



Full wwPDB X-ray Structure Validation Report ⓘ

May 22, 2020 – 02:58 am BST

PDB ID : 4V7U
Title : Crystal structure of the E. coli ribosome bound to erythromycin.
Authors : Dunkle, J.A.; Xiong, L.; Mankin, A.S.; Cate, J.H.D.
Deposited on : 2010-08-15
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

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

with specific help available everywhere you see the ⓘ symbol.

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

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

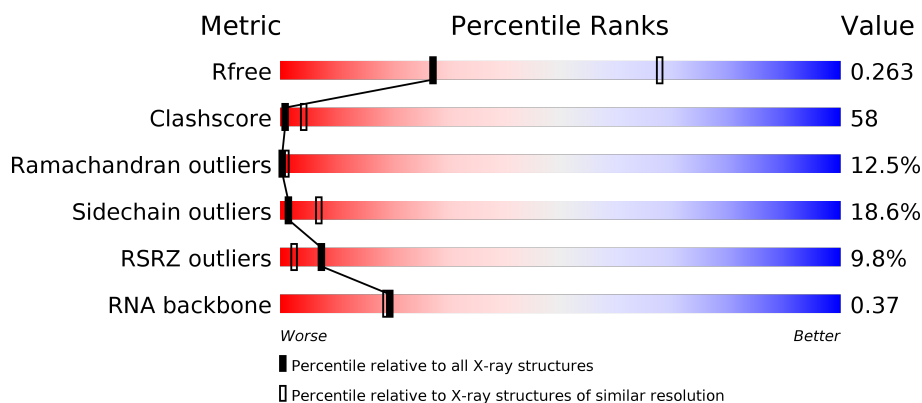
1 Overall quality at a glance

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}	130704	1094 (3.10-3.10)
Clashscore	141614	1184 (3.10-3.10)
Ramachandran outliers	138981	1141 (3.10-3.10)
Sidechain outliers	138945	1141 (3.10-3.10)
RSRZ outliers	127900	1067 (3.10-3.10)
RNA backbone	3102	1116 (3.40-2.80)

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 respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AA	1533	<div> <div>15%</div> <div>49%</div> <div>20%</div> <div>17%</div> </div>
1	CA	1533	<div> <div>3%</div> <div>12%</div> <div>48%</div> <div>25%</div> <div>14%</div> </div>
2	AB	218	<div> <div>33%</div> <div>21%</div> <div>54%</div> <div>23%</div> </div>
2	CB	218	<div> <div>31%</div> <div>22%</div> <div>63%</div> <div>14%</div> </div>

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	AC	206	
3	CC	206	
4	AD	205	
4	CD	205	
5	AE	150	
5	CE	150	
6	AF	100	
6	CF	100	
7	AG	151	
7	CG	151	
8	AH	129	
8	CH	129	
9	AI	127	
9	CI	127	
10	AJ	98	
10	CJ	98	
11	AK	117	
11	CK	117	
12	AL	123	
12	CL	123	
13	AM	114	
13	CM	114	
14	AN	100	
14	CN	100	
15	AO	88	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
15	CO	88	
16	AP	82	
16	CP	82	
17	AQ	80	
17	CQ	80	
18	AR	55	
18	CR	55	
19	AS	79	
19	CS	79	
20	AT	85	
20	CT	85	
21	AU	51	
21	CU	51	
22	BA	2904	
22	DA	2904	
23	BB	118	
23	DB	118	
24	BC	271	
24	DC	271	
25	BD	209	
25	DD	209	
26	BE	201	
26	DE	201	
27	BF	178	
27	DF	178	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
28	BG	176	
28	DG	176	
29	BH	149	
29	DH	149	
30	BI	141	
30	DI	141	
31	BJ	142	
31	DJ	142	
32	BK	122	
32	DK	122	
33	BL	143	
33	DL	143	
34	BM	136	
34	DM	136	
35	BN	120	
35	DN	120	
36	BO	116	
36	DO	116	
37	BP	114	
37	DP	114	
38	BQ	117	
38	DQ	117	
39	BR	103	
39	DR	103	
40	BS	110	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
40	DS	110	
41	BT	93	
41	DT	93	
42	BU	102	
42	DU	102	
43	BV	94	
43	DV	94	
44	BW	79	
44	DW	79	
45	BX	77	
45	DX	77	
46	BY	63	
46	DY	63	
47	BZ	58	
47	DZ	58	
48	B0	56	
48	D0	56	
49	B1	50	
49	D1	50	
50	B2	46	
50	D2	46	
51	B3	64	
51	D3	64	
52	B4	38	
52	D4	38	

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
53	MG	BA	3130	-	-	-	X
53	MG	CA	1614	-	-	-	X
53	MG	CA	1628	-	-	-	X
53	MG	DA	3003	-	-	-	X
53	MG	DA	3007	-	-	-	X
53	MG	DA	3010	-	-	-	X
53	MG	DA	3013	-	-	-	X
53	MG	DA	3015	-	-	-	X
53	MG	DA	3016	-	-	-	X
53	MG	DA	3020	-	-	-	X
53	MG	DA	3026	-	-	-	X
53	MG	DA	3028	-	-	-	X
53	MG	DA	3033	-	-	-	X
53	MG	DA	3043	-	-	-	X
53	MG	DA	3045	-	-	-	X
53	MG	DA	3057	-	-	-	X
53	MG	DA	3058	-	-	-	X
53	MG	DA	3062	-	-	-	X
53	MG	DA	3063	-	-	-	X
53	MG	DA	3064	-	-	-	X
53	MG	DA	3074	-	-	-	X
53	MG	DA	3078	-	-	-	X
53	MG	DA	3109	-	-	-	X
53	MG	DA	3111	-	-	-	X
53	MG	DA	3127	-	-	-	X
53	MG	DA	3130	-	-	-	X
53	MG	DA	3133	-	-	-	X
53	MG	DJ	201	-	-	-	X

2 Entry composition

There are 56 unique types of molecules in this entry. The entry contains 284525 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	1533	Total	C	N	O	P	0	0	0
			32895	14671	6036	10655	1533			
1	CA	1530	Total	C	N	O	P	0	0	0
			32831	14642	6024	10635	1530			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AB	218	Total	C	N	O	S	0	0	0
			1705	1081	305	312	7			
2	CB	218	Total	C	N	O	S	0	0	0
			1705	1081	305	312	7			

- 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
			1625	1028	305	289	3			
3	CC	206	Total	C	N	O	S	0	0	0
			1625	1028	305	289	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AD	205	Total	C	N	O	S	0	0	0
			1643	1026	315	298	4			
4	CD	205	Total	C	N	O	S	0	0	0
			1643	1026	315	298	4			

- 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
			1106	687	211	202	6			
5	CE	150	Total	C	N	O	S	0	0	0
			1106	687	211	202	6			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AF	100	Total	C	N	O	S	0	0	0
			818	515	148	149	6			
6	CF	100	Total	C	N	O	S	0	0	0
			818	515	148	149	6			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	AG	151	Total	C	N	O	S	0	0	0
			1182	735	227	216	4			
7	CG	150	Total	C	N	O	S	0	0	0
			1175	730	226	215	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	AH	129	Total	C	N	O	S	0	0	0
			979	616	173	184	6			
8	CH	129	Total	C	N	O	S	0	0	0
			979	616	173	184	6			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AI	127	Total	C	N	O	S	0	0	0
			1022	634	206	179	3			
9	CI	127	Total	C	N	O	S	0	0	0
			1022	634	206	179	3			

- 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
			787	493	150	143	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
			787	493	150	143	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	AK	117	Total	C	N	O	S	0	0	0
			877	540	174	160	3			
11	CK	117	Total	C	N	O	S	0	0	0
			877	540	174	160	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AL	123	Total	C	N	O	S	0	0	0
			955	590	196	165	4			
12	CL	123	Total	C	N	O	S	0	0	0
			955	590	196	165	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AM	114	Total	C	N	O	S	0	0	0
			884	546	178	157	3			
13	CM	114	Total	C	N	O	S	0	0	1
			877	541	178	155	3			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AN	96	Total	C	N	O	S	0	0	0
			774	483	160	128	3			
14	CN	95	Total	C	N	O	S	0	0	0
			769	480	159	127	3			

- 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
			714	439	144	130	1			
15	CO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AP	82	Total	C	N	O	S	0	0	0
			649	406	128	114	1			
16	CP	81	Total	C	N	O	S	0	0	1
			639	400	127	111	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AQ	80	Total	C	N	O	S	0	0	0
			649	411	121	114	3			
17	CQ	80	Total	C	N	O	S	0	0	0
			649	411	121	114	3			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	AR	55	Total	C	N	O	0	0	0
			456	288	86	82			
18	CR	55	Total	C	N	O	0	0	0
			456	288	86	82			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AS	79	Total	C	N	O	S	0	0	0
			638	408	120	108	2			
19	CS	79	Total	C	N	O	S	0	0	0
			638	408	120	108	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AT	85	Total	C	N	O	S	0	0	0
			665	411	137	114	3			
20	CT	85	Total	C	N	O	S	0	0	0
			665	411	137	114	3			

- Molecule 21 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AU	51	Total	C	N	O	S	0	0	0
			426	265	86	74	1			
21	CU	51	Total	C	N	O	S	0	0	0
			426	265	86	74	1			

- Molecule 22 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BA	2854	Total	C	N	O	P	0	0	0
			61274	27334	11279	19807	2854			
22	DA	2841	Total	C	N	O	P	0	0	0
			60995	27210	11229	19715	2841			

- Molecule 23 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BB	118	Total	C	N	O	P	0	0	0
			2529	1126	464	821	118			
23	DB	117	Total	C	N	O	P	0	0	0
			2507	1116	459	815	117			

- Molecule 24 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	BC	271	Total	C	N	O	S	0	0	0
			2083	1288	423	365	7			
24	DC	271	Total	C	N	O	S	0	0	0
			2083	1288	423	365	7			

- Molecule 25 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BD	209	Total	C	N	O	S	0	0	0
			1565	979	288	294	4			
25	DD	209	Total	C	N	O	S	0	0	0
			1565	979	288	294	4			

- Molecule 26 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	BE	201	Total	C	N	O	S	0	0	0
			1552	974	283	290	5			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	DE	201	Total	C	N	O	S	0	0	0
			1552	974	283	290	5			

- Molecule 27 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BF	178	Total	C	N	O	S	0	0	1
			1411	899	250	256	6			
27	DF	178	Total	C	N	O	S	0	0	0
			1420	905	251	258	6			

- Molecule 28 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	BG	176	Total	C	N	O	S	0	0	0
			1323	832	243	246	2			
28	DG	176	Total	C	N	O	S	0	0	0
			1323	832	243	246	2			

- Molecule 29 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	BH	149	Total	C	N	O	S	0	0	0
			1111	699	197	214	1			
29	DH	149	Total	C	N	O	S	0	0	0
			1111	699	197	214	1			

- Molecule 30 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BI	141	Total	C	N	O	S	0	0	0
			1032	651	179	196	6			
30	DI	141	Total	C	N	O	S	0	0	0
			1032	651	179	196	6			

- Molecule 31 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	BJ	142	Total	C	N	O	S	0	0	0
			1129	714	212	199	4			
31	DJ	142	Total	C	N	O	S	0	0	0
			1129	714	212	199	4			

- Molecule 32 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	BK	122	Total	C	N	O	S	0	0	0
			939	587	180	166	6			
32	DK	122	Total	C	N	O	S	0	0	0
			939	587	180	166	6			

- Molecule 33 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	BL	143	Total	C	N	O	S	0	0	0
			1045	649	206	189	1			
33	DL	143	Total	C	N	O	S	0	0	0
			1045	649	206	189	1			

- Molecule 34 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	BM	136	Total	C	N	O	S	0	0	0
			1074	686	205	177	6			
34	DM	136	Total	C	N	O	S	0	0	0
			1074	686	205	177	6			

- Molecule 35 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	BN	120	Total	C	N	O	S	0	0	0
			961	593	196	167	5			
35	DN	120	Total	C	N	O	S	0	0	0
			961	593	196	167	5			

- Molecule 36 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
36	BO	116	Total	C	N	O	0	0	0
			892	552	178	162			
36	DO	116	Total	C	N	O	0	0	0
			892	552	178	162			

- Molecule 37 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	BP	114	Total	C	N	O	S	0	0	0
			917	574	179	163	1			
37	DP	114	Total	C	N	O	S	0	0	0
			917	574	179	163	1			

- Molecule 38 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	BQ	117	Total	C	N	O	S	0	0	0
			947	604	192	151				
38	DQ	117	Total	C	N	O	S	0	0	0
			947	604	192	151				

- Molecule 39 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BR	103	Total	C	N	O	S	0	0	0
			816	516	153	145	2			
39	DR	103	Total	C	N	O	S	0	0	0
			816	516	153	145	2			

- Molecule 40 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	BS	110	Total	C	N	O	S	0	0	0
			857	532	166	156	3			
40	DS	110	Total	C	N	O	S	0	0	0
			857	532	166	156	3			

- Molecule 41 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	BT	93	Total	C	N	O	S	0	0	0
			739	466	139	132	2			
41	DT	93	Total	C	N	O	S	0	0	0
			739	466	139	132	2			

- Molecule 42 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BU	102	Total	C	N	O	S	0	0	0
			780	492	146	142				

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
42	DU	102	Total	C	N	O	0	0	0
			780	492	146	142			

- Molecule 43 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	BV	94	Total	C	N	O	S	0	0	0
			753	479	137	134	3			
43	DV	94	Total	C	N	O	S	0	0	0
			753	479	137	134	3			

- Molecule 44 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	BW	79	Total	C	N	O	S	0	0	0
			596	367	120	108	1			
44	DW	79	Total	C	N	O	S	0	0	0
			596	367	120	108	1			

- Molecule 45 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	BX	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			
45	DX	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			

- Molecule 46 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	BY	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			
46	DY	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			

- Molecule 47 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BZ	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			
47	DZ	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			

- Molecule 48 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	B0	56	Total	C	N	O	S	0	0	0
			444	269	94	80	1			
48	D0	56	Total	C	N	O	S	0	0	0
			444	269	94	80	1			

- Molecule 49 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	B1	50	Total	C	N	O	0	0	0
			410	263	75	72			
49	D1	50	Total	C	N	O	0	0	0
			410	263	75	72			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	B2	46	Total	C	N	O	S	0	0	0
			377	228	90	57	2			
50	D2	46	Total	C	N	O	S	0	0	0
			377	228	90	57	2			

- Molecule 51 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	B3	64	Total	C	N	O	S	0	0	0
			504	323	105	74	2			
51	D3	64	Total	C	N	O	S	0	0	0
			504	323	105	74	2			

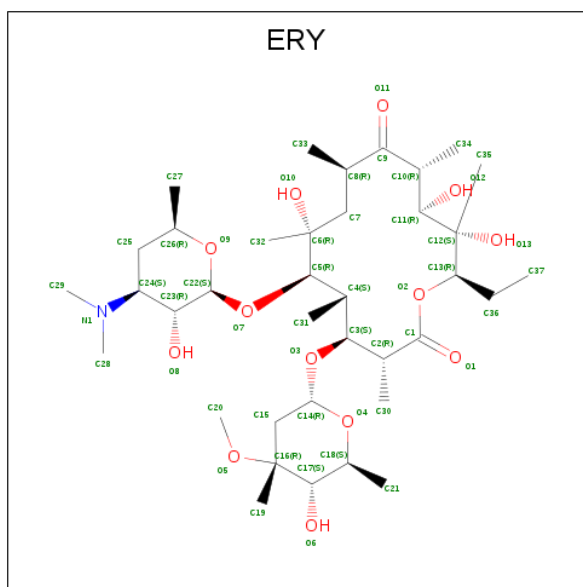
- Molecule 52 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	B4	38	Total	C	N	O	S	0	0	0
			302	185	65	48	4			
52	D4	38	Total	C	N	O	S	0	0	0
			302	185	65	48	4			

- Molecule 53 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
53	BB	4	Total Mg 4 4	0	0
53	BA	135	Total Mg 135 135	0	0
53	CA	42	Total Mg 42 42	0	0
53	DJ	1	Total Mg 1 1	0	0
53	AA	41	Total Mg 41 41	0	0
53	AN	2	Total Mg 2 2	0	0
53	DA	133	Total Mg 133 133	0	0
53	DC	2	Total Mg 2 2	0	0
53	DB	1	Total Mg 1 1	0	0

- Molecule 54 is ERYTHROMYCIN A (three-letter code: ERY) (formula: $C_{37}H_{67}NO_{13}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
54	BA	1	Total C N O 51 37 1 13	0	0

- Molecule 55 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
55	B4	1	Total Zn 1 1	0	0
55	D4	1	Total Zn 1 1	0	0

- Molecule 56 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
56	AA	197	Total O 197 197	0	0
56	AE	1	Total O 1 1	0	0
56	AL	1	Total O 1 1	0	0
56	AN	7	Total O 7 7	0	0
56	AT	1	Total O 1 1	0	0
56	AU	1	Total O 1 1	0	0
56	BA	605	Total O 605 605	0	0
56	BB	19	Total O 19 19	0	0
56	BC	7	Total O 7 7	0	0
56	BD	3	Total O 3 3	0	0
56	BE	1	Total O 1 1	0	0
56	BL	4	Total O 4 4	0	0
56	BN	2	Total O 2 2	0	0
56	BR	1	Total O 1 1	0	0
56	BT	2	Total O 2 2	0	0
56	BV	1	Total O 1 1	0	0
56	B3	3	Total O 3 3	0	0
56	B4	2	Total O 2 2	0	0

Continued on next page...

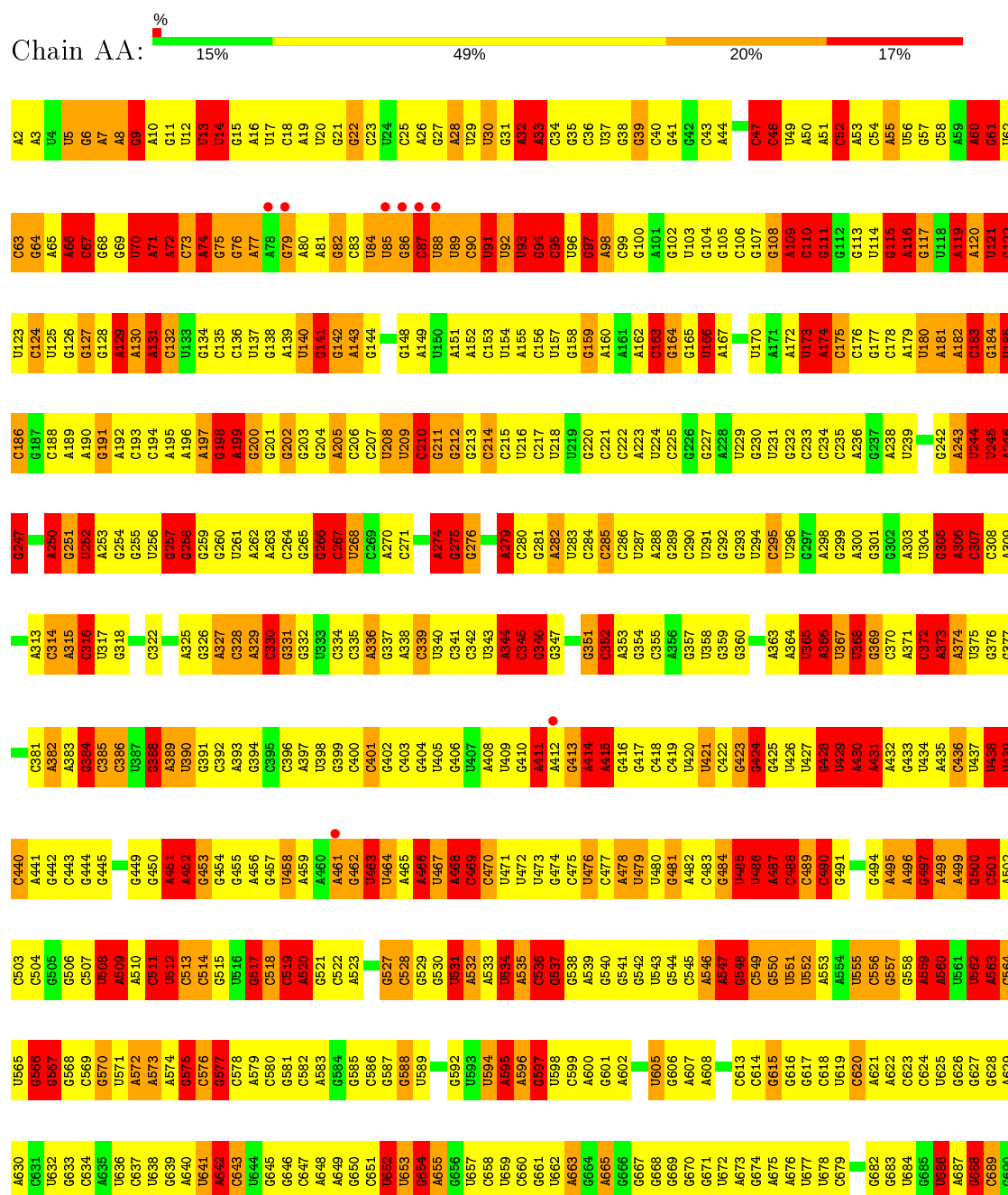
Continued from previous page...

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
56	CA	195	Total 195	O 195	0	0
56	CE	3	Total 3	O 3	0	0
56	CL	1	Total 1	O 1	0	0
56	CN	3	Total 3	O 3	0	0
56	CT	4	Total 4	O 4	0	0
56	CU	1	Total 1	O 1	0	0
56	DA	600	Total 600	O 600	0	0
56	DB	3	Total 3	O 3	0	0
56	DC	13	Total 13	O 13	0	0
56	DD	2	Total 2	O 2	0	0
56	DE	4	Total 4	O 4	0	0
56	DJ	3	Total 3	O 3	0	0
56	DL	4	Total 4	O 4	0	0
56	DN	2	Total 2	O 2	0	0
56	DT	2	Total 2	O 2	0	0
56	DU	2	Total 2	O 2	0	0
56	DV	2	Total 2	O 2	0	0
56	D2	1	Total 1	O 1	0	0
56	D3	1	Total 1	O 1	0	0
56	D4	4	Total 4	O 4	0	0

3 Residue-property plots

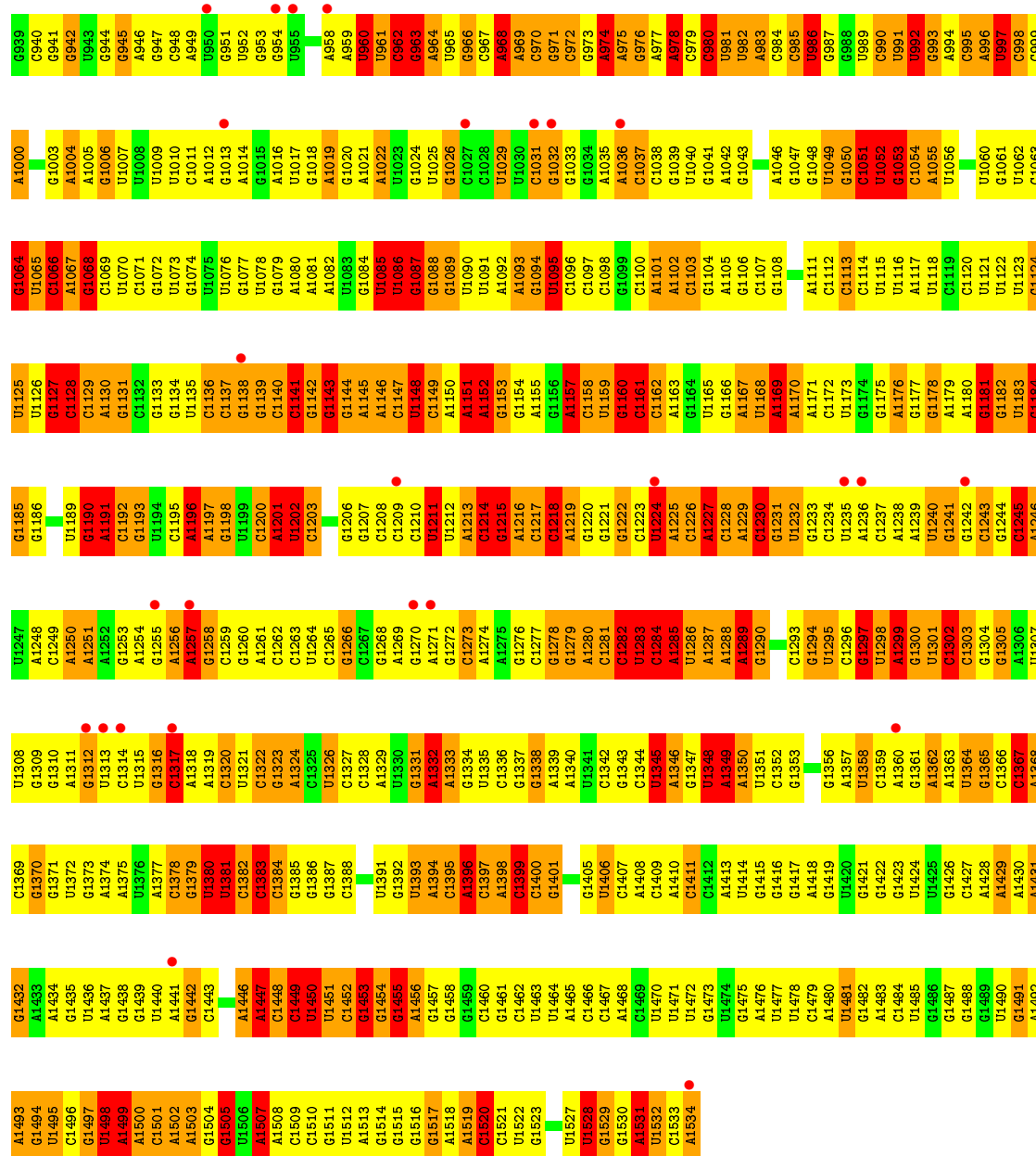
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are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

• Molecule 1: 16S rRNA

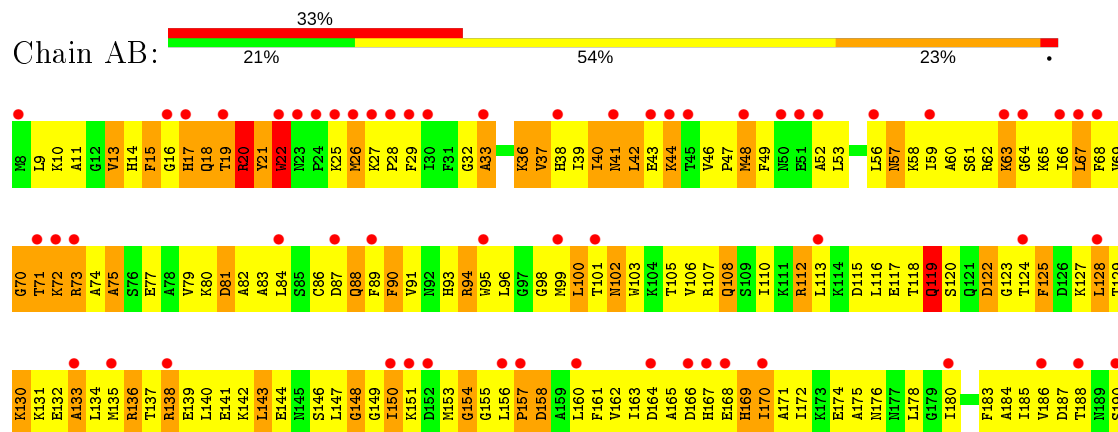


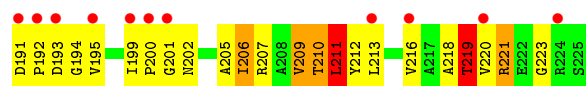
G691	G692	G693	G694	G695	G696	G697	G698	G699	G700	G701	G702	G703	G704	G705	G706	G707	G708	G709	G710	G711	G712	G713	G714	G715	G716	G717	G718	G719	G720	G721	G722	G723	G724	G725	G726	G727	G728	G729	G730	G731	G732	G733	G734	G735	G736	G737	G738	G739	G740	G741	G742	G743	G744	G745	G746	G747	G748	G749	G750	G751	G752	G753	G754	G755	G756	G757	G758	G759	G760	G761	G762	G763	G764	G765	G766	G767	G768	G769	G770	G771	G772	G773	G774	G775	G776	G777	G778	G779	G780	G781	G782	G783	G784	G785	G786	G787	G788	G789	G790	G791	G792	G793	G794	G795	G796	G797	G798	G799	G800	G801	G802	G803	G804	G805	G806	G807	G808	G809	G810	G811	G812	G813	G814	G815	G816	G817	G818	G819	G820	G821	G822	G823	G824	G825	G826	G827	G828	G829	G830	G831	G832	G833	G834	G835	G836	G837	G838	G839	G840	G841	G842	G843	G844	G845	G846	G847	G848	G849	G850	G851	G852	G853	G854	G855	G856	G857	G858	G859	G860	G861	G862	G863	G864	G865	G866	G867	G868	G869	G870	G871	G872	G873	G874	G875	G876	G877	G878	G879	G880	G881	G882	G883	G884	G885	G886	G887	G888	G889	G890	G891	G892	G893	G894	G895	G896	G897	G898	G899	G900	G901	G902	G903	G904	G905	G906	G907	G908	G909	G910	G911	G912	G913	G914	G915	G916	G917	G918	G919	G920	G921	G922	G923	G924	G925	G926	G927	G928	G929	G930	G931	G932	G933	G934	G935	G936	G937	G938	G939	G940	G941	G942	G943	G944	G945	G946	G947	G948	G949	G950	G951	G952	G953	G954	G955	G956	G957	G958	G959	G960	G961	G962	G963	G964	G965	G966	G967	G968	G969	G970	G971	G972	G973	G974	G975	G976	G977	G978	G979	G980	G981	G982	G983	G984	G985	G986	G987	G988	G989	G990	G991	G992	G993	G994	G995	G996	G997	G998	G999	G1000	G1001	G1002	G1003	G1004	G1005	G1006	G1007	G1008	G1009	G1010	G1011	G1012	G1013	G1014	G1015	G1016	G1017	G1018	G1019	G1020	G1021	G1022	G1023	G1024	G1025	G1026	G1027	G1028	G1029	G1030	G1031	G1032	G1033	G1034	G1035	G1036	G1037	G1038	G1039	G1040	G1041	G1042	G1043	G1044	G1045	G1046	G1047	G1048	G1049	G1050	G1051	G1052	G1053	G1054	G1055	G1056	G1057	G1058	G1059	G1060	G1061	G1062	G1063	G1064	G1065	G1066	G1067	G1068	G1069	G1070	G1071	G1072	G1073	G1074	G1075	G1076	G1077	G1078	G1079	G1080	G1081	G1082	G1083	G1084	G1085	G1086	G1087	G1088	G1089	G1090	G1091	G1092	G1093	G1094	G1095	G1096	G1097	G1098	G1099	G1100	G1101	G1102	G1103	G1104	G1105	G1106	G1107	G1108	G1109	G1110	G1111	G1112	G1113	G1114	G1115	G1116	G1117	G1118	G1119	G1120	G1121	G1122	G1123	G1124	G1125	G1126	G1127	G1128	G1129	G1130	G1131	G1132	G1133	G1134	G1135	G1136	G1137	G1138	G1139	G1140	G1141	G1142	G1143	G1144	G1145	G1146	G1147	G1148	G1149	G1150	G1151	G1152	G1153	G1154	G1155	G1156	G1157	G1158	G1159	G1160	G1161	G1162	G1163	G1164	G1165	G1166	G1167	G1168	G1169	G1170	G1171	G1172	G1173	G1174	G1175	G1176	G1177	G1178	G1179	G1180	G1181	G1182	G1183	G1184	G1185	G1186	G1187	G1188	G1189	G1190	G1191	G1192	G1193	G1194	G1195	G1196	G1197	G1198	G1199	G1200	G1201	G1202	G1203	G1204	G1205	G1206	G1207	G1208	G1209	G1210	G1211	G1212	G1213	G1214	G1215	G1216	G1217	G1218	G1219	G1220	G1221	G1222	G1223	G1224	G1225	G1226	G1227	G1228	G1229	G1230	G1231	G1232	G1233	G1234	G1235	G1236	G1237	G1238	G1239	G1240	G1241	G1242	G1243	G1244	G1245	G1246	G1247	G1248	G1249	G1250	G1251	G1252	G1253	G1254	G1255	G1256	G1257	G1258	G1259	G1260	G1261	G1262	G1263	G1264	G1265	G1266	G1267	G1268	G1269	G1270	G1271	G1272	G1273	G1274	G1275	G1276	G1277	G1278	G1279	G1280	G1281	G1282	G1283	G1284	G1285	G1286	G1287	G1288	G1289	G1290	G1291	G1292	G1293	G1294	G1295	G1296	G1297	G1298	G1299	G1300	G1301	G1302	G1303	G1304	G1305	G1306	G1307	G1308	G1309	G1310	G1311	G1312	G1313	G1314	G1315	G1316	G1317	G1318	G1319	G1320	G1321	G1322	G1323	G1324	G1325	G1326	G1327	G1328	G1329	G1330	G1331	G1332	G1333	G1334	G1335	G1336	G1337	G1338	G1339	G1340	G1341	G1342	G1343	G1344	G1345	G1346	G1347	G1348	G1349	G1350	G1351	G1352	G1353	G1354	G1355	G1356	G1357	G1358	G1359	G1360	G1361	G1362	G1363	G1364	G1365	G1366	G1367	G1368	G1369	G1370	G1371	G1372	G1373	G1374	G1375	G1376	G1377	G1378	G1379	G1380	G1381	G1382	G1383	G1384	G1385	G1386	G1387	G1388	G1389	G1390	G1391	G1392	G1393	G1394	G1395	G1396	G1397	G1398	G1399	G1400	G1401	G1402	G1403	G1404	G1405	G1406	G1407	G1408	G1409	G1410	G1411	G1412	G1413	G1414	G1415	G1416	G1417	G1418	G1419	G1420	G1421	G1422	G1423	G1424	G1425	G1426	G1427	G1428	G1429	G1430	G1431	G1432	G1433	G1434	G1435	G1436	G1437	G1438	G1439	G1440	G1441	G1442	G1443	G1444	G1445	G1446	G1447	G1448	G1449	G1450	G1451	G1452	G1453	G1454	G1455	G1456	G1457	G1458	G1459	G1460	G1461	G1462	G1463	G1464	G1465	G1466	G1467	G1468	G1469	G1470	G1471	G1472	G1473	G1474	G1475	G1476	G1477	G1478	G1479	G1480	G1481	G1482	G1483	G1484	G1485	G1486	G1487	G1488	G1489	G1490	G1491	G1492	G1493	G1494	G1495	G1496	G1497	G1498	G1499	G1500	G1501	G1502	G1503	G1504	G1505	G1506	G1507	G1508	G1509	G1510	G1511	G1512	G1513	G1514	G1515	G1516	G1517	G1518	G1519	G1520	G1521	G1522	G1523	G1524	G1525	G1526	G1527	G1528	G1529	G1530	G1531	G1532	G1533	G1534	G1535	G1536	G1537	G1538	G1539	G1540	G1541	G1542	G1543	G1544	G1545	G1546	G1547	G1548	G1549	G1550	G1551	G1552	G1553	G1554	G1555	G1556	G1557	G1558	G1559	G1560	G1561	G1562	G1563	G1564	G1565	G1566	G1567	G1568	G1569	G1570	G1571	G1572	G1573	G1574	G1575	G1576	G1577	G1578	G1579	G1580	G1581	G1582	G1583	G1584	G1585	G1586	G1587	G1588	G1589	G1590	G1591	G1592	G1593	G1594	G1595	G1596	G1597	G1598	G1599	G1600	G1601	G1602	G1603	G1604	G1605	G1606	G1607	G1608	G1609	G1610	G1611	G1612	G1613	G1614	G1615	G1616	G1617	G1618	G1619	G1620	G1621	G1622	G1623	G1624	G1625	G1626	G1627	G1628	G1629	G1630	G1631	G1632	G1633	G1634	G1635	G1636	G1637	G1638	G1639	G1640	G1641	G1642	G1643	G1644	G1645	G1646	G1647	G1648	G1649	G1650	G1651	G1652	G1653	G1654	G1655	G1656	G1657	G1658	G1659	G1660	G1661	G1662	G1663	G1664	G1665	G1666	G1667	G1668	G1669	G1670	G1671	G1672	G1673	G1674	G1675	G1676	G1677	G1678	G1679	G1680	G1681	G1682	G1683	G1684	G1685	G1686	G1687	G1688	G1689	G1690	G1691	G1692	G1693	G1694	G1695	G1696	G1697	G1698	G1699	G1700	G1701	G1702	G1703	G1704	G1705	G1706	G1707	G1708	G1709	G1710	G1711	G1712	G1713	G1714	G1715	G1716	G1717	G1718	G1719	G1720	G1721	G1722	G1723	G1724	G1725	G1726	G1727	G1728	G1729	G1730	G1731	G1732	G1733	G1734	G1735	G1736	G1737	G1738	G1739	G1740	G1741	G1742	G1743	G1744	G1745	G1746	G1747	G1748	G1749	G1750	G1751	G1752	G1753	G1754	G1755	G1756	G1757	G1758	G1759	G1760	G1761	G1762	G1763	G1764	G1765	G1766	G1767	G1768	G1769	G1770	G1771	G1772	G1773	G1774	G1775	G1776	G1777	G1778	G1779	G1780	G1781	G1782	G1783	G1784	G1785	G1786	G1787	G1788	G1789	G1790	G1791	G1792	G1793	G1794	G1795	G1796	G1797	G1798	G1799	G1800	G1801	G1802	G1803	G1804	G1805	G1806	G1807	G1808	G1809	G1810	G1811	G1812	G1813	G1814	G1815	G1816	G1817	G1818	G1819	G1820	G1821	G1822	G1823	G1824	G1825	G1826	G1827	G1828	G1829	G1830	G1831	G1832	G1833	G1834	G1835	G1836	G1837	G1838	G1839	G1840	G1841	G1842	G1843	G1844	G1845	G1846	G1847	G1848	G1849	G1850	G1851	G1852	G1853	G1854	G1855	G1856	G1857	G1858	G1859	G1860	G1861	G1862	G1863	G1864	G1865	G1866	G1867	G1868	G1869	G1870	G1871	G1872	G1873	G1874	G1875	G1876	G1877	G1878	G1879	G1880	G1881	G1882	G1883	G1884	G1885	G1886	G1887	G1888	G1889	G1890	G1891	G1892	G1893	G1894	G1895	G1896	G1897	G1898	G1899	G1900	G1901	G1902	G1903	G1904	G1905	G1906	G1907	G1908	G1909	G1910	G1911	G1912	G1913	G1914	G1915	G1916	G1917	G1918	G1919	G1920	G1921	G1922	G1923	G1924	G1925	G1926	G1927	G1928	G1929	G1930	G1931	G1932	G1933	G1934	G1935	G1936	G1937	G1938	G1939	G1940	G1941	G1942	G1943	G1944	G1945	G1946	G1947	G1948	G1949	G1950	G1951	G1952	G1953	G1954	G1955	G1956	G1957	G1958	G1959	G1960	G1961	G1962	G1963	G1964	G1965	G1966	G1967	G1968	G1969	G1970	G1971	G1972	G1973	G1974	G1975	G1976	G1977	G1978	G1979	G1980	G1981	G1982	G1983	G1984	G1985	G1986	G1987	G1988	G1989	G1990	G1991	G1992	G1993	G1994	G1995	G1996	G1997	G1998	G1999	G2000	G2001	G2002	G2003	G2004	G2005	G2006	G2007	G2008	G2009	G2010	G2011	G2012	G2013	G2014	G2015	G2016	G2017	G2018	G2019	G2020	G2021	G2022	G2023	G2024	G2025	G2026	G2027	G2028	G2029	G2030	G2031	G2032	G2033	G2034	G2035	G2036	G2037	G2038	G2039	G2040	G2041	G2042	G2043	G2044	G2045	G2046	G2047	G2048	G2049	G2050	G2051	G2052	G2053	G2054	G2055	G2056	G2057	G2058	G2059	G2060	G2061	G2062	G2063	G2064	G2065	G2066	G2067	G2068	G2069	G2070	G2071	G2072	G2073	G2074	G2075	G2076	G2077	G2078	G2079	G2080	G2081	G2082	G2083	G2084	G2085
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------



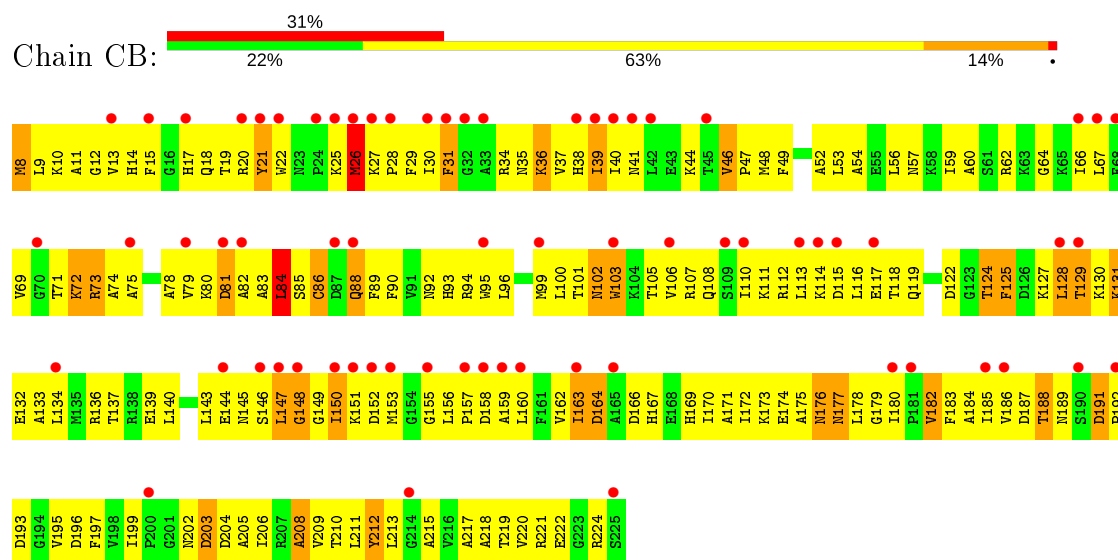


• Molecule 2: 30S ribosomal protein S2

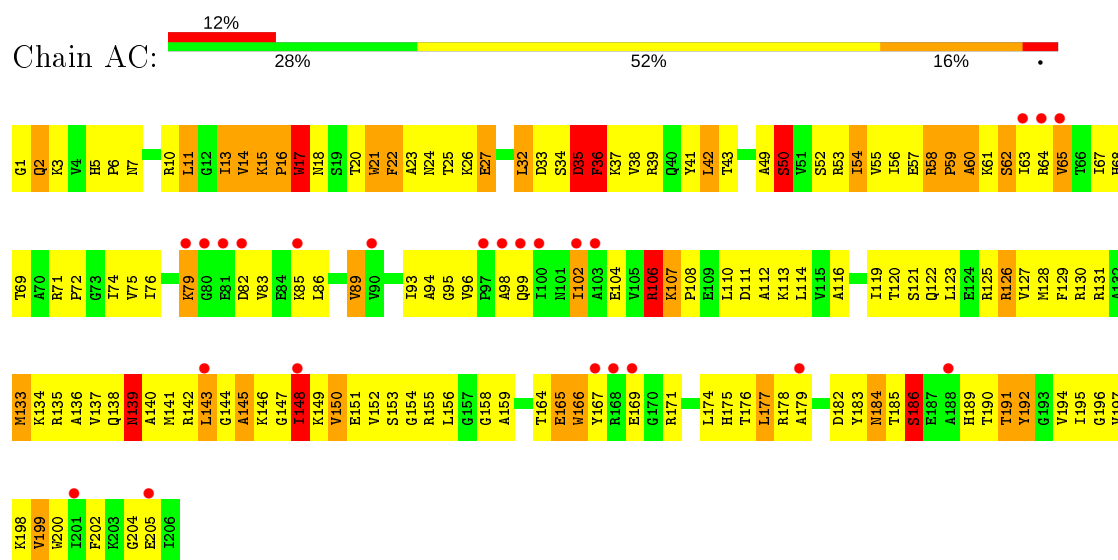




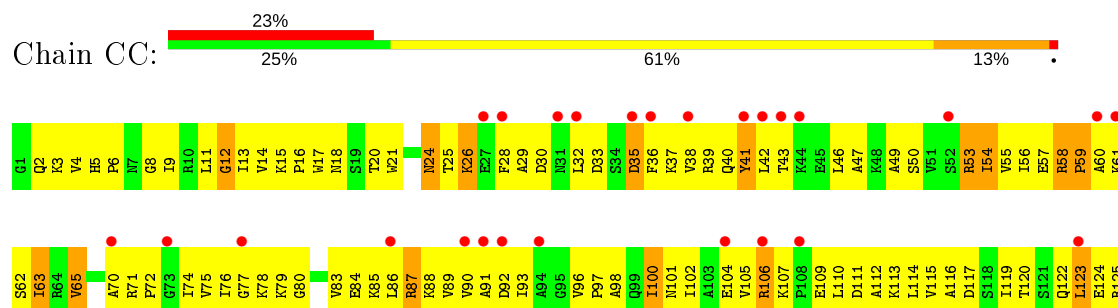
• Molecule 2: 30S ribosomal protein S2

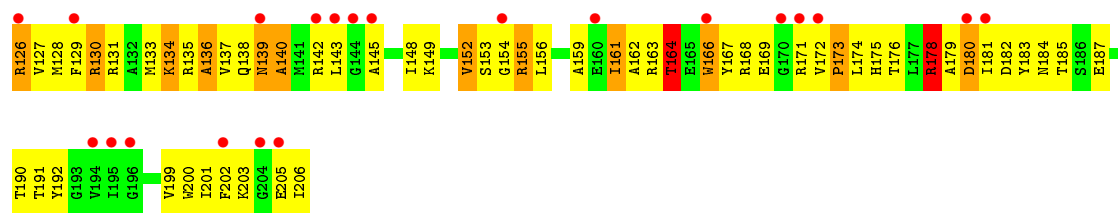


• Molecule 3: 30S ribosomal protein S3

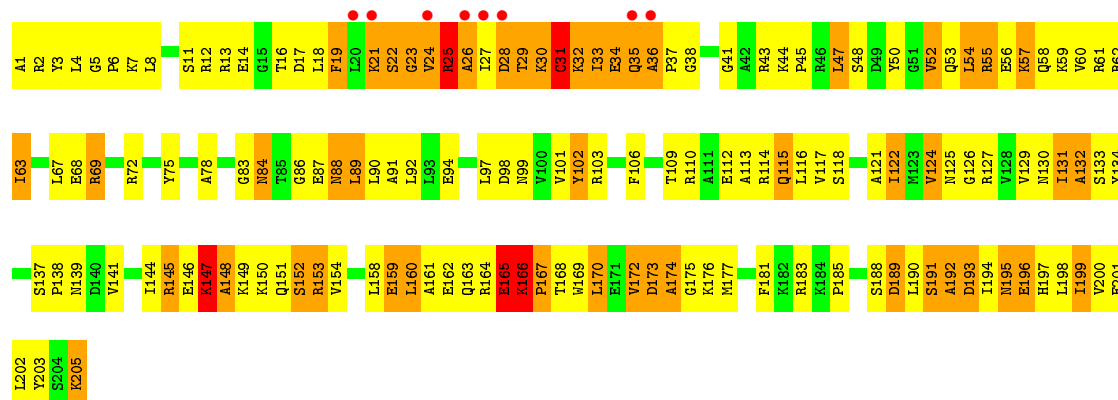


• Molecule 3: 30S ribosomal protein S3

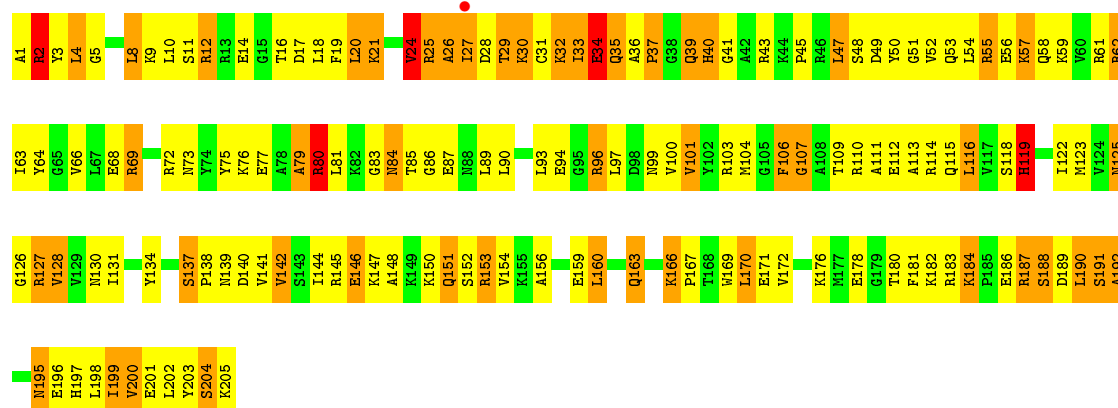




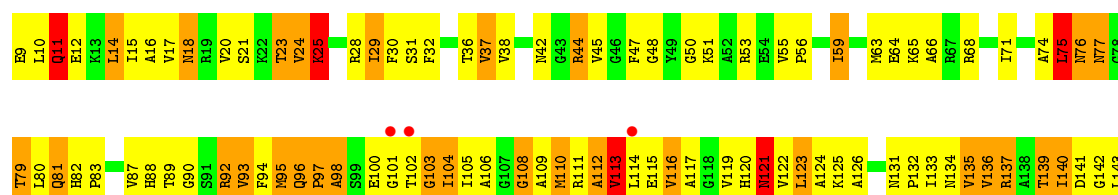
• Molecule 4: 30S ribosomal protein S4



• Molecule 4: 30S ribosomal protein S4

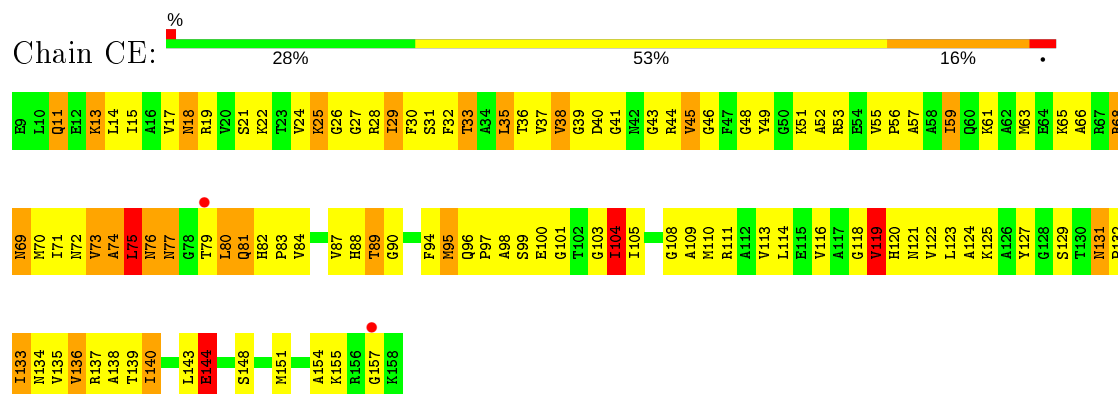


• Molecule 5: 30S ribosomal protein S5

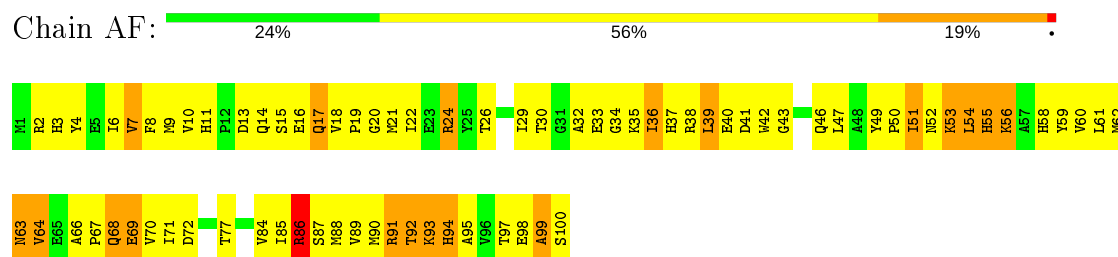


E144
M146
M147
S148
P149
E150
M151
V152
A153
A154
K155
R156
G157
K158

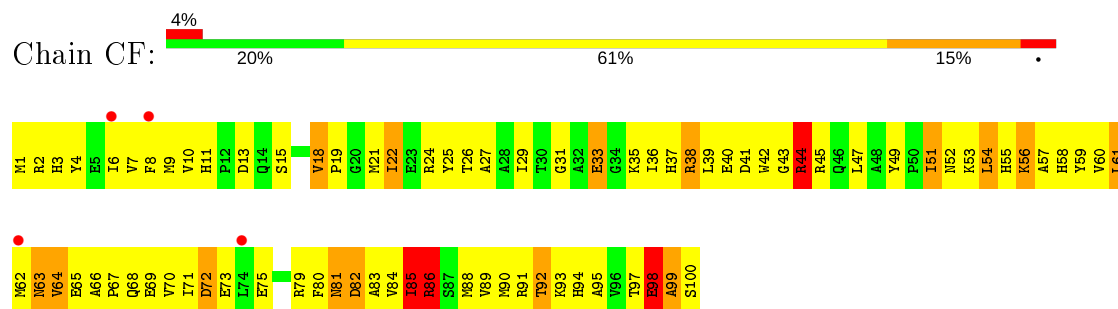
• Molecule 5: 30S ribosomal protein S5



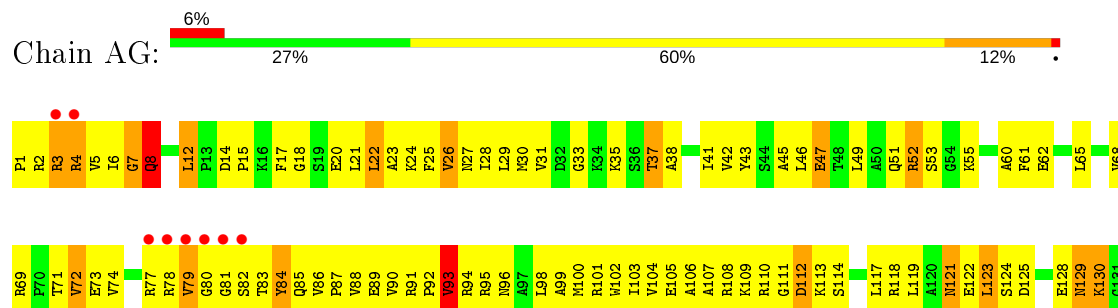
• Molecule 6: 30S ribosomal protein S6

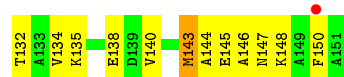


• Molecule 6: 30S ribosomal protein S6

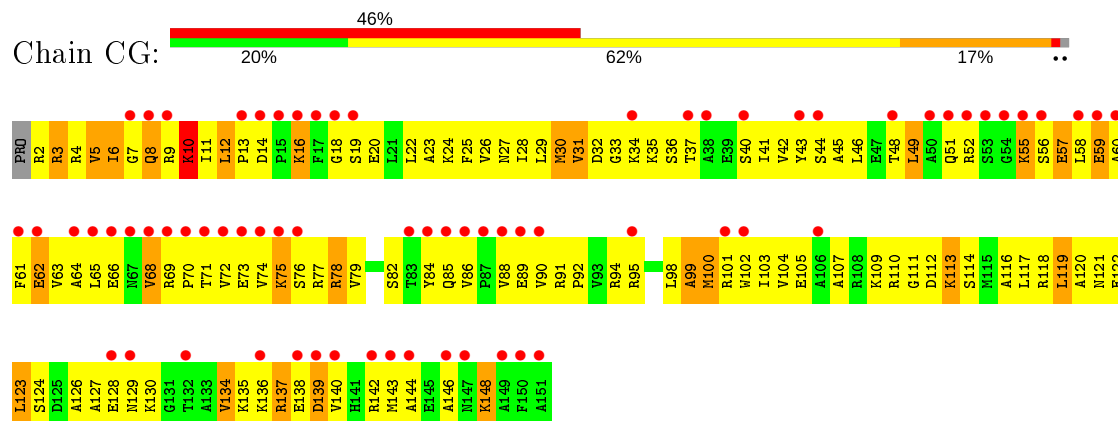


• Molecule 7: 30S ribosomal protein S7

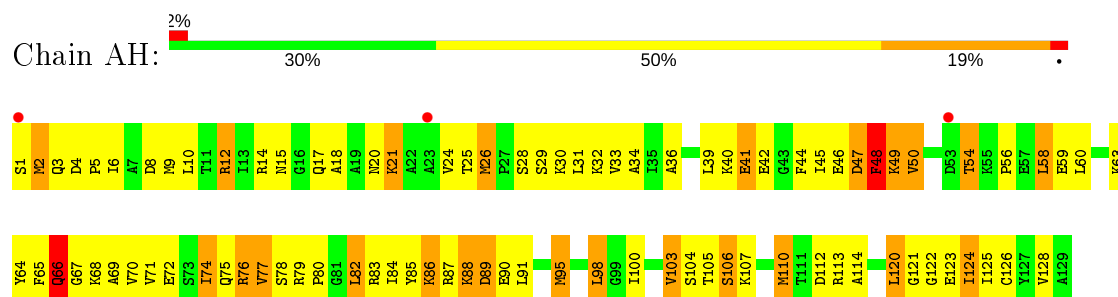




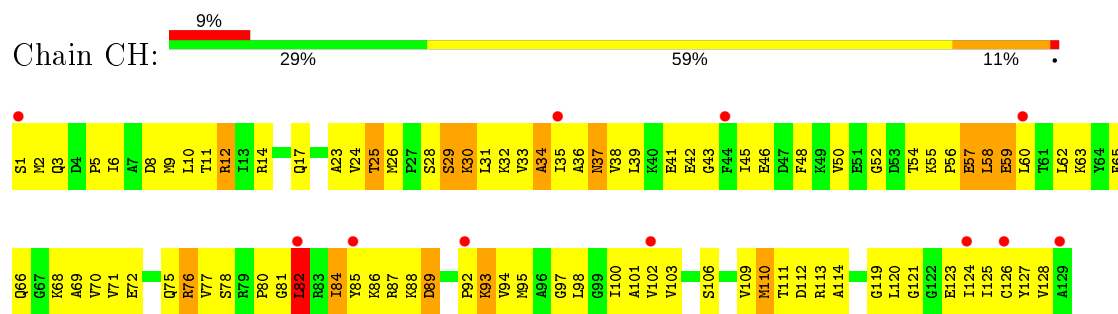
• Molecule 7: 30S ribosomal protein S7



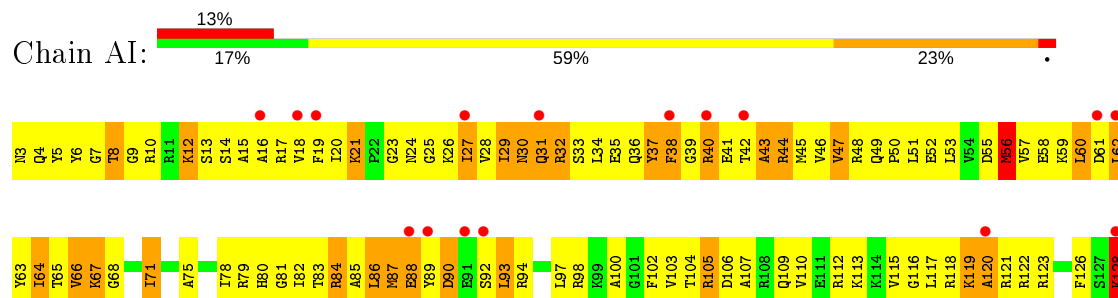
• Molecule 8: 30S ribosomal protein S8



• Molecule 8: 30S ribosomal protein S8

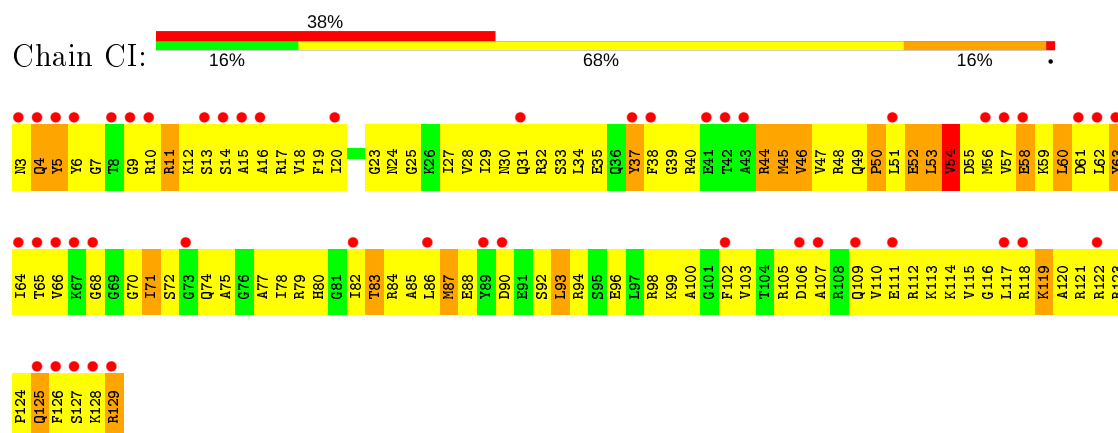


• Molecule 9: 30S ribosomal protein S9

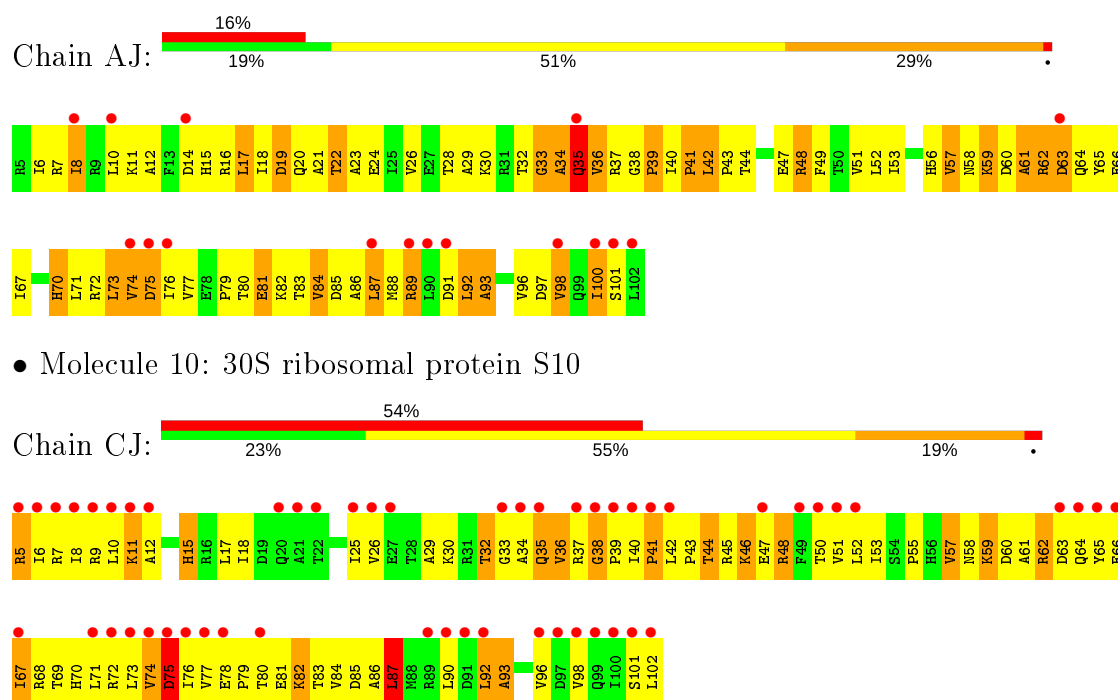


R129

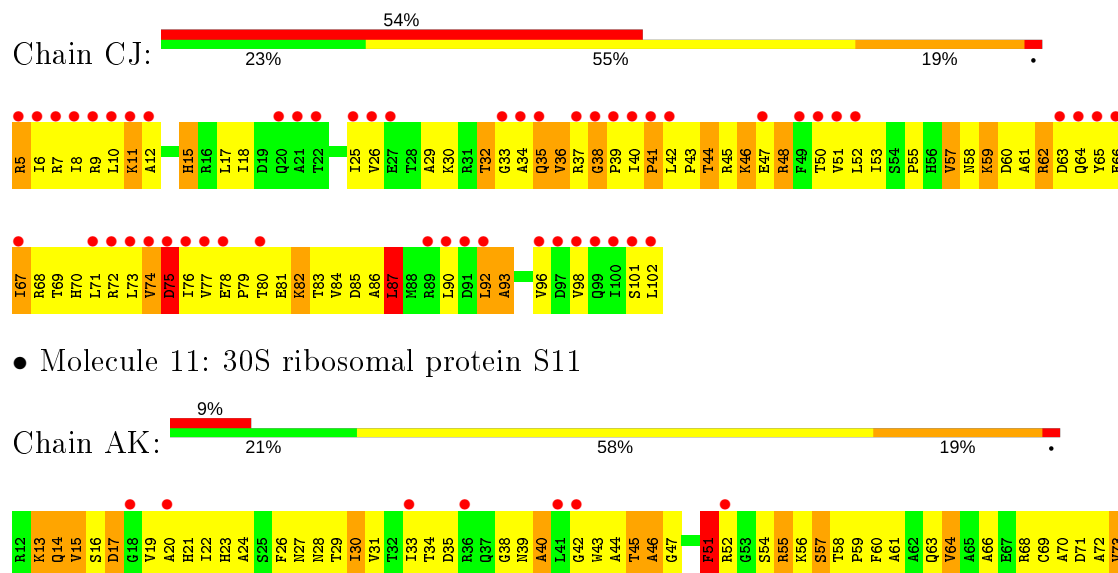
- Molecule 9: 30S ribosomal protein S9



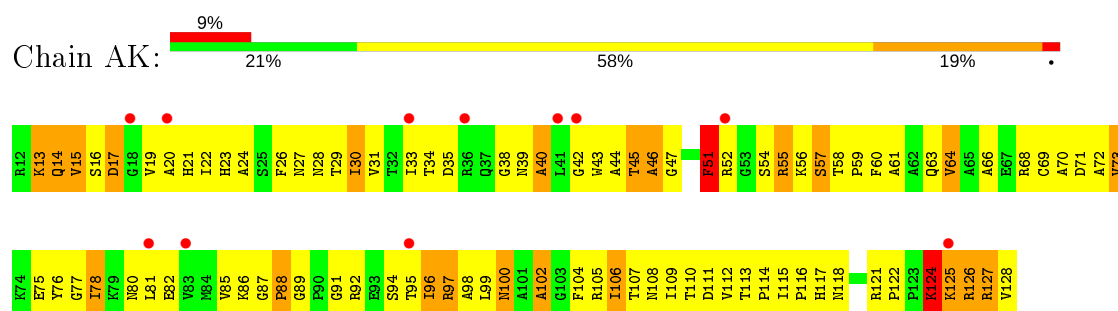
- Molecule 10: 30S ribosomal protein S10



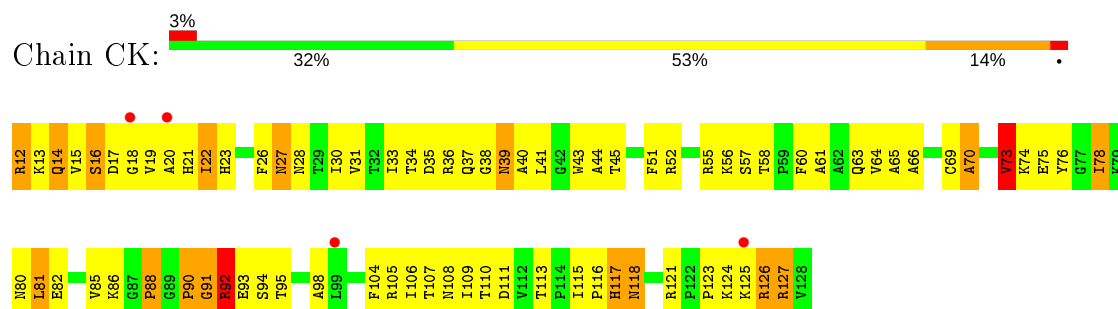
- Molecule 10: 30S ribosomal protein S10



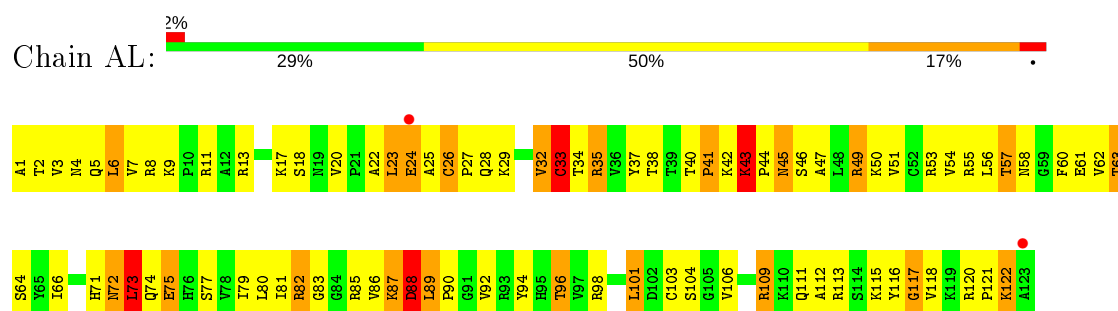
- Molecule 11: 30S ribosomal protein S11



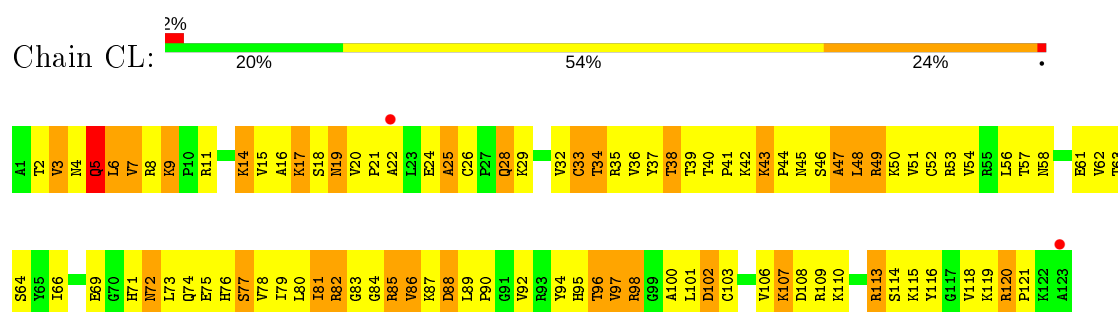
- Molecule 11: 30S ribosomal protein S11



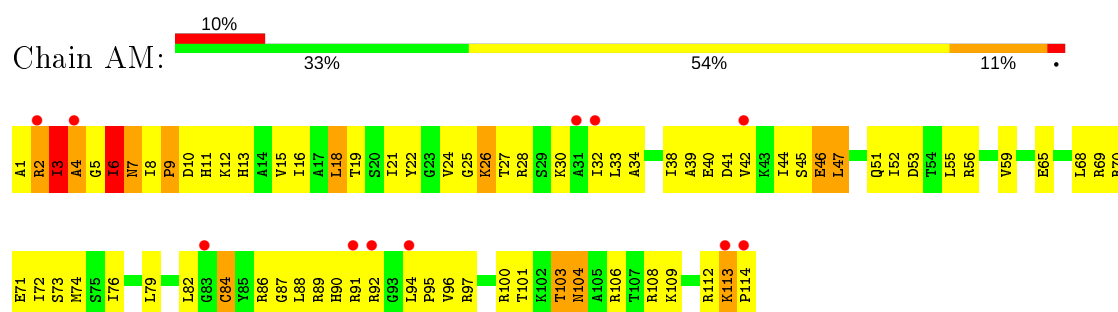
- Molecule 12: 30S ribosomal protein S12



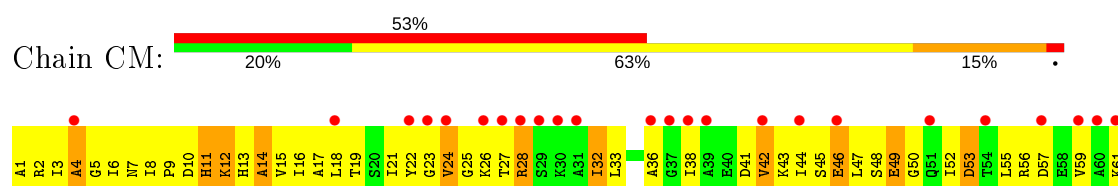
- Molecule 12: 30S ribosomal protein S12

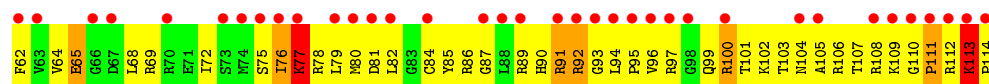


- Molecule 13: 30S ribosomal protein S13



- Molecule 13: 30S ribosomal protein S13

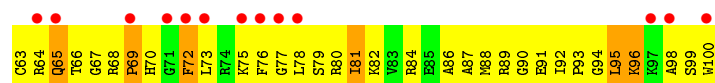
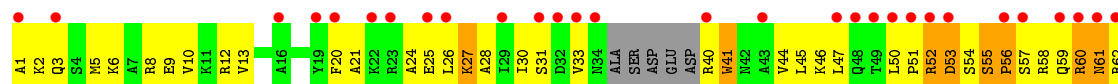




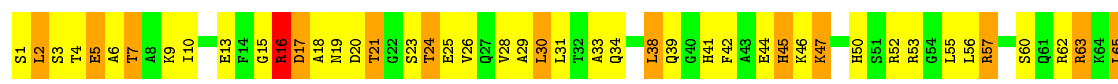
• Molecule 14: 30S ribosomal protein S14



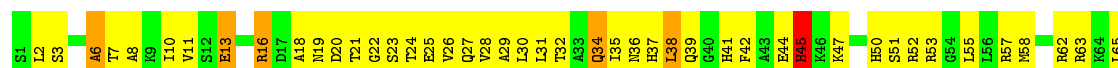
• Molecule 14: 30S ribosomal protein S14



• Molecule 15: 30S ribosomal protein S15

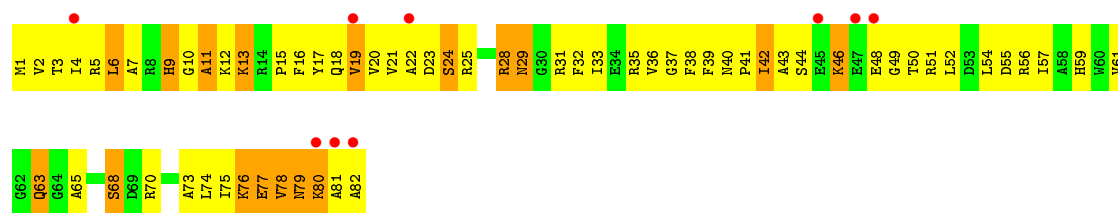


• Molecule 15: 30S ribosomal protein S15

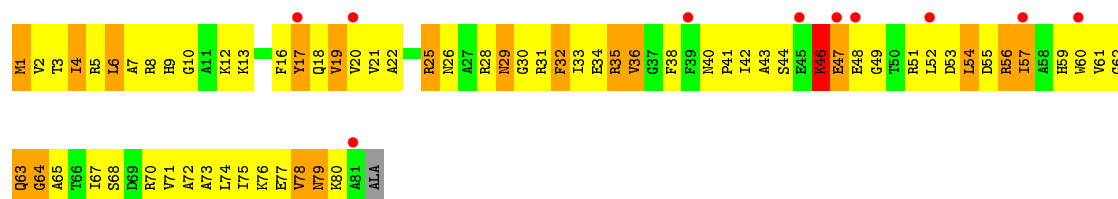


• Molecule 16: 30S ribosomal protein S16

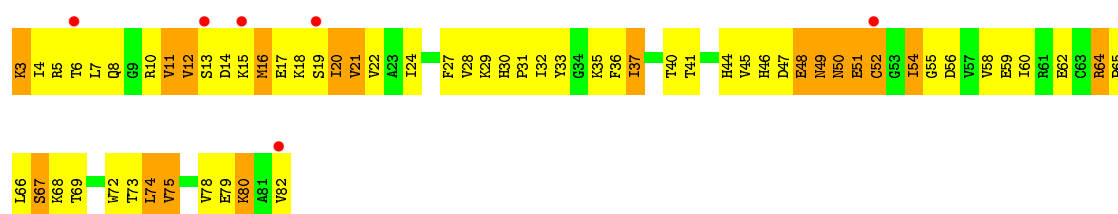




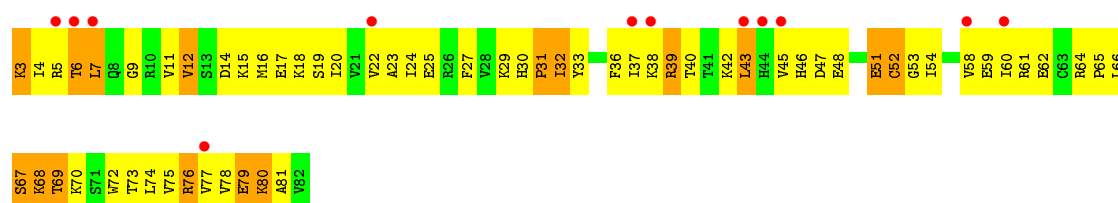
• Molecule 16: 30S ribosomal protein S16



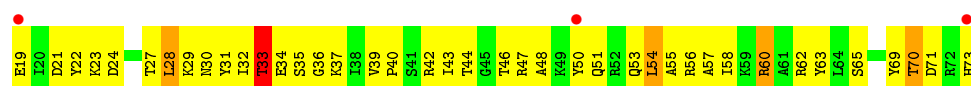
• Molecule 17: 30S ribosomal protein S17



• Molecule 17: 30S ribosomal protein S17



• Molecule 18: 30S ribosomal protein S18

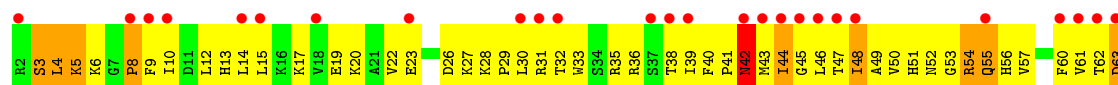


• Molecule 18: 30S ribosomal protein S18

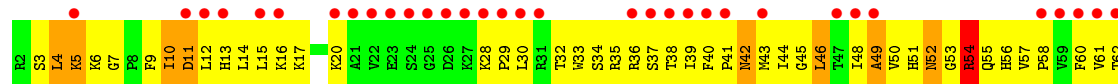




• Molecule 19: 30S ribosomal protein S19



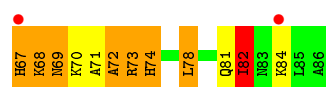
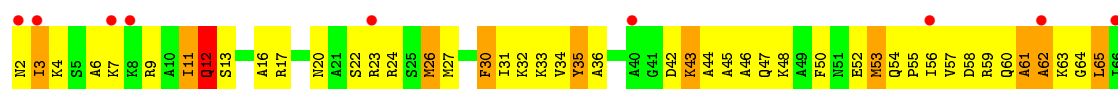
• Molecule 19: 30S ribosomal protein S19



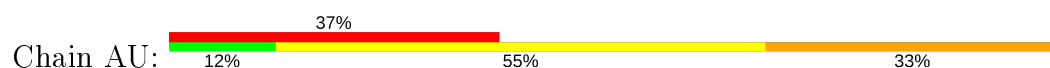
• Molecule 20: 30S ribosomal protein S20

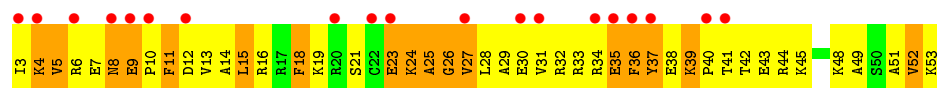


• Molecule 20: 30S ribosomal protein S20

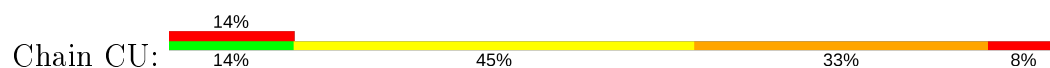


• Molecule 21: 30S ribosomal protein S21

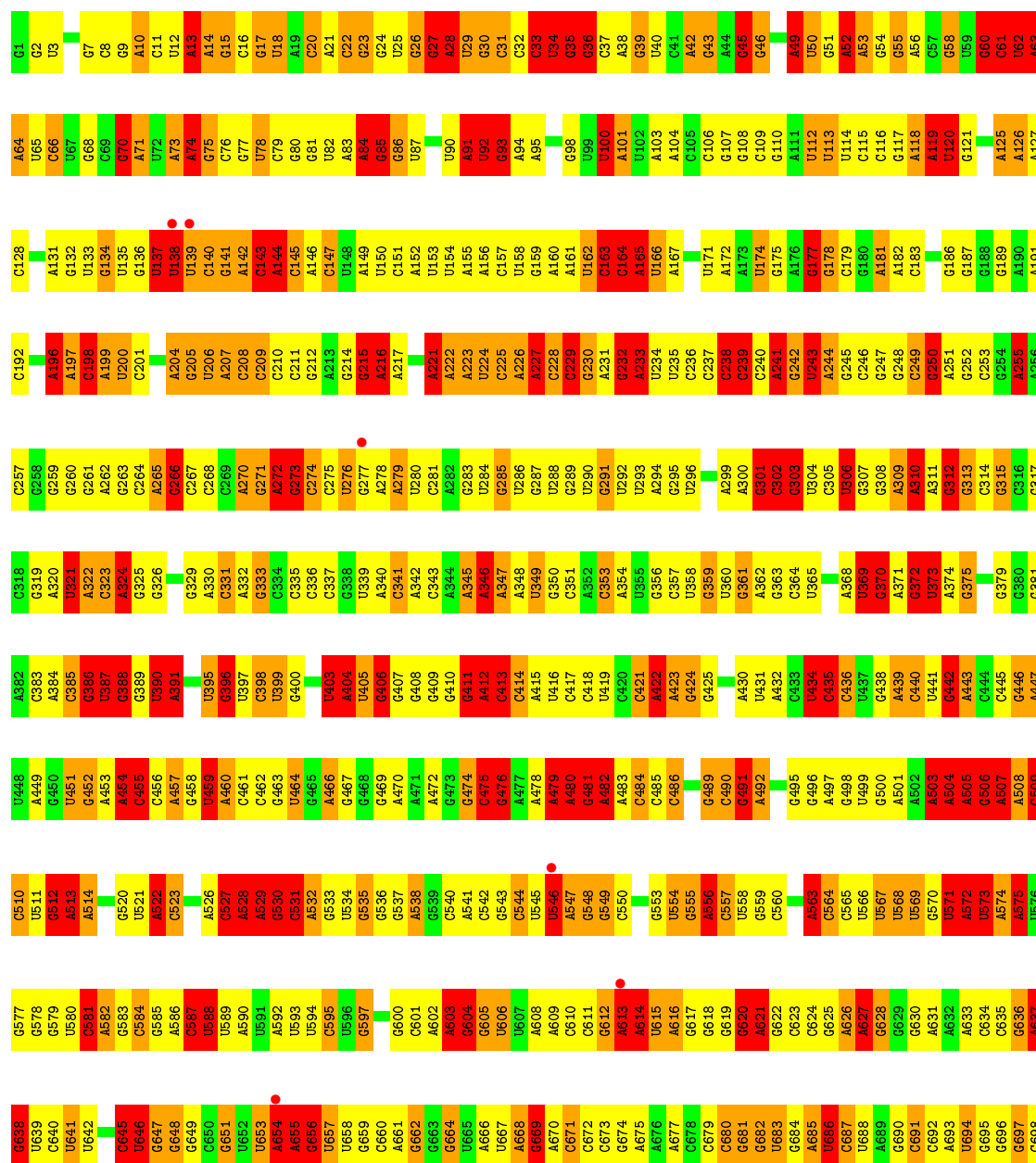
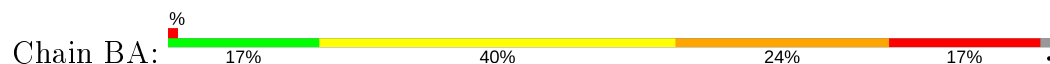




- Molecule 21: 30S ribosomal protein S21

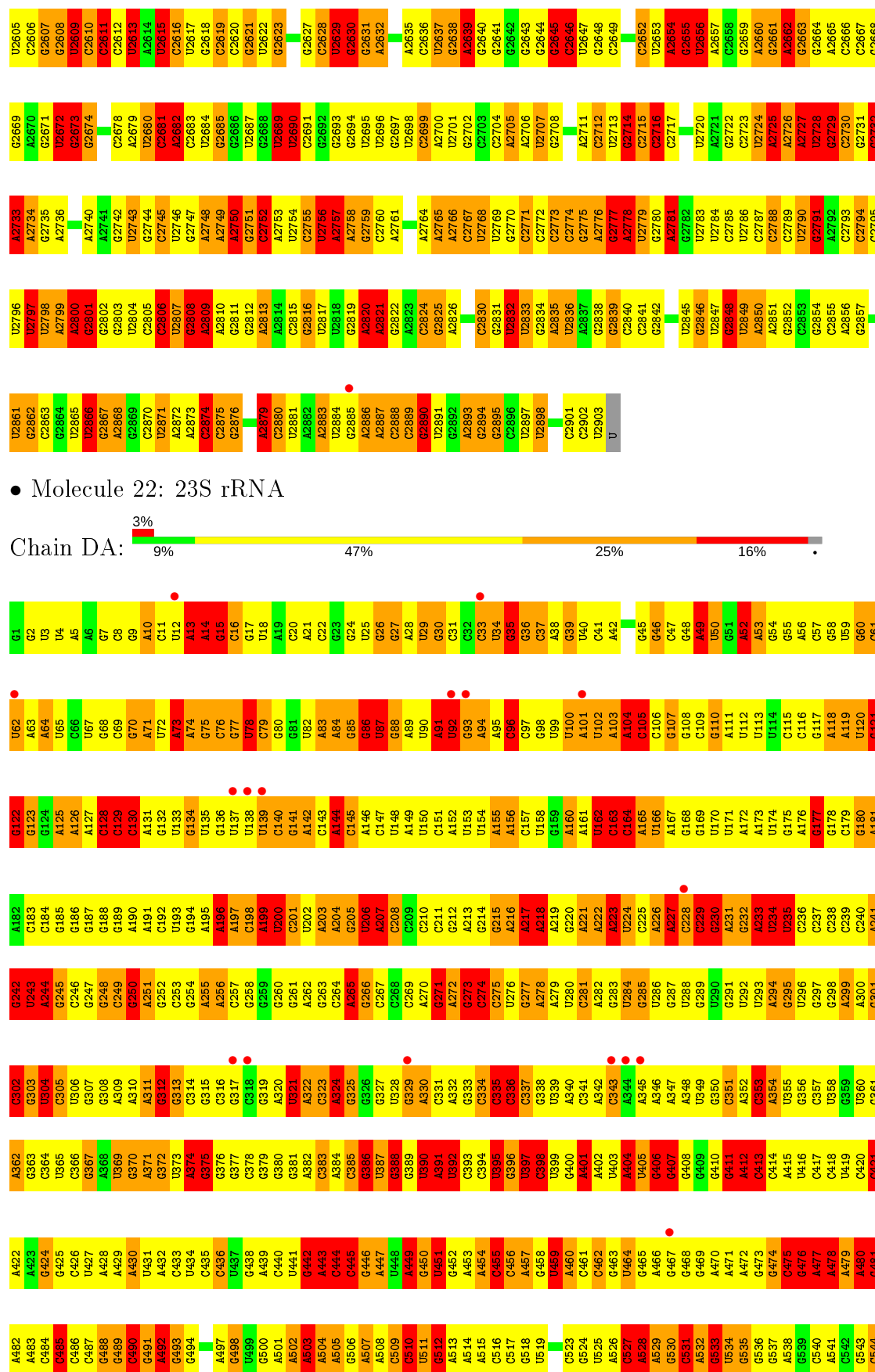


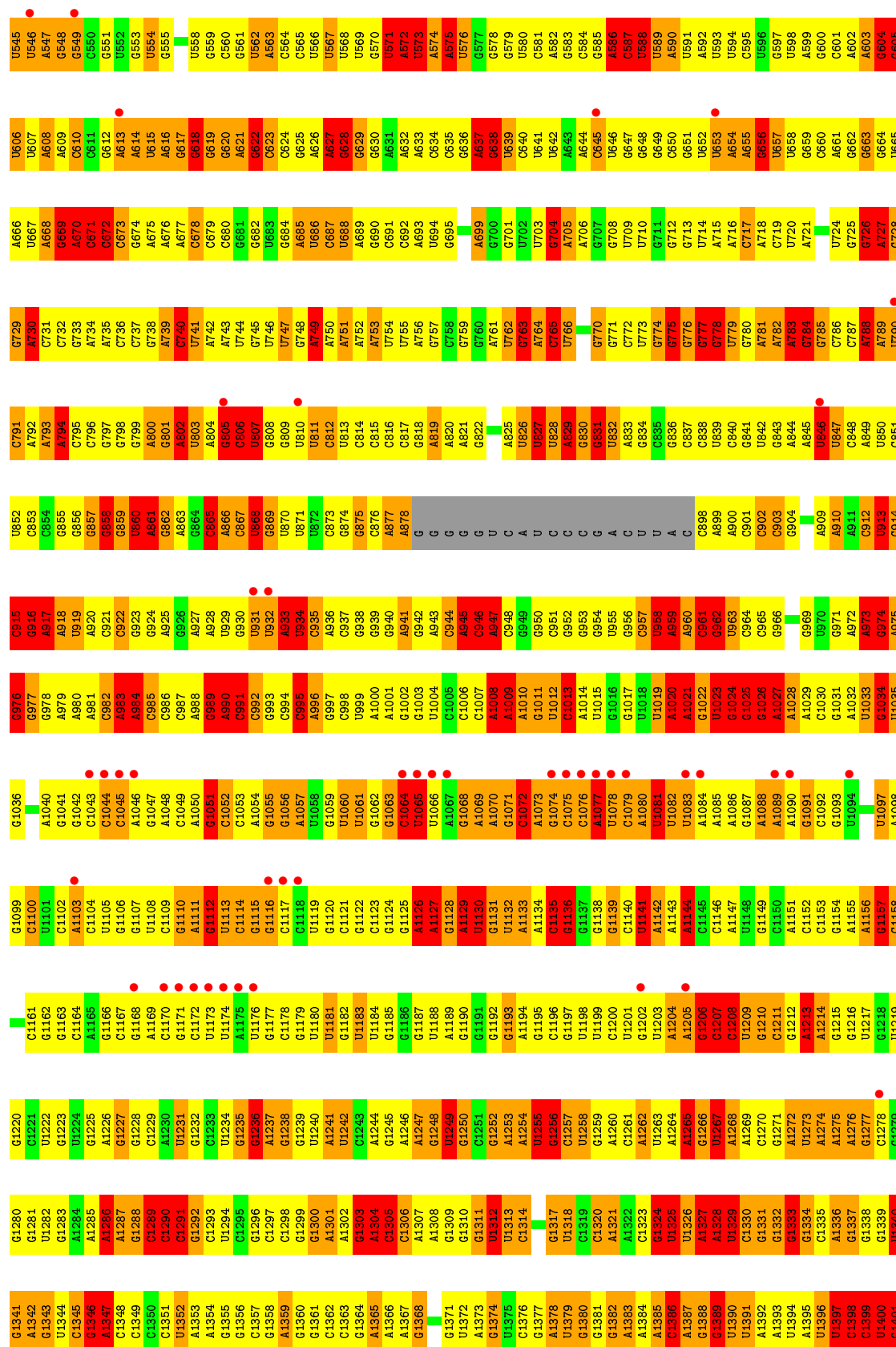
- Molecule 22: 23S rRNA



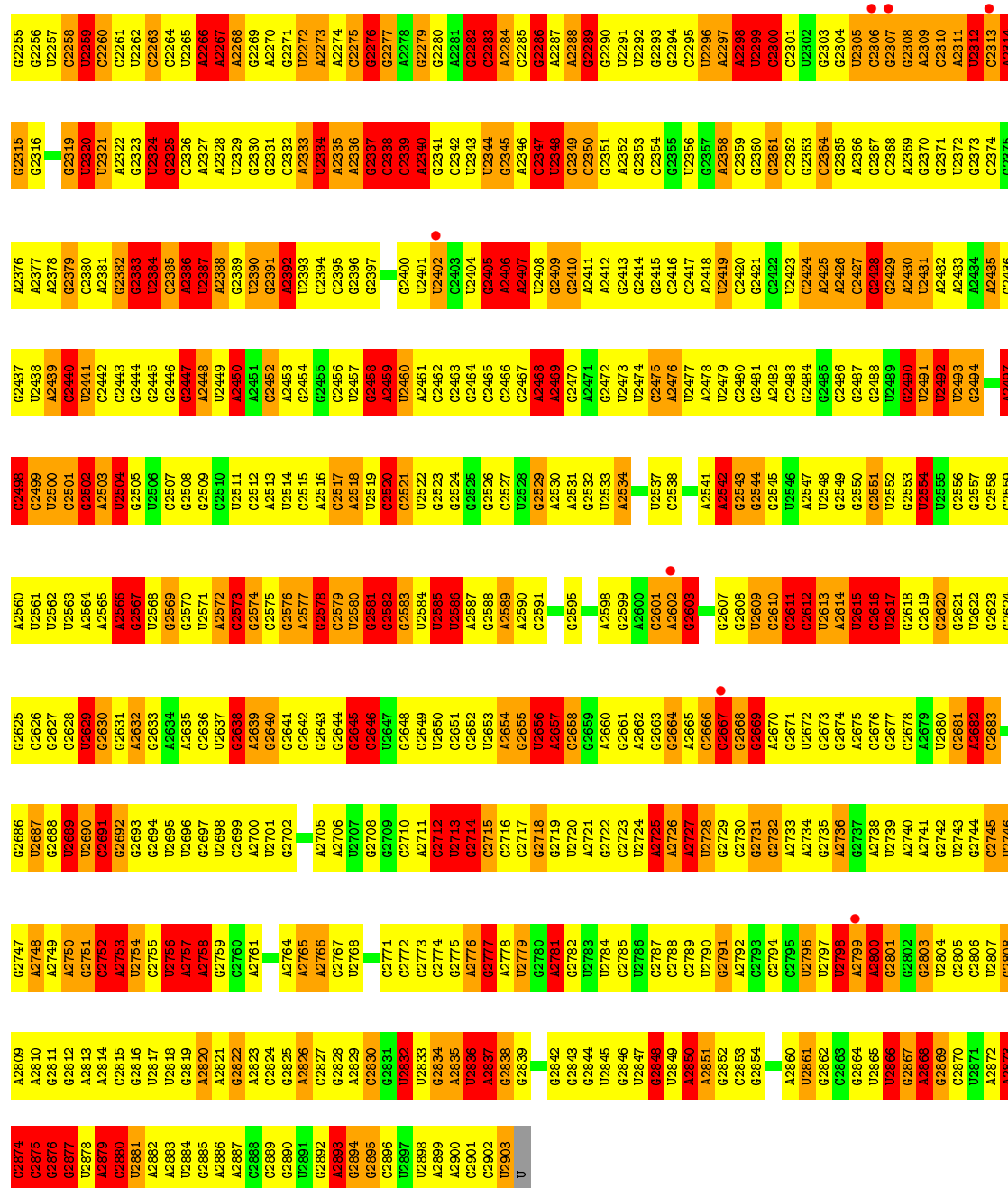


G2543	A2482	U2419	G2355	C2295	U2231	A	U	A1918	G1850	A1786	G1721	A1655
G2544	C2463	C2420	U2356	U2296	C2232	U	G	A1919	U1851	A1787	A1722	C1656
G2545	G2484	G2421	G2357	A2297	G2233	A	U	C1920	A1852	C1788	U1725	U1657
U2546	G2485	C2422	A2358	G2234	U2235	C	A	G1921	A1853	A1789	G1726	C1658
A2547	C2486	U2423	G2359	U2299	U2236	C	G	U1922	A1854	U1791	C1727	U1662
U2548	G2487	C2424	G2361	U2300	U2237	A	G	U1923	A1855	A1792	G1723	G1663
G2549	G2488	A2425	C2362	C2301	G2238	C	A	C1924	U1856	G1793	U1729	A1664
G2550	U2489	A2426	G2363	U2302	G2239	C	U	U1925	G1857	C1793	C1730	A1665
C2551	C2490	C2427	C2364	G2303	G2240	A	A	U1926	A1858	A1794	U1731	G1666
G2552	U2491	G2428	G2365	G2304	U2241	G	G	C1990	U1859	C1795	G1732	U1667
G2553	U2492	G2429	C2366	U2305	G2242	G	U	U1927	U1796	U1796	G1733	A1668
U2554	U2493	A2430	G2367	G2306	U2243	U	G	G1929	U1797	G1797	G1734	A1669
U2555	G2494	U2431	C2368	G2307	U2244	G	U	G1930	U1798	U1798	C1670	C1670
G2556	G2495	A2432	A2369	G2308	G2245	G	G	U1931	U1799	A1735	A1735	C1671
G2557	C2496	A2433	G2370	A2247	G2246	A	A	U1932	A1866	C1800	U1736	U1671
U2558	A2497	A2434	G2371	C2248	U2247	A	A	G1933	G1867	A1801	G1737	A1672
U2559	C2498	U2435	U2372	U2249	U2187	G	G	C1934	C1868	A1802	G1738	G1673
U2560	C2499	G2436	G2373	U2250	U2188	G	G	G1935	G1869	A1739	A1739	G1674
G2561	U2500	C2437	C2374	G2251	U2189	C	C	U1936	C1870	G1740	G1740	A1675
U2562	G2501	U2438	G2375	A2248	G2190	U	U	A1937	A1871	C1806	C1741	C1676
U2563	C2502	A2439	U2376	G2255	A2191	U	U	U1938	A1872	G1807	G1742	A1677
A2564	A2503	C2440	A2381	G2256	U2192	U	U	A1939	G1873	A1808	U1742	A1678
A2565	U2504	U2441	G2382	U2257	G2193	G	G	U1940	C1874	A1810	G1743	A1679
G2566	G2505	C2442	G2383	U2258	U2194	G	G	C1941	G1875	A1745	A1745	U1680
U2567	U2506	C2443	G2384	U2259	U2195	G	G	C1942	A1876	G1681	U1746	G1681
G2568	C2507	U2444	U2384	C2260	C2196	U	U	U1943	A1877	G1682	U1747	G1682
G2569	G2508	U2445	G2385	C2261	U2197	U	U	U1944	C1878	A1748	C1748	U1683
U2570	C2509	A2446	A2386	U2262	U2198	U	U	C1945	G1879	A1749	A1749	G1684
G2571	U2510	C2447	C2387	U2263	U2199	U	U	U1946	U1882	G1753	G1753	U1685
A2572	G2511	U2448	U2388	C2264	G2200	G	G	G1947	U1883	A1754	A1754	A1689
C2573	C2512	U2449	C2389	U2265	C2201	U	U	U1948	U1884	A1755	A1755	A1690
G2574	U2513	A2450	U2390	U2266	U2202	U	U	A1951	A1885	G1756	G1756	U1691
C2575	A2514	C2451	G2391	A2267	U2203	U	U	A1952	U1886	U1757	U1757	U1692
G2576	C2515	G2452	U2392	U2268	G2204	U	U	A1953	U1887	U1758	U1758	U1693
A2577	U2516	G2453	U2393	U2269	C2205	U	U	G1954	A1889	A1759	A1759	C1694
U2578	C2517	C2454	U2394	U2270	C2206	U	U	U1955	A1890	G1760	G1760	G1695
U2580	A2518	U2455	G2395	G2271	C2207	U	U	U1956	C1894	C1761	C1761	G1696
G2581	U2519	G2456	C2396	U2272	C2208	U	U	C1957	U1897	A1762	A1762	G1697
G2582	C2520	A2457	G2397	A2273	G2209	U	U	C1958	G1897	G1763	G1763	A1698
U2583	U2521	U2460	U2398	U2274	U2210	U	U	U1959	C1898	C1764	C1764	G1699
U2584	G2522	C2461	G2399	C2275	A2211	U	U	A1960	A1899	U1765	U1765	A1700
U2585	U2523	C2462	G2400	G2276	G2212	U	U	C1961	A1899	G1766	G1766	A1701
U2586	G2524	C2463	U2401	G2277	U2213	U	U	G1962	A1900	G1767	G1767	G1702
A2587	U2525	G2464	U2402	C2278	A2214	U	U	U1963	A1901	C1768	C1768	G1703
G2588	G2526	C2465	C2403	G2279	U2215	U	U	G1964	G1902	U1769	U1769	C1706
A2589	C2527	C2466	U2404	G2280	A2094	U	U	C1965	G1905	A1773	A1773	C1707
U2590	U2528	C2467	G2405	A2281	A2095	U	U	A1966	G1906	G1774	G1774	U1712
G2591	G2529	A2468	A2406	G2282	C2096	U	U	G1967	C1907	U1775	U1775	U1713
C2592	U2530	A2469	A2407	G2283	A2097	U	U	G1968	G1908	G1776	G1776	U1714
U2593	A2531	G2470	U2408	A2284	U2098	C	C	A1969	C1909	A1780	A1780	G1715
C2594	G2532	A2471	G2409	C2285	U2099	U	U	G1970	G1910	G1845	G1845	U1716
U2595	U2533	U2472	G2410	G2286	C2103	U	U	U1971	C1911	G1846	G1846	U1717
U2596	G2534	A2473	A2411	A2287	C2104	U	U	U1972	G1912	A1847	A1847	G1718
G2597	U2535	U2474	A2412	G2288	G2224	C	C	U1973	U1911	G1848	G1848	A1783
U2598	G2536	A2475	G2413	G2289	A2225	U	U	C1974	A1913	G1849	G1849	U1720
G2599	C2537	U2476	G2414	C2290	C2226	U	U	G1975	C1914	U1782	U1782	U1721
A2600	U2538	U2477	A2415	G2291	G2227	G	G	U1976	U1915	A1848	A1848	G1719
C2601	G2539	A2478	G2416	U2292	A2228	U	U	U1977	U1916	G1849	G1849	A1784
U2602	U2540	U2479	C2417	G2293	G2229	A	A	C2042	U1917	G1850	G1850	U1722
G2603	A2541	C2480	C2417	U2294	U2230	U	U	C2043	U1918	G1851	G1851	U1723
U2604	U2542	C2481	A2418	C2294	G2230	A	A	C2044	U1919	G1852	G1852	U1724



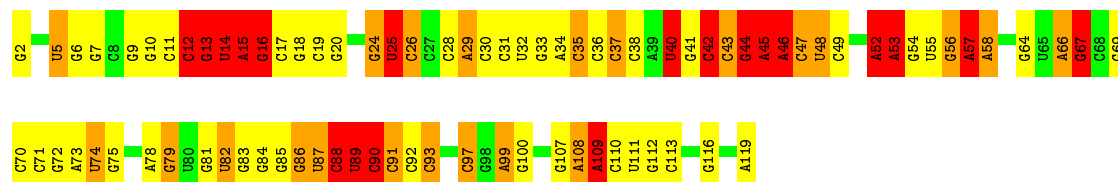


U2195	A2135	U2075	A2015	A1953	A1889	U1827	G1767	G1707	U1647	G1587	A1525	G1464	U1402
C2196	G2136	U2076	U2016	G1954	A1890	G1828	C1768	C1708	U1648	G1588	C1526	G1465	A1403
U2197	U2137	A2077	U2017	U1955	G1890	A1829	U1769	U1709	G1649	U1589	G1527	U1466	C1404
G2198	G2138	C2078	G2018	U1956	G1893	C1830	G1770	G1710	A1650	G1590	U1467	U1468	U1405
A2199	A2139	U2079	A2019	G1957	G1894	G1831	C1771	A1711	G1651	A1591	G1529	G1469	G1408
C2200	G2140	A2080	A2020	C1958	G1895	C1832	A1772	U1712	A1652	G1582	G1530	A1470	G1411
G2201	G2141	U2081	C2021	G1959	G1896	C1833	A1773	A1713	G1653	A1593	C1531	U1471	U1412
U2202	A2142	A2082	U2022	A1960	G1899	U1834	C1774	U1714	A1654	U1594	A1532	C1472	A1413
U2203	G2143	C2083	C2023	C1961	G1899	G1835	U1775	G1715	A1655	C1595	C1533	G1473	A1414
G2204	G2144	G2084	G2024	C1962	A1900	C1836	U1776	U1716	C1656	A1596	U1534	U1474	A1415
A2205	A2145	U2085	C2025	U1963	A1901	C1837	U1777	U1717	C1657	A1597	U1535	G1475	G1416
C2206	C2146	U2086	U2026	G1964	C1902	C1838	U1778	G1718	G1658	A1598	G1536	U1476	U1417
C2207	C2147	G2087	G2027	G1965	G1903	C1839	U1779	G1719	G1659	U1599	G1537	G1477	G1418
G2208	G2148	A2088	U2028	A1966	G1904	G1840	A1780	U1720	G1660	C1600	G1538	C1477	C1417
G2209	U2149	C2089	G2029	C1967	C1905	U1841	U1781	G1721	G1661	U1601	U1539	G1478	G1418
U2210	C2150	A2090	A2030	G1968	G1906	G1842	U1782	A1722	U1662	A1602	G1540	G1479	A1419
A2211	U2151	C2091	G2031	A1969	G1907	C1843	A1783	G1723	G1663	A1603	C1541	C1480	A1420
U2212	G2152	U2092	G2032	A1970	G1910	C1844	A1784	G1724	A1664	C1604	U1542	U1481	G1421
U2213	C2153	C2093	A2033	U1971	G1911	G1845	A1785	U1725	A1665	C1605	G1543	G1482	G1422
G2214	A2154	A2094	U2034	G1972	U1912	G1846	A1786	C1726	G1666	C1606	A1544	G1483	G1423
C2215	U2155	C2095	G2035	C1973	A1913	C1847	U1787	C1727	G1667	C1607	U1545	U1484	G1424
G2216	G2156	C2096	C2036	C1974	A1914	A1848	C1788	C1728	A1668	A1608	A1546	U1485	G1425
G2217	G2157	A2097	A2037	G1975	C1914	G1849	A1789	U1729	A1669	A1609	U1486	G1426	G1426
G2218	A	U2098	G2038	U1976	U1915	G1850	C1790	C1730	C1670	A1610	A1549	C1489	A1427
U2219	G	U2099	U2039	A1977	A1916	G1851	G1791	G1731	U1671	G1611	C1550	C1489	C1428
U2220	C	G2100	G2040	A1978	U1917	G1852	G1792	C1732	A1672	C1612	A1551	A1490	G1429
G2221	U	A2101	U2041	U1979	G1918	U1855	C1793	G1733	G1673	G1613	A1552	G1491	G1430
C2222	C	G2102	A2042	G1980	A1919	U1856	A1794	G1734	G1674	A1614	A1553	G1492	A1431
G2223	A	C2103	C2043	A1981	C1920	C1857	C1795	G1735	C1675	C1615	U1554	C1493	G1432
G2224	C	C2104	C2044	U1982	G1921	A1858	U1796	U1736	A1676	A1616	G1555	A1494	A1433
A2225	C	U2105	C2045	G1983	G1928	U1859	G1797	G1737	A1677	C1617	A1495	G1434	G1434
C2226	U	U2106	G2046	G1984	C1924	G1860	U1798	G1738	A1678	A1618	C1557	A1496	G1435
A2227	U	G2107	C2047	C1985	C1925	G1861	U1799	A1739	A1679	G1619	C1558	A1497	G1436
G2228	G	A2108	G2048	C1986	U1926	G1862	A1800	G1740	U1680	C1620	U1559	C1498	C1437
U2229	A	U2109	G2049	A1987	A1927	G1863	A1801	C1741	G1681	U1621	G1560	C1499	U1438
G2230	A	G2110	C2050	G1988	A1928	U1864	A1802	U1742	G1682	G1623	U1561	A1439	A1439
U2231	A	U	C2051	G1989	G1929	U1865	A1803	G1743	U1683	G1624	U1562	G1501	U1440
C2232	U	G	A2052	C1990	G1930	A1866	C1804	A1744	G1684	U1624	U1563	A1502	G1441
U2233	A	U	G2053	U1991	U1931	G1867	A1805	A1745	C1685	C1625	C1564	A1503	U1442
G2234	C	A	A2054	G1992	A1932	C1868	C1806	A1746	C1686	A1626	C1565	A1504	U1443
C2235	C	G	C2055	U1993	G1933	G1869	G1807	U1747	G1687	G1627	A1566	A1505	G1444
U2236	A	G	G2056	C1994	C1934	C1870	A1808	C1748	U1688	G1628	U1567	U1506	G1445
G2237	C	A	G2057	U1995	G1935	A1871	A1809	A1749	A1689	U1629	G1568	C1507	C1446
C2238	C	U	A2058	C1996	A1936	A1872	A1810	G1750	A1690	A1630	A1569	A1508	C1447
G2239	A	A	A2059	C1997	U1937	G1873	G1811	U1751	C1691	G1631	A1570	A1509	G1448
U2240	G	G	G2060	A1998	U1938	C1874	U1812	C1752	U1692	A1632	A1571	G1510	G1449
A2241	U	U	G2061	C1999	U1939	G1875	G1813	G1753	U1693	G1633	A1572	G1511	C1450
G2242	U	U	C2062	C2000	U1940	A1876	G1814	A1754	G1694	A1634	G1573	C1451	C1451
U2243	A	G	C2063	C2001	G1941	A1877	A1815	A1755	G1695	A1635	C1574	U1513	G1452
U2244	G	G	C2064	G2002	C1942	G1878	C1816	G1756	G1696	U1636	C1575	A1453	A1453
U2245	A	G	C2065	U1943	U1944	C1879	G1817	A1757	G1697	A1637	U1576	A1454	C1454
G2246	G	A	C2066	C2006	U1944	U1880	U1818	U1758	A1698	C1638	A1515	G1455	G1455
A2247	U	U	G2067	U2007	G1945	C1881	A1819	A1759	G1699	C1639	G1517	G1456	G1456
C2248	G	G	U2068	C2008	U1946	U1882	U1820	C1760	A1700	A1640	U1578	U1457	U1457
U2249	C	C	G2069	A2009	C1947	U1883	U1821	G1761	A1701	A1641	G1581	U1458	U1458
G2250	U	U	A2070	G1948	G1947	G1884	C1822	A1762	G1702	G1642	C1582	U1520	U1459
A2251	U	U	A2071	G1949	G1949	A1885	G1823	G1763	G1703	G1643	A1583	G1521	U1460
G2252	U	U	C2072	G2012	U1950	U1886	G1824	G1764	C1704	C1644	A1584	A1522	C1461
C2253	G	G	A2013	U1951	C1887	U1825	U1765	U1765	A1705	G1645	C1585	U1523	G1462
G2254	G	A2134	U2074	A2014	A1952	G1888	G1826	G1766	C1706	C1646	A1586	G1524	C1463

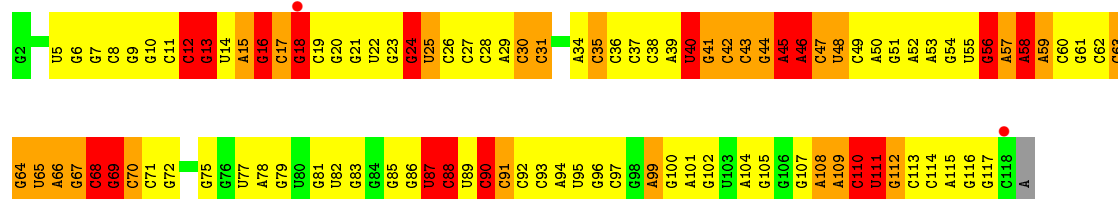
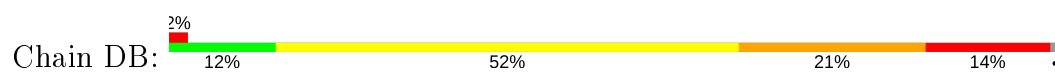


Molecule 23: 5S rRNA

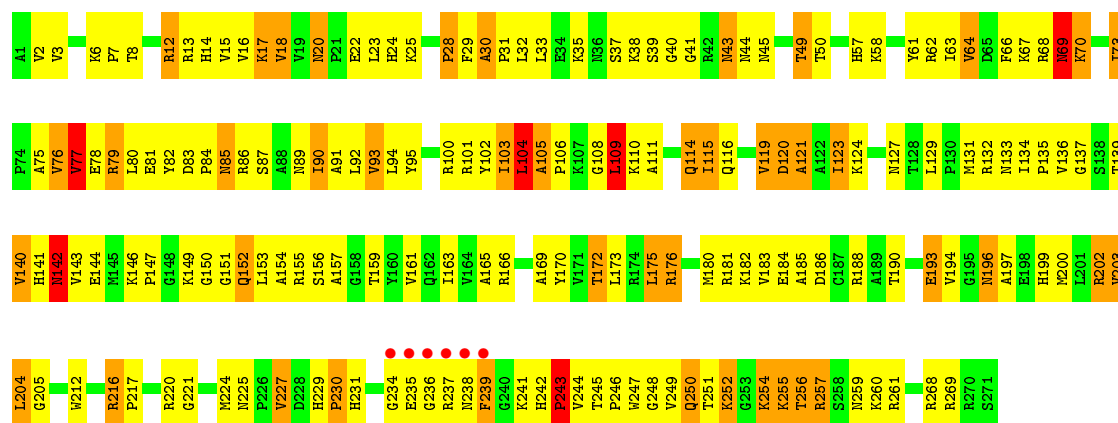
Chain BB:



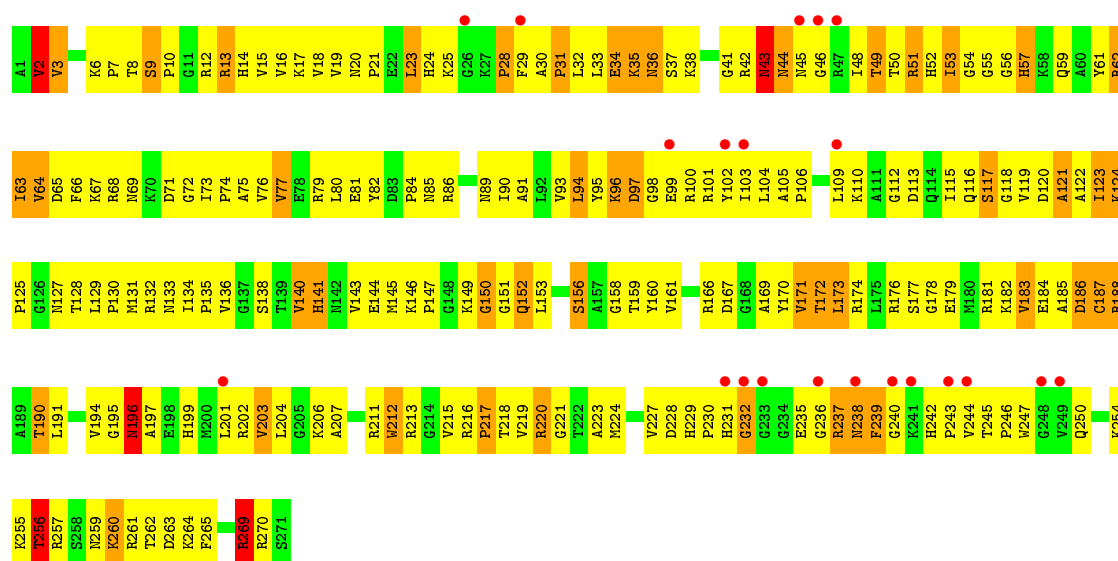
Molecule 23: 5S rRNA



• Molecule 24: 50S ribosomal protein L2

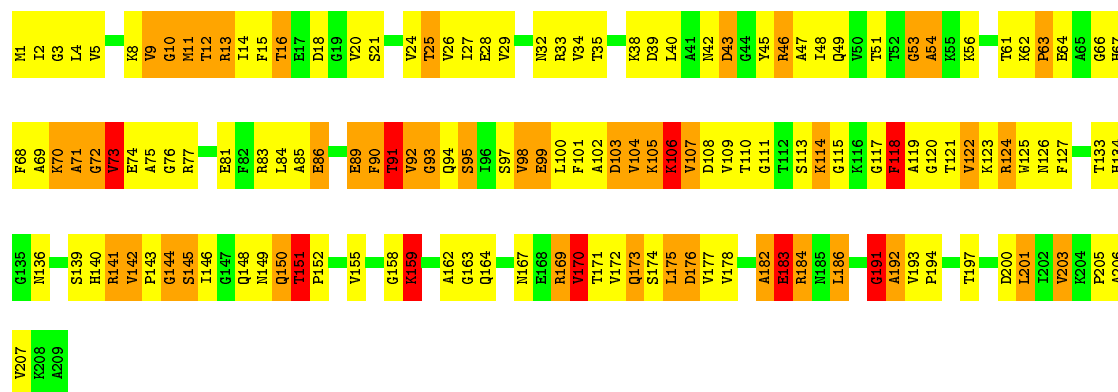


• Molecule 24: 50S ribosomal protein L2

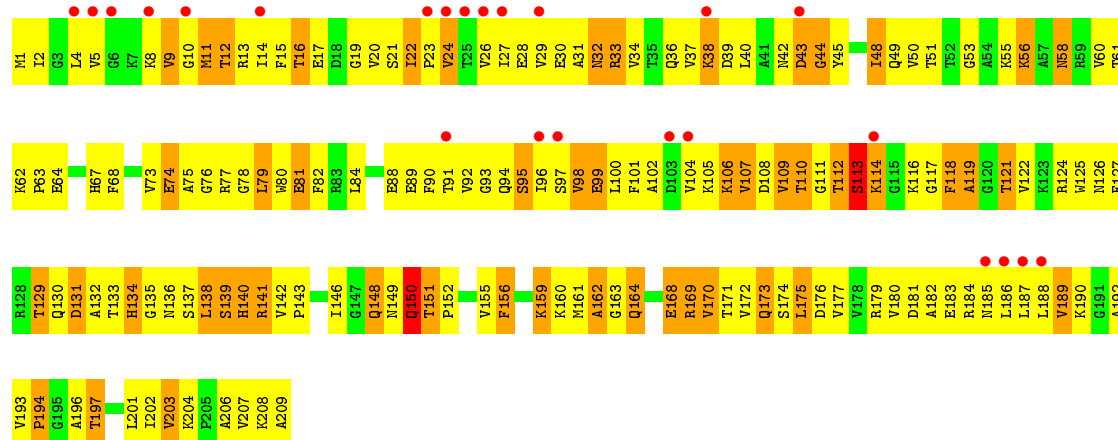


• Molecule 25: 50S ribosomal protein L3

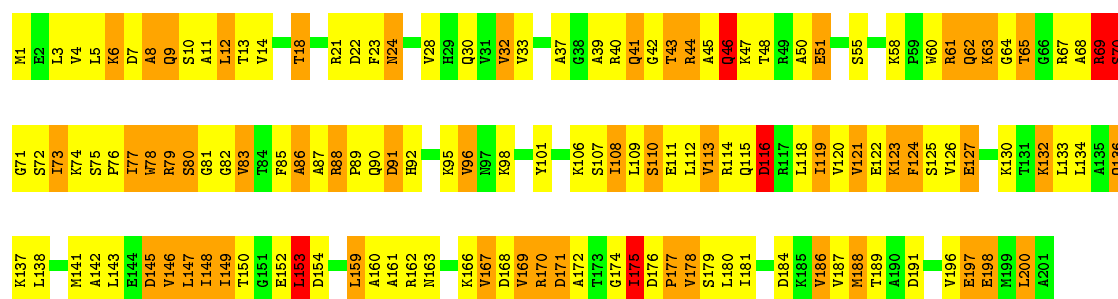




• Molecule 25: 50S ribosomal protein L3

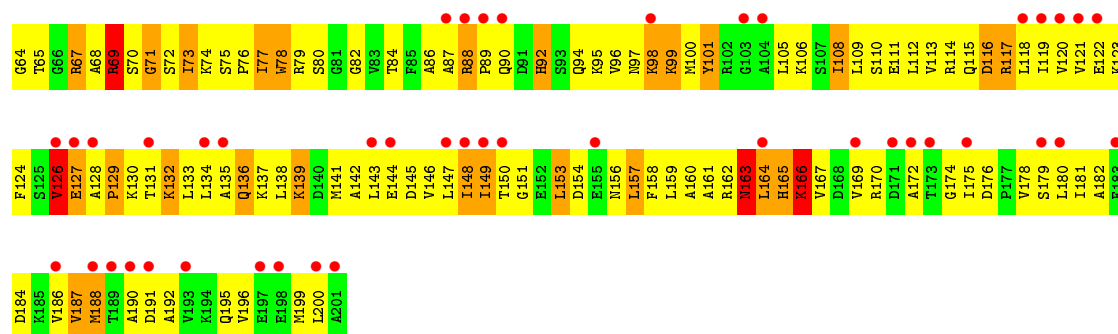


• Molecule 26: 50S ribosomal protein L4

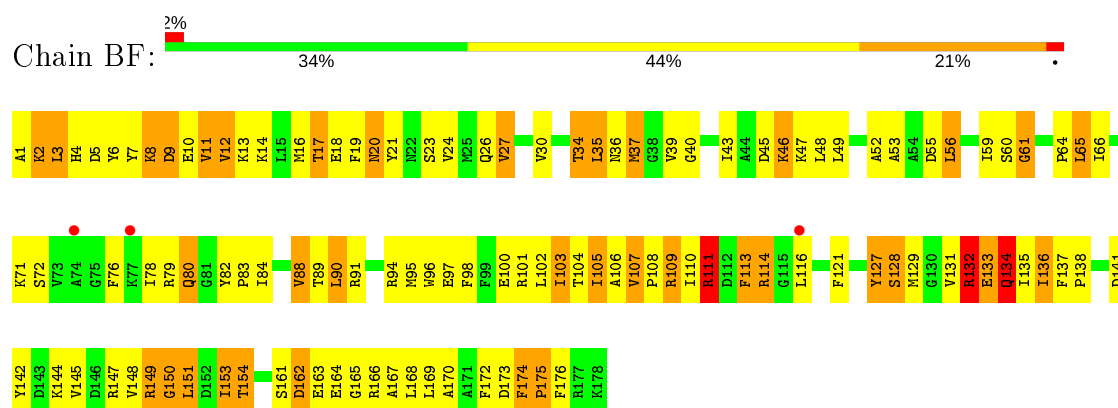


• Molecule 26: 50S ribosomal protein L4

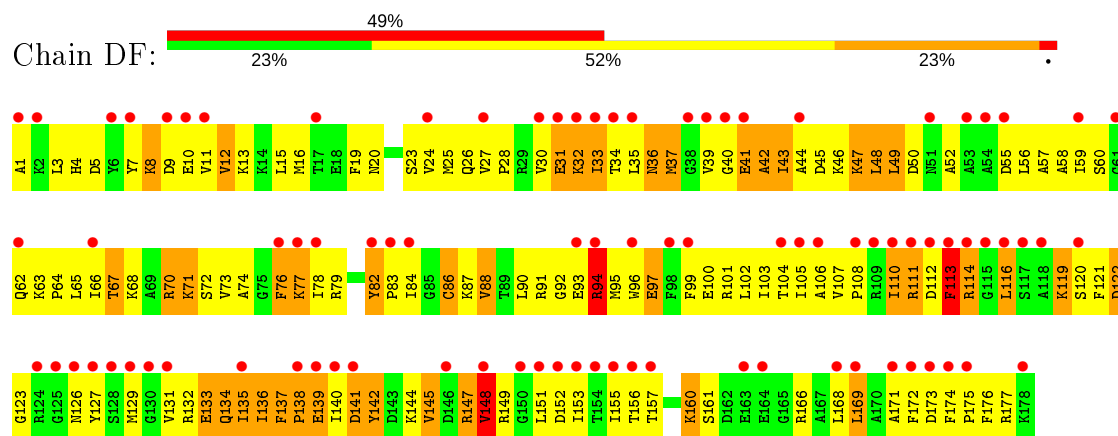




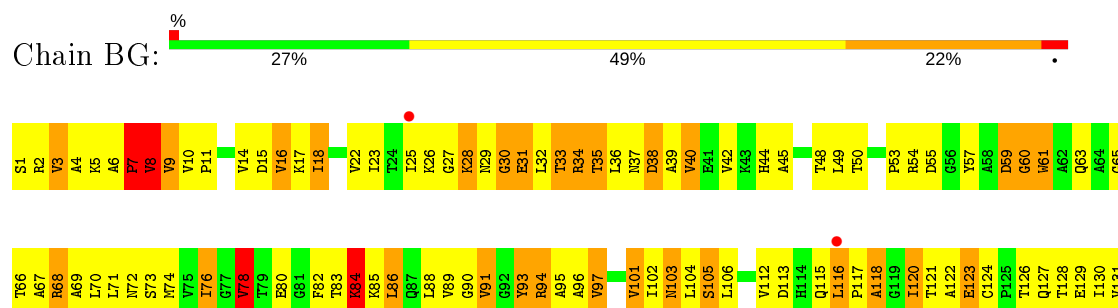
• Molecule 27: 50S ribosomal protein L5



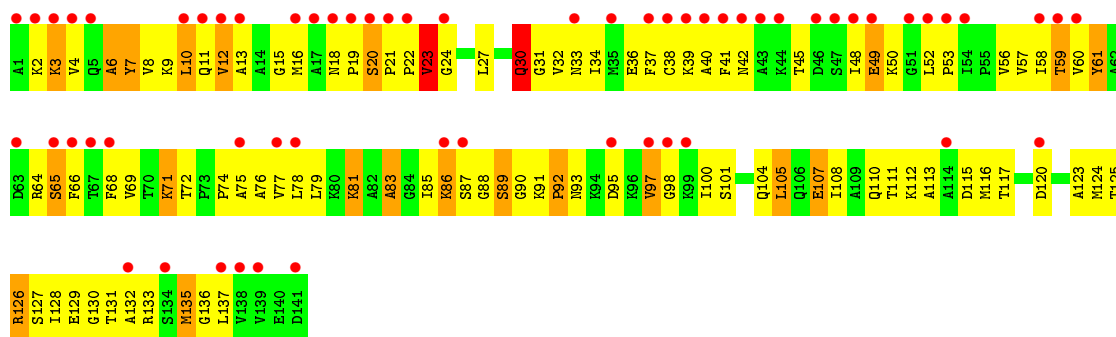
• Molecule 27: 50S ribosomal protein L5



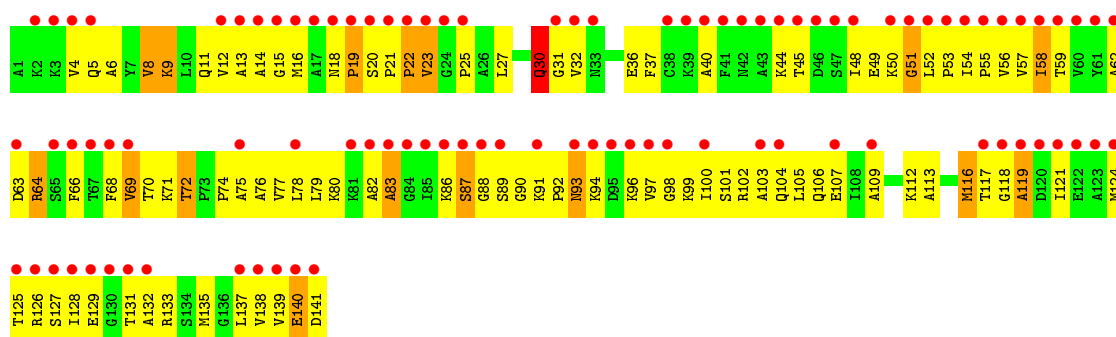
• Molecule 28: 50S ribosomal protein L6



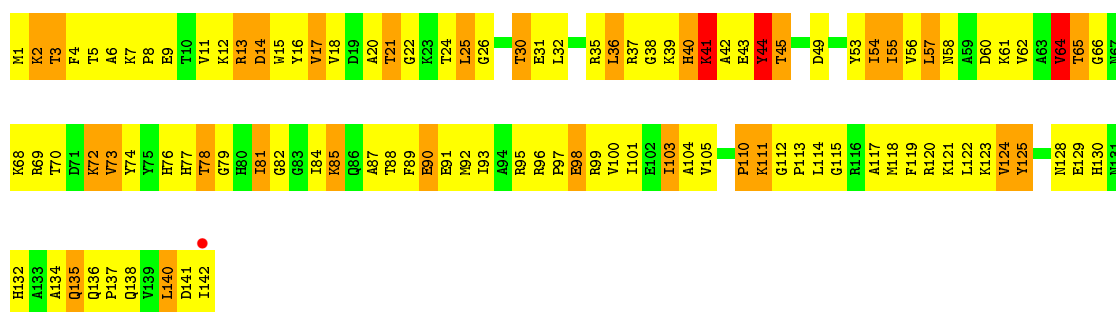
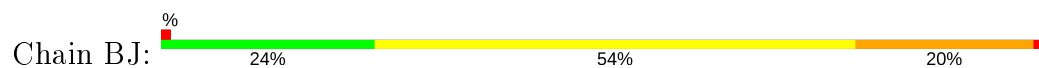




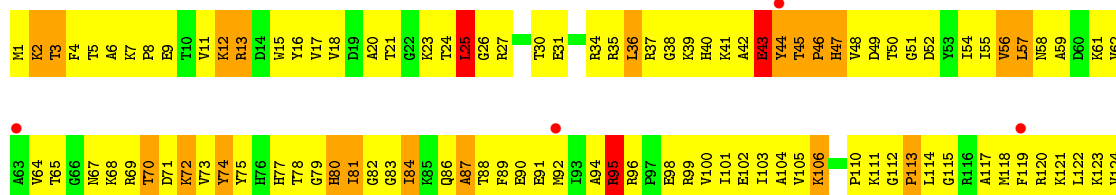
• Molecule 30: 50S ribosomal protein L11



• Molecule 31: 50S ribosomal protein L13



• Molecule 31: 50S ribosomal protein L13

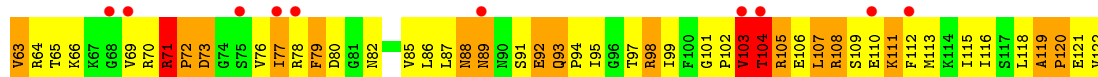
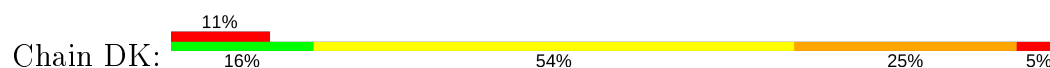




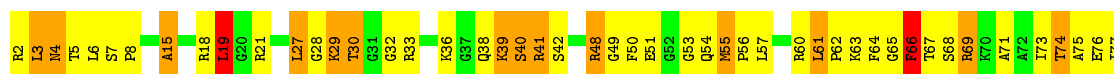
- Molecule 32: 50S ribosomal protein L14



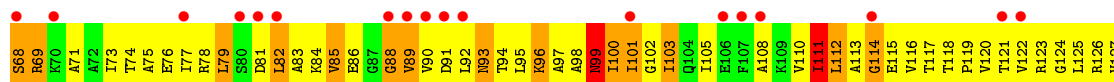
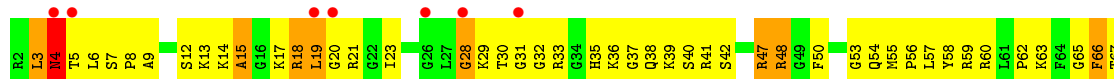
- Molecule 32: 50S ribosomal protein L14



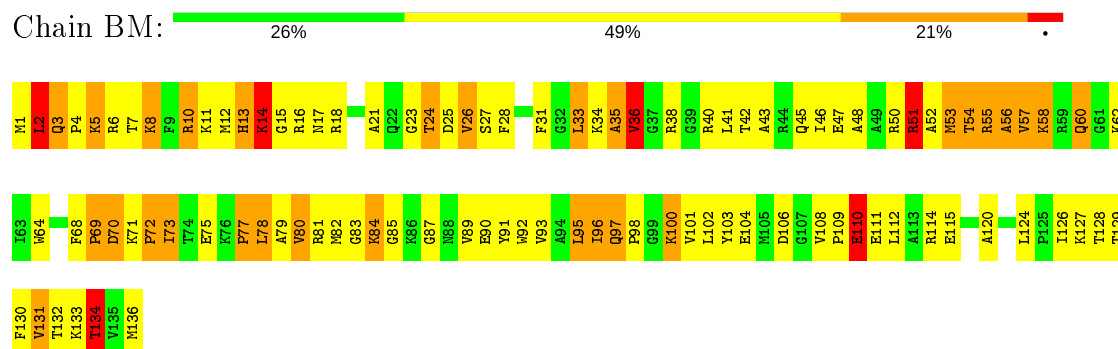
- Molecule 33: 50S ribosomal protein L15



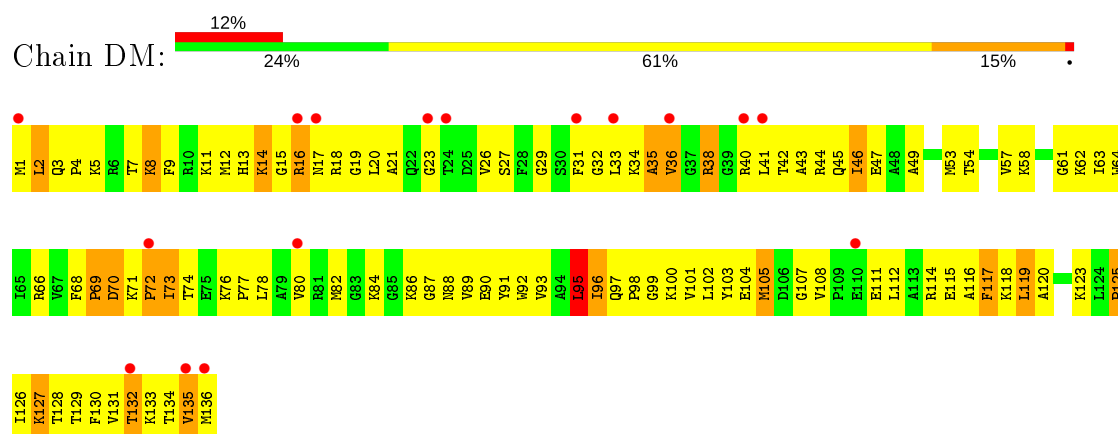
- Molecule 33: 50S ribosomal protein L15



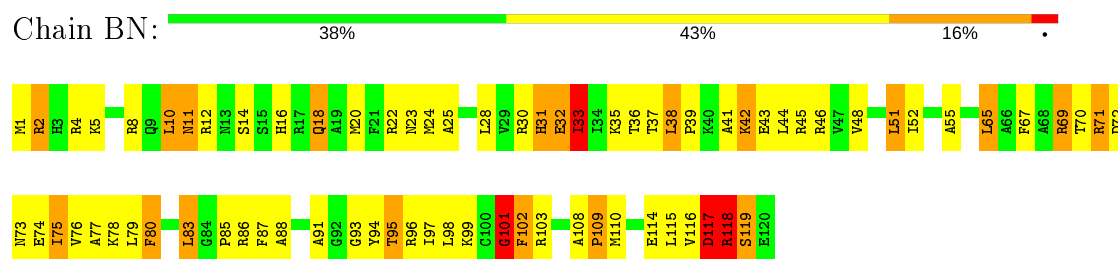
- Molecule 34: 50S ribosomal protein L16



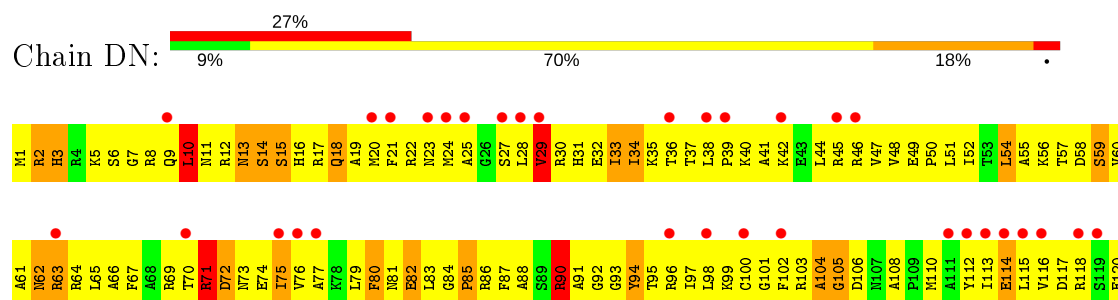
- Molecule 34: 50S ribosomal protein L16



- Molecule 35: 50S ribosomal protein L17

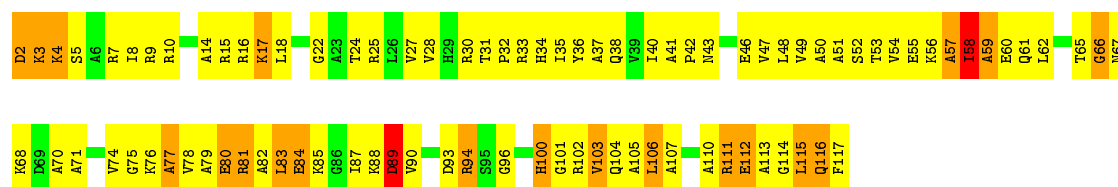


- Molecule 35: 50S ribosomal protein L17



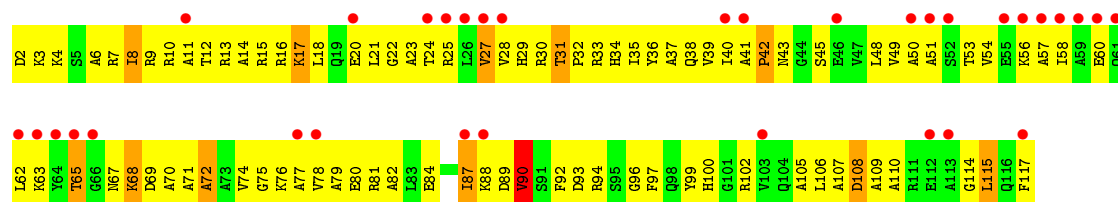
- Molecule 36: 50S ribosomal protein L18

Chain BO:  23% 58% 17%

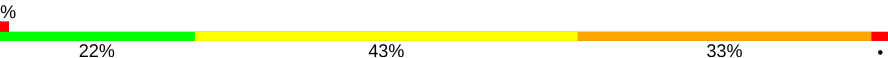


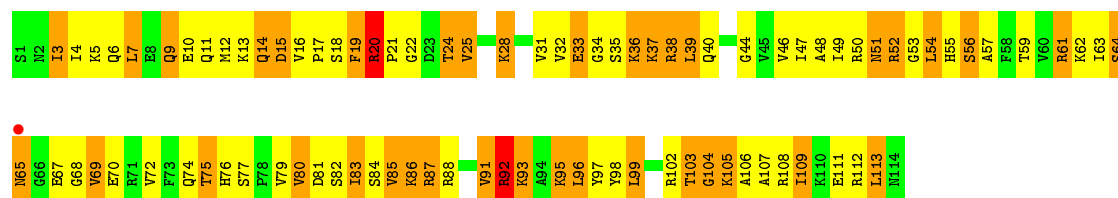
• Molecule 36: 50S ribosomal protein L18

Chain DO:  22% 67% 9%



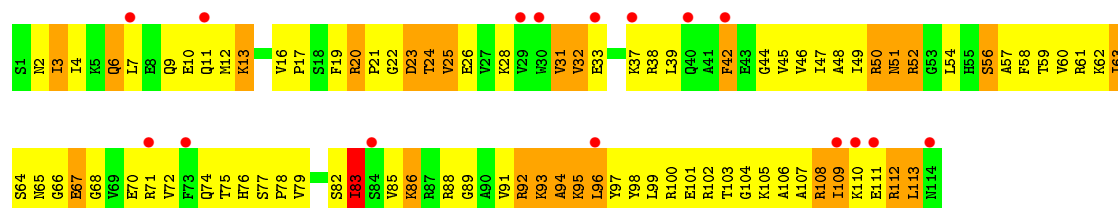
• Molecule 37: 50S ribosomal protein L19

Chain BP:  22% 43% 33%



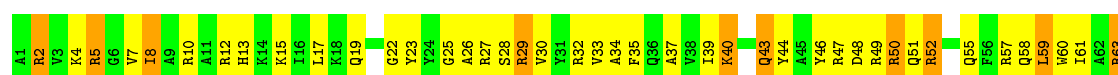
• Molecule 37: 50S ribosomal protein L19

Chain DP:  22% 54% 23%



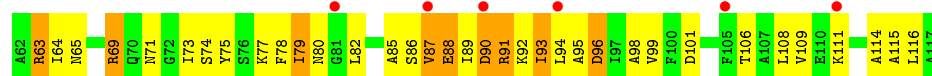
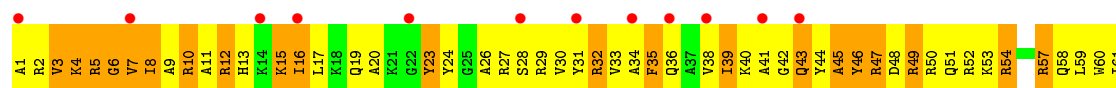
• Molecule 38: 50S ribosomal protein L20

Chain BQ:  34% 47% 17%





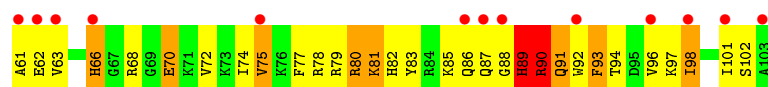
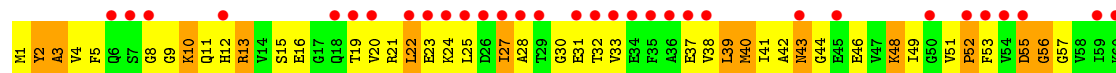
- Molecule 38: 50S ribosomal protein L20



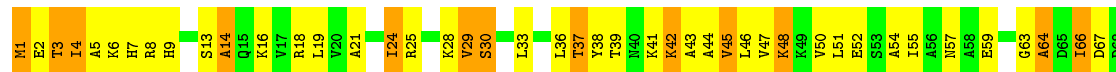
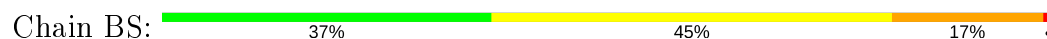
- Molecule 39: 50S ribosomal protein L21



- Molecule 39: 50S ribosomal protein L21

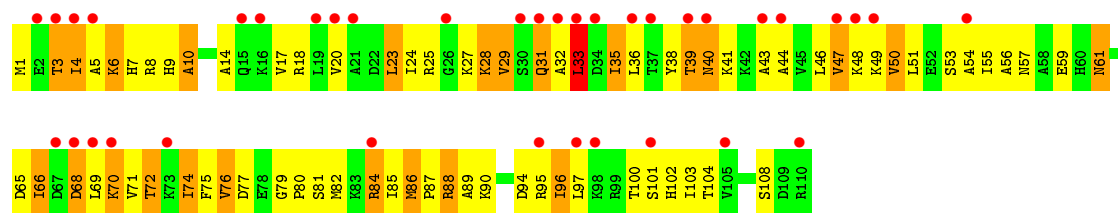


- Molecule 40: 50S ribosomal protein L22

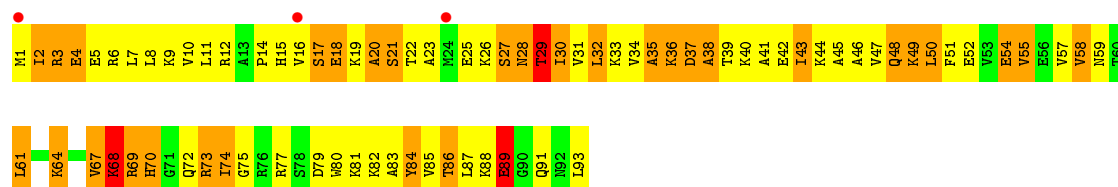
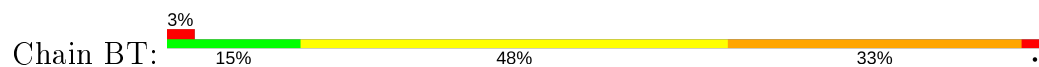


- Molecule 40: 50S ribosomal protein L22

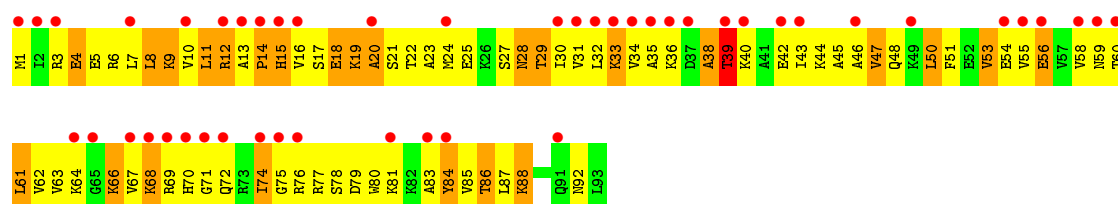
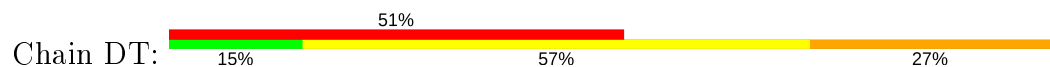




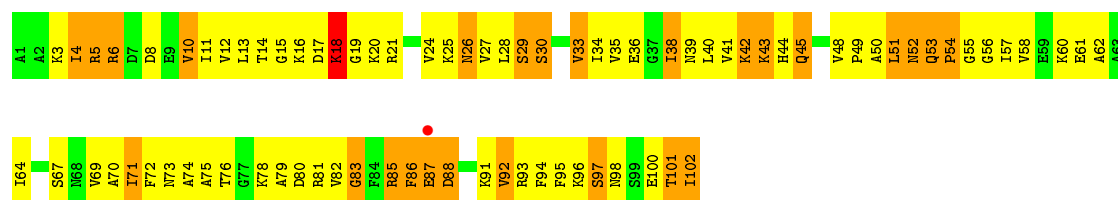
• Molecule 41: 50S ribosomal protein L23



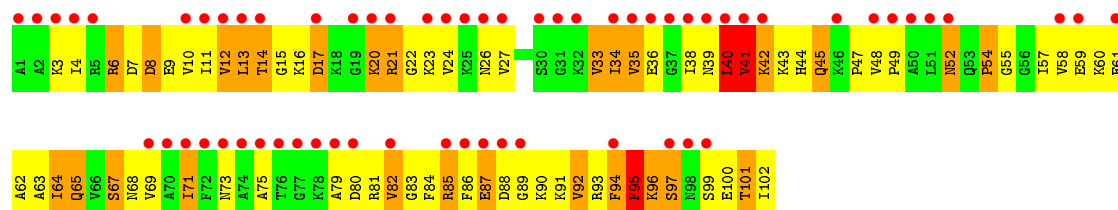
• Molecule 41: 50S ribosomal protein L23



• Molecule 42: 50S ribosomal protein L24

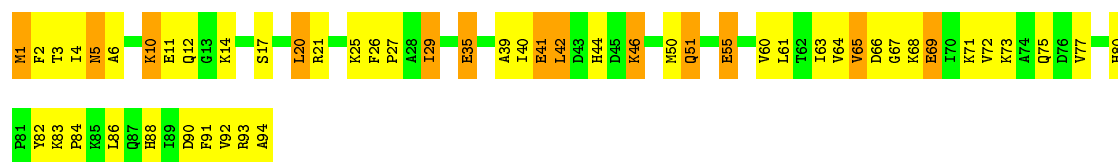


• Molecule 42: 50S ribosomal protein L24



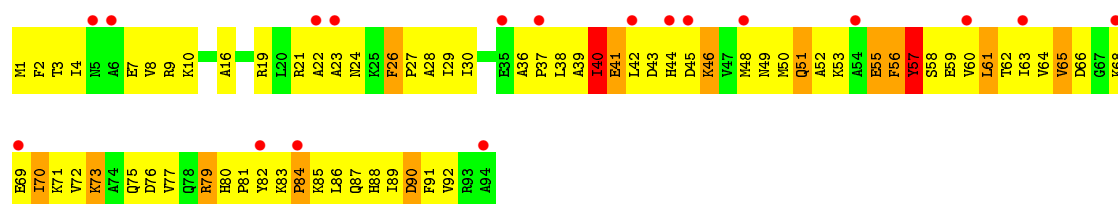
• Molecule 43: 50S ribosomal protein L25

Chain BV: 




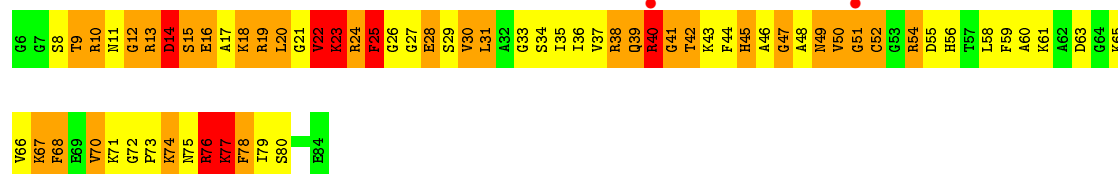
- Molecule 43: 50S ribosomal protein L25

Chain DV: 

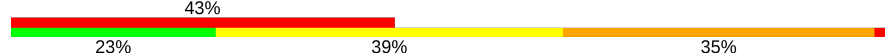


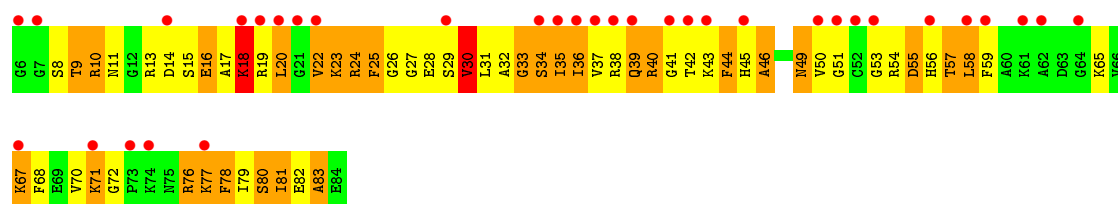
- Molecule 44: 50S ribosomal protein L27

Chain BW: 



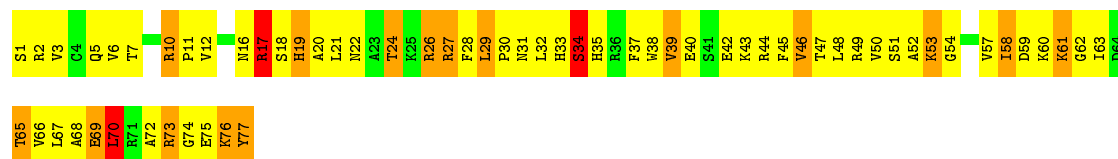
- Molecule 44: 50S ribosomal protein L27

Chain DW: 

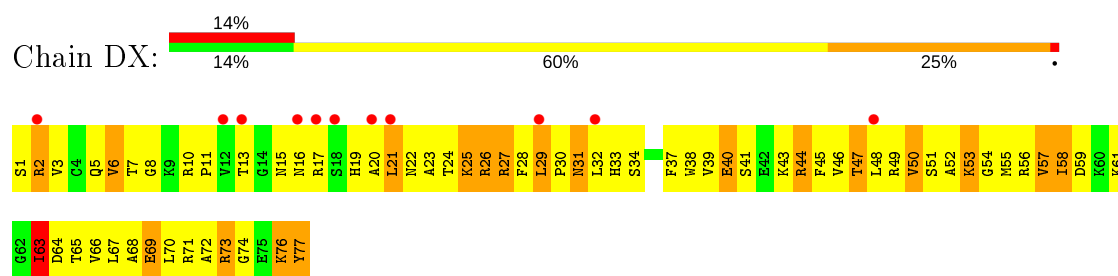


- Molecule 45: 50S ribosomal protein L28

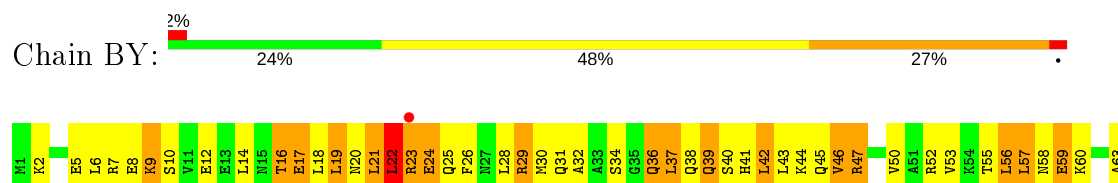
Chain BX: 



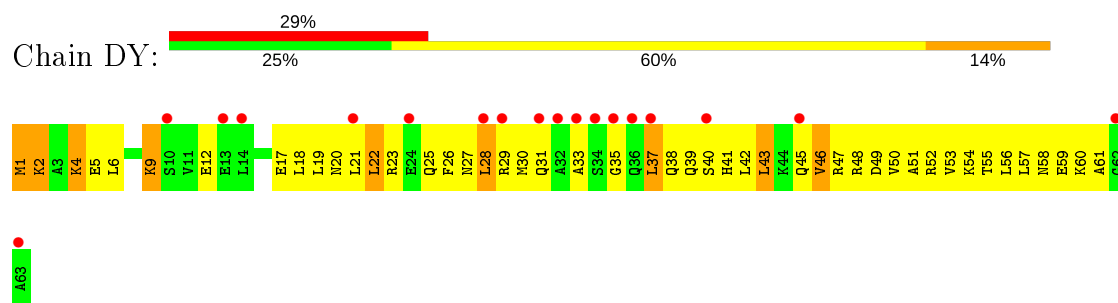
- Molecule 45: 50S ribosomal protein L28



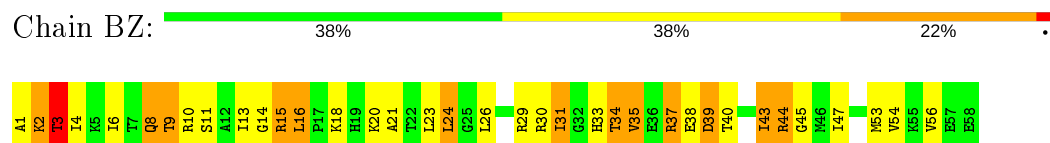
- Molecule 46: 50S ribosomal protein L29



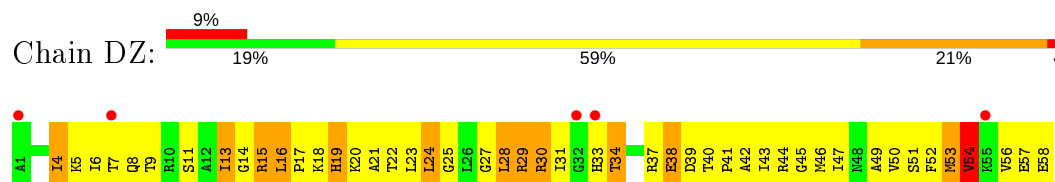
- Molecule 46: 50S ribosomal protein L29



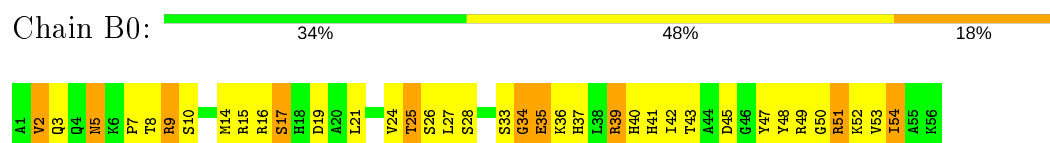
- Molecule 47: 50S ribosomal protein L30



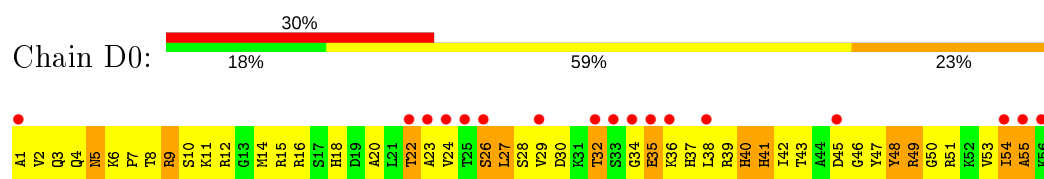
- Molecule 47: 50S ribosomal protein L30



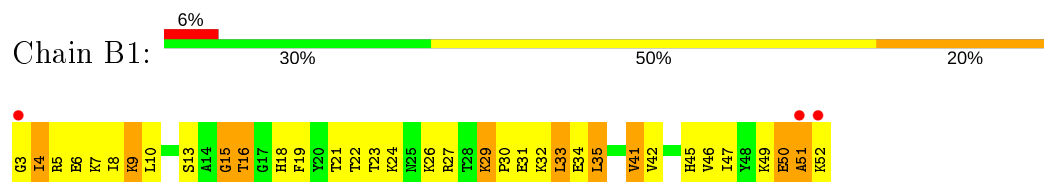
- Molecule 48: 50S ribosomal protein L32



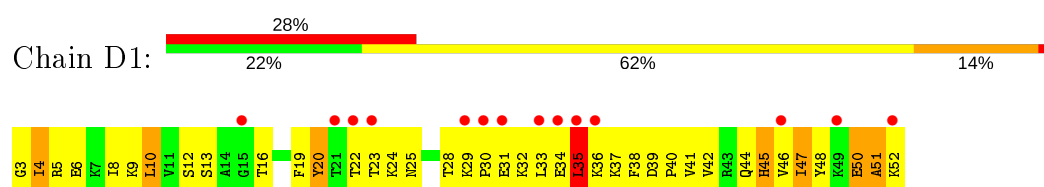
- Molecule 48: 50S ribosomal protein L32



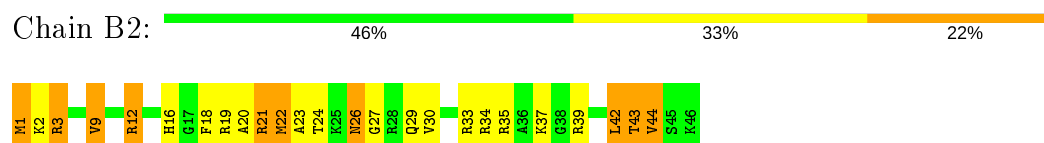
- Molecule 49: 50S ribosomal protein L33



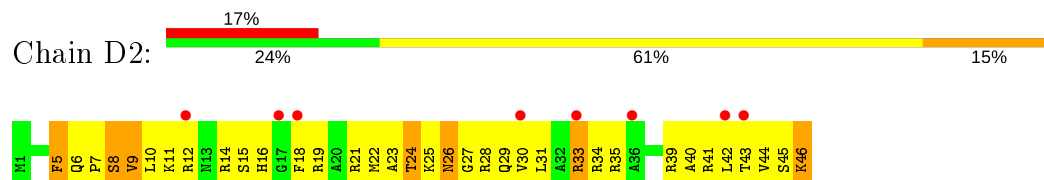
- Molecule 49: 50S ribosomal protein L33



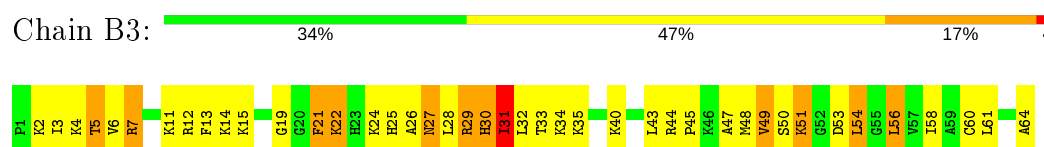
- Molecule 50: 50S ribosomal protein L34



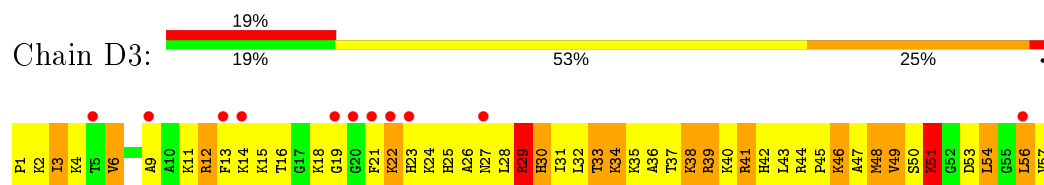
- Molecule 50: 50S ribosomal protein L34



- Molecule 51: 50S ribosomal protein L35



- Molecule 51: 50S ribosomal protein L35





• Molecule 52: 50S ribosomal protein L36



• Molecule 52: 50S ribosomal protein L36



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	211.96Å 434.53Å 623.58Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	82.40 – 3.10 82.42 – 3.10	Depositor EDS
% Data completeness (in resolution range)	(Not available) (82.40-3.10) 83.9 (82.42-3.10)	Depositor EDS
R_{merge}	0.10	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.47 (at 3.13Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.205 , 0.254 0.215 , 0.263	Depositor DCC
R_{free} test set	18659 reflections (2.02%)	wwPDB-VP
Wilson B-factor (Å ²)	54.4	Xtriage
Anisotropy	0.354	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.24 , 79.0	EDS
L-test for twinning ²	$\langle L \rangle = 0.47$, $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.91	EDS
Total number of atoms	284525	wwPDB-VP
Average B, all atoms (Å ²)	102.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.52% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: MG, ZN, ERY

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	0.53	0/36834	1.32	524/57462 (0.9%)
1	CA	0.46	0/36762	1.21	433/57350 (0.8%)
2	AB	0.24	0/1736	0.47	0/2338
2	CB	0.22	0/1736	0.44	0/2338
3	AC	0.27	0/1652	0.50	0/2225
3	CC	0.24	0/1652	0.44	0/2225
4	AD	0.30	0/1665	0.52	0/2227
4	CD	0.37	0/1665	0.61	0/2227
5	AE	0.34	0/1119	0.61	0/1504
5	CE	0.31	0/1119	0.55	0/1504
6	AF	0.29	0/836	0.47	0/1128
6	CF	0.28	0/836	0.51	0/1128
7	AG	0.22	0/1196	0.44	0/1602
7	CG	0.22	0/1188	0.44	0/1591
8	AH	0.32	0/989	0.56	0/1326
8	CH	0.27	0/989	0.49	0/1326
9	AI	0.23	0/1034	0.45	0/1375
9	CI	0.22	0/1034	0.41	0/1375
10	AJ	0.24	0/797	0.47	0/1077
10	CJ	0.21	0/797	0.47	0/1077
11	AK	0.27	0/893	0.53	0/1205
11	CK	0.26	0/893	0.50	0/1205
12	AL	0.38	0/969	0.69	0/1300
12	CL	0.32	0/969	0.56	0/1300
13	AM	0.23	0/893	0.49	0/1193
13	CM	0.27	1/885 (0.1%)	0.39	0/1183
14	AN	0.25	0/785	0.48	0/1043
14	CN	0.21	0/780	0.38	0/1036
15	AO	0.30	0/722	0.49	0/964
15	CO	0.25	0/722	0.44	0/964
16	AP	0.31	0/659	0.51	0/884
16	CP	0.33	0/649	0.53	0/872

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	AQ	0.37	0/658	0.59	0/881
17	CQ	0.26	0/658	0.50	0/881
18	AR	0.29	0/463	0.49	0/621
18	CR	0.28	0/463	0.46	0/621
19	AS	0.23	0/653	0.46	0/877
19	CS	0.21	0/653	0.41	0/877
20	AT	0.34	0/671	0.57	0/888
20	CT	0.26	0/671	0.51	0/888
21	AU	0.25	0/431	0.46	0/570
21	CU	0.31	0/431	0.58	0/570
22	BA	0.85	15/68626 (0.0%)	1.69	1674/107056 (1.6%)
22	DA	0.46	0/68314	1.26	901/106569 (0.8%)
23	BB	0.74	0/2828	1.56	46/4410 (1.0%)
23	DB	0.40	0/2803	1.09	27/4371 (0.6%)
24	BC	0.48	0/2122	0.74	1/2852 (0.0%)
24	DC	0.29	0/2122	0.54	0/2852
25	BD	0.61	0/1586	0.80	2/2134 (0.1%)
25	DD	0.28	0/1586	0.55	0/2134
26	BE	0.51	0/1571	0.73	0/2113
26	DE	0.25	0/1571	0.48	0/2113
27	BF	0.35	0/1435	0.55	0/1928
27	DF	0.21	0/1444	0.44	0/1937
28	BG	0.38	0/1343	0.61	0/1816
28	DG	0.21	0/1343	0.44	0/1816
29	BH	0.28	0/1122	0.51	0/1515
29	DH	0.26	0/1122	0.48	0/1515
30	BI	0.23	0/1046	0.47	0/1410
30	DI	0.20	0/1046	0.42	0/1410
31	BJ	0.60	0/1152	0.84	1/1551 (0.1%)
31	DJ	0.27	0/1152	0.55	1/1551 (0.1%)
32	BK	0.61	1/948 (0.1%)	0.83	0/1268
32	DK	0.30	0/948	0.56	0/1268
33	BL	0.50	0/1054	0.80	2/1403 (0.1%)
33	DL	0.25	0/1054	0.51	0/1403
34	BM	0.55	0/1093	0.78	0/1460
34	DM	0.27	0/1093	0.49	0/1460
35	BN	0.55	0/974	0.82	2/1301 (0.2%)
35	DN	0.27	0/974	0.50	0/1301
36	BO	0.42	0/902	0.66	0/1209
36	DO	0.22	0/902	0.41	0/1209
37	BP	0.52	0/929	0.72	0/1242
37	DP	0.28	0/929	0.49	0/1242
38	BQ	0.72	0/960	0.89	1/1278 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
38	DQ	0.27	0/960	0.46	0/1278
39	BR	0.67	2/829 (0.2%)	0.85	1/1107 (0.1%)
39	DR	0.27	0/829	0.48	0/1107
40	BS	0.63	0/864	0.84	0/1156
40	DS	0.26	0/864	0.51	0/1156
41	BT	0.51	0/745	0.80	0/994
41	DT	0.22	0/745	0.46	0/994
42	BU	0.44	0/788	0.75	0/1051
42	DU	0.23	0/788	0.45	0/1051
43	BV	0.47	0/766	0.65	0/1025
43	DV	0.23	0/766	0.43	0/1025
44	BW	0.67	0/603	0.93	1/797 (0.1%)
44	DW	0.24	0/603	0.48	0/797
45	BX	0.43	0/635	0.75	1/848 (0.1%)
45	DX	0.28	0/635	0.54	0/848
46	BY	0.39	0/510	0.63	0/677
46	DY	0.21	0/510	0.41	0/677
47	BZ	0.58	0/453	0.93	2/605 (0.3%)
47	DZ	0.25	0/453	0.49	0/605
48	B0	0.52	0/450	0.79	0/599
48	D0	0.27	0/450	0.49	0/599
49	B1	0.38	0/417	0.64	0/554
49	D1	0.23	0/417	0.46	0/554
50	B2	0.52	0/380	0.71	0/498
50	D2	0.27	0/380	0.52	0/498
51	B3	0.50	0/513	0.70	1/676 (0.1%)
51	D3	0.26	0/513	0.54	0/676
52	B4	0.41	0/303	0.64	0/397
52	D4	0.24	0/303	0.43	0/397
All	All	0.56	19/306773 (0.0%)	1.25	3621/458571 (0.8%)

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
12	AL	0	1
20	AT	0	1
25	BD	0	1
31	BJ	0	1
35	BN	0	1
All	All	0	5

All (19) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	BA	1142	A	N9-C4	-8.33	1.32	1.37
22	BA	984	A	C5-C6	-7.40	1.34	1.41
39	BR	86	GLN	CB-CG	7.19	1.72	1.52
22	BA	1783	A	N7-C5	-6.87	1.35	1.39
22	BA	984	A	N9-C4	-5.90	1.34	1.37
22	BA	2606	C	N1-C6	-5.84	1.33	1.37
39	BR	86	GLN	CG-CD	5.77	1.64	1.51
13	CM	113	LYS	C-N	-5.63	1.23	1.34
22	BA	1785	A	N7-C5	-5.57	1.35	1.39
22	BA	563	A	N7-C5	-5.57	1.35	1.39
22	BA	984	A	N3-C4	-5.53	1.31	1.34
22	BA	1299	G	N7-C5	-5.52	1.35	1.39
22	BA	1385	A	N9-C4	-5.42	1.34	1.37
22	BA	2699	C	N1-C6	-5.35	1.33	1.37
22	BA	1658	C	N1-C6	-5.32	1.33	1.37
32	BK	122	VAL	CA-CB	5.19	1.65	1.54
22	BA	673	C	N1-C6	-5.11	1.34	1.37
22	BA	2587	A	C5-C4	-5.09	1.35	1.38
22	BA	1654	A	N3-C4	-5.07	1.31	1.34

