:AA:93:G:H2'	1:AA:96:U:O4'	2.17	0.44
19:AS:60:VAL:O	19:AS:60:VAL:HG13	2.18	0.44
48:DP:85:LEU:HA	48:DP:88:LEU:HB3	2.00	0.44
46:BN:14:VAL:HG21	46:BN:137:LYS:HE3	1.99	0.44
25:AZ:315:LYS:HG2	25:AZ:373:GLU:HG3	1.99	0.44
36:DA:1012:U:C4	46:DN:28:THR:HG21	2.53	0.44
1:AA:512:U:C2	1:AA:513:C:C5	3.05	0.44
26:D0:26:TYR:CD2	36:DA:857:C:H1'	2.53	0.44
50:DR:74:LYS:HD2	50:DR:77:ARG:HH11	1.82	0.44
25:AZ:342:PHE:CD2	25:AZ:388:ILE:HG12	2.53	0.44
36:DA:1291:C:H2'	36:DA:1292:U:C6	2.53	0.44
11:AK:58:PRO:HD3	11:AK:89:ALA:HB1	2.00	0.44
58:DZ:132:ASN:ND2	58:DZ:159:PRO:O	2.51	0.44
36:DA:2770:G:C5'	36:DA:2771:C:OP2	2.65	0.44
1:CA:792:A:O2'	1:CA:794:A:N7	2.45	0.44
36:BA:828:U:C5	36:BA:829:A:N6	2.86	0.44
36:BA:536:A:H2'	36:BA:537:C:C6	2.53	0.44
37:DB:77:U:P	58:DZ:19:ARG:HH21	2.40	0.44
1:AA:577:G:O2'	1:AA:578:C:H5'	2.18	0.44
36:DA:843:G:O2'	36:DA:844:C:H5'	2.17	0.44
18:AR:79:LEU:HB3	18:AR:80:PRO:HD2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:860:A:H2'	1:AA:861:G:O4'	2.17	0.44
35:B9:3:VAL:HG21	36:BA:2539:C:H4'	2.00	0.44
43:DH:110:SER:O	43:DH:111:HIS:HB2	2.18	0.44
1:CA:1346:A:OP1	9:CI:120:ARG:NH2	2.51	0.44
11:CK:59:TYR:CE2	11:CK:63:LEU:HD11	2.53	0.44
4:CD:49:ARG:H	4:CD:49:ARG:HG2	1.65	0.44
2:CB:213:LEU:C	2:CB:213:LEU:HD23	2.38	0.44
25:CZ:214:VAL:HG13	25:CZ:214:VAL:O	2.18	0.44
41:DF:99:TYR:CD1	41:DF:99:TYR:N	2.85	0.44
36:BA:2819:G:H2'	36:BA:2821:A:N7	2.32	0.44
1:AA:439:A:H2'	1:AA:441:A:O4'	2.18	0.44
25:AZ:357:PRO:O	25:AZ:359:VAL:HG23	2.18	0.44
38:DC:82:LYS:HG3	38:DC:116:THR:HG21	2.00	0.44
38:BC:99:ILE:C	38:BC:101:GLN:N	2.72	0.44
39:DD:243:GLY:O	39:DD:244:ARG:CB	2.65	0.44
39:BD:241:PRO:C	39:BD:242:ARG:HG2	2.39	0.44
36:BA:1902:C:H5'	39:BD:246:PRO:HD3	2.00	0.44
49:BQ:27:VAL:HG23	49:BQ:137:TYR:CE2	2.53	0.44
1:CA:1005:A:C2'	1:CA:1006:C:H5'	2.47	0.44
40:DE:47:VAL:HG23	40:DE:84:PHE:O	2.18	0.44
37:BB:43:C:H3'	37:BB:44:G:C5'	2.48	0.44
36:BA:1485:G:O2'	36:BA:1486:A:H5'	2.18	0.44
9:CI:53:VAL:C	9:CI:55:ALA:N	2.69	0.44
42:DG:72:ARG:HB2	42:DG:87:PRO:HD2	2.00	0.44
36:DA:2101:G:H1	36:DA:2189:U:H3	1.60	0.44
51:BS:57:LYS:HD2	51:BS:57:LYS:C	2.38	0.44
36:BA:2307:G:H3'	36:BA:2307:G:N3	2.33	0.44
14:AN:41:ARG:HG2	14:AN:42:ILE:N	2.30	0.44
48:BP:149:GLU:O	48:BP:150:ALA:HB2	2.18	0.44
32:B6:17:LYS:O	32:B6:18:ARG:HB3	2.17	0.44
36:DA:1885:A:C8	36:DA:1885:A:H5'	2.52	0.44
51:BS:89:ARG:HB3	51:BS:92:TYR:HB3	1.99	0.44
2:CB:114:ARG:HH11	2:CB:118:LEU:HG	1.83	0.44
2:CB:152:PHE:O	2:CB:155:LEU:N	2.51	0.44
36:DA:833:U:H5''	48:DP:48:PRO:HB2	2.00	0.44
43:DH:43:VAL:HG11	43:DH:46:GLU:OE2	2.17	0.44
48:DP:41:ARG:CD	48:DP:45:LEU:HD23	2.36	0.44
36:DA:265:A:H4'	36:DA:266:G:O5'	2.18	0.44
36:DA:1665:A:H4'	47:DO:67:LYS:HB2	1.99	0.44
9:CI:4:TYR:CE2	9:CI:88:TYR:CB	2.96	0.44
1:CA:722:A:O2'	1:CA:724:G:H8	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:140:MET:CG	60:CZ:501:GDP:HN21	2.31	0.44
40:DE:115:GLY:C	40:DE:116:VAL:O	2.53	0.44
46:BN:32:THR:C	46:BN:34:LEU:N	2.70	0.44
58:DZ:142:SER:C	58:DZ:144:LEU:N	2.71	0.44
56:DX:49:VAL:HG12	56:DX:87:GLN:NE2	2.28	0.44
57:BY:31:LEU:HD23	57:BY:36:ALA:O	2.18	0.44
46:DN:3:THR:CG2	46:DN:4:TYR:H	2.26	0.44
25:AZ:86:ALA:O	25:AZ:88:TYR:N	2.45	0.44
7:CG:78:ARG:HH11	7:CG:80:VAL:HG21	1.80	0.44
1:AA:1378:C:OP1	7:AG:7:ALA:HB2	2.18	0.44
39:BD:158:ALA:HB3	39:BD:161:THR:CG2	2.45	0.44
1:AA:1513:A:H2'	1:AA:1514:C:H6	1.78	0.44
4:AD:145:GLU:C	4:AD:146:ILE:HD13	2.38	0.44
12:AL:45:PRO:O	12:AL:46:LYS:O	2.36	0.44
12:AL:53:ARG:HB3	12:AL:69:TYR:HE1	1.83	0.44
1:CA:1048:G:OP1	14:CN:4:LYS:HB2	2.18	0.44
36:DA:9:U:O4	36:DA:2629:A:N7	2.51	0.44
25:CZ:67:HIS:ND1	25:CZ:80:VAL:HG22	2.32	0.44
36:BA:470:A:OP1	41:BF:59:TYR:CE1	2.68	0.44
1:AA:1402:C:O2	1:AA:1500:A:N1	2.50	0.44
36:BA:692:C:H2'	36:BA:693:C:C6	2.53	0.44
37:DB:55:U:H2'	37:DB:56:G:C8	2.52	0.44
29:B3:31:LEU:O	29:B3:32:GLN:HB2	2.18	0.44
1:AA:1031:G:O2'	1:AA:1032:G:H5'	2.16	0.44
3:CC:172:ARG:O	3:CC:173:VAL:CG2	2.65	0.44
57:BY:22:GLY:O	57:BY:23:ARG:C	2.56	0.44
10:CJ:44:VAL:CG2	10:CJ:66:ARG:HH21	2.31	0.44
36:DA:150:C:O2'	36:DA:151:C:H5'	2.18	0.44
36:BA:2659:G:C2'	36:BA:2660:A:H5''	2.48	0.44
12:AL:97:ARG:CG	12:AL:97:ARG:HH11	2.30	0.44
33:B7:10:ARG:HG2	33:B7:10:ARG:HH11	1.83	0.44
36:BA:116:C:H2'	36:BA:117:G:C8	2.53	0.44
22:AV:19:G:H4'	22:AV:20:U:OP1	2.18	0.44
39:BD:91:ARG:NH1	39:BD:91:ARG:HG2	2.33	0.44
36:BA:630:G:H4'	36:BA:640:C:H4'	1.99	0.44
36:BA:825:C:H4'	36:BA:2428:G:C5	2.53	0.44
36:DA:85:G:N3	36:DA:103:A:C2	2.85	0.44
17:CQ:99:SER:C	17:CQ:100:LYS:HG3	2.39	0.44
36:DA:2295:C:O2'	36:DA:2296:U:H5'	2.17	0.44
36:BA:2243:U:H2'	36:BA:2244:U:C6	2.53	0.44
36:DA:1929:G:H4'	36:DA:1930:G:OP1	2.16	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:131:ILE:HD13	5:CE:131:ILE:HA	1.87	0.44
38:BC:30:LYS:HE3	38:BC:30:LYS:HB3	1.83	0.44
7:AG:18:TYR:CD2	7:AG:59:LEU:HD13	2.52	0.44
13:AM:15:VAL:CG1	13:AM:45:VAL:HG22	2.48	0.43
47:DO:104:ARG:HH21	52:DT:33:LYS:HD3	1.81	0.43
41:DF:24:LEU:CD1	41:DF:118:ALA:HB1	2.48	0.43
40:DE:47:VAL:HG12	40:DE:49:LEU:CD2	2.48	0.43
40:DE:69:LYS:HD3	40:DE:89:ASP:C	2.37	0.43
46:DN:10:GLU:HG3	46:DN:11:PRO:HD2	1.99	0.43
9:AI:52:ALA:CB	9:AI:95:LYS:HZ2	2.30	0.43
39:BD:35:LYS:CG	39:BD:63:ARG:HG2	2.41	0.43
1:AA:240:C:H2'	1:AA:241:C:C6	2.52	0.43
5:CE:12:LEU:HD12	5:CE:31:LEU:CB	2.42	0.43
40:BE:38:THR:HG23	40:BE:39:PRO:HD2	1.99	0.43
32:D6:53:LYS:HG2	32:D6:54:ILE:H	1.82	0.43
1:CA:240:C:H2'	1:CA:241:C:C6	2.53	0.43
36:BA:1885:A:C8	36:BA:1885:A:H5'	2.53	0.43
1:AA:1202:G:C2'	1:AA:1203:C:H5'	2.48	0.43
51:BS:89:ARG:HG3	51:BS:92:TYR:N	2.33	0.43
32:D6:25:LYS:O	36:DA:2286:A:N1	2.51	0.43
36:DA:2150:U:H2'	36:DA:2151:G:C8	2.53	0.43
36:DA:1866:C:H6	36:DA:1866:C:O5'	2.00	0.43
1:AA:1238:A:H2'	1:AA:1239:A:H5'	2.00	0.43
33:B7:34:ARG:HD2	33:B7:34:ARG:HA	1.77	0.43
56:BX:10:ALA:O	56:BX:28:PHE:CB	2.64	0.43
41:DF:107:LYS:HE3	41:DF:205:ARG:CG	2.48	0.43
1:CA:724:G:O2'	1:CA:725:G:H5'	2.18	0.43
35:B9:22:ARG:NH1	36:BA:2741:A:OP1	2.51	0.43
48:DP:74:GLU:C	48:DP:75:ILE:HD12	2.38	0.43
36:BA:1067:A:H3'	36:BA:1068:G:C5'	2.41	0.43
42:BG:138:GLN:HE21	42:BG:152:LEU:HB3	1.83	0.43
42:BG:16:ARG:HH11	42:BG:16:ARG:HG3	1.83	0.43
31:D5:2:ALA:N	36:DA:2015:A:N3	2.66	0.43
46:BN:17:ASP:OD1	46:BN:56:ASN:HB3	2.18	0.43
43:BH:31:GLY:O	43:BH:79:VAL:HG12	2.18	0.43
36:BA:581:C:OP1	53:BU:33:ARG:HG3	2.17	0.43
10:CJ:4:ILE:CB	10:CJ:74:ILE:HD11	2.47	0.43
25:AZ:363:MET:HB3	25:AZ:364:PRO:CD	2.48	0.43
36:BA:847:U:OP2	36:BA:928:G:O6	2.35	0.43
36:BA:2031:A:N3	36:BA:2455:G:O2'	2.49	0.43
1:CA:8:A:N6	4:CD:205:GLU:O	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DR:100:LEU:CD1	50:DR:100:LEU:N	2.81	0.43
50:BR:75:LEU:C	50:BR:75:LEU:HD13	2.38	0.43
1:AA:8:A:N6	4:AD:205:GLU:O	2.51	0.43
11:AK:125:PHE:C	11:AK:127:LYS:H	2.20	0.43
25:AZ:404:LEU:CD2	25:AZ:404:LEU:H	2.32	0.43
1:AA:109:A:C6	1:AA:326:G:C6	3.06	0.43
3:AC:3:ASN:O	3:AC:4:LYS:HB2	2.17	0.43
25:AZ:69:GLU:CG	25:AZ:70:TYR:N	2.81	0.43
17:CQ:45:HIS:CB	17:CQ:65:ILE:HD13	2.48	0.43
36:BA:2154:G:C2	36:BA:2155:G:C4	3.06	0.43
1:AA:155:C:H2'	1:AA:156:G:C8	2.50	0.43
29:D3:26:LEU:O	29:D3:28:LEU:HD22	2.18	0.43
2:CB:238:LEU:O	2:CB:239:VAL:C	2.55	0.43
46:BN:75:TYR:O	46:BN:76:SER:O	2.35	0.43
13:AM:104:ARG:O	13:AM:104:ARG:HG2	2.17	0.43
36:BA:2319:G:C4'	36:BA:2319:G:OP1	2.66	0.43
36:DA:1651:G:C2	36:DA:2007:C:C2	3.06	0.43
33:B7:4:THR:HG21	36:BA:788:A:H1'	1.98	0.43
10:CJ:47:PHE:CE2	14:CN:37:PHE:CE2	3.06	0.43
42:DG:23:PHE:N	42:DG:23:PHE:CD1	2.86	0.43
36:DA:1120:G:H2'	36:DA:1121:C:H6	1.80	0.43
7:AG:153:HIS:CE1	11:AK:58:PRO:HD2	2.53	0.43
36:DA:2659:G:C2'	36:DA:2660:A:H5''	2.48	0.43
1:AA:341:C:H6	1:AA:341:C:O5'	2.01	0.43
1:CA:332:G:O2'	1:CA:333:G:H5'	2.17	0.43
1:CA:1493:A:C8	23:CX:23:G:H1'	2.53	0.43
27:D1:14:VAL:HG11	27:D1:39:LYS:CE	2.48	0.43
3:CC:90:GLU:O	3:CC:93:LYS:HB3	2.18	0.43
1:AA:294:U:H2'	1:AA:295:C:C6	2.52	0.43
25:AZ:257:GLY:O	25:AZ:302:GLN:HG2	2.18	0.43
6:CF:76:ALA:O	6:CF:80:ARG:HG3	2.18	0.43
3:CC:29:TYR:O	3:CC:30:ARG:C	2.56	0.43
15:AO:6:GLU:CD	15:AO:6:GLU:H	2.18	0.43
40:BE:79:ARG:HG2	40:BE:79:ARG:HH11	1.83	0.43
43:BH:116:GLU:OE1	43:BH:116:GLU:HA	2.18	0.43
36:BA:977:G:C6	36:BA:987:G:C6	3.05	0.43
46:DN:38:HIS:C	53:DU:67:ALA:HB1	2.37	0.43
38:DC:117:PRO:O	38:DC:118:ASP:HB3	2.16	0.43
39:DD:242:ARG:CG	39:DD:242:ARG:NH1	2.72	0.43
52:DT:29:ARG:HB2	52:DT:85:LYS:HA	1.98	0.43
1:CA:1039:C:C6	1:CA:1040:U:H5	2.35	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DE:76:ARG:HG2	40:DE:76:ARG:HH11	1.83	0.43
36:DA:1300:U:H4'	36:DA:1301:A:O5'	2.18	0.43
36:BA:1301:A:HO2'	36:BA:1302:A:C2'	2.21	0.43
1:AA:1039:C:C6	1:AA:1040:U:H5	2.36	0.43
22:AW:68:C:H2'	22:AW:69:G:C8	2.53	0.43
32:B6:27:LYS:HE3	32:B6:30:THR:OG1	2.18	0.43
48:BP:115:LEU:HD23	48:BP:115:LEU:N	2.33	0.43
1:AA:1306:A:OP2	21:AU:6:ARG:NH2	2.51	0.43
36:DA:600:G:H5'	41:DF:32:LEU:HD12	2.01	0.43
9:CI:85:LEU:HD12	9:CI:85:LEU:C	2.39	0.43
36:BA:274:G:H3'	36:BA:274:G:OP1	2.18	0.43
32:D6:16:CYS:SG	32:D6:48:VAL:CG2	3.00	0.43
54:BV:16:PRO:O	54:BV:96:ILE:O	2.35	0.43
4:AD:112:VAL:HG12	4:AD:116:GLN:CD	2.39	0.43
4:CD:127:THR:HG22	4:CD:128:VAL:O	2.18	0.43
1:CA:1202:G:O2'	1:CA:1203:C:H5'	2.18	0.43
32:B6:45:LYS:CG	36:BA:2371:G:H4'	2.48	0.43
48:BP:98:GLU:CA	48:BP:101:VAL:HG22	2.48	0.43
36:DA:941:A:H4'	48:DP:35:HIS:CE1	2.53	0.43
52:BT:93:ARG:HH22	52:BT:95:ARG:HD3	1.81	0.43
10:CJ:6:ILE:HD12	10:CJ:23:ILE:HG21	2.00	0.43
10:CJ:9:ARG:HH21	10:CJ:97:GLU:HG3	1.84	0.43
49:DQ:137:TYR:CE2	58:DZ:81:ARG:CZ	3.01	0.43
9:AI:58:HIS:C	9:AI:59:PHE:HD1	2.20	0.43
55:DW:24:ILE:HG21	55:DW:36:LEU:CD2	2.48	0.43
10:AJ:37:PRO:HA	10:AJ:72:VAL:HG22	1.99	0.43
1:CA:1536:C:H2'	1:CA:1537:U:C4'	2.47	0.43
53:BU:93:LYS:O	53:BU:96:ALA:HB3	2.17	0.43
25:CZ:173:GLY:HA2	25:CZ:195:TRP:HZ3	1.83	0.43
36:DA:1208:C:C2	36:DA:1209:G:C8	3.06	0.43
36:BA:140:G:C1'	36:BA:141:A:H2	2.31	0.43
2:AB:25:ASN:HD22	2:AB:26:PRO:N	2.16	0.43
14:AN:39:LEU:CD1	14:AN:47:LEU:HD12	2.47	0.43
46:BN:31:ALA:O	46:BN:34:LEU:HB3	2.18	0.43
1:AA:1190:G:P	3:AC:5:ILE:HD12	2.57	0.43
42:BG:141:PHE:O	42:BG:144:ILE:HG22	2.17	0.43
36:BA:990:A:C6	36:BA:1186:G:H1'	2.52	0.43
11:AK:27:ASN:HD21	11:AK:45:GLY:H	1.66	0.43
36:BA:303:U:H2'	36:BA:304:G:C8	2.53	0.43
43:DH:76:VAL:C	43:DH:78:GLY:N	2.68	0.43
36:BA:358:U:C2'	36:BA:359:A:H5'	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:135:GLU:O	58:BZ:136:PHE:O	2.35	0.43
13:CM:77:ASN:O	13:CM:80:ARG:HB3	2.18	0.43
1:AA:60:A:H4'	1:AA:61:G:O5'	2.17	0.43
37:BB:13:A:O2'	37:BB:15:A:H5'	2.18	0.43
37:DB:13:A:H8	37:DB:13:A:H5'	1.82	0.43
36:DA:813:U:H2'	36:DA:814:C:H6	1.81	0.43
39:BD:28:GLU:CB	39:BD:29:PRO:CD	2.95	0.43
28:D2:47:ASN:O	28:D2:48:HIS:C	2.56	0.43
1:AA:309:G:O2'	1:AA:607:A:N1	2.51	0.43
4:CD:159:ARG:NH1	4:CD:159:ARG:HG3	2.33	0.43
36:BA:271(Q):G:H1'	36:BA:271(R):G:H8	1.81	0.43
12:AL:42:THR:HA	12:AL:53:ARG:O	2.18	0.43
1:CA:878:G:H5'	8:CH:89:PRO:HG2	1.99	0.43
3:AC:3:ASN:O	3:AC:4:LYS:CB	2.66	0.43
18:AR:55:ARG:HG3	18:AR:55:ARG:HH11	1.84	0.43
36:BA:2389:G:C5'	36:BA:2390:U:H5'	2.47	0.43
41:DF:21:ALA:C	41:DF:23:ASP:H	2.20	0.43
1:AA:165:C:H2'	1:AA:166:G:H8	1.83	0.43
36:DA:1817:G:C2'	36:DA:1818:U:H5'	2.48	0.43
1:AA:920:U:O4'	1:AA:1080:A:C2	2.72	0.43
36:BA:1817:G:C2'	36:BA:1818:U:H5'	2.49	0.43
36:DA:2360:A:HO2'	36:DA:2361:A:H8	1.65	0.43
25:CZ:185:ASN:N	25:CZ:185:ASN:ND2	2.66	0.43
1:AA:757:U:H2'	1:AA:758:G:O4'	2.18	0.43
55:DW:9:TYR:HE1	55:DW:102:HIS:HE2	1.63	0.43
9:AI:11:LYS:HG2	9:AI:11:LYS:O	2.17	0.43
39:BD:173:VAL:HG12	39:BD:185:VAL:O	2.18	0.43
36:BA:2770:G:H5''	36:BA:2771:C:OP2	2.18	0.43
42:DG:136:ARG:CB	42:DG:136:ARG:HH11	2.31	0.43
36:BA:1446:C:H42	36:BA:1465:G:H1	1.66	0.43
13:AM:37:THR:O	13:AM:39:ILE:HG13	2.17	0.43
26:B0:51:VAL:HG21	26:B0:79:VAL:O	2.18	0.43
1:CA:600:C:OP2	8:CH:97:VAL:HG12	2.18	0.43
22:CV:20:U:H2'	22:CV:21:A:H5'	1.98	0.43
47:BO:79:PHE:CD2	52:BT:72:VAL:HG12	2.53	0.43
37:BB:24:G:H1'	37:BB:26:A:H62	1.83	0.43
1:AA:102:G:O2'	1:AA:103:C:H5'	2.18	0.43
17:AQ:94:ASN:O	17:AQ:96:GLU:N	2.51	0.43
1:AA:778:G:H1'	11:AK:119:CYS:HB3	1.99	0.43
36:DA:1963:U:O2	36:DA:1963:U:H2'	2.18	0.43
36:BA:1146:C:O2'	36:BA:1147:C:H5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BC:117:PRO:HG3	38:BC:145:VAL:HG12	1.99	0.43
38:BC:82:LYS:HG3	38:BC:116:THR:HG21	2.01	0.43
28:B2:9:GLN:HB3	28:B2:60:LEU:HD22	2.01	0.43
1:CA:1194:U:H2'	1:CA:1195:C:C6	2.53	0.43
58:BZ:81:ARG:CZ	58:BZ:81:ARG:CB	2.90	0.43
40:DE:87:GLU:OE1	40:DE:87:GLU:O	2.36	0.43
32:D6:32:ASN:O	32:D6:33:LYS:CB	2.66	0.43
36:BA:2184:G:H2'	36:BA:2185:C:C6	2.54	0.43
57:DY:85:VAL:HG12	57:DY:86:ARG:H	1.83	0.43
4:CD:194:LEU:HB3	4:CD:196:LEU:CD1	2.36	0.43
22:CV:22:G:O2'	22:CV:23:A:H5''	2.18	0.43
32:B6:18:ARG:HE	32:B6:43:CYS:HB3	1.83	0.43
32:B6:53:LYS:HG2	32:B6:54:ILE:H	1.83	0.43
36:DA:655:A:C4'	36:DA:656:G:H5'	2.32	0.43
48:DP:62:LEU:O	48:DP:62:LEU:HG	2.17	0.43
36:DA:692:C:H2'	36:DA:693:C:C6	2.53	0.43
4:CD:17:VAL:HG11	4:CD:197:PRO:CB	2.42	0.43
48:BP:50:ARG:HG2	48:BP:50:ARG:NH1	2.33	0.43
1:AA:858:G:C8	1:AA:869:G:O6	2.70	0.43
30:D4:7:PRO:HG3	42:DG:61:ALA:HB1	1.99	0.43
36:BA:2150:U:H2'	36:BA:2151:G:C8	2.52	0.43
52:BT:89:VAL:HG11	52:BT:91:ARG:HG3	2.00	0.43
36:DA:2414:G:C2	36:DA:2415:G:C8	3.07	0.43
40:BE:60:ASN:O	40:BE:61:ARG:C	2.55	0.43
9:AI:40:LEU:C	9:AI:42:ARG:N	2.71	0.43
2:AB:239:VAL:O	2:AB:240:GLN:CB	2.65	0.43
10:CJ:7:LYS:C	10:CJ:8:LEU:HD12	2.39	0.43
6:CF:30:LEU:HD11	6:CF:63:TYR:CD2	2.53	0.43
2:CB:19:HIS:NE2	2:CB:206:ASP:HB2	2.32	0.43
25:AZ:178:ALA:HB1	25:AZ:199:ILE:HD11	2.00	0.43
36:DA:2463:C:C2'	36:DA:2464:C:H5'	2.48	0.43
31:D5:20:ARG:HA	31:D5:23:HIS:ND1	2.33	0.43
36:DA:271(D):G:O2'	36:DA:271(E):U:H5'	2.17	0.43
1:AA:1126:U:P	1:AA:1281:U:O2	2.76	0.43
36:DA:2661:G:H2'	36:DA:2662:A:C8	2.52	0.43
31:B5:43:HIS:CD2	36:BA:2815:C:O2'	2.71	0.43
28:D2:20:GLU:C	28:D2:22:GLU:N	2.72	0.43
52:DT:50:ILE:HA	52:DT:99:LEU:HD12	1.99	0.43
1:AA:80:G:C3'	1:AA:81:U:H5'	2.47	0.43
4:CD:150:GLU:HG2	4:CD:151:LYS:N	2.33	0.43
4:AD:148:VAL:HG23	4:AD:181:MET:HB3	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:99:LEU:HA	7:CG:102:ARG:CD	2.48	0.43
36:DA:2481:G:C2'	36:DA:2482:G:OP2	2.66	0.43
47:BO:35:VAL:O	47:BO:35:VAL:CG1	2.66	0.43
42:BG:152:LEU:HD23	42:BG:152:LEU:N	2.31	0.43
52:BT:23:ARG:HB2	52:BT:24:PRO:HD2	2.00	0.43
20:CT:26:ASN:HB3	20:CT:71:THR:OG1	2.17	0.43
19:AS:35:SER:HB2	19:AS:37:ARG:HD2	1.99	0.43
43:DH:31:GLY:O	43:DH:79:VAL:HG12	2.18	0.43
45:DK:88:UNK:O	45:DK:89:UNK:C	2.66	0.43
54:DV:39:LEU:HD12	54:DV:50:PRO:O	2.19	0.43
22:AW:38:A:H2'	22:AW:39:U:O4'	2.18	0.43
25:CZ:363:MET:HB3	25:CZ:364:PRO:CD	2.48	0.43
46:DN:17:ASP:OD1	46:DN:56:ASN:HB3	2.18	0.43
1:AA:622:A:C8	1:AA:623:C:C6	3.06	0.43
56:DX:44:GLU:OE2	56:DX:50:LYS:HG3	2.18	0.43
58:BZ:135:GLU:O	58:BZ:136:PHE:CG	2.71	0.43
16:AP:28:ARG:HG2	16:AP:28:ARG:HH11	1.84	0.43
1:CA:1205:U:O2'	3:CC:195:VAL:HG23	2.18	0.43
1:CA:1227:A:C2	1:CA:1228:C:C2	3.06	0.43
13:CM:104:ARG:O	13:CM:104:ARG:HG2	2.18	0.43
9:CI:110:GLU:OE2	9:CI:113:LYS:NZ	2.51	0.43
40:DE:101:ARG:HD3	40:DE:170:LEU:O	2.17	0.43
2:AB:88:ALA:HB2	2:AB:219:VAL:CG1	2.47	0.43
24:CY:40:C:C2'	24:CY:41:C:C5'	2.93	0.43
38:DC:74:VAL:HG12	38:DC:75:LEU:N	2.33	0.43
20:CT:10:LEU:HG	20:CT:12:ALA:N	2.32	0.43
36:BA:877:U:C2'	36:BA:878:A:H5''	2.47	0.43
13:CM:58:GLU:O	13:CM:62:ASN:HB2	2.18	0.43
36:DA:391:G:H1'	36:DA:411:G:O4'	2.18	0.43
25:AZ:133:VAL:HB	25:AZ:170:VAL:HG22	2.00	0.43
11:CK:20:TYR:CZ	11:CK:83:ILE:HD12	2.53	0.43
36:DA:2114:A:C2'	36:DA:2115:G:H5'	2.48	0.43
1:CA:918:A:H2'	1:CA:919:A:O4'	2.18	0.43
26:B0:20:ARG:CG	26:B0:20:ARG:NH1	2.78	0.43
17:AQ:26:GLN:HA	17:AQ:36:ILE:O	2.18	0.43
4:AD:88:VAL:HG12	4:AD:90:GLY:H	1.82	0.43
36:BA:205:G:O2'	36:BA:206:U:OP2	2.33	0.43
56:BX:63:LYS:HB2	56:BX:63:LYS:HE3	1.89	0.43
57:BY:87:LYS:O	57:BY:88:LYS:CB	2.67	0.43
26:D0:43:THR:CG2	36:DA:2336:A:H61	2.31	0.43
12:AL:126:LYS:HE2	12:AL:126:LYS:CA	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2545:G:O2'	36:DA:2546:U:H5'	2.18	0.43
25:CZ:349:VAL:HG23	25:CZ:374:LEU:HD22	2.00	0.43
25:CZ:342:PHE:CD2	25:CZ:388:ILE:HG12	2.53	0.43
42:DG:22:ARG:HB3	42:DG:23:PHE:CD1	2.53	0.43
10:CJ:48:THR:HG23	10:CJ:62:HIS:ND1	2.32	0.43
36:BA:1843:C:H2'	36:BA:1844:C:H6	1.83	0.43
1:CA:668:G:O2'	15:CO:46:HIS:CD2	2.71	0.43
36:BA:237:C:H2'	36:BA:238:C:H6	1.81	0.43
36:BA:237:C:O2'	36:BA:238:C:H5'	2.19	0.43
36:DA:688:U:H5'	36:DA:1780:A:C2	2.53	0.43
53:BU:8:VAL:HG12	53:BU:12:ARG:HG3	2.00	0.43
1:CA:1346:A:H5''	9:CI:120:ARG:NH2	2.33	0.43
36:DA:2166:G:H2'	36:DA:2167:U:C6	2.53	0.43
1:CA:1060:C:H5''	10:CJ:51:ARG:HG2	1.99	0.43
36:DA:1229:G:H3'	36:DA:1230:C:C6	2.54	0.43
5:CE:99:GLY:O	5:CE:117:ASP:HA	2.18	0.43
1:CA:821:G:H2'	1:CA:822:C:H6	1.82	0.43
25:AZ:95:GLY:O	25:AZ:99:MET:HE2	2.18	0.43
36:BA:2872:G:C2	36:BA:2873:A:N6	2.86	0.43
9:AI:47:LEU:H	9:AI:47:LEU:HG	1.58	0.43
36:DA:309:G:N3	36:DA:329:G:O2'	2.51	0.43
25:CZ:257:GLY:O	25:CZ:302:GLN:HG2	2.18	0.43
28:B2:28:LYS:O	28:B2:31:GLU:N	2.51	0.43
41:BF:3:GLU:O	41:BF:3:GLU:HG3	2.17	0.43
58:BZ:67:LEU:HD12	58:BZ:67:LEU:H	1.84	0.43
40:DE:76:ARG:O	40:DE:77:ILE:C	2.57	0.43
36:DA:1544:A:O2'	36:DA:1545:A:H5'	2.17	0.43
40:BE:49:LEU:HD22	40:BE:49:LEU:N	2.32	0.43
41:BF:170:LEU:HB2	41:BF:173:VAL:HB	2.00	0.43
39:DD:70:TRP:CH2	39:DD:150:LYS:CA	2.92	0.43
12:AL:17:LYS:CD	12:AL:18:VAL:HG22	2.48	0.43
32:D6:15:GLU:OE1	32:D6:18:ARG:CZ	2.64	0.43
36:DA:654(E):G:N2	36:DA:654(Q):C:O2'	2.52	0.43
1:CA:1202:G:H2'	1:CA:1203:C:O4'	2.18	0.43
39:BD:44:ASN:CB	39:BD:48:ARG:O	2.67	0.43
39:DD:49:ILE:HG13	39:DD:49:ILE:O	2.19	0.43
43:DH:54:ARG:HB2	43:DH:55:PRO:HD2	1.99	0.43
43:DH:66:GLY:HA2	43:DH:69:ARG:CB	2.40	0.43
4:CD:20:TYR:HD1	4:CD:26:CYS:O	2.01	0.43
36:BA:2657:A:H5'	36:BA:2657:A:N3	2.33	0.43
10:CJ:7:LYS:HG2	10:CJ:71:LEU:HD13	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1052:C:O2'	36:DA:1053:C:P	2.76	0.43
25:AZ:188:THR:CG2	25:AZ:193:ASN:HD22	2.27	0.43
35:D9:35:ARG:CD	36:DA:2742:C:OP1	2.66	0.43
55:BW:24:ILE:HG21	55:BW:36:LEU:HD21	2.01	0.43
54:DV:64:HIS:ND1	54:DV:92:THR:HG22	2.33	0.43
53:BU:83:LEU:HA	53:BU:88:ILE:CG1	2.48	0.43
25:CZ:138:VAL:HG21	25:CZ:173:GLY:N	2.33	0.43
25:CZ:178:ALA:HB1	25:CZ:199:ILE:HD11	1.99	0.43
36:DA:2572:A:O2'	40:DE:144:ARG:NH1	2.50	0.43
41:BF:107:LYS:HE3	41:BF:205:ARG:HG2	2.01	0.43
36:BA:1596:A:O2'	36:BA:1597:A:H5'	2.18	0.43
1:AA:961:U:OP2	1:AA:1223:C:H4'	2.18	0.43
41:DF:164:ARG:HD2	41:DF:176:LEU:O	2.19	0.43
4:AD:8:VAL:HB	4:AD:21:LEU:HD12	2.01	0.43
7:CG:102:ARG:CG	7:CG:103:TRP:N	2.80	0.43
1:CA:427:U:C4	1:CA:428:G:C6	3.06	0.43
42:BG:104:GLU:O	42:BG:108:ASN:HB2	2.17	0.43
34:B8:15:LYS:HD2	34:B8:16:ILE:N	2.33	0.43
37:BB:16:G:C6	37:BB:69:G:C2	3.06	0.43
46:DN:56:ASN:HD22	46:DN:56:ASN:HA	1.57	0.43
57:BY:61:ILE:HG22	57:BY:62:GLU:N	2.33	0.43
43:DH:72:ILE:O	43:DH:75:ALA:N	2.52	0.43
36:DA:2491:U:C5'	36:DA:2570:G:H5''	2.45	0.43
16:AP:14:ASN:HA	16:AP:42:ARG:NH2	2.34	0.43
56:DX:57:LEU:CD1	56:DX:57:LEU:N	2.80	0.43
46:DN:3:THR:O	46:DN:4:TYR:CD2	2.71	0.43
52:DT:35:LYS:O	52:DT:36:GLU:HB2	2.18	0.43
19:CS:32:LYS:CE	19:CS:32:LYS:H	2.31	0.43
46:DN:73:THR:HA	46:DN:83:LYS:O	2.18	0.43
25:CZ:317:GLU:O	25:CZ:400:VAL:HA	2.18	0.43
36:DA:709:U:H2'	36:DA:710:G:H8	1.80	0.43
22:CV:43:C:H5'	22:CV:44:G:OP2	2.19	0.43
25:CZ:133:VAL:HB	25:CZ:170:VAL:HG22	1.99	0.43
12:AL:45:PRO:HG3	12:AL:53:ARG:CD	2.48	0.43
29:B3:16:PRO:HB2	29:B3:19:GLN:HG3	2.00	0.43
36:DA:2444:G:OP2	41:DF:68:LYS:NZ	2.48	0.43
1:CA:484:G:HO2'	1:CA:485:G:P	2.41	0.43
36:BA:587:C:O2'	36:BA:588:U:OP2	2.29	0.43
2:AB:28:PHE:CZ	2:AB:189:ASP:HA	2.54	0.43
2:AB:32:ILE:HD11	2:AB:40:HIS:CD2	2.54	0.43
1:CA:393:A:H5'	1:CA:483:C:O2'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1337:G:H2'	36:DA:1338:G:H8	1.84	0.43
27:B1:56:GLN:O	27:B1:57:GLU:HB3	2.18	0.43
37:DB:29:A:C2	37:DB:56:G:C2	3.07	0.43
1:AA:167:G:O2'	1:AA:168:G:H5'	2.18	0.43
41:BF:21:ALA:C	41:BF:23:ASP:H	2.21	0.43
55:DW:37:ARG:HG2	55:DW:38:TYR:CD2	2.53	0.43
36:BA:1416:G:HO2'	36:BA:1417:C:H5	1.65	0.43
5:CE:34:VAL:HG12	5:CE:62:ALA:HB1	2.00	0.43
27:D1:53:VAL:CG2	27:D1:74:VAL:HG13	2.48	0.43
26:D0:43:THR:CG2	36:DA:2332:U:H5'	2.48	0.43
36:DA:2330:G:H2'	36:DA:2331:G:O4'	2.17	0.43
55:DW:78:GLU:OE2	55:DW:99:ARG:HD2	2.17	0.43
12:AL:126:LYS:HE2	12:AL:127:GLU:H	1.82	0.43
1:AA:782:A:H2'	1:AA:783:C:H5'	1.99	0.43
1:AA:783:C:O2'	1:AA:784:C:H5'	2.19	0.43
50:BR:74:LYS:HE3	50:BR:77:ARG:HH11	1.84	0.43
36:DA:2122:U:H2'	36:DA:2123:G:H8	1.81	0.43
55:BW:55:ALA:C	55:BW:57:ASN:N	2.71	0.43
4:CD:106:TYR:C	4:CD:108:LEU:H	2.22	0.43
12:CL:97:ARG:HH11	12:CL:97:ARG:CG	2.30	0.43
25:CZ:254:GLU:CD	25:CZ:307:PRO:HA	2.38	0.43
36:DA:116:C:H2'	36:DA:117:G:O4'	2.18	0.43
6:CF:80:ARG:NH1	6:CF:88:VAL:HB	2.33	0.43
28:D2:59:ARG:HH21	36:DA:77:C:P	2.41	0.43
36:DA:1787:A:O4'	36:DA:2589:A:H4'	2.18	0.43
1:AA:599:C:O2'	1:AA:600:C:H5'	2.18	0.43
18:CR:21:LYS:HD2	18:CR:57:GLY:CA	2.49	0.43
44:BJ:52:UNK:CB	44:BJ:87:UNK:HA	2.49	0.43
38:BC:195:ALA:O	38:BC:198:ALA:HB3	2.18	0.43
22:CW:11:C:O2'	22:CW:12:U:H5'	2.18	0.43
5:AE:68:GLU:O	5:AE:68:GLU:HG3	2.17	0.43
11:CK:121:PRO:HG2	11:CK:126:ARG:HG3	2.00	0.43
39:BD:243:GLY:O	39:BD:244:ARG:CB	2.66	0.43
1:AA:1153:C:O2'	1:AA:1154:G:P	2.76	0.43
40:DE:68:ALA:O	40:DE:70:ALA:N	2.51	0.43
36:DA:31:C:H2'	36:DA:32:C:H5'	1.95	0.43
36:BA:1538:G:H2'	36:BA:1539:G:H8	1.83	0.43
1:AA:1005:A:C2'	1:AA:1006:C:H5'	2.48	0.43
36:DA:1528:A:N1	36:DA:1542:A:C2	2.85	0.43
48:BP:84:ASN:ND2	48:BP:84:ASN:N	2.59	0.43
1:AA:1305:G:N2	1:AA:1331:G:C2'	2.60	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1416:G:C3'	1:AA:1417:G:H5''	2.47	0.43
26:B0:10:THR:CG2	26:B0:12:ASN:HB2	2.47	0.43
42:DG:60:LEU:HD22	42:DG:63:ILE:HD12	2.00	0.43
25:CZ:86:ALA:O	25:CZ:88:TYR:N	2.44	0.43
4:CD:101:LEU:HD23	4:CD:121:VAL:CG1	2.42	0.43
36:DA:1885:A:H8	36:DA:1885:A:C5'	2.32	0.43
48:DP:110:TYR:O	48:DP:111:ARG:C	2.57	0.43
2:AB:74:LYS:NZ	2:AB:166:ASP:HB2	2.33	0.43
36:BA:832:G:P	48:BP:40:SER:HB3	2.58	0.43
34:D8:34:TRP:HA	36:DA:2420:C:OP1	2.19	0.43
2:AB:69:LEU:HD13	2:AB:71:VAL:CG2	2.49	0.43
2:AB:93:VAL:HG13	2:AB:93:VAL:O	2.19	0.43
36:BA:2747:G:C2	36:BA:2756:U:H5	2.36	0.43
36:DA:2892:A:N6	36:DA:2893:G:H21	2.16	0.43
42:DG:125:PHE:O	42:DG:126:ASP:C	2.57	0.43
1:CA:1505:G:H2'	23:CX:18:G:OP2	2.19	0.43
40:BE:64:LYS:C	40:BE:66:HIS:H	2.22	0.43
36:DA:1517:G:C2'	36:DA:1518:U:H5'	2.48	0.43
51:BS:106:ARG:CG	51:BS:106:ARG:NH1	2.80	0.43
30:B4:14:ILE:N	30:B4:14:ILE:HD12	2.34	0.43
43:BH:167:GLU:HB3	43:BH:168:PRO:CD	2.45	0.43
12:CL:104:VAL:HG12	12:CL:105:TYR:CD1	2.54	0.43
53:DU:95:LEU:HD11	54:DV:11:GLN:O	2.17	0.43
40:DE:60:ASN:OD1	40:DE:61:ARG:N	2.52	0.43
40:DE:61:ARG:CB	40:DE:62:PRO:CD	2.95	0.43
56:DX:35:THR:HG21	56:DX:37:THR:HG22	2.01	0.43
16:CP:53:VAL:HG23	16:CP:54:GLU:N	2.25	0.43
1:CA:1116:C:C2'	1:CA:1117:G:C5'	2.96	0.43
2:CB:25:ASN:HD22	2:CB:26:PRO:N	2.16	0.43
1:CA:622:A:C8	1:CA:623:C:C6	3.06	0.43
50:BR:13:HIS:O	50:BR:14:SER:C	2.56	0.43
22:CW:75:C:C5'	27:D1:30:VAL:HG11	2.48	0.43
36:BA:278:A:N1	36:BA:362:U:C4	2.87	0.43
36:DA:338:G:N2	36:DA:339:U:H1'	2.33	0.43
36:DA:448:U:H1'	41:DF:84:VAL:HG13	1.99	0.43
13:AM:108:ARG:HH11	13:AM:108:ARG:CG	2.31	0.43
28:D2:8:LYS:O	28:D2:11:GLU:HB2	2.18	0.43
40:BE:24:THR:CG2	40:BE:186:GLY:HA2	2.47	0.43
7:AG:78:ARG:HH11	7:AG:80:VAL:HG21	1.83	0.43
36:BA:2529:G:H5''	36:BA:2530:A:H5''	2.00	0.43
37:DB:13:A:O2'	37:DB:15:A:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1344:G:O2'	36:BA:1385:G:H2'	2.19	0.43
1:CA:741:G:H2'	1:CA:742:G:O4'	2.18	0.43
7:AG:6:ARG:O	7:AG:7:ALA:O	2.36	0.43
36:BA:492:A:C2	36:BA:493:G:H1'	2.53	0.43
11:AK:124:LYS:O	11:AK:127:LYS:HG2	2.19	0.43
13:AM:58:GLU:O	13:AM:62:ASN:HB2	2.19	0.43
36:BA:1991:U:C2'	36:BA:1992:G:H5''	2.47	0.43
3:AC:3:ASN:CG	3:AC:4:LYS:N	2.70	0.43
44:DJ:96:UNK:HA	44:DJ:99:UNK:CB	2.49	0.43
36:BA:391:G:H1'	36:BA:411:G:O4'	2.19	0.43
1:AA:1402:C:C5	1:AA:1403:C:C5	3.06	0.43
36:DA:1469:A:O2'	36:DA:1470:G:H5'	2.19	0.43
50:BR:53:HIS:O	50:BR:53:HIS:ND1	2.51	0.43
1:AA:513:C:H2'	1:AA:514:C:H6	1.83	0.43
26:B0:43:THR:CG2	36:BA:2332:U:H5'	2.49	0.43
39:BD:238:GLY:O	39:BD:239:ARG:C	2.56	0.43
36:BA:2461:C:H2'	36:BA:2462:U:H6	1.83	0.43
36:DA:151:C:H2'	36:DA:152:G:H8	1.83	0.43
38:BC:62:VAL:O	38:BC:160:ARG:HA	2.18	0.43
36:BA:1473:G:H2'	36:BA:1474:C:O4'	2.18	0.43
2:AB:226:ARG:O	2:AB:226:ARG:HD2	2.19	0.43
10:AJ:47:PHE:CE2	14:AN:37:PHE:HE2	2.37	0.43
36:BA:1916:A:H2'	36:BA:1917:U:O4'	2.18	0.43
1:AA:1346:A:OP1	9:AI:120:ARG:NH2	2.51	0.43
36:DA:1441:G:O2'	36:DA:1442:G:H5'	2.19	0.43
36:BA:2166:G:H2'	36:BA:2167:U:C6	2.53	0.43
44:BJ:119:UNK:O	44:BJ:120:UNK:CB	2.66	0.43
52:BT:63:VAL:O	52:BT:73:GLU:HA	2.18	0.43
1:CA:923:A:O4'	1:CA:1398:A:C2	2.70	0.43
10:CJ:12:ASP:OD1	10:CJ:12:ASP:C	2.57	0.43
36:DA:60:G:C4	36:DA:63:U:C4	3.05	0.43
45:DK:56:UNK:O	45:DK:68:UNK:C	2.66	0.43
16:CP:12:LYS:HG2	16:CP:13:HIS:CD2	2.53	0.43
1:CA:321:A:O2'	1:CA:322:C:H5'	2.18	0.43
38:DC:98:GLU:O	38:DC:98:GLU:HG3	2.18	0.43
38:BC:100:ILE:O	38:BC:104:LEU:HB2	2.18	0.43
43:BH:83:TYR:HB3	43:BH:135:GLY:O	2.18	0.43
49:BQ:141:GLN:OXT	58:BZ:53:ILE:HD12	2.19	0.43
40:DE:33:VAL:CG1	40:DE:69:LYS:HE3	2.48	0.43
48:DP:9:ASN:N	48:DP:10:PRO:CD	2.80	0.43
46:BN:115:ARG:HG3	46:BN:115: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:AV:46:G:C3'	22:AV:47:U:C5'	2.74	0.43
36:DA:2312:U:H2'	36:DA:2313:C:H5'	1.99	0.43
32:D6:17:LYS:HD3	32:D6:17:LYS:O	2.19	0.43
57:DY:76:CYS:O	57:DY:99:CYS:SG	2.77	0.43
57:BY:80:GLY:O	57:BY:81:LYS:O	2.36	0.43
20:AT:55:ILE:O	20:AT:58:LYS:HB3	2.19	0.43
36:DA:2110:G:N2	36:DA:2178:C:C5	2.86	0.43
30:D4:14:ILE:N	30:D4:14:ILE:HD12	2.33	0.43
30:D4:28:LYS:HE2	30:D4:29:PRO:HD2	1.99	0.43
51:DS:14:VAL:HG12	51:DS:15:ARG:N	2.34	0.43
52:BT:106:SER:O	52:BT:107:ASP:HB3	2.19	0.43
51:BS:13:ARG:CG	51:BS:14:VAL:N	2.77	0.43
51:BS:14:VAL:HG12	51:BS:15:ARG:N	2.33	0.43
10:AJ:96:ILE:CD1	10:AJ:96:ILE:N	2.76	0.43
36:DA:1053:C:H42	36:DA:1108:U:H3	1.65	0.43
40:BE:144:ARG:HG3	40:BE:145:LYS:H	1.83	0.43
36:DA:2010:G:H2'	36:DA:2011:U:H6	1.83	0.43
1:CA:722:A:O3'	1:CA:723:U:H2'	2.18	0.43
36:DA:2807:G:C2'	36:DA:2808:U:H5"	2.48	0.43
2:CB:163:PHE:HA	2:CB:185:ILE:O	2.18	0.43
48:BP:74:GLU:C	48:BP:75:ILE:HD12	2.39	0.43
36:BA:1059:G:H3'	36:BA:1060:U:H6	1.84	0.43
36:BA:1068:G:H1'	36:BA:1069:A:O5'	2.19	0.43
42:DG:12:TYR:HA	42:DG:16:ARG:CG	2.48	0.43
58:DZ:168:GLU:CD	58:DZ:168:GLU:O	2.57	0.43
12:CL:33:ARG:HD3	12:CL:62:SER:HG	1.80	0.43
58:BZ:114:GLY:N	58:BZ:146:ILE:HG22	2.33	0.43
27:D1:69:LYS:HZ1	27:D1:76:ARG:NH2	2.01	0.43
7:AG:102:ARG:CG	7:AG:103:TRP:N	2.82	0.43
7:AG:99:LEU:HA	7:AG:102:ARG:HD2	2.01	0.43
42:BG:138:GLN:HG2	42:BG:153:ARG:HG2	2.00	0.43
54:BV:39:LEU:HA	54:BV:47:VAL:HG11	1.99	0.43
54:BV:34:GLU:HA	54:BV:57:VAL:O	2.19	0.43
24:AY:16:H2U:C5'	24:AY:17:H2U:H5'	2.42	0.43
36:BA:301:G:C6	36:BA:317:G:C6	3.06	0.43
34:D8:48:PHE:CD1	34:D8:48:PHE:N	2.85	0.43
34:D8:53:PRO:HA	34:D8:56:GLU:HB2	2.01	0.43
50:DR:10:LEU:HB3	50:DR:17:ARG:HE	1.83	0.43
50:BR:76:VAL:O	50:BR:79:LEU:HB3	2.19	0.43
22:CW:40:C:H2'	22:CW:41:C:H6	1.84	0.43
36:BA:2126:A:HO2'	36:BA:2127:G:P	2.41	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:113:LYS:HD3	9:AI:119:ALA:HA	2.00	0.43
9:AI:110:GLU:OE2	9:AI:113:LYS:NZ	2.52	0.43
19:AS:13:ASP:C	19:AS:15:LEU:H	2.22	0.43
57:BY:35:TYR:HD2	57:BY:68:HIS:NE2	2.16	0.43
1:CA:375:U:O2'	16:CP:28:ARG:HD2	2.18	0.43
36:DA:995:C:N3	46:DN:1:MET:HE2	2.34	0.43
36:BA:500:G:H22	36:BA:502:A:H3'	1.81	0.43
4:AD:159:ARG:HG3	4:AD:159:ARG:NH1	2.33	0.43
1:CA:220:G:H2'	1:CA:221:C:H5'	2.00	0.43
22:CV:63:G:O2'	22:CV:64:A:H5'	2.19	0.43
11:CK:124:LYS:O	11:CK:127:LYS:HG2	2.18	0.43
28:D2:47:ASN:ND2	36:DA:95:G:H1'	2.34	0.43
1:AA:1411:C:O2'	1:AA:1412:C:H5'	2.18	0.43
27:B1:30:VAL:H	36:BA:2396:G:C4'	2.31	0.43
22:CW:52:G:O6	22:CW:62:C:N4	2.51	0.43
36:DA:2060:A:N6	41:DF:74:ARG:NH2	2.66	0.43
5:CE:144:THR:O	5:CE:148:VAL:HG23	2.19	0.43
36:DA:1510:G:C2'	36:DA:1511:C:H5'	2.48	0.43
42:DG:145:THR:HG22	42:DG:147:ASP:H	1.82	0.43
36:DA:2012:G:OP2	55:DW:16:LYS:HE3	2.18	0.43
22:CV:67:C:H2'	22:CV:68:C:H6	1.84	0.43
42:BG:39:ILE:HG22	42:BG:157:ILE:HG23	2.00	0.43
25:AZ:313:HIS:CB	25:AZ:380:LEU:HD12	2.49	0.43
36:BA:381:G:O2'	36:BA:382:G:H5'	2.18	0.43
8:CH:83:ILE:HG13	8:CH:137:VAL:HG22	2.00	0.43
10:AJ:44:VAL:CG2	10:AJ:66:ARG:HH21	2.30	0.43
1:CA:1262:C:H2'	1:CA:1263:C:C6	2.54	0.43
33:B7:43:THR:HG23	33:B7:44:PRO:CD	2.49	0.43
57:DY:20:TYR:C	57:DY:22:GLY:H	2.21	0.43
57:DY:22:GLY:O	57:DY:23:ARG:C	2.57	0.43
2:CB:168:THR:HG21	2:CB:192:SER:HA	1.99	0.43
4:AD:106:TYR:C	4:AD:108:LEU:H	2.21	0.43
36:DA:986:C:C2'	36:DA:987:G:H5'	2.48	0.43
23:AX:22:U:O2'	23:AX:23:G:H5'	2.18	0.43
25:CZ:94:THR:O	25:CZ:96:ALA:N	2.52	0.43
5:CE:69:VAL:O	5:CE:71:LEU:N	2.47	0.43
1:AA:833:U:H2'	1:AA:834:C:C6	2.52	0.43
50:BR:41:ALA:C	50:BR:43:GLU:N	2.72	0.43
36:BA:1787:A:O4'	36:BA:2589:A:H4'	2.17	0.43
1:AA:838:G:C6	1:AA:840:C:H1'	2.53	0.43
36:BA:1929:G:H4'	36:BA:1930:G:OP1	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1530:C:H2'	36:DA:1531:C:C6	2.54	0.43
20:CT:38:LYS:O	20:CT:41:ILE:HG12	2.18	0.43
1:CA:936:C:H2'	1:CA:937:A:H8	1.84	0.43
11:CK:105:VAL:HG23	11:CK:105:VAL:O	2.18	0.43
36:BA:614:U:O4'	36:BA:614:U:O2	2.35	0.43
36:DA:614:U:O2	36:DA:614:U:O4'	2.35	0.43
43:DH:116:GLU:HA	43:DH:116:GLU:OE1	2.19	0.43
38:DC:79:LYS:HA	38:DC:97:GLU:CD	2.39	0.43
13:AM:15:VAL:HA	13:AM:18:ALA:HB3	1.99	0.43
41:DF:3:GLU:O	41:DF:3:GLU:HG3	2.18	0.43
36:DA:1540:U:H3'	36:DA:1541:G:O3'	2.18	0.43
32:D6:33:LYS:O	32:D6:34:LEU:HB2	2.18	0.43
58:DZ:99:TYR:CD2	58:DZ:123:ASP:HB3	2.46	0.43
43:BH:153:LYS:HB2	43:BH:154:PRO:HD2	2.01	0.43
27:B1:5:CYS:HB3	27:B1:8:SER:OG	2.18	0.43
34:B8:34:TRP:HA	36:BA:2420:C:OP1	2.18	0.43
41:BF:103:LYS:CG	41:BF:106:ARG:HH21	2.30	0.43
32:B6:36:LEU:O	32:B6:37:ARG:NE	2.52	0.43
36:DA:654(U):A:C6	36:DA:654(V):A:N6	2.87	0.43
46:BN:87:LEU:O	46:BN:88:GLU:C	2.57	0.43
34:D8:13:ARG:NH2	36:DA:250:G:OP2	2.52	0.43
36:DA:251:A:H4'	48:DP:51:PHE:HZ	1.84	0.43
51:BS:78:LEU:HD11	51:BS:103:GLU:CG	2.35	0.43
36:DA:1946:U:H2'	36:DA:1947:C:C6	2.53	0.43
58:BZ:108:PRO:C	58:BZ:110:GLY:H	2.22	0.43
36:DA:2315:G:N3	42:DG:128:ARG:HG3	2.33	0.43
36:BA:562:U:C4	36:BA:2036:C:O4'	2.72	0.43
3:CC:135:LYS:HZ1	5:CE:50:GLU:HG2	1.82	0.43
51:DS:77:ALA:O	51:DS:78:LEU:C	2.57	0.43
9:AI:33:PHE:C	9:AI:35:GLU:N	2.72	0.43
7:AG:37:ASN:HD21	9:AI:41:VAL:H	1.65	0.43
58:BZ:16:SER:O	58:BZ:20:ARG:HD2	2.19	0.43
30:B4:28:LYS:HE2	30:B4:29:PRO:HD2	2.00	0.43
1:CA:1255:G:H3'	1:CA:1279:A:H61	1.84	0.43
10:CJ:37:PRO:HA	10:CJ:72:VAL:HG22	1.99	0.43
49:DQ:27:VAL:O	49:DQ:28:ALA:HB3	2.17	0.43
25:AZ:141:VAL:HG23	25:AZ:146:LEU:HD21	2.01	0.43
39:BD:147:LEU:HD12	39:BD:147:LEU:HA	1.76	0.43
36:BA:1090:U:H2'	36:BA:1091:G:O4'	2.18	0.43
43:BH:98:LEU:CB	43:BH:125:VAL:HG21	2.39	0.43
4:AD:150:GLU:N	4:AD:150:GLU:OE1	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:27:LYS:O	20:AT:27:LYS:HD3	2.17	0.43
19:CS:10:PHE:O	19:CS:10:PHE:CD1	2.71	0.43
13:AM:84:ILE:HG13	19:AS:66:MET:SD	2.57	0.43
42:BG:63:ILE:HD13	42:BG:141:PHE:CD2	2.53	0.43
1:CA:1288:A:H2'	1:CA:1289:A:C8	2.53	0.43
19:AS:10:PHE:CD1	19:AS:10:PHE:O	2.71	0.43
7:CG:16:LEU:HD21	9:CI:45:ALA:HB2	2.01	0.43
39:DD:134:ARG:HG3	39:DD:187:GLY:CA	2.44	0.43
50:DR:13:HIS:O	50:DR:14:SER:C	2.57	0.43
36:BA:334:C:P	36:BA:335:C:H41	2.41	0.43
36:BA:318:C:H2'	36:BA:319:C:H6	1.84	0.43
9:AI:111:ARG:O	9:AI:119:ALA:CB	2.66	0.43
9:AI:112:LYS:HA	9:AI:119:ALA:HB2	2.00	0.43
36:BA:2774:C:H2'	36:BA:2775:A:O4'	2.19	0.43
40:BE:11:MET:HB3	40:BE:24:THR:HA	2.00	0.43
36:DA:318:C:H2'	36:DA:319:C:H6	1.83	0.43
1:AA:965:A:C2	1:AA:969:A:N1	2.86	0.43
16:CP:50:LYS:C	16:CP:50:LYS:HD3	2.38	0.43
36:DA:2262:U:H2'	36:DA:2263:C:H6	1.83	0.43
13:AM:77:ASN:O	13:AM:81:LEU:CD2	2.66	0.43
25:AZ:152:MET:HE3	25:AZ:156:ASP:HB2	1.98	0.43
39:BD:118:VAL:CG2	39:BD:119:ALA:N	2.80	0.43
36:DA:225:A:C2'	36:DA:226:G:H5'	2.48	0.43
36:DA:1286:A:OP1	50:DR:105:ARG:CZ	2.67	0.43
27:B1:25:LYS:HE2	36:BA:2396:G:H5'	2.01	0.43
11:CK:48:ILE:HD11	11:CK:67:ASP:HB3	1.99	0.43
46:BN:42:TRP:CD1	53:BU:63:VAL:HG11	2.54	0.43
36:DA:1991:U:C2'	36:DA:1992:G:H5''	2.48	0.43
36:DA:67:U:H2'	36:DA:68:G:C8	2.52	0.43
1:CA:308:C:H2'	1:CA:309:G:C8	2.53	0.43
24:CY:54:5MU:H73	24:CY:55:PSU:O2	2.19	0.43
36:BA:2340:G:H2'	36:BA:2341:G:H8	1.83	0.43
1:CA:514:C:H2'	1:CA:515:G:H8	1.82	0.43
8:AH:10:LEU:CD2	8:AH:83:ILE:HD11	2.47	0.43
36:DA:2081:C:H2'	36:DA:2082:A:C8	2.54	0.43
38:DC:62:VAL:O	38:DC:160:ARG:HA	2.17	0.43
36:DA:2842:G:C2	36:DA:2876:G:C2	3.07	0.43
1:CA:1444:C:H2'	1:CA:1445:C:H6	1.82	0.43
36:DA:516:C:O2'	36:DA:517:C:H5'	2.18	0.43
35:B9:27:CYS:SG	35:B9:28:GLU:N	2.92	0.43
36:BA:992:C:H2'	36:BA:993:G:H8	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:95:GLY:O	25:CZ:99:MET:HE2	2.19	0.43
36:BA:1532:C:H2'	36:BA:1533:G:O4'	2.19	0.43
1:AA:750:G:N3	15:AO:23:GLY:HA3	2.33	0.43
25:AZ:94:THR:O	25:AZ:96:ALA:N	2.52	0.43
1:AA:123:C:OP1	1:AA:312:C:H5'	2.18	0.43
36:BA:85:G:N3	36:BA:103:A:C2	2.86	0.43
40:DE:79:ARG:HG2	40:DE:79:ARG:HH11	1.83	0.43
6:CF:98:LEU:O	6:CF:98:LEU:HD12	2.18	0.43
49:DQ:58:PHE:HD1	49:DQ:58:PHE:O	2.02	0.43
36:DA:53:A:H2'	36:DA:54:G:H5'	2.01	0.43
46:BN:108:PRO:O	46:BN:113:GLY:HA3	2.19	0.43
52:DT:63:VAL:O	52:DT:73:GLU:HA	2.18	0.43
18:AR:33:ASP:O	18:AR:40:LEU:HD11	2.19	0.43
28:B2:44:LEU:C	28:B2:46:GLN:H	2.22	0.43
42:BG:45:GLU:O	42:BG:46:ALA:HB2	2.19	0.43
42:BG:43:LEU:HD21	42:BG:90:LEU:HD22	1.99	0.43
40:BE:47:VAL:HG23	40:BE:84:PHE:O	2.19	0.43
13:AM:23:TYR:HE2	13:AM:70:LEU:HD22	1.77	0.43
9:CI:81:ILE:O	9:CI:85:LEU:HG	2.19	0.43
38:BC:27:ARG:CD	38:BC:182:PRO:CB	2.96	0.43
36:BA:654(E):G:N2	36:BA:654(Q):C:O2'	2.52	0.43
57:BY:7:VAL:HG12	57:BY:8:LYS:HD2	2.00	0.43
57:BY:81:LYS:NZ	57:BY:99:CYS:SG	2.80	0.43
1:AA:1060:C:H5''	10:AJ:51:ARG:HG2	2.00	0.43
2:AB:118:LEU:HD21	2:AB:138:LEU:HD22	2.00	0.43
48:BP:98:GLU:O	48:BP:101:VAL:HG22	2.18	0.43
51:BS:25:ARG:NH1	51:BS:42:ASP:OD2	2.52	0.43
36:DA:299:A:N1	36:DA:322:A:O2'	2.37	0.43
41:DF:132:VAL:O	41:DF:138:GLU:OE1	2.37	0.43
37:DB:42:C:O2	42:DG:66:GLN:NE2	2.52	0.43
2:CB:74:LYS:NZ	2:CB:166:ASP:HB2	2.34	0.43
43:DH:51:ARG:HG3	43:DH:52:VAL:N	2.34	0.43
48:DP:46:LYS:HG2	48:DP:52:GLU:HG2	2.01	0.43
1:AA:1314:C:O2'	1:AA:1315:U:H5'	2.19	0.43
36:BA:1866:C:H6	36:BA:1866:C:O5'	2.01	0.43
48:BP:16:ARG:HH11	48:BP:16:ARG:CA	2.32	0.43
36:DA:2137:C:H2'	36:DA:2138:C:H6	1.80	0.43
1:AA:1243:C:H2'	1:AA:1244:C:H6	1.83	0.43
47:DO:66:LYS:H	47:DO:82:ASN:HD21	1.67	0.43
10:CJ:5:ARG:CB	10:CJ:99:LYS:HB2	2.37	0.43
36:BA:2414:G:C2	36:BA:2415:G:C8	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DW:29:LEU:CD1	55:DW:51:LEU:HD11	2.48	0.43
40:DE:60:ASN:O	40:DE:61:ARG:C	2.56	0.43
46:DN:23:LEU:HB3	46:DN:60:ILE:CG2	2.39	0.43
2:AB:200:ILE:HD12	2:AB:200:ILE:N	2.24	0.43
1:CA:939:G:C3'	7:CG:102:ARG:HH22	2.32	0.43
36:DA:34:C:N4	36:DA:447:A:H61	2.05	0.43
15:CO:17:ARG:NH1	15:CO:77:ARG:NH1	2.67	0.43
2:CB:229:VAL:CG1	2:CB:230:VAL:N	2.71	0.43
19:CS:37:ARG:HG3	19:CS:37:ARG:H	1.41	0.43
19:CS:35:SER:HB2	19:CS:37:ARG:HD2	2.00	0.43
19:AS:45:VAL:C	19:AS:47:HIS:H	2.18	0.43
1:CA:1371:G:C6	1:CA:1372:U:C4	3.07	0.43
43:BH:23:ARG:O	43:BH:24:VAL:CG2	2.66	0.43
37:DB:67:G:O2'	37:DB:68:C:O5'	2.37	0.43
52:DT:18:ASP:OD1	52:DT:18:ASP:N	2.51	0.43
3:AC:186:PHE:CE2	3:AC:188:LEU:HD22	2.53	0.43
36:BA:448:U:H1'	41:BF:84:VAL:HG13	2.01	0.43
36:DA:285:C:H2'	36:DA:286:C:C6	2.54	0.43
1:CA:60:A:H4'	1:CA:61:G:O5'	2.19	0.43
12:CL:38:THR:O	12:CL:39:VAL:HG23	2.18	0.43
52:BT:35:LYS:O	52:BT:38:ASN:ND2	2.51	0.43
1:AA:8:A:C4	4:AD:209:ARG:HB2	2.53	0.43
50:BR:100:LEU:N	50:BR:100:LEU:CD1	2.82	0.43
48:DP:124:LYS:HD3	48:DP:124:LYS:HA	1.84	0.43
39:DD:118:VAL:CG2	39:DD:119:ALA:N	2.82	0.43
36:DA:900:A:H3'	36:DA:901:A:H8	1.84	0.43
36:BA:2537:U:H2'	36:BA:2538:C:H6	1.79	0.43
1:CA:167:G:O2'	1:CA:168:G:H5'	2.18	0.43
49:BQ:5:ARG:CZ	49:BQ:5:ARG:CB	2.97	0.43
33:B7:9:ARG:HG3	33:B7:9:ARG:HH11	1.84	0.43
36:DA:2693:A:H2'	36:DA:2694:G:C8	2.51	0.43
52:BT:134:GLU:O	52:BT:135:ALA:CB	2.66	0.43
1:AA:189(K):U:H2'	1:AA:189(L):G:H8	1.82	0.43
1:CA:509:A:C6	1:CA:510:A:N1	2.87	0.43
36:BA:151:C:H2'	36:BA:152:G:H8	1.83	0.43
36:DA:1094:U:HO2'	36:DA:1097:U:H5	1.65	0.43
36:DA:1097:U:O2'	36:DA:1098:A:H5'	2.19	0.43
36:BA:2684:U:C4	36:BA:2685:G:C5	3.07	0.43
22:CW:10:G:O2'	22:CW:11:C:H5'	2.18	0.43
36:DA:1530:C:H2'	36:DA:1531:C:H6	1.84	0.43
47:DO:7:TYR:CE1	47:DO:20:MET:HB2	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:894:G:O2'	1:AA:895:G:H5'	2.18	0.43
18:AR:61:LYS:O	18:AR:65:ILE:HG13	2.19	0.43
36:DA:248:G:H5''	36:DA:386:G:N2	2.33	0.43
18:CR:33:ASP:O	18:CR:40:LEU:HD11	2.19	0.43
36:BA:2796:U:OP1	36:BA:2799:C:H5	2.02	0.43
39:BD:186:HIS:CD2	39:BD:188:GLU:HB2	2.54	0.43
25:CZ:116:THR:O	25:CZ:120:ILE:HG13	2.19	0.43
1:CA:838:G:C6	1:CA:840:C:H1'	2.54	0.43
1:CA:451:A:N6	1:CA:480:U:H2'	2.34	0.43
25:AZ:6:ILE:HD12	25:AZ:6:ILE:N	2.34	0.43
28:D2:54:LYS:HE2	36:DA:73:A:P	2.59	0.43
1:AA:1425:U:H2'	1:AA:1426:C:C6	2.54	0.43
38:DC:3:HIS:HB3	38:DC:7:TYR:HD2	1.84	0.43
29:D3:5:LYS:HE3	29:D3:34:GLU:OE1	2.19	0.43
38:BC:79:LYS:HD2	38:BC:97:GLU:OE1	2.19	0.43
39:DD:242:ARG:HB2	39:DD:243:GLY:H	1.38	0.43
43:BH:85:LYS:C	43:BH:85:LYS:CE	2.87	0.43
58:BZ:120:ILE:O	58:BZ:121:HIS:HB2	2.19	0.43
36:DA:636:G:H4'	36:DA:638:G:O3'	2.19	0.43
43:DH:153:LYS:HB2	43:DH:154:PRO:HD2	1.99	0.43
1:AA:1202:G:H2'	1:AA:1203:C:O4'	2.19	0.43
48:DP:147:LEU:CG	48:DP:148:LEU:H	2.20	0.43
17:AQ:76:LEU:HG	17:AQ:77:VAL:N	2.34	0.43
22:AV:22:G:C2'	22:AV:23:A:H5''	2.49	0.43
51:DS:89:ARG:HB3	51:DS:92:TYR:HB3	2.00	0.43
48:DP:33:ARG:O	48:DP:34:GLY:O	2.37	0.43
42:DG:37:VAL:O	42:DG:94:LEU:HB2	2.19	0.43
51:DS:18:ILE:HG13	51:DS:18:ILE:H	1.52	0.43
40:BE:60:ASN:OD1	40:BE:61:ARG:N	2.52	0.43
17:AQ:33:GLY:O	17:AQ:34:LYS:C	2.57	0.43
2:AB:87:ARG:NH2	2:AB:233:SER:N	2.62	0.43
25:AZ:138:VAL:HG21	25:AZ:173:GLY:N	2.34	0.43
56:BX:28:PHE:N	56:BX:28:PHE:CD1	2.87	0.43
40:BE:116:VAL:CG2	40:BE:117:MET:H	2.32	0.43
35:B9:35:ARG:HD3	36:BA:2742:C:OP1	2.18	0.43
46:DN:58:ASP:OD2	46:DN:59:LYS:HG2	2.18	0.43
4:AD:8:VAL:C	4:AD:10:ARG:H	2.21	0.43
1:AA:78:G:H2'	1:AA:79:G:O4'	2.18	0.43
41:BF:164:ARG:HD2	41:BF:176:LEU:O	2.19	0.43
52:BT:23:ARG:HA	52:BT:52:ILE:HD12	1.98	0.43
36:DA:747:U:C4	36:DA:2613:U:C5	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:61:TYR:HD1	19:CS:62:ILE:N	2.17	0.43
22:AW:40:C:H2'	22:AW:41:C:H6	1.84	0.43
49:DQ:76:LYS:HB3	49:DQ:91:GLU:CG	2.49	0.43
36:BA:927:G:H3'	36:BA:928:G:H8	1.82	0.43
36:DA:1332:G:N2	36:DA:1610:A:H8	2.11	0.43
1:AA:1205:U:O2'	3:AC:195:VAL:HG23	2.19	0.43
36:BA:203:C:C3'	36:BA:204:A:H5''	2.44	0.43
24:AY:66:C:H2'	24:AY:67:G:C8	2.54	0.43
36:BA:318:C:O2'	36:BA:319:C:H5'	2.19	0.43
24:CY:26:A:O2'	24:CY:27:C:H5'	2.19	0.43
25:CZ:141:VAL:HG23	25:CZ:146:LEU:HD21	2.00	0.43
25:CZ:24:LYS:HG3	25:CZ:25:THR:N	2.30	0.43
36:DA:2262:U:H2'	36:DA:2263:C:C6	2.53	0.43
7:AG:94:ARG:H	7:AG:94:ARG:HG3	1.62	0.43
1:AA:66:G:N2	1:AA:172:A:C2	2.87	0.43
42:BG:154:GLY:O	42:BG:155:MET:CB	2.66	0.43
25:CZ:158:LEU:O	25:CZ:163:PHE:HB2	2.19	0.43
1:AA:427:U:C4	1:AA:428:G:C6	3.07	0.43
4:AD:36:ARG:C	4:AD:38:TYR:N	2.72	0.43
29:D3:15:TYR:CD2	29:D3:19:GLN:NE2	2.85	0.43
22:CV:57:G:H2'	22:CV:58:A:H5'	2.00	0.43
9:AI:97:LYS:N	9:AI:98:PRO:CD	2.82	0.43
44:BJ:25:UNK:HA	44:BJ:116:UNK:CA	2.49	0.43
36:BA:9:U:O4	36:BA:2629:A:N7	2.52	0.43
36:DA:66:C:H2'	36:DA:67:U:H6	1.84	0.43
47:BO:10:VAL:HG21	47:BO:16:ALA:C	2.39	0.43
1:AA:1033:G:H2'	1:AA:1034:G:O4'	2.19	0.43
52:DT:134:GLU:O	52:DT:135:ALA:CB	2.67	0.43
6:AF:2:ARG:HD2	6:AF:69:GLU:HB3	2.01	0.43
2:AB:112:VAL:O	2:AB:115:LEU:HB3	2.18	0.43
36:BA:742:G:H2'	36:BA:743:G:H8	1.84	0.43
57:BY:22:GLY:O	57:BY:23:ARG:O	2.37	0.43
1:CA:827:U:C5'	1:CA:828:A:OP2	2.67	0.43
25:CZ:340:PRO:HG2	25:CZ:342:PHE:CZ	2.54	0.43
25:CZ:185:ASN:H	25:CZ:185:ASN:HD22	1.64	0.43
1:CA:716:A:N3	11:CK:117:ASN:O	2.51	0.43
43:BH:147:ASN:O	43:BH:151:ILE:HG12	2.18	0.43
36:DA:20:C:H2'	36:DA:21:A:C8	2.53	0.43
3:AC:28:GLN:O	3:AC:29:TYR:CB	2.66	0.43
1:CA:495:A:H61	4:CD:119:GLN:NE2	2.17	0.43
25:CZ:120:ILE:O	25:CZ:123:ALA:HB3	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:625:G:O2'	36:BA:626:U:H5'	2.19	0.43
1:CA:896:C:O2'	1:CA:897:C:H5'	2.18	0.43
25:AZ:67:HIS:ND1	25:AZ:80:VAL:HG22	2.34	0.43
7:AG:125:MET:O	7:AG:129:GLU:HG3	2.19	0.43
36:DA:343:C:C2'	36:DA:344:G:H5'	2.49	0.43
25:CZ:68:VAL:O	25:CZ:78:SER:O	2.37	0.43
42:DG:98:ARG:HG2	42:DG:98:ARG:H	1.62	0.43
41:DF:46:ARG:HA	41:DF:46:ARG:HD2	1.73	0.43
36:DA:2413:G:N3	48:DP:70:GLN:NE2	2.66	0.43
36:DA:1775:U:H2'	36:DA:1776:G:H5'	2.01	0.43
1:CA:1150:U:O2'	1:CA:1151:A:H5'	2.19	0.43
1:CA:1153:C:O2'	1:CA:1154:G:H5'	2.19	0.43
56:BX:51:VAL:HG13	56:BX:81:VAL:HB	2.01	0.43
1:AA:228:A:C5'	1:AA:228:A:C8	2.97	0.43
52:DT:33:LYS:HD2	52:DT:43:GLN:HB3	2.01	0.43
28:B2:53:LEU:C	28:B2:55:ARG:N	2.72	0.43
39:DD:62:TYR:CD1	39:DD:62:TYR:C	2.92	0.43
34:B8:5:LYS:HG2	36:BA:242:G:C8	2.54	0.43
39:BD:30:GLU:CG	39:BD:35:LYS:HZ1	2.30	0.43
13:CM:66:LEU:CD1	13:CM:66:LEU:N	2.82	0.43
32:D6:32:ASN:CG	32:D6:33:LYS:N	2.71	0.43
36:BA:2188:C:C6	36:BA:2189:U:H5	2.37	0.43
52:BT:27:THR:CG2	52:BT:28:VAL:H	2.30	0.43
24:CY:3:G:O6	24:CY:70:C:N3	2.51	0.43
27:B1:5:CYS:CB	27:B1:8:SER:HG	2.32	0.43
52:DT:13:ARG:CZ	52:DT:13:ARG:CA	2.97	0.43
34:B8:13:ARG:NH2	36:BA:250:G:OP2	2.52	0.43
1:CA:542:G:N2	1:CA:543:C:C2	2.87	0.43
4:CD:192:GLU:O	4:CD:193:ASP:C	2.57	0.43
50:DR:30:THR:HG22	50:DR:31:HIS:CE1	2.54	0.43
2:AB:142:LEU:HD23	2:AB:142:LEU:O	2.19	0.43
36:DA:1021:A:C3'	36:DA:1021:A:C8	3.02	0.43
48:DP:48:PRO:O	48:DP:49:ARG:C	2.57	0.43
36:DA:322:A:O4'	36:DA:340:A:H1'	2.19	0.43
36:BA:676:A:H2	36:BA:802:A:H61	1.67	0.43
36:DA:2314:C:C5'	42:DG:38:VAL:HG21	2.48	0.43
27:B1:78:LYS:N	27:B1:78:LYS:HE2	2.34	0.43
36:DA:2136:C:H2'	36:DA:2137:C:H6	1.80	0.43
48:DP:115:LEU:HD23	48:DP:115:LEU:N	2.34	0.43
10:CJ:75:ILE:HG13	10:CJ:76:ASN:N	2.28	0.43
36:BA:2134:A:H61	36:BA:2157:G:H1'	1.76	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:18:PHE:O	9:CI:19:LEU:HB2	2.18	0.43
39:DD:13:ARG:HH11	39:DD:13:ARG:HG3	1.84	0.43
53:DU:83:LEU:HA	53:DU:88:ILE:CG1	2.48	0.43
42:DG:4:ASP:OD2	42:DG:9:ARG:NH2	2.52	0.43
36:DA:1059:G:H3'	36:DA:1060:U:H6	1.83	0.43
41:BF:107:LYS:HE3	41:BF:205:ARG:CG	2.49	0.43
4:AD:150:GLU:HG2	4:AD:151:LYS:N	2.34	0.43
36:BA:747:U:C5	36:BA:2613:U:C5	3.07	0.43
1:AA:1117:G:H21	1:AA:1180:A:H1'	1.83	0.43
1:CA:1286:A:O2'	1:CA:1287:A:P	2.76	0.43
55:DW:25:ARG:HB2	55:DW:25:ARG:NH1	2.33	0.43
1:AA:706:A:C1'	11:AK:29:ILE:HD11	2.49	0.43
36:DA:278:A:N1	36:DA:362:U:C4	2.87	0.43
15:CO:39:LEU:O	15:CO:42:HIS:HB3	2.18	0.43
58:DZ:70:LEU:HD11	58:DZ:91:LEU:HD21	1.99	0.43
43:BH:65:HIS:O	43:BH:67:LEU:N	2.42	0.43
43:BH:72:ILE:O	43:BH:75:ALA:N	2.52	0.43
50:DR:52:ILE:O	50:DR:55:ALA:HB3	2.19	0.43
57:DY:60:PHE:O	57:DY:61:ILE:CG1	2.67	0.43
24:AY:26:A:O2'	24:AY:27:C:H5'	2.19	0.43
13:CM:99:ARG:C	13:CM:101:GLN:NE2	2.72	0.43
16:CP:14:ASN:OD1	16:CP:16:HIS:CE1	2.71	0.43
2:AB:15:VAL:N	2:AB:16:HIS:CE1	2.87	0.43
46:BN:4:TYR:O	46:BN:5:VAL:C	2.57	0.43
14:CN:44:LEU:C	14:CN:44:LEU:HD12	2.39	0.43
16:AP:50:LYS:HD3	16:AP:50:LYS:C	2.39	0.43
1:AA:197:A:C5	1:AA:221:C:H4'	2.54	0.43
1:AA:198:G:O2'	1:AA:199:G:O5'	2.37	0.43
1:AA:522:C:H41	12:AL:53:ARG:NH2	2.14	0.43
31:D5:7:PRO:HA	36:DA:2615:U:C2	2.54	0.43
2:AB:21:ARG:HB3	2:AB:39:ILE:HA	2.01	0.43
1:AA:878:G:H5'	8:AH:89:PRO:HG2	2.01	0.43
24:CY:60:U:H2'	24:CY:61:C:C5	2.53	0.43
36:BA:134:C:H2'	36:BA:135:G:C8	2.51	0.43
36:DA:2358:G:N2	48:DP:55:ARG:NH2	2.66	0.43
58:BZ:74:VAL:HG22	58:BZ:86:VAL:CG1	2.48	0.43
36:DA:1709:U:H1'	36:DA:2860:A:N3	2.33	0.43
36:BA:1469:A:O2'	36:BA:1470:G:H5'	2.19	0.43
7:AG:69:VAL:HG11	7:AG:104:LEU:HD22	2.01	0.43
7:CG:140:ASP:C	7:CG:140:ASP:OD1	2.57	0.43
12:CL:126:LYS:HE2	12:CL:126:LYS:CA	2.49	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:2848:G:H8	52:DT:97:ALA:HB2	1.82	0.43
36:BA:1259:G:H2'	36:BA:1260:G:C8	2.54	0.43
36:DA:1431:U:H2'	36:DA:1432:C:O4'	2.19	0.43
25:AZ:185:ASN:N	25:AZ:185:ASN:ND2	2.67	0.43
38:DC:155:GLU:OE1	38:DC:160:ARG:HD3	2.19	0.43
1:CA:341:C:H6	1:CA:341:C:O5'	2.01	0.43
25:AZ:223:MET:HB3	25:AZ:242:ILE:HA	2.01	0.43
9:CI:5:TYR:CD2	9:CI:6:GLY:N	2.87	0.43
46:BN:65:LYS:HD3	46:BN:69:GLN:NE2	2.34	0.43
55:BW:79:GLY:CA	55:BW:100:THR:HG23	2.49	0.43
1:AA:1298:C:C5	7:AG:114:ARG:NE	2.87	0.43
36:BA:1283:G:N2	36:BA:1285:G:H3'	2.34	0.43
36:BA:2316:C:O2'	42:BG:128:ARG:NH2	2.52	0.43
1:CA:902:G:H2'	1:CA:903:G:H8	1.82	0.43
36:DA:1625:C:H2'	36:DA:1626:G:H5'	2.01	0.43
42:DG:120:LEU:HB2	42:DG:179:PRO:O	2.19	0.43
36:BA:1124:C:H2'	36:BA:1125:G:O4'	2.19	0.43
41:BF:46:ARG:HA	41:BF:46:ARG:HD2	1.75	0.43
41:BF:42:ALA:O	41:BF:45:ARG:HB2	2.18	0.43
36:BA:516:C:O2'	36:BA:517:C:H5'	2.19	0.43
1:AA:802:A:H3'	1:AA:803:G:H8	1.84	0.43
36:DA:1958:C:O2'	36:DA:1959:G:H5'	2.19	0.43
38:DC:83:ILE:HD11	38:DC:97:GLU:CD	2.39	0.42
38:DC:96:GLY:C	38:DC:98:GLU:H	2.21	0.42
38:BC:117:PRO:HD2	38:BC:147:PHE:CD2	2.54	0.42
36:DA:2645:G:H4'	36:DA:2646:C:OP2	2.19	0.42
42:BG:170:ARG:NE	42:BG:180:PHE:CD2	2.87	0.42
43:BH:83:TYR:O	43:BH:84:SER:O	2.36	0.42
49:BQ:134:ARG:NH1	58:BZ:122:ARG:HH21	2.17	0.42
40:DE:49:LEU:O	40:DE:78:LEU:HB2	2.19	0.42
56:DX:12:VAL:O	56:DX:13:LEU:HB2	2.19	0.42
13:AM:66:LEU:CD1	13:AM:66:LEU:N	2.82	0.42
42:DG:149:VAL:C	42:DG:151:ALA:H	2.22	0.42
32:D6:17:LYS:O	32:D6:18:ARG:CB	2.67	0.42
1:AA:555:C:OP1	12:AL:20:LYS:HE3	2.19	0.42
51:DS:89:ARG:HG3	51:DS:92:TYR:N	2.34	0.42
36:DA:1021:A:H3'	36:DA:1021:A:H8	1.84	0.42
41:DF:160:ASN:HD21	41:DF:162:LEU:CB	2.32	0.42
48:DP:35:HIS:C	48:DP:36:LYS:HG3	2.39	0.42
45:BK:90:UNK:HA	58:BZ:112:ARG:HH22	1.84	0.42
36:BA:2111:C:C2	36:BA:2147:G:N2	2.82	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:BT:107:ASP:CG	52:BT:108:ARG:H	2.22	0.42
9:AI:43:ALA:O	9:AI:45:ALA:N	2.52	0.42
1:AA:1238:A:H2	1:AA:1301:U:N3	2.09	0.42
1:CA:961:U:OP2	1:CA:1223:C:H4'	2.19	0.42
9:AI:4:TYR:CZ	9:AI:88:TYR:CB	3.02	0.42
25:CZ:263:ARG:HG3	25:CZ:264:LYS:H	1.84	0.42
36:BA:2282:G:H4'	36:BA:2283:C:O5'	2.19	0.42
1:CA:1536:C:H2'	1:CA:1537:U:C5'	2.49	0.42
1:CA:723:U:O4	1:CA:1537:U:H2'	2.19	0.42
57:BY:49:VAL:O	57:BY:50:ARG:CB	2.60	0.42
36:DA:2654:A:H1'	36:DA:2656:U:C6	2.54	0.42
52:DT:106:SER:O	52:DT:107:ASP:HB3	2.18	0.42
12:AL:60:LEU:HB2	12:AL:64:TYR:O	2.19	0.42
1:CA:1124:G:H5'	10:CJ:35:SER:CB	2.49	0.42
15:CO:82:ILE:CG2	15:CO:83:GLU:N	2.81	0.42
36:BA:2668:G:C2'	36:BA:2669:G:H5'	2.48	0.42
36:DA:848:G:C4	36:DA:933:A:C8	3.07	0.42
43:DH:76:VAL:O	43:DH:78:GLY:N	2.52	0.42
54:DV:39:LEU:HA	54:DV:47:VAL:HG11	2.00	0.42
49:BQ:12:GLN:NE2	49:BQ:72:LYS:HG3	2.34	0.42
19:CS:13:ASP:C	19:CS:15:LEU:H	2.21	0.42
19:CS:11:VAL:HG13	19:CS:16:LEU:HD11	2.01	0.42
36:BA:338:G:N2	36:BA:339:U:H1'	2.34	0.42
43:BH:33:LEU:HD12	43:BH:75:ALA:O	2.19	0.42
57:BY:67:LEU:HD23	57:BY:68:HIS:N	2.34	0.42
56:BX:57:LEU:HD13	56:BX:78:LYS:O	2.19	0.42
3:AC:65:ALA:O	3:AC:100:ALA:O	2.37	0.42
1:AA:35:G:H21	12:AL:118:SER:HB2	1.84	0.42
6:AF:10:LEU:HB2	6:AF:59:TYR:HB3	2.00	0.42
5:AE:107:ARG:HG2	5:AE:107:ARG:HH11	1.83	0.42
46:BN:3:THR:CG2	46:BN:4:TYR:H	2.28	0.42
1:CA:782:A:O3'	1:CA:1515:C:H4'	2.18	0.42
1:AA:346:G:O2'	1:AA:347:G:O5'	2.37	0.42
25:CZ:163:PHE:C	25:CZ:165:GLY:H	2.22	0.42
15:CO:3:ILE:HA	15:CO:7:GLU:OE1	2.19	0.42
48:BP:28:GLY:C	48:BP:29:LYS:HD2	2.39	0.42
14:CN:29:ARG:CG	14:CN:29:ARG:NH1	2.80	0.42
22:AW:51:U:H2'	22:AW:52:G:C8	2.48	0.42
6:AF:28:ARG:NH1	6:AF:28:ARG:HG3	2.31	0.42
4:CD:88:VAL:HG12	4:CD:90:GLY:H	1.84	0.42
1:AA:1048:G:OP1	14:AN:4:LYS:HB2	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:918:A:H2'	1:AA:919:A:O4'	2.19	0.42
1:AA:416:G:H2'	1:AA:417:C:O4'	2.19	0.42
5:AE:144:THR:O	5:AE:145:LYS:C	2.57	0.42
7:CG:68:ASN:O	7:CG:138:LYS:HD2	2.19	0.42
48:BP:71:VAL:CG1	48:BP:72:PRO:HD3	2.49	0.42
5:AE:34:VAL:HG12	5:AE:62:ALA:HB1	2.01	0.42
36:DA:1446:C:H42	36:DA:1465:G:H1	1.67	0.42
6:AF:52:ILE:O	6:AF:53:ALA:HB3	2.19	0.42
1:CA:341:C:O2	1:CA:349:A:C2	2.72	0.42
2:AB:168:THR:HG21	2:AB:192:SER:HA	2.01	0.42
1:CA:1251:A:H2'	1:CA:1252:A:C8	2.54	0.42
47:BO:25:LEU:HB2	47:BO:38:VAL:HG23	2.00	0.42
58:BZ:31:ARG:HB2	58:BZ:32:HIS:CE1	2.53	0.42
24:CY:32:OMC:HM22	24:CY:33:U:H5'	2.01	0.42
1:CA:1240:U:OP1	7:CG:116:ALA:N	2.49	0.42
7:AG:120:ILE:HG22	7:AG:124:LEU:HD12	2.00	0.42
1:CA:29:G:O2'	1:CA:30:U:H5'	2.19	0.42
39:BD:258:LYS:HD3	39:BD:273:ARG:NH2	2.34	0.42
5:AE:15:ARG:HD2	5:AE:26:PHE:CG	2.54	0.42
18:CR:43:PHE:CG	18:CR:66:LEU:HD11	2.53	0.42
1:CA:691:G:H2'	1:CA:692:U:C6	2.54	0.42
1:AA:1441:G:H5''	1:AA:1442:G:H5'	2.00	0.42
36:DA:1305:C:O2'	36:DA:1306:C:H5'	2.19	0.42
36:DA:2542:A:O2'	36:DA:2543:G:H5'	2.19	0.42
43:BH:121:ILE:CG2	43:BH:133:VAL:HG13	2.46	0.42
58:BZ:100:VAL:O	58:BZ:123:ASP:O	2.36	0.42
40:DE:77:ILE:HG22	40:DE:78:LEU:CD1	2.48	0.42
56:DX:51:VAL:HG13	56:DX:81:VAL:HB	2.00	0.42
25:CZ:366:ASP:C	25:CZ:367:ASN:HD22	2.23	0.42
49:DQ:12:GLN:HE21	49:DQ:72:LYS:HG3	1.85	0.42
36:DA:2224:G:H4'	36:DA:2226:C:C2	2.54	0.42
32:D6:42:TRP:CH2	36:DA:643:A:N7	2.88	0.42
52:DT:14:TYR:CD1	52:DT:14:TYR:N	2.86	0.42
57:DY:26:LYS:CG	57:DY:27:VAL:H	2.24	0.42
4:AD:98:GLU:OE1	4:AD:194:LEU:HD11	2.19	0.42
36:BA:1499:C:H2'	36:BA:1500:G:C5'	2.49	0.42
2:AB:169:LYS:HD3	2:AB:169:LYS:O	2.19	0.42
36:DA:1142:U:H5''	36:DA:1142(A):A:H5''	2.01	0.42
36:BA:1142:U:H5''	36:BA:1142(A):A:H5''	2.01	0.42
41:DF:162:LEU:N	41:DF:162:LEU:HD12	2.34	0.42
3:CC:132:ARG:HH11	3:CC:136:GLN:NE2	1.98	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2317:C:O2'	36:BA:2318:G:H5'	2.17	0.42
36:DA:607:U:N3	36:DA:621:A:C2	2.87	0.42
51:DS:13:ARG:O	51:DS:15:ARG:HG3	2.19	0.42
36:BA:1747(A):G:C2'	36:BA:1748:G:C5'	2.82	0.42
36:BA:1514:U:H2'	36:BA:1515:G:C8	2.55	0.42
1:CA:1276:G:C6	1:CA:1277:C:C4	3.07	0.42
1:CA:1283:G:O2'	1:CA:1284:C:OP2	2.34	0.42
1:CA:1220:G:H2'	1:CA:1221:G:H8	1.83	0.42
1:CA:858:G:C8	1:CA:858:G:OP2	2.72	0.42
48:DP:84:ASN:OD1	48:DP:116:GLY:HA2	2.18	0.42
52:DT:128:GLU:CD	52:DT:129:ARG:N	2.72	0.42
55:DW:20:VAL:CG2	55:DW:47:VAL:HG21	2.45	0.42
42:DG:11:TYR:OH	42:DG:33:ARG:HB3	2.19	0.42
42:BG:123:ASN:O	42:BG:126:ASP:OD2	2.37	0.42
1:CA:1442(B):A:H4'	1:CA:1443:G:OP1	2.19	0.42
40:DE:117:MET:HE3	40:DE:136:ARG:HA	2.00	0.42
1:CA:1129:C:O3'	1:CA:1131:G:OP2	2.37	0.42
1:CA:78:G:H2'	1:CA:79:G:O4'	2.18	0.42
53:BU:13:LYS:HD3	53:BU:13:LYS:N	2.34	0.42
19:CS:9:VAL:HG12	19:CS:10:PHE:N	2.34	0.42
13:AM:82:MET:O	13:AM:83:ASP:O	2.37	0.42
36:DA:358:U:C2'	36:DA:359:A:H5'	2.49	0.42
37:BB:67:G:O2'	37:BB:68:C:O5'	2.37	0.42
36:BA:480:A:H2	36:BA:499:U:O2	2.02	0.42
2:CB:8:LYS:O	2:CB:12:GLU:HG3	2.20	0.42
40:BE:101:ARG:HE	40:BE:171:GLU:CB	2.32	0.42
1:CA:405:U:O2	1:CA:498:U:C6	2.72	0.42
50:DR:4:LEU:CD1	50:DR:7:GLY:HA3	2.48	0.42
16:CP:14:ASN:OD1	16:CP:14:ASN:O	2.38	0.42
58:BZ:70:LEU:CD2	58:BZ:70:LEU:N	2.83	0.42
3:CC:54:ARG:CG	3:CC:55:VAL:N	2.82	0.42
1:AA:502:G:OP1	12:AL:118:SER:N	2.49	0.42
6:AF:77:ARG:NH1	6:AF:77:ARG:CG	2.82	0.42
13:AM:77:ASN:O	13:AM:80:ARG:HB3	2.19	0.42
36:BA:2206:G:N2	36:BA:2207:G:C4'	2.83	0.42
25:AZ:317:GLU:O	25:AZ:400:VAL:HA	2.19	0.42
24:CY:1:A:H5'	25:CZ:300:ARG:NH1	2.34	0.42
36:DA:2199:A:C2	36:DA:2200:C:H1'	2.53	0.42
1:CA:919:A:O2'	1:CA:920:U:H5'	2.19	0.42
4:CD:145:GLU:C	4:CD:146:ILE:HD13	2.39	0.42
36:DA:1952:A:C6	36:DA:1953:A:N1	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:27:GLN:O	6:AF:31:GLU:HB2	2.19	0.42
24:AY:77:TRP:O	25:AZ:273:HIS:HA	2.19	0.42
5:AE:64:ARG:HH11	5:AE:64:ARG:CG	2.29	0.42
47:BO:14:THR:HG23	47:BO:16:ALA:H	1.84	0.42
47:DO:14:THR:HG23	47:DO:16:ALA:H	1.84	0.42
1:AA:1030(D):A:C2'	1:AA:1031:G:H5'	2.48	0.42
1:CA:1121:U:H2'	1:CA:1122:U:C6	2.54	0.42
42:DG:18:GLU:OE2	42:DG:21:ARG:NH2	2.52	0.42
25:CZ:343:TYR:CE2	25:CZ:348:ASP:HB3	2.53	0.42
39:DD:201:HIS:C	39:DD:203:ASN:H	2.21	0.42
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.55	0.42
36:BA:1790:C:H2'	36:BA:1791:A:C5	2.54	0.42
1:CA:602:A:H2'	1:CA:603:U:O4'	2.18	0.42
13:AM:32:GLU:OE1	13:AM:32:GLU:C	2.58	0.42
6:CF:9:VAL:HG22	6:CF:60:PHE:CD2	2.54	0.42
1:AA:1107:C:C4	1:AA:1108:G:C8	3.07	0.42
36:BA:2639:A:C2'	36:BA:2640:G:H5'	2.50	0.42
27:B1:42:GLN:HA	36:BA:2231:C:OP1	2.19	0.42
36:BA:2661:G:O2'	36:BA:2662:A:H5'	2.20	0.42
7:CG:42:ILE:HD13	7:CG:116:ALA:CB	2.49	0.42
36:BA:2295:C:O2'	36:BA:2296:U:H5'	2.19	0.42
8:AH:60:ARG:HG2	8:AH:62:TYR:CE1	2.54	0.42
39:BD:80:ALA:HB2	39:BD:96:HIS:CD2	2.53	0.42
50:BR:49:ASP:OD1	50:BR:95:THR:HB	2.19	0.42
38:BC:196:LEU:O	38:BC:199:HIS:N	2.52	0.42
41:DF:87:GLY:O	41:DF:88:VAL:O	2.37	0.42
11:CK:85:ARG:HG2	11:CK:111:ASP:O	2.20	0.42
38:BC:28:LEU:HD23	38:BC:28:LEU:O	2.18	0.42
36:BA:121:G:H4'	36:BA:149:A:H5'	2.00	0.42
8:AH:33:GLU:HG2	8:AH:48:TYR:OH	2.19	0.42
38:BC:83:ILE:HD11	38:BC:97:GLU:CD	2.40	0.42
28:B2:55:ARG:HA	28:B2:58:ALA:CB	2.48	0.42
41:DF:26:ALA:HB1	41:DF:27:GLU:OE1	2.20	0.42
40:DE:47:VAL:CG2	40:DE:84:PHE:O	2.67	0.42
1:AA:1037:C:O5'	1:AA:1037:C:H6	2.03	0.42
32:B6:11:LEU:HD13	32:B6:24:GLU:O	2.19	0.42
40:BE:47:VAL:CG2	40:BE:84:PHE:O	2.67	0.42
13:AM:66:LEU:O	13:AM:67:GLU:O	2.36	0.42
46:BN:9:VAL:HG21	46:BN:48:MET:CB	2.49	0.42
32:D6:11:LEU:HD13	32:D6:11:LEU:H	1.85	0.42
41:BF:160:ASN:HD21	41:BF:162:LEU:CB	2.31	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DF:122:LYS:HB3	41:DF:191:ARG:HG3	2.00	0.42
51:DS:58:LEU:HG	51:DS:59:LYS:N	2.33	0.42
25:AZ:366:ASP:C	25:AZ:367:ASN:HD22	2.22	0.42
52:DT:10:VAL:C	52:DT:12:SER:N	2.73	0.42
4:CD:10:ARG:HH11	4:CD:10:ARG:HG2	1.84	0.42
51:DS:92:TYR:O	51:DS:93:LYS:HB3	2.19	0.42
48:BP:46:LYS:HG2	48:BP:52:GLU:OE2	2.19	0.42
37:BB:7:G:C3'	37:BB:8:U:C5'	2.97	0.42
36:BA:1021:A:C3'	36:BA:1021:A:C8	3.02	0.42
1:AA:1315:U:O2	1:AA:1360:A:H2	2.02	0.42
45:BK:88:UNK:O	45:BK:89:UNK:C	2.67	0.42
36:BA:833:U:H2'	36:BA:834:C:C6	2.54	0.42
2:AB:155:LEU:HD13	2:AB:157:ARG:H	1.84	0.42
52:BT:109:GLU:HG2	52:BT:112:ARG:CZ	2.49	0.42
52:BT:96:ARG:CB	52:BT:96:ARG:NH1	2.82	0.42
58:BZ:29:TYR:HA	58:BZ:33:LEU:O	2.19	0.42
1:CA:858:G:H5''	1:CA:858:G:C8	2.52	0.42
2:CB:55:PHE:N	2:CB:55:PHE:CD1	2.87	0.42
36:BA:2131:G:H4'	36:BA:2132:U:OP2	2.18	0.42
31:D5:57:VAL:HG12	31:D5:58:LEU:H	1.85	0.42
1:CA:723:U:N3	1:CA:1537:U:H2'	2.34	0.42
2:CB:231:GLU:HA	2:CB:232:PRO:HD3	1.69	0.42
3:AC:11:ARG:O	3:AC:12:LEU:C	2.57	0.42
28:D2:31:GLU:O	28:D2:35:LEU:HD23	2.20	0.42
46:DN:36:GLY:O	46:DN:37:LYS:HB2	2.19	0.42
43:DH:139:GLN:HG3	43:DH:140:LYS:N	2.34	0.42
43:DH:44:VAL:CG1	43:DH:45:VAL:H	2.17	0.42
46:BN:28:THR:O	46:BN:31:ALA:HB3	2.19	0.42
47:DO:35:VAL:CG1	47:DO:35:VAL:O	2.67	0.42
13:AM:79:LYS:O	13:AM:82:MET:HG2	2.18	0.42
42:BG:31:VAL:CG2	42:BG:32:PRO:HD2	2.49	0.42
34:B8:53:PRO:HA	34:B8:56:GLU:HB2	2.01	0.42
36:BA:506:G:O3'	36:BA:507:A:H8	2.03	0.42
36:DA:2881:C:H2'	36:DA:2882:A:C8	2.54	0.42
36:BA:2127:G:H2'	36:BA:2128:C:C6	2.54	0.42
36:DA:190:A:H3'	36:DA:204:A:H61	1.84	0.42
36:BA:1721:G:C2	36:BA:1739:U:OP2	2.72	0.42
12:AL:38:THR:O	12:AL:39:VAL:HG23	2.19	0.42
16:CP:14:ASN:HA	16:CP:42:ARG:NH2	2.33	0.42
26:B0:7:LEU:HD13	49:BQ:85:LYS:CG	2.44	0.42
36:DA:1170:G:N2	36:DA:1180:C:C2	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:66:G:N2	1:CA:172:A:C2	2.86	0.42
36:DA:318:C:O2'	36:DA:319:C:H5'	2.19	0.42
36:BA:289:A:H2'	36:BA:290:G:C8	2.55	0.42
36:DA:194:G:H2'	36:DA:195:A:O4'	2.20	0.42
39:DD:28:GLU:CB	39:DD:29:PRO:CD	2.94	0.42
42:BG:52:ILE:O	42:BG:54:GLU:N	2.53	0.42
53:DU:32:PHE:CB	53:DU:36:ARG:HH22	2.31	0.42
5:CE:7:GLU:O	5:CE:8:GLU:HB3	2.19	0.42
1:CA:35:G:H21	12:CL:118:SER:HB2	1.83	0.42
36:BA:1287:A:OP1	50:BR:105:ARG:O	2.37	0.42
56:DX:63:LYS:HE3	56:DX:63:LYS:HB2	1.91	0.42
3:CC:23:TYR:CG	3:CC:24:ALA:N	2.87	0.42
24:AY:60:U:H2'	24:AY:61:C:H5	1.84	0.42
49:BQ:5:ARG:NH1	49:BQ:5:ARG:CB	2.82	0.42
36:BA:2389:G:H5''	36:BA:2390:U:O4'	2.19	0.42
4:AD:91:SER:O	4:AD:92:VAL:C	2.57	0.42
47:DO:10:VAL:HG21	47:DO:16:ALA:C	2.40	0.42
36:DA:1040:C:H6	36:DA:1040:C:O5'	2.02	0.42
36:BA:1469:A:H2'	36:BA:1470:G:H8	1.84	0.42
1:AA:751:U:C4'	15:AO:24:SER:HA	2.48	0.42
1:AA:135:C:C2'	1:AA:136:C:H5'	2.50	0.42
4:AD:200:GLU:HG2	4:AD:201:GLN:H	1.84	0.42
1:CA:710:G:O2'	1:CA:711:G:H5'	2.20	0.42
36:BA:1133:U:O4	36:BA:2026:C:H1'	2.19	0.42
36:BA:2330:G:C2'	36:BA:2331:G:H5'	2.48	0.42
36:BA:382:G:C2'	36:BA:383:U:H5'	2.49	0.42
39:BD:238:GLY:O	39:BD:239:ARG:O	2.38	0.42
25:AZ:221:PHE:CG	25:AZ:247:VAL:HG13	2.53	0.42
4:CD:45:GLN:C	4:CD:46:LYS:HG3	2.38	0.42
26:B0:26:TYR:CD2	36:BA:857:C:H1'	2.54	0.42
4:AD:106:TYR:HD2	4:AD:113:SER:C	2.22	0.42
4:CD:106:TYR:HD2	4:CD:113:SER:C	2.22	0.42
36:BA:1431:U:H2'	36:BA:1432:C:O4'	2.20	0.42
36:DA:1304:C:O2'	36:DA:1305:C:H5'	2.19	0.42
1:AA:1092:A:C6	1:AA:1093:A:C6	3.07	0.42
1:CA:1246:C:H2'	1:CA:1247:U:H6	1.84	0.42
36:DA:1146:C:O2'	36:DA:1147:C:H5'	2.19	0.42
36:BA:1914:C:H2'	36:BA:1915:U:O4'	2.19	0.42
20:AT:38:LYS:O	20:AT:41:ILE:HG12	2.19	0.42
22:AW:11:C:O2'	22:AW:12:U:H5'	2.19	0.42
33:D7:37:LYS:O	36:DA:458:G:H8	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:10:C:O2'	37:DB:11:C:H5'	2.19	0.42
4:CD:25:ARG:C	4:CD:27:TYR:H	2.23	0.42
36:BA:489:G:N2	36:BA:1321:A:OP1	2.49	0.42
36:BA:1777:U:O2'	36:BA:1778:U:H5'	2.19	0.42
36:DA:133:C:H6	36:DA:133:C:O5'	2.02	0.42
36:BA:514:A:O2'	36:BA:515:A:H5'	2.19	0.42
39:DD:41:GLY:O	39:DD:42:GLY:O	2.37	0.42
39:BD:242:ARG:HB2	39:BD:243:GLY:H	1.43	0.42
13:AM:25:ILE:HD11	13:AM:60:VAL:CG1	2.50	0.42
28:B2:35:LEU:HD13	28:B2:35:LEU:C	2.38	0.42
28:B2:54:LYS:CB	36:BA:61:G:OP2	2.67	0.42
39:DD:24:ILE:CD1	39:DD:25:THR:N	2.81	0.42
1:CA:1039:C:H2'	1:CA:1040:U:H5	1.78	0.42
40:DE:54:GLN:O	40:DE:75:VAL:CG2	2.62	0.42
36:BA:2224:G:H4'	36:BA:2226:C:C2	2.54	0.42
56:BX:55:ASN:HB2	56:BX:80:ILE:CG2	2.43	0.42
36:DA:1448:G:N3	36:DA:1528(A):A:C2	2.84	0.42
36:BA:322:A:O4'	36:BA:340:A:H1'	2.18	0.42
37:DB:106:G:H5'	58:DZ:31:ARG:HG2	1.98	0.42
58:DZ:48:PHE:O	58:DZ:52:SER:N	2.48	0.42
52:BT:80:SER:CB	52:BT:81:PRO:CD	2.96	0.42
43:DH:15:VAL:HG23	43:DH:16:SER:N	2.34	0.42
32:D6:45:LYS:CB	36:DA:2371:G:H4'	2.49	0.42
57:DY:81:LYS:CD	57:DY:97:ARG:O	2.67	0.42
1:AA:1271:G:C3'	1:AA:1272:G:H5''	2.49	0.42
1:AA:407:G:O2'	4:AD:116:GLN:CG	2.64	0.42
36:DA:611:C:H6	36:DA:611:C:O5'	2.01	0.42
20:CT:53:LEU:HB3	20:CT:102:GLY:HA3	2.01	0.42
36:BA:942:G:O2'	36:BA:943:U:H5'	2.19	0.42
36:BA:1947:C:C3'	36:BA:1948:G:H5''	2.49	0.42
36:BA:1021:A:H8	36:BA:1021:A:H3'	1.85	0.42
48:BP:35:HIS:C	48:BP:36:LYS:HG3	2.40	0.42
41:DF:160:ASN:ND2	41:DF:162:LEU:N	2.59	0.42
48:DP:38:GLN:HG3	48:DP:39:LYS:N	2.35	0.42
36:DA:2282:G:H4'	36:DA:2283:C:O5'	2.19	0.42
30:D4:25:TYR:N	30:D4:25:TYR:CD1	2.88	0.42
36:BA:2892:A:N6	36:BA:2893:G:H21	2.16	0.42
50:DR:45:ARG:CG	50:DR:46:GLY:H	2.13	0.42
36:DA:2464:C:O2'	36:DA:2465:C:P	2.78	0.42
35:B9:7:VAL:CG1	35:B9:34:GLN:HG2	2.38	0.42
36:DA:1068:G:H1'	36:DA:1069:A:O5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1070:A:H5'	36:DA:1072:C:OP2	2.20	0.42
36:DA:1090:U:H2'	36:DA:1091:G:O4'	2.19	0.42
50:DR:2:ARG:CD	50:DR:2:ARG:C	2.87	0.42
36:DA:733:G:N7	36:DA:761:A:C5	2.86	0.42
2:AB:178:ARG:CG	2:AB:178:ARG:NH1	2.82	0.42
1:CA:411:A:H62	1:CA:413:G:H21	1.65	0.42
37:DB:81:G:H2'	37:DB:82:G:H5'	2.02	0.42
14:CN:26:ARG:HH11	14:CN:47:LEU:CD2	2.24	0.42
54:DV:39:LEU:O	54:DV:40:LEU:HB2	2.20	0.42
36:BA:478:A:C6	36:BA:480:A:C6	3.08	0.42
57:BY:60:PHE:O	57:BY:61:ILE:CG1	2.67	0.42
57:DY:61:ILE:HG22	57:DY:62:GLU:N	2.34	0.42
12:AL:80:HIS:HB2	24:AY:68:C:H4'	2.01	0.42
15:CO:29:VAL:HG11	15:CO:67:LEU:HD21	2.01	0.42
22:AV:61:C:O2	22:AV:61:C:H2'	2.20	0.42
19:AS:11:VAL:HG23	19:AS:38:SER:HB3	2.00	0.42
40:BE:101:ARG:CB	40:BE:201:THR:HG21	2.48	0.42
1:AA:59:A:H5'	1:AA:60:A:C5'	2.48	0.42
39:BD:107:ALA:HA	39:BD:108:PRO:HD2	1.90	0.42
36:DA:998:C:H2'	36:DA:999:U:O5'	2.19	0.42
52:BT:75:ILE:N	52:BT:75:ILE:CD1	2.81	0.42
36:BA:877:U:O2'	36:BA:900:A:N6	2.52	0.42
36:DA:2196:C:O2'	36:DA:2197:U:H5'	2.19	0.42
1:AA:656:C:O2'	1:AA:657:G:H5'	2.19	0.42
53:DU:15:LYS:HA	53:DU:18:LEU:HD23	2.00	0.42
1:CA:528:C:H41	12:CL:49:ASN:ND2	2.17	0.42
1:AA:250:A:H5''	1:AA:251:G:OP1	2.19	0.42
9:AI:98:PRO:HB2	9:AI:99:LEU:HD22	2.02	0.42
22:AW:51:U:H3	22:AW:63:G:H1	1.67	0.42
53:BU:24:TYR:HB2	53:BU:29:SER:OG	2.20	0.42
36:BA:2617:C:O2'	36:BA:2618:G:H5'	2.20	0.42
36:BA:1336:A:O2'	36:BA:1337:G:H5'	2.19	0.42
2:AB:11:LEU:CD1	2:AB:217:ARG:NH2	2.82	0.42
1:AA:96:U:H2'	1:AA:97:G:C8	2.54	0.42
36:DA:856:C:H6	36:DA:856:C:H5''	1.83	0.42
58:BZ:79:ARG:O	58:BZ:79:ARG:CG	2.67	0.42
3:AC:23:TYR:CG	3:AC:24:ALA:N	2.87	0.42
36:DA:1509(A):A:H2'	36:DA:1509(B):A:C8	2.53	0.42
25:CZ:309:SER:O	25:CZ:310:ILE:O	2.38	0.42
36:DA:2073:C:O2'	36:DA:2074:U:H5'	2.19	0.42
29:D3:28:LEU:N	29:D3:28:LEU:HD23	2.33	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BN:76:SER:OG	46:BN:77:GLY:N	2.52	0.42
22:AV:67:C:H2'	22:AV:68:C:H6	1.83	0.42
2:CB:124:SER:OG	2:CB:125:PRO:HD2	2.19	0.42
42:DG:178:PHE:HD1	42:DG:178:PHE:H	1.67	0.42
36:BA:2330:G:H2'	36:BA:2331:G:O4'	2.19	0.42
1:AA:828:A:H2'	1:AA:829:G:O4'	2.19	0.42
1:AA:1009:G:H2'	1:AA:1010:G:C8	2.53	0.42
8:CH:20:TYR:HE2	8:CH:76:PRO:HG2	1.81	0.42
36:DA:199:A:H61	36:DA:2433:A:H2'	1.84	0.42
38:BC:41:VAL:HG21	38:BC:185:LEU:CD2	2.49	0.42
1:CA:130:A:C8	17:CQ:63:ARG:HG3	2.54	0.42
56:DX:45:THR:OG1	56:DX:46:ALA:N	2.53	0.42
3:CC:130:VAL:O	3:CC:131:ARG:C	2.58	0.42
1:AA:1477:C:H2'	1:AA:1478:C:C6	2.53	0.42
36:BA:825:C:H4'	36:BA:2428:G:N7	2.34	0.42
22:AW:10:G:O2'	22:AW:11:C:H5'	2.19	0.42
44:DJ:52:UNK:HA	44:DJ:86:UNK:O	2.20	0.42
21:AU:5:ASP:O	21:AU:11:GLY:HA3	2.19	0.42
28:D2:63:VAL:O	28:D2:65:ASN:N	2.52	0.42
25:AZ:116:THR:O	25:AZ:120:ILE:HG13	2.19	0.42
36:BA:1570:A:H2'	36:BA:1571:A:C8	2.54	0.42
36:BA:1487:G:O2'	36:BA:1488:G:H5'	2.19	0.42
1:CA:757:U:O2'	1:CA:758:G:H5'	2.19	0.42
36:DA:740:U:H2'	36:DA:741:G:C8	2.55	0.42
36:DA:1387:C:C2	36:DA:1388:G:C8	3.06	0.42
25:AZ:362:VAL:HG12	25:AZ:362:VAL:O	2.20	0.42
36:BA:2584:U:O4'	36:BA:2584:U:O2	2.38	0.42
19:CS:79:THR:O	19:CS:80:TYR:CB	2.67	0.42
46:BN:7:LYS:O	46:BN:8:GLN:C	2.57	0.42
45:BK:99:UNK:O	45:BK:100:UNK:C	2.67	0.42
56:BX:14:SER:N	56:BX:17:ALA:HB3	2.35	0.42
42:BG:47:LYS:N	42:BG:47:LYS:HD2	2.34	0.42
46:DN:115:ARG:HG3	46:DN:115:ARG:HH11	1.84	0.42
36:DA:1854:A:H62	36:DA:1888:G:H8	1.66	0.42
39:BD:97:TYR:C	39:BD:99:ASP:N	2.71	0.42
58:DZ:69:THR:HG22	58:DZ:89:PHE:O	2.19	0.42
1:CA:954:G:H2'	1:CA:955:U:C6	2.54	0.42
39:DD:70:TRP:CZ3	39:DD:146:GLU:OE2	2.72	0.42
42:DG:57:ALA:O	42:DG:60:LEU:HB3	2.19	0.42
32:D6:53:LYS:CD	32:D6:53:LYS:N	2.82	0.42
57:DY:15:VAL:HG12	57:DY:17:SER:H	1.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:105:VAL:HG21	4:CD:121:VAL:HG22	2.01	0.42
36:BA:1278:A:O2'	36:BA:1279:G:H5'	2.19	0.42
48:DP:126:VAL:HA	48:DP:145:PRO:CG	2.49	0.42
48:DP:98:GLU:CA	48:DP:101:VAL:HG22	2.48	0.42
25:CZ:285:ASN:HD22	25:CZ:285:ASN:HA	1.65	0.42
51:BS:17:ARG:C	51:BS:19:LYS:H	2.22	0.42
36:DA:1499:C:H2'	36:DA:1500:G:H5'	2.01	0.42
37:DB:7:G:C3'	37:DB:8:U:C5'	2.98	0.42
36:DA:2419:U:O2'	36:DA:2420:C:H5'	2.18	0.42
41:DF:158:THR:HG21	41:DF:163:VAL:HB	2.01	0.42
41:BF:6:VAL:O	41:BF:7:TYR:HB2	2.20	0.42
36:DA:671:C:H2'	36:DA:672:C:H6	1.84	0.42
36:BA:2178:C:O4'	36:BA:2178:C:O2	2.35	0.42
36:BA:2810:A:H2'	40:BE:61:ARG:NH2	2.34	0.42
36:BA:1516:C:C2'	36:BA:1517:G:C5'	2.83	0.42
41:DF:30:PRO:O	41:DF:33:LEU:HB2	2.20	0.42
10:CJ:8:LEU:HB3	10:CJ:16:LEU:CD2	2.50	0.42
33:D7:34:ARG:HA	33:D7:34:ARG:HD2	1.77	0.42
48:DP:16:ARG:HH11	48:DP:16:ARG:CA	2.32	0.42
10:AJ:6:ILE:CD1	10:AJ:23:ILE:HG21	2.49	0.42
25:CZ:246:LYS:HB3	25:CZ:281:ILE:CG2	2.38	0.42
53:BU:83:LEU:HD12	53:BU:83:LEU:N	2.35	0.42
15:AO:82:ILE:CG2	15:AO:83:GLU:N	2.83	0.42
12:AL:60:LEU:C	12:AL:62:SER:H	2.23	0.42
36:BA:733:G:C8	36:BA:761:A:C6	3.07	0.42
20:AT:20:LEU:O	20:AT:23:ARG:HB3	2.20	0.42
42:BG:114:ILE:HG23	42:BG:117:PHE:HB2	1.99	0.42
51:BS:35:ILE:HG23	51:BS:35:ILE:O	2.19	0.42
24:CY:17:H2U:OP2	24:CY:17:H2U:O3'	2.38	0.42
1:AA:1318:A:H1'	19:AS:37:ARG:HH21	1.85	0.42
19:CS:48:THR:HG22	19:CS:61:TYR:CB	2.50	0.42
9:CI:70:LYS:O	9:CI:73:GLN:HB2	2.20	0.42
50:BR:52:ILE:O	50:BR:55:ALA:N	2.52	0.42
36:BA:1349:A:N6	36:BA:1598:C:N4	2.67	0.42
22:CW:37:A:H5'	22:CW:38:A:OP2	2.20	0.42
36:DA:1721:G:C2	36:DA:1739:U:OP2	2.73	0.42
17:AQ:70:ARG:HG2	17:AQ:70:ARG:HH11	1.85	0.42
36:DA:481:G:C2'	36:DA:482:A:OP2	2.67	0.42
1:AA:357:G:C2	1:AA:358:U:C5	3.07	0.42
36:BA:271(J):C:C2'	36:BA:271(J):C:O2	2.62	0.42
6:CF:57:GLN:H	6:CF:57:GLN:NE2	2.17	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2199:A:C2	36:BA:2200:C:H1'	2.54	0.42
36:DA:586:A:N1	36:DA:809:G:O2'	2.47	0.42
40:DE:11:MET:HB3	40:DE:24:THR:HA	2.02	0.42
20:AT:10:LEU:HG	20:AT:12:ALA:N	2.34	0.42
49:DQ:110:THR:HG23	49:DQ:113:GLN:CG	2.49	0.42
36:DA:2390:U:O2'	36:DA:2391:G:H5'	2.20	0.42
36:BA:2262:U:H2'	36:BA:2263:C:H6	1.84	0.42
1:CA:256:U:O2'	1:CA:257:G:H5'	2.19	0.42
36:DA:67:U:O2'	36:DA:68:G:H5'	2.19	0.42
1:CA:522:C:H41	12:CL:53:ARG:NH2	2.17	0.42
1:CA:1032:G:H2'	1:CA:1033:G:C8	2.54	0.42
17:AQ:45:HIS:CG	17:AQ:65:ILE:HD13	2.55	0.42
37:BB:30:C:H1'	37:BB:57:A:H61	1.84	0.42
36:BA:1509(A):A:H2'	36:BA:1509(B):A:C8	2.55	0.42
36:BA:67:U:O2'	36:BA:68:G:H5'	2.18	0.42
9:AI:48:GLU:N	9:AI:49:PRO:HD3	2.34	0.42
46:DN:54:VAL:HG11	46:DN:99:LEU:CD2	2.49	0.42
50:BR:109:ALA:O	50:BR:111:LEU:HD12	2.19	0.42
1:AA:1226:C:O2'	13:AM:103:THR:O	2.28	0.42
25:CZ:223:MET:HB3	25:CZ:242:ILE:HA	1.99	0.42
19:AS:36:ARG:NH1	19:AS:53:ASN:HA	2.35	0.42
49:BQ:24:GLY:O	49:BQ:26:TYR:N	2.50	0.42
15:CO:66:LEU:HD12	15:CO:66:LEU:HA	1.91	0.42
50:DR:12:ARG:HE	50:DR:16:HIS:CE1	2.36	0.42
1:AA:598:U:H2'	1:AA:599:C:C6	2.54	0.42
36:DA:2169:A:O2'	36:DA:2170:A:H5'	2.18	0.42
1:CA:1068:G:N7	1:CA:1094:G:H2'	2.34	0.42
36:BA:451:C:N4	36:BA:454:A:H5'	2.34	0.42
36:BA:740:U:H2'	36:BA:741:G:C8	2.55	0.42
2:CB:180:LEU:O	2:CB:181:PHE:HB2	2.19	0.42
45:BK:56:UNK:O	45:BK:68:UNK:C	2.67	0.42
1:CA:773:G:O2'	1:CA:774:G:H5'	2.19	0.42
36:DA:121:G:H4'	36:DA:149:A:H5'	2.00	0.42
36:DA:1777:U:O2'	36:DA:1778:U:H5'	2.19	0.42
17:CQ:94:ASN:O	17:CQ:96:GLU:N	2.52	0.42
38:DC:79:LYS:HD2	38:DC:97:GLU:OE1	2.19	0.42
36:DA:2544:G:H1'	36:DA:2646:C:H4'	2.02	0.42
41:BF:26:ALA:HB1	41:BF:27:GLU:OE1	2.19	0.42
39:BD:24:ILE:CD1	39:BD:25:THR:N	2.80	0.42
34:D8:5:LYS:HG2	36:DA:242:G:C8	2.55	0.42
37:DB:107:G:O2'	37:DB:108:U:H5'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:DZ:53:ILE:HG22	58:DZ:71:VAL:O	2.20	0.42
52:BT:19:LEU:HD22	52:BT:85:LYS:CD	2.48	0.42
42:DG:54:GLU:O	42:DG:58:GLN:HG2	2.20	0.42
4:AD:192:GLU:O	4:AD:193:ASP:C	2.58	0.42
4:CD:107:ARG:HD2	4:CD:173:TRP:CZ2	2.55	0.42
4:CD:98:GLU:OE1	4:CD:194:LEU:HD11	2.19	0.42
4:CD:2:GLY:O	4:CD:3:ARG:C	2.58	0.42
10:AJ:48:THR:HG23	10:AJ:62:HIS:ND1	2.33	0.42
51:BS:29:PHE:HD1	51:BS:30:ARG:N	2.17	0.42
48:BP:35:HIS:O	48:BP:36:LYS:CB	2.68	0.42
36:DA:973:A:O4'	36:DA:1188:U:C6	2.72	0.42
36:DA:659:C:O2'	36:DA:660:G:H5'	2.19	0.42
36:BA:251:A:H4'	48:BP:51:PHE:HZ	1.84	0.42
1:AA:1431:C:C2'	1:AA:1432:G:H5'	2.50	0.42
1:CA:1392:G:O2'	1:CA:1393:U:H5'	2.18	0.42
12:CL:113:ARG:CB	12:CL:122:THR:HG21	2.50	0.42
9:CI:28:VAL:O	9:CI:30:GLY:N	2.49	0.42
36:DA:2740:A:H2'	36:DA:2741:A:C8	2.54	0.42
32:B6:5:VAL:O	32:B6:6:ARG:CG	2.68	0.42
52:BT:119:LYS:O	52:BT:123:GLN:HG2	2.19	0.42
31:B5:41:PRO:HA	31:B5:42:PRO:HD3	1.83	0.42
42:BG:181:ARG:HB3	42:BG:181:ARG:HE	1.68	0.42
7:AG:99:LEU:HA	7:AG:102:ARG:CD	2.50	0.42
37:DB:94:C:O2'	37:DB:95:C:H5'	2.20	0.42
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.54	0.42
34:D8:52:LYS:O	34:D8:55:ALA:HB3	2.19	0.42
10:AJ:81:THR:O	10:AJ:83:GLU:N	2.53	0.42
36:BA:910:A:N1	36:BA:2277:G:H1'	2.34	0.42
57:BY:47:LYS:HG3	57:BY:60:PHE:CE1	2.55	0.42
36:DA:2126:A:H8	36:DA:2126:A:OP2	2.03	0.42
12:AL:75:HIS:HA	12:AL:102:ARG:NH2	2.35	0.42
8:AH:111:ILE:C	8:AH:112:LEU:HD23	2.40	0.42
11:CK:57:THR:HG22	11:CK:60:ALA:HB2	2.00	0.42
37:BB:15:A:H1'	37:BB:110:G:C5	2.55	0.42
6:AF:44:GLY:HA2	6:AF:59:TYR:CE1	2.54	0.42
36:BA:1396:U:C2'	36:BA:1396:U:O2	2.65	0.42
2:AB:86:GLU:C	2:AB:88:ALA:N	2.73	0.42
1:CA:965:A:C2	1:CA:969:A:N1	2.87	0.42
25:CZ:63:ILE:HG13	25:CZ:64:ASN:ND2	2.34	0.42
38:BC:149:ILE:O	38:BC:153:ILE:HG13	2.19	0.42
1:AA:1212:U:O4'	1:AA:1212:U:O2	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AV:57:G:H2'	22:AV:58:A:H5'	2.01	0.42
53:DU:14:HIS:O	53:DU:18:LEU:HD23	2.20	0.42
36:BA:998:C:H2'	36:BA:999:U:O5'	2.19	0.42
11:AK:20:TYR:CE2	11:AK:83:ILE:HD12	2.55	0.42
36:DA:2389:G:H5''	36:DA:2390:U:O4'	2.19	0.42
12:CL:119:LYS:O	12:CL:120:TYR:CB	2.65	0.42
36:DA:856:C:H5''	36:DA:856:C:C6	2.53	0.42
36:DA:135:G:H2'	36:DA:136:G:H8	1.85	0.42
36:DA:135:G:O2'	36:DA:136:G:H5'	2.20	0.42
12:CL:45:PRO:HG3	12:CL:53:ARG:CD	2.50	0.42
50:DR:53:HIS:O	50:DR:53:HIS:ND1	2.52	0.42
47:BO:11:ALA:O	47:BO:12:ASP:HB3	2.19	0.42
1:CA:309:G:O2'	1:CA:607:A:N1	2.52	0.42
5:AE:144:THR:O	5:AE:147:ASP:OD1	2.37	0.42
1:CA:513:C:C2	1:CA:514:C:C6	3.08	0.42
36:BA:1173:G:H5'	36:BA:1174:A:OP1	2.19	0.42
40:BE:132:HIS:CG	40:BE:135:HIS:CE1	3.07	0.42
1:CA:827:U:C2	1:CA:870:U:C4	3.07	0.42
36:BA:1651:G:C2	36:BA:2007:C:C2	3.07	0.42
36:BA:20:C:H2'	36:BA:21:A:C8	2.55	0.42
36:DA:237:C:O2'	36:DA:238:C:H5'	2.20	0.42
1:CA:369:C:HO2'	1:CA:370:C:H6	1.66	0.42
36:BA:1429:G:H2'	36:BA:1430:C:C6	2.55	0.42
1:AA:1194:U:H2'	1:AA:1195:C:C6	2.55	0.42
41:BF:108:LYS:HB3	41:BF:112:MET:CE	2.50	0.42
17:AQ:12:SER:HB3	17:AQ:20:THR:CB	2.50	0.42
25:AZ:65:THR:HA	25:AZ:83:PRO:HD3	2.01	0.42
1:AA:1118:C:OP1	9:AI:104:ARG:NE	2.46	0.42
36:BA:70:G:H2'	36:BA:113:G:O2'	2.20	0.42
36:BA:229:A:H8	36:BA:229:A:OP1	2.02	0.42
4:AD:122:ARG:HA	4:AD:122:ARG:HD2	1.72	0.42
26:B0:24:LYS:HA	26:B0:24:LYS:HD3	1.86	0.42
1:AA:768:A:H5'	1:AA:1524:C:H1'	2.02	0.42
38:DC:99:ILE:C	38:DC:101:GLN:N	2.72	0.42
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.20	0.42
28:B2:21:LEU:HB3	28:B2:64:LEU:CG	2.47	0.42
28:B2:65:ASN:O	28:B2:69:ARG:NH1	2.52	0.42
43:DH:83:TYR:O	43:DH:84:SER:O	2.37	0.42
39:DD:30:GLU:CG	39:DD:63:ARG:HH21	2.32	0.42
42:BG:47:LYS:HZ2	42:BG:82:LEU:HB2	1.85	0.42
36:DA:1486:A:H61	36:DA:1504:C:H42	1.68	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
58:BZ:171:ILE:CD1	58:BZ:171:ILE:H	2.32	0.42
4:CD:6:GLY:O	4:CD:7:PRO:C	2.58	0.42
1:AA:974:A:H8	1:AA:974:A:OP1	2.02	0.42
1:CA:975:A:N6	1:CA:1367:C:O4'	2.52	0.42
10:CJ:49:VAL:HG22	14:CN:41:ARG:HG3	2.02	0.42
51:DS:98:VAL:C	51:DS:100:ALA:N	2.73	0.42
51:BS:89:ARG:HB3	51:BS:92:TYR:CB	2.50	0.42
2:AB:71:VAL:O	2:AB:164:VAL:HA	2.19	0.42
36:DA:2177:C:H2'	36:DA:2178:C:O2	2.20	0.42
51:DS:74:ALA:HB1	51:DS:103:GLU:CG	2.47	0.42
9:AI:42:ARG:NH2	9:AI:75:ASP:OD1	2.53	0.42
1:CA:1314:C:O4'	1:CA:1314:C:O2	2.37	0.42
30:B4:25:TYR:N	30:B4:25:TYR:CD1	2.88	0.42
36:DA:2740:A:C6	36:DA:2741:A:C6	3.08	0.42
1:CA:454:C:H5''	1:CA:455:C:C5	2.55	0.42
52:DT:96:ARG:CB	52:DT:96:ARG:NH1	2.83	0.42
46:BN:58:ASP:O	46:BN:59:LYS:HB2	2.20	0.42
1:CA:428:G:O2'	1:CA:429:U:P	2.77	0.42
52:DT:23:ARG:HB2	52:DT:24:PRO:HD2	2.01	0.42
20:AT:26:ASN:CB	20:AT:71:THR:HG23	2.44	0.42
54:BV:39:LEU:O	54:BV:40:LEU:HB2	2.20	0.42
58:DZ:61:LEU:HB2	58:DZ:65:GLN:O	2.20	0.42
36:DA:848:G:H2'	36:DA:849:A:C8	2.54	0.42
36:DA:927:G:H3'	36:DA:928:G:H8	1.84	0.42
20:CT:27:LYS:O	20:CT:27:LYS:HD3	2.20	0.42
36:DA:478:A:C6	36:DA:480:A:C6	3.07	0.42
16:AP:45:THR:O	16:AP:45:THR:HG23	2.20	0.42
20:AT:104:LEU:HD23	20:AT:105:SER:N	2.34	0.42
40:BE:129:HIS:O	40:BE:130:GLY:C	2.58	0.42
50:BR:7:GLY:O	50:BR:8:ARG:HB2	2.19	0.42
49:BQ:32:TYR:O	49:BQ:105:GLU:CB	2.64	0.42
52:BT:74:ARG:C	52:BT:75:ILE:HD12	2.40	0.42
25:AZ:63:ILE:HG13	25:AZ:64:ASN:ND2	2.35	0.42
47:DO:28:SER:O	47:DO:29:ASN:HB3	2.19	0.42
36:DA:2529:G:H5''	36:DA:2530:A:H5''	2.02	0.42
17:AQ:59:ILE:HG22	17:AQ:71:PHE:HD2	1.83	0.42
49:DQ:109:VAL:HG12	49:DQ:110:THR:H	1.84	0.42
2:AB:190:THR:O	2:AB:191:ASP:CB	2.67	0.42
6:AF:27:GLN:NE2	6:AF:27:GLN:HA	2.35	0.42
36:BA:1286:A:OP1	50:BR:105:ARG:CZ	2.67	0.42
40:DE:120:TRP:CE3	40:DE:120:TRP:HA	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2262:U:H2'	36:BA:2263:C:C6	2.54	0.42
7:CG:23:VAL:O	7:CG:27:ILE:HG13	2.19	0.42
13:CM:118:ALA:HB3	22:CV:29:G:H5''	2.01	0.42
36:DA:528:A:C2	36:DA:2043:C:O5'	2.70	0.42
24:CY:60:U:H2'	24:CY:61:C:H5	1.84	0.42
36:BA:135:G:O2'	36:BA:136:G:H5'	2.20	0.42
56:DX:8:ILE:H	56:DX:8:ILE:CD1	2.30	0.42
1:AA:748:C:H6	1:AA:748:C:OP2	2.02	0.42
36:BA:2732:G:O2'	36:BA:2733:A:H5'	2.18	0.42
2:AB:97:TRP:CH2	2:AB:176:GLU:CD	2.93	0.42
1:AA:1296:C:H4'	1:AA:1302:U:C4	2.54	0.42
17:AQ:16:GLN:O	17:AQ:17:LYS:HB2	2.19	0.42
15:CO:21:ASP:OD1	15:CO:21:ASP:C	2.58	0.42
25:AZ:316:PHE:CE1	25:AZ:372:VAL:HB	2.54	0.42
24:AY:54:5MU:H73	24:AY:55:PSU:O2	2.19	0.42
1:CA:515:G:O2'	1:CA:516:U:H5'	2.19	0.42
2:CB:144:ARG:CG	2:CB:145:LEU:N	2.82	0.42
50:DR:109:ALA:O	50:DR:111:LEU:HD12	2.20	0.42
39:BD:239:ARG:HH11	39:BD:239:ARG:HG2	1.85	0.42
1:AA:594:G:H2'	1:AA:595:G:H5'	2.02	0.42
1:AA:1262:C:H2'	1:AA:1263:C:C6	2.54	0.42
1:AA:373:A:C2	1:AA:374:A:C8	3.08	0.42
16:CP:2:VAL:O	16:CP:64:ALA:HA	2.20	0.42
6:CF:52:ILE:O	6:CF:53:ALA:HB3	2.20	0.42
36:BA:1097:U:O2'	36:BA:1098:A:H5'	2.19	0.42
36:DA:736:C:H2'	36:DA:737:C:C6	2.54	0.42
1:CA:1444:C:H2'	1:CA:1445:C:C6	2.54	0.42
1:AA:189(E):U:O2'	1:AA:189(F):U:H5'	2.19	0.42
1:AA:567:G:H2'	1:AA:568:G:O4'	2.19	0.42
36:DA:1526:G:O2'	36:DA:1527:G:H5'	2.20	0.42
2:CB:62:ALA:O	2:CB:65:GLY:N	2.43	0.42
4:CD:141:ARG:HB3	4:CD:142:PRO:CD	2.49	0.42
36:DA:594:U:H3	36:DA:663:G:H1	1.68	0.42
1:CA:643:C:H2'	1:CA:644:G:H8	1.85	0.42
1:AA:124:G:C6	1:AA:125:U:C4	3.07	0.42
36:DA:1449:A:N7	36:DA:1450:G:C8	2.88	0.42
8:CH:119:LEU:HD12	8:CH:124:ALA:HA	2.00	0.42
51:BS:70:GLY:C	51:BS:72:ALA:N	2.72	0.42
39:DD:258:LYS:HD3	39:DD:273:ARG:NH2	2.33	0.42
36:DA:569:U:C4	36:DA:570:G:C6	3.08	0.42
8:CH:91:ARG:HG2	8:CH:91:ARG:O	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:BV:71:LEU:HA	54:BV:71:LEU:HD23	1.75	0.42
38:DC:15:ASP:C	38:DC:15:ASP:OD1	2.57	0.42
36:BA:1424:G:H2'	36:BA:1425:G:O4'	2.19	0.42
39:DD:242:ARG:HG2	39:DD:242:ARG:NH1	2.34	0.42
22:CV:42:C:H5'	22:CV:42:C:C6	2.44	0.42
43:BH:83:TYR:HB3	43:BH:135:GLY:H	1.84	0.42
43:DH:122:THR:O	43:DH:133:VAL:HA	2.20	0.42
41:BF:24:LEU:CD1	41:BF:118:ALA:HB1	2.49	0.42
49:BQ:141:GLN:CB	58:BZ:99:TYR:HE1	2.26	0.42
39:DD:27:THR:CG2	39:DD:27:THR:O	2.68	0.42
39:DD:30:GLU:CG	39:DD:35:LYS:HZ1	2.32	0.42
32:B6:33:LYS:O	32:B6:34:LEU:HB2	2.18	0.42
41:DF:40:GLN:NE2	41:DF:184:TYR:HB2	2.34	0.42
52:BT:29:ARG:HB2	52:BT:85:LYS:HA	2.02	0.42
36:DA:2187:G:C3'	36:DA:2188:C:H5'	2.49	0.42
57:DY:39:VAL:HG12	57:DY:40:GLU:H	1.85	0.42
57:BY:81:LYS:CD	57:BY:97:ARG:O	2.66	0.42
4:AD:127:THR:HG22	4:AD:128:VAL:O	2.19	0.42
32:B6:10:LEU:N	32:B6:10:LEU:HD23	2.28	0.42
36:BA:1499:C:H2'	36:BA:1500:G:H5'	2.00	0.42
53:DU:115:ALA:C	53:DU:117:GLN:N	2.73	0.42
48:BP:110:TYR:O	48:BP:111:ARG:C	2.58	0.42
20:CT:53:LEU:HD11	20:CT:92:LEU:HD11	2.01	0.42
51:BS:67:ARG:NE	51:BS:98:VAL:HG11	2.35	0.42
36:BA:265:A:H4'	36:BA:266:G:O5'	2.20	0.42
34:D8:28:GLY:CA	34:D8:32:LEU:HD22	2.49	0.42
48:DP:61:ARG:C	48:DP:62:LEU:HD23	2.40	0.42
36:BA:671:C:H2'	36:BA:672:C:H6	1.82	0.42
48:DP:39:LYS:HD2	48:DP:40:SER:N	2.27	0.42
36:DA:2109:U:O2	36:DA:2180:U:C5	2.73	0.42
36:BA:600:G:H5'	41:BF:32:LEU:HD12	2.02	0.42
36:DA:2283:C:H2'	36:DA:2284:C:O4'	2.20	0.42
4:AD:17:VAL:O	4:AD:18:LYS:O	2.37	0.42
42:DG:128:ARG:HA	42:DG:128:ARG:HD3	1.88	0.42
36:BA:2807:G:H1	36:BA:2893:G:H1	1.67	0.42
14:AN:12:ARG:NH1	14:AN:12:ARG:CB	2.83	0.42
7:AG:42:ILE:HD13	7:AG:116:ALA:CB	2.50	0.42
52:BT:125:ARG:HD3	52:BT:125:ARG:HA	1.89	0.42
36:DA:651:G:H2'	36:DA:652:C:H5'	2.02	0.42
2:CB:187:LEU:HD11	2:CB:204:ASN:O	2.20	0.42
42:DG:114:ILE:C	42:DG:116:ASP:N	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:34:ARG:HG3	12:CL:105:TYR:HE2	1.85	0.42
25:CZ:136:ASN:HA	25:CZ:173:GLY:O	2.20	0.42
40:DE:116:VAL:HG21	40:DE:122:PHE:CG	2.54	0.42
36:DA:141:A:C8	36:DA:1408:C:O2'	2.70	0.42
1:AA:1221:G:OP1	1:AA:1321:C:N3	2.53	0.42
43:DH:139:GLN:NE2	43:DH:140:LYS:HA	2.35	0.42
36:DA:2524:G:H2'	36:DA:2525:G:O4'	2.19	0.42
29:B3:17:LYS:HA	29:B3:17:LYS:HD3	1.87	0.42
19:AS:66:MET:H	19:AS:66:MET:HG2	1.67	0.42
42:BG:173:LEU:HB3	42:BG:178:PHE:CG	2.55	0.42
16:CP:5:ARG:HB2	16:CP:6:LEU:H	1.69	0.42
13:AM:94:ARG:HH22	36:BA:887:A:C5'	2.32	0.42
36:DA:990:A:N6	36:DA:1186:G:H1'	2.33	0.42
1:CA:1104:G:O5'	2:CB:111:ARG:CD	2.63	0.42
36:DA:1011:G:OP1	53:DU:75:ASN:HB2	2.20	0.42
37:BB:13:A:HO2'	37:BB:14:U:H3'	1.85	0.42
36:BA:2476:A:C2	36:BA:2477:C:C2	3.08	0.42
36:BA:104:U:H2'	36:BA:105:C:H5'	2.00	0.42
52:BT:35:LYS:O	52:BT:36:GLU:HB2	2.19	0.42
36:DA:2562:U:H4'	47:DO:25:LEU:HD21	2.00	0.42
36:DA:2475:C:N4	36:DA:2529:G:H22	2.17	0.42
15:CO:11:VAL:HG21	15:CO:34:LEU:HD22	2.02	0.42
10:AJ:35:SER:O	10:AJ:36:GLY:O	2.37	0.42
12:AL:93:LEU:HD13	12:AL:96:VAL:HG21	2.02	0.42
48:DP:28:GLY:C	48:DP:29:LYS:HD2	2.39	0.42
53:BU:29:SER:HB2	53:BU:30:LYS:HE2	2.02	0.42
4:CD:145:GLU:N	4:CD:145:GLU:CD	2.71	0.42
2:AB:28:PHE:O	2:AB:32:ILE:HG22	2.20	0.42
49:DQ:79:LEU:CD2	49:DQ:80:GLU:H	2.30	0.42
39:BD:275:LYS:CD	39:BD:276:LYS:N	2.83	0.42
25:AZ:309:SER:O	25:AZ:310:ILE:O	2.38	0.42
1:AA:380:G:C2	1:AA:384:G:C6	3.08	0.42
24:AY:77:TRP:N	25:AZ:273:HIS:H	2.18	0.42
17:CQ:45:HIS:CG	17:CQ:65:ILE:HD13	2.54	0.42
46:BN:14:VAL:HG11	46:BN:137:LYS:HD2	2.01	0.42
36:BA:1095:A:H2'	36:BA:1096:A:C8	2.52	0.42
36:BA:2012:G:H4'	55:BW:96:ILE:HD11	2.00	0.42
1:CA:201:C:H2'	1:CA:202:U:H3'	2.02	0.42
36:DA:2695:C:H2'	36:DA:2696:U:H6	1.84	0.42
1:AA:1121:U:H2'	1:AA:1122:U:C6	2.55	0.42
26:D0:53:MET:CG	26:D0:57:PHE:HA	2.49	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:189(H):G:HO2'	1:AA:189(I):G:P	2.42	0.42
36:BA:1658:C:OP1	40:BE:132:HIS:ND1	2.53	0.42
13:CM:35:GLU:C	13:CM:37:THR:N	2.73	0.42
36:DA:2086:U:H2'	36:DA:2087:G:C8	2.55	0.42
41:DF:113:ALA:HB1	41:DF:186:ILE:CG2	2.49	0.42
10:AJ:8:LEU:HB3	10:AJ:16:LEU:HD21	2.02	0.42
1:AA:130:A:C8	17:AQ:63:ARG:HG3	2.55	0.42
1:AA:509:A:C6	1:AA:510:A:N1	2.88	0.42
40:DE:110:GLY:HA3	40:DE:162:ALA:HB2	2.01	0.42
36:BA:201:C:O2'	36:BA:202:U:H5'	2.19	0.42
1:CA:639:G:O2'	1:CA:640:A:H5'	2.20	0.42
23:CX:23:G:C5	24:CY:36:A:C2	3.08	0.42
40:DE:152:LYS:HG2	46:DN:78:TYR:CZ	2.55	0.42
36:BA:1906:G:C8	36:BA:1929:G:H2'	2.55	0.42
1:AA:1118:C:H1'	1:AA:1179:A:C4	2.54	0.42
1:AA:451:A:N6	1:AA:480:U:H2'	2.35	0.42
39:DD:52:ARG:HB3	39:DD:53:PHE:CE2	2.55	0.42
25:AZ:301:GLY:HA2	25:AZ:347:THR:OG1	2.20	0.42
1:CA:1421:G:H1	1:CA:1479:C:H42	1.67	0.42
41:BF:99:TYR:CD1	41:BF:99:TYR:N	2.87	0.42
36:DA:70:G:H2'	36:DA:113:G:O2'	2.19	0.42
38:BC:98:GLU:HG3	38:BC:98:GLU:O	2.20	0.42
28:B2:57:ILE:O	28:B2:61:LEU:N	2.52	0.42
56:DX:13:LEU:HA	56:DX:18:TYR:OH	2.20	0.42
48:BP:131:SER:O	48:BP:132:LYS:C	2.59	0.42
40:BE:54:GLN:O	40:BE:75:VAL:CG2	2.65	0.42
34:D8:8:LYS:CA	34:D8:11:LYS:HD3	2.41	0.42
46:BN:10:GLU:HG3	46:BN:11:PRO:HD2	2.01	0.42
42:DG:45:GLU:O	42:DG:47:LYS:N	2.51	0.42
42:DG:81:LYS:HB3	42:DG:82:LEU:H	1.68	0.42
42:DG:82:LEU:HB3	42:DG:87:PRO:HB3	2.01	0.42
32:D6:13:CYS:HB3	32:D6:49:HIS:HB3	2.02	0.42
57:BY:39:VAL:HG12	57:BY:40:GLU:H	1.84	0.42
1:CA:540:G:O2'	1:CA:541:G:H5'	2.20	0.42
4:CD:8:VAL:HB	4:CD:21:LEU:HD12	2.01	0.42
27:D1:16:ASN:HD22	27:D1:37:ILE:HG22	1.82	0.42
36:BA:2370:G:C6	36:BA:2371:G:C6	3.07	0.42
37:DB:48:A:OP1	51:DS:93:LYS:HB3	2.20	0.42
48:BP:126:VAL:HA	48:BP:145:PRO:CG	2.50	0.42
37:DB:43:C:H5'	37:DB:44:G:OP2	2.20	0.42
39:DD:44:ASN:CB	39:DD:48:ARG:O	2.68	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:18:LYS:CA	4:CD:33:MET:HE2	2.49	0.42
36:DA:265:A:C8	36:DA:266:G:H1'	2.55	0.42
52:BT:95:ARG:NH1	52:BT:95:ARG:HB3	2.35	0.42
5:CE:51:VAL:O	5:CE:54:ALA:HB3	2.20	0.42
40:BE:59:VAL:HG21	40:BE:63:LEU:HA	2.01	0.42
36:DA:1477:A:C2	36:DA:1515:G:C2	3.08	0.42
36:DA:1666:G:H1'	47:DO:3:GLN:HE21	1.84	0.42
43:BH:157:TYR:O	43:BH:158:HIS:CD2	2.73	0.42
36:BA:2133:G:C2'	36:BA:2157:G:H22	2.33	0.42
25:AZ:136:ASN:HA	25:AZ:173:GLY:O	2.20	0.42
25:AZ:34:VAL:C	25:AZ:36:ALA:H	2.23	0.42
36:DA:1405:U:H2'	36:DA:1406:U:C6	2.55	0.42
52:DT:119:LYS:O	52:DT:123:GLN:HG2	2.20	0.42
9:CI:58:HIS:C	9:CI:59:PHE:HD1	2.23	0.42
1:AA:1442(A):G:N2	52:BT:119:LYS:HA	2.34	0.42
53:BU:95:LEU:HD11	54:BV:11:GLN:HG3	2.02	0.42
52:DT:92:GLY:O	52:DT:94:ALA:N	2.53	0.42
52:BT:34:VAL:HG22	52:BT:39:ARG:HA	2.01	0.42
46:DN:57:ALA:O	46:DN:58:ASP:O	2.37	0.42
36:BA:2464:C:O2'	36:BA:2465:C:P	2.77	0.42
42:BG:138:GLN:HE21	42:BG:152:LEU:HA	1.84	0.42
53:DU:13:LYS:HD3	53:DU:13:LYS:N	2.34	0.42
34:B8:20:GLY:O	34:B8:57:ARG:HD3	2.19	0.42
9:CI:43:ALA:O	9:CI:45:ALA:N	2.52	0.42
54:DV:52:VAL:O	54:DV:52:VAL:HG13	2.19	0.42
58:DZ:108:PRO:O	58:DZ:110:GLY:N	2.52	0.42
25:CZ:325:LYS:HE3	25:CZ:331:HIS:HB2	2.02	0.42
46:DN:18:ALA:O	46:DN:20:GLY:N	2.53	0.42
19:CS:11:VAL:HG23	19:CS:38:SER:HB3	2.01	0.42
36:BA:479:A:HO2'	36:BA:481:G:H8	1.67	0.42
36:BA:280:C:N4	36:BA:360:G:H1	2.18	0.42
3:AC:40:ARG:CG	3:AC:40:ARG:NH1	2.81	0.42
3:AC:54:ARG:CG	3:AC:55:VAL:N	2.83	0.42
1:AA:1536:C:H2'	1:AA:1537:U:C6	2.54	0.42
1:AA:1104:G:O5'	2:AB:111:ARG:CD	2.62	0.42
58:BZ:63:ASP:CG	58:BZ:65:GLN:HE21	2.23	0.42
57:DY:47:LYS:HG3	57:DY:60:PHE:CE1	2.54	0.42
36:DA:1450(A):C:C2	36:DA:1451:C:C5	3.08	0.42
43:DH:89:ILE:HG12	43:DH:129:THR:HA	2.01	0.42
36:BA:1170:G:N2	36:BA:1180:C:C2	2.87	0.42
1:CA:7:G:O2'	5:CE:120:THR:O	2.36	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:13:A:HO2'	37:DB:14:U:H3'	1.83	0.42
36:DA:1107:G:H4'	44:DJ:81:UNK:HA	2.02	0.42
1:AA:345:C:O5'	52:BT:41:ARG:CZ	2.68	0.42
36:BA:709:U:H2'	36:BA:710:G:H8	1.78	0.42
1:CA:656:C:O2'	1:CA:657:G:H5'	2.20	0.42
1:CA:109:A:C6	1:CA:326:G:C6	3.07	0.42
36:DA:1579:A:H2'	36:DA:1580:A:O4'	2.20	0.42
46:BN:42:TRP:O	53:BU:64:ARG:NH1	2.52	0.42
5:CE:144:THR:O	5:CE:147:ASP:OD1	2.37	0.42
1:CA:1033:G:H2'	1:CA:1034:G:O4'	2.20	0.42
55:DW:2:GLU:HA	55:DW:64:MET:HE1	2.02	0.42
36:BA:2358:G:N2	48:BP:55:ARG:NH2	2.68	0.42
26:D0:53:MET:HA	26:D0:58:THR:O	2.20	0.42
1:AA:515:G:O2'	1:AA:516:U:H5'	2.20	0.42
36:DA:1982:C:C5'	36:DA:1983:C:OP2	2.67	0.42
22:CV:1:G:C1'	26:D0:5:LYS:NZ	2.83	0.42
1:CA:827:U:N3	1:CA:870:U:C4	2.88	0.42
36:DA:2735:G:H2'	36:DA:2736:G:C8	2.55	0.42
50:DR:32:GLY:O	50:DR:115:GLU:HA	2.20	0.42
36:DA:1432:C:H2'	36:DA:1433:U:O4'	2.20	0.42
28:D2:12:GLU:HA	28:D2:15:LYS:HE2	2.01	0.42
5:CE:36:ASP:OD1	5:CE:36:ASP:C	2.58	0.42
42:DG:133:LEU:N	42:DG:133:LEU:HD23	2.34	0.42
36:BA:236:C:H2'	36:BA:237:C:H6	1.85	0.42
1:AA:495:A:H61	4:AD:119:GLN:NE2	2.18	0.42
36:DA:1906:G:C8	36:DA:1929:G:H2'	2.55	0.42
1:AA:600:C:OP2	8:AH:97:VAL:HG12	2.19	0.42
41:BF:87:GLY:O	41:BF:88:VAL:O	2.37	0.42
1:AA:111:G:O6	1:AA:330:C:N4	2.45	0.42
36:DA:625:G:O2'	36:DA:626:U:H5'	2.20	0.42
36:BA:60:G:C4	36:BA:63:U:C4	3.08	0.42
10:AJ:84:GLN:O	10:AJ:88:LEU:N	2.47	0.42
15:AO:48:LYS:HA	15:AO:48:LYS:HD3	1.79	0.42
8:AH:35:ILE:H	8:AH:35:ILE:HG12	1.69	0.42
15:CO:48:LYS:HD3	15:CO:48:LYS:HA	1.80	0.42
26:B0:25:ARG:HG2	26:B0:25:ARG:HH11	1.85	0.42
10:CJ:21:GLN:CG	10:CJ:21:GLN:O	2.68	0.42
13:CM:106:ASN:O	13:CM:107:ALA:HB3	2.20	0.42
38:DC:117:PRO:HD2	38:DC:147:PHE:CD2	2.55	0.42
1:CA:1037:C:O5'	1:CA:1037:C:H6	2.03	0.42
32:B6:32:ASN:CG	32:B6:33:LYS:N	2.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:638:G:C6	36:BA:639:U:N3	2.88	0.42
40:BE:76:ARG:O	40:BE:77:ILE:C	2.58	0.42
46:DN:43:THR:HB	46:DN:46:VAL:HG12	2.00	0.42
39:BD:30:GLU:CG	39:BD:63:ARG:HH21	2.33	0.42
1:CA:1305:G:H5''	21:CU:4:GLY:C	2.39	0.42
29:B3:35:ARG:HG2	29:B3:37:LEU:HG	2.01	0.42
27:B1:70:VAL:O	27:B1:73:LEU:HB2	2.20	0.42
57:BY:75:ILE:CG2	57:BY:76:CYS:N	2.78	0.42
57:BY:81:LYS:HD3	57:BY:97:ARG:NE	2.34	0.42
57:BY:97:ARG:HH21	57:BY:98:VAL:CG2	2.32	0.42
4:AD:101:LEU:C	4:AD:103:ASN:H	2.23	0.42
4:CD:100:ARG:HH11	4:CD:100:ARG:HG3	1.85	0.42
36:DA:2308:G:N7	36:DA:2310:A:C5'	2.81	0.42
14:CN:3:ARG:NE	14:CN:3:ARG:O	2.49	0.42
36:DA:1499:C:H2'	36:DA:1500:G:C5'	2.50	0.42
36:BA:1946:U:H2'	36:BA:1947:C:H6	1.85	0.42
51:BS:83:LYS:HE2	51:BS:83:LYS:HB3	1.91	0.42
48:DP:35:HIS:O	48:DP:36:LYS:HB2	2.20	0.42
20:AT:92:LEU:O	20:AT:94:ALA:N	2.52	0.42
52:BT:50:ILE:HG22	52:BT:51:ARG:N	2.34	0.42
41:BF:28:ILE:O	41:BF:30:PRO:HD3	2.19	0.42
39:DD:147:LEU:HD12	39:DD:147:LEU:HA	1.74	0.42
58:DZ:10:ARG:HE	58:DZ:36:LYS:HB2	1.85	0.42
48:DP:82:GLY:HA3	48:DP:115:LEU:HD21	2.01	0.42
25:AZ:143:ASP:O	25:AZ:147:LEU:HD23	2.19	0.42
3:CC:8:ILE:O	3:CC:11:ARG:N	2.52	0.42
9:CI:18:PHE:HD1	9:CI:62:TYR:O	2.03	0.42
36:DA:271(I):G:H2'	36:DA:271(J):C:O4'	2.20	0.42
31:D5:50:GLY:HA3	31:D5:56:LYS:HD2	2.01	0.42
35:B9:34:GLN:HB3	35:B9:35:ARG:H	1.71	0.42
25:CZ:188:THR:CG2	25:CZ:193:ASN:HD22	2.28	0.42
25:CZ:178:ALA:HB3	25:CZ:199:ILE:HD11	2.02	0.42
25:CZ:206:ILE:C	25:CZ:208:GLU:N	2.74	0.42
43:BH:125:VAL:O	43:BH:125:VAL:HG12	2.19	0.42
1:CA:1442(A):G:C3'	1:CA:1442(B):A:H5''	2.50	0.42
56:BX:46:ALA:C	56:BX:47:PHE:CD1	2.93	0.42
46:DN:32:THR:C	46:DN:34:LEU:N	2.72	0.42
43:DH:45:VAL:O	43:DH:47:GLU:N	2.53	0.42
1:CA:412:A:H5'	1:CA:413:G:OP2	2.20	0.42
54:BV:45:THR:CG2	54:BV:52:VAL:HG21	2.50	0.42
42:BG:102:PHE:O	42:BG:103:LEU:CB	2.59	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:9:VAL:HG12	19:AS:10:PHE:N	2.34	0.42
22:AW:29:G:O2'	22:AW:30:G:H5'	2.20	0.42
49:BQ:76:LYS:HB3	49:BQ:91:GLU:CG	2.49	0.42
15:CO:39:LEU:CD1	15:CO:56:LEU:HB2	2.44	0.42
1:AA:623:C:C4	1:AA:624:C:C4	3.08	0.42
50:DR:58:GLY:CA	50:DR:80:PHE:HE2	2.28	0.42
50:BR:57:ARG:O	50:BR:58:GLY:C	2.59	0.42
40:BE:4:ILE:HD11	40:BE:28:ALA:O	2.20	0.42
1:AA:1015:A:C6	1:AA:1016:A:C6	3.07	0.42
24:CY:26:A:C2'	24:CY:27:C:H5'	2.50	0.42
40:BE:11:MET:CB	40:BE:24:THR:HA	2.50	0.42
37:BB:13:A:H2'	37:BB:14:U:H5''	2.02	0.42
50:BR:4:LEU:CD1	50:BR:7:GLY:HA3	2.50	0.42
1:CA:197:A:C5	1:CA:221:C:H4'	2.54	0.42
3:AC:50:ALA:CA	3:AC:72:LYS:HB2	2.45	0.42
7:CG:6:ARG:O	7:CG:7:ALA:O	2.38	0.42
38:BC:75:LEU:HD21	38:BC:113:VAL:HG22	2.01	0.42
46:BN:73:THR:HA	46:BN:83:LYS:O	2.19	0.42
48:BP:124:LYS:HA	48:BP:124:LYS:HD3	1.84	0.42
1:CA:298:A:H2'	1:CA:299:G:O4'	2.20	0.42
41:DF:125:LEU:N	41:DF:125:LEU:CD2	2.83	0.42
36:BA:402:A:C2'	36:BA:403:U:H5'	2.49	0.42
1:CA:16:A:N1	1:CA:919:A:H2	2.18	0.42
2:AB:29:ALA:HA	2:AB:32:ILE:HG21	2.01	0.42
4:CD:65:ARG:NH1	4:CD:70:ILE:O	2.53	0.42
18:CR:59:SER:O	18:CR:60:ALA:C	2.58	0.42
53:BU:17:ILE:HG23	53:BU:39:LEU:CD1	2.49	0.42
52:DT:66:VAL:HA	52:DT:71:GLY:HA2	2.00	0.42
58:BZ:79:ARG:HG3	58:BZ:79:ARG:O	2.18	0.42
36:BA:1510:G:C2'	36:BA:1511:C:H5'	2.49	0.42
1:AA:256:U:C5'	17:AQ:17:LYS:HZ1	2.32	0.42
36:DA:1657:C:H2'	36:DA:1658:C:C6	2.54	0.42
40:BE:67:PHE:HD1	40:BE:67:PHE:HA	1.72	0.42
40:BE:68:ALA:O	40:BE:70:ALA:N	2.52	0.42
1:CA:416:G:H2'	1:CA:417:C:O4'	2.20	0.42
2:AB:144:ARG:CG	2:AB:145:LEU:N	2.81	0.42
1:AA:1498:U:H4'	1:AA:1519:A:N1	2.35	0.42
36:BA:634:C:H2'	36:BA:635:C:H6	1.84	0.42
1:CA:1107:C:C4	1:CA:1108:G:C8	3.07	0.42
46:DN:39:ARG:O	46:DN:41:ASP:N	2.53	0.42
29:D3:23:LEU:HD21	29:D3:50:VAL:HG11	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:208:C:H2'	36:BA:209:C:H6	1.84	0.42
1:AA:1346:A:H5''	9:AI:120:ARG:NH2	2.34	0.42
45:DK:99:UNK:O	45:DK:100:UNK:C	2.67	0.42
55:BW:92:ARG:O	55:BW:93:ALA:HB3	2.20	0.42
16:CP:9:PHE:CE2	16:CP:18:ARG:CZ	3.02	0.42
43:BH:110:SER:O	43:BH:111:HIS:HB2	2.20	0.42
22:CV:24:G:C6	22:CV:25:C:C4	3.08	0.42
44:BJ:125:UNK:C	44:BJ:127:UNK:N	2.82	0.42
36:DA:1847:A:H2'	36:DA:1847:A:N3	2.35	0.42
38:BC:57:ASN:HA	38:BC:57:ASN:HD22	1.64	0.42
36:DA:596:G:H2'	36:DA:597:U:O4'	2.19	0.42
39:BD:242:ARG:HG3	39:BD:242:ARG:HH11	1.81	0.41
47:DO:104:ARG:N	47:DO:122:LEU:OXT	2.49	0.41
28:B2:29:LYS:O	28:B2:32:LEU:HB3	2.19	0.41
41:BF:24:LEU:CB	41:BF:25:PRO:HD2	2.21	0.41
1:CA:1054:C:O2'	1:CA:1055:A:P	2.78	0.41
58:BZ:104:PHE:HE2	58:BZ:119:GLU:HB3	1.85	0.41
1:CA:1037:C:C5	1:CA:1038:C:N3	2.88	0.41
41:DF:37:VAL:HG12	41:DF:41:LEU:HD12	2.02	0.41
46:BN:43:THR:HB	46:BN:46:VAL:HG12	2.02	0.41
42:DG:43:LEU:HD22	42:DG:43:LEU:N	2.35	0.41
37:DB:41:U:N3	42:DG:70:VAL:HB	2.35	0.41
4:CD:104:VAL:O	4:CD:104:VAL:HG12	2.20	0.41
36:BA:607:U:N3	36:BA:621:A:C2	2.87	0.41
32:B6:16:CYS:SG	32:B6:48:VAL:CG2	2.98	0.41
48:BP:112:LEU:C	48:BP:112:LEU:HD22	2.41	0.41
1:AA:1505:G:H2'	23:AX:18:G:OP2	2.20	0.41
51:BS:67:ARG:O	51:BS:71:ARG:HG3	2.20	0.41
51:BS:92:TYR:O	51:BS:93:LYS:HB3	2.20	0.41
2:CB:142:LEU:HD23	2:CB:142:LEU:O	2.20	0.41
36:BA:654(S):G:N7	36:BA:654(T):C:O2	2.53	0.41
32:D6:10:LEU:H	32:D6:10:LEU:HD22	1.78	0.41
36:DA:250:G:H2'	36:DA:251:A:C8	2.55	0.41
51:BS:77:ALA:O	51:BS:78:LEU:C	2.59	0.41
19:AS:6:LYS:CD	19:AS:6:LYS:N	2.83	0.41
36:BA:252:G:O2'	36:BA:253:C:H5'	2.20	0.41
36:BA:2149:G:O2'	36:BA:2150:U:H5'	2.19	0.41
36:BA:2110:G:N1	36:BA:2178:C:C5	2.74	0.41
36:DA:1516:C:C2'	36:DA:1517:G:C5'	2.82	0.41
1:CA:1312:G:O2'	1:CA:1313:U:H5'	2.20	0.41
41:DF:28:ILE:O	41:DF:30:PRO:HD3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:206:ILE:O	25:AZ:210:ILE:CG2	2.68	0.41
2:AB:18:GLY:O	2:AB:19:HIS:HB2	2.20	0.41
36:DA:2008:C:H2'	36:DA:2009:G:H8	1.85	0.41
25:CZ:272:MET:HB2	25:CZ:277:LEU:HB2	2.02	0.41
40:DE:64:LYS:C	40:DE:66:HIS:H	2.21	0.41
53:BU:59:ARG:CG	53:BU:59:ARG:NH1	2.79	0.41
36:DA:142:A:H5''	36:DA:142(A):C:C5	2.54	0.41
36:DA:761:A:H3'	36:DA:761:A:H8	1.86	0.41
28:B2:18:PRO:HG2	28:B2:72:ALA:O	2.20	0.41
43:DH:139:GLN:HE21	43:DH:140:LYS:CA	2.33	0.41
12:AL:60:LEU:CD2	12:AL:66:VAL:HG22	2.50	0.41
11:CK:44:SER:OG	11:CK:47:VAL:HG23	2.20	0.41
15:AO:32:LEU:O	15:AO:36:ILE:HG13	2.19	0.41
36:DA:1076:C:O2	45:DK:89:UNK:HA	2.20	0.41
54:DV:51:VAL:HG12	54:DV:52:VAL:N	2.24	0.41
50:BR:52:ILE:O	50:BR:55:ALA:HB3	2.20	0.41
36:BA:1599:C:OP2	56:BX:36:LYS:HD2	2.19	0.41
8:CH:111:ILE:C	8:CH:112:LEU:HD23	2.39	0.41
19:AS:16:LEU:O	19:AS:20:LEU:N	2.51	0.41
56:DX:57:LEU:HD13	56:DX:78:LYS:O	2.20	0.41
3:CC:186:PHE:HE2	3:CC:188:LEU:HD22	1.83	0.41
1:CA:1307:U:H2'	1:CA:1308:U:C6	2.54	0.41
3:CC:73:PRO:CG	3:CC:105:GLU:HB2	2.47	0.41
22:AV:63:G:O2'	22:AV:64:A:H5'	2.18	0.41
36:DA:105:C:O2'	57:DY:2:ARG:HG3	2.20	0.41
22:CV:44:G:H5''	22:CV:45:U:C5	2.55	0.41
36:DA:211:A:O2'	36:DA:212:G:H5'	2.20	0.41
36:BA:797:C:H2'	36:BA:798:G:H8	1.85	0.41
25:AZ:163:PHE:C	25:AZ:165:GLY:H	2.22	0.41
28:D2:47:ASN:HD22	36:DA:95:G:H1'	1.85	0.41
2:CB:102:LEU:HD12	2:CB:102:LEU:N	2.35	0.41
1:CA:528:C:H41	12:CL:49:ASN:HD21	1.68	0.41
22:AW:52:G:O6	22:AW:62:C:N4	2.51	0.41
38:BC:10:LEU:CD1	38:BC:32:LEU:HA	2.48	0.41
12:CL:42:THR:HA	12:CL:53:ARG:O	2.19	0.41
24:CY:61:C:H2'	24:CY:62:U:C5'	2.50	0.41
1:CA:665:A:H1'	1:CA:733:A:O4'	2.19	0.41
6:CF:24:GLU:HG2	6:CF:28:ARG:NH1	2.35	0.41
2:AB:102:LEU:HD12	2:AB:102:LEU:N	2.35	0.41
36:DA:1470:G:N2	36:DA:1523:U:C4	2.88	0.41
1:AA:751:U:C2'	1:AA:752:G:H5'	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DV:97:LYS:HD3	54:DV:97:LYS:HA	1.84	0.41
12:CL:126:LYS:HE2	12:CL:127:GLU:N	2.34	0.41
8:CH:20:TYR:HA	8:CH:65:TYR:CZ	2.55	0.41
48:DP:107:LYS:O	48:DP:108:LYS:HB2	2.20	0.41
13:CM:16:ASP:CA	13:CM:34:LEU:HD11	2.50	0.41
24:AY:20:H2U:H61	24:AY:20:H2U:H2'	1.88	0.41
36:BA:2122:U:H2'	36:BA:2123:G:H8	1.84	0.41
1:AA:369:C:HO2'	1:AA:370:C:H6	1.68	0.41
1:CA:1423:G:H5'	47:DO:49:ARG:HH22	1.85	0.41
42:BG:48:GLU:O	42:BG:49:ASP:C	2.59	0.41
36:BA:1526:G:C6	36:BA:1527:G:C2	3.08	0.41
17:AQ:99:SER:C	17:AQ:100:LYS:HG3	2.41	0.41
1:AA:957:U:O2	1:AA:959:A:H8	2.02	0.41
3:AC:106:VAL:O	3:AC:107:GLN:C	2.58	0.41
38:DC:57:ASN:HA	38:DC:57:ASN:HD22	1.66	0.41
36:DA:229:A:OP1	36:DA:229:A:H8	2.03	0.41
36:DA:1986:A:H2'	36:DA:1986:A:N3	2.35	0.41
43:BH:119:GLU:OE1	43:BH:119:GLU:N	2.53	0.41
8:CH:6:ILE:N	8:CH:6:ILE:HD12	2.35	0.41
3:AC:90:GLU:O	3:AC:93:LYS:HB3	2.20	0.41
36:BA:2557:G:H2'	36:BA:2558:C:C6	2.54	0.41
1:AA:1150:U:O2'	1:AA:1151:A:H5'	2.21	0.41
28:B2:59:ARG:O	28:B2:63:VAL:HG23	2.20	0.41
56:DX:51:VAL:CG1	56:DX:81:VAL:HB	2.50	0.41
9:AI:85:LEU:C	9:AI:85:LEU:HD12	2.39	0.41
1:AA:1305:G:H5''	21:AU:4:GLY:C	2.41	0.41
41:BF:169:ASN:ND2	41:BF:169:ASN:O	2.52	0.41
58:DZ:125:LEU:O	58:DZ:164:ALA:HB3	2.19	0.41
25:CZ:86:ALA:O	25:CZ:87:ASP:HB2	2.20	0.41
36:BA:1858:G:H8	36:BA:1858:G:OP2	2.02	0.41
1:CA:555:C:OP1	12:CL:20:LYS:HE3	2.21	0.41
3:CC:76:VAL:O	3:CC:83:ARG:HG3	2.19	0.41
32:B6:17:LYS:O	32:B6:18:ARG:CB	2.67	0.41
36:DA:1858:G:OP2	36:DA:1858:G:H8	2.04	0.41
37:DB:48:A:H4'	51:DS:95:HIS:HD2	1.85	0.41
48:BP:96:THR:HG22	48:BP:126:VAL:CB	2.45	0.41
48:DP:111:ARG:HA	48:DP:128:HIS:CD2	2.54	0.41
43:BH:46:GLU:O	43:BH:48:GLY:N	2.54	0.41
48:DP:59:LEU:HA	48:DP:61:ARG:CD	2.50	0.41
36:DA:26:G:P	55:DW:80:PRO:HB3	2.61	0.41
36:DA:260:G:C6	36:DA:261:G:N7	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:833:U:H5'	48:BP:48:PRO:HB2	2.00	0.41
52:BT:92:GLY:O	52:BT:94:ALA:N	2.53	0.41
7:AG:16:LEU:HD21	9:AI:45:ALA:HB2	2.02	0.41
4:AD:59:ARG:HH21	4:AD:62:GLN:CG	2.28	0.41
57:DY:56:PRO:O	57:DY:57:GLN:O	2.38	0.41
36:BA:1070:A:H5'	36:BA:1072:C:OP2	2.20	0.41
36:DA:1091:G:H22	36:DA:1101:U:H1'	1.85	0.41
56:BX:45:THR:OG1	56:BX:46:ALA:N	2.53	0.41
28:D2:52:ASP:O	28:D2:53:LEU:C	2.57	0.41
28:D2:50:ILE:HG21	36:DA:61:G:H5'	2.02	0.41
36:DA:733:G:C8	36:DA:761:A:C6	3.08	0.41
1:CA:548:G:H2'	1:CA:549:C:O4'	2.20	0.41
20:CT:22:ARG:O	20:CT:26:ASN:ND2	2.53	0.41
27:D1:23:LYS:CE	27:D1:28:GLY:HA3	2.51	0.41
56:BX:83:VAL:HG12	56:BX:87:GLN:HB2	2.01	0.41
53:BU:68:ALA:C	53:BU:70:ARG:H	2.22	0.41
53:BU:70:ARG:NH2	53:BU:75:ASN:HB2	2.34	0.41
36:BA:1655:A:H1'	40:BE:113:PHE:CE1	2.56	0.41
36:DA:815:C:H2'	36:DA:816:C:C6	2.55	0.41
36:DA:1588:C:H2'	36:DA:1589:C:C6	2.54	0.41
36:DA:1534:U:C2'	36:DA:1535:A:H5'	2.50	0.41
36:DA:2108:C:C2'	36:DA:2108:C:O2	2.63	0.41
17:CQ:36:ILE:HG13	17:CQ:36:ILE:O	2.20	0.41
36:DA:877:U:O2'	36:DA:900:A:N6	2.54	0.41
49:BQ:42:ILE:HG22	49:BQ:47:ILE:HG13	2.03	0.41
35:D9:29:ASN:H	35:D9:29:ASN:ND2	2.17	0.41
2:CB:39:ILE:CG2	2:CB:40:HIS:N	2.82	0.41
1:CA:1296:C:C4'	1:CA:1302:U:C4	3.03	0.41
1:CA:165:C:H2'	1:CA:166:G:H8	1.84	0.41
35:D9:1:MET:HE3	35:D9:31:LYS:HB3	2.01	0.41
40:BE:120:TRP:HA	40:BE:120:TRP:CE3	2.55	0.41
5:CE:126:ARG:O	5:CE:127:ASN:C	2.58	0.41
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.20	0.41
7:AG:68:ASN:O	7:AG:138:LYS:HD2	2.20	0.41
36:BA:1131:G:O2'	36:BA:1132:A:H8	2.03	0.41
48:DP:17:LYS:O	48:DP:19:VAL:N	2.53	0.41
36:BA:1171:G:H3'	36:BA:1173:G:O4'	2.20	0.41
48:BP:107:LYS:HE3	48:BP:107:LYS:HB2	1.87	0.41
22:CV:75:C:H2'	22:CV:76:A:H1'	2.01	0.41
50:BR:74:LYS:CD	50:BR:77:ARG:NH1	2.83	0.41
33:B7:5:TRP:O	36:BA:1612:C:H4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1889:A:H1'	36:BA:2087:G:O4'	2.19	0.41
49:DQ:1:MET:HE1	49:DQ:44:ALA:C	2.40	0.41
1:AA:67:C:H2'	1:AA:68:G:C8	2.56	0.41
41:BF:113:ALA:HB1	41:BF:186:ILE:CG2	2.51	0.41
36:BA:2489:G:C6	36:BA:2490:G:N1	2.89	0.41
36:BA:79:G:H2'	36:BA:80:G:H8	1.84	0.41
55:DW:55:ALA:C	55:DW:57:ASN:N	2.73	0.41
2:CB:224:GLN:C	2:CB:226:ARG:N	2.71	0.41
40:BE:110:GLY:HA3	40:BE:162:ALA:HB2	2.01	0.41
3:CC:28:GLN:O	3:CC:29:TYR:CB	2.68	0.41
38:BC:200:LYS:HG3	38:BC:208:PHE:CD1	2.55	0.41
36:DA:1424:G:H2'	36:DA:1425:G:O4'	2.20	0.41
15:CO:33:THR:HG23	15:CO:63:ARG:NH1	2.36	0.41
36:DA:930:U:H4'	36:DA:931:G:O5'	2.20	0.41
36:BA:2856:C:O2'	36:BA:2857:G:H5'	2.20	0.41
36:BA:1387:C:C2	36:BA:1388:G:C8	3.08	0.41
44:BJ:104:UNK:HA	44:BJ:108:UNK:O	2.20	0.41
25:CZ:65:THR:HA	25:CZ:83:PRO:HD3	2.02	0.41
2:AB:58:ILE:CG2	2:AB:222:ILE:CD1	2.98	0.41
48:BP:138:LEU:HD12	48:BP:138:LEU:N	2.34	0.41
4:AD:49:ARG:HG2	4:AD:49:ARG:H	1.64	0.41
47:BO:17:ARG:HD3	47:BO:17:ARG:HA	1.93	0.41
38:DC:28:LEU:O	38:DC:28:LEU:HD23	2.20	0.41
36:DA:2236:C:H2'	36:DA:2237:G:O4'	2.20	0.41
11:AK:61:ALA:HB2	11:AK:90:GLY:HA2	2.02	0.41
36:DA:2335:A:C8	36:DA:2337:G:C5	3.08	0.41
1:AA:1151:A:O2'	1:AA:1152:A:H8	2.03	0.41
1:AA:1054:C:OP1	1:AA:1197:G:OP1	2.38	0.41
43:BH:122:THR:O	43:BH:133:VAL:HA	2.19	0.41
1:CA:1053:G:C4'	1:CA:1054:C:C5'	2.81	0.41
58:BZ:121:HIS:HD2	58:BZ:123:ASP:H	1.69	0.41
39:DD:35:LYS:CG	39:DD:36:PRO:N	2.77	0.41
56:DX:14:SER:N	56:DX:17:ALA:HB3	2.34	0.41
52:BT:53:ARG:O	52:BT:59:THR:HB	2.21	0.41
42:BG:46:ALA:CB	42:BG:88:ILE:CD1	2.94	0.41
1:AA:1008:C:H42	1:AA:1021:G:H1	1.68	0.41
36:DA:1537:G:H2'	36:DA:1538:G:C8	2.56	0.41
48:BP:82:GLY:HA3	48:BP:115:LEU:HD21	2.02	0.41
30:B4:5:ILE:CD1	30:B4:5:ILE:N	2.83	0.41
13:CM:5:ALA:HB1	13:CM:66:LEU:HD23	2.00	0.41
32:D6:27:LYS:HE3	32:D6:30:THR:OG1	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:D6:11:LEU:HG	32:D6:51:GLU:HG3	2.02	0.41
36:BA:1205:U:C5	41:BF:171:PRO:HA	2.55	0.41
39:DD:97:TYR:C	39:DD:99:ASP:N	2.74	0.41
51:BS:58:LEU:HG	51:BS:59:LYS:N	2.32	0.41
51:BS:59:LYS:CG	51:BS:60:GLY:H	2.01	0.41
32:D6:45:LYS:CG	36:DA:2371:G:H4'	2.50	0.41
12:CL:17:LYS:CD	12:CL:18:VAL:HG22	2.51	0.41
57:DY:75:ILE:O	57:DY:96:ILE:HD13	2.20	0.41
5:CE:80:ILE:HG12	5:CE:142:LEU:HD21	2.02	0.41
54:DV:18:LEU:CD2	54:DV:19:LYS:N	2.78	0.41
54:DV:61:VAL:HA	54:DV:94:LEU:HD23	2.01	0.41
4:CD:101:LEU:O	4:CD:102:ASP:C	2.59	0.41
5:AE:76:ILE:HG13	5:AE:77:PRO:HD2	2.02	0.41
32:B6:36:LEU:HD23	32:B6:37:ARG:N	2.34	0.41
51:DS:17:ARG:C	51:DS:19:LYS:N	2.73	0.41
46:DN:87:LEU:O	46:DN:88:GLU:C	2.58	0.41
48:BP:39:LYS:HD2	48:BP:40:SER:N	2.26	0.41
48:BP:45:LEU:CD1	48:BP:46:LYS:N	2.82	0.41
51:BS:17:ARG:C	51:BS:19:LYS:N	2.74	0.41
36:DA:2289:G:H1'	36:DA:2346:A:H2	1.85	0.41
36:DA:1190:G:H5'	48:DP:35:HIS:CA	2.50	0.41
36:DA:1947:C:C3'	36:DA:1948:G:H5''	2.49	0.41
36:DA:604:G:C6	36:DA:605:C:C4	3.08	0.41
4:AD:9:CYS:SG	4:AD:31:CYS:O	2.61	0.41
40:BE:59:VAL:HG13	40:BE:60:ASN:N	2.31	0.41
41:BF:28:ILE:O	41:BF:28:ILE:HG12	2.21	0.41
38:DC:43:VAL:CG2	38:DC:175:VAL:HG21	2.43	0.41
1:CA:1410:G:H2'	1:CA:1411:C:C6	2.55	0.41
1:AA:454:C:H5''	1:AA:455:C:C5	2.55	0.41
25:AZ:135:MET:CE	25:AZ:150:VAL:HB	2.50	0.41
25:AZ:182:MET:SD	25:AZ:188:THR:HB	2.60	0.41
14:CN:14:PRO:O	14:CN:15:LYS:O	2.38	0.41
55:BW:20:VAL:CG2	55:BW:47:VAL:HG21	2.42	0.41
4:AD:58:LEU:HD23	4:AD:62:GLN:HG2	2.01	0.41
36:BA:1208:C:C2	36:BA:1209:G:C8	3.09	0.41
36:BA:2875:C:C4'	52:BT:5:ALA:HB2	2.43	0.41
52:BT:6:LEU:HA	52:BT:9:LEU:HD12	2.02	0.41
10:AJ:6:ILE:HG22	10:AJ:98:ILE:CD1	2.48	0.41
53:DU:95:LEU:HD11	54:DV:11:GLN:HG3	2.00	0.41
36:DA:2810:A:H2'	40:DE:61:ARG:NH2	2.34	0.41
36:BA:271(D):G:H1	36:BA:271(T):C:H42	1.68	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:CZ:34:VAL:HA	25:CZ:182:MET:HE2	2.02	0.41
28:D2:20:GLU:O	28:D2:22:GLU:N	2.53	0.41
52:DT:89:VAL:HG11	52:DT:91:ARG:HG3	1.98	0.41
28:D2:31:GLU:HA	28:D2:34:GLU:HB2	2.01	0.41
46:DN:58:ASP:C	46:DN:60:ILE:N	2.61	0.41
1:CA:942:G:H21	9:CI:124:GLN:HE22	1.62	0.41
10:CJ:35:SER:O	10:CJ:36:GLY:O	2.37	0.41
36:DA:2668:G:C2'	36:DA:2669:G:H5'	2.49	0.41
47:DO:34:THR:OG1	47:DO:35:VAL:N	2.54	0.41
1:CA:376:G:N3	1:CA:389:A:C2	2.87	0.41
1:AA:376:G:N3	1:AA:389:A:C2	2.88	0.41
13:CM:82:MET:HG2	13:CM:83:ASP:H	1.85	0.41
34:D8:56:GLU:O	34:D8:57:ARG:C	2.58	0.41
58:DZ:111:VAL:HB	58:DZ:112:ARG:H	1.73	0.41
57:BY:47:LYS:HE3	57:BY:60:PHE:CZ	2.54	0.41
50:DR:63:ARG:HA	50:DR:80:PHE:CZ	2.56	0.41
50:BR:79:LEU:C	50:BR:79:LEU:HD13	2.41	0.41
36:BA:1348:G:C3'	36:BA:1349:A:H5''	2.50	0.41
36:BA:319:C:O2'	36:BA:320:A:H5'	2.20	0.41
56:DX:82:GLN:O	56:DX:82:GLN:HG3	2.20	0.41
13:CM:77:ASN:O	13:CM:81:LEU:HD23	2.20	0.41
42:BG:55:LYS:HA	42:BG:58:GLN:CG	2.48	0.41
39:BD:79:VAL:CG2	39:BD:111:LEU:HD11	2.51	0.41
1:AA:220:G:H2'	1:AA:221:C:H5'	2.01	0.41
36:DA:586:A:H5'	41:DF:89:VAL:HG21	2.01	0.41
25:CZ:152:MET:HG3	25:CZ:153:GLU:N	2.34	0.41
1:CA:148:G:H2'	1:CA:149:A:C8	2.54	0.41
1:CA:436:C:H5''	4:CD:156:GLU:CD	2.40	0.41
14:CN:28:GLY:O	14:CN:29:ARG:C	2.58	0.41
36:DA:2885:C:H2'	36:DA:2886:G:O5'	2.21	0.41
55:BW:50:VAL:HG13	55:BW:51:LEU:N	2.36	0.41
36:BA:211:A:O2'	36:BA:212:G:H5'	2.20	0.41
45:BK:86:UNK:O	45:BK:87:UNK:CB	2.68	0.41
49:DQ:5:ARG:CZ	49:DQ:5:ARG:CB	2.98	0.41
36:DA:752:A:HO2'	36:DA:753:C:P	2.41	0.41
36:DA:753:C:O5'	36:DA:753:C:H6	2.04	0.41
1:AA:16:A:N1	1:AA:919:A:C2	2.86	0.41
1:CA:512:U:C2	1:CA:513:C:C5	3.08	0.41
36:BA:1658:C:OP1	40:BE:132:HIS:CE1	2.73	0.41
40:BE:132:HIS:ND1	40:BE:135:HIS:HE1	2.17	0.41
36:BA:2750:A:H5''	36:BA:2751:G:OP2	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:147:ASN:N	43:BH:147:ASN:ND2	2.69	0.41
38:BC:155:GLU:OE1	38:BC:160:ARG:HD3	2.20	0.41
13:CM:32:GLU:OE1	13:CM:32:GLU:C	2.59	0.41
27:B1:18:ILE:HG12	27:B1:37:ILE:HG22	2.02	0.41
1:AA:409:G:H3'	1:AA:410:G:C8	2.56	0.41
11:AK:73:MET:C	11:AK:75:TYR:H	2.24	0.41
36:BA:1432:C:H2'	36:BA:1433:U:O4'	2.20	0.41
28:D2:2:LYS:HB2	36:DA:97:C:H5''	2.01	0.41
27:B1:34:THR:CG2	27:B1:36:GLY:H	2.32	0.41
1:CA:757:U:H2'	1:CA:758:G:O4'	2.20	0.41
1:AA:124:G:H2'	1:AA:125:U:O4'	2.20	0.41
8:CH:19:VAL:HG23	8:CH:21:LYS:HG3	2.02	0.41
1:AA:1068:G:N7	1:AA:1094:G:H2'	2.35	0.41
1:AA:586:C:O2'	1:AA:587:G:H5'	2.20	0.41
44:BJ:4:UNK:C	44:BJ:6:UNK:N	2.80	0.41
36:DA:1467:C:O2'	36:DA:1468:C:H5'	2.20	0.41
36:BA:1305:C:O2'	36:BA:1306:C:H5'	2.20	0.41
18:CR:79:LEU:HB3	18:CR:80:PRO:HD2	2.01	0.41
1:AA:355:C:C4	1:AA:356:A:N7	2.88	0.41
38:BC:116:THR:HA	38:BC:117:PRO:HD3	1.89	0.41
38:BC:97:GLU:O	38:BC:98:GLU:HB3	2.21	0.41
28:B2:61:LEU:HA	28:B2:61:LEU:HD23	1.73	0.41
1:AA:1037:C:C5	1:AA:1038:C:N3	2.89	0.41
36:DA:1540:U:C4	36:DA:1541:G:N7	2.88	0.41
32:B6:11:LEU:HD13	32:B6:11:LEU:H	1.85	0.41
46:DN:112:LEU:O	46:DN:115:ARG:HB3	2.21	0.41
9:AI:92:TYR:HA	9:AI:95:LYS:HG2	2.01	0.41
52:BT:80:SER:HB3	52:BT:81:PRO:CD	2.39	0.41
1:CA:964:A:H1'	10:CJ:55:LYS:HE2	2.01	0.41
25:CZ:368:VAL:CG1	25:CZ:369:THR:N	2.83	0.41
52:BT:10:VAL:C	52:BT:12:SER:N	2.73	0.41
27:B1:4:VAL:CG2	27:B1:5:CYS:N	2.81	0.41
1:CA:241:C:H4'	12:CL:19:ARG:HH22	1.84	0.41
1:AA:407:G:H4'	4:AD:115:ARG:O	2.20	0.41
34:B8:28:GLY:CA	34:B8:32:LEU:HD22	2.50	0.41
1:AA:973:G:H3'	1:AA:974:A:H5''	2.01	0.41
36:BA:604:G:C6	36:BA:605:C:N4	2.88	0.41
48:BP:130:PHE:CG	48:BP:135:LEU:HD23	2.55	0.41
36:DA:833:U:H2'	36:DA:834:C:H6	1.84	0.41
2:CB:93:VAL:HG13	2:CB:93:VAL:O	2.20	0.41
41:DF:169:ASN:O	41:DF:169:ASN:ND2	2.52	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:811:U:HO2'	36:DA:812:C:H5''	1.86	0.41
36:BA:1076:C:O2	45:BK:89:UNK:HA	2.20	0.41
36:BA:2177:C:H2'	36:BA:2178:C:O2	2.20	0.41
52:BT:110:ILE:C	52:BT:112:ARG:H	2.24	0.41
7:AG:42:ILE:HD13	7:AG:116:ALA:HB1	2.02	0.41
58:BZ:29:TYR:CB	58:BZ:34:ASN:CB	2.94	0.41
36:DA:1689:A:N6	36:DA:1698:A:H2	2.01	0.41
36:DA:2133:G:C2'	36:DA:2157:G:H22	2.33	0.41
12:CL:121:GLY:O	12:CL:122:THR:O	2.38	0.41
1:CA:1243:C:H2'	1:CA:1244:C:C6	2.55	0.41
2:CB:19:HIS:O	2:CB:20:GLU:O	2.37	0.41
12:AL:34:ARG:HG3	12:AL:105:TYR:CE2	2.55	0.41
36:BA:1666:G:H1'	47:BO:3:GLN:HE21	1.85	0.41
35:B9:35:ARG:CD	36:BA:2742:C:OP1	2.68	0.41
4:CD:58:LEU:CD2	4:CD:62:GLN:CG	2.98	0.41
36:BA:1058:G:N2	36:BA:1080:C:H42	2.19	0.41
42:DG:25:TYR:CD2	42:DG:31:VAL:HG23	2.55	0.41
52:DT:50:ILE:HA	52:DT:99:LEU:HD11	2.01	0.41
46:DN:58:ASP:O	46:DN:59:LYS:HB2	2.20	0.41
20:CT:50:GLU:CG	20:CT:100:ILE:HD13	2.40	0.41
4:CD:38:TYR:HA	4:CD:39:PRO:HD3	1.96	0.41
36:BA:761:A:H8	36:BA:761:A:H3'	1.85	0.41
51:BS:34:HIS:HB2	51:BS:36:TYR:CE1	2.54	0.41
1:AA:1116:C:C2'	1:AA:1117:G:C5'	2.94	0.41
20:CT:66:ALA:HB1	20:CT:71:THR:HB	2.02	0.41
24:AY:17:H2U:O3'	24:AY:17:H2U:OP2	2.39	0.41
54:DV:38:LEU:HD22	54:DV:52:VAL:HG11	2.02	0.41
36:DA:582:G:H2'	36:DA:583:G:H8	1.83	0.41
53:DU:8:VAL:HG12	53:DU:12:ARG:HG3	2.03	0.41
37:DB:16:G:C6	37:DB:69:G:C2	3.08	0.41
58:BZ:35:ARG:HD2	58:BZ:36:LYS:N	2.35	0.41
47:BO:86:ILE:C	47:BO:87:ILE:HD13	2.40	0.41
16:AP:8:ARG:C	16:AP:9:PHE:HD1	2.24	0.41
57:BY:33:LYS:C	57:BY:35:TYR:H	2.23	0.41
13:CM:97:PRO:CG	13:CM:103:THR:HG22	2.50	0.41
36:DA:2873:A:H1'	50:DR:6:SER:OG	2.20	0.41
25:CZ:143:ASP:O	25:CZ:147:LEU:HD23	2.20	0.41
37:BB:13:A:H5'	37:BB:13:A:H8	1.85	0.41
3:CC:94:LEU:O	3:CC:95:THR:CB	2.65	0.41
1:AA:436:C:H5''	4:AD:156:GLU:CD	2.40	0.41
39:BD:131:LEU:N	39:BD:131:LEU:HD12	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:CY:42:G:N2	24:CY:43:G:H1'	2.34	0.41
46:BN:3:THR:O	46:BN:4:TYR:CD2	2.72	0.41
1:CA:250:A:H5''	1:CA:251:G:OP1	2.21	0.41
36:BA:900:A:H3'	36:BA:901:A:H8	1.84	0.41
1:AA:658:G:O2'	1:AA:659:U:H5'	2.21	0.41
36:DA:1192:G:C2'	36:DA:1193:G:H5'	2.51	0.41
22:CW:51:U:H3	22:CW:63:G:H1	1.67	0.41
48:BP:85:LEU:HA	48:BP:88:LEU:HB3	2.01	0.41
25:CZ:125:GLN:NE2	25:CZ:394:THR:HB	2.35	0.41
46:DN:14:VAL:CG2	46:DN:137:LYS:HE3	2.51	0.41
1:CA:1376:U:H2'	1:CA:1377:A:H8	1.85	0.41
11:CK:34:ASP:O	11:CK:36:ASP:N	2.53	0.41
48:DP:89:ALA:HB1	48:DP:121:LYS:HD3	2.01	0.41
6:AF:78:GLU:O	6:AF:81:ILE:HG13	2.20	0.41
58:DZ:109:ALA:HB3	58:DZ:145:GLU:OE1	2.19	0.41
29:D3:31:LEU:O	29:D3:32:GLN:HB2	2.20	0.41
37:BB:29:A:C2	37:BB:56:G:C2	3.08	0.41
57:DY:87:LYS:O	57:DY:88:LYS:CB	2.65	0.41
1:CA:189:G:H2'	1:CA:189(A):C:C6	2.55	0.41
1:AA:513:C:C2	1:AA:514:C:C6	3.08	0.41
36:BA:1291:C:H2'	36:BA:1292:U:C6	2.55	0.41
52:DT:97:ALA:O	52:DT:98:LYS:HB2	2.21	0.41
25:AZ:340:PRO:HG2	25:AZ:342:PHE:CZ	2.55	0.41
36:DA:230:U:H2'	36:DA:231:C:C6	2.55	0.41
22:AV:76:A:N7	26:B0:2:ALA:HB1	2.35	0.41
6:AF:53:ALA:O	6:AF:54:LYS:CB	2.67	0.41
1:AA:602:A:H2'	1:AA:603:U:O4'	2.19	0.41
36:DA:1625:C:C2'	36:DA:1626:G:H5'	2.50	0.41
7:CG:42:ILE:HD13	7:CG:116:ALA:HB1	2.03	0.41
36:BA:346:A:H2'	36:BA:347:A:H5'	2.02	0.41
20:CT:96:GLY:O	20:CT:97:ALA:O	2.38	0.41
36:DA:489:G:N2	36:DA:1321:A:OP1	2.48	0.41
8:CH:33:GLU:HG2	8:CH:48:TYR:OH	2.20	0.41
36:DA:2642:G:O2'	36:DA:2643:G:H5'	2.20	0.41
22:AW:20:U:O2'	22:AW:21:A:H4'	2.20	0.41
27:B1:40:ARG:HH12	36:BA:2232:U:P	2.43	0.41
36:DA:1487:G:O2'	36:DA:1488:G:H5'	2.20	0.41
12:AL:57:LYS:HA	12:AL:67:THR:HA	2.03	0.41
1:CA:586:C:O2'	1:CA:587:G:H5'	2.21	0.41
1:CA:1419:G:H8	1:CA:1419:G:H5''	1.86	0.41
25:CZ:6:ILE:N	25:CZ:6:ILE:HD12	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:782:A:H5'	36:BA:783:A:C2	2.55	0.41
36:BA:2645:G:H4'	36:BA:2646:C:OP2	2.20	0.41
28:B2:43:GLN:C	28:B2:44:LEU:HD12	2.40	0.41
39:DD:63:ARG:HG3	39:DD:63:ARG:HH11	1.86	0.41
52:BT:56:GLY:O	52:BT:57:PHE:C	2.59	0.41
36:DA:1538:G:H2'	36:DA:1539:G:H8	1.85	0.41
36:BA:558:G:H1'	46:BN:45:ASN:HB3	2.01	0.41
41:BF:167:ALA:O	41:BF:168:ARG:C	2.59	0.41
1:AA:1417:G:H1'	1:AA:1483:A:N6	2.35	0.41
31:B5:3:LYS:N	31:B5:3:LYS:HD2	2.36	0.41
48:BP:8:PRO:O	48:BP:9:ASN:HB2	2.20	0.41
36:DA:2186:G:H2'	36:DA:2187:G:C4	2.55	0.41
1:AA:241:C:H4'	12:AL:19:ARG:HH22	1.85	0.41
57:BY:77:PRO:O	57:BY:78:ALA:CB	2.69	0.41
1:CA:542:G:O2'	1:CA:543:C:H5'	2.21	0.41
48:DP:146:VAL:CG2	48:DP:147:LEU:N	2.71	0.41
32:B6:36:LEU:C	32:B6:36:LEU:CD2	2.88	0.41
53:BU:115:ALA:C	53:BU:117:GLN:N	2.73	0.41
46:BN:62:VAL:HG13	46:BN:62:VAL:O	2.20	0.41
37:BB:22:U:H2'	37:BB:23:G:H8	1.85	0.41
36:DA:2111:C:C2	36:DA:2147:G:N2	2.82	0.41
36:DA:2149:G:H2'	36:DA:2150:U:O4'	2.20	0.41
36:BA:599:G:C6	36:BA:600:G:N7	2.89	0.41
36:BA:2110:G:N2	36:BA:2178:C:C5	2.87	0.41
36:BA:2785:C:H1'	40:BE:64:LYS:NZ	2.36	0.41
1:AA:1240:U:OP1	7:AG:116:ALA:N	2.50	0.41
12:AL:121:GLY:O	12:AL:122:THR:O	2.38	0.41
12:CL:109:GLY:HA3	12:CL:122:THR:H	1.86	0.41
3:CC:11:ARG:O	3:CC:12:LEU:C	2.58	0.41
36:BA:1665:A:H4'	47:BO:67:LYS:HB2	2.03	0.41
50:BR:2:ARG:CG	50:BR:2:ARG:NH1	2.80	0.41
42:BG:120:LEU:O	42:BG:121:ASN:C	2.58	0.41
36:BA:1405:U:H2'	36:BA:1406:U:C6	2.54	0.41
36:DA:2762:G:H2'	36:DA:2763:G:O4'	2.21	0.41
46:DN:31:ALA:O	46:DN:34:LEU:HB3	2.21	0.41
46:BN:57:ALA:C	46:BN:58:ASP:O	2.58	0.41
4:CD:39:PRO:O	4:CD:44:GLY:HA3	2.20	0.41
2:CB:43:ASP:OD2	2:CB:46:LYS:HE3	2.20	0.41
1:AA:376:G:H5''	16:AP:5:ARG:CB	2.41	0.41
13:CM:49:THR:HB	13:CM:52:GLU:H	1.85	0.41
13:CM:87:TYR:CD1	19:CS:81:ARG:NH2	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:621:A:H2'	1:AA:622:A:O4'	2.21	0.41
40:DE:4:ILE:HD11	40:DE:28:ALA:O	2.20	0.41
36:BA:845:G:C8	36:BA:845:G:OP2	2.60	0.41
43:DH:33:LEU:HD12	43:DH:75:ALA:O	2.20	0.41
36:DA:2854:G:H2'	36:DA:2855:C:H6	1.82	0.41
57:DY:31:LEU:HD23	57:DY:36:ALA:O	2.20	0.41
43:BH:89:ILE:HG12	43:BH:129:THR:HA	2.02	0.41
36:DA:2774:C:P	40:DE:164:ARG:HD3	2.60	0.41
8:AH:112:LEU:CD2	8:AH:112:LEU:N	2.76	0.41
36:BA:2475:C:N4	36:BA:2529:G:H22	2.18	0.41
3:CC:50:ALA:HB1	3:CC:70:VAL:HG11	2.01	0.41
36:BA:1414:G:C2	36:BA:1589:C:O2	2.73	0.41
38:BC:113:VAL:O	38:BC:138:PRO:HG3	2.20	0.41
12:CL:89:ARG:HG3	12:CL:89:ARG:H	1.70	0.41
1:CA:1488:G:H2'	1:CA:1489:G:C8	2.55	0.41
25:AZ:152:MET:HG3	25:AZ:153:GLU:N	2.35	0.41
1:AA:413:G:H1'	1:AA:428:G:N2	2.36	0.41
1:AA:655:A:H2'	1:AA:656:C:C6	2.55	0.41
36:DA:1771:C:HO2'	36:DA:1786:A:H8	1.64	0.41
12:CL:47:LYS:HB3	12:CL:48:PRO:CD	2.51	0.41
22:CW:51:U:H2'	22:CW:52:G:C8	2.48	0.41
46:BN:39:ARG:O	46:BN:41:ASP:N	2.54	0.41
17:CQ:16:GLN:HB3	17:CQ:16:GLN:HE21	1.56	0.41
1:CA:926:G:C5'	1:CA:927:G:O5'	2.68	0.41
6:CF:24:GLU:HG2	6:CF:28:ARG:HH12	1.85	0.41
4:AD:85:LYS:HD3	4:AD:92:VAL:CG1	2.50	0.41
36:DA:1259:G:H2'	36:DA:1260:G:C8	2.55	0.41
11:AK:48:ILE:HD11	11:AK:67:ASP:HB3	2.03	0.41
19:AS:24:ALA:O	19:AS:25:LYS:CB	2.68	0.41
33:D7:43:THR:CG2	33:D7:44:PRO:N	2.82	0.41
1:CA:189(H):G:O2'	1:CA:189(I):G:O5'	2.37	0.41
39:DD:200:ASP:O	39:DD:203:ASN:HB2	2.20	0.41
36:BA:2408:U:H2'	36:BA:2409:G:H8	1.83	0.41
36:DA:2000:G:HO2'	36:DA:2001:A:H5'	1.85	0.41
36:DA:1173:G:H5'	36:DA:1174:A:OP1	2.20	0.41
36:BA:2319:G:O4'	36:BA:2319:G:P	2.79	0.41
1:AA:827:U:C5'	1:AA:828:A:OP2	2.69	0.41
25:CZ:330:ARG:NH2	25:CZ:332:THR:OG1	2.49	0.41
1:AA:1251:A:H5''	9:AI:12:GLU:OE1	2.20	0.41
57:DY:22:GLY:O	57:DY:23:ARG:O	2.37	0.41
56:DX:46:ALA:C	56:DX:47:PHE:CD1	2.93	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:986:C:O2'	36:DA:987:G:H5'	2.21	0.41
36:DA:86:C:H2'	36:DA:87:C:H6	1.84	0.41
1:AA:369:C:O2'	1:AA:370:C:H6	2.04	0.41
1:CA:294:U:H2'	1:CA:295:C:H6	1.85	0.41
36:BA:1094:U:HO2'	36:BA:1097:U:H5	1.66	0.41
1:CA:369:C:O2'	1:CA:370:C:H6	2.03	0.41
1:CA:421:U:C5	3:CC:127:ARG:NH1	2.87	0.41
11:CK:126:ARG:O	11:CK:128:ALA:N	2.54	0.41
56:DX:21:PHE:O	56:DX:22:ALA:C	2.59	0.41
1:AA:643:C:H2'	1:AA:644:G:H8	1.85	0.41
1:AA:1105:A:O2'	1:AA:1106:G:H5'	2.20	0.41
36:DA:1532:C:H2'	36:DA:1533:G:O4'	2.19	0.41
2:AB:62:ALA:O	2:AB:65:GLY:N	2.46	0.41
39:DD:80:ALA:HB2	39:DD:96:HIS:CD2	2.55	0.41
5:AE:69:VAL:O	5:AE:71:LEU:N	2.45	0.41
1:AA:1134:G:C2	1:AA:1141:C:C2	3.09	0.41
55:DW:92:ARG:O	55:DW:93:ALA:HB3	2.19	0.41
36:BA:596:G:H2'	36:BA:597:U:O4'	2.20	0.41
52:BT:133:GLU:HG2	52:BT:133:GLU:O	2.21	0.41
1:AA:1170:A:H2'	1:AA:1171:G:O4'	2.20	0.41
25:CZ:301:GLY:HA2	25:CZ:347:THR:OG1	2.20	0.41
13:CM:20:THR:C	13:CM:22:ILE:H	2.24	0.41
28:B2:47:ASN:C	28:B2:51:ARG:H	2.23	0.41
28:B2:35:LEU:HD23	28:B2:53:LEU:HD13	2.02	0.41
28:B2:57:ILE:O	28:B2:61:LEU:CG	2.66	0.41
36:DA:1205:U:C5	41:DF:171:PRO:HA	2.55	0.41
39:DD:34:VAL:O	39:DD:35:LYS:C	2.58	0.41
40:DE:69:LYS:C	40:DE:71:GLY:N	2.74	0.41
40:DE:89:ASP:CG	40:DE:90:THR:H	2.24	0.41
56:DX:18:TYR:C	56:DX:20:GLY:N	2.74	0.41
36:DA:599:G:C6	36:DA:600:G:N7	2.88	0.41
41:DF:184:TYR:O	41:DF:188:ARG:HG2	2.20	0.41
36:DA:1486:A:N6	36:DA:1504:C:H42	2.18	0.41
36:BA:2186:G:H2'	36:BA:2187:G:C4	2.55	0.41
39:DD:102:LYS:C	39:DD:103:ARG:HG2	2.41	0.41
31:D5:3:LYS:N	31:D5:3:LYS:HD2	2.36	0.41
29:D3:35:ARG:HG2	29:D3:37:LEU:HG	2.01	0.41
36:BA:2833:G:C3'	36:BA:2834:G:C5'	2.78	0.41
52:BT:13:ARG:CA	52:BT:13:ARG:CZ	2.95	0.41
4:AD:187:ARG:HG2	4:AD:188:LEU:O	2.20	0.41
5:AE:12:LEU:HD12	5:AE:31:LEU:CB	2.44	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:B6:19:ARG:CD	32:B6:20:ASN:H	2.28	0.41
32:B6:53:LYS:N	32:B6:53:LYS:CD	2.83	0.41
51:DS:67:ARG:NE	51:DS:98:VAL:HG11	2.35	0.41
36:BA:943:U:OP1	48:BP:38:GLN:HB3	2.21	0.41
51:BS:25:ARG:CZ	51:BS:40:ILE:HD11	2.50	0.41
51:BS:63:THR:O	51:BS:67:ARG:HG3	2.20	0.41
2:CB:158:LEU:HA	2:CB:159:PRO:HD3	1.86	0.41
34:D8:32:LEU:CD2	34:D8:36:LYS:HE2	2.43	0.41
48:BP:35:HIS:O	48:BP:36:LYS:HB2	2.19	0.41
1:AA:1256:A:C2	1:AA:1277:C:C5	3.08	0.41
4:AD:31:CYS:C	4:AD:33:MET:H	2.24	0.41
40:BE:60:ASN:OD1	40:BE:62:PRO:HD2	2.20	0.41
51:DS:78:LEU:O	51:DS:80:LEU:N	2.48	0.41
9:AI:70:LYS:O	9:AI:73:GLN:HB2	2.21	0.41
3:AC:43:LEU:HD22	3:AC:47:LEU:HD22	2.03	0.41
25:CZ:263:ARG:CB	25:CZ:263:ARG:NH1	2.81	0.41
38:DC:77:ILE:CD1	38:DC:95:GLY:HA3	2.40	0.41
46:DN:119:ARG:CB	46:DN:119:ARG:HH11	2.34	0.41
42:DG:176:LEU:O	42:DG:176:LEU:HD23	2.21	0.41
28:D2:32:LEU:O	28:D2:32:LEU:HD23	2.21	0.41
1:AA:1129:C:O2'	1:AA:1131:G:C8	2.72	0.41
1:CA:1124:G:HO2'	1:CA:1145:C:N4	2.19	0.41
12:CL:60:LEU:CD2	12:CL:66:VAL:HG22	2.51	0.41
46:BN:30:ILE:O	46:BN:30:ILE:HG22	2.20	0.41
36:BA:732:C:O2'	36:BA:733:G:H5'	2.21	0.41
27:D1:59:THR:O	27:D1:91:LYS:HE2	2.20	0.41
37:DB:96:U:H2'	37:DB:97:G:H8	1.85	0.41
11:CK:29:ILE:HB	11:CK:44:SER:HB3	2.02	0.41
54:BV:52:VAL:HG13	54:BV:52:VAL:O	2.21	0.41
10:AJ:4:ILE:CD1	10:AJ:77:PRO:HB3	2.51	0.41
50:BR:12:ARG:HE	50:BR:16:HIS:CE1	2.38	0.41
50:BR:63:ARG:HA	50:BR:80:PHE:CZ	2.56	0.41
36:BA:285:C:H2'	36:BA:286:C:C6	2.55	0.41
36:DA:480:A:H2	36:DA:499:U:O2	2.04	0.41
57:DY:36:ALA:HA	57:DY:69:ALA:H	1.85	0.41
46:DN:90:MET:O	46:DN:93:THR:O	2.37	0.41
43:BH:89:ILE:HD11	43:BH:128:PRO:O	2.20	0.41
11:AK:57:THR:HG22	11:AK:60:ALA:HB2	2.02	0.41
36:BA:1169:G:N2	36:BA:1181:C:C2	2.89	0.41
1:AA:435:C:H2'	1:AA:436:C:H5'	2.03	0.41
39:BD:266:SER:O	39:BD:267:SER:O	2.38	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AF:87:ARG:CG	6:AF:87:ARG:NH1	2.80	0.41
39:DD:124:PRO:HG2	39:DD:129:ASN:HD21	1.86	0.41
36:BA:995:C:N3	46:BN:1:MET:HE2	2.36	0.41
12:AL:47:LYS:HB3	12:AL:48:PRO:CD	2.50	0.41
53:BU:15:LYS:HA	53:BU:18:LEU:HD23	2.01	0.41
22:CV:18:G:O2'	22:CV:57:G:N2	2.54	0.41
36:DA:233:A:C2'	36:DA:234:C:H5'	2.50	0.41
6:CF:77:ARG:CG	6:CF:77:ARG:NH1	2.84	0.41
2:CB:29:ALA:HA	2:CB:32:ILE:HG21	2.01	0.41
36:BA:1286:A:N6	36:BA:1289:C:C2	2.88	0.41
12:AL:91:LYS:HZ3	12:AL:91:LYS:HB3	1.86	0.41
53:DU:51:LYS:H	53:DU:51:LYS:HG2	1.67	0.41
1:AA:878:G:C5'	8:AH:89:PRO:HG2	2.51	0.41
47:DO:10:VAL:HG23	47:DO:10:VAL:O	2.20	0.41
36:DA:1258:C:C2	36:DA:1259:G:C8	3.08	0.41
36:DA:2691:C:H2'	36:DA:2692:C:H6	1.86	0.41
1:AA:919:A:O2'	1:AA:920:U:H5'	2.21	0.41
2:CB:209:ARG:HH12	2:CB:239:VAL:HG11	1.86	0.41
33:B7:46:VAL:HG12	33:B7:47:ARG:N	2.36	0.41
38:BC:87:GLU:CG	38:BC:94:VAL:HG21	2.51	0.41
38:DC:87:GLU:CG	38:DC:94:VAL:HG21	2.50	0.41
8:AH:123:GLU:O	8:AH:127:LEU:HD23	2.21	0.41
1:CA:1511:G:H2'	1:CA:1512:U:O4'	2.20	0.41
36:DA:2120:G:O2'	36:DA:2121:G:H5'	2.20	0.41
36:BA:2081:C:H2'	36:BA:2082:A:C8	2.55	0.41
36:DA:19:C:O2'	36:DA:20:C:H5'	2.20	0.41
36:DA:2701:C:H2'	36:DA:2702:U:H2'	2.03	0.41
36:BA:2033:A:H4'	36:BA:2034:U:OP1	2.20	0.41
36:DA:201:C:O2'	36:DA:202:U:H5'	2.21	0.41
36:DA:445:C:OP1	53:DU:2:PRO:HA	2.20	0.41
46:BN:120:LEU:CD1	46:BN:122:VAL:HG23	2.50	0.41
1:AA:818:G:O2'	1:AA:819:A:H5'	2.20	0.41
36:BA:1525:G:O2'	36:BA:1526:G:H5'	2.20	0.41
28:D2:65:ASN:HA	28:D2:65:ASN:HD22	1.59	0.41
1:AA:29:G:O2'	1:AA:30:U:H5'	2.20	0.41
36:BA:1530:C:H2'	36:BA:1531:C:H6	1.85	0.41
36:BA:1449:A:N7	36:BA:1450:G:C8	2.88	0.41
36:DA:428:A:H3'	36:DA:429:A:H8	1.85	0.41
36:BA:736:C:H2'	36:BA:737:C:H6	1.85	0.41
36:DA:1345:C:O2'	36:DA:1346:G:H5'	2.20	0.41
55:DW:79:GLY:CA	55:DW:100:THR:HG23	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DG:96:ARG:O	42:DG:97:ASP:C	2.58	0.41
49:DQ:48:GLU:O	49:DQ:49:ALA:C	2.59	0.41
36:BA:2698:U:H2'	36:BA:2699:C:C6	2.56	0.41
36:BA:394:A:C2'	36:BA:395:U:H5'	2.51	0.41
36:DA:2856:C:O2'	36:DA:2857:G:H5'	2.20	0.41
44:BJ:70:UNK:O	44:BJ:71:UNK:C	2.69	0.41
15:CO:18:PHE:C	15:CO:18:PHE:CD1	2.94	0.41
10:AJ:21:GLN:O	10:AJ:21:GLN:CG	2.68	0.41
27:B1:89:GLU:O	27:B1:93:GLU:HB2	2.21	0.41
36:BA:1692:U:H2'	36:BA:1694:C:C5	2.55	0.41
46:BN:38:HIS:C	53:BU:67:ALA:HB1	2.41	0.41
36:BA:2544:G:H1'	36:BA:2646:C:H4'	2.01	0.41
52:DT:28:VAL:HG12	52:DT:29:ARG:CD	2.45	0.41
58:BZ:119:GLU:CG	58:BZ:122:ARG:HH11	2.32	0.41
58:BZ:67:LEU:N	58:BZ:67:LEU:CD1	2.84	0.41
56:BX:18:TYR:C	56:BX:20:GLY:N	2.74	0.41
42:BG:42:GLY:O	42:BG:88:ILE:CG2	2.69	0.41
36:DA:558:G:H1'	46:DN:45:ASN:HB3	2.02	0.41
1:AA:1330:U:H5'	1:AA:1331:G:P	2.60	0.41
39:BD:27:THR:O	39:BD:27:THR:CG2	2.69	0.41
34:D8:4:MET:O	34:D8:62:LEU:CD1	2.62	0.41
41:BF:132:VAL:O	41:BF:138:GLU:OE1	2.39	0.41
39:DD:70:TRP:HZ3	39:DD:146:GLU:CD	2.24	0.41
51:DS:58:LEU:HD23	51:DS:65:VAL:HG13	2.02	0.41
36:DA:1024:G:H3'	36:DA:1025:G:C5'	2.29	0.41
1:CA:1271:G:C3'	1:CA:1272:G:H5''	2.50	0.41
43:DH:163:TYR:N	43:DH:163:TYR:HD1	2.17	0.41
57:BY:14:LEU:HD12	57:BY:15:VAL:N	2.31	0.41
4:AD:3:ARG:HH12	4:AD:118:ARG:HD3	1.81	0.41
5:CE:82:VAL:HG21	5:CE:138:ALA:HA	2.03	0.41
1:AA:973:G:OP1	10:AJ:57:LYS:HD3	2.20	0.41
11:AK:108:ILE:O	18:AR:87:ARG:N	2.50	0.41
36:BA:605:C:H5	36:BA:623:G:N1	2.07	0.41
41:BF:103:LYS:O	41:BF:106:ARG:N	2.53	0.41
48:BP:110:TYR:O	48:BP:111:ARG:O	2.39	0.41
48:BP:110:TYR:HB3	48:BP:111:ARG:H	1.77	0.41
51:BS:98:VAL:C	51:BS:100:ALA:N	2.73	0.41
41:DF:6:VAL:O	41:DF:7:TYR:HB2	2.20	0.41
36:DA:940:G:H2'	36:DA:941:A:C4'	2.50	0.41
4:AD:20:TYR:HD1	4:AD:26:CYS:O	2.03	0.41
3:CC:135:LYS:HZ2	5:CE:50:GLU:HG2	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:650:C:H3'	36:BA:651:G:C5'	2.37	0.41
12:CL:112:ASP:O	12:CL:113:ARG:C	2.59	0.41
52:DT:6:LEU:HA	52:DT:9:LEU:HD12	2.03	0.41
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.85	0.41
25:AZ:206:ILE:O	25:AZ:210:ILE:HG22	2.20	0.41
36:BA:2283:C:H2'	36:BA:2284:C:O4'	2.21	0.41
35:B9:24:TYR:CE2	35:B9:35:ARG:HG3	2.55	0.41
58:BZ:126:VAL:HB	58:BZ:161:VAL:HG13	2.02	0.41
36:DA:2631:G:H21	40:DE:61:ARG:HH12	1.68	0.41
36:DA:2785:C:H1'	40:DE:64:LYS:NZ	2.36	0.41
4:CD:58:LEU:CD2	4:CD:62:GLN:HG2	2.51	0.41
2:CB:162:ILE:HG21	2:CB:184:VAL:HG22	2.02	0.41
25:AZ:272:MET:HB2	25:AZ:277:LEU:HB2	2.02	0.41
42:DG:16:ARG:CZ	42:DG:31:VAL:HG11	2.51	0.41
43:DH:125:VAL:O	43:DH:125:VAL:HG12	2.20	0.41
15:AO:17:ARG:CG	15:AO:17:ARG:NH1	2.83	0.41
46:BN:34:LEU:HD11	46:BN:116:LEU:HB3	2.02	0.41
46:BN:36:GLY:O	46:BN:37:LYS:HB2	2.20	0.41
1:CA:79:G:H1'	1:CA:80:G:OP1	2.20	0.41
22:AW:55:U:C5	22:AW:57:G:H5''	2.56	0.41
54:BV:39:LEU:HD12	54:BV:50:PRO:O	2.21	0.41
34:D8:48:PHE:O	34:D8:49:VAL:CG2	2.69	0.41
13:AM:49:THR:HB	13:AM:52:GLU:H	1.86	0.41
43:BH:76:VAL:O	43:BH:78:GLY:N	2.52	0.41
22:CV:61:C:H2'	22:CV:61:C:O2	2.20	0.41
36:BA:2854:G:H2'	36:BA:2855:C:H6	1.83	0.41
36:DA:2758:A:C2	36:DA:2759:G:C1'	3.02	0.41
13:CM:99:ARG:N	13:CM:101:GLN:HE22	2.18	0.41
3:CC:35:GLU:HG3	3:CC:95:THR:OG1	2.20	0.41
4:AD:159:ARG:HH11	4:AD:159:ARG:HG3	1.85	0.41
25:CZ:295:ARG:HG2	25:CZ:295:ARG:O	2.21	0.41
36:BA:419:C:C2	36:BA:420:C:C5	3.09	0.41
36:BA:724:U:O2'	36:BA:725:G:H5'	2.21	0.41
36:BA:16:G:H2'	36:BA:17:G:H8	1.85	0.41
36:DA:2030:A:H5''	36:DA:2031:A:OP1	2.20	0.41
36:DA:319:C:O2'	36:DA:320:A:H5'	2.21	0.41
39:DD:158:ALA:O	39:DD:196:VAL:HG11	2.20	0.41
1:AA:160:A:H2'	1:AA:161:A:O4'	2.21	0.41
36:DA:797:C:H2'	36:DA:798:G:H8	1.86	0.41
1:AA:1211:U:O4'	1:AA:1211:U:O2	2.38	0.41
53:BU:14:HIS:O	53:BU:18:LEU:HD23	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:402:A:C2'	36:DA:403:U:H5'	2.50	0.41
36:BA:1534:U:C2'	36:BA:1535:A:H5'	2.51	0.41
26:D0:20:ARG:CG	26:D0:20:ARG:NH1	2.79	0.41
2:CB:32:ILE:HD11	2:CB:40:HIS:CD2	2.56	0.41
46:BN:54:VAL:HG11	46:BN:99:LEU:CD2	2.51	0.41
42:BG:40:ASN:HA	42:BG:91:ARG:HA	2.02	0.41
3:AC:60:ALA:O	3:AC:61:ALA:CB	2.66	0.41
48:BP:122:PRO:HB3	48:BP:141:ALA:HB1	2.03	0.41
15:AO:21:ASP:C	15:AO:21:ASP:OD1	2.58	0.41
1:AA:189:G:H2'	1:AA:189(A):C:C6	2.56	0.41
36:DA:742:G:H2'	36:DA:743:G:H8	1.86	0.41
2:CB:236:TYR:C	2:CB:238:LEU:N	2.73	0.41
42:DG:18:GLU:HA	42:DG:18:GLU:OE1	2.21	0.41
1:AA:782:A:C2'	1:AA:783:C:H5'	2.51	0.41
36:DA:2409:G:H2'	36:DA:2410:G:O4'	2.20	0.41
22:CV:1:G:C1'	26:D0:5:LYS:HZ1	2.34	0.41
12:CL:126:LYS:HE2	12:CL:127:GLU:H	1.86	0.41
2:AB:115:LEU:HD13	2:AB:145:LEU:HB3	2.02	0.41
40:DE:93:VAL:O	40:DE:93:VAL:HG12	2.20	0.41
36:DA:1171:G:H3'	36:DA:1173:G:O4'	2.21	0.41
1:CA:828:A:H2'	1:CA:829:G:O4'	2.21	0.41
36:BA:2087:G:C2'	36:BA:2088:G:H5'	2.51	0.41
1:CA:1251:A:H5''	9:CI:12:GLU:OE1	2.20	0.41
36:BA:86:C:H2'	36:BA:87:C:H6	1.84	0.41
36:DA:988:A:H4'	36:DA:1155:A:N1	2.36	0.41
37:DB:98:G:C2'	37:DB:99:G:H5'	2.51	0.41
53:BU:8:VAL:O	53:BU:9:VAL:C	2.58	0.41
36:BA:343:C:C2'	36:BA:344:G:H5'	2.50	0.41
6:AF:76:ALA:O	6:AF:80:ARG:HG3	2.21	0.41
6:AF:80:ARG:NH1	6:AF:88:VAL:HB	2.35	0.41
46:DN:7:LYS:O	46:DN:8:GLN:C	2.59	0.41
36:DA:2698:U:H2'	36:DA:2699:C:C6	2.56	0.41
1:CA:363:A:C5	12:CL:31:PRO:HD2	2.55	0.41
36:BA:1986:A:H2'	36:BA:1986:A:N3	2.36	0.41
10:AJ:79:ARG:HA	10:AJ:79:ARG:HD3	1.93	0.41
1:CA:1110:A:H8	1:CA:1110:A:O5'	2.03	0.41
5:AE:127:ASN:HA	5:AE:128:PRO:HD3	1.90	0.41
36:BA:1902:C:C2'	36:BA:1903:G:O5'	2.69	0.41
1:AA:1053:G:O2'	1:AA:1054:C:P	2.79	0.41
52:DT:32:TYR:HB2	52:DT:33:LYS:H	1.47	0.41
52:DT:56:GLY:O	52:DT:57:PHE:C	2.58	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:DT:80:SER:HB3	52:DT:81:PRO:CD	2.39	0.41
28:B2:66:GLU:CD	28:B2:67:LYS:N	2.74	0.41
32:B6:30:THR:HG22	32:B6:31:PRO:HD2	2.02	0.41
39:BD:63:ARG:HH11	39:BD:63:ARG:HG3	1.85	0.41
46:BN:112:LEU:O	46:BN:115:ARG:HB3	2.21	0.41
1:CA:1305:G:O2'	1:CA:1331:G:N2	2.54	0.41
36:BA:654(N):G:C2'	36:BA:654(O):G:H5'	2.51	0.41
43:DH:154:PRO:O	43:DH:155:SER:HB2	2.20	0.41
43:BH:15:VAL:HG23	43:BH:16:SER:N	2.36	0.41
50:BR:99:LYS:HA	50:BR:112:ALA:HA	2.03	0.41
36:BA:187:G:N3	36:BA:1365:A:H2	2.18	0.41
32:D6:36:LEU:CD2	32:D6:36:LEU:C	2.89	0.41
57:BY:28:LYS:HE3	57:BY:28:LYS:H	1.86	0.41
4:AD:105:VAL:HG21	4:AD:121:VAL:HG22	2.02	0.41
4:CD:187:ARG:HG2	4:CD:188:LEU:O	2.21	0.41
53:BU:115:ALA:C	53:BU:117:GLN:H	2.24	0.41
48:DP:35:HIS:O	48:DP:36:LYS:CB	2.68	0.41
48:DP:46:LYS:HG2	48:DP:52:GLU:CG	2.50	0.41
1:AA:981:U:H5'	14:AN:21:TYR:CE1	2.55	0.41
36:DA:2147:G:H2'	36:DA:2148:G:C4'	2.51	0.41
27:B1:82:LEU:C	27:B1:83:GLU:HG3	2.41	0.41
36:BA:2811:G:O2'	36:BA:2812:G:H5'	2.21	0.41
40:BE:61:ARG:CB	40:BE:62:PRO:CD	2.94	0.41
36:BA:662:G:OP1	48:BP:18:ARG:HD2	2.21	0.41
1:CA:1360:A:O2'	1:CA:1361:G:H5'	2.21	0.41
36:DA:2068:U:N3	36:DA:2430:A:C2	2.66	0.41
2:CB:204:ASN:ND2	2:CB:206:ASP:N	2.54	0.41
25:AZ:206:ILE:HD13	25:AZ:210:ILE:HG21	2.02	0.41
43:BH:97:ARG:NH2	43:BH:104:GLU:OE2	2.54	0.41
16:AP:21:VAL:HG21	16:AP:59:TRP:CD2	2.55	0.41
36:DA:271(G):C:O2'	36:DA:271(H):G:H5'	2.21	0.41
38:BC:77:ILE:CD1	38:BC:95:GLY:HA3	2.40	0.41
25:CZ:206:ILE:O	25:CZ:210:ILE:CG2	2.69	0.41
25:CZ:210:ILE:HA	25:CZ:211:PRO:HD2	1.94	0.41
36:BA:1091:G:H22	36:BA:1101:U:H1'	1.85	0.41
3:AC:179:ARG:HG3	3:AC:206:GLU:HG2	2.03	0.41
36:DA:142(A):C:C2'	36:DA:143:G:H5'	2.51	0.41
46:DN:30:ILE:HG22	46:DN:30:ILE:O	2.21	0.41
46:DN:29:LYS:O	46:DN:31:ALA:N	2.53	0.41
1:AA:548:G:H2'	1:AA:549:C:O4'	2.20	0.41
36:DA:958:U:O4	49:DQ:17:LEU:HG	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1190:G:P	3:CC:5:ILE:HD12	2.60	0.41
13:CM:87:TYR:CE1	19:CS:81:ARG:NH2	2.89	0.41
34:D8:15:LYS:CB	48:DP:65:ARG:NH2	2.84	0.41
36:DA:1076:C:H5	36:DA:1077:A:C4	2.39	0.41
36:DA:280:C:N4	36:DA:360:G:H1	2.19	0.41
50:BR:16:HIS:O	50:BR:17:ARG:C	2.58	0.41
50:BR:58:GLY:CA	50:BR:80:PHE:HE2	2.27	0.41
53:DU:9:VAL:O	53:DU:12:ARG:HB2	2.20	0.41
36:BA:2774:C:P	40:BE:164:ARG:HD3	2.61	0.41
1:AA:191:G:C6	1:AA:192:U:C4	3.09	0.41
50:DR:7:GLY:O	50:DR:8:ARG:HB2	2.20	0.41
36:BA:1011:G:OP1	53:BU:75:ASN:HB2	2.20	0.41
44:DJ:80:UNK:O	44:DJ:81:UNK:C	2.69	0.41
39:DD:196:VAL:HG12	39:DD:196:VAL:O	2.21	0.41
9:CI:97:LYS:N	9:CI:98:PRO:CD	2.83	0.41
36:DA:380:U:H2'	36:DA:381:G:C8	2.55	0.41
5:AE:118:ILE:HG13	5:AE:119:LEU:N	2.36	0.41
42:DG:106:LEU:HG	42:DG:106:LEU:O	2.19	0.41
36:BA:1353:A:O4'	36:BA:1569:A:H2	2.04	0.41
36:BA:528:A:C2	36:BA:2043:C:O5'	2.71	0.41
1:CA:380:G:C2	1:CA:384:G:C6	3.09	0.41
5:CE:147:ASP:HB3	5:CE:150:ARG:NH1	2.34	0.41
1:CA:96:U:H2'	1:CA:97:G:C8	2.55	0.41
3:CC:3:ASN:ND2	3:CC:4:LYS:H	2.19	0.41
1:CA:1096:C:H5''	2:CB:137:ARG:NH2	2.34	0.41
1:CA:1030(A):G:N3	1:CA:1030(C):G:OP2	2.54	0.41
25:AZ:125:GLN:NE2	25:AZ:394:THR:HB	2.36	0.41
58:DZ:145:GLU:O	58:DZ:147:GLY:N	2.53	0.41
1:CA:474:G:H2'	1:CA:475:G:H8	1.86	0.41
5:CE:6:PHE:HB3	5:CE:34:VAL:HG22	2.03	0.41
36:DA:2319:G:O4'	36:DA:2319:G:P	2.78	0.41
8:AH:83:ILE:HG23	8:AH:83:ILE:O	2.21	0.41
1:AA:1010:G:H2'	1:AA:1011:G:H8	1.86	0.41
36:DA:1997:G:O2'	36:DA:1998:G:H5'	2.21	0.41
36:BA:1843:C:O2'	39:BD:256:GLY:O	2.26	0.41
36:BA:150:C:O2'	36:BA:151:C:H5'	2.21	0.41
48:DP:122:PRO:HB3	48:DP:141:ALA:HB1	2.03	0.41
1:AA:1058:G:H2'	1:AA:1059:C:C6	2.56	0.41
36:DA:1472:A:H2'	36:DA:1473:G:H5'	2.02	0.41
6:CF:53:ALA:O	6:CF:54:LYS:CB	2.69	0.41
2:AB:224:GLN:C	2:AB:226:ARG:H	2.23	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:30:SER:HB3	10:CJ:84:GLN:HE22	1.86	0.41
46:DN:120:LEU:CD1	46:DN:122:VAL:HG23	2.50	0.41
1:CA:598:U:H2'	1:CA:599:C:C6	2.56	0.41
8:CH:97:VAL:O	8:CH:97:VAL:HG22	2.21	0.41
36:BA:842:G:H2'	36:BA:843:G:H8	1.85	0.41
3:CC:108:ASN:OD1	3:CC:110:ASN:N	2.52	0.41
7:AG:51:GLN:C	7:AG:53:LYS:H	2.24	0.41
57:BY:52:SER:O	57:BY:54:LYS:N	2.49	0.41
36:BA:350:U:O2'	36:BA:351:G:H5'	2.20	0.41
36:BA:1272:A:C2	36:BA:1618:A:C2	3.08	0.41
4:AD:25:ARG:C	4:AD:27:TYR:H	2.23	0.41
1:CA:189(E):U:O2'	1:CA:189(F):U:H5'	2.21	0.41
27:D1:17:SER:HB2	27:D1:38:SER:HB2	2.03	0.41
36:DA:394:A:C2'	36:DA:395:U:H5'	2.50	0.41
36:BA:1775:U:H2'	36:BA:1776:G:H5'	2.02	0.41
17:CQ:91:ARG:HB2	17:CQ:91:ARG:NH1	2.35	0.41
51:DS:73:LEU:HD23	51:DS:73:LEU:O	2.21	0.41
36:BA:1437:C:O2	36:BA:1437:C:H2'	2.21	0.41
38:DC:97:GLU:O	38:DC:98:GLU:HB3	2.21	0.41
38:BC:82:LYS:HG2	38:BC:82:LYS:H	1.74	0.41
13:AM:15:VAL:O	13:AM:16:ASP:C	2.59	0.41
52:DT:28:VAL:CG2	52:DT:46:GLU:HA	2.49	0.41
42:BG:72:ARG:HE	42:BG:86:MET:CA	2.32	0.41
32:B6:28:ARG:C	32:B6:32:ASN:HD22	2.24	0.41
34:B8:61:LEU:CG	34:B8:62:LEU:H	2.34	0.41
9:CI:92:TYR:HA	9:CI:95:LYS:HG2	2.03	0.41
58:DZ:48:PHE:CE1	58:DZ:71:VAL:HG21	2.55	0.41
37:DB:104:U:O3'	58:DZ:72:ARG:NH1	2.54	0.41
52:BT:19:LEU:HA	52:BT:20:PRO:HD3	1.92	0.41
52:BT:28:VAL:O	52:BT:29:ARG:HG2	2.21	0.41
52:BT:28:VAL:CG2	52:BT:46:GLU:HA	2.50	0.41
52:BT:83:ILE:CG1	52:BT:84:GLN:N	2.83	0.41
52:BT:85:LYS:CB	52:BT:85:LYS:HZ2	2.28	0.41
42:DG:84:LYS:N	42:DG:84:LYS:HD2	2.29	0.41
36:DA:2186:G:P	36:DA:2187:G:OP1	2.79	0.41
36:BA:1854:A:H62	36:BA:1888:G:H8	1.68	0.41
43:DH:167:GLU:HB3	43:DH:168:PRO:CD	2.45	0.41
10:CJ:54:PHE:O	10:CJ:55:LYS:CB	2.68	0.41
24:CY:3:G:H2'	24:CY:4:G:O4'	2.20	0.41
27:B1:8:SER:HB3	27:B1:66:HIS:CG	2.56	0.41
32:D6:17:LYS:HA	32:D6:17:LYS:CE	2.45	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:D6:19:ARG:O	32:D6:20:ASN:O	2.39	0.41
52:DT:12:SER:O	52:DT:13:ARG:NH2	2.54	0.41
52:DT:12:SER:O	52:DT:13:ARG:CZ	2.69	0.41
57:DY:28:LYS:HE2	57:DY:28:LYS:N	2.36	0.41
57:DY:76:CYS:CB	57:DY:77:PRO:HD2	2.50	0.41
57:BY:13:VAL:O	57:BY:24:VAL:HG13	2.21	0.41
4:AD:2:GLY:O	4:AD:3:ARG:C	2.59	0.41
4:AD:194:LEU:N	4:AD:194:LEU:HD22	2.35	0.41
36:DA:654(D):G:N1	36:DA:654(O):G:N1	2.69	0.41
54:DV:18:LEU:HD22	54:DV:96:ILE:HG13	2.02	0.41
4:CD:189:PRO:HB2	4:CD:190:ASP:H	1.76	0.41
25:AZ:241:ARG:N	25:AZ:285:ASN:HD22	2.19	0.41
53:DU:115:ALA:C	53:DU:117:GLN:H	2.24	0.41
14:CN:60:SER:O	14:CN:61:TRP:HB3	2.21	0.41
32:B6:14:THR:HB	32:B6:52:VAL:HG21	2.02	0.41
32:B6:42:TRP:CH2	36:BA:643:A:N7	2.89	0.41
32:B6:20:ASN:O	32:B6:21:TYR:CG	2.72	0.41
14:AN:60:SER:O	14:AN:61:TRP:HB3	2.21	0.41
20:CT:92:LEU:O	20:CT:94:ALA:N	2.54	0.41
54:DV:99:ILE:CD1	54:DV:99:ILE:N	2.73	0.41
51:DS:30:ARG:NH2	51:DS:62:LYS:HB3	2.34	0.41
36:BA:664:C:H4'	36:BA:941:A:OP1	2.21	0.41
48:BP:31:ALA:C	48:BP:33:ARG:N	2.73	0.41
36:DA:593:G:C2	36:DA:665:C:C2	3.09	0.41
36:DA:1189:A:H2'	36:DA:1190:G:O4'	2.21	0.41
36:DA:664:C:H4'	36:DA:940:G:O3'	2.21	0.41
36:DA:806:C:C5	48:DP:39:LYS:HE2	2.56	0.41
36:BA:1076:C:H5	36:BA:1077:A:C4	2.39	0.41
58:BZ:108:PRO:HD3	58:BZ:141:VAL:HG11	2.03	0.41
36:BA:2756:U:C1'	36:BA:2757:A:H5''	2.34	0.41
36:DA:2282:G:OP1	36:DA:2283:C:H1'	2.20	0.41
42:DG:125:PHE:HA	42:DG:131:TYR:HA	2.03	0.41
51:DS:15:ARG:O	51:DS:18:ILE:CG1	2.67	0.41
13:AM:11:ARG:CG	13:AM:12:ASN:N	2.81	0.41
36:BA:651:G:C2'	36:BA:652:C:H5'	2.51	0.41
36:DA:2415:G:H2'	36:DA:2416:C:H6	1.86	0.41
36:BA:2631:G:H21	40:BE:61:ARG:HH12	1.69	0.41
10:AJ:75:ILE:HG13	10:AJ:76:ASN:N	2.28	0.41
10:AJ:32:ALA:N	10:AJ:78:ASN:ND2	2.65	0.41
9:AI:28:VAL:CG1	9:AI:29:ASN:N	2.68	0.41
7:AG:115:ARG:O	7:AG:116:ALA:C	2.59	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1323:G:H4'	1:CA:1363:C:N3	2.36	0.41
36:DA:2157:G:O2'	36:DA:2158:A:H8	2.04	0.41
2:AB:235:SER:O	2:AB:237:ALA:N	2.49	0.41
2:AB:87:ARG:CZ	2:AB:233:SER:HB3	2.51	0.41
1:CA:1411:C:O2'	1:CA:1412:C:H5'	2.21	0.41
16:CP:21:VAL:HG21	16:CP:59:TRP:CD2	2.56	0.41
48:DP:84:ASN:CG	48:DP:116:GLY:HA2	2.41	0.41
36:BA:2009:G:HO2'	36:BA:2010:G:H5'	1.85	0.41
13:CM:13:LYS:HA	13:CM:44:ARG:HH11	1.86	0.41
2:AB:187:LEU:HD11	2:AB:204:ASN:O	2.20	0.41
36:DA:2465:C:O2'	36:DA:2466:C:H5'	2.21	0.41
31:D5:20:ARG:O	31:D5:23:HIS:HB2	2.21	0.41
36:BA:1208:C:C2'	36:BA:1208:C:O2	2.69	0.41
10:AJ:97:GLU:OE1	10:AJ:99:LYS:HE2	2.19	0.41
53:DU:92:ARG:CB	54:DV:11:GLN:NE2	2.84	0.41
38:BC:77:ILE:HB	38:BC:115:ALA:HB2	2.01	0.41
38:DC:77:ILE:HB	38:DC:115:ALA:HB2	2.02	0.41
53:BU:92:ARG:CB	54:BV:11:GLN:NE2	2.84	0.41
31:B5:57:VAL:HG12	31:B5:58:LEU:H	1.85	0.41
36:DA:1101:U:O2'	36:DA:1102:C:H5'	2.21	0.41
40:BE:35:GLN:CG	40:BE:36:ARG:H	2.34	0.41
36:BA:142:A:H5''	36:BA:142(A):C:C5	2.54	0.41
46:BN:58:ASP:OD2	46:BN:59:LYS:HG2	2.21	0.41
4:AD:6:GLY:O	4:AD:7:PRO:C	2.59	0.41
1:AA:79:G:H1'	1:AA:80:G:OP1	2.21	0.41
4:CD:158:ILE:CG2	4:CD:181:MET:HE1	2.51	0.41
49:DQ:52:VAL:O	49:DQ:53:ALA:C	2.59	0.41
1:AA:1533:C:C3'	1:AA:1534:A:C5'	2.92	0.41
25:AZ:20:VAL:O	25:AZ:21:ASP:CB	2.57	0.41
31:B5:2:ALA:N	36:BA:2015:A:N3	2.68	0.41
37:DB:95:C:C4	37:DB:96:U:C5	3.09	0.41
54:BV:38:LEU:H	54:BV:51:VAL:HG13	1.85	0.41
1:AA:1116:C:O2'	1:AA:1117:G:H5''	2.20	0.41
39:BD:57:GLY:O	39:BD:58:HIS:C	2.59	0.41
3:CC:40:ARG:NH1	3:CC:40:ARG:CG	2.80	0.41
34:D8:48:PHE:C	34:D8:49:VAL:CG2	2.88	0.41
43:DH:28:GLY:HA3	43:DH:79:VAL:CG2	2.50	0.41
37:BB:66:A:C2'	37:BB:67:G:OP2	2.68	0.41
1:AA:620:C:O2'	1:AA:621:A:H5'	2.21	0.41
36:BA:582:G:H2'	36:BA:583:G:H8	1.86	0.41
39:DD:17:THR:O	39:DD:211:ARG:NH2	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:2712(A):A:H5''	36:BA:2713:A:OP2	2.20	0.41
36:BA:2758:A:O2'	36:BA:2759:G:P	2.79	0.41
36:BA:1453:U:H5'	50:BR:63:ARG:CZ	2.51	0.41
53:DU:10:ARG:C	53:DU:12:ARG:N	2.74	0.41
14:CN:23:ARG:NH1	14:CN:30:ALA:HB2	2.36	0.41
36:DA:1332:G:H4'	36:DA:1333:C:OP2	2.21	0.41
55:BW:25:ARG:HB2	55:BW:25:ARG:NH1	2.36	0.41
53:DU:68:ALA:O	53:DU:71:GLN:HG2	2.21	0.41
16:AP:14:ASN:O	16:AP:14:ASN:OD1	2.39	0.41
12:AL:75:HIS:HD2	12:AL:77:LEU:H	1.68	0.41
1:CA:1216:G:H2'	1:CA:1217:C:H6	1.85	0.41
46:BN:90:MET:O	46:BN:93:THR:O	2.38	0.41
36:DA:2823:A:OP1	40:DE:113:PHE:HB2	2.21	0.41
6:CF:46:ARG:HH22	18:CR:37:VAL:HG13	1.84	0.41
25:CZ:135:MET:CE	25:CZ:150:VAL:HB	2.51	0.41
42:BG:55:LYS:O	42:BG:58:GLN:HG2	2.21	0.41
42:BG:57:ALA:C	42:BG:59:GLU:H	2.24	0.41
1:CA:1015:A:H2'	1:CA:1016:A:H8	1.82	0.41
53:BU:80:ILE:O	53:BU:84:LYS:HB2	2.21	0.41
53:BU:68:ALA:O	53:BU:71:GLN:HG2	2.19	0.41
49:BQ:25:ASP:OD2	58:BZ:78:LYS:HG2	2.21	0.41
2:CB:88:ALA:HB2	2:CB:219:VAL:CG1	2.51	0.41
3:AC:35:GLU:HG2	3:AC:59:ARG:HH22	1.86	0.41
6:CF:34:GLY:CA	6:CF:71:ARG:HH21	2.34	0.41
36:BA:105:C:O2'	57:BY:2:ARG:HG3	2.20	0.41
3:AC:50:ALA:HB1	3:AC:70:VAL:HG11	2.02	0.41
36:BA:1006:C:C2	36:BA:1138:G:N2	2.88	0.41
1:AA:198:G:O2'	1:AA:199:G:P	2.79	0.41
36:BA:1480:G:C2'	36:BA:1481:U:H5'	2.46	0.41
20:CT:10:LEU:HG	20:CT:12:ALA:H	1.86	0.41
36:BA:875:G:H2'	36:BA:876:C:C6	2.56	0.41
2:AB:151:GLY:C	2:AB:153:ARG:N	2.71	0.41
36:DA:289:A:H2'	36:DA:290:G:C8	2.55	0.41
28:D2:38:GLN:HE21	28:D2:41:ILE:CD1	2.34	0.41
1:AA:412:A:H5'	1:AA:413:G:OP2	2.21	0.41
53:BU:35:ALA:O	53:BU:36:ARG:C	2.59	0.41
1:AA:1124:G:H5'	10:AJ:35:SER:CB	2.50	0.41
36:DA:1286:A:N6	36:DA:1289:C:C2	2.89	0.41
36:DA:1263:U:C4	36:DA:1264:G:C6	3.09	0.41
52:DT:109:GLU:HG2	52:DT:112:ARG:CZ	2.51	0.41
47:DO:22:ILE:HA	47:DO:22:ILE:HD13	1.79	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:63:G:O2'	22:CW:64:A:H5'	2.21	0.41
36:BA:529:A:H4'	36:BA:530:G:O5'	2.21	0.41
2:CB:28:PHE:O	2:CB:32:ILE:HG22	2.21	0.41
1:AA:108:G:C5'	1:AA:109:A:H5''	2.51	0.41
6:AF:24:GLU:HG2	6:AF:28:ARG:NH1	2.36	0.41
6:AF:20:ALA:O	6:AF:24:GLU:HB2	2.21	0.41
1:AA:1423:G:C6	1:AA:1424:C:C4	3.09	0.41
4:CD:85:LYS:HD3	4:CD:92:VAL:CG1	2.50	0.41
4:CD:65:ARG:HD3	4:CD:75:PHE:CD2	2.56	0.41
35:D9:1:MET:HE2	36:DA:2478:A:OP2	2.20	0.41
24:AY:61:C:H2'	24:AY:62:U:C5'	2.50	0.41
8:CH:107:LEU:HD23	8:CH:107:LEU:N	2.35	0.41
44:DJ:93:UNK:O	44:DJ:97:UNK:N	2.53	0.41
58:BZ:8:TYR:N	58:BZ:8:TYR:CD1	2.88	0.41
36:DA:118:A:C8	36:DA:119:A:C8	3.08	0.41
58:BZ:77:ASP:C	58:BZ:79:ARG:H	2.25	0.41
13:CM:3:ARG:HG2	13:CM:9:ILE:HD11	2.02	0.41
36:DA:1509(B):A:H2'	36:DA:1510:G:O4'	2.21	0.41
48:DP:93:GLY:O	48:DP:123:LEU:HD12	2.21	0.41
36:DA:953:A:N1	36:DA:964:C:O2	2.54	0.41
2:AB:97:TRP:HZ2	2:AB:102:LEU:CD1	2.33	0.41
36:DA:2492:U:H2'	36:DA:2493:U:C6	2.56	0.41
19:CS:24:ALA:O	19:CS:25:LYS:CB	2.68	0.41
52:BT:8:LYS:HA	52:BT:11:GLU:OE1	2.21	0.41
26:B0:53:MET:HA	26:B0:58:THR:O	2.21	0.41
36:BA:1470:G:N2	36:BA:1523:U:C4	2.89	0.41
36:DA:2012:G:H4'	55:DW:96:ILE:HD11	2.03	0.41
18:AR:59:SER:O	18:AR:60:ALA:C	2.59	0.41
1:CA:1498:U:H4'	1:CA:1519:A:C2	2.56	0.41
36:DA:1416:G:HO2'	36:DA:1417:C:H5	1.66	0.41
42:BG:150:ASP:O	42:BG:151:ALA:CB	2.68	0.41
25:AZ:315:LYS:HB3	25:AZ:315:LYS:HE2	1.87	0.41
24:AY:55:PSU:O5'	24:AY:56:C:OP2	2.39	0.41
36:BA:2409:G:H2'	36:BA:2410:G:O4'	2.21	0.41
19:CS:50:ALA:HA	19:CS:59:PRO:HA	2.02	0.41
6:CF:15:ASP:O	6:CF:17:SER:N	2.54	0.41
38:BC:22:ILE:HD13	38:BC:190:ARG:HG2	2.01	0.41
1:CA:67:C:H2'	1:CA:68:G:C8	2.55	0.41
1:AA:1062:U:O4	3:AC:2:GLY:HA3	2.21	0.41
42:DG:115:ARG:HH22	42:DG:136:ARG:HB2	1.86	0.41
42:DG:136:ARG:HH11	42:DG:136:ARG:CG	2.34	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:756:C:C2'	36:BA:757:U:H5'	2.51	0.41
1:CA:637:G:O2'	1:CA:638:G:H5'	2.21	0.41
1:AA:332:G:H2'	1:AA:333:G:H8	1.86	0.41
36:DA:2033:A:H4'	36:DA:2034:U:OP1	2.20	0.41
13:AM:35:GLU:C	13:AM:37:THR:N	2.74	0.41
24:CY:20:H2U:H2'	24:CY:20:H2U:H61	1.88	0.41
1:CA:41:G:H2'	1:CA:42:G:H8	1.86	0.41
11:CK:73:MET:C	11:CK:75:TYR:H	2.23	0.41
36:BA:2489:G:C6	36:BA:2490:G:C6	3.09	0.41
1:CA:302:G:O2'	1:CA:556:C:H5'	2.21	0.41
2:CB:224:GLN:C	2:CB:226:ARG:H	2.24	0.41
36:BA:1248:G:OP1	53:BU:2:PRO:HD2	2.20	0.41
36:BA:445:C:OP1	53:BU:2:PRO:HA	2.21	0.41
36:DA:918:A:H4'	37:DB:98:G:N3	2.36	0.41
23:CX:23:G:H2'	23:CX:24:A:C8	2.55	0.41
1:CA:937:A:C2	1:CA:1379:G:O6	2.73	0.41
36:DA:343:C:O2'	36:DA:344:G:H5'	2.21	0.41
36:DA:1526:G:C6	36:DA:1527:G:C2	3.09	0.41
11:AK:61:ALA:CB	11:AK:90:GLY:HA2	2.51	0.41
36:BA:346:A:C2'	36:BA:347:A:H5'	2.51	0.41
36:DA:313:C:O2'	36:DA:314:A:H5'	2.21	0.41
39:BD:153:ALA:O	39:BD:154:LYS:HG2	2.21	0.41
7:CG:85:TYR:CD2	7:CG:154:TYR:HE2	2.38	0.41
36:DA:738:G:C6	36:DA:739:G:C2	3.08	0.41
36:BA:2192:G:N3	36:BA:2192:G:H2'	2.35	0.41
36:DA:2192:G:H2'	36:DA:2192:G:N3	2.35	0.41
25:AZ:230:THR:HG23	25:AZ:230:THR:O	2.21	0.41
1:CA:1134:G:C2	1:CA:1141:C:C2	3.09	0.41
4:CD:61:LYS:HB2	4:CD:203:VAL:HG13	2.01	0.41
1:CA:1059:C:O3'	14:CN:45:ARG:NH2	2.54	0.41
38:DC:200:LYS:HE3	38:DC:208:PHE:HB2	2.03	0.41
1:CA:708:C:O2'	1:CA:709:G:H5'	2.21	0.41
27:B1:10:LYS:NZ	27:B1:65:SER:OG	2.54	0.41
36:BA:1374:G:H2'	36:BA:1375:C:C6	2.56	0.41
36:DA:346:A:H2'	36:DA:347:A:H5'	2.03	0.41
40:BE:152:LYS:HG2	46:BN:78:TYR:CE1	2.56	0.41
21:CU:5:ASP:O	21:CU:11:GLY:HA3	2.21	0.41
36:DA:272:G:H1	36:DA:404:C:H42	1.69	0.41
45:BK:3:UNK:O	45:BK:4:UNK:C	2.69	0.41
36:BA:2066:C:O2'	36:BA:2067:G:H5'	2.20	0.41
36:BA:594:U:H3	36:BA:663:G:H1	1.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BH:114:VAL:O	43:BH:114:VAL:HG23	2.21	0.41
58:BZ:85:HIS:ND1	58:BZ:85:HIS:C	2.74	0.41
36:DA:2766:G:N3	36:DA:2766:G:H2'	2.36	0.41
55:BW:34:ASN:HA	55:BW:34:ASN:HD22	1.74	0.41
36:DA:2796:U:OP1	36:DA:2799:C:H5	2.04	0.41
39:DD:35:LYS:O	39:DD:36:PRO:C	2.59	0.41
1:AA:1039:C:H2'	1:AA:1040:U:H5	1.78	0.41
36:BA:323:G:HO2'	36:BA:1205:U:H3	1.68	0.41
47:BO:104:ARG:HH21	52:BT:33:LYS:HD3	1.81	0.41
42:DG:90:LEU:HD12	42:DG:90:LEU:HA	1.86	0.41
51:DS:58:LEU:CG	51:DS:59:LYS:N	2.84	0.41
25:CZ:321:TYR:HD1	25:CZ:367:ASN:ND2	2.19	0.41
32:D6:14:THR:HB	32:D6:52:VAL:HG21	2.02	0.41
57:BY:15:VAL:HG12	57:BY:17:SER:H	1.86	0.41
51:DS:67:ARG:HE	51:DS:98:VAL:HG11	1.86	0.41
48:DP:110:TYR:O	48:DP:111:ARG:O	2.38	0.41
48:DP:96:THR:HG22	48:DP:126:VAL:CB	2.48	0.41
36:DA:654(S):G:N7	36:DA:654(T):C:O2	2.54	0.41
36:BA:26:G:P	55:BW:80:PRO:HB3	2.61	0.41
38:BC:73:ARG:HH11	38:BC:73:ARG:HG3	1.86	0.41
36:BA:1139:G:H5''	46:BN:70:LYS:HZ3	1.84	0.41
36:DA:691:C:H1'	39:DD:43:ARG:NH1	2.35	0.41
20:CT:55:ILE:O	20:CT:58:LYS:HB3	2.20	0.41
20:CT:65:LYS:O	20:CT:68:LYS:HB2	2.21	0.41
36:DA:806:C:O2'	36:DA:2445:G:H4'	2.21	0.41
1:AA:980:C:C5'	1:AA:980:C:H6	2.17	0.41
58:BZ:108:PRO:C	58:BZ:110:GLY:N	2.75	0.41
4:CD:17:VAL:O	4:CD:18:LYS:O	2.39	0.41
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.36	0.41
52:BT:125:ARG:NH1	52:BT:125:ARG:HG2	2.36	0.41
1:CA:1256:A:C2	1:CA:1277:C:C5	3.09	0.41
50:DR:45:ARG:CG	50:DR:46:GLY:N	2.80	0.41
2:CB:48:MET:HA	2:CB:51:LEU:HB2	2.02	0.41
56:DX:10:ALA:O	56:DX:28:PHE:CB	2.63	0.41
36:BA:2008:C:H2'	36:BA:2009:G:H8	1.86	0.41
1:AA:266:G:O2'	1:AA:267:C:OP2	2.33	0.41
25:CZ:182:MET:SD	25:CZ:188:THR:HB	2.61	0.41
42:DG:25:TYR:CE2	42:DG:31:VAL:HG23	2.55	0.41
42:DG:5:VAL:HG12	42:DG:6:ALA:N	2.36	0.41
36:DA:2533:A:C2'	36:DA:2534:A:H5'	2.51	0.41
49:BQ:52:VAL:O	49:BQ:53:ALA:C	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:150:GLU:C	4:CD:152:SER:N	2.74	0.41
4:CD:36:ARG:HG2	4:CD:38:TYR:CZ	2.56	0.41
46:BN:32:THR:O	46:BN:34:LEU:N	2.54	0.41
36:DA:1558:A:O2'	36:DA:1559:G:OP2	2.34	0.41
58:DZ:62:PRO:C	58:DZ:64:GLY:H	2.23	0.41
36:BA:990:A:N6	36:BA:1186:G:H1'	2.36	0.41
51:DS:34:HIS:HB2	51:DS:36:TYR:CE1	2.54	0.41
58:DZ:140:ASP:O	58:DZ:141:VAL:HG22	2.20	0.41
52:BT:18:ASP:N	52:BT:18:ASP:OD1	2.53	0.41
1:CA:621:A:H2'	1:CA:622:A:O4'	2.21	0.41
50:DR:117:VAL:HG22	50:DR:118:GLU:N	2.36	0.41
1:AA:723:U:O2'	1:AA:724:G:H5'	2.21	0.41
13:AM:108:ARG:HH11	13:AM:108:ARG:HA	1.85	0.41
36:DA:284:U:H2'	36:DA:285:C:H6	1.81	0.41
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.56	0.41
36:DA:1409:C:O2'	36:DA:1410:G:H5'	2.21	0.41
1:CA:1217:C:O2'	1:CA:1218:C:H5'	2.20	0.41
5:CE:118:ILE:HG13	5:CE:119:LEU:N	2.36	0.41
36:BA:1638:C:H2'	36:BA:1639:U:O4'	2.21	0.41
37:DB:115:G:O4'	51:DS:47:THR:HB	2.21	0.41
36:BA:271(H):G:O2'	36:BA:271(I):G:H8	2.04	0.41
36:BA:18:C:H4'	53:BU:23:GLY:O	2.21	0.41
3:AC:53:ALA:HB2	3:AC:115:LEU:HG	2.03	0.41
38:DC:149:ILE:O	38:DC:153:ILE:HG13	2.21	0.41
1:CA:782:A:C2'	1:CA:783:C:H5'	2.50	0.41
1:AA:528:C:H41	12:AL:49:ASN:ND2	2.19	0.41
1:CA:1119:C:OP2	9:CI:9:ARG:NH2	2.54	0.41
36:DA:1534:U:O2'	36:DA:1535:A:H5'	2.21	0.41
29:D3:16:PRO:HB2	29:D3:19:GLN:HG3	2.02	0.41
36:DA:2206:G:H21	36:DA:2207:G:H5'	1.77	0.41
36:BA:233:A:C2'	36:BA:234:C:H5'	2.51	0.41
40:BE:137:HIS:CB	40:BE:138:PRO:HD2	2.49	0.41
12:AL:46:LYS:HB2	12:AL:92:ASP:HA	2.02	0.41
49:BQ:109:VAL:HG12	49:BQ:110:THR:H	1.83	0.41
35:D9:32:HIS:O	35:D9:33:LYS:C	2.59	0.41
44:BJ:24:UNK:O	44:BJ:116:UNK:HA	2.21	0.41
36:DA:2154:G:N2	36:DA:2155:G:H1'	2.36	0.41
12:CL:46:LYS:HB2	12:CL:92:ASP:HA	2.02	0.41
44:DJ:129:UNK:C	44:DJ:131:UNK:H	2.34	0.41
58:DZ:109:ALA:HB1	58:DZ:145:GLU:OE1	2.19	0.41
55:BW:64:MET:HE2	55:BW:109:GLU:HG3	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1498:U:C5	23:CX:20:U:H5'	2.56	0.41
1:AA:1354:C:O2'	1:AA:1355:G:H5'	2.21	0.41
50:BR:111:LEU:N	50:BR:111:LEU:CD1	2.83	0.41
36:BA:385:C:O2	48:BP:71:VAL:HG21	2.21	0.41
36:DA:2750:A:H5''	36:DA:2751:G:OP2	2.22	0.41
13:CM:16:ASP:OD1	13:CM:16:ASP:N	2.54	0.41
54:DV:67:GLY:O	54:DV:88:ARG:HD2	2.21	0.41
11:AK:117:ASN:HD22	11:AK:117:ASN:N	2.17	0.41
22:CV:12:U:H4'	36:DA:1908:C:O2	2.20	0.41
1:CA:1067:A:N1	1:CA:1108:G:O2'	2.38	0.41
9:AI:5:TYR:CD2	9:AI:6:GLY:N	2.89	0.41
28:D2:12:GLU:O	28:D2:16:LEU:HG	2.20	0.41
23:AX:23:G:H2'	23:AX:24:A:C8	2.56	0.41
36:DA:869:G:O2'	36:DA:870:A:H5'	2.21	0.41
1:AA:409:G:OP1	4:AD:24:GLU:HB3	2.21	0.41
7:AG:18:TYR:CG	7:AG:59:LEU:HD13	2.56	0.41
1:AA:1173:G:O2'	1:AA:1174:G:H5'	2.21	0.41
25:CZ:274:ARG:O	25:CZ:275:LYS:HD2	2.21	0.41
36:BA:1467:C:O2'	36:BA:1468:C:H5'	2.21	0.41
1:CA:560:U:H4'	1:CA:561:U:H5''	2.03	0.41
1:CA:111:G:O6	1:CA:330:C:N4	2.46	0.41
36:DA:82:G:H8	36:DA:82:G:OP2	2.04	0.41
55:BW:95:ILE:O	55:BW:95:ILE:HG13	2.21	0.41
8:AH:91:ARG:O	8:AH:91:ARG:HG2	2.20	0.41
36:DA:269:U:H2'	36:DA:269:U:O2	2.20	0.41
26:B0:55:ARG:HB3	26:B0:55:ARG:HE	1.33	0.41
22:AV:2:C:O2	22:AV:2:C:H2'	2.21	0.41
38:DC:78:ALA:CB	38:DC:116:THR:HG23	2.51	0.40
38:BC:125:SER:C	38:BC:127:LEU:H	2.25	0.40
36:BA:1902:C:OP1	39:BD:242:ARG:NH1	2.53	0.40
13:AM:16:ASP:N	13:AM:16:ASP:OD1	2.53	0.40
52:DT:19:LEU:HD13	52:DT:78:LEU:HD23	2.02	0.40
28:B2:28:LYS:HZ2	28:B2:31:GLU:CB	2.34	0.40
28:B2:70:GLN:CD	28:B2:70:GLN:N	2.74	0.40
1:CA:1195:C:H2'	1:CA:1197:G:O4'	2.21	0.40
13:CM:65:LYS:HB2	13:CM:69:GLU:HG2	2.02	0.40
32:D6:11:LEU:HD13	32:D6:24:GLU:O	2.21	0.40
9:CI:85:LEU:HD11	9:CI:96:LEU:CD2	2.45	0.40
58:DZ:98:MET:CG	58:DZ:99:TYR:H	2.33	0.40
26:D0:10:THR:HG21	36:DA:2277:G:OP2	2.21	0.40
57:DY:26:LYS:HG2	57:DY:27:VAL:N	2.25	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:DY:81:LYS:HD3	57:DY:97:ARG:NE	2.35	0.40
4:AD:101:LEU:O	4:AD:102:ASP:C	2.59	0.40
54:DV:15:GLU:O	54:DV:16:PRO:C	2.60	0.40
54:DV:19:LYS:CE	54:DV:20:LEU:H	2.34	0.40
4:CD:8:VAL:C	4:CD:10:ARG:H	2.23	0.40
36:DA:2309:A:C2'	36:DA:2310:A:C5'	2.98	0.40
36:DA:2309:A:C2'	36:DA:2310:A:H5''	2.51	0.40
46:DN:97:ARG:O	46:DN:98:VAL:C	2.59	0.40
37:BB:7:G:O5'	51:BS:29:PHE:CE2	2.74	0.40
36:BA:1018:C:O2'	36:BA:1019:U:H5'	2.21	0.40
26:D0:50:ASN:HD22	26:D0:63:VAL:HG22	1.82	0.40
36:BA:673:C:C2'	36:BA:674:G:H5'	2.52	0.40
36:DA:259:G:H1'	36:DA:621:A:HO2'	1.84	0.40
51:BS:13:ARG:HG3	51:BS:14:VAL:N	2.23	0.40
12:AL:111:LYS:H	12:AL:111:LYS:HD3	1.86	0.40
27:B1:48:LYS:HG2	27:B1:50:ARG:HH21	1.83	0.40
36:DA:637:A:C6	36:DA:652:C:H4'	2.56	0.40
2:CB:18:GLY:O	2:CB:19:HIS:HB2	2.20	0.40
25:AZ:196:VAL:HG13	25:AZ:196:VAL:O	2.21	0.40
25:AZ:206:ILE:CG2	25:AZ:207:ASP:N	2.84	0.40
9:CI:4:TYR:CZ	9:CI:88:TYR:CB	3.03	0.40
39:DD:76:PRO:HG2	39:DD:98:VAL:HG23	2.00	0.40
46:BN:119:ARG:HH11	46:BN:119:ARG:CB	2.34	0.40
1:CA:1536:C:C4	1:CA:1537:U:C2	3.09	0.40
53:BU:59:ARG:O	53:BU:61:TRP:N	2.55	0.40
25:CZ:206:ILE:CG2	25:CZ:207:ASP:N	2.84	0.40
52:DT:26:ASP:OD1	52:DT:26:ASP:O	2.39	0.40
58:DZ:126:VAL:HB	58:DZ:161:VAL:HG13	2.03	0.40
46:DN:57:ALA:C	46:DN:58:ASP:O	2.59	0.40
1:CA:413:G:O6	4:CD:35:ARG:HD3	2.21	0.40
4:CD:38:TYR:HB2	4:CD:44:GLY:O	2.21	0.40
58:BZ:114:GLY:N	58:BZ:146:ILE:CG2	2.83	0.40
36:BA:64:A:C8	56:BX:66:LEU:HD12	2.56	0.40
54:BV:47:VAL:HG21	54:BV:50:PRO:O	2.21	0.40
50:DR:57:ARG:O	50:DR:58:GLY:C	2.58	0.40
36:BA:190:A:H3'	36:BA:204:A:H61	1.86	0.40
24:CY:66:C:H2'	24:CY:67:G:C8	2.55	0.40
36:BA:1461:G:C5	36:BA:1462:C:N3	2.89	0.40
56:DX:83:VAL:HG12	56:DX:87:GLN:HB2	2.03	0.40
53:DU:70:ARG:NH2	53:DU:75:ASN:HB2	2.36	0.40
36:DA:2873:A:O4'	50:DR:8:ARG:NH2	2.54	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:28:ARG:HH11	16:CP:28:ARG:HG2	1.86	0.40
46:DN:1:MET:HE1	46:DN:3:THR:OG1	2.21	0.40
52:DT:35:LYS:NZ	52:DT:41:ARG:CD	2.83	0.40
36:BA:271(I):G:H2'	36:BA:271(J):C:O4'	2.21	0.40
36:DA:191:A:H2'	36:DA:192:C:H6	1.83	0.40
17:CQ:5:VAL:HA	17:CQ:59:ILE:O	2.21	0.40
29:D3:52:HIS:H	29:D3:52:HIS:CD2	2.38	0.40
42:BG:52:ILE:H	42:BG:52:ILE:CD1	2.33	0.40
40:DE:24:THR:HG23	40:DE:184:VAL:HG22	2.02	0.40
1:AA:308:C:H2'	1:AA:309:G:C8	2.57	0.40
1:AA:308:C:H2'	1:AA:309:G:H8	1.85	0.40
29:B3:15:TYR:HD2	29:B3:19:GLN:NE2	2.17	0.40
15:AO:3:ILE:HA	15:AO:7:GLU:OE1	2.21	0.40
49:DQ:21:THR:O	49:DQ:22:LYS:CB	2.66	0.40
6:AF:27:GLN:NE2	6:AF:27:GLN:CA	2.83	0.40
45:DK:86:UNK:O	45:DK:87:UNK:CB	2.69	0.40
36:BA:1509(B):A:H2'	36:BA:1510:G:O4'	2.20	0.40
26:B0:53:MET:CG	26:B0:57:PHE:HA	2.51	0.40
40:BE:93:VAL:C	40:BE:95:ILE:N	2.74	0.40
36:DA:2692:C:O2	36:DA:2847:U:O2'	2.39	0.40
1:CA:513:C:H2'	1:CA:514:C:H6	1.86	0.40
36:DA:1131:G:N7	46:DN:75:TYR:CD2	2.90	0.40
36:BA:743:G:O2'	36:BA:744:G:H5'	2.20	0.40
6:AF:15:ASP:OD1	6:AF:18:GLN:HG3	2.21	0.40
54:DV:69:LYS:HB2	54:DV:88:ARG:HD3	2.03	0.40
49:DQ:64:ILE:CG2	49:DQ:65:PHE:N	2.84	0.40
1:CA:959:A:H2'	1:CA:960:U:C4'	2.51	0.40
1:AA:106:C:O2'	1:AA:107:G:H5'	2.21	0.40
36:DA:751:A:C6	36:DA:789:A:C5	3.09	0.40
36:BA:718:A:H2'	36:BA:719:C:O4'	2.21	0.40
1:AA:1246:C:H2'	1:AA:1247:U:H6	1.86	0.40
3:CC:137:ALA:O	3:CC:141:VAL:HG23	2.20	0.40
2:AB:180:LEU:O	2:AB:181:PHE:HB2	2.21	0.40
1:CA:803:G:C6	1:CA:804:U:C4	3.09	0.40
11:AK:126:ARG:O	11:AK:128:ALA:N	2.54	0.40
42:DG:135:LEU:O	42:DG:154:GLY:HA3	2.21	0.40
58:BZ:68:PRO:O	58:BZ:68:PRO:HG2	2.21	0.40
5:AE:74:GLY:HA3	5:AE:116:THR:OG1	2.21	0.40
1:CA:1137:C:O2'	1:CA:1138:G:N2	2.45	0.40
38:DC:119:VAL:HG13	38:DC:120:MET:CE	2.51	0.40
41:DF:18:ARG:HG2	41:DF:19:GLU:N	2.36	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BG:47:LYS:HG3	42:BG:82:LEU:HD12	2.03	0.40
40:BE:76:ARG:O	40:BE:77:ILE:O	2.39	0.40
32:B6:35:GLU:OE1	32:B6:35:GLU:HA	2.21	0.40
39:BD:35:LYS:HB3	39:BD:36:PRO:HD2	2.03	0.40
58:BZ:153:SER:N	58:BZ:167:PRO:HB2	2.36	0.40
36:BA:271(M):G:H2'	36:BA:271(N):U:H5''	2.03	0.40
42:DG:46:ALA:CB	42:DG:88:ILE:CG1	2.98	0.40
36:DA:2107:C:H1'	36:DA:2182:G:H22	1.86	0.40
32:D6:15:GLU:O	32:D6:15:GLU:HG2	2.21	0.40
57:BY:26:LYS:CG	57:BY:27:VAL:H	2.23	0.40
4:CD:3:ARG:HH21	4:CD:5:ILE:HG13	1.86	0.40
10:CJ:50:ILE:HG12	14:CN:41:ARG:HD2	2.03	0.40
36:DA:1142:U:H5''	36:DA:1142(A):A:C5'	2.51	0.40
34:D8:32:LEU:CG	34:D8:36:LYS:HZ3	2.32	0.40
41:DF:196:LEU:HA	41:DF:196:LEU:HD23	1.90	0.40
58:BZ:109:ALA:C	58:BZ:111:VAL:H	2.23	0.40
36:DA:605:C:O2	36:DA:605:C:O4'	2.38	0.40
1:AA:1276:G:C6	1:AA:1277:C:C4	3.10	0.40
51:DS:16:ASN:C	51:DS:18:ILE:N	2.75	0.40
51:BS:16:ASN:C	51:BS:18:ILE:N	2.75	0.40
12:AL:112:ASP:O	12:AL:113:ARG:C	2.59	0.40
36:DA:861:A:H2'	36:DA:862:G:O4'	2.21	0.40
36:DA:860:U:O2'	36:DA:861:A:H5'	2.21	0.40
9:CI:33:PHE:C	9:CI:35:GLU:N	2.73	0.40
10:CJ:97:GLU:OE1	10:CJ:99:LYS:HE2	2.20	0.40
38:BC:175:VAL:HG12	38:BC:188:ASN:CB	2.39	0.40
36:BA:2068:U:N3	36:BA:2430:A:C2	2.68	0.40
14:CN:12:ARG:CB	14:CN:12:ARG:NH1	2.84	0.40
39:BD:13:ARG:HH11	39:BD:13:ARG:HG3	1.86	0.40
9:CI:20:ARG:O	9:CI:60:ASP:HB2	2.21	0.40
31:D5:16:ARG:O	31:D5:19:ARG:HB3	2.22	0.40
36:DA:271(H):G:O2'	36:DA:271(I):G:H8	2.05	0.40
27:D1:64:ALA:HA	27:D1:67:ILE:HG13	2.02	0.40
42:DG:10:LYS:O	42:DG:14:GLU:HB2	2.21	0.40
56:BX:39:ILE:O	56:BX:41:ASN:N	2.52	0.40
36:BA:2465:C:O2'	36:BA:2466:C:H5'	2.21	0.40
28:B2:11:GLU:HA	28:B2:14:ARG:HG3	2.03	0.40
4:CD:36:ARG:C	4:CD:38:TYR:N	2.72	0.40
1:CA:1116:C:O2'	1:CA:1117:G:H5''	2.21	0.40
36:DA:271(Q):G:N3	36:DA:271(R):G:N7	2.69	0.40
27:D1:58:ILE:HG13	27:D1:59:THR:N	2.35	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DB:79:C:H2'	37:DB:80:U:O4'	2.22	0.40
13:AM:83:ASP:C	13:AM:85:GLY:N	2.74	0.40
16:CP:68:ASP:C	16:CP:70:ALA:N	2.74	0.40
37:BB:81:G:H2'	37:BB:82:G:C5'	2.51	0.40
34:B8:51:ALA:N	34:B8:53:PRO:HD2	2.36	0.40
1:CA:1371:G:O2'	1:CA:1372:U:H5'	2.20	0.40
54:DV:38:LEU:H	54:DV:51:VAL:HG13	1.86	0.40
54:DV:47:VAL:HG12	54:DV:52:VAL:CB	2.47	0.40
46:BN:125:GLY:HA2	46:BN:126:PRO:O	2.22	0.40
36:BA:1682:G:H2'	36:BA:1683:C:C6	2.56	0.40
1:CA:621:A:O2'	1:CA:622:A:H5'	2.20	0.40
36:DA:2685:G:O2'	36:DA:2726:U:H5	2.03	0.40
43:BH:24:VAL:HG11	43:BH:72:ILE:HD12	2.03	0.40
25:AZ:325:LYS:HE3	25:AZ:331:HIS:HB2	2.04	0.40
36:BA:1332:G:H4'	36:BA:1333:C:OP2	2.22	0.40
36:BA:214:G:O2'	36:BA:215:G:O4'	2.36	0.40
13:AM:112:GLY:HA2	13:AM:113:PRO:HD2	1.89	0.40
1:AA:7:G:O2'	5:AE:120:THR:O	2.38	0.40
1:CA:1226:C:O2'	13:CM:103:THR:O	2.29	0.40
43:DH:89:ILE:HD11	43:DH:128:PRO:O	2.20	0.40
36:DA:723:G:C6	36:DA:724:U:C4	3.09	0.40
53:BU:70:ARG:NH2	53:BU:75:ASN:CB	2.84	0.40
1:AA:500:G:H2'	1:AA:501:C:C6	2.57	0.40
36:DA:1169:G:N2	36:DA:1181:C:C2	2.89	0.40
37:DB:13:A:H2'	37:DB:14:U:H5''	2.02	0.40
1:CA:8:A:C4	4:CD:209:ARG:HB2	2.56	0.40
36:DA:1480:G:C2'	36:DA:1481:U:H5'	2.46	0.40
3:CC:49:SER:O	3:CC:50:ALA:CB	2.64	0.40
9:CI:98:PRO:HB2	9:CI:99:LEU:HD22	2.03	0.40
38:BC:150:GLY:C	38:BC:154:ARG:NH1	2.75	0.40
20:CT:104:LEU:HD23	20:CT:105:SER:N	2.36	0.40
36:BA:2578:G:H4'	36:BA:2578:G:OP2	2.21	0.40
36:BA:2291:U:H2'	36:BA:2292:C:H6	1.84	0.40
36:DA:2206:G:N2	36:DA:2207:G:C4'	2.83	0.40
1:AA:1119:C:OP2	9:AI:9:ARG:NH2	2.53	0.40
29:B3:52:HIS:CD2	29:B3:52:HIS:H	2.39	0.40
36:BA:1367:A:H2'	36:BA:1368:G:H5'	2.03	0.40
24:CY:77:TRP:NE1	25:CZ:67:HIS:HD2	2.19	0.40
26:B0:72:ARG:O	26:B0:73:GLY:C	2.59	0.40
36:BA:2196:C:H2'	36:BA:2197:U:C6	2.57	0.40
46:BN:130:HIS:O	46:BN:130:HIS:CG	2.74	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:D4:5:ILE:CD1	30:D4:5:ILE:N	2.83	0.40
7:AG:23:VAL:O	7:AG:27:ILE:HG13	2.21	0.40
46:BN:14:VAL:CG2	46:BN:137:LYS:HE3	2.51	0.40
29:B3:31:LEU:C	29:B3:33:GLN:H	2.25	0.40
36:BA:2688:U:H2'	36:BA:2719:G:N2	2.35	0.40
11:AK:48:ILE:HA	11:AK:48:ILE:HD13	1.82	0.40
36:BA:67:U:H2'	36:BA:68:G:C8	2.54	0.40
36:BA:1469:A:H2'	36:BA:1470:G:O4'	2.21	0.40
17:AQ:16:GLN:HB3	17:AQ:16:GLN:HE21	1.57	0.40
48:BP:17:LYS:O	48:BP:19:VAL:N	2.54	0.40
6:CF:78:GLU:O	6:CF:81:ILE:HG13	2.20	0.40
36:BA:380:U:H2'	36:BA:381:G:C8	2.55	0.40
48:BP:71:VAL:N	48:BP:72:PRO:CD	2.85	0.40
36:BA:2735:G:H2'	36:BA:2736:G:C8	2.53	0.40
8:CH:83:ILE:O	8:CH:83:ILE:HG23	2.21	0.40
43:BH:37:VAL:HG11	43:BH:68:THR:HG21	2.04	0.40
36:DA:2453:A:O2'	36:DA:2454:G:H5'	2.21	0.40
1:CA:124:G:H2'	1:CA:125:U:O4'	2.21	0.40
1:CA:1173:G:O2'	1:CA:1174:G:H5'	2.21	0.40
36:BA:517:C:O5'	36:BA:517:C:H6	2.04	0.40
1:AA:1134:G:C2'	1:AA:1135:U:H5'	2.51	0.40
36:DA:346:A:C2'	36:DA:347:A:H5'	2.52	0.40
36:DA:1692:U:H2'	36:DA:1694:C:C5	2.56	0.40
11:AK:23:ALA:O	11:AK:86:GLY:HA3	2.22	0.40
1:CA:355:C:C4	1:CA:356:A:N7	2.89	0.40
36:DA:2345:G:N3	36:DA:2381:C:H2'	2.36	0.40
1:CA:119:A:O2'	1:CA:120:A:OP2	2.30	0.40
37:BB:101:G:H2'	37:BB:102:A:O4'	2.21	0.40
55:BW:28:SER:C	55:BW:30:GLU:N	2.73	0.40
38:BC:11:LEU:HD23	38:BC:11:LEU:O	2.20	0.40
48:BP:139:LYS:HG2	48:BP:139:LYS:O	2.22	0.40
36:BA:1847:A:H2'	36:BA:1847:A:N3	2.37	0.40
12:CL:71:PRO:O	12:CL:72:GLY:O	2.39	0.40
38:DC:125:SER:C	38:DC:127:LEU:H	2.25	0.40
38:BC:78:ALA:CB	38:BC:116:THR:HG23	2.51	0.40
56:BX:51:VAL:CG1	56:BX:81:VAL:HB	2.52	0.40
1:CA:1002:G:O2'	1:CA:1003:G:H5'	2.21	0.40
40:DE:76:ARG:O	40:DE:77:ILE:O	2.39	0.40
56:DX:27:THR:HG23	56:DX:80:ILE:CB	2.39	0.40
30:B4:6:HIS:HB3	42:BG:67:LYS:HZ2	1.86	0.40
1:CA:1330:U:H5'	1:CA:1331:G:P	2.60	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:CW:67:C:H2'	22:CW:68:C:H6	1.84	0.40
32:D6:30:THR:HG22	32:D6:31:PRO:HD2	2.04	0.40
25:AZ:321:TYR:HD1	25:AZ:367:ASN:ND2	2.20	0.40
57:BY:28:LYS:N	57:BY:28:LYS:HE2	2.36	0.40
36:DA:654(L):G:H3'	36:DA:654(L):G:N3	2.37	0.40
36:BA:2287:A:N6	36:BA:2344:U:N3	2.66	0.40
36:BA:2289:G:H1'	36:BA:2346:A:H2	1.87	0.40
4:CD:192:GLU:OE1	4:CD:192:GLU:HA	2.20	0.40
43:DH:46:GLU:O	43:DH:48:GLY:N	2.54	0.40
55:BW:4:LYS:CA	55:BW:106:ILE:HG22	2.50	0.40
55:BW:4:LYS:CG	55:BW:5:ALA:H	2.34	0.40
1:AA:858:G:O2'	1:AA:859:A:H5'	2.22	0.40
9:AI:29:ASN:ND2	9:AI:65:VAL:O	2.55	0.40
12:CL:111:LYS:H	12:CL:111:LYS:HD3	1.87	0.40
1:CA:1125:U:C5'	1:CA:1126:U:C5	3.02	0.40
36:DA:653:A:N3	36:DA:653:A:H2'	2.37	0.40
49:DQ:27:VAL:HG23	49:DQ:137:TYR:CE2	2.56	0.40
25:AZ:193:ASN:O	25:AZ:195:TRP:N	2.46	0.40
35:D9:34:GLN:HB3	35:D9:35:ARG:H	1.71	0.40
36:BA:2526:G:H5'	36:BA:2742:C:O2'	2.21	0.40
43:DH:115:VAL:O	43:DH:117:PRO:HD3	2.22	0.40
31:B5:42:PRO:O	31:B5:43:HIS:HB2	2.22	0.40
36:DA:2533:A:O2'	36:DA:2534:A:H5'	2.22	0.40
1:CA:1442(A):G:C3'	1:CA:1442(B):A:C5'	2.96	0.40
1:AA:1444:C:O2'	1:AA:1445:C:H5'	2.21	0.40
52:DT:34:VAL:HG22	52:DT:39:ARG:HA	2.03	0.40
42:BG:10:LYS:HA	42:BG:14:GLU:HG2	2.03	0.40
15:AO:39:LEU:O	15:AO:42:HIS:HB3	2.21	0.40
22:AW:37:A:H5'	22:AW:38:A:OP2	2.21	0.40
36:BA:34:C:N4	36:BA:447:A:H61	2.09	0.40
16:AP:53:VAL:HG23	16:AP:54:GLU:N	2.26	0.40
36:DA:896:A:C8	58:DZ:146:ILE:HD12	2.56	0.40
39:DD:57:GLY:O	39:DD:58:HIS:C	2.59	0.40
19:CS:16:LEU:CD1	19:CS:16:LEU:N	2.83	0.40
36:DA:2712:U:C1'	36:DA:2712(A):A:C8	3.01	0.40
50:BR:87:TYR:C	50:BR:89:ASP:N	2.74	0.40
53:DU:8:VAL:CG1	53:DU:12:ARG:HE	2.34	0.40
24:AY:26:A:C2'	24:AY:27:C:H5'	2.51	0.40
36:DA:1639:U:H2'	36:DA:1640:C:C5'	2.47	0.40
36:DA:2127:G:H4'	38:DC:37:PHE:CD1	2.56	0.40
5:AE:102:ALA:HB1	5:AE:120:THR:HG21	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:108:ARG:N	13:CM:108:ARG:HD2	2.37	0.40
36:DA:1222:C:H2'	36:DA:1223:G:H5''	2.03	0.40
11:CK:57:THR:CG2	11:CK:60:ALA:H	2.28	0.40
37:DB:15:A:H1'	37:DB:110:G:C5	2.56	0.40
3:AC:22:TRP:CH2	3:AC:32:LEU:HB2	2.57	0.40
12:CL:91:LYS:HB3	12:CL:91:LYS:HZ2	1.87	0.40
1:CA:1487:G:C6	1:CA:1488:G:N7	2.90	0.40
36:DA:1006:C:C2	36:DA:1138:G:N2	2.90	0.40
5:AE:110:LEU:HD13	5:AE:118:ILE:HG21	2.03	0.40
25:CZ:404:LEU:N	25:CZ:404:LEU:HD22	2.36	0.40
1:AA:414:A:C5	1:AA:431:A:C2	3.09	0.40
15:CO:4:THR:OG1	15:CO:7:GLU:HG3	2.21	0.40
14:AN:28:GLY:O	14:AN:29:ARG:O	2.39	0.40
22:AV:18:G:O2'	22:AV:57:G:N2	2.54	0.40
1:AA:1511:G:O2'	1:AA:1512:U:H5'	2.21	0.40
47:BO:22:ILE:HD13	47:BO:22:ILE:HA	1.77	0.40
53:DU:35:ALA:O	53:DU:36:ARG:C	2.60	0.40
36:BA:225:A:C2'	36:BA:226:G:H5'	2.52	0.40
36:BA:973:A:O4'	36:BA:1188:U:C6	2.75	0.40
49:DQ:42:ILE:HG22	49:DQ:47:ILE:HG13	2.03	0.40
5:CE:144:THR:O	5:CE:145:LYS:C	2.60	0.40
5:CE:64:ARG:NH1	5:CE:64:ARG:CG	2.84	0.40
6:CF:20:ALA:O	6:CF:24:GLU:HB2	2.21	0.40
25:AZ:126:VAL:HG13	61:AZ:502:KIR:H473	2.02	0.40
1:AA:393:A:H5'	1:AA:483:C:O2'	2.20	0.40
56:BX:8:ILE:H	56:BX:8:ILE:CD1	2.31	0.40
48:BP:121:LYS:HA	48:BP:122:PRO:HD3	1.90	0.40
1:AA:474:G:H2'	1:AA:475:G:H8	1.86	0.40
1:AA:416:G:C5	1:AA:417:C:C4	3.09	0.40
36:DA:1131:G:O2'	36:DA:1132:A:H8	2.03	0.40
7:CG:69:VAL:HG13	7:CG:100:ALA:HB1	2.03	0.40
33:B7:6:GLN:O	36:BA:686:G:H1'	2.21	0.40
4:AD:65:ARG:HD3	4:AD:75:PHE:CD2	2.56	0.40
36:BA:1472:A:H2'	36:BA:1473:G:H5'	2.04	0.40
36:BA:2701:C:H2'	36:BA:2702:U:H2'	2.02	0.40
29:D3:46:ASN:O	29:D3:50:VAL:HG22	2.20	0.40
55:DW:55:ALA:O	55:DW:57:ASN:N	2.54	0.40
36:BA:127:A:H5''	36:BA:128:C:C6	2.56	0.40
1:AA:1044:A:C2'	1:AA:1045:C:O5'	2.70	0.40
36:DA:115:C:O2'	36:DA:116:C:H5'	2.22	0.40
49:BQ:48:GLU:O	49:BQ:49:ALA:C	2.60	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:1319:G:C6	36:DA:1320:C:N4	2.89	0.40
7:AG:91:VAL:HG23	7:AG:95:ARG:HD3	2.04	0.40
4:AD:39:PRO:O	4:AD:44:GLY:HA3	2.22	0.40
1:CA:551:U:H2'	1:CA:552:U:C6	2.56	0.40
36:BA:1229:G:H3'	36:BA:1230:C:C6	2.56	0.40
18:CR:68:LYS:HE2	18:CR:68:LYS:HB2	1.91	0.40
44:DJ:70:UNK:O	44:DJ:71:UNK:C	2.69	0.40
36:DA:2243:U:H2'	36:DA:2244:U:C6	2.56	0.40
36:BA:2642:G:O2'	36:BA:2643:G:H5'	2.21	0.40
13:CM:19:LEU:O	13:CM:22:ILE:HD13	2.21	0.40
28:B2:2:LYS:CE	28:B2:59:ARG:HH22	2.31	0.40
28:B2:62:THR:O	28:B2:63:VAL:C	2.58	0.40
1:CA:1054:C:OP1	1:CA:1197:G:OP1	2.39	0.40
49:BQ:27:VAL:HG23	49:BQ:137:TYR:CD2	2.57	0.40
58:BZ:99:TYR:HA	58:BZ:124:ILE:O	2.20	0.40
1:CA:1007:C:C2'	1:CA:1008:C:H5'	2.51	0.40
32:B6:7:ILE:HG22	32:B6:7:ILE:O	2.22	0.40
41:DF:183:VAL:HG23	41:DF:183:VAL:O	2.22	0.40
39:BD:62:TYR:HA	39:BD:87:ASN:ND2	2.35	0.40
36:BA:2186:G:P	36:BA:2187:G:OP1	2.80	0.40
36:BA:271(M):G:H2'	36:BA:271(N):U:C5'	2.51	0.40
52:BT:12:SER:O	52:BT:13:ARG:CZ	2.70	0.40
52:DT:7:ILE:O	52:DT:10:VAL:HB	2.21	0.40
57:DY:28:LYS:H	57:DY:28:LYS:HE3	1.86	0.40
4:CD:107:ARG:HH11	4:CD:107:ARG:HG2	1.86	0.40
4:CD:7:PRO:HB2	4:CD:10:ARG:HD2	2.03	0.40
36:BA:2309:A:C2'	36:BA:2310:A:C5'	2.99	0.40
1:AA:972:C:OP2	10:AJ:57:LYS:HG2	2.22	0.40
10:AJ:51:ARG:H	10:AJ:60:ARG:HA	1.86	0.40
1:CA:973:G:OP1	10:CJ:57:LYS:HD3	2.21	0.40
3:CC:76:VAL:HG21	3:CC:103:VAL:HG11	2.03	0.40
32:B6:13:CYS:HB3	32:B6:49:HIS:HB3	2.03	0.40
10:AJ:62:HIS:HB2	14:AN:59:ALA:HB3	2.03	0.40
25:CZ:241:ARG:N	25:CZ:285:ASN:HD22	2.20	0.40
36:BA:671:C:C5	48:BP:36:LYS:NZ	2.90	0.40
36:BA:2147:G:H2'	36:BA:2148:G:C5'	2.51	0.40
10:AJ:32:ALA:N	10:AJ:78:ASN:HD21	2.17	0.40
7:AG:41:ARG:O	7:AG:42:ILE:C	2.60	0.40
1:CA:1266:G:H2'	1:CA:1268:A:OP2	2.22	0.40
41:DF:28:ILE:HG12	41:DF:28:ILE:O	2.22	0.40
1:CA:1320:C:H42	19:CS:36:ARG:HG3	1.86	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1238:A:H2'	1:CA:1239:A:H5'	2.03	0.40
25:AZ:135:MET:O	25:AZ:138:VAL:HG23	2.21	0.40
25:AZ:178:ALA:HB3	25:AZ:199:ILE:HD11	2.04	0.40
55:DW:47:VAL:O	55:DW:51:LEU:HB2	2.22	0.40
36:BA:2762:G:H2'	36:BA:2763:G:O4'	2.21	0.40
53:DU:109:LEU:HA	53:DU:109:LEU:HD23	1.84	0.40
53:DU:83:LEU:HD12	53:DU:83:LEU:N	2.37	0.40
36:BA:2885:C:H2'	36:BA:2886:G:O5'	2.21	0.40
28:D2:68:ARG:NH1	28:D2:68:ARG:HG3	2.36	0.40
36:DA:2245:U:C5'	36:DA:2246:G:H5'	2.43	0.40
3:AC:12:LEU:O	3:AC:13:GLY:C	2.60	0.40
36:DA:140:G:C1'	36:DA:141:A:H2	2.33	0.40
58:DZ:166:SER:H	58:DZ:167:PRO:CA	2.32	0.40
2:AB:178:ARG:NH1	2:AB:178:ARG:HG3	2.35	0.40
4:AD:158:ILE:CG2	4:AD:181:MET:HE1	2.52	0.40
12:CL:60:LEU:HB2	12:CL:64:TYR:O	2.21	0.40
37:DB:80:U:O2'	37:DB:81:G:H5''	2.22	0.40
58:DZ:61:LEU:HA	58:DZ:62:PRO:HD3	1.90	0.40
34:B8:56:GLU:O	34:B8:57:ARG:C	2.60	0.40
19:CS:29:ARG:HB3	19:CS:47:HIS:HA	2.02	0.40
36:DA:1599:C:OP2	56:DX:36:LYS:HD2	2.20	0.40
1:CA:623:C:C4	1:CA:624:C:C4	3.10	0.40
36:DA:2758:A:O2'	36:DA:2759:G:P	2.79	0.40
57:DY:67:LEU:HD23	57:DY:68:HIS:N	2.36	0.40
3:CC:54:ARG:O	3:CC:55:VAL:HG23	2.20	0.40
37:BB:14:U:OP2	37:BB:71:C:H5'	2.21	0.40
36:BA:2823:A:OP1	40:BE:113:PHE:HB2	2.21	0.40
3:AC:35:GLU:O	3:AC:39:ILE:HG13	2.22	0.40
1:CA:221:C:O2'	1:CA:222:U:H5'	2.21	0.40
36:DA:2291:U:H2'	36:DA:2292:C:H6	1.80	0.40
25:AZ:266:VAL:HB	25:AZ:291:ARG:NH1	2.36	0.40
13:AM:77:ASN:O	13:AM:81:LEU:HD23	2.21	0.40
36:DA:2472:G:H2'	36:DA:2475:C:H42	1.86	0.40
50:DR:105:ARG:HE	50:DR:105:ARG:H	1.69	0.40
14:CN:4:LYS:C	14:CN:6:LEU:N	2.75	0.40
46:DN:26:LEU:C	46:DN:26:LEU:HD12	2.41	0.40
2:CB:21:ARG:HB3	2:CB:39:ILE:HA	2.02	0.40
26:D0:72:ARG:O	26:D0:73:GLY:C	2.59	0.40
40:DE:120:TRP:CG	40:DE:155:LYS:HB3	2.57	0.40
12:AL:89:ARG:H	12:AL:89:ARG:HG3	1.67	0.40
22:AV:4:C:C2'	22:AV:5:G:H5''	2.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DA:529:A:H4'	36:DA:530:G:O5'	2.21	0.40
18:AR:25:THR:HB	18:AR:26:LEU:HD12	2.03	0.40
36:BA:1750:G:H2'	36:BA:1751:C:H6	1.87	0.40
36:BA:693:C:H2'	36:BA:694:U:C6	2.57	0.40
49:DQ:5:ARG:CB	49:DQ:5:ARG:NH1	2.84	0.40
36:DA:2688:U:H2'	36:DA:2719:G:N2	2.35	0.40
36:DA:2694:G:O2'	36:DA:2695:C:H5'	2.22	0.40
27:D1:52:ARG:NH2	36:DA:2218:U:C4'	2.85	0.40
36:DA:2364:C:O2'	36:DA:2365:G:H5'	2.21	0.40
36:DA:743:G:O2'	36:DA:744:G:H5'	2.21	0.40
36:BA:2026:C:N3	36:BA:2027:G:C8	2.89	0.40
40:DE:93:VAL:HG12	40:DE:175:VAL:CG2	2.52	0.40
1:AA:826:C:C2	1:AA:827:U:C5	3.10	0.40
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.56	0.40
36:DA:2461:C:H2'	36:DA:2462:U:H6	1.85	0.40
26:B0:77:ARG:NH2	36:BA:857:C:H5'	2.37	0.40
28:D2:56:GLN:C	28:D2:58:ALA:N	2.75	0.40
43:DH:37:VAL:HG11	43:DH:68:THR:HG21	2.03	0.40
36:DA:1668:A:H4'	36:DA:1669:A:O5'	2.21	0.40
49:BQ:58:PHE:CD1	49:BQ:58:PHE:O	2.75	0.40
53:BU:8:VAL:HG11	53:BU:12:ARG:HE	1.87	0.40
27:D1:14:VAL:HG11	27:D1:39:LYS:HE2	2.02	0.40
1:AA:294:U:H2'	1:AA:295:C:H6	1.87	0.40
18:AR:43:PHE:CG	18:AR:66:LEU:HD11	2.56	0.40
36:BA:1625:C:H2'	36:BA:1626:G:H5'	2.03	0.40
29:B3:49:LYS:HE2	36:BA:850:C:O3'	2.22	0.40
7:CG:18:TYR:CD2	7:CG:59:LEU:HD13	2.56	0.40
36:DA:1661:G:H2'	36:DA:1662:C:H6	1.86	0.40
1:AA:955:U:O2'	1:AA:956:U:H5'	2.21	0.40
41:BF:122:LYS:NZ	41:BF:152:GLU:OE2	2.55	0.40
1:AA:773:G:O2'	1:AA:774:G:H5'	2.21	0.40
25:CZ:362:VAL:HG12	25:CZ:362:VAL:O	2.21	0.40
52:DT:133:GLU:O	52:DT:133:GLU:HG2	2.21	0.40
10:CJ:94:VAL:HG12	10:CJ:95:GLU:N	2.36	0.40
36:BA:2542:A:O2'	36:BA:2543:G:H5'	2.21	0.40
28:B2:53:LEU:O	28:B2:56:GLN:HB2	2.21	0.40
41:BF:18:ARG:HG2	41:BF:19:GLU:N	2.37	0.40
56:BX:80:ILE:O	56:BX:80:ILE:HG12	2.21	0.40
40:BE:77:ILE:C	40:BE:78:LEU:HG	2.41	0.40
40:BE:33:VAL:CG1	40:BE:89:ASP:O	2.66	0.40
41:DF:37:VAL:CG1	41:DF:41:LEU:HD12	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BA:1486:A:N6	36:BA:1504:C:H42	2.20	0.40
39:BD:97:TYR:O	39:BD:99:ASP:N	2.55	0.40
42:DG:82:LEU:HD22	42:DG:87:PRO:CA	2.52	0.40
52:BT:7:ILE:O	52:BT:10:VAL:HB	2.22	0.40
52:BT:10:VAL:O	52:BT:12:SER:N	2.54	0.40
27:B1:4:VAL:HB	27:B1:11:ARG:HB3	2.02	0.40
36:DA:2370:G:C6	36:DA:2371:G:C6	3.09	0.40
57:BY:40:GLU:HA	57:BY:64:GLU:OE2	2.22	0.40
4:AD:192:GLU:OE1	4:AD:192:GLU:HA	2.21	0.40
4:CD:8:VAL:HG11	4:CD:115:ARG:CZ	2.52	0.40
50:BR:30:THR:HG22	50:BR:31:HIS:CE1	2.56	0.40
36:DA:1140:C:H5''	46:DN:66:LYS:NZ	2.37	0.40
46:BN:91:LEU:HA	46:BN:91:LEU:HD23	1.81	0.40
43:BH:51:ARG:HG3	43:BH:52:VAL:N	2.35	0.40
41:DF:160:ASN:HD21	41:DF:162:LEU:H	1.61	0.40
4:CD:31:CYS:C	4:CD:33:MET:H	2.25	0.40
20:AT:53:LEU:HB3	20:AT:102:GLY:HA3	2.03	0.40
5:CE:50:GLU:HB3	5:CE:52:PRO:HD2	2.03	0.40
43:DH:19:VAL:O	43:DH:20:ALA:CB	2.70	0.40
1:CA:1266:G:N2	1:CA:1269:A:OP2	2.49	0.40
1:CA:1315:U:O2	1:CA:1360:A:H2	2.04	0.40
19:CS:36:ARG:H	19:CS:36:ARG:HG2	1.70	0.40
58:DZ:81:ARG:HH11	58:DZ:81:ARG:HB3	1.85	0.40
12:AL:34:ARG:HG3	12:AL:105:TYR:HE2	1.86	0.40
36:DA:1108:U:H5'	36:DA:1109:C:OP2	2.22	0.40
25:AZ:210:ILE:HA	25:AZ:211:PRO:HD2	1.94	0.40
31:D5:23:HIS:O	31:D5:24:ALA:C	2.60	0.40
43:DH:97:ARG:NH2	43:DH:104:GLU:OE2	2.54	0.40
40:DE:59:VAL:HG21	40:DE:63:LEU:HA	2.01	0.40
57:BY:56:PRO:O	57:BY:57:GLN:O	2.39	0.40
36:DA:1058:G:C8	36:DA:1059:G:H5'	2.57	0.40
52:DT:93:ARG:HH22	52:DT:95:ARG:HD3	1.82	0.40
41:BF:110:LEU:C	41:BF:110:LEU:HD13	2.42	0.40
36:BA:2305:A:C2'	36:BA:2306:C:H5''	2.52	0.40
36:BA:958:U:H5''	49:BQ:14:ARG:HD3	2.02	0.40
34:B8:14:VAL:CG2	34:B8:22:VAL:HG13	2.51	0.40
34:B8:48:PHE:O	34:B8:49:VAL:CG2	2.69	0.40
39:DD:270:ILE:H	39:DD:270:ILE:HG13	1.79	0.40
39:BD:270:ILE:HG13	39:BD:270:ILE:H	1.79	0.40
25:CZ:266:VAL:HB	25:CZ:291:ARG:NH1	2.37	0.40
43:DH:24:VAL:HG11	43:DH:72:ILE:HD12	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:42:ARG:C	16:AP:44:THR:H	2.24	0.40
36:DA:2126:A:HO2'	36:DA:2127:G:P	2.44	0.40
16:CP:42:ARG:C	16:CP:44:THR:H	2.25	0.40
53:BU:82:GLY:O	53:BU:84:LYS:N	2.55	0.40
50:BR:51:LEU:HA	50:BR:51:LEU:HD12	1.90	0.40
38:DC:150:GLY:C	38:DC:154:ARG:NH1	2.74	0.40
1:AA:1378:C:OP1	7:AG:7:ALA:CB	2.70	0.40
52:BT:35:LYS:NZ	52:BT:41:ARG:CD	2.84	0.40
17:CQ:59:ILE:CG2	17:CQ:71:PHE:CD2	3.03	0.40
36:BA:797:C:C2	36:BA:798:G:C8	3.09	0.40
42:BG:52:ILE:HG12	42:BG:54:GLU:N	2.35	0.40
18:CR:25:THR:HB	18:CR:26:LEU:HD12	2.03	0.40
36:DA:1353:A:H2'	36:DA:1354:A:C8	2.56	0.40
24:AY:51:G:HO2'	25:AZ:338:TYR:HD1	1.67	0.40
6:AF:24:GLU:HG2	6:AF:28:ARG:HH12	1.87	0.40
38:DC:40:THR:HG22	38:DC:177:LYS:NZ	2.36	0.40
44:BJ:34:UNK:O	44:BJ:38:UNK:N	2.54	0.40
4:AD:88:VAL:HG12	4:AD:90:GLY:N	2.37	0.40
36:DA:954:G:N3	36:DA:2274:A:C2	2.89	0.40
11:AK:34:ASP:C	11:AK:36:ASP:H	2.24	0.40
36:DA:1258:C:O2'	36:DA:1259:G:H5'	2.22	0.40
36:BA:2364:C:O2'	36:BA:2365:G:H5'	2.20	0.40
36:BA:1106:G:O6	36:BA:1107:G:N2	2.54	0.40
27:D1:52:ARG:O	27:D1:53:VAL:O	2.40	0.40
47:DO:2:ILE:HG13	47:DO:8:LEU:HD21	2.04	0.40
36:DA:648:G:O2'	36:DA:649:G:H5'	2.20	0.40
1:AA:189(H):G:O2'	1:AA:189(I):G:P	2.80	0.40
40:DE:98:PRO:HD3	40:DE:175:VAL:CG1	2.52	0.40
7:AG:15:ASP:HB3	7:AG:19:GLY:N	2.36	0.40
6:AF:15:ASP:O	6:AF:17:SER:N	2.54	0.40
1:CA:1327:C:OP1	21:CU:20:LYS:HB3	2.22	0.40
26:D0:26:TYR:O	26:D0:29:GLN:HG3	2.21	0.40
36:BA:36:G:O2'	36:BA:37:C:H5'	2.22	0.40
11:CK:117:ASN:N	11:CK:117:ASN:HD22	2.19	0.40
7:CG:15:ASP:HB3	7:CG:19:GLY:N	2.36	0.40
47:DO:31:LYS:HB3	47:DO:32:TYR:CD1	2.56	0.40
24:AY:76:A:O4'	25:AZ:237:VAL:HG11	2.21	0.40
36:BA:2383:G:C2'	36:BA:2384:G:H5'	2.52	0.40
36:DA:1429:G:H2'	36:DA:1430:C:C6	2.56	0.40
22:AV:75:C:H2'	22:AV:76:A:H1'	2.03	0.40
1:AA:370:C:O2'	1:AA:371:G:H5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DO:49:ARG:HD3	47:DO:49:ARG:H	1.86	0.40
45:BK:23:UNK:O	45:BK:25:UNK:N	2.55	0.40
50:DR:12:ARG:HH11	50:DR:12:ARG:CG	2.34	0.40
36:DA:515:A:C8	36:DA:516:C:C5	3.10	0.40
40:BE:174:ASP:OD1	40:BE:175:VAL:N	2.54	0.40
1:CA:861:G:O2'	1:CA:862:C:H5'	2.22	0.40
1:CA:102:G:H2'	1:CA:103:C:H6	1.86	0.40
36:BA:1530:C:H2'	36:BA:1531:C:C6	2.56	0.40
1:CA:802:A:H3'	1:CA:803:G:H8	1.86	0.40
8:AH:119:LEU:HD12	8:AH:124:ALA:HA	2.03	0.40
28:D2:25:VAL:O	28:D2:28:LYS:HB2	2.21	0.40
36:BA:376:C:H2'	36:BA:377:C:C6	2.57	0.40
36:DA:350:U:N3	36:DA:351:G:C2	2.89	0.40
36:DA:350:U:O2'	36:DA:351:G:H5'	2.21	0.40
36:DA:556:G:H2'	36:DA:557:U:C6	2.57	0.40
36:DA:531:C:N3	36:DA:563:G:C8	2.90	0.40
36:BA:272(A):U:H6	36:BA:272(A):U:H3'	1.86	0.40
13:CM:21:TYR:N	13:CM:21:TYR:CD1	2.89	0.40
43:DH:119:GLU:OE1	43:DH:119:GLU:N	2.53	0.40
1:CA:750:G:N3	15:CO:23:GLY:HA3	2.37	0.40
36:BA:428:A:H3'	36:BA:429:A:H8	1.85	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	232/256 (91%)	175 (75%)	39 (17%)	18 (8%)	1	6
2	CB	232/256 (91%)	173 (75%)	41 (18%)	18 (8%)	1	6
3	AC	204/239 (85%)	161 (79%)	23 (11%)	20 (10%)	1	4
3	CC	204/239 (85%)	159 (78%)	28 (14%)	17 (8%)	1	6