All (3621) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	571	U	O4'-C1'-N1	17.46	122.17	108.20
22	BA	2848	G	P-O3'-C3'	17.00	140.09	119.70
22	BA	627	A	P-O3'-C3'	16.24	139.19	119.70
22	BA	984	A	N1-C6-N6	16.11	128.26	118.60
22	BA	1603	A	P-O3'-C3'	-15.84	100.69	119.70
1	AA	111	G	P-O3'-C3'	-15.18	101.49	119.70
22	BA	2893	A	P-O3'-C3'	15.14	137.87	119.70
22	BA	984	A	C2-N3-C4	-15.11	103.05	110.60
22	DA	2137	U	N1-C1'-C2'	-14.97	94.53	114.00
22	DA	2283	C	N1-C1'-C2'	-14.81	94.75	114.00
22	DA	946	C	N1-C1'-C2'	-14.73	94.85	114.00
22	BA	451	U	O4'-C1'-N1	14.72	119.98	108.20
22	BA	1997	C	N1-C1'-C2'	-14.71	94.88	114.00
22	BA	788	A	P-O3'-C3'	14.65	137.28	119.70
22	DA	2504	U	N1-C1'-C2'	-14.29	95.43	114.00
22	BA	1012	U	O4'-C1'-N1	14.29	119.63	108.20
22	BA	2283	C	N1-C1'-C2'	-14.16	95.59	114.00
1	AA	1202	U	N1-C1'-C2'	-14.12	95.64	114.00
22	BA	302	C	N1-C1'-C2'	-14.13	95.64	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	250	G	P-O3'-C3'	-14.11	102.77	119.70
22	DA	1956	U	N1-C1'-C2'	-13.79	96.07	114.00
22	BA	531	C	O4'-C1'-N1	-13.74	97.21	108.20
22	BA	2752	C	N1-C1'-C2'	-13.73	96.15	114.00
22	BA	2423	U	O4'-C1'-N1	-13.71	97.23	108.20
22	BA	2776	A	P-O3'-C3'	13.70	136.14	119.70
1	AA	352	C	N1-C1'-C2'	-13.67	96.23	114.00
22	BA	728	G	P-O3'-C3'	13.52	135.93	119.70
22	DA	2586	U	N1-C1'-C2'	-13.51	96.44	114.00
22	DA	485	C	N1-C1'-C2'	-13.45	96.51	114.00
22	BA	241	A	P-O3'-C3'	13.28	135.64	119.70
22	DA	1997	C	N1-C1'-C2'	-13.27	96.75	114.00
1	AA	52	C	N1-C1'-C2'	-13.24	96.79	114.00
22	BA	2800	A	P-O3'-C3'	13.20	135.54	119.70
22	DA	2068	U	N1-C1'-C2'	-13.12	96.95	114.00
22	DA	1782	U	P-O3'-C3'	-13.08	104.01	119.70
22	BA	1151	A	P-O3'-C3'	-13.06	104.02	119.70
22	DA	740	C	N1-C1'-C2'	-13.05	97.03	114.00
22	BA	1023	U	N1-C1'-C2'	-12.97	97.14	114.00
1	CA	1086	U	N1-C1'-C2'	-12.94	97.18	114.00
23	BB	90	C	N1-C1'-C2'	-12.93	97.19	114.00
22	BA	1461	C	N1-C1'-C2'	-12.92	97.20	114.00
1	CA	1302	C	N1-C1'-C2'	-12.90	97.22	114.00
22	BA	783	A	P-O3'-C3'	-12.78	104.37	119.70
22	DA	1782	U	N1-C1'-C2'	-12.78	97.39	114.00
22	DA	2440	C	N1-C1'-C2'	-12.72	97.46	114.00
23	BB	44	G	P-O3'-C3'	12.61	134.84	119.70
22	BA	2517	C	O4'-C1'-N1	12.60	118.28	108.20
1	CA	132	C	N1-C1'-C2'	-12.57	97.66	114.00
22	BA	390	U	P-O3'-C3'	12.56	134.77	119.70
22	BA	1635	A	P-O3'-C3'	-12.50	104.69	119.70
1	CA	66	A	P-O3'-C3'	-12.47	104.74	119.70
1	AA	267	C	N1-C1'-C2'	-12.43	97.84	114.00
1	AA	1202	U	O4'-C1'-N1	12.41	118.13	108.20
22	BA	373	U	N1-C1'-C2'	-12.41	97.87	114.00
22	DA	2300	C	N1-C1'-C2'	-12.40	97.88	114.00
22	DA	1013	C	N1-C1'-C2'	-12.37	97.92	114.00
1	CA	328	C	P-O3'-C3'	12.34	134.51	119.70
22	DA	961	C	P-O3'-C3'	12.34	134.51	119.70
22	BA	805	G	P-O3'-C3'	12.29	134.45	119.70
1	AA	960	U	P-O3'-C3'	12.27	134.42	119.70
22	BA	481	G	P-O3'-C3'	12.26	134.41	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1402	U	N1-C1'-C2'	-12.25	98.07	114.00
22	BA	2214	C	N1-C1'-C2'	-12.24	98.08	114.00
22	DA	234	U	N1-C1'-C2'	-12.21	98.12	114.00
22	BA	92	U	N1-C1'-C2'	-12.14	98.22	114.00
22	BA	227	A	P-O3'-C3'	12.12	134.25	119.70
22	DA	235	U	N1-C1'-C2'	-12.06	98.32	114.00
22	DA	1675	C	N1-C1'-C2'	-12.06	98.32	114.00
22	BA	449	A	P-O3'-C3'	-12.04	105.25	119.70
22	BA	1602	U	O4'-C1'-N1	12.04	117.83	108.20
22	DA	2063	C	N1-C1'-C2'	-12.03	98.37	114.00
1	CA	245	U	N1-C1'-C2'	-12.02	98.38	114.00
22	BA	1993	U	N1-C1'-C2'	-12.01	98.38	114.00
22	BA	847	U	P-O3'-C3'	-12.01	105.29	119.70
22	BA	2447	G	P-O3'-C3'	12.01	134.11	119.70
22	BA	1240	U	O4'-C1'-N1	-11.98	98.61	108.20
22	BA	1435	G	P-O3'-C3'	-11.96	105.35	119.70
22	BA	2712	C	P-O3'-C3'	11.93	134.01	119.70
22	BA	1971	U	N1-C1'-C2'	-11.84	98.61	114.00
22	DA	1804	C	P-O3'-C3'	-11.83	105.50	119.70
22	DA	1023	U	N1-C1'-C2'	-11.81	98.65	114.00
22	BA	588	U	N1-C1'-C2'	-11.79	98.67	114.00
22	DA	2616	C	P-O3'-C3'	-11.79	105.55	119.70
1	AA	32	A	P-O3'-C3'	-11.79	105.56	119.70
22	BA	531	C	P-O3'-C3'	11.78	133.83	119.70
22	BA	961	C	O4'-C1'-N1	11.76	117.60	108.20
22	DA	2095	A	P-O3'-C3'	-11.75	105.60	119.70
23	BB	88	C	O4'-C1'-N1	-11.74	98.81	108.20
22	BA	790	U	N1-C1'-C2'	-11.72	98.76	114.00
22	BA	2060	A	P-O3'-C3'	11.72	133.76	119.70
22	BA	1204	A	P-O3'-C3'	11.70	133.74	119.70
1	AA	870	U	P-O3'-C3'	11.67	133.70	119.70
22	DA	1963	U	N1-C1'-C2'	-11.65	98.85	114.00
22	DA	1967	C	N1-C1'-C2'	-11.64	98.86	114.00
22	BA	1815	A	P-O3'-C3'	11.63	133.66	119.70
22	BA	984	A	C6-C5-N7	-11.62	124.17	132.30
22	BA	2581	G	P-O3'-C3'	11.61	133.64	119.70
22	DA	1667	G	P-O3'-C3'	11.61	133.63	119.70
22	DA	2320	U	N1-C1'-C2'	-11.60	98.92	114.00
22	DA	765	C	N1-C1'-C2'	-11.59	98.94	114.00
22	DA	2347	C	N1-C1'-C2'	-11.59	98.94	114.00
22	BA	1602	U	P-O3'-C3'	11.58	133.59	119.70
1	AA	1282	C	N1-C1'-C2'	-11.57	98.96	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1654	A	N9-C1'-C2'	-11.54	99.00	114.00
22	BA	2691	C	N1-C1'-C2'	-11.53	99.01	114.00
1	CA	643	C	N1-C1'-C2'	-11.53	99.01	114.00
22	BA	1287	A	P-O3'-C3'	-11.52	105.88	119.70
1	AA	597	G	P-O3'-C3'	-11.49	105.91	119.70
1	CA	330	C	N1-C1'-C2'	-11.49	99.06	114.00
22	BA	49	A	P-O3'-C3'	11.46	133.45	119.70
22	BA	1782	U	N1-C1'-C2'	-11.46	99.10	114.00
1	AA	1284	C	N1-C1'-C2'	-11.42	99.16	114.00
1	CA	520	A	P-O3'-C3'	-11.42	106.00	119.70
22	BA	1675	C	N1-C1'-C2'	-11.40	99.17	114.00
22	BA	2879	A	P-O3'-C3'	11.37	133.34	119.70
1	CA	116	A	P-O3'-C3'	-11.34	106.09	119.70
1	CA	352	C	N1-C1'-C2'	-11.33	99.27	114.00
1	CA	1095	U	N1-C1'-C2'	-11.30	99.31	114.00
22	DA	87	U	N1-C1'-C2'	-11.30	99.31	114.00
22	BA	1963	U	P-O3'-C3'	-11.29	106.15	119.70
1	CA	1230	C	N1-C1'-C2'	-11.26	99.36	114.00
1	CA	1383	C	N1-C1'-C2'	-11.25	99.38	114.00
1	AA	122	G	P-O3'-C3'	-11.23	106.23	119.70
22	BA	1859	U	N1-C1'-C2'	-11.22	99.42	114.00
22	BA	164	C	P-O3'-C3'	-11.21	106.24	119.70
1	CA	891	U	N1-C1'-C2'	-11.21	99.42	114.00
22	DA	244	A	P-O3'-C3'	-11.18	106.28	119.70
22	BA	1967	C	N1-C1'-C2'	-11.16	99.49	114.00
23	DB	90	C	N1-C1'-C2'	-11.15	99.50	114.00
22	DA	2646	C	N1-C1'-C2'	-11.14	99.52	114.00
22	BA	2424	C	P-O3'-C3'	-11.13	106.34	119.70
22	DA	2348	U	N1-C1'-C2'	-11.13	99.53	114.00
22	BA	1398	C	N1-C1'-C2'	-11.12	99.54	114.00
1	CA	14	U	N1-C1'-C2'	-11.10	99.57	114.00
22	BA	1779	U	O4'-C1'-N1	11.09	117.07	108.20
1	AA	972	C	N1-C1'-C2'	-11.08	99.59	114.00
22	BA	1394	U	O4'-C1'-N1	-11.04	99.37	108.20
22	BA	2809	A	P-O3'-C3'	-11.01	106.48	119.70
22	BA	685	A	P-O3'-C3'	11.01	132.91	119.70
1	AA	488	C	N1-C1'-C2'	-11.00	99.70	114.00
22	BA	229	C	N1-C1'-C2'	-10.99	99.71	114.00
22	DA	1081	U	N1-C1'-C2'	-10.98	99.73	114.00
22	BA	2382	G	P-O3'-C3'	10.97	132.86	119.70
22	BA	2449	U	O4'-C1'-N1	-10.96	99.43	108.20
1	CA	252	U	N1-C1'-C2'	-10.96	99.75	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1249	U	N1-C1'-C2'	-10.94	99.78	114.00
22	BA	435	C	N1-C1'-C2'	-10.91	99.82	114.00
22	BA	573	U	O4'-C1'-N1	10.90	116.92	108.20
1	AA	512	U	N1-C1'-C2'	-10.90	99.83	114.00
22	BA	861	A	P-O3'-C3'	-10.90	106.62	119.70
22	BA	671	C	N1-C1'-C2'	-10.88	99.85	114.00
22	DA	2875	C	N1-C1'-C2'	-10.88	99.86	114.00
23	DB	110	C	N1-C1'-C2'	-10.87	99.88	114.00
22	BA	2425	A	P-O3'-C3'	10.86	132.73	119.70
22	BA	2894	G	P-O3'-C3'	-10.86	106.67	119.70
22	BA	164	C	N1-C1'-C2'	-10.85	99.89	114.00
22	BA	1417	C	N1-C1'-C2'	-10.84	99.91	114.00
1	CA	109	A	P-O3'-C3'	10.83	132.69	119.70
22	DA	915	C	N1-C1'-C2'	-10.80	99.96	114.00
22	DA	1512	C	N1-C1'-C2'	-10.80	99.96	114.00
22	DA	128	C	N1-C1'-C2'	-10.80	99.96	114.00
22	BA	2333	A	P-O3'-C3'	10.77	132.63	119.70
22	BA	249	C	P-O3'-C3'	10.76	132.61	119.70
22	BA	587	C	O4'-C1'-N1	-10.76	99.59	108.20
1	CA	997	U	N1-C1'-C2'	-10.76	100.01	114.00
22	DA	2616	C	N1-C1'-C2'	-10.76	100.01	114.00
22	BA	1247	A	P-O3'-C3'	10.76	132.61	119.70
23	BB	25	U	N1-C1'-C2'	-10.75	100.02	114.00
22	BA	243	U	N1-C1'-C2'	-10.75	100.02	114.00
1	AA	1345	U	O4'-C1'-N1	10.74	116.79	108.20
1	CA	372	C	O4'-C1'-N1	10.74	116.79	108.20
22	BA	995	C	O4'-C1'-N1	-10.73	99.61	108.20
22	BA	1330	C	N1-C1'-C2'	-10.72	100.06	114.00
22	BA	784	G	P-O3'-C3'	10.72	132.56	119.70
1	AA	275	G	P-O3'-C3'	-10.71	106.85	119.70
1	AA	812	G	P-O3'-C3'	10.70	132.54	119.70
1	CA	1528	U	P-O3'-C3'	10.70	132.54	119.70
1	AA	1532	U	N1-C1'-C2'	-10.70	100.09	114.00
22	BA	1013	C	N1-C1'-C2'	-10.69	100.11	114.00
22	BA	1648	U	N1-C1'-C2'	-10.67	100.13	114.00
22	DA	2382	G	P-O3'-C3'	10.67	132.50	119.70
22	BA	790	U	P-O3'-C3'	-10.67	106.90	119.70
1	AA	330	C	N1-C1'-C2'	-10.64	100.17	114.00
22	BA	2022	U	O4'-C1'-N1	10.64	116.71	108.20
22	BA	1360	G	P-O3'-C3'	-10.64	106.94	119.70
22	BA	475	C	N1-C1'-C2'	-10.61	100.20	114.00
22	BA	934	U	N1-C1'-C2'	-10.61	100.20	114.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1707	G	P-O3'-C3'	-10.60	106.98	119.70
1	AA	1507	A	P-O3'-C3'	-10.59	106.99	119.70
22	DA	934	U	N1-C1'-C2'	-10.58	100.25	114.00
1	AA	915	A	P-O3'-C3'	-10.54	107.05	119.70
22	BA	1249	U	N1-C1'-C2'	-10.53	100.31	114.00
22	DA	2880	C	N1-C1'-C2'	-10.53	100.31	114.00
22	DA	1289	C	N1-C1'-C2'	-10.52	100.32	114.00
22	BA	2384	U	P-O3'-C3'	10.51	132.31	119.70
22	BA	645	C	P-O3'-C3'	10.50	132.30	119.70
22	BA	1427	A	P-O3'-C3'	10.50	132.30	119.70
22	BA	2226	C	P-O3'-C3'	-10.48	107.13	119.70
22	BA	1565	C	N1-C1'-C2'	10.46	127.60	114.00
1	AA	1528	U	P-O3'-C3'	10.45	132.24	119.70
1	CA	92	U	N1-C1'-C2'	-10.44	100.42	114.00
22	BA	2239	G	P-O3'-C3'	-10.43	107.18	119.70
22	BA	2068	U	N1-C1'-C2'	-10.43	100.44	114.00
1	CA	248	C	N1-C1'-C2'	-10.43	100.44	114.00
22	DA	392	U	N1-C1'-C2'	-10.43	100.45	114.00
1	AA	985	C	N1-C1'-C2'	-10.42	100.45	114.00
1	AA	874	G	P-O3'-C3'	-10.42	107.19	119.70
1	AA	66	A	P-O3'-C3'	-10.41	107.20	119.70
22	BA	1396	U	O4'-C1'-N1	10.41	116.53	108.20
22	DA	991	C	N1-C1'-C2'	-10.40	100.48	114.00
22	DA	1565	C	P-O3'-C3'	10.39	132.17	119.70
22	BA	2086	U	N1-C1'-C2'	-10.39	100.49	114.00
22	BA	2225	A	P-O3'-C3'	10.37	132.15	119.70
22	BA	1963	U	N1-C1'-C2'	-10.37	100.52	114.00
22	BA	2801	G	P-O3'-C3'	-10.36	107.27	119.70
1	AA	1448	C	N1-C1'-C2'	-10.35	100.54	114.00
22	BA	239	C	N1-C1'-C2'	-10.35	100.54	114.00
22	BA	687	C	N1-C1'-C2'	-10.34	100.56	114.00
22	BA	1045	C	P-O3'-C3'	10.34	132.10	119.70
22	DA	1991	U	O4'-C1'-N1	-10.34	99.93	108.20
1	CA	316	C	N1-C1'-C2'	-10.32	100.59	114.00
22	BA	2023	C	N1-C1'-C2'	-10.31	100.59	114.00
22	BA	178	G	P-O3'-C3'	-10.31	107.33	119.70
22	BA	1288	G	O4'-C1'-N9	10.31	116.45	108.20
22	DA	2586	U	P-O3'-C3'	-10.31	107.33	119.70
22	BA	119	A	P-O3'-C3'	10.30	132.06	119.70
22	BA	2497	A	P-O3'-C3'	10.29	132.05	119.70
1	AA	1162	C	N1-C1'-C2'	-10.29	100.63	114.00
22	BA	604	G	P-O3'-C3'	-10.27	107.37	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2214	C	N1-C1'-C2'	-10.27	100.65	114.00
1	CA	239	U	O4'-C1'-N1	-10.26	99.99	108.20
22	DA	206	U	N1-C1'-C2'	-10.26	100.66	114.00
1	CA	1401	G	P-O3'-C3'	-10.24	107.41	119.70
1	AA	1224	U	P-O3'-C3'	10.24	131.99	119.70
22	DA	2151	U	N1-C1'-C2'	-10.23	100.70	114.00
22	BA	1634	A	P-O3'-C3'	10.22	131.96	119.70
22	BA	1249	U	O4'-C1'-N1	-10.21	100.03	108.20
23	BB	57	A	P-O3'-C3'	-10.19	107.47	119.70
22	BA	1941	C	N1-C1'-C2'	-10.19	100.75	114.00
22	DA	1963	U	P-O3'-C3'	-10.19	107.47	119.70
22	DA	164	C	N1-C1'-C2'	-10.19	100.76	114.00
22	DA	2645	G	P-O3'-C3'	10.18	131.92	119.70
22	BA	656	G	P-O3'-C3'	-10.17	107.50	119.70
22	BA	2609	U	O4'-C1'-N1	10.16	116.33	108.20
22	BA	2506	U	O4'-C1'-N1	10.15	116.32	108.20
22	BA	2036	C	N1-C1'-C2'	-10.14	100.81	114.00
22	DA	481	G	O4'-C1'-N9	10.13	116.31	108.20
1	AA	13	U	P-O3'-C3'	10.13	131.85	119.70
22	BA	2044	C	P-O3'-C3'	-10.13	107.55	119.70
1	AA	490	C	N1-C1'-C2'	-10.10	100.87	114.00
22	BA	61	C	N1-C1'-C2'	-10.08	100.89	114.00
22	BA	2807	U	O4'-C1'-N1	-10.07	100.14	108.20
22	BA	1954	G	P-O3'-C3'	10.06	131.78	119.70
22	BA	1971	U	O4'-C1'-N1	10.06	116.25	108.20
22	DA	304	U	N1-C1'-C2'	-10.06	100.92	114.00
1	AA	889	A	P-O3'-C3'	10.05	131.77	119.70
22	DA	459	U	N1-C1'-C2'	-10.05	100.93	114.00
22	BA	646	U	N1-C1'-C2'	-10.04	100.95	114.00
1	AA	119	A	P-O3'-C3'	10.02	131.72	119.70
1	AA	1203	C	N1-C1'-C2'	-10.01	100.99	114.00
1	AA	891	U	N1-C1'-C2'	-10.01	100.99	114.00
22	BA	204	A	P-O3'-C3'	10.00	131.70	119.70
1	CA	1345	U	O4'-C1'-N1	9.98	116.19	108.20
1	CA	1449	C	N1-C1'-C2'	-9.97	101.03	112.00
22	BA	1034	G	P-O3'-C3'	-9.97	107.74	119.70
22	BA	2030	A	P-O3'-C3'	9.97	131.66	119.70
22	BA	2137	U	N1-C1'-C2'	-9.95	101.05	112.00
22	DA	2611	C	N1-C1'-C2'	-9.95	101.06	112.00
1	CA	1065	U	O4'-C1'-N1	9.93	116.15	108.20
22	BA	2808	G	P-O3'-C3'	9.93	131.62	119.70
22	DA	1291	C	N1-C1'-C2'	-9.93	101.08	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	511	C	P-O3'-C3'	9.91	131.59	119.70
22	DA	250	G	P-O3'-C3'	-9.91	107.81	119.70
22	BA	1250	G	P-O3'-C3'	9.91	131.59	119.70
1	AA	534	U	N1-C1'-C2'	-9.90	101.11	112.00
22	BA	215	G	P-O3'-C3'	9.90	131.58	119.70
22	BA	2728	U	P-O3'-C3'	9.90	131.58	119.70
22	BA	301	G	P-O3'-C3'	9.89	131.57	119.70
22	BA	1654	A	P-O3'-C3'	-9.89	107.83	119.70
22	BA	784	G	O4'-C1'-N9	-9.89	100.29	108.20
1	AA	33	A	P-O3'-C3'	-9.87	107.86	119.70
22	BA	2725	A	P-O3'-C3'	9.86	131.54	119.70
22	DA	2520	C	N1-C1'-C2'	-9.85	101.16	112.00
22	BA	2611	C	N1-C1'-C2'	-9.84	101.18	112.00
22	DA	15	G	P-O3'-C3'	-9.84	107.89	119.70
22	BA	1272	A	P-O3'-C3'	9.84	131.50	119.70
1	AA	1181	G	P-O3'-C3'	9.83	131.50	119.70
1	AA	1088	G	P-O3'-C3'	-9.81	107.93	119.70
22	BA	2572	A	P-O3'-C3'	9.81	131.47	119.70
22	BA	2835	A	P-O3'-C3'	9.79	131.45	119.70
22	DA	2043	C	O4'-C1'-N1	-9.78	100.37	108.20
22	DA	1064	C	N1-C1'-C2'	-9.78	101.24	112.00
22	DA	2615	U	N1-C1'-C2'	-9.78	101.25	112.00
22	BA	2824	C	N1-C2-O2	-9.77	113.04	118.90
22	DA	2333	A	P-O3'-C3'	9.77	131.42	119.70
22	BA	1816	C	P-O3'-C3'	-9.77	107.98	119.70
1	CA	792	A	P-O3'-C3'	9.75	131.40	119.70
22	DA	86	G	P-O3'-C3'	-9.74	108.02	119.70
1	AA	1128	C	N1-C1'-C2'	-9.73	101.29	112.00
22	BA	459	U	N1-C1'-C2'	-9.73	101.29	112.00
22	BA	2756	U	P-O3'-C3'	9.73	131.38	119.70
1	CA	980	C	N1-C1'-C2'	-9.73	101.30	112.00
22	BA	2347	C	N1-C1'-C2'	-9.73	101.30	112.00
22	BA	85	G	P-O3'-C3'	-9.72	108.03	119.70
22	BA	2866	U	O4'-C1'-N1	9.72	115.98	108.20
22	DA	1648	U	N1-C1'-C2'	-9.71	101.32	112.00
22	BA	620	G	P-O3'-C3'	9.70	131.34	119.70
22	BA	2210	U	P-O3'-C3'	9.70	131.34	119.70
22	BA	1838	C	P-O3'-C3'	9.70	131.34	119.70
22	DA	917	A	P-O3'-C3'	-9.70	108.06	119.70
22	DA	2498	C	N1-C1'-C2'	-9.69	101.34	112.00
22	BA	587	C	N1-C1'-C2'	9.69	126.59	114.00
22	BA	747	U	P-O3'-C3'	-9.69	108.08	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	616	A	P-O3'-C3'	-9.68	108.09	119.70
22	DA	413	C	N1-C1'-C2'	-9.67	101.36	112.00
22	BA	1135	C	N1-C1'-C2'	-9.66	101.37	112.00
22	BA	2689	U	O4'-C1'-N1	9.66	115.93	108.20
22	DA	846	U	O4'-C1'-N1	9.66	115.93	108.20
22	BA	783	A	C5-N7-C8	-9.64	99.08	103.90
1	CA	486	U	N1-C1'-C2'	-9.64	101.39	112.00
1	AA	934	C	O4'-C1'-N1	9.64	115.91	108.20
22	BA	126	A	P-O3'-C3'	-9.62	108.15	119.70
22	DA	763	G	P-O3'-C3'	-9.60	108.18	119.70
1	CA	1161	C	N1-C1'-C2'	-9.59	101.45	112.00
22	BA	527	C	P-O3'-C3'	9.59	131.20	119.70
22	BA	238	C	P-O3'-C3'	9.58	131.19	119.70
22	BA	1476	U	N1-C1'-C2'	-9.56	101.48	112.00
22	BA	503	A	P-O3'-C3'	9.56	131.17	119.70
22	DA	829	A	P-O3'-C3'	9.55	131.16	119.70
1	AA	93	U	N1-C1'-C2'	-9.55	101.50	112.00
22	BA	2645	G	P-O3'-C3'	9.54	131.15	119.70
1	CA	512	U	N1-C1'-C2'	-9.54	101.50	112.00
1	CA	705	G	P-O3'-C3'	-9.54	108.25	119.70
22	BA	2629	U	P-O3'-C3'	9.53	131.13	119.70
22	BA	1455	G	P-O3'-C3'	-9.53	108.27	119.70
22	BA	2490	G	P-O3'-C3'	9.52	131.12	119.70
22	DA	2656	U	N1-C1'-C2'	-9.52	101.53	112.00
1	AA	969	A	P-O3'-C3'	-9.52	108.28	119.70
22	BA	1329	U	P-O3'-C3'	9.51	131.11	119.70
1	CA	755	G	P-O3'-C3'	-9.51	108.29	119.70
1	CA	1068	G	P-O3'-C3'	-9.51	108.29	119.70
1	AA	1095	U	N1-C1'-C2'	-9.51	101.54	112.00
22	BA	984	A	N9-C4-C5	-9.51	102.00	105.80
22	BA	1288	G	P-O3'-C3'	9.51	131.11	119.70
1	AA	279	A	P-O3'-C3'	9.50	131.10	119.70
22	DA	2023	C	N1-C1'-C2'	-9.48	101.58	112.00
22	BA	1647	U	O4'-C1'-N1	9.46	115.77	108.20
22	BA	2468	A	P-O3'-C3'	9.45	131.04	119.70
22	BA	413	C	N1-C1'-C2'	-9.45	101.60	112.00
22	BA	522	A	P-O3'-C3'	-9.45	108.36	119.70
22	DA	1971	U	O4'-C1'-N1	9.45	115.76	108.20
22	DA	2226	C	N1-C1'-C2'	-9.45	101.60	112.00
1	AA	1298	U	P-O3'-C3'	9.45	131.04	119.70
22	DA	945	A	P-O3'-C3'	9.45	131.04	119.70
1	AA	173	U	O4'-C1'-N1	9.45	115.76	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2617	U	P-O3'-C3'	-9.44	108.37	119.70
1	AA	1381	U	N1-C1'-C2'	-9.44	101.62	112.00
22	BA	506	G	P-O3'-C3'	9.44	131.02	119.70
22	DA	1655	A	P-O3'-C3'	-9.43	108.38	119.70
22	BA	2312	U	N1-C1'-C2'	-9.42	101.64	112.00
22	BA	1682	G	P-O3'-C3'	-9.41	108.41	119.70
22	BA	866	A	N9-C1'-C2'	-9.40	101.66	112.00
1	CA	95	C	N1-C1'-C2'	-9.40	101.66	112.00
22	BA	2656	U	N1-C1'-C2'	-9.40	101.67	112.00
22	DA	588	U	N1-C1'-C2'	-9.39	101.67	112.00
22	DA	2137	U	P-O3'-C3'	-9.38	108.44	119.70
23	BB	52	A	P-O3'-C3'	9.38	130.96	119.70
22	BA	2681	C	P-O3'-C3'	9.38	130.96	119.70
22	DA	672	C	N1-C1'-C2'	-9.38	101.69	112.00
22	BA	1265	A	P-O3'-C3'	9.37	130.95	119.70
1	AA	1451	U	P-O3'-C3'	9.36	130.94	119.70
22	BA	621	A	P-O3'-C3'	-9.35	108.48	119.70
22	DA	2875	C	O4'-C1'-N1	9.34	115.67	108.20
1	AA	305	G	P-O3'-C3'	9.33	130.90	119.70
1	CA	173	U	O4'-C1'-N1	9.33	115.66	108.20
22	BA	1498	C	N1-C1'-C2'	-9.32	101.75	112.00
22	BA	200	U	N1-C1'-C2'	-9.32	101.75	112.00
22	BA	2197	U	P-O3'-C3'	9.32	130.88	119.70
22	BA	2498	C	N1-C1'-C2'	-9.32	101.75	112.00
22	DA	1965	C	N1-C1'-C2'	-9.31	101.76	112.00
22	BA	92	U	P-O3'-C3'	-9.31	108.53	119.70
22	BA	2200	C	N1-C1'-C2'	-9.31	101.76	112.00
1	AA	984	C	N1-C1'-C2'	-9.29	101.78	112.00
22	DA	1417	C	N1-C1'-C2'	-9.30	101.77	112.00
22	BA	404	A	P-O3'-C3'	9.29	130.85	119.70
22	BA	512	G	O4'-C1'-N9	9.29	115.63	108.20
22	BA	686	U	O4'-C1'-N1	9.29	115.63	108.20
22	DA	1982	U	N1-C1'-C2'	-9.29	101.78	112.00
23	BB	48	U	P-O5'-C5'	-9.29	106.04	120.90
1	CA	577	G	P-O3'-C3'	-9.29	108.56	119.70
1	AA	1259	C	N1-C1'-C2'	-9.28	101.79	112.00
22	DA	533	G	P-O3'-C3'	-9.28	108.56	119.70
22	DA	243	U	N1-C1'-C2'	-9.28	101.79	112.00
22	BA	1779	U	C5-C6-N1	-9.28	118.06	122.70
22	DA	2874	C	N1-C1'-C2'	-9.28	101.80	112.00
22	DA	778	G	P-O3'-C3'	-9.27	108.58	119.70
1	AA	961	U	N1-C1'-C2'	-9.27	101.81	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	595	A	P-O3'-C3'	9.26	130.81	119.70
22	DA	1498	C	N1-C1'-C2'	-9.26	101.82	112.00
22	DA	2450	A	P-O3'-C3'	-9.24	108.61	119.70
22	BA	727	A	P-O5'-C5'	-9.24	106.12	120.90
22	DA	1267	U	N1-C1'-C2'	-9.24	101.84	112.00
1	AA	547	A	P-O3'-C3'	9.23	130.77	119.70
1	AA	1283	U	N1-C1'-C2'	-9.22	101.85	112.00
22	BA	2732	G	P-O3'-C3'	9.22	130.76	119.70
22	BA	671	C	O4'-C1'-N1	9.20	115.56	108.20
22	DA	2712	C	P-O3'-C3'	9.20	130.74	119.70
22	DA	1476	U	O4'-C1'-N1	9.20	115.56	108.20
22	DA	1611	C	N1-C1'-C2'	-9.19	101.89	112.00
1	AA	173	U	P-O3'-C3'	9.19	130.72	119.70
22	DA	78	U	O4'-C1'-N1	9.18	115.55	108.20
22	BA	62	U	O4'-C1'-N1	9.18	115.55	108.20
1	AA	793	U	P-O3'-C3'	-9.18	108.69	119.70
1	AA	1349	A	P-O3'-C3'	-9.16	108.71	119.70
22	BA	61	C	P-O3'-C3'	-9.16	108.71	119.70
1	CA	486	U	P-O5'-C5'	-9.16	106.24	120.90
1	CA	1283	U	N1-C1'-C2'	-9.16	101.92	112.00
22	BA	143	C	N1-C1'-C2'	-9.16	101.93	112.00
22	BA	1644	C	N1-C1'-C2'	-9.15	101.93	112.00
1	AA	575	G	P-O3'-C3'	9.14	130.67	119.70
1	AA	972	C	O4'-C1'-N1	9.14	115.52	108.20
22	DA	1418	G	P-O3'-C3'	-9.14	108.73	119.70
22	DA	1804	C	N1-C1'-C2'	-9.12	101.96	112.00
22	BA	1499	C	O4'-C1'-N1	9.12	115.50	108.20
23	BB	67	G	P-O3'-C3'	-9.12	108.75	119.70
22	BA	1965	C	N1-C1'-C2'	-9.11	101.98	112.00
1	AA	1228	C	N1-C1'-C2'	-9.11	101.98	112.00
22	BA	646	U	O4'-C1'-N1	9.11	115.48	108.20
1	CA	331	G	P-O3'-C3'	-9.11	108.77	119.70
22	DA	933	A	P-O3'-C3'	-9.10	108.78	119.70
22	DA	1682	G	P-O3'-C3'	-9.10	108.78	119.70
1	AA	1399	C	P-O3'-C3'	9.10	130.61	119.70
22	BA	962	G	P-O3'-C3'	-9.09	108.80	119.70
22	BA	2266	A	P-O3'-C3'	9.09	130.60	119.70
1	CA	200	G	P-O3'-C3'	-9.07	108.81	119.70
22	BA	2319	G	P-O3'-C3'	9.07	130.59	119.70
22	BA	1920	C	P-O3'-C3'	-9.07	108.82	119.70
1	AA	307	C	P-O3'-C3'	-9.06	108.83	119.70
1	AA	110	C	N1-C1'-C2'	-9.06	102.04	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	811	U	P-O3'-C3'	9.05	130.56	119.70
22	BA	2354	C	O4'-C1'-N1	-9.02	100.99	108.20
1	CA	428	G	P-O3'-C3'	9.01	130.51	119.70
22	BA	1786	A	O4'-C1'-N9	9.01	115.41	108.20
22	DA	656	G	P-O3'-C3'	-9.01	108.89	119.70
22	BA	208	C	C6-N1-C2	9.00	123.90	120.30
23	BB	40	U	P-O3'-C3'	9.00	130.50	119.70
22	BA	2689	U	N1-C1'-C2'	9.00	125.69	114.00
1	CA	986	U	N1-C1'-C2'	-9.00	102.10	112.00
22	DA	1324	G	P-O3'-C3'	8.99	130.49	119.70
22	BA	2541	A	P-O3'-C3'	8.98	130.48	119.70
1	AA	1068	G	P-O3'-C3'	-8.98	108.93	119.70
22	DA	2691	C	N1-C1'-C2'	-8.97	102.13	112.00
22	BA	847	U	N1-C1'-C2'	-8.96	102.14	112.00
1	AA	1380	U	P-O3'-C3'	8.96	130.45	119.70
1	AA	1125	U	P-O3'-C3'	8.96	130.45	119.70
1	AA	821	G	P-O3'-C3'	-8.96	108.95	119.70
22	DA	2320	U	P-O3'-C3'	-8.95	108.96	119.70
22	BA	974	G	C5-N7-C8	-8.95	99.83	104.30
22	BA	165	A	P-O3'-C3'	-8.94	108.97	119.70
22	DA	831	G	P-O3'-C3'	-8.93	108.98	119.70
22	BA	2051	A	P-O3'-C3'	8.93	130.41	119.70
22	DA	1276	A	P-O3'-C3'	-8.93	108.99	119.70
22	BA	2230	G	P-O3'-C3'	-8.92	109.00	119.70
22	BA	369	U	O4'-C1'-N1	-8.91	101.07	108.20
22	DA	2299	U	N1-C1'-C2'	-8.88	102.23	112.00
1	AA	577	G	P-O3'-C3'	-8.86	109.06	119.70
1	AA	1502	A	P-O3'-C3'	8.86	130.33	119.70
22	BA	2733	A	P-O3'-C3'	-8.86	109.07	119.70
22	BA	27	G	P-O3'-C3'	8.86	130.33	119.70
22	DA	2469	A	P-O3'-C3'	-8.86	109.07	119.70
1	AA	1348	U	N1-C1'-C2'	-8.85	102.26	112.00
22	BA	421	C	P-O3'-C3'	8.85	130.32	119.70
22	BA	1434	A	P-O3'-C3'	8.85	130.32	119.70
22	BA	1379	U	N1-C1'-C2'	-8.84	102.28	112.00
22	BA	2504	U	N1-C1'-C2'	-8.83	102.29	112.00
22	BA	1981	A	P-O3'-C3'	-8.82	109.12	119.70
22	BA	1816	C	N1-C1'-C2'	-8.81	102.31	112.00
1	AA	815	A	P-O3'-C3'	8.80	130.27	119.70
22	DA	1931	U	P-O3'-C3'	-8.80	109.14	119.70
22	BA	34	U	P-O3'-C3'	8.80	130.26	119.70
22	BA	1716	U	N1-C1'-C2'	-8.80	102.32	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	805	G	P-O5'-C5'	-8.79	106.84	120.90
22	DA	336	C	N1-C1'-C2'	-8.78	102.34	112.00
22	DA	687	C	N1-C1'-C2'	-8.78	102.34	112.00
22	DA	2036	C	N1-C1'-C2'	-8.77	102.35	112.00
22	BA	249	C	N1-C1'-C2'	8.77	125.40	114.00
22	BA	2520	C	N1-C1'-C2'	-8.77	102.35	112.00
1	AA	1398	A	P-O3'-C3'	-8.77	109.18	119.70
22	BA	2880	C	N1-C1'-C2'	-8.77	102.35	112.00
22	BA	984	A	C4-C5-N7	8.77	115.08	110.70
22	BA	1326	U	P-O3'-C3'	-8.77	109.18	119.70
22	DA	2300	C	P-O3'-C3'	-8.77	109.18	119.70
22	DA	2689	U	O4'-C1'-N1	8.76	115.21	108.20
22	BA	1142	A	C2-N3-C4	-8.76	106.22	110.60
22	DA	78	U	N1-C1'-C2'	-8.75	102.38	112.00
22	BA	1626	A	P-O3'-C3'	8.74	130.19	119.70
1	CA	110	C	P-O3'-C3'	-8.74	109.22	119.70
22	BA	1568	G	P-O3'-C3'	-8.73	109.22	119.70
22	BA	2519	U	O4'-C1'-N1	8.73	115.19	108.20
22	DA	222	A	P-O3'-C3'	8.73	130.17	119.70
1	AA	792	A	O4'-C1'-N9	8.72	115.18	108.20
1	CA	1395	C	N1-C1'-C2'	-8.72	102.41	112.00
22	BA	1451	C	O4'-C1'-N1	8.71	115.17	108.20
1	AA	9	G	P-O3'-C3'	-8.71	109.25	119.70
22	BA	2727	A	P-O3'-C3'	-8.70	109.26	119.70
22	BA	1210	G	P-O3'-C3'	8.70	130.14	119.70
22	DA	2877	G	P-O3'-C3'	-8.70	109.26	119.70
22	BA	2689	U	P-O3'-C3'	8.70	130.14	119.70
22	BA	28	A	P-O5'-C5'	-8.70	106.98	120.90
22	BA	1508	A	P-O3'-C3'	8.69	130.13	119.70
22	BA	1558	C	P-O3'-C3'	8.69	130.13	119.70
1	CA	1367	C	N1-C1'-C2'	-8.69	102.44	112.00
22	BA	2517	C	C6-N1-C2	8.69	123.78	120.30
22	BA	946	C	N1-C1'-C2'	-8.69	102.45	112.00
22	BA	748	G	P-O3'-C3'	-8.68	109.29	119.70
22	DA	1931	U	N1-C1'-C2'	-8.68	102.46	112.00
22	DA	1541	C	N1-C1'-C2'	-8.66	102.47	112.00
22	BA	1942	C	N1-C1'-C2'	-8.66	102.47	112.00
22	BA	1739	A	P-O3'-C3'	-8.65	109.32	119.70
22	DA	730	A	P-O3'-C3'	-8.65	109.31	119.70
22	BA	2612	C	O4'-C1'-N1	8.64	115.11	108.20
22	DA	1065	U	N1-C1'-C2'	-8.64	102.50	112.00
1	CA	1202	U	N1-C1'-C2'	-8.64	102.50	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2490	G	P-O3'-C3'	8.64	130.06	119.70
1	CA	1218	C	N1-C1'-C2'	-8.63	102.51	112.00
22	BA	2836	U	N1-C1'-C2'	-8.62	102.52	112.00
22	BA	2573	C	N1-C1'-C2'	-8.62	102.52	112.00
1	AA	141	G	P-O3'-C3'	-8.61	109.37	119.70
22	DA	164	C	P-O3'-C3'	-8.61	109.37	119.70
22	DA	1779	U	O4'-C1'-N1	8.60	115.08	108.20
22	BA	1675	C	P-O3'-C3'	-8.60	109.39	119.70
22	DA	2249	U	P-O3'-C3'	8.59	130.01	119.70
22	BA	505	A	P-O3'-C3'	-8.59	109.39	119.70
22	DA	2492	U	N1-C1'-C2'	-8.58	102.56	112.00
22	BA	2508	G	P-O5'-C5'	-8.57	107.18	120.90
22	BA	2797	U	P-O3'-C3'	8.57	129.99	119.70
22	DA	1980	G	P-O3'-C3'	8.57	129.99	119.70
1	AA	438	U	P-O3'-C3'	8.57	129.99	119.70
1	CA	110	C	N1-C1'-C2'	-8.57	102.57	112.00
22	DA	2497	A	P-O3'-C3'	8.57	129.98	119.70
22	BA	764	A	O4'-C1'-N9	8.56	115.05	108.20
22	DA	2458	G	O4'-C1'-N9	8.56	115.05	108.20
22	BA	2752	C	P-O3'-C3'	-8.55	109.44	119.70
22	DA	304	U	O4'-C1'-N1	8.55	115.04	108.20
1	AA	519	C	P-O3'-C3'	-8.55	109.44	119.70
1	CA	564	C	N1-C1'-C2'	-8.55	102.60	112.00
22	BA	958	U	O4'-C1'-N1	-8.54	101.37	108.20
22	BA	1956	U	N1-C1'-C2'	-8.54	102.61	112.00
1	AA	752	G	P-O3'-C3'	8.53	129.94	119.70
22	BA	2458	G	P-O3'-C3'	8.53	129.94	119.70
22	DA	1256	G	P-O3'-C3'	-8.53	109.46	119.70
22	BA	984	A	N1-C2-N3	8.53	133.56	129.30
1	CA	9	G	P-O3'-C3'	-8.53	109.47	119.70
1	CA	536	C	P-O3'-C3'	-8.53	109.47	119.70
1	AA	501	C	N1-C1'-C2'	-8.52	102.63	112.00
22	BA	2426	A	P-O3'-C3'	8.52	129.92	119.70
22	BA	474	G	P-O3'-C3'	8.52	129.92	119.70
22	BA	865	C	P-O3'-C3'	8.51	129.91	119.70
1	AA	469	C	N1-C1'-C2'	-8.50	102.65	112.00
22	BA	2321	U	P-O3'-C3'	-8.49	109.52	119.70
22	DA	2384	U	N1-C1'-C2'	8.49	125.03	114.00
1	CA	438	U	O4'-C1'-N1	8.48	114.98	108.20
22	BA	1759	A	P-O3'-C3'	-8.48	109.53	119.70
22	DA	2501	C	O4'-C1'-N1	8.47	114.98	108.20
1	AA	1157	A	P-O3'-C3'	8.47	129.86	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1396	A	P-O3'-C3'	8.47	129.86	119.70
22	BA	2035	G	P-O3'-C3'	8.46	129.86	119.70
1	AA	306	A	P-O3'-C3'	-8.46	109.55	119.70
22	BA	1407	G	P-O3'-C3'	-8.46	109.55	119.70
22	BA	791	C	O4'-C1'-N1	8.45	114.96	108.20
1	AA	889	A	O4'-C1'-N9	8.44	114.95	108.20
22	DA	2239	G	P-O3'-C3'	-8.44	109.57	119.70
22	BA	422	A	P-O3'-C3'	-8.44	109.57	119.70
23	DB	68	C	N1-C1'-C2'	-8.44	102.72	112.00
1	CA	509	A	P-O3'-C3'	-8.44	109.57	119.70
22	BA	571	U	P-O3'-C3'	8.44	129.83	119.70
1	CA	374	A	P-O3'-C3'	-8.44	109.57	119.70
22	DA	1127	A	P-O3'-C3'	-8.44	109.57	119.70
22	BA	1611	C	P-O3'-C3'	-8.44	109.58	119.70
22	DA	1915	U	N1-C1'-C2'	-8.43	102.72	112.00
1	AA	1200	C	P-O3'-C3'	8.43	129.81	119.70
22	BA	783	A	N7-C8-N9	8.42	118.01	113.80
22	BA	1157	G	P-O3'-C3'	-8.42	109.60	119.70
22	BA	1942	C	P-O3'-C3'	-8.41	109.61	119.70
22	DA	2611	C	P-O3'-C3'	-8.40	109.61	119.70
22	BA	1126	A	P-O3'-C3'	8.39	129.77	119.70
22	BA	1639	C	O4'-C1'-N1	8.39	114.92	108.20
1	CA	122	G	P-O3'-C3'	-8.39	109.63	119.70
22	DA	121	G	P-O3'-C3'	-8.39	109.63	119.70
1	CA	13	U	P-O3'-C3'	8.39	129.77	119.70
22	DA	2406	A	P-O3'-C3'	8.39	129.76	119.70
22	BA	904	G	P-O3'-C3'	-8.38	109.64	119.70
22	BA	2321	U	N1-C1'-C2'	-8.38	102.78	112.00
22	BA	1522	A	P-O3'-C3'	8.36	129.74	119.70
22	DA	1632	A	P-O3'-C3'	8.36	129.74	119.70
22	DA	2581	G	P-O3'-C3'	8.36	129.73	119.70
22	BA	1254	A	P-O5'-C5'	-8.36	107.52	120.90
1	CA	575	G	P-O3'-C3'	8.35	129.72	119.70
1	CA	348	G	P-O3'-C3'	-8.34	109.69	119.70
1	CA	701	U	P-O3'-C3'	8.33	129.70	119.70
22	DA	1829	A	P-O3'-C3'	-8.33	109.71	119.70
22	BA	2846	G	P-O5'-C5'	-8.32	107.58	120.90
22	BA	1112	G	P-O3'-C3'	-8.32	109.72	119.70
1	CA	915	A	P-O3'-C3'	-8.32	109.72	119.70
22	DA	229	C	N1-C1'-C2'	-8.32	102.85	112.00
22	BA	391	A	P-O3'-C3'	-8.31	109.72	119.70
22	DA	2447	G	P-O3'-C3'	8.31	129.67	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	813	U	P-O3'-C3'	-8.31	109.73	119.70
22	BA	1732	C	P-O3'-C3'	8.31	129.67	119.70
22	DA	2283	C	P-O3'-C3'	-8.31	109.73	119.70
23	BB	42	C	N1-C1'-C2'	-8.30	102.87	112.00
22	DA	2616	C	O4'-C1'-N1	8.30	114.84	108.20
22	BA	2250	G	O4'-C1'-N9	-8.29	101.57	108.20
22	DA	1396	U	P-O3'-C3'	8.29	129.65	119.70
22	BA	800	A	P-O3'-C3'	8.29	129.65	119.70
22	BA	2093	G	N9-C1'-C2'	-8.29	102.89	112.00
22	DA	1119	U	O4'-C1'-N1	8.28	114.83	108.20
22	DA	2836	U	N1-C1'-C2'	-8.28	102.89	112.00
1	AA	1433	A	P-O3'-C3'	-8.28	109.77	119.70
1	CA	1450	U	N1-C1'-C2'	-8.27	102.90	112.00
1	AA	252	U	N1-C1'-C2'	-8.26	102.91	112.00
1	CA	534	U	N1-C1'-C2'	-8.26	102.92	112.00
22	BA	1848	A	P-O3'-C3'	-8.26	109.79	119.70
1	CA	344	A	P-O3'-C3'	8.26	129.61	119.70
22	DA	1972	G	P-O3'-C3'	-8.26	109.79	119.70
22	BA	556	A	P-O3'-C3'	-8.25	109.80	119.70
1	CA	1148	U	N1-C1'-C2'	-8.24	102.93	112.00
22	BA	403	U	P-O3'-C3'	8.24	129.59	119.70
1	CA	1245	C	N1-C1'-C2'	-8.23	102.94	112.00
1	AA	1203	C	P-O3'-C3'	-8.23	109.82	119.70
22	DA	122	G	P-O3'-C3'	-8.22	109.83	119.70
22	DA	1428	C	O4'-C1'-N1	8.22	114.78	108.20
22	BA	1213	A	P-O5'-C5'	-8.22	107.75	120.90
1	CA	32	A	P-O3'-C3'	-8.21	109.84	119.70
22	BA	673	C	C6-N1-C2	8.21	123.58	120.30
1	AA	1284	C	P-O3'-C3'	-8.21	109.85	119.70
22	BA	1653	G	P-O3'-C3'	8.21	129.55	119.70
22	DA	1612	C	N1-C1'-C2'	-8.20	102.98	112.00
22	BA	2572	A	N1-C6-N6	8.19	123.52	118.60
1	CA	1398	A	P-O3'-C3'	-8.19	109.87	119.70
22	BA	144	A	P-O3'-C3'	-8.19	109.87	119.70
1	CA	884	U	P-O3'-C3'	8.19	129.53	119.70
22	DA	1378	A	P-O3'-C3'	8.19	129.53	119.70
1	CA	388	G	P-O3'-C3'	8.19	129.52	119.70
1	CA	1528	U	O4'-C1'-N1	8.18	114.75	108.20
1	CA	68	G	P-O3'-C3'	-8.18	109.89	119.70
22	BA	783	A	N9-C1'-C2'	-8.18	103.00	112.00
22	BA	2422	C	O4'-C1'-N1	-8.18	101.66	108.20
22	DA	991	C	P-O3'-C3'	-8.17	109.89	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2603	G	P-O3'-C3'	-8.17	109.90	119.70
22	BA	1615	C	P-O3'-C3'	8.16	129.50	119.70
22	DA	1967	C	P-O3'-C3'	-8.16	109.90	119.70
1	CA	793	U	P-O3'-C3'	-8.16	109.91	119.70
22	BA	984	A	N9-C1'-C2'	-8.16	103.02	112.00
22	BA	1859	U	P-O3'-C3'	-8.16	109.91	119.70
22	BA	1021	A	P-O3'-C3'	-8.15	109.92	119.70
22	BA	2215	C	N1-C1'-C2'	-8.15	103.04	112.00
22	DA	670	A	P-O3'-C3'	8.15	129.47	119.70
22	DA	868	U	P-O3'-C3'	-8.14	109.93	119.70
22	DA	2060	A	P-O3'-C3'	8.14	129.47	119.70
22	BA	783	A	N1-C6-N6	8.14	123.48	118.60
1	CA	486	U	P-O3'-C3'	-8.14	109.93	119.70
22	DA	1013	C	P-O3'-C3'	-8.14	109.93	119.70
22	BA	1901	A	P-O3'-C3'	-8.13	109.94	119.70
22	BA	2777	G	P-O3'-C3'	-8.13	109.94	119.70
22	DA	1400	U	N1-C1'-C2'	-8.13	103.06	112.00
1	CA	519	C	N1-C1'-C2'	-8.12	103.06	112.00
22	DA	1081	U	O4'-C1'-N1	8.12	114.70	108.20
22	DA	1347	A	P-O3'-C3'	-8.12	109.95	119.70
1	AA	1303	C	N1-C1'-C2'	-8.12	103.07	112.00
22	BA	2613	U	P-O3'-C3'	8.12	129.44	119.70
22	BA	1013	C	P-O3'-C3'	-8.11	109.96	119.70
22	DA	531	C	P-O3'-C3'	8.11	129.44	119.70
1	AA	985	C	P-O3'-C3'	-8.11	109.97	119.70
1	AA	316	C	P-O3'-C3'	-8.11	109.97	119.70
22	DA	1157	G	P-O3'-C3'	-8.10	109.97	119.70
22	DA	2199	A	P-O3'-C3'	-8.08	110.00	119.70
22	BA	1980	G	O4'-C1'-N9	8.08	114.66	108.20
1	AA	431	A	P-O3'-C3'	-8.08	110.01	119.70
1	AA	1365	G	P-O3'-C3'	-8.06	110.02	119.70
1	AA	1380	U	O4'-C1'-N1	8.06	114.65	108.20
22	DA	1626	A	P-O3'-C3'	8.06	129.38	119.70
1	CA	316	C	P-O3'-C3'	-8.06	110.03	119.70
22	DA	806	C	N1-C1'-C2'	-8.06	103.14	112.00
22	DA	1758	U	P-O3'-C3'	8.05	129.36	119.70
22	BA	1324	G	P-O3'-C3'	8.05	129.36	119.70
22	DA	860	U	N1-C1'-C2'	-8.04	103.15	112.00
22	DA	2612	C	O4'-C1'-N1	8.04	114.63	108.20
22	DA	2836	U	P-O3'-C3'	-8.04	110.06	119.70
22	DA	390	U	P-O3'-C3'	8.03	129.33	119.70
22	DA	2063	C	P-O3'-C3'	-8.02	110.07	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	654	G	P-O3'-C3'	-8.02	110.08	119.70
22	DA	2573	C	N1-C1'-C2'	-8.02	103.18	112.00
1	AA	1332	A	P-O3'-C3'	-8.02	110.08	119.70
1	AA	1256	A	P-O3'-C3'	8.01	129.31	119.70
1	AA	816	A	P-O3'-C3'	-8.01	110.09	119.70
1	CA	753	A	P-O3'-C3'	8.01	129.31	119.70
22	BA	196	A	O4'-C1'-N9	8.00	114.60	108.20
22	BA	948	C	C5-C6-N1	-8.00	117.00	121.00
22	BA	727	A	P-O3'-C3'	-8.00	110.10	119.70
1	CA	497	G	P-O3'-C3'	-8.00	110.11	119.70
22	BA	595	C	C6-N1-C2	7.99	123.50	120.30
22	DA	2629	U	P-O3'-C3'	7.99	129.29	119.70
22	BA	1357	C	P-O3'-C3'	-7.98	110.13	119.70
22	DA	860	U	P-O3'-C3'	-7.97	110.13	119.70
22	DA	335	C	N1-C1'-C2'	-7.97	103.23	112.00
22	DA	1759	A	P-O3'-C3'	-7.96	110.15	119.70
1	AA	934	C	P-O3'-C3'	7.96	129.25	119.70
22	BA	1289	C	P-O3'-C3'	-7.96	110.15	119.70
1	CA	14	U	P-O3'-C3'	-7.96	110.15	119.70
22	DA	1838	C	P-O3'-C3'	7.96	129.25	119.70
22	BA	2567	G	P-O3'-C3'	-7.96	110.15	119.70
22	BA	221	A	P-O3'-C3'	7.95	129.24	119.70
22	BA	1980	G	P-O3'-C3'	7.95	129.24	119.70
22	DA	2024	G	P-O3'-C3'	-7.95	110.16	119.70
22	BA	1782	U	P-O3'-C3'	-7.94	110.17	119.70
22	DA	218	A	P-O3'-C3'	-7.93	110.18	119.70
22	BA	2060	A	O4'-C1'-N9	7.93	114.55	108.20
22	BA	860	U	P-O5'-C5'	-7.93	108.21	120.90
1	AA	115	G	P-O3'-C3'	7.93	129.21	119.70
22	BA	2759	G	P-O5'-C5'	-7.93	108.22	120.90
1	CA	511	C	P-O3'-C3'	7.92	129.21	119.70
1	CA	499	A	P-O3'-C3'	7.92	129.21	119.70
1	AA	486	U	N1-C1'-C2'	-7.92	103.29	112.00
22	DA	1522	A	P-O3'-C3'	7.91	129.20	119.70
22	BA	2646	C	N1-C1'-C2'	-7.91	103.30	112.00
22	DA	2727	A	P-O3'-C3'	-7.90	110.22	119.70
22	BA	2214	C	P-O3'-C3'	-7.90	110.22	119.70
22	DA	1430	G	P-O3'-C3'	-7.90	110.22	119.70
22	DA	1782	U	O4'-C1'-N1	7.90	114.52	108.20
22	BA	1255	U	N1-C1'-C2'	-7.90	103.31	112.00
22	BA	2152	G	P-O3'-C3'	-7.89	110.23	119.70
22	BA	1714	U	O4'-C1'-N1	-7.89	101.89	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1348	U	N1-C1'-C2'	-7.89	103.32	112.00
22	BA	812	C	P-O3'-C3'	-7.89	110.23	119.70
22	DA	1558	C	P-O3'-C3'	7.89	129.17	119.70
22	DA	573	U	O4'-C1'-N1	7.89	114.51	108.20
23	BB	16	G	P-O3'-C3'	-7.89	110.24	119.70
22	BA	2312	U	P-O3'-C3'	-7.88	110.24	119.70
22	BA	704	G	P-O3'-C3'	7.88	129.16	119.70
1	AA	48	C	O4'-C1'-N1	7.88	114.50	108.20
22	BA	654	A	P-O3'-C3'	7.87	129.14	119.70
22	DA	1213	A	P-O3'-C3'	-7.87	110.26	119.70
22	BA	531	C	N1-C1'-C2'	7.86	124.22	114.00
22	BA	1127	A	C8-N9-C4	-7.86	102.66	105.80
1	AA	479	U	O4'-C1'-N1	7.86	114.48	108.20
22	BA	1255	U	O5'-P-OP1	-7.86	98.63	105.70
22	BA	2258	C	P-O3'-C3'	7.86	129.13	119.70
22	BA	1026	G	P-O3'-C3'	-7.85	110.28	119.70
22	DA	805	G	P-O3'-C3'	7.85	129.12	119.70
22	BA	2337	G	P-O3'-C3'	-7.85	110.28	119.70
22	DA	1305	C	N1-C1'-C2'	-7.85	103.36	112.00
22	BA	454	A	P-O3'-C3'	7.84	129.11	119.70
1	AA	718	A	P-O3'-C3'	-7.84	110.30	119.70
22	BA	1293	C	P-O3'-C3'	-7.84	110.30	119.70
22	BA	1627	G	P-O3'-C3'	-7.83	110.30	119.70
1	AA	1447	A	P-O3'-C3'	7.83	129.10	119.70
22	BA	764	A	P-O3'-C3'	7.83	129.09	119.70
22	BA	33	C	P-O3'-C3'	7.83	129.09	119.70
1	AA	511	C	N1-C1'-C2'	7.82	124.17	114.00
1	AA	1196	A	P-O3'-C3'	7.82	129.09	119.70
1	AA	389	A	P-O3'-C3'	-7.82	110.32	119.70
22	BA	817	C	N1-C2-O2	-7.82	114.21	118.90
1	CA	1282	C	N1-C1'-C2'	-7.81	103.41	112.00
22	DA	445	C	N1-C1'-C2'	-7.81	103.41	112.00
1	CA	240	G	P-O3'-C3'	-7.81	110.33	119.70
23	DB	88	C	P-O3'-C3'	7.80	129.06	119.70
1	CA	245	U	P-O3'-C3'	-7.80	110.34	119.70
1	CA	512	U	P-O3'-C3'	-7.80	110.34	119.70
1	CA	1399	C	P-O3'-C3'	7.80	129.06	119.70
1	CA	48	C	O4'-C1'-N1	7.79	114.43	108.20
1	AA	490	C	P-O3'-C3'	-7.79	110.35	119.70
22	BA	196	A	P-O3'-C3'	7.79	129.04	119.70
22	DA	527	C	P-O3'-C3'	7.78	129.04	119.70
1	AA	373	A	P-O3'-C3'	-7.78	110.36	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	91	A	P-O3'-C3'	7.78	129.04	119.70
22	BA	2385	C	N1-C1'-C2'	-7.78	103.44	112.00
22	DA	2617	U	N1-C1'-C2'	-7.78	103.44	112.00
1	AA	1055	A	P-O3'-C3'	-7.77	110.38	119.70
22	BA	1839	G	P-O3'-C3'	-7.77	110.38	119.70
22	BA	1555	G	P-O3'-C3'	-7.77	110.38	119.70
22	BA	137	U	O4'-C1'-N1	-7.76	101.99	108.20
23	DB	68	C	O4'-C1'-N1	7.76	114.41	108.20
1	AA	365	U	O4'-C1'-N1	7.76	114.41	108.20
22	BA	1732	C	O4'-C1'-N1	7.76	114.41	108.20
22	DA	2752	C	N1-C1'-C2'	-7.76	103.47	112.00
1	CA	874	G	P-O3'-C3'	-7.76	110.39	119.70
1	AA	688	G	P-O3'-C3'	-7.75	110.40	119.70
1	CA	734	G	P-O3'-C3'	-7.75	110.40	119.70
1	AA	1066	C	O4'-C1'-N1	-7.75	102.00	108.20
22	DA	2251	G	P-O3'-C3'	-7.75	110.40	119.70
22	BA	1340	U	O4'-C1'-N1	7.74	114.39	108.20
1	AA	439	U	N1-C1'-C2'	-7.74	103.49	112.00
22	BA	1885	A	P-O3'-C3'	-7.74	110.41	119.70
22	DA	784	G	O4'-C1'-N9	7.74	114.39	108.20
22	DA	811	U	O4'-C1'-N1	7.74	114.39	108.20
22	BA	2681	C	N1-C2-O2	-7.74	114.26	118.90
22	BA	1936	A	C2-N3-C4	-7.73	106.73	110.60
22	DA	2075	U	O4'-C1'-N1	-7.73	102.01	108.20
1	CA	547	A	P-O3'-C3'	7.72	128.97	119.70
22	DA	2387	U	N1-C1'-C2'	-7.72	103.50	112.00
1	AA	129	A	P-O3'-C3'	7.72	128.96	119.70
1	CA	643	C	P-O3'-C3'	-7.72	110.44	119.70
22	BA	2346	A	P-O3'-C3'	7.72	128.96	119.70
22	DA	2847	U	P-O3'-C3'	7.72	128.96	119.70
1	AA	109	A	P-O3'-C3'	7.71	128.96	119.70
22	BA	2606	C	C5-C6-N1	-7.71	117.14	121.00
1	AA	794	A	P-O3'-C3'	-7.71	110.45	119.70
22	BA	2662	A	P-O3'-C3'	-7.71	110.45	119.70
1	CA	891	U	P-O3'-C3'	-7.71	110.45	119.70
1	AA	1128	C	P-O3'-C3'	-7.70	110.46	119.70
22	BA	1695	G	P-O3'-C3'	-7.70	110.46	119.70
22	BA	1681	G	P-O3'-C3'	7.69	128.93	119.70
22	DA	2876	G	P-O3'-C3'	-7.69	110.47	119.70
22	BA	385	C	O4'-C1'-N1	-7.68	102.06	108.20
1	AA	717	U	P-O3'-C3'	7.68	128.91	119.70
22	BA	2672	U	O4'-C1'-N1	-7.67	102.06	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1693	U	P-O3'-C3'	7.66	128.90	119.70
22	DA	392	U	P-O3'-C3'	-7.66	110.51	119.70
1	AA	1201	A	P-O3'-C3'	7.66	128.89	119.70
22	DA	2324	U	P-O3'-C3'	7.66	128.89	119.70
22	BA	2086	U	O4'-C1'-N1	7.65	114.32	108.20
22	BA	1385	A	P-O3'-C3'	7.64	128.88	119.70
22	BA	812	C	N1-C1'-C2'	-7.63	103.60	112.00
22	BA	984	A	C5-C6-N6	-7.63	117.60	123.70
22	BA	613	A	P-O3'-C3'	7.63	128.86	119.70
22	BA	490	C	P-O5'-C5'	-7.63	108.70	120.90
1	AA	198	G	P-O3'-C3'	-7.62	110.55	119.70
22	DA	200	U	N1-C1'-C2'	-7.62	103.61	112.00
22	DA	1136	G	P-O3'-C3'	-7.62	110.55	119.70
22	DA	1236	G	P-O3'-C3'	7.62	128.84	119.70
22	BA	790	U	O4'-C1'-N1	7.62	114.29	108.20
1	CA	430	A	P-O3'-C3'	-7.61	110.57	119.70
1	AA	72	A	P-O3'-C3'	-7.61	110.57	119.70
1	AA	1200	C	N1-C1'-C2'	7.61	123.89	114.00
22	BA	783	A	C4-C5-N7	7.61	114.50	110.70
22	BA	1330	C	O4'-C1'-N1	7.60	114.28	108.20
1	CA	116	A	N9-C1'-C2'	-7.60	103.64	112.00
22	BA	2566	A	P-O3'-C3'	7.60	128.82	119.70
22	BA	729	G	P-O3'-C3'	-7.60	110.58	119.70
22	BA	740	C	N1-C1'-C2'	-7.60	103.64	112.00
22	DA	144	A	P-O3'-C3'	-7.60	110.58	119.70
22	BA	479	A	P-O3'-C3'	7.59	128.81	119.70
22	DA	575	A	P-O3'-C3'	-7.59	110.59	119.70
22	BA	1706	C	P-O3'-C3'	7.59	128.81	119.70
22	DA	1918	A	P-O3'-C3'	7.59	128.81	119.70
22	DA	105	C	O4'-C1'-N1	7.59	114.27	108.20
22	BA	1786	A	P-O3'-C3'	7.59	128.80	119.70
22	DA	2492	U	P-O3'-C3'	-7.58	110.60	119.70
23	DB	46	A	P-O3'-C3'	-7.58	110.60	119.70
22	BA	786	C	C6-N1-C2	7.58	123.33	120.30
22	BA	697	G	P-O3'-C3'	7.57	128.79	119.70
22	BA	2768	U	P-O3'-C3'	-7.57	110.61	119.70
1	AA	336	A	P-O3'-C3'	-7.57	110.62	119.70
22	BA	573	U	P-O3'-C3'	7.57	128.78	119.70
1	CA	547	A	O4'-C1'-N9	7.56	114.25	108.20
22	BA	1152	C	N1-C2-O2	-7.55	114.37	118.90
1	AA	512	U	P-O3'-C3'	-7.55	110.64	119.70
22	DA	92	U	N1-C1'-C2'	-7.55	103.69	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1255	U	N1-C1'-C2'	-7.55	103.70	112.00
22	BA	1510	G	P-O3'-C3'	-7.55	110.64	119.70
22	DA	510	C	N1-C1'-C2'	-7.54	103.70	112.00
1	AA	1394	A	P-O3'-C3'	7.54	128.75	119.70
22	BA	985	C	P-O3'-C3'	-7.54	110.65	119.70
22	BA	914	G	P-O3'-C3'	-7.54	110.65	119.70
22	BA	482	A	P-O3'-C3'	-7.54	110.65	119.70
1	CA	536	C	N1-C1'-C2'	-7.54	103.71	112.00
22	DA	353	C	P-O3'-C3'	7.53	128.74	119.70
1	AA	1395	C	P-O5'-C5'	-7.53	108.85	120.90
22	DA	407	G	P-O3'-C3'	-7.53	110.67	119.70
22	BA	1905	C	O4'-C1'-N1	7.53	114.22	108.20
22	BA	2250	G	C5-N7-C8	-7.53	100.54	104.30
22	BA	1416	G	P-O3'-C3'	7.52	128.73	119.70
22	BA	507	A	P-O3'-C3'	-7.52	110.67	119.70
22	BA	1306	C	O4'-C1'-N1	7.52	114.22	108.20
1	AA	974	A	P-O3'-C3'	7.52	128.72	119.70
23	BB	67	G	P-O5'-C5'	-7.51	108.88	120.90
1	AA	1382	C	N1-C1'-C2'	-7.51	103.74	112.00
22	DA	637	A	P-O3'-C3'	7.51	128.71	119.70
1	AA	1259	C	P-O3'-C3'	-7.50	110.70	119.70
22	BA	984	A	C4-C5-C6	7.50	120.75	117.00
22	DA	2384	U	P-O3'-C3'	7.50	128.71	119.70
1	AA	415	A	P-O3'-C3'	-7.50	110.70	119.70
22	BA	1943	U	P-O3'-C3'	7.50	128.70	119.70
22	DA	2620	C	O4'-C1'-N1	-7.50	102.20	108.20
1	AA	95	C	N1-C1'-C2'	-7.50	103.76	112.00
22	BA	489	G	P-O3'-C3'	7.49	128.69	119.70
22	DA	1399	C	N1-C1'-C2'	-7.49	103.76	112.00
22	BA	125	A	P-O3'-C3'	7.49	128.69	119.70
22	DA	478	A	P-O3'-C3'	-7.49	110.71	119.70
22	BA	915	C	N1-C1'-C2'	-7.49	103.76	112.00
22	DA	1460	U	P-O3'-C3'	7.49	128.68	119.70
22	BA	529	A	C8-N9-C4	7.49	108.79	105.80
22	DA	1141	U	P-O3'-C3'	7.48	128.68	119.70
22	BA	783	A	C6-C5-N7	-7.48	127.06	132.30
23	BB	108	A	P-O3'-C3'	7.48	128.67	119.70
22	BA	177	G	P-O3'-C3'	7.47	128.67	119.70
1	CA	548	G	P-O3'-C3'	-7.47	110.73	119.70
22	BA	199	A	P-O3'-C3'	7.47	128.67	119.70
1	AA	642	A	P-O3'-C3'	-7.47	110.74	119.70
22	BA	509	C	P-O3'-C3'	-7.47	110.73	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	233	A	P-O3'-C3'	-7.47	110.74	119.70
22	DA	2259	U	N1-C1'-C2'	-7.47	103.79	112.00
22	BA	777	G	N9-C1'-C2'	-7.46	103.79	112.00
22	DA	669	G	P-O3'-C3'	7.46	128.66	119.70
22	DA	1333	G	P-O3'-C3'	-7.46	110.75	119.70
22	DA	919	U	O4'-C1'-N1	-7.46	102.23	108.20
22	BA	2440	C	N1-C1'-C2'	-7.45	103.80	112.00
22	DA	805	G	O4'-C1'-N9	7.45	114.16	108.20
22	DA	934	U	P-O3'-C3'	-7.45	110.77	119.70
22	BA	1286	A	O4'-C1'-N9	7.44	114.16	108.20
22	BA	14	A	P-O3'-C3'	-7.44	110.77	119.70
22	BA	1965	C	P-O3'-C3'	-7.44	110.77	119.70
22	DA	2440	C	P-O5'-C5'	-7.44	108.99	120.90
22	DA	1397	U	P-O3'-C3'	7.44	128.63	119.70
22	DA	627	A	P-O3'-C3'	7.44	128.63	119.70
22	DA	2866	U	P-O3'-C3'	7.44	128.62	119.70
22	BA	1918	A	P-O3'-C3'	7.43	128.62	119.70
1	CA	247	G	P-O3'-C3'	-7.43	110.78	119.70
22	BA	1461	C	P-O3'-C3'	-7.43	110.78	119.70
1	AA	536	C	P-O3'-C3'	-7.43	110.78	119.70
22	DA	1008	A	P-O3'-C3'	7.43	128.62	119.70
22	DA	2580	U	O4'-C1'-N1	7.43	114.14	108.20
1	AA	641	U	P-O3'-C3'	7.42	128.61	119.70
22	BA	60	G	P-O3'-C3'	7.42	128.61	119.70
22	BA	995	C	P-O3'-C3'	7.42	128.61	119.70
22	BA	1524	G	P-O3'-C3'	-7.42	110.79	119.70
22	BA	1278	C	C6-N1-C2	7.42	123.27	120.30
22	BA	1119	U	P-O3'-C3'	-7.42	110.80	119.70
1	CA	1358	U	O4'-C1'-N1	7.42	114.13	108.20
22	BA	1048	A	P-O3'-C3'	-7.41	110.81	119.70
22	BA	1491	G	P-O3'-C3'	-7.41	110.81	119.70
22	BA	2615	U	N1-C1'-C2'	-7.41	103.85	112.00
22	BA	2585	U	O4'-C1'-N1	7.41	114.13	108.20
1	CA	15	G	P-O3'-C3'	-7.41	110.81	119.70
22	DA	217	A	P-O3'-C3'	-7.41	110.81	119.70
22	DA	2837	A	P-O3'-C3'	-7.40	110.81	119.70
22	BA	1451	C	P-O3'-C3'	7.40	128.58	119.70
22	DA	1398	C	P-O3'-C3'	-7.40	110.82	119.70
22	BA	2151	U	N1-C1'-C2'	-7.40	103.86	112.00
1	CA	214	C	N1-C1'-C2'	-7.40	103.86	112.00
1	CA	429	U	P-O3'-C3'	7.40	128.58	119.70
22	BA	2267	A	C3'-C2'-C1'	7.40	107.42	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	235	U	P-O3'-C3'	-7.39	110.83	119.70
22	BA	2430	A	P-O3'-C3'	7.39	128.57	119.70
22	BA	1205	A	P-O3'-C3'	7.39	128.56	119.70
22	BA	2575	C	O4'-C1'-N1	7.39	114.11	108.20
22	DA	1602	U	P-O3'-C3'	7.39	128.56	119.70
22	DA	2289	G	P-O3'-C3'	-7.38	110.84	119.70
22	BA	1063	G	P-O3'-C3'	-7.38	110.84	119.70
22	DA	2267	A	P-O3'-C3'	-7.38	110.84	119.70
22	BA	1463	C	O4'-C1'-N1	-7.38	102.30	108.20
22	DA	1512	C	P-O3'-C3'	-7.38	110.85	119.70
22	BA	2423	U	N1-C1'-C2'	7.37	123.58	114.00
1	CA	1051	C	N1-C1'-C2'	-7.37	103.89	112.00
22	DA	959	A	P-O3'-C3'	-7.36	110.87	119.70
1	AA	517	G	P-O3'-C3'	7.35	128.52	119.70
22	DA	1427	A	P-O3'-C3'	7.35	128.52	119.70
22	BA	2151	U	O4'-C1'-N1	7.35	114.08	108.20
1	CA	688	G	P-O3'-C3'	-7.35	110.88	119.70
22	DA	2282	G	P-O3'-C3'	7.34	128.51	119.70
23	DB	69	G	P-O3'-C3'	-7.34	110.89	119.70
22	BA	967	U	P-O3'-C3'	-7.34	110.89	119.70
22	BA	1611	C	P-O5'-C5'	-7.34	109.15	120.90
1	CA	575	G	C4-N9-C1'	-7.34	116.96	126.50
22	BA	35	G	P-O5'-C5'	-7.34	109.16	120.90
1	CA	1498	U	P-O3'-C3'	7.34	128.51	119.70
22	BA	961	C	P-O3'-C3'	7.33	128.50	119.70
1	AA	960	U	N1-C1'-C2'	7.33	123.53	114.00
22	BA	671	C	P-O3'-C3'	-7.33	110.90	119.70
1	CA	277	C	N1-C1'-C2'	-7.33	103.94	112.00
1	CA	1395	C	P-O3'-C3'	-7.33	110.90	119.70
22	BA	395	U	P-O3'-C3'	7.33	128.50	119.70
22	BA	528	A	N1-C6-N6	7.32	122.99	118.60
22	BA	747	U	O5'-P-OP2	-7.32	99.11	105.70
1	AA	245	U	N1-C1'-C2'	-7.32	103.94	112.00
22	DA	2458	G	P-O3'-C3'	7.32	128.49	119.70
22	BA	835	C	N1-C1'-C2'	-7.32	103.95	112.00
1	CA	1224	U	P-O3'-C3'	7.32	128.48	119.70
22	BA	2250	G	N1-C6-O6	7.31	124.29	119.90
22	DA	622	G	P-O3'-C3'	-7.31	110.92	119.70
1	AA	704	A	P-O3'-C3'	-7.31	110.93	119.70
22	BA	70	G	P-O3'-C3'	7.31	128.47	119.70
22	BA	2791	G	P-O3'-C3'	-7.31	110.93	119.70
22	BA	2645	G	O4'-C1'-N9	7.31	114.05	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	794	A	P-O3'-C3'	-7.31	110.93	119.70
22	BA	84	A	P-O3'-C3'	7.30	128.47	119.70
22	BA	2715	C	P-O3'-C3'	-7.30	110.94	119.70
22	BA	2459	A	P-O3'-C3'	-7.30	110.94	119.70
22	DA	1135	C	N1-C1'-C2'	-7.30	103.97	112.00
22	BA	974	G	C4-C5-N7	7.30	113.72	110.80
22	BA	1286	A	P-O3'-C3'	7.30	128.46	119.70
1	CA	248	C	P-O3'-C3'	-7.30	110.94	119.70
22	DA	398	C	N1-C1'-C2'	-7.30	103.97	112.00
1	AA	885	G	P-O3'-C3'	-7.29	110.95	119.70
22	DA	2874	C	P-O3'-C3'	-7.29	110.95	119.70
22	BA	682	G	O4'-C1'-N9	-7.29	102.37	108.20
1	CA	1499	A	P-O5'-C5'	-7.29	109.24	120.90
1	AA	935	A	P-O3'-C3'	-7.29	110.96	119.70
1	AA	520	A	P-O3'-C3'	-7.28	110.97	119.70
1	AA	913	A	P-O3'-C3'	7.27	128.42	119.70
1	AA	1320	C	P-O3'-C3'	-7.27	110.98	119.70
1	AA	1345	U	P-O3'-C3'	7.27	128.42	119.70
22	DA	1072	C	O4'-C1'-N1	7.27	114.01	108.20
22	BA	1867	G	P-O3'-C3'	-7.27	110.98	119.70
22	DA	704	G	P-O3'-C3'	7.27	128.42	119.70
22	BA	2431	U	N1-C1'-C2'	-7.26	104.01	112.00
22	DA	1681	G	P-O3'-C3'	7.26	128.41	119.70
22	BA	726	G	P-O3'-C3'	7.25	128.40	119.70
22	BA	1198	U	O4'-C1'-N1	-7.25	102.40	108.20
1	CA	1218	C	P-O3'-C3'	-7.25	111.00	119.70
22	BA	2250	G	C6-C5-N7	-7.25	126.05	130.40
22	DA	2585	U	P-O3'-C3'	7.25	128.40	119.70
22	BA	934	U	P-O3'-C3'	-7.25	111.00	119.70
22	DA	162	U	O4'-C1'-N1	7.25	114.00	108.20
22	DA	1130	U	P-O3'-C3'	7.25	128.39	119.70
22	BA	1942	C	P-O5'-C5'	-7.24	109.31	120.90
22	BA	1027	A	O4'-C1'-N9	-7.24	102.41	108.20
1	CA	566	G	P-O3'-C3'	7.24	128.39	119.70
22	BA	2018	G	N9-C4-C5	7.24	108.30	105.40
22	DA	1954	G	P-O3'-C3'	7.24	128.39	119.70
22	BA	2584	U	O4'-C1'-N1	7.24	113.99	108.20
1	AA	1141	C	N1-C1'-C2'	-7.24	104.04	112.00
22	DA	783	A	P-O3'-C3'	-7.24	111.02	119.70
22	BA	2286	G	P-O3'-C3'	7.23	128.38	119.70
1	AA	961	U	P-O3'-C3'	-7.23	111.03	119.70
22	BA	2064	C	N1-C1'-C2'	-7.23	104.05	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	388	G	P-O3'-C3'	7.22	128.37	119.70
22	BA	791	C	N1-C2-O2	-7.22	114.56	118.90
22	DA	858	G	P-O3'-C3'	7.22	128.37	119.70
1	AA	346	G	P-O5'-C5'	-7.22	109.34	120.90
1	CA	1052	U	N1-C1'-C2'	-7.22	104.05	112.00
22	BA	951	C	C6-N1-C2	7.22	123.19	120.30
22	BA	1238	G	N9-C1'-C2'	-7.22	104.06	112.00
22	BA	324	A	P-O3'-C3'	-7.21	111.04	119.70
22	BA	1884	G	O4'-C1'-N9	7.21	113.97	108.20
22	BA	1116	G	P-O3'-C3'	-7.21	111.05	119.70
22	DA	2348	U	O4'-C1'-N1	7.21	113.97	108.20
22	DA	2848	G	P-O3'-C3'	7.21	128.35	119.70
22	BA	2820	A	C2-N3-C4	-7.21	107.00	110.60
22	DA	1402	U	O4'-C1'-N1	7.20	113.96	108.20
22	DA	2339	C	N1-C1'-C2'	-7.20	104.08	112.00
1	CA	184	G	P-O3'-C3'	-7.20	111.06	119.70
22	DA	485	C	P-O3'-C3'	-7.20	111.06	119.70
22	BA	1920	C	N1-C1'-C2'	-7.20	104.08	112.00
22	BA	822	G	O4'-C1'-N9	7.20	113.96	108.20
22	DA	1838	C	O4'-C1'-N1	7.20	113.96	108.20
22	BA	257	C	O4'-C1'-N1	7.19	113.95	108.20
22	DA	413	C	P-O3'-C3'	-7.19	111.07	119.70
22	BA	858	G	P-O3'-C3'	7.19	128.33	119.70
1	AA	531	U	P-O3'-C3'	7.19	128.32	119.70
1	AA	1101	A	P-O3'-C3'	7.19	128.33	119.70
1	CA	596	A	P-O3'-C3'	-7.18	111.08	119.70
22	BA	1733	G	P-O3'-C3'	-7.18	111.09	119.70
22	BA	1273	U	P-O3'-C3'	-7.17	111.09	119.70
22	BA	752	A	P-O3'-C3'	7.17	128.31	119.70
22	BA	921	C	O4'-C1'-N1	7.17	113.94	108.20
22	DA	304	U	P-O3'-C3'	-7.17	111.09	119.70
22	DA	1498	C	P-O3'-C3'	-7.17	111.09	119.70
1	AA	1053	G	P-O3'-C3'	7.17	128.30	119.70
22	BA	1024	G	P-O5'-C5'	-7.17	109.43	120.90
1	AA	519	C	N1-C1'-C2'	-7.16	104.12	112.00
22	BA	1033	U	N1-C1'-C2'	7.16	123.31	114.00
22	BA	2866	U	P-O3'-C3'	7.16	128.29	119.70
39	BR	9	GLY	N-CA-C	-7.15	95.22	113.10
22	BA	1758	U	N1-C2-N3	7.15	119.19	114.90
22	BA	1818	U	P-O3'-C3'	7.14	128.27	119.70
22	BA	2067	G	P-O3'-C3'	7.14	128.27	119.70
22	DA	312	G	P-O3'-C3'	-7.14	111.13	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	464	U	O4'-C1'-N1	-7.14	102.49	108.20
23	DB	40	U	P-O3'-C3'	7.14	128.27	119.70
22	BA	2424	C	N1-C1'-C2'	-7.14	104.14	112.00
22	DA	1615	C	N1-C1'-C2'	7.14	123.28	114.00
1	AA	1320	C	N1-C1'-C2'	-7.14	104.15	112.00
22	BA	1396	U	P-O3'-C3'	7.14	128.27	119.70
1	AA	282	A	P-O3'-C3'	-7.14	111.14	119.70
22	BA	984	A	C5-C6-N1	-7.14	114.13	117.70
1	AA	485	U	P-O3'-C3'	7.13	128.26	119.70
22	BA	637	A	P-O3'-C3'	7.13	128.26	119.70
1	CA	183	C	O4'-C1'-N1	7.13	113.91	108.20
22	DA	442	G	P-O3'-C3'	7.13	128.25	119.70
1	AA	652	U	P-O3'-C3'	7.13	128.25	119.70
22	BA	2797	U	N1-C1'-C2'	7.13	123.26	114.00
22	BA	2391	G	O4'-C1'-N9	7.12	113.90	108.20
1	AA	14	U	P-O5'-C5'	-7.12	109.51	120.90
22	BA	2275	C	N1-C1'-C2'	7.12	123.25	114.00
22	DA	2250	G	O4'-C1'-N9	-7.12	102.51	108.20
22	DA	1265	A	P-O3'-C3'	7.11	128.24	119.70
22	BA	462	C	C6-N1-C2	7.11	123.14	120.30
22	BA	2654	A	P-O3'-C3'	7.11	128.23	119.70
1	AA	1131	G	P-O3'-C3'	-7.11	111.17	119.70
22	BA	1328	A	P-O3'-C3'	7.11	128.23	119.70
1	CA	1227	A	P-O3'-C3'	7.11	128.23	119.70
1	AA	344	A	P-O3'-C3'	7.10	128.22	119.70
1	CA	1455	G	P-O3'-C3'	-7.10	111.18	119.70
22	DA	749	A	P-O3'-C3'	-7.10	111.18	119.70
1	CA	429	U	O4'-C1'-N1	7.10	113.88	108.20
22	BA	35	G	N1-C6-O6	-7.10	115.64	119.90
22	DA	2023	C	P-O3'-C3'	-7.09	111.19	119.70
22	DA	2383	G	P-O3'-C3'	-7.09	111.19	119.70
22	BA	2439	A	P-O3'-C3'	7.09	128.21	119.70
22	DA	2069	G	P-O3'-C3'	-7.09	111.19	119.70
22	BA	306	U	O4'-C1'-N1	-7.08	102.53	108.20
22	BA	2890	G	N1-C6-O6	7.08	124.15	119.90
1	CA	93	U	N1-C1'-C2'	-7.08	104.21	112.00
22	DA	2151	U	O4'-C1'-N1	7.08	113.87	108.20
22	DA	162	U	P-O3'-C3'	7.08	128.20	119.70
22	DA	1780	A	P-O3'-C3'	7.08	128.19	119.70
1	AA	452	A	P-O3'-C3'	-7.08	111.21	119.70
22	DA	868	U	N1-C1'-C2'	-7.08	104.22	112.00
1	CA	518	C	O4'-C1'-N1	7.07	113.86	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1245	C	O4'-C1'-N1	7.07	113.86	108.20
22	DA	917	A	N9-C1'-C2'	-7.06	104.23	112.00
1	AA	1453	G	P-O3'-C3'	-7.05	111.23	119.70
1	CA	439	U	N1-C1'-C2'	-7.05	104.25	112.00
1	CA	1289	A	P-O3'-C3'	-7.05	111.24	119.70
22	DA	1810	A	P-O3'-C3'	-7.05	111.25	119.70
22	BA	2343	U	O4'-C1'-N1	-7.04	102.56	108.20
22	BA	1499	C	N1-C1'-C2'	-7.04	104.26	112.00
22	BA	1999	C	C5-C6-N1	-7.04	117.48	121.00
22	DA	945	A	O4'-C1'-N9	7.04	113.83	108.20
22	DA	1397	U	N1-C1'-C2'	7.04	123.15	114.00
22	BA	484	C	O4'-C1'-N1	-7.03	102.57	108.20
1	AA	411	A	P-O3'-C3'	7.03	128.13	119.70
22	BA	852	U	P-O3'-C3'	-7.03	111.27	119.70
22	DA	1606	C	P-O3'-C3'	7.02	128.13	119.70
22	BA	1343	G	P-O3'-C3'	-7.02	111.27	119.70
22	BA	2307	G	P-O3'-C3'	7.02	128.13	119.70
22	DA	1207	C	N1-C1'-C2'	-7.02	104.28	112.00
1	AA	316	C	N1-C1'-C2'	-7.01	104.28	112.00
1	CA	132	C	P-O3'-C3'	-7.01	111.28	119.70
1	AA	372	C	O4'-C1'-N1	7.01	113.81	108.20
1	CA	802	A	P-O3'-C3'	7.01	128.11	119.70
1	AA	1362	A	O4'-C1'-N9	7.00	113.80	108.20
22	BA	2348	U	P-O3'-C3'	-7.00	111.30	119.70
1	CA	718	A	P-O3'-C3'	-7.00	111.30	119.70
22	DA	976	G	P-O3'-C3'	-7.00	111.30	119.70
22	BA	1866	A	P-O3'-C3'	-7.00	111.31	119.70
45	BX	70	LEU	CA-CB-CG	7.00	131.39	115.30
22	BA	434	U	O4'-C1'-N1	6.99	113.80	108.20
22	BA	1398	C	P-O3'-C3'	-6.99	111.31	119.70
1	CA	1202	U	P-O3'-C3'	-6.99	111.31	119.70
22	BA	1757	A	P-O3'-C3'	6.99	128.09	119.70
22	BA	2423	U	P-O3'-C3'	6.99	128.09	119.70
22	BA	1011	G	P-O3'-C3'	6.99	128.09	119.70
22	BA	2815	C	N1-C2-O2	-6.99	114.71	118.90
22	BA	1272	A	P-O5'-C5'	-6.99	109.72	120.90
1	CA	915	A	N9-C1'-C2'	-6.99	104.31	112.00
22	DA	369	U	O4'-C1'-N1	6.99	113.79	108.20
22	DA	1476	U	N1-C1'-C2'	-6.99	104.31	112.00
22	BA	442	G	P-O3'-C3'	6.99	128.08	119.70
1	AA	1283	U	P-O3'-C3'	-6.98	111.32	119.70
22	BA	232	G	P-O3'-C3'	6.98	128.08	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2289	G	P-O3'-C3'	-6.98	111.32	119.70
22	BA	2051	A	C5-C6-N6	-6.98	118.12	123.70
22	BA	1340	U	C5-C6-N1	-6.97	119.21	122.70
1	CA	704	A	P-O3'-C3'	-6.97	111.33	119.70
22	BA	1351	C	O4'-C1'-N1	6.97	113.78	108.20
1	CA	1520	C	O4'-C1'-N1	-6.97	102.62	108.20
22	DA	1822	C	O4'-C1'-N1	6.97	113.78	108.20
1	AA	1190	G	P-O3'-C3'	6.97	128.06	119.70
22	BA	1645	G	O4'-C1'-N9	-6.97	102.62	108.20
22	DA	1941	C	N1-C1'-C2'	-6.97	104.33	112.00
1	AA	1401	G	P-O3'-C3'	-6.97	111.34	119.70
22	BA	2392	A	P-O3'-C3'	-6.97	111.34	119.70
23	DB	111	U	N1-C1'-C2'	-6.97	104.33	112.00
1	CA	132	C	O4'-C1'-N1	6.97	113.77	108.20
22	DA	397	U	N1-C1'-C2'	-6.97	104.34	112.00
1	AA	1167	A	P-O3'-C3'	6.96	128.05	119.70
1	CA	85	U	P-O3'-C3'	6.96	128.05	119.70
22	BA	1971	U	O3'-P-O5'	-6.96	90.78	104.00
22	DA	2225	A	P-O3'-C3'	6.96	128.05	119.70
22	BA	386	G	P-O3'-C3'	6.96	128.05	119.70
1	CA	980	C	P-O3'-C3'	-6.95	111.36	119.70
22	BA	1809	A	P-O3'-C3'	-6.95	111.36	119.70
22	BA	2364	C	O4'-C1'-N1	6.95	113.76	108.20
22	DA	302	C	N1-C1'-C2'	-6.95	104.36	112.00
23	BB	86	G	P-O3'-C3'	-6.95	111.36	119.70
1	CA	555	U	P-O3'-C3'	-6.94	111.37	119.70
22	BA	1999	C	C6-N1-C2	6.94	123.08	120.30
22	DA	230	G	P-O3'-C3'	-6.94	111.37	119.70
22	DA	73	A	P-O3'-C3'	-6.94	111.38	119.70
22	BA	906	U	O4'-C1'-N1	6.93	113.75	108.20
22	DA	1568	G	P-O3'-C3'	-6.93	111.38	119.70
22	BA	2383	G	P-O3'-C3'	-6.93	111.38	119.70
22	BA	794	A	P-O3'-C3'	-6.93	111.38	119.70
1	AA	1068	G	N9-C1'-C2'	-6.93	104.38	112.00
22	BA	1266	G	P-O3'-C3'	6.93	128.02	119.70
22	DA	1208	C	N1-C1'-C2'	-6.93	104.38	112.00
22	BA	1654	A	C3'-C2'-C1'	6.92	107.04	101.50
22	BA	138	U	N1-C1'-C2'	-6.92	104.38	112.00
1	CA	1230	C	P-O3'-C3'	-6.92	111.39	119.70
22	DA	1386	C	O4'-C1'-N1	6.92	113.74	108.20
22	DA	336	C	P-O3'-C3'	-6.92	111.39	119.70
22	DA	1993	U	N1-C1'-C2'	-6.92	104.39	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	972	C	P-O3'-C3'	-6.92	111.40	119.70
1	CA	40	C	O4'-C1'-N1	-6.92	102.66	108.20
1	AA	438	U	O4'-C1'-N1	6.92	113.73	108.20
22	BA	989	G	P-O3'-C3'	-6.92	111.40	119.70
22	DA	1960	A	P-O3'-C3'	-6.92	111.40	119.70
22	BA	510	C	O5'-P-OP2	-6.92	99.47	105.70
22	BA	163	C	N1-C1'-C2'	-6.92	104.39	112.00
1	CA	1450	U	O4'-C1'-N1	6.92	113.73	108.20
22	DA	274	C	N1-C1'-C2'	-6.92	104.39	112.00
22	DA	1982	U	P-O3'-C3'	-6.92	111.40	119.70
22	BA	1494	A	P-O3'-C3'	-6.91	111.40	119.70
22	BA	1738	G	P-O3'-C3'	6.91	128.00	119.70
22	BA	944	C	C6-N1-C2	6.91	123.06	120.30
22	DA	2272	U	O4'-C1'-N1	-6.91	102.67	108.20
22	DA	1965	C	P-O3'-C3'	-6.91	111.41	119.70
22	BA	961	C	N3-C4-C5	-6.90	119.14	121.90
22	BA	2572	A	C8-N9-C4	6.90	108.56	105.80
22	DA	2325	G	P-O3'-C3'	-6.90	111.42	119.70
1	CA	421	U	O4'-C1'-N1	6.90	113.72	108.20
1	AA	60	A	P-O3'-C3'	6.89	127.97	119.70
1	AA	1094	G	O4'-C1'-N9	6.89	113.72	108.20
22	BA	2297	A	P-O3'-C3'	-6.89	111.43	119.70
22	BA	2637	U	C5-C6-N1	-6.89	119.26	122.70
1	AA	52	C	P-O3'-C3'	-6.88	111.44	119.70
1	AA	919	A	P-O3'-C3'	6.88	127.96	119.70
22	BA	531	C	O3'-P-O5'	-6.88	90.92	104.00
22	BA	746	U	P-O3'-C3'	6.88	127.96	119.70
22	BA	2211	A	P-O3'-C3'	6.88	127.96	119.70
22	DA	1996	C	P-O3'-C3'	6.88	127.96	119.70
22	BA	2283	C	P-O3'-C3'	-6.88	111.45	119.70
22	DA	476	G	P-O3'-C3'	-6.88	111.45	119.70
1	CA	424	G	P-O3'-C3'	-6.88	111.45	119.70
23	BB	87	U	P-O3'-C3'	6.87	127.95	119.70
22	BA	1303	G	P-O3'-C3'	-6.87	111.46	119.70
22	DA	2469	A	N9-C1'-C2'	-6.87	104.44	112.00
1	CA	387	U	O4'-C1'-N1	6.87	113.69	108.20
1	AA	258	G	N9-C1'-C2'	-6.87	104.45	112.00
1	AA	965	U	P-O3'-C3'	6.87	127.94	119.70
22	DA	451	U	O4'-C1'-N1	6.87	113.69	108.20
1	AA	463	U	P-O3'-C3'	-6.86	111.47	119.70
22	BA	1802	A	P-O3'-C3'	-6.86	111.47	119.70
22	BA	2611	C	P-O5'-C5'	-6.86	109.93	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1051	G	P-O3'-C3'	-6.86	111.47	119.70
22	BA	1340	U	O3'-P-O5'	-6.85	90.98	104.00
1	AA	1197	A	P-O3'-C3'	-6.85	111.48	119.70
22	BA	1606	C	P-O5'-C5'	-6.84	109.95	120.90
23	BB	13	G	P-O3'-C3'	-6.84	111.49	119.70
1	CA	1302	C	P-O3'-C3'	-6.84	111.49	119.70
22	DA	2334	U	O4'-C1'-N1	6.84	113.67	108.20
22	BA	1326	U	O4'-C1'-N1	6.84	113.67	108.20
1	CA	641	U	P-O3'-C3'	6.84	127.91	119.70
1	AA	1085	U	N1-C1'-C2'	6.84	122.89	114.00
22	BA	369	U	N1-C1'-C2'	6.84	122.89	114.00
22	BA	1651	G	C8-N9-C4	-6.84	103.66	106.40
22	BA	1535	A	O4'-C1'-N9	6.84	113.67	108.20
22	DA	587	C	P-O3'-C3'	6.84	127.91	119.70
22	BA	93	G	P-O3'-C3'	-6.84	111.50	119.70
22	DA	2758	A	P-O3'-C3'	-6.84	111.50	119.70
22	BA	741	U	P-O5'-C5'	-6.83	109.96	120.90
22	BA	1386	C	N1-C1'-C2'	-6.83	104.49	112.00
22	DA	375	G	P-O3'-C3'	-6.83	111.50	119.70
22	DA	1491	G	P-O3'-C3'	-6.83	111.51	119.70
22	BA	2504	U	P-O3'-C3'	-6.83	111.51	119.70
23	DB	18	G	P-O3'-C3'	-6.82	111.51	119.70
22	BA	680	C	O4'-C1'-N1	-6.82	102.74	108.20
22	BA	390	U	N1-C1'-C2'	6.82	122.86	114.00
22	BA	2499	C	P-O5'-C5'	-6.81	110.00	120.90
22	BA	2426	A	O4'-C1'-N9	-6.81	102.75	108.20
22	DA	2873	A	O4'-C1'-N9	6.81	113.65	108.20
22	BA	1681	G	C5-C6-O6	-6.81	124.52	128.60
22	BA	2673	G	N9-C1'-C2'	-6.81	104.51	112.00
22	DA	1065	U	P-O3'-C3'	-6.81	111.53	119.70
22	DA	1208	C	O4'-C1'-N1	6.81	113.65	108.20
22	DA	2314	A	P-O3'-C3'	-6.81	111.53	119.70
1	AA	1381	U	O4'-C1'-N1	6.80	113.64	108.20
1	CA	511	C	N1-C1'-C2'	6.80	122.84	114.00
1	CA	820	U	O4'-C1'-N1	6.80	113.64	108.20
22	DA	2266	A	P-O3'-C3'	6.80	127.86	119.70
22	DA	2669	G	P-O3'-C3'	-6.80	111.54	119.70
22	BA	1714	U	P-O3'-C3'	-6.79	111.55	119.70
22	BA	1647	U	P-O3'-C3'	6.79	127.85	119.70
22	BA	1655	A	O5'-P-OP2	-6.79	99.59	105.70
1	AA	9	G	N9-C1'-C2'	-6.79	104.53	112.00
1	AA	1318	A	P-O3'-C3'	6.79	127.85	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	806	C	P-O5'-C5'	-6.79	110.04	120.90
22	BA	2363	G	P-O3'-C3'	6.79	127.85	119.70
1	CA	1507	A	P-O3'-C3'	-6.79	111.55	119.70
22	DA	475	C	N1-C1'-C2'	-6.79	104.53	112.00
22	BA	2267	A	P-O5'-C5'	-6.79	110.04	120.90
22	BA	2766	A	O4'-C1'-N9	-6.79	102.77	108.20
1	CA	428	G	O4'-C1'-N9	6.78	113.63	108.20
22	BA	2215	C	P-O3'-C3'	-6.78	111.56	119.70
22	BA	793	A	C2-N3-C4	-6.78	107.21	110.60
22	BA	1237	A	P-O3'-C3'	6.78	127.83	119.70
22	BA	2820	A	O4'-C1'-N9	-6.78	102.78	108.20
22	BA	974	G	N7-C8-N9	6.78	116.49	113.10
22	BA	2264	C	P-O5'-C5'	-6.78	110.06	120.90
22	DA	196	A	P-O3'-C3'	6.78	127.83	119.70
22	BA	396	G	P-O3'-C3'	-6.77	111.57	119.70
1	AA	566	G	P-O3'-C3'	6.77	127.83	119.70
22	BA	806	C	O4'-C1'-N1	-6.77	102.78	108.20
1	CA	1381	U	P-O3'-C3'	-6.77	111.57	119.70
1	CA	500	G	P-O3'-C3'	-6.77	111.58	119.70
1	AA	1152	A	P-O3'-C3'	-6.77	111.58	119.70
22	BA	806	C	P-O3'-C3'	-6.77	111.58	119.70
22	BA	1708	C	C6-N1-C2	6.77	123.01	120.30
22	DA	1818	U	O4'-C1'-N1	6.77	113.61	108.20
22	BA	1428	C	O4'-C1'-N1	6.77	113.61	108.20
1	AA	1531	A	P-O3'-C3'	-6.76	111.58	119.70
22	DA	105	C	N1-C1'-C2'	-6.76	104.56	112.00
22	DA	2714	G	P-O3'-C3'	-6.76	111.59	119.70
22	BA	2229	U	P-O3'-C3'	6.76	127.81	119.70
22	DA	1802	A	P-O3'-C3'	-6.76	111.59	119.70
22	BA	2427	C	C3'-C2'-C1'	6.76	106.91	101.50
22	BA	2459	A	N1-C6-N6	-6.76	114.55	118.60
22	DA	2428	G	P-O3'-C3'	-6.76	111.59	119.70
22	BA	1946	U	O4'-C1'-N1	-6.75	102.80	108.20
1	AA	1382	C	P-O3'-C3'	-6.75	111.60	119.70
22	BA	1411	U	O4'-C1'-N1	6.75	113.60	108.20
22	DA	2286	G	P-O3'-C3'	6.75	127.80	119.70
1	AA	366	A	P-O3'-C3'	6.75	127.80	119.70
22	BA	1985	C	N1-C2-O2	-6.75	114.85	118.90
22	BA	861	A	P-O5'-C5'	-6.75	110.11	120.90
22	DA	2392	A	P-O3'-C3'	-6.74	111.61	119.70
22	BA	1009	A	P-O3'-C3'	-6.74	111.62	119.70
22	BA	1560	G	P-O3'-C3'	-6.74	111.62	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1672	A	C8-N9-C4	6.74	108.49	105.80
22	DA	827	U	P-O3'-C3'	6.74	127.78	119.70
22	DA	1811	G	P-O3'-C3'	-6.74	111.62	119.70
22	BA	34	U	O4'-C1'-N1	-6.73	102.81	108.20
1	CA	1332	A	P-O3'-C3'	-6.73	111.62	119.70
22	DA	2150	C	O4'-C1'-N1	6.73	113.58	108.20
22	BA	2043	C	O4'-C1'-N1	-6.73	102.82	108.20
22	BA	2356	U	O4'-C1'-N1	6.73	113.58	108.20
22	BA	1320	C	P-O3'-C3'	6.72	127.77	119.70
1	CA	174	A	P-O3'-C3'	-6.72	111.63	119.70
22	BA	744	U	O4'-C1'-N1	6.72	113.58	108.20
22	DA	2498	C	P-O3'-C3'	-6.72	111.64	119.70
22	DA	2576	G	P-O3'-C3'	6.72	127.76	119.70
1	AA	1228	C	P-O3'-C3'	-6.71	111.64	119.70
22	DA	1386	C	N1-C1'-C2'	-6.71	104.61	112.00
1	AA	372	C	P-O3'-C3'	6.71	127.75	119.70
1	AA	469	C	O4'-C1'-N1	6.71	113.57	108.20
22	BA	1512	C	P-O3'-C3'	-6.71	111.65	119.70
22	BA	534	U	O4'-C1'-N1	6.70	113.56	108.20
1	CA	213	G	P-O3'-C3'	-6.70	111.66	119.70
22	BA	2756	U	N1-C1'-C2'	6.70	122.71	114.00
22	BA	583	G	P-O5'-C5'	-6.70	110.19	120.90
22	BA	2450	A	P-O5'-C5'	-6.70	110.19	120.90
22	BA	1236	G	P-O3'-C3'	6.69	127.73	119.70
22	BA	1996	C	P-O3'-C3'	6.69	127.73	119.70
1	AA	314	C	P-O3'-C3'	6.68	127.72	119.70
22	BA	531	C	N3-C4-C5	6.68	124.57	121.90
22	BA	1783	A	P-O3'-C3'	-6.67	111.69	119.70
22	DA	2582	G	P-O3'-C3'	-6.67	111.69	119.70
22	BA	2522	U	O4'-C1'-N1	-6.67	102.86	108.20
22	DA	2566	A	P-O3'-C3'	6.67	127.70	119.70
22	BA	2603	G	P-O3'-C3'	-6.66	111.71	119.70
22	BA	2631	G	P-O5'-C5'	-6.66	110.24	120.90
22	BA	1325	U	O4'-C1'-N1	6.66	113.53	108.20
22	DA	229	C	P-O3'-C3'	-6.66	111.71	119.70
1	AA	266	G	P-O3'-C3'	6.66	127.69	119.70
22	BA	926	G	P-O5'-C5'	-6.66	110.25	120.90
22	BA	1610	A	O4'-C1'-N9	-6.66	102.88	108.20
22	DA	444	C	O4'-C1'-N1	6.66	113.53	108.20
1	CA	1481	U	O4'-C1'-N1	6.65	113.52	108.20
22	BA	856	G	P-O3'-C3'	6.65	127.68	119.70
22	BA	1498	C	P-O3'-C3'	-6.65	111.72	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2199	A	P-O3'-C3'	-6.65	111.72	119.70
1	AA	497	G	P-O3'-C3'	-6.65	111.72	119.70
22	DA	861	A	P-O3'-C3'	-6.65	111.72	119.70
22	DA	2542	A	P-O3'-C3'	6.65	127.68	119.70
22	BA	996	A	O5'-P-OP2	-6.65	99.72	105.70
1	AA	1336	C	P-O3'-C3'	6.64	127.67	119.70
22	BA	1045	C	N1-C1'-C2'	6.64	122.64	114.00
22	DA	1399	C	P-O3'-C3'	-6.64	111.73	119.70
22	BA	302	C	P-O3'-C3'	-6.64	111.73	119.70
22	BA	753	A	P-O3'-C3'	-6.64	111.73	119.70
22	BA	1200	C	C6-N1-C2	6.64	122.95	120.30
22	BA	2064	C	P-O5'-C5'	-6.63	110.29	120.90
22	BA	32	C	O4'-C1'-N1	6.63	113.51	108.20
22	BA	1074	G	P-O3'-C3'	-6.63	111.74	119.70
22	BA	1760	C	O4'-C1'-N1	-6.63	102.89	108.20
22	DA	421	C	P-O3'-C3'	6.63	127.66	119.70
22	BA	1971	U	C3'-C2'-C1'	6.63	106.80	101.50
1	CA	811	C	P-O3'-C3'	6.63	127.65	119.70
22	DA	774	G	P-O3'-C3'	6.62	127.65	119.70
1	AA	451	A	P-O3'-C3'	6.62	127.65	119.70
22	BA	237	C	O4'-C1'-N1	6.62	113.50	108.20
22	BA	2850	A	P-O3'-C3'	-6.62	111.76	119.70
22	BA	216	A	P-O3'-C3'	-6.62	111.76	119.70
22	BA	1326	U	N1-C1'-C2'	-6.62	104.72	112.00
22	DA	2567	G	P-O3'-C3'	-6.62	111.76	119.70
22	BA	1931	U	N1-C1'-C2'	-6.61	104.72	112.00
1	AA	14	U	N1-C1'-C2'	-6.61	104.73	112.00
1	AA	121	U	N1-C1'-C2'	-6.61	104.73	112.00
22	BA	933	A	P-O3'-C3'	-6.61	111.77	119.70
22	BA	2567	G	C6-C5-N7	6.61	134.37	130.40
22	BA	2226	C	P-O5'-C5'	-6.61	110.33	120.90
22	DA	916	G	P-O3'-C3'	-6.61	111.77	119.70
22	DA	1419	A	P-O3'-C3'	-6.61	111.77	119.70
1	AA	686	U	O4'-C1'-N1	6.61	113.49	108.20
1	AA	688	G	N9-C1'-C2'	-6.61	104.73	112.00
22	BA	443	A	P-O5'-C5'	-6.61	110.33	120.90
22	BA	2350	C	O4'-C1'-N1	6.61	113.48	108.20
1	CA	86	G	P-O3'-C3'	6.61	127.63	119.70
22	BA	673	C	P-O3'-C3'	-6.60	111.78	119.70
22	DA	1733	G	P-O3'-C3'	-6.60	111.78	119.70
22	DA	2798	U	O4'-C1'-N1	-6.60	102.92	108.20
22	BA	1628	G	C6-C5-N7	-6.60	126.44	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2022	U	P-O5'-C5'	-6.60	110.34	120.90
22	DA	324	A	P-O3'-C3'	-6.60	111.78	119.70
1	CA	1211	U	P-O3'-C3'	6.59	127.61	119.70
22	BA	1734	G	P-O3'-C3'	-6.59	111.79	119.70
1	CA	546	A	P-O3'-C3'	6.59	127.61	119.70
22	BA	414	C	O4'-C1'-N1	6.59	113.47	108.20
22	DA	1627	G	P-O3'-C3'	-6.58	111.80	119.70
1	AA	428	G	P-O3'-C3'	6.58	127.60	119.70
22	BA	1058	U	O4'-C1'-N1	6.58	113.47	108.20
22	BA	1386	C	P-O3'-C3'	-6.58	111.80	119.70
22	BA	1457	U	P-O3'-C3'	6.58	127.60	119.70
22	BA	2492	U	P-O3'-C3'	-6.58	111.80	119.70
22	BA	1255	U	P-O5'-C5'	-6.58	110.37	120.90
22	DA	1560	G	P-O3'-C3'	-6.58	111.81	119.70
22	BA	507	A	N9-C1'-C2'	-6.58	104.77	112.00
22	BA	528	A	C6-C5-N7	-6.58	127.70	132.30
22	BA	1760	C	C5-C6-N1	-6.57	117.72	121.00
1	CA	70	U	P-O3'-C3'	6.57	127.59	119.70
22	DA	1900	A	P-O3'-C3'	6.57	127.58	119.70
22	DA	807	U	O4'-C1'-N1	6.56	113.45	108.20
23	BB	47	C	O4'-C1'-N1	-6.56	102.95	108.20
22	BA	2672	U	P-O3'-C3'	6.56	127.57	119.70
1	CA	129	A	P-O3'-C3'	6.56	127.57	119.70
22	BA	475	C	P-O3'-C3'	-6.56	111.83	119.70
22	BA	1667	G	C5-C6-O6	-6.56	124.67	128.60
1	AA	984	C	P-O3'-C3'	-6.55	111.83	119.70
22	BA	434	U	P-O3'-C3'	6.55	127.57	119.70
22	BA	2595	G	P-O5'-C5'	-6.55	110.42	120.90
22	BA	783	A	C2-N3-C4	-6.55	107.33	110.60
22	BA	1939	U	O4'-C1'-N1	6.55	113.44	108.20
22	BA	1993	U	P-O5'-C5'	-6.55	110.42	120.90
22	DA	1839	G	P-O3'-C3'	-6.55	111.84	119.70
23	BB	79	G	C5-C6-N1	6.55	114.77	111.50
22	DA	398	C	P-O3'-C3'	-6.54	111.85	119.70
1	AA	1278	G	P-O3'-C3'	6.54	127.55	119.70
22	BA	1993	U	C3'-C2'-C1'	6.54	106.73	101.50
1	CA	1087	G	P-O3'-C3'	-6.54	111.85	119.70
22	BA	1311	G	P-O3'-C3'	6.54	127.55	119.70
22	DA	2324	U	O4'-C1'-N1	6.54	113.43	108.20
22	BA	143	C	O4'-C1'-N1	6.54	113.43	108.20
22	DA	990	A	P-O3'-C3'	-6.54	111.86	119.70
22	BA	2820	A	O3'-P-O5'	-6.54	91.58	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1993	U	C3'-C2'-C1'	6.54	106.73	101.50
22	DA	2240	U	O4'-C1'-N1	6.54	113.43	108.20
22	BA	2501	C	N1-C1'-C2'	6.53	122.49	114.00
22	BA	2821	A	P-O3'-C3'	-6.53	111.86	119.70
1	CA	885	G	N9-C1'-C2'	-6.53	104.82	112.00
1	CA	1202	U	O4'-C1'-N1	6.53	113.42	108.20
1	AA	486	U	P-O3'-C3'	-6.53	111.86	119.70
1	AA	872	A	O4'-C1'-N9	6.53	113.42	108.20
22	BA	125	A	O3'-P-O5'	-6.53	91.60	104.00
22	DA	1956	U	O4'-C1'-N1	6.53	113.42	108.20
1	CA	328	C	O4'-C1'-N1	-6.52	102.98	108.20
22	DA	2646	C	P-O5'-C5'	-6.52	110.47	120.90
22	BA	1127	A	C3'-C2'-C1'	6.52	106.72	101.50
22	DA	571	U	P-O3'-C3'	6.52	127.52	119.70
22	DA	2520	C	P-O3'-C3'	-6.52	111.88	119.70
22	DA	2137	U	O4'-C1'-N1	6.52	113.41	108.20
22	DA	105	C	P-O3'-C3'	-6.51	111.88	119.70
22	DA	913	U	P-O3'-C3'	6.51	127.52	119.70
22	BA	1992	G	C4-N9-C1'	-6.51	118.03	126.50
22	BA	593	U	O4'-C1'-N1	6.51	113.41	108.20
22	BA	1024	G	C8-N9-C4	-6.51	103.80	106.40
22	BA	2519	U	N1-C1'-C2'	-6.51	104.84	112.00
1	CA	438	U	P-O3'-C3'	6.51	127.51	119.70
22	BA	1544	A	P-O5'-C5'	-6.51	110.49	120.90
1	CA	291	U	O4'-C1'-N1	6.51	113.41	108.20
22	DA	1286	A	P-O3'-C3'	6.51	127.51	119.70
22	BA	1618	A	C5-C6-N6	6.51	128.91	123.70
22	DA	395	U	N1-C1'-C2'	6.51	122.46	114.00
22	BA	2335	A	P-O3'-C3'	-6.51	111.89	119.70
1	AA	1126	U	P-O3'-C3'	6.50	127.50	119.70
22	BA	600	G	P-O5'-C5'	-6.50	110.49	120.90
22	DA	386	G	P-O3'-C3'	6.50	127.50	119.70
22	DA	802	A	P-O3'-C3'	-6.50	111.90	119.70
22	BA	1780	A	P-O3'-C3'	6.50	127.50	119.70
22	BA	1497	U	O4'-C1'-N1	6.50	113.40	108.20
1	CA	1181	G	P-O3'-C3'	6.50	127.50	119.70
22	DA	274	C	P-O3'-C3'	-6.50	111.90	119.70
22	BA	2871	U	O5'-P-OP1	6.50	118.50	110.70
1	AA	424	G	P-O3'-C3'	-6.49	111.92	119.70
22	BA	1299	G	C6-C5-N7	-6.48	126.51	130.40
1	AA	722	G	P-O3'-C3'	-6.48	111.92	119.70
22	BA	2555	U	O4'-C1'-N1	6.48	113.39	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	344	A	O4'-C1'-N9	6.48	113.39	108.20
22	BA	1276	A	P-O3'-C3'	-6.48	111.92	119.70
1	AA	14	U	P-O3'-C3'	-6.48	111.93	119.70
1	AA	792	A	P-O3'-C3'	6.48	127.47	119.70
22	BA	637	A	O4'-C1'-N9	6.48	113.38	108.20
22	DA	1025	G	P-O3'-C3'	6.47	127.47	119.70
22	DA	1483	G	P-O3'-C3'	-6.47	111.93	119.70
1	CA	1531	A	P-O3'-C3'	-6.47	111.94	119.70
22	BA	2296	U	O4'-C1'-N1	6.47	113.38	108.20
1	CA	119	A	P-O3'-C3'	6.47	127.46	119.70
22	DA	2468	A	P-O3'-C3'	6.47	127.46	119.70
22	BA	1300	G	O4'-C1'-N9	6.46	113.37	108.20
22	BA	2778	A	P-O3'-C3'	6.46	127.46	119.70
1	AA	1283	U	O4'-C1'-N1	6.46	113.37	108.20
33	BL	19	LEU	CA-CB-CG	6.46	130.15	115.30
22	BA	1638	C	O4'-C1'-N1	6.45	113.36	108.20
22	BA	1678	A	N1-C6-N6	6.45	122.47	118.60
22	BA	2431	U	P-O3'-C3'	-6.45	111.95	119.70
22	DA	2338	C	O4'-C1'-N1	6.45	113.36	108.20
22	DA	2868	A	P-O3'-C3'	-6.45	111.96	119.70
1	AA	184	G	P-O3'-C3'	-6.45	111.96	119.70
1	AA	857	C	O4'-C1'-N1	6.45	113.36	108.20
22	BA	2628	C	P-O3'-C3'	6.45	127.44	119.70
23	BB	109	A	P-O3'-C3'	-6.45	111.96	119.70
22	BA	2326	C	P-O3'-C3'	6.45	127.44	119.70
22	BA	973	A	P-O3'-C3'	6.45	127.44	119.70
22	DA	1397	U	O4'-C1'-N1	6.45	113.36	108.20
22	DA	957	C	P-O3'-C3'	6.45	127.44	119.70
1	CA	73	C	N1-C1'-C2'	-6.44	104.91	112.00
22	BA	1756	G	O4'-C1'-N9	-6.44	103.05	108.20
22	DA	1493	C	P-O3'-C3'	6.44	127.43	119.70
22	DA	2873	A	P-O3'-C3'	6.44	127.43	119.70
22	BA	2089	C	P-O3'-C3'	-6.44	111.98	119.70
1	CA	575	G	C8-N9-C1'	6.44	135.37	127.00
22	DA	2850	A	P-O3'-C3'	-6.44	111.98	119.70
1	AA	365	U	C5-C6-N1	-6.43	119.48	122.70
22	DA	2143	C	P-O3'-C3'	6.43	127.42	119.70
22	BA	1476	U	C3'-C2'-C1'	6.43	106.65	101.50
22	DA	1305	C	O4'-C1'-N1	6.43	113.34	108.20
1	CA	914	A	C3'-C2'-C1'	6.43	106.64	101.50
1	CA	47	C	N1-C1'-C2'	6.42	122.35	114.00
22	BA	1129	A	C3'-C2'-C1'	6.42	106.64	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	108	G	P-O3'-C3'	-6.42	112.00	119.70
22	BA	807	U	P-O5'-C5'	-6.42	110.63	120.90
22	DA	177	G	P-O3'-C3'	6.41	127.40	119.70
1	AA	258	G	P-O5'-C5'	-6.41	110.64	120.90
22	DA	1945	G	P-O3'-C3'	-6.41	112.01	119.70
22	BA	476	G	P-O5'-C5'	-6.41	110.65	120.90
22	BA	1760	C	C6-N1-C2	6.41	122.86	120.30
22	BA	575	A	C4-C5-C6	6.41	120.20	117.00
22	BA	24	G	P-O3'-C3'	6.41	127.39	119.70
22	BA	1275	A	P-O3'-C3'	6.40	127.39	119.70
22	BA	1033	U	P-O3'-C3'	6.40	127.38	119.70
22	BA	2502	G	P-O5'-C5'	-6.39	110.67	120.90
1	AA	469	C	P-O3'-C3'	-6.39	112.03	119.70
22	DA	1997	C	P-O3'-C3'	-6.39	112.03	119.70
22	DA	273	G	P-O3'-C3'	-6.39	112.03	119.70
1	CA	978	A	P-O3'-C3'	-6.39	112.03	119.70
22	DA	242	G	P-O3'-C3'	6.39	127.37	119.70
1	CA	1141	C	N1-C1'-C2'	-6.39	104.97	112.00
22	BA	913	U	P-O3'-C3'	6.39	127.36	119.70
22	BA	1758	U	N3-C2-O2	-6.39	117.73	122.20
22	DA	1807	G	P-O3'-C3'	-6.38	112.04	119.70
22	DA	2151	U	P-O3'-C3'	-6.38	112.04	119.70
22	BA	63	A	N9-C1'-C2'	-6.38	104.98	112.00
1	CA	481	G	P-O3'-C3'	6.38	127.36	119.70
1	CA	316	C	O4'-C1'-N1	6.38	113.30	108.20
22	BA	1378	A	P-O3'-C3'	6.38	127.36	119.70
22	BA	2562	U	O4'-C1'-N1	-6.38	103.10	108.20
22	DA	1635	A	P-O3'-C3'	-6.38	112.05	119.70
22	DA	2334	U	N1-C1'-C2'	6.38	122.29	114.00
22	DA	2682	A	C3'-C2'-C1'	6.38	106.60	101.50
22	BA	1651	G	P-O5'-C5'	-6.38	110.70	120.90
1	AA	1320	C	O4'-C1'-N1	6.37	113.30	108.20
22	BA	769	U	O4'-C1'-N1	-6.37	103.10	108.20
1	AA	985	C	O4'-C1'-N1	6.37	113.30	108.20
22	BA	1340	U	P-O3'-C3'	6.37	127.35	119.70
22	BA	451	U	P-O3'-C3'	6.37	127.34	119.70
22	BA	2504	U	O4'-C1'-N1	6.37	113.30	108.20
1	CA	306	A	N9-C1'-C2'	-6.37	104.99	112.00
22	DA	1722	A	P-O3'-C3'	-6.37	112.06	119.70
1	CA	654	G	P-O3'-C3'	-6.37	112.06	119.70
1	CA	733	G	P-O3'-C3'	6.37	127.34	119.70
22	BA	967	U	O4'-C1'-N1	6.36	113.29	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	564	C	P-O3'-C3'	-6.36	112.06	119.70
22	BA	2656	U	P-O3'-C3'	-6.36	112.07	119.70
22	DA	221	A	P-O3'-C3'	6.36	127.33	119.70
22	BA	1459	G	P-O3'-C3'	-6.36	112.07	119.70
22	BA	785	G	C2-N3-C4	-6.36	108.72	111.90
22	DA	777	G	N9-C1'-C2'	-6.35	105.01	112.00
1	AA	318	G	N3-C4-N9	-6.35	122.19	126.00
22	BA	2052	A	N9-C1'-C2'	-6.35	105.01	112.00
22	BA	2505	G	N1-C6-O6	-6.35	116.09	119.90
22	BA	2056	G	C5-C6-O6	-6.35	124.79	128.60
22	DA	1970	A	P-O3'-C3'	6.35	127.32	119.70
22	BA	2384	U	N1-C1'-C2'	6.35	122.25	114.00
1	AA	67	C	O4'-C1'-N1	6.35	113.28	108.20
1	CA	1502	A	P-O3'-C3'	6.35	127.31	119.70
1	AA	245	U	O4'-C1'-N1	6.34	113.28	108.20
22	BA	1992	G	C8-N9-C1'	6.34	135.25	127.00
22	DA	222	A	O4'-C1'-N9	6.34	113.27	108.20
22	BA	479	A	O4'-C1'-N9	6.34	113.27	108.20
22	BA	2728	U	N1-C1'-C2'	6.34	122.24	114.00
1	CA	792	A	O4'-C1'-N9	6.34	113.27	108.20
22	DA	129	C	P-O3'-C3'	-6.34	112.10	119.70
22	BA	2492	U	P-O5'-C5'	-6.33	110.77	120.90
22	DA	1389	G	P-O3'-C3'	-6.33	112.10	119.70
1	AA	267	C	O4'-C1'-N1	6.33	113.27	108.20
22	BA	655	A	P-O3'-C3'	6.33	127.30	119.70
22	BA	846	U	P-O3'-C3'	6.33	127.30	119.70
1	AA	110	C	P-O3'-C3'	-6.33	112.10	119.70
1	AA	1224	U	O4'-C1'-N1	6.33	113.27	108.20
22	DA	1554	U	P-O3'-C3'	6.33	127.30	119.70
1	CA	567	G	C3'-C2'-C1'	6.33	106.56	101.50
22	BA	1005	C	N1-C2-O2	6.33	122.70	118.90
22	BA	1329	U	O4'-C1'-N1	6.33	113.26	108.20
23	BB	42	C	P-O3'-C3'	-6.33	112.11	119.70
22	BA	1009	A	N9-C1'-C2'	-6.32	105.05	112.00
22	BA	1132	U	O4'-C1'-N1	6.32	113.26	108.20
22	DA	455	C	O4'-C1'-N1	6.32	113.26	108.20
22	DA	2217	G	C3'-C2'-C1'	6.32	106.56	101.50
22	BA	1155	A	O4'-C1'-N9	6.32	113.26	108.20
22	BA	100	U	N1-C1'-C2'	6.32	122.22	114.00
22	BA	2498	C	P-O3'-C3'	-6.32	112.11	119.70
22	DA	2143	C	O4'-C1'-N1	6.32	113.26	108.20
1	AA	124	C	O4'-C1'-N1	-6.32	103.15	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1717	A	P-O3'-C3'	-6.32	112.12	119.70
22	BA	1499	C	P-O3'-C3'	-6.32	112.12	119.70
22	BA	2613	U	O4'-C1'-N1	6.32	113.25	108.20
22	BA	2297	A	O4'-C1'-N9	-6.31	103.15	108.20
1	AA	1396	A	P-O3'-C3'	6.31	127.27	119.70
1	CA	576	C	O4'-C1'-N1	-6.31	103.15	108.20
1	AA	733	G	O4'-C1'-N9	6.31	113.25	108.20
22	BA	2777	G	O4'-C1'-N9	-6.31	103.15	108.20
22	BA	2425	A	O4'-C1'-N9	6.31	113.25	108.20
1	CA	60	A	P-O3'-C3'	6.31	127.27	119.70
1	CA	482	A	C3'-C2'-C1'	6.31	106.55	101.50
1	CA	1201	A	P-O3'-C3'	6.31	127.27	119.70
22	DA	1739	A	P-O3'-C3'	-6.31	112.13	119.70
22	DA	1020	A	P-O3'-C3'	6.30	127.26	119.70
22	DA	1267	U	P-O3'-C3'	-6.30	112.14	119.70
22	BA	1945	G	P-O3'-C3'	-6.30	112.14	119.70
1	CA	686	U	O4'-C1'-N1	6.30	113.24	108.20
1	CA	1152	A	P-O3'-C3'	-6.30	112.14	119.70
1	AA	1478	U	P-O5'-C5'	-6.29	110.83	120.90
22	BA	1324	G	O4'-C1'-N9	6.29	113.23	108.20
22	BA	835	C	C6-N1-C2	6.29	122.82	120.30
22	DA	1304	A	P-O3'-C3'	-6.29	112.15	119.70
22	BA	587	C	P-O3'-C3'	6.29	127.25	119.70
1	AA	1087	G	P-O3'-C3'	-6.29	112.15	119.70
22	BA	1735	A	P-O3'-C3'	-6.29	112.15	119.70
22	BA	1994	C	N1-C2-O2	-6.29	115.13	118.90
22	BA	2824	C	N3-C4-C5	-6.29	119.38	121.90
22	DA	806	C	P-O3'-C3'	-6.29	112.15	119.70
23	BB	15	A	P-O5'-C5'	-6.29	110.84	120.90
22	DA	2875	C	P-O3'-C3'	-6.29	112.16	119.70
22	BA	984	A	C8-N9-C4	6.28	108.31	105.80
22	DA	1857	G	P-O3'-C3'	6.28	127.24	119.70
1	AA	85	U	P-O3'-C3'	6.28	127.24	119.70
23	DB	24	G	P-O3'-C3'	6.28	127.23	119.70
22	BA	588	U	C3'-C2'-C1'	6.28	106.52	101.50
1	AA	1282	C	P-O3'-C3'	-6.28	112.17	119.70
22	BA	776	G	O4'-C1'-N9	-6.28	103.18	108.20
22	BA	2327	A	P-O3'-C3'	-6.28	112.17	119.70
22	BA	1426	G	O4'-C1'-N9	-6.27	103.18	108.20
22	BA	2646	C	P-O5'-C5'	-6.27	110.86	120.90
1	CA	218	U	O4'-C1'-N1	6.27	113.22	108.20
22	BA	523	C	N3-C4-C5	6.27	124.41	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2656	U	P-O3'-C3'	-6.27	112.18	119.70
1	AA	1064	G	P-O3'-C3'	6.26	127.22	119.70
22	BA	1116	G	N9-C1'-C2'	-6.26	105.11	112.00
22	DA	271	G	P-O3'-C3'	6.26	127.22	119.70
22	BA	2875	C	P-O5'-C5'	-6.26	110.88	120.90
23	DB	110	C	P-O3'-C3'	-6.26	112.19	119.70
22	BA	2263	C	N1-C2-O2	-6.26	115.14	118.90
1	CA	992	U	P-O3'-C3'	6.26	127.21	119.70
22	DA	1460	U	O4'-C1'-N1	-6.26	103.19	108.20
22	DA	2194	U	P-O3'-C3'	-6.26	112.19	119.70
1	AA	257	G	P-O3'-C3'	6.26	127.21	119.70
22	BA	482	A	O5'-P-OP2	-6.26	100.07	105.70
22	DA	995	C	N1-C1'-C2'	6.26	122.13	114.00
1	CA	1507	A	N9-C1'-C2'	-6.25	105.12	112.00
1	CA	407	U	O4'-C1'-N1	-6.25	103.20	108.20
22	DA	1758	U	N1-C1'-C2'	6.25	122.13	114.00
22	BA	2388	A	O4'-C1'-N9	6.25	113.20	108.20
22	DA	233	A	P-O3'-C3'	-6.25	112.20	119.70
1	AA	1066	C	P-O3'-C3'	-6.25	112.21	119.70
22	BA	948	C	C4-C5-C6	6.25	120.52	117.40
1	AA	811	C	P-O3'-C3'	6.24	127.19	119.70
22	BA	603	A	P-O3'-C3'	6.24	127.19	119.70
22	BA	934	U	C3'-C2'-C1'	6.24	106.50	101.50
22	DA	775	G	P-O3'-C3'	6.24	127.19	119.70
22	BA	1759	A	P-O5'-C5'	-6.24	110.92	120.90
1	CA	486	U	O4'-C1'-N1	-6.24	103.21	108.20
1	CA	1127	G	P-O3'-C3'	-6.24	112.22	119.70
22	BA	1758	U	O4'-C1'-N1	-6.24	103.21	108.20
22	BA	2556	C	O4'-C1'-N1	6.23	113.19	108.20
22	BA	63	A	P-O3'-C3'	-6.23	112.22	119.70
22	DA	1962	C	P-O3'-C3'	6.23	127.18	119.70
1	AA	368	U	P-O3'-C3'	-6.23	112.22	119.70
22	BA	1452	G	N3-C4-C5	6.23	131.72	128.60
1	AA	884	U	N1-C1'-C2'	6.23	122.10	114.00
22	BA	529	A	N7-C8-N9	-6.23	110.69	113.80
22	BA	2469	A	N9-C1'-C2'	-6.23	105.15	112.00
1	CA	937	A	C3'-C2'-C1'	6.23	106.48	101.50
22	BA	1694	C	N1-C1'-C2'	-6.23	105.15	112.00
22	BA	2344	U	P-O3'-C3'	6.23	127.17	119.70
1	AA	414	A	C3'-C2'-C1'	6.22	106.48	101.50
22	DA	989	G	P-O3'-C3'	6.22	127.17	119.70
22	BA	1419	A	P-O3'-C3'	6.22	127.16	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1993	U	P-O3'-C3'	-6.22	112.24	119.70
22	BA	406	G	P-O3'-C3'	-6.21	112.24	119.70
22	BA	729	G	C3'-C2'-C1'	6.21	106.47	101.50
1	CA	275	G	P-O3'-C3'	-6.21	112.24	119.70
22	BA	2809	A	P-O5'-C5'	-6.21	110.96	120.90
22	BA	2824	C	C4-C5-C6	6.21	120.51	117.40
22	BA	2888	C	P-O3'-C3'	-6.21	112.25	119.70
22	BA	2492	U	N1-C1'-C2'	-6.21	105.17	112.00
22	DA	107	G	P-O3'-C3'	-6.21	112.25	119.70
22	BA	2152	G	N9-C1'-C2'	-6.21	105.17	112.00
1	AA	1348	U	P-O3'-C3'	-6.21	112.25	119.70
1	AA	1398	A	N9-C1'-C2'	-6.21	105.17	112.00
1	AA	141	G	N9-C1'-C2'	-6.20	105.18	112.00
1	AA	562	U	O4'-C1'-N1	-6.20	103.24	108.20
1	CA	282	A	P-O3'-C3'	-6.20	112.26	119.70
22	DA	2459	A	P-O3'-C3'	-6.20	112.25	119.70
22	DA	604	G	P-O3'-C3'	-6.20	112.26	119.70
1	AA	534	U	P-O3'-C3'	-6.20	112.26	119.70
22	BA	819	A	O4'-C1'-N9	-6.20	103.24	108.20
22	BA	2047	C	O4'-C1'-N1	-6.20	103.24	108.20
22	DA	2052	A	N9-C1'-C2'	-6.20	105.18	112.00
22	BA	2630	G	P-O3'-C3'	-6.20	112.26	119.70
22	BA	30	G	P-O5'-C5'	-6.19	110.99	120.90
1	AA	247	G	N9-C1'-C2'	-6.19	105.19	112.00
1	AA	567	G	C3'-C2'-C1'	6.19	106.45	101.50
22	BA	1828	G	P-O5'-C5'	6.19	130.81	120.90
1	CA	1087	G	N9-C1'-C2'	-6.19	105.19	112.00
22	BA	1008	A	P-O3'-C3'	6.19	127.12	119.70
22	DA	52	A	P-O3'-C3'	-6.19	112.27	119.70
22	BA	1251	C	C2-N3-C4	-6.19	116.81	119.90
1	AA	884	U	P-O3'-C3'	6.18	127.12	119.70
22	BA	2424	C	N3-C4-N4	-6.18	113.67	118.00
22	DA	2893	A	P-O3'-C3'	6.18	127.12	119.70
22	DA	2504	U	O4'-C1'-N1	6.18	113.14	108.20
1	CA	1151	A	P-O3'-C3'	6.18	127.12	119.70
22	DA	2800	A	C3'-C2'-C1'	6.18	106.44	101.50
22	BA	985	C	N1-C1'-C2'	-6.18	105.20	112.00
22	BA	528	A	P-O3'-C3'	-6.18	112.29	119.70
22	BA	174	U	P-O3'-C3'	-6.17	112.29	119.70
22	BA	2755	C	O4'-C1'-N1	-6.17	103.26	108.20
22	DA	2757	A	P-O3'-C3'	-6.17	112.29	119.70
22	BA	2529	G	O4'-C1'-N9	-6.17	103.26	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2582	G	N9-C1'-C2'	-6.17	105.21	112.00
22	BA	2578	G	P-O3'-C3'	-6.17	112.30	119.70
23	BB	12	C	N1-C1'-C2'	6.17	122.02	114.00
22	BA	528	A	C5-N7-C8	-6.16	100.82	103.90
22	DA	1901	A	P-O3'-C3'	-6.16	112.30	119.70
22	DA	2386	A	P-O3'-C3'	-6.16	112.31	119.70
23	BB	45	A	N9-C1'-C2'	-6.16	105.22	112.00
22	BA	621	A	P-O5'-C5'	-6.16	111.05	120.90
1	CA	914	A	N9-C1'-C2'	-6.16	105.22	112.00
22	BA	1707	G	C3'-C2'-C1'	6.16	106.42	101.50
22	DA	1019	U	O4'-C1'-N1	6.16	113.12	108.20
1	AA	594	U	O4'-C1'-N1	6.15	113.12	108.20
1	CA	1161	C	O4'-C1'-N1	6.15	113.12	108.20
1	CA	418	C	O4'-C1'-N1	6.15	113.12	108.20
1	AA	575	G	P-O5'-C5'	-6.15	111.06	120.90
1	AA	935	A	C3'-C2'-C1'	6.15	106.42	101.50
22	BA	2226	C	N1-C1'-C2'	-6.15	105.24	112.00
1	AA	1066	C	N1-C1'-C2'	-6.14	105.24	112.00
1	CA	74	A	C3'-C2'-C1'	6.14	106.42	101.50
22	BA	2517	C	N3-C4-C5	6.14	124.36	121.90
1	CA	980	C	O4'-C1'-N1	6.14	113.11	108.20
22	BA	66	C	O4'-C1'-N1	6.14	113.11	108.20
22	DA	1617	C	O4'-C1'-N1	6.14	113.11	108.20
22	BA	729	G	P-O5'-C5'	-6.14	111.08	120.90
22	BA	1300	G	P-O3'-C3'	6.13	127.06	119.70
1	CA	305	G	P-O3'-C3'	6.13	127.06	119.70
22	DA	1402	U	C3'-C2'-C1'	6.13	106.41	101.50
1	AA	971	G	O4'-C1'-N9	6.13	113.10	108.20
22	DA	2387	U	C3'-C2'-C1'	6.13	106.40	101.50
22	DA	2713	U	O4'-C1'-N1	-6.13	103.30	108.20
1	AA	1451	U	N1-C1'-C2'	6.13	121.96	114.00
22	BA	115	C	O4'-C1'-N1	-6.13	103.30	108.20
22	BA	1315	C	O4'-C1'-N1	-6.13	103.30	108.20
1	CA	1398	A	N9-C1'-C2'	-6.13	105.26	112.00
22	BA	2646	C	P-O3'-C3'	-6.12	112.35	119.70
22	DA	790	U	O4'-C1'-N1	6.12	113.10	108.20
22	BA	2800	A	C3'-C2'-C1'	6.12	106.40	101.50
22	BA	2889	C	N1-C2-O2	-6.12	115.23	118.90
22	DA	390	U	N1-C1'-C2'	6.12	121.96	114.00
22	DA	2712	C	O4'-C1'-N1	6.12	113.10	108.20
1	AA	559	A	O4'-C1'-N9	6.12	113.10	108.20
22	BA	557	C	P-O3'-C3'	6.12	127.04	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2066	C	C6-N1-C2	6.12	122.75	120.30
22	BA	2259	U	N1-C1'-C2'	-6.12	105.27	112.00
1	CA	1345	U	P-O3'-C3'	6.12	127.04	119.70
22	BA	2407	A	P-O5'-C5'	-6.12	111.11	120.90
22	BA	1357	C	C6-N1-C2	6.12	122.75	120.30
22	BA	2606	C	C6-N1-C2	6.12	122.75	120.30
22	BA	2729	G	P-O3'-C3'	-6.12	112.36	119.70
22	BA	1461	C	C3'-C2'-C1'	6.11	106.39	101.50
22	BA	491	G	C3'-C2'-C1'	6.11	106.39	101.50
22	DA	947	A	P-O3'-C3'	-6.11	112.37	119.70
22	BA	620	G	O3'-P-O5'	6.11	115.61	104.00
22	BA	667	U	O4'-C1'-N1	-6.11	103.31	108.20
22	DA	1255	U	O4'-C1'-N1	6.11	113.09	108.20
1	AA	547	A	O4'-C1'-N9	6.11	113.09	108.20
1	CA	439	U	C3'-C2'-C1'	6.11	106.39	101.50
1	AA	1203	C	O4'-C1'-N1	6.11	113.08	108.20
1	AA	1302	C	N1-C1'-C2'	-6.11	105.28	112.00
22	BA	1682	G	P-O5'-C5'	-6.11	111.13	120.90
1	CA	960	U	P-O3'-C3'	6.11	127.03	119.70
22	BA	2382	G	O4'-C1'-N9	6.10	113.08	108.20
22	BA	2901	C	O4'-C1'-N1	-6.10	103.32	108.20
22	BA	803	U	O4'-C1'-N1	6.10	113.08	108.20
1	CA	1380	U	P-O3'-C3'	6.10	127.02	119.70
22	DA	2023	C	O4'-C1'-N1	6.10	113.08	108.20
1	AA	183	C	O4'-C1'-N1	6.10	113.08	108.20
23	BB	25	U	P-O3'-C3'	-6.10	112.38	119.70
1	CA	122	G	N9-C1'-C2'	-6.10	105.29	112.00
1	CA	960	U	O4'-C1'-N1	6.10	113.08	108.20
22	BA	114	U	O4'-C1'-N1	-6.10	103.32	108.20
22	BA	861	A	OP1-P-O3'	6.10	118.61	105.20
1	CA	654	G	C3'-C2'-C1'	6.10	106.38	101.50
22	BA	758	C	P-O3'-C3'	6.10	127.02	119.70
22	BA	1184	U	P-O3'-C3'	6.10	127.02	119.70
22	BA	1421	G	P-O3'-C3'	-6.10	112.39	119.70
22	DA	1717	A	P-O3'-C3'	-6.10	112.38	119.70
22	BA	2250	G	N7-C8-N9	6.09	116.15	113.10
1	CA	889	A	P-O3'-C3'	6.09	127.01	119.70
1	AA	452	A	N9-C1'-C2'	-6.09	105.30	112.00
22	BA	1613	G	N1-C6-O6	-6.09	116.25	119.90
22	DA	1839	G	N9-C1'-C2'	-6.09	105.30	112.00
1	AA	1509	C	C6-N1-C2	6.09	122.73	120.30
22	BA	1398	C	C3'-C2'-C1'	6.09	106.37	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1024	G	C3'-C2'-C1'	6.09	106.37	101.50
23	BB	97	C	C6-N1-C2	6.08	122.73	120.30
22	BA	786	C	N3-C4-C5	6.08	124.33	121.90
22	BA	937	C	C6-N1-C2	6.08	122.73	120.30
22	BA	1794	A	P-O3'-C3'	6.08	126.99	119.70
22	BA	2052	A	P-O5'-C5'	-6.08	111.17	120.90
22	DA	788	A	P-O3'-C3'	6.08	127.00	119.70
1	AA	97	G	C3'-C2'-C1'	6.08	106.36	101.50
1	AA	1258	G	P-O3'-C3'	-6.08	112.41	119.70
22	BA	584	C	O4'-C1'-N1	6.08	113.06	108.20
22	DA	2067	G	P-O3'-C3'	6.07	126.99	119.70
22	BA	1829	A	P-O3'-C3'	-6.07	112.42	119.70
1	CA	414	A	P-O3'-C3'	-6.07	112.41	119.70
22	DA	865	C	P-O3'-C3'	6.07	126.98	119.70
1	AA	247	G	P-O3'-C3'	-6.07	112.42	119.70
22	BA	1290	C	C5-C6-N1	-6.07	117.97	121.00
22	BA	2691	C	P-O5'-C5'	-6.07	111.19	120.90
22	BA	120	U	P-O5'-C5'	-6.07	111.20	120.90
1	AA	991	U	P-O3'-C3'	6.06	126.97	119.70
22	BA	1735	A	C3'-C2'-C1'	6.06	106.35	101.50
22	BA	834	G	C2-N3-C4	-6.06	108.87	111.90
22	BA	2868	A	P-O3'-C3'	-6.06	112.43	119.70
22	DA	1919	A	P-O3'-C3'	-6.06	112.43	119.70
1	AA	345	C	O4'-C1'-N1	-6.06	103.35	108.20
22	BA	2502	G	O5'-P-OP2	-6.06	100.25	105.70
1	AA	914	A	C3'-C2'-C1'	6.05	106.34	101.50
1	AA	316	C	O4'-C1'-N1	6.05	113.04	108.20
22	BA	2244	U	O4'-C1'-N1	-6.05	103.36	108.20
1	AA	1162	C	C3'-C2'-C1'	6.05	106.34	101.50
22	BA	2219	U	O4'-C1'-N1	6.05	113.04	108.20
1	CA	816	A	P-O3'-C3'	-6.05	112.44	119.70
22	BA	2463	C	P-O3'-C3'	-6.05	112.44	119.70
22	BA	2440	C	C3'-C2'-C1'	6.04	106.34	101.50
22	DA	1956	U	C3'-C2'-C1'	6.04	106.34	101.50
1	AA	1478	U	O4'-C1'-N1	-6.04	103.36	108.20
22	BA	802	A	P-O3'-C3'	-6.04	112.45	119.70
1	CA	251	G	P-O3'-C3'	6.04	126.95	119.70
22	DA	2214	C	C3'-C2'-C1'	6.04	106.33	101.50
1	AA	185	U	N1-C1'-C2'	-6.04	105.35	112.00
22	BA	206	U	N1-C1'-C2'	-6.04	105.35	112.00
22	DA	1817	G	P-O3'-C3'	-6.04	112.45	119.70
1	CA	1505	G	C3'-C2'-C1'	6.04	106.33	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1255	U	P-O3'-C3'	-6.04	112.45	119.70
1	AA	1187	G	P-O3'-C3'	-6.04	112.45	119.70
22	BA	174	U	O4'-C1'-N1	-6.04	103.37	108.20
22	BA	385	C	P-O3'-C3'	6.04	126.94	119.70
22	BA	760	G	C5-C6-O6	-6.04	124.98	128.60
22	BA	2600	A	P-O3'-C3'	6.04	126.94	119.70
22	DA	2034	U	P-O3'-C3'	-6.04	112.46	119.70
22	DA	2036	C	P-O3'-C3'	-6.04	112.46	119.70
1	AA	1153	G	P-O3'-C3'	-6.03	112.46	119.70
22	DA	1451	C	O4'-C1'-N1	6.03	113.03	108.20
22	BA	273	G	C3'-C2'-C1'	6.03	106.33	101.50
1	AA	497	G	C3'-C2'-C1'	6.03	106.32	101.50
1	CA	209	U	P-O3'-C3'	6.03	126.94	119.70
22	DA	1693	U	N1-C1'-C2'	6.03	121.84	114.00
1	AA	30	U	N1-C1'-C2'	6.03	121.84	114.00
22	BA	575	A	O4'-C1'-N9	6.03	113.02	108.20
1	CA	115	G	P-O3'-C3'	6.03	126.93	119.70
22	DA	1320	C	P-O3'-C3'	6.03	126.93	119.70
22	BA	567	U	P-O3'-C3'	-6.02	112.47	119.70
22	BA	819	A	C8-N9-C4	6.02	108.21	105.80
22	DA	199	A	P-O3'-C3'	6.02	126.92	119.70
1	AA	198	G	C3'-C2'-C1'	6.02	106.31	101.50
1	AA	723	U	O4'-C1'-N1	6.01	113.01	108.20
22	DA	2348	U	P-O3'-C3'	-6.01	112.48	119.70
22	BA	831	G	N9-C1'-C2'	-6.01	105.39	112.00
22	BA	2311	A	P-O3'-C3'	6.01	126.91	119.70
1	AA	1095	U	C3'-C2'-C1'	6.01	106.31	101.50
22	DA	1997	C	C3'-C2'-C1'	6.01	106.31	101.50
22	BA	1761	C	O4'-C1'-N1	-6.01	103.39	108.20
1	AA	330	C	P-O3'-C3'	-6.00	112.50	119.70
22	BA	18	U	P-O5'-C5'	-6.00	111.29	120.90
1	AA	501	C	C3'-C2'-C1'	6.00	106.30	101.50
22	BA	491	G	N9-C1'-C2'	-6.00	105.40	112.00
22	BA	906	U	P-O5'-C5'	-6.00	111.30	120.90
22	BA	2051	A	OP1-P-O3'	6.00	118.40	105.20
22	BA	2606	C	N1-C1'-C2'	-6.00	105.40	112.00
1	CA	485	U	O4'-C1'-N1	-6.00	103.40	108.20
1	CA	686	U	P-O3'-C3'	6.00	126.90	119.70
22	BA	1248	G	P-O5'-C5'	-6.00	111.30	120.90
22	BA	387	U	P-O5'-C5'	-6.00	111.30	120.90
22	BA	1872	A	C3'-C2'-C1'	6.00	106.30	101.50
22	BA	2146	C	O4'-C1'-N1	6.00	113.00	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	510	C	P-O3'-C3'	-6.00	112.50	119.70
1	AA	551	U	O4'-C1'-N1	-6.00	103.40	108.20
1	AA	1448	C	P-O3'-C3'	-6.00	112.50	119.70
1	CA	1214	C	O4'-C1'-N1	6.00	113.00	108.20
22	DA	959	A	C3'-C2'-C1'	6.00	106.30	101.50
22	DA	1328	A	P-O3'-C3'	-6.00	112.50	119.70
22	DA	218	A	N9-C1'-C2'	-6.00	105.41	112.00
22	DA	2603	G	N9-C1'-C2'	-6.00	105.41	112.00
1	AA	1241	G	C3'-C2'-C1'	5.99	106.29	101.50
22	DA	2226	C	C3'-C2'-C1'	5.99	106.29	101.50
22	DA	2573	C	P-O3'-C3'	-5.99	112.51	119.70
22	BA	13	A	P-O3'-C3'	5.99	126.89	119.70
22	BA	413	C	P-O3'-C3'	-5.99	112.52	119.70
22	BA	1858	A	C3'-C2'-C1'	5.99	106.29	101.50
22	BA	1963	U	C2-N1-C1'	5.99	124.89	117.70
22	BA	2261	C	P-O3'-C3'	5.99	126.88	119.70
22	BA	2880	C	P-O3'-C3'	-5.99	112.52	119.70
22	DA	1389	G	C3'-C2'-C1'	5.98	106.29	101.50
22	BA	1115	G	P-O3'-C3'	5.98	126.88	119.70
22	BA	266	G	P-O3'-C3'	-5.98	112.52	119.70
22	BA	775	G	O4'-C1'-N9	5.98	112.98	108.20
22	BA	1618	A	C5-C6-N1	-5.98	114.71	117.70
22	DA	1803	A	C3'-C2'-C1'	5.98	106.28	101.50
22	BA	1520	U	O4'-C1'-N1	-5.98	103.42	108.20
22	BA	1969	A	P-O3'-C3'	5.98	126.88	119.70
1	AA	267	C	C3'-C2'-C1'	5.98	106.28	101.50
22	BA	914	G	N9-C1'-C2'	-5.98	105.42	112.00
22	DA	976	G	C3'-C2'-C1'	5.98	106.28	101.50
22	DA	1602	U	N1-C1'-C2'	5.98	121.77	114.00
22	BA	628	G	P-O3'-C3'	-5.98	112.53	119.70
22	DA	1437	C	O4'-C1'-N1	5.98	112.98	108.20
1	AA	537	G	P-O3'-C3'	-5.97	112.53	119.70
22	BA	1248	G	P-O3'-C3'	5.97	126.87	119.70
22	BA	1378	A	O4'-C1'-N9	5.97	112.98	108.20
22	DA	129	C	P-O5'-C5'	-5.97	111.34	120.90
1	AA	47	C	N1-C1'-C2'	5.97	121.76	114.00
22	BA	2681	C	N1-C1'-C2'	5.97	121.76	114.00
22	DA	2312	U	P-O3'-C3'	-5.97	112.53	119.70
22	BA	2656	U	C3'-C2'-C1'	5.97	106.28	101.50
22	BA	2228	G	P-O5'-C5'	-5.97	111.35	120.90
22	DA	765	C	C3'-C2'-C1'	5.97	106.27	101.50
22	BA	1015	U	P-O5'-C5'	-5.97	111.35	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	520	A	C3'-C2'-C1'	5.97	106.27	101.50
1	AA	840	C	O4'-C1'-N1	5.96	112.97	108.20
22	BA	578	G	O5'-P-OP2	-5.96	100.33	105.70
22	DA	1809	A	P-O3'-C3'	-5.96	112.54	119.70
22	DA	638	G	C3'-C2'-C1'	5.96	106.27	101.50
1	AA	199	A	C3'-C2'-C1'	5.96	106.27	101.50
22	BA	372	G	P-O3'-C3'	5.96	126.86	119.70
22	BA	1694	C	C6-N1-C2	5.96	122.68	120.30
22	DA	412	A	C3'-C2'-C1'	5.96	106.27	101.50
22	DA	2052	A	P-O3'-C3'	-5.96	112.55	119.70
22	BA	331	C	O4'-C1'-N1	5.96	112.97	108.20
22	BA	597	G	C6-C5-N7	-5.96	126.83	130.40
1	AA	1505	G	C3'-C2'-C1'	5.96	106.27	101.50
22	BA	323	C	O4'-C1'-N1	5.96	112.97	108.20
22	DA	2756	U	N1-C1'-C2'	5.96	121.74	114.00
22	BA	2715	C	O5'-P-OP2	-5.96	100.34	105.70
22	DA	586	A	P-O3'-C3'	5.96	126.85	119.70
1	CA	643	C	O4'-C1'-N1	5.95	112.96	108.20
1	CA	1297	G	P-O3'-C3'	5.95	126.84	119.70
1	AA	93	U	P-O3'-C3'	-5.95	112.56	119.70
1	AA	386	C	O4'-C1'-N1	5.95	112.96	108.20
22	BA	749	A	OP1-P-OP2	5.95	128.53	119.60
22	BA	1526	C	C6-N1-C2	5.95	122.68	120.30
22	BA	255	A	O4'-C1'-N9	-5.95	103.44	108.20
1	CA	872	A	O4'-C1'-N9	5.95	112.96	108.20
1	CA	986	U	P-O3'-C3'	-5.95	112.56	119.70
22	BA	2520	C	C3'-C2'-C1'	5.95	106.26	101.50
22	DA	2629	U	O4'-C1'-N1	5.95	112.96	108.20
22	DA	1541	C	C3'-C2'-C1'	5.94	106.25	101.50
1	AA	174	A	P-O3'-C3'	-5.94	112.57	119.70
1	AA	559	A	P-O3'-C3'	5.94	126.83	119.70
22	BA	198	C	N3-C4-C5	-5.94	119.52	121.90
22	BA	513	A	C3'-C2'-C1'	5.94	106.25	101.50
1	AA	252	U	P-O3'-C3'	-5.94	112.57	119.70
22	BA	2874	C	P-O3'-C3'	-5.94	112.57	119.70
22	BA	2447	G	O3'-P-O5'	-5.94	92.72	104.00
22	BA	935	C	P-O3'-C3'	-5.94	112.58	119.70
22	BA	2573	C	O4'-C1'-N1	-5.94	103.45	108.20
22	DA	207	A	P-O3'-C3'	-5.94	112.58	119.70
22	DA	1839	G	C3'-C2'-C1'	5.94	106.25	101.50
22	BA	504	A	P-O5'-C5'	-5.93	111.40	120.90
1	CA	1143	G	C3'-C2'-C1'	5.93	106.25	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1558	C	N1-C1'-C2'	5.93	121.71	114.00
22	DA	1848	A	P-O3'-C3'	-5.93	112.58	119.70
22	BA	243	U	C3'-C2'-C1'	5.93	106.25	101.50
22	DA	961	C	O4'-C1'-N1	5.93	112.94	108.20
1	AA	1365	G	N9-C1'-C2'	-5.93	105.48	112.00
22	DA	673	C	O4'-C1'-N1	5.93	112.94	108.20
22	BA	748	G	O4'-C1'-N9	5.93	112.94	108.20
22	BA	2774	C	O4'-C1'-N1	5.92	112.94	108.20
1	CA	277	C	C3'-C2'-C1'	5.92	106.24	101.50
1	CA	575	G	N3-C4-N9	-5.92	122.45	126.00
1	AA	912	C	O4'-C1'-N1	-5.92	103.46	108.20
22	BA	346	A	P-O3'-C3'	-5.92	112.59	119.70
1	CA	500	G	N9-C1'-C2'	-5.92	105.49	112.00
22	BA	206	U	P-O3'-C3'	-5.92	112.60	119.70
1	CA	9	G	N9-C1'-C2'	-5.92	105.49	112.00
1	CA	276	G	P-O3'-C3'	-5.92	112.60	119.70
22	DA	374	A	C3'-C2'-C1'	5.92	106.23	101.50
22	BA	1013	C	C3'-C2'-C1'	5.92	106.23	101.50
22	BA	480	A	N9-C1'-C2'	-5.91	105.50	112.00
22	DA	14	A	C3'-C2'-C1'	5.91	106.23	101.50
22	DA	687	C	P-O3'-C3'	-5.91	112.60	119.70
22	BA	2321	U	O4'-C1'-N1	-5.91	103.47	108.20
22	DA	973	A	P-O3'-C3'	5.91	126.79	119.70
22	BA	1695	G	C3'-C2'-C1'	5.91	106.23	101.50
22	BA	1867	G	N9-C1'-C2'	-5.91	105.50	112.00
22	DA	861	A	C3'-C2'-C1'	5.91	106.23	101.50
22	BA	1784	A	P-O3'-C3'	5.91	126.79	119.70
35	BN	101	GLY	N-CA-C	5.91	127.87	113.10
1	CA	1184	G	C3'-C2'-C1'	5.91	106.23	101.50
22	DA	671	C	N1-C1'-C2'	-5.91	105.50	112.00
22	DA	2214	C	P-O3'-C3'	-5.91	112.61	119.70
1	AA	1142	G	C3'-C2'-C1'	5.91	106.22	101.50
22	BA	1340	U	C6-N1-C2	5.91	124.54	121.00
22	DA	2348	U	C3'-C2'-C1'	5.91	106.22	101.50
22	BA	2250	G	C4-C5-N7	5.90	113.16	110.80
1	AA	244	U	N1-C2-O2	5.90	126.93	122.80
22	DA	2753	A	C3'-C2'-C1'	5.90	106.22	101.50
22	BA	669	G	P-O3'-C3'	5.90	126.78	119.70
22	BA	1627	G	C8-N9-C4	-5.90	104.04	106.40
1	CA	6	G	P-O3'-C3'	-5.90	112.62	119.70
22	DA	1699	G	P-O3'-C3'	5.90	126.78	119.70
22	BA	914	G	C6-C5-N7	-5.90	126.86	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	506	G	O4'-C1'-N9	5.90	112.92	108.20
22	BA	523	C	P-O5'-C5'	-5.90	111.47	120.90
22	BA	2462	C	P-O5'-C5'	-5.90	111.46	120.90
1	CA	47	C	P-O3'-C3'	5.90	126.78	119.70
22	DA	1700	A	C3'-C2'-C1'	5.90	106.22	101.50
22	BA	2064	C	C3'-C2'-C1'	5.90	106.22	101.50
22	BA	2773	C	C6-N1-C2	5.90	122.66	120.30
22	DA	2391	G	P-O3'-C3'	5.90	126.78	119.70
22	BA	739	A	C4'-C3'-C2'	5.89	108.49	102.60
22	BA	1458	U	P-O3'-C3'	5.89	126.77	119.70
22	BA	1780	A	C5-C6-N1	-5.89	114.75	117.70
22	DA	765	C	P-O3'-C3'	-5.89	112.63	119.70
22	DA	1555	G	P-O3'-C3'	-5.89	112.63	119.70
1	AA	1213	A	P-O3'-C3'	5.89	126.77	119.70
22	DA	605	G	C3'-C2'-C1'	5.89	106.21	101.50
22	DA	2520	C	C3'-C2'-C1'	5.89	106.21	101.50
22	BA	16	C	P-O3'-C3'	-5.89	112.64	119.70
22	BA	1178	C	O4'-C1'-N1	5.89	112.91	108.20
22	BA	1379	U	C3'-C2'-C1'	5.89	106.21	101.50
22	BA	1967	C	C3'-C2'-C1'	5.89	106.21	101.50
44	BW	20	LEU	CB-CG-CD2	5.89	121.01	111.00
22	DA	2076	U	O4'-C1'-N1	5.89	112.91	108.20
1	CA	422	C	O4'-C1'-N1	-5.88	103.49	108.20
22	DA	1493	C	N1-C1'-C2'	5.88	121.65	114.00
1	AA	111	G	N9-C1'-C2'	-5.88	105.53	112.00
22	BA	1273	U	P-O5'-C5'	-5.88	111.49	120.90
22	BA	1900	A	P-O3'-C3'	5.88	126.76	119.70
22	BA	2380	C	P-O5'-C5'	-5.88	111.49	120.90
22	BA	2137	U	O4'-C1'-N1	5.88	112.90	108.20
22	DA	984	A	P-O3'-C3'	5.88	126.75	119.70
1	AA	244	U	N3-C2-O2	-5.88	118.09	122.20
1	AA	185	U	C3'-C2'-C1'	5.88	106.20	101.50
22	BA	1376	C	P-O3'-C3'	5.88	126.75	119.70
1	AA	1202	U	C3'-C2'-C1'	5.87	106.20	101.50
22	BA	373	U	C3'-C2'-C1'	5.87	106.20	101.50
22	BA	1025	G	P-O3'-C3'	5.87	126.75	119.70
22	BA	2781	A	P-O3'-C3'	-5.87	112.65	119.70
1	CA	997	U	P-O3'-C3'	-5.87	112.66	119.70
1	CA	1169	A	C3'-C2'-C1'	5.87	106.20	101.50
1	AA	488	C	C3'-C2'-C1'	5.87	106.19	101.50
22	BA	1537	G	P-O3'-C3'	-5.87	112.66	119.70
22	BA	2335	A	C3'-C2'-C1'	5.87	106.19	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2712	C	N1-C1'-C2'	5.87	121.63	114.00
22	BA	163	C	O4'-C1'-N1	5.87	112.89	108.20
1	AA	509	A	C3'-C2'-C1'	5.86	106.19	101.50
1	AA	1162	C	P-O3'-C3'	-5.86	112.66	119.70
22	BA	577	G	OP2-P-O3'	5.86	118.10	105.20
22	BA	682	G	C4-N9-C1'	5.86	134.12	126.50
22	BA	2195	U	O4'-C1'-N1	5.86	112.89	108.20
22	DA	60	G	P-O3'-C3'	5.86	126.73	119.70
1	CA	68	G	C3'-C2'-C1'	5.86	106.19	101.50
1	CA	931	C	O4'-C1'-N1	5.86	112.89	108.20
22	DA	1803	A	P-O3'-C3'	-5.86	112.67	119.70
22	BA	1020	A	P-O3'-C3'	5.86	126.73	119.70
1	CA	734	G	C3'-C2'-C1'	5.86	106.19	101.50
22	BA	1288	G	O5'-P-OP2	-5.85	100.43	105.70
22	BA	2325	G	P-O3'-C3'	-5.85	112.67	119.70
22	DA	1717	A	C3'-C2'-C1'	5.85	106.18	101.50
23	DB	87	U	P-O3'-C3'	5.85	126.72	119.70
1	AA	279	A	O4'-C1'-N9	-5.85	103.52	108.20
22	BA	2542	A	P-O5'-C5'	-5.85	111.54	120.90
22	BA	2714	G	C5-C6-O6	5.85	132.11	128.60
1	CA	214	C	P-O3'-C3'	-5.85	112.68	119.70
1	CA	534	U	P-O3'-C3'	-5.85	112.68	119.70
22	DA	2347	C	P-O3'-C3'	-5.85	112.68	119.70
1	AA	250	A	P-O3'-C3'	5.85	126.72	119.70
1	AA	874	G	N9-C1'-C2'	-5.85	105.57	112.00
22	BA	2337	G	N9-C1'-C2'	-5.85	105.57	112.00
22	BA	1452	G	N3-C4-N9	-5.85	122.49	126.00
22	BA	52	A	P-O3'-C3'	-5.84	112.69	119.70
22	BA	2249	U	P-O3'-C3'	5.84	126.71	119.70
1	CA	277	C	P-O3'-C3'	-5.84	112.69	119.70
1	AA	1184	G	P-O3'-C3'	-5.84	112.69	119.70
22	DA	2034	U	N1-C1'-C2'	-5.84	105.58	112.00
22	DA	2364	C	O4'-C1'-N1	5.84	112.87	108.20
23	BB	14	U	P-O3'-C3'	5.84	126.71	119.70
22	DA	1081	U	P-O3'-C3'	-5.84	112.69	119.70
22	DA	2447	G	O4'-C1'-N9	5.84	112.87	108.20
22	BA	621	A	N9-C1'-C2'	-5.84	105.58	112.00
1	CA	1285	A	P-O3'-C3'	5.84	126.71	119.70
22	BA	2072	C	O3'-P-O5'	-5.84	92.91	104.00
22	BA	2807	U	C5-C6-N1	-5.84	119.78	122.70
22	DA	990	A	C3'-C2'-C1'	5.84	106.17	101.50
22	BA	690	G	P-O5'-C5'	-5.83	111.56	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2325	G	C3'-C2'-C1'	5.83	106.17	101.50
22	DA	727	A	C3'-C2'-C1'	5.83	106.17	101.50
22	DA	1255	U	C2-N1-C1'	5.83	124.70	117.70
1	AA	686	U	N1-C1'-C2'	5.83	121.58	114.00
22	BA	1662	U	O4'-C1'-N1	5.83	112.87	108.20
1	CA	1381	U	N1-C1'-C2'	-5.83	105.58	112.00
1	AA	816	A	C3'-C2'-C1'	5.83	106.17	101.50
22	BA	527	C	O4'-C1'-N1	5.83	112.87	108.20
1	CA	294	U	O4'-C1'-N1	5.83	112.86	108.20
22	BA	2517	C	P-O3'-C3'	5.83	126.70	119.70
1	AA	560	A	O4'-C1'-N9	-5.83	103.54	108.20
22	BA	456	C	O4'-C1'-N1	-5.83	103.54	108.20
22	BA	2750	A	P-O3'-C3'	5.83	126.69	119.70
22	DA	492	A	C3'-C2'-C1'	5.83	106.16	101.50
22	DA	1492	G	C3'-C2'-C1'	5.83	106.16	101.50
22	BA	1697	G	C5-C6-O6	-5.83	125.10	128.60
22	BA	2344	U	N1-C1'-C2'	5.83	121.57	114.00
22	BA	2567	G	C5-C6-N1	5.83	114.41	111.50
22	DA	915	C	P-O3'-C3'	-5.83	112.71	119.70
22	DA	2895	G	P-O3'-C3'	-5.83	112.71	119.70
22	DA	1034	G	C3'-C2'-C1'	5.82	106.16	101.50
22	DA	726	G	P-O3'-C3'	5.82	126.69	119.70
22	DA	1021	A	C3'-C2'-C1'	5.82	106.16	101.50
22	DA	2267	A	N9-C1'-C2'	-5.82	105.60	112.00
22	DA	2276	G	C3'-C2'-C1'	5.82	106.16	101.50
22	BA	1101	U	N1-C1'-C2'	-5.82	105.60	112.00
1	AA	605	U	O4'-C1'-N1	5.82	112.86	108.20
22	BA	1992	G	N3-C4-N9	-5.82	122.51	126.00
1	CA	248	C	O4'-C1'-N1	5.82	112.85	108.20
22	DA	1129	A	C3'-C2'-C1'	5.82	106.15	101.50
22	DA	2094	A	C3'-C2'-C1'	5.82	106.15	101.50
1	AA	429	U	P-O3'-C3'	5.82	126.68	119.70
22	BA	829	A	C8-N9-C4	5.82	108.13	105.80
1	CA	870	U	P-O3'-C3'	5.82	126.68	119.70
22	DA	449	A	C3'-C2'-C1'	5.82	106.15	101.50
1	AA	439	U	C3'-C2'-C1'	5.81	106.15	101.50
22	BA	683	U	N1-C1'-C2'	-5.81	105.61	112.00
22	BA	1112	G	N9-C1'-C2'	-5.81	105.61	112.00
22	BA	1666	G	P-O5'-C5'	-5.81	111.60	120.90
1	CA	461	A	P-O3'-C3'	5.81	126.67	119.70
22	DA	2725	A	P-O3'-C3'	5.81	126.67	119.70
1	AA	772	U	P-O3'-C3'	-5.81	112.73	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	801	U	O4'-C1'-N1	5.81	112.85	108.20
22	BA	573	U	P-O5'-C5'	-5.81	111.60	120.90
1	AA	974	A	O4'-C1'-N9	5.81	112.85	108.20
22	BA	1007	C	N3-C4-C5	5.81	124.22	121.90
22	BA	2402	U	O4'-C1'-N1	5.81	112.84	108.20
22	BA	2734	A	P-O3'-C3'	-5.81	112.73	119.70
22	DA	976	G	N9-C1'-C2'	-5.81	105.61	112.00
25	BD	141	ARG	NE-CZ-NH1	-5.81	117.40	120.30
23	DB	56	G	P-O3'-C3'	5.80	126.67	119.70
22	BA	1943	U	N1-C1'-C2'	5.80	121.54	114.00
22	DA	2745	C	O4'-C1'-N1	-5.80	103.56	108.20
1	AA	817	C	N1-C1'-C2'	5.80	121.54	114.00
22	DA	1848	A	N9-C1'-C2'	-5.80	105.62	112.00
22	DA	2572	A	P-O3'-C3'	5.80	126.66	119.70
22	BA	1975	G	P-O3'-C3'	-5.80	112.74	119.70
1	CA	52	C	N1-C1'-C2'	-5.80	105.62	112.00
1	AA	87	C	N1-C1'-C2'	-5.80	105.62	112.00
22	DA	1838	C	N1-C1'-C2'	5.80	121.53	114.00
22	DA	2150	C	N1-C1'-C2'	-5.80	105.62	112.00
22	DA	2777	G	C3'-C2'-C1'	5.80	106.14	101.50
22	DA	947	A	C3'-C2'-C1'	5.79	106.14	101.50
22	BA	867	C	O4'-C1'-N1	5.79	112.83	108.20
22	BA	2640	G	P-O5'-C5'	-5.79	111.63	120.90
22	DA	1675	C	C3'-C2'-C1'	5.79	106.13	101.50
22	BA	753	A	C3'-C2'-C1'	5.79	106.13	101.50
22	BA	1135	C	P-O5'-C5'	-5.79	111.64	120.90
22	DA	104	A	C3'-C2'-C1'	5.79	106.13	101.50
22	DA	2151	U	C3'-C2'-C1'	5.79	106.13	101.50
22	BA	463	G	P-O5'-C5'	-5.79	111.64	120.90
22	BA	920	A	P-O3'-C3'	-5.79	112.75	119.70
22	DA	775	G	O4'-C1'-N9	5.79	112.83	108.20
22	DA	1612	C	C3'-C2'-C1'	5.79	106.13	101.50
22	BA	1160	G	P-O5'-C5'	-5.79	111.64	120.90
22	BA	73	A	C3'-C2'-C1'	5.79	106.13	101.50
22	BA	657	U	O4'-C1'-N1	-5.79	103.57	108.20
22	DA	2210	U	P-O3'-C3'	5.79	126.64	119.70
22	BA	1063	G	C3'-C2'-C1'	5.78	106.13	101.50
22	BA	1379	U	P-O5'-C5'	-5.78	111.65	120.90
22	BA	1996	C	OP1-P-O3'	5.78	117.92	105.20
1	AA	512	U	C3'-C2'-C1'	5.78	106.13	101.50
22	BA	2230	G	P-O5'-C5'	-5.78	111.65	120.90
22	BA	2653	U	O4'-C1'-N1	5.78	112.83	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2061	G	C4-C5-C6	5.78	122.27	118.80
1	CA	389	A	N9-C1'-C2'	-5.78	105.64	112.00
22	BA	2530	A	P-O3'-C3'	5.78	126.63	119.70
22	DA	1291	C	C3'-C2'-C1'	5.78	106.12	101.50
22	DA	2609	U	N1-C1'-C2'	5.78	121.51	114.00
22	BA	62	U	P-O3'-C3'	5.78	126.63	119.70
22	BA	272	A	P-O3'-C3'	-5.78	112.77	119.70
22	BA	2556	C	N1-C2-O2	-5.78	115.43	118.90
22	BA	2637	U	N1-C2-O2	-5.78	118.76	122.80
1	CA	722	G	P-O3'-C3'	-5.78	112.77	119.70
22	DA	2498	C	C3'-C2'-C1'	5.78	106.12	101.50
22	BA	932	U	P-O3'-C3'	-5.78	112.77	119.70
22	DA	1136	G	N9-C1'-C2'	-5.78	105.65	112.00
22	DA	1619	G	N9-C1'-C2'	-5.78	105.65	112.00
22	BA	2027	G	O5'-P-OP2	-5.77	100.50	105.70
1	AA	1226	C	O4'-C1'-N1	-5.77	103.58	108.20
1	AA	1323	G	P-O3'-C3'	-5.77	112.78	119.70
22	BA	1965	C	P-O5'-C5'	-5.77	111.67	120.90
1	CA	107	G	P-O3'-C3'	-5.77	112.78	119.70
22	DA	1135	C	P-O3'-C3'	-5.77	112.78	119.70
1	AA	1365	G	C3'-C2'-C1'	5.77	106.11	101.50
22	BA	452	G	P-O3'-C3'	-5.77	112.78	119.70
22	BA	1839	G	C3'-C2'-C1'	5.77	106.11	101.50
22	BA	1133	A	P-O3'-C3'	-5.76	112.78	119.70
22	BA	1027	A	N1-C6-N6	5.76	122.06	118.60
1	CA	1066	C	N1-C1'-C2'	-5.76	105.66	112.00
22	DA	740	C	C3'-C2'-C1'	5.76	106.11	101.50
1	AA	1228	C	C3'-C2'-C1'	5.76	106.11	101.50
22	BA	1266	G	C8-N9-C4	5.76	108.70	106.40
1	CA	1215	G	P-O3'-C3'	-5.76	112.79	119.70
22	DA	492	A	P-O3'-C3'	-5.76	112.79	119.70
1	AA	686	U	P-O3'-C3'	5.76	126.61	119.70
1	AA	368	U	C3'-C2'-C1'	5.76	106.11	101.50
22	BA	2200	C	P-O3'-C3'	-5.76	112.79	119.70
22	DA	273	G	C3'-C2'-C1'	5.76	106.11	101.50
22	DA	1798	U	O4'-C1'-N1	5.76	112.81	108.20
22	DA	2314	A	C3'-C2'-C1'	5.76	106.11	101.50
22	DA	2687	U	O4'-C1'-N1	5.75	112.80	108.20
1	AA	1268	G	P-O3'-C3'	5.75	126.60	119.70
22	BA	1707	G	N9-C1'-C2'	-5.75	105.67	112.00
1	CA	962	C	N1-C1'-C2'	-5.75	105.67	112.00
1	AA	469	C	C3'-C2'-C1'	5.75	106.10	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	373	A	N9-C1'-C2'	-5.75	105.67	112.00
1	AA	463	U	N1-C1'-C2'	-5.75	105.68	112.00
22	BA	1675	C	C5-C6-N1	-5.75	118.12	121.00
22	BA	2487	G	C5-C6-O6	-5.75	125.15	128.60
22	DA	397	U	O4'-C1'-N1	5.75	112.80	108.20
22	BA	761	A	C5-C6-N1	5.75	120.57	117.70
22	BA	2831	G	N1-C6-O6	5.75	123.35	119.90
1	CA	643	C	C3'-C2'-C1'	5.75	106.10	101.50
22	DA	105	C	C3'-C2'-C1'	5.75	106.10	101.50
22	DA	411	G	P-O3'-C3'	5.75	126.59	119.70
22	BA	1293	C	C6-N1-C2	5.75	122.60	120.30
1	AA	1191	A	C3'-C2'-C1'	5.74	106.09	101.50
22	BA	2791	G	O5'-P-OP1	-5.74	100.53	105.70
1	CA	1282	C	P-O3'-C3'	-5.74	112.81	119.70
22	BA	346	A	C3'-C2'-C1'	5.74	106.09	101.50
22	BA	20	C	P-O3'-C3'	5.74	126.59	119.70
22	BA	1005	C	N3-C2-O2	-5.74	117.88	121.90
22	BA	1123	C	C6-N1-C2	5.74	122.60	120.30
22	BA	981	A	C8-N9-C4	5.74	108.10	105.80
22	BA	1135	C	C3'-C2'-C1'	5.74	106.09	101.50
22	BA	1417	C	P-O3'-C3'	-5.74	112.81	119.70
1	CA	54	C	O4'-C1'-N1	5.74	112.79	108.20
1	CA	109	A	O3'-P-O5'	-5.74	93.10	104.00
22	DA	2093	G	N9-C1'-C2'	-5.74	105.69	112.00
22	BA	1446	C	O4'-C1'-N1	-5.74	103.61	108.20
22	DA	1247	A	O4'-C1'-N9	5.74	112.79	108.20
22	BA	2426	A	N1-C6-N6	5.73	122.04	118.60
23	BB	15	A	P-O3'-C3'	5.73	126.58	119.70
22	DA	983	A	C3'-C2'-C1'	5.73	106.09	101.50
22	DA	2498	C	O4'-C1'-N1	5.73	112.79	108.20
1	AA	935	A	N9-C1'-C2'	-5.73	105.70	112.00
22	DA	1027	A	C3'-C2'-C1'	5.73	106.08	101.50
22	DA	1815	A	P-O3'-C3'	5.73	126.58	119.70
1	CA	688	G	N9-C1'-C2'	-5.73	105.70	112.00
22	DA	200	U	C3'-C2'-C1'	5.73	106.08	101.50
22	DA	2638	G	P-O3'-C3'	5.73	126.58	119.70
22	DA	1699	G	C3'-C2'-C1'	-5.73	96.92	101.50
22	DA	2492	U	C3'-C2'-C1'	5.73	106.08	101.50
1	AA	508	U	P-O3'-C3'	5.73	126.57	119.70
22	BA	2018	G	N3-C2-N2	-5.73	115.89	119.90
22	BA	2683	C	N1-C2-O2	-5.73	115.46	118.90
22	BA	412	A	C3'-C2'-C1'	5.72	106.08	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1320	C	N1-C1'-C2'	5.72	121.44	114.00
22	BA	2025	C	C5-C6-N1	-5.72	118.14	121.00
22	DA	52	A	C3'-C2'-C1'	5.72	106.08	101.50
22	BA	829	A	P-O5'-C5'	-5.72	111.75	120.90
22	BA	1253	A	O4'-C1'-N9	-5.72	103.62	108.20
1	CA	381	C	P-O3'-C3'	5.72	126.57	119.70
1	CA	1128	C	O4'-C1'-N1	5.72	112.78	108.20
1	CA	689	C	O4'-C1'-N1	-5.72	103.62	108.20
1	AA	1095	U	P-O3'-C3'	-5.72	112.84	119.70
22	DA	1664	A	P-O3'-C3'	-5.72	112.84	119.70
1	AA	704	A	C3'-C2'-C1'	5.72	106.07	101.50
22	BA	302	C	C3'-C2'-C1'	5.72	106.08	101.50
22	BA	1739	A	P-O5'-C5'	-5.72	111.75	120.90
23	BB	87	U	O4'-C1'-N1	5.72	112.77	108.20
22	BA	14	A	C3'-C2'-C1'	5.72	106.07	101.50
22	BA	980	A	OP1-P-O3'	5.72	117.78	105.20
23	BB	16	G	C3'-C2'-C1'	5.72	106.07	101.50
22	DA	1945	G	C3'-C2'-C1'	5.72	106.07	101.50
22	BA	630	G	P-O3'-C3'	5.71	126.56	119.70
22	DA	1314	C	P-O3'-C3'	5.71	126.56	119.70
22	DA	2830	C	O4'-C1'-N1	5.71	112.77	108.20
22	BA	1865	U	P-O3'-C3'	5.71	126.55	119.70
22	DA	1785	A	C3'-C2'-C1'	5.71	106.07	101.50
1	AA	1085	U	P-O3'-C3'	5.71	126.55	119.70
22	BA	765	C	P-O3'-C3'	-5.71	112.85	119.70
1	CA	247	G	C3'-C2'-C1'	5.71	106.07	101.50
1	CA	509	A	P-O5'-C5'	-5.71	111.77	120.90
22	DA	2405	G	P-O3'-C3'	5.71	126.55	119.70
1	CA	577	G	C3'-C2'-C1'	5.71	106.06	101.50
23	DB	16	G	P-O3'-C3'	-5.71	112.85	119.70
22	BA	199	A	O4'-C1'-N9	5.70	112.76	108.20
22	BA	2695	U	P-O3'-C3'	5.70	126.54	119.70
22	DA	391	A	C3'-C2'-C1'	5.70	106.06	101.50
22	BA	435	C	C3'-C2'-C1'	5.70	106.06	101.50
22	DA	1183	U	O4'-C1'-N1	5.70	112.76	108.20
22	DA	1695	G	C3'-C2'-C1'	5.70	106.06	101.50
22	BA	1703	G	O3'-P-O5'	-5.70	93.17	104.00
22	BA	2197	U	N1-C1'-C2'	5.70	121.41	114.00
22	DA	227	A	P-O3'-C3'	5.70	126.54	119.70
22	DA	2752	C	O4'-C1'-N1	5.70	112.76	108.20
1	AA	1532	U	P-O3'-C3'	-5.69	112.87	119.70
1	CA	1218	C	C3'-C2'-C1'	5.69	106.05	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	128	C	P-O3'-C3'	-5.69	112.87	119.70
22	BA	11	C	N1-C2-O2	-5.69	115.49	118.90
22	DA	230	G	C3'-C2'-C1'	5.69	106.05	101.50
22	DA	1126	A	P-O3'-C3'	5.69	126.53	119.70
22	BA	2043	C	C6-N1-C2	5.69	122.58	120.30
1	CA	1196	A	P-O3'-C3'	5.69	126.53	119.70
22	BA	2543	G	P-O5'-C5'	-5.69	111.80	120.90
1	CA	173	U	P-O3'-C3'	5.69	126.52	119.70
22	DA	91	A	P-O3'-C3'	5.69	126.52	119.70
1	AA	1088	G	C3'-C2'-C1'	5.68	106.05	101.50
22	BA	774	G	O4'-C1'-N9	5.68	112.75	108.20
1	CA	95	C	P-O3'-C3'	-5.68	112.88	119.70
22	BA	459	U	C3'-C2'-C1'	5.68	106.05	101.50
1	CA	884	U	O4'-C1'-N1	5.68	112.75	108.20
22	DA	35	G	C3'-C2'-C1'	5.68	106.05	101.50
22	DA	946	C	C3'-C2'-C1'	5.68	106.05	101.50
22	BA	1206	G	P-O3'-C3'	-5.68	112.88	119.70
22	BA	2483	C	O4'-C1'-N1	-5.68	103.66	108.20
22	DA	749	A	C3'-C2'-C1'	5.68	106.04	101.50
22	BA	2816	G	N1-C6-O6	-5.68	116.49	119.90
22	DA	2459	A	C3'-C2'-C1'	5.68	106.04	101.50
22	DA	2727	A	C3'-C2'-C1'	5.68	106.04	101.50
22	BA	649	G	P-O5'-C5'	-5.68	111.82	120.90
22	DA	203	A	P-O3'-C3'	5.68	126.51	119.70
1	AA	295	C	P-O3'-C3'	-5.68	112.89	119.70
1	CA	1085	U	P-O3'-C3'	5.68	126.51	119.70
1	CA	1383	C	C3'-C2'-C1'	5.68	106.04	101.50
1	AA	231	U	P-O3'-C3'	5.67	126.51	119.70
1	AA	1302	C	O4'-C1'-N1	-5.67	103.66	108.20
22	BA	1349	C	O4'-C1'-N1	-5.67	103.66	108.20
22	DA	1009	A	C3'-C2'-C1'	5.67	106.04	101.50
22	DA	2781	A	C3'-C2'-C1'	5.67	106.04	101.50
1	AA	1447	A	O4'-C1'-N9	5.67	112.74	108.20
1	CA	308	C	P-O3'-C3'	-5.67	112.89	119.70
1	AA	1395	C	O4'-C1'-N1	-5.67	103.66	108.20
1	CA	374	A	C3'-C2'-C1'	5.67	106.04	101.50
22	DA	1811	G	C3'-C2'-C1'	5.67	106.04	101.50
1	AA	74	A	C3'-C2'-C1'	5.67	106.04	101.50
1	AA	1395	C	C3'-C2'-C1'	5.67	106.04	101.50
22	BA	584	C	N1-C1'-C2'	-5.67	105.76	112.00
22	BA	1716	U	P-O3'-C3'	-5.67	112.90	119.70
22	BA	2807	U	C6-N1-C2	5.67	124.40	121.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	430	A	P-O3'-C3'	-5.67	112.90	119.70
22	BA	985	C	P-O5'-C5'	-5.67	111.83	120.90
22	BA	1947	C	P-O3'-C3'	-5.67	112.90	119.70
22	BA	1999	C	N1-C1'-C2'	-5.67	105.76	112.00
23	BB	46	A	N9-C1'-C2'	-5.67	105.76	112.00
1	CA	382	A	C3'-C2'-C1'	5.67	106.03	101.50
22	BA	1213	A	N9-C1'-C2'	-5.67	105.77	112.00
22	BA	2890	G	C6-C5-N7	-5.67	127.00	130.40
1	AA	415	A	C3'-C2'-C1'	5.66	106.03	101.50
22	BA	1499	C	C3'-C2'-C1'	5.66	106.03	101.50
22	BA	2061	G	O5'-P-OP2	-5.66	100.60	105.70
22	DA	480	A	N9-C1'-C2'	-5.66	105.77	112.00
22	BA	1902	C	N1-C2-O2	-5.66	115.50	118.90
1	CA	997	U	C3'-C2'-C1'	5.66	106.03	101.50
22	BA	1956	U	P-O5'-C5'	-5.66	111.84	120.90
22	BA	2395	C	P-O5'-C5'	-5.66	111.84	120.90
22	DA	1305	C	C3'-C2'-C1'	5.66	106.03	101.50
1	AA	131	A	C3'-C2'-C1'	5.66	106.03	101.50
22	BA	919	U	N1-C2-O2	-5.66	118.84	122.80
22	BA	1142	A	C5-C6-N1	-5.66	114.87	117.70
22	BA	2623	G	N1-C2-N3	5.66	127.30	123.90
22	BA	2707	U	C5-C6-N1	-5.66	119.87	122.70
22	DA	1329	U	P-O3'-C3'	5.66	126.49	119.70
22	DA	2868	A	C3'-C2'-C1'	5.66	106.03	101.50
22	BA	1765	U	O4'-C1'-N1	-5.66	103.67	108.20
1	AA	808	C	O4'-C1'-N1	5.66	112.72	108.20
22	BA	954	G	P-O3'-C3'	5.66	126.48	119.70
22	BA	370	G	O4'-C1'-N9	-5.65	103.68	108.20
1	AA	173	U	N1-C1'-C2'	5.65	121.35	114.00
1	AA	555	U	O4'-C1'-N1	-5.65	103.68	108.20
22	BA	528	A	C2-N3-C4	-5.65	107.77	110.60
22	BA	1327	A	P-O3'-C3'	5.65	126.48	119.70
22	BA	2605	U	P-O3'-C3'	-5.65	112.92	119.70
22	DA	1669	A	C3'-C2'-C1'	5.65	106.02	101.50
1	AA	1124	G	P-O3'-C3'	5.65	126.48	119.70
22	BA	671	C	C3'-C2'-C1'	5.65	106.02	101.50
22	BA	2008	C	C4-C5-C6	5.65	120.23	117.40
23	BB	42	C	C3'-C2'-C1'	5.65	106.02	101.50
1	AA	976	G	C3'-C2'-C1'	5.65	106.02	101.50
1	AA	1499	A	P-O5'-C5'	-5.65	111.86	120.90
22	BA	73	A	P-O5'-C5'	-5.65	111.86	120.90
22	BA	310	A	P-O3'-C3'	5.65	126.48	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	933	A	C3'-C2'-C1'	5.65	106.02	101.50
22	BA	1537	G	C3'-C2'-C1'	5.65	106.02	101.50
22	DA	1972	G	N9-C1'-C2'	-5.65	105.79	112.00
22	BA	74	A	P-O3'-C3'	5.65	126.48	119.70
22	BA	413	C	C3'-C2'-C1'	5.65	106.02	101.50
1	AA	116	A	N9-C1'-C2'	-5.64	105.79	112.00
22	BA	201	C	O4'-C1'-N1	5.64	112.72	108.20
22	BA	1009	A	C3'-C2'-C1'	5.64	106.02	101.50
22	BA	1395	A	O4'-C1'-N9	5.64	112.72	108.20
1	CA	388	G	O3'-P-O5'	-5.64	93.28	104.00
22	DA	1455	G	P-O3'-C3'	-5.64	112.93	119.70
1	AA	486	U	P-O5'-C5'	-5.64	111.88	120.90
22	BA	443	A	C3'-C2'-C1'	5.64	106.01	101.50
22	BA	2347	C	C3'-C2'-C1'	5.64	106.01	101.50
1	CA	436	C	O4'-C1'-N1	-5.64	103.69	108.20
1	CA	519	C	C3'-C2'-C1'	5.64	106.01	101.50
1	CA	1202	U	C3'-C2'-C1'	5.64	106.01	101.50
22	DA	2440	C	C3'-C2'-C1'	5.64	106.01	101.50
22	DA	2554	U	P-O3'-C3'	5.64	126.47	119.70
22	BA	2508	G	P-O3'-C3'	-5.64	112.94	119.70
1	AA	972	C	C3'-C2'-C1'	5.64	106.01	101.50
22	BA	482	A	N9-C1'-C2'	-5.64	105.80	112.00
22	BA	1779	U	N3-C4-O4	-5.64	115.45	119.40
22	DA	404	A	P-O3'-C3'	5.64	126.46	119.70
22	DA	811	U	P-O3'-C3'	5.64	126.47	119.70
22	DA	1333	G	C3'-C2'-C1'	5.64	106.01	101.50
22	BA	955	U	C5-C4-O4	-5.63	122.52	125.90
22	BA	1838	C	C6-N1-C2	5.63	122.55	120.30
23	DB	12	C	O4'-C1'-N1	-5.63	103.69	108.20
22	DA	1981	A	P-O5'-C5'	-5.63	111.89	120.90
22	BA	1289	C	P-O5'-C5'	-5.63	111.89	120.90
23	BB	109	A	N9-C1'-C2'	-5.63	105.80	112.00
22	BA	45	G	P-O5'-C5'	-5.63	111.89	120.90
1	CA	686	U	N1-C1'-C2'	5.63	121.32	114.00
22	DA	1305	C	P-O3'-C3'	-5.63	112.94	119.70
22	BA	984	A	C5-N7-C8	-5.63	101.09	103.90
22	BA	1276	A	O5'-P-OP2	-5.63	100.64	105.70
22	DA	1400	U	C3'-C2'-C1'	5.63	106.00	101.50
22	DA	2024	G	N9-C1'-C2'	-5.63	105.81	112.00
22	BA	977	G	OP1-P-O3'	5.63	117.58	105.20
1	CA	1064	G	P-O3'-C3'	5.63	126.45	119.70
1	CA	1190	G	O4'-C1'-N9	5.63	112.70	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	575	A	C3'-C2'-C1'	5.63	106.00	101.50
22	BA	2065	C	C6-N1-C2	5.62	122.55	120.30
22	DA	1902	C	O4'-C1'-N1	5.62	112.70	108.20
22	DA	2585	U	N1-C1'-C2'	5.62	121.31	114.00
22	BA	398	C	O4'-C1'-N1	-5.62	103.70	108.20
1	AA	1448	C	C3'-C2'-C1'	5.62	106.00	101.50
1	AA	64	G	P-O3'-C3'	5.62	126.44	119.70
22	BA	113	U	P-O5'-C5'	-5.62	111.91	120.90
22	BA	575	A	O5'-P-OP1	-5.62	100.64	105.70
1	CA	1383	C	P-O3'-C3'	-5.62	112.96	119.70
22	BA	740	C	P-O3'-C3'	-5.62	112.96	119.70
22	DA	1821	A	C3'-C2'-C1'	5.62	105.99	101.50
22	BA	1565	C	P-O3'-C3'	5.62	126.44	119.70
22	BA	2733	A	N9-C1'-C2'	-5.61	105.83	112.00
22	DA	304	U	C3'-C2'-C1'	5.61	105.99	101.50
22	DA	2517	C	N1-C1'-C2'	5.61	121.30	114.00
22	BA	1497	U	P-O3'-C3'	5.61	126.43	119.70
1	CA	575	G	N3-C4-C5	5.61	131.41	128.60
22	DA	1916	A	P-O3'-C3'	-5.61	112.97	119.70
22	BA	980	A	P-O3'-C3'	-5.61	112.97	119.70
22	DA	1312	U	P-O3'-C3'	5.61	126.43	119.70
22	BA	1428	C	N3-C2-O2	5.61	125.83	121.90
22	BA	1144	A	P-O3'-C3'	-5.61	112.97	119.70
22	BA	1838	C	N1-C1'-C2'	5.61	121.29	114.00
1	CA	1184	G	P-O3'-C3'	-5.61	112.97	119.70
22	DA	1996	C	O4'-C1'-N1	5.61	112.69	108.20
22	DA	2500	U	O4'-C1'-N1	5.61	112.69	108.20
22	DA	2669	G	C3'-C2'-C1'	5.61	105.98	101.50
22	BA	1945	G	C3'-C2'-C1'	5.60	105.98	101.50
22	BA	2570	G	C2-N3-C4	-5.60	109.10	111.90
22	DA	1716	U	N1-C1'-C2'	-5.60	105.84	112.00
22	DA	1919	A	N9-C1'-C2'	-5.60	105.84	112.00
22	BA	2567	G	C4-C5-N7	-5.60	108.56	110.80
22	BA	1350	C	P-O3'-C3'	-5.60	112.98	119.70
22	BA	2251	G	N9-C1'-C2'	-5.60	105.84	112.00
24	BC	109	LEU	CA-CB-CG	5.60	128.18	115.30
1	CA	721	G	P-O3'-C3'	5.60	126.42	119.70
22	BA	1717	A	N9-C1'-C2'	-5.60	105.84	112.00
22	BA	2407	A	C3'-C2'-C1'	5.60	105.98	101.50
22	BA	2745	C	O4'-C1'-N1	5.60	112.68	108.20
22	DA	478	A	C3'-C2'-C1'	5.60	105.98	101.50
22	BA	814	C	O5'-P-OP2	-5.60	100.66	105.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	544	C	O4'-C1'-N1	5.60	112.68	108.20
1	AA	968	A	P-O3'-C3'	5.59	126.42	119.70
22	BA	1370	C	P-O3'-C3'	5.59	126.41	119.70
22	BA	1444	G	O5'-P-OP2	-5.59	100.67	105.70
1	CA	414	A	C3'-C2'-C1'	5.59	105.98	101.50
22	DA	223	A	C3'-C2'-C1'	5.59	105.97	101.50
22	DA	991	C	C3'-C2'-C1'	5.59	105.98	101.50
22	DA	2657	A	C3'-C2'-C1'	5.59	105.98	101.50
1	AA	817	C	P-O3'-C3'	5.59	126.41	119.70
22	DA	784	G	P-O3'-C3'	5.59	126.41	119.70
22	BA	1303	G	P-O5'-C5'	-5.59	111.95	120.90
1	AA	654	G	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	486	C	P-O3'-C3'	-5.59	112.99	119.70
22	BA	581	C	O4'-C1'-N1	-5.59	103.73	108.20
22	BA	829	A	P-O3'-C3'	5.59	126.41	119.70
22	BA	1142	A	N3-C4-N9	-5.59	122.93	127.40
22	BA	2887	A	P-O3'-C3'	5.59	126.41	119.70
22	DA	459	U	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	691	C	C5-C6-N1	-5.59	118.21	121.00
22	BA	2727	A	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	1494	A	C3'-C2'-C1'	5.59	105.97	101.50
22	BA	2463	C	O4'-C1'-N1	-5.59	103.73	108.20
1	AA	1130	A	P-O3'-C3'	-5.58	113.00	119.70
1	CA	131	A	C3'-C2'-C1'	5.58	105.97	101.50
1	AA	61	G	P-O3'-C3'	-5.58	113.00	119.70
22	BA	1428	C	N1-C2-O2	-5.58	115.55	118.90
22	BA	1808	A	O4'-C1'-N9	5.58	112.67	108.20
22	BA	2744	G	C5-C6-O6	-5.58	125.25	128.60
22	BA	2890	G	C5-C6-O6	-5.58	125.25	128.60
22	DA	73	A	C3'-C2'-C1'	5.58	105.97	101.50
22	DA	826	U	P-O3'-C3'	-5.58	113.00	119.70
22	DA	1821	A	P-O3'-C3'	-5.58	113.00	119.70
1	AA	93	U	O4'-C1'-N1	5.58	112.66	108.20
22	BA	455	C	P-O5'-C5'	-5.58	111.98	120.90
22	BA	1333	G	N9-C1'-C2'	-5.58	105.86	112.00
22	BA	2034	U	N1-C1'-C2'	-5.58	105.86	112.00
1	CA	85	U	N1-C1'-C2'	5.58	121.25	114.00
1	CA	821	G	P-O3'-C3'	-5.58	113.01	119.70
1	CA	1160	G	P-O3'-C3'	-5.58	113.00	119.70
22	DA	1536	C	P-O3'-C3'	5.58	126.39	119.70
22	DA	1654	A	C3'-C2'-C1'	5.58	105.96	101.50
22	BA	747	U	N1-C1'-C2'	-5.58	105.86	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2673	G	C3'-C2'-C1'	5.58	105.96	101.50
1	AA	318	G	N3-C4-C5	5.58	131.39	128.60
22	BA	691	C	C6-N1-C2	5.58	122.53	120.30
1	CA	352	C	C3'-C2'-C1'	5.58	105.96	101.50
22	DA	312	G	C3'-C2'-C1'	5.58	105.96	101.50
1	AA	500	G	P-O3'-C3'	-5.57	113.01	119.70
22	BA	1250	G	N9-C1'-C2'	5.57	121.24	114.00
22	BA	475	C	C3'-C2'-C1'	5.57	105.96	101.50
1	CA	874	G	C3'-C2'-C1'	5.57	105.96	101.50
22	BA	310	A	P-O5'-C5'	-5.57	111.99	120.90
22	BA	575	A	P-O3'-C3'	-5.57	113.02	119.70
22	BA	2832	U	P-O3'-C3'	5.57	126.38	119.70
22	BA	1385	A	C8-N9-C4	5.57	108.03	105.80
22	BA	2450	A	C3'-C2'-C1'	5.57	105.95	101.50
22	BA	2757	A	P-O3'-C3'	-5.57	113.02	119.70
22	DA	1829	A	N9-C1'-C2'	-5.57	105.88	112.00
1	AA	1203	C	C3'-C2'-C1'	5.57	105.95	101.50
22	BA	229	C	C3'-C2'-C1'	5.57	105.95	101.50
22	BA	546	U	O4'-C1'-N1	5.57	112.65	108.20
22	BA	672	C	P-O5'-C5'	-5.57	111.99	120.90
22	BA	918	A	P-O3'-C3'	5.57	126.38	119.70
22	BA	1278	C	O4'-C1'-N1	5.57	112.65	108.20
22	BA	2215	C	P-O5'-C5'	-5.57	112.00	120.90
22	DA	2615	U	C3'-C2'-C1'	5.57	105.95	101.50
22	DA	2895	G	C3'-C2'-C1'	5.57	105.95	101.50
22	BA	528	A	C5-C6-N1	-5.56	114.92	117.70
22	BA	1730	C	O4'-C1'-N1	5.56	112.65	108.20
1	CA	71	A	C3'-C2'-C1'	5.56	105.95	101.50
22	BA	2512	C	P-O3'-C3'	-5.56	113.03	119.70
22	BA	2815	C	O4'-C1'-N1	-5.56	103.75	108.20
22	DA	1603	A	C3'-C2'-C1'	5.56	105.95	101.50
1	AA	352	C	C3'-C2'-C1'	5.56	105.94	101.50
22	BA	1263	U	P-O3'-C3'	5.56	126.37	119.70
22	BA	137	U	P-O3'-C3'	5.55	126.37	119.70
22	BA	1313	U	P-O3'-C3'	-5.55	113.03	119.70
1	CA	596	A	C3'-C2'-C1'	5.55	105.94	101.50
22	BA	1429	G	C3'-C2'-C1'	5.55	105.94	101.50
23	BB	25	U	C3'-C2'-C1'	5.55	105.94	101.50
22	DA	628	G	C3'-C2'-C1'	5.55	105.94	101.50
22	BA	763	G	C3'-C2'-C1'	5.55	105.94	101.50
1	CA	1095	U	C3'-C2'-C1'	5.55	105.94	101.50
22	DA	2877	G	N9-C1'-C2'	-5.55	105.90	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	994	A	C3'-C2'-C1'	5.55	105.94	101.50
22	BA	1780	A	C2-N3-C4	-5.55	107.83	110.60
22	DA	1523	U	O4'-C1'-N1	5.55	112.64	108.20
22	BA	411	G	P-O3'-C3'	5.55	126.36	119.70
22	BA	1937	A	P-O5'-C5'	-5.55	112.03	120.90
22	BA	2309	A	C3'-C2'-C1'	5.55	105.94	101.50
22	BA	1997	C	O5'-P-OP1	-5.54	100.71	105.70
22	DA	1026	G	C3'-C2'-C1'	5.54	105.94	101.50
1	AA	528	C	O4'-C1'-N1	-5.54	103.77	108.20
22	BA	590	A	P-O3'-C3'	-5.54	113.05	119.70
22	BA	2465	C	C6-N1-C2	5.54	122.52	120.30
22	DA	1941	C	C3'-C2'-C1'	5.54	105.93	101.50
22	BA	177	G	O4'-C1'-N9	5.54	112.63	108.20
22	BA	865	C	N1-C2-O2	-5.54	115.58	118.90
22	BA	1024	G	C3'-C2'-C1'	5.54	105.93	101.50
1	CA	1299	A	P-O3'-C3'	-5.54	113.05	119.70
22	BA	2691	C	C3'-C2'-C1'	5.54	105.93	101.50
1	AA	548	G	C3'-C2'-C1'	5.54	105.93	101.50
1	AA	1337	G	C3'-C2'-C1'	5.54	105.93	101.50
22	BA	1014	A	N1-C6-N6	-5.54	115.28	118.60
22	BA	1198	U	O5'-P-OP2	-5.54	100.72	105.70
1	CA	64	G	O4'-C1'-N9	5.54	112.63	108.20
1	CA	1182	G	P-O3'-C3'	5.54	126.34	119.70
1	CA	1191	A	C3'-C2'-C1'	5.54	105.93	101.50
22	DA	1648	U	C3'-C2'-C1'	5.54	105.93	101.50
22	DA	2458	G	C4-N9-C1'	5.54	133.70	126.50
22	BA	2551	C	P-O3'-C3'	-5.53	113.06	119.70
1	CA	247	G	N9-C1'-C2'	-5.53	105.91	112.00
1	AA	373	A	C3'-C2'-C1'	5.53	105.92	101.50
22	BA	1695	G	P-O5'-C5'	-5.53	112.05	120.90
22	DA	783	A	C3'-C2'-C1'	5.53	105.92	101.50
22	DA	2876	G	C3'-C2'-C1'	5.53	105.92	101.50
1	CA	14	U	O4'-C1'-N1	5.53	112.62	108.20
1	CA	1053	G	P-O3'-C3'	5.53	126.33	119.70
1	AA	14	U	C3'-C2'-C1'	5.53	105.92	101.50
22	BA	2716	C	N3-C4-C5	5.53	124.11	121.90
1	CA	497	G	C3'-C2'-C1'	5.53	105.92	101.50
1	AA	998	C	O4'-C1'-N1	5.52	112.62	108.20
1	AA	1127	G	P-O3'-C3'	-5.52	113.07	119.70
22	BA	996	A	C3'-C2'-C1'	5.52	105.92	101.50
1	CA	369	G	P-O3'-C3'	-5.52	113.07	119.70
22	BA	852	U	C5-C6-N1	-5.52	119.94	122.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1317	G	P-O3'-C3'	-5.52	113.07	119.70
22	DA	2459	A	N9-C1'-C2'	-5.52	105.92	112.00
22	BA	1829	A	C3'-C2'-C1'	5.52	105.92	101.50
1	AA	267	C	P-O5'-C5'	-5.52	112.07	120.90
22	BA	2271	G	N3-C4-C5	-5.52	125.84	128.60
22	DA	324	A	C3'-C2'-C1'	5.52	105.92	101.50
22	DA	490	C	O4'-C1'-N1	-5.52	103.78	108.20
22	BA	653	U	P-O3'-C3'	5.52	126.32	119.70
22	BA	1024	G	N9-C1'-C2'	-5.52	105.93	112.00
22	BA	2571	U	O4'-C1'-N1	-5.52	103.79	108.20
22	BA	2682	A	C3'-C2'-C1'	5.52	105.91	101.50
22	BA	2831	G	N3-C2-N2	-5.52	116.04	119.90
22	DA	1256	G	C3'-C2'-C1'	5.52	105.91	101.50
22	BA	2210	U	O4'-C1'-N1	5.52	112.61	108.20
22	BA	2319	G	O4'-C1'-N9	5.52	112.61	108.20
1	CA	238	A	P-O3'-C3'	5.52	126.32	119.70
1	AA	47	C	P-O3'-C3'	5.51	126.32	119.70
1	AA	1259	C	O4'-C1'-N1	5.51	112.61	108.20
22	DA	588	U	C3'-C2'-C1'	5.51	105.91	101.50
22	DA	1325	U	P-O3'-C3'	5.51	126.32	119.70
22	DA	1569	A	P-O3'-C3'	-5.51	113.08	119.70
22	BA	705	A	P-O3'-C3'	-5.51	113.08	119.70
22	BA	792	A	N1-C6-N6	5.51	121.91	118.60
22	BA	1692	U	N3-C2-O2	5.51	126.06	122.20
22	BA	2455	G	P-O3'-C3'	5.51	126.31	119.70
1	AA	1191	A	P-O3'-C3'	-5.51	113.09	119.70
1	AA	1322	C	P-O3'-C3'	5.51	126.31	119.70
22	BA	585	G	O3'-P-O5'	-5.51	93.53	104.00
22	DA	1324	G	O4'-C1'-N9	5.51	112.61	108.20
22	DA	1512	C	C3'-C2'-C1'	5.51	105.91	101.50
22	DA	1627	G	C3'-C2'-C1'	5.51	105.91	101.50
22	DA	1653	G	O4'-C1'-N9	5.51	112.61	108.20
1	AA	345	C	P-O5'-C5'	-5.51	112.08	120.90
1	AA	1152	A	C3'-C2'-C1'	5.51	105.91	101.50
1	AA	1349	A	C3'-C2'-C1'	5.51	105.91	101.50
1	CA	71	A	P-O3'-C3'	-5.51	113.09	119.70
1	CA	83	C	N1-C1'-C2'	-5.51	105.94	112.00
22	DA	87	U	O4'-C1'-N1	5.51	112.61	108.20
22	DA	1674	G	P-O3'-C3'	5.51	126.31	119.70
22	BA	973	A	N1-C2-N3	5.51	132.05	129.30
1	AA	1496	C	P-O3'-C3'	-5.51	113.09	119.70
22	BA	530	G	C8-N9-C4	-5.51	104.20	106.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	687	C	P-O5'-C5'	-5.51	112.09	120.90
22	BA	858	G	P-O5'-C5'	-5.51	112.09	120.90
1	AA	430	A	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	1126	U	N1-C1'-C2'	5.50	121.16	114.00
1	CA	1148	U	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	71	A	P-O3'-C3'	-5.50	113.09	119.70
1	AA	163	C	O4'-C1'-N1	-5.50	103.80	108.20
22	BA	742	A	P-O3'-C3'	-5.50	113.10	119.70
22	BA	1694	C	C5-C6-N1	-5.50	118.25	121.00
22	BA	1714	U	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	2013	A	OP1-P-O3'	5.50	117.31	105.20
22	BA	2808	G	O5'-P-OP2	-5.50	100.75	105.70
22	DA	218	A	C3'-C2'-C1'	5.50	105.90	101.50
22	DA	1733	G	N9-C1'-C2'	-5.50	105.95	112.00
22	BA	975	A	P-O3'-C3'	-5.50	113.10	119.70
22	BA	1255	U	N3-C2-O2	5.50	126.05	122.20
22	BA	1426	G	P-O3'-C3'	5.50	126.30	119.70
22	BA	1475	G	O4'-C1'-N9	5.50	112.60	108.20
22	DA	1695	G	P-O3'-C3'	-5.50	113.10	119.70
1	AA	91	U	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	388	G	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	435	C	P-O5'-C5'	-5.50	112.10	120.90
22	BA	1866	A	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	115	G	C4'-C3'-C2'	5.50	108.10	102.60
1	AA	1129	C	N1-C1'-C2'	5.50	121.15	114.00
22	BA	572	A	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	1611	C	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	2501	C	C2-N1-C1'	-5.50	112.75	118.80
22	DA	2880	C	C3'-C2'-C1'	5.50	105.90	101.50
1	AA	1183	U	N1-C1'-C2'	-5.50	105.95	112.00
1	AA	1381	U	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	223	A	C3'-C2'-C1'	5.50	105.90	101.50
22	BA	1424	G	P-O3'-C3'	5.50	126.30	119.70
22	BA	2503	A	P-O3'-C3'	5.50	126.30	119.70
1	AA	509	A	P-O3'-C3'	-5.50	113.11	119.70
22	BA	1954	G	C5-C6-O6	-5.50	125.30	128.60
1	AA	94	G	P-O3'-C3'	5.49	126.29	119.70
22	BA	726	G	N3-C4-N9	-5.49	122.70	126.00
22	BA	2685	G	P-O5'-C5'	-5.49	112.11	120.90
23	BB	89	U	O4'-C1'-N1	5.49	112.59	108.20
22	DA	1555	G	C3'-C2'-C1'	5.49	105.89	101.50
1	AA	994	A	P-O3'-C3'	-5.49	113.11	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2879	A	O4'-C1'-N9	5.49	112.59	108.20
1	CA	92	U	P-O3'-C3'	-5.49	113.11	119.70
22	DA	2407	A	C3'-C2'-C1'	5.49	105.89	101.50
22	BA	2387	U	O4'-C1'-N1	5.49	112.59	108.20
23	DB	111	U	P-O3'-C3'	-5.49	113.11	119.70
22	BA	838	C	N1-C2-O2	-5.49	115.61	118.90
1	CA	891	U	C3'-C2'-C1'	5.49	105.89	101.50
22	DA	265	A	O4'-C1'-N9	5.49	112.59	108.20
22	DA	1799	G	P-O3'-C3'	5.49	126.29	119.70
1	AA	174	A	C3'-C2'-C1'	5.49	105.89	101.50
22	BA	567	U	O3'-P-O5'	-5.49	93.58	104.00
1	CA	452	A	N9-C1'-C2'	-5.49	105.97	112.00
22	BA	1153	C	C4-C5-C6	5.48	120.14	117.40
1	CA	1395	C	C3'-C2'-C1'	5.48	105.89	101.50
1	AA	1323	G	C3'-C2'-C1'	5.48	105.89	101.50
22	BA	1128	G	O4'-C1'-N9	5.48	112.59	108.20
22	BA	1385	A	O4'-C1'-N9	5.48	112.59	108.20
22	BA	1554	U	C4'-C3'-C2'	5.48	108.08	102.60
22	DA	1340	U	N1-C1'-C2'	-5.48	105.97	112.00
1	AA	537	G	C3'-C2'-C1'	5.48	105.88	101.50
22	BA	1753	G	P-O3'-C3'	5.48	126.28	119.70
22	DA	2758	A	C3'-C2'-C1'	5.48	105.88	101.50
22	DA	2062	A	C3'-C2'-C1'	5.48	105.88	101.50
22	BA	1229	C	C5-C6-N1	-5.48	118.26	121.00
23	BB	16	G	N9-C1'-C2'	-5.48	105.97	112.00
1	CA	93	U	P-O3'-C3'	-5.48	113.13	119.70
1	AA	191	G	O4'-C1'-N9	-5.48	103.82	108.20
22	DA	1401	G	C3'-C2'-C1'	5.48	105.88	101.50
1	AA	331	G	N9-C1'-C2'	-5.47	105.98	112.00
1	AA	874	G	C3'-C2'-C1'	5.47	105.88	101.50
22	BA	436	C	O4'-C1'-N1	5.47	112.58	108.20
22	BA	1290	C	C6-N1-C2	5.47	122.49	120.30
22	BA	1480	C	P-O5'-C5'	-5.47	112.14	120.90
22	BA	1943	U	O4'-C1'-N1	-5.47	103.82	108.20
23	BB	67	G	C3'-C2'-C1'	5.47	105.88	101.50
22	DA	49	A	P-O3'-C3'	5.47	126.27	119.70
1	AA	1381	U	P-O3'-C3'	-5.47	113.13	119.70
22	BA	535	G	OP2-P-O3'	5.47	117.24	105.20
22	BA	14	A	P-O5'-C5'	-5.47	112.15	120.90
22	BA	1511	G	P-O5'-C5'	-5.47	112.15	120.90
22	BA	2639	A	P-O3'-C3'	-5.47	113.14	119.70
22	DA	1456	G	C3'-C2'-C1'	5.47	105.88	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2281	A	P-O5'-C5'	-5.47	112.15	120.90
22	DA	1682	G	C3'-C2'-C1'	5.47	105.87	101.50
22	BA	2001	C	P-O3'-C3'	-5.46	113.14	119.70
1	CA	347	G	C3'-C2'-C1'	5.46	105.87	101.50
1	AA	794	A	C3'-C2'-C1'	5.46	105.87	101.50
1	AA	1322	C	N1-C1'-C2'	5.46	121.10	114.00
22	BA	513	A	P-O3'-C3'	-5.46	113.15	119.70
1	CA	68	G	N9-C1'-C2'	-5.46	105.99	112.00
22	DA	1249	U	P-O3'-C3'	-5.46	113.15	119.70
22	BA	1954	G	C5-C6-N1	5.46	114.23	111.50
22	BA	2428	G	P-O5'-C5'	-5.46	112.17	120.90
22	BA	2029	G	OP1-P-O3'	5.46	117.21	105.20
22	BA	2875	C	O4'-C1'-N1	-5.46	103.83	108.20
22	DA	392	U	C3'-C2'-C1'	5.46	105.86	101.50
22	DA	406	G	C3'-C2'-C1'	5.46	105.86	101.50
22	BA	1702	G	P-O5'-C5'	-5.45	112.17	120.90
22	BA	2259	U	P-O5'-C5'	-5.45	112.17	120.90
22	BA	1026	G	C3'-C2'-C1'	5.45	105.86	101.50
1	CA	381	C	N1-C1'-C2'	5.45	121.09	114.00
1	CA	962	C	O4'-C1'-N1	5.45	112.56	108.20
1	AA	1498	U	P-O3'-C3'	5.45	126.24	119.70
22	BA	2788	C	P-O5'-C5'	-5.45	112.18	120.90
22	DA	777	G	C3'-C2'-C1'	5.45	105.86	101.50
1	CA	330	C	C3'-C2'-C1'	5.45	105.86	101.50
22	BA	29	U	P-O5'-C5'	-5.45	112.19	120.90
22	BA	1564	C	P-O3'-C3'	5.45	126.23	119.70
22	DA	1144	A	N9-C1'-C2'	-5.45	106.01	112.00
22	DA	1346	G	C3'-C2'-C1'	5.45	105.86	101.50
22	DA	2199	A	C3'-C2'-C1'	5.45	105.86	101.50
1	CA	1160	G	N9-C1'-C2'	-5.44	106.01	112.00
22	BA	569	U	O4'-C1'-N1	5.44	112.55	108.20
22	DA	794	A	P-O3'-C3'	-5.44	113.17	119.70
22	DA	1934	C	O4'-C1'-N1	5.44	112.55	108.20
1	AA	1046	A	O4'-C1'-N9	5.44	112.55	108.20
22	BA	604	G	C3'-C2'-C1'	5.44	105.85	101.50
22	BA	1459	G	C3'-C2'-C1'	5.44	105.85	101.50
22	BA	1944	U	P-O3'-C3'	5.44	126.23	119.70
22	DA	622	G	C3'-C2'-C1'	5.44	105.85	101.50
22	BA	1142	A	N1-C6-N6	5.44	121.86	118.60
22	BA	1762	A	O4'-C1'-N9	-5.44	103.85	108.20
22	DA	406	G	P-O3'-C3'	-5.44	113.18	119.70
22	DA	1757	A	P-O3'-C3'	5.44	126.22	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2424	C	C2-N3-C4	-5.43	117.18	119.90
1	CA	248	C	C3'-C2'-C1'	5.43	105.85	101.50
1	CA	722	G	C3'-C2'-C1'	5.43	105.85	101.50
22	DA	2063	C	C3'-C2'-C1'	5.43	105.85	101.50
1	AA	84	U	O4'-C1'-N1	5.43	112.55	108.20
1	AA	1348	U	C3'-C2'-C1'	5.43	105.85	101.50
22	BA	528	A	N9-C1'-C2'	-5.43	106.03	112.00
22	BA	793	A	N1-C2-N3	5.43	132.02	129.30
22	BA	1619	G	N1-C6-O6	-5.43	116.64	119.90
22	BA	2567	G	C2-N3-C4	5.43	114.62	111.90
22	BA	2714	G	P-O3'-C3'	-5.43	113.18	119.70
1	CA	9	G	C3'-C2'-C1'	5.43	105.85	101.50
22	DA	1247	A	P-O3'-C3'	5.43	126.22	119.70
22	BA	694	U	O4'-C1'-N1	5.43	112.55	108.20
22	BA	1931	U	P-O3'-C3'	-5.43	113.18	119.70
1	CA	282	A	C3'-C2'-C1'	5.43	105.84	101.50
1	AA	1128	C	P-O5'-C5'	-5.43	112.21	120.90
22	BA	765	C	C3'-C2'-C1'	5.43	105.84	101.50
22	BA	568	U	O4'-C1'-N1	-5.43	103.86	108.20
22	BA	2890	G	N9-C4-C5	-5.43	103.23	105.40
23	DB	16	G	C3'-C2'-C1'	5.43	105.84	101.50
22	BA	2021	C	O4'-C1'-N1	-5.42	103.86	108.20
1	CA	353	A	O4'-C1'-N9	5.42	112.54	108.20
1	CA	1393	U	O4'-C1'-N1	-5.42	103.86	108.20
22	DA	1569	A	C3'-C2'-C1'	5.42	105.84	101.50
1	AA	352	C	O4'-C1'-N1	-5.42	103.86	108.20
1	AA	721	G	P-O3'-C3'	5.42	126.21	119.70
22	DA	1576	U	O4'-C1'-N1	5.42	112.54	108.20
22	BA	1033	U	O4'-C1'-N1	5.42	112.53	108.20
22	DA	1647	U	P-O3'-C3'	5.42	126.20	119.70
22	BA	1619	G	O5'-P-OP2	-5.42	100.83	105.70
1	CA	766	A	P-O3'-C3'	5.42	126.20	119.70
1	CA	421	U	P-O3'-C3'	5.41	126.19	119.70
22	DA	163	C	N1-C1'-C2'	-5.41	106.05	112.00
22	DA	407	G	C3'-C2'-C1'	5.41	105.83	101.50
1	AA	978	A	C3'-C2'-C1'	5.41	105.83	101.50
22	BA	1631	G	O4'-C1'-N9	5.41	112.53	108.20
22	BA	2324	U	O4'-C1'-N1	-5.41	103.87	108.20
47	BZ	16	LEU	CA-CB-CG	-5.41	102.86	115.30
1	CA	52	C	C3'-C2'-C1'	5.41	105.83	101.50
22	DA	397	U	P-O3'-C3'	-5.41	113.21	119.70
22	DA	510	C	C3'-C2'-C1'	5.41	105.83	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2746	U	N1-C1'-C2'	-5.41	106.05	112.00
22	BA	606	U	O4'-C1'-N1	5.41	112.53	108.20
22	BA	1774	C	O4'-C1'-N1	-5.41	103.87	108.20
22	BA	2333	A	C8-N9-C4	5.41	107.96	105.80
23	BB	29	A	P-O5'-C5'	-5.41	112.25	120.90
1	CA	1086	U	C3'-C2'-C1'	5.41	105.83	101.50
22	BA	1674	G	P-O3'-C3'	5.41	126.19	119.70
1	CA	52	C	P-O3'-C3'	-5.41	113.21	119.70
22	DA	13	A	P-O3'-C3'	5.41	126.19	119.70
22	BA	681	G	P-O5'-C5'	-5.41	112.25	120.90
22	BA	1822	C	P-O5'-C5'	-5.41	112.25	120.90
1	AA	487	A	C3'-C2'-C1'	5.40	105.82	101.50
1	AA	1215	G	C3'-C2'-C1'	5.40	105.82	101.50
22	BA	1382	G	P-O5'-C5'	-5.40	112.26	120.90
22	DA	2092	U	O4'-C1'-N1	5.40	112.52	108.20
22	BA	181	A	P-O3'-C3'	-5.40	113.22	119.70
22	BA	2026	U	C5-C6-N1	-5.40	120.00	122.70
22	BA	2258	C	C4'-C3'-C2'	5.40	108.00	102.60
22	BA	1885	A	C3'-C2'-C1'	5.40	105.82	101.50
22	DA	10	A	O4'-C1'-N9	5.40	112.52	108.20
22	DA	2850	A	C3'-C2'-C1'	5.40	105.82	101.50
22	DA	806	C	C3'-C2'-C1'	5.40	105.82	101.50
22	BA	463	G	OP2-P-O3'	5.39	117.07	105.20
22	BA	1133	A	O4'-C1'-N9	5.39	112.52	108.20
22	BA	1255	U	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	1153	G	C3'-C2'-C1'	5.39	105.81	101.50
1	CA	423	G	C3'-C2'-C1'	5.39	105.81	101.50
22	DA	398	C	C3'-C2'-C1'	5.39	105.81	101.50
23	DB	45	A	P-O3'-C3'	-5.39	113.23	119.70
22	BA	2383	G	C3'-C2'-C1'	5.39	105.81	101.50
22	BA	2055	C	C6-N1-C2	5.39	122.46	120.30
22	BA	2092	U	N1-C1'-C2'	5.39	121.01	114.00
1	CA	15	G	C3'-C2'-C1'	5.39	105.81	101.50
22	DA	60	G	O4'-C1'-N9	5.39	112.51	108.20
22	DA	868	U	C3'-C2'-C1'	5.39	105.81	101.50
22	DA	916	G	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	64	G	O4'-C1'-N9	5.39	112.51	108.20
1	AA	1131	G	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	1259	C	C3'-C2'-C1'	5.39	105.81	101.50
22	BA	412	A	N9-C1'-C2'	-5.39	106.07	112.00
22	BA	1816	C	C3'-C2'-C1'	5.39	105.81	101.50
1	CA	1218	C	O4'-C1'-N1	5.39	112.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2052	A	P-O5'-C5'	-5.39	112.28	120.90
1	AA	576	C	O4'-C1'-N1	5.39	112.51	108.20
1	AA	1087	G	C3'-C2'-C1'	5.38	105.81	101.50
22	BA	2787	C	N1-C2-O2	-5.38	115.67	118.90
22	DA	35	G	N9-C1'-C2'	-5.38	106.08	112.00
22	BA	534	U	C5-C6-N1	-5.38	120.01	122.70
22	BA	867	C	N1-C1'-C2'	-5.38	106.08	112.00
22	BA	2543	G	P-O3'-C3'	-5.38	113.24	119.70
1	AA	61	G	C3'-C2'-C1'	5.38	105.80	101.50
1	AA	1131	G	N9-C1'-C2'	-5.38	106.08	112.00
1	AA	536	C	N1-C1'-C2'	-5.38	106.08	112.00
1	AA	754	C	N1-C1'-C2'	-5.38	106.08	112.00
22	BA	458	G	C3'-C2'-C1'	-5.38	97.20	101.50
22	BA	1240	U	C6-N1-C1'	-5.38	113.67	121.20
22	BA	2148	G	C3'-C2'-C1'	5.38	105.80	101.50
22	BA	2504	U	N1-C2-O2	5.38	126.56	122.80
22	BA	2607	G	P-O3'-C3'	-5.38	113.25	119.70
25	BD	10	GLY	N-CA-C	5.38	126.55	113.10
22	DA	1255	U	C6-N1-C1'	-5.38	113.67	121.20
1	AA	1304	G	C3'-C2'-C1'	5.38	105.80	101.50
1	AA	1454	G	C3'-C2'-C1'	5.38	105.80	101.50
22	BA	2546	U	C5-C4-O4	-5.38	122.67	125.90
22	BA	2836	U	P-O3'-C3'	-5.38	113.25	119.70
1	CA	642	A	P-O3'-C3'	-5.38	113.25	119.70
22	DA	2879	A	P-O3'-C3'	5.38	126.15	119.70
22	BA	303	G	C3'-C2'-C1'	5.37	105.80	101.50
22	BA	860	U	N3-C2-O2	-5.37	118.44	122.20
22	BA	984	A	O3'-P-O5'	5.37	114.21	104.00
22	BA	1272	A	C8-N9-C4	5.37	107.95	105.80
1	CA	14	U	C3'-C2'-C1'	5.37	105.80	101.50
22	BA	2424	C	C5-C6-N1	-5.37	118.31	121.00
1	AA	252	U	C3'-C2'-C1'	5.37	105.80	101.50
22	DA	1329	U	N1-C1'-C2'	5.37	120.98	114.00
1	AA	642	A	C3'-C2'-C1'	5.37	105.80	101.50
22	BA	772	C	C6-N1-C2	5.37	122.45	120.30
22	BA	1254	A	C3'-C2'-C1'	5.37	105.79	101.50
22	BA	2552	U	O4'-C1'-N1	-5.37	103.91	108.20
1	AA	384	G	P-O3'-C3'	5.37	126.14	119.70
1	CA	531	U	N1-C1'-C2'	5.37	120.98	114.00
1	AA	352	C	P-O3'-C3'	-5.37	113.26	119.70
22	BA	955	U	N3-C4-C5	5.37	117.82	114.60
22	BA	2312	U	O4'-C1'-N1	5.37	112.49	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	638	G	P-O3'-C3'	-5.37	113.26	119.70
22	DA	831	G	C3'-C2'-C1'	5.37	105.79	101.50
22	DA	1034	G	P-O3'-C3'	-5.37	113.26	119.70
22	BA	166	U	P-O3'-C3'	-5.36	113.26	119.70
22	BA	1698	A	P-O3'-C3'	5.36	126.14	119.70
22	BA	2681	C	N3-C2-O2	5.36	125.66	121.90
22	BA	2890	G	C4-C5-N7	5.36	112.94	110.80
1	CA	1449	C	O4'-C1'-N1	5.36	112.49	108.20
22	DA	2832	U	P-O3'-C3'	5.36	126.14	119.70
22	DA	2866	U	N1-C1'-C2'	5.36	120.97	114.00
1	AA	1184	G	C3'-C2'-C1'	5.36	105.79	101.50
22	DA	1498	C	C3'-C2'-C1'	5.36	105.79	101.50
1	AA	1304	G	P-O3'-C3'	-5.36	113.27	119.70
22	BA	1360	G	O5'-P-OP2	-5.36	100.88	105.70
22	BA	2231	U	N1-C1'-C2'	-5.36	106.10	112.00
1	CA	369	G	C3'-C2'-C1'	5.36	105.79	101.50
1	CA	482	A	P-O3'-C3'	-5.36	113.27	119.70
22	DA	1700	A	P-O3'-C3'	-5.36	113.27	119.70
22	BA	2705	A	P-O5'-C5'	-5.36	112.33	120.90
22	BA	1261	C	O4'-C1'-N1	5.36	112.49	108.20
22	DA	1981	A	C3'-C2'-C1'	5.36	105.79	101.50
22	BA	585	G	P-O3'-C3'	5.36	126.13	119.70
23	DB	46	A	C3'-C2'-C1'	5.36	105.78	101.50
22	BA	1657	U	P-O3'-C3'	-5.35	113.28	119.70
1	CA	1447	A	P-O3'-C3'	5.35	126.12	119.70
1	AA	966	G	P-O3'-C3'	-5.35	113.28	119.70
22	BA	677	A	OP1-P-O3'	5.35	116.97	105.20
22	BA	1828	G	P-O3'-C3'	5.35	126.12	119.70
22	BA	2645	G	O3'-P-O5'	-5.35	93.83	104.00
1	CA	6	G	C3'-C2'-C1'	5.35	105.78	101.50
1	CA	1257	A	C3'-C2'-C1'	5.35	105.78	101.50
1	AA	286	C	O4'-C1'-N1	5.35	112.48	108.20
22	BA	621	A	C3'-C2'-C1'	5.35	105.78	101.50
1	CA	347	G	P-O3'-C3'	-5.35	113.28	119.70
22	DA	274	C	C3'-C2'-C1'	5.35	105.78	101.50
22	DA	2137	U	C3'-C2'-C1'	5.35	105.78	101.50
1	AA	1522	U	P-O5'-C5'	-5.35	112.34	120.90
23	BB	45	A	C3'-C2'-C1'	5.35	105.78	101.50
1	CA	816	A	C3'-C2'-C1'	5.35	105.78	101.50
22	BA	512	G	P-O3'-C3'	5.35	126.11	119.70
22	BA	962	G	P-O5'-C5'	-5.35	112.35	120.90
1	CA	64	G	P-O3'-C3'	5.35	126.11	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	2508	G	C4-N9-C1'	5.34	133.45	126.50
1	CA	1152	A	C3'-C2'-C1'	5.34	105.78	101.50
22	DA	1707	G	P-O5'-C5'	-5.34	112.35	120.90
1	CA	1349	A	C3'-C2'-C1'	5.34	105.78	101.50
22	BA	486	C	C6-N1-C2	5.34	122.44	120.30
22	BA	914	G	C4-N9-C1'	5.34	133.44	126.50
22	BA	987	C	O4'-C1'-N1	5.34	112.47	108.20
51	B3	21	PHE	N-CA-C	5.34	125.42	111.00
1	AA	722	G	C3'-C2'-C1'	5.34	105.77	101.50
22	DA	618	G	C3'-C2'-C1'	5.34	105.77	101.50
22	DA	962	G	C3'-C2'-C1'	5.34	105.77	101.50
22	DA	1289	C	P-O3'-C3'	-5.34	113.30	119.70
22	DA	1468	U	O4'-C1'-N1	5.34	112.47	108.20
22	BA	638	G	P-O3'-C3'	-5.33	113.30	119.70
22	BA	1426	G	P-O5'-C5'	-5.33	112.37	120.90
1	CA	453	G	P-O3'-C3'	-5.33	113.30	119.70
22	DA	1475	G	P-O3'-C3'	5.33	126.10	119.70
1	CA	652	U	P-O3'-C3'	5.33	126.10	119.70
22	DA	2024	G	C3'-C2'-C1'	5.33	105.77	101.50
22	DA	2036	C	C3'-C2'-C1'	5.33	105.77	101.50
22	BA	628	G	P-O5'-C5'	-5.33	112.37	120.90
22	BA	664	G	O5'-P-OP2	-5.33	100.90	105.70
22	BA	324	A	N9-C1'-C2'	-5.33	106.14	112.00
22	BA	489	G	O3'-P-O5'	-5.33	93.87	104.00
22	BA	1943	U	C4'-C3'-C2'	5.33	107.93	102.60
1	CA	389	A	P-O3'-C3'	-5.33	113.31	119.70
22	DA	618	G	P-O3'-C3'	-5.33	113.31	119.70
22	DA	2502	G	C3'-C2'-C1'	5.33	105.76	101.50
22	BA	86	G	O5'-P-OP2	-5.33	100.91	105.70
22	BA	480	A	C3'-C2'-C1'	5.33	105.76	101.50
22	BA	1510	G	N9-C1'-C2'	-5.33	106.14	112.00
1	AA	718	A	C3'-C2'-C1'	5.32	105.76	101.50
22	BA	800	A	C5-N7-C8	-5.32	101.24	103.90
22	BA	2200	C	C3'-C2'-C1'	5.32	105.76	101.50
1	CA	67	C	O4'-C1'-N1	5.32	112.46	108.20
22	DA	1157	G	C3'-C2'-C1'	5.32	105.76	101.50
22	DA	1491	G	C3'-C2'-C1'	5.32	105.76	101.50
1	AA	339	C	C5-C6-N1	-5.32	118.34	121.00
1	AA	368	U	N1-C1'-C2'	-5.32	106.15	112.00
22	BA	2007	U	P-O3'-C3'	-5.32	113.31	119.70
1	CA	563	A	P-O3'-C3'	-5.32	113.31	119.70
1	CA	1052	U	C3'-C2'-C1'	5.32	105.76	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	2837	A	C3'-C2'-C1'	5.32	105.76	101.50
22	BA	1989	G	P-O5'-C5'	-5.32	112.39	120.90
22	DA	129	C	N1-C1'-C2'	-5.32	106.15	112.00
1	CA	32	A	C3'-C2'-C1'	5.32	105.75	101.50
22	BA	2022	U	N3-C4-O4	5.32	123.12	119.40
22	DA	1972	G	C3'-C2'-C1'	5.32	105.75	101.50
1	AA	1108	G	P-O3'-C3'	-5.31	113.32	119.70
22	BA	1942	C	C3'-C2'-C1'	5.31	105.75	101.50
1	CA	1148	U	P-O3'-C3'	-5.31	113.32	119.70
22	DA	1949	G	P-O3'-C3'	5.31	126.08	119.70
22	DA	1965	C	P-O5'-C5'	-5.31	112.40	120.90
22	BA	1343	G	C3'-C2'-C1'	5.31	105.75	101.50
1	CA	590	U	O4'-C1'-N1	5.31	112.45	108.20
22	DA	223	A	P-O3'-C3'	-5.31	113.33	119.70
22	DA	572	A	O4'-C1'-N9	-5.31	103.95	108.20
22	DA	1206	G	P-O3'-C3'	-5.31	113.32	119.70
22	DA	1901	A	C3'-C2'-C1'	5.31	105.75	101.50
1	AA	1401	G	P-O5'-C5'	-5.31	112.40	120.90
22	BA	2881	U	O4'-C1'-N1	-5.31	103.95	108.20
35	BN	33	ILE	CB-CA-C	-5.31	100.98	111.60
1	CA	974	A	P-O3'-C3'	5.31	126.07	119.70
22	DA	770	G	C8-N9-C4	-5.31	104.28	106.40
1	AA	52	C	C3'-C2'-C1'	5.31	105.75	101.50
22	BA	2508	G	C8-N9-C1'	-5.31	120.10	127.00
22	BA	2615	U	C3'-C2'-C1'	5.31	105.75	101.50
22	DA	1294	U	O4'-C1'-N1	-5.31	103.95	108.20
1	AA	85	U	N1-C1'-C2'	5.31	120.90	114.00
1	AA	439	U	P-O3'-C3'	-5.31	113.33	119.70
22	DA	207	A	C3'-C2'-C1'	5.31	105.75	101.50
1	AA	246	A	P-O3'-C3'	5.31	126.07	119.70
22	BA	667	U	P-O3'-C3'	5.31	126.07	119.70
22	BA	1323	C	C6-N1-C2	5.31	122.42	120.30
22	BA	1919	A	N9-C1'-C2'	-5.31	106.16	112.00
22	BA	2236	U	P-O5'-C5'	-5.31	112.41	120.90
23	BB	12	C	P-O3'-C3'	5.31	126.07	119.70
22	DA	530	G	P-O3'-C3'	-5.31	113.33	119.70
1	AA	71	A	C3'-C2'-C1'	5.30	105.74	101.50
22	BA	2729	G	N9-C1'-C2'	-5.30	106.16	112.00
22	DA	512	G	P-O3'-C3'	5.30	126.06	119.70
22	DA	1144	A	C3'-C2'-C1'	5.30	105.74	101.50
1	AA	1382	C	C3'-C2'-C1'	5.30	105.74	101.50
22	BA	1192	G	P-O5'-C5'	-5.30	112.42	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	199	A	P-O3'-C3'	-5.30	113.34	119.70
22	DA	687	C	C3'-C2'-C1'	5.30	105.74	101.50
22	BA	2632	A	P-O5'-C5'	-5.30	112.42	120.90
22	BA	309	A	P-O3'-C3'	5.30	126.06	119.70
22	BA	1628	G	C5-C6-O6	-5.30	125.42	128.60
22	BA	2611	C	P-O3'-C3'	-5.30	113.34	119.70
47	BZ	16	LEU	CB-CG-CD2	-5.30	101.99	111.00
1	CA	309	A	P-O3'-C3'	-5.30	113.34	119.70
23	DB	90	C	C3'-C2'-C1'	5.30	105.74	101.50
1	AA	1130	A	O4'-C1'-N9	-5.30	103.96	108.20
22	BA	2661	G	P-O3'-C3'	5.30	126.06	119.70
1	CA	1332	A	C3'-C2'-C1'	5.30	105.74	101.50
22	BA	765	C	P-O5'-C5'	-5.30	112.43	120.90
22	DA	1386	C	P-O3'-C3'	-5.30	113.34	119.70
22	BA	1682	G	C3'-C2'-C1'	5.29	105.74	101.50
22	DA	1483	G	C3'-C2'-C1'	5.29	105.74	101.50
22	BA	1848	A	C3'-C2'-C1'	5.29	105.73	101.50
22	BA	2655	G	P-O3'-C3'	5.29	126.05	119.70
22	BA	2836	U	O4'-C1'-N1	5.29	112.44	108.20
22	DA	1328	A	C3'-C2'-C1'	5.29	105.73	101.50
1	AA	23	C	P-O3'-C3'	-5.29	113.35	119.70
22	BA	35	G	N9-C1'-C2'	-5.29	106.18	112.00
22	BA	1760	C	P-O3'-C3'	-5.29	113.35	119.70
33	BL	40	SER	N-CA-C	-5.29	96.72	111.00
1	CA	567	G	P-O3'-C3'	-5.29	113.35	119.70
22	DA	678	C	O4'-C1'-N1	-5.29	103.97	108.20
23	DB	13	G	C3'-C2'-C1'	5.29	105.73	101.50
22	BA	2757	A	N9-C1'-C2'	-5.29	106.18	112.00
22	BA	386	G	O3'-P-O5'	-5.29	93.95	104.00
22	DA	2300	C	C3'-C2'-C1'	5.29	105.73	101.50
22	BA	22	C	C2-N3-C4	-5.29	117.26	119.90
22	BA	1318	U	O4'-C1'-N1	5.29	112.43	108.20
1	CA	110	C	C3'-C2'-C1'	5.28	105.73	101.50
22	DA	1858	A	C3'-C2'-C1'	5.28	105.73	101.50
1	CA	1367	C	O4'-C1'-N1	5.28	112.42	108.20
1	AA	1129	C	P-O3'-C3'	5.28	126.04	119.70
1	AA	534	U	C3'-C2'-C1'	5.28	105.72	101.50
1	AA	1402	C	C6-N1-C2	5.28	122.41	120.30
22	BA	36	G	P-O3'-C3'	-5.28	113.37	119.70
22	BA	765	C	N1-C1'-C2'	-5.28	106.19	112.00
1	CA	512	U	C3'-C2'-C1'	5.28	105.72	101.50
22	DA	2551	C	O4'-C1'-N1	5.28	112.42	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	1181	U	O4'-C1'-N1	5.28	112.42	108.20
22	DA	1290	C	O4'-C1'-N1	5.28	112.42	108.20
22	DA	1739	A	C3'-C2'-C1'	5.28	105.72	101.50
1	AA	110	C	C3'-C2'-C1'	5.27	105.72	101.50
23	DB	58	A	C3'-C2'-C1'	5.27	105.72	101.50
22	BA	538	A	P-O5'-C5'	-5.27	112.47	120.90
22	BA	977	G	O3'-P-O5'	-5.27	93.98	104.00
22	BA	1956	U	P-O3'-C3'	-5.27	113.37	119.70
22	BA	2017	U	P-O5'-C5'	-5.27	112.46	120.90
22	BA	2580	U	P-O3'-C3'	5.27	126.03	119.70
22	DA	144	A	C3'-C2'-C1'	5.27	105.72	101.50
22	BA	726	G	O3'-P-O5'	5.27	114.01	104.00
1	CA	1128	C	P-O3'-C3'	-5.27	113.38	119.70
22	DA	1290	C	N1-C1'-C2'	-5.27	106.20	112.00
22	BA	1716	U	C3'-C2'-C1'	5.27	105.72	101.50
22	BA	1785	A	C3'-C2'-C1'	5.27	105.72	101.50
22	DA	2572	A	O4'-C1'-N9	5.27	112.42	108.20
22	BA	564	C	O4'-C1'-N1	5.27	112.42	108.20
22	BA	964	C	P-O5'-C5'	-5.27	112.47	120.90
22	BA	2431	U	P-O5'-C5'	-5.27	112.47	120.90
22	BA	636	G	P-O3'-C3'	5.26	126.02	119.70
22	BA	835	C	N3-C2-O2	5.26	125.59	121.90
1	CA	885	G	P-O3'-C3'	-5.26	113.38	119.70
1	CA	885	G	C3'-C2'-C1'	5.26	105.71	101.50
22	DA	2339	C	O4'-C1'-N1	5.26	112.41	108.20
22	DA	130	C	O4'-C1'-N1	5.26	112.41	108.20
1	AA	275	G	C8-N9-C4	-5.26	104.30	106.40
1	CA	174	A	C3'-C2'-C1'	5.26	105.70	101.50
22	DA	1051	G	C3'-C2'-C1'	5.26	105.70	101.50
22	DA	1077	A	C3'-C2'-C1'	5.26	105.71	101.50
22	BA	1025	G	C4'-C3'-C2'	5.25	107.86	102.60
1	AA	468	A	P-O3'-C3'	-5.25	113.40	119.70
22	BA	945	A	O4'-C1'-N9	5.25	112.40	108.20
22	BA	1675	C	C2-N3-C4	-5.25	117.27	119.90
22	DA	1206	G	C3'-C2'-C1'	5.25	105.70	101.50
22	DA	1733	G	C3'-C2'-C1'	5.25	105.70	101.50
22	DA	1916	A	C3'-C2'-C1'	5.25	105.70	101.50
22	BA	595	C	N3-C4-C5	5.25	124.00	121.90
22	BA	1091	G	O4'-C1'-N9	5.25	112.40	108.20
22	BA	1993	U	O4'-C1'-N1	5.25	112.40	108.20
22	BA	2619	C	C5-C6-N1	-5.25	118.37	121.00
22	BA	2815	C	P-O5'-C5'	-5.25	112.50	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	1420	U	N3-C2-O2	5.25	125.88	122.20
1	AA	885	G	C3'-C2'-C1'	5.25	105.70	101.50
22	BA	1617	C	O4'-C1'-N1	5.25	112.40	108.20
22	BA	2501	C	C6-N1-C2	5.25	122.40	120.30
31	BJ	64	VAL	N-CA-C	5.25	125.17	111.00
22	DA	2667	C	N1-C1'-C2'	-5.25	106.23	112.00
22	BA	2881	U	N3-C2-O2	5.25	125.87	122.20
23	BB	90	C	P-O5'-C5'	-5.25	112.50	120.90
22	DA	2068	U	C3'-C2'-C1'	5.25	105.70	101.50
22	BA	958	U	C3'-C2'-C1'	5.25	105.70	101.50
22	BA	2803	G	P-O5'-C5'	-5.25	112.51	120.90
1	AA	331	G	P-O3'-C3'	-5.24	113.41	119.70
22	BA	1130	U	N1-C2-O2	5.24	126.47	122.80
22	BA	2573	C	C3'-C2'-C1'	5.24	105.69	101.50
22	BA	2831	G	P-O5'-C5'	-5.24	112.51	120.90
1	CA	1401	G	N9-C1'-C2'	-5.24	106.23	112.00
23	DB	111	U	O4'-C1'-N1	5.24	112.39	108.20
1	AA	468	A	C3'-C2'-C1'	5.24	105.69	101.50
22	BA	2561	U	O4'-C1'-N1	5.24	112.39	108.20
22	DA	672	C	P-O3'-C3'	-5.24	113.41	119.70
22	DA	974	G	P-O3'-C3'	5.24	125.99	119.70
22	DA	1064	C	P-O3'-C3'	-5.24	113.41	119.70
22	BA	781	A	P-O3'-C3'	5.24	125.99	119.70
22	DA	915	C	C3'-C2'-C1'	5.24	105.69	101.50
23	DB	69	G	N9-C1'-C2'	-5.24	106.23	112.00
1	AA	72	A	C3'-C2'-C1'	5.24	105.69	101.50
22	BA	528	A	O4'-C1'-N9	-5.24	104.01	108.20
22	BA	2652	C	P-O3'-C3'	-5.24	113.41	119.70
23	BB	5	U	N1-C1'-C2'	-5.24	106.24	112.00
22	DA	1888	G	O4'-C1'-N9	5.24	112.39	108.20
22	BA	1941	C	C3'-C2'-C1'	5.24	105.69	101.50
1	CA	132	C	C3'-C2'-C1'	5.24	105.69	101.50
22	BA	683	U	C3'-C2'-C1'	5.24	105.69	101.50
22	DA	444	C	N1-C1'-C2'	-5.24	106.24	112.00
1	CA	978	A	C3'-C2'-C1'	5.23	105.69	101.50
22	BA	637	A	N9-C1'-C2'	5.23	120.80	114.00
1	CA	402	G	P-O5'-C5'	-5.23	112.53	120.90
1	CA	1127	G	C3'-C2'-C1'	5.23	105.69	101.50
22	DA	2691	C	C3'-C2'-C1'	5.23	105.69	101.50
22	BA	25	U	C5-C4-O4	-5.23	122.76	125.90
22	BA	1646	C	P-O3'-C3'	-5.23	113.42	119.70
22	BA	1792	G	N9-C1'-C2'	-5.23	106.25	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	1317	C	O4'-C1'-N1	5.23	112.38	108.20
22	DA	388	G	C3'-C2'-C1'	5.23	105.69	101.50
22	DA	1347	A	C3'-C2'-C1'	5.23	105.69	101.50
22	BA	1925	C	O4'-C1'-N1	5.23	112.38	108.20
1	AA	733	G	P-O3'-C3'	5.23	125.97	119.70
22	BA	2508	G	O4'-C1'-N9	-5.23	104.02	108.20
1	CA	316	C	C3'-C2'-C1'	5.23	105.68	101.50
22	BA	992	C	O4'-C1'-N1	5.23	112.38	108.20
22	BA	2508	G	C6-C5-N7	-5.23	127.27	130.40
1	CA	794	A	C3'-C2'-C1'	5.23	105.68	101.50
22	DA	1291	C	O4'-C1'-N1	5.23	112.38	108.20
22	BA	209	C	C6-N1-C2	5.22	122.39	120.30
22	BA	936	A	P-O5'-C5'	-5.22	112.54	120.90
22	BA	2066	C	P-O5'-C5'	-5.22	112.54	120.90
1	CA	509	A	C3'-C2'-C1'	5.22	105.68	101.50
22	BA	2405	G	P-O3'-C3'	5.22	125.97	119.70
22	DA	401	A	O4'-C1'-N9	5.22	112.38	108.20
22	DA	2069	G	N9-C1'-C2'	-5.22	106.25	112.00
22	DA	2289	G	C3'-C2'-C1'	5.22	105.68	101.50
1	AA	346	G	C3'-C2'-C1'	5.22	105.68	101.50
22	BA	2830	C	P-O5'-C5'	-5.22	112.55	120.90
1	AA	1432	G	P-O3'-C3'	5.22	125.96	119.70
22	BA	1239	G	O3'-P-O5'	-5.22	94.09	104.00
1	AA	977	A	P-O3'-C3'	-5.22	113.44	119.70
22	BA	2806	C	O3'-P-O5'	-5.22	94.09	104.00
1	CA	74	A	P-O3'-C3'	-5.22	113.44	119.70
22	DA	1327	A	C3'-C2'-C1'	5.22	105.67	101.50
22	DA	2428	G	C3'-C2'-C1'	5.22	105.67	101.50
22	BA	162	U	O4'-C1'-N1	5.21	112.37	108.20
22	BA	1839	G	N9-C1'-C2'	-5.21	106.26	112.00
22	BA	2794	C	N3-C2-O2	5.21	125.55	121.90
22	BA	2890	G	C2-N3-C4	-5.21	109.29	111.90
1	CA	389	A	C3'-C2'-C1'	5.21	105.67	101.50
22	DA	206	U	C3'-C2'-C1'	5.21	105.67	101.50
22	DA	1291	C	P-O3'-C3'	-5.21	113.44	119.70
22	DA	2337	G	C3'-C2'-C1'	5.21	105.67	101.50
1	AA	490	C	O4'-C1'-N1	5.21	112.37	108.20
1	CA	1157	A	P-O3'-C3'	5.21	125.95	119.70
22	DA	1682	G	N9-C1'-C2'	-5.21	106.27	112.00
22	BA	17	G	C8-N9-C4	-5.21	104.31	106.40
22	DA	2640	G	P-O3'-C3'	-5.21	113.45	119.70
1	AA	891	U	C3'-C2'-C1'	5.21	105.67	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1838	C	N1-C2-O2	-5.21	115.77	118.90
22	BA	2558	C	P-O5'-C5'	-5.21	112.56	120.90
22	BA	2839	G	OP2-P-O3'	5.21	116.66	105.20
1	AA	1169	A	P-O3'-C3'	-5.21	113.45	119.70
22	BA	87	U	P-O3'-C3'	-5.21	113.45	119.70
22	BA	1062	G	C3'-C2'-C1'	5.21	105.67	101.50
22	BA	1238	G	O4'-C1'-N9	5.21	112.37	108.20
22	DA	503	A	P-O3'-C3'	5.21	125.95	119.70
22	DA	868	U	O4'-C1'-N1	5.21	112.37	108.20
22	BA	978	G	C5-C6-N1	5.21	114.10	111.50
22	BA	750	A	N1-C2-N3	5.21	131.90	129.30
22	BA	1421	G	C3'-C2'-C1'	5.21	105.66	101.50
23	BB	57	A	P-O5'-C5'	-5.21	112.57	120.90
1	AA	961	U	C3'-C2'-C1'	5.20	105.66	101.50
22	BA	1380	G	N1-C6-O6	-5.20	116.78	119.90
22	DA	2179	C	C3'-C2'-C1'	5.20	105.66	101.50
1	AA	519	C	C3'-C2'-C1'	5.20	105.66	101.50
22	BA	1200	C	C5-C6-N1	-5.20	118.40	121.00
22	DA	1065	U	C3'-C2'-C1'	5.20	105.66	101.50
22	BA	1319	C	C6-N1-C2	5.20	122.38	120.30
1	CA	719	C	O4'-C1'-N1	5.20	112.36	108.20
22	BA	1794	A	P-O5'-C5'	-5.20	112.58	120.90
1	CA	1302	C	C3'-C2'-C1'	5.20	105.66	101.50
22	DA	588	U	P-O3'-C3'	-5.20	113.46	119.70
22	DA	1272	A	P-O3'-C3'	5.20	125.94	119.70
22	DA	1303	G	C3'-C2'-C1'	5.20	105.66	101.50
22	DA	2757	A	C3'-C2'-C1'	5.20	105.66	101.50
1	AA	1070	U	O4'-C1'-N1	-5.20	104.04	108.20
22	BA	1761	C	N1-C2-O2	-5.20	115.78	118.90
22	BA	673	C	O4'-C1'-N1	5.19	112.36	108.20
23	BB	79	G	C2-N3-C4	5.19	114.50	111.90
22	DA	1112	G	C3'-C2'-C1'	5.19	105.66	101.50
1	AA	812	G	O3'-P-O5'	-5.19	94.13	104.00
22	BA	530	G	P-O3'-C3'	-5.19	113.47	119.70
22	BA	2569	G	N3-C4-C5	-5.19	126.00	128.60
22	BA	769	U	P-O5'-C5'	-5.19	112.59	120.90
22	BA	984	A	N3-C4-C5	5.19	130.43	126.80
22	DA	2340	A	C3'-C2'-C1'	5.19	105.65	101.50
22	BA	119	A	O3'-P-O5'	5.19	113.86	104.00
23	DB	40	U	N1-C1'-C2'	5.19	120.75	114.00
22	BA	25	U	C6-N1-C2	5.19	124.11	121.00
22	BA	333	G	P-O3'-C3'	-5.19	113.48	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1429	G	N9-C1'-C2'	-5.19	106.30	112.00
22	BA	1760	C	O3'-P-O5'	-5.19	94.14	104.00
22	BA	2775	G	OP2-P-O3'	5.19	116.61	105.20
1	CA	503	C	O4'-C1'-N1	-5.19	104.05	108.20
22	DA	2037	A	P-O3'-C3'	-5.19	113.48	119.70
1	CA	81	A	P-O3'-C3'	5.19	125.92	119.70
22	DA	200	U	P-O3'-C3'	-5.19	113.48	119.70
22	DA	2419	U	O4'-C1'-N1	5.19	112.35	108.20
22	BA	93	G	N9-C1'-C2'	-5.18	106.30	112.00
22	BA	1125	G	C5-C6-O6	-5.18	125.49	128.60
22	BA	1330	C	C3'-C2'-C1'	5.18	105.65	101.50
1	CA	980	C	C3'-C2'-C1'	5.18	105.65	101.50
1	AA	1050	G	C3'-C2'-C1'	5.18	105.64	101.50
22	BA	270	A	P-O5'-C5'	-5.18	112.61	120.90
22	BA	873	C	C6-N1-C2	5.18	122.37	120.30
1	CA	1230	C	C3'-C2'-C1'	5.18	105.64	101.50
22	DA	1396	U	N1-C1'-C2'	5.18	120.73	114.00
22	DA	1667	G	O4'-C1'-N9	-5.18	104.06	108.20
1	AA	436	C	O4'-C1'-N1	5.18	112.34	108.20
1	AA	466	A	P-O3'-C3'	5.18	125.91	119.70
22	BA	2716	C	P-O5'-C5'	-5.18	112.62	120.90
1	CA	1095	U	P-O3'-C3'	-5.18	113.49	119.70
1	AA	166	U	P-O3'-C3'	-5.17	113.49	119.70
22	BA	523	C	C6-N1-C2	5.17	122.37	120.30
22	BA	909	A	O4'-C1'-N9	-5.17	104.06	108.20
22	BA	2055	C	N1-C1'-C2'	-5.17	106.31	112.00
1	AA	1088	G	N9-C1'-C2'	-5.17	106.31	112.00
1	AA	1258	G	C3'-C2'-C1'	5.17	105.64	101.50
22	BA	554	U	P-O3'-C3'	5.17	125.91	119.70
1	AA	486	U	O4'-C1'-N1	-5.17	104.06	108.20
22	BA	614	A	P-O5'-C5'	-5.17	112.62	120.90
1	CA	968	A	O4'-C1'-N9	5.17	112.34	108.20
22	BA	243	U	P-O3'-C3'	-5.17	113.50	119.70
22	BA	1243	C	P-O5'-C5'	-5.17	112.63	120.90
22	BA	476	G	C3'-C2'-C1'	5.17	105.64	101.50
38	BQ	52	ARG	NE-CZ-NH1	-5.17	117.72	120.30
22	DA	1937	A	P-O3'-C3'	5.17	125.90	119.70
22	DA	2500	U	P-O3'-C3'	5.17	125.90	119.70
22	BA	116	C	O4'-C1'-N1	5.17	112.33	108.20
22	BA	785	G	P-O5'-C5'	-5.17	112.63	120.90
22	BA	1146	C	O4'-C1'-N1	5.17	112.33	108.20
22	DA	1327	A	P-O3'-C3'	-5.17	113.50	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	93	U	C3'-C2'-C1'	5.16	105.63	101.50
22	BA	1210	G	P-O5'-C5'	-5.16	112.64	120.90
22	BA	1681	G	C8-N9-C4	5.16	108.47	106.40
22	BA	1784	A	C8-N9-C4	5.16	107.87	105.80
22	BA	2683	C	P-O3'-C3'	-5.16	113.50	119.70
22	DA	92	U	C3'-C2'-C1'	5.16	105.63	101.50
22	DA	1759	A	C3'-C2'-C1'	5.16	105.63	101.50
22	DA	2245	U	O4'-C1'-N1	5.16	112.33	108.20
22	DA	321	U	O4'-C1'-N1	5.16	112.33	108.20
22	BA	1806	C	O4'-C1'-N1	-5.16	104.07	108.20
22	BA	2025	C	C4-C5-C6	5.16	119.98	117.40
22	BA	767	U	O4'-C1'-N1	5.16	112.33	108.20
1	CA	404	G	P-O3'-C3'	5.16	125.89	119.70
22	DA	1943	U	N1-C1'-C2'	5.16	120.70	114.00
22	BA	1255	U	OP1-P-OP2	5.16	127.33	119.60
22	DA	321	U	P-O3'-C3'	5.16	125.89	119.70
22	DA	1965	C	O4'-C1'-N1	-5.16	104.08	108.20
22	BA	390	U	O4'-C1'-N1	-5.15	104.08	108.20
22	BA	1963	U	O4'-C1'-N1	-5.15	104.08	108.20
22	BA	2876	G	C6-C5-N7	-5.15	127.31	130.40
22	DA	2877	G	C3'-C2'-C1'	5.15	105.62	101.50
22	BA	1109	C	O4'-C1'-N1	5.15	112.32	108.20
22	BA	1971	U	OP1-P-O3'	5.15	116.53	105.20
22	DA	15	G	N9-C1'-C2'	-5.15	106.33	112.00
22	DA	234	U	P-O3'-C3'	-5.15	113.52	119.70
22	DA	528	A	P-O3'-C3'	-5.15	113.52	119.70
22	DA	587	C	N1-C1'-C2'	5.15	120.70	114.00
22	BA	1555	G	C3'-C2'-C1'	5.15	105.62	101.50
22	BA	2307	G	O4'-C1'-N9	5.15	112.32	108.20
1	CA	87	C	N1-C1'-C2'	-5.15	106.33	112.00
22	DA	752	A	P-O3'-C3'	5.15	125.88	119.70
22	DA	1023	U	C3'-C2'-C1'	5.15	105.62	101.50
22	DA	2578	G	P-O3'-C3'	-5.15	113.52	119.70
22	BA	972	A	O5'-P-OP2	-5.15	101.07	105.70
22	BA	451	U	C5-C6-N1	-5.15	120.13	122.70
22	BA	811	U	O4'-C1'-N1	5.15	112.32	108.20
22	BA	908	C	N1-C2-O2	-5.15	115.81	118.90
22	BA	1619	G	N9-C4-C5	5.15	107.46	105.40
22	BA	1981	A	C3'-C2'-C1'	5.15	105.62	101.50
1	AA	28	A	P-O5'-C5'	-5.15	112.67	120.90
1	AA	346	G	P-O3'-C3'	-5.15	113.52	119.70
22	BA	2832	U	O3'-P-O5'	-5.15	94.22	104.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	274	A	O4'-C1'-N9	5.14	112.32	108.20
22	DA	802	A	C3'-C2'-C1'	5.14	105.61	101.50
22	DA	2240	U	O5'-P-OP2	-5.14	101.07	105.70
22	BA	456	C	O5'-P-OP2	-5.14	101.07	105.70
22	BA	1364	G	P-O3'-C3'	5.14	125.87	119.70
22	DA	2197	U	P-O3'-C3'	5.14	125.87	119.70
22	BA	783	A	C5-C6-N1	-5.14	115.13	117.70
22	DA	1455	G	C3'-C2'-C1'	5.14	105.61	101.50
22	BA	542	C	O3'-P-O5'	-5.14	94.23	104.00
22	BA	1296	G	C5-C6-N1	5.14	114.07	111.50
1	AA	500	G	N9-C1'-C2'	-5.14	106.35	112.00
22	BA	2501	C	P-O5'-C5'	-5.14	112.68	120.90
22	BA	860	U	C3'-C2'-C1'	5.14	105.61	101.50
22	BA	1403	A	P-O3'-C3'	-5.14	113.54	119.70
22	BA	1568	G	C4-N9-C1'	5.14	133.18	126.50
22	BA	1802	A	P-O5'-C5'	-5.14	112.68	120.90
22	BA	2051	A	N1-C6-N6	5.14	121.68	118.60
22	BA	2375	G	P-O3'-C3'	-5.14	113.53	119.70
22	DA	749	A	N9-C1'-C2'	-5.14	106.35	112.00
22	BA	856	G	O3'-P-O5'	-5.13	94.25	104.00
22	BA	942	G	O3'-P-O5'	-5.13	94.24	104.00
22	BA	2781	A	C3'-C2'-C1'	5.13	105.61	101.50
22	DA	1510	G	C3'-C2'-C1'	5.13	105.61	101.50
22	BA	1989	G	C6-C5-N7	-5.13	127.32	130.40
22	BA	1989	G	O4'-C1'-N9	-5.13	104.09	108.20
22	BA	2690	U	O5'-P-OP2	-5.13	101.08	105.70
22	BA	255	A	C2-N3-C4	-5.13	108.03	110.60
1	CA	1453	G	C3'-C2'-C1'	5.13	105.60	101.50
22	DA	2347	C	C3'-C2'-C1'	5.13	105.60	101.50
22	BA	390	U	OP2-P-O3'	5.13	116.48	105.20
22	BA	2609	U	C4'-C3'-C2'	5.13	107.73	102.60
22	DA	87	U	P-O3'-C3'	-5.13	113.55	119.70
22	DA	1782	U	C3'-C2'-C1'	5.13	105.60	101.50
22	DA	2450	A	C3'-C2'-C1'	5.13	105.60	101.50
1	AA	1098	C	O4'-C1'-N1	-5.13	104.10	108.20
22	BA	1829	A	N9-C1'-C2'	-5.13	106.36	112.00
1	CA	93	U	C3'-C2'-C1'	5.13	105.60	101.50
22	DA	1267	U	C3'-C2'-C1'	5.13	105.60	101.50
22	DA	1418	G	C3'-C2'-C1'	5.13	105.60	101.50
22	DA	1783	A	O5'-P-OP2	-5.13	101.09	105.70
22	BA	2752	C	C3'-C2'-C1'	5.12	105.60	101.50
1	AA	210	C	P-O3'-C3'	5.12	125.85	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	26	G	O4'-C1'-N9	-5.12	104.10	108.20
22	BA	386	G	O4'-C1'-N9	5.12	112.30	108.20
1	AA	563	A	C3'-C2'-C1'	5.12	105.60	101.50
22	BA	55	G	N3-C2-N2	-5.12	116.31	119.90
22	BA	1653	G	O5'-P-OP2	-5.12	101.09	105.70
22	BA	2324	U	N1-C1'-C2'	5.12	120.66	114.00
22	BA	2813	A	C8-N9-C4	5.12	107.85	105.80
1	CA	1051	C	O4'-C1'-N1	5.12	112.30	108.20
22	BA	1700	A	P-O3'-C3'	-5.12	113.56	119.70
22	BA	2821	A	N9-C1'-C2'	-5.12	106.37	112.00
1	CA	963	G	O4'-C1'-N9	5.12	112.30	108.20
22	BA	52	A	C3'-C2'-C1'	5.12	105.59	101.50
22	BA	2586	U	P-O3'-C3'	-5.12	113.56	119.70
22	BA	1380	G	N9-C1'-C2'	-5.12	106.37	112.00
22	DA	2657	A	P-O3'-C3'	-5.12	113.56	119.70
1	AA	969	A	C3'-C2'-C1'	5.12	105.59	101.50
22	BA	682	G	C8-N9-C1'	-5.12	120.35	127.00
22	BA	529	A	C4'-C3'-C2'	5.11	107.71	102.60
22	BA	1114	C	P-O3'-C3'	5.11	125.84	119.70
23	BB	82	U	P-O5'-C5'	-5.11	112.72	120.90
22	DA	1399	C	C3'-C2'-C1'	5.11	105.59	101.50
22	DA	2615	U	P-O3'-C3'	-5.11	113.56	119.70
22	BA	940	G	O5'-P-OP2	-5.11	101.10	105.70
22	BA	1678	A	C5-C6-N6	-5.11	119.61	123.70
22	BA	1270	C	N3-C2-O2	5.11	125.48	121.90
22	BA	2567	G	N1-C6-O6	-5.11	116.83	119.90
22	DA	1816	C	O4'-C1'-N1	5.11	112.29	108.20
22	BA	112	U	N1-C2-O2	-5.11	119.22	122.80
22	DA	1735	A	P-O3'-C3'	-5.11	113.57	119.70
1	AA	786	G	P-O3'-C3'	5.11	125.83	119.70
22	BA	630	G	N9-C1'-C2'	-5.11	106.38	112.00
1	AA	95	C	O4'-C1'-N1	-5.11	104.11	108.20
22	BA	2055	C	O4'-C1'-N1	5.11	112.28	108.20
22	BA	2893	A	N9-C1'-C2'	5.11	120.64	114.00
1	CA	1066	C	C3'-C2'-C1'	5.11	105.58	101.50
22	BA	2608	G	P-O3'-C3'	5.10	125.82	119.70
1	CA	1455	G	C3'-C2'-C1'	5.10	105.58	101.50
22	DA	391	A	N9-C1'-C2'	-5.10	106.39	112.00
22	BA	1023	U	C3'-C2'-C1'	5.10	105.58	101.50
22	BA	2590	A	P-O5'-C5'	-5.10	112.74	120.90
22	DA	1025	G	N1-C6-O6	5.10	122.96	119.90
1	AA	1284	C	C3'-C2'-C1'	5.10	105.58	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	CA	534	U	C3'-C2'-C1'	5.10	105.58	101.50
1	AA	316	C	C3'-C2'-C1'	5.09	105.58	101.50
1	AA	755	G	C3'-C2'-C1'	5.09	105.58	101.50
22	BA	683	U	P-O3'-C3'	-5.09	113.59	119.70
22	BA	873	C	C5-C6-N1	-5.09	118.45	121.00
22	BA	1607	C	P-O3'-C3'	5.09	125.81	119.70
22	BA	668	A	N1-C2-N3	-5.09	126.75	129.30
22	BA	809	G	N3-C4-N9	5.09	129.06	126.00
22	BA	914	G	C3'-C2'-C1'	5.09	105.57	101.50
1	CA	1093	A	P-O3'-C3'	5.09	125.81	119.70
22	DA	1451	C	P-O3'-C3'	5.09	125.81	119.70
22	DA	1856	U	O4'-C1'-N1	5.09	112.27	108.20
1	AA	41	G	P-O3'-C3'	-5.09	113.59	119.70
1	AA	245	U	C3'-C2'-C1'	5.09	105.57	101.50
22	BA	2629	U	C5-C6-N1	-5.09	120.16	122.70
31	DJ	25	LEU	CA-CB-CG	5.09	127.01	115.30
22	BA	604	G	N9-C1'-C2'	-5.09	106.40	112.00
22	BA	1784	A	C2-N3-C4	-5.09	108.06	110.60
22	BA	1799	G	P-O3'-C3'	5.09	125.80	119.70
22	BA	1913	A	P-O3'-C3'	5.09	125.80	119.70
22	BA	2264	C	C6-N1-C2	5.09	122.33	120.30
1	CA	184	G	C3'-C2'-C1'	5.09	105.57	101.50
1	CA	1283	U	C3'-C2'-C1'	5.09	105.57	101.50
1	AA	1066	C	C3'-C2'-C1'	5.08	105.57	101.50
22	BA	1992	G	N9-C4-C5	5.08	107.43	105.40
22	BA	2725	A	O5'-C5'-C4'	-5.08	102.04	111.70
22	BA	1021	A	C3'-C2'-C1'	5.08	105.57	101.50
22	BA	1327	A	N1-C6-N6	5.08	121.65	118.60
22	BA	779	U	N3-C4-O4	5.08	122.96	119.40
22	BA	1822	C	O4'-C1'-N1	-5.08	104.14	108.20
22	BA	2544	G	P-O5'-C5'	-5.08	112.77	120.90
22	BA	2547	A	P-O5'-C5'	-5.08	112.77	120.90
22	DA	777	G	P-O3'-C3'	-5.08	113.60	119.70
22	BA	974	G	N3-C4-C5	5.08	131.14	128.60
22	DA	226	A	P-O3'-C3'	5.08	125.79	119.70
22	DA	397	U	C3'-C2'-C1'	5.08	105.56	101.50
22	DA	1256	G	N9-C1'-C2'	-5.08	106.42	112.00
22	DA	2609	U	O4'-C1'-N1	5.08	112.26	108.20
1	AA	258	G	C3'-C2'-C1'	5.08	105.56	101.50
22	BA	1420	A	P-O5'-C5'	-5.08	112.78	120.90
1	CA	67	C	N1-C1'-C2'	-5.08	106.42	112.00
1	CA	529	G	P-O3'-C3'	-5.08	113.61	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	321	U	O4'-C1'-N1	5.08	112.26	108.20
22	BA	760	G	N1-C6-O6	5.08	122.94	119.90
22	BA	1006	C	C5-C6-N1	-5.08	118.46	121.00
22	BA	1461	C	O4'-C1'-N1	5.08	112.26	108.20
22	DA	763	G	C3'-C2'-C1'	5.08	105.56	101.50
22	DA	1081	U	C3'-C2'-C1'	5.08	105.56	101.50
22	BA	856	G	C6-C5-N7	-5.07	127.36	130.40
22	BA	1222	U	P-O3'-C3'	-5.07	113.61	119.70
22	BA	2329	U	O4'-C1'-N1	5.07	112.26	108.20
22	BA	2898	U	O5'-P-OP2	-5.07	101.13	105.70
22	BA	85	G	N9-C1'-C2'	-5.07	106.42	112.00
23	BB	53	A	P-O5'-C5'	-5.07	112.79	120.90
22	DA	2340	A	P-O3'-C3'	-5.07	113.62	119.70
22	BA	528	A	C4-C5-C6	5.07	119.53	117.00
22	BA	1963	U	C3'-C2'-C1'	5.07	105.56	101.50
1	AA	756	C	P-O3'-C3'	-5.07	113.62	119.70
22	BA	239	C	C3'-C2'-C1'	5.07	105.55	101.50
1	CA	252	U	C3'-C2'-C1'	5.07	105.55	101.50
22	BA	1664	A	O3'-P-O5'	-5.07	94.38	104.00
22	BA	1867	G	C3'-C2'-C1'	5.07	105.55	101.50
22	BA	2297	A	N9-C1'-C2'	-5.07	106.43	112.00
22	BA	818	G	C6-N1-C2	-5.06	122.06	125.10
22	BA	1951	U	P-O3'-C3'	5.06	125.78	119.70
22	BA	2578	G	O4'-C1'-N9	5.06	112.25	108.20
22	DA	1817	G	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	464	U	P-O3'-C3'	5.06	125.77	119.70
22	BA	1240	U	C2-N1-C1'	5.06	123.78	117.70
22	DA	443	A	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	662	G	O5'-P-OP2	-5.06	101.14	105.70
22	BA	200	U	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	1008	A	P-O5'-C5'	5.06	129.00	120.90
22	BA	1297	C	P-O5'-C5'	-5.06	112.81	120.90
22	BA	1920	C	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	2081	U	C5-C6-N1	-5.06	120.17	122.70
22	BA	2199	A	P-O5'-C5'	-5.06	112.80	120.90
22	BA	2440	C	O5'-P-OP2	-5.06	101.15	105.70
22	BA	2787	C	C6-N1-C2	5.06	122.32	120.30
1	CA	245	U	C3'-C2'-C1'	5.06	105.55	101.50
22	DA	2298	A	C3'-C2'-C1'	5.06	105.55	101.50
23	DB	18	G	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	507	A	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	1403	A	C3'-C2'-C1'	5.06	105.55	101.50

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1700	A	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	2068	U	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	2750	A	C4'-C3'-C2'	5.06	107.66	102.60
1	AA	984	C	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	934	U	O4'-C1'-N1	5.06	112.25	108.20
22	BA	962	G	C2-N3-C4	-5.06	109.37	111.90
22	BA	1646	C	P-O5'-C5'	-5.06	112.81	120.90
22	BA	2514	U	C5-C6-N1	-5.06	120.17	122.70
22	BA	2662	A	C3'-C2'-C1'	5.06	105.55	101.50
22	BA	804	A	C2-N3-C4	-5.05	108.07	110.60
22	BA	1303	G	N9-C1'-C2'	-5.05	106.44	112.00
22	DA	1415	U	P-O3'-C3'	5.05	125.77	119.70
22	DA	1722	A	C3'-C2'-C1'	5.05	105.54	101.50
22	BA	702	U	O4'-C1'-N1	-5.05	104.16	108.20
22	BA	1403	A	N9-C1'-C2'	-5.05	106.44	112.00
1	CA	1161	C	P-O3'-C3'	-5.05	113.64	119.70
1	CA	915	A	C3'-C2'-C1'	5.05	105.54	101.50
22	BA	686	U	N3-C2-O2	5.05	125.73	122.20
22	BA	799	G	C5-C6-O6	-5.05	125.57	128.60
22	BA	938	G	P-O3'-C3'	-5.05	113.64	119.70
22	BA	2442	C	O5'-P-OP2	-5.05	101.16	105.70
22	BA	2543	G	C8-N9-C4	-5.05	104.38	106.40
1	AA	116	A	O5'-P-OP2	-5.05	101.16	105.70
1	AA	1087	G	N9-C1'-C2'	-5.05	106.45	112.00
22	BA	2791	G	C8-N9-C4	-5.05	104.38	106.40
22	DA	477	A	C3'-C2'-C1'	5.05	105.54	101.50
22	DA	1483	G	N9-C1'-C2'	-5.05	106.45	112.00
22	BA	1966	A	P-O5'-C5'	-5.04	112.83	120.90
1	AA	1433	A	C3'-C2'-C1'	5.04	105.53	101.50
22	BA	981	A	N1-C6-N6	5.04	121.63	118.60
22	BA	1832	C	N1-C2-O2	-5.04	115.87	118.90
22	BA	2868	A	P-O5'-C5'	-5.04	112.83	120.90
1	CA	821	G	C3'-C2'-C1'	5.04	105.53	101.50
1	CA	1449	C	C3'-C2'-C1'	5.04	105.53	101.50
22	DA	2836	U	C3'-C2'-C1'	5.04	105.53	101.50
1	AA	13	U	N1-C1'-C2'	5.04	120.55	114.00
22	BA	35	G	C5'-C4'-O4'	-5.04	103.05	109.10
22	BA	2232	C	C6-N1-C2	5.04	122.32	120.30
1	CA	1087	G	C3'-C2'-C1'	5.04	105.53	101.50
1	CA	652	U	N1-C1'-C2'	5.04	120.55	114.00
1	AA	43	C	C6-N1-C2	5.04	122.32	120.30
22	BA	1662	U	P-O5'-C5'	-5.04	112.84	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	BA	1965	C	C6-N1-C2	-5.04	118.28	120.30
22	DA	217	A	C3'-C2'-C1'	5.04	105.53	101.50
22	DA	2263	C	O4'-C1'-N1	5.04	112.23	108.20
1	AA	1319	A	P-O3'-C3'	5.04	125.75	119.70
22	BA	312	G	C3'-C2'-C1'	5.04	105.53	101.50
22	BA	612	G	P-O3'-C3'	5.04	125.74	119.70
22	BA	315	G	P-O5'-C5'	-5.03	112.85	120.90
22	BA	1377	G	P-O3'-C3'	5.03	125.74	119.70
22	BA	2063	C	C3'-C2'-C1'	5.03	105.53	101.50
1	CA	794	A	N9-C1'-C2'	-5.03	106.46	112.00
1	CA	986	U	C3'-C2'-C1'	5.03	105.53	101.50
22	BA	2385	C	C3'-C2'-C1'	5.03	105.53	101.50
1	AA	1102	A	C3'-C2'-C1'	5.03	105.52	101.50
22	BA	126	A	C3'-C2'-C1'	5.03	105.52	101.50
22	BA	466	A	C2-N3-C4	5.03	113.11	110.60
22	BA	1785	A	C8-N9-C4	-5.03	103.79	105.80
1	CA	1284	C	N1-C1'-C2'	-5.03	106.47	112.00
1	CA	1326	U	O4'-C1'-N1	5.03	112.22	108.20
22	DA	958	U	P-O3'-C3'	-5.03	113.67	119.70
22	DA	1340	U	C3'-C2'-C1'	5.03	105.52	101.50
1	AA	985	C	C3'-C2'-C1'	5.03	105.52	101.50
22	BA	1417	C	C3'-C2'-C1'	5.03	105.52	101.50
22	BA	1554	U	O3'-P-O5'	-5.03	94.45	104.00
22	BA	1791	A	OP2-P-O3'	5.03	116.26	105.20
22	BA	1926	U	O4'-C1'-N1	5.03	112.22	108.20
22	BA	2035	G	O4'-C1'-N9	5.03	112.22	108.20
22	BA	2036	C	C3'-C2'-C1'	5.03	105.52	101.50
22	BA	2486	C	C6-N1-C2	5.03	122.31	120.30
22	DA	475	C	P-O3'-C3'	-5.03	113.67	119.70
1	AA	70	U	P-O3'-C3'	5.03	125.73	119.70
22	BA	436	C	P-O3'-C3'	-5.03	113.67	119.70
22	BA	931	U	N1-C1'-C2'	5.03	120.53	114.00
22	BA	1790	C	C2-N3-C4	-5.03	117.39	119.90
22	BA	2440	C	P-O3'-C3'	-5.03	113.67	119.70
22	BA	2880	C	C3'-C2'-C1'	5.03	105.52	101.50
1	CA	451	A	P-O3'-C3'	5.03	125.73	119.70
1	CA	214	C	C3'-C2'-C1'	5.02	105.52	101.50
22	BA	159	G	P-O3'-C3'	5.02	125.73	119.70
22	BA	1074	G	C3'-C2'-C1'	5.02	105.52	101.50
22	BA	1261	C	P-O3'-C3'	5.02	125.73	119.70
22	BA	2249	U	C4'-C3'-C2'	5.02	107.62	102.60
22	BA	2756	U	C4'-C3'-C2'	5.02	107.62	102.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	DA	572	A	C3'-C2'-C1'	5.02	105.52	101.50
1	AA	1062	U	O4'-C1'-N1	-5.02	104.18	108.20
22	DA	2325	G	C3'-C2'-C1'	5.02	105.52	101.50
22	BA	93	G	C3'-C2'-C1'	5.02	105.52	101.50
1	AA	754	C	P-O3'-C3'	-5.02	113.68	119.70
22	BA	2368	C	P-O3'-C3'	-5.02	113.68	119.70
22	BA	584	C	C6-N1-C2	5.02	122.31	120.30
22	BA	1675	C	C3'-C2'-C1'	5.02	105.51	101.50
22	BA	1448	G	P-O5'-C5'	-5.01	112.88	120.90
1	CA	595	A	P-O3'-C3'	5.01	125.72	119.70
22	DA	656	G	N9-C1'-C2'	-5.01	106.48	112.00
22	DA	1871	A	O4'-C1'-N9	5.01	112.21	108.20
22	DA	1931	U	C3'-C2'-C1'	5.01	105.51	101.50
1	AA	1320	C	C3'-C2'-C1'	5.01	105.51	101.50
23	BB	83	G	O5'-P-OP2	-5.01	101.19	105.70
22	BA	2456	C	OP1-P-O3'	5.01	116.22	105.20
22	DA	1455	G	N9-C1'-C2'	-5.01	106.49	112.00
22	DA	96	C	O4'-C1'-N1	-5.01	104.19	108.20
22	DA	335	C	O4'-C1'-N1	5.01	112.21	108.20
22	BA	369	U	P-O3'-C3'	5.01	125.71	119.70
22	BA	2767	C	O4'-C1'-N1	-5.01	104.19	108.20
1	AA	463	U	C3'-C2'-C1'	5.00	105.50	101.50
22	BA	847	U	C4'-C3'-C2'	5.00	107.60	102.60
22	BA	1134	A	OP1-P-OP2	5.00	127.11	119.60
22	BA	1188	U	N1-C1'-C2'	5.00	120.50	114.00
22	BA	2749	A	P-O5'-C5'	-5.00	112.89	120.90
22	DA	1560	G	C3'-C2'-C1'	5.00	105.50	101.50
22	DA	2573	C	C3'-C2'-C1'	5.00	105.50	101.50
1	AA	109	A	O3'-P-O5'	-5.00	94.50	104.00
22	BA	834	G	C6-C5-N7	-5.00	127.40	130.40
22	BA	2071	A	N9-C4-C5	5.00	107.80	105.80
22	BA	2277	G	P-O3'-C3'	-5.00	113.70	119.70

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
12	AL	22	ALA	Peptide
20	AT	6	ALA	Peptide
25	BD	191	GLY	Peptide
31	BJ	110	PRO	Peptide
35	BN	101	GLY	Peptide

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32895	0	16553	2319	0
1	CA	32831	0	16521	2706	0
2	AB	1705	0	1732	283	0
2	CB	1705	0	1732	260	0
3	AC	1625	0	1699	194	0
3	CC	1625	0	1699	238	0
4	AD	1643	0	1710	284	0
4	CD	1643	0	1710	269	0
5	AE	1106	0	1148	203	0
5	CE	1106	0	1148	183	0
6	AF	818	0	808	113	0
6	CF	818	0	808	134	0
7	AG	1182	0	1240	150	0
7	CG	1175	0	1230	209	0
8	AH	979	0	1034	162	0
8	CH	979	0	1034	140	0
9	AI	1022	0	1070	165	0
9	CI	1022	0	1070	178	0
10	AJ	787	0	828	169	0
10	CJ	787	0	828	142	0
11	AK	877	0	887	165	0
11	CK	877	0	887	138	0
12	AL	955	0	1019	132	0
12	CL	955	0	1019	173	0
13	AM	884	0	944	120	0
13	CM	877	0	937	176	0
14	AN	774	0	827	131	0
14	CN	769	0	822	149	0
15	AO	714	0	737	93	0
15	CO	714	0	737	71	0
16	AP	649	0	666	105	0
16	CP	639	0	656	135	0
17	AQ	649	0	691	141	0
17	CQ	649	0	691	98	0
18	AR	456	0	478	51	0
18	CR	456	0	478	95	0
19	AS	638	0	665	97	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	CS	638	0	665	118	0
20	AT	665	0	714	117	0
20	CT	665	0	714	99	0
21	AU	426	0	449	131	0
21	CU	426	0	449	126	0
22	BA	61274	0	30819	3116	1
22	DA	60995	0	30679	5725	1
23	BB	2529	0	1281	109	0
23	DB	2507	0	1270	238	0
24	BC	2083	0	2157	313	0
24	DC	2083	0	2157	347	0
25	BD	1565	0	1616	274	0
25	DD	1565	0	1616	319	0
26	BE	1552	0	1619	199	0
26	DE	1552	0	1619	321	0
27	BF	1411	0	1447	210	0
27	DF	1420	0	1460	289	0
28	BG	1323	0	1374	225	0
28	DG	1323	0	1374	229	0
29	BH	1111	0	1148	184	0
29	DH	1111	0	1148	208	0
30	BI	1032	0	1088	135	0
30	DI	1032	0	1088	149	0
31	BJ	1129	0	1162	214	0
31	DJ	1129	0	1162	205	0
32	BK	939	0	1012	150	0
32	DK	939	0	1012	188	0
33	BL	1045	0	1117	169	0
33	DL	1045	0	1117	224	0
34	BM	1074	0	1157	148	0
34	DM	1074	0	1157	156	0
35	BN	961	0	1000	131	0
35	DN	961	0	1000	228	0
36	BO	892	0	923	120	0
36	DO	892	0	923	118	0
37	BP	917	0	965	189	0
37	DP	917	0	965	184	0
38	BQ	947	0	1022	192	0
38	DQ	947	0	1022	203	0
39	BR	816	0	839	145	0
39	DR	816	0	839	147	0
40	BS	857	0	922	93	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
40	DS	857	0	922	125	0
41	BT	739	0	807	155	0
41	DT	739	0	807	174	0
42	BU	780	0	834	103	0
42	DU	780	0	834	147	0
43	BV	753	0	780	63	0
43	DV	753	0	780	118	0
44	BW	596	0	610	286	0
44	DW	596	0	610	180	0
45	BX	625	0	655	113	0
45	DX	625	0	655	128	0
46	BY	509	0	543	72	0
46	DY	509	0	543	114	0
47	BZ	449	0	491	44	0
47	DZ	449	0	491	69	0
48	B0	444	0	461	52	0
48	D0	444	0	461	92	0
49	B1	410	0	440	66	0
49	D1	410	0	440	55	0
50	B2	377	0	418	29	0
50	D2	377	0	418	65	0
51	B3	504	0	574	71	0
51	D3	504	0	574	105	0
52	B4	302	0	340	48	0
52	D4	302	0	343	48	0
53	AA	41	0	0	0	0
53	AN	2	0	0	0	0
53	BA	135	0	0	0	0
53	BB	4	0	0	0	0
53	CA	42	0	0	0	0
53	DA	133	0	0	0	0
53	DB	1	0	0	0	0
53	DC	2	0	0	0	0
53	DJ	1	0	0	0	0
54	BA	51	0	67	4	0
55	B4	1	0	0	0	0
55	D4	1	0	0	0	0
56	AA	197	0	0	12	0
56	AE	1	0	0	0	0
56	AL	1	0	0	0	0
56	AN	7	0	0	0	0
56	AT	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
56	AU	1	0	0	0	0
56	B3	3	0	0	0	0
56	B4	2	0	0	0	0
56	BA	605	0	0	46	0
56	BB	19	0	0	0	0
56	BC	7	0	0	0	0
56	BD	3	0	0	2	0
56	BE	1	0	0	1	0
56	BL	4	0	0	1	0
56	BN	2	0	0	0	0
56	BR	1	0	0	0	0
56	BT	2	0	0	1	0
56	BV	1	0	0	1	0
56	CA	195	0	0	3	0
56	CE	3	0	0	1	0
56	CL	1	0	0	0	0
56	CN	3	0	0	0	0
56	CT	4	0	0	0	0
56	CU	1	0	0	0	0
56	D2	1	0	0	1	0
56	D3	1	0	0	0	0
56	D4	4	0	0	0	0
56	DA	600	0	0	30	0
56	DB	3	0	0	0	0
56	DC	13	0	0	2	0
56	DD	2	0	0	0	0
56	DE	4	0	0	0	0
56	DJ	3	0	0	0	0
56	DL	4	0	0	1	0
56	DN	2	0	0	0	0
56	DT	2	0	0	0	0
56	DU	2	0	0	0	0
56	DV	2	0	0	0	0
All	All	284525	0	190908	27236	1

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 58.

All (27236) 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)
37:BP:50:ARG:CG	37:BP:57:ALA:H	1.24	1.44
37:BP:50:ARG:HD2	37:BP:51:ASN:N	1.27	1.42
37:BP:50:ARG:HG2	37:BP:57:ALA:N	1.13	1.41
1:CA:238:A:C2'	1:CA:239:U:H5''	1.57	1.34
38:BQ:63:ARG:NH1	38:BQ:96:ASP:HA	1.37	1.34
25:BD:114:LYS:HE3	25:BD:114:LYS:N	1.41	1.33
22:BA:1063:G:OP1	30:BI:76:ALA:HB3	1.25	1.33
37:BP:50:ARG:CD	37:BP:51:ASN:H	1.42	1.32
31:BJ:111:LYS:HD3	31:BJ:112:GLY:N	1.44	1.32
45:BX:30:PRO:HB2	45:BX:32:LEU:CD1	1.61	1.31
12:CL:43:LYS:CB	12:CL:44:PRO:HD3	1.59	1.30
5:AE:152:VAL:HB	5:AE:155:LYS:NZ	1.44	1.30
25:BD:151:THR:HG22	25:BD:152:PRO:CD	1.60	1.29
22:BA:636:G:C6	33:BL:111:ILE:HD11	1.70	1.26
22:DA:1817:G:O2'	22:DA:1818:U:H5'	1.36	1.24
6:AF:16:GLU:CG	4:CD:191:SER:HB2	1.68	1.23
22:DA:2800:A:O2'	22:DA:2801:G:H4'	1.37	1.23
28:BG:84:LYS:HG3	28:BG:132:LEU:N	1.53	1.22
1:CA:1152:A:H2'	1:CA:1153:G:C8	1.75	1.22
22:BA:1073:A:C2'	22:BA:1074:G:H5''	1.69	1.22
43:BV:80:HIS:CD2	43:BV:83:LYS:H	1.58	1.21
22:DA:1401:G:H2'	22:DA:1402:U:C6	1.76	1.21
1:AA:430:A:O2'	1:AA:431:A:H5'	1.33	1.20
27:BF:35:LEU:HB3	27:BF:153:ILE:CG2	1.71	1.20
22:BA:636:G:C5	33:BL:111:ILE:HD11	1.77	1.20
37:BP:50:ARG:HD3	37:BP:56:SER:CB	1.71	1.20
26:DE:148:ILE:HD13	26:DE:187:VAL:HG21	1.23	1.20
16:AP:4:ILE:HG12	16:AP:21:VAL:HG22	1.21	1.20
1:CA:373:A:O2'	1:CA:374:A:H5'	1.35	1.20
44:DW:27:GLY:CA	44:DW:31:LEU:HD11	1.70	1.19
22:DA:784:G:C2	24:DC:227:VAL:HG21	1.77	1.19
2:AB:40:ILE:HD13	2:AB:201:GLY:HA2	1.22	1.19
7:CG:91:ARG:HG2	7:CG:92:PRO:HD2	1.24	1.18
22:DA:1064:C:O2'	22:DA:1065:U:H5'	1.40	1.18
22:BA:2585:U:O2'	22:BA:2586:U:H5'	1.42	1.18
35:DN:28:LEU:HD21	35:DN:115:LEU:HD21	1.19	1.18
1:AA:1127:G:O2'	1:AA:1128:C:H5'	1.40	1.18
40:BS:66:ILE:HA	40:BS:69:LEU:HD22	1.26	1.17
11:CK:70:ALA:HA	11:CK:73:VAL:HG22	1.24	1.17
1:AA:1531:A:C8	1:AA:1531:A:H5'	1.79	1.17
1:CA:519:C:H2'	1:CA:520:A:C8	1.80	1.17
33:BL:93:ASN:HD22	33:BL:94:THR:N	1.42	1.17

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DY:20:ASN:HD22	46:DY:50:VAL:HG22	1.09	1.17
24:BC:68:ARG:HD3	24:BC:103:ILE:HD11	1.27	1.16
51:B3:31:ILE:CD1	51:B3:34:LYS:HD2	1.73	1.16
38:DQ:77:LYS:HE2	38:DQ:116:LEU:HD21	1.24	1.16
1:CA:238:A:H2'	1:CA:239:U:C5'	1.76	1.16
32:BK:18:ARG:HB2	32:BK:45:GLU:CG	1.74	1.16
22:DA:1784:A:H4'	22:DA:1785:A:O5'	1.41	1.16
22:DA:2214:C:O2'	22:DA:2215:C:H5'	1.44	1.16
6:AF:16:GLU:HG2	4:CD:191:SER:CB	1.76	1.16
3:CC:109:GLU:HG2	3:CC:139:ASN:HB2	1.21	1.16
22:DA:2346:A:H3'	22:DA:2347:C:H5''	1.21	1.16
28:BG:137:LYS:HA	28:BG:140:ILE:HD11	1.28	1.15
28:BG:83:THR:HA	28:BG:84:LYS:NZ	1.58	1.15
22:DA:1469:A:H2'	22:DA:1470:A:C8	1.81	1.15
25:BD:99:GLU:HG3	25:BD:100:LEU:H	1.08	1.15
22:DA:118:A:N3	22:DA:178:G:H1'	1.62	1.15
22:DA:455:C:H3'	22:DA:456:C:H5'	1.25	1.15
5:AE:153:ALA:HA	5:AE:156:ARG:CB	1.76	1.15
27:BF:40:GLY:HA2	27:BF:84:ILE:HD11	1.27	1.15
39:BR:49:ILE:HD12	39:BR:52:PRO:CA	1.76	1.15
42:DU:90:LYS:HE2	42:DU:92:VAL:HG12	1.19	1.15
22:DA:2758:A:O2'	22:DA:2759:G:H5'	1.45	1.15
1:CA:1182:G:H4'	1:CA:1183:U:H5'	1.23	1.15
12:CL:89:LEU:HB3	12:CL:92:VAL:HG21	1.19	1.15
38:BQ:63:ARG:HH12	38:BQ:96:ASP:CA	1.59	1.15
1:CA:213:G:H2'	1:CA:214:C:C6	1.82	1.15
3:CC:110:LEU:HD21	3:CC:203:LYS:HD2	1.21	1.15
45:BX:58:ILE:HD12	45:BX:66:VAL:HG21	1.27	1.14
49:B1:8:ILE:HG23	49:B1:51:ALA:HA	1.27	1.14
34:DM:42:THR:HG22	34:DM:44:ARG:H	1.07	1.14
1:AA:1306:A:H2'	1:AA:1307:U:H5'	1.27	1.14
27:BF:35:LEU:HB3	27:BF:153:ILE:HG23	1.28	1.14
22:DA:143:C:H2'	22:DA:144:A:C8	1.82	1.14
1:AA:204:G:H3'	1:AA:205:A:H5''	1.15	1.14
4:CD:25:ARG:HG2	4:CD:25:ARG:HH11	1.02	1.14
22:DA:1915:U:H2'	22:DA:1916:A:C8	1.81	1.14
22:DA:449:A:O2'	22:DA:450:G:H5'	1.42	1.14
45:DX:53:LYS:HA	45:DX:56:ARG:HB3	1.29	1.14
41:BT:29:THR:HG22	41:BT:86:THR:HG22	1.27	1.14
1:AA:93:U:O2'	1:AA:94:G:H5''	1.48	1.14
25:BD:106:LYS:H	25:BD:106:LYS:HD2	1.11	1.14

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:170:ARG:HH21	26:BE:170:ARG:HG2	0.97	1.13
22:DA:996:A:H4'	38:DQ:91:ARG:HD2	1.17	1.13
1:AA:1279:G:H1'	1:AA:1282:C:N4	1.63	1.13
28:BG:8:VAL:HG11	28:BG:49:LEU:HB2	1.25	1.13
38:BQ:69:ARG:CB	38:BQ:69:ARG:HH21	1.60	1.13
12:CL:82:ARG:HG2	12:CL:82:ARG:HH11	1.06	1.13
21:CU:24:LYS:HG3	21:CU:25:ALA:H	1.05	1.13
8:AH:28:SER:HB2	8:AH:58:LEU:HB2	1.30	1.13
2:AB:9:LEU:HD12	2:AB:42:LEU:HD13	1.13	1.13
38:DQ:87:VAL:HG21	39:DR:52:PRO:HD3	1.15	1.13
22:DA:1537:G:C2'	22:DA:1538:G:H4'	1.79	1.13
12:AL:43:LYS:HB2	12:AL:44:PRO:HD3	1.23	1.13
25:BD:151:THR:CG2	25:BD:152:PRO:HD3	1.78	1.13
22:BA:855:G:H21	44:BW:23:LYS:HG2	1.13	1.13
39:BR:49:ILE:CD1	39:BR:52:PRO:HA	1.78	1.13
12:CL:83:GLY:HA2	12:CL:94:TYR:HA	1.29	1.13
1:AA:545:C:H2'	1:AA:546:A:H5'	1.28	1.12
1:CA:6:G:N3	1:CA:6:G:H2'	1.62	1.12
43:DV:44:HIS:NE2	43:DV:85:LYS:HB2	1.64	1.12
28:BG:104:LEU:HB2	28:BG:112:VAL:CG2	1.79	1.12
32:BK:18:ARG:HB2	32:BK:45:GLU:HG2	1.15	1.12
10:AJ:36:VAL:HG22	10:AJ:76:ILE:HG12	1.20	1.12
37:BP:19:PHE:O	37:BP:20:ARG:HB3	1.45	1.12
10:CJ:15:HIS:HA	10:CJ:18:ILE:HG22	1.29	1.12
4:CD:89:LEU:HD23	4:CD:199:ILE:HD11	1.26	1.12
29:DH:83:LYS:HE2	29:DH:149:GLU:HB3	1.30	1.12
36:DO:17:LYS:HE2	36:DO:21:LEU:HD11	1.31	1.12
29:DH:93:SER:HB3	29:DH:121:VAL:HG21	1.31	1.12
31:BJ:73:VAL:HG23	31:BJ:74:TYR:H	1.01	1.12
26:DE:130:LYS:HB3	26:DE:133:LEU:HB3	1.19	1.12
34:DM:27:SER:H	34:DM:66:ARG:NH2	1.47	1.12
5:AE:155:LYS:HA	5:AE:158:LYS:NZ	1.62	1.12
6:CF:92:THR:HG22	6:CF:94:HIS:H	1.13	1.12
37:DP:20:ARG:HD2	37:DP:21:PRO:HD2	1.21	1.12
16:AP:28:ARG:HG2	16:AP:29:ASN:ND2	1.63	1.12
21:AU:9:GLU:CG	21:AU:10:PRO:HD3	1.79	1.12
26:DE:130:LYS:HG3	26:DE:133:LEU:HD13	1.27	1.12
2:AB:46:VAL:HB	2:AB:47:PRO:HD3	1.32	1.11
4:AD:36:ALA:HA	4:AD:41:GLY:HA3	1.11	1.11
7:AG:12:LEU:H	7:AG:12:LEU:HD22	1.10	1.11
1:CA:1284:C:H3'	1:CA:1285:A:H5''	1.27	1.11

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:52:ARG:HH11	37:DP:52:ARG:HG2	1.12	1.11
26:BE:79:ARG:HG2	26:BE:80:SER:H	1.11	1.11
27:BF:40:GLY:CA	27:BF:84:ILE:HD11	1.79	1.11
9:AI:32:ARG:HG2	9:AI:36:GLN:CB	1.79	1.11
31:DJ:75:TYR:HD1	31:DJ:84:ILE:HD11	1.11	1.11
1:AA:468:A:O2'	1:AA:469:C:H5'	1.51	1.11
22:BA:1070:A:C2	30:BI:9:LYS:HG2	1.84	1.11
10:CJ:47:GLU:HB2	10:CJ:67:ILE:HG13	1.33	1.11
44:DW:37:VAL:HG12	44:DW:55:ASP:HB2	1.17	1.11
44:BW:28:GLU:HB3	44:BW:31:LEU:HD21	1.30	1.11
22:DA:2051:A:H4'	22:DA:2052:A:OP1	1.40	1.11
22:BA:1714:U:H2'	22:BA:1714:U:O2	1.47	1.11
24:BC:16:VAL:HB	24:BC:203:VAL:HB	1.24	1.11
52:D4:16:ILE:HG12	52:D4:25:VAL:HG22	1.18	1.11
29:BH:32:PRO:HB3	45:BX:38:TRP:HB3	1.29	1.11
2:CB:46:VAL:HG13	2:CB:47:PRO:HD3	1.28	1.11
22:BA:1060:U:C4'	22:BA:1061:U:H5'	1.81	1.10
22:BA:866:A:H5'	22:BA:866:A:C8	1.86	1.10
22:DA:197:A:H62	22:DA:2430:A:H2'	1.02	1.10
19:CS:40:PHE:HB3	19:CS:41:PRO:HD2	1.25	1.10
32:DK:71:ARG:HB3	32:DK:72:PRO:CD	1.80	1.10
40:DS:32:ALA:HA	40:DS:35:ILE:HD11	1.30	1.10
22:BA:1188:U:H2'	22:BA:1189:A:H5'	1.32	1.10
22:DA:647:G:H2'	22:DA:648:G:H8	1.15	1.10
38:DQ:61:ILE:HD11	38:DQ:92:LYS:HD3	1.22	1.10
25:BD:106:LYS:HB3	25:BD:206:ALA:HB3	1.33	1.10
31:BJ:44:TYR:CD2	38:BQ:63:ARG:HD3	1.86	1.10
44:BW:76:ARG:HH21	44:BW:76:ARG:HG3	1.14	1.10
22:DA:1324:G:H1'	22:DA:1616:A:N6	1.66	1.10
22:DA:2378:A:H2'	22:DA:2379:G:H5'	1.23	1.10
17:AQ:12:VAL:HG13	17:AQ:13:SER:H	1.00	1.10
22:BA:1499:C:O2'	22:BA:1500:G:H5'	1.48	1.10
37:BP:13:LYS:HE3	37:BP:76:HIS:HA	1.32	1.10
22:BA:1060:U:H4'	22:BA:1061:U:C5'	1.82	1.09
35:DN:54:LEU:HD11	35:DN:66:ALA:HB2	1.33	1.09
1:AA:1239:A:H62	1:AA:1299:A:N6	1.48	1.09
8:CH:68:LYS:HD3	8:CH:69:ALA:H	1.14	1.09
38:DQ:4:LYS:HE3	38:DQ:7:VAL:HG13	1.16	1.09
12:AL:49:ARG:HH11	12:AL:49:ARG:HG2	1.12	1.09
49:B1:24:LYS:HE2	49:B1:52:LYS:HB2	1.31	1.09
35:BN:73:ASN:HA	35:BN:76:VAL:HG12	1.30	1.09

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:90:LEU:HB2	29:DH:123:ARG:HB3	1.31	1.09
22:BA:1179:G:C6	22:BA:1180:U:H1'	1.87	1.09
43:BV:10:LYS:H	43:BV:10:LYS:HD3	1.05	1.09
3:CC:29:ALA:HB1	14:CN:64:ARG:HH12	0.95	1.09
44:DW:23:LYS:HD2	44:DW:24:ARG:N	1.68	1.09
1:AA:488:C:O2'	1:AA:489:C:H5'	1.52	1.09
26:BE:108:ILE:HD11	26:BE:180:LEU:HB3	1.31	1.09
44:DW:27:GLY:HA2	44:DW:31:LEU:HD11	1.31	1.09
4:AD:47:LEU:HD21	4:AD:52:VAL:HG12	1.12	1.09
38:BQ:4:LYS:HG3	38:BQ:5:ARG:H	1.10	1.09
44:BW:23:LYS:HG3	44:BW:24:ARG:O	1.52	1.09
1:CA:1226:C:H41	13:CM:102:LYS:HA	1.05	1.09
20:AT:43:LYS:HB3	20:AT:86:ALA:HB1	1.25	1.09
22:BA:2431:U:H5'	22:BA:2431:U:H6	1.18	1.09
12:CL:43:LYS:HB2	12:CL:44:PRO:CD	1.82	1.09
22:DA:1032:A:H1'	52:D4:23:ILE:HD13	1.33	1.09
20:AT:6:ALA:HB1	20:AT:9:ARG:HB2	1.29	1.09
51:B3:31:ILE:HD11	51:B3:34:LYS:CD	1.83	1.09
33:DL:117:THR:HG22	33:DL:118:THR:H	1.17	1.09
40:BS:1:MET:HE2	40:BS:1:MET:HA	1.31	1.09
10:CJ:5:ARG:HG2	10:CJ:79:PRO:HG3	1.27	1.09
22:DA:2135:A:H3'	22:DA:2136:G:H5''	1.19	1.09
22:BA:1073:A:H2'	22:BA:1074:G:H5''	1.35	1.09
1:AA:158:G:H2'	1:AA:159:G:H5'	1.17	1.08
4:AD:43:ARG:O	4:AD:45:PRO:HD3	1.49	1.08
21:AU:52:VAL:HG13	21:AU:53:LYS:H	1.17	1.08
4:CD:25:ARG:HH12	4:CD:30:LYS:HG2	1.04	1.08
25:DD:9:VAL:HG22	37:DP:4:ILE:HD11	1.33	1.08
6:CF:86:ARG:NH1	18:CR:63:TYR:HB3	1.68	1.08
22:DA:2585:U:O2'	22:DA:2586:U:H5'	1.53	1.08
3:AC:56:ILE:HG12	3:AC:65:VAL:HG22	1.35	1.08
22:DA:2389:G:H5''	22:DA:2390:U:H5'	1.26	1.08
1:AA:619:U:H3	4:AD:130:ASN:HB3	1.18	1.08
22:BA:2309:A:O2'	22:BA:2310:C:H5'	1.53	1.08
25:BD:120:GLY:HA2	25:BD:162:ALA:CB	1.83	1.08
52:D4:7:VAL:HG13	52:D4:8:LYS:H	1.17	1.08
26:DE:47:LYS:HB3	26:DE:51:GLU:HB2	1.31	1.08
39:DR:39:LEU:HA	39:DR:49:ILE:HG21	1.15	1.08
44:DW:40:ARG:HG2	44:DW:40:ARG:HH11	1.16	1.08
1:AA:204:G:H3'	1:AA:205:A:C5'	1.82	1.08
1:AA:721:G:H4'	1:AA:722:G:O5'	1.46	1.08

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:923:A:H5''	5:AE:25:LYS:HE2	1.30	1.08
1:CA:764:C:H2'	1:CA:765:G:H5'	1.33	1.08
22:DA:2135:A:H2'	22:DA:2136:G:H8	0.98	1.08
37:BP:77:SER:OG	37:BP:79:VAL:HG13	1.54	1.08
1:CA:1143:G:H2'	1:CA:1144:G:C8	1.88	1.08
11:AK:87:GLY:N	11:AK:113:THR:HG22	1.68	1.08
11:AK:87:GLY:H	11:AK:113:THR:HG22	1.04	1.08
22:BA:1867:G:O2'	22:BA:1868:C:H5'	1.49	1.08
1:CA:1143:G:H2'	1:CA:1144:G:H8	1.09	1.08
1:CA:213:G:H2'	1:CA:214:C:H6	1.16	1.08
2:CB:130:LYS:HA	2:CB:133:ALA:HB3	1.29	1.08
22:DA:391:A:O2'	22:DA:392:U:H5'	1.53	1.08
22:DA:604:G:O2'	22:DA:605:G:H5'	1.54	1.08
25:DD:133:THR:HG23	25:DD:134:HIS:H	1.19	1.08
2:AB:117:GLU:HA	2:AB:120:SER:HB2	1.31	1.08
37:BP:50:ARG:HG3	37:BP:57:ALA:O	1.53	1.08
29:DH:6:LEU:HD13	29:DH:36:ALA:HA	1.31	1.08
22:DA:2360:G:H1'	33:DL:60:ARG:HH21	1.19	1.08
40:DS:88:ARG:HH21	40:DS:88:ARG:HG2	1.02	1.08
17:AQ:16:MET:HB2	17:AQ:19:SER:HB3	1.31	1.07
38:BQ:69:ARG:NH2	38:BQ:69:ARG:HB2	1.68	1.07
22:DA:921:C:H2'	22:DA:922:C:H5'	1.35	1.07
1:AA:1021:A:H2'	1:AA:1022:A:H5''	1.36	1.07
1:AA:545:C:H5'	4:AD:68:GLU:HG3	1.30	1.07
19:AS:45:GLY:H	19:AS:61:VAL:HG23	1.13	1.07
22:BA:1073:A:C3'	22:BA:1074:G:H5''	1.82	1.07
32:BK:71:ARG:HB2	32:BK:72:PRO:HD3	1.32	1.07
4:CD:89:LEU:CD2	4:CD:199:ILE:HD11	1.85	1.07
21:CU:16:ARG:HD2	21:CU:19:LYS:HE2	1.36	1.07
12:CL:43:LYS:HB2	12:CL:44:PRO:HD3	1.08	1.07
45:DX:30:PRO:HG2	45:DX:32:LEU:HD21	1.11	1.07
2:AB:163:ILE:HG23	2:AB:164:ASP:H	1.17	1.07
10:AJ:14:ASP:HB3	10:AJ:17:LEU:HB3	1.21	1.07
4:CD:187:ARG:HH21	4:CD:191:SER:HA	1.11	1.07
7:CG:74:VAL:HG13	7:CG:140:VAL:HG13	1.09	1.07
25:DD:148:GLN:HG2	25:DD:152:PRO:HG2	1.31	1.07
43:BV:80:HIS:HD2	43:BV:83:LYS:N	1.52	1.07
5:CE:103:GLY:O	5:CE:104:ILE:HG22	1.54	1.07
22:DA:1870:C:H5''	22:DA:1871:A:H2	1.05	1.07
5:AE:89:THR:HG22	5:AE:90:GLY:H	0.93	1.07
22:DA:447:A:H5'	22:DA:449:A:C5	1.90	1.07

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:37:THR:HG22	35:DN:39:PRO:HD2	1.13	1.07
22:BA:1791:A:O2'	24:BC:205:GLY:HA2	1.55	1.07
2:CB:206:ILE:HA	2:CB:209:VAL:HG22	1.31	1.07
21:CU:35:GLU:HG3	21:CU:36:PHE:H	0.97	1.07
22:DA:2060:A:H2'	26:DE:63:LYS:HZ2	1.12	1.07
22:BA:265:A:H4'	22:BA:266:G:OP1	1.48	1.07
22:DA:1676:A:H2	22:DA:1993:U:H5'	1.19	1.07
22:DA:2135:A:H2'	22:DA:2136:G:C8	1.89	1.07
24:DC:146:LYS:HB2	24:DC:149:LYS:HB2	1.35	1.06
33:BL:109:LYS:HG2	33:BL:126:ARG:HB3	1.30	1.06
4:CD:55:ARG:HG3	4:CD:55:ARG:HH11	1.16	1.06
3:CC:29:ALA:HB1	14:CN:64:ARG:NH1	1.70	1.06
39:DR:27:ILE:HG22	39:DR:28:ALA:H	0.92	1.06
22:DA:1676:A:C2	22:DA:1993:U:H5'	1.90	1.06
25:DD:29:VAL:HB	25:DD:98:VAL:HG12	1.36	1.06
22:BA:1179:G:C5	22:BA:1180:U:H1'	1.88	1.06
5:AE:81:GLN:HG2	5:AE:149:PRO:HG3	1.33	1.06
38:BQ:63:ARG:HH22	38:BQ:96:ASP:N	1.53	1.06
46:BY:47:ARG:HH21	46:BY:47:ARG:HG3	1.19	1.06
10:CJ:57:VAL:HG22	10:CJ:58:ASN:H	1.18	1.06
3:AC:128:MET:HB3	3:AC:131:ARG:HG3	1.35	1.06
22:BA:866:A:H5'	22:BA:866:A:H8	0.95	1.06
11:CK:92:ARG:HH11	11:CK:92:ARG:HG3	1.20	1.06
5:CE:29:ILE:HG23	5:CE:30:PHE:N	1.65	1.06
10:CJ:84:VAL:HG23	10:CJ:85:ASP:H	1.12	1.06
22:DA:1021:A:O2'	22:DA:1022:G:H4'	1.54	1.06
22:DA:82:U:H2'	22:DA:83:A:H5''	1.34	1.06
34:DM:42:THR:HB	34:DM:45:GLN:HG3	1.37	1.06
47:DZ:16:LEU:HD22	47:DZ:16:LEU:H	1.11	1.06
1:AA:842:U:H3'	1:AA:843:U:H5''	1.10	1.06
30:BI:79:LEU:HA	30:BI:83:ALA:HB3	1.34	1.06
17:CQ:4:ILE:HG22	17:CQ:5:ARG:H	1.13	1.06
41:DT:10:VAL:HG23	41:DT:11:LEU:HD12	1.38	1.06
44:DW:18:LYS:HD3	44:DW:19:ARG:N	1.68	1.06
11:AK:22:ILE:HD11	11:AK:85:VAL:HG13	1.38	1.06
44:BW:23:LYS:HD2	44:BW:24:ARG:H	1.20	1.06
22:DA:1870:C:H5''	22:DA:1871:A:C2	1.91	1.06
25:DD:186:LEU:HD21	37:DP:3:ILE:HD11	1.38	1.06
22:DA:246:C:H2'	22:DA:247:G:H5'	1.38	1.06
22:DA:2713:U:H3'	22:DA:2714:G:H5''	1.37	1.05
29:BH:96:THR:O	29:BH:97:ARG:HG3	1.54	1.05

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1024:G:H3'	22:DA:1025:G:H5''	1.13	1.05
22:DA:1079:C:H41	22:DA:1088:A:H5''	1.19	1.05
22:DA:2682:A:H61	22:DA:2728:U:H1'	1.20	1.05
17:AQ:12:VAL:HG11	17:AQ:21:VAL:CG1	1.86	1.05
48:B0:39:ARG:HB2	48:B0:39:ARG:HH11	1.19	1.05
22:BA:412:A:O2'	22:BA:413:C:H5'	1.55	1.05
36:BO:2:ASP:HB3	36:BO:5:SER:HB2	1.37	1.05
45:BX:30:PRO:HB2	45:BX:32:LEU:HD11	1.14	1.05
4:CD:29:THR:C	4:CD:30:LYS:HD3	1.77	1.05
1:AA:489:C:O2'	1:AA:490:C:H5'	1.56	1.05
5:AE:153:ALA:HA	5:AE:156:ARG:HB2	1.34	1.05
4:CD:2:ARG:HH11	4:CD:2:ARG:HB2	1.14	1.05
9:AI:32:ARG:HG2	9:AI:36:GLN:HB3	1.35	1.05
29:BH:5:LEU:HD13	29:BH:13:GLY:HA2	1.36	1.05
10:AJ:48:ARG:HG2	10:AJ:48:ARG:HH11	1.15	1.05
1:CA:491:G:O2'	1:CA:492:C:H5'	1.56	1.05
21:AU:9:GLU:HG3	21:AU:10:PRO:HD3	1.05	1.05
22:BA:1064:C:OP1	30:BI:87:SER:O	1.72	1.05
38:BQ:86:SER:O	39:BR:51:VAL:HA	1.56	1.05
41:BT:61:LEU:HD12	41:BT:61:LEU:O	1.56	1.05
22:DA:1430:G:O2'	22:DA:1431:A:H5'	1.56	1.05
1:AA:1256:A:H1'	1:AA:1258:G:C5	1.92	1.05
2:AB:66:ILE:HB	2:AB:88:GLN:HB3	1.37	1.05
11:AK:126:ARG:HB2	21:AU:33:ARG:NH1	1.72	1.05
3:CC:26:LYS:HA	3:CC:26:LYS:HE3	1.39	1.05
25:DD:141:ARG:HH11	25:DD:141:ARG:HB3	1.21	1.05
2:AB:9:LEU:HD21	2:AB:11:ALA:HB3	1.39	1.05
41:DT:50:LEU:HD23	41:DT:51:PHE:H	1.19	1.05
28:BG:72:ASN:O	28:BG:76:ILE:HG22	1.56	1.04
44:BW:23:LYS:CE	44:BW:24:ARG:HG3	1.86	1.04
31:DJ:18:VAL:HG13	31:DJ:56:VAL:HA	1.37	1.04
33:DL:103:ILE:H	33:DL:103:ILE:HD12	1.13	1.04
45:DX:2:ARG:HH21	45:DX:32:LEU:HD23	1.18	1.04
1:AA:1007:U:H2'	1:AA:1008:U:H5''	1.35	1.04
29:BH:90:LEU:HB2	29:BH:123:ARG:HB3	1.40	1.04
4:CD:25:ARG:NH1	4:CD:30:LYS:HG2	1.70	1.04
7:CG:22:LEU:HA	7:CG:25:PHE:HB3	1.31	1.04
2:AB:116:LEU:HD12	2:AB:140:LEU:HD11	1.39	1.04
24:BC:246:PRO:HG2	24:BC:247:TRP:CZ3	1.92	1.04
1:CA:371:A:O2'	1:CA:372:C:H5'	1.57	1.04
22:DA:573:U:H4'	22:DA:574:A:OP1	1.51	1.04

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:65:ASN:ND2	38:BQ:69:ARG:HH22	1.55	1.04
22:DA:396:G:O2'	22:DA:397:U:H5'	1.56	1.04
1:CA:137:U:H1'	1:CA:227:G:N2	1.72	1.04
32:DK:39:ILE:HD11	32:DK:62:VAL:HG23	1.40	1.04
34:BM:2:LEU:HD23	34:BM:69:PRO:HD2	1.38	1.04
17:CQ:3:LYS:NZ	17:CQ:6:THR:HG21	1.70	1.04
22:DA:2590:A:H5''	24:DC:237:ARG:HG3	1.38	1.04
41:DT:29:THR:HB	41:DT:87:LEU:H	1.23	1.04
37:BP:102:ARG:HB3	37:BP:107:ALA:HB2	1.38	1.04
46:BY:57:LEU:HA	46:BY:60:LYS:HB3	1.35	1.04
25:DD:51:THR:CG2	25:DD:76:GLY:HA3	1.87	1.04
21:AU:16:ARG:HH11	21:AU:19:LYS:HG3	1.23	1.04
49:B1:33:LEU:H	49:B1:51:ALA:HB3	1.21	1.04
22:DA:2291:U:H2'	22:DA:2292:U:C6	1.92	1.04
22:BA:1779:U:H5	22:BA:1784:A:N7	1.56	1.04
31:BJ:81:ILE:HG23	31:BJ:82:GLY:H	1.19	1.04
38:BQ:63:ARG:CZ	38:BQ:96:ASP:HA	1.88	1.04
5:CE:95:MET:HB3	5:CE:124:ALA:HB2	1.38	1.04
9:CI:34:LEU:HG	9:CI:35:GLU:HG3	1.36	1.04
36:BO:88:LYS:HE2	36:BO:116:GLN:HE21	1.17	1.03
37:BP:52:ARG:HH11	37:BP:52:ARG:CG	1.71	1.03
44:BW:24:ARG:HB2	44:BW:65:LYS:HD3	1.38	1.03
1:AA:94:G:H4'	1:AA:95:C:O5'	1.57	1.03
22:DA:1565:C:O2'	22:DA:1566:A:H2'	1.55	1.03
22:BA:137:U:H5''	22:BA:140:C:C5	1.94	1.03
44:BW:23:LYS:HD2	44:BW:24:ARG:N	1.74	1.03
47:BZ:15:ARG:HG3	47:BZ:15:ARG:HH11	1.22	1.03
2:CB:103:TRP:HD1	2:CB:107:ARG:HB3	1.23	1.03
2:CB:19:THR:HG22	2:CB:37:VAL:HA	1.31	1.03
22:DA:922:C:H1'	44:DW:22:VAL:HG21	1.39	1.03
37:DP:91:VAL:HG22	37:DP:109:ILE:HG21	1.04	1.03
16:CP:70:ARG:O	16:CP:74:LEU:HG	1.56	1.03
22:DA:2060:A:H2'	26:DE:63:LYS:NZ	1.71	1.03
22:DA:2517:C:O2'	22:DA:2518:A:H3'	1.58	1.03
1:CA:32:A:H2'	1:CA:33:A:C8	1.92	1.03
1:CA:33:A:H2'	1:CA:34:C:H6	1.22	1.03
9:CI:71:ILE:HD12	9:CI:72:SER:H	1.22	1.03
26:DE:170:ARG:HH22	26:DE:176:ASP:HB2	1.18	1.03
41:DT:39:THR:HG21	41:DT:42:GLU:HB2	1.34	1.03
22:BA:958:U:H6	22:BA:958:U:H5'	1.21	1.03
32:BK:108:ARG:HH11	32:BK:108:ARG:HG2	1.16	1.03

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:14:LEU:HD22	5:CE:59:ILE:CD1	1.89	1.03
22:DA:274:C:H2'	22:DA:275:C:C6	1.93	1.03
28:DG:126:THR:HG22	28:DG:127:GLN:H	1.23	1.03
32:DK:2:ILE:HG22	32:DK:3:GLN:N	1.71	1.03
5:AE:89:THR:HG22	5:AE:90:GLY:N	1.69	1.03
22:BA:1011:G:O2'	22:BA:1013:C:H5''	1.58	1.03
22:BA:1941:C:H5'	22:BA:1941:C:H6	1.21	1.03
22:DA:1668:A:H4'	22:DA:1669:A:H5'	1.36	1.03
29:BH:68:ARG:NH2	29:BH:72:ILE:HG21	1.74	1.03
1:CA:84:U:H3	1:CA:87:C:H1'	1.20	1.03
27:DF:103:ILE:HA	27:DF:107:VAL:HG21	1.38	1.03
32:DK:2:ILE:CG2	32:DK:3:GLN:H	1.72	1.03
50:D2:19:ARG:HB3	50:D2:19:ARG:HH21	1.21	1.02
6:AF:38:ARG:HB3	6:AF:63:ASN:HB2	1.38	1.02
7:AG:26:VAL:HG12	7:AG:42:VAL:HG21	1.06	1.02
31:BJ:124:VAL:HG23	31:BJ:125:TYR:H	1.24	1.02
34:BM:1:MET:HE3	34:BM:2:LEU:H	1.24	1.02
1:CA:597:G:H2'	1:CA:598:U:H5'	1.40	1.02
22:DA:1056:G:H1'	22:DA:1103:A:H61	1.22	1.02
22:DA:1060:U:H4'	22:DA:1061:U:O5'	1.59	1.02
1:AA:1225:A:H2'	1:AA:1226:C:C5	1.95	1.02
27:BF:7:TYR:CD2	27:BF:11:VAL:HG11	1.94	1.02
1:CA:1202:U:H2'	1:CA:1203:C:H6	1.20	1.02
20:CT:26:MET:HE3	20:CT:56:ILE:HD13	1.37	1.02
22:DA:1594:U:H2'	22:DA:1595:C:C6	1.95	1.02
1:CA:174:A:O2'	1:CA:175:C:H5'	1.60	1.02
29:DH:93:SER:CB	29:DH:121:VAL:HG21	1.89	1.02
40:DS:20:VAL:HG11	40:DS:43:ALA:HB1	1.41	1.02
1:AA:1129:C:H5''	9:AI:17:ARG:HH22	1.16	1.02
1:AA:874:G:O2'	1:AA:875:U:H5'	1.57	1.02
1:AA:1328:C:H5''	13:AM:27:THR:HG21	1.41	1.02
17:AQ:12:VAL:CG1	17:AQ:21:VAL:HG13	1.88	1.02
24:DC:147:PRO:HD3	24:DC:184:GLU:HG3	1.06	1.02
12:AL:24:GLU:HB2	12:AL:26:CYS:SG	2.00	1.02
28:BG:137:LYS:CA	28:BG:140:ILE:HD11	1.90	1.02
31:BJ:2:LYS:H	31:BJ:2:LYS:HD3	0.91	1.02
22:DA:491:G:H2'	22:DA:492:A:C8	1.95	1.02
44:BW:31:LEU:N	44:BW:31:LEU:HD23	1.73	1.02
4:CD:30:LYS:HD3	4:CD:30:LYS:N	1.68	1.02
22:BA:762:U:H4'	22:BA:763:G:O5'	1.57	1.02
35:BN:73:ASN:HA	35:BN:76:VAL:CG1	1.89	1.02

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:D3:3:ILE:HG22	51:D3:4:LYS:H	1.18	1.02
22:DA:784:G:N1	24:DC:227:VAL:HG21	1.75	1.02
1:AA:206:C:H2'	1:AA:207:C:O4'	1.58	1.02
9:AI:98:ARG:HG2	9:AI:103:VAL:HG21	1.37	1.02
37:BP:87:ARG:HH11	37:BP:87:ARG:HG2	1.23	1.02
1:CA:254:G:H21	17:CQ:17:GLU:HG3	1.19	1.02
22:DA:942:G:H2'	22:DA:943:A:H5'	1.41	1.02
2:AB:69:VAL:HB	2:AB:162:VAL:HG12	1.34	1.01
1:AA:414:A:H2'	1:AA:415:A:H8	1.23	1.01
2:AB:9:LEU:CD1	2:AB:42:LEU:HD13	1.90	1.01
41:BT:64:LYS:HA	41:BT:79:ASP:OD1	1.59	1.01
1:CA:537:G:H5''	12:CL:109:ARG:NH1	1.75	1.01
22:DA:1492:G:H3'	22:DA:1493:C:C5'	1.89	1.01
23:DB:24:G:H1'	23:DB:27:C:N4	1.73	1.01
31:DJ:99:ARG:HA	31:DJ:102:GLU:HB3	1.42	1.01
5:CE:29:ILE:HG23	5:CE:30:PHE:H	1.18	1.01
14:AN:15:LEU:HD23	14:AN:18:LYS:HD2	1.41	1.01
17:AQ:46:HIS:HB2	17:AQ:66:LEU:HD12	1.42	1.01
23:DB:110:C:O2'	23:DB:111:U:H5'	1.59	1.01
42:DU:47:PRO:HB3	42:DU:54:PRO:HG3	1.38	1.01
1:AA:545:C:C2'	1:AA:546:A:H5'	1.89	1.01
10:AJ:57:VAL:HG22	10:AJ:58:ASN:H	1.22	1.01
11:AK:126:ARG:HB2	21:AU:33:ARG:HH12	1.20	1.01
29:BH:89:LYS:HG2	29:BH:90:LEU:H	1.21	1.01
42:BU:5:ARG:HG2	42:BU:5:ARG:HH21	1.23	1.01
1:CA:1183:U:H3'	1:CA:1184:G:H5''	1.05	1.01
1:CA:982:U:H4'	1:CA:983:A:O5'	1.59	1.01
22:DA:1313:U:H2'	22:DA:1313:U:O2	1.59	1.01
22:DA:1731:G:O2'	22:DA:1732:C:H5''	1.61	1.01
1:AA:511:C:O2'	1:AA:512:U:H5''	1.59	1.01
22:BA:990:A:H5'	22:BA:990:A:H8	1.18	1.01
27:BF:134:GLN:HG2	27:BF:135:ILE:H	1.21	1.01
5:CE:14:LEU:HD22	5:CE:59:ILE:HD13	1.40	1.01
22:DA:2199:A:H2'	22:DA:2200:C:C6	1.95	1.01
25:DD:89:GLU:HG2	25:DD:94:GLN:NE2	1.76	1.01
1:AA:1531:A:H8	1:AA:1531:A:H5'	0.88	1.01
2:AB:9:LEU:HD23	2:AB:11:ALA:H	1.24	1.01
22:BA:1458:U:H4'	22:BA:1459:G:O5'	1.60	1.01
25:BD:114:LYS:CE	25:BD:114:LYS:N	2.23	1.01
32:BK:21:CYS:HA	32:BK:41:ILE:HD12	1.43	1.01
22:DA:1655:A:H2'	22:DA:1656:C:C6	1.96	1.01

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:71:ARG:HB2	35:DN:71:ARG:HH21	1.20	1.01
40:BS:73:LYS:HA	40:BS:73:LYS:HE3	1.40	1.01
22:DA:1474:U:H2'	22:DA:1475:G:H5'	1.38	1.01
31:DJ:5:THR:HA	31:DJ:44:TYR:CD2	1.96	1.00
44:DW:37:VAL:HG23	44:DW:38:ARG:HH11	1.25	1.00
22:DA:1808:A:H62	45:DX:27:ARG:HH11	1.05	1.00
22:DA:412:A:O2'	22:DA:413:C:H5'	1.61	1.00
22:BA:2502:G:H5'	22:BA:2503:A:H5''	1.41	1.00
22:BA:2356:U:H4'	44:BW:16:GLU:HG3	1.42	1.00
22:DA:2199:A:H2'	22:DA:2200:C:H6	1.21	1.00
22:DA:1008:A:H5''	31:DJ:37:ARG:HH22	1.22	1.00
43:DV:79:ARG:HG3	43:DV:80:HIS:H	1.26	1.00
51:B3:31:ILE:HD11	51:B3:34:LYS:HD2	1.04	1.00
31:BJ:17:VAL:HG22	31:BJ:137:PRO:HB2	1.41	1.00
22:DA:1069:A:H4'	22:DA:1070:A:O5'	1.61	1.00
32:DK:38:ILE:HG12	32:DK:61:VAL:HG12	1.43	1.00
37:DP:86:LYS:HA	37:DP:86:LYS:HZ2	1.21	1.00
1:AA:487:A:O2'	1:AA:488:C:H5'	1.60	1.00
12:AL:27:PRO:HB2	12:AL:28:GLN:OE1	1.59	1.00
22:BA:2680:U:P	25:BD:114:LYS:HE2	2.02	1.00
1:CA:1332:A:O2'	1:CA:1333:A:H5'	1.61	1.00
51:D3:41:ARG:HH21	51:D3:41:ARG:HG3	1.27	1.00
5:AE:11:GLN:HA	5:AE:11:GLN:HE21	1.27	1.00
24:BC:251:THR:HG22	24:BC:252:LYS:H	1.24	1.00
31:BJ:2:LYS:HD3	31:BJ:2:LYS:N	1.70	1.00
31:BJ:88:THR:HG22	31:BJ:91:GLU:CG	1.92	1.00
10:CJ:64:GLN:HB2	14:CN:98:ALA:HB3	1.42	1.00
16:CP:4:ILE:HG21	16:CP:57:ILE:HD11	1.44	1.00
32:DK:2:ILE:HG22	32:DK:3:GLN:H	0.87	1.00
11:AK:109:ILE:HG21	21:AU:16:ARG:HE	1.26	1.00
14:AN:44:VAL:HG23	14:AN:45:LEU:H	1.25	1.00
22:BA:2680:U:OP1	25:BD:114:LYS:HE2	1.60	1.00
37:BP:50:ARG:HD3	37:BP:56:SER:HB3	1.41	1.00
38:BQ:4:LYS:HG3	38:BQ:5:ARG:N	1.76	1.00
25:DD:16:THR:HG22	25:DD:20:VAL:HB	1.42	1.00
1:CA:1182:G:C4'	1:CA:1183:U:H5'	1.91	1.00
22:BA:1716:U:O2'	22:BA:1717:A:H5'	1.61	1.00
22:BA:2214:C:H6	22:BA:2214:C:H5'	1.26	1.00
24:BC:106:PRO:HB3	24:BC:141:HIS:CE1	1.95	1.00
9:CI:51:LEU:HG	9:CI:86:LEU:HD22	1.43	1.00
1:CA:135:C:O2	16:CP:1:MET:HB2	1.61	1.00

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1537:G:H2'	22:DA:1538:G:H4'	1.42	1.00
1:AA:842:U:H3'	1:AA:843:U:C5'	1.89	0.99
52:B4:36:ARG:HG2	52:B4:37:GLN:H	1.22	0.99
29:BH:68:ARG:HH22	29:BH:72:ILE:HG21	1.23	0.99
1:CA:1026:G:H1	1:CA:1036:A:N6	1.59	0.99
22:DA:455:C:H3'	22:DA:456:C:C5'	1.91	0.99
24:DC:131:MET:HG2	24:DC:134:ILE:HD11	1.43	0.99
10:AJ:51:VAL:HB	14:AN:80:ARG:HB2	1.42	0.99
22:BA:2353:G:H1'	44:BW:30:VAL:CG1	1.92	0.99
27:BF:11:VAL:HG12	27:BF:12:VAL:H	1.28	0.99
1:AA:1184:G:O2'	1:AA:1185:G:H5'	1.62	0.99
2:AB:26:MET:HE3	2:AB:192:PRO:HG3	1.42	0.99
2:AB:209:VAL:HG23	2:AB:210:THR:H	1.24	0.99
14:CN:33:VAL:HG22	14:CN:40:ARG:HH21	1.26	0.99
52:B4:9:LYS:H	52:B4:9:LYS:HD3	1.26	0.99
22:BA:1179:G:H3'	22:BA:1180:U:H4'	1.41	0.99
1:CA:170:U:O2'	1:CA:171:A:H5'	1.62	0.99
1:CA:876:C:H1'	8:CH:11:THR:HG21	1.42	0.99
22:DA:607:U:O4	22:DA:619:G:H2'	1.60	0.99
25:DD:106:LYS:HB3	25:DD:206:ALA:CB	1.92	0.99
29:DH:80:ILE:HB	29:DH:101:ASP:CB	1.92	0.99
30:DI:113:ALA:HB1	30:DI:124:MET:SD	2.02	0.99
44:DW:18:LYS:HD3	44:DW:19:ARG:H	1.20	0.99
44:DW:37:VAL:CG1	44:DW:55:ASP:HB2	1.91	0.99
1:AA:158:G:C2'	1:AA:159:G:H5'	1.92	0.99
5:AE:155:LYS:HA	5:AE:158:LYS:HZ2	1.26	0.99
9:AI:88:GLU:HG3	9:AI:89:TYR:H	1.27	0.99
21:AU:13:VAL:HG13	21:AU:15:LEU:HG	1.45	0.99
22:BA:1071:G:H1'	22:BA:1089:A:N7	1.78	0.99
22:BA:1941:C:H5'	22:BA:1941:C:C6	1.98	0.99
35:BN:103:ARG:HD3	35:BN:110:MET:HE3	1.44	0.99
24:BC:12:ARG:HH11	24:BC:12:ARG:HG3	1.22	0.99
22:BA:1813:G:N3	24:BC:49:THR:HG21	1.77	0.99
29:BH:117:LEU:HD11	29:BH:130:VAL:HG11	1.45	0.99
1:CA:1183:U:C3'	1:CA:1184:G:H5''	1.93	0.99
23:BB:90:C:H6	23:BB:90:C:H5''	1.23	0.99
44:BW:39:GLN:HG2	44:BW:41:GLY:H	1.26	0.99
5:CE:13:LYS:HA	5:CE:13:LYS:HE2	1.42	0.99
6:CF:92:THR:O	6:CF:93:LYS:HG2	1.62	0.99
7:CG:71:THR:HG23	7:CG:72:VAL:HG23	1.44	0.99
37:DP:52:ARG:HH11	37:DP:52:ARG:CG	1.75	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:559:A:H4'	1:AA:560:A:O5'	1.63	0.99
12:AL:49:ARG:CG	12:AL:49:ARG:HH11	1.75	0.99
7:CG:134:VAL:HB	7:CG:137:ARG:HH21	1.24	0.99
22:DA:1731:G:H4'	22:DA:1732:C:OP1	1.61	0.99
22:DA:960:A:H2'	22:DA:962:G:H5'	1.43	0.99
27:DF:74:ALA:HB3	27:DF:78:ILE:HB	1.44	0.99
2:AB:58:LYS:HZ1	2:AB:62:ARG:HG3	1.22	0.99
27:BF:39:VAL:HG11	27:BF:49:LEU:HD13	1.42	0.99
9:AI:98:ARG:CG	9:AI:103:VAL:HG21	1.93	0.99
2:CB:89:PHE:HE2	2:CB:152:ASP:HB2	1.23	0.99
31:DJ:44:TYR:HD1	38:DQ:63:ARG:HH21	1.06	0.99
10:AJ:35:GLN:HG2	10:AJ:77:VAL:HB	1.45	0.98
44:BW:23:LYS:HE3	44:BW:24:ARG:HG3	1.44	0.98
22:DA:105:C:O2'	22:DA:106:C:H6	1.45	0.98
22:DA:616:A:O2'	22:DA:617:G:H8	1.45	0.98
22:BA:2151:U:O2'	22:BA:2152:G:H5''	1.62	0.98
27:BF:131:VAL:HG22	27:BF:151:LEU:HD12	1.45	0.98
44:BW:39:GLN:HG3	44:BW:42:THR:N	1.78	0.98
22:DA:206:U:HO2'	22:DA:207:A:H8	1.01	0.98
22:DA:2631:G:H2'	22:DA:2632:A:H5''	1.41	0.98
24:DC:94:LEU:HD13	24:DC:100:ARG:HD3	1.44	0.98
25:DD:139:SER:HB3	25:DD:142:VAL:HG21	1.45	0.98
22:BA:1627:G:C8	22:BA:1627:G:H5'	1.98	0.98
27:BF:11:VAL:HG12	27:BF:12:VAL:N	1.77	0.98
27:BF:43:ILE:HG22	27:BF:82:TYR:CE1	1.97	0.98
1:CA:14:U:N3	1:CA:16:A:H5''	1.79	0.98
1:CA:920:U:H2'	1:CA:921:U:C6	1.98	0.98
21:CU:35:GLU:CG	21:CU:36:PHE:H	1.76	0.98
22:DA:2056:G:H21	48:D0:1:ALA:H3	1.05	0.98
29:DH:31:VAL:HB	29:DH:32:PRO:HD3	1.45	0.98
1:AA:1279:G:H1'	1:AA:1282:C:H42	1.26	0.98
1:AA:415:A:H2'	1:AA:416:G:C8	1.99	0.98
25:DD:68:PHE:HB3	25:DD:73:VAL:HA	1.45	0.98
32:DK:71:ARG:HB3	32:DK:72:PRO:HD3	1.41	0.98
35:DN:24:MET:HG2	35:DN:44:LEU:HD13	1.46	0.98
41:DT:60:THR:HG22	41:DT:83:ALA:HA	1.44	0.98
7:AG:61:PHE:HE1	7:AG:65:LEU:HD22	1.27	0.98
17:AQ:18:LYS:HA	17:AQ:47:ASP:CB	1.94	0.98
21:AU:9:GLU:HG3	21:AU:10:PRO:CD	1.93	0.98
22:BA:2440:C:H6	22:BA:2440:C:H5'	1.26	0.98
7:CG:91:ARG:HG2	7:CG:92:PRO:CD	1.93	0.98

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1765:U:O2'	22:DA:1766:G:H5'	1.64	0.98
41:DT:39:THR:CG2	41:DT:42:GLU:HB2	1.94	0.98
1:AA:1533:C:H3'	1:AA:1534:A:H5''	1.43	0.98
22:BA:866:A:C5'	22:BA:866:A:H8	1.76	0.98
1:CA:1383:C:O2'	1:CA:1384:C:H5'	1.63	0.98
1:CA:154:U:H2'	1:CA:155:A:H5'	1.44	0.98
48:D0:37:HIS:HB3	48:D0:43:THR:HG22	1.43	0.98
22:DA:946:C:HO2'	22:DA:947:A:H8	1.00	0.98
31:BJ:88:THR:HG22	31:BJ:91:GLU:HG3	1.45	0.98
42:BU:25:LYS:HG2	42:BU:36:GLU:HB3	1.44	0.98
22:DA:2074:U:O2'	22:DA:2075:U:H5'	1.63	0.98
22:DA:27:G:H22	22:DA:512:G:H2'	1.26	0.98
22:DA:593:U:H2'	22:DA:594:U:C6	1.98	0.98
43:DV:61:LEU:HD23	43:DV:61:LEU:H	1.23	0.98
1:AA:965:U:H4'	1:AA:969:A:C8	1.97	0.98
24:BC:75:ALA:HB2	24:BC:95:TYR:CD2	1.98	0.98
25:BD:13:ARG:HH12	37:BP:74:GLN:NE2	1.61	0.98
22:DA:1935:G:H1'	22:DA:1964:G:N2	1.79	0.98
22:DA:845:A:N6	22:DA:932:U:H3	1.62	0.98
4:AD:117:VAL:HA	4:AD:122:ILE:HD11	1.46	0.97
9:AI:40:ARG:HA	9:AI:44:ARG:HB3	1.42	0.97
52:B4:9:LYS:H	52:B4:9:LYS:CD	1.77	0.97
6:CF:66:ALA:HB3	6:CF:71:ILE:HD13	1.46	0.97
22:DA:2624:G:C2	22:DA:2625:G:H1'	1.98	0.97
8:AH:82:LEU:HD13	8:AH:84:ILE:HD11	1.44	0.97
33:BL:81:ASP:O	33:BL:82:LEU:HB3	1.63	0.97
45:BX:38:TRP:HB2	45:BX:45:PHE:HE2	1.26	0.97
7:CG:14:ASP:HB3	7:CG:18:GLY:H	1.29	0.97
22:DA:1919:A:O2'	22:DA:1920:C:H5'	1.64	0.97
22:DA:2271:G:O2'	22:DA:2272:U:H5'	1.64	0.97
22:DA:2752:C:H2'	22:DA:2753:A:C8	1.99	0.97
35:BN:24:MET:HG2	35:BN:44:LEU:HD22	1.47	0.97
10:CJ:79:PRO:HA	10:CJ:84:VAL:HG11	1.43	0.97
11:CK:92:ARG:HH11	11:CK:92:ARG:CG	1.76	0.97
32:DK:111:LYS:HE3	32:DK:111:LYS:H	1.28	0.97
44:DW:18:LYS:H	44:DW:36:ILE:HG12	1.29	0.97
1:AA:32:A:H2'	1:AA:33:A:C8	2.00	0.97
1:AA:977:A:H2'	1:AA:977:A:N3	1.78	0.97
13:AM:89:ARG:HB3	13:AM:96:VAL:HG22	1.46	0.97
49:B1:34:GLU:HG2	49:B1:49:LYS:HG3	1.46	0.97
4:CD:2:ARG:HH21	4:CD:114:ARG:HD2	1.29	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:35:LEU:HD11	5:CE:136:VAL:HG11	1.46	0.97
22:DA:373:U:O2'	22:DA:374:A:H5'	1.64	0.97
23:DB:58:A:H2'	23:DB:59:A:C8	1.99	0.97
26:DE:170:ARG:NH2	26:DE:176:ASP:HB2	1.79	0.97
2:AB:42:LEU:HG	2:AB:43:GLU:HG3	1.42	0.97
17:AQ:12:VAL:HG13	17:AQ:13:SER:N	1.79	0.97
31:BJ:77:HIS:CD2	31:BJ:79:GLY:H	1.82	0.97
34:BM:40:ARG:HB2	34:BM:93:VAL:HG21	1.42	0.97
1:CA:413:G:N1	4:CD:32:LYS:HE3	1.79	0.97
1:CA:511:C:O2'	1:CA:512:U:H5''	1.64	0.97
22:DA:1126:A:H4'	22:DA:1127:A:O5'	1.62	0.97
22:DA:84:A:H4'	22:DA:85:G:O5'	1.61	0.97
32:DK:13:ASN:H	32:DK:13:ASN:HD22	1.07	0.97
10:AJ:52:LEU:HD23	10:AJ:62:ARG:CG	1.93	0.97
22:BA:2328:A:H2'	22:BA:2329:U:C6	1.98	0.97
22:BA:508:A:H4'	22:BA:509:C:OP2	1.59	0.97
12:CL:80:LEU:HB3	12:CL:97:VAL:HG22	1.43	0.97
21:CU:35:GLU:HG3	21:CU:36:PHE:N	1.75	0.97
22:DA:1152:C:H5''	38:DQ:79:ILE:HD12	1.46	0.97
22:DA:1328:A:H2'	22:DA:1330:C:H41	1.28	0.97
22:DA:1534:U:H6	22:DA:1538:G:H1	1.05	0.97
23:DB:16:G:O2'	23:DB:17:C:H5'	1.65	0.97
1:AA:572:A:H5'	1:AA:573:A:OP2	1.65	0.97
21:AU:16:ARG:HH11	21:AU:19:LYS:CG	1.77	0.97
22:BA:545:U:H2'	22:BA:546:U:H4'	1.43	0.97
41:BT:50:LEU:HD12	41:BT:50:LEU:H	1.25	0.97
1:CA:120:A:C3'	1:CA:121:U:H5''	1.95	0.97
20:CT:73:ARG:CG	20:CT:73:ARG:HH11	1.77	0.97
22:DA:2135:A:C3'	22:DA:2136:G:H5''	1.93	0.97
26:DE:128:ALA:HB1	26:DE:129:PRO:HD2	1.45	0.97
31:BJ:111:LYS:CD	31:BJ:112:GLY:H	1.77	0.97
14:CN:66:THR:HG23	14:CN:82:LYS:HE3	1.44	0.97
34:DM:19:GLY:H	34:DM:38:ARG:NH2	1.61	0.97
8:AH:105:THR:HG21	8:AH:120:LEU:HD13	1.44	0.97
8:AH:9:MET:HE1	8:AH:32:LYS:HA	1.47	0.97
22:BA:1277:G:H5'	35:BN:20:MET:CE	1.94	0.97
22:BA:923:G:H21	44:BW:23:LYS:NZ	1.63	0.97
1:CA:1141:C:HO2'	1:CA:1142:G:H8	1.04	0.97
4:CD:77:GLU:HG3	4:CD:81:LEU:CD1	1.94	0.97
13:CM:64:VAL:HG12	13:CM:65:GLU:H	1.30	0.97
22:DA:2389:G:C5'	22:DA:2390:U:H5'	1.93	0.97

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:802:A:O2'	22:DA:803:U:H5'	1.65	0.97
29:DH:68:ARG:HG3	29:DH:68:ARG:HH11	1.30	0.97
5:AE:12:GLU:HB2	5:AE:38:VAL:HG12	1.46	0.97
39:BR:51:VAL:HB	39:BR:52:PRO:CD	1.95	0.97
22:DA:2286:G:H4'	22:DA:2287:A:O4'	1.64	0.97
23:DB:86:G:H2'	23:DB:87:U:H5''	1.44	0.97
16:AP:73:ALA:O	16:AP:77:GLU:HB2	1.65	0.96
22:BA:1084:A:H2'	22:BA:1085:A:C8	1.99	0.96
22:BA:1784:A:H4'	22:BA:1785:A:O5'	1.64	0.96
2:CB:110:ILE:HD13	2:CB:151:LYS:HA	1.44	0.96
5:CE:74:ALA:O	5:CE:75:LEU:HB2	1.64	0.96
20:CT:60:GLN:HB3	20:CT:65:LEU:HD12	1.45	0.96
6:AF:86:ARG:CZ	18:AR:63:TYR:HB3	1.95	0.96
22:BA:92:U:H6	22:BA:92:U:H5''	1.28	0.96
31:BJ:44:TYR:HB2	38:BQ:63:ARG:HB3	1.45	0.96
1:CA:373:A:HO2'	1:CA:374:A:H5'	1.15	0.96
22:DA:2304:G:H22	22:DA:2312:U:H3	1.11	0.96
22:DA:678:C:H2'	22:DA:679:C:C6	2.00	0.96
10:AJ:42:LEU:HB3	10:AJ:43:PRO:HD2	1.44	0.96
10:AJ:48:ARG:HH11	10:AJ:48:ARG:CG	1.78	0.96
16:AP:28:ARG:HG2	16:AP:29:ASN:HD22	1.24	0.96
2:CB:160:LEU:HD22	2:CB:175:ALA:HB2	1.45	0.96
10:CJ:11:LYS:HB3	10:CJ:71:LEU:HD13	1.45	0.96
22:DA:2689:U:H4'	22:DA:2690:U:OP2	1.62	0.96
22:DA:90:U:H3'	22:DA:91:A:H5''	1.47	0.96
24:DC:77:VAL:HG23	24:DC:112:GLY:H	1.26	0.96
29:DH:68:ARG:HD3	29:DH:71:LYS:HD3	1.45	0.96
1:AA:1381:U:HO2'	1:AA:1382:C:H6	0.96	0.96
4:AD:31:CYS:O	4:AD:32:LYS:HB2	1.63	0.96
22:BA:2820:A:H3'	22:BA:2820:A:H8	1.28	0.96
22:DA:1049:C:O2	22:DA:1113:U:H4'	1.65	0.96
30:DI:74:PRO:HB2	30:DI:77:VAL:HG22	1.43	0.96
38:DQ:57:ARG:NH1	38:DQ:92:LYS:HE2	1.80	0.96
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.00	0.96
4:AD:109:THR:HG23	4:AD:112:GLU:H	1.25	0.96
19:AS:28:LYS:HB3	19:AS:29:PRO:HD2	1.47	0.96
22:BA:2197:U:O2'	22:BA:2198:A:H2'	1.64	0.96
26:BE:170:ARG:HH21	26:BE:170:ARG:CG	1.77	0.96
1:CA:1221:G:H4'	19:CS:35:ARG:NH2	1.79	0.96
29:DH:8:LYS:HD2	29:DH:9:VAL:N	1.81	0.96
34:DM:35:ALA:HB3	34:DM:99:GLY:H	1.29	0.96

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:DU:58:VAL:CG1	42:DU:60:LYS:HG2	1.95	0.96
11:AK:87:GLY:H	11:AK:113:THR:CG2	1.75	0.96
44:BW:18:LYS:HG3	44:BW:19:ARG:H	1.28	0.96
4:CD:69:ARG:HG3	4:CD:69:ARG:HH11	1.31	0.96
22:DA:1346:G:O2'	22:DA:1347:A:H8	1.48	0.96
37:DP:91:VAL:HG22	37:DP:109:ILE:CG2	1.96	0.96
44:DW:40:ARG:CG	44:DW:40:ARG:HH11	1.78	0.96
22:BA:1020:A:H4'	22:BA:1021:A:O5'	1.66	0.96
22:BA:2148:G:H2'	22:BA:2149:U:O4'	1.64	0.96
1:CA:1226:C:N4	13:CM:102:LYS:HA	1.81	0.96
13:CM:95:PRO:HD3	13:CM:108:ARG:HG2	1.48	0.96
22:DA:995:C:O2	31:DJ:3:THR:HG23	1.65	0.96
24:DC:13:ARG:HG2	24:DC:14:HIS:CD2	2.00	0.96
39:DR:27:ILE:CG2	39:DR:28:ALA:H	1.78	0.96
44:DW:28:GLU:H	44:DW:31:LEU:HD21	1.29	0.96
4:AD:167:PRO:HB2	4:AD:170:LEU:HD11	1.48	0.96
4:AD:47:LEU:CD2	4:AD:52:VAL:HG12	1.96	0.96
16:AP:10:GLY:HA3	16:AP:15:PRO:HA	1.48	0.96
26:BE:146:VAL:HG23	26:BE:167:VAL:HG23	1.46	0.96
1:CA:120:A:C2'	1:CA:121:U:H5''	1.95	0.96
8:CH:17:GLN:NE2	8:CH:69:ALA:HB1	1.80	0.96
22:BA:1585:C:C2'	22:BA:1586:A:H5'	1.96	0.96
22:BA:923:G:N3	44:BW:23:LYS:HE2	1.80	0.96
1:CA:1284:C:H3'	1:CA:1285:A:C5'	1.95	0.96
1:CA:508:U:H4'	1:CA:509:A:OP1	1.64	0.96
7:CG:4:ARG:HH21	7:CG:6:ILE:HB	1.29	0.96
22:DA:1341:G:O2'	22:DA:1398:C:H5'	1.66	0.96
22:DA:304:U:HO2'	22:DA:305:C:H6	1.09	0.96
32:DK:70:ARG:HB3	32:DK:76:VAL:HG22	1.47	0.96
1:AA:61:G:H2'	1:AA:62:U:C6	1.99	0.96
26:BE:79:ARG:HG2	26:BE:80:SER:N	1.80	0.96
21:CU:24:LYS:HG3	21:CU:25:ALA:N	1.77	0.96
29:DH:115:VAL:HG12	29:DH:132:PHE:HB2	1.48	0.96
45:DX:30:PRO:HG2	45:DX:32:LEU:CD2	1.96	0.96
1:AA:982:U:H4'	1:AA:983:A:O5'	1.62	0.95
19:AS:50:VAL:HG21	19:AS:70:LEU:HB3	1.47	0.95
52:D4:16:ILE:HG12	52:D4:25:VAL:CG2	1.96	0.95
22:DA:2093:G:HO2'	22:DA:2094:A:H8	1.10	0.95
30:DI:96:LYS:HE2	30:DI:138:VAL:HG11	1.46	0.95
1:AA:975:A:H4'	1:AA:976:G:H5''	1.49	0.95
5:AE:89:THR:CG2	5:AE:90:GLY:H	1.79	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:40:ARG:HH12	14:AN:44:VAL:HG21	1.27	0.95
29:BH:49:ALA:HB3	29:BH:50:ARG:NH2	1.79	0.95
38:BQ:69:ARG:HB2	38:BQ:69:ARG:HH21	1.21	0.95
1:CA:652:U:HO2'	1:CA:653:U:H6	0.98	0.95
1:AA:1449:C:H2'	1:AA:1450:U:H5'	1.47	0.95
17:AQ:18:LYS:HA	17:AQ:47:ASP:HB2	1.45	0.95
32:BK:71:ARG:CB	32:BK:72:PRO:HD3	1.96	0.95
34:BM:35:ALA:O	34:BM:128:THR:HA	1.66	0.95
38:BQ:63:ARG:HH12	38:BQ:96:ASP:HA	0.82	0.95
22:DA:1965:C:H3'	22:DA:1966:A:C5'	1.95	0.95
22:DA:647:G:H2'	22:DA:648:G:C8	2.01	0.95
44:DW:27:GLY:HA3	44:DW:31:LEU:HD11	1.47	0.95
1:AA:87:C:H2'	1:AA:88:U:H6	1.28	0.95
10:AJ:14:ASP:HB3	10:AJ:17:LEU:CB	1.97	0.95
12:CL:2:THR:HB	12:CL:5:GLN:HB2	1.48	0.95
39:DR:27:ILE:HG22	39:DR:28:ALA:N	1.74	0.95
1:AA:1069:C:H2'	1:AA:1070:U:H5''	1.49	0.95
8:AH:82:LEU:CD1	8:AH:84:ILE:HD11	1.94	0.95
1:AA:1129:C:H5''	9:AI:17:ARG:NH2	1.81	0.95
22:BA:1188:U:C2'	22:BA:1189:A:H5'	1.94	0.95
22:BA:303:G:H2'	22:BA:304:U:H6	1.27	0.95
22:DA:484:C:O2'	22:DA:485:C:H5'	1.65	0.95
32:DK:87:LEU:HB2	32:DK:92:GLU:O	1.67	0.95
2:CB:114:LYS:HA	2:CB:117:GLU:HG2	1.44	0.95
22:DA:197:A:N6	22:DA:2430:A:H2'	1.81	0.95
26:DE:130:LYS:CB	26:DE:133:LEU:HB3	1.96	0.95
31:DJ:75:TYR:CD1	31:DJ:84:ILE:HD11	2.02	0.95
10:AJ:40:ILE:HB	10:AJ:73:LEU:HB2	1.49	0.95
11:AK:126:ARG:CB	21:AU:33:ARG:HH12	1.80	0.95
41:BT:48:GLN:HE21	41:BT:48:GLN:HA	1.29	0.95
4:CD:77:GLU:HG3	4:CD:81:LEU:HD11	1.48	0.95
22:DA:1401:G:H2'	22:DA:1402:U:H6	1.26	0.95
22:DA:1494:A:H2'	22:DA:1495:A:C8	2.00	0.95
22:DA:1594:U:H2'	22:DA:1595:C:H6	1.30	0.95
44:DW:23:LYS:HD2	44:DW:24:ARG:H	1.26	0.95
2:AB:67:LEU:HD13	2:AB:160:LEU:HD13	1.48	0.95
11:AK:15:VAL:HG13	11:AK:78:ILE:CG2	1.96	0.95
7:CG:68:VAL:HG22	7:CG:134:VAL:HG12	1.46	0.95
7:CG:88:VAL:HG22	7:CG:89:GLU:H	1.31	0.95
12:CL:42:LYS:HG2	12:CL:43:LYS:H	1.31	0.95
22:DA:1915:U:H2'	22:DA:1916:A:H8	1.25	0.95

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DS:32:ALA:HA	40:DS:35:ILE:CD1	1.97	0.95
1:AA:566:G:H4'	1:AA:567:G:OP1	1.63	0.95
22:BA:1885:A:H2'	22:BA:1886:U:H6	1.31	0.95
22:BA:729:G:N3	22:BA:729:G:H2'	1.80	0.95
33:BL:132:ARG:HG3	33:BL:142:ILE:HD12	1.49	0.95
1:CA:1299:A:N3	1:CA:1299:A:H2'	1.81	0.95
4:CD:25:ARG:HG2	4:CD:25:ARG:NH1	1.70	0.95
22:DA:502:A:H5'	22:DA:503:A:OP2	1.67	0.95
24:DC:128:THR:CG2	24:DC:188:ARG:HB3	1.96	0.95
25:DD:53:GLY:HA3	25:DD:77:ARG:HG3	1.49	0.95
1:AA:1306:A:C2'	1:AA:1307:U:H5'	1.97	0.95
1:AA:1348:U:O2'	1:AA:1349:A:H5'	1.67	0.95
1:AA:1382:C:O2'	1:AA:1383:C:H5'	1.66	0.95
17:AQ:12:VAL:HG11	17:AQ:21:VAL:HG13	0.95	0.95
21:AU:16:ARG:NH1	21:AU:19:LYS:HG3	1.80	0.95
22:BA:1421:G:O2'	22:BA:1422:G:H5'	1.65	0.95
22:BA:996:A:H4'	38:BQ:91:ARG:HG2	1.49	0.95
27:BF:34:THR:HG23	27:BF:89:THR:HG23	1.47	0.95
27:BF:71:LYS:HD3	27:BF:80:GLN:HG3	1.46	0.95
33:BL:112:LEU:HD12	33:BL:130:GLY:HA3	1.49	0.95
22:DA:2056:G:H21	48:D0:1:ALA:N	1.65	0.95
22:DA:217:A:H2'	22:DA:218:A:C8	2.01	0.95
26:BE:119:ILE:CD1	26:BE:187:VAL:HA	1.96	0.94
1:CA:113:G:N2	1:CA:353:A:H8	1.65	0.94
13:CM:33:LEU:HB3	13:CM:38:ILE:HB	1.48	0.94
22:DA:234:U:O2'	22:DA:235:U:H5'	1.64	0.94
23:DB:24:G:H1'	23:DB:27:C:H42	1.25	0.94
25:DD:51:THR:HG23	25:DD:76:GLY:HA3	1.47	0.94
31:DJ:110:PRO:HB2	31:DJ:111:LYS:HG2	1.49	0.94
22:DA:993:G:H1'	39:DR:91:GLN:HE21	1.30	0.94
5:AE:81:GLN:H	5:AE:81:GLN:NE2	1.66	0.94
1:CA:1493:A:H8	22:DA:1913:A:H61	1.14	0.94
7:CG:91:ARG:CG	7:CG:92:PRO:HD2	1.97	0.94
1:AA:1151:A:HO2'	1:AA:1152:A:H8	0.96	0.94
1:AA:1238:A:H5'	1:AA:1336:C:H41	1.32	0.94
9:AI:51:LEU:HB3	9:AI:56:MET:HG2	1.48	0.94
49:B1:8:ILE:HD11	49:B1:24:LYS:HG2	1.49	0.94
1:CA:519:C:O2'	1:CA:520:A:H5'	1.66	0.94
1:AA:1210:C:H2'	1:AA:1211:U:H5'	1.46	0.94
1:AA:1251:A:H2'	1:AA:1252:A:H8	1.26	0.94
1:CA:279:A:H5''	1:CA:280:C:H3'	1.50	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:369:G:O2'	1:CA:370:C:H5'	1.66	0.94
7:CG:74:VAL:HG13	7:CG:140:VAL:CG1	1.97	0.94
10:CJ:15:HIS:HA	10:CJ:18:ILE:CG2	1.97	0.94
22:DA:1079:C:N4	22:DA:1088:A:H5''	1.82	0.94
30:BI:15:GLY:HA2	30:BI:50:LYS:HB3	1.47	0.94
31:BJ:44:TYR:CD1	31:BJ:44:TYR:O	2.20	0.94
22:DA:1360:G:H2'	22:DA:1361:G:H5'	1.47	0.94
23:DB:90:C:H6	23:DB:90:C:H5''	1.29	0.94
35:DN:37:THR:CG2	35:DN:39:PRO:HD2	1.97	0.94
1:AA:1138:G:H2'	1:AA:1138:G:N3	1.80	0.94
4:AD:2:ARG:NH2	4:AD:114:ARG:HD3	1.83	0.94
10:AJ:53:ILE:HG22	10:AJ:61:ALA:HB1	1.46	0.94
12:AL:43:LYS:NZ	12:AL:44:PRO:HD3	1.82	0.94
22:BA:2328:A:H2'	22:BA:2329:U:H6	1.29	0.94
22:BA:35:G:H8	22:BA:35:G:H5'	1.30	0.94
26:BE:119:ILE:HD13	26:BE:187:VAL:HA	1.48	0.94
1:CA:332:G:H2'	1:CA:333:U:H6	1.31	0.94
4:CD:176:LYS:HG3	4:CD:178:GLU:HB2	1.48	0.94
22:DA:2757:A:O2'	22:DA:2758:A:H5'	1.66	0.94
25:DD:89:GLU:HG2	25:DD:94:GLN:HE22	1.30	0.94
40:DS:88:ARG:HH21	40:DS:88:ARG:CG	1.80	0.94
2:AB:165:ALA:HB2	2:AB:186:VAL:HG12	1.47	0.94
5:AE:44:ARG:HA	5:AE:71:ILE:O	1.68	0.94
12:AL:33:CYS:HA	12:AL:54:VAL:HA	1.47	0.94
17:AQ:37:ILE:H	17:AQ:37:ILE:HD12	1.33	0.94
25:BD:14:ILE:HA	37:BP:11:GLN:HE22	1.33	0.94
1:CA:960:U:C5'	1:CA:961:U:H5''	1.98	0.94
11:CK:27:ASN:HD22	11:CK:27:ASN:N	1.66	0.94
12:CL:42:LYS:HD3	12:CL:43:LYS:HZ2	1.29	0.94
22:DA:1023:U:H6	22:DA:1023:U:H5'	1.30	0.94
22:DA:2439:A:H4'	22:DA:2440:C:O5'	1.67	0.94
22:DA:784:G:HO2'	22:DA:785:G:H8	1.16	0.94
25:DD:114:LYS:HD2	25:DD:116:LYS:NZ	1.83	0.94
26:DE:119:ILE:CD1	26:DE:143:LEU:HD21	1.97	0.94
22:BA:335:C:H5''	42:BU:81:ARG:HD3	1.45	0.94
25:BD:61:THR:OG1	25:BD:63:PRO:HD2	1.66	0.94
1:CA:1278:G:H4'	1:CA:1279:G:O5'	1.67	0.94
1:CA:33:A:H2'	1:CA:34:C:C6	2.01	0.94
24:DC:16:VAL:H	24:DC:203:VAL:HG12	1.31	0.94
26:DE:148:ILE:CD1	26:DE:187:VAL:HG21	1.98	0.94
26:DE:149:ILE:HG23	26:DE:188:MET:CA	1.98	0.94

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:103:ARG:HD3	35:DN:110:MET:SD	2.08	0.94
9:AI:51:LEU:HB3	9:AI:56:MET:CG	1.98	0.94
22:DA:452:G:OP1	26:DE:53:THR:HG23	1.66	0.94
22:BA:1644:C:O2'	22:BA:1645:G:H5'	1.68	0.94
40:BS:59:GLU:HA	40:BS:64:ALA:CB	1.98	0.94
1:CA:1067:A:H1'	1:CA:1068:G:C8	2.03	0.94
3:CC:148:ILE:HD13	3:CC:201:ILE:HG12	1.50	0.94
22:DA:2311:A:H4'	22:DA:2312:U:OP2	1.65	0.94
22:DA:617:G:O2'	22:DA:618:G:H8	1.50	0.94
25:DD:8:LYS:HB2	25:DD:201:LEU:HD11	1.47	0.94
46:DY:6:LEU:HD21	46:DY:56:LEU:HD12	1.49	0.94
1:AA:1441:A:H62	1:AA:1461:G:H21	1.07	0.94
1:AA:275:G:O2'	1:AA:276:G:H5'	1.65	0.94
27:BF:10:GLU:O	27:BF:11:VAL:HB	1.67	0.94
37:BP:95:LYS:HG2	37:BP:97:TYR:CE1	2.02	0.94
42:BU:80:ASP:OD1	42:BU:95:PHE:HB3	1.67	0.94
22:BA:2352:A:N1	44:BW:30:VAL:HG11	1.83	0.94
1:CA:1452:C:H4'	1:CA:1453:G:O5'	1.66	0.94
12:CL:43:LYS:HB3	12:CL:44:PRO:HD3	1.50	0.94
36:DO:30:ARG:HA	36:DO:35:ILE:HD13	1.50	0.94
38:DQ:4:LYS:HE3	38:DQ:7:VAL:CG1	1.98	0.94
42:DU:95:PHE:H	42:DU:95:PHE:HD1	1.13	0.94
47:DZ:16:LEU:CD2	47:DZ:16:LEU:H	1.80	0.94
7:AG:26:VAL:CG1	7:AG:42:VAL:HG21	1.98	0.93
22:BA:1962:C:H4'	22:BA:1963:U:OP1	1.65	0.93
26:BE:170:ARG:NH2	26:BE:170:ARG:HG2	1.73	0.93
1:CA:1157:A:H4'	1:CA:1158:C:O5'	1.68	0.93
1:CA:664:G:H22	1:CA:741:G:H1	1.14	0.93
22:DA:1069:A:O2'	22:DA:1070:A:H5'	1.68	0.93
22:DA:232:G:H4'	22:DA:233:A:OP1	1.67	0.93
22:DA:2729:G:H5''	25:DD:190:LYS:NZ	1.83	0.93
28:DG:112:VAL:HG13	28:DG:150:TYR:HE1	1.31	0.93
32:DK:71:ARG:CB	32:DK:72:PRO:HD3	1.98	0.93
35:DN:103:ARG:HB2	35:DN:110:MET:HG3	1.50	0.93
38:DQ:78:PHE:CE1	38:DQ:82:LEU:HD11	2.03	0.93
46:DY:18:LEU:O	46:DY:22:LEU:HD13	1.67	0.93
1:AA:1021:A:C2'	1:AA:1022:A:H5''	1.98	0.93
4:AD:131:ILE:H	4:AD:131:ILE:HD12	1.33	0.93
22:BA:2503:A:H4'	22:BA:2504:U:OP1	1.67	0.93
22:BA:603:A:H4'	22:BA:604:G:O5'	1.68	0.93
28:BG:8:VAL:O	28:BG:9:VAL:HG12	1.65	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BT:32:LEU:H	41:BT:83:ALA:HB3	1.34	0.93
48:D0:6:LYS:HD2	48:D0:7:PRO:HD2	1.46	0.93
40:DS:88:ARG:NH2	40:DS:88:ARG:HG2	1.77	0.93
42:DU:10:VAL:HG12	42:DU:71:ILE:HA	1.48	0.93
31:BJ:64:VAL:O	31:BJ:65:THR:HB	1.68	0.93
1:CA:1097:C:H2'	1:CA:1098:C:H6	1.33	0.93
1:CA:1293:C:H2'	1:CA:1294:G:H8	1.34	0.93
2:CB:185:ILE:HG22	2:CB:199:ILE:HG13	1.48	0.93
8:CH:1:SER:HB3	8:CH:3:GLN:HG3	1.51	0.93
22:DA:2611:C:H5'	22:DA:2611:C:H6	1.31	0.93
31:DJ:44:TYR:HB2	38:DQ:63:ARG:CZ	1.97	0.93
1:AA:667:G:H4'	15:AO:50:HIS:ND1	1.84	0.93
22:BA:2820:A:H3'	22:BA:2820:A:C8	2.02	0.93
22:BA:933:A:H2'	22:BA:933:A:N3	1.83	0.93
1:CA:1378:C:H3'	1:CA:1379:G:H5''	1.50	0.93
19:CS:35:ARG:HA	19:CS:70:LEU:HB2	1.51	0.93
22:DA:33:C:O2'	22:DA:34:U:H5'	1.67	0.93
27:DF:30:VAL:HG12	27:DF:157:THR:HG21	1.50	0.93
1:AA:1449:C:C2'	1:AA:1450:U:H5'	1.99	0.93
6:AF:36:ILE:HG22	6:AF:64:VAL:HG22	1.49	0.93
29:BH:4:ILE:HG23	29:BH:17:ASP:O	1.69	0.93
31:BJ:25:LEU:HD22	31:BJ:25:LEU:C	1.88	0.93
31:BJ:2:LYS:CD	31:BJ:2:LYS:H	1.81	0.93
38:BQ:91:ARG:HB3	38:BQ:93:ILE:HG22	1.49	0.93
1:CA:1249:C:H2'	1:CA:1250:A:H5''	1.51	0.93
7:CG:137:ARG:CZ	7:CG:138:GLU:HG2	1.98	0.93
1:CA:537:G:H5''	12:CL:109:ARG:HH12	1.30	0.93
17:CQ:3:LYS:HZ1	17:CQ:6:THR:HG21	1.31	0.93
22:DA:2287:A:O2'	22:DA:2288:A:H3'	1.69	0.93
22:DA:2725:A:O2'	22:DA:2726:A:H2'	1.69	0.93
31:DJ:45:THR:HG21	31:DJ:50:THR:HG23	1.45	0.93
2:AB:218:ALA:HA	2:AB:221:ARG:HH21	1.33	0.93
22:BA:558:U:P	31:BJ:113:PRO:HG2	2.09	0.93
1:CA:560:A:H4'	1:CA:561:U:H5''	1.48	0.93
22:DA:1324:G:H1	22:DA:1330:C:H42	1.16	0.93
22:DA:2223:G:H2'	22:DA:2224:G:H5'	1.48	0.93
22:DA:1364:G:N7	45:DX:1:SER:HB2	1.84	0.93
1:AA:667:G:H4'	15:AO:50:HIS:CE1	2.04	0.93
27:BF:129:MET:HG2	27:BF:153:ILE:CD1	1.98	0.93
7:CG:100:MET:H	7:CG:100:MET:CE	1.81	0.93
14:AN:19:TYR:O	14:AN:22:LYS:HB3	1.69	0.93

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2540:C:H2'	22:BA:2541:A:H5'	1.49	0.93
26:BE:112:LEU:HD13	26:BE:186:VAL:HG11	1.51	0.93
38:BQ:4:LYS:HE2	38:BQ:7:VAL:HG13	1.51	0.93
22:DA:686:U:H3	50:D2:12:ARG:HB2	1.33	0.93
26:BE:46:GLN:HG3	26:BE:87:ALA:H	1.33	0.93
1:CA:183:C:O2'	1:CA:184:G:H5'	1.68	0.93
4:CD:34:GLU:O	4:CD:37:PRO:HD3	1.69	0.93
13:CM:78:ARG:HH21	13:CM:79:LEU:HD23	1.34	0.93
22:DA:320:A:H4'	22:DA:322:A:N7	1.84	0.93
24:DC:224:MET:SD	24:DC:229:HIS:HB2	2.09	0.93
27:DF:28:PRO:HB2	27:DF:168:LEU:HD21	1.51	0.93
22:BA:1063:G:P	30:BI:76:ALA:HB3	2.08	0.93
44:BW:18:LYS:HA	44:BW:36:ILE:CG1	1.97	0.93
1:CA:1293:C:H2'	1:CA:1294:G:C8	2.04	0.93
22:DA:257:C:H2'	22:DA:258:G:O4'	1.69	0.93
22:DA:2626:C:C2'	22:DA:2627:G:H5'	1.97	0.93
22:DA:739:A:H4'	22:DA:740:C:OP1	1.67	0.93
4:AD:89:LEU:HD21	4:AD:199:ILE:HD11	1.50	0.92
37:BP:52:ARG:HH11	37:BP:52:ARG:HG3	1.31	0.92
12:CL:109:ARG:HB2	12:CL:118:VAL:HG21	1.50	0.92
20:CT:23:ARG:HB3	20:CT:60:GLN:HE22	1.31	0.92
22:DA:1026:G:O2'	22:DA:1027:A:H5'	1.69	0.92
22:DA:300:A:H1'	22:DA:333:G:N2	1.83	0.92
27:DF:42:ALA:HB2	27:DF:49:LEU:HD21	1.51	0.92
21:AU:36:PHE:HD1	21:AU:39:LYS:HB3	1.32	0.92
22:BA:469:G:O6	50:B2:37:LYS:HE2	1.69	0.92
1:CA:91:U:O2'	1:CA:92:U:H5''	1.69	0.92
6:CF:11:HIS:HD2	6:CF:54:LEU:HD21	1.31	0.92
1:CA:668:G:O2'	15:CO:45:HIS:HB3	1.69	0.92
23:DB:75:G:H1	23:DB:102:G:N2	1.66	0.92
33:DL:17:LYS:NZ	33:DL:19:LEU:HD22	1.85	0.92
1:AA:1319:A:H4'	1:AA:1320:C:OP1	1.68	0.92
1:AA:1531:A:H8	1:AA:1531:A:C5'	1.81	0.92
22:BA:1340:U:H4'	22:BA:1341:G:OP2	1.65	0.92
31:BJ:56:VAL:HG12	31:BJ:57:LEU:H	1.33	0.92
32:BK:18:ARG:H	32:BK:45:GLU:HB2	1.31	0.92
22:BA:1277:G:H5'	35:BN:20:MET:HE1	1.48	0.92
1:CA:1268:G:H21	1:CA:1327:C:H1'	1.30	0.92
9:CI:17:ARG:HB2	9:CI:65:THR:HB	1.50	0.92
27:DF:122:ASP:HB2	27:DF:126:ASN:HB2	1.48	0.92
1:AA:1123:U:H4'	10:AJ:39:PRO:HD2	1.48	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:100:LEU:HB3	2:AB:174:GLU:HG2	1.51	0.92
28:BG:104:LEU:HB2	28:BG:112:VAL:HG21	1.49	0.92
1:CA:1219:A:OP1	14:CN:52:ARG:HG3	1.70	0.92
1:CA:940:C:HO2'	1:CA:1374:A:H2	1.11	0.92
12:CL:43:LYS:CB	12:CL:44:PRO:CD	2.40	0.92
22:DA:1783:A:H5'	22:DA:2608:G:H4'	1.50	0.92
22:DA:593:U:H2'	22:DA:594:U:H6	1.32	0.92
22:DA:975:A:O2'	22:DA:976:G:H8	1.53	0.92
1:AA:439:U:O2'	1:AA:440:C:H5'	1.69	0.92
25:BD:99:GLU:HG3	25:BD:100:LEU:N	1.85	0.92
25:BD:113:SER:C	25:BD:114:LYS:HE3	1.90	0.92
36:BO:76:LYS:O	36:BO:80:GLU:HG2	1.70	0.92
4:CD:25:ARG:HH11	4:CD:25:ARG:CG	1.82	0.92
21:CU:16:ARG:HG3	21:CU:19:LYS:CG	1.99	0.92
22:DA:1647:U:H5''	22:DA:1648:U:OP1	1.68	0.92
26:DE:108:ILE:HD11	26:DE:181:ILE:HB	1.50	0.92
34:DM:27:SER:H	34:DM:66:ARG:HH22	1.12	0.92
1:AA:60:A:H4'	1:AA:61:G:O5'	1.70	0.92
22:BA:1073:A:H3'	22:BA:1074:G:H5''	1.51	0.92
22:BA:962:G:H21	22:BA:2250:G:H1	1.14	0.92
30:BI:23:VAL:HB	30:BI:27:LEU:HB3	1.49	0.92
11:CK:81:LEU:HD11	11:CK:104:PHE:CD2	2.04	0.92
22:DA:1669:A:H2'	22:DA:1669:A:N3	1.80	0.92
22:DA:183:C:H2'	22:DA:184:C:H5'	1.52	0.92
22:DA:279:A:H61	22:DA:361:G:H1'	1.34	0.92
22:DA:671:C:O2'	22:DA:672:C:H5'	1.69	0.92
29:DH:27:ARG:HH11	45:DX:59:ASP:HA	1.35	0.92
1:AA:1157:A:H1'	1:AA:1181:G:C2	2.04	0.92
1:AA:939:G:H5'	7:AG:101:ARG:HH12	1.34	0.92
48:B0:9:ARG:HH21	48:B0:9:ARG:HG3	1.34	0.92
22:DA:1808:A:H3'	22:DA:1809:A:H8	1.33	0.92
1:AA:209:U:H5'	1:AA:210:C:OP2	1.70	0.92
25:BD:5:VAL:H	25:BD:32:ASN:HD21	1.10	0.92
38:BQ:111:LYS:CE	39:BR:50:GLY:HA2	1.99	0.92
41:BT:29:THR:HA	41:BT:86:THR:HA	1.49	0.92
41:BT:39:THR:HB	41:BT:42:GLU:HB2	1.50	0.92
1:CA:977:A:O2'	1:CA:978:A:H5''	1.70	0.92
21:CU:15:LEU:HD12	21:CU:15:LEU:O	1.68	0.92
22:DA:1734:G:O2'	22:DA:1735:A:H8	1.53	0.92
27:DF:39:VAL:HG22	27:DF:49:LEU:HG	1.52	0.92
27:DF:64:PRO:HA	27:DF:88:VAL:HG22	1.51	0.92

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:158:G:H2'	1:AA:159:G:C5'	2.00	0.92
11:AK:108:ASN:HB3	21:AU:6:ARG:HG2	1.49	0.92
1:CA:920:U:H2'	1:CA:921:U:H6	1.33	0.92
30:DI:91:LYS:HB3	30:DI:94:LYS:HB2	1.52	0.92
1:AA:174:A:O2'	1:AA:175:C:H5'	1.70	0.92
15:AO:63:ARG:HD3	15:AO:87:ARG:HH22	1.33	0.92
22:BA:491:G:H2'	22:BA:492:A:C8	2.05	0.92
22:BA:636:G:C6	33:BL:111:ILE:CD1	2.52	0.92
44:BW:14:ASP:O	44:BW:15:SER:HB2	1.70	0.92
1:CA:721:G:H4'	1:CA:722:G:O5'	1.69	0.92
18:CR:72:ARG:NH2	21:CU:3:ILE:HD13	1.85	0.92
22:DA:234:U:H6	22:DA:234:U:H5''	1.32	0.92
22:DA:338:G:C2'	22:DA:339:U:H5'	1.99	0.92
22:DA:320:A:H2'	26:DE:131:THR:OG1	1.67	0.92
32:DK:7:MET:CE	32:DK:7:MET:HA	1.98	0.92
11:AK:15:VAL:HG13	11:AK:78:ILE:HG23	1.49	0.91
32:BK:21:CYS:HA	32:BK:41:ILE:CD1	2.00	0.91
22:BA:855:G:N2	44:BW:23:LYS:HG2	1.84	0.91
8:CH:11:THR:HG22	8:CH:14:ARG:HH12	1.35	0.91
33:DL:108:ALA:HB3	33:DL:125:LEU:HD22	1.53	0.91
27:BF:134:GLN:O	27:BF:136:ILE:HG12	1.67	0.91
46:BY:9:LYS:HZ2	46:BY:9:LYS:HA	1.35	0.91
1:CA:1026:G:H1	1:CA:1036:A:H61	1.06	0.91
2:CB:79:VAL:HA	2:CB:213:LEU:HD21	1.49	0.91
4:CD:32:LYS:HB3	4:CD:35:GLN:OE1	1.71	0.91
14:CN:89:ARG:HG3	14:CN:91:GLU:HG3	1.50	0.91
50:D2:19:ARG:HB3	50:D2:19:ARG:NH2	1.85	0.91
33:DL:23:ILE:HG13	39:DR:82:HIS:CE1	2.06	0.91
35:DN:34:ILE:HG22	35:DN:113:ILE:HG22	1.49	0.91
35:DN:73:ASN:HA	35:DN:76:VAL:HG22	1.50	0.91
41:DT:50:LEU:HD23	41:DT:51:PHE:N	1.84	0.91
16:AP:28:ARG:HE	16:AP:29:ASN:HD21	1.07	0.91
11:AK:124:LYS:NZ	21:AU:33:ARG:HH21	1.68	0.91
22:BA:2431:U:H5'	22:BA:2431:U:C6	2.05	0.91
5:CE:104:ILE:H	5:CE:122:VAL:H	0.96	0.91
22:DA:2848:G:HO2'	22:DA:2849:U:H6	0.93	0.91
1:AA:569:C:H5''	1:AA:570:G:OP1	1.70	0.91
3:AC:110:LEU:HD21	3:AC:143:LEU:HD23	1.49	0.91
49:B1:33:LEU:N	49:B1:51:ALA:HB3	1.84	0.91
22:BA:1585:C:H2'	22:BA:1586:A:O4'	1.70	0.91
24:BC:16:VAL:H	24:BC:203:VAL:HG12	1.34	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BP:77:SER:HG	37:BP:79:VAL:HG13	1.36	0.91
40:BS:73:LYS:HE3	40:BS:74:ILE:H	1.36	0.91
1:CA:209:U:H5''	1:CA:210:C:OP2	1.70	0.91
8:CH:11:THR:HG22	8:CH:14:ARG:NH1	1.86	0.91
12:CL:42:LYS:HD2	12:CL:43:LYS:HG2	1.53	0.91
22:DA:822:G:O6	22:DA:943:A:H2	1.52	0.91
24:DC:75:ALA:HB2	24:DC:95:TYR:CD1	2.04	0.91
1:AA:1127:G:C2'	1:AA:1128:C:H5'	2.00	0.91
1:AA:414:A:H2'	1:AA:415:A:C8	2.06	0.91
1:AA:98:A:H2'	1:AA:99:C:H6	1.33	0.91
17:AQ:12:VAL:CG1	17:AQ:13:SER:H	1.82	0.91
18:AR:35:SER:HA	18:AR:71:ASP:HB3	1.53	0.91
21:AU:39:LYS:H	21:AU:40:PRO:HD2	1.34	0.91
22:BA:100:U:H4'	22:BA:101:A:O5'	1.68	0.91
40:BS:73:LYS:HE3	40:BS:74:ILE:N	1.84	0.91
3:CC:149:LYS:HE3	3:CC:200:TRP:CE3	2.06	0.91
32:DK:2:ILE:O	32:DK:3:GLN:HB3	1.71	0.91
41:DT:38:ALA:HB1	41:DT:81:LYS:NZ	1.84	0.91
13:AM:106:ARG:HH21	13:AM:112:ARG:HB3	1.32	0.91
1:CA:1304:G:H1'	1:CA:1333:A:H61	1.36	0.91
22:DA:1060:U:C4'	22:DA:1061:U:H2'	2.00	0.91
22:DA:1458:U:O3'	22:DA:1459:G:H4'	1.70	0.91
22:DA:1605:C:H4'	22:DA:1610:A:C6	2.06	0.91
22:DA:618:G:N2	22:DA:619:G:H1'	1.86	0.91
36:DO:17:LYS:HE3	36:DO:17:LYS:O	1.70	0.91
36:DO:31:THR:HG21	36:DO:36:TYR:HE2	1.36	0.91
38:DQ:79:ILE:HA	38:DQ:82:LEU:HD12	1.50	0.91
1:AA:1183:U:H3'	1:AA:1184:G:H5''	1.53	0.91
22:BA:1064:C:H5'	30:BI:88:GLY:HA3	1.49	0.91
22:BA:894:U:H2'	22:BA:895:U:C6	2.06	0.91
22:BA:1653:G:H1	35:BN:11:ASN:ND2	1.69	0.91
41:BT:61:LEU:C	41:BT:61:LEU:HD12	1.91	0.91
1:CA:1152:A:H2'	1:CA:1153:G:H8	1.19	0.91
1:CA:1242:G:C2	1:CA:1243:C:H1'	2.06	0.91
1:CA:1446:A:H2'	1:CA:1447:A:H5'	1.52	0.91
12:CL:89:LEU:CB	12:CL:92:VAL:HG21	2.00	0.91
22:DA:649:G:H2'	22:DA:650:C:C6	2.06	0.91
25:DD:148:GLN:CG	25:DD:152:PRO:HG2	2.01	0.91
26:DE:119:ILE:HD13	26:DE:143:LEU:HD21	1.49	0.91
41:DT:38:ALA:HB1	41:DT:81:LYS:HZ3	1.30	0.91
44:DW:13:ARG:HG3	44:DW:14:ASP:H	1.35	0.91

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:274:A:HO2'	1:AA:275:G:H8	1.18	0.91
45:BX:6:VAL:HG13	45:BX:7:THR:HG23	1.53	0.91
1:CA:808:C:OP1	15:CO:47:LYS:HE2	1.70	0.91
22:DA:2379:G:H2'	22:DA:2380:C:H6	1.36	0.91
26:DE:111:GLU:HA	26:DE:114:ARG:HE	1.35	0.91
29:DH:26:ALA:HB2	29:DH:30:LEU:HD12	1.51	0.91
30:DI:45:THR:HG23	30:DI:54:ILE:HD13	1.51	0.91
17:AQ:22:VAL:HG21	17:AQ:60:ILE:HD11	1.51	0.91
22:BA:1664:A:H5''	22:BA:1665:A:OP2	1.69	0.91
27:BF:72:SER:HB2	27:BF:80:GLN:H	1.36	0.91
33:BL:91:ASP:H	33:BL:94:THR:HG21	1.36	0.91
1:CA:456:A:H2'	1:CA:457:G:H8	1.36	0.91
21:CU:24:LYS:CG	21:CU:25:ALA:H	1.83	0.91
23:DB:75:G:H1	23:DB:102:G:H22	0.91	0.91
25:DD:34:VAL:HG12	25:DD:48:ILE:HD11	1.53	0.91
50:B2:3:ARG:HH21	50:B2:3:ARG:HG2	1.33	0.91
22:BA:1935:G:H1'	22:BA:1964:G:N2	1.86	0.91
22:BA:215:G:H4'	22:BA:216:A:H4'	1.52	0.91
25:BD:120:GLY:HA2	25:BD:162:ALA:HB1	1.50	0.91
1:CA:1217:C:O2'	1:CA:1218:C:H6	1.54	0.91
16:CP:1:MET:CE	16:CP:1:MET:HA	2.01	0.91
22:DA:1508:A:H4'	22:DA:1509:A:OP1	1.71	0.91
22:DA:786:C:C2'	22:DA:787:C:H5'	2.01	0.91
25:DD:124:ARG:HH11	25:DD:125:TRP:HE1	1.05	0.91
22:DA:2729:G:H5''	25:DD:190:LYS:HZ3	1.35	0.91
1:AA:674:G:H4'	18:AR:69:TYR:CD1	2.06	0.90
9:AI:128:LYS:HD2	9:AI:129:ARG:H	1.35	0.90
28:BG:84:LYS:HG3	28:BG:132:LEU:H	1.28	0.90
22:DA:1606:C:H4'	22:DA:1607:C:H5'	1.53	0.90
22:DA:1790:C:O2'	24:DC:207:ALA:HB2	1.71	0.90
22:DA:1808:A:H3'	22:DA:1809:A:C8	2.06	0.90
22:DA:1967:C:H6	22:DA:1967:C:H5''	1.37	0.90
1:AA:1046:A:O2'	1:AA:1047:G:H5'	1.72	0.90
1:AA:1210:C:C2'	1:AA:1211:U:H5'	2.01	0.90
1:AA:684:U:H1'	11:AK:39:ASN:O	1.71	0.90
12:AL:87:LYS:O	12:AL:88:ASP:HB2	1.71	0.90
31:BJ:43:GLU:O	31:BJ:45:THR:CG2	2.20	0.90
1:CA:1215:G:HO2'	1:CA:1216:A:H8	0.91	0.90
10:CJ:30:LYS:CG	10:CJ:36:VAL:HG22	2.00	0.90
13:CM:12:LYS:HE3	13:CM:12:LYS:HA	1.52	0.90
13:CM:13:HIS:HB3	13:CM:16:ILE:HD13	1.51	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2748:A:H1'	28:DG:66:THR:CG2	2.01	0.90
22:DA:684:G:H5'	50:D2:16:HIS:CE1	2.05	0.90
23:DB:56:G:H4'	23:DB:57:A:O5'	1.69	0.90
1:AA:255:G:H2'	1:AA:256:U:H6	1.36	0.90
1:AA:94:G:H4'	1:AA:95:C:C5'	2.00	0.90
22:BA:1032:A:H1'	52:B4:23:ILE:HD13	1.52	0.90
25:BD:120:GLY:HA2	25:BD:162:ALA:HB2	1.50	0.90
1:CA:1125:U:C6	10:CJ:40:ILE:HG12	2.06	0.90
4:CD:32:LYS:O	4:CD:33:ILE:HG22	1.71	0.90
20:AT:43:LYS:CB	20:AT:86:ALA:HB1	2.00	0.90
49:B1:33:LEU:HB3	49:B1:51:ALA:CB	2.02	0.90
22:BA:1060:U:H4'	22:BA:1061:U:H5'	0.93	0.90
40:BS:73:LYS:CA	40:BS:73:LYS:HE3	2.02	0.90
1:CA:1158:C:H2'	1:CA:1158:C:O2	1.69	0.90
3:CC:190:THR:HG22	3:CC:191:THR:H	1.35	0.90
22:DA:2756:U:O2'	22:DA:2757:A:H5'	1.70	0.90
27:DF:91:ARG:HB3	27:DF:91:ARG:HH21	1.35	0.90
29:DH:116:ARG:O	29:DH:117:LEU:HG	1.72	0.90
38:DQ:87:VAL:HG12	38:DQ:88:GLU:H	1.32	0.90
45:DX:30:PRO:CG	45:DX:32:LEU:HD21	2.01	0.90
3:CC:112:ALA:HB2	3:CC:182:ASP:HB3	1.53	0.90
22:DA:748:G:O6	22:DA:751:A:H5'	1.72	0.90
22:DA:95:A:H2'	22:DA:96:C:C5'	2.01	0.90
25:DD:133:THR:HG23	25:DD:134:HIS:N	1.83	0.90
26:DE:111:GLU:HB2	26:DE:114:ARG:HH21	1.33	0.90
27:DF:91:ARG:HB3	27:DF:91:ARG:NH2	1.86	0.90
28:DG:18:ILE:HD12	28:DG:42:VAL:HG13	1.52	0.90
1:AA:795:C:H5''	1:AA:796:C:OP2	1.72	0.90
20:AT:33:LYS:N	20:AT:33:LYS:HE2	1.86	0.90
21:AU:33:ARG:HE	21:AU:34:ARG:HG3	1.35	0.90
22:BA:1936:A:H2	22:BA:1943:U:C5	1.89	0.90
24:BC:12:ARG:HH11	24:BC:12:ARG:CG	1.83	0.90
31:BJ:73:VAL:HG23	31:BJ:74:TYR:N	1.85	0.90
1:CA:1067:A:H4'	1:CA:1068:G:O5'	1.71	0.90
5:CE:103:GLY:HA3	5:CE:121:ASN:HA	1.53	0.90
12:CL:42:LYS:HG2	12:CL:43:LYS:N	1.86	0.90
22:DA:1024:G:C3'	22:DA:1025:G:H5''	2.01	0.90
22:DA:1700:A:H2'	22:DA:1701:A:H5'	1.52	0.90
22:DA:2378:A:C2'	22:DA:2379:G:H5'	2.01	0.90
41:DT:13:ALA:HB1	41:DT:14:PRO:HD2	1.54	0.90
1:AA:1241:G:HO2'	1:AA:1242:G:H8	0.93	0.90

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BD:151:THR:CG2	25:BD:152:PRO:CD	2.43	0.90
25:BD:91:THR:O	25:BD:93:GLY:N	2.05	0.90
1:CA:386:C:C5	1:CA:387:U:C5	2.60	0.90
3:CC:39:ARG:HG2	3:CC:54:ILE:HD13	1.54	0.90
22:DA:1255:U:H5'	22:DA:2502:G:H22	1.37	0.90
22:DA:2714:G:O2'	22:DA:2715:C:H5'	1.72	0.90
22:DA:526:A:N6	22:DA:2626:C:H4'	1.85	0.90
38:DQ:4:LYS:CE	38:DQ:7:VAL:HG13	2.02	0.90
22:BA:1929:G:H4'	22:BA:1930:G:OP1	1.69	0.90
1:CA:876:C:C1'	8:CH:11:THR:HG21	2.01	0.90
3:CC:46:LEU:HD22	3:CC:75:VAL:HG22	1.52	0.90
9:CI:51:LEU:HG	9:CI:86:LEU:CD2	2.01	0.90
12:CL:89:LEU:HB3	12:CL:92:VAL:CG2	1.99	0.90
22:DA:1231:U:H2'	22:DA:1232:G:H8	1.37	0.90
38:DQ:87:VAL:HG21	39:DR:52:PRO:CD	2.00	0.90
39:DR:2:TYR:HD2	39:DR:42:ALA:HB2	1.35	0.90
1:AA:49:U:O4	1:AA:365:U:H5	1.54	0.90
1:AA:693:G:C2'	1:AA:694:A:H5'	2.02	0.90
5:AE:81:GLN:N	5:AE:81:GLN:HE21	1.70	0.90
19:AS:45:GLY:N	19:AS:61:VAL:HG23	1.87	0.90
22:BA:2502:G:H5'	22:BA:2503:A:C5'	2.02	0.90
22:BA:417:C:H2'	22:BA:418:C:H6	1.37	0.90
29:BH:41:LYS:HA	29:BH:44:ILE:HG12	1.53	0.90
35:BN:79:LEU:O	35:BN:80:PHE:HB2	1.70	0.90
1:CA:268:U:H2'	1:CA:269:C:C6	2.07	0.90
17:CQ:25:GLU:HG3	17:CQ:40:THR:HG22	1.54	0.90
22:DA:1207:C:HO2'	22:DA:1208:C:H6	0.92	0.90
22:DA:1388:G:HO2'	22:DA:1389:G:H8	0.90	0.90
22:DA:1817:G:HO2'	22:DA:1818:U:H5'	1.28	0.90
22:DA:246:C:C2'	22:DA:247:G:H5'	2.01	0.90
26:DE:23:PHE:HB2	26:DE:114:ARG:HH22	1.37	0.90
22:DA:659:G:H4'	26:DE:95:LYS:HD3	1.54	0.90
2:AB:67:LEU:HD21	2:AB:91:VAL:HG23	1.54	0.90
7:AG:119:LEU:HD21	7:AG:123:LEU:HD23	1.53	0.90
22:BA:143:C:HO2'	22:BA:144:A:H8	1.19	0.90
22:BA:777:G:O2'	22:BA:778:G:H5'	1.71	0.90
34:BM:114:ARG:HG2	34:BM:130:PHE:CE1	2.07	0.90
1:CA:1288:A:O2'	1:CA:1289:A:H8	1.55	0.90
32:DK:13:ASN:HD21	32:DK:97:THR:H	1.13	0.90
1:AA:1143:G:H2'	1:AA:1144:G:H8	1.35	0.89
22:BA:1746:A:H2'	22:BA:1747:U:C6	2.08	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1799:G:H4'	22:BA:1800:C:O5'	1.71	0.89
1:CA:1283:U:O2'	1:CA:1284:C:H5'	1.72	0.89
17:CQ:45:VAL:HG21	17:CQ:60:ILE:HG21	1.52	0.89
26:DE:79:ARG:HG2	26:DE:80:SER:H	1.36	0.89
33:DL:92:LEU:HD22	33:DL:124:GLY:HA3	1.51	0.89
3:AC:56:ILE:CG1	3:AC:65:VAL:HG22	2.02	0.89
5:AE:14:LEU:O	5:AE:14:LEU:HD13	1.70	0.89
22:BA:243:U:OP1	51:B3:5:THR:HG21	1.72	0.89
1:CA:1217:C:HO2'	1:CA:1218:C:H6	1.04	0.89
1:CA:960:U:H5'	1:CA:961:U:H5''	1.54	0.89
22:DA:1338:G:H4'	41:DT:18:GLU:OE2	1.72	0.89
22:DA:142:A:HO2'	22:DA:143:C:H6	0.92	0.89
22:DA:1635:A:O2'	22:DA:1636:U:H5'	1.71	0.89
22:DA:2291:U:H2'	22:DA:2292:U:H6	1.31	0.89
29:DH:61:VAL:HG13	29:DH:62:LEU:HG	1.51	0.89
34:DM:7:THR:HG22	34:DM:9:PHE:H	1.36	0.89
35:DN:51:LEU:HD23	35:DN:54:LEU:HD21	1.52	0.89
5:AE:103:GLY:HA2	5:AE:121:ASN:HA	1.53	0.89
15:AO:26:VAL:HG12	15:AO:30:LEU:HD12	1.52	0.89
22:BA:1498:C:O2'	22:BA:1499:C:H6	1.55	0.89
47:BZ:40:THR:HG22	47:BZ:43:ILE:HG23	1.55	0.89
1:CA:1218:C:O2'	1:CA:1219:A:H8	1.54	0.89
9:CI:71:ILE:CD1	9:CI:72:SER:H	1.85	0.89
10:CJ:40:ILE:HG22	10:CJ:42:LEU:CD1	2.03	0.89
1:CA:238:A:H2'	1:CA:239:U:H5''	0.90	0.89
1:CA:961:U:O2'	1:CA:962:C:H6	1.54	0.89
13:CM:77:LYS:HA	13:CM:80:MET:HE2	1.52	0.89
14:CN:40:ARG:NH1	19:CS:6:LYS:HB2	1.88	0.89
22:DA:1700:A:C2'	22:DA:1701:A:H5'	2.02	0.89
22:DA:2668:G:HO2'	22:DA:2669:G:H8	0.94	0.89
22:DA:27:G:N2	22:DA:512:G:H2'	1.86	0.89
22:DA:528:A:O2'	22:DA:529:A:H5''	1.71	0.89
27:DF:91:ARG:HA	27:DF:95:MET:SD	2.12	0.89
32:DK:7:MET:HA	32:DK:7:MET:HE3	1.53	0.89
21:AU:3:ILE:HA	21:AU:19:LYS:NZ	1.86	0.89
49:B1:8:ILE:CG2	49:B1:51:ALA:HA	2.02	0.89
26:BE:96:VAL:O	26:BE:96:VAL:HG12	1.72	0.89
29:BH:2:GLN:O	29:BH:3:VAL:HG22	1.70	0.89
45:BX:58:ILE:CD1	45:BX:66:VAL:HG21	2.02	0.89
1:CA:1366:C:O2'	1:CA:1367:C:H5'	1.73	0.89
11:CK:26:PHE:CZ	11:CK:88:PRO:HG2	2.08	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1361:G:O2'	22:DA:1362:C:H5'	1.72	0.89
12:AL:23:LEU:HB2	12:AL:58:ASN:ND2	1.88	0.89
16:AP:19:VAL:HG22	16:AP:36:VAL:HG12	1.55	0.89
22:BA:1414:C:C4	22:BA:1415:U:H5	1.91	0.89
24:BC:251:THR:HG22	24:BC:252:LYS:N	1.86	0.89
45:BX:5:GLN:HE21	45:BX:49:ARG:H	1.20	0.89
1:CA:1245:C:O2'	1:CA:1246:A:H8	1.56	0.89
1:CA:728:A:O2'	1:CA:729:A:H5'	1.72	0.89
8:CH:76:ARG:HD3	8:CH:77:VAL:N	1.88	0.89
12:CL:82:ARG:HG2	12:CL:82:ARG:NH1	1.86	0.89
19:CS:40:PHE:CB	19:CS:41:PRO:HD2	2.01	0.89
33:DL:63:LYS:HB3	51:D3:12:ARG:HD2	1.54	0.89
22:DA:1552:A:N3	22:DA:1552:A:H2'	1.88	0.89
22:DA:2746:U:H2'	22:DA:2747:G:H5'	1.53	0.89
24:DC:255:LYS:O	24:DC:256:THR:HG23	1.72	0.89
34:DM:34:LYS:HB2	34:DM:131:VAL:CG2	2.02	0.89
46:DY:37:LEU:HD13	46:DY:42:LEU:CD1	2.01	0.89
22:BA:1287:A:H5'	35:BN:103:ARG:HD2	1.54	0.89
22:BA:2138:G:H1	22:BA:2153:C:N4	1.70	0.89
24:BC:20:ASN:HD21	24:BC:22:GLU:HG2	1.36	0.89
40:BS:96:ILE:HD12	40:BS:96:ILE:C	1.92	0.89
45:BX:58:ILE:HD11	45:BX:66:VAL:HG11	1.55	0.89
1:CA:1102:A:H2'	1:CA:1103:C:H6	1.36	0.89
6:CF:11:HIS:CD2	6:CF:54:LEU:HD21	2.08	0.89
7:CG:107:ALA:O	7:CG:118:ARG:HB3	1.73	0.89
22:DA:118:A:OP2	22:DA:119:A:H3'	1.72	0.89
22:DA:1807:G:H2'	22:DA:1808:A:H5'	1.52	0.89
22:DA:2626:C:O2'	22:DA:2627:G:H5'	1.72	0.89
40:DS:84:ARG:HB3	40:DS:96:ILE:CG2	2.02	0.89
1:AA:1279:G:N3	1:AA:1279:G:H2'	1.85	0.89
22:BA:153:U:O2'	22:BA:154:U:H5'	1.72	0.89
31:BJ:44:TYR:HD2	38:BQ:63:ARG:HD3	1.28	0.89
42:BU:5:ARG:HH21	42:BU:5:ARG:CG	1.84	0.89
5:CE:28:ARG:HG2	5:CE:29:ILE:N	1.88	0.89
8:CH:68:LYS:HD3	8:CH:69:ALA:N	1.86	0.89
22:DA:127:A:N7	50:D2:46:LYS:HE3	1.88	0.89
28:DG:106:LEU:HB2	28:DG:108:PHE:HE1	1.34	0.89
34:DM:36:VAL:HG21	34:DM:129:THR:HG22	1.51	0.89
1:AA:642:A:O2'	1:AA:643:C:H5'	1.73	0.89
2:AB:58:LYS:NZ	2:AB:62:ARG:HG3	1.87	0.89
25:BD:110:THR:HG23	25:BD:171:THR:HG22	1.53	0.89

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:110:SER:O	26:BE:113:VAL:HG12	1.73	0.89
22:DA:861:A:H2'	22:DA:862:G:H8	1.36	0.89
1:AA:1202:U:O2'	1:AA:1203:C:H5'	1.72	0.89
4:AD:145:ARG:HH11	4:AD:147:LYS:HE3	1.36	0.89
22:BA:1056:G:O2'	22:BA:1086:A:H1'	1.73	0.89
25:BD:106:LYS:N	25:BD:106:LYS:HD2	1.87	0.89
38:BQ:93:ILE:HG23	38:BQ:94:LEU:N	1.86	0.89
22:DA:1056:G:H1'	22:DA:1103:A:N6	1.88	0.89
22:DA:1611:C:O2'	22:DA:1612:C:H6	1.55	0.89
22:DA:164:C:O2'	22:DA:165:A:H5'	1.72	0.89
22:DA:1913:A:H4'	22:DA:1914:C:OP1	1.70	0.89
25:DD:49:GLN:HE21	25:DD:79:LEU:HB3	1.37	0.89
34:DM:36:VAL:HG22	43:DV:82:TYR:HB2	1.54	0.89
34:DM:8:LYS:HA	34:DM:8:LYS:HE3	1.53	0.89
1:AA:184:G:O2'	1:AA:185:U:H6	1.56	0.88
3:AC:134:LYS:HE3	3:AC:138:GLN:HE22	1.38	0.88
12:AL:43:LYS:HB2	12:AL:44:PRO:CD	2.03	0.88
17:AQ:45:VAL:HG21	17:AQ:60:ILE:CD1	2.03	0.88
24:BC:106:PRO:HB3	24:BC:141:HIS:HE1	1.35	0.88
31:BJ:25:LEU:HD22	31:BJ:26:GLY:N	1.88	0.88
40:BS:66:ILE:HD13	40:BS:67:ASP:N	1.88	0.88
1:CA:1175:G:O2'	1:CA:1176:A:H5'	1.72	0.88
1:CA:1454:G:O2'	1:CA:1455:G:H5''	1.72	0.88
1:CA:239:U:H5'	1:CA:239:U:H6	1.37	0.88
1:CA:91:U:HO2'	1:CA:92:U:H6	1.17	0.88
2:CB:128:LEU:HB3	2:CB:131:LYS:HB3	1.53	0.88
29:DH:3:VAL:HG12	29:DH:38:PRO:HA	1.55	0.88
45:DX:53:LYS:HA	45:DX:56:ARG:CB	2.04	0.88
1:AA:1157:A:H1'	1:AA:1181:G:N2	1.88	0.88
22:BA:1348:C:H2'	22:BA:1349:C:H5'	1.53	0.88
28:BG:126:THR:HG22	28:BG:127:GLN:N	1.88	0.88
33:BL:110:VAL:O	33:BL:111:ILE:HB	1.71	0.88
1:CA:199:A:O2'	1:CA:200:G:H5''	1.72	0.88
6:CF:86:ARG:HH11	18:CR:63:TYR:HB3	1.28	0.88
21:CU:16:ARG:HG3	21:CU:19:LYS:HG2	1.53	0.88
22:DA:786:C:H2'	22:DA:787:C:H5'	1.55	0.88
1:AA:1025:U:H5''	1:AA:1026:G:H5'	1.54	0.88
1:AA:1258:G:O2'	1:AA:1259:C:H6	1.55	0.88
4:AD:117:VAL:CA	4:AD:122:ILE:HD11	2.03	0.88
7:AG:26:VAL:HG12	7:AG:42:VAL:CG2	2.00	0.88
10:AJ:36:VAL:HG22	10:AJ:76:ILE:CG1	2.03	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:4:LYS:HE2	20:AT:5:SER:HB3	1.53	0.88
24:BC:28:PRO:HG2	24:BC:33:LEU:HD11	1.54	0.88
37:BP:20:ARG:HD3	37:BP:112:ARG:NH1	1.89	0.88
37:BP:33:GLU:HG3	37:BP:34:GLY:H	1.38	0.88
41:BT:31:VAL:C	41:BT:32:LEU:HD23	1.94	0.88
44:BW:23:LYS:O	44:BW:66:VAL:HB	1.73	0.88
1:CA:1499:A:O2'	1:CA:1500:A:H5'	1.72	0.88
7:CG:78:ARG:HA	7:CG:84:TYR:HB2	1.56	0.88
1:CA:1372:U:H5''	9:CI:71:ILE:HD11	1.55	0.88
22:DA:1469:A:H2'	22:DA:1470:A:H8	1.33	0.88
22:DA:1673:G:H2'	22:DA:1674:G:H5'	1.55	0.88
22:DA:302:C:O2'	22:DA:303:G:H8	1.57	0.88
34:DM:35:ALA:HB3	34:DM:99:GLY:N	1.88	0.88
20:AT:82:ILE:O	20:AT:86:ALA:HB3	1.72	0.88
23:BB:45:A:O2'	23:BB:46:A:H5'	1.73	0.88
27:BF:35:LEU:HB3	27:BF:153:ILE:HG22	1.53	0.88
40:BS:43:ALA:HA	40:BS:46:LEU:HD12	1.54	0.88
1:CA:375:U:OP1	16:CP:70:ARG:HD3	1.73	0.88
4:CD:29:THR:HG22	4:CD:30:LYS:CD	2.03	0.88
5:CE:104:ILE:N	5:CE:122:VAL:H	1.71	0.88
7:CG:4:ARG:NH2	7:CG:6:ILE:HB	1.89	0.88
10:CJ:84:VAL:HG23	10:CJ:85:ASP:N	1.88	0.88
17:CQ:58:VAL:HB	17:CQ:74:LEU:HD11	1.56	0.88
22:DA:1237:A:C2	22:DA:1238:G:H1'	2.08	0.88
22:DA:2069:G:O2'	22:DA:2070:A:H5'	1.73	0.88
24:DC:173:LEU:HD22	24:DC:173:LEU:H	1.35	0.88
26:DE:129:PRO:HD3	26:DE:156:ASN:OD1	1.73	0.88
26:DE:149:ILE:O	26:DE:188:MET:HA	1.73	0.88
35:DN:37:THR:HB	35:DN:40:LYS:HB2	1.54	0.88
1:AA:1021:A:H2'	1:AA:1022:A:C5'	2.02	0.88
1:AA:184:G:HO2'	1:AA:185:U:H6	1.01	0.88
2:AB:36:LYS:HA	2:AB:36:LYS:HE3	1.53	0.88
22:BA:784:G:C6	24:BC:227:VAL:HG11	2.07	0.88
31:BJ:110:PRO:HB2	31:BJ:111:LYS:HG3	1.56	0.88
11:CK:74:LYS:HA	11:CK:78:ILE:HD11	1.55	0.88
22:DA:1754:A:OP1	37:DP:93:LYS:HE3	1.73	0.88
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.09	0.88
14:AN:29:ILE:HG23	14:AN:34:ASN:ND2	1.87	0.88
22:BA:2540:C:C2'	22:BA:2541:A:H5'	2.03	0.88
22:BA:990:A:H5'	22:BA:990:A:C8	2.08	0.88
1:CA:531:U:H5''	1:CA:532:A:OP1	1.74	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:19:ASN:H	12:CL:19:ASN:HD22	1.16	0.88
37:DP:86:LYS:HA	37:DP:86:LYS:NZ	1.87	0.88
42:DU:59:GLU:C	42:DU:60:LYS:HD2	1.94	0.88
2:AB:139:GLU:O	2:AB:143:LEU:HD23	1.73	0.88
4:AD:145:ARG:NH1	4:AD:147:LYS:HE3	1.89	0.88
22:BA:2207:C:H2'	22:BA:2208:C:H6	1.39	0.88
46:BY:31:GLN:HG2	46:BY:37:LEU:HB2	1.52	0.88
1:CA:674:G:H4'	18:CR:69:TYR:CD1	2.09	0.88
17:CQ:58:VAL:CG1	17:CQ:74:LEU:HD11	2.04	0.88
22:DA:1231:U:H2'	22:DA:1232:G:C8	2.08	0.88
22:DA:2136:G:H2'	22:DA:2137:U:H5	1.38	0.88
24:DC:122:ALA:HB3	24:DC:127:ASN:HD22	1.39	0.88
47:DZ:20:LYS:O	47:DZ:24:LEU:HD13	1.74	0.88
1:AA:430:A:HO2'	1:AA:431:A:H5'	1.12	0.88
1:AA:653:U:O2'	1:AA:654:G:H5'	1.72	0.88
3:AC:166:TRP:H	3:AC:166:TRP:HE3	1.17	0.88
5:AE:152:VAL:HB	5:AE:155:LYS:HZ2	1.08	0.88
5:AE:155:LYS:HD2	5:AE:156:ARG:H	1.35	0.88
24:BC:80:LEU:HD11	24:BC:109:LEU:HG	1.53	0.88
22:DA:1307:A:H62	22:DA:1606:C:H6	1.14	0.88
22:DA:2053:G:H2'	22:DA:2054:A:O4'	1.72	0.88
22:DA:2493:U:H3'	22:DA:2494:G:H5''	1.54	0.88
22:DA:873:C:H4'	34:DM:64:TRP:HE1	1.37	0.88
41:DT:87:LEU:HD23	41:DT:88:LYS:N	1.89	0.88
47:DZ:6:ILE:HD12	47:DZ:47:ILE:HD11	1.56	0.88
22:BA:2661:G:O2'	22:BA:2662:A:H5'	1.74	0.88
22:BA:357:C:H2'	22:BA:358:U:C6	2.09	0.88
33:BL:110:VAL:HG11	33:BL:131:ALA:HB1	1.56	0.88
22:BA:483:A:O2'	42:BU:56:GLY:HA2	1.73	0.88
1:CA:456:A:H2'	1:CA:457:G:C8	2.09	0.88
1:CA:94:G:H4'	1:CA:95:C:OP1	1.71	0.88
1:CA:962:C:O2'	1:CA:963:G:H8	1.57	0.88
3:CC:140:ALA:O	3:CC:145:ALA:HB3	1.74	0.88
22:DA:2713:U:H3'	22:DA:2714:G:C5'	2.04	0.88
22:DA:297:G:H5''	42:DU:84:PHE:HB2	1.55	0.88
25:DD:173:GLN:HA	25:DD:173:GLN:HE21	1.39	0.88
2:AB:40:ILE:HG13	2:AB:41:ASN:H	1.39	0.88
13:AM:19:THR:HA	13:AM:24:VAL:HG23	1.56	0.88
15:AO:9:LYS:O	15:AO:13:GLU:HG3	1.74	0.88
22:BA:1429:G:O2'	22:BA:1430:G:H5'	1.73	0.88
31:BJ:77:HIS:HD2	31:BJ:79:GLY:N	1.71	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:960:U:H4'	1:CA:961:U:C5'	2.03	0.88
7:CG:100:MET:HE3	7:CG:100:MET:H	1.36	0.88
13:CM:13:HIS:HB2	13:CM:43:LYS:HE2	1.55	0.88
22:DA:2324:U:H5''	22:DA:2325:G:H5''	1.56	0.88
22:DA:528:A:N1	22:DA:2042:A:H2'	1.88	0.88
22:DA:921:C:C2'	22:DA:922:C:H5'	2.04	0.88
24:DC:144:GLU:HA	24:DC:151:GLY:HA2	1.56	0.88
22:BA:1056:G:H5''	22:BA:1057:A:H5'	1.54	0.87
22:BA:1510:G:H2'	22:BA:1511:G:H8	1.39	0.87
31:BJ:88:THR:CG2	31:BJ:91:GLU:HG3	2.04	0.87
37:BP:9:GLN:HA	37:BP:12:MET:HG3	1.56	0.87
7:CG:28:ILE:HG21	7:CG:100:MET:HG3	1.54	0.87
1:AA:274:A:O2'	1:AA:275:G:H8	1.55	0.87
1:AA:983:A:O2'	1:AA:984:C:H5'	1.74	0.87
5:AE:81:GLN:HG2	5:AE:149:PRO:CG	2.04	0.87
24:BC:246:PRO:HG2	24:BC:247:TRP:CH2	2.09	0.87
34:BM:40:ARG:HB2	34:BM:93:VAL:CG2	2.05	0.87
35:BN:12:ARG:HG3	35:BN:12:ARG:HH21	1.37	0.87
41:BT:15:HIS:HB3	41:BT:31:VAL:CG2	2.04	0.87
5:CE:28:ARG:HG2	5:CE:29:ILE:H	1.39	0.87
7:CG:63:VAL:HG11	7:CG:127:ALA:HB2	1.57	0.87
10:CJ:40:ILE:HG22	10:CJ:42:LEU:HD12	1.55	0.87
51:D3:41:ARG:CG	51:D3:41:ARG:HH21	1.87	0.87
23:DB:30:C:H2'	23:DB:31:C:H5'	1.56	0.87
37:DP:50:ARG:HA	37:DP:57:ALA:O	1.74	0.87
1:AA:1381:U:O2'	1:AA:1382:C:H5'	1.73	0.87
1:AA:426:U:O2'	1:AA:427:U:H5'	1.73	0.87
1:CA:245:U:O2'	1:CA:246:A:H5'	1.74	0.87
1:CA:481:G:H4'	1:CA:482:A:OP1	1.74	0.87
1:CA:752:G:H1'	1:CA:754:C:N4	1.87	0.87
22:DA:1387:A:N6	22:DA:1401:G:C6	2.41	0.87
25:DD:114:LYS:HD2	25:DD:116:LYS:HZ2	1.37	0.87
31:DJ:73:VAL:HB	31:DJ:75:TYR:CE2	2.08	0.87
1:AA:469:C:H2'	1:AA:470:C:C6	2.09	0.87
29:BH:8:LYS:O	29:BH:13:GLY:HA3	1.73	0.87
56:BA:3776:HOH:O	31:BJ:39:LYS:HE3	1.73	0.87
34:BM:64:TRP:HZ3	34:BM:106:ASP:HB2	1.39	0.87
41:BT:70:HIS:HB2	41:BT:73:ARG:O	1.73	0.87
44:BW:40:ARG:HD3	44:BW:45:HIS:CE1	2.09	0.87
1:CA:844:G:O2'	1:CA:845:A:H5''	1.75	0.87
22:DA:1343:G:H2'	22:DA:1344:U:C5	2.09	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2102:G:H2'	22:DA:2103:C:H5'	1.56	0.87
47:DZ:16:LEU:HD22	47:DZ:16:LEU:N	1.89	0.87
1:AA:267:C:O2'	1:AA:268:U:H5'	1.73	0.87
1:CA:571:U:H5''	1:CA:572:A:OP2	1.74	0.87
1:CA:818:G:O2'	1:CA:819:A:H5'	1.73	0.87
22:DA:1401:G:H2'	22:DA:1402:U:C5	2.09	0.87
22:DA:1740:G:O2'	22:DA:1741:C:H5'	1.74	0.87
22:DA:311:A:O2'	22:DA:332:A:H5'	1.75	0.87
22:DA:616:A:HO2'	22:DA:617:G:H8	1.09	0.87
24:DC:122:ALA:HB3	24:DC:127:ASN:ND2	1.89	0.87
29:DH:78:VAL:HG11	29:DH:144:VAL:HG12	1.54	0.87
39:DR:39:LEU:CA	39:DR:49:ILE:HG21	2.04	0.87
5:AE:153:ALA:CA	5:AE:156:ARG:HB2	2.03	0.87
22:BA:1073:A:H3'	22:BA:1074:G:C5'	2.03	0.87
22:BA:1627:G:H5'	22:BA:1627:G:H8	1.37	0.87
25:BD:169:ARG:O	25:BD:170:VAL:HG13	1.75	0.87
32:BK:95:ILE:O	32:BK:95:ILE:HD12	1.73	0.87
1:CA:113:G:H21	1:CA:353:A:H8	0.92	0.87
1:CA:519:C:O2'	1:CA:520:A:C5'	2.23	0.87
22:DA:1204:A:H4'	22:DA:1205:A:C5'	2.05	0.87
22:DA:1327:A:H2'	22:DA:1328:A:C8	2.09	0.87
22:DA:1447:C:H2'	22:DA:1448:G:C8	2.09	0.87
22:DA:2800:A:C4	22:DA:2801:G:H1'	2.08	0.87
24:DC:67:LYS:HB3	24:DC:150:GLY:HA2	1.53	0.87
27:DF:137:PHE:HB2	27:DF:138:PRO:HD2	1.57	0.87
41:DT:29:THR:H	41:DT:87:LEU:CB	1.88	0.87
1:AA:224:U:O2'	1:AA:225:C:H5'	1.74	0.87
22:BA:1936:A:C2	22:BA:1943:U:H5	1.93	0.87
28:BG:8:VAL:CG1	28:BG:49:LEU:HB2	2.04	0.87
22:DA:2379:G:H2'	22:DA:2380:C:C6	2.10	0.87
22:DA:2624:G:N2	22:DA:2625:G:H1'	1.88	0.87
22:DA:779:U:OP1	24:DC:48:ILE:HG13	1.74	0.87
23:DB:12:C:H4'	23:DB:13:G:OP1	1.73	0.87
23:DB:40:U:O2	23:DB:43:C:H2'	1.74	0.87
24:DC:159:THR:O	24:DC:194:VAL:HG12	1.75	0.87
36:DO:27:VAL:HB	36:DO:38:GLN:HG3	1.57	0.87
1:AA:996:A:C2	1:AA:1046:A:H5'	2.10	0.87
1:AA:116:A:H2'	1:AA:117:G:H8	1.40	0.87
1:AA:365:U:H5''	1:AA:366:A:OP1	1.75	0.87
5:AE:156:ARG:O	5:AE:158:LYS:N	2.08	0.87
5:AE:81:GLN:H	5:AE:81:GLN:HE21	0.88	0.87

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1188:U:H2'	22:BA:1189:A:C5'	2.05	0.87
29:BH:82:SER:O	29:BH:83:LYS:HB2	1.75	0.87
5:CE:104:ILE:H	5:CE:122:VAL:N	1.73	0.87
1:AA:792:A:H4'	1:AA:793:U:O5'	1.73	0.87
2:AB:108:GLN:H	2:AB:108:GLN:HE21	1.21	0.87
2:AB:132:GLU:O	2:AB:136:ARG:HB2	1.75	0.87
4:AD:194:ILE:O	4:AD:194:ILE:HG13	1.74	0.87
14:AN:22:LYS:HG3	14:AN:23:ARG:N	1.90	0.87
22:BA:2579:C:C2'	22:BA:2580:U:H5'	2.04	0.87
22:BA:558:U:OP1	31:BJ:113:PRO:HG2	1.75	0.87
33:BL:93:ASN:ND2	33:BL:94:THR:N	2.22	0.87
37:BP:102:ARG:CB	37:BP:107:ALA:HB2	2.05	0.87
1:CA:1278:G:H4'	1:CA:1279:G:C5'	2.03	0.87
1:CA:1226:C:H5''	13:CM:94:LEU:HD21	1.57	0.87
21:CU:39:LYS:N	21:CU:40:PRO:HD2	1.89	0.87
22:DA:116:C:H5''	22:DA:128:C:H41	1.40	0.87
22:DA:2423:U:H5''	22:DA:2424:C:OP1	1.73	0.87
22:DA:727:A:H2'	22:DA:728:G:C8	2.10	0.87
23:DB:65:U:H3'	23:DB:108:A:N6	1.90	0.87
13:AM:89:ARG:CB	13:AM:96:VAL:HG22	2.04	0.86
22:BA:1070:A:C2	30:BI:9:LYS:CG	2.58	0.86
1:CA:1125:U:C5	10:CJ:40:ILE:HG12	2.10	0.86
1:CA:764:C:C2'	1:CA:765:G:H5'	2.04	0.86
2:CB:119:GLN:HG3	2:CB:124:THR:HG21	1.57	0.86
4:CD:187:ARG:NH2	4:CD:191:SER:HA	1.90	0.86
16:CP:1:MET:HA	16:CP:1:MET:HE3	1.56	0.86
22:DA:739:A:O2'	22:DA:740:C:C5	2.28	0.86
23:DB:45:A:H2'	23:DB:46:A:C8	2.09	0.86
22:DA:2748:A:H1'	28:DG:66:THR:HG22	1.56	0.86
32:DK:60:ALA:HA	32:DK:87:LEU:CD2	2.05	0.86
42:DU:14:THR:HG23	42:DU:15:GLY:H	1.38	0.86
2:AB:100:LEU:HD12	2:AB:178:LEU:HD23	1.57	0.86
22:BA:1062:G:OP1	22:BA:1070:A:H4'	1.75	0.86
22:BA:409:G:O2'	22:BA:410:G:H5'	1.74	0.86
1:CA:335:C:H2'	1:CA:336:A:C8	2.10	0.86
16:CP:74:LEU:O	16:CP:78:VAL:HG23	1.74	0.86
51:D3:3:ILE:HG22	51:D3:4:LYS:N	1.87	0.86
22:DA:2356:U:H4'	44:DW:16:GLU:HG3	1.57	0.86
22:DA:861:A:H2'	22:DA:862:G:C8	2.10	0.86
33:DL:68:SER:O	33:DL:69:ARG:HB2	1.74	0.86
39:DR:39:LEU:HB3	39:DR:49:ILE:HD13	1.57	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DW:43:LYS:HD2	44:DW:79:ILE:HD11	1.56	0.86
1:AA:1303:C:H2'	1:AA:1304:G:C8	2.11	0.86
1:AA:109:A:H2'	1:AA:326:G:N2	1.88	0.86
25:BD:34:VAL:HG22	25:BD:94:GLN:H	1.40	0.86
41:BT:29:THR:CG2	41:BT:86:THR:HG22	2.04	0.86
43:BV:10:LYS:N	43:BV:10:LYS:HD3	1.87	0.86
1:CA:17:U:H2'	1:CA:18:C:C6	2.10	0.86
1:CA:238:A:C3'	1:CA:239:U:H5''	2.04	0.86
1:CA:451:A:H4'	1:CA:452:A:O5'	1.72	0.86
2:CB:103:TRP:CD1	2:CB:107:ARG:HB3	2.10	0.86
12:CL:79:ILE:HD12	12:CL:96:THR:HG21	1.54	0.86
22:DA:1070:A:H5'	22:DA:1071:G:H5''	1.57	0.86
22:DA:1489:C:H4'	22:DA:1490:A:OP1	1.76	0.86
1:AA:116:A:H2'	1:AA:117:G:C8	2.10	0.86
1:AA:1234:C:C2'	1:AA:1235:U:H5'	2.05	0.86
1:AA:495:A:H4'	1:AA:496:A:O5'	1.75	0.86
22:BA:2571:U:O2'	25:BD:151:THR:HG21	1.76	0.86
44:BW:18:LYS:HG3	44:BW:19:ARG:N	1.85	0.86
1:CA:1048:G:H21	1:CA:1214:C:H5	1.20	0.86
1:CA:559:A:H4'	1:CA:560:A:O5'	1.73	0.86
1:CA:913:A:H4'	1:CA:914:A:O5'	1.73	0.86
4:CD:69:ARG:CG	4:CD:69:ARG:HH11	1.88	0.86
22:DA:1166:G:N2	22:DA:1184:U:H1'	1.90	0.86
22:DA:1305:C:HO2'	22:DA:1306:C:H6	0.93	0.86
22:DA:2136:G:H2'	22:DA:2137:U:C5	2.09	0.86
22:DA:92:U:H2'	22:DA:93:G:C8	2.10	0.86
25:DD:29:VAL:HB	25:DD:98:VAL:CG1	2.05	0.86
28:DG:124:CYS:HB3	28:DG:130:ILE:HA	1.54	0.86
41:DT:4:GLU:HG3	41:DT:6:ARG:HH21	1.38	0.86
10:AJ:57:VAL:HG22	10:AJ:58:ASN:N	1.88	0.86
22:BA:2636:C:H2'	22:BA:2637:U:C6	2.09	0.86
28:BG:83:THR:HA	28:BG:84:LYS:HZ1	1.36	0.86
44:BW:46:ALA:HB3	44:BW:79:ILE:O	1.74	0.86
1:CA:1142:G:H2'	1:CA:1143:G:C8	2.09	0.86
5:CE:24:VAL:HG23	5:CE:26:GLY:H	1.39	0.86
1:CA:1348:U:H4'	9:CI:121:ARG:HG3	1.57	0.86
14:CN:66:THR:CG2	14:CN:82:LYS:HE3	2.06	0.86
22:DA:1539:U:HO2'	22:DA:1540:G:H8	0.87	0.86
22:DA:2287:A:HO2'	22:DA:2288:A:H3'	1.37	0.86
24:DC:239:PHE:HD1	24:DC:240:GLY:H	1.20	0.86
37:DP:52:ARG:HG2	37:DP:52:ARG:NH1	1.90	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:996:A:C4'	38:DQ:91:ARG:HD2	2.05	0.86
1:AA:1284:C:H2'	1:AA:1285:A:C8	2.10	0.86
1:AA:792:A:O2'	1:AA:794:A:N7	2.09	0.86
5:AE:152:VAL:HB	5:AE:155:LYS:HZ1	1.33	0.86
15:AO:26:VAL:HG12	15:AO:30:LEU:CD1	2.06	0.86
1:CA:1005:A:C5	1:CA:1006:G:H1'	2.11	0.86
22:DA:1965:C:H3'	22:DA:1966:A:H5''	1.54	0.86
22:DA:45:G:H5'	22:DA:46:G:H5'	1.57	0.86
22:DA:858:G:H2'	22:DA:2268:A:N3	1.90	0.86
24:DC:94:LEU:HA	24:DC:100:ARG:HG2	1.57	0.86
34:DM:38:ARG:O	34:DM:126:ILE:HG21	1.76	0.86
41:DT:29:THR:H	41:DT:87:LEU:HB2	1.40	0.86
5:AE:29:ILE:HD12	5:AE:30:PHE:N	1.91	0.86
7:AG:110:ARG:NH1	7:AG:122:GLU:HG2	1.90	0.86
22:BA:1779:U:C5	22:BA:1784:A:N7	2.43	0.86
39:BR:49:ILE:HB	39:BR:51:VAL:O	1.76	0.86
2:CB:184:ALA:O	2:CB:199:ILE:HG12	1.74	0.86
22:DA:1013:C:O2'	22:DA:1014:A:H5'	1.76	0.86
22:DA:2758:A:HO2'	22:DA:2759:G:H5'	1.41	0.86
22:DA:794:A:H2'	22:DA:795:C:H6	1.41	0.86
1:AA:486:U:C2'	1:AA:487:A:H5'	2.05	0.86
22:BA:2063:C:H6	22:BA:2063:C:H5'	1.41	0.86
22:BA:272:A:HO2'	22:BA:273:G:H8	0.92	0.86
33:BL:110:VAL:HG12	33:BL:111:ILE:N	1.89	0.86
1:CA:429:U:H1'	1:CA:430:A:H5''	1.57	0.86
4:CD:2:ARG:NH1	4:CD:2:ARG:HB2	1.91	0.86
10:CJ:30:LYS:HG2	10:CJ:36:VAL:HG22	1.57	0.86
18:CR:22:TYR:HA	18:CR:57:ALA:HB1	1.58	0.86
22:DA:312:G:H5'	22:DA:331:C:O2'	1.74	0.86
22:DA:765:C:H2'	22:DA:766:U:C6	2.11	0.86
22:DA:873:C:H4'	34:DM:64:TRP:NE1	1.91	0.86
23:DB:46:A:H2'	23:DB:47:C:C6	2.11	0.86
40:DS:4:ILE:HD12	40:DS:5:ALA:N	1.90	0.86
10:AJ:52:LEU:HD23	10:AJ:62:ARG:HG3	1.57	0.86
28:BG:137:LYS:HA	28:BG:140:ILE:CD1	2.06	0.86
31:BJ:111:LYS:CD	31:BJ:112:GLY:N	2.33	0.86
44:BW:37:VAL:C	44:BW:38:ARG:HG2	1.95	0.86
46:BY:9:LYS:NZ	46:BY:9:LYS:HA	1.91	0.86
1:CA:1239:A:H1'	1:CA:1241:G:C4	2.10	0.86
1:CA:482:A:H2'	1:CA:483:C:C6	2.10	0.86
1:CA:990:C:H2'	1:CA:991:U:O4'	1.74	0.86

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:42:LYS:HD3	12:CL:43:LYS:NZ	1.89	0.86
22:DA:1716:U:HO2'	22:DA:1717:A:H8	0.90	0.86
22:DA:851:C:H2'	22:DA:852:U:C6	2.10	0.86
22:BA:2103:C:H2'	22:BA:2104:C:H5'	1.58	0.86
26:BE:149:ILE:HD11	26:BE:172:ALA:HA	1.56	0.86
34:BM:1:MET:CE	34:BM:2:LEU:H	1.88	0.86
37:BP:50:ARG:CD	37:BP:51:ASN:N	2.14	0.86
1:CA:1285:A:H4'	1:CA:1286:U:OP1	1.76	0.86
16:CP:16:PHE:CE2	16:CP:40:ASN:HB2	2.10	0.86
22:DA:2875:C:HO2'	22:DA:2876:G:H8	0.87	0.86
22:DA:860:U:HO2'	22:DA:861:A:H8	0.88	0.86
22:DA:915:C:O2'	22:DA:916:G:H5'	1.75	0.86
1:AA:1258:G:HO2'	1:AA:1259:C:H6	0.86	0.85
20:AT:43:LYS:HB3	20:AT:86:ALA:CB	2.06	0.85
24:BC:67:LYS:HG2	24:BC:150:GLY:HA2	1.56	0.85
37:BP:3:ILE:HD13	37:BP:3:ILE:O	1.76	0.85
39:BR:80:ARG:C	39:BR:81:LYS:HD3	1.97	0.85
1:CA:202:G:HO2'	1:CA:468:A:H8	0.90	0.85
20:CT:62:ALA:HA	20:CT:67:HIS:CE1	2.11	0.85
22:DA:1062:G:H22	22:DA:1077:A:H2	1.19	0.85
22:DA:1534:U:H6	22:DA:1538:G:N1	1.74	0.85
22:DA:2214:C:O2'	22:DA:2215:C:C5'	2.22	0.85
25:DD:34:VAL:HG12	25:DD:48:ILE:CD1	2.06	0.85
34:DM:76:LYS:NZ	34:DM:84:LYS:H	1.74	0.85
35:DN:103:ARG:HB2	35:DN:110:MET:CG	2.06	0.85
38:DQ:15:LYS:HE3	38:DQ:19:GLN:NE2	1.89	0.85
22:BA:726:G:O2'	22:BA:727:A:P	2.32	0.85
22:BA:855:G:H21	44:BW:23:LYS:CG	1.88	0.85
25:BD:97:SER:C	25:BD:99:GLU:HG2	1.96	0.85
37:BP:50:ARG:HD3	37:BP:56:SER:HB2	1.55	0.85
38:BQ:29:ARG:HG3	38:BQ:29:ARG:HH11	1.40	0.85
22:BA:2353:G:H1'	44:BW:30:VAL:HG13	1.58	0.85
16:CP:48:GLU:HG3	16:CP:51:ARG:HE	1.39	0.85
16:CP:67:ILE:HD11	16:CP:75:ILE:CD1	2.06	0.85
22:DA:1307:A:N6	22:DA:1606:C:H6	1.72	0.85
22:DA:1328:A:H2'	22:DA:1330:C:N4	1.91	0.85
22:DA:1537:G:O2'	22:DA:1538:G:H4'	1.75	0.85
22:DA:1616:A:H8	22:DA:1616:A:OP1	1.58	0.85
22:DA:2267:A:N6	22:DA:2272:U:H3	1.73	0.85
42:DU:83:GLY:O	42:DU:93:ARG:HA	1.76	0.85
44:DW:18:LYS:H	44:DW:36:ILE:CG1	1.88	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:96:C:H4'	46:DY:41:HIS:CD2	2.11	0.85
1:AA:263:A:H2'	1:AA:264:C:C5	2.11	0.85
48:B0:33:SER:OG	48:B0:35:GLU:HG3	1.76	0.85
36:BO:40:ILE:HG12	36:BO:47:VAL:HG12	1.57	0.85
8:CH:93:LYS:N	8:CH:93:LYS:HD3	1.91	0.85
9:CI:51:LEU:HB2	9:CI:56:MET:SD	2.16	0.85
18:CR:72:ARG:H	18:CR:72:ARG:HE	1.18	0.85
22:DA:83:A:N6	22:DA:101:A:H5'	1.91	0.85
26:DE:133:LEU:O	26:DE:137:LYS:HB2	1.74	0.85
26:DE:44:ARG:HG3	26:DE:44:ARG:HH21	1.39	0.85
32:DK:118:LEU:O	32:DK:120:PRO:HD2	1.76	0.85
44:DW:9:THR:HG23	44:DW:10:ARG:HG3	1.56	0.85
1:AA:198:G:HO2'	1:AA:199:A:H8	0.85	0.85
12:AL:34:THR:HG22	12:AL:35:ARG:NE	1.91	0.85
13:AM:95:PRO:HG3	13:AM:101:THR:HG22	1.57	0.85
23:BB:46:A:H2'	23:BB:47:C:C6	2.11	0.85
1:CA:1343:G:H1'	9:CI:122:ARG:NH1	1.91	0.85
1:CA:729:A:H2'	1:CA:730:G:H8	1.42	0.85
19:CS:40:PHE:HB3	19:CS:41:PRO:CD	2.06	0.85
22:DA:249:C:H5''	22:DA:2394:C:O2'	1.77	0.85
22:DA:324:A:C2	22:DA:325:G:H1'	2.11	0.85
22:DA:387:U:H4'	22:DA:388:G:O5'	1.74	0.85
12:AL:72:ASN:OD1	12:AL:104:SER:HB3	1.76	0.85
16:AP:79:ASN:O	16:AP:80:LYS:HB2	1.75	0.85
22:BA:958:U:H5'	22:BA:958:U:C6	2.10	0.85
31:BJ:77:HIS:HD2	31:BJ:79:GLY:H	0.90	0.85
1:CA:1454:G:HO2'	1:CA:1455:G:H8	0.87	0.85
1:CA:223:A:H2'	1:CA:224:U:H6	1.42	0.85
10:CJ:15:HIS:CE1	10:CJ:68:ARG:HD3	2.11	0.85
44:DW:37:VAL:HG12	44:DW:55:ASP:CB	2.04	0.85
5:AE:153:ALA:HA	5:AE:156:ARG:CA	2.05	0.85
22:BA:1068:G:H2'	22:BA:1069:A:H5'	1.58	0.85
22:BA:646:U:H3'	22:BA:647:G:H5''	1.58	0.85
41:BT:18:GLU:HA	41:BT:18:GLU:OE2	1.73	0.85
22:DA:2094:A:O2'	22:DA:2095:A:H5''	1.77	0.85
22:DA:2378:A:H2'	22:DA:2379:G:C5'	2.05	0.85
22:DA:477:A:HO2'	22:DA:478:A:H8	0.88	0.85
22:DA:639:U:H2'	22:DA:640:C:H6	1.41	0.85
38:DQ:77:LYS:CE	38:DQ:116:LEU:HD21	2.06	0.85
41:DT:14:PRO:O	41:DT:15:HIS:HB2	1.77	0.85
1:AA:1142:G:H2'	1:AA:1143:G:O4'	1.76	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:195:ASN:O	4:AD:196:GLU:HG3	1.77	0.85
22:BA:434:U:H4'	22:BA:435:C:OP1	1.74	0.85
22:BA:528:A:C2	22:BA:2043:C:H4'	2.12	0.85
32:BK:108:ARG:HH11	32:BK:108:ARG:CG	1.89	0.85
37:BP:61:ARG:HG2	37:BP:70:GLU:HG2	1.58	0.85
44:BW:40:ARG:HB2	44:BW:56:HIS:ND1	1.91	0.85
2:CB:103:TRP:CH2	2:CB:156:LEU:HB3	2.11	0.85
4:CD:33:ILE:O	4:CD:35:GLN:HG2	1.75	0.85
18:CR:39:VAL:HG13	18:CR:40:PRO:HD2	1.58	0.85
22:DA:1092:C:H2'	22:DA:1093:G:H5'	1.58	0.85
22:DA:335:C:HO2'	22:DA:336:C:H6	1.22	0.85
24:DC:94:LEU:HB2	24:DC:100:ARG:HD2	1.55	0.85
39:DR:39:LEU:HA	39:DR:49:ILE:CG2	2.06	0.85
42:DU:14:THR:HG21	42:DU:64:ILE:HD11	1.58	0.85
43:DV:77:VAL:HG23	43:DV:89:ILE:CG2	2.07	0.85
47:DZ:18:LYS:O	47:DZ:22:THR:HG23	1.77	0.85
47:DZ:53:MET:O	47:DZ:54:VAL:HG13	1.76	0.85
1:AA:1129:C:C5'	9:AI:17:ARG:HH22	1.89	0.85
1:AA:1128:C:O2'	1:AA:1129:C:H5'	1.76	0.85
1:AA:484:G:H4'	1:AA:485:U:O5'	1.76	0.85
5:AE:131:ASN:O	5:AE:135:VAL:HG12	1.77	0.85
7:AG:61:PHE:CE1	7:AG:65:LEU:HD22	2.11	0.85
22:BA:303:G:H2'	22:BA:304:U:C6	2.12	0.85
24:BC:33:LEU:HD21	24:BC:62:ARG:HD3	1.57	0.85
32:BK:18:ARG:HG3	32:BK:18:ARG:HH11	1.40	0.85
44:BW:37:VAL:HG11	44:BW:55:ASP:HB2	1.57	0.85
1:CA:951:G:H2'	1:CA:952:U:C6	2.12	0.85
2:CB:164:ASP:HB3	2:CB:167:HIS:HB3	1.59	0.85
4:CD:195:ASN:HB3	4:CD:197:HIS:CD2	2.12	0.85
1:CA:522:C:H41	12:CL:49:ARG:HH22	1.21	0.85
22:DA:279:A:N6	22:DA:361:G:H1'	1.92	0.85
22:DA:310:A:O2'	22:DA:311:A:H8	1.60	0.85
37:DP:109:ILE:O	37:DP:110:LYS:HG3	1.77	0.85
40:DS:95:ARG:O	40:DS:96:ILE:HG22	1.76	0.85
1:AA:198:G:O2'	1:AA:199:A:H8	1.59	0.85
1:AA:961:U:H2'	1:AA:962:C:H6	1.41	0.85
21:AU:36:PHE:HB3	21:AU:40:PRO:HD3	1.59	0.85
22:BA:2790:U:H4'	22:BA:2791:G:OP1	1.75	0.85
25:BD:174:SER:O	25:BD:175:LEU:HB2	1.75	0.85
31:BJ:111:LYS:HD3	31:BJ:112:GLY:H	1.04	0.85
21:CU:36:PHE:CD1	21:CU:40:PRO:HB3	2.12	0.85

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2023:C:HO2'	22:DA:2024:G:H8	1.23	0.85
22:DA:217:A:C2'	22:DA:218:A:C8	2.60	0.85
22:DA:607:U:H5	22:DA:619:G:C5	1.95	0.85
22:DA:802:A:H2'	22:DA:803:U:C6	2.10	0.85
1:AA:500:G:H2'	1:AA:501:C:C6	2.12	0.85
2:AB:89:PHE:HB3	2:AB:149:GLY:HA2	1.58	0.85
10:AJ:57:VAL:CG2	10:AJ:58:ASN:H	1.90	0.85
11:AK:124:LYS:HE3	21:AU:34:ARG:HG2	1.56	0.85
19:AS:51:HIS:CD2	19:AS:53:GLY:H	1.95	0.85
22:BA:74:A:H4'	22:BA:75:G:O5'	1.75	0.85
36:BO:88:LYS:CE	36:BO:116:GLN:HE21	1.89	0.85
1:CA:1054:C:O2'	1:CA:1055:A:H5''	1.76	0.85
1:CA:1124:G:H4'	1:CA:1125:U:OP1	1.74	0.85
1:CA:563:A:N3	1:CA:563:A:H2'	1.92	0.85
4:CD:84:ASN:HD22	4:CD:84:ASN:C	1.80	0.85
22:DA:2868:A:H2'	22:DA:2869:G:C8	2.12	0.85
22:DA:329:G:O6	42:DU:16:LYS:HB2	1.76	0.85
22:DA:942:G:C2'	22:DA:943:A:H5'	2.07	0.85
24:DC:16:VAL:HG11	24:DC:201:LEU:O	1.77	0.85
24:DC:145:MET:HE2	24:DC:181:ARG:HH22	1.42	0.85
25:DD:106:LYS:HB3	25:DD:206:ALA:HB3	1.55	0.85
41:DT:1:MET:HG2	41:DT:4:GLU:HA	1.59	0.85
44:DW:17:ALA:O	44:DW:18:LYS:HB3	1.74	0.85
1:AA:275:G:H2'	1:AA:276:G:H8	1.39	0.84
1:AA:939:G:H5'	7:AG:101:ARG:NH1	1.92	0.84
15:AO:29:ALA:HA	15:AO:84:LEU:HD21	1.59	0.84
1:CA:386:C:C5	1:CA:387:U:H5	1.95	0.84
21:CU:3:ILE:HG23	21:CU:18:PHE:HD1	1.41	0.84
22:DA:2191:A:H5''	22:DA:2192:U:OP2	1.76	0.84
22:DA:649:G:H2'	22:DA:650:C:H6	1.38	0.84
22:DA:668:A:H2'	22:DA:670:A:H62	1.40	0.84
26:DE:98:LYS:O	26:DE:99:LYS:HB2	1.77	0.84
29:DH:90:LEU:CB	29:DH:123:ARG:HB3	2.07	0.84
1:AA:500:G:H5'	12:AL:120:ARG:HH12	1.42	0.84
22:BA:1885:A:H2'	22:BA:1886:U:C6	2.11	0.84
39:BR:24:LYS:HA	39:BR:94:THR:HG23	1.59	0.84
22:BA:2352:A:C2	44:BW:30:VAL:HG11	2.12	0.84
44:BW:40:ARG:HG2	44:BW:52:CYS:SG	2.17	0.84
1:CA:752:G:H1'	1:CA:754:C:H41	1.39	0.84
1:CA:764:C:H2'	1:CA:765:G:C5'	2.08	0.84
1:CA:78:A:H2'	1:CA:79:G:C8	2.12	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:15:SER:OG	6:CF:58:HIS:HD2	1.59	0.84
22:DA:999:U:C2'	22:DA:1000:A:H5'	2.07	0.84
22:DA:1735:A:O2'	22:DA:1736:U:H6	1.59	0.84
22:DA:1746:A:H2'	22:DA:1747:U:H6	1.40	0.84
22:DA:426:C:O2'	22:DA:427:U:H5'	1.77	0.84
22:DA:477:A:O2'	22:DA:478:A:H8	1.57	0.84
22:DA:95:A:H2'	22:DA:96:C:H5''	1.59	0.84
1:AA:914:A:O2'	1:AA:915:A:H5'	1.77	0.84
2:AB:32:GLY:HA3	2:AB:39:ILE:H	1.40	0.84
8:AH:17:GLN:HE21	8:AH:71:VAL:HG23	1.42	0.84
21:AU:19:LYS:HE2	21:AU:19:LYS:CA	2.07	0.84
31:BJ:124:VAL:HG23	31:BJ:125:TYR:N	1.87	0.84
40:BS:73:LYS:CE	40:BS:73:LYS:HA	2.00	0.84
1:CA:1322:C:O2'	1:CA:1323:G:H5'	1.77	0.84
14:CN:27:LYS:HB2	14:CN:45:LEU:CD2	2.08	0.84
22:DA:1611:C:HO2'	22:DA:1612:C:H6	0.85	0.84
22:DA:1956:U:O2'	22:DA:1957:C:H5'	1.77	0.84
22:DA:412:A:N6	22:DA:2412:A:O4'	2.10	0.84
22:DA:2425:A:H4'	22:DA:2426:A:O5'	1.75	0.84
31:DJ:35:ARG:HH12	31:DJ:140:LEU:HD11	1.42	0.84
1:AA:1374:A:H2'	1:AA:1375:A:C8	2.13	0.84
4:AD:11:SER:HA	4:AD:18:LEU:HD12	1.59	0.84
17:AQ:45:VAL:HG21	17:AQ:60:ILE:HD13	1.59	0.84
29:BH:125:THR:HG23	29:BH:126:GLY:H	1.41	0.84
43:BV:10:LYS:NZ	43:BV:11:GLU:HG3	1.93	0.84
4:CD:53:GLN:HG2	4:CD:198:LEU:HD22	1.59	0.84
22:DA:1915:U:O2'	22:DA:1916:A:H5'	1.76	0.84
22:DA:2271:G:H2'	22:DA:2272:U:H6	1.42	0.84
22:DA:813:U:H2'	22:DA:814:C:H6	1.42	0.84
31:DJ:111:LYS:HB2	31:DJ:115:GLY:N	1.92	0.84
1:AA:16:A:O2'	1:AA:17:U:H5'	1.77	0.84
1:AA:451:A:H4'	1:AA:452:A:O5'	1.77	0.84
1:AA:98:A:H2'	1:AA:99:C:C6	2.12	0.84
5:AE:135:VAL:O	5:AE:139:THR:HG22	1.78	0.84
5:AE:155:LYS:CD	5:AE:156:ARG:H	1.89	0.84
48:B0:47:TYR:CE2	48:B0:52:LYS:HB2	2.11	0.84
23:BB:53:A:O2'	23:BB:54:G:H5'	1.78	0.84
32:BK:113:MET:SD	32:BK:116:ILE:HD11	2.17	0.84
1:CA:142:G:C2	1:CA:143:A:H1'	2.11	0.84
1:CA:47:C:O2'	1:CA:48:C:H5'	1.77	0.84
16:CP:4:ILE:HD12	16:CP:4:ILE:N	1.93	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:50:ARG:HB3	37:DP:57:ALA:N	1.89	0.84
3:AC:142:ARG:HB3	3:AC:143:LEU:HD13	1.60	0.84
17:AQ:18:LYS:CA	17:AQ:47:ASP:HB2	2.06	0.84
44:BW:23:LYS:CD	44:BW:24:ARG:H	1.90	0.84
1:CA:277:C:H2'	1:CA:278:G:H8	1.43	0.84
1:CA:821:G:H2'	1:CA:822:U:C6	2.12	0.84
22:DA:491:G:H2'	22:DA:492:A:H8	1.42	0.84
22:DA:915:C:H2'	22:DA:916:G:C8	2.12	0.84
32:DK:21:CYS:HA	32:DK:41:ILE:HD12	1.59	0.84
42:DU:42:LYS:HD3	42:DU:57:ILE:HD12	1.59	0.84
22:BA:2138:G:H1	22:BA:2153:C:H42	1.23	0.84
22:BA:2444:G:OP2	26:BE:63:LYS:HE2	1.75	0.84
22:BA:545:U:H2'	22:BA:546:U:C4'	2.07	0.84
28:BG:60:GLY:O	28:BG:61:TRP:HB2	1.75	0.84
42:BU:35:VAL:HG12	42:BU:38:ILE:HG12	1.57	0.84
1:CA:794:A:H2'	1:CA:795:C:C6	2.13	0.84
1:CA:951:G:H2'	1:CA:952:U:H6	1.40	0.84
9:CI:23:GLY:H	9:CI:60:LEU:HA	1.42	0.84
22:DA:1654:A:O2'	22:DA:1655:A:H8	1.58	0.84
22:DA:2216:G:HO2'	22:DA:2217:G:H8	0.88	0.84
22:DA:672:C:H5'	22:DA:672:C:H6	1.43	0.84
28:DG:175:LYS:O	28:DG:175:LYS:HD3	1.77	0.84
1:AA:1003:G:N2	1:AA:1005:A:H5'	1.92	0.84
2:AB:163:ILE:O	2:AB:185:ILE:HG12	1.78	0.84
28:BG:84:LYS:HE2	28:BG:84:LYS:N	1.93	0.84
35:BN:36:THR:HG23	35:BN:37:THR:O	1.76	0.84
1:CA:1165:U:H2'	1:CA:1166:G:H5'	1.60	0.84
23:DB:57:A:HO2'	23:DB:58:A:H8	0.84	0.84
36:DO:23:ALA:O	36:DO:42:PRO:HG3	1.76	0.84
1:AA:1409:C:O2'	1:AA:1410:A:H5'	1.76	0.84
16:AP:37:GLY:HA2	16:AP:51:ARG:NH1	1.92	0.84
27:BF:132:ARG:O	27:BF:133:GLU:HB3	1.74	0.84
27:BF:131:VAL:CG2	27:BF:151:LEU:HD12	2.07	0.84
29:BH:31:VAL:HB	29:BH:32:PRO:CD	2.07	0.84
32:BK:19:VAL:HG22	32:BK:41:ILE:HG13	1.57	0.84
13:CM:68:LEU:HD22	13:CM:69:ARG:HH11	1.41	0.84
10:CJ:51:VAL:HB	14:CN:80:ARG:HB2	1.58	0.84
41:DT:10:VAL:HG23	41:DT:11:LEU:H	1.43	0.84
5:AE:103:GLY:O	5:AE:104:ILE:HG22	1.77	0.84
1:CA:1143:G:C2'	1:CA:1144:G:H8	1.91	0.84
17:CQ:4:ILE:HG22	17:CQ:5:ARG:N	1.92	0.84

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:604:G:HO2'	22:DA:605:G:H8	1.25	0.84
24:DC:106:PRO:HB3	24:DC:141:HIS:CE1	2.12	0.84
26:DE:130:LYS:HB3	26:DE:133:LEU:CB	2.07	0.84
29:DH:89:LYS:HD2	29:DH:124:THR:HA	1.58	0.84
33:DL:92:LEU:CD2	33:DL:124:GLY:HA3	2.07	0.84
35:DN:71:ARG:HB2	35:DN:71:ARG:NH2	1.92	0.84
1:AA:545:C:C5'	4:AD:68:GLU:HG3	2.07	0.83
1:AA:548:G:H2'	1:AA:549:C:C6	2.13	0.83
2:AB:163:ILE:HG23	2:AB:164:ASP:N	1.92	0.83
8:AH:48:PHE:O	8:AH:49:LYS:HB2	1.75	0.83
9:AI:23:GLY:H	9:AI:60:LEU:HA	1.43	0.83
37:BP:50:ARG:CD	37:BP:56:SER:CB	2.55	0.83
40:BS:82:MET:HG3	40:BS:98:LYS:HB2	1.57	0.83
6:CF:61:LEU:HD13	6:CF:62:MET:N	1.93	0.83
22:DA:1210:G:H5''	22:DA:1211:C:H3'	1.57	0.83
22:DA:1451:C:H42	22:DA:1461:C:H42	1.24	0.83
22:DA:2310:C:H2'	22:DA:2311:A:H5''	1.57	0.83
22:DA:867:C:HO2'	22:DA:868:U:H6	0.95	0.83
24:DC:64:VAL:HG11	24:DC:66:PHE:CZ	2.13	0.83
38:DQ:61:ILE:CD1	38:DQ:92:LYS:HD3	2.04	0.83
41:DT:44:LYS:O	41:DT:48:GLN:HG2	1.78	0.83
1:AA:924:C:H2'	1:AA:925:G:H8	1.42	0.83
19:AS:4:LEU:HD22	19:AS:8:PRO:HA	1.58	0.83
22:BA:2092:U:H4'	22:BA:2093:G:O5'	1.78	0.83
22:BA:278:A:C2	22:BA:362:A:C8	2.67	0.83
22:BA:957:C:H4'	22:BA:958:U:OP1	1.78	0.83
34:BM:35:ALA:O	34:BM:36:VAL:HG12	1.76	0.83
34:BM:62:LYS:HD3	34:BM:64:TRP:CZ2	2.13	0.83
46:BY:17:GLU:HG3	46:BY:18:LEU:N	1.92	0.83
47:BZ:15:ARG:NH1	47:BZ:15:ARG:HG3	1.90	0.83
7:CG:74:VAL:CG1	7:CG:140:VAL:HG13	2.03	0.83
17:CQ:59:GLU:HB3	17:CQ:76:ARG:O	1.77	0.83
22:DA:1139:G:O2'	22:DA:1140:C:H5'	1.77	0.83
22:DA:1438:U:C4	22:DA:1439:A:H2	1.96	0.83
22:DA:2190:G:H5'	22:DA:2191:A:OP2	1.77	0.83
22:DA:2517:C:HO2'	22:DA:2518:A:H3'	1.39	0.83
27:DF:147:ARG:O	27:DF:148:VAL:HG22	1.78	0.83
32:DK:13:ASN:H	32:DK:13:ASN:ND2	1.74	0.83
1:AA:545:C:H5'	4:AD:68:GLU:CG	2.08	0.83
1:AA:89:U:O2'	1:AA:90:C:H5''	1.77	0.83
21:AU:52:VAL:HG13	21:AU:53:LYS:N	1.92	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1063:G:OP1	30:BI:76:ALA:CB	2.19	0.83
22:BA:1421:G:HO2'	22:BA:1422:G:H5'	1.40	0.83
22:BA:2311:A:H1'	27:BF:78:ILE:CD1	2.08	0.83
22:BA:923:G:H21	44:BW:23:LYS:HZ3	1.23	0.83
32:BK:95:ILE:C	32:BK:95:ILE:HD12	1.98	0.83
34:BM:2:LEU:CD2	34:BM:69:PRO:HD2	2.08	0.83
39:BR:9:GLY:C	39:BR:10:LYS:HD3	1.98	0.83
44:BW:28:GLU:HB3	44:BW:31:LEU:CD2	2.07	0.83
1:CA:1038:C:H2'	1:CA:1039:G:H8	1.43	0.83
1:CA:1183:U:H3'	1:CA:1184:G:C5'	2.01	0.83
1:CA:1513:A:H2'	1:CA:1514:G:C8	2.12	0.83
6:CF:86:ARG:HD3	18:CR:63:TYR:O	1.78	0.83
22:DA:251:A:H4'	33:DL:47:ARG:NH2	1.93	0.83
34:DM:76:LYS:HZ3	34:DM:84:LYS:H	1.22	0.83
38:DQ:61:ILE:HD11	38:DQ:92:LYS:CD	2.07	0.83
1:AA:1151:A:O2'	1:AA:1152:A:H5''	1.78	0.83
1:AA:431:A:O2'	1:AA:432:A:H5'	1.77	0.83
25:BD:104:VAL:HA	25:BD:106:LYS:NZ	1.94	0.83
27:BF:37:MET:HG2	27:BF:56:LEU:HG	1.58	0.83
27:BF:43:ILE:HG22	27:BF:82:TYR:CD1	2.13	0.83
22:BA:372:G:O4'	45:BX:60:LYS:HE3	1.77	0.83
1:CA:1172:C:O2'	1:CA:1173:U:H5'	1.79	0.83
22:DA:1339:G:H5'	22:DA:1393:A:N1	1.93	0.83
22:DA:2303:G:H5'	27:DF:121:PHE:CE1	2.14	0.83
22:DA:454:A:H4'	22:DA:455:C:OP2	1.78	0.83
22:DA:82:U:C2'	22:DA:83:A:H5''	2.07	0.83
22:DA:867:C:O2'	22:DA:868:U:H6	1.60	0.83
22:DA:91:A:O2'	22:DA:92:U:H5''	1.79	0.83
24:DC:147:PRO:CD	24:DC:184:GLU:HG3	2.02	0.83
26:DE:18:THR:HG22	26:DE:106:LYS:HE2	1.58	0.83
30:DI:104:GLN:HA	30:DI:107:GLU:CB	2.08	0.83
38:DQ:4:LYS:HZ2	38:DQ:6:GLY:HA3	1.42	0.83
1:AA:855:U:H2'	1:AA:856:C:H6	1.44	0.83
4:AD:13:ARG:HG2	4:AD:55:ARG:HH21	1.42	0.83
9:AI:40:ARG:CA	9:AI:44:ARG:HB3	2.08	0.83
9:AI:9:GLY:HA2	9:AI:80:HIS:CD2	2.14	0.83
1:AA:1314:C:OP2	19:AS:5:LYS:HD2	1.78	0.83
49:B1:24:LYS:HE2	49:B1:52:LYS:CB	2.06	0.83
1:CA:106:C:O2'	1:CA:107:G:H5'	1.77	0.83
1:CA:366:A:O2'	1:CA:394:G:N2	2.11	0.83
4:CD:125:ASN:ND2	4:CD:141:VAL:H	1.76	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:16:ARG:HD2	21:CU:19:LYS:CE	2.07	0.83
22:DA:1432:G:O2'	22:DA:1433:A:H5'	1.77	0.83
22:DA:2267:A:H61	22:DA:2272:U:H3	1.27	0.83
1:AA:1202:U:O2'	1:AA:1203:C:C5'	2.26	0.83
6:AF:61:LEU:HD12	6:AF:62:MET:H	1.42	0.83
22:BA:1178:C:H2'	22:BA:1179:G:N7	1.94	0.83
22:BA:2188:U:H2'	22:BA:2189:U:H6	1.43	0.83
29:BH:32:PRO:HB3	45:BX:38:TRP:CB	2.07	0.83
42:BU:93:ARG:NH1	42:BU:102:ILE:HD11	1.93	0.83
1:CA:575:G:H4'	1:CA:576:C:O5'	1.75	0.83
2:CB:49:PHE:HA	2:CB:52:ALA:HB3	1.61	0.83
22:DA:1965:C:H2'	22:DA:1966:A:C8	2.13	0.83
35:DN:38:LEU:HB3	35:DN:39:PRO:HD3	1.59	0.83
37:DP:48:ALA:HB3	37:DP:59:THR:OG1	1.78	0.83
1:AA:1007:U:C2'	1:AA:1008:U:H5''	2.07	0.83
9:AI:100:ALA:HB1	9:AI:102:PHE:CE2	2.12	0.83
26:BE:23:PHE:CD1	26:BE:111:GLU:HG3	2.14	0.83
31:BJ:56:VAL:HG12	31:BJ:57:LEU:N	1.91	0.83
36:BO:15:ARG:HG3	36:BO:15:ARG:HH11	1.44	0.83
44:BW:9:THR:HG22	44:BW:10:ARG:NH1	1.94	0.83
45:BX:30:PRO:CB	45:BX:32:LEU:HD11	2.03	0.83
1:CA:496:A:N3	1:CA:496:A:H2'	1.92	0.83
1:CA:982:U:H1'	1:CA:983:A:N7	1.94	0.83
1:CA:1328:C:H5''	13:CM:27:THR:HG21	1.61	0.83
48:D0:46:GLY:HA2	48:D0:54:ILE:HD11	1.58	0.83
22:DA:1278:C:O2'	35:DN:27:SER:HB3	1.79	0.83
31:DJ:64:VAL:HG22	31:DJ:68:LYS:HG3	1.58	0.83
32:DK:71:ARG:CG	32:DK:72:PRO:HD3	2.08	0.83
34:DM:27:SER:N	34:DM:66:ARG:NH2	2.27	0.83
38:DQ:34:ALA:O	38:DQ:38:VAL:HG23	1.78	0.83
46:DY:20:ASN:ND2	46:DY:50:VAL:HG22	1.92	0.83
8:AH:77:VAL:HG23	8:AH:126:CYS:HA	1.59	0.83
12:AL:34:THR:HG22	12:AL:35:ARG:HE	1.39	0.83
22:BA:2758:A:H2'	22:BA:2759:G:H5'	1.59	0.83
27:BF:127:TYR:O	27:BF:128:SER:HB2	1.78	0.83
28:BG:35:THR:C	28:BG:36:LEU:HD22	1.98	0.83
1:CA:1304:G:H1'	1:CA:1333:A:N6	1.92	0.83
1:CA:547:A:H4'	1:CA:548:G:O5'	1.77	0.83
12:CL:42:LYS:CD	12:CL:43:LYS:HG2	2.08	0.83
51:D3:3:ILE:CG2	51:D3:4:LYS:H	1.91	0.83
22:DA:1809:A:C2	22:DA:1810:A:C5	2.66	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:16:VAL:N	24:DC:203:VAL:HG12	1.93	0.83
1:AA:1533:C:H3'	1:AA:1534:A:C5'	2.08	0.83
1:AA:299:G:H2'	1:AA:300:A:C8	2.12	0.83
2:AB:67:LEU:HD21	2:AB:91:VAL:CG2	2.08	0.83
5:AE:79:THR:HB	5:AE:121:ASN:ND2	1.93	0.83
7:AG:38:ALA:O	7:AG:42:VAL:HG23	1.79	0.83
17:AQ:74:LEU:H	17:AQ:74:LEU:HD12	1.44	0.83
14:AN:46:LYS:HD2	19:AS:12:LEU:HD21	1.58	0.83
52:B4:10:LEU:HD12	52:B4:33:HIS:CD2	2.14	0.83
33:BL:30:THR:O	33:BL:33:ARG:HG2	1.78	0.83
33:BL:77:ILE:CD1	33:BL:108:ALA:HB1	2.09	0.83
1:CA:1450:U:H4'	1:CA:1451:U:C5	2.13	0.83
11:CK:70:ALA:HA	11:CK:73:VAL:CG2	2.06	0.83
21:CU:38:GLU:N	21:CU:40:PRO:HD2	1.92	0.83
22:DA:170:U:H2'	22:DA:171:U:H6	1.43	0.83
22:DA:1936:A:H2'	22:DA:1945:G:O6	1.79	0.83
22:DA:637:A:H4'	22:DA:638:G:O5'	1.79	0.83
25:DD:112:THR:HG22	25:DD:113:SER:N	1.94	0.83
26:DE:75:SER:O	26:DE:78:TRP:HB2	1.79	0.83
35:DN:35:LYS:HG2	35:DN:112:TYR:CE1	2.14	0.83
40:DS:8:ARG:O	40:DS:9:HIS:HB2	1.76	0.83
8:AH:74:ILE:HD12	8:AH:128:VAL:HG22	1.61	0.83
13:AM:2:ARG:O	13:AM:3:ILE:HG12	1.79	0.83
21:AU:39:LYS:N	21:AU:40:PRO:HD2	1.94	0.83
22:BA:491:G:H2'	22:BA:492:A:H8	1.42	0.83
28:BG:126:THR:HG22	28:BG:127:GLN:H	1.43	0.83
28:BG:33:THR:C	28:BG:34:ARG:HD3	2.00	0.83
31:BJ:73:VAL:CG2	31:BJ:74:TYR:H	1.84	0.83
38:BQ:85:ALA:O	38:BQ:87:VAL:O	1.96	0.83
8:CH:62:LEU:HD22	8:CH:62:LEU:H	1.41	0.83
10:CJ:10:LEU:CD2	10:CJ:98:VAL:HG22	2.08	0.83
20:CT:4:LYS:HB3	20:CT:6:ALA:H	1.44	0.83
51:D3:18:LYS:CD	51:D3:19:GLY:H	1.91	0.83
52:D4:16:ILE:CG1	52:D4:25:VAL:HG22	2.06	0.83
22:DA:1808:A:N6	45:DX:27:ARG:HH11	1.77	0.83
22:DA:558:U:H5''	31:DJ:111:LYS:HD2	1.60	0.83
23:DB:65:U:H3'	23:DB:108:A:H61	1.44	0.83
31:DJ:25:LEU:HD22	31:DJ:26:GLY:N	1.93	0.83
41:DT:29:THR:HB	41:DT:87:LEU:N	1.92	0.83
1:AA:107:G:H2'	1:AA:108:G:H5'	1.59	0.82
1:AA:1055:A:H1'	3:AC:155:ARG:HH21	1.43	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:76:ILE:HA	3:AC:83:VAL:HG23	1.59	0.82
5:AE:12:GLU:CB	5:AE:38:VAL:HG12	2.07	0.82
29:BH:10:ALA:O	29:BH:12:LEU:N	2.12	0.82
7:CG:142:ARG:O	7:CG:146:ALA:HB3	1.79	0.82
22:DA:92:U:H2'	22:DA:93:G:H8	1.44	0.82
24:DC:110:LYS:HB3	24:DC:113:ASP:OD2	1.79	0.82
22:DA:2531:A:H5''	28:DG:156:TYR:CZ	2.13	0.82
29:DH:97:ARG:O	29:DH:98:ASP:HB2	1.77	0.82
47:DZ:15:ARG:HD2	47:DZ:15:ARG:N	1.91	0.82
2:AB:131:LYS:O	2:AB:135:MET:HB2	1.78	0.82
11:AK:51:PHE:HE1	11:AK:60:PHE:HE2	1.28	0.82
14:AN:60:ARG:O	14:AN:61:ASN:HB2	1.76	0.82
21:AU:3:ILE:HA	21:AU:19:LYS:HZ2	1.44	0.82
28:BG:33:THR:HA	28:BG:34:ARG:HH11	1.44	0.82
44:BW:28:GLU:CG	44:BW:29:SER:H	1.92	0.82
1:CA:1101:A:H4'	1:CA:1102:A:O5'	1.78	0.82
1:CA:1226:C:H41	13:CM:102:LYS:CA	1.90	0.82
1:CA:17:U:H2'	1:CA:18:C:H6	1.44	0.82
2:CB:206:ILE:HA	2:CB:209:VAL:CG2	2.06	0.82
3:CC:166:TRP:O	3:CC:167:TYR:HB2	1.77	0.82
3:CC:41:TYR:HE1	3:CC:89:VAL:HG12	1.44	0.82
5:CE:48:GLY:HA3	5:CE:66:ALA:HB2	1.61	0.82
13:CM:13:HIS:HB3	13:CM:16:ILE:HB	1.61	0.82
3:CC:29:ALA:CB	14:CN:64:ARG:HH12	1.86	0.82
24:DC:52:HIS:NE2	24:DC:218:THR:HG23	1.94	0.82
26:DE:128:ALA:HB1	26:DE:129:PRO:CD	2.09	0.82
22:DA:2360:G:C1'	33:DL:60:ARG:HH21	1.92	0.82
34:DM:42:THR:HG22	34:DM:44:ARG:N	1.92	0.82
38:DQ:87:VAL:HG11	39:DR:52:PRO:HG3	1.60	0.82
1:AA:1083:U:H5''	1:AA:1086:U:H5	1.43	0.82
22:BA:243:U:O2'	22:BA:244:A:H5'	1.79	0.82
22:BA:704:G:O2'	22:BA:726:G:N2	2.13	0.82
1:CA:1361:G:H2'	1:CA:1362:A:H5'	1.61	0.82
3:CC:18:ASN:HA	3:CC:55:VAL:HG12	1.61	0.82
4:CD:187:ARG:HH21	4:CD:191:SER:CA	1.91	0.82
22:DA:1962:C:H4'	22:DA:1963:U:OP1	1.77	0.82
22:DA:2143:C:H5'	22:DA:2144:G:OP2	1.79	0.82
25:DD:51:THR:HG21	25:DD:75:ALA:O	1.79	0.82
28:DG:120:ILE:HG13	28:DG:140:ILE:HG22	1.60	0.82
2:AB:127:LYS:HG3	2:AB:128:LEU:H	1.44	0.82
2:AB:9:LEU:HD12	2:AB:42:LEU:CD1	2.04	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:113:ARG:HB3	12:AL:118:VAL:HB	1.61	0.82
49:B1:49:LYS:O	49:B1:50:GLU:HB3	1.78	0.82
22:BA:2440:C:C6	22:BA:2440:C:H5'	2.12	0.82
23:BB:109:A:O2'	23:BB:110:C:H5'	1.77	0.82
27:BF:11:VAL:CG1	27:BF:12:VAL:N	2.42	0.82
22:BA:2352:A:C6	44:BW:30:VAL:HG11	2.14	0.82
22:DA:2210:U:H4'	22:DA:2211:A:O5'	1.79	0.82
42:DU:43:LYS:HE3	42:DU:45:GLN:CD	1.99	0.82
1:AA:1314:C:O2'	1:AA:1315:U:H5'	1.78	0.82
5:AE:155:LYS:HA	5:AE:158:LYS:HZ3	1.41	0.82
22:BA:1150:C:H2'	22:BA:1151:A:O5'	1.78	0.82
22:BA:2800:A:C2	22:BA:2895:G:H1'	2.14	0.82
26:BE:146:VAL:HG23	26:BE:167:VAL:CG2	2.09	0.82
27:BF:34:THR:CG2	27:BF:89:THR:HG23	2.09	0.82
32:BK:18:ARG:N	32:BK:45:GLU:HB2	1.94	0.82
41:BT:44:LYS:HG3	41:BT:55:VAL:HG11	1.61	0.82
1:CA:14:U:H3	1:CA:16:A:H5''	1.41	0.82
5:CE:76:ASN:O	5:CE:79:THR:HG22	1.79	0.82
22:DA:1935:G:H1	22:DA:1962:C:H2'	1.44	0.82
22:DA:2324:U:C5'	22:DA:2325:G:H5''	2.09	0.82
22:DA:2346:A:H3'	22:DA:2347:C:C5'	2.08	0.82
22:DA:1453:A:C8	35:DN:73:ASN:HB3	2.13	0.82
4:AD:117:VAL:N	4:AD:122:ILE:HD11	1.95	0.82
18:AR:44:THR:OG1	18:AR:46:THR:HG22	1.79	0.82
20:AT:82:ILE:HD12	20:AT:83:ASN:N	1.93	0.82
24:BC:165:ALA:HB3	24:BC:172:THR:HG23	1.60	0.82
1:CA:530:G:H5''	1:CA:531:U:OP1	1.80	0.82
10:CJ:15:HIS:CA	10:CJ:18:ILE:HG22	2.07	0.82
22:DA:1245:G:H4'	26:DE:33:VAL:HG11	1.58	0.82
22:DA:1288:G:C8	22:DA:1327:A:N6	2.48	0.82
22:DA:1673:G:C2'	22:DA:1674:G:H5'	2.09	0.82
22:DA:638:G:H2'	22:DA:639:U:C6	2.15	0.82
27:DF:49:LEU:HD22	27:DF:49:LEU:H	1.43	0.82
32:DK:60:ALA:HA	32:DK:87:LEU:HD23	1.61	0.82
1:AA:1130:A:H8	1:AA:1130:A:H5''	1.43	0.82
25:BD:12:THR:HG23	25:BD:13:ARG:N	1.95	0.82
37:BP:50:ARG:HG2	37:BP:56:SER:C	1.99	0.82
37:BP:92:ARG:O	37:BP:93:LYS:HB2	1.79	0.82
44:BW:49:ASN:HA	44:BW:61:LYS:HB2	1.61	0.82
11:CK:88:PRO:HG3	21:CU:28:LEU:CD1	2.10	0.82
22:DA:590:A:H2'	22:DA:591:U:H6	1.43	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:78:VAL:HB	29:DH:144:VAL:HA	1.60	0.82
39:DR:90:ARG:O	39:DR:91:GLN:HB3	1.79	0.82
40:DS:96:ILE:O	40:DS:96:ILE:HG23	1.80	0.82
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.42	0.82
1:AA:977:A:H3'	1:AA:1362:A:N6	1.94	0.82
3:AC:153:SER:HB3	3:AC:164:THR:HG22	1.60	0.82
22:BA:1073:A:C3'	22:BA:1074:G:C5'	2.57	0.82
22:BA:2068:U:H5''	22:BA:2068:U:H6	1.44	0.82
37:BP:50:ARG:CD	37:BP:56:SER:HB2	2.10	0.82
44:BW:18:LYS:HA	44:BW:36:ILE:HG13	1.58	0.82
1:CA:1372:U:C5'	9:CI:71:ILE:HD11	2.09	0.82
22:DA:1422:G:H4'	22:DA:1493:C:OP1	1.79	0.82
25:DD:187:LEU:HD12	25:DD:188:LEU:H	1.43	0.82
26:DE:147:LEU:CG	26:DE:186:VAL:HG23	2.08	0.82
10:AJ:35:GLN:HG2	10:AJ:77:VAL:CB	2.09	0.82
11:AK:124:LYS:HZ1	21:AU:33:ARG:HH21	1.25	0.82
12:AL:62:VAL:HG21	12:AL:94:TYR:CE2	2.14	0.82
22:BA:1061:U:H3'	22:BA:1062:G:H5''	1.61	0.82
22:BA:250:G:H2'	22:BA:251:A:C8	2.13	0.82
31:BJ:44:TYR:HD1	31:BJ:44:TYR:O	1.58	0.82
38:BQ:65:ASN:HD21	38:BQ:69:ARG:HH22	1.28	0.82
41:BT:73:ARG:NH2	41:BT:73:ARG:HB3	1.93	0.82
1:CA:106:C:C2'	1:CA:107:G:H5'	2.09	0.82
1:CA:1234:C:H4'	1:CA:1364:U:O2'	1.80	0.82
2:CB:146:SER:HB2	2:CB:147:LEU:HD12	1.61	0.82
7:CG:110:ARG:HG3	7:CG:111:GLY:H	1.45	0.82
7:CG:59:GLU:HG3	7:CG:60:ALA:N	1.93	0.82
11:CK:106:ILE:HD11	11:CK:109:ILE:HD11	1.60	0.82
15:CO:25:GLU:HG2	15:CO:80:LEU:HG	1.60	0.82
22:DA:1056:G:C1'	22:DA:1103:A:H61	1.93	0.82
22:DA:874:G:H5'	22:DA:875:G:OP2	1.80	0.82
23:DB:88:C:OP2	23:DB:88:C:H3'	1.79	0.82
29:DH:84:ALA:HB3	29:DH:148:ALA:CB	2.10	0.82
32:DK:113:MET:O	32:DK:116:ILE:HG12	1.79	0.82
6:AF:3:HIS:H	6:AF:92:THR:CG2	1.93	0.82
16:AP:57:ILE:O	16:AP:61:VAL:HG23	1.79	0.82
11:AK:126:ARG:N	21:AU:33:ARG:HH22	1.78	0.82
51:B3:61:LEU:HB3	51:B3:64:ALA:HB2	1.60	0.82
22:BA:856:G:H1'	44:BW:23:LYS:HB3	1.60	0.82
27:BF:134:GLN:HG2	27:BF:135:ILE:N	1.95	0.82
1:CA:948:C:H5''	13:CM:104:ASN:HB3	1.59	0.82

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:127:LYS:HE3	2:CB:132:GLU:HG3	1.62	0.82
22:DA:2612:C:O2	48:D0:1:ALA:HB2	1.80	0.82
22:DA:1706:C:H4'	22:DA:1707:G:OP2	1.77	0.82
27:DF:103:ILE:HA	27:DF:107:VAL:CG2	2.10	0.82
29:DH:80:ILE:HB	29:DH:101:ASP:OD2	1.80	0.82
1:AA:1118:U:H2'	1:AA:1119:C:H6	1.45	0.81
1:AA:1227:A:H2'	1:AA:1227:A:N3	1.93	0.81
1:AA:17:U:H2'	1:AA:18:C:C6	2.15	0.81
24:BC:79:ARG:NH2	24:BC:92:LEU:HD22	1.94	0.81
40:BS:66:ILE:HA	40:BS:69:LEU:CD2	2.08	0.81
1:CA:1168:U:H2'	1:CA:1168:U:O2	1.80	0.81
17:CQ:58:VAL:HB	17:CQ:74:LEU:CD1	2.10	0.81
20:CT:2:ASN:N	20:CT:7:LYS:HZ3	1.77	0.81
25:DD:124:ARG:HD3	25:DD:125:TRP:NE1	1.94	0.81
35:DN:73:ASN:HD22	35:DN:76:VAL:HG21	1.44	0.81
1:AA:924:C:H2'	1:AA:925:G:C8	2.15	0.81
22:BA:1069:A:O2'	22:BA:1070:A:H5''	1.79	0.81
24:BC:131:MET:HA	24:BC:134:ILE:HD12	1.59	0.81
24:BC:76:VAL:O	24:BC:76:VAL:CG2	2.27	0.81
27:BF:100:GLU:HG2	27:BF:104:THR:OG1	1.80	0.81
37:BP:51:ASN:O	37:BP:52:ARG:HG2	1.80	0.81
1:CA:335:C:H2'	1:CA:336:A:H8	1.45	0.81
10:CJ:84:VAL:CG2	10:CJ:85:ASP:H	1.93	0.81
49:D1:47:ILE:H	49:D1:47:ILE:HD12	1.43	0.81
52:D4:7:VAL:HG13	52:D4:8:LYS:N	1.93	0.81
22:DA:1069:A:N6	22:DA:1073:A:H5''	1.94	0.81
22:DA:1305:C:O2'	22:DA:1306:C:H6	1.62	0.81
22:DA:1965:C:H5'	22:DA:1966:A:H5''	1.62	0.81
22:DA:2552:U:C2	22:DA:2554:U:H5'	2.15	0.81
22:DA:338:G:H2'	22:DA:339:U:H5'	1.59	0.81
22:DA:503:A:H4'	22:DA:504:A:O5'	1.80	0.81
22:DA:67:U:H2'	22:DA:68:G:H8	1.45	0.81
39:DR:48:LYS:H	39:DR:48:LYS:HD2	1.42	0.81
42:DU:47:PRO:HB3	42:DU:54:PRO:CG	2.10	0.81
1:AA:1506:U:H3'	56:AA:1802:HOH:O	1.80	0.81
1:AA:352:C:H6	1:AA:352:C:H5''	1.45	0.81
6:AF:38:ARG:HG3	6:AF:39:LEU:N	1.94	0.81
18:AR:31:TYR:CD2	18:AR:54:LEU:HD21	2.16	0.81
33:BL:74:THR:HG23	33:BL:107:PHE:HB2	1.62	0.81
36:BO:7:ARG:HG3	36:BO:96:GLY:HA3	1.60	0.81
38:BQ:63:ARG:HH22	38:BQ:96:ASP:CA	1.93	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:972:C:O2'	10:CJ:57:VAL:HG23	1.80	0.81
11:CK:92:ARG:NH1	11:CK:92:ARG:HG3	1.94	0.81
13:CM:64:VAL:HG12	13:CM:65:GLU:HG3	1.61	0.81
17:CQ:18:LYS:HD3	17:CQ:48:GLU:OE2	1.78	0.81
22:DA:1346:G:O2'	22:DA:1347:A:C8	2.27	0.81
22:DA:834:G:H1'	22:DA:2358:A:N3	1.96	0.81
24:DC:15:VAL:HG22	24:DC:204:LEU:O	1.81	0.81
22:DA:1813:G:N3	24:DC:49:THR:HB	1.95	0.81
37:DP:91:VAL:CG2	37:DP:109:ILE:HG21	2.00	0.81
42:DU:35:VAL:HG12	42:DU:36:GLU:H	1.43	0.81
46:DY:2:LYS:HD2	46:DY:4:LYS:HE3	1.61	0.81
1:AA:563:A:H2'	1:AA:563:A:N3	1.94	0.81
2:AB:101:THR:HG22	2:AB:174:GLU:OE1	1.80	0.81
3:AC:129:PHE:CE2	3:AC:156:LEU:HD23	2.15	0.81
6:AF:11:HIS:HD2	6:AF:13:ASP:H	1.23	0.81
23:BB:88:C:H6	23:BB:88:C:H5'	1.44	0.81
25:BD:118:PHE:HD2	25:BD:119:ALA:H	1.28	0.81
31:BJ:124:VAL:O	31:BJ:125:TYR:HB2	1.78	0.81
22:BA:1287:A:OP2	35:BN:103:ARG:HG3	1.80	0.81
38:BQ:91:ARG:NH2	38:BQ:93:ILE:HD13	1.96	0.81
1:CA:1281:C:H5''	1:CA:1282:C:H5	1.44	0.81
1:CA:332:G:H2'	1:CA:333:U:C6	2.15	0.81
1:CA:373:A:H2'	1:CA:374:A:H8	1.45	0.81
1:CA:701:U:H4'	1:CA:702:A:C5'	2.10	0.81
2:CB:99:MET:HA	2:CB:106:VAL:HG21	1.61	0.81
4:CD:176:LYS:HG3	4:CD:178:GLU:CB	2.11	0.81
20:CT:26:MET:HE3	20:CT:30:PHE:HD1	1.44	0.81
22:DA:1324:G:H1	22:DA:1330:C:N4	1.76	0.81
22:DA:1447:C:H2'	22:DA:1448:G:H8	1.43	0.81
22:DA:614:A:H4'	22:DA:616:A:H62	1.45	0.81
22:DA:79:C:H2'	22:DA:80:G:O4'	1.80	0.81
24:DC:35:LYS:HB3	24:DC:35:LYS:NZ	1.95	0.81
27:DF:43:ILE:HG23	27:DF:44:ALA:H	1.44	0.81
27:DF:65:LEU:HD11	27:DF:67:THR:HG22	1.59	0.81
35:DN:37:THR:HG22	35:DN:39:PRO:CD	2.05	0.81
1:AA:246:A:H4'	1:AA:247:G:OP1	1.80	0.81
1:AA:556:C:C2'	1:AA:557:G:H5'	2.10	0.81
1:AA:865:A:H2'	1:AA:866:C:C6	2.15	0.81
3:AC:174:LEU:O	3:AC:174:LEU:HD12	1.79	0.81
6:AF:49:TYR:HE2	6:AF:51:ILE:HB	1.42	0.81
14:AN:51:PRO:O	14:AN:52:ARG:HB2	1.80	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1110:G:O2'	22:BA:1111:A:H8	1.63	0.81
22:BA:1248:G:OP2	26:BE:44:ARG:NH1	2.13	0.81
35:BN:103:ARG:HB2	35:BN:110:MET:CE	2.10	0.81
1:CA:1128:C:H4'	1:CA:1148:U:H3	1.44	0.81
6:CF:2:ARG:HH21	6:CF:91:ARG:HB2	1.44	0.81
11:CK:44:ALA:HB3	11:CK:69:CYS:HB2	1.63	0.81
14:CN:89:ARG:HG3	14:CN:91:GLU:CG	2.10	0.81
22:DA:2136:G:HO2'	22:DA:2137:U:H6	0.84	0.81
22:DA:2552:U:O2	22:DA:2554:U:H5'	1.80	0.81
22:DA:2771:C:H2'	22:DA:2772:C:H6	1.45	0.81
22:DA:413:C:H2'	22:DA:414:C:C6	2.15	0.81
24:DC:144:GLU:HB3	24:DC:187:CYS:HB2	1.62	0.81
22:DA:660:C:H5''	26:DE:94:GLN:OE1	1.80	0.81
22:DA:810:U:O4	33:DL:30:THR:HG22	1.80	0.81
45:DX:31:ASN:ND2	45:DX:31:ASN:H	1.79	0.81
47:DZ:4:ILE:HD12	47:DZ:58:GLU:HA	1.61	0.81
8:AH:9:MET:CE	8:AH:32:LYS:HA	2.11	0.81
12:AL:85:ARG:CZ	12:AL:87:LYS:HB3	2.11	0.81
24:BC:16:VAL:H	24:BC:203:VAL:CG1	1.92	0.81
36:BO:2:ASP:HB3	36:BO:5:SER:CB	2.10	0.81
43:BV:20:LEU:HD23	43:BV:25:LYS:HB2	1.62	0.81
1:CA:1329:A:H5''	13:CM:25:GLY:H	1.45	0.81
4:CD:77:GLU:O	4:CD:81:LEU:HD12	1.81	0.81
5:CE:44:ARG:HG2	5:CE:72:ASN:HA	1.61	0.81
13:CM:11:HIS:N	13:CM:44:ILE:HD12	1.93	0.81
51:D3:21:PHE:HB2	51:D3:49:VAL:HG13	1.62	0.81
22:DA:1474:U:C2'	22:DA:1475:G:H5'	2.10	0.81
22:DA:249:C:H2'	22:DA:249:C:O2	1.80	0.81
22:DA:2657:A:H2'	22:DA:2658:C:C6	2.16	0.81
22:DA:85:G:O2'	22:DA:86:G:H5''	1.80	0.81
42:DU:85:ARG:HE	42:DU:85:ARG:HA	1.45	0.81
45:DX:2:ARG:HH21	45:DX:32:LEU:CD2	1.91	0.81
1:AA:1468:A:H2'	1:AA:1469:C:H5'	1.61	0.81
1:AA:560:A:H5'	1:AA:566:G:N2	1.96	0.81
10:AJ:19:ASP:HA	10:AJ:22:THR:HB	1.62	0.81
12:AL:23:LEU:HB2	12:AL:58:ASN:HD22	1.45	0.81
22:BA:1078:U:H4'	22:BA:1079:C:H6	1.45	0.81
24:BC:15:VAL:HA	24:BC:203:VAL:HG11	1.62	0.81
24:BC:251:THR:CG2	24:BC:252:LYS:H	1.91	0.81
32:BK:10:VAL:CB	32:BK:16:ALA:HB1	2.11	0.81
36:BO:41:ALA:HB2	36:BO:48:LEU:HD21	1.63	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:28:GLU:HB3	44:BW:31:LEU:HD11	1.61	0.81
16:CP:38:PHE:HE2	16:CP:51:ARG:HB3	1.44	0.81
22:DA:2360:G:H5''	22:DA:2361:G:OP2	1.79	0.81
22:DA:2875:C:O2'	22:DA:2876:G:H8	1.63	0.81
22:DA:2893:A:H4'	22:DA:2894:G:O5'	1.79	0.81
31:DJ:17:VAL:HG23	31:DJ:137:PRO:HB2	1.63	0.81
22:DA:1012:U:O4	31:DJ:30:THR:HG21	1.81	0.81
35:DN:92:GLY:H	35:DN:94:TYR:HE1	1.28	0.81
36:DO:115:LEU:HD13	36:DO:115:LEU:H	1.44	0.81
1:AA:496:A:H2'	1:AA:496:A:N3	1.94	0.81
8:AH:110:MET:HE2	8:AH:114:ALA:HB1	1.63	0.81
16:AP:48:GLU:HG3	16:AP:49:GLY:H	1.44	0.81
21:AU:10:PRO:O	21:AU:11:PHE:HB3	1.78	0.81
22:BA:1078:U:H4'	22:BA:1079:C:C6	2.16	0.81
35:BN:73:ASN:CA	35:BN:76:VAL:HG12	2.09	0.81
1:CA:110:C:H2'	1:CA:111:G:C8	2.16	0.81
1:CA:210:C:H2'	1:CA:210:C:O2	1.81	0.81
1:CA:239:U:C6	1:CA:239:U:H5'	2.16	0.81
9:CI:24:ASN:O	9:CI:61:ASP:HA	1.80	0.81
9:CI:27:ILE:HD13	9:CI:62:LEU:HB3	1.62	0.81
10:CJ:5:ARG:CG	10:CJ:79:PRO:HG3	2.10	0.81
20:CT:26:MET:CE	20:CT:56:ILE:HD13	2.11	0.81
22:DA:2776:A:H4'	22:DA:2777:G:O5'	1.80	0.81
22:DA:5:A:C2	22:DA:2899:A:C2	2.69	0.81
22:DA:870:U:H2'	22:DA:871:U:H5'	1.61	0.81
31:DJ:127:GLY:O	31:DJ:129:GLU:HG3	1.79	0.81
32:DK:28:SER:O	32:DK:29:HIS:HB2	1.78	0.81
38:DQ:91:ARG:NH1	39:DR:10:LYS:HB3	1.96	0.81
5:AE:114:LEU:HD21	5:AE:122:VAL:CG2	2.11	0.81
22:BA:1062:G:O2'	22:BA:1063:G:C8	2.34	0.81
22:BA:2393:U:H5'	33:BL:60:ARG:O	1.81	0.81
22:BA:995:C:H5'	22:BA:995:C:H6	1.45	0.81
44:BW:17:ALA:HA	44:BW:35:ILE:HG23	1.60	0.81
45:BX:35:HIS:HB3	45:BX:37:PHE:CE2	2.15	0.81
45:BX:52:ALA:O	45:BX:53:LYS:HB2	1.79	0.81
1:CA:1463:U:H2'	1:CA:1464:U:C6	2.15	0.81
1:CA:983:A:O2'	1:CA:984:C:H5'	1.81	0.81
1:CA:1239:A:H5''	7:CG:118:ARG:HH12	1.46	0.81
7:CG:59:GLU:OE2	7:CG:63:VAL:HG23	1.80	0.81
11:CK:60:PHE:O	11:CK:64:VAL:HG13	1.80	0.81
17:CQ:4:ILE:CG2	17:CQ:5:ARG:H	1.94	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:CT:3:ILE:O	20:CT:4:LYS:HG2	1.80	0.81
22:DA:1024:G:H3'	22:DA:1025:G:C5'	2.06	0.81
22:DA:2283:C:O2'	22:DA:2284:A:H5'	1.81	0.81
22:DA:304:U:O2'	22:DA:305:C:H6	1.63	0.81
27:DF:65:LEU:HG	27:DF:67:THR:HG23	1.62	0.81
42:DU:14:THR:HG23	42:DU:15:GLY:N	1.95	0.81
22:DA:2353:G:H1'	44:DW:30:VAL:HG13	1.63	0.81
44:DW:28:GLU:H	44:DW:31:LEU:CD2	1.94	0.81
1:AA:214:C:H2'	1:AA:215:C:H6	1.46	0.81
10:AJ:8:ILE:HG23	10:AJ:100:ILE:CG2	2.10	0.81
22:BA:1339:G:N2	22:BA:1603:A:H1'	1.96	0.81
22:BA:1707:G:H2'	22:BA:1708:C:C6	2.15	0.81
23:BB:46:A:H2'	23:BB:47:C:H6	1.46	0.81
24:BC:106:PRO:O	24:BC:109:LEU:HD13	1.81	0.81
26:BE:108:ILE:HD11	26:BE:180:LEU:CB	2.09	0.81
31:BJ:12:LYS:O	31:BJ:13:ARG:HB2	1.80	0.81
35:BN:103:ARG:CD	35:BN:110:MET:HE3	2.11	0.81
7:CG:4:ARG:HD2	7:CG:5:VAL:H	1.44	0.81
14:CN:60:ARG:HG2	14:CN:61:ASN:H	1.46	0.81
16:CP:16:PHE:HE2	16:CP:40:ASN:HB2	1.45	0.81
22:DA:336:C:O2'	22:DA:337:C:H6	1.63	0.81
32:DK:118:LEU:C	32:DK:120:PRO:HD2	2.01	0.81
44:DW:49:ASN:ND2	44:DW:81:ILE:HG23	1.94	0.81
1:AA:977:A:H3'	1:AA:1362:A:H62	1.45	0.81
7:AG:119:LEU:CD2	7:AG:123:LEU:HD23	2.10	0.81
9:AI:44:ARG:HG3	9:AI:45:MET:HE1	1.63	0.81
14:AN:40:ARG:HH12	14:AN:44:VAL:CG2	1.93	0.81
25:BD:172:VAL:O	25:BD:173:GLN:HB2	1.80	0.81
38:BQ:8:ILE:O	38:BQ:8:ILE:HD12	1.80	0.81
39:BR:49:ILE:CB	39:BR:51:VAL:O	2.29	0.81
1:CA:962:C:N4	1:CA:974:A:H61	1.78	0.81
2:CB:105:THR:O	2:CB:108:GLN:HG2	1.81	0.81
2:CB:164:ASP:CB	2:CB:167:HIS:HB3	2.11	0.81
11:CK:55:ARG:H	11:CK:55:ARG:HD2	1.44	0.81
22:DA:2136:G:O2'	22:DA:2137:U:H6	1.64	0.81
22:DA:2311:A:H3'	22:DA:2312:U:H6	1.44	0.81
22:DA:2733:A:O2'	22:DA:2734:A:H5'	1.81	0.81
22:DA:852:U:H2'	22:DA:853:C:C6	2.16	0.81
25:DD:48:ILE:HG22	25:DD:84:LEU:HD23	1.63	0.81
29:DH:68:ARG:CD	29:DH:71:LYS:HD3	2.11	0.81
31:DJ:106:LYS:HE2	31:DJ:106:LYS:HA	1.63	0.81

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:27:GLY:HA3	32:DK:30:ARG:HD3	1.62	0.81
37:DP:88:ARG:HH11	37:DP:112:ARG:NH2	1.79	0.81
45:DX:31:ASN:HD22	45:DX:31:ASN:H	1.29	0.81
1:AA:429:U:O3'	4:AD:8:LEU:HD23	1.81	0.80
1:AA:646:G:H2'	1:AA:647:C:H5'	1.64	0.80
1:AA:1202:U:O4'	14:AN:68:ARG:HD2	1.80	0.80
22:BA:1159:U:C2'	22:BA:1160:G:H5'	2.10	0.80
22:BA:1286:A:H4'	22:BA:1287:A:OP1	1.78	0.80
22:BA:2094:A:H4'	29:BH:25:TYR:CE1	2.16	0.80
1:CA:202:G:O2'	1:CA:468:A:H8	1.63	0.80
8:CH:45:ILE:C	8:CH:63:LYS:HD2	2.02	0.80
8:CH:52:GLY:HA3	8:CH:56:PRO:HA	1.60	0.80
13:CM:52:ILE:HG13	13:CM:56:ARG:HH21	1.45	0.80
20:CT:26:MET:HE3	20:CT:56:ILE:CD1	2.11	0.80
49:D1:8:ILE:HD11	49:D1:52:LYS:HE3	1.63	0.80
22:DA:1064:C:O2'	22:DA:1065:U:C5'	2.27	0.80
22:DA:1492:G:H3'	22:DA:1493:C:H5'	1.61	0.80
22:DA:2603:G:H4'	22:DA:2603:G:OP2	1.82	0.80
22:DA:2823:A:C5	22:DA:2824:C:C5	2.68	0.80
22:DA:704:G:C2'	22:DA:726:G:H22	1.94	0.80
23:DB:109:A:HO2'	23:DB:110:C:H6	1.25	0.80
29:DH:27:ARG:NH1	45:DX:59:ASP:HA	1.96	0.80
29:DH:68:ARG:CG	29:DH:68:ARG:HH11	1.94	0.80
39:DR:39:LEU:O	39:DR:40:MET:HB2	1.82	0.80
1:AA:1130:A:H5''	1:AA:1130:A:C8	2.17	0.80
1:AA:429:U:C3'	4:AD:8:LEU:HD23	2.11	0.80
1:AA:6:G:O6	5:AE:98:ALA:HB1	1.80	0.80
5:AE:152:VAL:CB	5:AE:155:LYS:HZ2	1.92	0.80
9:AI:119:LYS:HG3	9:AI:122:ARG:HB3	1.62	0.80
10:AJ:8:ILE:HG23	10:AJ:100:ILE:HG22	1.63	0.80
11:AK:106:ILE:HD13	11:AK:106:ILE:O	1.81	0.80
12:AL:43:LYS:HZ3	12:AL:44:PRO:HD3	1.44	0.80
16:AP:28:ARG:HE	16:AP:29:ASN:ND2	1.79	0.80
16:AP:48:GLU:CG	16:AP:49:GLY:H	1.93	0.80
19:AS:43:MET:O	19:AS:61:VAL:HG21	1.81	0.80
20:AT:34:VAL:HG11	20:AT:78:LEU:HD22	1.63	0.80
22:BA:1139:G:O2'	22:BA:1140:C:H5'	1.81	0.80
31:BJ:43:GLU:O	31:BJ:45:THR:HG23	1.81	0.80
37:BP:87:ARG:NH1	37:BP:87:ARG:HG2	1.94	0.80
1:CA:1102:A:H2'	1:CA:1103:C:C6	2.16	0.80
15:CO:47:LYS:HD2	15:CO:47:LYS:H	1.46	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:D4:19:ARG:O	52:D4:20:ASP:HB2	1.82	0.80
22:DA:2024:G:O2'	22:DA:2025:C:H5'	1.81	0.80
22:DA:432:A:O2'	22:DA:433:C:H5'	1.81	0.80
23:DB:13:G:H5''	23:DB:13:G:H8	1.45	0.80
28:DG:167:VAL:HG23	28:DG:168:VAL:H	1.46	0.80
1:AA:204:G:H1'	1:AA:465:A:C2	2.16	0.80
4:AD:121:ALA:C	4:AD:122:ILE:HD13	2.00	0.80
7:AG:100:MET:O	7:AG:104:VAL:HG23	1.80	0.80
8:AH:9:MET:HE2	8:AH:32:LYS:HG2	1.62	0.80
28:BG:120:ILE:HD13	28:BG:121:THR:N	1.96	0.80
1:CA:1202:U:H2'	1:CA:1203:C:C6	2.11	0.80
1:CA:157:U:O2'	1:CA:158:G:H5'	1.81	0.80
7:CG:74:VAL:HG11	7:CG:143:MET:HB2	1.63	0.80
22:DA:1364:G:C8	45:DX:1:SER:HB2	2.16	0.80
22:DA:1388:G:O2'	22:DA:1389:G:H8	1.62	0.80
22:DA:1996:C:H4'	22:DA:1997:C:OP1	1.78	0.80
22:DA:2286:G:N7	49:D1:33:LEU:HD21	1.97	0.80
30:DI:104:GLN:HA	30:DI:107:GLU:HB2	1.63	0.80
22:DA:2352:A:C6	44:DW:30:VAL:HG11	2.15	0.80
46:DY:17:GLU:HG3	46:DY:53:VAL:HG11	1.61	0.80
46:DY:4:LYS:HD3	46:DY:4:LYS:H	1.45	0.80
8:AH:46:GLU:O	8:AH:47:ASP:HB3	1.80	0.80
11:AK:126:ARG:CA	21:AU:33:ARG:HH12	1.94	0.80
22:BA:1378:A:O2'	22:BA:1379:U:H3'	1.80	0.80
32:BK:91:SER:O	32:BK:93:GLN:HB2	1.81	0.80
44:BW:35:ILE:HG23	44:BW:35:ILE:O	1.79	0.80
1:CA:279:A:C5'	1:CA:280:C:H3'	2.10	0.80
16:CP:71:VAL:O	16:CP:74:LEU:HB2	1.80	0.80
22:DA:1301:A:C8	22:DA:1303:G:C8	2.69	0.80
22:DA:1533:C:C2'	22:DA:1534:U:H5'	2.11	0.80
28:DG:117:PRO:HD2	28:DG:120:ILE:CG2	2.12	0.80
1:AA:1374:A:H2'	1:AA:1375:A:H8	1.45	0.80
1:AA:547:A:H4'	1:AA:548:G:O5'	1.82	0.80
4:AD:16:THR:HG22	4:AD:17:ASP:O	1.81	0.80
6:AF:86:ARG:HD2	18:AR:63:TYR:O	1.80	0.80
17:AQ:51:GLU:HG2	17:AQ:52:CYS:SG	2.21	0.80
22:BA:1417:C:O2'	22:BA:1418:G:H5'	1.81	0.80
22:BA:2813:A:H2	22:BA:2887:A:H61	1.25	0.80
28:BG:126:THR:HG22	28:BG:128:THR:H	1.45	0.80
1:CA:1118:U:H1'	1:CA:1179:A:C4	2.16	0.80
4:CD:195:ASN:HB3	4:CD:197:HIS:NE2	1.97	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1918:A:H4'	22:DA:1919:A:OP1	1.80	0.80
26:DE:110:SER:O	26:DE:113:VAL:HG12	1.80	0.80
36:DO:11:ALA:HB2	36:DO:96:GLY:N	1.96	0.80
43:DV:63:ILE:O	43:DV:70:ILE:HD11	1.82	0.80
7:AG:4:ARG:HA	7:AG:4:ARG:HE	1.46	0.80
22:BA:1734:G:O2'	22:BA:1735:A:H8	1.64	0.80
22:BA:2543:G:H8	22:BA:2543:G:H5'	1.47	0.80
24:BC:106:PRO:CB	24:BC:141:HIS:HE1	1.95	0.80
24:BC:20:ASN:HD22	24:BC:20:ASN:C	1.83	0.80
28:BG:11:PRO:O	28:BG:14:VAL:HG22	1.82	0.80
5:CE:104:ILE:HA	5:CE:122:VAL:CG2	2.11	0.80
8:CH:93:LYS:H	8:CH:93:LYS:HD3	1.45	0.80
51:D3:18:LYS:HD2	51:D3:19:GLY:H	1.47	0.80
22:DA:1340:U:OP1	22:DA:1340:U:H4'	1.81	0.80
22:DA:1645:G:OP1	22:DA:1646:C:H5'	1.82	0.80
22:DA:1975:G:C5	22:DA:1976:U:C5	2.70	0.80
22:DA:603:A:H4'	22:DA:604:G:O5'	1.80	0.80
22:DA:738:G:H2'	22:DA:739:A:C8	2.17	0.80
30:DI:50:LYS:HE2	30:DI:50:LYS:HA	1.62	0.80
26:DE:29:HIS:ND1	33:DL:6:LEU:HD22	1.96	0.80
13:AM:79:LEU:HD22	13:AM:86:ARG:HB2	1.64	0.80
22:BA:1022:G:N2	22:BA:1142:A:C2	2.49	0.80
22:BA:1253:A:H3'	22:BA:1254:A:H5''	1.62	0.80
41:BT:45:ALA:O	41:BT:48:GLN:HB2	1.82	0.80
1:CA:1533:C:H2'	1:CA:1534:A:H5''	1.63	0.80
1:CA:936:C:HO2'	1:CA:937:A:H8	1.26	0.80
11:CK:110:THR:HG22	21:CU:4:LYS:HA	1.63	0.80
17:CQ:68:LYS:O	17:CQ:69:THR:HG23	1.81	0.80
22:DA:1401:G:O2'	22:DA:1402:U:H5'	1.80	0.80
22:DA:528:A:C2	22:DA:2042:A:H2'	2.16	0.80
27:DF:30:VAL:HG12	27:DF:157:THR:CG2	2.10	0.80
51:B3:22:LYS:HA	51:B3:47:ALA:O	1.80	0.80
1:CA:1218:C:O2'	1:CA:1219:A:C8	2.30	0.80
1:CA:960:U:O2'	1:CA:1223:C:H4'	1.82	0.80
1:CA:1240:U:O4'	7:CG:41:ILE:HD11	1.82	0.80
7:CG:42:VAL:HG12	7:CG:43:TYR:HD2	1.46	0.80
48:D0:42:ILE:HD11	48:D0:48:TYR:HB2	1.62	0.80
22:DA:84:A:C4	22:DA:103:A:N6	2.50	0.80
22:DA:1022:G:H22	22:DA:1142:A:H2	1.30	0.80
22:DA:2461:A:H1'	22:DA:2492:U:H3	1.46	0.80
22:DA:2631:G:C2'	22:DA:2632:A:H5''	2.12	0.80

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:455:C:N4	22:DA:472:A:H2'	1.96	0.80
22:DA:487:C:C2'	22:DA:488:G:H5'	2.12	0.80
39:DR:62:GLU:HB3	39:DR:97:LYS:HB3	1.64	0.80
40:DS:32:ALA:O	40:DS:33:LEU:HB2	1.80	0.80
46:DY:19:LEU:HA	46:DY:22:LEU:HB2	1.63	0.80
8:AH:83:ARG:O	8:AH:84:ILE:HD13	1.82	0.80
10:AJ:48:ARG:HG2	10:AJ:48:ARG:NH1	1.89	0.80
12:AL:85:ARG:HH21	12:AL:87:LYS:HD2	1.44	0.80
49:B1:7:LYS:HA	49:B1:23:THR:HG22	1.63	0.80
52:B4:9:LYS:HB3	52:B4:14:CYS:HB3	1.64	0.80
28:BG:140:ILE:N	28:BG:140:ILE:HD12	1.95	0.80
31:BJ:44:TYR:CD2	38:BQ:63:ARG:CD	2.65	0.80
37:BP:95:LYS:HG2	37:BP:97:TYR:CZ	2.16	0.80
39:BR:29:THR:O	39:BR:63:VAL:HG22	1.81	0.80
1:CA:77:A:H2'	1:CA:78:A:C8	2.17	0.80
2:CB:89:PHE:HB3	2:CB:149:GLY:O	1.82	0.80
12:CL:83:GLY:HA2	12:CL:94:TYR:CA	2.11	0.80
21:CU:53:LYS:HB2	21:CU:53:LYS:NZ	1.97	0.80
22:DA:1656:C:C2'	22:DA:1657:U:H5'	2.12	0.80
25:DD:146:ILE:HG13	25:DD:155:VAL:HG22	1.64	0.80
32:DK:17:ARG:HG2	32:DK:18:ARG:H	1.44	0.80
33:DL:117:THR:HG22	33:DL:118:THR:N	1.95	0.80
34:DM:66:ARG:HD2	34:DM:101:VAL:CG1	2.11	0.80
43:DV:70:ILE:HD13	43:DV:70:ILE:N	1.97	0.80
1:AA:486:U:H5''	1:AA:486:U:C6	2.17	0.80
2:AB:185:ILE:HA	2:AB:199:ILE:HB	1.62	0.80
2:AB:9:LEU:HD23	2:AB:11:ALA:N	1.97	0.80
52:B4:37:GLN:O	52:B4:37:GLN:HG2	1.82	0.80
22:BA:1076:C:H2'	22:BA:1077:A:H8	1.46	0.80
22:BA:1277:G:H4'	35:BN:20:MET:HE2	1.64	0.80
40:BS:48:LYS:O	40:BS:52:GLU:HG3	1.81	0.80
1:CA:753:A:H4'	1:CA:754:C:O5'	1.82	0.80
1:CA:982:U:H1'	1:CA:983:A:C8	2.17	0.80
8:CH:23:ALA:HA	8:CH:62:LEU:CD2	2.12	0.80
22:DA:1166:G:H22	22:DA:1184:U:H1'	1.44	0.80
22:DA:1833:C:C4	22:DA:1834:U:C4	2.70	0.80
41:DT:67:VAL:O	41:DT:68:LYS:HG3	1.82	0.80
17:AQ:6:THR:O	17:AQ:7:LEU:HD12	1.82	0.79
19:AS:3:SER:O	19:AS:5:LYS:HG3	1.82	0.79
22:BA:2341:G:H2'	22:BA:2342:C:H6	1.48	0.79
22:BA:2602:A:H4'	22:BA:2603:G:OP2	1.81	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2816:G:O3'	35:BN:99:LYS:HE2	1.82	0.79
23:BB:25:U:O2'	23:BB:26:C:H5'	1.82	0.79
32:BK:21:CYS:HB2	32:BK:39:ILE:HD11	1.61	0.79
33:BL:27:LEU:N	33:BL:27:LEU:HD12	1.97	0.79
37:BP:50:ARG:CG	37:BP:57:ALA:N	2.04	0.79
47:BZ:40:THR:CG2	47:BZ:43:ILE:HG23	2.12	0.79
1:CA:166:U:H2'	1:CA:167:A:H5'	1.64	0.79
1:CA:247:G:O6	1:CA:278:G:C6	2.35	0.79
10:CJ:15:HIS:HE1	10:CJ:68:ARG:HD3	1.46	0.79
16:CP:46:LYS:HE2	16:CP:47:GLU:N	1.96	0.79
22:DA:192:C:H2'	22:DA:193:U:H5'	1.62	0.79
22:DA:2016:U:O2'	22:DA:2017:U:H5'	1.81	0.79
22:DA:2195:U:O2'	22:DA:2196:C:H5'	1.82	0.79
22:DA:915:C:H2'	22:DA:916:G:H8	1.47	0.79
22:DA:95:A:H1'	46:DY:40:SER:HB2	1.63	0.79
22:DA:999:U:O2'	22:DA:1000:A:H5'	1.82	0.79
27:DF:48:LEU:HG	27:DF:49:LEU:HD22	1.63	0.79
31:DJ:45:THR:H	31:DJ:46:PRO:CD	1.94	0.79
42:DU:54:PRO:HG2	42:DU:55:GLY:H	1.47	0.79
23:DB:94:A:OP1	43:DV:19:ARG:HD3	1.80	0.79
5:AE:136:VAL:O	5:AE:136:VAL:HG22	1.81	0.79
14:AN:40:ARG:NH1	14:AN:44:VAL:HG21	1.97	0.79
22:BA:1998:A:OP2	25:BD:141:ARG:NH2	2.15	0.79
28:BG:142:GLN:NE2	28:BG:142:GLN:HA	1.97	0.79
44:BW:23:LYS:CD	44:BW:24:ARG:N	2.44	0.79
46:BY:57:LEU:HA	46:BY:60:LYS:CB	2.13	0.79
1:CA:1148:U:O2'	1:CA:1149:C:H5'	1.82	0.79
1:CA:1167:A:N7	1:CA:1169:A:N6	2.31	0.79
5:CE:29:ILE:CG2	5:CE:30:PHE:N	2.39	0.79
17:CQ:58:VAL:CB	17:CQ:74:LEU:HD11	2.12	0.79
22:DA:1359:A:C2	22:DA:1360:G:H1'	2.15	0.79
27:DF:28:PRO:CB	27:DF:168:LEU:HD21	2.11	0.79
29:DH:1:MET:HE3	29:DH:23:ALA:HB2	1.64	0.79
45:DX:20:ALA:O	45:DX:21:LEU:HB2	1.83	0.79
1:AA:548:G:H2'	1:AA:549:C:H6	1.48	0.79
4:AD:54:LEU:C	4:AD:54:LEU:HD23	2.03	0.79
5:AE:104:ILE:O	5:AE:104:ILE:HG23	1.81	0.79
22:BA:1734:G:HO2'	22:BA:1735:A:H8	0.81	0.79
22:BA:2327:A:H2'	22:BA:2328:A:C8	2.17	0.79
25:BD:140:HIS:NE2	56:BD:302:HOH:O	2.15	0.79
32:BK:10:VAL:HB	32:BK:16:ALA:HB1	1.63	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BU:5:ARG:HG2	42:BU:5:ARG:NH2	1.91	0.79
1:CA:1038:C:H2'	1:CA:1039:G:C8	2.16	0.79
22:DA:1394:U:H3'	22:DA:1394:U:H6	1.47	0.79
22:DA:2201:G:H2'	22:DA:2202:U:H6	1.48	0.79
22:DA:240:C:H3'	22:DA:241:A:H5''	1.63	0.79
22:DA:989:G:H4'	22:DA:990:A:OP1	1.81	0.79
24:DC:144:GLU:HG3	24:DC:151:GLY:N	1.98	0.79
24:DC:173:LEU:N	24:DC:173:LEU:HD22	1.97	0.79
25:DD:110:THR:OG1	25:DD:171:THR:HG22	1.82	0.79
30:DI:5:GLN:OE1	30:DI:59:THR:HG21	1.81	0.79
1:CA:1422:G:H5''	32:DK:48:PRO:HB3	1.64	0.79
22:DA:637:A:OP2	33:DL:112:LEU:HD22	1.82	0.79
41:DT:28:ASN:HB2	41:DT:87:LEU:HB3	1.65	0.79
4:AD:122:ILE:N	4:AD:122:ILE:HD13	1.97	0.79
7:AG:12:LEU:HD22	7:AG:12:LEU:N	1.94	0.79
22:BA:2021:C:P	48:B0:8:THR:HG21	2.23	0.79
22:BA:2341:G:H2'	22:BA:2342:C:C6	2.17	0.79
35:BN:32:GLU:OE1	35:BN:118:ARG:HA	1.83	0.79
36:BO:31:THR:HG23	36:BO:34:HIS:H	1.47	0.79
38:BQ:111:LYS:HE2	39:BR:50:GLY:HA2	1.62	0.79
41:BT:40:LYS:CA	41:BT:43:ILE:HG23	2.12	0.79
46:BY:5:GLU:O	46:BY:8:GLU:HB2	1.82	0.79
1:CA:642:A:O2'	1:CA:643:C:H6	1.64	0.79
1:CA:663:A:O2'	1:CA:664:G:H5'	1.82	0.79
2:CB:46:VAL:HG13	2:CB:47:PRO:CD	2.11	0.79
14:CN:52:ARG:HA	14:CN:52:ARG:NE	1.98	0.79
11:CK:126:ARG:HB2	21:CU:33:ARG:HD2	1.63	0.79
22:DA:1197:G:H5'	22:DA:1227:G:O2'	1.82	0.79
22:DA:1533:C:H2'	22:DA:1534:U:H5'	1.65	0.79
22:DA:1698:A:H1'	22:DA:1700:A:OP2	1.82	0.79
22:DA:2902:C:H2'	22:DA:2903:U:O4'	1.81	0.79
1:AA:415:A:H2'	1:AA:416:G:H8	1.44	0.79
5:AE:155:LYS:HD2	5:AE:155:LYS:H	1.45	0.79
10:AJ:52:LEU:HD21	10:AJ:62:ARG:HE	1.45	0.79
12:AL:2:THR:HG22	12:AL:4:ASN:H	1.47	0.79
48:B0:39:ARG:HG2	48:B0:40:HIS:ND1	1.97	0.79
22:BA:2813:A:H2	22:BA:2887:A:N6	1.80	0.79
23:BB:45:A:H2'	23:BB:46:A:H8	1.46	0.79
29:BH:81:ALA:O	29:BH:102:ALA:HB2	1.80	0.79
34:BM:73:ILE:HG21	34:BM:91:TYR:CZ	2.16	0.79
1:CA:413:G:C6	4:CD:32:LYS:HE3	2.17	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:113:LYS:HE3	3:CC:184:ASN:HD21	1.46	0.79
5:CE:143:LEU:O	5:CE:144:GLU:HB2	1.81	0.79
6:CF:54:LEU:HD13	6:CF:55:HIS:H	1.48	0.79
10:CJ:80:THR:O	10:CJ:84:VAL:HG22	1.82	0.79
22:DA:1023:U:C6	22:DA:1023:U:H5'	2.17	0.79
22:DA:1107:G:H2'	22:DA:1108:U:H5'	1.63	0.79
22:DA:217:A:O2'	22:DA:218:A:C8	2.36	0.79
26:DE:148:ILE:HA	26:DE:187:VAL:HB	1.65	0.79
35:DN:2:ARG:HD2	35:DN:2:ARG:O	1.83	0.79
1:AA:125:U:C2'	1:AA:126:G:H5'	2.12	0.79
1:AA:807:A:H2'	1:AA:808:C:H6	1.48	0.79
3:AC:71:ARG:O	3:AC:74:ILE:HG22	1.83	0.79
7:AG:30:MET:HG2	7:AG:31:VAL:N	1.98	0.79
13:AM:28:ARG:O	13:AM:32:ILE:HG12	1.82	0.79
15:AO:55:LEU:HD12	15:AO:55:LEU:O	1.82	0.79
22:BA:35:G:H5'	22:BA:35:G:C8	2.15	0.79
30:BI:53:PRO:HD2	30:BI:77:VAL:HG21	1.64	0.79
32:BK:116:ILE:HD12	32:BK:117:SER:N	1.97	0.79
41:BT:61:LEU:C	41:BT:61:LEU:CD1	2.51	0.79
1:CA:482:A:O2'	1:CA:483:C:H5'	1.83	0.79
3:CC:113:LYS:HG3	3:CC:184:ASN:ND2	1.97	0.79
5:CE:131:ASN:O	5:CE:135:VAL:HG23	1.83	0.79
12:CL:34:THR:HG22	12:CL:35:ARG:HG2	1.63	0.79
14:CN:20:PHE:CA	14:CN:24:ALA:HB2	2.13	0.79
16:CP:52:LEU:HD22	16:CP:78:VAL:HG21	1.65	0.79
22:DA:1275:A:N7	35:DN:16:HIS:HB2	1.98	0.79
22:DA:241:A:H4'	22:DA:242:G:OP1	1.83	0.79
33:DL:119:PRO:HB3	33:DL:139:GLY:O	1.83	0.79
41:DT:5:GLU:OE2	46:DY:18:LEU:HD21	1.81	0.79
1:AA:1234:C:O2'	1:AA:1235:U:H5'	1.83	0.79
1:AA:1060:U:C5	3:AC:1:GLY:HA3	2.18	0.79
13:AM:106:ARG:HH21	13:AM:112:ARG:CB	1.96	0.79
16:AP:29:ASN:HD22	16:AP:29:ASN:N	1.79	0.79
22:BA:2425:A:H5'	22:BA:2427:C:O4'	1.82	0.79
22:BA:529:A:H4'	22:BA:530:G:OP1	1.81	0.79
26:BE:189:THR:OG1	26:BE:191:ASP:HB3	1.81	0.79
27:BF:72:SER:HB2	27:BF:80:GLN:N	1.95	0.79
28:BG:120:ILE:HD11	28:BG:132:LEU:HB2	1.63	0.79
29:BH:31:VAL:HB	29:BH:32:PRO:HD2	1.64	0.79
33:BL:110:VAL:HG12	33:BL:111:ILE:H	1.48	0.79
39:BR:51:VAL:HB	39:BR:52:PRO:HD2	1.64	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BU:15:GLY:O	42:BU:17:ASP:N	2.15	0.79
1:CA:522:C:H41	12:CL:49:ARG:NH2	1.80	0.79
20:CT:23:ARG:HB3	20:CT:60:GLN:NE2	1.97	0.79
22:DA:1387:A:C5'	22:DA:1469:A:H1'	2.12	0.79
32:DK:88:ASN:HB2	32:DK:91:SER:HB2	1.64	0.79
32:DK:13:ASN:HD21	32:DK:97:THR:N	1.80	0.79
22:DA:663:G:OP1	33:DL:17:LYS:HG2	1.82	0.79
51:B3:26:ALA:O	51:B3:27:ASN:HB2	1.81	0.79
1:CA:940:C:H5'	7:CG:101:ARG:NH2	1.98	0.79
22:DA:2361:G:OP1	51:D3:25:HIS:HA	1.83	0.79
22:DA:1355:G:O2'	22:DA:1356:G:H5'	1.82	0.79
22:DA:2214:C:H2'	22:DA:2215:C:C6	2.18	0.79
22:DA:604:G:O2'	22:DA:605:G:H8	1.65	0.79
26:DE:112:LEU:HD12	26:DE:118:LEU:HD13	1.63	0.79
29:DH:84:ALA:HB3	29:DH:148:ALA:HA	1.65	0.79
29:DH:6:LEU:HD13	29:DH:36:ALA:CA	2.09	0.79
13:AM:47:LEU:HD23	13:AM:51:GLN:HB3	1.65	0.79
14:AN:47:LEU:HD23	14:AN:47:LEU:O	1.82	0.79
22:BA:2093:G:O2'	22:BA:2094:A:H5'	1.82	0.79
29:BH:94:ILE:HG21	29:BH:99:ILE:HG12	1.63	0.79
31:BJ:44:TYR:O	31:BJ:45:THR:HG22	1.83	0.79
1:CA:132:C:O2'	1:CA:133:U:H5'	1.83	0.79
1:CA:78:A:H2'	1:CA:79:G:H8	1.48	0.79
2:CB:110:ILE:HD11	2:CB:150:ILE:HG23	1.64	0.79
3:CC:120:THR:O	3:CC:120:THR:HG22	1.82	0.79
6:CF:2:ARG:HG2	6:CF:4:TYR:CZ	2.18	0.79
17:CQ:46:HIS:HB2	17:CQ:70:LYS:CE	2.13	0.79
22:DA:1345:C:OP2	22:DA:1345:C:H3'	1.83	0.79
24:DC:128:THR:HG22	24:DC:188:ARG:HB3	1.63	0.79
33:DL:17:LYS:HZ3	33:DL:19:LEU:HD22	1.42	0.79
40:DS:20:VAL:CG1	40:DS:43:ALA:HB1	2.12	0.79
40:DS:32:ALA:CA	40:DS:35:ILE:HD11	2.11	0.79
1:AA:1124:G:H2'	1:AA:1145:A:H61	1.48	0.79
1:AA:1158:C:H2'	1:AA:1158:C:O2	1.82	0.79
1:AA:1239:A:H62	1:AA:1299:A:H62	1.25	0.79
1:AA:489:C:C2'	1:AA:490:C:H5'	2.12	0.79
1:AA:518:C:H2'	1:AA:530:G:C8	2.18	0.79
1:AA:654:G:H2'	1:AA:655:A:H8	1.47	0.79
10:AJ:8:ILE:HD12	10:AJ:74:VAL:HG11	1.64	0.79
22:BA:2547:A:H2'	22:BA:2548:U:C6	2.17	0.79
22:BA:915:C:H6	22:BA:915:C:H5''	1.45	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:16:VAL:N	24:BC:203:VAL:CG1	2.46	0.79
27:BF:105:ILE:HD11	27:BF:138:PRO:HG2	1.65	0.79
28:BG:3:VAL:O	28:BG:68:ARG:HG3	1.82	0.79
38:BQ:4:LYS:NZ	38:BQ:8:ILE:HG23	1.98	0.79
45:BX:65:THR:O	45:BX:68:ALA:HB3	1.81	0.79
12:CL:98:ARG:HD3	12:CL:103:CYS:SG	2.22	0.79
24:DC:181:ARG:HE	24:DC:265:PHE:HB2	1.48	0.79
28:DG:104:LEU:HB3	28:DG:106:LEU:HD21	1.62	0.79
22:DA:2882:A:C5'	35:DN:96:ARG:HD3	2.13	0.79
5:AE:29:ILE:HD12	5:AE:30:PHE:H	1.45	0.78
12:AL:33:CYS:HA	12:AL:53:ARG:O	1.82	0.78
15:AO:16:ARG:HD3	15:AO:16:ARG:H	1.46	0.78
20:AT:28:ARG:O	20:AT:32:LYS:HG2	1.83	0.78
20:AT:53:MET:O	20:AT:56:ILE:HG22	1.83	0.78
33:BL:81:ASP:O	33:BL:82:LEU:CB	2.29	0.78
34:BM:53:MET:O	34:BM:56:ALA:HB3	1.82	0.78
3:CC:41:TYR:HE1	3:CC:89:VAL:CG1	1.95	0.78
5:CE:82:HIS:HB2	5:CE:83:PRO:HD2	1.64	0.78
9:CI:113:LYS:HG3	9:CI:119:LYS:HA	1.63	0.78
18:CR:19:GLU:CD	18:CR:20:ILE:H	1.86	0.78
22:DA:79:C:H42	22:DA:107:G:H1	1.31	0.78
22:DA:1794:A:H2'	22:DA:1795:C:H6	1.49	0.78
22:DA:1827:U:C4'	22:DA:1970:A:O2'	2.31	0.78
22:DA:2582:G:H2'	22:DA:2582:G:N3	1.97	0.78
22:DA:287:G:O2'	22:DA:288:U:H5'	1.82	0.78
22:DA:960:A:C2'	22:DA:962:G:H5'	2.11	0.78
32:DK:27:GLY:HA3	32:DK:30:ARG:CD	2.12	0.78
1:AA:1298:U:H4'	1:AA:1299:A:O5'	1.82	0.78
1:AA:486:U:H6	1:AA:486:U:H5''	1.46	0.78
3:AC:52:SER:HB2	3:AC:111:ASP:OD2	1.83	0.78
22:BA:1414:C:C4	22:BA:1415:U:C5	2.72	0.78
32:BK:18:ARG:CB	32:BK:45:GLU:HG2	2.08	0.78
47:BZ:1:ALA:O	47:BZ:3:THR:HG22	1.83	0.78
1:CA:1097:C:H2'	1:CA:1098:C:C6	2.17	0.78
1:CA:590:U:O2'	1:CA:591:U:H5'	1.83	0.78
1:CA:87:C:O2'	1:CA:88:U:H4'	1.82	0.78
17:CQ:25:GLU:HA	17:CQ:39:ARG:O	1.83	0.78
22:DA:1241:A:H5'	22:DA:1241:A:N3	1.99	0.78
22:DA:1521:G:C6	22:DA:1522:A:N6	2.51	0.78
22:DA:1931:U:H2'	22:DA:1932:A:H8	1.48	0.78
22:DA:2019:A:H4'	38:DQ:33:VAL:HG21	1.64	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2628:C:O2'	22:DA:2781:A:H2'	1.82	0.78
25:DD:141:ARG:HB3	25:DD:141:ARG:NH1	1.97	0.78
26:DE:166:LYS:HA	26:DE:166:LYS:HE2	1.65	0.78
3:AC:146:LYS:HB2	3:AC:202:PHE:CD2	2.18	0.78
6:AF:3:HIS:H	6:AF:92:THR:HG23	1.49	0.78
6:AF:92:THR:O	6:AF:93:LYS:HG2	1.83	0.78
11:AK:91:GLY:HA2	11:AK:94:SER:HB3	1.65	0.78
17:AQ:11:VAL:HG12	17:AQ:12:VAL:HG12	1.65	0.78
49:B1:10:LEU:HD21	49:B1:33:LEU:HD23	1.65	0.78
22:BA:2707:U:O2	35:BN:71:ARG:NH1	2.17	0.78
25:BD:118:PHE:O	25:BD:120:GLY:N	2.16	0.78
33:BL:91:ASP:H	33:BL:94:THR:CG2	1.95	0.78
41:BT:28:ASN:C	41:BT:91:GLN:HE22	1.85	0.78
1:CA:719:C:H3'	1:CA:720:C:C6	2.19	0.78
4:CD:104:MET:SD	4:CD:142:VAL:HG13	2.24	0.78
22:DA:1060:U:O4'	22:DA:1061:U:H2'	1.83	0.78
22:DA:2058:A:H5'	22:DA:2059:A:OP2	1.83	0.78
22:DA:2244:U:H2'	22:DA:2245:U:O4'	1.83	0.78
22:DA:623:C:H2'	22:DA:624:C:H6	1.47	0.78
22:DA:729:G:H3'	22:DA:730:A:C5'	2.13	0.78
23:DB:50:A:C2	23:DB:51:G:H1'	2.19	0.78
27:DF:32:LYS:HB3	27:DF:156:THR:HB	1.63	0.78
28:DG:93:TYR:HD2	28:DG:93:TYR:H	1.30	0.78
29:DH:80:ILE:HB	29:DH:101:ASP:HB2	1.63	0.78
33:DL:73:ILE:O	33:DL:105:ILE:HA	1.84	0.78
47:DZ:6:ILE:CD1	47:DZ:47:ILE:HD11	2.13	0.78
1:AA:1299:A:N3	1:AA:1299:A:H2'	1.98	0.78
1:AA:154:U:O2'	1:AA:155:A:H5'	1.83	0.78
1:AA:232:G:O2'	1:AA:233:C:H5'	1.83	0.78
1:AA:986:U:H2'	1:AA:987:G:O4'	1.83	0.78
7:AG:68:VAL:HG21	7:AG:103:ILE:HD11	1.65	0.78
21:AU:7:GLU:HB2	21:AU:11:PHE:CE1	2.18	0.78
22:BA:277:G:H4'	22:BA:278:A:N7	1.98	0.78
22:BA:284:U:H2'	22:BA:285:G:H8	1.46	0.78
22:BA:668:A:H2'	22:BA:670:A:H62	1.48	0.78
30:BI:100:ILE:HG22	30:BI:101:SER:H	1.47	0.78
36:BO:58:ILE:O	36:BO:59:ALA:HB2	1.82	0.78
1:CA:32:A:H2'	1:CA:33:A:H8	1.42	0.78
4:CD:202:LEU:HD22	4:CD:203:TYR:HE2	1.49	0.78
10:CJ:35:GLN:HG2	10:CJ:76:ILE:HG23	1.64	0.78
22:DA:116:C:O2'	22:DA:117:G:H5'	1.83	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2214:C:H2'	22:DA:2215:C:H6	1.49	0.78
22:DA:2093:G:O6	22:DA:2225:A:C8	2.37	0.78
22:DA:336:C:HO2'	22:DA:337:C:H6	0.81	0.78
22:DA:632:A:H5''	33:DL:68:SER:OG	1.84	0.78
22:DA:674:G:O2'	26:DE:69:ARG:HG3	1.82	0.78
28:DG:88:LEU:HD13	28:DG:93:TYR:HB3	1.65	0.78
32:DK:2:ILE:HB	32:DK:33:ALA:HB3	1.66	0.78
44:DW:37:VAL:CG2	44:DW:38:ARG:HH11	1.96	0.78
1:AA:1386:G:H2'	1:AA:1387:G:H8	1.48	0.78
1:AA:536:C:O2'	1:AA:537:G:H5'	1.82	0.78
1:AA:865:A:H2'	1:AA:866:C:H6	1.48	0.78
2:AB:130:LYS:NZ	2:AB:130:LYS:HA	1.99	0.78
4:AD:170:LEU:N	4:AD:170:LEU:HD12	1.99	0.78
14:AN:92:ILE:HG21	14:AN:95:LEU:HD22	1.66	0.78
22:BA:1326:U:O2'	22:BA:1327:A:H5'	1.83	0.78
22:BA:1735:A:O2'	22:BA:1736:U:H5'	1.84	0.78
22:BA:842:U:O4	56:BA:3583:HOH:O	2.02	0.78
30:BI:33:ASN:HB3	30:BI:36:GLU:HB2	1.66	0.78
36:BO:116:GLN:OE1	36:BO:116:GLN:HA	1.83	0.78
37:BP:80:VAL:HG12	37:BP:81:ASP:N	1.98	0.78
44:BW:28:GLU:CB	44:BW:31:LEU:HD11	2.13	0.78
44:BW:37:VAL:HG13	44:BW:55:ASP:O	1.84	0.78
1:CA:1182:G:H4'	1:CA:1183:U:C5'	2.11	0.78
1:CA:1218:C:HO2'	1:CA:1219:A:H8	0.79	0.78
1:CA:33:A:O2'	1:CA:34:C:H5'	1.84	0.78
4:CD:2:ARG:HH21	4:CD:114:ARG:CD	1.96	0.78
4:CD:115:GLN:HE21	4:CD:153:ARG:NH2	1.82	0.78
16:CP:52:LEU:HD23	16:CP:80:LYS:NZ	1.99	0.78
22:DA:1607:C:H4'	22:DA:1608:A:C8	2.18	0.78
22:DA:762:U:H4'	22:DA:763:G:O5'	1.83	0.78
28:DG:16:VAL:HG11	28:DG:44:HIS:CD2	2.18	0.78
36:DO:18:LEU:HD13	36:DO:25:ARG:HG2	1.65	0.78
1:AA:1533:C:C3'	1:AA:1534:A:H5''	2.13	0.78
1:AA:328:C:O2	1:AA:328:C:H2'	1.83	0.78
17:AQ:20:ILE:N	17:AQ:47:ASP:OD1	2.17	0.78
21:AU:52:VAL:CG1	21:AU:53:LYS:H	1.96	0.78
49:B1:9:LYS:O	49:B1:50:GLU:HG3	1.84	0.78
25:BD:1:MET:HG2	25:BD:205:PRO:HG2	1.64	0.78
28:BG:83:THR:HA	28:BG:84:LYS:CE	2.13	0.78
22:BA:662:G:H4'	33:BL:15:ALA:O	1.82	0.78
35:BN:65:LEU:HD11	35:BN:69:ARG:NH2	1.99	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:249:U:H5'	1:CA:250:A:OP2	1.84	0.78
3:CC:41:TYR:CE1	3:CC:89:VAL:HG12	2.17	0.78
51:D3:15:LYS:HZ1	51:D3:19:GLY:HA2	1.46	0.78
22:DA:1338:G:H4'	41:DT:18:GLU:CG	2.13	0.78
22:DA:1516:G:O2'	22:DA:1517:G:H5'	1.84	0.78
22:DA:1809:A:O2'	22:DA:1810:A:C8	2.37	0.78
22:DA:2015:A:C4	48:D0:2:VAL:HG11	2.18	0.78
22:DA:2585:U:HO2'	22:DA:2586:U:H5'	1.48	0.78
22:DA:674:G:OP1	26:DE:71:GLY:HA3	1.82	0.78
22:DA:975:A:O2'	22:DA:976:G:C8	2.31	0.78
26:DE:147:LEU:HG	26:DE:186:VAL:HG23	1.65	0.78
38:DQ:24:TYR:O	38:DQ:27:ARG:HB3	1.84	0.78
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.19	0.78
2:AB:66:ILE:HB	2:AB:88:GLN:CB	2.14	0.78
32:BK:43:ILE:CD1	32:BK:52:VAL:HG21	2.13	0.78
39:BR:64:VAL:HG12	39:BR:64:VAL:O	1.81	0.78
1:CA:66:A:N3	1:CA:66:A:H2'	1.99	0.78
3:CC:110:LEU:O	3:CC:110:LEU:HD23	1.83	0.78
4:CD:2:ARG:NH2	4:CD:114:ARG:HD2	1.99	0.78
12:CL:107:LYS:O	12:CL:108:ASP:HB2	1.83	0.78
22:DA:1273:U:H4'	22:DA:1275:A:OP2	1.84	0.78
22:DA:1819:A:H4'	22:DA:1820:U:H5'	1.66	0.78
22:DA:1847:A:O2'	22:DA:1848:A:C8	2.36	0.78
22:DA:2023:C:O2'	22:DA:2024:G:H8	1.66	0.78
25:DD:159:LYS:HE2	25:DD:160:LYS:N	1.99	0.78
31:DJ:36:LEU:HD12	31:DJ:121:LYS:HB2	1.64	0.78
38:DQ:90:ASP:O	38:DQ:94:LEU:HB2	1.83	0.78
1:AA:596:A:H2'	1:AA:597:G:H8	1.48	0.78
2:AB:106:VAL:O	2:AB:110:ILE:HD13	1.83	0.78
2:AB:116:LEU:CD1	2:AB:140:LEU:HD11	2.14	0.78
10:AJ:91:ASP:C	10:AJ:92:LEU:HD23	2.04	0.78
21:AU:19:LYS:HE2	21:AU:19:LYS:N	1.99	0.78
24:BC:104:LEU:O	24:BC:105:ALA:HB2	1.83	0.78
28:BG:22:VAL:HG22	28:BG:36:LEU:CD1	2.14	0.78
39:BR:60:LYS:H	39:BR:100:GLY:HA3	1.48	0.78
40:BS:36:LEU:HD23	40:BS:48:LYS:HA	1.66	0.78
1:CA:1316:G:N2	1:CA:1318:A:H3'	1.98	0.78
3:CC:166:TRP:HE3	3:CC:166:TRP:H	1.31	0.78
4:CD:115:GLN:HE21	4:CD:153:ARG:HH22	1.28	0.78
4:CD:55:ARG:NH1	4:CD:55:ARG:HG3	1.81	0.78
6:CF:92:THR:HG22	6:CF:94:HIS:N	1.96	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:12:ALA:HB3	10:CJ:18:ILE:HB	1.66	0.78
1:CA:1319:A:OP2	19:CS:4:LEU:HD21	1.84	0.78
22:DA:1815:A:H4'	22:DA:1816:C:OP1	1.82	0.78
25:DD:177:VAL:HG12	25:DD:187:LEU:HD11	1.65	0.78
25:DD:16:THR:CG2	25:DD:20:VAL:HB	2.14	0.78
27:DF:7:TYR:O	27:DF:8:LYS:HG3	1.83	0.78
29:DH:94:ILE:HG13	29:DH:98:ASP:CG	2.03	0.78
35:DN:96:ARG:HG2	35:DN:98:LEU:HD13	1.65	0.78
4:AD:25:ARG:NH1	4:AD:30:LYS:HE3	1.97	0.78
12:AL:49:ARG:NH1	12:AL:49:ARG:HG2	1.89	0.78
22:BA:1438:U:O2'	22:BA:1439:A:H5'	1.84	0.78
22:BA:641:U:H5''	22:BA:642:U:OP2	1.84	0.78
31:BJ:64:VAL:CG1	31:BJ:68:LYS:HB2	2.14	0.78
32:BK:77:ILE:N	32:BK:77:ILE:HD12	1.99	0.78
36:BO:31:THR:HG22	36:BO:34:HIS:O	1.82	0.78
37:BP:112:ARG:C	37:BP:113:LEU:HD23	2.03	0.78
38:BQ:69:ARG:CB	38:BQ:69:ARG:NH2	2.35	0.78
41:BT:32:LEU:N	41:BT:83:ALA:HB3	1.96	0.78
44:BW:50:VAL:O	44:BW:52:CYS:N	2.16	0.78
44:BW:30:VAL:HA	44:BW:60:ALA:HB3	1.66	0.78
1:CA:373:A:H5'	1:CA:373:A:H8	1.49	0.78
1:CA:934:C:H4'	1:CA:935:A:OP1	1.82	0.78
2:CB:103:TRP:O	2:CB:107:ARG:HG2	1.83	0.78
9:CI:11:ARG:HD3	9:CI:106:ASP:OD1	1.82	0.78
22:DA:1261:C:H2'	22:DA:1262:A:H5''	1.66	0.78
22:DA:1372:U:H2'	22:DA:1373:A:C8	2.18	0.78
22:DA:2211:A:OP2	22:DA:2211:A:H4'	1.82	0.78
22:DA:2502:G:H5'	22:DA:2503:A:H5''	1.65	0.78
28:DG:22:VAL:HG12	28:DG:23:ILE:H	1.49	0.78
33:DL:79:LEU:HA	33:DL:82:LEU:HD11	1.64	0.78
40:DS:29:VAL:HG23	40:DS:69:LEU:O	1.84	0.78
4:AD:25:ARG:HH11	4:AD:30:LYS:HE3	1.48	0.78
22:BA:855:G:N3	44:BW:23:LYS:HD3	1.98	0.78
10:CJ:26:VAL:O	10:CJ:30:LYS:HB3	1.84	0.78
20:CT:42:ASP:HB3	20:CT:45:ALA:HB3	1.66	0.78
22:DA:1542:U:O2'	22:DA:1543:G:H5'	1.84	0.78
22:DA:1693:U:H4'	22:DA:1694:C:OP2	1.82	0.78
22:DA:1738:G:HO2'	22:DA:1739:A:H8	1.32	0.78
26:DE:149:ILE:HG23	26:DE:188:MET:CB	2.13	0.78
31:DJ:18:VAL:CG1	31:DJ:56:VAL:HA	2.14	0.78
40:DS:20:VAL:HG23	40:DS:23:LEU:HD12	1.65	0.78

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:6:ARG:O	41:DT:9:LYS:HD2	1.83	0.78
1:AA:1016:A:C8	1:AA:1017:U:H1'	2.19	0.77
1:AA:1469:C:H2'	1:AA:1470:U:H5'	1.67	0.77
1:AA:96:U:HO2'	1:AA:97:G:H8	1.32	0.77
4:AD:172:VAL:HG13	4:AD:173:ASP:N	1.99	0.77
11:AK:81:LEU:HD22	11:AK:104:PHE:CD1	2.19	0.77
22:BA:1199:U:H2'	22:BA:1200:C:C6	2.18	0.77
22:BA:556:A:H5''	22:BA:557:C:OP2	1.84	0.77
24:BC:246:PRO:CG	24:BC:247:TRP:CZ3	2.66	0.77
28:BG:8:VAL:CG1	28:BG:9:VAL:N	2.46	0.77
30:BI:3:LYS:HD2	30:BI:4:VAL:HG23	1.66	0.77
31:BJ:88:THR:HG23	31:BJ:91:GLU:H	1.49	0.77
37:BP:83:ILE:HD13	37:BP:83:ILE:C	2.04	0.77
41:BT:26:LYS:O	41:BT:27:SER:HB2	1.84	0.77
1:CA:1387:G:H2'	1:CA:1388:C:H6	1.48	0.77
1:CA:374:A:H5''	1:CA:452:A:N1	1.99	0.77
4:CD:159:GLU:OE2	4:CD:160:LEU:HD22	1.84	0.77
10:CJ:5:ARG:C	10:CJ:6:ILE:HD12	2.04	0.77
22:DA:379:G:C6	22:DA:396:G:O6	2.37	0.77
22:DA:794:A:H2'	22:DA:795:C:C6	2.19	0.77
31:DJ:59:ALA:O	31:DJ:62:VAL:HG12	1.84	0.77
36:DO:67:ASN:H	36:DO:70:ALA:HB3	1.48	0.77
41:DT:3:ARG:HD2	41:DT:42:GLU:HG2	1.64	0.77
42:DU:36:GLU:O	42:DU:38:ILE:HD12	1.84	0.77
44:DW:49:ASN:CG	44:DW:81:ILE:HG23	2.04	0.77
9:AI:88:GLU:HG3	9:AI:89:TYR:N	1.99	0.77
12:AL:79:ILE:HD12	12:AL:96:THR:HG21	1.65	0.77
52:B4:9:LYS:C	52:B4:10:LEU:HD23	2.02	0.77
33:BL:68:SER:HB3	33:BL:71:ALA:HB2	1.64	0.77
44:BW:51:GLY:HA3	44:BW:59:PHE:CE2	2.19	0.77
1:CA:821:G:H2'	1:CA:822:U:H6	1.48	0.77
1:CA:820:U:H4'	1:CA:821:G:OP2	1.84	0.77
2:CB:131:LYS:O	2:CB:131:LYS:HE3	1.84	0.77
2:CB:89:PHE:CE2	2:CB:152:ASP:HB2	2.14	0.77
19:CS:52:ASN:ND2	19:CS:54:ARG:HG2	1.99	0.77
21:CU:35:GLU:O	21:CU:36:PHE:CD2	2.37	0.77
22:DA:2887:A:H1'	48:D0:39:ARG:HH22	1.49	0.77
22:DA:1248:G:O2'	38:DQ:2:ARG:HA	1.84	0.77
22:DA:1574:C:H6	22:DA:1574:C:O5'	1.66	0.77
22:DA:1808:A:C3'	22:DA:1809:A:H8	1.95	0.77
22:DA:2135:A:C2'	22:DA:2136:G:H8	1.91	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2142:A:H61	22:DA:2150:C:N4	1.81	0.77
22:DA:82:U:H2'	22:DA:83:A:C5'	2.12	0.77
22:DA:1830:C:H5'	24:DC:14:HIS:HE1	1.49	0.77
40:DS:20:VAL:HG11	40:DS:43:ALA:CB	2.13	0.77
14:AN:40:ARG:NH1	14:AN:44:VAL:HG11	1.98	0.77
16:AP:19:VAL:HG22	16:AP:36:VAL:CG1	2.14	0.77
50:B2:3:ARG:HG2	50:B2:3:ARG:NH2	1.97	0.77
22:BA:1073:A:H8	22:BA:1073:A:P	2.08	0.77
22:BA:45:G:H5''	22:BA:46:G:OP1	1.83	0.77
33:BL:110:VAL:CG1	33:BL:111:ILE:N	2.47	0.77
40:BS:66:ILE:C	40:BS:66:ILE:HD13	2.04	0.77
44:BW:28:GLU:OE2	44:BW:28:GLU:HA	1.84	0.77
44:BW:40:ARG:H	44:BW:56:HIS:HB3	1.49	0.77
1:CA:1102:A:O2'	1:CA:1103:C:H5'	1.84	0.77
1:CA:1380:U:H4'	1:CA:1381:U:OP1	1.84	0.77
22:DA:1830:C:H5'	24:DC:14:HIS:CE1	2.18	0.77
22:DA:2204:G:OP2	24:DC:149:LYS:HD2	1.84	0.77
22:DA:225:C:H2'	22:DA:226:A:O4'	1.83	0.77
22:DA:2311:A:H5'	22:DA:2312:U:C5	2.20	0.77
22:DA:2492:U:H2'	22:DA:2493:U:H6	1.49	0.77
22:DA:2757:A:N1	28:DG:66:THR:HG21	1.99	0.77
22:DA:991:C:H6	22:DA:991:C:O5'	1.67	0.77
29:DH:41:LYS:HA	29:DH:44:ILE:CG1	2.14	0.77
31:DJ:44:TYR:HB2	38:DQ:63:ARG:NH2	1.99	0.77
33:DL:123:ARG:HG2	33:DL:143:GLU:HB3	1.66	0.77
34:DM:42:THR:HB	34:DM:45:GLN:CG	2.14	0.77
37:DP:26:GLU:OE1	37:DP:28:LYS:HE3	1.85	0.77
39:DR:3:ALA:HB2	39:DR:101:ILE:HD13	1.65	0.77
44:DW:40:ARG:NH1	44:DW:40:ARG:HG2	1.87	0.77
1:AA:1381:U:O2'	1:AA:1382:C:C5'	2.32	0.77
2:AB:86:CYS:SG	2:AB:221:ARG:HB2	2.24	0.77
4:AD:34:GLU:O	4:AD:37:PRO:HD3	1.84	0.77
48:B0:39:ARG:HB2	48:B0:39:ARG:NH1	1.97	0.77
49:B1:13:SER:HB3	49:B1:47:ILE:O	1.83	0.77
22:BA:1179:G:OP2	22:BA:1180:U:H5''	1.84	0.77
22:BA:1252:G:N3	38:BQ:32:ARG:HG2	1.99	0.77
22:BA:2795:C:H2'	22:BA:2796:U:H6	1.48	0.77
22:BA:898:C:H2'	22:BA:899:A:H5'	1.66	0.77
27:BF:3:LEU:HD23	27:BF:100:GLU:HG3	1.66	0.77
29:BH:62:LEU:HD12	29:BH:62:LEU:C	2.05	0.77
31:BJ:44:TYR:HA	38:BQ:59:LEU:CD2	2.15	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:BT:39:THR:HB	41:BT:42:GLU:H	1.49	0.77
42:BU:87:GLU:HG3	42:BU:88:ASP:N	1.98	0.77
1:CA:8:A:C5	4:CD:205:LYS:HG3	2.19	0.77
8:CH:23:ALA:HA	8:CH:62:LEU:HD23	1.66	0.77
49:D1:51:ALA:O	49:D1:52:LYS:HB2	1.83	0.77
22:DA:1539:U:O2'	22:DA:1540:G:H8	1.66	0.77
22:DA:2261:C:N4	44:DW:10:ARG:HB3	2.00	0.77
22:DA:675:A:OP1	26:DE:60:TRP:HZ2	1.66	0.77
35:DN:7:GLY:HA2	35:DN:46:ARG:NH2	1.99	0.77
22:DA:2331:G:H1'	44:DW:40:ARG:HB3	1.66	0.77
1:AA:961:U:H2'	1:AA:962:C:C6	2.19	0.77
19:AS:46:LEU:H	19:AS:61:VAL:CG2	1.98	0.77
22:BA:1993:U:H4'	25:BD:133:THR:HG21	1.67	0.77
22:BA:2330:G:H21	44:BW:38:ARG:HA	1.48	0.77
22:BA:92:U:H5''	22:BA:92:U:C6	2.17	0.77
24:BC:244:VAL:HB	24:BC:249:VAL:O	1.85	0.77
26:BE:83:VAL:HG12	26:BE:83:VAL:O	1.85	0.77
28:BG:83:THR:HA	28:BG:84:LYS:HZ3	1.48	0.77
30:BI:104:GLN:O	30:BI:105:LEU:HB2	1.84	0.77
33:BL:27:LEU:H	33:BL:27:LEU:HD12	1.49	0.77
34:BM:132:THR:HG22	34:BM:133:LYS:H	1.50	0.77
34:BM:31:PHE:CE2	34:BM:110:GLU:HG2	2.19	0.77
39:BR:49:ILE:HD12	39:BR:52:PRO:HA	0.86	0.77
40:BS:59:GLU:HA	40:BS:64:ALA:HB2	1.65	0.77
1:CA:1399:C:H4'	1:CA:1400:C:O5'	1.84	0.77
1:CA:936:C:O2'	1:CA:937:A:H8	1.66	0.77
4:CD:204:SER:HB2	5:CE:105:ILE:HD11	1.67	0.77
7:CG:148:LYS:HD3	7:CG:148:LYS:O	1.85	0.77
25:DD:21:SER:O	25:DD:23:PRO:HD3	1.84	0.77
44:DW:39:GLN:HE22	44:DW:58:LEU:HD23	1.48	0.77
47:DZ:4:ILE:CD1	47:DZ:58:GLU:HA	2.15	0.77
1:AA:514:C:O2'	1:AA:515:G:H5'	1.83	0.77
6:AF:55:HIS:O	6:AF:56:LYS:HB2	1.84	0.77
13:AM:113:LYS:H	13:AM:114:PRO:CD	1.97	0.77
29:BH:5:LEU:CD1	29:BH:13:GLY:HA2	2.15	0.77
1:CA:112:G:C2'	1:CA:113:G:H5'	2.14	0.77
1:CA:1264:U:H2'	1:CA:1265:C:C6	2.19	0.77
1:CA:520:A:H2'	1:CA:521:G:O4'	1.84	0.77
11:CK:30:ILE:HG12	11:CK:45:THR:CG2	2.15	0.77
13:CM:68:LEU:HD22	13:CM:69:ARG:NH1	2.00	0.77
51:D3:22:LYS:H	51:D3:48:MET:CB	1.96	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:D3:32:LEU:HA	51:D3:35:LYS:HG3	1.66	0.77
22:DA:2223:G:C2'	22:DA:2224:G:H5'	2.14	0.77
22:DA:876:C:H3'	22:DA:877:A:H8	1.49	0.77
23:DB:44:G:H5''	27:DF:91:ARG:CZ	2.14	0.77
23:DB:46:A:H2'	23:DB:47:C:H6	1.48	0.77
22:DA:323:C:H6	26:DE:165:HIS:CE1	2.03	0.77
26:DE:44:ARG:CG	26:DE:44:ARG:HH21	1.98	0.77
27:DF:140:ILE:O	27:DF:141:ASP:HB2	1.82	0.77
28:DG:83:THR:C	28:DG:84:LYS:HD3	2.04	0.77
35:DN:51:LEU:HA	35:DN:54:LEU:HD22	1.66	0.77
36:DO:4:LYS:HG3	36:DO:8:ILE:CD1	2.15	0.77
22:BA:2887:A:H2'	22:BA:2887:A:N3	1.98	0.77
1:CA:277:C:O2'	1:CA:278:G:H5'	1.83	0.77
22:DA:1204:A:H4'	22:DA:1205:A:H5''	1.64	0.77
22:DA:1399:C:O2'	22:DA:1400:U:H5'	1.85	0.77
22:DA:172:A:H2'	22:DA:173:A:C8	2.18	0.77
22:DA:172:A:O2'	22:DA:173:A:H5'	1.84	0.77
22:DA:2068:U:H5''	22:DA:2068:U:H6	1.48	0.77
22:DA:247:G:H4'	22:DA:386:G:C5	2.19	0.77
22:DA:449:A:HO2'	22:DA:450:G:H5'	1.46	0.77
22:DA:655:A:O2'	22:DA:656:G:C8	2.38	0.77
25:DD:73:VAL:O	25:DD:74:GLU:HB2	1.84	0.77
27:DF:39:VAL:HA	27:DF:49:LEU:HG	1.64	0.77
28:DG:139:VAL:HA	28:DG:142:GLN:HB3	1.66	0.77
36:DO:30:ARG:HG2	36:DO:31:THR:N	1.98	0.77
1:AA:93:U:HO2'	1:AA:94:G:H5''	1.47	0.77
1:AA:619:U:N3	4:AD:130:ASN:HB3	1.98	0.77
6:AF:8:PHE:HE1	6:AF:21:MET:CE	1.98	0.77
8:AH:28:SER:CB	8:AH:58:LEU:HB2	2.12	0.77
22:BA:1063:G:H2'	22:BA:1064:C:H6	1.49	0.77
22:BA:1537:G:H5''	22:BA:1537:G:N3	2.00	0.77
22:BA:709:U:H2'	22:BA:710:U:O4'	1.85	0.77
37:BP:52:ARG:HG3	37:BP:52:ARG:NH1	1.94	0.77
44:BW:28:GLU:CB	44:BW:31:LEU:HD21	2.12	0.77
1:CA:125:U:O2'	1:CA:126:G:H5'	1.84	0.77
12:CL:85:ARG:HG2	12:CL:86:VAL:H	1.49	0.77
20:CT:73:ARG:HG2	20:CT:73:ARG:HH11	1.47	0.77
22:DA:1208:C:C2	22:DA:1209:U:C5	2.73	0.77
22:DA:2333:A:C2	22:DA:2335:A:N6	2.53	0.77
22:DA:2476:A:C2'	22:DA:2477:U:H5'	2.15	0.77
25:DD:149:ASN:O	25:DD:152:PRO:HD2	1.84	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:49:LEU:HA	27:DF:52:ALA:HB3	1.67	0.77
29:DH:80:ILE:CG2	29:DH:101:ASP:HB2	2.15	0.77
32:DK:97:THR:O	32:DK:98:ARG:HB2	1.84	0.77
33:DL:120:VAL:HG12	33:DL:121:THR:H	1.50	0.77
1:AA:141:G:N2	1:AA:142:G:H1'	1.99	0.77
1:AA:274:A:O2'	1:AA:275:G:C8	2.33	0.77
1:AA:306:A:H2'	1:AA:307:C:C6	2.20	0.77
1:AA:693:G:O2'	1:AA:694:A:H5'	1.84	0.77
22:BA:324:A:O2'	22:BA:325:G:H5'	1.84	0.77
25:BD:106:LYS:HB3	25:BD:206:ALA:CB	2.13	0.77
27:BF:39:VAL:CG1	27:BF:49:LEU:HD13	2.14	0.77
1:CA:711:G:O2'	1:CA:712:A:H5'	1.84	0.77
9:CI:71:ILE:HD12	9:CI:72:SER:N	1.97	0.77
22:DA:100:U:H1'	22:DA:101:A:C5	2.20	0.77
22:DA:1317:G:H2'	22:DA:1318:U:O4'	1.84	0.77
22:DA:1366:A:O2'	22:DA:1367:A:H5'	1.85	0.77
22:DA:2848:G:O2'	22:DA:2849:U:H6	1.66	0.77
22:DA:35:G:O2'	22:DA:36:G:O5'	2.01	0.77
23:DB:45:A:H2'	23:DB:46:A:H8	1.50	0.77
27:DF:113:PHE:CE2	27:DF:116:LEU:HD22	2.20	0.77
27:DF:12:VAL:HG12	27:DF:16:MET:HG3	1.67	0.77
1:AA:637:C:C2'	1:AA:638:U:H5'	2.15	0.77
3:AC:153:SER:CB	3:AC:164:THR:HG22	2.14	0.77
9:AI:79:ARG:O	9:AI:83:THR:HG23	1.86	0.77
16:AP:59:HIS:HE1	16:AP:63:GLN:HE22	1.30	0.77
48:B0:9:ARG:CG	48:B0:9:ARG:HH21	1.98	0.77
22:BA:2470:G:O2'	22:BA:2471:A:H5'	1.85	0.77
27:BF:37:MET:HE3	27:BF:37:MET:HA	1.66	0.77
33:BL:61:LEU:O	51:B3:12:ARG:HD3	1.85	0.77
44:BW:28:GLU:HG3	44:BW:29:SER:H	1.49	0.77
1:CA:191:G:H2'	1:CA:192:A:H8	1.49	0.77
7:CG:148:LYS:NZ	7:CG:148:LYS:HB2	2.00	0.77
16:CP:4:ILE:HD12	16:CP:4:ILE:H	1.47	0.77
17:CQ:3:LYS:HZ2	17:CQ:6:THR:HG21	1.50	0.77
21:CU:9:GLU:HB3	21:CU:10:PRO:CD	2.14	0.77
22:DA:1742:U:H2'	22:DA:1743:G:C8	2.20	0.77
22:DA:2385:C:HO2'	22:DA:2386:A:H8	1.31	0.77
22:DA:2699:C:H2'	22:DA:2700:A:C8	2.19	0.77
22:DA:2800:A:C2'	22:DA:2801:G:H4'	2.15	0.77
25:DD:40:LEU:HA	25:DD:44:GLY:HA2	1.67	0.77
27:DF:45:ASP:OD2	27:DF:47:LYS:HB2	1.85	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:11:ALA:O	32:DK:99:ILE:HG23	1.84	0.77
37:DP:21:PRO:HA	37:DP:46:VAL:HG12	1.66	0.77
44:DW:39:GLN:HG2	44:DW:42:THR:HB	1.65	0.77
1:AA:1399:C:H4'	1:AA:1400:C:O5'	1.85	0.76
2:AB:9:LEU:CD2	2:AB:11:ALA:HB3	2.14	0.76
14:AN:86:ALA:O	14:AN:91:GLU:HB2	1.85	0.76
17:AQ:37:ILE:N	17:AQ:37:ILE:HD12	1.99	0.76
23:BB:66:A:H4'	23:BB:67:G:OP1	1.85	0.76
24:BC:76:VAL:O	24:BC:76:VAL:HG23	1.84	0.76
29:BH:90:LEU:CB	29:BH:123:ARG:HB3	2.14	0.76
37:BP:67:GLU:HA	37:BP:67:GLU:OE1	1.84	0.76
38:BQ:29:ARG:HH11	38:BQ:29:ARG:CG	1.98	0.76
42:BU:38:ILE:HG22	42:BU:39:ASN:N	1.99	0.76
22:DA:1238:G:O2'	22:DA:1239:G:H5'	1.85	0.76
22:DA:747:U:O2	22:DA:2014:A:H1'	1.84	0.76
22:DA:217:A:O2'	22:DA:218:A:H8	1.67	0.76
22:DA:589:U:H2'	22:DA:590:A:H8	1.49	0.76
31:DJ:74:TYR:HE2	31:DJ:103:ILE:HD11	1.48	0.76
31:DJ:111:LYS:HB2	31:DJ:115:GLY:H	1.49	0.76
40:DS:18:ARG:HA	40:DS:76:VAL:HG11	1.66	0.76
40:DS:55:ILE:O	40:DS:59:GLU:HG2	1.85	0.76
43:DV:16:ALA:HA	43:DV:19:ARG:CZ	2.15	0.76
4:AD:167:PRO:CB	4:AD:170:LEU:HD11	2.14	0.76
11:AK:86:LYS:HA	11:AK:113:THR:HG22	1.65	0.76
15:AO:63:ARG:HG2	15:AO:87:ARG:HH12	1.50	0.76
22:BA:1461:C:O2'	22:BA:1462:C:H5'	1.85	0.76
22:BA:1494:A:O2'	22:BA:1495:A:H5'	1.85	0.76
22:BA:2585:U:HO2'	22:BA:2586:U:H5'	1.47	0.76
39:BR:42:ALA:HA	39:BR:46:GLU:HB2	1.66	0.76
1:CA:1248:A:HO2'	9:CI:37:TYR:HD1	1.33	0.76
19:CS:52:ASN:HD21	19:CS:54:ARG:HG2	1.50	0.76
21:CU:39:LYS:N	21:CU:40:PRO:CD	2.48	0.76
22:DA:181:A:H2	22:DA:434:U:H1'	1.49	0.76
22:DA:2353:G:H2'	22:DA:2354:C:O4'	1.83	0.76
22:DA:382:A:H2'	22:DA:383:C:H5''	1.66	0.76
23:DB:86:G:C2'	23:DB:87:U:H5''	2.15	0.76
24:DC:20:ASN:HB2	24:DC:23:LEU:HD22	1.65	0.76
31:DJ:37:ARG:HG3	31:DJ:118:MET:SD	2.25	0.76
22:BA:1141:U:H4'	22:BA:1142:A:O5'	1.85	0.76
22:BA:1434:A:H2'	22:BA:1435:G:C8	2.20	0.76
22:BA:1778:U:H2'	22:BA:1784:A:N6	2.00	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:252:LYS:HZ3	24:BC:252:LYS:HB2	1.50	0.76
32:BK:70:ARG:HD3	32:BK:76:VAL:CG2	2.15	0.76
34:BM:8:LYS:HE3	34:BM:8:LYS:HA	1.68	0.76
37:BP:80:VAL:O	37:BP:81:ASP:HB3	1.85	0.76
40:BS:5:ALA:HB3	40:BS:54:ALA:HB2	1.67	0.76
22:DA:1662:U:H2'	22:DA:1663:G:H5''	1.67	0.76
22:DA:2756:U:C1'	22:DA:2757:A:H5''	2.15	0.76
22:DA:338:G:O2'	22:DA:339:U:H5'	1.82	0.76
22:DA:600:G:C5'	26:DE:27:LEU:HD22	2.15	0.76
46:DY:37:LEU:HD13	46:DY:42:LEU:HD11	1.65	0.76
22:BA:1420:A:O2'	22:BA:1421:G:H5'	1.85	0.76
22:BA:747:U:C5	22:BA:2613:U:C5	2.74	0.76
22:BA:893:C:H2'	22:BA:894:U:O4'	1.85	0.76
37:BP:67:GLU:HG3	37:BP:68:GLY:H	1.50	0.76
41:BT:40:LYS:H	41:BT:43:ILE:CG2	1.99	0.76
41:BT:8:LEU:HD12	41:BT:46:ALA:HA	1.67	0.76
44:BW:73:PRO:CG	44:BW:76:ARG:HD2	2.14	0.76
44:BW:77:LYS:O	44:BW:78:PHE:HB2	1.85	0.76
1:CA:1258:G:O2'	1:CA:1259:C:H5'	1.85	0.76
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.01	0.76
1:CA:373:A:C8	1:CA:373:A:H5'	2.20	0.76
1:CA:513:C:H2'	1:CA:514:C:H6	1.51	0.76
4:CD:148:ALA:O	4:CD:151:GLN:HB2	1.84	0.76
12:CL:97:VAL:HG23	12:CL:97:VAL:O	1.83	0.76
13:CM:64:VAL:HG12	13:CM:65:GLU:N	2.00	0.76
22:DA:1309:G:OP1	50:D2:9:VAL:HG12	1.85	0.76
22:DA:1343:G:H2'	22:DA:1344:U:H5	1.48	0.76
22:DA:2285:C:H5	49:D1:5:ARG:HH22	1.32	0.76
26:DE:44:ARG:NH2	26:DE:44:ARG:HG3	1.98	0.76
30:DI:102:ARG:NH1	30:DI:105:LEU:HD13	2.01	0.76
33:DL:108:ALA:CB	33:DL:125:LEU:HD22	2.16	0.76
34:DM:66:ARG:HD2	34:DM:101:VAL:HG13	1.65	0.76
5:AE:105:ILE:HD11	5:AE:123:LEU:HD23	1.66	0.76
6:AF:16:GLU:HG2	4:CD:191:SER:HB2	0.82	0.76
13:AM:26:LYS:O	13:AM:30:LYS:HG3	1.83	0.76
19:AS:62:THR:HB	19:AS:65:MET:HG3	1.68	0.76
22:BA:2210:U:H4'	22:BA:2211:A:C5'	2.14	0.76
23:BB:66:A:H61	23:BB:107:G:H2'	1.49	0.76
26:BE:119:ILE:HD11	26:BE:187:VAL:CG2	2.16	0.76
29:BH:89:LYS:HG2	29:BH:90:LEU:N	2.00	0.76
30:BI:7:TYR:HB3	30:BI:58:ILE:H	1.50	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:103:ARG:HB2	35:BN:110:MET:HE2	1.66	0.76
36:BO:24:THR:HG22	36:BO:42:PRO:HD3	1.68	0.76
37:BP:33:GLU:CG	37:BP:34:GLY:H	1.97	0.76
1:CA:1215:G:O2'	1:CA:1216:A:H8	1.69	0.76
4:CD:57:LYS:HB2	4:CD:199:ILE:HB	1.67	0.76
5:CE:104:ILE:HA	5:CE:122:VAL:HB	1.67	0.76
7:CG:30:MET:O	7:CG:31:VAL:HB	1.86	0.76
1:CA:1279:G:H5''	10:CJ:9:ARG:HH22	1.50	0.76
21:CU:36:PHE:HD1	21:CU:40:PRO:HB3	1.47	0.76
22:DA:1605:C:H4'	22:DA:1610:A:N1	1.99	0.76
22:DA:1722:A:C6	22:DA:1739:A:C8	2.73	0.76
23:DB:57:A:O2'	23:DB:58:A:H8	1.66	0.76
41:DT:58:VAL:HG23	41:DT:84:TYR:O	1.86	0.76
42:DU:34:ILE:HG12	42:DU:62:ALA:O	1.85	0.76
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.20	0.76
4:AD:166:LYS:NZ	4:AD:166:LYS:HB3	2.01	0.76
7:AG:96:ASN:O	7:AG:100:MET:HG3	1.86	0.76
8:AH:88:LYS:HG3	8:AH:89:ASP:N	2.01	0.76
14:AN:88:MET:CE	14:AN:97:LYS:HD2	2.15	0.76
22:BA:2086:U:H2'	22:BA:2087:G:C8	2.21	0.76
22:BA:2250:G:N2	22:BA:2496:C:H5''	1.99	0.76
29:BH:6:LEU:O	29:BH:15:LEU:HA	1.86	0.76
34:BM:62:LYS:HD3	34:BM:64:TRP:CH2	2.20	0.76
39:BR:16:GLU:HA	39:BR:98:ILE:HG22	1.66	0.76
42:BU:52:ASN:C	42:BU:54:PRO:HD2	2.05	0.76
44:BW:40:ARG:HB2	44:BW:56:HIS:CG	2.21	0.76
45:BX:30:PRO:HB2	45:BX:32:LEU:HD13	1.67	0.76
1:CA:84:U:N3	1:CA:87:C:H1'	1.97	0.76
49:D1:10:LEU:HD23	49:D1:20:TYR:HB3	1.66	0.76
22:DA:162:U:H5''	22:DA:163:C:OP1	1.86	0.76
22:DA:2283:C:H5''	22:DA:2283:C:H6	1.49	0.76
22:DA:2492:U:H2'	22:DA:2493:U:C6	2.21	0.76
22:DA:340:A:H2'	22:DA:341:C:H5'	1.68	0.76
22:DA:487:C:H2'	22:DA:488:G:H5'	1.68	0.76
26:DE:105:LEU:HD12	26:DE:200:LEU:HD11	1.68	0.76
26:DE:29:HIS:HB2	33:DL:6:LEU:HD21	1.67	0.76
29:DH:84:ALA:HB3	29:DH:148:ALA:CA	2.16	0.76
41:DT:29:THR:CB	41:DT:86:THR:H	1.99	0.76
42:DU:81:ARG:HD2	42:DU:81:ARG:N	2.00	0.76
4:AD:29:THR:C	4:AD:30:LYS:HD3	2.05	0.76
21:AU:38:GLU:OE2	21:AU:41:THR:HG21	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:276:U:O2'	22:BA:278:A:N7	2.19	0.76
22:BA:800:A:H4'	22:BA:801:G:O5'	1.86	0.76
31:BJ:17:VAL:CG2	31:BJ:137:PRO:HB2	2.15	0.76
33:BL:110:VAL:CG1	33:BL:131:ALA:HB1	2.15	0.76
38:BQ:81:GLY:HA2	38:BQ:116:LEU:CD1	2.16	0.76
41:BT:4:GLU:OE1	41:BT:6:ARG:HG3	1.86	0.76
1:CA:792:A:O2'	1:CA:794:A:N7	2.18	0.76
4:CD:191:SER:O	4:CD:192:ALA:CB	2.32	0.76
7:CG:124:SER:O	7:CG:128:GLU:HG2	1.86	0.76
49:D1:16:THR:HG21	49:D1:41:VAL:HB	1.67	0.76
22:DA:234:U:C6	22:DA:234:U:H5''	2.19	0.76
22:DA:2846:G:OP1	37:DP:51:ASN:HB2	1.86	0.76
22:DA:993:G:H1'	39:DR:91:GLN:NE2	2.01	0.76
32:DK:13:ASN:ND2	32:DK:97:THR:H	1.82	0.76
42:DU:40:LEU:HA	42:DU:61:GLU:HA	1.66	0.76
8:AH:83:ARG:C	8:AH:84:ILE:HD13	2.04	0.76
22:BA:357:C:H2'	22:BA:358:U:H6	1.50	0.76
24:BC:246:PRO:HG2	24:BC:247:TRP:CE3	2.20	0.76
28:BG:18:ILE:HD12	28:BG:42:VAL:HG13	1.67	0.76
28:BG:68:ARG:HD2	28:BG:68:ARG:C	2.06	0.76
39:BR:39:LEU:N	39:BR:39:LEU:HD23	2.00	0.76
1:CA:642:A:O2'	1:CA:643:C:C6	2.38	0.76
2:CB:103:TRP:HA	2:CB:106:VAL:HB	1.66	0.76
2:CB:95:TRP:HZ2	2:CB:100:LEU:HD13	1.49	0.76
3:CC:12:GLY:O	3:CC:13:ILE:HD13	1.86	0.76
5:CE:104:ILE:HD13	5:CE:122:VAL:HG21	1.65	0.76
14:CN:60:ARG:HH22	14:CN:70:HIS:HB3	1.49	0.76
48:D0:6:LYS:HD2	48:D0:7:PRO:CD	2.15	0.76
22:DA:1428:C:C5	22:DA:1569:A:H5'	2.21	0.76
22:DA:1453:A:H4'	22:DA:1454:C:OP2	1.85	0.76
22:DA:2431:U:O2	22:DA:2433:A:C8	2.39	0.76
22:DA:647:G:O2'	22:DA:648:G:H5'	1.84	0.76
22:DA:90:U:H3'	22:DA:91:A:C5'	2.16	0.76
27:DF:43:ILE:HD13	27:DF:77:LYS:HG2	1.67	0.76
47:DZ:23:LEU:HD21	47:DZ:53:MET:HE1	1.68	0.76
1:AA:108:G:H2'	1:AA:109:A:OP1	1.86	0.76
1:AA:184:G:C4	1:AA:185:U:C5	2.73	0.76
1:AA:189:A:H2'	1:AA:190:A:C8	2.21	0.76
1:AA:536:C:H2'	1:AA:537:G:C8	2.20	0.76
3:AC:6:PRO:HG2	3:AC:183:TYR:CD2	2.20	0.76
7:AG:121:ASN:O	7:AG:125:ASP:HB2	1.86	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:19:LYS:HE2	21:AU:19:LYS:HA	1.65	0.76
22:BA:1339:G:H21	22:BA:1603:A:H1'	1.48	0.76
22:BA:2207:C:H2'	22:BA:2208:C:C6	2.21	0.76
22:BA:2630:G:O2'	22:BA:2631:G:H5'	1.86	0.76
24:BC:15:VAL:HA	24:BC:203:VAL:CG1	2.16	0.76
28:BG:8:VAL:HG12	28:BG:49:LEU:H	1.51	0.76
29:BH:67:ALA:HA	29:BH:138:VAL:HB	1.67	0.76
1:CA:16:A:C2'	1:CA:17:U:H5'	2.16	0.76
2:CB:114:LYS:HA	2:CB:117:GLU:CG	2.15	0.76
8:CH:100:ILE:HD12	8:CH:100:ILE:C	2.05	0.76
16:CP:54:LEU:H	16:CP:54:LEU:HD23	1.51	0.76
22:DA:1107:G:C2'	22:DA:1108:U:H5'	2.15	0.76
22:DA:1273:U:O3'	22:DA:1274:A:H3'	1.86	0.76
22:DA:1765:U:C2'	22:DA:1766:G:H5'	2.16	0.76
22:DA:590:A:H2'	22:DA:591:U:C6	2.21	0.76
22:DA:922:C:H2'	22:DA:923:G:H8	1.50	0.76
27:DF:39:VAL:HG13	27:DF:49:LEU:CD2	2.16	0.76
33:DL:89:VAL:HG23	33:DL:121:THR:HG23	1.66	0.76
1:AA:1014:A:H4'	19:AS:13:HIS:CD2	2.20	0.76
1:AA:291:U:O2'	1:AA:292:G:H5'	1.86	0.76
1:AA:619:U:H3	4:AD:130:ASN:CB	1.97	0.76
8:AH:63:LYS:HB2	8:AH:70:VAL:HG21	1.67	0.76
9:AI:44:ARG:HG3	9:AI:45:MET:CE	2.16	0.76
10:AJ:53:ILE:HG22	10:AJ:61:ALA:CB	2.16	0.76
13:AM:106:ARG:HH12	13:AM:109:LYS:HD3	1.51	0.76
22:BA:1653:G:H1	35:BN:11:ASN:HD21	1.33	0.76
22:BA:2352:A:H5''	22:BA:2353:G:OP2	1.86	0.76
33:BL:64:PHE:HD1	33:BL:64:PHE:O	1.68	0.76
38:BQ:63:ARG:HH22	38:BQ:95:ALA:C	1.88	0.76
1:CA:1348:U:HO2'	1:CA:1349:A:H8	1.34	0.76
1:CA:154:U:H2'	1:CA:155:A:C5'	2.15	0.76
1:CA:269:C:H2'	1:CA:270:A:C8	2.21	0.76
1:CA:914:A:O2'	1:CA:915:A:C5'	2.34	0.76
5:CE:95:MET:HE1	5:CE:143:LEU:HD21	1.68	0.76
6:CF:42:TRP:HB2	6:CF:59:TYR:HB2	1.68	0.76
16:CP:38:PHE:HE2	16:CP:51:ARG:CB	1.98	0.76
16:CP:67:ILE:HD11	16:CP:75:ILE:HD12	1.67	0.76
1:CA:254:G:N2	17:CQ:17:GLU:HG3	1.99	0.76
17:CQ:22:VAL:HG21	17:CQ:58:VAL:HG21	1.68	0.76
20:CT:54:GLN:N	20:CT:55:PRO:HD2	2.00	0.76
22:DA:1361:G:C2'	22:DA:1362:C:H5'	2.17	0.76

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2015:A:C5	48:D0:2:VAL:HG11	2.20	0.76
22:DA:2843:G:N2	22:DA:2875:C:N3	2.34	0.76
22:DA:489:G:H2'	22:DA:491:G:H8	1.50	0.76
22:DA:49:A:H4'	22:DA:50:U:O5'	1.86	0.76
22:DA:26:G:H1'	22:DA:515:A:H61	1.48	0.76
33:DL:3:LEU:HD12	33:DL:4:ASN:N	2.01	0.76
46:DY:25:GLN:HB2	46:DY:46:VAL:HG11	1.68	0.76
1:AA:265:G:H2'	1:AA:266:G:H5'	1.68	0.75
2:AB:95:TRP:HH2	2:AB:100:LEU:HB2	1.51	0.75
10:AJ:65:TYR:CB	14:AN:95:LEU:HD11	2.15	0.75
22:BA:1499:C:O2'	22:BA:1500:G:C5'	2.30	0.75
22:BA:1873:G:O2'	22:BA:1874:C:H5'	1.86	0.75
22:BA:1919:A:C8	22:BA:1919:A:H5'	2.21	0.75
22:BA:2152:G:O2'	22:BA:2153:C:H5'	1.86	0.75
22:BA:2415:G:H4'	33:BL:66:PHE:HB3	1.67	0.75
24:BC:257:ARG:CG	24:BC:269:ARG:HH22	1.98	0.75
27:BF:84:ILE:HG13	27:BF:84:ILE:O	1.86	0.75
36:BO:59:ALA:HA	36:BO:62:LEU:HD13	1.66	0.75
44:BW:24:ARG:CD	44:BW:25:PHE:N	2.48	0.75
1:CA:1074:G:H4'	2:CB:101:THR:O	1.85	0.75
1:CA:251:G:H4'	1:CA:252:U:C5'	2.16	0.75
1:CA:599:C:H4'	8:CH:121:GLY:HA3	1.68	0.75
1:CA:922:G:H2'	1:CA:923:A:C8	2.21	0.75
2:CB:162:VAL:HG13	2:CB:184:ALA:HB2	1.67	0.75
10:CJ:57:VAL:HG22	10:CJ:58:ASN:N	1.98	0.75
11:CK:15:VAL:O	11:CK:16:SER:HB2	1.85	0.75
17:CQ:46:HIS:HB2	17:CQ:70:LYS:HE3	1.67	0.75
22:DA:1351:C:O2'	22:DA:1571:A:H1'	1.84	0.75
22:DA:1742:U:H2'	22:DA:1743:G:H8	1.51	0.75
22:DA:852:U:H2'	22:DA:853:C:H6	1.48	0.75
25:DD:40:LEU:H	25:DD:40:LEU:HD12	1.50	0.75
38:DQ:4:LYS:CE	38:DQ:7:VAL:H	1.99	0.75
1:AA:158:G:C2'	1:AA:159:G:C5'	2.62	0.75
1:AA:413:G:N2	1:AA:428:G:O2'	2.20	0.75
2:AB:95:TRP:CH2	2:AB:100:LEU:HB2	2.21	0.75
4:AD:170:LEU:HD12	4:AD:170:LEU:H	1.51	0.75
5:AE:80:LEU:HD12	5:AE:146:MET:CE	2.16	0.75
10:AJ:29:ALA:CB	10:AJ:36:VAL:HG21	2.15	0.75
22:BA:2148:G:C2'	22:BA:2149:U:O4'	2.34	0.75
22:BA:2847:U:C2'	22:BA:2848:G:H5'	2.15	0.75
22:BA:506:G:H4'	22:BA:507:A:H5'	1.67	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:33:G:O2'	23:BB:34:A:H5'	1.85	0.75
24:BC:104:LEU:O	24:BC:105:ALA:CB	2.35	0.75
24:BC:257:ARG:HG3	24:BC:269:ARG:HH22	1.51	0.75
27:BF:109:ARG:CB	27:BF:136:ILE:HG22	2.15	0.75
33:BL:68:SER:HB3	33:BL:71:ALA:CB	2.15	0.75
38:BQ:57:ARG:HG2	38:BQ:61:ILE:HD12	1.67	0.75
42:BU:73:ASN:ND2	42:BU:76:THR:HG23	2.01	0.75
1:CA:1071:C:H4'	5:CE:53:ARG:NH1	2.01	0.75
1:CA:640:A:O2'	8:CH:106:SER:HB2	1.86	0.75
1:CA:647:C:H2'	1:CA:648:A:H8	1.52	0.75
9:CI:59:LYS:HE3	9:CI:60:LEU:CG	2.15	0.75
14:CN:27:LYS:HB2	14:CN:45:LEU:HD23	1.65	0.75
22:DA:335:C:O2'	22:DA:336:C:H6	1.68	0.75
25:DD:187:LEU:O	25:DD:188:LEU:HD23	1.86	0.75
22:DA:2636:C:H4'	25:DD:81:GLU:OE1	1.86	0.75
32:DK:39:ILE:HD11	32:DK:62:VAL:CG2	2.14	0.75
42:DU:45:GLN:HE21	42:DU:45:GLN:HA	1.50	0.75
44:DW:27:GLY:HA2	44:DW:31:LEU:CD1	2.14	0.75
47:DZ:31:ILE:O	47:DZ:31:ILE:HG13	1.86	0.75
1:AA:1210:C:H2'	1:AA:1211:U:C5'	2.15	0.75
1:AA:382:A:H2'	1:AA:383:A:C8	2.21	0.75
1:AA:87:C:H2'	1:AA:88:U:C6	2.18	0.75
1:AA:970:C:H5"	1:AA:971:G:OP1	1.86	0.75
8:AH:105:THR:HG22	8:AH:121:GLY:O	1.85	0.75
22:BA:1084:A:H2'	22:BA:1085:A:H8	1.51	0.75
22:BA:1784:A:H4'	22:BA:1785:A:C5'	2.15	0.75
22:BA:705:A:N6	22:BA:726:G:H1'	2.01	0.75
44:BW:39:GLN:HG2	44:BW:40:ARG:N	2.01	0.75
1:CA:1347:G:H22	1:CA:1373:G:H2'	1.50	0.75
1:CA:518:C:H4'	1:CA:519:C:H5"	1.68	0.75
22:DA:1092:C:C2'	22:DA:1093:G:H5'	2.17	0.75
22:DA:2829:A:H2'	22:DA:2830:C:H5'	1.66	0.75
32:DK:17:ARG:CG	32:DK:18:ARG:H	1.99	0.75
36:DO:17:LYS:HE2	36:DO:21:LEU:CD1	2.12	0.75
1:AA:1151:A:C6	1:AA:1152:A:N6	2.54	0.75
2:AB:17:HIS:CD2	2:AB:202:ASN:HD21	2.04	0.75
5:AE:120:HIS:O	5:AE:121:ASN:HB3	1.86	0.75
5:AE:89:THR:CG2	5:AE:90:GLY:N	2.42	0.75
22:BA:1182:G:H2'	22:BA:1183:U:O4'	1.87	0.75
22:BA:197:A:N6	22:BA:2430:A:H2'	2.01	0.75
23:BB:90:C:C6	23:BB:90:C:H5"	2.16	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:79:ARG:CG	26:BE:80:SER:H	1.85	0.75
33:BL:101:ILE:CG2	33:BL:102:GLY:N	2.49	0.75
34:BM:64:TRP:CZ3	34:BM:106:ASP:HB2	2.20	0.75
1:CA:119:A:H5'	1:CA:120:A:O5'	1.86	0.75
1:CA:519:C:H2'	1:CA:520:A:H8	1.49	0.75
2:CB:110:ILE:CD1	2:CB:151:LYS:HA	2.16	0.75
20:CT:81:GLN:O	20:CT:82:ILE:HG23	1.87	0.75
22:DA:172:A:H2'	22:DA:173:A:H8	1.50	0.75
22:DA:2052:A:O2'	22:DA:2053:G:H5'	1.86	0.75
22:DA:2314:A:C2	22:DA:2315:G:C5	2.75	0.75
22:DA:2590:A:O3'	24:DC:237:ARG:HD2	1.86	0.75
22:DA:70:G:OP2	22:DA:70:G:H8	1.67	0.75
22:DA:866:A:HO2'	22:DA:867:C:H6	1.31	0.75
28:DG:164:ALA:O	28:DG:165:ASP:HB2	1.83	0.75
37:DP:88:ARG:HH11	37:DP:112:ARG:HH21	1.34	0.75
37:DP:50:ARG:HB3	37:DP:57:ALA:H	1.47	0.75
22:DA:1338:G:O2'	41:DT:18:GLU:HG3	1.86	0.75
46:DY:57:LEU:O	46:DY:57:LEU:HD13	1.85	0.75
1:AA:414:A:C2'	1:AA:415:A:H8	1.99	0.75
1:AA:66:A:H2'	1:AA:66:A:N3	2.02	0.75
2:AB:67:LEU:CD2	2:AB:91:VAL:HG23	2.16	0.75
4:AD:167:PRO:HB2	4:AD:170:LEU:CD1	2.16	0.75
4:AD:172:VAL:HG22	4:AD:173:ASP:H	1.52	0.75
19:AS:55:GLN:HA	19:AS:55:GLN:HE21	1.51	0.75
21:AU:4:LYS:O	21:AU:4:LYS:HD2	1.86	0.75
22:BA:1901:A:H2'	22:BA:1902:C:H6	1.51	0.75
22:BA:914:G:C8	22:BA:914:G:H5''	2.22	0.75
28:BG:86:LEU:N	28:BG:86:LEU:HD12	2.01	0.75
31:BJ:64:VAL:HG13	31:BJ:68:LYS:HB2	1.69	0.75
35:BN:98:LEU:HD22	48:B0:42:ILE:HD11	1.69	0.75
1:CA:1450:U:H4'	1:CA:1451:U:H5	1.51	0.75
1:CA:764:C:O2	1:CA:764:C:H2'	1.86	0.75
8:CH:57:GLU:O	8:CH:58:LEU:HB2	1.85	0.75
16:CP:68:SER:O	16:CP:71:VAL:HG22	1.86	0.75
22:DA:1827:U:H4'	22:DA:1970:A:O2'	1.87	0.75
22:DA:2415:G:H4'	33:DL:66:PHE:HB2	1.69	0.75
22:DA:846:U:O2'	22:DA:847:U:H5''	1.86	0.75
23:DB:110:C:O2'	23:DB:111:U:C5'	2.33	0.75
27:DF:122:ASP:HB2	27:DF:126:ASN:CB	2.17	0.75
31:DJ:25:LEU:HD12	31:DJ:64:VAL:HA	1.67	0.75
31:DJ:92:MET:CE	31:DJ:92:MET:HA	2.16	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DO:57:ALA:C	36:DO:58:ILE:HD12	2.07	0.75
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.21	0.75
1:AA:1387:G:H2'	1:AA:1388:C:C6	2.21	0.75
10:AJ:56:HIS:HD2	10:AJ:57:VAL:HG12	1.51	0.75
20:AT:8:LYS:O	20:AT:11:ILE:HG23	1.87	0.75
22:BA:2297:A:C8	22:BA:2297:A:H5''	2.21	0.75
22:BA:274:C:O2'	22:BA:275:C:H5'	1.85	0.75
22:BA:686:U:H4'	22:BA:687:C:OP2	1.84	0.75
24:BC:77:VAL:HA	24:BC:93:VAL:HA	1.68	0.75
28:BG:84:LYS:CG	28:BG:132:LEU:H	1.99	0.75
34:BM:23:GLY:O	34:BM:101:VAL:HG12	1.86	0.75
36:BO:43:ASN:HD21	36:BO:46:GLU:HG2	1.51	0.75
1:CA:569:C:H5''	1:CA:570:G:OP1	1.86	0.75
1:CA:942:G:N2	1:CA:1342:C:H1'	2.02	0.75
3:CC:33:ASP:O	3:CC:37:LYS:HG2	1.87	0.75
4:CD:97:LEU:HB2	4:CD:134:TYR:HB3	1.67	0.75
22:DA:1639:C:H2'	22:DA:1640:A:H5''	1.68	0.75
22:DA:1663:G:HO2'	22:DA:1664:A:H8	1.33	0.75
22:DA:2197:U:O2'	22:DA:2198:A:H2'	1.86	0.75
22:DA:784:G:O2'	22:DA:785:G:H8	1.68	0.75
25:DD:10:GLY:O	25:DD:11:MET:HB2	1.85	0.75
25:DD:8:LYS:HB2	25:DD:201:LEU:CD1	2.16	0.75
26:DE:126:VAL:HG11	26:DE:134:LEU:HD22	1.68	0.75
27:DF:129:MET:HG3	27:DF:153:ILE:HD12	1.68	0.75
27:DF:43:ILE:HD13	27:DF:82:TYR:HE2	1.51	0.75
29:DH:41:LYS:HA	29:DH:44:ILE:HG12	1.68	0.75
31:DJ:44:TYR:O	31:DJ:45:THR:HB	1.87	0.75
1:AA:1039:G:O2'	1:AA:1040:U:H5'	1.86	0.75
1:AA:143:A:H5'	1:AA:144:G:H5'	1.66	0.75
1:AA:830:G:O2'	1:AA:831:A:H5'	1.86	0.75
3:AC:35:ASP:OD1	3:AC:56:ILE:HG21	1.87	0.75
6:AF:51:ILE:CD1	6:AF:86:ARG:HG3	2.17	0.75
17:AQ:13:SER:O	17:AQ:20:ILE:HD11	1.87	0.75
22:BA:1936:A:C2	22:BA:1943:U:C5	2.70	0.75
22:BA:2250:G:H21	22:BA:2496:C:H5''	1.52	0.75
22:BA:2820:A:C8	22:BA:2820:A:C3'	2.68	0.75
31:BJ:111:LYS:HE2	31:BJ:115:GLY:H	1.52	0.75
31:BJ:6:ALA:HB2	31:BJ:45:THR:HG21	1.69	0.75
31:BJ:74:TYR:OH	31:BJ:100:VAL:HG13	1.87	0.75
38:BQ:26:ALA:HB1	38:BQ:30:VAL:CG2	2.17	0.75
43:BV:20:LEU:CD2	43:BV:25:LYS:HB2	2.17	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1152:A:C2'	1:CA:1153:G:H8	1.96	0.75
1:CA:971:G:H2'	1:CA:1365:G:O2'	1.86	0.75
2:CB:95:TRP:CZ2	2:CB:100:LEU:HD13	2.20	0.75
7:CG:30:MET:SD	7:CG:35:LYS:HB2	2.27	0.75
49:D1:16:THR:CG2	49:D1:41:VAL:HB	2.16	0.75
22:DA:2384:U:H5''	22:DA:2386:A:OP1	1.86	0.75
22:DA:374:A:N6	22:DA:401:A:C8	2.54	0.75
22:DA:589:U:O2'	22:DA:590:A:H5'	1.86	0.75
22:DA:602:A:H4'	22:DA:604:G:O3'	1.86	0.75
26:DE:147:LEU:O	26:DE:148:ILE:HB	1.85	0.75
36:DO:58:ILE:O	36:DO:62:LEU:HB2	1.87	0.75
1:AA:1118:U:H2'	1:AA:1119:C:C6	2.20	0.75
4:AD:191:SER:OG	4:AD:192:ALA:N	2.20	0.75
10:AJ:11:LYS:CG	10:AJ:97:ASP:HB3	2.16	0.75
12:AL:2:THR:HB	12:AL:5:GLN:HG3	1.69	0.75
37:BP:63:ILE:HA	37:BP:68:GLY:HA2	1.69	0.75
1:CA:117:G:O2'	1:CA:118:U:H5'	1.87	0.75
2:CB:56:LEU:HD23	2:CB:183:PHE:CE1	2.21	0.75
2:CB:59:ILE:HA	2:CB:62:ARG:HD3	1.68	0.75
3:CC:152:VAL:HG23	3:CC:156:LEU:HD21	1.67	0.75
6:CF:6:ILE:HD12	6:CF:6:ILE:N	2.01	0.75
7:CG:14:ASP:HB3	7:CG:18:GLY:N	2.00	0.75
11:CK:82:GLU:CB	11:CK:108:ASN:HB3	2.17	0.75
22:DA:1519:G:H5'	22:DA:1520:U:OP2	1.86	0.75
22:DA:1803:A:O2'	22:DA:1804:C:O4'	2.04	0.75
22:DA:188:G:H2'	22:DA:189:G:H5'	1.69	0.75
22:DA:2880:C:H1'	35:DN:93:GLY:H	1.52	0.75
22:DA:445:C:H2'	22:DA:446:G:C8	2.21	0.75
22:DA:716:A:H2'	22:DA:717:C:H5''	1.69	0.75
28:DG:1:SER:HB2	28:DG:61:TRP:HE3	1.52	0.75
31:DJ:57:LEU:HG	31:DJ:128:ASN:H	1.51	0.75
1:AA:462:G:H3'	1:AA:463:U:H6	1.51	0.75
3:AC:134:LYS:HE3	3:AC:138:GLN:NE2	2.01	0.75
5:AE:80:LEU:HD23	5:AE:122:VAL:HG11	1.68	0.75
16:AP:48:GLU:HG3	16:AP:49:GLY:N	2.02	0.75
22:BA:2199:A:H5'	22:BA:2200:C:H5	1.51	0.75
36:BO:88:LYS:HE2	36:BO:116:GLN:NE2	1.98	0.75
41:BT:29:THR:HA	41:BT:86:THR:CA	2.16	0.75
43:BV:10:LYS:H	43:BV:10:LYS:CD	1.88	0.75
46:BY:59:GLU:O	46:BY:63:ALA:HB3	1.87	0.75
1:CA:1221:G:N2	1:CA:1222:G:H1'	2.02	0.75

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:413:G:N2	1:CA:428:G:O2'	2.20	0.75
1:CA:408:A:C2	1:CA:435:A:C2	2.74	0.75
1:CA:996:A:O2'	1:CA:997:U:C6	2.39	0.75
3:CC:126:ARG:HE	3:CC:126:ARG:HA	1.52	0.75
5:CE:65:LYS:NZ	5:CE:68:ARG:HD3	2.01	0.75
6:CF:9:MET:HE1	18:CR:64:LEU:O	1.86	0.75
8:CH:23:ALA:HB1	8:CH:60:LEU:O	1.87	0.75
12:CL:14:LYS:HG3	12:CL:14:LYS:O	1.85	0.75
22:DA:2798:U:H5'	22:DA:2800:A:N7	2.02	0.75
22:DA:589:U:C2'	22:DA:590:A:H5'	2.17	0.75
22:DA:704:G:H2'	22:DA:726:G:H22	1.51	0.75
23:DB:91:C:H2'	23:DB:92:C:H6	1.51	0.75
25:DD:146:ILE:HD12	25:DD:155:VAL:HG21	1.69	0.75
28:DG:53:PRO:HB3	28:DG:61:TRP:H	1.51	0.75
29:DH:78:VAL:HG21	29:DH:144:VAL:HG13	1.69	0.75
34:DM:27:SER:N	34:DM:66:ARG:HH22	1.85	0.75
1:AA:1151:A:H5'	10:AJ:42:LEU:O	1.86	0.74
1:AA:473:U:H2'	1:AA:474:G:H8	1.52	0.74
5:AE:153:ALA:CA	5:AE:156:ARG:CB	2.59	0.74
11:AK:17:ASP:HA	11:AK:80:ASN:O	1.87	0.74
22:BA:1462:C:C2'	22:BA:1463:C:H5'	2.16	0.74
22:BA:384:A:H2'	22:BA:385:C:H5'	1.68	0.74
25:BD:151:THR:HG22	25:BD:152:PRO:HD3	0.82	0.74
27:BF:129:MET:CE	27:BF:153:ILE:HD11	2.17	0.74
28:BG:23:ILE:HD12	28:BG:23:ILE:H	1.52	0.74
31:BJ:6:ALA:CB	31:BJ:45:THR:HG21	2.17	0.74
22:BA:2358:A:H61	33:BL:54:GLN:HE22	1.35	0.74
35:BN:1:MET:O	35:BN:2:ARG:HB2	1.87	0.74
25:BD:15:PHE:H	37:BP:11:GLN:NE2	1.85	0.74
1:CA:495:A:H4'	1:CA:496:A:O5'	1.86	0.74
3:CC:6:PRO:HG2	3:CC:183:TYR:CD2	2.22	0.74
22:DA:1413:A:H2'	22:DA:1414:C:C6	2.21	0.74
22:DA:1915:U:C2'	22:DA:1916:A:H8	2.00	0.74
22:DA:2542:A:H4'	22:DA:2543:G:C5'	2.16	0.74
25:DD:181:ASP:HB3	25:DD:183:GLU:OE2	1.87	0.74
25:DD:49:GLN:NE2	25:DD:79:LEU:HB3	2.01	0.74
29:DH:78:VAL:HG22	29:DH:100:ALA:HA	1.69	0.74
34:DM:2:LEU:HB3	34:DM:69:PRO:HG2	1.68	0.74
37:DP:28:LYS:HB3	37:DP:39:LEU:HD23	1.67	0.74
42:DU:90:LYS:HE2	42:DU:92:VAL:CG1	2.09	0.74
43:DV:89:ILE:HD12	43:DV:91:PHE:CZ	2.22	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:486:U:O2'	1:AA:487:A:H5'	1.85	0.74
1:AA:397:A:N7	1:AA:547:A:O2'	2.20	0.74
11:AK:108:ASN:CB	21:AU:6:ARG:HG2	2.17	0.74
22:BA:2571:U:O2'	25:BD:151:THR:CG2	2.35	0.74
24:BC:94:LEU:HD12	24:BC:95:TYR:N	2.02	0.74
42:BU:91:LYS:O	42:BU:92:VAL:HB	1.86	0.74
45:BX:38:TRP:HB2	45:BX:45:PHE:CE2	2.16	0.74
1:CA:120:A:H3'	1:CA:121:U:H5''	1.68	0.74
1:CA:50:A:H2	1:CA:360:G:N3	1.85	0.74
1:CA:701:U:H4'	1:CA:702:A:H5''	1.69	0.74
1:CA:997:U:O2'	1:CA:998:C:H5'	1.87	0.74
3:CC:46:LEU:CD2	3:CC:75:VAL:HG22	2.16	0.74
22:BA:2196:C:O3'	4:CD:150:LYS:HD2	1.87	0.74
49:D1:25:ASN:HB3	49:D1:28:THR:OG1	1.86	0.74
22:DA:1746:A:H2'	22:DA:1747:U:C6	2.20	0.74
22:DA:641:U:H5''	22:DA:642:U:OP2	1.85	0.74
26:DE:147:LEU:CB	26:DE:186:VAL:HG23	2.17	0.74
29:DH:99:ILE:HG22	29:DH:100:ALA:N	2.02	0.74
35:DN:97:ILE:HG13	35:DN:98:LEU:N	2.01	0.74
37:DP:88:ARG:HE	37:DP:112:ARG:HH21	1.33	0.74
40:DS:49:LYS:HB3	40:DS:49:LYS:NZ	2.03	0.74
45:DX:63:ILE:O	45:DX:67:LEU:HD12	1.87	0.74
1:AA:425:G:C2'	1:AA:426:U:H5'	2.17	0.74
9:AI:51:LEU:CB	9:AI:56:MET:HG2	2.17	0.74
16:AP:28:ARG:NE	16:AP:29:ASN:HD21	1.83	0.74
22:BA:794:A:H2'	22:BA:795:C:C6	2.21	0.74
22:BA:1820:U:O2	24:BC:199:HIS:HB3	1.86	0.74
22:BA:1654:A:H4'	25:BD:118:PHE:CZ	2.21	0.74
25:BD:151:THR:CG2	25:BD:152:PRO:N	2.47	0.74
28:BG:104:LEU:HD22	28:BG:106:LEU:HD11	1.67	0.74
22:BA:1064:C:H5'	30:BI:88:GLY:CA	2.17	0.74
31:BJ:39:LYS:HA	31:BJ:43:GLU:HG3	1.69	0.74
1:CA:1316:G:H22	1:CA:1318:A:H3'	1.52	0.74
1:CA:519:C:C2'	1:CA:520:A:C8	2.67	0.74
21:CU:38:GLU:HG2	21:CU:41:THR:OG1	1.85	0.74
22:DA:2369:A:O2'	22:DA:2370:G:H5'	1.87	0.74
22:DA:2738:A:H2	22:DA:2766:A:H61	1.33	0.74
22:DA:574:A:H4'	22:DA:575:A:H5'	1.66	0.74
27:DF:39:VAL:HG22	27:DF:49:LEU:CG	2.16	0.74
29:DH:33:GLN:O	29:DH:35:LYS:HG2	1.88	0.74
30:DI:52:LEU:HD12	30:DI:53:PRO:HD2	1.68	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DQ:108:LEU:O	38:DQ:108:LEU:HD23	1.88	0.74
41:DT:45:ALA:HA	41:DT:48:GLN:CG	2.17	0.74
44:DW:23:LYS:CD	44:DW:24:ARG:N	2.50	0.74
46:DY:18:LEU:O	46:DY:18:LEU:HD13	1.86	0.74
1:AA:113:G:H2'	1:AA:114:U:H6	1.51	0.74
1:AA:1324:A:H2'	1:AA:1325:C:H6	1.53	0.74
7:AG:129:ASN:HA	7:AG:134:VAL:HG11	1.68	0.74
9:AI:32:ARG:HG2	9:AI:36:GLN:HB2	1.70	0.74
10:AJ:14:ASP:CB	10:AJ:17:LEU:HB3	2.10	0.74
10:AJ:53:ILE:CG2	10:AJ:61:ALA:HB1	2.18	0.74
22:BA:287:G:H1	22:BA:353:C:H42	1.33	0.74
25:BD:121:THR:HG22	25:BD:125:TRP:HD1	1.52	0.74
39:BR:39:LEU:HD23	39:BR:39:LEU:H	1.52	0.74
1:CA:1298:U:H4'	1:CA:1299:A:O5'	1.86	0.74
9:CI:45:MET:CE	9:CI:48:ARG:HG3	2.18	0.74
11:CK:88:PRO:HG3	21:CU:28:LEU:HD13	1.69	0.74
49:D1:32:LYS:HE3	49:D1:52:LYS:OXT	1.88	0.74
25:DD:12:THR:CG2	25:DD:13:ARG:N	2.50	0.74
28:DG:1:SER:HB2	28:DG:61:TRP:CE3	2.23	0.74
29:DH:96:THR:HG21	29:DH:112:LYS:HZ3	1.52	0.74
45:DX:58:ILE:HG12	45:DX:66:VAL:HG21	1.69	0.74
45:DX:67:LEU:HD23	45:DX:77:TYR:CZ	2.22	0.74
21:AU:33:ARG:NE	21:AU:34:ARG:HG3	2.01	0.74
22:BA:2210:U:H4'	22:BA:2211:A:O5'	1.86	0.74
22:BA:962:G:N2	22:BA:2250:G:H1	1.86	0.74
22:BA:272:A:O2'	22:BA:273:G:H8	1.67	0.74
22:BA:2795:C:H2'	22:BA:2796:U:C6	2.23	0.74
24:BC:199:HIS:CE1	24:BC:202:ARG:HH22	2.04	0.74
25:BD:70:LYS:O	25:BD:71:ALA:CB	2.35	0.74
26:BE:46:GLN:HG3	26:BE:87:ALA:N	2.01	0.74
27:BF:45:ASP:HB3	27:BF:48:LEU:HB2	1.67	0.74
30:BI:115:ASP:O	30:BI:116:MET:HG2	1.86	0.74
30:BI:78:LEU:HD13	30:BI:108:ILE:HG23	1.69	0.74
31:BJ:44:TYR:HB2	38:BQ:63:ARG:CB	2.17	0.74
33:BL:94:THR:HG22	33:BL:95:LEU:H	1.51	0.74
46:BY:56:LEU:O	46:BY:57:LEU:HB3	1.87	0.74
1:CA:491:G:C2'	1:CA:492:C:H5'	2.17	0.74
1:CA:920:U:C2	1:CA:921:U:C5	2.75	0.74
1:CA:970:C:H5''	1:CA:971:G:OP1	1.86	0.74
3:CC:168:ARG:HG3	3:CC:169:GLU:N	2.03	0.74
3:CC:148:ILE:CD1	3:CC:201:ILE:HG12	2.17	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:202:LEU:HD22	4:CD:203:TYR:CE2	2.22	0.74
7:CG:27:ASN:OD1	7:CG:35:LYS:HD2	1.88	0.74
19:CS:38:THR:N	19:CS:69:LYS:HD3	2.03	0.74
22:DA:1492:G:H3'	22:DA:1493:C:H5''	1.69	0.74
22:DA:1652:A:OP1	35:DN:8:ARG:HD3	1.87	0.74
22:DA:1076:C:O2	30:DI:92:PRO:HG2	1.87	0.74
33:DL:103:ILE:N	33:DL:103:ILE:HD12	1.98	0.74
36:DO:48:LEU:HD13	36:DO:87:ILE:HD12	1.69	0.74
1:AA:206:C:H2'	1:AA:207:C:C4'	2.17	0.74
1:AA:968:A:H4'	1:AA:969:A:OP2	1.84	0.74
5:AE:155:LYS:CD	5:AE:156:ARG:N	2.49	0.74
12:AL:85:ARG:NH2	12:AL:87:LYS:HD2	2.03	0.74
22:BA:1430:G:O2'	22:BA:1431:A:H5'	1.88	0.74
22:BA:613:A:C8	22:BA:616:A:N1	2.55	0.74
28:BG:30:GLY:HA3	28:BG:78:VAL:HG12	1.70	0.74
31:BJ:114:LEU:HD22	31:BJ:118:MET:CE	2.18	0.74
31:BJ:88:THR:HG22	31:BJ:91:GLU:CB	2.17	0.74
22:BA:855:G:N3	44:BW:23:LYS:CD	2.50	0.74
1:CA:1011:C:H2'	1:CA:1012:A:H8	1.52	0.74
6:CF:2:ARG:NH2	6:CF:91:ARG:HB2	2.02	0.74
20:CT:73:ARG:HG3	20:CT:73:ARG:HH11	1.51	0.74
22:DA:1050:A:O2'	22:DA:1051:G:H5'	1.86	0.74
22:DA:105:C:H2'	22:DA:106:C:C5	2.23	0.74
22:DA:279:A:C2	22:DA:362:A:H4'	2.21	0.74
22:DA:374:A:H2'	22:DA:375:G:C8	2.23	0.74
22:DA:86:G:O2'	22:DA:87:U:H5'	1.87	0.74
29:DH:61:VAL:HG13	29:DH:62:LEU:H	1.51	0.74
31:DJ:45:THR:OG1	31:DJ:48:VAL:HB	1.86	0.74
37:DP:57:ALA:HA	37:DP:75:THR:HB	1.69	0.74
1:AA:1449:C:H2'	1:AA:1450:U:C5'	2.17	0.74
1:AA:558:G:C4	1:AA:559:A:C2	2.75	0.74
1:AA:855:U:H2'	1:AA:856:C:C6	2.22	0.74
2:AB:133:ALA:O	2:AB:137:THR:HG23	1.87	0.74
5:AE:45:VAL:HG21	5:AE:117:ALA:HB2	1.68	0.74
10:AJ:49:PHE:HE1	10:AJ:67:ILE:HG13	1.53	0.74
10:AJ:52:LEU:CD2	10:AJ:62:ARG:HE	2.00	0.74
30:BI:79:LEU:HD13	30:BI:135:MET:SD	2.28	0.74
33:BL:91:ASP:HB3	33:BL:94:THR:HB	1.69	0.74
37:BP:19:PHE:O	37:BP:20:ARG:CB	2.32	0.74
42:BU:25:LYS:O	42:BU:26:ASN:HB3	1.86	0.74
44:BW:39:GLN:CG	44:BW:41:GLY:H	1.99	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:56:LEU:HD23	2:CB:183:PHE:CD1	2.22	0.74
6:CF:61:LEU:HD13	6:CF:62:MET:H	1.52	0.74
19:CS:35:ARG:HH21	19:CS:51:HIS:HD2	1.36	0.74
22:DA:1656:C:O2'	22:DA:1657:U:H5'	1.87	0.74
22:DA:1799:G:H4'	22:DA:1800:C:O5'	1.86	0.74
22:DA:2296:U:O2'	22:DA:2297:A:H8	1.70	0.74
22:DA:714:U:H2'	22:DA:716:A:OP2	1.87	0.74
22:DA:765:C:H2'	22:DA:766:U:H6	1.49	0.74
24:DC:119:VAL:HG13	24:DC:133:ASN:ND2	2.02	0.74
27:DF:134:GLN:HB2	27:DF:137:PHE:HE2	1.51	0.74
28:DG:34:ARG:O	28:DG:35:THR:HG23	1.87	0.74
32:DK:13:ASN:N	32:DK:13:ASN:HD22	1.76	0.74
35:DN:51:LEU:HA	35:DN:54:LEU:CD2	2.18	0.74
37:DP:32:VAL:HA	37:DP:37:LYS:HA	1.68	0.74
42:DU:33:VAL:O	42:DU:34:ILE:HG13	1.87	0.74
22:DA:855:G:N3	44:DW:23:LYS:HE3	2.02	0.74
1:AA:366:A:O2'	1:AA:394:G:N2	2.21	0.74
1:AA:605:U:O2'	1:AA:606:G:H5'	1.87	0.74
2:AB:100:LEU:HD12	2:AB:178:LEU:CD2	2.18	0.74
4:AD:138:PRO:O	4:AD:139:ASN:HB2	1.87	0.74
8:AH:58:LEU:HD22	8:AH:59:GLU:N	2.03	0.74
8:AH:75:GLN:OE1	8:AH:75:GLN:HA	1.87	0.74
25:BD:107:VAL:H	25:BD:206:ALA:H	1.34	0.74
22:BA:2052:A:H4'	25:BD:148:GLN:O	1.88	0.74
28:BG:73:SER:HA	28:BG:76:ILE:CG2	2.18	0.74
47:BZ:13:ILE:HG22	47:BZ:14:GLY:N	2.03	0.74
1:CA:1081:A:H5'	5:CE:22:LYS:HD2	1.69	0.74
1:CA:254:G:O2'	1:CA:255:G:H5'	1.88	0.74
1:CA:577:G:O2'	1:CA:578:C:H5'	1.86	0.74
3:CC:35:ASP:CG	3:CC:56:ILE:HD12	2.07	0.74
6:CF:39:LEU:HD12	6:CF:40:GLU:N	2.03	0.74
21:CU:33:ARG:HH22	21:CU:34:ARG:HH11	1.34	0.74
22:DA:105:C:H2'	22:DA:106:C:H5	1.52	0.74
22:DA:1237:A:H2	22:DA:1238:G:H1'	1.50	0.74
22:DA:1366:A:H2'	22:DA:1367:A:H8	1.52	0.74
22:DA:2060:A:C2'	26:DE:63:LYS:NZ	2.48	0.74
22:DA:2310:C:H2'	22:DA:2311:A:C5'	2.18	0.74
22:DA:286:U:H2'	22:DA:287:G:H8	1.53	0.74
22:DA:771:G:O2'	22:DA:772:C:H5'	1.86	0.74
25:DD:118:PHE:CD1	25:DD:119:ALA:N	2.56	0.74
42:DU:35:VAL:HG12	42:DU:36:GLU:N	2.02	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:297:G:H5''	42:DU:84:PHE:CB	2.18	0.74
1:AA:1202:U:H2'	1:AA:1203:C:C6	2.23	0.74
1:AA:1306:A:H2'	1:AA:1307:U:C5'	2.14	0.74
1:AA:255:G:H4'	17:AQ:18:LYS:HE3	1.70	0.74
2:AB:218:ALA:HA	2:AB:221:ARG:NH2	2.03	0.74
22:BA:1011:G:HO2'	22:BA:1013:C:H5''	1.52	0.74
29:BH:62:LEU:HD12	29:BH:63:ALA:N	2.03	0.74
30:BI:126:ARG:HA	30:BI:129:GLU:HB2	1.69	0.74
32:BK:114:LYS:HE2	32:BK:114:LYS:HA	1.69	0.74
38:BQ:69:ARG:CG	38:BQ:69:ARG:HH21	2.00	0.74
1:CA:1254:A:H2'	1:CA:1255:G:C8	2.23	0.74
3:CC:6:PRO:HG3	3:CC:200:TRP:HE1	1.52	0.74
3:CC:63:ILE:HG12	3:CC:65:VAL:HG23	1.69	0.74
4:CD:29:THR:HG22	4:CD:30:LYS:HD3	1.70	0.74
5:CE:14:LEU:HD13	5:CE:36:THR:HG22	1.70	0.74
12:CL:113:ARG:HB3	12:CL:118:VAL:HB	1.69	0.74
20:CT:12:GLN:O	20:CT:12:GLN:HG2	1.87	0.74
22:DA:2461:A:H1'	22:DA:2492:U:N3	2.03	0.74
26:DE:148:ILE:HD13	26:DE:187:VAL:CG2	2.13	0.74
31:DJ:70:THR:HG22	31:DJ:90:GLU:OE2	1.86	0.74
1:AA:1152:A:H2'	1:AA:1153:G:H8	1.51	0.74
10:AJ:52:LEU:HD23	10:AJ:62:ARG:HG2	1.69	0.74
17:AQ:7:LEU:HD23	17:AQ:24:ILE:CD1	2.18	0.74
17:AQ:20:ILE:HB	17:AQ:47:ASP:OD1	1.87	0.74
22:BA:2094:A:H5'	29:BH:25:TYR:CD1	2.23	0.74
22:BA:228:C:H4'	22:BA:229:C:H5''	1.68	0.74
22:BA:2758:A:C2'	22:BA:2759:G:H5'	2.18	0.74
27:BF:106:ALA:N	27:BF:108:PRO:HD2	2.02	0.74
31:BJ:44:TYR:C	31:BJ:45:THR:HG22	2.09	0.74
45:BX:52:ALA:O	45:BX:53:LYS:CB	2.36	0.74
1:CA:1408:A:C2	1:CA:1492:A:N6	2.56	0.74
1:CA:1495:U:O2'	1:CA:1496:C:H5'	1.88	0.74
1:CA:313:A:H2'	1:CA:314:C:C6	2.21	0.74
2:CB:127:LYS:HE2	2:CB:136:ARG:HH21	1.52	0.74
8:CH:54:THR:HG23	8:CH:55:LYS:H	1.52	0.74
9:CI:59:LYS:HE3	9:CI:60:LEU:HG	1.70	0.74
1:CA:36:C:H4'	12:CL:118:VAL:O	1.87	0.74
1:CA:254:G:H4'	17:CQ:16:MET:HE3	1.70	0.74
22:DA:1281:G:C6	22:DA:1290:C:N4	2.56	0.74
22:DA:2493:U:H5''	22:DA:2494:G:OP2	1.87	0.74
22:DA:2615:U:O2'	22:DA:2616:C:H5'	1.88	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:146:VAL:HB	26:DE:167:VAL:HB	1.68	0.74
27:DF:135:ILE:N	27:DF:135:ILE:HD12	2.03	0.74
41:DT:67:VAL:HG23	41:DT:75:GLY:O	1.88	0.74
1:AA:255:G:H2'	1:AA:256:U:C6	2.22	0.73
4:AD:147:LYS:O	4:AD:149:LYS:HB2	1.88	0.73
22:BA:1654:A:O2'	25:BD:118:PHE:CG	2.41	0.73
26:BE:142:ALA:C	26:BE:143:LEU:HD23	2.08	0.73
28:BG:84:LYS:CG	28:BG:132:LEU:N	2.45	0.73
39:BR:49:ILE:O	39:BR:51:VAL:O	2.05	0.73
44:BW:47:GLY:O	44:BW:49:ASN:N	2.20	0.73
45:BX:34:SER:HA	45:BX:49:ARG:HA	1.70	0.73
1:CA:1295:U:H2'	1:CA:1296:C:C6	2.23	0.73
1:CA:129:A:O2'	1:CA:130:A:C8	2.40	0.73
1:CA:1372:U:H5''	9:CI:71:ILE:CD1	2.18	0.73
9:CI:15:ALA:O	9:CI:66:VAL:HG23	1.88	0.73
51:D3:23:HIS:O	51:D3:46:LYS:HB2	1.88	0.73
22:DA:2544:G:H5'	22:DA:2645:G:N7	2.03	0.73
22:DA:2726:A:O2'	22:DA:2727:A:H5'	1.86	0.73
27:DF:12:VAL:HA	27:DF:15:LEU:HB2	1.70	0.73
22:DA:1008:A:C5'	31:DJ:37:ARG:HH22	1.99	0.73
36:DO:70:ALA:O	36:DO:74:VAL:HG23	1.87	0.73
1:AA:257:G:H2'	1:AA:258:G:H8	1.53	0.73
1:AA:747:A:H2'	1:AA:748:G:H1'	1.70	0.73
5:AE:149:PRO:O	5:AE:152:VAL:HG22	1.88	0.73
8:AH:14:ARG:HB2	8:AH:74:ILE:CG2	2.17	0.73
10:AJ:29:ALA:HB1	10:AJ:36:VAL:HG21	1.69	0.73
22:BA:1590:A:H2'	22:BA:1591:A:C8	2.23	0.73
22:BA:2773:C:OP1	25:BD:171:THR:HG23	1.88	0.73
38:BQ:93:ILE:CG2	38:BQ:94:LEU:N	2.50	0.73
43:BV:5:ASN:ND2	43:BV:5:ASN:H	1.86	0.73
1:CA:1031:C:H5'	1:CA:1032:G:H5''	1.71	0.73
1:CA:223:A:C5	1:CA:224:U:C5	2.76	0.73
1:CA:429:U:H3'	4:CD:8:LEU:HD23	1.70	0.73
22:DA:1438:U:O2'	22:DA:1439:A:H5'	1.87	0.73
22:DA:1929:G:H4'	22:DA:1930:G:OP1	1.87	0.73
22:DA:2720:U:H5''	37:DP:52:ARG:NH2	2.03	0.73
22:DA:481:G:O2'	22:DA:507:A:N6	2.19	0.73
25:DD:146:ILE:CD1	25:DD:155:VAL:HG21	2.17	0.73
25:DD:127:PHE:CZ	25:DD:160:LYS:HD2	2.23	0.73
33:DL:100:ILE:O	33:DL:101:ILE:HB	1.88	0.73
22:DA:810:U:C4	33:DL:30:THR:HG22	2.24	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:61:LEU:O	41:DT:61:LEU:HD12	1.88	0.73
1:AA:1088:G:H21	1:AA:1167:A:H62	1.35	0.73
1:AA:1256:A:H1'	1:AA:1258:G:C6	2.23	0.73
2:AB:137:THR:HA	2:AB:140:LEU:HD13	1.70	0.73
22:BA:1415:U:O2	22:BA:1415:U:H2'	1.86	0.73
22:BA:1871:A:O2'	22:BA:1872:A:C8	2.39	0.73
22:BA:409:G:HO2'	22:BA:410:G:H5'	1.53	0.73
26:BE:142:ALA:O	26:BE:143:LEU:HD23	1.88	0.73
29:BH:18:GLN:HE21	29:BH:18:GLN:HA	1.53	0.73
35:BN:2:ARG:HA	35:BN:5:LYS:HD2	1.69	0.73
1:CA:1145:A:O2'	1:CA:1146:A:H5''	1.88	0.73
1:CA:158:G:H2'	1:CA:159:G:H8	1.51	0.73
4:CD:29:THR:HB	4:CD:30:LYS:HE3	1.71	0.73
7:CG:16:LYS:HE2	9:CI:45:MET:SD	2.29	0.73
8:CH:102:VAL:HG23	8:CH:125:ILE:HB	1.71	0.73
12:CL:7:VAL:O	12:CL:7:VAL:HG12	1.88	0.73
18:CR:41:SER:HB3	18:CR:51:GLN:HG2	1.69	0.73
51:D3:15:LYS:NZ	51:D3:19:GLY:HA2	2.02	0.73
22:DA:1139:G:N3	22:DA:1143:A:H2	1.86	0.73
22:DA:2093:G:C2	22:DA:2094:A:C5	2.77	0.73
22:DA:2096:C:O2'	22:DA:2097:A:H5'	1.87	0.73
22:DA:2330:G:N1	22:DA:2386:A:C6	2.57	0.73
22:DA:58:G:N2	22:DA:59:U:H1'	2.03	0.73
31:DJ:25:LEU:HB2	31:DJ:62:VAL:HG21	1.70	0.73
32:DK:39:ILE:CD1	32:DK:62:VAL:HG23	2.17	0.73
1:AA:1162:C:H2'	1:AA:1163:A:C8	2.23	0.73
1:AA:274:A:O2'	1:AA:275:G:O4'	2.05	0.73
1:AA:647:C:O2'	1:AA:648:A:H5'	1.89	0.73
2:AB:77:GLU:HB2	2:AB:80:LYS:HE2	1.69	0.73
4:AD:13:ARG:CG	4:AD:55:ARG:HH21	2.00	0.73
9:AI:84:ARG:O	9:AI:87:MET:HB3	1.88	0.73
10:AJ:35:GLN:CG	10:AJ:77:VAL:HB	2.18	0.73
13:AM:15:VAL:HA	13:AM:33:LEU:CD1	2.18	0.73
22:BA:2015:A:C2	48:B0:2:VAL:HG23	2.22	0.73
22:BA:1867:G:O2'	22:BA:1868:C:C5'	2.35	0.73
22:BA:2742:G:C2'	22:BA:2743:U:H5'	2.18	0.73
22:BA:743:A:O3'	56:BA:3652:HOH:O	2.05	0.73
22:BA:855:G:H1'	44:BW:23:LYS:HD3	1.70	0.73
24:BC:259:ASN:O	24:BC:260:LYS:HB2	1.88	0.73
37:BP:24:THR:O	37:BP:44:GLY:O	2.05	0.73
39:BR:49:ILE:HG21	39:BR:53:PHE:H	1.54	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:40:ARG:HD3	44:BW:45:HIS:HE1	1.51	0.73
1:CA:1165:U:C2'	1:CA:1166:G:H5'	2.19	0.73
1:CA:90:C:O2'	1:CA:91:U:C6	2.39	0.73
4:CD:137:SER:CB	4:CD:138:PRO:HD2	2.18	0.73
9:CI:100:ALA:HB1	9:CI:102:PHE:CE2	2.22	0.73
10:CJ:64:GLN:CB	14:CN:98:ALA:HB3	2.19	0.73
1:CA:1458:G:O2'	20:CT:22:SER:HB3	1.87	0.73
22:DA:1507:C:H5'	22:DA:1508:A:OP2	1.88	0.73
22:DA:2341:G:O2'	22:DA:2342:C:H5'	1.87	0.73
22:DA:2756:U:H1'	22:DA:2757:A:H5''	1.70	0.73
28:DG:86:LEU:HA	28:DG:163:TYR:HB3	1.70	0.73
35:DN:55:ALA:CB	35:DN:79:LEU:HD22	2.17	0.73
38:DQ:15:LYS:HE3	38:DQ:19:GLN:HE21	1.49	0.73
42:DU:81:ARG:CB	42:DU:96:LYS:HD2	2.18	0.73
47:DZ:51:SER:HA	47:DZ:54:VAL:CG2	2.19	0.73
1:AA:258:G:N2	1:AA:259:G:H1'	2.03	0.73
1:AA:86:G:N2	1:AA:87:C:H41	1.86	0.73
3:AC:14:VAL:O	3:AC:15:LYS:HD2	1.88	0.73
6:AF:86:ARG:NH2	18:AR:63:TYR:HB3	2.03	0.73
11:AK:21:HIS:CD2	11:AK:34:THR:HG22	2.24	0.73
13:AM:10:ASP:CG	13:AM:11:HIS:H	1.91	0.73
16:AP:2:VAL:HG23	16:AP:65:ALA:HA	1.69	0.73
22:BA:1558:C:H4'	22:BA:1559:U:O5'	1.88	0.73
22:BA:2438:U:O2'	22:BA:2439:A:H5''	1.88	0.73
22:BA:2492:U:O2'	22:BA:2493:U:H5'	1.88	0.73
24:BC:79:ARG:NH2	24:BC:81:GLU:OE2	2.21	0.73
24:BC:93:VAL:CG1	24:BC:94:LEU:N	2.52	0.73
28:BG:59:ASP:HB2	28:BG:63:GLN:HG2	1.70	0.73
38:BQ:4:LYS:HZ2	38:BQ:5:ARG:CA	2.01	0.73
42:BU:71:ILE:HD11	42:BU:81:ARG:H	1.53	0.73
1:CA:1106:G:O2'	1:CA:1107:C:H5'	1.89	0.73
2:CB:44:LYS:O	2:CB:48:MET:HG3	1.89	0.73
11:CK:78:ILE:HD13	11:CK:78:ILE:H	1.52	0.73
13:CM:13:HIS:HB3	13:CM:16:ILE:CD1	2.19	0.73
17:CQ:59:GLU:HG2	17:CQ:76:ARG:HG2	1.69	0.73
22:DA:206:U:O2'	22:DA:207:A:H5'	1.89	0.73
22:DA:2092:U:H4'	22:DA:2093:G:H5''	1.69	0.73
22:DA:2136:G:N3	22:DA:2137:U:C5	2.56	0.73
22:DA:2271:G:C2'	22:DA:2272:U:H5'	2.18	0.73
22:DA:2519:U:C6	22:DA:2542:A:N6	2.57	0.73
22:DA:274:C:H2'	22:DA:275:C:H6	1.51	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:913:U:H4'	22:DA:914:G:OP1	1.86	0.73
28:DG:106:LEU:HB2	28:DG:108:PHE:CE1	2.19	0.73
29:DH:2:GLN:O	29:DH:3:VAL:HG22	1.89	0.73
29:DH:94:ILE:HG13	29:DH:98:ASP:OD1	1.88	0.73
1:AA:1355:G:O2'	1:AA:1356:G:H5'	1.89	0.73
1:AA:221:C:O2'	1:AA:222:C:H5'	1.89	0.73
1:AA:488:C:HO2'	1:AA:489:C:H5'	1.53	0.73
8:AH:88:LYS:HG3	8:AH:89:ASP:H	1.53	0.73
9:AI:119:LYS:HG3	9:AI:122:ARG:CB	2.19	0.73
17:AQ:22:VAL:HG21	17:AQ:60:ILE:CD1	2.17	0.73
22:BA:2355:G:H4'	44:BW:20:LEU:HD13	1.69	0.73
22:BA:2383:G:O2'	22:BA:2384:U:H5'	1.88	0.73
24:BC:257:ARG:NE	24:BC:269:ARG:NH2	2.37	0.73
27:BF:43:ILE:HG22	27:BF:82:TYR:HE1	1.53	0.73
31:BJ:56:VAL:CG1	31:BJ:57:LEU:H	2.01	0.73
33:BL:55:MET:HE3	33:BL:55:MET:HA	1.71	0.73
40:BS:63:GLY:O	40:BS:64:ALA:HB3	1.89	0.73
1:CA:1224:U:H5'	1:CA:1225:A:OP2	1.88	0.73
1:CA:157:U:C2'	1:CA:158:G:H5'	2.18	0.73
3:CC:41:TYR:CE1	3:CC:89:VAL:CG1	2.70	0.73
22:DA:135:U:H2'	22:DA:136:G:C8	2.23	0.73
22:DA:1388:G:N3	22:DA:1389:G:C8	2.57	0.73
22:DA:1438:U:C2'	22:DA:1439:A:H5'	2.19	0.73
22:DA:144:A:H2'	22:DA:145:C:C6	2.23	0.73
22:DA:1654:A:N3	22:DA:1655:A:C8	2.56	0.73
22:DA:1967:C:C5'	22:DA:1967:C:H6	2.01	0.73
22:DA:231:A:O2'	22:DA:232:G:C5'	2.37	0.73
22:DA:246:C:H2'	22:DA:247:G:C5'	2.18	0.73
22:DA:480:A:H3'	22:DA:481:G:C5'	2.18	0.73
25:DD:177:VAL:HA	25:DD:188:LEU:O	1.88	0.73
33:DL:128:THR:HG22	33:DL:130:GLY:H	1.53	0.73
35:DN:70:THR:O	35:DN:70:THR:HG22	1.89	0.73
41:DT:30:ILE:O	41:DT:85:VAL:HG23	1.88	0.73
2:AB:209:VAL:HG23	2:AB:210:THR:N	2.04	0.73
22:BA:1107:G:H2'	22:BA:1108:U:H6	1.54	0.73
22:BA:2656:U:C5	22:BA:2664:G:N2	2.56	0.73
22:BA:580:U:H2'	22:BA:581:C:C6	2.24	0.73
24:BC:15:VAL:CA	24:BC:203:VAL:HG11	2.17	0.73
33:BL:127:VAL:HG11	33:BL:142:ILE:HG21	1.70	0.73
38:BQ:63:ARG:NH2	38:BQ:96:ASP:HA	2.02	0.73
44:BW:39:GLN:C	44:BW:41:GLY:N	2.34	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1148:U:O2'	1:CA:1149:C:C5'	2.37	0.73
1:CA:502:A:O2'	1:CA:503:C:H5'	1.88	0.73
1:CA:642:A:HO2'	1:CA:643:C:H6	1.35	0.73
1:CA:734:G:O2'	1:CA:735:C:H5'	1.88	0.73
1:CA:978:A:O2'	1:CA:979:C:H5'	1.87	0.73
2:CB:19:THR:HG22	2:CB:37:VAL:CA	2.15	0.73
15:CO:55:LEU:HA	15:CO:58:MET:HG3	1.69	0.73
22:DA:1387:A:H5'	22:DA:1469:A:H1'	1.70	0.73
22:DA:2476:A:H2'	22:DA:2477:U:H5'	1.70	0.73
22:DA:338:G:H2'	22:DA:339:U:C5'	2.19	0.73
22:DA:959:A:H2'	22:DA:960:A:C8	2.23	0.73
23:DB:17:C:H42	23:DB:68:C:H42	1.37	0.73
26:DE:24:ASN:O	26:DE:28:VAL:HG13	1.88	0.73
37:DP:62:LYS:HD3	37:DP:64:SER:HB2	1.70	0.73
41:DT:61:LEU:C	41:DT:61:LEU:HD12	2.09	0.73
43:DV:79:ARG:HG3	43:DV:80:HIS:N	2.02	0.73
1:AA:1447:A:H5'	1:AA:1448:C:OP2	1.87	0.73
1:AA:429:U:H3'	4:AD:8:LEU:HD23	1.69	0.73
10:AJ:81:GLU:O	10:AJ:85:ASP:HB2	1.89	0.73
49:B1:34:GLU:CG	49:B1:49:LYS:HG3	2.18	0.73
22:BA:1870:C:H4'	22:BA:1871:A:OP1	1.88	0.73
22:BA:1988:G:C2'	22:BA:1989:G:H5'	2.19	0.73
22:BA:2214:C:C6	22:BA:2214:C:H5'	2.17	0.73
23:BB:28:C:OP1	36:BO:31:THR:HG21	1.88	0.73
39:BR:45:GLU:HA	39:BR:45:GLU:OE2	1.89	0.73
44:BW:50:VAL:HG12	44:BW:51:GLY:N	2.04	0.73
1:CA:210:C:C2'	1:CA:210:C:O2	2.37	0.73
1:CA:597:G:H2'	1:CA:598:U:C5'	2.16	0.73
1:CA:855:U:H5	1:CA:871:U:O4	1.71	0.73
1:CA:406:G:H21	4:CD:115:GLN:HE22	1.35	0.73
11:CK:27:ASN:HD22	11:CK:27:ASN:H	1.33	0.73
14:CN:2:LYS:HD3	14:CN:5:MET:CG	2.19	0.73
22:DA:2815:C:H2'	22:DA:2816:G:O4'	1.88	0.73
22:DA:638:G:O2'	22:DA:639:U:O4'	2.07	0.73
22:DA:1695:G:C8	24:DC:7:PRO:HB2	2.24	0.73
30:DI:132:ALA:HB1	30:DI:137:LEU:HD12	1.70	0.73
34:DM:66:ARG:CZ	34:DM:101:VAL:HG11	2.18	0.73
22:DA:1277:G:H5'	35:DN:20:MET:SD	2.29	0.73
44:DW:30:VAL:O	44:DW:30:VAL:HG22	1.89	0.73
1:AA:1183:U:H3'	1:AA:1184:G:C5'	2.18	0.73
1:AA:747:A:H5'	1:AA:748:G:OP2	1.88	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:757:U:O2'	1:AA:879:C:H1'	1.88	0.73
4:AD:145:ARG:HD2	4:AD:147:LYS:HE2	1.69	0.73
14:AN:22:LYS:HG3	14:AN:23:ARG:H	1.54	0.73
19:AS:41:PRO:O	19:AS:44:ILE:HG13	1.88	0.73
22:BA:864:G:O2'	22:BA:865:C:H5'	1.89	0.73
22:BA:958:U:H6	22:BA:958:U:C5'	2.01	0.73
29:BH:147:VAL:HG12	29:BH:149:GLU:HG3	1.69	0.73
29:BH:49:ALA:HB3	29:BH:50:ARG:HH21	1.53	0.73
41:BT:33:LYS:HG3	41:BT:80:TRP:CE3	2.22	0.73
1:CA:1493:A:H8	22:DA:1913:A:N6	1.86	0.73
1:CA:252:U:H2'	1:CA:253:A:C8	2.24	0.73
1:CA:933:G:OP1	7:CG:3:ARG:HD3	1.88	0.73
4:CD:34:GLU:O	4:CD:36:ALA:N	2.22	0.73
6:CF:61:LEU:HD11	6:CF:63:ASN:OD1	1.88	0.73
9:CI:75:ALA:HA	9:CI:78:ILE:HD12	1.70	0.73
12:CL:72:ASN:HD22	12:CL:72:ASN:H	1.37	0.73
14:CN:47:LEU:O	14:CN:50:LEU:HG	1.89	0.73
15:CO:7:THR:O	15:CO:11:VAL:HG23	1.89	0.73
22:DA:173:A:H2'	22:DA:174:U:H6	1.53	0.73
22:DA:2472:G:H2'	22:DA:2475:C:H42	1.51	0.73
22:DA:33:C:O2'	22:DA:34:U:C5'	2.36	0.73
23:DB:59:A:H2'	23:DB:60:C:H6	1.53	0.73
24:DC:146:LYS:HG3	24:DC:149:LYS:HD3	1.71	0.73
27:DF:48:LEU:HD23	27:DF:48:LEU:H	1.52	0.73
28:DG:115:GLN:HG2	28:DG:116:LEU:N	2.01	0.73
32:DK:41:ILE:HG22	32:DK:58:LEU:O	1.88	0.73
38:DQ:87:VAL:CG2	39:DR:52:PRO:HD3	2.09	0.73
42:DU:81:ARG:HB2	42:DU:96:LYS:HD2	1.70	0.73
1:AA:536:C:HO2'	1:AA:537:G:H5'	1.54	0.73
2:AB:117:GLU:CA	2:AB:120:SER:HB2	2.14	0.73
4:AD:57:LYS:HB3	4:AD:199:ILE:HB	1.70	0.73
22:BA:2777:G:H5''	22:BA:2778:A:OP1	1.89	0.73
22:BA:513:A:O2'	22:BA:514:A:H5'	1.87	0.73
22:BA:65:U:H2'	22:BA:66:C:H6	1.51	0.73
22:BA:1695:G:C8	24:BC:7:PRO:HG2	2.24	0.73
31:BJ:9:GLU:HA	31:BJ:9:GLU:OE2	1.87	0.73
46:BY:47:ARG:NH2	46:BY:47:ARG:HG3	1.97	0.73
1:CA:1283:U:H2'	1:CA:1284:C:C6	2.24	0.73
1:CA:756:C:O2'	1:CA:757:U:H5'	1.89	0.73
1:CA:802:A:H2'	1:CA:803:G:H5'	1.69	0.73
2:CB:90:PHE:HE1	2:CB:92:ASN:HD22	1.34	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:93:LEU:O	4:CD:96:ARG:HG3	1.89	0.73
6:CF:18:VAL:HB	6:CF:19:PRO:CD	2.19	0.73
21:CU:16:ARG:CG	21:CU:19:LYS:HG2	2.19	0.73
22:DA:1179:G:O2'	22:DA:1180:U:H5'	1.88	0.73
22:DA:228:C:C5'	22:DA:229:C:C5	2.71	0.73
22:DA:241:A:H1'	22:DA:243:U:C5	2.24	0.73
22:DA:571:U:H4'	22:DA:573:U:H5	1.53	0.73
22:DA:679:C:H2'	22:DA:680:C:H6	1.54	0.73
22:DA:982:C:H5''	22:DA:983:A:OP1	1.88	0.73
22:DA:1490:A:C8	24:DC:73:ILE:HD12	2.24	0.73
27:DF:46:LYS:HD3	27:DF:46:LYS:O	1.87	0.73
38:DQ:91:ARG:HG3	39:DR:11:GLN:CD	2.09	0.73
1:AA:1215:G:O2'	1:AA:1216:A:H5'	1.88	0.72
1:AA:558:G:C5	1:AA:559:A:C2	2.76	0.72
10:AJ:40:ILE:HB	10:AJ:73:LEU:CB	2.18	0.72
12:AL:86:VAL:HG11	12:AL:89:LEU:HD23	1.71	0.72
27:BF:134:GLN:HE21	27:BF:134:GLN:N	1.87	0.72
41:BT:54:GLU:O	41:BT:55:VAL:HB	1.88	0.72
1:CA:1503:A:C8	1:CA:1531:A:H1'	2.23	0.72
1:CA:265:G:C2'	1:CA:266:G:H5'	2.19	0.72
1:CA:690:G:H2'	1:CA:691:G:O4'	1.89	0.72
3:CC:120:THR:HG23	3:CC:187:GLU:O	1.89	0.72
9:CI:61:ASP:O	9:CI:62:LEU:HD22	1.89	0.72
22:DA:1338:G:H5''	41:DT:17:SER:HB3	1.71	0.72
22:DA:1739:A:H2'	22:DA:1740:G:C8	2.23	0.72
22:DA:1262:A:H61	22:DA:2017:U:H3	1.35	0.72
22:DA:2458:G:O2'	22:DA:2460:U:C5	2.42	0.72
22:DA:781:A:H5''	22:DA:782:A:OP1	1.89	0.72
25:DD:79:LEU:HD22	25:DD:79:LEU:N	2.03	0.72
46:DY:50:VAL:HA	46:DY:53:VAL:HG23	1.69	0.72
10:AJ:20:GLN:HE21	10:AJ:20:GLN:HA	1.53	0.72
22:BA:2808:G:N2	22:BA:2891:U:C6	2.56	0.72
25:BD:114:LYS:H	25:BD:114:LYS:CE	2.02	0.72
30:BI:33:ASN:HD22	30:BI:64:ARG:NH2	1.85	0.72
22:BA:1277:G:C5'	35:BN:20:MET:CE	2.67	0.72
36:BO:106:LEU:HD12	36:BO:106:LEU:C	2.10	0.72
1:CA:374:A:H2'	1:CA:375:U:C6	2.24	0.72
1:CA:795:C:H5''	1:CA:796:C:OP2	1.89	0.72
1:CA:937:A:O2'	1:CA:938:A:H5'	1.90	0.72
4:CD:127:ARG:HG2	4:CD:127:ARG:HH11	1.53	0.72
4:CD:29:THR:HG22	4:CD:30:LYS:HD2	1.72	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:795:C:H5''	11:CK:127:ARG:HH21	1.54	0.72
16:CP:46:LYS:HE2	16:CP:47:GLU:H	1.52	0.72
52:D4:7:VAL:CG1	52:D4:8:LYS:H	1.97	0.72
22:DA:1552:A:O2'	22:DA:1553:A:H5'	1.89	0.72
22:DA:1717:A:H2'	22:DA:1718:G:O4'	1.88	0.72
22:DA:2142:A:H2'	22:DA:2143:C:H4'	1.71	0.72
22:DA:2271:G:H2'	22:DA:2272:U:C6	2.22	0.72
22:DA:2311:A:H1'	27:DF:78:ILE:HD11	1.70	0.72
28:DG:122:ALA:HB1	28:DG:131:VAL:O	1.89	0.72
38:DQ:91:ARG:HD3	39:DR:11:GLN:HG3	1.71	0.72
1:AA:461:A:H3'	1:AA:461:A:N3	2.02	0.72
1:AA:628:G:H2'	1:AA:629:A:C8	2.24	0.72
3:AC:122:GLN:HB3	3:AC:127:VAL:CG2	2.19	0.72
6:AF:9:MET:HE2	6:AF:59:TYR:CE2	2.24	0.72
8:AH:9:MET:HE2	8:AH:32:LYS:CG	2.18	0.72
11:AK:124:LYS:HE3	21:AU:34:ARG:CG	2.19	0.72
22:BA:2150:C:H2'	22:BA:2151:U:C5	2.23	0.72
25:BD:99:GLU:CG	25:BD:100:LEU:H	1.93	0.72
28:BG:85:LYS:C	28:BG:86:LEU:HD12	2.10	0.72
33:BL:127:VAL:HG23	33:BL:131:ALA:HB3	1.71	0.72
39:BR:21:ARG:NH2	39:BR:93:PHE:CZ	2.57	0.72
41:BT:40:LYS:N	41:BT:43:ILE:HG23	2.05	0.72
1:CA:1296:C:O2'	1:CA:1302:C:C4	2.42	0.72
1:CA:265:G:O2'	17:CQ:67:SER:HA	1.89	0.72
1:CA:961:U:HO2'	1:CA:962:C:H6	0.77	0.72
6:CF:42:TRP:HB2	6:CF:59:TYR:CB	2.18	0.72
22:DA:105:C:O2'	22:DA:106:C:C6	2.29	0.72
22:DA:2235:G:H2'	22:DA:2236:U:H6	1.54	0.72
22:DA:412:A:C2'	22:DA:413:C:H5'	2.19	0.72
22:DA:575:A:C2	22:DA:576:U:C5	2.77	0.72
35:DN:28:LEU:C	35:DN:28:LEU:HD23	2.10	0.72
37:DP:49:ILE:H	37:DP:95:LYS:HE2	1.52	0.72
38:DQ:4:LYS:NZ	38:DQ:6:GLY:HA3	2.04	0.72
41:DT:43:ILE:HG21	41:DT:58:VAL:HG11	1.71	0.72
41:DT:29:THR:N	41:DT:87:LEU:HB2	2.03	0.72
42:DU:13:LEU:H	42:DU:13:LEU:HD12	1.52	0.72
42:DU:91:LYS:O	42:DU:92:VAL:HG22	1.89	0.72
44:DW:20:LEU:N	44:DW:20:LEU:HD12	2.05	0.72
1:AA:1142:G:C2	1:AA:1143:G:H1'	2.24	0.72
1:AA:250:A:H4'	1:AA:251:G:O5'	1.90	0.72
1:AA:279:A:H5''	1:AA:281:G:O4'	1.88	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:163:ILE:CG2	2:AB:164:ASP:H	1.97	0.72
3:AC:158:GLY:HA2	3:AC:192:TYR:CE1	2.23	0.72
5:AE:80:LEU:HD23	5:AE:122:VAL:CG1	2.20	0.72
8:AH:105:THR:HG21	8:AH:120:LEU:CD1	2.18	0.72
22:BA:2146:C:H4'	22:BA:2147:A:O5'	1.88	0.72
22:BA:671:C:H3'	33:BL:42:SER:OG	1.88	0.72
22:BA:996:A:O2'	38:BQ:91:ARG:HG3	1.88	0.72
1:CA:1533:C:C2'	1:CA:1534:A:H5''	2.19	0.72
1:CA:338:A:H61	1:CA:351:G:H1	1.37	0.72
1:CA:6:G:N3	1:CA:6:G:C2'	2.45	0.72
1:CA:71:A:C2	1:CA:72:A:C8	2.76	0.72
2:CB:114:LYS:CA	2:CB:117:GLU:HG2	2.18	0.72
3:CC:166:TRP:HE3	3:CC:166:TRP:N	1.87	0.72
5:CE:38:VAL:HG12	5:CE:39:GLY:N	2.04	0.72
5:CE:44:ARG:NH2	5:CE:70:MET:HB2	2.04	0.72
14:CN:63:CYS:SG	14:CN:82:LYS:HG3	2.29	0.72
22:DA:125:A:H4'	22:DA:126:A:OP2	1.89	0.72
22:DA:1597:A:O3'	22:DA:1598:A:H8	1.72	0.72
22:DA:2197:U:C5	22:DA:2224:G:C6	2.77	0.72
26:DE:146:VAL:HG12	26:DE:167:VAL:HG23	1.70	0.72
27:DF:8:LYS:HB2	27:DF:8:LYS:NZ	2.05	0.72
28:DG:167:VAL:HG23	28:DG:168:VAL:N	2.04	0.72
32:DK:94:PRO:HG3	32:DK:115:ILE:HD12	1.71	0.72
32:DK:99:ILE:HG13	32:DK:118:LEU:HD12	1.71	0.72
34:DM:34:LYS:HB2	34:DM:131:VAL:HG21	1.71	0.72
23:DB:8:C:H5''	36:DO:15:ARG:HH12	1.52	0.72
1:AA:1094:G:O2'	1:AA:1095:U:P	2.47	0.72
1:AA:1464:U:H2'	1:AA:1465:A:H8	1.53	0.72
1:AA:501:C:O2'	1:AA:502:A:H5'	1.88	0.72
1:AA:874:G:HO2'	1:AA:875:U:H5'	1.53	0.72
7:AG:37:THR:O	7:AG:41:ILE:HG13	1.88	0.72
22:BA:1179:G:H3'	22:BA:1180:U:C4'	2.20	0.72
23:BB:16:G:O2'	23:BB:17:C:H5'	1.90	0.72
29:BH:117:LEU:CD1	29:BH:130:VAL:HG11	2.18	0.72
41:BT:2:ILE:HG12	41:BT:3:ARG:HG2	1.71	0.72
41:BT:50:LEU:HD12	41:BT:50:LEU:N	2.04	0.72
1:CA:374:A:H2'	1:CA:375:U:H6	1.54	0.72
10:CJ:11:LYS:HB3	10:CJ:71:LEU:CD1	2.16	0.72
13:CM:78:ARG:HH21	13:CM:79:LEU:CD2	2.03	0.72
22:DA:1090:A:H2'	22:DA:1091:G:H5''	1.71	0.72
22:DA:142:A:O2'	22:DA:143:C:H6	1.68	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:15:G:OP1	48:D0:20:ALA:HB2	1.88	0.72
22:DA:185:G:H2'	22:DA:186:G:C8	2.24	0.72
22:DA:2631:G:H2'	22:DA:2632:A:C5'	2.19	0.72
22:DA:443:A:H61	26:DE:36:ALA:HB1	1.55	0.72
26:DE:122:GLU:HA	26:DE:190:ALA:HB2	1.71	0.72
26:DE:73:ILE:HG13	26:DE:78:TRP:HE1	1.54	0.72
31:DJ:111:LYS:HB2	31:DJ:115:GLY:CA	2.20	0.72
37:DP:63:ILE:HA	37:DP:68:GLY:HA2	1.70	0.72
43:DV:61:LEU:CD2	43:DV:61:LEU:H	2.01	0.72
1:AA:1151:A:C4	1:AA:1152:A:N7	2.57	0.72
1:AA:1152:A:H2'	1:AA:1153:G:C8	2.24	0.72
1:AA:597:G:H5''	1:AA:598:U:OP2	1.89	0.72
5:AE:152:VAL:O	5:AE:155:LYS:HD2	1.89	0.72
5:AE:79:THR:OG1	5:AE:80:LEU:N	2.23	0.72
10:AJ:11:LYS:HG3	10:AJ:97:ASP:HB3	1.71	0.72
16:AP:51:ARG:O	16:AP:52:LEU:HD12	1.90	0.72
22:BA:1277:G:C5'	35:BN:20:MET:HE1	2.20	0.72
24:BC:79:ARG:HH22	24:BC:92:LEU:HD22	1.51	0.72
25:BD:104:VAL:HA	25:BD:106:LYS:HZ3	1.52	0.72
28:BG:84:LYS:HB3	28:BG:132:LEU:O	1.88	0.72
33:BL:77:ILE:HG12	33:BL:95:LEU:HD13	1.70	0.72
44:BW:67:LYS:O	44:BW:68:PHE:HB2	1.88	0.72
1:CA:1170:A:H2'	1:CA:1171:A:O4'	1.89	0.72
1:CA:330:C:O2'	1:CA:331:G:H5'	1.90	0.72
1:CA:345:C:H4'	1:CA:346:G:H5''	1.71	0.72
1:CA:82:G:H2'	1:CA:83:C:H4'	1.71	0.72
12:CL:80:LEU:HD23	12:CL:97:VAL:HG21	1.70	0.72
21:CU:3:ILE:HG23	21:CU:18:PHE:CD1	2.25	0.72
22:DA:1722:A:N6	22:DA:1739:A:C8	2.58	0.72
22:DA:740:C:C5	22:DA:1981:A:C2	2.77	0.72
22:DA:2889:C:O2'	22:DA:2890:G:H5'	1.89	0.72
22:DA:971:G:H2'	22:DA:972:A:H5'	1.72	0.72
26:DE:108:ILE:HD13	26:DE:108:ILE:O	1.89	0.72
34:DM:57:VAL:HA	34:DM:112:LEU:HD11	1.70	0.72
1:AA:254:G:O2'	1:AA:255:G:H5'	1.88	0.72
4:AD:160:LEU:H	4:AD:160:LEU:HD13	1.54	0.72
22:BA:1434:A:H2'	22:BA:1435:G:H8	1.55	0.72
29:BH:111:ALA:O	29:BH:112:LYS:HD3	1.89	0.72
33:BL:64:PHE:O	33:BL:64:PHE:CD1	2.42	0.72
34:BM:114:ARG:HG2	34:BM:130:PHE:CZ	2.24	0.72
34:BM:12:MET:HE3	34:BM:71:LYS:HG3	1.69	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:33:ILE:HG23	35:BN:114:GLU:HB3	1.71	0.72
39:BR:74:ILE:HB	39:BR:87:GLN:HB3	1.70	0.72
44:BW:8:SER:O	44:BW:9:THR:CB	2.37	0.72
1:CA:338:A:N6	1:CA:351:G:H1	1.88	0.72
13:CM:12:LYS:H	13:CM:44:ILE:HG13	1.52	0.72
20:CT:62:ALA:HA	20:CT:67:HIS:NE2	2.05	0.72
22:DA:1080:A:C4	22:DA:1081:U:C5	2.77	0.72
22:DA:1700:A:H2'	22:DA:1701:A:C5'	2.19	0.72
22:DA:2094:A:O2'	22:DA:2095:A:C5'	2.37	0.72
22:DA:2297:A:C2	22:DA:2298:A:N7	2.58	0.72
22:DA:2392:A:C2	33:DL:55:MET:HG2	2.25	0.72
22:DA:2758:A:O2'	22:DA:2759:G:C5'	2.34	0.72
26:DE:130:LYS:CG	26:DE:133:LEU:HD13	2.16	0.72
29:DH:84:ALA:HB3	29:DH:148:ALA:HB2	1.70	0.72
34:DM:36:VAL:HG21	34:DM:129:THR:CG2	2.20	0.72
36:DO:31:THR:HG21	36:DO:36:TYR:CE2	2.24	0.72
41:DT:20:ALA:HB1	41:DT:31:VAL:HG21	1.69	0.72
1:AA:1299:A:C8	1:AA:1301:U:H1'	2.24	0.72
1:AA:423:G:H2'	1:AA:424:G:O4'	1.90	0.72
1:AA:92:U:O2'	1:AA:93:U:C6	2.43	0.72
6:AF:38:ARG:NH1	6:AF:61:LEU:HD21	2.04	0.72
11:AK:13:LYS:O	11:AK:14:GLN:HB3	1.89	0.72
22:BA:1152:C:O2'	22:BA:1153:C:H5'	1.88	0.72
22:BA:1253:A:C3'	22:BA:1254:A:H5''	2.19	0.72
22:BA:1268:A:C2	22:BA:2013:A:C4	2.78	0.72
22:BA:2786:U:O2'	25:BD:66:GLY:HA3	1.90	0.72
23:BB:112:G:H2'	23:BB:113:C:C6	2.24	0.72
24:BC:89:ASN:O	24:BC:90:ILE:HD13	1.89	0.72
25:BD:14:ILE:CA	37:BP:11:GLN:HE22	2.02	0.72
44:BW:54:ARG:HH11	44:BW:54:ARG:HB2	1.54	0.72
44:BW:37:VAL:HG22	44:BW:55:ASP:O	1.89	0.72
44:BW:73:PRO:HG3	44:BW:76:ARG:HD2	1.69	0.72
22:BA:989:G:C8	47:BZ:13:ILE:HD11	2.24	0.72
1:CA:68:G:N2	1:CA:152:A:H1'	2.05	0.72
7:CG:119:LEU:C	7:CG:119:LEU:HD23	2.10	0.72
7:CG:99:ALA:HB3	7:CG:100:MET:CE	2.20	0.72
1:CA:972:C:H4'	10:CJ:59:LYS:HG2	1.70	0.72
1:CA:275:G:OP1	17:CQ:15:LYS:HD2	1.90	0.72
22:DA:1339:G:H21	22:DA:1603:A:H1'	1.54	0.72
22:DA:217:A:C2'	22:DA:218:A:H8	2.02	0.72
22:DA:2353:G:N3	44:DW:30:VAL:HG13	2.04	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:671:C:O2'	22:DA:672:C:C5'	2.38	0.72
22:DA:865:C:H5''	22:DA:866:A:OP1	1.89	0.72
25:DD:107:VAL:HG12	25:DD:109:VAL:HG23	1.71	0.72
26:DE:111:GLU:CB	26:DE:114:ARG:HH21	2.01	0.72
30:DI:112:LYS:NZ	30:DI:128:ILE:HD12	2.04	0.72
41:DT:9:LYS:HG2	41:DT:9:LYS:O	1.89	0.72
1:AA:1368:A:O2'	1:AA:1369:C:H5'	1.90	0.72
1:AA:251:G:H4'	1:AA:252:U:O5'	1.89	0.72
4:AD:196:GLU:HA	4:AD:199:ILE:CG2	2.19	0.72
5:AE:155:LYS:HD3	5:AE:156:ARG:N	2.05	0.72
7:AG:4:ARG:NE	7:AG:4:ARG:HA	2.03	0.72
9:AI:83:THR:HG21	9:AI:102:PHE:CB	2.19	0.72
21:AU:9:GLU:CB	21:AU:10:PRO:HD3	2.19	0.72
22:BA:1179:G:C5	22:BA:1180:U:C1'	2.71	0.72
25:BD:70:LYS:O	25:BD:71:ALA:HB3	1.90	0.72
28:BG:104:LEU:CB	28:BG:112:VAL:CG2	2.65	0.72
38:BQ:23:TYR:O	38:BQ:28:SER:HB3	1.89	0.72
44:BW:18:LYS:CA	44:BW:36:ILE:HG13	2.20	0.72
1:CA:120:A:O2'	1:CA:121:U:H5''	1.90	0.72
1:CA:936:C:H5'	1:CA:1383:C:N3	2.05	0.72
1:CA:464:U:C4	1:CA:466:A:H4'	2.24	0.72
1:CA:953:G:C6	1:CA:1229:A:N6	2.57	0.72
2:CB:26:MET:HE2	2:CB:29:PHE:HD2	1.54	0.72
8:CH:28:SER:HB2	8:CH:57:GLU:O	1.89	0.72
22:DA:1031:G:O2'	52:D4:7:VAL:HG12	1.90	0.72
22:DA:1342:A:C6	22:DA:1397:U:C6	2.78	0.72
22:DA:1608:A:C8	22:DA:1611:C:N4	2.57	0.72
22:DA:1735:A:HO2'	22:DA:1736:U:H6	0.79	0.72
22:DA:183:C:C2'	22:DA:184:C:H5'	2.20	0.72
22:DA:644:A:O2'	22:DA:645:C:H5''	1.90	0.72
22:DA:77:G:N2	22:DA:110:G:H1'	2.05	0.72
26:DE:90:GLN:OE1	26:DE:90:GLN:HA	1.90	0.72
28:DG:7:PRO:O	28:DG:8:VAL:HB	1.89	0.72
34:DM:41:LEU:C	34:DM:93:VAL:HG23	2.10	0.72
1:AA:596:A:H5'	1:AA:596:A:C8	2.25	0.72
1:AA:68:G:C5	1:AA:69:G:H1'	2.25	0.72
4:AD:61:ARG:HH21	4:AD:67:LEU:HD23	1.54	0.72
5:AE:80:LEU:HD12	5:AE:146:MET:SD	2.30	0.72
15:AO:73:ASP:CG	15:AO:76:ARG:HG3	2.10	0.72
22:BA:386:G:H4'	22:BA:387:U:OP2	1.90	0.72
23:BB:45:A:H2'	23:BB:46:A:C8	2.25	0.72