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	AD	206/209 (99%)	134 (65%)	46 (22%)	26 (13%)	0	1
4	CD	206/209 (99%)	133 (65%)	48 (23%)	25 (12%)	0	2
5	AE	148/162 (91%)	138 (93%)	5 (3%)	5 (3%)	5	25
5	CE	148/162 (91%)	138 (93%)	6 (4%)	4 (3%)	6	31
6	AF	99/101 (98%)	80 (81%)	12 (12%)	7 (7%)	1	8
6	CF	99/101 (98%)	81 (82%)	11 (11%)	7 (7%)	1	8
7	AG	153/156 (98%)	123 (80%)	22 (14%)	8 (5%)	2	15
7	CG	153/156 (98%)	123 (80%)	22 (14%)	8 (5%)	2	15
8	AH	136/138 (99%)	125 (92%)	10 (7%)	1 (1%)	26	65
8	CH	136/138 (99%)	125 (92%)	10 (7%)	1 (1%)	26	65
9	AI	125/128 (98%)	85 (68%)	23 (18%)	17 (14%)	0	1
9	CI	125/128 (98%)	84 (67%)	24 (19%)	17 (14%)	0	1
10	AJ	96/105 (91%)	75 (78%)	12 (12%)	9 (9%)	1	4
10	CJ	96/105 (91%)	75 (78%)	12 (12%)	9 (9%)	1	4
11	AK	117/129 (91%)	100 (86%)	10 (8%)	7 (6%)	2	11
11	CK	117/129 (91%)	101 (86%)	9 (8%)	7 (6%)	2	11
12	AL	122/135 (90%)	94 (77%)	15 (12%)	13 (11%)	0	3
12	CL	122/135 (90%)	91 (75%)	18 (15%)	13 (11%)	0	3
13	AM	122/126 (97%)	82 (67%)	26 (21%)	14 (12%)	0	2
13	CM	122/126 (97%)	84 (69%)	24 (20%)	14 (12%)	0	2
14	AN	58/61 (95%)	41 (71%)	6 (10%)	11 (19%)	0	0
14	CN	58/61 (95%)	40 (69%)	7 (12%)	11 (19%)	0	0
15	AO	86/89 (97%)	79 (92%)	7 (8%)	0	100	100
15	CO	86/89 (97%)	79 (92%)	6 (7%)	1 (1%)	16	52
16	AP	81/88 (92%)	52 (64%)	22 (27%)	7 (9%)	1	5
16	CP	81/88 (92%)	52 (64%)	22 (27%)	7 (9%)	1	5
17	AQ	97/105 (92%)	86 (89%)	9 (9%)	2 (2%)	9	37
17	CQ	97/105 (92%)	86 (89%)	9 (9%)	2 (2%)	9	37
18	AR	68/88 (77%)	56 (82%)	11 (16%)	1 (2%)	13	46
18	CR	68/88 (77%)	57 (84%)	10 (15%)	1 (2%)	13	46
19	AS	76/93 (82%)	50 (66%)	16 (21%)	10 (13%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	CS	76/93 (82%)	50 (66%)	16 (21%)	10 (13%)	0	1
20	AT	97/106 (92%)	64 (66%)	24 (25%)	9 (9%)	1	4
20	CT	97/106 (92%)	62 (64%)	26 (27%)	9 (9%)	1	4
21	AU	22/27 (82%)	18 (82%)	3 (14%)	1 (4%)	3	17
21	CU	22/27 (82%)	18 (82%)	3 (14%)	1 (4%)	3	17
25	AZ	381/405 (94%)	269 (71%)	82 (22%)	30 (8%)	1	6
25	CZ	381/405 (94%)	268 (70%)	83 (22%)	30 (8%)	1	6
26	B0	82/85 (96%)	69 (84%)	10 (12%)	3 (4%)	4	23
26	D0	82/85 (96%)	69 (84%)	10 (12%)	3 (4%)	4	23
27	B1	91/98 (93%)	70 (77%)	10 (11%)	11 (12%)	0	2
27	D1	91/98 (93%)	71 (78%)	14 (15%)	6 (7%)	1	9
28	B2	69/72 (96%)	40 (58%)	15 (22%)	14 (20%)	0	0
28	D2	69/72 (96%)	44 (64%)	18 (26%)	7 (10%)	1	4
29	B3	57/60 (95%)	47 (82%)	5 (9%)	5 (9%)	1	5
29	D3	57/60 (95%)	47 (82%)	5 (9%)	5 (9%)	1	5
30	B4	42/71 (59%)	20 (48%)	17 (40%)	5 (12%)	0	2
30	D4	42/71 (59%)	20 (48%)	17 (40%)	5 (12%)	0	2
31	B5	57/60 (95%)	39 (68%)	8 (14%)	10 (18%)	0	0
31	D5	57/60 (95%)	39 (68%)	8 (14%)	10 (18%)	0	0
32	B6	48/54 (89%)	24 (50%)	8 (17%)	16 (33%)	0	0
32	D6	48/54 (89%)	24 (50%)	8 (17%)	16 (33%)	0	0
33	B7	46/49 (94%)	42 (91%)	3 (6%)	1 (2%)	8	36
33	D7	46/49 (94%)	42 (91%)	3 (6%)	1 (2%)	8	36
34	B8	61/65 (94%)	34 (56%)	21 (34%)	6 (10%)	1	4
34	D8	61/65 (94%)	34 (56%)	21 (34%)	6 (10%)	1	4
35	B9	35/37 (95%)	25 (71%)	6 (17%)	4 (11%)	0	2
35	D9	35/37 (95%)	24 (69%)	8 (23%)	3 (9%)	1	5
38	BC	226/229 (99%)	170 (75%)	45 (20%)	11 (5%)	3	16
38	DC	226/229 (99%)	171 (76%)	43 (19%)	12 (5%)	2	14
39	BD	273/276 (99%)	219 (80%)	31 (11%)	23 (8%)	1	6
39	DD	273/276 (99%)	217 (80%)	31 (11%)	25 (9%)	1	4