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:251:THR:HG22	24:BC:252:LYS:NZ	2.04	0.72
22:BA:1813:G:N3	24:BC:49:THR:CG2	2.53	0.72
36:BO:75:GLY:HA2	36:BO:106:LEU:HD13	1.70	0.72
39:BR:97:LYS:O	39:BR:98:ILE:HB	1.89	0.72
47:BZ:9:THR:HG23	47:BZ:10:ARG:HB2	1.71	0.72
1:CA:260:G:OP1	20:CT:74:HIS:HE1	1.73	0.72
1:CA:412:A:H4'	1:CA:413:G:OP1	1.89	0.72
7:CG:112:ASP:HB3	7:CG:117:LEU:HB3	1.71	0.72
13:CM:77:LYS:HA	13:CM:80:MET:CE	2.20	0.72
18:CR:39:VAL:CG1	18:CR:40:PRO:HD2	2.20	0.72
22:DA:1353:A:O2'	22:DA:1354:A:H5'	1.89	0.72
22:DA:1357:C:C5	56:DA:3415:HOH:O	2.43	0.72
22:DA:740:C:C6	22:DA:1981:A:C2	2.77	0.72
22:DA:2438:U:O2'	22:DA:2439:A:H5''	1.90	0.72
22:DA:53:A:C2	22:DA:179:C:H4'	2.25	0.72
24:DC:94:LEU:CD1	24:DC:100:ARG:HD3	2.19	0.72
32:DK:104:THR:OG1	32:DK:106:GLU:HB2	1.89	0.72
32:DK:28:SER:O	32:DK:29:HIS:CB	2.37	0.72
35:DN:28:LEU:HD13	35:DN:48:VAL:HG11	1.72	0.72
41:DT:11:LEU:HD12	41:DT:11:LEU:H	1.53	0.72
1:AA:1009:U:O2'	1:AA:1010:U:H5'	1.89	0.71
1:AA:1167:A:C8	1:AA:1169:A:N6	2.58	0.71
1:AA:1348:U:O2'	1:AA:1349:A:C5'	2.38	0.71
1:AA:425:G:H2'	1:AA:426:U:H5'	1.71	0.71
2:AB:66:ILE:CB	2:AB:88:GLN:HB3	2.19	0.71
20:AT:57:VAL:CG1	20:AT:71:ALA:HB1	2.20	0.71
21:AU:32:ARG:O	21:AU:32:ARG:HG2	1.90	0.71
51:B3:44:ARG:N	51:B3:45:PRO:HD2	2.05	0.71
22:BA:1015:U:O2'	22:BA:1016:G:H5'	1.90	0.71
22:BA:1150:C:C2'	22:BA:1151:A:O5'	2.37	0.71
22:BA:346:A:C2	22:BA:347:A:H1'	2.24	0.71
34:BM:42:THR:OG1	34:BM:45:GLN:HG3	1.90	0.71
1:CA:1128:C:C4'	1:CA:1148:U:H3	2.03	0.71
1:CA:1322:C:H2'	1:CA:1322:C:O2	1.90	0.71
1:CA:14:U:C2	1:CA:16:A:H5''	2.24	0.71
1:CA:277:C:H2'	1:CA:278:G:C8	2.25	0.71
2:CB:209:VAL:O	2:CB:213:LEU:HB2	1.90	0.71
8:CH:1:SER:CB	8:CH:3:GLN:HG3	2.19	0.71
9:CI:45:MET:HE2	9:CI:48:ARG:HG3	1.71	0.71
17:CQ:45:VAL:HG11	17:CQ:60:ILE:HG22	1.70	0.71
22:DA:242:G:C8	51:D3:3:ILE:O	2.43	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2056:G:C2	22:DA:2057:G:C8	2.78	0.71
22:DA:477:A:C2'	22:DA:478:A:H8	2.02	0.71
22:DA:800:A:H4'	22:DA:801:G:O5'	1.88	0.71
24:DC:29:PHE:HD2	24:DC:32:LEU:HD12	1.55	0.71
29:DH:115:VAL:CG1	29:DH:132:PHE:HB2	2.20	0.71
38:DQ:40:LYS:CD	38:DQ:44:TYR:HE2	2.02	0.71
7:AG:144:ALA:C	7:AG:146:ALA:H	1.92	0.71
8:AH:105:THR:CG2	8:AH:120:LEU:HD13	2.17	0.71
12:AL:86:VAL:O	12:AL:86:VAL:HG12	1.88	0.71
13:AM:106:ARG:NH2	13:AM:112:ARG:HB3	2.05	0.71
22:BA:1427:A:H4'	22:BA:1428:C:O5'	1.90	0.71
22:BA:2396:G:O2'	22:BA:2397:G:H5'	1.90	0.71
22:BA:2480:C:H2'	22:BA:2481:G:H5'	1.72	0.71
24:BC:29:PHE:CE2	24:BC:31:PRO:HG2	2.24	0.71
26:BE:119:ILE:HD11	26:BE:187:VAL:HG22	1.72	0.71
26:BE:61:ARG:NH1	26:BE:64:GLY:HA3	2.05	0.71
33:BL:109:LYS:CG	33:BL:126:ARG:HB3	2.15	0.71
34:BM:17:ASN:O	34:BM:38:ARG:HD3	1.90	0.71
1:CA:1103:C:H5''	2:CB:96:LEU:HD22	1.72	0.71
1:CA:1299:A:O2'	1:CA:1300:G:H4'	1.90	0.71
3:CC:20:THR:O	3:CC:20:THR:HG23	1.89	0.71
3:CC:76:ILE:HA	3:CC:83:VAL:HG13	1.71	0.71
4:CD:55:ARG:HH11	4:CD:55:ARG:CG	1.95	0.71
20:CT:58:ASP:O	20:CT:61:ALA:HB3	1.90	0.71
22:DA:1356:G:N2	22:DA:1357:C:H1'	2.05	0.71
22:DA:2407:A:O2'	22:DA:2408:U:H5'	1.90	0.71
22:DA:308:G:C6	22:DA:309:A:C6	2.79	0.71
22:DA:608:A:C5	22:DA:621:A:N7	2.58	0.71
22:DA:962:G:H21	22:DA:2250:G:H22	1.37	0.71
23:DB:57:A:C6	27:DF:25:MET:HG2	2.25	0.71
28:DG:91:VAL:HG22	28:DG:93:TYR:HE2	1.56	0.71
34:DM:15:GLY:O	34:DM:16:ARG:HB3	1.89	0.71
40:DS:33:LEU:HA	40:DS:36:LEU:HD23	1.71	0.71
22:DA:2330:G:H21	44:DW:38:ARG:HA	1.55	0.71
1:AA:1069:C:C2'	1:AA:1070:U:H5''	2.20	0.71
1:AA:204:G:C3'	1:AA:205:A:H5''	2.09	0.71
1:AA:210:C:H4'	1:AA:211:G:N2	2.06	0.71
1:AA:619:U:N1	4:AD:131:ILE:HD11	2.05	0.71
2:AB:22:TRP:O	2:AB:22:TRP:CG	2.43	0.71
3:AC:56:ILE:HG12	3:AC:65:VAL:CG2	2.17	0.71
8:AH:21:LYS:HE2	8:AH:21:LYS:HA	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:58:LEU:HD22	8:AH:59:GLU:H	1.55	0.71
13:AM:95:PRO:CG	13:AM:101:THR:HG22	2.20	0.71
48:B0:33:SER:CB	48:B0:35:GLU:HG3	2.19	0.71
22:BA:1462:C:H2'	22:BA:1463:C:H5'	1.72	0.71
22:BA:438:G:C2'	22:BA:439:A:H5'	2.19	0.71
34:BM:8:LYS:HD2	34:BM:8:LYS:N	2.06	0.71
36:BO:31:THR:CG2	36:BO:34:HIS:H	2.02	0.71
40:BS:13:SER:O	40:BS:14:ALA:HB2	1.91	0.71
1:CA:1003:G:N2	1:CA:1005:A:H5''	2.05	0.71
1:CA:484:G:H4'	1:CA:485:U:O5'	1.89	0.71
5:CE:55:VAL:N	5:CE:56:PRO:HD2	2.04	0.71
8:CH:54:THR:O	8:CH:56:PRO:HD3	1.89	0.71
19:CS:50:VAL:HG11	19:CS:70:LEU:HB3	1.71	0.71
11:CK:124:LYS:HE3	21:CU:34:ARG:CZ	2.20	0.71
22:DA:1002:G:C2	22:DA:1003:G:H1'	2.25	0.71
22:DA:216:A:O2'	22:DA:217:A:H8	1.73	0.71
22:DA:2666:C:H2'	22:DA:2667:C:H5'	1.70	0.71
22:DA:2756:U:H4'	22:DA:2757:A:O5'	1.89	0.71
22:DA:286:U:H2'	22:DA:287:G:C8	2.25	0.71
22:DA:321:U:C2	26:DE:159:LEU:HD21	2.25	0.71
22:DA:491:G:C2'	22:DA:492:A:H8	2.02	0.71
22:DA:626:A:H2'	33:DL:78:ARG:NH2	2.05	0.71
24:DC:149:LYS:HE2	24:DC:152:GLN:NE2	2.05	0.71
32:DK:11:ALA:HB2	32:DK:64:ARG:NH1	2.04	0.71
36:DO:4:LYS:HG3	36:DO:8:ILE:HD11	1.72	0.71
40:DS:24:ILE:HG22	40:DS:35:ILE:HD11	1.72	0.71
43:DV:77:VAL:HG23	43:DV:89:ILE:HG22	1.72	0.71
1:AA:1281:C:O2'	1:AA:1282:C:H5'	1.91	0.71
1:AA:488:C:O2'	1:AA:489:C:C5'	2.36	0.71
1:AA:842:U:HO2'	1:AA:846:G:H1	1.36	0.71
22:BA:313:G:C2'	22:BA:314:C:H5'	2.20	0.71
28:BG:10:VAL:HG23	28:BG:10:VAL:O	1.88	0.71
30:BI:33:ASN:HD22	30:BI:64:ARG:HH22	1.36	0.71
41:BT:39:THR:HG22	41:BT:41:ALA:HB3	1.71	0.71
46:BY:45:GLN:O	46:BY:46:VAL:HB	1.90	0.71
1:CA:1463:U:H2'	1:CA:1464:U:H6	1.54	0.71
1:CA:191:G:H2'	1:CA:192:A:C8	2.25	0.71
1:CA:193:C:H1'	20:CT:54:GLN:NE2	2.04	0.71
1:CA:740:U:O2'	1:CA:741:G:H5'	1.88	0.71
2:CB:26:MET:HA	2:CB:26:MET:HE2	1.70	0.71
3:CC:109:GLU:CG	3:CC:139:ASN:HB2	2.12	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:137:SER:HB2	4:CD:138:PRO:HD2	1.70	0.71
4:CD:3:TYR:O	4:CD:4:LEU:HB2	1.89	0.71
15:CO:24:THR:HG23	15:CO:65:LEU:HD22	1.72	0.71
22:DA:2615:U:C2	48:D0:3:GLN:HA	2.26	0.71
51:D3:57:VAL:O	51:D3:60:CYS:HB2	1.90	0.71
22:DA:1675:C:O2'	22:DA:1676:A:H5'	1.90	0.71
22:DA:1931:U:H2'	22:DA:1932:A:C8	2.25	0.71
22:DA:1936:A:H4'	22:DA:1937:A:OP2	1.90	0.71
22:DA:374:A:H2'	22:DA:375:G:H8	1.53	0.71
22:DA:67:U:H2'	22:DA:68:G:C8	2.24	0.71
22:DA:724:U:H2'	22:DA:725:G:O4'	1.90	0.71
29:DH:80:ILE:HB	29:DH:101:ASP:CG	2.10	0.71
29:DH:41:LYS:O	29:DH:44:ILE:HG12	1.89	0.71
31:DJ:35:ARG:NH1	31:DJ:140:LEU:HD11	2.04	0.71
39:DR:39:LEU:CB	39:DR:49:ILE:HD13	2.18	0.71
40:DS:17:VAL:HG11	40:DS:103:ILE:HD11	1.72	0.71
1:AA:1143:G:H2'	1:AA:1144:G:C8	2.22	0.71
1:AA:1162:C:O2'	1:AA:1163:A:O4'	2.07	0.71
1:AA:1241:G:O2'	1:AA:1242:G:H8	1.70	0.71
1:AA:452:A:H5''	1:AA:452:A:H8	1.55	0.71
1:AA:646:G:C2'	1:AA:647:C:H5'	2.20	0.71
4:AD:60:VAL:O	4:AD:63:ILE:HG23	1.90	0.71
6:AF:7:VAL:O	6:AF:7:VAL:HG22	1.90	0.71
22:BA:1707:G:H2'	22:BA:1708:C:H6	1.52	0.71
22:BA:1788:C:C2'	22:BA:1789:A:H5'	2.21	0.71
22:BA:2667:C:H2'	22:BA:2668:G:H5'	1.73	0.71
22:BA:271:G:O2'	22:BA:272:A:H5''	1.91	0.71
22:BA:679:C:O2'	22:BA:680:C:H5'	1.91	0.71
24:BC:141:HIS:HB2	24:BC:190:THR:HB	1.72	0.71
40:BS:2:GLU:O	40:BS:3:THR:CG2	2.39	0.71
41:BT:39:THR:CB	41:BT:42:GLU:HB2	2.20	0.71
1:CA:1331:G:HO2'	1:CA:1332:A:H8	1.38	0.71
1:CA:142:G:N2	1:CA:143:A:H1'	2.06	0.71
1:CA:1480:A:C4	1:CA:1481:U:C6	2.78	0.71
10:CJ:25:ILE:O	10:CJ:25:ILE:HG22	1.90	0.71
12:CL:62:VAL:HG21	12:CL:94:TYR:CD2	2.25	0.71
6:CF:90:MET:HE1	18:CR:60:ARG:HD3	1.72	0.71
48:D0:5:ASN:HD22	48:D0:6:LYS:N	1.86	0.71
22:DA:2285:C:H5	49:D1:5:ARG:NH2	1.87	0.71
22:DA:191:A:O2'	22:DA:192:C:H5'	1.90	0.71
22:DA:1992:G:H4'	22:DA:1993:U:OP1	1.89	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2503:A:H4'	22:DA:2504:U:OP1	1.89	0.71
22:DA:2746:U:H5''	28:DG:137:LYS:HG2	1.70	0.71
22:DA:481:G:H1'	22:DA:506:G:H21	1.55	0.71
22:DA:61:C:H4'	46:DY:43:LEU:HD23	1.72	0.71
22:DA:950:G:O2'	22:DA:951:C:H5'	1.90	0.71
24:DC:71:ASP:HA	24:DC:117:SER:O	1.91	0.71
28:DG:72:ASN:O	28:DG:76:ILE:HG12	1.91	0.71
34:DM:114:ARG:HA	34:DM:130:PHE:CE1	2.25	0.71
44:DW:17:ALA:HB1	44:DW:36:ILE:HG12	1.72	0.71
22:DA:2091:C:H1'	45:DX:33:HIS:NE2	2.06	0.71
1:AA:109:A:H2'	1:AA:326:G:H21	1.56	0.71
1:AA:673:A:H2'	1:AA:674:G:C8	2.26	0.71
4:AD:117:VAL:HA	4:AD:122:ILE:CD1	2.18	0.71
6:AF:3:HIS:N	6:AF:92:THR:HG23	2.05	0.71
11:AK:30:ILE:C	11:AK:30:ILE:HD12	2.11	0.71
14:AN:44:VAL:HG23	14:AN:45:LEU:N	2.05	0.71
22:BA:1963:U:H6	22:BA:1963:U:C3'	2.03	0.71
25:BD:176:ASP:OD2	25:BD:176:ASP:N	2.23	0.71
27:BF:3:LEU:CD2	27:BF:100:GLU:HG3	2.20	0.71
28:BG:6:ALA:HB1	28:BG:7:PRO:HD2	1.72	0.71
35:BN:109:PRO:O	35:BN:109:PRO:HG2	1.89	0.71
1:CA:386:C:C4	1:CA:387:U:C5	2.78	0.71
1:CA:79:G:H2'	1:CA:80:A:H8	1.56	0.71
2:CB:30:ILE:HG23	2:CB:39:ILE:O	1.89	0.71
52:D4:19:ARG:HH12	52:D4:26:ILE:HG13	1.55	0.71
22:DA:1734:G:HO2'	22:DA:1735:A:H8	0.77	0.71
22:DA:1810:A:H3'	22:DA:1811:G:H8	1.54	0.71
22:DA:2643:G:O2'	22:DA:2644:G:H5'	1.90	0.71
22:DA:2688:G:H1'	22:DA:2721:A:N6	2.06	0.71
22:DA:2734:A:H2'	22:DA:2735:G:H5'	1.71	0.71
22:DA:1799:G:H8	24:DC:179:GLU:OE1	1.73	0.71
27:DF:104:THR:HG22	27:DF:105:ILE:HG13	1.71	0.71
33:DL:3:LEU:C	33:DL:3:LEU:HD12	2.10	0.71
35:DN:73:ASN:CA	35:DN:76:VAL:HG22	2.20	0.71
36:DO:34:HIS:HD2	36:DO:53:THR:OG1	1.73	0.71
40:DS:53:SER:O	40:DS:56:ALA:HB3	1.90	0.71
45:DX:58:ILE:HG22	45:DX:58:ILE:O	1.91	0.71
1:AA:1124:G:H3'	1:AA:1145:A:N6	2.06	0.71
1:AA:121:U:H5''	1:AA:121:U:H6	1.55	0.71
1:AA:1441:A:H62	1:AA:1461:G:N2	1.87	0.71
15:AO:16:ARG:O	15:AO:17:ASP:HB3	1.90	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1747:U:H2'	22:BA:1748:C:C6	2.26	0.71
24:BC:80:LEU:CD1	24:BC:109:LEU:HG	2.20	0.71
22:BA:1654:A:H1'	25:BD:118:PHE:CD1	2.26	0.71
28:BG:33:THR:HA	28:BG:34:ARG:NH1	2.06	0.71
33:BL:132:ARG:HG3	33:BL:142:ILE:CD1	2.20	0.71
37:BP:13:LYS:CE	37:BP:76:HIS:HA	2.17	0.71
41:BT:39:THR:H	41:BT:43:ILE:HG22	1.53	0.71
14:CN:33:VAL:HG22	14:CN:40:ARG:NH2	2.03	0.71
22:DA:242:G:H8	51:D3:3:ILE:O	1.72	0.71
22:DA:1438:U:C4	22:DA:1439:A:C2	2.79	0.71
22:DA:1628:G:O2'	22:DA:1629:U:H5'	1.91	0.71
22:DA:206:U:O2'	22:DA:207:A:H8	1.72	0.71
22:DA:228:C:H5''	22:DA:229:C:C5	2.25	0.71
22:DA:332:A:C4	22:DA:335:C:N4	2.59	0.71
22:DA:491:G:C2'	22:DA:492:A:C8	2.73	0.71
22:DA:620:G:O2'	22:DA:622:G:N7	2.24	0.71
24:DC:35:LYS:HB3	24:DC:35:LYS:HZ3	1.52	0.71
37:DP:88:ARG:NE	37:DP:112:ARG:HH21	1.89	0.71
1:AA:1152:A:C2'	1:AA:1153:G:H8	2.03	0.71
1:AA:1196:A:O2'	1:AA:1197:A:OP2	2.08	0.71
15:AO:2:LEU:HD22	15:AO:34:GLN:HG2	1.72	0.71
18:AR:55:ALA:HA	18:AR:58:ILE:HD12	1.73	0.71
24:BC:108:GLY:C	24:BC:109:LEU:HD22	2.11	0.71
25:BD:69:ALA:HA	25:BD:73:VAL:HG13	1.73	0.71
1:CA:1068:G:O2'	1:CA:1069:C:H5'	1.91	0.71
1:CA:1255:G:H21	1:CA:1258:G:N2	1.87	0.71
1:CA:79:G:H2'	1:CA:80:A:C8	2.26	0.71
10:CJ:81:GLU:O	10:CJ:86:ALA:HB3	1.90	0.71
13:CM:100:ARG:CZ	13:CM:102:LYS:HD3	2.21	0.71
22:DA:2056:G:N2	48:D0:1:ALA:N	2.36	0.71
22:DA:1666:G:O3'	32:DK:6:THR:HG23	1.90	0.71
22:DA:1809:A:C2	22:DA:1810:A:C4	2.78	0.71
22:DA:1809:A:O2'	22:DA:1810:A:H8	1.72	0.71
22:DA:2074:U:C2'	22:DA:2075:U:H5'	2.20	0.71
27:DF:30:VAL:HG13	27:DF:168:LEU:HD23	1.73	0.71
30:DI:77:VAL:HA	30:DI:80:LYS:HE3	1.73	0.71
31:DJ:57:LEU:HD11	31:DJ:129:GLU:H	1.54	0.71
32:DK:71:ARG:HB3	32:DK:72:PRO:HD2	1.71	0.71
22:DA:2873:A:H2	35:DN:5:LYS:HG3	1.55	0.71
47:DZ:23:LEU:HD12	47:DZ:28:LEU:HD21	1.73	0.71
1:AA:1152:A:HO2'	1:AA:1153:G:H8	1.39	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:54:LEU:C	4:AD:54:LEU:CD2	2.59	0.71
9:AI:129:ARG:HA	9:AI:129:ARG:NH1	2.06	0.71
22:BA:1747:U:O2'	22:BA:1748:C:H5'	1.90	0.71
22:BA:1857:G:H1'	22:BA:1884:G:N2	2.05	0.71
25:BD:122:VAL:HG12	25:BD:123:LYS:N	2.06	0.71
33:BL:77:ILE:HD11	33:BL:108:ALA:HB1	1.71	0.71
35:BN:38:LEU:HB3	35:BN:39:PRO:HD3	1.73	0.71
1:CA:1035:A:H2	1:CA:1036:A:H62	1.37	0.71
2:CB:59:ILE:HG22	2:CB:62:ARG:HD3	1.71	0.71
4:CD:204:SER:CB	5:CE:105:ILE:HD11	2.20	0.71
5:CE:19:ARG:HG3	5:CE:32:PHE:CE1	2.25	0.71
11:CK:27:ASN:ND2	11:CK:27:ASN:N	2.38	0.71
12:CL:42:LYS:CG	12:CL:43:LYS:HG2	2.21	0.71
21:CU:16:ARG:HG3	21:CU:19:LYS:HG3	1.70	0.71
22:DA:1662:U:O2'	22:DA:2687:U:H5''	1.91	0.71
22:DA:167:A:H3'	22:DA:168:G:H8	1.56	0.71
22:DA:2094:A:HO2'	22:DA:2095:A:H8	1.38	0.71
22:DA:1051:G:H5''	22:DA:2752:C:H1'	1.72	0.71
22:DA:70:G:O2'	22:DA:71:A:C5'	2.38	0.71
22:DA:1826:G:OP2	24:DC:220:ARG:HB3	1.91	0.71
29:DH:41:LYS:H	29:DH:44:ILE:HG23	1.55	0.71
33:DL:79:LEU:HB2	33:DL:113:ALA:H	1.55	0.71
35:DN:82:GLU:C	35:DN:85:PRO:HD2	2.10	0.71
41:DT:34:VAL:O	41:DT:34:VAL:HG12	1.90	0.71
42:DU:90:LYS:CE	42:DU:92:VAL:HG12	2.10	0.71
43:DV:9:ARG:HD3	43:DV:39:ALA:HB1	1.72	0.71
44:DW:8:SER:O	44:DW:9:THR:HB	1.90	0.71
1:AA:1303:C:O2'	1:AA:1304:G:H5'	1.91	0.71
1:AA:1324:A:H2'	1:AA:1325:C:C6	2.26	0.71
1:AA:1492:A:H2'	1:AA:1493:A:H5''	1.73	0.71
1:AA:818:G:O2'	1:AA:819:A:H5'	1.91	0.71
2:AB:40:ILE:CD1	2:AB:201:GLY:HA2	2.13	0.71
22:BA:1798:U:OP1	24:BC:257:ARG:HB2	1.90	0.71
28:BG:120:ILE:HD13	28:BG:121:THR:H	1.56	0.71
41:BT:15:HIS:HB3	41:BT:31:VAL:HG23	1.69	0.71
44:BW:54:ARG:HB2	44:BW:54:ARG:NH1	2.06	0.71
1:CA:1084:G:C5	1:CA:1085:U:C4	2.78	0.71
3:CC:80:GLY:O	3:CC:83:VAL:HG22	1.90	0.71
13:CM:12:LYS:HE2	13:CM:16:ILE:HG22	1.71	0.71
13:CM:78:ARG:NH2	13:CM:79:LEU:HD23	2.03	0.71
49:D1:33:LEU:H	49:D1:51:ALA:HB3	1.55	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:D3:56:LEU:CD1	51:D3:56:LEU:H	2.03	0.71
22:DA:999:U:H2'	22:DA:1000:A:H5'	1.71	0.71
22:DA:1722:A:N6	22:DA:1738:G:H1'	2.06	0.71
22:DA:2882:A:H5'	35:DN:96:ARG:HD3	1.73	0.71
22:DA:2060:A:C2'	26:DE:63:LYS:HZ2	1.99	0.71
30:DI:20:SER:OG	30:DI:25:PRO:HG2	1.91	0.71
32:DK:16:ALA:HB3	32:DK:46:ALA:N	2.06	0.71
36:DO:62:LEU:HD11	36:DO:65:THR:HG23	1.72	0.71
39:DR:43:ASN:ND2	39:DR:44:GLY:H	1.89	0.71
41:DT:15:HIS:CD2	41:DT:17:SER:HB2	2.26	0.71
43:DV:36:ALA:HB1	43:DV:37:PRO:HD2	1.73	0.71
43:DV:38:LEU:HD23	43:DV:40:ILE:HD12	1.73	0.71
1:AA:76:G:H2'	1:AA:76:G:N3	2.06	0.70
1:AA:914:A:N3	1:AA:915:A:C8	2.59	0.70
15:AO:63:ARG:HD3	15:AO:87:ARG:NH2	2.06	0.70
19:AS:79:TYR:O	19:AS:80:ARG:HB3	1.91	0.70
20:AT:27:MET:HE1	20:AT:57:VAL:HA	1.72	0.70
22:BA:395:U:O2'	22:BA:396:G:N7	2.23	0.70
22:BA:646:U:H3'	22:BA:647:G:C5'	2.21	0.70
22:BA:675:A:OP1	26:BE:58:LYS:HE2	1.91	0.70
37:BP:4:ILE:HG22	37:BP:5:LYS:N	2.04	0.70
37:BP:4:ILE:O	37:BP:5:LYS:HB3	1.91	0.70
1:CA:1051:C:O2'	1:CA:1052:U:O5'	2.07	0.70
1:CA:93:U:O2'	1:CA:94:G:H5"	1.91	0.70
2:CB:112:ARG:O	2:CB:112:ARG:HG3	1.91	0.70
15:CO:32:THR:HG23	15:CO:62:ARG:NH1	2.05	0.70
19:CS:28:LYS:HB3	19:CS:29:PRO:HD2	1.72	0.70
22:DA:1079:C:O2'	22:DA:1080:A:C8	2.43	0.70
22:DA:2210:U:H4'	22:DA:2211:A:C5'	2.21	0.70
22:DA:2720:U:H5"	37:DP:52:ARG:HH21	1.56	0.70
22:DA:373:U:HO2'	22:DA:374:A:H5'	1.55	0.70
22:DA:831:G:O2'	22:DA:832:U:H5'	1.91	0.70
26:DE:134:LEU:HA	26:DE:137:LYS:CB	2.21	0.70
28:DG:90:GLY:HA2	28:DG:159:LYS:HE3	1.73	0.70
32:DK:64:ARG:HD2	32:DK:102:PRO:O	1.91	0.70
35:DN:87:PHE:CE1	35:DN:90:ARG:HD2	2.26	0.70
37:DP:28:LYS:HB3	37:DP:39:LEU:CD2	2.20	0.70
42:DU:43:LYS:HG2	42:DU:45:GLN:HG2	1.73	0.70
1:AA:373:A:O2'	1:AA:374:A:H5'	1.91	0.70
1:AA:536:C:H2'	1:AA:537:G:H8	1.56	0.70
17:AQ:80:LYS:HB2	17:AQ:80:LYS:NZ	2.06	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AU:36:PHE:CD1	21:AU:39:LYS:HB3	2.23	0.70
22:BA:1459:G:O2'	22:BA:1460:U:H5''	1.91	0.70
22:BA:1734:G:N3	22:BA:1735:A:C8	2.59	0.70
22:BA:2269:G:H4'	44:BW:18:LYS:HE2	1.71	0.70
22:BA:2325:G:C6	22:BA:2326:C:N4	2.59	0.70
22:BA:2615:U:C2	48:B0:3:GLN:HA	2.25	0.70
22:BA:368:A:H2'	22:BA:369:U:H5'	1.74	0.70
22:BA:869:G:O2'	34:BM:8:LYS:HD3	1.90	0.70
42:BU:72:PHE:CE2	42:BU:74:ALA:HA	2.26	0.70
44:BW:39:GLN:HG3	44:BW:42:THR:H	1.52	0.70
44:BW:51:GLY:HA3	44:BW:59:PHE:CZ	2.25	0.70
46:BY:9:LYS:HZ2	46:BY:10:SER:H	1.39	0.70
1:CA:194:C:O2'	1:CA:195:A:H5'	1.91	0.70
1:CA:563:A:OP2	12:CL:11:ARG:HG3	1.91	0.70
11:CK:117:HIS:O	11:CK:118:ASN:HB2	1.90	0.70
14:CN:20:PHE:HA	14:CN:24:ALA:HB2	1.73	0.70
18:CR:71:ASP:OD1	21:CU:3:ILE:HD11	1.92	0.70
22:DA:1097:U:H2'	22:DA:1098:A:O4'	1.91	0.70
22:DA:1298:C:H42	22:DA:1642:G:H1	1.37	0.70
22:DA:141:G:H3'	22:DA:142:A:O4'	1.91	0.70
22:DA:1844:C:O2'	22:DA:1845:G:H5'	1.91	0.70
22:DA:1373:A:C5'	22:DA:2212:A:H1'	2.21	0.70
22:DA:2311:A:H5'	22:DA:2312:U:C6	2.25	0.70
22:DA:2425:A:H1'	22:DA:2427:C:C4	2.26	0.70
22:DA:33:C:H2'	22:DA:446:G:N2	2.07	0.70
22:DA:475:C:H4'	22:DA:509:C:O2'	1.91	0.70
22:DA:614:A:C4'	22:DA:616:A:H62	2.05	0.70
22:DA:709:U:H2'	22:DA:710:U:C6	2.26	0.70
22:DA:784:G:C2	24:DC:227:VAL:CG2	2.67	0.70
27:DF:41:GLU:HG2	27:DF:42:ALA:H	1.57	0.70
28:DG:117:PRO:HD2	28:DG:120:ILE:HG22	1.73	0.70
35:DN:7:GLY:HA2	35:DN:46:ARG:HH22	1.55	0.70
1:AA:1101:A:H4'	1:AA:1102:A:O5'	1.90	0.70
1:AA:480:U:H5''	1:AA:481:G:OP2	1.91	0.70
1:AA:92:U:O2'	1:AA:93:U:H5'	1.92	0.70
2:AB:15:PHE:O	2:AB:40:ILE:HG12	1.91	0.70
2:AB:46:VAL:HB	2:AB:47:PRO:CD	2.17	0.70
4:AD:116:LEU:C	4:AD:122:ILE:HD11	2.11	0.70
17:AQ:69:THR:O	17:AQ:69:THR:HG22	1.90	0.70
51:B3:26:ALA:O	51:B3:27:ASN:CB	2.39	0.70
22:BA:1450:G:C6	22:BA:1451:C:N4	2.60	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:196:A:H2'	22:BA:805:G:O6	1.92	0.70
25:BD:108:ASP:OD2	25:BD:173:GLN:HA	1.92	0.70
28:BG:34:ARG:HD3	28:BG:34:ARG:N	2.06	0.70
33:BL:29:LYS:HG3	33:BL:30:THR:HG23	1.73	0.70
33:BL:4:ASN:HD22	33:BL:4:ASN:H	1.39	0.70
38:BQ:85:ALA:O	38:BQ:86:SER:C	2.29	0.70
42:BU:71:ILE:HD11	42:BU:81:ARG:N	2.06	0.70
1:CA:371:A:C2'	1:CA:372:C:H5'	2.21	0.70
6:CF:90:MET:CE	18:CR:60:ARG:HD3	2.22	0.70
14:CN:79:SER:HB2	14:CN:81:ILE:HD11	1.73	0.70
15:CO:2:LEU:HD13	15:CO:34:GLN:NE2	2.05	0.70
16:CP:48:GLU:HG3	16:CP:51:ARG:NE	2.05	0.70
22:DA:125:A:C5'	50:D2:19:ARG:HD3	2.21	0.70
22:DA:1716:U:O2'	22:DA:1717:A:H8	1.68	0.70
22:DA:1816:C:H2'	24:DC:61:TYR:CZ	2.26	0.70
22:DA:1858:A:C2	22:DA:1859:U:C2	2.79	0.70
22:DA:1965:C:C5'	22:DA:1966:A:H5''	2.21	0.70
22:DA:2262:U:H5''	44:DW:38:ARG:NH2	2.06	0.70
22:DA:2752:C:C2'	22:DA:2753:A:C8	2.74	0.70
22:DA:807:U:H2'	22:DA:807:U:O2	1.91	0.70
26:DE:139:LYS:NZ	26:DE:139:LYS:HB2	2.07	0.70
35:DN:73:ASN:HA	35:DN:76:VAL:CG2	2.21	0.70
42:DU:17:ASP:HB2	42:DU:38:ILE:HA	1.72	0.70
44:DW:46:ALA:HA	44:DW:50:VAL:HG12	1.72	0.70
1:AA:1171:A:H2'	1:AA:1172:C:C6	2.26	0.70
1:AA:290:C:C2'	1:AA:291:U:H5'	2.21	0.70
6:AF:52:ASN:O	6:AF:53:LYS:CB	2.39	0.70
7:AG:79:VAL:HG12	7:AG:80:GLY:N	2.04	0.70
19:AS:4:LEU:HD12	19:AS:4:LEU:H	1.55	0.70
22:BA:2192:U:O2'	22:BA:2193:G:H5'	1.92	0.70
22:BA:2667:C:C2'	22:BA:2668:G:H5'	2.21	0.70
23:BB:90:C:H6	23:BB:90:C:C5'	2.00	0.70
31:BJ:58:ASN:HD21	31:BJ:128:ASN:HB2	1.55	0.70
32:BK:76:VAL:HB	37:BP:72:VAL:HG22	1.72	0.70
1:CA:112:G:H2'	1:CA:113:G:H5'	1.73	0.70
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.27	0.70
1:CA:814:A:H5'	1:CA:1511:G:H4'	1.72	0.70
1:CA:198:G:C4	1:CA:199:A:C8	2.79	0.70
1:CA:252:U:H2'	1:CA:253:A:H8	1.56	0.70
6:CF:25:TYR:O	6:CF:29:ILE:HD13	1.91	0.70
7:CG:64:ALA:HB2	7:CG:126:ALA:HB1	1.72	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:49:GLN:N	9:CI:50:PRO:HD2	2.06	0.70
12:CL:3:VAL:O	12:CL:7:VAL:HG23	1.91	0.70
17:CQ:30:HIS:CD2	17:CQ:31:PRO:HD2	2.27	0.70
11:CK:126:ARG:O	21:CU:33:ARG:NH2	2.25	0.70
22:DA:1794:A:H2'	22:DA:1795:C:C6	2.26	0.70
22:DA:390:U:O2'	22:DA:391:A:C8	2.43	0.70
22:DA:673:C:O4'	26:DE:77:ILE:HD11	1.92	0.70
44:DW:77:LYS:O	44:DW:78:PHE:HB2	1.90	0.70
1:AA:934:C:H5	1:AA:1344:C:H2'	1.57	0.70
4:AD:110:ARG:O	4:AD:113:ALA:HB3	1.91	0.70
9:AI:6:TYR:O	9:AI:85:ALA:HA	1.92	0.70
10:AJ:65:TYR:HB3	14:AN:95:LEU:HD11	1.71	0.70
16:AP:12:LYS:HG2	16:AP:13:LYS:HG2	1.74	0.70
22:BA:1188:U:C2'	22:BA:1189:A:C5'	2.68	0.70
22:BA:1508:A:H4'	22:BA:1509:A:H5'	1.74	0.70
22:BA:2211:A:OP2	22:BA:2211:A:H4'	1.89	0.70
22:BA:21:A:O2'	22:BA:22:C:H5'	1.92	0.70
22:BA:485:C:H2'	22:BA:486:C:H6	1.56	0.70
22:BA:684:G:OP1	50:B2:21:ARG:NH1	2.24	0.70
25:BD:101:PHE:CZ	25:BD:203:VAL:HG22	2.27	0.70
26:BE:150:THR:HG21	26:BE:153:LEU:HA	1.73	0.70
31:BJ:81:ILE:HG23	31:BJ:82:GLY:N	2.00	0.70
42:BU:78:LYS:HG2	42:BU:79:ALA:H	1.55	0.70
1:CA:613:C:H2'	1:CA:614:C:C6	2.27	0.70
3:CC:148:ILE:HD13	3:CC:201:ILE:CG1	2.21	0.70
3:CC:190:THR:HG22	3:CC:191:THR:N	2.07	0.70
12:CL:87:LYS:HG2	12:CL:87:LYS:O	1.92	0.70
14:CN:2:LYS:HD3	14:CN:5:MET:HG2	1.74	0.70
15:CO:69:LEU:O	15:CO:69:LEU:HD13	1.92	0.70
22:DA:1669:A:C2'	22:DA:1669:A:N3	2.55	0.70
22:DA:2443:C:H2'	22:DA:2444:G:O4'	1.92	0.70
22:DA:224:U:H5	22:DA:420:C:H4'	1.56	0.70
22:DA:873:C:H4'	34:DM:64:TRP:CD1	2.26	0.70
31:DJ:92:MET:HA	31:DJ:92:MET:HE2	1.72	0.70
1:AA:731:G:OP1	1:AA:766:A:H1'	1.92	0.70
1:AA:820:U:H4'	1:AA:821:G:OP2	1.90	0.70
1:AA:972:C:H4'	10:AJ:59:LYS:CG	2.21	0.70
22:BA:1080:A:O2'	30:BI:126:ARG:CG	2.39	0.70
22:BA:1115:G:HO2'	22:BA:1116:G:H8	1.39	0.70
24:BC:90:ILE:CG2	24:BC:102:TYR:CD1	2.75	0.70
27:BF:66:ILE:O	27:BF:66:ILE:HG13	1.90	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BS:2:GLU:O	40:BS:107:VAL:O	2.08	0.70
41:BT:8:LEU:HD22	41:BT:8:LEU:N	2.05	0.70
1:CA:865:A:C2	1:CA:918:A:H4'	2.26	0.70
1:CA:989:U:C2'	1:CA:990:C:H5'	2.22	0.70
8:CH:102:VAL:CG2	8:CH:125:ILE:HB	2.21	0.70
12:CL:3:VAL:HG23	12:CL:4:ASN:H	1.57	0.70
12:CL:49:ARG:HG2	12:CL:89:LEU:HD21	1.73	0.70
16:CP:44:SER:H	16:CP:46:LYS:NZ	1.89	0.70
22:DA:1826:G:C6	22:DA:1827:U:C4	2.80	0.70
22:DA:270:A:N1	22:DA:369:U:H1'	2.05	0.70
22:DA:2800:A:O2'	22:DA:2801:G:C4'	2.30	0.70
22:DA:976:G:H2'	22:DA:977:G:H8	1.57	0.70
23:DB:15:A:C8	23:DB:109:A:N6	2.59	0.70
24:DC:127:ASN:O	24:DC:190:THR:HA	1.91	0.70
29:DH:68:ARG:HD2	29:DH:68:ARG:O	1.91	0.70
46:DY:56:LEU:O	46:DY:59:GLU:HG2	1.90	0.70
9:AI:28:VAL:HB	9:AI:63:TYR:HD2	1.57	0.70
17:AQ:11:VAL:HG12	17:AQ:12:VAL:N	2.07	0.70
22:BA:412:A:C2'	22:BA:413:C:H5'	2.21	0.70
27:BF:134:GLN:N	27:BF:134:GLN:NE2	2.39	0.70
1:CA:102:G:N2	1:CA:103:U:C2	2.60	0.70
2:CB:150:ILE:HD11	2:CB:153:MET:CE	2.21	0.70
3:CC:112:ALA:O	3:CC:199:VAL:HG21	1.91	0.70
51:D3:22:LYS:H	51:D3:48:MET:HB3	1.56	0.70
22:DA:1060:U:H1'	22:DA:1062:G:OP2	1.91	0.70
22:DA:1536:C:H4'	22:DA:1537:G:C5'	2.21	0.70
22:DA:475:C:O2'	22:DA:476:G:H5'	1.91	0.70
22:DA:659:G:H2'	22:DA:660:C:C6	2.27	0.70
22:DA:783:A:H2	22:DA:1778:U:H4'	1.54	0.70
24:DC:255:LYS:C	24:DC:256:THR:HG23	2.10	0.70
28:DG:122:ALA:CB	28:DG:132:LEU:HG	2.21	0.70
2:AB:58:LYS:C	2:AB:58:LYS:HD3	2.12	0.70
10:AJ:21:ALA:HA	10:AJ:24:GLU:OE2	1.92	0.70
12:AL:43:LYS:HZ2	12:AL:44:PRO:HD3	1.54	0.70
22:BA:2180:U:H2'	22:BA:2181:U:C5	2.27	0.70
22:BA:2480:C:C2'	22:BA:2481:G:H5'	2.22	0.70
38:BQ:63:ARG:NH2	38:BQ:95:ALA:C	2.45	0.70
39:BR:49:ILE:HG22	39:BR:54:VAL:N	2.07	0.70
44:BW:23:LYS:CG	44:BW:24:ARG:N	2.54	0.70
1:CA:1130:A:C5	1:CA:1146:A:C6	2.79	0.70
1:CA:1160:G:O6	1:CA:1181:G:C6	2.45	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1225:A:H4'	19:CS:77:ARG:NH1	2.06	0.70
1:CA:197:A:N6	1:CA:221:C:H4'	2.07	0.70
2:CB:74:ALA:HB1	2:CB:206:ILE:HD11	1.72	0.70
22:DA:1652:A:H62	35:DN:11:ASN:ND2	1.90	0.70
22:DA:2360:G:H1'	33:DL:60:ARG:NH2	2.02	0.70
22:DA:2531:A:C5'	28:DG:156:TYR:CZ	2.75	0.70
31:DJ:20:ALA:HA	31:DJ:23:LYS:CG	2.21	0.70
35:DN:24:MET:CG	35:DN:44:LEU:HD22	2.21	0.70
37:DP:88:ARG:NH1	37:DP:112:ARG:HH21	1.88	0.70
38:DQ:10:ARG:HB2	38:DQ:10:ARG:NH1	2.06	0.70
45:DX:6:VAL:HG12	45:DX:50:VAL:HG12	1.72	0.70
1:AA:804:U:H5''	1:AA:805:C:OP2	1.92	0.70
1:AA:598:U:H4'	8:AH:85:TYR:CD1	2.27	0.70
17:AQ:49:ASN:O	17:AQ:51:GLU:N	2.25	0.70
22:BA:746:U:O2'	22:BA:747:U:OP2	2.10	0.70
24:BC:199:HIS:CE1	24:BC:202:ARG:NH2	2.60	0.70
29:BH:134:VAL:HG21	29:BH:139:PHE:CA	2.21	0.70
29:BH:99:ILE:HG22	29:BH:99:ILE:O	1.92	0.70
1:CA:1278:G:H5'	1:CA:1279:G:H5'	1.73	0.70
1:CA:266:G:O2'	1:CA:267:C:H3'	1.92	0.70
1:CA:968:A:N3	1:CA:1062:U:H4'	2.07	0.70
7:CG:22:LEU:HA	7:CG:25:PHE:CB	2.17	0.70
5:CE:154:ALA:HB1	8:CH:65:PHE:CE2	2.27	0.70
9:CI:78:ILE:O	9:CI:82:ILE:HG13	1.92	0.70
10:CJ:38:GLY:O	10:CJ:40:ILE:HD12	1.91	0.70
49:D1:10:LEU:CD2	49:D1:20:TYR:HB3	2.21	0.70
22:DA:1430:G:O2'	22:DA:1431:A:C5'	2.39	0.70
22:DA:1441:G:H2'	22:DA:1442:U:C6	2.27	0.70
22:DA:2336:A:C8	44:DW:40:ARG:NH2	2.59	0.70
22:DA:489:G:H2'	22:DA:491:G:C8	2.26	0.70
22:DA:605:G:H1'	22:DA:657:U:O2'	1.91	0.70
22:DA:720:U:H2'	22:DA:721:A:C8	2.27	0.70
23:DB:19:C:O2'	23:DB:20:G:H5'	1.92	0.70
26:DE:149:ILE:HG23	26:DE:188:MET:HA	1.74	0.70
26:DE:149:ILE:HG23	26:DE:188:MET:HB2	1.72	0.70
29:DH:68:ARG:CG	29:DH:71:LYS:HD3	2.22	0.70
33:DL:110:VAL:HB	33:DL:127:VAL:HA	1.74	0.70
33:DL:142:ILE:HG22	33:DL:144:GLU:H	1.57	0.70
34:DM:33:LEU:CD2	34:DM:128:THR:HB	2.21	0.70
34:DM:26:VAL:HG21	34:DM:132:THR:O	1.91	0.70
35:DN:65:LEU:H	35:DN:65:LEU:HD12	1.57	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:52:ARG:CG	37:DP:52:ARG:NH1	2.45	0.70
45:DX:53:LYS:CA	45:DX:56:ARG:HB3	2.17	0.70
46:DY:19:LEU:HG	46:DY:22:LEU:HD22	1.74	0.70
1:AA:352:C:C6	1:AA:352:C:H5''	2.25	0.70
1:AA:994:A:O2'	1:AA:995:C:H5'	1.92	0.70
1:AA:1240:U:H3	7:AG:29:LEU:HD21	1.57	0.70
10:AJ:42:LEU:HB3	10:AJ:43:PRO:CD	2.21	0.70
22:BA:2454:G:H1'	56:BA:3533:HOH:O	1.92	0.70
22:BA:2728:U:O2'	22:BA:2729:G:O5'	2.09	0.70
22:BA:894:U:H2'	22:BA:895:U:H6	1.52	0.70
24:BC:33:LEU:CD2	24:BC:62:ARG:HD3	2.22	0.70
31:BJ:95:ARG:O	31:BJ:95:ARG:HG3	1.91	0.70
34:BM:72:PRO:O	34:BM:91:TYR:O	2.09	0.70
43:BV:10:LYS:HZ1	43:BV:11:GLU:HG3	1.55	0.70
44:BW:22:VAL:HG13	44:BW:25:PHE:CE2	2.26	0.70
1:CA:1383:C:O2'	1:CA:1384:C:C5'	2.38	0.70
1:CA:659:U:H2'	1:CA:660:C:H6	1.55	0.70
1:CA:828:U:H2'	1:CA:829:G:O5'	1.92	0.70
7:CG:24:LYS:O	7:CG:28:ILE:HG12	1.91	0.70
19:CS:62:THR:HG22	19:CS:63:ASP:H	1.57	0.70
22:DA:1534:U:C6	22:DA:1538:G:N1	2.58	0.70
22:DA:1534:U:H2'	22:DA:1536:C:O2	1.91	0.70
22:DA:704:G:H1'	22:DA:727:A:N6	2.06	0.70
22:DA:919:U:H2'	22:DA:920:A:O4'	1.92	0.70
22:DA:921:C:H2'	22:DA:922:C:C5'	2.18	0.70
30:DI:102:ARG:HH11	30:DI:105:LEU:HD13	1.55	0.70
34:DM:108:VAL:HG21	34:DM:112:LEU:HB3	1.74	0.70
35:DN:34:ILE:CG2	35:DN:113:ILE:HG22	2.22	0.70
1:AA:1031:C:O2'	1:AA:1032:G:H5''	1.92	0.69
1:AA:771:G:H2'	1:AA:772:U:H6	1.56	0.69
6:AF:49:TYR:CE2	6:AF:51:ILE:HB	2.26	0.69
7:AG:92:PRO:O	7:AG:93:VAL:HG13	1.92	0.69
11:AK:109:ILE:CG2	21:AU:16:ARG:HE	2.05	0.69
22:BA:63:A:O2'	22:BA:64:A:H5'	1.92	0.69
27:BF:127:TYR:O	27:BF:128:SER:CB	2.40	0.69
29:BH:4:ILE:HG12	29:BH:18:GLN:NE2	2.06	0.69
31:BJ:4:PHE:O	31:BJ:44:TYR:CE1	2.45	0.69
39:BR:49:ILE:O	39:BR:49:ILE:HG13	1.91	0.69
39:BR:81:LYS:N	39:BR:81:LYS:HD3	2.03	0.69
44:BW:24:ARG:HD2	44:BW:25:PHE:N	2.06	0.69
44:BW:39:GLN:HG2	44:BW:41:GLY:N	2.05	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1455:G:H2'	1:CA:1456:A:C8	2.27	0.69
1:CA:17:U:C2	1:CA:18:C:C5	2.80	0.69
1:CA:254:G:HO2'	1:CA:255:G:H5'	1.56	0.69
1:CA:960:U:H4'	1:CA:961:U:O5'	1.91	0.69
3:CC:133:MET:O	3:CC:137:VAL:HG23	1.92	0.69
12:CL:14:LYS:HE2	12:CL:15:VAL:C	2.13	0.69
20:CT:34:VAL:HG12	20:CT:78:LEU:HD21	1.74	0.69
48:D0:5:ASN:HD22	48:D0:6:LYS:H	1.39	0.69
22:DA:156:A:H2'	22:DA:157:C:O4'	1.92	0.69
22:DA:1975:G:C4	22:DA:1976:U:C5	2.80	0.69
22:DA:2201:G:H2'	22:DA:2202:U:C6	2.27	0.69
22:DA:2523:G:C2'	22:DA:2524:G:H5'	2.22	0.69
22:DA:14:A:C6	22:DA:526:A:C2	2.79	0.69
26:DE:29:HIS:HB2	33:DL:6:LEU:CD2	2.22	0.69
36:DO:30:ARG:HA	36:DO:35:ILE:CD1	2.22	0.69
37:DP:75:THR:HG23	37:DP:76:HIS:CD2	2.27	0.69
1:AA:923:A:O4'	1:AA:1398:A:C2	2.45	0.69
1:AA:351:G:H4'	1:AA:352:C:OP1	1.91	0.69
9:AI:83:THR:HG21	9:AI:102:PHE:HB3	1.72	0.69
13:AM:39:ALA:HB3	13:AM:42:VAL:CG2	2.21	0.69
22:BA:1063:G:H2'	22:BA:1064:C:C6	2.26	0.69
22:BA:1288:G:C4	22:BA:1327:A:C2	2.80	0.69
22:BA:1430:G:C2'	22:BA:1431:A:H5'	2.22	0.69
22:BA:1996:C:H4'	22:BA:1997:C:OP1	1.92	0.69
33:BL:77:ILE:HG12	33:BL:95:LEU:CD1	2.21	0.69
34:BM:46:ILE:C	34:BM:46:ILE:HD12	2.11	0.69
44:BW:19:ARG:NH1	44:BW:22:VAL:HG11	2.07	0.69
8:CH:1:SER:C	8:CH:3:GLN:H	1.95	0.69
13:CM:85:TYR:HE2	13:CM:96:VAL:CG1	2.06	0.69
22:DA:1071:G:N7	22:DA:1089:A:C6	2.59	0.69
22:DA:1379:U:H2'	22:DA:1379:U:O2	1.91	0.69
22:DA:1901:A:H4'	22:DA:1901:A:OP2	1.92	0.69
22:DA:921:C:C2'	22:DA:922:C:C5'	2.70	0.69
24:DC:119:VAL:HG13	24:DC:133:ASN:HD21	1.56	0.69
29:DH:94:ILE:HG13	29:DH:98:ASP:CB	2.22	0.69
30:DI:57:VAL:O	30:DI:58:ILE:HG13	1.92	0.69
34:DM:34:LYS:HD3	34:DM:131:VAL:HG21	1.73	0.69
22:DA:1249:U:H4'	38:DQ:3:VAL:HG11	1.74	0.69
2:AB:41:ASN:OD1	2:AB:44:LYS:HB2	1.93	0.69
8:AH:17:GLN:NE2	8:AH:71:VAL:HG23	2.05	0.69
22:BA:1032:A:H1'	52:B4:23:ILE:CD1	2.22	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2478:A:H5'	52:B4:32:LYS:HD3	1.73	0.69
22:BA:1794:A:H2'	22:BA:1795:C:C6	2.28	0.69
22:BA:2689:U:H4'	22:BA:2690:U:OP2	1.92	0.69
22:BA:285:G:H2'	22:BA:285:G:N3	2.06	0.69
26:BE:12:LEU:HD13	26:BE:12:LEU:O	1.93	0.69
27:BF:9:ASP:O	27:BF:10:GLU:HB2	1.92	0.69
28:BG:126:THR:CG2	28:BG:127:GLN:H	2.05	0.69
30:BI:74:PRO:O	30:BI:77:VAL:HG22	1.93	0.69
33:BL:95:LEU:HD13	33:BL:100:ILE:HD11	1.73	0.69
33:BL:91:ASP:CB	33:BL:94:THR:HB	2.21	0.69
33:BL:92:LEU:HA	33:BL:125:LEU:HD21	1.75	0.69
38:BQ:89:ILE:O	38:BQ:90:ASP:HB2	1.93	0.69
42:BU:93:ARG:HH11	42:BU:102:ILE:HD11	1.56	0.69
22:BA:1364:G:OP2	45:BX:1:SER:N	2.23	0.69
1:CA:375:U:O3'	16:CP:6:LEU:HD12	1.92	0.69
1:CA:511:C:O2'	1:CA:512:U:C5'	2.40	0.69
1:CA:302:G:O2'	1:CA:556:C:H5''	1.93	0.69
1:CA:881:G:C6	1:CA:882:C:C4	2.80	0.69
1:CA:885:G:H1'	1:CA:914:A:N1	2.06	0.69
7:CG:22:LEU:HD23	7:CG:22:LEU:O	1.91	0.69
11:CK:30:ILE:HA	11:CK:45:THR:HG22	1.74	0.69
14:CN:59:GLN:O	14:CN:60:ARG:HB2	1.92	0.69
17:CQ:11:VAL:CG2	17:CQ:58:VAL:HG13	2.23	0.69
22:DA:1555:G:O2'	22:DA:1556:C:H5'	1.92	0.69
22:DA:2344:U:H4'	22:DA:2345:G:OP1	1.91	0.69
22:DA:2353:G:H21	44:DW:30:VAL:HG22	1.58	0.69
22:DA:505:A:O2'	22:DA:506:G:H5'	1.92	0.69
22:DA:656:G:O2'	22:DA:657:U:H5'	1.93	0.69
28:DG:48:THR:O	28:DG:49:LEU:HB2	1.91	0.69
29:DH:8:LYS:C	29:DH:8:LYS:HD2	2.13	0.69
22:DA:2848:G:OP2	37:DP:94:ALA:CB	2.40	0.69
43:DV:30:ILE:HG13	43:DV:40:ILE:HD11	1.74	0.69
1:AA:533:A:OP1	56:AA:1850:HOH:O	2.10	0.69
5:AE:14:LEU:HB2	5:AE:36:THR:HG22	1.75	0.69
22:BA:1510:G:H2'	22:BA:1511:G:C8	2.25	0.69
28:BG:137:LYS:C	28:BG:140:ILE:CD1	2.61	0.69
30:BI:89:SER:HB3	30:BI:92:PRO:HG3	1.72	0.69
31:BJ:21:THR:HG22	31:BJ:22:GLY:N	2.07	0.69
32:BK:10:VAL:CG2	32:BK:16:ALA:HB1	2.22	0.69
1:CA:960:U:O2'	1:CA:1223:C:H5''	1.90	0.69
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.27	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1454:G:O2'	1:CA:1455:G:H8	1.69	0.69
1:CA:865:A:H2	1:CA:918:A:H4'	1.56	0.69
2:CB:111:LYS:C	2:CB:111:LYS:HD3	2.13	0.69
2:CB:122:ASP:HB3	2:CB:124:THR:HG22	1.74	0.69
3:CC:129:PHE:CE1	3:CC:156:LEU:HB3	2.28	0.69
8:CH:86:LYS:HB2	8:CH:124:ILE:HD11	1.72	0.69
9:CI:74:GLN:O	9:CI:78:ILE:HG13	1.93	0.69
11:CK:19:VAL:HB	11:CK:34:THR:HG23	1.73	0.69
22:DA:1153:C:H2'	22:DA:1154:G:C8	2.27	0.69
22:DA:2267:A:N6	22:DA:2272:U:N3	2.40	0.69
22:DA:2839:G:N2	22:DA:2880:C:C4	2.61	0.69
22:DA:310:A:HO2'	22:DA:311:A:H8	0.77	0.69
41:DT:34:VAL:CG2	41:DT:83:ALA:HB2	2.22	0.69
44:DW:28:GLU:N	44:DW:31:LEU:HD21	2.05	0.69
47:DZ:16:LEU:HD23	47:DZ:19:HIS:CD2	2.27	0.69
6:AF:93:LYS:O	6:AF:94:HIS:HB2	1.93	0.69
13:AM:10:ASP:CG	13:AM:11:HIS:N	2.46	0.69
13:AM:47:LEU:CD2	13:AM:51:GLN:HB3	2.21	0.69
49:B1:34:GLU:O	49:B1:35:LEU:HB3	1.92	0.69
22:BA:143:C:O2'	22:BA:144:A:H8	1.76	0.69
22:BA:2210:U:H4'	22:BA:2211:A:H5'	1.73	0.69
24:BC:159:THR:O	24:BC:194:VAL:HG12	1.92	0.69
30:BI:98:GLY:HA3	30:BI:137:LEU:HD23	1.75	0.69
31:BJ:43:GLU:O	31:BJ:45:THR:HG22	1.91	0.69
32:BK:70:ARG:HD3	32:BK:76:VAL:HG22	1.72	0.69
41:BT:29:THR:HA	41:BT:86:THR:H	1.57	0.69
44:BW:23:LYS:NZ	44:BW:24:ARG:HG3	2.06	0.69
44:BW:72:GLY:N	44:BW:73:PRO:HD2	2.07	0.69
1:CA:1101:A:H1'	1:CA:1102:A:O4'	1.93	0.69
4:CD:54:LEU:O	4:CD:58:GLN:HB2	1.92	0.69
7:CG:4:ARG:HD2	7:CG:5:VAL:N	2.07	0.69
8:CH:93:LYS:CD	8:CH:93:LYS:H	2.00	0.69
22:DA:2756:U:H5''	52:D4:19:ARG:HA	1.74	0.69
22:DA:1307:A:O2'	22:DA:1308:A:H5'	1.91	0.69
22:DA:1394:U:H3'	22:DA:1394:U:C6	2.27	0.69
22:DA:1467:U:H2'	22:DA:1468:U:H5'	1.74	0.69
22:DA:165:A:H2'	22:DA:166:U:H6	1.55	0.69
22:DA:249:C:C5'	22:DA:2394:C:O2'	2.40	0.69
22:DA:774:G:HO2'	22:DA:775:G:H8	1.38	0.69
24:DC:171:VAL:HG12	24:DC:173:LEU:HD13	1.74	0.69
22:DA:2680:U:OP2	25:DD:114:LYS:HD3	1.92	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:56:SER:HB2	37:DP:75:THR:HG21	1.74	0.69
1:AA:115:G:H4'	1:AA:116:A:O5'	1.91	0.69
1:AA:363:A:O2'	1:AA:364:A:H5'	1.93	0.69
1:AA:654:G:H2'	1:AA:655:A:C8	2.27	0.69
4:AD:88:ASN:HA	4:AD:91:ALA:HB3	1.74	0.69
6:AF:3:HIS:HB2	6:AF:92:THR:HG23	1.75	0.69
22:BA:1256:G:C2'	26:BE:77:ILE:HD11	2.22	0.69
22:BA:1572:A:O2'	22:BA:1573:G:H5'	1.93	0.69
22:BA:2221:G:O2'	22:BA:2222:C:H5'	1.92	0.69
22:BA:2729:G:H8	22:BA:2729:G:H5''	1.57	0.69
25:BD:97:SER:O	25:BD:99:GLU:HG2	1.91	0.69
26:BE:187:VAL:HG12	26:BE:188:MET:N	2.08	0.69
31:BJ:74:TYR:HB2	31:BJ:87:ALA:O	1.93	0.69
44:BW:18:LYS:CA	44:BW:36:ILE:CG1	2.70	0.69
44:BW:9:THR:HG22	44:BW:10:ARG:HH11	1.57	0.69
1:CA:1394:A:C5	1:CA:1501:C:H4'	2.28	0.69
2:CB:80:LYS:HD3	2:CB:90:PHE:CZ	2.27	0.69
22:DA:1054:A:C4	22:DA:1055:G:H1'	2.28	0.69
22:DA:1808:A:C3'	22:DA:1809:A:C8	2.75	0.69
22:DA:2142:A:N6	22:DA:2150:C:N4	2.41	0.69
22:DA:2663:G:H2'	22:DA:2664:G:H8	1.55	0.69
22:DA:2815:C:C2	22:DA:2816:G:C8	2.81	0.69
22:DA:802:A:H2'	22:DA:803:U:H6	1.54	0.69
25:DD:107:VAL:CG1	25:DD:109:VAL:HG23	2.23	0.69
26:DE:6:LYS:HG2	26:DE:7:ASP:CG	2.12	0.69
28:DG:116:LEU:HD13	28:DG:120:ILE:O	1.93	0.69
32:DK:88:ASN:CB	32:DK:91:SER:HB2	2.23	0.69
38:DQ:87:VAL:HG12	38:DQ:88:GLU:N	2.06	0.69
44:DW:23:LYS:CD	44:DW:24:ARG:H	2.04	0.69
1:AA:1226:C:H4'	1:AA:1227:A:OP1	1.91	0.69
1:AA:468:A:C2'	1:AA:469:C:H5'	2.22	0.69
1:AA:674:G:H4'	18:AR:69:TYR:HD1	1.54	0.69
1:AA:92:U:H2'	1:AA:93:U:C5	2.28	0.69
7:AG:86:VAL:HG22	7:AG:150:PHE:HB3	1.74	0.69
52:B4:36:ARG:HG2	52:B4:37:GLN:N	2.02	0.69
22:BA:1735:A:H2'	22:BA:1736:U:C6	2.28	0.69
22:BA:2574:G:OP1	56:BA:3710:HOH:O	2.09	0.69
22:BA:527:C:H4'	22:BA:528:A:O5'	1.93	0.69
34:BM:80:VAL:CG2	34:BM:81:ARG:N	2.55	0.69
22:BA:581:C:OP1	38:BQ:32:ARG:HB2	1.93	0.69
22:BA:851:C:O2'	47:BZ:45:GLY:HA3	1.93	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1000:A:H1'	1:CA:1041:G:N2	2.07	0.69
1:CA:1391:U:O2'	1:CA:1392:G:H5'	1.93	0.69
1:CA:369:G:H2'	1:CA:370:C:H6	1.57	0.69
1:CA:663:A:C2'	1:CA:664:G:H5'	2.23	0.69
11:CK:30:ILE:HG12	11:CK:45:THR:HG21	1.73	0.69
13:CM:113:LYS:HD3	13:CM:114:PRO:N	2.08	0.69
22:DA:1051:G:C5'	22:DA:2752:C:H1'	2.23	0.69
22:DA:104:A:O2'	22:DA:105:C:C5'	2.41	0.69
22:DA:1255:U:H3'	22:DA:1256:G:C5'	2.21	0.69
22:DA:1265:A:H4'	22:DA:1266:G:O5'	1.93	0.69
22:DA:2466:C:O2'	22:DA:2467:C:H5'	1.93	0.69
22:DA:500:G:N2	22:DA:503:A:C8	2.60	0.69
25:DD:110:THR:HA	25:DD:171:THR:HA	1.75	0.69
25:DD:106:LYS:HB3	25:DD:206:ALA:HB2	1.71	0.69
27:DF:43:ILE:CD1	27:DF:77:LYS:HG2	2.22	0.69
28:DG:19:ASN:HD22	28:DG:19:ASN:N	1.90	0.69
31:DJ:1:MET:SD	31:DJ:2:LYS:HE3	2.32	0.69
34:DM:42:THR:O	34:DM:46:ILE:HG12	1.92	0.69
35:DN:22:ARG:O	35:DN:22:ARG:HG2	1.93	0.69
39:DR:9:GLY:O	39:DR:10:LYS:HG3	1.92	0.69
40:DS:10:ALA:HB3	40:DS:101:SER:O	1.93	0.69
44:DW:9:THR:HG23	44:DW:10:ARG:N	2.08	0.69
1:AA:408:A:OP1	4:AD:109:THR:HG21	1.93	0.69
1:AA:409:U:OP1	4:AD:23:GLY:HA3	1.93	0.69
5:AE:109:ALA:O	5:AE:110:MET:HB3	1.91	0.69
6:AF:46:GLN:NE2	6:AF:56:LYS:HG3	2.08	0.69
17:AQ:45:VAL:HG13	17:AQ:72:TRP:O	1.93	0.69
17:AQ:54:ILE:C	17:AQ:54:ILE:HD13	2.12	0.69
22:BA:1250:G:OP2	33:BL:21:ARG:NH2	2.26	0.69
22:BA:2886:A:H2'	22:BA:2887:A:O4'	1.93	0.69
22:BA:417:C:H2'	22:BA:418:C:C6	2.25	0.69
22:BA:861:A:H5''	22:BA:862:G:OP2	1.93	0.69
24:BC:77:VAL:HG22	24:BC:111:ALA:HA	1.74	0.69
26:BE:119:ILE:HD11	26:BE:187:VAL:HA	1.74	0.69
26:BE:28:VAL:O	26:BE:32:VAL:HG13	1.93	0.69
27:BF:37:MET:CG	27:BF:56:LEU:HG	2.23	0.69
28:BG:15:ASP:CG	28:BG:16:VAL:H	1.95	0.69
31:BJ:12:LYS:O	31:BJ:13:ARG:CB	2.40	0.69
42:BU:87:GLU:HG3	42:BU:88:ASP:H	1.55	0.69
45:BX:40:GLU:O	45:BX:43:LYS:HD2	1.92	0.69
1:CA:1134:G:C6	1:CA:1135:U:H1'	2.27	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:119:A:H5'	1:CA:120:A:C5'	2.22	0.69
1:CA:960:U:O2'	1:CA:1223:C:C5'	2.41	0.69
1:CA:1467:C:H2'	1:CA:1468:A:C8	2.27	0.69
1:CA:327:A:O2'	1:CA:329:A:H5''	1.93	0.69
2:CB:185:ILE:HG22	2:CB:199:ILE:CG1	2.21	0.69
12:CL:82:ARG:CG	12:CL:82:ARG:HH11	1.91	0.69
13:CM:3:ILE:O	13:CM:4:ALA:HB2	1.93	0.69
22:DA:1309:G:H4'	50:D2:7:PRO:HB2	1.73	0.69
22:DA:1360:G:C2'	22:DA:1361:G:H5'	2.22	0.69
22:DA:2234:G:C6	22:DA:2235:G:N7	2.61	0.69
22:DA:226:A:C2	22:DA:230:G:O6	2.46	0.69
22:DA:2385:C:OP1	22:DA:2385:C:H3'	1.91	0.69
24:DC:173:LEU:HD22	24:DC:181:ARG:O	1.93	0.69
24:DC:36:ASN:HD21	24:DC:85:ASN:ND2	1.91	0.69
25:DD:177:VAL:CG1	25:DD:187:LEU:HD11	2.21	0.69
27:DF:136:ILE:HG23	27:DF:142:TYR:CG	2.28	0.69
27:DF:28:PRO:HB2	27:DF:168:LEU:CD2	2.20	0.69
33:DL:88:GLY:O	33:DL:89:VAL:HG12	1.93	0.69
38:DQ:87:VAL:HG11	39:DR:52:PRO:CG	2.23	0.69
46:DY:60:LYS:HG2	46:DY:60:LYS:O	1.93	0.69
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.28	0.69
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.27	0.69
4:AD:196:GLU:C	4:AD:198:LEU:H	1.97	0.69
14:AN:42:ASN:HD21	14:AN:46:LYS:NZ	1.91	0.69
16:AP:4:ILE:HG12	16:AP:21:VAL:CG2	2.12	0.69
22:BA:2394:C:OP2	51:B3:29:ARG:HD3	1.92	0.69
22:BA:1559:U:H4'	22:BA:1560:G:OP2	1.92	0.69
22:BA:1585:C:H2'	22:BA:1586:A:H5'	1.74	0.69
22:BA:2019:A:H4'	38:BQ:33:VAL:HG21	1.75	0.69
22:BA:573:U:H4'	22:BA:574:A:OP1	1.91	0.69
22:BA:914:G:H8	22:BA:914:G:H5''	1.58	0.69
36:BO:15:ARG:NH1	36:BO:15:ARG:HG3	2.03	0.69
44:BW:37:VAL:HG12	44:BW:38:ARG:H	1.58	0.69
44:BW:8:SER:O	44:BW:9:THR:HB	1.92	0.69
1:CA:348:G:H2'	1:CA:349:A:H8	1.58	0.69
1:CA:686:U:O4	1:CA:703:G:H1'	1.91	0.69
9:CI:19:PHE:O	9:CI:63:TYR:HB3	1.93	0.69
9:CI:51:LEU:CG	9:CI:86:LEU:HD22	2.20	0.69
22:DA:1108:U:H2'	22:DA:1109:C:O4'	1.93	0.69
22:DA:1207:C:O2'	22:DA:1208:C:H6	1.70	0.69
22:DA:1364:G:OP2	45:DX:1:SER:N	2.25	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2135:A:H3'	22:DA:2136:G:C5'	2.11	0.69
22:DA:2389:G:H5''	22:DA:2390:U:C5'	2.13	0.69
22:DA:2815:C:H2'	22:DA:2816:G:C8	2.27	0.69
22:DA:373:U:O2'	22:DA:374:A:C5'	2.38	0.69
23:DB:40:U:O2'	23:DB:45:A:N6	2.24	0.69
24:DC:140:VAL:HG22	24:DC:161:VAL:O	1.91	0.69
28:DG:120:ILE:O	28:DG:120:ILE:HG23	1.92	0.69
28:DG:94:ARG:NE	28:DG:105:SER:HB2	2.07	0.69
29:DH:83:LYS:CE	29:DH:149:GLU:HB3	2.18	0.69
33:DL:133:ALA:O	33:DL:137:ALA:HB3	1.91	0.69
35:DN:87:PHE:CD1	35:DN:90:ARG:HD2	2.28	0.69
22:DA:2331:G:C1'	44:DW:40:ARG:HB3	2.21	0.69
44:DW:30:VAL:HG23	44:DW:59:PHE:CD1	2.27	0.69
47:DZ:30:ARG:HH21	47:DZ:33:HIS:HB2	1.58	0.69
1:AA:807:A:H2'	1:AA:808:C:C6	2.28	0.69
4:AD:33:ILE:O	4:AD:33:ILE:HG23	1.92	0.69
6:AF:2:ARG:HH21	6:AF:68:GLN:NE2	1.91	0.69
6:AF:3:HIS:CA	6:AF:92:THR:HG23	2.23	0.69
21:AU:18:PHE:O	21:AU:21:SER:HB3	1.93	0.69
51:B3:14:LYS:O	51:B3:21:PHE:O	2.10	0.69
22:BA:1788:C:H2'	22:BA:1789:A:H5'	1.75	0.69
22:BA:1945:G:H2'	22:BA:1946:U:C6	2.26	0.69
27:BF:71:LYS:HA	27:BF:80:GLN:CG	2.23	0.69
22:BA:2311:A:H1'	27:BF:78:ILE:HD13	1.74	0.69
28:BG:126:THR:CG2	28:BG:127:GLN:N	2.56	0.69
28:BG:22:VAL:HG22	28:BG:36:LEU:HD13	1.73	0.69
28:BG:86:LEU:N	28:BG:86:LEU:CD1	2.56	0.69
31:BJ:44:TYR:HA	38:BQ:59:LEU:HD21	1.73	0.69
1:CA:119:A:H4'	1:CA:120:A:O5'	1.92	0.69
1:CA:1268:G:N2	1:CA:1327:C:H1'	2.07	0.69
1:CA:1319:A:H5''	19:CS:4:LEU:CD1	2.22	0.69
3:CC:179:ALA:O	3:CC:181:ILE:HG13	1.93	0.69
22:DA:1008:A:H4'	22:DA:1009:A:OP1	1.93	0.69
22:DA:1324:G:H5''	22:DA:1325:U:H5''	1.75	0.69
22:DA:2339:C:HO2'	22:DA:2340:A:H8	1.39	0.69
22:DA:2443:C:O2'	22:DA:2444:G:H5'	1.93	0.69
22:DA:2464:G:H2'	22:DA:2465:C:O4'	1.92	0.69
22:DA:307:G:N2	22:DA:310:A:C8	2.60	0.69
25:DD:116:LYS:HA	35:DN:1:MET:HE1	1.74	0.69
25:DD:141:ARG:HH11	25:DD:141:ARG:CB	2.03	0.69
36:DO:56:LYS:HD3	36:DO:56:LYS:O	1.93	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1272:G:O2'	1:AA:1273:C:H5'	1.93	0.69
6:AF:61:LEU:HD12	6:AF:62:MET:N	2.07	0.69
1:AA:1248:A:C2	9:AI:71:ILE:HD11	2.28	0.69
9:AI:98:ARG:HG3	9:AI:103:VAL:HG21	1.75	0.69
22:BA:1795:C:H2'	22:BA:1796:U:H6	1.58	0.69
22:BA:2661:G:H2'	22:BA:2662:A:C8	2.28	0.69
24:BC:16:VAL:CB	24:BC:203:VAL:HB	2.15	0.69
24:BC:39:SER:C	24:BC:41:GLY:H	1.96	0.69
22:BA:2444:G:OP2	26:BE:63:LYS:CE	2.40	0.69
29:BH:90:LEU:HD22	29:BH:123:ARG:HA	1.75	0.69
29:BH:78:VAL:CG2	29:BH:145:ASN:HD22	2.06	0.69
32:BK:93:GLN:HA	32:BK:93:GLN:OE1	1.91	0.69
33:BL:114:GLY:C	33:BL:115:GLU:HG3	2.11	0.69
35:BN:44:LEU:HD12	35:BN:44:LEU:O	1.93	0.69
37:BP:50:ARG:NE	37:BP:56:SER:HB2	2.08	0.69
42:BU:85:ARG:HA	42:BU:91:LYS:O	1.92	0.69
1:CA:1048:G:N2	1:CA:1214:C:H5	1.90	0.69
1:CA:1072:G:H2'	1:CA:1073:U:C6	2.28	0.69
1:CA:223:A:C4	1:CA:224:U:C5	2.81	0.69
1:CA:252:U:H6	1:CA:252:U:H5'	1.58	0.69
8:CH:38:VAL:HA	8:CH:41:GLU:HG3	1.75	0.69
8:CH:65:PHE:CD2	8:CH:66:GLN:HG2	2.28	0.69
50:D2:23:ALA:O	50:D2:24:THR:HB	1.91	0.69
22:DA:118:A:C8	22:DA:119:A:C8	2.81	0.69
22:DA:1565:C:HO2'	22:DA:1566:A:H2'	1.57	0.69
22:DA:1751:U:H2'	22:DA:1752:C:C6	2.27	0.69
22:DA:2653:U:C4	22:DA:2654:A:C6	2.80	0.69
24:DC:131:MET:HA	24:DC:134:ILE:HG12	1.75	0.69
22:DA:2591:C:P	24:DC:237:ARG:HD2	2.33	0.69
31:DJ:20:ALA:HA	31:DJ:23:LYS:HG3	1.75	0.69
22:DA:2336:A:N7	44:DW:40:ARG:NH2	2.41	0.69
45:DX:2:ARG:CD	45:DX:32:LEU:HD23	2.22	0.69
1:AA:139:A:C5	1:AA:140:U:C5	2.81	0.68
1:AA:428:G:C1'	1:AA:430:A:C8	2.75	0.68
4:AD:35:GLN:O	4:AD:36:ALA:HB2	1.91	0.68
5:AE:11:GLN:HA	5:AE:11:GLN:NE2	2.07	0.68
9:AI:27:ILE:N	9:AI:27:ILE:HD12	2.08	0.68
1:AA:706:A:O2'	11:AK:30:ILE:HD11	1.93	0.68
22:BA:247:G:O6	51:B3:11:LYS:HE3	1.93	0.68
52:B4:9:LYS:N	52:B4:9:LYS:HD3	2.06	0.68
22:BA:1794:A:H2'	22:BA:1795:C:H6	1.57	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2800:A:O2'	22:BA:2801:G:OP1	2.12	0.68
22:BA:454:A:H4'	22:BA:455:C:OP2	1.91	0.68
25:BD:92:VAL:O	25:BD:93:GLY:C	2.31	0.68
37:BP:113:LEU:O	37:BP:113:LEU:HG	1.91	0.68
41:BT:32:LEU:H	41:BT:83:ALA:CB	2.05	0.68
45:BX:40:GLU:HG3	45:BX:43:LYS:NZ	2.08	0.68
1:CA:1140:C:H2'	1:CA:1141:C:H5	1.58	0.68
1:CA:320:A:O2'	1:CA:1435:G:H1'	1.91	0.68
1:CA:306:A:H2'	1:CA:307:C:H6	1.58	0.68
1:CA:423:G:H2'	1:CA:424:G:O4'	1.93	0.68
1:CA:628:G:O2'	1:CA:629:A:H5'	1.93	0.68
7:CG:135:LYS:O	7:CG:139:ASP:HB2	1.94	0.68
19:CS:46:LEU:H	19:CS:46:LEU:HD23	1.57	0.68
19:CS:38:THR:HA	19:CS:69:LYS:HA	1.75	0.68
48:D0:38:LEU:HB2	48:D0:41:HIS:CE1	2.28	0.68
22:DA:1269:A:H2'	22:DA:1270:C:C6	2.27	0.68
22:DA:2216:G:O2'	22:DA:2217:G:H8	1.70	0.68
22:DA:2902:C:C2'	22:DA:2903:U:H5'	2.22	0.68
22:DA:815:C:OP2	39:DR:85:LYS:HE2	1.93	0.68
23:DB:17:C:N4	23:DB:68:C:H42	1.90	0.68
25:DD:187:LEU:HD12	25:DD:188:LEU:N	2.08	0.68
38:DQ:91:ARG:HH11	39:DR:10:LYS:HB3	1.55	0.68
41:DT:62:VAL:HG12	41:DT:63:VAL:N	2.08	0.68
1:AA:508:U:H4'	1:AA:509:A:OP1	1.94	0.68
5:AE:110:MET:HA	5:AE:113:VAL:HG13	1.75	0.68
24:BC:68:ARG:HD3	24:BC:103:ILE:CD1	2.17	0.68
29:BH:89:LYS:O	29:BH:90:LEU:HD12	1.93	0.68
37:BP:51:ASN:O	37:BP:52:ARG:CG	2.41	0.68
1:CA:370:C:C2'	1:CA:371:A:H5'	2.22	0.68
1:CA:962:C:HO2'	1:CA:963:G:H8	0.76	0.68
10:CJ:7:ARG:HG3	10:CJ:75:ASP:OD1	1.93	0.68
51:D3:56:LEU:HD13	51:D3:56:LEU:H	1.58	0.68
22:DA:1196:C:H1'	22:DA:1226:A:C4	2.29	0.68
22:DA:1347:A:O2'	22:DA:1348:C:H5'	1.94	0.68
22:DA:1353:A:C2'	22:DA:1354:A:H5'	2.23	0.68
22:DA:52:A:H2	22:DA:179:C:O4'	1.76	0.68
22:DA:2199:A:N6	22:DA:2225:A:C8	2.61	0.68
22:DA:2614:A:H4'	22:DA:2615:U:OP1	1.91	0.68
22:DA:311:A:H61	22:DA:330:A:H5'	1.58	0.68
22:DA:455:C:C3'	22:DA:456:C:C5'	2.69	0.68
23:DB:19:C:H2'	23:DB:20:G:H8	1.59	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:211:ARG:HD3	24:DC:217:PRO:HD3	1.75	0.68
41:DT:15:HIS:HD2	41:DT:17:SER:HB2	1.58	0.68
45:DX:31:ASN:HD22	45:DX:31:ASN:N	1.91	0.68
46:DY:57:LEU:O	46:DY:60:LYS:HB3	1.93	0.68
47:DZ:50:VAL:O	47:DZ:54:VAL:HG22	1.92	0.68
1:AA:1358:U:H6	1:AA:1359:C:C5	2.11	0.68
1:AA:208:U:H3	1:AA:212:G:N2	1.91	0.68
2:AB:67:LEU:HD13	2:AB:160:LEU:CD1	2.21	0.68
6:AF:86:ARG:NH1	18:AR:63:TYR:HB3	2.08	0.68
7:AG:30:MET:HG2	7:AG:31:VAL:H	1.56	0.68
16:AP:28:ARG:HG2	16:AP:29:ASN:HD21	1.59	0.68
19:AS:6:LYS:HE2	19:AS:6:LYS:HA	1.75	0.68
20:AT:79:THR:O	20:AT:82:ILE:HG13	1.92	0.68
21:AU:13:VAL:HG13	21:AU:15:LEU:CG	2.21	0.68
22:BA:1801:A:C5	24:BC:261:ARG:NH1	2.61	0.68
22:BA:1901:A:H2'	22:BA:1902:C:C6	2.28	0.68
22:BA:2728:U:HO2'	22:BA:2729:G:P	2.16	0.68
22:BA:358:U:H2'	22:BA:359:G:O4'	1.94	0.68
22:BA:407:G:O2'	22:BA:408:G:H5'	1.93	0.68
22:BA:479:A:O2'	22:BA:481:G:H5'	1.93	0.68
22:BA:80:G:C2'	22:BA:81:G:H5'	2.22	0.68
22:BA:995:C:O2'	22:BA:996:A:P	2.52	0.68
25:BD:114:LYS:HE3	25:BD:114:LYS:CA	2.23	0.68
38:BQ:97:ILE:HD11	38:BQ:105:PHE:HB2	1.73	0.68
44:BW:31:LEU:CD2	44:BW:31:LEU:N	2.46	0.68
6:CF:18:VAL:HG21	6:CF:58:HIS:CD2	2.27	0.68
18:CR:21:ASP:HB3	18:CR:23:LYS:CG	2.24	0.68
22:DA:2024:G:O2'	22:DA:2025:C:C5'	2.41	0.68
22:DA:2420:C:OP1	51:D3:33:THR:HB	1.94	0.68
22:DA:574:A:H4'	22:DA:575:A:C5'	2.24	0.68
22:DA:634:C:H2'	22:DA:635:C:C6	2.28	0.68
22:DA:848:C:H2'	22:DA:849:A:H8	1.58	0.68
23:DB:58:A:C2'	23:DB:59:A:C8	2.76	0.68
25:DD:11:MET:HE1	25:DD:192:ALA:HA	1.75	0.68
29:DH:80:ILE:CB	29:DH:101:ASP:HB2	2.23	0.68
30:DI:21:PRO:N	30:DI:22:PRO:HD2	2.09	0.68
36:DO:8:ILE:HG22	36:DO:9:ARG:N	2.08	0.68
41:DT:50:LEU:HD11	46:DY:26:PHE:CE1	2.28	0.68
1:AA:1160:G:O6	1:AA:1181:G:C6	2.46	0.68
1:AA:213:G:H2'	1:AA:214:C:H5'	1.76	0.68
1:AA:430:A:C2'	1:AA:431:A:H5'	2.22	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:601:G:H2'	1:AA:602:A:H8	1.58	0.68
2:AB:15:PHE:HD1	2:AB:16:GLY:N	1.91	0.68
3:AC:154:GLY:O	3:AC:195:ILE:HG12	1.93	0.68
14:AN:40:ARG:HH12	14:AN:44:VAL:HG11	1.58	0.68
51:B3:22:LYS:HG2	51:B3:22:LYS:O	1.92	0.68
22:BA:1116:G:O2'	22:BA:1117:C:H5'	1.93	0.68
22:BA:2440:C:C5'	22:BA:2440:C:H6	2.04	0.68
22:BA:620:G:H4'	22:BA:621:A:O5'	1.93	0.68
22:BA:2305:U:C4	27:BF:150:GLY:O	2.46	0.68
30:BI:7:TYR:HA	30:BI:58:ILE:HB	1.75	0.68
36:BO:88:LYS:O	36:BO:89:ASP:HB2	1.91	0.68
44:BW:30:VAL:C	44:BW:31:LEU:HD23	2.12	0.68
1:CA:1051:C:O2'	1:CA:1052:U:H6	1.76	0.68
1:CA:1513:A:H2'	1:CA:1514:G:H8	1.55	0.68
1:CA:280:C:H4'	1:CA:281:G:OP2	1.92	0.68
1:CA:914:A:O2'	1:CA:915:A:H5'	1.92	0.68
2:CB:26:MET:HE2	2:CB:29:PHE:CD2	2.29	0.68
9:CI:35:GLU:HA	9:CI:39:GLY:HA3	1.74	0.68
9:CI:35:GLU:HA	9:CI:39:GLY:CA	2.23	0.68
12:CL:24:GLU:O	12:CL:25:ALA:HB3	1.94	0.68
16:CP:48:GLU:OE2	16:CP:51:ARG:HG2	1.93	0.68
22:DA:684:G:H5'	50:D2:16:HIS:NE2	2.07	0.68
22:DA:1102:C:H2'	22:DA:1103:A:C8	2.28	0.68
22:DA:116:C:H5''	22:DA:128:C:N4	2.07	0.68
22:DA:1325:U:H4'	22:DA:1326:U:OP1	1.93	0.68
22:DA:1402:U:O2'	22:DA:1403:A:O5'	2.11	0.68
22:DA:1471:G:H2'	22:DA:1472:C:C6	2.29	0.68
22:DA:1965:C:H2'	22:DA:1966:A:H8	1.55	0.68
22:DA:2250:G:O5'	22:DA:2250:G:C8	2.47	0.68
22:DA:340:A:C2'	22:DA:341:C:H5'	2.23	0.68
22:DA:391:A:O2'	22:DA:392:U:C5'	2.38	0.68
22:DA:838:C:O2'	22:DA:839:U:H5'	1.93	0.68
23:DB:11:C:H5'	44:DW:71:LYS:HD3	1.75	0.68
24:DC:36:ASN:HD21	24:DC:85:ASN:HD21	1.41	0.68
25:DD:50:VAL:HG21	25:DD:82:PHE:CE2	2.28	0.68
27:DF:107:VAL:N	27:DF:108:PRO:CD	2.56	0.68
37:DP:86:LYS:NZ	37:DP:86:LYS:CA	2.55	0.68
39:DR:40:MET:O	39:DR:41:ILE:HD13	1.93	0.68
39:DR:21:ARG:HB2	39:DR:93:PHE:HD1	1.59	0.68
43:DV:26:PHE:CE1	43:DV:86:LEU:HB3	2.28	0.68
1:AA:500:G:H5'	12:AL:120:ARG:NH1	2.09	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:15:LYS:HG3	3:AC:16:PRO:HD2	1.75	0.68
9:AI:9:GLY:HA2	9:AI:80:HIS:HD2	1.55	0.68
17:AQ:11:VAL:CG1	17:AQ:12:VAL:HG12	2.23	0.68
22:BA:243:U:OP1	51:B3:5:THR:CG2	2.42	0.68
22:BA:1060:U:H5''	22:BA:1061:U:OP1	1.94	0.68
23:BB:112:G:H2'	23:BB:113:C:H6	1.57	0.68
26:BE:95:LYS:O	26:BE:96:VAL:HB	1.93	0.68
27:BF:37:MET:CE	27:BF:151:LEU:HB3	2.24	0.68
30:BI:20:SER:HB3	30:BI:21:PRO:HD3	1.75	0.68
22:BA:2415:G:H4'	33:BL:65:GLY:O	1.94	0.68
1:CA:1167:A:C8	1:CA:1169:A:N6	2.62	0.68
1:CA:461:A:N3	1:CA:461:A:H2'	2.06	0.68
2:CB:99:MET:O	2:CB:103:TRP:HB3	1.93	0.68
3:CC:168:ARG:HG3	3:CC:169:GLU:H	1.57	0.68
8:CH:17:GLN:NE2	8:CH:71:VAL:HG23	2.08	0.68
12:CL:79:ILE:HD12	12:CL:96:THR:CG2	2.23	0.68
52:D4:7:VAL:HG22	52:D4:25:VAL:HG21	1.76	0.68
22:DA:128:C:H6	22:DA:128:C:H5''	1.57	0.68
22:DA:1731:G:N3	22:DA:1733:G:C8	2.62	0.68
22:DA:1754:A:C6	22:DA:1755:A:C6	2.82	0.68
22:DA:228:C:C5'	22:DA:229:C:H5	2.07	0.68
22:DA:3:U:H2'	22:DA:4:U:H6	1.58	0.68
23:DB:58:A:H2'	23:DB:59:A:H8	1.57	0.68
27:DF:113:PHE:CZ	27:DF:116:LEU:HD22	2.28	0.68
28:DG:131:VAL:C	28:DG:132:LEU:HD12	2.13	0.68
32:DK:19:VAL:HG12	32:DK:41:ILE:CG1	2.23	0.68
35:DN:96:ARG:NH1	35:DN:116:VAL:HG13	2.09	0.68
22:DA:2873:A:C2	35:DN:5:LYS:HG3	2.29	0.68
22:DA:2882:A:H4'	35:DN:97:ILE:HG12	1.76	0.68
42:DU:85:ARG:NE	42:DU:85:ARG:HA	2.08	0.68
44:DW:28:GLU:HG3	44:DW:29:SER:H	1.57	0.68
46:DY:28:LEU:HG	46:DY:42:LEU:HD22	1.75	0.68
1:AA:1069:C:H4'	1:AA:1192:C:O2	1.94	0.68
1:AA:1247:U:O2'	1:AA:1248:A:H5'	1.94	0.68
1:AA:125:U:H2'	1:AA:126:G:H5'	1.76	0.68
1:AA:430:A:H2'	1:AA:431:A:H8	1.59	0.68
2:AB:146:SER:C	2:AB:147:LEU:HD23	2.14	0.68
4:AD:25:ARG:O	4:AD:26:ALA:CB	2.41	0.68
5:AE:132:PRO:O	5:AE:136:VAL:HG13	1.94	0.68
12:AL:33:CYS:CA	12:AL:54:VAL:HA	2.24	0.68
14:AN:15:LEU:HD12	14:AN:53:ASP:HB2	1.76	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:27:LEU:HD23	48:B0:27:LEU:H	1.59	0.68
22:BA:2154:A:H2'	22:BA:2155:U:O4'	1.92	0.68
22:BA:2180:U:H2'	22:BA:2181:U:H5	1.57	0.68
22:BA:2752:C:H2'	22:BA:2753:A:C8	2.29	0.68
31:BJ:5:THR:HG22	31:BJ:6:ALA:O	1.94	0.68
36:BO:104:GLN:O	36:BO:107:ALA:HB3	1.93	0.68
38:BQ:63:ARG:NH2	38:BQ:96:ASP:CA	2.56	0.68
38:BQ:97:ILE:HD11	38:BQ:105:PHE:CA	2.23	0.68
43:BV:44:HIS:HE1	43:BV:86:LEU:H	1.41	0.68
47:BZ:26:LEU:O	47:BZ:37:ARG:NH1	2.26	0.68
1:CA:1127:G:O2'	1:CA:1128:C:H5'	1.93	0.68
1:CA:522:C:O4'	1:CA:536:C:H4'	1.93	0.68
1:CA:737:C:OP1	6:CF:91:ARG:HB3	1.94	0.68
1:CA:751:U:H2'	1:CA:752:G:O4'	1.93	0.68
5:CE:79:THR:HA	5:CE:121:ASN:CG	2.14	0.68
5:CE:83:PRO:HB3	5:CE:96:GLN:HG2	1.75	0.68
8:CH:17:GLN:OE1	8:CH:62:LEU:HB3	1.94	0.68
3:CC:36:PHE:CE1	14:CN:91:GLU:HB3	2.29	0.68
17:CQ:29:LYS:HE2	17:CQ:36:PHE:CE2	2.27	0.68
22:DA:1032:A:C1'	52:D4:23:ILE:HD13	2.20	0.68
22:DA:138:U:H2'	22:DA:140:C:H1'	1.74	0.68
22:DA:1627:G:N2	22:DA:1628:G:C8	2.62	0.68
22:DA:1722:A:H62	22:DA:1738:G:H1'	1.59	0.68
22:DA:2204:G:C2	22:DA:2205:A:C8	2.81	0.68
22:DA:538:A:O2'	31:DJ:8:PRO:HG3	1.92	0.68
22:DA:962:G:H2'	22:DA:963:U:C6	2.29	0.68
22:DA:784:G:N2	24:DC:227:VAL:HG21	2.08	0.68
25:DD:28:GLU:HA	25:DD:185:ASN:O	1.93	0.68
26:DE:60:TRP:CE3	26:DE:62:GLN:HB2	2.29	0.68
29:DH:31:VAL:CB	29:DH:32:PRO:HD3	2.19	0.68
29:DH:61:VAL:HG13	29:DH:62:LEU:N	2.08	0.68
32:DK:71:ARG:CB	32:DK:72:PRO:CD	2.52	0.68
35:DN:72:ASP:OD1	35:DN:75:ILE:HG23	1.94	0.68
22:DA:1248:G:H2'	38:DQ:1:ALA:O	1.93	0.68
38:DQ:8:ILE:O	38:DQ:8:ILE:HG12	1.91	0.68
1:AA:1001:C:H2'	1:AA:1002:G:H8	1.59	0.68
1:AA:872:A:C2	1:AA:874:G:C6	2.81	0.68
1:AA:914:A:O2'	1:AA:915:A:C5'	2.42	0.68
4:AD:55:ARG:HH12	4:AD:58:GLN:HG2	1.59	0.68
10:AJ:87:LEU:HD13	10:AJ:88:MET:N	2.07	0.68
13:AM:79:LEU:CD2	13:AM:86:ARG:HB2	2.23	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1402:U:H2'	22:BA:1403:A:O5'	1.94	0.68
22:BA:308:G:O2'	22:BA:309:A:H5'	1.92	0.68
22:BA:62:U:H4'	22:BA:63:A:OP1	1.93	0.68
27:BF:37:MET:CE	27:BF:37:MET:HA	2.23	0.68
28:BG:115:GLN:CD	28:BG:115:GLN:H	1.97	0.68
32:BK:7:MET:SD	32:BK:20:MET:HB2	2.34	0.68
35:BN:24:MET:HG2	35:BN:44:LEU:CD2	2.24	0.68
37:BP:13:LYS:HE3	37:BP:76:HIS:CA	2.18	0.68
42:BU:42:LYS:HD3	42:BU:42:LYS:N	2.08	0.68
44:BW:30:VAL:H	44:BW:31:LEU:HD23	1.59	0.68
2:CB:9:LEU:H	2:CB:9:LEU:HD23	1.58	0.68
16:CP:35:ARG:HH12	16:CP:38:PHE:HB3	1.58	0.68
20:CT:26:MET:CE	20:CT:30:PHE:HD1	2.07	0.68
22:DA:2215:C:HO2'	22:DA:2216:G:H8	1.42	0.68
22:DA:2242:G:N7	22:DA:2243:U:C5	2.62	0.68
22:DA:228:C:H5'	22:DA:229:C:H5	1.58	0.68
22:DA:370:G:N1	22:DA:424:G:C5	2.62	0.68
22:DA:455:C:N3	22:DA:473:G:H4'	2.08	0.68
22:DA:513:A:C2	22:DA:514:A:C5	2.82	0.68
22:DA:729:G:H3'	22:DA:730:A:H5''	1.75	0.68
25:DD:149:ASN:O	25:DD:151:THR:N	2.26	0.68
28:DG:132:LEU:N	28:DG:132:LEU:HD12	2.07	0.68
29:DH:59:ALA:HA	29:DH:63:ALA:HB3	1.75	0.68
39:DR:39:LEU:HD23	39:DR:39:LEU:H	1.58	0.68
44:DW:16:GLU:OE2	44:DW:16:GLU:HA	1.91	0.68
1:AA:121:U:OP2	1:AA:121:U:H4'	1.93	0.68
1:AA:238:A:H2'	1:AA:239:U:H5'	1.76	0.68
1:AA:258:G:O2'	1:AA:259:G:H5'	1.94	0.68
3:AC:112:ALA:HB2	3:AC:182:ASP:O	1.94	0.68
4:AD:145:ARG:HD2	4:AD:147:LYS:CE	2.24	0.68
5:AE:154:ALA:HB1	8:AH:65:PHE:CE2	2.29	0.68
10:AJ:10:LEU:CD1	10:AJ:98:VAL:HG12	2.23	0.68
10:AJ:52:LEU:CD2	10:AJ:62:ARG:HG3	2.23	0.68
22:BA:1082:U:H5'	30:BI:117:THR:O	1.94	0.68
22:BA:2353:G:O2'	44:BW:31:LEU:CD2	2.41	0.68
35:BN:71:ARG:HH21	35:BN:71:ARG:CG	2.06	0.68
36:BO:111:ARG:HD3	36:BO:112:GLU:N	2.08	0.68
36:BO:49:VAL:HG21	36:BO:82:ALA:HA	1.74	0.68
38:BQ:40:LYS:HA	38:BQ:43:GLN:CG	2.23	0.68
44:BW:42:THR:HG22	44:BW:43:LYS:HG2	1.74	0.68
45:BX:5:GLN:HE21	45:BX:49:ARG:N	1.91	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:181:A:H4'	1:CA:182:A:OP1	1.93	0.68
1:CA:70:U:H4'	1:CA:71:A:OP1	1.94	0.68
12:CL:66:ILE:HD13	12:CL:73:LEU:HD12	1.76	0.68
14:CN:60:ARG:NH2	14:CN:70:HIS:HB3	2.09	0.68
22:DA:101:A:HO2'	22:DA:102:U:P	2.16	0.68
22:DA:125:A:H5''	50:D2:19:ARG:HD3	1.76	0.68
22:DA:1535:A:H2'	22:DA:1535:A:N3	2.06	0.68
22:DA:24:G:C2'	22:DA:25:U:H5'	2.23	0.68
22:DA:2699:C:H2'	22:DA:2700:A:H8	1.56	0.68
22:DA:528:A:N1	22:DA:2043:C:O5'	2.27	0.68
22:DA:623:C:H2'	22:DA:624:C:C6	2.28	0.68
24:DC:79:ARG:HD3	24:DC:81:GLU:OE1	1.94	0.68
25:DD:20:VAL:CG1	25:DD:22:ILE:HG12	2.24	0.68
23:DB:42:C:H41	27:DF:87:LYS:NZ	1.91	0.68
44:DW:18:LYS:HD3	44:DW:19:ARG:HG2	1.74	0.68
46:DY:57:LEU:HD13	46:DY:60:LYS:HE3	1.74	0.68
1:AA:1184:G:HO2'	1:AA:1185:G:H5'	1.59	0.68
1:AA:701:U:O2	1:AA:701:U:H2'	1.93	0.68
2:AB:202:ASN:ND2	2:AB:205:ALA:HB2	2.09	0.68
8:AH:45:ILE:C	8:AH:63:LYS:HD2	2.14	0.68
9:AI:86:LEU:CD2	9:AI:93:LEU:HD22	2.23	0.68
10:AJ:35:GLN:HA	10:AJ:35:GLN:HE21	1.57	0.68
19:AS:39:ILE:HD11	19:AS:70:LEU:HD23	1.76	0.68
22:BA:1253:A:H3'	22:BA:1254:A:C5'	2.24	0.68
31:BJ:31:GLU:OE2	31:BJ:35:ARG:HD2	1.94	0.68
33:BL:29:LYS:CG	33:BL:30:THR:HG23	2.24	0.68
34:BM:46:ILE:HD12	34:BM:47:GLU:N	2.09	0.68
39:BR:47:VAL:O	39:BR:47:VAL:HG12	1.93	0.68
41:BT:39:THR:O	41:BT:39:THR:HG22	1.94	0.68
1:CA:1162:C:O2'	1:CA:1163:A:H5'	1.94	0.68
1:CA:1315:U:O4	19:CS:4:LEU:HG	1.94	0.68
1:CA:764:C:N4	1:CA:812:G:H1	1.91	0.68
5:CE:79:THR:HG23	5:CE:81:GLN:H	1.58	0.68
11:CK:82:GLU:HB2	11:CK:108:ASN:HB3	1.74	0.68
12:CL:2:THR:O	12:CL:6:LEU:HD12	1.94	0.68
12:CL:83:GLY:CA	12:CL:94:TYR:HA	2.17	0.68
13:CM:18:LEU:H	13:CM:18:LEU:HD12	1.58	0.68
13:CM:32:ILE:O	13:CM:32:ILE:HD13	1.93	0.68
13:CM:2:ARG:NE	13:CM:8:ILE:HD11	2.08	0.68
22:DA:1471:G:H2'	22:DA:1472:C:H6	1.58	0.68
22:DA:1817:G:C2'	22:DA:1818:U:H5'	2.24	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2804:U:O2'	22:DA:2805:C:H5'	1.94	0.68
22:DA:983:A:O2'	22:DA:984:A:H5'	1.93	0.68
24:DC:220:ARG:O	24:DC:223:ALA:HB3	1.94	0.68
28:DG:43:LYS:O	28:DG:49:LEU:HD12	1.93	0.68
1:AA:107:G:C2'	1:AA:108:G:H5'	2.24	0.68
1:AA:176:C:H2'	1:AA:177:G:N3	2.09	0.68
1:AA:684:U:H3	1:AA:706:A:H61	1.42	0.68
3:AC:139:ASN:HA	3:AC:142:ARG:HB2	1.76	0.68
9:AI:31:GLN:O	9:AI:32:ARG:HB2	1.94	0.68
9:AI:32:ARG:CG	9:AI:36:GLN:HB3	2.19	0.68
11:AK:107:THR:HG22	11:AK:108:ASN:ND2	2.09	0.68
20:AT:81:GLN:HA	20:AT:84:LYS:HB2	1.76	0.68
22:BA:242:G:OP2	51:B3:2:LYS:HE2	1.94	0.68
22:BA:22:C:H2'	22:BA:23:G:O5'	1.94	0.68
22:BA:2309:A:O2'	22:BA:2310:C:C5'	2.38	0.68
22:BA:2373:G:H2'	22:BA:2374:C:C6	2.28	0.68
22:BA:438:G:O2'	22:BA:439:A:H5'	1.93	0.68
22:BA:962:G:H2'	22:BA:963:U:C6	2.29	0.68
27:BF:134:GLN:H	27:BF:134:GLN:NE2	1.92	0.68
1:CA:134:G:C2'	1:CA:135:C:H5'	2.24	0.68
1:CA:369:G:OP2	1:CA:388:G:N2	2.27	0.68
1:CA:429:U:C1'	1:CA:430:A:H5''	2.24	0.68
1:CA:775:G:C2'	1:CA:776:G:H5'	2.24	0.68
7:CG:129:ASN:OD1	7:CG:134:VAL:HG11	1.94	0.68
12:CL:46:SER:O	12:CL:47:ALA:HB2	1.94	0.68
22:DA:1775:U:H2'	22:DA:1776:G:O5'	1.94	0.68
22:DA:1944:U:O4'	22:DA:1955:U:H1'	1.94	0.68
22:DA:234:U:C5'	22:DA:234:U:H6	2.05	0.68
22:DA:364:C:H2'	22:DA:365:U:C6	2.28	0.68
22:DA:36:G:N1	22:DA:445:C:N4	2.42	0.68
23:DB:115:A:H2'	23:DB:116:G:C8	2.28	0.68
23:DB:83:G:OP1	47:DZ:16:LEU:HD21	1.94	0.68
27:DF:42:ALA:CB	27:DF:49:LEU:HD21	2.24	0.68
28:DG:126:THR:HG22	28:DG:127:GLN:N	2.03	0.68
29:DH:93:SER:HB3	29:DH:121:VAL:CG2	2.18	0.68
40:DS:32:ALA:HA	40:DS:35:ILE:CG1	2.22	0.68
1:AA:1470:U:O2'	1:AA:1471:U:H5'	1.94	0.67
1:AA:32:A:C2'	1:AA:33:A:C8	2.75	0.67
1:AA:47:C:H4'	1:AA:48:C:O5'	1.93	0.67
1:AA:982:U:H4'	1:AA:983:A:C5'	2.25	0.67
5:AE:81:GLN:CG	5:AE:149:PRO:HG3	2.20	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:10:ASP:OD1	13:AM:44:ILE:HD13	1.94	0.67
14:AN:59:GLN:HE21	14:AN:59:GLN:N	1.91	0.67
18:AR:62:ARG:HD3	18:AR:69:TYR:CD2	2.29	0.67
22:BA:1056:G:HO2'	22:BA:1086:A:H1'	1.59	0.67
22:BA:1793:C:O2'	22:BA:1794:A:H5'	1.94	0.67
22:BA:923:G:C2	44:BW:23:LYS:HE2	2.28	0.67
22:BA:1654:A:C1'	25:BD:118:PHE:CE1	2.77	0.67
29:BH:104:THR:O	29:BH:104:THR:HG23	1.93	0.67
22:BA:587:C:N3	33:BL:33:ARG:NH2	2.42	0.67
37:BP:87:ARG:NH2	37:BP:111:GLU:HG3	2.09	0.67
37:BP:25:VAL:N	37:BP:85:VAL:O	2.25	0.67
1:CA:162:A:H2'	1:CA:163:C:O4'	1.94	0.67
6:CF:2:ARG:HG2	6:CF:4:TYR:OH	1.95	0.67
7:CG:75:LYS:HG3	7:CG:76:SER:N	2.08	0.67
13:CM:68:LEU:O	13:CM:72:ILE:HG22	1.94	0.67
20:CT:22:SER:O	20:CT:26:MET:HB2	1.93	0.67
35:DN:98:LEU:CD2	48:D0:53:VAL:HG21	2.24	0.67
22:DA:1062:G:OP1	22:DA:1070:A:H4'	1.94	0.67
22:DA:1345:C:H5''	22:DA:1396:U:O4	1.95	0.67
22:DA:1525:A:H2'	22:DA:1526:C:O4'	1.93	0.67
22:DA:1569:A:N1	22:DA:1570:A:C2	2.62	0.67
22:DA:188:G:C2'	22:DA:189:G:H5'	2.23	0.67
22:DA:579:G:C8	22:DA:2017:U:C4	2.81	0.67
22:DA:2205:A:O2'	22:DA:2206:C:H5'	1.94	0.67
22:DA:275:C:H2'	22:DA:276:U:O4'	1.94	0.67
22:DA:839:U:H2'	22:DA:840:C:H6	1.59	0.67
22:DA:1790:C:H4'	24:DC:207:ALA:HB1	1.76	0.67
24:DC:99:GLU:HG2	24:DC:100:ARG:H	1.57	0.67
24:DC:99:GLU:HG2	24:DC:100:ARG:N	2.09	0.67
25:DD:139:SER:HB3	25:DD:142:VAL:CG2	2.21	0.67
25:DD:105:LYS:HA	25:DD:177:VAL:CG2	2.24	0.67
28:DG:139:VAL:HA	28:DG:142:GLN:CB	2.24	0.67
30:DI:45:THR:CG2	30:DI:54:ILE:HD13	2.22	0.67
34:DM:96:ILE:HD13	34:DM:102:LEU:HD11	1.77	0.67
38:DQ:60:TRP:CH2	38:DQ:93:ILE:HB	2.29	0.67
38:DQ:79:ILE:C	38:DQ:79:ILE:HD13	2.14	0.67
39:DR:2:TYR:CD2	39:DR:42:ALA:HB2	2.25	0.67
43:DV:72:VAL:HA	43:DV:92:VAL:O	1.93	0.67
1:AA:1196:A:HO2'	1:AA:1197:A:P	2.17	0.67
1:AA:486:U:C5'	1:AA:486:U:H6	2.06	0.67
49:B1:8:ILE:HG22	49:B1:9:LYS:N	2.08	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:244:A:C2	22:BA:255:A:C4	2.82	0.67
23:BB:70:C:O2'	23:BB:71:C:H5'	1.93	0.67
28:BG:82:PHE:CZ	28:BG:137:LYS:HB2	2.29	0.67
22:BA:1161:C:H1'	39:BR:8:GLY:O	1.94	0.67
1:CA:1337:G:H5''	1:CA:1338:G:OP1	1.93	0.67
1:CA:1410:A:H2'	1:CA:1411:C:C6	2.29	0.67
1:CA:1484:C:H2'	1:CA:1485:U:O4'	1.94	0.67
1:CA:239:U:C5'	1:CA:239:U:H6	2.07	0.67
1:CA:51:A:H4'	1:CA:52:C:C5'	2.24	0.67
5:CE:104:ILE:HA	5:CE:122:VAL:CB	2.23	0.67
1:CA:940:C:H5'	7:CG:101:ARG:HH22	1.58	0.67
12:CL:19:ASN:H	12:CL:19:ASN:ND2	1.90	0.67
22:DA:1021:A:C2'	22:DA:1022:G:H4'	2.24	0.67
22:DA:1125:G:H4'	52:D4:37:GLN:NE2	2.09	0.67
22:DA:1268:A:H2'	22:DA:1269:A:O4'	1.95	0.67
22:DA:1438:U:H5	22:DA:1552:A:N1	1.92	0.67
22:DA:2192:U:H2'	22:DA:2192:U:O2	1.93	0.67
22:DA:2619:C:H4'	25:DD:156:PHE:O	1.95	0.67
26:DE:112:LEU:HD13	26:DE:112:LEU:O	1.94	0.67
42:DU:7:ASP:O	42:DU:8:ASP:HB2	1.92	0.67
1:AA:263:A:H2'	1:AA:264:C:C6	2.29	0.67
2:AB:202:ASN:HD21	2:AB:205:ALA:HB2	1.60	0.67
2:AB:63:LYS:HD3	2:AB:63:LYS:C	2.15	0.67
13:AM:39:ALA:HB3	13:AM:42:VAL:HG22	1.75	0.67
10:AJ:51:VAL:CB	14:AN:80:ARG:HB2	2.22	0.67
21:AU:35:GLU:O	21:AU:36:PHE:HB2	1.94	0.67
22:BA:1079:C:C4	22:BA:1088:A:H2	2.12	0.67
22:BA:1688:U:O2	22:BA:1700:A:H5''	1.94	0.67
22:BA:1676:A:C2	22:BA:1993:U:H5'	2.30	0.67
22:BA:2085:U:O2'	22:BA:2086:U:H5'	1.94	0.67
28:BG:15:ASP:CG	28:BG:16:VAL:N	2.47	0.67
37:BP:33:GLU:CG	37:BP:34:GLY:N	2.58	0.67
1:CA:1140:C:H2'	1:CA:1141:C:C5	2.30	0.67
5:CE:135:VAL:O	5:CE:138:ALA:HB3	1.92	0.67
12:CL:62:VAL:HG21	12:CL:94:TYR:CE2	2.29	0.67
22:DA:1738:G:O2'	22:DA:1739:A:H8	1.75	0.67
22:DA:2062:A:H2'	22:DA:2062:A:N3	2.09	0.67
22:DA:2752:C:C2'	22:DA:2753:A:H8	2.07	0.67
24:DC:79:ARG:C	24:DC:80:LEU:HD12	2.15	0.67
27:DF:34:THR:O	27:DF:35:LEU:HB2	1.94	0.67
30:DI:96:LYS:CE	30:DI:138:VAL:HG11	2.22	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:27:GLY:HA3	32:DK:30:ARG:CG	2.24	0.67
22:DA:832:U:OP1	33:DL:39:LYS:N	2.26	0.67
3:AC:102:ILE:H	3:AC:102:ILE:HD12	1.60	0.67
4:AD:147:LYS:H	4:AD:147:LYS:HE2	1.58	0.67
14:AN:2:LYS:HD3	14:AN:5:MET:CG	2.24	0.67
14:AN:51:PRO:O	14:AN:52:ARG:CB	2.42	0.67
18:AR:54:LEU:O	18:AR:58:ILE:HG13	1.94	0.67
19:AS:30:LEU:O	19:AS:49:ALA:HB3	1.95	0.67
22:BA:1152:C:H3'	56:BA:3360:HOH:O	1.95	0.67
22:BA:1988:G:H2'	22:BA:1989:G:H5'	1.77	0.67
22:BA:84:A:H62	22:BA:101:A:H2	1.42	0.67
24:BC:245:THR:OG1	24:BC:249:VAL:HB	1.95	0.67
24:BC:85:ASN:OD1	24:BC:85:ASN:N	2.28	0.67
29:BH:67:ALA:HA	29:BH:138:VAL:CB	2.24	0.67
36:BO:57:ALA:O	36:BO:59:ALA:N	2.27	0.67
22:BA:335:C:C5'	42:BU:81:ARG:HD3	2.24	0.67
46:BY:6:LEU:O	46:BY:7:ARG:HB3	1.95	0.67
1:CA:1202:U:O2'	1:CA:1203:C:C5'	2.42	0.67
1:CA:597:G:C2'	1:CA:598:U:H5'	2.20	0.67
2:CB:127:LYS:HE2	2:CB:136:ARG:NH2	2.09	0.67
2:CB:110:ILE:HD13	2:CB:151:LYS:CA	2.21	0.67
3:CC:24:ASN:O	3:CC:28:PHE:HB2	1.94	0.67
5:CE:55:VAL:O	5:CE:59:ILE:HG22	1.94	0.67
52:D4:10:LEU:HB2	52:D4:33:HIS:ND1	2.09	0.67
22:DA:1199:U:H2'	22:DA:1200:C:C6	2.30	0.67
22:DA:120:U:H1'	22:DA:149:A:C8	2.29	0.67
22:DA:2199:A:N3	22:DA:2200:C:C6	2.63	0.67
22:DA:273:G:H2'	22:DA:274:C:C6	2.30	0.67
22:DA:2813:A:H2'	22:DA:2814:A:C8	2.30	0.67
22:DA:2:G:C6	22:DA:3:U:C4	2.82	0.67
28:DG:130:ILE:HG22	28:DG:132:LEU:HD11	1.75	0.67
30:DI:37:PHE:CE1	30:DI:56:VAL:HG21	2.30	0.67
35:DN:44:LEU:O	35:DN:48:VAL:HG23	1.95	0.67
35:DN:63:ARG:O	35:DN:67:PHE:HB2	1.94	0.67
42:DU:92:VAL:HG21	42:DU:101:THR:HG21	1.75	0.67
22:DA:2331:G:O2'	44:DW:40:ARG:HB3	1.94	0.67
1:AA:1064:G:H1'	1:AA:1066:C:C5	2.30	0.67
1:AA:642:A:H2'	1:AA:643:C:H6	1.60	0.67
3:AC:131:ARG:O	3:AC:135:ARG:HG2	1.93	0.67
4:AD:196:GLU:HA	4:AD:199:ILE:HG23	1.76	0.67
5:AE:149:PRO:HA	5:AE:152:VAL:HG13	1.75	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:114:SER:HB3	7:AG:117:LEU:HG	1.76	0.67
1:AA:1320:C:H41	19:AS:36:ARG:HG2	1.59	0.67
22:BA:1107:G:H2'	22:BA:1108:U:C6	2.29	0.67
22:BA:1159:U:O2'	22:BA:1160:G:H5'	1.93	0.67
22:BA:1253:A:N7	56:BA:3332:HOH:O	2.26	0.67
22:BA:836:G:H5''	22:BA:837:C:OP2	1.94	0.67
27:BF:121:PHE:HB3	27:BF:162:ASP:OD2	1.95	0.67
31:BJ:25:LEU:CD2	31:BJ:25:LEU:C	2.62	0.67
32:BK:71:ARG:CB	32:BK:72:PRO:CD	2.72	0.67
36:BO:52:SER:OG	36:BO:54:VAL:HG12	1.95	0.67
40:BS:51:LEU:O	40:BS:55:ILE:HG13	1.94	0.67
46:BY:18:LEU:HD13	46:BY:18:LEU:O	1.94	0.67
1:CA:282:A:H2'	1:CA:283:U:C6	2.30	0.67
1:CA:345:C:H4'	1:CA:346:G:C5'	2.24	0.67
1:CA:954:G:H1	1:CA:1228:C:N4	1.91	0.67
4:CD:170:LEU:HA	4:CD:182:LYS:HB2	1.77	0.67
8:CH:37:ASN:HA	8:CH:48:PHE:HE1	1.58	0.67
8:CH:62:LEU:N	8:CH:62:LEU:HD22	2.09	0.67
21:CU:38:GLU:HA	21:CU:41:THR:OG1	1.95	0.67
22:DA:127:A:C8	50:D2:46:LYS:HE3	2.29	0.67
22:DA:1029:A:H5''	22:DA:1030:C:OP2	1.94	0.67
22:DA:1417:C:O2'	22:DA:1418:G:H5'	1.94	0.67
22:DA:1906:G:C8	22:DA:1929:G:H2'	2.30	0.67
22:DA:2259:U:C4	22:DA:2427:C:N4	2.62	0.67
27:DF:110:ILE:HD13	27:DF:110:ILE:H	1.58	0.67
27:DF:28:PRO:CB	27:DF:168:LEU:HD11	2.24	0.67
27:DF:28:PRO:HB2	27:DF:168:LEU:HD11	1.75	0.67
30:DI:132:ALA:CB	30:DI:137:LEU:HD12	2.25	0.67
31:DJ:86:GLN:O	31:DJ:87:ALA:CB	2.41	0.67
35:DN:22:ARG:HG3	35:DN:70:THR:HA	1.74	0.67
37:DP:105:LYS:HA	37:DP:108:ARG:NE	2.09	0.67
42:DU:14:THR:CG2	42:DU:15:GLY:H	2.07	0.67
43:DV:41:GLU:O	43:DV:42:LEU:HD23	1.94	0.67
1:AA:1239:A:N6	1:AA:1299:A:N6	2.32	0.67
1:AA:1427:C:C2'	1:AA:1428:A:H5'	2.25	0.67
4:AD:2:ARG:HH21	4:AD:114:ARG:HD3	1.59	0.67
4:AD:7:LYS:HZ1	4:AD:21:LYS:HG3	1.58	0.67
22:BA:1515:A:H2'	22:BA:1516:G:O4'	1.95	0.67
22:BA:1970:A:H4'	22:BA:1971:U:O5'	1.94	0.67
27:BF:16:MET:O	27:BF:20:ASN:HA	1.95	0.67
32:BK:76:VAL:C	32:BK:77:ILE:HD12	2.15	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:65:GLY:O	33:BL:66:PHE:HB3	1.94	0.67
34:BM:78:LEU:HD23	34:BM:79:ALA:N	2.10	0.67
37:BP:37:LYS:HG2	37:BP:37:LYS:O	1.94	0.67
46:BY:7:ARG:HG3	46:BY:7:ARG:O	1.94	0.67
1:CA:1296:C:C4	1:CA:1297:G:N2	2.63	0.67
2:CB:9:LEU:HD12	2:CB:11:ALA:C	2.15	0.67
16:CP:4:ILE:HG21	16:CP:57:ILE:CD1	2.23	0.67
22:DA:1055:G:C3'	22:DA:1056:G:H5'	2.25	0.67
22:DA:140:C:H5'	22:DA:141:G:N2	2.10	0.67
22:DA:1695:G:H2'	22:DA:1696:G:O4'	1.95	0.67
22:DA:2503:A:H3'	22:DA:2503:A:OP2	1.95	0.67
22:DA:251:A:H4'	33:DL:47:ARG:HH22	1.59	0.67
22:DA:2886:A:H62	48:D0:39:ARG:HD3	1.58	0.67
22:DA:396:G:O2'	22:DA:397:U:C6	2.48	0.67
22:DA:995:C:H5''	38:DQ:53:LYS:HG2	1.77	0.67
26:DE:52:VAL:HG12	26:DE:74:LYS:HD3	1.76	0.67
27:DF:155:ILE:HD12	27:DF:155:ILE:N	2.09	0.67
27:DF:65:LEU:HD23	27:DF:65:LEU:H	1.60	0.67
27:DF:64:PRO:HA	27:DF:88:VAL:CG2	2.24	0.67
28:DG:138:GLN:HG2	28:DG:138:GLN:O	1.94	0.67
35:DN:14:SER:C	35:DN:16:HIS:H	1.98	0.67
22:DA:1156:A:P	38:DQ:54:ARG:HE	2.18	0.67
38:DQ:64:ILE:HD11	38:DQ:95:ALA:HB3	1.77	0.67
46:DY:17:GLU:OE1	46:DY:53:VAL:HB	1.94	0.67
1:AA:994:A:N7	1:AA:1216:A:H4'	2.10	0.67
1:AA:370:C:O2'	1:AA:371:A:H5'	1.95	0.67
3:AC:59:PRO:O	3:AC:62:SER:HB3	1.93	0.67
4:AD:109:THR:HG23	4:AD:112:GLU:N	2.07	0.67
8:AH:48:PHE:O	8:AH:49:LYS:CB	2.42	0.67
49:B1:8:ILE:HG23	49:B1:51:ALA:CA	2.17	0.67
22:BA:1061:U:H3'	22:BA:1062:G:C5'	2.24	0.67
22:BA:1486:U:O2'	22:BA:1487:U:H5'	1.94	0.67
22:BA:2346:A:H3'	22:BA:2347:C:H5''	1.77	0.67
26:BE:127:GLU:H	26:BE:127:GLU:CD	1.97	0.67
38:BQ:39:ILE:O	38:BQ:43:GLN:HG2	1.95	0.67
38:BQ:94:LEU:HD23	39:BR:11:GLN:HB2	1.76	0.67
39:BR:49:ILE:CG1	39:BR:51:VAL:O	2.43	0.67
1:CA:87:C:O2'	1:CA:88:U:C4'	2.43	0.67
2:CB:150:ILE:HD11	2:CB:153:MET:HE1	1.77	0.67
9:CI:10:ARG:HG3	9:CI:14:SER:O	1.94	0.67
22:DA:1014:A:O2'	22:DA:1015:U:H5'	1.94	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1084:A:H2'	22:DA:1085:A:H5'	1.76	0.67
22:DA:740:C:H5''	22:DA:1784:A:H3'	1.76	0.67
22:DA:2074:U:HO2'	22:DA:2075:U:H5'	1.60	0.67
22:DA:216:A:HO2'	22:DA:217:A:H8	1.36	0.67
22:DA:2746:U:C2'	22:DA:2747:G:H5'	2.25	0.67
22:DA:915:C:O2	23:DB:100:G:H4'	1.95	0.67
29:DH:5:LEU:O	29:DH:6:LEU:HD12	1.95	0.67
30:DI:11:GLN:OE1	30:DI:74:PRO:HG2	1.94	0.67
33:DL:111:ILE:HA	33:DL:128:THR:OG1	1.94	0.67
38:DQ:26:ALA:HB1	38:DQ:30:VAL:HB	1.77	0.67
2:AB:112:ARG:O	2:AB:116:LEU:HD23	1.95	0.67
2:AB:32:GLY:HA3	2:AB:39:ILE:N	2.09	0.67
4:AD:33:ILE:O	4:AD:34:GLU:CB	2.42	0.67
6:AF:4:TYR:CE2	6:AF:71:ILE:HG12	2.29	0.67
7:AG:69:ARG:CD	7:AG:95:ARG:HG2	2.25	0.67
13:AM:40:GLU:HG3	13:AM:41:ASP:H	1.59	0.67
15:AO:68:TYR:O	15:AO:71:ARG:HG2	1.94	0.67
22:BA:1063:G:O2'	22:BA:1064:C:O4'	2.11	0.67
22:BA:132:G:O2'	22:BA:133:U:H5'	1.95	0.67
22:BA:1490:A:H5'	22:BA:1491:G:OP2	1.93	0.67
22:BA:1585:C:O2'	22:BA:1586:A:H5'	1.94	0.67
27:BF:107:VAL:N	27:BF:108:PRO:CD	2.58	0.67
41:BT:39:THR:HB	41:BT:42:GLU:CB	2.24	0.67
45:BX:38:TRP:NE1	45:BX:40:GLU:HB2	2.10	0.67
45:BX:5:GLN:NE2	45:BX:49:ARG:H	1.91	0.67
1:CA:14:U:H2'	1:CA:16:A:OP2	1.94	0.67
1:CA:251:G:H21	1:CA:253:A:H62	1.41	0.67
1:CA:305:G:H5'	1:CA:306:A:OP1	1.95	0.67
1:CA:372:C:O2'	1:CA:373:A:P	2.52	0.67
1:CA:39:G:H2'	1:CA:40:C:H6	1.60	0.67
1:CA:754:C:H2'	1:CA:754:C:O2	1.94	0.67
2:CB:159:ALA:HA	2:CB:180:ILE:HG22	1.77	0.67
14:CN:8:ARG:HD2	14:CN:12:ARG:CZ	2.24	0.67
14:CN:86:ALA:O	14:CN:91:GLU:HB2	1.95	0.67
19:CS:38:THR:CA	19:CS:69:LYS:HD3	2.24	0.67
22:DA:1360:G:H2'	22:DA:1361:G:C5'	2.23	0.67
22:DA:1739:A:H2'	22:DA:1740:G:H8	1.59	0.67
22:DA:216:A:O2'	22:DA:217:A:C8	2.48	0.67
22:DA:2348:U:O2'	22:DA:2349:G:O4'	2.12	0.67
22:DA:300:A:H1'	22:DA:333:G:H21	1.58	0.67
25:DD:151:THR:HG22	25:DD:152:PRO:HD3	1.76	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2531:A:H5''	28:DG:156:TYR:OH	1.94	0.67
28:DG:93:TYR:CD2	28:DG:93:TYR:N	2.63	0.67
29:DH:41:LYS:N	29:DH:44:ILE:HG23	2.10	0.67
22:DA:1080:A:H5'	30:DI:133:ARG:HH21	1.60	0.67
31:DJ:58:ASN:OD1	31:DJ:127:GLY:HA2	1.95	0.67
36:DO:7:ARG:HA	36:DO:10:ARG:NH2	2.10	0.67
37:DP:86:LYS:N	37:DP:86:LYS:HZ3	1.93	0.67
41:DT:40:LYS:O	41:DT:43:ILE:HG22	1.93	0.67
41:DT:43:ILE:CG2	41:DT:58:VAL:HG11	2.24	0.67
1:AA:921:U:H2'	1:AA:922:G:O4'	1.95	0.67
2:AB:40:ILE:HD13	2:AB:201:GLY:CA	2.13	0.67
9:AI:37:TYR:CD2	9:AI:38:PHE:HD2	2.12	0.67
10:AJ:10:LEU:HB3	10:AJ:18:ILE:HD11	1.76	0.67
22:BA:1941:C:H2'	22:BA:1942:C:C6	2.30	0.67
33:BL:132:ARG:HA	33:BL:142:ILE:HD11	1.77	0.67
41:BT:29:THR:HA	41:BT:86:THR:N	2.09	0.67
1:CA:577:G:C4	1:CA:816:A:C2	2.83	0.67
1:CA:974:A:O2'	1:CA:975:A:P	2.52	0.67
2:CB:212:TYR:CD2	2:CB:215:ALA:HB3	2.30	0.67
2:CB:86:CYS:HB2	2:CB:88:GLN:OE1	1.94	0.67
8:CH:76:ARG:HD3	8:CH:77:VAL:H	1.59	0.67
22:DA:578:G:H21	22:DA:1252:G:N2	1.92	0.67
22:DA:1342:A:N6	22:DA:1397:U:C5	2.63	0.67
22:DA:740:C:C5'	22:DA:1784:A:H3'	2.25	0.67
22:DA:2384:U:H3'	22:DA:2386:A:OP2	1.95	0.67
22:DA:2744:G:N2	22:DA:2745:C:C2	2.63	0.67
22:DA:804:A:H2'	22:DA:806:C:C4	2.30	0.67
22:DA:836:G:C6	22:DA:837:C:N3	2.63	0.67
23:DB:41:G:H3'	23:DB:42:C:C5'	2.23	0.67
28:DG:84:LYS:N	28:DG:84:LYS:HD3	2.09	0.67
29:DH:72:ILE:HD11	29:DH:141:LYS:N	2.08	0.67
31:DJ:89:PHE:CE2	31:DJ:100:VAL:HG11	2.30	0.67
34:DM:71:LYS:HB3	34:DM:93:VAL:O	1.95	0.67
35:DN:74:GLU:O	35:DN:77:ALA:HB3	1.94	0.67
40:DS:84:ARG:HB3	40:DS:96:ILE:HG23	1.76	0.67
42:DU:42:LYS:HD3	42:DU:57:ILE:CD1	2.25	0.67
47:DZ:6:ILE:O	47:DZ:34:THR:HA	1.95	0.67
1:AA:439:U:O2'	1:AA:440:C:C5'	2.43	0.67
1:AA:693:G:H2'	1:AA:694:A:H5'	1.75	0.67
2:AB:42:LEU:HG	2:AB:43:GLU:N	2.10	0.67
1:AA:1080:A:OP1	5:AE:51:LYS:HE3	1.95	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:82:ARG:HG3	12:AL:82:ARG:O	1.94	0.67
16:AP:5:ARG:HA	16:AP:68:SER:OG	1.95	0.67
20:AT:32:LYS:O	20:AT:35:TYR:CD2	2.48	0.67
49:B1:29:LYS:HD2	49:B1:31:GLU:OE1	1.94	0.67
22:BA:151:C:H5'	22:BA:1360:G:OP1	1.95	0.67
22:BA:2188:U:H2'	22:BA:2189:U:C6	2.30	0.67
22:BA:77:G:OP1	46:BY:52:ARG:HD3	1.95	0.67
24:BC:69:ASN:O	24:BC:70:LYS:HB2	1.94	0.67
25:BD:110:THR:CG2	25:BD:171:THR:HG22	2.24	0.67
34:BM:53:MET:HE2	34:BM:120:ALA:CB	2.25	0.67
44:BW:9:THR:OG1	44:BW:10:ARG:N	2.25	0.67
46:BY:39:GLN:HG3	46:BY:42:LEU:HD22	1.76	0.67
1:CA:1213:A:O2'	1:CA:1214:C:H5''	1.94	0.67
1:CA:1283:U:O2'	1:CA:1284:C:C5'	2.42	0.67
1:CA:172:A:C5	1:CA:174:A:N7	2.63	0.67
1:CA:513:C:H2'	1:CA:514:C:C6	2.30	0.67
7:CG:100:MET:O	7:CG:104:VAL:HG13	1.94	0.67
11:CK:18:GLY:O	11:CK:81:LEU:HA	1.95	0.67
12:CL:42:LYS:CD	12:CL:43:LYS:NZ	2.57	0.67
13:CM:100:ARG:NH2	13:CM:102:LYS:HD3	2.10	0.67
18:CR:32:ILE:HG13	18:CR:32:ILE:O	1.95	0.67
51:D3:39:ARG:O	51:D3:43:LEU:HD13	1.95	0.67
52:D4:3:VAL:O	52:D4:4:ARG:HB2	1.95	0.67
22:DA:1255:U:H5'	22:DA:2502:G:N2	2.08	0.67
22:DA:1308:A:H2'	22:DA:1309:G:O4'	1.95	0.67
22:DA:1654:A:HO2'	22:DA:1655:A:H8	0.76	0.67
22:DA:2141:G:H2'	22:DA:2142:A:C8	2.30	0.67
22:DA:2832:U:H5''	22:DA:2834:G:H5'	1.76	0.67
22:DA:2880:C:H1'	35:DN:93:GLY:N	2.09	0.67
30:DI:55:PRO:HG2	30:DI:70:THR:HG23	1.77	0.67
35:DN:34:ILE:HD12	35:DN:44:LEU:HD21	1.77	0.67
38:DQ:64:ILE:CD1	38:DQ:95:ALA:HB3	2.25	0.67
40:DS:80:PRO:HD2	40:DS:100:THR:OG1	1.95	0.67
22:DA:2014:A:H5'	40:DS:94:ASP:OD2	1.95	0.67
41:DT:39:THR:HG21	41:DT:42:GLU:CB	2.19	0.67
42:DU:58:VAL:HG11	42:DU:60:LYS:HG2	1.76	0.67
1:AA:1398:A:H8	1:AA:1398:A:H5''	1.60	0.66
2:AB:99:MET:HA	2:AB:106:VAL:HG21	1.75	0.66
2:AB:13:VAL:CG2	2:AB:207:ARG:HH22	2.08	0.66
1:AA:1055:A:H1'	3:AC:155:ARG:NH2	2.10	0.66
5:AE:148:SER:O	5:AE:152:VAL:HG13	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:28:SER:HB2	8:AH:58:LEU:CB	2.19	0.66
13:AM:13:HIS:HB3	13:AM:41:ASP:HA	1.77	0.66
16:AP:54:LEU:HD22	16:AP:80:LYS:HG3	1.75	0.66
17:AQ:80:LYS:HZ2	17:AQ:80:LYS:HB2	1.59	0.66
22:BA:1019:U:H3	22:BA:1142:A:H62	1.40	0.66
22:BA:1498:C:O2'	22:BA:1499:C:C5'	2.44	0.66
22:BA:1858:A:O2'	22:BA:1859:U:C5'	2.42	0.66
22:BA:475:C:O2'	22:BA:476:G:H5'	1.95	0.66
29:BH:137:GLU:HG3	29:BH:138:VAL:N	2.10	0.66
38:BQ:91:ARG:HH21	38:BQ:93:ILE:HD13	1.58	0.66
39:BR:49:ILE:HG21	39:BR:53:PHE:N	2.10	0.66
44:BW:18:LYS:HA	44:BW:36:ILE:CD1	2.24	0.66
1:CA:104:G:C2	1:CA:105:G:C8	2.83	0.66
1:CA:1096:C:O2'	1:CA:1097:C:H5'	1.95	0.66
1:CA:1361:G:H2'	1:CA:1362:A:C5'	2.25	0.66
1:CA:182:A:O2'	1:CA:183:C:H2'	1.95	0.66
1:CA:240:G:H5''	1:CA:240:G:H8	1.58	0.66
11:CK:107:THR:HG22	11:CK:108:ASN:HB2	1.78	0.66
13:CM:106:ARG:HA	13:CM:110:GLY:O	1.95	0.66
22:DA:1062:G:H2'	22:DA:1070:A:OP1	1.95	0.66
22:DA:1070:A:H61	30:DI:8:VAL:CG1	2.07	0.66
22:DA:1204:A:H4'	22:DA:1205:A:O5'	1.91	0.66
22:DA:184:C:H2'	22:DA:185:G:H8	1.58	0.66
22:DA:2884:U:H2'	22:DA:2885:G:C8	2.30	0.66
22:DA:300:A:H1'	22:DA:333:G:H22	1.59	0.66
24:DC:106:PRO:HB3	24:DC:141:HIS:HE1	1.58	0.66
29:DH:92:GLY:O	29:DH:121:VAL:HG11	1.95	0.66
29:DH:143:ILE:O	29:DH:144:VAL:HG13	1.96	0.66
36:DO:62:LEU:CD1	36:DO:65:THR:HG23	2.26	0.66
45:DX:13:THR:HA	45:DX:27:ARG:HA	1.77	0.66
1:AA:1503:A:C8	1:AA:1531:A:H1'	2.29	0.66
2:AB:22:TRP:HA	2:AB:188:THR:O	1.95	0.66
6:AF:11:HIS:CD2	6:AF:13:ASP:H	2.09	0.66
6:AF:52:ASN:O	6:AF:53:LYS:HB3	1.94	0.66
15:AO:18:ALA:O	15:AO:19:ASN:HB2	1.95	0.66
22:BA:1248:G:O2'	38:BQ:2:ARG:HA	1.95	0.66
22:BA:1624:U:H2'	22:BA:1625:C:H6	1.59	0.66
22:BA:2038:G:H2'	22:BA:2039:U:O4'	1.95	0.66
22:BA:2402:U:H2'	22:BA:2403:C:OP2	1.95	0.66
22:BA:2473:U:O2	22:BA:2473:U:H2'	1.94	0.66
22:BA:2579:C:H2'	22:BA:2580:U:H5'	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:8:ARG:HD2	35:BN:43:GLU:HG3	1.77	0.66
44:BW:37:VAL:HG13	44:BW:55:ASP:C	2.15	0.66
1:CA:1159:U:H5	1:CA:1182:G:HO2'	1.42	0.66
1:CA:15:G:H2'	1:CA:16:A:C8	2.31	0.66
1:CA:199:A:O2'	1:CA:200:G:C5'	2.44	0.66
1:CA:498:A:H5''	1:CA:499:A:OP1	1.96	0.66
1:CA:629:A:H2'	1:CA:630:A:O4'	1.94	0.66
1:CA:738:C:C4	1:CA:739:C:C5	2.83	0.66
6:CF:11:HIS:CD2	6:CF:54:LEU:CD2	2.77	0.66
22:DA:1856:U:H3	22:DA:1886:U:H3	1.43	0.66
22:DA:1965:C:H5''	22:DA:1965:C:H6	1.59	0.66
22:DA:2666:C:H2'	22:DA:2667:C:C5'	2.25	0.66
22:DA:478:A:C2	22:DA:480:A:C4	2.84	0.66
22:DA:53:A:H2'	22:DA:54:G:H5'	1.77	0.66
22:DA:838:C:C2'	22:DA:839:U:H5'	2.25	0.66
24:DC:140:VAL:HG23	24:DC:141:HIS:H	1.58	0.66
22:DA:1813:G:C2	24:DC:49:THR:HB	2.30	0.66
26:DE:119:ILE:HG13	26:DE:119:ILE:O	1.94	0.66
27:DF:103:ILE:N	27:DF:103:ILE:HD12	2.10	0.66
27:DF:28:PRO:HG2	27:DF:168:LEU:HD11	1.77	0.66
28:DG:112:VAL:HG13	28:DG:150:TYR:CE1	2.23	0.66
30:DI:104:GLN:HA	30:DI:107:GLU:HB3	1.77	0.66
32:DK:107:LEU:HD23	32:DK:107:LEU:C	2.16	0.66
37:DP:92:ARG:HG2	37:DP:92:ARG:O	1.93	0.66
39:DR:82:HIS:O	39:DR:82:HIS:CG	2.47	0.66
40:DS:50:VAL:O	40:DS:53:SER:HB3	1.95	0.66
40:DS:86:MET:SD	40:DS:87:PRO:HD2	2.35	0.66
46:DY:1:MET:H1	46:DY:1:MET:HE2	1.60	0.66
46:DY:49:ASP:HA	46:DY:52:ARG:HD2	1.76	0.66
1:AA:113:G:H2'	1:AA:114:U:C6	2.31	0.66
4:AD:89:LEU:HD21	4:AD:199:ILE:CD1	2.24	0.66
4:AD:61:ARG:NH2	4:AD:67:LEU:HD23	2.10	0.66
4:AD:86:GLY:O	4:AD:89:LEU:HB3	1.95	0.66
11:AK:39:ASN:O	11:AK:40:ALA:HB3	1.95	0.66
14:AN:88:MET:HE3	14:AN:97:LYS:HD2	1.77	0.66
15:AO:16:ARG:HD3	15:AO:20:ASP:OD2	1.95	0.66
20:AT:53:MET:HE1	20:AT:57:VAL:HG21	1.76	0.66
48:B0:16:ARG:HG2	48:B0:19:ASP:OD1	1.95	0.66
22:BA:1842:G:H2'	22:BA:1843:C:C6	2.31	0.66
22:BA:2311:A:O3'	22:BA:2312:U:C6	2.48	0.66
22:BA:789:A:OP1	22:BA:790:U:H5	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:962:G:H2'	22:BA:963:U:H6	1.61	0.66
25:BD:182:ALA:C	25:BD:184:ARG:N	2.46	0.66
26:BE:152:GLU:O	26:BE:153:LEU:HG	1.95	0.66
27:BF:169:LEU:HD12	27:BF:169:LEU:N	2.11	0.66
28:BG:163:TYR:O	28:BG:164:ALA:CB	2.42	0.66
33:BL:94:THR:HG22	33:BL:95:LEU:N	2.10	0.66
38:BQ:63:ARG:NH2	38:BQ:96:ASP:N	2.37	0.66
44:BW:37:VAL:C	44:BW:38:ARG:CG	2.61	0.66
1:CA:1453:G:H2'	1:CA:1453:G:N3	2.09	0.66
1:CA:1467:C:H2'	1:CA:1468:A:H8	1.59	0.66
1:CA:86:G:H1'	1:CA:87:C:O5'	1.96	0.66
3:CC:110:LEU:CD2	3:CC:203:LYS:HD2	2.13	0.66
7:CG:11:ILE:CD1	7:CG:24:LYS:HB2	2.24	0.66
19:CS:28:LYS:O	19:CS:30:LEU:HD12	1.93	0.66
20:CT:30:PHE:CE2	20:CT:52:GLU:HG2	2.29	0.66
22:DA:1081:U:OP1	30:DI:126:ARG:HD2	1.96	0.66
22:DA:170:U:C6	22:DA:171:U:H5	2.13	0.66
22:DA:2020:A:H5'	48:D0:8:THR:HG22	1.76	0.66
22:DA:2104:C:O2	22:DA:2105:U:H5	1.79	0.66
22:DA:2202:U:H5''	22:DA:2203:U:OP1	1.95	0.66
22:DA:2299:U:O2'	22:DA:2300:C:C6	2.46	0.66
22:DA:2752:C:H2'	22:DA:2753:A:H8	1.53	0.66
23:DB:91:C:H2'	23:DB:92:C:C6	2.30	0.66
24:DC:72:GLY:O	24:DC:73:ILE:HD13	1.94	0.66
22:DA:1655:A:H5'	25:DD:118:PHE:CD1	2.29	0.66
26:DE:147:LEU:HB3	26:DE:186:VAL:HG23	1.76	0.66
32:DK:18:ARG:HB2	32:DK:45:GLU:HB2	1.77	0.66
38:DQ:91:ARG:HG3	39:DR:11:GLN:NE2	2.10	0.66
41:DT:13:ALA:O	41:DT:32:LEU:HB2	1.95	0.66
45:DX:2:ARG:NH2	45:DX:32:LEU:HD23	2.01	0.66
46:DY:23:ARG:O	46:DY:27:ASN:HB2	1.96	0.66
1:AA:1157:A:C5	1:AA:1180:A:C6	2.83	0.66
1:AA:307:C:H5''	1:AA:308:C:OP2	1.95	0.66
2:AB:116:LEU:HD12	2:AB:140:LEU:CD1	2.22	0.66
5:AE:155:LYS:HD2	5:AE:156:ARG:N	2.10	0.66
51:B3:31:ILE:O	51:B3:35:LYS:HE3	1.95	0.66
24:BC:161:VAL:HG12	24:BC:161:VAL:O	1.94	0.66
26:BE:145:ASP:HB3	26:BE:184:ASP:HB2	1.76	0.66
27:BF:7:TYR:HD2	27:BF:11:VAL:HG11	1.60	0.66
36:BO:105:ALA:O	36:BO:106:LEU:HB3	1.95	0.66
39:BR:39:LEU:HA	39:BR:49:ILE:HG21	1.77	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BU:73:ASN:O	42:BU:75:ALA:N	2.27	0.66
1:CA:120:A:O2'	1:CA:121:U:H4'	1.95	0.66
1:CA:259:G:O2'	1:CA:260:G:H5'	1.95	0.66
1:CA:543:U:O2'	1:CA:544:G:H5'	1.95	0.66
10:CJ:52:LEU:HD21	10:CJ:59:LYS:HA	1.77	0.66
16:CP:1:MET:CA	16:CP:1:MET:CE	2.73	0.66
19:CS:49:ALA:HB1	19:CS:56:HIS:HB3	1.75	0.66
21:CU:38:GLU:CA	21:CU:40:PRO:HD2	2.25	0.66
48:D0:39:ARG:O	48:D0:40:HIS:HB2	1.94	0.66
22:DA:158:U:H1'	22:DA:169:G:N2	2.10	0.66
22:DA:1815:A:H1'	22:DA:1817:G:N7	2.11	0.66
22:DA:529:A:C8	22:DA:2023:C:N4	2.63	0.66
22:DA:2346:A:C3'	22:DA:2347:C:H5''	2.12	0.66
22:DA:2798:U:H5'	22:DA:2800:A:C5	2.30	0.66
22:DA:2900:A:C5	22:DA:2901:C:C5	2.84	0.66
22:DA:546:U:H5'	22:DA:547:A:OP1	1.95	0.66
22:DA:64:A:P	41:DT:77:ARG:HG2	2.35	0.66
23:DB:38:C:H4'	36:DO:100:HIS:NE2	2.10	0.66
38:DQ:93:ILE:O	38:DQ:96:ASP:HB3	1.95	0.66
41:DT:50:LEU:CD2	41:DT:51:PHE:HD1	2.08	0.66
43:DV:69:GLU:OE1	43:DV:71:LYS:HG3	1.96	0.66
46:DY:53:VAL:O	46:DY:57:LEU:HB2	1.95	0.66
1:AA:1063:C:H2'	1:AA:1064:G:C8	2.31	0.66
1:AA:633:G:H2'	1:AA:634:C:H6	1.60	0.66
3:AC:133:MET:HB3	3:AC:150:VAL:CG2	2.25	0.66
4:AD:160:LEU:HD22	4:AD:160:LEU:N	2.10	0.66
5:AE:96:GLN:HE21	5:AE:97:PRO:HD2	1.60	0.66
17:AQ:80:LYS:N	17:AQ:80:LYS:HD3	2.11	0.66
22:BA:1045:C:C3'	22:BA:1046:A:H5'	2.25	0.66
22:BA:1603:A:OP1	56:BA:3411:HOH:O	2.13	0.66
22:BA:1681:G:O2'	22:BA:1762:A:H1'	1.96	0.66
22:BA:1820:U:C2	24:BC:200:MET:HG3	2.31	0.66
22:BA:2573:C:OP1	56:BA:3710:HOH:O	2.13	0.66
22:BA:26:G:H1'	22:BA:514:A:N6	2.10	0.66
24:BC:79:ARG:NH2	24:BC:92:LEU:CD2	2.58	0.66
33:BL:127:VAL:HG23	33:BL:131:ALA:CB	2.26	0.66
33:BL:99:ASN:OD1	56:BL:202:HOH:O	2.12	0.66
37:BP:4:ILE:HG22	37:BP:5:LYS:H	1.59	0.66
41:BT:7:LEU:HD21	41:BT:42:GLU:OE2	1.95	0.66
44:BW:19:ARG:HA	44:BW:34:SER:HA	1.78	0.66
45:BX:38:TRP:HE1	45:BX:40:GLU:HB2	1.61	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1295:U:H2'	1:CA:1296:C:H6	1.60	0.66
9:CI:59:LYS:HG2	9:CI:60:LEU:HG	1.76	0.66
11:CK:40:ALA:O	11:CK:41:LEU:HD23	1.95	0.66
13:CM:28:ARG:HD2	13:CM:28:ARG:O	1.94	0.66
18:CR:71:ASP:CB	21:CU:3:ILE:HD11	2.25	0.66
22:DA:1627:G:C2	22:DA:1628:G:N7	2.63	0.66
22:DA:2212:A:N7	22:DA:2214:C:N4	2.44	0.66
22:DA:2612:C:H5'	22:DA:2613:U:OP1	1.94	0.66
22:DA:2869:G:H2'	22:DA:2870:C:C6	2.30	0.66
22:DA:30:G:H2'	22:DA:31:C:O4'	1.95	0.66
22:DA:672:C:H5'	22:DA:672:C:C6	2.28	0.66
22:DA:955:U:OP1	34:DM:86:LYS:HE3	1.95	0.66
27:DF:103:ILE:O	27:DF:103:ILE:HG22	1.95	0.66
27:DF:48:LEU:HG	27:DF:49:LEU:CD2	2.25	0.66
28:DG:120:ILE:CG1	28:DG:140:ILE:HG22	2.25	0.66
33:DL:116:VAL:HG13	33:DL:117:THR:H	1.60	0.66
45:DX:69:GLU:O	45:DX:70:LEU:HB2	1.95	0.66
3:AC:144:GLY:O	3:AC:145:ALA:HB3	1.96	0.66
4:AD:84:ASN:HD22	4:AD:87:GLU:HG2	1.60	0.66
11:AK:22:ILE:HG13	11:AK:22:ILE:O	1.93	0.66
13:AM:88:LEU:HD23	13:AM:91:ARG:HH21	1.61	0.66
17:AQ:18:LYS:C	17:AQ:47:ASP:OD2	2.34	0.66
17:AQ:45:VAL:HG21	17:AQ:60:ILE:HD11	1.77	0.66
17:AQ:55:GLY:HA3	17:AQ:82:VAL:HG11	1.76	0.66
20:AT:24:ARG:O	20:AT:28:ARG:HG2	1.95	0.66
22:BA:1416:G:O2'	22:BA:1417:C:O5'	2.14	0.66
22:BA:224:U:H2'	22:BA:225:C:O5'	1.94	0.66
22:BA:2540:C:H2'	22:BA:2541:A:C5'	2.25	0.66
22:BA:706:A:OP1	24:BC:6:LYS:HE3	1.96	0.66
22:BA:995:C:C6	22:BA:995:C:H5'	2.30	0.66
27:BF:35:LEU:HD23	27:BF:153:ILE:CG2	2.25	0.66
29:BH:96:THR:HG23	29:BH:96:THR:O	1.95	0.66
32:BK:88:ASN:HD22	32:BK:90:ASN:H	1.44	0.66
34:BM:36:VAL:HG12	34:BM:127:LYS:O	1.96	0.66
37:BP:50:ARG:HH21	37:BP:51:ASN:HA	1.59	0.66
40:BS:4:ILE:HG22	40:BS:106:VAL:HG13	1.76	0.66
44:BW:9:THR:CG2	44:BW:10:ARG:HH11	2.09	0.66
1:CA:149:A:C2	1:CA:150:U:C2	2.84	0.66
1:CA:464:U:O4	1:CA:466:A:H4'	1.95	0.66
20:CT:60:GLN:CB	20:CT:65:LEU:HD12	2.23	0.66
22:DA:1071:G:O2'	22:DA:1072:C:H5'	1.94	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1586:A:H2'	22:DA:1587:G:H8	1.60	0.66
22:DA:2199:A:C4	22:DA:2200:C:C6	2.84	0.66
22:DA:2414:G:H2'	22:DA:2415:G:H5'	1.78	0.66
22:DA:424:G:O2'	22:DA:425:G:H5'	1.96	0.66
22:DA:518:G:H2'	22:DA:519:U:C6	2.31	0.66
22:DA:946:C:O2'	22:DA:947:A:H8	1.73	0.66
26:DE:109:LEU:O	26:DE:112:LEU:HB3	1.96	0.66
33:DL:23:ILE:HD12	33:DL:23:ILE:N	2.10	0.66
35:DN:73:ASN:O	35:DN:76:VAL:HG22	1.95	0.66
23:DB:7:G:O2'	36:DO:27:VAL:HG11	1.95	0.66
36:DO:94:ARG:HD2	36:DO:97:PHE:O	1.96	0.66
42:DU:96:LYS:O	42:DU:97:SER:HB3	1.95	0.66
1:AA:203:G:HO2'	1:AA:466:A:H2	1.43	0.66
1:AA:243:A:H4'	1:AA:244:U:H5''	1.77	0.66
4:AD:106:PHE:CD1	4:AD:144:ILE:HD11	2.31	0.66
4:AD:59:LYS:O	4:AD:63:ILE:HG22	1.96	0.66
9:AI:128:LYS:HD2	9:AI:129:ARG:N	2.09	0.66
17:AQ:7:LEU:HD23	17:AQ:24:ILE:HD11	1.78	0.66
49:B1:35:LEU:O	49:B1:35:LEU:HD23	1.96	0.66
22:BA:1474:U:H2'	22:BA:1475:G:H5'	1.77	0.66
22:BA:1636:U:P	56:BA:3647:HOH:O	2.53	0.66
22:BA:1712:U:C2	22:BA:1713:A:N7	2.63	0.66
22:BA:2199:A:H3'	22:BA:2200:C:H6	1.61	0.66
22:BA:364:C:H2'	22:BA:365:U:C6	2.30	0.66
27:BF:161:SER:OG	27:BF:164:GLU:HG3	1.96	0.66
29:BH:134:VAL:CG2	29:BH:139:PHE:HA	2.26	0.66
31:BJ:36:LEU:HD21	31:BJ:122:LEU:HB2	1.78	0.66
41:BT:48:GLN:NE2	41:BT:48:GLN:HA	2.08	0.66
29:BH:32:PRO:CB	45:BX:38:TRP:HB3	2.17	0.66
1:CA:1160:G:O6	1:CA:1181:G:O6	2.13	0.66
1:CA:1285:A:O2'	1:CA:1286:U:H5'	1.96	0.66
1:CA:1430:A:H2'	1:CA:1431:A:O4'	1.94	0.66
1:CA:1518:A:C2	1:CA:1519:A:C2	2.83	0.66
1:CA:15:G:H2'	1:CA:16:A:H8	1.60	0.66
1:CA:246:A:C2	1:CA:279:A:N6	2.64	0.66
1:CA:596:A:N6	1:CA:645:G:N1	2.43	0.66
3:CC:76:ILE:HD11	3:CC:102:ILE:HD11	1.77	0.66
5:CE:14:LEU:HD13	5:CE:36:THR:CG2	2.25	0.66
12:CL:89:LEU:O	12:CL:92:VAL:HG23	1.96	0.66
14:CN:25:GLU:HA	14:CN:28:ALA:HB2	1.78	0.66
18:CR:25:ILE:HA	18:CR:28:LEU:HB2	1.78	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:108:G:H2'	22:DA:109:C:H6	1.59	0.66
22:DA:1716:U:O2'	22:DA:1717:A:C8	2.47	0.66
22:DA:2466:C:C2'	22:DA:2467:C:H5'	2.25	0.66
22:DA:2632:A:O2'	22:DA:2633:G:H5'	1.96	0.66
22:DA:2686:G:H2'	22:DA:2687:U:C6	2.31	0.66
22:DA:2714:G:H8	22:DA:2714:G:O5'	1.77	0.66
22:DA:455:C:H42	22:DA:473:G:H5'	1.60	0.66
22:DA:781:A:C5'	22:DA:782:A:OP1	2.44	0.66
22:DA:7:G:H2'	22:DA:8:C:O4'	1.95	0.66
25:DD:181:ASP:CB	25:DD:183:GLU:OE2	2.44	0.66
29:DH:72:ILE:HD11	29:DH:141:LYS:H	1.61	0.66
35:DN:97:ILE:HG13	35:DN:98:LEU:H	1.60	0.66
22:DA:2296:U:H5	36:DO:9:ARG:NH2	1.94	0.66
41:DT:69:ARG:O	41:DT:74:ILE:HD12	1.95	0.66
1:AA:105:G:H2'	1:AA:106:C:C6	2.31	0.66
1:AA:1160:G:N2	1:AA:1161:C:C2	2.64	0.66
1:AA:443:C:O2'	1:AA:444:G:H5'	1.96	0.66
1:AA:451:A:H1'	1:AA:452:A:N7	2.10	0.66
2:AB:74:ALA:O	2:AB:75:ALA:CB	2.44	0.66
5:AE:120:HIS:O	5:AE:121:ASN:CB	2.44	0.66
5:AE:148:SER:HB2	5:AE:151:MET:HB2	1.78	0.66
5:AE:153:ALA:N	5:AE:156:ARG:HB2	2.10	0.66
8:AH:88:LYS:HA	8:AH:91:LEU:CD1	2.26	0.66
15:AO:69:LEU:HD21	15:AO:76:ARG:HB2	1.78	0.66
18:AR:56:ARG:O	18:AR:60:ARG:HB2	1.95	0.66
22:BA:1386:C:H2'	22:BA:1387:A:C8	2.30	0.66
22:BA:1734:G:C4	22:BA:1735:A:N7	2.64	0.66
22:BA:2025:C:OP2	56:BA:3475:HOH:O	2.13	0.66
22:BA:2636:C:H2'	22:BA:2637:U:H6	1.57	0.66
25:BD:69:ALA:HA	25:BD:73:VAL:CG1	2.26	0.66
28:BG:155:PRO:O	28:BG:170:THR:HA	1.94	0.66
28:BG:93:TYR:CD2	28:BG:106:LEU:HA	2.30	0.66
33:BL:87:GLY:O	33:BL:89:VAL:N	2.29	0.66
33:BL:94:THR:CG2	33:BL:95:LEU:N	2.58	0.66
36:BO:28:VAL:HG23	36:BO:106:LEU:HD21	1.78	0.66
38:BQ:63:ARG:NH1	38:BQ:98:ALA:HB3	2.09	0.66
1:CA:183:C:O2'	1:CA:184:G:C5'	2.43	0.66
1:CA:197:A:C6	1:CA:221:C:H4'	2.30	0.66
1:CA:729:A:C4	1:CA:730:G:C8	2.84	0.66
1:CA:910:C:H2'	1:CA:911:U:C6	2.30	0.66
1:CA:951:G:O2'	1:CA:952:U:H5'	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:212:TYR:HD2	2:CB:212:TYR:O	1.79	0.66
4:CD:101:VAL:HB	4:CD:113:ALA:HB1	1.78	0.66
5:CE:59:ILE:O	5:CE:59:ILE:HG13	1.95	0.66
22:DA:1071:G:N7	22:DA:1089:A:C5	2.64	0.66
22:DA:1210:G:C5'	22:DA:1211:C:H3'	2.26	0.66
22:DA:1421:G:H8	22:DA:1421:G:OP2	1.78	0.66
22:DA:1516:G:C2'	22:DA:1517:G:H5'	2.25	0.66
22:DA:2259:U:O4'	22:DA:2427:C:H2'	1.95	0.66
22:DA:2519:U:H1'	22:DA:2520:C:H5	1.59	0.66
22:DA:2552:U:C2	22:DA:2554:U:C5'	2.78	0.66
22:DA:2734:A:C2'	22:DA:2735:G:H5'	2.26	0.66
22:DA:2771:C:H2'	22:DA:2772:C:C6	2.30	0.66
22:DA:352:A:C4	22:DA:353:C:H1'	2.30	0.66
22:DA:41:C:H2'	22:DA:42:A:C8	2.30	0.66
22:DA:727:A:C2'	22:DA:728:G:C8	2.79	0.66
22:DA:836:G:C5	22:DA:837:C:C4	2.84	0.66
26:DE:105:LEU:HB3	26:DE:200:LEU:HD11	1.78	0.66
36:DO:12:THR:HG23	36:DO:16:ARG:HH11	1.61	0.66
22:DA:2876:G:H4'	37:DP:2:ASN:HD21	1.60	0.66
46:DY:1:MET:HG2	46:DY:4:LYS:HZ1	1.61	0.66
47:DZ:6:ILE:HD12	47:DZ:47:ILE:CD1	2.25	0.66
1:AA:1151:A:O2'	1:AA:1152:A:C5'	2.44	0.66
1:AA:338:A:N1	1:AA:351:G:O6	2.29	0.66
1:AA:452:A:H2'	1:AA:453:G:O4'	1.95	0.66
2:AB:65:LYS:HE2	2:AB:153:MET:HG2	1.77	0.66
2:AB:176:ASN:HD21	2:AB:194:GLY:HA3	1.60	0.66
5:AE:55:VAL:N	5:AE:56:PRO:HD2	2.10	0.66
1:AA:587:G:H4'	8:AH:3:GLN:HA	1.78	0.66
16:AP:44:SER:O	16:AP:46:LYS:HG3	1.96	0.66
21:AU:4:LYS:C	21:AU:4:LYS:HD2	2.17	0.66
22:BA:1425:G:C2'	22:BA:1426:G:H5'	2.26	0.66
22:BA:2726:A:O2'	22:BA:2727:A:H5'	1.96	0.66
22:BA:726:G:O2'	22:BA:727:A:OP2	2.11	0.66
22:BA:869:G:O2'	34:BM:8:LYS:CD	2.44	0.66
29:BH:78:VAL:HG11	29:BH:145:ASN:HB3	1.78	0.66
22:BA:1080:A:O2'	30:BI:126:ARG:HG2	1.96	0.66
36:BO:53:THR:HB	36:BO:65:THR:HG22	1.77	0.66
41:BT:39:THR:O	41:BT:40:LYS:HB2	1.95	0.66
1:CA:170:U:HO2'	1:CA:171:A:H5'	1.60	0.66
1:CA:585:G:O2'	1:CA:586:C:H5'	1.95	0.66
5:CE:105:ILE:O	5:CE:105:ILE:HG22	1.95	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:24:VAL:HG23	5:CE:26:GLY:N	2.10	0.66
1:CA:1329:A:H5''	13:CM:25:GLY:N	2.09	0.66
16:CP:48:GLU:CG	16:CP:51:ARG:HE	2.06	0.66
48:D0:28:SER:O	48:D0:36:LYS:HA	1.96	0.66
22:DA:125:A:H5''	50:D2:19:ARG:HB2	1.78	0.66
50:D2:24:THR:CG2	50:D2:27:GLY:HA3	2.25	0.66
52:D4:19:ARG:HH12	52:D4:26:ILE:CG1	2.09	0.66
22:DA:1055:G:H3'	22:DA:1056:G:H5'	1.77	0.66
22:DA:1288:G:N3	22:DA:1288:G:H2'	2.11	0.66
22:DA:1590:A:H2'	22:DA:1591:A:H8	1.61	0.66
22:DA:192:C:C2'	22:DA:193:U:H5'	2.26	0.66
22:DA:2107:G:H2'	22:DA:2108:A:C8	2.31	0.66
22:DA:2497:A:O2'	22:DA:2498:C:OP2	2.14	0.66
22:DA:249:C:H4'	22:DA:250:G:O5'	1.95	0.66
22:DA:24:G:C5	22:DA:25:U:C5	2.84	0.66
22:DA:2788:C:H2'	22:DA:2789:C:C6	2.31	0.66
22:DA:2849:U:O4	22:DA:2867:G:C8	2.48	0.66
22:DA:468:G:H5''	26:DE:55:SER:CB	2.25	0.66
22:DA:73:A:O5'	22:DA:73:A:H8	1.79	0.66
22:DA:84:A:OP2	22:DA:84:A:H8	1.79	0.66
22:DA:60:G:H1	22:DA:89:A:H62	1.44	0.66
25:DD:137:SER:C	25:DD:138:LEU:HD22	2.16	0.66
25:DD:208:LYS:O	25:DD:209:ALA:CB	2.43	0.66
30:DI:83:ALA:HB2	30:DI:99:LYS:O	1.96	0.66
35:DN:114:GLU:HG2	35:DN:115:LEU:N	2.11	0.66
39:DR:68:ARG:HH11	39:DR:90:ARG:HG2	1.59	0.66
42:DU:94:PHE:HD2	42:DU:94:PHE:O	1.79	0.66
43:DV:59:GLU:HG2	43:DV:60:VAL:H	1.60	0.66
45:DX:58:ILE:HG12	45:DX:66:VAL:HG11	1.78	0.66
1:AA:232:G:C2'	1:AA:233:C:H5'	2.26	0.66
3:AC:137:VAL:HG22	3:AC:148:ILE:HD13	1.78	0.66
4:AD:57:LYS:HG2	4:AD:202:LEU:HD23	1.77	0.66
5:AE:123:LEU:H	5:AE:123:LEU:HD12	1.61	0.66
6:AF:8:PHE:CE1	6:AF:21:MET:CE	2.78	0.66
12:AL:81:ILE:HD11	12:AL:94:TYR:CG	2.30	0.66
14:AN:29:ILE:HG23	14:AN:34:ASN:HD21	1.59	0.66
16:AP:56:ARG:NH1	16:AP:59:HIS:CD2	2.64	0.66
22:BA:1073:A:C2'	22:BA:1074:G:C5'	2.61	0.66
22:BA:1267:U:O3'	56:BA:3380:HOH:O	2.13	0.66
22:BA:1435:G:O2'	22:BA:1436:G:H5'	1.95	0.66
26:BE:175:ILE:HG23	26:BE:175:ILE:O	1.96	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:42:ASN:HA	30:BI:45:THR:HB	1.78	0.66
33:BL:78:ARG:HB3	33:BL:113:ALA:HB3	1.77	0.66
36:BO:62:LEU:HD23	36:BO:70:ALA:HA	1.78	0.66
38:BQ:26:ALA:HB1	38:BQ:30:VAL:HG23	1.77	0.66
38:BQ:4:LYS:CG	38:BQ:5:ARG:N	2.53	0.66
40:BS:21:ALA:HB1	40:BS:74:ILE:HD13	1.77	0.66
40:BS:24:ILE:HG12	40:BS:36:LEU:HD11	1.78	0.66
44:BW:8:SER:O	44:BW:9:THR:HG22	1.96	0.66
1:CA:1087:G:O2'	1:CA:1088:G:H5'	1.96	0.66
1:CA:1127:G:O2'	1:CA:1128:C:C5'	2.44	0.66
1:CA:1405:G:H1'	1:CA:1518:A:O2'	1.95	0.66
1:CA:708:C:O2'	1:CA:709:U:H5'	1.95	0.66
1:CA:796:C:O2'	1:CA:797:C:H5'	1.96	0.66
2:CB:184:ALA:HB3	2:CB:195:VAL:HG21	1.78	0.66
5:CE:76:ASN:O	5:CE:77:ASN:CB	2.44	0.66
15:CO:24:THR:HG23	15:CO:65:LEU:CD2	2.26	0.66
22:DA:1268:A:C2	22:DA:1269:A:H1'	2.30	0.66
22:DA:1387:A:C4	22:DA:1388:G:N7	2.63	0.66
22:DA:1455:G:HO2'	22:DA:1456:G:H8	1.44	0.66
22:DA:2038:G:H2'	22:DA:2039:U:O4'	1.96	0.66
22:DA:2076:U:H5''	22:DA:2238:G:H22	1.59	0.66
22:DA:2458:G:H4'	22:DA:2459:A:OP1	1.96	0.66
22:DA:2638:G:O2'	22:DA:2639:A:H8	1.79	0.66
22:DA:2742:G:O2'	22:DA:2743:U:H5'	1.95	0.66
22:DA:457:A:N1	22:DA:470:A:H5''	2.11	0.66
22:DA:618:G:N2	22:DA:619:G:C1'	2.59	0.66
22:DA:663:G:O6	22:DA:664:G:C6	2.48	0.66
22:DA:962:G:H2'	22:DA:963:U:H6	1.60	0.66
23:DB:109:A:O2'	23:DB:110:C:H6	1.77	0.66
23:DB:38:C:O2'	23:DB:39:A:H5'	1.96	0.66
25:DD:107:VAL:H	25:DD:206:ALA:H	1.43	0.66
25:DD:12:THR:HG23	25:DD:13:ARG:H	1.61	0.66
27:DF:39:VAL:CG2	27:DF:49:LEU:HG	2.25	0.66
31:DJ:74:TYR:OH	31:DJ:100:VAL:HG13	1.96	0.66
22:DA:662:G:H4'	33:DL:15:ALA:O	1.96	0.66
34:DM:17:ASN:O	34:DM:18:ARG:HG2	1.96	0.66
22:DA:1652:A:H62	35:DN:11:ASN:HD21	1.44	0.66
35:DN:96:ARG:CG	35:DN:98:LEU:HD13	2.25	0.66
1:AA:1316:G:H5''	1:AA:1317:C:OP2	1.96	0.65
1:AA:826:C:H5'	8:AH:12:ARG:HH21	1.61	0.65
2:AB:221:ARG:CZ	2:AB:221:ARG:HB3	2.25	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:122:GLN:HB3	3:AC:127:VAL:HG21	1.78	0.65
5:AE:81:GLN:OE1	5:AE:149:PRO:HD3	1.95	0.65
7:AG:90:VAL:HG23	7:AG:94:ARG:HD3	1.79	0.65
1:AA:523:A:H61	12:AL:88:ASP:CG	1.99	0.65
20:AT:54:GLN:N	20:AT:55:PRO:HD2	2.11	0.65
22:BA:1738:G:HO2'	22:BA:1739:A:H8	1.44	0.65
22:BA:2152:G:O2'	22:BA:2153:C:C5'	2.43	0.65
22:BA:215:G:C4'	22:BA:216:A:H4'	2.27	0.65
22:BA:2491:U:H5''	22:BA:2570:G:H5''	1.79	0.65
22:BA:2791:G:H8	22:BA:2791:G:H5''	1.61	0.65
23:BB:7:G:O2'	36:BO:38:GLN:NE2	2.29	0.65
24:BC:166:ARG:CG	24:BC:166:ARG:O	2.44	0.65
34:BM:132:THR:HG22	34:BM:133:LYS:N	2.10	0.65
1:AA:345:C:H3'	37:BP:33:GLU:OE1	1.96	0.65
41:BT:29:THR:CA	41:BT:86:THR:HA	2.22	0.65
44:BW:17:ALA:O	44:BW:18:LYS:HB3	1.96	0.65
22:BA:856:G:H1'	44:BW:23:LYS:CB	2.26	0.65
1:CA:1288:A:O2'	1:CA:1289:A:C8	2.37	0.65
1:CA:518:C:H4'	1:CA:519:C:C5'	2.26	0.65
9:CI:17:ARG:NH1	9:CI:65:THR:HG21	2.11	0.65
11:CK:81:LEU:O	11:CK:81:LEU:HD22	1.95	0.65
22:DA:1545:A:C2'	22:DA:1546:G:H5'	2.26	0.65
22:DA:2400:G:H2'	22:DA:2401:U:O4'	1.96	0.65
22:DA:963:U:O2'	22:DA:964:C:H5'	1.96	0.65
23:DB:57:A:N6	27:DF:25:MET:HG2	2.10	0.65
30:DI:102:ARG:HG2	30:DI:141:ASP:O	1.96	0.65
32:DK:11:ALA:CB	32:DK:64:ARG:NH1	2.59	0.65
34:DM:4:PRO:HD3	34:DM:68:PHE:HE2	1.62	0.65
37:DP:20:ARG:HD2	37:DP:21:PRO:CD	2.11	0.65
1:AA:1142:G:C2'	1:AA:1143:G:O4'	2.44	0.65
1:AA:49:U:O4	1:AA:365:U:C5	2.43	0.65
9:AI:24:ASN:H	9:AI:61:ASP:HB2	1.61	0.65
14:AN:5:MET:HA	14:AN:8:ARG:HD2	1.79	0.65
19:AS:48:ILE:O	19:AS:48:ILE:HD12	1.96	0.65
22:BA:1071:G:H1'	22:BA:1089:A:C5	2.31	0.65
22:BA:1079:C:C4	22:BA:1088:A:C2	2.84	0.65
22:BA:2292:U:H2'	22:BA:2293:G:C8	2.31	0.65
22:BA:2704:C:H5''	22:BA:2705:A:OP2	1.96	0.65
22:BA:2801:G:O2'	22:BA:2802:G:H5'	1.96	0.65
27:BF:129:MET:HE3	27:BF:153:ILE:HD11	1.77	0.65
27:BF:13:LYS:O	27:BF:17:THR:HG23	1.95	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BG:148:ARG:HD2	28:BG:163:TYR:CE2	2.30	0.65
34:BM:12:MET:CE	34:BM:71:LYS:HG3	2.26	0.65
36:BO:58:ILE:O	36:BO:59:ALA:CB	2.44	0.65
1:CA:1339:A:H2'	1:CA:1340:A:O4'	1.96	0.65
1:CA:154:U:C2'	1:CA:155:A:H5'	2.23	0.65
1:CA:994:A:N6	1:CA:1216:A:H5'	2.11	0.65
2:CB:206:ILE:CA	2:CB:209:VAL:HG22	2.20	0.65
11:CK:106:ILE:O	11:CK:106:ILE:HG12	1.95	0.65
22:DA:511:U:H5''	22:DA:1235:G:H4'	1.78	0.65
22:DA:185:G:C6	22:DA:212:G:C2	2.84	0.65
22:DA:2392:A:C8	22:DA:2429:G:C2	2.84	0.65
22:DA:2537:U:H2'	22:DA:2538:C:C6	2.31	0.65
22:DA:302:C:HO2'	22:DA:303:G:H8	0.76	0.65
22:DA:329:G:H4'	22:DA:330:A:OP1	1.96	0.65
22:DA:952:G:H21	22:DA:2267:A:H2	1.44	0.65
33:DL:116:VAL:HG13	33:DL:117:THR:N	2.11	0.65
41:DT:29:THR:CB	41:DT:87:LEU:H	2.05	0.65
42:DU:81:ARG:HB3	42:DU:96:LYS:HZ3	1.59	0.65
42:DU:9:GLU:OE1	42:DU:23:LYS:HA	1.96	0.65
47:DZ:13:ILE:HG22	47:DZ:14:GLY:N	2.10	0.65
2:AB:130:LYS:NZ	2:AB:133:ALA:HB2	2.11	0.65
2:AB:40:ILE:O	2:AB:41:ASN:HB2	1.96	0.65
17:AQ:66:LEU:O	17:AQ:67:SER:HB3	1.96	0.65
22:BA:1680:U:H2'	22:BA:1681:G:O4'	1.96	0.65
22:BA:1941:C:C5'	22:BA:1941:C:H6	2.06	0.65
22:BA:2476:A:C2'	22:BA:2477:U:H5'	2.26	0.65
22:BA:2671:G:C2'	22:BA:2672:U:H5'	2.26	0.65
22:BA:289:G:H2'	22:BA:290:U:O4'	1.96	0.65
22:BA:475:C:C4	22:BA:481:G:O6	2.49	0.65
22:BA:990:A:C5'	22:BA:990:A:H8	2.02	0.65
22:BA:1842:G:O4'	24:BC:242:HIS:CE1	2.49	0.65
22:BA:1059:G:O2'	30:BI:128:ILE:HD13	1.96	0.65
32:BK:18:ARG:NH1	32:BK:18:ARG:HG3	2.11	0.65
33:BL:100:ILE:HD12	33:BL:101:ILE:HD13	1.77	0.65
33:BL:93:ASN:HD22	33:BL:94:THR:H	1.43	0.65
43:BV:80:HIS:CD2	43:BV:82:TYR:H	2.15	0.65
44:BW:28:GLU:CA	44:BW:28:GLU:OE2	2.43	0.65
22:BA:2080:A:H5'	45:BX:18:SER:CB	2.26	0.65
45:BX:30:PRO:O	45:BX:32:LEU:HD13	1.96	0.65
45:BX:58:ILE:HD12	45:BX:66:VAL:CG2	2.16	0.65
1:CA:1304:G:C1'	1:CA:1333:A:H61	2.09	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1501:C:N4	1:CA:1504:G:C2	2.64	0.65
1:CA:457:G:N3	1:CA:457:G:H2'	2.10	0.65
1:CA:535:A:H4'	1:CA:536:C:OP1	1.90	0.65
1:CA:532:A:C8	3:CC:192:TYR:CE2	2.84	0.65
14:CN:87:ALA:HB2	14:CN:92:ILE:HD12	1.79	0.65
15:CO:42:PHE:HB3	15:CO:52:ARG:NH2	2.10	0.65
16:CP:52:LEU:HD21	16:CP:75:ILE:HG12	1.78	0.65
50:D2:34:ARG:HB3	50:D2:42:LEU:HD11	1.79	0.65
51:D3:41:ARG:HG3	51:D3:41:ARG:NH2	2.07	0.65
22:DA:1255:U:H3'	22:DA:1256:G:H5''	1.79	0.65
22:DA:1304:A:O2'	22:DA:1305:C:C6	2.48	0.65
22:DA:1671:U:O2	22:DA:1673:G:C8	2.49	0.65
22:DA:2686:G:H2'	22:DA:2687:U:H6	1.61	0.65
22:DA:321:U:O4'	26:DE:159:LEU:HG	1.96	0.65
23:DB:111:U:O2'	23:DB:112:G:C8	2.49	0.65
22:DA:1205:A:N7	26:DE:165:HIS:CG	2.65	0.65
30:DI:74:PRO:O	30:DI:78:LEU:HG	1.95	0.65
32:DK:118:LEU:O	32:DK:120:PRO:CD	2.44	0.65
35:DN:7:GLY:H	35:DN:46:ARG:HH12	1.44	0.65
41:DT:5:GLU:HA	41:DT:8:LEU:HD12	1.78	0.65
1:AA:1069:C:H2'	1:AA:1070:U:C5'	2.25	0.65
1:AA:469:C:O2'	1:AA:470:C:H5'	1.97	0.65
3:AC:41:TYR:OH	3:AC:89:VAL:HG21	1.96	0.65
9:AI:56:MET:CE	9:AI:57:VAL:H	2.10	0.65
20:AT:34:VAL:CG1	20:AT:78:LEU:HD22	2.25	0.65
22:BA:1644:C:C2'	22:BA:1645:G:H5'	2.26	0.65
22:BA:617:G:C2'	22:BA:618:G:H5'	2.27	0.65
26:BE:112:LEU:HD13	26:BE:186:VAL:CG1	2.26	0.65
29:BH:108:VAL:HG12	29:BH:109:GLU:H	1.62	0.65
29:BH:78:VAL:HG21	29:BH:145:ASN:HD22	1.61	0.65
37:BP:28:LYS:HE3	37:BP:82:SER:OG	1.97	0.65
37:BP:92:ARG:HH11	37:BP:92:ARG:HB2	1.61	0.65
41:BT:54:GLU:OE1	41:BT:88:LYS:HG3	1.96	0.65
44:BW:18:LYS:N	44:BW:36:ILE:HG12	2.12	0.65
47:BZ:40:THR:HG23	47:BZ:43:ILE:H	1.62	0.65
1:CA:1195:C:H5''	1:CA:1196:A:OP2	1.95	0.65
1:CA:130:A:O4'	17:CQ:64:ARG:HD3	1.96	0.65
1:CA:249:U:C2	1:CA:276:G:N1	2.64	0.65
1:CA:763:G:H2'	1:CA:764:C:H6	1.60	0.65
2:CB:79:VAL:HA	2:CB:213:LEU:CD2	2.25	0.65
12:CL:64:SER:HB2	12:CL:81:ILE:HD11	1.77	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:77:LYS:O	13:CM:77:LYS:HD3	1.96	0.65
13:CM:2:ARG:HA	13:CM:7:ASN:O	1.95	0.65
49:D1:20:TYR:HE2	49:D1:37:LYS:HZ2	1.44	0.65
22:DA:119:A:H5'	22:DA:120:U:OP1	1.97	0.65
22:DA:1313:U:O2'	22:DA:1314:C:H5'	1.96	0.65
22:DA:1324:G:H1'	22:DA:1616:A:H61	1.59	0.65
22:DA:1327:A:H2'	22:DA:1328:A:H8	1.59	0.65
22:DA:1425:G:H2'	22:DA:1426:G:O4'	1.96	0.65
22:DA:2142:A:C3'	22:DA:2143:C:H4'	2.26	0.65
22:DA:2217:G:O2'	22:DA:2218:G:O4'	2.15	0.65
22:DA:2290:G:H4'	22:DA:2381:A:O2'	1.96	0.65
22:DA:296:U:C2	22:DA:297:G:C8	2.84	0.65
22:DA:594:U:H2'	22:DA:595:C:C6	2.32	0.65
22:DA:620:G:H4'	22:DA:621:A:O5'	1.95	0.65
24:DC:156:SER:HB3	24:DC:159:THR:CG2	2.27	0.65
25:DD:114:LYS:CD	25:DD:116:LYS:NZ	2.58	0.65
35:DN:94:TYR:N	35:DN:94:TYR:CD1	2.63	0.65
43:DV:4:ILE:HB	43:DV:63:ILE:HG13	1.77	0.65
1:AA:1025:U:C5'	1:AA:1026:G:H5'	2.26	0.65
1:AA:1084:G:C5	1:AA:1085:U:C4	2.84	0.65
1:AA:1319:A:H2'	1:AA:1323:G:N7	2.12	0.65
1:AA:1367:C:H5'	10:AJ:62:ARG:NH1	2.10	0.65
1:AA:275:G:H2'	1:AA:276:G:C8	2.29	0.65
1:AA:322:C:O2'	20:AT:17:ARG:HG2	1.94	0.65
1:AA:486:U:H2'	1:AA:487:A:H5'	1.79	0.65
1:AA:754:C:O2	1:AA:754:C:H5''	1.96	0.65
6:AF:38:ARG:HG3	6:AF:39:LEU:H	1.58	0.65
7:AG:146:ALA:C	7:AG:148:LYS:H	1.99	0.65
7:AG:24:LYS:O	7:AG:28:ILE:HG12	1.96	0.65
22:BA:1071:G:H1'	22:BA:1089:A:C8	2.32	0.65
22:BA:548:G:H3'	22:BA:548:G:H8	1.61	0.65
22:BA:63:A:H5'	22:BA:63:A:H8	1.60	0.65
22:BA:915:C:C6	22:BA:915:C:H5''	2.30	0.65
22:BA:1059:G:H1'	30:BI:127:SER:HB2	1.78	0.65
37:BP:13:LYS:HE3	37:BP:75:THR:O	1.97	0.65
44:BW:28:GLU:HG3	44:BW:29:SER:N	2.11	0.65
44:BW:49:ASN:ND2	44:BW:49:ASN:C	2.49	0.65
1:CA:1225:A:H5'	13:CM:101:THR:HG23	1.77	0.65
1:CA:1349:A:H2'	1:CA:1350:A:C8	2.31	0.65
1:CA:482:A:H2'	1:CA:483:C:H6	1.59	0.65
1:CA:518:C:H2'	1:CA:530:G:C8	2.31	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:95:MET:CE	5:CE:143:LEU:HD21	2.27	0.65
15:CO:2:LEU:HD13	15:CO:34:GLN:HE21	1.60	0.65
17:CQ:25:GLU:HG3	17:CQ:40:THR:CG2	2.25	0.65
6:CF:59:TYR:HE2	18:CR:66:LEU:HD21	1.59	0.65
51:D3:33:THR:CG2	51:D3:34:LYS:N	2.59	0.65
22:DA:980:A:C4	22:DA:1136:G:O4'	2.50	0.65
22:DA:1282:U:H2'	22:DA:1283:G:O4'	1.97	0.65
22:DA:1287:A:O2'	22:DA:1288:G:H5'	1.96	0.65
22:DA:1655:A:H2'	22:DA:1656:C:H6	1.58	0.65
22:DA:1956:U:O2	22:DA:1985:C:H4'	1.96	0.65
22:DA:2584:U:H2'	22:DA:2585:U:H5'	1.78	0.65
22:DA:2620:C:O4'	25:DD:161:MET:HG3	1.97	0.65
22:DA:389:G:C8	22:DA:2413:G:H4'	2.31	0.65
22:DA:489:G:C5	22:DA:491:G:C5	2.85	0.65
22:DA:506:G:H4'	22:DA:507:A:H5'	1.76	0.65
23:DB:18:G:C6	23:DB:67:G:O6	2.50	0.65
26:DE:34:ALA:HB1	26:DE:94:GLN:HB2	1.77	0.65
28:DG:112:VAL:CG1	28:DG:114:HIS:HB3	2.27	0.65
28:DG:8:VAL:HG22	28:DG:72:ASN:HB2	1.79	0.65
29:DH:9:VAL:CG1	29:DH:10:ALA:N	2.59	0.65
30:DI:89:SER:HB3	30:DI:97:VAL:HG11	1.78	0.65
33:DL:85:VAL:O	33:DL:85:VAL:HG22	1.97	0.65
37:DP:102:ARG:HD2	37:DP:106:ALA:C	2.16	0.65
45:DX:6:VAL:CG1	45:DX:50:VAL:HG12	2.26	0.65
1:AA:1027:C:O5'	1:AA:1027:C:H6	1.79	0.65
1:AA:1087:G:O2'	1:AA:1088:G:H5'	1.97	0.65
1:AA:129:A:O2'	1:AA:130:A:H5''	1.97	0.65
1:AA:1319:A:C8	1:AA:1323:G:C6	2.85	0.65
1:AA:137:U:O2	1:AA:137:U:H2'	1.97	0.65
1:AA:160:A:H1'	1:AA:344:A:C2	2.32	0.65
1:AA:9:G:O2'	1:AA:10:A:H5'	1.97	0.65
2:AB:19:THR:HB	2:AB:37:VAL:HB	1.78	0.65
49:B1:3:GLY:O	49:B1:5:ARG:N	2.24	0.65
49:B1:16:THR:CG2	49:B1:41:VAL:CG2	2.75	0.65
22:BA:2492:U:H2'	22:BA:2493:U:H6	1.61	0.65
22:BA:404:A:H1'	22:BA:405:U:OP2	1.96	0.65
22:BA:580:U:H2'	22:BA:581:C:H6	1.61	0.65
27:BF:142:TYR:O	27:BF:145:VAL:HG22	1.97	0.65
31:BJ:44:TYR:C	31:BJ:44:TYR:HD1	1.98	0.65
35:BN:1:MET:O	35:BN:2:ARG:CB	2.45	0.65
46:BY:26:PHE:HD2	46:BY:29:ARG:HH11	1.45	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1072:G:H2'	1:CA:1073:U:H6	1.61	0.65
1:CA:1125:U:C2	1:CA:1127:G:N7	2.64	0.65
1:CA:1380:U:O4	7:CG:2:ARG:HB2	1.95	0.65
1:CA:429:U:H1'	1:CA:430:A:C5'	2.26	0.65
1:CA:533:A:C2	1:CA:536:C:C5	2.84	0.65
1:CA:861:G:O2'	1:CA:862:C:H5'	1.97	0.65
2:CB:89:PHE:HE2	2:CB:152:ASP:CB	2.04	0.65
12:CL:42:LYS:HD2	12:CL:43:LYS:CG	2.25	0.65
15:CO:38:LEU:HD12	15:CO:41:HIS:HB3	1.77	0.65
50:D2:24:THR:HG23	50:D2:27:GLY:HA3	1.79	0.65
22:DA:1317:G:C6	22:DA:1318:U:N3	2.65	0.65
22:DA:1798:U:C5	24:DC:270:ARG:NH1	2.65	0.65
22:DA:2800:A:H2'	22:DA:2801:G:O4'	1.97	0.65
22:DA:305:C:C2	22:DA:313:G:C2	2.84	0.65
22:DA:532:A:H4'	22:DA:533:G:C8	2.32	0.65
24:DC:145:MET:CE	24:DC:181:ARG:HH22	2.08	0.65
25:DD:106:LYS:O	25:DD:107:VAL:HB	1.97	0.65
22:DA:443:A:N6	26:DE:36:ALA:HB1	2.11	0.65
27:DF:101:ARG:O	27:DF:106:ALA:HB3	1.96	0.65
27:DF:31:GLU:O	27:DF:95:MET:HE2	1.97	0.65
33:DL:103:ILE:H	33:DL:103:ILE:CD1	1.89	0.65
36:DO:74:VAL:HB	36:DO:106:LEU:HD13	1.77	0.65
39:DR:24:LYS:HA	39:DR:94:THR:HG23	1.77	0.65
41:DT:29:THR:HA	41:DT:87:LEU:HB2	1.78	0.65
1:AA:1095:U:O2'	1:AA:1096:C:H5'	1.96	0.65
1:AA:1254:A:OP1	10:AJ:47:GLU:HG2	1.97	0.65
1:AA:1517:G:N3	22:BA:1919:A:O2'	2.29	0.65
1:AA:204:G:C1'	1:AA:465:A:C2	2.80	0.65
3:AC:152:VAL:HG23	3:AC:152:VAL:O	1.95	0.65
1:AA:619:U:C2	4:AD:131:ILE:HD11	2.32	0.65
8:AH:45:ILE:HA	8:AH:63:LYS:HG3	1.79	0.65
10:AJ:49:PHE:CE1	14:AN:76:PHE:HZ	2.14	0.65
18:AR:62:ARG:HB3	18:AR:69:TYR:CE2	2.31	0.65
50:B2:18:PHE:O	50:B2:22:MET:HB2	1.96	0.65
22:BA:2315:G:O2'	22:BA:2316:G:H5'	1.97	0.65
27:BF:129:MET:CG	27:BF:153:ILE:CD1	2.74	0.65
34:BM:114:ARG:HA	34:BM:130:PHE:CE1	2.31	0.65
41:BT:73:ARG:CZ	41:BT:73:ARG:HB3	2.25	0.65
45:BX:38:TRP:CB	45:BX:45:PHE:HE2	2.05	0.65
45:BX:50:VAL:CG1	45:BX:51:SER:N	2.60	0.65
1:CA:14:U:O2	1:CA:16:A:C8	2.49	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:18:C:C2	1:CA:19:A:C8	2.85	0.65
1:CA:251:G:H21	1:CA:253:A:N6	1.95	0.65
1:CA:1343:G:H4'	9:CI:123:ARG:O	1.97	0.65
9:CI:63:TYR:C	9:CI:64:ILE:HD12	2.17	0.65
12:CL:42:LYS:HG2	12:CL:43:LYS:HG2	1.79	0.65
14:CN:79:SER:HB2	14:CN:81:ILE:CD1	2.26	0.65
22:DA:1417:C:H4'	22:DA:1587:G:H21	1.61	0.65
22:DA:1754:A:N6	22:DA:1755:A:C6	2.65	0.65
22:DA:1826:G:P	24:DC:220:ARG:HB3	2.37	0.65
22:DA:1827:U:H2'	22:DA:1828:G:O4'	1.97	0.65
22:DA:1854:A:O4'	22:DA:2233:U:H4'	1.97	0.65
22:DA:36:G:H4'	22:DA:451:U:C2	2.31	0.65
22:DA:481:G:O2'	22:DA:482:A:OP2	2.13	0.65
26:DE:126:VAL:HG22	26:DE:127:GLU:H	1.62	0.65
29:DH:41:LYS:HA	29:DH:44:ILE:CG2	2.27	0.65
31:DJ:74:TYR:CE2	31:DJ:103:ILE:HD11	2.30	0.65
32:DK:21:CYS:HA	32:DK:41:ILE:CD1	2.26	0.65
38:DQ:50:ARG:N	38:DQ:50:ARG:HD2	2.10	0.65
41:DT:11:LEU:HD11	41:DT:46:ALA:HB1	1.77	0.65
46:DY:25:GLN:HA	46:DY:28:LEU:HB3	1.79	0.65
1:AA:1367:C:C5'	10:AJ:62:ARG:NH1	2.60	0.65
1:AA:39:G:H2'	1:AA:40:C:H6	1.60	0.65
2:AB:132:GLU:HG3	2:AB:132:GLU:O	1.96	0.65
18:AR:63:TYR:CD1	18:AR:69:TYR:OH	2.50	0.65
22:BA:1059:G:H5''	22:BA:1060:U:H3'	1.79	0.65
22:BA:1153:C:OP2	56:BA:3358:HOH:O	2.13	0.65
22:BA:2654:A:H4'	22:BA:2655:G:OP1	1.97	0.65
22:BA:638:G:H2'	22:BA:639:U:C6	2.32	0.65
24:BC:39:SER:O	24:BC:41:GLY:N	2.30	0.65
32:BK:35:VAL:HG12	32:BK:36:GLY:N	2.10	0.65
32:BK:76:VAL:HB	37:BP:72:VAL:CG2	2.26	0.65
41:BT:50:LEU:O	41:BT:51:PHE:HB2	1.96	0.65
42:BU:48:VAL:O	42:BU:53:GLN:HB3	1.97	0.65
1:CA:1221:G:H4'	19:CS:35:ARG:HH21	1.60	0.65
1:CA:132:C:O2'	1:CA:133:U:C5'	2.44	0.65
1:CA:801:U:O2'	1:CA:802:A:H5'	1.97	0.65
1:CA:8:A:C6	4:CD:205:LYS:HG3	2.32	0.65
1:CA:1147:C:H4'	9:CI:6:TYR:CE1	2.32	0.65
1:CA:537:G:C5'	12:CL:109:ARG:HH12	2.08	0.65
22:DA:1751:U:H2'	22:DA:1752:C:H6	1.61	0.65
22:DA:2056:G:N2	22:DA:2057:G:C8	2.64	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2626:C:H2'	22:DA:2627:G:H5'	1.76	0.65
23:DB:30:C:C2'	23:DB:31:C:H5'	2.25	0.65
26:DE:73:ILE:HG12	26:DE:73:ILE:O	1.97	0.65
29:DH:12:LEU:HD12	29:DH:12:LEU:O	1.96	0.65
31:DJ:45:THR:HG23	31:DJ:45:THR:O	1.96	0.65
31:DJ:94:ALA:O	31:DJ:95:ARG:HB3	1.97	0.65
37:DP:113:LEU:HD23	37:DP:113:LEU:C	2.17	0.65
38:DQ:6:GLY:C	38:DQ:8:ILE:H	1.98	0.65
38:DQ:91:ARG:CD	39:DR:11:GLN:HG3	2.27	0.65
38:DQ:91:ARG:NH2	38:DQ:93:ILE:HD13	2.12	0.65
39:DR:48:LYS:N	39:DR:48:LYS:HD2	2.10	0.65
41:DT:10:VAL:HG23	41:DT:11:LEU:N	2.10	0.65
42:DU:6:ARG:HG2	42:DU:7:ASP:N	2.12	0.65
1:AA:1111:A:O2'	1:AA:1112:C:H5'	1.96	0.65
2:AB:110:ILE:HD12	2:AB:147:LEU:HD13	1.78	0.65
2:AB:63:LYS:HD3	2:AB:63:LYS:O	1.96	0.65
1:AA:437:U:H4'	4:AD:153:ARG:NH2	2.12	0.65
10:AJ:33:GLY:O	10:AJ:34:ALA:HB2	1.97	0.65
11:AK:87:GLY:N	11:AK:113:THR:CG2	2.44	0.65
16:AP:20:VAL:CG2	16:AP:32:PHE:HB2	2.27	0.65
22:BA:1498:C:O2'	22:BA:1499:C:H5'	1.97	0.65
22:BA:1510:G:H8	22:BA:1510:G:H5'	1.59	0.65
25:BD:8:LYS:HB2	25:BD:201:LEU:HD21	1.79	0.65
25:BD:94:GLN:O	25:BD:95:SER:HB2	1.96	0.65
27:BF:133:GLU:H	27:BF:150:GLY:HA3	1.62	0.65
27:BF:37:MET:HE3	27:BF:151:LEU:HB3	1.79	0.65
27:BF:129:MET:CG	27:BF:153:ILE:HD11	2.26	0.65
28:BG:132:LEU:CD1	28:BG:143:VAL:HG12	2.27	0.65
29:BH:131:SER:HB2	29:BH:139:PHE:HD2	1.61	0.65
33:BL:93:ASN:C	33:BL:93:ASN:HD22	2.00	0.65
35:BN:33:ILE:HG12	35:BN:118:ARG:CZ	2.27	0.65
36:BO:106:LEU:O	36:BO:106:LEU:HD12	1.97	0.65
38:BQ:4:LYS:CE	38:BQ:7:VAL:HG13	2.26	0.65
40:BS:1:MET:HE1	40:BS:2:GLU:H	1.62	0.65
44:BW:76:ARG:HG3	44:BW:76:ARG:NH2	1.92	0.65
45:BX:46:VAL:HG21	45:BX:67:LEU:HD11	1.77	0.65
1:CA:1017:U:OP2	1:CA:1017:U:H6	1.80	0.65
1:CA:1090:U:H2'	1:CA:1091:U:H6	1.62	0.65
1:CA:176:C:H2'	1:CA:177:G:O5'	1.96	0.65
4:CD:204:SER:HB2	5:CE:105:ILE:CD1	2.26	0.65
17:CQ:78:VAL:HG12	17:CQ:79:GLU:H	1.61	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:54:ARG:HG2	19:CS:55:GLN:H	1.62	0.65
22:DA:1087:G:H1'	22:DA:1089:A:H1'	1.79	0.65
22:DA:1401:G:C2'	22:DA:1402:U:H6	2.07	0.65
22:DA:1787:A:N3	22:DA:1787:A:H2'	2.11	0.65
22:DA:2079:U:C2	22:DA:2242:G:N2	2.65	0.65
22:DA:322:A:C2	22:DA:340:A:C6	2.84	0.65
22:DA:479:A:O2'	22:DA:481:G:H5'	1.97	0.65
22:DA:527:C:C5	22:DA:2779:U:C5	2.85	0.65
26:DE:6:LYS:HB2	26:DE:121:VAL:HG12	1.78	0.65
32:DK:80:ASP:HB2	37:DP:67:GLU:OE1	1.97	0.65
1:AA:1068:G:O2'	1:AA:1069:C:H5'	1.96	0.65
1:AA:327:A:O2'	1:AA:329:A:H5''	1.96	0.65
1:AA:965:U:C4'	1:AA:969:A:C8	2.77	0.65
2:AB:134:LEU:HD12	2:AB:137:THR:OG1	1.96	0.65
2:AB:20:ARG:O	2:AB:22:TRP:HB3	1.97	0.65
3:AC:133:MET:HB3	3:AC:150:VAL:HG21	1.79	0.65
4:AD:47:LEU:HD23	4:AD:47:LEU:O	1.97	0.65
6:AF:66:ALA:HB1	6:AF:67:PRO:HD2	1.79	0.65
8:AH:9:MET:CE	8:AH:32:LYS:HG2	2.27	0.65
10:AJ:26:VAL:HG12	10:AJ:30:LYS:HE2	1.78	0.65
12:AL:79:ILE:HD12	12:AL:96:THR:CG2	2.25	0.65
12:AL:4:ASN:ND2	12:AL:8:ARG:HH12	1.94	0.65
22:BA:1414:C:C5	22:BA:1415:U:H5	2.14	0.65
22:BA:686:U:H2'	22:BA:788:A:N1	2.12	0.65
22:BA:747:U:C4	22:BA:2613:U:C5	2.85	0.65
31:BJ:44:TYR:CE2	38:BQ:63:ARG:HD3	2.30	0.65
40:BS:37:THR:HB	40:BS:38:TYR:CD1	2.32	0.65
22:BA:923:G:N2	44:BW:23:LYS:HZ3	1.93	0.65
1:CA:1254:A:H2'	1:CA:1255:G:H8	1.60	0.65
1:CA:1346:A:C8	1:CA:1348:U:N3	2.65	0.65
1:CA:1406:U:H2'	1:CA:1407:C:H5'	1.79	0.65
1:CA:1493:A:H3'	22:DA:1913:A:H62	1.62	0.65
1:CA:374:A:H5''	1:CA:452:A:C2	2.32	0.65
5:CE:65:LYS:HZ2	5:CE:68:ARG:HD3	1.60	0.65
6:CF:98:GLU:O	6:CF:99:ALA:CB	2.45	0.65
7:CG:110:ARG:HG3	7:CG:111:GLY:N	2.12	0.65
10:CJ:77:VAL:O	10:CJ:79:PRO:HD3	1.96	0.65
1:CA:1319:A:H5''	19:CS:4:LEU:HD11	1.76	0.65
19:CS:68:HIS:HB3	19:CS:72:GLU:HG3	1.78	0.65
48:D0:4:GLN:HG2	48:D0:4:GLN:O	1.95	0.65
22:DA:1079:C:O2'	22:DA:1080:A:H8	1.80	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1290:C:C2	22:DA:1291:C:C5	2.84	0.65
22:DA:1512:C:O2'	22:DA:1513:U:C5'	2.44	0.65
22:DA:1827:U:O4'	22:DA:1970:A:O2'	2.14	0.65
22:DA:2393:U:C2'	22:DA:2394:C:H5'	2.26	0.65
22:DA:600:G:H5''	26:DE:27:LEU:HD22	1.78	0.65
22:DA:813:U:H2'	22:DA:814:C:C6	2.31	0.65
29:DH:80:ILE:CB	29:DH:101:ASP:CB	2.72	0.65
42:DU:60:LYS:N	42:DU:60:LYS:HD2	2.12	0.65
42:DU:81:ARG:HB2	42:DU:96:LYS:CG	2.27	0.65
45:DX:29:LEU:HB2	45:DX:30:PRO:CD	2.26	0.65
1:AA:1346:A:H61	1:AA:1374:A:H3'	1.62	0.64
2:AB:71:THR:HG21	2:AB:94:ARG:HD3	1.77	0.64
6:AF:42:TRP:HZ2	6:AF:61:LEU:HD22	1.62	0.64
5:AE:158:LYS:HE2	8:AH:63:LYS:NZ	2.12	0.64
22:BA:2331:G:O2'	22:BA:2336:A:N1	2.28	0.64
22:BA:2339:C:H2'	22:BA:2340:A:C8	2.32	0.64
22:BA:503:A:H4'	22:BA:504:A:O5'	1.98	0.64
24:BC:20:ASN:C	24:BC:20:ASN:ND2	2.50	0.64
25:BD:114:LYS:HE3	25:BD:114:LYS:H	1.52	0.64
26:BE:61:ARG:HH11	26:BE:64:GLY:HA3	1.62	0.64
29:BH:27:ARG:NH1	29:BH:38:PRO:HG3	2.12	0.64
37:BP:52:ARG:H	37:BP:56:SER:HB3	1.62	0.64
41:BT:28:ASN:HA	41:BT:91:GLN:NE2	2.12	0.64
22:BA:309:A:O3'	42:BU:15:GLY:HA2	1.98	0.64
43:BV:39:ALA:C	43:BV:40:ILE:HD13	2.17	0.64
44:BW:9:THR:HG23	44:BW:10:ARG:N	2.10	0.64
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.32	0.64
1:CA:198:G:O6	1:CA:220:G:C4	2.50	0.64
2:CB:221:ARG:HA	2:CB:224:ARG:CZ	2.28	0.64
3:CC:111:ASP:HB3	3:CC:114:LEU:HB2	1.79	0.64
5:CE:131:ASN:HD22	5:CE:132:PRO:CD	2.10	0.64
10:CJ:10:LEU:HD23	10:CJ:98:VAL:HG22	1.78	0.64
12:CL:6:LEU:C	12:CL:8:ARG:H	2.01	0.64
13:CM:13:HIS:CB	13:CM:16:ILE:HD13	2.23	0.64
13:CM:18:LEU:HA	13:CM:21:ILE:HD11	1.79	0.64
15:CO:47:LYS:N	15:CO:47:LYS:HD2	2.11	0.64
48:D0:37:HIS:CB	48:D0:43:THR:HG22	2.25	0.64
22:DA:1127:A:O2'	22:DA:1128:G:C5'	2.45	0.64
22:DA:1301:A:C4	22:DA:1303:G:N7	2.64	0.64
22:DA:1431:A:C2	22:DA:1432:G:C4	2.85	0.64
22:DA:1480:C:H2'	22:DA:1481:U:O4'	1.96	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2188:U:H2'	22:DA:2189:U:C6	2.32	0.64
22:DA:2837:A:H2'	22:DA:2838:G:C8	2.32	0.64
22:DA:397:U:HO2'	22:DA:398:C:H6	1.44	0.64
22:DA:860:U:O2'	22:DA:861:A:H8	1.71	0.64
22:DA:859:G:N2	22:DA:916:G:O2'	2.30	0.64
22:DA:91:A:O2'	22:DA:92:U:C5'	2.44	0.64
22:DA:922:C:H1'	44:DW:22:VAL:CG2	2.21	0.64
23:DB:112:G:H2'	23:DB:113:C:C6	2.33	0.64
31:DJ:51:GLY:C	31:DJ:121:LYS:HE3	2.17	0.64
38:DQ:96:ASP:O	38:DQ:99:VAL:HG23	1.97	0.64
22:DA:492:A:N1	40:DS:49:LYS:HE2	2.11	0.64
44:DW:23:LYS:HD2	44:DW:24:ARG:HB2	1.79	0.64
45:DX:65:THR:O	45:DX:68:ALA:HB3	1.97	0.64
1:AA:221:C:C2'	1:AA:222:C:H5'	2.26	0.64
1:AA:421:U:H3'	1:AA:421:U:H6	1.61	0.64
1:AA:662:U:H2'	1:AA:663:A:C8	2.31	0.64
9:AI:100:ALA:HB1	9:AI:102:PHE:CZ	2.32	0.64
17:AQ:31:PRO:HB2	17:AQ:32:ILE:HD12	1.79	0.64
22:BA:1510:G:O2'	22:BA:1511:G:H5'	1.96	0.64
22:BA:1654:A:H1'	25:BD:118:PHE:CE1	2.31	0.64
29:BH:44:ILE:O	29:BH:48:GLU:HB2	1.97	0.64
29:BH:75:LEU:HD23	29:BH:143:ILE:HG23	1.79	0.64
22:BA:1190:G:H5''	33:BL:32:GLY:HA2	1.79	0.64
31:BJ:44:TYR:CD2	38:BQ:63:ARG:HG2	2.33	0.64
43:BV:26:PHE:HB2	43:BV:27:PRO:CD	2.28	0.64
47:BZ:6:ILE:O	47:BZ:35:VAL:HG12	1.97	0.64
1:CA:106:C:O2	1:CA:379:C:H4'	1.97	0.64
1:CA:1168:U:C2'	1:CA:1168:U:O2	2.45	0.64
1:CA:1230:C:H5''	1:CA:1230:C:H6	1.62	0.64
1:CA:158:G:C5	1:CA:164:G:C6	2.86	0.64
1:CA:677:U:H3	1:CA:713:G:H22	1.44	0.64
2:CB:90:PHE:HE1	2:CB:92:ASN:ND2	1.95	0.64
10:CJ:37:ARG:HB3	10:CJ:74:VAL:O	1.97	0.64
51:D3:41:ARG:HD2	51:D3:41:ARG:O	1.97	0.64
22:DA:117:G:N1	22:DA:119:A:N6	2.45	0.64
22:DA:1420:A:C4	22:DA:2211:A:N7	2.64	0.64
22:DA:2566:A:O2'	22:DA:2567:G:OP2	2.14	0.64
22:DA:2508:G:N2	22:DA:2582:G:C6	2.66	0.64
22:DA:2756:U:H1'	22:DA:2757:A:C5'	2.26	0.64
22:DA:2800:A:H2'	22:DA:2801:G:C4'	2.28	0.64
22:DA:404:A:H4'	22:DA:405:U:H5'	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:481:G:H1'	22:DA:506:G:N2	2.10	0.64
23:DB:71:C:C2'	23:DB:72:G:H5'	2.27	0.64
25:DD:100:LEU:HD13	25:DD:100:LEU:O	1.96	0.64
26:DE:122:GLU:O	26:DE:123:LYS:HB3	1.97	0.64
28:DG:112:VAL:HG12	28:DG:114:HIS:HB3	1.77	0.64
28:DG:84:LYS:O	28:DG:85:LYS:HB3	1.96	0.64
22:DA:2261:C:H42	44:DW:10:ARG:HB3	1.60	0.64
46:DY:5:GLU:O	46:DY:6:LEU:HG	1.96	0.64
1:AA:528:C:H6	1:AA:528:C:H5''	1.63	0.64
2:AB:108:GLN:HE21	2:AB:108:GLN:N	1.95	0.64
8:AH:10:LEU:HD11	8:AH:126:CYS:CB	2.27	0.64
9:AI:57:VAL:O	9:AI:58:GLU:HG2	1.97	0.64
9:AI:98:ARG:HG2	9:AI:103:VAL:CG2	2.23	0.64
10:AJ:41:PRO:O	10:AJ:42:LEU:HB2	1.97	0.64
14:AN:88:MET:HE1	14:AN:97:LYS:HD2	1.79	0.64
21:AU:41:THR:O	21:AU:45:LYS:HB2	1.97	0.64
22:BA:646:U:C3'	22:BA:647:G:H5''	2.27	0.64
23:BB:24:G:N7	23:BB:56:G:H2'	2.13	0.64
24:BC:203:VAL:O	24:BC:204:LEU:HB2	1.96	0.64
24:BC:245:THR:HB	24:BC:247:TRP:CE3	2.33	0.64
25:BD:48:ILE:HG23	25:BD:84:LEU:HD21	1.78	0.64
31:BJ:32:LEU:O	31:BJ:36:LEU:HB2	1.97	0.64
1:CA:268:U:H2'	1:CA:269:C:H6	1.57	0.64
1:CA:373:A:N3	1:CA:374:A:C8	2.65	0.64
1:CA:892:A:C5	1:CA:893:C:C5	2.86	0.64
1:CA:962:C:H42	1:CA:974:A:H61	1.41	0.64
1:CA:994:A:N3	1:CA:995:C:C6	2.65	0.64
2:CB:119:GLN:CG	2:CB:124:THR:HG21	2.28	0.64
3:CC:133:MET:CE	3:CC:152:VAL:HG13	2.27	0.64
9:CI:53:LEU:O	9:CI:54:VAL:HG13	1.97	0.64
16:CP:16:PHE:CZ	16:CP:38:PHE:HD1	2.15	0.64
20:CT:57:VAL:CG1	20:CT:71:ALA:CB	2.76	0.64
22:DA:1090:A:C3'	22:DA:1091:G:H5''	2.27	0.64
22:DA:1213:A:H2'	22:DA:1214:A:H8	1.63	0.64
22:DA:1343:G:O2'	22:DA:1344:U:C6	2.49	0.64
22:DA:1359:A:C2	22:DA:1360:G:C1'	2.79	0.64
22:DA:1537:G:H2'	22:DA:1538:G:C4'	2.24	0.64
22:DA:2151:U:O2'	22:DA:2152:G:O4'	2.14	0.64
22:DA:2461:A:H1'	22:DA:2492:U:C2	2.32	0.64
22:DA:2788:C:H2'	22:DA:2789:C:H6	1.61	0.64
22:DA:404:A:H5'	22:DA:405:U:OP1	1.97	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:716:A:C3'	22:DA:717:C:H5''	2.28	0.64
22:DA:839:U:H2'	22:DA:840:C:C6	2.32	0.64
22:DA:973:A:H5'	22:DA:974:G:OP2	1.98	0.64
24:DC:86:ARG:HD2	24:DC:90:ILE:HD11	1.79	0.64
31:DJ:103:ILE:HD12	31:DJ:103:ILE:O	1.97	0.64
31:DJ:27:ARG:O	31:DJ:30:THR:HG22	1.96	0.64
32:DK:2:ILE:O	32:DK:3:GLN:CB	2.45	0.64
40:DS:31:GLN:O	40:DS:35:ILE:HG12	1.97	0.64
42:DU:47:PRO:CB	42:DU:54:PRO:HG3	2.22	0.64
42:DU:81:ARG:HB2	42:DU:96:LYS:CD	2.27	0.64
43:DV:56:PHE:C	43:DV:58:SER:H	2.00	0.64
46:DY:22:LEU:CD1	46:DY:23:ARG:NH1	2.60	0.64
1:AA:430:A:C4	1:AA:431:A:C8	2.85	0.64
1:AA:408:A:C2	1:AA:435:A:C2	2.85	0.64
1:AA:462:G:H3'	1:AA:463:U:C6	2.32	0.64
1:AA:531:U:H4'	1:AA:532:A:O5'	1.98	0.64
1:AA:52:C:O2'	1:AA:53:A:H5'	1.97	0.64
3:AC:54:ILE:HD12	3:AC:54:ILE:C	2.17	0.64
4:AD:61:ARG:HH21	4:AD:67:LEU:HA	1.62	0.64
6:AF:3:HIS:CB	6:AF:92:THR:HG23	2.27	0.64
22:BA:1269:A:OP2	56:BA:3383:HOH:O	2.14	0.64
22:BA:1556:C:C2'	22:BA:1557:C:H5'	2.28	0.64
22:BA:2352:A:N1	44:BW:30:VAL:HG21	2.11	0.64
22:BA:485:C:H2'	22:BA:486:C:C6	2.32	0.64
22:BA:1820:U:C2	24:BC:200:MET:CG	2.80	0.64
22:BA:1654:A:O2'	25:BD:118:PHE:CD1	2.48	0.64
25:BD:53:GLY:HA3	25:BD:77:ARG:HB2	1.79	0.64
26:BE:150:THR:HG23	26:BE:153:LEU:H	1.62	0.64
28:BG:148:ARG:HA	28:BG:161:VAL:CG1	2.27	0.64
28:BG:60:GLY:O	28:BG:61:TRP:CB	2.45	0.64
28:BG:8:VAL:HG12	28:BG:9:VAL:H	1.61	0.64
29:BH:132:PHE:CG	29:BH:133:GLN:N	2.65	0.64
34:BM:21:ALA:CB	34:BM:100:LYS:N	2.60	0.64
38:BQ:81:GLY:CA	38:BQ:116:LEU:CD1	2.74	0.64
44:BW:23:LYS:HD2	44:BW:24:ARG:CB	2.27	0.64
1:CA:1190:G:O2'	1:CA:1191:A:P	2.56	0.64
1:CA:121:U:H3'	1:CA:121:U:OP1	1.97	0.64
1:CA:1264:U:H2'	1:CA:1265:C:H6	1.63	0.64
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.33	0.64
1:CA:282:A:H2'	1:CA:283:U:H6	1.61	0.64
1:CA:440:C:H2'	1:CA:441:A:H5'	1.80	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:70:VAL:O	6:CF:73:GLU:HB2	1.98	0.64
7:CG:4:ARG:NE	7:CG:6:ILE:HG22	2.13	0.64
9:CI:61:ASP:C	9:CI:62:LEU:HD22	2.18	0.64
10:CJ:30:LYS:CE	10:CJ:36:VAL:HG22	2.27	0.64
16:CP:6:LEU:HB2	16:CP:17:TYR:HB3	1.78	0.64
21:CU:16:ARG:CD	21:CU:19:LYS:HG2	2.28	0.64
22:DA:1680:U:H2'	22:DA:1681:G:O4'	1.97	0.64
22:DA:1663:G:C6	22:DA:1998:A:N6	2.65	0.64
22:DA:2142:A:C2'	22:DA:2143:C:H4'	2.28	0.64
22:DA:231:A:O2'	22:DA:232:G:H5'	1.96	0.64
22:DA:716:A:C2'	22:DA:717:C:H5''	2.27	0.64
25:DD:119:ALA:CB	25:DD:163:GLY:H	2.09	0.64
26:DE:61:ARG:HE	26:DE:65:THR:HB	1.61	0.64
27:DF:30:VAL:HA	27:DF:157:THR:HG22	1.79	0.64
33:DL:79:LEU:HD22	33:DL:115:GLU:O	1.98	0.64
33:DL:89:VAL:HG23	33:DL:121:THR:CG2	2.26	0.64
38:DQ:4:LYS:CD	38:DQ:7:VAL:HG22	2.27	0.64
31:DJ:44:TYR:CD1	38:DQ:63:ARG:NH2	2.64	0.64
1:AA:1505:G:H5''	56:AA:1802:HOH:O	1.96	0.64
1:AA:238:A:C2'	1:AA:239:U:H5'	2.27	0.64
1:AA:601:G:H2'	1:AA:602:A:C8	2.32	0.64
1:AA:688:G:H2'	1:AA:689:C:H6	1.62	0.64
1:AA:903:G:C5	1:AA:904:U:C5	2.86	0.64
1:AA:914:A:C4	1:AA:915:A:C8	2.86	0.64
3:AC:143:LEU:HD22	3:AC:143:LEU:H	1.62	0.64
3:AC:41:TYR:CZ	3:AC:89:VAL:HG21	2.32	0.64
7:AG:21:LEU:HD21	7:AG:96:ASN:HD22	1.62	0.64
49:B1:49:LYS:HG2	49:B1:50:GLU:H	1.62	0.64
22:BA:1338:G:O2'	22:BA:1339:G:H5'	1.97	0.64
22:BA:1499:C:H2'	22:BA:1500:G:H8	1.62	0.64
22:BA:1539:U:H2'	22:BA:1540:G:H8	1.62	0.64
22:BA:1935:G:H1	22:BA:1962:C:H2'	1.62	0.64
22:BA:1937:A:H5'	56:BA:3464:HOH:O	1.97	0.64
22:BA:2134:A:N6	22:BA:2157:G:C5	2.65	0.64
22:BA:2197:U:O2'	22:BA:2198:A:C2'	2.44	0.64
22:BA:2408:U:H2'	22:BA:2409:G:C8	2.33	0.64
25:BD:182:ALA:O	25:BD:184:ARG:N	2.31	0.64
25:BD:5:VAL:H	25:BD:32:ASN:ND2	1.91	0.64
26:BE:7:ASP:O	26:BE:9:GLN:N	2.30	0.64
32:BK:19:VAL:HG22	32:BK:41:ILE:CG1	2.26	0.64
38:BQ:4:LYS:HZ3	38:BQ:8:ILE:HG23	1.62	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BS:24:ILE:HG23	40:BS:71:VAL:HG11	1.80	0.64
41:BT:1:MET:HB2	41:BT:2:ILE:HD13	1.78	0.64
46:BY:32:ALA:HA	46:BY:37:LEU:HB3	1.78	0.64
1:CA:1071:C:H2'	1:CA:1072:G:C8	2.32	0.64
1:CA:495:A:C2	1:CA:496:A:C6	2.86	0.64
17:CQ:45:VAL:HG11	17:CQ:60:ILE:CG2	2.27	0.64
21:CU:33:ARG:HH12	21:CU:34:ARG:HD3	1.63	0.64
21:CU:38:GLU:H	21:CU:40:PRO:HD2	1.59	0.64
22:DA:1735:A:C2	22:DA:1736:U:C2	2.85	0.64
22:DA:193:U:C2'	22:DA:194:G:H5'	2.28	0.64
22:DA:2331:G:N1	22:DA:2385:C:C4	2.66	0.64
22:DA:2443:C:C2	22:DA:2444:G:C8	2.86	0.64
22:DA:2502:G:H5'	22:DA:2503:A:C5'	2.27	0.64
22:DA:2023:C:H4'	22:DA:2617:U:O3'	1.96	0.64
22:DA:395:U:O2'	22:DA:396:G:H8	1.81	0.64
22:DA:46:G:N2	22:DA:47:C:C2	2.65	0.64
25:DD:148:GLN:HG2	25:DD:152:PRO:CG	2.18	0.64
28:DG:93:TYR:OH	28:DG:159:LYS:HE2	1.97	0.64
30:DI:30:GLN:HG3	30:DI:31:GLY:H	1.62	0.64
33:DL:111:ILE:N	33:DL:111:ILE:HD13	2.13	0.64
35:DN:51:LEU:HD23	35:DN:54:LEU:CD2	2.25	0.64
41:DT:34:VAL:HG21	41:DT:83:ALA:HB2	1.77	0.64
1:AA:1348:U:H2'	1:AA:1349:A:H8	1.63	0.64
1:AA:1468:A:H2'	1:AA:1469:C:C5'	2.28	0.64
7:AG:105:GLU:O	7:AG:109:LYS:HG2	1.97	0.64
9:AI:37:TYR:CD2	9:AI:38:PHE:CD2	2.85	0.64
11:AK:47:GLY:HA3	11:AK:52:ARG:HH11	1.62	0.64
16:AP:7:ALA:O	16:AP:9:HIS:HD2	1.80	0.64
17:AQ:45:VAL:CG2	17:AQ:60:ILE:HD13	2.28	0.64
19:AS:28:LYS:HB3	19:AS:29:PRO:CD	2.27	0.64
52:B4:13:ASN:H	52:B4:13:ASN:ND2	1.95	0.64
52:B4:9:LYS:N	52:B4:9:LYS:CD	2.55	0.64
22:BA:1416:G:O2'	22:BA:1417:C:H6	1.81	0.64
22:BA:1735:A:O2'	22:BA:1736:U:C5'	2.45	0.64
22:BA:2352:A:C3'	22:BA:2353:G:H5'	2.26	0.64
22:BA:544:C:N3	22:BA:548:G:OP1	2.30	0.64
23:BB:12:C:H4'	23:BB:13:G:OP1	1.97	0.64
32:BK:21:CYS:CA	32:BK:41:ILE:CD1	2.75	0.64
39:BR:49:ILE:HG13	39:BR:51:VAL:O	1.97	0.64
41:BT:86:THR:O	41:BT:87:LEU:HD23	1.97	0.64
43:BV:41:GLU:C	43:BV:42:LEU:HD23	2.18	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1005:A:C4	1:CA:1006:G:H1'	2.33	0.64
1:CA:124:C:O2'	1:CA:125:U:H5'	1.97	0.64
1:CA:1399:C:O2	1:CA:1401:G:C5	2.49	0.64
3:CC:35:ASP:OD1	3:CC:56:ILE:HD12	1.98	0.64
5:CE:129:SER:HA	56:CE:202:HOH:O	1.96	0.64
6:CF:79:ARG:HG2	6:CF:79:ARG:HH11	1.62	0.64
10:CJ:44:THR:HG22	10:CJ:45:ARG:H	1.63	0.64
11:CK:17:ASP:OD2	11:CK:80:ASN:HB2	1.98	0.64
22:DA:2466:C:OP1	52:D4:4:ARG:HB3	1.97	0.64
22:DA:1366:A:H2'	22:DA:1367:A:C8	2.33	0.64
22:DA:2237:G:H5''	22:DA:2238:G:OP1	1.97	0.64
22:DA:2729:G:O2'	22:DA:2730:C:H5'	1.98	0.64
22:DA:2798:U:H5''	22:DA:2799:A:OP1	1.97	0.64
22:DA:375:G:H8	22:DA:375:G:H5''	1.61	0.64
22:DA:391:A:H2'	22:DA:392:U:C6	2.32	0.64
22:DA:416:U:H2'	22:DA:417:C:C6	2.32	0.64
22:DA:449:A:C2'	22:DA:450:G:H5'	2.27	0.64
22:DA:575:A:O2'	22:DA:576:U:H5'	1.98	0.64
22:DA:794:A:O2'	22:DA:795:C:H5'	1.97	0.64
24:DC:144:GLU:HB3	24:DC:187:CYS:CB	2.28	0.64
24:DC:80:LEU:HD12	24:DC:80:LEU:N	2.13	0.64
28:DG:117:PRO:CG	28:DG:143:VAL:HG11	2.28	0.64
28:DG:164:ALA:O	28:DG:165:ASP:CB	2.45	0.64
32:DK:17:ARG:HG2	32:DK:18:ARG:N	2.13	0.64
35:DN:1:MET:O	35:DN:2:ARG:HB2	1.96	0.64
38:DQ:87:VAL:CG1	39:DR:52:PRO:HG3	2.27	0.64
22:DA:2270:A:H5'	44:DW:18:LYS:HG2	1.80	0.64
44:DW:23:LYS:HD2	44:DW:24:ARG:CA	2.27	0.64
46:DY:2:LYS:CD	46:DY:4:LYS:HE3	2.27	0.64
1:AA:1064:G:H4'	1:AA:1065:U:O5'	1.97	0.64
1:AA:1121:U:O2'	1:AA:1122:U:H5'	1.98	0.64
1:AA:1239:A:H62	1:AA:1299:A:H61	1.41	0.64
1:AA:137:U:H1'	1:AA:227:G:N2	2.13	0.64
1:AA:1469:C:H6	1:AA:1469:C:H3'	1.63	0.64
1:AA:429:U:C1'	1:AA:430:A:H5''	2.28	0.64
1:AA:605:U:H2'	1:AA:606:G:H8	1.62	0.64
1:AA:842:U:H2'	1:AA:844:G:P	2.37	0.64
4:AD:172:VAL:O	4:AD:173:ASP:HB2	1.95	0.64
5:AE:136:VAL:O	5:AE:136:VAL:CG2	2.45	0.64
1:AA:1240:U:H3	7:AG:29:LEU:CD2	2.10	0.64
13:AM:3:ILE:HA	13:AM:56:ARG:CZ	2.27	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:12:U:H2'	22:BA:12:U:O2	1.97	0.64
24:BC:91:ALA:HB3	24:BC:103:ILE:HG22	1.79	0.64
26:BE:1:MET:HG2	26:BE:14:VAL:HG23	1.78	0.64
27:BF:131:VAL:CG2	27:BF:151:LEU:CD1	2.75	0.64
28:BG:132:LEU:HD23	28:BG:132:LEU:N	2.13	0.64
33:BL:68:SER:O	33:BL:69:ARG:HB2	1.97	0.64
44:BW:19:ARG:NH2	44:BW:22:VAL:HG21	2.12	0.64
44:BW:70:VAL:HG13	44:BW:70:VAL:O	1.96	0.64
1:CA:1146:A:O2'	1:CA:1147:C:H5'	1.97	0.64
1:CA:555:U:H2'	1:CA:556:C:C6	2.32	0.64
1:CA:695:A:H2'	1:CA:696:A:C8	2.33	0.64
1:CA:70:U:H2'	1:CA:94:G:N7	2.12	0.64
2:CB:147:LEU:N	2:CB:147:LEU:HD12	2.13	0.64
2:CB:66:ILE:HB	2:CB:88:GLN:HG2	1.79	0.64
4:CD:111:ALA:O	4:CD:114:ARG:HB3	1.96	0.64
4:CD:39:GLN:C	4:CD:41:GLY:H	2.00	0.64
7:CG:88:VAL:HG22	7:CG:89:GLU:N	2.09	0.64
9:CI:49:GLN:N	9:CI:50:PRO:CD	2.61	0.64
14:CN:80:ARG:HH11	14:CN:80:ARG:HG2	1.63	0.64
21:CU:18:PHE:HB3	21:CU:19:LYS:NZ	2.13	0.64
21:CU:33:ARG:NH1	21:CU:34:ARG:HD3	2.12	0.64
22:DA:1304:A:O2'	22:DA:1305:C:H6	1.79	0.64
22:DA:1338:G:H4'	41:DT:18:GLU:CD	2.18	0.64
22:DA:1358:G:H2'	22:DA:1372:U:O4	1.97	0.64
22:DA:1388:G:O2'	22:DA:1389:G:H5'	1.98	0.64
22:DA:1745:A:C2	22:DA:1746:A:C8	2.85	0.64
22:DA:2815:C:H2'	22:DA:2816:G:H8	1.62	0.64
22:DA:518:G:H2'	22:DA:519:U:H6	1.63	0.64
22:DA:79:C:N4	22:DA:107:G:H1	1.96	0.64
26:DE:119:ILE:HD11	26:DE:143:LEU:HD21	1.78	0.64
26:DE:30:GLN:HG2	26:DE:30:GLN:O	1.97	0.64
26:DE:60:TRP:O	26:DE:61:ARG:HB2	1.98	0.64
31:DJ:64:VAL:CG2	31:DJ:68:LYS:HG3	2.28	0.64
41:DT:48:GLN:HA	41:DT:48:GLN:HE21	1.63	0.64
42:DU:3:LYS:HG2	42:DU:84:PHE:HZ	1.61	0.64
43:DV:75:GLN:CG	43:DV:92:VAL:HG11	2.28	0.64
45:DX:52:ALA:O	45:DX:53:LYS:HB3	1.98	0.64
47:DZ:30:ARG:NH2	47:DZ:33:HIS:HB2	2.12	0.64
1:AA:1405:G:O4'	1:AA:1519:A:H4'	1.97	0.64
1:AA:637:C:H2'	1:AA:638:U:H5'	1.80	0.64
1:AA:914:A:H2'	1:AA:915:A:H8	1.61	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:60:VAL:HA	4:AD:63:ILE:CG2	2.27	0.64
14:AN:92:ILE:HG21	14:AN:95:LEU:CD2	2.27	0.64
51:B3:21:PHE:H	51:B3:48:MET:CE	2.11	0.64
22:BA:1654:A:H2'	22:BA:1655:A:H8	1.63	0.64
22:BA:2847:U:H2'	22:BA:2848:G:H5'	1.80	0.64
22:BA:503:A:H5'	22:BA:505:A:OP1	1.98	0.64
22:BA:659:G:H21	26:BE:30:GLN:HE22	1.43	0.64
22:BA:974:G:C8	22:BA:989:G:C2	2.86	0.64
24:BC:83:ASP:OD1	24:BC:84:PRO:HD2	1.98	0.64
25:BD:121:THR:O	25:BD:122:VAL:HB	1.98	0.64
31:BJ:140:LEU:HD13	31:BJ:140:LEU:C	2.18	0.64
38:BQ:87:VAL:O	38:BQ:88:GLU:CB	2.46	0.64
39:BR:58:VAL:HG12	39:BR:102:SER:HB2	1.78	0.64
44:BW:28:GLU:CD	44:BW:29:SER:H	2.01	0.64
44:BW:30:VAL:HG23	44:BW:60:ALA:O	1.98	0.64
1:CA:1449:C:O2'	1:CA:1450:U:C5'	2.45	0.64
1:CA:961:U:OP1	1:CA:961:U:H3'	1.97	0.64
3:CC:91:ALA:HB2	3:CC:98:ALA:HB3	1.79	0.64
33:DL:62:PRO:O	51:D3:12:ARG:HB3	1.98	0.64
52:D4:9:LYS:HD3	52:D4:9:LYS:O	1.97	0.64
22:DA:1062:G:O4'	22:DA:1088:A:N7	2.30	0.64
22:DA:1673:G:H2'	22:DA:1674:G:C5'	2.27	0.64
22:DA:199:A:O2'	22:DA:200:U:H5'	1.98	0.64
22:DA:2030:A:C2	22:DA:2499:C:H5''	2.33	0.64
22:DA:2102:G:C2'	22:DA:2103:C:H5'	2.25	0.64
22:DA:391:A:H2'	22:DA:392:U:H6	1.63	0.64
22:DA:492:A:O2'	22:DA:493:G:H5'	1.98	0.64
22:DA:642:U:H4'	22:DA:2349:G:O2'	1.97	0.64
22:DA:992:C:H4'	39:DR:74:ILE:CD1	2.28	0.64
22:DA:616:A:H4'	26:DE:101:TYR:CZ	2.33	0.64
33:DL:100:ILE:O	33:DL:101:ILE:CB	2.46	0.64
33:DL:98:ALA:O	33:DL:100:ILE:HG22	1.97	0.64
35:DN:14:SER:O	35:DN:16:HIS:N	2.31	0.64
37:DP:28:LYS:HB2	37:DP:28:LYS:HZ3	1.62	0.64
1:AA:501:C:O2'	1:AA:502:A:C5'	2.45	0.64
1:AA:864:A:H3'	1:AA:865:A:C8	2.33	0.64
4:AD:158:LEU:O	4:AD:161:ALA:HB3	1.98	0.64
5:AE:79:THR:HB	5:AE:121:ASN:HD21	1.63	0.64
21:AU:7:GLU:CB	21:AU:11:PHE:CE1	2.81	0.64
22:BA:1775:U:H2'	22:BA:1776:G:O5'	1.98	0.64
22:BA:2266:A:H4'	22:BA:2267:A:O5'	1.98	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2728:U:O2'	22:BA:2729:G:C5'	2.46	0.64
22:BA:37:C:O2'	22:BA:38:A:H5'	1.98	0.64
25:BD:174:SER:O	25:BD:175:LEU:CB	2.43	0.64
25:BD:35:THR:OG1	25:BD:49:GLN:HG2	1.98	0.64
29:BH:68:ARG:NH2	29:BH:72:ILE:CG2	2.58	0.64
31:BJ:7:LYS:O	31:BJ:11:VAL:HG23	1.98	0.64
33:BL:66:PHE:CD1	33:BL:66:PHE:C	2.70	0.64
46:BY:18:LEU:O	46:BY:22:LEU:CB	2.46	0.64
1:CA:337:G:H2'	1:CA:338:A:C8	2.33	0.64
1:CA:369:G:H2'	1:CA:370:C:C6	2.33	0.64
1:CA:687:A:C2	1:CA:704:A:C5	2.86	0.64
7:CG:49:LEU:HD13	7:CG:49:LEU:O	1.97	0.64
10:CJ:39:PRO:HA	10:CJ:74:VAL:H	1.63	0.64
13:CM:13:HIS:HB3	13:CM:16:ILE:CB	2.28	0.64
15:CO:28:VAL:HG13	15:CO:62:ARG:HG3	1.80	0.64
19:CS:10:ILE:N	19:CS:10:ILE:HD12	2.12	0.64
19:CS:35:ARG:NH2	19:CS:51:HIS:HD2	1.96	0.64
22:DA:2015:A:C6	48:D0:2:VAL:HG11	2.33	0.64
22:DA:1044:C:O2	22:DA:1044:C:H2'	1.97	0.64
22:DA:1125:G:H4'	52:D4:37:GLN:HE21	1.62	0.64
22:DA:1181:U:H2'	22:DA:1182:G:H8	1.63	0.64
22:DA:1373:A:H2'	22:DA:1374:G:O4'	1.98	0.64
22:DA:1430:G:H2'	22:DA:1431:A:H8	1.63	0.64
22:DA:189:G:C2'	22:DA:190:A:O5'	2.44	0.64
22:DA:1915:U:O2'	22:DA:1916:A:C5'	2.46	0.64
22:DA:2324:U:HO2'	22:DA:2385:C:H5	1.46	0.64
22:DA:412:A:N7	22:DA:2412:A:H1'	2.12	0.64
22:DA:2549:G:N2	22:DA:2560:A:C4	2.66	0.64
22:DA:2798:U:H5'	22:DA:2800:A:N6	2.13	0.64
22:DA:2869:G:H2'	22:DA:2870:C:O4'	1.97	0.64
22:DA:375:G:H5''	22:DA:375:G:C8	2.33	0.64
22:DA:503:A:C4'	22:DA:504:A:O5'	2.46	0.64
22:DA:866:A:O2'	22:DA:867:C:H6	1.81	0.64
26:DE:79:ARG:HG2	26:DE:80:SER:N	2.12	0.64
27:DF:1:ALA:HB2	27:DF:93:GLU:O	1.98	0.64
27:DF:90:LEU:HB3	27:DF:95:MET:HG3	1.80	0.64
28:DG:162:ARG:HD2	28:DG:162:ARG:H	1.63	0.64
29:DH:41:LYS:CA	29:DH:44:ILE:HG23	2.28	0.64
31:DJ:43:GLU:O	31:DJ:45:THR:HG22	1.98	0.64
33:DL:73:ILE:O	33:DL:105:ILE:HG23	1.98	0.64
33:DL:110:VAL:C	33:DL:111:ILE:HD13	2.18	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DO:115:LEU:H	36:DO:115:LEU:CD1	2.10	0.64
25:DD:9:VAL:O	37:DP:4:ILE:HD11	1.98	0.64
37:DP:50:ARG:CB	37:DP:57:ALA:H	2.11	0.64
39:DR:39:LEU:HD23	39:DR:39:LEU:N	2.13	0.64
2:AB:107:ARG:O	2:AB:110:ILE:HB	1.97	0.64
8:AH:6:ILE:HB	8:AH:76:ARG:HH12	1.62	0.64
9:AI:46:VAL:HA	9:AI:49:GLN:HG3	1.80	0.64
13:AM:40:GLU:HG3	13:AM:41:ASP:N	2.12	0.64
13:AM:68:LEU:HD12	13:AM:72:ILE:HG13	1.79	0.64
17:AQ:48:GLU:OE1	17:AQ:48:GLU:HA	1.97	0.64
22:BA:1475:G:O2'	22:BA:1476:U:P	2.56	0.64
22:BA:790:U:HO2'	22:BA:791:C:P	2.21	0.64
26:BE:153:LEU:HD12	26:BE:153:LEU:C	2.19	0.64
31:BJ:43:GLU:O	31:BJ:45:THR:N	2.30	0.64
32:BK:63:VAL:HG22	32:BK:107:LEU:HD22	1.80	0.64
32:BK:10:VAL:HG21	32:BK:16:ALA:HB1	1.78	0.64
40:BS:1:MET:HA	40:BS:1:MET:CE	2.20	0.64
44:BW:28:GLU:HB3	44:BW:31:LEU:CD1	2.28	0.64
47:BZ:3:THR:HA	47:BZ:38:GLU:HA	1.80	0.64
1:CA:995:C:H42	1:CA:1046:A:H1'	1.62	0.64
1:CA:1239:A:H3'	7:CG:118:ARG:NH2	2.13	0.64
1:CA:1520:C:H2'	1:CA:1521:C:H6	1.61	0.64
1:CA:867:G:C4	1:CA:868:C:C5	2.86	0.64
1:CA:994:A:HO2'	1:CA:995:C:H6	1.43	0.64
10:CJ:48:ARG:CZ	10:CJ:48:ARG:HB2	2.26	0.64
12:CL:33:CYS:HB3	12:CL:77:SER:O	1.98	0.64
12:CL:85:ARG:HG2	12:CL:86:VAL:N	2.13	0.64
13:CM:106:ARG:CZ	13:CM:112:ARG:HB3	2.28	0.64
10:CJ:48:ARG:HB3	14:CN:100:TRP:HZ2	1.63	0.64
14:CN:92:ILE:HG21	14:CN:95:LEU:HD22	1.80	0.64
22:DA:2264:C:H2'	22:DA:2265:U:C6	2.33	0.64
22:DA:2339:C:O2'	22:DA:2340:A:C8	2.49	0.64
22:DA:564:C:C2'	22:DA:565:C:H5'	2.28	0.64
22:DA:664:G:H4'	22:DA:941:A:OP1	1.97	0.64
22:DA:830:G:C2	22:DA:2448:A:N7	2.66	0.64
24:DC:23:LEU:HD21	24:DC:89:ASN:OD1	1.98	0.64
25:DD:112:THR:O	25:DD:113:SER:CB	2.46	0.64
29:DH:5:LEU:C	29:DH:6:LEU:HD12	2.19	0.64
30:DI:20:SER:N	30:DI:21:PRO:CD	2.61	0.64
33:DL:79:LEU:HA	33:DL:82:LEU:CD1	2.28	0.64
33:DL:84:LYS:O	33:DL:85:VAL:HB	1.98	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DM:97:GLN:HB2	34:DM:98:PRO:HD2	1.80	0.64
38:DQ:50:ARG:O	38:DQ:54:ARG:HD3	1.98	0.64
38:DQ:4:LYS:NZ	38:DQ:7:VAL:H	1.96	0.64
38:DQ:89:ILE:HG22	38:DQ:91:ARG:H	1.62	0.64
42:DU:81:ARG:CD	42:DU:81:ARG:N	2.61	0.64
45:DX:32:LEU:HD22	45:DX:32:LEU:N	2.13	0.64
1:AA:1531:A:C8	1:AA:1531:A:C5'	2.67	0.63
1:AA:358:U:O2'	1:AA:359:G:H5'	1.98	0.63
1:AA:841:C:H3'	1:AA:843:U:OP2	1.97	0.63
1:AA:945:G:N3	1:AA:945:G:H2'	2.14	0.63
4:AD:55:ARG:HA	4:AD:55:ARG:HH11	1.63	0.63
1:AA:972:C:H4'	10:AJ:59:LYS:HG3	1.79	0.63
16:AP:37:GLY:HA2	16:AP:51:ARG:HH12	1.62	0.63
22:BA:1061:U:H1'	22:BA:1070:A:H1'	1.80	0.63
22:BA:1417:C:H2'	22:BA:1418:G:C8	2.33	0.63
22:BA:528:A:H2	22:BA:2043:C:C5'	2.10	0.63
22:BA:2334:U:H4'	22:BA:2335:A:OP2	1.98	0.63
22:BA:2889:C:H2'	22:BA:2890:G:O5'	1.98	0.63
22:BA:277:G:C8	22:BA:361:G:O6	2.51	0.63
28:BG:168:VAL:O	28:BG:170:THR:HG23	1.98	0.63
34:BM:10:ARG:NH2	34:BM:89:VAL:HB	2.13	0.63
37:BP:52:ARG:HH11	37:BP:52:ARG:HG2	1.58	0.63
42:BU:100:GLU:O	42:BU:101:THR:HB	1.99	0.63
42:BU:42:LYS:HA	42:BU:58:VAL:O	1.98	0.63
1:CA:1071:C:H2'	1:CA:1072:G:H8	1.63	0.63
1:CA:1158:C:O2	1:CA:1158:C:C2'	2.45	0.63
1:CA:954:G:H1	1:CA:1228:C:H42	1.44	0.63
1:CA:1273:C:H2'	1:CA:1274:A:C8	2.32	0.63
1:CA:934:C:C5	1:CA:1344:C:C4	2.86	0.63
1:CA:94:G:O2'	1:CA:95:C:H5'	1.98	0.63
9:CI:56:MET:HG3	9:CI:57:VAL:HG23	1.79	0.63
20:CT:26:MET:HE3	20:CT:30:PHE:CD1	2.30	0.63
49:D1:8:ILE:HG22	49:D1:9:LYS:N	2.13	0.63
22:DA:1112:G:O2'	22:DA:1113:U:H5'	1.97	0.63
22:DA:72:U:C5	22:DA:112:U:H4'	2.32	0.63
22:DA:1171:G:C2	22:DA:1179:G:N3	2.66	0.63
22:DA:1455:G:O2'	22:DA:1456:G:H8	1.80	0.63
22:DA:1469:A:C2	22:DA:1470:A:C5	2.85	0.63
22:DA:153:U:O2'	22:DA:154:U:H5'	1.97	0.63
22:DA:1790:C:H4'	24:DC:207:ALA:CB	2.28	0.63
22:DA:1773:A:N7	22:DA:1829:A:H1'	2.13	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2800:A:C2'	22:DA:2801:G:C4'	2.76	0.63
22:DA:477:A:O2'	22:DA:478:A:C5'	2.46	0.63
24:DC:80:LEU:HD21	24:DC:109:LEU:HB3	1.80	0.63
25:DD:4:LEU:HD23	25:DD:101:PHE:CE1	2.33	0.63
25:DD:149:ASN:CG	25:DD:150:GLN:N	2.50	0.63
25:DD:176:ASP:O	25:DD:189:VAL:HA	1.98	0.63
35:DN:1:MET:O	35:DN:2:ARG:CB	2.46	0.63
36:DO:31:THR:HG23	36:DO:34:HIS:C	2.18	0.63
37:DP:67:GLU:CD	37:DP:68:GLY:H	2.00	0.63
1:AA:844:G:H2'	1:AA:844:G:N3	2.12	0.63
4:AD:48:SER:O	4:AD:52:VAL:HG13	1.98	0.63
9:AI:51:LEU:HB3	9:AI:56:MET:HG3	1.77	0.63
12:AL:42:LYS:HB3	12:AL:43:LYS:HD3	1.78	0.63
19:AS:4:LEU:CD2	19:AS:8:PRO:HA	2.28	0.63
50:B2:24:THR:HG23	50:B2:27:GLY:H	1.61	0.63
26:BE:48:THR:HG22	26:BE:86:ALA:HB3	1.79	0.63
28:BG:137:LYS:CA	28:BG:140:ILE:CD1	2.71	0.63
34:BM:57:VAL:HA	34:BM:112:LEU:HD21	1.80	0.63
25:BD:13:ARG:NH1	37:BP:74:GLN:NE2	2.42	0.63
22:BA:996:A:C4'	38:BQ:91:ARG:HG2	2.26	0.63
39:BR:41:ILE:O	39:BR:46:GLU:HB2	1.98	0.63
44:BW:39:GLN:O	44:BW:40:ARG:C	2.37	0.63
1:CA:1349:A:O2'	1:CA:1350:A:H5'	1.98	0.63
1:CA:674:G:H4'	18:CR:69:TYR:CE1	2.33	0.63
3:CC:161:ILE:H	3:CC:161:ILE:CD1	2.11	0.63
3:CC:161:ILE:H	3:CC:161:ILE:HD13	1.63	0.63
1:CA:643:C:H5''	8:CH:31:LEU:HD13	1.80	0.63
14:CN:60:ARG:CG	14:CN:61:ASN:H	2.12	0.63
16:CP:78:VAL:C	16:CP:80:LYS:H	2.01	0.63
20:CT:34:VAL:HG21	20:CT:53:MET:HG2	1.80	0.63
22:DA:2700:A:C2	22:DA:2708:G:C2	2.86	0.63
22:DA:329:G:H3'	22:DA:329:G:OP1	1.98	0.63
22:DA:771:G:C2'	22:DA:772:C:H5'	2.28	0.63
22:DA:781:A:H2'	22:DA:1777:U:H1'	1.81	0.63
23:DB:57:A:C5	27:DF:25:MET:HB2	2.34	0.63
25:DD:10:GLY:HA3	25:DD:26:VAL:H	1.62	0.63
32:DK:115:ILE:HG22	32:DK:116:ILE:N	2.11	0.63
40:DS:84:ARG:HB3	40:DS:96:ILE:HG21	1.79	0.63
1:AA:694:A:H2'	1:AA:695:A:O5'	1.99	0.63
2:AB:108:GLN:H	2:AB:108:GLN:NE2	1.94	0.63
2:AB:69:VAL:CB	2:AB:162:VAL:HG12	2.19	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:172:VAL:HG13	4:AD:173:ASP:H	1.61	0.63
13:AM:10:ASP:CG	13:AM:44:ILE:HB	2.19	0.63
18:AR:40:PRO:HG2	18:AR:43:ILE:HG12	1.81	0.63
24:BC:180:MET:HG3	24:BC:268:ARG:NH1	2.13	0.63
28:BG:104:LEU:O	28:BG:112:VAL:HG22	1.99	0.63
31:BJ:55:ILE:O	31:BJ:55:ILE:HG13	1.97	0.63
34:BM:35:ALA:O	34:BM:36:VAL:CG1	2.44	0.63
36:BO:88:LYS:CE	36:BO:116:GLN:NE2	2.58	0.63
44:BW:17:ALA:O	44:BW:18:LYS:CB	2.46	0.63
1:CA:1129:C:H1'	1:CA:1146:A:H61	1.64	0.63
1:CA:1226:C:OP2	13:CM:94:LEU:HD22	1.98	0.63
1:CA:166:U:C2'	1:CA:167:A:H5'	2.28	0.63
1:CA:253:A:N1	1:CA:274:A:C2	2.67	0.63
2:CB:160:LEU:HD22	2:CB:175:ALA:CB	2.25	0.63
2:CB:160:LEU:HD13	2:CB:180:ILE:HG21	1.79	0.63
4:CD:2:ARG:NH2	4:CD:114:ARG:NH1	2.47	0.63
4:CD:30:LYS:CD	4:CD:30:LYS:N	2.52	0.63
4:CD:97:LEU:O	4:CD:101:VAL:HG23	1.98	0.63
18:CR:21:ASP:HB3	18:CR:23:LYS:HG2	1.80	0.63
51:D3:32:LEU:HA	51:D3:35:LYS:CG	2.27	0.63
22:DA:1647:U:C5'	22:DA:1648:U:OP1	2.45	0.63
22:DA:1813:G:C2'	22:DA:1814:G:H5'	2.29	0.63
22:DA:2289:G:O2'	22:DA:2290:G:H5'	1.97	0.63
22:DA:2663:G:O2'	22:DA:2664:G:H5'	1.97	0.63
22:DA:2668:G:C4	22:DA:2669:G:C8	2.86	0.63
22:DA:2746:U:H1'	28:DG:138:GLN:HE21	1.63	0.63
22:DA:524:G:H2'	22:DA:525:U:H6	1.62	0.63
23:DB:52:A:N6	36:DO:33:ARG:HE	1.96	0.63
22:DA:2747:G:O2'	28:DG:66:THR:HG22	1.98	0.63
31:DJ:111:LYS:HE3	31:DJ:114:LEU:HD23	1.80	0.63
31:DJ:35:ARG:HG2	31:DJ:40:HIS:CD2	2.32	0.63
37:DP:47:ILE:HD11	37:DP:70:GLU:HG2	1.80	0.63
38:DQ:59:LEU:O	38:DQ:63:ARG:HG2	1.98	0.63
1:AA:255:G:C4	1:AA:256:U:C5	2.86	0.63
2:AB:72:LYS:C	2:AB:74:ALA:H	2.02	0.63
4:AD:166:LYS:HB3	4:AD:166:LYS:HZ2	1.62	0.63
6:AF:9:MET:CE	6:AF:59:TYR:CE2	2.82	0.63
7:AG:3:ARG:HG3	7:AG:4:ARG:H	1.63	0.63
13:AM:18:LEU:O	13:AM:24:VAL:HG21	1.98	0.63
51:B3:33:THR:HG23	51:B3:34:LYS:N	2.12	0.63
22:BA:1110:G:O2'	22:BA:1111:A:C8	2.41	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:142:A:O2'	22:BA:143:C:C6	2.51	0.63
22:BA:2544:G:O2'	22:BA:2545:G:H5'	1.97	0.63
22:BA:320:A:H4'	22:BA:322:A:N7	2.13	0.63
22:BA:863:A:O2'	22:BA:864:G:H5'	1.99	0.63
22:BA:898:C:C2'	22:BA:899:A:H5'	2.28	0.63
24:BC:229:HIS:CD2	24:BC:246:PRO:HA	2.33	0.63
28:BG:31:GLU:O	28:BG:31:GLU:HG3	1.97	0.63
31:BJ:124:VAL:O	31:BJ:125:TYR:CB	2.45	0.63
31:BJ:135:GLN:HE21	31:BJ:135:GLN:HA	1.64	0.63
32:BK:61:VAL:HG22	32:BK:87:LEU:HD11	1.80	0.63
41:BT:8:LEU:N	41:BT:8:LEU:CD2	2.60	0.63
1:CA:240:G:H5''	1:CA:240:G:C8	2.33	0.63
1:CA:441:A:C2	1:CA:497:G:C6	2.86	0.63
2:CB:26:MET:HA	2:CB:26:MET:CE	2.27	0.63
5:CE:76:ASN:O	5:CE:77:ASN:HB2	1.97	0.63
13:CM:91:ARG:HD3	13:CM:91:ARG:O	1.99	0.63
14:CN:13:VAL:HG22	14:CN:59:GLN:OE1	1.98	0.63
22:DA:1079:C:N4	22:DA:1088:A:N3	2.46	0.63
22:DA:1297:C:O5'	22:DA:1297:C:H6	1.81	0.63
22:DA:1429:G:N3	22:DA:1430:G:N7	2.47	0.63
22:DA:2229:U:H2'	22:DA:2230:G:H8	1.63	0.63
22:DA:239:C:HO2'	22:DA:621:A:H2	1.45	0.63
22:DA:2459:A:H2'	22:DA:2459:A:N3	2.14	0.63
22:DA:2695:U:H2'	22:DA:2695:U:O2	1.97	0.63
22:DA:181:A:C2	22:DA:434:U:H1'	2.33	0.63
22:DA:3:U:H2'	22:DA:4:U:C6	2.32	0.63
23:DB:100:G:H2'	23:DB:101:A:O4'	1.99	0.63
25:DD:151:THR:HG22	25:DD:152:PRO:CD	2.29	0.63
27:DF:39:VAL:HG22	27:DF:49:LEU:CB	2.29	0.63
28:DG:94:ARG:CZ	28:DG:105:SER:HB2	2.28	0.63
29:DH:27:ARG:HH21	29:DH:27:ARG:HB2	1.61	0.63
22:DA:57:C:O2'	41:DT:36:LYS:HE2	1.97	0.63
1:AA:1049:U:C5	14:AN:1:ALA:HA	2.33	0.63
1:AA:1136:C:H5''	1:AA:1137:C:OP2	1.99	0.63
1:AA:1310:G:H2'	1:AA:1311:A:O4'	1.98	0.63
1:AA:1358:U:C6	1:AA:1359:C:C5	2.87	0.63
1:AA:185:U:HO2'	1:AA:186:C:H6	1.45	0.63
1:AA:937:A:H2'	1:AA:938:A:H5'	1.80	0.63
2:AB:157:PRO:O	2:AB:180:ILE:HD12	1.99	0.63
7:AG:71:THR:O	7:AG:90:VAL:HG12	1.98	0.63
10:AJ:10:LEU:O	10:AJ:71:LEU:HD13	1.99	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:45:ASN:N	12:AL:45:ASN:HD22	1.95	0.63
19:AS:17:LYS:HB3	19:AS:30:LEU:HD23	1.81	0.63
20:AT:67:HIS:HB3	20:AT:68:LYS:NZ	2.14	0.63
22:BA:1256:G:H2'	26:BE:77:ILE:HD11	1.81	0.63
22:BA:1906:G:H2'	22:BA:1907:G:O5'	1.97	0.63
22:BA:574:A:H4'	22:BA:575:A:O5'	1.99	0.63
22:BA:611:C:H2'	22:BA:612:G:C5'	2.28	0.63
22:BA:93:G:O2'	22:BA:94:A:H5'	1.98	0.63
27:BF:109:ARG:HB3	27:BF:136:ILE:HG22	1.79	0.63
31:BJ:130:HIS:CD2	31:BJ:132:HIS:H	2.16	0.63
22:BA:2356:U:C4'	44:BW:16:GLU:HG3	2.24	0.63
1:CA:1151:A:H2'	1:CA:1152:A:H8	1.64	0.63
1:CA:1244:G:C6	1:CA:1245:C:N4	2.66	0.63
1:CA:388:G:HO2'	1:CA:389:A:P	2.21	0.63
1:CA:54:C:N4	1:CA:352:C:H2'	2.14	0.63
1:CA:678:U:H1'	1:CA:777:A:O3'	1.97	0.63
1:CA:764:C:N4	1:CA:812:G:N1	2.46	0.63
1:CA:929:G:C5	1:CA:930:C:C5	2.86	0.63
1:CA:92:U:O2'	1:CA:93:U:H5'	1.98	0.63
4:CD:148:ALA:HB1	4:CD:151:GLN:NE2	2.13	0.63
7:CG:11:ILE:HD11	7:CG:24:LYS:HB2	1.80	0.63
22:DA:143:C:H2'	22:DA:144:A:H8	1.54	0.63
22:DA:170:U:H2'	22:DA:171:U:C6	2.31	0.63
22:DA:1839:G:O2'	22:DA:1840:G:H5'	1.99	0.63
22:DA:192:C:H2'	22:DA:193:U:C5'	2.27	0.63
22:DA:2093:G:O2'	22:DA:2094:A:H8	1.78	0.63
22:DA:247:G:C8	22:DA:249:C:C6	2.87	0.63
22:DA:2586:U:O2'	22:DA:2587:A:H5'	1.98	0.63
22:DA:2602:A:H3'	22:DA:2602:A:OP1	1.99	0.63
22:DA:493:G:H2'	22:DA:494:G:O4'	1.98	0.63
22:DA:27:G:H1'	22:DA:513:A:N6	2.13	0.63
22:DA:618:G:O2'	22:DA:619:G:H5'	1.98	0.63
22:DA:774:G:O2'	22:DA:775:G:H8	1.82	0.63
22:DA:851:C:H2'	22:DA:852:U:C5	2.34	0.63
22:DA:675:A:OP1	26:DE:60:TRP:CZ2	2.50	0.63
27:DF:43:ILE:HG12	27:DF:77:LYS:CD	2.29	0.63
37:DP:105:LYS:HA	37:DP:108:ARG:CZ	2.28	0.63
39:DR:4:VAL:O	39:DR:38:VAL:HG23	1.99	0.63
42:DU:39:ASN:OD1	42:DU:64:ILE:HB	1.99	0.63
44:DW:23:LYS:HD2	44:DW:24:ARG:CB	2.29	0.63
1:AA:1002:G:H2'	1:AA:1003:G:O4'	1.98	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:84:LEU:HG	2:AB:84:LEU:O	1.98	0.63
22:BA:1799:G:N2	24:BC:153:LEU:HD23	2.13	0.63
25:BD:149:ASN:CG	25:BD:150:GLN:H	2.00	0.63
25:BD:111:GLY:O	25:BD:169:ARG:O	2.16	0.63
27:BF:105:ILE:CD1	27:BF:138:PRO:HG2	2.28	0.63
28:BG:104:LEU:HB2	28:BG:112:VAL:HG23	1.78	0.63
31:BJ:114:LEU:HD22	31:BJ:118:MET:HE3	1.79	0.63
36:BO:62:LEU:CD2	36:BO:70:ALA:HA	2.28	0.63
44:BW:23:LYS:NZ	44:BW:24:ARG:CG	2.61	0.63
1:CA:1202:U:O2'	1:CA:1203:C:H5'	1.99	0.63
1:CA:1332:A:HO2'	1:CA:1333:A:H5'	1.64	0.63
1:CA:1480:A:C5	1:CA:1481:U:C5	2.87	0.63
1:CA:577:G:O2'	1:CA:578:C:C5'	2.46	0.63
1:CA:91:U:C6	1:CA:92:U:C5	2.86	0.63
1:CA:1248:A:O2'	9:CI:37:TYR:HD1	1.82	0.63
18:CR:71:ASP:HB3	21:CU:3:ILE:HD11	1.78	0.63
49:D1:47:ILE:N	49:D1:47:ILE:HD12	2.14	0.63
51:D3:21:PHE:HB2	51:D3:49:VAL:CG1	2.27	0.63
22:DA:1069:A:N6	22:DA:1073:A:C5'	2.61	0.63
22:DA:1285:A:H2'	22:DA:1286:A:H5''	1.79	0.63
22:DA:1401:G:C2'	22:DA:1402:U:C6	2.69	0.63
22:DA:1480:C:C4	22:DA:1481:U:C5	2.87	0.63
22:DA:1510:G:C2	22:DA:1511:G:C5	2.86	0.63
22:DA:1695:G:H8	24:DC:7:PRO:O	1.81	0.63
1:CA:1418:A:H2	22:DA:1948:G:N3	1.97	0.63
22:DA:1992:G:N2	22:DA:1995:U:C5	2.67	0.63
22:DA:2733:A:C2'	22:DA:2734:A:H5'	2.28	0.63
22:DA:335:C:C2	22:DA:336:C:C5	2.87	0.63
22:DA:396:G:O2'	22:DA:397:U:C5'	2.41	0.63
23:DB:90:C:H6	23:DB:90:C:C5'	2.10	0.63
24:DC:131:MET:HA	24:DC:134:ILE:CG1	2.29	0.63
24:DC:184:GLU:HB2	24:DC:187:CYS:SG	2.39	0.63
24:DC:2:VAL:O	24:DC:3:VAL:HG23	1.99	0.63
24:DC:8:THR:O	24:DC:9:SER:CB	2.46	0.63
26:DE:157:LEU:HD12	26:DE:157:LEU:C	2.19	0.63
33:DL:19:LEU:HD11	33:DL:31:GLY:HA3	1.81	0.63
38:DQ:40:LYS:HD3	38:DQ:44:TYR:HE2	1.63	0.63
22:DA:2269:G:O3'	44:DW:18:LYS:HE2	1.98	0.63
1:AA:1152:A:O2'	1:AA:1153:G:H8	1.81	0.63
1:AA:217:C:O2'	1:AA:218:U:H5'	1.98	0.63
1:AA:414:A:O2'	1:AA:415:A:C5'	2.47	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:12:LEU:H	7:AG:12:LEU:CD2	1.88	0.63
10:AJ:17:LEU:HD23	10:AJ:18:ILE:N	2.13	0.63
21:AU:13:VAL:CG1	21:AU:15:LEU:HG	2.25	0.63
52:B4:15:LYS:O	52:B4:16:ILE:HB	1.98	0.63
22:BA:1682:G:H2'	22:BA:1683:U:C6	2.32	0.63
22:BA:2071:A:H2'	22:BA:2072:C:C6	2.34	0.63
24:BC:144:GLU:HA	24:BC:151:GLY:HA2	1.80	0.63
24:BC:15:VAL:HG22	24:BC:204:LEU:O	1.98	0.63
25:BD:68:PHE:CD2	25:BD:75:ALA:HA	2.32	0.63
25:BD:8:LYS:HB2	25:BD:201:LEU:CD2	2.28	0.63
22:BA:588:U:H1'	26:BE:85:PHE:CD1	2.34	0.63
27:BF:167:ALA:O	27:BF:170:ALA:HB3	1.99	0.63
28:BG:10:VAL:O	28:BG:10:VAL:CG2	2.46	0.63
28:BG:8:VAL:HG12	28:BG:49:LEU:N	2.13	0.63
31:BJ:56:VAL:CG1	31:BJ:57:LEU:N	2.59	0.63
1:CA:214:C:H2'	1:CA:215:C:C6	2.34	0.63
1:CA:444:G:C2'	1:CA:445:G:H5'	2.29	0.63
1:CA:738:C:C4	1:CA:739:C:H5	2.15	0.63
1:CA:964:A:H2'	1:CA:965:U:H5'	1.81	0.63
3:CC:14:VAL:HG12	3:CC:14:VAL:O	1.97	0.63
5:CE:38:VAL:HG12	5:CE:39:GLY:H	1.62	0.63
8:CH:85:TYR:CD2	8:CH:123:GLU:HB2	2.34	0.63
13:CM:103:THR:HG22	13:CM:104:ASN:N	2.14	0.63
13:CM:95:PRO:HD3	13:CM:108:ARG:CG	2.26	0.63
14:CN:68:ARG:HG3	14:CN:69:PRO:HD2	1.81	0.63
17:CQ:77:VAL:HG12	17:CQ:78:VAL:O	1.99	0.63
19:CS:20:LYS:HD3	19:CS:20:LYS:O	1.98	0.63
19:CS:62:THR:HG22	19:CS:63:ASP:N	2.13	0.63
21:CU:36:PHE:HB3	21:CU:40:PRO:HD3	1.81	0.63
22:DA:1481:U:H2'	22:DA:1481:U:O2	1.98	0.63
22:DA:1804:C:N4	22:DA:1814:G:N2	2.47	0.63
22:DA:2298:A:H2'	22:DA:2299:U:C5	2.34	0.63
22:DA:445:C:C2'	22:DA:446:G:C8	2.82	0.63
22:DA:664:G:O2'	22:DA:665:U:H5'	1.99	0.63
22:DA:848:C:H2'	22:DA:849:A:C8	2.32	0.63
23:DB:15:A:H1'	23:DB:109:A:N7	2.13	0.63
23:DB:42:C:N4	27:DF:87:LYS:HD2	2.13	0.63
26:DE:133:LEU:C	26:DE:133:LEU:HD23	2.19	0.63
26:DE:60:TRP:HZ3	26:DE:62:GLN:HG3	1.63	0.63
29:DH:93:SER:HA	29:DH:121:VAL:HG11	1.80	0.63
30:DI:36:GLU:HB2	30:DI:40:ALA:HB3	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:27:GLY:HA3	32:DK:30:ARG:HG3	1.81	0.63
40:DS:70:LYS:H	40:DS:70:LYS:HE3	1.64	0.63
43:DV:7:GLU:O	43:DV:40:ILE:HG22	1.98	0.63
44:DW:37:VAL:HG23	44:DW:38:ARG:NH1	2.07	0.63
1:AA:517:G:O2'	1:AA:530:G:H4'	1.98	0.63
1:AA:996:A:H2	1:AA:1046:A:H5'	1.62	0.63
2:AB:71:THR:O	2:AB:72:LYS:HG2	1.98	0.63
3:AC:67:ILE:O	3:AC:67:ILE:HG22	1.98	0.63
12:AL:109:ARG:NH2	12:AL:116:TYR:CE2	2.67	0.63
12:AL:33:CYS:H	12:AL:54:VAL:HG13	1.63	0.63
22:BA:682:G:H5'	50:B2:26:ASN:OD1	1.98	0.63
22:BA:1105:U:H2'	22:BA:1106:G:H8	1.64	0.63
22:BA:1416:G:HO2'	22:BA:1417:C:H6	1.46	0.63
22:BA:1425:G:O2'	22:BA:1426:G:H5'	1.99	0.63
22:BA:2136:G:C2	22:BA:2137:U:C4	2.87	0.63
22:BA:2431:U:C5'	22:BA:2431:U:H6	2.03	0.63
22:BA:2816:G:O2'	22:BA:2817:U:H5'	1.98	0.63
22:BA:613:A:H8	22:BA:616:A:N1	1.94	0.63
22:BA:754:U:H2'	22:BA:755:U:C6	2.34	0.63
22:BA:825:A:O2'	22:BA:826:U:H5'	1.99	0.63
22:BA:84:A:H4'	22:BA:85:G:O5'	1.98	0.63
24:BC:77:VAL:O	24:BC:77:VAL:HG22	1.98	0.63
26:BE:24:ASN:C	26:BE:24:ASN:HD22	2.01	0.63
27:BF:169:LEU:CD1	27:BF:169:LEU:H	2.12	0.63
29:BH:78:VAL:CG1	29:BH:145:ASN:HB3	2.29	0.63
30:BI:71:LYS:HG2	30:BI:72:THR:H	1.63	0.63
22:BA:1141:U:C6	31:BJ:65:THR:CG2	2.81	0.63
38:BQ:109:VAL:HG12	38:BQ:113:LYS:HD2	1.81	0.63
1:CA:322:C:H5	1:CA:328:C:C5	2.16	0.63
1:CA:328:C:H2'	1:CA:328:C:O2	1.97	0.63
1:CA:46:G:O2'	1:CA:365:U:H1'	1.99	0.63
1:CA:407:U:O2'	4:CD:112:GLU:HG3	1.99	0.63
7:CG:118:ARG:O	7:CG:122:GLU:HB2	1.99	0.63
9:CI:114:LYS:HB2	9:CI:117:LEU:HD12	1.79	0.63
10:CJ:47:GLU:HB2	10:CJ:67:ILE:CG1	2.21	0.63
12:CL:41:PRO:HD2	12:CL:47:ALA:O	1.97	0.63
12:CL:50:LYS:N	12:CL:50:LYS:HD2	2.14	0.63
13:CM:12:LYS:HB3	13:CM:17:ALA:HB2	1.80	0.63
17:CQ:17:GLU:O	17:CQ:18:LYS:HB2	1.97	0.63
21:CU:16:ARG:NE	21:CU:16:ARG:HA	2.13	0.63
21:CU:3:ILE:HG22	21:CU:19:LYS:NZ	2.14	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:36:PHE:CD2	21:CU:39:LYS:HE2	2.34	0.63
22:DA:1483:G:H2'	22:DA:1484:U:C6	2.34	0.63
22:DA:1536:C:H4'	22:DA:1537:G:H5'	1.79	0.63
22:DA:185:G:H2'	22:DA:186:G:H8	1.63	0.63
22:DA:230:G:C2	22:DA:231:A:N7	2.66	0.63
22:DA:2689:U:C4'	22:DA:2690:U:OP2	2.42	0.63
22:DA:502:A:N6	22:DA:505:A:C6	2.67	0.63
24:DC:196:ASN:O	24:DC:197:ALA:HB3	1.99	0.63
25:DD:119:ALA:HB2	25:DD:163:GLY:C	2.20	0.63
26:DE:149:ILE:CG2	26:DE:188:MET:HB2	2.29	0.63
29:DH:96:THR:HA	29:DH:113:SER:OG	1.99	0.63
35:DN:75:ILE:O	35:DN:75:ILE:HD12	1.99	0.63
43:DV:8:VAL:HG13	43:DV:66:ASP:OD2	1.99	0.63
1:AA:111:G:O6	1:AA:330:C:N4	2.31	0.63
1:AA:1239:A:N6	1:AA:1299:A:H62	1.92	0.63
1:AA:1469:C:H2'	1:AA:1470:U:C5'	2.29	0.63
1:AA:1473:G:O2'	1:AA:1474:U:H5'	1.99	0.63
1:AA:1508:A:O2'	1:AA:1509:C:H5'	1.99	0.63
1:AA:625:U:H4'	16:AP:16:PHE:CE2	2.33	0.63
1:AA:937:A:N6	1:AA:1345:U:O4	2.32	0.63
2:AB:9:LEU:CG	2:AB:42:LEU:HD13	2.28	0.63
4:AD:168:THR:HG22	4:AD:183:ARG:HH21	1.64	0.63
5:AE:23:THR:HA	5:AE:28:ARG:HA	1.79	0.63
12:AL:23:LEU:CB	12:AL:58:ASN:HD22	2.11	0.63
14:AN:42:ASN:HD21	14:AN:46:LYS:HZ1	1.47	0.63
19:AS:51:HIS:HD2	19:AS:53:GLY:H	1.42	0.63
22:BA:1734:G:C4	22:BA:1735:A:C8	2.86	0.63
22:BA:1996:C:P	32:BK:31:ARG:HH21	2.22	0.63
22:BA:274:C:H2'	22:BA:275:C:H6	1.62	0.63
22:BA:287:G:H1	22:BA:353:C:N4	1.96	0.63
22:BA:571:U:H4'	22:BA:572:A:OP1	1.98	0.63
22:BA:712:G:H2'	22:BA:713:G:H5'	1.80	0.63
22:BA:748:G:OP2	40:BS:88:ARG:HG3	1.99	0.63
22:BA:946:C:H2'	22:BA:947:A:H8	1.64	0.63
22:BA:973:A:O4'	22:BA:1188:U:C6	2.52	0.63
24:BC:182:LYS:O	24:BC:183:VAL:HG23	1.98	0.63
27:BF:134:GLN:CG	27:BF:135:ILE:H	2.03	0.63
32:BK:1:MET:HE3	32:BK:32:TYR:CD1	2.34	0.63
37:BP:85:VAL:O	37:BP:86:LYS:HB2	1.99	0.63
39:BR:42:ALA:CA	39:BR:46:GLU:HB2	2.29	0.63
41:BT:40:LYS:N	41:BT:43:ILE:CG2	2.60	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:93:ARG:O	43:BV:94:ALA:HB2	1.99	0.63
45:BX:77:TYR:O	45:BX:77:TYR:CD1	2.52	0.63
1:CA:1221:G:C2	1:CA:1222:G:H1'	2.34	0.63
1:CA:184:G:N2	1:CA:185:U:C2	2.67	0.63
1:CA:486:U:O2'	1:CA:487:A:H5'	1.98	0.63
5:CE:104:ILE:CA	5:CE:122:VAL:HB	2.28	0.63
7:CG:19:SER:O	7:CG:23:ALA:HB2	1.99	0.63
8:CH:38:VAL:HA	8:CH:41:GLU:CG	2.29	0.63
9:CI:18:VAL:HG11	9:CI:82:ILE:HA	1.80	0.63
22:DA:2286:G:C8	49:D1:33:LEU:HD21	2.34	0.63
22:DA:1183:U:H2'	22:DA:1184:U:C6	2.33	0.63
22:DA:1540:G:HO2'	22:DA:1541:C:H6	1.42	0.63
22:DA:161:A:H5''	22:DA:162:U:H3'	1.81	0.63
22:DA:2734:A:H2'	22:DA:2735:G:C5'	2.28	0.63
22:DA:78:U:O2'	22:DA:79:C:H5'	1.98	0.63
22:DA:83:A:H61	22:DA:101:A:H5'	1.60	0.63
26:DE:149:ILE:HG23	26:DE:188:MET:N	2.12	0.63
27:DF:43:ILE:HG23	27:DF:44:ALA:N	2.12	0.63
29:DH:96:THR:HG21	29:DH:112:LYS:NZ	2.13	0.63
29:DH:75:LEU:O	29:DH:76:GLU:HB2	1.99	0.63
31:DJ:45:THR:H	31:DJ:46:PRO:HD2	1.64	0.63
31:DJ:84:ILE:HG23	31:DJ:84:ILE:O	1.99	0.63
38:DQ:10:ARG:HB2	38:DQ:10:ARG:CZ	2.29	0.63
1:AA:1128:C:H4'	1:AA:1148:U:O2	1.99	0.62
1:AA:1180:A:H5''	1:AA:1181:G:OP2	1.98	0.62
1:AA:1508:A:H2'	1:AA:1509:C:H6	1.65	0.62
1:AA:267:C:O2'	1:AA:268:U:C5'	2.45	0.62
1:AA:469:C:H2'	1:AA:470:C:H6	1.64	0.62
2:AB:89:PHE:CE1	2:AB:153:MET:HG3	2.34	0.62
3:AC:153:SER:CB	3:AC:164:THR:HA	2.28	0.62
3:AC:21:TRP:HB3	3:AC:58:ARG:H	1.64	0.62
4:AD:196:GLU:C	4:AD:198:LEU:N	2.50	0.62
4:AD:84:ASN:HD22	4:AD:87:GLU:H	1.47	0.62
5:AE:45:VAL:CG2	5:AE:117:ALA:HB2	2.29	0.62
6:AF:36:ILE:HG22	6:AF:64:VAL:CG2	2.26	0.62
7:AG:143:MET:CE	7:AG:143:MET:HA	2.29	0.62
1:AA:1060:U:H4'	10:AJ:53:ILE:HG23	1.81	0.62
11:AK:58:THR:HB	11:AK:59:PRO:HD2	1.81	0.62
16:AP:80:LYS:HB2	16:AP:80:LYS:NZ	2.14	0.62
21:AU:16:ARG:HH11	21:AU:19:LYS:HG2	1.63	0.62
22:BA:1507:C:C2	22:BA:1508:A:C2	2.87	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2134:A:O2'	22:BA:2135:A:H5''	1.99	0.62
25:BD:33:ARG:HH21	25:BD:51:THR:HG23	1.64	0.62
29:BH:26:ALA:HA	29:BH:30:LEU:HB2	1.80	0.62
32:BK:98:ARG:O	32:BK:99:ILE:HD13	1.97	0.62
38:BQ:27:ARG:HH11	38:BQ:27:ARG:HG3	1.64	0.62
40:BS:1:MET:HE2	40:BS:1:MET:CA	2.18	0.62
44:BW:18:LYS:HA	44:BW:36:ILE:HD11	1.81	0.62
44:BW:39:GLN:O	44:BW:41:GLY:N	2.31	0.62
1:CA:307:C:H5''	1:CA:308:C:OP2	1.99	0.62
1:CA:810:C:H2'	1:CA:811:C:H5'	1.81	0.62
1:CA:997:U:O2'	1:CA:998:C:C5'	2.46	0.62
4:CD:131:ILE:N	4:CD:131:ILE:HD13	2.13	0.62
13:CM:11:HIS:HA	13:CM:44:ILE:HB	1.81	0.62
22:DA:1453:A:N7	35:DN:73:ASN:HB3	2.14	0.62
22:DA:1515:A:H4'	22:DA:1556:C:O2'	1.99	0.62
22:DA:1639:C:C2'	22:DA:1640:A:H5''	2.29	0.62
22:DA:1929:G:C4'	22:DA:1930:G:OP1	2.47	0.62
22:DA:203:A:H8	22:DA:203:A:O5'	1.82	0.62
22:DA:2823:A:C6	22:DA:2824:C:C5	2.87	0.62
22:DA:444:C:HO2'	22:DA:445:C:P	2.22	0.62
22:DA:48:G:H22	22:DA:177:G:N2	1.97	0.62
22:DA:831:G:O2'	22:DA:832:U:C5'	2.46	0.62
22:DA:845:A:N6	22:DA:932:U:N3	2.42	0.62
28:DG:163:TYR:N	28:DG:163:TYR:CD2	2.67	0.62
28:DG:82:PHE:HB3	28:DG:140:ILE:CD1	2.29	0.62
29:DH:1:MET:HE3	29:DH:23:ALA:CB	2.29	0.62
39:DR:9:GLY:H	39:DR:10:LYS:HD2	1.65	0.62
1:AA:1049:U:H1'	1:AA:1201:A:N7	2.14	0.62
1:AA:1365:G:H2'	1:AA:1366:C:C6	2.34	0.62
1:AA:1396:A:H4'	1:AA:1397:C:O5'	1.99	0.62
1:AA:433:G:C2'	1:AA:434:U:H5'	2.28	0.62
1:AA:642:A:H2'	1:AA:643:C:C6	2.33	0.62
3:AC:22:PHE:C	3:AC:22:PHE:CD2	2.73	0.62
4:AD:173:ASP:O	4:AD:174:ALA:CB	2.46	0.62
4:AD:75:TYR:O	4:AD:78:ALA:HB3	1.99	0.62
5:AE:64:GLU:OE1	5:AE:65:LYS:HG2	1.99	0.62
9:AI:60:LEU:H	9:AI:60:LEU:HD23	1.65	0.62
10:AJ:17:LEU:C	10:AJ:17:LEU:HD23	2.19	0.62
16:AP:20:VAL:HG21	16:AP:32:PHE:CG	2.34	0.62
49:B1:32:LYS:HG2	49:B1:52:LYS:OXT	1.99	0.62
22:BA:1432:G:O2'	22:BA:1433:A:H5'	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1494:A:C2	22:BA:1495:A:C4	2.87	0.62
22:BA:1866:A:H2'	22:BA:1867:G:O4'	1.98	0.62
22:BA:2495:G:C2'	22:BA:2496:C:H5'	2.30	0.62
25:BD:142:VAL:HG23	25:BD:143:PRO:N	2.13	0.62
27:BF:39:VAL:HG13	27:BF:40:GLY:N	2.13	0.62
31:BJ:130:HIS:HD2	31:BJ:132:HIS:H	1.45	0.62
38:BQ:86:SER:HB2	39:BR:50:GLY:O	1.98	0.62
38:BQ:86:SER:HB3	39:BR:51:VAL:HG13	1.81	0.62
44:BW:22:VAL:HG13	44:BW:25:PHE:HE2	1.64	0.62
45:BX:44:ARG:CG	45:BX:45:PHE:N	2.62	0.62
1:CA:1446:A:C2'	1:CA:1447:A:H5'	2.26	0.62
1:CA:205:A:C6	1:CA:206:C:N4	2.67	0.62
1:CA:72:A:C6	1:CA:73:C:C4	2.87	0.62
6:CF:3:HIS:HB2	6:CF:92:THR:HG23	1.80	0.62
6:CF:54:LEU:CD1	6:CF:56:LYS:O	2.48	0.62
7:CG:22:LEU:C	7:CG:22:LEU:HD23	2.20	0.62
7:CG:68:VAL:O	7:CG:70:PRO:HD3	1.99	0.62
9:CI:119:LYS:O	9:CI:119:LYS:HG3	1.99	0.62
16:CP:44:SER:H	16:CP:46:LYS:HZ1	1.47	0.62
18:CR:58:ILE:O	18:CR:62:ARG:HG3	1.99	0.62
22:DA:1090:A:C2'	22:DA:1091:G:H5''	2.29	0.62
22:DA:1181:U:O2'	22:DA:1182:G:H5'	1.99	0.62
22:DA:1865:U:O4	22:DA:1875:G:C2	2.52	0.62
22:DA:1912:A:N6	22:DA:1917:U:N3	2.46	0.62
22:DA:1931:U:C2'	22:DA:1932:A:H8	2.12	0.62
22:DA:2468:A:O2'	22:DA:2469:A:H8	1.81	0.62
22:DA:2742:G:OP1	52:D4:36:ARG:HD3	1.99	0.62
22:DA:42:A:C2	22:DA:438:G:C2	2.87	0.62
22:DA:445:C:O2'	22:DA:446:G:C8	2.51	0.62
22:DA:455:C:C5	22:DA:472:A:C2	2.87	0.62
22:DA:547:A:H8	22:DA:548:G:H5'	1.64	0.62
22:DA:545:U:H2'	22:DA:547:A:OP1	1.97	0.62
22:DA:818:G:N7	22:DA:1187:G:C6	2.67	0.62
22:DA:822:G:O6	22:DA:943:A:C2	2.43	0.62
24:DC:156:SER:HB3	24:DC:159:THR:HG21	1.80	0.62
25:DD:124:ARG:HD3	25:DD:125:TRP:CD1	2.34	0.62
28:DG:18:ILE:HD12	28:DG:42:VAL:CG1	2.26	0.62
22:DA:2747:G:HO2'	28:DG:66:THR:HG22	1.63	0.62
29:DH:41:LYS:HA	29:DH:44:ILE:HG23	1.81	0.62
35:DN:90:ARG:NH2	35:DN:116:VAL:HG11	2.14	0.62
39:DR:68:ARG:NH1	39:DR:90:ARG:HG2	2.14	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:411:A:O2'	1:AA:413:G:H5''	1.99	0.62
1:AA:428:G:O4'	1:AA:430:A:C8	2.53	0.62
1:AA:872:A:C4	1:AA:874:G:N7	2.67	0.62
1:AA:991:U:H4'	1:AA:992:U:OP1	1.98	0.62
5:AE:80:LEU:CD2	5:AE:122:VAL:HG11	2.29	0.62
1:AA:683:G:H21	11:AK:39:ASN:HA	1.64	0.62
12:AL:28:GLN:HB2	12:AL:81:ILE:O	1.99	0.62
17:AQ:20:ILE:H	17:AQ:47:ASP:CG	2.02	0.62
17:AQ:62:GLU:HB2	17:AQ:72:TRP:CZ2	2.34	0.62
20:AT:68:LYS:HB2	20:AT:68:LYS:NZ	2.14	0.62
22:BA:1733:G:HO2'	22:BA:1734:G:H8	1.47	0.62
22:BA:1747:U:H2'	22:BA:1748:C:H6	1.64	0.62
22:BA:2150:C:O2'	22:BA:2151:U:C6	2.49	0.62
22:BA:2796:U:H3	22:BA:2799:A:H61	1.46	0.62
24:BC:16:VAL:N	24:BC:203:VAL:HG11	2.14	0.62
25:BD:97:SER:OG	25:BD:99:GLU:HG2	1.99	0.62
26:BE:24:ASN:O	26:BE:28:VAL:HG12	1.98	0.62
26:BE:73:ILE:O	26:BE:73:ILE:HG12	1.98	0.62
32:BK:36:GLY:HA2	32:BK:62:VAL:O	2.00	0.62
38:BQ:85:ALA:O	38:BQ:88:GLU:HB2	1.98	0.62
45:BX:29:LEU:CD2	45:BX:29:LEU:N	2.62	0.62
1:CA:1092:A:H62	1:CA:1093:A:N6	1.97	0.62
1:CA:1128:C:H4'	1:CA:1148:U:N3	2.14	0.62
1:CA:1129:C:O2'	1:CA:1130:A:C8	2.50	0.62
1:CA:517:G:H5'	1:CA:519:C:C2	2.34	0.62
1:CA:93:U:C2'	1:CA:94:G:H5''	2.29	0.62
1:CA:989:U:H2'	1:CA:990:C:H5'	1.80	0.62
2:CB:151:LYS:HG3	2:CB:152:ASP:N	2.14	0.62
4:CD:197:HIS:O	4:CD:200:VAL:HG12	1.98	0.62
5:CE:56:PRO:O	5:CE:59:ILE:HG23	1.99	0.62
12:CL:5:GLN:HG3	12:CL:9:LYS:NZ	2.14	0.62
17:CQ:24:ILE:HD13	17:CQ:43:LEU:HD22	1.80	0.62
22:DA:1208:C:C2	22:DA:1209:U:C6	2.87	0.62
22:DA:1469:A:C2'	22:DA:1470:A:H8	2.09	0.62
22:DA:184:C:H2'	22:DA:185:G:C8	2.33	0.62
22:DA:2330:G:H2'	22:DA:2331:G:H5'	1.80	0.62
22:DA:2636:C:H2'	22:DA:2637:U:H6	1.64	0.62
22:DA:2798:U:H5'	22:DA:2800:A:H62	1.63	0.62
22:DA:540:C:O2'	22:DA:541:A:H5'	1.99	0.62
22:DA:616:A:O2'	22:DA:617:G:C8	2.34	0.62
22:DA:685:A:H4'	22:DA:686:U:O5'	1.98	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:753:A:C2	22:DA:754:U:C2	2.86	0.62
22:DA:851:C:C4'	47:DZ:46:MET:HG2	2.29	0.62
28:DG:53:PRO:HB3	28:DG:61:TRP:N	2.13	0.62
39:DR:27:ILE:CG2	39:DR:28:ALA:N	2.49	0.62
22:DA:64:A:OP1	41:DT:77:ARG:HG2	1.97	0.62
42:DU:3:LYS:HG2	42:DU:84:PHE:CZ	2.35	0.62
46:DY:22:LEU:CD1	46:DY:23:ARG:HH12	2.12	0.62
22:DA:850:U:O2'	47:DZ:22:THR:HA	1.99	0.62
1:AA:198:G:C2'	1:AA:199:A:H8	2.12	0.62
1:AA:205:A:OP1	1:AA:205:A:H4'	1.98	0.62
1:AA:293:G:H2'	1:AA:294:U:H6	1.64	0.62
1:AA:32:A:H2'	1:AA:33:A:H8	1.61	0.62
1:AA:908:A:O2'	1:AA:909:A:H5'	1.99	0.62
3:AC:110:LEU:CD2	3:AC:143:LEU:HD23	2.28	0.62
3:AC:55:VAL:O	3:AC:65:VAL:HA	1.99	0.62
8:AH:6:ILE:HB	8:AH:76:ARG:NH1	2.14	0.62
17:AQ:11:VAL:HG12	17:AQ:12:VAL:CG1	2.29	0.62
17:AQ:3:LYS:O	17:AQ:3:LYS:HD2	1.99	0.62
20:AT:43:LYS:NZ	20:AT:86:ALA:HA	2.13	0.62
11:AK:108:ASN:HB3	21:AU:5:VAL:O	1.98	0.62
22:BA:1579:A:O2'	22:BA:1580:A:H5'	1.99	0.62
22:BA:2292:U:H2'	22:BA:2293:G:H8	1.65	0.62
22:BA:945:A:H5'	22:BA:946:C:OP2	1.99	0.62
25:BD:16:THR:CG2	25:BD:20:VAL:HB	2.28	0.62
27:BF:7:TYR:CD2	27:BF:11:VAL:CG1	2.78	0.62
28:BG:1:SER:HA	28:BG:5:LYS:HG3	1.81	0.62
28:BG:63:GLN:OE1	28:BG:63:GLN:HA	1.98	0.62
34:BM:2:LEU:HD23	34:BM:69:PRO:CD	2.21	0.62
38:BQ:97:ILE:HD11	38:BQ:105:PHE:CB	2.29	0.62
39:BR:49:ILE:C	39:BR:51:VAL:O	2.38	0.62
39:BR:29:THR:C	39:BR:63:VAL:HG22	2.20	0.62
1:CA:1520:C:H2'	1:CA:1521:C:C6	2.34	0.62
1:CA:369:G:N3	1:CA:370:C:C6	2.67	0.62
1:CA:562:U:H4'	1:CA:563:A:O5'	1.99	0.62
1:CA:66:A:C6	1:CA:67:C:C5	2.87	0.62
1:CA:770:C:H1'	1:CA:899:C:H42	1.65	0.62
2:CB:160:LEU:CD1	2:CB:180:ILE:HG21	2.29	0.62
2:CB:66:ILE:H	2:CB:88:GLN:HB3	1.65	0.62
3:CC:39:ARG:CG	3:CC:54:ILE:HD13	2.28	0.62
4:CD:77:GLU:CG	4:CD:81:LEU:HD11	2.27	0.62
6:CF:54:LEU:CD1	6:CF:56:LYS:H	2.12	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:18:LEU:N	13:CM:18:LEU:HD12	2.14	0.62
20:CT:73:ARG:CG	20:CT:73:ARG:NH1	2.48	0.62
49:D1:8:ILE:CG2	49:D1:9:LYS:N	2.61	0.62
22:DA:1157:G:H2'	22:DA:1158:C:C6	2.33	0.62
22:DA:1394:U:C3'	22:DA:1394:U:C6	2.82	0.62
22:DA:1416:G:C2	22:DA:1417:C:C4	2.87	0.62
22:DA:1451:C:N4	22:DA:1461:C:H42	1.96	0.62
22:DA:2294:G:H2'	22:DA:2295:C:H6	1.62	0.62
22:DA:2542:A:H4'	22:DA:2543:G:H5''	1.80	0.62
22:DA:2667:C:O2'	22:DA:2668:G:H8	1.81	0.62
22:DA:336:C:O2'	22:DA:337:C:C6	2.42	0.62
22:DA:674:G:H4'	26:DE:69:ARG:CG	2.29	0.62
23:DB:111:U:O2'	23:DB:112:G:H8	1.83	0.62
26:DE:69:ARG:O	26:DE:70:SER:HB3	1.98	0.62
30:DI:27:LEU:CD1	30:DI:32:VAL:HG11	2.30	0.62
36:DO:105:ALA:O	36:DO:109:ALA:HB2	1.99	0.62
22:DA:2336:A:N7	44:DW:40:ARG:CZ	2.63	0.62
46:DY:22:LEU:HG	46:DY:23:ARG:NH1	2.15	0.62
22:DA:76:C:OP1	46:DY:48:ARG:HG2	1.99	0.62
1:AA:1127:G:O2'	1:AA:1128:C:C5'	2.33	0.62
1:AA:293:G:H2'	1:AA:294:U:C6	2.35	0.62
1:AA:373:A:H2'	1:AA:374:A:H8	1.64	0.62
1:AA:687:A:C8	1:AA:701:U:H5	2.18	0.62
5:AE:100:GLU:HB2	5:AE:103:GLY:CA	2.29	0.62
7:AG:25:PHE:CE1	7:AG:104:VAL:HG22	2.35	0.62
14:AN:90:GLY:O	14:AN:92:ILE:N	2.32	0.62
21:AU:48:LYS:HA	21:AU:51:ALA:HB3	1.82	0.62
22:BA:1023:U:H5'	22:BA:1023:U:C6	2.35	0.62
22:BA:1074:G:O2'	22:BA:1075:C:H6	1.82	0.62
22:BA:712:G:C2'	22:BA:713:G:H5'	2.29	0.62
22:BA:859:G:H8	22:BA:859:G:OP2	1.82	0.62
24:BC:30:ALA:HB3	24:BC:31:PRO:CD	2.29	0.62
25:BD:140:HIS:CE1	56:BD:302:HOH:O	2.50	0.62
31:BJ:88:THR:HG22	31:BJ:91:GLU:HB2	1.79	0.62
37:BP:102:ARG:O	37:BP:103:THR:CG2	2.48	0.62
41:BT:27:SER:C	41:BT:28:ASN:CG	2.57	0.62
1:CA:1024:G:H2'	1:CA:1025:U:O4'	2.00	0.62
1:CA:1283:U:H2'	1:CA:1284:C:C5	2.35	0.62
1:CA:913:A:H4'	1:CA:914:A:C5'	2.28	0.62
5:CE:29:ILE:CG2	5:CE:30:PHE:H	1.98	0.62
9:CI:35:GLU:CB	9:CI:39:GLY:HA3	2.29	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:35:ARG:HA	19:CS:70:LEU:CB	2.28	0.62
21:CU:16:ARG:HE	21:CU:16:ARG:HA	1.64	0.62
21:CU:29:ALA:O	21:CU:32:ARG:HB2	1.99	0.62
22:DA:1063:G:C6	22:DA:1064:C:N4	2.67	0.62
22:DA:1120:G:O2'	22:DA:1121:C:H5'	1.99	0.62
22:DA:1206:G:C6	22:DA:1207:C:N4	2.67	0.62
22:DA:126:A:P	50:D2:19:ARG:HG3	2.39	0.62
22:DA:1605:C:C4'	22:DA:1610:A:C6	2.82	0.62
22:DA:382:A:H2'	22:DA:383:C:C5'	2.30	0.62
22:DA:47:C:H42	22:DA:178:G:H1	1.47	0.62
22:DA:510:C:H6	22:DA:510:C:O5'	1.82	0.62
22:DA:834:G:H1'	22:DA:2358:A:C2	2.34	0.62
25:DD:133:THR:CG2	25:DD:134:HIS:N	2.57	0.62
25:DD:137:SER:HB3	25:DD:138:LEU:CD2	2.29	0.62
25:DD:56:LYS:HB3	25:DD:56:LYS:NZ	2.14	0.62
32:DK:107:LEU:C	32:DK:109:SER:H	2.02	0.62
33:DL:21:ARG:NH2	33:DL:21:ARG:HB3	2.14	0.62
23:DB:112:G:H21	36:DO:45:SER:HA	1.65	0.62
42:DU:3:LYS:HE2	42:DU:84:PHE:HE1	1.64	0.62
44:DW:33:GLY:O	44:DW:34:SER:CB	2.48	0.62
44:DW:46:ALA:CA	44:DW:50:VAL:HG12	2.30	0.62
1:AA:1095:U:O2'	1:AA:1096:C:C5'	2.47	0.62
1:AA:1101:A:H1'	1:AA:1102:A:O4'	1.99	0.62
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.34	0.62
1:AA:93:U:O2'	1:AA:94:G:C5'	2.38	0.62
1:AA:978:A:H1'	1:AA:1322:C:H5	1.63	0.62
5:AE:11:GLN:HG3	5:AE:116:VAL:HB	1.81	0.62
16:AP:54:LEU:HD12	16:AP:54:LEU:H	1.64	0.62
20:AT:32:LYS:O	20:AT:35:TYR:HD2	1.82	0.62
52:B4:36:ARG:CG	52:B4:37:GLN:H	2.04	0.62
22:BA:2507:C:H2'	22:BA:2508:G:O5'	2.00	0.62
25:BD:9:VAL:HG21	25:BD:26:VAL:CG1	2.30	0.62
25:BD:53:GLY:HA3	25:BD:77:ARG:H	1.64	0.62
34:BM:1:MET:O	34:BM:2:LEU:HB2	1.99	0.62
34:BM:77:PRO:HD2	34:BM:80:VAL:HG11	1.81	0.62
39:BR:15:SER:O	39:BR:18:GLN:HB3	2.00	0.62
22:BA:855:G:H1'	44:BW:23:LYS:NZ	2.15	0.62
1:CA:1111:A:O2'	1:CA:1112:C:H5'	2.00	0.62
1:CA:1288:A:HO2'	1:CA:1289:A:H8	0.73	0.62
1:CA:1323:G:O2'	1:CA:1362:A:H1'	2.00	0.62
1:CA:1464:U:O2'	1:CA:1465:A:H5'	2.00	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:542:G:O2'	1:CA:543:U:H5'	2.00	0.62
1:CA:756:C:H2'	1:CA:757:U:C5'	2.29	0.62
1:CA:978:A:OP1	1:CA:980:C:N4	2.32	0.62
2:CB:114:LYS:HE3	2:CB:151:LYS:HB2	1.81	0.62
2:CB:160:LEU:CD2	2:CB:175:ALA:HB2	2.25	0.62
2:CB:80:LYS:O	2:CB:84:LEU:N	2.27	0.62
3:CC:176:THR:HG22	3:CC:178:ARG:HG3	1.81	0.62
3:CC:43:THR:O	3:CC:47:ALA:HB2	1.99	0.62
6:CF:99:ALA:O	6:CF:100:SER:HB2	2.00	0.62
7:CG:74:VAL:CG1	7:CG:143:MET:HB2	2.30	0.62
16:CP:4:ILE:CD1	16:CP:4:ILE:H	2.10	0.62
19:CS:38:THR:OG1	19:CS:67:GLY:HA2	1.99	0.62
22:DA:242:G:C8	51:D3:4:LYS:HG3	2.33	0.62
22:DA:1929:G:C5'	22:DA:1930:G:OP1	2.48	0.62
22:DA:1953:A:H2	22:DA:2549:G:N3	1.97	0.62
22:DA:2698:U:H2'	22:DA:2699:C:C6	2.34	0.62
22:DA:784:G:C6	24:DC:227:VAL:HG11	2.34	0.62
30:DI:105:LEU:O	30:DI:105:LEU:HD23	1.98	0.62
30:DI:57:VAL:HG12	30:DI:58:ILE:N	2.14	0.62
33:DL:124:GLY:H	33:DL:143:GLU:HG3	1.65	0.62
36:DO:24:THR:OG1	36:DO:90:VAL:HG11	2.00	0.62
41:DT:69:ARG:HG3	41:DT:70:HIS:HD2	1.64	0.62
43:DV:26:PHE:HE1	43:DV:86:LEU:HB3	1.63	0.62
1:AA:180:U:H2'	1:AA:181:A:O5'	1.99	0.62
1:AA:771:G:H2'	1:AA:772:U:C6	2.33	0.62
2:AB:146:SER:O	2:AB:147:LEU:HD23	1.99	0.62
1:AA:619:U:C2	4:AD:131:ILE:CD1	2.82	0.62
1:AA:1379:G:N7	7:AG:1:PRO:HB2	2.14	0.62
8:AH:74:ILE:O	8:AH:74:ILE:HG23	2.00	0.62
8:AH:87:ARG:O	8:AH:121:GLY:HA3	1.99	0.62
8:AH:88:LYS:HA	8:AH:91:LEU:HG	1.81	0.62
11:AK:86:LYS:CA	11:AK:113:THR:HG22	2.29	0.62
18:AR:35:SER:HB3	21:AU:3:ILE:HG13	1.80	0.62
22:BA:1713:A:H4'	22:BA:1714:U:OP1	1.99	0.62
22:BA:405:U:H3'	22:BA:406:G:H5'	1.82	0.62
22:BA:563:A:C2	22:BA:564:C:C2	2.87	0.62
29:BH:134:VAL:HG21	29:BH:139:PHE:HA	1.82	0.62
29:BH:21:VAL:HG21	29:BH:25:TYR:HD2	1.63	0.62
33:BL:101:ILE:HG22	33:BL:102:GLY:H	1.64	0.62
33:BL:19:LEU:HB2	33:BL:27:LEU:HD22	1.81	0.62
44:BW:28:GLU:CG	44:BW:29:SER:N	2.57	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1067:A:C4'	1:CA:1068:G:O5'	2.47	0.62
4:CD:89:LEU:HD21	4:CD:199:ILE:HD11	1.78	0.62
10:CJ:41:PRO:O	10:CJ:42:LEU:HB2	2.00	0.62
11:CK:12:ARG:HD3	11:CK:12:ARG:N	2.15	0.62
11:CK:30:ILE:HG12	11:CK:45:THR:HG22	1.82	0.62
22:DA:1087:G:C5	22:DA:1089:A:C2	2.88	0.62
22:DA:1439:A:C8	22:DA:1440:U:O4'	2.53	0.62
22:DA:1930:G:HO2'	22:DA:1968:G:H1	1.45	0.62
22:DA:2093:G:C6	22:DA:2225:A:C8	2.88	0.62
22:DA:2339:C:O2'	22:DA:2340:A:H8	1.82	0.62
22:DA:2367:G:O2'	22:DA:2368:C:H5'	1.99	0.62
22:DA:2611:C:C6	22:DA:2611:C:H5'	2.23	0.62
22:DA:2624:G:C2	22:DA:2625:G:C1'	2.77	0.62
22:DA:2695:U:O2'	22:DA:2696:U:H5'	2.00	0.62
22:DA:418:C:H2'	22:DA:419:U:H6	1.65	0.62
22:DA:553:G:H2'	22:DA:554:U:O4'	1.99	0.62
24:DC:14:HIS:O	24:DC:203:VAL:HG11	2.00	0.62
25:DD:112:THR:HG22	25:DD:113:SER:H	1.64	0.62
25:DD:117:GLY:O	25:DD:119:ALA:N	2.33	0.62
27:DF:129:MET:HE1	27:DF:174:PHE:CZ	2.34	0.62
27:DF:30:VAL:CG1	27:DF:168:LEU:HD23	2.29	0.62
30:DI:57:VAL:HG12	30:DI:58:ILE:H	1.63	0.62
31:DJ:25:LEU:C	31:DJ:27:ARG:H	2.03	0.62
31:DJ:43:GLU:HG2	31:DJ:43:GLU:O	2.00	0.62
32:DK:21:CYS:SG	32:DK:39:ILE:HG21	2.39	0.62
33:DL:120:VAL:HG12	33:DL:121:THR:N	2.14	0.62
35:DN:90:ARG:NH2	35:DN:116:VAL:CG1	2.62	0.62
22:DA:2332:C:O2'	44:DW:40:ARG:NH2	2.32	0.62
45:DX:10:ARG:HB3	45:DX:11:PRO:HD2	1.81	0.62
1:AA:1006:G:H2'	1:AA:1007:U:C6	2.35	0.62
1:AA:1320:C:H42	19:AS:35:ARG:HB2	1.63	0.62
1:AA:596:A:H2'	1:AA:597:G:C8	2.32	0.62
9:AI:6:TYR:CG	9:AI:7:GLY:N	2.68	0.62
11:AK:20:ALA:HA	11:AK:33:ILE:HD13	1.82	0.62
22:BA:1286:A:O2'	22:BA:1288:G:OP2	2.18	0.62
23:BB:17:C:O2'	23:BB:18:G:H5'	1.99	0.62
28:BG:8:VAL:HG13	28:BG:9:VAL:N	2.14	0.62
29:BH:53:GLU:O	29:BH:53:GLU:HG2	1.98	0.62
43:BV:51:GLN:HG2	43:BV:86:LEU:HD11	1.80	0.62
44:BW:46:ALA:O	44:BW:47:GLY:O	2.16	0.62
1:CA:437:U:H4'	4:CD:151:GLN:OE1	1.99	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:54:LEU:CD1	6:CF:55:HIS:H	2.12	0.62
6:CF:54:LEU:CD1	6:CF:55:HIS:N	2.63	0.62
7:CG:28:ILE:HG21	7:CG:100:MET:CG	2.28	0.62
3:CC:36:PHE:HZ	14:CN:91:GLU:O	1.82	0.62
19:CS:79:TYR:O	19:CS:80:ARG:HB2	1.99	0.62
22:DA:1608:A:O3'	22:DA:1609:A:H3'	2.00	0.62
22:DA:2511:U:C5	22:DA:2512:C:C5	2.88	0.62
22:DA:2662:A:H2'	22:DA:2663:G:O4'	1.99	0.62
22:DA:827:U:H6	56:DA:3352:HOH:O	1.81	0.62
22:DA:830:G:N3	22:DA:2448:A:C6	2.68	0.62
22:DA:922:C:H2'	22:DA:923:G:C8	2.32	0.62
27:DF:48:LEU:O	27:DF:52:ALA:HB2	2.00	0.62
30:DI:118:GLY:O	30:DI:119:ALA:HB3	1.99	0.62
30:DI:105:LEU:HD21	30:DI:129:GLU:OE2	2.00	0.62
36:DO:71:ALA:HB1	36:DO:102:ARG:O	1.99	0.62
36:DO:43:ASN:ND2	36:DO:45:SER:HB3	2.13	0.62
37:DP:23:ASP:O	37:DP:24:THR:HG23	2.00	0.62
37:DP:32:VAL:HB	37:DP:37:LYS:HG2	1.80	0.62
37:DP:56:SER:O	37:DP:75:THR:HG22	2.00	0.62
40:DS:1:MET:N	40:DS:1:MET:CE	2.62	0.62
1:AA:1378:C:C5	1:AA:1379:G:C8	2.88	0.62
1:AA:411:A:N6	1:AA:413:G:N2	2.48	0.62
1:AA:469:C:O2'	1:AA:470:C:C5'	2.47	0.62
1:AA:542:G:C2	1:AA:543:U:C5	2.88	0.62
1:AA:614:C:H2'	1:AA:615:G:O5'	1.99	0.62
1:AA:824:G:H1'	8:AH:1:SER:HA	1.81	0.62
11:AK:51:PHE:HZ	11:AK:64:VAL:HG11	1.65	0.62
12:AL:29:LYS:O	12:AL:81:ILE:HG22	2.00	0.62
13:AM:2:ARG:C	13:AM:3:ILE:HG23	2.19	0.62
22:BA:1062:G:C2'	22:BA:1063:G:C8	2.83	0.62
22:BA:1797:G:O3'	24:BC:255:LYS:HA	2.00	0.62
22:BA:2134:A:N6	22:BA:2135:A:N6	2.47	0.62
22:BA:2520:C:O2'	22:BA:2521:C:H5'	1.98	0.62
22:BA:2729:G:O2'	22:BA:2730:C:H5'	2.00	0.62
22:BA:2820:A:O2'	22:BA:2821:A:P	2.57	0.62
24:BC:12:ARG:HG3	24:BC:12:ARG:NH1	2.01	0.62
25:BD:47:ALA:HA	25:BD:84:LEU:HG	1.81	0.62
27:BF:98:PHE:O	27:BF:102:LEU:HB2	2.00	0.62
28:BG:61:TRP:CE3	28:BG:61:TRP:HA	2.34	0.62
35:BN:103:ARG:HB2	35:BN:110:MET:HE3	1.82	0.62
37:BP:33:GLU:N	37:BP:36:LYS:O	2.32	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BP:28:LYS:HB2	37:BP:82:SER:HB3	1.82	0.62
1:CA:1009:U:H2'	1:CA:1010:U:C6	2.35	0.62
1:CA:1011:C:N3	1:CA:1019:A:C2	2.68	0.62
1:CA:113:G:H1'	1:CA:354:G:H5'	1.81	0.62
1:CA:32:A:C2'	1:CA:33:A:H8	2.11	0.62
1:CA:666:G:C6	1:CA:741:G:C6	2.87	0.62
1:CA:881:G:C5	1:CA:882:C:C5	2.88	0.62
2:CB:35:ASN:O	2:CB:36:LYS:HD2	2.00	0.62
7:CG:45:ALA:HB1	7:CG:120:ALA:HB2	1.82	0.62
8:CH:11:THR:CG2	8:CH:14:ARG:HH12	2.12	0.62
22:DA:1182:G:H2'	22:DA:1183:U:O4'	2.00	0.62
22:DA:121:G:H1'	22:DA:148:U:N3	2.14	0.62
22:DA:1541:C:O2'	22:DA:1542:U:O4'	2.10	0.62
22:DA:1585:C:H2'	22:DA:1586:A:O5'	2.00	0.62
22:DA:1823:G:H5'	56:DC:410:HOH:O	1.98	0.62
22:DA:188:G:H2'	22:DA:189:G:C5'	2.30	0.62
22:DA:1912:A:N6	22:DA:1917:U:H3	1.98	0.62
22:DA:216:A:C4	22:DA:217:A:C8	2.88	0.62
22:DA:2242:G:C5	22:DA:2243:U:C5	2.88	0.62
22:DA:2331:G:H4'	44:DW:41:GLY:N	2.15	0.62
22:DA:2718:G:OP1	37:DP:97:TYR:HD1	1.82	0.62
22:DA:479:A:H4'	22:DA:480:A:O5'	2.00	0.62
22:DA:859:G:N2	22:DA:916:G:H2'	2.14	0.62
22:DA:960:A:C8	22:DA:962:G:C8	2.87	0.62
23:DB:12:C:H5''	23:DB:15:A:H62	1.63	0.62
24:DC:8:THR:O	24:DC:9:SER:HB3	2.00	0.62
32:DK:7:MET:HG3	32:DK:17:ARG:HH12	1.63	0.62
33:DL:77:ILE:HD11	33:DL:108:ALA:HB1	1.80	0.62
33:DL:29:LYS:C	33:DL:30:THR:HG23	2.19	0.62
34:DM:19:GLY:H	34:DM:38:ARG:HH21	1.47	0.62
35:DN:67:PHE:HE2	35:DN:73:ASN:CG	2.02	0.62
37:DP:62:LYS:O	37:DP:63:ILE:HB	2.00	0.62
38:DQ:40:LYS:HD3	38:DQ:44:TYR:CE2	2.34	0.62
38:DQ:71:ASN:ND2	38:DQ:106:THR:HA	2.15	0.62
44:DW:70:VAL:O	44:DW:70:VAL:HG22	2.00	0.62
1:AA:1352:C:H2'	1:AA:1353:G:H8	1.63	0.62
1:AA:703:G:H4'	1:AA:704:A:H5'	1.81	0.62
1:AA:819:A:H4'	1:AA:820:U:OP2	1.98	0.62
2:AB:18:GLN:O	2:AB:37:VAL:HG23	1.99	0.62
3:AC:143:LEU:N	3:AC:143:LEU:HD13	2.15	0.62
1:AA:1373:G:H5''	7:AG:35:LYS:HD2	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:78:SER:HA	8:AH:84:ILE:HG12	1.81	0.62
9:AI:28:VAL:HB	9:AI:63:TYR:CD2	2.35	0.62
14:AN:2:LYS:HD3	14:AN:5:MET:HG3	1.82	0.62
15:AO:9:LYS:NZ	15:AO:9:LYS:HB3	2.14	0.62
22:BA:1022:G:C6	22:BA:1141:U:C5	2.88	0.62
22:BA:1366:A:C2	22:BA:1367:A:H1'	2.34	0.62
22:BA:2151:U:O2'	22:BA:2152:G:C5'	2.45	0.62
22:BA:2339:C:H2'	22:BA:2340:A:H8	1.63	0.62
22:BA:2405:G:H1'	22:BA:2412:A:N6	2.15	0.62
22:BA:2408:U:H2'	22:BA:2409:G:H8	1.64	0.62
22:BA:1656:C:H5''	25:BD:141:ARG:HB2	1.82	0.62
28:BG:33:THR:CA	28:BG:34:ARG:HH11	2.12	0.62
22:BA:2641:G:OP1	31:BJ:76:HIS:HE1	1.82	0.62
37:BP:104:GLY:O	37:BP:106:ALA:N	2.33	0.62
39:BR:48:LYS:HD2	39:BR:48:LYS:O	1.99	0.62
41:BT:19:LYS:O	41:BT:23:ALA:N	2.26	0.62
44:BW:22:VAL:O	44:BW:25:PHE:HD2	1.82	0.62
1:CA:209:U:C5'	1:CA:210:C:OP2	2.47	0.62
1:CA:265:G:H2'	1:CA:266:G:H5'	1.82	0.62
1:CA:508:U:C4'	1:CA:509:A:OP1	2.42	0.62
20:CT:73:ARG:NH1	20:CT:73:ARG:HG3	2.13	0.62
20:CT:81:GLN:C	20:CT:82:ILE:HG12	2.20	0.62
22:DA:1426:G:H5'	22:DA:1427:A:OP2	2.00	0.62
22:DA:1734:G:C2'	22:DA:1735:A:H8	2.13	0.62
22:DA:2054:A:N7	22:DA:2056:G:H1'	2.15	0.62
22:DA:2657:A:O2'	22:DA:2658:C:C5'	2.48	0.62
22:DA:565:C:H2'	22:DA:566:U:O4'	1.98	0.62
22:DA:593:U:C2	22:DA:594:U:C5	2.88	0.62
22:DA:728:G:C2	22:DA:730:A:C4	2.88	0.62
24:DC:131:MET:HE1	24:DC:183:VAL:HG11	1.82	0.62
25:DD:114:LYS:HB2	25:DD:116:LYS:HE3	1.81	0.62
27:DF:11:VAL:HG12	27:DF:15:LEU:HD12	1.81	0.62
27:DF:94:ARG:HD3	27:DF:97:GLU:OE1	1.99	0.62
31:DJ:64:VAL:HG13	31:DJ:65:THR:N	2.14	0.62
22:DA:627:A:N6	33:DL:111:ILE:HB	2.15	0.62
4:AD:172:VAL:HG22	4:AD:173:ASP:N	2.15	0.61
7:AG:74:VAL:CG2	7:AG:85:GLN:HE21	2.12	0.61
11:AK:66:ALA:HB1	11:AK:99:LEU:HD13	1.81	0.61
13:AM:113:LYS:H	13:AM:114:PRO:HD2	1.61	0.61
14:AN:82:LYS:HE2	14:AN:85:GLU:HG3	1.82	0.61
22:BA:1722:A:N6	22:BA:1738:G:H1'	2.15	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1845:G:O2'	22:BA:1846:G:H5'	2.00	0.61
22:BA:2476:A:H2'	22:BA:2477:U:H5'	1.81	0.61
22:BA:250:G:H2'	22:BA:251:A:H8	1.62	0.61
22:BA:2784:U:H2'	22:BA:2785:C:C6	2.35	0.61
22:BA:364:C:H2'	22:BA:365:U:H6	1.64	0.61
22:BA:480:A:H2	22:BA:499:U:O2	1.83	0.61
25:BD:125:TRP:O	25:BD:126:ASN:HB2	1.99	0.61
25:BD:62:LYS:HB2	25:BD:63:PRO:HD3	1.82	0.61
28:BG:37:ASN:O	28:BG:38:ASP:HB3	2.00	0.61
34:BM:1:MET:HE3	34:BM:2:LEU:N	2.07	0.61
35:BN:116:VAL:HG22	35:BN:116:VAL:O	2.00	0.61
44:BW:45:HIS:N	44:BW:45:HIS:ND1	2.48	0.61
1:CA:1378:C:H3'	1:CA:1379:G:C5'	2.27	0.61
1:CA:34:C:H2'	1:CA:35:G:C8	2.34	0.61
1:CA:915:A:O2'	1:CA:916:U:H5'	2.00	0.61
2:CB:31:PHE:HB2	2:CB:41:ASN:HB2	1.82	0.61
8:CH:68:LYS:HA	8:CH:68:LYS:HE2	1.82	0.61
9:CI:35:GLU:CA	9:CI:39:GLY:HA3	2.30	0.61
12:CL:62:VAL:HG23	12:CL:63:THR:N	2.15	0.61
12:CL:7:VAL:HG22	17:CQ:33:TYR:HD1	1.63	0.61
13:CM:21:ILE:HG22	13:CM:22:TYR:N	2.15	0.61
17:CQ:29:LYS:HB2	17:CQ:36:PHE:CE1	2.35	0.61
18:CR:25:ILE:HD12	18:CR:67:LEU:CD2	2.29	0.61
51:D3:18:LYS:CG	51:D3:19:GLY:N	2.63	0.61
52:D4:19:ARG:O	52:D4:20:ASP:CB	2.47	0.61
22:DA:1063:G:O2'	22:DA:1064:C:C6	2.49	0.61
22:DA:1388:G:C2'	22:DA:1389:G:H8	2.13	0.61
22:DA:2226:C:H2'	22:DA:2227:A:C8	2.35	0.61
22:DA:234:U:H2'	22:DA:235:U:H6	1.65	0.61
22:DA:2290:G:O2'	22:DA:2381:A:H1'	1.99	0.61
22:DA:616:A:N3	22:DA:617:G:C8	2.68	0.61
23:DB:57:A:O2'	23:DB:58:A:C8	2.46	0.61
26:DE:135:ALA:C	26:DE:137:LYS:H	2.01	0.61
28:DG:100:ASN:O	28:DG:115:GLN:HB2	2.00	0.61
30:DI:45:THR:HG23	30:DI:54:ILE:CD1	2.27	0.61
35:DN:82:GLU:O	35:DN:85:PRO:HD2	2.00	0.61
32:DK:73:ASP:O	37:DP:74:GLN:HG3	2.00	0.61
43:DV:4:ILE:HD12	43:DV:63:ILE:CG1	2.29	0.61
44:DW:45:HIS:O	44:DW:46:ALA:HB2	2.00	0.61
46:DY:22:LEU:HD12	46:DY:23:ARG:HH12	1.64	0.61
1:AA:1131:G:C2'	1:AA:1132:C:O5'	2.48	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1469:C:C6	1:AA:1469:C:H3'	2.34	0.61
1:AA:417:G:C6	1:AA:418:C:C4	2.88	0.61
1:AA:542:G:O2'	1:AA:543:U:H5'	2.00	0.61
1:AA:697:U:C5	1:AA:698:G:C8	2.87	0.61
1:AA:797:C:O2'	1:AA:798:U:H5'	2.01	0.61
1:AA:946:A:C2	1:AA:1236:A:C2	2.88	0.61
1:AA:95:C:O2'	1:AA:96:U:H5'	2.01	0.61
1:AA:1108:G:OP1	3:AC:175:HIS:HB2	2.00	0.61
5:AE:149:PRO:HG2	5:AE:150:GLU:H	1.65	0.61
6:AF:8:PHE:HE1	6:AF:21:MET:HE1	1.64	0.61
8:AH:36:ALA:HB1	8:AH:60:LEU:HD21	1.80	0.61
16:AP:12:LYS:O	16:AP:13:LYS:HB2	2.00	0.61
22:BA:2214:C:H2'	22:BA:2215:C:H6	1.65	0.61
22:BA:2402:U:C2'	22:BA:2403:C:OP2	2.48	0.61
22:BA:636:G:C5	33:BL:111:ILE:CD1	2.70	0.61
22:BA:855:G:C1'	44:BW:23:LYS:HD3	2.29	0.61
24:BC:94:LEU:HD13	24:BC:100:ARG:HD3	1.82	0.61
27:BF:4:HIS:O	27:BF:7:TYR:HB3	2.00	0.61
37:BP:33:GLU:HB3	37:BP:36:LYS:H	1.65	0.61
22:BA:2720:U:OP1	37:BP:52:ARG:NH2	2.33	0.61
38:BQ:87:VAL:O	38:BQ:88:GLU:HB3	2.00	0.61
42:BU:17:ASP:O	42:BU:19:GLY:N	2.32	0.61
44:BW:24:ARG:CB	44:BW:65:LYS:HD3	2.22	0.61
1:CA:1095:U:H2'	1:CA:1096:C:C6	2.35	0.61
1:CA:1262:C:H2'	1:CA:1263:C:H5'	1.81	0.61
1:CA:1281:C:C5'	1:CA:1282:C:H5	2.11	0.61
1:CA:739:C:H2'	1:CA:739:C:O2	1.99	0.61
1:CA:802:A:H2'	1:CA:803:G:C5'	2.30	0.61
1:CA:964:A:C2	1:CA:972:C:N3	2.69	0.61
9:CI:30:ASN:O	9:CI:32:ARG:HG2	2.01	0.61
12:CL:36:VAL:O	12:CL:36:VAL:HG23	2.00	0.61
14:CN:27:LYS:HD2	14:CN:27:LYS:C	2.21	0.61
17:CQ:29:LYS:HE2	17:CQ:36:PHE:CZ	2.36	0.61
48:D0:38:LEU:N	48:D0:41:HIS:CE1	2.67	0.61
22:DA:1239:G:C5	22:DA:1240:U:C5	2.88	0.61
22:DA:1385:A:H4'	22:DA:1386:C:OP1	2.01	0.61
22:DA:1417:C:O2'	22:DA:1418:G:C5'	2.48	0.61
22:DA:1476:U:O2'	22:DA:1477:A:H8	1.82	0.61
22:DA:1734:G:N3	22:DA:1735:A:C8	2.68	0.61
22:DA:1858:A:N6	22:DA:1885:A:C8	2.68	0.61
22:DA:1973:G:C6	22:DA:1974:C:C4	2.88	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2324:U:H5'	22:DA:2325:G:C5'	2.29	0.61
22:DA:2756:U:C1'	22:DA:2757:A:C5'	2.78	0.61
22:DA:324:A:N3	22:DA:325:G:H1'	2.14	0.61
22:DA:589:U:H2'	22:DA:590:A:C8	2.34	0.61
22:DA:635:C:O2'	22:DA:639:U:H5''	2.00	0.61
22:DA:63:A:N6	22:DA:91:A:N6	2.48	0.61
23:DB:90:C:C6	23:DB:90:C:H5''	2.22	0.61
22:DA:1829:A:O2'	24:DC:14:HIS:CE1	2.54	0.61
24:DC:65:ASP:OD2	24:DC:68:ARG:HG2	2.00	0.61
25:DD:118:PHE:O	25:DD:119:ALA:CB	2.48	0.61
28:DG:82:PHE:HB3	28:DG:140:ILE:HD13	1.82	0.61
30:DI:86:LYS:O	30:DI:87:SER:HB2	2.00	0.61
35:DN:34:ILE:HG22	35:DN:113:ILE:CG2	2.28	0.61
35:DN:37:THR:HB	35:DN:40:LYS:CB	2.28	0.61
41:DT:39:THR:HG21	41:DT:42:GLU:OE1	1.99	0.61
1:AA:1083:U:H5''	1:AA:1086:U:C5	2.30	0.61
1:AA:265:G:C2'	1:AA:266:G:H5'	2.30	0.61
1:AA:429:U:H1'	1:AA:430:A:C5'	2.30	0.61
1:AA:821:G:H4'	56:AA:1742:HOH:O	1.99	0.61
9:AI:29:ILE:HA	9:AI:64:ILE:O	1.99	0.61
10:AJ:57:VAL:O	10:AJ:58:ASN:HB2	1.99	0.61
17:AQ:51:GLU:HG3	17:AQ:74:LEU:HD21	1.82	0.61
22:BA:1171:G:C6	22:BA:1172:C:C4	2.89	0.61
22:BA:1746:A:H2'	22:BA:1747:U:H6	1.64	0.61
22:BA:2663:G:H2'	22:BA:2664:G:H8	1.65	0.61
26:BE:6:LYS:HG2	26:BE:7:ASP:N	2.15	0.61
27:BF:40:GLY:CA	27:BF:84:ILE:CD1	2.69	0.61
29:BH:3:VAL:HA	29:BH:37:VAL:O	2.00	0.61
29:BH:61:VAL:HG12	29:BH:61:VAL:O	2.00	0.61
31:BJ:124:VAL:CG2	31:BJ:125:TYR:N	2.63	0.61
33:BL:100:ILE:HD12	33:BL:100:ILE:O	1.99	0.61
35:BN:12:ARG:CG	35:BN:12:ARG:HH21	2.11	0.61
44:BW:9:THR:CG2	44:BW:10:ARG:NH1	2.64	0.61
22:BA:2269:G:O2'	44:BW:18:LYS:HG2	2.01	0.61
44:BW:23:LYS:HD2	44:BW:24:ARG:CA	2.29	0.61
45:BX:31:ASN:OD1	45:BX:33:HIS:NE2	2.34	0.61
1:CA:1073:U:C2	1:CA:1074:G:C8	2.89	0.61
1:CA:1496:C:H2'	1:CA:1497:G:O4'	2.01	0.61
1:CA:337:G:H2'	1:CA:338:A:H8	1.65	0.61
4:CD:69:ARG:CG	4:CD:69:ARG:NH1	2.54	0.61
1:CA:1297:G:H1'	7:CG:113:LYS:HZ1	1.65	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1537:G:N3	22:DA:1537:G:H2'	2.14	0.61
22:DA:1609:A:N6	22:DA:1616:A:C2	2.68	0.61
22:DA:1943:U:O4'	22:DA:1945:G:H5'	1.99	0.61
22:DA:2515:C:OP1	31:DJ:81:ILE:HG22	2.00	0.61
23:DB:64:G:H3'	23:DB:65:U:H6	1.65	0.61
25:DD:34:VAL:HG12	25:DD:48:ILE:CG1	2.30	0.61
31:DJ:44:TYR:HD1	38:DQ:63:ARG:NH2	1.90	0.61
22:DA:1249:U:H4'	38:DQ:3:VAL:CG1	2.30	0.61
40:DS:8:ARG:HA	40:DS:102:HIS:ND1	2.15	0.61
46:DY:1:MET:H2	46:DY:5:GLU:HG2	1.65	0.61
1:AA:1004:A:H2'	1:AA:1005:A:O4'	1.99	0.61
1:AA:1015:G:O2'	1:AA:1016:A:H5'	1.99	0.61
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.82	0.61
1:AA:172:A:C5	1:AA:174:A:N7	2.69	0.61
1:AA:33:A:H2'	1:AA:34:C:C6	2.35	0.61
1:AA:414:A:O2'	1:AA:415:A:H5'	2.00	0.61
2:AB:162:VAL:CG2	2:AB:184:ALA:HB2	2.30	0.61
2:AB:26:MET:HE2	2:AB:29:PHE:CD2	2.36	0.61
5:AE:55:VAL:HG12	5:AE:56:PRO:N	2.15	0.61
9:AI:103:VAL:HG23	9:AI:104:THR:N	2.15	0.61
17:AQ:28:VAL:O	17:AQ:37:ILE:HD12	2.01	0.61
51:B3:21:PHE:H	51:B3:48:MET:HE3	1.65	0.61
22:BA:1963:U:C6	22:BA:1963:U:C3'	2.78	0.61
22:BA:2015:A:N1	48:B0:2:VAL:HG23	2.15	0.61
22:BA:572:A:C2	22:BA:2033:A:C2	2.88	0.61
22:BA:617:G:O2'	22:BA:618:G:H5'	2.01	0.61
22:BA:623:C:H2'	22:BA:624:C:C6	2.36	0.61
22:BA:686:U:H2'	22:BA:788:A:C2	2.35	0.61
23:BB:49:C:OP1	36:BO:102:ARG:HG3	2.00	0.61
24:BC:132:ARG:HH12	24:BC:169:ALA:HA	1.65	0.61
28:BG:4:ALA:HB2	28:BG:65:GLY:HA2	1.82	0.61
29:BH:78:VAL:HG11	29:BH:145:ASN:CB	2.30	0.61
22:BA:2846:G:OP2	37:BP:51:ASN:HB2	2.01	0.61
1:CA:1029:U:H4'	1:CA:1032:G:H1	1.65	0.61
1:CA:1531:A:O2'	1:CA:1532:U:H5'	2.01	0.61
1:CA:68:G:H5'	1:CA:171:A:O2'	2.00	0.61
4:CD:57:LYS:HE2	4:CD:58:GLN:OE1	2.01	0.61
7:CG:134:VAL:HB	7:CG:137:ARG:NH2	2.06	0.61
7:CG:59:GLU:HG3	7:CG:60:ALA:H	1.64	0.61
18:CR:33:THR:HG23	18:CR:39:VAL:HG22	1.82	0.61
22:DA:1023:U:H6	22:DA:1023:U:C5'	2.10	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1060:U:H4'	22:DA:1061:U:C5'	2.28	0.61
22:DA:1103:A:OP2	22:DA:1104:C:H5	1.84	0.61
22:DA:1698:A:H4'	22:DA:1699:G:O5'	1.99	0.61
22:DA:2612:C:C5'	22:DA:2613:U:OP1	2.48	0.61
22:DA:2825:G:H3'	22:DA:2826:A:H8	1.64	0.61
22:DA:377:G:C6	22:DA:378:C:C4	2.88	0.61
22:DA:749:A:C4	22:DA:750:A:C8	2.88	0.61
22:DA:863:A:C2	22:DA:915:C:N4	2.68	0.61
24:DC:211:ARG:CD	24:DC:217:PRO:HD3	2.29	0.61
25:DD:118:PHE:O	25:DD:119:ALA:HB3	1.99	0.61
25:DD:137:SER:HB3	25:DD:138:LEU:HD23	1.81	0.61
22:DA:2052:A:N7	25:DD:146:ILE:HD11	2.16	0.61
27:DF:59:ILE:HG23	27:DF:137:PHE:HE1	1.66	0.61
29:DH:84:ALA:HA	29:DH:89:LYS:O	1.99	0.61
40:DS:39:THR:O	40:DS:40:ASN:HB3	2.01	0.61
41:DT:29:THR:HB	41:DT:86:THR:N	2.16	0.61
44:DW:81:ILE:HD12	44:DW:82:GLU:N	2.15	0.61
1:AA:128:G:O2'	1:AA:129:A:H5'	2.00	0.61
1:AA:628:G:H2'	1:AA:629:A:H8	1.64	0.61
1:AA:686:U:O4	1:AA:703:G:H1'	2.00	0.61
2:AB:185:ILE:O	2:AB:185:ILE:HG13	2.00	0.61
10:AJ:88:MET:HE2	10:AJ:89:ARG:HH12	1.65	0.61
13:AM:24:VAL:HG23	13:AM:24:VAL:O	2.00	0.61
14:AN:91:GLU:O	14:AN:93:PRO:HD3	2.00	0.61
1:AA:1320:C:N4	19:AS:35:ARG:HB2	2.15	0.61
51:B3:56:LEU:N	51:B3:56:LEU:HD22	2.16	0.61
22:BA:1303:G:H2'	22:BA:1304:A:H8	1.64	0.61
22:BA:1428:C:C5	22:BA:1569:A:H5''	2.35	0.61
22:BA:142:A:H2'	22:BA:143:C:C5	2.36	0.61
22:BA:610:C:O2'	22:BA:611:C:H5'	2.00	0.61
25:BD:4:LEU:HD13	25:BD:100:LEU:HD23	1.81	0.61
25:BD:9:VAL:CG2	25:BD:26:VAL:CG1	2.78	0.61
27:BF:52:ALA:O	27:BF:55:ASP:HB2	2.01	0.61
28:BG:9:VAL:HA	28:BG:48:THR:HA	1.82	0.61
31:BJ:2:LYS:CD	31:BJ:2:LYS:N	2.47	0.61
31:BJ:4:PHE:N	31:BJ:44:TYR:OH	2.33	0.61
41:BT:43:ILE:O	41:BT:47:VAL:HG23	2.00	0.61
43:BV:6:ALA:HB2	43:BV:42:LEU:HD22	1.82	0.61
1:CA:275:G:N2	1:CA:276:G:C4	2.69	0.61
1:CA:301:G:H2'	1:CA:302:G:H8	1.65	0.61
1:CA:346:G:H2'	1:CA:346:G:N3	2.14	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:356:A:H2'	1:CA:357:G:O4'	2.01	0.61
1:CA:729:A:H2'	1:CA:730:G:C8	2.31	0.61
1:CA:82:G:H2'	1:CA:83:C:C4'	2.31	0.61
2:CB:78:ALA:O	2:CB:213:LEU:HD23	2.01	0.61
3:CC:166:TRP:CE3	3:CC:166:TRP:N	2.65	0.61
9:CI:35:GLU:HB3	9:CI:39:GLY:HA3	1.83	0.61
9:CI:53:LEU:HG	9:CI:96:GLU:HB3	1.82	0.61
11:CK:78:ILE:N	11:CK:78:ILE:HD13	2.14	0.61
16:CP:20:VAL:HG22	16:CP:21:VAL:N	2.15	0.61
52:D4:7:VAL:O	52:D4:8:LYS:HG2	2.01	0.61
22:DA:101:A:O2'	22:DA:102:U:P	2.57	0.61
22:DA:1112:G:O2'	22:DA:1113:U:C5'	2.49	0.61
22:DA:117:G:C6	22:DA:119:A:C6	2.89	0.61
22:DA:1361:G:H2'	22:DA:1362:C:C5'	2.30	0.61
22:DA:1597:A:H5''	22:DA:1598:A:H5'	1.83	0.61
22:DA:1967:C:C6	22:DA:1967:C:H5''	2.27	0.61
22:DA:1982:U:H6	22:DA:1982:U:O5'	1.82	0.61
22:DA:2096:C:H2'	22:DA:2097:A:C8	2.35	0.61
22:DA:2260:C:H2'	22:DA:2261:C:H6	1.66	0.61
22:DA:2811:G:H2'	22:DA:2812:G:H8	1.65	0.61
22:DA:397:U:O2'	22:DA:398:C:H6	1.83	0.61
22:DA:455:C:C6	22:DA:472:A:C2	2.88	0.61
22:DA:481:G:HO2'	22:DA:482:A:P	2.22	0.61
22:DA:672:C:H42	22:DA:808:G:H1	1.47	0.61
22:DA:971:G:C2'	22:DA:972:A:H5'	2.29	0.61
28:DG:25:ILE:CG2	28:DG:78:VAL:HG21	2.29	0.61
29:DH:41:LYS:HG2	29:DH:44:ILE:HD13	1.83	0.61
30:DI:109:ALA:HB1	30:DI:125:THR:HA	1.81	0.61
35:DN:98:LEU:HD23	48:D0:53:VAL:HG21	1.82	0.61
37:DP:25:VAL:HA	37:DP:85:VAL:HA	1.82	0.61
1:AA:1101:A:N7	2:AB:170:ILE:HG22	2.15	0.61
1:AA:877:G:H21	8:AH:1:SER:HB2	1.65	0.61
4:AD:28:ASP:OD1	4:AD:33:ILE:HG12	2.01	0.61
6:AF:18:VAL:N	6:AF:19:PRO:HD2	2.14	0.61
12:AL:34:THR:HG22	12:AL:35:ARG:CZ	2.30	0.61
13:AM:2:ARG:HA	13:AM:7:ASN:O	2.00	0.61
16:AP:59:HIS:CE1	16:AP:63:GLN:HE22	2.16	0.61
22:BA:2075:U:H2'	22:BA:2238:G:N2	2.16	0.61
22:BA:2353:G:H1'	44:BW:30:VAL:HG12	1.81	0.61
22:BA:42:A:C3'	22:BA:43:G:H5''	2.30	0.61
22:BA:656:G:H2'	22:BA:657:U:C6	2.35	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:142:ASN:O	24:BC:142:ASN:ND2	2.34	0.61
24:BC:14:HIS:O	24:BC:203:VAL:HG11	2.00	0.61
25:BD:45:TYR:CD1	25:BD:45:TYR:N	2.68	0.61
27:BF:97:GLU:O	27:BF:101:ARG:HG2	1.99	0.61
28:BG:104:LEU:CB	28:BG:112:VAL:HG21	2.26	0.61
37:BP:53:GLY:O	37:BP:55:HIS:N	2.34	0.61
40:BS:84:ARG:HB2	40:BS:96:ILE:HD11	1.80	0.61
1:CA:1381:U:C4	7:CG:77:ARG:NH1	2.68	0.61
1:CA:659:U:H2'	1:CA:660:C:C6	2.36	0.61
1:CA:738:C:H2'	1:CA:739:C:H6	1.65	0.61
1:CA:865:A:H2	1:CA:918:A:C4'	2.14	0.61
4:CD:66:VAL:HG22	4:CD:96:ARG:NH1	2.15	0.61
10:CJ:57:VAL:CG2	10:CJ:58:ASN:H	2.01	0.61
15:CO:38:LEU:O	15:CO:41:HIS:HB3	1.99	0.61
22:DA:1688:U:O2	22:DA:1700:A:H5'	2.01	0.61
22:DA:1810:A:H2'	22:DA:1811:G:O4'	2.00	0.61
22:DA:2086:U:H2'	22:DA:2087:G:O4'	1.99	0.61
22:DA:265:A:N7	22:DA:427:U:O2'	2.33	0.61
23:DB:58:A:O2'	23:DB:59:A:C5'	2.48	0.61
24:DC:94:LEU:HA	24:DC:100:ARG:CG	2.29	0.61
25:DD:108:ASP:N	25:DD:204:LYS:O	2.31	0.61
26:DE:149:ILE:HG12	26:DE:149:ILE:O	2.00	0.61
34:DM:63:ILE:HD11	34:DM:105:MET:CE	2.31	0.61
37:DP:19:PHE:O	37:DP:20:ARG:HB3	2.00	0.61
39:DR:19:THR:HG22	39:DR:20:VAL:N	2.14	0.61
43:DV:55:GLU:O	43:DV:57:TYR:N	2.34	0.61
43:DV:82:TYR:CD1	43:DV:83:LYS:HG2	2.35	0.61
46:DY:1:MET:N	46:DY:1:MET:CE	2.63	0.61
10:AJ:20:GLN:HA	10:AJ:20:GLN:NE2	2.16	0.61
17:AQ:46:HIS:HB2	17:AQ:66:LEU:CD1	2.23	0.61
20:AT:4:LYS:CE	20:AT:5:SER:HB3	2.30	0.61
22:BA:1405:U:H2'	22:BA:1406:U:C6	2.36	0.61
22:BA:1964:G:H4'	22:BA:1965:C:OP2	1.99	0.61
22:BA:2140:G:OP2	22:BA:2140:G:H8	1.83	0.61
22:BA:2197:U:P	4:CD:150:LYS:HD2	2.40	0.61
22:BA:634:C:O5'	22:BA:634:C:H6	1.83	0.61
26:BE:150:THR:CG2	26:BE:153:LEU:HA	2.30	0.61
27:BF:35:LEU:HD23	27:BF:153:ILE:HG21	1.81	0.61
40:BS:2:GLU:O	40:BS:3:THR:HG22	2.01	0.61
8:CH:62:LEU:H	8:CH:62:LEU:CD2	2.12	0.61
13:CM:13:HIS:HB3	13:CM:16:ILE:CG1	2.31	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:85:TYR:HE2	13:CM:96:VAL:HG13	1.64	0.61
20:CT:9:ARG:HD2	20:CT:12:GLN:NE2	2.16	0.61
22:DA:1299:G:H2'	22:DA:1639:C:N4	2.15	0.61
22:DA:1998:A:O3'	22:DA:2724:U:H4'	2.00	0.61
22:DA:2069:G:N2	22:DA:2443:C:C2	2.69	0.61
22:DA:2394:C:OP1	33:DL:63:LYS:HG2	2.01	0.61
22:DA:304:U:O2'	22:DA:305:C:C6	2.40	0.61
22:DA:335:C:O2'	22:DA:336:C:C6	2.45	0.61
22:DA:475:C:O2'	22:DA:476:G:C5'	2.49	0.61
22:DA:627:A:O2'	22:DA:628:G:C8	2.53	0.61
22:DA:668:A:C5	22:DA:670:A:C8	2.88	0.61
26:DE:23:PHE:HB2	26:DE:114:ARG:NH2	2.14	0.61
27:DF:122:ASP:HB3	27:DF:126:ASN:ND2	2.15	0.61
31:DJ:106:LYS:HE2	31:DJ:106:LYS:CA	2.29	0.61
32:DK:16:ALA:HB1	32:DK:45:GLU:CG	2.31	0.61
33:DL:123:ARG:HA	33:DL:143:GLU:HB3	1.80	0.61
35:DN:12:ARG:HG3	35:DN:13:ASN:H	1.66	0.61
35:DN:41:ALA:O	35:DN:45:ARG:HG3	2.00	0.61
43:DV:38:LEU:HD23	43:DV:40:ILE:CD1	2.30	0.61
3:AC:52:SER:HB3	3:AC:114:LEU:HD11	1.82	0.61
11:AK:124:LYS:HE2	11:AK:124:LYS:C	2.21	0.61
22:BA:1850:G:C6	22:BA:1851:U:C4	2.89	0.61
22:BA:483:A:C8	22:BA:484:C:C5	2.88	0.61
32:BK:88:ASN:ND2	32:BK:90:ASN:H	1.99	0.61
41:BT:39:THR:CG2	41:BT:41:ALA:HB3	2.30	0.61
44:BW:37:VAL:HG12	44:BW:38:ARG:N	2.16	0.61
1:CA:1160:G:C6	1:CA:1181:G:O6	2.54	0.61
1:CA:1234:C:C4'	1:CA:1364:U:O2'	2.48	0.61
1:CA:1250:A:N3	1:CA:1287:A:N6	2.49	0.61
1:CA:1386:G:O2'	1:CA:1387:G:H5'	2.00	0.61
3:CC:122:GLN:HB2	3:CC:127:VAL:HG21	1.83	0.61
22:DA:1024:G:H2'	22:DA:1025:G:C8	2.36	0.61
22:DA:1655:A:O2'	22:DA:1656:C:H5'	2.01	0.61
22:DA:1766:G:C6	22:DA:1987:A:C6	2.88	0.61
22:DA:1794:A:C4	22:DA:1795:C:C5	2.89	0.61
22:DA:1914:C:C5	22:DA:1915:U:C4	2.88	0.61
22:DA:1935:G:N1	22:DA:1962:C:H2'	2.13	0.61
22:DA:2425:A:H1'	22:DA:2427:C:C5	2.36	0.61
22:DA:2819:G:H5"	56:DA:3793:HOH:O	2.00	0.61
22:DA:2837:A:N6	22:DA:2882:A:C6	2.68	0.61
22:DA:910:A:H62	34:DM:12:MET:HA	1.66	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:17:C:N3	23:DB:68:C:N3	2.48	0.61
24:DC:144:GLU:HG3	24:DC:151:GLY:H	1.65	0.61
25:DD:29:VAL:CB	25:DD:98:VAL:HG12	2.21	0.61
31:DJ:103:ILE:HD12	31:DJ:103:ILE:C	2.21	0.61
33:DL:108:ALA:HB3	33:DL:125:LEU:CD2	2.30	0.61
36:DO:71:ALA:CB	36:DO:102:ARG:HB3	2.30	0.61
38:DQ:63:ARG:HH12	38:DQ:99:VAL:HG21	1.65	0.61
41:DT:29:THR:CA	41:DT:87:LEU:HB2	2.31	0.61
41:DT:4:GLU:HG3	41:DT:6:ARG:NH2	2.10	0.61
44:DW:20:LEU:CD1	44:DW:35:ILE:HG13	2.31	0.61
44:DW:18:LYS:N	44:DW:36:ILE:HG12	2.09	0.61
45:DX:19:HIS:O	45:DX:20:ALA:HB3	2.00	0.61
1:AA:1070:U:O2	1:AA:1071:C:C6	2.54	0.61
1:AA:1203:C:O2'	1:AA:1204:A:H5'	2.00	0.61
1:AA:185:U:H2'	1:AA:186:C:C6	2.36	0.61
1:AA:203:G:O2'	1:AA:466:A:H2	1.84	0.61
1:AA:420:U:O2'	1:AA:421:U:H5''	2.01	0.61
3:AC:156:LEU:N	3:AC:156:LEU:HD12	2.16	0.61
4:AD:190:LEU:O	4:AD:191:SER:CB	2.48	0.61
4:AD:2:ARG:HB2	4:AD:4:LEU:HD11	1.83	0.61
12:AL:32:VAL:HG23	12:AL:55:ARG:O	2.01	0.61
17:AQ:10:ARG:O	17:AQ:22:VAL:HG13	2.01	0.61
22:BA:1026:G:O2'	22:BA:1027:A:H5'	2.00	0.61
22:BA:1060:U:C5'	22:BA:1061:U:H5'	2.30	0.61
22:BA:1287:A:OP2	35:BN:103:ARG:CG	2.48	0.61
22:BA:1340:U:H3'	41:BT:61:LEU:CD2	2.30	0.61
22:BA:1534:U:H5'	22:BA:1535:A:OP1	2.00	0.61
22:BA:1673:G:C2'	22:BA:1674:G:H5'	2.31	0.61
22:BA:1845:G:C2'	22:BA:1846:G:H5'	2.31	0.61
22:BA:2678:C:C2'	22:BA:2679:A:H5'	2.30	0.61
22:BA:639:U:H2'	22:BA:640:C:C6	2.36	0.61
37:BP:85:VAL:CG1	37:BP:86:LYS:N	2.64	0.61
39:BR:10:LYS:HD3	39:BR:10:LYS:N	2.16	0.61
40:BS:73:LYS:C	40:BS:73:LYS:HE3	2.19	0.61
44:BW:8:SER:O	44:BW:9:THR:CG2	2.49	0.61
1:CA:1009:U:H2'	1:CA:1010:U:H6	1.64	0.61
1:CA:1050:G:N3	1:CA:1051:C:C5	2.68	0.61
1:CA:672:U:O2'	1:CA:673:A:H5'	2.00	0.61
1:CA:949:A:H4'	1:CA:1364:U:O4	2.01	0.61
5:CE:17:VAL:HG13	5:CE:17:VAL:O	2.00	0.61
5:CE:36:THR:HB	5:CE:63:MET:HE1	1.83	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:5:PRO:O	8:CH:8:ASP:HB3	2.01	0.61
9:CI:127:SER:C	9:CI:129:ARG:H	2.04	0.61
22:DA:1173:U:H1'	22:DA:1177:G:H22	1.64	0.61
22:DA:1651:G:N2	22:DA:2007:U:C2	2.69	0.61
22:DA:1808:A:H62	45:DX:27:ARG:NH1	1.88	0.61
22:DA:1906:G:H8	22:DA:1929:G:H2'	1.65	0.61
22:DA:2236:U:H2'	22:DA:2237:G:O4'	2.01	0.61
22:DA:2341:G:C2'	22:DA:2342:C:H5'	2.30	0.61
22:DA:2837:A:C6	22:DA:2882:A:N1	2.69	0.61
22:DA:40:U:C4	22:DA:41:C:C4	2.89	0.61
22:DA:321:U:C1'	26:DE:159:LEU:HG	2.30	0.61
35:DN:79:LEU:O	35:DN:81:ASN:N	2.34	0.61
37:DP:48:ALA:HB3	37:DP:59:THR:CB	2.31	0.61
47:DZ:29:ARG:H	47:DZ:29:ARG:NH2	1.99	0.61
1:AA:1238:A:H5'	1:AA:1336:C:N4	2.12	0.61
1:AA:1468:A:C2'	1:AA:1469:C:C5'	2.79	0.61
1:AA:1527:U:OP2	21:AU:38:GLU:HG2	2.00	0.61
1:AA:180:U:C2'	1:AA:181:A:O5'	2.49	0.61
1:AA:195:A:O2'	1:AA:196:A:H5'	2.01	0.61
1:AA:199:A:H2'	1:AA:200:G:H8	1.66	0.61
2:AB:49:PHE:CG	2:AB:212:TYR:OH	2.53	0.61
13:AM:2:ARG:O	13:AM:3:ILE:CG1	2.49	0.61
50:B2:29:GLN:O	50:B2:33:ARG:HG3	2.00	0.61
22:BA:1159:U:H2'	22:BA:1160:G:H5'	1.83	0.61
22:BA:1501:G:C2'	22:BA:1502:A:H5'	2.31	0.61
22:BA:1836:C:H2'	22:BA:1837:C:H5'	1.82	0.61
22:BA:1911:U:C2	22:BA:1918:A:C2	2.89	0.61
22:BA:1963:U:H6	22:BA:1963:U:H3'	1.64	0.61
22:BA:528:A:H8	22:BA:528:A:H3'	1.65	0.61
22:BA:610:C:C2'	22:BA:611:C:H5'	2.31	0.61
25:BD:62:LYS:N	25:BD:63:PRO:CD	2.64	0.61
27:BF:114:ARG:N	27:BF:114:ARG:HD2	2.16	0.61
28:BG:93:TYR:CE2	28:BG:106:LEU:HA	2.35	0.61
33:BL:78:ARG:HB3	33:BL:113:ALA:CB	2.31	0.61
44:BW:24:ARG:HD3	44:BW:25:PHE:N	2.16	0.61
1:CA:1201:A:H1'	1:CA:1202:U:OP2	2.01	0.61
1:CA:158:G:H2'	1:CA:159:G:C8	2.34	0.61
1:CA:642:A:O2'	1:CA:643:C:C5'	2.48	0.61
1:CA:743:A:C5	1:CA:744:C:C5	2.88	0.61
2:CB:86:CYS:SG	2:CB:220:VAL:HB	2.41	0.61
5:CE:79:THR:HA	5:CE:121:ASN:ND2	2.16	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:42:VAL:O	7:CG:43:TYR:HB2	2.00	0.61
16:CP:1:MET:HA	16:CP:1:MET:HE2	1.83	0.61
22:DA:2362:C:OP2	51:D3:43:LEU:HD21	2.01	0.61
22:DA:1026:G:H2'	22:DA:1027:A:C8	2.36	0.61
22:DA:1062:G:H8	22:DA:1070:A:OP2	1.84	0.61
22:DA:1262:A:N6	22:DA:2017:U:H3	1.99	0.61
22:DA:1441:G:C4	22:DA:1551:A:C2	2.89	0.61
22:DA:1554:U:C5'	22:DA:1555:G:OP2	2.49	0.61
22:DA:1826:G:C4	22:DA:1827:U:C5	2.89	0.61
22:DA:217:A:H2'	22:DA:218:A:N7	2.16	0.61
22:DA:2529:G:H4'	28:DG:174:LYS:HD3	1.83	0.61
22:DA:628:G:O2'	22:DA:629:G:H8	1.84	0.61
23:DB:16:G:O6	23:DB:69:G:C5	2.54	0.61
26:DE:153:LEU:HD12	26:DE:170:ARG:O	2.00	0.61
22:DA:323:C:H2'	26:DE:163:ASN:CG	2.21	0.61
22:DA:659:G:C4'	26:DE:95:LYS:HD3	2.28	0.61
22:DA:1082:U:H4'	30:DI:117:THR:O	2.00	0.61
39:DR:21:ARG:HB2	39:DR:93:PHE:CD1	2.35	0.61
39:DR:97:LYS:O	39:DR:97:LYS:HG2	2.00	0.61
40:DS:4:ILE:HD11	40:DS:6:LYS:HE2	1.83	0.61
41:DT:9:LYS:HG3	46:DY:21:LEU:HD13	1.82	0.61
43:DV:56:PHE:CE1	43:DV:61:LEU:HD13	2.36	0.61
22:DA:2432:A:N1	45:DX:20:ALA:CB	2.63	0.61
1:AA:605:U:C2'	1:AA:606:G:H5'	2.31	0.60
3:AC:125:ARG:O	3:AC:126:ARG:CB	2.49	0.60
3:AC:147:GLY:HA3	3:AC:171:ARG:O	2.02	0.60
6:AF:8:PHE:HA	6:AF:87:SER:HB2	1.83	0.60
8:AH:124:ILE:O	8:AH:124:ILE:CG1	2.49	0.60
15:AO:45:HIS:C	15:AO:46:LYS:HG3	2.21	0.60
21:AU:39:LYS:N	21:AU:40:PRO:CD	2.64	0.60
22:BA:1061:U:H1'	22:BA:1070:A:C1'	2.31	0.60
22:BA:1698:A:H4'	22:BA:1699:G:O5'	2.00	0.60
22:BA:2199:A:H3'	22:BA:2200:C:C6	2.36	0.60
22:BA:242:G:O2'	51:B3:5:THR:HG23	2.01	0.60
26:BE:143:LEU:HD13	26:BE:146:VAL:HG11	1.82	0.60
27:BF:147:ARG:HG3	27:BF:148:VAL:N	2.16	0.60
29:BH:14:SER:OG	29:BH:17:ASP:HB2	2.01	0.60
31:BJ:25:LEU:HB2	31:BJ:62:VAL:HG21	1.83	0.60
38:BQ:49:ARG:HH11	38:BQ:49:ARG:HG3	1.65	0.60
43:BV:65:VAL:O	43:BV:65:VAL:CG2	2.49	0.60
1:CA:176:C:C2'	1:CA:177:G:O5'	2.49	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:33:A:H1'	12:CL:28:GLN:OE1	2.01	0.60
1:CA:300:A:H2	1:CA:566:G:O6	1.84	0.60
14:CN:64:ARG:HD3	14:CN:77:GLY:O	1.99	0.60
18:CR:44:THR:OG1	18:CR:46:THR:HG22	2.00	0.60
22:DA:1651:G:C2	22:DA:2007:U:C2	2.89	0.60
22:DA:2730:C:H2'	22:DA:2731:G:O4'	2.00	0.60
22:DA:413:C:H4'	22:DA:1880:U:H4'	1.81	0.60
22:DA:459:U:C5	22:DA:469:G:N2	2.69	0.60
23:DB:13:G:N2	23:DB:16:G:C4	2.69	0.60
25:DD:106:LYS:CB	25:DD:206:ALA:HB3	2.29	0.60
30:DI:48:ILE:HG13	30:DI:49:GLU:N	2.16	0.60
30:DI:71:LYS:HG3	30:DI:72:THR:H	1.66	0.60
31:DJ:82:GLY:O	31:DJ:84:ILE:N	2.34	0.60
32:DK:19:VAL:HG12	32:DK:41:ILE:HG12	1.82	0.60
26:DE:29:HIS:CD2	33:DL:8:PRO:HB3	2.36	0.60
34:DM:8:LYS:CE	34:DM:8:LYS:HA	2.30	0.60
44:DW:18:LYS:CD	44:DW:19:ARG:N	2.55	0.60
1:AA:1303:C:C2'	1:AA:1304:G:C8	2.83	0.60
1:AA:1451:U:O2'	1:AA:1452:C:OP1	2.19	0.60
1:AA:937:A:C2'	1:AA:938:A:H5'	2.31	0.60
5:AE:59:ILE:O	5:AE:59:ILE:HD12	2.01	0.60
10:AJ:65:TYR:HB2	14:AN:95:LEU:HD11	1.81	0.60
1:AA:266:G:O3'	17:AQ:68:LYS:HB2	2.01	0.60
51:B3:56:LEU:N	51:B3:56:LEU:CD2	2.64	0.60
22:BA:1098:A:H5'	22:BA:1099:G:OP2	2.00	0.60
22:BA:137:U:H3	22:BA:142:A:N6	1.98	0.60
22:BA:13:A:O2'	22:BA:15:G:N7	2.33	0.60
22:BA:322:A:C5	22:BA:340:A:C2	2.89	0.60
22:BA:478:A:N6	22:BA:480:A:N6	2.49	0.60
22:BA:565:C:H4'	56:BA:3332:HOH:O	2.02	0.60
22:BA:2599:G:N7	24:BC:234:GLY:HA2	2.16	0.60
22:BA:2591:C:OP1	24:BC:237:ARG:HG3	2.01	0.60
24:BC:80:LEU:HD11	24:BC:109:LEU:CG	2.27	0.60
25:BD:98:VAL:O	25:BD:99:GLU:C	2.38	0.60
28:BG:23:ILE:HG21	28:BG:71:LEU:HD11	1.82	0.60
22:BA:666:A:H4'	33:BL:48:ARG:HE	1.65	0.60
1:CA:1050:G:C2	1:CA:1051:C:C4	2.88	0.60
1:CA:1172:C:H2'	1:CA:1173:U:H6	1.66	0.60
1:CA:994:A:C5	1:CA:1216:A:H4'	2.35	0.60
1:CA:503:C:O5'	1:CA:503:C:H6	1.83	0.60
1:CA:566:G:H4'	1:CA:567:G:OP1	2.00	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:613:C:H2'	1:CA:614:C:H6	1.65	0.60
1:CA:577:G:H1	1:CA:764:C:H42	1.49	0.60
1:CA:866:C:C4	1:CA:867:G:H1'	2.35	0.60
3:CC:21:TRP:HZ3	3:CC:28:PHE:CE1	2.20	0.60
10:CJ:42:LEU:HD22	10:CJ:71:LEU:HD23	1.83	0.60
11:CK:23:HIS:HB3	11:CK:30:ILE:HB	1.83	0.60
12:CL:34:THR:HB	12:CL:53:ARG:HG3	1.83	0.60
14:CN:80:ARG:NH1	14:CN:81:ILE:HG13	2.17	0.60
16:CP:52:LEU:HD23	16:CP:80:LYS:HZ1	1.66	0.60
22:DA:1775:U:C2'	22:DA:1776:G:O5'	2.49	0.60
22:DA:2283:C:N4	22:DA:2389:G:C5	2.69	0.60
22:DA:2345:G:C8	22:DA:2347:C:C5	2.89	0.60
22:DA:648:G:H1'	22:DA:2351:G:OP1	2.02	0.60
22:DA:283:G:H3'	22:DA:284:U:C6	2.36	0.60
22:DA:2843:G:C2	22:DA:2875:C:N3	2.68	0.60
22:DA:415:A:C2	22:DA:2409:G:C6	2.89	0.60
22:DA:516:C:H2'	22:DA:517:C:H6	1.65	0.60
23:DB:17:C:H42	23:DB:68:C:N4	1.98	0.60
23:DB:59:A:H2'	23:DB:60:C:C6	2.36	0.60
24:DC:120:ASP:CG	24:DC:121:ALA:H	2.04	0.60
25:DD:176:ASP:HB3	25:DD:190:LYS:HB3	1.82	0.60
26:DE:131:THR:HG22	26:DE:161:ALA:H	1.65	0.60
26:DE:178:VAL:O	26:DE:182:ALA:HB2	2.01	0.60
29:DH:54:LEU:HA	29:DH:57:LYS:CG	2.31	0.60
37:DP:28:LYS:CB	37:DP:39:LEU:HD23	2.29	0.60
38:DQ:57:ARG:CZ	38:DQ:92:LYS:HE2	2.30	0.60
39:DR:98:ILE:HG22	39:DR:98:ILE:O	2.01	0.60
1:AA:1322:C:O2'	1:AA:1323:G:H5'	2.01	0.60
2:AB:40:ILE:HG13	2:AB:41:ASN:N	2.13	0.60
15:AO:63:ARG:HH11	15:AO:87:ARG:NH2	1.99	0.60
20:AT:28:ARG:HA	20:AT:31:ILE:HG13	1.83	0.60
21:AU:10:PRO:O	21:AU:11:PHE:CB	2.49	0.60
22:BA:1062:G:H2'	22:BA:1063:G:C8	2.36	0.60
22:BA:2258:C:C2	22:BA:2426:A:H4'	2.36	0.60
22:BA:2531:A:OP1	28:BG:174:LYS:HG3	2.01	0.60
22:BA:512:G:N7	56:BA:3766:HOH:O	2.32	0.60
24:BC:143:VAL:HG21	24:BC:161:VAL:HG11	1.83	0.60
26:BE:126:VAL:HG22	26:BE:127:GLU:H	1.67	0.60
30:BI:15:GLY:CA	30:BI:50:LYS:HB3	2.28	0.60
31:BJ:44:TYR:O	31:BJ:45:THR:CG2	2.49	0.60
34:BM:1:MET:O	34:BM:2:LEU:CB	2.49	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BO:59:ALA:C	36:BO:61:GLN:H	2.04	0.60
22:BA:141:G:H1	41:BT:2:ILE:HG23	1.65	0.60
45:BX:34:SER:HA	45:BX:48:LEU:O	2.01	0.60
46:BY:47:ARG:HH21	46:BY:47:ARG:CG	2.01	0.60
1:CA:1011:C:H2'	1:CA:1012:A:C8	2.34	0.60
1:CA:1124:G:O2'	1:CA:1127:G:O6	2.18	0.60
1:CA:1324:A:H4'	1:CA:1362:A:O2'	2.01	0.60
1:CA:1406:U:C2'	1:CA:1407:C:H5'	2.31	0.60
1:CA:596:A:N6	1:CA:645:G:C6	2.70	0.60
4:CD:187:ARG:C	4:CD:189:ASP:H	2.04	0.60
7:CG:7:GLY:O	7:CG:8:GLN:HB2	2.01	0.60
17:CQ:23:ALA:C	17:CQ:24:ILE:HD12	2.22	0.60
22:DA:1064:C:HO2'	22:DA:1065:U:H5'	1.63	0.60
22:DA:1361:G:C5	22:DA:1362:C:C5	2.89	0.60
22:DA:1401:G:C4	22:DA:1402:U:C5	2.89	0.60
22:DA:16:C:O3'	48:D0:10:SER:HB2	2.02	0.60
22:DA:1835:G:C5	22:DA:1836:C:C5	2.90	0.60
22:DA:2047:C:C2'	22:DA:2048:G:H5'	2.31	0.60
22:DA:2264:C:H2'	22:DA:2265:U:H6	1.66	0.60
22:DA:2523:G:O2'	22:DA:2524:G:H5'	2.01	0.60
22:DA:2829:A:C2'	22:DA:2830:C:H5'	2.31	0.60
25:DD:119:ALA:HB3	25:DD:163:GLY:H	1.66	0.60
25:DD:137:SER:CA	25:DD:138:LEU:HD22	2.31	0.60
26:DE:147:LEU:HD21	26:DE:179:SER:HB2	1.82	0.60
26:DE:179:SER:HA	26:DE:182:ALA:HB3	1.82	0.60
26:DE:45:ALA:O	26:DE:46:GLN:HB2	2.01	0.60
29:DH:140:ALA:O	29:DH:141:LYS:HG3	2.01	0.60
30:DI:49:GLU:OE2	30:DI:54:ILE:HG13	2.01	0.60
34:DM:71:LYS:HG3	34:DM:72:PRO:HD2	1.82	0.60
38:DQ:46:TYR:CZ	38:DQ:50:ARG:NH1	2.69	0.60
38:DQ:64:ILE:CD1	38:DQ:95:ALA:CB	2.80	0.60
38:DQ:73:ILE:HG13	38:DQ:74:SER:N	2.16	0.60
41:DT:14:PRO:HG2	41:DT:15:HIS:H	1.64	0.60
45:DX:56:ARG:O	45:DX:59:ASP:HB2	2.02	0.60
1:AA:1124:G:H2'	1:AA:1145:A:N6	2.17	0.60
1:AA:1223:C:OP1	1:AA:1224:U:H3'	2.00	0.60
1:AA:1363:A:O2'	1:AA:1365:G:N7	2.29	0.60
1:AA:194:C:O2'	1:AA:195:A:H5'	2.02	0.60
1:AA:500:G:C6	1:AA:501:C:N4	2.69	0.60
1:AA:86:G:N2	1:AA:87:C:N4	2.50	0.60
1:AA:943:U:H2'	1:AA:944:G:H5'	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:7:LYS:HZ1	4:AD:21:LYS:CG	2.14	0.60
8:AH:79:ARG:HB2	8:AH:80:PRO:HD2	1.84	0.60
11:AK:35:ASP:OD2	11:AK:39:ASN:HB2	2.01	0.60
12:AL:85:ARG:NE	12:AL:87:LYS:HB3	2.16	0.60
17:AQ:60:ILE:CG2	17:AQ:72:TRP:HE3	2.13	0.60
20:AT:7:LYS:O	20:AT:11:ILE:HG22	1.99	0.60
49:B1:9:LYS:N	49:B1:9:LYS:HD3	2.17	0.60
22:BA:1057:A:C2	22:BA:1082:U:C2	2.88	0.60
22:BA:1059:G:C6	22:BA:1060:U:C4	2.90	0.60
22:BA:1394:U:P	56:BA:3409:HOH:O	2.58	0.60
22:BA:1402:U:C2'	22:BA:1403:A:O5'	2.49	0.60
22:BA:1556:C:O2'	22:BA:1557:C:H5'	2.00	0.60
22:BA:2134:A:C6	22:BA:2135:A:C6	2.89	0.60
22:BA:2458:G:O2'	22:BA:2460:U:O4	2.17	0.60
22:BA:2636:C:H4'	25:BD:81:GLU:OE2	2.02	0.60
22:BA:34:U:H1'	22:BA:35:G:OP1	2.00	0.60
22:BA:687:C:H2'	22:BA:688:U:C6	2.36	0.60
22:BA:960:A:H5''	22:BA:961:C:OP2	2.02	0.60
22:BA:981:A:OP1	56:BA:3591:HOH:O	2.16	0.60
24:BC:257:ARG:HG3	24:BC:269:ARG:NH2	2.15	0.60
29:BH:50:ARG:O	29:BH:54:LEU:HB2	2.01	0.60
31:BJ:72:LYS:HD3	31:BJ:74:TYR:CE1	2.36	0.60
32:BK:77:ILE:N	32:BK:77:ILE:CD1	2.64	0.60
35:BN:44:LEU:HD11	35:BN:48:VAL:CG2	2.31	0.60
41:BT:2:ILE:N	41:BT:2:ILE:HD13	2.16	0.60
1:CA:1399:C:O2	1:CA:1401:G:C6	2.53	0.60
1:CA:373:A:C2	1:CA:482:A:C6	2.90	0.60
3:CC:76:ILE:HA	3:CC:83:VAL:CG1	2.31	0.60
5:CE:73:VAL:HG11	5:CE:143:LEU:HB3	1.83	0.60
11:CK:82:GLU:HB3	11:CK:108:ASN:HB3	1.82	0.60
16:CP:38:PHE:CE2	16:CP:51:ARG:CB	2.83	0.60
22:DA:1335:C:H2'	22:DA:1336:A:C1'	2.32	0.60
22:DA:1590:A:H2'	22:DA:1591:A:C8	2.36	0.60
22:DA:2136:G:O2'	22:DA:2137:U:C6	2.45	0.60
22:DA:2324:U:C5'	22:DA:2325:G:C5'	2.79	0.60
22:DA:2572:A:C8	25:DD:149:ASN:ND2	2.58	0.60
22:DA:2735:G:H2'	22:DA:2736:A:H8	1.65	0.60
22:DA:2784:U:H2'	22:DA:2785:C:H6	1.67	0.60
22:DA:2818:U:H2'	22:DA:2819:G:C8	2.36	0.60
22:DA:301:G:C2	22:DA:302:C:N4	2.69	0.60
22:DA:310:A:H1'	22:DA:311:A:C8	2.37	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:300:A:C5	22:DA:334:C:H4'	2.36	0.60
22:DA:96:C:H4'	46:DY:41:HIS:HD2	1.66	0.60
25:DD:151:THR:HG22	25:DD:152:PRO:N	2.16	0.60
25:DD:146:ILE:CD1	25:DD:155:VAL:CG2	2.79	0.60
25:DD:40:LEU:HD12	25:DD:40:LEU:N	2.17	0.60
25:DD:50:VAL:HG21	25:DD:82:PHE:HE2	1.66	0.60
27:DF:60:SER:C	27:DF:62:GLN:H	2.03	0.60
29:DH:120:GLY:O	29:DH:121:VAL:HB	2.01	0.60
33:DL:18:ARG:O	33:DL:19:LEU:HB3	2.01	0.60
41:DT:50:LEU:HD22	41:DT:51:PHE:HD1	1.66	0.60
43:DV:49:ASN:O	43:DV:52:ALA:HB3	2.01	0.60
1:AA:1162:C:H2'	1:AA:1163:A:H8	1.66	0.60
1:AA:1336:C:H4'	1:AA:1337:G:H5'	1.84	0.60
2:AB:60:ALA:HB2	2:AB:220:VAL:CG1	2.31	0.60
4:AD:90:LEU:HD11	4:AD:196:GLU:OE2	2.01	0.60
9:AI:12:LYS:O	9:AI:12:LYS:HG2	2.00	0.60
17:AQ:7:LEU:HD22	17:AQ:72:TRP:CH2	2.36	0.60
19:AS:51:HIS:CD2	19:AS:53:GLY:N	2.69	0.60
22:BA:1011:G:H5''	38:BQ:76:SER:OG	2.01	0.60
22:BA:1062:G:HO2'	22:BA:1063:G:H8	1.44	0.60
22:BA:2524:G:H2'	22:BA:2525:G:O5'	2.01	0.60
22:BA:2679:A:C2'	22:BA:2680:U:O5'	2.49	0.60
22:BA:2711:A:P	56:BA:3546:HOH:O	2.59	0.60
22:BA:548:G:H3'	22:BA:548:G:C8	2.37	0.60
24:BC:139:THR:O	24:BC:161:VAL:O	2.20	0.60
24:BC:90:ILE:HA	24:BC:104:LEU:O	2.01	0.60
28:BG:10:VAL:HG11	28:BG:16:VAL:HG21	1.82	0.60
29:BH:81:ALA:HB2	29:BH:145:ASN:O	2.02	0.60
29:BH:31:VAL:HG13	29:BH:36:ALA:O	2.01	0.60
34:BM:34:LYS:HE3	34:BM:131:VAL:HG11	1.83	0.60
34:BM:80:VAL:HG23	34:BM:81:ARG:N	2.17	0.60
39:BR:1:MET:HG3	39:BR:1:MET:O	1.99	0.60
44:BW:47:GLY:C	44:BW:49:ASN:H	2.05	0.60
1:CA:163:C:H2'	1:CA:164:G:O5'	2.01	0.60
1:CA:382:A:N7	1:CA:383:A:C6	2.69	0.60
1:CA:665:A:H1'	1:CA:733:G:O4'	2.02	0.60
1:CA:751:U:H4'	15:CO:23:SER:HA	1.83	0.60
1:CA:961:U:O4	1:CA:983:A:N6	2.34	0.60
2:CB:115:ASP:O	2:CB:119:GLN:HB3	2.01	0.60
2:CB:162:VAL:HG13	2:CB:184:ALA:CB	2.32	0.60
3:CC:137:VAL:O	3:CC:140:ALA:HB3	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:29:THR:HB	4:CD:30:LYS:CE	2.30	0.60
5:CE:104:ILE:HA	5:CE:122:VAL:HG23	1.82	0.60
5:CE:14:LEU:CD1	5:CE:36:THR:HG22	2.30	0.60
10:CJ:53:ILE:HG13	14:CN:84:ARG:CD	2.31	0.60
17:CQ:46:HIS:CE1	17:CQ:48:GLU:HG2	2.37	0.60
22:DA:1426:G:H5''	22:DA:1427:A:H3'	1.83	0.60
22:DA:1512:C:H2'	22:DA:1513:U:H6	1.65	0.60
22:DA:1539:U:O2'	22:DA:1540:G:C8	2.46	0.60
22:DA:1744:A:H3'	22:DA:1745:A:H8	1.65	0.60
22:DA:1773:A:N3	22:DA:1978:A:C2	2.69	0.60
22:DA:20:C:H2'	22:DA:21:A:H8	1.66	0.60
22:DA:2344:U:O2'	22:DA:2345:G:H5''	2.01	0.60
22:DA:2371:G:C2	22:DA:2372:U:C6	2.89	0.60
22:DA:310:A:C2	22:DA:330:A:C5	2.88	0.60
22:DA:388:G:N7	22:DA:390:U:H2'	2.16	0.60
22:DA:828:U:C5	22:DA:829:A:N6	2.70	0.60
25:DD:24:VAL:HG23	25:DD:190:LYS:N	2.16	0.60
22:DA:2899:A:H5'	31:DJ:136:GLN:NE2	2.17	0.60
38:DQ:101:ASP:HB2	39:DR:2:TYR:OH	2.01	0.60
1:AA:1064:G:N2	1:AA:1190:G:O2'	2.35	0.60
1:AA:1136:C:H3'	1:AA:1136:C:O2	2.02	0.60
1:AA:120:A:C5	1:AA:122:G:C6	2.90	0.60
1:AA:1464:U:H2'	1:AA:1465:A:C8	2.36	0.60
10:AJ:84:VAL:CG1	10:AJ:85:ASP:N	2.64	0.60
15:AO:63:ARG:NH1	15:AO:67:ASP:OD1	2.34	0.60
22:BA:1081:U:OP2	22:BA:1081:U:H6	1.85	0.60
22:BA:1476:U:HO2'	22:BA:1477:A:C5'	2.14	0.60
22:BA:1494:A:O2'	22:BA:1495:A:C5'	2.50	0.60
22:BA:1735:A:H2'	22:BA:1736:U:H6	1.66	0.60
22:BA:1809:A:H2'	22:BA:1810:A:C8	2.36	0.60
22:BA:2076:U:O2	22:BA:2076:U:O5'	2.20	0.60
22:BA:2485:G:H5''	34:BM:45:GLN:HE22	1.67	0.60
22:BA:2520:C:C6	22:BA:2567:G:H1'	2.36	0.60
22:BA:2773:C:OP1	25:BD:171:THR:CG2	2.49	0.60
22:BA:976:G:OP2	56:BA:3587:HOH:O	2.17	0.60
26:BE:121:VAL:O	26:BE:189:THR:HA	2.01	0.60
29:BH:43:ASN:HD22	29:BH:43:ASN:N	1.99	0.60
34:BM:68:PHE:C	34:BM:68:PHE:CD2	2.74	0.60
22:BA:1277:G:C4'	35:BN:20:MET:HE2	2.30	0.60
38:BQ:91:ARG:HB3	38:BQ:93:ILE:CG2	2.29	0.60
38:BQ:91:ARG:NH2	38:BQ:93:ILE:CD1	2.65	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:BS:24:ILE:HG12	40:BS:36:LEU:CD1	2.32	0.60
41:BT:27:SER:C	41:BT:28:ASN:ND2	2.55	0.60
44:BW:24:ARG:CD	44:BW:24:ARG:C	2.70	0.60
1:CA:1287:A:O2'	1:CA:1288:A:C8	2.51	0.60
1:CA:564:C:H6	1:CA:564:C:H5'	1.67	0.60
1:CA:654:G:H2'	1:CA:655:A:C8	2.37	0.60
2:CB:73:ARG:HG3	2:CB:74:ALA:N	2.16	0.60
3:CC:84:GLU:C	3:CC:86:LEU:H	2.05	0.60
5:CE:131:ASN:C	5:CE:135:VAL:HG23	2.22	0.60
13:CM:16:ILE:HD12	13:CM:16:ILE:N	2.15	0.60
16:CP:75:ILE:HA	16:CP:78:VAL:HG23	1.83	0.60
17:CQ:68:LYS:O	17:CQ:69:THR:CG2	2.50	0.60
48:D0:42:ILE:CD1	48:D0:48:TYR:HB2	2.30	0.60
51:D3:9:ALA:O	51:D3:13:PHE:HD2	1.83	0.60
22:DA:108:G:H2'	22:DA:109:C:C6	2.37	0.60
22:DA:54:G:N2	22:DA:117:G:H1'	2.16	0.60
22:DA:1215:G:OP1	38:DQ:7:VAL:HG11	2.01	0.60
22:DA:1713:A:OP1	22:DA:1713:A:H8	1.84	0.60
22:DA:152:A:C2	22:DA:175:G:C2	2.89	0.60
22:DA:1802:A:C2	22:DA:1803:A:C6	2.90	0.60
22:DA:187:G:C2	22:DA:210:C:C2	2.90	0.60
22:DA:2191:A:C5	22:DA:2192:U:C5	2.89	0.60
22:DA:2714:G:H2'	22:DA:2715:C:C6	2.36	0.60
22:DA:527:C:N3	22:DA:2779:U:H2'	2.16	0.60
22:DA:289:G:C2	22:DA:352:A:C2	2.90	0.60
22:DA:648:G:O2'	22:DA:649:G:H5'	2.02	0.60
22:DA:745:G:C5'	22:DA:746:U:OP2	2.50	0.60
23:DB:45:A:C2'	23:DB:46:A:C8	2.83	0.60
27:DF:113:PHE:O	27:DF:114:ARG:CB	2.49	0.60
28:DG:162:ARG:HB2	28:DG:166:GLU:HB3	1.84	0.60
31:DJ:99:ARG:HG2	31:DJ:102:GLU:OE2	2.01	0.60
46:DY:1:MET:H1	46:DY:1:MET:CE	2.15	0.60
46:DY:31:GLN:OE1	46:DY:37:LEU:HB2	2.01	0.60
46:DY:28:LEU:HD11	46:DY:43:LEU:HD13	1.84	0.60
1:AA:1307:U:H2'	1:AA:1308:U:H6	1.65	0.60
1:AA:198:G:O2'	1:AA:199:A:C5'	2.49	0.60
1:AA:19:A:O2'	1:AA:20:U:H5'	2.02	0.60
1:AA:61:G:H2'	1:AA:62:U:H6	1.64	0.60
1:AA:946:A:H2'	1:AA:947:G:C8	2.37	0.60
2:AB:95:TRP:HZ2	2:AB:100:LEU:HD23	1.67	0.60
3:AC:202:PHE:CZ	3:AC:204:GLY:HA2	2.37	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:35:ASP:O	3:AC:38:VAL:HG22	2.01	0.60
5:AE:153:ALA:HA	5:AE:156:ARG:N	2.15	0.60
22:BA:1392:A:H61	41:BT:18:GLU:CD	2.04	0.60
22:BA:1476:U:C6	22:BA:1476:U:OP2	2.54	0.60
22:BA:2023:C:O2	22:BA:2023:C:H2'	1.99	0.60
22:BA:2405:G:O2'	22:BA:2411:A:N6	2.35	0.60
22:BA:2543:G:H2'	22:BA:2544:G:C8	2.37	0.60
22:BA:42:A:H3'	22:BA:43:G:H5''	1.82	0.60
29:BH:62:LEU:C	29:BH:62:LEU:CD1	2.68	0.60
30:BI:10:LEU:HD13	30:BI:27:LEU:HA	1.84	0.60
22:BA:1061:U:C5	30:BI:9:LYS:HG3	2.36	0.60
31:BJ:44:TYR:CD2	38:BQ:63:ARG:CG	2.84	0.60
40:BS:8:ARG:HB3	40:BS:102:HIS:ND1	2.17	0.60
43:BV:80:HIS:CD2	43:BV:83:LYS:N	2.42	0.60
45:BX:38:TRP:HE3	45:BX:45:PHE:CE2	2.18	0.60
1:CA:1191:A:H8	1:CA:1191:A:OP2	1.85	0.60
1:CA:728:A:H2'	1:CA:729:A:C8	2.36	0.60
2:CB:122:ASP:CB	2:CB:124:THR:HG22	2.30	0.60
4:CD:2:ARG:CB	4:CD:2:ARG:HH11	2.03	0.60
5:CE:52:ALA:HB2	5:CE:61:LYS:HE3	1.82	0.60
5:CE:36:THR:HG21	5:CE:63:MET:HE2	1.83	0.60
7:CG:105:GLU:O	7:CG:109:LYS:HD3	2.01	0.60
7:CG:35:LYS:HB3	7:CG:35:LYS:NZ	2.17	0.60
22:DA:2015:A:C2	48:D0:2:VAL:HG11	2.35	0.60
22:DA:103:A:H2'	22:DA:104:A:C8	2.36	0.60
22:DA:1310:G:H2'	22:DA:1311:G:O4'	2.01	0.60
22:DA:1329:U:HO2'	22:DA:1330:C:P	2.24	0.60
22:DA:1359:A:N1	22:DA:1360:G:H1'	2.15	0.60
22:DA:1529:G:H2'	22:DA:1530:G:C8	2.36	0.60
22:DA:1664:A:O2'	22:DA:1665:A:H5'	2.01	0.60
22:DA:2099:U:H2'	22:DA:2099:U:O2	2.01	0.60
22:DA:2199:A:C4	22:DA:2200:C:C5	2.89	0.60
22:DA:2286:G:O6	49:D1:22:THR:HG21	2.02	0.60
24:DC:145:MET:HB2	24:DC:152:GLN:HE22	1.66	0.60
22:DA:782:A:N7	24:DC:219:VAL:HG21	2.16	0.60
24:DC:77:VAL:HG23	24:DC:112:GLY:N	2.08	0.60
25:DD:17:GLU:H	25:DD:17:GLU:CD	2.05	0.60
26:DE:126:VAL:HG22	26:DE:127:GLU:OE2	2.01	0.60
27:DF:5:ASP:C	27:DF:7:TYR:H	2.04	0.60
23:DB:44:G:H5''	27:DF:91:ARG:NE	2.17	0.60
28:DG:117:PRO:HG2	28:DG:143:VAL:HG11	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:15:LEU:HD22	29:DH:15:LEU:N	2.17	0.60
32:DK:38:ILE:HG23	32:DK:60:ALA:O	2.01	0.60
41:DT:45:ALA:HA	41:DT:48:GLN:HG2	1.81	0.60
43:DV:29:ILE:HD12	43:DV:29:ILE:C	2.22	0.60
1:AA:1087:G:O2'	1:AA:1088:G:H8	1.84	0.60
1:AA:429:U:H4'	1:AA:430:A:O5'	2.02	0.60
1:AA:92:U:O2'	1:AA:93:U:C5'	2.50	0.60
2:AB:153:MET:CE	2:AB:157:PRO:HG3	2.31	0.60
2:AB:59:ILE:C	2:AB:59:ILE:HD12	2.22	0.60
3:AC:153:SER:HB3	3:AC:164:THR:HA	1.83	0.60
1:AA:1060:U:H5	3:AC:1:GLY:HA3	1.65	0.60
4:AD:147:LYS:N	4:AD:147:LYS:HD3	2.17	0.60
7:AG:53:SER:C	7:AG:55:LYS:H	2.04	0.60
12:AL:62:VAL:HG21	12:AL:94:TYR:HE2	1.61	0.60
16:AP:10:GLY:O	16:AP:11:ALA:CB	2.49	0.60
22:BA:1104:C:H2'	22:BA:1105:U:C6	2.37	0.60
22:BA:1106:G:C2	22:BA:1107:G:C8	2.89	0.60
22:BA:1495:A:O2'	22:BA:1496:A:H5'	2.01	0.60
22:BA:2200:C:O2'	22:BA:2201:G:H5'	2.02	0.60
22:BA:877:A:C6	22:BA:899:A:C6	2.90	0.60
22:BA:995:C:HO2'	22:BA:996:A:P	2.25	0.60
25:BD:73:VAL:HG23	25:BD:74:GLU:H	1.67	0.60
22:BA:2310:C:C5	27:BF:76:PHE:CZ	2.90	0.60
28:BG:83:THR:C	28:BG:84:LYS:HE2	2.20	0.60
29:BH:32:PRO:HA	45:BX:38:TRP:CD1	2.37	0.60
32:BK:113:MET:CG	32:BK:116:ILE:HD11	2.32	0.60
38:BQ:26:ALA:HB1	38:BQ:30:VAL:HG21	1.84	0.60
29:BH:32:PRO:HA	45:BX:38:TRP:HD1	1.65	0.60
1:CA:1051:C:O2'	1:CA:1052:U:C6	2.54	0.60
1:CA:1064:G:O2'	1:CA:1190:G:N2	2.34	0.60
1:CA:1319:A:N6	1:CA:1323:G:C2	2.70	0.60
1:CA:1342:C:O2'	9:CI:125:GLN:HG3	2.02	0.60
1:CA:209:U:H2'	1:CA:209:U:O2	2.01	0.60
1:CA:414:A:H2'	1:CA:415:A:H5''	1.83	0.60
1:CA:934:C:N3	1:CA:1345:U:C5	2.69	0.60
1:CA:976:G:O5'	1:CA:1358:U:O2'	2.19	0.60
3:CC:179:ALA:HB1	3:CC:202:PHE:CE1	2.37	0.60
19:CS:54:ARG:CG	19:CS:55:GLN:H	2.15	0.60
20:CT:57:VAL:HG12	20:CT:71:ALA:HB1	1.84	0.60
50:D2:15:SER:C	50:D2:16:HIS:ND1	2.55	0.60
22:DA:819:A:OP2	22:DA:1187:G:N2	2.35	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:121:G:H1'	22:DA:148:U:H3	1.65	0.60
22:DA:1532:A:N1	22:DA:1540:G:C6	2.70	0.60
22:DA:1351:C:H4'	22:DA:1572:A:O4'	2.01	0.60
22:DA:1665:A:C2'	22:DA:1666:G:H5'	2.31	0.60
22:DA:1771:C:H42	22:DA:1980:G:H1	1.48	0.60
22:DA:1951:U:H2'	22:DA:1953:A:OP2	2.02	0.60
22:DA:2873:A:H5''	22:DA:2874:C:OP2	2.00	0.60
22:DA:365:U:H2'	22:DA:366:C:C6	2.37	0.60
22:DA:379:G:C6	22:DA:396:G:C6	2.90	0.60
22:DA:637:A:N6	22:DA:652:U:H4'	2.16	0.60
32:DK:57:VAL:O	32:DK:57:VAL:HG13	2.01	0.60
33:DL:23:ILE:HG13	39:DR:82:HIS:HE1	1.66	0.60
40:DS:96:ILE:CG2	40:DS:96:ILE:O	2.50	0.60
42:DU:52:ASN:CG	42:DU:54:PRO:HD3	2.21	0.60
22:DA:2353:G:H21	44:DW:30:VAL:CG2	2.15	0.60
1:AA:1138:G:O2'	1:AA:1139:G:H4'	2.01	0.60
1:AA:290:C:H2'	1:AA:291:U:H5'	1.82	0.60
1:AA:468:A:C2	1:AA:469:C:N4	2.70	0.60
2:AB:59:ILE:HD12	2:AB:60:ALA:N	2.17	0.60
2:AB:74:ALA:O	2:AB:75:ALA:HB2	2.02	0.60
9:AI:100:ALA:CB	9:AI:102:PHE:CE2	2.84	0.60
22:BA:1315:C:O2'	22:BA:1316:U:H5'	2.00	0.60
22:BA:1392:A:C6	22:BA:1393:A:C6	2.90	0.60
22:BA:1464:G:O2'	22:BA:1465:G:H5'	2.01	0.60
22:BA:1609:A:O2'	22:BA:1610:A:H5''	2.02	0.60
1:AA:702:A:C4	22:BA:1847:A:H2	2.20	0.60
22:BA:2014:A:H2'	22:BA:2015:A:C8	2.36	0.60
22:BA:2103:C:C2'	22:BA:2104:C:H5'	2.30	0.60
22:BA:422:A:H2'	22:BA:423:A:C8	2.37	0.60
22:BA:893:C:O2'	22:BA:894:U:H5'	2.02	0.60
24:BC:140:VAL:HA	24:BC:190:THR:O	2.01	0.60
28:BG:84:LYS:HG3	28:BG:131:VAL:C	2.19	0.60
31:BJ:13:ARG:O	31:BJ:14:ASP:HB2	2.02	0.60
32:BK:5:GLN:O	32:BK:6:THR:HB	2.01	0.60
22:BA:910:A:C4	34:BM:13:HIS:CE1	2.89	0.60
37:BP:87:ARG:CZ	37:BP:111:GLU:HG3	2.32	0.60
22:BA:2231:U:OP1	45:BX:29:LEU:CD2	2.50	0.60
1:CA:1446:A:H2'	1:CA:1447:A:C5'	2.28	0.60
3:CC:54:ILE:O	3:CC:54:ILE:HG23	2.02	0.60
4:CD:84:ASN:ND2	4:CD:86:GLY:N	2.50	0.60
5:CE:95:MET:HB3	5:CE:124:ALA:CB	2.24	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:80:LEU:HB3	12:CL:97:VAL:CG2	2.25	0.60
12:CL:83:GLY:H	12:CL:95:HIS:H	1.50	0.60
1:CA:1225:A:H5'	13:CM:101:THR:CG2	2.32	0.60
14:CN:6:LYS:O	14:CN:10:VAL:HG23	2.02	0.60
17:CQ:59:GLU:HG3	17:CQ:59:GLU:O	2.02	0.60
50:D2:10:LEU:O	50:D2:14:ARG:HB2	2.02	0.60
22:DA:1237:A:N3	22:DA:1238:G:H1'	2.17	0.60
22:DA:1394:U:H4'	22:DA:1603:A:H4'	1.84	0.60
22:DA:1873:G:O2'	22:DA:1874:C:H5'	2.02	0.60
22:DA:197:A:H62	22:DA:2430:A:C2'	1.96	0.60
22:DA:262:A:H2	22:DA:430:A:H1'	1.66	0.60
22:DA:266:G:H2'	22:DA:267:C:O5'	2.01	0.60
22:DA:2723:C:C5	22:DA:2724:U:C5	2.90	0.60
22:DA:2853:C:H6	22:DA:2853:C:O5'	1.84	0.60
22:DA:319:G:C6	22:DA:333:G:C6	2.89	0.60
22:DA:397:U:OP1	45:DX:30:PRO:HA	2.01	0.60
22:DA:61:C:H2'	22:DA:62:U:H5'	1.82	0.60
22:DA:861:A:O2'	22:DA:862:G:C5'	2.50	0.60
22:DA:931:U:H2'	22:DA:931:U:O2	2.00	0.60
23:DB:16:G:O6	23:DB:69:G:C6	2.55	0.60
24:DC:56:GLY:HA3	24:DC:213:ARG:O	2.02	0.60
27:DF:31:GLU:C	27:DF:95:MET:HE2	2.22	0.60
29:DH:68:ARG:HD3	29:DH:71:LYS:HB2	1.82	0.60
30:DI:4:VAL:HG22	30:DI:6:ALA:H	1.66	0.60
33:DL:142:ILE:CG2	33:DL:144:GLU:H	2.15	0.60
35:DN:55:ALA:HA	35:DN:80:PHE:CE1	2.37	0.60
37:DP:88:ARG:HE	37:DP:112:ARG:NH2	2.00	0.60
42:DU:43:LYS:HE3	42:DU:45:GLN:OE1	2.02	0.60
1:AA:1317:C:H2'	1:AA:1318:A:H5'	1.84	0.60
1:AA:454:G:C2'	1:AA:455:G:H5'	2.31	0.60
1:AA:623:C:O2'	1:AA:624:C:H5'	2.02	0.60
1:AA:657:U:O2'	1:AA:658:C:H5'	2.02	0.60
2:AB:80:LYS:HB2	2:AB:90:PHE:HE1	1.67	0.60
3:AC:21:TRP:CG	3:AC:58:ARG:HG2	2.37	0.60
4:AD:137:SER:HB3	4:AD:138:PRO:HD2	1.84	0.60
4:AD:24:VAL:HG12	4:AD:25:ARG:N	2.16	0.60
13:AM:65:GLU:O	13:AM:69:ARG:HG3	2.02	0.60
17:AQ:58:VAL:CG2	17:AQ:59:GLU:N	2.65	0.60
52:B4:25:VAL:C	52:B4:26:ILE:HD13	2.23	0.60
22:BA:1033:U:H4'	22:BA:1034:G:OP1	2.01	0.60
22:BA:1204:A:H4'	22:BA:1205:A:O5'	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:138:U:C3'	22:BA:139:U:H5'	2.32	0.60
24:BC:136:VAL:HG23	24:BC:166:ARG:NH1	2.17	0.60
26:BE:41:GLN:HB2	26:BE:43:THR:HG23	1.84	0.60
41:BT:32:LEU:O	41:BT:34:VAL:HG13	2.02	0.60
47:BZ:35:VAL:HG21	47:BZ:37:ARG:NH1	2.16	0.60
1:CA:9:G:H2'	1:CA:10:A:H8	1.67	0.60
1:CA:1349:A:O2'	1:CA:1350:A:C5'	2.50	0.60
1:CA:1370:G:H5''	9:CI:110:VAL:HG21	1.83	0.60
1:CA:1431:A:OP2	1:CA:1431:A:H8	1.83	0.60
1:CA:1490:U:H5'	1:CA:1491:G:OP2	2.01	0.60
1:CA:631:C:H3'	1:CA:632:U:H5'	1.84	0.60
1:CA:735:C:H2'	1:CA:736:C:C6	2.37	0.60
11:CK:91:GLY:O	11:CK:94:SER:HB3	2.02	0.60
18:CR:31:TYR:CG	18:CR:54:LEU:HD21	2.37	0.60
51:D3:41:ARG:CG	51:D3:41:ARG:NH2	2.56	0.60
22:DA:1142:A:C8	22:DA:1144:A:N7	2.70	0.60
22:DA:1287:A:O2'	22:DA:1288:G:C5'	2.50	0.60
22:DA:1387:A:H5''	22:DA:1469:A:H1'	1.83	0.60
22:DA:1634:A:H4'	22:DA:1635:A:OP1	2.02	0.60
22:DA:1839:G:O2'	22:DA:1840:G:C5'	2.50	0.60
22:DA:2093:G:C6	22:DA:2225:A:N7	2.69	0.60
22:DA:2149:U:C2	22:DA:2150:C:C5	2.90	0.60
22:DA:223:A:C4	22:DA:408:G:H1'	2.37	0.60
22:DA:2298:A:H5'	22:DA:2322:A:O2'	2.01	0.60
22:DA:2694:G:C5	22:DA:2695:U:C5	2.90	0.60
22:DA:2748:A:C1'	28:DG:66:THR:HG22	2.29	0.60
22:DA:311:A:C2	22:DA:328:U:O4	2.55	0.60
22:DA:568:U:H2'	22:DA:570:G:OP2	2.02	0.60
22:DA:804:A:H5''	22:DA:805:G:OP1	2.01	0.60
22:DA:95:A:H4'	46:DY:38:GLN:O	2.01	0.60
26:DE:126:VAL:HG22	26:DE:127:GLU:CD	2.23	0.60
22:DA:1140:C:OP2	31:DJ:68:LYS:HE3	2.02	0.60
34:DM:136:MET:HE2	43:DV:57:TYR:HD2	1.67	0.60
37:DP:91:VAL:HG21	37:DP:96:LEU:HD21	1.83	0.60
41:DT:13:ALA:HB1	41:DT:14:PRO:CD	2.30	0.60
1:AA:1065:U:H5''	1:AA:1190:G:N2	2.16	0.59
1:AA:214:C:O2'	1:AA:215:C:H5'	2.02	0.59
2:AB:100:LEU:HB3	2:AB:174:GLU:CG	2.28	0.59
5:AE:110:MET:O	5:AE:114:LEU:HB2	2.02	0.59
7:AG:110:ARG:HH12	7:AG:122:GLU:HG2	1.65	0.59
8:AH:25:THR:O	8:AH:26:MET:HB3	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:45:ILE:CA	8:AH:63:LYS:HD2	2.32	0.59
9:AI:65:THR:HG22	9:AI:66:VAL:N	2.17	0.59
9:AI:6:TYR:HE2	9:AI:17:ARG:HB2	1.67	0.59
14:AN:50:LEU:O	14:AN:52:ARG:N	2.35	0.59
22:BA:1461:C:O2'	22:BA:1462:C:C5'	2.49	0.59
22:BA:1818:U:O2'	22:BA:1819:A:OP2	2.18	0.59
22:BA:2778:A:H4'	22:BA:2779:U:OP2	2.02	0.59
22:BA:303:G:C5	22:BA:304:U:C5	2.90	0.59
22:BA:387:U:H4'	22:BA:388:G:O5'	2.01	0.59
22:BA:751:A:H5'	40:BS:90:LYS:HA	1.83	0.59
24:BC:246:PRO:CG	24:BC:247:TRP:CH2	2.85	0.59
22:BA:1801:A:C6	24:BC:261:ARG:NH1	2.70	0.59
28:BG:137:LYS:C	28:BG:140:ILE:HD11	2.20	0.59
31:BJ:54:ILE:HD12	31:BJ:54:ILE:C	2.23	0.59
22:BA:1252:G:C2	38:BQ:32:ARG:HG2	2.37	0.59
41:BT:32:LEU:N	41:BT:32:LEU:HD23	2.16	0.59
46:BY:43:LEU:O	46:BY:47:ARG:HB2	2.02	0.59
1:CA:1256:A:C4	1:CA:1278:G:C6	2.89	0.59
1:CA:1305:G:H22	1:CA:1331:G:H2'	1.67	0.59
1:CA:182:A:HO2'	1:CA:183:C:H2'	1.67	0.59
1:CA:223:A:H2'	1:CA:224:U:C6	2.31	0.59
1:CA:440:C:C2'	1:CA:441:A:H5'	2.31	0.59
1:CA:505:G:C6	1:CA:535:A:C2	2.90	0.59
1:CA:824:G:O2'	1:CA:825:A:H5'	2.01	0.59
1:CA:91:U:C4	1:CA:92:U:C4	2.90	0.59
1:CA:929:G:H2'	1:CA:930:C:H6	1.66	0.59
5:CE:143:LEU:O	5:CE:144:GLU:CB	2.50	0.59
5:CE:96:GLN:HG2	5:CE:97:PRO:HD2	1.84	0.59
7:CG:116:ALA:C	7:CG:120:ALA:HB3	2.23	0.59
13:CM:13:HIS:CB	13:CM:16:ILE:HB	2.30	0.59
22:DA:1255:U:O2'	22:DA:1256:G:OP1	2.20	0.59
22:DA:1826:G:C5	22:DA:1827:U:C5	2.90	0.59
22:DA:1767:G:N1	22:DA:1986:C:C4	2.70	0.59
22:DA:195:A:C6	22:DA:198:C:C5	2.90	0.59
22:DA:1991:U:H6	22:DA:1991:U:H5''	1.67	0.59
22:DA:2287:A:N7	22:DA:2289:G:C8	2.69	0.59
22:DA:200:U:O4	22:DA:248:G:C2	2.55	0.59
22:DA:526:A:C6	22:DA:2626:C:H4'	2.37	0.59
22:DA:642:U:H2'	22:DA:644:A:OP2	2.02	0.59
29:DH:78:VAL:CG1	29:DH:144:VAL:HG12	2.29	0.59
30:DI:69:VAL:O	30:DI:69:VAL:HG13	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:45:THR:HG21	31:DJ:50:THR:CG2	2.27	0.59
22:DA:2515:C:OP1	31:DJ:81:ILE:CG2	2.49	0.59
35:DN:98:LEU:HD21	48:D0:53:VAL:HG11	1.84	0.59
36:DO:115:LEU:HD13	36:DO:115:LEU:N	2.16	0.59
37:DP:88:ARG:CZ	37:DP:112:ARG:HH21	2.14	0.59
22:DA:560:C:H1'	38:DQ:47:ARG:NH1	2.17	0.59
38:DQ:57:ARG:O	38:DQ:61:ILE:HD13	2.02	0.59
40:DS:14:ALA:HB1	40:DS:18:ARG:NH2	2.16	0.59
42:DU:90:LYS:HB3	42:DU:92:VAL:HG13	1.84	0.59
46:DY:28:LEU:HD23	46:DY:42:LEU:HD13	1.84	0.59
1:AA:1234:C:H2'	1:AA:1235:U:H5'	1.85	0.59
1:AA:1427:C:O2'	1:AA:1428:A:H5'	2.01	0.59
1:AA:1469:C:C3'	1:AA:1469:C:C6	2.85	0.59
1:AA:201:G:H5''	1:AA:202:G:OP2	2.01	0.59
1:AA:427:U:C4	1:AA:428:G:C6	2.89	0.59
1:AA:489:C:C2'	1:AA:490:C:C5'	2.80	0.59
1:AA:721:G:C4'	1:AA:722:G:O5'	2.37	0.59
1:AA:994:A:C8	1:AA:1216:A:H4'	2.37	0.59
5:AE:156:ARG:C	5:AE:158:LYS:H	2.05	0.59
5:AE:96:GLN:NE2	5:AE:97:PRO:HD2	2.17	0.59
1:AA:933:G:OP2	7:AG:2:ARG:HB3	2.02	0.59
8:AH:87:ARG:O	8:AH:88:LYS:HB3	2.00	0.59
12:AL:43:LYS:HB2	12:AL:43:LYS:NZ	2.16	0.59
14:AN:40:ARG:HH12	14:AN:44:VAL:CG1	2.14	0.59
21:AU:3:ILE:HA	21:AU:19:LYS:HZ1	1.64	0.59
22:BA:1419:A:H2'	22:BA:1421:G:N7	2.17	0.59
22:BA:141:G:N1	41:BT:2:ILE:CG2	2.65	0.59
22:BA:1505:A:C2'	22:BA:1506:U:H5'	2.32	0.59
22:BA:1673:G:H2'	22:BA:1674:G:H5'	1.84	0.59
22:BA:1714:U:C2'	22:BA:1714:U:O2	2.33	0.59
22:BA:2133:G:P	22:BA:2133:G:H21	2.26	0.59
22:BA:2439:A:H4'	22:BA:2440:C:O5'	2.02	0.59
22:BA:325:G:O2'	22:BA:326:G:H5'	2.02	0.59
24:BC:24:HIS:CE1	24:BC:25:LYS:O	2.55	0.59
24:BC:255:LYS:O	24:BC:256:THR:HG23	2.02	0.59
26:BE:7:ASP:CG	26:BE:8:ALA:H	2.06	0.59
27:BF:134:GLN:O	27:BF:136:ILE:N	2.28	0.59
28:BG:22:VAL:HG22	28:BG:36:LEU:HD11	1.82	0.59
35:BN:10:LEU:O	35:BN:12:ARG:HG3	2.01	0.59
31:BJ:44:TYR:HA	38:BQ:59:LEU:HD22	1.83	0.59
42:BU:17:ASP:HB3	42:BU:20:LYS:HD2	1.82	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:17:SER:O	43:BV:20:LEU:HB2	2.02	0.59
1:CA:1137:C:H4'	1:CA:1138:G:C2	2.37	0.59
1:CA:1152:A:C2'	1:CA:1153:G:C8	2.68	0.59
1:CA:182:A:H2	1:CA:194:C:H42	1.47	0.59
1:CA:268:U:H2'	1:CA:269:C:C5	2.37	0.59
1:CA:301:G:O2'	1:CA:302:G:H5'	2.02	0.59
1:CA:441:A:H61	1:CA:493:A:N6	2.00	0.59
1:CA:960:U:H4'	1:CA:961:U:H5''	1.84	0.59
2:CB:163:ILE:HG22	2:CB:164:ASP:N	2.17	0.59
2:CB:8:MET:SD	2:CB:9:LEU:HD23	2.42	0.59
4:CD:52:VAL:HG12	4:CD:53:GLN:N	2.17	0.59
5:CE:37:VAL:HG11	5:CE:113:VAL:HA	1.84	0.59
7:CG:91:ARG:NH2	7:CG:92:PRO:HB2	2.17	0.59
5:CE:157:GLY:HA3	8:CH:63:LYS:CE	2.32	0.59
12:CL:24:GLU:O	12:CL:25:ALA:CB	2.50	0.59
13:CM:82:LEU:HD12	13:CM:82:LEU:N	2.18	0.59
48:D0:46:GLY:CA	48:D0:54:ILE:HD11	2.30	0.59
49:D1:5:ARG:HD2	49:D1:25:ASN:HB2	1.84	0.59
50:D2:25:LYS:HA	50:D2:28:ARG:HE	1.65	0.59
52:D4:22:VAL:O	52:D4:24:ARG:HG3	2.02	0.59
22:DA:1362:C:C4	22:DA:1363:C:C5	2.91	0.59
22:DA:1498:C:O2'	22:DA:1499:C:H5'	2.02	0.59
22:DA:1507:C:H3'	22:DA:1508:A:O4'	2.02	0.59
22:DA:1299:G:H22	22:DA:1640:A:H5'	1.68	0.59
22:DA:173:A:H2'	22:DA:174:U:C6	2.36	0.59
22:DA:785:G:O2'	22:DA:1779:U:C5'	2.50	0.59
22:DA:414:C:H5''	22:DA:1879:C:O2'	2.02	0.59
22:DA:2016:U:C2'	22:DA:2017:U:H5'	2.31	0.59
22:DA:1462:C:H1'	22:DA:2702:G:H21	1.67	0.59
22:DA:2741:A:C2'	22:DA:2742:G:H5'	2.32	0.59
22:DA:2773:C:H2'	22:DA:2774:C:H6	1.67	0.59
22:DA:455:C:N3	22:DA:473:G:C4'	2.65	0.59
22:DA:479:A:C2	22:DA:480:A:C6	2.91	0.59
22:DA:993:G:C2'	22:DA:994:C:H5'	2.33	0.59
22:DA:2572:A:H8	25:DD:149:ASN:HD21	1.46	0.59
25:DD:20:VAL:HG12	25:DD:22:ILE:HG12	1.82	0.59
27:DF:71:LYS:O	27:DF:72:SER:HB3	2.02	0.59
28:DG:90:GLY:CA	28:DG:159:LYS:HE3	2.32	0.59
30:DI:77:VAL:CA	30:DI:80:LYS:HE3	2.32	0.59
31:DJ:4:PHE:HB3	38:DQ:63:ARG:HH22	1.67	0.59
33:DL:76:GLU:O	33:DL:76:GLU:HG3	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:68:LYS:O	41:DT:74:ILE:HG13	2.02	0.59
44:DW:18:LYS:CD	44:DW:19:ARG:HG2	2.33	0.59
1:AA:1349:A:O2'	1:AA:1350:A:H5'	2.01	0.59
1:AA:1468:A:C2'	1:AA:1469:C:H5'	2.29	0.59
1:AA:641:U:H4'	8:AH:106:SER:O	2.01	0.59
1:AA:711:G:C2'	1:AA:712:A:H5'	2.32	0.59
2:AB:64:GLY:HA3	2:AB:158:ASP:OD2	2.02	0.59
7:AG:112:ASP:HB2	7:AG:118:ARG:HG3	1.84	0.59
9:AI:39:GLY:O	9:AI:40:ARG:HB2	2.03	0.59
1:AA:538:G:OP1	12:AL:109:ARG:HD3	2.02	0.59
20:AT:43:LYS:HD3	20:AT:86:ALA:HB1	1.84	0.59
51:B3:56:LEU:H	51:B3:56:LEU:CD2	2.16	0.59
22:BA:1463:C:H6	22:BA:1463:C:H5'	1.67	0.59
22:BA:1471:G:H2'	22:BA:1472:C:H6	1.67	0.59
22:BA:1510:G:O2'	22:BA:1511:G:C5'	2.50	0.59
22:BA:2109:U:H2'	22:BA:2110:G:H5'	1.84	0.59
22:BA:2214:C:H2'	22:BA:2215:C:C6	2.37	0.59
22:BA:90:U:H2'	22:BA:91:A:C8	2.38	0.59
23:BB:40:U:O2	23:BB:43:C:H3'	2.01	0.59
56:BA:3242:HOH:O	26:BE:81:GLY:HA2	2.02	0.59
27:BF:43:ILE:HA	27:BF:82:TYR:CE1	2.37	0.59
33:BL:2:ARG:HA	33:BL:5:THR:OG1	2.02	0.59
37:BP:92:ARG:O	37:BP:92:ARG:CG	2.51	0.59
38:BQ:8:ILE:C	38:BQ:8:ILE:HD12	2.21	0.59
42:BU:102:ILE:HG13	42:BU:102:ILE:O	2.01	0.59
1:CA:1171:A:O2'	1:CA:1172:C:H5'	2.02	0.59
1:CA:1471:U:O2'	1:CA:1472:U:H5'	2.02	0.59
1:CA:532:A:C8	3:CC:192:TYR:HE2	2.20	0.59
1:CA:701:U:H4'	1:CA:702:A:H5'	1.84	0.59
1:CA:825:A:H2'	1:CA:826:C:H6	1.66	0.59
1:CA:958:A:H62	19:CS:54:ARG:NH1	2.00	0.59
3:CC:120:THR:O	3:CC:120:THR:CG2	2.49	0.59
3:CC:21:TRP:CZ3	14:CN:93:PRO:HG2	2.37	0.59
5:CE:136:VAL:O	5:CE:140:ILE:HG13	2.02	0.59
8:CH:85:TYR:CE2	8:CH:123:GLU:HB2	2.37	0.59
9:CI:115:VAL:HG21	10:CJ:61:ALA:O	2.03	0.59
13:CM:13:HIS:CG	13:CM:16:ILE:HD13	2.37	0.59
10:CJ:66:GLU:HG3	14:CN:100:TRP:CZ3	2.38	0.59
1:CA:377:G:P	16:CP:5:ARG:HH11	2.25	0.59
48:D0:12:ARG:O	48:D0:16:ARG:HG3	2.01	0.59
22:DA:1000:A:N6	22:DA:1001:A:N1	2.50	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1290:C:HO2'	22:DA:1291:C:H6	1.49	0.59
22:DA:1914:C:H2'	22:DA:1915:U:C6	2.37	0.59
22:DA:1965:C:C3'	22:DA:1966:A:H5''	2.30	0.59
22:DA:2440:C:H2'	22:DA:2441:U:O4'	2.02	0.59
22:DA:2508:G:C2	22:DA:2582:G:C6	2.90	0.59
22:DA:2686:G:C5	22:DA:2687:U:C5	2.90	0.59
22:DA:2741:A:H2'	22:DA:2742:G:H5'	1.84	0.59
22:DA:321:U:O2	26:DE:159:LEU:HD11	2.01	0.59
29:DH:41:LYS:HA	29:DH:44:ILE:CD1	2.32	0.59
29:DH:73:ASN:O	29:DH:75:LEU:HD12	2.02	0.59
32:DK:19:VAL:CG1	32:DK:41:ILE:HG12	2.32	0.59
35:DN:34:ILE:CG2	35:DN:113:ILE:CG2	2.80	0.59
35:DN:49:GLU:N	35:DN:50:PRO:CD	2.65	0.59
39:DR:89:HIS:NE2	39:DR:91:GLN:HB2	2.17	0.59
40:DS:24:ILE:HG22	40:DS:32:ALA:HB1	1.84	0.59
41:DT:17:SER:C	41:DT:18:GLU:HG2	2.22	0.59
44:DW:17:ALA:HB1	44:DW:36:ILE:HA	1.84	0.59
1:AA:1001:C:H2'	1:AA:1002:G:C8	2.36	0.59
1:AA:977:A:C8	1:AA:1223:C:C2	2.90	0.59
1:AA:15:G:C5	1:AA:1396:A:C2	2.90	0.59
1:AA:330:C:C5'	1:AA:330:C:H6	2.15	0.59
1:AA:649:A:H2'	1:AA:650:G:O4'	2.03	0.59
1:AA:961:U:H6	1:AA:961:U:O5'	1.85	0.59
8:AH:74:ILE:HD12	8:AH:128:VAL:HG13	1.85	0.59
1:AA:707:U:OP1	11:AK:86:LYS:HE3	2.01	0.59
12:AL:87:LYS:O	12:AL:88:ASP:CB	2.46	0.59
13:AM:4:ALA:H	13:AM:56:ARG:HG3	1.68	0.59
20:AT:67:HIS:HB3	20:AT:68:LYS:HZ2	1.67	0.59
49:B1:27:ARG:O	49:B1:30:PRO:HD3	2.02	0.59
49:B1:33:LEU:HB3	49:B1:51:ALA:HB1	1.81	0.59
22:BA:1885:A:C2	22:BA:1886:U:H1'	2.37	0.59
25:BD:169:ARG:O	25:BD:170:VAL:CG1	2.48	0.59
27:BF:72:SER:H	27:BF:80:GLN:HB2	1.68	0.59
27:BF:30:VAL:CG1	27:BF:96:TRP:CH2	2.85	0.59
28:BG:36:LEU:N	28:BG:36:LEU:HD22	2.17	0.59
29:BH:8:LYS:O	29:BH:9:VAL:HB	2.00	0.59
31:BJ:3:THR:HG22	31:BJ:44:TYR:OH	2.02	0.59
32:BK:39:ILE:HG22	32:BK:60:ALA:O	2.02	0.59
40:BS:85:ILE:HG22	40:BS:86:MET:N	2.17	0.59
22:BA:2080:A:H5'	45:BX:18:SER:HB2	1.85	0.59
45:BX:69:GLU:HA	45:BX:72:ALA:HB3	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:91:U:C4	1:CA:92:U:O4	2.55	0.59
2:CB:46:VAL:CG1	2:CB:47:PRO:HD3	2.19	0.59
6:CF:54:LEU:HD12	6:CF:56:LYS:H	1.68	0.59
10:CJ:63:ASP:OD2	14:CN:84:ARG:NH1	2.35	0.59
10:CJ:37:ARG:HG2	10:CJ:75:ASP:HB3	1.84	0.59
12:CL:48:LEU:N	12:CL:48:LEU:HD23	2.16	0.59
19:CS:50:VAL:CG1	19:CS:70:LEU:HB3	2.32	0.59
22:DA:1099:G:H5''	22:DA:1100:C:OP2	2.02	0.59
22:DA:128:C:C6	22:DA:128:C:H5''	2.37	0.59
22:DA:1383:A:C2	22:DA:1384:A:C4	2.90	0.59
22:DA:1614:A:H8	22:DA:1614:A:O5'	1.86	0.59
22:DA:1831:G:O2'	22:DA:1832:C:H5'	2.02	0.59
22:DA:227:A:HO2'	22:DA:228:C:P	2.25	0.59
22:DA:2601:C:H5''	22:DA:2602:A:OP2	2.02	0.59
22:DA:9:G:C6	22:DA:2629:U:C5	2.91	0.59
22:DA:2701:U:H3'	22:DA:2702:G:H5''	1.83	0.59
22:DA:320:A:H5''	22:DA:321:U:OP1	2.03	0.59
22:DA:49:A:N6	22:DA:177:G:C5	2.70	0.59
22:DA:988:A:C2	22:DA:989:G:C2	2.90	0.59
23:DB:34:A:N6	23:DB:44:G:H1'	2.18	0.59
25:DD:114:LYS:HD2	25:DD:116:LYS:CE	2.31	0.59
26:DE:61:ARG:HD2	26:DE:61:ARG:O	2.02	0.59
28:DG:91:VAL:HG23	28:DG:92:GLY:N	2.18	0.59
31:DJ:94:ALA:O	31:DJ:95:ARG:CB	2.50	0.59
35:DN:44:LEU:HD23	35:DN:113:ILE:HG21	1.84	0.59
35:DN:67:PHE:HE2	35:DN:73:ASN:OD1	1.86	0.59
37:DP:24:THR:O	37:DP:44:GLY:O	2.21	0.59
38:DQ:40:LYS:HA	38:DQ:43:GLN:HG3	1.85	0.59
40:DS:75:PHE:CE2	40:DS:104:THR:HG21	2.37	0.59
22:DA:1393:A:N6	41:DT:19:LYS:HB2	2.16	0.59
43:DV:81:PRO:HB2	43:DV:82:TYR:HD2	1.66	0.59
1:AA:1082:A:H2'	1:AA:1083:U:O4'	2.01	0.59
1:AA:357:G:C2'	1:AA:358:U:H5'	2.33	0.59
1:AA:466:A:H5'	1:AA:467:U:OP2	2.03	0.59
1:AA:969:A:H2'	1:AA:970:C:C6	2.38	0.59
4:AD:84:ASN:ND2	4:AD:87:GLU:HG2	2.17	0.59
8:AH:29:SER:HB3	8:AH:32:LYS:HG3	1.85	0.59
13:AM:10:ASP:OD1	13:AM:44:ILE:HB	2.03	0.59
49:B1:22:THR:OG1	49:B1:23:THR:N	2.34	0.59
22:BA:1068:G:C2'	22:BA:1069:A:H5'	2.31	0.59
22:BA:1073:A:P	22:BA:1073:A:C8	2.93	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1113:U:C2	22:BA:1114:C:C5	2.89	0.59
22:BA:1238:G:O2'	22:BA:1239:G:H5'	2.03	0.59
22:BA:1309:G:OP1	50:B2:9:VAL:HG13	2.03	0.59
22:BA:1378:A:H2'	56:BA:3750:HOH:O	2.02	0.59
22:BA:2524:G:N2	22:BA:2539:C:O2	2.34	0.59
22:BA:368:A:C2'	22:BA:369:U:H5'	2.32	0.59
22:BA:996:A:H4'	38:BQ:91:ARG:CG	2.30	0.59
27:BF:131:VAL:HG22	27:BF:151:LEU:H	1.68	0.59
33:BL:76:GLU:C	33:BL:77:ILE:HD12	2.22	0.59
35:BN:79:LEU:O	35:BN:80:PHE:CB	2.42	0.59
42:BU:38:ILE:O	42:BU:40:LEU:HG	2.02	0.59
44:BW:25:PHE:O	44:BW:65:LYS:HA	2.02	0.59
1:CA:996:A:N1	1:CA:1046:A:H5'	2.16	0.59
1:CA:1113:C:H2'	1:CA:1114:C:C6	2.37	0.59
1:CA:1219:A:C6	1:CA:1220:G:C5	2.91	0.59
1:CA:264:C:H1'	17:CQ:65:PRO:HG2	1.85	0.59
1:CA:292:G:N7	1:CA:293:G:H1'	2.17	0.59
1:CA:455:G:N2	1:CA:478:A:C2	2.71	0.59
1:CA:60:A:H4'	1:CA:61:G:O5'	2.02	0.59
4:CD:186:GLU:O	4:CD:187:ARG:CB	2.50	0.59
4:CD:18:LEU:O	4:CD:19:PHE:HB2	2.01	0.59
20:CT:57:VAL:HG12	20:CT:71:ALA:CB	2.33	0.59
22:DA:1056:G:N2	22:DA:1102:C:H5	2.00	0.59
22:DA:1060:U:C5'	22:DA:1061:U:H2'	2.32	0.59
22:DA:111:A:C2	22:DA:112:U:C2	2.91	0.59
22:DA:1304:A:HO2'	22:DA:1305:C:H6	1.43	0.59
22:DA:2216:G:C4	22:DA:2217:G:N7	2.71	0.59
22:DA:1462:C:C1'	22:DA:2702:G:H21	2.16	0.59
22:DA:413:C:O2'	22:DA:414:C:O4'	2.16	0.59
22:DA:7:G:HO2'	31:DJ:15:TRP:HZ2	1.50	0.59
24:DC:94:LEU:HB2	24:DC:100:ARG:CD	2.31	0.59
25:DD:169:ARG:O	25:DD:170:VAL:HG22	2.02	0.59
26:DE:134:LEU:O	26:DE:138:LEU:HG	2.02	0.59
30:DI:79:LEU:HD22	30:DI:100:ILE:HD12	1.83	0.59
30:DI:75:ALA:HA	30:DI:78:LEU:HD12	1.84	0.59
32:DK:16:ALA:HB1	32:DK:45:GLU:HG3	1.84	0.59
33:DL:111:ILE:O	33:DL:131:ALA:HB1	2.01	0.59
33:DL:128:THR:HB	33:DL:131:ALA:H	1.67	0.59
37:DP:45:VAL:HG12	37:DP:46:VAL:N	2.16	0.59
37:DP:50:ARG:CA	37:DP:57:ALA:O	2.49	0.59
40:DS:20:VAL:CG2	40:DS:23:LEU:HD12	2.32	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:74:ILE:HG23	41:DT:75:GLY:N	2.16	0.59
43:DV:75:GLN:HG3	43:DV:92:VAL:HG11	1.84	0.59
22:DA:851:C:O4'	47:DZ:46:MET:HG2	2.02	0.59
1:AA:125:U:O2'	1:AA:126:G:H5'	2.02	0.59
1:AA:267:C:H2'	1:AA:268:U:C6	2.38	0.59
1:AA:797:C:OP2	11:AK:125:LYS:HG3	2.02	0.59
1:AA:903:G:H2'	1:AA:904:U:H6	1.68	0.59
11:AK:51:PHE:N	11:AK:51:PHE:CD2	2.69	0.59
15:AO:55:LEU:C	15:AO:55:LEU:HD12	2.22	0.59
17:AQ:14:ASP:O	17:AQ:16:MET:HG2	2.03	0.59
22:BA:1199:U:H5''	56:BA:3702:HOH:O	2.03	0.59
22:BA:2507:C:C2'	22:BA:2508:G:O5'	2.51	0.59
22:BA:348:A:H2'	22:BA:349:U:O4'	2.03	0.59
22:BA:363:G:O2'	22:BA:364:C:H5'	2.02	0.59
22:BA:369:U:HO2'	22:BA:370:G:P	2.25	0.59
22:BA:622:G:H2'	22:BA:623:C:C6	2.37	0.59
22:BA:962:G:O2'	22:BA:963:U:H5'	2.01	0.59
26:BE:48:THR:OG1	26:BE:50:ALA:HB3	2.01	0.59
27:BF:35:LEU:CB	27:BF:153:ILE:HG22	2.31	0.59
29:BH:29:PHE:O	29:BH:33:GLN:HB3	2.02	0.59
32:BK:61:VAL:CG2	32:BK:87:LEU:HD11	2.33	0.59
22:BA:1338:G:O2'	41:BT:18:GLU:HG2	2.02	0.59
44:BW:37:VAL:O	44:BW:38:ARG:CG	2.51	0.59
1:CA:143:A:N3	1:CA:143:A:H2'	2.16	0.59
1:CA:552:U:H2'	1:CA:553:A:H8	1.67	0.59
1:CA:643:C:O2'	1:CA:644:U:H5'	2.03	0.59
1:CA:814:A:C5'	1:CA:1511:G:H4'	2.33	0.59
1:CA:910:C:H2'	1:CA:911:U:H6	1.66	0.59
1:CA:935:A:O2'	1:CA:936:C:C6	2.53	0.59
3:CC:59:PRO:HG2	3:CC:62:SER:HB3	1.84	0.59
5:CE:157:GLY:HA3	8:CH:63:LYS:HE3	1.85	0.59
22:DA:104:A:O2'	22:DA:105:C:O4'	2.17	0.59
22:DA:1381:G:H2'	22:DA:1382:G:H5''	1.84	0.59
22:DA:1512:C:H2'	22:DA:1513:U:C6	2.38	0.59
22:DA:1527:G:N2	22:DA:1546:G:C6	2.70	0.59
22:DA:1665:A:H2'	22:DA:1666:G:O4'	2.02	0.59
22:DA:1760:C:C6	22:DA:1761:C:C5	2.91	0.59
22:DA:120:U:O4	22:DA:177:G:C8	2.56	0.59
22:DA:1865:U:C4	22:DA:1875:G:C2	2.90	0.59
22:DA:1935:G:H1'	22:DA:1964:G:C2	2.38	0.59
22:DA:411:G:H4'	22:DA:412:A:OP1	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:538:A:H5'	31:DJ:7:LYS:NZ	2.18	0.59
22:DA:538:A:HO2'	31:DJ:8:PRO:HG3	1.67	0.59
23:DB:45:A:C2'	23:DB:46:A:H8	2.14	0.59
23:DB:46:A:H2'	23:DB:47:C:C5	2.38	0.59
24:DC:173:LEU:H	24:DC:173:LEU:CD2	2.11	0.59
24:DC:24:HIS:CG	24:DC:25:LYS:H	2.21	0.59
22:DA:323:C:C6	26:DE:165:HIS:CE1	2.89	0.59
27:DF:39:VAL:HG13	27:DF:49:LEU:HD23	1.85	0.59
27:DF:74:ALA:HB1	27:DF:76:PHE:CD2	2.38	0.59
33:DL:48:ARG:HG3	33:DL:48:ARG:HH11	1.66	0.59
35:DN:62:ASN:O	35:DN:63:ARG:CB	2.50	0.59
40:DS:27:LYS:O	40:DS:71:VAL:HG12	2.03	0.59
47:DZ:28:LEU:HD23	47:DZ:28:LEU:N	2.17	0.59
47:DZ:23:LEU:HD21	47:DZ:53:MET:CE	2.32	0.59
1:AA:1049:U:H5	14:AN:1:ALA:HA	1.65	0.59
1:AA:1158:C:C2'	1:AA:1158:C:O2	2.51	0.59
1:AA:175:C:O2'	1:AA:176:C:H5'	2.03	0.59
1:AA:675:A:H1'	11:AK:117:HIS:CD2	2.37	0.59
1:AA:864:A:H2'	1:AA:865:A:C8	2.36	0.59
1:AA:968:A:C4'	1:AA:969:A:OP2	2.50	0.59
8:AH:95:MET:HB2	8:AH:98:LEU:O	2.02	0.59
13:AM:4:ALA:HB2	13:AM:59:VAL:HG13	1.85	0.59
51:B3:30:HIS:CE1	51:B3:31:ILE:CG2	2.85	0.59
22:BA:1165:A:O2'	22:BA:1166:G:H5'	2.03	0.59
22:BA:1882:U:O2'	22:BA:1883:U:H5'	2.03	0.59
22:BA:2415:G:H2'	22:BA:2416:C:H6	1.66	0.59
22:BA:286:U:H2'	22:BA:287:G:O4'	2.02	0.59
22:BA:588:U:H2'	22:BA:589:U:C6	2.38	0.59
22:BA:65:U:H2'	22:BA:66:C:C6	2.36	0.59
22:BA:705:A:H62	22:BA:726:G:H1'	1.66	0.59
22:BA:1257:C:H5'	26:BE:78:TRP:CZ3	2.38	0.59
27:BF:147:ARG:HG3	27:BF:148:VAL:H	1.67	0.59
27:BF:172:PHE:O	27:BF:173:ASP:C	2.41	0.59
28:BG:23:ILE:HD12	28:BG:23:ILE:N	2.17	0.59
31:BJ:124:VAL:CG2	31:BJ:125:TYR:H	2.07	0.59
31:BJ:125:TYR:OH	31:BJ:132:HIS:NE2	2.35	0.59
31:BJ:18:VAL:HG22	31:BJ:140:LEU:CD1	2.31	0.59
32:BK:71:ARG:HG3	32:BK:106:GLU:OE2	2.03	0.59
37:BP:102:ARG:HB3	37:BP:107:ALA:CB	2.25	0.59
37:BP:98:TYR:CE2	37:BP:99:LEU:HD13	2.37	0.59
22:BA:309:A:H4'	42:BU:15:GLY:HA2	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BX:39:VAL:O	45:BX:40:GLU:HB3	2.02	0.59
1:CA:222:C:O2'	1:CA:223:A:H5'	2.02	0.59
1:CA:296:U:C2	1:CA:297:G:C8	2.91	0.59
1:CA:477:C:H5'	1:CA:478:A:OP1	2.03	0.59
1:CA:979:C:H2'	1:CA:980:C:O4'	2.03	0.59
6:CF:54:LEU:HD13	6:CF:55:HIS:N	2.16	0.59
12:CL:97:VAL:HG23	12:CL:100:ALA:HB3	1.85	0.59
14:CN:79:SER:CB	14:CN:81:ILE:HD11	2.31	0.59
15:CO:83:ARG:O	15:CO:83:ARG:HG2	2.03	0.59
17:CQ:75:VAL:O	17:CQ:76:ARG:HB3	2.03	0.59
18:CR:52:ARG:O	18:CR:56:ARG:HG2	2.03	0.59
20:CT:57:VAL:CG1	20:CT:71:ALA:HB1	2.32	0.59
22:DA:104:A:O2'	22:DA:105:C:H5'	2.01	0.59
22:DA:1171:G:N2	22:DA:1179:G:H1'	2.16	0.59
22:DA:1252:G:C2	22:DA:1253:A:C2	2.90	0.59
22:DA:1274:A:O2'	22:DA:1275:A:H5''	2.03	0.59
22:DA:1476:U:HO2'	22:DA:1477:A:H8	1.49	0.59
22:DA:1542:U:C2'	22:DA:1543:G:H5'	2.32	0.59
22:DA:1603:A:C2	22:DA:1604:C:C2	2.91	0.59
22:DA:2195:U:H2'	22:DA:2196:C:H6	1.67	0.59
22:DA:2520:C:H2'	22:DA:2521:C:H6	1.67	0.59
22:DA:2689:U:H5''	22:DA:2690:U:O5'	2.03	0.59
22:DA:271:G:O2'	22:DA:272:A:C5'	2.51	0.59
22:DA:2748:A:C4	22:DA:2757:A:N6	2.70	0.59
22:DA:571:U:C5	22:DA:575:A:C6	2.91	0.59
22:DA:689:A:H2'	22:DA:690:G:C8	2.38	0.59
24:DC:61:TYR:CE1	24:DC:62:ARG:O	2.56	0.59
24:DC:32:LEU:HD23	24:DC:63:ILE:CG1	2.32	0.59
26:DE:150:THR:O	26:DE:192:ALA:HB2	2.03	0.59
23:DB:42:C:C5	27:DF:65:LEU:HD13	2.38	0.59
27:DF:67:THR:O	27:DF:84:ILE:HG22	2.03	0.59
28:DG:23:ILE:HG21	28:DG:71:LEU:HD21	1.84	0.59
29:DH:68:ARG:HD3	29:DH:71:LYS:CD	2.28	0.59
37:DP:102:ARG:O	37:DP:103:THR:HB	2.03	0.59
1:AA:114:U:H2'	1:AA:115:G:C8	2.38	0.59
1:AA:433:G:H2'	1:AA:434:U:H5'	1.84	0.59
1:AA:919:A:O2'	1:AA:920:U:H5'	2.02	0.59
4:AD:84:ASN:ND2	4:AD:87:GLU:H	2.00	0.59
8:AH:54:THR:O	8:AH:56:PRO:HD3	2.02	0.59
15:AO:81:ILE:HG13	15:AO:82:GLU:N	2.18	0.59
19:AS:55:GLN:NE2	19:AS:56:HIS:H	2.01	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1300:G:H5''	22:BA:1301:A:H5'	1.85	0.59
22:BA:1408:G:O2'	22:BA:1409:U:H5'	2.03	0.59
22:BA:2544:G:C2'	22:BA:2545:G:H5'	2.33	0.59
22:BA:2849:U:H4'	22:BA:2868:A:C2	2.37	0.59
22:BA:319:G:C4	22:BA:333:G:N2	2.71	0.59
22:BA:572:A:H8	56:BA:3567:HOH:O	1.86	0.59
22:BA:574:A:H2	25:BD:150:GLN:HE22	1.48	0.59
24:BC:114:GLN:O	24:BC:115:ILE:HD12	2.03	0.59
24:BC:64:VAL:HG11	24:BC:66:PHE:CZ	2.38	0.59
26:BE:147:LEU:HB2	26:BE:186:VAL:HB	1.84	0.59
27:BF:39:VAL:HG13	27:BF:84:ILE:HD12	1.83	0.59
28:BG:37:ASN:HB3	28:BG:40:VAL:CG1	2.32	0.59
22:BA:1132:U:H5'	31:BJ:84:ILE:HD13	1.84	0.59
40:BS:59:GLU:HA	40:BS:64:ALA:CA	2.32	0.59
40:BS:85:ILE:CG2	40:BS:86:MET:N	2.66	0.59
1:CA:1105:A:O2'	1:CA:1106:G:H5'	2.03	0.59
2:CB:186:VAL:O	2:CB:186:VAL:HG23	2.03	0.59
5:CE:68:ARG:O	5:CE:70:MET:HG2	2.02	0.59
1:CA:933:G:P	7:CG:3:ARG:HD3	2.43	0.59
9:CI:114:LYS:HD2	9:CI:117:LEU:HD12	1.84	0.59
11:CK:33:ILE:HD11	11:CK:69:CYS:O	2.02	0.59
11:CK:19:VAL:HB	11:CK:34:THR:CG2	2.32	0.59
12:CL:17:LYS:H	12:CL:17:LYS:HD3	1.68	0.59
14:CN:72:PHE:HB2	14:CN:78:LEU:O	2.03	0.59
17:CQ:9:GLY:HA3	17:CQ:23:ALA:O	2.03	0.59
20:CT:69:ASN:O	20:CT:72:ALA:HB3	2.02	0.59
22:DA:1329:U:O2'	22:DA:1330:C:OP1	2.20	0.59
22:DA:1345:C:C2	22:DA:1346:G:N7	2.70	0.59
22:DA:1555:G:N2	22:DA:1556:C:C2	2.70	0.59
22:DA:1717:A:C2'	22:DA:1718:G:O4'	2.51	0.59
22:DA:206:U:H2'	22:DA:207:A:C8	2.38	0.59
22:DA:2337:G:N3	22:DA:2337:G:H2'	2.17	0.59
22:DA:2345:G:H4'	22:DA:2346:A:O5'	2.02	0.59
22:DA:2478:A:C8	22:DA:2529:G:C5	2.90	0.59
22:DA:2716:C:H2'	22:DA:2717:C:C6	2.38	0.59
22:DA:2852:G:H2'	22:DA:2853:C:O4'	2.02	0.59
22:DA:295:G:C2	22:DA:296:U:C5	2.90	0.59
22:DA:851:C:H2'	22:DA:852:U:H6	1.65	0.59
22:DA:857:G:H1'	44:DW:19:ARG:NE	2.17	0.59
23:DB:12:C:H5''	23:DB:15:A:N6	2.17	0.59
25:DD:19:GLY:O	32:DK:72:PRO:HB3	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:6:LYS:HE3	26:DE:7:ASP:OD2	2.03	0.59
31:DJ:70:THR:HG22	31:DJ:90:GLU:CD	2.23	0.59
35:DN:93:GLY:O	35:DN:116:VAL:HG21	2.02	0.59
41:DT:21:SER:C	41:DT:25:GLU:HB3	2.23	0.59
43:DV:38:LEU:CD2	43:DV:40:ILE:HD12	2.33	0.59
45:DX:6:VAL:HG22	45:DX:7:THR:HG23	1.85	0.59
1:AA:1003:G:H22	1:AA:1005:A:H5'	1.65	0.59
1:AA:1007:U:H2'	1:AA:1008:U:C5'	2.23	0.59
1:AA:1460:C:O2'	1:AA:1461:G:H5'	2.03	0.59
1:AA:701:U:O2'	1:AA:702:A:OP2	2.19	0.59
1:AA:935:A:H2'	1:AA:936:C:H6	1.68	0.59
8:AH:17:GLN:OE1	8:AH:69:ALA:HB1	2.03	0.59
9:AI:89:TYR:O	9:AI:90:ASP:HB3	2.03	0.59
1:AA:972:C:H4'	10:AJ:59:LYS:HG2	1.83	0.59
10:AJ:44:THR:HG23	10:AJ:70:HIS:CA	2.33	0.59
13:AM:68:LEU:CD1	13:AM:72:ILE:HG13	2.32	0.59
18:AR:54:LEU:HG	18:AR:58:ILE:HD11	1.85	0.59
22:BA:2015:A:C6	48:B0:2:VAL:HG23	2.37	0.59
49:B1:16:THR:CG2	49:B1:41:VAL:HG21	2.33	0.59
22:BA:2466:C:OP1	52:B4:4:ARG:HB2	2.03	0.59
22:BA:1076:C:H2'	22:BA:1077:A:C8	2.33	0.59
22:BA:1575:C:H2'	22:BA:1576:U:O4'	2.02	0.59
22:BA:2897:U:H2'	22:BA:2898:U:C6	2.38	0.59
30:BI:105:LEU:HA	30:BI:108:ILE:HB	1.84	0.59
31:BJ:4:PHE:O	31:BJ:44:TYR:HE1	1.84	0.59
37:BP:102:ARG:O	37:BP:103:THR:HG22	2.02	0.59
37:BP:4:ILE:HA	37:BP:7:LEU:HB2	1.85	0.59
45:BX:50:VAL:HG12	45:BX:51:SER:N	2.16	0.59
1:CA:1120:C:H2'	1:CA:1121:U:H6	1.68	0.59
1:CA:134:G:H2'	1:CA:135:C:O4'	2.02	0.59
1:CA:1417:G:C6	1:CA:1482:G:C6	2.91	0.59
1:CA:185:U:H2'	1:CA:186:C:H6	1.68	0.59
1:CA:321:A:H61	1:CA:332:G:H1	1.51	0.59
1:CA:734:G:N2	1:CA:735:C:C2	2.71	0.59
2:CB:93:HIS:CE1	2:CB:145:ASN:HD22	2.21	0.59
2:CB:30:ILE:HD11	2:CB:188:THR:CG2	2.33	0.59
4:CD:116:LEU:HD21	4:CD:153:ARG:HD3	1.84	0.59
5:CE:110:MET:HG2	5:CE:139:THR:HG21	1.83	0.59
5:CE:80:LEU:N	5:CE:121:ASN:HD21	2.01	0.59
7:CG:55:LYS:H	7:CG:55:LYS:HD2	1.68	0.59
1:CA:1126:U:O4	10:CJ:73:LEU:HD11	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:126:ARG:HB2	21:CU:33:ARG:CD	2.32	0.59
48:D0:12:ARG:HG3	48:D0:15:ARG:HH11	1.68	0.59
50:D2:24:THR:HG23	50:D2:27:GLY:CA	2.33	0.59
22:DA:1060:U:C4'	22:DA:1061:U:O5'	2.43	0.59
22:DA:1188:U:O2'	22:DA:1189:A:H5'	2.03	0.59
22:DA:1200:C:H6	22:DA:1200:C:O5'	1.86	0.59
22:DA:1387:A:O2'	22:DA:1388:G:H8	1.86	0.59
22:DA:144:A:H2'	22:DA:145:C:H6	1.67	0.59
22:DA:1956:U:O2'	22:DA:1957:C:C5'	2.48	0.59
22:DA:2235:G:H2'	22:DA:2236:U:C6	2.38	0.59
22:DA:2286:G:H4'	22:DA:2287:A:C1'	2.33	0.59
22:DA:2584:U:H5	56:DA:3690:HOH:O	1.86	0.59
22:DA:303:G:O2'	22:DA:304:U:C6	2.48	0.59
22:DA:477:A:C4	22:DA:478:A:N7	2.71	0.59
22:DA:676:A:H2	22:DA:2069:G:N3	2.01	0.59
22:DA:59:U:O2'	22:DA:73:A:H2'	2.02	0.59
29:DH:110:VAL:HG23	29:DH:110:VAL:O	2.01	0.59
31:DJ:21:THR:HG23	31:DJ:61:LYS:HB3	1.85	0.59
32:DK:71:ARG:HG3	32:DK:72:PRO:HD3	1.83	0.59
37:DP:49:ILE:HG22	37:DP:95:LYS:NZ	2.18	0.59
39:DR:31:GLU:HG2	39:DR:32:THR:H	1.67	0.59
41:DT:7:LEU:O	41:DT:7:LEU:HD23	2.02	0.59
43:DV:82:TYR:CE1	43:DV:83:LYS:HG2	2.38	0.59
44:DW:30:VAL:CG2	44:DW:59:PHE:CE1	2.86	0.59
47:DZ:8:GLN:C	47:DZ:9:THR:HG23	2.23	0.59
1:AA:1053:G:O2'	1:AA:1054:C:OP2	2.20	0.59
1:AA:579:A:H2'	1:AA:580:C:C6	2.38	0.59
1:AA:616:G:C2	1:AA:625:U:O2	2.56	0.59
2:AB:60:ALA:HB2	2:AB:220:VAL:HG13	1.83	0.59
3:AC:106:ARG:HG2	3:AC:106:ARG:O	2.03	0.59
4:AD:125:ASN:OD1	4:AD:141:VAL:HG22	2.03	0.59
10:AJ:18:ILE:O	10:AJ:22:THR:N	2.35	0.59
11:AK:30:ILE:HD12	11:AK:31:VAL:N	2.17	0.59
17:AQ:35:LYS:HG2	17:AQ:36:PHE:N	2.18	0.59
19:AS:55:GLN:HA	19:AS:55:GLN:NE2	2.17	0.59
20:AT:60:GLN:HA	20:AT:60:GLN:NE2	2.18	0.59
11:AK:126:ARG:N	21:AU:33:ARG:HH12	1.99	0.59
49:B1:10:LEU:HD21	49:B1:33:LEU:CD2	2.32	0.59
22:BA:1716:U:H2'	22:BA:1717:A:C8	2.37	0.59
22:BA:2260:C:O2'	22:BA:2261:C:H5'	2.03	0.59
22:BA:2552:U:H2'	22:BA:2554:U:OP2	2.03	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:BB:28:C:H2'	23:BB:29:A:O4'	2.03	0.59
26:BE:72:SER:C	26:BE:74:LYS:H	2.06	0.59
30:BI:120:ASP:HB3	30:BI:123:ALA:HB3	1.83	0.59
37:BP:112:ARG:O	37:BP:113:LEU:HD23	2.02	0.59
39:BR:90:ARG:O	39:BR:91:GLN:CB	2.50	0.59
42:BU:94:PHE:O	42:BU:94:PHE:CD1	2.56	0.59
44:BW:18:LYS:CG	44:BW:19:ARG:H	2.09	0.59
44:BW:24:ARG:CZ	44:BW:65:LYS:HE2	2.33	0.59
1:CA:1134:G:N1	1:CA:1141:C:C4	2.71	0.59
4:CD:2:ARG:HH21	4:CD:114:ARG:NH1	1.99	0.59
10:CJ:101:SER:O	10:CJ:102:LEU:HB2	2.03	0.59
10:CJ:90:LEU:O	10:CJ:90:LEU:HD23	2.03	0.59
11:CK:55:ARG:N	11:CK:55:ARG:HD2	2.16	0.59
1:CA:882:C:H41	12:CL:5:GLN:NE2	2.01	0.59
13:CM:96:VAL:HG12	13:CM:96:VAL:O	2.02	0.59
16:CP:16:PHE:HZ	16:CP:38:PHE:HD1	1.51	0.59
22:DA:100:U:C6	22:DA:100:U:OP1	2.56	0.59
22:DA:1135:C:N4	22:DA:1139:G:C6	2.71	0.59
22:DA:1286:A:C6	22:DA:1289:C:N3	2.71	0.59
22:DA:1388:G:O2'	22:DA:1389:G:C5'	2.51	0.59
22:DA:151:C:O2'	22:DA:152:A:H5'	2.03	0.59
22:DA:2229:U:H2'	22:DA:2230:G:C8	2.38	0.59
22:DA:2328:A:H2'	22:DA:2329:U:C6	2.37	0.59
22:DA:2353:G:H1'	44:DW:30:VAL:CG1	2.31	0.59
22:DA:2415:G:H2'	22:DA:2416:C:H6	1.68	0.59
22:DA:242:G:C5'	51:D3:63:TYR:CE1	2.85	0.59
22:DA:2615:U:O2'	22:DA:2616:C:C5'	2.50	0.59
22:DA:2893:A:H1'	22:DA:2894:G:C6	2.38	0.59
22:DA:604:G:C2	22:DA:605:G:C5	2.91	0.59
22:DA:627:A:O2'	22:DA:628:G:O5'	2.21	0.59
22:DA:729:G:O2'	22:DA:1775:U:H1'	2.03	0.59
23:DB:39:A:C2	23:DB:44:G:C2	2.91	0.59
24:DC:63:ILE:HG22	24:DC:64:VAL:N	2.17	0.59
25:DD:53:GLY:CA	25:DD:77:ARG:HG3	2.30	0.59
26:DE:196:VAL:HG12	26:DE:196:VAL:O	2.02	0.59
27:DF:43:ILE:HD13	27:DF:82:TYR:CE2	2.35	0.59
31:DJ:3:THR:CG2	38:DQ:60:TRP:HE1	2.15	0.59
35:DN:33:ILE:HG12	35:DN:118:ARG:HD2	1.85	0.59
36:DO:31:THR:HG23	36:DO:34:HIS:O	2.02	0.59
37:DP:22:GLY:HA3	37:DP:91:VAL:CG2	2.32	0.59
2:AB:89:PHE:HB3	2:AB:149:GLY:CA	2.31	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:114:ARG:HG2	4:AD:132:ALA:HB1	1.85	0.58
12:AL:43:LYS:CB	12:AL:44:PRO:HD3	2.16	0.58
20:AT:61:ALA:HA	20:AT:66:ILE:HG22	1.83	0.58
22:BA:1179:G:C2	22:BA:1180:U:O2'	2.56	0.58
22:BA:1241:A:C2'	22:BA:1242:U:H5'	2.33	0.58
22:BA:1761:C:C2'	22:BA:1762:A:H5'	2.34	0.58
22:BA:1836:C:C2'	22:BA:1837:C:H5'	2.33	0.58
22:BA:2648:G:H2'	22:BA:2649:C:C6	2.38	0.58
22:BA:2681:C:C5	22:BA:2724:U:C5	2.91	0.58
22:BA:2732:G:OP2	22:BA:2732:G:H8	1.86	0.58
22:BA:373:U:O2'	22:BA:374:A:H5'	2.03	0.58
22:BA:783:A:C8	22:BA:784:G:H4'	2.38	0.58
22:BA:790:U:O2'	22:BA:791:C:O5'	2.20	0.58
22:BA:851:C:H2'	22:BA:852:U:C6	2.38	0.58
22:BA:869:G:H4'	34:BM:8:LYS:HD3	1.85	0.58
24:BC:39:SER:C	24:BC:41:GLY:N	2.56	0.58
24:BC:93:VAL:HG13	24:BC:94:LEU:N	2.17	0.58
26:BE:154:ASP:C	26:BE:154:ASP:OD2	2.42	0.58
33:BL:101:ILE:HG23	33:BL:102:GLY:N	2.17	0.58
36:BO:4:LYS:O	36:BO:8:ILE:HG13	2.02	0.58
22:BA:584:C:OP1	38:BQ:5:ARG:HB3	2.03	0.58
38:BQ:65:ASN:ND2	38:BQ:69:ARG:NH2	2.38	0.58
39:BR:49:ILE:HG22	39:BR:53:PHE:C	2.23	0.58
1:CA:1416:G:N2	1:CA:1485:U:H1'	2.17	0.58
1:CA:309:A:H1'	1:CA:608:A:C2	2.38	0.58
1:CA:373:A:H2'	1:CA:374:A:C8	2.35	0.58
1:CA:992:U:O2'	1:CA:993:G:OP2	2.21	0.58
3:CC:136:ALA:HA	3:CC:139:ASN:HD21	1.67	0.58
4:CD:109:THR:HG22	4:CD:111:ALA:H	1.67	0.58
4:CD:18:LEU:HD22	4:CD:63:ILE:HG12	1.85	0.58
4:CD:25:ARG:HH12	4:CD:30:LYS:CG	1.97	0.58
5:CE:89:THR:OG1	5:CE:90:GLY:N	2.33	0.58
6:CF:99:ALA:O	6:CF:100:SER:CB	2.50	0.58
6:CF:66:ALA:CB	6:CF:71:ILE:HD13	2.26	0.58
7:CG:73:GLU:HA	7:CG:140:VAL:HG11	1.84	0.58
8:CH:39:LEU:HB2	8:CH:45:ILE:HD11	1.84	0.58
5:CE:154:ALA:HB1	8:CH:65:PHE:HE2	1.67	0.58
13:CM:12:LYS:CE	13:CM:12:LYS:HA	2.28	0.58
14:CN:52:ARG:HA	14:CN:52:ARG:CZ	2.33	0.58
3:CC:32:LEU:HD12	14:CN:76:PHE:HA	1.84	0.58
19:CS:5:LYS:HE2	19:CS:6:LYS:O	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:D1:10:LEU:HD23	49:D1:20:TYR:CB	2.33	0.58
22:DA:1127:A:O2'	22:DA:1128:G:H5''	2.03	0.58
22:DA:1141:U:H4'	22:DA:1142:A:O5'	2.02	0.58
22:DA:129:C:O2'	22:DA:130:C:O4'	2.20	0.58
22:DA:1545:A:H2'	22:DA:1546:G:H5'	1.84	0.58
22:DA:1785:A:H2'	22:DA:1787:A:N7	2.18	0.58
22:DA:1802:A:O2'	22:DA:1803:A:C8	2.55	0.58
22:DA:2187:U:O2'	22:DA:2188:U:H5'	2.03	0.58
22:DA:2234:G:C5	22:DA:2235:G:N7	2.70	0.58
22:DA:2408:U:H5	56:DA:3596:HOH:O	1.85	0.58
22:DA:455:C:N4	22:DA:473:G:H5'	2.18	0.58
23:DB:67:G:O2'	23:DB:68:C:H6	1.85	0.58
28:DG:44:HIS:HA	28:DG:49:LEU:HA	1.85	0.58
32:DK:27:GLY:CA	32:DK:30:ARG:HD3	2.31	0.58
35:DN:75:ILE:HD12	35:DN:79:LEU:HD12	1.84	0.58
25:DD:9:VAL:CG2	37:DP:4:ILE:HD11	2.23	0.58
1:AA:723:U:H5'	1:AA:724:G:OP1	2.03	0.58
1:AA:923:A:H2'	1:AA:924:C:C6	2.38	0.58
1:AA:94:G:H4'	1:AA:95:C:H5''	1.83	0.58
3:AC:119:ILE:O	3:AC:123:LEU:HG	2.02	0.58
4:AD:109:THR:CG2	4:AD:112:GLU:HB2	2.33	0.58
5:AE:149:PRO:CA	5:AE:152:VAL:HG13	2.33	0.58
11:AK:100:ASN:HB2	11:AK:106:ILE:HG21	1.84	0.58
13:AM:15:VAL:HA	13:AM:33:LEU:HD11	1.85	0.58
14:AN:13:VAL:HA	14:AN:59:GLN:OE1	2.03	0.58
48:B0:33:SER:HB2	48:B0:35:GLU:HG3	1.84	0.58
22:BA:1060:U:O4'	22:BA:1062:G:H5''	2.03	0.58
22:BA:1507:C:C6	22:BA:1508:A:H2	2.21	0.58
22:BA:1858:A:H2'	22:BA:1859:U:C6	2.39	0.58
22:BA:2291:U:H2'	22:BA:2292:U:C6	2.37	0.58
22:BA:855:G:H1'	44:BW:23:LYS:CD	2.31	0.58
22:BA:988:A:C2'	22:BA:989:G:O5'	2.51	0.58
24:BC:254:LYS:O	24:BC:255:LYS:HB2	2.02	0.58
25:BD:106:LYS:HB2	25:BD:206:ALA:H	1.68	0.58
26:BE:45:ALA:C	26:BE:46:GLN:HG2	2.22	0.58
29:BH:38:PRO:HB2	29:BH:40:THR:HG23	1.85	0.58
32:BK:108:ARG:CG	32:BK:108:ARG:NH1	2.56	0.58
39:BR:21:ARG:NH2	39:BR:93:PHE:CE1	2.71	0.58
41:BT:1:MET:CB	41:BT:2:ILE:HD13	2.33	0.58
1:CA:1077:G:C2	1:CA:1081:A:C2	2.92	0.58
1:CA:183:C:H2'	1:CA:183:C:O2	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:366:A:H1'	1:CA:395:C:O2	2.03	0.58
1:CA:599:C:H4'	8:CH:121:GLY:CA	2.33	0.58
1:CA:702:A:H8	1:CA:702:A:OP1	1.86	0.58
3:CC:137:VAL:HG13	3:CC:148:ILE:CG2	2.34	0.58
13:CM:18:LEU:HD22	13:CM:32:ILE:HG21	1.84	0.58
20:CT:69:ASN:HD22	20:CT:69:ASN:C	2.06	0.58
52:D4:16:ILE:HG22	52:D4:16:ILE:O	2.03	0.58
22:DA:1387:A:C4	22:DA:1388:G:C8	2.90	0.58
22:DA:142:A:H2'	22:DA:143:C:C6	2.38	0.58
22:DA:150:U:H2'	22:DA:151:C:C6	2.38	0.58
22:DA:1792:G:O2'	22:DA:1793:C:H5'	2.03	0.58
22:DA:1832:C:H2'	22:DA:1833:C:O5'	2.03	0.58
22:DA:1973:G:C6	22:DA:1974:C:N4	2.71	0.58
22:DA:1975:G:C5	22:DA:1976:U:H5	2.15	0.58
22:DA:1993:U:O2'	22:DA:1994:C:C5'	2.51	0.58
22:DA:2092:U:H4'	22:DA:2093:G:OP1	2.02	0.58
22:DA:303:G:C6	22:DA:315:G:O6	2.56	0.58
22:DA:762:U:O2'	22:DA:763:G:H5''	2.03	0.58
22:DA:845:A:H61	22:DA:932:U:H3	1.49	0.58
23:DB:46:A:C2'	23:DB:47:C:H6	2.16	0.58
24:DC:183:VAL:HG13	24:DC:184:GLU:N	2.16	0.58
22:DA:784:G:N2	24:DC:227:VAL:CG2	2.66	0.58
26:DE:119:ILE:CD1	26:DE:143:LEU:CD2	2.79	0.58
26:DE:47:LYS:HB3	26:DE:51:GLU:CB	2.18	0.58
29:DH:57:LYS:HD2	29:DH:57:LYS:O	2.03	0.58
30:DI:132:ALA:HB1	30:DI:137:LEU:CD1	2.32	0.58
32:DK:105:ARG:O	32:DK:108:ARG:HG2	2.03	0.58
32:DK:19:VAL:HG12	32:DK:41:ILE:HG13	1.84	0.58
35:DN:16:HIS:CE1	35:DN:20:MET:HE2	2.38	0.58
35:DN:16:HIS:O	35:DN:20:MET:N	2.35	0.58
35:DN:31:HIS:O	35:DN:33:ILE:HG13	2.03	0.58
39:DR:1:MET:HG3	39:DR:101:ILE:HD12	1.84	0.58
39:DR:22:LEU:HD21	39:DR:96:VAL:HG22	1.84	0.58
1:AA:1303:C:O2'	1:AA:1304:G:C5'	2.52	0.58
1:AA:15:G:N7	1:AA:1396:A:C2	2.71	0.58
1:AA:186:C:O4'	20:AT:75:LYS:HD2	2.02	0.58
1:AA:342:C:C2'	1:AA:343:U:H5'	2.32	0.58
1:AA:923:A:OP1	5:AE:25:LYS:HG2	2.03	0.58
1:AA:96:U:O2'	1:AA:97:G:H8	1.86	0.58
2:AB:69:VAL:HG23	2:AB:160:LEU:HD11	1.84	0.58
1:AA:877:G:H21	8:AH:1:SER:H3	1.51	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:25:GLU:HG3	14:AN:26:LEU:HD12	1.84	0.58
15:AO:16:ARG:O	15:AO:17:ASP:CB	2.51	0.58
20:AT:57:VAL:HG12	20:AT:58:ASP:N	2.17	0.58
48:B0:24:VAL:C	48:B0:25:THR:HG23	2.23	0.58
22:BA:1254:A:H8	22:BA:1254:A:H5'	1.67	0.58
22:BA:22:C:C2'	22:BA:23:G:O5'	2.51	0.58
22:BA:2599:G:C2'	22:BA:2600:A:H5'	2.33	0.58
22:BA:2747:G:O6	22:BA:2755:C:H5''	2.03	0.58
26:BE:160:ALA:O	26:BE:161:ALA:HB3	2.03	0.58
28:BG:8:VAL:HG12	28:BG:9:VAL:N	2.17	0.58
31:BJ:25:LEU:HB2	31:BJ:62:VAL:CG2	2.34	0.58
22:BA:1131:G:C8	31:BJ:77:HIS:CE1	2.91	0.58
38:BQ:40:LYS:HA	38:BQ:43:GLN:HG3	1.83	0.58
1:CA:1169:A:H2'	1:CA:1170:A:H8	1.67	0.58
1:CA:243:A:H4'	1:CA:244:U:OP2	2.02	0.58
1:CA:747:A:H2'	1:CA:748:G:O4'	2.03	0.58
3:CC:149:LYS:O	3:CC:149:LYS:HD2	2.04	0.58
12:CL:82:ARG:HB2	12:CL:97:VAL:HG12	1.85	0.58
22:DA:1252:G:H5''	56:DA:3285:HOH:O	2.02	0.58
22:DA:1551:A:C6	22:DA:1552:A:N7	2.71	0.58
22:DA:1552:A:C2'	22:DA:1552:A:N3	2.64	0.58
22:DA:1813:G:N2	24:DC:49:THR:HB	2.18	0.58
22:DA:1969:A:H2'	22:DA:1972:G:H21	1.68	0.58
22:DA:2016:U:C4	22:DA:2017:U:C4	2.91	0.58
22:DA:2103:C:H2'	22:DA:2104:C:O4'	2.03	0.58
22:DA:2001:C:H4'	22:DA:2689:U:H2'	1.85	0.58
22:DA:2697:G:C5	22:DA:2698:U:C5	2.91	0.58
22:DA:2822:G:H2'	22:DA:2823:A:H5''	1.86	0.58
22:DA:53:A:N7	22:DA:54:G:C4	2.72	0.58
22:DA:584:C:OP1	38:DQ:5:ARG:HD3	2.03	0.58
22:DA:592:A:O2'	51:D3:3:ILE:HG13	2.02	0.58
22:DA:764:A:C2	22:DA:781:A:C2	2.91	0.58
23:DB:59:A:H2'	23:DB:60:C:O4'	2.03	0.58
24:DC:173:LEU:N	24:DC:173:LEU:CD2	2.67	0.58
28:DG:148:ARG:HB2	28:DG:152:ARG:HH21	1.68	0.58
28:DG:152:ARG:HG3	28:DG:153:PRO:HD2	1.84	0.58
28:DG:22:VAL:HG12	28:DG:23:ILE:N	2.16	0.58
32:DK:113:MET:HG3	32:DK:116:ILE:HD11	1.85	0.58
35:DN:90:ARG:HH21	35:DN:116:VAL:HG11	1.67	0.58
42:DU:14:THR:HB	42:DU:68:ASN:HB3	1.85	0.58
43:DV:16:ALA:HB2	43:DV:19:ARG:NH2	2.18	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1065:U:H5''	1:AA:1190:G:H21	1.68	0.58
1:AA:1055:A:N6	1:AA:1206:G:C5	2.72	0.58
1:AA:1225:A:H2'	1:AA:1226:C:C6	2.35	0.58
1:AA:1319:A:N7	1:AA:1323:G:C6	2.71	0.58
1:AA:214:C:H2'	1:AA:215:C:C6	2.33	0.58
2:AB:27:LYS:HB3	2:AB:28:PRO:HD3	1.86	0.58
5:AE:59:ILE:HD12	5:AE:59:ILE:C	2.23	0.58
7:AG:7:GLY:O	7:AG:8:GLN:HB3	2.03	0.58
10:AJ:88:MET:CE	10:AJ:89:ARG:HH12	2.16	0.58
12:AL:43:LYS:NZ	12:AL:44:PRO:CD	2.61	0.58
16:AP:6:LEU:HG	16:AP:17:TYR:HB3	1.85	0.58
22:BA:1016:G:H2'	22:BA:1017:G:O5'	2.03	0.58
22:BA:1058:U:O2'	30:BI:117:THR:HG23	2.03	0.58
22:BA:1115:G:O2'	22:BA:1116:G:H8	1.84	0.58
22:BA:1495:A:H2'	22:BA:1496:A:C8	2.38	0.58
22:BA:2466:C:H5'	52:B4:5:ALA:HB3	1.85	0.58
22:BA:287:G:H2'	22:BA:288:U:C6	2.37	0.58
22:BA:528:A:C8	22:BA:528:A:C3'	2.87	0.58
24:BC:166:ARG:HG2	24:BC:166:ARG:O	2.04	0.58
28:BG:83:THR:CA	28:BG:84:LYS:CE	2.81	0.58
34:BM:108:VAL:HG13	34:BM:109:PRO:HD2	1.85	0.58
34:BM:1:MET:CE	34:BM:2:LEU:N	2.64	0.58
22:BA:18:U:O3'	38:BQ:22:GLY:HA2	2.03	0.58
1:CA:1069:C:H4'	1:CA:1192:C:O2	2.03	0.58
1:CA:1528:U:O2'	1:CA:1529:G:H3'	2.02	0.58
1:CA:205:A:C5	1:CA:206:C:N4	2.70	0.58
1:CA:251:G:H4'	1:CA:252:U:H5''	1.84	0.58
1:CA:58:C:O2'	1:CA:59:A:H5'	2.03	0.58
1:CA:719:C:H3'	1:CA:720:C:C5	2.37	0.58
1:CA:855:U:H2'	1:CA:856:C:C6	2.39	0.58
2:CB:9:LEU:C	2:CB:11:ALA:H	2.05	0.58
3:CC:181:ILE:HG12	3:CC:202:PHE:HB2	1.85	0.58
18:CR:72:ARG:H	18:CR:72:ARG:NE	1.96	0.58
50:D2:31:LEU:HA	50:D2:34:ARG:HB2	1.85	0.58
51:D3:22:LYS:H	51:D3:48:MET:HB2	1.67	0.58
22:DA:991:C:C4	22:DA:1185:G:C6	2.91	0.58
22:DA:1638:C:H1'	22:DA:2698:U:O2'	2.03	0.58
22:DA:206:U:C2'	22:DA:207:A:H8	2.15	0.58
22:DA:777:G:N7	22:DA:793:A:H2	2.01	0.58
22:DA:1797:G:O3'	24:DC:255:LYS:O	2.20	0.58
25:DD:38:LYS:HD2	25:DD:45:TYR:CZ	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:28:PRO:HB2	27:DF:168:LEU:CG	2.33	0.58
28:DG:175:LYS:HD3	28:DG:175:LYS:C	2.24	0.58
28:DG:93:TYR:HD2	28:DG:93:TYR:N	2.00	0.58
29:DH:147:VAL:O	29:DH:148:ALA:HB3	2.03	0.58
32:DK:5:GLN:HA	32:DK:20:MET:SD	2.43	0.58
33:DL:79:LEU:CD2	33:DL:115:GLU:O	2.51	0.58
33:DL:128:THR:HB	33:DL:131:ALA:HB3	1.85	0.58
35:DN:14:SER:C	35:DN:16:HIS:N	2.53	0.58
36:DO:27:VAL:HB	36:DO:38:GLN:CG	2.31	0.58
39:DR:4:VAL:HG23	39:DR:39:LEU:HG	1.85	0.58
43:DV:1:MET:HA	43:DV:1:MET:CE	2.34	0.58
44:DW:8:SER:O	44:DW:9:THR:CB	2.50	0.58
1:AA:40:C:O2	1:AA:40:C:H2'	2.03	0.58
1:AA:462:G:C5'	1:AA:463:U:OP2	2.51	0.58
1:AA:500:G:H2'	1:AA:501:C:C5	2.37	0.58
1:AA:523:A:H61	12:AL:88:ASP:CB	2.17	0.58
1:AA:613:C:O2'	1:AA:614:C:H5'	2.03	0.58
1:AA:920:U:O4'	1:AA:1080:A:C2	2.57	0.58
1:AA:91:U:O2'	1:AA:92:U:O4'	2.21	0.58
2:AB:89:PHE:CE1	2:AB:153:MET:HB2	2.39	0.58
5:AE:82:HIS:HB2	5:AE:83:PRO:CD	2.34	0.58
10:AJ:15:HIS:CG	10:AJ:16:ARG:N	2.71	0.58
10:AJ:44:THR:HG23	10:AJ:70:HIS:HA	1.84	0.58
11:AK:23:HIS:HB3	11:AK:30:ILE:HG13	1.85	0.58
22:BA:1456:G:C5	22:BA:1457:U:C5	2.91	0.58
22:BA:1858:A:H2'	22:BA:1859:U:C5	2.38	0.58
22:BA:455:C:N3	22:BA:472:A:H2'	2.18	0.58
22:BA:693:A:H2'	22:BA:694:U:O4'	2.04	0.58
26:BE:148:ILE:HA	26:BE:187:VAL:HB	1.85	0.58
28:BG:30:GLY:HA3	28:BG:78:VAL:CG1	2.33	0.58
32:BK:113:MET:SD	32:BK:116:ILE:CD1	2.89	0.58
33:BL:77:ILE:HD13	33:BL:108:ALA:HB1	1.84	0.58
33:BL:89:VAL:HA	33:BL:121:THR:HG23	1.86	0.58
42:BU:43:LYS:O	42:BU:57:ILE:HA	2.03	0.58
1:CA:119:A:C4'	1:CA:120:A:O5'	2.51	0.58
1:CA:1470:U:O2'	1:CA:1471:U:H5'	2.03	0.58
1:CA:309:A:H1'	1:CA:608:A:H2	1.67	0.58
1:CA:441:A:H61	1:CA:493:A:H62	1.51	0.58
1:CA:518:C:H2'	1:CA:530:G:N7	2.17	0.58
1:CA:688:G:H5''	1:CA:688:G:H8	1.66	0.58
4:CD:26:ALA:O	4:CD:31:CYS:SG	2.60	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:57:LYS:HG3	4:CD:58:GLN:N	2.17	0.58
5:CE:71:ILE:HG23	5:CE:73:VAL:HG22	1.86	0.58
12:CL:61:GLU:HG3	12:CL:61:GLU:O	2.04	0.58
14:CN:26:LEU:O	14:CN:26:LEU:HD23	2.03	0.58
1:CA:261:U:C5	20:CT:73:ARG:NE	2.72	0.58
21:CU:19:LYS:C	21:CU:21:SER:H	2.06	0.58
22:DA:1708:C:H2'	22:DA:1709:U:C6	2.38	0.58
22:DA:1844:C:O2	22:DA:1844:C:H2'	2.02	0.58
22:DA:2297:A:O2'	22:DA:2298:A:H8	1.85	0.58
22:DA:271:G:O2'	22:DA:272:A:O5'	2.21	0.58
22:DA:799:G:P	22:DA:800:A:H3'	2.42	0.58
22:DA:811:U:H5''	22:DA:812:C:OP2	2.03	0.58
27:DF:74:ALA:HB1	27:DF:76:PHE:HD2	1.67	0.58
28:DG:24:THR:O	28:DG:25:ILE:HD12	2.03	0.58
28:DG:38:ASP:O	28:DG:39:ALA:HB2	2.04	0.58
32:DK:9:ASN:N	32:DK:9:ASN:HD22	2.00	0.58
35:DN:80:PHE:O	35:DN:85:PRO:HD3	2.04	0.58
36:DO:35:ILE:HG13	36:DO:102:ARG:HD2	1.83	0.58
38:DQ:27:ARG:HA	38:DQ:33:VAL:HG12	1.86	0.58
39:DR:10:LYS:N	39:DR:10:LYS:HD2	2.17	0.58
44:DW:81:ILE:HD12	44:DW:81:ILE:C	2.23	0.58
1:AA:1160:G:O6	1:AA:1181:G:O6	2.22	0.58
1:AA:1228:C:H2'	1:AA:1229:A:C8	2.39	0.58
1:AA:1284:C:H2'	1:AA:1285:A:H8	1.61	0.58
1:AA:1381:U:O2'	1:AA:1382:C:H6	1.76	0.58
1:AA:575:G:C6	1:AA:821:G:N7	2.72	0.58
1:AA:6:G:HO2'	1:AA:7:A:H8	1.50	0.58
1:AA:89:U:O2'	1:AA:90:C:C5'	2.52	0.58
2:AB:148:GLY:CA	2:AB:151:LYS:HE3	2.33	0.58
2:AB:71:THR:HG23	2:AB:93:HIS:C	2.24	0.58
4:AD:33:ILE:O	4:AD:34:GLU:HB3	2.02	0.58
6:AF:4:TYR:CD2	6:AF:71:ILE:HG12	2.38	0.58
11:AK:80:ASN:HB3	11:AK:105:ARG:HB3	1.85	0.58
14:AN:4:SER:O	14:AN:8:ARG:HG3	2.04	0.58
20:AT:2:ASN:O	20:AT:3:ILE:C	2.41	0.58
22:BA:1476:U:OP2	22:BA:1476:U:H6	1.86	0.58
22:BA:1508:A:O2'	22:BA:1509:A:O5'	2.22	0.58
22:BA:1945:G:H2'	22:BA:1946:U:H6	1.68	0.58
22:BA:273:G:O2'	22:BA:274:C:C5'	2.52	0.58
22:BA:412:A:O2'	22:BA:413:C:C5'	2.44	0.58
25:BD:107:VAL:H	25:BD:206:ALA:N	2.02	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BG:148:ARG:HA	28:BG:161:VAL:HG11	1.86	0.58
28:BG:23:ILE:HG21	28:BG:71:LEU:CD1	2.33	0.58
31:BJ:74:TYR:CD2	31:BJ:92:MET:HE1	2.38	0.58
32:BK:61:VAL:HG21	32:BK:112:PHE:CE2	2.38	0.58
35:BN:65:LEU:HD11	35:BN:69:ARG:HH21	1.66	0.58
38:BQ:81:GLY:HA2	38:BQ:116:LEU:HD12	1.84	0.58
39:BR:49:ILE:CG2	39:BR:53:PHE:N	2.67	0.58
41:BT:59:ASN:O	41:BT:83:ALA:O	2.21	0.58
45:BX:53:LYS:O	45:BX:57:VAL:HG23	2.03	0.58
1:CA:1101:A:C4'	1:CA:1102:A:O5'	2.52	0.58
1:CA:313:A:H2'	1:CA:314:C:H6	1.67	0.58
1:CA:330:C:O2'	1:CA:331:G:C5'	2.51	0.58
1:CA:47:C:H4'	1:CA:48:C:O5'	2.04	0.58
1:CA:647:C:H2'	1:CA:648:A:C8	2.38	0.58
2:CB:128:LEU:HD22	2:CB:132:GLU:HG2	1.85	0.58
2:CB:139:GLU:O	2:CB:143:LEU:HG	2.03	0.58
3:CC:76:ILE:HG12	3:CC:83:VAL:HG11	1.86	0.58
4:CD:186:GLU:O	4:CD:187:ARG:HB2	2.02	0.58
6:CF:41:ASP:OD2	6:CF:58:HIS:HE1	1.86	0.58
6:CF:38:ARG:HG3	6:CF:63:ASN:HB2	1.85	0.58
9:CI:12:LYS:HG2	9:CI:12:LYS:O	2.04	0.58
14:CN:31:SER:HA	14:CN:45:LEU:HD11	1.85	0.58
21:CU:24:LYS:HZ2	21:CU:25:ALA:HB2	1.69	0.58
22:DA:1208:C:O2'	22:DA:1209:U:C6	2.56	0.58
22:DA:1324:G:H3'	22:DA:1325:U:H5''	1.84	0.58
22:DA:1385:A:O2'	22:DA:1386:C:C5'	2.52	0.58
22:DA:1441:G:H2'	22:DA:1442:U:H6	1.66	0.58
22:DA:1607:C:H4'	22:DA:1608:A:H8	1.68	0.58
22:DA:2087:G:C2	22:DA:2233:U:O2	2.57	0.58
22:DA:2352:A:H2'	22:DA:2353:G:H5'	1.85	0.58
22:DA:2401:U:H5''	22:DA:2402:U:OP2	2.04	0.58
22:DA:311:A:H1'	22:DA:332:A:C8	2.38	0.58
22:DA:876:C:H3'	22:DA:877:A:C8	2.35	0.58
25:DD:124:ARG:NH1	25:DD:125:TRP:CZ2	2.72	0.58
22:DA:2051:A:H4'	25:DD:146:ILE:HG23	1.84	0.58
25:DD:94:GLN:HG2	25:DD:94:GLN:O	2.03	0.58
26:DE:134:LEU:HA	26:DE:137:LYS:HB2	1.84	0.58
27:DF:100:GLU:O	27:DF:100:GLU:HG2	2.02	0.58
27:DF:65:LEU:CG	27:DF:67:THR:HG23	2.32	0.58
29:DH:54:LEU:HA	29:DH:57:LYS:HG2	1.86	0.58
44:DW:51:GLY:HA3	44:DW:59:PHE:H	1.68	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DX:77:TYR:C	45:DX:77:TYR:CD1	2.77	0.58
1:AA:1078:U:O4'	5:AE:88:HIS:HE1	1.86	0.58
1:AA:115:G:H1'	1:AA:116:A:N7	2.18	0.58
1:AA:126:G:C2'	1:AA:127:G:O5'	2.51	0.58
1:AA:1285:A:H5'	1:AA:1286:U:O4	2.03	0.58
1:AA:335:C:H2'	1:AA:336:A:C8	2.38	0.58
1:AA:450:G:N7	1:AA:481:G:O6	2.37	0.58
5:AE:109:ALA:O	5:AE:110:MET:CB	2.52	0.58
9:AI:86:LEU:HD23	9:AI:93:LEU:HD22	1.84	0.58
13:AM:89:ARG:HH11	13:AM:94:LEU:HB3	1.69	0.58
3:AC:36:PHE:HZ	14:AN:89:ARG:HH12	1.51	0.58
16:AP:46:LYS:NZ	16:AP:48:GLU:HB3	2.17	0.58
16:AP:77:GLU:C	16:AP:79:ASN:H	2.06	0.58
17:AQ:48:GLU:O	17:AQ:49:ASN:ND2	2.37	0.58
18:AR:21:ASP:OD2	18:AR:23:LYS:HD2	2.04	0.58
48:B0:14:MET:O	48:B0:17:SER:HB3	2.04	0.58
49:B1:29:LYS:HB3	49:B1:29:LYS:NZ	2.19	0.58
22:BA:1875:G:HO2'	22:BA:1876:A:H8	1.52	0.58
22:BA:1941:C:C5'	22:BA:1941:C:C6	2.83	0.58
22:BA:2104:C:H2'	22:BA:2105:U:O4'	2.03	0.58
22:BA:754:U:H2'	22:BA:755:U:H6	1.67	0.58
23:BB:46:A:C5	23:BB:47:C:C4	2.92	0.58
22:BA:1993:U:H4'	25:BD:133:THR:CG2	2.33	0.58
25:BD:92:VAL:HG12	25:BD:92:VAL:O	2.02	0.58
28:BG:142:GLN:HA	28:BG:142:GLN:HE21	1.68	0.58
37:BP:105:LYS:HA	37:BP:108:ARG:HH21	1.68	0.58
1:CA:1111:A:C2'	1:CA:1112:C:H5'	2.34	0.58
1:CA:1151:A:O3'	10:CJ:70:HIS:CE1	2.56	0.58
1:CA:383:A:C8	1:CA:384:G:H1'	2.39	0.58
1:CA:519:C:O2'	1:CA:520:A:O4'	2.20	0.58
1:CA:642:A:O2'	1:CA:643:C:H5'	2.03	0.58
1:CA:679:C:O2	1:CA:712:A:C2	2.56	0.58
1:CA:976:G:OP1	1:CA:976:G:H4'	2.02	0.58
5:CE:95:MET:CB	5:CE:124:ALA:HB2	2.22	0.58
10:CJ:17:LEU:CD2	10:CJ:96:VAL:HG13	2.33	0.58
13:CM:16:ILE:H	13:CM:16:ILE:HD12	1.69	0.58
22:DA:1051:G:H2'	22:DA:1052:C:C6	2.39	0.58
22:DA:1291:C:O2'	22:DA:1292:G:O4'	2.21	0.58
22:DA:1426:G:C8	22:DA:1427:A:H2'	2.38	0.58
22:DA:1613:G:N1	22:DA:1617:C:C2	2.72	0.58
22:DA:1827:U:H2'	22:DA:1828:G:C8	2.38	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1493:A:H3'	22:DA:1913:A:N6	2.18	0.58
22:DA:1975:G:C6	22:DA:1976:U:C5	2.92	0.58
22:DA:2091:C:N4	22:DA:2092:U:C4	2.72	0.58
22:DA:2230:G:H2'	22:DA:2231:U:C6	2.38	0.58
22:DA:2874:C:O2'	22:DA:2875:C:C6	2.53	0.58
22:DA:653:U:H4'	22:DA:653:U:OP1	2.03	0.58
22:DA:709:U:H2'	22:DA:710:U:H6	1.68	0.58
22:DA:860:U:O4'	22:DA:2268:A:H5'	2.03	0.58
24:DC:66:PHE:HB3	24:DC:150:GLY:O	2.03	0.58
27:DF:111:ARG:HG3	27:DF:135:ILE:HG12	1.86	0.58
27:DF:45:ASP:HB3	27:DF:48:LEU:CD2	2.34	0.58
27:DF:97:GLU:HG2	27:DF:97:GLU:O	2.01	0.58
28:DG:169:ARG:O	28:DG:170:THR:HB	2.02	0.58
30:DI:12:VAL:HG12	30:DI:13:ALA:N	2.18	0.58
34:DM:36:VAL:CG2	34:DM:129:THR:HG22	2.27	0.58
35:DN:71:ARG:CB	35:DN:71:ARG:HH21	2.08	0.58
36:DO:17:LYS:HE3	36:DO:17:LYS:C	2.23	0.58
37:DP:37:LYS:O	37:DP:38:ARG:HB3	2.03	0.58
22:DA:2013:A:OP1	40:DS:96:ILE:HA	2.04	0.58
42:DU:95:PHE:N	42:DU:95:PHE:HD1	1.92	0.58
42:DU:81:ARG:CG	42:DU:96:LYS:HD2	2.33	0.58
44:DW:17:ALA:CB	44:DW:36:ILE:HA	2.34	0.58
44:DW:77:LYS:O	44:DW:78:PHE:CB	2.51	0.58
44:DW:49:ASN:HD21	44:DW:80:SER:HA	1.68	0.58
45:DX:63:ILE:CD1	45:DX:64:ASP:H	2.16	0.58
1:AA:1449:C:O2'	1:AA:1450:U:H5'	2.04	0.58
1:AA:556:C:H2'	1:AA:557:G:H5'	1.84	0.58
2:AB:212:TYR:O	2:AB:216:VAL:HG23	2.04	0.58
12:AL:98:ARG:HB2	12:AL:116:TYR:HA	1.85	0.58
13:AM:68:LEU:O	13:AM:72:ILE:HG13	2.04	0.58
15:AO:20:ASP:OD1	15:AO:23:SER:HB2	2.03	0.58
17:AQ:18:LYS:HA	17:AQ:47:ASP:HB3	1.81	0.58
18:AR:35:SER:HB3	21:AU:3:ILE:CG1	2.34	0.58
20:AT:8:LYS:HA	20:AT:11:ILE:CG2	2.33	0.58
22:BA:1106:G:N2	22:BA:1107:G:H1'	2.18	0.58
22:BA:1327:A:H2'	22:BA:1328:A:O4'	2.04	0.58
22:BA:1853:A:N1	22:BA:2087:G:H1'	2.18	0.58
22:BA:2365:G:H2'	22:BA:2366:A:C8	2.39	0.58
22:BA:60:G:C8	22:BA:62:U:C6	2.92	0.58
22:BA:806:C:O5'	22:BA:806:C:H6	1.87	0.58
23:BB:2:G:N1	23:BB:119:A:C2	2.72	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:252:LYS:CB	24:BC:252:LYS:NZ	2.67	0.58
24:BC:49:THR:HG22	24:BC:50:THR:N	2.17	0.58
27:BF:72:SER:OG	27:BF:79:ARG:HA	2.04	0.58
27:BF:84:ILE:CG1	27:BF:84:ILE:O	2.52	0.58
28:BG:59:ASP:O	28:BG:60:GLY:C	2.42	0.58
22:BA:2747:G:O2'	28:BG:66:THR:HG22	2.04	0.58
29:BH:53:GLU:O	29:BH:54:LEU:HD22	2.03	0.58
22:BA:636:G:C4	33:BL:111:ILE:HD11	2.35	0.58
33:BL:68:SER:CB	33:BL:71:ALA:HB2	2.34	0.58
37:BP:85:VAL:HG12	37:BP:86:LYS:N	2.19	0.58
41:BT:20:ALA:O	41:BT:22:THR:N	2.37	0.58
43:BV:2:PHE:CB	43:BV:61:LEU:HD22	2.33	0.58
44:BW:13:ARG:O	44:BW:14:ASP:C	2.41	0.58
1:CA:1333:A:H2'	1:CA:1334:G:O4'	2.03	0.58
1:CA:57:G:N1	1:CA:356:A:C2	2.72	0.58
1:CA:664:G:N2	1:CA:741:G:H1	1.95	0.58
1:CA:91:U:O2'	1:CA:92:U:H6	1.86	0.58
1:CA:935:A:N6	7:CG:2:ARG:CZ	2.67	0.58
4:CD:24:VAL:O	4:CD:25:ARG:HB2	2.04	0.58
4:CD:84:ASN:ND2	4:CD:86:GLY:H	2.02	0.58
5:CE:103:GLY:O	5:CE:104:ILE:CG2	2.41	0.58
6:CF:81:ASN:C	6:CF:81:ASN:HD22	2.07	0.58
7:CG:119:LEU:HD23	7:CG:120:ALA:N	2.18	0.58
7:CG:34:LYS:NZ	7:CG:34:LYS:HB2	2.19	0.58
7:CG:4:ARG:CZ	7:CG:6:ILE:HG22	2.33	0.58
14:CN:30:ILE:O	14:CN:40:ARG:HA	2.04	0.58
18:CR:32:ILE:HD12	18:CR:33:THR:O	2.04	0.58
19:CS:10:ILE:HG22	19:CS:14:LEU:HD21	1.86	0.58
19:CS:11:ASP:H	19:CS:14:LEU:HD21	1.68	0.58
1:CA:192:A:C2	20:CT:54:GLN:NE2	2.71	0.58
22:DA:1055:G:N3	22:DA:1055:G:H2'	2.19	0.58
22:DA:183:C:H6	22:DA:183:C:O5'	1.86	0.58
22:DA:1845:G:C6	22:DA:1846:G:C5	2.92	0.58
22:DA:1887:C:C2'	22:DA:1888:G:H5'	2.33	0.58
22:DA:2611:C:C5'	22:DA:2611:C:H6	2.11	0.58
22:DA:481:G:HO2'	22:DA:507:A:H61	1.51	0.58
22:DA:608:A:C6	22:DA:621:A:C8	2.92	0.58
23:DB:18:G:C2	23:DB:19:C:C2	2.91	0.58
23:DB:27:C:O2'	23:DB:28:C:H5'	2.04	0.58
24:DC:52:HIS:HA	24:DC:216:ARG:HB2	1.85	0.58
22:DA:797:G:OP1	26:DE:57:LYS:HG2	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:7:GLY:CA	35:DN:46:ARG:HH22	2.17	0.58
35:DN:52:ILE:HG21	35:DN:94:TYR:CD2	2.38	0.58
36:DO:30:ARG:HG2	36:DO:31:THR:H	1.66	0.58
1:AA:1507:A:O2'	1:AA:1508:A:H5'	2.04	0.58
1:AA:438:U:O2'	1:AA:439:U:OP2	2.19	0.58
1:AA:652:U:O2'	1:AA:653:U:O5'	2.22	0.58
4:AD:62:ARG:HA	4:AD:62:ARG:NE	2.17	0.58
4:AD:75:TYR:CD1	4:AD:75:TYR:C	2.77	0.58
11:AK:124:LYS:HE3	21:AU:34:ARG:CD	2.33	0.58
16:AP:20:VAL:HG21	16:AP:32:PHE:CB	2.33	0.58
17:AQ:74:LEU:HD12	17:AQ:74:LEU:N	2.13	0.58
22:BA:1016:G:C2'	22:BA:1017:G:O5'	2.52	0.58
22:BA:1084:A:C6	22:BA:1085:A:C6	2.92	0.58
22:BA:1786:A:H1'	22:BA:1938:A:N6	2.19	0.58
22:BA:1759:A:C8	22:BA:2696:U:H1'	2.39	0.58
22:BA:511:U:C5	22:BA:512:G:C5	2.92	0.58
24:BC:80:LEU:HD11	24:BC:109:LEU:HB2	1.86	0.58
25:BD:16:THR:HG23	25:BD:20:VAL:HB	1.85	0.58
25:BD:97:SER:O	25:BD:99:GLU:CG	2.51	0.58
33:BL:110:VAL:CG1	33:BL:131:ALA:CB	2.80	0.58
44:BW:37:VAL:O	44:BW:38:ARG:CB	2.52	0.58
1:CA:106:C:HO2'	1:CA:107:G:H5'	1.67	0.58
1:CA:348:G:H2'	1:CA:349:A:C8	2.37	0.58
1:CA:5:U:H4'	1:CA:6:G:H5''	1.85	0.58
1:CA:745:G:H2'	1:CA:746:A:C8	2.38	0.58
2:CB:160:LEU:HB2	2:CB:182:VAL:HG12	1.84	0.58
2:CB:185:ILE:CG2	2:CB:199:ILE:HG13	2.28	0.58
6:CF:42:TRP:CB	6:CF:59:TYR:HB2	2.33	0.58
10:CJ:40:ILE:HG22	10:CJ:42:LEU:HD11	1.84	0.58
13:CM:76:ILE:O	13:CM:76:ILE:HG22	2.04	0.58
22:DA:1060:U:C4'	22:DA:1061:U:C2'	2.81	0.58
22:DA:1063:G:HO2'	22:DA:1064:C:H6	1.47	0.58
22:DA:1092:C:H2'	22:DA:1093:G:C5'	2.32	0.58
22:DA:1195:G:N3	22:DA:1226:A:C2	2.72	0.58
22:DA:1635:A:H2'	22:DA:1636:U:H6	1.68	0.58
22:DA:165:A:C4	22:DA:166:U:C5	2.91	0.58
22:DA:1808:A:O3'	22:DA:1809:A:C8	2.57	0.58
22:DA:233:A:O2'	22:DA:234:U:C6	2.54	0.58
22:DA:27:G:H1'	22:DA:513:A:H62	1.67	0.58
22:DA:2848:G:OP2	37:DP:94:ALA:HB2	2.04	0.58
22:DA:303:G:C2	22:DA:304:U:C2	2.92	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:477:A:C2'	22:DA:478:A:C8	2.86	0.58
22:DA:632:A:O3'	33:DL:68:SER:HB3	2.04	0.58
26:DE:29:HIS:HA	26:DE:32:VAL:CG2	2.33	0.58
27:DF:32:LYS:NZ	27:DF:32:LYS:HB2	2.19	0.58
27:DF:59:ILE:HD13	27:DF:137:PHE:HZ	1.68	0.58
28:DG:162:ARG:C	28:DG:163:TYR:HD2	2.07	0.58
29:DH:31:VAL:HB	29:DH:32:PRO:CD	2.27	0.58
32:DK:15:GLY:O	32:DK:16:ALA:O	2.22	0.58
33:DL:55:MET:SD	33:DL:59:ARG:NE	2.76	0.58
34:DM:31:PHE:HB2	34:DM:105:MET:HB3	1.86	0.58
40:DS:33:LEU:CA	40:DS:36:LEU:HD23	2.34	0.58
42:DU:82:VAL:HB	42:DU:93:ARG:HB3	1.85	0.58
46:DY:9:LYS:HB3	46:DY:12:GLU:HG3	1.84	0.58
1:AA:1123:U:H5''	1:AA:1124:G:OP2	2.04	0.58
1:AA:1239:A:H4'	1:AA:1240:U:C5'	2.34	0.58
1:AA:1492:A:H2'	1:AA:1493:A:C5'	2.33	0.58
1:AA:154:U:C2'	1:AA:155:A:H5'	2.34	0.58
1:AA:507:C:OP2	1:AA:508:U:H3'	2.03	0.58
4:AD:89:LEU:CD2	4:AD:199:ILE:HD11	2.28	0.58
10:AJ:48:ARG:NH1	10:AJ:48:ARG:CG	2.50	0.58
11:AK:21:HIS:CD2	11:AK:34:THR:CG2	2.86	0.58
11:AK:27:ASN:O	11:AK:56:LYS:HE3	2.03	0.58
17:AQ:27:PHE:O	17:AQ:28:VAL:HG12	2.03	0.58
19:AS:14:LEU:HD13	19:AS:32:THR:HG21	1.85	0.58
52:B4:9:LYS:H	52:B4:9:LYS:CE	2.17	0.58
22:BA:1141:U:H6	31:BJ:65:THR:HG21	1.69	0.58
22:BA:142:A:O2'	22:BA:143:C:O5'	2.22	0.58
22:BA:1452:G:H2'	22:BA:1457:U:O4	2.04	0.58
22:BA:145:C:O2'	22:BA:146:A:H5'	2.04	0.58
22:BA:2547:A:H2'	22:BA:2548:U:H6	1.66	0.58
22:BA:568:U:O2	22:BA:570:G:C8	2.56	0.58
22:BA:947:A:HO2'	22:BA:984:A:H2	1.52	0.58
27:BF:71:LYS:HA	27:BF:80:GLN:HG2	1.86	0.58
22:BA:2531:A:P	28:BG:174:LYS:HG3	2.44	0.58
28:BG:97:VAL:HG23	28:BG:124:CYS:SG	2.44	0.58
34:BM:83:GLY:O	34:BM:85:GLY:N	2.37	0.58
40:BS:36:LEU:HD23	40:BS:48:LYS:CA	2.32	0.58
1:CA:98:A:C2	1:CA:99:C:C2	2.91	0.58
9:CI:114:LYS:HD2	9:CI:120:ALA:O	2.03	0.58
11:CK:70:ALA:CA	11:CK:73:VAL:HG22	2.16	0.58
13:CM:64:VAL:CG1	13:CM:65:GLU:H	2.09	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:D3:35:LYS:HB2	51:D3:40:LYS:HD3	1.86	0.58
22:DA:1227:G:C2'	22:DA:1228:G:H5'	2.34	0.58
22:DA:1413:A:C6	22:DA:1414:C:N4	2.72	0.58
22:DA:1512:C:O2'	22:DA:1513:U:H5'	2.04	0.58
22:DA:1544:A:C6	22:DA:1545:A:C6	2.92	0.58
22:DA:1555:G:C2	22:DA:1556:C:C2	2.91	0.58
22:DA:20:C:H2'	22:DA:21:A:C8	2.38	0.58
22:DA:234:U:H2'	22:DA:235:U:C6	2.39	0.58
22:DA:2415:G:H2'	22:DA:2416:C:C6	2.39	0.58
22:DA:2446:G:C2	22:DA:2501:C:C5	2.92	0.58
22:DA:2478:A:C8	22:DA:2529:G:C6	2.91	0.58
22:DA:266:G:C2'	22:DA:267:C:O5'	2.51	0.58
22:DA:371:A:C4	22:DA:373:U:O4	2.56	0.58
22:DA:464:U:H2'	22:DA:465:G:O4'	2.04	0.58
22:DA:856:G:H1	22:DA:921:C:H42	1.52	0.58
22:DA:953:G:O2'	22:DA:954:G:H5'	2.04	0.58
23:DB:78:A:C2	23:DB:99:A:C4	2.92	0.58
24:DC:29:PHE:C	24:DC:31:PRO:HD2	2.24	0.58
26:DE:52:VAL:HG12	26:DE:74:LYS:HG2	1.86	0.58
27:DF:122:ASP:HB3	27:DF:126:ASN:HD22	1.69	0.58
27:DF:43:ILE:CG1	27:DF:77:LYS:HG2	2.34	0.58
29:DH:94:ILE:CG1	29:DH:98:ASP:OD1	2.51	0.58
31:DJ:43:GLU:O	31:DJ:45:THR:N	2.37	0.58
37:DP:42:PHE:CE2	37:DP:71:ARG:HD3	2.39	0.58
37:DP:50:ARG:CA	37:DP:57:ALA:H	2.17	0.58
38:DQ:48:ASP:HA	38:DQ:51:GLN:HB2	1.86	0.58
39:DR:49:ILE:HD12	39:DR:51:VAL:O	2.02	0.58
40:DS:24:ILE:HG21	40:DS:36:LEU:HD21	1.86	0.58
44:DW:37:VAL:HA	44:DW:55:ASP:O	2.03	0.58
1:AA:1153:G:O2'	1:AA:1154:G:O5'	2.22	0.57
1:AA:1239:A:H1'	1:AA:1241:G:C4	2.40	0.57
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.03	0.57
1:AA:563:A:C8	1:AA:567:G:O4'	2.56	0.57
1:AA:588:G:N2	1:AA:589:U:H1'	2.19	0.57
1:AA:788:U:H2'	1:AA:789:U:H6	1.68	0.57
2:AB:49:PHE:O	2:AB:52:ALA:HB3	2.04	0.57
2:AB:56:LEU:HD13	2:AB:220:VAL:HG22	1.85	0.57
2:AB:80:LYS:HB2	2:AB:90:PHE:CE1	2.39	0.57
5:AE:11:GLN:HE21	5:AE:11:GLN:CA	2.08	0.57
1:AA:1240:U:N3	7:AG:29:LEU:HD21	2.18	0.57
7:AG:29:LEU:C	7:AG:29:LEU:HD23	2.24	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AP:78:VAL:HG13	16:AP:78:VAL:O	2.03	0.57
20:AT:27:MET:O	20:AT:31:ILE:HG13	2.04	0.57
20:AT:53:MET:HE1	20:AT:57:VAL:CG2	2.34	0.57
22:BA:1070:A:C6	22:BA:1097:U:H4'	2.38	0.57
22:BA:1165:A:H2'	22:BA:1166:G:C8	2.39	0.57
22:BA:1565:C:O2'	22:BA:1566:A:H2'	2.04	0.57
24:BC:196:ASN:O	24:BC:197:ALA:HB3	2.03	0.57
25:BD:155:VAL:CG1	25:BD:159:LYS:HG3	2.34	0.57
25:BD:3:GLY:O	25:BD:4:LEU:HD12	2.04	0.57
27:BF:7:TYR:O	27:BF:11:VAL:HG12	2.04	0.57
1:AA:345:C:C3'	37:BP:33:GLU:OE1	2.51	0.57
44:BW:24:ARG:O	44:BW:25:PHE:HB2	2.04	0.57
44:BW:30:VAL:O	44:BW:30:VAL:HG22	2.04	0.57
44:BW:47:GLY:N	44:BW:80:SER:HB3	2.18	0.57
1:CA:1394:A:H2'	1:CA:1501:C:O2'	2.04	0.57
1:CA:1518:A:N1	1:CA:1519:A:C6	2.72	0.57
1:CA:245:U:O2'	1:CA:246:A:C5'	2.49	0.57
1:CA:38:G:C2	1:CA:397:A:C2	2.92	0.57
1:CA:452:A:H5''	1:CA:452:A:H8	1.69	0.57
1:CA:728:A:N7	15:CO:53:ARG:NE	2.52	0.57
2:CB:209:VAL:HG23	2:CB:210:THR:N	2.18	0.57
6:CF:15:SER:OG	6:CF:58:HIS:CD2	2.50	0.57
14:CN:27:LYS:HD2	14:CN:27:LYS:O	2.04	0.57
16:CP:52:LEU:O	16:CP:53:ASP:HB2	2.04	0.57
16:CP:73:ALA:HA	16:CP:76:LYS:HB2	1.86	0.57
1:CA:723:U:O4'	21:CU:48:LYS:HD2	2.04	0.57
22:DA:2886:A:N7	48:D0:39:ARG:NE	2.52	0.57
22:DA:70:G:H5'	22:DA:112:U:O2	2.04	0.57
22:DA:1205:A:N7	26:DE:165:HIS:ND1	2.52	0.57
22:DA:1585:C:C2'	22:DA:1586:A:O5'	2.51	0.57
22:DA:1984:G:C6	22:DA:1985:C:C4	2.92	0.57
22:DA:2184:A:H2'	22:DA:2185:U:O4'	2.04	0.57
22:DA:2805:C:H2'	22:DA:2806:C:H6	1.69	0.57
22:DA:2811:G:H2'	22:DA:2812:G:C8	2.39	0.57
22:DA:332:A:C5	22:DA:335:C:N4	2.72	0.57
22:DA:408:G:N2	22:DA:420:C:H1'	2.18	0.57
22:DA:604:G:C6	22:DA:625:G:N1	2.72	0.57
22:DA:742:A:H2'	22:DA:743:A:C8	2.39	0.57
25:DD:179:ARG:H	25:DD:188:LEU:HB2	1.69	0.57
27:DF:28:PRO:CG	27:DF:168:LEU:HD11	2.34	0.57
28:DG:130:ILE:HG22	28:DG:132:LEU:CD1	2.33	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DI:58:ILE:HG23	30:DI:66:PHE:CD2	2.39	0.57
31:DJ:64:VAL:CG1	31:DJ:65:THR:N	2.67	0.57
33:DL:79:LEU:HD12	33:DL:112:LEU:HA	1.85	0.57
33:DL:83:ALA:HB1	33:DL:118:THR:HG22	1.86	0.57
44:DW:24:ARG:HH21	44:DW:65:LYS:HG2	1.69	0.57
1:AA:1033:G:H2'	1:AA:1034:G:H5''	1.86	0.57
1:AA:1343:G:H1'	9:AI:122:ARG:NH1	2.19	0.57
1:AA:274:A:H4'	1:AA:275:G:OP1	2.02	0.57
1:AA:372:C:H4'	1:AA:373:A:OP1	2.03	0.57
1:AA:419:C:O2'	1:AA:420:U:H5'	2.04	0.57
1:AA:834:U:OP1	18:AR:48:ALA:HB2	2.03	0.57
2:AB:89:PHE:CZ	2:AB:153:MET:HB2	2.39	0.57
2:AB:17:HIS:CD2	2:AB:202:ASN:ND2	2.72	0.57
4:AD:121:ALA:HA	4:AD:145:ARG:HG3	1.84	0.57
13:AM:39:ALA:HB3	13:AM:42:VAL:CG1	2.34	0.57
13:AM:89:ARG:HB3	13:AM:96:VAL:CG2	2.30	0.57
17:AQ:80:LYS:HZ2	17:AQ:80:LYS:H	1.52	0.57
20:AT:14:GLU:HA	20:AT:17:ARG:HB2	1.86	0.57
22:BA:2275:C:O2	34:BM:84:LYS:HG2	2.04	0.57
22:BA:2555:U:C5	22:BA:2556:C:C6	2.92	0.57
22:BA:272:A:O2'	22:BA:273:G:O5'	2.21	0.57
25:BD:69:ALA:N	25:BD:73:VAL:HG12	2.19	0.57
31:BJ:31:GLU:HG3	31:BJ:142:ILE:HD12	1.86	0.57
22:BA:2674:G:H4'	32:BK:30:ARG:HG3	1.84	0.57
35:BN:28:LEU:HD23	35:BN:48:VAL:HG11	1.86	0.57
35:BN:75:ILE:O	35:BN:75:ILE:HD12	2.03	0.57
42:BU:48:VAL:O	42:BU:48:VAL:HG13	2.05	0.57
1:CA:1135:U:H5'	1:CA:1136:C:OP2	2.04	0.57
1:CA:1151:A:C4	1:CA:1152:A:N7	2.72	0.57
1:CA:1276:G:C2'	1:CA:1277:C:H5'	2.33	0.57
1:CA:1423:G:O2'	1:CA:1424:U:H5'	2.03	0.57
1:CA:171:A:C6	1:CA:172:A:C6	2.93	0.57
1:CA:181:A:H1'	1:CA:182:A:C2	2.39	0.57
1:CA:273:U:C2'	1:CA:274:A:H5'	2.33	0.57
1:CA:352:C:H5''	1:CA:352:C:H6	1.69	0.57
1:CA:499:A:C6	1:CA:547:A:C8	2.91	0.57
1:CA:501:C:O2'	1:CA:502:A:H5'	2.03	0.57
1:CA:526:C:H6	1:CA:526:C:H3'	1.69	0.57
1:CA:867:G:C2	1:CA:868:C:C5	2.92	0.57
3:CC:119:ILE:O	3:CC:123:LEU:HB2	2.03	0.57
9:CI:9:GLY:HA3	9:CI:16:ALA:HB3	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1107:G:H2'	22:DA:1108:U:C5'	2.34	0.57
22:DA:120:U:H1'	22:DA:149:A:N7	2.17	0.57
22:DA:1709:U:O2'	22:DA:1710:G:H5'	2.03	0.57
22:DA:1813:G:H2'	22:DA:1814:G:H5'	1.85	0.57
22:DA:2297:A:O2'	22:DA:2298:A:C8	2.57	0.57
22:DA:2315:G:H2'	22:DA:2316:G:O4'	2.04	0.57
22:DA:239:C:O2'	22:DA:621:A:H2	1.86	0.57
22:DA:2657:A:O2'	22:DA:2658:C:H5'	2.03	0.57
22:DA:35:G:O2'	22:DA:36:G:O4'	2.22	0.57
22:DA:416:U:C4	22:DA:417:C:N4	2.73	0.57
22:DA:224:U:C5	22:DA:420:C:H4'	2.38	0.57
22:DA:489:G:C4	22:DA:491:G:C8	2.92	0.57
22:DA:736:C:O5'	22:DA:736:C:H6	1.86	0.57
22:DA:740:C:O2'	22:DA:741:U:H5'	2.03	0.57
24:DC:2:VAL:C	24:DC:3:VAL:HG23	2.25	0.57
24:DC:28:PRO:HG3	24:DC:62:ARG:NH1	2.18	0.57
24:DC:36:ASN:ND2	24:DC:85:ASN:HD21	2.01	0.57
25:DD:148:GLN:CD	25:DD:148:GLN:N	2.57	0.57
27:DF:36:ASN:O	27:DF:37:MET:HB3	2.04	0.57
33:DL:83:ALA:HA	33:DL:118:THR:HG23	1.86	0.57
22:DA:661:A:O2'	33:DL:13:LYS:HA	2.04	0.57
1:AA:274:A:O2'	1:AA:275:G:C5'	2.52	0.57
1:AA:411:A:H62	1:AA:413:G:N2	2.02	0.57
1:AA:924:C:O2'	1:AA:925:G:H5'	2.03	0.57
1:AA:620:C:C2	4:AD:131:ILE:HG21	2.38	0.57
4:AD:151:GLN:H	4:AD:154:VAL:CG1	2.17	0.57
8:AH:82:LEU:O	8:AH:82:LEU:HD13	2.04	0.57
10:AJ:29:ALA:HB1	10:AJ:36:VAL:CG2	2.34	0.57
10:AJ:80:THR:H	10:AJ:83:THR:HG22	1.68	0.57
22:BA:1113:U:H2'	22:BA:1114:C:H6	1.68	0.57
22:BA:1161:C:C2'	22:BA:1162:G:O5'	2.52	0.57
22:BA:1927:A:C6	22:BA:1928:A:C6	2.92	0.57
22:BA:2362:C:C2'	22:BA:2363:G:H5'	2.34	0.57
25:BD:51:THR:OG1	25:BD:76:GLY:HA3	2.04	0.57
28:BG:154:GLU:OE1	28:BG:157:LYS:N	2.38	0.57
28:BG:39:ALA:HB1	28:BG:57:TYR:CG	2.40	0.57
41:BT:74:ILE:CG2	41:BT:75:GLY:N	2.66	0.57
1:CA:438:U:H2'	1:CA:494:G:O6	2.04	0.57
1:CA:738:C:C5	1:CA:739:C:H5	2.22	0.57
2:CB:128:LEU:HD23	2:CB:131:LYS:CD	2.35	0.57
2:CB:20:ARG:HH21	2:CB:38:HIS:CD2	2.23	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:30:MET:CE	7:CG:33:GLY:HA2	2.35	0.57
1:CA:1346:A:N1	7:CG:9:ARG:NH2	2.51	0.57
13:CM:95:PRO:HG3	13:CM:99:GLN:OE1	2.04	0.57
20:CT:11:ILE:C	20:CT:13:SER:H	2.08	0.57
51:D3:56:LEU:CD1	51:D3:56:LEU:N	2.65	0.57
22:DA:137:U:C4	22:DA:138:U:C2	2.92	0.57
22:DA:1510:G:N2	22:DA:1511:G:C4	2.71	0.57
22:DA:1551:A:C5	22:DA:1552:A:N7	2.72	0.57
22:DA:1656:C:H2'	22:DA:1657:U:H5'	1.87	0.57
22:DA:166:U:O2	22:DA:166:U:H2'	2.04	0.57
22:DA:1814:G:C6	22:DA:1815:A:N6	2.71	0.57
22:DA:1845:G:C6	22:DA:1846:G:N7	2.72	0.57
22:DA:2234:G:C5	22:DA:2235:G:C8	2.91	0.57
22:DA:2360:G:C1'	33:DL:60:ARG:NH2	2.62	0.57
22:DA:24:G:H2'	22:DA:25:U:H5'	1.84	0.57
22:DA:9:G:C6	22:DA:2629:U:C6	2.92	0.57
22:DA:2823:A:H2'	22:DA:2824:C:H5'	1.85	0.57
22:DA:404:A:C2	22:DA:421:C:N3	2.72	0.57
22:DA:447:A:H5'	22:DA:449:A:C6	2.38	0.57
22:DA:455:C:C3'	22:DA:456:C:H5'	2.16	0.57
22:DA:946:C:O2'	22:DA:947:A:O5'	2.22	0.57
25:DD:151:THR:CG2	25:DD:152:PRO:HD3	2.34	0.57
25:DD:48:ILE:HG12	25:DD:48:ILE:O	2.02	0.57
22:DA:600:G:H5'	26:DE:27:LEU:HD22	1.87	0.57
30:DI:23:VAL:HG11	30:DI:37:PHE:HZ	1.70	0.57
38:DQ:63:ARG:HH12	38:DQ:99:VAL:CG2	2.18	0.57
39:DR:78:ARG:HB3	39:DR:83:TYR:CD1	2.40	0.57
46:DY:37:LEU:HD13	46:DY:42:LEU:HD12	1.83	0.57
1:AA:1045:C:H2'	1:AA:1045:C:O2	2.03	0.57
1:AA:1015:G:H1'	1:AA:1218:C:O2'	2.05	0.57
1:AA:126:G:H2'	1:AA:127:G:O5'	2.05	0.57
1:AA:259:G:H2'	1:AA:260:G:H8	1.70	0.57
1:AA:429:U:H1'	1:AA:430:A:H5''	1.84	0.57
1:AA:981:U:C2	1:AA:982:U:C5	2.92	0.57
2:AB:207:ARG:O	2:AB:211:LEU:HB2	2.05	0.57
4:AD:2:ARG:NH2	4:AD:114:ARG:CD	2.65	0.57
5:AE:148:SER:O	5:AE:152:VAL:N	2.37	0.57
7:AG:73:GLU:HA	7:AG:140:VAL:HG12	1.85	0.57
15:AO:81:ILE:HG13	15:AO:82:GLU:H	1.67	0.57
16:AP:75:ILE:C	16:AP:77:GLU:H	2.07	0.57
22:BA:1148:U:C6	22:BA:1148:U:H3'	2.40	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1585:C:H2'	22:BA:1586:A:C5'	2.34	0.57
22:BA:1919:A:H8	22:BA:1919:A:H5'	1.66	0.57
22:BA:2353:G:O2'	44:BW:31:LEU:HD22	2.04	0.57
22:BA:2543:G:H5'	22:BA:2543:G:C8	2.36	0.57
22:BA:403:U:O2'	22:BA:404:A:OP2	2.22	0.57
23:BB:16:G:O2'	23:BB:17:C:C5'	2.52	0.57
44:BW:40:ARG:N	44:BW:56:HIS:HB3	2.17	0.57
46:BY:18:LEU:O	46:BY:22:LEU:HB2	2.03	0.57
1:CA:1124:G:O2'	1:CA:1125:U:C6	2.58	0.57
1:CA:1146:A:C6	1:CA:1147:C:N4	2.72	0.57
1:CA:120:A:C3'	1:CA:121:U:C5'	2.78	0.57
1:CA:253:A:C6	1:CA:274:A:C2	2.91	0.57
1:CA:254:G:H21	17:CQ:17:GLU:CG	2.06	0.57
1:CA:828:U:C2'	1:CA:829:G:O5'	2.51	0.57
1:CA:937:A:O2'	1:CA:938:A:C5'	2.52	0.57
2:CB:67:LEU:HG	2:CB:157:PRO:HB3	1.85	0.57
5:CE:48:GLY:CA	5:CE:66:ALA:HB2	2.33	0.57
6:CF:37:HIS:O	6:CF:38:ARG:HB3	2.04	0.57
1:CA:932:C:H5''	7:CG:2:ARG:HD3	1.86	0.57
9:CI:117:LEU:CD2	9:CI:123:ARG:HD3	2.33	0.57
9:CI:48:ARG:C	9:CI:50:PRO:HD2	2.25	0.57
12:CL:78:VAL:HG23	12:CL:101:LEU:HD12	1.87	0.57
13:CM:89:ARG:HH22	19:CS:77:ARG:HD2	1.69	0.57
22:DA:1139:G:N2	22:DA:1140:C:C2	2.72	0.57
22:DA:1808:A:O3'	22:DA:1809:A:H8	1.86	0.57
22:DA:2075:U:N3	22:DA:2077:A:N7	2.44	0.57
22:DA:2151:U:H2'	22:DA:2152:G:H8	1.68	0.57
22:DA:2287:A:C8	22:DA:2289:G:C8	2.93	0.57
22:DA:2413:G:H2'	22:DA:2414:G:H8	1.68	0.57
22:DA:2595:G:N1	22:DA:2599:G:C6	2.72	0.57
22:DA:2624:G:H1'	48:D0:18:HIS:CE1	2.39	0.57
22:DA:274:C:O2'	22:DA:275:C:H5'	2.04	0.57
22:DA:387:U:H4'	22:DA:388:G:C5'	2.34	0.57
22:DA:447:A:H5'	22:DA:449:A:N7	2.18	0.57
22:DA:475:C:O2	22:DA:479:A:N6	2.37	0.57
22:DA:510:C:H2'	22:DA:511:U:C6	2.39	0.57
22:DA:657:U:O2'	22:DA:658:U:H5'	2.04	0.57
22:DA:859:G:N2	22:DA:916:G:C2'	2.68	0.57
23:DB:6:G:H4'	23:DB:28:C:H4'	1.86	0.57
32:DK:23:LYS:O	32:DK:25:LEU:HD23	2.04	0.57
33:DL:128:THR:HG22	33:DL:129:LYS:N	2.18	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DM:17:ASN:OD1	34:DM:95:LEU:HB3	2.05	0.57
22:DA:1249:U:H4'	38:DQ:3:VAL:CB	2.35	0.57
1:AA:110:C:O2'	1:AA:111:G:O4'	2.21	0.57
1:AA:1138:G:C2'	1:AA:1138:G:N3	2.61	0.57
1:AA:1242:G:C5	1:AA:1243:C:C5	2.92	0.57
1:AA:1348:U:H4'	9:AI:121:ARG:HG3	1.86	0.57
1:AA:144:G:C4	1:AA:179:A:C2	2.92	0.57
3:AC:147:GLY:HA2	3:AC:171:ARG:H	1.68	0.57
1:AA:619:U:C6	4:AD:131:ILE:HD11	2.39	0.57
4:AD:52:VAL:CG2	4:AD:53:GLN:N	2.66	0.57
10:AJ:73:LEU:O	10:AJ:74:VAL:HB	2.04	0.57
16:AP:18:GLN:HE21	16:AP:35:ARG:HD2	1.69	0.57
19:AS:49:ALA:HB1	19:AS:56:HIS:HB3	1.84	0.57
48:B0:9:ARG:CG	48:B0:9:ARG:NH2	2.65	0.57
22:BA:1065:U:P	22:BA:1065:U:H3'	2.44	0.57
22:BA:1108:U:H2'	22:BA:1109:C:O4'	2.05	0.57
22:BA:582:A:C2	22:BA:1259:G:C2	2.92	0.57
22:BA:1842:G:H2'	22:BA:1843:C:H6	1.67	0.57
22:BA:2637:U:C2'	22:BA:2638:G:H5'	2.34	0.57
22:BA:2800:A:HO2'	22:BA:2801:G:P	2.27	0.57
22:BA:313:G:H2'	22:BA:314:C:H5'	1.85	0.57
28:BG:82:PHE:CE2	28:BG:137:LYS:HB2	2.39	0.57
30:BI:48:ILE:HG13	30:BI:49:GLU:H	1.68	0.57
31:BJ:117:ALA:HA	31:BJ:120:ARG:NH2	2.19	0.57
36:BO:111:ARG:C	36:BO:113:ALA:H	2.06	0.57
38:BQ:78:PHE:CZ	38:BQ:82:LEU:HD11	2.40	0.57
39:BR:51:VAL:HB	39:BR:52:PRO:HD3	1.82	0.57
42:BU:6:ARG:O	42:BU:24:VAL:HB	2.04	0.57
44:BW:23:LYS:HZ2	44:BW:24:ARG:CG	2.17	0.57
1:CA:110:C:O2'	1:CA:111:G:H5'	2.05	0.57
1:CA:977:A:H8	1:CA:1223:C:C4	2.22	0.57
1:CA:39:G:H2'	1:CA:40:C:C6	2.40	0.57
1:CA:543:U:C2'	1:CA:544:G:H5'	2.35	0.57
2:CB:184:ALA:HB3	2:CB:195:VAL:CG2	2.34	0.57
3:CC:155:ARG:NE	3:CC:159:ALA:O	2.38	0.57
4:CD:191:SER:O	4:CD:192:ALA:HB3	2.04	0.57
4:CD:25:ARG:O	4:CD:26:ALA:O	2.23	0.57
5:CE:25:LYS:HB2	5:CE:25:LYS:NZ	2.20	0.57
5:CE:96:GLN:CG	5:CE:97:PRO:HD2	2.34	0.57
6:CF:18:VAL:HB	6:CF:19:PRO:HD2	1.84	0.57
7:CG:103:ILE:HG22	7:CG:103:ILE:O	2.03	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:643:C:H5''	8:CH:31:LEU:HD22	1.86	0.57
10:CJ:52:LEU:HD23	10:CJ:62:ARG:HG2	1.86	0.57
13:CM:13:HIS:HE2	13:CM:41:ASP:HA	1.69	0.57
22:DA:1069:A:H4'	22:DA:1070:A:C5'	2.34	0.57
22:DA:1115:G:HO2'	22:DA:1116:G:H8	1.52	0.57
22:DA:1805:A:C2	22:DA:1813:G:C6	2.91	0.57
22:DA:1858:A:O2'	22:DA:1859:U:H5'	2.03	0.57
22:DA:236:C:O2'	22:DA:237:C:H5'	2.04	0.57
22:DA:2415:G:O2'	22:DA:2416:C:H5'	2.05	0.57
22:DA:2582:G:O2'	22:DA:2583:G:H5'	2.04	0.57
22:DA:545:U:H3'	22:DA:545:U:H6	1.70	0.57
22:DA:95:A:H2'	22:DA:96:C:C4'	2.34	0.57
27:DF:42:ALA:CA	27:DF:48:LEU:HD11	2.34	0.57
31:DJ:114:LEU:O	31:DJ:117:ALA:HB3	2.05	0.57
31:DJ:55:ILE:HG22	31:DJ:123:LYS:HB2	1.87	0.57
32:DK:19:VAL:CG1	32:DK:41:ILE:CG1	2.83	0.57
34:DM:13:HIS:O	34:DM:14:LYS:HB2	2.05	0.57
35:DN:9:GLN:O	35:DN:17:ARG:CD	2.52	0.57
41:DT:29:THR:CB	41:DT:86:THR:N	2.68	0.57
45:DX:11:PRO:HB3	45:DX:27:ARG:HH21	1.69	0.57
1:AA:1012:A:N6	1:AA:1013:G:C6	2.73	0.57
1:AA:1386:G:H2'	1:AA:1387:G:C8	2.36	0.57
1:AA:1507:A:H8	1:AA:1507:A:H5''	1.69	0.57
1:AA:330:C:C5'	1:AA:330:C:C6	2.87	0.57
1:AA:692:U:H2'	1:AA:694:A:OP2	2.04	0.57
4:AD:173:ASP:O	4:AD:174:ALA:HB2	2.04	0.57
4:AD:54:LEU:O	4:AD:54:LEU:HD23	2.04	0.57
9:AI:128:LYS:CD	9:AI:129:ARG:H	2.13	0.57
14:AN:59:GLN:HE21	14:AN:59:GLN:H	1.52	0.57
20:AT:43:LYS:CD	20:AT:86:ALA:HB1	2.35	0.57
51:B3:30:HIS:CE1	51:B3:31:ILE:HG22	2.40	0.57
22:BA:1738:G:O2'	22:BA:1739:A:H8	1.88	0.57
22:BA:216:A:H2'	22:BA:217:A:H8	1.68	0.57
22:BA:2758:A:H2'	22:BA:2759:G:C5'	2.34	0.57
22:BA:2784:U:H2'	22:BA:2785:C:H6	1.70	0.57
22:BA:654:A:H3'	22:BA:654:A:N3	2.19	0.57
22:BA:944:C:OP2	56:BA:3265:HOH:O	2.17	0.57
22:BA:996:A:C2	22:BA:997:G:C8	2.92	0.57
24:BC:252:LYS:CB	24:BC:252:LYS:HZ3	2.18	0.57
25:BD:172:VAL:O	25:BD:173:GLN:CB	2.49	0.57
27:BF:64:PRO:HA	27:BF:88:VAL:HG23	1.85	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:83:LYS:HE3	29:BH:98:ASP:OD2	2.04	0.57
30:BI:53:PRO:O	30:BI:74:PRO:HD2	2.04	0.57
33:BL:101:ILE:HG22	33:BL:102:GLY:N	2.19	0.57
34:BM:41:LEU:O	34:BM:93:VAL:HG23	2.04	0.57
34:BM:71:LYS:HB3	34:BM:93:VAL:O	2.04	0.57
41:BT:7:LEU:C	41:BT:9:LYS:H	2.08	0.57
42:BU:71:ILE:N	42:BU:71:ILE:HD12	2.18	0.57
46:BY:39:GLN:HB2	46:BY:41:HIS:CD2	2.40	0.57
1:CA:1021:A:C2	1:CA:1022:A:H1'	2.38	0.57
1:CA:1447:A:O2'	1:CA:1448:C:OP1	2.22	0.57
1:CA:1495:U:C2'	1:CA:1496:C:H5'	2.34	0.57
1:CA:1531:A:H8	1:CA:1531:A:C5'	2.18	0.57
1:CA:708:C:H2'	1:CA:709:U:H6	1.70	0.57
2:CB:130:LYS:O	2:CB:134:LEU:HG	2.04	0.57
3:CC:126:ARG:NE	3:CC:126:ARG:HA	2.18	0.57
5:CE:118:GLY:O	5:CE:119:VAL:HG13	2.03	0.57
6:CF:53:LYS:O	6:CF:53:LYS:HD3	2.03	0.57
8:CH:54:THR:HG23	8:CH:55:LYS:N	2.19	0.57
11:CK:64:VAL:HG23	11:CK:65:ALA:N	2.20	0.57
12:CL:66:ILE:CD1	12:CL:73:LEU:HD12	2.34	0.57
10:CJ:66:GLU:HG3	14:CN:100:TRP:HZ3	1.70	0.57
3:CC:25:THR:HG23	14:CN:75:LYS:HD2	1.86	0.57
21:CU:28:LEU:O	21:CU:28:LEU:HD23	2.05	0.57
50:D2:24:THR:HG23	50:D2:24:THR:O	2.04	0.57
22:DA:2348:U:OP1	51:D3:37:THR:HG21	2.04	0.57
22:DA:1127:A:O2'	22:DA:1128:G:H5'	2.03	0.57
22:DA:1525:A:C2'	22:DA:1526:C:H5'	2.35	0.57
22:DA:1651:G:C2	22:DA:2007:U:N3	2.72	0.57
22:DA:2199:A:N6	22:DA:2225:A:N9	2.53	0.57
22:DA:2531:A:C4	22:DA:2532:G:C8	2.92	0.57
22:DA:2563:U:H1'	22:DA:2566:A:C6	2.40	0.57
22:DA:2836:U:O2'	22:DA:2837:A:O5'	2.15	0.57
22:DA:373:U:C2	22:DA:374:A:N7	2.72	0.57
22:DA:477:A:C4	22:DA:478:A:C8	2.93	0.57
22:DA:663:G:C6	22:DA:664:G:C5	2.92	0.57
22:DA:921:C:O2'	22:DA:922:C:H5''	2.05	0.57
23:DB:11:C:C5	23:DB:12:C:H5	2.23	0.57
24:DC:38:LYS:HE2	24:DC:55:GLY:H	1.69	0.57
24:DC:95:TYR:C	24:DC:97:ASP:H	2.07	0.57
27:DF:45:ASP:C	27:DF:47:LYS:H	2.07	0.57
29:DH:41:LYS:HA	29:DH:44:ILE:HD13	1.87	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:50:PHE:CZ	33:DL:53:GLY:N	2.73	0.57
35:DN:84:GLY:O	35:DN:88:ALA:HB2	2.05	0.57
25:DD:186:LEU:CD2	37:DP:3:ILE:HD11	2.26	0.57
41:DT:18:GLU:HA	41:DT:22:THR:HG21	1.85	0.57
45:DX:2:ARG:HD3	45:DX:32:LEU:HD23	1.87	0.57
45:DX:3:VAL:O	45:DX:3:VAL:HG23	2.05	0.57
45:DX:57:VAL:CG1	45:DX:58:ILE:N	2.68	0.57
46:DY:48:ARG:O	46:DY:51:ALA:HB3	2.04	0.57
1:AA:1111:A:N1	3:AC:176:THR:HG23	2.20	0.57
1:AA:1055:A:N6	1:AA:1206:G:C6	2.73	0.57
1:AA:1261:A:H2'	1:AA:1262:C:H5'	1.86	0.57
2:AB:165:ALA:CB	2:AB:186:VAL:HG12	2.28	0.57
3:AC:116:ALA:HB2	3:AC:199:VAL:CG1	2.35	0.57
4:AD:16:THR:HG22	4:AD:17:ASP:N	2.20	0.57
7:AG:49:LEU:HD12	7:AG:60:ALA:HB1	1.86	0.57
9:AI:119:LYS:O	9:AI:120:ALA:HB3	2.05	0.57
20:AT:29:THR:HA	20:AT:32:LYS:HG2	1.86	0.57
20:AT:55:PRO:HG2	20:AT:56:ILE:H	1.69	0.57
22:BA:1361:G:C5	22:BA:1371:G:N2	2.73	0.57
1:AA:1494:G:H1'	22:BA:1912:A:O2'	2.04	0.57
22:BA:1980:G:HO2'	22:BA:1982:U:H5	1.50	0.57
22:BA:2203:U:H5''	22:BA:2204:G:OP1	2.05	0.57
22:BA:2211:A:C4'	22:BA:2211:A:OP2	2.52	0.57
22:BA:545:U:H2'	22:BA:546:U:C5'	2.35	0.57
24:BC:121:ALA:HB3	24:BC:129:LEU:HD21	1.87	0.57
24:BC:255:LYS:C	24:BC:256:THR:HG23	2.25	0.57
26:BE:147:LEU:O	26:BE:168:ASP:O	2.23	0.57
31:BJ:132:HIS:HB3	31:BJ:135:GLN:HG2	1.86	0.57
40:BS:6:LYS:HB2	40:BS:103:ILE:O	2.04	0.57
40:BS:73:LYS:CE	40:BS:74:ILE:H	2.15	0.57
40:BS:96:ILE:HD12	40:BS:96:ILE:O	2.04	0.57
43:BV:6:ALA:HB1	43:BV:40:ILE:HG22	1.85	0.57
44:BW:41:GLY:O	44:BW:42:THR:C	2.41	0.57
44:BW:47:GLY:H	44:BW:80:SER:HB3	1.69	0.57
1:CA:1272:G:H2'	1:CA:1273:C:H5'	1.86	0.57
1:CA:182:A:C4	1:CA:184:G:N7	2.72	0.57
1:CA:409:U:H2'	1:CA:410:G:O4'	2.04	0.57
1:CA:503:C:O2'	1:CA:504:C:H5'	2.04	0.57
1:CA:544:G:OP1	4:CD:55:ARG:NH2	2.38	0.57
1:CA:835:U:H2'	1:CA:836:G:O5'	2.05	0.57
1:CA:619:U:N3	4:CD:131:ILE:HD11	2.19	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:31:CYS:O	4:CD:32:LYS:HB2	2.05	0.57
6:CF:38:ARG:HD3	6:CF:39:LEU:N	2.20	0.57
7:CG:25:PHE:CE2	7:CG:61:PHE:HZ	2.22	0.57
10:CJ:10:LEU:O	10:CJ:18:ILE:HD11	2.04	0.57
9:CI:116:GLY:HA2	10:CJ:60:ASP:OD2	2.04	0.57
12:CL:97:VAL:CG2	12:CL:100:ALA:HB3	2.35	0.57
16:CP:75:ILE:CG2	16:CP:80:LYS:HD2	2.34	0.57
18:CR:19:GLU:CG	18:CR:20:ILE:N	2.68	0.57
19:CS:12:LEU:HD13	19:CS:12:LEU:O	2.04	0.57
19:CS:52:ASN:C	19:CS:52:ASN:HD22	2.07	0.57
22:DA:1064:C:H2'	22:DA:1065:U:C6	2.40	0.57
22:DA:2262:U:O2'	22:DA:2263:C:H5'	2.05	0.57
22:DA:2682:A:C2	22:DA:2683:C:C2	2.92	0.57
22:DA:272:A:N3	22:DA:273:G:N7	2.53	0.57
22:DA:405:U:H3'	22:DA:406:G:H5'	1.86	0.57
22:DA:464:U:O4'	22:DA:686:U:H5	1.87	0.57
22:DA:976:G:HO2'	22:DA:977:G:H8	1.52	0.57
22:DA:323:C:H5'	26:DE:163:ASN:OD1	2.04	0.57
28:DG:94:ARG:HG2	28:DG:105:SER:N	2.19	0.57
29:DH:6:LEU:CD1	29:DH:36:ALA:HA	2.20	0.57
35:DN:75:ILE:C	35:DN:75:ILE:HD12	2.24	0.57
45:DX:39:VAL:HG22	45:DX:44:ARG:O	2.05	0.57
1:AA:1256:A:C1'	1:AA:1258:G:C5	2.79	0.57
1:AA:542:G:C2	1:AA:543:U:C4	2.93	0.57
1:AA:875:U:H1'	8:AH:15:ASN:HD21	1.70	0.57
1:AA:972:C:O2'	1:AA:973:G:O5'	2.22	0.57
3:AC:75:VAL:O	3:AC:82:ASP:HB3	2.04	0.57
4:AD:190:LEU:O	4:AD:191:SER:HB3	2.04	0.57
11:AK:60:PHE:O	11:AK:63:GLN:HB3	2.04	0.57
19:AS:57:VAL:HG21	19:AS:74:ALA:HA	1.85	0.57
11:AK:109:ILE:HB	21:AU:5:VAL:HG23	1.86	0.57
22:BA:1153:C:H2'	22:BA:1154:G:O5'	2.04	0.57
22:BA:1249:U:H5'	22:BA:1249:U:C6	2.40	0.57
22:BA:1592:C:O2'	22:BA:1593:A:H5'	2.04	0.57
22:BA:2196:C:O2'	22:BA:2197:U:H5'	2.03	0.57
22:BA:33:C:O2'	22:BA:34:U:H5'	2.04	0.57
25:BD:105:LYS:HD2	25:BD:105:LYS:O	2.05	0.57
25:BD:107:VAL:O	25:BD:174:SER:O	2.22	0.57
28:BG:37:ASN:HB3	28:BG:40:VAL:HG11	1.86	0.57
28:BG:96:ALA:O	28:BG:97:VAL:HB	2.03	0.57
33:BL:110:VAL:HG12	33:BL:131:ALA:CB	2.35	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BO:111:ARG:HD3	36:BO:111:ARG:C	2.24	0.57
39:BR:38:VAL:HG23	39:BR:40:MET:H	1.70	0.57
43:BV:6:ALA:CB	43:BV:42:LEU:HD22	2.34	0.57
22:BA:2352:A:C2	44:BW:30:VAL:CG1	2.87	0.57
1:CA:1050:G:O2'	1:CA:1051:C:H6	1.87	0.57
1:CA:160:A:H2'	1:CA:161:A:O4'	2.05	0.57
1:CA:277:C:O2'	1:CA:278:G:C5'	2.51	0.57
1:CA:415:A:H3'	1:CA:416:G:H8	1.70	0.57
1:CA:516:U:H2'	1:CA:519:C:H42	1.69	0.57
1:CA:756:C:C2'	1:CA:757:U:H5'	2.34	0.57
1:CA:791:G:C2'	1:CA:792:A:H5'	2.35	0.57
2:CB:30:ILE:HD11	2:CB:188:THR:HB	1.86	0.57
4:CD:56:GLU:HA	4:CD:56:GLU:OE1	2.05	0.57
5:CE:14:LEU:HD12	5:CE:15:ILE:N	2.19	0.57
6:CF:54:LEU:HD12	6:CF:56:LYS:O	2.05	0.57
7:CG:72:VAL:CG1	7:CG:144:ALA:HB1	2.34	0.57
9:CI:28:VAL:HA	9:CI:32:ARG:O	2.05	0.57
22:DA:1087:G:N2	22:DA:1103:A:H1'	2.19	0.57
22:DA:1613:G:C2	22:DA:1617:C:C2	2.92	0.57
22:DA:1627:G:N2	22:DA:1628:G:N7	2.52	0.57
22:DA:217:A:O2'	22:DA:218:A:C5'	2.53	0.57
22:DA:2234:G:C6	22:DA:2235:G:C5	2.92	0.57
22:DA:2288:A:H4'	22:DA:2289:G:OP1	2.01	0.57
22:DA:28:A:C6	22:DA:513:A:C8	2.93	0.57
22:DA:602:A:H1'	22:DA:656:G:N2	2.19	0.57
22:DA:982:C:C5'	22:DA:983:A:OP1	2.52	0.57
25:DD:125:TRP:O	25:DD:126:ASN:HB2	2.05	0.57
25:DD:40:LEU:CD1	25:DD:40:LEU:H	2.18	0.57
27:DF:135:ILE:HD12	27:DF:135:ILE:H	1.69	0.57
32:DK:105:ARG:HB2	32:DK:108:ARG:HD2	1.87	0.57
34:DM:57:VAL:O	34:DM:58:LYS:HB2	2.02	0.57
32:DK:77:ILE:HG23	37:DP:71:ARG:HD2	1.87	0.57
47:DZ:7:THR:O	47:DZ:54:VAL:HA	2.05	0.57
1:AA:1091:U:C2	1:AA:1095:U:N3	2.72	0.57
1:AA:1181:G:O2'	1:AA:1182:G:C4	2.58	0.57
1:AA:1218:C:H2'	1:AA:1219:A:C8	2.39	0.57
1:AA:1284:C:H2'	1:AA:1285:A:N7	2.20	0.57
1:AA:198:G:C4	1:AA:199:A:N7	2.72	0.57
1:AA:443:C:C2'	1:AA:444:G:H5'	2.34	0.57
1:AA:528:C:C6	1:AA:528:C:H5''	2.40	0.57
1:AA:941:G:H2'	1:AA:942:G:O5'	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:76:G:N1	1:AA:95:C:N4	2.52	0.57
1:AA:973:G:H5'	10:AJ:57:VAL:HA	1.87	0.57
4:AD:176:LYS:N	4:AD:176:LYS:HD3	2.19	0.57
1:AA:1348:U:H4'	9:AI:121:ARG:CG	2.34	0.57
9:AI:49:GLN:O	9:AI:52:GLU:HG3	2.04	0.57
10:AJ:26:VAL:O	10:AJ:30:LYS:HG2	2.04	0.57
16:AP:16:PHE:HD1	16:AP:16:PHE:O	1.88	0.57
20:AT:33:LYS:HE2	20:AT:33:LYS:H	1.66	0.57
22:BA:1115:G:O2'	22:BA:1116:G:O5'	2.22	0.57
22:BA:1606:C:HO2'	22:BA:1607:C:P	2.27	0.57
22:BA:221:A:H4'	22:BA:222:A:O5'	2.03	0.57
26:BE:1:MET:HB3	26:BE:14:VAL:O	2.05	0.57
27:BF:106:ALA:C	27:BF:108:PRO:HD2	2.25	0.57
36:BO:34:HIS:CD2	36:BO:53:THR:OG1	2.58	0.57
36:BO:79:ALA:HB1	36:BO:113:ALA:HB3	1.86	0.57
38:BQ:29:ARG:HG3	38:BQ:29:ARG:NH1	2.11	0.57
42:BU:35:VAL:HG12	42:BU:38:ILE:CG1	2.32	0.57
43:BV:44:HIS:CE1	43:BV:86:LEU:H	2.22	0.57
22:BA:112:U:H5'	46:BY:58:ASN:HD21	1.70	0.57
1:CA:1167:A:C5	1:CA:1169:A:N6	2.72	0.57
1:CA:289:G:N2	1:CA:290:C:C2	2.73	0.57
1:CA:668:G:O2'	15:CO:45:HIS:CB	2.49	0.57
6:CF:64:VAL:HG23	6:CF:65:GLU:N	2.18	0.57
7:CG:42:VAL:HG12	7:CG:43:TYR:CD2	2.35	0.57
8:CH:37:ASN:O	8:CH:41:GLU:HG2	2.04	0.57
8:CH:97:GLY:O	8:CH:98:LEU:HB2	2.03	0.57
9:CI:45:MET:O	9:CI:49:GLN:HG3	2.04	0.57
12:CL:2:THR:HG22	12:CL:4:ASN:N	2.20	0.57
1:CA:1308:U:OP1	13:CM:95:PRO:HB3	2.04	0.57
19:CS:39:ILE:HG12	19:CS:68:HIS:O	2.05	0.57
22:DA:1650:A:H5'	35:DN:106:ASP:OD2	2.05	0.57
22:DA:1700:A:O2'	22:DA:1701:A:H5'	2.05	0.57
22:DA:2418:A:C6	22:DA:2419:U:N3	2.73	0.57
22:DA:2626:C:C2'	22:DA:2627:G:C5'	2.79	0.57
22:DA:2626:C:H2'	22:DA:2627:G:C5'	2.34	0.57
22:DA:2701:U:H3'	22:DA:2702:G:C5'	2.35	0.57
22:DA:2800:A:N3	22:DA:2801:G:H1'	2.20	0.57
22:DA:2892:G:H5''	22:DA:2894:G:N2	2.20	0.57
22:DA:36:G:H5'	22:DA:451:U:C2	2.40	0.57
22:DA:492:A:O2'	22:DA:493:G:C5'	2.53	0.57
22:DA:942:G:H4'	22:DA:1190:G:H5'	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:975:A:N3	22:DA:976:G:C8	2.72	0.57
24:DC:38:LYS:CE	24:DC:55:GLY:H	2.17	0.57
22:DA:1490:A:H8	24:DC:73:ILE:HD12	1.70	0.57
26:DE:16:GLU:O	26:DE:16:GLU:HG3	2.03	0.57
27:DF:169:LEU:HB3	27:DF:174:PHE:HB2	1.87	0.57
27:DF:103:ILE:HG12	27:DF:175:PRO:HD3	1.86	0.57
27:DF:49:LEU:N	27:DF:49:LEU:HD22	2.17	0.57
29:DH:73:ASN:C	29:DH:75:LEU:H	2.07	0.57
29:DH:96:THR:HG22	29:DH:113:SER:OG	2.03	0.57
30:DI:48:ILE:HG13	30:DI:49:GLU:HG2	1.85	0.57
33:DL:128:THR:HB	33:DL:131:ALA:CB	2.35	0.57
33:DL:29:LYS:O	33:DL:30:THR:HG23	2.04	0.57
33:DL:90:VAL:HG13	33:DL:95:LEU:HD21	1.87	0.57
37:DP:75:THR:CG2	37:DP:76:HIS:CD2	2.88	0.57
22:DA:533:G:OP1	38:DQ:23:TYR:HB3	2.04	0.57
38:DQ:40:LYS:HD2	38:DQ:44:TYR:HE2	1.69	0.57
38:DQ:60:TRP:CZ2	38:DQ:93:ILE:HB	2.39	0.57
40:DS:9:HIS:H	40:DS:102:HIS:CE1	2.23	0.57
41:DT:29:THR:OG1	41:DT:85:VAL:HB	2.05	0.57
1:AA:473:U:H2'	1:AA:474:G:C8	2.37	0.57
1:AA:574:A:H5''	1:AA:575:G:OP2	2.04	0.57
1:AA:57:G:C5	1:AA:58:C:C4	2.93	0.57
1:AA:747:A:H2'	1:AA:748:G:C1'	2.34	0.57
4:AD:16:THR:CG2	4:AD:17:ASP:N	2.67	0.57
5:AE:152:VAL:O	5:AE:154:ALA:N	2.37	0.57
15:AO:74:VAL:HG12	15:AO:75:ALA:N	2.19	0.57
19:AS:64:GLU:H	19:AS:64:GLU:CD	2.08	0.57
21:AU:33:ARG:HE	21:AU:34:ARG:CG	2.14	0.57
22:BA:1205:A:H3'	22:BA:1206:G:H5'	1.87	0.57
22:BA:181:A:C2	22:BA:182:A:C4	2.92	0.57
22:BA:1952:A:C5	32:BK:22:ILE:HG21	2.39	0.57
22:BA:2233:U:H2'	22:BA:2234:G:C8	2.40	0.57
22:BA:2808:G:C2	22:BA:2891:U:C5	2.93	0.57
22:BA:832:U:H2'	22:BA:833:A:C8	2.40	0.57
25:BD:151:THR:HG23	25:BD:152:PRO:N	2.18	0.57
31:BJ:41:LYS:N	38:BQ:66:ALA:HB1	2.20	0.57
32:BK:18:ARG:HB2	32:BK:45:GLU:HG3	1.80	0.57
37:BP:39:LEU:HD12	37:BP:39:LEU:H	1.70	0.57
39:BR:74:ILE:N	39:BR:74:ILE:CD1	2.68	0.57
40:BS:1:MET:CE	40:BS:2:GLU:H	2.18	0.57
22:BA:2332:C:OP1	44:BW:44:PHE:HZ	1.88	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:477:C:H3'	1:CA:478:A:C8	2.40	0.57
1:CA:517:G:H5'	1:CA:519:C:N3	2.19	0.57
1:CA:583:A:H3'	1:CA:584:G:H8	1.69	0.57
1:CA:796:C:C2'	1:CA:797:C:H5'	2.35	0.57
1:CA:960:U:O2'	1:CA:1223:C:C4'	2.52	0.57
1:CA:983:A:O2'	1:CA:984:C:C5'	2.52	0.57
1:CA:1190:G:H5'	3:CC:175:HIS:NE2	2.20	0.57
5:CE:71:ILE:HD11	5:CE:144:GLU:OE2	2.05	0.57
13:CM:97:ARG:O	13:CM:97:ARG:HG2	2.05	0.57
1:CA:1317:C:H1'	14:CN:52:ARG:NH1	2.20	0.57
16:CP:48:GLU:HG3	16:CP:51:ARG:HH21	1.69	0.57
1:CA:377:G:H5'	16:CP:5:ARG:HH12	1.69	0.57
52:D4:5:ALA:O	52:D4:38:GLY:HA2	2.04	0.57
22:DA:125:A:H5''	50:D2:19:ARG:CB	2.35	0.57
22:DA:1327:A:O2'	22:DA:1328:A:O4'	2.19	0.57
22:DA:1623:G:C5	22:DA:1624:U:C5	2.92	0.57
22:DA:1714:U:H3'	22:DA:1715:G:C5'	2.35	0.57
22:DA:189:G:H2'	22:DA:190:A:O5'	2.05	0.57
22:DA:2015:A:H2'	22:DA:2016:U:H5'	1.87	0.57
22:DA:2344:U:HO2'	22:DA:2345:G:C5'	2.17	0.57
22:DA:242:G:H5''	51:D3:63:TYR:CE1	2.39	0.57
22:DA:2430:A:H5'	22:DA:2431:U:OP2	2.05	0.57
22:DA:2513:A:C6	22:DA:2514:U:C4	2.93	0.57
22:DA:2014:A:H2	22:DA:2613:U:O2	1.88	0.57
22:DA:2622:U:O2'	22:DA:2825:G:N7	2.38	0.57
22:DA:2657:A:H2'	22:DA:2658:C:H6	1.70	0.57
22:DA:2746:U:H2'	22:DA:2747:G:C5'	2.30	0.57
22:DA:480:A:OP2	42:DU:43:LYS:HD2	2.05	0.57
22:DA:507:A:OP2	22:DA:507:A:H2'	2.05	0.57
22:DA:973:A:OP1	22:DA:973:A:H8	1.87	0.57
28:DG:84:LYS:O	28:DG:85:LYS:CB	2.53	0.57
28:DG:91:VAL:N	28:DG:93:TYR:CD2	2.73	0.57
29:DH:100:ALA:HB2	29:DH:142:VAL:HG21	1.85	0.57
33:DL:19:LEU:HD11	33:DL:31:GLY:CA	2.35	0.57
33:DL:83:ALA:HA	33:DL:118:THR:CG2	2.34	0.57
34:DM:126:ILE:O	34:DM:128:THR:HG23	2.05	0.57
42:DU:7:ASP:O	42:DU:8:ASP:CB	2.52	0.57
43:DV:70:ILE:O	43:DV:71:LYS:HB2	2.03	0.57
1:AA:1303:C:H2'	1:AA:1304:G:H8	1.67	0.56
1:AA:63:C:P	1:AA:384:G:H21	2.28	0.56
1:AA:688:G:H2'	1:AA:689:C:C6	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:70:GLY:HA2	2:AB:163:ILE:HG22	1.87	0.56
8:AH:110:MET:HE2	8:AH:114:ALA:CB	2.35	0.56
8:AH:124:ILE:O	8:AH:124:ILE:HG13	2.05	0.56
9:AI:19:PHE:HD2	9:AI:63:TYR:HD1	1.53	0.56
20:AT:57:VAL:HG13	20:AT:71:ALA:CB	2.35	0.56
49:B1:8:ILE:HG22	49:B1:9:LYS:H	1.69	0.56
52:B4:16:ILE:HD13	52:B4:25:VAL:HG22	1.86	0.56
22:BA:1422:G:C4	22:BA:1423:G:C8	2.92	0.56
22:BA:1876:A:C2'	22:BA:1877:A:H5'	2.34	0.56
22:BA:2228:G:H2'	22:BA:2229:U:C6	2.39	0.56
22:BA:224:U:C2'	22:BA:225:C:O5'	2.50	0.56
22:BA:2276:G:OP2	34:BM:83:GLY:O	2.23	0.56
22:BA:2471:A:H2'	22:BA:2472:G:H5'	1.86	0.56
22:BA:855:G:N3	44:BW:23:LYS:CG	2.68	0.56
22:BA:92:U:H6	22:BA:92:U:C5'	2.09	0.56
25:BD:136:ASN:ND2	25:BD:139:SER:O	2.36	0.56
29:BH:101:ASP:C	29:BH:104:THR:HB	2.25	0.56
32:BK:24:VAL:HG12	32:BK:30:ARG:HD2	1.86	0.56
35:BN:101:GLY:HA3	35:BN:102:PHE:CD2	2.39	0.56
36:BO:116:GLN:OE1	36:BO:116:GLN:CA	2.53	0.56
37:BP:52:ARG:CG	37:BP:52:ARG:NH1	2.42	0.56
37:BP:87:ARG:NH1	37:BP:87:ARG:CG	2.68	0.56
42:BU:78:LYS:HG2	42:BU:79:ALA:N	2.20	0.56
1:CA:1062:U:H2'	1:CA:1063:C:C5	2.40	0.56
1:CA:119:A:C5'	1:CA:120:A:O5'	2.53	0.56
1:CA:1299:A:C2'	1:CA:1299:A:N3	2.64	0.56
1:CA:527:G:C2	1:CA:528:C:C6	2.93	0.56
2:CB:29:PHE:O	2:CB:40:ILE:HG23	2.05	0.56
3:CC:117:ASP:HA	3:CC:120:THR:HB	1.87	0.56
3:CC:168:ARG:CG	3:CC:169:GLU:N	2.68	0.56
7:CG:136:LYS:O	7:CG:140:VAL:HG23	2.04	0.56
1:CA:520:A:OP1	12:CL:48:LEU:HG	2.05	0.56
16:CP:67:ILE:HD11	16:CP:75:ILE:HD11	1.86	0.56
19:CS:35:ARG:CA	19:CS:70:LEU:HB2	2.32	0.56
51:D3:18:LYS:HG3	51:D3:19:GLY:N	2.19	0.56
22:DA:1115:G:O2'	22:DA:1116:G:H8	1.87	0.56
22:DA:1338:G:H2'	22:DA:1339:G:H5'	1.86	0.56
22:DA:1525:A:C6	22:DA:1526:C:C2	2.93	0.56
22:DA:163:C:O2'	22:DA:164:C:H5''	2.05	0.56
22:DA:1930:G:O2'	22:DA:1931:U:P	2.63	0.56
22:DA:333:G:N3	22:DA:334:C:C6	2.72	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:605:G:O2'	22:DA:606:U:C5'	2.53	0.56
22:DA:689:A:N3	22:DA:779:U:H1'	2.20	0.56
23:DB:11:C:H3'	23:DB:12:C:C5'	2.35	0.56
25:DD:125:TRP:CG	25:DD:160:LYS:HB3	2.40	0.56
26:DE:175:ILE:O	26:DE:175:ILE:HG23	2.04	0.56
28:DG:122:ALA:HB2	28:DG:132:LEU:HG	1.87	0.56
22:DA:1248:G:OP1	38:DQ:1:ALA:HB3	2.04	0.56
22:DA:2264:C:H41	44:DW:11:ASN:ND2	2.02	0.56
1:AA:1062:U:H2'	1:AA:1063:C:C6	2.41	0.56
1:AA:807:A:C5	1:AA:808:C:C5	2.93	0.56
2:AB:102:ASN:O	2:AB:106:VAL:HG23	2.04	0.56
4:AD:131:ILE:C	4:AD:133:SER:H	2.08	0.56
6:AF:17:GLN:HG2	4:CD:188:SER:HB2	1.87	0.56
11:AK:24:ALA:HB2	11:AK:29:THR:HG23	1.86	0.56
16:AP:42:ILE:O	16:AP:43:ALA:HB3	2.05	0.56
16:AP:59:HIS:HE1	16:AP:63:GLN:NE2	2.02	0.56
22:BA:1465:G:C6	22:BA:1466:U:N3	2.73	0.56
22:BA:2421:G:N7	51:B3:30:HIS:HD2	2.02	0.56
22:BA:2555:U:C5	22:BA:2556:C:C2	2.92	0.56
22:BA:359:G:H3'	22:BA:360:U:H6	1.70	0.56
22:BA:482:A:N6	22:BA:506:G:O2'	2.35	0.56
22:BA:619:G:H5''	22:BA:620:G:OP2	2.05	0.56
22:BA:780:G:H21	22:BA:783:A:H62	1.53	0.56
22:BA:789:A:OP1	22:BA:790:U:C5	2.58	0.56
22:BA:901:C:H2'	22:BA:902:C:H6	1.71	0.56
25:BD:53:GLY:HA3	25:BD:77:ARG:CB	2.35	0.56
26:BE:153:LEU:O	26:BE:153:LEU:HD12	2.05	0.56
28:BG:84:LYS:O	28:BG:85:LYS:HB2	2.05	0.56
29:BH:72:ILE:O	29:BH:72:ILE:HG23	2.05	0.56
22:BA:1080:A:O2'	30:BI:126:ARG:HG3	2.06	0.56
32:BK:95:ILE:HG13	32:BK:96:GLY:N	2.19	0.56
35:BN:24:MET:CE	35:BN:44:LEU:HB2	2.34	0.56
37:BP:33:GLU:HG3	37:BP:34:GLY:N	2.15	0.56
1:CA:1128:C:O2'	1:CA:1129:C:O4'	2.23	0.56
1:CA:961:U:H5	1:CA:1223:C:H1'	1.69	0.56
1:CA:1416:G:H22	1:CA:1485:U:H1'	1.68	0.56
1:CA:182:A:C2	1:CA:194:C:N4	2.71	0.56
1:CA:722:G:O3'	1:CA:723:U:C5	2.58	0.56
2:CB:9:LEU:HG	2:CB:10:LYS:N	2.20	0.56
3:CC:100:ILE:HD12	3:CC:101:ASN:N	2.20	0.56
3:CC:5:HIS:CD2	3:CC:183:TYR:HE2	2.23	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:106:PHE:CD1	4:CD:106:PHE:N	2.72	0.56
10:CJ:17:LEU:HD23	10:CJ:96:VAL:HG13	1.87	0.56
11:CK:27:ASN:ND2	11:CK:27:ASN:H	2.02	0.56
16:CP:52:LEU:HD23	16:CP:80:LYS:HZ2	1.69	0.56
22:DA:100:U:H1'	22:DA:101:A:N7	2.20	0.56
22:DA:1307:A:N6	22:DA:1606:C:C6	2.54	0.56
22:DA:1361:G:C2'	22:DA:1362:C:C5'	2.83	0.56
22:DA:1389:G:O2'	22:DA:1390:U:C5'	2.53	0.56
22:DA:1669:A:H2'	22:DA:1670:C:H5'	1.87	0.56
22:DA:1721:G:HO2'	22:DA:1722:A:H8	1.52	0.56
22:DA:178:G:C6	22:DA:179:C:C5	2.94	0.56
22:DA:1819:A:C4'	22:DA:1820:U:H5'	2.34	0.56
22:DA:193:U:O2'	22:DA:194:G:H5'	2.05	0.56
22:DA:2209:G:C5	22:DA:2210:U:C4	2.92	0.56
22:DA:2297:A:N3	22:DA:2298:A:C8	2.73	0.56
22:DA:2413:G:O2'	22:DA:2414:G:H5'	2.04	0.56
22:DA:2487:G:H2'	22:DA:2488:G:C8	2.40	0.56
22:DA:1783:A:C5'	22:DA:2608:G:H4'	2.29	0.56
22:DA:279:A:N6	22:DA:361:G:O2'	2.37	0.56
22:DA:2823:A:C4	22:DA:2824:C:C6	2.93	0.56
22:DA:2850:A:O2'	22:DA:2851:A:H5'	2.06	0.56
22:DA:38:A:H2'	22:DA:39:G:O4'	2.05	0.56
22:DA:70:G:O2'	22:DA:71:A:H5''	2.05	0.56
22:DA:739:A:O2'	22:DA:740:C:H5	1.86	0.56
22:DA:78:U:O2'	22:DA:79:C:OP2	2.23	0.56
25:DD:202:ILE:N	25:DD:202:ILE:HD12	2.19	0.56
29:DH:21:VAL:HG22	29:DH:22:LYS:N	2.19	0.56
29:DH:90:LEU:HB3	29:DH:123:ARG:HD2	1.86	0.56
30:DI:79:LEU:HD13	30:DI:100:ILE:HG13	1.87	0.56
32:DK:111:LYS:N	32:DK:111:LYS:HE3	2.12	0.56
32:DK:59:LYS:HE3	32:DK:89:ASN:OD1	2.05	0.56
41:DT:69:ARG:NE	41:DT:70:HIS:CD2	2.73	0.56
42:DU:92:VAL:HB	42:DU:101:THR:CG2	2.35	0.56
43:DV:30:ILE:HG12	43:DV:91:PHE:HB2	1.87	0.56
45:DX:26:ARG:HD3	45:DX:28:PHE:CE2	2.40	0.56
1:AA:1024:G:H2'	1:AA:1025:U:H6	1.69	0.56
1:AA:1064:G:O2'	1:AA:1190:G:N2	2.38	0.56
1:AA:1103:C:H2'	1:AA:1104:G:O4'	2.05	0.56
1:AA:1167:A:N7	1:AA:1169:A:N6	2.52	0.56
1:AA:977:A:H8	1:AA:1223:C:C2	2.23	0.56
1:AA:400:C:C2'	1:AA:401:C:H5'	2.35	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:500:G:H2'	1:AA:501:C:H6	1.66	0.56
1:AA:687:A:C2	1:AA:704:A:C5	2.94	0.56
8:AH:74:ILE:CD1	8:AH:128:VAL:HG22	2.32	0.56
10:AJ:8:ILE:HG23	10:AJ:100:ILE:HG23	1.87	0.56
16:AP:19:VAL:HG13	16:AP:37:GLY:CA	2.34	0.56
16:AP:29:ASN:N	16:AP:29:ASN:ND2	2.53	0.56
17:AQ:16:MET:HE2	17:AQ:20:ILE:HD12	1.86	0.56
1:AA:1319:A:OP1	19:AS:4:LEU:HD11	2.05	0.56
49:B1:16:THR:HG22	49:B1:41:VAL:CG2	2.35	0.56
22:BA:1056:G:H4'	22:BA:1086:A:H8	1.71	0.56
22:BA:819:A:C4	22:BA:1189:A:C2	2.93	0.56
22:BA:1216:G:C5	22:BA:1217:U:C5	2.93	0.56
22:BA:1857:G:O2'	22:BA:1858:A:P	2.64	0.56
22:BA:1997:C:OP1	22:BA:1997:C:C4'	2.52	0.56
22:BA:528:A:H2	22:BA:2043:C:H5'	1.69	0.56
22:BA:2575:C:H5''	22:BA:2576:G:OP2	2.05	0.56
22:BA:276:U:O2	22:BA:276:U:H2'	2.03	0.56
22:BA:277:G:H8	22:BA:361:G:O6	1.87	0.56
22:BA:481:G:C4	22:BA:507:A:C2	2.94	0.56
22:BA:627:A:C6	22:BA:637:A:C8	2.93	0.56
25:BD:169:ARG:C	25:BD:170:VAL:CG1	2.74	0.56
27:BF:46:LYS:HD2	27:BF:46:LYS:N	2.21	0.56
32:BK:43:ILE:CD1	32:BK:52:VAL:CG2	2.83	0.56
34:BM:36:VAL:O	34:BM:36:VAL:HG13	2.04	0.56
1:CA:1239:A:H3'	7:CG:118:ARG:HH22	1.69	0.56
1:CA:1392:G:O2'	1:CA:1393:U:H5'	2.05	0.56
1:CA:1456:A:H2'	1:CA:1457:G:O4'	2.06	0.56
1:CA:413:G:C2	4:CD:32:LYS:HE3	2.40	0.56
1:CA:719:C:H5''	1:CA:720:C:OP2	2.05	0.56
1:CA:802:A:C2'	1:CA:803:G:H5'	2.34	0.56
2:CB:156:LEU:HD23	2:CB:156:LEU:H	1.69	0.56
3:CC:181:ILE:HA	3:CC:201:ILE:O	2.06	0.56
5:CE:18:ASN:OD1	5:CE:33:THR:HG22	2.05	0.56
1:CA:1071:C:H4'	5:CE:53:ARG:HH12	1.70	0.56
48:D0:38:LEU:N	48:D0:41:HIS:HE1	2.03	0.56
50:D2:35:ARG:HG3	50:D2:42:LEU:HD21	1.86	0.56
22:DA:1181:U:H2'	22:DA:1182:G:C8	2.39	0.56
22:DA:1536:C:C2	22:DA:1536:C:OP2	2.58	0.56
22:DA:1597:A:O3'	22:DA:1598:A:C8	2.56	0.56
22:DA:1716:U:O2'	22:DA:1717:A:H5'	2.05	0.56
22:DA:1856:U:H2'	22:DA:1857:G:H5'	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2052:A:OP1	25:DD:146:ILE:HG23	2.04	0.56
22:DA:2617:U:H5''	22:DA:2618:G:OP2	2.05	0.56
22:DA:2893:A:O4'	22:DA:2894:G:C2	2.58	0.56
22:DA:417:C:O2'	22:DA:418:C:H5'	2.04	0.56
22:DA:560:C:H1'	38:DQ:47:ARG:HH11	1.70	0.56
22:DA:597:G:C2	22:DA:661:A:C2	2.94	0.56
22:DA:856:G:N2	22:DA:922:C:C2	2.73	0.56
22:DA:961:C:H5	22:DA:2456:C:C4'	2.18	0.56
22:DA:98:G:O2'	22:DA:103:A:C8	2.57	0.56
23:DB:43:C:C2	23:DB:45:A:N7	2.74	0.56
23:DB:59:A:O2'	23:DB:60:C:H5'	2.04	0.56
22:DA:1830:C:C5'	24:DC:14:HIS:HE1	2.18	0.56
24:DC:44:ASN:O	24:DC:46:GLY:N	2.38	0.56
27:DF:3:LEU:HG	27:DF:100:GLU:OE2	2.05	0.56
27:DF:36:ASN:O	27:DF:37:MET:CB	2.52	0.56
33:DL:90:VAL:HG12	33:DL:90:VAL:O	2.04	0.56
34:DM:116:ALA:C	34:DM:118:LYS:H	2.08	0.56
43:DV:61:LEU:N	43:DV:61:LEU:HD23	2.07	0.56
43:DV:44:HIS:CD2	43:DV:85:LYS:HB2	2.39	0.56
1:AA:1202:U:H2'	1:AA:1203:C:H6	1.70	0.56
1:AA:642:A:O2'	1:AA:643:C:C5'	2.50	0.56
1:AA:932:C:OP1	7:AG:3:ARG:HB3	2.05	0.56
5:AE:100:GLU:HB3	5:AE:121:ASN:HA	1.86	0.56
8:AH:17:GLN:HE21	8:AH:71:VAL:CG2	2.15	0.56
11:AK:51:PHE:CZ	11:AK:64:VAL:HG11	2.41	0.56
1:AA:751:U:H4'	15:AO:23:SER:HA	1.86	0.56
19:AS:51:HIS:HD2	19:AS:53:GLY:N	2.02	0.56
52:B4:3:VAL:O	52:B4:4:ARG:O	2.24	0.56
22:BA:1505:A:C6	22:BA:1506:U:N3	2.74	0.56
22:BA:1728:C:O2'	22:BA:1729:U:H6	1.87	0.56
22:BA:1735:A:C2	22:BA:1736:U:C2	2.94	0.56
22:BA:1819:A:OP1	24:BC:154:ALA:HA	2.05	0.56
22:BA:1872:A:O2'	22:BA:1873:G:O4'	2.23	0.56
22:BA:2554:U:C4	22:BA:2555:U:O4	2.59	0.56
22:BA:2661:G:O2'	22:BA:2662:A:C5'	2.50	0.56
22:BA:303:G:C4	22:BA:304:U:C5	2.93	0.56
24:BC:18:VAL:O	24:BC:18:VAL:HG22	2.04	0.56
24:BC:203:VAL:CG1	24:BC:204:LEU:N	2.68	0.56
26:BE:141:MET:HB2	26:BE:143:LEU:HG	1.86	0.56
26:BE:145:ASP:HB2	26:BE:184:ASP:OD2	2.05	0.56
22:BA:659:G:H4'	26:BE:95:LYS:HD2	1.86	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:40:GLY:C	27:BF:84:ILE:HD11	2.26	0.56
30:BI:3:LYS:CD	30:BI:4:VAL:HG23	2.35	0.56
31:BJ:140:LEU:CD1	31:BJ:140:LEU:C	2.73	0.56
35:BN:32:GLU:CB	35:BN:115:LEU:HD12	2.36	0.56
36:BO:2:ASP:O	36:BO:3:LYS:HG2	2.05	0.56
41:BT:40:LYS:O	41:BT:44:LYS:N	2.38	0.56
41:BT:32:LEU:O	41:BT:83:ALA:HB2	2.06	0.56
1:CA:1134:G:C5	1:CA:1135:U:H1'	2.40	0.56
1:CA:1169:A:HO2'	1:CA:1170:A:H8	1.47	0.56
1:CA:960:U:C4'	1:CA:961:U:H5''	2.34	0.56
3:CC:36:PHE:HE1	14:CN:91:GLU:HB3	1.69	0.56
3:CC:8:GLY:HA2	3:CC:11:LEU:HG	1.86	0.56
22:DA:1062:G:N2	22:DA:1077:A:H2	1.98	0.56
22:DA:1847:A:O2'	22:DA:1848:A:H8	1.88	0.56
22:DA:2561:U:H2'	22:DA:2562:U:O5'	2.04	0.56
22:DA:2582:G:C2'	22:DA:2582:G:N3	2.68	0.56
22:DA:2624:G:H1'	48:D0:18:HIS:HE1	1.69	0.56
22:DA:2751:G:H4'	28:DG:3:VAL:CG1	2.36	0.56
22:DA:617:G:N3	22:DA:618:G:C8	2.73	0.56
23:DB:58:A:O2'	23:DB:59:A:O4'	2.22	0.56
23:DB:67:G:C4	23:DB:68:C:C5	2.93	0.56
24:DC:128:THR:HG22	24:DC:188:ARG:CB	2.32	0.56
24:DC:64:VAL:HG11	24:DC:66:PHE:CE1	2.40	0.56
22:DA:2787:C:H1'	25:DD:63:PRO:HG3	1.87	0.56
26:DE:31:VAL:HG11	26:DE:100:MET:O	2.03	0.56
27:DF:129:MET:O	27:DF:129:MET:HG3	2.04	0.56
27:DF:46:LYS:O	27:DF:50:ASP:HB2	2.04	0.56
28:DG:91:VAL:HG23	28:DG:92:GLY:H	1.68	0.56
29:DH:9:VAL:HG13	29:DH:10:ALA:H	1.69	0.56
29:DH:1:MET:HB3	29:DH:21:VAL:O	2.06	0.56
30:DI:77:VAL:CB	30:DI:80:LYS:HE3	2.35	0.56
32:DK:54:LYS:HG2	32:DK:54:LYS:O	2.05	0.56
22:DA:1152:C:C5'	38:DQ:79:ILE:HD12	2.30	0.56
41:DT:3:ARG:NH1	41:DT:42:GLU:HG2	2.21	0.56
45:DX:1:SER:O	45:DX:3:VAL:HG13	2.05	0.56
1:AA:1152:A:C4	1:AA:1153:G:N7	2.73	0.56
1:AA:579:A:H2'	1:AA:580:C:H6	1.70	0.56
4:AD:198:LEU:O	4:AD:201:GLU:HB3	2.05	0.56
9:AI:117:LEU:HD12	9:AI:120:ALA:O	2.06	0.56
12:AL:43:LYS:HZ2	12:AL:44:PRO:CD	2.19	0.56
13:AM:45:SER:O	13:AM:46:GLU:CB	2.53	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AN:42:ASN:C	14:AN:44:VAL:H	2.09	0.56
49:B1:31:GLU:O	49:B1:31:GLU:HG2	2.04	0.56
49:B1:16:THR:HG22	49:B1:41:VAL:HG21	1.87	0.56
49:B1:50:GLU:OE1	49:B1:50:GLU:HA	2.05	0.56
22:BA:1054:A:H2'	22:BA:1055:G:C8	2.40	0.56
22:BA:1289:C:H2'	22:BA:1290:C:H6	1.71	0.56
22:BA:134:G:H2'	22:BA:135:U:O4'	2.06	0.56
22:BA:2593:U:H2'	22:BA:2594:C:H6	1.69	0.56
22:BA:2862:G:H2'	22:BA:2863:C:H6	1.71	0.56
22:BA:58:G:N2	22:BA:70:G:C4	2.74	0.56
28:BG:59:ASP:CB	28:BG:63:GLN:HG2	2.35	0.56
31:BJ:135:GLN:CA	31:BJ:135:GLN:HE21	2.18	0.56
32:BK:43:ILE:HD12	32:BK:52:VAL:CG2	2.35	0.56
36:BO:2:ASP:O	36:BO:3:LYS:CB	2.52	0.56
37:BP:25:VAL:HG11	37:BP:46:VAL:HG23	1.87	0.56
42:BU:27:VAL:HA	42:BU:33:VAL:HG12	1.87	0.56
22:BA:2080:A:C5'	45:BX:18:SER:CB	2.83	0.56
1:CA:1454:G:O2'	1:CA:1455:G:C5'	2.49	0.56
1:CA:363:A:H2'	1:CA:364:A:O4'	2.04	0.56
1:CA:790:A:N6	1:CA:791:G:C6	2.74	0.56
5:CE:15:ILE:HB	5:CE:35:LEU:HD13	1.88	0.56
6:CF:3:HIS:HD2	6:CF:65:GLU:HG2	1.71	0.56
6:CF:66:ALA:HB1	6:CF:70:VAL:CG2	2.36	0.56
8:CH:9:MET:HG3	8:CH:26:MET:SD	2.45	0.56
9:CI:51:LEU:O	9:CI:53:LEU:N	2.38	0.56
10:CJ:44:THR:OG1	10:CJ:70:HIS:CE1	2.58	0.56
18:CR:25:ILE:O	18:CR:25:ILE:HG13	2.05	0.56
22:DA:1300:G:H5''	22:DA:1301:A:H5'	1.87	0.56
22:DA:1675:C:N3	25:DD:133:THR:HG21	2.20	0.56
22:DA:1683:U:O2'	22:DA:1684:G:H5'	2.06	0.56
22:DA:1798:U:H5	24:DC:270:ARG:NH1	2.04	0.56
22:DA:1808:A:H5''	22:DA:1809:A:N7	2.19	0.56
22:DA:1939:U:H6	22:DA:1939:U:H5'	1.70	0.56
22:DA:2478:A:N7	22:DA:2529:G:C6	2.73	0.56
22:DA:2531:A:H5'	28:DG:156:TYR:CE2	2.41	0.56
22:DA:254:G:N7	51:D3:4:LYS:HE2	2.20	0.56
22:DA:324:A:N6	22:DA:338:G:O2'	2.39	0.56
22:DA:388:G:H2'	22:DA:390:U:OP2	2.06	0.56
22:DA:478:A:C2	22:DA:480:A:C5	2.93	0.56
22:DA:621:A:O2'	22:DA:622:G:O5'	2.24	0.56
23:DB:21:G:N2	23:DB:22:U:H1'	2.20	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:DO:79:ALA:HB1	36:DO:114:GLY:HA3	1.87	0.56
22:DA:2718:G:OP1	37:DP:97:TYR:CD1	2.58	0.56
40:DS:50:VAL:O	40:DS:53:SER:N	2.38	0.56
22:DA:1338:G:H4'	41:DT:18:GLU:HG3	1.86	0.56
41:DT:69:ARG:CG	41:DT:70:HIS:HD2	2.19	0.56
41:DT:29:THR:H	41:DT:87:LEU:HB3	1.67	0.56
43:DV:79:ARG:HB3	43:DV:79:ARG:NH1	2.20	0.56
46:DY:49:ASP:O	46:DY:52:ARG:HB2	2.04	0.56
1:AA:414:A:C4	1:AA:415:A:C8	2.94	0.56
1:AA:489:C:H2'	1:AA:490:C:C5'	2.36	0.56
1:AA:55:A:C4	1:AA:56:U:C6	2.93	0.56
1:AA:815:A:H4'	1:AA:817:C:C4	2.41	0.56
3:AC:146:LYS:CB	3:AC:202:PHE:CD2	2.87	0.56
3:AC:79:LYS:HE3	3:AC:79:LYS:H	1.71	0.56
5:AE:113:VAL:HG21	5:AE:140:ILE:HD12	1.87	0.56
10:AJ:28:THR:HG22	10:AJ:28:THR:O	2.03	0.56
1:AA:375:U:H4'	16:AP:17:TYR:CE2	2.41	0.56
17:AQ:20:ILE:CB	17:AQ:47:ASP:OD1	2.51	0.56
17:AQ:54:ILE:O	17:AQ:54:ILE:HD13	2.06	0.56
19:AS:79:TYR:CG	19:AS:80:ARG:N	2.73	0.56
49:B1:9:LYS:NZ	49:B1:50:GLU:OE2	2.33	0.56
22:BA:1179:G:N1	22:BA:1180:U:O2'	2.38	0.56
22:BA:1300:G:C5'	22:BA:1301:A:H5'	2.36	0.56
22:BA:2051:A:H4'	22:BA:2052:A:OP1	2.05	0.56
22:BA:64:A:H2'	22:BA:65:U:C6	2.40	0.56
22:BA:933:A:C2'	22:BA:933:A:N3	2.63	0.56
23:BB:2:G:C2	23:BB:119:A:C2	2.94	0.56
25:BD:151:THR:O	25:BD:152:PRO:C	2.42	0.56
27:BF:169:LEU:HD12	27:BF:169:LEU:H	1.71	0.56
31:BJ:81:ILE:CG2	31:BJ:82:GLY:H	1.95	0.56
31:BJ:99:ARG:O	31:BJ:103:ILE:HG23	2.04	0.56
32:BK:107:LEU:O	32:BK:109:SER:N	2.32	0.56
34:BM:35:ALA:O	34:BM:36:VAL:CB	2.52	0.56
47:BZ:9:THR:CG2	47:BZ:10:ARG:HB2	2.34	0.56
1:CA:1348:U:O2'	1:CA:1349:A:H8	1.88	0.56
1:CA:1450:U:C4'	1:CA:1451:U:C5	2.87	0.56
1:CA:23:C:H5	1:CA:561:U:O4	1.88	0.56
1:CA:253:A:C2	1:CA:254:G:C5	2.93	0.56
1:CA:372:C:HO2'	1:CA:373:A:P	2.28	0.56
1:CA:460:A:H5''	1:CA:461:A:OP1	2.06	0.56
1:CA:473:U:OP1	16:CP:76:LYS:CE	2.54	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:704:A:O2'	1:CA:705:G:H8	1.89	0.56
1:CA:945:G:H1'	1:CA:1337:G:H1'	1.87	0.56
1:CA:969:A:O2'	1:CA:970:C:C5'	2.54	0.56
3:CC:126:ARG:HE	3:CC:126:ARG:CA	2.17	0.56
11:CK:74:LYS:O	11:CK:74:LYS:HG2	2.06	0.56
20:CT:34:VAL:CG1	20:CT:78:LEU:HD21	2.36	0.56
21:CU:5:VAL:HG12	21:CU:6:ARG:H	1.71	0.56
49:D1:38:PHE:CD2	49:D1:39:ASP:N	2.74	0.56
22:DA:103:A:O2'	22:DA:104:A:C5'	2.54	0.56
22:DA:103:A:O2'	22:DA:104:A:H5'	2.06	0.56
22:DA:1726:C:O2'	22:DA:1727:C:H5'	2.05	0.56
22:DA:2638:G:HO2'	22:DA:2639:A:H8	1.47	0.56
22:DA:308:G:N1	22:DA:309:A:C2	2.74	0.56
22:DA:36:G:H1	22:DA:445:C:N4	2.02	0.56
22:DA:467:G:H4'	22:DA:796:C:O2'	2.06	0.56
22:DA:510:C:O2'	22:DA:511:U:H5'	2.05	0.56
25:DD:15:PHE:HA	25:DD:20:VAL:O	2.04	0.56
27:DF:129:MET:CE	27:DF:174:PHE:CZ	2.89	0.56
32:DK:11:ALA:CB	32:DK:64:ARG:HH12	2.18	0.56
32:DK:92:GLU:O	32:DK:93:GLN:C	2.44	0.56
33:DL:65:GLY:O	33:DL:66:PHE:CB	2.53	0.56
36:DO:17:LYS:CE	36:DO:21:LEU:HD11	2.21	0.56
1:AA:1278:G:O5'	1:AA:1279:G:H5'	2.06	0.56
1:AA:1319:A:C5	1:AA:1323:G:C4	2.94	0.56
1:AA:1410:A:C2'	1:AA:1411:C:O5'	2.53	0.56
1:AA:188:C:O2	1:AA:188:C:H2'	2.05	0.56
1:AA:339:C:H2'	1:AA:340:U:H6	1.71	0.56
1:AA:503:C:H6	1:AA:503:C:O5'	1.88	0.56
1:AA:900:A:N1	1:AA:901:A:C2	2.74	0.56
2:AB:186:VAL:N	2:AB:199:ILE:O	2.39	0.56
2:AB:20:ARG:O	2:AB:21:TYR:C	2.44	0.56
4:AD:29:THR:O	4:AD:30:LYS:HD3	2.06	0.56
4:AD:69:ARG:HE	4:AD:69:ARG:HA	1.70	0.56
5:AE:14:LEU:C	5:AE:14:LEU:HD13	2.24	0.56
7:AG:130:LYS:N	7:AG:134:VAL:HG21	2.20	0.56
7:AG:25:PHE:O	7:AG:28:ILE:HB	2.06	0.56
7:AG:72:VAL:HG12	7:AG:89:GLU:HA	1.87	0.56
1:AA:667:G:C4'	15:AO:50:HIS:ND1	2.66	0.56
17:AQ:18:LYS:CB	17:AQ:47:ASP:HB2	2.35	0.56
50:B2:12:ARG:HB2	50:B2:12:ARG:HH21	1.69	0.56
22:BA:1334:G:C6	22:BA:1335:C:C4	2.93	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1474:U:C2'	22:BA:1475:G:H5'	2.35	0.56
22:BA:1508:A:O2'	22:BA:1509:A:C5'	2.53	0.56
22:BA:1867:G:HO2'	22:BA:1868:C:H5'	1.68	0.56
22:BA:645:C:N4	22:BA:2350:C:H4'	2.20	0.56
29:BH:27:ARG:HH12	29:BH:38:PRO:HG3	1.70	0.56
31:BJ:53:TYR:CD1	31:BJ:121:LYS:HG2	2.41	0.56
33:BL:92:LEU:HD23	33:BL:125:LEU:HD23	1.87	0.56
35:BN:103:ARG:HD3	35:BN:110:MET:CE	2.29	0.56
36:BO:59:ALA:CA	36:BO:62:LEU:HD13	2.35	0.56
37:BP:5:LYS:O	37:BP:9:GLN:HG2	2.05	0.56
38:BQ:97:ILE:HD13	38:BQ:104:ALA:HB3	1.88	0.56
40:BS:13:SER:O	40:BS:14:ALA:CB	2.53	0.56
42:BU:25:LYS:HB2	42:BU:34:ILE:O	2.05	0.56
1:CA:1046:A:H2'	1:CA:1047:G:H8	1.70	0.56
1:CA:1318:A:O2'	19:CS:36:ARG:HD3	2.05	0.56
1:CA:178:C:C4	1:CA:179:A:N7	2.74	0.56
1:CA:181:A:H2	1:CA:195:A:C2	2.24	0.56
1:CA:345:C:H4'	1:CA:346:G:O5'	2.06	0.56
1:CA:347:G:H2'	1:CA:348:G:H8	1.70	0.56
1:CA:80:A:C6	1:CA:81:A:O2'	2.56	0.56
1:CA:89:U:O2'	1:CA:90:C:O4'	2.23	0.56
2:CB:25:LYS:O	2:CB:26:MET:HE3	2.05	0.56
3:CC:85:LYS:O	3:CC:89:VAL:HG21	2.05	0.56
5:CE:13:LYS:HB2	5:CE:116:VAL:HG11	1.88	0.56
5:CE:95:MET:HE1	5:CE:143:LEU:CD2	2.35	0.56
8:CH:102:VAL:HG22	8:CH:126:CYS:SG	2.45	0.56
11:CK:92:ARG:NH1	11:CK:92:ARG:CG	2.48	0.56
17:CQ:30:HIS:CG	17:CQ:31:PRO:HD2	2.40	0.56
20:CT:61:ALA:HA	20:CT:67:HIS:HA	1.88	0.56
49:D1:29:LYS:HE2	49:D1:31:GLU:OE2	2.06	0.56
50:D2:45:SER:C	50:D2:46:LYS:HD2	2.25	0.56
22:DA:1203:U:C4	22:DA:1204:A:N7	2.73	0.56
22:DA:1256:G:O2'	22:DA:1257:C:H5'	2.05	0.56
22:DA:1263:U:C4'	48:D0:6:LYS:HE3	2.36	0.56
22:DA:191:A:C2	22:DA:192:C:C2	2.94	0.56
22:DA:1997:C:HO2'	22:DA:1998:A:C5'	2.18	0.56
22:DA:2107:G:H2'	22:DA:2108:A:H8	1.68	0.56
22:DA:2135:A:C3'	22:DA:2136:G:C5'	2.78	0.56
22:DA:2200:C:N4	22:DA:2224:G:N2	2.53	0.56
22:DA:2508:G:H2'	22:DA:2509:G:H8	1.70	0.56
22:DA:2636:C:H2'	22:DA:2637:U:C6	2.40	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:35:G:C5	22:DA:454:A:C2	2.94	0.56
22:DA:53:A:C2'	22:DA:54:G:H5'	2.36	0.56
22:DA:629:G:OP1	51:D3:16:THR:HB	2.06	0.56
22:DA:936:A:C6	22:DA:937:C:C4	2.94	0.56
22:DA:989:G:C4'	22:DA:990:A:OP1	2.53	0.56
24:DC:184:GLU:O	24:DC:185:ALA:HB3	2.05	0.56
25:DD:149:ASN:ND2	25:DD:150:GLN:HB3	2.20	0.56
25:DD:4:LEU:HD12	25:DD:32:ASN:OD1	2.05	0.56
25:DD:73:VAL:HG22	25:DD:74:GLU:N	2.19	0.56
29:DH:25:TYR:CE1	29:DH:30:LEU:HD21	2.40	0.56
31:DJ:16:TYR:O	31:DJ:54:ILE:HD12	2.06	0.56
32:DK:63:VAL:HG12	32:DK:64:ARG:HD3	1.86	0.56
35:DN:18:GLN:HG2	35:DN:18:GLN:O	2.04	0.56
37:DP:50:ARG:O	37:DP:51:ASN:HB2	2.06	0.56
39:DR:4:VAL:HG22	39:DR:40:MET:HB3	1.86	0.56
22:DA:923:G:H1'	44:DW:23:LYS:HZ1	1.70	0.56
44:DW:37:VAL:CG2	44:DW:38:ARG:NH1	2.64	0.56
1:AA:1231:G:C6	1:AA:1232:U:C4	2.94	0.56
1:AA:192:A:C5	1:AA:193:C:C5	2.93	0.56
1:AA:199:A:H2'	1:AA:200:G:C8	2.41	0.56
1:AA:550:G:C2'	1:AA:551:U:H5'	2.36	0.56
1:AA:652:U:HO2'	1:AA:653:U:P	2.28	0.56
1:AA:723:U:O2'	1:AA:855:U:H4'	2.05	0.56
1:AA:812:G:HO2'	1:AA:813:U:P	2.28	0.56
1:AA:80:A:C2	1:AA:81:A:H1'	2.40	0.56
3:AC:34:SER:O	3:AC:38:VAL:HG13	2.05	0.56
6:AF:86:ARG:HH12	6:AF:88:MET:HE3	1.70	0.56
6:AF:93:LYS:O	6:AF:94:HIS:CB	2.53	0.56
8:AH:54:THR:C	8:AH:56:PRO:HD3	2.26	0.56
12:AL:33:CYS:N	12:AL:54:VAL:HG13	2.21	0.56
13:AM:2:ARG:HG3	13:AM:56:ARG:HH12	1.69	0.56
16:AP:79:ASN:O	16:AP:80:LYS:CB	2.51	0.56
19:AS:19:GLU:HA	19:AS:19:GLU:OE2	2.06	0.56
22:BA:1056:G:H4'	22:BA:1086:A:C8	2.41	0.56
22:BA:1501:G:O2'	22:BA:1502:A:H5'	2.05	0.56
22:BA:1736:U:H2'	22:BA:1737:G:O4'	2.06	0.56
22:BA:2279:G:N7	44:BW:10:ARG:NH2	2.53	0.56
22:BA:2793:C:H2'	22:BA:2794:C:H6	1.70	0.56
22:BA:289:G:H2'	22:BA:290:U:C6	2.40	0.56
28:BG:83:THR:CA	28:BG:84:LYS:HE2	2.35	0.56
30:BI:23:VAL:HG23	30:BI:24:GLY:H	1.71	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:18:C:H4'	1:CA:1078:U:O2	2.05	0.56
1:CA:1151:A:H4'	10:CJ:70:HIS:HE1	1.71	0.56
1:CA:1169:A:C2'	1:CA:1170:A:H8	2.18	0.56
1:CA:66:A:C5	1:CA:67:C:C5	2.94	0.56
1:CA:977:A:H1'	1:CA:1223:C:H42	1.70	0.56
3:CC:172:VAL:HG12	3:CC:181:ILE:HD13	1.88	0.56
3:CC:181:ILE:O	3:CC:181:ILE:HG22	2.04	0.56
4:CD:104:MET:SD	4:CD:142:VAL:CG1	2.94	0.56
4:CD:138:PRO:O	4:CD:139:ASN:HB2	2.05	0.56
5:CE:68:ARG:O	5:CE:69:ASN:C	2.44	0.56
5:CE:79:THR:HA	5:CE:121:ASN:OD1	2.06	0.56
7:CG:22:LEU:CA	7:CG:25:PHE:HB3	2.22	0.56
10:CJ:102:LEU:HD13	10:CJ:102:LEU:OXT	2.04	0.56