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	BE	202/206 (98%)	134 (66%)	39 (19%)	29 (14%)	0	1
40	DE	202/206 (98%)	134 (66%)	39 (19%)	29 (14%)	0	1
41	BF	205/210 (98%)	148 (72%)	35 (17%)	22 (11%)	0	3
41	DF	205/210 (98%)	149 (73%)	34 (17%)	22 (11%)	0	3
42	BG	179/182 (98%)	118 (66%)	33 (18%)	28 (16%)	0	0
42	DG	179/182 (98%)	119 (66%)	31 (17%)	29 (16%)	0	0
43	BH	157/180 (87%)	93 (59%)	34 (22%)	30 (19%)	0	0
43	DH	157/180 (87%)	94 (60%)	33 (21%)	30 (19%)	0	0
46	BN	136/140 (97%)	93 (68%)	20 (15%)	23 (17%)	0	0
46	DN	136/140 (97%)	93 (68%)	20 (15%)	23 (17%)	0	0
47	BO	120/122 (98%)	106 (88%)	8 (7%)	6 (5%)	3	16
47	DO	120/122 (98%)	106 (88%)	8 (7%)	6 (5%)	3	16
48	BP	144/150 (96%)	78 (54%)	36 (25%)	30 (21%)	0	0
48	DP	144/150 (96%)	77 (54%)	37 (26%)	30 (21%)	0	0
49	BQ	139/141 (99%)	114 (82%)	20 (14%)	5 (4%)	4	24
49	DQ	139/141 (99%)	114 (82%)	20 (14%)	5 (4%)	4	24
50	BR	115/118 (98%)	83 (72%)	16 (14%)	16 (14%)	0	1
50	DR	115/118 (98%)	83 (72%)	17 (15%)	15 (13%)	0	1
51	BS	96/112 (86%)	50 (52%)	24 (25%)	22 (23%)	0	0
51	DS	96/112 (86%)	49 (51%)	23 (24%)	24 (25%)	0	0
52	BT	135/146 (92%)	82 (61%)	30 (22%)	23 (17%)	0	0
52	DT	135/146 (92%)	82 (61%)	30 (22%)	23 (17%)	0	0
53	BU	115/118 (98%)	83 (72%)	25 (22%)	7 (6%)	2	11
53	DU	115/118 (98%)	83 (72%)	25 (22%)	7 (6%)	2	11
54	BV	99/101 (98%)	61 (62%)	23 (23%)	15 (15%)	0	0
54	DV	99/101 (98%)	62 (63%)	22 (22%)	15 (15%)	0	0
55	BW	111/113 (98%)	87 (78%)	12 (11%)	12 (11%)	0	3
55	DW	111/113 (98%)	85 (77%)	14 (13%)	12 (11%)	0	3
56	BX	90/96 (94%)	64 (71%)	20 (22%)	6 (7%)	1	9
56	DX	90/96 (94%)	65 (72%)	19 (21%)	6 (7%)	1	9
57	BY	98/110 (89%)	41 (42%)	31 (32%)	26 (26%)	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
57	DY	98/110 (89%)	43 (44%)	29 (30%)	26 (26%)	0	0
58	BZ	174/206 (84%)	109 (63%)	27 (16%)	38 (22%)	0	0
58	DZ	174/206 (84%)	109 (63%)	47 (27%)	18 (10%)	1	4
All	All	12256/13106 (94%)	8858 (72%)	2104 (17%)	1294 (11%)	0	3