10:CJ:30:LYS:HE2	10:CJ:36:VAL:CG2	2.36	0.56
11:CK:12:ARG:N	11:CK:12:ARG:CD	2.68	0.56
17:CQ:67:SER:O	17:CQ:69:THR:N	2.39	0.56
11:CK:126:ARG:N	21:CU:33:ARG:HE	2.03	0.56
22:DA:111:A:N1	22:DA:112:U:C2	2.74	0.56
22:DA:140:C:H5'	22:DA:141:G:H21	1.70	0.56
22:DA:1429:G:C2	22:DA:1430:G:C5	2.93	0.56
22:DA:1492:G:C3'	22:DA:1493:C:C5'	2.75	0.56
22:DA:149:A:C2'	22:DA:150:U:H5'	2.36	0.56
22:DA:1519:G:C6	22:DA:1520:U:N3	2.73	0.56
22:DA:1843:C:H6	22:DA:1843:C:O5'	1.89	0.56
22:DA:2051:A:C4'	22:DA:2052:A:OP1	2.33	0.56
22:DA:2093:G:O2'	22:DA:2094:A:P	2.63	0.56
22:DA:1373:A:H5'	22:DA:2212:A:H1'	1.86	0.56
22:DA:2215:C:O2'	22:DA:2216:G:H8	1.89	0.56
22:DA:2259:U:C5	22:DA:2427:C:C4	2.93	0.56
22:DA:2327:A:H2'	22:DA:2328:A:C8	2.41	0.56
22:DA:2345:G:C5	22:DA:2347:C:N4	2.73	0.56
22:DA:354:A:H2'	22:DA:355:U:O4'	2.06	0.56
23:DB:63:C:H2'	23:DB:63:C:O2	2.05	0.56
24:DC:145:MET:HE2	24:DC:181:ARG:NH2	2.17	0.56
24:DC:16:VAL:HG12	24:DC:202:ARG:HA	1.87	0.56
27:DF:127:TYR:O	27:DF:155:ILE:HD11	2.06	0.56
27:DF:57:ALA:HB2	27:DF:64:PRO:HG2	1.88	0.56
28:DG:122:ALA:HB2	28:DG:132:LEU:HA	1.88	0.56
30:DI:52:LEU:O	30:DI:54:ILE:HD12	2.05	0.56
23:DB:50:A:OP1	36:DO:68:LYS:HB2	2.06	0.56
40:DS:68:ASP:N	40:DS:68:ASP:OD1	2.38	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DS:6:LYS:NZ	40:DS:104:THR:HG23	2.20	0.56
43:DV:88:HIS:O	43:DV:89:ILE:HG23	2.04	0.56
43:DV:75:GLN:HB2	43:DV:90:ASP:O	2.05	0.56
45:DX:19:HIS:C	45:DX:21:LEU:H	2.09	0.56
1:AA:1157:A:H1'	1:AA:1181:G:N1	2.20	0.56
1:AA:197:A:O2'	1:AA:198:G:C8	2.58	0.56
1:AA:420:U:C2'	1:AA:421:U:H5''	2.36	0.56
1:AA:433:G:O2'	1:AA:434:U:H5'	2.06	0.56
1:AA:556:C:C3'	1:AA:557:G:H5'	2.35	0.56
1:AA:687:A:N7	1:AA:701:U:H5	2.04	0.56
1:AA:923:A:H2'	1:AA:924:C:H6	1.71	0.56
11:AK:51:PHE:HB2	11:AK:55:ARG:HB3	1.88	0.56
13:AM:22:TYR:CE2	13:AM:69:ARG:HG2	2.41	0.56
14:AN:2:LYS:HD3	14:AN:5:MET:HG2	1.88	0.56
15:AO:45:HIS:C	15:AO:47:LYS:H	2.09	0.56
1:AA:483:C:O2	16:AP:13:LYS:NZ	2.39	0.56
17:AQ:80:LYS:CB	17:AQ:80:LYS:HZ2	2.17	0.56
20:AT:43:LYS:HD3	20:AT:86:ALA:O	2.06	0.56
48:B0:39:ARG:CB	48:B0:39:ARG:HH11	2.05	0.56
22:BA:1052:C:C2'	22:BA:1053:C:H5'	2.36	0.56
22:BA:1266:G:OP1	48:B0:15:ARG:NE	2.38	0.56
22:BA:138:U:H3'	22:BA:139:U:H5'	1.87	0.56
22:BA:2400:G:O2'	22:BA:2401:U:H5'	2.06	0.56
22:BA:2524:G:C2'	22:BA:2525:G:O5'	2.53	0.56
22:BA:301:G:OP2	42:BU:81:ARG:NH1	2.39	0.56
24:BC:106:PRO:CB	24:BC:141:HIS:CE1	2.74	0.56
22:BA:2682:A:C8	25:BD:11:MET:HG2	2.39	0.56
25:BD:158:GLY:O	25:BD:159:LYS:C	2.44	0.56
26:BE:5:LEU:HD22	26:BE:121:VAL:HA	1.87	0.56
28:BG:86:LEU:HB3	28:BG:162:ARG:O	2.05	0.56
29:BH:111:ALA:O	29:BH:112:LYS:CD	2.54	0.56
31:BJ:44:TYR:O	31:BJ:45:THR:CB	2.54	0.56
33:BL:93:ASN:O	33:BL:95:LEU:N	2.38	0.56
34:BM:78:LEU:CD2	34:BM:79:ALA:N	2.69	0.56
39:BR:53:PHE:CD1	39:BR:53:PHE:N	2.73	0.56
1:CA:1195:C:H2'	1:CA:1197:A:O4'	2.05	0.56
1:CA:1206:G:C6	1:CA:1207:G:C5	2.94	0.56
1:CA:1416:G:C2'	1:CA:1417:G:H5'	2.35	0.56
1:CA:1452:C:H5'	1:CA:1453:G:C5	2.40	0.56
1:CA:104:G:H4'	1:CA:174:A:O4'	2.05	0.56
1:CA:229:U:H2'	1:CA:230:G:O4'	2.05	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:722:G:N3	1:CA:722:G:H2'	2.20	0.56
1:CA:934:C:C5	1:CA:1344:C:N3	2.74	0.56
2:CB:128:LEU:HD23	2:CB:131:LYS:HD3	1.88	0.56
1:CA:1189:U:O2'	3:CC:175:HIS:HD2	1.87	0.56
4:CD:40:HIS:O	4:CD:43:ARG:HB2	2.06	0.56
6:CF:18:VAL:CB	6:CF:19:PRO:CD	2.83	0.56
7:CG:32:ASP:HB3	7:CG:34:LYS:HD3	1.87	0.56
11:CK:124:LYS:O	21:CU:33:ARG:CZ	2.54	0.56
13:CM:47:LEU:HD23	13:CM:48:SER:N	2.21	0.56
22:DA:116:C:HO2'	22:DA:117:G:H5'	1.71	0.56
22:DA:1323:C:C4	22:DA:1324:G:N7	2.74	0.56
22:DA:1827:U:H2'	22:DA:1828:G:H8	1.70	0.56
22:DA:2143:C:C5'	22:DA:2144:G:OP2	2.52	0.56
22:DA:2432:A:N1	45:DX:20:ALA:HA	2.21	0.56
22:DA:2526:G:C5	22:DA:2527:C:C5	2.94	0.56
22:DA:338:G:C2'	22:DA:339:U:C5'	2.76	0.56
22:DA:674:G:N2	22:DA:2445:G:OP1	2.37	0.56
22:DA:196:A:H2'	22:DA:805:G:O6	2.06	0.56
25:DD:10:GLY:CA	25:DD:26:VAL:HB	2.36	0.56
25:DD:37:VAL:CG2	25:DD:91:THR:HA	2.36	0.56
26:DE:136:GLN:HA	26:DE:139:LYS:HG2	1.88	0.56
28:DG:71:LEU:HD22	28:DG:74:MET:CE	2.35	0.56
30:DI:23:VAL:HG11	30:DI:37:PHE:CZ	2.41	0.56
30:DI:44:LYS:HD3	30:DI:44:LYS:O	2.06	0.56
32:DK:47:ILE:HG22	32:DK:49:ARG:HG3	1.88	0.56
35:DN:35:LYS:NZ	35:DN:112:TYR:CE1	2.74	0.56
38:DQ:35:PHE:HE1	38:DQ:39:ILE:HD11	1.71	0.56
31:DJ:4:PHE:HB3	38:DQ:63:ARG:NH2	2.21	0.56
40:DS:49:LYS:HB3	40:DS:49:LYS:HZ2	1.70	0.56
40:DS:4:ILE:HD12	40:DS:5:ALA:H	1.71	0.56
41:DT:34:VAL:HG21	41:DT:43:ILE:HD12	1.88	0.56
42:DU:20:LYS:HD2	42:DU:38:ILE:HD11	1.86	0.56
44:DW:36:ILE:HG22	44:DW:37:VAL:O	2.05	0.56
1:AA:1157:A:C6	1:AA:1180:A:C5	2.94	0.56
1:AA:1061:G:C6	1:AA:1197:A:C2	2.94	0.56
1:AA:1303:C:C2'	1:AA:1304:G:H8	2.19	0.56
1:AA:1508:A:H2'	1:AA:1509:C:O5'	2.06	0.56
1:AA:495:A:C2	1:AA:496:A:N6	2.74	0.56
1:AA:769:G:H4'	1:AA:1513:A:H4'	1.87	0.56
1:AA:771:G:C4	1:AA:809:G:N2	2.74	0.56
1:AA:841:C:H2'	1:AA:843:U:H5'	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:106:VAL:CG2	12:AL:116:TYR:HB3	2.36	0.56
12:AL:89:LEU:HB3	12:AL:92:VAL:CG2	2.36	0.56
15:AO:5:GLU:O	15:AO:9:LYS:HG3	2.06	0.56
22:BA:1061:U:H6	22:BA:1070:A:C1'	2.19	0.56
22:BA:1734:G:O2'	22:BA:1735:A:C8	2.48	0.56
22:BA:1761:C:H2'	22:BA:1762:A:H5'	1.88	0.56
22:BA:197:A:H62	22:BA:2430:A:H2'	1.67	0.56
22:BA:2750:A:O2'	22:BA:2752:C:N4	2.35	0.56
22:BA:611:C:H2'	22:BA:612:G:O5'	2.05	0.56
22:BA:68:G:N2	22:BA:74:A:OP2	2.36	0.56
24:BC:15:VAL:C	24:BC:203:VAL:HG11	2.26	0.56
24:BC:250:GLN:H	24:BC:250:GLN:CD	2.09	0.56
27:BF:133:GLU:H	27:BF:150:GLY:CA	2.18	0.56
32:BK:1:MET:HE3	32:BK:32:TYR:CG	2.40	0.56
37:BP:50:ARG:HD3	37:BP:56:SER:CA	2.33	0.56
22:BA:1160:G:N2	39:BR:10:LYS:HD2	2.21	0.56
22:BA:2080:A:H5'	45:BX:18:SER:HB3	1.86	0.56
1:CA:1005:A:C8	1:CA:1006:G:H1'	2.41	0.56
1:CA:1050:G:C2	1:CA:1051:C:C5	2.94	0.56
1:CA:120:A:H3'	1:CA:121:U:C5'	2.34	0.56
1:CA:1477:U:H2'	1:CA:1478:U:C6	2.41	0.56
1:CA:577:G:N9	1:CA:816:A:C2	2.74	0.56
1:CA:881:G:H2'	1:CA:882:C:O4'	2.05	0.56
3:CC:137:VAL:HG13	3:CC:148:ILE:HG23	1.88	0.56
3:CC:39:ARG:HG2	3:CC:54:ILE:CD1	2.32	0.56
1:CA:1151:A:C4'	10:CJ:70:HIS:HE1	2.19	0.56
15:CO:69:LEU:HD13	15:CO:77:TYR:HB2	1.88	0.56
49:D1:12:SER:HB2	49:D1:48:TYR:CZ	2.40	0.56
22:DA:1062:G:C8	22:DA:1088:A:C8	2.93	0.56
22:DA:1139:G:N3	22:DA:1143:A:C2	2.71	0.56
22:DA:1278:C:H1'	35:DN:27:SER:OG	2.06	0.56
22:DA:1438:U:C5	22:DA:1552:A:N1	2.73	0.56
22:DA:1313:U:C6	22:DA:1610:A:C8	2.94	0.56
22:DA:1673:G:O2'	22:DA:1674:G:H5'	2.06	0.56
22:DA:1826:G:C5	22:DA:1827:U:C4	2.94	0.56
22:DA:1936:A:H2	22:DA:1943:U:C5	2.23	0.56
22:DA:1954:G:O2'	22:DA:1955:U:P	2.64	0.56
22:DA:2255:G:H2'	22:DA:2256:G:O4'	2.06	0.56
22:DA:2348:U:HO2'	22:DA:2349:G:H8	1.52	0.56
22:DA:2766:A:N3	22:DA:2766:A:H2'	2.20	0.56
22:DA:58:G:N2	22:DA:59:U:C1'	2.68	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:624:C:O2'	22:DA:657:U:H5''	2.05	0.56
22:DA:672:C:H6	22:DA:672:C:C5'	2.16	0.56
22:DA:847:U:H5'	22:DA:848:C:OP2	2.06	0.56
22:DA:976:G:C2'	22:DA:977:G:H8	2.17	0.56
23:DB:71:C:H2'	23:DB:72:G:H5'	1.87	0.56
22:DA:1568:G:H21	24:DC:57:HIS:CE1	2.24	0.56
24:DC:61:TYR:HD2	24:DC:85:ASN:ND2	2.04	0.56
26:DE:149:ILE:HG12	26:DE:188:MET:HG3	1.87	0.56
27:DF:103:ILE:H	27:DF:107:VAL:HG13	1.71	0.56
27:DF:136:ILE:CG2	27:DF:142:TYR:CG	2.88	0.56
28:DG:143:VAL:O	28:DG:147:LEU:HG	2.05	0.56
29:DH:21:VAL:HG22	29:DH:22:LYS:H	1.71	0.56
29:DH:62:LEU:HD12	29:DH:63:ALA:N	2.21	0.56
31:DJ:106:LYS:HB2	31:DJ:119:PHE:HE2	1.71	0.56
32:DK:76:VAL:O	37:DP:71:ARG:HG3	2.06	0.56
37:DP:95:LYS:HE3	37:DP:95:LYS:HA	1.88	0.56
39:DR:49:ILE:HG13	39:DR:49:ILE:O	2.04	0.56
22:DA:297:G:H4'	42:DU:84:PHE:O	2.05	0.56
1:AA:109:A:H4'	1:AA:110:C:OP2	2.07	0.56
1:AA:1167:A:N7	1:AA:1169:A:C6	2.73	0.56
1:AA:1355:G:C2'	1:AA:1356:G:H5'	2.36	0.56
1:AA:1358:U:C5	1:AA:1359:C:C4	2.94	0.56
1:AA:1409:C:C2'	1:AA:1410:A:H5'	2.36	0.56
1:AA:238:A:H2'	1:AA:239:U:C5'	2.36	0.56
1:AA:243:A:C2	1:AA:246:A:C8	2.94	0.56
1:AA:545:C:C3'	1:AA:546:A:H5'	2.36	0.56
1:AA:674:G:OP1	6:AF:51:ILE:HG13	2.06	0.56
1:AA:932:C:H2'	1:AA:932:C:O2	2.04	0.56
2:AB:71:THR:HG22	2:AB:72:LYS:H	1.70	0.56
6:AF:32:ALA:O	6:AF:33:GLU:HB2	2.06	0.56
9:AI:51:LEU:HD13	9:AI:56:MET:HG2	1.87	0.56
11:AK:39:ASN:O	11:AK:40:ALA:CB	2.54	0.56
1:AA:552:U:H5'	12:AL:82:ARG:HD2	1.87	0.56
14:AN:78:LEU:HB2	14:AN:83:VAL:HG23	1.87	0.56
22:BA:1020:A:N1	22:BA:1141:U:O2'	2.37	0.56
22:BA:1224:U:H4'	39:BR:88:GLY:O	2.06	0.56
22:BA:226:A:N6	22:BA:227:A:C6	2.74	0.56
22:BA:2430:A:H5'	22:BA:2431:U:OP2	2.06	0.56
22:BA:271:G:O2'	22:BA:272:A:C5'	2.54	0.56
22:BA:2865:U:C4	22:BA:2866:U:C4	2.93	0.56
22:BA:784:G:O2'	22:BA:785:G:H5''	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:35:LEU:CB	27:BF:153:ILE:HG23	2.20	0.56
28:BG:30:GLY:CA	28:BG:78:VAL:HG12	2.36	0.56
31:BJ:40:HIS:C	31:BJ:41:LYS:CG	2.75	0.56
32:BK:113:MET:HA	32:BK:116:ILE:HG13	1.87	0.56
34:BM:5:LYS:HZ2	34:BM:5:LYS:HB3	1.71	0.56
22:BA:141:G:N1	41:BT:2:ILE:HG23	2.21	0.56
1:CA:892:A:O2'	1:CA:1415:G:H4'	2.06	0.56
1:CA:908:A:O2'	1:CA:909:A:H5'	2.06	0.56
1:CA:92:U:O2'	1:CA:93:U:C6	2.50	0.56
1:CA:947:G:OP1	13:CM:106:ARG:HG3	2.05	0.56
3:CC:18:ASN:HD21	3:CC:53:ARG:NH1	2.03	0.56
6:CF:6:ILE:HD12	6:CF:6:ILE:H	1.71	0.56
7:CG:46:LEU:HD11	7:CG:57:GLU:OE2	2.06	0.56
13:CM:82:LEU:HD21	19:CS:60:PHE:HB3	1.88	0.56
15:CO:3:SER:OG	15:CO:6:ALA:HB2	2.05	0.56
16:CP:21:VAL:HG23	16:CP:36:VAL:HG21	1.87	0.56
51:D3:22:LYS:HA	51:D3:47:ALA:O	2.06	0.56
22:DA:1298:C:N4	22:DA:1642:G:H1	2.05	0.56
22:DA:1668:A:H4'	22:DA:1669:A:C5'	2.25	0.56
22:DA:183:C:O2'	22:DA:432:A:H1'	2.04	0.56
22:DA:2092:U:C5	22:DA:2226:C:OP2	2.59	0.56
22:DA:2339:C:O2'	22:DA:2340:A:OP2	2.24	0.56
22:DA:2385:C:C2	22:DA:2386:A:N7	2.73	0.56
22:DA:249:C:C2'	22:DA:249:C:O2	2.53	0.56
22:DA:308:G:C8	22:DA:501:A:H1'	2.40	0.56
22:DA:271:G:C2	22:DA:367:G:C2	2.94	0.56
22:DA:92:U:O2'	22:DA:93:G:C5'	2.54	0.56
23:DB:15:A:C4	23:DB:109:A:C6	2.94	0.56
24:DC:158:GLY:HA2	24:DC:194:VAL:O	2.06	0.56
26:DE:57:LYS:NZ	26:DE:58:LYS:H	2.03	0.56
33:DL:122:VAL:O	33:DL:122:VAL:HG23	2.06	0.56
33:DL:123:ARG:HG2	33:DL:143:GLU:CB	2.35	0.56
34:DM:40:ARG:HB2	34:DM:93:VAL:HG21	1.88	0.56
34:DM:41:LEU:O	34:DM:93:VAL:HG23	2.05	0.56
34:DM:76:LYS:HG2	34:DM:80:VAL:HG11	1.88	0.56
35:DN:31:HIS:C	35:DN:33:ILE:H	2.09	0.56
41:DT:55:VAL:HG22	41:DT:56:GLU:N	2.21	0.56
42:DU:82:VAL:O	42:DU:96:LYS:HG3	2.05	0.56
43:DV:80:HIS:CG	43:DV:81:PRO:HD2	2.40	0.56
1:AA:1046:A:H2'	1:AA:1047:G:O5'	2.05	0.55
1:AA:185:U:H2'	1:AA:186:C:H6	1.70	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:191:G:H5''	1:AA:191:G:H8	1.70	0.55
1:AA:313:A:O2'	1:AA:314:C:H5'	2.06	0.55
1:AA:475:C:O2'	1:AA:476:U:H5'	2.06	0.55
1:AA:523:A:C2	1:AA:527:G:O6	2.59	0.55
1:AA:585:G:H21	1:AA:879:C:C4'	2.19	0.55
2:AB:116:LEU:HG	2:AB:140:LEU:HG	1.88	0.55
3:AC:149:LYS:HG3	3:AC:200:TRP:CE3	2.40	0.55
12:AL:6:LEU:HD23	17:AQ:33:TYR:CE2	2.41	0.55
13:AM:86:ARG:O	13:AM:89:ARG:HB2	2.06	0.55
20:AT:61:ALA:CA	20:AT:66:ILE:HG22	2.36	0.55
22:BA:1067:A:H8	22:BA:1067:A:OP2	1.90	0.55
22:BA:1080:A:H4'	30:BI:126:ARG:HG3	1.87	0.55
22:BA:2144:G:N2	22:BA:2148:G:C8	2.75	0.55
22:BA:232:G:H4'	22:BA:233:A:OP1	2.06	0.55
22:BA:2383:G:H2'	22:BA:2384:U:C6	2.40	0.55
22:BA:747:U:C4	22:BA:2613:U:C4	2.94	0.55
22:BA:875:G:C2'	22:BA:876:C:H5'	2.36	0.55
22:BA:996:A:P	38:BQ:91:ARG:HH12	2.28	0.55
23:BB:110:C:O2'	23:BB:111:U:H5'	2.07	0.55
23:BB:5:U:O2'	23:BB:6:G:H5'	2.05	0.55
24:BC:119:VAL:HG12	24:BC:133:ASN:ND2	2.21	0.55
26:BE:120:VAL:HA	26:BE:188:MET:O	2.06	0.55
35:BN:38:LEU:O	35:BN:38:LEU:HD12	2.06	0.55
36:BO:111:ARG:O	36:BO:113:ALA:N	2.39	0.55
43:BV:61:LEU:O	43:BV:71:LYS:HA	2.06	0.55
44:BW:49:ASN:CA	44:BW:61:LYS:HB2	2.36	0.55
1:CA:120:A:O2'	1:CA:121:U:C4'	2.54	0.55
1:CA:1298:U:O2'	1:CA:1299:A:OP2	2.24	0.55
1:CA:1366:C:H2'	1:CA:1367:C:H6	1.70	0.55
1:CA:16:A:H2'	1:CA:17:U:H5'	1.88	0.55
1:CA:185:U:H2'	1:CA:186:C:C6	2.40	0.55
1:CA:195:A:N7	1:CA:196:A:C6	2.74	0.55
1:CA:42:G:C2'	1:CA:43:C:H5'	2.36	0.55
1:CA:526:C:C6	1:CA:526:C:H3'	2.41	0.55
1:CA:728:A:H2'	1:CA:729:A:H8	1.70	0.55
1:CA:990:C:C2'	1:CA:991:U:O4'	2.52	0.55
1:CA:64:G:C8	1:CA:99:C:N4	2.74	0.55
2:CB:122:ASP:HB3	2:CB:124:THR:CG2	2.35	0.55
2:CB:95:TRP:CZ3	2:CB:171:ALA:HA	2.41	0.55
2:CB:26:MET:HE3	2:CB:192:PRO:HG3	1.87	0.55
9:CI:5:TYR:HD1	9:CI:88:GLU:HB2	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:60:PHE:HA	11:CK:63:GLN:HG2	1.88	0.55
10:CJ:53:ILE:HG13	14:CN:84:ARG:HD2	1.89	0.55
21:CU:53:LYS:HB2	21:CU:53:LYS:HZ3	1.69	0.55
22:DA:109:C:H4'	22:DA:348:A:H4'	1.86	0.55
22:DA:144:A:O2'	22:DA:145:C:H5'	2.06	0.55
22:DA:164:C:C2'	22:DA:165:A:H5'	2.35	0.55
22:DA:1787:A:H2	22:DA:1788:C:C2	2.25	0.55
22:DA:2145:C:H3'	22:DA:2147:A:OP2	2.07	0.55
22:DA:2262:U:H1'	22:DA:2328:A:H1'	1.88	0.55
22:DA:2550:G:O6	22:DA:2551:C:N4	2.39	0.55
22:DA:46:G:C2	22:DA:47:C:C5	2.93	0.55
23:DB:42:C:H5	27:DF:65:LEU:HD13	1.72	0.55
24:DC:211:ARG:HD2	24:DC:215:VAL:O	2.07	0.55
24:DC:34:GLU:HG3	24:DC:35:LYS:N	2.19	0.55
28:DG:145:ALA:HA	28:DG:148:ARG:NE	2.22	0.55
29:DH:98:ASP:O	29:DH:99:ILE:HG12	2.07	0.55
33:DL:110:VAL:HG11	33:DL:127:VAL:HG23	1.88	0.55
39:DR:78:ARG:CB	39:DR:83:TYR:CD1	2.88	0.55
40:DS:79:GLY:HA3	40:DS:100:THR:OG1	2.06	0.55
41:DT:69:ARG:HG3	41:DT:70:HIS:CD2	2.41	0.55
1:AA:1095:U:O2'	1:AA:1096:C:O4'	2.20	0.55
1:AA:1305:G:H22	1:AA:1331:G:H2'	1.70	0.55
1:AA:453:G:C6	1:AA:454:G:C5	2.94	0.55
1:AA:487:A:O2'	1:AA:488:C:C5'	2.47	0.55
2:AB:57:ASN:HD22	2:AB:57:ASN:C	2.08	0.55
4:AD:190:LEU:HD12	4:AD:190:LEU:O	2.06	0.55
4:AD:2:ARG:CB	4:AD:4:LEU:HD11	2.37	0.55
8:AH:74:ILE:CD1	8:AH:128:VAL:HG13	2.36	0.55
9:AI:93:LEU:HD12	9:AI:94:ARG:N	2.20	0.55
10:AJ:10:LEU:O	10:AJ:71:LEU:HA	2.06	0.55
11:AK:109:ILE:HG21	21:AU:16:ARG:NE	2.08	0.55
14:AN:62:ARG:HB3	14:AN:67:GLY:O	2.06	0.55
22:BA:1197:G:O2'	22:BA:1198:U:H5'	2.06	0.55
22:BA:1360:G:O6	22:BA:1372:U:C2	2.60	0.55
22:BA:1435:G:H8	22:BA:1435:G:H5''	1.71	0.55
22:BA:31:C:O3'	22:BA:1238:G:C5'	2.54	0.55
22:BA:339:U:C2'	22:BA:340:A:H5'	2.36	0.55
24:BC:170:TYR:CD2	24:BC:184:GLU:HA	2.41	0.55
30:BI:104:GLN:O	30:BI:105:LEU:CB	2.54	0.55
22:BA:1203:U:H1'	33:BL:4:ASN:HB3	1.88	0.55
34:BM:2:LEU:O	34:BM:3:GLN:HB3	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:108:ALA:O	35:BN:110:MET:HG2	2.07	0.55
44:BW:37:VAL:CG1	44:BW:55:ASP:HB2	2.33	0.55
46:BY:9:LYS:HZ2	46:BY:10:SER:N	2.04	0.55
1:CA:1067:A:H1'	1:CA:1068:G:H8	1.62	0.55
1:CA:1200:C:O2'	1:CA:1201:A:P	2.64	0.55
1:CA:1480:A:H2'	1:CA:1481:U:O4'	2.06	0.55
1:CA:1494:G:O2'	1:CA:1495:U:H5'	2.07	0.55
1:CA:160:A:N1	1:CA:343:U:H1'	2.20	0.55
1:CA:517:G:H4'	1:CA:519:C:C4	2.41	0.55
1:CA:57:G:C6	1:CA:356:A:N1	2.74	0.55
1:CA:735:C:O2'	1:CA:736:C:H5'	2.06	0.55
1:CA:995:C:HO2'	1:CA:996:A:H8	1.54	0.55
2:CB:119:GLN:CG	2:CB:124:THR:CG2	2.84	0.55
12:CL:109:ARG:NH2	12:CL:116:TYR:HE2	2.04	0.55
51:D3:6:VAL:HB	51:D3:9:ALA:HB3	1.88	0.55
22:DA:1204:A:N6	22:DA:1241:A:C2	2.74	0.55
22:DA:1267:U:O2'	22:DA:1268:A:H5'	2.06	0.55
22:DA:1461:C:H2'	22:DA:1462:C:C6	2.40	0.55
22:DA:1512:C:O2'	22:DA:1513:U:O4'	2.20	0.55
22:DA:157:C:C4	22:DA:158:U:C5	2.93	0.55
22:DA:2343:U:H2'	22:DA:2344:U:C6	2.42	0.55
22:DA:2449:U:H3'	56:DA:3666:HOH:O	2.06	0.55
22:DA:961:C:C5	22:DA:2456:C:C4'	2.89	0.55
22:DA:644:A:H2'	22:DA:645:C:H5'	1.86	0.55
22:DA:65:U:H6	22:DA:65:U:O5'	1.89	0.55
22:DA:729:G:N7	24:DC:206:LYS:HE3	2.20	0.55
22:DA:740:C:O2'	22:DA:741:U:C5'	2.53	0.55
22:DA:745:G:H5''	22:DA:746:U:OP2	2.05	0.55
23:DB:7:G:O2'	23:DB:8:C:H5'	2.06	0.55
22:DA:1792:G:H5''	24:DC:203:VAL:HG22	1.88	0.55
24:DC:20:ASN:CB	24:DC:23:LEU:HD22	2.33	0.55
24:DC:30:ALA:HB3	24:DC:31:PRO:HD3	1.87	0.55
25:DD:131:ASP:N	25:DD:131:ASP:OD2	2.39	0.55
26:DE:151:GLY:HA3	26:DE:191:ASP:OD1	2.06	0.55
29:DH:84:ALA:CB	29:DH:148:ALA:HA	2.36	0.55
29:DH:94:ILE:HB	29:DH:98:ASP:HB2	1.88	0.55
30:DI:121:ILE:HG22	30:DI:121:ILE:O	2.06	0.55
33:DL:118:THR:HG23	33:DL:120:VAL:HG23	1.87	0.55
34:DM:61:GLY:HA2	34:DM:107:GLY:HA3	1.89	0.55
34:DM:76:LYS:HG2	34:DM:80:VAL:CG1	2.37	0.55
38:DQ:79:ILE:O	38:DQ:82:LEU:HB2	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1320:C:O2'	1:AA:1321:U:O4'	2.25	0.55
1:AA:1358:U:H5	1:AA:1359:C:C4	2.24	0.55
1:AA:198:G:C6	1:AA:220:G:C2	2.94	0.55
1:AA:322:C:H41	1:AA:328:C:H6	1.55	0.55
1:AA:862:C:C2'	1:AA:863:U:H5'	2.36	0.55
1:AA:949:A:H2'	1:AA:950:U:C5'	2.36	0.55
2:AB:202:ASN:ND2	2:AB:205:ALA:CB	2.69	0.55
10:AJ:15:HIS:HB3	10:AJ:70:HIS:CE1	2.41	0.55
13:AM:106:ARG:HE	13:AM:112:ARG:HB3	1.72	0.55
15:AO:15:GLY:C	15:AO:17:ASP:H	2.09	0.55
16:AP:12:LYS:CG	16:AP:13:LYS:HG2	2.36	0.55
48:B0:37:HIS:HB3	48:B0:43:THR:HG22	1.87	0.55
48:B0:53:VAL:O	48:B0:54:ILE:C	2.44	0.55
22:BA:1056:G:H5''	22:BA:1057:A:C5'	2.30	0.55
22:BA:1259:G:H2'	22:BA:1260:A:C8	2.41	0.55
22:BA:1360:G:C2'	22:BA:1361:G:H5'	2.37	0.55
22:BA:1733:G:O2'	22:BA:1734:G:O5'	2.25	0.55
22:BA:1799:G:N2	22:BA:1818:U:O2'	2.32	0.55
22:BA:2602:A:H4'	22:BA:2603:G:H5'	1.87	0.55
22:BA:287:G:N3	22:BA:354:A:C2	2.75	0.55
22:BA:300:A:N1	22:BA:333:G:O2'	2.34	0.55
22:BA:435:C:O2'	22:BA:436:C:H5'	2.06	0.55
22:BA:734:A:C4	22:BA:735:A:C8	2.94	0.55
22:BA:813:U:H2'	22:BA:814:C:C6	2.42	0.55
22:BA:812:C:O2'	22:BA:813:U:H5'	2.05	0.55
24:BC:64:VAL:HG11	24:BC:66:PHE:CE2	2.41	0.55
25:BD:9:VAL:HG21	25:BD:26:VAL:HG11	1.86	0.55
22:BA:2310:C:C4	27:BF:76:PHE:CZ	2.94	0.55
27:BF:7:TYR:O	27:BF:11:VAL:CG1	2.55	0.55
28:BG:137:LYS:O	28:BG:140:ILE:CD1	2.53	0.55
32:BK:108:ARG:HG2	32:BK:108:ARG:NH1	1.98	0.55
38:BQ:63:ARG:HH11	38:BQ:99:VAL:HG23	1.72	0.55
44:BW:76:ARG:HH21	44:BW:76:ARG:CG	2.02	0.55
1:CA:1169:A:C2'	1:CA:1170:A:C8	2.89	0.55
1:CA:1218:C:C2'	1:CA:1219:A:H8	2.19	0.55
1:CA:971:G:H2'	1:CA:1365:G:HO2'	1.69	0.55
1:CA:249:U:H5'	1:CA:250:A:P	2.46	0.55
2:CB:54:ALA:HA	2:CB:57:ASN:HB3	1.89	0.55
2:CB:84:LEU:O	2:CB:84:LEU:HG	2.06	0.55
4:CD:58:GLN:HG3	4:CD:62:ARG:NH1	2.22	0.55
11:CK:27:ASN:HA	11:CK:57:SER:HB3	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:CM:82:LEU:HB2	19:CS:73:PHE:HE2	1.70	0.55
16:CP:22:ALA:HA	16:CP:33:ILE:CD1	2.36	0.55
17:CQ:11:VAL:HG22	17:CQ:58:VAL:HG13	1.87	0.55
19:CS:50:VAL:HG21	19:CS:74:ALA:HB2	1.89	0.55
49:D1:24:LYS:HE2	49:D1:52:LYS:NZ	2.21	0.55
22:DA:1060:U:H5'	22:DA:1061:U:H2'	1.87	0.55
22:DA:1060:U:O4'	22:DA:1061:U:C2'	2.52	0.55
22:DA:1133:A:C8	22:DA:2026:U:H4'	2.41	0.55
22:DA:1006:C:C2	22:DA:1138:G:N2	2.74	0.55
22:DA:1207:C:C2	22:DA:1208:C:C5	2.95	0.55
22:DA:1255:U:HO2'	22:DA:1256:G:P	2.29	0.55
22:DA:1675:C:H2'	22:DA:1676:A:C8	2.40	0.55
22:DA:1684:G:C2	22:DA:1705:A:C2	2.94	0.55
22:DA:1693:U:H5''	22:DA:1694:C:H5	1.72	0.55
22:DA:2025:C:H2'	22:DA:2026:U:C6	2.41	0.55
22:DA:2137:U:C2'	22:DA:2138:G:OP2	2.53	0.55
22:DA:2148:G:N2	22:DA:2149:U:O4	2.40	0.55
22:DA:2415:G:C4'	33:DL:66:PHE:HB2	2.36	0.55
22:DA:2414:G:C2'	22:DA:2415:G:H5'	2.36	0.55
22:DA:2429:G:OP2	22:DA:2430:A:OP2	2.24	0.55
22:DA:2443:C:H2'	22:DA:2444:G:H8	1.69	0.55
22:DA:2522:U:C2'	22:DA:2523:G:H5'	2.36	0.55
22:DA:579:G:C2	22:DA:1262:A:C5	2.93	0.55
22:DA:622:G:H2'	22:DA:623:C:C5	2.41	0.55
25:DD:109:VAL:O	25:DD:172:VAL:HG23	2.06	0.55
25:DD:127:PHE:HZ	25:DD:160:LYS:HD2	1.72	0.55
27:DF:66:ILE:HG13	27:DF:83:PRO:HB3	1.88	0.55
22:DA:558:U:P	31:DJ:113:PRO:HB2	2.46	0.55
22:DA:17:G:H4'	38:DQ:24:TYR:CE1	2.42	0.55
39:DR:27:ILE:HG13	39:DR:33:VAL:CG1	2.37	0.55
43:DV:64:VAL:HG13	43:DV:68:LYS:O	2.07	0.55
44:DW:54:ARG:C	44:DW:56:HIS:H	2.10	0.55
45:DX:32:LEU:HD13	45:DX:50:VAL:O	2.06	0.55
1:AA:184:G:H4'	1:AA:224:U:O3'	2.06	0.55
1:AA:455:G:C2	1:AA:478:A:C2	2.94	0.55
1:AA:582:C:H2'	1:AA:583:A:H8	1.71	0.55
1:AA:778:G:C2'	1:AA:779:C:H5'	2.37	0.55
1:AA:80:A:C2	1:AA:90:C:N3	2.74	0.55
1:AA:996:A:C2	1:AA:1046:A:C5'	2.88	0.55
3:AC:121:SER:O	3:AC:125:ARG:HB2	2.07	0.55
4:AD:12:ARG:NH1	4:AD:36:ALA:O	2.38	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:121:ASN:ND2	5:AE:122:VAL:N	2.54	0.55
11:AK:28:ASN:OD1	11:AK:46:ALA:HB3	2.06	0.55
14:AN:25:GLU:CG	14:AN:26:LEU:HD12	2.37	0.55
16:AP:28:ARG:C	16:AP:29:ASN:HD22	2.09	0.55
16:AP:48:GLU:CD	16:AP:49:GLY:H	2.09	0.55
49:B1:18:HIS:ND1	49:B1:19:PHE:N	2.54	0.55
22:BA:1075:C:C4	22:BA:1076:C:N4	2.75	0.55
22:BA:1300:G:H5''	22:BA:1301:A:C5'	2.35	0.55
22:BA:1340:U:C5	22:BA:1603:A:C8	2.94	0.55
22:BA:2243:U:H2'	22:BA:2244:U:C6	2.42	0.55
23:BB:11:C:O2	23:BB:109:A:N1	2.39	0.55
22:BA:1693:U:O2'	24:BC:13:ARG:NH2	2.40	0.55
22:BA:2784:U:H4'	25:BD:42:ASN:HD21	1.71	0.55
28:BG:70:LEU:O	28:BG:74:MET:HG3	2.06	0.55
29:BH:131:SER:HB2	29:BH:139:PHE:CD2	2.40	0.55
36:BO:75:GLY:HA3	36:BO:106:LEU:HA	1.88	0.55
1:CA:160:A:H1'	1:CA:344:A:C5	2.41	0.55
1:CA:203:G:N2	1:CA:215:C:C2	2.75	0.55
1:CA:274:A:HO2'	1:CA:275:G:H8	1.52	0.55
9:CI:109:GLN:HG2	9:CI:110:VAL:H	1.71	0.55
11:CK:51:PHE:CE2	11:CK:64:VAL:HG21	2.41	0.55
50:D2:22:MET:HG2	50:D2:22:MET:O	2.07	0.55
51:D3:33:THR:HG22	51:D3:34:LYS:N	2.21	0.55
22:DA:1090:A:H3'	22:DA:1091:G:H5''	1.87	0.55
22:DA:1146:C:N4	22:DA:1147:A:H62	2.04	0.55
22:DA:1252:G:N3	22:DA:1253:A:C2	2.75	0.55
22:DA:1261:C:C2'	22:DA:1262:A:H5''	2.37	0.55
22:DA:1312:U:C2	22:DA:1603:A:C6	2.95	0.55
22:DA:1439:A:N7	22:DA:1440:U:C1'	2.70	0.55
22:DA:1867:G:O2'	22:DA:1868:C:H5'	2.07	0.55
22:DA:2221:G:O2'	22:DA:2222:C:H5'	2.06	0.55
22:DA:2458:G:H2'	22:DA:2490:G:H1	1.71	0.55
22:DA:2751:G:H5'	28:DG:2:ARG:HD2	1.88	0.55
22:DA:300:A:H2'	22:DA:301:G:H5'	1.89	0.55
22:DA:528:A:C2	22:DA:2043:C:H4'	2.40	0.55
22:DA:694:U:C2'	22:DA:695:G:O5'	2.55	0.55
22:DA:730:A:C2	22:DA:731:C:C6	2.94	0.55
26:DE:5:LEU:HA	26:DE:120:VAL:HG13	1.88	0.55
35:DN:100:CYS:O	48:D0:41:HIS:HD2	1.89	0.55
37:DP:78:PRO:HG2	37:DP:79:VAL:H	1.71	0.55
39:DR:87:GLN:HG2	39:DR:88:GLY:N	2.21	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:DT:24:MET:CE	41:DT:24:MET:HA	2.36	0.55
42:DU:81:ARG:HG2	42:DU:96:LYS:HD2	1.86	0.55
44:DW:20:LEU:HD11	44:DW:35:ILE:HG13	1.87	0.55
46:DY:4:LYS:HB2	46:DY:4:LYS:NZ	2.21	0.55
1:AA:1201:A:H1'	1:AA:1202:U:OP2	2.07	0.55
1:AA:1263:C:O2'	1:AA:1264:U:H5'	2.06	0.55
1:AA:1269:A:H2	1:AA:1312:G:N3	2.05	0.55
1:AA:206:C:C2'	1:AA:207:C:O4'	2.46	0.55
1:AA:486:U:O2'	1:AA:487:A:C5'	2.54	0.55
1:AA:500:G:O2'	1:AA:501:C:H5'	2.05	0.55
1:AA:629:A:H2'	1:AA:630:A:O4'	2.07	0.55
1:AA:725:G:H2'	1:AA:726:C:H6	1.71	0.55
3:AC:39:ARG:HD3	3:AC:54:ILE:CG1	2.37	0.55
4:AD:97:LEU:CD2	4:AD:117:VAL:HG21	2.37	0.55
8:AH:9:MET:HE2	8:AH:32:LYS:CB	2.37	0.55
9:AI:83:THR:HG21	9:AI:102:PHE:HB2	1.86	0.55
10:AJ:87:LEU:HD13	10:AJ:87:LEU:C	2.26	0.55
16:AP:80:LYS:HZ2	16:AP:80:LYS:HB2	1.71	0.55
17:AQ:44:HIS:HD2	17:AQ:69:THR:HG22	1.71	0.55
22:BA:1059:G:C6	22:BA:1080:A:C6	2.94	0.55
22:BA:1071:G:H4'	22:BA:1088:A:O2'	2.06	0.55
22:BA:1612:C:H2'	22:BA:1613:G:O5'	2.07	0.55
22:BA:1641:A:H2'	22:BA:1642:G:O4'	2.06	0.55
22:BA:181:A:H2'	22:BA:182:A:C8	2.42	0.55
22:BA:2068:U:C5'	22:BA:2068:U:H6	2.18	0.55
22:BA:2332:C:H5''	22:BA:2333:A:OP1	2.06	0.55
22:BA:2492:U:H2'	22:BA:2493:U:C6	2.40	0.55
22:BA:2678:C:O2'	22:BA:2679:A:H5'	2.07	0.55
22:BA:2800:A:H5''	22:BA:2800:A:H8	1.71	0.55
24:BC:229:HIS:HD2	24:BC:246:PRO:HA	1.71	0.55
27:BF:39:VAL:CG1	27:BF:84:ILE:HD12	2.35	0.55
28:BG:163:TYR:O	28:BG:164:ALA:HB3	2.06	0.55
29:BH:49:ALA:CB	29:BH:50:ARG:NH2	2.63	0.55
32:BK:10:VAL:HG11	32:BK:16:ALA:HB2	1.89	0.55
35:BN:30:ARG:NH1	35:BN:74:GLU:OE2	2.39	0.55
36:BO:78:VAL:HG23	36:BO:79:ALA:N	2.21	0.55
39:BR:62:GLU:O	39:BR:64:VAL:HG23	2.07	0.55
41:BT:74:ILE:HG23	41:BT:75:GLY:N	2.21	0.55
46:BY:56:LEU:HA	46:BY:59:GLU:CG	2.35	0.55
46:BY:8:GLU:O	46:BY:9:LYS:CB	2.55	0.55
1:CA:1167:A:C2'	1:CA:1168:U:OP1	2.55	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:216:U:H4'	1:CA:464:U:H4'	1.87	0.55
1:CA:369:G:C4	1:CA:370:C:C5	2.95	0.55
1:CA:653:U:HO2'	1:CA:654:G:H8	1.54	0.55
1:CA:960:U:C4'	1:CA:961:U:C5'	2.82	0.55
2:CB:101:THR:O	2:CB:102:ASN:HB2	2.06	0.55
8:CH:111:THR:HG22	8:CH:113:ARG:H	1.70	0.55
18:CR:71:ASP:CG	21:CU:3:ILE:HD11	2.26	0.55
1:CA:261:U:OP1	20:CT:70:LYS:HE2	2.05	0.55
21:CU:28:LEU:C	21:CU:28:LEU:CD2	2.75	0.55
48:D0:53:VAL:HG23	48:D0:54:ILE:HG12	1.88	0.55
22:DA:1130:U:O2'	22:DA:1131:G:C8	2.58	0.55
22:DA:1204:A:O4'	22:DA:1206:G:N7	2.40	0.55
22:DA:1208:C:O2'	22:DA:1209:U:H6	1.89	0.55
22:DA:1303:G:O2'	22:DA:1304:A:H5'	2.06	0.55
22:DA:1387:A:C5	22:DA:1388:G:N7	2.75	0.55
22:DA:1492:G:C3'	22:DA:1493:C:H5'	2.34	0.55
22:DA:1710:G:O2'	22:DA:1711:A:H5'	2.06	0.55
22:DA:1794:A:H1'	22:DA:1900:A:C2	2.41	0.55
22:DA:1797:G:N2	22:DA:1803:A:C2	2.74	0.55
22:DA:2209:G:C6	22:DA:2216:G:C6	2.94	0.55
22:DA:2641:G:H5''	31:DJ:78:THR:HB	1.88	0.55
22:DA:271:G:O2'	22:DA:272:A:P	2.65	0.55
22:DA:2882:A:H5''	35:DN:96:ARG:HD3	1.88	0.55
22:DA:299:A:C2	22:DA:319:G:N3	2.75	0.55
22:DA:352:A:H5''	22:DA:353:C:OP2	2.06	0.55
22:DA:438:G:C6	22:DA:439:A:C6	2.95	0.55
22:DA:484:C:N4	22:DA:497:A:C2	2.75	0.55
22:DA:508:A:H62	40:DS:9:HIS:CE1	2.24	0.55
22:DA:607:U:H5	22:DA:619:G:C4	2.25	0.55
22:DA:828:U:H4'	22:DA:831:G:N1	2.21	0.55
22:DA:946:C:O2'	22:DA:947:A:C5'	2.54	0.55
22:DA:956:G:C2	22:DA:962:G:O6	2.60	0.55
23:DB:41:G:H3'	23:DB:42:C:H5''	1.87	0.55
22:DA:1490:A:C8	24:DC:73:ILE:CD1	2.90	0.55
25:DD:181:ASP:C	25:DD:183:GLU:H	2.10	0.55
25:DD:60:VAL:O	25:DD:60:VAL:HG13	2.06	0.55
27:DF:39:VAL:CA	27:DF:49:LEU:HG	2.36	0.55
33:DL:33:ARG:HD3	33:DL:40:SER:HA	1.87	0.55
36:DO:74:VAL:HB	36:DO:106:LEU:CD1	2.37	0.55
38:DQ:9:ALA:O	38:DQ:12:ARG:HG2	2.06	0.55
1:AA:1094:G:HO2'	1:AA:1095:U:P	2.28	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:234:C:O2'	1:AA:235:C:H5'	2.07	0.55
1:AA:251:G:N1	1:AA:266:G:C6	2.75	0.55
1:AA:502:A:C2	1:AA:544:G:C2	2.94	0.55
1:AA:626:G:H2'	1:AA:627:G:H8	1.71	0.55
1:AA:723:U:OP1	21:AU:48:LYS:HB2	2.07	0.55
1:AA:844:G:N2	1:AA:845:A:H62	2.05	0.55
2:AB:110:ILE:CD1	2:AB:147:LEU:HD13	2.36	0.55
2:AB:130:LYS:HA	2:AB:130:LYS:HZ3	1.72	0.55
4:AD:117:VAL:HA	4:AD:122:ILE:CG1	2.36	0.55
4:AD:195:ASN:O	4:AD:196:GLU:CG	2.51	0.55
8:AH:50:VAL:O	8:AH:50:VAL:HG22	2.06	0.55
1:AA:1343:G:H1'	9:AI:122:ARG:HH12	1.71	0.55
9:AI:53:LEU:N	9:AI:53:LEU:HD12	2.21	0.55
1:AA:1151:A:H5''	10:AJ:44:THR:OG1	2.07	0.55
14:AN:44:VAL:CG2	14:AN:45:LEU:H	2.08	0.55
22:BA:1060:U:O4'	22:BA:1062:G:C5'	2.55	0.55
22:BA:1579:A:C2'	22:BA:1580:A:H5'	2.36	0.55
22:BA:1935:G:H1'	22:BA:1964:G:H21	1.70	0.55
22:BA:2250:G:O5'	22:BA:2250:G:H8	1.89	0.55
22:BA:2615:U:O2'	22:BA:2616:C:H5'	2.06	0.55
22:BA:36:G:O2'	22:BA:37:C:H5'	2.07	0.55
22:BA:979:A:H2'	22:BA:982:C:H42	1.71	0.55
23:BB:2:G:C2	23:BB:119:A:N3	2.74	0.55
24:BC:78:GLU:OE1	24:BC:100:ARG:NE	2.36	0.55
25:BD:9:VAL:HG22	25:BD:26:VAL:HB	1.89	0.55
29:BH:78:VAL:HG21	29:BH:145:ASN:ND2	2.20	0.55
31:BJ:44:TYR:HD2	38:BQ:63:ARG:CD	2.07	0.55
31:BJ:65:THR:CG2	31:BJ:66:GLY:N	2.69	0.55
34:BM:6:ARG:CZ	34:BM:6:ARG:HB2	2.37	0.55
37:BP:25:VAL:CG1	37:BP:46:VAL:HG23	2.36	0.55
40:BS:45:VAL:HG22	40:BS:46:LEU:N	2.22	0.55
45:BX:40:GLU:HG3	45:BX:43:LYS:HZ3	1.70	0.55
1:CA:1168:U:O2'	1:CA:1169:A:C5'	2.55	0.55
1:CA:1190:G:H3'	3:CC:2:GLN:O	2.07	0.55
1:CA:1256:A:H2'	1:CA:1257:A:OP2	2.07	0.55
1:CA:1350:A:O2'	1:CA:1351:U:H5'	2.06	0.55
1:CA:1470:U:H2'	1:CA:1471:U:O5'	2.07	0.55
1:CA:137:U:C1'	1:CA:227:G:N2	2.60	0.55
1:CA:373:A:O2'	1:CA:374:A:C5'	2.31	0.55
1:CA:716:A:C2'	1:CA:717:U:O5'	2.54	0.55
3:CC:53:ARG:HB2	3:CC:53:ARG:HH11	1.71	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:89:LEU:CD2	4:CD:199:ILE:CD1	2.74	0.55
5:CE:17:VAL:HA	5:CE:33:THR:O	2.06	0.55
6:CF:26:THR:HA	6:CF:36:ILE:HD11	1.89	0.55
6:CF:85:ILE:O	6:CF:86:ARG:C	2.45	0.55
6:CF:98:GLU:O	6:CF:99:ALA:HB2	2.07	0.55
7:CG:71:THR:HG23	7:CG:72:VAL:CG2	2.30	0.55
11:CK:74:LYS:HG3	11:CK:78:ILE:CD1	2.37	0.55
13:CM:36:ALA:HB3	13:CM:55:LEU:HD11	1.89	0.55
14:CN:2:LYS:HD3	14:CN:5:MET:HG3	1.86	0.55
1:CA:473:U:OP1	16:CP:76:LYS:HE3	2.07	0.55
18:CR:55:ALA:HA	18:CR:58:ILE:HG13	1.88	0.55
19:CS:52:ASN:HD21	19:CS:55:GLN:N	2.04	0.55
21:CU:33:ARG:HG2	21:CU:34:ARG:N	2.21	0.55
21:CU:52:VAL:O	21:CU:52:VAL:HG22	2.07	0.55
22:DA:55:G:C2	22:DA:116:C:C2	2.94	0.55
22:DA:120:U:C2	22:DA:149:A:C6	2.95	0.55
22:DA:1400:U:O2'	22:DA:1401:G:O4'	2.21	0.55
22:DA:1428:C:C5	22:DA:1569:A:C5'	2.89	0.55
22:DA:1717:A:N6	22:DA:1744:A:C8	2.74	0.55
22:DA:2151:U:C2'	22:DA:2152:G:H8	2.20	0.55
22:DA:2331:G:H2'	22:DA:2332:C:O4'	2.06	0.55
22:DA:2393:U:H2'	22:DA:2394:C:H5'	1.88	0.55
22:DA:30:G:H2'	22:DA:31:C:C6	2.42	0.55
22:DA:413:C:H2'	22:DA:414:C:H6	1.66	0.55
22:DA:465:G:H4'	50:D2:16:HIS:HD2	1.70	0.55
25:DD:121:THR:CG2	25:DD:127:PHE:HB2	2.36	0.55
25:DD:124:ARG:HD3	25:DD:125:TRP:HE1	1.68	0.55
25:DD:34:VAL:HG21	25:DD:90:PHE:O	2.07	0.55
32:DK:60:ALA:HB2	32:DK:86:LEU:HA	1.88	0.55
33:DL:62:PRO:HG2	51:D3:24:LYS:CB	2.36	0.55
34:DM:66:ARG:NH1	34:DM:101:VAL:HG11	2.22	0.55
38:DQ:101:ASP:CB	39:DR:2:TYR:OH	2.53	0.55
40:DS:1:MET:N	40:DS:1:MET:HE3	2.20	0.55
40:DS:24:ILE:HG22	40:DS:32:ALA:CB	2.36	0.55
46:DY:28:LEU:CD2	46:DY:42:LEU:HD13	2.36	0.55
1:AA:1432:G:O2'	1:AA:1433:A:OP2	2.22	0.55
1:AA:1494:G:C2	1:AA:1495:U:C5	2.94	0.55
1:AA:495:A:C2	1:AA:496:A:C6	2.94	0.55
1:AA:529:G:O6	12:AL:45:ASN:HA	2.06	0.55
1:AA:551:U:H2'	1:AA:552:U:O5'	2.07	0.55
1:AA:577:G:H2'	1:AA:578:C:C6	2.41	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:72:PRO:HG3	3:AC:104:GLU:HG3	1.89	0.55
7:AG:49:LEU:CD1	7:AG:60:ALA:HB1	2.37	0.55
9:AI:57:VAL:C	9:AI:58:GLU:HG2	2.27	0.55
9:AI:67:LYS:HD3	9:AI:67:LYS:N	2.21	0.55
14:AN:63:CYS:HB3	14:AN:67:GLY:H	1.72	0.55
16:AP:37:GLY:HA2	16:AP:51:ARG:HH11	1.71	0.55
52:B4:13:ASN:H	52:B4:13:ASN:HD22	1.55	0.55
22:BA:1001:A:C2'	22:BA:1002:G:H5'	2.37	0.55
22:BA:1098:A:C6	22:BA:1099:G:N1	2.74	0.55
22:BA:1935:G:N1	22:BA:1962:C:H2'	2.21	0.55
22:BA:2136:G:O2'	22:BA:2137:U:C6	2.58	0.55
22:BA:2319:G:O2'	22:BA:2320:U:H5	1.90	0.55
24:BC:250:GLN:NE2	24:BC:250:GLN:N	2.55	0.55
25:BD:85:ALA:O	25:BD:86:GLU:CB	2.55	0.55
25:BD:85:ALA:O	25:BD:86:GLU:HB2	2.07	0.55
28:BG:25:ILE:HD11	28:BG:71:LEU:HD12	1.88	0.55
29:BH:34:GLY:O	29:BH:35:LYS:HG3	2.06	0.55
29:BH:6:LEU:HD22	29:BH:36:ALA:N	2.21	0.55
32:BK:113:MET:O	32:BK:116:ILE:HG13	2.06	0.55
33:BL:39:LYS:C	33:BL:40:SER:O	2.38	0.55
37:BP:50:ARG:HD2	37:BP:51:ASN:CA	2.25	0.55
37:BP:50:ARG:CG	37:BP:57:ALA:O	2.42	0.55
43:BV:72:VAL:HG23	43:BV:73:LYS:N	2.22	0.55
43:BV:75:GLN:HB2	43:BV:92:VAL:HG23	1.89	0.55
1:CA:1036:A:C2'	1:CA:1037:C:H5'	2.36	0.55
1:CA:1049:U:H4'	1:CA:1050:G:OP2	2.04	0.55
1:CA:1052:U:H3'	1:CA:1053:G:H5''	1.87	0.55
1:CA:1138:G:N2	1:CA:1140:C:C4	2.74	0.55
1:CA:1150:A:H62	1:CA:1151:A:N6	2.05	0.55
1:CA:1268:G:H21	1:CA:1327:C:C1'	2.13	0.55
1:CA:158:G:C4	1:CA:159:G:C8	2.95	0.55
1:CA:250:A:H1'	1:CA:252:U:C4	2.41	0.55
1:CA:676:A:H2'	1:CA:677:U:H6	1.72	0.55
1:CA:764:C:C3'	1:CA:765:G:H5'	2.37	0.55
1:CA:977:A:N3	1:CA:977:A:H5''	2.21	0.55
8:CH:1:SER:C	8:CH:3:GLN:N	2.60	0.55
9:CI:70:GLY:O	9:CI:71:ILE:HD12	2.07	0.55
13:CM:3:ILE:O	13:CM:4:ALA:CB	2.55	0.55
22:DA:1291:C:O2'	22:DA:1292:G:C5'	2.55	0.55
22:DA:1648:U:O2'	22:DA:1649:G:O4'	2.19	0.55
22:DA:1974:C:H2'	22:DA:1975:G:H8	1.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2225:A:H4'	22:DA:2226:C:O5'	2.06	0.55
22:DA:2385:C:P	22:DA:2385:C:H3'	2.46	0.55
22:DA:2392:A:N1	33:DL:55:MET:CE	2.70	0.55
22:DA:2069:G:C2	22:DA:2443:C:C2	2.94	0.55
22:DA:2508:G:C2	22:DA:2582:G:O6	2.60	0.55
22:DA:2714:G:H2'	22:DA:2715:C:H6	1.69	0.55
22:DA:301:G:C8	22:DA:334:C:C2	2.95	0.55
22:DA:489:G:H4'	22:DA:490:C:OP1	2.04	0.55
22:DA:533:G:OP1	38:DQ:27:ARG:HD3	2.06	0.55
22:DA:973:A:H1'	22:DA:1188:U:C6	2.42	0.55
23:DB:16:G:C6	23:DB:17:C:N4	2.75	0.55
24:DC:127:ASN:O	24:DC:191:LEU:HD22	2.07	0.55
25:DD:12:THR:HG22	25:DD:13:ARG:N	2.21	0.55
28:DG:91:VAL:HG22	28:DG:93:TYR:CE2	2.39	0.55
31:DJ:51:GLY:O	31:DJ:121:LYS:HE3	2.06	0.55
32:DK:24:VAL:HA	32:DK:39:ILE:HG22	1.88	0.55
33:DL:75:ALA:HB2	33:DL:105:ILE:HG13	1.88	0.55
33:DL:81:ASP:O	33:DL:83:ALA:N	2.39	0.55
34:DM:36:VAL:HG22	43:DV:82:TYR:CB	2.34	0.55
35:DN:35:LYS:NZ	35:DN:112:TYR:HE1	2.04	0.55
37:DP:16:VAL:HG13	37:DP:19:PHE:HE2	1.72	0.55
40:DS:1:MET:H3	40:DS:1:MET:HE3	1.70	0.55
41:DT:69:ARG:HD2	41:DT:70:HIS:H	1.71	0.55
42:DU:60:LYS:HE2	42:DU:60:LYS:HA	1.88	0.55
47:DZ:4:ILE:CG2	47:DZ:56:VAL:CG1	2.84	0.55
1:AA:116:A:H8	1:AA:116:A:O5'	1.89	0.55
1:AA:155:A:H2'	1:AA:156:C:C6	2.42	0.55
1:AA:567:G:H1'	56:AA:1819:HOH:O	2.07	0.55
1:AA:625:U:O2'	1:AA:626:G:H5'	2.07	0.55
5:AE:153:ALA:O	5:AE:156:ARG:O	2.25	0.55
5:AE:15:ILE:HG22	5:AE:16:ALA:N	2.20	0.55
7:AG:68:VAL:HG21	7:AG:103:ILE:CD1	2.37	0.55
11:AK:52:ARG:NH1	11:AK:56:LYS:HZ2	2.05	0.55
16:AP:19:VAL:CG1	16:AP:37:GLY:C	2.75	0.55
21:AU:24:LYS:CG	21:AU:25:ALA:H	2.19	0.55
48:B0:35:GLU:OE1	48:B0:45:ASP:HB2	2.07	0.55
48:B0:54:ILE:HG22	48:B0:54:ILE:O	2.06	0.55
22:BA:1287:A:O2'	22:BA:1288:G:H5'	2.07	0.55
22:BA:1462:C:O2'	22:BA:1463:C:H5''	2.07	0.55
22:BA:1614:A:C2	40:BS:93:ALA:HB2	2.42	0.55
22:BA:1626:A:HO2'	22:BA:1627:G:P	2.29	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:163:C:OP1	22:BA:163:C:C6	2.60	0.55
22:BA:1676:A:H2	22:BA:1993:U:H5'	1.68	0.55
22:BA:1821:A:H2'	22:BA:1822:C:C6	2.42	0.55
22:BA:2386:A:H2'	22:BA:2387:U:C6	2.41	0.55
22:BA:2665:A:O2'	22:BA:2666:C:H5'	2.06	0.55
22:BA:2742:G:O2'	22:BA:2743:U:H5'	2.07	0.55
23:BB:78:A:C2	23:BB:99:A:C4	2.94	0.55
24:BC:234:GLY:O	24:BC:236:GLY:N	2.38	0.55
25:BD:182:ALA:C	25:BD:184:ARG:H	2.08	0.55
25:BD:4:LEU:HD23	25:BD:29:VAL:HG11	1.88	0.55
37:BP:50:ARG:HG2	37:BP:56:SER:CA	2.36	0.55
39:BR:66:HIS:ND1	39:BR:94:THR:HB	2.22	0.55
43:BV:68:LYS:HG2	43:BV:68:LYS:O	2.07	0.55
44:BW:30:VAL:H	44:BW:31:LEU:CD2	2.20	0.55
46:BY:16:THR:O	46:BY:20:ASN:N	2.32	0.55
47:BZ:34:THR:HG22	47:BZ:35:VAL:N	2.21	0.55
1:CA:220:G:C2	1:CA:221:C:C6	2.95	0.55
1:CA:631:C:H5''	1:CA:632:U:O4'	2.07	0.55
1:CA:5:U:H4'	1:CA:6:G:C5'	2.37	0.55
1:CA:704:A:O2'	1:CA:705:G:C8	2.60	0.55
1:CA:969:A:O2'	1:CA:970:C:H5'	2.06	0.55
2:CB:185:ILE:O	2:CB:185:ILE:HG13	2.07	0.55
7:CG:32:ASP:CB	7:CG:34:LYS:HD3	2.36	0.55
8:CH:36:ALA:O	8:CH:45:ILE:HD11	2.06	0.55
9:CI:100:ALA:CB	9:CI:102:PHE:CE2	2.90	0.55
51:D3:18:LYS:CD	51:D3:19:GLY:N	2.67	0.55
51:D3:23:HIS:O	51:D3:46:LYS:HE3	2.07	0.55
22:DA:100:U:H3'	22:DA:100:U:OP1	2.07	0.55
22:DA:1263:U:O4'	48:D0:6:LYS:HE3	2.07	0.55
22:DA:1300:G:H5'	22:DA:1301:A:C2	2.42	0.55
22:DA:1327:A:C2	22:DA:1328:A:C4	2.94	0.55
22:DA:1779:U:H5	22:DA:1784:A:N7	2.05	0.55
22:DA:1992:G:C4'	22:DA:1993:U:OP1	2.55	0.55
22:DA:2107:G:C2	22:DA:2183:A:C2	2.95	0.55
22:DA:2214:C:HO2'	22:DA:2215:C:H5'	1.68	0.55
22:DA:2238:G:C5'	22:DA:2239:G:OP1	2.54	0.55
22:DA:2298:A:C5'	22:DA:2322:A:O2'	2.54	0.55
22:DA:2522:U:H6	22:DA:2522:U:H3'	1.71	0.55
22:DA:2677:G:H2'	22:DA:2678:C:C6	2.42	0.55
22:DA:2715:C:C4	22:DA:2716:C:C5	2.94	0.55
22:DA:632:A:H4'	33:DL:68:SER:HA	1.89	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:18:G:C2	23:DB:67:G:O6	2.60	0.55
25:DD:53:GLY:HA3	25:DD:77:ARG:CG	2.32	0.55
28:DG:167:VAL:CG2	28:DG:168:VAL:H	2.17	0.55
31:DJ:4:PHE:O	31:DJ:44:TYR:CZ	2.59	0.55
1:AA:1284:C:C6	1:AA:1285:A:N7	2.75	0.55
1:AA:1399:C:O2	1:AA:1401:G:C5	2.60	0.55
1:AA:173:U:C2	1:AA:197:A:C2	2.95	0.55
1:AA:418:C:H2'	1:AA:419:C:H6	1.72	0.55
1:AA:454:G:H2'	1:AA:455:G:H5'	1.89	0.55
1:AA:642:A:C5	8:AH:106:SER:HA	2.42	0.55
1:AA:841:C:H2'	1:AA:841:C:O2	2.06	0.55
2:AB:71:THR:HG22	2:AB:72:LYS:N	2.22	0.55
4:AD:19:PHE:CD1	4:AD:19:PHE:N	2.75	0.55
4:AD:2:ARG:CB	4:AD:4:LEU:CD1	2.84	0.55
5:AE:45:VAL:CG2	5:AE:117:ALA:CB	2.85	0.55
8:AH:63:LYS:CB	8:AH:70:VAL:HG21	2.34	0.55
9:AI:49:GLN:N	9:AI:50:PRO:HD2	2.22	0.55
11:AK:42:GLY:HA3	11:AK:73:VAL:HG12	1.87	0.55
12:AL:29:LYS:O	12:AL:80:LEU:HD12	2.07	0.55
16:AP:23:ASP:O	16:AP:25:ARG:N	2.40	0.55
16:AP:57:ILE:HG21	16:AP:75:ILE:HD11	1.88	0.55
20:AT:78:LEU:O	20:AT:82:ILE:HG23	2.07	0.55
22:BA:1459:G:O2'	22:BA:1460:U:H3'	2.07	0.55
22:BA:1731:G:C5	22:BA:1733:G:N7	2.75	0.55
22:BA:275:C:H3'	22:BA:276:U:H5''	1.88	0.55
23:BB:45:A:HO2'	23:BB:46:A:H5'	1.70	0.55
25:BD:106:LYS:H	25:BD:106:LYS:CD	1.97	0.55
28:BG:54:ARG:C	28:BG:54:ARG:HD3	2.28	0.55
31:BJ:88:THR:CG2	31:BJ:91:GLU:H	2.19	0.55
32:BK:18:ARG:N	32:BK:45:GLU:CB	2.69	0.55
40:BS:18:ARG:HG2	40:BS:76:VAL:HG13	1.89	0.55
42:BU:100:GLU:O	42:BU:101:THR:CB	2.54	0.55
45:BX:16:ASN:HB2	45:BX:24:THR:OG1	2.06	0.55
1:CA:113:G:N2	1:CA:353:A:C8	2.58	0.55
1:CA:1146:A:O2'	1:CA:1147:C:C5'	2.55	0.55
1:CA:1169:A:O2'	1:CA:1170:A:H8	1.89	0.55
1:CA:1448:C:O2'	1:CA:1449:C:C6	2.58	0.55
1:CA:1494:G:H2'	1:CA:1495:U:O5'	2.07	0.55
1:CA:624:C:H2'	1:CA:625:U:O4'	2.07	0.55
1:CA:658:C:H1'	15:CO:21:THR:HG21	1.89	0.55
1:CA:716:A:H2'	1:CA:717:U:O5'	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:982:U:H4'	1:CA:983:A:C5'	2.36	0.55
2:CB:164:ASP:HB3	2:CB:167:HIS:CB	2.33	0.55
7:CG:134:VAL:CB	7:CG:137:ARG:HH21	2.10	0.55
1:CA:933:G:OP2	7:CG:2:ARG:HD2	2.07	0.55
13:CM:23:GLY:O	13:CM:24:VAL:HG13	2.07	0.55
6:CF:59:TYR:HE2	18:CR:66:LEU:CD2	2.19	0.55
1:CA:1320:C:O2'	19:CS:72:GLU:HA	2.07	0.55
22:DA:1300:G:H4'	22:DA:1301:A:O5'	2.06	0.55
22:DA:1420:A:N3	22:DA:2211:A:N7	2.54	0.55
22:DA:1450:G:N2	22:DA:1462:C:C2	2.75	0.55
22:DA:1740:G:C2'	22:DA:1741:C:H5'	2.37	0.55
22:DA:2062:A:C2'	22:DA:2062:A:N3	2.70	0.55
22:DA:2390:U:OP2	51:D3:34:LYS:CE	2.55	0.55
22:DA:2468:A:O2'	22:DA:2469:A:C8	2.55	0.55
22:DA:2900:A:C6	22:DA:2901:C:C4	2.95	0.55
22:DA:575:A:C2	22:DA:576:U:C6	2.94	0.55
28:DG:1:SER:O	28:DG:3:VAL:HG22	2.07	0.55
28:DG:24:THR:C	28:DG:25:ILE:HD12	2.27	0.55
29:DH:78:VAL:HG21	29:DH:144:VAL:CG1	2.36	0.55
22:DA:2676:C:OP1	32:DK:31:ARG:NH2	2.40	0.55
33:DL:110:VAL:CG1	33:DL:127:VAL:HG23	2.37	0.55
34:DM:21:ALA:HA	34:DM:97:GLN:HG2	1.88	0.55
36:DO:31:THR:CG2	36:DO:36:TYR:HE2	2.13	0.55
37:DP:28:LYS:CG	37:DP:39:LEU:HD23	2.36	0.55
41:DT:14:PRO:HG2	41:DT:15:HIS:N	2.21	0.55
43:DV:1:MET:HA	43:DV:1:MET:HE2	1.89	0.55
1:AA:1098:C:H6	1:AA:1098:C:O5'	1.89	0.55
1:AA:1283:U:O2'	1:AA:1284:C:C6	2.55	0.55
1:AA:1293:C:H2'	1:AA:1294:G:C8	2.42	0.55
1:AA:223:A:H2'	1:AA:224:U:C6	2.42	0.55
1:AA:464:U:H2'	1:AA:466:A:OP2	2.07	0.55
1:AA:708:C:O2'	1:AA:709:U:H5'	2.07	0.55
3:AC:141:MET:HA	3:AC:145:ALA:HB3	1.89	0.55
4:AD:36:ALA:CA	4:AD:41:GLY:HA3	2.07	0.55
6:AF:37:HIS:ND1	6:AF:95:ALA:CB	2.70	0.55
10:AJ:11:LYS:HG3	10:AJ:97:ASP:CB	2.37	0.55
11:AK:21:HIS:HD2	11:AK:34:THR:HG22	1.69	0.55
22:BA:1026:G:C8	22:BA:1134:A:C4	2.95	0.55
22:BA:1079:C:N4	22:BA:1088:A:C2	2.74	0.55
22:BA:1321:A:H5''	22:BA:1321:A:H8	1.71	0.55
22:BA:1498:C:HO2'	22:BA:1499:C:H6	0.72	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1539:U:C2	22:BA:1540:G:C8	2.95	0.55
22:BA:156:A:O2'	22:BA:157:C:H5'	2.07	0.55
22:BA:2134:A:C6	22:BA:2135:A:N6	2.75	0.55
22:BA:405:U:C3'	22:BA:406:G:H5'	2.36	0.55
22:BA:80:G:H2'	22:BA:81:G:H5'	1.88	0.55
22:BA:851:C:C2'	22:BA:852:U:O5'	2.55	0.55
22:BA:1654:A:C4'	25:BD:118:PHE:CZ	2.89	0.55
25:BD:97:SER:H	25:BD:99:GLU:CD	2.11	0.55
30:BI:19:PRO:HG2	30:BI:23:VAL:CG2	2.37	0.55
30:BI:58:ILE:O	30:BI:60:VAL:HG23	2.06	0.55
32:BK:47:ILE:HG13	32:BK:48:PRO:HD2	1.87	0.55
38:BQ:48:ASP:HA	38:BQ:51:GLN:HB2	1.89	0.55
41:BT:19:LYS:HA	41:BT:22:THR:OG1	2.07	0.55
47:BZ:4:ILE:HD11	47:BZ:43:ILE:HD11	1.89	0.55
1:CA:109:A:C8	1:CA:327:A:O4'	2.60	0.55
1:CA:1115:U:O2'	1:CA:1116:U:H5'	2.07	0.55
1:CA:1117:A:O2'	9:CI:107:ALA:HB2	2.07	0.55
1:CA:1139:G:H4'	1:CA:1140:C:O5'	2.07	0.55
1:CA:1218:C:C2'	1:CA:1219:A:C8	2.89	0.55
1:CA:287:U:O2'	1:CA:288:A:H5'	2.06	0.55
1:CA:557:G:C6	1:CA:558:G:N1	2.75	0.55
1:CA:687:A:N1	1:CA:704:A:N7	2.55	0.55
1:CA:705:G:O2'	1:CA:706:A:H5'	2.07	0.55
1:CA:86:G:C2	1:CA:87:C:C5	2.95	0.55
1:CA:994:A:O2'	1:CA:995:C:H6	1.89	0.55
2:CB:110:ILE:CD1	2:CB:150:ILE:HG23	2.37	0.55
5:CE:56:PRO:HG2	5:CE:57:ALA:H	1.72	0.55
6:CF:92:THR:O	6:CF:93:LYS:CG	2.49	0.55
1:CA:795:C:C5'	11:CK:127:ARG:HH21	2.18	0.55
13:CM:47:LEU:C	13:CM:47:LEU:HD23	2.27	0.55
18:CR:21:ASP:HB3	18:CR:23:LYS:HG3	1.89	0.55
22:DA:1087:G:H2'	22:DA:1089:A:C8	2.42	0.55
22:DA:1036:G:C6	22:DA:1120:G:C6	2.95	0.55
22:DA:1430:G:H2'	22:DA:1431:A:C8	2.41	0.55
22:DA:1299:G:N2	22:DA:1640:A:H5'	2.20	0.55
22:DA:1907:G:C2	22:DA:1924:C:C2	2.95	0.55
22:DA:2250:G:O5'	22:DA:2250:G:H8	1.88	0.55
22:DA:2284:A:OP1	49:D1:5:ARG:HG3	2.07	0.55
22:DA:227:A:C4'	22:DA:229:C:H41	2.20	0.55
22:DA:2798:U:H5'	22:DA:2800:A:C6	2.42	0.55
22:DA:2842:G:H2'	22:DA:2843:G:O4'	2.07	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:571:U:H4'	22:DA:573:U:C5	2.40	0.55
24:DC:170:TYR:HD2	24:DC:183:VAL:O	1.90	0.55
24:DC:33:LEU:O	24:DC:34:GLU:HB3	2.06	0.55
25:DD:12:THR:HG22	25:DD:13:ARG:O	2.07	0.55
26:DE:147:LEU:O	26:DE:148:ILE:CB	2.55	0.55
27:DF:41:GLU:O	27:DF:43:ILE:N	2.40	0.55
27:DF:73:VAL:O	27:DF:73:VAL:HG12	2.07	0.55
28:DG:70:LEU:C	28:DG:70:LEU:HD12	2.27	0.55
29:DH:136:SER:O	29:DH:137:GLU:HG3	2.07	0.55
38:DQ:15:LYS:CE	38:DQ:19:GLN:HE21	2.18	0.55
22:DA:581:C:OP1	38:DQ:32:ARG:HB2	2.07	0.55
40:DS:71:VAL:O	40:DS:71:VAL:HG13	2.07	0.55
1:AA:1032:G:N2	1:AA:1033:G:C8	2.75	0.54
1:AA:1306:A:C6	1:AA:1307:U:C2	2.95	0.54
1:AA:1508:A:H2'	1:AA:1509:C:C6	2.42	0.54
1:AA:449:G:O2'	1:AA:450:G:H5'	2.06	0.54
2:AB:139:GLU:O	2:AB:143:LEU:CD2	2.52	0.54
3:AC:106:ARG:CG	3:AC:106:ARG:O	2.54	0.54
4:AD:160:LEU:HD22	4:AD:161:ALA:H	1.72	0.54
4:AD:36:ALA:HA	4:AD:41:GLY:CA	2.07	0.54
5:AE:37:VAL:HG11	5:AE:113:VAL:HA	1.88	0.54
5:AE:81:GLN:HG2	5:AE:149:PRO:CB	2.36	0.54
8:AH:12:ARG:HH11	8:AH:26:MET:CB	2.20	0.54
11:AK:13:LYS:O	11:AK:14:GLN:CB	2.55	0.54
12:AL:7:VAL:HG22	17:AQ:30:HIS:CD2	2.41	0.54
22:BA:1695:G:H2'	22:BA:1696:G:O4'	2.07	0.54
22:BA:1858:A:O2'	22:BA:1859:U:O5'	2.26	0.54
22:BA:2093:G:H1'	22:BA:2198:A:C2	2.42	0.54
22:BA:2742:G:H2'	22:BA:2743:U:H5'	1.88	0.54
22:BA:2808:G:C2	22:BA:2891:U:C6	2.96	0.54
22:BA:526:A:H5''	22:BA:527:C:OP1	2.06	0.54
22:BA:545:U:C6	22:BA:546:U:H4'	2.43	0.54
22:BA:606:U:H4'	22:BA:658:U:HO2'	1.71	0.54
22:BA:717:C:O2	22:BA:717:C:H2'	2.06	0.54
22:BA:871:U:H2'	22:BA:872:U:C6	2.42	0.54
22:BA:923:G:H21	44:BW:23:LYS:CE	2.21	0.54
22:BA:659:G:H21	26:BE:30:GLN:NE2	2.04	0.54
27:BF:165:GLY:O	27:BF:168:LEU:HB3	2.07	0.54
28:BG:140:ILE:HD12	28:BG:140:ILE:H	1.70	0.54
32:BK:34:GLY:O	32:BK:35:VAL:C	2.45	0.54
33:BL:27:LEU:CD1	33:BL:27:LEU:N	2.69	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:4:ASN:N	33:BL:4:ASN:HD22	1.99	0.54
37:BP:64:SER:O	37:BP:65:ASN:C	2.45	0.54
38:BQ:35:PHE:CE1	38:BQ:39:ILE:HD11	2.42	0.54
38:BQ:94:LEU:C	38:BQ:96:ASP:H	2.09	0.54
39:BR:39:LEU:CD2	39:BR:39:LEU:N	2.69	0.54
41:BT:27:SER:O	41:BT:28:ASN:CG	2.46	0.54
44:BW:18:LYS:N	44:BW:36:ILE:CG1	2.70	0.54
45:BX:29:LEU:HB2	45:BX:30:PRO:CD	2.37	0.54
47:BZ:2:LYS:O	47:BZ:3:THR:HG23	2.07	0.54
1:CA:1124:G:O2'	1:CA:1125:U:C5	2.59	0.54
1:CA:1154:G:H2'	1:CA:1155:A:H8	1.72	0.54
1:CA:1369:C:H2'	1:CA:1370:G:O4'	2.07	0.54
1:CA:16:A:O4'	5:CE:21:SER:HB3	2.07	0.54
1:CA:32:A:C2'	1:CA:33:A:C8	2.78	0.54
1:CA:50:A:C2	1:CA:360:G:N3	2.72	0.54
1:CA:452:A:H62	1:CA:480:U:H3	1.55	0.54
1:CA:985:C:HO2'	1:CA:986:U:H6	1.50	0.54
4:CD:123:MET:CE	4:CD:126:GLY:O	2.55	0.54
1:CA:404:G:OP2	4:CD:2:ARG:NH1	2.40	0.54
5:CE:74:ALA:O	5:CE:75:LEU:CB	2.46	0.54
8:CH:46:GLU:H	8:CH:63:LYS:HG3	1.72	0.54
9:CI:90:ASP:HB3	9:CI:93:LEU:HD23	1.89	0.54
11:CK:21:HIS:O	11:CK:22:ILE:HD12	2.07	0.54
12:CL:46:SER:O	12:CL:47:ALA:CB	2.54	0.54
13:CM:94:LEU:HD23	13:CM:101:THR:HG22	1.88	0.54
22:DA:1125:G:C6	22:DA:1126:A:N6	2.75	0.54
22:DA:1204:A:O4'	22:DA:1206:G:C5	2.60	0.54
22:DA:1339:G:H5'	22:DA:1393:A:C2	2.42	0.54
22:DA:1331:G:N2	22:DA:1616:A:N6	2.55	0.54
22:DA:1982:U:C6	22:DA:1982:U:O5'	2.60	0.54
22:DA:1991:U:C5'	22:DA:1991:U:H6	2.20	0.54
22:DA:2303:G:N1	22:DA:2314:A:C5	2.76	0.54
22:DA:38:A:C2	22:DA:442:G:C6	2.96	0.54
22:DA:477:A:O2'	22:DA:478:A:H5'	2.08	0.54
22:DA:503:A:H5''	22:DA:504:A:O5'	2.07	0.54
22:DA:739:A:H8	22:DA:739:A:OP2	1.90	0.54
22:DA:806:C:H2'	22:DA:807:U:H6	1.71	0.54
22:DA:972:A:H3'	22:DA:973:A:H5''	1.89	0.54
26:DE:88:ARG:HB3	26:DE:89:PRO:HD2	1.88	0.54
27:DF:48:LEU:O	27:DF:52:ALA:CB	2.54	0.54
27:DF:4:HIS:CE1	27:DF:96:TRP:CH2	2.95	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:59:ILE:CD1	27:DF:137:PHE:HZ	2.19	0.54
33:DL:127:VAL:CG1	33:DL:132:ARG:HB2	2.37	0.54
38:DQ:65:ASN:HA	38:DQ:75:TYR:HB2	1.88	0.54
38:DQ:4:LYS:HE3	38:DQ:7:VAL:H	1.72	0.54
22:DA:1391:U:H4'	41:DT:19:LYS:NZ	2.22	0.54
42:DU:39:ASN:HD21	42:DU:64:ILE:HG22	1.72	0.54
43:DV:3:THR:HA	43:DV:62:THR:O	2.06	0.54
47:DZ:15:ARG:CD	47:DZ:15:ARG:N	2.67	0.54
1:AA:1075:U:H4'	1:AA:1101:A:N6	2.23	0.54
1:AA:1112:C:H1'	3:AC:178:ARG:HH11	1.72	0.54
1:AA:1167:A:C8	1:AA:1169:A:C6	2.96	0.54
1:AA:183:C:O2'	1:AA:184:G:H5'	2.07	0.54
1:AA:267:C:H2'	1:AA:268:U:H6	1.72	0.54
1:AA:657:U:O2	15:AO:21:THR:CG2	2.54	0.54
5:AE:45:VAL:HG21	5:AE:117:ALA:CB	2.38	0.54
6:AF:40:GLU:HB2	6:AF:42:TRP:HE1	1.71	0.54
6:AF:51:ILE:HD13	6:AF:86:ARG:HG3	1.88	0.54
11:AK:109:ILE:CG2	11:AK:110:THR:N	2.70	0.54
11:AK:22:ILE:CD1	11:AK:85:VAL:HG13	2.26	0.54
17:AQ:60:ILE:CG2	17:AQ:72:TRP:CE3	2.90	0.54
22:BA:1394:U:H3'	22:BA:1394:U:C6	2.42	0.54
22:BA:1858:A:O2'	22:BA:1859:U:H5'	2.06	0.54
22:BA:274:C:C5	22:BA:275:C:C5	2.95	0.54
22:BA:78:U:H2'	22:BA:79:C:C6	2.42	0.54
24:BC:29:PHE:CD2	24:BC:31:PRO:HG2	2.42	0.54
26:BE:79:ARG:O	26:BE:80:SER:C	2.46	0.54
30:BI:126:ARG:HA	30:BI:129:GLU:CB	2.36	0.54
30:BI:64:ARG:HG3	30:BI:65:SER:N	2.22	0.54
31:BJ:31:GLU:O	31:BJ:32:LEU:C	2.42	0.54
32:BK:13:ASN:N	32:BK:13:ASN:OD1	2.41	0.54
32:BK:74:GLY:HA3	37:BP:74:GLN:HE21	1.72	0.54
35:BN:117:ASP:O	35:BN:119:SER:N	2.37	0.54
35:BN:8:ARG:HD2	35:BN:43:GLU:CG	2.37	0.54
38:BQ:40:LYS:HG2	38:BQ:44:TYR:CE1	2.42	0.54
1:CA:1066:C:H2'	1:CA:1067:A:C8	2.42	0.54
1:CA:329:A:C8	1:CA:332:G:C6	2.95	0.54
1:CA:461:A:P	1:CA:462:G:OP2	2.65	0.54
1:CA:704:A:O2'	1:CA:705:G:O5'	2.25	0.54
1:CA:845:A:N3	1:CA:845:A:H2'	2.21	0.54
1:CA:995:C:N3	1:CA:1046:A:O2'	2.37	0.54
3:CC:190:THR:CG2	3:CC:191:THR:H	2.15	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:25:THR:HG22	3:CC:25:THR:O	2.07	0.54
5:CE:104:ILE:CD1	5:CE:122:VAL:HG21	2.35	0.54
5:CE:131:ASN:HD22	5:CE:132:PRO:HD2	1.72	0.54
7:CG:148:LYS:HZ2	7:CG:148:LYS:HB2	1.72	0.54
14:CN:52:ARG:HH21	14:CN:58:ARG:CD	2.21	0.54
48:D0:42:ILE:CD1	48:D0:48:TYR:CB	2.85	0.54
22:DA:1126:A:H4'	22:DA:1127:A:C5'	2.36	0.54
22:DA:116:C:H2'	22:DA:117:G:O5'	2.07	0.54
22:DA:1206:G:O2'	22:DA:1207:C:C6	2.60	0.54
22:DA:1342:A:C5	22:DA:1345:C:N4	2.75	0.54
22:DA:1390:U:C2'	22:DA:1391:U:H5'	2.37	0.54
22:DA:1771:C:O2'	22:DA:1772:A:H5'	2.07	0.54
22:DA:1786:A:O2'	22:DA:1938:A:N6	2.41	0.54
22:DA:1788:C:H2'	22:DA:1789:A:H5'	1.90	0.54
22:DA:2291:U:H2'	22:DA:2292:U:C5	2.39	0.54
22:DA:2650:U:C2	22:DA:2671:G:N2	2.76	0.54
22:DA:308:G:N1	22:DA:309:A:N1	2.55	0.54
22:DA:362:A:C5	22:DA:363:G:C8	2.95	0.54
22:DA:262:A:C2	22:DA:430:A:H1'	2.41	0.54
22:DA:18:U:O2	22:DA:554:U:H5''	2.07	0.54
22:DA:599:A:C5	22:DA:600:G:N7	2.75	0.54
22:DA:628:G:O2'	22:DA:629:G:C8	2.58	0.54
23:DB:58:A:C2'	23:DB:59:A:H8	2.17	0.54
25:DD:38:LYS:HD2	25:DD:45:TYR:OH	2.07	0.54
25:DD:5:VAL:HG23	25:DD:82:PHE:CZ	2.42	0.54
26:DE:52:VAL:HG12	26:DE:74:LYS:CD	2.36	0.54
26:DE:60:TRP:HZ3	26:DE:62:GLN:CG	2.20	0.54
28:DG:82:PHE:CB	28:DG:140:ILE:HD13	2.37	0.54
22:DA:832:U:P	33:DL:38:GLN:H	2.29	0.54
34:DM:63:ILE:HD11	34:DM:105:MET:HE1	1.90	0.54
36:DO:81:ARG:HA	36:DO:84:GLU:HB2	1.89	0.54
37:DP:24:THR:O	37:DP:25:VAL:O	2.26	0.54
41:DT:32:LEU:HD23	41:DT:32:LEU:N	2.22	0.54
42:DU:14:THR:CG2	42:DU:64:ILE:HD11	2.35	0.54
1:AA:1088:G:H21	1:AA:1167:A:N6	2.02	0.54
1:AA:1253:G:N1	1:AA:1285:A:N6	2.55	0.54
1:AA:1451:U:HO2'	1:AA:1452:C:P	2.31	0.54
1:AA:184:G:O2'	1:AA:185:U:O5'	2.25	0.54
1:AA:204:G:C3'	1:AA:205:A:C5'	2.72	0.54
1:AA:642:A:HO2'	1:AA:643:C:H5'	1.67	0.54
2:AB:113:LEU:O	2:AB:117:GLU:HG3	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:40:ILE:HG21	2:AB:201:GLY:HA2	1.88	0.54
5:AE:106:ALA:CB	5:AE:124:ALA:HB3	2.36	0.54
11:AK:107:THR:HG22	11:AK:108:ASN:HD21	1.73	0.54
13:AM:45:SER:O	13:AM:46:GLU:HB2	2.07	0.54
16:AP:22:ALA:HA	16:AP:33:ILE:HG13	1.88	0.54
17:AQ:15:LYS:HD2	17:AQ:15:LYS:C	2.27	0.54
21:AU:8:ASN:O	21:AU:11:PHE:HE2	1.90	0.54
22:BA:1098:A:C5	22:BA:1099:G:C6	2.95	0.54
22:BA:528:A:H2	22:BA:2043:C:H4'	1.67	0.54
22:BA:2109:U:N3	22:BA:2181:U:C4	2.76	0.54
22:BA:2197:U:OP1	4:CD:150:LYS:NZ	2.40	0.54
22:BA:2555:U:C5	22:BA:2556:C:N1	2.75	0.54
22:BA:2567:G:H2'	22:BA:2568:U:C6	2.43	0.54
22:BA:361:G:OP2	22:BA:361:G:H8	1.91	0.54
22:BA:740:C:H5'	22:BA:1784:A:H3'	1.88	0.54
22:BA:792:A:N3	22:BA:2072:C:O2'	2.30	0.54
25:BD:101:PHE:CE2	25:BD:203:VAL:HG22	2.42	0.54
26:BE:145:ASP:CB	26:BE:184:ASP:OD2	2.56	0.54
26:BE:18:THR:HA	26:BE:106:LYS:HG2	1.88	0.54
31:BJ:16:TYR:HA	31:BJ:138:GLN:O	2.06	0.54
1:CA:1004:A:H2'	1:CA:1005:A:O4'	2.07	0.54
1:CA:1102:A:H5''	1:CA:1102:A:H8	1.71	0.54
1:CA:1175:G:H2'	1:CA:1176:A:H8	1.73	0.54
1:CA:1184:G:HO2'	1:CA:1185:G:C5'	2.20	0.54
1:CA:1127:G:H5'	1:CA:1280:A:O2'	2.07	0.54
1:CA:142:G:N3	1:CA:196:A:H2	2.04	0.54
1:CA:826:C:H2'	1:CA:826:C:O2	2.07	0.54
1:CA:969:A:O2'	1:CA:970:C:O4'	2.22	0.54
2:CB:11:ALA:C	2:CB:13:VAL:H	2.09	0.54
4:CD:94:GLU:HA	4:CD:99:ASN:ND2	2.22	0.54
5:CE:36:THR:HB	5:CE:63:MET:CE	2.37	0.54
6:CF:66:ALA:HB1	6:CF:70:VAL:HG22	1.88	0.54
8:CH:46:GLU:N	8:CH:63:LYS:HD2	2.21	0.54
9:CI:47:VAL:C	9:CI:50:PRO:HD2	2.27	0.54
11:CK:22:ILE:HG22	11:CK:22:ILE:O	2.05	0.54
20:CT:3:ILE:O	20:CT:3:ILE:HG22	2.07	0.54
22:DA:1120:G:C6	22:DA:1121:C:C4	2.96	0.54
22:DA:1244:A:C2'	22:DA:1245:G:H5'	2.38	0.54
22:DA:1510:G:N2	22:DA:1511:G:C5	2.75	0.54
22:DA:1759:A:H2'	22:DA:1760:C:C6	2.42	0.54
22:DA:1803:A:O2'	22:DA:1804:C:C5'	2.55	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2217:G:H2'	22:DA:2218:G:H8	1.72	0.54
22:DA:2226:C:O2'	22:DA:2227:A:O4'	2.20	0.54
22:DA:2263:C:H5	44:DW:11:ASN:OD1	1.90	0.54
22:DA:2533:U:H2'	22:DA:2534:A:O4'	2.07	0.54
22:DA:579:G:H2'	22:DA:580:U:C6	2.41	0.54
24:DC:260:LYS:NZ	24:DC:260:LYS:HB2	2.23	0.54
26:DE:119:ILE:HD11	26:DE:143:LEU:CD2	2.36	0.54
33:DL:96:LYS:HE2	33:DL:102:GLY:O	2.07	0.54
37:DP:24:THR:HA	37:DP:44:GLY:O	2.06	0.54
38:DQ:96:ASP:C	38:DQ:98:ALA:H	2.11	0.54
39:DR:97:LYS:O	39:DR:98:ILE:C	2.45	0.54
40:DS:74:ILE:HG12	40:DS:74:ILE:O	2.07	0.54
22:DA:1393:A:H62	41:DT:19:LYS:HG2	1.72	0.54
44:DW:13:ARG:HG3	44:DW:14:ASP:N	2.15	0.54
45:DX:51:SER:OG	45:DX:54:GLY:HA3	2.07	0.54
45:DX:57:VAL:C	45:DX:59:ASP:H	2.10	0.54
46:DY:28:LEU:HD13	46:DY:28:LEU:C	2.27	0.54
1:AA:414:A:N3	1:AA:415:A:C8	2.75	0.54
1:AA:466:A:H4'	1:AA:467:U:OP2	2.06	0.54
1:AA:672:U:H2'	1:AA:673:A:C8	2.43	0.54
9:AI:10:ARG:HB2	9:AI:14:SER:O	2.08	0.54
15:AO:72:LYS:HA	15:AO:72:LYS:HE2	1.88	0.54
17:AQ:7:LEU:HD22	17:AQ:72:TRP:CZ3	2.42	0.54
50:B2:30:VAL:O	50:B2:34:ARG:HG3	2.07	0.54
22:BA:1104:C:H2'	22:BA:1105:U:H6	1.71	0.54
22:BA:1378:A:H2'	22:BA:1380:G:N7	2.22	0.54
22:BA:1795:C:H2'	22:BA:1796:U:C6	2.42	0.54
22:BA:189:G:H2'	22:BA:205:G:N2	2.21	0.54
22:BA:2199:A:C5'	22:BA:2200:C:H5	2.19	0.54
22:BA:288:U:O2'	22:BA:289:G:H5'	2.08	0.54
27:BF:30:VAL:HG11	27:BF:96:TRP:CH2	2.42	0.54
29:BH:133:GLN:HA	29:BH:133:GLN:OE1	2.08	0.54
30:BI:24:GLY:O	30:BI:27:LEU:HG	2.07	0.54
30:BI:60:VAL:HG22	30:BI:66:PHE:HB2	1.90	0.54
35:BN:103:ARG:CD	35:BN:110:MET:CE	2.85	0.54
35:BN:71:ARG:NH2	35:BN:71:ARG:HG3	2.23	0.54
37:BP:3:ILE:HD13	37:BP:3:ILE:C	2.27	0.54
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.72	0.54
1:CA:1092:A:C2	1:CA:1183:U:N3	2.74	0.54
1:CA:1216:A:C2	1:CA:1217:C:N3	2.76	0.54
1:CA:120:A:O2'	1:CA:121:U:C5'	2.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.43	0.54
1:CA:975:A:H2	1:CA:1366:C:H1'	1.71	0.54
1:CA:198:G:H1'	1:CA:199:A:H5'	1.89	0.54
1:CA:440:C:H2'	1:CA:441:A:C5'	2.37	0.54
6:CF:91:ARG:O	6:CF:93:LYS:HE3	2.08	0.54
13:CM:77:LYS:C	13:CM:77:LYS:HD3	2.27	0.54
16:CP:62:GLY:O	16:CP:63:GLN:HB2	2.07	0.54
51:D3:21:PHE:H	51:D3:48:MET:HB2	1.72	0.54
52:D4:30:GLU:HB2	52:D4:33:HIS:HD2	1.72	0.54
22:DA:1068:G:C8	22:DA:1069:A:N7	2.76	0.54
22:DA:1227:G:O2'	22:DA:1228:G:H5'	2.08	0.54
22:DA:1854:A:H2'	22:DA:1855:U:H5'	1.88	0.54
22:DA:1963:U:O2'	22:DA:1964:G:C5'	2.56	0.54
22:DA:2136:G:C2	22:DA:2137:U:C5	2.96	0.54
22:DA:2353:G:N3	44:DW:30:VAL:CG1	2.70	0.54
22:DA:2426:A:H3'	22:DA:2427:C:H5'	1.90	0.54
22:DA:247:G:H4'	22:DA:386:G:C4	2.42	0.54
22:DA:428:A:H2'	22:DA:429:A:O4'	2.08	0.54
22:DA:524:G:H2'	22:DA:525:U:C6	2.41	0.54
22:DA:532:A:N1	22:DA:2020:A:H1'	2.22	0.54
22:DA:672:C:C2	22:DA:809:G:N2	2.75	0.54
22:DA:779:U:OP1	24:DC:48:ILE:CG1	2.51	0.54
28:DG:70:LEU:HD12	28:DG:71:LEU:N	2.23	0.54
30:DI:112:LYS:HZ3	30:DI:128:ILE:HD12	1.68	0.54
22:DA:1077:A:OP1	30:DI:94:LYS:HG2	2.08	0.54
31:DJ:73:VAL:HG23	31:DJ:74:TYR:H	1.73	0.54
32:DK:104:THR:C	32:DK:106:GLU:H	2.10	0.54
32:DK:13:ASN:ND2	32:DK:13:ASN:N	2.45	0.54
32:DK:38:ILE:CG1	32:DK:61:VAL:HG12	2.29	0.54
32:DK:92:GLU:OE1	32:DK:92:GLU:HA	2.07	0.54
34:DM:17:ASN:HB3	34:DM:38:ARG:HH22	1.72	0.54
36:DO:29:HIS:O	36:DO:36:TYR:HD2	1.90	0.54
37:DP:19:PHE:CE1	37:DP:58:PHE:CD2	2.96	0.54
42:DU:22:GLY:HA3	42:DU:36:GLU:HB3	1.89	0.54
1:AA:1240:U:H3'	1:AA:1241:G:H5'	1.89	0.54
1:AA:1279:G:C1'	1:AA:1282:C:N4	2.56	0.54
1:AA:1429:A:C2	1:AA:1472:U:C2	2.96	0.54
1:AA:197:A:H4'	1:AA:198:G:O5'	2.07	0.54
1:AA:211:G:C6	1:AA:212:G:H1'	2.43	0.54
1:AA:6:G:H22	5:AE:101:GLY:HA3	1.73	0.54
1:AA:74:A:C6	1:AA:97:G:O6	2.60	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:817:C:H4'	1:AA:818:G:OP1	2.07	0.54
1:AA:935:A:O2'	1:AA:936:C:O4'	2.25	0.54
2:AB:118:THR:O	2:AB:119:GLN:HB2	2.08	0.54
4:AD:97:LEU:HD22	4:AD:117:VAL:HG11	1.90	0.54
5:AE:121:ASN:N	5:AE:121:ASN:HD22	2.04	0.54
9:AI:20:ILE:HD12	9:AI:85:ALA:O	2.08	0.54
9:AI:8:THR:HG22	9:AI:9:GLY:N	2.22	0.54
9:AI:116:GLY:HA2	10:AJ:60:ASP:OD2	2.08	0.54
15:AO:81:ILE:O	15:AO:85:GLY:N	2.40	0.54
17:AQ:58:VAL:HG22	17:AQ:59:GLU:N	2.22	0.54
19:AS:22:VAL:HG12	19:AS:23:GLU:N	2.23	0.54
22:BA:1452:G:H3'	56:BA:3415:HOH:O	2.06	0.54
22:BA:1471:G:H2'	22:BA:1472:C:C6	2.43	0.54
22:BA:1794:A:O2'	22:BA:1795:C:H5'	2.07	0.54
22:BA:1871:A:H8	22:BA:1872:A:C5	2.25	0.54
22:BA:528:A:C2	22:BA:2043:C:C5'	2.90	0.54
22:BA:284:U:H2'	22:BA:285:G:C8	2.35	0.54
22:BA:611:C:H2'	22:BA:612:G:H5'	1.90	0.54
23:BB:81:G:C2'	23:BB:82:U:H5'	2.38	0.54
25:BD:124:ARG:HG2	25:BD:125:TRP:NE1	2.23	0.54
25:BD:155:VAL:HG13	25:BD:159:LYS:HG3	1.88	0.54
25:BD:66:GLY:O	25:BD:69:ALA:HB3	2.07	0.54
22:BA:674:G:O2'	26:BE:69:ARG:HD2	2.08	0.54
27:BF:71:LYS:HA	27:BF:80:GLN:HG3	1.89	0.54
29:BH:82:SER:O	29:BH:83:LYS:CB	2.54	0.54
22:BA:1141:U:H6	31:BJ:65:THR:CG2	2.20	0.54
33:BL:68:SER:O	33:BL:69:ARG:CB	2.56	0.54
40:BS:69:LEU:HA	40:BS:108:SER:O	2.08	0.54
42:BU:71:ILE:HD12	42:BU:71:ILE:O	2.08	0.54
44:BW:37:VAL:CG1	44:BW:55:ASP:O	2.56	0.54
46:BY:16:THR:O	46:BY:19:LEU:N	2.41	0.54
1:CA:1070:U:C2	1:CA:1071:C:C5	2.96	0.54
1:CA:1255:G:N1	1:CA:1279:G:N7	2.56	0.54
1:CA:1509:C:H2'	1:CA:1510:C:C6	2.43	0.54
1:CA:15:G:H5'	1:CA:1396:A:O2'	2.07	0.54
1:CA:596:A:C6	1:CA:645:G:C2	2.96	0.54
1:CA:821:G:H4'	56:CA:1740:HOH:O	2.05	0.54
1:CA:994:A:C2	1:CA:995:C:C6	2.95	0.54
2:CB:100:LEU:HB2	2:CB:174:GLU:OE1	2.07	0.54
2:CB:191:ASP:C	2:CB:193:ASP:H	2.11	0.54
3:CC:115:VAL:HG13	3:CC:199:VAL:HG11	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:33:VAL:O	8:CH:35:ILE:N	2.41	0.54
10:CJ:5:ARG:HG2	10:CJ:79:PRO:CG	2.19	0.54
10:CJ:80:THR:C	10:CJ:84:VAL:HG22	2.28	0.54
12:CL:37:TYR:O	12:CL:38:THR:HG22	2.07	0.54
13:CM:82:LEU:HB2	19:CS:73:PHE:CE2	2.43	0.54
15:CO:32:THR:HG23	15:CO:62:ARG:HH11	1.72	0.54
16:CP:7:ALA:O	16:CP:17:TYR:HA	2.06	0.54
19:CS:52:ASN:HD22	19:CS:54:ARG:H	1.54	0.54
48:D0:38:LEU:H	48:D0:41:HIS:CE1	2.24	0.54
22:DA:1021:A:O2'	22:DA:1022:G:C4'	2.42	0.54
22:DA:1269:A:H2'	22:DA:1270:C:H6	1.70	0.54
22:DA:1303:G:O2'	22:DA:1304:A:C5'	2.55	0.54
22:DA:1307:A:H2'	22:DA:1308:A:O5'	2.07	0.54
22:DA:1346:G:O2'	22:DA:1347:A:C5'	2.55	0.54
22:DA:1662:U:C2'	22:DA:1663:G:H5''	2.37	0.54
22:DA:2100:G:C6	22:DA:2101:A:C6	2.96	0.54
22:DA:2738:A:H2	22:DA:2766:A:N6	2.03	0.54
22:DA:677:A:C6	22:DA:678:C:N4	2.75	0.54
22:DA:679:C:H2'	22:DA:680:C:C6	2.39	0.54
22:DA:75:G:HO2'	22:DA:76:C:P	2.31	0.54
22:DA:796:C:H2'	22:DA:797:G:C8	2.42	0.54
22:DA:919:U:C2	22:DA:920:A:C8	2.95	0.54
24:DC:176:ARG:C	24:DC:178:GLY:H	2.10	0.54
25:DD:138:LEU:N	25:DD:138:LEU:HD22	2.23	0.54
25:DD:20:VAL:HG11	25:DD:22:ILE:HG12	1.90	0.54
26:DE:134:LEU:HA	26:DE:137:LYS:HB3	1.88	0.54
31:DJ:57:LEU:HG	31:DJ:128:ASN:N	2.21	0.54
32:DK:34:GLY:O	32:DK:35:VAL:HG23	2.06	0.54
35:DN:7:GLY:HA2	35:DN:46:ARG:CZ	2.37	0.54
42:DU:39:ASN:HB2	42:DU:62:ALA:H	1.71	0.54
45:DX:65:THR:O	45:DX:68:ALA:CB	2.56	0.54
46:DY:47:ARG:O	46:DY:50:VAL:N	2.39	0.54
1:AA:110:C:H2'	1:AA:111:G:C8	2.43	0.54
1:AA:1257:A:H4'	1:AA:1258:G:OP2	2.08	0.54
1:AA:1380:U:C5	7:AG:2:ARG:HA	2.43	0.54
1:AA:1453:G:H2'	1:AA:1454:G:O4'	2.07	0.54
1:AA:558:G:O5'	1:AA:558:G:H8	1.90	0.54
1:AA:665:A:C1'	1:AA:733:G:H1'	2.38	0.54
1:AA:574:A:H1'	1:AA:883:C:O4'	2.08	0.54
1:AA:949:A:O2'	1:AA:950:U:H5'	2.07	0.54
1:AA:94:G:C4'	1:AA:95:C:C5'	2.81	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:179:ALA:HB1	3:AC:202:PHE:HE1	1.72	0.54
4:AD:151:GLN:O	4:AD:152:SER:C	2.45	0.54
4:AD:160:LEU:HD22	4:AD:161:ALA:N	2.22	0.54
6:AF:38:ARG:HH12	6:AF:61:LEU:HD21	1.71	0.54
6:AF:42:TRP:CZ2	6:AF:61:LEU:HD22	2.42	0.54
9:AI:18:VAL:HA	9:AI:64:ILE:HG23	1.89	0.54
1:AA:1248:A:H2	9:AI:71:ILE:HD11	1.69	0.54
14:AN:20:PHE:HA	14:AN:24:ALA:HB3	1.88	0.54
17:AQ:13:SER:O	17:AQ:20:ILE:CD1	2.56	0.54
19:AS:6:LYS:CE	19:AS:6:LYS:HA	2.37	0.54
22:BA:137:U:N3	22:BA:142:A:N6	2.55	0.54
22:BA:2585:U:O2'	22:BA:2586:U:C5'	2.36	0.54
22:BA:2564:A:C2	22:BA:2647:U:H4'	2.42	0.54
24:BC:165:ALA:HB3	24:BC:172:THR:CG2	2.35	0.54
25:BD:117:GLY:C	25:BD:118:PHE:CG	2.81	0.54
29:BH:67:ALA:C	29:BH:69:ALA:H	2.11	0.54
31:BJ:43:GLU:O	31:BJ:44:TYR:C	2.46	0.54
32:BK:13:ASN:O	32:BK:15:GLY:N	2.40	0.54
35:BN:70:THR:HG21	35:BN:75:ILE:HD11	1.90	0.54
36:BO:59:ALA:C	36:BO:61:GLN:N	2.60	0.54
1:CA:977:A:H1'	1:CA:1223:C:N4	2.22	0.54
1:CA:1393:U:C6	1:CA:1393:U:C3'	2.91	0.54
1:CA:1399:C:C2	1:CA:1401:G:C5	2.96	0.54
1:CA:163:C:C2'	1:CA:164:G:O5'	2.56	0.54
1:CA:369:G:O2'	1:CA:370:C:C5'	2.48	0.54
1:CA:491:G:HO2'	1:CA:492:C:H5'	1.67	0.54
1:CA:733:G:O2'	1:CA:734:G:H5''	2.08	0.54
1:CA:986:U:N3	1:CA:1220:G:C2	2.76	0.54
3:CC:72:PRO:HG3	3:CC:104:GLU:CD	2.28	0.54
1:CA:932:C:C6	7:CG:2:ARG:NH1	2.75	0.54
9:CI:27:ILE:HD13	9:CI:62:LEU:CB	2.33	0.54
10:CJ:45:ARG:O	10:CJ:46:LYS:C	2.46	0.54
13:CM:111:PRO:HG2	13:CM:113:LYS:HG3	1.89	0.54
15:CO:31:LEU:O	15:CO:35:ILE:HG13	2.07	0.54
21:CU:35:GLU:OE1	21:CU:37:TYR:CD1	2.61	0.54
48:D0:27:LEU:HB3	48:D0:37:HIS:O	2.08	0.54
22:DA:1179:G:C2	22:DA:1180:U:C2	2.96	0.54
22:DA:1179:G:N2	22:DA:1180:U:C2	2.76	0.54
22:DA:1213:A:H2'	22:DA:1214:A:C8	2.42	0.54
22:DA:1237:A:O2'	22:DA:1238:G:O4'	2.26	0.54
22:DA:1479:G:N2	22:DA:1513:U:H1'	2.23	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:163:C:O2'	22:DA:164:C:C5'	2.55	0.54
22:DA:1669:A:OP2	56:DA:3706:HOH:O	2.18	0.54
22:DA:1913:A:C4'	22:DA:1914:C:OP1	2.49	0.54
22:DA:2093:G:N3	22:DA:2094:A:C8	2.75	0.54
22:DA:2607:G:H2'	22:DA:2608:G:O4'	2.06	0.54
22:DA:2691:C:O2'	22:DA:2692:G:H5'	2.06	0.54
22:DA:2687:U:H3	22:DA:2722:G:H1	1.56	0.54
22:DA:2817:U:H2'	22:DA:2818:U:O5'	2.07	0.54
22:DA:2879:A:O2'	22:DA:2880:C:P	2.66	0.54
22:DA:945:A:H5'	22:DA:946:C:OP2	2.08	0.54
26:DE:148:ILE:HA	26:DE:187:VAL:CB	2.35	0.54
32:DK:2:ILE:CG2	32:DK:3:GLN:N	2.44	0.54
33:DL:141:LYS:HD2	33:DL:142:ILE:N	2.22	0.54
39:DR:81:LYS:O	39:DR:82:HIS:C	2.44	0.54
43:DV:4:ILE:HD12	43:DV:63:ILE:HG13	1.90	0.54
43:DV:21:ARG:HE	43:DV:87:GLN:HG2	1.73	0.54
1:AA:1159:U:N3	1:AA:1182:G:C5	2.75	0.54
1:AA:1261:A:N1	1:AA:1274:A:C2	2.75	0.54
1:AA:1361:G:H3'	1:AA:1362:A:H5''	1.88	0.54
1:AA:188:C:H2'	1:AA:189:A:O4'	2.08	0.54
1:AA:214:C:C6	1:AA:215:C:H5	2.26	0.54
1:AA:32:A:C2'	1:AA:33:A:H8	2.17	0.54
1:AA:991:U:C4'	1:AA:992:U:OP1	2.56	0.54
2:AB:128:LEU:O	2:AB:129:THR:HG23	2.08	0.54
3:AC:147:GLY:N	3:AC:202:PHE:HB3	2.22	0.54
4:AD:117:VAL:HG22	4:AD:122:ILE:HG13	1.88	0.54
4:AD:19:PHE:HD1	4:AD:19:PHE:N	2.06	0.54
4:AD:31:CYS:O	4:AD:32:LYS:CB	2.46	0.54
9:AI:52:GLU:HB3	9:AI:53:LEU:HD12	1.89	0.54
9:AI:90:ASP:CG	9:AI:92:SER:HB3	2.28	0.54
10:AJ:65:TYR:HB3	14:AN:95:LEU:CD1	2.38	0.54
17:AQ:4:ILE:HD12	17:AQ:4:ILE:N	2.23	0.54
22:BA:1733:G:O2'	22:BA:1734:G:H8	1.91	0.54
22:BA:687:C:O2'	22:BA:1780:A:N1	2.40	0.54
22:BA:1912:A:O2'	22:BA:1913:A:H5''	2.08	0.54
22:BA:2063:C:O2'	22:BA:2064:C:H5'	2.08	0.54
22:BA:2459:A:N3	22:BA:2459:A:H2'	2.23	0.54
22:BA:2772:C:H2'	22:BA:2773:C:C6	2.42	0.54
22:BA:2810:A:H2'	22:BA:2811:G:O4'	2.08	0.54
22:BA:725:G:C6	22:BA:726:G:N1	2.76	0.54
22:BA:852:U:H2'	22:BA:853:C:C6	2.43	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:866:A:C4'	22:BA:866:A:C8	2.91	0.54
25:BD:46:ARG:HG2	25:BD:46:ARG:NH1	2.22	0.54
27:BF:40:GLY:N	27:BF:84:ILE:HD11	2.23	0.54
28:BG:26:LYS:HB3	28:BG:32:LEU:HG	1.89	0.54
29:BH:74:ALA:C	29:BH:75:LEU:HD12	2.28	0.54
32:BK:113:MET:HG3	32:BK:116:ILE:HD11	1.89	0.54
33:BL:85:VAL:CG2	33:BL:94:THR:HG23	2.38	0.54
34:BM:54:THR:O	34:BM:56:ALA:N	2.40	0.54
42:BU:13:LEU:HD12	42:BU:69:VAL:CA	2.38	0.54
44:BW:16:GLU:O	44:BW:17:ALA:HB3	2.07	0.54
44:BW:40:ARG:NH1	44:BW:45:HIS:CE1	2.76	0.54
44:BW:44:PHE:O	44:BW:78:PHE:HA	2.08	0.54
44:BW:46:ALA:CB	44:BW:79:ILE:O	2.52	0.54
47:BZ:15:ARG:HH11	47:BZ:15:ARG:CG	2.05	0.54
1:CA:1108:G:OP1	3:CC:175:HIS:ND1	2.34	0.54
1:CA:1117:A:C6	1:CA:1184:G:O6	2.61	0.54
1:CA:1175:G:C2'	1:CA:1176:A:H5'	2.38	0.54
1:CA:1309:G:H1'	13:CM:72:ILE:CD1	2.38	0.54
1:CA:1331:G:O2'	1:CA:1332:A:H8	1.90	0.54
1:CA:1442:G:H2'	1:CA:1443:C:H6	1.73	0.54
1:CA:246:A:N3	1:CA:279:A:N6	2.55	0.54
1:CA:663:A:C2	1:CA:743:A:C2	2.96	0.54
1:CA:834:U:O2'	1:CA:835:U:H5'	2.07	0.54
1:CA:880:C:C2'	1:CA:881:G:H5'	2.37	0.54
1:CA:934:C:H5	1:CA:1344:C:C2	2.26	0.54
4:CD:190:LEU:O	4:CD:191:SER:O	2.26	0.54
4:CD:26:ALA:O	4:CD:28:ASP:O	2.26	0.54
4:CD:29:THR:C	4:CD:30:LYS:CD	2.65	0.54
4:CD:2:ARG:CB	4:CD:2:ARG:NH1	2.67	0.54
6:CF:35:LYS:HB2	6:CF:37:HIS:CE1	2.42	0.54
6:CF:67:PRO:O	6:CF:69:GLU:N	2.41	0.54
7:CG:100:MET:HE2	7:CG:100:MET:H	1.69	0.54
7:CG:128:GLU:HG3	7:CG:130:LYS:H	1.73	0.54
9:CI:56:MET:O	9:CI:58:GLU:HG2	2.08	0.54
11:CK:81:LEU:HD11	11:CK:104:PHE:CG	2.41	0.54
11:CK:35:ASP:C	11:CK:37:GLN:H	2.11	0.54
13:CM:106:ARG:HH21	13:CM:112:ARG:NE	2.05	0.54
49:D1:22:THR:HG23	49:D1:23:THR:N	2.22	0.54
49:D1:42:VAL:HG12	49:D1:42:VAL:O	2.06	0.54
22:DA:1033:U:H4'	22:DA:1034:G:OP1	2.06	0.54
22:DA:1131:G:N7	22:DA:2025:C:H4'	2.22	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1759:A:H2'	22:DA:1760:C:H6	1.72	0.54
22:DA:2024:G:N2	22:DA:2040:G:H1'	2.23	0.54
22:DA:2093:G:N2	22:DA:2094:A:C4	2.76	0.54
22:DA:2096:C:H2'	22:DA:2097:A:H8	1.73	0.54
22:DA:2197:U:C6	22:DA:2224:G:C6	2.96	0.54
22:DA:460:A:C2	22:DA:470:A:C4	2.96	0.54
22:DA:538:A:H5''	31:DJ:7:LYS:HZ2	1.71	0.54
22:DA:639:U:H2'	22:DA:640:C:C6	2.32	0.54
24:DC:231:HIS:O	24:DC:232:GLY:C	2.46	0.54
24:DC:68:ARG:HH12	24:DC:115:ILE:HD12	1.72	0.54
25:DD:97:SER:HB2	25:DD:99:GLU:HG2	1.90	0.54
22:DA:2312:U:H5'	27:DF:70:ARG:NH1	2.23	0.54
28:DG:51:PHE:HE2	28:DG:68:ARG:HA	1.72	0.54
29:DH:68:ARG:CG	29:DH:68:ARG:NH1	2.59	0.54
22:DA:1139:G:O3'	31:DJ:26:GLY:HA3	2.08	0.54
22:DA:2674:G:H4'	32:DK:30:ARG:CG	2.37	0.54
32:DK:40:LYS:NZ	32:DK:89:ASN:HD21	2.05	0.54
38:DQ:4:LYS:HG2	38:DQ:5:ARG:N	2.23	0.54
39:DR:78:ARG:CB	39:DR:83:TYR:HD1	2.20	0.54
42:DU:58:VAL:HG12	42:DU:60:LYS:HG2	1.83	0.54
43:DV:77:VAL:HA	43:DV:89:ILE:HG22	1.89	0.54
46:DY:17:GLU:HG2	46:DY:50:VAL:HG13	1.90	0.54
1:AA:1152:A:C2'	1:AA:1153:G:C8	2.85	0.54
1:AA:1227:A:HO2'	1:AA:1228:C:P	2.31	0.54
1:AA:1285:A:H4'	1:AA:1286:U:C4	2.43	0.54
1:AA:430:A:O2'	1:AA:431:A:C5'	2.29	0.54
1:AA:466:A:C5'	1:AA:467:U:OP2	2.56	0.54
1:AA:694:A:C2'	1:AA:695:A:O5'	2.55	0.54
2:AB:148:GLY:O	2:AB:151:LYS:HG2	2.08	0.54
3:AC:13:ILE:O	3:AC:15:LYS:N	2.40	0.54
4:AD:168:THR:HG22	4:AD:183:ARG:NH2	2.23	0.54
5:AE:87:VAL:HG12	5:AE:92:ARG:HA	1.88	0.54
6:AF:46:GLN:HE22	6:AF:56:LYS:HG3	1.71	0.54
7:AG:112:ASP:O	7:AG:113:LYS:HD3	2.08	0.54
11:AK:71:ASP:OD1	11:AK:72:ALA:N	2.41	0.54
11:AK:22:ILE:CG1	11:AK:85:VAL:HA	2.38	0.54
14:AN:22:LYS:CG	14:AN:23:ARG:H	2.17	0.54
16:AP:59:HIS:CE1	16:AP:63:GLN:NE2	2.76	0.54
22:BA:1073:A:H2'	22:BA:1074:G:C5'	2.23	0.54
22:BA:1090:A:O2'	22:BA:1091:G:H5'	2.08	0.54
22:BA:1092:C:H2'	22:BA:1093:G:O4'	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1165:A:H2'	22:BA:1166:G:H8	1.73	0.54
22:BA:1179:G:O5'	22:BA:1180:U:O5'	2.25	0.54
22:BA:1439:A:C2	22:BA:1553:A:C5	2.96	0.54
22:BA:1909:C:C2	22:BA:1922:G:N2	2.75	0.54
22:BA:2286:G:O6	49:B1:22:THR:HG21	2.08	0.54
22:BA:1782:U:C6	22:BA:2609:U:C5	2.96	0.54
22:BA:2760:C:C2'	22:BA:2761:A:H5'	2.38	0.54
22:BA:301:G:O2'	22:BA:302:C:P	2.66	0.54
22:BA:618:G:C6	22:BA:619:G:C4	2.95	0.54
22:BA:74:A:H5''	22:BA:74:A:N3	2.22	0.54
24:BC:68:ARG:CD	24:BC:103:ILE:HD11	2.20	0.54
24:BC:93:VAL:HG12	24:BC:94:LEU:H	1.72	0.54
27:BF:169:LEU:N	27:BF:169:LEU:CD1	2.69	0.54
27:BF:53:ALA:O	27:BF:64:PRO:HG2	2.07	0.54
28:BG:37:ASN:O	28:BG:38:ASP:CB	2.56	0.54
30:BI:123:ALA:C	30:BI:125:THR:H	2.10	0.54
31:BJ:110:PRO:O	31:BJ:111:LYS:HD2	2.08	0.54
32:BK:73:ASP:C	32:BK:73:ASP:OD1	2.46	0.54
44:BW:72:GLY:N	44:BW:73:PRO:CD	2.71	0.54
29:BH:27:ARG:HG3	45:BX:59:ASP:OD1	2.08	0.54
45:BX:77:TYR:O	45:BX:77:TYR:CG	2.61	0.54
1:CA:1145:A:O2'	1:CA:1146:A:C5'	2.56	0.54
1:CA:1316:G:H1	19:CS:4:LEU:HD21	1.73	0.54
1:CA:1460:C:H6	1:CA:1460:C:O5'	1.91	0.54
1:CA:502:A:H4'	1:CA:550:G:H4'	1.89	0.54
1:CA:674:G:H4'	18:CR:69:TYR:HD1	1.66	0.54
1:CA:66:A:N6	1:CA:67:C:N4	2.56	0.54
1:CA:908:A:H2'	1:CA:909:A:H8	1.72	0.54
1:CA:97:G:C5	1:CA:98:A:H1'	2.43	0.54
2:CB:162:VAL:CG1	2:CB:184:ALA:HB2	2.38	0.54
9:CI:39:GLY:O	9:CI:40:ARG:HB2	2.07	0.54
13:CM:81:ASP:HB3	13:CM:82:LEU:HD12	1.89	0.54
14:CN:20:PHE:CB	14:CN:24:ALA:HB2	2.38	0.54
14:CN:12:ARG:HB3	14:CN:59:GLN:HG2	1.89	0.54
18:CR:19:GLU:CD	18:CR:20:ILE:N	2.57	0.54
19:CS:50:VAL:CG2	19:CS:74:ALA:HB2	2.38	0.54
22:DA:99:U:H5'	22:DA:100:U:OP1	2.07	0.54
22:DA:1132:U:H3'	22:DA:1133:A:H5''	1.89	0.54
22:DA:1416:G:C4	22:DA:1417:C:C5	2.96	0.54
22:DA:1415:U:O3'	22:DA:1416:G:H4'	2.08	0.54
22:DA:1566:A:C2	24:DC:212:TRP:CD2	2.96	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1619:G:H2'	22:DA:1620:G:H8	1.72	0.54
22:DA:1667:G:C2'	22:DA:1991:U:O4	2.56	0.54
22:DA:1991:U:H5''	22:DA:1991:U:C6	2.43	0.54
22:DA:1649:G:N1	22:DA:2009:A:C6	2.75	0.54
22:DA:2252:G:H2'	22:DA:2253:G:O4'	2.08	0.54
22:DA:2337:G:O2'	22:DA:2338:C:H5'	2.08	0.54
22:DA:2716:C:O2'	22:DA:2717:C:H5'	2.08	0.54
22:DA:2812:G:C2	22:DA:2813:A:C4	2.96	0.54
22:DA:2816:G:O3'	35:DN:99:LYS:HE3	2.08	0.54
23:DB:11:C:H2'	23:DB:15:A:N6	2.23	0.54
23:DB:5:U:H2'	23:DB:6:G:H8	1.72	0.54
24:DC:177:SER:O	24:DC:270:ARG:HG3	2.08	0.54
22:DA:2591:C:OP1	24:DC:237:ARG:HD2	2.07	0.54
24:DC:64:VAL:HG11	24:DC:66:PHE:CE2	2.43	0.54
25:DD:21:SER:O	25:DD:23:PRO:CD	2.55	0.54
27:DF:32:LYS:HB2	27:DF:32:LYS:HZ2	1.72	0.54
27:DF:56:LEU:HD13	27:DF:56:LEU:O	2.08	0.54
28:DG:74:MET:O	28:DG:78:VAL:HG13	2.08	0.54
30:DI:21:PRO:CD	30:DI:22:PRO:HD2	2.38	0.54
30:DI:52:LEU:HD11	30:DI:78:LEU:HD21	1.88	0.54
36:DO:35:ILE:O	36:DO:53:THR:HG23	2.07	0.54
43:DV:69:GLU:HG2	43:DV:70:ILE:N	2.23	0.54
22:DA:2232:C:P	45:DX:26:ARG:NH1	2.81	0.54
47:DZ:16:LEU:HD23	47:DZ:19:HIS:CG	2.43	0.54
1:AA:1473:G:C2'	1:AA:1474:U:H5'	2.38	0.54
1:AA:214:C:C5	1:AA:215:C:H5	2.25	0.54
1:AA:501:C:H1'	1:AA:549:C:O2'	2.08	0.54
1:AA:614:C:C2'	1:AA:615:G:O5'	2.55	0.54
1:AA:668:G:O2'	15:AO:45:HIS:CD2	2.61	0.54
5:AE:148:SER:O	5:AE:152:VAL:CG1	2.56	0.54
7:AG:25:PHE:HA	7:AG:100:MET:HE3	1.89	0.54
11:AK:14:GLN:HA	11:AK:76:TYR:O	2.07	0.54
17:AQ:73:THR:HG22	17:AQ:74:LEU:N	2.22	0.54
22:BA:1371:G:O2'	22:BA:1372:U:H5'	2.07	0.54
22:BA:1441:G:O2'	22:BA:1442:U:H5'	2.08	0.54
22:BA:1678:A:C2'	22:BA:1679:A:H5'	2.37	0.54
22:BA:2314:A:O2'	22:BA:2315:G:H5'	2.07	0.54
22:BA:2318:G:C6	22:BA:2319:G:N1	2.76	0.54
22:BA:2063:C:O2	22:BA:2450:A:N1	2.41	0.54
22:BA:2602:A:H5''	22:BA:2603:G:H5''	1.89	0.54
22:BA:2672:U:C2'	22:BA:2673:G:O5'	2.56	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:765:C:H2'	22:BA:766:U:C6	2.43	0.54
23:BB:30:C:H2'	23:BB:31:C:H5'	1.90	0.54
25:BD:62:LYS:N	25:BD:63:PRO:HD3	2.23	0.54
26:BE:124:PHE:C	26:BE:124:PHE:CD1	2.82	0.54
31:BJ:20:ALA:O	31:BJ:21:THR:C	2.46	0.54
22:BA:2485:G:H5''	34:BM:45:GLN:NE2	2.22	0.54
37:BP:98:TYR:CD2	37:BP:99:LEU:HD13	2.43	0.54
38:BQ:85:ALA:O	38:BQ:87:VAL:C	2.46	0.54
1:CA:994:A:N7	1:CA:1216:A:H4'	2.23	0.54
1:CA:1514:G:H2'	1:CA:1515:G:H8	1.72	0.54
1:CA:177:G:H2'	1:CA:178:C:H5'	1.90	0.54
1:CA:342:C:H2'	1:CA:343:U:H5'	1.90	0.54
1:CA:389:A:O2'	1:CA:390:U:H5'	2.08	0.54
1:CA:444:G:O2'	1:CA:445:G:H5'	2.08	0.54
1:CA:62:U:H4'	1:CA:378:G:N2	2.22	0.54
1:CA:667:G:C2	1:CA:740:U:O2	2.60	0.54
1:CA:754:C:C2'	1:CA:754:C:O2	2.56	0.54
1:CA:756:C:H2'	1:CA:757:U:O5'	2.08	0.54
1:CA:764:C:N4	1:CA:812:G:C6	2.75	0.54
1:CA:799:G:C2	1:CA:800:G:H1'	2.43	0.54
9:CI:119:LYS:HG2	9:CI:122:ARG:HB3	1.88	0.54
1:CA:538:G:H5''	12:CL:110:LYS:HB2	1.89	0.54
13:CM:18:LEU:HA	13:CM:21:ILE:CD1	2.38	0.54
22:DA:1050:A:C4	22:DA:2751:G:N2	2.76	0.54
22:DA:1283:G:N2	22:DA:1286:A:C8	2.76	0.54
22:DA:1520:U:O4	22:DA:1521:G:C6	2.61	0.54
22:DA:1734:G:C4	22:DA:1735:A:N7	2.76	0.54
22:DA:1737:G:N7	22:DA:1738:G:C6	2.76	0.54
22:DA:1771:C:C2'	22:DA:1772:A:H5'	2.38	0.54
22:DA:2009:A:C2'	22:DA:2010:G:H5'	2.38	0.54
22:DA:227:A:O2'	22:DA:228:C:O5'	2.23	0.54
22:DA:2404:U:H2'	22:DA:2405:G:O4'	2.08	0.54
22:DA:279:A:H61	22:DA:361:G:C1'	2.16	0.54
22:DA:566:U:C5	22:DA:567:U:C5	2.96	0.54
22:DA:754:U:O2'	22:DA:755:U:H5'	2.07	0.54
22:DA:87:U:O2'	22:DA:88:G:P	2.65	0.54
24:DC:9:SER:O	24:DC:12:ARG:HB2	2.07	0.54
26:DE:147:LEU:HB2	26:DE:186:VAL:HA	1.90	0.54
26:DE:60:TRP:O	26:DE:61:ARG:CB	2.56	0.54
26:DE:40:ARG:CZ	26:DE:92:HIS:CD2	2.91	0.54
31:DJ:38:GLY:O	31:DJ:43:GLU:HB2	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:16:HIS:CE1	35:DN:20:MET:CE	2.91	0.54
39:DR:78:ARG:HB3	39:DR:83:TYR:HD1	1.73	0.54
22:DA:1391:U:H4'	41:DT:19:LYS:HZ1	1.73	0.54
42:DU:64:ILE:HG23	42:DU:64:ILE:O	2.08	0.54
34:DM:36:VAL:HG13	43:DV:82:TYR:CD1	2.43	0.54
22:DA:372:G:P	45:DX:61:LYS:NZ	2.81	0.54
1:AA:198:G:O2'	1:AA:199:A:H5'	2.08	0.54
1:AA:270:A:H2'	1:AA:271:C:O4'	2.08	0.54
1:AA:342:C:H2'	1:AA:343:U:H5'	1.90	0.54
1:AA:620:C:C6	4:AD:131:ILE:HG12	2.43	0.54
1:AA:66:A:O4'	1:AA:173:U:C4	2.61	0.54
1:AA:922:G:H2'	1:AA:923:A:C8	2.43	0.54
2:AB:70:GLY:HA2	2:AB:163:ILE:CG2	2.38	0.54
3:AC:147:GLY:H	3:AC:202:PHE:HB3	1.73	0.54
3:AC:39:ARG:HD3	3:AC:54:ILE:HG13	1.88	0.54
11:AK:86:LYS:C	11:AK:113:THR:HG22	2.27	0.54
15:AO:23:SER:O	15:AO:24:THR:C	2.45	0.54
1:AA:624:C:H4'	16:AP:10:GLY:O	2.07	0.54
17:AQ:14:ASP:O	17:AQ:16:MET:SD	2.66	0.54
17:AQ:79:GLU:C	17:AQ:80:LYS:HD3	2.28	0.54
51:B3:44:ARG:N	51:B3:45:PRO:CD	2.71	0.54
22:BA:1131:G:OP1	31:BJ:82:GLY:HA2	2.08	0.54
22:BA:1360:G:H2'	22:BA:1361:G:H5'	1.89	0.54
22:BA:1392:A:N6	22:BA:1393:A:N6	2.56	0.54
22:BA:1866:A:O2'	22:BA:1867:G:H5'	2.08	0.54
22:BA:2345:G:C5	22:BA:2381:A:C2	2.96	0.54
22:BA:247:G:H4'	22:BA:386:G:C5	2.43	0.54
22:BA:303:G:C4	22:BA:304:U:C6	2.96	0.54
22:BA:983:A:C6	22:BA:984:A:C2	2.96	0.54
24:BC:245:THR:HB	24:BC:247:TRP:HE3	1.69	0.54
25:BD:68:PHE:C	25:BD:73:VAL:HG12	2.28	0.54
28:BG:136:ASP:O	28:BG:140:ILE:HD11	2.08	0.54
31:BJ:111:LYS:HD3	31:BJ:111:LYS:C	2.22	0.54
33:BL:7:SER:HB2	33:BL:8:PRO:HD2	1.90	0.54
37:BP:80:VAL:HG12	37:BP:81:ASP:H	1.73	0.54
38:BQ:40:LYS:HG2	38:BQ:44:TYR:CD1	2.43	0.54
39:BR:64:VAL:O	39:BR:64:VAL:CG1	2.54	0.54
40:BS:84:ARG:O	40:BS:95:ARG:O	2.26	0.54
46:BY:47:ARG:NH2	46:BY:47:ARG:CG	2.66	0.54
1:CA:1084:G:C8	1:CA:1085:U:C5	2.96	0.54
1:CA:1133:G:C6	1:CA:1134:G:N7	2.75	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1190:G:HO2'	1:CA:1191:A:P	2.31	0.54
1:CA:238:A:C3'	1:CA:239:U:C5'	2.83	0.54
1:CA:583:A:H2'	1:CA:584:G:O4'	2.08	0.54
1:CA:880:C:H2'	1:CA:881:G:H5'	1.89	0.54
1:CA:80:A:N6	1:CA:90:C:N3	2.55	0.54
2:CB:128:LEU:CD2	2:CB:131:LYS:HD3	2.38	0.54
3:CC:100:ILE:HD12	3:CC:101:ASN:H	1.73	0.54
3:CC:112:ALA:HB2	3:CC:182:ASP:CB	2.33	0.54
4:CD:127:ARG:HG2	4:CD:127:ARG:NH1	2.21	0.54
5:CE:39:GLY:HA2	5:CE:44:ARG:O	2.08	0.54
1:CA:1249:C:H4'	9:CI:74:GLN:HE22	1.71	0.54
12:CL:82:ARG:CG	12:CL:82:ARG:NH1	2.58	0.54
1:CA:375:U:O3'	16:CP:6:LEU:CD1	2.56	0.54
18:CR:35:SER:HA	18:CR:71:ASP:OD1	2.08	0.54
22:DA:1055:G:C5	22:DA:1056:G:C8	2.96	0.54
22:DA:1071:G:O2'	22:DA:1072:C:C5'	2.54	0.54
22:DA:136:G:H1	22:DA:143:C:H42	1.56	0.54
22:DA:1455:G:O6	22:DA:2705:A:C2	2.61	0.54
22:DA:2047:C:O2'	22:DA:2048:G:H5'	2.07	0.54
22:DA:2143:C:H2'	22:DA:2148:G:N1	2.23	0.54
22:DA:2261:C:C2	22:DA:2280:G:N2	2.76	0.54
22:DA:2305:U:H4'	27:DF:132:ARG:HG2	1.90	0.54
22:DA:2352:A:C2'	22:DA:2353:G:H5'	2.38	0.54
22:DA:2487:G:H2'	22:DA:2488:G:H8	1.73	0.54
22:DA:2517:C:O2'	22:DA:2518:A:C3'	2.45	0.54
22:DA:2550:G:C2	22:DA:2559:C:O2	2.61	0.54
22:DA:2808:G:O2'	22:DA:2809:A:C8	2.61	0.54
22:DA:457:A:C2	22:DA:459:U:O4	2.61	0.54
22:DA:462:C:O2'	22:DA:463:G:H5'	2.08	0.54
22:DA:492:A:N1	40:DS:49:LYS:CE	2.71	0.54
22:DA:538:A:O2'	31:DJ:8:PRO:CG	2.56	0.54
22:DA:627:A:O2'	22:DA:628:G:P	2.66	0.54
22:DA:602:A:C2	22:DA:656:G:C6	2.96	0.54
22:DA:762:U:O2'	22:DA:763:G:C5'	2.56	0.54
22:DA:852:U:H5'	47:DZ:45:GLY:HA3	1.89	0.54
22:DA:972:A:C2	22:DA:973:A:N6	2.76	0.54
24:DC:173:LEU:CD2	24:DC:181:ARG:O	2.55	0.54
22:DA:1820:U:H3	24:DC:197:ALA:HA	1.73	0.54
26:DE:127:GLU:OE2	26:DE:133:LEU:HD21	2.08	0.54
27:DF:131:VAL:C	27:DF:133:GLU:H	2.11	0.54
28:DG:71:LEU:HD22	28:DG:74:MET:HE2	1.90	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:58:LEU:O	29:DH:61:VAL:HG12	2.08	0.54
31:DJ:43:GLU:CG	31:DJ:43:GLU:O	2.56	0.54
31:DJ:56:VAL:HG21	31:DJ:101:ILE:HG21	1.90	0.54
32:DK:4:GLU:O	32:DK:5:GLN:HG2	2.07	0.54
35:DN:37:THR:HA	35:DN:110:MET:HE2	1.89	0.54
37:DP:74:GLN:HA	37:DP:74:GLN:OE1	2.06	0.54
39:DR:19:THR:HG23	39:DR:96:VAL:O	2.08	0.54
39:DR:51:VAL:HG23	39:DR:53:PHE:O	2.08	0.54
40:DS:24:ILE:CG2	40:DS:32:ALA:HB1	2.38	0.54
42:DU:41:VAL:O	42:DU:59:GLU:HA	2.08	0.54
42:DU:90:LYS:HB3	42:DU:92:VAL:CG1	2.38	0.54
43:DV:3:THR:HG22	43:DV:62:THR:OG1	2.08	0.54
44:DW:22:VAL:O	44:DW:23:LYS:HG3	2.08	0.54
44:DW:77:LYS:N	44:DW:77:LYS:HZ2	2.06	0.54
45:DX:11:PRO:CB	45:DX:27:ARG:HH21	2.21	0.54
1:AA:1196:A:O2'	1:AA:1197:A:P	2.66	0.53
1:AA:783:C:C2'	1:AA:784:A:H5'	2.38	0.53
2:AB:185:ILE:HG22	2:AB:199:ILE:HG21	1.91	0.53
3:AC:54:ILE:HD12	3:AC:55:VAL:N	2.23	0.53
4:AD:106:PHE:CG	4:AD:144:ILE:HD11	2.43	0.53
4:AD:125:ASN:HA	4:AD:141:VAL:HG23	1.90	0.53
4:AD:35:GLN:O	4:AD:36:ALA:CB	2.55	0.53
11:AK:126:ARG:N	21:AU:33:ARG:NH2	2.51	0.53
14:AN:20:PHE:HA	14:AN:24:ALA:CB	2.38	0.53
15:AO:50:HIS:O	15:AO:53:ARG:HB3	2.08	0.53
49:B1:47:ILE:H	49:B1:47:ILE:HD12	1.73	0.53
22:BA:1154:G:OP2	38:BQ:57:ARG:NH1	2.40	0.53
22:BA:1857:G:N2	22:BA:1884:G:O2'	2.41	0.53
22:BA:1947:C:C2	22:BA:1960:A:C2	2.96	0.53
22:BA:2136:G:O6	22:BA:2156:G:C2	2.62	0.53
22:BA:2725:A:O2'	22:BA:2726:A:H2'	2.07	0.53
22:BA:2765:A:H2'	22:BA:2765:A:N3	2.23	0.53
22:BA:2847:U:O2'	22:BA:2848:G:H5'	2.08	0.53
22:BA:63:A:H5'	22:BA:63:A:C8	2.40	0.53
22:BA:1568:G:H4'	24:BC:58:LYS:HB3	1.90	0.53
25:BD:68:PHE:CE2	25:BD:75:ALA:HA	2.42	0.53
26:BE:115:GLN:OE1	26:BE:115:GLN:HA	2.08	0.53
29:BH:75:LEU:HD23	29:BH:143:ILE:CG2	2.38	0.53
31:BJ:40:HIS:H	31:BJ:40:HIS:CD2	2.25	0.53
34:BM:21:ALA:HB2	34:BM:97:GLN:O	2.08	0.53
36:BO:35:ILE:HG21	36:BO:71:ALA:HA	1.88	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:BO:75:GLY:HA2	36:BO:106:LEU:CD1	2.39	0.53
37:BP:25:VAL:HA	37:BP:84:SER:O	2.08	0.53
42:BU:10:VAL:HG23	42:BU:11:ILE:N	2.23	0.53
45:BX:29:LEU:HD23	45:BX:29:LEU:H	1.72	0.53
1:CA:1005:A:N7	1:CA:1006:G:H1'	2.22	0.53
1:CA:1183:U:O2'	1:CA:1184:G:OP1	2.23	0.53
1:CA:312:C:H2'	1:CA:313:A:O4'	2.07	0.53
1:CA:615:G:H2'	1:CA:616:G:H8	1.73	0.53
1:CA:840:C:N3	1:CA:842:U:H4'	2.22	0.53
4:CD:141:VAL:O	4:CD:141:VAL:HG12	2.07	0.53
13:CM:16:ILE:O	13:CM:16:ILE:HG22	2.08	0.53
16:CP:16:PHE:CD2	16:CP:40:ASN:HB2	2.44	0.53
19:CS:35:ARG:NH1	19:CS:76:THR:HG22	2.23	0.53
20:CT:54:GLN:N	20:CT:55:PRO:CD	2.70	0.53
48:D0:38:LEU:HB2	48:D0:41:HIS:NE2	2.24	0.53
22:DA:1431:A:O2'	22:DA:1432:G:H5'	2.08	0.53
22:DA:1531:C:H2'	22:DA:1532:A:O4'	2.08	0.53
22:DA:1652:A:H2'	22:DA:1653:G:O4'	2.09	0.53
22:DA:2395:C:H42	22:DA:2421:G:H1	1.56	0.53
22:DA:2660:A:C2	22:DA:2661:G:N7	2.76	0.53
22:DA:2757:A:OP1	52:D4:20:ASP:HA	2.07	0.53
22:DA:2879:A:HO2'	22:DA:2880:C:P	2.31	0.53
22:DA:390:U:O2'	22:DA:391:A:N7	2.41	0.53
22:DA:588:U:H6	22:DA:588:U:O5'	1.90	0.53
22:DA:663:G:H5''	22:DA:664:G:OP2	2.09	0.53
22:DA:86:G:O2'	22:DA:87:U:C5'	2.57	0.53
22:DA:90:U:C4	22:DA:91:A:C5	2.96	0.53
23:DB:60:C:C2	23:DB:61:G:N7	2.77	0.53
24:DC:124:LYS:NZ	24:DC:124:LYS:HB3	2.22	0.53
24:DC:216:ARG:HH11	24:DC:216:ARG:HG3	1.72	0.53
25:DD:112:THR:CG2	25:DD:113:SER:N	2.66	0.53
25:DD:172:VAL:HG21	25:DD:194:PRO:HD2	1.90	0.53
27:DF:33:ILE:HG13	27:DF:95:MET:CE	2.38	0.53
31:DJ:73:VAL:HG23	31:DJ:74:TYR:N	2.23	0.53
31:DJ:88:THR:CG2	31:DJ:91:GLU:HG3	2.37	0.53
22:DA:580:U:O2'	38:DQ:30:VAL:HG22	2.07	0.53
38:DQ:61:ILE:HD12	38:DQ:61:ILE:N	2.24	0.53
39:DR:39:LEU:CB	39:DR:49:ILE:CD1	2.85	0.53
40:DS:8:ARG:O	40:DS:9:HIS:CB	2.54	0.53
41:DT:16:VAL:O	41:DT:16:VAL:HG12	2.07	0.53
1:AA:1039:G:C2'	1:AA:1040:U:H5'	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:206:C:C2	1:AA:207:C:H1'	2.44	0.53
1:AA:830:G:H2'	1:AA:831:A:H8	1.72	0.53
4:AD:2:ARG:CZ	4:AD:114:ARG:HD3	2.37	0.53
7:AG:20:GLU:O	7:AG:24:LYS:HG3	2.07	0.53
9:AI:33:SER:OG	9:AI:35:GLU:HG2	2.09	0.53
10:AJ:35:GLN:HE21	10:AJ:35:GLN:CA	2.20	0.53
10:AJ:51:VAL:O	10:AJ:62:ARG:HA	2.08	0.53
20:AT:2:ASN:O	20:AT:4:LYS:N	2.41	0.53
11:AK:109:ILE:CB	21:AU:5:VAL:HG23	2.38	0.53
22:BA:1001:A:H2'	22:BA:1002:G:C5'	2.37	0.53
22:BA:1385:A:C2	22:BA:1386:C:C2	2.95	0.53
22:BA:1522:A:O2'	22:BA:1523:U:P	2.66	0.53
22:BA:1669:A:OP2	56:BA:3720:HOH:O	2.18	0.53
22:BA:2083:G:C2'	22:BA:2084:C:H5'	2.38	0.53
22:BA:2109:U:C4	22:BA:2181:U:O4	2.61	0.53
22:BA:2197:U:HO2'	22:BA:2198:A:P	2.32	0.53
22:BA:2310:C:C5	27:BF:76:PHE:HZ	2.26	0.53
22:BA:2365:G:H4'	44:BW:59:PHE:CZ	2.44	0.53
22:BA:271:G:H4'	22:BA:272:A:OP1	2.06	0.53
22:BA:31:C:O3'	22:BA:1238:G:H5''	2.07	0.53
22:BA:409:G:C2'	22:BA:410:G:H5'	2.38	0.53
22:BA:994:C:O3'	22:BA:995:C:H3'	2.07	0.53
24:BC:124:LYS:HB3	24:BC:127:ASN:ND2	2.23	0.53
26:BE:196:VAL:HG13	26:BE:200:LEU:CD2	2.38	0.53
27:BF:175:PRO:O	27:BF:176:PHE:HB2	2.07	0.53
28:BG:162:ARG:CZ	28:BG:168:VAL:HG21	2.38	0.53
29:BH:125:THR:HG23	29:BH:126:GLY:N	2.17	0.53
34:BM:109:PRO:O	34:BM:110:GLU:C	2.47	0.53
34:BM:81:ARG:HG3	34:BM:82:MET:H	1.73	0.53
41:BT:54:GLU:HB3	41:BT:88:LYS:CG	2.38	0.53
42:BU:93:ARG:NH1	42:BU:102:ILE:CD1	2.70	0.53
1:CA:1014:A:H4'	19:CS:13:HIS:CD2	2.43	0.53
1:CA:1072:G:H2'	1:CA:1073:U:O4'	2.09	0.53
1:CA:1352:C:H2'	1:CA:1353:G:O4'	2.08	0.53
1:CA:1394:A:C6	1:CA:1501:C:H5'	2.43	0.53
1:CA:213:G:C2'	1:CA:214:C:H6	2.04	0.53
1:CA:251:G:N2	1:CA:253:A:N6	2.56	0.53
1:CA:276:G:O2'	1:CA:277:C:C6	2.59	0.53
1:CA:392:C:H2'	1:CA:393:A:H8	1.73	0.53
1:CA:411:A:C6	1:CA:429:U:C5	2.96	0.53
1:CA:899:C:OP1	1:CA:899:C:H6	1.91	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:974:A:H8	14:CN:70:HIS:CE1	2.25	0.53
1:CA:982:U:C5	1:CA:983:A:N6	2.76	0.53
3:CC:179:ALA:O	3:CC:180:ASP:C	2.46	0.53
1:CA:598:U:H4'	8:CH:85:TYR:CD1	2.43	0.53
10:CJ:8:ILE:HG13	10:CJ:8:ILE:O	2.07	0.53
13:CM:41:ASP:O	13:CM:42:VAL:HB	2.08	0.53
17:CQ:29:LYS:HB2	17:CQ:36:PHE:CZ	2.44	0.53
17:CQ:78:VAL:O	17:CQ:79:GLU:C	2.47	0.53
1:CA:193:C:C1'	20:CT:54:GLN:NE2	2.71	0.53
21:CU:5:VAL:HG12	21:CU:6:ARG:N	2.22	0.53
22:DA:1155:A:H5''	38:DQ:54:ARG:CZ	2.38	0.53
22:DA:1317:G:C2	22:DA:1336:A:C2	2.96	0.53
22:DA:1352:U:C5	22:DA:1377:G:O6	2.61	0.53
22:DA:144:A:O2'	22:DA:145:C:C5'	2.56	0.53
22:DA:1627:G:C2	22:DA:1628:G:C8	2.96	0.53
22:DA:1835:G:C4	22:DA:1836:C:C6	2.96	0.53
22:DA:1840:G:O2'	22:DA:1841:U:H5'	2.08	0.53
22:DA:1915:U:C2'	22:DA:1916:A:C8	2.72	0.53
22:DA:1997:C:O2'	22:DA:1998:A:H5'	2.08	0.53
22:DA:2093:G:C5	22:DA:2225:A:C5	2.97	0.53
22:DA:2394:C:H41	51:D3:30:HIS:CE1	2.26	0.53
22:DA:2645:G:H4'	22:DA:2732:G:H2'	1.89	0.53
22:DA:2893:A:C4'	22:DA:2894:G:O5'	2.52	0.53
22:DA:373:U:C2	22:DA:374:A:C8	2.96	0.53
22:DA:705:A:N6	22:DA:726:G:H1'	2.24	0.53
24:DC:158:GLY:N	24:DC:194:VAL:HG13	2.24	0.53
28:DG:94:ARG:HG2	28:DG:105:SER:H	1.72	0.53
31:DJ:114:LEU:HA	31:DJ:117:ALA:HB3	1.89	0.53
33:DL:3:LEU:O	33:DL:4:ASN:C	2.46	0.53
37:DP:102:ARG:HB3	37:DP:107:ALA:HB2	1.89	0.53
37:DP:25:VAL:HG23	37:DP:25:VAL:O	2.08	0.53
38:DQ:4:LYS:HZ2	38:DQ:6:GLY:CA	2.17	0.53
43:DV:26:PHE:CD2	43:DV:26:PHE:O	2.61	0.53
1:AA:1087:G:O2'	1:AA:1088:G:C5'	2.56	0.53
1:AA:108:G:C2'	1:AA:109:A:OP1	2.50	0.53
1:AA:204:G:H1'	1:AA:465:A:H2	1.71	0.53
1:AA:410:G:OP2	4:AD:21:LYS:HE2	2.08	0.53
4:AD:25:ARG:HD3	4:AD:30:LYS:HE3	1.90	0.53
4:AD:89:LEU:HD12	4:AD:89:LEU:C	2.28	0.53
5:AE:114:LEU:HD21	5:AE:122:VAL:HG21	1.89	0.53
5:AE:153:ALA:O	5:AE:154:ALA:C	2.46	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:156:ARG:NH2	8:AH:113:ARG:HH12	2.06	0.53
6:AF:86:ARG:HH12	6:AF:88:MET:CE	2.21	0.53
8:AH:10:LEU:HD22	8:AH:74:ILE:CG1	2.38	0.53
9:AI:56:MET:SD	9:AI:57:VAL:N	2.81	0.53
14:AN:27:LYS:N	14:AN:30:ILE:HB	2.23	0.53
20:AT:57:VAL:HG13	20:AT:71:ALA:HB1	1.90	0.53
20:AT:60:GLN:HE21	20:AT:65:LEU:HD21	1.74	0.53
51:B3:31:ILE:C	51:B3:31:ILE:HD12	2.29	0.53
22:BA:1006:C:C2	22:BA:1138:G:N2	2.77	0.53
22:BA:1178:C:N4	22:BA:1180:U:C4	2.76	0.53
22:BA:1773:A:C2'	22:BA:1774:C:H5'	2.38	0.53
22:BA:2297:A:H8	22:BA:2297:A:H5''	1.73	0.53
22:BA:2804:U:H2'	22:BA:2805:C:H6	1.73	0.53
22:BA:2850:A:H2'	22:BA:2851:A:C8	2.44	0.53
23:BB:35:C:C2'	23:BB:36:C:O5'	2.56	0.53
27:BF:114:ARG:H	27:BF:114:ARG:HD2	1.72	0.53
27:BF:90:LEU:C	27:BF:95:MET:HB2	2.28	0.53
29:BH:101:ASP:O	29:BH:104:THR:HB	2.08	0.53
32:BK:58:LEU:N	32:BK:58:LEU:HD23	2.23	0.53
34:BM:8:LYS:HD2	34:BM:8:LYS:H	1.74	0.53
39:BR:61:ALA:HB1	39:BR:98:ILE:H	1.72	0.53
42:BU:10:VAL:HB	42:BU:70:ALA:O	2.09	0.53
23:BB:74:U:O2	43:BV:29:ILE:CD1	2.55	0.53
44:BW:22:VAL:O	44:BW:23:LYS:O	2.26	0.53
1:CA:1210:C:H2'	1:CA:1211:U:O5'	2.09	0.53
1:CA:1239:A:O2'	1:CA:1241:G:C5	2.51	0.53
1:CA:1253:G:N1	1:CA:1285:A:N6	2.56	0.53
1:CA:276:G:O2'	1:CA:277:C:P	2.67	0.53
1:CA:481:G:C4'	1:CA:482:A:OP1	2.53	0.53
1:CA:932:C:C5	7:CG:2:ARG:NH1	2.77	0.53
3:CC:21:TRP:CZ3	3:CC:28:PHE:CE1	2.97	0.53
6:CF:21:MET:HA	6:CF:24:ARG:CZ	2.38	0.53
7:CG:30:MET:O	7:CG:31:VAL:CB	2.54	0.53
10:CJ:74:VAL:HG12	10:CJ:75:ASP:N	2.22	0.53
12:CL:85:ARG:NH1	12:CL:87:LYS:HA	2.24	0.53
1:CA:1226:C:C4	13:CM:102:LYS:HA	2.43	0.53
14:CN:81:ILE:N	14:CN:81:ILE:HD12	2.24	0.53
16:CP:74:LEU:O	16:CP:78:VAL:CG2	2.54	0.53
19:CS:38:THR:HA	19:CS:69:LYS:HD3	1.90	0.53
48:D0:42:ILE:CD1	48:D0:47:TYR:O	2.55	0.53
22:DA:163:C:O2'	22:DA:164:C:O4'	2.27	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:192:C:H5'	22:DA:678:C:H1'	1.89	0.53
22:DA:1970:A:H1'	22:DA:1972:G:C8	2.43	0.53
22:DA:2309:A:C6	22:DA:2310:C:H1'	2.42	0.53
22:DA:284:U:H2'	22:DA:285:G:H8	1.73	0.53
22:DA:445:C:O2'	22:DA:446:G:O4'	2.26	0.53
22:DA:818:G:C2'	22:DA:819:A:H5''	2.38	0.53
22:DA:833:A:H2'	22:DA:834:G:C8	2.43	0.53
22:DA:870:U:C2'	22:DA:871:U:H5'	2.34	0.53
22:DA:993:G:H2'	22:DA:994:C:H5'	1.91	0.53
24:DC:128:THR:HG22	24:DC:188:ARG:CG	2.38	0.53
27:DF:147:ARG:H	27:DF:147:ARG:HD2	1.73	0.53
28:DG:141:GLY:O	28:DG:144:ALA:HB3	2.09	0.53
29:DH:37:VAL:CG2	29:DH:38:PRO:HD2	2.37	0.53
34:DM:19:GLY:O	34:DM:20:LEU:HB2	2.08	0.53
40:DS:36:LEU:C	40:DS:38:TYR:H	2.11	0.53
41:DT:8:LEU:HD22	41:DT:46:ALA:HA	1.89	0.53
45:DX:28:PHE:O	45:DX:29:LEU:HB3	2.08	0.53
46:DY:28:LEU:CG	46:DY:42:LEU:HD22	2.39	0.53
22:DA:75:G:H4'	46:DY:48:ARG:NH2	2.23	0.53
1:AA:1157:A:C2	1:AA:1181:G:C4	2.96	0.53
1:AA:139:A:C2'	1:AA:140:U:H5'	2.39	0.53
1:AA:235:C:O2'	1:AA:236:A:H5'	2.08	0.53
1:AA:275:G:N3	1:AA:276:G:C8	2.76	0.53
1:AA:82:G:N2	1:AA:84:U:C4	2.77	0.53
1:AA:585:G:N3	1:AA:879:C:H4'	2.24	0.53
2:AB:61:SER:HA	2:AB:223:GLY:C	2.28	0.53
2:AB:89:PHE:CD1	2:AB:153:MET:HG3	2.43	0.53
3:AC:5:HIS:HD2	3:AC:7:ASN:H	1.56	0.53
5:AE:155:LYS:HD2	5:AE:155:LYS:N	2.16	0.53
7:AG:144:ALA:C	7:AG:146:ALA:N	2.61	0.53
13:AM:70:ARG:O	13:AM:74:MET:HB2	2.09	0.53
13:AM:86:ARG:O	13:AM:90:HIS:HD2	1.91	0.53
20:AT:43:LYS:HD3	20:AT:86:ALA:CA	2.38	0.53
49:B1:22:THR:HG23	49:B1:23:THR:N	2.22	0.53
22:BA:1059:G:C6	22:BA:1060:U:N3	2.76	0.53
22:BA:1259:G:H2'	22:BA:1260:A:H8	1.74	0.53
22:BA:1275:A:N1	22:BA:1295:C:O2'	2.36	0.53
22:BA:1394:U:H3'	22:BA:1394:U:H6	1.73	0.53
22:BA:163:C:O2'	22:BA:164:C:P	2.67	0.53
22:BA:2152:G:O2'	22:BA:2153:C:O4'	2.25	0.53
22:BA:605:G:H1'	22:BA:657:U:H1'	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:721:A:H2'	22:BA:722:A:C8	2.44	0.53
22:BA:987:C:C2'	22:BA:988:A:H5'	2.39	0.53
24:BC:141:HIS:N	24:BC:190:THR:O	2.29	0.53
24:BC:43:ASN:HB3	24:BC:45:ASN:H	1.74	0.53
24:BC:63:ILE:O	24:BC:64:VAL:HB	2.08	0.53
22:BA:1256:G:O2'	26:BE:77:ILE:HD11	2.07	0.53
29:BH:31:VAL:O	29:BH:32:PRO:C	2.43	0.53
22:BA:826:U:O2'	33:BL:53:GLY:HA3	2.07	0.53
38:BQ:75:TYR:CE2	38:BQ:79:ILE:HG13	2.42	0.53
42:BU:51:LEU:HA	42:BU:53:GLN:OE1	2.08	0.53
45:BX:29:LEU:HD23	45:BX:29:LEU:N	2.24	0.53
1:CA:1125:U:C5	10:CJ:40:ILE:CG1	2.89	0.53
1:CA:115:G:H4'	1:CA:116:A:OP1	2.08	0.53
1:CA:1278:G:C5'	1:CA:1279:G:H5'	2.38	0.53
1:CA:1309:G:H2'	1:CA:1310:G:H8	1.73	0.53
1:CA:1453:G:C2'	1:CA:1453:G:N3	2.69	0.53
1:CA:238:A:H2'	1:CA:239:U:C4'	2.36	0.53
1:CA:716:A:H1'	11:CK:118:ASN:O	2.08	0.53
1:CA:764:C:H42	1:CA:812:G:H1	1.55	0.53
4:CD:116:LEU:HB3	4:CD:122:ILE:HD11	1.90	0.53
5:CE:114:LEU:HD13	5:CE:122:VAL:HG11	1.91	0.53
5:CE:132:PRO:O	5:CE:135:VAL:N	2.42	0.53
7:CG:12:LEU:O	7:CG:12:LEU:HD22	2.09	0.53
7:CG:2:ARG:HG2	7:CG:3:ARG:N	2.23	0.53
13:CM:57:ASP:O	13:CM:61:LYS:HG3	2.08	0.53
16:CP:2:VAL:HG13	16:CP:65:ALA:HA	1.90	0.53
21:CU:38:GLU:C	21:CU:40:PRO:HD2	2.28	0.53
33:DL:62:PRO:CG	51:D3:24:LYS:HB3	2.38	0.53
22:DA:1069:A:O2'	22:DA:1070:A:C5'	2.49	0.53
22:DA:56:A:C2	22:DA:115:C:O2	2.61	0.53
22:DA:1303:G:HO2'	22:DA:1304:A:C5'	2.21	0.53
22:DA:142:A:C2'	22:DA:143:C:H6	2.21	0.53
22:DA:1661:G:C5	22:DA:1662:U:C5	2.96	0.53
22:DA:1681:G:H3'	22:DA:1757:A:N1	2.24	0.53
22:DA:188:G:O2'	22:DA:189:G:H5'	2.08	0.53
22:DA:2331:G:H4'	44:DW:41:GLY:H	1.73	0.53
22:DA:2077:A:C5	22:DA:2435:A:C6	2.97	0.53
22:DA:2892:G:H5''	22:DA:2894:G:H22	1.73	0.53
22:DA:2898:U:H2'	22:DA:2899:A:C8	2.43	0.53
22:DA:333:G:C4	22:DA:334:C:C5	2.96	0.53
22:DA:584:C:P	38:DQ:5:ARG:HD3	2.49	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:591:U:H1'	51:D3:1:PRO:HD2	1.90	0.53
22:DA:77:G:O2'	22:DA:78:U:C6	2.51	0.53
23:DB:5:U:H2'	23:DB:6:G:C8	2.44	0.53
22:DA:2618:G:H21	25:DD:155:VAL:HG21	1.72	0.53
27:DF:107:VAL:N	27:DF:108:PRO:HD2	2.23	0.53
28:DG:149:ALA:O	28:DG:151:ARG:N	2.40	0.53
28:DG:162:ARG:HB2	28:DG:166:GLU:CB	2.38	0.53
29:DH:41:LYS:CA	29:DH:44:ILE:HG12	2.36	0.53
30:DI:105:LEU:HD21	30:DI:129:GLU:CD	2.28	0.53
31:DJ:55:ILE:HG13	31:DJ:55:ILE:O	2.07	0.53
43:DV:63:ILE:O	43:DV:63:ILE:HG22	2.08	0.53
44:DW:18:LYS:HZ3	44:DW:18:LYS:HB2	1.74	0.53
44:DW:30:VAL:HG23	44:DW:59:PHE:HD1	1.73	0.53
44:DW:40:ARG:NH1	44:DW:40:ARG:CG	2.50	0.53
44:DW:65:LYS:O	44:DW:81:ILE:HA	2.09	0.53
1:AA:1112:C:O2	3:AC:178:ARG:HG2	2.07	0.53
1:AA:1134:G:O6	1:AA:1141:C:N4	2.41	0.53
1:AA:1136:C:H4'	1:AA:1137:C:OP1	2.08	0.53
1:AA:1161:C:O2'	1:AA:1162:C:H5'	2.08	0.53
1:AA:330:C:H5''	1:AA:330:C:C6	2.42	0.53
1:AA:476:U:O2'	1:AA:477:C:H5'	2.08	0.53
1:AA:71:A:H3'	1:AA:71:A:OP2	2.09	0.53
2:AB:123:GLY:O	2:AB:125:PHE:HD2	1.92	0.53
3:AC:61:LYS:O	3:AC:62:SER:HB2	2.09	0.53
8:AH:63:LYS:HB2	8:AH:70:VAL:CG2	2.36	0.53
11:AK:124:LYS:CE	21:AU:33:ARG:HH21	2.21	0.53
11:AK:43:TRP:CE3	11:AK:44:ALA:HA	2.44	0.53
11:AK:69:CYS:O	11:AK:73:VAL:CG2	2.56	0.53
14:AN:15:LEU:CD1	14:AN:53:ASP:HB2	2.38	0.53
22:BA:1277:G:C4'	35:BN:20:MET:CE	2.86	0.53
22:BA:1675:C:H2'	22:BA:1676:A:C8	2.43	0.53
22:BA:1870:C:H3'	22:BA:1871:A:C2	2.43	0.53
22:BA:1912:A:C2	22:BA:1919:A:C6	2.96	0.53
22:BA:2311:A:O3'	22:BA:2312:U:H6	1.92	0.53
22:BA:2352:A:N1	44:BW:30:VAL:CG1	2.66	0.53
22:BA:1864:U:OP1	22:BA:2411:A:H5'	2.09	0.53
22:BA:2511:U:O4	22:BA:2575:C:N3	2.42	0.53
22:BA:2515:C:O2'	22:BA:2516:A:H5'	2.08	0.53
22:BA:286:U:O2'	22:BA:287:G:H5'	2.09	0.53
22:BA:814:C:O2'	22:BA:815:C:H5'	2.09	0.53
23:BB:2:G:C6	23:BB:119:A:C2	2.96	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:79:ARG:CG	26:BE:80:SER:N	2.51	0.53
27:BF:133:GLU:O	27:BF:136:ILE:HD11	2.07	0.53
28:BG:83:THR:C	28:BG:84:LYS:CE	2.76	0.53
31:BJ:16:TYR:O	31:BJ:55:ILE:HG23	2.08	0.53
32:BK:86:LEU:N	32:BK:86:LEU:HD23	2.24	0.53
37:BP:37:LYS:O	37:BP:37:LYS:CG	2.55	0.53
38:BQ:88:GLU:C	38:BQ:88:GLU:OE1	2.47	0.53
38:BQ:91:ARG:NE	39:BR:11:GLN:H	2.06	0.53
41:BT:4:GLU:O	41:BT:8:LEU:HD23	2.08	0.53
44:BW:22:VAL:CG1	44:BW:25:PHE:HE2	2.20	0.53
22:BA:95:A:O2'	46:BY:41:HIS:HD2	1.91	0.53
46:BY:57:LEU:CA	46:BY:60:LYS:HB3	2.24	0.53
1:CA:1151:A:H4'	10:CJ:70:HIS:CE1	2.43	0.53
1:CA:117:G:C2'	1:CA:118:U:H5'	2.38	0.53
1:CA:1281:C:H3'	1:CA:1282:C:H6	1.73	0.53
1:CA:373:A:C2	1:CA:374:A:C8	2.96	0.53
1:CA:501:C:H1'	1:CA:549:C:H1'	1.90	0.53
2:CB:174:GLU:O	2:CB:178:LEU:HB2	2.07	0.53
7:CG:40:SER:O	7:CG:44:SER:HB3	2.07	0.53
9:CI:80:HIS:CD2	9:CI:84:ARG:HG3	2.44	0.53
11:CK:15:VAL:HG12	11:CK:17:ASP:H	1.73	0.53
1:CA:882:C:H41	12:CL:5:GLN:HE21	1.55	0.53
13:CM:85:TYR:CE2	13:CM:96:VAL:HG13	2.43	0.53
14:CN:65:GLN:HA	14:CN:65:GLN:HE21	1.73	0.53
16:CP:71:VAL:CG2	16:CP:72:ALA:N	2.71	0.53
17:CQ:12:VAL:HG22	17:CQ:12:VAL:O	2.07	0.53
19:CS:51:HIS:CD2	19:CS:53:GLY:H	2.26	0.53
20:CT:30:PHE:CD1	20:CT:56:ILE:CD1	2.91	0.53
21:CU:13:VAL:HG21	21:CU:15:LEU:HD23	1.91	0.53
22:DA:1000:A:N6	22:DA:1001:A:C6	2.77	0.53
22:DA:1087:G:C6	22:DA:1089:A:C2	2.96	0.53
22:DA:1034:G:O6	22:DA:1122:G:C6	2.62	0.53
22:DA:118:A:H1'	22:DA:178:G:O4'	2.08	0.53
22:DA:1312:U:O2'	22:DA:1313:U:OP2	2.26	0.53
22:DA:142:A:H2'	22:DA:143:C:C5	2.43	0.53
22:DA:1475:G:N3	22:DA:1475:G:H2'	2.24	0.53
22:DA:1772:A:H2'	22:DA:1773:A:O5'	2.08	0.53
22:DA:2359:C:O2	33:DL:60:ARG:NH2	2.41	0.53
22:DA:2579:C:H2'	22:DA:2579:C:O2	2.08	0.53
22:DA:2695:U:O2	22:DA:2696:U:C5	2.60	0.53
22:DA:447:A:O4'	22:DA:449:A:N6	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:46:G:N1	22:DA:47:C:C4	2.76	0.53
22:DA:953:G:C2'	22:DA:954:G:H5'	2.38	0.53
22:DA:961:C:H5	22:DA:2456:C:H5'	1.74	0.53
24:DC:171:VAL:O	24:DC:171:VAL:HG12	2.07	0.53
24:DC:236:GLY:O	24:DC:238:ASN:N	2.41	0.53
25:DD:109:VAL:HB	25:DD:175:LEU:HD12	1.90	0.53
25:DD:148:GLN:CD	25:DD:148:GLN:H	2.12	0.53
25:DD:110:THR:HG23	25:DD:171:THR:CG2	2.38	0.53
27:DF:28:PRO:HB2	27:DF:168:LEU:CD1	2.38	0.53
29:DH:104:THR:CG2	29:DH:104:THR:O	2.56	0.53
40:DS:51:LEU:HD12	40:DS:54:ALA:HB3	1.90	0.53
43:DV:80:HIS:CD2	43:DV:82:TYR:H	2.26	0.53
45:DX:37:PHE:O	45:DX:45:PHE:HA	2.09	0.53
1:AA:1301:U:H2'	1:AA:1303:C:H5	1.73	0.53
1:AA:87:C:O2'	1:AA:88:U:O4'	2.24	0.53
2:AB:53:LEU:HA	2:AB:56:LEU:HB3	1.89	0.53
5:AE:100:GLU:HB3	5:AE:121:ASN:CB	2.39	0.53
7:AG:29:LEU:HD23	7:AG:29:LEU:O	2.09	0.53
12:AL:34:THR:HG22	12:AL:35:ARG:NH2	2.24	0.53
12:AL:89:LEU:HB3	12:AL:92:VAL:HG21	1.91	0.53
20:AT:42:ASP:HB3	20:AT:45:ALA:HB3	1.90	0.53
50:B2:3:ARG:HH21	50:B2:3:ARG:CG	2.12	0.53
51:B3:33:THR:CG2	51:B3:34:LYS:N	2.71	0.53
22:BA:1001:A:H2'	22:BA:1002:G:H5'	1.89	0.53
22:BA:1508:A:C4'	22:BA:1509:A:H5'	2.37	0.53
22:BA:2776:A:H4'	22:BA:2778:A:OP1	2.08	0.53
22:BA:2804:U:H2'	22:BA:2805:C:C6	2.43	0.53
22:BA:783:A:H8	22:BA:784:G:H4'	1.73	0.53
22:BA:934:U:H2'	22:BA:935:C:C6	2.44	0.53
23:BB:85:G:O2'	23:BB:86:G:H5'	2.08	0.53
29:BH:72:ILE:HD11	29:BH:142:VAL:HG11	1.91	0.53
29:BH:49:ALA:HB3	29:BH:50:ARG:HH22	1.72	0.53
22:BA:1667:G:OP1	32:BK:6:THR:HA	2.08	0.53
32:BK:93:GLN:CA	32:BK:93:GLN:OE1	2.57	0.53
33:BL:109:LYS:HD2	33:BL:126:ARG:HE	1.73	0.53
38:BQ:4:LYS:HZ2	38:BQ:5:ARG:HA	1.72	0.53
38:BQ:97:ILE:HD11	38:BQ:105:PHE:N	2.22	0.53
42:BU:82:VAL:O	42:BU:94:PHE:O	2.27	0.53
45:BX:32:LEU:O	45:BX:33:HIS:CG	2.62	0.53
1:CA:1231:G:C5	1:CA:1232:U:C5	2.97	0.53
1:CA:1332:A:C2'	1:CA:1333:A:H5'	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:273:U:H2'	1:CA:274:A:H5'	1.90	0.53
1:CA:961:U:O2'	1:CA:962:C:C6	2.40	0.53
2:CB:130:LYS:HD3	2:CB:133:ALA:HB3	1.90	0.53
3:CC:110:LEU:C	3:CC:110:LEU:HD23	2.29	0.53
3:CC:137:VAL:O	3:CC:138:GLN:C	2.47	0.53
3:CC:71:ARG:HB3	3:CC:71:ARG:NH1	2.22	0.53
1:CA:935:A:H61	7:CG:2:ARG:NE	2.05	0.53
12:CL:42:LYS:CD	12:CL:43:LYS:HZ3	2.21	0.53
14:CN:8:ARG:HH11	14:CN:12:ARG:NH2	2.07	0.53
49:D1:24:LYS:HE2	49:D1:52:LYS:HZ1	1.74	0.53
22:DA:1004:U:O4'	22:DA:1010:A:C2	2.62	0.53
22:DA:52:A:C5	22:DA:118:A:C2	2.96	0.53
22:DA:1240:U:O2'	22:DA:1241:A:H5'	2.09	0.53
22:DA:128:C:O2'	22:DA:129:C:C6	2.60	0.53
22:DA:1399:C:H2'	22:DA:1400:U:C5	2.43	0.53
22:DA:1787:A:C2	22:DA:1788:C:C2	2.96	0.53
22:DA:1826:G:C2'	22:DA:1827:U:O5'	2.57	0.53
22:DA:1833:C:C5	22:DA:1834:U:C5	2.96	0.53
22:DA:1929:G:H5''	22:DA:1930:G:OP1	2.08	0.53
22:DA:2239:G:OP2	56:DA:3528:HOH:O	2.18	0.53
22:DA:228:C:N3	22:DA:418:C:C4'	2.71	0.53
22:DA:2294:G:C4	22:DA:2295:C:C5	2.97	0.53
22:DA:2473:U:P	22:DA:2473:U:H6	2.32	0.53
22:DA:2738:A:C2	22:DA:2766:A:N6	2.77	0.53
22:DA:379:G:C6	22:DA:380:G:C5	2.96	0.53
22:DA:460:A:C2	22:DA:470:A:C5	2.97	0.53
22:DA:523:C:C2'	22:DA:524:G:H5'	2.37	0.53
22:DA:647:G:O2'	22:DA:648:G:C5'	2.55	0.53
22:DA:655:A:O2'	22:DA:656:G:N7	2.40	0.53
22:DA:782:A:OP1	22:DA:782:A:H8	1.92	0.53
24:DC:229:HIS:ND1	24:DC:230:PRO:HD2	2.23	0.53
24:DC:244:VAL:HG12	24:DC:250:GLN:HA	1.90	0.53
24:DC:30:ALA:N	24:DC:31:PRO:CD	2.71	0.53
22:DA:1993:U:H4'	25:DD:133:THR:CG2	2.39	0.53
27:DF:101:ARG:HH11	27:DF:138:PRO:CG	2.21	0.53
29:DH:26:ALA:O	29:DH:27:ARG:CB	2.55	0.53
32:DK:107:LEU:HD11	32:DK:115:ILE:HG21	1.89	0.53
34:DM:15:GLY:O	34:DM:16:ARG:CB	2.57	0.53
37:DP:20:ARG:CD	37:DP:21:PRO:HD2	2.15	0.53
37:DP:60:VAL:O	37:DP:60:VAL:HG12	2.07	0.53
22:DA:2683:C:O2'	37:DP:74:GLN:NE2	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:DW:43:LYS:CD	44:DW:79:ILE:HD11	2.35	0.53
1:AA:1136:C:H5''	1:AA:1137:C:P	2.49	0.53
1:AA:1203:C:O2'	1:AA:1204:A:C5'	2.56	0.53
1:AA:1258:G:N3	1:AA:1259:C:C5	2.76	0.53
1:AA:1443:C:H2'	1:AA:1444:U:H6	1.74	0.53
1:AA:1531:A:O2'	1:AA:1532:U:H5'	2.09	0.53
1:AA:184:G:O4'	1:AA:224:U:H4'	2.08	0.53
1:AA:345:C:O2	32:BK:117:SER:HA	2.09	0.53
1:AA:594:U:H2'	1:AA:595:A:O4'	2.08	0.53
1:AA:903:G:C4	1:AA:904:U:C5	2.96	0.53
1:AA:991:U:H5''	1:AA:992:U:OP1	2.09	0.53
2:AB:165:ALA:HB3	2:AB:190:SER:HB3	1.91	0.53
3:AC:137:VAL:HA	3:AC:148:ILE:HD13	1.91	0.53
4:AD:170:LEU:N	4:AD:170:LEU:CD1	2.70	0.53
4:AD:75:TYR:HE2	4:AD:200:VAL:HA	1.72	0.53
4:AD:99:ASN:OD1	4:AD:110:ARG:NH1	2.41	0.53
13:AM:113:LYS:N	13:AM:114:PRO:CD	2.66	0.53
16:AP:20:VAL:HG22	16:AP:21:VAL:N	2.23	0.53
20:AT:60:GLN:NE2	20:AT:65:LEU:HD21	2.24	0.53
22:BA:2021:C:OP1	48:B0:8:THR:HG21	2.08	0.53
22:BA:1064:C:H4'	30:BI:90:GLY:H	1.72	0.53
22:BA:1073:A:OP1	22:BA:1073:A:C8	2.62	0.53
22:BA:1728:C:O2'	22:BA:1729:U:C6	2.61	0.53
22:BA:1775:U:C2'	22:BA:1776:G:O5'	2.55	0.53
22:BA:1778:U:H2'	22:BA:1784:A:H62	1.69	0.53
22:BA:1901:A:C4	22:BA:1902:C:C5	2.96	0.53
22:BA:259:G:O2'	22:BA:260:G:H5'	2.09	0.53
22:BA:2679:A:H2'	22:BA:2680:U:O5'	2.08	0.53
22:BA:359:G:C2	22:BA:360:U:H1'	2.43	0.53
22:BA:361:G:HO2'	22:BA:362:A:C5'	2.21	0.53
23:BB:12:C:C4'	23:BB:13:G:OP1	2.56	0.53
24:BC:252:LYS:NZ	24:BC:252:LYS:CA	2.72	0.53
25:BD:121:THR:HG22	25:BD:125:TRP:CD1	2.41	0.53
31:BJ:44:TYR:CG	38:BQ:63:ARG:HG2	2.44	0.53
31:BJ:97:PRO:O	31:BJ:98:GLU:C	2.46	0.53
32:BK:20:MET:C	32:BK:41:ILE:HD11	2.28	0.53
36:BO:89:ASP:H	36:BO:116:GLN:HB2	1.73	0.53
37:BP:20:ARG:HG2	37:BP:20:ARG:O	2.08	0.53
22:BA:495:G:H1'	40:BS:57:ASN:ND2	2.24	0.53
44:BW:30:VAL:N	44:BW:31:LEU:HD23	2.23	0.53
1:CA:106:C:H2'	1:CA:107:G:C5'	2.38	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1186:G:H4'	9:CI:111:GLU:CD	2.29	0.53
1:CA:1296:C:H1'	1:CA:1302:C:C2	2.43	0.53
1:CA:1514:G:O2'	1:CA:1515:G:H5'	2.09	0.53
1:CA:154:U:C2'	1:CA:155:A:C5'	2.84	0.53
1:CA:505:G:H5'	1:CA:534:U:C2	2.44	0.53
1:CA:543:U:H2'	1:CA:544:G:C5'	2.39	0.53
1:CA:736:C:H2'	1:CA:737:C:C6	2.43	0.53
1:CA:765:G:C8	1:CA:812:G:C2	2.97	0.53
1:CA:964:A:H5''	1:CA:1198:G:O3'	2.08	0.53
2:CB:9:LEU:O	2:CB:10:LYS:HB3	2.09	0.53
2:CB:119:GLN:HG3	2:CB:124:THR:CG2	2.33	0.53
3:CC:163:ARG:C	3:CC:164:THR:HG22	2.28	0.53
3:CC:183:TYR:CD1	3:CC:200:TRP:NE1	2.77	0.53
4:CD:187:ARG:NH2	4:CD:191:SER:CA	2.62	0.53
11:CK:115:ILE:O	11:CK:115:ILE:HG23	2.08	0.53
13:CM:100:ARG:HH12	13:CM:102:LYS:HE3	1.74	0.53
14:CN:92:ILE:HD12	14:CN:95:LEU:CD2	2.39	0.53
15:CO:28:VAL:O	15:CO:29:ALA:C	2.47	0.53
16:CP:12:LYS:HG2	16:CP:13:LYS:HG2	1.89	0.53
48:D0:24:VAL:HG11	48:D0:27:LEU:HD11	1.89	0.53
48:D0:50:GLY:O	48:D0:51:ARG:HG3	2.09	0.53
52:D4:15:LYS:HA	52:D4:15:LYS:HE3	1.90	0.53
22:DA:117:G:O4'	22:DA:126:A:H2	1.92	0.53
22:DA:1304:A:O2'	22:DA:1305:C:O5'	2.26	0.53
22:DA:1587:G:N2	22:DA:1588:G:H1'	2.24	0.53
22:DA:2009:A:N6	56:DA:3384:HOH:O	2.41	0.53
22:DA:2056:G:H2'	22:DA:2056:G:N3	2.22	0.53
22:DA:229:C:HO2'	22:DA:230:G:P	2.32	0.53
22:DA:2324:U:O2	22:DA:2385:C:C5	2.62	0.53
22:DA:2578:G:H4'	22:DA:2578:G:OP2	2.09	0.53
22:DA:1998:A:H4'	22:DA:2724:U:O2'	2.09	0.53
22:DA:271:G:C6	22:DA:272:A:N6	2.76	0.53
22:DA:299:A:C6	22:DA:300:A:C2	2.96	0.53
22:DA:508:A:H3'	22:DA:509:C:H5'	1.91	0.53
22:DA:533:G:H5''	22:DA:533:G:H8	1.74	0.53
22:DA:761:A:H8	56:DA:3301:HOH:O	1.91	0.53
22:DA:975:A:C8	22:DA:990:A:N6	2.74	0.53
26:DE:128:ALA:O	26:DE:130:LYS:HG2	2.08	0.53
26:DE:145:ASP:HB3	26:DE:184:ASP:H	1.72	0.53
26:DE:147:LEU:CB	26:DE:186:VAL:HA	2.38	0.53
27:DF:56:LEU:O	27:DF:60:SER:HB3	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:96:THR:O	29:DH:97:ARG:HG3	2.08	0.53
31:DJ:82:GLY:O	31:DJ:84:ILE:HG22	2.08	0.53
33:DL:68:SER:O	33:DL:69:ARG:CB	2.52	0.53
22:DA:85:G:OP2	42:DU:27:VAL:HG11	2.08	0.53
43:DV:29:ILE:HD12	43:DV:29:ILE:O	2.07	0.53
43:DV:87:GLN:O	43:DV:88:HIS:HB2	2.09	0.53
44:DW:37:VAL:O	44:DW:38:ARG:HB2	2.08	0.53
1:AA:1046:A:C2'	1:AA:1047:G:O5'	2.57	0.53
1:AA:1153:G:C2	1:AA:1154:G:C8	2.97	0.53
1:AA:259:G:C4	1:AA:260:G:C8	2.97	0.53
1:AA:439:U:HO2'	1:AA:440:C:H5'	1.71	0.53
1:AA:72:A:H2'	1:AA:73:C:H6	1.73	0.53
1:AA:736:C:H2'	1:AA:737:C:C6	2.44	0.53
1:AA:82:G:N2	1:AA:84:U:N3	2.57	0.53
1:AA:953:G:H2'	1:AA:954:G:O4'	2.09	0.53
3:AC:120:THR:HG22	3:AC:121:SER:N	2.23	0.53
4:AD:149:LYS:O	4:AD:151:GLN:OE1	2.27	0.53
5:AE:105:ILE:O	5:AE:105:ILE:HG13	2.09	0.53
5:AE:76:ASN:HB3	5:AE:81:GLN:HG3	1.89	0.53
8:AH:10:LEU:HD11	8:AH:126:CYS:HB3	1.89	0.53
11:AK:52:ARG:HD2	11:AK:56:LYS:HD3	1.91	0.53
18:AR:24:ASP:HB3	18:AR:27:THR:HB	1.91	0.53
48:B0:33:SER:O	48:B0:34:GLY:O	2.26	0.53
22:BA:1028:A:H61	22:BA:1125:G:H2'	1.73	0.53
22:BA:1833:C:H2'	22:BA:1834:U:H6	1.73	0.53
22:BA:2414:G:C2'	22:BA:2415:G:H5'	2.39	0.53
22:BA:27:G:O2'	22:BA:28:A:P	2.66	0.53
22:BA:514:A:H1'	22:BA:581:C:O2'	2.09	0.53
22:BA:52:A:O2'	22:BA:53:A:H5'	2.09	0.53
22:BA:706:A:H2'	22:BA:707:G:O4'	2.08	0.53
24:BC:70:LYS:HE2	24:BC:73:ILE:HG13	1.91	0.53
22:BA:2682:A:H8	25:BD:11:MET:HG2	1.73	0.53
25:BD:29:VAL:HB	25:BD:98:VAL:HG13	1.91	0.53
25:BD:35:THR:HG1	25:BD:49:GLN:HG2	1.73	0.53
28:BG:165:ASP:N	28:BG:165:ASP:OD1	2.41	0.53
29:BH:43:ASN:HA	29:BH:46:PHE:HB3	1.91	0.53
34:BM:73:ILE:HG21	34:BM:91:TYR:CE2	2.44	0.53
34:BM:96:ILE:C	34:BM:96:ILE:HD12	2.29	0.53
38:BQ:27:ARG:HA	38:BQ:33:VAL:HG12	1.90	0.53
40:BS:74:ILE:HG13	40:BS:105:VAL:HG22	1.91	0.53
44:BW:22:VAL:CG1	44:BW:25:PHE:CE2	2.92	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:70:VAL:HG23	44:BW:75:ASN:OD1	2.08	0.53
47:BZ:6:ILE:O	47:BZ:34:THR:HA	2.09	0.53
1:CA:1046:A:O2'	1:CA:1047:G:H5'	2.08	0.53
1:CA:1159:U:C4	1:CA:1182:G:C4	2.97	0.53
1:CA:1157:A:C6	1:CA:1180:A:C5	2.97	0.53
1:CA:1182:G:C5'	1:CA:1183:U:H5'	2.38	0.53
1:CA:1014:A:C2	1:CA:1219:A:H1'	2.44	0.53
1:CA:174:A:HO2'	1:CA:175:C:H5'	1.69	0.53
1:CA:192:A:N3	20:CT:54:GLN:NE2	2.54	0.53
1:CA:301:G:H2'	1:CA:302:G:C8	2.42	0.53
1:CA:524:G:H2'	1:CA:525:C:H6	1.73	0.53
1:CA:643:C:O2'	1:CA:644:U:C5'	2.57	0.53
1:CA:644:U:H2'	1:CA:645:G:C8	2.44	0.53
1:CA:92:U:O2'	1:CA:93:U:C5'	2.56	0.53
2:CB:199:ILE:O	2:CB:199:ILE:HG13	2.09	0.53
6:CF:97:THR:O	6:CF:98:GLU:HG3	2.09	0.53
17:CQ:7:LEU:CD2	17:CQ:7:LEU:N	2.71	0.53
50:D2:30:VAL:HG12	50:D2:30:VAL:O	2.09	0.53
22:DA:1056:G:N2	22:DA:1102:C:C5	2.77	0.53
22:DA:1237:A:O2'	22:DA:1238:G:O5'	2.27	0.53
22:DA:1314:C:OP1	22:DA:1332:G:OP1	2.27	0.53
22:DA:1629:U:H2'	22:DA:1630:A:O4'	2.08	0.53
22:DA:1714:U:H3'	22:DA:1715:G:H5'	1.90	0.53
22:DA:1817:G:O2'	22:DA:1818:U:C5'	2.31	0.53
22:DA:1862:G:C2	22:DA:1881:C:C2	2.96	0.53
22:DA:1914:C:H2'	22:DA:1915:U:C5	2.43	0.53
22:DA:2443:C:C2'	22:DA:2444:G:H5'	2.39	0.53
22:DA:2446:G:H3'	22:DA:2447:G:H5''	1.90	0.53
22:DA:244:A:H2'	22:DA:245:G:O4'	2.09	0.53
22:DA:2544:G:H2'	22:DA:2545:G:C8	2.44	0.53
22:DA:2711:A:N6	22:DA:2714:G:C5	2.76	0.53
22:DA:2791:G:C5	22:DA:2892:G:N2	2.77	0.53
22:DA:415:A:O2'	22:DA:1865:U:H5''	2.08	0.53
22:DA:460:A:N3	22:DA:470:A:C6	2.77	0.53
22:DA:548:G:H5''	22:DA:549:G:H5'	1.91	0.53
22:DA:617:G:O2'	22:DA:618:G:O5'	2.27	0.53
22:DA:782:A:C8	22:DA:782:A:OP1	2.62	0.53
22:DA:672:C:N4	22:DA:808:G:H1	2.07	0.53
24:DC:145:MET:CE	24:DC:181:ARG:NH2	2.72	0.53
24:DC:53:ILE:HD12	24:DC:54:GLY:N	2.24	0.53
22:DA:616:A:H4'	26:DE:101:TYR:CE1	2.43	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:674:G:O2'	26:DE:69:ARG:CG	2.56	0.53
28:DG:117:PRO:HG2	28:DG:143:VAL:CG1	2.39	0.53
28:DG:95:ALA:HB3	28:DG:127:GLN:HA	1.91	0.53
30:DI:106:GLN:O	30:DI:106:GLN:HG3	2.09	0.53
31:DJ:101:ILE:O	31:DJ:101:ILE:HG22	2.09	0.53
32:DK:103:VAL:C	32:DK:104:THR:HG22	2.28	0.53
1:AA:1070:U:C2	1:AA:1071:C:C5	2.97	0.53
1:AA:545:C:H2'	1:AA:545:C:O2	2.07	0.53
3:AC:2:GLN:N	3:AC:2:GLN:OE1	2.41	0.53
5:AE:148:SER:O	5:AE:152:VAL:CA	2.57	0.53
7:AG:86:VAL:HG13	7:AG:87:PRO:HD2	1.91	0.53
10:AJ:18:ILE:HG23	10:AJ:19:ASP:N	2.24	0.53
16:AP:56:ARG:NH1	16:AP:59:HIS:HD2	2.06	0.53
17:AQ:60:ILE:HG22	17:AQ:72:TRP:CE3	2.43	0.53
22:BA:1063:G:H5'	30:BI:76:ALA:CB	2.39	0.53
22:BA:1094:U:H2'	22:BA:1096:A:OP2	2.08	0.53
22:BA:1788:C:H2'	22:BA:1789:A:C5'	2.39	0.53
22:BA:2314:A:C2'	22:BA:2315:G:H5'	2.39	0.53
22:BA:2706:A:C2	22:BA:2707:U:C2	2.97	0.53
22:BA:289:G:H2'	22:BA:290:U:H6	1.73	0.53
22:BA:627:A:C5	22:BA:637:A:C8	2.97	0.53
22:BA:684:G:OP1	50:B2:16:HIS:HD2	1.91	0.53
22:BA:860:U:C6	22:BA:860:U:H5'	2.43	0.53
22:BA:946:C:O2'	22:BA:947:A:H5'	2.09	0.53
23:BB:73:A:H4'	23:BB:73:A:OP1	2.08	0.53
31:BJ:111:LYS:CE	31:BJ:115:GLY:H	2.20	0.53
35:BN:71:ARG:NH2	35:BN:71:ARG:CG	2.68	0.53
36:BO:31:THR:CG2	36:BO:34:HIS:N	2.72	0.53
41:BT:86:THR:C	41:BT:87:LEU:HD23	2.28	0.53
44:BW:76:ARG:CG	44:BW:76:ARG:NH2	2.68	0.53
22:BA:112:U:H5'	46:BY:58:ASN:ND2	2.24	0.53
47:BZ:8:GLN:O	47:BZ:9:THR:HG22	2.08	0.53
1:CA:1042:A:H2'	1:CA:1043:G:O4'	2.08	0.53
1:CA:1129:C:C5	1:CA:1139:G:C8	2.96	0.53
1:CA:1365:G:O2'	1:CA:1366:C:H5'	2.09	0.53
1:CA:618:C:H3'	1:CA:619:U:H5''	1.91	0.53
3:CC:96:VAL:HB	3:CC:97:PRO:HD2	1.90	0.53
5:CE:132:PRO:O	5:CE:136:VAL:HG12	2.09	0.53
6:CF:27:ALA:O	6:CF:31:GLY:HA3	2.07	0.53
8:CH:29:SER:O	8:CH:32:LYS:N	2.42	0.53
11:CK:19:VAL:HG22	11:CK:82:GLU:HG2	1.89	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:110:LYS:O	12:CL:113:ARG:HD3	2.08	0.53
13:CM:87:GLY:O	13:CM:91:ARG:HD2	2.09	0.53
16:CP:4:ILE:CD1	16:CP:4:ILE:N	2.63	0.53
20:CT:82:ILE:C	20:CT:84:LYS:H	2.12	0.53
22:DA:465:G:C4'	50:D2:16:HIS:HD2	2.22	0.53
52:D4:36:ARG:HG2	52:D4:37:GLN:N	2.24	0.53
22:DA:1070:A:C5	22:DA:1097:U:H4'	2.43	0.53
22:DA:1075:C:HO2'	22:DA:1076:C:H6	1.49	0.53
22:DA:1204:A:C4	22:DA:1206:G:C6	2.97	0.53
22:DA:1343:G:C2	22:DA:1344:U:C4	2.97	0.53
22:DA:14:A:C5	22:DA:526:A:C2	2.96	0.53
22:DA:1765:U:C2'	22:DA:1766:G:C5'	2.86	0.53
22:DA:191:A:C2	22:DA:192:C:N3	2.77	0.53
22:DA:1998:A:H2'	22:DA:1999:C:H6	1.74	0.53
22:DA:2312:U:H2'	22:DA:2313:C:C6	2.44	0.53
22:DA:2324:U:H5'	22:DA:2325:G:H5'	1.89	0.53
22:DA:2520:C:H2'	22:DA:2521:C:C6	2.43	0.53
22:DA:2663:G:H2'	22:DA:2664:G:C8	2.42	0.53
22:DA:303:G:C6	22:DA:315:G:C6	2.96	0.53
22:DA:612:G:N2	22:DA:614:A:O2'	2.42	0.53
22:DA:858:G:N2	22:DA:920:A:C2	2.77	0.53
23:DB:70:C:O2'	23:DB:71:C:H5'	2.09	0.53
24:DC:106:PRO:CB	24:DC:141:HIS:HE1	2.21	0.53
24:DC:245:THR:C	24:DC:247:TRP:H	2.13	0.53
25:DD:24:VAL:HG23	25:DD:190:LYS:HA	1.91	0.53
22:DA:469:G:OP2	26:DE:55:SER:HB3	2.08	0.53
31:DJ:11:VAL:HG21	31:DJ:13:ARG:CZ	2.39	0.53
31:DJ:2:LYS:HB2	31:DJ:2:LYS:NZ	2.24	0.53
33:DL:121:THR:OG1	33:DL:141:LYS:HE3	2.08	0.53
33:DL:77:ILE:HD12	33:DL:125:LEU:HD13	1.91	0.53
41:DT:39:THR:HG23	41:DT:42:GLU:HB2	1.87	0.53
1:AA:1046:A:O2'	1:AA:1047:G:C5'	2.52	0.53
1:AA:1151:A:HO2'	1:AA:1152:A:H5''	1.73	0.53
1:AA:1303:C:HO2'	1:AA:1304:G:H8	1.54	0.53
1:AA:341:C:H2'	1:AA:342:C:H6	1.72	0.53
1:AA:600:A:H2'	1:AA:601:G:H8	1.74	0.53
1:AA:679:C:O2	1:AA:712:A:C2	2.61	0.53
3:AC:139:ASN:C	3:AC:139:ASN:HD22	2.10	0.53
4:AD:164:ARG:O	4:AD:166:LYS:N	2.41	0.53
6:AF:97:THR:O	6:AF:98:GLU:HG2	2.07	0.53
7:AG:145:GLU:CA	7:AG:148:LYS:HB2	2.39	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:100:ILE:CD1	8:AH:128:VAL:HB	2.38	0.53
9:AI:107:ALA:O	9:AI:109:GLN:HG2	2.09	0.53
1:AA:1250:A:O3'	9:AI:68:GLY:HA2	2.08	0.53
11:AK:34:THR:OG1	11:AK:40:ALA:N	2.40	0.53
14:AN:15:LEU:N	14:AN:18:LYS:HE2	2.24	0.53
14:AN:79:SER:O	14:AN:81:ILE:N	2.42	0.53
15:AO:3:SER:O	15:AO:6:ALA:N	2.42	0.53
17:AQ:46:HIS:CD2	17:AQ:48:GLU:H	2.27	0.53
18:AR:58:ILE:O	18:AR:62:ARG:HG3	2.08	0.53
49:B1:3:GLY:O	49:B1:4:ILE:HG12	2.10	0.53
22:BA:1637:A:H4'	22:BA:2711:A:O2'	2.09	0.53
22:BA:1761:C:O5'	22:BA:1761:C:H6	1.91	0.53
22:BA:1911:U:O4	22:BA:1918:A:H2'	2.09	0.53
22:BA:2135:A:O2'	22:BA:2136:G:H8	1.91	0.53
22:BA:2331:G:H2'	22:BA:2332:C:C6	2.43	0.53
22:BA:2503:A:O2'	22:BA:2505:G:OP2	2.26	0.53
22:BA:271:G:C6	22:BA:272:A:N6	2.77	0.53
22:BA:2793:C:H2'	22:BA:2794:C:C6	2.44	0.53
22:BA:408:G:O2'	22:BA:409:G:H5'	2.09	0.53
22:BA:658:U:O2'	26:BE:95:LYS:NZ	2.40	0.53
22:BA:833:A:OP2	33:BL:39:LYS:HE3	2.08	0.53
24:BC:216:ARG:HB2	24:BC:217:PRO:HD2	1.91	0.53
25:BD:34:VAL:HG23	25:BD:34:VAL:O	2.09	0.53
25:BD:97:SER:CA	25:BD:99:GLU:HG2	2.39	0.53
26:BE:148:ILE:H	26:BE:187:VAL:H	1.56	0.53
26:BE:21:ARG:HG2	26:BE:22:ASP:O	2.09	0.53
30:BI:126:ARG:HA	30:BI:129:GLU:CG	2.39	0.53
31:BJ:40:HIS:C	31:BJ:41:LYS:HG2	2.29	0.53
34:BM:80:VAL:HG23	34:BM:81:ARG:H	1.74	0.53
36:BO:3:LYS:CG	36:BO:4:LYS:H	2.21	0.53
41:BT:22:THR:O	41:BT:25:GLU:N	2.36	0.53
41:BT:38:ALA:HB1	41:BT:43:ILE:CG2	2.39	0.53
46:BY:56:LEU:HA	46:BY:59:GLU:HG2	1.90	0.53
1:CA:71:A:C6	1:CA:100:G:C5	2.97	0.53
1:CA:1100:C:O2'	1:CA:1101:A:H5'	2.09	0.53
1:CA:257:G:C2	1:CA:270:A:N1	2.77	0.53
1:CA:414:A:C2'	1:CA:415:A:H5''	2.38	0.53
1:CA:982:U:C6	1:CA:983:A:C6	2.97	0.53
2:CB:119:GLN:O	2:CB:119:GLN:HG2	2.08	0.53
3:CC:172:VAL:CG1	3:CC:181:ILE:HD13	2.39	0.53
7:CG:63:VAL:HG11	7:CG:127:ALA:CB	2.34	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:CK:86:LYS:HB2	11:CK:113:THR:HA	1.90	0.53
16:CP:2:VAL:HG13	16:CP:65:ALA:CB	2.39	0.53
1:CA:255:G:H5'	17:CQ:17:GLU:O	2.09	0.53
19:CS:28:LYS:HB3	19:CS:29:PRO:CD	2.39	0.53
11:CK:124:LYS:O	21:CU:33:ARG:NE	2.42	0.53
51:D3:44:ARG:N	51:D3:45:PRO:HD2	2.25	0.53
51:D3:57:VAL:HA	51:D3:60:CYS:HB2	1.91	0.53
22:DA:1193:G:N2	22:DA:1194:A:N3	2.57	0.53
22:DA:1206:G:C5	22:DA:1207:C:N4	2.77	0.53
22:DA:1388:G:H2'	22:DA:1389:G:C8	2.44	0.53
22:DA:1338:G:O2'	22:DA:1393:A:N1	2.41	0.53
22:DA:1616:A:OP1	22:DA:1616:A:C8	2.49	0.53
22:DA:1690:A:H2'	22:DA:1691:C:O4'	2.08	0.53
22:DA:1805:A:C2	22:DA:1813:G:N1	2.76	0.53
22:DA:1813:G:H21	24:DC:49:THR:HB	1.73	0.53
22:DA:1885:A:C6	22:DA:1886:U:C2	2.97	0.53
22:DA:223:A:C5	22:DA:422:A:C8	2.97	0.53
22:DA:2330:G:C2'	22:DA:2331:G:H5'	2.39	0.53
22:DA:2426:A:H3'	22:DA:2427:C:C5'	2.37	0.53
22:DA:2523:G:H2'	22:DA:2524:G:H5'	1.91	0.53
22:DA:2571:U:C4	22:DA:2574:G:C8	2.97	0.53
22:DA:2761:A:H1'	28:DG:142:GLN:HE22	1.72	0.53
22:DA:2899:A:O2'	22:DA:2900:A:H5'	2.09	0.53
22:DA:647:G:C8	22:DA:648:G:N7	2.77	0.53
23:DB:109:A:C4	23:DB:110:C:C5	2.96	0.53
23:DB:19:C:H2'	23:DB:20:G:C8	2.43	0.53
24:DC:141:HIS:HB3	24:DC:190:THR:HB	1.90	0.53
22:DA:1842:G:O4'	24:DC:242:HIS:CE1	2.62	0.53
25:DD:159:LYS:HE2	25:DD:160:LYS:H	1.72	0.53
25:DD:9:VAL:O	25:DD:9:VAL:HG22	2.08	0.53
29:DH:80:ILE:HD12	29:DH:81:ALA:H	1.73	0.53
31:DJ:4:PHE:CD1	31:DJ:5:THR:N	2.77	0.53
31:DJ:73:VAL:HB	31:DJ:75:TYR:HE2	1.66	0.53
22:DA:17:G:H4'	38:DQ:24:TYR:HE1	1.74	0.53
40:DS:39:THR:O	40:DS:40:ASN:CB	2.58	0.53
42:DU:26:ASN:OD1	42:DU:34:ILE:HD12	2.07	0.53
42:DU:3:LYS:HD3	42:DU:82:VAL:HG21	1.90	0.53
1:AA:11:G:C5	1:AA:12:U:C5	2.96	0.52
1:AA:1298:U:H1'	1:AA:1299:A:C2	2.44	0.52
1:AA:1299:A:C8	1:AA:1301:U:C1'	2.91	0.52
1:AA:1363:A:N3	1:AA:1363:A:H2'	2.23	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1387:G:H2'	1:AA:1388:C:H6	1.70	0.52
1:AA:213:G:H2'	1:AA:214:C:C5'	2.38	0.52
1:AA:469:C:H2'	1:AA:470:C:C5	2.45	0.52
1:AA:490:C:H2'	1:AA:491:G:H8	1.74	0.52
1:AA:994:A:C5	1:AA:1216:A:H4'	2.45	0.52
2:AB:56:LEU:HD13	2:AB:220:VAL:CG2	2.39	0.52
2:AB:58:LYS:O	2:AB:58:LYS:HD3	2.08	0.52
4:AD:17:ASP:OD1	4:AD:27:ILE:HA	2.08	0.52
7:AG:49:LEU:O	7:AG:49:LEU:HD13	2.09	0.52
13:AM:52:ILE:O	13:AM:55:LEU:HB2	2.09	0.52
14:AN:40:ARG:HH22	14:AN:44:VAL:HG21	1.73	0.52
19:AS:79:TYR:CE2	19:AS:80:ARG:HB2	2.44	0.52
51:B3:40:LYS:HA	51:B3:43:LEU:HD12	1.91	0.52
22:BA:1148:U:C3'	22:BA:1148:U:C6	2.93	0.52
22:BA:1562:U:H2'	22:BA:1563:U:O4'	2.09	0.52
22:BA:1609:A:H5''	56:BA:3644:HOH:O	2.07	0.52
22:BA:2383:G:H2'	22:BA:2384:U:H6	1.73	0.52
22:BA:2663:G:H2'	22:BA:2664:G:C8	2.44	0.52
22:BA:559:G:H1'	38:BQ:55:GLN:NE2	2.25	0.52
22:BA:580:U:C2'	22:BA:581:C:H5'	2.39	0.52
22:BA:784:G:C5'	24:BC:225:ASN:OD1	2.58	0.52
22:BA:1799:G:C2	24:BC:153:LEU:HD23	2.44	0.52
25:BD:118:PHE:HD2	25:BD:119:ALA:N	2.03	0.52
25:BD:34:VAL:CG2	25:BD:94:GLN:H	2.16	0.52
36:BO:2:ASP:C	36:BO:2:ASP:OD1	2.47	0.52
39:BR:97:LYS:O	39:BR:98:ILE:CB	2.58	0.52
40:BS:63:GLY:O	40:BS:64:ALA:CB	2.56	0.52
46:BY:9:LYS:HZ2	46:BY:9:LYS:CA	2.17	0.52
1:CA:1225:A:H3'	13:CM:101:THR:HG21	1.89	0.52
1:CA:1408:A:C2	1:CA:1494:G:C4	2.97	0.52
1:CA:183:C:HO2'	1:CA:184:G:H5'	1.70	0.52
1:CA:216:U:H2'	1:CA:217:C:C6	2.44	0.52
1:CA:279:A:H4'	1:CA:280:C:OP2	2.09	0.52
1:CA:327:A:O2'	1:CA:328:C:OP1	2.23	0.52
1:CA:452:A:H5''	1:CA:452:A:C8	2.44	0.52
3:CC:133:MET:HE3	3:CC:152:VAL:HG13	1.91	0.52
4:CD:171:GLU:HG3	4:CD:171:GLU:O	2.08	0.52
4:CD:176:LYS:HE2	4:CD:178:GLU:OE1	2.09	0.52
6:AF:16:GLU:CB	4:CD:191:SER:HB2	2.35	0.52
7:CG:19:SER:HB3	7:CG:22:LEU:HB3	1.91	0.52
7:CG:11:ILE:HG21	7:CG:24:LYS:NZ	2.23	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:125:ILE:HG22	8:CH:126:CYS:SG	2.49	0.52
9:CI:128:LYS:O	9:CI:129:ARG:HB2	2.10	0.52
9:CI:44:ARG:NH1	9:CI:44:ARG:HB3	2.23	0.52
11:CK:92:ARG:NH2	11:CK:111:ASP:OD1	2.42	0.52
19:CS:44:ILE:HA	19:CS:61:VAL:CG1	2.39	0.52
22:DA:1140:C:O4'	22:DA:1143:A:C2	2.62	0.52
22:DA:1240:U:O2'	22:DA:1241:A:C5'	2.57	0.52
22:DA:142:A:C2'	22:DA:143:C:C6	2.92	0.52
22:DA:1494:A:C2	22:DA:1495:A:C4	2.97	0.52
22:DA:172:A:O2'	22:DA:173:A:C5'	2.57	0.52
22:DA:2376:A:H2'	22:DA:2377:A:O4'	2.09	0.52
22:DA:2691:C:N4	22:DA:2719:G:N2	2.58	0.52
22:DA:273:G:O2'	22:DA:274:C:O4'	2.17	0.52
22:DA:310:A:O2'	22:DA:311:A:H5''	2.09	0.52
22:DA:466:A:P	50:D2:34:ARG:HH21	2.31	0.52
22:DA:48:G:N2	22:DA:177:G:N2	2.57	0.52
22:DA:563:A:C4	22:DA:2018:G:C2	2.97	0.52
22:DA:930:G:C2	22:DA:933:A:C2	2.97	0.52
22:DA:938:G:C2	22:DA:939:G:N7	2.77	0.52
23:DB:30:C:H1'	23:DB:58:A:N1	2.24	0.52
24:DC:140:VAL:HG23	24:DC:141:HIS:N	2.24	0.52
22:DA:2729:G:C5'	25:DD:190:LYS:HZ3	2.16	0.52
25:DD:34:VAL:HG12	25:DD:48:ILE:HG13	1.89	0.52
22:DA:323:C:H3'	26:DE:163:ASN:ND2	2.24	0.52
27:DF:33:ILE:HG13	27:DF:95:MET:HE3	1.92	0.52
27:DF:49:LEU:N	27:DF:49:LEU:HD13	2.24	0.52
28:DG:120:ILE:HD13	28:DG:120:ILE:O	2.08	0.52
28:DG:126:THR:CG2	28:DG:127:GLN:H	2.07	0.52
28:DG:146:ASP:O	28:DG:149:ALA:HB3	2.10	0.52
30:DI:105:LEU:HD21	30:DI:129:GLU:CG	2.39	0.52
31:DJ:30:THR:CG2	31:DJ:31:GLU:N	2.72	0.52
32:DK:17:ARG:CG	32:DK:18:ARG:N	2.71	0.52
32:DK:20:MET:O	32:DK:41:ILE:HG13	2.07	0.52
37:DP:3:ILE:O	37:DP:3:ILE:HG13	2.09	0.52
38:DQ:31:TYR:O	38:DQ:33:VAL:N	2.42	0.52
41:DT:45:ALA:C	41:DT:47:VAL:H	2.12	0.52
43:DV:48:MET:CE	43:DV:85:LYS:HA	2.38	0.52
46:DY:1:MET:HE3	46:DY:1:MET:H3	1.73	0.52
1:AA:1087:G:O2'	1:AA:1088:G:C8	2.61	0.52
1:AA:1102:A:O2'	1:AA:1103:C:H5'	2.09	0.52
1:AA:181:A:H3'	1:AA:181:A:OP2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:790:A:C6	1:AA:791:G:C6	2.97	0.52
2:AB:153:MET:SD	2:AB:157:PRO:HD3	2.49	0.52
4:AD:160:LEU:CD2	4:AD:161:ALA:N	2.73	0.52
4:AD:36:ALA:H	4:AD:37:PRO:HD3	1.74	0.52
7:AG:135:LYS:HE2	7:AG:138:GLU:HB2	1.91	0.52
8:AH:9:MET:HG3	8:AH:26:MET:SD	2.49	0.52
11:AK:86:LYS:HA	11:AK:113:THR:CG2	2.35	0.52
16:AP:52:LEU:O	16:AP:54:LEU:HD12	2.10	0.52
20:AT:16:ALA:O	20:AT:17:ARG:C	2.48	0.52
52:B4:7:VAL:HG23	52:B4:8:LYS:H	1.74	0.52
22:BA:1172:C:N3	22:BA:1173:U:H1'	2.24	0.52
22:BA:142:A:C5	22:BA:143:C:N4	2.76	0.52
22:BA:1568:G:H4'	24:BC:58:LYS:HG2	1.90	0.52
22:BA:1773:A:H2'	22:BA:1774:C:H5'	1.91	0.52
22:BA:2149:U:O2'	22:BA:2150:C:O4'	2.26	0.52
22:BA:2305:U:O2'	22:BA:2306:C:H5'	2.09	0.52
22:BA:2673:G:H2'	22:BA:2674:G:H8	1.75	0.52
22:BA:2885:G:H3'	22:BA:2886:A:H5''	1.90	0.52
22:BA:310:A:O2'	22:BA:311:A:P	2.67	0.52
22:BA:646:U:H5'	22:BA:647:G:H5''	1.91	0.52
22:BA:9:G:C6	22:BA:2629:U:C6	2.98	0.52
27:BF:129:MET:HG2	27:BF:153:ILE:HD12	1.89	0.52
27:BF:134:GLN:O	27:BF:135:ILE:HB	2.08	0.52
28:BG:171:LYS:HD3	28:BG:172:GLU:H	1.72	0.52
31:BJ:101:ILE:O	31:BJ:104:ALA:HB3	2.09	0.52
33:BL:100:ILE:HD12	33:BL:100:ILE:C	2.29	0.52
22:BA:1223:G:OP2	39:BR:68:ARG:NH1	2.42	0.52
22:BA:923:G:N2	44:BW:23:LYS:NZ	2.46	0.52
44:BW:75:ASN:O	44:BW:76:ARG:HB2	2.09	0.52
1:CA:1271:A:H2'	1:CA:1272:G:H8	1.73	0.52
1:CA:1289:A:H3'	1:CA:1290:G:H8	1.73	0.52
1:CA:1361:G:C2'	1:CA:1362:A:C5'	2.87	0.52
1:CA:227:G:H21	16:CP:64:GLY:HA3	1.73	0.52
1:CA:244:U:OP2	1:CA:244:U:H4'	2.09	0.52
1:CA:51:A:H4'	1:CA:52:C:H5'	1.90	0.52
1:CA:729:A:C2'	1:CA:730:G:H8	2.20	0.52
1:CA:767:A:H2'	1:CA:768:A:C8	2.44	0.52
1:CA:86:G:O2'	1:CA:87:C:OP2	2.27	0.52
2:CB:185:ILE:HG22	2:CB:199:ILE:CD1	2.39	0.52
3:CC:63:ILE:CG1	3:CC:65:VAL:HG23	2.39	0.52
4:CD:35:GLN:O	4:CD:36:ALA:HB2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:CF:61:LEU:CD1	6:CF:62:MET:N	2.70	0.52
1:CA:1372:U:H5'	9:CI:71:ILE:HD11	1.88	0.52
10:CJ:30:LYS:HE2	10:CJ:36:VAL:HG22	1.90	0.52
11:CK:123:PRO:HB2	11:CK:125:LYS:HG3	1.91	0.52
13:CM:13:HIS:HA	13:CM:43:LYS:HG2	1.91	0.52
16:CP:1:MET:HG3	16:CP:1:MET:O	2.09	0.52
22:DA:1161:C:H4'	39:DR:8:GLY:O	2.09	0.52
22:DA:1341:G:O2'	22:DA:1398:C:C5'	2.50	0.52
22:DA:1339:G:C5'	22:DA:1393:A:N1	2.71	0.52
22:DA:1600:C:O2	22:DA:1600:C:H2'	2.09	0.52
22:DA:1857:G:O2'	22:DA:1884:G:N2	2.39	0.52
22:DA:1914:C:C6	22:DA:1915:U:C5	2.97	0.52
22:DA:2360:G:O2'	33:DL:60:ARG:HD2	2.10	0.52
22:DA:2469:A:C2'	22:DA:2470:G:O5'	2.58	0.52
22:DA:28:A:C2	22:DA:29:U:H1'	2.45	0.52
22:DA:352:A:N3	22:DA:353:C:H1'	2.24	0.52
22:DA:503:A:C4	22:DA:506:G:N7	2.77	0.52
22:DA:518:G:C4	22:DA:519:U:C5	2.97	0.52
22:DA:564:C:H2'	22:DA:565:C:H5'	1.91	0.52
22:DA:612:G:C2	22:DA:617:G:O6	2.62	0.52
22:DA:616:A:C2'	22:DA:617:G:H8	2.21	0.52
22:DA:654:A:C2'	22:DA:655:A:O5'	2.57	0.52
22:DA:740:C:HO2'	22:DA:741:U:C5'	2.23	0.52
22:DA:913:U:C4'	22:DA:914:G:OP1	2.56	0.52
23:DB:108:A:HO2'	23:DB:109:A:P	2.32	0.52
24:DC:140:VAL:O	24:DC:141:HIS:HB2	2.08	0.52
27:DF:42:ALA:HB2	27:DF:48:LEU:HD11	1.90	0.52
28:DG:8:VAL:HG22	28:DG:72:ASN:CB	2.39	0.52
29:DH:1:MET:CE	29:DH:23:ALA:HB2	2.36	0.52
31:DJ:114:LEU:HA	31:DJ:117:ALA:CB	2.39	0.52
22:DA:1007:C:OP1	31:DJ:39:LYS:HE3	2.10	0.52
31:DJ:16:TYR:HB2	31:DJ:54:ILE:HD13	1.91	0.52
34:DM:26:VAL:HA	34:DM:66:ARG:NH2	2.23	0.52
35:DN:49:GLU:H	35:DN:50:PRO:HD3	1.74	0.52
35:DN:96:ARG:HH12	35:DN:116:VAL:HG13	1.74	0.52
36:DO:39:VAL:HB	36:DO:49:VAL:H	1.74	0.52
37:DP:9:GLN:HA	37:DP:12:MET:HG3	1.92	0.52
1:AA:1002:G:C2	1:AA:1003:G:H1'	2.45	0.52
1:AA:1084:G:C6	1:AA:1085:U:O4	2.62	0.52
1:AA:1202:U:C1'	14:AN:68:ARG:HD2	2.38	0.52
1:AA:458:U:H3	1:AA:474:G:H1	1.57	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:616:G:H2'	1:AA:617:G:H5'	1.91	0.52
1:AA:975:A:H8	1:AA:1357:A:HO2'	1.54	0.52
1:AA:977:A:C2'	1:AA:977:A:N3	2.62	0.52
5:AE:81:GLN:NE2	5:AE:146:MET:SD	2.79	0.52
6:AF:7:VAL:HA	6:AF:60:VAL:O	2.09	0.52
9:AI:40:ARG:HA	9:AI:44:ARG:CB	2.28	0.52
22:BA:242:G:P	51:B3:2:LYS:HE2	2.50	0.52
22:BA:1054:A:C4	22:BA:1055:G:C8	2.96	0.52
22:BA:1056:G:HO2'	22:BA:1086:A:H8	1.54	0.52
22:BA:1301:A:N3	22:BA:1301:A:H2'	2.25	0.52
22:BA:1348:C:H2'	22:BA:1349:C:C5'	2.32	0.52
22:BA:2564:A:OP1	22:BA:2648:G:H4'	2.09	0.52
22:BA:2816:G:H1'	22:BA:2883:A:O2'	2.08	0.52
22:BA:687:C:H2'	22:BA:688:U:H6	1.72	0.52
24:BC:129:LEU:HB2	24:BC:134:ILE:HD11	1.91	0.52
28:BG:131:VAL:CG2	28:BG:131:VAL:O	2.58	0.52
30:BI:86:LYS:HD2	30:BI:86:LYS:H	1.74	0.52
31:BJ:89:PHE:CE1	31:BJ:93:ILE:HG13	2.44	0.52
35:BN:109:PRO:O	35:BN:109:PRO:CG	2.58	0.52
35:BN:25:ALA:HA	35:BN:48:VAL:CG2	2.40	0.52
38:BQ:75:TYR:CD2	38:BQ:75:TYR:C	2.82	0.52
40:BS:25:ARG:HD3	40:BS:73:LYS:HZ2	1.73	0.52
40:BS:8:ARG:O	40:BS:9:HIS:HB2	2.10	0.52
43:BV:26:PHE:HD1	43:BV:27:PRO:O	1.93	0.52
34:BM:36:VAL:HG23	43:BV:82:TYR:CD1	2.45	0.52
44:BW:35:ILE:CG2	44:BW:35:ILE:O	2.51	0.52
1:CA:1217:C:OP1	14:CN:8:ARG:HB2	2.10	0.52
1:CA:1226:C:C5	13:CM:102:LYS:HA	2.45	0.52
1:CA:1439:G:C2	1:CA:1463:U:O2	2.63	0.52
1:CA:18:C:N3	1:CA:19:A:C8	2.77	0.52
1:CA:262:A:O2'	1:CA:263:A:H5'	2.09	0.52
2:CB:176:ASN:C	2:CB:178:LEU:H	2.12	0.52
2:CB:75:ALA:O	2:CB:79:VAL:HB	2.09	0.52
3:CC:106:ARG:C	3:CC:107:LYS:HG3	2.30	0.52
1:CA:1206:G:H4'	3:CC:191:THR:O	2.09	0.52
4:CD:26:ALA:O	4:CD:27:ILE:C	2.48	0.52
6:CF:81:ASN:O	6:CF:83:ALA:N	2.42	0.52
9:CI:29:ILE:CD1	9:CI:38:PHE:HE1	2.23	0.52
9:CI:59:LYS:HE3	9:CI:60:LEU:CD2	2.38	0.52
11:CK:125:LYS:O	11:CK:126:ARG:O	2.27	0.52
12:CL:7:VAL:HG22	17:CQ:33:TYR:CD1	2.43	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:8:ARG:HH11	14:CN:12:ARG:HH22	1.57	0.52
14:CN:96:LYS:HD2	14:CN:96:LYS:H	1.74	0.52
16:CP:22:ALA:HA	16:CP:33:ILE:HD12	1.89	0.52
17:CQ:58:VAL:HG11	17:CQ:74:LEU:HD11	1.88	0.52
22:DA:1084:A:C2'	22:DA:1085:A:H5'	2.40	0.52
22:DA:1203:U:H2'	22:DA:1204:A:C2	2.44	0.52
22:DA:1366:A:C4	22:DA:1367:A:C8	2.98	0.52
22:DA:2061:G:C2	22:DA:2063:C:C4	2.97	0.52
22:DA:185:G:N1	22:DA:212:G:C2	2.77	0.52
22:DA:2199:A:C2	22:DA:2200:C:N1	2.78	0.52
22:DA:2209:G:C2	22:DA:2216:G:C2	2.97	0.52
22:DA:226:A:H2'	22:DA:227:A:C8	2.45	0.52
22:DA:2418:A:C6	22:DA:2419:U:C4	2.98	0.52
22:DA:2513:A:C5	22:DA:2514:U:C4	2.97	0.52
22:DA:2627:G:O2'	22:DA:2781:A:N1	2.36	0.52
22:DA:374:A:C6	22:DA:401:A:C8	2.97	0.52
22:DA:575:A:N3	22:DA:576:U:C5	2.77	0.52
22:DA:613:A:OP2	22:DA:614:A:C2	2.62	0.52
22:DA:852:U:O2'	22:DA:853:C:H5'	2.10	0.52
25:DD:179:ARG:HH22	37:DP:11:GLN:HE21	1.57	0.52
28:DG:163:TYR:N	28:DG:163:TYR:HD2	2.05	0.52
33:DL:135:ILE:HG23	33:DL:136:GLU:N	2.25	0.52
22:DA:831:G:H5''	33:DL:37:GLY:HA2	1.90	0.52
35:DN:98:LEU:O	35:DN:112:TYR:HB2	2.10	0.52
35:DN:98:LEU:HD21	48:D0:53:VAL:HG21	1.92	0.52
38:DQ:40:LYS:O	38:DQ:44:TYR:HD2	1.91	0.52
40:DS:66:ILE:H	40:DS:66:ILE:HD13	1.74	0.52
41:DT:64:LYS:HA	41:DT:79:ASP:OD1	2.10	0.52
46:DY:57:LEU:CD1	46:DY:60:LYS:HE3	2.39	0.52
1:AA:1014:A:H5''	19:AS:13:HIS:HB2	1.91	0.52
1:AA:1057:G:O3'	3:AC:196:GLY:HA3	2.09	0.52
1:AA:748:G:C6	1:AA:749:A:C6	2.98	0.52
1:AA:74:A:C2	1:AA:75:G:C4	2.98	0.52
2:AB:15:PHE:HD1	2:AB:16:GLY:H	1.57	0.52
5:AE:76:ASN:O	5:AE:77:ASN:HB3	2.09	0.52
9:AI:113:LYS:HG3	9:AI:119:LYS:HA	1.90	0.52
10:AJ:56:HIS:CD2	10:AJ:57:VAL:HG12	2.37	0.52
11:AK:59:PRO:HG2	11:AK:60:PHE:H	1.73	0.52
17:AQ:40:THR:HG22	17:AQ:41:THR:N	2.25	0.52
18:AR:50:TYR:O	18:AR:54:LEU:N	2.39	0.52
48:B0:39:ARG:O	48:B0:40:HIS:HB2	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1017:G:O2'	22:BA:1018:U:H5'	2.08	0.52
22:BA:1405:U:N3	22:BA:1406:U:C4	2.77	0.52
22:BA:1505:A:O2'	22:BA:1506:U:H5'	2.09	0.52
22:BA:1537:G:H2'	22:BA:1538:G:O4'	2.08	0.52
22:BA:2418:A:C5	22:BA:2419:U:C5	2.98	0.52
22:BA:2579:C:C3'	22:BA:2580:U:H5'	2.39	0.52
22:BA:860:U:H6	22:BA:860:U:H5'	1.74	0.52
22:BA:981:A:H5''	22:BA:982:C:OP2	2.10	0.52
23:BB:40:U:HO2'	23:BB:43:C:H5	1.54	0.52
28:BG:166:GLU:OE2	28:BG:168:VAL:HG22	2.08	0.52
29:BH:18:GLN:NE2	29:BH:18:GLN:HA	2.24	0.52
30:BI:107:GLU:O	30:BI:111:THR:HG23	2.10	0.52
34:BM:11:LYS:HE2	34:BM:87:GLY:O	2.09	0.52
41:BT:40:LYS:HA	41:BT:43:ILE:HG23	1.90	0.52
46:BY:21:LEU:HA	46:BY:25:GLN:HB3	1.92	0.52
1:CA:117:G:H2'	1:CA:118:U:O4'	2.09	0.52
1:CA:1216:A:C2	1:CA:1217:C:C4	2.97	0.52
1:CA:1240:U:O2'	7:CG:37:THR:HB	2.09	0.52
1:CA:297:G:H2'	1:CA:298:A:H5''	1.92	0.52
1:CA:338:A:N1	1:CA:351:G:N2	2.58	0.52
1:CA:373:A:C2'	1:CA:374:A:H5'	2.34	0.52
1:CA:836:G:C5	1:CA:851:G:C6	2.97	0.52
1:CA:954:G:N1	1:CA:1228:C:N4	2.56	0.52
2:CB:163:ILE:HG23	2:CB:185:ILE:HD11	1.90	0.52
3:CC:63:ILE:HG23	3:CC:98:ALA:HA	1.91	0.52
4:CD:84:ASN:CG	5:CE:101:GLY:HA3	2.29	0.52
1:CA:935:A:H61	7:CG:2:ARG:CZ	2.22	0.52
9:CI:66:VAL:HG21	9:CI:74:GLN:HB3	1.91	0.52
12:CL:50:LYS:N	12:CL:50:LYS:CD	2.73	0.52
13:CM:2:ARG:HD2	13:CM:2:ARG:N	2.25	0.52
14:CN:50:LEU:HB2	14:CN:51:PRO:HD3	1.91	0.52
1:CA:734:G:N2	18:CR:63:TYR:CE2	2.77	0.52
22:DA:1157:G:H2'	22:DA:1158:C:C5	2.44	0.52
22:DA:1208:C:O2	22:DA:1209:U:C6	2.62	0.52
22:DA:1258:U:H2'	22:DA:1259:G:C8	2.44	0.52
22:DA:1343:G:H2'	22:DA:1344:U:C6	2.45	0.52
22:DA:1366:A:C2'	22:DA:1367:A:H5'	2.40	0.52
22:DA:1551:A:C4	22:DA:1552:A:C8	2.97	0.52
22:DA:1801:A:C5	22:DA:2203:U:C5	2.96	0.52
22:DA:2093:G:O2'	22:DA:2094:A:O5'	2.27	0.52
22:DA:2108:A:C8	22:DA:2108:A:OP2	2.62	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2185:U:H2'	22:DA:2186:G:H8	1.74	0.52
22:DA:2283:C:C5'	22:DA:2283:C:H6	2.22	0.52
22:DA:2440:C:C2'	22:DA:2441:U:O5'	2.56	0.52
22:DA:2511:U:C4	22:DA:2512:C:C5	2.98	0.52
22:DA:2755:C:HO2'	22:DA:2756:U:H6	1.56	0.52
22:DA:372:G:N2	22:DA:400:G:H2'	2.23	0.52
22:DA:716:A:H3'	22:DA:717:C:H5''	1.92	0.52
22:DA:779:U:H2'	22:DA:780:G:O4'	2.09	0.52
27:DF:41:GLU:CG	27:DF:42:ALA:H	2.20	0.52
28:DG:167:VAL:CG2	28:DG:168:VAL:N	2.73	0.52
28:DG:1:SER:C	28:DG:3:VAL:H	2.12	0.52
29:DH:58:LEU:HA	29:DH:61:VAL:CG1	2.38	0.52
29:DH:68:ARG:CD	29:DH:68:ARG:O	2.58	0.52
30:DI:27:LEU:HD13	30:DI:32:VAL:HG11	1.90	0.52
30:DI:50:LYS:HA	30:DI:50:LYS:CE	2.37	0.52
31:DJ:69:ARG:NH2	31:DJ:89:PHE:HE1	2.06	0.52
42:DU:40:LEU:O	42:DU:41:VAL:HG13	2.09	0.52
1:AA:1078:U:O4'	5:AE:88:HIS:CE1	2.62	0.52
1:AA:984:C:N3	1:AA:1222:G:C2	2.77	0.52
1:AA:1447:A:H5''	1:AA:1448:C:H5	1.75	0.52
1:AA:421:U:H3'	1:AA:421:U:C6	2.42	0.52
1:AA:429:U:P	4:AD:12:ARG:HH21	2.32	0.52
1:AA:613:C:H2'	1:AA:614:C:C6	2.45	0.52
2:AB:176:ASN:HD21	2:AB:194:GLY:CA	2.22	0.52
3:AC:21:TRP:CB	3:AC:58:ARG:HG2	2.39	0.52
4:AD:25:ARG:O	4:AD:26:ALA:HB3	2.10	0.52
6:AF:98:GLU:HG3	6:AF:99:ALA:N	2.24	0.52
13:AM:5:GLY:HA3	13:AM:65:GLU:HG3	1.90	0.52
16:AP:28:ARG:CG	16:AP:29:ASN:ND2	2.55	0.52
19:AS:23:GLU:HG3	19:AS:23:GLU:O	2.09	0.52
21:AU:14:ALA:O	21:AU:15:LEU:HD12	2.09	0.52
22:BA:2020:A:H5'	48:B0:8:THR:HG22	1.90	0.52
22:BA:1411:U:C2'	22:BA:1412:U:H5'	2.40	0.52
22:BA:1670:C:C5	22:BA:1671:U:C4	2.97	0.52
22:BA:1694:C:H4'	22:BA:1695:G:H5''	1.92	0.52
22:BA:1744:A:H5''	22:BA:1745:A:OP2	2.09	0.52
22:BA:1999:C:O2'	22:BA:2000:C:H5'	2.10	0.52
22:BA:2467:C:C2'	22:BA:2468:A:H5'	2.39	0.52
22:BA:2772:C:H2'	22:BA:2773:C:H6	1.74	0.52
22:BA:2897:U:H2'	22:BA:2898:U:H6	1.75	0.52
22:BA:294:A:C5	22:BA:345:A:C2	2.98	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:900:A:C5	22:BA:901:C:C5	2.97	0.52
22:BA:784:G:C5	24:BC:227:VAL:HG11	2.45	0.52
27:BF:134:GLN:CG	27:BF:135:ILE:N	2.65	0.52
28:BG:126:THR:HG22	28:BG:128:THR:N	2.21	0.52
29:BH:18:GLN:HE21	29:BH:18:GLN:CA	2.22	0.52
30:BI:105:LEU:HD23	30:BI:108:ILE:HG21	1.91	0.52
44:BW:18:LYS:HE3	44:BW:19:ARG:CG	2.40	0.52
45:BX:34:SER:CA	45:BX:49:ARG:HA	2.39	0.52
1:CA:1169:A:O2'	1:CA:1170:A:C8	2.61	0.52
1:CA:1269:A:C2	1:CA:1313:U:H1'	2.45	0.52
1:CA:470:C:C2	1:CA:471:U:C5	2.97	0.52
1:CA:703:G:H4'	1:CA:704:A:H5'	1.90	0.52
1:CA:819:A:H4'	1:CA:820:U:OP2	2.10	0.52
1:CA:885:G:H5'	1:CA:885:G:H8	1.73	0.52
4:CD:2:ARG:HE	4:CD:114:ARG:HG2	1.74	0.52
4:CD:25:ARG:O	4:CD:26:ALA:C	2.48	0.52
6:CF:18:VAL:O	6:CF:22:ILE:HG12	2.09	0.52
7:CG:71:THR:HG23	7:CG:72:VAL:N	2.24	0.52
10:CJ:66:GLU:CG	14:CN:100:TRP:HZ3	2.21	0.52
16:CP:21:VAL:HG23	16:CP:36:VAL:CG2	2.39	0.52
16:CP:21:VAL:CG2	16:CP:36:VAL:HG21	2.40	0.52
48:D0:24:VAL:CG1	48:D0:27:LEU:HD11	2.39	0.52
22:DA:1048:A:C6	22:DA:1111:A:C2	2.98	0.52
22:DA:1069:A:O2'	22:DA:1071:G:H5''	2.10	0.52
22:DA:1076:C:C4	22:DA:1077:A:N6	2.78	0.52
22:DA:1206:G:H2'	22:DA:1207:C:C5	2.45	0.52
22:DA:1206:G:O2'	22:DA:1207:C:C5'	2.58	0.52
22:DA:1290:C:O2'	22:DA:1291:C:H6	1.92	0.52
22:DA:1387:A:N6	22:DA:1401:G:O6	2.41	0.52
22:DA:1606:C:H4'	22:DA:1607:C:C5'	2.33	0.52
22:DA:1689:A:H2'	22:DA:1690:A:C8	2.45	0.52
22:DA:1735:A:O2'	22:DA:1736:U:O5'	2.27	0.52
22:DA:1911:U:H2'	22:DA:1918:A:C2	2.44	0.52
22:DA:2013:A:N6	22:DA:2014:A:C2	2.78	0.52
22:DA:2144:G:O2'	22:DA:2145:C:H3'	2.09	0.52
22:DA:2219:U:H2'	22:DA:2220:U:O4'	2.09	0.52
22:DA:2298:A:H2'	22:DA:2299:U:C6	2.44	0.52
22:DA:2620:C:H2'	22:DA:2621:G:O4'	2.08	0.52
22:DA:347:A:O2'	22:DA:348:A:H5'	2.09	0.52
22:DA:616:A:O2'	22:DA:617:G:O5'	2.28	0.52
22:DA:945:A:C8	22:DA:2448:A:C2	2.98	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:10:GLY:HA3	25:DD:26:VAL:HB	1.92	0.52
27:DF:11:VAL:HG12	27:DF:12:VAL:H	1.74	0.52
27:DF:35:LEU:O	27:DF:36:ASN:HB2	2.08	0.52
28:DG:58:ALA:O	28:DG:60:GLY:N	2.43	0.52
33:DL:7:SER:HB2	33:DL:8:PRO:HD2	1.90	0.52
34:DM:90:GLU:O	34:DM:91:TYR:HB3	2.08	0.52
35:DN:21:PHE:O	35:DN:25:ALA:HB3	2.09	0.52
37:DP:92:ARG:O	37:DP:93:LYS:HB2	2.09	0.52
39:DR:55:ASP:CG	39:DR:56:GLY:H	2.12	0.52
42:DU:92:VAL:CG2	42:DU:101:THR:HG21	2.40	0.52
43:DV:57:TYR:HD1	43:DV:57:TYR:H	1.57	0.52
1:AA:1508:A:C2'	1:AA:1509:C:O5'	2.57	0.52
1:AA:292:G:C2	1:AA:309:A:C2	2.97	0.52
1:AA:502:A:H2'	1:AA:503:C:O4'	2.09	0.52
2:AB:185:ILE:HA	2:AB:199:ILE:O	2.09	0.52
2:AB:98:GLY:C	2:AB:100:LEU:H	2.13	0.52
8:AH:103:VAL:HG23	8:AH:110:MET:O	2.10	0.52
1:AA:1343:G:H4'	9:AI:123:ARG:HB3	1.91	0.52
9:AI:75:ALA:HA	9:AI:78:ILE:HD12	1.92	0.52
11:AK:51:PHE:O	11:AK:56:LYS:HB3	2.10	0.52
13:AM:89:ARG:HB2	13:AM:96:VAL:HG22	1.91	0.52
15:AO:62:ARG:NH1	15:AO:86:LEU:HD12	2.25	0.52
50:B2:20:ALA:O	50:B2:23:ALA:HB3	2.10	0.52
22:BA:1107:G:C4	22:BA:1108:U:C5	2.97	0.52
22:BA:1115:G:O2'	22:BA:1116:G:C5'	2.57	0.52
22:BA:1240:U:H6	22:BA:1240:U:H5''	1.75	0.52
22:BA:1593:A:H2'	22:BA:1594:U:O4'	2.10	0.52
22:BA:1626:A:O2'	22:BA:1627:G:OP2	2.27	0.52
22:BA:2109:U:O4	22:BA:2110:G:C5	2.63	0.52
22:BA:2140:G:OP2	22:BA:2140:G:C8	2.63	0.52
22:BA:2593:U:H2'	22:BA:2594:C:C6	2.44	0.52
22:BA:2648:G:H2'	22:BA:2649:C:H6	1.73	0.52
22:BA:2889:C:C2'	22:BA:2890:G:O5'	2.58	0.52
22:BA:839:U:H2'	22:BA:840:C:C6	2.45	0.52
24:BC:94:LEU:C	24:BC:94:LEU:HD12	2.28	0.52
26:BE:127:GLU:HG2	26:BE:133:LEU:HD13	1.90	0.52
33:BL:67:THR:CG2	33:BL:68:SER:N	2.72	0.52
35:BN:33:ILE:HD11	35:BN:118:ARG:NH2	2.25	0.52
40:BS:29:VAL:HG12	40:BS:30:SER:N	2.25	0.52
40:BS:73:LYS:HB3	40:BS:106:VAL:HB	1.91	0.52
1:CA:1169:A:O2'	1:CA:1170:A:O4'	2.27	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1178:G:OP2	9:CI:98:ARG:NH2	2.42	0.52
1:CA:142:G:C6	1:CA:143:A:C8	2.97	0.52
1:CA:256:U:H2'	1:CA:257:G:O4'	2.10	0.52
1:CA:246:A:C2	1:CA:279:A:C6	2.98	0.52
1:CA:439:U:H2'	1:CA:440:C:C6	2.44	0.52
1:CA:64:G:H4'	1:CA:65:A:H5''	1.91	0.52
1:CA:76:G:N2	1:CA:95:C:C2	2.77	0.52
5:CE:88:HIS:O	5:CE:89:THR:C	2.47	0.52
7:CG:116:ALA:O	7:CG:120:ALA:HB3	2.10	0.52
1:CA:1226:C:C5'	13:CM:94:LEU:HD21	2.36	0.52
14:CN:76:PHE:HE2	14:CN:92:ILE:HG21	1.75	0.52
16:CP:1:MET:CA	16:CP:1:MET:HE2	2.38	0.52
22:DA:1313:U:C2'	22:DA:1313:U:O2	2.41	0.52
22:DA:1401:G:C5	22:DA:1402:U:C4	2.97	0.52
22:DA:1417:C:HO2'	22:DA:1418:G:C5'	2.23	0.52
22:DA:170:U:C5	22:DA:171:U:H5	2.28	0.52
22:DA:1858:A:C6	22:DA:1885:A:C8	2.98	0.52
22:DA:1936:A:C2	22:DA:1943:U:C5	2.97	0.52
22:DA:2066:C:H2'	22:DA:2067:G:H8	1.75	0.52
22:DA:2409:G:H2'	22:DA:2410:G:O4'	2.09	0.52
22:DA:2648:G:H2'	22:DA:2649:C:O4'	2.09	0.52
22:DA:600:G:H1'	26:DE:100:MET:HG2	1.90	0.52
22:DA:727:A:O2'	22:DA:728:G:C8	2.62	0.52
22:DA:946:C:H5'	22:DA:946:C:H6	1.75	0.52
23:DB:13:G:H5''	23:DB:13:G:C8	2.34	0.52
23:DB:37:C:H2'	23:DB:38:C:H5'	1.91	0.52
25:DD:107:VAL:HG13	25:DD:203:VAL:HG23	1.91	0.52
26:DE:29:HIS:HA	26:DE:32:VAL:HG22	1.92	0.52
26:DE:52:VAL:CG1	26:DE:74:LYS:HG2	2.40	0.52
27:DF:42:ALA:O	27:DF:44:ALA:N	2.42	0.52
27:DF:52:ALA:HB1	27:DF:149:ARG:HE	1.74	0.52
30:DI:82:ALA:HB3	30:DI:100:ILE:CD1	2.40	0.52
37:DP:45:VAL:O	37:DP:60:VAL:HA	2.09	0.52
41:DT:15:HIS:CE1	41:DT:80:TRP:CH2	2.97	0.52
41:DT:9:LYS:CG	41:DT:9:LYS:O	2.57	0.52
42:DU:12:VAL:O	42:DU:12:VAL:HG12	2.08	0.52
22:DA:83:A:OP2	42:DU:91:LYS:HE3	2.09	0.52
43:DV:63:ILE:HD13	43:DV:72:VAL:CG2	2.39	0.52
22:DA:2269:G:O2'	44:DW:18:LYS:HG2	2.10	0.52
45:DX:2:ARG:HD2	45:DX:32:LEU:HD23	1.90	0.52
47:DZ:4:ILE:HG21	47:DZ:56:VAL:CG1	2.38	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1142:G:N3	1:AA:1143:G:H1'	2.25	0.52
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.09	0.52
1:AA:152:A:N6	1:AA:170:U:C2	2.78	0.52
1:AA:357:G:H2'	1:AA:358:U:H5'	1.92	0.52
1:AA:451:A:C1'	1:AA:452:A:N7	2.72	0.52
1:AA:633:G:H2'	1:AA:634:C:C6	2.43	0.52
1:AA:788:U:H2'	1:AA:789:U:C6	2.44	0.52
1:AA:914:A:C2'	1:AA:915:A:H8	2.23	0.52
5:AE:12:GLU:HB2	5:AE:38:VAL:CG1	2.31	0.52
8:AH:46:GLU:O	8:AH:47:ASP:CB	2.51	0.52
1:AA:44:A:OP2	16:AP:12:LYS:NZ	2.43	0.52
19:AS:33:TRP:NE1	19:AS:51:HIS:ND1	2.58	0.52
49:B1:8:ILE:CG2	49:B1:51:ALA:CA	2.83	0.52
22:BA:1070:A:N1	22:BA:1097:U:H4'	2.24	0.52
22:BA:1179:G:N7	22:BA:1180:U:H1'	2.24	0.52
22:BA:197:A:H2'	22:BA:198:C:H5'	1.90	0.52
22:BA:2199:A:H5'	22:BA:2200:C:C5	2.40	0.52
22:BA:234:U:C2'	22:BA:235:U:H5'	2.40	0.52
22:BA:250:G:OP2	51:B3:12:ARG:NH1	2.42	0.52
22:BA:2663:G:C2'	22:BA:2664:G:H5'	2.39	0.52
22:BA:532:A:N7	22:BA:2021:C:H2'	2.24	0.52
22:BA:545:U:H6	22:BA:546:U:H4'	1.75	0.52
26:BE:126:VAL:HG22	26:BE:127:GLU:N	2.23	0.52
29:BH:35:LYS:O	29:BH:36:ALA:HB2	2.09	0.52
30:BI:75:ALA:HB3	30:BI:131:THR:HG21	1.91	0.52
30:BI:78:LEU:HD23	30:BI:81:LYS:HE3	1.90	0.52
36:BO:82:ALA:O	36:BO:87:ILE:HG12	2.09	0.52
38:BQ:46:TYR:CZ	38:BQ:50:ARG:NH1	2.78	0.52
41:BT:51:PHE:C	41:BT:52:GLU:HG2	2.30	0.52
46:BY:56:LEU:O	46:BY:57:LEU:CB	2.55	0.52
1:CA:122:G:O2'	1:CA:123:U:H5'	2.10	0.52
1:CA:1279:G:H5''	10:CJ:9:ARG:NH2	2.22	0.52
1:CA:949:A:C4'	1:CA:1364:U:O4	2.57	0.52
1:CA:1381:U:O2	1:CA:1381:U:C2'	2.58	0.52
1:CA:181:A:C2	1:CA:195:A:C2	2.98	0.52
1:CA:220:G:O2'	1:CA:221:C:H5'	2.10	0.52
1:CA:369:G:C2	1:CA:370:C:C6	2.97	0.52
1:CA:652:U:O2'	1:CA:653:U:O5'	2.27	0.52
9:CI:45:MET:HA	9:CI:48:ARG:HB2	1.92	0.52
11:CK:26:PHE:CE1	11:CK:88:PRO:HG2	2.43	0.52
12:CL:26:CYS:HB2	12:CL:29:LYS:HE2	1.92	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:89:LEU:C	12:CL:92:VAL:HG23	2.29	0.52
17:CQ:14:ASP:HB2	17:CQ:54:ILE:HB	1.92	0.52
19:CS:79:TYR:CE1	19:CS:80:ARG:HD2	2.45	0.52
11:CK:126:ARG:O	21:CU:33:ARG:CZ	2.57	0.52
21:CU:33:ARG:O	21:CU:34:ARG:O	2.27	0.52
22:DA:1140:C:O2'	22:DA:1141:U:H5'	2.10	0.52
22:DA:1156:A:OP1	22:DA:1156:A:H8	1.92	0.52
22:DA:1340:U:C4	22:DA:1603:A:C8	2.98	0.52
22:DA:1373:A:C2	22:DA:1374:G:H1'	2.45	0.52
22:DA:1444:G:N2	22:DA:1445:G:H1'	2.25	0.52
22:DA:1731:G:C2	22:DA:1733:G:N7	2.78	0.52
22:DA:414:C:H4'	22:DA:1879:C:O2	2.10	0.52
22:DA:219:A:N6	22:DA:220:G:N1	2.58	0.52
22:DA:2298:A:N6	22:DA:2321:U:O4	2.42	0.52
22:DA:240:C:C3'	22:DA:241:A:H5''	2.37	0.52
22:DA:242:G:H5'	51:D3:63:TYR:CD1	2.45	0.52
22:DA:2553:G:H3'	22:DA:2554:U:H5''	1.90	0.52
22:DA:2656:U:C5	22:DA:2664:G:N2	2.78	0.52
22:DA:2748:A:N1	22:DA:2757:A:N7	2.58	0.52
22:DA:287:G:C6	22:DA:354:A:N1	2.77	0.52
22:DA:411:G:C4'	22:DA:412:A:OP1	2.57	0.52
22:DA:628:G:C6	22:DA:636:G:C2	2.98	0.52
22:DA:640:C:O2	22:DA:640:C:H2'	2.10	0.52
24:DC:255:LYS:O	24:DC:256:THR:CG2	2.51	0.52
27:DF:111:ARG:H	27:DF:111:ARG:NE	2.08	0.52
35:DN:103:ARG:CD	35:DN:110:MET:SD	2.92	0.52
37:DP:51:ASN:H	37:DP:56:SER:HB3	1.74	0.52
38:DQ:91:ARG:HG3	39:DR:11:GLN:CG	2.40	0.52
43:DV:9:ARG:HG2	43:DV:39:ALA:O	2.10	0.52
1:AA:125:U:H2'	1:AA:126:G:C5'	2.38	0.52
1:AA:1358:U:C6	1:AA:1359:C:C6	2.98	0.52
1:AA:1410:A:H2'	1:AA:1411:C:O5'	2.10	0.52
1:AA:62:U:H4'	1:AA:385:C:O2	2.09	0.52
1:AA:844:G:H5''	1:AA:845:A:OP1	2.10	0.52
1:AA:914:A:O2'	1:AA:915:A:O4'	2.27	0.52
1:AA:949:A:C2'	1:AA:950:U:H5'	2.40	0.52
4:AD:57:LYS:HE2	4:AD:203:TYR:OH	2.09	0.52
7:AG:143:MET:HE3	7:AG:143:MET:HA	1.91	0.52
8:AH:82:LEU:HD11	8:AH:84:ILE:HD11	1.83	0.52
10:AJ:19:ASP:N	10:AJ:19:ASP:OD1	2.41	0.52
11:AK:96:ILE:HD12	11:AK:96:ILE:C	2.30	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:B4:7:VAL:HG13	52:B4:38:GLY:HA2	1.92	0.52
22:BA:1052:C:H2'	22:BA:1053:C:H5'	1.91	0.52
22:BA:1055:G:H3'	22:BA:1056:G:H8	1.75	0.52
22:BA:1056:G:N2	22:BA:1102:C:C5	2.78	0.52
22:BA:1189:A:H2'	22:BA:1190:G:O5'	2.10	0.52
22:BA:1499:C:HO2'	22:BA:1500:G:H5'	1.68	0.52
22:BA:1485:U:C2	22:BA:1505:A:C2	2.97	0.52
22:BA:1760:C:H2'	22:BA:1761:C:O4'	2.10	0.52
22:BA:1932:A:H2'	22:BA:1933:G:O4'	2.10	0.52
22:BA:2182:U:H2'	22:BA:2183:A:OP1	2.10	0.52
22:BA:2405:G:H1'	22:BA:2412:A:H61	1.73	0.52
22:BA:469:G:O6	50:B2:37:LYS:CE	2.51	0.52
22:BA:560:C:O2	38:BQ:47:ARG:NH1	2.41	0.52
24:BC:91:ALA:O	24:BC:102:TYR:HA	2.10	0.52
24:BC:199:HIS:O	24:BC:202:ARG:HG3	2.09	0.52
34:BM:13:HIS:O	34:BM:14:LYS:CB	2.56	0.52
37:BP:83:ILE:CD1	37:BP:83:ILE:C	2.78	0.52
1:CA:1048:G:N2	1:CA:1210:C:C2	2.78	0.52
1:CA:1130:A:N7	1:CA:1146:A:N6	2.58	0.52
1:CA:115:G:H5'	1:CA:116:A:OP1	2.10	0.52
1:CA:1181:G:H2'	1:CA:1182:G:N7	2.24	0.52
1:CA:1276:G:O2'	1:CA:1277:C:H5'	2.09	0.52
1:CA:160:A:O2'	1:CA:344:A:N6	2.43	0.52
1:CA:590:U:C2'	1:CA:591:U:H5'	2.39	0.52
1:CA:996:A:C2	1:CA:997:U:N3	2.78	0.52
2:CB:81:ASP:CG	2:CB:82:ALA:H	2.13	0.52
5:CE:24:VAL:HG22	5:CE:27:GLY:H	1.75	0.52
6:CF:21:MET:HG3	6:CF:24:ARG:HH22	1.73	0.52
7:CG:10:LYS:O	7:CG:10:LYS:HD2	2.09	0.52
7:CG:49:LEU:HG	7:CG:123:LEU:HB3	1.92	0.52
1:CA:1279:G:H2'	10:CJ:45:ARG:HH21	1.74	0.52
13:CM:12:LYS:CE	13:CM:16:ILE:HG22	2.40	0.52
13:CM:18:LEU:O	13:CM:24:VAL:HG23	2.09	0.52
13:CM:69:ARG:HD2	13:CM:69:ARG:N	2.24	0.52
14:CN:2:LYS:CD	14:CN:5:MET:HG2	2.39	0.52
49:D1:51:ALA:O	49:D1:52:LYS:CB	2.57	0.52
22:DA:1087:G:C4	22:DA:1089:A:C2	2.98	0.52
22:DA:1206:G:C5	22:DA:1207:C:C4	2.98	0.52
22:DA:1398:C:HO2'	22:DA:1399:C:H6	1.56	0.52
22:DA:1572:A:H2'	22:DA:1573:G:C8	2.45	0.52
22:DA:1817:G:H5''	24:DC:86:ARG:NH1	2.25	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2029:G:H2'	22:DA:2031:A:OP1	2.10	0.52
22:DA:2076:U:H5''	22:DA:2238:G:N2	2.25	0.52
22:DA:2574:G:O2'	25:DD:148:GLN:HB2	2.10	0.52
22:DA:2014:A:H2	22:DA:2613:U:C2	2.28	0.52
22:DA:2674:G:O2'	32:DK:30:ARG:HG3	2.10	0.52
22:DA:333:G:HO2'	22:DA:334:C:H6	1.57	0.52
22:DA:402:A:H2'	22:DA:403:U:O4'	2.10	0.52
22:DA:477:A:H2'	22:DA:478:A:C8	2.44	0.52
22:DA:585:G:H1'	22:DA:1256:G:N2	2.24	0.52
22:DA:65:U:H3'	22:DA:65:U:C6	2.44	0.52
23:DB:52:A:H2	23:DB:54:G:O6	1.93	0.52
24:DC:203:VAL:O	24:DC:204:LEU:HB2	2.10	0.52
26:DE:5:LEU:HD23	26:DE:120:VAL:HG22	1.92	0.52
27:DF:12:VAL:CG1	27:DF:16:MET:HG3	2.37	0.52
28:DG:138:GLN:CG	28:DG:138:GLN:O	2.58	0.52
28:DG:145:ALA:HA	28:DG:148:ARG:CD	2.40	0.52
28:DG:76:ILE:HG22	28:DG:76:ILE:O	2.10	0.52
29:DH:4:ILE:HG23	29:DH:17:ASP:O	2.10	0.52
30:DI:74:PRO:HB2	30:DI:77:VAL:CG2	2.29	0.52
31:DJ:5:THR:HA	31:DJ:44:TYR:CE2	2.42	0.52
33:DL:127:VAL:HG13	33:DL:132:ARG:HB2	1.92	0.52
22:DA:2360:G:H1'	33:DL:60:ARG:HD2	1.92	0.52
37:DP:50:ARG:HA	37:DP:57:ALA:H	1.75	0.52
38:DQ:57:ARG:HH12	38:DQ:92:LYS:HE2	1.68	0.52
41:DT:3:ARG:HH11	41:DT:42:GLU:HG2	1.75	0.52
42:DU:20:LYS:HD2	42:DU:38:ILE:CD1	2.40	0.52
45:DX:29:LEU:HD12	45:DX:29:LEU:C	2.30	0.52
45:DX:58:ILE:CG2	45:DX:58:ILE:O	2.58	0.52
45:DX:67:LEU:HD22	45:DX:77:TYR:CE1	2.45	0.52
22:DA:95:A:O2'	46:DY:41:HIS:HD2	1.93	0.52
47:DZ:40:THR:C	47:DZ:42:ALA:N	2.60	0.52
47:DZ:46:MET:O	47:DZ:49:ALA:HB3	2.09	0.52
1:AA:569:C:C5'	1:AA:570:G:OP1	2.51	0.52
1:AA:931:C:H2'	1:AA:932:C:H6	1.73	0.52
1:AA:934:C:H4'	1:AA:935:A:OP1	2.09	0.52
2:AB:116:LEU:HB3	2:AB:140:LEU:CD2	2.40	0.52
2:AB:65:LYS:HG2	2:AB:153:MET:HG3	1.91	0.52
3:AC:95:GLY:O	3:AC:96:VAL:CG1	2.58	0.52
4:AD:147:LYS:O	4:AD:148:ALA:C	2.49	0.52
9:AI:118:ARG:HB3	9:AI:122:ARG:HG3	1.91	0.52
10:AJ:20:GLN:O	10:AJ:24:GLU:HG3	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:127:ARG:HG2	11:AK:127:ARG:HH11	1.75	0.52
19:AS:46:LEU:H	19:AS:61:VAL:HG22	1.73	0.52
50:B2:12:ARG:NH2	50:B2:12:ARG:HB2	2.25	0.52
22:BA:163:C:O2'	22:BA:164:C:O5'	2.27	0.52
22:BA:1668:A:H4'	22:BA:1669:A:O5'	2.10	0.52
22:BA:1767:G:O2'	22:BA:1768:C:H5'	2.10	0.52
22:BA:2182:U:C2'	22:BA:2183:A:OP1	2.58	0.52
22:BA:460:A:H2'	22:BA:461:C:O4'	2.09	0.52
22:BA:857:G:H2'	22:BA:858:G:O4'	2.09	0.52
24:BC:123:ILE:CG1	24:BC:123:ILE:O	2.58	0.52
33:BL:85:VAL:HG21	33:BL:94:THR:HG23	1.92	0.52
35:BN:65:LEU:C	35:BN:65:LEU:HD12	2.30	0.52
22:BA:1454:C:H41	35:BN:73:ASN:HD21	1.56	0.52
39:BR:61:ALA:HB2	39:BR:98:ILE:HA	1.92	0.52
40:BS:59:GLU:HA	40:BS:64:ALA:HA	1.90	0.52
42:BU:53:GLN:N	42:BU:54:PRO:CD	2.73	0.52
43:BV:2:PHE:HD1	43:BV:50:MET:CE	2.23	0.52
1:CA:1157:A:C5	1:CA:1180:A:C6	2.98	0.52
1:CA:116:A:O2'	1:CA:117:G:H5'	2.10	0.52
1:CA:1064:G:N2	1:CA:1190:G:O2'	2.43	0.52
1:CA:1316:G:N2	1:CA:1318:A:C8	2.78	0.52
1:CA:1393:U:C6	1:CA:1393:U:H3'	2.45	0.52
1:CA:1507:A:H2'	1:CA:1508:A:C8	2.45	0.52
1:CA:1522:U:O2'	1:CA:1523:G:H5'	2.10	0.52
1:CA:130:A:H1'	1:CA:264:C:H5'	1.92	0.52
1:CA:441:A:N6	1:CA:493:A:N6	2.57	0.52
1:CA:406:G:N7	1:CA:495:A:H2'	2.24	0.52
1:CA:652:U:O2'	1:CA:653:U:H6	1.78	0.52
3:CC:135:ARG:O	3:CC:137:VAL:N	2.43	0.52
6:CF:79:ARG:HG2	6:CF:79:ARG:NH1	2.25	0.52
8:CH:28:SER:HA	8:CH:58:LEU:HD12	1.91	0.52
10:CJ:30:LYS:HG3	10:CJ:36:VAL:HG22	1.91	0.52
14:CN:20:PHE:CE1	14:CN:54:SER:HB2	2.45	0.52
17:CQ:29:LYS:CE	17:CQ:36:PHE:CE2	2.92	0.52
22:DA:1050:A:H2'	22:DA:1051:G:H8	1.75	0.52
22:DA:1073:A:OP2	22:DA:1073:A:H4'	2.10	0.52
22:DA:1270:C:H2'	22:DA:1648:U:H5''	1.92	0.52
22:DA:1540:G:O2'	22:DA:1541:C:H6	1.90	0.52
22:DA:1565:C:N4	22:DA:1567:G:C2	2.78	0.52
22:DA:1571:A:H3'	22:DA:1571:A:C8	2.45	0.52
22:DA:1616:A:H4'	22:DA:1617:C:OP2	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1639:C:C3'	22:DA:1640:A:H5''	2.39	0.52
22:DA:2077:A:C5	22:DA:2435:A:C5	2.98	0.52
22:DA:2458:G:O2'	22:DA:2459:A:N7	2.43	0.52
22:DA:2507:C:H1'	22:DA:2583:G:N2	2.25	0.52
22:DA:2667:C:O2'	22:DA:2668:G:C8	2.57	0.52
22:DA:304:U:O2'	22:DA:305:C:P	2.67	0.52
22:DA:54:G:C6	22:DA:55:G:N7	2.78	0.52
22:DA:564:C:O2'	22:DA:565:C:H5'	2.10	0.52
22:DA:603:A:H4'	22:DA:604:G:C4'	2.40	0.52
22:DA:637:A:O5'	33:DL:112:LEU:HD21	2.09	0.52
22:DA:92:U:C6	22:DA:93:G:C8	2.98	0.52
22:DA:971:G:C6	22:DA:972:A:C4	2.98	0.52
26:DE:98:LYS:O	26:DE:99:LYS:CB	2.55	0.52
27:DF:11:VAL:HG12	27:DF:12:VAL:N	2.24	0.52
27:DF:76:PHE:H	27:DF:76:PHE:HD2	1.58	0.52
22:DA:1154:G:OP1	38:DQ:57:ARG:HD2	2.09	0.52
39:DR:90:ARG:O	39:DR:91:GLN:CB	2.54	0.52
41:DT:39:THR:OG1	41:DT:42:GLU:HG3	2.10	0.52
42:DU:92:VAL:HB	42:DU:101:THR:HG23	1.91	0.52
42:DU:95:PHE:N	42:DU:95:PHE:CD1	2.64	0.52
44:DW:14:ASP:O	44:DW:15:SER:HB2	2.09	0.52
44:DW:49:ASN:HD21	44:DW:80:SER:CA	2.23	0.52
1:AA:1120:C:H42	1:AA:1153:G:H1	1.58	0.52
1:AA:1276:G:C2'	1:AA:1277:C:H5'	2.40	0.52
1:AA:1382:C:O2'	1:AA:1383:C:C5'	2.50	0.52
1:AA:1480:A:C6	1:AA:1481:U:N3	2.78	0.52
1:AA:337:G:O2'	1:AA:338:A:H5'	2.09	0.52
1:AA:438:U:O2'	1:AA:439:U:P	2.68	0.52
1:AA:582:C:C2	1:AA:583:A:C8	2.98	0.52
1:AA:922:G:C6	1:AA:923:A:C6	2.97	0.52
2:AB:81:ASP:OD1	2:AB:83:ALA:N	2.43	0.52
3:AC:122:GLN:HB3	3:AC:127:VAL:HG22	1.92	0.52
4:AD:131:ILE:H	4:AD:131:ILE:CD1	2.10	0.52
4:AD:169:TRP:CD2	4:AD:185:PRO:HB3	2.45	0.52
4:AD:28:ASP:C	4:AD:29:THR:O	2.47	0.52
4:AD:3:TYR:HE2	4:AD:5:GLY:O	1.93	0.52
7:AG:99:ALA:O	7:AG:103:ILE:HG13	2.10	0.52
7:AG:3:ARG:HG3	7:AG:4:ARG:N	2.24	0.52
12:AL:121:PRO:O	12:AL:122:LYS:C	2.48	0.52
16:AP:50:THR:O	16:AP:50:THR:HG22	2.09	0.52
1:AA:263:A:OP1	20:AT:73:ARG:HD3	2.10	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AT:77:ASN:N	20:AT:77:ASN:HD22	2.07	0.52
21:AU:24:LYS:HG2	21:AU:25:ALA:H	1.75	0.52
22:BA:1116:G:O2'	22:BA:1117:C:C5'	2.58	0.52
22:BA:1394:U:C6	22:BA:1394:U:C3'	2.93	0.52
22:BA:1534:U:H2'	22:BA:1534:U:O2	2.10	0.52
22:BA:1872:A:H2'	22:BA:1873:G:O4'	2.10	0.52
22:BA:310:A:HO2'	22:BA:311:A:P	2.33	0.52
22:BA:372:G:C8	45:BX:60:LYS:HE2	2.44	0.52
23:BB:92:C:C2'	23:BB:93:C:O5'	2.58	0.52
22:BA:1801:A:C4	24:BC:261:ARG:NH1	2.76	0.52
26:BE:187:VAL:O	26:BE:188:MET:CB	2.59	0.52
29:BH:100:ALA:O	29:BH:104:THR:HB	2.09	0.52
35:BN:12:ARG:HD3	35:BN:16:HIS:CG	2.45	0.52
38:BQ:91:ARG:CZ	39:BR:11:GLN:H	2.23	0.52
38:BQ:63:ARG:NH2	38:BQ:95:ALA:O	2.43	0.52
41:BT:30:ILE:O	41:BT:30:ILE:HG12	2.09	0.52
43:BV:5:ASN:HD22	43:BV:5:ASN:H	1.54	0.52
44:BW:17:ALA:HA	44:BW:35:ILE:CG2	2.35	0.52
44:BW:42:THR:HG22	44:BW:43:LYS:N	2.25	0.52
47:BZ:29:ARG:C	47:BZ:30:ARG:HG3	2.30	0.52
1:CA:106:C:C2'	1:CA:107:G:C5'	2.85	0.52
1:CA:1198:G:N2	10:CJ:55:PRO:HG2	2.25	0.52
1:CA:1279:G:H2'	1:CA:1279:G:N3	2.23	0.52
1:CA:1393:U:H3'	1:CA:1393:U:H6	1.74	0.52
1:CA:253:A:C2	1:CA:274:A:C2	2.98	0.52
1:CA:998:C:H2'	1:CA:999:C:H6	1.75	0.52
3:CC:39:ARG:HE	3:CC:54:ILE:HG23	1.74	0.52
4:CD:32:LYS:CB	4:CD:35:GLN:OE1	2.52	0.52
5:CE:65:LYS:HZ3	5:CE:68:ARG:HD3	1.74	0.52
13:CM:81:ASP:C	13:CM:82:LEU:HD12	2.30	0.52
22:DA:1056:G:C2	22:DA:1102:C:H5	2.28	0.52
22:DA:1062:G:O2'	22:DA:1063:G:H8	1.92	0.52
22:DA:1239:G:C5	22:DA:1240:U:C6	2.98	0.52
22:DA:1626:A:O2'	22:DA:1627:G:OP2	2.24	0.52
22:DA:176:A:O5'	22:DA:176:A:H8	1.93	0.52
22:DA:1819:A:C3'	22:DA:1820:U:H5'	2.39	0.52
22:DA:1858:A:O2'	22:DA:1859:U:C5'	2.58	0.52
22:DA:1936:A:C2	22:DA:1943:U:H5	2.28	0.52
22:DA:2088:A:H2'	22:DA:2089:C:C6	2.45	0.52
22:DA:2139:U:H3	22:DA:2152:G:H1	1.58	0.52
22:DA:2516:A:C4	22:DA:2569:G:N2	2.77	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:274:C:O2'	22:DA:275:C:O4'	2.27	0.52
22:DA:107:G:C5'	22:DA:294:A:OP1	2.58	0.52
22:DA:343:C:O2	22:DA:343:C:H2'	2.08	0.52
22:DA:47:C:N4	22:DA:178:G:H1	2.08	0.52
22:DA:70:G:OP2	22:DA:70:G:C8	2.57	0.52
24:DC:245:THR:HB	24:DC:246:PRO:CD	2.40	0.52
25:DD:37:VAL:HG23	25:DD:91:THR:HA	1.92	0.52
25:DD:79:LEU:CD2	25:DD:79:LEU:N	2.72	0.52
27:DF:113:PHE:O	27:DF:114:ARG:HB2	2.09	0.52
22:DA:2530:A:H3'	28:DG:156:TYR:OH	2.10	0.52
35:DN:36:THR:CG2	35:DN:41:ALA:HB2	2.39	0.52
36:DO:108:ASP:C	36:DO:110:ALA:H	2.14	0.52
38:DQ:6:GLY:C	38:DQ:8:ILE:N	2.64	0.52
1:AA:652:U:O2'	1:AA:653:U:P	2.67	0.51
1:AA:828:U:H2'	1:AA:829:G:O5'	2.09	0.51
2:AB:150:ILE:HA	2:AB:153:MET:HB3	1.92	0.51
3:AC:57:GLU:O	3:AC:59:PRO:HD2	2.10	0.51
4:AD:196:GLU:O	4:AD:198:LEU:N	2.42	0.51
8:AH:8:ASP:O	8:AH:9:MET:C	2.48	0.51
9:AI:23:GLY:HA3	9:AI:61:ASP:HB2	1.91	0.51
9:AI:85:ALA:C	9:AI:87:MET:H	2.13	0.51
11:AK:24:ALA:CB	11:AK:29:THR:HG23	2.40	0.51
13:AM:95:PRO:CG	13:AM:101:THR:CG2	2.88	0.51
14:AN:26:LEU:O	14:AN:27:LYS:HB3	2.11	0.51
19:AS:33:TRP:O	19:AS:35:ARG:HG3	2.10	0.51
19:AS:55:GLN:CD	19:AS:56:HIS:H	2.14	0.51
11:AK:124:LYS:O	21:AU:33:ARG:HG2	2.10	0.51
22:BA:103:A:H2'	22:BA:104:A:C8	2.46	0.51
22:BA:1057:A:N7	22:BA:1086:A:H2'	2.24	0.51
22:BA:1064:C:OP1	30:BI:87:SER:C	2.45	0.51
22:BA:1047:G:N2	22:BA:1110:G:C4	2.77	0.51
22:BA:1277:G:H4'	35:BN:20:MET:CE	2.38	0.51
22:BA:1421:G:C2	22:BA:1422:G:N7	2.77	0.51
22:BA:1585:C:H2'	22:BA:1586:A:C4'	2.40	0.51
22:BA:2221:G:C2'	22:BA:2222:C:H5'	2.40	0.51
22:BA:2400:G:C2'	22:BA:2401:U:H5'	2.40	0.51
22:BA:2630:G:C2'	22:BA:2631:G:H5'	2.39	0.51
22:BA:2757:A:N1	28:BG:66:THR:HG21	2.25	0.51
22:BA:788:A:O2'	22:BA:789:A:OP2	2.22	0.51
24:BC:184:GLU:O	24:BC:185:ALA:HB3	2.09	0.51
24:BC:229:HIS:HD2	24:BC:246:PRO:CA	2.22	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:241:LYS:O	24:BC:243:PRO:HD3	2.10	0.51
26:BE:5:LEU:HD13	26:BE:122:GLU:CG	2.40	0.51
29:BH:8:LYS:O	29:BH:13:GLY:CA	2.53	0.51
31:BJ:49:ASP:OD1	31:BJ:121:LYS:NZ	2.43	0.51
31:BJ:81:ILE:HG12	31:BJ:82:GLY:N	2.25	0.51
36:BO:111:ARG:C	36:BO:113:ALA:N	2.64	0.51
44:BW:19:ARG:CZ	44:BW:22:VAL:HB	2.40	0.51
47:BZ:43:ILE:CD1	47:BZ:47:ILE:HD11	2.40	0.51
1:CA:1149:C:H2'	1:CA:1150:A:O4'	2.09	0.51
1:CA:1271:A:H2'	1:CA:1272:G:C8	2.45	0.51
1:CA:1408:A:N1	1:CA:1494:G:C5	2.79	0.51
1:CA:1426:G:H2'	1:CA:1427:C:H6	1.75	0.51
1:CA:564:C:H2'	1:CA:565:U:C6	2.45	0.51
1:CA:693:G:H2'	1:CA:694:A:C8	2.45	0.51
1:CA:704:A:H2'	1:CA:705:G:C8	2.45	0.51
2:CB:27:LYS:N	2:CB:28:PRO:CD	2.72	0.51
3:CC:113:LYS:HE3	3:CC:184:ASN:ND2	2.22	0.51
4:CD:8:LEU:HD22	4:CD:21:LYS:HD2	1.92	0.51
10:CJ:52:LEU:CD2	10:CJ:62:ARG:HG2	2.40	0.51
12:CL:34:THR:HB	12:CL:53:ARG:CG	2.39	0.51
1:CA:260:G:OP1	20:CT:74:HIS:CE1	2.59	0.51
11:CK:124:LYS:HE3	21:CU:34:ARG:NH1	2.26	0.51
21:CU:53:LYS:HB2	21:CU:53:LYS:HZ2	1.71	0.51
52:D4:7:VAL:CG2	52:D4:25:VAL:CG2	2.89	0.51
22:DA:101:A:O2'	22:DA:102:U:OP2	2.28	0.51
22:DA:1107:G:N7	22:DA:1108:U:C5	2.78	0.51
22:DA:1205:A:H5''	22:DA:1206:G:C8	2.45	0.51
22:DA:1421:G:H2'	22:DA:1421:G:N3	2.24	0.51
22:DA:1527:G:C2	22:DA:1546:G:N1	2.78	0.51
22:DA:13:A:O2'	22:DA:15:G:N7	2.44	0.51
22:DA:1682:G:O2'	22:DA:1683:U:C6	2.53	0.51
22:DA:1721:G:H1'	22:DA:1739:A:N6	2.25	0.51
22:DA:2653:U:N3	22:DA:2654:A:N6	2.57	0.51
22:DA:310:A:O2'	22:DA:311:A:C5'	2.57	0.51
22:DA:223:A:C6	22:DA:422:A:N7	2.78	0.51
22:DA:475:C:H2'	22:DA:476:G:C8	2.45	0.51
22:DA:484:C:H2'	22:DA:485:C:H6	1.75	0.51
22:DA:659:G:H2'	22:DA:660:C:H6	1.73	0.51
22:DA:694:U:H2'	22:DA:695:G:O5'	2.10	0.51
22:DA:845:A:C2	22:DA:847:U:N1	2.78	0.51
24:DC:7:PRO:HB3	24:DC:13:ARG:NH2	2.24	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:106:LYS:HD3	25:DD:106:LYS:N	2.25	0.51
25:DD:121:THR:HG22	25:DD:127:PHE:HB2	1.92	0.51
31:DJ:37:ARG:NH2	31:DJ:39:LYS:HZ2	2.08	0.51
34:DM:112:LEU:O	34:DM:112:LEU:HD13	2.09	0.51
34:DM:119:LEU:HD23	34:DM:119:LEU:O	2.10	0.51
35:DN:16:HIS:O	35:DN:20:MET:CB	2.59	0.51
37:DP:22:GLY:HA3	37:DP:91:VAL:HG23	1.92	0.51
38:DQ:96:ASP:C	38:DQ:98:ALA:N	2.63	0.51
39:DR:30:GLY:HA2	39:DR:63:VAL:O	2.10	0.51
41:DT:30:ILE:HG22	41:DT:85:VAL:HG21	1.90	0.51
43:DV:72:VAL:HB	43:DV:91:PHE:HB3	1.90	0.51
45:DX:29:LEU:HB2	45:DX:30:PRO:HD2	1.93	0.51
46:DY:28:LEU:CD2	46:DY:42:LEU:HD22	2.40	0.51
1:AA:19:A:C2'	1:AA:20:U:H5'	2.40	0.51
1:AA:247:G:OP1	1:AA:247:G:H4'	2.09	0.51
1:AA:39:G:C4	1:AA:40:C:C5	2.99	0.51
1:AA:616:G:C2'	1:AA:617:G:H5'	2.40	0.51
1:AA:626:G:H2'	1:AA:627:G:C8	2.45	0.51
1:AA:646:G:H2'	1:AA:647:C:C5'	2.38	0.51
1:AA:829:G:C6	1:AA:858:G:C2	2.99	0.51
2:AB:9:LEU:CD2	2:AB:11:ALA:N	2.73	0.51
5:AE:152:VAL:O	5:AE:155:LYS:CD	2.58	0.51
49:B1:15:GLY:O	49:B1:16:THR:O	2.28	0.51
50:B2:27:GLY:O	50:B2:30:VAL:HB	2.10	0.51
22:BA:1013:C:H2'	22:BA:1014:A:H8	1.75	0.51
22:BA:1288:G:C5	22:BA:1327:A:C2	2.98	0.51
22:BA:1377:G:H8	22:BA:1377:G:O5'	1.93	0.51
22:BA:142:A:C5	22:BA:143:C:C4	2.98	0.51
22:BA:1523:U:O2'	22:BA:1524:G:H5'	2.10	0.51
22:BA:1838:C:C5	22:BA:1899:A:C5	2.98	0.51
22:BA:1875:G:H2'	22:BA:1876:A:OP2	2.11	0.51
22:BA:211:C:O2'	22:BA:212:G:H5'	2.10	0.51
22:BA:2210:U:C2	22:BA:2212:A:N7	2.79	0.51
22:BA:2491:U:O5'	22:BA:2491:U:H2'	2.10	0.51
22:BA:2662:A:H2'	22:BA:2663:G:O4'	2.09	0.51
22:BA:439:A:H2'	22:BA:440:C:O5'	2.11	0.51
22:BA:855:G:H1'	44:BW:23:LYS:HZ3	1.74	0.51
22:BA:855:G:H21	44:BW:23:LYS:CB	2.23	0.51
22:BA:980:A:C6	22:BA:981:A:N1	2.78	0.51
24:BC:259:ASN:C	24:BC:261:ARG:H	2.14	0.51
27:BF:168:LEU:HG	27:BF:169:LEU:HD12	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:636:G:N1	33:BL:111:ILE:HD11	2.21	0.51
38:BQ:77:LYS:HE2	38:BQ:116:LEU:CD2	2.40	0.51
44:BW:19:ARG:HH22	44:BW:22:VAL:HG21	1.74	0.51
45:BX:38:TRP:HE3	45:BX:45:PHE:CD2	2.27	0.51
1:CA:1036:A:O2'	1:CA:1037:C:H5'	2.10	0.51
1:CA:1129:C:O2'	1:CA:1130:A:H8	1.90	0.51
1:CA:1320:C:H2'	1:CA:1321:U:H5'	1.91	0.51
1:CA:1346:A:C8	1:CA:1348:U:C2	2.98	0.51
1:CA:1348:U:O2'	1:CA:1349:A:H5'	2.10	0.51
1:CA:1357:A:N7	1:CA:1358:U:C5	2.79	0.51
1:CA:372:C:H4'	1:CA:373:A:OP2	2.11	0.51
1:CA:399:G:C6	1:CA:400:C:C4	2.98	0.51
1:CA:300:A:C2	1:CA:566:G:O6	2.62	0.51
1:CA:777:A:C6	1:CA:778:G:C4	2.98	0.51
1:CA:944:G:H3'	1:CA:945:G:H5'	1.92	0.51
1:CA:9:G:C2	1:CA:10:A:C8	2.98	0.51
2:CB:46:VAL:N	2:CB:47:PRO:HD2	2.25	0.51
2:CB:49:PHE:O	2:CB:53:LEU:HB3	2.10	0.51
6:CF:3:HIS:O	6:CF:92:THR:HA	2.10	0.51
9:CI:12:LYS:O	9:CI:13:SER:HB3	2.10	0.51
9:CI:64:ILE:N	9:CI:64:ILE:HD12	2.25	0.51
10:CJ:11:LYS:HA	10:CJ:71:LEU:HA	1.92	0.51
10:CJ:52:LEU:HA	10:CJ:62:ARG:HG2	1.92	0.51
10:CJ:44:THR:HG23	10:CJ:70:HIS:CD2	2.45	0.51
10:CJ:81:GLU:O	10:CJ:86:ALA:CB	2.58	0.51
16:CP:20:VAL:HG23	16:CP:34:GLU:O	2.10	0.51
18:CR:21:ASP:OD1	18:CR:23:LYS:HE3	2.10	0.51
14:CN:46:LYS:HE3	19:CS:10:ILE:HB	1.92	0.51
19:CS:20:LYS:C	19:CS:20:LYS:HD3	2.30	0.51
11:CK:126:ARG:CB	21:CU:33:ARG:HD2	2.38	0.51
22:DA:210:C:H4'	22:DA:1367:A:H1'	1.92	0.51
22:DA:1506:U:O5'	22:DA:1506:U:H6	1.93	0.51
22:DA:1526:C:N4	22:DA:1527:G:C6	2.78	0.51
22:DA:1536:C:H5''	22:DA:1537:G:O5'	2.09	0.51
22:DA:1819:A:H5''	24:DC:156:SER:HB2	1.92	0.51
22:DA:2283:C:C4	22:DA:2389:G:C4	2.98	0.51
22:DA:2443:C:H2'	22:DA:2444:G:C8	2.45	0.51
22:DA:2697:G:N7	22:DA:2698:U:C5	2.78	0.51
22:DA:2848:G:OP2	37:DP:94:ALA:N	2.33	0.51
22:DA:357:C:C4	22:DA:358:U:C5	2.98	0.51
22:DA:380:G:H1	22:DA:394:C:H42	1.57	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:491:G:N3	22:DA:492:A:C8	2.79	0.51
22:DA:776:G:C8	22:DA:793:A:C2	2.98	0.51
22:DA:868:U:HO2'	22:DA:869:G:P	2.34	0.51
22:DA:956:G:C1'	34:DM:82:MET:HE1	2.40	0.51
22:DA:97:C:H2'	22:DA:98:G:O4'	2.10	0.51
29:DH:9:VAL:HG12	29:DH:10:ALA:N	2.25	0.51
30:DI:18:ASN:HB3	30:DI:19:PRO:HD3	1.91	0.51
30:DI:63:ASP:O	30:DI:64:ARG:HB2	2.10	0.51
31:DJ:25:LEU:C	31:DJ:25:LEU:HD22	2.31	0.51
31:DJ:45:THR:C	31:DJ:47:HIS:N	2.63	0.51
36:DO:49:VAL:HG12	36:DO:50:ALA:H	1.75	0.51
42:DU:52:ASN:ND2	42:DU:54:PRO:HD3	2.25	0.51
1:AA:198:G:O2'	1:AA:199:A:O5'	2.27	0.51
1:AA:403:C:C2'	1:AA:404:G:H5'	2.41	0.51
1:AA:665:A:H2'	1:AA:732:C:O2	2.11	0.51
3:AC:129:PHE:CD2	3:AC:156:LEU:HD23	2.45	0.51
4:AD:147:LYS:N	4:AD:147:LYS:CD	2.74	0.51
7:AG:20:GLU:HB3	7:AG:24:LYS:HE2	1.92	0.51
9:AI:117:LEU:HB3	9:AI:122:ARG:O	2.10	0.51
11:AK:85:VAL:CG1	11:AK:92:ARG:HG3	2.40	0.51
12:AL:43:LYS:CB	12:AL:44:PRO:CD	2.81	0.51
20:AT:43:LYS:CE	20:AT:86:ALA:HA	2.40	0.51
22:BA:1106:G:C2	22:BA:1107:G:N9	2.78	0.51
22:BA:118:A:C8	22:BA:119:A:C8	2.98	0.51
22:BA:1669:A:N3	22:BA:1669:A:H2'	2.24	0.51
22:BA:1694:C:H4'	22:BA:1695:G:C5'	2.41	0.51
22:BA:1897:G:C2	22:BA:1898:U:C2	2.98	0.51
22:BA:945:A:C4	22:BA:2448:A:C2	2.98	0.51
22:BA:37:C:H2'	22:BA:38:A:O5'	2.10	0.51
22:BA:412:A:C2'	22:BA:413:C:C5'	2.86	0.51
22:BA:622:G:H2'	22:BA:623:C:H6	1.74	0.51
22:BA:729:G:C2'	22:BA:729:G:N3	2.64	0.51
24:BC:108:GLY:O	24:BC:109:LEU:HD22	2.10	0.51
22:BA:2784:U:H4'	25:BD:42:ASN:ND2	2.25	0.51
28:BG:162:ARG:NH1	28:BG:168:VAL:HG21	2.26	0.51
30:BI:33:ASN:HB3	30:BI:36:GLU:CB	2.38	0.51
22:BA:1070:A:H2	30:BI:9:LYS:HG2	1.65	0.51
32:BK:91:SER:O	32:BK:92:GLU:C	2.48	0.51
32:BK:92:GLU:N	32:BK:92:GLU:OE1	2.43	0.51
37:BP:91:VAL:HG11	37:BP:96:LEU:HD21	1.91	0.51
38:BQ:104:ALA:O	38:BQ:107:ALA:HB3	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:BZ:40:THR:CG2	47:BZ:43:ILE:H	2.23	0.51
1:CA:306:A:H2'	1:CA:307:C:C6	2.44	0.51
1:CA:464:U:O4	1:CA:466:A:C4'	2.58	0.51
1:CA:719:C:O2'	18:CR:37:LYS:HB3	2.11	0.51
2:CB:119:GLN:HG2	2:CB:124:THR:HG23	1.90	0.51
2:CB:176:ASN:O	2:CB:178:LEU:N	2.44	0.51
4:CD:176:LYS:HG2	4:CD:178:GLU:OE2	2.11	0.51
6:CF:3:HIS:CD2	6:CF:65:GLU:HG2	2.46	0.51
11:CK:63:GLN:HB2	11:CK:98:ALA:HB2	1.93	0.51
16:CP:75:ILE:HG22	16:CP:80:LYS:HD2	1.92	0.51
20:CT:42:ASP:O	20:CT:43:LYS:C	2.49	0.51
49:D1:34:GLU:C	49:D1:35:LEU:HD23	2.31	0.51
22:DA:1139:G:C2'	22:DA:1140:C:H5'	2.41	0.51
22:DA:813:U:C2	22:DA:1195:G:N2	2.79	0.51
22:DA:1381:G:C2'	22:DA:1382:G:H5''	2.40	0.51
22:DA:1390:U:O2'	22:DA:1391:U:H5'	2.11	0.51
22:DA:1380:G:O2'	22:DA:1569:A:N6	2.43	0.51
22:DA:1688:U:C4	22:DA:1698:A:C2	2.98	0.51
22:DA:1739:A:O2'	22:DA:1740:G:C5'	2.59	0.51
22:DA:1965:C:H5''	22:DA:1966:A:H2'	1.92	0.51
22:DA:2066:C:H5''	56:DA:3530:HOH:O	2.10	0.51
22:DA:2297:A:N3	22:DA:2298:A:N7	2.59	0.51
22:DA:2303:G:O6	22:DA:2314:A:N6	2.43	0.51
22:DA:2392:A:N1	33:DL:55:MET:HE3	2.26	0.51
22:DA:2453:A:O2'	22:DA:2572:A:H1'	2.11	0.51
22:DA:2556:C:H2'	22:DA:2557:G:O4'	2.11	0.51
22:DA:2732:G:H5''	22:DA:2733:A:O4'	2.10	0.51
22:DA:2834:G:H1'	22:DA:2879:A:N6	2.25	0.51
22:DA:462:C:C2'	22:DA:463:G:H5'	2.40	0.51
22:DA:634:C:H2'	22:DA:635:C:H6	1.74	0.51
22:DA:739:A:C8	22:DA:739:A:OP2	2.64	0.51
22:DA:192:C:O2'	22:DA:802:A:N3	2.43	0.51
22:DA:807:U:C2'	22:DA:807:U:O2	2.59	0.51
23:DB:68:C:O2'	23:DB:69:G:P	2.68	0.51
24:DC:259:ASN:OD1	24:DC:261:ARG:HB3	2.10	0.51
22:DA:321:U:H1'	26:DE:159:LEU:CD1	2.40	0.51
22:DA:321:U:H1'	26:DE:159:LEU:HD11	1.92	0.51
27:DF:35:LEU:HD12	27:DF:153:ILE:HG23	1.92	0.51
27:DF:32:LYS:CB	27:DF:32:LYS:HZ2	2.24	0.51
28:DG:157:LYS:C	28:DG:159:LYS:H	2.12	0.51
28:DG:68:ARG:C	28:DG:68:ARG:HD3	2.30	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:140:ALA:C	29:DH:141:LYS:HG3	2.30	0.51
29:DH:5:LEU:HD23	29:DH:36:ALA:HB2	1.92	0.51
33:DL:77:ILE:HG12	33:DL:101:ILE:HD11	1.92	0.51
34:DM:125:PRO:O	34:DM:126:ILE:HG23	2.10	0.51
34:DM:135:VAL:HG12	34:DM:136:MET:N	2.26	0.51
35:DN:28:LEU:C	35:DN:28:LEU:CD2	2.79	0.51
35:DN:92:GLY:N	35:DN:94:TYR:HE1	2.02	0.51
38:DQ:71:ASN:HD21	38:DQ:106:THR:HG23	1.76	0.51
40:DS:1:MET:H1	40:DS:1:MET:CE	2.23	0.51
40:DS:28:LYS:HA	40:DS:70:LYS:HA	1.92	0.51
41:DT:58:VAL:HG22	41:DT:59:ASN:N	2.25	0.51
41:DT:68:LYS:HB2	41:DT:68:LYS:NZ	2.25	0.51
42:DU:35:VAL:CG1	42:DU:36:GLU:H	2.10	0.51
42:DU:42:LYS:CB	42:DU:42:LYS:NZ	2.74	0.51
43:DV:70:ILE:CD1	43:DV:70:ILE:N	2.68	0.51
44:DW:30:VAL:CG2	44:DW:59:PHE:HE1	2.22	0.51
22:DA:381:G:H5''	45:DX:15:ASN:HD22	1.74	0.51
1:AA:1241:G:C2	1:AA:1242:G:C5	2.99	0.51
1:AA:1319:A:C5	1:AA:1323:G:C5	2.98	0.51
1:AA:1504:G:C3'	1:AA:1505:G:H5'	2.40	0.51
1:AA:300:A:H2'	1:AA:301:G:O4'	2.11	0.51
1:AA:466:A:C4'	1:AA:467:U:OP2	2.57	0.51
2:AB:117:GLU:HA	2:AB:120:SER:CB	2.22	0.51
4:AD:193:ASP:N	4:AD:193:ASP:OD1	2.43	0.51
5:AE:110:MET:HA	5:AE:113:VAL:CG1	2.40	0.51
11:AK:122:PRO:HG2	21:AU:33:ARG:O	2.11	0.51
12:AL:87:LYS:O	12:AL:87:LYS:HG3	2.11	0.51
13:AM:82:LEU:N	13:AM:82:LEU:HD23	2.24	0.51
15:AO:57:ARG:HH11	15:AO:57:ARG:HB3	1.75	0.51
19:AS:28:LYS:CB	19:AS:29:PRO:HD2	2.28	0.51
1:AA:322:C:O2'	20:AT:17:ARG:CG	2.58	0.51
22:BA:2340:A:H2'	22:BA:2341:G:C8	2.46	0.51
22:BA:2431:U:C6	22:BA:2431:U:C5'	2.87	0.51
22:BA:2469:A:C6	22:BA:2482:A:C8	2.98	0.51
22:BA:2659:G:N2	22:BA:2661:G:H3'	2.25	0.51
22:BA:859:G:N2	22:BA:916:G:H2'	2.25	0.51
23:BB:90:C:C2'	23:BB:91:C:O5'	2.59	0.51
22:BA:784:G:H5''	24:BC:225:ASN:OD1	2.10	0.51
25:BD:29:VAL:HB	25:BD:98:VAL:CG1	2.40	0.51
26:BE:48:THR:H	26:BE:51:GLU:CG	2.22	0.51
28:BG:117:PRO:O	28:BG:118:ALA:O	2.28	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:108:VAL:HG12	29:BH:109:GLU:N	2.25	0.51
29:BH:31:VAL:C	29:BH:33:GLN:N	2.63	0.51
31:BJ:74:TYR:CD2	31:BJ:92:MET:CE	2.93	0.51
36:BO:24:THR:N	36:BO:42:PRO:HG3	2.26	0.51
39:BR:74:ILE:N	39:BR:74:ILE:HD12	2.25	0.51
40:BS:25:ARG:HD3	40:BS:73:LYS:NZ	2.25	0.51
41:BT:34:VAL:HG11	41:BT:43:ILE:HD12	1.92	0.51
44:BW:42:THR:CG2	44:BW:43:LYS:HZ2	2.24	0.51
44:BW:75:ASN:OD1	44:BW:76:ARG:N	2.44	0.51
45:BX:10:ARG:HB2	45:BX:11:PRO:CD	2.40	0.51
1:CA:1071:C:O2	1:CA:1072:G:C8	2.63	0.51
1:CA:1278:G:O2'	1:CA:1279:G:C2	2.62	0.51
1:CA:1477:U:H2'	1:CA:1478:U:H6	1.76	0.51
1:CA:197:A:C6	1:CA:221:C:C4'	2.94	0.51
1:CA:279:A:H4'	1:CA:280:C:O5'	2.09	0.51
1:CA:383:A:H5''	1:CA:384:G:OP2	2.10	0.51
1:CA:526:C:C6	1:CA:526:C:C3'	2.94	0.51
1:CA:532:A:H4'	1:CA:533:A:OP2	2.11	0.51
1:CA:865:A:C2	1:CA:918:A:C4'	2.92	0.51
1:CA:967:C:N3	1:CA:968:A:C6	2.79	0.51
4:CD:47:LEU:HD23	4:CD:52:VAL:HG23	1.93	0.51
4:CD:84:ASN:HD22	4:CD:86:GLY:N	2.09	0.51
6:CF:45:ARG:O	6:CF:56:LYS:HB3	2.10	0.51
6:CF:88:MET:HE1	18:CR:64:LEU:HD11	1.91	0.51
9:CI:5:TYR:CD2	9:CI:5:TYR:N	2.77	0.51
13:CM:12:LYS:CA	13:CM:12:LYS:HE3	2.33	0.51
14:CN:62:ARG:HB3	14:CN:68:ARG:O	2.11	0.51
1:CA:1225:A:H4'	19:CS:77:ARG:HH12	1.76	0.51
20:CT:82:ILE:C	20:CT:84:LYS:N	2.61	0.51
21:CU:35:GLU:CG	21:CU:36:PHE:N	2.49	0.51
22:DA:77:G:C6	22:DA:110:G:C5	2.99	0.51
22:DA:1287:A:HO2'	22:DA:1288:G:C5'	2.23	0.51
22:DA:1347:A:O2'	22:DA:1348:C:C5'	2.58	0.51
22:DA:123:G:O3'	22:DA:1376:C:H4'	2.11	0.51
22:DA:1416:G:C6	22:DA:1417:C:N4	2.78	0.51
22:DA:1611:C:O2'	22:DA:1612:C:H5'	2.11	0.51
22:DA:1760:C:H3'	22:DA:1761:C:C6	2.45	0.51
22:DA:1773:A:C8	22:DA:1829:A:N9	2.79	0.51
22:DA:190:A:H2'	22:DA:191:A:O4'	2.10	0.51
22:DA:1914:C:O2'	22:DA:1915:U:H5''	2.10	0.51
22:DA:1965:C:C5'	22:DA:1965:C:H6	2.22	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2249:U:H1'	22:DA:2275:C:N4	2.25	0.51
22:DA:2294:G:N3	22:DA:2295:C:C6	2.78	0.51
22:DA:2303:G:C6	22:DA:2314:A:N6	2.78	0.51
22:DA:830:G:N3	22:DA:2448:A:C5	2.78	0.51
22:DA:2585:U:O2'	22:DA:2586:U:C5'	2.44	0.51
22:DA:477:A:H2'	22:DA:478:A:H8	1.74	0.51
22:DA:605:G:O2'	22:DA:606:U:H5'	2.10	0.51
22:DA:622:G:H2'	22:DA:623:C:C6	2.44	0.51
22:DA:982:C:H4'	22:DA:983:A:OP1	2.11	0.51
23:DB:21:G:C2	23:DB:22:U:H1'	2.45	0.51
25:DD:78:GLY:C	25:DD:79:LEU:HD22	2.31	0.51
22:DA:37:C:O2'	26:DE:45:ALA:CB	2.59	0.51
27:DF:43:ILE:HG12	27:DF:77:LYS:HG2	1.93	0.51
29:DH:38:PRO:O	29:DH:40:THR:N	2.42	0.51
31:DJ:6:ALA:HB3	31:DJ:45:THR:HB	1.92	0.51
32:DK:2:ILE:N	32:DK:2:ILE:CD1	2.73	0.51
33:DL:94:THR:O	33:DL:98:ALA:N	2.42	0.51
34:DM:32:GLY:HA2	34:DM:104:GLU:HA	1.92	0.51
35:DN:7:GLY:N	35:DN:46:ARG:HH12	2.07	0.51
38:DQ:77:LYS:HE2	38:DQ:116:LEU:CD2	2.18	0.51
40:DS:75:PHE:CZ	40:DS:104:THR:HG21	2.45	0.51
43:DV:75:GLN:HG2	43:DV:92:VAL:HG11	1.93	0.51
22:DA:112:U:H5'	46:DY:58:ASN:HD21	1.73	0.51
1:AA:1468:A:C2'	1:AA:1469:C:H5''	2.41	0.51
1:AA:232:G:H2'	1:AA:233:C:H6	1.76	0.51
1:AA:345:C:H6	1:AA:345:C:H5''	1.75	0.51
1:AA:462:G:H5'	1:AA:463:U:OP2	2.10	0.51
1:AA:468:A:C2	1:AA:469:C:C5	2.98	0.51
1:AA:496:A:N3	1:AA:496:A:C2'	2.71	0.51
1:AA:895:G:C6	1:AA:896:C:C4	2.99	0.51
2:AB:118:THR:O	2:AB:118:THR:HG22	2.11	0.51
3:AC:155:ARG:HG2	3:AC:159:ALA:O	2.10	0.51
4:AD:3:TYR:O	4:AD:4:LEU:HB2	2.09	0.51
4:AD:2:ARG:HB3	4:AD:4:LEU:CD1	2.41	0.51
5:AE:24:VAL:O	5:AE:25:LYS:C	2.49	0.51
6:AF:67:PRO:HG2	6:AF:70:VAL:HG22	1.92	0.51
9:AI:62:LEU:HD23	9:AI:62:LEU:N	2.25	0.51
17:AQ:11:VAL:HG23	17:AQ:56:ASP:O	2.10	0.51
22:BA:1179:G:C6	22:BA:1180:U:O2'	2.64	0.51
22:BA:1784:A:H4'	22:BA:1785:A:H5''	1.89	0.51
22:BA:1838:C:C4	22:BA:1899:A:C4	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2579:C:O2'	22:BA:2580:U:H5'	2.10	0.51
22:BA:2635:A:H2'	22:BA:2636:C:O5'	2.11	0.51
22:BA:571:U:C4	22:BA:575:A:C5	2.98	0.51
24:BC:108:GLY:O	24:BC:109:LEU:CD2	2.58	0.51
25:BD:104:VAL:HG13	25:BD:106:LYS:HD3	1.92	0.51
26:BE:141:MET:O	26:BE:142:ALA:HB3	2.11	0.51
26:BE:41:GLN:HB2	26:BE:43:THR:CG2	2.40	0.51
28:BG:117:PRO:O	28:BG:118:ALA:C	2.49	0.51
29:BH:78:VAL:HB	29:BH:145:ASN:HB3	1.92	0.51
30:BI:100:ILE:HG22	30:BI:101:SER:N	2.23	0.51
31:BJ:40:HIS:O	31:BJ:41:LYS:HG2	2.10	0.51
32:BK:10:VAL:HB	32:BK:16:ALA:CB	2.36	0.51
32:BK:45:GLU:HA	32:BK:45:GLU:OE2	2.10	0.51
33:BL:57:LEU:HD22	51:B3:53:ASP:HB3	1.92	0.51
36:BO:111:ARG:O	36:BO:114:GLY:N	2.43	0.51
36:BO:59:ALA:O	36:BO:61:GLN:N	2.44	0.51
37:BP:56:SER:O	37:BP:75:THR:HG23	2.11	0.51
38:BQ:40:LYS:HD3	38:BQ:44:TYR:CE1	2.46	0.51
38:BQ:91:ARG:CZ	38:BQ:93:ILE:HG21	2.40	0.51
41:BT:29:THR:N	41:BT:86:THR:HA	2.25	0.51
45:BX:12:VAL:HG23	45:BX:28:PHE:HB2	1.91	0.51
1:CA:108:G:H5'	1:CA:109:A:H5''	1.92	0.51
1:CA:1143:G:C2'	1:CA:1144:G:C8	2.75	0.51
1:CA:1151:A:C6	1:CA:1152:A:N6	2.79	0.51
1:CA:1242:G:H4'	1:CA:1304:G:OP1	2.10	0.51
1:CA:1449:C:O2'	1:CA:1450:U:O4'	2.29	0.51
1:CA:1475:G:H4'	22:DA:1689:A:H4'	1.91	0.51
1:CA:1501:C:C5	1:CA:1504:G:C4	2.99	0.51
1:CA:815:A:C2	1:CA:1529:G:C4	2.98	0.51
1:CA:529:G:O6	12:CL:45:ASN:HA	2.11	0.51
1:CA:68:G:O2'	1:CA:69:G:O5'	2.20	0.51
4:CD:84:ASN:CG	4:CD:87:GLU:HG3	2.30	0.51
5:CE:14:LEU:HD13	5:CE:59:ILE:HD12	1.93	0.51
8:CH:88:LYS:HA	8:CH:120:LEU:O	2.11	0.51
9:CI:29:ILE:HD13	9:CI:38:PHE:CE1	2.46	0.51
9:CI:59:LYS:HE3	9:CI:60:LEU:HD21	1.92	0.51
10:CJ:92:LEU:HD13	10:CJ:92:LEU:N	2.25	0.51
11:CK:14:GLN:HA	11:CK:76:TYR:O	2.10	0.51
12:CL:32:VAL:HG12	12:CL:32:VAL:O	2.10	0.51
13:CM:17:ALA:HB3	13:CM:18:LEU:HD12	1.92	0.51
20:CT:55:PRO:HG2	20:CT:56:ILE:H	1.74	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1000:A:C6	22:DA:1001:A:C6	2.98	0.51
22:DA:1240:U:O2	22:DA:1240:U:H2'	2.09	0.51
22:DA:1299:G:H5'	22:DA:1301:A:O4'	2.10	0.51
22:DA:1503:A:N6	22:DA:1504:A:H62	2.09	0.51
22:DA:1510:G:C2	22:DA:1511:G:C6	2.99	0.51
22:DA:1417:C:H4'	22:DA:1587:G:N2	2.25	0.51
22:DA:1693:U:H5''	22:DA:1694:C:C5	2.45	0.51
22:DA:1736:U:H2'	22:DA:1737:G:O4'	2.10	0.51
22:DA:1926:U:H1'	22:DA:1929:G:C6	2.45	0.51
22:DA:2792:A:C2	22:DA:2805:C:C2	2.99	0.51
22:DA:324:A:O2'	22:DA:325:G:O4'	2.27	0.51
22:DA:38:A:O2'	26:DE:43:THR:HA	2.11	0.51
22:DA:617:G:C2'	22:DA:618:G:H8	2.23	0.51
22:DA:64:A:O2'	41:DT:69:ARG:HG2	2.11	0.51
22:DA:800:A:C2	22:DA:802:A:C8	2.98	0.51
22:DA:919:U:N3	22:DA:920:A:N7	2.58	0.51
23:DB:81:G:C5	23:DB:82:U:C5	2.98	0.51
24:DC:149:LYS:CE	24:DC:152:GLN:NE2	2.72	0.51
24:DC:179:GLU:HA	24:DC:269:ARG:O	2.10	0.51
25:DD:122:VAL:HG22	25:DD:127:PHE:O	2.09	0.51
27:DF:155:ILE:HD12	27:DF:155:ILE:H	1.75	0.51
27:DF:52:ALA:HA	27:DF:55:ASP:HB2	1.93	0.51
28:DG:23:ILE:CG2	28:DG:24:THR:N	2.74	0.51
29:DH:5:LEU:HA	29:DH:36:ALA:CB	2.40	0.51
33:DL:79:LEU:HB3	33:DL:114:GLY:H	1.75	0.51
35:DN:62:ASN:C	35:DN:64:ARG:H	2.13	0.51
37:DP:44:GLY:HA3	37:DP:60:VAL:HG13	1.92	0.51
44:DW:25:PHE:O	44:DW:27:GLY:N	2.41	0.51
1:AA:71:A:C8	1:AA:100:G:C2	2.98	0.51
1:AA:1306:A:H1'	1:AA:1332:A:C6	2.45	0.51
1:AA:1521:C:H2'	1:AA:1522:U:O5'	2.11	0.51
1:AA:270:A:H2'	1:AA:271:C:C6	2.44	0.51
1:AA:335:C:H2'	1:AA:336:A:H8	1.75	0.51
1:AA:771:G:C4	1:AA:772:U:C5	2.99	0.51
1:AA:1101:A:C8	2:AB:170:ILE:CG2	2.94	0.51
3:AC:119:ILE:HG22	3:AC:197:VAL:HG21	1.93	0.51
6:AF:51:ILE:O	6:AF:51:ILE:HG23	2.09	0.51
9:AI:5:TYR:HB2	9:AI:20:ILE:HB	1.91	0.51
1:AA:660:C:P	15:AO:4:THR:HG21	2.51	0.51
16:AP:42:ILE:HG22	16:AP:43:ALA:N	2.26	0.51
19:AS:52:ASN:O	19:AS:76:THR:HG22	2.11	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1253:A:C5	56:BA:3332:HOH:O	2.64	0.51
22:BA:1348:C:C2'	22:BA:1349:C:H5'	2.34	0.51
22:BA:1572:A:C2'	22:BA:1573:G:H5'	2.40	0.51
22:BA:1730:C:H1'	22:BA:1731:G:C2	2.46	0.51
22:BA:207:A:H2'	22:BA:208:C:O4'	2.11	0.51
22:BA:2752:C:H2'	22:BA:2753:A:H8	1.74	0.51
22:BA:339:U:H2'	22:BA:340:A:H5'	1.91	0.51
22:BA:37:C:H1'	26:BE:45:ALA:HB2	1.92	0.51
22:BA:26:G:H1'	22:BA:514:A:H61	1.73	0.51
22:BA:845:A:C6	22:BA:847:U:C6	2.98	0.51
22:BA:923:G:H4'	44:BW:25:PHE:CE1	2.45	0.51
26:BE:4:VAL:HG12	26:BE:4:VAL:O	2.11	0.51
28:BG:2:ARG:HH21	28:BG:2:ARG:HG3	1.76	0.51
28:BG:97:VAL:HA	28:BG:101:VAL:O	2.10	0.51
29:BH:95:GLY:C	29:BH:97:ARG:H	2.13	0.51
30:BI:89:SER:OG	30:BI:135:MET:HA	2.11	0.51
31:BJ:114:LEU:HD22	31:BJ:118:MET:HE2	1.92	0.51
33:BL:125:LEU:N	33:BL:125:LEU:HD23	2.25	0.51
41:BT:39:THR:O	41:BT:41:ALA:N	2.42	0.51
1:CA:1004:A:N3	1:CA:1026:G:C5	2.79	0.51
1:CA:1078:U:H2'	1:CA:1079:G:O4'	2.11	0.51
1:CA:112:G:C2	1:CA:330:C:C4	2.99	0.51
1:CA:1117:A:C2	1:CA:1184:G:C6	2.99	0.51
1:CA:1326:U:H2'	1:CA:1327:C:C6	2.45	0.51
1:CA:1531:A:H8	1:CA:1531:A:O5'	1.93	0.51
1:CA:246:A:C4	1:CA:282:A:N6	2.78	0.51
1:CA:34:C:H2'	1:CA:35:G:H8	1.74	0.51
1:CA:444:G:C2	1:CA:445:G:C8	2.98	0.51
1:CA:544:G:C2'	1:CA:545:C:O5'	2.58	0.51
1:CA:595:A:H4'	1:CA:596:A:OP1	2.09	0.51
2:CB:114:LYS:CE	2:CB:151:LYS:HB2	2.39	0.51
3:CC:149:LYS:CE	3:CC:200:TRP:CE3	2.88	0.51
3:CC:63:ILE:HG22	3:CC:97:PRO:O	2.11	0.51
1:CA:1307:U:H1'	13:CM:107:THR:HG21	1.93	0.51
16:CP:48:GLU:HG3	16:CP:51:ARG:NH2	2.25	0.51
17:CQ:73:THR:O	17:CQ:75:VAL:HG13	2.11	0.51
1:CA:1014:A:C2	19:CS:33:TRP:HB2	2.46	0.51
52:D4:1:MET:HB2	52:D4:34:LYS:O	2.10	0.51
22:DA:1385:A:O2'	22:DA:1386:C:H5''	2.11	0.51
22:DA:1388:G:N1	22:DA:1400:U:N3	2.57	0.51
22:DA:1464:G:C2	22:DA:1465:G:C5	2.99	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1532:A:N1	22:DA:1540:G:O6	2.43	0.51
22:DA:1554:U:H2'	22:DA:1554:U:O2	2.11	0.51
22:DA:1619:G:O2'	22:DA:1620:G:H5'	2.11	0.51
22:DA:1735:A:O2'	22:DA:1736:U:C6	2.44	0.51
22:DA:1815:A:O4'	22:DA:1817:G:C8	2.64	0.51
22:DA:2214:C:C2	22:DA:2215:C:C5	2.98	0.51
22:DA:2458:G:O2'	22:DA:2460:U:H5	1.88	0.51
22:DA:2807:U:H3'	22:DA:2808:G:H5''	1.91	0.51
22:DA:37:C:O2'	22:DA:38:A:H5'	2.11	0.51
22:DA:383:C:H2'	22:DA:384:A:OP1	2.10	0.51
22:DA:428:A:O2'	22:DA:429:A:H5'	2.10	0.51
22:DA:460:A:H5'	41:DT:72:GLN:O	2.10	0.51
22:DA:595:C:O5'	22:DA:595:C:H6	1.93	0.51
22:DA:704:G:O2'	22:DA:726:G:N2	2.44	0.51
23:DB:8:C:H5''	36:DO:15:ARG:NH1	2.24	0.51
26:DE:139:LYS:HB2	26:DE:139:LYS:HZ2	1.75	0.51
22:DA:675:A:P	26:DE:60:TRP:HZ2	2.32	0.51
22:DA:2305:U:H4'	27:DF:132:ARG:CG	2.41	0.51
28:DG:11:PRO:O	28:DG:14:VAL:HG22	2.10	0.51
30:DI:52:LEU:CD1	30:DI:53:PRO:HD2	2.40	0.51
36:DO:48:LEU:HD13	36:DO:87:ILE:CD1	2.38	0.51
1:CA:1442:G:O2'	37:DP:113:LEU:HD13	2.11	0.51
38:DQ:15:LYS:HD2	38:DQ:15:LYS:C	2.30	0.51
40:DS:1:MET:H1	40:DS:1:MET:HE2	1.76	0.51
41:DT:11:LEU:HD23	41:DT:32:LEU:HD12	1.92	0.51
41:DT:74:ILE:HG13	41:DT:75:GLY:H	1.74	0.51
44:DW:30:VAL:HG23	44:DW:59:PHE:CE1	2.45	0.51
44:DW:39:GLN:O	44:DW:56:HIS:HB3	2.11	0.51
46:DY:28:LEU:HG	46:DY:42:LEU:CD2	2.41	0.51
1:AA:1348:U:H2'	1:AA:1349:A:C8	2.44	0.51
1:AA:1354:U:O2'	1:AA:1355:G:H5'	2.11	0.51
1:AA:138:G:C2'	1:AA:139:A:H5'	2.40	0.51
1:AA:683:G:C2'	1:AA:684:U:H5'	2.40	0.51
2:AB:49:PHE:CD1	2:AB:53:LEU:HD23	2.46	0.51
5:AE:152:VAL:HB	5:AE:155:LYS:CE	2.36	0.51
7:AG:62:GLU:O	7:AG:65:LEU:HB3	2.10	0.51
9:AI:112:ARG:HH22	10:AJ:64:GLN:HE22	1.58	0.51
1:AA:1367:C:H5''	10:AJ:62:ARG:HH11	1.75	0.51
21:AU:24:LYS:HG2	21:AU:25:ALA:N	2.26	0.51
22:BA:1022:G:O2'	22:BA:1023:U:OP2	2.28	0.51
22:BA:1027:A:C6	22:BA:1126:A:N3	2.79	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1161:C:H2'	22:BA:1162:G:O5'	2.10	0.51
22:BA:1195:G:N3	22:BA:1226:A:H2	2.08	0.51
22:BA:1936:A:H2	22:BA:1943:U:C4	2.28	0.51
22:BA:2199:A:C4	22:BA:2225:A:C2	2.99	0.51
22:BA:2214:C:H6	22:BA:2214:C:C5'	2.11	0.51
22:BA:2321:U:H6	22:BA:2321:U:H5''	1.76	0.51
22:BA:2733:A:O2'	22:BA:2734:A:H5'	2.10	0.51
22:BA:390:U:O2'	22:BA:391:A:OP2	2.21	0.51
22:BA:554:U:O4	22:BA:555:G:C6	2.64	0.51
22:BA:659:G:C5	22:BA:660:C:C5	2.99	0.51
22:BA:866:A:C5'	22:BA:866:A:C8	2.65	0.51
22:BA:899:A:HO2'	22:BA:900:A:H8	1.57	0.51
22:BA:920:A:C6	22:BA:921:C:C4	2.99	0.51
23:BB:43:C:O2	27:BF:91:ARG:NH2	2.44	0.51
27:BF:39:VAL:CG1	27:BF:40:GLY:N	2.73	0.51
27:BF:60:SER:O	27:BF:61:GLY:C	2.48	0.51
28:BG:168:VAL:HG23	28:BG:168:VAL:O	2.10	0.51
28:BG:30:GLY:O	28:BG:32:LEU:N	2.44	0.51
28:BG:93:TYR:O	28:BG:94:ARG:HB3	2.11	0.51
29:BH:24:GLY:O	29:BH:28:ASN:HB2	2.09	0.51
29:BH:78:VAL:CB	29:BH:145:ASN:HB3	2.40	0.51
35:BN:101:GLY:H	48:B0:41:HIS:CD2	2.29	0.51
36:BO:2:ASP:O	36:BO:3:LYS:CG	2.59	0.51
38:BQ:26:ALA:CB	38:BQ:30:VAL:HG23	2.40	0.51
39:BR:102:SER:O	39:BR:103:ALA:O	2.29	0.51
39:BR:42:ALA:HA	39:BR:46:GLU:CB	2.38	0.51
40:BS:74:ILE:HG23	40:BS:74:ILE:O	2.11	0.51
41:BT:85:VAL:O	41:BT:86:THR:O	2.29	0.51
44:BW:71:LYS:HD3	44:BW:71:LYS:N	2.26	0.51
1:CA:1269:A:H2'	1:CA:1270:G:H5'	1.91	0.51
1:CA:1289:A:H2'	1:CA:1290:G:O4'	2.11	0.51
1:CA:1320:C:C2'	1:CA:1321:U:H5'	2.41	0.51
1:CA:1451:U:C2	1:CA:1453:G:O6	2.64	0.51
1:CA:261:U:P	20:CT:70:LYS:HE2	2.50	0.51
1:CA:585:G:C2'	1:CA:586:C:H5'	2.39	0.51
1:CA:719:C:H3'	1:CA:720:C:H6	1.74	0.51
2:CB:118:THR:O	2:CB:122:ASP:HB2	2.11	0.51
2:CB:84:LEU:O	2:CB:84:LEU:CG	2.59	0.51
6:CF:1:MET:HE3	6:CF:65:GLU:O	2.10	0.51
9:CI:51:LEU:CD1	9:CI:86:LEU:HD22	2.40	0.51
14:CN:80:ARG:NH1	14:CN:80:ARG:HG2	2.24	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:18:GLN:HE21	16:CP:35:ARG:NH2	2.09	0.51
49:D1:13:SER:OG	49:D1:46:VAL:HG22	2.10	0.51
22:DA:125:A:O5'	50:D2:19:ARG:HD3	2.10	0.51
51:D3:41:ARG:HH21	51:D3:41:ARG:CB	2.23	0.51
22:DA:1055:G:C4	22:DA:1056:G:C8	2.99	0.51
22:DA:1413:A:C5	22:DA:1414:C:N4	2.79	0.51
22:DA:1809:A:H2	22:DA:1810:A:C4	2.29	0.51
22:DA:1829:A:C8	22:DA:1830:C:C5	2.99	0.51
22:DA:1858:A:H2'	22:DA:1859:U:C6	2.46	0.51
22:DA:2151:U:HO2'	22:DA:2152:G:H8	1.59	0.51
22:DA:2213:U:O2'	22:DA:2214:C:H5'	2.10	0.51
22:DA:2666:C:H2'	22:DA:2667:C:O5'	2.11	0.51
22:DA:2748:A:C2	22:DA:2757:A:C5	2.99	0.51
22:DA:2834:G:H1'	22:DA:2879:A:H61	1.75	0.51
22:DA:2835:A:N6	22:DA:2879:A:C4	2.79	0.51
22:DA:567:U:H5''	56:DA:3259:HOH:O	2.11	0.51
22:DA:571:U:C4	22:DA:575:A:C5	2.99	0.51
22:DA:621:A:C2'	22:DA:622:G:O5'	2.59	0.51
22:DA:627:A:C2	22:DA:637:A:C4	2.99	0.51
25:DD:30:GLU:HG2	25:DD:185:ASN:ND2	2.26	0.51
22:DA:37:C:O2'	26:DE:45:ALA:HB2	2.11	0.51
30:DI:52:LEU:HD12	30:DI:53:PRO:CD	2.41	0.51
33:DL:50:PHE:CE2	33:DL:53:GLY:N	2.79	0.51
33:DL:90:VAL:HB	33:DL:122:VAL:HA	1.91	0.51
34:DM:73:ILE:HG21	34:DM:91:TYR:CE1	2.46	0.51
35:DN:19:ALA:HA	35:DN:22:ARG:HB3	1.93	0.51
35:DN:31:HIS:O	35:DN:33:ILE:N	2.43	0.51
35:DN:73:ASN:C	35:DN:76:VAL:HG22	2.31	0.51
36:DO:27:VAL:O	36:DO:37:ALA:HA	2.10	0.51
42:DU:42:LYS:NZ	42:DU:42:LYS:HB3	2.25	0.51
1:AA:1160:G:O2'	1:AA:1161:C:O5'	2.28	0.51
1:AA:1361:G:C3'	1:AA:1362:A:H5''	2.41	0.51
1:AA:180:U:C6	1:AA:180:U:H3'	2.45	0.51
1:AA:913:A:O2'	1:AA:914:A:OP2	2.25	0.51
2:AB:168:GLU:HB3	2:AB:171:ALA:HB3	1.92	0.51
2:AB:60:ALA:HB3	2:AB:223:GLY:HA3	1.92	0.51
3:AC:41:TYR:HD1	3:AC:42:LEU:CD1	2.24	0.51
7:AG:110:ARG:HG3	7:AG:111:GLY:N	2.25	0.51
7:AG:77:ARG:O	7:AG:78:ARG:HB2	2.10	0.51
8:AH:74:ILE:HD12	8:AH:128:VAL:CG2	2.37	0.51
10:AJ:10:LEU:HD11	10:AJ:98:VAL:HG12	1.91	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:106:VAL:HG23	12:AL:116:TYR:HB3	1.93	0.51
13:AM:92:ARG:NH2	13:AM:94:LEU:HD12	2.26	0.51
20:AT:14:GLU:OE1	20:AT:18:LYS:HE2	2.10	0.51
20:AT:33:LYS:HE2	20:AT:33:LYS:CA	2.41	0.51
51:B3:51:LYS:NZ	51:B3:54:LEU:HD23	2.26	0.51
22:BA:1009:A:O5'	22:BA:1009:A:H8	1.94	0.51
22:BA:1064:C:H4'	30:BI:89:SER:N	2.26	0.51
22:BA:1153:C:C2'	22:BA:1154:G:O5'	2.59	0.51
22:BA:1945:G:C4	22:BA:1946:U:C5	2.99	0.51
22:BA:1947:C:N3	22:BA:1960:A:C2	2.79	0.51
22:BA:2225:A:H4'	22:BA:2226:C:O5'	2.11	0.51
22:BA:528:A:C2	22:BA:2043:C:C4'	2.91	0.51
22:BA:601:C:O2	22:BA:605:G:H4'	2.10	0.51
23:BB:35:C:H2'	23:BB:36:C:O5'	2.11	0.51
24:BC:44:ASN:C	24:BC:44:ASN:OD1	2.49	0.51
24:BC:93:VAL:O	24:BC:94:LEU:HB3	2.10	0.51
27:BF:131:VAL:HG21	27:BF:151:LEU:CD1	2.40	0.51
29:BH:1:MET:O	29:BH:20:ASN:ND2	2.44	0.51
22:BA:1058:U:O4'	30:BI:117:THR:HG21	2.11	0.51
30:BI:135:MET:HG2	30:BI:137:LEU:HG	1.92	0.51
22:BA:2898:U:O2	31:BJ:134:ALA:HB1	2.10	0.51
31:BJ:6:ALA:H	31:BJ:45:THR:HG21	1.76	0.51
33:BL:40:SER:O	33:BL:41:ARG:CB	2.58	0.51
42:BU:73:ASN:HD22	42:BU:76:THR:H	1.59	0.51
22:BA:112:U:C5'	46:BY:58:ASN:HD21	2.24	0.51
1:CA:1172:C:H2'	1:CA:1173:U:C6	2.45	0.51
1:CA:119:A:H5'	1:CA:120:A:H5'	1.91	0.51
1:CA:949:A:C2	1:CA:1233:G:C4	2.98	0.51
1:CA:1239:A:H5''	7:CG:118:ARG:NH1	2.20	0.51
1:CA:1370:G:H5''	9:CI:110:VAL:CG2	2.40	0.51
1:CA:1450:U:C4'	1:CA:1451:U:H5	2.22	0.51
1:CA:155:A:H2'	1:CA:156:C:O4'	2.10	0.51
1:CA:255:G:C4	1:CA:256:U:C5	2.99	0.51
1:CA:322:C:C5	1:CA:328:C:C5	2.98	0.51
1:CA:519:C:C2'	1:CA:520:A:H8	2.19	0.51
1:CA:597:G:C2	1:CA:644:U:C2	2.99	0.51
1:CA:805:C:H2'	1:CA:806:C:H6	1.76	0.51
1:CA:920:U:H2'	1:CA:921:U:C5	2.45	0.51
1:CA:963:G:O2'	1:CA:964:A:P	2.68	0.51
1:CA:963:G:O2'	1:CA:964:A:C8	2.63	0.51
2:CB:209:VAL:HG23	2:CB:210:THR:H	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:148:ILE:HD12	3:CC:200:TRP:O	2.11	0.51
6:CF:88:MET:HG2	6:CF:90:MET:SD	2.50	0.51
1:CA:1129:C:P	9:CI:17:ARG:HH22	2.32	0.51
13:CM:15:VAL:O	13:CM:19:THR:HG23	2.11	0.51
16:CP:29:ASN:N	16:CP:29:ASN:OD1	2.41	0.51
16:CP:36:VAL:O	16:CP:36:VAL:CG1	2.59	0.51
17:CQ:30:HIS:CE1	17:CQ:32:ILE:H	2.28	0.51
21:CU:39:LYS:H	21:CU:40:PRO:HD2	1.73	0.51
22:DA:1168:G:C2	22:DA:1182:G:C2	2.99	0.51
22:DA:1312:U:H4'	22:DA:1313:U:O5'	2.10	0.51
22:DA:1352:U:C5	22:DA:1377:G:C6	2.98	0.51
22:DA:1497:U:C5	22:DA:1578:U:O5'	2.63	0.51
22:DA:1836:C:O2	22:DA:1836:C:H2'	2.09	0.51
22:DA:2027:G:H2'	22:DA:2028:U:H6	1.75	0.51
22:DA:2098:U:O5'	22:DA:2098:U:H6	1.93	0.51
22:DA:2259:U:O2'	22:DA:2260:C:C6	2.63	0.51
22:DA:2285:C:O4'	22:DA:2288:A:C2	2.64	0.51
22:DA:2311:A:H1'	27:DF:78:ILE:CD1	2.41	0.51
22:DA:246:C:H4'	22:DA:385:C:O2'	2.10	0.51
22:DA:2677:G:C4	22:DA:2731:G:N2	2.79	0.51
22:DA:311:A:H61	22:DA:330:A:C5'	2.24	0.51
22:DA:739:A:C4'	22:DA:740:C:OP1	2.51	0.51
22:DA:851:C:C2	22:DA:852:U:C5	2.99	0.51
22:DA:878:A:H4'	22:DA:898:C:H42	1.75	0.51
25:DD:124:ARG:NH1	25:DD:125:TRP:HE1	1.89	0.51
26:DE:60:TRP:CZ3	26:DE:62:GLN:CG	2.94	0.51
29:DH:103:VAL:C	29:DH:105:ALA:H	2.14	0.51
37:DP:88:ARG:O	37:DP:111:GLU:HA	2.11	0.51
40:DS:36:LEU:C	40:DS:38:TYR:N	2.64	0.51
45:DX:2:ARG:HB3	45:DX:11:PRO:HD3	1.93	0.51
45:DX:67:LEU:CD2	45:DX:77:TYR:CZ	2.93	0.51
46:DY:19:LEU:HA	46:DY:22:LEU:CB	2.39	0.51
1:AA:1014:A:H4'	19:AS:13:HIS:NE2	2.26	0.51
1:AA:1124:G:OP1	10:AJ:37:ARG:C	2.48	0.51
1:AA:198:G:C2'	1:AA:199:A:C8	2.93	0.51
1:AA:408:A:C2	1:AA:435:A:N3	2.79	0.51
1:AA:421:U:C6	1:AA:421:U:C3'	2.94	0.51
1:AA:204:G:C2	1:AA:465:A:C5	2.99	0.51
1:AA:468:A:N1	1:AA:469:C:N4	2.58	0.51
1:AA:935:A:H2'	1:AA:936:C:C6	2.45	0.51
1:AA:428:G:O3'	4:AD:12:ARG:NH2	2.44	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:147:LYS:H	4:AD:147:LYS:CE	2.22	0.51
5:AE:112:ALA:O	5:AE:113:VAL:C	2.49	0.51
5:AE:63:MET:O	5:AE:66:ALA:HB3	2.10	0.51
6:AF:2:ARG:HH21	6:AF:68:GLN:HE21	1.58	0.51
12:AL:72:ASN:OD1	12:AL:104:SER:CB	2.54	0.51
14:AN:20:PHE:O	14:AN:21:ALA:HB3	2.10	0.51
14:AN:62:ARG:NH1	14:AN:69:PRO:HG3	2.26	0.51
14:AN:92:ILE:HG22	14:AN:95:LEU:CB	2.41	0.51
1:AA:736:C:OP1	18:AR:60:ARG:NH1	2.44	0.51
20:AT:8:LYS:HA	20:AT:11:ILE:HG23	1.93	0.51
48:B0:27:LEU:H	48:B0:27:LEU:CD2	2.24	0.51
22:BA:1360:G:H5''	22:BA:1360:G:H8	1.76	0.51
22:BA:1424:G:H2'	22:BA:1425:G:O4'	2.11	0.51
22:BA:1510:G:C8	22:BA:1510:G:H5'	2.45	0.51
22:BA:1627:G:C2	22:BA:1628:G:C8	2.99	0.51
22:BA:1644:C:O2'	22:BA:1645:G:C5'	2.53	0.51
22:BA:1738:G:O2'	22:BA:1739:A:O5'	2.29	0.51
22:BA:1742:U:O2'	22:BA:1743:G:H5'	2.11	0.51
22:BA:2415:G:H2'	22:BA:2416:C:C6	2.43	0.51
22:BA:302:C:O2'	22:BA:303:G:C5'	2.59	0.51
22:BA:324:A:O2'	22:BA:325:G:C5'	2.57	0.51
22:BA:508:A:C4'	22:BA:509:C:OP2	2.45	0.51
22:BA:885:C:H3'	22:BA:885:C:H6	1.75	0.51
24:BC:251:THR:CG2	24:BC:252:LYS:N	2.54	0.51
25:BD:142:VAL:HG23	25:BD:143:PRO:CD	2.41	0.51
34:BM:40:ARG:HB3	34:BM:95:LEU:HD12	1.93	0.51
37:BP:4:ILE:O	37:BP:5:LYS:CB	2.56	0.51
37:BP:4:ILE:CG2	37:BP:5:LYS:N	2.74	0.51
38:BQ:97:ILE:C	38:BQ:97:ILE:HD12	2.30	0.51
39:BR:1:MET:HA	39:BR:42:ALA:O	2.10	0.51
44:BW:37:VAL:CG2	44:BW:55:ASP:O	2.59	0.51
1:CA:1176:A:H2'	1:CA:1177:G:O4'	2.10	0.51
1:CA:1453:G:H5''	1:CA:1453:G:N3	2.26	0.51
1:CA:442:G:C6	1:CA:443:C:N4	2.79	0.51
1:CA:686:U:O2'	1:CA:687:A:O5'	2.28	0.51
1:CA:767:A:H2'	1:CA:768:A:O4'	2.11	0.51
1:CA:962:C:H42	1:CA:974:A:N6	2.09	0.51
2:CB:128:LEU:O	2:CB:129:THR:C	2.48	0.51
10:CJ:48:ARG:NH1	10:CJ:48:ARG:HB2	2.26	0.51
13:CM:86:ARG:NH1	13:CM:90:HIS:HD2	2.09	0.51
14:CN:55:SER:C	14:CN:57:SER:H	2.15	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:CQ:46:HIS:NE2	17:CQ:48:GLU:HG2	2.26	0.51
18:CR:32:ILE:CD1	18:CR:36:GLY:HA2	2.41	0.51
50:D2:23:ALA:O	50:D2:24:THR:CB	2.59	0.51
52:D4:7:VAL:CG2	52:D4:25:VAL:HG21	2.41	0.51
22:DA:1014:A:C2'	22:DA:1015:U:H5'	2.41	0.51
22:DA:1017:G:N2	22:DA:1146:C:C2	2.79	0.51
22:DA:1442:U:C2	22:DA:1443:U:C5	2.99	0.51
22:DA:1607:C:C4'	22:DA:1608:A:C8	2.92	0.51
22:DA:165:A:C5	22:DA:166:U:C5	2.99	0.51
22:DA:1673:G:C2'	22:DA:1674:G:C5'	2.84	0.51
22:DA:1709:U:H2'	22:DA:1710:G:C8	2.46	0.51
22:DA:1813:G:N3	24:DC:49:THR:CB	2.70	0.51
22:DA:1773:A:C2	22:DA:1978:A:C2	2.99	0.51
22:DA:2068:U:C5'	22:DA:2068:U:H6	2.21	0.51
22:DA:2227:A:H5''	22:DA:2228:G:OP2	2.11	0.51
22:DA:2077:A:C8	22:DA:2435:A:C4	2.99	0.51
22:DA:2437:G:O4'	22:DA:2598:A:C2	2.64	0.51
22:DA:718:A:C3'	22:DA:719:C:H5'	2.41	0.51
22:DA:773:U:H5''	22:DA:774:G:OP2	2.10	0.51
22:DA:786:C:H4'	22:DA:1780:A:N7	2.26	0.51
27:DF:108:PRO:O	27:DF:110:ILE:HG23	2.11	0.51
27:DF:42:ALA:HA	27:DF:48:LEU:HD11	1.92	0.51
28:DG:83:THR:CA	28:DG:84:LYS:HD3	2.41	0.51
36:DO:28:VAL:O	36:DO:28:VAL:HG13	2.10	0.51
36:DO:7:ARG:O	36:DO:8:ILE:C	2.48	0.51
41:DT:11:LEU:CD1	41:DT:46:ALA:HB1	2.41	0.51
41:DT:11:LEU:HD11	41:DT:46:ALA:CB	2.40	0.51
43:DV:26:PHE:HE2	43:DV:42:LEU:HD12	1.75	0.51
44:DW:31:LEU:C	44:DW:33:GLY:H	2.13	0.51
44:DW:37:VAL:O	44:DW:38:ARG:CB	2.59	0.51
1:AA:1033:G:H2'	1:AA:1034:G:C5'	2.41	0.51
1:AA:1284:C:C6	1:AA:1285:A:C8	2.99	0.51
1:AA:429:U:O4'	1:AA:430:A:H5''	2.11	0.51
1:AA:882:C:O2'	1:AA:883:C:H5'	2.11	0.51
1:AA:945:G:N2	1:AA:1334:G:H4'	2.25	0.51
2:AB:172:ILE:O	2:AB:175:ALA:HB3	2.11	0.51
2:AB:209:VAL:O	2:AB:211:LEU:N	2.44	0.51
5:AE:106:ALA:HB2	5:AE:124:ALA:HB3	1.93	0.51
5:AE:38:VAL:HG22	5:AE:66:ALA:HB1	1.92	0.51
9:AI:24:ASN:HB2	9:AI:26:LYS:HG2	1.93	0.51
1:AA:1367:C:H5''	10:AJ:62:ARG:NH1	2.26	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:124:LYS:HE2	11:AK:125:LYS:HA	1.93	0.51
13:AM:39:ALA:HB3	13:AM:42:VAL:HG13	1.92	0.51
13:AM:73:SER:HA	13:AM:76:ILE:HD12	1.92	0.51
1:AA:1014:A:H5''	19:AS:13:HIS:CG	2.46	0.51
19:AS:51:HIS:HA	19:AS:55:GLN:O	2.10	0.51
20:AT:27:MET:HE1	20:AT:57:VAL:CG2	2.41	0.51
49:B1:49:LYS:HG2	49:B1:50:GLU:N	2.26	0.51
49:B1:8:ILE:CG2	49:B1:9:LYS:N	2.74	0.51
22:BA:1430:G:H2'	22:BA:1431:A:H8	1.75	0.51
22:BA:398:C:H2'	22:BA:399:U:O5'	2.11	0.51
22:BA:548:G:H4'	22:BA:549:G:H5'	1.93	0.51
24:BC:142:ASN:HA	24:BC:153:LEU:O	2.11	0.51
24:BC:244:VAL:HG23	24:BC:245:THR:O	2.10	0.51
24:BC:90:ILE:HD12	24:BC:103:ILE:O	2.10	0.51
30:BI:32:VAL:HG13	30:BI:66:PHE:CE2	2.46	0.51
32:BK:21:CYS:N	32:BK:41:ILE:HD11	2.26	0.51
33:BL:96:LYS:HA	33:BL:101:ILE:HG22	1.93	0.51
34:BM:57:VAL:O	34:BM:58:LYS:HB2	2.11	0.51
39:BR:67:GLY:HA3	39:BR:93:PHE:CZ	2.47	0.51
41:BT:31:VAL:CA	41:BT:32:LEU:HD23	2.41	0.51
41:BT:32:LEU:N	41:BT:83:ALA:CB	2.70	0.51
43:BV:68:LYS:O	43:BV:69:GLU:C	2.49	0.51
45:BX:31:ASN:O	45:BX:51:SER:HA	2.11	0.51
1:CA:1150:A:O3'	10:CJ:43:PRO:HA	2.10	0.51
1:CA:1350:A:C2'	1:CA:1351:U:H5'	2.41	0.51
1:CA:1511:G:O2'	1:CA:1512:U:H5'	2.11	0.51
1:CA:153:C:H6	1:CA:153:C:O5'	1.94	0.51
1:CA:62:U:O2'	1:CA:63:C:H5'	2.10	0.51
1:CA:734:G:O2'	1:CA:735:C:C5'	2.57	0.51
4:CD:81:LEU:O	4:CD:83:GLY:N	2.41	0.51
5:CE:13:LYS:CA	5:CE:13:LYS:HE2	2.29	0.51
6:CF:42:TRP:HB2	6:CF:59:TYR:HB3	1.92	0.51
7:CG:116:ALA:HA	7:CG:120:ALA:CB	2.41	0.51
8:CH:86:LYS:O	8:CH:121:GLY:HA2	2.11	0.51
9:CI:45:MET:HE3	9:CI:48:ARG:HG3	1.93	0.51
12:CL:29:LYS:O	12:CL:80:LEU:HD12	2.10	0.51
14:CN:27:LYS:HB2	14:CN:45:LEU:HD22	1.93	0.51
16:CP:75:ILE:HA	16:CP:78:VAL:CG2	2.40	0.51
22:DA:1050:A:H2'	22:DA:1051:G:C8	2.46	0.51
22:DA:1183:U:H2'	22:DA:1184:U:H6	1.76	0.51
22:DA:1381:G:C3'	22:DA:1382:G:H5''	2.41	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1482:G:C6	22:DA:1483:G:N7	2.79	0.51
22:DA:1441:G:C4	22:DA:1551:A:H2	2.29	0.51
22:DA:1601:G:H2'	22:DA:1602:U:O4'	2.10	0.51
22:DA:1825:U:H2'	22:DA:1826:G:O4'	2.11	0.51
22:DA:2102:G:C5	22:DA:2103:C:C5	2.99	0.51
22:DA:217:A:O2'	22:DA:218:A:O5'	2.29	0.51
22:DA:2472:G:H1'	22:DA:2478:A:N6	2.26	0.51
22:DA:2893:A:H5''	22:DA:2894:G:C5'	2.41	0.51
22:DA:480:A:H3'	22:DA:481:G:H5''	1.93	0.51
22:DA:491:G:H2'	22:DA:492:A:N7	2.23	0.51
22:DA:50:U:OP1	22:DA:50:U:H6	1.94	0.51
22:DA:861:A:O2'	22:DA:862:G:O4'	2.24	0.51
22:DA:930:G:N3	22:DA:933:A:C2	2.79	0.51
23:DB:54:G:N2	27:DF:25:MET:HE2	2.25	0.51
23:DB:85:G:N2	23:DB:92:C:C2	2.79	0.51
24:DC:147:PRO:HA	24:DC:187:CYS:HB3	1.93	0.51
25:DD:42:ASN:O	25:DD:43:ASP:CB	2.58	0.51
22:DA:600:G:H5'	26:DE:27:LEU:HD13	1.92	0.51
28:DG:87:GLN:HA	28:DG:129:GLU:HA	1.92	0.51
29:DH:66:ASN:ND2	29:DH:137:GLU:HB3	2.26	0.51
29:DH:89:LYS:HA	29:DH:125:THR:HG23	1.92	0.51
31:DJ:3:THR:HG22	38:DQ:60:TRP:HE1	1.75	0.51
33:DL:17:LYS:HZ1	33:DL:19:LEU:HD22	1.74	0.51
34:DM:4:PRO:HD3	34:DM:68:PHE:CE2	2.43	0.51
41:DT:20:ALA:O	41:DT:31:VAL:HG22	2.10	0.51
41:DT:12:ARG:HB2	41:DT:33:LYS:HG2	1.92	0.51
1:AA:1152:A:C2	1:AA:1153:G:C5	2.99	0.50
1:AA:1324:A:C5	1:AA:1325:C:C5	2.99	0.50
1:AA:1486:G:H2'	1:AA:1487:G:O4'	2.11	0.50
1:AA:1504:G:H3'	1:AA:1505:G:H5'	1.93	0.50
1:AA:1533:C:O5'	1:AA:1533:C:H6	1.93	0.50
3:AC:142:ARG:HB3	3:AC:143:LEU:CD1	2.36	0.50
5:AE:144:GLU:HG2	5:AE:145:ASN:N	2.26	0.50
5:AE:80:LEU:HD22	5:AE:80:LEU:N	2.25	0.50
10:AJ:81:GLU:O	10:AJ:84:VAL:HG12	2.10	0.50
52:B4:7:VAL:HG23	52:B4:8:LYS:N	2.27	0.50
52:B4:9:LYS:O	52:B4:10:LEU:HD23	2.11	0.50
22:BA:1081:U:H2'	22:BA:1081:U:O2	2.11	0.50
22:BA:1157:G:H2'	22:BA:1158:C:H6	1.75	0.50
22:BA:1359:A:H2'	22:BA:1360:G:O5'	2.10	0.50
22:BA:1508:A:O2'	22:BA:1509:A:C8	2.62	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1820:U:OP1	24:BC:176:ARG:HG2	2.11	0.50
22:BA:1838:C:HO2'	22:BA:1898:U:H5	1.57	0.50
22:BA:1906:G:C2'	22:BA:1907:G:O5'	2.59	0.50
22:BA:2006:C:H6	22:BA:2006:C:O5'	1.94	0.50
22:BA:2013:A:H2'	22:BA:2014:A:H5'	1.93	0.50
22:BA:2197:U:O2'	22:BA:2198:A:P	2.69	0.50
22:BA:275:C:N4	22:BA:276:U:C6	2.79	0.50
22:BA:568:U:OP1	33:BL:36:LYS:HE3	2.12	0.50
24:BC:90:ILE:CG2	24:BC:102:TYR:HD1	2.21	0.50
24:BC:238:ASN:O	24:BC:239:PHE:HB2	2.11	0.50
25:BD:146:ILE:HB	25:BD:159:LYS:HD2	1.93	0.50
29:BH:99:ILE:CG2	29:BH:99:ILE:O	2.59	0.50
31:BJ:69:ARG:O	31:BJ:90:GLU:HG2	2.11	0.50
32:BK:20:MET:C	32:BK:41:ILE:CD1	2.79	0.50
40:BS:2:GLU:O	40:BS:3:THR:HG23	2.10	0.50
45:BX:67:LEU:HD22	45:BX:77:TYR:CG	2.46	0.50
1:CA:179:A:C2	1:CA:180:U:C2	2.99	0.50
1:CA:259:G:H2'	1:CA:260:G:O4'	2.11	0.50
1:CA:287:U:C2'	1:CA:288:A:H5'	2.41	0.50
1:CA:457:G:OP2	1:CA:457:G:C8	2.65	0.50
1:CA:563:A:N3	1:CA:563:A:C2'	2.72	0.50
1:CA:892:A:C5	1:CA:893:C:C4	2.99	0.50
2:CB:49:PHE:O	2:CB:53:LEU:CB	2.59	0.50
4:CD:100:VAL:O	4:CD:101:VAL:C	2.48	0.50
8:CH:29:SER:O	8:CH:30:LYS:C	2.49	0.50
1:CA:740:U:O4'	15:CO:41:HIS:HE1	1.94	0.50
16:CP:25:ARG:O	16:CP:26:ASN:ND2	2.44	0.50
17:CQ:62:GLU:HB2	17:CQ:72:TRP:CZ3	2.46	0.50
19:CS:43:MET:O	19:CS:61:VAL:HG11	2.11	0.50
22:DA:1102:C:H2'	22:DA:1103:A:H8	1.74	0.50
22:DA:1048:A:C5	22:DA:1111:A:C2	2.99	0.50
22:DA:1139:G:H2'	22:DA:1140:C:O5'	2.11	0.50
22:DA:1156:A:H5''	22:DA:1157:G:OP2	2.12	0.50
22:DA:1545:A:H2'	22:DA:1546:G:O4'	2.11	0.50
22:DA:1613:G:C2	22:DA:1617:C:N3	2.79	0.50
22:DA:1649:G:H2'	22:DA:1650:A:H8	1.74	0.50
22:DA:1666:G:H4'	32:DK:6:THR:HG23	1.92	0.50
22:DA:1738:G:O2'	22:DA:1739:A:C8	2.54	0.50
22:DA:201:C:H2'	22:DA:202:U:H6	1.76	0.50
22:DA:228:C:H5''	22:DA:229:C:C6	2.46	0.50
22:DA:247:G:C5	22:DA:249:C:HI'	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2808:G:HO2'	22:DA:2809:A:H8	1.59	0.50
22:DA:298:G:C2	22:DA:339:U:C5	2.99	0.50
22:DA:298:G:O5'	22:DA:298:G:H8	1.93	0.50
22:DA:654:A:H2'	22:DA:655:A:O5'	2.11	0.50
22:DA:806:C:C2	22:DA:807:U:C5	2.98	0.50
22:DA:831:G:O5'	22:DA:831:G:H8	1.93	0.50
22:DA:920:A:C6	22:DA:921:C:C4	2.99	0.50
22:DA:1566:A:C2	24:DC:212:TRP:HB2	2.46	0.50
22:DA:1797:G:H4'	24:DC:254:LYS:O	2.11	0.50
24:DC:52:HIS:HD2	24:DC:217:PRO:O	1.95	0.50
24:DC:76:VAL:O	24:DC:76:VAL:HG23	2.11	0.50
24:DC:89:ASN:O	24:DC:90:ILE:HG13	2.11	0.50
26:DE:149:ILE:HD13	26:DE:188:MET:SD	2.51	0.50
34:DM:71:LYS:HD3	34:DM:95:LEU:CD1	2.41	0.50
35:DN:24:MET:HG2	35:DN:44:LEU:CD1	2.29	0.50
35:DN:34:ILE:O	35:DN:112:TYR:HA	2.11	0.50
37:DP:102:ARG:O	37:DP:103:THR:CB	2.59	0.50
38:DQ:46:TYR:HD1	39:DR:74:ILE:HG23	1.75	0.50
39:DR:52:PRO:O	39:DR:53:PHE:CD2	2.65	0.50
1:AA:999:C:H2'	1:AA:1000:A:H8	1.76	0.50
1:AA:1197:A:H5'	1:AA:1197:A:H8	1.77	0.50
1:AA:1286:U:O2	1:AA:1286:U:H2'	2.10	0.50
1:AA:1314:C:C5	19:AS:5:LYS:HD3	2.47	0.50
1:AA:659:U:OP1	15:AO:4:THR:HG22	2.11	0.50
1:AA:687:A:N1	1:AA:704:A:C5	2.79	0.50
1:AA:767:A:H2'	1:AA:768:A:O4'	2.11	0.50
2:AB:15:PHE:CD1	2:AB:16:GLY:N	2.76	0.50
3:AC:152:VAL:CG2	3:AC:152:VAL:O	2.59	0.50
4:AD:109:THR:HG22	4:AD:112:GLU:HB2	1.92	0.50
4:AD:3:TYR:CE2	4:AD:5:GLY:O	2.65	0.50
5:AE:100:GLU:N	5:AE:121:ASN:HB2	2.26	0.50
11:AK:43:TRP:C	11:AK:43:TRP:CE3	2.85	0.50
15:AO:28:VAL:O	15:AO:31:LEU:HB2	2.12	0.50
16:AP:20:VAL:HG22	16:AP:32:PHE:HB2	1.92	0.50
18:AR:33:THR:CG2	18:AR:37:LYS:HB2	2.40	0.50
22:BA:1081:U:C6	22:BA:1081:U:OP2	2.64	0.50
22:BA:1500:G:O2'	22:BA:1501:G:H5'	2.11	0.50
22:BA:2273:A:H2'	22:BA:2274:A:C8	2.45	0.50
22:BA:301:G:C6	22:BA:317:G:C6	2.98	0.50
22:BA:324:A:N6	22:BA:339:U:O4'	2.44	0.50
22:BA:79:C:O2'	22:BA:346:A:H1'	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:119:VAL:HG12	24:BC:133:ASN:HD21	1.75	0.50
24:BC:246:PRO:HD2	24:BC:247:TRP:CZ3	2.45	0.50
26:BE:119:ILE:HD13	26:BE:119:ILE:H	1.76	0.50
28:BG:33:THR:H	28:BG:34:ARG:NH1	2.08	0.50
29:BH:9:VAL:O	29:BH:13:GLY:HA3	2.12	0.50
30:BI:6:ALA:HB3	30:BI:60:VAL:H	1.77	0.50
32:BK:103:VAL:O	32:BK:122:VAL:HB	2.12	0.50
32:BK:2:ILE:O	32:BK:3:GLN:O	2.30	0.50
35:BN:32:GLU:HB3	35:BN:115:LEU:HD12	1.94	0.50
1:CA:66:A:H61	1:CA:103:U:H3	1.59	0.50
1:CA:1224:U:C5'	1:CA:1225:A:OP2	2.57	0.50
1:CA:1250:A:H2'	1:CA:1251:A:O4'	2.11	0.50
1:CA:1365:G:C2	1:CA:1366:C:C2	2.99	0.50
1:CA:185:U:C4	1:CA:186:C:N4	2.79	0.50
1:CA:193:C:H1'	20:CT:54:GLN:HE21	1.72	0.50
1:CA:31:G:H5'	1:CA:306:A:N1	2.26	0.50
1:CA:696:A:H2'	1:CA:697:U:H6	1.77	0.50
5:CE:103:GLY:HA3	5:CE:120:HIS:O	2.10	0.50
7:CG:91:ARG:CG	7:CG:92:PRO:CD	2.75	0.50
17:CQ:59:GLU:O	17:CQ:75:VAL:HG22	2.10	0.50
21:CU:13:VAL:CG2	21:CU:15:LEU:HB3	2.41	0.50
21:CU:13:VAL:CG2	21:CU:15:LEU:HD23	2.41	0.50
48:D0:27:LEU:N	48:D0:27:LEU:HD22	2.26	0.50
22:DA:2815:C:O2'	48:D0:40:HIS:HB2	2.11	0.50
22:DA:1053:C:N4	22:DA:1054:A:N6	2.59	0.50
22:DA:1178:C:C2	22:DA:1179:G:C8	2.99	0.50
22:DA:1317:G:N2	22:DA:1336:A:C2	2.79	0.50
22:DA:1355:G:C2'	22:DA:1356:G:H5'	2.40	0.50
22:DA:1420:A:C8	22:DA:2211:A:N6	2.72	0.50
22:DA:1529:G:H2'	22:DA:1530:G:H8	1.76	0.50
22:DA:1649:G:C2	22:DA:2009:A:C2	2.99	0.50
22:DA:1767:G:C5	22:DA:1768:C:H5	2.28	0.50
22:DA:1819:A:H1'	22:DA:1821:A:C6	2.46	0.50
22:DA:1914:C:O2'	22:DA:1915:U:C5'	2.58	0.50
22:DA:2209:G:N1	22:DA:2216:G:C6	2.78	0.50
22:DA:2331:G:C2	22:DA:2385:C:N3	2.79	0.50
22:DA:2458:G:C4'	22:DA:2459:A:OP1	2.59	0.50
22:DA:2616:C:O2'	22:DA:2617:U:H6	1.94	0.50
22:DA:2635:A:H8	22:DA:2635:A:O5'	1.94	0.50
22:DA:2767:C:O2'	22:DA:2768:U:H5'	2.11	0.50
22:DA:2817:U:O2	22:DA:2836:U:H1'	2.10	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:291:G:C6	22:DA:292:U:C4	2.99	0.50
22:DA:363:G:O2'	22:DA:364:C:H5'	2.11	0.50
22:DA:397:U:O2'	22:DA:398:C:P	2.70	0.50
22:DA:560:C:C2'	22:DA:561:G:H5'	2.41	0.50
22:DA:597:G:H2'	22:DA:598:U:O4'	2.10	0.50
22:DA:615:U:N3	26:DE:35:TYR:CE1	2.79	0.50
22:DA:638:G:O2'	22:DA:639:U:C5'	2.59	0.50
22:DA:858:G:C4	22:DA:2268:A:C2	2.99	0.50
23:DB:64:G:C5	23:DB:65:U:C4	2.99	0.50
25:DD:169:ARG:O	25:DD:170:VAL:CG2	2.59	0.50
26:DE:170:ARG:CZ	26:DE:176:ASP:HB2	2.39	0.50
26:DE:58:LYS:HD3	26:DE:58:LYS:N	2.25	0.50
27:DF:92:GLY:O	27:DF:95:MET:HB3	2.10	0.50
28:DG:152:ARG:CD	28:DG:153:PRO:HD2	2.41	0.50
28:DG:8:VAL:HB	28:DG:49:LEU:HB3	1.93	0.50
29:DH:66:ASN:HD22	29:DH:137:GLU:HB3	1.77	0.50
33:DL:20:GLY:HA2	33:DL:28:GLY:HA2	1.93	0.50
35:DN:84:GLY:N	35:DN:85:PRO:CD	2.73	0.50
36:DO:6:ALA:O	36:DO:10:ARG:HG3	2.10	0.50
37:DP:45:VAL:CG1	37:DP:46:VAL:N	2.75	0.50
22:DA:1338:G:C4'	41:DT:18:GLU:OE2	2.52	0.50
42:DU:24:VAL:HG12	42:DU:24:VAL:O	2.11	0.50
1:AA:1048:G:OP1	14:AN:3:GLN:N	2.43	0.50
1:AA:1155:A:O2'	1:AA:1156:G:H5'	2.11	0.50
1:AA:1427:C:H2'	1:AA:1428:A:H5'	1.94	0.50
1:AA:1469:C:C3'	1:AA:1469:C:H6	2.23	0.50
1:AA:1494:G:C2	1:AA:1495:U:C6	2.99	0.50
1:AA:543:U:O2'	1:AA:544:G:H5'	2.12	0.50
1:AA:577:G:O2'	1:AA:578:C:H5'	2.11	0.50
3:AC:95:GLY:O	3:AC:96:VAL:HG13	2.12	0.50
6:AF:47:LEU:HB3	18:AR:65:SER:OG	2.11	0.50
9:AI:98:ARG:HG3	9:AI:103:VAL:HG11	1.92	0.50
10:AJ:32:THR:HG23	10:AJ:33:GLY:N	2.26	0.50
11:AK:92:ARG:HD3	21:AU:24:LYS:HE2	1.91	0.50
12:AL:74:GLN:O	12:AL:75:GLU:C	2.49	0.50
12:AL:3:VAL:O	12:AL:7:VAL:HG23	2.11	0.50
13:AM:68:LEU:HD11	13:AM:72:ILE:HD11	1.93	0.50
16:AP:48:GLU:OE1	16:AP:49:GLY:N	2.44	0.50
17:AQ:73:THR:HG22	17:AQ:74:LEU:H	1.76	0.50
20:AT:27:MET:HE1	20:AT:57:VAL:HG22	1.94	0.50
22:BA:1157:G:H2'	22:BA:1158:C:C6	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1644:C:O2	22:BA:1644:C:H2'	2.09	0.50
22:BA:182:A:O2'	22:BA:183:C:H5'	2.12	0.50
22:BA:1857:G:N3	22:BA:1884:G:C2	2.79	0.50
22:BA:2086:U:H2'	22:BA:2087:G:H8	1.74	0.50
22:BA:2720:U:C6	22:BA:2872:A:N6	2.79	0.50
22:BA:548:G:C8	22:BA:548:G:C3'	2.94	0.50
22:BA:570:G:H2'	22:BA:2030:A:N7	2.25	0.50
22:BA:978:G:O2'	22:BA:979:A:H5'	2.12	0.50
26:BE:37:ALA:C	26:BE:39:ALA:H	2.15	0.50
32:BK:21:CYS:CA	32:BK:41:ILE:HD12	2.28	0.50
34:BM:64:TRP:HB2	34:BM:104:GLU:HB2	1.94	0.50
34:BM:114:ARG:HA	34:BM:130:PHE:HE1	1.74	0.50
39:BR:18:GLN:O	39:BR:97:LYS:O	2.29	0.50
39:BR:90:ARG:O	39:BR:91:GLN:HB3	2.10	0.50
43:BV:5:ASN:N	43:BV:5:ASN:ND2	2.52	0.50
22:BA:2080:A:C5'	45:BX:18:SER:HB3	2.41	0.50
45:BX:19:HIS:C	45:BX:21:LEU:H	2.13	0.50
45:BX:70:LEU:HB3	45:BX:75:GLU:HB2	1.94	0.50
1:CA:1007:U:H2'	1:CA:1007:U:O2	2.10	0.50
1:CA:1040:U:C2'	1:CA:1041:G:H5'	2.41	0.50
1:CA:1225:A:H2'	1:CA:1225:A:N3	2.26	0.50
1:CA:1527:U:H2'	1:CA:1528:U:H6	1.76	0.50
1:CA:342:C:C2'	1:CA:343:U:H5'	2.41	0.50
1:CA:656:G:O2'	15:CO:27:GLN:NE2	2.43	0.50
1:CA:811:C:H4'	1:CA:900:A:N6	2.26	0.50
1:CA:846:G:C2'	1:CA:847:G:H5'	2.41	0.50
1:CA:864:A:H2	1:CA:917:G:N3	2.09	0.50
2:CB:90:PHE:CE2	2:CB:149:GLY:HA3	2.46	0.50
1:CA:831:A:OP1	2:CB:20:ARG:HG3	2.11	0.50
2:CB:93:HIS:HB2	2:CB:145:ASN:O	2.10	0.50
4:CD:58:GLN:HG3	4:CD:62:ARG:HH11	1.77	0.50
6:CF:43:GLY:O	6:CF:44:ARG:C	2.49	0.50
7:CG:11:ILE:HD13	7:CG:24:LYS:HB2	1.94	0.50
5:CE:155:LYS:HB3	8:CH:70:VAL:HG23	1.92	0.50
9:CI:6:TYR:HE2	9:CI:17:ARG:HA	1.76	0.50
17:CQ:22:VAL:CG2	17:CQ:58:VAL:HG21	2.41	0.50
18:CR:55:ALA:CA	18:CR:58:ILE:HG13	2.41	0.50
19:CS:54:ARG:HG2	19:CS:55:GLN:N	2.25	0.50
21:CU:23:GLU:O	21:CU:24:LYS:HB3	2.11	0.50
48:D0:42:ILE:CD1	48:D0:48:TYR:CG	2.94	0.50
50:D2:15:SER:O	50:D2:16:HIS:ND1	2.45	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1056:G:H1'	22:DA:1103:A:C6	2.46	0.50
22:DA:1393:A:H62	41:DT:19:LYS:CG	2.24	0.50
22:DA:1465:G:C5	22:DA:1466:U:C5	3.00	0.50
22:DA:1655:A:H5'	25:DD:118:PHE:CE1	2.45	0.50
22:DA:1671:U:O2	22:DA:1673:G:H8	1.92	0.50
22:DA:1798:U:C4	22:DA:1819:A:C2	2.98	0.50
22:DA:2029:G:C2	22:DA:2033:A:N7	2.80	0.50
22:DA:2531:A:C5'	28:DG:156:TYR:CE2	2.93	0.50
22:DA:404:A:H1'	22:DA:406:G:C5	2.47	0.50
22:DA:406:G:O2'	22:DA:407:G:C5'	2.60	0.50
22:DA:410:G:N2	22:DA:418:C:C2	2.80	0.50
22:DA:623:C:O2'	22:DA:624:C:H5'	2.12	0.50
22:DA:934:U:H2'	22:DA:935:C:C6	2.45	0.50
24:DC:103:ILE:HD12	24:DC:104:LEU:N	2.26	0.50
24:DC:32:LEU:HD23	24:DC:63:ILE:HG12	1.94	0.50
24:DC:23:LEU:HD12	24:DC:80:LEU:CB	2.42	0.50
26:DE:122:GLU:O	26:DE:122:GLU:HG2	2.11	0.50
26:DE:88:ARG:CB	26:DE:89:PRO:HD2	2.42	0.50
27:DF:45:ASP:CG	27:DF:47:LYS:HB2	2.32	0.50
28:DG:8:VAL:O	28:DG:9:VAL:HB	2.11	0.50
29:DH:64:ALA:C	29:DH:66:ASN:N	2.63	0.50
38:DQ:26:ALA:HA	38:DQ:29:ARG:HG3	1.92	0.50
38:DQ:47:ARG:O	38:DQ:47:ARG:HG2	2.02	0.50
39:DR:19:THR:HG22	39:DR:20:VAL:H	1.76	0.50
41:DT:64:LYS:N	41:DT:64:LYS:HD2	2.26	0.50
45:DX:58:ILE:CG1	45:DX:66:VAL:HG11	2.42	0.50
46:DY:21:LEU:HD23	46:DY:25:GLN:CD	2.31	0.50
22:DA:112:U:H5'	46:DY:58:ASN:ND2	2.26	0.50
1:AA:1170:A:H2'	1:AA:1171:A:O4'	2.12	0.50
1:AA:121:U:O2'	1:AA:122:G:OP1	2.28	0.50
1:AA:314:C:O2'	1:AA:315:A:H5'	2.11	0.50
1:AA:9:G:C2	1:AA:10:A:C8	2.99	0.50
3:AC:13:ILE:HD13	3:AC:13:ILE:N	2.26	0.50
3:AC:13:ILE:HG12	3:AC:14:VAL:HG22	1.92	0.50
4:AD:116:LEU:HB3	4:AD:122:ILE:HD12	1.93	0.50
6:AF:55:HIS:O	6:AF:56:LYS:CB	2.55	0.50
8:AH:77:VAL:O	8:AH:79:ARG:HG2	2.12	0.50
12:AL:46:SER:O	12:AL:47:ALA:HB2	2.11	0.50
17:AQ:80:LYS:HZ2	17:AQ:80:LYS:N	2.09	0.50
21:AU:33:ARG:CG	21:AU:34:ARG:H	2.24	0.50
22:BA:1240:U:H5''	22:BA:1240:U:C6	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1385:A:O2'	22:BA:1396:U:O2	2.27	0.50
22:BA:1275:A:O2'	22:BA:1645:G:N3	2.44	0.50
22:BA:1958:C:C2'	22:BA:1959:G:H5'	2.42	0.50
22:BA:2085:U:H2'	22:BA:2086:U:O5'	2.12	0.50
22:BA:2806:C:C2'	22:BA:2807:U:H5'	2.41	0.50
22:BA:28:A:C2	22:BA:513:A:C8	3.00	0.50
22:BA:763:G:O2'	22:BA:765:C:H5'	2.11	0.50
22:BA:830:G:H4'	22:BA:831:G:OP2	2.11	0.50
23:BB:19:C:O2'	23:BB:20:G:H5'	2.12	0.50
26:BE:10:SER:O	26:BE:11:ALA:HB3	2.12	0.50
27:BF:151:LEU:C	27:BF:151:LEU:CD1	2.80	0.50
27:BF:27:VAL:O	27:BF:27:VAL:CG1	2.59	0.50
29:BH:119:ASN:C	29:BH:121:VAL:H	2.14	0.50
30:BI:56:VAL:HG23	30:BI:69:VAL:O	2.10	0.50
32:BK:4:GLU:O	32:BK:5:GLN:HB2	2.11	0.50
36:BO:67:ASN:H	36:BO:70:ALA:HB3	1.76	0.50
37:BP:92:ARG:O	37:BP:92:ARG:HG3	2.11	0.50
38:BQ:86:SER:HB3	39:BR:51:VAL:CG1	2.40	0.50
39:BR:61:ALA:HB2	39:BR:98:ILE:HD13	1.93	0.50
41:BT:39:THR:CG2	41:BT:39:THR:O	2.59	0.50
42:BU:27:VAL:HG22	42:BU:28:LEU:N	2.27	0.50
46:BY:18:LEU:O	46:BY:22:LEU:HB3	2.09	0.50
47:BZ:34:THR:CG2	47:BZ:35:VAL:N	2.75	0.50
1:CA:1278:G:H4'	1:CA:1279:G:H5'	1.88	0.50
1:CA:178:C:O2'	1:CA:179:A:H5'	2.11	0.50
1:CA:115:G:C2	1:CA:289:G:N7	2.79	0.50
1:CA:414:A:O2'	1:CA:415:A:C4'	2.60	0.50
1:CA:444:G:N1	1:CA:445:G:C5	2.80	0.50
1:CA:676:A:H2'	1:CA:677:U:C6	2.46	0.50
1:CA:765:G:O6	1:CA:811:C:C5	2.65	0.50
1:CA:878:A:O2'	1:CA:879:C:H5'	2.12	0.50
4:CD:2:ARG:NH2	4:CD:114:ARG:HH11	2.08	0.50
4:CD:29:THR:CG2	4:CD:30:LYS:CD	2.83	0.50
4:CD:12:ARG:HG3	4:CD:33:ILE:HA	1.94	0.50
4:CD:77:GLU:C	4:CD:81:LEU:HD12	2.31	0.50
5:CE:38:VAL:HG11	5:CE:70:MET:SD	2.51	0.50
8:CH:33:VAL:C	8:CH:35:ILE:H	2.14	0.50
10:CJ:15:HIS:HE1	10:CJ:68:ARG:CD	2.20	0.50
12:CL:115:LYS:O	12:CL:116:TYR:CB	2.59	0.50
12:CL:120:ARG:HG2	12:CL:121:PRO:N	2.26	0.50
12:CL:19:ASN:N	12:CL:19:ASN:HD22	1.86	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:CL:74:GLN:NE2	12:CL:74:GLN:HA	2.27	0.50
16:CP:44:SER:HB2	16:CP:46:LYS:HD3	1.92	0.50
19:CS:14:LEU:C	19:CS:14:LEU:HD12	2.31	0.50
20:CT:61:ALA:C	20:CT:63:LYS:H	2.14	0.50
22:DA:1077:A:O2'	22:DA:1078:U:O5'	2.29	0.50
22:DA:1301:A:N7	22:DA:1303:G:C8	2.80	0.50
22:DA:1713:A:H1'	22:DA:1716:U:H5'	1.93	0.50
22:DA:1732:C:H3'	22:DA:1733:G:H5''	1.93	0.50
22:DA:2226:C:H2'	22:DA:2227:A:H8	1.76	0.50
22:DA:2259:U:C5	22:DA:2427:C:N4	2.80	0.50
22:DA:2264:C:C5	22:DA:2265:U:C5	2.99	0.50
22:DA:2798:U:C5'	22:DA:2800:A:H62	2.25	0.50
22:DA:306:U:H3	22:DA:312:G:H1	1.58	0.50
22:DA:319:G:N7	22:DA:320:A:N7	2.59	0.50
22:DA:352:A:C3'	22:DA:353:C:H4'	2.41	0.50
22:DA:404:A:N3	22:DA:406:G:C6	2.79	0.50
22:DA:462:C:H2'	22:DA:463:G:O4'	2.11	0.50
22:DA:527:C:O2'	22:DA:528:A:P	2.70	0.50
22:DA:533:G:O5'	38:DQ:23:TYR:CD2	2.63	0.50
22:DA:562:U:H2'	22:DA:572:A:O4'	2.10	0.50
22:DA:665:U:O2'	22:DA:666:A:H5'	2.12	0.50
22:DA:728:G:N3	22:DA:730:A:C8	2.80	0.50
29:DH:62:LEU:HD12	29:DH:63:ALA:H	1.76	0.50
30:DI:132:ALA:HB1	30:DI:137:LEU:HB2	1.94	0.50
31:DJ:86:GLN:O	31:DJ:87:ALA:HB2	2.11	0.50
33:DL:83:ALA:CB	33:DL:118:THR:HG22	2.41	0.50
33:DL:23:ILE:N	33:DL:23:ILE:CD1	2.74	0.50
34:DM:62:LYS:C	34:DM:63:ILE:HD12	2.31	0.50
36:DO:77:ALA:O	36:DO:81:ARG:HG3	2.11	0.50
41:DT:29:THR:N	41:DT:87:LEU:CB	2.64	0.50
44:DW:35:ILE:HG22	44:DW:36:ILE:N	2.26	0.50
1:AA:1032:G:H2'	1:AA:1033:G:H5'	1.94	0.50
1:AA:1437:A:O5'	1:AA:1437:A:H8	1.95	0.50
1:AA:264:C:H2'	1:AA:265:G:O4'	2.11	0.50
1:AA:284:C:H2'	1:AA:285:C:H6	1.76	0.50
1:AA:747:A:C5'	1:AA:748:G:OP2	2.59	0.50
1:AA:75:G:C5	1:AA:76:G:C8	2.98	0.50
1:AA:781:A:C3'	1:AA:782:A:H5'	2.42	0.50
1:AA:864:A:C3'	1:AA:865:A:C8	2.94	0.50
3:AC:33:ASP:O	3:AC:37:LYS:CB	2.60	0.50
4:AD:36:ALA:C	4:AD:38:GLY:H	2.14	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:38:ILE:HG13	13:AM:55:LEU:HD21	1.94	0.50
14:AN:11:LYS:HA	14:AN:14:ALA:HB3	1.92	0.50
16:AP:16:PHE:C	16:AP:16:PHE:CD1	2.84	0.50
17:AQ:56:ASP:OD2	17:AQ:80:LYS:HA	2.12	0.50
20:AT:83:ASN:HA	20:AT:86:ALA:OXT	2.11	0.50
51:B3:31:ILE:HG13	51:B3:31:ILE:O	2.12	0.50
22:BA:1106:G:C4	22:BA:1107:G:C8	3.00	0.50
22:BA:1383:A:H2'	22:BA:1384:A:C8	2.47	0.50
22:BA:1405:U:C2	22:BA:1406:U:C5	3.00	0.50
22:BA:1416:G:O2'	22:BA:1417:C:C5'	2.60	0.50
22:BA:1459:G:C5	22:BA:1461:C:C4	2.99	0.50
22:BA:1565:C:HO2'	22:BA:1566:A:P	2.34	0.50
22:BA:1590:A:H2'	22:BA:1591:A:H8	1.73	0.50
22:BA:570:G:C4	22:BA:2030:A:N7	2.78	0.50
22:BA:2134:A:O2'	22:BA:2135:A:H8	1.94	0.50
22:BA:2280:G:C2	22:BA:2281:A:C8	2.99	0.50
22:BA:395:U:O2'	22:BA:396:G:C8	2.62	0.50
24:BC:90:ILE:HG21	24:BC:102:TYR:CD1	2.47	0.50
25:BD:105:LYS:HE3	25:BD:176:ASP:HB3	1.92	0.50
25:BD:35:THR:CG2	25:BD:51:THR:HG22	2.42	0.50
26:BE:42:GLY:C	26:BE:43:THR:HG23	2.31	0.50
27:BF:153:ILE:HD12	27:BF:153:ILE:O	2.12	0.50
29:BH:89:LYS:CG	29:BH:90:LEU:H	2.00	0.50
32:BK:1:MET:CE	32:BK:32:TYR:CE1	2.95	0.50
33:BL:96:LYS:HD3	33:BL:103:ILE:HA	1.92	0.50
36:BO:116:GLN:O	36:BO:117:PHE:HB3	2.12	0.50
36:BO:55:GLU:O	36:BO:56:LYS:C	2.47	0.50
38:BQ:40:LYS:HB2	38:BQ:40:LYS:HZ3	1.75	0.50
39:BR:47:VAL:CG1	39:BR:54:VAL:HB	2.41	0.50
44:BW:9:THR:O	44:BW:10:ARG:O	2.30	0.50
1:CA:1092:A:C6	1:CA:1183:U:O2	2.64	0.50
1:CA:1231:G:H2'	1:CA:1232:U:H6	1.76	0.50
1:CA:159:G:C2	1:CA:161:A:OP2	2.65	0.50
1:CA:39:G:C4	1:CA:40:C:C5	2.99	0.50
1:CA:734:G:C2	1:CA:735:C:C2	2.99	0.50
1:CA:787:A:C2'	1:CA:788:U:H5'	2.42	0.50
1:CA:805:C:C2	1:CA:806:C:C5	3.00	0.50
1:CA:855:U:H2'	1:CA:856:C:H6	1.76	0.50
4:CD:176:LYS:O	4:CD:176:LYS:HD2	2.11	0.50
4:CD:76:LYS:O	4:CD:79:ALA:HB3	2.11	0.50
9:CI:53:LEU:HG	9:CI:96:GLU:CB	2.41	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:38:GLY:O	10:CJ:40:ILE:CD1	2.60	0.50
7:CG:148:LYS:HD2	11:CK:60:PHE:CD1	2.47	0.50
13:CM:81:ASP:CB	13:CM:82:LEU:HD12	2.42	0.50
15:CO:16:ARG:HB2	15:CO:23:SER:CB	2.42	0.50
16:CP:12:LYS:O	16:CP:13:LYS:HB2	2.11	0.50
19:CS:10:ILE:HG22	19:CS:14:LEU:HD11	1.93	0.50
22:DA:1082:U:H2'	22:DA:1083:U:H5'	1.93	0.50
22:DA:116:C:C2'	22:DA:117:G:H5'	2.42	0.50
22:DA:1280:G:H2'	22:DA:1281:G:H5'	1.92	0.50
22:DA:11:C:H2'	22:DA:12:U:H5'	1.93	0.50
22:DA:2009:A:O2'	22:DA:2010:G:H5'	2.12	0.50
22:DA:2369:A:C2'	22:DA:2370:G:H5'	2.42	0.50
22:DA:2522:U:H2'	22:DA:2523:G:H5'	1.94	0.50
22:DA:2673:G:C2	22:DA:2674:G:C8	3.00	0.50
22:DA:310:A:C4	22:DA:312:G:N7	2.79	0.50
22:DA:527:C:C5	22:DA:2779:U:C6	3.00	0.50
22:DA:54:G:N1	22:DA:117:G:C2	2.79	0.50
22:DA:563:A:N3	38:DQ:36:GLN:NE2	2.59	0.50
22:DA:644:A:C2'	22:DA:645:C:C5'	2.89	0.50
22:DA:701:G:H2'	22:DA:701:G:N3	2.25	0.50
22:DA:777:G:N2	22:DA:778:G:C4	2.80	0.50
22:DA:876:C:H2'	22:DA:877:A:OP1	2.10	0.50
27:DF:65:LEU:CD1	27:DF:67:THR:HG22	2.37	0.50
31:DJ:25:LEU:HB2	31:DJ:62:VAL:CG2	2.39	0.50
32:DK:25:LEU:H	32:DK:25:LEU:HD23	1.76	0.50
38:DQ:31:TYR:C	38:DQ:33:VAL:H	2.15	0.50
38:DQ:46:TYR:CE2	38:DQ:50:ARG:NH1	2.79	0.50
47:DZ:51:SER:HA	47:DZ:54:VAL:HG23	1.93	0.50
1:AA:1091:U:O2	1:AA:1093:A:C8	2.65	0.50
1:AA:1256:A:C4	1:AA:1258:G:C6	3.00	0.50
1:AA:1294:G:C6	1:AA:1295:U:C4	3.00	0.50
1:AA:131:A:H2'	1:AA:132:C:C6	2.46	0.50
1:AA:134:G:H2'	1:AA:135:C:C6	2.47	0.50
1:AA:1453:G:H2'	1:AA:1453:G:N3	2.27	0.50
1:AA:267:C:C5	1:AA:268:U:C5	3.00	0.50
1:AA:417:G:C5	1:AA:418:C:C4	3.00	0.50
1:AA:428:G:H1'	1:AA:430:A:C8	2.46	0.50
1:AA:587:G:N2	1:AA:755:G:C5	2.79	0.50
1:AA:647:C:C2'	1:AA:648:A:H5'	2.42	0.50
1:AA:886:G:H2'	1:AA:887:G:O4'	2.12	0.50
4:AD:18:LEU:HD21	4:AD:59:LYS:HG2	1.92	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:104:ILE:CG2	5:AE:104:ILE:O	2.53	0.50
1:AA:642:A:N7	8:AH:106:SER:HA	2.27	0.50
1:AA:1118:U:OP1	9:AI:10:ARG:HD2	2.11	0.50
16:AP:40:ASN:OD1	16:AP:42:ILE:HB	2.10	0.50
20:AT:53:MET:CE	20:AT:57:VAL:CG2	2.90	0.50
52:B4:3:VAL:C	52:B4:4:ARG:HG2	2.30	0.50
22:BA:1327:A:H2'	22:BA:1328:A:O5'	2.11	0.50
22:BA:1437:C:H2'	22:BA:1438:U:C6	2.45	0.50
22:BA:1712:U:N3	22:BA:1713:A:C5	2.79	0.50
22:BA:2840:C:H2'	22:BA:2841:C:H6	1.77	0.50
22:BA:2848:G:O2'	22:BA:2867:G:N2	2.34	0.50
24:BC:247:TRP:C	24:BC:249:VAL:H	2.15	0.50
25:BD:121:THR:HB	25:BD:127:PHE:CD1	2.46	0.50
25:BD:39:ASP:CG	25:BD:40:LEU:N	2.65	0.50
25:BD:38:LYS:O	25:BD:46:ARG:HA	2.12	0.50
29:BH:110:VAL:O	29:BH:111:ALA:HB2	2.11	0.50
30:BI:72:THR:HB	30:BI:112:LYS:NZ	2.26	0.50
31:BJ:44:TYR:C	31:BJ:45:THR:CG2	2.78	0.50
32:BK:52:VAL:HG23	32:BK:53:LYS:N	2.26	0.50
34:BM:5:LYS:NZ	34:BM:5:LYS:HB3	2.26	0.50
22:BA:871:U:OP1	34:BM:5:LYS:HG3	2.10	0.50
35:BN:44:LEU:HD11	35:BN:48:VAL:HG23	1.93	0.50
37:BP:53:GLY:O	37:BP:56:SER:OG	2.23	0.50
38:BQ:93:ILE:CG2	38:BQ:94:LEU:H	2.24	0.50
44:BW:51:GLY:H	44:BW:61:LYS:HZ2	1.58	0.50
22:BA:988:A:OP2	47:BZ:11:SER:HB3	2.11	0.50
1:CA:1133:G:C2	1:CA:1142:G:C5	2.99	0.50
1:CA:738:C:N3	1:CA:739:C:C5	2.79	0.50
1:CA:775:G:O2'	1:CA:776:G:H5'	2.12	0.50
1:CA:982:U:C1'	1:CA:983:A:N7	2.72	0.50
3:CC:110:LEU:HD21	3:CC:203:LYS:CD	2.15	0.50
3:CC:5:HIS:NE2	3:CC:183:TYR:HE2	2.09	0.50
6:CF:35:LYS:HB2	6:CF:37:HIS:HE1	1.77	0.50
7:CG:59:GLU:C	7:CG:61:PHE:H	2.15	0.50
8:CH:81:GLY:O	8:CH:82:LEU:HB2	2.11	0.50
9:CI:51:LEU:C	9:CI:53:LEU:H	2.14	0.50
11:CK:74:LYS:HD2	11:CK:104:PHE:HE1	1.76	0.50
12:CL:2:THR:CB	12:CL:5:GLN:HB2	2.30	0.50
13:CM:94:LEU:N	13:CM:94:LEU:HD12	2.27	0.50
1:CA:667:G:H4'	15:CO:50:HIS:CG	2.46	0.50
17:CQ:3:LYS:NZ	17:CQ:6:THR:CG2	2.60	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:15:LEU:HD23	19:CS:15:LEU:C	2.32	0.50
20:CT:59:ARG:C	20:CT:61:ALA:N	2.65	0.50
18:CR:72:ARG:HH21	21:CU:3:ILE:HD13	1.75	0.50
51:D3:28:LEU:HA	51:D3:32:LEU:HD21	1.93	0.50
52:D4:10:LEU:HD12	52:D4:33:HIS:ND1	2.26	0.50
52:D4:36:ARG:O	52:D4:37:GLN:HB3	2.10	0.50
22:DA:1135:C:H5''	22:DA:1135:C:H6	1.76	0.50
22:DA:1156:A:H4'	22:DA:1157:G:OP1	2.08	0.50
22:DA:840:C:H4'	22:DA:1192:G:O2'	2.11	0.50
22:DA:14:A:N6	22:DA:526:A:C4	2.79	0.50
22:DA:1768:C:H2'	22:DA:1768:C:O2	2.11	0.50
22:DA:206:U:H2'	22:DA:207:A:H8	1.76	0.50
22:DA:2298:A:O2'	22:DA:2299:U:C5'	2.60	0.50
22:DA:223:A:O2'	22:DA:408:G:N3	2.42	0.50
22:DA:424:G:C2	22:DA:425:G:C8	3.00	0.50
22:DA:638:G:O2'	22:DA:639:U:H5'	2.12	0.50
22:DA:947:A:H2'	22:DA:948:C:C6	2.47	0.50
23:DB:81:G:H2'	23:DB:82:U:H6	1.77	0.50
22:DA:1799:G:C8	24:DC:179:GLU:OE1	2.60	0.50
26:DE:108:ILE:O	26:DE:112:LEU:HB2	2.11	0.50
22:DA:321:U:N1	26:DE:159:LEU:HD21	2.27	0.50
22:DA:468:G:H5''	26:DE:55:SER:HB2	1.92	0.50
27:DF:103:ILE:H	27:DF:107:VAL:CG1	2.24	0.50
27:DF:43:ILE:HG12	27:DF:77:LYS:HD3	1.94	0.50
27:DF:8:LYS:HB2	27:DF:8:LYS:HZ3	1.74	0.50
29:DH:25:TYR:O	29:DH:29:PHE:HB3	2.11	0.50
31:DJ:45:THR:N	31:DJ:46:PRO:CD	2.69	0.50
32:DK:6:THR:O	32:DK:8:LEU:HD12	2.12	0.50
35:DN:21:PHE:O	35:DN:25:ALA:CB	2.59	0.50
37:DP:10:GLU:HG2	37:DP:10:GLU:O	2.10	0.50
22:DA:1249:U:H4'	38:DQ:3:VAL:HB	1.92	0.50
40:DS:55:ILE:H	40:DS:55:ILE:HD12	1.76	0.50
41:DT:29:THR:HB	41:DT:86:THR:CA	2.42	0.50
42:DU:81:ARG:H	42:DU:81:ARG:CD	2.25	0.50
43:DV:26:PHE:CE1	43:DV:86:LEU:CB	2.93	0.50
43:DV:9:ARG:HD2	43:DV:40:ILE:O	2.11	0.50
44:DW:45:HIS:HB3	44:DW:58:LEU:HD11	1.93	0.50
47:DZ:15:ARG:HD2	47:DZ:15:ARG:H	1.76	0.50
1:AA:99:C:H2'	1:AA:100:G:OP2	2.11	0.50
1:AA:103:U:H2'	1:AA:103:U:O2	2.11	0.50
1:AA:1202:U:N3	14:AN:81:ILE:HG21	2.26	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1346:A:O4'	1:AA:1348:U:C6	2.63	0.50
1:AA:1382:C:HO2'	1:AA:1383:C:H5'	1.74	0.50
1:AA:1387:G:C6	1:AA:1388:C:N4	2.80	0.50
1:AA:290:C:H2'	1:AA:291:U:C5'	2.42	0.50
1:AA:563:A:H1'	1:AA:566:G:O2'	2.12	0.50
1:AA:580:C:H2'	1:AA:581:G:O4'	2.11	0.50
1:AA:636:U:O2'	1:AA:637:C:H5'	2.12	0.50
1:AA:652:U:C4	1:AA:752:G:N3	2.79	0.50
1:AA:794:A:H2'	1:AA:795:C:C6	2.46	0.50
1:AA:857:C:H2'	1:AA:858:G:O4'	2.11	0.50
6:AF:42:TRP:HZ2	6:AF:61:LEU:CD2	2.25	0.50
1:AA:875:U:O2'	8:AH:14:ARG:NH1	2.45	0.50
8:AH:5:PRO:O	8:AH:8:ASP:HB3	2.12	0.50
17:AQ:16:MET:HE3	17:AQ:21:VAL:HG12	1.94	0.50
17:AQ:49:ASN:O	17:AQ:49:ASN:ND2	2.44	0.50
21:AU:36:PHE:HA	21:AU:39:LYS:HE2	1.94	0.50
22:BA:1074:G:H2'	22:BA:1075:C:C6	2.47	0.50
22:BA:1430:G:H2'	22:BA:1431:A:C8	2.47	0.50
22:BA:1497:U:H5''	22:BA:1498:C:OP2	2.11	0.50
22:BA:1604:C:H2'	22:BA:1605:C:C6	2.47	0.50
22:BA:2264:C:H41	44:BW:11:ASN:ND2	2.10	0.50
22:BA:2383:G:O2'	22:BA:2384:U:C5'	2.59	0.50
22:BA:2425:A:H5''	22:BA:2427:C:H5'	1.94	0.50
22:BA:2489:U:H2'	22:BA:2490:G:O5'	2.12	0.50
22:BA:2602:A:H5''	22:BA:2603:G:C5'	2.40	0.50
22:BA:33:C:H4'	22:BA:34:U:OP1	2.12	0.50
22:BA:912:C:H2'	22:BA:913:U:C6	2.47	0.50
23:BB:52:A:H4'	23:BB:53:A:OP1	2.11	0.50
22:BA:1568:G:H4'	24:BC:58:LYS:CG	2.42	0.50
25:BD:53:GLY:CA	25:BD:77:ARG:H	2.24	0.50
26:BE:12:LEU:O	26:BE:13:THR:HB	2.11	0.50
28:BG:137:LYS:O	28:BG:140:ILE:HD13	2.10	0.50
29:BH:143:ILE:HD12	29:BH:143:ILE:C	2.32	0.50
32:BK:51:LYS:HE3	32:BK:51:LYS:C	2.32	0.50
32:BK:120:PRO:HG3	37:BP:65:ASN:HD21	1.77	0.50
38:BQ:4:LYS:NZ	38:BQ:5:ARG:HA	2.26	0.50
39:BR:39:LEU:HB3	39:BR:49:ILE:HD13	1.93	0.50
40:BS:29:VAL:CG1	40:BS:30:SER:N	2.74	0.50
41:BT:2:ILE:HG13	41:BT:3:ARG:CZ	2.42	0.50
44:BW:22:VAL:O	44:BW:25:PHE:HB2	2.12	0.50
1:CA:1449:C:O2'	1:CA:1450:U:H5'	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:62:U:H4'	1:CA:378:G:H22	1.77	0.50
1:CA:511:C:H4'	4:CD:40:HIS:CD2	2.47	0.50
1:CA:623:C:H6	1:CA:623:C:O5'	1.95	0.50
1:CA:68:G:H5'	1:CA:171:A:H1'	1.94	0.50
1:CA:994:A:N6	1:CA:1216:A:C5'	2.75	0.50
2:CB:125:PHE:HD1	2:CB:137:THR:HG22	1.77	0.50
3:CC:26:LYS:HA	3:CC:26:LYS:CE	2.24	0.50
3:CC:84:GLU:C	3:CC:86:LEU:N	2.65	0.50
6:CF:81:ASN:O	6:CF:84:VAL:HG12	2.11	0.50
7:CG:11:ILE:CG2	7:CG:24:LYS:HZ1	2.25	0.50
7:CG:30:MET:HE1	7:CG:33:GLY:HA2	1.93	0.50
9:CI:49:GLN:HA	9:CI:52:GLU:HG3	1.93	0.50
1:CA:716:A:N3	11:CK:118:ASN:O	2.44	0.50
11:CK:22:ILE:CD1	11:CK:31:VAL:HG22	2.41	0.50
14:CN:47:LEU:CD1	14:CN:50:LEU:HD21	2.42	0.50
18:CR:31:TYR:CD2	18:CR:54:LEU:HD21	2.47	0.50
19:CS:38:THR:HB	19:CS:69:LYS:NZ	2.27	0.50
48:D0:32:THR:HG21	48:D0:47:TYR:CE2	2.47	0.50
22:DA:667:U:O2	51:D3:1:PRO:HB3	2.11	0.50
22:DA:118:A:O5'	22:DA:119:A:H5''	2.11	0.50
22:DA:1290:C:O2'	22:DA:1291:C:C6	2.63	0.50
22:DA:1342:A:C3'	22:DA:1343:G:H5''	2.41	0.50
22:DA:1341:G:H2'	22:DA:1397:U:O2	2.12	0.50
22:DA:1635:A:C2'	22:DA:1636:U:H5'	2.41	0.50
22:DA:164:C:H2'	22:DA:165:A:O4'	2.12	0.50
22:DA:1661:G:C4	22:DA:1662:U:C6	3.00	0.50
22:DA:1736:U:C2'	22:DA:1737:G:O5'	2.60	0.50
22:DA:1773:A:C8	22:DA:1829:A:C1'	2.95	0.50
22:DA:1869:G:C2	22:DA:1873:G:N1	2.79	0.50
22:DA:1907:G:N2	22:DA:1924:C:C2	2.79	0.50
22:DA:1975:G:C4	22:DA:1976:U:C6	3.00	0.50
22:DA:2093:G:N2	22:DA:2094:A:C5	2.79	0.50
22:DA:2472:G:H1'	22:DA:2478:A:H61	1.76	0.50
22:DA:2694:G:C4	22:DA:2695:U:C6	2.99	0.50
22:DA:2750:A:O2'	22:DA:2752:C:N4	2.40	0.50
22:DA:2845:U:H2'	22:DA:2846:G:O4'	2.12	0.50
22:DA:36:G:C2'	22:DA:37:C:H5'	2.42	0.50
22:DA:46:G:H2'	22:DA:46:G:N3	2.25	0.50
22:DA:830:G:C4	22:DA:2448:A:C5	2.99	0.50
23:DB:61:G:O2'	23:DB:62:C:H5'	2.12	0.50
25:DD:32:ASN:HA	25:DD:51:THR:O	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:162:ARG:C	26:DE:164:LEU:H	2.15	0.50
27:DF:103:ILE:HG21	27:DF:173:ASP:O	2.12	0.50
27:DF:111:ARG:NH1	27:DF:113:PHE:CE1	2.80	0.50
27:DF:32:LYS:HD2	27:DF:156:THR:HG21	1.93	0.50
27:DF:5:ASP:C	27:DF:7:TYR:N	2.65	0.50
28:DG:28:LYS:H	28:DG:79:THR:HG22	1.77	0.50
29:DH:31:VAL:CB	29:DH:32:PRO:CD	2.86	0.50
22:DA:2642:G:H5'	31:DJ:80:HIS:CE1	2.47	0.50
32:DK:66:LYS:HG2	32:DK:66:LYS:O	2.12	0.50
33:DL:58:TYR:O	51:D3:12:ARG:CZ	2.59	0.50
36:DO:12:THR:CG2	36:DO:16:ARG:HH11	2.24	0.50
37:DP:62:LYS:O	37:DP:63:ILE:CB	2.59	0.50
40:DS:8:ARG:HB3	40:DS:102:HIS:CE1	2.47	0.50
40:DS:7:HIS:CE1	40:DS:10:ALA:HA	2.47	0.50
40:DS:55:ILE:HG23	40:DS:66:ILE:HG21	1.92	0.50
41:DT:69:ARG:NE	41:DT:70:HIS:HD2	2.10	0.50
45:DX:19:HIS:C	45:DX:21:LEU:N	2.65	0.50
1:AA:1191:A:OP1	3:AC:3:LYS:HD3	2.11	0.50
1:AA:122:G:O2'	1:AA:123:U:H5'	2.12	0.50
1:AA:1269:A:C2	1:AA:1312:G:N3	2.80	0.50
1:AA:506:G:C6	1:AA:507:C:C4	3.00	0.50
1:AA:558:G:C4	1:AA:559:A:H2	2.25	0.50
1:AA:715:A:H8	1:AA:715:A:O5'	1.95	0.50
1:AA:953:G:C2'	1:AA:954:G:H5'	2.42	0.50
1:AA:959:A:H5''	1:AA:960:U:OP2	2.11	0.50
3:AC:194:VAL:O	3:AC:194:VAL:HG12	2.11	0.50
6:AF:3:HIS:H	6:AF:92:THR:HG21	1.71	0.50
1:AA:877:G:N3	8:AH:1:SER:N	2.59	0.50
10:AJ:17:LEU:HD21	10:AJ:96:VAL:CG2	2.41	0.50
13:AM:6:ILE:N	13:AM:6:ILE:HD12	2.27	0.50
14:AN:80:ARG:HG3	14:AN:81:ILE:N	2.27	0.50
10:AJ:53:ILE:HD11	14:AN:84:ARG:CZ	2.42	0.50
15:AO:86:LEU:C	15:AO:86:LEU:HD23	2.32	0.50
12:AL:7:VAL:HG22	17:AQ:30:HIS:HD2	1.77	0.50
22:BA:1055:G:N3	22:BA:1055:G:H2'	2.26	0.50
22:BA:1098:A:H3'	22:BA:1099:G:C8	2.47	0.50
22:BA:70:G:H2'	22:BA:113:U:O2'	2.12	0.50
22:BA:142:A:C2	22:BA:143:C:C2	3.00	0.50
22:BA:1656:C:H5''	25:BD:141:ARG:CB	2.41	0.50
22:BA:1936:A:H2'	22:BA:1945:G:O6	2.12	0.50
22:BA:215:G:H4'	22:BA:216:A:OP1	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2563:U:O2	22:BA:2565:A:H8	1.94	0.50
22:BA:2659:G:P	28:BG:157:LYS:HE3	2.51	0.50
22:BA:2728:U:O2'	22:BA:2729:G:H5''	2.11	0.50
22:BA:272:A:O2'	22:BA:273:G:P	2.69	0.50
22:BA:528:A:H8	22:BA:528:A:C3'	2.24	0.50
24:BC:103:ILE:HG23	24:BC:104:LEU:N	2.25	0.50
24:BC:257:ARG:NE	24:BC:269:ARG:HH22	2.06	0.50
25:BD:12:THR:CG2	25:BD:13:ARG:N	2.67	0.50
28:BG:84:LYS:CB	28:BG:132:LEU:H	2.25	0.50
30:BI:58:ILE:HG22	30:BI:60:VAL:HG23	1.92	0.50
33:BL:93:ASN:ND2	33:BL:94:THR:H	2.03	0.50
34:BM:36:VAL:HG12	34:BM:127:LYS:C	2.32	0.50
22:BA:956:G:H4'	34:BM:82:MET:HE1	1.94	0.50
37:BP:103:THR:HG23	37:BP:103:THR:O	2.11	0.50
38:BQ:40:LYS:HB2	38:BQ:40:LYS:NZ	2.27	0.50
41:BT:26:LYS:O	41:BT:27:SER:CB	2.59	0.50
43:BV:6:ALA:HB1	43:BV:40:ILE:CG2	2.41	0.50
44:BW:16:GLU:OE2	44:BW:16:GLU:CA	2.60	0.50
22:BA:855:G:C2	44:BW:23:LYS:HG2	2.46	0.50
44:BW:73:PRO:HG2	44:BW:76:ARG:HD2	1.91	0.50
41:BT:50:LEU:HD23	46:BY:26:PHE:CE1	2.46	0.50
46:BY:45:GLN:O	46:BY:46:VAL:CB	2.57	0.50
47:BZ:24:LEU:O	47:BZ:24:LEU:HG	2.11	0.50
1:CA:1050:G:O2'	1:CA:1051:C:C6	2.62	0.50
1:CA:1097:C:C2	1:CA:1098:C:C5	2.99	0.50
1:CA:1151:A:C5'	10:CJ:70:HIS:HE1	2.25	0.50
1:CA:1426:G:H2'	1:CA:1427:C:C6	2.47	0.50
1:CA:1471:U:H2'	1:CA:1472:U:H6	1.76	0.50
1:CA:177:G:C3'	1:CA:178:C:H5'	2.42	0.50
1:CA:17:U:H4'	1:CA:1080:A:O4'	2.12	0.50
1:CA:182:A:H2	1:CA:194:C:N4	2.10	0.50
1:CA:140:U:O2	1:CA:183:C:N4	2.45	0.50
1:CA:350:G:C6	1:CA:351:G:C6	3.00	0.50
1:CA:470:C:N3	1:CA:471:U:C5	2.80	0.50
1:CA:525:C:H2'	1:CA:525:C:O2	2.10	0.50
1:CA:642:A:C8	8:CH:106:SER:HA	2.47	0.50
1:CA:671:G:N2	1:CA:736:C:C2	2.80	0.50
1:CA:740:U:H5'	15:CO:41:HIS:ND1	2.27	0.50
1:CA:756:C:C2'	1:CA:757:U:C5'	2.90	0.50
1:CA:821:G:O2'	1:CA:822:U:O4'	2.27	0.50
1:CA:936:C:O2'	1:CA:937:A:C8	2.46	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:973:G:C6	1:CA:974:A:C6	3.00	0.50
2:CB:110:ILE:HA	2:CB:113:LEU:HB3	1.94	0.50
3:CC:46:LEU:HD11	3:CC:86:LEU:CD1	2.42	0.50
4:CD:204:SER:OG	5:CE:105:ILE:HD11	2.11	0.50
10:CJ:33:GLY:O	10:CJ:35:GLN:N	2.40	0.50
1:CA:796:C:OP1	11:CK:127:ARG:HB3	2.12	0.50
12:CL:85:ARG:O	12:CL:86:VAL:HG22	2.11	0.50
13:CM:107:THR:O	13:CM:107:THR:HG22	2.11	0.50
14:CN:54:SER:O	14:CN:55:SER:HB2	2.12	0.50
17:CQ:18:LYS:CD	17:CQ:48:GLU:OE2	2.55	0.50
19:CS:79:TYR:CD1	19:CS:80:ARG:N	2.78	0.50
22:DA:117:G:O4'	22:DA:126:A:C2	2.64	0.50
22:DA:1327:A:C2	22:DA:1328:A:H1'	2.47	0.50
22:DA:1408:G:H22	22:DA:1595:C:H1'	1.75	0.50
22:DA:1515:A:H5'	22:DA:1557:C:H5'	1.94	0.50
22:DA:118:A:C2	22:DA:178:G:H1'	2.40	0.50
22:DA:1858:A:H62	22:DA:1884:G:H21	1.60	0.50
22:DA:187:G:C2	22:DA:210:C:O2	2.65	0.50
22:DA:233:A:H2'	22:DA:234:U:C5	2.47	0.50
22:DA:2415:G:H4'	33:DL:66:PHE:CB	2.40	0.50
22:DA:2563:U:H1'	22:DA:2566:A:N6	2.27	0.50
22:DA:2721:A:C2	22:DA:2873:A:C5	2.99	0.50
22:DA:2738:A:H2'	22:DA:2739:U:O5'	2.12	0.50
22:DA:514:A:N3	22:DA:581:C:O2'	2.29	0.50
22:DA:559:G:C5	22:DA:560:C:C5	3.00	0.50
22:DA:5:A:C2	22:DA:2899:A:N3	2.80	0.50
22:DA:61:C:N3	22:DA:94:A:C2	2.80	0.50
22:DA:719:C:H6	22:DA:719:C:O5'	1.93	0.50
22:DA:786:C:O2'	22:DA:787:C:H5'	2.10	0.50
22:DA:936:A:C2	22:DA:937:C:C2	3.00	0.50
22:DA:972:A:N1	22:DA:973:A:N6	2.60	0.50
23:DB:68:C:HO2'	23:DB:69:G:H5''	1.77	0.50
24:DC:68:ARG:HH12	24:DC:115:ILE:CD1	2.25	0.50
25:DD:119:ALA:CB	25:DD:163:GLY:C	2.80	0.50
25:DD:56:LYS:HB3	25:DD:56:LYS:HZ3	1.77	0.50
26:DE:52:VAL:CG1	26:DE:74:LYS:HD3	2.41	0.50
35:DN:28:LEU:CD1	35:DN:48:VAL:HG11	2.41	0.50
37:DP:78:PRO:HG2	37:DP:79:VAL:N	2.26	0.50
38:DQ:79:ILE:HA	38:DQ:82:LEU:CD1	2.34	0.50
39:DR:39:LEU:HB2	39:DR:49:ILE:CD1	2.42	0.50
42:DU:86:PHE:CG	42:DU:87:GLU:N	2.80	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:DZ:52:PHE:CD2	47:DZ:53:MET:HG2	2.47	0.50
1:AA:1052:U:C5'	1:AA:1053:G:OP2	2.60	0.50
1:AA:1083:U:C5'	1:AA:1086:U:H5	2.20	0.50
1:AA:1134:G:N1	1:AA:1141:C:C4	2.80	0.50
1:AA:1143:G:N3	1:AA:1144:G:C8	2.80	0.50
1:AA:27:G:C5	1:AA:557:G:C2	3.00	0.50
1:AA:580:C:O2'	1:AA:581:G:H5'	2.12	0.50
1:AA:596:A:C6	1:AA:645:G:C2	3.00	0.50
1:AA:908:A:C2	1:AA:909:A:C4	3.00	0.50
2:AB:79:VAL:O	2:AB:83:ALA:HB3	2.11	0.50
3:AC:156:LEU:N	3:AC:156:LEU:CD1	2.75	0.50
4:AD:52:VAL:HG22	4:AD:53:GLN:N	2.27	0.50
1:AA:1123:U:O3'	10:AJ:38:GLY:HA3	2.12	0.50
19:AS:62:THR:CG2	19:AS:63:ASP:N	2.75	0.50
20:AT:60:GLN:HE21	20:AT:65:LEU:CD2	2.25	0.50
51:B3:28:LEU:HD11	51:B3:40:LYS:HB3	1.93	0.50
22:BA:1206:G:O2'	22:BA:1207:C:H5'	2.11	0.50
22:BA:1247:A:C4	22:BA:1249:U:C5	2.99	0.50
22:BA:1356:G:C2	22:BA:1357:C:C2	3.00	0.50
22:BA:151:C:H2'	22:BA:152:A:C8	2.47	0.50
22:BA:1850:G:C5	22:BA:1851:U:C4	3.00	0.50
22:BA:1856:U:O4	22:BA:1857:G:N1	2.45	0.50
22:BA:2077:A:O2'	22:BA:2078:C:H5'	2.11	0.50
22:BA:2134:A:N6	22:BA:2157:G:C6	2.80	0.50
22:BA:2495:G:O2'	22:BA:2496:C:H5'	2.12	0.50
22:BA:2704:C:O2	22:BA:2704:C:H2'	2.11	0.50
22:BA:273:G:O2'	22:BA:274:C:O5'	2.30	0.50
22:BA:2824:C:H2'	22:BA:2825:G:O5'	2.12	0.50
22:BA:511:U:H5	22:BA:512:G:C5	2.28	0.50
22:BA:571:U:C4	22:BA:2030:A:N1	2.80	0.50
23:BB:92:C:H2'	23:BB:93:C:O5'	2.11	0.50
26:BE:5:LEU:O	26:BE:6:LYS:C	2.50	0.50
26:BE:91:ASP:C	26:BE:91:ASP:OD2	2.49	0.50
28:BG:36:LEU:N	28:BG:36:LEU:CD2	2.74	0.50
30:BI:21:PRO:HB2	30:BI:22:PRO:HD3	1.94	0.50
37:BP:92:ARG:HH11	37:BP:92:ARG:CB	2.25	0.50
39:BR:49:ILE:CD1	39:BR:53:PHE:H	2.24	0.50
41:BT:29:THR:HG22	41:BT:86:THR:CG2	2.20	0.50
43:BV:29:ILE:HG22	43:BV:90:ASP:HA	1.92	0.50
44:BW:49:ASN:O	44:BW:49:ASN:CG	2.50	0.50
1:CA:1157:A:C6	1:CA:1180:A:C6	2.99	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1442:G:H2'	1:CA:1443:C:C6	2.47	0.50
1:CA:378:G:C2	1:CA:386:C:O2	2.65	0.50
1:CA:580:C:H2'	1:CA:581:G:C8	2.47	0.50
1:CA:59:A:H2'	1:CA:59:A:N3	2.26	0.50
1:CA:663:A:N1	1:CA:743:A:C2	2.80	0.50
1:CA:674:G:C4'	18:CR:69:TYR:CE1	2.94	0.50
1:CA:821:G:C4	1:CA:822:U:C5	2.99	0.50
1:CA:944:G:H2'	1:CA:945:G:H5''	1.93	0.50
2:CB:159:ALA:HA	2:CB:180:ILE:CG2	2.40	0.50
2:CB:66:ILE:O	2:CB:88:GLN:HB2	2.11	0.50
3:CC:17:TRP:CZ2	14:CN:94:GLY:O	2.65	0.50
4:CD:128:VAL:O	4:CD:128:VAL:HG22	2.11	0.50
4:CD:191:SER:O	4:CD:192:ALA:HB2	2.08	0.50
7:CG:12:LEU:H	7:CG:12:LEU:CD1	2.25	0.50
8:CH:58:LEU:HD23	8:CH:58:LEU:C	2.32	0.50
12:CL:106:VAL:CG1	12:CL:109:ARG:HG2	2.42	0.50
1:CA:502:A:OP1	12:CL:114:SER:HB2	2.12	0.50
13:CM:100:ARG:NH1	13:CM:102:LYS:HE3	2.27	0.50
13:CM:18:LEU:H	13:CM:18:LEU:CD1	2.25	0.50
13:CM:46:GLU:O	13:CM:47:LEU:HB2	2.12	0.50
13:CM:92:ARG:HD2	19:CS:79:TYR:OH	2.11	0.50
1:CA:1203:C:OP1	14:CN:1:ALA:HB3	2.11	0.50
15:CO:63:ARG:HH22	22:DA:715:A:C5'	2.24	0.50
17:CQ:68:LYS:O	17:CQ:69:THR:CB	2.59	0.50
18:CR:72:ARG:HG3	18:CR:73:HIS:CE1	2.47	0.50
22:DA:1091:G:O2'	22:DA:1092:C:H5'	2.12	0.50
22:DA:1206:G:C6	22:DA:1207:C:C4	3.00	0.50
22:DA:1252:G:H4'	22:DA:1253:A:OP1	2.10	0.50
22:DA:146:A:C2	22:DA:147:C:C2	3.00	0.50
22:DA:167:A:H2'	22:DA:168:G:O4'	2.12	0.50
22:DA:1767:G:C4	22:DA:1768:C:H5	2.30	0.50
22:DA:1993:U:O2'	22:DA:1994:C:H5'	2.12	0.50
22:DA:2136:G:H2'	22:DA:2137:U:C6	2.47	0.50
22:DA:2185:U:H2'	22:DA:2186:G:C8	2.46	0.50
22:DA:2187:U:H6	22:DA:2187:U:O5'	1.94	0.50
22:DA:2190:G:C5'	22:DA:2191:A:OP2	2.53	0.50
22:DA:2311:A:H3'	22:DA:2312:U:C6	2.35	0.50
22:DA:2469:A:C6	22:DA:2482:A:C8	3.00	0.50
22:DA:305:C:H1'	22:DA:313:G:N2	2.26	0.50
22:DA:529:A:C5	22:DA:2023:C:C4	3.00	0.50
22:DA:672:C:C3'	22:DA:672:C:C6	2.95	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:833:A:H2'	22:DA:834:G:H8	1.76	0.50
22:DA:92:U:H2'	22:DA:93:G:O4'	2.11	0.50
22:DA:9:G:C5	22:DA:2629:U:C5	2.99	0.50
23:DB:42:C:H41	27:DF:87:LYS:HZ3	1.57	0.50
24:DC:188:ARG:HG2	24:DC:188:ARG:HH21	1.77	0.50
25:DD:111:GLY:HA3	25:DD:194:PRO:HG2	1.94	0.50
29:DH:37:VAL:HG23	29:DH:38:PRO:HD2	1.94	0.50
31:DJ:122:LEU:C	31:DJ:123:LYS:HD2	2.32	0.50
31:DJ:142:ILE:N	31:DJ:142:ILE:HD12	2.26	0.50
22:DA:1665:A:H1'	32:DK:1:MET:CG	2.41	0.50
32:DK:34:GLY:H	32:DK:37:ASP:HB2	1.76	0.50
33:DL:85:VAL:O	33:DL:86:GLU:HB2	2.12	0.50
37:DP:102:ARG:HG3	37:DP:107:ALA:HA	1.93	0.50
37:DP:13:LYS:HD3	37:DP:76:HIS:HA	1.94	0.50
38:DQ:46:TYR:HA	38:DQ:49:ARG:HE	1.77	0.50
39:DR:75:VAL:HG12	39:DR:85:LYS:O	2.11	0.50
42:DU:33:VAL:O	42:DU:34:ILE:CG1	2.57	0.50
43:DV:23:ALA:O	43:DV:24:ASN:HB2	2.12	0.50
1:AA:1314:C:C2'	1:AA:1315:U:H5'	2.41	0.49
1:AA:19:A:N3	1:AA:917:G:C2	2.80	0.49
1:AA:355:C:O4'	1:AA:388:G:O2'	2.30	0.49
1:AA:462:G:C8	1:AA:463:U:C5	2.99	0.49
1:AA:463:U:O2'	1:AA:464:U:H5'	2.10	0.49
1:AA:49:U:H5	1:AA:365:U:O4	1.95	0.49
1:AA:597:G:H2'	1:AA:597:G:N3	2.27	0.49
1:AA:637:C:O2'	1:AA:638:U:H5'	2.11	0.49
1:AA:6:G:O2'	1:AA:7:A:H8	1.94	0.49
1:AA:92:U:H2'	1:AA:93:U:C6	2.47	0.49
3:AC:156:LEU:CD1	3:AC:156:LEU:H	2.26	0.49
3:AC:166:TRP:N	3:AC:166:TRP:HE3	1.98	0.49
3:AC:137:VAL:HG11	3:AC:169:GLU:HB3	1.93	0.49
1:AA:619:U:C2	4:AD:131:ILE:HD12	2.47	0.49
7:AG:27:ASN:OD1	7:AG:35:LYS:NZ	2.44	0.49
7:AG:80:GLY:C	7:AG:82:SER:H	2.14	0.49
9:AI:21:LYS:HD2	9:AI:21:LYS:C	2.32	0.49
9:AI:56:MET:HE2	9:AI:57:VAL:H	1.77	0.49
10:AJ:66:GLU:HB3	14:AN:98:ALA:HB2	1.93	0.49
17:AQ:18:LYS:HB3	17:AQ:47:ASP:HB2	1.93	0.49
17:AQ:54:ILE:C	17:AQ:54:ILE:CD1	2.77	0.49
20:AT:29:THR:HA	20:AT:32:LYS:CG	2.41	0.49
49:B1:8:ILE:CD1	49:B1:24:LYS:HG2	2.33	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1535:A:H4'	22:BA:1536:C:OP2	2.08	0.49
22:BA:1644:C:O2	22:BA:1644:C:C2'	2.60	0.49
22:BA:2435:A:C2'	22:BA:2436:G:O5'	2.60	0.49
22:BA:2680:U:P	25:BD:114:LYS:CE	2.90	0.49
22:BA:357:C:C6	22:BA:358:U:C5	3.00	0.49
22:BA:729:G:H2'	22:BA:1775:U:H1'	1.94	0.49
22:BA:847:U:O2'	22:BA:848:C:H5'	2.12	0.49
22:BA:947:A:O2'	22:BA:984:A:H2	1.95	0.49
23:BB:46:A:C5	23:BB:47:C:C5	3.00	0.49
24:BC:141:HIS:HE2	24:BC:193:GLU:C	2.15	0.49
24:BC:247:TRP:O	24:BC:249:VAL:N	2.44	0.49
24:BC:252:LYS:HZ2	24:BC:252:LYS:HA	1.77	0.49
25:BD:120:GLY:CA	25:BD:162:ALA:HB2	2.34	0.49
26:BE:127:GLU:N	26:BE:127:GLU:OE1	2.44	0.49
27:BF:174:PHE:CD1	27:BF:176:PHE:CE1	3.00	0.49
29:BH:31:VAL:CG1	29:BH:36:ALA:O	2.60	0.49
33:BL:93:ASN:O	33:BL:94:THR:HG22	2.11	0.49
35:BN:12:ARG:HG3	35:BN:12:ARG:NH2	2.16	0.49
36:BO:3:LYS:CG	36:BO:4:LYS:N	2.75	0.49
37:BP:50:ARG:HG2	37:BP:57:ALA:H	0.40	0.49
38:BQ:91:ARG:HD3	39:BR:11:GLN:CG	2.41	0.49
42:BU:80:ASP:O	42:BU:81:ARG:HB2	2.11	0.49
1:CA:865:A:H5'	1:CA:1078:U:O4	2.12	0.49
1:CA:1244:G:C5	1:CA:1245:C:C4	3.00	0.49
1:CA:309:A:H5''	16:CP:29:ASN:O	2.12	0.49
1:CA:370:C:O2'	1:CA:371:A:H5'	2.12	0.49
1:CA:628:G:C2'	1:CA:629:A:H5'	2.42	0.49
1:CA:71:A:N3	1:CA:72:A:C8	2.80	0.49
1:CA:815:A:H4'	1:CA:817:C:C4	2.47	0.49
1:CA:855:U:OP2	1:CA:871:U:N3	2.44	0.49
1:CA:8:A:H62	4:CD:205:LYS:HB2	1.76	0.49
2:CB:117:GLU:OE2	2:CB:151:LYS:HD3	2.12	0.49
3:CC:183:TYR:CD1	3:CC:200:TRP:CE2	3.00	0.49
4:CD:3:TYR:CE2	4:CD:5:GLY:N	2.80	0.49
4:CD:57:LYS:CB	4:CD:199:ILE:HB	2.39	0.49
11:CK:57:SER:O	11:CK:90:PRO:HB3	2.12	0.49
11:CK:74:LYS:CA	11:CK:78:ILE:HD11	2.37	0.49
13:CM:105:ALA:HB1	13:CM:109:LYS:HD3	1.94	0.49
14:CN:94:GLY:O	14:CN:95:LEU:C	2.50	0.49
16:CP:57:ILE:O	16:CP:61:VAL:HG23	2.11	0.49
49:D1:3:GLY:O	49:D1:4:ILE:HB	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2349:G:OP1	51:D3:44:ARG:NH2	2.45	0.49
22:DA:1021:A:HO2'	22:DA:1022:G:P	2.35	0.49
22:DA:1080:A:C2	22:DA:1081:U:C4	3.00	0.49
22:DA:112:U:C4	22:DA:113:U:C2	3.00	0.49
22:DA:1223:G:N2	22:DA:1225:G:H3'	2.27	0.49
22:DA:504:A:C2	22:DA:1234:U:H4'	2.47	0.49
22:DA:1338:G:C2'	22:DA:1339:G:H5'	2.42	0.49
22:DA:1471:G:N1	22:DA:1521:G:H1'	2.27	0.49
22:DA:1654:A:C2	22:DA:1655:A:C8	2.99	0.49
22:DA:1765:U:H2'	22:DA:1766:G:C5'	2.42	0.49
22:DA:180:G:P	50:D2:35:ARG:HH12	2.35	0.49
22:DA:1863:G:H2'	22:DA:1864:U:O4'	2.12	0.49
22:DA:1884:G:H8	22:DA:1884:G:OP2	1.95	0.49
22:DA:2061:G:C4	22:DA:2063:C:N4	2.80	0.49
22:DA:2092:U:H5	22:DA:2226:C:OP2	1.95	0.49
22:DA:211:C:H2'	22:DA:212:G:O4'	2.12	0.49
22:DA:216:A:C4	22:DA:217:A:N7	2.80	0.49
22:DA:2306:C:C5	22:DA:2307:G:N2	2.80	0.49
22:DA:2371:G:C2	22:DA:2372:U:C5	3.00	0.49
22:DA:2561:U:C2'	22:DA:2562:U:O5'	2.60	0.49
22:DA:2823:A:C5	22:DA:2824:C:C6	3.00	0.49
22:DA:426:C:HO2'	22:DA:427:U:H5'	1.77	0.49
22:DA:532:A:H2'	38:DQ:27:ARG:NH1	2.26	0.49
22:DA:759:G:O5'	22:DA:759:G:H8	1.94	0.49
22:DA:831:G:O3'	33:DL:38:GLN:N	2.38	0.49
23:DB:30:C:O2	23:DB:30:C:H2'	2.11	0.49
31:DJ:120:ARG:O	31:DJ:123:LYS:NZ	2.44	0.49
31:DJ:44:TYR:HB2	38:DQ:63:ARG:NE	2.27	0.49
35:DN:114:GLU:HG3	35:DN:118:ARG:HD3	1.94	0.49
35:DN:86:ARG:HB3	35:DN:117:ASP:OD1	2.12	0.49
22:DA:2722:G:H4'	35:DN:3:HIS:O	2.11	0.49
36:DO:53:THR:HB	36:DO:65:THR:HG22	1.93	0.49
37:DP:31:VAL:HG12	37:DP:38:ARG:HG2	1.94	0.49
38:DQ:40:LYS:CD	38:DQ:44:TYR:CE2	2.90	0.49
1:AA:1079:G:N2	1:AA:1080:A:C2	2.80	0.49
1:AA:1198:G:H2'	1:AA:1199:U:H6	1.77	0.49
1:AA:1202:U:C5	1:AA:1203:C:C5	3.00	0.49
1:AA:1437:A:O2'	1:AA:1438:G:H5'	2.11	0.49
1:AA:224:U:C2'	1:AA:225:C:H5'	2.42	0.49
1:AA:429:U:H3'	4:AD:8:LEU:CD2	2.40	0.49
5:AE:76:ASN:CB	5:AE:81:GLN:HG3	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:146:ALA:C	7:AG:148:LYS:N	2.64	0.49
7:AG:26:VAL:HG23	7:AG:27:ASN:H	1.76	0.49
8:AH:15:ASN:O	8:AH:18:ALA:HB3	2.12	0.49
8:AH:85:TYR:O	8:AH:86:LYS:HD2	2.11	0.49
9:AI:26:LYS:C	9:AI:27:ILE:HD12	2.30	0.49
12:AL:113:ARG:HD2	12:AL:118:VAL:HG11	1.94	0.49
20:AT:33:LYS:CA	20:AT:33:LYS:CE	2.90	0.49
22:BA:1416:G:O2'	22:BA:1417:C:C6	2.59	0.49
22:BA:153:U:C2'	22:BA:154:U:H5'	2.41	0.49
22:BA:1643:G:C2'	22:BA:1644:C:O5'	2.60	0.49
22:BA:1739:A:H5''	22:BA:1739:A:C8	2.47	0.49
22:BA:1754:A:C6	22:BA:1755:A:C6	3.00	0.49
22:BA:1945:G:O2'	22:BA:1946:U:H5'	2.12	0.49
22:BA:1131:G:O2'	22:BA:2026:U:H5'	2.11	0.49
22:BA:2149:U:O2'	22:BA:2150:C:O5'	2.30	0.49
22:BA:238:C:C6	22:BA:238:C:H3'	2.46	0.49
22:BA:2575:C:H2'	22:BA:2578:G:O6	2.12	0.49
22:BA:2756:U:H4'	22:BA:2757:A:O5'	2.12	0.49
22:BA:31:C:H4'	22:BA:1238:G:H4'	1.94	0.49
22:BA:451:U:C2	22:BA:453:A:N7	2.80	0.49
22:BA:864:G:C6	22:BA:865:C:N4	2.80	0.49
22:BA:987:C:H2'	22:BA:988:A:H5'	1.94	0.49
24:BC:182:LYS:C	24:BC:183:VAL:HG23	2.33	0.49
22:BA:616:A:H4'	26:BE:101:TYR:CE2	2.47	0.49
26:BE:98:LYS:HE2	56:BE:301:HOH:O	2.11	0.49
28:BG:94:ARG:HG3	28:BG:127:GLN:OE1	2.12	0.49
32:BK:113:MET:O	32:BK:116:ILE:CD1	2.60	0.49
35:BN:65:LEU:O	35:BN:65:LEU:HD12	2.13	0.49
36:BO:81:ARG:O	36:BO:84:GLU:HB3	2.13	0.49
38:BQ:97:ILE:CD1	38:BQ:105:PHE:HB2	2.42	0.49
38:BQ:91:ARG:HD3	39:BR:11:GLN:HG3	1.94	0.49
39:BR:64:VAL:O	39:BR:65:ALA:HB3	2.12	0.49
44:BW:24:ARG:HD2	44:BW:25:PHE:CA	2.42	0.49
1:CA:1082:A:P	5:CE:22:LYS:HE3	2.52	0.49
1:CA:72:A:C5	1:CA:73:C:C4	3.00	0.49
1:CA:770:C:O2'	1:CA:899:C:N3	2.45	0.49
1:CA:961:U:O4	1:CA:983:A:C6	2.65	0.49
2:CB:159:ALA:C	2:CB:160:LEU:HD12	2.32	0.49
3:CC:122:GLN:O	3:CC:127:VAL:HG13	2.12	0.49
6:CF:9:MET:O	6:CF:85:ILE:HG13	2.11	0.49
7:CG:37:THR:O	7:CG:41:ILE:HG13	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:CH:12:ARG:HD3	8:CH:26:MET:HE2	1.95	0.49
8:CH:78:SER:HB2	8:CH:124:ILE:O	2.12	0.49
8:CH:92:PRO:HG3	8:CH:127:TYR:OH	2.12	0.49
9:CI:94:ARG:HH11	9:CI:94:ARG:HG3	1.77	0.49
12:CL:2:THR:HG22	12:CL:4:ASN:H	1.77	0.49
10:CJ:53:ILE:HD11	14:CN:84:ARG:CZ	2.42	0.49
18:CR:64:LEU:O	18:CR:66:LEU:HD23	2.12	0.49
1:CA:259:G:P	20:CT:35:TYR:HH	2.35	0.49
52:D4:7:VAL:HG21	52:D4:25:VAL:HG23	1.93	0.49
22:DA:1059:G:N3	30:DI:131:THR:HG22	2.27	0.49
22:DA:1062:G:OP1	22:DA:1070:A:C4'	2.60	0.49
22:DA:1343:G:C2'	22:DA:1344:U:C5	2.91	0.49
22:DA:1358:G:N2	22:DA:1374:G:C6	2.80	0.49
22:DA:1485:U:O2'	22:DA:1486:U:H5'	2.11	0.49
22:DA:1490:A:H8	24:DC:73:ILE:CD1	2.26	0.49
22:DA:156:A:C2	22:DA:157:C:C2	3.00	0.49
22:DA:170:U:C2	22:DA:171:U:C5	3.00	0.49
22:DA:1788:C:C2'	22:DA:1789:A:H5'	2.41	0.49
22:DA:1814:G:C6	22:DA:1815:A:C6	3.00	0.49
22:DA:1991:U:C4'	22:DA:1991:U:C6	2.95	0.49
22:DA:2021:C:H4'	22:DA:2022:U:OP2	2.11	0.49
22:DA:2210:U:C4'	22:DA:2211:A:H5'	2.43	0.49
22:DA:2714:G:C8	22:DA:2714:G:O5'	2.63	0.49
22:DA:2682:A:N6	22:DA:2728:U:H1'	2.05	0.49
22:DA:2823:A:C2'	22:DA:2824:C:H5'	2.42	0.49
22:DA:2834:G:C1'	22:DA:2879:A:H61	2.25	0.49
22:DA:288:U:H2'	22:DA:289:G:O4'	2.12	0.49
22:DA:352:A:H3'	22:DA:353:C:C4'	2.42	0.49
22:DA:674:G:O3'	26:DE:60:TRP:CH2	2.64	0.49
22:DA:85:G:HO2'	22:DA:86:G:H5''	1.76	0.49
24:DC:229:HIS:CG	24:DC:230:PRO:HD2	2.47	0.49
24:DC:23:LEU:HD12	24:DC:80:LEU:HB2	1.94	0.49
25:DD:24:VAL:HG23	25:DD:190:LYS:CA	2.42	0.49
26:DE:195:GLN:O	26:DE:199:MET:HB2	2.12	0.49
26:DE:73:ILE:HG13	26:DE:78:TRP:NE1	2.25	0.49
27:DF:12:VAL:O	27:DF:16:MET:HB2	2.12	0.49
22:DA:1139:G:H5'	31:DJ:104:ALA:HB1	1.93	0.49
22:DA:1667:G:P	32:DK:6:THR:HA	2.52	0.49
33:DL:93:ASN:O	33:DL:95:LEU:N	2.44	0.49
40:DS:57:ASN:O	40:DS:61:ASN:HB2	2.11	0.49
47:DZ:28:LEU:CD2	47:DZ:28:LEU:N	2.75	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:851:C:H4'	47:DZ:46:MET:HG2	1.93	0.49
1:AA:1240:U:H3'	1:AA:1241:G:C5'	2.41	0.49
1:AA:212:G:C2	1:AA:213:G:C5	3.00	0.49
1:AA:263:A:P	20:AT:73:ARG:NH1	2.85	0.49
1:AA:303:A:H2'	1:AA:304:U:O4'	2.12	0.49
1:AA:528:C:H6	1:AA:528:C:C5'	2.24	0.49
1:AA:5:U:H3'	1:AA:5:U:OP1	2.12	0.49
1:AA:868:C:N4	1:AA:869:G:C2	2.80	0.49
1:AA:87:C:O2'	1:AA:88:U:O5'	2.30	0.49
1:AA:972:C:O5'	10:AJ:59:LYS:HG2	2.11	0.49
1:AA:437:U:H4'	4:AD:153:ARG:HH22	1.78	0.49
4:AD:2:ARG:C	4:AD:4:LEU:HD13	2.33	0.49
1:AA:1343:G:O3'	9:AI:123:ARG:HB3	2.12	0.49
10:AJ:92:LEU:O	10:AJ:93:ALA:HB3	2.11	0.49
11:AK:85:VAL:CG1	11:AK:92:ARG:NH1	2.75	0.49
17:AQ:49:ASN:O	17:AQ:50:ASN:C	2.50	0.49
22:BA:1059:G:C2	22:BA:1080:A:C4	3.00	0.49
22:BA:1856:U:C4	22:BA:1857:G:C6	3.01	0.49
22:BA:250:G:C6	22:BA:251:A:C6	3.00	0.49
22:BA:2861:U:O2'	22:BA:2862:G:H5'	2.12	0.49
25:BD:182:ALA:O	25:BD:183:GLU:C	2.50	0.49
31:BJ:30:THR:HG22	31:BJ:31:GLU:N	2.27	0.49
34:BM:50:ARG:O	34:BM:53:MET:HB3	2.13	0.49
37:BP:103:THR:O	37:BP:104:GLY:O	2.30	0.49
38:BQ:60:TRP:CH2	38:BQ:93:ILE:HB	2.47	0.49
42:BU:12:VAL:HA	42:BU:69:VAL:HG12	1.94	0.49
1:CA:106:C:H2'	1:CA:107:G:O4'	2.13	0.49
1:CA:1081:A:H2'	1:CA:1082:A:O4'	2.12	0.49
1:CA:1175:G:H2'	1:CA:1176:A:C8	2.47	0.49
1:CA:1225:A:N3	1:CA:1225:A:C2'	2.74	0.49
1:CA:1434:A:N6	1:CA:1435:G:C6	2.79	0.49
1:CA:1458:G:H4'	20:CT:22:SER:HB2	1.93	0.49
1:CA:227:G:N2	16:CP:64:GLY:HA3	2.27	0.49
1:CA:274:A:H4'	1:CA:275:G:O5'	2.12	0.49
1:CA:436:C:H2'	1:CA:437:U:C6	2.47	0.49
1:CA:525:C:C2'	1:CA:526:C:H5'	2.41	0.49
1:CA:545:C:C2'	1:CA:546:A:H5'	2.41	0.49
1:CA:704:A:O2'	1:CA:705:G:O4'	2.30	0.49
1:CA:984:C:O2'	1:CA:985:C:C6	2.65	0.49
6:CF:54:LEU:HD12	6:CF:56:LYS:N	2.28	0.49
1:CA:1370:G:C5'	9:CI:110:VAL:HG21	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:59:LYS:CE	9:CI:60:LEU:HG	2.40	0.49
10:CJ:32:THR:HG23	10:CJ:83:THR:OG1	2.12	0.49
17:CQ:11:VAL:HG22	17:CQ:58:VAL:CG1	2.42	0.49
21:CU:28:LEU:C	21:CU:28:LEU:HD23	2.32	0.49
11:CK:123:PRO:O	21:CU:34:ARG:N	2.44	0.49
21:CU:9:GLU:HB3	21:CU:10:PRO:HD3	1.89	0.49
22:DA:2372:U:H1'	49:D1:45:HIS:CE1	2.47	0.49
51:D3:2:LYS:O	51:D3:3:ILE:O	2.30	0.49
22:DA:834:G:H5'	51:D3:56:LEU:HD11	1.94	0.49
22:DA:1064:C:OP1	30:DI:88:GLY:HA3	2.11	0.49
22:DA:1245:G:H4'	26:DE:33:VAL:CG1	2.35	0.49
22:DA:1363:C:N4	22:DA:1368:G:H1	2.10	0.49
22:DA:1560:G:N3	22:DA:1560:G:H2'	2.27	0.49
22:DA:1665:A:O2'	22:DA:1666:G:H5'	2.12	0.49
22:DA:1667:G:O2'	22:DA:1668:A:P	2.70	0.49
22:DA:177:G:OP2	22:DA:177:G:N2	2.30	0.49
22:DA:1809:A:N3	22:DA:1810:A:C8	2.80	0.49
22:DA:1916:A:H2'	22:DA:1917:U:C6	2.47	0.49
22:DA:2061:G:N3	22:DA:2063:C:C4	2.80	0.49
22:DA:2092:U:C5	22:DA:2225:A:O2'	2.63	0.49
22:DA:2135:A:C8	22:DA:2135:A:OP2	2.65	0.49
22:DA:2320:U:H1'	22:DA:2333:A:H62	1.78	0.49
22:DA:2356:U:H4'	44:DW:16:GLU:CG	2.38	0.49
22:DA:2438:U:O2'	22:DA:2440:C:OP1	2.30	0.49
22:DA:302:C:O2'	22:DA:303:G:C5'	2.59	0.49
22:DA:655:A:H4'	22:DA:656:G:O5'	2.12	0.49
22:DA:856:G:C1'	44:DW:23:LYS:HB3	2.43	0.49
24:DC:93:VAL:HG12	24:DC:101:ARG:O	2.12	0.49
27:DF:129:MET:HE1	27:DF:174:PHE:CE1	2.47	0.49
27:DF:11:VAL:C	27:DF:13:LYS:H	2.15	0.49
23:DB:57:A:C6	27:DF:25:MET:CG	2.95	0.49
29:DH:9:VAL:CG1	29:DH:10:ALA:H	2.24	0.49
29:DH:49:ALA:O	29:DH:53:GLU:N	2.46	0.49
22:DA:1667:G:OP1	32:DK:6:THR:HA	2.11	0.49
22:DA:910:A:C2	34:DM:13:HIS:CE1	3.00	0.49
34:DM:17:ASN:CB	34:DM:38:ARG:HH12	2.25	0.49
35:DN:81:ASN:O	35:DN:82:GLU:HB2	2.11	0.49
36:DO:62:LEU:HD11	36:DO:65:THR:CG2	2.41	0.49
1:AA:121:U:H5''	1:AA:121:U:C6	2.43	0.49
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.47	0.49
1:AA:203:G:C2	1:AA:215:C:N3	2.80	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:519:C:H2'	1:AA:520:A:C8	2.48	0.49
1:AA:587:G:C2	1:AA:755:G:C6	3.00	0.49
2:AB:69:VAL:CG2	2:AB:160:LEU:HD11	2.43	0.49
2:AB:161:PHE:HA	2:AB:183:PHE:O	2.12	0.49
2:AB:187:ASP:OD1	2:AB:188:THR:N	2.45	0.49
3:AC:82:ASP:O	3:AC:86:LEU:HG	2.12	0.49
9:AI:129:ARG:HA	9:AI:129:ARG:HH11	1.76	0.49
9:AI:8:THR:O	9:AI:81:GLY:CA	2.61	0.49
16:AP:40:ASN:OD1	16:AP:42:ILE:N	2.41	0.49
49:B1:33:LEU:HB3	49:B1:51:ALA:HB3	1.91	0.49
22:BA:103:A:H2'	22:BA:104:A:O4'	2.12	0.49
22:BA:1305:C:O2	22:BA:1305:C:H2'	2.11	0.49
22:BA:1406:U:O2'	22:BA:1407:G:O5'	2.31	0.49
22:BA:1585:C:C3'	22:BA:1586:A:H5'	2.35	0.49
22:BA:2033:A:OP1	56:BA:3480:HOH:O	2.20	0.49
22:BA:2307:G:N2	22:BA:2311:A:C8	2.81	0.49
22:BA:2523:G:O2'	22:BA:2524:G:H5'	2.13	0.49
22:BA:623:C:H2'	22:BA:624:C:H6	1.77	0.49
22:BA:734:A:C5	22:BA:735:A:N7	2.80	0.49
22:BA:839:U:H1'	22:BA:1191:G:H1'	1.93	0.49
22:BA:988:A:H2'	22:BA:989:G:O5'	2.12	0.49
22:BA:996:A:O3'	38:BQ:91:ARG:HG2	2.11	0.49
25:BD:104:VAL:HG13	25:BD:106:LYS:CD	2.41	0.49
26:BE:134:LEU:HD11	26:BE:138:LEU:HD11	1.93	0.49
26:BE:149:ILE:HD12	26:BE:175:ILE:HB	1.95	0.49
30:BI:27:LEU:HD12	30:BI:27:LEU:C	2.33	0.49
32:BK:18:ARG:H	32:BK:45:GLU:CB	2.13	0.49
34:BM:132:THR:CG2	34:BM:133:LYS:H	2.20	0.49
36:BO:2:ASP:O	36:BO:3:LYS:HB3	2.12	0.49
36:BO:30:ARG:HG2	36:BO:31:THR:N	2.27	0.49
36:BO:79:ALA:HA	36:BO:115:LEU:HD22	1.94	0.49
37:BP:80:VAL:CG1	37:BP:81:ASP:N	2.67	0.49
38:BQ:49:ARG:HG3	38:BQ:49:ARG:NH1	2.27	0.49
42:BU:48:VAL:O	42:BU:53:GLN:CB	2.61	0.49
44:BW:40:ARG:HH11	44:BW:45:HIS:CE1	2.30	0.49
44:BW:51:GLY:O	44:BW:52:CYS:O	2.31	0.49
46:BY:18:LEU:HD13	46:BY:22:LEU:HB2	1.94	0.49
1:CA:971:G:C2'	1:CA:1365:G:O2'	2.58	0.49
1:CA:130:A:N6	1:CA:234:C:O4'	2.45	0.49
1:CA:487:A:H2'	1:CA:488:C:O4'	2.12	0.49
1:CA:58:C:H2'	1:CA:59:A:O5'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:191:THR:HB	3:CC:192:TYR:CE1	2.47	0.49
8:CH:31:LEU:O	8:CH:35:ILE:HG13	2.12	0.49
11:CK:74:LYS:HG3	11:CK:78:ILE:HD11	1.92	0.49
12:CL:85:ARG:HH12	12:CL:87:LYS:HA	1.77	0.49
1:CA:980:C:O2	14:CN:58:ARG:HA	2.13	0.49
14:CN:61:ASN:ND2	14:CN:72:PHE:CE1	2.80	0.49
15:CO:52:ARG:O	15:CO:55:LEU:HB3	2.13	0.49
20:CT:67:HIS:HB3	20:CT:68:LYS:HD2	1.94	0.49
21:CU:31:VAL:O	21:CU:32:ARG:C	2.51	0.49
35:DN:100:CYS:O	48:D0:41:HIS:CD2	2.66	0.49
22:DA:1200:C:C2'	22:DA:1201:U:H5'	2.42	0.49
22:DA:1211:C:H4'	22:DA:1212:G:OP2	2.13	0.49
22:DA:1277:G:N3	35:DN:23:ASN:HB3	2.27	0.49
22:DA:1359:A:N3	22:DA:1359:A:H2'	2.27	0.49
22:DA:1427:A:H4'	22:DA:1428:C:O5'	2.12	0.49
22:DA:1522:A:H1'	22:DA:1524:G:C4	2.48	0.49
22:DA:1654:A:O2'	22:DA:1655:A:O5'	2.29	0.49
22:DA:2285:C:OP2	49:D1:5:ARG:HD3	2.12	0.49
22:DA:2406:A:C2	33:DL:69:ARG:NH2	2.80	0.49
22:DA:2729:G:H5''	25:DD:190:LYS:HZ1	1.76	0.49
22:DA:2741:A:H2'	22:DA:2742:G:O4'	2.11	0.49
22:DA:2788:C:O2'	22:DA:2809:A:N3	2.37	0.49
22:DA:2875:C:O2'	22:DA:2876:G:O5'	2.31	0.49
22:DA:2876:G:O2'	22:DA:2877:G:C5'	2.61	0.49
22:DA:342:A:H2'	22:DA:343:C:O5'	2.12	0.49
22:DA:379:G:C4	22:DA:396:G:N1	2.80	0.49
22:DA:536:G:C2'	22:DA:537:G:H5'	2.42	0.49
22:DA:565:C:H4'	22:DA:1253:A:N6	2.27	0.49
22:DA:74:A:H4'	22:DA:75:G:O5'	2.13	0.49
22:DA:791:C:C4	22:DA:794:A:O4'	2.65	0.49
26:DE:132:LYS:HG2	26:DE:132:LYS:O	2.13	0.49
29:DH:32:PRO:HA	45:DX:38:TRP:HD1	1.77	0.49
31:DJ:45:THR:O	31:DJ:46:PRO:C	2.51	0.49
40:DS:44:ALA:O	40:DS:48:LYS:CB	2.60	0.49
42:DU:3:LYS:HD3	42:DU:82:VAL:CG2	2.42	0.49
1:AA:1055:A:C6	1:AA:1206:G:C5	3.00	0.49
1:AA:1338:G:H2'	1:AA:1339:A:H8	1.72	0.49
1:AA:262:A:C6	1:AA:263:A:C6	3.00	0.49
1:AA:344:A:H4'	1:AA:345:C:OP2	2.11	0.49
1:AA:55:A:C5	1:AA:56:U:C5	2.99	0.49
1:AA:8:A:N6	4:AD:201:GLU:O	2.45	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:958:A:C6	1:AA:959:A:N1	2.80	0.49
2:AB:22:TRP:CD1	2:AB:22:TRP:O	2.65	0.49
2:AB:49:PHE:CD1	2:AB:49:PHE:C	2.86	0.49
4:AD:7:LYS:NZ	4:AD:21:LYS:HG3	2.27	0.49
8:AH:88:LYS:HA	8:AH:91:LEU:CG	2.42	0.49
12:AL:49:ARG:HD3	12:AL:49:ARG:N	2.28	0.49
13:AM:106:ARG:NH1	13:AM:109:LYS:HD3	2.25	0.49
14:AN:92:ILE:HG22	14:AN:95:LEU:HB3	1.94	0.49
20:AT:8:LYS:C	20:AT:11:ILE:HG23	2.32	0.49
1:AA:1457:G:O3'	20:AT:26:MET:HB3	2.13	0.49
11:AK:109:ILE:HB	21:AU:5:VAL:CG2	2.42	0.49
22:BA:137:U:C4	22:BA:142:A:N6	2.72	0.49
22:BA:1438:U:H3'	56:BA:3629:HOH:O	2.12	0.49
22:BA:1507:C:C4	22:BA:1508:A:C2	3.00	0.49
22:BA:1678:A:H2'	22:BA:1679:A:H5'	1.94	0.49
22:BA:2373:G:H2'	22:BA:2374:C:H6	1.74	0.49
22:BA:2385:C:O2'	22:BA:2386:A:H5'	2.12	0.49
22:BA:2656:U:C4	22:BA:2664:G:N2	2.79	0.49
22:BA:2681:C:C2	22:BA:2724:U:O4	2.66	0.49
22:BA:928:A:C2'	22:BA:929:U:H5'	2.42	0.49
25:BD:9:VAL:CG2	25:BD:10:GLY:N	2.75	0.49
26:BE:108:ILE:CD1	26:BE:180:LEU:CD1	2.91	0.49
26:BE:75:SER:OG	26:BE:77:ILE:HG23	2.13	0.49
32:BK:51:LYS:O	32:BK:51:LYS:CE	2.61	0.49
1:CA:155:A:C5	1:CA:156:C:C5	3.01	0.49
1:CA:279:A:H5''	1:CA:280:C:C3'	2.32	0.49
1:CA:367:U:OP1	1:CA:395:C:H1'	2.13	0.49
1:CA:431:A:C2	1:CA:432:A:H1'	2.47	0.49
1:CA:61:G:H8	1:CA:61:G:H5''	1.76	0.49
1:CA:683:G:H2'	1:CA:684:U:O4'	2.13	0.49
1:CA:784:A:H2'	1:CA:785:G:C8	2.47	0.49
1:CA:855:U:C5	1:CA:871:U:O4	2.60	0.49
3:CC:42:LEU:CD1	3:CC:86:LEU:HD22	2.42	0.49
5:CE:103:GLY:HA3	5:CE:121:ASN:CA	2.36	0.49
12:CL:41:PRO:HG2	12:CL:45:ASN:O	2.12	0.49
12:CL:85:ARG:O	12:CL:86:VAL:CG2	2.60	0.49
14:CN:63:CYS:HB2	14:CN:79:SER:OG	2.12	0.49
19:CS:32:THR:O	19:CS:32:THR:HG23	2.12	0.49
22:DA:1063:G:C5	22:DA:1064:C:N4	2.80	0.49
22:DA:1346:G:O2'	22:DA:1347:A:O5'	2.30	0.49
22:DA:1361:G:H2'	22:DA:1362:C:H5'	1.86	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1700:A:C2'	22:DA:1701:A:C5'	2.81	0.49
22:DA:1754:A:C6	22:DA:1755:A:C5	3.01	0.49
22:DA:241:A:N1	22:DA:255:A:H5'	2.27	0.49
22:DA:2507:C:H1'	22:DA:2583:G:C2	2.47	0.49
22:DA:340:A:H2'	22:DA:341:C:C5'	2.40	0.49
22:DA:352:A:C3'	22:DA:353:C:C4'	2.90	0.49
22:DA:356:G:C2	22:DA:357:C:C2	3.00	0.49
22:DA:449:A:C5	22:DA:450:G:C8	3.00	0.49
22:DA:453:A:N3	22:DA:457:A:O2'	2.46	0.49
22:DA:627:A:O4'	22:DA:637:A:N6	2.45	0.49
22:DA:638:G:H2'	22:DA:639:U:C5	2.47	0.49
22:DA:644:A:C2'	22:DA:645:C:H5''	2.42	0.49
22:DA:950:G:H2'	22:DA:951:C:O4'	2.13	0.49
24:DC:110:LYS:HB3	24:DC:113:ASP:CG	2.32	0.49
26:DE:162:ARG:O	26:DE:164:LEU:N	2.46	0.49
26:DE:37:ALA:HA	26:DE:40:ARG:HB3	1.92	0.49
26:DE:63:LYS:HA	26:DE:63:LYS:CE	2.42	0.49
27:DF:1:ALA:HA	27:DF:97:GLU:HB2	1.94	0.49
32:DK:59:LYS:HG2	32:DK:89:ASN:HA	1.95	0.49
22:DA:873:C:C4'	34:DM:64:TRP:HE1	2.19	0.49
36:DO:24:THR:O	36:DO:90:VAL:HB	2.12	0.49
40:DS:89:ALA:O	40:DS:90:LYS:HB2	2.12	0.49
45:DX:20:ALA:O	45:DX:21:LEU:CB	2.57	0.49
46:DY:49:ASP:HA	46:DY:52:ARG:CD	2.42	0.49
1:AA:1082:A:O2'	1:AA:1083:U:H5'	2.13	0.49
1:AA:1101:A:N7	2:AB:170:ILE:CG2	2.76	0.49
1:AA:1157:A:C6	1:AA:1180:A:C6	3.00	0.49
1:AA:148:G:N2	1:AA:175:C:O2	2.46	0.49
1:AA:175:C:C2'	1:AA:176:C:H5'	2.43	0.49
1:AA:300:A:H1'	1:AA:565:U:O2	2.12	0.49
1:AA:37:U:O2'	1:AA:38:G:H5'	2.13	0.49
1:AA:562:U:C4	1:AA:884:U:C6	3.01	0.49
1:AA:953:G:C2	1:AA:954:G:H1'	2.47	0.49
1:AA:983:A:C2'	1:AA:983:A:N3	2.75	0.49
2:AB:143:LEU:H	2:AB:143:LEU:HD23	1.77	0.49
4:AD:113:ALA:O	4:AD:116:LEU:HB2	2.13	0.49
7:AG:145:GLU:HA	7:AG:148:LYS:HD2	1.94	0.49
7:AG:22:LEU:HD11	7:AG:46:LEU:HD22	1.94	0.49
7:AG:22:LEU:HD23	7:AG:25:PHE:HD2	1.78	0.49
10:AJ:80:THR:O	10:AJ:82:LYS:N	2.45	0.49
17:AQ:16:MET:CG	17:AQ:20:ILE:HD13	2.42	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:126:ARG:H	21:AU:33:ARG:HH22	1.55	0.49
22:BA:1079:C:N4	22:BA:1088:A:H2	2.10	0.49
22:BA:1520:U:H2'	22:BA:1521:G:O5'	2.12	0.49
22:BA:1577:C:H2'	22:BA:1578:U:C1'	2.43	0.49
22:BA:1650:A:H2'	22:BA:1651:G:H5''	1.93	0.49
22:BA:1786:A:C4	22:BA:1938:A:C6	3.00	0.49
22:BA:2846:G:H2'	22:BA:2847:U:O4'	2.12	0.49
22:BA:332:A:C5	22:BA:335:C:C4	3.00	0.49
22:BA:416:U:C4	22:BA:417:C:C4	3.01	0.49
22:BA:528:A:C8	22:BA:528:A:H3'	2.47	0.49
22:BA:536:G:H2'	22:BA:537:G:O5'	2.13	0.49
22:BA:699:A:H1'	22:BA:1634:A:H2'	1.95	0.49
24:BC:229:HIS:CD2	24:BC:230:PRO:HD2	2.47	0.49
26:BE:119:ILE:CD1	26:BE:187:VAL:HG22	2.42	0.49
22:BA:1257:C:C5'	26:BE:78:TRP:CZ3	2.95	0.49
29:BH:41:LYS:CA	29:BH:44:ILE:HG12	2.35	0.49
29:BH:5:LEU:O	29:BH:16:GLY:HA2	2.13	0.49
30:BI:90:GLY:O	30:BI:92:PRO:HD3	2.12	0.49
33:BL:79:LEU:HD13	33:BL:116:VAL:HG12	1.94	0.49
46:BY:9:LYS:HB3	46:BY:12:GLU:HG3	1.95	0.49
1:CA:1084:G:C4	1:CA:1085:U:C5	3.01	0.49
1:CA:1086:U:H6	1:CA:1086:U:C5'	2.26	0.49
1:CA:1138:G:H2'	1:CA:1139:G:OP1	2.13	0.49
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.47	0.49
1:CA:78:A:C6	1:CA:79:G:C6	3.00	0.49
1:CA:861:G:H2'	1:CA:862:C:H6	1.77	0.49
1:CA:908:A:H2'	1:CA:909:A:C8	2.47	0.49
3:CC:152:VAL:HG23	3:CC:156:LEU:CD2	2.39	0.49
5:CE:79:THR:OG1	5:CE:121:ASN:ND2	2.46	0.49
9:CI:10:ARG:O	9:CI:11:ARG:CB	2.61	0.49
13:CM:13:HIS:CD2	13:CM:16:ILE:HD13	2.47	0.49
16:CP:77:GLU:C	16:CP:79:ASN:H	2.16	0.49
18:CR:39:VAL:CG1	18:CR:40:PRO:CD	2.89	0.49
48:D0:3:GLN:NE2	48:D0:7:PRO:HD3	2.27	0.49
50:D2:30:VAL:O	50:D2:30:VAL:CG1	2.61	0.49
22:DA:1006:C:O5'	22:DA:1006:C:H6	1.95	0.49
22:DA:1122:G:N3	22:DA:1122:G:H2'	2.27	0.49
22:DA:1404:C:O2'	22:DA:1405:U:H5'	2.13	0.49
22:DA:1416:G:N1	22:DA:1417:C:C4	2.81	0.49
22:DA:1569:A:C2	22:DA:1570:A:N3	2.81	0.49
22:DA:1611:C:O2'	22:DA:1612:C:C5'	2.60	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1723:G:O2'	22:DA:1724:G:H5'	2.13	0.49
22:DA:1975:G:C2	22:DA:1976:U:C6	3.01	0.49
22:DA:2581:G:C6	22:DA:2610:C:C2	2.99	0.49
22:DA:2616:C:HO2'	22:DA:2617:U:H6	1.59	0.49
22:DA:2651:C:O2'	22:DA:2652:C:H5'	2.12	0.49
22:DA:271:G:C2	22:DA:272:A:C6	3.00	0.49
22:DA:79:C:O2'	22:DA:346:A:H1'	2.12	0.49
22:DA:475:C:C6	22:DA:476:G:N7	2.81	0.49
22:DA:477:A:O2'	22:DA:478:A:O5'	2.30	0.49
22:DA:558:U:OP1	31:DJ:113:PRO:HD2	2.12	0.49
22:DA:71:A:OP2	22:DA:71:A:H3'	2.13	0.49
22:DA:77:G:O2'	22:DA:78:U:O5'	2.30	0.49
24:DC:169:ALA:O	24:DC:185:ALA:HB3	2.12	0.49
24:DC:75:ALA:HB1	24:DC:93:VAL:HG22	1.94	0.49
25:DD:38:LYS:NZ	25:DD:38:LYS:HB3	2.28	0.49
22:DA:320:A:C2'	26:DE:131:THR:OG1	2.51	0.49
26:DE:196:VAL:HG13	26:DE:200:LEU:HD23	1.94	0.49
27:DF:136:ILE:O	27:DF:137:PHE:O	2.30	0.49
29:DH:25:TYR:O	29:DH:30:LEU:HG	2.12	0.49
30:DI:77:VAL:HB	30:DI:80:LYS:CE	2.42	0.49
33:DL:48:ARG:HG3	33:DL:48:ARG:NH1	2.28	0.49
37:DP:9:GLN:C	37:DP:11:GLN:H	2.15	0.49
42:DU:4:ILE:HD13	42:DU:69:VAL:HG12	1.95	0.49
44:DW:24:ARG:O	44:DW:25:PHE:CB	2.61	0.49
46:DY:18:LEU:C	46:DY:19:LEU:HD12	2.33	0.49
46:DY:18:LEU:HD13	46:DY:22:LEU:HD13	1.95	0.49
1:AA:1098:C:C2	1:AA:1099:G:C8	3.00	0.49
1:AA:1241:G:O2'	1:AA:1242:G:C8	2.52	0.49
1:AA:1264:U:O2	1:AA:1272:G:C2	2.65	0.49
1:AA:1416:G:H2'	1:AA:1417:G:H5'	1.94	0.49
1:AA:164:G:H2'	1:AA:165:G:H5'	1.93	0.49
1:AA:290:C:O2'	1:AA:291:U:H5'	2.11	0.49
1:AA:330:C:O5'	1:AA:330:C:H6	1.96	0.49
1:AA:483:C:H2'	1:AA:484:G:C8	2.47	0.49
1:AA:695:A:H61	1:AA:797:C:H1'	1.77	0.49
1:AA:914:A:C2	1:AA:915:A:C8	3.01	0.49
15:AO:63:ARG:CG	15:AO:87:ARG:HH12	2.23	0.49
18:AR:33:THR:HG21	18:AR:37:LYS:HB2	1.95	0.49
18:AR:42:ARG:C	18:AR:43:ILE:HD13	2.33	0.49
19:AS:39:ILE:HD11	19:AS:70:LEU:CD2	2.42	0.49
20:AT:56:ILE:CG2	20:AT:57:VAL:N	2.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:125:LYS:C	21:AU:33:ARG:NH1	2.66	0.49
11:AK:125:LYS:C	21:AU:33:ARG:NH2	2.66	0.49
22:BA:2015:A:C4	48:B0:2:VAL:HG21	2.48	0.49
22:BA:1074:G:H2'	22:BA:1075:C:C5	2.48	0.49
22:BA:137:U:O2'	22:BA:138:U:P	2.71	0.49
22:BA:1429:G:N3	22:BA:1568:G:C2	2.81	0.49
22:BA:1476:U:O2'	22:BA:1477:A:H5'	2.13	0.49
22:BA:1485:U:N3	22:BA:1505:A:C2	2.80	0.49
22:BA:1869:G:N2	22:BA:1873:G:C6	2.80	0.49
22:BA:1936:A:N3	22:BA:1943:U:H5	2.11	0.49
22:BA:2865:U:C4	22:BA:2866:U:C5	3.00	0.49
22:BA:314:C:O2'	22:BA:315:G:H5'	2.13	0.49
22:BA:611:C:C2'	22:BA:612:G:H5'	2.42	0.49
23:BB:17:C:C2'	23:BB:18:G:H5'	2.43	0.49
25:BD:15:PHE:H	37:BP:11:GLN:HE21	1.59	0.49
25:BD:20:VAL:CG1	25:BD:21:SER:N	2.74	0.49
27:BF:110:ILE:O	27:BF:111:ARG:C	2.51	0.49
32:BK:63:VAL:HG22	32:BK:107:LEU:CD2	2.41	0.49
33:BL:38:GLN:O	33:BL:40:SER:O	2.30	0.49
33:BL:77:ILE:N	33:BL:77:ILE:HD12	2.28	0.49
35:BN:73:ASN:ND2	35:BN:76:VAL:HG11	2.28	0.49
37:BP:62:LYS:HB3	37:BP:69:VAL:HG13	1.94	0.49
37:BP:17:PRO:HG3	37:BP:83:ILE:O	2.12	0.49
41:BT:54:GLU:O	41:BT:55:VAL:CB	2.56	0.49
1:CA:1072:G:C5	1:CA:1073:U:C5	3.01	0.49
1:CA:1108:G:H5''	3:CC:175:HIS:CE1	2.48	0.49
1:CA:1458:G:O2'	20:CT:22:SER:CB	2.59	0.49
1:CA:35:G:H2'	1:CA:36:C:C6	2.48	0.49
1:CA:448:A:C4	1:CA:487:A:C2	3.01	0.49
1:CA:541:G:O2'	1:CA:542:G:H5'	2.12	0.49
1:CA:563:A:H1'	1:CA:566:G:O2'	2.13	0.49
1:CA:980:C:OP2	1:CA:981:U:O4	2.30	0.49
2:CB:151:LYS:HG3	2:CB:152:ASP:OD1	2.13	0.49
2:CB:59:ILE:CG2	2:CB:62:ARG:HD3	2.42	0.49
4:CD:20:LEU:O	4:CD:21:LYS:CB	2.61	0.49
4:CD:90:LEU:HD21	4:CD:196:GLU:HB3	1.94	0.49
5:CE:131:ASN:HD22	5:CE:132:PRO:N	2.10	0.49
6:CF:49:TYR:CE1	18:CR:65:SER:HA	2.48	0.49
7:CG:22:LEU:O	7:CG:26:VAL:HG22	2.12	0.49
7:CG:24:LYS:O	7:CG:28:ILE:CG1	2.60	0.49
7:CG:55:LYS:HE3	7:CG:63:VAL:HG21	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:824:G:H1'	8:CH:1:SER:N	2.27	0.49
9:CI:47:VAL:O	9:CI:50:PRO:HG2	2.12	0.49
9:CI:58:GLU:HG3	9:CI:59:LYS:H	1.78	0.49
12:CL:49:ARG:HH11	12:CL:89:LEU:HD21	1.77	0.49
16:CP:71:VAL:HG23	16:CP:72:ALA:N	2.26	0.49
22:DA:1000:A:N1	22:DA:1001:A:C2	2.80	0.49
22:DA:1048:A:C6	22:DA:1049:C:N4	2.81	0.49
22:DA:1114:C:O2'	22:DA:1115:G:C8	2.66	0.49
22:DA:1345:C:C2	22:DA:1346:G:C8	3.01	0.49
22:DA:1838:C:C2	22:DA:1899:A:C2	3.00	0.49
22:DA:1844:C:C2'	22:DA:1845:G:H5'	2.42	0.49
22:DA:2379:G:C4	22:DA:2380:C:C5	3.01	0.49
22:DA:2563:U:H2'	22:DA:2565:A:OP2	2.12	0.49
22:DA:271:G:N2	22:DA:367:G:C4	2.81	0.49
22:DA:75:G:O2'	22:DA:76:C:O5'	2.27	0.49
22:DA:1820:U:O2'	24:DC:199:HIS:CD2	2.66	0.49
24:DC:30:ALA:C	24:DC:32:LEU:H	2.15	0.49
24:DC:44:ASN:C	24:DC:46:GLY:N	2.65	0.49
25:DD:179:ARG:NH2	37:DP:11:GLN:NE2	2.61	0.49
27:DF:8:LYS:HB2	27:DF:8:LYS:HZ2	1.77	0.49
28:DG:53:PRO:HG3	28:DG:61:TRP:NE1	2.27	0.49
29:DH:32:PRO:HA	45:DX:38:TRP:CD1	2.48	0.49
31:DJ:111:LYS:HB2	31:DJ:115:GLY:HA3	1.91	0.49
31:DJ:38:GLY:C	31:DJ:40:HIS:H	2.16	0.49
32:DK:108:ARG:HA	32:DK:116:ILE:HG21	1.94	0.49
35:DN:120:GLU:OE1	35:DN:120:GLU:HA	2.13	0.49
36:DO:13:ARG:O	36:DO:17:LYS:HB2	2.13	0.49
42:DU:95:PHE:O	42:DU:97:SER:N	2.46	0.49
44:DW:54:ARG:HB3	44:DW:54:ARG:NH1	2.27	0.49
1:AA:1077:G:N1	1:AA:1081:A:C6	2.80	0.49
1:AA:1319:A:C8	1:AA:1323:G:C5	3.00	0.49
1:AA:1328:C:H5''	13:AM:27:THR:CG2	2.29	0.49
1:AA:1372:U:H2'	1:AA:1373:G:O4'	2.12	0.49
1:AA:198:G:N3	1:AA:199:A:C8	2.81	0.49
1:AA:202:G:H21	1:AA:466:A:H61	1.60	0.49
1:AA:208:U:H5	1:AA:210:C:C5	2.31	0.49
1:AA:212:G:H2'	1:AA:213:G:C8	2.48	0.49
1:AA:450:G:H2'	1:AA:451:A:OP1	2.13	0.49
2:AB:56:LEU:HB2	2:AB:183:PHE:CE1	2.48	0.49
2:AB:26:MET:HE3	2:AB:192:PRO:CG	2.29	0.49
3:AC:137:VAL:CG1	3:AC:169:GLU:HB3	2.43	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:142:ARG:CB	3:AC:143:LEU:HD13	2.35	0.49
4:AD:172:VAL:O	4:AD:173:ASP:CB	2.60	0.49
8:AH:104:SER:O	8:AH:122:GLY:HA3	2.13	0.49
8:AH:48:PHE:N	8:AH:48:PHE:CD1	2.81	0.49
1:AA:707:U:H4'	11:AK:21:HIS:CD2	2.48	0.49
12:AL:83:GLY:HA2	12:AL:94:TYR:HA	1.94	0.49
13:AM:3:ILE:HA	13:AM:56:ARG:NH1	2.27	0.49
49:B1:16:THR:HG21	49:B1:41:VAL:HG22	1.95	0.49
22:BA:1927:A:H2'	22:BA:1928:A:C8	2.48	0.49
22:BA:1934:C:H4'	22:BA:1974:C:O3'	2.13	0.49
22:BA:2520:C:O2'	22:BA:2521:C:C5'	2.60	0.49
22:BA:2572:A:N7	25:BD:150:GLN:HB3	2.28	0.49
22:BA:499:U:H2'	22:BA:500:G:O4'	2.13	0.49
22:BA:594:U:H2'	22:BA:595:C:C6	2.48	0.49
23:BB:70:C:HO2'	23:BB:71:C:H5'	1.76	0.49
24:BC:93:VAL:HG12	24:BC:94:LEU:N	2.25	0.49
28:BG:89:VAL:O	28:BG:159:LYS:HA	2.12	0.49
29:BH:1:MET:HB3	29:BH:21:VAL:O	2.12	0.49
29:BH:66:ASN:C	29:BH:68:ARG:H	2.15	0.49
30:BI:32:VAL:HG22	30:BI:66:PHE:CG	2.47	0.49
31:BJ:135:GLN:CA	31:BJ:135:GLN:NE2	2.74	0.49
33:BL:95:LEU:HD22	33:BL:100:ILE:HG12	1.95	0.49
46:BY:8:GLU:O	46:BY:9:LYS:HB3	2.13	0.49
1:CA:1288:A:N1	1:CA:1371:G:H1'	2.28	0.49
1:CA:139:A:C2'	1:CA:140:U:H5'	2.43	0.49
1:CA:240:G:H2'	1:CA:241:G:H8	1.77	0.49
1:CA:577:G:C8	1:CA:816:A:C2	3.01	0.49
1:CA:666:G:C5	1:CA:741:G:N1	2.81	0.49
1:CA:807:A:H2'	1:CA:808:C:C6	2.48	0.49
1:CA:810:C:C2'	1:CA:811:C:H5'	2.42	0.49
2:CB:119:GLN:HA	2:CB:122:ASP:HB3	1.93	0.49
2:CB:20:ARG:HA	2:CB:20:ARG:HE	1.77	0.49
3:CC:42:LEU:HD12	3:CC:46:LEU:HD12	1.95	0.49
4:CD:64:TYR:CD2	4:CD:93:LEU:HB3	2.47	0.49
5:CE:13:LYS:CE	5:CE:13:LYS:HA	2.27	0.49
6:CF:41:ASP:CG	6:CF:58:HIS:HE1	2.16	0.49
9:CI:51:LEU:HG	9:CI:86:LEU:HD21	1.88	0.49
12:CL:72:ASN:HD22	12:CL:72:ASN:N	2.08	0.49
14:CN:47:LEU:HD11	14:CN:50:LEU:HD21	1.93	0.49
16:CP:41:PRO:O	16:CP:42:ILE:HD13	2.13	0.49
50:D2:30:VAL:O	50:D2:34:ARG:HG2	2.12	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:54:G:C6	22:DA:117:G:N2	2.81	0.49
22:DA:1340:U:O2'	22:DA:1341:G:OP1	2.22	0.49
22:DA:1429:G:O2'	22:DA:1430:G:C8	2.66	0.49
22:DA:1431:A:H2'	22:DA:1432:G:H8	1.78	0.49
22:DA:1471:G:H1	22:DA:1521:G:H1'	1.77	0.49
22:DA:1731:G:C2	22:DA:1733:G:C5	3.01	0.49
22:DA:1864:U:O3'	22:DA:2409:G:N2	2.46	0.49
1:CA:1493:A:C8	22:DA:1913:A:N6	2.72	0.49
22:DA:1965:C:OP1	22:DA:1966:A:H2'	2.12	0.49
22:DA:2440:C:O2'	22:DA:2441:U:H4'	2.13	0.49
22:DA:2056:G:C6	22:DA:2577:A:C8	3.00	0.49
22:DA:2654:A:H4'	22:DA:2655:G:OP1	2.10	0.49
22:DA:2712:C:C2	22:DA:2715:C:OP1	2.66	0.49
22:DA:2747:G:O6	22:DA:2755:C:H5''	2.11	0.49
22:DA:2834:G:C1'	22:DA:2879:A:N6	2.76	0.49
22:DA:301:G:C6	22:DA:302:C:N4	2.80	0.49
22:DA:304:U:C2'	22:DA:305:C:OP2	2.59	0.49
22:DA:311:A:N6	22:DA:330:A:C5'	2.75	0.49
22:DA:419:U:H5''	56:DA:3233:HOH:O	2.12	0.49
22:DA:834:G:C5'	51:D3:56:LEU:HD11	2.43	0.49
22:DA:843:G:H2'	22:DA:844:A:C8	2.48	0.49
22:DA:997:G:O2'	22:DA:998:C:H5'	2.13	0.49
24:DC:124:LYS:HG3	24:DC:125:PRO:O	2.13	0.49
24:DC:212:TRP:C	24:DC:212:TRP:CD1	2.86	0.49
22:DA:1566:A:H2	24:DC:212:TRP:HB2	1.77	0.49
24:DC:41:GLY:HA3	24:DC:53:ILE:HG23	1.94	0.49
25:DD:105:LYS:HA	25:DD:177:VAL:HG22	1.93	0.49
25:DD:34:VAL:CG1	25:DD:48:ILE:HG13	2.42	0.49
27:DF:63:LYS:HD3	27:DF:63:LYS:C	2.33	0.49
28:DG:148:ARG:HD3	28:DG:152:ARG:NH2	2.27	0.49
30:DI:90:GLY:O	30:DI:92:PRO:HD3	2.13	0.49
31:DJ:41:LYS:C	31:DJ:43:GLU:N	2.64	0.49
31:DJ:88:THR:HG23	31:DJ:91:GLU:HG3	1.93	0.49
34:DM:62:LYS:O	34:DM:63:ILE:HD12	2.11	0.49
34:DM:71:LYS:HD3	34:DM:95:LEU:HD11	1.95	0.49
36:DO:25:ARG:HD2	36:DO:93:ASP:OD1	2.12	0.49
25:DD:184:ARG:HH22	37:DP:6:GLN:HE21	1.59	0.49
42:DU:35:VAL:CG1	42:DU:36:GLU:N	2.70	0.49
22:DA:1364:G:OP2	45:DX:1:SER:CA	2.60	0.49
1:AA:11:G:H2'	1:AA:12:U:H6	1.78	0.49
1:AA:1288:A:C6	1:AA:1289:A:C5	3.01	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1323:G:O2'	1:AA:1324:A:C8	2.62	0.49
1:AA:291:U:C2'	1:AA:292:G:H5'	2.41	0.49
1:AA:328:C:O2	1:AA:328:C:C2'	2.51	0.49
1:AA:382:A:O2'	1:AA:383:A:H5'	2.13	0.49
1:AA:487:A:H2'	1:AA:488:C:O4'	2.13	0.49
1:AA:877:G:N2	8:AH:1:SER:H3	2.10	0.49
1:AA:984:C:O2'	1:AA:985:C:C5'	2.61	0.49
2:AB:32:GLY:O	2:AB:33:ALA:HB2	2.13	0.49
3:AC:102:ILE:N	3:AC:102:ILE:HD12	2.26	0.49
3:AC:6:PRO:CG	3:AC:183:TYR:CD2	2.92	0.49
3:AC:184:ASN:HD22	3:AC:185:THR:H	1.61	0.49
4:AD:145:ARG:HH11	4:AD:147:LYS:CE	2.17	0.49
7:AG:83:THR:O	7:AG:84:TYR:C	2.50	0.49
10:AJ:33:GLY:HA2	10:AJ:83:THR:HB	1.95	0.49
12:AL:73:LEU:HD21	12:AL:103:CYS:SG	2.53	0.49
12:AL:49:ARG:CG	12:AL:49:ARG:NH1	2.47	0.49
12:AL:58:ASN:HD21	12:AL:60:PHE:HD1	1.61	0.49
17:AQ:54:ILE:HG12	17:AQ:55:GLY:N	2.28	0.49
11:AK:108:ASN:HD22	21:AU:6:ARG:HA	1.78	0.49
48:B0:50:GLY:O	48:B0:51:ARG:O	2.29	0.49
52:B4:10:LEU:HD23	52:B4:10:LEU:N	2.28	0.49
22:BA:1005:C:H1'	22:BA:1012:U:C4	2.47	0.49
22:BA:1378:A:HO2'	22:BA:1379:U:P	2.36	0.49
22:BA:1627:G:C8	22:BA:1627:G:C5'	2.85	0.49
22:BA:1655:A:H3'	22:BA:1656:C:H6	1.78	0.49
22:BA:171:U:O2'	22:BA:172:A:H5'	2.13	0.49
22:BA:1923:U:H2'	22:BA:1924:C:H6	1.77	0.49
22:BA:2149:U:O2'	22:BA:2150:C:C4'	2.61	0.49
22:BA:2199:A:N3	22:BA:2199:A:H2'	2.26	0.49
22:BA:2489:U:O2	22:BA:2491:U:C4	2.66	0.49
22:BA:2714:G:P	56:BA:3547:HOH:O	2.70	0.49
22:BA:2798:U:OP2	22:BA:2798:U:H3'	2.13	0.49
22:BA:478:A:C6	22:BA:480:A:C6	3.00	0.49
22:BA:61:C:H6	22:BA:61:C:O5'	1.96	0.49
22:BA:876:C:H2'	22:BA:877:A:C8	2.47	0.49
22:BA:908:C:O2'	22:BA:909:A:H5'	2.12	0.49
22:BA:927:A:H2'	22:BA:928:A:C8	2.48	0.49
24:BC:246:PRO:CD	24:BC:247:TRP:CZ3	2.95	0.49
26:BE:127:GLU:N	26:BE:127:GLU:CD	2.64	0.49
32:BK:61:VAL:CG2	32:BK:112:PHE:CE2	2.95	0.49
32:BK:21:CYS:HB2	32:BK:39:ILE:CD1	2.39	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:29:LYS:HG2	33:BL:30:THR:HG23	1.95	0.49
38:BQ:4:LYS:HZ2	38:BQ:5:ARG:N	2.10	0.49
39:BR:1:MET:CG	39:BR:1:MET:O	2.61	0.49
39:BR:57:GLY:HA2	39:BR:103:ALA:O	2.13	0.49
41:BT:11:LEU:HG	41:BT:46:ALA:HB1	1.93	0.49
43:BV:2:PHE:HB3	43:BV:61:LEU:HD22	1.94	0.49
44:BW:22:VAL:HG13	44:BW:25:PHE:CD2	2.48	0.49
44:BW:39:GLN:HG3	44:BW:42:THR:CA	2.42	0.49
46:BY:17:GLU:OE2	46:BY:21:LEU:HD11	2.12	0.49
1:CA:1092:A:N6	1:CA:1093:A:N6	2.60	0.49
1:CA:1266:G:H3'	1:CA:1266:G:C8	2.48	0.49
1:CA:174:A:H2'	1:CA:175:C:H6	1.78	0.49
1:CA:243:A:C2	1:CA:246:A:C8	3.01	0.49
1:CA:371:A:N3	1:CA:373:A:N6	2.60	0.49
1:CA:493:A:H2'	1:CA:494:G:O4'	2.12	0.49
1:CA:503:C:C2'	1:CA:504:C:H5'	2.42	0.49
1:CA:772:U:C2'	1:CA:773:G:H5'	2.43	0.49
1:CA:790:A:H2'	1:CA:791:G:O4'	2.12	0.49
1:CA:896:C:H2'	1:CA:897:C:H5'	1.95	0.49
1:CA:21:G:C2'	1:CA:914:A:H61	2.26	0.49
5:CE:135:VAL:O	5:CE:139:THR:HG23	2.12	0.49
5:CE:44:ARG:HH22	5:CE:70:MET:HB2	1.76	0.49
1:CA:642:A:N7	8:CH:106:SER:HA	2.28	0.49
8:CH:111:THR:HG22	8:CH:113:ARG:N	2.28	0.49
8:CH:84:ILE:O	8:CH:123:GLU:HA	2.13	0.49
14:CN:5:MET:O	14:CN:9:GLU:HG3	2.13	0.49
21:CU:10:PRO:O	21:CU:11:PHE:CB	2.60	0.49
50:D2:10:LEU:HD21	50:D2:14:ARG:NH1	2.28	0.49
22:DA:1337:G:H8	22:DA:1337:G:OP2	1.95	0.49
22:DA:187:G:H2'	22:DA:1365:A:H2	1.78	0.49
22:DA:1379:U:C2'	22:DA:1379:U:O2	2.61	0.49
22:DA:1438:U:O4	22:DA:1439:A:H2	1.94	0.49
22:DA:1635:A:H2'	22:DA:1636:U:C6	2.47	0.49
22:DA:1693:U:C4'	22:DA:1694:C:OP2	2.56	0.49
22:DA:2567:G:H2'	22:DA:2568:U:C6	2.47	0.49
22:DA:272:A:C4	22:DA:273:G:N7	2.81	0.49
22:DA:60:G:H1	22:DA:89:A:N6	2.11	0.49
22:DA:861:A:O2'	22:DA:862:G:H5'	2.13	0.49
28:DG:152:ARG:CG	28:DG:153:PRO:HD2	2.42	0.49
28:DG:152:ARG:HD2	28:DG:153:PRO:CD	2.43	0.49
29:DH:54:LEU:HA	29:DH:57:LYS:HG3	1.94	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:DI:23:VAL:HG21	30:DI:37:PHE:HE2	1.77	0.49
31:DJ:4:PHE:CG	31:DJ:5:THR:N	2.80	0.49
34:DM:46:ILE:HA	34:DM:103:TYR:OH	2.13	0.49
35:DN:16:HIS:O	35:DN:20:MET:HB2	2.13	0.49
36:DO:7:ARG:NH2	36:DO:29:HIS:HD2	2.11	0.49
38:DQ:39:ILE:O	38:DQ:42:GLY:N	2.44	0.49
41:DT:62:VAL:HG12	41:DT:63:VAL:H	1.78	0.49
1:AA:1202:U:H1'	14:AN:68:ARG:HD2	1.94	0.49
1:AA:1317:C:H2'	1:AA:1318:A:C5'	2.43	0.49
1:AA:141:G:C2	1:AA:142:G:H1'	2.47	0.49
1:AA:339:C:H2'	1:AA:340:U:C6	2.48	0.49
1:AA:424:G:O5'	1:AA:424:G:H8	1.95	0.49
1:AA:57:G:H2'	1:AA:58:C:C6	2.47	0.49
1:AA:849:G:C6	1:AA:850:U:C4	3.00	0.49
2:AB:36:LYS:HA	2:AB:36:LYS:CE	2.36	0.49
3:AC:139:ASN:C	3:AC:139:ASN:ND2	2.66	0.49
3:AC:33:ASP:O	3:AC:37:LYS:HB3	2.13	0.49
3:AC:63:ILE:CG2	3:AC:98:ALA:HB2	2.43	0.49
4:AD:124:VAL:O	4:AD:126:GLY:N	2.38	0.49
5:AE:82:HIS:NE2	8:AH:95:MET:HE1	2.28	0.49
11:AK:26:PHE:CE1	11:AK:88:PRO:HG2	2.48	0.49
12:AL:23:LEU:CB	12:AL:58:ASN:ND2	2.70	0.49
21:AU:52:VAL:CG1	21:AU:53:LYS:N	2.63	0.49
51:B3:61:LEU:CB	51:B3:64:ALA:HB2	2.39	0.49
22:BA:1171:G:C5	22:BA:1172:C:C5	3.01	0.49
22:BA:1731:G:C6	22:BA:1733:G:C5	3.01	0.49
22:BA:2282:G:H5"	22:BA:2283:C:O4'	2.13	0.49
22:BA:2392:A:O3'	51:B3:26:ALA:HB1	2.12	0.49
22:BA:2503:A:OP2	22:BA:2503:A:H3'	2.12	0.49
22:BA:2637:U:OP1	25:BD:83:ARG:NH2	2.45	0.49
22:BA:2755:C:H6	22:BA:2755:C:O5'	1.96	0.49
22:BA:359:G:H5"	22:BA:360:U:OP2	2.12	0.49
26:BE:5:LEU:HD12	26:BE:10:SER:HB3	1.95	0.49
27:BF:129:MET:HG2	27:BF:153:ILE:HD11	1.81	0.49
28:BG:61:TRP:HE3	28:BG:61:TRP:HA	1.76	0.49
28:BG:71:LEU:HD13	28:BG:74:MET:SD	2.52	0.49
29:BH:66:ASN:C	29:BH:68:ARG:N	2.66	0.49
36:BO:7:ARG:HA	36:BO:10:ARG:NH2	2.27	0.49
37:BP:33:GLU:OE1	37:BP:33:GLU:C	2.51	0.49
40:BS:84:ARG:HB2	40:BS:96:ILE:CD1	2.43	0.49
1:CA:1241:G:H2'	1:CA:1242:G:H8	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1271:A:H5'	1:CA:1314:C:H5''	1.95	0.49
1:CA:1297:G:C8	1:CA:1297:G:OP2	2.66	0.49
1:CA:1342:C:H2'	1:CA:1343:G:C8	2.48	0.49
1:CA:1394:A:N6	1:CA:1501:C:H5'	2.28	0.49
1:CA:1434:A:N6	1:CA:1435:G:N1	2.60	0.49
1:CA:1518:A:H2	1:CA:1519:A:C2	2.31	0.49
1:CA:201:G:H2'	1:CA:202:G:C8	2.48	0.49
1:CA:268:U:C4	1:CA:269:C:N4	2.81	0.49
1:CA:386:C:H3'	1:CA:386:C:H6	1.77	0.49
1:CA:441:A:H2'	1:CA:442:G:H5'	1.93	0.49
1:CA:564:C:O2'	1:CA:565:U:H5'	2.13	0.49
1:CA:666:G:C5	1:CA:741:G:C6	3.01	0.49
1:CA:892:A:C6	1:CA:893:C:C4	3.00	0.49
3:CC:148:ILE:HD13	3:CC:201:ILE:CD1	2.43	0.49
4:CD:151:GLN:O	4:CD:154:VAL:HG12	2.13	0.49
4:CD:187:ARG:NH2	4:CD:191:SER:CB	2.76	0.49
6:CF:21:MET:HA	6:CF:24:ARG:NH1	2.27	0.49
6:CF:3:HIS:ND1	6:CF:95:ALA:N	2.60	0.49
7:CG:61:PHE:O	7:CG:63:VAL:N	2.41	0.49
8:CH:24:VAL:HG22	8:CH:25:THR:N	2.28	0.49
9:CI:20:ILE:HD11	9:CI:61:ASP:O	2.12	0.49
11:CK:124:LYS:O	21:CU:33:ARG:NH2	2.45	0.49
3:CC:33:ASP:HB2	14:CN:64:ARG:HH21	1.78	0.49
16:CP:36:VAL:O	16:CP:36:VAL:HG13	2.13	0.49
21:CU:3:ILE:HG22	21:CU:19:LYS:HZ1	1.78	0.49
51:D3:41:ARG:CB	51:D3:41:ARG:NH2	2.75	0.49
22:DA:1070:A:C5'	22:DA:1071:G:H5''	2.38	0.49
22:DA:132:G:N2	22:DA:148:U:C2	2.81	0.49
22:DA:1360:G:C6	22:DA:1372:U:C2	3.01	0.49
22:DA:1456:G:O2'	22:DA:1457:U:C5'	2.61	0.49
22:DA:1519:G:C6	22:DA:1520:U:C2	3.00	0.49
22:DA:1714:U:H6	22:DA:1714:U:O5'	1.96	0.49
22:DA:1817:G:H4'	24:DC:85:ASN:O	2.12	0.49
22:DA:185:G:C5	22:DA:212:G:N2	2.81	0.49
22:DA:2145:C:H5'	22:DA:2147:A:OP2	2.13	0.49
22:DA:2191:A:H3'	22:DA:2192:U:H6	1.78	0.49
22:DA:2199:A:C2	22:DA:2200:C:C1'	2.96	0.49
22:DA:2266:A:O2'	22:DA:2267:A:OP2	2.27	0.49
22:DA:2805:C:C5	22:DA:2806:C:C5	3.01	0.49
22:DA:300:A:N7	22:DA:334:C:H4'	2.28	0.49
22:DA:479:A:O2'	22:DA:480:A:H5'	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:505:A:O2'	22:DA:506:G:C5'	2.61	0.49
22:DA:513:A:H2'	22:DA:514:A:C8	2.48	0.49
22:DA:713:G:H21	22:DA:718:A:H2	1.61	0.49
22:DA:743:A:O2'	22:DA:744:U:H5'	2.13	0.49
22:DA:90:U:C4	22:DA:91:A:N7	2.81	0.49
22:DA:93:G:O2'	22:DA:94:A:H8	1.96	0.49
23:DB:37:C:C2'	23:DB:38:C:H5'	2.42	0.49
25:DD:10:GLY:O	25:DD:11:MET:CB	2.58	0.49
25:DD:51:THR:HG21	25:DD:76:GLY:HA3	1.86	0.49
26:DE:76:PRO:HA	26:DE:82:GLY:O	2.13	0.49
27:DF:141:ASP:O	27:DF:144:LYS:HG2	2.13	0.49
27:DF:47:LYS:HA	27:DF:50:ASP:HB3	1.94	0.49
27:DF:65:LEU:HD11	27:DF:67:THR:CG2	2.37	0.49
28:DG:94:ARG:CD	28:DG:105:SER:HB2	2.43	0.49
31:DJ:64:VAL:CG1	31:DJ:65:THR:H	2.26	0.49
33:DL:117:THR:CG2	33:DL:118:THR:H	1.99	0.49
35:DN:34:ILE:HD12	35:DN:44:LEU:CD2	2.43	0.49
35:DN:56:LYS:HE2	35:DN:87:PHE:O	2.12	0.49
37:DP:98:TYR:CE2	37:DP:99:LEU:HD21	2.48	0.49
41:DT:61:LEU:C	41:DT:61:LEU:CD1	2.81	0.49
44:DW:30:VAL:O	44:DW:30:VAL:CG2	2.61	0.49
1:AA:1108:G:C5	1:AA:1109:C:C6	3.01	0.48
1:AA:1526:G:OP2	21:AU:38:GLU:HB2	2.12	0.48
1:AA:596:A:N3	1:AA:597:G:C8	2.80	0.48
1:AA:605:U:H2'	1:AA:606:G:C8	2.46	0.48
1:AA:701:U:C2'	1:AA:701:U:O2	2.61	0.48
1:AA:75:G:C2	1:AA:96:U:N3	2.81	0.48
4:AD:21:LYS:HD3	4:AD:21:LYS:O	2.13	0.48
6:AF:10:VAL:HG12	6:AF:11:HIS:N	2.28	0.48
6:AF:7:VAL:O	6:AF:7:VAL:CG2	2.61	0.48
7:AG:110:ARG:HG2	7:AG:118:ARG:HG2	1.94	0.48
7:AG:69:ARG:HD2	7:AG:95:ARG:HG2	1.95	0.48
8:AH:12:ARG:NH1	8:AH:26:MET:HA	2.28	0.48
9:AI:55:ASP:O	9:AI:59:LYS:HE3	2.13	0.48
10:AJ:32:THR:HG23	10:AJ:33:GLY:H	1.78	0.48
11:AK:114:PRO:O	11:AK:115:ILE:HD13	2.12	0.48
11:AK:22:ILE:HG12	11:AK:85:VAL:HA	1.94	0.48
1:AA:1328:C:C5'	13:AM:27:THR:HG21	2.28	0.48
13:AM:2:ARG:O	13:AM:3:ILE:HG23	2.12	0.48
1:AA:263:A:P	20:AT:73:ARG:HH11	2.36	0.48
22:BA:1430:G:H2'	22:BA:1431:A:C5'	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1469:A:H2'	22:BA:1470:A:C8	2.48	0.48
22:BA:1588:G:C2	22:BA:1589:U:C6	3.01	0.48
22:BA:1983:G:O2'	22:BA:1984:G:H5'	2.12	0.48
22:BA:2210:U:O2	22:BA:2212:A:C8	2.66	0.48
22:BA:2217:G:H2'	22:BA:2218:G:O4'	2.12	0.48
22:BA:2331:G:O2'	44:BW:39:GLN:O	2.31	0.48
22:BA:531:C:H4'	22:BA:532:A:H5''	1.95	0.48
22:BA:71:A:N3	22:BA:71:A:H5''	2.28	0.48
22:BA:777:G:O2'	22:BA:778:G:C5'	2.52	0.48
24:BC:221:GLY:HA3	24:BC:229:HIS:CE1	2.48	0.48
25:BD:86:GLU:OE1	25:BD:86:GLU:HA	2.13	0.48
27:BF:128:SER:OG	27:BF:154:THR:HB	2.12	0.48
27:BF:37:MET:HE3	27:BF:151:LEU:CB	2.43	0.48
30:BI:16:MET:O	30:BI:19:PRO:HD3	2.12	0.48
32:BK:28:SER:O	32:BK:29:HIS:HB2	2.12	0.48
33:BL:28:GLY:O	39:BR:82:HIS:NE2	2.46	0.48
33:BL:29:LYS:HG3	33:BL:30:THR:CG2	2.43	0.48
38:BQ:105:PHE:O	38:BQ:108:LEU:N	2.46	0.48
41:BT:57:VAL:HG22	41:BT:58:VAL:N	2.28	0.48
44:BW:24:ARG:C	44:BW:24:ARG:HD2	2.32	0.48
44:BW:40:ARG:NH1	44:BW:45:HIS:NE2	2.60	0.48
1:CA:1037:C:C6	1:CA:1037:C:OP2	2.66	0.48
1:CA:1466:C:C5	1:CA:1467:C:C5	3.01	0.48
1:CA:157:U:H2'	1:CA:158:G:H5'	1.95	0.48
1:CA:213:G:H5''	1:CA:214:C:H5	1.78	0.48
1:CA:346:G:N3	1:CA:346:G:C2'	2.76	0.48
1:CA:418:C:H1'	1:CA:540:G:O2'	2.13	0.48
1:CA:872:A:C4	1:CA:874:G:N7	2.81	0.48
1:CA:82:G:C5	1:CA:89:U:C5	3.01	0.48
2:CB:83:ALA:O	2:CB:85:SER:N	2.44	0.48
3:CC:148:ILE:HD12	3:CC:149:LYS:H	1.77	0.48
3:CC:21:TRP:CH2	14:CN:93:PRO:HG2	2.48	0.48
4:CD:73:ASN:HA	4:CD:76:LYS:HE3	1.95	0.48
4:CD:94:GLU:CD	4:CD:99:ASN:HD21	2.16	0.48
1:CA:1297:G:H1'	7:CG:113:LYS:NZ	2.26	0.48
9:CI:109:GLN:CG	9:CI:110:VAL:H	2.26	0.48
10:CJ:7:ARG:HG3	10:CJ:75:ASP:CG	2.33	0.48
13:CM:22:TYR:HB2	13:CM:65:GLU:HG2	1.94	0.48
13:CM:8:ILE:N	13:CM:9:PRO:CD	2.76	0.48
16:CP:46:LYS:H	16:CP:46:LYS:HZ2	1.61	0.48
18:CR:25:ILE:HD12	18:CR:67:LEU:HD21	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:118:A:OP2	22:DA:119:A:C3'	2.54	0.48
22:DA:1328:A:C4	22:DA:1330:C:N4	2.81	0.48
22:DA:1388:G:C2	22:DA:1389:G:C8	3.01	0.48
22:DA:1573:G:H2'	22:DA:1574:C:H5'	1.95	0.48
22:DA:1810:A:H2'	22:DA:1811:G:C8	2.48	0.48
22:DA:1767:G:N2	22:DA:1986:C:N1	2.60	0.48
22:DA:2230:G:H2'	22:DA:2231:U:H6	1.78	0.48
22:DA:2264:C:H2'	22:DA:2265:U:O4'	2.12	0.48
22:DA:965:C:H4'	22:DA:2273:A:H1'	1.95	0.48
22:DA:2370:G:C6	22:DA:2371:G:C6	3.01	0.48
22:DA:2415:G:H4'	33:DL:65:GLY:O	2.13	0.48
22:DA:245:G:OP2	33:DL:67:THR:HG21	2.13	0.48
22:DA:2838:G:N2	22:DA:2881:U:C2	2.81	0.48
22:DA:489:G:C8	22:DA:491:G:N7	2.81	0.48
22:DA:526:A:C6	22:DA:2626:C:C4'	2.96	0.48
22:DA:668:A:C4	22:DA:670:A:N7	2.81	0.48
22:DA:862:G:H2'	22:DA:863:A:O4'	2.12	0.48
22:DA:870:U:H2'	22:DA:871:U:C5'	2.37	0.48
22:DA:982:C:C4'	22:DA:983:A:OP1	2.60	0.48
23:DB:57:A:C5	27:DF:25:MET:CB	2.95	0.48
23:DB:67:G:O2'	23:DB:68:C:O5'	2.30	0.48
23:DB:77:U:C2'	23:DB:78:A:H5'	2.42	0.48
22:DA:1819:A:H5''	24:DC:156:SER:CB	2.43	0.48
25:DD:133:THR:O	25:DD:134:HIS:C	2.50	0.48
25:DD:104:VAL:O	25:DD:177:VAL:HG21	2.13	0.48
27:DF:105:ILE:HG22	27:DF:105:ILE:O	2.13	0.48
28:DG:37:ASN:HD22	28:DG:40:VAL:HG21	1.76	0.48
28:DG:92:GLY:O	28:DG:93:TYR:C	2.50	0.48
22:DA:1278:C:HO2'	35:DN:27:SER:HB3	1.76	0.48
37:DP:47:ILE:HD13	37:DP:61:ARG:HB2	1.95	0.48
38:DQ:4:LYS:O	38:DQ:5:ARG:HG3	2.13	0.48
1:AA:1157:A:N7	1:AA:1180:A:C6	2.81	0.48
1:AA:1157:A:N7	1:AA:1180:A:N6	2.61	0.48
1:AA:122:G:O5'	1:AA:122:G:H8	1.97	0.48
1:AA:1421:G:C2	1:AA:1422:G:C8	3.01	0.48
1:AA:1429:A:C2	1:AA:1472:U:N3	2.81	0.48
1:AA:1501:C:N3	1:AA:1504:G:C6	2.81	0.48
1:AA:211:G:H2'	1:AA:212:G:O5'	2.12	0.48
1:AA:243:A:C2	1:AA:245:U:H2'	2.48	0.48
1:AA:304:U:O2'	1:AA:305:G:H5'	2.14	0.48
1:AA:783:C:O2'	1:AA:784:A:H5'	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:25:LYS:HE2	2:AB:191:ASP:OD1	2.14	0.48
3:AC:42:LEU:HG	3:AC:67:ILE:HD11	1.95	0.48
4:AD:7:LYS:HZ3	4:AD:21:LYS:HB2	1.78	0.48
4:AD:36:ALA:C	4:AD:38:GLY:N	2.66	0.48
5:AE:139:THR:O	5:AE:140:ILE:C	2.50	0.48
6:AF:36:ILE:CG2	6:AF:64:VAL:HG22	2.32	0.48
7:AG:138:GLU:HA	7:AG:138:GLU:OE1	2.14	0.48
7:AG:14:ASP:HB3	7:AG:18:GLY:H	1.77	0.48
11:AK:34:THR:OG1	11:AK:39:ASN:N	2.32	0.48
11:AK:63:GLN:HG3	11:AK:98:ALA:HB2	1.96	0.48
1:AA:1308:U:OP2	13:AM:97:ARG:HG3	2.13	0.48
15:AO:78:THR:O	15:AO:81:ILE:HG12	2.14	0.48
22:BA:1559:U:OP1	22:BA:1559:U:H6	1.96	0.48
22:BA:2094:A:C5'	29:BH:25:TYR:CD1	2.93	0.48
22:BA:1050:A:C2	22:BA:2751:G:C5	3.01	0.48
22:BA:845:A:H3'	22:BA:845:A:N3	2.28	0.48
25:BD:118:PHE:O	25:BD:119:ALA:HB3	2.13	0.48
27:BF:105:ILE:O	27:BF:105:ILE:HG13	2.12	0.48
28:BG:115:GLN:OE1	28:BG:115:GLN:N	2.44	0.48
29:BH:61:VAL:CG1	29:BH:61:VAL:O	2.61	0.48
33:BL:132:ARG:HA	33:BL:142:ILE:CD1	2.41	0.48
34:BM:77:PRO:CD	34:BM:80:VAL:HG11	2.42	0.48
36:BO:3:LYS:HG3	36:BO:4:LYS:N	2.27	0.48
36:BO:59:ALA:N	36:BO:62:LEU:CD1	2.76	0.48
38:BQ:65:ASN:O	38:BQ:69:ARG:HB3	2.12	0.48
39:BR:73:LYS:C	39:BR:74:ILE:HD12	2.33	0.48
41:BT:14:PRO:HA	41:BT:32:LEU:HB3	1.94	0.48
41:BT:25:GLU:O	41:BT:27:SER:N	2.42	0.48
44:BW:18:LYS:CG	44:BW:19:ARG:N	2.64	0.48
44:BW:71:LYS:CD	44:BW:71:LYS:N	2.76	0.48
46:BY:21:LEU:O	46:BY:22:LEU:C	2.51	0.48
1:CA:1244:G:O2'	1:CA:1245:C:H5'	2.12	0.48
1:CA:1266:G:C6	1:CA:1270:G:O6	2.66	0.48
1:CA:1366:C:C4	1:CA:1367:C:N4	2.82	0.48
1:CA:1431:A:C6	1:CA:1432:G:N1	2.81	0.48
1:CA:1498:U:H5'	1:CA:1519:A:N1	2.28	0.48
1:CA:69:G:N2	1:CA:71:A:H62	2.11	0.48
1:CA:744:C:O2'	1:CA:745:G:H5'	2.12	0.48
1:CA:821:G:O2'	1:CA:822:U:H5'	2.14	0.48
4:CD:28:ASP:OD1	4:CD:29:THR:N	2.47	0.48
5:CE:11:GLN:CB	5:CE:116:VAL:HB	2.43	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:40:ASP:OD1	5:CE:41:GLY:N	2.39	0.48
7:CG:99:ALA:HB3	7:CG:100:MET:HE3	1.93	0.48
1:CA:599:C:C4'	8:CH:121:GLY:HA3	2.40	0.48
11:CK:81:LEU:HD13	11:CK:81:LEU:N	2.29	0.48
15:CO:8:ALA:O	15:CO:11:VAL:HB	2.13	0.48
15:CO:69:LEU:CD1	15:CO:77:TYR:HA	2.43	0.48
16:CP:4:ILE:HG12	16:CP:57:ILE:CD1	2.44	0.48
16:CP:71:VAL:O	16:CP:75:ILE:HG13	2.13	0.48
21:CU:33:ARG:NH2	21:CU:34:ARG:CD	2.76	0.48
50:D2:21:ARG:HG2	50:D2:31:LEU:HD12	1.95	0.48
22:DA:12:U:O2	22:DA:12:U:H2'	2.12	0.48
22:DA:1308:A:N6	22:DA:1309:G:N1	2.62	0.48
22:DA:133:U:H2'	22:DA:134:G:O4'	2.13	0.48
22:DA:1364:G:OP2	45:DX:1:SER:HA	2.13	0.48
22:DA:1520:U:C4	22:DA:1521:G:C5	3.00	0.48
22:DA:2054:A:C2	22:DA:2616:C:N3	2.81	0.48
22:DA:2210:U:H4'	22:DA:2211:A:H5'	1.95	0.48
22:DA:228:C:C2	22:DA:418:C:H4'	2.48	0.48
22:DA:2383:G:H2'	22:DA:2384:U:C6	2.48	0.48
22:DA:2740:A:N6	22:DA:2764:A:C8	2.81	0.48
22:DA:533:G:C2	22:DA:534:U:C2	3.01	0.48
22:DA:603:A:C4'	22:DA:604:G:O5'	2.57	0.48
22:DA:618:G:H2'	22:DA:619:G:C8	2.48	0.48
22:DA:730:A:O2'	22:DA:731:C:H5'	2.13	0.48
22:DA:976:G:H2'	22:DA:977:G:C8	2.42	0.48
24:DC:135:PRO:HG2	24:DC:138:SER:OG	2.13	0.48
24:DC:191:LEU:N	24:DC:191:LEU:HD22	2.28	0.48
24:DC:159:THR:N	24:DC:194:VAL:CG1	2.76	0.48
22:DA:660:C:C5'	26:DE:94:GLN:OE1	2.58	0.48
28:DG:83:THR:HA	28:DG:84:LYS:HD3	1.94	0.48
28:DG:88:LEU:CD1	28:DG:93:TYR:HB3	2.40	0.48
31:DJ:105:VAL:O	31:DJ:105:VAL:HG22	2.13	0.48
31:DJ:1:MET:SD	31:DJ:2:LYS:CE	3.00	0.48
35:DN:58:ASP:O	35:DN:59:SER:HB3	2.13	0.48
35:DN:97:ILE:HD11	35:DN:99:LYS:NZ	2.27	0.48
22:DA:1222:U:OP2	39:DR:90:ARG:NH2	2.46	0.48
39:DR:66:HIS:CD2	39:DR:94:THR:HG22	2.48	0.48
41:DT:62:VAL:CG1	41:DT:63:VAL:N	2.76	0.48
45:DX:24:THR:O	45:DX:25:LYS:C	2.52	0.48
46:DY:21:LEU:HA	46:DY:25:GLN:HB3	1.95	0.48
1:AA:1053:G:H5''	1:AA:1055:A:OP1	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1161:C:O2'	1:AA:1162:C:C6	2.63	0.48
1:AA:1456:A:H2'	1:AA:1457:G:O4'	2.12	0.48
1:AA:1494:G:N3	1:AA:1495:U:C6	2.82	0.48
1:AA:16:A:H2	1:AA:1080:A:N3	2.11	0.48
1:AA:210:C:C4'	1:AA:211:G:N2	2.76	0.48
1:AA:927:G:O2'	1:AA:928:G:H5'	2.14	0.48
1:AA:929:G:O2'	1:AA:930:C:H5'	2.14	0.48
1:AA:979:C:H5''	1:AA:980:C:OP2	2.13	0.48
3:AC:129:PHE:CE1	3:AC:130:ARG:HD3	2.48	0.48
4:AD:150:LYS:O	4:AD:150:LYS:HG3	2.13	0.48
4:AD:190:LEU:HD12	4:AD:190:LEU:C	2.33	0.48
4:AD:2:ARG:CZ	4:AD:114:ARG:CD	2.91	0.48
5:AE:125:LYS:HG3	5:AE:126:ALA:N	2.28	0.48
12:AL:20:VAL:HG23	12:AL:20:VAL:O	2.13	0.48
15:AO:63:ARG:NH1	15:AO:87:ARG:NH2	2.61	0.48
17:AQ:13:SER:O	17:AQ:16:MET:SD	2.71	0.48
18:AR:22:TYR:CZ	18:AR:23:LYS:HE3	2.47	0.48
1:AA:1458:G:OP1	20:AT:29:THR:HG21	2.13	0.48
21:AU:24:LYS:O	21:AU:28:LEU:HB2	2.13	0.48
48:B0:27:LEU:HD23	48:B0:27:LEU:N	2.26	0.48
22:BA:245:G:O6	51:B3:7:ARG:HG3	2.13	0.48
52:B4:15:LYS:O	52:B4:16:ILE:CB	2.61	0.48
22:BA:1063:G:O2'	22:BA:1064:C:C5'	2.62	0.48
22:BA:1206:G:C5	22:BA:1207:C:C5	3.01	0.48
22:BA:1249:U:H5'	22:BA:1249:U:H6	1.77	0.48
22:BA:1296:G:H2'	22:BA:1297:C:O5'	2.12	0.48
22:BA:1328:A:HO2'	22:BA:1329:U:H6	1.60	0.48
22:BA:1534:U:H5'	22:BA:1535:A:P	2.53	0.48
22:BA:153:U:H2'	22:BA:154:U:O5'	2.13	0.48
22:BA:1570:A:H2'	22:BA:1571:A:C8	2.48	0.48
22:BA:1610:A:H4'	22:BA:1611:C:OP2	2.12	0.48
22:BA:1820:U:H4'	22:BA:1821:A:OP2	2.13	0.48
22:BA:1872:A:C2'	22:BA:1873:G:O4'	2.61	0.48
22:BA:2414:G:H2'	22:BA:2415:G:H5'	1.94	0.48
22:BA:244:A:H2'	22:BA:245:G:O4'	2.13	0.48
22:BA:2722:G:H8	22:BA:2722:G:O5'	1.96	0.48
22:BA:520:G:H2'	22:BA:521:U:H6	1.77	0.48
22:BA:846:U:H2'	22:BA:846:U:O2	2.13	0.48
25:BD:104:VAL:HA	25:BD:106:LYS:HZ2	1.75	0.48
26:BE:115:GLN:O	26:BE:116:ASP:C	2.51	0.48
26:BE:147:LEU:HA	26:BE:147:LEU:HD22	1.53	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:321:U:H1'	26:BE:159:LEU:HG	1.95	0.48
22:BA:2444:G:P	26:BE:63:LYS:HE2	2.52	0.48
29:BH:52:ALA:C	29:BH:54:LEU:H	2.17	0.48
31:BJ:54:ILE:HD12	31:BJ:55:ILE:N	2.28	0.48
33:BL:110:VAL:O	33:BL:111:ILE:CB	2.49	0.48
34:BM:73:ILE:HG12	34:BM:93:VAL:HG12	1.95	0.48
39:BR:49:ILE:HG22	39:BR:54:VAL:HG12	1.95	0.48
40:BS:72:THR:HG21	40:BS:108:SER:OG	2.13	0.48
41:BT:14:PRO:HG2	41:BT:14:PRO:O	2.13	0.48
41:BT:20:ALA:O	41:BT:21:SER:C	2.50	0.48
44:BW:8:SER:C	44:BW:9:THR:HG22	2.33	0.48
45:BX:44:ARG:HE	45:BX:46:VAL:HG13	1.76	0.48
45:BX:67:LEU:HD22	45:BX:77:TYR:CD2	2.48	0.48
1:CA:254:G:C2'	1:CA:255:G:H5'	2.42	0.48
1:CA:312:C:N4	1:CA:313:A:N6	2.62	0.48
1:CA:381:C:O2	1:CA:381:C:H2'	2.12	0.48
1:CA:499:A:O2'	1:CA:500:G:C8	2.64	0.48
1:CA:66:A:C6	1:CA:67:C:C4	3.00	0.48
1:CA:688:G:C8	1:CA:688:G:H5''	2.47	0.48
1:CA:892:A:H2'	1:CA:893:C:H6	1.77	0.48
1:CA:961:U:C4	1:CA:983:A:C6	3.01	0.48
1:CA:971:G:OP1	1:CA:972:C:H5''	2.13	0.48
1:CA:97:G:C6	1:CA:98:A:H1'	2.48	0.48
3:CC:72:PRO:HG3	3:CC:104:GLU:OE1	2.13	0.48
4:CD:123:MET:HE2	4:CD:126:GLY:O	2.13	0.48
6:CF:4:TYR:O	6:CF:63:ASN:HA	2.13	0.48
7:CG:75:LYS:HB3	7:CG:86:VAL:O	2.12	0.48
8:CH:94:VAL:O	8:CH:95:MET:HB2	2.14	0.48
9:CI:5:TYR:HD2	9:CI:5:TYR:N	2.12	0.48
12:CL:22:ALA:O	12:CL:58:ASN:ND2	2.45	0.48
12:CL:86:VAL:C	12:CL:88:ASP:H	2.16	0.48
49:D1:52:LYS:HB2	49:D1:52:LYS:NZ	2.28	0.48
22:DA:1075:C:O2'	22:DA:1076:C:H6	1.97	0.48
22:DA:1103:A:H8	22:DA:1103:A:O5'	1.95	0.48
22:DA:973:A:H1'	22:DA:1188:U:C5	2.49	0.48
22:DA:1274:A:C6	22:DA:1302:A:C2	3.01	0.48
22:DA:1429:G:O2'	22:DA:1430:G:P	2.72	0.48
22:DA:1800:C:C2	22:DA:1802:A:C8	3.02	0.48
22:DA:1802:A:O2'	22:DA:1803:A:H5'	2.12	0.48
22:DA:1805:A:N3	22:DA:1813:G:C2	2.81	0.48
22:DA:2196:C:O2'	22:DA:2197:U:H5'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2293:G:O2'	22:DA:2294:G:H5'	2.12	0.48
22:DA:2544:G:C5'	22:DA:2645:G:N7	2.74	0.48
22:DA:2581:G:H5''	22:DA:2582:G:OP1	2.13	0.48
22:DA:2705:A:H2'	22:DA:2706:A:H5'	1.95	0.48
22:DA:287:G:C2'	22:DA:288:U:H5'	2.42	0.48
22:DA:411:G:C5'	22:DA:412:A:OP1	2.61	0.48
22:DA:573:U:C4'	22:DA:574:A:OP1	2.41	0.48
22:DA:574:A:OP2	56:DA:3266:HOH:O	2.20	0.48
22:DA:656:G:O2'	22:DA:657:U:O4'	2.28	0.48
22:DA:599:A:C2	22:DA:659:G:C6	3.01	0.48
22:DA:674:G:H4'	26:DE:69:ARG:HB3	1.94	0.48
22:DA:762:U:H4'	22:DA:763:G:C5'	2.43	0.48
22:DA:785:G:O2'	22:DA:1779:U:H5''	2.12	0.48
22:DA:464:U:C6	22:DA:788:A:C2	3.02	0.48
24:DC:120:ASP:CG	24:DC:121:ALA:N	2.66	0.48
24:DC:128:THR:O	24:DC:129:LEU:HB3	2.14	0.48
25:DD:108:ASP:OD1	25:DD:207:VAL:HG23	2.12	0.48
26:DE:144:GLU:O	26:DE:145:ASP:C	2.51	0.48
22:DA:443:A:H2'	26:DE:40:ARG:NE	2.28	0.48
28:DG:1:SER:C	28:DG:3:VAL:N	2.67	0.48
29:DH:84:ALA:N	29:DH:148:ALA:HA	2.29	0.48
31:DJ:110:PRO:CB	31:DJ:111:LYS:HG2	2.31	0.48
34:DM:72:PRO:O	34:DM:91:TYR:O	2.31	0.48
43:DV:3:THR:C	43:DV:4:ILE:HG13	2.33	0.48
1:AA:1210:C:O2'	1:AA:1211:U:H5'	2.14	0.48
1:AA:1260:G:H4'	1:AA:1284:C:H5'	1.96	0.48
1:AA:11:G:C6	1:AA:12:U:C4	3.01	0.48
1:AA:204:G:C8	1:AA:205:A:H5''	2.48	0.48
1:AA:44:A:C2	1:AA:399:G:C2	3.02	0.48
1:AA:452:A:N6	1:AA:480:U:C2	2.81	0.48
1:AA:865:A:O2'	1:AA:866:C:H5'	2.12	0.48
2:AB:90:PHE:O	2:AB:149:GLY:HA3	2.11	0.48
2:AB:40:ILE:CG1	2:AB:41:ASN:H	2.17	0.48
6:AF:49:TYR:HB2	6:AF:50:PRO:CD	2.43	0.48
8:AH:1:SER:O	8:AH:3:GLN:N	2.46	0.48
22:BA:1052:C:C6	22:BA:1052:C:H3'	2.48	0.48
22:BA:1069:A:N1	22:BA:1074:G:N7	2.61	0.48
22:BA:1296:G:C2'	22:BA:1297:C:O5'	2.60	0.48
22:BA:1394:U:H2'	22:BA:1395:A:O5'	2.13	0.48
22:BA:2033:A:H5''	56:BA:3481:HOH:O	2.13	0.48
22:BA:2107:G:O6	22:BA:2183:A:C5	2.66	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2405:G:O2'	22:BA:2406:A:P	2.71	0.48
22:BA:2415:G:H4'	33:BL:66:PHE:CB	2.42	0.48
22:BA:2562:U:C4	22:BA:2563:U:C5	3.01	0.48
22:BA:528:A:H2	22:BA:2043:C:C4'	2.25	0.48
22:BA:946:C:H2'	22:BA:947:A:C8	2.46	0.48
22:BA:996:A:O2'	38:BQ:91:ARG:CG	2.60	0.48
25:BD:25:THR:O	25:BD:25:THR:HG22	2.09	0.48
32:BK:118:LEU:O	32:BK:119:ALA:HB3	2.12	0.48
32:BK:12:ASP:HA	32:BK:98:ARG:O	2.12	0.48
33:BL:18:ARG:O	33:BL:19:LEU:O	2.31	0.48
41:BT:15:HIS:HB3	41:BT:31:VAL:HG22	1.94	0.48
41:BT:29:THR:CA	41:BT:86:THR:H	2.24	0.48
42:BU:33:VAL:O	42:BU:64:ILE:HG22	2.13	0.48
1:CA:101:A:C4	1:CA:102:G:C8	3.01	0.48
1:CA:1283:U:HO2'	1:CA:1284:C:H6	1.59	0.48
1:CA:1387:G:C4	1:CA:1388:C:C5	3.01	0.48
1:CA:142:G:C2	1:CA:143:A:C1'	2.93	0.48
1:CA:206:C:H2'	1:CA:207:C:H4'	1.94	0.48
1:CA:306:A:C4	1:CA:307:C:C6	3.02	0.48
1:CA:38:G:N2	1:CA:397:A:C4	2.82	0.48
1:CA:65:A:H4'	1:CA:66:A:O5'	2.14	0.48
1:CA:714:G:H2'	1:CA:715:A:C8	2.49	0.48
1:CA:716:A:C6	1:CA:717:U:C4	3.02	0.48
1:CA:914:A:O2'	1:CA:915:A:O5'	2.31	0.48
2:CB:110:ILE:HD11	2:CB:150:ILE:CG2	2.40	0.48
2:CB:80:LYS:O	2:CB:81:ASP:C	2.51	0.48
3:CC:49:ALA:O	3:CC:50:SER:HB2	2.13	0.48
6:CF:6:ILE:N	6:CF:6:ILE:CD1	2.71	0.48
7:CG:137:ARG:HD2	7:CG:137:ARG:C	2.33	0.48
11:CK:81:LEU:CD1	11:CK:104:PHE:CD2	2.87	0.48
20:CT:26:MET:HE1	20:CT:27:MET:HA	1.96	0.48
21:CU:33:ARG:HG2	21:CU:34:ARG:H	1.78	0.48
51:D3:15:LYS:HG2	51:D3:16:THR:H	1.79	0.48
22:DA:104:A:H2'	22:DA:105:C:C6	2.48	0.48
22:DA:1256:G:O2'	22:DA:1257:C:C5'	2.61	0.48
22:DA:1363:C:C2	22:DA:1364:G:C8	3.01	0.48
22:DA:1669:A:C2'	22:DA:1670:C:H5'	2.42	0.48
22:DA:1681:G:O2'	22:DA:1762:A:H2'	2.13	0.48
22:DA:1767:G:C4	22:DA:1768:C:C5	3.02	0.48
22:DA:1828:G:O2'	22:DA:1829:A:H5'	2.13	0.48
22:DA:1991:U:C6	22:DA:1991:U:C3'	2.97	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:204:A:O4'	22:DA:206:U:C6	2.66	0.48
22:DA:2259:U:O2'	22:DA:2260:C:H6	1.96	0.48
22:DA:2267:A:N7	56:DA:3536:HOH:O	2.35	0.48
22:DA:2623:G:H4'	22:DA:2825:G:H2'	1.95	0.48
22:DA:463:G:N2	22:DA:466:A:OP 2	2.42	0.48
22:DA:53:A:N7	22:DA:54:G:C5	2.81	0.48
22:DA:754:U:H2'	22:DA:755:U:H6	1.79	0.48
22:DA:751:A:C2	22:DA:789:A:C4	3.01	0.48
22:DA:807:U:H1'	22:DA:2445:G:H5'	1.95	0.48
22:DA:91:A:O2'	22:DA:92:U:H6	1.96	0.48
22:DA:95:A:O2'	46:DY:41:HIS:CD2	2.66	0.48
22:DA:1695:G:H8	24:DC:7:PRO:HB2	1.75	0.48
25:DD:146:ILE:CG1	25:DD:155:VAL:HG22	2.41	0.48
25:DD:34:VAL:HG22	25:DD:92:VAL:O	2.13	0.48
23:DB:54:G:H21	27:DF:25:MET:CE	2.26	0.48
32:DK:17:ARG:H	32:DK:45:GLU:HG2	1.79	0.48
33:DL:141:LYS:HD2	33:DL:141:LYS:C	2.34	0.48
33:DL:77:ILE:CD1	33:DL:125:LEU:HD13	2.43	0.48
33:DL:99:ASN:O	33:DL:100:ILE:CB	2.61	0.48
34:DM:53:MET:HB2	34:DM:120:ALA:HB2	1.94	0.48
36:DO:94:ARG:CD	36:DO:97:PHE:O	2.61	0.48
37:DP:19:PHE:O	37:DP:20:ARG:CB	2.61	0.48
39:DR:19:THR:HA	39:DR:96:VAL:O	2.14	0.48
41:DT:50:LEU:CD2	41:DT:51:PHE:CD1	2.94	0.48
44:DW:77:LYS:HB2	44:DW:77:LYS:NZ	2.28	0.48
46:DY:45:GLN:C	46:DY:47:ARG:H	2.17	0.48
1:AA:1025:U:H5''	1:AA:1026:G:OP1	2.14	0.48
1:AA:1182:G:H4'	1:AA:1183:U:H5'	1.96	0.48
1:AA:1191:A:C2	1:AA:1192:C:C4	3.01	0.48
1:AA:1258:G:O2'	1:AA:1259:C:C5'	2.62	0.48
1:AA:37:U:C2'	1:AA:38:G:H5'	2.44	0.48
1:AA:978:A:C1'	1:AA:1322:C:H5	2.25	0.48
1:AA:978:A:H1'	1:AA:1322:C:C5	2.47	0.48
4:AD:133:SER:O	4:AD:134:TYR:C	2.49	0.48
7:AG:108:ARG:NH2	7:AG:118:ARG:HH22	2.12	0.48
9:AI:82:ILE:O	9:AI:86:LEU:N	2.39	0.48
10:AJ:80:THR:HB	10:AJ:83:THR:HG22	1.95	0.48
11:AK:64:VAL:O	11:AK:68:ARG:HG3	2.13	0.48
12:AL:38:THR:HA	12:AL:49:ARG:O	2.12	0.48
13:AM:84:CYS:O	13:AM:88:LEU:HD12	2.14	0.48
17:AQ:82:VAL:OXT	17:AQ:82:VAL:HG22	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:B0:42:ILE:CD1	48:B0:48:TYR:HB2	2.43	0.48
22:BA:1716:U:O2'	22:BA:1717:A:C5'	2.50	0.48
22:BA:1820:U:O2	24:BC:200:MET:HG3	2.13	0.48
22:BA:2152:G:O2'	22:BA:2153:C:C4'	2.61	0.48
22:BA:216:A:H2'	22:BA:217:A:C8	2.47	0.48
22:BA:2862:G:H2'	22:BA:2863:C:C6	2.48	0.48
22:BA:580:U:O3'	38:BQ:30:VAL:CG1	2.61	0.48
22:BA:807:U:C2'	22:BA:808:G:H5'	2.43	0.48
23:BB:89:U:H3'	23:BB:90:C:H5''	1.94	0.48
24:BC:106:PRO:CA	24:BC:141:HIS:HE1	2.25	0.48
24:BC:7:PRO:CB	24:BC:13:ARG:HB2	2.43	0.48
25:BD:118:PHE:C	25:BD:120:GLY:H	2.14	0.48
22:BA:659:G:N2	26:BE:30:GLN:HE22	2.09	0.48
27:BF:107:VAL:HG11	27:BF:175:PRO:HG2	1.94	0.48
27:BF:107:VAL:HG13	27:BF:113:PHE:CZ	2.49	0.48
28:BG:96:ALA:O	28:BG:97:VAL:CB	2.61	0.48
29:BH:32:PRO:O	29:BH:33:GLN:HB2	2.13	0.48
29:BH:50:ARG:C	29:BH:52:ALA:H	2.16	0.48
30:BI:19:PRO:HG2	30:BI:23:VAL:HG22	1.96	0.48
30:BI:61:TYR:CD2	30:BI:61:TYR:N	2.81	0.48
32:BK:121:GLU:O	32:BK:122:VAL:C	2.52	0.48
32:BK:63:VAL:CG1	32:BK:103:VAL:HG12	2.43	0.48
35:BN:52:ILE:HG21	35:BN:94:TYR:CG	2.48	0.48
35:BN:87:PHE:HE1	35:BN:116:VAL:CG1	2.26	0.48
37:BP:22:GLY:O	37:BP:109:ILE:HD11	2.13	0.48
37:BP:111:GLU:H	37:BP:111:GLU:CD	2.17	0.48
40:BS:21:ALA:CB	40:BS:74:ILE:HD13	2.43	0.48
42:BU:44:HIS:O	42:BU:45:GLN:C	2.51	0.48
42:BU:5:ARG:CB	42:BU:5:ARG:HH21	2.25	0.48
42:BU:33:VAL:HG23	42:BU:64:ILE:CG2	2.43	0.48
44:BW:9:THR:CG2	44:BW:10:ARG:HD3	2.44	0.48
47:BZ:38:GLU:OE1	47:BZ:38:GLU:N	2.41	0.48
1:CA:106:C:H1'	1:CA:379:C:H5''	1.95	0.48
1:CA:1124:G:N2	1:CA:1127:G:N2	2.62	0.48
1:CA:1158:C:C2	1:CA:1160:G:C8	3.02	0.48
1:CA:1182:G:C3'	1:CA:1183:U:H5'	2.43	0.48
1:CA:769:G:H4'	1:CA:1513:A:H4'	1.96	0.48
1:CA:275:G:O2'	1:CA:276:G:O5'	2.31	0.48
1:CA:644:U:H2'	1:CA:645:G:H8	1.78	0.48
1:CA:740:U:O4'	15:CO:41:HIS:CE1	2.66	0.48
3:CC:171:ARG:O	3:CC:173:PRO:HD2	2.12	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:38:VAL:O	3:CC:42:LEU:HD23	2.14	0.48
3:CC:39:ARG:HG2	3:CC:54:ILE:HG21	1.94	0.48
4:CD:150:LYS:N	4:CD:150:LYS:HD3	2.29	0.48
4:CD:2:ARG:HH21	4:CD:114:ARG:CZ	2.27	0.48
4:CD:84:ASN:C	4:CD:84:ASN:ND2	2.53	0.48
5:CE:132:PRO:O	5:CE:134:ASN:N	2.47	0.48
9:CI:38:PHE:HE2	9:CI:71:ILE:HG22	1.78	0.48
13:CM:16:ILE:CD1	13:CM:16:ILE:H	2.26	0.48
21:CU:27:VAL:O	21:CU:31:VAL:HG23	2.14	0.48
50:D2:21:ARG:HG2	50:D2:31:LEU:CD1	2.44	0.48
22:DA:1064:C:H2'	22:DA:1065:U:H6	1.76	0.48
22:DA:1289:C:HO2'	22:DA:1290:C:C5'	2.27	0.48
22:DA:1338:G:O6	41:DT:66:LYS:HE2	2.13	0.48
22:DA:1464:G:C2	22:DA:1465:G:C4	3.02	0.48
22:DA:1489:C:C4'	22:DA:1490:A:OP1	2.57	0.48
22:DA:1572:A:H2'	22:DA:1573:G:H8	1.78	0.48
22:DA:571:U:C4	22:DA:2030:A:C6	3.01	0.48
22:DA:2051:A:C2	22:DA:2052:A:N6	2.81	0.48
22:DA:2239:G:H2'	22:DA:2240:U:H6	1.78	0.48
22:DA:2461:A:H1'	22:DA:2492:U:O2	2.12	0.48
22:DA:2537:U:H2'	22:DA:2538:C:H6	1.79	0.48
22:DA:2668:G:O2'	22:DA:2669:G:P	2.71	0.48
22:DA:676:A:C2	22:DA:2070:A:O4'	2.67	0.48
22:DA:778:G:C6	22:DA:779:U:N3	2.81	0.48
22:DA:799:G:O5'	22:DA:800:A:H3'	2.12	0.48
22:DA:919:U:H6	22:DA:919:U:C5'	2.26	0.48
23:DB:41:G:O6	27:DF:68:LYS:HD3	2.13	0.48
25:DD:133:THR:CG2	25:DD:134:HIS:H	1.99	0.48
28:DG:67:ALA:O	28:DG:71:LEU:HB2	2.13	0.48
31:DJ:23:LYS:NZ	31:DJ:142:ILE:H	2.11	0.48
22:DA:1142:A:H4'	31:DJ:27:ARG:HH22	1.78	0.48
31:DJ:37:ARG:NH2	31:DJ:39:LYS:NZ	2.62	0.48
33:DL:143:GLU:N	33:DL:143:GLU:OE1	2.46	0.48
35:DN:90:ARG:NH2	35:DN:116:VAL:HG12	2.27	0.48
40:DS:70:LYS:N	40:DS:70:LYS:HE3	2.27	0.48
41:DT:67:VAL:HB	41:DT:76:ARG:HG3	1.96	0.48
42:DU:45:GLN:HA	42:DU:45:GLN:NE2	2.24	0.48
44:DW:51:GLY:HA3	44:DW:59:PHE:O	2.12	0.48
45:DX:69:GLU:HA	45:DX:72:ALA:HB3	1.95	0.48
46:DY:59:GLU:C	46:DY:61:ALA:H	2.16	0.48
47:DZ:4:ILE:CG2	47:DZ:56:VAL:HG13	2.44	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1451:U:O5'	1:AA:1452:C:H5	1.96	0.48
1:AA:819:A:N7	1:AA:1529:G:C2	2.81	0.48
1:AA:977:A:O2'	1:AA:978:A:H5''	2.13	0.48
6:AF:8:PHE:CE1	6:AF:21:MET:HE1	2.45	0.48
7:AG:68:VAL:HG12	7:AG:102:TRP:HE3	1.78	0.48
7:AG:74:VAL:HA	7:AG:87:PRO:HA	1.95	0.48
10:AJ:53:ILE:CG1	14:AN:84:ARG:CZ	2.91	0.48
16:AP:23:ASP:O	16:AP:24:SER:C	2.51	0.48
16:AP:81:ALA:O	16:AP:82:ALA:HB2	2.13	0.48
19:AS:43:MET:HA	19:AS:46:LEU:HD12	1.94	0.48
20:AT:82:ILE:CD1	20:AT:83:ASN:N	2.72	0.48
21:AU:49:ALA:O	21:AU:52:VAL:HG12	2.13	0.48
49:B1:50:GLU:OE1	49:B1:50:GLU:CA	2.61	0.48
33:BL:62:PRO:HG3	51:B3:24:LYS:HD3	1.95	0.48
52:B4:16:ILE:HA	52:B4:24:ARG:O	2.13	0.48
22:BA:1210:G:P	22:BA:1212:G:H5'	2.53	0.48
22:BA:1214:A:H4'	22:BA:1239:G:H4'	1.95	0.48
22:BA:1520:U:O2'	22:BA:1521:G:H5'	2.14	0.48
22:BA:2148:G:O2'	22:BA:2149:U:C4'	2.61	0.48
22:BA:2249:U:H4'	22:BA:2250:G:OP2	2.14	0.48
22:BA:9:G:C5	22:BA:2629:U:C5	3.02	0.48
22:BA:320:A:H4'	22:BA:322:A:C8	2.48	0.48
22:BA:626:A:C2	33:BL:78:ARG:HD3	2.48	0.48
22:BA:657:U:H2'	22:BA:658:U:C6	2.49	0.48
22:BA:745:G:H2'	22:BA:746:U:H5'	1.95	0.48
22:BA:807:U:O2'	22:BA:808:G:H5'	2.13	0.48
22:BA:832:U:O2'	22:BA:833:A:H5'	2.14	0.48
22:BA:998:C:OP2	38:BQ:57:ARG:NH2	2.43	0.48
23:BB:14:U:OP2	23:BB:70:C:O2'	2.31	0.48
28:BG:17:LYS:HE3	28:BG:17:LYS:HB2	1.67	0.48
28:BG:38:ASP:H	28:BG:40:VAL:CG1	2.27	0.48
29:BH:6:LEU:N	29:BH:6:LEU:HD13	2.28	0.48
34:BM:31:PHE:CZ	34:BM:110:GLU:HG2	2.48	0.48
35:BN:16:HIS:HD2	35:BN:16:HIS:O	1.97	0.48
37:BP:31:VAL:O	37:BP:37:LYS:HA	2.14	0.48
39:BR:49:ILE:HB	39:BR:53:PHE:N	2.28	0.48
41:BT:61:LEU:HA	56:BT:101:HOH:O	2.12	0.48
43:BV:4:ILE:O	43:BV:63:ILE:HA	2.13	0.48
1:CA:431:A:H2'	1:CA:431:A:N3	2.28	0.48
1:CA:449:G:O2'	1:CA:450:G:H5'	2.14	0.48
1:CA:734:G:H2'	1:CA:735:C:C6	2.49	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:765:G:H1'	1:CA:812:G:N2	2.29	0.48
1:CA:919:A:O2'	1:CA:920:U:H5'	2.13	0.48
4:CD:187:ARG:NH1	4:CD:196:GLU:OE2	2.46	0.48
5:CE:155:LYS:NZ	8:CH:72:GLU:HG2	2.29	0.48
13:CM:49:GLU:HA	13:CM:49:GLU:OE1	2.13	0.48
15:CO:55:LEU:O	15:CO:58:MET:N	2.47	0.48
19:CS:36:ARG:O	19:CS:36:ARG:HG2	2.13	0.48
19:CS:40:PHE:CB	19:CS:41:PRO:CD	2.78	0.48
19:CS:44:ILE:HG12	19:CS:45:GLY:N	2.27	0.48
48:D0:42:ILE:HD12	48:D0:47:TYR:O	2.14	0.48
48:D0:50:GLY:C	48:D0:51:ARG:HG3	2.33	0.48
50:D2:24:THR:HG21	50:D2:27:GLY:HA3	1.94	0.48
50:D2:34:ARG:HB3	50:D2:42:LEU:CD1	2.43	0.48
51:D3:12:ARG:HD3	51:D3:12:ARG:N	2.29	0.48
51:D3:49:VAL:HG21	51:D3:54:LEU:HA	1.94	0.48
22:DA:1057:A:N3	22:DA:1082:U:C2	2.81	0.48
22:DA:1252:G:C2	22:DA:1253:A:H2	2.32	0.48
22:DA:1329:U:O2'	22:DA:1330:C:P	2.70	0.48
22:DA:1417:C:H2'	22:DA:1418:G:C8	2.49	0.48
22:DA:1532:A:C2	22:DA:1540:G:N1	2.82	0.48
22:DA:1668:A:O4'	22:DA:1669:A:C2	2.66	0.48
22:DA:1716:U:O2'	22:DA:1717:A:C5'	2.61	0.48
22:DA:1824:G:OP2	22:DA:1824:G:H8	1.95	0.48
22:DA:1832:C:C2'	22:DA:1833:C:O5'	2.60	0.48
22:DA:1667:G:O2'	22:DA:1991:U:O4	2.26	0.48
22:DA:2094:A:O2'	22:DA:2095:A:O4'	2.31	0.48
22:DA:2298:A:C6	22:DA:2321:U:C5	3.01	0.48
22:DA:2396:G:C2	22:DA:2421:G:C2	3.01	0.48
22:DA:2662:A:C2'	22:DA:2663:G:H5'	2.44	0.48
22:DA:2668:G:N3	22:DA:2669:G:C8	2.81	0.48
22:DA:2800:A:N1	22:DA:2801:G:N3	2.62	0.48
22:DA:395:U:O2'	22:DA:396:G:O5'	2.31	0.48
22:DA:426:C:C2'	22:DA:427:U:H5'	2.42	0.48
22:DA:729:G:C8	24:DC:206:LYS:HE3	2.49	0.48
22:DA:749:A:H1'	22:DA:1618:A:OP1	2.13	0.48
22:DA:813:U:C2	22:DA:814:C:C6	3.01	0.48
24:DC:181:ARG:HG3	24:DC:182:LYS:N	2.29	0.48
24:DC:24:HIS:CE1	24:DC:79:ARG:NH1	2.82	0.48
26:DE:29:HIS:ND1	33:DL:6:LEU:CD2	2.74	0.48
32:DK:11:ALA:HB2	32:DK:64:ARG:HH12	1.75	0.48
33:DL:92:LEU:HD22	33:DL:124:GLY:CA	2.35	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2334:U:O3'	36:DO:13:ARG:HB2	2.11	0.48
37:DP:83:ILE:O	37:DP:83:ILE:HG23	2.13	0.48
39:DR:10:LYS:NZ	39:DR:23:GLU:HG3	2.28	0.48
22:DA:508:A:N6	40:DS:9:HIS:NE2	2.49	0.48
42:DU:82:VAL:H	42:DU:96:LYS:HZ2	1.61	0.48
43:DV:56:PHE:C	43:DV:58:SER:N	2.66	0.48
44:DW:49:ASN:OD1	44:DW:80:SER:HA	2.13	0.48
44:DW:30:VAL:CG2	44:DW:59:PHE:CD1	2.96	0.48
45:DX:39:VAL:O	45:DX:41:SER:N	2.46	0.48
47:DZ:41:PRO:HA	47:DZ:44:ARG:HB3	1.95	0.48
1:AA:1150:A:O2'	10:AJ:42:LEU:C	2.51	0.48
1:AA:1151:A:N6	1:AA:1152:A:N6	2.61	0.48
1:AA:1317:C:H6	1:AA:1317:C:H3'	1.78	0.48
1:AA:1365:G:O2'	1:AA:1366:C:H5'	2.14	0.48
1:AA:198:G:N2	1:AA:220:G:H1'	2.29	0.48
1:AA:266:G:OP2	1:AA:267:C:H5	1.97	0.48
1:AA:410:G:OP2	4:AD:21:LYS:CE	2.61	0.48
1:AA:52:C:H2'	1:AA:53:A:C8	2.48	0.48
1:AA:542:G:N3	1:AA:543:U:C5	2.81	0.48
4:AD:138:PRO:HA	4:AD:181:PHE:HD2	1.79	0.48
5:AE:152:VAL:CB	5:AE:155:LYS:NZ	2.41	0.48
7:AG:83:THR:O	7:AG:85:GLN:N	2.46	0.48
8:AH:21:LYS:HE2	8:AH:21:LYS:CA	2.41	0.48
10:AJ:33:GLY:O	10:AJ:34:ALA:CB	2.61	0.48
10:AJ:29:ALA:HB3	10:AJ:36:VAL:HG21	1.96	0.48
11:AK:51:PHE:CE1	11:AK:60:PHE:HE2	2.18	0.48
15:AO:52:ARG:HA	15:AO:55:LEU:HB3	1.94	0.48
15:AO:73:ASP:OD2	15:AO:76:ARG:HG3	2.14	0.48
16:AP:4:ILE:O	16:AP:68:SER:OG	2.29	0.48
20:AT:66:ILE:O	20:AT:67:HIS:O	2.32	0.48
49:B1:9:LYS:CD	49:B1:9:LYS:N	2.77	0.48
22:BA:1105:U:H2'	22:BA:1106:G:C8	2.45	0.48
22:BA:134:G:N2	22:BA:146:A:C4	2.82	0.48
22:BA:2056:G:C2	22:BA:2057:G:C8	3.00	0.48
22:BA:2210:U:OP1	22:BA:2210:U:H6	1.96	0.48
22:BA:28:A:C4	22:BA:29:U:C6	3.02	0.48
22:BA:872:U:H2'	22:BA:873:C:C6	2.48	0.48
22:BA:875:G:H2'	22:BA:876:C:H5'	1.96	0.48
22:BA:95:A:O2'	46:BY:41:HIS:CD2	2.67	0.48
23:BB:37:C:C5	23:BB:38:C:C5	3.01	0.48
24:BC:230:PRO:HG2	24:BC:245:THR:O	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:80:LEU:HD11	24:BC:109:LEU:CB	2.44	0.48
25:BD:119:ALA:HB1	25:BD:123:LYS:HB3	1.95	0.48
26:BE:132:LYS:NZ	26:BE:132:LYS:HB3	2.29	0.48
31:BJ:3:THR:HG21	38:BQ:60:TRP:HE1	1.78	0.48
32:BK:1:MET:HG3	32:BK:67:LYS:HG3	1.96	0.48
34:BM:53:MET:HE2	34:BM:120:ALA:HB2	1.94	0.48
37:BP:24:THR:O	37:BP:25:VAL:O	2.30	0.48
38:BQ:40:LYS:HA	38:BQ:43:GLN:HG2	1.93	0.48
39:BR:91:GLN:OE1	39:BR:91:GLN:HA	2.14	0.48
41:BT:30:ILE:HG12	41:BT:32:LEU:CD2	2.43	0.48
42:BU:97:SER:O	42:BU:98:ASN:CB	2.61	0.48
45:BX:73:ARG:HG3	45:BX:73:ARG:O	2.14	0.48
1:CA:1130:A:N7	1:CA:1146:A:C6	2.82	0.48
1:CA:151:A:H2'	1:CA:152:A:O4'	2.13	0.48
1:CA:169:C:O2'	1:CA:170:U:H5'	2.14	0.48
1:CA:197:A:N6	1:CA:221:C:C5'	2.76	0.48
1:CA:885:G:H1'	1:CA:914:A:C2	2.49	0.48
22:BA:2197:U:OP1	4:CD:150:LYS:CE	2.62	0.48
8:CH:33:VAL:C	8:CH:35:ILE:N	2.66	0.48
9:CI:30:ASN:O	9:CI:31:GLN:CG	2.61	0.48
9:CI:49:GLN:O	9:CI:52:GLU:HG2	2.13	0.48
12:CL:7:VAL:O	12:CL:7:VAL:CG1	2.58	0.48
15:CO:16:ARG:HH12	15:CO:76:ARG:HD2	1.78	0.48
6:CF:86:ARG:CD	18:CR:63:TYR:O	2.57	0.48
21:CU:14:ALA:O	21:CU:15:LEU:C	2.52	0.48
48:D0:29:VAL:HA	48:D0:35:GLU:O	2.13	0.48
50:D2:18:PHE:O	50:D2:21:ARG:N	2.45	0.48
22:DA:125:A:O3'	50:D2:19:ARG:HG3	2.14	0.48
51:D3:11:LYS:C	51:D3:12:ARG:HD3	2.34	0.48
51:D3:2:LYS:HB2	51:D3:2:LYS:HE3	1.68	0.48
22:DA:1034:G:O2'	22:DA:1035:U:O4'	2.20	0.48
22:DA:1068:G:O2'	22:DA:1069:A:H5'	2.13	0.48
22:DA:1131:G:C5	22:DA:2025:C:H4'	2.49	0.48
22:DA:1275:A:C4	35:DN:16:HIS:HD2	2.32	0.48
22:DA:1342:A:C6	22:DA:1397:U:C5	3.01	0.48
22:DA:1388:G:H2'	22:DA:1389:G:H8	1.78	0.48
22:DA:142:A:O2'	22:DA:143:C:C6	2.49	0.48
22:DA:1596:A:C6	22:DA:1597:A:C6	3.01	0.48
22:DA:699:A:N6	22:DA:1633:G:H21	2.11	0.48
22:DA:1665:A:H1'	32:DK:1:MET:HG3	1.95	0.48
22:DA:1736:U:H2'	22:DA:1737:G:O5'	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1943:U:O4'	22:DA:1943:U:O2	2.32	0.48
22:DA:2452:C:H2'	22:DA:2453:A:C8	2.48	0.48
22:DA:2563:U:H4'	32:DK:28:SER:HA	1.96	0.48
22:DA:2588:G:C2'	22:DA:2589:A:H5'	2.43	0.48
22:DA:2728:U:H2'	22:DA:2729:G:C8	2.48	0.48
22:DA:30:G:C2	22:DA:31:C:C2	3.01	0.48
22:DA:334:C:O2'	22:DA:335:C:OP1	2.28	0.48
22:DA:279:A:C6	22:DA:361:G:O2'	2.67	0.48
22:DA:265:A:C6	22:DA:428:A:O4'	2.66	0.48
22:DA:36:G:H5'	22:DA:451:U:O2	2.13	0.48
23:DB:42:C:O2'	23:DB:43:C:H5'	2.14	0.48
24:DC:144:GLU:CB	24:DC:187:CYS:HB2	2.39	0.48
24:DC:255:LYS:C	24:DC:256:THR:CG2	2.80	0.48
24:DC:259:ASN:OD1	24:DC:262:THR:HG23	2.13	0.48
25:DD:124:ARG:NH1	25:DD:125:TRP:NE1	2.48	0.48
26:DE:135:ALA:C	26:DE:137:LYS:N	2.66	0.48
27:DF:110:ILE:HA	27:DF:111:ARG:HH11	1.79	0.48
31:DJ:25:LEU:C	31:DJ:27:ARG:N	2.67	0.48
36:DO:18:LEU:HD13	36:DO:25:ARG:CG	2.38	0.48
40:DS:25:ARG:HA	40:DS:74:ILE:HG21	1.94	0.48
41:DT:8:LEU:CD2	41:DT:46:ALA:HA	2.43	0.48
45:DX:26:ARG:HG3	45:DX:27:ARG:N	2.27	0.48
45:DX:63:ILE:HD12	45:DX:63:ILE:N	2.29	0.48
47:DZ:23:LEU:CD1	47:DZ:28:LEU:HD21	2.41	0.48
1:AA:1003:G:H21	1:AA:1005:A:H5'	1.74	0.48
1:AA:1227:A:O2'	1:AA:1228:C:O5'	2.22	0.48
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.14	0.48
1:AA:1317:C:C6	1:AA:1317:C:C3'	2.97	0.48
1:AA:1322:C:O2'	1:AA:1323:G:C5'	2.61	0.48
1:AA:1387:G:C4	1:AA:1388:C:C5	3.02	0.48
1:AA:500:G:C4	1:AA:501:C:C5	3.01	0.48
1:AA:515:G:N1	1:AA:537:G:C6	2.82	0.48
1:AA:555:U:H2'	1:AA:556:C:O5'	2.13	0.48
2:AB:206:ILE:HD13	2:AB:207:ARG:H	1.78	0.48
2:AB:68:PHE:CD2	2:AB:83:ALA:HB1	2.49	0.48
3:AC:106:ARG:O	3:AC:107:LYS:HB2	2.12	0.48
3:AC:137:VAL:HG22	3:AC:148:ILE:HG23	1.94	0.48
7:AG:22:LEU:HD11	7:AG:46:LEU:CD2	2.43	0.48
7:AG:52:ARG:HH21	7:AG:124:SER:CB	2.27	0.48
9:AI:26:LYS:O	9:AI:62:LEU:HD23	2.13	0.48
11:AK:109:ILE:O	11:AK:110:THR:CG2	2.61	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AK:34:THR:HG1	11:AK:39:ASN:H	1.58	0.48
12:AL:113:ARG:HD2	12:AL:118:VAL:CG1	2.43	0.48
12:AL:35:ARG:HB2	12:AL:37:TYR:CE1	2.48	0.48
13:AM:94:LEU:HD22	13:AM:95:PRO:HD2	1.96	0.48
10:AJ:63:ASP:OD2	14:AN:97:LYS:NZ	2.47	0.48
17:AQ:15:LYS:HD2	17:AQ:16:MET:N	2.28	0.48
19:AS:10:ILE:HD11	19:AS:15:LEU:HB2	1.95	0.48
11:AK:125:LYS:O	21:AU:33:ARG:NH1	2.46	0.48
22:BA:686:U:O4	50:B2:12:ARG:NH2	2.47	0.48
22:BA:1028:A:N6	22:BA:1125:G:H2'	2.29	0.48
22:BA:1188:U:O2'	22:BA:1189:A:H5'	2.12	0.48
22:BA:1462:C:O2'	22:BA:1463:C:C5'	2.62	0.48
22:BA:1565:C:O2'	22:BA:1566:A:O5'	2.30	0.48
22:BA:1612:C:C2'	22:BA:1613:G:O5'	2.61	0.48
22:BA:1735:A:O2'	22:BA:1736:U:O4'	2.27	0.48
22:BA:178:G:O2'	22:BA:179:C:H5'	2.14	0.48
22:BA:1842:G:O4'	24:BC:242:HIS:ND1	2.47	0.48
22:BA:1871:A:C8	22:BA:1872:A:C6	3.01	0.48
22:BA:1912:A:N1	22:BA:1919:A:N7	2.62	0.48
22:BA:2148:G:O2'	22:BA:2149:U:O4'	2.31	0.48
22:BA:2250:G:H21	22:BA:2496:C:C5'	2.22	0.48
22:BA:2393:U:H2'	22:BA:2394:C:O4'	2.14	0.48
22:BA:1787:A:O4'	22:BA:2589:A:H4'	2.14	0.48
22:BA:2754:U:O5'	22:BA:2754:U:H6	1.96	0.48
22:BA:2805:C:C4	22:BA:2806:C:C4	3.01	0.48
22:BA:391:A:C6	22:BA:411:G:C2	3.02	0.48
22:BA:60:G:C8	22:BA:62:U:H2'	2.48	0.48
22:BA:566:U:O2'	22:BA:809:G:OP2	2.26	0.48
22:BA:962:G:P	56:BA:3355:HOH:O	2.71	0.48
22:BA:990:A:C5'	22:BA:990:A:C8	2.87	0.48
23:BB:49:C:O3'	36:BO:68:LYS:HE2	2.12	0.48
26:BE:113:VAL:CG1	26:BE:114:ARG:N	2.76	0.48
26:BE:172:ALA:O	26:BE:175:ILE:HG22	2.14	0.48
27:BF:40:GLY:N	27:BF:84:ILE:CD1	2.77	0.48
36:BO:110:ALA:O	36:BO:113:ALA:HB3	2.13	0.48
36:BO:54:VAL:HG22	36:BO:54:VAL:O	2.14	0.48
45:BX:50:VAL:HG12	45:BX:51:SER:O	2.13	0.48
1:CA:1146:A:C6	1:CA:1147:C:C4	3.02	0.48
1:CA:1299:A:H62	1:CA:1302:C:H41	1.61	0.48
1:CA:1490:U:C5'	1:CA:1491:G:OP2	2.62	0.48
1:CA:68:G:N2	1:CA:152:A:C1'	2.75	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:158:G:N7	1:CA:164:G:C6	2.82	0.48
1:CA:43:C:H2'	1:CA:44:A:C5'	2.43	0.48
1:CA:511:C:C2	1:CA:512:U:C5	3.01	0.48
1:CA:770:C:O2'	1:CA:771:G:H5'	2.14	0.48
2:CB:74:ALA:CB	2:CB:206:ILE:HD11	2.43	0.48
5:CE:33:THR:OG1	5:CE:49:TYR:CZ	2.65	0.48
6:CF:49:TYR:HE1	18:CR:65:SER:HA	1.78	0.48
7:CG:26:VAL:HG12	7:CG:42:VAL:HG21	1.96	0.48
8:CH:46:GLU:N	8:CH:63:LYS:HG3	2.29	0.48
8:CH:9:MET:HA	8:CH:26:MET:HE2	1.94	0.48
11:CK:15:VAL:O	11:CK:16:SER:CB	2.59	0.48
1:CA:520:A:O2'	12:CL:69:GLU:HG3	2.13	0.48
12:CL:97:VAL:O	12:CL:97:VAL:CG2	2.56	0.48
15:CO:41:HIS:CD2	15:CO:41:HIS:C	2.87	0.48
52:D4:1:MET:HB3	52:D4:34:LYS:HE3	1.95	0.48
22:DA:70:G:O3'	22:DA:113:U:H4'	2.13	0.48
22:DA:1603:A:H2'	22:DA:1604:C:C6	2.49	0.48
22:DA:1833:C:N4	22:DA:1834:U:O4	2.47	0.48
22:DA:1975:G:N3	22:DA:1976:U:C6	2.82	0.48
22:DA:1957:C:O2'	22:DA:1985:C:H1'	2.13	0.48
22:DA:2093:G:C2	22:DA:2094:A:N7	2.81	0.48
22:DA:2104:C:O2	22:DA:2105:U:C5	2.62	0.48
22:DA:2136:G:O6	22:DA:2156:G:C2	2.66	0.48
22:DA:2286:G:N7	49:D1:33:LEU:CD2	2.75	0.48
22:DA:2636:C:P	25:DD:81:GLU:HB2	2.54	0.48
22:DA:2675:A:H2'	22:DA:2676:C:O4'	2.14	0.48
22:DA:2714:G:C2'	22:DA:2715:C:H5'	2.44	0.48
22:DA:2748:A:C2	22:DA:2749:A:C4	3.02	0.48
22:DA:28:A:H2'	22:DA:29:U:O4'	2.13	0.48
22:DA:370:G:H2'	22:DA:424:G:OP1	2.13	0.48
22:DA:533:G:H2'	22:DA:534:U:C6	2.49	0.48
22:DA:931:U:C2'	22:DA:931:U:O2	2.61	0.48
22:DA:947:A:O2'	22:DA:948:C:O4'	2.29	0.48
22:DA:996:A:O2'	38:DQ:91:ARG:HG2	2.13	0.48
24:DC:16:VAL:HB	24:DC:203:VAL:HB	1.94	0.48
24:DC:250:GLN:HG2	24:DC:250:GLN:H	1.51	0.48
24:DC:71:ASP:OD2	24:DC:118:GLY:HA2	2.14	0.48
26:DE:118:LEU:HD11	26:DE:188:MET:HE2	1.95	0.48
26:DE:128:ALA:CB	26:DE:129:PRO:CD	2.83	0.48
26:DE:158:PHE:HA	26:DE:169:VAL:HG11	1.95	0.48
26:DE:148:ILE:CA	26:DE:187:VAL:HB	2.40	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:69:VAL:HG11	32:DK:106:GLU:HG2	1.95	0.48
33:DL:99:ASN:O	33:DL:100:ILE:HB	2.14	0.48
34:DM:53:MET:CE	34:DM:117:PHE:CE1	2.96	0.48
36:DO:105:ALA:O	36:DO:109:ALA:CB	2.62	0.48
22:DA:2019:A:C4'	38:DQ:33:VAL:HG21	2.39	0.48
41:DT:48:GLN:HA	41:DT:48:GLN:NE2	2.28	0.48
22:DA:1340:U:H5'	41:DT:61:LEU:CD2	2.44	0.48
44:DW:37:VAL:C	44:DW:39:GLN:H	2.16	0.48
22:DA:2432:A:C6	45:DX:20:ALA:HA	2.47	0.48
47:DZ:40:THR:HG22	47:DZ:42:ALA:H	1.77	0.48
1:AA:1253:G:H2'	1:AA:1254:A:H8	1.79	0.48
1:AA:174:A:HO2'	1:AA:175:C:H5'	1.77	0.48
1:AA:192:A:C6	1:AA:193:C:C4	3.02	0.48
1:AA:344:A:O2'	37:BP:36:LYS:HE2	2.13	0.48
1:AA:363:A:C2'	1:AA:364:A:H5'	2.44	0.48
1:AA:674:G:H4'	18:AR:69:TYR:CE1	2.48	0.48
1:AA:903:G:C4	1:AA:904:U:C6	3.02	0.48
1:AA:92:U:C2'	1:AA:93:U:C6	2.96	0.48
3:AC:154:GLY:O	3:AC:195:ILE:CG1	2.61	0.48
3:AC:185:THR:O	3:AC:186:SER:HB2	2.13	0.48
4:AD:131:ILE:O	4:AD:133:SER:N	2.43	0.48
5:AE:94:PHE:CD1	5:AE:94:PHE:O	2.67	0.48
8:AH:36:ALA:CB	8:AH:60:LEU:HD21	2.43	0.48
8:AH:1:SER:C	8:AH:3:GLN:N	2.66	0.48
8:AH:76:ARG:NE	8:AH:78:SER:O	2.47	0.48
9:AI:3:ASN:O	9:AI:4:GLN:HG2	2.13	0.48
10:AJ:17:LEU:HD23	10:AJ:18:ILE:HA	1.96	0.48
10:AJ:22:THR:HG22	10:AJ:23:ALA:N	2.29	0.48
10:AJ:70:HIS:H	10:AJ:70:HIS:CD2	2.32	0.48
10:AJ:53:ILE:HD11	14:AN:84:ARG:NH1	2.28	0.48
22:BA:1189:A:C2'	22:BA:1190:G:O5'	2.62	0.48
22:BA:1282:U:H2'	22:BA:1283:G:O4'	2.14	0.48
22:BA:1360:G:C6	22:BA:1372:U:C2	3.02	0.48
22:BA:1508:A:O2'	22:BA:1509:A:P	2.72	0.48
22:BA:1513:U:C2'	22:BA:1514:G:H5'	2.43	0.48
22:BA:1967:C:H2'	22:BA:1968:G:C8	2.49	0.48
22:BA:242:G:O5'	51:B3:2:LYS:HE2	2.14	0.48
22:BA:2489:U:C2'	22:BA:2490:G:O5'	2.62	0.48
22:BA:2515:C:O2	22:BA:2570:G:C2	2.67	0.48
22:BA:38:A:O2'	26:BE:43:THR:HA	2.12	0.48
22:BA:696:G:O2'	22:BA:697:G:H5'	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:819:A:OP2	22:BA:1187:G:N2	2.43	0.48
22:BA:861:A:N3	23:BB:79:G:O2'	2.47	0.48
24:BC:182:LYS:O	24:BC:183:VAL:CG2	2.62	0.48
24:BC:83:ASP:OD1	24:BC:84:PRO:CD	2.62	0.48
28:BG:97:VAL:HG22	28:BG:102:ILE:HG12	1.95	0.48
29:BH:80:ILE:O	29:BH:81:ALA:HB2	2.12	0.48
30:BI:12:VAL:HG23	30:BI:13:ALA:H	1.78	0.48
31:BJ:64:VAL:HG11	31:BJ:68:LYS:HB2	1.92	0.48
32:BK:95:ILE:C	32:BK:95:ILE:CD1	2.64	0.48
39:BR:42:ALA:CB	39:BR:46:GLU:HB2	2.43	0.48
41:BT:22:THR:O	41:BT:25:GLU:HB3	2.13	0.48
41:BT:31:VAL:C	41:BT:32:LEU:CD2	2.74	0.48
1:CA:1347:G:H3'	9:CI:109:GLN:O	2.13	0.48
1:CA:549:C:H2'	1:CA:550:G:O4'	2.14	0.48
1:CA:687:A:C2	1:CA:704:A:C6	3.02	0.48
1:CA:67:C:O2	1:CA:68:G:N7	2.47	0.48
3:CC:70:ALA:HB2	3:CC:114:LEU:HD11	1.96	0.48
1:CA:1082:A:OP2	5:CE:22:LYS:HE3	2.13	0.48
7:CG:88:VAL:CG2	7:CG:89:GLU:H	2.14	0.48
9:CI:94:ARG:NH1	9:CI:94:ARG:HG3	2.29	0.48
12:CL:109:ARG:HD2	12:CL:109:ARG:HA	1.69	0.48
14:CN:8:ARG:NH1	14:CN:12:ARG:HH22	2.11	0.48
14:CN:25:GLU:O	14:CN:28:ALA:HB3	2.12	0.48
15:CO:36:ASN:O	15:CO:37:HIS:C	2.51	0.48
17:CQ:80:LYS:O	17:CQ:81:ALA:HB3	2.14	0.48
18:CR:53:GLN:O	18:CR:56:ARG:HB2	2.14	0.48
19:CS:52:ASN:C	19:CS:54:ARG:H	2.17	0.48
18:CR:72:ARG:HA	21:CU:4:LYS:HE3	1.94	0.48
22:DA:242:G:C5	51:D3:4:LYS:HE3	2.49	0.48
22:DA:1007:C:H2'	22:DA:1008:A:C8	2.48	0.48
22:DA:1071:G:O6	22:DA:1089:A:C2	2.66	0.48
22:DA:1431:A:H2'	22:DA:1432:G:C8	2.49	0.48
22:DA:1551:A:C4	22:DA:1552:A:H8	2.31	0.48
22:DA:202:U:H2'	22:DA:202:U:O2	2.13	0.48
22:DA:2348:U:P	51:D3:37:THR:HG21	2.54	0.48
22:DA:2345:G:C5	22:DA:2381:A:C2	3.02	0.48
22:DA:2522:U:O2'	22:DA:2523:G:H5'	2.14	0.48
22:DA:2674:G:C6	22:DA:2675:A:C6	3.02	0.48
22:DA:2748:A:C6	22:DA:2757:A:N7	2.82	0.48
22:DA:2837:A:N6	22:DA:2882:A:N6	2.60	0.48
22:DA:310:A:C8	22:DA:312:G:O6	2.66	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:445:C:H2'	22:DA:446:G:N7	2.28	0.48
22:DA:503:A:C5'	22:DA:504:A:O5'	2.62	0.48
22:DA:813:U:C2	22:DA:814:C:C5	3.02	0.48
22:DA:82:U:C3'	22:DA:83:A:H5''	2.43	0.48
22:DA:956:G:H1'	34:DM:82:MET:HE1	1.95	0.48
23:DB:24:G:H4'	23:DB:26:C:H5	1.78	0.48
23:DB:49:C:H2'	23:DB:50:A:H8	1.79	0.48
22:DA:1820:U:O2'	24:DC:199:HIS:HD2	1.97	0.48
25:DD:110:THR:CG2	25:DD:171:THR:HG22	2.43	0.48
25:DD:137:SER:C	25:DD:138:LEU:CD2	2.82	0.48
25:DD:110:THR:HG23	25:DD:171:THR:HG22	1.96	0.48
26:DE:147:LEU:CD2	26:DE:179:SER:HB2	2.43	0.48
26:DE:46:GLN:HB3	26:DE:86:ALA:HB1	1.95	0.48
26:DE:59:PRO:HB2	26:DE:67:ARG:NH2	2.29	0.48
27:DF:12:VAL:HG12	27:DF:12:VAL:O	2.14	0.48
27:DF:93:GLU:C	27:DF:95:MET:H	2.17	0.48
29:DH:24:GLY:O	29:DH:25:TYR:C	2.52	0.48
34:DM:31:PHE:O	34:DM:105:MET:N	2.43	0.48
36:DO:34:HIS:HA	36:DO:65:THR:O	2.14	0.48
36:DO:89:ASP:O	36:DO:90:VAL:HG13	2.14	0.48
37:DP:59:THR:HA	37:DP:72:VAL:HA	1.95	0.48
40:DS:24:ILE:HG22	40:DS:35:ILE:CD1	2.41	0.48
40:DS:18:ARG:CA	40:DS:76:VAL:HG11	2.38	0.48
1:AA:1141:C:O2	1:AA:1142:G:C8	2.67	0.48
1:AA:135:C:H2'	1:AA:136:C:H5'	1.95	0.48
1:AA:687:A:C6	1:AA:704:A:N7	2.82	0.48
1:AA:686:U:O2'	1:AA:687:A:C8	2.59	0.48
1:AA:752:G:O2'	1:AA:753:A:P	2.71	0.48
1:AA:761:G:H2'	1:AA:762:U:C6	2.49	0.48
1:AA:792:A:N3	1:AA:794:A:C5	2.82	0.48
1:AA:845:A:H3'	1:AA:845:A:C8	2.49	0.48
1:AA:868:C:H2'	1:AA:869:G:C5'	2.43	0.48
1:AA:923:A:O2'	1:AA:924:C:H5'	2.14	0.48
2:AB:56:LEU:CD1	2:AB:220:VAL:CG2	2.91	0.48
2:AB:90:PHE:H	2:AB:149:GLY:HA2	1.78	0.48
3:AC:34:SER:OG	3:AC:94:ALA:HA	2.13	0.48
4:AD:94:GLU:HG3	4:AD:99:ASN:ND2	2.29	0.48
5:AE:120:HIS:C	5:AE:121:ASN:HD22	2.17	0.48
6:AF:20:GLY:O	6:AF:24:ARG:HD3	2.13	0.48
1:AA:586:C:O2'	8:AH:3:GLN:NE2	2.46	0.48
8:AH:45:ILE:CD1	8:AH:60:LEU:HD22	2.44	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AI:16:ALA:HB2	9:AI:66:VAL:CG2	2.44	0.48
10:AJ:11:LYS:O	10:AJ:12:ALA:HB2	2.14	0.48
11:AK:54:SER:HA	11:AK:57:SER:OG	2.14	0.48
12:AL:23:LEU:O	12:AL:25:ALA:N	2.46	0.48
13:AM:92:ARG:HB3	13:AM:92:ARG:CZ	2.43	0.48
15:AO:44:GLU:O	15:AO:45:HIS:HB2	2.13	0.48
19:AS:30:LEU:O	19:AS:49:ALA:CB	2.61	0.48
20:AT:18:LYS:O	20:AT:19:HIS:C	2.52	0.48
51:B3:54:LEU:HA	51:B3:54:LEU:HD13	1.76	0.48
22:BA:1088:A:H4'	22:BA:1089:A:H8	1.78	0.48
22:BA:1139:G:C2'	22:BA:1140:C:H5'	2.44	0.48
22:BA:1604:C:H2'	22:BA:1605:C:H6	1.79	0.48
22:BA:1694:C:H4'	22:BA:1695:G:O5'	2.13	0.48
22:BA:1707:G:C5	22:BA:1756:G:C6	3.02	0.48
22:BA:1848:A:O2'	22:BA:1849:G:H5'	2.14	0.48
22:BA:1974:C:H2'	22:BA:1975:G:O5'	2.14	0.48
22:BA:2136:G:O6	22:BA:2156:G:N3	2.47	0.48
22:BA:361:G:OP2	22:BA:361:G:C8	2.67	0.48
22:BA:611:C:C2'	22:BA:612:G:O5'	2.62	0.48
22:BA:930:G:C5'	22:BA:931:U:OP2	2.61	0.48
28:BG:7:PRO:O	28:BG:68:ARG:NH1	2.45	0.48
29:BH:14:SER:O	29:BH:16:GLY:N	2.47	0.48
30:BI:85:ILE:HD13	30:BI:88:GLY:HA2	1.96	0.48
31:BJ:3:THR:HG21	38:BQ:60:TRP:NE1	2.28	0.48
32:BK:113:MET:HA	32:BK:116:ILE:CG1	2.43	0.48
36:BO:115:LEU:HD12	36:BO:116:GLN:H	1.77	0.48
37:BP:28:LYS:O	37:BP:80:VAL:O	2.32	0.48
44:BW:11:ASN:C	44:BW:12:GLY:O	2.50	0.48
44:BW:22:VAL:O	44:BW:25:PHE:CD2	2.66	0.48
45:BX:44:ARG:HG2	45:BX:45:PHE:N	2.27	0.48
1:CA:1272:G:H2'	1:CA:1273:C:C5'	2.43	0.48
1:CA:182:A:C5	1:CA:184:G:C8	3.02	0.48
1:CA:205:A:C4	1:CA:206:C:N4	2.82	0.48
1:CA:255:G:H2'	1:CA:256:U:H6	1.78	0.48
1:CA:269:C:H2'	1:CA:270:A:H8	1.74	0.48
1:CA:595:A:C4'	1:CA:596:A:OP1	2.62	0.48
4:CD:145:ARG:HG3	4:CD:146:GLU:N	2.29	0.48
4:CD:160:LEU:HA	4:CD:160:LEU:HD13	1.73	0.48
10:CJ:35:GLN:NE2	10:CJ:78:GLU:HB2	2.29	0.48
11:CK:33:ILE:O	11:CK:41:LEU:HB2	2.13	0.48
14:CN:61:ASN:C	14:CN:62:ARG:HG3	2.34	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:CN:72:PHE:CG	14:CN:73:LEU:N	2.82	0.48
15:CO:16:ARG:HB2	15:CO:23:SER:OG	2.14	0.48
16:CP:38:PHE:O	16:CP:38:PHE:CG	2.67	0.48
20:CT:81:GLN:O	20:CT:82:ILE:HG12	2.14	0.48
51:D3:44:ARG:H	51:D3:45:PRO:HD2	1.79	0.48
22:DA:1064:C:C5	22:DA:1065:U:C5	3.02	0.48
22:DA:1085:A:H4'	22:DA:1105:U:O4'	2.14	0.48
22:DA:1071:G:N2	22:DA:1090:A:OP2	2.46	0.48
22:DA:1170:C:OP2	22:DA:1170:C:H6	1.96	0.48
22:DA:120:U:C2	22:DA:149:A:N6	2.82	0.48
22:DA:122:G:O2'	22:DA:123:G:C5'	2.62	0.48
22:DA:1330:C:O2'	22:DA:1331:G:O5'	2.31	0.48
22:DA:1439:A:N7	22:DA:1440:U:H1'	2.29	0.48
22:DA:1475:G:HO2'	22:DA:1476:U:H6	1.60	0.48
22:DA:1499:C:C4	22:DA:1500:G:N7	2.81	0.48
22:DA:1608:A:N7	22:DA:1611:C:N4	2.61	0.48
22:DA:1678:A:H2'	22:DA:1679:A:O4'	2.13	0.48
22:DA:1789:A:O2'	22:DA:1790:C:H5'	2.13	0.48
22:DA:1919:A:C2'	22:DA:1920:C:H5'	2.44	0.48
22:DA:1991:U:C4'	22:DA:1991:U:H6	2.27	0.48
22:DA:2102:G:C6	22:DA:2103:C:C5	3.02	0.48
22:DA:2508:G:H2'	22:DA:2509:G:C8	2.49	0.48
22:DA:2636:C:OP1	25:DD:81:GLU:HB2	2.14	0.48
22:DA:360:U:H2'	22:DA:361:G:O4'	2.13	0.48
22:DA:503:A:C6	22:DA:506:G:C6	3.01	0.48
22:DA:614:A:OP2	22:DA:614:A:N3	2.47	0.48
22:DA:689:A:N3	22:DA:779:U:C1'	2.77	0.48
22:DA:931:U:H5	22:DA:1182:G:N2	2.12	0.48
22:DA:993:G:O2'	22:DA:994:C:H5'	2.14	0.48
24:DC:245:THR:HB	24:DC:246:PRO:HD2	1.96	0.48
25:DD:208:LYS:O	25:DD:209:ALA:HB2	2.12	0.48
25:DD:37:VAL:HG12	25:DD:37:VAL:O	2.13	0.48
26:DE:37:ALA:HB1	26:DE:92:HIS:O	2.13	0.48
29:DH:109:GLU:OE2	29:DH:109:GLU:HA	2.13	0.48
30:DI:20:SER:H	30:DI:21:PRO:CD	2.26	0.48
31:DJ:92:MET:HE2	31:DJ:95:ARG:HD2	1.96	0.48
37:DP:86:LYS:N	37:DP:86:LYS:NZ	2.62	0.48
38:DQ:61:ILE:H	38:DQ:61:ILE:CD1	2.26	0.48
39:DR:87:GLN:HG2	39:DR:88:GLY:H	1.78	0.48
40:DS:68:ASP:O	40:DS:69:LEU:HD12	2.13	0.48
22:DA:2356:U:C4'	44:DW:16:GLU:HG3	2.37	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DX:67:LEU:CD2	45:DX:77:TYR:CE1	2.96	0.48
46:DY:57:LEU:O	46:DY:60:LYS:HE3	2.14	0.48
46:DY:1:MET:N	46:DY:5:GLU:HG2	2.29	0.48
1:AA:1152:A:O2'	1:AA:1153:G:C5'	2.62	0.47
1:AA:122:G:H2'	1:AA:123:U:H6	1.79	0.47
1:AA:1293:C:H2'	1:AA:1294:G:H8	1.78	0.47
1:AA:1501:C:C4	1:AA:1504:G:C5	3.02	0.47
1:AA:292:G:N2	1:AA:309:A:C4	2.82	0.47
1:AA:338:A:C6	1:AA:351:G:O6	2.66	0.47
1:AA:429:U:C4'	1:AA:430:A:O5'	2.62	0.47
1:AA:520:A:C2	1:AA:536:C:O2	2.67	0.47
1:AA:577:G:O4'	1:AA:816:A:H2'	2.14	0.47
1:AA:577:G:H2'	1:AA:578:C:H6	1.79	0.47
3:AC:147:GLY:O	3:AC:148:ILE:HB	2.14	0.47
4:AD:25:ARG:HD3	4:AD:30:LYS:CE	2.44	0.47
9:AI:112:ARG:HH22	10:AJ:64:GLN:NE2	2.11	0.47
11:AK:22:ILE:HD11	11:AK:85:VAL:CG1	2.27	0.47
14:AN:82:LYS:HE2	14:AN:82:LYS:HA	1.96	0.47
15:AO:24:THR:HG22	15:AO:25:GLU:N	2.27	0.47
20:AT:43:LYS:HE2	20:AT:86:ALA:CB	2.44	0.47
21:AU:23:GLU:HA	21:AU:27:VAL:HG23	1.96	0.47
22:BA:1381:G:C2'	22:BA:1382:G:H5'	2.43	0.47
22:BA:1488:C:H2'	22:BA:1489:C:H6	1.79	0.47
22:BA:1845:G:H2'	22:BA:1846:G:C5'	2.44	0.47
22:BA:1963:U:O2'	22:BA:1964:G:H5''	2.14	0.47
22:BA:2078:C:O2'	22:BA:2079:U:H5'	2.14	0.47
22:BA:2362:C:H2'	22:BA:2363:G:H5'	1.96	0.47
22:BA:2582:G:H2'	22:BA:2582:G:N3	2.28	0.47
22:BA:2617:U:H2'	22:BA:2618:G:O4'	2.14	0.47
22:BA:2788:C:H2'	22:BA:2789:C:C6	2.49	0.47
22:BA:2850:A:H2'	22:BA:2851:A:H8	1.78	0.47
22:BA:27:G:O2'	22:BA:28:A:OP2	2.27	0.47
22:BA:292:U:H2'	22:BA:293:U:O4'	2.13	0.47
22:BA:301:G:HO2'	22:BA:302:C:P	2.37	0.47
22:BA:466:A:H2'	22:BA:467:G:H5'	1.95	0.47
22:BA:580:U:O2'	22:BA:581:C:H5'	2.14	0.47
22:BA:870:U:C2'	22:BA:871:U:H5'	2.44	0.47
23:BB:48:U:O2	23:BB:48:U:H2'	2.14	0.47
24:BC:76:VAL:O	24:BC:77:VAL:O	2.32	0.47
27:BF:39:VAL:CG1	27:BF:49:LEU:CD1	2.89	0.47
34:BM:1:MET:HA	34:BM:1:MET:CE	2.43	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:73:ASN:C	35:BN:76:VAL:HG12	2.33	0.47
39:BR:21:ARG:NH2	39:BR:93:PHE:CE2	2.82	0.47
44:BW:50:VAL:CG1	44:BW:51:GLY:N	2.69	0.47
1:CA:1117:A:N1	1:CA:1184:G:O6	2.46	0.47
1:CA:1343:G:C6	1:CA:1344:C:C4	3.02	0.47
1:CA:1494:G:C2'	1:CA:1495:U:O5'	2.62	0.47
1:CA:1509:C:H2'	1:CA:1510:C:H6	1.78	0.47
1:CA:1514:G:H2'	1:CA:1515:G:C8	2.49	0.47
1:CA:246:A:N7	1:CA:281:G:N2	2.61	0.47
1:CA:344:A:O2'	1:CA:345:C:OP1	2.27	0.47
1:CA:76:G:N2	1:CA:95:C:N3	2.61	0.47
2:CB:21:TYR:N	2:CB:21:TYR:CD1	2.82	0.47
3:CC:5:HIS:HA	3:CC:6:PRO:HD2	1.75	0.47
4:CD:10:LEU:O	4:CD:14:GLU:HG2	2.14	0.47
5:CE:114:LEU:O	5:CE:119:VAL:HG23	2.13	0.47
5:CE:125:LYS:HB2	5:CE:125:LYS:HE3	1.69	0.47
7:CG:101:ARG:O	7:CG:104:VAL:HG22	2.13	0.47
7:CG:72:VAL:HG12	7:CG:144:ALA:HB1	1.94	0.47
7:CG:148:LYS:HB2	7:CG:148:LYS:HZ3	1.76	0.47
7:CG:34:LYS:CB	7:CG:34:LYS:NZ	2.77	0.47
7:CG:90:VAL:HG12	7:CG:94:ARG:HD3	1.96	0.47
9:CI:57:VAL:O	9:CI:57:VAL:HG12	2.14	0.47
11:CK:81:LEU:HD11	11:CK:104:PHE:HB3	1.95	0.47
11:CK:121:ARG:NH2	21:CU:35:GLU:HG2	2.29	0.47
11:CK:51:PHE:HE2	11:CK:64:VAL:HG21	1.79	0.47
1:CA:1317:C:OP1	14:CN:56:PRO:HD2	2.14	0.47
10:CJ:52:LEU:O	14:CN:80:ARG:HG3	2.13	0.47
16:CP:2:VAL:HG22	16:CP:3:THR:N	2.28	0.47
16:CP:41:PRO:C	16:CP:42:ILE:HD13	2.34	0.47
16:CP:78:VAL:C	16:CP:80:LYS:N	2.67	0.47
21:CU:16:ARG:CG	21:CU:19:LYS:CG	2.80	0.47
22:DA:1167:C:O2'	22:DA:1168:G:H5'	2.12	0.47
22:DA:1238:G:H2'	22:DA:1239:G:H8	1.78	0.47
22:DA:1286:A:C6	22:DA:1289:C:C2	3.02	0.47
22:DA:1296:G:H1'	22:DA:1645:G:N2	2.29	0.47
22:DA:143:C:C4	22:DA:144:A:N6	2.82	0.47
22:DA:1571:A:H8	22:DA:1571:A:H3'	1.78	0.47
22:DA:1612:C:C2'	22:DA:1613:G:O5'	2.61	0.47
22:DA:1702:G:C6	22:DA:1703:G:C5	3.02	0.47
22:DA:1748:C:O2'	22:DA:1749:A:H5'	2.13	0.47
22:DA:1767:G:N2	22:DA:1986:C:C2	2.82	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1914:C:C6	22:DA:1915:U:C6	3.02	0.47
22:DA:193:U:H2'	22:DA:194:G:H5'	1.96	0.47
22:DA:1663:G:C2	22:DA:1998:A:C5	3.02	0.47
22:DA:2106:U:C4	22:DA:2107:G:N7	2.81	0.47
22:DA:2109:U:H2'	22:DA:2110:G:OP1	2.13	0.47
22:DA:2304:G:N2	22:DA:2312:U:H3	1.94	0.47
22:DA:2454:G:C2	22:DA:2499:C:N3	2.82	0.47
22:DA:2457:U:C4	22:DA:2458:G:C5	3.02	0.47
22:DA:2697:G:C2	22:DA:2711:A:C2	3.02	0.47
22:DA:2752:C:O2'	22:DA:2753:A:H8	1.97	0.47
22:DA:2835:A:N6	22:DA:2879:A:N9	2.62	0.47
22:DA:291:G:O2'	22:DA:292:U:H5'	2.14	0.47
22:DA:31:C:O5'	22:DA:31:C:H6	1.97	0.47
22:DA:67:U:C2'	22:DA:68:G:H8	2.23	0.47
22:DA:727:A:H2'	22:DA:728:G:N7	2.28	0.47
22:DA:808:G:H2'	22:DA:809:G:C8	2.49	0.47
22:DA:830:G:P	22:DA:830:G:H8	2.37	0.47
22:DA:867:C:O2'	22:DA:868:U:O5'	2.31	0.47
22:DA:918:A:H5''	23:DB:97:C:O2'	2.14	0.47
22:DA:664:G:H5'	22:DA:940:G:H4'	1.95	0.47
23:DB:109:A:C6	23:DB:110:C:N4	2.82	0.47
23:DB:46:A:HO2'	23:DB:47:C:H6	1.62	0.47
25:DD:121:THR:HG21	25:DD:127:PHE:CD1	2.49	0.47
26:DE:44:ARG:HH22	26:DE:87:ALA:HB3	1.78	0.47
26:DE:78:TRP:HB3	26:DE:79:ARG:O	2.14	0.47
26:DE:79:ARG:CG	26:DE:80:SER:H	2.12	0.47
31:DJ:45:THR:N	31:DJ:46:PRO:HD2	2.30	0.47
33:DL:121:THR:O	33:DL:121:THR:HG23	2.14	0.47
56:DA:3265:HOH:O	33:DL:35:HIS:HB2	2.14	0.47
34:DM:53:MET:HE1	34:DM:117:PHE:CE1	2.49	0.47
35:DN:64:ARG:NH2	35:DN:64:ARG:HG2	2.29	0.47
36:DO:69:ASP:O	36:DO:70:ALA:C	2.52	0.47
38:DQ:57:ARG:C	38:DQ:59:LEU:H	2.17	0.47
39:DR:46:GLU:OE1	39:DR:48:LYS:HG3	2.13	0.47
41:DT:27:SER:O	41:DT:28:ASN:HB3	2.14	0.47
41:DT:28:ASN:O	41:DT:29:THR:CG2	2.62	0.47
1:AA:374:A:OP1	1:AA:452:A:N1	2.47	0.47
1:AA:390:U:H2'	1:AA:391:G:C8	2.49	0.47
1:AA:403:C:O2'	1:AA:404:G:H5'	2.14	0.47
1:AA:429:U:C1'	1:AA:430:A:C5'	2.91	0.47
1:AA:693:G:HO2'	1:AA:694:A:H5'	1.75	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:60:ALA:CB	2:AB:223:GLY:HA3	2.44	0.47
3:AC:129:PHE:CZ	3:AC:130:ARG:HD3	2.49	0.47
4:AD:189:ASP:O	4:AD:190:LEU:HB3	2.14	0.47
7:AG:145:GLU:N	7:AG:148:LYS:HB2	2.29	0.47
9:AI:15:ALA:C	9:AI:66:VAL:HG23	2.34	0.47
9:AI:17:ARG:HE	9:AI:65:THR:HB	1.78	0.47
11:AK:124:LYS:HZ3	11:AK:127:ARG:NE	2.11	0.47
11:AK:28:ASN:OD1	11:AK:29:THR:N	2.47	0.47
14:AN:11:LYS:NZ	14:AN:11:LYS:HB2	2.29	0.47
22:BA:1435:G:C8	22:BA:1435:G:H5''	2.49	0.47
22:BA:1739:A:H2'	22:BA:1740:G:O4'	2.15	0.47
22:BA:1924:C:C2	22:BA:1925:C:C6	3.02	0.47
22:BA:2151:U:C4	22:BA:2152:G:N7	2.82	0.47
22:BA:2094:A:C2	22:BA:2196:C:C2	3.02	0.47
22:BA:2388:A:H5'	22:BA:2389:G:OP2	2.14	0.47
22:BA:1782:U:H1'	22:BA:2609:U:O4'	2.14	0.47
22:BA:2740:A:C6	22:BA:2764:A:C8	3.03	0.47
22:BA:2773:C:H2'	22:BA:2774:C:H6	1.79	0.47
22:BA:2825:G:H2'	22:BA:2826:A:H5'	1.96	0.47
22:BA:520:G:H2'	22:BA:521:U:C6	2.48	0.47
22:BA:626:A:H2'	33:BL:78:ARG:CZ	2.45	0.47
22:BA:859:G:C8	22:BA:859:G:OP2	2.64	0.47
24:BC:184:GLU:O	24:BC:186:ASP:N	2.47	0.47
22:BA:2595:G:H1	24:BC:238:ASN:HD21	1.60	0.47
26:BE:174:GLY:O	26:BE:175:ILE:C	2.53	0.47
27:BF:1:ALA:O	27:BF:2:LYS:HB3	2.12	0.47
30:BI:56:VAL:HG22	30:BI:57:VAL:N	2.29	0.47
32:BK:1:MET:C	32:BK:2:ILE:HD12	2.35	0.47
34:BM:24:THR:HG23	34:BM:24:THR:O	2.13	0.47
38:BQ:81:GLY:CA	38:BQ:116:LEU:HD13	2.44	0.47
39:BR:37:GLU:N	39:BR:37:GLU:CD	2.66	0.47
41:BT:67:VAL:C	41:BT:68:LYS:HD3	2.35	0.47
46:BY:38:GLN:N	46:BY:38:GLN:OE1	2.47	0.47
1:CA:101:A:C5	1:CA:102:G:N7	2.82	0.47
1:CA:1269:A:H2'	1:CA:1270:G:C5'	2.44	0.47
1:CA:1294:G:H2'	1:CA:1295:U:O5'	2.13	0.47
1:CA:1307:U:H1'	13:CM:107:THR:CG2	2.44	0.47
1:CA:1318:A:H8	1:CA:1318:A:O5'	1.97	0.47
1:CA:68:G:C5'	1:CA:171:A:O2'	2.61	0.47
1:CA:254:G:H4'	17:CQ:16:MET:CE	2.42	0.47
1:CA:275:G:C2	1:CA:276:G:C5	3.02	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:305:G:C5'	1:CA:306:A:OP1	2.62	0.47
1:CA:306:A:C5	1:CA:307:C:C5	3.02	0.47
1:CA:530:G:N3	1:CA:530:G:H3'	2.29	0.47
1:CA:26:A:H61	1:CA:558:G:C2'	2.27	0.47
1:CA:654:G:H2'	1:CA:655:A:H8	1.79	0.47
1:CA:722:G:N3	1:CA:722:G:C2'	2.77	0.47
8:CH:39:LEU:HB2	8:CH:45:ILE:CD1	2.43	0.47
9:CI:7:GLY:HA3	9:CI:84:ARG:O	2.14	0.47
12:CL:42:LYS:CG	12:CL:43:LYS:N	2.66	0.47
14:CN:1:ALA:HA	14:CN:67:GLY:O	2.14	0.47
14:CN:68:ARG:HG3	14:CN:69:PRO:CD	2.44	0.47
16:CP:44:SER:C	16:CP:46:LYS:HZ2	2.17	0.47
19:CS:52:ASN:OD1	19:CS:57:VAL:HG13	2.13	0.47
22:DA:1062:G:C8	22:DA:1088:A:H8	2.33	0.47
22:DA:1079:C:N3	22:DA:1088:A:H2	2.12	0.47
22:DA:116:C:H2'	22:DA:117:G:C5'	2.44	0.47
22:DA:991:C:N4	22:DA:1185:G:O6	2.47	0.47
22:DA:1206:G:C4	22:DA:1207:C:C5	3.02	0.47
22:DA:1363:C:H42	22:DA:1368:G:H1	1.61	0.47
22:DA:121:G:C1'	22:DA:148:U:N3	2.78	0.47
22:DA:1535:A:H5'	22:DA:1536:C:OP2	2.14	0.47
22:DA:1616:A:OP1	22:DA:1616:A:H2'	2.14	0.47
22:DA:1702:G:C6	22:DA:1703:G:N7	2.83	0.47
22:DA:1816:C:HO2'	24:DC:61:TYR:HH	1.62	0.47
22:DA:1874:C:H2'	22:DA:1875:G:O4'	2.13	0.47
22:DA:677:A:O3'	22:DA:2071:A:H5''	2.13	0.47
22:DA:2269:G:O2'	44:DW:18:LYS:CD	2.62	0.47
22:DA:2889:C:C2'	22:DA:2890:G:H5'	2.43	0.47
22:DA:291:G:N1	22:DA:350:G:N7	2.61	0.47
23:DB:64:G:H5''	23:DB:65:U:OP2	2.14	0.47
24:DC:71:ASP:CA	24:DC:117:SER:O	2.60	0.47
25:DD:183:GLU:H	25:DD:183:GLU:CD	2.18	0.47
28:DG:58:ALA:O	28:DG:59:ASP:C	2.52	0.47
28:DG:85:LYS:O	28:DG:86:LEU:CB	2.61	0.47