All (1294) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	18	GLY
2	AB	190	THR
2	AB	191	ASP
2	AB	230	VAL
2	AB	234	PRO
3	AC	15	THR
3	AC	61	ALA
3	AC	82	GLU
3	AC	93	LYS
4	AD	3	ARG
4	AD	18	LYS
4	AD	30	LYS
4	AD	35	ARG
4	AD	125	HIS
4	AD	189	PRO
5	AE	153	LYS
7	AG	7	ALA
7	AG	8	GLU
7	AG	79	ARG
8	AH	83	ILE
9	AI	21	PRO
9	AI	28	VAL
9	AI	54	ASP
9	AI	91	ASP
9	AI	101	PHE
10	AJ	36	GLY
10	AJ	75	ILE
10	AJ	85	LEU
11	AK	89	ALA
11	AK	128	ALA
12	AL	46	LYS
12	AL	71	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AL	79	GLU
12	AL	91	LYS
12	AL	122	THR
13	AM	12	ASN
13	AM	67	GLU
13	AM	83	ASP
13	AM	113	PRO
13	AM	117	VAL
14	AN	14	PRO
14	AN	15	LYS
14	AN	16	PHE
14	AN	22	THR
14	AN	29	ARG
14	AN	59	ALA
14	AN	60	SER
16	AP	26	ARG
16	AP	44	THR
16	AP	45	THR
16	AP	53	VAL
17	AQ	68	ARG
19	AS	28	LYS
19	AS	44	MET
19	AS	67	VAL
19	AS	80	TYR
20	AT	48	LYS
20	AT	73	HIS
20	AT	99	LEU
25	AZ	24	LYS
25	AZ	189	ARG
25	AZ	310	ILE
26	B0	75	LEU
27	B1	53	VAL
27	B1	83	GLU
28	B2	16	LEU
28	B2	63	VAL
28	B2	66	GLU
28	B2	68	ARG
30	B4	26	SER
30	B4	43	TYR
31	B5	4	HIS
31	B5	24	ALA
31	B5	25	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	B5	37	LYS
31	B5	49	CYS
31	B5	52	TYR
31	B5	57	VAL
32	B6	6	ARG
32	B6	16	CYS
32	B6	18	ARG
32	B6	20	ASN
32	B6	23	THR
32	B6	28	ARG
32	B6	31	PRO
32	B6	33	LYS
32	B6	49	HIS
34	B8	29	LYS
34	B8	34	TRP
34	B8	43	GLN
34	B8	49	VAL
35	B9	35	ARG
35	B9	36	GLN
38	BC	98	GLU
39	BD	25	THR
39	BD	34	VAL
39	BD	35	LYS
39	BD	224	ALA
39	BD	239	ARG
39	BD	245	PRO
39	BD	246	PRO
39	BD	267	SER
39	BD	273	ARG
39	BD	275	LYS
40	BE	2	LYS
40	BE	4	ILE
40	BE	56	PRO
40	BE	66	HIS
40	BE	69	LYS
40	BE	75	VAL
40	BE	76	ARG
40	BE	82	ARG
40	BE	185	LYS
40	BE	186	GLY
40	BE	189	PRO
41	BF	10	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	BF	14	PRO
41	BF	21	ALA
41	BF	26	ALA
41	BF	86	GLY
41	BF	88	VAL
41	BF	89	VAL
41	BF	134	GLY
42	BG	25	TYR
42	BG	43	LEU
42	BG	46	ALA
42	BG	48	GLU
42	BG	49	ASP
42	BG	81	LYS
42	BG	87	PRO
42	BG	96	ARG
42	BG	103	LEU
42	BG	115	ARG
42	BG	125	PHE
42	BG	147	ASP
42	BG	176	LEU
43	BH	24	VAL
43	BH	46	GLU
43	BH	55	PRO
43	BH	81	GLU
43	BH	84	SER
43	BH	127	GLU
43	BH	137	ASP
43	BH	138	LYS
43	BH	158	HIS
43	BH	165	ALA
46	BN	19	GLU
46	BN	76	SER
46	BN	130	HIS
47	BO	29	ASN
47	BO	48	PRO
47	BO	68	GLU
48	BP	11	GLY
48	BP	13	ASN
48	BP	17	LYS
48	BP	21	ARG
48	BP	47	ASP
48	BP	56	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	BP	57	THR
48	BP	58	THR
48	BP	61	ARG
48	BP	67	MET
48	BP	110	TYR
48	BP	111	ARG
48	BP	147	LEU
49	BQ	2	LEU
49	BQ	25	ASP
50	BR	4	LEU
50	BR	8	ARG
50	BR	9	LYS
50	BR	11	ASN
50	BR	45	ARG
50	BR	88	ARG
50	BR	104	ARG
50	BR	117	VAL
51	BS	23	ARG
51	BS	57	LYS
51	BS	59	LYS
51	BS	76	LYS
51	BS	92	TYR
51	BS	93	LYS
51	BS	94	TYR
51	BS	97	ARG
51	BS	98	VAL
51	BS	103	GLU
52	BT	2	ASN
52	BT	24	PRO
52	BT	27	THR
52	BT	28	VAL
52	BT	30	VAL
52	BT	32	TYR
52	BT	80	SER
52	BT	91	ARG
52	BT	95	ARG
52	BT	107	ASP
53	BU	91	ASP
53	BU	93	LYS
54	BV	16	PRO
54	BV	22	VAL
54	BV	46	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	BV	79	VAL
55	BW	6	ILE
55	BW	63	ASP
55	BW	110	LYS
56	BX	12	VAL
57	BY	23	ARG
57	BY	42	VAL
57	BY	50	ARG
57	BY	56	PRO
57	BY	57	GLN
57	BY	61	ILE
57	BY	63	LYS
57	BY	74	PRO
57	BY	75	ILE
57	BY	77	PRO
57	BY	78	ALA
57	BY	82	PRO
57	BY	90	LEU
58	BZ	30	ASN
58	BZ	34	ASN
58	BZ	50	GLN
58	BZ	78	LYS
58	BZ	80	ARG
58	BZ	81	ARG
58	BZ	96	VAL
58	BZ	97	GLU
58	BZ	111	VAL
58	BZ	113	ALA
58	BZ	120	ILE
58	BZ	136	PHE
58	BZ	140	ASP
58	BZ	146	ILE
58	BZ	152	ALA
58	BZ	163	LEU
58	BZ	166	SER
58	BZ	168	GLU
2	CB	15	VAL
2	CB	18	GLY
2	CB	190	THR
2	CB	191	ASP
2	CB	230	VAL
2	CB	234	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	15	THR
3	CC	61	ALA
3	CC	82	GLU
3	CC	93	LYS
4	CD	3	ARG
4	CD	18	LYS
4	CD	30	LYS
4	CD	35	ARG
4	CD	125	HIS
4	CD	189	PRO
5	CE	153	LYS
6	CF	36	ARG
7	CG	7	ALA
7	CG	8	GLU
7	CG	79	ARG
8	CH	83	ILE
9	CI	21	PRO
9	CI	28	VAL
9	CI	54	ASP
9	CI	91	ASP
9	CI	101	PHE
10	CJ	36	GLY
10	CJ	75	ILE
10	CJ	85	LEU
11	CK	89	ALA
11	CK	128	ALA
12	CL	46	LYS
12	CL	71	PRO
12	CL	79	GLU
12	CL	91	LYS
12	CL	122	THR
13	CM	12	ASN
13	CM	67	GLU
13	CM	83	ASP
13	CM	113	PRO
13	CM	117	VAL
14	CN	14	PRO
14	CN	15	LYS
14	CN	16	PHE
14	CN	22	THR
14	CN	29	ARG
14	CN	59	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	CN	60	SER
16	CP	26	ARG
16	CP	44	THR
16	CP	45	THR
16	CP	53	VAL
17	CQ	68	ARG
19	CS	28	LYS
19	CS	44	MET
19	CS	67	VAL
19	CS	80	TYR
20	CT	48	LYS
20	CT	73	HIS
20	CT	99	LEU
25	CZ	24	LYS
25	CZ	189	ARG
25	CZ	310	ILE
26	D0	75	LEU
27	D1	30	VAL
27	D1	83	GLU
27	D1	85	LEU
28	D2	11	GLU
28	D2	47	ASN
28	D2	48	HIS
28	D2	70	GLN
30	D4	26	SER
30	D4	43	TYR
31	D5	4	HIS
31	D5	24	ALA
31	D5	25	LEU
31	D5	37	LYS
31	D5	49	CYS
31	D5	52	TYR
31	D5	57	VAL
32	D6	6	ARG
32	D6	16	CYS
32	D6	18	ARG
32	D6	20	ASN
32	D6	23	THR
32	D6	28	ARG
32	D6	31	PRO
32	D6	33	LYS
32	D6	49	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	D8	29	LYS
34	D8	34	TRP
34	D8	43	GLN
34	D8	49	VAL
35	D9	35	ARG
35	D9	36	GLN
38	DC	98	GLU
39	DD	25	THR
39	DD	34	VAL
39	DD	35	LYS
39	DD	224	ALA
39	DD	239	ARG
39	DD	245	PRO
39	DD	246	PRO
39	DD	273	ARG
39	DD	275	LYS
40	DE	2	LYS
40	DE	4	ILE
40	DE	66	HIS
40	DE	69	LYS
40	DE	75	VAL
40	DE	76	ARG
40	DE	82	ARG
40	DE	185	LYS
40	DE	186	GLY
40	DE	189	PRO
41	DF	10	PRO
41	DF	14	PRO
41	DF	21	ALA
41	DF	26	ALA
41	DF	86	GLY
41	DF	88	VAL
41	DF	89	VAL
41	DF	134	GLY
42	DG	11	TYR
42	DG	28	VAL
42	DG	68	PRO
42	DG	81	LYS
42	DG	82	LEU
42	DG	84	LYS
42	DG	86	MET
42	DG	114	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DG	115	ARG
42	DG	117	PHE
42	DG	126	ASP
42	DG	129	GLY
43	DH	24	VAL
43	DH	46	GLU
43	DH	55	PRO
43	DH	81	GLU
43	DH	84	SER
43	DH	127	GLU
43	DH	137	ASP
43	DH	138	LYS
43	DH	158	HIS
43	DH	165	ALA
46	DN	19	GLU
46	DN	76	SER
46	DN	130	HIS
47	DO	29	ASN
47	DO	48	PRO
47	DO	68	GLU
48	DP	11	GLY
48	DP	13	ASN
48	DP	17	LYS
48	DP	21	ARG
48	DP	47	ASP
48	DP	57	THR
48	DP	58	THR
48	DP	61	ARG
48	DP	67	MET
48	DP	110	TYR
48	DP	111	ARG
48	DP	147	LEU
49	DQ	25	ASP
50	DR	4	LEU
50	DR	8	ARG
50	DR	9	LYS
50	DR	11	ASN
50	DR	45	ARG
50	DR	88	ARG
50	DR	103	ARG
50	DR	104	ARG
50	DR	117	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	DS	23	ARG
51	DS	57	LYS
51	DS	59	LYS
51	DS	76	LYS
51	DS	92	TYR
51	DS	93	LYS
51	DS	94	TYR
51	DS	97	ARG
51	DS	98	VAL
51	DS	103	GLU
52	DT	2	ASN
52	DT	24	PRO
52	DT	27	THR
52	DT	28	VAL
52	DT	30	VAL
52	DT	32	TYR
52	DT	80	SER
52	DT	91	ARG
52	DT	95	ARG
52	DT	107	ASP
53	DU	91	ASP
53	DU	93	LYS
54	DV	16	PRO
54	DV	22	VAL
54	DV	46	VAL
54	DV	79	VAL
55	DW	6	ILE
55	DW	63	ASP
55	DW	110	LYS
56	DX	12	VAL
56	DX	41	ASN
57	DY	23	ARG
57	DY	42	VAL
57	DY	50	ARG
57	DY	56	PRO
57	DY	57	GLN
57	DY	61	ILE
57	DY	63	LYS
57	DY	74	PRO
57	DY	75	ILE
57	DY	77	PRO
57	DY	78	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	DY	82	PRO
57	DY	90	LEU
58	DZ	14	LYS
58	DZ	124	ILE
58	DZ	163	LEU
58	DZ	168	GLU
2	AB	20	GLU
2	AB	237	ALA
3	AC	47	LEU
3	AC	51	GLY
3	AC	96	GLY
3	AC	107	GLN
3	AC	130	VAL
3	AC	146	ALA
4	AD	27	TYR
4	AD	44	GLY
4	AD	70	ILE
4	AD	110	PHE
4	AD	129	ASN
4	AD	153	ARG
6	AF	16	GLN
6	AF	36	ARG
6	AF	39	LYS
6	AF	40	VAL
6	AF	42	GLU
7	AG	146	GLU
9	AI	34	ASN
9	AI	41	VAL
9	AI	44	VAL
9	AI	56	LEU
9	AI	89	ASN
9	AI	100	GLY
10	AJ	32	ALA
10	AJ	59	SER
10	AJ	86	MET
12	AL	18	VAL
12	AL	72	GLY
13	AM	4	ILE
13	AM	116	THR
14	AN	4	LYS
16	AP	47	ASP
16	AP	81	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	AQ	95	TYR
19	AS	5	LEU
19	AS	26	GLY
19	AS	30	LEU
19	AS	46	GLY
25	AZ	21	ASP
25	AZ	110	ASP
25	AZ	141	VAL
25	AZ	221	PHE
25	AZ	274	ARG
25	AZ	323	LEU
25	AZ	329	GLY
25	AZ	331	HIS
26	B0	13	GLY
26	B0	74	ARG
27	B1	30	VAL
27	B1	31	GLY
27	B1	78	LYS
28	B2	9	GLN
28	B2	37	PHE
28	B2	41	ILE
28	B2	47	ASN
28	B2	65	ASN
29	B3	30	ARG
30	B4	44	THR
31	B5	51	TYR
32	B6	9	LEU
32	B6	17	LYS
32	B6	44	ARG
33	B7	17	GLY
34	B8	31	HIS
34	B8	33	ASN
35	B9	11	CYS
38	BC	67	GLY
38	BC	118	ASP
38	BC	128	GLY
38	BC	160	ARG
39	BD	37	LEU
39	BD	41	GLY
39	BD	42	GLY
39	BD	58	HIS
39	BD	127	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BD	268	ARG
40	BE	29	GLY
40	BE	45	THR
40	BE	46	ALA
40	BE	71	GLY
40	BE	77	ILE
40	BE	124	GLY
40	BE	190	GLY
40	BE	197	ILE
41	BF	7	TYR
41	BF	85	GLY
41	BF	117	ARG
41	BF	126	VAL
41	BF	132	VAL
42	BG	9	ARG
42	BG	10	LYS
42	BG	21	ARG
42	BG	80	PHE
42	BG	82	LEU
42	BG	155	MET
43	BH	18	GLU
43	BH	43	VAL
43	BH	47	GLU
43	BH	49	VAL
43	BH	52	VAL
43	BH	160	LYS
46	BN	8	GLN
46	BN	36	GLY
46	BN	37	LYS
46	BN	57	ALA
46	BN	58	ASP
47	BO	5	GLN
47	BO	49	ARG
48	BP	9	ASN
48	BP	20	GLY
48	BP	25	SER
48	BP	31	ALA
48	BP	34	GLY
48	BP	52	GLU
48	BP	62	LEU
48	BP	65	ARG
48	BP	70	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
49	BQ	62	GLY
49	BQ	135	ASP
50	BR	5	LYS
50	BR	6	SER
50	BR	14	SER
50	BR	58	GLY
50	BR	103	ARG
51	BS	17	ARG
51	BS	80	LEU
51	BS	88	ASP
51	BS	102	ALA
52	BT	4	GLY
52	BT	17	THR
52	BT	41	ARG
52	BT	55	ASN
52	BT	92	GLY
52	BT	93	ARG
52	BT	135	ALA
53	BU	9	VAL
53	BU	90	VAL
54	BV	18	LEU
54	BV	53	GLU
55	BW	40	ASN
56	BX	19	ALA
56	BX	41	ASN
56	BX	53	LYS
57	BY	3	VAL
57	BY	69	ALA
57	BY	81	LYS
58	BZ	13	GLU
58	BZ	27	VAL
58	BZ	124	ILE
58	BZ	158	PRO
58	BZ	161	VAL
2	CB	20	GLU
2	CB	237	ALA
3	CC	12	LEU
3	CC	47	LEU
3	CC	51	GLY
3	CC	96	GLY
3	CC	130	VAL
3	CC	146	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	160	ALA
4	CD	27	TYR
4	CD	44	GLY
4	CD	70	ILE
4	CD	110	PHE
4	CD	129	ASN
4	CD	153	ARG
6	CF	16	GLN
6	CF	39	LYS
6	CF	40	VAL
6	CF	42	GLU
7	CG	146	GLU
9	CI	34	ASN
9	CI	41	VAL
9	CI	44	VAL
9	CI	56	LEU
9	CI	89	ASN
9	CI	100	GLY
10	CJ	32	ALA
10	CJ	59	SER
10	CJ	86	MET
12	CL	18	VAL
12	CL	72	GLY
13	CM	4	ILE
13	CM	116	THR
14	CN	4	LYS
16	CP	47	ASP
16	CP	81	ARG
17	CQ	95	TYR
19	CS	5	LEU
19	CS	26	GLY
19	CS	30	LEU
19	CS	46	GLY
25	CZ	21	ASP
25	CZ	110	ASP
25	CZ	141	VAL
25	CZ	221	PHE
25	CZ	274	ARG
25	CZ	323	LEU
25	CZ	329	GLY
25	CZ	331	HIS
25	CZ	379	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	D0	13	GLY
26	D0	74	ARG
27	D1	28	GLY
27	D1	53	VAL
27	D1	91	LYS
29	D3	30	ARG
30	D4	44	THR
31	D5	51	TYR
32	D6	9	LEU
32	D6	17	LYS
32	D6	44	ARG
33	D7	17	GLY
34	D8	31	HIS
34	D8	33	ASN
35	D9	11	CYS
38	DC	67	GLY
38	DC	118	ASP
38	DC	128	GLY
38	DC	160	ARG
39	DD	37	LEU
39	DD	41	GLY
39	DD	42	GLY
39	DD	58	HIS
39	DD	127	VAL
39	DD	267	SER
39	DD	268	ARG
40	DE	29	GLY
40	DE	45	THR
40	DE	46	ALA
40	DE	56	PRO
40	DE	71	GLY
40	DE	77	ILE
40	DE	124	GLY
40	DE	190	GLY
40	DE	197	ILE
41	DF	7	TYR
41	DF	85	GLY
41	DF	117	ARG
41	DF	126	VAL
41	DF	132	VAL
42	DG	14	GLU
42	DG	29	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DG	53	LEU
42	DG	75	LYS
42	DG	80	PHE
42	DG	87	PRO
42	DG	96	ARG
42	DG	97	ASP
43	DH	18	GLU
43	DH	43	VAL
43	DH	47	GLU
43	DH	49	VAL
43	DH	52	VAL
43	DH	160	LYS
46	DN	8	GLN
46	DN	9	VAL
46	DN	36	GLY
46	DN	37	LYS
46	DN	57	ALA
46	DN	58	ASP
47	DO	5	GLN
47	DO	49	ARG
48	DP	9	ASN
48	DP	20	GLY
48	DP	25	SER
48	DP	31	ALA
48	DP	34	GLY
48	DP	56	SER
48	DP	62	LEU
48	DP	65	ARG
48	DP	70	GLN
49	DQ	2	LEU
49	DQ	62	GLY
49	DQ	135	ASP
50	DR	5	LYS
50	DR	6	SER
50	DR	14	SER
50	DR	58	GLY
51	DS	17	ARG
51	DS	80	LEU
51	DS	88	ASP
51	DS	102	ALA
52	DT	4	GLY
52	DT	17	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	DT	41	ARG
52	DT	55	ASN
52	DT	92	GLY
52	DT	93	ARG
52	DT	135	ALA
53	DU	9	VAL
53	DU	90	VAL
54	DV	18	LEU
54	DV	53	GLU
56	DX	13	LEU
56	DX	19	ALA
56	DX	53	LYS
57	DY	3	VAL
57	DY	69	ALA
57	DY	81	LYS
58	DZ	152	ALA
58	DZ	166	SER
58	DZ	177	PRO
2	AB	26	PRO
2	AB	238	LEU
3	AC	12	LEU
3	AC	95	THR
3	AC	160	ALA
3	AC	168	ALA
4	AD	4	TYR
4	AD	102	ASP
4	AD	137	SER
5	AE	8	GLU
6	AF	54	LYS
6	AF	62	TRP
7	AG	52	GLU
7	AG	137	LYS
7	AG	145	ALA
7	AG	155	ARG
9	AI	90	PRO
9	AI	120	ARG
12	AL	47	LYS
12	AL	115	LYS
12	AL	127	GLU
13	AM	5	ALA
13	AM	21	TYR
13	AM	60	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	AM	85	GLY
13	AM	120	LYS
14	AN	3	ARG
14	AN	20	ALA
18	AR	87	ARG
19	AS	14	HIS
20	AT	75	ASN
20	AT	96	GLY
20	AT	97	ALA
21	AU	3	LYS
25	AZ	94	THR
25	AZ	169	PRO
25	AZ	186	PRO
25	AZ	258	LEU
25	AZ	326	GLU
25	AZ	379	ALA
25	AZ	381	GLU
25	AZ	404	LEU
27	B1	80	LEU
27	B1	92	LYS
28	B2	58	ALA
29	B3	3	ARG
38	BC	79	LYS
38	BC	82	LYS
38	BC	117	PRO
38	BC	127	LEU
39	BD	24	ILE
39	BD	36	PRO
40	BE	62	PRO
40	BE	72	VAL
40	BE	169	ASN
41	BF	25	PRO
41	BF	83	PHE
41	BF	133	ASN
41	BF	142	TRP
41	BF	168	ARG
41	BF	178	PRO
42	BG	53	LEU
42	BG	84	LYS
42	BG	86	MET
42	BG	97	ASP
42	BG	138	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BH	20	ALA
43	BH	77	LYS
43	BH	129	THR
43	BH	154	PRO
43	BH	156	ALA
43	BH	167	GLU
46	BN	7	LYS
46	BN	9	VAL
46	BN	33	LEU
46	BN	42	TRP
46	BN	47	ALA
46	BN	135	PRO
48	BP	36	LYS
48	BP	107	LYS
48	BP	149	GLU
50	BR	3	HIS
51	BS	13	ARG
51	BS	14	VAL
51	BS	22	GLY
51	BS	53	SER
52	BT	12	SER
52	BT	29	ARG
52	BT	98	LYS
52	BT	111	ARG
53	BU	60	LEU
54	BV	2	PHE
54	BV	36	PRO
54	BV	50	PRO
54	BV	56	SER
54	BV	100	ARG
55	BW	18	ARG
55	BW	56	ALA
55	BW	60	ASN
56	BX	13	LEU
57	BY	66	PRO
57	BY	92	ASN
58	BZ	41	LEU
58	BZ	66	SER
58	BZ	148	ASP
58	BZ	151	HIS
58	BZ	156	LYS
58	BZ	177	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	26	PRO
2	CB	238	LEU
3	CC	95	THR
3	CC	107	GLN
3	CC	168	ALA
4	CD	4	TYR
4	CD	137	SER
5	CE	8	GLU
5	CE	37	ARG
6	CF	54	LYS
6	CF	62	TRP
7	CG	52	GLU
7	CG	137	LYS
7	CG	155	ARG
9	CI	90	PRO
9	CI	120	ARG
12	CL	47	LYS
12	CL	115	LYS
12	CL	127	GLU
13	CM	5	ALA
13	CM	21	TYR
13	CM	85	GLY
13	CM	120	LYS
14	CN	3	ARG
14	CN	20	ALA
18	CR	87	ARG
19	CS	14	HIS
20	CT	75	ASN
20	CT	96	GLY
20	CT	97	ALA
21	CU	3	LYS
25	CZ	94	THR
25	CZ	169	PRO
25	CZ	186	PRO
25	CZ	258	LEU
25	CZ	326	GLU
25	CZ	381	GLU
25	CZ	404	LEU
29	D3	3	ARG
38	DC	79	LYS
38	DC	82	LYS
38	DC	117	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DC	127	LEU
39	DD	24	ILE
39	DD	202	LYS
39	DD	225	ALA
40	DE	62	PRO
40	DE	72	VAL
40	DE	169	ASN
41	DF	25	PRO
41	DF	82	ILE
41	DF	83	PHE
41	DF	133	ASN
41	DF	142	TRP
41	DF	178	PRO
42	DG	49	ASP
42	DG	116	ASP
42	DG	151	ALA
43	DH	20	ALA
43	DH	76	VAL
43	DH	77	LYS
43	DH	129	THR
43	DH	154	PRO
43	DH	156	ALA
43	DH	167	GLU
46	DN	7	LYS
46	DN	42	TRP
46	DN	47	ALA
46	DN	135	PRO
48	DP	35	HIS
48	DP	36	LYS
48	DP	52	GLU
48	DP	107	LYS
48	DP	149	GLU
50	DR	3	HIS
51	DS	13	ARG
51	DS	14	VAL
51	DS	22	GLY
51	DS	53	SER
52	DT	12	SER
52	DT	29	ARG
52	DT	111	ARG
53	DU	83	LEU
54	DV	2	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	DV	36	PRO
54	DV	50	PRO
54	DV	56	SER
54	DV	100	ARG
55	DW	18	ARG
55	DW	25	ARG
55	DW	36	LEU
55	DW	40	ASN
55	DW	60	ASN
57	DY	27	VAL
57	DY	66	PRO
57	DY	92	ASN
58	DZ	112	ARG
2	AB	95	GLN
2	AB	225	ALA
4	AD	32	ALA
4	AD	40	PRO
4	AD	107	ARG
4	AD	159	ARG
9	AI	55	ALA
9	AI	92	TYR
10	AJ	27	ALA
11	AK	127	LYS
12	AL	48	PRO
12	AL	51	ALA
13	AM	114	ARG
19	AS	45	VAL
20	AT	93	GLU
20	AT	95	ALA
25	AZ	22	HIS
25	AZ	95	GLY
25	AZ	130	TYR
25	AZ	139	ASP
25	AZ	292	GLY
27	B1	57	GLU
27	B1	86	SER
28	B2	14	ARG
28	B2	38	GLN
29	B3	29	ARG
30	B4	28	LYS
30	B4	40	HIS
31	B5	53	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	B5	56	LYS
32	B6	52	VAL
38	BC	104	LEU
39	BD	3	VAL
39	BD	225	ALA
39	BD	244	ARG
41	BF	6	VAL
41	BF	82	ILE
42	BG	126	ASP
42	BG	144	ILE
42	BG	174	GLU
43	BH	76	VAL
43	BH	152	ARG
46	BN	40	PRO
46	BN	77	GLY
46	BN	127	ASP
46	BN	129	PRO
47	BO	13	ASN
48	BP	23	PRO
48	BP	35	HIS
48	BP	43	GLY
48	BP	148	LEU
50	BR	102	GLU
51	BS	104	GLY
52	BT	36	GLU
55	BW	25	ARG
55	BW	36	LEU
55	BW	72	LYS
56	BX	46	ALA
57	BY	27	VAL
57	BY	39	VAL
57	BY	64	GLU
58	BZ	150	LEU
2	CB	95	GLN
2	CB	225	ALA
4	CD	32	ALA
4	CD	40	PRO
4	CD	102	ASP
4	CD	107	ARG
4	CD	159	ARG
7	CG	145	ALA
9	CI	11	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	CI	55	ALA
9	CI	92	TYR
10	CJ	27	ALA
11	CK	127	LYS
12	CL	48	PRO
13	CM	60	VAL
13	CM	114	ARG
19	CS	45	VAL
20	CT	95	ALA
25	CZ	22	HIS
25	CZ	130	TYR
25	CZ	139	ASP
28	D2	14	ARG
28	D2	21	LEU
29	D3	29	ARG
30	D4	28	LYS
30	D4	40	HIS
31	D5	53	ALA
31	D5	56	LYS
32	D6	52	VAL
38	DC	104	LEU
39	DD	3	VAL
39	DD	36	PRO
39	DD	244	ARG
40	DE	116	VAL
41	DF	6	VAL
41	DF	168	ARG
42	DG	43	LEU
42	DG	128	ARG
42	DG	181	ARG
43	DH	41	MET
43	DH	152	ARG
46	DN	4	TYR
46	DN	33	LEU
46	DN	40	PRO
46	DN	77	GLY
46	DN	127	ASP
46	DN	129	PRO
47	DO	13	ASN
48	DP	43	GLY
48	DP	148	LEU
50	DR	102	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	DS	104	GLY
52	DT	36	GLU
52	DT	98	LYS
52	DT	131	ALA
55	DW	56	ALA
55	DW	72	LYS
57	DY	39	VAL
57	DY	64	GLU
58	DZ	16	SER
58	DZ	24	LEU
58	DZ	61	LEU
58	DZ	151	HIS
2	AB	232	PRO
2	AB	239	VAL
3	AC	26	LYS
3	AC	131	ARG
4	AD	5	ILE
4	AD	168	ARG
5	AE	37	ARG
9	AI	11	LYS
10	AJ	90	LEU
11	AK	27	ASN
11	AK	35	PRO
11	AK	91	ARG
12	AL	40	VAL
13	AM	124	PRO
16	AP	43	LYS
25	AZ	23	GLY
25	AZ	109	ALA
25	AZ	128	VAL
25	AZ	211	PRO
27	B1	69	LYS
27	B1	91	LYS
28	B2	44	LEU
29	B3	2	PRO
32	B6	15	GLU
32	B6	27	LYS
39	BD	242	ARG
40	BE	55	ASN
40	BE	61	ARG
40	BE	116	VAL
40	BE	119	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	BF	58	ALA
42	BG	90	LEU
43	BH	41	MET
46	BN	4	TYR
46	BN	133	GLN
51	BS	24	LEU
51	BS	89	ARG
52	BT	131	ALA
53	BU	83	LEU
55	BW	93	ALA
57	BY	26	LYS
57	BY	53	PRO
57	BY	65	ALA
58	BZ	46	LYS
58	BZ	51	ALA
2	CB	232	PRO
2	CB	239	VAL
3	CC	26	LYS
3	CC	83	ARG
4	CD	5	ILE
4	CD	168	ARG
10	CJ	90	LEU
11	CK	27	ASN
11	CK	35	PRO
11	CK	91	ARG
12	CL	51	ALA
13	CM	124	PRO
14	CN	19	ARG
15	CO	88	ARG
16	CP	43	LYS
20	CT	63	ILE
20	CT	93	GLU
25	CZ	23	GLY
25	CZ	95	GLY
25	CZ	109	ALA
25	CZ	128	VAL
25	CZ	211	PRO
25	CZ	292	GLY
28	D2	64	LEU
29	D3	2	PRO
32	D6	15	GLU
32	D6	27	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DC	37	PHE
39	DD	242	ARG
40	DE	55	ASN
40	DE	61	ARG
40	DE	119	ARG
43	DH	58	GLU
46	DN	12	ARG
46	DN	133	GLN
48	DP	23	PRO
51	DS	24	LEU
51	DS	87	PHE
51	DS	89	ARG
51	DS	90	GLY
51	DS	105	ALA
53	DU	60	LEU
55	DW	35	ILE
55	DW	93	ALA
56	DX	46	ALA
57	DY	53	PRO
57	DY	65	ALA
58	DZ	30	ASN
58	DZ	139	VAL
2	AB	165	VAL
3	AC	3	ASN
3	AC	29	TYR
3	AC	66	VAL
3	AC	83	ARG
4	AD	128	VAL
14	AN	19	ARG
20	AT	63	ILE
25	AZ	368	VAL
39	BD	28	GLU
43	BH	21	PRO
43	BH	44	VAL
43	BH	58	GLU
46	BN	5	VAL
46	BN	12	ARG
51	BS	90	GLY
53	BU	11	ARG
54	BV	37	VAL
55	BW	35	ILE
2	CB	165	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	CK	90	GLY
12	CL	40	VAL
25	CZ	368	VAL
39	DD	28	GLU
41	DF	58	ALA
42	DG	67	LYS
42	DG	71	THR
43	DH	44	VAL
46	DN	5	VAL
53	DU	11	ARG
54	DV	23	GLU
54	DV	37	VAL
57	DY	26	LYS
4	AD	39	PRO
10	AJ	91	PRO
43	BH	107	VAL
48	BP	19	VAL
57	BY	31	LEU
58	BZ	130	PRO
58	BZ	147	GLY
3	CC	66	VAL
4	CD	128	VAL
10	CJ	91	PRO
39	DD	234	GLY
40	DE	98	PRO
43	DH	21	PRO
43	DH	107	VAL
49	DQ	27	VAL
57	DY	31	LEU
58	DZ	146	ILE
2	AB	127	ILE
4	AD	92	VAL
5	AE	67	VAL
11	AK	90	GLY
29	B3	27	GLY
43	BH	45	VAL
46	BN	46	VAL
49	BQ	27	VAL
54	BV	54	GLY
58	BZ	12	GLY
58	BZ	143	GLY
29	D3	27	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DN	46	VAL
48	DP	19	VAL
54	DV	54	GLY
58	DZ	111	VAL
2	AB	130	ARG
4	AD	172	PRO
25	AZ	191	GLY
32	B6	41	PRO
40	BE	98	PRO
40	BE	130	GLY
54	BV	48	GLY
57	BY	76	CYS
2	CB	127	ILE
2	CB	130	ARG
4	CD	172	PRO
5	CE	67	VAL
25	CZ	191	GLY
40	DE	53	PRO
42	DG	85	GLY
43	DH	45	VAL
54	DV	35	LEU
57	DY	76	CYS
58	DZ	12	GLY
58	DZ	141	VAL
5	AE	70	PRO
28	B2	42	GLY
35	B9	10	ILE
38	BC	119	VAL
40	BE	53	PRO
50	BR	46	GLY
58	BZ	14	LYS
58	BZ	139	VAL
4	CD	37	PRO
4	CD	39	PRO
9	CI	57	GLY
32	D6	41	PRO
38	DC	119	VAL
40	DE	130	GLY
2	AB	131	PRO
4	AD	37	PRO
9	AI	57	GLY
54	BV	35	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	131	PRO

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AB	202/220 (92%)	178 (88%)	24 (12%)	6	25
2	CB	202/220 (92%)	180 (89%)	22 (11%)	8	30
3	AC	160/188 (85%)	143 (89%)	17 (11%)	8	31
3	CC	160/188 (85%)	144 (90%)	16 (10%)	9	34
4	AD	180/181 (99%)	157 (87%)	23 (13%)	5	21
4	CD	180/181 (99%)	157 (87%)	23 (13%)	5	21
5	AE	115/123 (94%)	104 (90%)	11 (10%)	10	37
5	CE	115/123 (94%)	105 (91%)	10 (9%)	13	44
6	AF	90/90 (100%)	81 (90%)	9 (10%)	9	34
6	CF	90/90 (100%)	82 (91%)	8 (9%)	12	42
7	AG	126/127 (99%)	116 (92%)	10 (8%)	15	49
7	CG	126/127 (99%)	116 (92%)	10 (8%)	15	49
8	AH	119/119 (100%)	109 (92%)	10 (8%)	14	46
8	CH	119/119 (100%)	109 (92%)	10 (8%)	14	46
9	AI	98/99 (99%)	89 (91%)	9 (9%)	11	40
9	CI	98/99 (99%)	89 (91%)	9 (9%)	11	40
10	AJ	88/92 (96%)	80 (91%)	8 (9%)	12	40
10	CJ	88/92 (96%)	80 (91%)	8 (9%)	12	40
11	AK	90/99 (91%)	81 (90%)	9 (10%)	9	34
11	CK	90/99 (91%)	82 (91%)	8 (9%)	12	42
12	AL	104/111 (94%)	95 (91%)	9 (9%)	13	44
12	CL	104/111 (94%)	97 (93%)	7 (7%)	20	56
13	AM	99/101 (98%)	86 (87%)	13 (13%)	5	21

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	CM	99/101 (98%)	86 (87%)	13 (13%)	5	21
14	AN	49/50 (98%)	39 (80%)	10 (20%)	1	6
14	CN	49/50 (98%)	39 (80%)	10 (20%)	1	6
15	AO	79/80 (99%)	70 (89%)	9 (11%)	7	28
15	CO	79/80 (99%)	71 (90%)	8 (10%)	9	33
16	AP	72/74 (97%)	66 (92%)	6 (8%)	14	46
16	CP	72/74 (97%)	66 (92%)	6 (8%)	14	46
17	AQ	94/97 (97%)	87 (93%)	7 (7%)	17	51
17	CQ	94/97 (97%)	87 (93%)	7 (7%)	17	51
18	AR	61/77 (79%)	54 (88%)	7 (12%)	7	27
18	CR	61/77 (79%)	54 (88%)	7 (12%)	7	27
19	AS	69/80 (86%)	56 (81%)	13 (19%)	2	8
19	CS	69/80 (86%)	56 (81%)	13 (19%)	2	8
20	AT	76/82 (93%)	71 (93%)	5 (7%)	21	56
20	CT	76/82 (93%)	71 (93%)	5 (7%)	21	56
21	AU	19/22 (86%)	18 (95%)	1 (5%)	28	64
21	CU	19/22 (86%)	18 (95%)	1 (5%)	28	64
25	AZ	322/338 (95%)	299 (93%)	23 (7%)	18	54
25	CZ	322/338 (95%)	299 (93%)	23 (7%)	18	54
26	B0	66/67 (98%)	58 (88%)	8 (12%)	6	24
26	D0	66/67 (98%)	56 (85%)	10 (15%)	3	14
27	B1	78/83 (94%)	67 (86%)	11 (14%)	4	18
27	D1	78/83 (94%)	71 (91%)	7 (9%)	12	41
28	B2	66/67 (98%)	61 (92%)	5 (8%)	16	51
28	D2	66/67 (98%)	60 (91%)	6 (9%)	12	40
29	B3	51/52 (98%)	44 (86%)	7 (14%)	4	19
29	D3	51/52 (98%)	44 (86%)	7 (14%)	4	19
30	B4	39/63 (62%)	32 (82%)	7 (18%)	2	10
30	D4	39/63 (62%)	32 (82%)	7 (18%)	2	10
31	B5	51/52 (98%)	43 (84%)	8 (16%)	3	13
31	D5	51/52 (98%)	43 (84%)	8 (16%)	3	13

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
32	B6	49/52 (94%)	36 (74%)	13 (26%)	0	2
32	D6	49/52 (94%)	37 (76%)	12 (24%)	1	3
33	B7	41/42 (98%)	35 (85%)	6 (15%)	4	16
33	D7	41/42 (98%)	35 (85%)	6 (15%)	4	16
34	B8	53/55 (96%)	45 (85%)	8 (15%)	3	15
34	D8	53/55 (96%)	45 (85%)	8 (15%)	3	15
35	B9	34/34 (100%)	31 (91%)	3 (9%)	12	43
35	D9	34/34 (100%)	31 (91%)	3 (9%)	12	43
38	BC	180/181 (99%)	170 (94%)	10 (6%)	26	62
38	DC	180/181 (99%)	171 (95%)	9 (5%)	30	67
39	BD	217/218 (100%)	187 (86%)	30 (14%)	4	19
39	DD	217/218 (100%)	186 (86%)	31 (14%)	4	17
40	BE	165/166 (99%)	148 (90%)	17 (10%)	9	32
40	DE	165/166 (99%)	148 (90%)	17 (10%)	9	32
41	BF	165/166 (99%)	150 (91%)	15 (9%)	12	40
41	DF	165/166 (99%)	150 (91%)	15 (9%)	12	40
42	BG	155/156 (99%)	132 (85%)	23 (15%)	4	16
42	DG	155/156 (99%)	138 (89%)	17 (11%)	8	30
43	BH	132/148 (89%)	116 (88%)	16 (12%)	6	24
43	DH	132/148 (89%)	116 (88%)	16 (12%)	6	24
46	BN	117/119 (98%)	102 (87%)	15 (13%)	5	21
46	DN	117/119 (98%)	102 (87%)	15 (13%)	5	21
47	BO	100/100 (100%)	95 (95%)	5 (5%)	30	67
47	DO	100/100 (100%)	95 (95%)	5 (5%)	30	67
48	BP	112/116 (97%)	97 (87%)	15 (13%)	5	20
48	DP	112/116 (97%)	97 (87%)	15 (13%)	5	20
49	BQ	111/111 (100%)	96 (86%)	15 (14%)	5	20
49	DQ	111/111 (100%)	97 (87%)	14 (13%)	5	22
50	BR	100/101 (99%)	89 (89%)	11 (11%)	8	30
50	DR	100/101 (99%)	90 (90%)	10 (10%)	9	34
51	BS	77/88 (88%)	68 (88%)	9 (12%)	7	26

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
51	DS	77/88 (88%)	68 (88%)	9 (12%)	7	26
52	BT	120/127 (94%)	97 (81%)	23 (19%)	2	8
52	DT	120/127 (94%)	98 (82%)	22 (18%)	2	9
53	BU	92/94 (98%)	83 (90%)	9 (10%)	10	36
53	DU	92/94 (98%)	84 (91%)	8 (9%)	13	44
54	BV	82/82 (100%)	66 (80%)	16 (20%)	2	7
54	DV	82/82 (100%)	66 (80%)	16 (20%)	2	7
55	BW	91/92 (99%)	86 (94%)	5 (6%)	27	63
55	DW	91/92 (99%)	86 (94%)	5 (6%)	27	63
56	BX	74/78 (95%)	64 (86%)	10 (14%)	5	20
56	DX	74/78 (95%)	64 (86%)	10 (14%)	5	20
57	BY	84/91 (92%)	70 (83%)	14 (17%)	3	11
57	DY	84/91 (92%)	70 (83%)	14 (17%)	3	11
58	BZ	155/179 (87%)	126 (81%)	29 (19%)	2	8
58	DZ	155/179 (87%)	135 (87%)	20 (13%)	5	21
All	All	10338/10860 (95%)	9176 (89%)	1162 (11%)	7	29

All (1162) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	15	VAL
2	AB	17	PHE
2	AB	24	TRP
2	AB	25	ASN
2	AB	32	ILE
2	AB	36	ARG
2	AB	42	ILE
2	AB	51	LEU
2	AB	69	LEU
2	AB	76	GLN
2	AB	144	ARG
2	AB	145	LEU
2	AB	155	LEU
2	AB	162	ILE
2	AB	163	PHE
2	AB	170	GLU
2	AB	178	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	AB	187	LEU
2	AB	191	ASP
2	AB	196	LEU
2	AB	200	ILE
2	AB	204	ASN
2	AB	230	VAL
2	AB	234	PRO
3	AC	5	ILE
3	AC	14	ILE
3	AC	16	ARG
3	AC	29	TYR
3	AC	34	LEU
3	AC	38	ARG
3	AC	40	ARG
3	AC	49	SER
3	AC	70	VAL
3	AC	79	ARG
3	AC	105	GLU
3	AC	107	GLN
3	AC	119	ARG
3	AC	127	ARG
3	AC	132	ARG
3	AC	167	TRP
3	AC	192	THR
4	AD	3	ARG
4	AD	15	GLU
4	AD	27	TYR
4	AD	33	MET
4	AD	36	ARG
4	AD	49	ARG
4	AD	58	LEU
4	AD	59	ARG
4	AD	67	ILE
4	AD	86	LYS
4	AD	97	LEU
4	AD	110	PHE
4	AD	129	ASN
4	AD	131	ARG
4	AD	132	ARG
4	AD	135	LEU
4	AD	138	TYR
4	AD	145	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	154	ASN
4	AD	162	LEU
4	AD	179	GLU
4	AD	187	ARG
4	AD	202	LEU
5	AE	12	LEU
5	AE	20	GLN
5	AE	31	LEU
5	AE	38	GLN
5	AE	41	VAL
5	AE	79	GLU
5	AE	80	ILE
5	AE	107	ARG
5	AE	116	THR
5	AE	120	THR
5	AE	147	ASP
6	AF	25	ILE
6	AF	27	GLN
6	AF	31	GLU
6	AF	32	ASN
6	AF	57	GLN
6	AF	63	TYR
6	AF	83	ASP
6	AF	86	ARG
6	AF	92	LYS
7	AG	24	THR
7	AG	36	LYS
7	AG	54	THR
7	AG	74	GLU
7	AG	84	ASN
7	AG	86	GLN
7	AG	98	SER
7	AG	104	LEU
7	AG	114	ARG
7	AG	137	LYS
8	AH	1	MET
8	AH	26	VAL
8	AH	30	ARG
8	AH	56	LYS
8	AH	63	LEU
8	AH	102	ARG
8	AH	104	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	AH	112	LEU
8	AH	115	SER
8	AH	119	LEU
9	AI	4	TYR
9	AI	10	ARG
9	AI	37	PHE
9	AI	47	LEU
9	AI	79	LEU
9	AI	99	LEU
9	AI	120	ARG
9	AI	121	ARG
9	AI	128	ARG
10	AJ	28	ARG
10	AJ	38	ILE
10	AJ	49	VAL
10	AJ	50	ILE
10	AJ	55	LYS
10	AJ	60	ARG
10	AJ	67	THR
10	AJ	96	ILE
11	AK	27	ASN
11	AK	29	ILE
11	AK	30	VAL
11	AK	36	ASP
11	AK	87	THR
11	AK	92	GLU
11	AK	103	LEU
11	AK	106	LYS
11	AK	116	HIS
12	AL	7	ILE
12	AL	20	LYS
12	AL	53	ARG
12	AL	84	LEU
12	AL	89	ARG
12	AL	97	ARG
12	AL	102	ARG
12	AL	122	THR
12	AL	126	LYS
13	AM	15	VAL
13	AM	50	GLU
13	AM	64	TRP
13	AM	65	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	AM	66	LEU
13	AM	71	ARG
13	AM	93	ARG
13	AM	101	GLN
13	AM	108	ARG
13	AM	109	THR
13	AM	113	PRO
13	AM	115	LYS
13	AM	120	LYS
14	AN	3	ARG
14	AN	14	PRO
14	AN	16	PHE
14	AN	18	VAL
14	AN	22	THR
14	AN	29	ARG
14	AN	33	VAL
14	AN	41	ARG
14	AN	44	LEU
14	AN	60	SER
15	AO	6	GLU
15	AO	25	THR
15	AO	26	GLU
15	AO	38	ARG
15	AO	39	LEU
15	AO	41	GLU
15	AO	66	LEU
15	AO	82	ILE
15	AO	88	ARG
16	AP	2	VAL
16	AP	5	ARG
16	AP	11	SER
16	AP	25	ARG
16	AP	62	VAL
16	AP	69	THR
17	AQ	7	THR
17	AQ	18	THR
17	AQ	26	GLN
17	AQ	38	ARG
17	AQ	52	LYS
17	AQ	70	ARG
17	AQ	79	SER
18	AR	31	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	AR	37	VAL
18	AR	38	GLU
18	AR	44	LEU
18	AR	47	THR
18	AR	54	ARG
18	AR	66	LEU
19	AS	5	LEU
19	AS	6	LYS
19	AS	7	LYS
19	AS	10	PHE
19	AS	15	LEU
19	AS	22	LEU
19	AS	29	ARG
19	AS	32	LYS
19	AS	34	TRP
19	AS	37	ARG
19	AS	61	TYR
19	AS	63	THR
19	AS	66	MET
20	AT	23	ARG
20	AT	24	LEU
20	AT	26	ASN
20	AT	45	GLN
20	AT	74	LYS
21	AU	22	ARG
25	AZ	21	ASP
25	AZ	38	GLU
25	AZ	64	ASN
25	AZ	93	ILE
25	AZ	98	GLN
25	AZ	117	ARG
25	AZ	122	LEU
25	AZ	185	ASN
25	AZ	198	LYS
25	AZ	201	GLU
25	AZ	206	ILE
25	AZ	241	ARG
25	AZ	263	ARG
25	AZ	272	MET
25	AZ	275	LYS
25	AZ	284	ASP
25	AZ	285	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	AZ	291	ARG
25	AZ	300	ARG
25	AZ	341	GLN
25	AZ	345	ARG
25	AZ	347	THR
25	AZ	355	LEU
26	B0	9	SER
26	B0	14	ARG
26	B0	20	ARG
26	B0	27	GLU
26	B0	41	ARG
26	B0	49	LYS
26	B0	75	LEU
26	B0	84	LEU
27	B1	3	LYS
27	B1	4	VAL
27	B1	13	ILE
27	B1	20	ARG
27	B1	21	ARG
27	B1	26	ARG
27	B1	38	SER
27	B1	57	GLU
27	B1	60	PHE
27	B1	83	GLU
27	B1	86	SER
28	B2	12	GLU
28	B2	35	LEU
28	B2	53	LEU
28	B2	64	LEU
28	B2	66	GLU
29	B3	29	ARG
29	B3	31	LEU
29	B3	35	ARG
29	B3	38	GLU
29	B3	46	ASN
29	B3	48	GLU
29	B3	50	VAL
30	B4	5	ILE
30	B4	9	LEU
30	B4	20	ASN
30	B4	32	TYR
30	B4	34	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	B4	43	TYR
30	B4	47	GLN
31	B5	6	VAL
31	B5	15	ARG
31	B5	25	LEU
31	B5	40	LYS
31	B5	46	CYS
31	B5	48	GLU
31	B5	51	TYR
31	B5	56	LYS
32	B6	6	ARG
32	B6	9	LEU
32	B6	10	LEU
32	B6	11	LEU
32	B6	18	ARG
32	B6	19	ARG
32	B6	21	TYR
32	B6	31	PRO
32	B6	33	LYS
32	B6	36	LEU
32	B6	41	PRO
32	B6	42	TRP
32	B6	53	LYS
33	B7	1	MET
33	B7	4	THR
33	B7	12	ARG
33	B7	24	THR
33	B7	34	ARG
33	B7	37	LYS
34	B8	30	ARG
34	B8	31	HIS
34	B8	34	TRP
34	B8	40	GLU
34	B8	41	ILE
34	B8	56	GLU
34	B8	61	LEU
34	B8	64	TYR
35	B9	1	MET
35	B9	29	ASN
35	B9	34	GLN
38	BC	28	LEU
38	BC	36	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BC	55	ASP
38	BC	57	ASN
38	BC	68	LEU
38	BC	71	GLN
38	BC	104	LEU
38	BC	105	ASP
38	BC	167	LYS
38	BC	175	VAL
39	BD	10	THR
39	BD	13	ARG
39	BD	20	ASP
39	BD	24	ILE
39	BD	26	LYS
39	BD	30	GLU
39	BD	33	LEU
39	BD	43	ARG
39	BD	44	ASN
39	BD	46	GLN
39	BD	61	LEU
39	BD	65	ILE
39	BD	68	LYS
39	BD	75	ILE
39	BD	95	LEU
39	BD	99	ASP
39	BD	122	ASP
39	BD	166	GLN
39	BD	176	ARG
39	BD	183	ARG
39	BD	192	THR
39	BD	211	ARG
39	BD	217	ARG
39	BD	218	ARG
39	BD	239	ARG
39	BD	242	ARG
39	BD	246	PRO
39	BD	257	LEU
39	BD	260	ARG
39	BD	275	LYS
40	BE	18	ASP
40	BE	34	VAL
40	BE	55	ASN
40	BE	57	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	BE	62	PRO
40	BE	67	PHE
40	BE	73	GLU
40	BE	76	ARG
40	BE	78	LEU
40	BE	82	ARG
40	BE	87	GLU
40	BE	121	ASN
40	BE	128	SER
40	BE	181	LEU
40	BE	197	ILE
40	BE	202	LYS
40	BE	203	LYS
41	BF	19	GLU
41	BF	23	ASP
41	BF	28	ILE
41	BF	51	THR
41	BF	64	ILE
41	BF	70	THR
41	BF	88	VAL
41	BF	95	ARG
41	BF	98	SER
41	BF	125	LEU
41	BF	160	ASN
41	BF	164	ARG
41	BF	169	ASN
41	BF	179	GLU
41	BF	183	VAL
42	BG	21	ARG
42	BG	26	GLN
42	BG	33	ARG
42	BG	40	ASN
42	BG	51	ARG
42	BG	52	ILE
42	BG	67	LYS
42	BG	82	LEU
42	BG	83	ARG
42	BG	90	LEU
42	BG	91	ARG
42	BG	106	LEU
42	BG	107	LEU
42	BG	113	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	BG	120	LEU
42	BG	121	ASN
42	BG	140	ILE
42	BG	143	GLU
42	BG	152	LEU
42	BG	153	ARG
42	BG	164	GLU
42	BG	175	LEU
42	BG	176	LEU
43	BH	43	VAL
43	BH	54	ARG
43	BH	71	LEU
43	BH	83	TYR
43	BH	85	LYS
43	BH	104	GLU
43	BH	105	LEU
43	BH	116	GLU
43	BH	119	GLU
43	BH	139	GLN
43	BH	143	GLN
43	BH	153	LYS
43	BH	157	TYR
43	BH	159	GLU
43	BH	162	ILE
43	BH	163	TYR
46	BN	1	MET
46	BN	4	TYR
46	BN	25	ARG
46	BN	28	THR
46	BN	32	THR
46	BN	38	HIS
46	BN	41	ASP
46	BN	45	ASN
46	BN	48	MET
46	BN	56	ASN
46	BN	63	THR
46	BN	65	LYS
46	BN	87	LEU
46	BN	109	LYS
46	BN	119	ARG
47	BO	23	ARG
47	BO	47	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	BO	48	PRO
47	BO	49	ARG
47	BO	65	THR
48	BP	16	ARG
48	BP	39	LYS
48	BP	41	ARG
48	BP	42	SER
48	BP	48	PRO
48	BP	61	ARG
48	BP	70	GLN
48	BP	84	ASN
48	BP	85	LEU
48	BP	90	ARG
48	BP	91	PHE
48	BP	100	LEU
48	BP	105	LEU
48	BP	108	LYS
48	BP	112	LEU
49	BQ	1	MET
49	BQ	14	ARG
49	BQ	16	ARG
49	BQ	18	LYS
49	BQ	25	ASP
49	BQ	45	GLN
49	BQ	55	VAL
49	BQ	56	ARG
49	BQ	58	PHE
49	BQ	59	ARG
49	BQ	79	LEU
49	BQ	104	PHE
49	BQ	110	THR
49	BQ	133	ARG
49	BQ	135	ASP
50	BR	2	ARG
50	BR	5	LYS
50	BR	6	SER
50	BR	10	LEU
50	BR	12	ARG
50	BR	31	HIS
50	BR	33	ARG
50	BR	51	LEU
50	BR	99	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	BR	100	LEU
50	BR	117	VAL
51	BS	11	LYS
51	BS	12	PHE
51	BS	15	ARG
51	BS	29	PHE
51	BS	36	TYR
51	BS	73	LEU
51	BS	80	LEU
51	BS	92	TYR
51	BS	97	ARG
52	BT	13	ARG
52	BT	21	GLU
52	BT	24	PRO
52	BT	29	ARG
52	BT	30	VAL
52	BT	32	TYR
52	BT	38	ASN
52	BT	39	ARG
52	BT	41	ARG
52	BT	43	GLN
52	BT	48	ILE
52	BT	49	VAL
52	BT	50	ILE
52	BT	53	ARG
52	BT	58	ASN
52	BT	66	VAL
52	BT	82	LEU
52	BT	83	ILE
52	BT	90	GLN
52	BT	99	LEU
52	BT	108	ARG
52	BT	124	ASP
52	BT	128	GLU
53	BU	9	VAL
53	BU	36	ARG
53	BU	49	HIS
53	BU	66	ASN
53	BU	72	HIS
53	BU	74	LEU
53	BU	78	THR
53	BU	92	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
53	BU	108	GLU
54	BV	2	PHE
54	BV	12	TYR
54	BV	16	PRO
54	BV	18	LEU
54	BV	19	LYS
54	BV	21	ARG
54	BV	37	VAL
54	BV	39	LEU
54	BV	40	LEU
54	BV	61	VAL
54	BV	68	LYS
54	BV	82	ARG
54	BV	89	GLN
54	BV	91	TYR
54	BV	95	LEU
54	BV	99	ILE
55	BW	11	ARG
55	BW	36	LEU
55	BW	76	VAL
55	BW	82	LEU
55	BW	107	LEU
56	BX	6	ASP
56	BX	14	SER
56	BX	27	THR
56	BX	28	PHE
56	BX	37	THR
56	BX	40	LYS
56	BX	57	LEU
56	BX	66	LEU
56	BX	68	ARG
56	BX	80	ILE
57	BY	2	ARG
57	BY	6	HIS
57	BY	28	LYS
57	BY	29	GLU
57	BY	32	PRO
57	BY	50	ARG
57	BY	55	TYR
57	BY	62	GLU
57	BY	73	ARG
57	BY	76	CYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
57	BY	77	PRO
57	BY	90	LEU
57	BY	96	ILE
57	BY	97	ARG
58	BZ	9	TYR
58	BZ	24	LEU
58	BZ	30	ASN
58	BZ	32	HIS
58	BZ	34	ASN
58	BZ	35	ARG
58	BZ	37	VAL
58	BZ	41	LEU
58	BZ	42	VAL
58	BZ	50	GLN
58	BZ	60	GLU
58	BZ	63	ASP
58	BZ	67	LEU
58	BZ	70	LEU
58	BZ	72	ARG
58	BZ	73	GLN
58	BZ	79	ARG
58	BZ	80	ARG
58	BZ	81	ARG
58	BZ	86	VAL
58	BZ	93	ASP
58	BZ	107	THR
58	BZ	123	ASP
58	BZ	127	LYS
58	BZ	150	LEU
58	BZ	151	HIS
58	BZ	155	LEU
58	BZ	171	ILE
58	BZ	178	GLU
2	CB	15	VAL
2	CB	17	PHE
2	CB	24	TRP
2	CB	25	ASN
2	CB	32	ILE
2	CB	36	ARG
2	CB	42	ILE
2	CB	51	LEU
2	CB	69	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	76	GLN
2	CB	144	ARG
2	CB	155	LEU
2	CB	163	PHE
2	CB	170	GLU
2	CB	178	ARG
2	CB	187	LEU
2	CB	191	ASP
2	CB	196	LEU
2	CB	200	ILE
2	CB	204	ASN
2	CB	230	VAL
2	CB	234	PRO
3	CC	5	ILE
3	CC	14	ILE
3	CC	16	ARG
3	CC	29	TYR
3	CC	38	ARG
3	CC	40	ARG
3	CC	49	SER
3	CC	70	VAL
3	CC	79	ARG
3	CC	105	GLU
3	CC	107	GLN
3	CC	119	ARG
3	CC	127	ARG
3	CC	132	ARG
3	CC	167	TRP
3	CC	192	THR
4	CD	3	ARG
4	CD	15	GLU
4	CD	27	TYR
4	CD	33	MET
4	CD	36	ARG
4	CD	49	ARG
4	CD	58	LEU
4	CD	59	ARG
4	CD	67	ILE
4	CD	86	LYS
4	CD	97	LEU
4	CD	110	PHE
4	CD	129	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	131	ARG
4	CD	132	ARG
4	CD	135	LEU
4	CD	138	TYR
4	CD	145	GLU
4	CD	154	ASN
4	CD	162	LEU
4	CD	179	GLU
4	CD	187	ARG
4	CD	202	LEU
5	CE	12	LEU
5	CE	20	GLN
5	CE	31	LEU
5	CE	38	GLN
5	CE	41	VAL
5	CE	80	ILE
5	CE	107	ARG
5	CE	116	THR
5	CE	120	THR
5	CE	147	ASP
6	CF	25	ILE
6	CF	27	GLN
6	CF	32	ASN
6	CF	57	GLN
6	CF	63	TYR
6	CF	83	ASP
6	CF	86	ARG
6	CF	92	LYS
7	CG	24	THR
7	CG	36	LYS
7	CG	54	THR
7	CG	74	GLU
7	CG	84	ASN
7	CG	86	GLN
7	CG	98	SER
7	CG	104	LEU
7	CG	114	ARG
7	CG	137	LYS
8	CH	1	MET
8	CH	5	PRO
8	CH	26	VAL
8	CH	30	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	CH	56	LYS
8	CH	102	ARG
8	CH	104	ARG
8	CH	112	LEU
8	CH	115	SER
8	CH	119	LEU
9	CI	4	TYR
9	CI	10	ARG
9	CI	37	PHE
9	CI	47	LEU
9	CI	79	LEU
9	CI	99	LEU
9	CI	120	ARG
9	CI	121	ARG
9	CI	128	ARG
10	CJ	28	ARG
10	CJ	38	ILE
10	CJ	49	VAL
10	CJ	50	ILE
10	CJ	55	LYS
10	CJ	60	ARG
10	CJ	67	THR
10	CJ	96	ILE
11	CK	27	ASN
11	CK	29	ILE
11	CK	30	VAL
11	CK	87	THR
11	CK	92	GLU
11	CK	103	LEU
11	CK	106	LYS
11	CK	116	HIS
12	CL	7	ILE
12	CL	20	LYS
12	CL	84	LEU
12	CL	89	ARG
12	CL	97	ARG
12	CL	122	THR
12	CL	126	LYS
13	CM	15	VAL
13	CM	50	GLU
13	CM	64	TRP
13	CM	65	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	CM	66	LEU
13	CM	71	ARG
13	CM	93	ARG
13	CM	101	GLN
13	CM	108	ARG
13	CM	109	THR
13	CM	113	PRO
13	CM	115	LYS
13	CM	120	LYS
14	CN	3	ARG
14	CN	14	PRO
14	CN	16	PHE
14	CN	18	VAL
14	CN	22	THR
14	CN	29	ARG
14	CN	33	VAL
14	CN	41	ARG
14	CN	44	LEU
14	CN	60	SER
15	CO	25	THR
15	CO	26	GLU
15	CO	38	ARG
15	CO	39	LEU
15	CO	41	GLU
15	CO	66	LEU
15	CO	82	ILE
15	CO	88	ARG
16	CP	2	VAL
16	CP	5	ARG
16	CP	11	SER
16	CP	25	ARG
16	CP	62	VAL
16	CP	69	THR
17	CQ	7	THR
17	CQ	18	THR
17	CQ	26	GLN
17	CQ	38	ARG
17	CQ	52	LYS
17	CQ	70	ARG
17	CQ	79	SER
18	CR	31	LEU
18	CR	37	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	CR	38	GLU
18	CR	44	LEU
18	CR	47	THR
18	CR	54	ARG
18	CR	66	LEU
19	CS	5	LEU
19	CS	6	LYS
19	CS	7	LYS
19	CS	10	PHE
19	CS	15	LEU
19	CS	22	LEU
19	CS	29	ARG
19	CS	32	LYS
19	CS	34	TRP
19	CS	37	ARG
19	CS	61	TYR
19	CS	63	THR
19	CS	66	MET
20	CT	23	ARG
20	CT	24	LEU
20	CT	26	ASN
20	CT	45	GLN
20	CT	74	LYS
21	CU	22	ARG
25	CZ	21	ASP
25	CZ	38	GLU
25	CZ	64	ASN
25	CZ	93	ILE
25	CZ	98	GLN
25	CZ	117	ARG
25	CZ	122	LEU
25	CZ	185	ASN
25	CZ	198	LYS
25	CZ	201	GLU
25	CZ	206	ILE
25	CZ	241	ARG
25	CZ	263	ARG
25	CZ	272	MET
25	CZ	275	LYS
25	CZ	284	ASP
25	CZ	285	ASN
25	CZ	291	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	CZ	300	ARG
25	CZ	341	GLN
25	CZ	345	ARG
25	CZ	347	THR
25	CZ	355	LEU
26	D0	9	SER
26	D0	14	ARG
26	D0	20	ARG
26	D0	27	GLU
26	D0	41	ARG
26	D0	49	LYS
26	D0	55	ARG
26	D0	64	ASP
26	D0	75	LEU
26	D0	84	LEU
27	D1	3	LYS
27	D1	26	ARG
27	D1	38	SER
27	D1	45	ASN
27	D1	46	LEU
27	D1	75	GLU
27	D1	83	GLU
28	D2	20	GLU
28	D2	21	LEU
28	D2	37	PHE
28	D2	47	ASN
28	D2	59	ARG
28	D2	65	ASN
29	D3	29	ARG
29	D3	31	LEU
29	D3	35	ARG
29	D3	38	GLU
29	D3	46	ASN
29	D3	48	GLU
29	D3	50	VAL
30	D4	5	ILE
30	D4	9	LEU
30	D4	20	ASN
30	D4	32	TYR
30	D4	34	GLU
30	D4	43	TYR
30	D4	47	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
31	D5	6	VAL
31	D5	15	ARG
31	D5	25	LEU
31	D5	40	LYS
31	D5	46	CYS
31	D5	48	GLU
31	D5	51	TYR
31	D5	56	LYS
32	D6	6	ARG
32	D6	10	LEU
32	D6	11	LEU
32	D6	18	ARG
32	D6	19	ARG
32	D6	21	TYR
32	D6	31	PRO
32	D6	33	LYS
32	D6	36	LEU
32	D6	41	PRO
32	D6	42	TRP
32	D6	53	LYS
33	D7	1	MET
33	D7	4	THR
33	D7	12	ARG
33	D7	24	THR
33	D7	34	ARG
33	D7	37	LYS
34	D8	30	ARG
34	D8	31	HIS
34	D8	34	TRP
34	D8	40	GLU
34	D8	41	ILE
34	D8	56	GLU
34	D8	61	LEU
34	D8	64	TYR
35	D9	1	MET
35	D9	29	ASN
35	D9	34	GLN
38	DC	28	LEU
38	DC	36	LYS
38	DC	55	ASP
38	DC	57	ASN
38	DC	71	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	DC	104	LEU
38	DC	105	ASP
38	DC	167	LYS
38	DC	175	VAL
39	DD	10	THR
39	DD	13	ARG
39	DD	20	ASP
39	DD	24	ILE
39	DD	26	LYS
39	DD	30	GLU
39	DD	33	LEU
39	DD	43	ARG
39	DD	44	ASN
39	DD	46	GLN
39	DD	61	LEU
39	DD	65	ILE
39	DD	68	LYS
39	DD	75	ILE
39	DD	95	LEU
39	DD	99	ASP
39	DD	122	ASP
39	DD	166	GLN
39	DD	176	ARG
39	DD	183	ARG
39	DD	192	THR
39	DD	198	ASN
39	DD	211	ARG
39	DD	217	ARG
39	DD	218	ARG
39	DD	239	ARG
39	DD	242	ARG
39	DD	246	PRO
39	DD	257	LEU
39	DD	260	ARG
39	DD	275	LYS
40	DE	18	ASP
40	DE	34	VAL
40	DE	55	ASN
40	DE	57	LYS
40	DE	62	PRO
40	DE	67	PHE
40	DE	73	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
40	DE	76	ARG
40	DE	78	LEU
40	DE	82	ARG
40	DE	87	GLU
40	DE	121	ASN
40	DE	128	SER
40	DE	181	LEU
40	DE	197	ILE
40	DE	202	LYS
40	DE	203	LYS
41	DF	19	GLU
41	DF	23	ASP
41	DF	28	ILE
41	DF	51	THR
41	DF	64	ILE
41	DF	70	THR
41	DF	88	VAL
41	DF	95	ARG
41	DF	98	SER
41	DF	125	LEU
41	DF	160	ASN
41	DF	164	ARG
41	DF	169	ASN
41	DF	179	GLU
41	DF	183	VAL
42	DG	12	TYR
42	DG	16	ARG
42	DG	33	ARG
42	DG	43	LEU
42	DG	52	ILE
42	DG	54	GLU
42	DG	67	LYS
42	DG	71	THR
42	DG	77	ILE
42	DG	86	MET
42	DG	104	GLU
42	DG	105	LYS
42	DG	116	ASP
42	DG	125	PHE
42	DG	136	ARG
42	DG	153	ARG
42	DG	174	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	DH	43	VAL
43	DH	54	ARG
43	DH	71	LEU
43	DH	83	TYR
43	DH	85	LYS
43	DH	104	GLU
43	DH	105	LEU
43	DH	116	GLU
43	DH	119	GLU
43	DH	139	GLN
43	DH	143	GLN
43	DH	153	LYS
43	DH	157	TYR
43	DH	159	GLU
43	DH	162	ILE
43	DH	163	TYR
46	DN	1	MET
46	DN	4	TYR
46	DN	25	ARG
46	DN	28	THR
46	DN	32	THR
46	DN	38	HIS
46	DN	41	ASP
46	DN	45	ASN
46	DN	48	MET
46	DN	56	ASN
46	DN	63	THR
46	DN	65	LYS
46	DN	87	LEU
46	DN	109	LYS
46	DN	119	ARG
47	DO	23	ARG
47	DO	47	ILE
47	DO	48	PRO
47	DO	49	ARG
47	DO	65	THR
48	DP	16	ARG
48	DP	39	LYS
48	DP	41	ARG
48	DP	42	SER
48	DP	48	PRO
48	DP	61	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
48	DP	70	GLN
48	DP	84	ASN
48	DP	85	LEU
48	DP	90	ARG
48	DP	91	PHE
48	DP	100	LEU
48	DP	105	LEU
48	DP	108	LYS
48	DP	112	LEU
49	DQ	1	MET
49	DQ	16	ARG
49	DQ	18	LYS
49	DQ	25	ASP
49	DQ	45	GLN
49	DQ	55	VAL
49	DQ	56	ARG
49	DQ	58	PHE
49	DQ	59	ARG
49	DQ	79	LEU
49	DQ	104	PHE
49	DQ	110	THR
49	DQ	133	ARG
49	DQ	135	ASP
50	DR	2	ARG
50	DR	5	LYS
50	DR	6	SER
50	DR	10	LEU
50	DR	12	ARG
50	DR	31	HIS
50	DR	33	ARG
50	DR	51	LEU
50	DR	99	LYS
50	DR	117	VAL
51	DS	11	LYS
51	DS	12	PHE
51	DS	15	ARG
51	DS	29	PHE
51	DS	36	TYR
51	DS	73	LEU
51	DS	80	LEU
51	DS	92	TYR
51	DS	97	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
52	DT	13	ARG
52	DT	21	GLU
52	DT	24	PRO
52	DT	29	ARG
52	DT	30	VAL
52	DT	32	TYR
52	DT	38	ASN
52	DT	39	ARG
52	DT	41	ARG
52	DT	43	GLN
52	DT	48	ILE
52	DT	49	VAL
52	DT	53	ARG
52	DT	58	ASN
52	DT	66	VAL
52	DT	82	LEU
52	DT	83	ILE
52	DT	90	GLN
52	DT	99	LEU
52	DT	108	ARG
52	DT	124	ASP
52	DT	128	GLU
53	DU	9	VAL
53	DU	49	HIS
53	DU	66	ASN
53	DU	72	HIS
53	DU	74	LEU
53	DU	78	THR
53	DU	92	ARG
53	DU	108	GLU
54	DV	2	PHE
54	DV	12	TYR
54	DV	16	PRO
54	DV	18	LEU
54	DV	19	LYS
54	DV	21	ARG
54	DV	37	VAL
54	DV	39	LEU
54	DV	40	LEU
54	DV	61	VAL
54	DV	68	LYS
54	DV	82	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
54	DV	89	GLN
54	DV	91	TYR
54	DV	95	LEU
54	DV	99	ILE
55	DW	11	ARG
55	DW	36	LEU
55	DW	76	VAL
55	DW	82	LEU
55	DW	107	LEU
56	DX	6	ASP
56	DX	14	SER
56	DX	27	THR
56	DX	28	PHE
56	DX	37	THR
56	DX	40	LYS
56	DX	57	LEU
56	DX	66	LEU
56	DX	68	ARG
56	DX	80	ILE
57	DY	2	ARG
57	DY	6	HIS
57	DY	28	LYS
57	DY	29	GLU
57	DY	32	PRO
57	DY	50	ARG
57	DY	55	TYR
57	DY	62	GLU
57	DY	73	ARG
57	DY	76	CYS
57	DY	77	PRO
57	DY	90	LEU
57	DY	96	ILE
57	DY	97	ARG
58	DZ	6	LYS
58	DZ	9	TYR
58	DZ	11	GLU
58	DZ	14	LYS
58	DZ	28	MET
58	DZ	38	TYR
58	DZ	41	LEU
58	DZ	43	GLU
58	DZ	70	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
58	DZ	81	ARG
58	DZ	86	VAL
58	DZ	87	ASP
58	DZ	97	GLU
58	DZ	122	ARG
58	DZ	138	GLU
58	DZ	141	VAL
58	DZ	150	LEU
58	DZ	155	LEU
58	DZ	163	LEU
58	DZ	166	SER

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (301) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	25	ASN
2	AB	37	ASN
2	AB	45	GLN
2	AB	78	GLN
2	AB	95	GLN
2	AB	146	GLN
2	AB	204	ASN
3	AC	118	GLN
3	AC	136	GLN
3	AC	139	GLN
3	AC	170	GLN
3	AC	181	ASN
4	AD	62	GLN
4	AD	129	ASN
4	AD	201	GLN
5	AE	20	GLN
6	AF	27	GLN
6	AF	32	ASN
6	AF	57	GLN
6	AF	73	ASN
6	AF	84	ASN
6	AF	100	ASN
7	AG	13	GLN
7	AG	37	ASN
7	AG	84	ASN
7	AG	86	GLN
7	AG	106	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AI	29	ASN
9	AI	124	GLN
10	AJ	13	HIS
10	AJ	56	HIS
10	AJ	68	HIS
10	AJ	78	ASN
10	AJ	84	GLN
11	AK	27	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
12	AL	78	GLN
13	AM	12	ASN
13	AM	92	HIS
13	AM	101	GLN
14	AN	49	HIS
15	AO	46	HIS
15	AO	53	HIS
16	AP	13	HIS
17	AQ	16	GLN
20	AT	16	HIS
20	AT	26	ASN
20	AT	42	GLN
20	AT	73	HIS
25	AZ	64	ASN
25	AZ	85	HIS
25	AZ	98	GLN
25	AZ	115	GLN
25	AZ	125	GLN
25	AZ	185	ASN
25	AZ	193	ASN
25	AZ	285	ASN
25	AZ	341	GLN
25	AZ	367	ASN
26	B0	12	ASN
26	B0	40	GLN
26	B0	50	ASN
26	B0	70	GLN
28	B2	43	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	B2	70	GLN
29	B3	19	GLN
29	B3	46	ASN
29	B3	52	HIS
30	B4	20	ASN
30	B4	47	GLN
31	B5	43	HIS
32	B6	29	ASN
32	B6	49	HIS
34	B8	43	GLN
35	B9	29	ASN
38	BC	57	ASN
38	BC	165	ASN
39	BD	44	ASN
39	BD	126	GLN
39	BD	166	GLN
39	BD	186	HIS
39	BD	198	ASN
40	BE	48	GLN
40	BE	54	GLN
40	BE	55	ASN
40	BE	129	HIS
40	BE	135	HIS
40	BE	169	ASN
40	BE	192	ASN
41	BF	29	ASN
41	BF	40	GLN
41	BF	69	HIS
41	BF	75	HIS
41	BF	133	ASN
41	BF	160	ASN
41	BF	169	ASN
41	BF	204	ASN
42	BG	40	ASN
42	BG	121	ASN
42	BG	138	GLN
43	BH	139	GLN
43	BH	147	ASN
46	BN	45	ASN
46	BN	56	ASN
46	BN	133	GLN
47	BO	3	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
47	BO	82	ASN
48	BP	38	GLN
48	BP	68	GLN
48	BP	84	ASN
48	BP	128	HIS
49	BQ	12	GLN
49	BQ	45	GLN
49	BQ	123	HIS
49	BQ	141	GLN
50	BR	11	ASN
50	BR	13	HIS
50	BR	16	HIS
50	BR	23	ASN
50	BR	24	GLN
50	BR	71	GLN
51	BS	34	HIS
52	BT	2	ASN
52	BT	38	ASN
52	BT	43	GLN
52	BT	55	ASN
52	BT	58	ASN
52	BT	90	GLN
53	BU	44	ASN
53	BU	49	HIS
53	BU	66	ASN
53	BU	94	ASN
53	BU	117	GLN
54	BV	11	GLN
55	BW	34	ASN
55	BW	57	ASN
55	BW	61	ASN
56	BX	87	GLN
58	BZ	30	ASN
58	BZ	55	HIS
58	BZ	65	GLN
58	BZ	75	ASN
58	BZ	118	GLN
58	BZ	121	HIS
2	CB	25	ASN
2	CB	37	ASN
2	CB	45	GLN
2	CB	78	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	95	GLN
2	CB	146	GLN
2	CB	204	ASN
3	CC	37	GLN
3	CC	118	GLN
3	CC	136	GLN
3	CC	139	GLN
3	CC	170	GLN
3	CC	181	ASN
4	CD	62	GLN
4	CD	74	GLN
4	CD	129	ASN
4	CD	201	GLN
5	CE	20	GLN
6	CF	27	GLN
6	CF	32	ASN
6	CF	57	GLN
6	CF	73	ASN
6	CF	84	ASN
6	CF	100	ASN
7	CG	13	GLN
7	CG	37	ASN
7	CG	84	ASN
7	CG	86	GLN
7	CG	106	GLN
9	CI	29	ASN
9	CI	58	HIS
9	CI	124	GLN
10	CJ	13	HIS
10	CJ	56	HIS
10	CJ	68	HIS
10	CJ	78	ASN
10	CJ	84	GLN
11	CK	27	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
12	CL	78	GLN
13	CM	12	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	CM	92	HIS
13	CM	101	GLN
14	CN	49	HIS
15	CO	46	HIS
16	CP	13	HIS
17	CQ	16	GLN
20	CT	16	HIS
20	CT	26	ASN
20	CT	42	GLN
20	CT	73	HIS
25	CZ	19	HIS
25	CZ	64	ASN
25	CZ	85	HIS
25	CZ	98	GLN
25	CZ	115	GLN
25	CZ	125	GLN
25	CZ	185	ASN
25	CZ	193	ASN
25	CZ	285	ASN
25	CZ	341	GLN
25	CZ	367	ASN
26	D0	12	ASN
26	D0	40	GLN
26	D0	50	ASN
26	D0	70	GLN
27	D1	16	ASN
27	D1	19	GLN
27	D1	45	ASN
28	D2	43	GLN
28	D2	47	ASN
28	D2	70	GLN
29	D3	19	GLN
29	D3	46	ASN
29	D3	52	HIS
30	D4	20	ASN
30	D4	47	GLN
31	D5	43	HIS
32	D6	29	ASN
32	D6	49	HIS
35	D9	29	ASN
38	DC	57	ASN
38	DC	165	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DD	44	ASN
39	DD	96	HIS
39	DD	126	GLN
39	DD	166	GLN
39	DD	186	HIS
39	DD	198	ASN
40	DE	48	GLN
40	DE	54	GLN
40	DE	55	ASN
40	DE	129	HIS
40	DE	135	HIS
40	DE	169	ASN
40	DE	192	ASN
41	DF	29	ASN
41	DF	40	GLN
41	DF	69	HIS
41	DF	75	HIS
41	DF	133	ASN
41	DF	160	ASN
41	DF	169	ASN
41	DF	204	ASN
42	DG	40	ASN
43	DH	139	GLN
43	DH	147	ASN
46	DN	45	ASN
46	DN	56	ASN
46	DN	133	GLN
47	DO	3	GLN
47	DO	82	ASN
48	DP	38	GLN
48	DP	68	GLN
48	DP	84	ASN
48	DP	128	HIS
49	DQ	12	GLN
49	DQ	45	GLN
49	DQ	123	HIS
49	DQ	141	GLN
50	DR	11	ASN
50	DR	13	HIS
50	DR	16	HIS
50	DR	23	ASN
50	DR	24	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	DR	71	GLN
51	DS	34	HIS
52	DT	2	ASN
52	DT	38	ASN
52	DT	43	GLN
52	DT	55	ASN
52	DT	58	ASN
52	DT	90	GLN
53	DU	44	ASN
53	DU	49	HIS
53	DU	66	ASN
53	DU	94	ASN
53	DU	117	GLN
54	DV	11	GLN
55	DW	34	ASN
55	DW	57	ASN
55	DW	61	ASN
56	DX	87	GLN
58	DZ	55	HIS
58	DZ	73	GLN
58	DZ	118	GLN
58	DZ	132	ASN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1509/1522 (99%)	240 (15%)	49 (3%)
1	CA	1509/1522 (99%)	234 (15%)	47 (3%)
22	AV	75/76 (98%)	19 (25%)	2 (2%)
22	AW	75/76 (98%)	17 (22%)	0
22	CV	75/76 (98%)	19 (25%)	1 (1%)
22	CW	75/76 (98%)	17 (22%)	0
23	AX	16/27 (59%)	6 (37%)	0
23	CX	16/27 (59%)	6 (37%)	0
24	AY	74/77 (96%)	25 (33%)	5 (6%)
24	CY	74/77 (96%)	25 (33%)	5 (6%)
36	BA	2900/2915 (99%)	510 (17%)	46 (1%)
36	DA	2900/2915 (99%)	508 (17%)	46 (1%)
37	BB	118/122 (96%)	25 (21%)	2 (1%)
37	DB	118/122 (96%)	25 (21%)	2 (1%)
All	All	9534/9630 (99%)	1676 (17%)	205 (2%)

All (1676) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	G
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	55	A
1	AA	60	A
1	AA	61	G
1	AA	65	U
1	AA	79	G
1	AA	80	G
1	AA	81	U
1	AA	88	A
1	AA	90	U
1	AA	101	A
1	AA	110	C
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	131	C
1	AA	144	G
1	AA	146	G
1	AA	147	G
1	AA	172	A
1	AA	173	U
1	AA	182	U
1	AA	189(I)	G
1	AA	195	A
1	AA	197	A
1	AA	198	G
1	AA	199	G
1	AA	202	U
1	AA	203	U
1	AA	228	A
1	AA	244	U
1	AA	246	A
1	AA	247	G
1	AA	251	G
1	AA	267	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	274	A
1	AA	275	G
1	AA	289	G
1	AA	321	A
1	AA	328	C
1	AA	330	C
1	AA	332	G
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	347	G
1	AA	348	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	367	U
1	AA	370	C
1	AA	372	C
1	AA	373	A
1	AA	397	A
1	AA	398	C
1	AA	406	G
1	AA	412	A
1	AA	413	G
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	439	A
1	AA	452	A
1	AA	453	A
1	AA	454	C
1	AA	484	G
1	AA	485	G
1	AA	495	A
1	AA	496	A
1	AA	499	A
1	AA	505	G
1	AA	508	C
1	AA	509	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	511	C
1	AA	518	C
1	AA	527	G
1	AA	530	G
1	AA	531	U
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	548	G
1	AA	559	A
1	AA	561	U
1	AA	562	C
1	AA	572	A
1	AA	573	A
1	AA	576	G
1	AA	577	G
1	AA	588	G
1	AA	632	A
1	AA	633	G
1	AA	653	A
1	AA	665	A
1	AA	688	G
1	AA	701	C
1	AA	702	A
1	AA	721	G
1	AA	722	A
1	AA	723	U
1	AA	731	G
1	AA	748	C
1	AA	749	C
1	AA	755	G
1	AA	777	A
1	AA	787	A
1	AA	793	U
1	AA	794	A
1	AA	816	A
1	AA	817	C
1	AA	821	G
1	AA	827	U
1	AA	828	A
1	AA	839	U
1	AA	840	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	841	U
1	AA	848	C
1	AA	858	G
1	AA	859	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	962	C
1	AA	968	A
1	AA	969	A
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	981	U
1	AA	982	U
1	AA	983	A
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	996	A
1	AA	1004	A
1	AA	1026	G
1	AA	1030	C
1	AA	1050	G
1	AA	1051	C
1	AA	1054	C
1	AA	1055	A
1	AA	1065	U
1	AA	1081	G
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1102	A
1	AA	1117	G
1	AA	1124	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1125	U
1	AA	1126	U
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1136	U
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1141	C
1	AA	1146	A
1	AA	1152	A
1	AA	1154	G
1	AA	1158	C
1	AA	1159	U
1	AA	1171	G
1	AA	1181	G
1	AA	1184	G
1	AA	1187	G
1	AA	1196	U
1	AA	1197	G
1	AA	1200	C
1	AA	1201	A
1	AA	1212	U
1	AA	1213	A
1	AA	1238	A
1	AA	1240	U
1	AA	1256	A
1	AA	1257	U
1	AA	1272	G
1	AA	1280	A
1	AA	1281	U
1	AA	1284	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1320	C
1	AA	1322	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1323	G
1	AA	1331	G
1	AA	1334	G
1	AA	1347	G
1	AA	1364	U
1	AA	1379	G
1	AA	1398	A
1	AA	1417	G
1	AA	1418	A
1	AA	1419	G
1	AA	1439	C
1	AA	1442	G
1	AA	1442(A)	G
1	AA	1447	A
1	AA	1452	C
1	AA	1456	G
1	AA	1457	G
1	AA	1492	A
1	AA	1499	A
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
1	AA	1534	A
1	AA	1537	U
22	AV	5	G
22	AV	8	U
22	AV	16	U
22	AV	17	C
22	AV	18	G
22	AV	19	G
22	AV	21	A
22	AV	22	G
22	AV	23	A
22	AV	42	C
22	AV	44	G
22	AV	45	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	AV	46	G
22	AV	47	U
22	AV	48	C
22	AV	61	C
22	AV	62	C
22	AV	63	G
22	AV	74	C
22	AW	4	C
22	AW	8	U
22	AW	9	A
22	AW	16	U
22	AW	17	C
22	AW	18	G
22	AW	19	G
22	AW	21	A
22	AW	39	U
22	AW	40	C
22	AW	44	G
22	AW	47	U
22	AW	48	C
22	AW	50	U
22	AW	59	U
22	AW	61	C
22	AW	70	G
23	AX	12	A
23	AX	13	A
23	AX	16	A
23	AX	17	U
23	AX	26	A
23	AX	27	A
24	AY	3	G
24	AY	5	G
24	AY	8	4SU
24	AY	9	C
24	AY	12	U
24	AY	16	H2U
24	AY	17	H2U
24	AY	18	G
24	AY	19	G
24	AY	20	H2U
24	AY	21	A
24	AY	41	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	AY	44	G
24	AY	45	U
24	AY	46	7MG
24	AY	47	U
24	AY	55	PSU
24	AY	56	C
24	AY	59	G
24	AY	62	U
24	AY	69	C
24	AY	70	C
24	AY	71	C
24	AY	73	G
24	AY	76	A
36	BA	10	G
36	BA	32	C
36	BA	34	C
36	BA	45	C
36	BA	71	A
36	BA	72	U
36	BA	74	A
36	BA	75	G
36	BA	83	G
36	BA	84	A
36	BA	88	G
36	BA	90	U
36	BA	92	A
36	BA	94	C
36	BA	96	G
36	BA	100	G
36	BA	102	G
36	BA	118	A
36	BA	119	A
36	BA	120	U
36	BA	129	C
36	BA	139(A)	G
36	BA	141	A
36	BA	146	G
36	BA	173	G
36	BA	174	C
36	BA	181	A
36	BA	182	A
36	BA	196	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	197	A
36	BA	199	A
36	BA	200	U
36	BA	204	A
36	BA	205	G
36	BA	215	G
36	BA	216	A
36	BA	221	A
36	BA	222	A
36	BA	229	A
36	BA	233	A
36	BA	245	G
36	BA	248	G
36	BA	261	G
36	BA	267	C
36	BA	271(K)	U
36	BA	271(L)	U
36	BA	271(M)	G
36	BA	271(N)	U
36	BA	271(O)	C
36	BA	271(P)	C
36	BA	271(R)	G
36	BA	271(Y)	U
36	BA	272(A)	U
36	BA	272(B)	G
36	BA	272(I)	U
36	BA	274	G
36	BA	276	A
36	BA	278	A
36	BA	288	C
36	BA	299	A
36	BA	310	A
36	BA	324	A
36	BA	329	G
36	BA	330	A
36	BA	332	A
36	BA	333	G
36	BA	352	G
36	BA	353	G
36	BA	358	U
36	BA	362	U
36	BA	363	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	363(E)	U
36	BA	363(F)	A
36	BA	372	G
36	BA	386	G
36	BA	388	G
36	BA	396	G
36	BA	405	U
36	BA	406	G
36	BA	411	G
36	BA	412	A
36	BA	428	A
36	BA	444	C
36	BA	448	U
36	BA	451	C
36	BA	457	A
36	BA	470	A
36	BA	481	G
36	BA	482	A
36	BA	494	G
36	BA	505	A
36	BA	508	G
36	BA	509	C
36	BA	512	G
36	BA	528	A
36	BA	529	A
36	BA	530	G
36	BA	531	C
36	BA	532	A
36	BA	533	G
36	BA	537	C
36	BA	556	G
36	BA	563	G
36	BA	573	G
36	BA	575	A
36	BA	586	A
36	BA	588	U
36	BA	603	A
36	BA	604	G
36	BA	607	U
36	BA	613	G
36	BA	614(B)	G
36	BA	615	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	622	G
36	BA	627	A
36	BA	629	G
36	BA	637	A
36	BA	645	C
36	BA	646	A
36	BA	650	C
36	BA	651	G
36	BA	653	A
36	BA	654(I)	C
36	BA	654(J)	A
36	BA	654(M)	C
36	BA	654(T)	C
36	BA	655	A
36	BA	656	G
36	BA	673	C
36	BA	686	G
36	BA	708	C
36	BA	717	G
36	BA	722	A
36	BA	730	C
36	BA	753	C
36	BA	761	A
36	BA	764	A
36	BA	776	G
36	BA	782	A
36	BA	784	A
36	BA	785	G
36	BA	790	C
36	BA	791	C
36	BA	792	G
36	BA	805	G
36	BA	812	C
36	BA	819	A
36	BA	827	U
36	BA	828	U
36	BA	830	G
36	BA	848	G
36	BA	857	C
36	BA	859	G
36	BA	866	A
36	BA	878	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	886	C
36	BA	889	C
36	BA	890	A
36	BA	896	A
36	BA	897	C
36	BA	901	A
36	BA	910	A
36	BA	917	A
36	BA	926	A
36	BA	932	G
36	BA	941	A
36	BA	945	A
36	BA	946	G
36	BA	953	A
36	BA	958	U
36	BA	959	A
36	BA	961	C
36	BA	974	G
36	BA	975	C
36	BA	983	A
36	BA	991	C
36	BA	996	A
36	BA	1011	G
36	BA	1012	U
36	BA	1013	C
36	BA	1022	G
36	BA	1023	U
36	BA	1025	G
36	BA	1026	U
36	BA	1027	A
36	BA	1033	U
36	BA	1038	C
36	BA	1039	G
36	BA	1041	G
36	BA	1045	A
36	BA	1047	G
36	BA	1048	A
36	BA	1051	G
36	BA	1053	C
36	BA	1059	G
36	BA	1061	U
36	BA	1062	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1065	U
36	BA	1067	A
36	BA	1068	G
36	BA	1069	A
36	BA	1070	A
36	BA	1071	G
36	BA	1073	A
36	BA	1074	G
36	BA	1079	C
36	BA	1087	G
36	BA	1088	A
36	BA	1103	A
36	BA	1111	A
36	BA	1112	G
36	BA	1116	C
36	BA	1135	C
36	BA	1136	G
36	BA	1142	U
36	BA	1143	A
36	BA	1155	A
36	BA	1170	G
36	BA	1174	A
36	BA	1175	U
36	BA	1176	G
36	BA	1178	C
36	BA	1205	U
36	BA	1210	A
36	BA	1211	U
36	BA	1212	G
36	BA	1223	G
36	BA	1236	G
36	BA	1244	G
36	BA	1247	A
36	BA	1248	G
36	BA	1250	G
36	BA	1253	A
36	BA	1256	G
36	BA	1265	A
36	BA	1271	G
36	BA	1272	A
36	BA	1273	U
36	BA	1300	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1301	A
36	BA	1302	A
36	BA	1314	C
36	BA	1319	G
36	BA	1321	A
36	BA	1330	C
36	BA	1332	G
36	BA	1349	A
36	BA	1359	A
36	BA	1365	A
36	BA	1379	A
36	BA	1380	G
36	BA	1384	A
36	BA	1385	G
36	BA	1386	C
36	BA	1395	A
36	BA	1396	U
36	BA	1407	C
36	BA	1416	G
36	BA	1419	A
36	BA	1427	A
36	BA	1428	C
36	BA	1437	C
36	BA	1445	A
36	BA	1449	A
36	BA	1455	G
36	BA	1460	A
36	BA	1461	G
36	BA	1467	C
36	BA	1471	A
36	BA	1474	C
36	BA	1475	G
36	BA	1478	G
36	BA	1481	U
36	BA	1482	G
36	BA	1485	G
36	BA	1490	A
36	BA	1493	C
36	BA	1494	A
36	BA	1495	A
36	BA	1497	U
36	BA	1499	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1502	C
36	BA	1505	C
36	BA	1509	C
36	BA	1509(A)	A
36	BA	1517	G
36	BA	1541	G
36	BA	1542	A
36	BA	1544	A
36	BA	1554	A
36	BA	1558	A
36	BA	1559	G
36	BA	1569	A
36	BA	1578	U
36	BA	1579	A
36	BA	1584	C
36	BA	1586	A
36	BA	1588	C
36	BA	1593	G
36	BA	1603	A
36	BA	1608	A
36	BA	1617	C
36	BA	1618	A
36	BA	1634	A
36	BA	1640	C
36	BA	1648	C
36	BA	1654	A
36	BA	1674	G
36	BA	1696	G
36	BA	1698	A
36	BA	1699	G
36	BA	1721	G
36	BA	1722	A
36	BA	1739	U
36	BA	1745(A)	C
36	BA	1746	G
36	BA	1748	G
36	BA	1763	G
36	BA	1764	G
36	BA	1773	A
36	BA	1791	A
36	BA	1799	G
36	BA	1800	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1801	G
36	BA	1816	G
36	BA	1820	U
36	BA	1821	A
36	BA	1835	G
36	BA	1847	A
36	BA	1858	G
36	BA	1865	G
36	BA	1878	G
36	BA	1881	C
36	BA	1885	A
36	BA	1888	G
36	BA	1889	A
36	BA	1900	A
36	BA	1906	G
36	BA	1929	G
36	BA	1930	G
36	BA	1936	A
36	BA	1937	A
36	BA	1938	A
36	BA	1948	G
36	BA	1955	U
36	BA	1963	U
36	BA	1967	C
36	BA	1969	A
36	BA	1970	A
36	BA	1971	A
36	BA	1972	A
36	BA	1982	C
36	BA	1987	G
36	BA	1991	U
36	BA	1992	G
36	BA	1993	U
36	BA	1997	G
36	BA	2020	A
36	BA	2023	G
36	BA	2031	A
36	BA	2033	A
36	BA	2034	U
36	BA	2036	C
36	BA	2043	C
36	BA	2055	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2056	G
36	BA	2060	A
36	BA	2061	G
36	BA	2062	A
36	BA	2069	G
36	BA	2093	G
36	BA	2100	G
36	BA	2102	U
36	BA	2104	G
36	BA	2112	G
36	BA	2116	G
36	BA	2118	U
36	BA	2126	A
36	BA	2127	G
36	BA	2131	G
36	BA	2132	U
36	BA	2133	G
36	BA	2146	C
36	BA	2148	G
36	BA	2158	A
36	BA	2159	G
36	BA	2160	G
36	BA	2172	U
36	BA	2173	A
36	BA	2174	C
36	BA	2177	C
36	BA	2179	C
36	BA	2180	U
36	BA	2185	C
36	BA	2186	G
36	BA	2187	G
36	BA	2189	U
36	BA	2190	G
36	BA	2192	G
36	BA	2193	G
36	BA	2198	A
36	BA	2199	A
36	BA	2200	C
36	BA	2207	G
36	BA	2208	A
36	BA	2218	U
36	BA	2219	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2225	A
36	BA	2238	G
36	BA	2239	G
36	BA	2266	A
36	BA	2275	C
36	BA	2283	C
36	BA	2287	A
36	BA	2288	A
36	BA	2305	A
36	BA	2306	C
36	BA	2307	G
36	BA	2308	G
36	BA	2313	C
36	BA	2316	C
36	BA	2319	G
36	BA	2320	A
36	BA	2336	A
36	BA	2347	C
36	BA	2350	C
36	BA	2361	A
36	BA	2383	G
36	BA	2385	C
36	BA	2392	A
36	BA	2402	C
36	BA	2423	U
36	BA	2425	A
36	BA	2429	G
36	BA	2430	A
36	BA	2431	U
36	BA	2434	A
36	BA	2439	A
36	BA	2441	C
36	BA	2448	A
36	BA	2465	C
36	BA	2469	A
36	BA	2475	C
36	BA	2476	A
36	BA	2482	G
36	BA	2491	U
36	BA	2502	G
36	BA	2505	G
36	BA	2518	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2524	G
36	BA	2529	G
36	BA	2543	G
36	BA	2554	U
36	BA	2566	A
36	BA	2567	G
36	BA	2573	C
36	BA	2582	G
36	BA	2602	A
36	BA	2612	C
36	BA	2630	G
36	BA	2646	C
36	BA	2654	A
36	BA	2655	G
36	BA	2657	A
36	BA	2658	C
36	BA	2660	A
36	BA	2673	G
36	BA	2682	U
36	BA	2690	C
36	BA	2691	C
36	BA	2702	U
36	BA	2703	C
36	BA	2712	U
36	BA	2712(A)	A
36	BA	2713	A
36	BA	2714	G
36	BA	2720	U
36	BA	2726	U
36	BA	2733	A
36	BA	2750	A
36	BA	2751	G
36	BA	2752	C
36	BA	2757	A
36	BA	2759	G
36	BA	2761	G
36	BA	2762	G
36	BA	2764	A
36	BA	2765	A
36	BA	2766	G
36	BA	2778	A
36	BA	2779	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	2780	G
36	BA	2789	C
36	BA	2790	A
36	BA	2791	C
36	BA	2794	C
36	BA	2799	C
36	BA	2802	G
36	BA	2803	C
36	BA	2808	U
36	BA	2820	A
36	BA	2821	A
36	BA	2823	A
36	BA	2833	G
36	BA	2834	G
36	BA	2847	U
36	BA	2849	U
36	BA	2872	G
36	BA	2880	C
36	BA	2894	G
37	BB	8	U
37	BB	13	A
37	BB	15	A
37	BB	16	G
37	BB	17	C
37	BB	21	G
37	BB	25	A
37	BB	27	C
37	BB	32	C
37	BB	41	U
37	BB	42	C
37	BB	43	C
37	BB	45	A
37	BB	53	A
37	BB	57	A
37	BB	66	A
37	BB	67	G
37	BB	68	C
37	BB	73	A
37	BB	81	G
37	BB	82	G
37	BB	88	C
37	BB	89	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BB	110	G
37	BB	113	G
1	CA	7	G
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	55	A
1	CA	60	A
1	CA	61	G
1	CA	65	U
1	CA	79	G
1	CA	80	G
1	CA	81	U
1	CA	88	A
1	CA	90	U
1	CA	101	A
1	CA	110	C
1	CA	116	A
1	CA	120	A
1	CA	121	C
1	CA	131	C
1	CA	144	G
1	CA	146	G
1	CA	147	G
1	CA	172	A
1	CA	173	U
1	CA	182	U
1	CA	189(I)	G
1	CA	195	A
1	CA	197	A
1	CA	198	G
1	CA	199	G
1	CA	202	U
1	CA	203	U
1	CA	228	A
1	CA	244	U
1	CA	246	A
1	CA	247	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	251	G
1	CA	267	C
1	CA	274	A
1	CA	275	G
1	CA	289	G
1	CA	321	A
1	CA	328	C
1	CA	330	C
1	CA	332	G
1	CA	344	A
1	CA	345	C
1	CA	346	G
1	CA	347	G
1	CA	348	G
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	367	U
1	CA	370	C
1	CA	372	C
1	CA	373	A
1	CA	397	A
1	CA	398	C
1	CA	406	G
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	422	C
1	CA	423	G
1	CA	428	G
1	CA	429	U
1	CA	430	A
1	CA	439	A
1	CA	452	A
1	CA	453	A
1	CA	454	C
1	CA	484	G
1	CA	485	G
1	CA	495	A
1	CA	496	A
1	CA	499	A
1	CA	505	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	508	C
1	CA	509	A
1	CA	511	C
1	CA	518	C
1	CA	527	G
1	CA	530	G
1	CA	531	U
1	CA	532	A
1	CA	533	A
1	CA	534	U
1	CA	548	G
1	CA	559	A
1	CA	561	U
1	CA	562	C
1	CA	572	A
1	CA	573	A
1	CA	576	G
1	CA	577	G
1	CA	588	G
1	CA	632	A
1	CA	633	G
1	CA	653	A
1	CA	665	A
1	CA	688	G
1	CA	701	C
1	CA	702	A
1	CA	722	A
1	CA	723	U
1	CA	731	G
1	CA	748	C
1	CA	749	C
1	CA	755	G
1	CA	777	A
1	CA	787	A
1	CA	793	U
1	CA	794	A
1	CA	816	A
1	CA	817	C
1	CA	821	G
1	CA	827	U
1	CA	828	A
1	CA	839	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	840	C
1	CA	841	U
1	CA	848	C
1	CA	859	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	962	C
1	CA	968	A
1	CA	969	A
1	CA	974	A
1	CA	975	A
1	CA	976	G
1	CA	977	A
1	CA	978	A
1	CA	980	C
1	CA	981	U
1	CA	982	U
1	CA	983	A
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	996	A
1	CA	1004	A
1	CA	1026	G
1	CA	1030	C
1	CA	1050	G
1	CA	1051	C
1	CA	1054	C
1	CA	1055	A
1	CA	1065	U
1	CA	1081	G
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1102	A
1	CA	1117	G
1	CA	1124	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1125	U
1	CA	1126	U
1	CA	1129	C
1	CA	1130	A
1	CA	1131	G
1	CA	1136	U
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1141	C
1	CA	1146	A
1	CA	1152	A
1	CA	1154	G
1	CA	1158	C
1	CA	1159	U
1	CA	1171	G
1	CA	1181	G
1	CA	1184	G
1	CA	1187	G
1	CA	1196	U
1	CA	1197	G
1	CA	1200	C
1	CA	1201	A
1	CA	1212	U
1	CA	1213	A
1	CA	1238	A
1	CA	1240	U
1	CA	1256	A
1	CA	1257	U
1	CA	1272	G
1	CA	1280	A
1	CA	1281	U
1	CA	1284	C
1	CA	1285	A
1	CA	1286	A
1	CA	1287	A
1	CA	1300	G
1	CA	1301	U
1	CA	1302	U
1	CA	1320	C
1	CA	1322	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1323	G
1	CA	1331	G
1	CA	1334	G
1	CA	1347	G
1	CA	1363	C
1	CA	1364	U
1	CA	1379	G
1	CA	1397	C
1	CA	1398	A
1	CA	1400	C
1	CA	1419	G
1	CA	1442	G
1	CA	1442(B)	A
1	CA	1443	G
1	CA	1447	A
1	CA	1452	C
1	CA	1456	G
1	CA	1492	A
1	CA	1499	A
1	CA	1503	A
1	CA	1506	U
1	CA	1517	G
1	CA	1519	A
1	CA	1529	G
1	CA	1530	G
1	CA	1534	A
22	CV	5	G
22	CV	8	U
22	CV	16	U
22	CV	17	C
22	CV	18	G
22	CV	19	G
22	CV	21	A
22	CV	22	G
22	CV	23	A
22	CV	42	C
22	CV	44	G
22	CV	45	U
22	CV	46	G
22	CV	47	U
22	CV	48	C
22	CV	61	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	CV	62	C
22	CV	63	G
22	CV	74	C
22	CW	4	C
22	CW	8	U
22	CW	9	A
22	CW	16	U
22	CW	17	C
22	CW	18	G
22	CW	19	G
22	CW	21	A
22	CW	39	U
22	CW	40	C
22	CW	44	G
22	CW	47	U
22	CW	48	C
22	CW	50	U
22	CW	59	U
22	CW	61	C
22	CW	70	G
23	CX	12	A
23	CX	13	A
23	CX	16	A
23	CX	17	U
23	CX	26	A
23	CX	27	A
24	CY	3	G
24	CY	5	G
24	CY	8	4SU
24	CY	9	C
24	CY	12	U
24	CY	16	H2U
24	CY	17	H2U
24	CY	18	G
24	CY	19	G
24	CY	20	H2U
24	CY	21	A
24	CY	41	C
24	CY	44	G
24	CY	45	U
24	CY	46	7MG
24	CY	47	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	CY	55	PSU
24	CY	56	C
24	CY	59	G
24	CY	62	U
24	CY	69	C
24	CY	70	C
24	CY	71	C
24	CY	73	G
24	CY	76	A
36	DA	10	G
36	DA	32	C
36	DA	34	C
36	DA	45	C
36	DA	71	A
36	DA	72	U
36	DA	74	A
36	DA	75	G
36	DA	83	G
36	DA	84	A
36	DA	88	G
36	DA	90	U
36	DA	92	A
36	DA	94	C
36	DA	96	G
36	DA	100	G
36	DA	102	G
36	DA	118	A
36	DA	119	A
36	DA	120	U
36	DA	129	C
36	DA	139(A)	G
36	DA	141	A
36	DA	146	G
36	DA	173	G
36	DA	174	C
36	DA	181	A
36	DA	182	A
36	DA	196	A
36	DA	197	A
36	DA	199	A
36	DA	200	U
36	DA	204	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	205	G
36	DA	215	G
36	DA	216	A
36	DA	221	A
36	DA	222	A
36	DA	229	A
36	DA	233	A
36	DA	245	G
36	DA	248	G
36	DA	261	G
36	DA	267	C
36	DA	271(K)	U
36	DA	271(L)	U
36	DA	271(M)	G
36	DA	271(N)	U
36	DA	271(O)	C
36	DA	271(P)	C
36	DA	271(R)	G
36	DA	271(Y)	U
36	DA	272(A)	U
36	DA	272(B)	G
36	DA	272(I)	U
36	DA	274	G
36	DA	276	A
36	DA	278	A
36	DA	288	C
36	DA	299	A
36	DA	310	A
36	DA	324	A
36	DA	329	G
36	DA	330	A
36	DA	332	A
36	DA	333	G
36	DA	352	G
36	DA	353	G
36	DA	358	U
36	DA	362	U
36	DA	363	G
36	DA	363(E)	U
36	DA	363(F)	A
36	DA	372	G
36	DA	386	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	388	G
36	DA	396	G
36	DA	405	U
36	DA	406	G
36	DA	411	G
36	DA	412	A
36	DA	428	A
36	DA	444	C
36	DA	448	U
36	DA	457	A
36	DA	470	A
36	DA	481	G
36	DA	482	A
36	DA	494	G
36	DA	505	A
36	DA	508	G
36	DA	509	C
36	DA	512	G
36	DA	528	A
36	DA	529	A
36	DA	530	G
36	DA	531	C
36	DA	532	A
36	DA	533	G
36	DA	537	C
36	DA	556	G
36	DA	563	G
36	DA	573	G
36	DA	575	A
36	DA	586	A
36	DA	588	U
36	DA	603	A
36	DA	604	G
36	DA	607	U
36	DA	613	G
36	DA	614(B)	G
36	DA	615	G
36	DA	622	G
36	DA	627	A
36	DA	629	G
36	DA	637	A
36	DA	645	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	646	A
36	DA	650	C
36	DA	651	G
36	DA	653	A
36	DA	654(I)	C
36	DA	654(J)	A
36	DA	654(M)	C
36	DA	654(T)	C
36	DA	655	A
36	DA	656	G
36	DA	673	C
36	DA	686	G
36	DA	708	C
36	DA	717	G
36	DA	722	A
36	DA	730	C
36	DA	753	C
36	DA	764	A
36	DA	776	G
36	DA	782	A
36	DA	784	A
36	DA	785	G
36	DA	790	C
36	DA	791	C
36	DA	792	G
36	DA	805	G
36	DA	812	C
36	DA	819	A
36	DA	827	U
36	DA	828	U
36	DA	830	G
36	DA	848	G
36	DA	857	C
36	DA	859	G
36	DA	866	A
36	DA	878	A
36	DA	886	C
36	DA	889	C
36	DA	890	A
36	DA	896	A
36	DA	897	C
36	DA	901	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	910	A
36	DA	917	A
36	DA	926	A
36	DA	932	G
36	DA	941	A
36	DA	945	A
36	DA	946	G
36	DA	953	A
36	DA	958	U
36	DA	959	A
36	DA	961	C
36	DA	974	G
36	DA	975	C
36	DA	983	A
36	DA	991	C
36	DA	996	A
36	DA	1011	G
36	DA	1012	U
36	DA	1013	C
36	DA	1022	G
36	DA	1023	U
36	DA	1025	G
36	DA	1026	U
36	DA	1027	A
36	DA	1033	U
36	DA	1038	C
36	DA	1039	G
36	DA	1041	G
36	DA	1045	A
36	DA	1047	G
36	DA	1048	A
36	DA	1051	G
36	DA	1053	C
36	DA	1059	G
36	DA	1061	U
36	DA	1062	G
36	DA	1065	U
36	DA	1067	A
36	DA	1068	G
36	DA	1069	A
36	DA	1070	A
36	DA	1071	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1073	A
36	DA	1074	G
36	DA	1079	C
36	DA	1087	G
36	DA	1088	A
36	DA	1103	A
36	DA	1111	A
36	DA	1112	G
36	DA	1116	C
36	DA	1135	C
36	DA	1136	G
36	DA	1142	U
36	DA	1143	A
36	DA	1155	A
36	DA	1170	G
36	DA	1174	A
36	DA	1175	U
36	DA	1176	G
36	DA	1178	C
36	DA	1205	U
36	DA	1210	A
36	DA	1211	U
36	DA	1212	G
36	DA	1223	G
36	DA	1236	G
36	DA	1244	G
36	DA	1247	A
36	DA	1248	G
36	DA	1250	G
36	DA	1253	A
36	DA	1256	G
36	DA	1265	A
36	DA	1271	G
36	DA	1272	A
36	DA	1273	U
36	DA	1300	U
36	DA	1301	A
36	DA	1302	A
36	DA	1314	C
36	DA	1319	G
36	DA	1321	A
36	DA	1330	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1332	G
36	DA	1349	A
36	DA	1359	A
36	DA	1365	A
36	DA	1379	A
36	DA	1380	G
36	DA	1384	A
36	DA	1385	G
36	DA	1386	C
36	DA	1395	A
36	DA	1396	U
36	DA	1407	C
36	DA	1416	G
36	DA	1419	A
36	DA	1427	A
36	DA	1428	C
36	DA	1437	C
36	DA	1445	A
36	DA	1449	A
36	DA	1455	G
36	DA	1460	A
36	DA	1461	G
36	DA	1467	C
36	DA	1471	A
36	DA	1474	C
36	DA	1475	G
36	DA	1478	G
36	DA	1481	U
36	DA	1482	G
36	DA	1485	G
36	DA	1490	A
36	DA	1493	C
36	DA	1494	A
36	DA	1495	A
36	DA	1497	U
36	DA	1499	C
36	DA	1502	C
36	DA	1505	C
36	DA	1509	C
36	DA	1509(A)	A
36	DA	1517	G
36	DA	1541	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1542	A
36	DA	1544	A
36	DA	1554	A
36	DA	1558	A
36	DA	1559	G
36	DA	1569	A
36	DA	1578	U
36	DA	1579	A
36	DA	1584	C
36	DA	1586	A
36	DA	1588	C
36	DA	1593	G
36	DA	1603	A
36	DA	1608	A
36	DA	1617	C
36	DA	1618	A
36	DA	1634	A
36	DA	1640	C
36	DA	1648	C
36	DA	1654	A
36	DA	1674	G
36	DA	1696	G
36	DA	1698	A
36	DA	1699	G
36	DA	1721	G
36	DA	1722	A
36	DA	1739	U
36	DA	1745(A)	C
36	DA	1746	G
36	DA	1748	G
36	DA	1763	G
36	DA	1764	G
36	DA	1773	A
36	DA	1791	A
36	DA	1799	G
36	DA	1800	C
36	DA	1801	G
36	DA	1816	G
36	DA	1820	U
36	DA	1821	A
36	DA	1835	G
36	DA	1847	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	1858	G
36	DA	1865	G
36	DA	1878	G
36	DA	1881	C
36	DA	1885	A
36	DA	1888	G
36	DA	1889	A
36	DA	1900	A
36	DA	1906	G
36	DA	1929	G
36	DA	1930	G
36	DA	1936	A
36	DA	1937	A
36	DA	1938	A
36	DA	1948	G
36	DA	1955	U
36	DA	1963	U
36	DA	1967	C
36	DA	1969	A
36	DA	1970	A
36	DA	1971	A
36	DA	1972	A
36	DA	1982	C
36	DA	1987	G
36	DA	1991	U
36	DA	1992	G
36	DA	1993	U
36	DA	1997	G
36	DA	2020	A
36	DA	2023	G
36	DA	2031	A
36	DA	2033	A
36	DA	2034	U
36	DA	2036	C
36	DA	2043	C
36	DA	2055	C
36	DA	2056	G
36	DA	2060	A
36	DA	2061	G
36	DA	2062	A
36	DA	2069	G
36	DA	2093	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2100	G
36	DA	2102	U
36	DA	2104	G
36	DA	2112	G
36	DA	2116	G
36	DA	2118	U
36	DA	2126	A
36	DA	2127	G
36	DA	2131	G
36	DA	2132	U
36	DA	2133	G
36	DA	2146	C
36	DA	2148	G
36	DA	2159	G
36	DA	2160	G
36	DA	2172	U
36	DA	2173	A
36	DA	2174	C
36	DA	2177	C
36	DA	2179	C
36	DA	2180	U
36	DA	2185	C
36	DA	2186	G
36	DA	2187	G
36	DA	2189	U
36	DA	2190	G
36	DA	2192	G
36	DA	2193	G
36	DA	2198	A
36	DA	2199	A
36	DA	2200	C
36	DA	2207	G
36	DA	2208	A
36	DA	2218	U
36	DA	2219	G
36	DA	2225	A
36	DA	2238	G
36	DA	2239	G
36	DA	2266	A
36	DA	2268	A
36	DA	2275	C
36	DA	2283	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2287	A
36	DA	2288	A
36	DA	2305	A
36	DA	2306	C
36	DA	2307	G
36	DA	2308	G
36	DA	2313	C
36	DA	2316	C
36	DA	2319	G
36	DA	2320	A
36	DA	2336	A
36	DA	2347	C
36	DA	2350	C
36	DA	2361	A
36	DA	2383	G
36	DA	2385	C
36	DA	2392	A
36	DA	2402	C
36	DA	2423	U
36	DA	2425	A
36	DA	2429	G
36	DA	2430	A
36	DA	2431	U
36	DA	2434	A
36	DA	2439	A
36	DA	2441	C
36	DA	2448	A
36	DA	2465	C
36	DA	2469	A
36	DA	2475	C
36	DA	2476	A
36	DA	2482	G
36	DA	2491	U
36	DA	2502	G
36	DA	2505	G
36	DA	2518	A
36	DA	2524	G
36	DA	2529	G
36	DA	2543	G
36	DA	2554	U
36	DA	2566	A
36	DA	2567	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2573	C
36	DA	2582	G
36	DA	2602	A
36	DA	2612	C
36	DA	2630	G
36	DA	2646	C
36	DA	2654	A
36	DA	2655	G
36	DA	2657	A
36	DA	2658	C
36	DA	2660	A
36	DA	2673	G
36	DA	2682	U
36	DA	2690	C
36	DA	2691	C
36	DA	2702	U
36	DA	2703	C
36	DA	2712	U
36	DA	2712(A)	A
36	DA	2713	A
36	DA	2714	G
36	DA	2720	U
36	DA	2726	U
36	DA	2733	A
36	DA	2750	A
36	DA	2751	G
36	DA	2752	C
36	DA	2757	A
36	DA	2759	G
36	DA	2761	G
36	DA	2762	G
36	DA	2764	A
36	DA	2765	A
36	DA	2766	G
36	DA	2778	A
36	DA	2779	U
36	DA	2780	G
36	DA	2789	C
36	DA	2790	A
36	DA	2791	C
36	DA	2794	C
36	DA	2799	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	2802	G
36	DA	2803	C
36	DA	2808	U
36	DA	2820	A
36	DA	2821	A
36	DA	2823	A
36	DA	2833	G
36	DA	2834	G
36	DA	2847	U
36	DA	2849	U
36	DA	2872	G
36	DA	2880	C
36	DA	2894	G
37	DB	8	U
37	DB	13	A
37	DB	15	A
37	DB	16	G
37	DB	17	C
37	DB	21	G
37	DB	25	A
37	DB	27	C
37	DB	32	C
37	DB	41	U
37	DB	42	C
37	DB	43	C
37	DB	45	A
37	DB	53	A
37	DB	57	A
37	DB	66	A
37	DB	67	G
37	DB	68	C
37	DB	73	A
37	DB	81	G
37	DB	82	G
37	DB	88	C
37	DB	89	G
37	DB	110	G
37	DB	113	G

All (205) RNA pucker outliers are listed below:

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
-----	-------	-----	------

Mol	Chain	Res	Type
1	AA	30	U
1	AA	60	A
1	AA	64	G
1	AA	79	G
1	AA	109	A
1	AA	115	G
1	AA	119	A
1	AA	197	A
1	AA	202	U
1	AA	243	A
1	AA	250	A
1	AA	266	G
1	AA	274	A
1	AA	344	A
1	AA	347	G
1	AA	351	G
1	AA	369	C
1	AA	428	G
1	AA	429	U
1	AA	484	G
1	AA	495	A
1	AA	508	C
1	AA	547	A
1	AA	560	U
1	AA	573	A
1	AA	575	G
1	AA	687	A
1	AA	748	C
1	AA	792	A
1	AA	793	U
1	AA	980	C
1	AA	982	U
1	AA	992	U
1	AA	1049	U
1	AA	1053	G
1	AA	1054	C
1	AA	1101	A
1	AA	1145	C
1	AA	1157	A
1	AA	1200	C
1	AA	1211	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1239	A
1	AA	1285	A
1	AA	1320	C
1	AA	1417	G
1	AA	1498	U
1	AA	1504	G
1	AA	1529	G
1	AA	1531	A
22	AV	18	G
22	AV	23	A
24	AY	16	H2U
24	AY	17	H2U
24	AY	20	H2U
24	AY	55	PSU
24	AY	69	C
36	BA	71	A
36	BA	181	A
36	BA	199	A
36	BA	221	A
36	BA	331	A
36	BA	332	A
36	BA	387	U
36	BA	481	G
36	BA	528	A
36	BA	587	C
36	BA	603	A
36	BA	614(C)	A
36	BA	752	A
36	BA	790	C
36	BA	856	C
36	BA	958	U
36	BA	1052	C
36	BA	1060	U
36	BA	1068	G
36	BA	1069	A
36	BA	1210	A
36	BA	1300	U
36	BA	1301	A
36	BA	1378	A
36	BA	1427	A
36	BA	1541	G
36	BA	1558	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BA	1653	G
36	BA	1799	G
36	BA	1819	A
36	BA	1820	U
36	BA	1948	G
36	BA	1970	A
36	BA	1992	G
36	BA	2033	A
36	BA	2036	C
36	BA	2126	A
36	BA	2131	G
36	BA	2145	C
36	BA	2282	G
36	BA	2286	A
36	BA	2422	A
36	BA	2481	G
36	BA	2689	U
36	BA	2750	A
36	BA	2756	U
37	BB	56	G
37	BB	66	A
1	CA	30	U
1	CA	60	A
1	CA	64	G
1	CA	79	G
1	CA	109	A
1	CA	115	G
1	CA	119	A
1	CA	197	A
1	CA	202	U
1	CA	243	A
1	CA	250	A
1	CA	266	G
1	CA	274	A
1	CA	344	A
1	CA	347	G
1	CA	351	G
1	CA	428	G
1	CA	429	U
1	CA	484	G
1	CA	495	A
1	CA	508	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	547	A
1	CA	560	U
1	CA	573	A
1	CA	575	G
1	CA	687	A
1	CA	748	C
1	CA	792	A
1	CA	793	U
1	CA	980	C
1	CA	982	U
1	CA	992	U
1	CA	1049	U
1	CA	1053	G
1	CA	1054	C
1	CA	1101	A
1	CA	1145	C
1	CA	1157	A
1	CA	1200	C
1	CA	1211	U
1	CA	1239	A
1	CA	1285	A
1	CA	1320	C
1	CA	1399	C
1	CA	1442(A)	G
1	CA	1493	A
1	CA	1498	U
22	CV	18	G
24	CY	16	H2U
24	CY	17	H2U
24	CY	20	H2U
24	CY	55	PSU
24	CY	69	C
36	DA	71	A
36	DA	181	A
36	DA	199	A
36	DA	221	A
36	DA	331	A
36	DA	332	A
36	DA	387	U
36	DA	481	G
36	DA	528	A
36	DA	587	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DA	603	A
36	DA	614(C)	A
36	DA	752	A
36	DA	790	C
36	DA	856	C
36	DA	958	U
36	DA	1052	C
36	DA	1060	U
36	DA	1068	G
36	DA	1069	A
36	DA	1210	A
36	DA	1300	U
36	DA	1301	A
36	DA	1378	A
36	DA	1427	A
36	DA	1541	G
36	DA	1558	A
36	DA	1653	G
36	DA	1799	G
36	DA	1819	A
36	DA	1820	U
36	DA	1948	G
36	DA	1970	A
36	DA	1992	G
36	DA	2033	A
36	DA	2126	A
36	DA	2131	G
36	DA	2145	C
36	DA	2160	G
36	DA	2282	G
36	DA	2286	A
36	DA	2422	A
36	DA	2481	G
36	DA	2689	U
36	DA	2750	A
36	DA	2756	U
37	DB	56	G
37	DB	66	A

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

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
24	H2U	AY	16	24	17,21,22	1.04	2 (11%)	23,30,33	1.85	4 (17%)
24	H2U	AY	17	24	17,21,22	0.97	1 (5%)	23,30,33	2.03	5 (21%)
24	H2U	AY	20	24	17,21,22	1.03	1 (5%)	23,30,33	1.93	4 (17%)
24	OMC	AY	32	24	13,22,23	0.76	0	20,31,34	1.04	2 (10%)
24	MIA	AY	37	24	21,31,32	1.25	2 (9%)	26,44,47	1.72	3 (11%)
24	7MG	AY	46	24	19,26,27	1.66	3 (15%)	24,39,42	2.29	4 (16%)
24	5MU	AY	54	24	12,22,23	1.32	3 (25%)	14,32,35	4.52	3 (21%)
24	PSU	AY	55	24	13,21,22	1.21	2 (15%)	18,30,33	3.63	5 (27%)
24	4SU	AY	8	24	11,21,22	1.52	3 (27%)	13,30,33	2.31	1 (7%)
24	H2U	CY	16	24	17,21,22	1.10	2 (11%)	23,30,33	1.85	4 (17%)
24	H2U	CY	17	24	17,21,22	0.98	1 (5%)	23,30,33	2.05	5 (21%)
24	H2U	CY	20	24	17,21,22	1.00	1 (5%)	23,30,33	1.92	4 (17%)
24	OMC	CY	32	24	13,22,23	0.73	0	20,31,34	1.02	2 (10%)
24	MIA	CY	37	24	21,31,32	1.05	1 (4%)	26,44,47	1.72	3 (11%)
24	7MG	CY	46	24	19,26,27	1.64	3 (15%)	24,39,42	2.29	3 (12%)
24	5MU	CY	54	24	12,22,23	1.35	3 (25%)	14,32,35	4.49	3 (21%)
24	PSU	CY	55	24	13,21,22	1.21	2 (15%)	18,30,33	3.66	5 (27%)
24	4SU	CY	8	24	11,21,22	1.55	4 (36%)	13,30,33	2.30	1 (7%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	H2U	AY	16	24	-	0/7/38/39	0/2/2/2
24	H2U	AY	17	24	-	0/7/38/39	0/2/2/2
24	H2U	AY	20	24	-	0/7/38/39	0/2/2/2
24	OMC	AY	32	24	-	0/5/27/28	0/2/2/2
24	MIA	AY	37	24	-	0/11/33/34	0/3/3/3
24	7MG	AY	46	24	-	0/7/37/38	0/3/3/3

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	5MU	AY	54	24	-	0/3/25/26	0/2/2/2
24	PSU	AY	55	24	1/1/5/5	0/7/25/26	0/2/2/2
24	4SU	AY	8	24	-	0/3/25/26	0/2/2/2
24	H2U	CY	16	24	-	0/7/38/39	0/2/2/2
24	H2U	CY	17	24	-	0/7/38/39	0/2/2/2
24	H2U	CY	20	24	-	0/7/38/39	0/2/2/2
24	OMC	CY	32	24	-	0/5/27/28	0/2/2/2
24	MIA	CY	37	24	-	0/11/33/34	0/3/3/3
24	7MG	CY	46	24	-	0/7/37/38	0/3/3/3
24	5MU	CY	54	24	-	0/3/25/26	0/2/2/2
24	PSU	CY	55	24	1/1/5/5	0/7/25/26	0/2/2/2
24	4SU	CY	8	24	-	0/3/25/26	0/2/2/2

All (34) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	CY	46	7MG	C8-N9	-4.67	1.38	1.45
24	AY	46	7MG	C8-N9	-4.67	1.38	1.45
24	AY	46	7MG	C8-N7	-2.74	1.31	1.43
24	CY	46	7MG	C8-N7	-2.72	1.31	1.43
24	AY	54	5MU	C6-C5	-2.16	1.34	1.40
24	CY	54	5MU	C6-C5	-2.16	1.34	1.40
24	CY	8	4SU	C6-C5	-2.12	1.33	1.38
24	AY	17	H2U	C6-N1	2.00	1.49	1.47
24	AY	16	H2U	C6-N1	2.01	1.49	1.47
24	AY	37	MIA	C6-N1	2.07	1.35	1.33
24	AY	8	4SU	C4-S4	2.07	1.71	1.67
24	CY	17	H2U	C6-N1	2.11	1.49	1.47
24	CY	37	MIA	C6-N1	2.11	1.36	1.33
24	CY	8	4SU	C4-S4	2.14	1.71	1.67
24	CY	20	H2U	C6-N1	2.21	1.50	1.47
24	CY	16	H2U	C6-N1	2.24	1.50	1.47
24	CY	16	H2U	C1'-N1	2.24	1.50	1.45
24	AY	16	H2U	C1'-N1	2.25	1.50	1.45
24	AY	55	PSU	C6-N1	2.32	1.39	1.34
24	CY	8	4SU	C6-N1	2.32	1.39	1.35
24	AY	8	4SU	C6-N1	2.35	1.39	1.35
24	AY	20	H2U	C6-N1	2.37	1.50	1.47
24	AY	54	5MU	C6-N1	2.38	1.38	1.35
24	CY	54	5MU	C6-N1	2.40	1.38	1.35
24	CY	55	PSU	C6-N1	2.41	1.39	1.34
24	CY	55	PSU	C4-N3	2.52	1.37	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	AY	55	PSU	C4-N3	2.54	1.37	1.33
24	AY	54	5MU	C4-N3	2.94	1.38	1.33
24	CY	54	5MU	C4-N3	3.07	1.38	1.33
24	AY	8	4SU	C5-C4	3.33	1.42	1.38
24	CY	8	4SU	C5-C4	3.35	1.42	1.38
24	AY	37	MIA	C2-S10	3.42	1.78	1.75
24	CY	46	7MG	C6-N1	3.70	1.40	1.33
24	AY	46	7MG	C6-N1	3.75	1.40	1.33

All (61) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	CY	55	PSU	N1-C2-N3	-12.54	120.33	128.33
24	AY	55	PSU	N1-C2-N3	-12.39	120.43	128.33
24	AY	54	5MU	C5-C4-N3	-8.99	115.12	125.14
24	CY	54	5MU	C5-C4-N3	-8.94	115.19	125.14
24	AY	8	4SU	C5-C4-N3	-8.16	115.63	123.63
24	CY	8	4SU	C5-C4-N3	-8.12	115.67	123.63
24	CY	46	7MG	C5-C6-N1	-7.79	111.48	123.46
24	AY	46	7MG	C5-C6-N1	-7.79	111.49	123.46
24	CY	20	H2U	C4-N3-C2	-5.21	121.49	125.79
24	AY	20	H2U	C4-N3-C2	-5.17	121.53	125.79
24	CY	16	H2U	C4-N3-C2	-4.92	121.73	125.79
24	CY	17	H2U	C4-N3-C2	-4.90	121.75	125.79
24	AY	16	H2U	C4-N3-C2	-4.89	121.75	125.79
24	AY	17	H2U	C4-N3-C2	-4.88	121.77	125.79
24	AY	55	PSU	C5-C1'-C2'	-3.52	109.26	115.52
24	CY	55	PSU	C5-C1'-C2'	-3.49	109.32	115.52
24	AY	37	MIA	C5-C6-N1	-2.96	117.42	120.48
24	CY	37	MIA	C5-C6-N1	-2.93	117.46	120.48
24	CY	55	PSU	C5-C6-N1	-2.92	120.27	124.39
24	AY	55	PSU	C5-C6-N1	-2.81	120.42	124.39
24	AY	32	OMC	CM2-O2'-C2'	-2.53	107.45	114.59
24	CY	32	OMC	CM2-O2'-C2'	-2.48	107.57	114.59
24	AY	16	H2U	O2-C2-N1	-2.35	120.23	123.30
24	CY	17	H2U	O2-C2-N1	-2.29	120.31	123.30
24	CY	16	H2U	O2-C2-N1	-2.29	120.31	123.30
24	AY	17	H2U	O2-C2-N1	-2.24	120.37	123.30
24	AY	20	H2U	O2-C2-N1	-2.18	120.45	123.30
24	CY	20	H2U	O2-C2-N1	-2.07	120.59	123.30
24	AY	54	5MU	C5M-C5-C6	2.00	122.65	118.62
24	AY	46	7MG	C5-C4-N3	2.01	128.78	126.82

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	CY	54	5MU	C5M-C5-C6	2.07	122.79	118.62
24	AY	46	7MG	CM7-N7-C8	2.24	126.86	120.52
24	CY	46	7MG	CM7-N7-C8	2.28	126.99	120.52
24	CY	32	OMC	C2-N3-C4	3.07	119.94	115.61
24	CY	37	MIA	C12-N6-C6	3.18	127.38	123.42
24	AY	32	OMC	C2-N3-C4	3.19	120.11	115.61
24	AY	37	MIA	C12-N6-C6	3.26	127.48	123.42
24	AY	55	PSU	C6-N1-C2	3.32	120.81	115.47
24	CY	17	H2U	O3'-C3'-C2'	3.35	122.73	111.83
24	CY	55	PSU	C6-N1-C2	3.36	120.88	115.47
24	AY	17	H2U	O3'-C3'-C2'	3.40	122.88	111.83
24	AY	16	H2U	C5-C4-N3	4.00	120.47	116.71
24	CY	16	H2U	C5-C4-N3	4.14	120.61	116.71
24	CY	20	H2U	N3-C2-N1	4.16	120.75	116.60
24	CY	20	H2U	C5-C4-N3	4.16	120.62	116.71
24	AY	17	H2U	C5-C4-N3	4.16	120.63	116.71
24	AY	20	H2U	N3-C2-N1	4.18	120.77	116.60
24	AY	20	H2U	C5-C4-N3	4.18	120.64	116.71
24	CY	17	H2U	C5-C4-N3	4.20	120.67	116.71
24	AY	17	H2U	N3-C2-N1	4.41	121.00	116.60
24	CY	16	H2U	N3-C2-N1	4.43	121.02	116.60
24	CY	17	H2U	N3-C2-N1	4.48	121.07	116.60
24	AY	16	H2U	N3-C2-N1	4.50	121.10	116.60
24	AY	37	MIA	C11-S10-C2	6.42	106.38	102.26
24	CY	37	MIA	C11-S10-C2	6.51	106.44	102.26
24	CY	55	PSU	C4-N3-C2	6.71	121.05	115.25
24	AY	55	PSU	C4-N3-C2	6.76	121.09	115.25
24	CY	46	7MG	C6-N1-C2	6.77	125.33	115.94
24	AY	46	7MG	C6-N1-C2	6.79	125.36	115.94
24	CY	54	5MU	C4-N3-C2	14.01	127.36	115.25
24	AY	54	5MU	C4-N3-C2	14.11	127.44	115.25

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
24	CY	55	PSU	C3'
24	AY	55	PSU	C3'

There are no torsion outliers.

There are no ring outliers.

17 monomers are involved in 32 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	AY	16	H2U	3	0
24	AY	17	H2U	5	0
24	AY	20	H2U	2	0
24	AY	32	OMC	1	0
24	AY	37	MIA	1	0
24	AY	46	7MG	4	0
24	AY	54	5MU	1	0
24	AY	55	PSU	3	0
24	AY	8	4SU	1	0
24	CY	16	H2U	3	0
24	CY	17	H2U	5	0
24	CY	20	H2U	2	0
24	CY	32	OMC	1	0
24	CY	46	7MG	4	0
24	CY	54	5MU	1	0
24	CY	55	PSU	2	0
24	CY	8	4SU	1	0

5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

5.6 Ligand geometry ⓘ

Of 12 ligands modelled in this entry, 8 are monoatomic - leaving 4 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
60	GDP	AZ	501	-	23,30,30	1.38	3 (13%)	30,47,47	1.90	8 (26%)
61	KIR	AZ	502	-	55,59,59	3.77	21 (38%)	53,84,84	1.73	11 (20%)
60	GDP	CZ	501	-	23,30,30	1.43	3 (13%)	30,47,47	1.80	7 (23%)
61	KIR	CZ	502	-	55,59,59	3.73	21 (38%)	53,84,84	1.72	12 (22%)

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
60	GDP	AZ	501	-	-	0/12/32/32	0/3/3/3
61	KIR	AZ	502	-	-	0/54/98/98	0/3/3/3
60	GDP	CZ	501	-	-	0/12/32/32	0/3/3/3
61	KIR	CZ	502	-	-	0/54/98/98	0/3/3/3

All (48) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	AZ	502	KIR	O18-C17	-14.73	1.22	1.44
61	CZ	502	KIR	O18-C17	-14.46	1.22	1.44
61	AZ	502	KIR	O30-C30	-11.91	1.17	1.42
61	CZ	502	KIR	O30-C30	-11.85	1.17	1.42
61	AZ	502	KIR	O34-C33	-11.13	1.29	1.44
61	CZ	502	KIR	O34-C33	-10.84	1.29	1.44
61	AZ	502	KIR	C44-C21	2.09	1.54	1.50
61	CZ	502	KIR	C44-C21	2.22	1.54	1.50
61	CZ	502	KIR	C20-C21	2.25	1.55	1.51
61	AZ	502	KIR	C20-C21	2.44	1.55	1.51
61	CZ	502	KIR	C29-C30	2.45	1.58	1.53
60	AZ	501	GDP	O4'-C1'	2.47	1.44	1.41
61	AZ	502	KIR	C29-C30	2.49	1.58	1.53
61	CZ	502	KIR	C6-N1	2.60	1.40	1.34
61	AZ	502	KIR	C16-C17	2.64	1.59	1.53
60	CZ	501	GDP	O4'-C1'	2.73	1.44	1.41
61	AZ	502	KIR	C6-N1	2.75	1.40	1.34
61	CZ	502	KIR	O34-C29	2.75	1.48	1.43
61	AZ	502	KIR	O34-C29	2.78	1.48	1.43
61	CZ	502	KIR	C16-C17	2.82	1.59	1.53
60	AZ	501	GDP	C2-N1	2.91	1.40	1.35
61	AZ	502	KIR	C8-C7	3.04	1.55	1.47
61	CZ	502	KIR	C8-C7	3.13	1.56	1.47
61	AZ	502	KIR	C42-C19	3.18	1.60	1.53
61	CZ	502	KIR	C42-C19	3.21	1.60	1.53
60	CZ	501	GDP	C2-N1	3.21	1.41	1.35
61	AZ	502	KIR	C37-C38	3.25	1.38	1.32
61	CZ	502	KIR	C37-C38	3.48	1.38	1.32
61	AZ	502	KIR	C32-C31	3.59	1.61	1.55
61	CZ	502	KIR	C32-C31	3.60	1.61	1.55
61	CZ	502	KIR	C19-C17	3.65	1.64	1.54
61	AZ	502	KIR	C19-C17	3.71	1.64	1.54

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
61	AZ	502	KIR	O29-C29	3.85	1.48	1.40
61	CZ	502	KIR	O29-C29	3.88	1.48	1.40
61	AZ	502	KIR	C5-C4	3.95	1.46	1.39
60	AZ	501	GDP	C6-N1	3.97	1.40	1.33
60	CZ	501	GDP	C6-N1	4.07	1.40	1.33
61	AZ	502	KIR	C2-N1	4.29	1.41	1.33
61	CZ	502	KIR	C5-C4	4.35	1.47	1.39
61	CZ	502	KIR	C2-N1	4.39	1.41	1.33
61	CZ	502	KIR	C27-N26	4.47	1.43	1.33
61	AZ	502	KIR	C27-N26	4.79	1.43	1.33
61	AZ	502	KIR	C19-C20	4.88	1.62	1.53
61	CZ	502	KIR	C19-C20	4.91	1.62	1.53
61	CZ	502	KIR	C22-C21	5.42	1.38	1.34
61	AZ	502	KIR	C22-C21	5.97	1.39	1.34
61	AZ	502	KIR	C45-C28	6.32	1.62	1.54
61	CZ	502	KIR	C45-C28	6.44	1.62	1.54

All (38) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
60	AZ	501	GDP	N3-C2-N1	-5.49	119.08	127.44
61	AZ	502	KIR	O29-C29-O34	-4.80	102.25	110.18
61	CZ	502	KIR	O29-C29-O34	-4.66	102.48	110.18
60	CZ	501	GDP	N3-C2-N1	-4.64	120.38	127.44
61	CZ	502	KIR	C11-C10-C9	-4.09	114.34	123.39
61	AZ	502	KIR	C11-C10-C9	-4.08	114.37	123.39
61	AZ	502	KIR	C48-C32-C47	-3.85	101.36	107.74
61	CZ	502	KIR	C48-C32-C47	-3.78	101.47	107.74
60	AZ	501	GDP	C5-C6-N1	-3.65	118.59	123.59
60	AZ	501	GDP	PA-O3A-PB	-3.54	120.81	132.67
60	CZ	501	GDP	PA-O3A-PB	-3.53	120.82	132.67
60	CZ	501	GDP	C4-C5-N7	-3.29	106.45	109.48
60	CZ	501	GDP	C5-C6-N1	-3.03	119.44	123.59
60	CZ	501	GDP	C4'-O4'-C1'	-2.75	106.70	109.72
61	CZ	502	KIR	C5-C6-N1	-2.65	120.87	123.90
61	AZ	502	KIR	C5-C6-N1	-2.54	121.00	123.90
60	AZ	501	GDP	C4-C5-N7	-2.48	107.19	109.48
61	CZ	502	KIR	O4-C4-C3	-2.35	119.39	121.84
61	AZ	502	KIR	C29-C30-C31	-2.31	107.39	110.76
61	AZ	502	KIR	O4-C4-C3	-2.28	119.46	121.84
60	AZ	501	GDP	C4'-O4'-C1'	-2.26	107.23	109.72
61	CZ	502	KIR	C29-C30-C31	-2.19	107.58	110.76

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
61	CZ	502	KIR	C23-C22-C21	-2.15	125.13	127.39
60	CZ	501	GDP	N2-C2-N1	2.03	120.56	117.20
60	AZ	501	GDP	N2-C2-N1	2.14	120.75	117.20
61	AZ	502	KIR	O18-C17-C16	2.34	108.96	104.21
61	CZ	502	KIR	C44-C21-C20	2.37	119.73	115.58
61	CZ	502	KIR	O18-C17-C16	2.39	109.07	104.21
61	AZ	502	KIR	C44-C21-C20	2.43	119.83	115.58
61	CZ	502	KIR	C48-C32-C31	2.52	113.53	109.19
61	AZ	502	KIR	C48-C32-C31	2.56	113.59	109.19
61	AZ	502	KIR	C6-N1-C2	2.70	123.44	116.57
61	CZ	502	KIR	C6-N1-C2	2.72	123.50	116.57
60	AZ	501	GDP	O4'-C1'-N9	2.83	114.02	108.10
60	AZ	501	GDP	C6-N1-C2	3.07	120.21	115.94
60	CZ	501	GDP	O4'-C1'-N9	3.13	114.66	108.10
61	CZ	502	KIR	C45-C28-C27	4.52	112.79	108.29
61	AZ	502	KIR	C45-C28-C27	4.78	113.05	108.29

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

4 monomers are involved in 13 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
60	AZ	501	GDP	2	0
61	AZ	502	KIR	3	0
60	CZ	501	GDP	6	0
61	CZ	502	KIR	2	0

5.7 Other polymers ⓘ

There are no such residues in this entry.

5.8 Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	AA	1510/1522 (99%)	0.05	32 (2%) 67 44	17, 54, 143, 200	0
1	CA	1510/1522 (99%)	-0.15	28 (1%) 70 48	26, 58, 145, 200	0
2	AB	234/256 (91%)	-0.12	2 (0%) 85 72	34, 64, 130, 141	0
2	CB	234/256 (91%)	-0.10	7 (2%) 54 29	36, 65, 130, 142	0
3	AC	206/239 (86%)	-0.29	0 100 100	27, 48, 81, 86	0
3	CC	206/239 (86%)	-0.40	0 100 100	32, 52, 82, 88	0
4	AD	208/209 (99%)	0.32	8 (3%) 44 21	55, 89, 119, 122	0
4	CD	208/209 (99%)	0.25	13 (6%) 23 9	55, 90, 119, 122	0
5	AE	150/162 (92%)	-0.41	0 100 100	23, 41, 62, 84	0
5	CE	150/162 (92%)	-0.41	0 100 100	30, 44, 64, 86	0
6	AF	101/101 (100%)	-0.23	1 (0%) 84 69	48, 72, 88, 94	0
6	CF	101/101 (100%)	0.07	1 (0%) 84 69	52, 74, 90, 95	0
7	AG	155/156 (99%)	-0.11	4 (2%) 59 35	40, 64, 100, 115	0
7	CG	155/156 (99%)	-0.08	4 (2%) 59 35	45, 67, 101, 115	0
8	AH	138/138 (100%)	-0.39	0 100 100	30, 44, 61, 71	0
8	CH	138/138 (100%)	-0.49	0 100 100	31, 47, 62, 72	0
9	AI	127/128 (99%)	0.29	2 (1%) 74 55	33, 73, 113, 120	0
9	CI	127/128 (99%)	0.37	8 (6%) 23 9	40, 77, 114, 120	0
10	AJ	98/105 (93%)	0.50	6 (6%) 25 10	41, 80, 133, 136	0
10	CJ	98/105 (93%)	0.76	17 (17%) 2 1	44, 84, 134, 137	0
11	AK	119/129 (92%)	-0.11	3 (2%) 61 37	28, 49, 80, 104	0
11	CK	119/129 (92%)	-0.15	3 (2%) 61 37	32, 53, 82, 104	0
12	AL	124/135 (91%)	0.02	2 (1%) 74 55	28, 66, 87, 125	0
12	CL	124/135 (91%)	0.13	2 (1%) 74 55	30, 67, 88, 124	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	124/126 (98%)	0.11	5 (4%) 42 20	50, 73, 100, 137	0
13	CM	124/126 (98%)	0.20	8 (6%) 22 8	53, 76, 101, 137	0
14	AN	60/61 (98%)	-0.02	1 (1%) 73 52	33, 48, 76, 79	0
14	CN	60/61 (98%)	-0.16	1 (1%) 73 52	39, 53, 76, 80	0
15	AO	88/89 (98%)	-0.34	0 100 100	36, 51, 73, 81	0
15	CO	88/89 (98%)	-0.20	0 100 100	37, 53, 73, 81	0
16	AP	83/88 (94%)	0.31	0 100 100	62, 78, 99, 125	0
16	CP	83/88 (94%)	0.37	3 (3%) 46 23	62, 80, 100, 124	0
17	AQ	99/105 (94%)	-0.18	0 100 100	33, 55, 72, 83	0
17	CQ	99/105 (94%)	-0.15	0 100 100	39, 56, 73, 83	0
18	AR	70/88 (79%)	-0.23	1 (1%) 78 60	37, 55, 87, 99	0
18	CR	70/88 (79%)	-0.13	2 (2%) 55 31	43, 59, 88, 99	0
19	AS	78/93 (83%)	0.41	6 (7%) 16 5	61, 81, 116, 125	0
19	CS	78/93 (83%)	0.57	6 (7%) 16 5	63, 83, 117, 125	0
20	AT	99/106 (93%)	0.23	5 (5%) 32 13	49, 77, 112, 115	0
20	CT	99/106 (93%)	0.33	4 (4%) 42 20	52, 78, 113, 115	0
21	AU	24/27 (88%)	0.35	1 (4%) 40 19	43, 55, 76, 93	0
21	CU	24/27 (88%)	0.60	3 (12%) 5 2	46, 59, 78, 92	0
22	AV	76/76 (100%)	-0.11	0 100 100	34, 64, 95, 113	0
22	AW	76/76 (100%)	0.95	14 (18%) 2 1	60, 165, 193, 200	0
22	CV	76/76 (100%)	-0.20	1 (1%) 79 62	38, 66, 97, 114	0
22	CW	76/76 (100%)	1.09	16 (21%) 1 0	63, 166, 193, 200	0
23	AX	17/27 (62%)	0.82	3 (17%) 2 1	27, 87, 137, 139	0
23	CX	17/27 (62%)	0.89	5 (29%) 1 0	32, 89, 137, 140	0
24	AY	68/77 (88%)	1.57	21 (30%) 1 0	70, 145, 175, 178	0
24	CY	68/77 (88%)	1.85	30 (44%) 0 0	72, 146, 174, 178	0
25	AZ	385/405 (95%)	0.90	56 (14%) 3 1	84, 129, 155, 177	0
25	CZ	385/405 (95%)	1.01	64 (16%) 2 1	85, 129, 155, 177	0
26	B0	84/85 (98%)	0.31	7 (8%) 14 5	47, 64, 95, 108	0
26	D0	84/85 (98%)	0.42	7 (8%) 14 5	50, 66, 95, 108	0
27	B1	93/98 (94%)	0.05	2 (2%) 65 42	38, 55, 114, 120	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
27	D1	93/98 (94%)	0.34	5 (5%) 29 12	54, 71, 121, 129	0
28	B2	71/72 (98%)	1.40	21 (29%) 1 0	108, 136, 147, 149	0
28	D2	71/72 (98%)	0.59	4 (5%) 28 11	88, 107, 126, 142	0
29	B3	59/60 (98%)	0.25	1 (1%) 73 52	50, 71, 91, 116	0
29	D3	59/60 (98%)	0.56	3 (5%) 32 13	51, 72, 91, 116	0
30	B4	44/71 (61%)	1.03	5 (11%) 7 2	109, 148, 172, 176	0
30	D4	44/71 (61%)	0.57	4 (9%) 11 4	110, 148, 172, 176	0
31	B5	59/60 (98%)	0.13	3 (5%) 32 13	45, 71, 131, 148	0
31	D5	59/60 (98%)	0.22	4 (6%) 20 7	46, 73, 130, 148	0
32	B6	50/54 (92%)	1.08	7 (14%) 4 2	50, 80, 106, 112	0
32	D6	50/54 (92%)	0.96	8 (16%) 3 1	54, 82, 106, 114	0
33	B7	48/49 (97%)	0.09	1 (2%) 67 44	45, 53, 90, 110	0
33	D7	48/49 (97%)	-0.03	0 100 100	47, 55, 89, 110	0
34	B8	63/65 (96%)	0.32	4 (6%) 23 9	49, 63, 79, 101	0
34	D8	63/65 (96%)	0.32	4 (6%) 23 9	51, 65, 80, 101	0
35	B9	37/37 (100%)	0.40	1 (2%) 58 34	62, 75, 96, 98	0
35	D9	37/37 (100%)	0.65	2 (5%) 29 12	61, 77, 96, 98	0
36	BA	2901/2915 (99%)	0.15	118 (4%) 41 19	21, 65, 173, 200	0
36	DA	2901/2915 (99%)	0.08	112 (3%) 43 21	26, 67, 173, 200	0
37	BB	119/122 (97%)	-0.14	0 100 100	52, 81, 104, 123	0
37	DB	119/122 (97%)	-0.25	0 100 100	55, 82, 104, 123	0
38	BC	228/229 (99%)	0.24	13 (5%) 27 11	47, 78, 152, 166	0
38	DC	228/229 (99%)	0.67	29 (12%) 5 2	51, 80, 152, 167	0
39	BD	275/276 (99%)	-0.26	3 (1%) 82 66	27, 44, 71, 96	0
39	DD	275/276 (99%)	-0.28	3 (1%) 82 66	29, 46, 71, 96	0
40	BE	204/206 (99%)	0.16	9 (4%) 38 17	40, 65, 114, 124	0
40	DE	204/206 (99%)	0.14	8 (3%) 43 21	41, 65, 114, 124	0
41	BF	207/210 (98%)	0.34	13 (6%) 23 9	45, 96, 152, 159	0
41	DF	207/210 (98%)	0.43	18 (8%) 13 4	45, 97, 152, 159	0
42	BG	181/182 (99%)	-0.07	6 (3%) 50 26	50, 73, 111, 132	0
42	DG	181/182 (99%)	0.24	8 (4%) 38 17	78, 100, 124, 135	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
43	BH	159/180 (88%)	1.07	24 (15%) 3 1	84, 119, 144, 150	0
43	DH	159/180 (88%)	0.99	23 (14%) 3 1	83, 119, 144, 151	0
44	BJ	0/173	-	-	-	-
44	DJ	0/173	-	-	-	-
45	BK	0/147	-	-	-	-
45	DK	0/147	-	-	-	-
46	BN	138/140 (98%)	0.06	1 (0%) 89 78	51, 74, 118, 123	0
46	DN	138/140 (98%)	0.06	1 (0%) 89 78	51, 75, 118, 123	0
47	BO	122/122 (100%)	-0.31	0 100 100	35, 49, 62, 66	0
47	DO	122/122 (100%)	-0.38	0 100 100	35, 50, 62, 65	0
48	BP	146/150 (97%)	0.77	12 (8%) 14 5	47, 93, 118, 139	0
48	DP	146/150 (97%)	0.87	19 (13%) 5 2	49, 95, 118, 139	0
49	BQ	141/141 (100%)	-0.06	2 (1%) 78 60	35, 54, 75, 117	0
49	DQ	141/141 (100%)	-0.07	2 (1%) 78 60	39, 54, 76, 117	0
50	BR	117/118 (99%)	0.16	1 (0%) 85 72	51, 70, 88, 93	0
50	DR	117/118 (99%)	0.15	4 (3%) 49 24	52, 71, 89, 93	0
51	BS	98/112 (87%)	0.40	3 (3%) 52 28	69, 89, 114, 118	0
51	DS	98/112 (87%)	0.76	12 (12%) 5 2	71, 90, 114, 117	0
52	BT	137/146 (93%)	0.23	10 (7%) 18 6	50, 71, 133, 164	0
52	DT	137/146 (93%)	0.20	10 (7%) 18 6	51, 72, 134, 164	0
53	BU	117/118 (99%)	0.02	1 (0%) 85 72	51, 68, 90, 112	0
53	DU	117/118 (99%)	-0.04	1 (0%) 85 72	52, 69, 89, 112	0
54	BV	101/101 (100%)	0.39	5 (4%) 32 13	52, 98, 113, 116	0
54	DV	101/101 (100%)	0.44	7 (6%) 20 7	52, 98, 113, 116	0
55	BW	113/113 (100%)	0.07	2 (1%) 71 50	56, 71, 102, 133	0
55	DW	113/113 (100%)	0.22	2 (1%) 71 50	56, 72, 103, 134	0
56	BX	92/96 (95%)	0.31	1 (1%) 82 66	64, 83, 101, 111	0
56	DX	92/96 (95%)	0.26	2 (2%) 65 42	65, 84, 102, 112	0
57	BY	100/110 (90%)	1.41	23 (23%) 1 0	93, 114, 151, 160	0
57	DY	100/110 (90%)	1.56	32 (32%) 1 0	93, 114, 151, 160	0
58	BZ	176/206 (85%)	0.08	5 (2%) 56 32	44, 71, 117, 123	0
58	DZ	176/206 (85%)	0.20	5 (2%) 56 32	56, 78, 111, 119	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
All	All	21994/23376 (94%)	0.16	1042 (4%) 35 16	17, 69, 146, 200	0

All (1042) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
36	BA	2802	G	12.4
49	DQ	141	GLN	11.2
58	DZ	113	ALA	11.1
36	DA	2802	G	10.6
42	DG	2	PRO	9.8
57	BY	52	SER	9.6
49	BQ	141	GLN	9.2
1	CA	89	C	9.1
36	DA	654(E)	G	9.1
36	BA	654(K)	C	9.1
57	BY	2	ARG	9.1
36	BA	654(J)	A	9.1
57	DY	51	VAL	8.6
32	B6	46	HIS	8.6
11	AK	129	SER	8.5
36	DA	654(K)	C	8.5
1	AA	1036	G	8.5
1	CA	88	A	8.3
36	BA	1077	A	8.2
25	CZ	36	ALA	8.2
38	DC	1	PRO	8.1
1	CA	1036	G	8.0
25	AZ	85	HIS	7.9
36	BA	2799	C	7.9
42	BG	48	GLU	7.8
38	BC	105	ASP	7.8
28	B2	71	ASN	7.7
24	AY	44	G	7.7
36	BA	654(C)	G	7.7
43	BH	53	GLU	7.6
36	BA	654(G)	C	7.5
19	AS	81	ARG	7.4
38	BC	109	ASP	7.3
36	DA	654(J)	A	7.3
36	BA	1087	G	7.1
36	BA	654(I)	C	7.1
36	BA	1065	U	7.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BA	2795	G	7.1
57	BY	51	VAL	7.1
36	BA	654(E)	G	7.0
36	BA	1078	U	7.0
38	DC	109	ASP	7.0
43	BH	52	VAL	7.0
26	B0	3	HIS	7.0
36	DA	1066	U	6.9
24	CY	44	G	6.9
36	BA	2801	A	6.8
36	DA	654(V)	A	6.8
25	AZ	199	ILE	6.7
43	BH	170	ARG	6.6
36	BA	1093	G	6.5
36	DA	2896	C	6.5
36	BA	654(F)	C	6.5
25	CZ	141	VAL	6.5
43	DH	169	VAL	6.4
36	BA	654(H)	G	6.4
22	CW	44	G	6.3
57	DY	52	SER	6.3
25	AZ	42	VAL	6.3
36	BA	654(V)	A	6.3
32	B6	42	TRP	6.3
28	D2	72	ALA	6.3
42	BG	2	PRO	6.3
36	BA	1079	C	6.3
43	BH	169	VAL	6.2
36	DA	654(G)	C	6.2
29	B3	1	MET	6.2
25	CZ	72	THR	6.2
38	BC	1	PRO	6.1
28	B2	64	LEU	6.1
58	BZ	113	ALA	6.1
1	CA	81	U	6.1
1	AA	1026	G	6.1
25	CZ	193	ASN	6.1
48	BP	149	GLU	6.1
36	DA	654(L)	G	6.0
52	DT	137	LYS	6.0
31	D5	59	GLU	6.0
36	DA	1077	A	5.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
32	D6	42	TRP	5.9
52	DT	135	ALA	5.9
52	BT	136	GLN	5.9
40	BE	204	ALA	5.9
29	D3	1	MET	5.9
36	DA	654(F)	C	5.8
36	DA	654(C)	G	5.8
57	BY	55	TYR	5.8
38	DC	77	ILE	5.8
36	BA	2894	G	5.8
28	B2	42	GLY	5.8
36	BA	1066	U	5.7
36	DA	352	G	5.7
25	AZ	112	PRO	5.7
36	BA	2801(A)	A	5.7
36	DA	2796	U	5.7
52	BT	135	ALA	5.7
43	DH	170	ARG	5.6
48	BP	150	ALA	5.6
28	B2	72	ALA	5.6
2	CB	7	VAL	5.6
12	CL	127	GLU	5.6
22	CW	3	C	5.6
1	AA	1030(B)	C	5.5
25	CZ	203	LEU	5.5
25	CZ	183	HIS	5.5
36	DA	1065	U	5.5
36	DA	2799	C	5.5
54	BV	36	PRO	5.5
25	CZ	33	TYR	5.4
38	DC	105	ASP	5.4
48	BP	107	LYS	5.4
43	DH	21	PRO	5.4
41	BF	11	VAL	5.4
36	DA	2801	A	5.4
42	DG	48	GLU	5.3
36	BA	654(T)	C	5.3
25	CZ	140	MET	5.3
1	AA	89	C	5.3
57	DY	2	ARG	5.3
41	BF	9	ILE	5.3
1	AA	81	U	5.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BA	654(L)	G	5.2
41	BF	24	LEU	5.2
1	AA	1037	C	5.2
36	BA	1073	A	5.2
22	CW	34	G	5.2
36	BA	1080	C	5.2
25	CZ	199	ILE	5.2
36	BA	2896	C	5.2
19	CS	81	ARG	5.2
25	AZ	41	ASN	5.2
32	D6	46	HIS	5.2
38	DC	115	ALA	5.1
1	AA	1030(A)	G	5.1
36	DA	229	A	5.1
36	BA	2796	U	5.0
36	DA	2897	U	5.0
1	CA	82	U	5.0
25	CZ	29	ALA	5.0
36	DA	654(I)	C	5.0
1	AA	88	A	5.0
36	BA	1094	U	5.0
36	DA	1082	U	5.0
58	DZ	114	GLY	5.0
2	CB	132	LYS	4.9
36	DA	2795	G	4.9
36	BA	352	G	4.9
51	BS	54	LEU	4.9
36	DA	2804	C	4.9
36	DA	1067	A	4.8
41	BF	8	GLN	4.8
43	DH	53	GLU	4.8
13	CM	123	ALA	4.8
36	BA	1064	C	4.8
53	BU	118	GLY	4.8
36	DA	1076	C	4.8
22	AW	34	G	4.8
14	AN	2	ALA	4.7
38	DC	97	GLU	4.7
36	DA	2801(A)	A	4.7
21	AU	25	LYS	4.7
36	DA	1090	U	4.7
36	BA	654	A	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	80	G	4.6
25	CZ	37	ALA	4.6
13	AM	125	ARG	4.6
36	DA	1087	G	4.6
14	CN	2	ALA	4.6
35	D9	1	MET	4.6
52	DT	136	GLN	4.6
54	DV	36	PRO	4.6
57	DY	55	TYR	4.6
36	BA	1069	A	4.6
1	AA	1038	C	4.6
57	DY	54	LYS	4.6
48	DP	149	GLU	4.6
36	DA	654(H)	G	4.6
23	CX	27	A	4.5
36	DA	1080	C	4.5
4	CD	112	VAL	4.5
25	AZ	203	LEU	4.5
36	BA	1072	C	4.5
36	BA	1068	G	4.5
40	DE	76	ARG	4.5
11	CK	129	SER	4.5
24	AY	15	A	4.5
4	AD	152	SER	4.4
22	AW	6	G	4.4
36	DA	1064	C	4.4
38	DC	106	GLY	4.4
36	BA	1067	A	4.4
32	B6	54	ILE	4.4
25	CZ	366	ASP	4.3
57	BY	45	VAL	4.3
22	CW	6	G	4.3
13	CM	7	VAL	4.3
26	D0	3	HIS	4.3
57	BY	54	LYS	4.3
43	DH	52	VAL	4.3
24	AY	24	G	4.3
22	CW	47	U	4.3
40	DE	204	ALA	4.3
24	AY	45	U	4.3
36	BA	1091	G	4.3
35	B9	1	MET	4.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	AM	84	ILE	4.3
30	B4	42	PHE	4.3
24	AY	19	G	4.2
57	DY	75	ILE	4.2
28	D2	71	ASN	4.2
57	BY	61	ILE	4.2
41	BF	20	LEU	4.2
42	BG	50	ALA	4.2
24	CY	45	U	4.2
43	BH	51	ARG	4.2
31	D5	60	VAL	4.2
32	D6	26	ASN	4.2
38	BC	107	TRP	4.2
25	CZ	142	ASP	4.2
28	B2	50	ILE	4.2
36	DA	156	U	4.2
58	BZ	114	GLY	4.1
10	CJ	77	PRO	4.1
41	BF	12	LEU	4.1
57	BY	56	PRO	4.1
25	AZ	38	GLU	4.1
36	BA	1062	G	4.1
1	CA	90	U	4.1
25	AZ	84	GLY	4.1
48	DP	150	ALA	4.1
25	AZ	141	VAL	4.1
1	AA	78	G	4.1
24	AY	18	G	4.1
36	BA	2207	G	4.1
31	B5	59	GLU	4.1
28	B2	49	LYS	4.1
23	AX	27	A	4.1
36	DA	1068	G	4.1
36	BA	1089	G	4.0
42	DG	49	ASP	4.0
39	BD	276	LYS	4.0
25	CZ	73	ALA	4.0
39	DD	276	LYS	4.0
7	CG	84	ASN	4.0
25	CZ	42	VAL	4.0
28	B2	9	GLN	4.0
24	CY	18	G	4.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BA	654(S)	G	4.0
36	DA	2805	G	4.0
31	B5	60	VAL	4.0
38	BC	117	PRO	4.0
20	CT	73	HIS	3.9
36	BA	229	A	3.9
25	CZ	1	ALA	3.9
52	BT	39	ARG	3.9
36	DA	654(S)	G	3.9
38	DC	107	TRP	3.9
48	BP	118	GLY	3.9
25	AZ	372	VAL	3.9
52	DT	132	LYS	3.9
1	CA	1030(B)	C	3.9
31	B5	58	LEU	3.8
36	BA	156	U	3.8
4	CD	152	SER	3.8
36	BA	614(B)	G	3.8
43	DH	96	ALA	3.8
36	BA	1096	A	3.8
36	DA	654(D)	G	3.8
42	BG	49	ASP	3.8
4	CD	47	ARG	3.8
25	AZ	184	ARG	3.8
57	BY	53	PRO	3.8
22	AW	44	G	3.8
36	BA	654(D)	G	3.8
36	BA	1082	U	3.8
43	DH	86	GLU	3.8
36	BA	271(L)	U	3.8
36	BA	654(U)	A	3.7
12	AL	127	GLU	3.7
26	B0	4	LYS	3.7
10	CJ	90	LEU	3.7
36	DA	2803	C	3.7
35	D9	37	GLY	3.7
58	BZ	115	GLY	3.7
26	D0	6	GLY	3.7
51	DS	34	HIS	3.7
36	DA	1085	A	3.7
10	CJ	85	LEU	3.7
29	D3	2	PRO	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	111	GLY	3.7
28	B2	41	ILE	3.7
36	DA	1062	G	3.7
43	BH	33	LEU	3.7
43	BH	44	VAL	3.7
1	AA	470	C	3.7
1	AA	1030(C)	G	3.7
36	BA	1071	G	3.7
20	AT	9	ASN	3.7
25	AZ	33	TYR	3.7
40	BE	69	LYS	3.7
36	DA	1073	A	3.7
57	DY	17	SER	3.7
36	BA	2803	C	3.7
22	AW	5	G	3.6
36	DA	1078	U	3.6
25	CZ	326	GLU	3.6
7	CG	79	ARG	3.6
26	B0	2	ALA	3.6
51	DS	60	GLY	3.6
58	DZ	167	PRO	3.6
40	DE	88	GLY	3.6
28	B2	57	ILE	3.6
52	BT	132	LYS	3.6
57	DY	45	VAL	3.6
10	CJ	89	ASP	3.6
24	AY	14	A	3.6
36	BA	1081	U	3.6
36	BA	2173	A	3.6
36	DA	1174	A	3.5
57	BY	96	ILE	3.5
36	DA	271(L)	U	3.5
10	AJ	34	VAL	3.5
41	DF	11	VAL	3.5
57	DY	28	LYS	3.5
57	BY	79	CYS	3.5
49	BQ	140	ALA	3.5
1	CA	91	C	3.5
1	CA	1137	C	3.5
25	AZ	130	TYR	3.5
38	DC	76	ALA	3.5
1	AA	76	C	3.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	CZ	147	LEU	3.5
1	AA	204	U	3.5
36	BA	271(K)	U	3.5
36	BA	888	C	3.5
36	DA	654(R)	C	3.5
43	DH	168	PRO	3.5
9	CI	6	GLY	3.5
12	AL	128	ALA	3.5
24	CY	42	G	3.5
24	CY	31	U	3.5
24	CY	61	C	3.4
25	CZ	105	VAL	3.4
48	BP	98	GLU	3.4
1	CA	1037	C	3.4
51	BS	107	GLU	3.4
42	DG	82	LEU	3.4
22	CW	45	U	3.4
40	DE	53	PRO	3.4
36	DA	2793	G	3.4
38	DC	121	GLY	3.4
24	AY	25	C	3.4
27	B1	85	LEU	3.4
10	CJ	86	MET	3.4
36	DA	1104	C	3.4
30	B4	32	TYR	3.4
41	BF	14	PRO	3.4
24	CY	43	G	3.4
34	B8	64	TYR	3.4
38	BC	108	MET	3.4
36	DA	1535	A	3.4
25	AZ	150	VAL	3.3
41	DF	8	GLN	3.3
24	CY	47	U	3.3
4	CD	23	GLY	3.3
50	BR	3	HIS	3.3
52	DT	1	MET	3.3
34	D8	64	TYR	3.3
48	BP	51	PHE	3.3
48	DP	110	TYR	3.3
24	AY	57	G	3.3
36	DA	1420	U	3.3
4	CD	154	ASN	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	DH	167	GLU	3.3
57	DY	19	LYS	3.3
20	AT	104	LEU	3.3
36	BA	1086	A	3.3
36	DA	2892	A	3.3
25	CZ	85	HIS	3.3
2	CB	96	ARG	3.3
42	BG	86	MET	3.3
43	BH	88	LEU	3.3
9	CI	4	TYR	3.3
23	CX	26	A	3.3
38	DC	78	ALA	3.3
1	AA	91	C	3.3
24	AY	9	C	3.3
57	BY	85	VAL	3.3
20	AT	73	HIS	3.3
9	AI	21	PRO	3.3
36	DA	1071	G	3.3
36	BA	654(M)	C	3.3
41	DF	12	LEU	3.3
18	AR	88	LYS	3.2
52	DT	39	ARG	3.2
43	BH	42	ARG	3.2
28	B2	47	ASN	3.2
57	BY	39	VAL	3.2
1	CA	412	A	3.2
25	CZ	185	ASN	3.2
36	BA	1541	G	3.2
25	AZ	368	VAL	3.2
57	DY	79	CYS	3.2
36	DA	155	U	3.2
36	DA	278	A	3.2
36	DA	2794	C	3.2
52	BT	134	GLU	3.2
30	B4	47	GLN	3.2
25	CZ	186	PRO	3.2
41	DF	207	GLY	3.2
36	DA	654(Q)	C	3.2
36	DA	2893	G	3.2
10	CJ	23	ILE	3.2
10	AJ	33	GLN	3.2
25	AZ	40	PRO	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	CZ	196	VAL	3.2
28	D2	19	VAL	3.2
24	CY	19	G	3.2
25	AZ	404	LEU	3.2
25	AZ	108	ALA	3.2
26	D0	4	LYS	3.2
13	CM	84	ILE	3.1
36	BA	1063	G	3.1
1	CA	204	U	3.1
24	CY	15	A	3.1
41	DF	24	LEU	3.1
48	BP	110	TYR	3.1
13	CM	43	THR	3.1
25	AZ	6	ILE	3.1
25	CZ	359	VAL	3.1
52	DT	27	THR	3.1
55	DW	1	MET	3.1
36	DA	2792	G	3.1
38	DC	108	MET	3.1
22	AW	45	U	3.1
40	BE	88	GLY	3.1
52	BT	137	LYS	3.1
36	DA	1074	G	3.1
48	DP	76	LYS	3.1
36	DA	271(K)	U	3.1
38	DC	93	TYR	3.1
31	D5	58	LEU	3.1
1	AA	1031	G	3.1
24	CY	24	G	3.1
41	DF	1	MET	3.1
22	CW	2	C	3.1
1	AA	1030(D)	A	3.1
20	AT	106	ALA	3.1
24	AY	13	C	3.0
38	DC	112	ALA	3.0
24	CY	21	A	3.0
25	CZ	213	PRO	3.0
36	BA	654(A)	G	3.0
27	D1	82	LEU	3.0
41	BF	7	TYR	3.0
57	DY	53	PRO	3.0
36	DA	1740	G	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	271(G)	C	3.0
36	DA	157	U	3.0
25	CZ	71	GLU	3.0
24	CY	25	C	3.0
9	CI	82	ALA	3.0
57	BY	92	ASN	3.0
10	CJ	79	ARG	3.0
28	B2	38	GLN	3.0
24	CY	9	C	3.0
38	DC	89	ALA	3.0
28	B2	54	LYS	3.0
51	DS	59	LYS	3.0
25	CZ	21	ASP	3.0
48	DP	7	ARG	3.0
2	CB	236	TYR	3.0
24	CY	26	A	3.0
36	DA	654	A	3.0
36	BA	157	U	3.0
36	DA	2099	U	3.0
36	DA	1063	G	3.0
57	BY	86	ARG	3.0
36	DA	1088	A	3.0
43	DH	88	LEU	3.0
21	CU	2	GLY	3.0
25	AZ	101	GLY	3.0
57	BY	60	PHE	3.0
38	DC	81	GLU	3.0
57	DY	36	ALA	3.0
20	CT	103	GLY	2.9
25	CZ	6	ILE	2.9
38	DC	95	GLY	2.9
13	CM	125	ARG	2.9
1	CA	1029	C	2.9
40	DE	69	LYS	2.9
25	AZ	180	GLU	2.9
1	CA	77	G	2.9
25	AZ	369	THR	2.9
19	CS	28	LYS	2.9
6	AF	101	ALA	2.9
7	AG	79	ARG	2.9
13	AM	122	LYS	2.9
19	CS	10	PHE	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	1044	G	2.9
43	BH	86	GLU	2.9
29	D3	22	ALA	2.9
7	AG	156	TRP	2.9
4	AD	209	ARG	2.9
41	BF	25	PRO	2.9
20	AT	100	ILE	2.9
48	DP	114	ILE	2.9
57	DY	91	GLU	2.9
49	DQ	140	ALA	2.9
58	DZ	112	ARG	2.9
48	DP	83	VAL	2.9
1	CA	1129	C	2.9
26	B0	6	GLY	2.9
12	CL	128	ALA	2.9
38	BC	122	ALA	2.9
22	AW	47	U	2.9
25	CZ	75	ARG	2.9
36	BA	1057	A	2.9
36	BA	1177	A	2.9
43	BH	122	THR	2.9
36	DA	1059	G	2.9
28	B2	23	LYS	2.9
38	BC	79	LYS	2.9
36	DA	2207	G	2.9
36	BA	155	U	2.9
36	BA	614(A)	U	2.9
41	DF	2	LYS	2.9
46	DN	8	GLN	2.9
1	AA	1447	A	2.9
22	AW	7	A	2.9
36	DA	1046	A	2.9
48	DP	125	VAL	2.9
25	AZ	183	HIS	2.9
36	BA	2794	C	2.9
36	DA	1072	C	2.9
1	CA	1024	G	2.8
48	BP	15	ARG	2.8
36	DA	1541	G	2.8
25	AZ	75	ARG	2.8
28	B2	68	ARG	2.8
36	BA	1100	C	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
38	DC	126	LYS	2.8
38	BC	125	SER	2.8
31	D5	55	ARG	2.8
36	BA	1088	A	2.8
40	BE	76	ARG	2.8
1	AA	1456	G	2.8
38	BC	104	LEU	2.8
36	BA	362	U	2.8
23	AX	26	A	2.8
11	CK	11	LYS	2.8
18	CR	88	LYS	2.8
43	BH	168	PRO	2.8
25	AZ	193	ASN	2.8
52	DT	6	LEU	2.8
25	CZ	63	ILE	2.8
36	BA	1046	A	2.8
36	BA	1420	U	2.8
57	DY	74	PRO	2.8
36	BA	2892	A	2.8
42	DG	50	ALA	2.8
9	CI	7	THR	2.8
51	DS	35	ILE	2.8
25	CZ	296	GLU	2.8
7	AG	84	ASN	2.8
1	AA	1035	A	2.8
1	AA	90	U	2.7
22	CW	16	U	2.7
57	DY	4	LYS	2.7
25	AZ	370	PHE	2.7
36	DA	1509	C	2.7
4	AD	107	ARG	2.7
38	DC	118	ASP	2.7
24	AY	60	U	2.7
1	CA	92	C	2.7
36	BA	654(B)	C	2.7
36	DA	654(U)	A	2.7
36	BA	2189	U	2.7
52	DT	134	GLU	2.7
48	DP	27	HIS	2.7
32	D6	21	TYR	2.7
13	CM	124	PRO	2.7
43	BH	13	LYS	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	DH	22	GLY	2.7
25	AZ	326	GLU	2.7
38	DC	101	GLN	2.7
58	DZ	165	VAL	2.7
1	AA	1027	C	2.7
1	AA	1001	A	2.7
36	BA	1095	A	2.7
57	DY	39	VAL	2.7
24	CY	10	G	2.7
25	AZ	142	ASP	2.7
36	BA	1059	G	2.7
51	DS	107	GLU	2.7
25	CZ	319	SER	2.7
36	BA	277	C	2.7
36	BA	1085	A	2.7
36	BA	1509(A)	A	2.7
27	D1	85	LEU	2.7
24	CY	57	G	2.7
25	CZ	336	SER	2.7
36	DA	1079	C	2.7
34	B8	48	PHE	2.7
38	DC	130	ILE	2.7
53	DU	118	GLY	2.7
25	CZ	115	GLN	2.7
13	AM	117	VAL	2.7
24	CY	22	G	2.7
36	BA	1090	U	2.7
36	BA	2897	U	2.7
43	BH	101	ARG	2.7
38	DC	125	SER	2.7
25	CZ	206	ILE	2.7
32	D6	54	ILE	2.7
24	CY	73	G	2.7
36	DA	271(J)	C	2.7
25	AZ	65	THR	2.7
48	DP	118	GLY	2.6
54	BV	101	GLY	2.6
38	DC	92	ASP	2.6
25	AZ	261	GLU	2.6
40	BE	10	GLY	2.6
48	DP	90	ARG	2.6
19	AS	28	LYS	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
34	D8	35	GLN	2.6
36	DA	1081	U	2.6
39	DD	25	THR	2.6
1	AA	1005	A	2.6
4	AD	37	PRO	2.6
10	AJ	25	GLU	2.6
19	AS	29	ARG	2.6
38	DC	129	ARG	2.6
25	AZ	11	HIS	2.6
36	BA	1104	C	2.6
38	DC	110	PHE	2.6
18	CR	24	ALA	2.6
25	AZ	196	VAL	2.6
52	BT	27	THR	2.6
4	AD	184	LYS	2.6
51	DS	90	GLY	2.6
54	BV	54	GLY	2.6
43	BH	96	ALA	2.6
36	BA	275	G	2.6
36	BA	2190	G	2.6
25	CZ	146	LEU	2.6
51	DS	68	GLN	2.6
1	AA	92	C	2.6
1	AA	1129	C	2.6
25	CZ	195	TRP	2.6
36	DA	888	C	2.6
57	DY	60	PHE	2.6
39	BD	25	THR	2.6
9	CI	88	TYR	2.6
52	BT	3	ARG	2.6
36	BA	654(Q)	C	2.6
25	CZ	405	GLU	2.6
7	CG	81	GLY	2.6
10	CJ	75	ILE	2.6
23	AX	13	A	2.6
36	DA	1089	G	2.6
41	BF	1	MET	2.6
36	BA	1543	C	2.6
57	DY	44	ILE	2.6
13	AM	7	VAL	2.6
25	AZ	110	ASP	2.6
26	B0	84	LEU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	DH	54	ARG	2.6
36	DA	884	C	2.6
39	BD	275	LYS	2.6
51	DS	83	LYS	2.6
57	BY	65	ALA	2.6
38	DC	94	VAL	2.6
43	BH	43	VAL	2.6
10	CJ	73	ASP	2.5
36	DA	1847	A	2.5
1	AA	79	G	2.5
24	AY	43	G	2.5
36	BA	2793	G	2.5
36	DA	2807	G	2.5
41	DF	14	PRO	2.5
36	BA	655	A	2.5
36	BA	1535	A	2.5
57	DY	56	PRO	2.5
24	AY	29	G	2.5
25	CZ	392	GLY	2.5
1	AA	1125	U	2.5
36	DA	405	U	2.5
40	DE	68	ALA	2.5
10	CJ	91	PRO	2.5
43	DH	41	MET	2.5
51	DS	40	ILE	2.5
24	AY	47	U	2.5
25	CZ	35	ALA	2.5
28	B2	53	LEU	2.5
34	D8	48	PHE	2.5
51	DS	80	LEU	2.5
36	DA	345	A	2.5
1	AA	82	U	2.5
36	BA	2804	C	2.5
1	CA	1001(A)	G	2.5
1	CA	1026	G	2.5
10	CJ	72	VAL	2.5
50	DR	58	GLY	2.5
2	AB	122	PHE	2.5
24	AY	73	G	2.5
25	CZ	34	VAL	2.5
36	DA	1099	G	2.5
36	DA	2894	G	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
10	CJ	5	ARG	2.5
13	CM	122	LYS	2.5
22	CW	7	A	2.5
30	B4	15	ILE	2.5
36	BA	1097	U	2.5
36	DA	1098	A	2.5
36	DA	1534	U	2.5
43	DH	113	VAL	2.5
57	DY	64	GLU	2.5
26	D0	7	LEU	2.5
43	DH	42	ARG	2.5
36	DA	614(B)	G	2.5
16	CP	46	PRO	2.5
1	AA	1029	C	2.5
36	BA	34	C	2.5
1	AA	1032	G	2.5
1	CA	73	G	2.5
19	CS	9	VAL	2.5
51	BS	33	LYS	2.5
25	CZ	310	ILE	2.5
36	BA	2103	C	2.5
4	AD	47	ARG	2.5
25	AZ	185	ASN	2.5
48	DP	51	PHE	2.5
58	BZ	82	ARG	2.5
2	CB	133	LYS	2.5
20	CT	104	LEU	2.5
4	CD	169	LYS	2.4
10	AJ	80	LYS	2.4
24	CY	13	C	2.4
24	CY	74	C	2.4
36	DA	2402	C	2.4
38	BC	102	LYS	2.4
57	DY	67	LEU	2.4
25	AZ	1	ALA	2.4
25	AZ	186	PRO	2.4
36	DA	1033	U	2.4
26	D0	5	LYS	2.4
57	DY	63	LYS	2.4
4	CD	178	VAL	2.4
41	DF	124	LEU	2.4
36	BA	1536	C	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	BE	54	GLN	2.4
41	DF	18	ARG	2.4
52	BT	91	ARG	2.4
22	AW	21	A	2.4
24	AY	40	C	2.4
36	BA	1174	A	2.4
41	BF	10	PRO	2.4
11	CK	12	ARG	2.4
25	CZ	64	ASN	2.4
19	AS	43	GLU	2.4
36	BA	1092	C	2.4
36	BA	1509	C	2.4
36	DA	1075	C	2.4
4	CD	155	LEU	2.4
41	DF	172	TRP	2.4
24	AY	21	A	2.4
7	CG	85	TYR	2.4
25	AZ	131	ILE	2.4
25	CZ	77	TYR	2.4
57	BY	91	GLU	2.4
25	CZ	341	GLN	2.4
48	DP	107	LYS	2.4
25	AZ	76	HIS	2.4
25	CZ	261	GLU	2.4
43	BH	81	GLU	2.4
24	AY	74	C	2.4
36	DA	654(T)	C	2.4
36	DA	1096	A	2.4
36	BA	2895	U	2.4
42	DG	80	PHE	2.4
48	DP	15	ARG	2.4
40	BE	132	HIS	2.4
25	AZ	397	ALA	2.4
28	B2	56	GLN	2.4
40	BE	52	LEU	2.4
24	CY	40	C	2.4
36	BA	271(N)	U	2.4
36	DA	158	U	2.4
36	DA	277	C	2.4
36	BA	1740	G	2.4
52	DT	133	GLU	2.4
21	CU	24	ARG	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
43	DH	148	ILE	2.4
36	DA	34	C	2.4
36	DA	1061	U	2.4
4	CD	157	LEU	2.4
30	D4	32	TYR	2.4
25	AZ	83	PRO	2.3
42	BG	81	LYS	2.3
25	CZ	367	ASN	2.3
36	BA	1083	U	2.3
1	CA	1447	A	2.3
27	D1	76	ARG	2.3
9	CI	90	PRO	2.3
25	AZ	401	THR	2.3
22	CW	53	G	2.3
23	CX	18	G	2.3
36	DA	275	G	2.3
54	DV	27	ALA	2.3
38	DC	137	LEU	2.3
57	DY	35	TYR	2.3
25	AZ	218	ASP	2.3
43	BH	14	GLY	2.3
9	AI	58	HIS	2.3
57	DY	30	VAL	2.3
26	D0	70	GLN	2.3
48	DP	104	GLY	2.3
24	CY	23	A	2.3
57	DY	69	ALA	2.3
30	D4	38	LYS	2.3
2	AB	21	ARG	2.3
19	AS	41	VAL	2.3
57	BY	3	VAL	2.3
1	CA	1537	U	2.3
54	DV	1	MET	2.3
36	BA	654(N)	G	2.3
36	BA	2805	G	2.3
25	AZ	260	PRO	2.3
26	B0	74	ARG	2.3
36	BA	2179	C	2.3
25	AZ	314	THR	2.3
24	CY	58	A	2.3
24	CY	53	G	2.3
36	BA	11	G	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	DA	1091	G	2.3
46	BN	3	THR	2.3
36	DA	1097	U	2.3
30	B4	34	GLU	2.3
25	CZ	124	ARG	2.3
48	DP	77	ARG	2.3
55	DW	112	GLY	2.3
1	CA	1131	G	2.3
16	CP	19	ILE	2.3
36	BA	1103	A	2.3
4	CD	151	LYS	2.3
25	AZ	356	PRO	2.3
36	BA	1175	U	2.3
43	BH	54	ARG	2.3
38	DC	113	VAL	2.3
25	AZ	357	PRO	2.3
36	BA	1534	U	2.3
36	DA	2895	U	2.3
50	DR	105	ARG	2.3
43	BH	17	VAL	2.3
24	CY	56	C	2.3
25	CZ	291	ARG	2.3
36	DA	1083	U	2.3
50	DR	80	PHE	2.3
22	CW	5	G	2.3
25	AZ	120	ILE	2.3
36	BA	508	G	2.3
58	BZ	139	VAL	2.3
25	AZ	344	PHE	2.2
57	DY	34	LYS	2.2
10	CJ	82	ILE	2.2
6	CF	101	ALA	2.2
22	CW	21	A	2.2
24	CY	14	A	2.2
32	B6	26	ASN	2.2
28	B2	8	LYS	2.2
50	DR	3	HIS	2.2
57	DY	86	ARG	2.2
25	AZ	332	THR	2.2
1	CA	1005	A	2.2
25	CZ	179	LEU	2.2
41	DF	181	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	AZ	169	PRO	2.2
38	DC	117	PRO	2.2
43	BH	128	PRO	2.2
26	D0	85	ALA	2.2
4	AD	175	SER	2.2
32	B6	23	THR	2.2
57	BY	83	THR	2.2
28	D2	24	LEU	2.2
4	AD	174	LEU	2.2
40	DE	128	SER	2.2
23	CX	11	U	2.2
10	CJ	6	ILE	2.2
25	CZ	260	PRO	2.2
33	B7	48	LYS	2.2
11	AK	128	ALA	2.2
25	AZ	109	ALA	2.2
36	BA	2310	A	2.2
54	DV	40	LEU	2.2
41	DF	194	MET	2.2
57	BY	47	LYS	2.2
26	B0	85	ALA	2.2
32	B6	37	ARG	2.2
41	DF	15	SER	2.2
51	DS	53	SER	2.2
36	BA	1076	C	2.2
43	BH	161	GLY	2.2
2	CB	136	VAL	2.2
52	BT	36	GLU	2.2
23	CX	13	A	2.2
9	CI	8	GLY	2.2
1	CA	1456	G	2.2
9	CI	17	VAL	2.2
22	AW	56	C	2.2
22	CW	46	G	2.2
24	CY	28	C	2.2
36	BA	10	G	2.2
25	CZ	130	TYR	2.2
40	BE	61	ARG	2.2
43	DH	97	ARG	2.2
25	CZ	65	THR	2.2
48	DP	91	PHE	2.2
25	CZ	117	ARG	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
36	BA	2789	C	2.2
36	DA	1173	G	2.2
32	D6	36	LEU	2.2
34	D8	63	PRO	2.2
16	CP	83	GLU	2.1
25	CZ	322	VAL	2.2
57	DY	5	MET	2.1
7	AG	78	ARG	2.1
41	DF	205	ARG	2.1
48	DP	26	GLY	2.1
55	BW	112	GLY	2.1
10	AJ	83	GLU	2.1
10	CJ	4	ILE	2.1
19	CS	58	VAL	2.1
36	DA	654(N)	G	2.1
43	BH	49	VAL	2.1
11	AK	127	LYS	2.1
54	BV	19	LYS	2.1
28	B2	51	ARG	2.1
48	BP	148	LEU	2.1
48	BP	71	VAL	2.1
57	DY	38	ILE	2.1
57	DY	71	LYS	2.1
30	D4	13	ARG	2.1
38	BC	110	PHE	2.1
43	DH	60	ARG	2.1
43	DH	103	LEU	2.1
34	B8	35	GLN	2.1
40	DE	54	GLN	2.1
19	AS	67	VAL	2.1
24	AY	58	A	2.1
43	DH	56	SER	2.1
48	DP	144	GLU	2.1
55	BW	113	LYS	2.1
21	CU	9	ARG	2.1
36	BA	1099	G	2.1
36	DA	508	G	2.1
36	BA	359	A	2.1
27	D1	80	LEU	2.1
28	B2	16	LEU	2.1
43	DH	109	PHE	2.1
22	AW	3	C	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
25	CZ	2	LYS	2.1
36	BA	2791	C	2.1
36	DA	654(B)	C	2.1
36	DA	2791	C	2.1
57	BY	28	LYS	2.1
13	CM	117	VAL	2.1
20	CT	9	ASN	2.1
48	BP	127	ALA	2.1
36	BA	271(J)	C	2.1
41	DF	161	GLU	2.1
27	D1	88	LYS	2.1
42	DG	75	LYS	2.1
42	DG	81	LYS	2.1
19	CS	33	THR	2.1
38	BC	78	ALA	2.1
54	DV	93	GLU	2.1
1	AA	1002	G	2.1
4	CD	146	ILE	2.1
22	AW	2	C	2.1
24	CY	75	C	2.1
25	AZ	146	LEU	2.1
32	D6	6	ARG	2.1
39	DD	273	ARG	2.1
41	DF	165	ARG	2.1
43	BH	24	VAL	2.1
54	DV	37	VAL	2.1
56	DX	53	LYS	2.1
57	DY	95	LYS	2.1
36	DA	359	A	2.1
25	CZ	337	GLY	2.1
28	B2	27	GLU	2.1
4	CD	170	VAL	2.1
41	BF	166	ALA	2.1
54	DV	46	VAL	2.1
51	DS	54	LEU	2.1
36	DA	887	A	2.1
22	CW	13	C	2.1
24	AY	5	G	2.1
24	CY	60	U	2.1
36	BA	2099	U	2.1
32	D6	20	ASN	2.1
41	BF	124	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
4	CD	150	GLU	2.1
25	AZ	4	GLU	2.1
48	BP	28	GLY	2.1
25	CZ	32	THR	2.0
36	DA	1045	A	2.0
10	CJ	10	GLY	2.0
22	CW	4	C	2.0
25	CZ	168	VAL	2.0
25	CZ	270	VAL	2.0
56	BX	26	TYR	2.0
22	CV	44	G	2.0
25	AZ	144	PRO	2.0
28	B2	26	ARG	2.0
43	DH	158	HIS	2.0
54	BV	20	LEU	2.0
25	CZ	3	GLY	2.0
30	D4	25	TYR	2.0
22	AW	17	C	2.0
22	AW	48	C	2.0
10	CJ	33	GLN	2.0
1	CA	1002	G	2.0
22	AW	46	G	2.0
22	CW	65	G	2.0
27	B1	86	SER	2.0
2	CB	37	ASN	2.0
25	CZ	154	VAL	2.0
32	B6	29	ASN	2.0
41	DF	191	ARG	2.0
57	BY	63	LYS	2.0
25	CZ	83	PRO	2.0
56	DX	85	PRO	2.0
1	CA	1035	A	2.0
25	CZ	373	GLU	2.0
34	B8	34	TRP	2.0
43	DH	43	VAL	2.0
25	AZ	64	ASN	2.0
36	DA	883	G	2.0
36	DA	1176	G	2.0
10	AJ	90	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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å ²)	Q<0.9
24	5MU	CY	54	21/22	0.80	0.39	-	144,149,151,153	0
24	MIA	AY	37	29/30	0.90	0.32	-	71,88,103,104	0
24	7MG	CY	46	24/25	0.50	0.47	-	170,172,175,176	0
24	4SU	AY	8	20/21	0.62	0.34	-	145,147,149,149	0
24	OMC	CY	32	21/22	0.82	0.50	-	107,112,121,122	0
24	PSU	CY	55	20/21	0.71	0.43	-	154,160,160,160	0
24	7MG	AY	46	24/25	0.59	0.38	-	170,172,175,176	0
24	H2U	CY	20	20/21	0.59	0.44	-	178,179,179,180	0
24	5MU	AY	54	21/22	0.78	0.32	-	145,149,150,153	0
24	MIA	CY	37	29/30	0.93	0.25	-	74,88,101,102	0
24	H2U	AY	20	20/21	0.71	0.51	-	178,179,179,179	0
24	H2U	CY	16	20/21	0.53	0.58	-	170,173,173,174	0
24	H2U	AY	17	20/21	0.67	0.63	-	170,174,175,176	0
24	OMC	AY	32	21/22	0.90	0.31	-	107,112,120,121	0
24	PSU	AY	55	20/21	0.74	0.39	-	154,159,160,161	0
24	H2U	CY	17	20/21	0.64	0.52	-	170,173,175,176	0
24	H2U	AY	16	20/21	0.54	0.59	-	169,173,173,174	0
24	4SU	CY	8	20/21	0.74	0.35	-	146,147,148,149	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. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å ²)	Q<0.9
61	KIR	CZ	502	57/57	0.84	0.35	0.28	118,120,121,123	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
59	ZN	CD	301	1/1	1.00	0.26	0.20	72,72,72,72	0
61	KIR	AZ	502	57/57	0.85	0.31	0.02	117,119,121,122	0
60	GDP	AZ	501	28/28	0.78	0.31	-0.04	130,136,140,141	0
59	ZN	CN	101	1/1	0.99	0.17	-0.10	60,60,60,60	0
59	ZN	AD	301	1/1	0.99	0.25	-0.48	59,59,59,59	0
60	GDP	CZ	501	28/28	0.86	0.17	-1.10	129,136,140,140	0
59	ZN	D4	101	1/1	0.94	0.10	-1.16	115,115,115,115	0
59	ZN	B4	101	1/1	0.97	0.17	-1.22	90,90,90,90	0
59	ZN	B9	101	1/1	0.99	0.11	-1.33	82,82,82,82	0
59	ZN	AN	101	1/1	1.00	0.16	-1.39	34,34,34,34	0
59	ZN	D9	101	1/1	0.97	0.11	-1.56	81,81,81,81	0

6.5 Other polymers [i](#)

There are no such residues in this entry.