28:DG:86:LEU:HA	28:DG:163:TYR:CB	2.43	0.47
29:DH:96:THR:O	29:DH:97:ARG:CG	2.61	0.47
32:DK:8:LEU:HD12	32:DK:8:LEU:N	2.29	0.47
34:DM:19:GLY:N	34:DM:38:ARG:NH2	2.46	0.47
35:DN:87:PHE:HE1	35:DN:90:ARG:HD2	1.77	0.47
35:DN:87:PHE:CE1	35:DN:90:ARG:CD	2.95	0.47
22:DA:995:C:O2'	38:DQ:60:TRP:CH2	2.67	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:DQ:96:ASP:C	38:DQ:96:ASP:OD1	2.51	0.47
22:DA:2330:G:N2	44:DW:38:ARG:HA	2.28	0.47
44:DW:43:LYS:HD3	44:DW:43:LYS:HA	1.60	0.47
1:AA:1258:G:C4	1:AA:1259:C:C5	3.02	0.47
1:AA:1277:C:O2'	1:AA:1279:G:C8	2.62	0.47
1:AA:298:A:H2'	1:AA:299:G:O4'	2.14	0.47
1:AA:415:A:O2'	1:AA:416:G:H5'	2.14	0.47
1:AA:468:A:N3	1:AA:469:C:C5	2.83	0.47
1:AA:716:A:C6	1:AA:717:U:N3	2.82	0.47
3:AC:191:THR:O	3:AC:192:TYR:HB3	2.14	0.47
1:AA:877:G:H21	8:AH:1:SER:N	2.12	0.47
9:AI:118:ARG:HB3	9:AI:122:ARG:CG	2.44	0.47
9:AI:65:THR:CG2	9:AI:66:VAL:N	2.76	0.47
10:AJ:18:ILE:CG2	10:AJ:19:ASP:N	2.77	0.47
1:AA:720:C:H5''	18:AR:40:PRO:HB3	1.96	0.47
19:AS:40:PHE:CB	19:AS:42:ASN:HD22	2.27	0.47
20:AT:35:TYR:CG	20:AT:36:ALA:N	2.83	0.47
20:AT:43:LYS:HD3	20:AT:86:ALA:CB	2.44	0.47
21:AU:3:ILE:CA	21:AU:19:LYS:HZ1	2.28	0.47
22:BA:1276:A:H5''	22:BA:1276:A:H8	1.79	0.47
22:BA:1365:A:O5'	45:BX:27:ARG:NH2	2.42	0.47
22:BA:141:G:H5'	22:BA:142:A:N7	2.29	0.47
22:BA:1569:A:C2	22:BA:1570:A:C4	3.02	0.47
22:BA:1577:C:H2'	22:BA:1578:U:O4'	2.14	0.47
22:BA:1985:C:C2'	22:BA:1986:C:O5'	2.62	0.47
22:BA:2552:U:H6	22:BA:2552:U:O5'	1.98	0.47
22:BA:2578:G:N3	22:BA:2578:G:H2'	2.28	0.47
22:BA:2638:G:O2'	22:BA:2775:G:N2	2.45	0.47
22:BA:918:A:H4'	23:BB:97:C:O2	2.15	0.47
24:BC:161:VAL:HG22	24:BC:175:LEU:HA	1.96	0.47
25:BD:106:LYS:O	25:BD:175:LEU:O	2.32	0.47
25:BD:33:ARG:NH2	25:BD:51:THR:HG23	2.28	0.47
30:BI:126:ARG:HA	30:BI:129:GLU:CD	2.35	0.47
30:BI:91:LYS:O	30:BI:97:VAL:HG21	2.14	0.47
31:BJ:56:VAL:O	31:BJ:124:VAL:O	2.32	0.47
32:BK:19:VAL:HG23	32:BK:43:ILE:HA	1.94	0.47
33:BL:19:LEU:HA	33:BL:27:LEU:O	2.13	0.47
37:BP:63:ILE:O	37:BP:63:ILE:HG22	2.14	0.47
39:BR:80:ARG:O	39:BR:81:LYS:HD3	2.13	0.47
44:BW:46:ALA:CB	44:BW:80:SER:HB3	2.44	0.47
45:BX:73:ARG:O	45:BX:73:ARG:CG	2.62	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BY:44:LYS:O	46:BY:47:ARG:HB3	2.14	0.47
1:CA:106:C:H2'	1:CA:107:G:H5'	1.87	0.47
1:CA:1129:C:C4	1:CA:1139:G:C5	3.02	0.47
1:CA:1162:C:H2'	1:CA:1163:A:O4'	2.14	0.47
1:CA:1249:C:H42	1:CA:1287:A:H2'	1.79	0.47
1:CA:1360:A:C2	1:CA:1361:G:H1'	2.49	0.47
1:CA:1380:U:C4'	1:CA:1381:U:OP1	2.59	0.47
1:CA:1396:A:H4'	1:CA:1397:C:O5'	2.15	0.47
1:CA:1464:U:C2'	1:CA:1465:A:H5'	2.44	0.47
1:CA:1480:A:O2'	1:CA:1481:U:H5'	2.13	0.47
1:CA:1493:A:OP1	1:CA:1493:A:C8	2.68	0.47
1:CA:1493:A:H2'	1:CA:1494:G:OP1	2.13	0.47
1:CA:1499:A:C2'	1:CA:1500:A:H5'	2.44	0.47
1:CA:351:G:H4'	1:CA:352:C:OP1	2.13	0.47
1:CA:382:A:C8	1:CA:383:A:C6	3.02	0.47
1:CA:563:A:C8	1:CA:567:G:O4'	2.67	0.47
1:CA:636:U:H2'	1:CA:637:C:C6	2.49	0.47
1:CA:70:U:C4'	1:CA:71:A:OP1	2.59	0.47
1:CA:79:G:N1	1:CA:80:A:N6	2.61	0.47
1:CA:867:G:H2'	1:CA:868:C:H6	1.79	0.47
1:CA:896:C:C2'	1:CA:897:C:H5'	2.45	0.47
1:CA:958:A:O2'	1:CA:959:A:H5'	2.13	0.47
1:CA:963:G:C6	1:CA:973:G:O6	2.67	0.47
3:CC:105:VAL:HG12	3:CC:105:VAL:O	2.13	0.47
4:CD:8:LEU:HD13	4:CD:8:LEU:HA	1.70	0.47
6:CF:41:ASP:OD1	6:CF:58:HIS:HE1	1.97	0.47
17:CQ:16:MET:HE3	17:CQ:19:SER:OG	2.14	0.47
18:CR:33:THR:CG2	18:CR:39:VAL:HG22	2.44	0.47
19:CS:13:HIS:O	19:CS:17:LYS:HG2	2.13	0.47
22:DA:125:A:OP2	50:D2:19:ARG:NH2	2.47	0.47
52:D4:9:LYS:HD3	52:D4:9:LYS:C	2.35	0.47
22:DA:1053:C:N4	22:DA:1054:A:H62	2.12	0.47
22:DA:1173:U:H1'	22:DA:1177:G:N2	2.29	0.47
22:DA:770:G:H1'	22:DA:1379:U:C4	2.49	0.47
22:DA:1389:G:O2'	22:DA:1390:U:O4'	2.30	0.47
22:DA:139:U:H2'	22:DA:139:U:O2	2.13	0.47
22:DA:1426:G:H8	22:DA:1426:G:OP2	1.97	0.47
22:DA:1451:C:H5'	22:DA:1452:G:OP1	2.13	0.47
22:DA:1553:A:N7	22:DA:1555:G:C6	2.83	0.47
22:DA:1649:G:C6	22:DA:2009:A:C6	3.02	0.47
22:DA:1693:U:O2'	24:DC:13:ARG:NH2	2.43	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1773:A:C8	22:DA:1829:A:H1'	2.49	0.47
22:DA:2094:A:O2'	22:DA:2095:A:H8	1.95	0.47
22:DA:2314:A:C2	22:DA:2315:G:C4	3.01	0.47
22:DA:2330:G:C6	22:DA:2386:A:N6	2.82	0.47
22:DA:2590:A:H5''	24:DC:237:ARG:CG	2.27	0.47
22:DA:2695:U:O2	22:DA:2695:U:C2'	2.60	0.47
22:DA:2691:C:C4	22:DA:2719:G:N2	2.82	0.47
22:DA:300:A:H2	22:DA:319:G:H21	1.60	0.47
22:DA:333:G:C2	22:DA:334:C:C6	3.02	0.47
22:DA:656:G:O2'	22:DA:657:U:C5'	2.62	0.47
22:DA:72:U:O2'	22:DA:73:A:H5'	2.14	0.47
25:DD:12:THR:HG23	25:DD:13:ARG:N	2.20	0.47
25:DD:36:GLN:OE1	25:DD:67:HIS:HE1	1.97	0.47
26:DE:131:THR:HG22	26:DE:161:ALA:N	2.29	0.47
26:DE:97:ASN:OD1	26:DE:97:ASN:C	2.53	0.47
32:DK:16:ALA:CB	32:DK:45:GLU:HG3	2.43	0.47
33:DL:57:LEU:HA	33:DL:60:ARG:HG2	1.96	0.47
37:DP:54:LEU:HG	37:DP:54:LEU:O	2.14	0.47
39:DR:51:VAL:HB	39:DR:52:PRO:HD2	1.95	0.47
40:DS:103:ILE:HG22	40:DS:103:ILE:O	2.14	0.47
43:DV:69:GLU:C	43:DV:70:ILE:HD13	2.34	0.47
44:DW:25:PHE:CD1	44:DW:25:PHE:C	2.87	0.47
1:AA:1328:C:C4	1:AA:1329:A:N7	2.83	0.47
1:AA:1306:A:H1'	1:AA:1332:A:N6	2.29	0.47
1:AA:1453:G:O2'	1:AA:1454:G:O5'	2.30	0.47
1:AA:15:G:C4	1:AA:16:A:C8	3.03	0.47
1:AA:179:A:C2'	1:AA:180:U:H5'	2.45	0.47
1:AA:208:U:H3'	1:AA:208:U:H6	1.79	0.47
1:AA:257:G:C2'	1:AA:258:G:O5'	2.62	0.47
1:AA:408:A:P	4:AD:109:THR:HG21	2.54	0.47
1:AA:468:A:HO2'	1:AA:469:C:H5'	1.70	0.47
1:AA:678:U:O2'	1:AA:679:C:H5'	2.15	0.47
1:AA:77:A:N6	1:AA:90:C:C4	2.80	0.47
2:AB:206:ILE:HD13	2:AB:207:ARG:N	2.29	0.47
3:AC:35:ASP:C	3:AC:37:LYS:H	2.17	0.47
3:AC:95:GLY:C	3:AC:96:VAL:HG13	2.34	0.47
6:AF:41:ASP:OD2	6:AF:58:HIS:NE2	2.45	0.47
7:AG:23:ALA:O	7:AG:26:VAL:CG2	2.62	0.47
7:AG:88:VAL:HG22	7:AG:89:GLU:N	2.29	0.47
8:AH:6:ILE:HD11	8:AH:31:LEU:HG	1.96	0.47
9:AI:20:ILE:HD12	9:AI:85:ALA:C	2.34	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:28:THR:CG2	10:AJ:28:THR:O	2.62	0.47
11:AK:43:TRP:HE3	11:AK:44:ALA:CA	2.27	0.47
13:AM:94:LEU:HB3	13:AM:95:PRO:HD2	1.96	0.47
22:BA:1079:C:N3	22:BA:1080:A:N7	2.62	0.47
22:BA:108:G:O2'	22:BA:109:C:H5'	2.13	0.47
22:BA:139:U:C5	41:BT:1:MET:SD	3.07	0.47
22:BA:1465:G:C5	22:BA:1466:U:C4	3.02	0.47
22:BA:1464:G:C2'	22:BA:1465:G:H5'	2.44	0.47
22:BA:2083:G:H2'	22:BA:2084:C:H5'	1.96	0.47
22:BA:2188:U:O2'	22:BA:2189:U:H5'	2.13	0.47
22:BA:2660:A:C2	22:BA:2661:G:C4	3.02	0.47
22:BA:2780:G:H4'	22:BA:2781:A:OP2	2.14	0.47
22:BA:278:A:N3	22:BA:278:A:H2'	2.28	0.47
22:BA:2:G:H2'	22:BA:3:U:C6	2.49	0.47
22:BA:603:A:C4'	22:BA:604:G:O5'	2.50	0.47
27:BF:100:GLU:C	27:BF:102:LEU:N	2.67	0.47
27:BF:134:GLN:C	27:BF:136:ILE:H	2.16	0.47
31:BJ:40:HIS:H	31:BJ:40:HIS:HD2	1.60	0.47
31:BJ:89:PHE:CD1	31:BJ:89:PHE:C	2.88	0.47
32:BK:87:LEU:HD22	32:BK:93:GLN:N	2.29	0.47
35:BN:101:GLY:C	35:BN:102:PHE:CD2	2.87	0.47
35:BN:44:LEU:HD11	35:BN:48:VAL:HG21	1.96	0.47
36:BO:74:VAL:O	36:BO:77:ALA:HB3	2.14	0.47
39:BR:25:LEU:N	39:BR:94:THR:HG21	2.29	0.47
39:BR:25:LEU:N	39:BR:94:THR:CG2	2.77	0.47
42:BU:83:GLY:HA3	42:BU:96:LYS:HE2	1.96	0.47
44:BW:23:LYS:CG	44:BW:24:ARG:O	2.41	0.47
1:CA:1266:G:H3'	1:CA:1266:G:H8	1.79	0.47
1:CA:408:A:C5	1:CA:409:U:C5	3.03	0.47
1:CA:477:C:H3'	1:CA:478:A:H8	1.78	0.47
1:CA:595:A:H5''	1:CA:596:A:OP1	2.14	0.47
1:CA:604:G:H2'	1:CA:605:U:O4'	2.13	0.47
1:CA:756:C:H2'	1:CA:757:U:H5'	1.95	0.47
1:CA:967:C:N3	1:CA:968:A:N6	2.62	0.47
3:CC:20:THR:O	3:CC:20:THR:CG2	2.61	0.47
7:CG:79:VAL:HG23	7:CG:79:VAL:O	2.15	0.47
10:CJ:52:LEU:HD23	10:CJ:62:ARG:CG	2.44	0.47
22:DA:1007:C:H3'	22:DA:1008:A:H8	1.79	0.47
22:DA:1282:U:C2'	22:DA:1283:G:H5'	2.45	0.47
22:DA:1345:C:O2'	22:DA:1346:G:P	2.73	0.47
22:DA:1494:A:H3'	22:DA:1494:A:OP2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2060:A:C3'	26:DE:63:LYS:HZ3	2.28	0.47
22:DA:228:C:H4'	22:DA:229:C:H6	1.79	0.47
22:DA:2353:G:H4'	44:DW:28:GLU:HG2	1.96	0.47
22:DA:2804:U:C2'	22:DA:2805:C:H5'	2.43	0.47
22:DA:2808:G:O2'	22:DA:2809:A:H8	1.97	0.47
22:DA:289:G:N2	22:DA:352:A:C4	2.82	0.47
22:DA:484:C:O2'	22:DA:485:C:C5'	2.52	0.47
22:DA:575:A:N3	22:DA:576:U:C6	2.82	0.47
22:DA:625:G:C6	22:DA:626:A:N7	2.82	0.47
22:DA:975:A:H8	22:DA:990:A:H62	1.59	0.47
24:DC:35:LYS:O	24:DC:36:ASN:CB	2.61	0.47
22:DA:779:U:H5''	24:DC:42:ARG:NH2	2.30	0.47
25:DD:34:VAL:HA	25:DD:49:GLN:O	2.15	0.47
26:DE:105:LEU:HB3	26:DE:200:LEU:CD1	2.41	0.47
26:DE:52:VAL:HG12	26:DE:74:LYS:CG	2.44	0.47
27:DF:27:VAL:O	27:DF:27:VAL:HG23	2.14	0.47
28:DG:18:ILE:CD1	28:DG:42:VAL:HG13	2.34	0.47
30:DI:127:SER:C	30:DI:128:ILE:HD13	2.34	0.47
30:DI:21:PRO:HD2	30:DI:22:PRO:HD2	1.97	0.47
31:DJ:48:VAL:HG12	31:DJ:49:ASP:N	2.28	0.47
32:DK:64:ARG:O	32:DK:82:ASN:HA	2.14	0.47
37:DP:91:VAL:HG22	37:DP:109:ILE:HD13	1.96	0.47
22:DA:2849:U:OP1	37:DP:92:ARG:NH1	2.47	0.47
44:DW:77:LYS:HZ3	44:DW:77:LYS:HB2	1.79	0.47
45:DX:37:PHE:HB2	45:DX:46:VAL:O	2.14	0.47
45:DX:76:LYS:HG3	45:DX:77:TYR:N	2.30	0.47
22:DA:61:C:C4'	46:DY:43:LEU:HD23	2.41	0.47
1:AA:1058:G:C5	1:AA:1059:C:C5	3.02	0.47
1:AA:1130:A:C5	1:AA:1146:A:C6	3.03	0.47
1:AA:1152:A:N3	1:AA:1153:G:C8	2.83	0.47
1:AA:287:U:H2'	1:AA:288:A:H8	1.79	0.47
1:AA:372:C:H5'	1:AA:373:A:OP1	2.13	0.47
1:AA:381:C:H2'	1:AA:382:A:C5'	2.44	0.47
1:AA:393:A:O2'	1:AA:394:G:H5'	2.14	0.47
2:AB:9:LEU:HB2	2:AB:42:LEU:CD1	2.44	0.47
3:AC:10:ARG:O	3:AC:13:ILE:O	2.32	0.47
3:AC:22:PHE:C	3:AC:22:PHE:HD2	2.18	0.47
4:AD:194:ILE:O	4:AD:194:ILE:CG1	2.54	0.47
4:AD:1:ALA:O	4:AD:67:LEU:CD1	2.63	0.47
4:AD:99:ASN:O	4:AD:103:ARG:HB2	2.14	0.47
9:AI:15:ALA:O	9:AI:66:VAL:HG23	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:57:VAL:CG2	10:AJ:58:ASN:N	2.55	0.47
16:AP:11:ALA:O	16:AP:12:LYS:C	2.53	0.47
16:AP:19:VAL:HG13	16:AP:37:GLY:C	2.34	0.47
17:AQ:27:PHE:HA	17:AQ:37:ILE:O	2.15	0.47
50:B2:21:ARG:C	50:B2:23:ALA:H	2.17	0.47
22:BA:1141:U:C4'	22:BA:1142:A:O5'	2.58	0.47
22:BA:1244:A:O5'	33:BL:7:SER:HB3	2.15	0.47
22:BA:132:G:C2'	22:BA:133:U:H5'	2.44	0.47
22:BA:1378:A:HO2'	22:BA:1379:U:H3'	1.76	0.47
22:BA:1818:U:H2'	24:BC:152:GLN:O	2.14	0.47
22:BA:2064:C:H2'	22:BA:2065:C:C6	2.49	0.47
22:BA:2065:C:H2'	22:BA:2066:C:H6	1.79	0.47
22:BA:2661:G:C2'	22:BA:2662:A:O5'	2.62	0.47
22:BA:274:C:C2'	22:BA:275:C:H5'	2.44	0.47
22:BA:324:A:HO2'	22:BA:325:G:H5'	1.78	0.47
22:BA:397:U:C2'	22:BA:398:C:H5'	2.45	0.47
22:BA:27:G:N2	22:BA:512:G:O2'	2.37	0.47
22:BA:574:A:P	56:BA:3267:HOH:O	2.71	0.47
24:BC:23:LEU:HD12	24:BC:82:TYR:N	2.29	0.47
27:BF:142:TYR:HA	27:BF:145:VAL:HG13	1.96	0.47
28:BG:142:GLN:CA	28:BG:142:GLN:NE2	2.74	0.47
29:BH:97:ARG:HG2	29:BH:111:ALA:HB1	1.96	0.47
30:BI:40:ALA:HB3	30:BI:68:PHE:CE1	2.50	0.47
36:BO:31:THR:HG23	36:BO:34:HIS:N	2.23	0.47
41:BT:37:ASP:C	41:BT:38:ALA:O	2.51	0.47
41:BT:44:LYS:O	41:BT:48:GLN:HG2	2.13	0.47
43:BV:1:MET:HG3	43:BV:2:PHE:N	2.29	0.47
43:BV:5:ASN:HB3	43:BV:64:VAL:HB	1.95	0.47
44:BW:19:ARG:HH12	44:BW:22:VAL:HG11	1.78	0.47
1:CA:1250:A:C6	1:CA:1251:A:C6	3.02	0.47
1:CA:1405:G:C8	1:CA:1405:G:H3'	2.50	0.47
1:CA:1454:G:HO2'	1:CA:1455:G:H5''	1.76	0.47
1:CA:1487:G:C2'	1:CA:1488:G:H5'	2.45	0.47
1:CA:170:U:O2'	1:CA:171:A:C5'	2.49	0.47
1:CA:202:G:H21	1:CA:465:A:H61	1.62	0.47
1:CA:382:A:H2'	1:CA:382:A:H8	1.58	0.47
1:CA:495:A:C4'	1:CA:496:A:O5'	2.61	0.47
1:CA:582:C:C2'	1:CA:583:A:H5'	2.44	0.47
1:CA:610:U:O4'	1:CA:610:U:O2	2.32	0.47
1:CA:772:U:O2'	1:CA:773:G:H5'	2.15	0.47
1:CA:86:G:O2'	1:CA:87:C:P	2.72	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:105:THR:C	2:CB:108:GLN:HG2	2.34	0.47
4:CD:10:LEU:H	4:CD:10:LEU:CD1	2.27	0.47
4:CD:39:GLN:C	4:CD:41:GLY:N	2.67	0.47
4:CD:68:GLU:O	4:CD:69:ARG:C	2.52	0.47
5:CE:95:MET:CE	5:CE:143:LEU:CD2	2.92	0.47
11:CK:51:PHE:C	11:CK:52:ARG:HD2	2.35	0.47
12:CL:115:LYS:O	12:CL:116:TYR:HB2	2.15	0.47
17:CQ:61:ARG:HD3	17:CQ:75:VAL:HG11	1.97	0.47
17:CQ:73:THR:HG23	17:CQ:75:VAL:HG12	1.95	0.47
21:CU:29:ALA:O	21:CU:32:ARG:CB	2.62	0.47
49:D1:10:LEU:HB2	49:D1:20:TYR:HB2	1.96	0.47
22:DA:1196:C:H1'	22:DA:1226:A:N9	2.30	0.47
22:DA:1300:G:H5'	22:DA:1301:A:N3	2.29	0.47
22:DA:1307:A:H2'	22:DA:1308:A:C5'	2.45	0.47
22:DA:1425:G:H8	22:DA:1425:G:O5'	1.98	0.47
22:DA:1438:U:H2'	22:DA:1439:A:O4'	2.13	0.47
22:DA:1441:G:C2	22:DA:1551:A:C2	3.03	0.47
22:DA:1324:G:C1'	22:DA:1616:A:N6	2.57	0.47
22:DA:1635:A:H5'	22:DA:1635:A:H8	1.79	0.47
22:DA:1760:C:H3'	22:DA:1761:C:H6	1.80	0.47
22:DA:740:C:H5'	22:DA:1784:A:H3'	1.96	0.47
22:DA:1831:G:C6	22:DA:1832:C:N3	2.83	0.47
22:DA:1857:G:N3	22:DA:1884:G:N1	2.62	0.47
22:DA:2024:G:O2'	22:DA:2025:C:O4'	2.32	0.47
22:DA:204:A:O2'	22:DA:205:G:O5'	2.28	0.47
22:DA:2418:A:N6	22:DA:2419:U:C4	2.82	0.47
22:DA:265:A:C5	22:DA:428:A:C8	3.02	0.47
22:DA:2902:C:H2'	22:DA:2903:U:H5'	1.96	0.47
22:DA:418:C:H2'	22:DA:419:U:C6	2.47	0.47
22:DA:536:G:H2'	22:DA:537:G:O4'	2.13	0.47
22:DA:579:G:C8	22:DA:2017:U:O4	2.67	0.47
22:DA:637:A:P	33:DL:128:THR:HG21	2.55	0.47
22:DA:705:A:H2'	22:DA:706:A:C8	2.49	0.47
22:DA:729:G:O6	24:DC:207:ALA:N	2.41	0.47
22:DA:806:C:C2'	22:DA:807:U:H6	2.27	0.47
22:DA:804:A:C2'	22:DA:806:C:C4	2.97	0.47
23:DB:34:A:C5	23:DB:44:G:C8	3.02	0.47
24:DC:63:ILE:O	24:DC:64:VAL:HB	2.15	0.47
27:DF:111:ARG:HH12	27:DF:113:PHE:HE1	1.63	0.47
29:DH:4:ILE:HG22	29:DH:5:LEU:N	2.30	0.47
30:DI:132:ALA:CA	30:DI:137:LEU:HD12	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:DK:40:LYS:HD2	32:DK:59:LYS:HB3	1.96	0.47
33:DL:62:PRO:HG2	51:D3:24:LYS:HB3	1.94	0.47
37:DP:107:ALA:O	37:DP:108:ARG:C	2.53	0.47
37:DP:19:PHE:CE1	37:DP:58:PHE:CE2	3.02	0.47
38:DQ:94:LEU:HD13	39:DR:4:VAL:CG1	2.44	0.47
41:DT:53:VAL:CG2	41:DT:92:ASN:HD22	2.27	0.47
42:DU:85:ARG:CA	42:DU:85:ARG:NE	2.78	0.47
43:DV:1:MET:O	43:DV:2:PHE:HB2	2.15	0.47
44:DW:19:ARG:HA	44:DW:34:SER:HA	1.95	0.47
46:DY:47:ARG:O	46:DY:48:ARG:C	2.53	0.47
47:DZ:5:LYS:CE	47:DZ:57:GLU:OE2	2.62	0.47
1:AA:1152:A:O2'	1:AA:1153:G:H5'	2.14	0.47
1:AA:1053:G:C6	1:AA:1199:U:C2	3.03	0.47
1:AA:1453:G:HO2'	1:AA:1454:G:P	2.37	0.47
1:AA:1430:A:C2	1:AA:1471:U:C2	3.03	0.47
1:AA:197:A:H1'	1:AA:198:G:O4'	2.15	0.47
1:AA:274:A:O2'	1:AA:275:G:O5'	2.32	0.47
1:AA:370:C:C2'	1:AA:371:A:H5'	2.45	0.47
1:AA:579:A:H5'	1:AA:728:A:H1'	1.95	0.47
1:AA:723:U:OP1	21:AU:48:LYS:HD3	2.15	0.47
1:AA:725:G:H2'	1:AA:726:C:C6	2.50	0.47
1:AA:827:U:N3	1:AA:870:U:C2	2.82	0.47
1:AA:982:U:C2	1:AA:983:A:N1	2.82	0.47
2:AB:153:MET:HE2	2:AB:157:PRO:HG3	1.95	0.47
3:AC:133:MET:HE3	3:AC:167:TYR:HB2	1.97	0.47
7:AG:21:LEU:CD2	7:AG:96:ASN:HD22	2.28	0.47
14:AN:40:ARG:NH2	14:AN:44:VAL:HG21	2.30	0.47
1:AA:995:C:H4'	14:AN:7:ALA:HB2	1.95	0.47
19:AS:10:ILE:HG22	19:AS:38:THR:N	2.30	0.47
19:AS:4:LEU:CD1	19:AS:4:LEU:H	2.24	0.47
52:B4:10:LEU:HD12	52:B4:33:HIS:HD2	1.69	0.47
22:BA:1034:G:C5	22:BA:1122:G:C2	3.03	0.47
22:BA:1179:G:O6	22:BA:1180:U:H1'	2.12	0.47
22:BA:1252:G:N3	38:BQ:32:ARG:CG	2.75	0.47
22:BA:146:A:H2'	22:BA:147:C:H6	1.79	0.47
22:BA:1654:A:C4'	25:BD:118:PHE:CE1	2.98	0.47
22:BA:414:C:H4'	22:BA:1879:C:O2	2.15	0.47
22:BA:2672:U:H2'	22:BA:2673:G:O5'	2.13	0.47
22:BA:345:A:O2'	22:BA:347:A:N7	2.44	0.47
22:BA:34:U:H2'	22:BA:34:U:H6	1.50	0.47
22:BA:604:G:H2'	22:BA:605:G:C8	2.49	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:65:U:C2	22:BA:66:C:C5	3.02	0.47
22:BA:786:C:O2'	22:BA:787:C:H5'	2.14	0.47
25:BD:142:VAL:HG23	25:BD:144:GLY:H	1.79	0.47
25:BD:191:GLY:O	25:BD:192:ALA:HB3	2.14	0.47
25:BD:46:ARG:HG2	25:BD:46:ARG:HH11	1.78	0.47
28:BG:23:ILE:CD1	28:BG:23:ILE:H	2.25	0.47
35:BN:18:GLN:NE2	35:BN:22:ARG:NH1	2.63	0.47
41:BT:40:LYS:HG2	41:BT:58:VAL:O	2.15	0.47
41:BT:73:ARG:HH21	41:BT:73:ARG:HB3	1.77	0.47
44:BW:23:LYS:HD2	44:BW:24:ARG:HB3	1.95	0.47
44:BW:39:GLN:CG	44:BW:42:THR:H	2.23	0.47
45:BX:38:TRP:CE3	45:BX:45:PHE:CE2	3.01	0.47
1:CA:1130:A:C6	1:CA:1146:A:C5	3.02	0.47
1:CA:1190:G:H4'	1:CA:1191:A:OP2	2.15	0.47
1:CA:1296:C:H1'	1:CA:1302:C:N3	2.29	0.47
1:CA:1461:G:C6	1:CA:1462:C:C4	3.02	0.47
1:CA:177:G:C2'	1:CA:178:C:H5'	2.44	0.47
1:CA:212:G:O2'	1:CA:213:G:O5'	2.29	0.47
1:CA:259:G:C2'	1:CA:260:G:H5'	2.44	0.47
1:CA:253:A:C6	1:CA:274:A:N1	2.82	0.47
1:CA:296:U:N3	1:CA:297:G:C5	2.83	0.47
1:CA:321:A:C8	1:CA:328:C:C2	3.03	0.47
1:CA:465:A:C8	1:CA:467:U:OP1	2.67	0.47
1:CA:49:U:O2	1:CA:362:G:H1'	2.14	0.47
1:CA:619:U:C4	4:CD:131:ILE:HD11	2.49	0.47
4:CD:109:THR:HG22	4:CD:110:ARG:N	2.29	0.47
8:CH:59:GLU:C	8:CH:60:LEU:HD12	2.35	0.47
11:CK:92:ARG:HD2	11:CK:92:ARG:HA	1.70	0.47
12:CL:6:LEU:C	12:CL:8:ARG:N	2.67	0.47
12:CL:88:ASP:HB3	12:CL:89:LEU:HD22	1.96	0.47
14:CN:40:ARG:HH12	19:CS:6:LYS:HB2	1.76	0.47
48:D0:3:GLN:HE22	48:D0:7:PRO:CD	2.28	0.47
51:D3:33:THR:HG22	51:D3:34:LYS:H	1.79	0.47
22:DA:1283:G:N2	22:DA:1286:A:H5'	2.29	0.47
22:DA:1361:G:C4	22:DA:1362:C:C6	3.03	0.47
22:DA:1388:G:C2'	22:DA:1389:G:C8	2.95	0.47
22:DA:1439:A:C2	22:DA:1553:A:N7	2.82	0.47
22:DA:1787:A:C2	22:DA:1788:C:C4	3.02	0.47
22:DA:1905:C:C5	22:DA:1930:G:C6	3.03	0.47
22:DA:2072:C:C2'	22:DA:2073:C:H5'	2.44	0.47
22:DA:2136:G:C2'	22:DA:2137:U:C6	2.98	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2323:G:C6	22:DA:2324:U:C4	3.03	0.47
22:DA:2337:G:C2'	22:DA:2338:C:H5'	2.44	0.47
22:DA:2344:U:O2'	22:DA:2345:G:C5'	2.62	0.47
22:DA:2014:A:C2	22:DA:2613:U:O2	2.67	0.47
22:DA:260:G:C6	22:DA:261:G:C5	3.03	0.47
22:DA:2726:A:O2'	22:DA:2727:A:C5'	2.57	0.47
22:DA:381:G:C5'	45:DX:15:ASN:HD22	2.28	0.47
22:DA:503:A:N3	22:DA:505:A:H2'	2.30	0.47
22:DA:648:G:H2'	22:DA:649:G:H8	1.79	0.47
22:DA:638:G:O6	22:DA:651:G:C5	2.67	0.47
22:DA:712:G:C2	22:DA:720:U:O2	2.67	0.47
15:CO:88:ARG:CD	22:DA:716:A:OP1	2.63	0.47
22:DA:721:A:H8	22:DA:721:A:O5'	1.97	0.47
22:DA:749:A:C4	22:DA:750:A:H8	2.33	0.47
22:DA:822:G:H5''	56:DA:3358:HOH:O	2.15	0.47
22:DA:873:C:C4'	34:DM:64:TRP:CD1	2.97	0.47
22:DA:973:A:H4'	22:DA:974:G:OP2	2.14	0.47
22:DA:96:C:O2'	22:DA:97:C:H5'	2.15	0.47
24:DC:31:PRO:O	24:DC:32:LEU:HG	2.14	0.47
22:DA:2578:G:H21	25:DD:130:GLN:NE2	2.12	0.47
25:DD:17:GLU:N	25:DD:17:GLU:CD	2.66	0.47
25:DD:9:VAL:O	37:DP:4:ILE:CD1	2.62	0.47
28:DG:132:LEU:CD1	28:DG:132:LEU:N	2.77	0.47
28:DG:163:TYR:O	28:DG:164:ALA:C	2.52	0.47
28:DG:51:PHE:CE2	28:DG:68:ARG:HA	2.49	0.47
29:DH:12:LEU:HD12	29:DH:12:LEU:C	2.34	0.47
29:DH:99:ILE:HG21	29:DH:130:VAL:HG21	1.96	0.47
31:DJ:56:VAL:CG2	31:DJ:124:VAL:HG23	2.45	0.47
31:DJ:43:GLU:HG2	31:DJ:45:THR:HG22	1.96	0.47
32:DK:87:LEU:HD23	32:DK:87:LEU:H	1.79	0.47
33:DL:83:ALA:O	33:DL:85:VAL:HG12	2.14	0.47
41:DT:46:ALA:O	41:DT:47:VAL:HG13	2.15	0.47
42:DU:81:ARG:O	42:DU:82:VAL:HG13	2.15	0.47
22:DA:2080:A:H4'	45:DX:22:ASN:HD22	1.79	0.47
46:DY:22:LEU:CG	46:DY:23:ARG:NH1	2.78	0.47
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.49	0.47
1:AA:1504:G:H3'	56:AA:1801:HOH:O	2.14	0.47
1:AA:185:U:C2'	1:AA:186:C:H6	2.27	0.47
1:AA:201:G:N2	1:AA:217:C:O2	2.47	0.47
1:AA:843:U:H2'	1:AA:844:G:H5'	1.95	0.47
3:AC:20:THR:CG2	3:AC:57:GLU:HB3	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:18:ASN:CB	3:AC:39:ARG:HH12	2.28	0.47
5:AE:100:GLU:CB	5:AE:121:ASN:HA	2.44	0.47
4:AD:200:VAL:HG11	5:AE:102:THR:HG23	1.97	0.47
7:AG:45:ALA:C	7:AG:47:GLU:H	2.18	0.47
8:AH:9:MET:CE	8:AH:32:LYS:CA	2.89	0.47
9:AI:49:GLN:O	9:AI:51:LEU:N	2.47	0.47
12:AL:33:CYS:CA	12:AL:53:ARG:O	2.57	0.47
16:AP:20:VAL:HG21	16:AP:32:PHE:HB2	1.94	0.47
17:AQ:51:GLU:O	17:AQ:52:CYS:O	2.32	0.47
20:AT:27:MET:CE	20:AT:57:VAL:CG2	2.93	0.47
20:AT:53:MET:HG3	20:AT:54:GLN:N	2.29	0.47
50:B2:1:MET:CE	50:B2:2:LYS:H	2.27	0.47
49:B1:7:LYS:HE3	51:B3:33:THR:HG21	1.96	0.47
22:BA:1299:G:H2'	22:BA:1639:C:N4	2.29	0.47
1:AA:1494:G:C8	22:BA:1913:A:N3	2.83	0.47
22:BA:2107:G:H2'	22:BA:2152:G:OP1	2.15	0.47
22:BA:2344:U:H4'	22:BA:2345:G:OP1	2.14	0.47
22:BA:412:A:H2'	22:BA:413:C:H6	1.80	0.47
22:BA:792:A:C3'	22:BA:793:A:H5'	2.43	0.47
24:BC:20:ASN:ND2	24:BC:22:GLU:H	2.12	0.47
24:BC:229:HIS:HD2	24:BC:246:PRO:HB3	1.79	0.47
26:BE:60:TRP:CZ2	26:BE:70:SER:HB3	2.50	0.47
28:BG:26:LYS:HB3	28:BG:32:LEU:HA	1.96	0.47
28:BG:35:THR:O	28:BG:36:LEU:HD22	2.14	0.47
30:BI:60:VAL:HG22	30:BI:66:PHE:CB	2.45	0.47
34:BM:96:ILE:HG13	34:BM:96:ILE:O	2.14	0.47
38:BQ:88:GLU:OE1	38:BQ:88:GLU:O	2.33	0.47
38:BQ:94:LEU:O	38:BQ:94:LEU:HD12	2.14	0.47
42:BU:40:LEU:O	42:BU:41:VAL:HG13	2.14	0.47
44:BW:11:ASN:O	44:BW:12:GLY:O	2.33	0.47
44:BW:70:VAL:CG2	44:BW:75:ASN:OD1	2.62	0.47
1:CA:1092:A:C8	1:CA:1093:A:N7	2.83	0.47
1:CA:1151:A:C2'	1:CA:1152:A:O5'	2.62	0.47
1:CA:1408:A:N1	1:CA:1494:G:C6	2.83	0.47
1:CA:1394:A:C6	1:CA:1501:C:H4'	2.50	0.47
1:CA:213:G:C2'	1:CA:214:C:C6	2.75	0.47
1:CA:328:C:C2'	1:CA:328:C:O2	2.62	0.47
1:CA:666:G:O2'	1:CA:667:G:H5'	2.15	0.47
1:CA:723:U:C4'	21:CU:48:LYS:HD2	2.44	0.47
1:CA:907:A:C2'	1:CA:908:A:H5'	2.45	0.47
1:CA:964:A:H2'	1:CA:965:U:C5'	2.44	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:985:C:O2'	1:CA:986:U:H6	1.96	0.47
2:CB:115:ASP:O	2:CB:119:GLN:CB	2.63	0.47
2:CB:122:ASP:CG	2:CB:124:THR:HG22	2.34	0.47
2:CB:95:TRP:CH2	2:CB:171:ALA:HA	2.49	0.47
3:CC:161:ILE:HD13	3:CC:161:ILE:N	2.25	0.47
3:CC:91:ALA:CB	3:CC:98:ALA:HB3	2.44	0.47
4:CD:100:VAL:HG11	4:CD:142:VAL:HG11	1.96	0.47
4:CD:29:THR:O	4:CD:30:LYS:HB2	2.14	0.47
5:CE:71:ILE:HG12	5:CE:144:GLU:HG2	1.96	0.47
17:CQ:68:LYS:C	17:CQ:69:THR:HG23	2.35	0.47
19:CS:11:ASP:O	19:CS:14:LEU:HG	2.15	0.47
22:DA:1008:A:C8	22:DA:1008:A:OP1	2.68	0.47
22:DA:1078:U:H4'	22:DA:1079:C:H5''	1.95	0.47
22:DA:187:G:H2'	22:DA:1365:A:C2	2.50	0.47
22:DA:1483:G:H2'	22:DA:1484:U:C5	2.50	0.47
22:DA:1608:A:C5	22:DA:1611:C:N4	2.82	0.47
22:DA:1797:G:N2	22:DA:1803:A:H2	2.13	0.47
22:DA:1826:G:H2'	22:DA:1827:U:O5'	2.14	0.47
22:DA:1867:G:O6	22:DA:1875:G:N2	2.47	0.47
22:DA:1924:C:H2'	22:DA:1925:C:O4'	2.14	0.47
22:DA:1932:A:C2	22:DA:1933:G:H1'	2.49	0.47
22:DA:2135:A:O2'	22:DA:2136:G:O4'	2.22	0.47
22:DA:2201:G:C5	22:DA:2223:G:C2	3.03	0.47
22:DA:2339:C:O2'	22:DA:2340:A:P	2.72	0.47
22:DA:2352:A:H8	22:DA:2352:A:O5'	1.98	0.47
22:DA:2459:A:C2'	22:DA:2459:A:N3	2.77	0.47
22:DA:2602:A:C3'	22:DA:2602:A:OP1	2.63	0.47
22:DA:2794:C:C2	22:DA:2803:G:N2	2.82	0.47
22:DA:319:G:OP2	26:DE:132:LYS:HD2	2.15	0.47
22:DA:322:A:C2	22:DA:340:A:N6	2.83	0.47
22:DA:379:G:N1	22:DA:396:G:C6	2.83	0.47
22:DA:517:C:H2'	22:DA:517:C:O2	2.14	0.47
22:DA:526:A:N6	22:DA:2626:C:C4'	2.68	0.47
22:DA:686:U:H6	22:DA:788:A:C2	2.31	0.47
23:DB:17:C:O2'	23:DB:18:G:C8	2.65	0.47
6:CF:80:PHE:CE2	24:DC:123:ILE:HG21	2.49	0.47
24:DC:156:SER:HB3	24:DC:159:THR:HG23	1.97	0.47
24:DC:16:VAL:HG12	24:DC:16:VAL:O	2.15	0.47
24:DC:264:LYS:HG3	24:DC:265:PHE:CD2	2.50	0.47
25:DD:196:ALA:O	25:DD:197:THR:C	2.53	0.47
26:DE:178:VAL:HG13	26:DE:179:SER:N	2.30	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:48:LEU:N	27:DF:48:LEU:HD23	2.24	0.47
27:DF:60:SER:OG	27:DF:88:VAL:HG11	2.15	0.47
30:DI:118:GLY:O	30:DI:119:ALA:CB	2.63	0.47
31:DJ:88:THR:HG22	31:DJ:91:GLU:OE1	2.15	0.47
44:DW:23:LYS:CD	44:DW:24:ARG:HB2	2.44	0.47
1:AA:1028:C:C2	1:AA:1034:G:C4	3.03	0.47
1:AA:1051:C:H2'	1:AA:1052:U:C6	2.49	0.47
1:AA:1077:G:N2	1:AA:1081:A:C4	2.83	0.47
1:AA:1102:A:H8	1:AA:1102:A:H5''	1.80	0.47
1:AA:1371:G:C5	1:AA:1372:U:C4	3.03	0.47
1:AA:1430:A:H2'	1:AA:1430:A:N3	2.29	0.47
1:AA:152:A:C8	1:AA:153:C:C5	3.02	0.47
1:AA:545:C:C2'	1:AA:545:C:O2	2.62	0.47
1:AA:969:A:H2'	1:AA:970:C:H6	1.78	0.47
4:AD:199:ILE:HG12	4:AD:200:VAL:N	2.29	0.47
7:AG:78:ARG:HH22	7:AG:81:GLY:HA2	1.79	0.47
1:AA:640:A:H4'	8:AH:107:LYS:HZ1	1.79	0.47
13:AM:95:PRO:HG2	13:AM:101:THR:CG2	2.44	0.47
16:AP:10:GLY:HA3	16:AP:15:PRO:CA	2.31	0.47
19:AS:31:ARG:HG2	19:AS:56:HIS:CD2	2.50	0.47
21:AU:36:PHE:HD1	21:AU:39:LYS:CB	2.16	0.47
50:B2:35:ARG:HG2	50:B2:42:LEU:HD21	1.97	0.47
22:BA:1069:A:C6	22:BA:1074:G:C5	3.03	0.47
22:BA:1153:C:H2'	22:BA:1154:G:C5'	2.44	0.47
22:BA:1450:G:H2'	22:BA:1451:C:C6	2.50	0.47
22:BA:1748:C:H2'	22:BA:1749:A:H8	1.80	0.47
22:BA:17:G:H2'	22:BA:18:U:C6	2.49	0.47
22:BA:2308:G:H2'	22:BA:2310:C:H5	1.80	0.47
22:BA:2663:G:O2'	22:BA:2664:G:H5'	2.15	0.47
22:BA:2665:A:C2	22:BA:2666:C:C6	3.02	0.47
22:BA:308:G:C2'	22:BA:309:A:H5'	2.44	0.47
22:BA:363:G:H2'	22:BA:364:C:C6	2.49	0.47
22:BA:364:C:O2'	22:BA:365:U:H5'	2.15	0.47
22:BA:503:A:C6	22:BA:506:G:C6	3.03	0.47
22:BA:645:C:H42	22:BA:2350:C:C1'	2.28	0.47
22:BA:80:G:C2	22:BA:107:G:C2	3.02	0.47
22:BA:817:C:H2'	22:BA:818:G:O4'	2.15	0.47
24:BC:123:ILE:HG12	24:BC:123:ILE:O	2.15	0.47
24:BC:245:THR:HB	24:BC:246:PRO:HD2	1.97	0.47
27:BF:141:ASP:HB3	27:BF:144:LYS:HB2	1.97	0.47
28:BG:93:TYR:O	28:BG:105:SER:HB3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:BK:63:VAL:HG13	32:BK:103:VAL:HG12	1.96	0.47
35:BN:18:GLN:HE21	35:BN:22:ARG:NH1	2.12	0.47
35:BN:24:MET:HE2	35:BN:44:LEU:HB2	1.97	0.47
36:BO:103:VAL:O	36:BO:105:ALA:O	2.32	0.47
37:BP:24:THR:C	37:BP:25:VAL:HG12	2.35	0.47
39:BR:16:GLU:HA	39:BR:98:ILE:CG2	2.40	0.47
1:CA:1129:C:C4	1:CA:1139:G:C4	3.03	0.47
1:CA:1255:G:H21	1:CA:1258:G:H21	1.60	0.47
1:CA:248:C:O2'	1:CA:249:U:O5'	2.32	0.47
1:CA:255:G:C2	1:CA:256:U:C5	3.03	0.47
1:CA:425:G:H2'	1:CA:426:U:O4'	2.14	0.47
1:CA:738:C:C2	1:CA:739:C:C5	3.03	0.47
1:CA:836:G:C6	1:CA:851:G:C5	3.03	0.47
1:CA:986:U:C2	1:CA:1220:G:N2	2.82	0.47
5:CE:131:ASN:C	5:CE:131:ASN:ND2	2.66	0.47
6:CF:41:ASP:OD2	6:CF:58:HIS:CE1	2.65	0.47
8:CH:28:SER:CB	8:CH:57:GLU:O	2.62	0.47
9:CI:49:GLN:HA	9:CI:52:GLU:CG	2.43	0.47
13:CM:23:GLY:HA3	13:CM:64:VAL:HG13	1.95	0.47
14:CN:26:LEU:C	14:CN:26:LEU:HD23	2.35	0.47
50:D2:26:ASN:HD22	50:D2:29:GLN:NE2	2.12	0.47
51:D3:18:LYS:CG	51:D3:19:GLY:H	2.26	0.47
22:DA:1051:G:H2'	22:DA:1052:C:H6	1.77	0.47
22:DA:1064:C:C6	22:DA:1065:U:H5	2.33	0.47
22:DA:1141:U:O2	22:DA:1142:A:C6	2.67	0.47
22:DA:1241:A:H2'	22:DA:1242:U:O5'	2.14	0.47
22:DA:1264:A:C6	22:DA:1265:A:N6	2.82	0.47
22:DA:121:G:N3	22:DA:131:A:N1	2.63	0.47
22:DA:1430:G:O2'	22:DA:1431:A:O4'	2.32	0.47
22:DA:1475:G:O2'	22:DA:1476:U:H6	1.97	0.47
22:DA:1566:A:C2	24:DC:212:TRP:CE3	3.03	0.47
22:DA:1324:G:O2'	22:DA:1616:A:C6	2.63	0.47
22:DA:165:A:C4	22:DA:166:U:C6	3.03	0.47
22:DA:1681:G:O2'	22:DA:1762:A:C2'	2.62	0.47
22:DA:1726:C:H2'	22:DA:1727:C:C6	2.50	0.47
22:DA:1726:C:H2'	22:DA:1727:C:H6	1.78	0.47
22:DA:1737:G:C6	22:DA:1738:G:N1	2.83	0.47
22:DA:2024:G:C2	22:DA:2040:G:N3	2.83	0.47
22:DA:2212:A:C8	22:DA:2214:C:N4	2.82	0.47
22:DA:226:A:C2	22:DA:230:G:C6	3.02	0.47
22:DA:2284:A:P	49:D1:5:ARG:HG3	2.55	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2308:G:N7	22:DA:2310:C:N4	2.62	0.47
22:DA:2331:G:N2	22:DA:2385:C:C2	2.82	0.47
22:DA:252:G:H2'	22:DA:253:C:O5'	2.14	0.47
22:DA:2692:G:H2'	22:DA:2693:G:H8	1.80	0.47
22:DA:2772:C:O2	22:DA:2772:C:H2'	2.15	0.47
22:DA:2806:C:N4	22:DA:2807:U:C4	2.83	0.47
22:DA:82:U:H5''	22:DA:296:U:H5''	1.97	0.47
22:DA:305:C:C2	22:DA:313:G:N1	2.82	0.47
22:DA:36:G:N1	22:DA:445:C:C4	2.83	0.47
22:DA:444:C:O2'	22:DA:445:C:O5'	2.32	0.47
22:DA:45:G:C5'	22:DA:46:G:OP1	2.63	0.47
22:DA:543:G:C2	22:DA:551:G:C6	3.03	0.47
22:DA:668:A:C4	22:DA:670:A:C5	3.03	0.47
22:DA:691:C:O2'	22:DA:692:C:H5'	2.15	0.47
22:DA:836:G:C6	22:DA:837:C:C4	3.03	0.47
22:DA:8:C:C2'	22:DA:9:G:H5'	2.45	0.47
23:DB:42:C:H2'	23:DB:43:C:C6	2.50	0.47
24:DC:129:LEU:HD23	24:DC:129:LEU:N	2.29	0.47
24:DC:239:PHE:CD1	24:DC:240:GLY:N	2.69	0.47
24:DC:35:LYS:O	24:DC:36:ASN:HB2	2.14	0.47
24:DC:80:LEU:CD2	24:DC:109:LEU:HB3	2.44	0.47
25:DD:118:PHE:CG	25:DD:119:ALA:N	2.83	0.47
25:DD:129:THR:HG22	25:DD:130:GLN:O	2.15	0.47
25:DD:180:VAL:HG22	25:DD:187:LEU:HD13	1.96	0.47
28:DG:154:GLU:O	28:DG:156:TYR:N	2.48	0.47
22:DA:2658:C:H5''	28:DG:157:LYS:CD	2.45	0.47
29:DH:50:ARG:HA	29:DH:50:ARG:NH1	2.29	0.47
29:DH:72:ILE:O	29:DH:72:ILE:HG13	2.14	0.47
30:DI:54:ILE:HD12	30:DI:54:ILE:N	2.30	0.47
32:DK:76:VAL:CG1	32:DK:77:ILE:N	2.78	0.47
22:DA:1277:G:O2'	35:DN:24:MET:HB2	2.13	0.47
35:DN:28:LEU:C	35:DN:30:ARG:H	2.18	0.47
38:DQ:79:ILE:HD13	38:DQ:80:ASN:N	2.29	0.47
39:DR:97:LYS:CG	39:DR:97:LYS:O	2.63	0.47
43:DV:21:ARG:C	43:DV:23:ALA:H	2.18	0.47
45:DX:53:LYS:CA	45:DX:56:ARG:CB	2.85	0.47
1:AA:1053:G:O2'	1:AA:1054:C:P	2.73	0.47
1:AA:1068:G:N7	1:AA:1094:G:H2'	2.29	0.47
1:AA:1162:C:O2'	1:AA:1163:A:C5'	2.63	0.47
1:AA:1443:C:H2'	1:AA:1444:U:O4'	2.14	0.47
1:AA:1521:C:C2'	1:AA:1522:U:O5'	2.62	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:441:A:C2	1:AA:497:G:C6	3.03	0.47
1:AA:828:U:C6	1:AA:828:U:H3'	2.50	0.47
1:AA:953:G:H2'	1:AA:954:G:H5'	1.97	0.47
3:AC:144:GLY:O	3:AC:145:ALA:CB	2.60	0.47
6:AF:18:VAL:H	6:AF:19:PRO:HD2	1.79	0.47
7:AG:128:GLU:O	7:AG:129:ASN:C	2.53	0.47
8:AH:77:VAL:HG11	8:AH:124:ILE:HD11	1.96	0.47
12:AL:109:ARG:HH21	12:AL:116:TYR:HE2	1.63	0.47
13:AM:18:LEU:HD23	13:AM:33:LEU:HD21	1.97	0.47
21:AU:16:ARG:HG2	21:AU:19:LYS:HG2	1.96	0.47
48:B0:5:ASN:O	48:B0:7:PRO:HD3	2.15	0.47
49:B1:10:LEU:O	49:B1:19:PHE:HB2	2.15	0.47
22:BA:1020:A:C2	22:BA:1141:U:O2'	2.64	0.47
22:BA:1022:G:N2	22:BA:1142:A:N1	2.62	0.47
22:BA:1088:A:H4'	22:BA:1089:A:C8	2.50	0.47
22:BA:1345:C:H2'	22:BA:1345:C:O2	2.15	0.47
22:BA:1524:G:O2'	22:BA:1525:A:H5'	2.15	0.47
22:BA:1849:G:H2'	22:BA:1850:G:H8	1.79	0.47
22:BA:2082:A:H2'	22:BA:2083:G:O4'	2.14	0.47
22:BA:2500:U:H5''	22:BA:2501:C:OP2	2.15	0.47
22:BA:263:G:H2'	22:BA:264:C:O5'	2.15	0.47
22:BA:321:U:O2'	26:BE:162:ARG:NH1	2.48	0.47
22:BA:634:C:H2'	22:BA:635:C:C6	2.50	0.47
22:BA:659:G:C6	22:BA:660:C:C4	3.03	0.47
22:BA:670:A:H4'	22:BA:671:C:H5''	1.97	0.47
22:BA:734:A:C5	22:BA:735:A:C8	3.02	0.47
24:BC:131:MET:HA	24:BC:134:ILE:CD1	2.39	0.47
24:BC:144:GLU:OE2	24:BC:188:ARG:HB2	2.15	0.47
24:BC:29:PHE:CZ	24:BC:31:PRO:CG	2.97	0.47
26:BE:147:LEU:HB2	26:BE:186:VAL:HA	1.97	0.47
27:BF:35:LEU:CB	27:BF:153:ILE:CG2	2.66	0.47
28:BG:136:ASP:OD1	28:BG:136:ASP:C	2.53	0.47
31:BJ:140:LEU:N	31:BJ:140:LEU:HD12	2.29	0.47
34:BM:28:PHE:HD2	34:BM:104:GLU:OE1	1.97	0.47
38:BQ:12:ARG:O	38:BQ:13:HIS:C	2.50	0.47
42:BU:54:PRO:HG2	42:BU:55:GLY:H	1.80	0.47
42:BU:85:ARG:HG3	42:BU:86:PHE:N	2.30	0.47
1:CA:1031:C:H5'	1:CA:1032:G:C5'	2.43	0.47
1:CA:994:A:N7	1:CA:1216:A:C4'	2.78	0.47
1:CA:1244:G:C6	1:CA:1245:C:C4	3.02	0.47
1:CA:1282:C:O2'	1:CA:1283:U:C6	2.68	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1357:A:C8	1:CA:1358:U:C5	3.03	0.47
1:CA:155:A:C2	1:CA:167:A:C4	3.02	0.47
1:CA:223:A:C4	1:CA:224:U:C6	3.02	0.47
1:CA:289:G:N1	1:CA:290:C:C4	2.83	0.47
1:CA:330:C:O2'	1:CA:331:G:H8	1.96	0.47
1:CA:160:A:H4'	1:CA:344:A:N1	2.29	0.47
1:CA:338:A:N6	1:CA:351:G:N1	2.47	0.47
1:CA:652:U:O4	1:CA:752:G:H2'	2.15	0.47
1:CA:846:G:O2'	1:CA:847:G:H5'	2.15	0.47
2:CB:116:LEU:HD13	2:CB:140:LEU:HB2	1.96	0.47
3:CC:53:ARG:HB2	3:CC:53:ARG:NH1	2.29	0.47
4:CD:29:THR:C	4:CD:31:CYS:N	2.68	0.47
5:CE:77:ASN:HB3	5:CE:79:THR:HG22	1.97	0.47
8:CH:54:THR:C	8:CH:56:PRO:HD3	2.34	0.47
10:CJ:7:ARG:NH1	10:CJ:102:LEU:HG	2.28	0.47
16:CP:48:GLU:HA	16:CP:51:ARG:HH21	1.80	0.47
17:CQ:29:LYS:HE2	17:CQ:36:PHE:CD2	2.49	0.47
18:CR:32:ILE:CD1	18:CR:33:THR:O	2.62	0.47
19:CS:35:ARG:HD2	19:CS:71:GLY:HA2	1.97	0.47
51:D3:28:LEU:O	51:D3:29:ARG:HB3	2.14	0.47
22:DA:121:G:N3	22:DA:131:A:C2	2.83	0.47
22:DA:1438:U:N3	22:DA:1555:G:C2	2.83	0.47
22:DA:1494:A:H2'	22:DA:1495:A:H8	1.67	0.47
22:DA:1313:U:C6	22:DA:1610:A:H8	2.32	0.47
22:DA:1608:A:C5	22:DA:1611:C:C4	3.03	0.47
22:DA:1745:A:N3	22:DA:1746:A:C8	2.83	0.47
22:DA:1803:A:HO2'	22:DA:1804:C:C4'	2.24	0.47
22:DA:1875:G:H8	22:DA:1875:G:OP2	1.97	0.47
22:DA:189:G:H3'	22:DA:189:G:C8	2.49	0.47
22:DA:2199:A:N3	22:DA:2199:A:H2'	2.28	0.47
22:DA:2243:U:O2'	22:DA:2244:U:H5'	2.14	0.47
22:DA:389:G:H1'	22:DA:2412:A:O2'	2.15	0.47
22:DA:2480:C:N4	22:DA:2481:G:C6	2.83	0.47
22:DA:586:A:H2	22:DA:809:G:N3	2.13	0.47
22:DA:617:G:O2'	22:DA:618:G:C8	2.38	0.47
22:DA:775:G:O6	22:DA:787:C:H2'	2.15	0.47
22:DA:818:G:H4'	22:DA:838:C:O3'	2.15	0.47
22:DA:934:U:H6	22:DA:934:U:H5"	1.80	0.47
26:DE:2:GLU:HG2	26:DE:13:THR:OG1	2.15	0.47
26:DE:60:TRP:HB3	26:DE:61:ARG:H	1.48	0.47
26:DE:88:ARG:CB	26:DE:89:PRO:CD	2.93	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:113:PHE:HE2	27:DF:116:LEU:HB2	1.79	0.47
22:DA:2746:U:C5'	28:DG:137:LYS:HG2	2.42	0.47
29:DH:48:GLU:HA	29:DH:51:ARG:HE	1.79	0.47
29:DH:61:VAL:CG1	29:DH:62:LEU:H	2.22	0.47
29:DH:68:ARG:CG	29:DH:71:LYS:CD	2.92	0.47
22:DA:7:G:H4'	31:DJ:15:TRP:CH2	2.49	0.47
34:DM:43:ALA:HA	34:DM:46:ILE:HD11	1.96	0.47
34:DM:8:LYS:HE3	34:DM:8:LYS:CA	2.37	0.47
34:DM:97:GLN:HB2	34:DM:98:PRO:CD	2.44	0.47
37:DP:13:LYS:H	37:DP:13:LYS:HD2	1.79	0.47
37:DP:59:THR:OG1	37:DP:72:VAL:HG12	2.15	0.47
38:DQ:78:PHE:CE2	38:DQ:109:VAL:HG22	2.49	0.47
22:DA:995:C:O2'	38:DQ:60:TRP:HH2	1.98	0.47
38:DQ:65:ASN:O	38:DQ:69:ARG:HB2	2.15	0.47
39:DR:27:ILE:HG13	39:DR:33:VAL:HG11	1.95	0.47
41:DT:10:VAL:CG2	41:DT:11:LEU:HD12	2.25	0.47
44:DW:49:ASN:ND2	44:DW:80:SER:HA	2.29	0.47
45:DX:16:ASN:O	45:DX:17:ARG:HB2	2.15	0.47
45:DX:70:LEU:O	45:DX:74:GLY:N	2.47	0.47
46:DY:31:GLN:C	46:DY:33:ALA:H	2.18	0.47
1:AA:1161:C:O2'	1:AA:1162:C:C5'	2.63	0.47
1:AA:1454:G:N2	1:AA:1455:G:C4	2.82	0.47
1:AA:191:G:H2'	1:AA:192:A:C8	2.50	0.47
1:AA:210:C:H4'	1:AA:211:G:C2	2.48	0.47
1:AA:209:U:C5'	1:AA:210:C:OP2	2.52	0.47
1:AA:229:U:H2'	1:AA:230:G:O4'	2.14	0.47
1:AA:255:G:C5	1:AA:256:U:C5	3.03	0.47
1:AA:400:C:H2'	1:AA:401:C:H5'	1.97	0.47
1:AA:475:C:C2'	1:AA:476:U:H5'	2.45	0.47
1:AA:596:A:N6	1:AA:645:G:N1	2.62	0.47
1:AA:66:A:C2'	1:AA:66:A:N3	2.76	0.47
1:AA:675:A:OP1	18:AR:70:THR:HG21	2.15	0.47
2:AB:163:ILE:O	2:AB:185:ILE:CG1	2.56	0.47
2:AB:36:LYS:HE3	2:AB:36:LYS:CA	2.35	0.47
2:AB:48:MET:HA	2:AB:48:MET:CE	2.45	0.47
1:AA:1060:U:C5	3:AC:1:GLY:CA	2.93	0.47
1:AA:8:A:C5	4:AD:205:LYS:HB3	2.50	0.47
5:AE:59:ILE:O	5:AE:63:MET:HG2	2.14	0.47
9:AI:32:ARG:HE	9:AI:36:GLN:CD	2.18	0.47
20:AT:27:MET:CE	20:AT:57:VAL:HG22	2.45	0.47
22:BA:1083:U:O2	22:BA:1086:A:N1	2.48	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1106:G:C6	22:BA:1107:G:N7	2.83	0.47
22:BA:1206:G:C6	22:BA:1207:C:C4	3.03	0.47
22:BA:1744:A:H3'	22:BA:1745:A:H8	1.80	0.47
22:BA:2145:C:H3'	22:BA:2146:C:H5''	1.96	0.47
22:BA:2150:C:C2'	22:BA:2151:U:C5	2.96	0.47
22:BA:2531:A:C6	22:BA:2532:G:C5	3.03	0.47
22:BA:2648:G:C2	22:BA:2649:C:C2	3.03	0.47
22:BA:263:G:C2'	22:BA:264:C:O5'	2.63	0.47
22:BA:319:G:C5	22:BA:333:G:C2	3.02	0.47
22:BA:726:G:O2'	22:BA:727:A:O5'	2.32	0.47
24:BC:132:ARG:NH1	24:BC:169:ALA:HA	2.29	0.47
24:BC:230:PRO:HD2	24:BC:246:PRO:HA	1.96	0.47
25:BD:142:VAL:HG23	25:BD:144:GLY:N	2.30	0.47
26:BE:5:LEU:HD23	26:BE:120:VAL:O	2.14	0.47
27:BF:71:LYS:CD	27:BF:80:GLN:HG3	2.31	0.47
28:BG:126:THR:CG2	28:BG:128:THR:H	2.21	0.47
29:BH:41:LYS:C	29:BH:43:ASN:N	2.65	0.47
29:BH:97:ARG:HE	29:BH:97:ARG:HB2	1.49	0.47
35:BN:71:ARG:HH21	35:BN:71:ARG:HG3	1.76	0.47
36:BO:57:ALA:O	36:BO:58:ILE:C	2.54	0.47
39:BR:49:ILE:HG21	39:BR:53:PHE:CA	2.44	0.47
39:BR:61:ALA:CB	39:BR:98:ILE:H	2.28	0.47
45:BX:40:GLU:C	45:BX:42:GLU:N	2.68	0.47
45:BX:70:LEU:O	45:BX:74:GLY:N	2.47	0.47
47:BZ:8:GLN:HB3	47:BZ:31:ILE:HA	1.97	0.47
1:CA:1115:U:C2'	1:CA:1116:U:H5'	2.45	0.47
1:CA:1235:U:H6	1:CA:1235:U:H3'	1.80	0.47
1:CA:1301:U:H2'	1:CA:1303:C:C6	2.49	0.47
1:CA:1348:U:O2'	1:CA:1349:A:C5'	2.63	0.47
1:CA:1452:C:H5'	1:CA:1453:G:C4	2.50	0.47
1:CA:1472:U:C2	1:CA:1473:G:C8	3.02	0.47
1:CA:428:G:H1'	1:CA:430:A:C8	2.50	0.47
1:CA:729:A:H2'	1:CA:730:G:O5'	2.15	0.47
1:CA:762:U:O5'	1:CA:762:U:H6	1.97	0.47
1:CA:974:A:HO2'	1:CA:975:A:P	2.37	0.47
2:CB:17:HIS:O	2:CB:18:GLN:HB2	2.15	0.47
3:CC:172:VAL:O	3:CC:174:LEU:HD22	2.15	0.47
7:CG:4:ARG:HE	7:CG:6:ILE:CA	2.27	0.47
10:CJ:51:VAL:HB	14:CN:80:ARG:CB	2.35	0.47
10:CJ:35:GLN:NE2	10:CJ:78:GLU:H	2.13	0.47
1:CA:1308:U:H5	13:CM:97:ARG:NH1	2.12	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:D0:38:LEU:H	48:D0:41:HIS:HE1	1.59	0.47
51:D3:50:SER:O	51:D3:53:ASP:N	2.45	0.47
22:DA:1178:C:H2'	22:DA:1179:G:O4'	2.15	0.47
22:DA:1385:A:O2'	22:DA:1386:C:C6	2.67	0.47
22:DA:1554:U:H5''	22:DA:1555:G:OP2	2.14	0.47
22:DA:1598:A:C2	22:DA:1599:U:C2	3.03	0.47
22:DA:1676:A:C2	22:DA:1993:U:C5'	2.81	0.47
22:DA:160:A:N6	22:DA:167:A:H1'	2.30	0.47
22:DA:1815:A:C1'	22:DA:1817:G:C8	2.98	0.47
22:DA:1827:U:C2'	22:DA:1828:G:O4'	2.62	0.47
22:DA:185:G:C6	22:DA:212:G:N2	2.82	0.47
22:DA:1963:U:O2'	22:DA:1964:G:H5''	2.14	0.47
22:DA:2040:G:C5	22:DA:2041:U:C5	3.03	0.47
22:DA:2077:A:N1	22:DA:2078:C:C4	2.83	0.47
22:DA:2197:U:O2'	22:DA:2198:A:C8	2.63	0.47
22:DA:965:C:H4'	22:DA:2273:A:C1'	2.44	0.47
22:DA:2294:G:C2	22:DA:2295:C:C6	3.02	0.47
22:DA:2324:U:O2'	22:DA:2385:C:H5	1.97	0.47
22:DA:310:A:N7	22:DA:312:G:C6	2.82	0.47
22:DA:405:U:H3'	22:DA:406:G:C5'	2.44	0.47
22:DA:46:G:N2	22:DA:47:C:N1	2.63	0.47
22:DA:65:U:C3'	22:DA:65:U:C6	2.98	0.47
22:DA:819:A:C4	22:DA:820:A:C8	3.03	0.47
25:DD:124:ARG:NH1	25:DD:125:TRP:CE2	2.83	0.47
25:DD:151:THR:O	25:DD:152:PRO:C	2.53	0.47
25:DD:183:GLU:N	25:DD:183:GLU:CD	2.67	0.47
27:DF:87:LYS:O	27:DF:88:VAL:HB	2.15	0.47
28:DG:23:ILE:O	28:DG:24:THR:HG23	2.15	0.47
28:DG:3:VAL:C	28:DG:5:LYS:H	2.18	0.47
22:DA:538:A:C5'	31:DJ:7:LYS:NZ	2.78	0.47
33:DL:65:GLY:O	33:DL:66:PHE:HB2	2.15	0.47
34:DM:66:ARG:NE	34:DM:101:VAL:HG11	2.29	0.47
35:DN:118:ARG:O	35:DN:118:ARG:HG2	2.14	0.47
41:DT:43:ILE:CD1	41:DT:83:ALA:HB1	2.45	0.47
42:DU:42:LYS:HZ3	42:DU:42:LYS:HB3	1.79	0.47
42:DU:73:ASN:HB3	42:DU:95:PHE:CE2	2.49	0.47
42:DU:11:ILE:HG21	42:DU:79:ALA:HB2	1.97	0.47
42:DU:94:PHE:CD2	42:DU:94:PHE:O	2.63	0.47
44:DW:32:ALA:O	44:DW:34:SER:N	2.47	0.47
1:AA:1031:C:HO2'	1:AA:1032:G:H5''	1.80	0.47
1:AA:1126:U:C6	1:AA:1281:C:N3	2.83	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1256:A:H1'	1:AA:1258:G:N7	2.26	0.47
1:AA:1460:C:H2'	1:AA:1461:G:O5'	2.15	0.47
1:AA:224:U:C2	1:AA:225:C:C5	3.03	0.47
1:AA:623:C:C2'	1:AA:624:C:H5'	2.45	0.47
1:AA:672:U:O2'	1:AA:673:A:H5'	2.15	0.47
1:AA:814:A:H5'	56:AA:1760:HOH:O	2.15	0.47
2:AB:162:VAL:HG23	2:AB:184:ALA:CB	2.45	0.47
2:AB:187:ASP:OD2	2:AB:202:ASN:HA	2.14	0.47
2:AB:40:ILE:HG21	2:AB:201:GLY:CA	2.44	0.47
2:AB:67:LEU:O	2:AB:160:LEU:HD12	2.14	0.47
3:AC:16:PRO:HB2	3:AC:17:TRP:H	1.45	0.47
6:AF:99:ALA:O	6:AF:100:SER:HB2	2.15	0.47
7:AG:107:ALA:CA	7:AG:122:GLU:HG3	2.45	0.47
9:AI:89:TYR:O	9:AI:90:ASP:CB	2.63	0.47
13:AM:89:ARG:NH1	13:AM:94:LEU:HB3	2.29	0.47
14:AN:42:ASN:O	14:AN:44:VAL:N	2.48	0.47
14:AN:87:ALA:HB2	14:AN:92:ILE:HD12	1.97	0.47
15:AO:42:PHE:HE1	15:AO:55:LEU:HB2	1.80	0.47
20:AT:68:LYS:HB2	20:AT:68:LYS:HZ2	1.80	0.47
22:BA:686:U:O4	50:B2:12:ARG:HB2	2.16	0.47
51:B3:31:ILE:HD13	51:B3:34:LYS:HD2	1.86	0.47
22:BA:1449:G:H2'	22:BA:1450:G:O5'	2.14	0.47
22:BA:1542:U:H2'	22:BA:1543:G:O4'	2.15	0.47
22:BA:1840:G:C2	22:BA:1841:U:C2	3.03	0.47
22:BA:197:A:C2'	22:BA:198:C:H5'	2.45	0.47
22:BA:2768:U:H2'	22:BA:2769:U:O5'	2.15	0.47
22:BA:411:G:H5''	22:BA:412:A:OP1	2.15	0.47
22:BA:445:C:O2'	22:BA:446:G:H5'	2.14	0.47
22:BA:481:G:O2'	22:BA:482:A:P	2.72	0.47
22:BA:608:A:C2	22:BA:621:A:C2	3.02	0.47
22:BA:670:A:H4'	22:BA:671:C:O5'	2.15	0.47
22:BA:68:G:C2	22:BA:74:A:C4	3.02	0.47
22:BA:912:C:C4	22:BA:913:U:O4	2.68	0.47
25:BD:9:VAL:HG22	25:BD:26:VAL:CG1	2.44	0.47
27:BF:134:GLN:C	27:BF:136:ILE:HG12	2.34	0.47
28:BG:88:LEU:HD11	28:BG:95:ALA:HB2	1.96	0.47
29:BH:30:LEU:O	29:BH:35:LYS:HB2	2.14	0.47
22:BA:1059:G:H4'	30:BI:116:MET:CE	2.45	0.47
32:BK:38:ILE:HD11	32:BK:112:PHE:HZ	1.78	0.47
33:BL:55:MET:HA	33:BL:56:PRO:HD3	1.63	0.47
33:BL:95:LEU:HD22	33:BL:100:ILE:HD11	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:34:ALA:O	38:BQ:37:ALA:HB3	2.14	0.47
39:BR:39:LEU:HA	39:BR:49:ILE:CG2	2.44	0.47
40:BS:39:THR:HG22	40:BS:44:ALA:HB2	1.95	0.47
40:BS:29:VAL:HG22	40:BS:55:ILE:HD11	1.97	0.47
41:BT:88:LYS:O	41:BT:89:GLU:CB	2.63	0.47
43:BV:21:ARG:HA	43:BV:25:LYS:O	2.15	0.47
44:BW:18:LYS:HG3	44:BW:19:ARG:HG3	1.97	0.47
44:BW:9:THR:CG2	44:BW:10:ARG:N	2.70	0.47
1:CA:1076:U:C2	1:CA:1082:A:C2	3.03	0.47
1:CA:134:G:H2'	1:CA:135:C:H5'	1.94	0.47
1:CA:1509:C:O2'	1:CA:1510:C:H5'	2.14	0.47
1:CA:213:G:C8	1:CA:214:C:C5	3.02	0.47
1:CA:509:A:OP1	4:CD:50:TYR:HD2	1.98	0.47
1:CA:771:G:C2	1:CA:809:G:C2	3.03	0.47
1:CA:785:G:H2'	1:CA:785:G:N3	2.29	0.47
1:CA:585:G:N3	1:CA:879:C:H4'	2.30	0.47
1:CA:917:G:C6	1:CA:918:A:C6	3.03	0.47
2:CB:101:THR:HG23	2:CB:174:GLU:HB3	1.97	0.47
4:CD:200:VAL:CG1	4:CD:201:GLU:N	2.78	0.47
5:CE:24:VAL:HG23	5:CE:25:LYS:N	2.29	0.47
6:CF:80:PHE:HE2	24:DC:123:ILE:HG12	1.81	0.47
7:CG:100:MET:HE3	7:CG:100:MET:N	2.18	0.47
7:CG:64:ALA:HB2	7:CG:126:ALA:CB	2.42	0.47
10:CJ:90:LEU:HD23	10:CJ:92:LEU:HD11	1.97	0.47
1:CA:947:G:OP1	13:CM:106:ARG:CG	2.62	0.47
16:CP:52:LEU:O	16:CP:53:ASP:CB	2.62	0.47
17:CQ:4:ILE:CG2	17:CQ:5:ARG:N	2.62	0.47
19:CS:32:THR:HG21	19:CS:48:ILE:CG2	2.45	0.47
21:CU:36:PHE:HA	21:CU:39:LYS:HE2	1.97	0.47
51:D3:28:LEU:HD23	51:D3:28:LEU:O	2.14	0.47
51:D3:50:SER:O	51:D3:51:LYS:C	2.52	0.47
22:DA:1103:A:H5''	22:DA:1104:C:OP2	2.15	0.47
22:DA:1138:G:H2'	22:DA:1139:G:O4'	2.15	0.47
22:DA:1204:A:N9	22:DA:1206:G:C6	2.83	0.47
22:DA:1223:G:O5'	22:DA:1223:G:H8	1.98	0.47
22:DA:1259:G:H2'	22:DA:1260:A:H8	1.79	0.47
22:DA:1307:A:C2'	22:DA:1308:A:H5'	2.45	0.47
22:DA:1354:A:C8	22:DA:1355:G:C8	3.03	0.47
22:DA:1388:G:C4	22:DA:1389:G:N7	2.83	0.47
22:DA:146:A:C6	22:DA:147:C:C4	3.03	0.47
22:DA:1469:A:C2'	22:DA:1470:A:C8	2.73	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1532:A:C6	22:DA:1540:G:O6	2.68	0.47
22:DA:1441:G:H4'	22:DA:1628:G:OP1	2.15	0.47
22:DA:1845:G:C5	22:DA:1846:G:N7	2.83	0.47
22:DA:1962:C:C4'	22:DA:1963:U:OP1	2.57	0.47
22:DA:227:A:H5'	22:DA:229:C:N4	2.31	0.47
22:DA:2314:A:O2'	22:DA:2315:G:H8	1.97	0.47
22:DA:233:A:O2'	22:DA:234:U:O5'	2.32	0.47
22:DA:2385:C:O2'	22:DA:2386:A:H8	1.92	0.47
22:DA:2666:C:C2'	22:DA:2667:C:O5'	2.63	0.47
22:DA:2748:A:C2	22:DA:2757:A:N7	2.83	0.47
22:DA:379:G:C2	22:DA:396:G:C6	3.03	0.47
22:DA:404:A:C5'	22:DA:405:U:OP1	2.63	0.47
22:DA:40:U:C4	22:DA:41:C:N4	2.83	0.47
22:DA:370:G:C6	22:DA:424:G:N7	2.83	0.47
22:DA:457:A:C2	22:DA:458:G:N2	2.83	0.47
15:CO:63:ARG:HH22	22:DA:715:A:H5''	1.79	0.47
22:DA:734:A:C4	22:DA:735:A:C8	3.03	0.47
22:DA:783:A:H8	22:DA:783:A:H2'	1.53	0.47
22:DA:90:U:C5	22:DA:91:A:N7	2.83	0.47
22:DA:946:C:O2'	22:DA:947:A:H5'	2.15	0.47
23:DB:60:C:H2'	23:DB:61:G:C8	2.50	0.47
24:DC:160:TYR:CD1	24:DC:160:TYR:C	2.88	0.47
24:DC:259:ASN:C	24:DC:261:ARG:H	2.19	0.47
25:DD:114:LYS:CD	25:DD:116:LYS:HZ2	2.18	0.47
25:DD:36:GLN:HE21	25:DD:38:LYS:NZ	2.13	0.47
26:DE:5:LEU:CD2	26:DE:120:VAL:HG22	2.45	0.47
27:DF:19:PHE:O	27:DF:20:ASN:HB3	2.15	0.47
27:DF:46:LYS:HE2	27:DF:83:PRO:HG3	1.97	0.47
30:DI:106:GLN:HA	30:DI:109:ALA:HB3	1.98	0.47
30:DI:103:ALA:O	30:DI:107:GLU:HB2	2.15	0.47
31:DJ:21:THR:HG23	31:DJ:61:LYS:CB	2.44	0.47
32:DK:35:VAL:HG21	32:DK:69:VAL:HG22	1.97	0.47
32:DK:9:ASN:N	32:DK:9:ASN:ND2	2.60	0.47
35:DN:38:LEU:O	35:DN:38:LEU:HD12	2.14	0.47
35:DN:87:PHE:HD1	35:DN:90:ARG:HD2	1.80	0.47
38:DQ:91:ARG:CG	39:DR:11:GLN:HG3	2.45	0.47
40:DS:44:ALA:O	40:DS:48:LYS:HB2	2.15	0.47
41:DT:21:SER:HA	41:DT:25:GLU:HB2	1.96	0.47
42:DU:14:THR:HG21	42:DU:64:ILE:CD1	2.36	0.47
42:DU:81:ARG:HB2	42:DU:96:LYS:HG3	1.96	0.47
43:DV:79:ARG:O	43:DV:87:GLN:HB2	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:855:G:O2'	44:DW:23:LYS:HD3	2.15	0.47
46:DY:54:LYS:O	46:DY:57:LEU:HB3	2.15	0.47
1:AA:1146:A:C2	1:AA:1147:C:H1'	2.51	0.46
1:AA:1159:U:N3	1:AA:1182:G:C4	2.83	0.46
1:AA:1302:C:OP1	13:AM:12:LYS:HE2	2.15	0.46
1:AA:1303:C:H2'	1:AA:1304:G:N7	2.30	0.46
1:AA:1472:U:O2'	1:AA:1473:G:H5'	2.15	0.46
1:AA:1491:G:H5''	1:AA:1492:A:OP1	2.15	0.46
1:AA:166:U:H5''	1:AA:167:A:OP2	2.15	0.46
1:AA:184:G:N3	1:AA:185:U:C5	2.82	0.46
1:AA:221:C:H2'	1:AA:222:C:H5'	1.96	0.46
1:AA:373:A:O2'	1:AA:374:A:C5'	2.62	0.46
1:AA:528:C:O2'	1:AA:535:A:H2'	2.15	0.46
1:AA:550:G:H2'	1:AA:551:U:H5'	1.96	0.46
1:AA:607:A:C6	1:AA:608:A:C6	3.03	0.46
1:AA:693:G:H2'	1:AA:694:A:C5'	2.43	0.46
3:AC:147:GLY:CA	3:AC:171:ARG:H	2.28	0.46
4:AD:129:VAL:HG11	4:AD:134:TYR:CB	2.44	0.46
4:AD:2:ARG:HB2	4:AD:4:LEU:CD1	2.44	0.46
11:AK:43:TRP:HE3	11:AK:44:ALA:HA	1.80	0.46
12:AL:85:ARG:HG3	12:AL:86:VAL:N	2.31	0.46
13:AM:3:ILE:H	13:AM:56:ARG:NH1	2.14	0.46
17:AQ:80:LYS:CD	17:AQ:80:LYS:N	2.78	0.46
22:BA:1378:A:O2'	22:BA:1379:U:P	2.73	0.46
22:BA:141:G:C5'	22:BA:142:A:C8	2.97	0.46
22:BA:142:A:C4	22:BA:143:C:C4	3.03	0.46
22:BA:1962:C:O2'	22:BA:1964:G:OP2	2.32	0.46
22:BA:235:U:H2'	22:BA:236:C:H6	1.80	0.46
22:BA:2850:A:C2	22:BA:2851:A:C4	3.04	0.46
22:BA:441:U:H2'	22:BA:442:G:C8	2.50	0.46
22:BA:565:C:H2'	22:BA:566:U:O4'	2.15	0.46
22:BA:638:G:C5	22:BA:651:G:C2	3.03	0.46
22:BA:826:U:P	56:BA:3696:HOH:O	2.73	0.46
22:BA:923:G:N3	44:BW:23:LYS:CE	2.67	0.46
24:BC:142:ASN:O	24:BC:142:ASN:CG	2.53	0.46
24:BC:257:ARG:CD	24:BC:269:ARG:NH2	2.78	0.46
25:BD:113:SER:O	25:BD:167:ASN:N	2.42	0.46
26:BE:145:ASP:HA	26:BE:166:LYS:O	2.15	0.46
26:BE:47:LYS:HB3	26:BE:51:GLU:HG3	1.96	0.46
27:BF:131:VAL:CG2	27:BF:151:LEU:H	2.27	0.46
27:BF:135:ILE:C	27:BF:137:PHE:N	2.68	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:BH:6:LEU:N	29:BH:6:LEU:CD1	2.78	0.46
30:BI:79:LEU:HD11	30:BI:132:ALA:HA	1.96	0.46
31:BJ:136:GLN:N	31:BJ:137:PRO:CD	2.77	0.46
32:BK:71:ARG:CG	32:BK:106:GLU:OE2	2.62	0.46
32:BK:47:ILE:HG13	32:BK:48:PRO:CD	2.45	0.46
34:BM:132:THR:CG2	34:BM:133:LYS:N	2.78	0.46
36:BO:89:ASP:O	36:BO:90:VAL:HG13	2.15	0.46
39:BR:51:VAL:CB	39:BR:52:PRO:CD	2.79	0.46
39:BR:49:ILE:CG2	39:BR:54:VAL:HG12	2.45	0.46
41:BT:48:GLN:HB3	41:BT:49:LYS:HE3	1.97	0.46
47:BZ:11:SER:O	47:BZ:15:ARG:NE	2.47	0.46
1:CA:1120:C:H2'	1:CA:1121:U:C6	2.48	0.46
1:CA:1133:G:C2	1:CA:1142:G:C6	3.02	0.46
1:CA:164:G:H2'	1:CA:165:G:H5'	1.96	0.46
1:CA:218:U:H2'	1:CA:219:U:O4'	2.14	0.46
1:CA:445:G:C4	1:CA:446:G:C8	3.03	0.46
1:CA:441:A:N6	1:CA:493:A:H62	2.13	0.46
1:CA:68:G:C2'	1:CA:69:G:O5'	2.63	0.46
1:CA:666:G:C4	1:CA:741:G:C2	3.03	0.46
1:CA:75:G:C2	1:CA:96:U:C2	3.03	0.46
1:CA:761:G:O2'	1:CA:762:U:H5'	2.15	0.46
2:CB:103:TRP:HZ2	2:CB:155:GLY:HA2	1.79	0.46
2:CB:10:LYS:HE3	2:CB:10:LYS:HA	1.98	0.46
1:CA:408:A:OP1	4:CD:111:ALA:HB3	2.15	0.46
7:CG:118:ARG:O	7:CG:122:GLU:CB	2.63	0.46
9:CI:45:MET:HA	9:CI:48:ARG:CG	2.45	0.46
9:CI:90:ASP:HB3	9:CI:93:LEU:CD2	2.45	0.46
10:CJ:92:LEU:HD22	10:CJ:93:ALA:N	2.29	0.46
14:CN:80:ARG:HG2	14:CN:81:ILE:N	2.30	0.46
16:CP:32:PHE:CD1	16:CP:32:PHE:C	2.88	0.46
16:CP:43:ALA:HB1	16:CP:46:LYS:HZ1	1.80	0.46
17:CQ:25:GLU:CG	17:CQ:40:THR:CG2	2.93	0.46
22:DA:1007:C:H2'	22:DA:1008:A:N7	2.30	0.46
22:DA:1062:G:C8	22:DA:1070:A:OP2	2.66	0.46
22:DA:1077:A:HO2'	22:DA:1078:U:C4'	2.28	0.46
22:DA:1011:G:C4	22:DA:1151:A:C2	3.03	0.46
22:DA:1204:A:N1	22:DA:1241:A:N1	2.63	0.46
22:DA:1261:C:O2	22:DA:1262:A:C8	2.68	0.46
22:DA:1286:A:C2	22:DA:1329:U:C5	3.03	0.46
22:DA:1291:C:O2'	22:DA:1292:G:H5'	2.14	0.46
22:DA:1385:A:O2'	22:DA:1386:C:O5'	2.32	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1746:A:C4	22:DA:1747:U:C5	3.03	0.46
22:DA:1962:C:O2'	22:DA:1964:G:OP2	2.31	0.46
22:DA:196:A:H61	22:DA:831:G:H21	1.62	0.46
22:DA:2040:G:O2'	22:DA:2041:U:H5'	2.15	0.46
22:DA:207:A:H2'	22:DA:208:C:C6	2.50	0.46
22:DA:2213:U:O2'	22:DA:2214:C:C5'	2.63	0.46
22:DA:2289:G:O2'	22:DA:2290:G:C5'	2.62	0.46
22:DA:2331:G:O2'	44:DW:40:ARG:CB	2.62	0.46
22:DA:2638:G:H2'	22:DA:2775:G:H22	1.80	0.46
22:DA:2716:C:H2'	22:DA:2717:C:H6	1.80	0.46
22:DA:425:G:C4	22:DA:426:C:C5	3.03	0.46
22:DA:491:G:O2'	22:DA:492:A:H8	1.97	0.46
22:DA:844:A:H2'	22:DA:845:A:O4'	2.16	0.46
22:DA:983:A:C6	22:DA:984:A:C2	3.03	0.46
23:DB:44:G:H5''	27:DF:91:ARG:NH1	2.30	0.46
26:DE:28:VAL:HG23	26:DE:29:HIS:N	2.29	0.46
27:DF:111:ARG:NH2	27:DF:113:PHE:CE1	2.84	0.46
27:DF:136:ILE:HG23	27:DF:142:TYR:CD1	2.50	0.46
31:DJ:41:LYS:C	31:DJ:43:GLU:H	2.19	0.46
32:DK:107:LEU:HD23	32:DK:108:ARG:N	2.30	0.46
22:DA:627:A:N6	33:DL:112:LEU:HD23	2.30	0.46
33:DL:9:ALA:HB3	33:DL:12:SER:OG	2.15	0.46
35:DN:97:ILE:HD11	35:DN:99:LYS:HZ2	1.80	0.46
36:DO:17:LYS:CE	36:DO:21:LEU:CD1	2.87	0.46
37:DP:28:LYS:HZ3	37:DP:82:SER:HB2	1.80	0.46
37:DP:85:VAL:O	37:DP:85:VAL:HG13	2.15	0.46
38:DQ:88:GLU:HG2	38:DQ:90:ASP:OD2	2.15	0.46
39:DR:79:ARG:O	39:DR:80:ARG:CB	2.63	0.46
22:DA:856:G:O4'	44:DW:23:LYS:HB3	2.15	0.46
44:DW:33:GLY:O	44:DW:34:SER:HB2	2.15	0.46
46:DY:30:MET:SD	46:DY:30:MET:O	2.73	0.46
1:AA:1021:A:C2'	1:AA:1022:A:C5'	2.76	0.46
1:AA:1169:A:C2	1:AA:1170:A:C4	3.03	0.46
1:AA:1429:A:N1	1:AA:1472:U:C4	2.83	0.46
1:AA:1459:G:O2'	1:AA:1460:C:H5'	2.15	0.46
1:AA:325:A:H2'	1:AA:326:G:O4'	2.16	0.46
1:AA:486:U:C5'	1:AA:486:U:C6	2.89	0.46
1:AA:499:A:O2'	1:AA:500:G:C8	2.66	0.46
1:AA:790:A:H2'	1:AA:791:G:C8	2.50	0.46
1:AA:791:G:C6	1:AA:792:A:N7	2.84	0.46
2:AB:127:LYS:HG3	2:AB:128:LEU:N	2.20	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:59:PRO:O	3:AC:60:ALA:C	2.54	0.46
5:AE:55:VAL:O	5:AE:59:ILE:HG23	2.15	0.46
7:AG:112:ASP:HB2	7:AG:118:ARG:CG	2.45	0.46
7:AG:15:PRO:HG2	7:AG:43:TYR:OH	2.16	0.46
11:AK:51:PHE:HZ	11:AK:64:VAL:CG1	2.28	0.46
12:AL:88:ASP:O	12:AL:90:PRO:HD3	2.15	0.46
13:AM:19:THR:HA	13:AM:24:VAL:CG2	2.37	0.46
19:AS:10:ILE:HG13	19:AS:10:ILE:O	2.12	0.46
19:AS:10:ILE:HD11	19:AS:15:LEU:HD13	1.97	0.46
20:AT:33:LYS:N	20:AT:33:LYS:CE	2.70	0.46
22:BA:1059:G:C2	22:BA:1080:A:N3	2.83	0.46
22:BA:1499:C:H2'	22:BA:1500:G:C8	2.46	0.46
22:BA:1534:U:H3'	22:BA:1536:C:H5	1.79	0.46
22:BA:1565:C:H3'	24:BC:17:LYS:HZ3	1.80	0.46
22:BA:1300:G:H2'	22:BA:1635:A:OP1	2.16	0.46
22:BA:1901:A:N3	22:BA:1902:C:C6	2.83	0.46
22:BA:2345:G:C4	22:BA:2381:A:C2	3.03	0.46
22:BA:2540:C:O2'	22:BA:2541:A:H5'	2.14	0.46
22:BA:608:A:N3	22:BA:621:A:C2	2.83	0.46
22:BA:923:G:H4'	44:BW:25:PHE:CZ	2.51	0.46
22:BA:974:G:C4	22:BA:1186:G:C2	3.03	0.46
22:BA:2619:C:H5'	25:BD:155:VAL:O	2.15	0.46
26:BE:169:VAL:CG2	26:BE:169:VAL:O	2.62	0.46
30:BI:126:ARG:CA	30:BI:129:GLU:HB2	2.43	0.46
30:BI:18:ASN:ND2	30:BI:38:CYS:HB3	2.29	0.46
31:BJ:31:GLU:HG3	31:BJ:142:ILE:HG21	1.97	0.46
31:BJ:44:TYR:O	31:BJ:45:THR:HB	2.15	0.46
22:BA:2393:U:O3'	33:BL:62:PRO:HA	2.15	0.46
33:BL:64:PHE:CD1	33:BL:64:PHE:C	2.88	0.46
37:BP:102:ARG:C	37:BP:103:THR:HG22	2.34	0.46
37:BP:32:VAL:O	37:BP:33:GLU:O	2.32	0.46
38:BQ:94:LEU:HD23	39:BR:11:GLN:CB	2.45	0.46
44:BW:49:ASN:O	44:BW:50:VAL:HG23	2.14	0.46
44:BW:74:LYS:O	44:BW:75:ASN:C	2.51	0.46
1:CA:1060:U:O2'	1:CA:1061:G:H5'	2.15	0.46
1:CA:1068:G:C2	1:CA:1069:C:C6	3.03	0.46
1:CA:1094:G:C2'	1:CA:1095:U:OP2	2.63	0.46
1:CA:1145:A:H4'	1:CA:1146:A:OP1	2.15	0.46
1:CA:1218:C:H2'	1:CA:1219:A:C8	2.51	0.46
1:CA:1239:A:H5''	7:CG:118:ARG:HH22	1.80	0.46
1:CA:1312:G:H2'	1:CA:1313:U:H6	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1336:C:H1'	1:CA:1337:G:C2	2.51	0.46
1:CA:198:G:N3	1:CA:199:A:C8	2.83	0.46
1:CA:407:U:H2'	1:CA:408:A:C8	2.50	0.46
1:CA:443:C:H2'	1:CA:444:G:C5'	2.45	0.46
1:CA:202:G:O2'	1:CA:468:A:C8	2.49	0.46
2:CB:30:ILE:HD11	2:CB:188:THR:CB	2.45	0.46
4:CD:196:GLU:N	4:CD:196:GLU:OE1	2.45	0.46
6:CF:39:LEU:HD12	6:CF:39:LEU:C	2.36	0.46
6:CF:54:LEU:HD12	6:CF:55:HIS:N	2.30	0.46
7:CG:9:ARG:C	7:CG:10:LYS:HG3	2.36	0.46
7:CG:14:ASP:CB	7:CG:18:GLY:H	2.16	0.46
1:CA:1350:A:H2	7:CG:33:GLY:HA3	1.80	0.46
7:CG:41:ILE:HG22	7:CG:41:ILE:O	2.14	0.46
8:CH:110:MET:HE1	8:CH:114:ALA:O	2.15	0.46
3:CC:17:TRP:CD1	14:CN:90:GLY:HA2	2.50	0.46
16:CP:20:VAL:CG2	16:CP:21:VAL:N	2.78	0.46
17:CQ:38:LYS:O	17:CQ:39:ARG:HD2	2.14	0.46
18:CR:28:LEU:C	18:CR:30:ASN:H	2.18	0.46
20:CT:9:ARG:HD2	20:CT:9:ARG:HA	1.71	0.46
49:D1:33:LEU:HB2	49:D1:51:ALA:CB	2.45	0.46
22:DA:105:C:C2'	22:DA:106:C:C5	2.97	0.46
22:DA:117:G:C6	22:DA:119:A:N6	2.83	0.46
22:DA:12:U:O4	22:DA:13:A:N6	2.48	0.46
22:DA:1444:G:C4	22:DA:1445:G:C8	3.03	0.46
22:DA:1676:A:H2'	22:DA:1677:A:O4'	2.15	0.46
22:DA:785:G:O2'	22:DA:1779:U:H5'	2.15	0.46
22:DA:1815:A:H1'	22:DA:1817:G:C8	2.50	0.46
22:DA:2047:C:H2'	22:DA:2048:G:H5'	1.98	0.46
22:DA:2065:C:HO2'	22:DA:2449:U:H3	1.63	0.46
22:DA:830:G:C2	22:DA:2448:A:C5	3.03	0.46
22:DA:2675:A:C2	22:DA:2676:C:C2	3.04	0.46
22:DA:2691:C:O2'	22:DA:2692:G:C5'	2.63	0.46
22:DA:513:A:N1	22:DA:514:A:C6	2.83	0.46
22:DA:604:G:C2	22:DA:605:G:C6	3.03	0.46
22:DA:686:U:C6	22:DA:788:A:N1	2.83	0.46
22:DA:730:A:H2'	22:DA:731:C:H6	1.79	0.46
23:DB:91:C:O2'	23:DB:92:C:H5'	2.14	0.46
24:DC:131:MET:CE	24:DC:183:VAL:HG11	2.44	0.46
25:DD:140:HIS:CD2	25:DD:140:HIS:N	2.83	0.46
26:DE:118:LEU:HD12	26:DE:186:VAL:CG1	2.46	0.46
28:DG:117:PRO:CG	28:DG:143:VAL:CG1	2.93	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:16:VAL:HA	37:DP:17:PRO:HD3	1.47	0.46
38:DQ:23:TYR:HB2	38:DQ:28:SER:HB3	1.96	0.46
38:DQ:38:VAL:O	38:DQ:42:GLY:N	2.49	0.46
39:DR:13:ARG:HE	39:DR:13:ARG:C	2.18	0.46
40:DS:29:VAL:CG2	40:DS:69:LEU:O	2.60	0.46
42:DU:13:LEU:HD13	42:DU:13:LEU:O	2.16	0.46
42:DU:64:ILE:O	42:DU:65:GLN:O	2.33	0.46
43:DV:43:ASP:HB3	43:DV:46:LYS:HB2	1.97	0.46
46:DY:23:ARG:HB3	46:DY:27:ASN:OD1	2.14	0.46
47:DZ:5:LYS:HE2	47:DZ:57:GLU:OE2	2.14	0.46
1:AA:1016:A:N7	1:AA:1017:U:H1'	2.30	0.46
1:AA:1024:G:C5	1:AA:1025:U:C5	3.04	0.46
1:AA:1302:C:H2'	1:AA:1302:C:H6	1.28	0.46
1:AA:1364:U:C3'	1:AA:1365:G:H5'	2.46	0.46
1:AA:1507:A:C8	1:AA:1507:A:H5''	2.50	0.46
1:AA:62:U:O3'	1:AA:384:G:N2	2.49	0.46
1:AA:500:G:C5'	1:AA:500:G:H8	2.29	0.46
1:AA:520:A:H2	1:AA:536:C:O2	1.99	0.46
1:AA:551:U:C2'	1:AA:552:U:O5'	2.63	0.46
1:AA:551:U:O2'	1:AA:552:U:H5'	2.15	0.46
1:AA:811:C:H4'	1:AA:900:A:N6	2.29	0.46
2:AB:148:GLY:HA2	2:AB:151:LYS:CE	2.46	0.46
2:AB:72:LYS:O	2:AB:74:ALA:N	2.48	0.46
3:AC:79:LYS:HE3	3:AC:79:LYS:N	2.29	0.46
1:AA:1079:G:H5'	5:AE:133:ILE:HG21	1.98	0.46
7:AG:21:LEU:HD21	7:AG:96:ASN:ND2	2.30	0.46
9:AI:42:THR:O	9:AI:43:ALA:HB2	2.15	0.46
9:AI:57:VAL:HG12	9:AI:58:GLU:HG2	1.97	0.46
10:AJ:83:THR:O	10:AJ:86:ALA:HB3	2.16	0.46
11:AK:34:THR:HB	11:AK:40:ALA:HA	1.97	0.46
15:AO:30:LEU:O	15:AO:33:ALA:HB3	2.15	0.46
16:AP:51:ARG:HG2	16:AP:52:LEU:N	2.29	0.46
21:AU:45:LYS:HE3	21:AU:45:LYS:HA	1.96	0.46
50:B2:42:LEU:HA	50:B2:42:LEU:HD13	1.63	0.46
22:BA:1113:U:N3	22:BA:1114:C:C5	2.83	0.46
22:BA:1243:C:H2'	22:BA:1244:A:O4'	2.16	0.46
22:BA:1403:A:O2'	22:BA:1404:C:H5'	2.16	0.46
22:BA:1421:G:C2	22:BA:1422:G:C8	3.04	0.46
22:BA:1980:G:O2'	22:BA:1982:U:H5	1.98	0.46
22:BA:1998:A:H2'	22:BA:1999:C:C6	2.50	0.46
22:BA:2435:A:H2'	22:BA:2436:G:O5'	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2525:G:C2	22:BA:2539:C:C2	3.03	0.46
22:BA:2032:G:N1	22:BA:2572:A:C8	2.83	0.46
22:BA:2742:G:OP1	52:B4:36:ARG:HD3	2.15	0.46
22:BA:2874:C:H2'	22:BA:2875:C:H6	1.81	0.46
22:BA:39:G:H2'	22:BA:40:U:C6	2.50	0.46
22:BA:545:U:O4'	22:BA:545:U:O2	2.33	0.46
22:BA:780:G:H2'	22:BA:782:A:N7	2.31	0.46
23:BB:15:A:O2'	23:BB:16:G:H5'	2.15	0.46
24:BC:161:VAL:HG22	24:BC:175:LEU:HD12	1.98	0.46
24:BC:75:ALA:HB1	24:BC:94:LEU:O	2.16	0.46
27:BF:23:SER:O	27:BF:26:GLN:HB3	2.15	0.46
27:BF:90:LEU:HB3	27:BF:95:MET:HA	1.97	0.46
30:BI:105:LEU:HA	30:BI:108:ILE:HD12	1.97	0.46
34:BM:45:GLN:O	34:BM:46:ILE:C	2.53	0.46
34:BM:51:ARG:O	34:BM:52:ALA:C	2.53	0.46
34:BM:72:PRO:O	34:BM:73:ILE:O	2.33	0.46
37:BP:7:LEU:O	37:BP:10:GLU:HG2	2.15	0.46
37:BP:13:LYS:NZ	37:BP:80:VAL:CG1	2.78	0.46
39:BR:49:ILE:CG2	39:BR:53:PHE:CA	2.94	0.46
39:BR:24:LYS:CA	39:BR:94:THR:HG23	2.39	0.46
22:BA:2330:G:N2	44:BW:38:ARG:HA	2.23	0.46
44:BW:75:ASN:O	44:BW:76:ARG:CB	2.64	0.46
1:CA:1178:G:H2'	1:CA:1180:A:OP2	2.15	0.46
1:CA:1190:G:O3'	3:CC:2:GLN:HB3	2.14	0.46
1:CA:1360:A:C2	1:CA:1361:G:C1'	2.99	0.46
1:CA:240:G:OP1	1:CA:240:G:H4'	2.16	0.46
1:CA:33:A:C4	1:CA:34:C:C5	3.03	0.46
1:CA:502:A:OP1	12:CL:114:SER:CB	2.64	0.46
1:CA:66:A:C2'	1:CA:66:A:N3	2.75	0.46
1:CA:763:G:N3	1:CA:764:C:C6	2.84	0.46
1:CA:777:A:C6	1:CA:778:G:C5	3.03	0.46
1:CA:765:G:C4	1:CA:812:G:C6	3.03	0.46
3:CC:149:LYS:HD2	3:CC:149:LYS:C	2.35	0.46
3:CC:14:VAL:O	3:CC:15:LYS:HB2	2.15	0.46
3:CC:154:GLY:O	3:CC:156:LEU:N	2.48	0.46
3:CC:183:TYR:CE1	3:CC:200:TRP:CZ2	3.03	0.46
6:CF:41:ASP:O	6:CF:42:TRP:C	2.54	0.46
6:CF:6:ILE:HB	6:CF:62:MET:HB3	1.97	0.46
8:CH:110:MET:CE	8:CH:114:ALA:HB1	2.46	0.46
8:CH:89:ASP:N	8:CH:89:ASP:OD1	2.48	0.46
9:CI:59:LYS:CG	9:CI:60:LEU:HG	2.43	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:CI:87:MET:CE	9:CI:88:GLU:HG3	2.45	0.46
10:CJ:53:ILE:CD1	14:CN:84:ARG:CZ	2.94	0.46
12:CL:34:THR:O	12:CL:35:ARG:HD3	2.16	0.46
20:CT:46:ALA:C	20:CT:48:LYS:H	2.17	0.46
48:D0:38:LEU:O	48:D0:41:HIS:ND1	2.47	0.46
22:DA:1080:A:O2'	22:DA:1081:U:C6	2.68	0.46
22:DA:1087:G:H21	22:DA:1103:A:H1'	1.80	0.46
22:DA:1239:G:C6	22:DA:1240:U:C5	3.03	0.46
22:DA:1265:A:H4'	22:DA:1266:G:H4'	1.97	0.46
22:DA:1388:G:C4	22:DA:1389:G:C8	3.03	0.46
22:DA:1497:U:H6	22:DA:1497:U:H3'	1.80	0.46
22:DA:1647:U:C4'	22:DA:1648:U:OP1	2.64	0.46
22:DA:1654:A:H1'	25:DD:118:PHE:HB3	1.96	0.46
22:DA:1829:A:H2'	22:DA:1830:C:H6	1.80	0.46
22:DA:1856:U:H2'	22:DA:1857:G:C5'	2.44	0.46
22:DA:2248:C:H3'	22:DA:2249:U:C6	2.50	0.46
22:DA:2271:G:C2'	22:DA:2272:U:C5'	2.92	0.46
22:DA:2559:C:H2'	22:DA:2560:A:H8	1.80	0.46
22:DA:2641:G:H5''	31:DJ:78:THR:CB	2.46	0.46
22:DA:2700:A:C4	22:DA:2701:U:C5	3.04	0.46
22:DA:373:U:O2	22:DA:374:A:C8	2.69	0.46
22:DA:417:C:C2'	22:DA:418:C:H5'	2.46	0.46
22:DA:478:A:C2	22:DA:480:A:C8	3.03	0.46
22:DA:63:A:C8	22:DA:64:A:N7	2.83	0.46
22:DA:763:G:C4	22:DA:765:C:C6	3.03	0.46
22:DA:771:G:H2'	22:DA:772:C:H5'	1.96	0.46
22:DA:857:G:N3	44:DW:19:ARG:NH1	2.56	0.46
22:DA:930:G:C2	22:DA:933:A:N1	2.84	0.46
23:DB:27:C:C2'	23:DB:28:C:H5'	2.45	0.46
23:DB:81:G:O2'	23:DB:82:U:H5'	2.15	0.46
25:DD:32:ASN:HB2	25:DD:50:VAL:HB	1.97	0.46
25:DD:56:LYS:C	25:DD:58:ASN:H	2.19	0.46
29:DH:2:GLN:O	29:DH:3:VAL:CG2	2.60	0.46
30:DI:19:PRO:HB2	30:DI:21:PRO:HD2	1.97	0.46
32:DK:101:GLY:O	32:DK:120:PRO:HB3	2.14	0.46
32:DK:61:VAL:HG23	32:DK:61:VAL:O	2.15	0.46
33:DL:3:LEU:C	33:DL:3:LEU:CD1	2.82	0.46
38:DQ:16:ILE:HG22	38:DQ:17:LEU:N	2.30	0.46
22:DA:580:U:H4'	38:DQ:30:VAL:HG11	1.98	0.46
38:DQ:46:TYR:HA	38:DQ:49:ARG:HH21	1.79	0.46
40:DS:3:THR:HG23	40:DS:57:ASN:HB3	1.96	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:DS:81:SER:HB3	40:DS:97:LEU:HD12	1.97	0.46
46:DY:33:ALA:C	46:DY:35:GLY:H	2.19	0.46
1:AA:978:A:O4'	1:AA:1322:C:C6	2.68	0.46
1:AA:49:U:C4	1:AA:364:A:C6	3.04	0.46
1:AA:555:U:C2'	1:AA:556:C:O5'	2.64	0.46
1:AA:761:G:H2'	1:AA:762:U:H6	1.80	0.46
1:AA:867:G:O2'	1:AA:868:C:H5'	2.14	0.46
4:AD:147:LYS:O	4:AD:149:LYS:N	2.48	0.46
6:AF:37:HIS:ND1	6:AF:95:ALA:HB1	2.31	0.46
6:AF:71:ILE:CG2	6:AF:72:ASP:N	2.78	0.46
7:AG:110:ARG:HG3	7:AG:111:GLY:H	1.81	0.46
7:AG:43:TYR:O	7:AG:47:GLU:HB2	2.15	0.46
12:AL:23:LEU:HB3	12:AL:24:GLU:HG3	1.97	0.46
16:AP:16:PHE:O	16:AP:16:PHE:CD1	2.67	0.46
16:AP:19:VAL:HG12	16:AP:38:PHE:N	2.29	0.46
19:AS:80:ARG:O	19:AS:80:ARG:CG	2.63	0.46
20:AT:73:ARG:O	20:AT:77:ASN:ND2	2.49	0.46
22:BA:1327:A:C2'	22:BA:1328:A:O5'	2.63	0.46
22:BA:160:A:C6	22:BA:161:A:C6	3.04	0.46
22:BA:1655:A:H5'	25:BD:118:PHE:CD2	2.51	0.46
22:BA:1665:A:C2'	22:BA:1666:G:H5'	2.46	0.46
22:BA:2105:U:OP2	22:BA:2105:U:H6	1.99	0.46
22:BA:2508:G:H2'	22:BA:2509:G:O4'	2.16	0.46
22:BA:2540:C:C2'	22:BA:2541:A:C5'	2.86	0.46
22:BA:2557:G:H2'	22:BA:2558:C:C6	2.51	0.46
22:BA:270:A:C2	22:BA:369:U:H4'	2.51	0.46
22:BA:227:A:N6	22:BA:410:G:H1'	2.30	0.46
22:BA:434:U:C4'	22:BA:435:C:OP1	2.57	0.46
22:BA:475:C:C4	22:BA:481:G:C6	3.04	0.46
22:BA:897:C:H5''	22:BA:898:C:OP2	2.15	0.46
23:BB:35:C:H2'	23:BB:36:C:O4'	2.15	0.46
24:BC:12:ARG:CG	24:BC:12:ARG:NH1	2.52	0.46
24:BC:141:HIS:NE2	24:BC:193:GLU:C	2.68	0.46
24:BC:17:LYS:HA	24:BC:17:LYS:HE3	1.97	0.46
25:BD:2:ILE:HG13	25:BD:100:LEU:HD21	1.97	0.46
25:BD:9:VAL:CG2	25:BD:26:VAL:HG12	2.44	0.46
27:BF:134:GLN:NE2	27:BF:148:VAL:O	2.48	0.46
28:BG:15:ASP:O	28:BG:16:VAL:HB	2.14	0.46
22:BA:1080:A:O3'	30:BI:126:ARG:HG3	2.15	0.46
31:BJ:58:ASN:ND2	31:BJ:128:ASN:HB2	2.28	0.46
34:BM:77:PRO:HB2	34:BM:80:VAL:CG1	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:BN:44:LEU:CD1	35:BN:48:VAL:HG23	2.45	0.46
35:BN:75:ILE:C	35:BN:75:ILE:HD12	2.35	0.46
23:BB:49:C:OP1	36:BO:101:GLY:HA3	2.15	0.46
37:BP:3:ILE:CD1	37:BP:3:ILE:C	2.83	0.46
39:BR:60:LYS:N	39:BR:100:GLY:HA3	2.24	0.46
39:BR:67:GLY:C	39:BR:93:PHE:CE2	2.89	0.46
42:BU:78:LYS:CG	42:BU:79:ALA:H	2.27	0.46
44:BW:24:ARG:O	44:BW:25:PHE:CB	2.62	0.46
44:BW:28:GLU:C	44:BW:63:ASP:HB3	2.36	0.46
44:BW:50:VAL:C	44:BW:52:CYS:N	2.67	0.46
1:CA:1106:G:C4	1:CA:1107:C:C5	3.03	0.46
1:CA:1089:G:H1'	1:CA:1167:A:N6	2.30	0.46
1:CA:1235:U:C6	1:CA:1235:U:H3'	2.50	0.46
1:CA:130:A:N7	17:CQ:65:PRO:HD2	2.29	0.46
1:CA:1382:C:HO2'	1:CA:1383:C:H6	1.60	0.46
1:CA:155:A:C6	1:CA:167:A:C6	3.04	0.46
1:CA:18:C:N3	1:CA:19:A:N7	2.64	0.46
1:CA:212:G:N2	1:CA:213:G:C5	2.84	0.46
1:CA:523:A:C2	1:CA:527:G:O6	2.68	0.46
1:CA:586:C:O2'	1:CA:878:A:H4'	2.15	0.46
1:CA:739:C:C2'	1:CA:739:C:O2	2.64	0.46
3:CC:136:ALA:HA	3:CC:139:ASN:ND2	2.31	0.46
1:CA:532:A:H62	3:CC:191:THR:HG21	1.80	0.46
4:CD:36:ALA:HA	4:CD:41:GLY:HA3	1.96	0.46
5:CE:109:ALA:HB3	5:CE:135:VAL:CG1	2.45	0.46
8:CH:41:GLU:C	8:CH:43:GLY:H	2.18	0.46
6:CF:90:MET:HE2	18:CR:60:ARG:HD3	1.97	0.46
19:CS:46:LEU:H	19:CS:46:LEU:CD2	2.26	0.46
51:D3:36:ALA:O	51:D3:40:LYS:HG3	2.16	0.46
51:D3:6:VAL:HB	51:D3:9:ALA:CB	2.45	0.46
22:DA:1000:A:C6	22:DA:1001:A:N1	2.83	0.46
22:DA:1019:U:OP1	22:DA:1035:U:O2'	2.29	0.46
22:DA:1026:G:H2'	22:DA:1027:A:H8	1.79	0.46
22:DA:1063:G:O2'	22:DA:1064:C:H6	1.94	0.46
22:DA:1080:A:O2'	22:DA:1081:U:H6	1.98	0.46
22:DA:1103:A:H3'	22:DA:1104:C:C6	2.50	0.46
22:DA:1188:U:C2'	22:DA:1189:A:H5'	2.45	0.46
22:DA:1299:G:H4'	22:DA:1301:A:C4	2.51	0.46
22:DA:1304:A:C2	22:DA:1305:C:C2	3.02	0.46
22:DA:149:A:N1	22:DA:150:U:C2	2.84	0.46
22:DA:1613:G:C6	22:DA:1619:G:O6	2.68	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1693:U:OP2	22:DA:1694:C:N4	2.39	0.46
22:DA:1838:C:N4	22:DA:1899:A:O4'	2.49	0.46
22:DA:1936:A:H2	22:DA:1943:U:C4	2.33	0.46
22:DA:1965:C:C3'	22:DA:1966:A:C5'	2.82	0.46
22:DA:197:A:C8	22:DA:197:A:H5'	2.51	0.46
22:DA:2100:G:C6	22:DA:2190:G:C5	3.04	0.46
22:DA:2135:A:H8	22:DA:2135:A:OP2	1.98	0.46
22:DA:216:A:N3	22:DA:217:A:C8	2.83	0.46
22:DA:2275:C:HO2'	34:DM:84:LYS:HA	1.79	0.46
22:DA:228:C:O2	22:DA:418:C:H4'	2.16	0.46
22:DA:2303:G:C6	22:DA:2314:A:C6	3.03	0.46
22:DA:2447:G:N7	22:DA:2500:U:H2'	2.31	0.46
22:DA:2514:U:H2'	22:DA:2515:C:C6	2.51	0.46
22:DA:2550:G:C6	22:DA:2551:C:C4	3.04	0.46
22:DA:2654:A:N3	22:DA:2656:U:O4	2.49	0.46
22:DA:1638:C:H4'	22:DA:2710:C:O2	2.16	0.46
22:DA:2849:U:C4	22:DA:2867:G:C8	3.04	0.46
22:DA:2861:U:O2'	22:DA:2862:G:H5'	2.16	0.46
22:DA:2887:A:H1'	48:D0:39:ARG:NH2	2.26	0.46
22:DA:293:U:H5''	22:DA:294:A:OP2	2.15	0.46
22:DA:33:C:O2	22:DA:447:A:N6	2.49	0.46
22:DA:48:G:N2	22:DA:177:G:C2	2.84	0.46
22:DA:538:A:O2'	31:DJ:8:PRO:CD	2.63	0.46
22:DA:58:G:C2'	22:DA:59:U:H5'	2.45	0.46
22:DA:642:U:H3'	22:DA:642:U:C6	2.50	0.46
22:DA:693:A:O2'	22:DA:694:U:H5'	2.16	0.46
22:DA:70:G:O2'	22:DA:71:A:H5'	2.14	0.46
22:DA:796:C:H2'	22:DA:797:G:H8	1.81	0.46
22:DA:849:A:C6	22:DA:850:U:C4	3.04	0.46
22:DA:924:G:O2'	22:DA:925:A:H5'	2.15	0.46
23:DB:44:G:H3'	27:DF:91:ARG:HE	1.80	0.46
23:DB:68:C:O2'	23:DB:69:G:H5''	2.15	0.46
24:DC:259:ASN:O	24:DC:260:LYS:CB	2.63	0.46
25:DD:173:GLN:HA	25:DD:173:GLN:NE2	2.18	0.46
26:DE:9:GLN:O	26:DE:9:GLN:HG3	2.15	0.46
27:DF:101:ARG:HH11	27:DF:138:PRO:HG2	1.79	0.46
32:DK:9:ASN:HD21	32:DK:17:ARG:NH2	2.14	0.46
33:DL:92:LEU:HD23	33:DL:124:GLY:HA3	1.96	0.46
34:DM:34:LYS:HB2	34:DM:131:VAL:HG22	1.93	0.46
42:DU:54:PRO:CG	42:DU:55:GLY:H	2.23	0.46
43:DV:10:LYS:HG3	43:DV:10:LYS:O	2.15	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DV:77:VAL:HG13	43:DV:77:VAL:O	2.15	0.46
45:DX:49:ARG:HB3	45:DX:49:ARG:HE	1.50	0.46
46:DY:55:THR:HG22	46:DY:56:LEU:HD22	1.97	0.46
1:AA:1328:C:C2	1:AA:1329:A:C8	3.04	0.46
1:AA:198:G:O6	1:AA:220:G:C6	2.69	0.46
1:AA:204:G:N3	1:AA:465:A:C2	2.84	0.46
1:AA:957:U:O2	1:AA:959:A:C8	2.69	0.46
2:AB:118:THR:O	2:AB:119:GLN:CB	2.64	0.46
4:AD:168:THR:CG2	4:AD:183:ARG:NH2	2.79	0.46
5:AE:121:ASN:ND2	5:AE:122:VAL:H	2.13	0.46
5:AE:155:LYS:CA	5:AE:158:LYS:NZ	2.55	0.46
6:AF:46:GLN:NE2	6:AF:56:LYS:CG	2.78	0.46
6:AF:91:ARG:HG3	6:AF:92:THR:H	1.80	0.46
7:AG:83:THR:HG22	7:AG:83:THR:O	2.15	0.46
8:AH:75:GLN:O	8:AH:126:CYS:HB2	2.16	0.46
9:AI:60:LEU:CD2	9:AI:60:LEU:H	2.27	0.46
9:AI:28:VAL:CB	9:AI:63:TYR:HD2	2.26	0.46
9:AI:18:VAL:HG21	9:AI:82:ILE:HG13	1.97	0.46
10:AJ:35:GLN:CB	10:AJ:77:VAL:HB	2.45	0.46
12:AL:71:HIS:ND1	12:AL:71:HIS:C	2.68	0.46
17:AQ:65:PRO:C	17:AQ:66:LEU:HD23	2.36	0.46
11:AK:111:ASP:HB3	21:AU:19:LYS:HD2	1.98	0.46
49:B1:13:SER:OG	49:B1:46:VAL:HG13	2.15	0.46
49:B1:3:GLY:C	49:B1:4:ILE:HG12	2.36	0.46
22:BA:108:G:C2'	22:BA:109:C:H5'	2.46	0.46
22:BA:1024:G:N2	22:BA:1142:A:H2	2.12	0.46
22:BA:1301:A:C2	22:BA:1303:G:C6	3.04	0.46
22:BA:1309:G:OP1	50:B2:9:VAL:CG1	2.64	0.46
22:BA:1441:G:H2'	22:BA:1442:U:C6	2.51	0.46
22:BA:1507:C:H2'	22:BA:1508:A:N3	2.30	0.46
22:BA:1733:G:O2'	22:BA:1734:G:P	2.73	0.46
22:BA:2140:G:H2'	22:BA:2141:G:H8	1.79	0.46
22:BA:2304:G:H22	22:BA:2312:U:H3	1.62	0.46
22:BA:2757:A:N3	22:BA:2757:A:H2'	2.30	0.46
22:BA:306:U:C3'	22:BA:307:G:H5'	2.45	0.46
22:BA:31:C:O3'	22:BA:1238:G:H5'	2.16	0.46
22:BA:423:A:H5''	22:BA:424:G:O5'	2.15	0.46
22:BA:430:A:H5''	22:BA:431:U:OP2	2.16	0.46
22:BA:669:G:C6	22:BA:801:G:O6	2.68	0.46
22:BA:2513:A:H2	25:BD:148:GLN:HE21	1.62	0.46
27:BF:131:VAL:C	27:BF:132:ARG:HG3	2.32	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BM:55:ARG:O	34:BM:56:ALA:HB2	2.16	0.46
35:BN:51:LEU:HD12	35:BN:51:LEU:HA	1.63	0.46
36:BO:107:ALA:O	36:BO:110:ALA:HB3	2.16	0.46
37:BP:59:THR:HG23	37:BP:72:VAL:HG12	1.98	0.46
42:BU:10:VAL:HG21	42:BU:69:VAL:HB	1.97	0.46
43:BV:42:LEU:HD23	43:BV:42:LEU:N	2.30	0.46
1:CA:1026:G:N1	1:CA:1036:A:N6	2.43	0.46
1:CA:1113:C:H2'	1:CA:1114:C:H6	1.80	0.46
1:CA:1139:G:H4'	1:CA:1140:C:C5'	2.45	0.46
1:CA:1145:A:HO2'	1:CA:1146:A:C5'	2.29	0.46
1:CA:1172:C:C2'	1:CA:1173:U:H5'	2.46	0.46
1:CA:1417:G:N2	1:CA:1484:C:C4	2.83	0.46
1:CA:174:A:C2	1:CA:175:C:C6	3.03	0.46
1:CA:322:C:O2	1:CA:332:G:N2	2.49	0.46
1:CA:320:A:C2	1:CA:334:C:N3	2.83	0.46
1:CA:445:G:C2	1:CA:446:G:C8	3.03	0.46
1:CA:452:A:H2'	1:CA:453:G:O4'	2.16	0.46
1:CA:607:A:N1	1:CA:608:A:C2	2.84	0.46
1:CA:704:A:O2'	1:CA:705:G:C5'	2.63	0.46
1:CA:803:G:C5	1:CA:804:U:C4	3.03	0.46
1:CA:851:G:C2	1:CA:852:G:C8	3.04	0.46
2:CB:25:LYS:HD2	2:CB:25:LYS:H	1.81	0.46
4:CD:190:LEU:HA	4:CD:190:LEU:HD23	1.57	0.46
4:CD:2:ARG:HH21	4:CD:114:ARG:HH11	1.62	0.46
4:CD:73:ASN:HD22	4:CD:76:LYS:CE	2.28	0.46
8:CH:126:CYS:C	8:CH:127:TYR:HD1	2.18	0.46
9:CI:46:VAL:O	9:CI:79:ARG:HG3	2.14	0.46
10:CJ:44:THR:HG23	10:CJ:70:HIS:CG	2.50	0.46
12:CL:3:VAL:HG23	12:CL:4:ASN:N	2.25	0.46
12:CL:89:LEU:HA	12:CL:90:PRO:HD2	1.47	0.46
13:CM:61:LYS:O	13:CM:62:PHE:HB2	2.15	0.46
21:CU:9:GLU:CB	21:CU:10:PRO:CD	2.86	0.46
21:CU:25:ALA:O	21:CU:26:GLY:C	2.52	0.46
11:CK:125:LYS:C	21:CU:33:ARG:HE	2.19	0.46
51:D3:56:LEU:HD12	51:D3:56:LEU:N	2.31	0.46
52:D4:30:GLU:HB2	52:D4:33:HIS:CD2	2.50	0.46
22:DA:1009:A:C2	22:DA:1010:A:C2	3.04	0.46
22:DA:105:C:C2'	22:DA:106:C:C6	2.98	0.46
22:DA:1171:G:H22	22:DA:1179:G:H1'	1.77	0.46
22:DA:1343:G:C2'	22:DA:1344:U:C6	2.98	0.46
22:DA:1403:A:C2	22:DA:1404:C:C2	3.03	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1429:G:O2'	22:DA:1430:G:H8	1.99	0.46
22:DA:155:A:C2	22:DA:172:A:C6	3.04	0.46
22:DA:1881:C:H2'	22:DA:1882:U:O4'	2.15	0.46
22:DA:1996:C:H5	32:DK:32:TYR:HH	1.62	0.46
22:DA:2061:G:N3	22:DA:2063:C:N4	2.62	0.46
22:DA:214:G:N2	22:DA:215:G:N2	2.63	0.46
22:DA:1372:U:O2'	22:DA:2214:C:C5	2.69	0.46
22:DA:2225:A:O2'	22:DA:2226:C:OP2	2.34	0.46
22:DA:2294:G:C5	22:DA:2295:C:C5	3.04	0.46
22:DA:2305:U:C5	22:DA:2312:U:N3	2.83	0.46
22:DA:231:A:O2'	22:DA:232:G:O5'	2.33	0.46
22:DA:2384:U:H3'	22:DA:2386:A:P	2.54	0.46
22:DA:2557:G:H2'	22:DA:2558:C:C6	2.51	0.46
22:DA:2566:A:O2'	22:DA:2567:G:P	2.74	0.46
22:DA:2619:C:H2'	22:DA:2619:C:O2	2.15	0.46
22:DA:37:C:H2'	22:DA:38:A:O4'	2.15	0.46
22:DA:52:A:C6	22:DA:118:A:C2	3.03	0.46
22:DA:678:C:C4	22:DA:679:C:N4	2.84	0.46
15:CO:88:ARG:HG3	22:DA:716:A:OP1	2.15	0.46
22:DA:938:G:N2	22:DA:939:G:C5	2.84	0.46
23:DB:90:C:O2'	23:DB:91:C:O4'	2.29	0.46
23:DB:95:U:H2'	23:DB:96:G:H8	1.80	0.46
26:DE:132:LYS:HA	26:DE:135:ALA:HB3	1.96	0.46
27:DF:144:LYS:HG3	27:DF:145:VAL:H	1.81	0.46
27:DF:25:MET:C	27:DF:27:VAL:H	2.18	0.46
29:DH:133:GLN:NE2	29:DH:139:PHE:CE2	2.84	0.46
29:DH:84:ALA:H	29:DH:148:ALA:HA	1.80	0.46
30:DI:18:ASN:N	30:DI:19:PRO:CD	2.79	0.46
32:DK:17:ARG:HH11	32:DK:18:ARG:HG2	1.79	0.46
32:DK:63:VAL:CG1	32:DK:64:ARG:HD3	2.45	0.46
22:DA:2710:C:OP1	35:DN:15:SER:HB2	2.15	0.46
42:DU:81:ARG:HB3	42:DU:96:LYS:NZ	2.27	0.46
43:DV:75:GLN:CG	43:DV:92:VAL:CG1	2.93	0.46
45:DX:63:ILE:HD13	45:DX:64:ASP:H	1.81	0.46
46:DY:22:LEU:HD12	46:DY:23:ARG:NH1	2.27	0.46
41:DT:12:ARG:HG3	46:DY:29:ARG:NH1	2.30	0.46
47:DZ:43:ILE:C	47:DZ:43:ILE:HD12	2.36	0.46
1:AA:1091:U:H1'	1:AA:1095:U:O2	2.15	0.46
1:AA:1305:G:N2	1:AA:1331:G:H2'	2.31	0.46
1:AA:14:U:O2	1:AA:17:U:H5	1.97	0.46
1:AA:372:C:C4'	1:AA:373:A:OP1	2.64	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:62:U:H5''	1:AA:385:C:H1'	1.97	0.46
1:AA:504:C:H3'	1:AA:504:C:H6	1.81	0.46
1:AA:674:G:H1	1:AA:716:A:H61	1.63	0.46
1:AA:731:G:O2'	1:AA:732:C:H5'	2.16	0.46
1:AA:791:G:C5	1:AA:792:A:N7	2.84	0.46
1:AA:983:A:H2'	1:AA:983:A:N3	2.30	0.46
4:AD:169:TRP:CE3	4:AD:185:PRO:HB3	2.51	0.46
5:AE:136:VAL:O	5:AE:137:ARG:HB2	2.16	0.46
8:AH:4:ASP:HB2	8:AH:80:PRO:HG3	1.98	0.46
10:AJ:11:LYS:HB3	10:AJ:71:LEU:CD2	2.45	0.46
11:AK:124:LYS:NZ	21:AU:33:ARG:NH2	2.51	0.46
21:AU:9:GLU:CB	21:AU:10:PRO:CD	2.92	0.46
22:BA:1000:A:C6	22:BA:1001:A:C6	3.04	0.46
22:BA:1025:G:H4'	22:BA:1026:G:OP2	2.15	0.46
22:BA:1358:G:N2	22:BA:1374:G:C5	2.84	0.46
22:BA:1542:U:O2'	22:BA:1543:G:H5'	2.14	0.46
22:BA:1824:G:H2'	22:BA:1825:U:H6	1.80	0.46
22:BA:2136:G:C6	22:BA:2137:U:O4	2.69	0.46
22:BA:2258:C:C2	22:BA:2426:A:C4'	2.98	0.46
22:BA:2267:A:H5''	22:BA:2268:A:H5'	1.96	0.46
22:BA:2428:G:H5''	22:BA:2429:G:OP1	2.16	0.46
22:BA:2496:C:OP1	34:BM:82:MET:HB2	2.16	0.46
22:BA:252:G:N2	22:BA:253:C:H1'	2.30	0.46
22:BA:28:A:H2'	22:BA:29:U:O4'	2.16	0.46
22:BA:728:G:O2'	22:BA:730:A:H5''	2.15	0.46
22:BA:855:G:N2	44:BW:23:LYS:CG	2.63	0.46
22:BA:2204:G:O5'	24:BC:149:LYS:HE3	2.14	0.46
24:BC:254:LYS:O	24:BC:255:LYS:CB	2.63	0.46
25:BD:118:PHE:CD2	25:BD:119:ALA:N	2.80	0.46
25:BD:16:THR:HG21	25:BD:20:VAL:HB	1.96	0.46
25:BD:39:ASP:CG	25:BD:40:LEU:H	2.19	0.46
25:BD:90:PHE:N	25:BD:90:PHE:CD1	2.83	0.46
27:BF:116:LEU:O	27:BF:176:PHE:HA	2.15	0.46
28:BG:93:TYR:HE2	28:BG:106:LEU:C	2.18	0.46
28:BG:154:GLU:OE1	28:BG:157:LYS:HB2	2.15	0.46
28:BG:8:VAL:O	28:BG:9:VAL:CG1	2.51	0.46
29:BH:134:VAL:HG22	29:BH:139:PHE:HA	1.98	0.46
29:BH:53:GLU:CG	29:BH:53:GLU:O	2.62	0.46
29:BH:83:LYS:HE3	29:BH:98:ASP:CG	2.35	0.46
31:BJ:120:ARG:O	31:BJ:123:LYS:HE2	2.16	0.46
31:BJ:25:LEU:CD2	31:BJ:26:GLY:N	2.70	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:BL:21:ARG:HA	33:BL:21:ARG:HD3	1.69	0.46
34:BM:13:HIS:O	34:BM:14:LYS:HB3	2.15	0.46
34:BM:41:LEU:HD22	34:BM:124:LEU:HD22	1.97	0.46
36:BO:37:ALA:HB3	36:BO:78:VAL:HG11	1.96	0.46
38:BQ:85:ALA:O	38:BQ:88:GLU:CB	2.64	0.46
40:BS:18:ARG:CG	40:BS:76:VAL:HG13	2.44	0.46
41:BT:10:VAL:HG23	41:BT:11:LEU:HD23	1.98	0.46
41:BT:17:SER:O	41:BT:18:GLU:CB	2.63	0.46
42:BU:42:LYS:HB3	42:BU:57:ILE:HG23	1.97	0.46
1:CA:1133:G:C6	1:CA:1142:G:O6	2.69	0.46
1:CA:1168:U:O2'	1:CA:1169:A:H5'	2.15	0.46
1:CA:208:U:O2	1:CA:210:C:H4'	2.15	0.46
1:CA:408:A:N3	1:CA:435:A:C2	2.84	0.46
1:CA:496:A:C2'	1:CA:496:A:N3	2.71	0.46
1:CA:587:G:H2'	1:CA:588:G:OP2	2.15	0.46
1:CA:602:A:C2	1:CA:637:C:O2	2.69	0.46
1:CA:85:U:O2	1:CA:85:U:O4'	2.34	0.46
1:CA:9:G:N3	1:CA:10:A:C8	2.83	0.46
2:CB:82:ALA:HB1	2:CB:217:ALA:CB	2.46	0.46
8:CH:77:VAL:HG21	8:CH:127:TYR:CE1	2.50	0.46
9:CI:59:LYS:HE3	9:CI:60:LEU:CD1	2.45	0.46
9:CI:51:LEU:CD1	9:CI:82:ILE:HG22	2.46	0.46
10:CJ:66:GLU:HG2	10:CJ:67:ILE:N	2.30	0.46
11:CK:63:GLN:O	11:CK:66:ALA:HB3	2.14	0.46
13:CM:64:VAL:O	13:CM:65:GLU:C	2.54	0.46
1:CA:1309:G:H1'	13:CM:72:ILE:HD12	1.96	0.46
14:CN:72:PHE:CD1	14:CN:72:PHE:C	2.88	0.46
21:CU:10:PRO:O	21:CU:11:PHE:HB3	2.14	0.46
38:DQ:29:ARG:HD2	48:D0:9:ARG:NH1	2.31	0.46
22:DA:116:C:C2'	22:DA:117:G:O5'	2.63	0.46
22:DA:1437:C:N3	22:DA:1438:U:O4	2.48	0.46
22:DA:1510:G:OP2	22:DA:1510:G:H3'	2.15	0.46
22:DA:16:C:H42	22:DA:524:G:H1	1.62	0.46
22:DA:1649:G:C6	22:DA:2009:A:N1	2.84	0.46
22:DA:2046:G:P	48:D0:11:LYS:NZ	2.89	0.46
22:DA:2313:C:O2'	22:DA:2314:A:H5'	2.15	0.46
22:DA:2428:G:H4'	22:DA:2429:G:C5	2.51	0.46
22:DA:2672:U:H3'	22:DA:2672:U:C6	2.50	0.46
22:DA:2868:A:C2	22:DA:2869:G:C4	3.03	0.46
22:DA:406:G:O2'	22:DA:407:G:C8	2.69	0.46
22:DA:607:U:C5	22:DA:619:G:C4	3.04	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:705:A:H2'	22:DA:706:A:H8	1.80	0.46
22:DA:845:A:C2	22:DA:847:U:C6	3.04	0.46
22:DA:910:A:H62	34:DM:12:MET:CA	2.26	0.46
22:DA:929:U:H2'	22:DA:930:G:O4'	2.16	0.46
24:DC:183:VAL:HG13	24:DC:185:ALA:H	1.81	0.46
28:DG:50:THR:HG22	28:DG:51:PHE:N	2.31	0.46
28:DG:7:PRO:O	28:DG:8:VAL:CB	2.61	0.46
29:DH:35:LYS:O	29:DH:36:ALA:HB2	2.15	0.46
30:DI:30:GLN:CG	30:DI:31:GLY:N	2.79	0.46
33:DL:3:LEU:O	33:DL:6:LEU:HB2	2.15	0.46
33:DL:3:LEU:CD1	33:DL:4:ASN:N	2.77	0.46
35:DN:37:THR:OG1	35:DN:40:LYS:HE3	2.16	0.46
40:DS:35:ILE:HG13	40:DS:36:LEU:HD22	1.97	0.46
45:DX:51:SER:O	45:DX:55:MET:N	2.49	0.46
22:DA:75:G:H4'	46:DY:48:ARG:HH21	1.80	0.46
1:AA:1144:G:C8	1:AA:1144:G:OP2	2.69	0.46
1:AA:1124:G:H3'	1:AA:1145:A:H62	1.76	0.46
1:AA:1157:A:N3	1:AA:1181:G:C4	2.83	0.46
1:AA:1260:G:OP1	1:AA:1284:C:H4'	2.15	0.46
1:AA:1317:C:C6	1:AA:1317:C:H3'	2.50	0.46
1:AA:1502:A:N6	1:AA:1504:G:N2	2.64	0.46
1:AA:1533:C:C3'	1:AA:1534:A:C5'	2.85	0.46
1:AA:261:U:OP2	20:AT:73:ARG:NH2	2.44	0.46
1:AA:385:C:H2'	1:AA:386:C:H6	1.81	0.46
1:AA:688:G:H8	1:AA:688:G:H5''	1.80	0.46
1:AA:711:G:O2'	1:AA:712:A:H5'	2.15	0.46
1:AA:75:G:N3	1:AA:76:G:H1'	2.31	0.46
2:AB:166:ASP:OD1	2:AB:167:HIS:N	2.48	0.46
2:AB:72:LYS:C	2:AB:74:ALA:N	2.69	0.46
3:AC:166:TRP:N	3:AC:166:TRP:CE3	2.78	0.46
4:AD:27:ILE:O	4:AD:27:ILE:HG22	2.15	0.46
5:AE:100:GLU:HB3	5:AE:121:ASN:CA	2.45	0.46
7:AG:74:VAL:HB	7:AG:85:GLN:HE21	1.81	0.46
11:AK:111:ASP:HB3	21:AU:19:LYS:CD	2.45	0.46
13:AM:1:ALA:N	13:AM:8:ILE:HG23	2.30	0.46
14:AN:40:ARG:CZ	14:AN:44:VAL:HG21	2.46	0.46
16:AP:10:GLY:O	16:AP:11:ALA:HB2	2.15	0.46
19:AS:64:GLU:N	19:AS:64:GLU:CD	2.65	0.46
22:BA:1340:U:C4'	22:BA:1341:G:OP2	2.52	0.46
22:BA:1535:A:O2'	22:BA:1536:C:OP1	2.28	0.46
22:BA:1733:G:C2	22:BA:1734:G:C5	3.03	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1798:U:C4	22:BA:1819:A:C2	3.04	0.46
22:BA:2134:A:O2'	22:BA:2135:A:C8	2.64	0.46
22:BA:245:G:H2'	22:BA:246:C:H6	1.81	0.46
22:BA:2851:A:H2'	22:BA:2852:G:O4'	2.15	0.46
22:BA:621:A:H2'	22:BA:622:G:O4'	2.16	0.46
22:BA:62:U:C4'	22:BA:63:A:OP1	2.61	0.46
22:BA:960:A:N7	22:BA:962:G:C8	2.84	0.46
22:BA:996:A:P	38:BQ:91:ARG:NH1	2.89	0.46
24:BC:156:SER:O	24:BC:194:VAL:HG11	2.15	0.46
28:BG:95:ALA:HA	28:BG:103:ASN:O	2.16	0.46
30:BI:79:LEU:HD22	30:BI:137:LEU:CD1	2.46	0.46
30:BI:56:VAL:HG11	30:BI:68:PHE:HD2	1.80	0.46
39:BR:39:LEU:O	39:BR:40:MET:HB2	2.16	0.46
42:BU:25:LYS:N	42:BU:34:ILE:O	2.49	0.46
44:BW:25:PHE:HB3	44:BW:66:VAL:HG23	1.98	0.46
1:CA:1079:G:H2'	1:CA:1080:A:C8	2.51	0.46
1:CA:1227:A:O5'	13:CM:109:LYS:HE3	2.16	0.46
1:CA:1377:A:H2'	1:CA:1378:C:OP2	2.16	0.46
1:CA:1440:U:OP2	1:CA:1440:U:H6	1.98	0.46
1:CA:321:A:N6	1:CA:332:G:H1	2.13	0.46
1:CA:377:G:H5'	16:CP:5:ARG:NH1	2.31	0.46
1:CA:577:G:C6	1:CA:812:G:N2	2.83	0.46
1:CA:73:C:O2'	1:CA:74:A:H8	1.99	0.46
2:CB:8:MET:CE	2:CB:9:LEU:CD2	2.94	0.46
3:CC:130:ARG:O	3:CC:133:MET:HG2	2.16	0.46
3:CC:148:ILE:HD12	3:CC:149:LYS:N	2.31	0.46
3:CC:37:LYS:O	3:CC:40:GLN:HB3	2.16	0.46
3:CC:63:ILE:O	3:CC:63:ILE:HG23	2.15	0.46
4:CD:137:SER:CB	4:CD:138:PRO:CD	2.91	0.46
7:CG:72:VAL:HG11	7:CG:144:ALA:HB1	1.97	0.46
5:CE:157:GLY:HA3	8:CH:63:LYS:HZ1	1.81	0.46
9:CI:127:SER:C	9:CI:129:ARG:N	2.68	0.46
10:CJ:35:GLN:HE22	10:CJ:78:GLU:HB2	1.80	0.46
10:CJ:5:ARG:CZ	10:CJ:5:ARG:HA	2.46	0.46
13:CM:5:GLY:C	13:CM:6:ILE:HG13	2.36	0.46
14:CN:52:ARG:CA	14:CN:52:ARG:NE	2.75	0.46
15:CO:20:ASP:OD1	15:CO:23:SER:HB2	2.16	0.46
19:CS:60:PHE:HE2	19:CS:62:THR:HG1	1.61	0.46
49:D1:10:LEU:HD22	49:D1:10:LEU:H	1.81	0.46
22:DA:1080:A:N3	22:DA:1081:U:C5	2.84	0.46
22:DA:1154:G:O5'	22:DA:1154:G:H8	1.99	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:512:G:OP2	22:DA:1235:G:H5'	2.16	0.46
22:DA:1482:G:C4	22:DA:1483:G:C8	3.04	0.46
22:DA:1735:A:N3	22:DA:1736:U:C6	2.83	0.46
22:DA:1827:U:H3'	56:DA:3723:HOH:O	2.16	0.46
22:DA:1833:C:C4	22:DA:1834:U:C5	3.04	0.46
22:DA:1887:C:H2'	22:DA:1888:G:H5'	1.98	0.46
22:DA:1900:A:C6	22:DA:1970:A:N7	2.84	0.46
22:DA:1910:G:H1	22:DA:1920:C:H42	1.62	0.46
22:DA:199:A:C8	22:DA:2433:A:C6	3.04	0.46
22:DA:2238:G:C4'	22:DA:2239:G:OP1	2.63	0.46
22:DA:2797:U:O2	22:DA:2797:U:H2'	2.15	0.46
22:DA:401:A:H2'	22:DA:402:A:C8	2.50	0.46
22:DA:406:G:O2'	22:DA:407:G:H5'	2.15	0.46
22:DA:564:C:H2'	22:DA:565:C:C5'	2.46	0.46
22:DA:690:G:H2'	22:DA:691:C:O4'	2.16	0.46
22:DA:708:G:N2	22:DA:724:U:H1'	2.31	0.46
22:DA:874:G:C2	22:DA:904:G:C2	3.03	0.46
22:DA:91:A:O2'	22:DA:92:U:P	2.73	0.46
23:DB:18:G:N2	23:DB:19:C:O2	2.49	0.46
23:DB:42:C:O2'	23:DB:43:C:C5'	2.64	0.46
24:DC:171:VAL:CG1	24:DC:173:LEU:HD13	2.44	0.46
24:DC:181:ARG:HE	24:DC:265:PHE:CB	2.25	0.46
24:DC:82:TYR:O	24:DC:84:PRO:HD3	2.16	0.46
24:DC:99:GLU:O	24:DC:100:ARG:HG2	2.16	0.46
25:DD:73:VAL:CG2	25:DD:74:GLU:N	2.77	0.46
26:DE:105:LEU:HD13	26:DE:105:LEU:O	2.16	0.46
26:DE:28:VAL:O	26:DE:32:VAL:HG13	2.14	0.46
27:DF:76:PHE:CD2	27:DF:76:PHE:N	2.84	0.46
28:DG:120:ILE:HG12	28:DG:134:GLY:HA3	1.97	0.46
28:DG:148:ARG:HB2	28:DG:152:ARG:NH2	2.30	0.46
28:DG:83:THR:O	28:DG:140:ILE:HD12	2.15	0.46
29:DH:66:ASN:O	29:DH:67:ALA:HB3	2.16	0.46
31:DJ:35:ARG:HA	31:DJ:40:HIS:CD2	2.51	0.46
31:DJ:89:PHE:HE2	31:DJ:100:VAL:HG11	1.76	0.46
31:DJ:95:ARG:O	31:DJ:96:ARG:C	2.54	0.46
32:DK:121:GLU:O	32:DK:122:VAL:OXT	2.33	0.46
32:DK:13:ASN:O	32:DK:14:SER:HB3	2.16	0.46
34:DM:96:ILE:O	34:DM:96:ILE:HG13	2.14	0.46
43:DV:30:ILE:HB	43:DV:38:LEU:HB3	1.96	0.46
1:AA:1447:A:H5''	1:AA:1448:C:C5	2.51	0.46
1:AA:1501:C:C4	1:AA:1504: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:AA:295:C:H2'	1:AA:296:U:O4'	2.16	0.46
1:AA:39:G:C5	1:AA:40:C:C5	3.03	0.46
1:AA:519:C:O2'	1:AA:520:A:H5'	2.16	0.46
2:AB:162:VAL:CG2	2:AB:184:ALA:CB	2.94	0.46
2:AB:19:THR:HA	2:AB:37:VAL:HG23	1.98	0.46
2:AB:42:LEU:CG	2:AB:43:GLU:HG3	2.29	0.46
4:AD:144:ILE:N	4:AD:144:ILE:HD13	2.29	0.46
5:AE:152:VAL:O	5:AE:155:LYS:HE3	2.16	0.46
5:AE:21:SER:OG	5:AE:28:ARG:HB2	2.16	0.46
6:AF:47:LEU:CD1	6:AF:51:ILE:HG22	2.45	0.46
9:AI:40:ARG:O	9:AI:44:ARG:HD3	2.15	0.46
12:AL:4:ASN:ND2	12:AL:8:ARG:NH1	2.62	0.46
14:AN:64:ARG:CB	14:AN:77:GLY:O	2.64	0.46
18:AR:29:LYS:HA	18:AR:32:ILE:HD11	1.98	0.46
19:AS:4:LEU:N	19:AS:4:LEU:HD12	2.27	0.46
48:B0:36:LYS:O	48:B0:37:HIS:HB3	2.16	0.46
22:BA:1074:G:HO2'	22:BA:1075:C:H6	1.52	0.46
22:BA:1241:A:H2'	22:BA:1242:U:H5'	1.96	0.46
22:BA:1359:A:C2'	22:BA:1360:G:O5'	2.64	0.46
22:BA:1385:A:C2	22:BA:1386:C:N3	2.83	0.46
22:BA:1587:G:C4	22:BA:1588:G:C8	3.04	0.46
22:BA:1934:C:H2'	22:BA:1935:G:O5'	2.15	0.46
22:BA:2300:C:H6	22:BA:2300:C:O5'	1.98	0.46
22:BA:2447:G:C4	22:BA:2500:U:C5	3.04	0.46
24:BC:68:ARG:HH22	24:BC:115:ILE:HG23	1.80	0.46
24:BC:237:ARG:O	24:BC:238:ASN:HB2	2.15	0.46
29:BH:94:ILE:HG23	29:BH:98:ASP:HB3	1.96	0.46
32:BK:10:VAL:CB	32:BK:16:ALA:CB	2.91	0.46
33:BL:82:LEU:HG	33:BL:90:VAL:HG21	1.97	0.46
35:BN:101:GLY:HA2	35:BN:110:MET:H	1.80	0.46
38:BQ:57:ARG:HG2	38:BQ:61:ILE:CD1	2.41	0.46
42:BU:71:ILE:CD1	42:BU:71:ILE:O	2.63	0.46
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.15	0.46
1:CA:1257:A:O2'	1:CA:1258:G:OP1	2.29	0.46
1:CA:1446:A:C2'	1:CA:1447:A:C5'	2.91	0.46
1:CA:1447:A:O3'	1:CA:1448:C:H6	1.99	0.46
1:CA:1449:C:N3	1:CA:1455:G:C2	2.84	0.46
1:CA:1533:C:C3'	1:CA:1534:A:H5''	2.45	0.46
1:CA:227:G:O2'	16:CP:63:GLN:NE2	2.45	0.46
1:CA:267:C:H2'	1:CA:268:U:C5'	2.45	0.46
1:CA:388:G:O2'	1:CA:389:A:P	2.73	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:427:U:C4	1:CA:428:G:C6	3.03	0.46
1:CA:596:A:H2'	1:CA:597:G:C8	2.51	0.46
1:CA:767:A:H2'	1:CA:768:A:H8	1.79	0.46
1:CA:780:A:O2'	1:CA:781:A:H5''	2.16	0.46
2:CB:71:THR:O	2:CB:72:LYS:C	2.54	0.46
4:CD:123:MET:HE3	4:CD:126:GLY:O	2.16	0.46
4:CD:34:GLU:HB3	4:CD:35:GLN:H	1.51	0.46
5:CE:104:ILE:HD13	5:CE:122:VAL:CG2	2.41	0.46
5:CE:110:MET:HG2	5:CE:139:THR:CG2	2.46	0.46
5:CE:131:ASN:C	5:CE:131:ASN:HD22	2.17	0.46
9:CI:4:GLN:HG2	9:CI:4:GLN:H	1.53	0.46
12:CL:22:ALA:HB3	12:CL:94:TYR:OH	2.16	0.46
14:CN:20:PHE:C	14:CN:24:ALA:HB2	2.35	0.46
3:CC:33:ASP:HB2	14:CN:64:ARG:NH2	2.31	0.46
16:CP:44:SER:N	16:CP:46:LYS:NZ	2.62	0.46
16:CP:46:LYS:NZ	16:CP:46:LYS:H	2.13	0.46
16:CP:4:ILE:HA	16:CP:20:VAL:O	2.16	0.46
21:CU:33:ARG:CZ	21:CU:34:ARG:HD3	2.46	0.46
48:D0:3:GLN:NE2	48:D0:7:PRO:CD	2.79	0.46
50:D2:26:ASN:HD22	50:D2:26:ASN:HA	1.57	0.46
22:DA:1335:C:H2'	22:DA:1336:A:O4'	2.15	0.46
22:DA:1343:G:O2'	22:DA:1344:U:H6	1.97	0.46
22:DA:1356:G:C2	22:DA:1376:C:O2	2.68	0.46
22:DA:156:A:H2'	22:DA:157:C:H6	1.81	0.46
22:DA:1754:A:C2	22:DA:1755:A:C4	3.03	0.46
22:DA:2054:A:C2	22:DA:2616:C:C2	3.03	0.46
22:DA:2090:A:H61	22:DA:2229:U:H3	1.64	0.46
22:DA:192:C:OP1	22:DA:2243:U:OP1	2.34	0.46
22:DA:2580:U:H5''	22:DA:2581:G:OP2	2.15	0.46
22:DA:2869:G:H2'	22:DA:2870:C:H6	1.79	0.46
22:DA:345:A:H2'	22:DA:346:A:OP2	2.16	0.46
22:DA:36:G:H2'	22:DA:37:C:H5'	1.98	0.46
22:DA:476:G:O2'	22:DA:477:A:H3'	2.15	0.46
22:DA:535:G:O2'	38:DQ:52:ARG:HB2	2.16	0.46
22:DA:72:U:H5'	46:DY:54:LYS:HE3	1.98	0.46
22:DA:816:C:H2'	22:DA:817:C:H6	1.80	0.46
22:DA:833:A:OP2	33:DL:39:LYS:NZ	2.49	0.46
24:DC:260:LYS:HA	24:DC:263:ASP:OD1	2.16	0.46
25:DD:112:THR:O	25:DD:113:SER:HB3	2.14	0.46
22:DA:659:G:C5'	26:DE:95:LYS:HD3	2.45	0.46
27:DF:136:ILE:HG22	27:DF:137:PHE:N	2.31	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:DG:104:LEU:N	28:DG:112:VAL:HG23	2.31	0.46
29:DH:132:PHE:CZ	29:DH:134:VAL:HB	2.51	0.46
29:DH:136:SER:C	29:DH:137:GLU:HG3	2.36	0.46
30:DI:12:VAL:CG1	30:DI:13:ALA:N	2.79	0.46
30:DI:77:VAL:HB	30:DI:80:LYS:HZ2	1.80	0.46
30:DI:8:VAL:C	30:DI:9:LYS:HG2	2.36	0.46
22:DA:7:G:O2'	31:DJ:15:TRP:HZ2	1.97	0.46
31:DJ:17:VAL:HG12	31:DJ:18:VAL:N	2.30	0.46
32:DK:4:GLU:C	32:DK:5:GLN:HG2	2.36	0.46
33:DL:62:PRO:HG2	51:D3:24:LYS:HB2	1.98	0.46
22:DA:910:A:C4	34:DM:13:HIS:ND1	2.84	0.46
34:DM:63:ILE:HD11	34:DM:105:MET:HE2	1.98	0.46
35:DN:108:ALA:O	35:DN:110:MET:HG2	2.16	0.46
35:DN:24:MET:SD	35:DN:44:LEU:HD22	2.56	0.46
35:DN:64:ARG:HH21	35:DN:64:ARG:HG2	1.80	0.46
37:DP:21:PRO:HA	37:DP:46:VAL:CG1	2.43	0.46
38:DQ:46:TYR:CD2	38:DQ:46:TYR:C	2.89	0.46
38:DQ:91:ARG:HG3	39:DR:11:GLN:HG3	1.97	0.46
40:DS:88:ARG:HD2	40:DS:94:ASP:CG	2.36	0.46
43:DV:57:TYR:N	43:DV:57:TYR:CD1	2.80	0.46
45:DX:32:LEU:CD1	45:DX:50:VAL:O	2.64	0.46
46:DY:1:MET:H2	46:DY:5:GLU:CG	2.29	0.46
1:AA:1084:G:H2'	1:AA:1085:U:C5	2.51	0.46
1:AA:1138:G:N2	1:AA:1140:C:N4	2.64	0.46
1:AA:113:G:C4	1:AA:114:U:C5	3.03	0.46
1:AA:1296:C:H5'	13:AM:13:HIS:NE2	2.31	0.46
1:AA:1409:C:HO2'	1:AA:1410:A:H5'	1.76	0.46
1:AA:292:G:N3	1:AA:309:A:C2	2.84	0.46
1:AA:35:G:O2'	12:AL:117:GLY:HA2	2.15	0.46
1:AA:430:A:HO2'	1:AA:431:A:C5'	2.03	0.46
1:AA:517:G:C5'	1:AA:519:C:C2	2.99	0.46
1:AA:546:A:P	4:AD:68:GLU:HB2	2.56	0.46
1:AA:678:U:H1'	1:AA:777:A:O3'	2.15	0.46
1:AA:984:C:HO2'	1:AA:985:C:H6	1.62	0.46
2:AB:185:ILE:CG1	2:AB:185:ILE:O	2.64	0.46
3:AC:151:GLU:HA	3:AC:166:TRP:HA	1.96	0.46
7:AG:68:VAL:CG2	7:AG:103:ILE:HD11	2.42	0.46
7:AG:132:THR:O	7:AG:135:LYS:HB3	2.15	0.46
1:AA:1350:A:H2	7:AG:33:GLY:HA3	1.80	0.46
8:AH:100:ILE:HD11	8:AH:128:VAL:HB	1.98	0.46
9:AI:8:THR:O	9:AI:81:GLY:HA2	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:92:ARG:HH11	13:AM:92:ARG:HG2	1.80	0.46
17:AQ:16:MET:CB	17:AQ:19:SER:HB3	2.23	0.46
21:AU:16:ARG:HD2	21:AU:19:LYS:HG2	1.96	0.46
51:B3:56:LEU:H	51:B3:56:LEU:HD23	1.79	0.46
22:BA:1059:G:C6	22:BA:1080:A:N1	2.84	0.46
22:BA:1303:G:O2'	22:BA:1304:A:H5'	2.16	0.46
22:BA:1313:U:O2	22:BA:1313:U:H2'	2.16	0.46
22:BA:1430:G:C2'	22:BA:1431:A:C5'	2.91	0.46
22:BA:1556:C:H2'	22:BA:1557:C:H5'	1.97	0.46
22:BA:2264:C:H41	44:BW:11:ASN:HD21	1.62	0.46
22:BA:2422:C:H6	22:BA:2422:C:H5''	1.80	0.46
22:BA:544:C:H2'	22:BA:544:C:O2	2.16	0.46
22:BA:748:G:O5'	40:BS:89:ALA:HB2	2.16	0.46
24:BC:106:PRO:CA	24:BC:141:HIS:CE1	2.99	0.46
24:BC:159:THR:OG1	24:BC:194:VAL:HG11	2.16	0.46
24:BC:196:ASN:OD1	24:BC:197:ALA:N	2.49	0.46
25:BD:133:THR:HG23	25:BD:134:HIS:N	2.29	0.46
25:BD:139:SER:HA	25:BD:142:VAL:HG13	1.98	0.46
22:BA:2578:G:C5	25:BD:145:SER:HB2	2.51	0.46
28:BG:148:ARG:HD2	28:BG:163:TYR:HE2	1.77	0.46
28:BG:175:LYS:O	28:BG:176:LYS:C	2.53	0.46
31:BJ:132:HIS:HB3	31:BJ:135:GLN:CG	2.46	0.46
32:BK:105:ARG:NE	32:BK:106:GLU:OE2	2.49	0.46
33:BL:95:LEU:HD22	33:BL:100:ILE:CD1	2.46	0.46
34:BM:114:ARG:CA	34:BM:130:PHE:CE1	2.98	0.46
38:BQ:82:LEU:HD22	38:BQ:88:GLU:OE2	2.16	0.46
39:BR:87:GLN:HG2	39:BR:88:GLY:N	2.30	0.46
42:BU:10:VAL:CG1	42:BU:24:VAL:HG23	2.46	0.46
42:BU:17:ASP:CB	42:BU:20:LYS:HD2	2.46	0.46
42:BU:49:PRO:O	42:BU:51:LEU:N	2.49	0.46
44:BW:26:GLY:O	44:BW:27:GLY:C	2.55	0.46
44:BW:28:GLU:HB2	44:BW:31:LEU:HD11	1.93	0.46
1:CA:1049:U:H2'	1:CA:1049:U:O2	2.15	0.46
1:CA:1054:C:H1'	1:CA:1196:A:C5	2.51	0.46
1:CA:1315:U:H3'	1:CA:1316:G:H8	1.80	0.46
1:CA:1319:A:N6	1:CA:1323:G:N3	2.64	0.46
1:CA:1408:A:C6	1:CA:1494:G:C6	3.04	0.46
1:CA:1517:G:C8	22:DA:1920:C:OP1	2.69	0.46
1:CA:781:A:H4'	1:CA:1523:G:O4'	2.16	0.46
1:CA:112:G:C4	1:CA:330:C:N4	2.84	0.46
1:CA:560:A:C8	1:CA:566:G:C4	3.04	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:607:A:C2	1:CA:608:A:C4	3.04	0.46
1:CA:994:A:O2'	1:CA:995:C:H5'	2.16	0.46
2:CB:178:LEU:HD12	2:CB:178:LEU:HA	1.78	0.46
2:CB:72:LYS:O	2:CB:73:ARG:C	2.54	0.46
3:CC:206:ILE:HG12	3:CC:206:ILE:OXT	2.16	0.46
3:CC:53:ARG:HD3	3:CC:55:VAL:HG13	1.97	0.46
4:CD:166:LYS:HA	4:CD:167:PRO:HD2	1.73	0.46
4:CD:80:ARG:HB2	4:CD:81:LEU:H	1.30	0.46
7:CG:119:LEU:HA	7:CG:122:GLU:HB3	1.96	0.46
8:CH:58:LEU:HD23	8:CH:59:GLU:N	2.31	0.46
10:CJ:42:LEU:HD12	10:CJ:42:LEU:N	2.31	0.46
10:CJ:7:ARG:CZ	10:CJ:102:LEU:CD2	2.94	0.46
13:CM:2:ARG:H	13:CM:2:ARG:HD2	1.80	0.46
18:CR:71:ASP:HB3	21:CU:3:ILE:CD1	2.44	0.46
19:CS:12:LEU:HD13	19:CS:12:LEU:C	2.36	0.46
20:CT:61:ALA:O	20:CT:63:LYS:N	2.49	0.46
22:DA:1060:U:H4'	22:DA:1061:U:C3'	2.46	0.46
22:DA:1171:G:C4	22:DA:1179:G:N2	2.84	0.46
22:DA:1195:G:N3	22:DA:1226:A:H2	2.13	0.46
22:DA:512:G:OP2	22:DA:1235:G:H4'	2.15	0.46
22:DA:1381:G:H2'	22:DA:1381:G:N3	2.31	0.46
22:DA:1986:C:O2	22:DA:1986:C:H2'	2.16	0.46
22:DA:2136:G:N3	22:DA:2137:U:C6	2.84	0.46
22:DA:2150:C:O2'	22:DA:2151:U:C6	2.64	0.46
22:DA:2345:G:C4	22:DA:2347:C:H5	2.34	0.46
22:DA:642:U:H5'	22:DA:2349:G:O3'	2.16	0.46
22:DA:2483:C:N3	34:DM:123:LYS:NZ	2.46	0.46
22:DA:9:G:H1	22:DA:2629:U:H2'	1.81	0.46
22:DA:2686:G:C4	22:DA:2687:U:C5	3.04	0.46
22:DA:2752:C:O2'	22:DA:2753:A:C5'	2.64	0.46
22:DA:2756:U:C2'	22:DA:2757:A:H5'	2.45	0.46
22:DA:362:A:C4	22:DA:363:G:C8	3.04	0.46
22:DA:39:G:N2	22:DA:441:U:C2	2.84	0.46
22:DA:223:A:H2	22:DA:407:G:N3	2.14	0.46
22:DA:444:C:H2'	22:DA:444:C:H6	1.57	0.46
22:DA:487:C:H1'	40:DS:53:SER:HA	1.98	0.46
22:DA:621:A:O2'	22:DA:622:G:O4'	2.30	0.46
22:DA:675:A:C6	22:DA:676:A:N6	2.84	0.46
23:DB:116:G:H2'	23:DB:117:G:H8	1.80	0.46
24:DC:51:ARG:O	24:DC:53:ILE:HG22	2.16	0.46
25:DD:137:SER:CB	25:DD:138:LEU:HD22	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:78:GLY:C	25:DD:80:TRP:CZ3	2.89	0.46
26:DE:52:VAL:O	26:DE:74:LYS:HD3	2.15	0.46
27:DF:110:ILE:HB	27:DF:113:PHE:HB2	1.98	0.46
27:DF:42:ALA:CB	27:DF:48:LEU:HD11	2.46	0.46
22:DA:1060:U:O4	30:DI:131:THR:HG22	2.16	0.46
22:DA:1061:U:H3	30:DI:74:PRO:HD3	1.80	0.46
30:DI:77:VAL:HB	30:DI:80:LYS:NZ	2.30	0.46
30:DI:77:VAL:HB	30:DI:80:LYS:HE3	1.96	0.46
31:DJ:20:ALA:HA	31:DJ:23:LYS:HG2	1.97	0.46
31:DJ:80:HIS:O	31:DJ:81:ILE:C	2.54	0.46
32:DK:1:MET:HA	32:DK:33:ALA:O	2.16	0.46
32:DK:35:VAL:HG21	32:DK:69:VAL:CG2	2.46	0.46
33:DL:96:LYS:HD3	33:DL:103:ILE:HA	1.98	0.46
35:DN:67:PHE:CE2	35:DN:73:ASN:ND2	2.84	0.46
37:DP:59:THR:HG23	37:DP:72:VAL:HG12	1.98	0.46
38:DQ:73:ILE:HD11	38:DQ:77:LYS:HD3	1.98	0.46
44:DW:70:VAL:CG2	44:DW:70:VAL:O	2.63	0.46
22:DA:2232:C:OP1	45:DX:26:ARG:NH1	2.48	0.46
47:DZ:37:ARG:O	47:DZ:38:GLU:HB2	2.14	0.46
1:AA:1066:C:H5'	1:AA:1066:C:C6	2.51	0.46
1:AA:1088:G:O2'	1:AA:1089:G:O5'	2.34	0.46
1:AA:1350:A:H2'	1:AA:1351:U:O4'	2.16	0.46
1:AA:212:G:H2'	1:AA:213:G:H8	1.79	0.46
1:AA:21:G:H2'	1:AA:22:G:C8	2.51	0.46
1:AA:293:G:C4	1:AA:294:U:C5	3.04	0.46
1:AA:795:C:C5'	1:AA:796:C:OP2	2.55	0.46
4:AD:54:LEU:HD22	4:AD:55:ARG:N	2.31	0.46
5:AE:153:ALA:C	5:AE:155:LYS:N	2.66	0.46
6:AF:3:HIS:HB2	6:AF:92:THR:CG2	2.45	0.46
5:AE:82:HIS:NE2	8:AH:95:MET:CE	2.79	0.46
11:AK:19:VAL:HB	11:AK:34:THR:O	2.16	0.46
12:AL:23:LEU:HG	12:AL:24:GLU:H	1.81	0.46
16:AP:48:GLU:CG	16:AP:49:GLY:N	2.56	0.46
20:AT:26:MET:CE	20:AT:56:ILE:HD11	2.46	0.46
22:BA:1014:A:H2'	22:BA:1015:U:C6	2.51	0.46
22:BA:81:G:C2	22:BA:106:C:C2	3.04	0.46
22:BA:1253:A:C3'	22:BA:1254:A:C5'	2.89	0.46
22:BA:1507:C:C4	22:BA:1508:A:N1	2.84	0.46
22:BA:2136:G:C2	22:BA:2137:U:O4	2.69	0.46
22:BA:2480:C:H2'	22:BA:2481:G:C5'	2.45	0.46
22:BA:2544:G:O5'	22:BA:2544:G:H8	1.99	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:85:G:H5''	22:BA:85:G:H8	1.79	0.46
24:BC:141:HIS:O	24:BC:143:VAL:N	2.49	0.46
24:BC:256:THR:O	24:BC:257:ARG:C	2.54	0.46
25:BD:113:SER:HB2	25:BD:114:LYS:NZ	2.31	0.46
25:BD:12:THR:HG22	25:BD:24:VAL:HG22	1.97	0.46
25:BD:142:VAL:CB	25:BD:143:PRO:CD	2.94	0.46
27:BF:88:VAL:CG1	27:BF:90:LEU:CD1	2.94	0.46
28:BG:136:ASP:O	28:BG:140:ILE:CD1	2.64	0.46
30:BI:123:ALA:HA	30:BI:126:ARG:CZ	2.46	0.46
30:BI:24:GLY:O	30:BI:34:ILE:HD12	2.16	0.46
31:BJ:60:ASP:OD1	31:BJ:61:LYS:HG3	2.15	0.46
33:BL:91:ASP:HB2	33:BL:94:THR:HB	1.95	0.46
34:BM:43:ALA:O	34:BM:46:ILE:HG13	2.16	0.46
35:BN:73:ASN:CA	35:BN:76:VAL:CG1	2.77	0.46
37:BP:21:PRO:HA	37:BP:46:VAL:HG12	1.98	0.46
38:BQ:8:ILE:C	38:BQ:8:ILE:CD1	2.83	0.46
39:BR:21:ARG:HG3	39:BR:95:ASP:OD1	2.14	0.46
39:BR:42:ALA:CB	39:BR:46:GLU:CB	2.94	0.46
41:BT:50:LEU:H	41:BT:50:LEU:CD1	2.03	0.46
1:CA:865:A:H5'	1:CA:1078:U:C4	2.51	0.46
1:CA:1084:G:C6	1:CA:1085:U:O4	2.69	0.46
1:CA:1086:U:O2'	1:CA:1087:G:H5'	2.15	0.46
1:CA:1363:A:C5	1:CA:1365:G:C6	3.04	0.46
1:CA:195:A:N7	1:CA:196:A:N6	2.64	0.46
1:CA:198:G:O2'	1:CA:199:A:P	2.74	0.46
1:CA:240:G:H2'	1:CA:241:G:C8	2.51	0.46
1:CA:502:A:C2	1:CA:503:C:C2	3.03	0.46
1:CA:560:A:H5'	1:CA:566:G:N2	2.31	0.46
1:CA:584:G:H2'	1:CA:585:G:C8	2.51	0.46
1:CA:842:U:O2'	1:CA:846:G:C6	2.69	0.46
1:CA:981:U:P	14:CN:12:ARG:HH12	2.38	0.46
2:CB:89:PHE:CZ	2:CB:153:MET:HA	2.50	0.46
3:CC:53:ARG:CD	3:CC:55:VAL:HG13	2.45	0.46
3:CC:93:ILE:O	3:CC:93:ILE:HG13	2.16	0.46
7:CG:59:GLU:OE2	7:CG:63:VAL:CG2	2.58	0.46
9:CI:118:ARG:O	9:CI:119:LYS:HB3	2.16	0.46
11:CK:121:ARG:HH21	21:CU:35:GLU:CB	2.29	0.46
12:CL:19:ASN:N	12:CL:19:ASN:ND2	2.54	0.46
13:CM:103:THR:CG2	13:CM:104:ASN:N	2.77	0.46
16:CP:48:GLU:HG3	16:CP:51:ARG:CZ	2.46	0.46
1:CA:1319:A:P	19:CS:4:LEU:HD21	2.55	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1014:A:C2	22:DA:1149:G:C2	3.04	0.46
22:DA:1027:A:O2'	22:DA:1028:A:C8	2.68	0.46
22:DA:119:A:C5'	22:DA:120:U:OP1	2.62	0.46
22:DA:1285:A:H2'	22:DA:1286:A:C5'	2.45	0.46
22:DA:1346:G:O2'	22:DA:1347:A:H5'	2.16	0.46
22:DA:1385:A:HO2'	22:DA:1386:C:H6	1.61	0.46
22:DA:1345:C:C5'	22:DA:1396:U:O4	2.63	0.46
22:DA:1402:U:C2'	22:DA:1403:A:O5'	2.63	0.46
22:DA:1490:A:H5'	22:DA:1490:A:N3	2.31	0.46
22:DA:1500:G:C6	22:DA:1501:G:N7	2.84	0.46
22:DA:1534:U:H3'	22:DA:1534:U:O2	2.16	0.46
22:DA:1545:A:H2'	22:DA:1546:G:C5'	2.45	0.46
22:DA:1571:A:C3'	22:DA:1571:A:C8	2.99	0.46
22:DA:1611:C:O2'	22:DA:1612:C:O5'	2.34	0.46
22:DA:1809:A:C2'	22:DA:1810:A:C8	2.99	0.46
22:DA:1815:A:C1'	22:DA:1817:G:N7	2.79	0.46
22:DA:1869:G:C2	22:DA:1873:G:C6	3.04	0.46
22:DA:1997:C:O2'	22:DA:1998:A:C5'	2.63	0.46
22:DA:2059:A:O3'	26:DE:64:GLY:HA2	2.16	0.46
22:DA:228:C:H4'	22:DA:229:C:C6	2.50	0.46
22:DA:2298:A:O2'	22:DA:2299:U:H5'	2.16	0.46
22:DA:2259:U:C6	22:DA:2427:C:C4	3.04	0.46
22:DA:2886:A:C2	22:DA:2887:A:N7	2.84	0.46
22:DA:379:G:C2	22:DA:396:G:C5	3.04	0.46
22:DA:49:A:C6	22:DA:177:G:C6	3.04	0.46
22:DA:502:A:H62	22:DA:505:A:N6	2.13	0.46
22:DA:513:A:C2	22:DA:514:A:C4	3.04	0.46
22:DA:679:C:C2	22:DA:680:C:C5	3.04	0.46
22:DA:975:A:C2	22:DA:976:G:C8	3.04	0.46
23:DB:109:A:C6	23:DB:110:C:C4	3.04	0.46
23:DB:109:A:O2'	23:DB:110:C:O5'	2.34	0.46
23:DB:29:A:H2'	23:DB:30:C:C6	2.51	0.46
23:DB:46:A:C2'	23:DB:47:C:C6	2.90	0.46
22:DA:1790:C:C2'	24:DC:207:ALA:HB2	2.45	0.46
25:DD:148:GLN:CG	25:DD:152:PRO:CG	2.84	0.46
26:DE:45:ALA:O	26:DE:46:GLN:CB	2.64	0.46
26:DE:58:LYS:HA	26:DE:59:PRO:HD3	1.68	0.46
27:DF:103:ILE:N	27:DF:103:ILE:CD1	2.78	0.46
27:DF:31:GLU:HG3	27:DF:32:LYS:N	2.30	0.46
28:DG:168:VAL:O	28:DG:168:VAL:HG12	2.14	0.46
28:DG:91:VAL:CG2	28:DG:92:GLY:H	2.27	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:DH:143:ILE:C	29:DH:144:VAL:HG22	2.37	0.46
29:DH:27:ARG:NH1	45:DX:59:ASP:CA	2.75	0.46
30:DI:23:VAL:HG21	30:DI:37:PHE:CE2	2.51	0.46
31:DJ:44:TYR:CD2	31:DJ:44:TYR:C	2.90	0.46
34:DM:40:ARG:HB2	34:DM:93:VAL:CG2	2.45	0.46
34:DM:72:PRO:HA	34:DM:92:TRP:CE3	2.51	0.46
35:DN:46:ARG:HG3	35:DN:46:ARG:H	1.52	0.46
35:DN:54:LEU:HD11	35:DN:66:ALA:CB	2.24	0.46
36:DO:24:THR:H	36:DO:90:VAL:HG12	1.81	0.46
37:DP:102:ARG:CB	37:DP:107:ALA:HB2	2.45	0.46
38:DQ:64:ILE:HG12	38:DQ:64:ILE:H	1.65	0.46
39:DR:78:ARG:HB2	39:DR:83:TYR:CD1	2.51	0.46
43:DV:48:MET:SD	43:DV:85:LYS:HA	2.55	0.46
46:DY:2:LYS:CG	46:DY:4:LYS:HE3	2.45	0.46
1:AA:114:U:H2'	1:AA:115:G:H8	1.80	0.45
1:AA:1162:C:N3	1:AA:1175:G:C2	2.84	0.45
1:AA:1180:A:C5'	1:AA:1181:G:OP2	2.63	0.45
1:AA:390:U:H2'	1:AA:391:G:H8	1.82	0.45
1:AA:66:A:N6	1:AA:104:G:C4	2.84	0.45
1:AA:827:U:C4	1:AA:870:U:C2	3.03	0.45
1:AA:972:C:HO2'	1:AA:973:G:P	2.39	0.45
2:AB:148:GLY:HA2	2:AB:151:LYS:HB3	1.98	0.45
2:AB:161:PHE:HD1	2:AB:183:PHE:CB	2.28	0.45
2:AB:9:LEU:HD21	2:AB:11:ALA:CB	2.28	0.45
4:AD:87:GLU:O	4:AD:90:LEU:HB2	2.16	0.45
5:AE:96:GLN:HE21	5:AE:96:GLN:CA	2.28	0.45
7:AG:110:ARG:CG	7:AG:111:GLY:N	2.79	0.45
9:AI:27:ILE:HG13	9:AI:62:LEU:HD21	1.98	0.45
9:AI:93:LEU:O	9:AI:97:LEU:HB2	2.15	0.45
10:AJ:74:VAL:HG12	10:AJ:75:ASP:N	2.31	0.45
14:AN:22:LYS:O	14:AN:25:GLU:HG2	2.16	0.45
19:AS:4:LEU:CD2	19:AS:9:PHE:N	2.79	0.45
49:B1:16:THR:HB	49:B1:41:VAL:HG21	1.97	0.45
49:B1:8:ILE:HG21	49:B1:51:ALA:CB	2.46	0.45
51:B3:27:ASN:N	51:B3:27:ASN:HD22	2.12	0.45
22:BA:1178:C:H2'	22:BA:1178:C:O2	2.16	0.45
22:BA:1198:U:H2'	22:BA:1199:U:C6	2.51	0.45
22:BA:1289:C:H2'	22:BA:1290:C:C6	2.50	0.45
22:BA:136:G:H2'	22:BA:137:U:C6	2.51	0.45
22:BA:1385:A:C5	22:BA:1403:A:C6	3.03	0.45
22:BA:1476:U:O2'	22:BA:1477:A:C5'	2.63	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:149:A:H2'	22:BA:150:U:H6	1.80	0.45
22:BA:1467:U:C4	22:BA:1546:G:C2	3.04	0.45
22:BA:160:A:C4	22:BA:167:A:C2	3.04	0.45
22:BA:1945:G:H2'	22:BA:1946:U:C5	2.51	0.45
22:BA:1774:C:H4'	22:BA:1979:U:O2	2.16	0.45
22:BA:2148:G:HO2'	22:BA:2149:U:P	2.39	0.45
22:BA:2192:U:H2'	22:BA:2193:G:H8	1.80	0.45
22:BA:2287:A:C8	22:BA:2289:G:C8	3.05	0.45
22:BA:2450:A:O2'	22:BA:2451:A:H5'	2.16	0.45
22:BA:2639:A:H4'	31:BJ:96:ARG:NH2	2.31	0.45
22:BA:2714:G:H2'	22:BA:2715:C:C6	2.51	0.45
22:BA:2807:U:O5'	22:BA:2807:U:H6	1.98	0.45
22:BA:2870:C:H2'	22:BA:2871:U:H5'	1.97	0.45
22:BA:2720:U:C2	22:BA:2872:A:C6	3.04	0.45
22:BA:441:U:O2'	26:BE:41:GLN:NE2	2.48	0.45
22:BA:475:C:O5'	22:BA:475:C:H6	1.99	0.45
22:BA:717:C:O2	22:BA:717:C:C2'	2.63	0.45
22:BA:726:G:O2'	22:BA:727:A:H8	1.99	0.45
22:BA:806:C:H2'	22:BA:807:U:H6	1.81	0.45
27:BF:52:ALA:HB2	27:BF:149:ARG:HD3	1.97	0.45
29:BH:100:ALA:O	29:BH:104:THR:CB	2.65	0.45
32:BK:11:ALA:O	32:BK:99:ILE:HA	2.16	0.45
33:BL:68:SER:HB3	33:BL:71:ALA:HB3	1.95	0.45
33:BL:93:ASN:ND2	33:BL:93:ASN:C	2.65	0.45
34:BM:26:VAL:HG13	34:BM:104:GLU:OE2	2.16	0.45
38:BQ:57:ARG:HA	38:BQ:60:TRP:CE3	2.51	0.45
42:BU:25:LYS:CG	42:BU:36:GLU:HB3	2.32	0.45
44:BW:73:PRO:HG2	44:BW:76:ARG:HB2	1.99	0.45
22:BA:2080:A:C5'	45:BX:18:SER:HB2	2.44	0.45
1:CA:1040:U:H6	1:CA:1040:U:O5'	1.98	0.45
1:CA:1084:G:OP1	1:CA:1086:U:C5	2.69	0.45
1:CA:1256:A:C2'	1:CA:1257:A:OP2	2.65	0.45
1:CA:1319:A:C6	1:CA:1323:G:C4	3.04	0.45
1:CA:1408:A:C2	1:CA:1494:G:C5	3.04	0.45
1:CA:371:A:H2'	1:CA:372:C:O4'	2.16	0.45
1:CA:464:U:N3	1:CA:466:A:H4'	2.31	0.45
1:CA:518:C:C5	1:CA:530:G:C6	3.04	0.45
1:CA:708:C:H2'	1:CA:709:U:C6	2.51	0.45
1:CA:753:A:H4'	1:CA:754:C:C5'	2.46	0.45
1:CA:794:A:H2'	1:CA:795:C:C5	2.50	0.45
1:CA:835:U:C2'	1:CA:836:G:O5'	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:CB:13:VAL:HG23	2:CB:211:LEU:HD22	1.98	0.45
2:CB:20:ARG:HA	2:CB:20:ARG:NE	2.31	0.45
2:CB:57:ASN:HB2	2:CB:219:THR:HB	1.98	0.45
1:CA:1189:U:O2'	3:CC:175:HIS:CD2	2.67	0.45
4:CD:130:ASN:C	4:CD:131:ILE:HD13	2.36	0.45
6:CF:90:MET:HE1	18:CR:60:ARG:CD	2.45	0.45
9:CI:70:GLY:C	9:CI:71:ILE:HG13	2.36	0.45
11:CK:58:THR:O	11:CK:61:ALA:HB3	2.16	0.45
11:CK:91:GLY:O	11:CK:92:ARG:C	2.54	0.45
12:CL:20:VAL:O	12:CL:20:VAL:HG23	2.16	0.45
12:CL:2:THR:O	12:CL:6:LEU:CD1	2.64	0.45
12:CL:49:ARG:HH11	12:CL:89:LEU:CD2	2.29	0.45
1:CA:523:A:H61	12:CL:88:ASP:HB2	1.81	0.45
15:CO:55:LEU:C	15:CO:57:ARG:N	2.69	0.45
1:CA:1014:A:H1'	19:CS:34:SER:OG	2.15	0.45
20:CT:61:ALA:O	20:CT:67:HIS:CG	2.69	0.45
49:D1:4:ILE:O	49:D1:4:ILE:HG22	2.15	0.45
22:DA:1040:A:H2'	22:DA:1041:G:O4'	2.16	0.45
22:DA:1190:G:OP1	33:DL:32:GLY:HA2	2.16	0.45
22:DA:1323:C:N4	22:DA:1324:G:N7	2.64	0.45
22:DA:1465:G:H2'	22:DA:1466:U:O4'	2.16	0.45
22:DA:1519:G:N1	22:DA:1520:U:C2	2.84	0.45
22:DA:1581:G:H2'	22:DA:1582:C:H5'	1.98	0.45
22:DA:1627:G:C6	22:DA:1640:A:C5	3.04	0.45
22:DA:1737:G:H5'	22:DA:1738:G:OP2	2.16	0.45
22:DA:1814:G:N1	22:DA:1815:A:N6	2.64	0.45
22:DA:1830:C:C4'	24:DC:14:HIS:HE1	2.29	0.45
22:DA:2046:G:H2'	22:DA:2047:C:C6	2.51	0.45
22:DA:2136:G:C2'	22:DA:2137:U:C5	2.92	0.45
22:DA:2242:G:N7	22:DA:2243:U:H5	2.09	0.45
22:DA:2511:U:C4	22:DA:2512:C:C4	3.04	0.45
22:DA:2631:G:N2	22:DA:2788:C:C2	2.84	0.45
22:DA:2751:G:N3	28:DG:2:ARG:NH2	2.63	0.45
22:DA:397:U:O2'	22:DA:398:C:C5'	2.64	0.45
22:DA:435:C:C6	22:DA:436:C:C6	3.04	0.45
22:DA:586:A:O5'	22:DA:586:A:H8	1.99	0.45
22:DA:749:A:C2	22:DA:750:A:C8	3.04	0.45
22:DA:76:C:HO2'	22:DA:77:G:P	2.40	0.45
23:DB:29:A:OP2	36:DO:32:PRO:HD2	2.16	0.45
23:DB:53:A:H2'	23:DB:53:A:N3	2.31	0.45
22:DA:917:A:H2	23:DB:79:G:H21	1.63	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:172:VAL:HG21	25:DD:194:PRO:CD	2.45	0.45
26:DE:196:VAL:HA	26:DE:199:MET:HB3	1.98	0.45
27:DF:4:HIS:CE1	27:DF:96:TRP:CZ2	3.03	0.45
27:DF:60:SER:O	27:DF:62:GLN:N	2.47	0.45
23:DB:42:C:N4	27:DF:87:LYS:NZ	2.62	0.45
29:DH:83:LYS:HE2	29:DH:149:GLU:CB	2.23	0.45
29:DH:94:ILE:CD1	29:DH:98:ASP:OD1	2.64	0.45
30:DI:102:ARG:HD3	30:DI:140:GLU:O	2.16	0.45
30:DI:30:GLN:CG	30:DI:31:GLY:H	2.26	0.45
30:DI:71:LYS:HG3	30:DI:72:THR:N	2.30	0.45
31:DJ:140:LEU:C	31:DJ:140:LEU:HD13	2.36	0.45
34:DM:53:MET:CE	34:DM:117:PHE:HE1	2.29	0.45
34:DM:4:PRO:O	34:DM:5:LYS:C	2.55	0.45
35:DN:33:ILE:HG12	35:DN:118:ARG:CD	2.46	0.45
35:DN:24:MET:HG3	35:DN:44:LEU:HD22	1.98	0.45
39:DR:49:ILE:HB	39:DR:51:VAL:O	2.16	0.45
40:DS:18:ARG:HA	40:DS:76:VAL:CG1	2.41	0.45
40:DS:39:THR:HB	40:DS:40:ASN:H	1.64	0.45
41:DT:19:LYS:O	41:DT:20:ALA:HB2	2.16	0.45
41:DT:55:VAL:CG2	41:DT:56:GLU:N	2.79	0.45
22:DA:1340:U:H5'	41:DT:61:LEU:HD22	1.98	0.45
47:DZ:19:HIS:CD2	47:DZ:52:PHE:HZ	2.35	0.45
1:AA:1014:A:C5'	19:AS:13:HIS:CD2	2.99	0.45
1:AA:1125:U:C5	1:AA:1127:G:C5	3.03	0.45
1:AA:1150:A:O5'	1:AA:1150:A:H8	2.00	0.45
1:AA:1277:C:H1'	1:AA:1282:C:C2	2.51	0.45
1:AA:1336:C:O2'	1:AA:1337:G:OP2	2.28	0.45
1:AA:184:G:O2'	1:AA:185:U:C6	2.36	0.45
1:AA:203:G:N2	1:AA:215:C:C2	2.84	0.45
1:AA:204:G:C1'	1:AA:465:A:H2	2.28	0.45
1:AA:357:G:O2'	1:AA:358:U:H5'	2.16	0.45
1:AA:433:G:H2'	1:AA:434:U:C5'	2.47	0.45
1:AA:468:A:C2	1:AA:469:C:C4	3.03	0.45
1:AA:499:A:H1'	1:AA:500:G:C8	2.51	0.45
1:AA:671:G:N2	1:AA:736:C:C2	2.85	0.45
1:AA:814:A:P	56:AA:1760:HOH:O	2.74	0.45
1:AA:952:U:H5'	1:AA:972:C:H41	1.81	0.45
2:AB:67:LEU:HB3	2:AB:160:LEU:HD12	1.97	0.45
2:AB:49:PHE:HB2	2:AB:52:ALA:HB3	1.97	0.45
4:AD:54:LEU:CD2	4:AD:55:ARG:N	2.79	0.45
5:AE:71:ILE:HD13	5:AE:144:GLU:HB2	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:39:LEU:O	8:AH:44:PHE:HB2	2.16	0.45
12:AL:115:LYS:O	12:AL:116:TYR:CB	2.64	0.45
13:AM:87:GLY:C	13:AM:89:ARG:H	2.19	0.45
19:AS:41:PRO:C	19:AS:43:MET:H	2.20	0.45
22:BA:1125:G:H5'	52:B4:37:GLN:HG3	1.97	0.45
22:BA:1606:C:O2'	22:BA:1607:C:P	2.72	0.45
22:BA:1655:A:H2'	22:BA:1656:C:O4'	2.17	0.45
22:BA:186:G:H2'	22:BA:187:G:H8	1.82	0.45
22:BA:2097:A:O2'	22:BA:2098:U:H5'	2.16	0.45
22:BA:2356:U:C5'	44:BW:16:GLU:HG3	2.47	0.45
22:BA:2356:U:H4'	44:BW:16:GLU:CG	2.31	0.45
22:BA:2385:C:H2'	22:BA:2386:A:C8	2.51	0.45
22:BA:2397:G:H2'	22:BA:2398:U:H6	1.81	0.45
22:BA:2470:G:C2'	22:BA:2471:A:H5'	2.45	0.45
22:BA:274:C:C6	22:BA:275:C:C5	3.03	0.45
22:BA:2838:G:H2'	22:BA:2839:G:O4'	2.17	0.45
22:BA:2840:C:H4'	35:BN:91:ALA:O	2.16	0.45
22:BA:633:A:H2'	22:BA:634:C:H5'	1.98	0.45
22:BA:760:G:H2'	22:BA:761:A:O4'	2.16	0.45
22:BA:995:C:H42	31:BJ:2:LYS:HB2	1.81	0.45
23:BB:19:C:C2'	23:BB:20:G:H5'	2.47	0.45
23:BB:75:G:O2'	43:BV:88:HIS:HE1	1.99	0.45
24:BC:180:MET:CG	24:BC:268:ARG:NH1	2.79	0.45
25:BD:148:GLN:HB2	25:BD:152:PRO:HG2	1.97	0.45
25:BD:97:SER:OG	25:BD:99:GLU:CG	2.63	0.45
26:BE:174:GLY:O	26:BE:175:ILE:O	2.34	0.45
27:BF:151:LEU:C	27:BF:151:LEU:HD12	2.36	0.45
29:BH:37:VAL:HG23	29:BH:38:PRO:HD2	1.97	0.45
33:BL:91:ASP:O	33:BL:93:ASN:O	2.34	0.45
34:BM:4:PRO:CG	34:BM:70:ASP:HA	2.45	0.45
38:BQ:63:ARG:HH12	38:BQ:96:ASP:C	2.14	0.45
40:BS:13:SER:OG	40:BS:16:LYS:HG3	2.16	0.45
42:BU:94:PHE:O	42:BU:94:PHE:CG	2.68	0.45
22:BA:2336:A:N6	44:BW:40:ARG:HD2	2.31	0.45
45:BX:26:ARG:NH1	45:BX:27:ARG:O	2.49	0.45
1:CA:1243:C:N4	1:CA:1244:G:O6	2.50	0.45
1:CA:1421:G:H1	1:CA:1479:C:H42	1.65	0.45
1:CA:1450:U:H4'	1:CA:1451:U:C6	2.51	0.45
1:CA:205:A:C2	1:CA:206:C:N4	2.85	0.45
1:CA:21:G:H1'	1:CA:914:A:N6	2.31	0.45
1:CA:543:U:H2'	1:CA:544:G:O5'	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:577:G:H1	1:CA:764:C:N4	2.12	0.45
1:CA:582:C:O2'	1:CA:583:A:H5'	2.17	0.45
1:CA:69:G:H2'	1:CA:70:U:C6	2.51	0.45
1:CA:784:A:N6	1:CA:799:G:C6	2.84	0.45
1:CA:892:A:C4	1:CA:893:C:C5	3.04	0.45
1:CA:953:G:C6	1:CA:954:G:C5	3.04	0.45
2:CB:185:ILE:HA	2:CB:199:ILE:HG13	1.98	0.45
2:CB:212:TYR:O	2:CB:212:TYR:CD2	2.66	0.45
3:CC:116:ALA:HB2	3:CC:199:VAL:HG21	1.98	0.45
3:CC:49:ALA:HA	3:CC:74:ILE:HG21	1.97	0.45
4:CD:50:TYR:O	4:CD:51:GLY:C	2.52	0.45
6:CF:35:LYS:HE2	6:CF:37:HIS:HE1	1.80	0.45
7:CG:142:ARG:C	7:CG:144:ALA:H	2.18	0.45
10:CJ:30:LYS:HG2	10:CJ:36:VAL:CG2	2.38	0.45
12:CL:42:LYS:CD	12:CL:43:LYS:CG	2.88	0.45
12:CL:84:GLY:H	12:CL:94:TYR:HA	1.81	0.45
15:CO:72:LYS:HA	15:CO:72:LYS:HD3	1.64	0.45
17:CQ:14:ASP:OD2	17:CQ:52:CYS:HB2	2.16	0.45
20:CT:31:ILE:C	20:CT:33:LYS:H	2.20	0.45
22:DA:1109:C:H5''	22:DA:1110:G:OP2	2.17	0.45
22:DA:122:G:C6	22:DA:130:C:N3	2.84	0.45
22:DA:1455:G:N7	35:DN:64:ARG:NH1	2.64	0.45
22:DA:1706:C:HO2'	22:DA:1707:G:P	2.38	0.45
22:DA:1792:G:C2'	22:DA:1793:C:H5'	2.46	0.45
22:DA:2006:C:H2'	22:DA:2007:U:C6	2.52	0.45
22:DA:2071:A:H2'	22:DA:2072:C:H6	1.80	0.45
22:DA:219:A:N6	22:DA:220:G:C6	2.84	0.45
22:DA:2214:C:C2	22:DA:2215:C:C6	3.05	0.45
22:DA:2331:G:H1'	44:DW:40:ARG:CB	2.41	0.45
22:DA:2332:C:H4'	44:DW:40:ARG:CZ	2.47	0.45
22:DA:271:G:N1	22:DA:272:A:N6	2.64	0.45
22:DA:2851:A:H2'	22:DA:2852:G:C8	2.51	0.45
22:DA:301:G:N1	22:DA:302:C:N4	2.65	0.45
22:DA:357:C:H2'	22:DA:358:U:H6	1.81	0.45
22:DA:618:G:O2'	22:DA:619:G:C5'	2.64	0.45
22:DA:730:A:N3	22:DA:731:C:C6	2.84	0.45
22:DA:809:G:C6	22:DA:810:U:N3	2.84	0.45
22:DA:952:G:C4	22:DA:966:G:N2	2.84	0.45
22:DA:1819:A:C5'	24:DC:156:SER:HB2	2.46	0.45
29:DH:66:ASN:HA	29:DH:137:GLU:OE2	2.16	0.45
30:DI:96:LYS:HE2	30:DI:138:VAL:CG1	2.33	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:8:PRO:HG2	31:DJ:9:GLU:N	2.31	0.45
34:DM:66:ARG:CD	34:DM:101:VAL:CG1	2.90	0.45
36:DO:67:ASN:O	36:DO:68:LYS:C	2.54	0.45
38:DQ:31:TYR:C	38:DQ:33:VAL:N	2.70	0.45
39:DR:70:GLU:CD	39:DR:70:GLU:H	2.17	0.45
43:DV:21:ARG:HE	43:DV:87:GLN:CG	2.28	0.45
46:DY:19:LEU:HG	46:DY:22:LEU:CD2	2.44	0.45
46:DY:1:MET:N	46:DY:1:MET:HE3	2.29	0.45
1:AA:1079:G:C2	1:AA:1080:A:C6	3.05	0.45
1:AA:1091:U:H5''	1:AA:1092:A:OP2	2.17	0.45
1:AA:1098:C:H2'	1:AA:1099:G:O4'	2.17	0.45
1:AA:1202:U:O2'	1:AA:1203:C:O5'	2.34	0.45
1:AA:211:G:N1	1:AA:212:G:N3	2.65	0.45
1:AA:451:A:C2	1:AA:480:U:C5	3.04	0.45
1:AA:863:U:O2	1:AA:867:G:C2	2.69	0.45
1:AA:923:A:C6	1:AA:924:C:C4	3.04	0.45
1:AA:942:G:H2'	1:AA:942:G:N3	2.31	0.45
9:AI:29:ILE:O	9:AI:30:ASN:C	2.55	0.45
12:AL:115:LYS:O	12:AL:116:TYR:HB2	2.16	0.45
12:AL:43:LYS:HZ3	12:AL:43:LYS:HB2	1.80	0.45
14:AN:20:PHE:C	14:AN:22:LYS:H	2.20	0.45
15:AO:42:PHE:CE1	15:AO:55:LEU:HD22	2.51	0.45
19:AS:47:THR:O	19:AS:48:ILE:C	2.54	0.45
19:AS:48:ILE:O	19:AS:48:ILE:CD1	2.65	0.45
20:AT:53:MET:HE2	20:AT:53:MET:C	2.37	0.45
49:B1:10:LEU:HD23	49:B1:50:GLU:O	2.17	0.45
22:BA:1061:U:H1'	22:BA:1070:A:O4'	2.16	0.45
22:BA:119:A:H4'	22:BA:120:U:O5'	2.17	0.45
22:BA:1220:G:H2'	22:BA:1221:C:C6	2.51	0.45
22:BA:1233:C:C4	22:BA:1234:U:C5	3.04	0.45
22:BA:1360:G:C8	22:BA:1360:G:H5''	2.51	0.45
22:BA:1374:G:C5	22:BA:1375:U:C5	3.04	0.45
22:BA:1460:U:H3'	22:BA:1461:C:C5'	2.46	0.45
22:BA:1509:A:N3	22:BA:1510:G:C8	2.85	0.45
22:BA:1624:U:C2	22:BA:1625:C:C5	3.04	0.45
22:BA:1673:G:C3'	22:BA:1674:G:H5'	2.46	0.45
22:BA:1717:A:H2'	22:BA:1718:G:O4'	2.15	0.45
22:BA:2302:U:H2'	22:BA:2303:G:H8	1.81	0.45
22:BA:2415:G:C5	22:BA:2416:C:C5	3.03	0.45
22:BA:2532:G:C5	22:BA:2533:U:C5	3.04	0.45
22:BA:2635:A:C2'	22:BA:2636:C:O5'	2.64	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2729:G:C8	22:BA:2729:G:H5''	2.46	0.45
22:BA:2794:C:H2'	22:BA:2795:C:C6	2.51	0.45
22:BA:2834:G:O6	22:BA:2879:A:H2'	2.16	0.45
22:BA:2610:C:H4'	54:BA:3136:ERY:C30	2.46	0.45
22:BA:412:A:H2'	22:BA:413:C:C5'	2.46	0.45
22:BA:933:A:H3'	22:BA:934:U:C5'	2.46	0.45
24:BC:29:PHE:CZ	24:BC:31:PRO:HG3	2.51	0.45
27:BF:16:MET:O	27:BF:20:ASN:N	2.50	0.45
28:BG:139:VAL:O	28:BG:140:ILE:C	2.51	0.45
31:BJ:121:LYS:HE3	31:BJ:121:LYS:HB2	1.72	0.45
34:BM:4:PRO:HG2	34:BM:92:TRP:CZ3	2.52	0.45
35:BN:87:PHE:HE1	35:BN:116:VAL:HG12	1.82	0.45
36:BO:28:VAL:HG23	36:BO:106:LEU:CD2	2.46	0.45
39:BR:52:PRO:O	39:BR:53:PHE:HB2	2.16	0.45
39:BR:68:ARG:HD3	39:BR:92:TRP:CZ2	2.52	0.45
44:BW:46:ALA:HB3	44:BW:80:SER:HB3	1.99	0.45
46:BY:23:ARG:HA	46:BY:23:ARG:NE	2.31	0.45
41:BT:12:ARG:HD2	46:BY:29:ARG:NH2	2.32	0.45
47:BZ:6:ILE:HD11	47:BZ:47:ILE:HD11	1.97	0.45
1:CA:1003:G:H21	1:CA:1005:A:H5''	1.78	0.45
1:CA:1150:A:N6	1:CA:1151:A:N6	2.64	0.45
1:CA:1270:G:O2'	1:CA:1314:C:H5'	2.16	0.45
1:CA:1405:G:H1'	1:CA:1518:A:HO2'	1.81	0.45
1:CA:1423:G:C2	1:CA:1424:U:C2	3.04	0.45
1:CA:1449:C:O2'	1:CA:1450:U:O5'	2.34	0.45
1:CA:276:G:C2	1:CA:277:C:C2	3.04	0.45
1:CA:296:U:N3	1:CA:297:G:N7	2.64	0.45
1:CA:46:G:HO2'	1:CA:365:U:H1'	1.80	0.45
1:CA:411:A:H1'	1:CA:413:G:O4'	2.16	0.45
1:CA:672:U:H2'	1:CA:673:A:H8	1.80	0.45
1:CA:66:A:C5	1:CA:67:C:H5	2.34	0.45
1:CA:694:A:H2'	1:CA:695:A:H5''	1.97	0.45
1:CA:701:U:O2'	1:CA:702:A:P	2.75	0.45
2:CB:99:MET:O	2:CB:103:TRP:CB	2.63	0.45
2:CB:119:GLN:HG2	2:CB:124:THR:CG2	2.46	0.45
2:CB:13:VAL:CG2	2:CB:211:LEU:HD22	2.46	0.45
2:CB:46:VAL:CG1	2:CB:47:PRO:CD	2.88	0.45
2:CB:72:LYS:O	2:CB:74:ALA:N	2.49	0.45
3:CC:32:LEU:CD1	14:CN:76:PHE:HA	2.45	0.45
3:CC:46:LEU:HD22	3:CC:75:VAL:CG2	2.34	0.45
5:CE:151:MET:O	5:CE:154:ALA:HB3	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:CJ:25:ILE:O	10:CJ:25:ILE:CG2	2.61	0.45
13:CM:13:HIS:NE2	13:CM:41:ASP:HA	2.32	0.45
21:CU:24:LYS:CG	21:CU:25:ALA:N	2.51	0.45
50:D2:30:VAL:HG22	50:D2:33:ARG:NH1	2.30	0.45
50:D2:46:LYS:HD2	50:D2:46:LYS:N	2.30	0.45
22:DA:1216:G:C2'	22:DA:1217:U:H5'	2.46	0.45
22:DA:1441:G:C4	22:DA:1442:U:C5	3.04	0.45
22:DA:1537:G:C3'	22:DA:1538:G:H4'	2.44	0.45
22:DA:1615:C:C5	22:DA:1617:C:C4	3.04	0.45
22:DA:1794:A:N3	22:DA:1795:C:C6	2.85	0.45
22:DA:183:C:H2'	22:DA:184:C:C5'	2.37	0.45
22:DA:1914:C:O2'	22:DA:1915:U:O4'	2.34	0.45
22:DA:252:G:C2'	22:DA:253:C:O5'	2.64	0.45
22:DA:2049:G:N2	22:DA:2620:C:C2	2.84	0.45
22:DA:319:G:C6	22:DA:333:G:N1	2.84	0.45
22:DA:352:A:O3'	22:DA:353:C:H4'	2.16	0.45
22:DA:484:C:H2'	22:DA:485:C:C6	2.51	0.45
22:DA:492:A:H2'	22:DA:493:G:C8	2.51	0.45
22:DA:538:A:H5'	31:DJ:7:LYS:HZ3	1.80	0.45
22:DA:946:C:O2'	22:DA:947:A:C8	2.58	0.45
22:DA:953:G:H2'	22:DA:954:G:H5'	1.98	0.45
22:DA:959:A:O2'	22:DA:960:A:O4'	2.34	0.45
22:DA:973:A:C5'	22:DA:974:G:OP2	2.65	0.45
23:DB:83:G:C6	23:DB:94:A:N6	2.85	0.45
24:DC:143:VAL:HB	24:DC:153:LEU:HB3	1.98	0.45
25:DD:106:LYS:HB3	25:DD:206:ALA:H	1.81	0.45
25:DD:151:THR:CB	25:DD:152:PRO:CD	2.95	0.45
25:DD:42:ASN:O	25:DD:43:ASP:HB2	2.16	0.45
28:DG:104:LEU:H	28:DG:112:VAL:HG23	1.81	0.45
29:DH:40:THR:O	29:DH:42:LYS:N	2.47	0.45
30:DI:54:ILE:HG23	30:DI:70:THR:HG21	1.98	0.45
32:DK:34:GLY:C	32:DK:35:VAL:CG2	2.84	0.45
32:DK:35:VAL:HA	32:DK:62:VAL:HG12	1.97	0.45
33:DL:117:THR:CG2	33:DL:118:THR:N	2.67	0.45
35:DN:25:ALA:O	35:DN:29:VAL:HG22	2.16	0.45
38:DQ:78:PHE:CZ	38:DQ:82:LEU:HD11	2.50	0.45
22:DA:2013:A:OP1	40:DS:97:LEU:N	2.49	0.45
41:DT:5:GLU:HA	41:DT:8:LEU:HB2	1.97	0.45
22:DA:2230:G:H4'	45:DX:29:LEU:CD1	2.47	0.45
1:AA:210:C:H5''	1:AA:211:G:OP1	2.16	0.45
1:AA:487:A:H8	1:AA:487:A:H5'	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:511:C:C2	1:AA:512:U:C5	3.04	0.45
1:AA:622:A:C8	1:AA:623:C:C6	3.04	0.45
1:AA:677:U:H2'	1:AA:678:U:C6	2.51	0.45
1:AA:930:C:O2'	1:AA:931:C:H5'	2.17	0.45
1:AA:982:U:O2	1:AA:983:A:N1	2.50	0.45
2:AB:220:VAL:HG12	2:AB:220:VAL:O	2.15	0.45
3:AC:107:LYS:HA	3:AC:108:PRO:HD2	1.76	0.45
4:AD:11:SER:HA	4:AD:18:LEU:CD1	2.38	0.45
4:AD:88:ASN:N	4:AD:88:ASN:OD1	2.49	0.45
5:AE:108:GLY:HA2	5:AE:111:ARG:HB3	1.98	0.45
1:AA:9:G:OP2	5:AE:125:LYS:HE2	2.16	0.45
7:AG:121:ASN:O	7:AG:125:ASP:CB	2.62	0.45
10:AJ:84:VAL:HG12	10:AJ:85:ASP:H	1.81	0.45
11:AK:121:ARG:HG3	21:AU:35:GLU:HG2	1.98	0.45
1:AA:1226:C:H2'	13:AM:101:THR:O	2.17	0.45
13:AM:22:TYR:CD2	13:AM:22:TYR:O	2.70	0.45
15:AO:3:SER:HB3	15:AO:6:ALA:CB	2.46	0.45
20:AT:14:GLU:O	20:AT:15:LYS:C	2.55	0.45
22:BA:2394:C:P	51:B3:29:ARG:HH21	2.40	0.45
52:B4:7:VAL:O	52:B4:8:LYS:HB2	2.16	0.45
22:BA:1057:A:H62	22:BA:1087:G:P	2.40	0.45
22:BA:1107:G:N3	22:BA:1108:U:C6	2.84	0.45
22:BA:1223:G:N2	22:BA:1226:A:OP2	2.41	0.45
22:BA:1416:G:C4	22:BA:1417:C:C5	3.04	0.45
22:BA:154:U:H2'	22:BA:155:A:C8	2.50	0.45
22:BA:1588:G:N3	22:BA:1589:U:C6	2.84	0.45
22:BA:1410:G:C2	22:BA:1593:A:C2	3.04	0.45
22:BA:1606:C:O2'	22:BA:1607:C:O5'	2.34	0.45
22:BA:1655:A:C2	22:BA:1656:C:H1'	2.51	0.45
22:BA:1844:C:C6	22:BA:1844:C:C3'	3.00	0.45
22:BA:1853:A:C5	22:BA:1889:A:C6	3.04	0.45
22:BA:2001:C:C2	22:BA:2002:G:C8	3.04	0.45
22:BA:187:G:C2	22:BA:210:C:O2	2.70	0.45
22:BA:2225:A:H4'	22:BA:2226:C:H6	1.82	0.45
22:BA:356:G:C6	22:BA:357:C:C4	3.04	0.45
22:BA:572:A:OP2	39:BR:80:ARG:NH2	2.46	0.45
22:BA:925:A:H2'	22:BA:926:G:O4'	2.16	0.45
23:BB:34:A:H2'	23:BB:35:C:OP2	2.17	0.45
23:BB:74:U:O2	43:BV:29:ILE:HD12	2.16	0.45
24:BC:103:ILE:O	24:BC:104:LEU:O	2.34	0.45
22:BA:2222:C:H4'	24:BC:184:GLU:OE1	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:32:VAL:CG2	26:BE:33:VAL:N	2.79	0.45
28:BG:1:SER:CA	28:BG:5:LYS:HG3	2.46	0.45
31:BJ:44:TYR:C	31:BJ:44:TYR:CD1	2.70	0.45
31:BJ:44:TYR:HB2	38:BQ:63:ARG:CG	2.47	0.45
34:BM:77:PRO:HB2	34:BM:80:VAL:HG12	1.99	0.45
41:BT:39:THR:HB	41:BT:42:GLU:N	2.25	0.45
42:BU:98:ASN:C	42:BU:98:ASN:OD1	2.55	0.45
22:BA:2356:U:H5''	44:BW:16:GLU:HG3	1.98	0.45
44:BW:18:LYS:HE3	44:BW:19:ARG:HG3	1.97	0.45
44:BW:19:ARG:NH2	44:BW:22:VAL:CG2	2.78	0.45
44:BW:49:ASN:ND2	44:BW:50:VAL:N	2.64	0.45
1:CA:119:A:H4'	1:CA:120:A:C8	2.51	0.45
1:CA:1309:G:C6	1:CA:1329:A:N1	2.85	0.45
1:CA:927:G:N1	1:CA:1391:U:C2	2.84	0.45
1:CA:461:A:O5'	1:CA:462:G:OP2	2.35	0.45
1:CA:587:G:C2	1:CA:755:G:C5	3.04	0.45
1:CA:617:G:C2	1:CA:624:C:C2	3.04	0.45
1:CA:693:G:O2'	1:CA:694:A:H5'	2.16	0.45
1:CA:711:G:C2'	1:CA:712:A:H5'	2.46	0.45
1:CA:780:A:H1'	1:CA:803:G:N2	2.32	0.45
1:CA:91:U:N1	1:CA:92:U:C5	2.85	0.45
2:CB:93:HIS:CE1	2:CB:145:ASN:ND2	2.84	0.45
2:CB:67:LEU:CD1	2:CB:157:PRO:HG3	2.47	0.45
2:CB:9:LEU:O	2:CB:10:LYS:CB	2.64	0.45
3:CC:85:LYS:C	3:CC:89:VAL:HG21	2.36	0.45
4:CD:167:PRO:HG2	4:CD:170:LEU:HD11	1.98	0.45
4:CD:184:LYS:H	4:CD:184:LYS:HG2	1.54	0.45
8:CH:12:ARG:HD3	8:CH:26:MET:CE	2.47	0.45
8:CH:46:GLU:N	8:CH:63:LYS:CG	2.80	0.45
1:CA:1147:C:O2	9:CI:17:ARG:NE	2.49	0.45
12:CL:75:GLU:C	12:CL:77:SER:H	2.19	0.45
3:CC:36:PHE:CZ	14:CN:91:GLU:O	2.66	0.45
19:CS:37:SER:O	19:CS:69:LYS:HA	2.16	0.45
21:CU:37:TYR:O	21:CU:38:GLU:HG3	2.16	0.45
52:D4:7:VAL:O	52:D4:8:LYS:CG	2.65	0.45
22:DA:1063:G:C2	22:DA:1064:C:N3	2.85	0.45
22:DA:1065:U:N3	22:DA:1074:G:C6	2.84	0.45
22:DA:1416:G:N2	22:DA:1417:C:C2	2.85	0.45
22:DA:1510:G:N2	22:DA:1511:G:C2	2.84	0.45
22:DA:155:A:C2'	22:DA:156:A:H5'	2.46	0.45
22:DA:1623:G:C6	22:DA:1624:U:C4	3.05	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1717:A:O2'	22:DA:1718:G:O4'	2.33	0.45
22:DA:1721:G:O2'	22:DA:1722:A:H8	1.99	0.45
22:DA:1723:G:C2'	22:DA:1724:G:H5'	2.47	0.45
22:DA:1737:G:C6	22:DA:1738:G:C2	3.05	0.45
22:DA:1835:G:C4	22:DA:1836:C:C5	3.04	0.45
22:DA:2060:A:H3'	26:DE:63:LYS:NZ	2.31	0.45
22:DA:2209:G:C6	22:DA:2210:U:O4	2.69	0.45
22:DA:2298:A:C6	22:DA:2321:U:C4	3.05	0.45
22:DA:2341:G:C5	22:DA:2342:C:C5	3.04	0.45
22:DA:2340:A:H2'	22:DA:2341:G:C8	2.51	0.45
22:DA:2378:A:C8	22:DA:2379:G:O4'	2.69	0.45
22:DA:2548:U:H2'	22:DA:2549:G:O4'	2.16	0.45
22:DA:2756:U:O4'	22:DA:2757:A:H5''	2.16	0.45
22:DA:296:U:H2'	22:DA:297:G:H8	1.81	0.45
22:DA:300:A:H2'	22:DA:301:G:C5'	2.47	0.45
22:DA:321:U:C2	26:DE:159:LEU:HD11	2.51	0.45
22:DA:397:U:O2'	22:DA:398:C:O5'	2.34	0.45
22:DA:467:G:C6	22:DA:468:G:N7	2.85	0.45
22:DA:479:A:H4'	22:DA:480:A:C5'	2.47	0.45
22:DA:763:G:C5	22:DA:765:C:C5	3.04	0.45
22:DA:91:A:HO2'	22:DA:92:U:H6	1.62	0.45
23:DB:58:A:O2'	23:DB:59:A:H5'	2.16	0.45
24:DC:105:ALA:HA	24:DC:106:PRO:HD3	1.67	0.45
22:DA:1566:A:C2	24:DC:212:TRP:CG	3.04	0.45
25:DD:117:GLY:HA2	25:DD:164:GLN:OE1	2.17	0.45
26:DE:40:ARG:HG2	26:DE:92:HIS:CG	2.51	0.45
27:DF:59:ILE:HG12	27:DF:137:PHE:CE1	2.51	0.45
23:DB:42:C:H42	27:DF:87:LYS:HD2	1.82	0.45
30:DI:32:VAL:HG22	30:DI:58:ILE:HG21	1.98	0.45
23:DB:9:G:OP2	36:DO:15:ARG:HD3	2.16	0.45
36:DO:20:GLU:O	36:DO:20:GLU:HG2	2.16	0.45
23:DB:48:U:H5'	36:DO:30:ARG:NH2	2.31	0.45
38:DQ:75:TYR:OH	38:DQ:92:LYS:HE3	2.17	0.45
45:DX:67:LEU:HD23	45:DX:77:TYR:CE2	2.50	0.45
1:AA:1090:U:H2'	1:AA:1091:U:H6	1.81	0.45
1:AA:1124:G:C3'	1:AA:1145:A:N6	2.77	0.45
1:AA:1181:G:C2	1:AA:1182:G:N2	2.84	0.45
1:AA:1285:A:H5'	1:AA:1286:U:C4	2.52	0.45
1:AA:1496:C:H2'	1:AA:1497:G:O4'	2.16	0.45
1:AA:1508:A:H2'	1:AA:1509:C:O4'	2.16	0.45
1:AA:1511:G:C5	1:AA:1512:U:C5	3.05	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:157:U:O2'	1:AA:158:G:H5'	2.17	0.45
1:AA:202:G:N2	1:AA:466:A:H61	2.14	0.45
1:AA:396:C:H3'	1:AA:397:A:H5''	1.98	0.45
1:AA:68:G:C6	1:AA:69:G:H1'	2.52	0.45
1:AA:880:C:H2'	1:AA:881:G:H8	1.81	0.45
1:AA:978:A:C1'	1:AA:1322:C:C5	3.00	0.45
2:AB:115:ASP:O	2:AB:119:GLN:HB3	2.16	0.45
3:AC:129:PHE:O	3:AC:133:MET:HG3	2.16	0.45
3:AC:183:TYR:OH	3:AC:198:LYS:HD3	2.17	0.45
3:AC:63:ILE:HG22	3:AC:98:ALA:HB2	1.99	0.45
3:AC:49:ALA:HB1	3:AC:75:VAL:HG22	1.97	0.45
4:AD:34:GLU:O	4:AD:36:ALA:N	2.44	0.45
4:AD:7:LYS:HG3	4:AD:8:LEU:HD22	1.98	0.45
5:AE:143:LEU:HA	5:AE:143:LEU:HD23	1.79	0.45
6:AF:66:ALA:CB	6:AF:67:PRO:HD2	2.44	0.45
6:AF:90:MET:HB3	6:AF:91:ARG:H	1.48	0.45
7:AG:25:PHE:CE1	7:AG:104:VAL:CG2	3.00	0.45
8:AH:40:LYS:O	8:AH:42:GLU:N	2.50	0.45
11:AK:108:ASN:CG	21:AU:6:ARG:HG2	2.37	0.45
12:AL:53:ARG:HA	12:AL:63:THR:HA	1.99	0.45
14:AN:44:VAL:C	14:AN:46:LYS:H	2.18	0.45
17:AQ:47:ASP:O	17:AQ:48:GLU:C	2.55	0.45
19:AS:40:PHE:HB3	19:AS:42:ASN:HD22	1.82	0.45
19:AS:62:THR:HG22	19:AS:63:ASP:N	2.30	0.45
22:BA:1056:G:O2'	22:BA:1086:A:C8	2.70	0.45
22:BA:1256:G:H21	26:BE:77:ILE:HG13	1.80	0.45
22:BA:1275:A:H4'	22:BA:1276:A:O5'	2.17	0.45
22:BA:1360:G:P	56:BA:3614:HOH:O	2.74	0.45
22:BA:1394:U:C2'	22:BA:1395:A:O5'	2.65	0.45
22:BA:1594:U:H2'	22:BA:1595:C:C6	2.51	0.45
22:BA:1681:G:H4'	22:BA:1763:G:C8	2.51	0.45
22:BA:570:G:H2'	22:BA:2030:A:C8	2.51	0.45
22:BA:2151:U:N3	22:BA:2152:G:C5	2.84	0.45
22:BA:2325:G:C6	22:BA:2326:C:C4	3.04	0.45
22:BA:239:C:O2'	22:BA:240:C:H5'	2.17	0.45
22:BA:2461:A:H1'	22:BA:2492:U:C2	2.52	0.45
22:BA:2573:C:H2'	56:BA:3709:HOH:O	2.17	0.45
22:BA:279:A:H2'	22:BA:280:U:O4'	2.15	0.45
22:BA:573:U:O2'	22:BA:574:A:H3'	2.17	0.45
22:BA:686:U:C4'	22:BA:687:C:OP2	2.59	0.45
22:BA:718:A:H2'	22:BA:719:C:H5'	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:861:A:C2	22:BA:917:A:C4	3.04	0.45
22:BA:923:G:N2	44:BW:23:LYS:HE2	2.31	0.45
25:BD:107:VAL:HG12	25:BD:107:VAL:O	2.15	0.45
25:BD:14:ILE:HA	37:BP:11:GLN:NE2	2.15	0.45
25:BD:106:LYS:CB	25:BD:206:ALA:H	2.30	0.45
26:BE:108:ILE:HD13	26:BE:180:LEU:HD13	1.99	0.45
28:BG:167:VAL:O	28:BG:168:VAL:C	2.53	0.45
29:BH:3:VAL:CA	29:BH:37:VAL:O	2.63	0.45
34:BM:78:LEU:O	34:BM:80:VAL:N	2.49	0.45
36:BO:25:ARG:HG3	36:BO:27:VAL:CG2	2.47	0.45
36:BO:36:TYR:CD2	36:BO:36:TYR:N	2.84	0.45
37:BP:88:ARG:CG	37:BP:112:ARG:NH2	2.80	0.45
39:BR:24:LYS:HA	39:BR:94:THR:CG2	2.37	0.45
44:BW:23:LYS:HG3	44:BW:24:ARG:N	2.28	0.45
44:BW:18:LYS:H	44:BW:36:ILE:HG12	1.79	0.45
45:BX:34:SER:H	45:BX:50:VAL:H	1.65	0.45
46:BY:57:LEU:CA	46:BY:60:LYS:CB	2.91	0.45
47:BZ:16:LEU:HD23	47:BZ:16:LEU:HA	1.17	0.45
1:CA:1256:A:N9	1:CA:1278:G:C6	2.85	0.45
1:CA:1279:G:H2'	10:CJ:45:ARG:NH2	2.31	0.45
1:CA:128:G:N2	1:CA:129:A:N3	2.64	0.45
1:CA:134:G:O2'	1:CA:135:C:H5'	2.15	0.45
1:CA:330:C:H6	1:CA:330:C:H5'	1.81	0.45
1:CA:375:U:C2	1:CA:376:G:C8	3.05	0.45
1:CA:411:A:H4'	1:CA:412:A:OP1	2.16	0.45
1:CA:591:U:H2'	1:CA:592:G:O4'	2.17	0.45
1:CA:6:G:O2'	1:CA:7:A:P	2.75	0.45
1:CA:765:G:C4	1:CA:812:G:N1	2.84	0.45
1:CA:769:G:O2'	1:CA:770:C:H5'	2.17	0.45
1:CA:905:U:H5''	1:CA:906:A:OP2	2.16	0.45
1:CA:929:G:C4	1:CA:930:C:C5	3.05	0.45
1:CA:945:G:H1'	1:CA:1337:G:O2'	2.16	0.45
3:CC:32:LEU:O	3:CC:36:PHE:CD2	2.70	0.45
4:CD:84:ASN:HB3	4:CD:87:GLU:HG3	1.98	0.45
6:CF:52:ASN:C	6:CF:54:LEU:H	2.19	0.45
7:CG:69:ARG:HH11	7:CG:95:ARG:NH1	2.14	0.45
9:CI:96:GLU:O	9:CI:99:LYS:HG2	2.17	0.45
12:CL:108:ASP:O	12:CL:110:LYS:HD3	2.17	0.45
16:CP:30:GLY:O	16:CP:32:PHE:N	2.50	0.45
20:CT:30:PHE:CD1	20:CT:56:ILE:HD12	2.50	0.45
21:CU:33:ARG:NH2	21:CU:34:ARG:HD3	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:CU:37:TYR:O	21:CU:38:GLU:CG	2.65	0.45
22:DA:684:G:OP1	50:D2:16:HIS:CD2	2.69	0.45
52:D4:27:CYS:SG	52:D4:30:GLU:O	2.74	0.45
22:DA:76:C:N3	22:DA:111:A:C2	2.84	0.45
22:DA:1255:U:O2'	22:DA:1256:G:P	2.74	0.45
22:DA:1289:C:C5'	22:DA:1289:C:H6	2.29	0.45
22:DA:1326:U:O2'	22:DA:1327:A:O5'	2.33	0.45
22:DA:1327:A:C2'	22:DA:1328:A:C8	2.91	0.45
22:DA:1340:U:C4'	22:DA:1340:U:OP1	2.60	0.45
22:DA:1354:A:H2'	22:DA:1355:G:O4'	2.15	0.45
22:DA:1574:C:H2'	22:DA:1575:C:O4'	2.16	0.45
22:DA:1717:A:C6	22:DA:1744:A:C5	3.04	0.45
22:DA:2083:G:H2'	22:DA:2084:C:H5'	1.98	0.45
22:DA:2206:C:N3	22:DA:2207:C:C5	2.85	0.45
22:DA:2260:C:H2'	22:DA:2261:C:C6	2.50	0.45
22:DA:2279:G:N2	22:DA:2327:A:C2	2.85	0.45
22:DA:2345:G:C6	22:DA:2347:C:N4	2.77	0.45
22:DA:2408:U:O2'	22:DA:2409:G:C8	2.70	0.45
22:DA:961:C:C5	22:DA:2456:C:H5'	2.51	0.45
22:DA:2550:G:N2	22:DA:2559:C:O2	2.50	0.45
22:DA:1050:A:C2	22:DA:2751:G:C2	3.05	0.45
22:DA:2854:G:C2	22:DA:2864:G:C2	3.05	0.45
22:DA:298:G:O3'	22:DA:299:A:H8	2.00	0.45
22:DA:301:G:C4	22:DA:302:C:N4	2.85	0.45
22:DA:406:G:H2'	22:DA:407:G:C8	2.52	0.45
22:DA:560:C:O2'	22:DA:561:G:H5'	2.15	0.45
22:DA:604:G:C6	22:DA:625:G:C6	3.05	0.45
22:DA:653:U:H2'	22:DA:653:U:O2	2.17	0.45
22:DA:688:U:O2'	22:DA:689:A:H5'	2.16	0.45
22:DA:749:A:C6	22:DA:1618:A:C2	3.03	0.45
22:DA:78:U:HO2'	22:DA:79:C:H6	1.62	0.45
23:DB:114:C:N4	23:DB:115:A:N6	2.65	0.45
25:DD:107:VAL:CG1	25:DD:109:VAL:CG2	2.92	0.45
26:DE:175:ILE:O	26:DE:175:ILE:CG2	2.65	0.45
27:DF:105:ILE:C	27:DF:108:PRO:HD2	2.37	0.45
22:DA:2761:A:H1'	28:DG:142:GLN:NE2	2.30	0.45
28:DG:152:ARG:HD2	28:DG:153:PRO:HD3	1.97	0.45
32:DK:2:ILE:N	32:DK:2:ILE:HD13	2.31	0.45
32:DK:76:VAL:HG12	32:DK:77:ILE:N	2.32	0.45
33:DL:100:ILE:N	56:DL:204:HOH:O	2.49	0.45
33:DL:111:ILE:O	33:DL:131:ALA:CB	2.63	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:96:LYS:C	33:DL:98:ALA:H	2.20	0.45
36:DO:76:LYS:O	36:DO:76:LYS:HG3	2.16	0.45
22:DA:1223:G:OP2	39:DR:90:ARG:NH1	2.50	0.45
43:DV:16:ALA:CB	43:DV:19:ARG:NH2	2.79	0.45
43:DV:75:GLN:HG3	43:DV:92:VAL:CG1	2.46	0.45
46:DY:58:ASN:C	46:DY:60:LYS:N	2.69	0.45
47:DZ:18:LYS:O	47:DZ:21:ALA:HB3	2.16	0.45
1:AA:1215:G:HO2'	1:AA:1216:A:H5'	1.80	0.45
1:AA:1324:A:H5'	1:AA:1362:A:O2'	2.16	0.45
1:AA:215:C:H2'	1:AA:216:U:C6	2.51	0.45
1:AA:489:C:H2'	1:AA:490:C:O5'	2.16	0.45
1:AA:528:C:H5'	1:AA:529:G:OP2	2.16	0.45
2:AB:186:VAL:O	2:AB:186:VAL:HG23	2.16	0.45
4:AD:11:SER:CA	4:AD:18:LEU:HD12	2.40	0.45
10:AJ:26:VAL:O	10:AJ:29:ALA:HB3	2.16	0.45
10:AJ:91:ASP:OD1	10:AJ:91:ASP:N	2.49	0.45
12:AL:33:CYS:H	12:AL:54:VAL:CG1	2.27	0.45
12:AL:35:ARG:CB	12:AL:37:TYR:CE1	2.99	0.45
14:AN:19:TYR:HB2	14:AN:54:SER:OG	2.17	0.45
18:AR:22:TYR:CA	18:AR:57:ALA:HB1	2.47	0.45
19:AS:80:ARG:O	19:AS:80:ARG:HG3	2.16	0.45
20:AT:38:ILE:HG12	20:AT:38:ILE:H	1.42	0.45
22:BA:1826:G:C5	22:BA:1827:U:C5	3.04	0.45
22:BA:1858:A:OP2	22:BA:1858:A:H8	2.00	0.45
22:BA:1859:U:H2'	22:BA:1860:G:H8	1.82	0.45
22:BA:2139:U:O2	22:BA:2152:G:N2	2.50	0.45
22:BA:2243:U:O2	22:BA:2434:A:C2	2.70	0.45
22:BA:2466:C:C5'	52:B4:5:ALA:HB3	2.46	0.45
22:BA:2808:G:O2'	22:BA:2809:A:OP2	2.34	0.45
22:BA:312:G:H2'	22:BA:313:G:H8	1.82	0.45
22:BA:360:U:H5''	22:BA:361:G:OP1	2.16	0.45
22:BA:478:A:N6	22:BA:480:A:C6	2.84	0.45
22:BA:528:A:C2	22:BA:2042:A:H2'	2.51	0.45
22:BA:544:C:H3'	22:BA:545:U:O2	2.16	0.45
22:BA:567:U:C2'	22:BA:568:U:O5'	2.65	0.45
22:BA:735:A:H3'	22:BA:736:C:C6	2.51	0.45
22:BA:777:G:H2'	22:BA:778:G:H8	1.82	0.45
22:BA:825:A:C2'	22:BA:826:U:H5'	2.47	0.45
23:BB:33:G:C2'	23:BB:34:A:H5'	2.47	0.45
24:BC:12:ARG:HD2	24:BC:12:ARG:HA	1.82	0.45
24:BC:252:LYS:HZ2	24:BC:252:LYS:CA	2.28	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:76:VAL:HG22	24:BC:76:VAL:O	2.14	0.45
24:BC:94:LEU:HD12	24:BC:95:TYR:H	1.81	0.45
25:BD:148:GLN:N	25:BD:148:GLN:OE1	2.50	0.45
26:BE:112:LEU:CD1	26:BE:186:VAL:HG11	2.34	0.45
26:BE:7:ASP:CG	26:BE:8:ALA:N	2.69	0.45
28:BG:166:GLU:OE2	28:BG:167:VAL:N	2.49	0.45
28:BG:27:GLY:O	28:BG:28:LYS:C	2.54	0.45
28:BG:85:LYS:HA	28:BG:130:ILE:O	2.16	0.45
29:BH:68:ARG:HH12	29:BH:140:ALA:HB1	1.82	0.45
32:BK:40:LYS:HG3	32:BK:41:ILE:N	2.32	0.45
33:BL:29:LYS:C	33:BL:30:THR:HG23	2.37	0.45
34:BM:6:ARG:O	34:BM:7:THR:HG23	2.16	0.45
36:BO:14:ALA:O	36:BO:15:ARG:C	2.54	0.45
39:BR:41:ILE:HG22	39:BR:42:ALA:N	2.32	0.45
44:BW:18:LYS:H	44:BW:36:ILE:CG1	2.30	0.45
45:BX:30:PRO:CB	45:BX:32:LEU:CD1	2.58	0.45
1:CA:110:C:H2'	1:CA:111:G:H8	1.75	0.45
1:CA:129:A:O2'	1:CA:130:A:H8	1.95	0.45
1:CA:934:C:H5	1:CA:1344:C:N3	2.15	0.45
1:CA:239:U:C6	1:CA:239:U:C4'	2.99	0.45
1:CA:483:C:H2'	1:CA:484:G:C8	2.51	0.45
1:CA:669:G:N2	1:CA:738:C:C2	2.84	0.45
1:CA:763:G:C4	1:CA:764:C:C6	3.04	0.45
1:CA:765:G:C6	1:CA:812:G:C5	3.04	0.45
1:CA:84:U:C2'	1:CA:85:U:H5'	2.46	0.45
2:CB:96:LEU:H	2:CB:99:MET:HE3	1.81	0.45
2:CB:9:LEU:N	2:CB:9:LEU:HD23	2.30	0.45
5:CE:109:ALA:HB3	5:CE:135:VAL:HG11	1.99	0.45
6:CF:62:MET:O	6:CF:63:ASN:HB2	2.16	0.45
1:CA:940:C:C5'	7:CG:101:ARG:NH2	2.76	0.45
8:CH:28:SER:N	8:CH:57:GLU:O	2.48	0.45
11:CK:64:VAL:CG2	11:CK:65:ALA:N	2.79	0.45
13:CM:95:PRO:CD	13:CM:108:ARG:HG2	2.33	0.45
19:CS:79:TYR:CD1	19:CS:80:ARG:HD2	2.51	0.45
22:DA:1263:U:H4'	48:D0:6:LYS:HE3	1.98	0.45
22:DA:1011:G:O2'	22:DA:1012:U:OP1	2.31	0.45
22:DA:1043:C:N4	22:DA:1044:C:C5	2.85	0.45
22:DA:1193:G:N2	22:DA:1194:A:C4	2.84	0.45
22:DA:1452:G:C4	22:DA:2702:G:C6	3.05	0.45
22:DA:1603:A:C2	22:DA:1604:C:H1'	2.52	0.45
22:DA:1789:A:H2'	22:DA:1790:C:O4'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:193:U:O3'	22:DA:803:U:H4'	2.16	0.45
22:DA:1954:G:O2'	22:DA:1955:U:OP2	2.35	0.45
22:DA:1982:U:H6	22:DA:1982:U:C5'	2.29	0.45
22:DA:197:A:O2'	22:DA:2244:U:OP1	2.34	0.45
22:DA:2443:C:C2'	22:DA:2444:G:O4'	2.64	0.45
22:DA:2622:U:O2'	22:DA:2824:C:N4	2.50	0.45
22:DA:2818:U:OP1	22:DA:2837:A:H1'	2.17	0.45
22:DA:292:U:H2'	22:DA:293:U:C6	2.51	0.45
22:DA:416:U:N3	22:DA:417:C:C4	2.85	0.45
22:DA:476:G:O2'	22:DA:477:A:O5'	2.32	0.45
22:DA:582:A:C6	22:DA:583:G:C6	3.04	0.45
22:DA:686:U:OP2	56:DA:3703:HOH:O	2.21	0.45
22:DA:754:U:H2'	22:DA:755:U:C6	2.52	0.45
22:DA:971:G:H2'	22:DA:972:A:C5'	2.45	0.45
23:DB:109:A:O2'	23:DB:110:C:C6	2.54	0.45
23:DB:38:C:C4'	36:DO:100:HIS:NE2	2.78	0.45
24:DC:176:ARG:C	24:DC:178:GLY:N	2.69	0.45
24:DC:2:VAL:O	24:DC:3:VAL:CB	2.64	0.45
24:DC:32:LEU:HD23	24:DC:63:ILE:HG13	1.99	0.45
24:DC:75:ALA:HA	24:DC:95:TYR:HA	1.97	0.45
27:DF:39:VAL:HG13	27:DF:49:LEU:HD21	1.95	0.45
28:DG:1:SER:HB2	28:DG:61:TRP:HB3	1.98	0.45
30:DI:49:GLU:HG3	30:DI:54:ILE:HD11	1.97	0.45
22:DA:1070:A:H61	30:DI:8:VAL:HG12	1.78	0.45
32:DK:104:THR:C	32:DK:106:GLU:N	2.69	0.45
32:DK:87:LEU:O	32:DK:89:ASN:N	2.50	0.45
33:DL:116:VAL:CG1	33:DL:117:THR:H	2.30	0.45
33:DL:124:GLY:H	33:DL:143:GLU:CG	2.29	0.45
36:DO:75:GLY:HA3	36:DO:109:ALA:O	2.17	0.45
36:DO:30:ARG:HG3	36:DO:35:ILE:HD11	1.98	0.45
22:DA:2296:U:C5	36:DO:9:ARG:NH2	2.81	0.45
39:DR:66:HIS:CD2	39:DR:94:THR:CG2	3.00	0.45
39:DR:89:HIS:O	39:DR:89:HIS:CD2	2.70	0.45
41:DT:11:LEU:CD1	41:DT:11:LEU:H	2.24	0.45
41:DT:28:ASN:C	41:DT:29:THR:HG22	2.37	0.45
42:DU:100:GLU:O	42:DU:101:THR:C	2.55	0.45
42:DU:38:ILE:HG21	42:DU:64:ILE:HD13	1.98	0.45
45:DX:17:ARG:NH1	45:DX:23:ALA:HB2	2.32	0.45
45:DX:40:GLU:O	45:DX:43:LYS:N	2.50	0.45
1:AA:1064:G:O4'	1:AA:1066:C:C6	2.69	0.45
1:AA:1202:U:C6	1:AA:1203:C:C5	3.04	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1269:A:C8	1:AA:1270:G:H1'	2.52	0.45
1:AA:1270:G:O3'	1:AA:1314:C:H5'	2.17	0.45
1:AA:1405:G:H1'	1:AA:1519:A:O4'	2.17	0.45
1:AA:173:U:C2	1:AA:197:A:N1	2.84	0.45
1:AA:32:A:C2	1:AA:33:A:C5	3.04	0.45
1:AA:396:C:C3'	1:AA:397:A:H5''	2.46	0.45
1:AA:533:A:C3'	1:AA:534:U:H5''	2.47	0.45
1:AA:665:A:N9	1:AA:733:G:H1'	2.32	0.45
2:AB:221:ARG:HG2	2:AB:221:ARG:O	2.16	0.45
3:AC:71:ARG:N	3:AC:72:PRO:CD	2.80	0.45
6:AF:38:ARG:HB3	6:AF:63:ASN:CB	2.26	0.45
7:AG:107:ALA:HA	7:AG:122:GLU:HG3	1.98	0.45
7:AG:90:VAL:HG22	7:AG:91:ARG:N	2.32	0.45
8:AH:4:ASP:OD2	8:AH:76:ARG:NH1	2.50	0.45
10:AJ:17:LEU:HD21	10:AJ:96:VAL:HG22	1.98	0.45
14:AN:64:ARG:HB2	14:AN:77:GLY:O	2.17	0.45
17:AQ:67:SER:O	17:AQ:68:LYS:C	2.55	0.45
48:B0:33:SER:O	48:B0:34:GLY:C	2.54	0.45
22:BA:103:A:H2'	22:BA:104:A:H8	1.81	0.45
22:BA:1379:U:H5'	22:BA:1379:U:H6	1.81	0.45
22:BA:1450:G:C4	22:BA:1451:C:C5	3.05	0.45
22:BA:1486:U:C2'	22:BA:1487:U:H5'	2.47	0.45
22:BA:1595:C:H6	22:BA:1595:C:O5'	1.99	0.45
22:BA:1682:G:H2'	22:BA:1683:U:H6	1.78	0.45
22:BA:1687:G:H2'	22:BA:1688:U:C6	2.52	0.45
22:BA:1822:C:H6	22:BA:1822:C:O5'	2.00	0.45
22:BA:1866:A:O2'	22:BA:1867:G:C5'	2.64	0.45
22:BA:1950:G:H5''	22:BA:1951:U:OP2	2.17	0.45
22:BA:1997:C:H6	22:BA:1997:C:C5'	2.30	0.45
22:BA:2063:C:C2'	22:BA:2064:C:H5'	2.47	0.45
22:BA:2081:U:H2'	22:BA:2082:A:C8	2.52	0.45
22:BA:2340:A:H2'	22:BA:2341:G:H8	1.80	0.45
22:BA:2645:G:C3'	22:BA:2646:C:H5'	2.45	0.45
22:BA:26:G:C6	22:BA:27:G:N1	2.85	0.45
22:BA:2865:U:C2	22:BA:2866:U:C5	3.05	0.45
22:BA:341:C:H2'	22:BA:342:A:O4'	2.17	0.45
23:BB:53:A:O2'	23:BB:54:G:C5'	2.57	0.45
23:BB:5:U:H2'	23:BB:6:G:C8	2.52	0.45
24:BC:257:ARG:CD	24:BC:269:ARG:HH22	2.29	0.45
28:BG:131:VAL:HG23	28:BG:131:VAL:O	2.16	0.45
22:BA:1064:C:H4'	30:BI:89:SER:HB2	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:13:ARG:O	31:BJ:14:ASP:CB	2.60	0.45
35:BN:103:ARG:NE	35:BN:110:MET:CE	2.80	0.45
44:BW:28:GLU:HB3	44:BW:31:LEU:CG	2.46	0.45
1:CA:1128:C:H1'	1:CA:1148:U:O4	2.15	0.45
1:CA:1297:G:O2'	7:CG:113:LYS:HE3	2.16	0.45
1:CA:1322:C:O2	1:CA:1322:C:C2'	2.61	0.45
1:CA:1304:G:C2'	1:CA:1333:A:H61	2.30	0.45
1:CA:1431:A:C6	1:CA:1432:G:C6	3.04	0.45
1:CA:206:C:O5'	1:CA:207:C:OP2	2.35	0.45
1:CA:21:G:H1'	1:CA:915:A:N6	2.32	0.45
1:CA:277:C:C2'	1:CA:278:G:H8	2.20	0.45
1:CA:340:U:C2	1:CA:350:G:N2	2.85	0.45
1:CA:47:C:O2'	1:CA:48:C:C5'	2.59	0.45
1:CA:524:G:C4	1:CA:525:C:C5	3.05	0.45
1:CA:560:A:C5	5:CE:127:TYR:CE2	3.05	0.45
1:CA:608:A:H2'	1:CA:609:A:O4'	2.16	0.45
1:CA:587:G:C2	1:CA:755:G:C6	3.05	0.45
1:CA:835:U:C2	1:CA:852:G:C6	3.05	0.45
1:CA:996:A:C2	1:CA:997:U:C4	3.05	0.45
2:CB:162:VAL:HG11	2:CB:172:ILE:HD11	1.97	0.45
5:CE:25:LYS:HZ3	5:CE:25:LYS:HB2	1.80	0.45
5:CE:98:ALA:O	5:CE:121:ASN:HB2	2.17	0.45
6:CF:45:ARG:O	6:CF:56:LYS:HA	2.17	0.45
8:CH:65:PHE:CE2	8:CH:66:GLN:HG2	2.50	0.45
9:CI:98:ARG:HG2	9:CI:103:VAL:HG21	1.98	0.45
12:CL:89:LEU:CB	12:CL:92:VAL:CG2	2.79	0.45
15:CO:22:GLY:O	15:CO:23:SER:C	2.53	0.45
16:CP:48:GLU:CD	16:CP:51:ARG:HB2	2.37	0.45
18:CR:39:VAL:HG13	18:CR:40:PRO:CD	2.39	0.45
19:CS:5:LYS:HB2	19:CS:6:LYS:H	1.59	0.45
20:CT:2:ASN:O	20:CT:3:ILE:C	2.54	0.45
51:D3:30:HIS:HB3	51:D3:31:ILE:H	1.39	0.45
22:DA:1042:G:C5	22:DA:1043:C:C4	3.04	0.45
22:DA:1238:G:C2'	22:DA:1239:G:H5'	2.47	0.45
22:DA:1359:A:C2	22:DA:1360:G:O4'	2.70	0.45
22:DA:156:A:H3'	22:DA:156:A:OP2	2.16	0.45
22:DA:1587:G:N2	22:DA:1588:G:C1'	2.80	0.45
22:DA:1823:G:C5'	56:DC:410:HOH:O	2.62	0.45
22:DA:2217:G:O2'	22:DA:2218:G:O5'	2.35	0.45
22:DA:2394:C:H41	51:D3:30:HIS:HE1	1.62	0.45
22:DA:2467:C:N4	22:DA:2468:A:N1	2.65	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2478:A:H2'	22:DA:2479:U:O4'	2.17	0.45
22:DA:2816:G:H1'	48:D0:40:HIS:CD2	2.52	0.45
22:DA:2843:G:H2'	22:DA:2844:G:C8	2.51	0.45
22:DA:2902:C:O2'	22:DA:2903:U:H5'	2.15	0.45
22:DA:478:A:C6	22:DA:480:A:C6	3.05	0.45
22:DA:558:U:H4'	31:DJ:111:LYS:NZ	2.31	0.45
22:DA:621:A:C2	22:DA:622:G:H1'	2.52	0.45
22:DA:734:A:C5	22:DA:735:A:C8	3.05	0.45
22:DA:812:C:H42	22:DA:1195:G:H1	1.63	0.45
22:DA:935:C:O2'	22:DA:936:A:H5'	2.17	0.45
23:DB:87:U:O2'	23:DB:88:C:OP1	2.31	0.45
25:DD:110:THR:HG23	25:DD:171:THR:CA	2.47	0.45
25:DD:50:VAL:HG21	25:DD:82:PHE:CD2	2.51	0.45
26:DE:139:LYS:HZ3	26:DE:139:LYS:HB2	1.78	0.45
27:DF:58:ALA:HB1	27:DF:139:GLU:HG2	1.99	0.45
27:DF:39:VAL:CB	27:DF:49:LEU:HG	2.47	0.45
28:DG:10:VAL:HG23	28:DG:10:VAL:O	2.17	0.45
28:DG:124:CYS:CB	28:DG:130:ILE:HA	2.38	0.45
28:DG:161:VAL:HG12	28:DG:161:VAL:O	2.16	0.45
29:DH:94:ILE:CB	29:DH:98:ASP:HB2	2.46	0.45
32:DK:60:ALA:CB	32:DK:86:LEU:HA	2.47	0.45
33:DL:47:ARG:H	33:DL:47:ARG:HG3	1.56	0.45
34:DM:36:VAL:O	34:DM:127:LYS:O	2.35	0.45
34:DM:69:PRO:O	34:DM:70:ASP:CB	2.62	0.45
35:DN:10:LEU:HA	35:DN:10:LEU:HD13	1.72	0.45
37:DP:4:ILE:O	37:DP:4:ILE:HG22	2.16	0.45
1:AA:1091:U:C2	1:AA:1095:U:C4	3.05	0.45
1:AA:1197:A:OP2	56:AA:1782:HOH:O	2.21	0.45
1:AA:945:G:H21	1:AA:1334:G:H4'	1.81	0.45
1:AA:1532:U:O2	1:AA:1534:A:H8	1.99	0.45
1:AA:267:C:HO2'	1:AA:268:U:H6	1.64	0.45
1:AA:215:C:O2	1:AA:465:A:N6	2.50	0.45
1:AA:468:A:H2'	1:AA:469:C:C6	2.52	0.45
1:AA:596:A:C5'	1:AA:596:A:C8	2.99	0.45
1:AA:82:G:N2	1:AA:84:U:H3	2.15	0.45
2:AB:46:VAL:CB	2:AB:47:PRO:HD3	2.18	0.45
6:AF:34:GLY:C	6:AF:35:LYS:HG2	2.37	0.45
8:AH:14:ARG:HB2	8:AH:74:ILE:HG22	1.98	0.45
10:AJ:35:GLN:HG2	10:AJ:77:VAL:CG1	2.46	0.45
10:AJ:71:LEU:O	10:AJ:72:ARG:HD3	2.17	0.45
10:AJ:77:VAL:O	10:AJ:79:PRO:HD2	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:24:GLU:OE1	12:AL:29:LYS:NZ	2.50	0.45
14:AN:15:LEU:HD23	14:AN:18:LYS:CD	2.29	0.45
17:AQ:13:SER:HB3	17:AQ:16:MET:HE1	1.98	0.45
17:AQ:45:VAL:HA	17:AQ:72:TRP:O	2.17	0.45
18:AR:53:GLN:O	18:AR:56:ARG:HB3	2.17	0.45
20:AT:47:GLN:HE21	20:AT:82:ILE:HD13	1.80	0.45
21:AU:24:LYS:O	21:AU:26:GLY:N	2.50	0.45
52:B4:26:ILE:HD13	52:B4:26:ILE:N	2.31	0.45
52:B4:1:MET:CE	52:B4:34:LYS:HG2	2.46	0.45
22:BA:1060:U:C5'	22:BA:1061:U:OP1	2.62	0.45
22:BA:1319:C:O2'	22:BA:1320:C:H5'	2.17	0.45
22:BA:1326:U:C2'	22:BA:1327:A:H5'	2.46	0.45
22:BA:1343:G:H2'	22:BA:1344:U:C6	2.52	0.45
22:BA:1644:C:HO2'	22:BA:1645:G:H5'	1.76	0.45
22:BA:1850:G:C5	22:BA:1851:U:C5	3.04	0.45
22:BA:2417:C:H2'	22:BA:2418:A:O5'	2.17	0.45
22:BA:2531:A:OP1	28:BG:174:LYS:CG	2.65	0.45
22:BA:2547:A:C2	22:BA:2562:U:C2	3.04	0.45
22:BA:544:C:N4	22:BA:548:G:OP1	2.50	0.45
22:BA:645:C:N4	22:BA:2350:C:C4'	2.80	0.45
22:BA:659:G:C5	22:BA:660:C:C4	3.05	0.45
22:BA:847:U:O2	22:BA:934:U:H1'	2.17	0.45
23:BB:57:A:H2'	23:BB:58:A:C8	2.52	0.45
24:BC:116:GLN:N	24:BC:127:ASN:OD1	2.44	0.45
24:BC:141:HIS:CD2	24:BC:194:VAL:N	2.85	0.45
24:BC:170:TYR:HD2	24:BC:183:VAL:C	2.21	0.45
24:BC:229:HIS:O	24:BC:231:HIS:O	2.35	0.45
25:BD:77:ARG:HD3	25:BD:200:ASP:OD1	2.16	0.45
26:BE:8:ALA:O	26:BE:9:GLN:C	2.54	0.45
30:BI:52:LEU:HD12	30:BI:52:LEU:N	2.32	0.45
31:BJ:40:HIS:N	31:BJ:40:HIS:CD2	2.85	0.45
32:BK:47:ILE:HD12	32:BK:47:ILE:HA	1.78	0.45
34:BM:21:ALA:HB3	34:BM:100:LYS:N	2.32	0.45
35:BN:67:PHE:HE2	35:BN:71:ARG:NH1	2.14	0.45
37:BP:31:VAL:HG22	37:BP:32:VAL:N	2.31	0.45
39:BR:24:LYS:HE2	39:BR:24:LYS:HB3	1.64	0.45
22:BA:1223:G:P	39:BR:68:ARG:HH12	2.40	0.45
41:BT:2:ILE:HG13	41:BT:3:ARG:NH2	2.32	0.45
41:BT:37:ASP:OD2	41:BT:37:ASP:N	2.49	0.45
42:BU:10:VAL:CG2	42:BU:69:VAL:HB	2.47	0.45
43:BV:2:PHE:HD1	43:BV:50:MET:HE2	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:6:ALA:HB1	43:BV:41:GLU:O	2.16	0.45
44:BW:36:ILE:O	44:BW:39:GLN:HB3	2.16	0.45
45:BX:77:TYR:C	45:BX:77:TYR:CD1	2.90	0.45
1:CA:1158:C:N3	1:CA:1160:G:C8	2.85	0.45
1:CA:1210:C:C2'	1:CA:1211:U:O5'	2.65	0.45
1:CA:1250:A:C5	1:CA:1287:A:N7	2.85	0.45
1:CA:1361:G:C2'	1:CA:1362:A:H5'	2.39	0.45
1:CA:1508:A:H2'	1:CA:1509:C:O4'	2.16	0.45
1:CA:1499:A:H1'	1:CA:1520:C:H5'	1.99	0.45
1:CA:186:C:O2'	1:CA:187:G:H5'	2.17	0.45
1:CA:247:G:C2	1:CA:248:C:C4	3.05	0.45
1:CA:588:G:N2	1:CA:589:U:H1'	2.31	0.45
1:CA:6:G:O6	5:CE:99:SER:HB2	2.17	0.45
1:CA:764:C:O2	1:CA:764:C:C2'	2.54	0.45
2:CB:162:VAL:HG11	2:CB:172:ILE:CD1	2.47	0.45
3:CC:74:ILE:O	3:CC:74:ILE:HG12	2.17	0.45
7:CG:48:THR:HG22	7:CG:121:ASN:OD1	2.17	0.45
8:CH:82:LEU:HD12	12:CL:3:VAL:HG11	1.99	0.45
9:CI:29:ILE:CD1	9:CI:38:PHE:CE1	2.99	0.45
10:CJ:81:GLU:C	10:CJ:83:THR:H	2.19	0.45
11:CK:123:PRO:HB2	11:CK:125:LYS:CG	2.47	0.45
11:CK:34:THR:HG1	11:CK:35:ASP:H	1.65	0.45
12:CL:43:LYS:HB3	12:CL:44:PRO:CD	2.29	0.45
12:CL:5:GLN:HG3	12:CL:9:LYS:HZ2	1.81	0.45
14:CN:31:SER:OG	14:CN:45:LEU:HD13	2.17	0.45
14:CN:52:ARG:HH21	14:CN:58:ARG:NE	2.15	0.45
17:CQ:58:VAL:HB	17:CQ:74:LEU:HD12	1.96	0.45
19:CS:5:LYS:HE3	19:CS:6:LYS:N	2.32	0.45
20:CT:60:GLN:CD	20:CT:65:LEU:HD12	2.37	0.45
1:CA:261:U:H5	20:CT:73:ARG:NE	2.12	0.45
21:CU:33:ARG:CZ	21:CU:34:ARG:HB2	2.47	0.45
48:D0:42:ILE:HD11	48:D0:48:TYR:CB	2.37	0.45
22:DA:1056:G:O5'	22:DA:1085:A:C2	2.70	0.45
22:DA:120:U:C1'	22:DA:149:A:C8	2.97	0.45
22:DA:1373:A:H4'	22:DA:2212:A:H1'	1.99	0.45
22:DA:121:G:H1'	22:DA:148:U:C2	2.52	0.45
22:DA:1536:C:H5''	22:DA:1537:G:C5'	2.47	0.45
22:DA:1549:A:C6	22:DA:1550:C:N3	2.85	0.45
22:DA:1654:A:O2'	22:DA:1655:A:P	2.74	0.45
22:DA:1713:A:H4'	22:DA:1714:U:OP1	2.15	0.45
22:DA:1838:C:C4	22:DA:1899:A:C4	3.05	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1876:A:H2'	22:DA:1876:A:N3	2.31	0.45
22:DA:2077:A:C8	22:DA:2435:A:N3	2.85	0.45
22:DA:2142:A:H3'	22:DA:2143:C:H4'	1.98	0.45
22:DA:2191:A:C4	22:DA:2192:U:C5	3.04	0.45
22:DA:2204:G:N3	22:DA:2205:A:C8	2.85	0.45
22:DA:2197:U:C5	22:DA:2224:G:C5	3.05	0.45
22:DA:2314:A:O2'	22:DA:2315:G:C8	2.70	0.45
22:DA:2363:G:O2'	22:DA:2364:C:H5'	2.16	0.45
22:DA:2401:U:H3'	22:DA:2402:U:H5''	1.98	0.45
22:DA:2407:A:C2	22:DA:2408:U:N3	2.84	0.45
22:DA:2680:U:OP2	25:DD:114:LYS:CD	2.65	0.45
22:DA:2821:A:H2'	22:DA:2822:G:O4'	2.17	0.45
22:DA:283:G:H3'	22:DA:284:U:H6	1.80	0.45
22:DA:323:C:OP1	22:DA:324:A:C8	2.70	0.45
22:DA:327:G:H21	42:DU:67:SER:HB2	1.82	0.45
22:DA:538:A:C5'	31:DJ:7:LYS:HZ3	2.29	0.45
22:DA:674:G:C4'	26:DE:69:ARG:HG2	2.47	0.45
22:DA:958:U:H6	22:DA:958:U:H2'	1.46	0.45
24:DC:129:LEU:O	24:DC:130:PRO:C	2.55	0.45
22:DA:1825:U:OP1	24:DC:246:PRO:HG3	2.17	0.45
24:DC:24:HIS:CG	24:DC:25:LYS:N	2.84	0.45
22:DA:675:A:P	26:DE:60:TRP:CZ2	3.10	0.45
27:DF:137:PHE:HB2	27:DF:138:PRO:CD	2.39	0.45
32:DK:107:LEU:C	32:DK:109:SER:N	2.69	0.45
33:DL:71:ALA:HA	33:DL:74:THR:HB	1.99	0.45
34:DM:49:ALA:O	34:DM:120:ALA:HB1	2.17	0.45
34:DM:68:PHE:O	34:DM:70:ASP:HB2	2.16	0.45
35:DN:33:ILE:HG23	35:DN:114:GLU:HB2	1.98	0.45
35:DN:95:THR:HG23	35:DN:95:THR:O	2.17	0.45
37:DP:31:VAL:O	37:DP:32:VAL:CG1	2.64	0.45
38:DQ:9:ALA:C	38:DQ:11:ALA:H	2.19	0.45
22:DA:481:G:OP2	42:DU:43:LYS:HA	2.17	0.45
42:DU:90:LYS:CB	42:DU:92:VAL:HG13	2.46	0.45
44:DW:18:LYS:HA	44:DW:18:LYS:HZ2	1.80	0.45
45:DX:31:ASN:ND2	45:DX:31:ASN:N	2.48	0.45
1:AA:1049:U:H4'	1:AA:1050:G:OP2	2.16	0.45
1:AA:1098:C:O2'	1:AA:1099:G:H5'	2.17	0.45
1:AA:1131:G:O2'	1:AA:1132:C:O5'	2.34	0.45
1:AA:1154:G:N3	1:AA:1155:A:C8	2.84	0.45
1:AA:122:G:H2'	1:AA:123:U:C6	2.52	0.45
1:AA:1324:A:H2'	1:AA:1325:C:O4'	2.17	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1331:G:C2'	1:AA:1332:A:OP2	2.64	0.45
1:AA:1489:G:C2'	1:AA:1490:U:H5'	2.47	0.45
1:AA:1508:A:O2'	1:AA:1509:C:C5'	2.63	0.45
1:AA:162:A:C5	1:AA:163:C:H1'	2.52	0.45
1:AA:453:G:N1	1:AA:454:G:C4	2.85	0.45
1:AA:480:U:C5'	1:AA:481:G:OP2	2.62	0.45
1:AA:677:U:H2'	1:AA:678:U:H6	1.82	0.45
1:AA:691:G:O6	11:AK:56:LYS:HE2	2.17	0.45
1:AA:727:G:N1	1:AA:731:G:C6	2.84	0.45
1:AA:583:A:C6	1:AA:759:A:N7	2.84	0.45
2:AB:27:LYS:N	2:AB:28:PRO:CD	2.79	0.45
4:AD:125:ASN:HA	4:AD:141:VAL:CG2	2.47	0.45
4:AD:28:ASP:O	4:AD:29:THR:O	2.35	0.45
6:AF:38:ARG:O	6:AF:39:LEU:HB2	2.17	0.45
11:AK:51:PHE:HE1	11:AK:60:PHE:CE2	2.18	0.45
14:AN:27:LYS:HA	14:AN:30:ILE:HG22	1.99	0.45
14:AN:27:LYS:O	14:AN:31:SER:HB2	2.17	0.45
15:AO:45:HIS:O	15:AO:47:LYS:N	2.44	0.45
16:AP:19:VAL:CG1	16:AP:37:GLY:CA	2.94	0.45
17:AQ:10:ARG:O	17:AQ:22:VAL:CG1	2.65	0.45
17:AQ:48:GLU:OE1	17:AQ:49:ASN:N	2.41	0.45
33:BL:62:PRO:HG3	51:B3:24:LYS:CD	2.47	0.45
51:B3:28:LEU:HD12	51:B3:28:LEU:HA	1.73	0.45
22:BA:1081:U:N3	22:BA:1082:U:C5	2.85	0.45
22:BA:1398:C:H2'	22:BA:1399:C:C6	2.51	0.45
22:BA:1654:A:H2'	22:BA:1655:A:C8	2.47	0.45
22:BA:1865:U:O2'	22:BA:1866:A:H5''	2.16	0.45
22:BA:2151:U:H6	22:BA:2151:U:H2'	1.30	0.45
22:BA:226:A:C6	22:BA:227:A:C6	3.04	0.45
22:BA:2536:G:C5	22:BA:2537:U:C4	3.05	0.45
22:BA:2615:U:H2'	22:BA:2616:C:H6	1.82	0.45
22:BA:2647:U:O2'	22:BA:2648:G:H5'	2.17	0.45
22:BA:2693:G:O2'	22:BA:2694:G:H5'	2.16	0.45
22:BA:2748:A:N6	22:BA:2749:A:C6	2.85	0.45
22:BA:2756:U:H1'	22:BA:2757:A:H5''	1.99	0.45
22:BA:2804:U:O2'	22:BA:2805:C:H5'	2.16	0.45
22:BA:536:G:H2'	22:BA:537:G:C5'	2.47	0.45
22:BA:900:A:C5	22:BA:901:C:C6	3.05	0.45
22:BA:930:G:H5''	22:BA:931:U:OP2	2.16	0.45
26:BE:175:ILE:HD11	26:BE:180:LEU:HD11	1.99	0.45
26:BE:68:ALA:O	26:BE:69:ARG:C	2.54	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:BF:13:LYS:HG3	27:BF:14:LYS:N	2.31	0.45
28:BG:94:ARG:HA	28:BG:127:GLN:O	2.17	0.45
29:BH:130:VAL:HG23	29:BH:131:SER:H	1.82	0.45
29:BH:5:LEU:HD23	29:BH:36:ALA:HB2	1.97	0.45
29:BH:89:LYS:C	29:BH:90:LEU:HD12	2.36	0.45
22:BA:1063:G:H5'	30:BI:76:ALA:HB3	1.98	0.45
31:BJ:84:ILE:HG23	31:BJ:84:ILE:O	2.17	0.45
32:BK:43:ILE:HD13	32:BK:52:VAL:HG21	1.96	0.45
33:BL:110:VAL:HG12	33:BL:131:ALA:HB2	1.99	0.45
33:BL:29:LYS:O	33:BL:30:THR:HG23	2.17	0.45
34:BM:25:ASP:OD2	34:BM:25:ASP:N	2.50	0.45
34:BM:69:PRO:O	34:BM:70:ASP:CG	2.55	0.45
35:BN:96:ARG:NH1	35:BN:116:VAL:HG23	2.32	0.45
36:BO:51:ALA:HB3	36:BO:78:VAL:HG13	1.98	0.45
36:BO:59:ALA:CA	36:BO:62:LEU:CD1	2.95	0.45
40:BS:37:THR:HB	40:BS:38:TYR:CE1	2.52	0.45
41:BT:33:LYS:HG3	41:BT:80:TRP:HE3	1.79	0.45
1:CA:1167:A:O2'	1:CA:1168:U:OP1	2.35	0.45
1:CA:1436:U:H2'	1:CA:1437:A:C8	2.52	0.45
1:CA:1480:A:C5	1:CA:1481:U:C6	3.04	0.45
1:CA:1500:A:H2'	1:CA:1501:C:O5'	2.16	0.45
1:CA:183:C:O2	1:CA:183:C:C2'	2.65	0.45
1:CA:207:C:O2	1:CA:207:C:H2'	2.16	0.45
1:CA:654:G:O2'	1:CA:655:A:C5'	2.64	0.45
1:CA:756:C:C2	1:CA:757:U:C6	3.05	0.45
1:CA:878:A:H2'	1:CA:879:C:H6	1.81	0.45
2:CB:111:LYS:O	2:CB:111:LYS:HD3	2.16	0.45
3:CC:106:ARG:HG2	3:CC:107:LYS:HG3	1.98	0.45
3:CC:179:ALA:HB1	3:CC:202:PHE:HE1	1.82	0.45
4:CD:29:THR:O	4:CD:31:CYS:N	2.44	0.45
6:CF:75:GLU:O	6:CF:79:ARG:HG3	2.17	0.45
6:CF:81:ASN:C	6:CF:81:ASN:ND2	2.70	0.45
8:CH:57:GLU:HG3	8:CH:58:LEU:H	1.81	0.45
11:CK:107:THR:HG22	11:CK:108:ASN:N	2.32	0.45
13:CM:21:ILE:CG2	13:CM:22:TYR:N	2.80	0.45
13:CM:2:ARG:O	13:CM:3:ILE:HB	2.17	0.45
16:CP:2:VAL:HG11	16:CP:65:ALA:HB2	1.97	0.45
17:CQ:67:SER:OG	17:CQ:70:LYS:HD3	2.17	0.45
49:D1:28:THR:C	49:D1:29:LYS:HG2	2.37	0.45
22:DA:1071:G:O4'	22:DA:1088:A:O2'	2.34	0.45
22:DA:1184:U:OP1	47:DZ:29:ARG:CD	2.65	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1206:G:O2'	22:DA:1207:C:H5'	2.17	0.45
22:DA:1686:C:C2	22:DA:1703:G:C2	3.04	0.45
22:DA:1805:A:N3	24:DC:49:THR:HG22	2.32	0.45
22:DA:1833:C:H2'	22:DA:1834:U:C6	2.52	0.45
22:DA:1958:C:P	56:DA:3716:HOH:O	2.74	0.45
22:DA:1659:G:C2	22:DA:2002:G:N3	2.85	0.45
22:DA:2024:G:C5	22:DA:2040:G:C2	3.05	0.45
22:DA:2056:G:C2	22:DA:2057:G:N7	2.85	0.45
22:DA:2298:A:O2'	22:DA:2299:U:O4'	2.34	0.45
22:DA:2362:C:P	51:D3:43:LEU:HD21	2.57	0.45
22:DA:961:C:C5	22:DA:2456:C:H4'	2.51	0.45
22:DA:263:G:H4'	22:DA:430:A:O4'	2.17	0.45
22:DA:2666:C:O2	22:DA:2666:C:O4'	2.33	0.45
22:DA:2752:C:O2'	22:DA:2753:A:C8	2.70	0.45
22:DA:310:A:C5	22:DA:312:G:C5	3.05	0.45
22:DA:425:G:C6	22:DA:426:C:N4	2.85	0.45
22:DA:483:A:C8	22:DA:484:C:C5	3.05	0.45
22:DA:502:A:C5	22:DA:505:A:N7	2.85	0.45
22:DA:677:A:O2'	22:DA:2071:A:H5'	2.17	0.45
22:DA:765:C:C2	22:DA:766:U:C6	3.05	0.45
22:DA:777:G:O2'	22:DA:778:G:O5'	2.31	0.45
22:DA:569:U:OP1	22:DA:945:A:H2'	2.17	0.45
23:DB:11:C:C5	23:DB:12:C:C5	3.04	0.45
23:DB:52:A:O2'	23:DB:53:A:C8	2.62	0.45
23:DB:67:G:HO2'	23:DB:68:C:P	2.39	0.45
29:DH:59:ALA:HA	29:DH:63:ALA:CB	2.45	0.45
29:DH:75:LEU:N	29:DH:75:LEU:HD12	2.32	0.45
41:DT:25:GLU:HA	41:DT:29:THR:O	2.17	0.45
46:DY:56:LEU:HD22	46:DY:56:LEU:N	2.32	0.45
1:AA:1141:C:O2'	1:AA:1142:G:H8	1.99	0.45
1:AA:164:G:C2'	1:AA:165:G:H5'	2.47	0.45
1:AA:204:G:N3	1:AA:465:A:C4	2.85	0.45
1:AA:255:G:O2'	1:AA:256:U:H5'	2.17	0.45
1:AA:737:C:C2	1:AA:738:C:C5	3.04	0.45
1:AA:858:G:O2'	1:AA:859:G:C5'	2.65	0.45
1:AA:877:G:N2	8:AH:1:SER:N	2.64	0.45
1:AA:953:G:H2'	1:AA:954:G:C5'	2.47	0.45
1:AA:961:U:O2	1:AA:983:A:C4	2.70	0.45
1:AA:965:U:O2	1:AA:969:A:C2	2.70	0.45
3:AC:76:ILE:HD11	3:AC:102:ILE:HG12	1.97	0.45
4:AD:149:LYS:HZ2	4:AD:177:MET:HG3	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:152:VAL:O	5:AE:155:LYS:CE	2.65	0.45
6:AF:4:TYR:O	6:AF:63:ASN:HA	2.16	0.45
7:AG:53:SER:C	7:AG:55:LYS:N	2.70	0.45
8:AH:30:LYS:HA	8:AH:30:LYS:CE	2.46	0.45
8:AH:31:LEU:HD12	8:AH:31:LEU:O	2.17	0.45
13:AM:76:ILE:O	13:AM:79:LEU:HB2	2.17	0.45
15:AO:44:GLU:HG3	15:AO:45:HIS:N	2.32	0.45
15:AO:69:LEU:HD22	15:AO:77:TYR:HB2	1.98	0.45
16:AP:42:ILE:HD13	16:AP:42:ILE:N	2.32	0.45
18:AR:33:THR:HG22	18:AR:37:LYS:O	2.17	0.45
19:AS:51:HIS:HE2	19:AS:53:GLY:C	2.20	0.45
21:AU:23:GLU:HB3	21:AU:24:LYS:H	1.44	0.45
51:B3:32:LEU:O	51:B3:33:THR:C	2.53	0.45
22:BA:1135:C:H6	22:BA:1135:C:H5''	1.81	0.45
22:BA:142:A:C2	22:BA:143:C:N3	2.84	0.45
22:BA:146:A:H2'	22:BA:147:C:C6	2.52	0.45
22:BA:1510:G:C4	22:BA:1511:G:C8	3.05	0.45
22:BA:1522:A:O2'	22:BA:1523:U:OP2	2.32	0.45
22:BA:1791:A:N6	22:BA:1828:G:O2'	2.45	0.45
22:BA:1857:G:H1'	22:BA:1884:G:H22	1.81	0.45
22:BA:2185:U:C5	22:BA:2186:G:N7	2.85	0.45
22:BA:2470:G:N2	22:BA:2471:A:C4	2.85	0.45
22:BA:1783:A:H5'	22:BA:2608:G:H4'	1.99	0.45
22:BA:2682:A:C8	25:BD:11:MET:CG	3.00	0.45
22:BA:447:A:N1	22:BA:454:A:H2'	2.31	0.45
22:BA:636:G:H3'	33:BL:128:THR:HG21	1.98	0.45
24:BC:70:LYS:HG3	24:BC:101:ARG:CZ	2.47	0.45
25:BD:49:GLN:HE22	25:BD:67:HIS:CE1	2.34	0.45
26:BE:149:ILE:O	26:BE:188:MET:HA	2.16	0.45
27:BF:109:ARG:C	27:BF:136:ILE:HG22	2.38	0.45
29:BH:31:VAL:CB	29:BH:32:PRO:HD2	2.42	0.45
32:BK:40:LYS:HE3	32:BK:57:VAL:HG13	1.98	0.45
35:BN:12:ARG:CG	35:BN:12:ARG:NH2	2.75	0.45
36:BO:3:LYS:HG3	36:BO:4:LYS:H	1.81	0.45
37:BP:87:ARG:HG3	37:BP:88:ARG:H	1.82	0.45
44:BW:49:ASN:HA	44:BW:61:LYS:H	1.82	0.45
1:CA:1231:G:H2'	1:CA:1232:U:C6	2.52	0.45
1:CA:1285:A:C4'	1:CA:1286:U:OP1	2.58	0.45
1:CA:1346:A:H5''	9:CI:121:ARG:HH22	1.81	0.45
1:CA:1470:U:C2'	1:CA:1471:U:O5'	2.65	0.45
1:CA:207:C:O2	1:CA:213:G:C6	2.70	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:214:C:H2'	1:CA:215:C:C5	2.51	0.45
1:CA:337:G:C2	1:CA:338:A:C5	3.05	0.45
1:CA:346:G:N3	1:CA:346:G:H5''	2.32	0.45
1:CA:429:U:H4'	1:CA:430:A:O5'	2.17	0.45
1:CA:441:A:C2	1:CA:497:G:C5	3.05	0.45
1:CA:642:A:O2'	1:CA:643:C:O5'	2.34	0.45
1:CA:757:U:H2'	1:CA:758:C:O4'	2.17	0.45
1:CA:996:A:N6	1:CA:1046:A:O4'	2.49	0.45
2:CB:160:LEU:HD13	2:CB:180:ILE:CG2	2.46	0.45
2:CB:84:LEU:HD12	2:CB:84:LEU:C	2.38	0.45
3:CC:140:ALA:O	3:CC:145:ALA:CB	2.55	0.45
1:CA:718:A:H5'	11:CK:118:ASN:CG	2.36	0.45
11:CK:31:VAL:O	11:CK:43:TRP:HA	2.17	0.45
11:CK:91:GLY:O	11:CK:94:SER:N	2.49	0.45
1:CA:35:G:H21	12:CL:114:SER:HB3	1.81	0.45
13:CM:84:CYS:SG	13:CM:85:TYR:N	2.90	0.45
18:CR:28:LEU:C	18:CR:30:ASN:N	2.69	0.45
51:D3:42:HIS:O	51:D3:45:PRO:HG2	2.17	0.45
22:DA:116:C:C2'	22:DA:117:G:C5'	2.95	0.45
22:DA:1208:C:N4	22:DA:1239:G:C6	2.85	0.45
22:DA:1289:C:H1'	22:DA:1330:C:H5'	1.98	0.45
22:DA:1389:G:N2	22:DA:1390:U:O2	2.50	0.45
22:DA:1426:G:C5'	22:DA:1427:A:OP2	2.65	0.45
22:DA:1440:U:H2'	22:DA:1441:G:H8	1.80	0.45
22:DA:1468:U:O2	22:DA:1525:A:C2	2.69	0.45
22:DA:1529:G:O6	22:DA:1543:G:C2	2.70	0.45
22:DA:155:A:N1	22:DA:172:A:C6	2.85	0.45
22:DA:1563:U:H2'	22:DA:1564:C:O4'	2.17	0.45
22:DA:164:C:HO2'	22:DA:165:A:H5'	1.79	0.45
22:DA:1731:G:HO2'	22:DA:1732:C:H5''	1.76	0.45
22:DA:1731:G:C4'	22:DA:1732:C:OP1	2.46	0.45
22:DA:2015:A:C2'	22:DA:2016:U:H5'	2.47	0.45
22:DA:2045:C:H2'	22:DA:2046:G:O5'	2.17	0.45
22:DA:2141:G:N2	22:DA:2151:U:O2	2.50	0.45
22:DA:225:C:H2'	22:DA:225:C:O2	2.17	0.45
22:DA:2271:G:HO2'	22:DA:2272:U:H5'	1.78	0.45
22:DA:230:G:O2'	22:DA:231:A:H8	2.00	0.45
22:DA:2367:G:C2'	22:DA:2368:C:H5'	2.45	0.45
22:DA:2369:A:C4	22:DA:2370:G:C8	3.04	0.45
22:DA:2417:C:H2'	22:DA:2418:A:O4'	2.16	0.45
22:DA:2628:C:HO2'	22:DA:2781:A:H2'	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:306:U:C5	22:DA:307:G:C5	3.06	0.45
22:DA:323:C:OP1	22:DA:324:A:H8	2.00	0.45
22:DA:351:C:N4	22:DA:352:A:H62	2.14	0.45
22:DA:265:A:N6	22:DA:428:A:O4'	2.49	0.45
22:DA:37:C:O2	22:DA:444:C:N3	2.50	0.45
22:DA:75:G:O2'	22:DA:76:C:H6	2.00	0.45
22:DA:898:C:C5	22:DA:899:A:C5	3.05	0.45
22:DA:981:A:H3'	22:DA:982:C:O2	2.17	0.45
23:DB:100:G:H2'	23:DB:101:A:C8	2.52	0.45
23:DB:60:C:H2'	23:DB:61:G:H8	1.81	0.45
23:DB:59:A:C2'	23:DB:60:C:H5'	2.47	0.45
24:DC:2:VAL:O	24:DC:3:VAL:CG2	2.65	0.45
24:DC:74:PRO:HG2	24:DC:96:LYS:HB2	1.98	0.45
31:DJ:57:LEU:HD21	31:DJ:128:ASN:HA	1.98	0.45
33:DL:99:ASN:C	33:DL:100:ILE:HG22	2.37	0.45
34:DM:69:PRO:O	34:DM:70:ASP:HB3	2.17	0.45
36:DO:88:LYS:O	36:DO:89:ASP:HB3	2.15	0.45
38:DQ:111:LYS:O	38:DQ:114:ALA:HB3	2.17	0.45
40:DS:33:LEU:N	40:DS:36:LEU:CD2	2.80	0.45
40:DS:51:LEU:O	40:DS:54:ALA:HB3	2.16	0.45
41:DT:14:PRO:CG	41:DT:15:HIS:N	2.80	0.45
41:DT:34:VAL:O	41:DT:35:ALA:HB3	2.17	0.45
43:DV:41:GLU:HG2	43:DV:42:LEU:N	2.32	0.45
46:DY:57:LEU:HD13	46:DY:60:LYS:CE	2.45	0.45
1:AA:1004:A:C2	1:AA:1005:A:H1'	2.52	0.44
1:AA:1053:G:O6	1:AA:1199:U:H2'	2.17	0.44
1:AA:1162:C:C2'	1:AA:1163:A:C8	2.96	0.44
1:AA:1171:A:O2'	1:AA:1172:C:H5'	2.17	0.44
1:AA:1277:C:O2'	1:AA:1279:G:H8	2.00	0.44
1:AA:1303:C:O2'	1:AA:1304:G:C8	2.69	0.44
1:AA:138:G:O2'	1:AA:139:A:H5'	2.18	0.44
1:AA:1438:G:O2'	1:AA:1439:G:H5'	2.17	0.44
1:AA:1507:A:C6	1:AA:1530:G:C6	3.05	0.44
1:AA:466:A:C6	1:AA:468:A:N6	2.86	0.44
1:AA:521:G:OP2	12:AL:50:LYS:NZ	2.50	0.44
1:AA:70:U:O2'	1:AA:71:A:C8	2.70	0.44
1:AA:785:G:C2'	1:AA:786:G:H5'	2.47	0.44
7:AG:69:ARG:HG3	7:AG:95:ARG:HG2	1.98	0.44
8:AH:48:PHE:H	8:AH:48:PHE:HD1	1.64	0.44
11:AK:20:ALA:HA	11:AK:33:ILE:CD1	2.47	0.44
12:AL:45:ASN:N	12:AL:45:ASN:ND2	2.65	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:44:ILE:N	13:AM:44:ILE:HD12	2.33	0.44
15:AO:34:GLN:O	15:AO:38:LEU:HD22	2.17	0.44
17:AQ:18:LYS:CA	17:AQ:47:ASP:CB	2.74	0.44
17:AQ:4:ILE:C	17:AQ:5:ARG:HG3	2.37	0.44
19:AS:55:GLN:CA	19:AS:55:GLN:NE2	2.80	0.44
20:AT:3:ILE:HA	20:AT:7:LYS:NZ	2.32	0.44
11:AK:108:ASN:ND2	21:AU:6:ARG:HA	2.32	0.44
51:B3:60:CYS:O	51:B3:61:LEU:HD23	2.17	0.44
22:BA:1276:A:C8	22:BA:1276:A:H5''	2.52	0.44
22:BA:1820:U:C2	24:BC:200:MET:HG2	2.50	0.44
22:BA:2079:U:O2'	45:BX:22:ASN:ND2	2.49	0.44
22:BA:2353:G:H2'	22:BA:2354:C:O5'	2.17	0.44
22:BA:2415:G:C6	22:BA:2416:C:C4	3.05	0.44
22:BA:2492:U:C2	22:BA:2493:U:C5	3.05	0.44
22:BA:2819:G:H5''	56:BA:3802:HOH:O	2.17	0.44
22:BA:28:A:H2'	22:BA:29:U:H6	1.81	0.44
22:BA:289:G:C8	22:BA:290:U:C5	3.05	0.44
22:BA:37:C:C2'	22:BA:38:A:O5'	2.65	0.44
22:BA:479:A:N3	22:BA:481:G:H5''	2.31	0.44
22:BA:602:A:C2	22:BA:656:G:C6	3.05	0.44
22:BA:655:A:H4'	22:BA:656:G:OP1	2.17	0.44
22:BA:995:C:OP2	38:BQ:52:ARG:NH1	2.50	0.44
23:BB:44:G:O2'	23:BB:45:A:OP2	2.32	0.44
24:BC:159:THR:N	24:BC:194:VAL:CG1	2.79	0.44
24:BC:30:ALA:N	24:BC:31:PRO:HD2	2.32	0.44
25:BD:32:ASN:O	25:BD:95:SER:HA	2.17	0.44
25:BD:9:VAL:CG2	25:BD:26:VAL:HB	2.47	0.44
26:BE:5:LEU:CD2	26:BE:121:VAL:HA	2.48	0.44
27:BF:162:ASP:O	27:BF:163:GLU:C	2.55	0.44
27:BF:82:TYR:O	27:BF:84:ILE:HG22	2.17	0.44
27:BF:98:PHE:C	27:BF:98:PHE:CD2	2.90	0.44
28:BG:116:LEU:HD21	28:BG:122:ALA:HB3	2.00	0.44
28:BG:156:TYR:O	28:BG:157:LYS:HG3	2.17	0.44
31:BJ:89:PHE:CE1	31:BJ:93:ILE:CG1	3.00	0.44
32:BK:41:ILE:HA	32:BK:41:ILE:HD12	1.72	0.44
22:BA:2820:A:OP1	35:BN:2:ARG:NH2	2.50	0.44
35:BN:71:ARG:HH21	35:BN:71:ARG:HG2	1.82	0.44
36:BO:79:ALA:HB1	36:BO:113:ALA:CB	2.47	0.44
40:BS:24:ILE:HA	40:BS:24:ILE:HD12	1.49	0.44
40:BS:43:ALA:O	40:BS:46:LEU:HB2	2.16	0.44
42:BU:60:LYS:HA	42:BU:60:LYS:HD2	1.61	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:BV:93:ARG:O	43:BV:94:ALA:CB	2.65	0.44
1:CA:1004:A:N3	1:CA:1026:G:C6	2.85	0.44
1:CA:1219:A:C4	1:CA:1220:G:C8	3.04	0.44
1:CA:1438:G:O2'	1:CA:1439:G:H5'	2.17	0.44
1:CA:267:C:H2'	1:CA:268:U:O5'	2.16	0.44
1:CA:686:U:O2	1:CA:687:A:C5	2.70	0.44
1:CA:72:A:C6	1:CA:73:C:N4	2.85	0.44
1:CA:821:G:C2'	1:CA:822:U:C6	2.94	0.44
1:CA:94:G:C4'	1:CA:95:C:OP1	2.53	0.44
2:CB:118:THR:HG22	2:CB:118:THR:O	2.16	0.44
2:CB:206:ILE:CG2	2:CB:210:THR:OG1	2.65	0.44
7:CG:12:LEU:HD22	7:CG:12:LEU:C	2.38	0.44
9:CI:117:LEU:HD22	9:CI:123:ARG:HD3	1.97	0.44
1:CA:947:G:P	13:CM:106:ARG:HG3	2.57	0.44
13:CM:62:PHE:O	13:CM:64:VAL:HG23	2.16	0.44
14:CN:9:GLU:OE1	14:CN:62:ARG:HD2	2.18	0.44
18:CR:44:THR:HG1	18:CR:46:THR:HG22	1.81	0.44
20:CT:17:ARG:HD2	20:CT:17:ARG:O	2.16	0.44
22:DA:54:G:O2'	50:D2:35:ARG:HD3	2.17	0.44
52:D4:27:CYS:SG	52:D4:33:HIS:HB2	2.56	0.44
22:DA:1078:U:H4'	22:DA:1079:C:C5'	2.47	0.44
22:DA:1087:G:C4	22:DA:1089:A:N3	2.85	0.44
22:DA:123:G:C2	22:DA:129:C:N3	2.85	0.44
22:DA:1455:G:O2'	22:DA:1456:G:O5'	2.34	0.44
22:DA:1495:A:H2'	22:DA:1496:A:C8	2.52	0.44
22:DA:149:A:C6	22:DA:150:U:N3	2.86	0.44
22:DA:1558:C:H6	22:DA:1558:C:OP1	2.00	0.44
22:DA:1550:C:H5''	22:DA:1720:U:O2'	2.16	0.44
22:DA:177:G:H5''	22:DA:178:G:OP2	2.16	0.44
22:DA:1933:G:H2'	22:DA:1934:C:O4'	2.18	0.44
22:DA:2067:G:H5''	22:DA:2068:U:OP2	2.16	0.44
22:DA:2103:C:C2'	22:DA:2104:C:H5'	2.48	0.44
22:DA:2192:U:O2	22:DA:2192:U:C2'	2.64	0.44
22:DA:2245:U:H5''	22:DA:2246:G:H5'	1.98	0.44
22:DA:2264:C:C6	22:DA:2265:U:C5	3.05	0.44
22:DA:2377:A:C6	22:DA:2378:A:C6	3.04	0.44
22:DA:2460:U:H2'	22:DA:2461:A:O4'	2.16	0.44
22:DA:2474:U:O4'	22:DA:2474:U:O2	2.34	0.44
22:DA:2533:U:C4	22:DA:2534:A:C4	3.06	0.44
22:DA:2771:C:H5''	25:DD:207:VAL:HG11	1.98	0.44
22:DA:2889:C:N4	22:DA:2890:G:C6	2.86	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:301:G:O2'	22:DA:302:C:O5'	2.34	0.44
22:DA:425:G:H2'	22:DA:426:C:H6	1.81	0.44
22:DA:449:A:C2'	22:DA:450:G:C5'	2.95	0.44
22:DA:455:C:N4	22:DA:473:G:OP2	2.50	0.44
22:DA:474:G:H4'	22:DA:475:C:OP1	2.15	0.44
22:DA:485:C:H2'	22:DA:486:C:C6	2.53	0.44
22:DA:615:U:O4	26:DE:39:ALA:HB2	2.18	0.44
22:DA:630:G:H4'	22:DA:640:C:O2'	2.17	0.44
22:DA:704:G:O2'	22:DA:705:A:C8	2.71	0.44
22:DA:82:U:H2'	22:DA:83:A:C4'	2.47	0.44
23:DB:42:C:C4	23:DB:43:C:N4	2.85	0.44
24:DC:221:GLY:O	24:DC:224:MET:HG2	2.17	0.44
22:DA:1994:C:P	25:DD:132:ALA:HB3	2.56	0.44
26:DE:141:MET:O	26:DE:142:ALA:HB3	2.17	0.44
27:DF:131:VAL:O	27:DF:132:ARG:HB2	2.16	0.44
29:DH:134:VAL:HG22	29:DH:134:VAL:O	2.17	0.44
22:DA:810:U:O2'	33:DL:20:GLY:O	2.34	0.44
34:DM:36:VAL:HG13	43:DV:82:TYR:HD1	1.81	0.44
23:DB:8:C:O2'	36:DO:40:ILE:HD13	2.16	0.44
37:DP:13:LYS:HE3	37:DP:76:HIS:O	2.18	0.44
39:DR:90:ARG:HD2	39:DR:90:ARG:HA	1.82	0.44
40:DS:75:PHE:CE2	40:DS:104:THR:CG2	2.99	0.44
42:DU:80:ASP:N	42:DU:80:ASP:OD1	2.49	0.44
42:DU:82:VAL:O	42:DU:96:LYS:CG	2.65	0.44
43:DV:30:ILE:HD12	43:DV:38:LEU:HD23	1.98	0.44
43:DV:44:HIS:CE1	43:DV:86:LEU:O	2.70	0.44
1:AA:197:A:O2'	1:AA:198:G:O4'	2.34	0.44
1:AA:701:U:O2'	1:AA:702:A:P	2.75	0.44
1:AA:937:A:H2'	1:AA:938:A:C5'	2.47	0.44
2:AB:221:ARG:HG2	2:AB:221:ARG:HH11	1.82	0.44
2:AB:66:ILE:HD13	2:AB:66:ILE:HA	1.83	0.44
3:AC:39:ARG:O	3:AC:43:THR:HG23	2.17	0.44
5:AE:96:GLN:CB	5:AE:123:LEU:HD13	2.46	0.44
5:AE:75:LEU:HD23	5:AE:79:THR:O	2.16	0.44
8:AH:20:ASN:ND2	8:AH:64:TYR:HE2	2.14	0.44
8:AH:36:ALA:HA	8:AH:39:LEU:HD12	1.98	0.44
10:AJ:71:LEU:O	10:AJ:72:ARG:CD	2.66	0.44
12:AL:24:GLU:HB2	12:AL:26:CYS:HG	1.78	0.44
12:AL:33:CYS:N	12:AL:54:VAL:HA	2.32	0.44
15:AO:65:LEU:HA	15:AO:65:LEU:HD22	1.82	0.44
17:AQ:16:MET:HB2	17:AQ:19:SER:CB	2.23	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AS:62:THR:HG22	19:AS:64:GLU:H	1.82	0.44
48:B0:47:TYR:CZ	48:B0:52:LYS:HB2	2.49	0.44
22:BA:592:A:O2'	51:B3:2:LYS:HA	2.17	0.44
22:BA:1071:G:C4	22:BA:1089:A:C6	3.06	0.44
22:BA:1725:U:H2'	22:BA:1726:C:O4'	2.17	0.44
1:AA:702:A:N3	22:BA:1847:A:H2	2.15	0.44
22:BA:1917:U:C4	22:BA:1918:A:C5	3.05	0.44
22:BA:1959:G:H2'	22:BA:1960:A:O5'	2.17	0.44
22:BA:1992:G:N2	22:BA:1996:C:O2'	2.46	0.44
22:BA:2745:C:C4	22:BA:2746:U:C4	3.06	0.44
22:BA:374:A:H2'	22:BA:375:G:C5'	2.47	0.44
22:BA:511:U:C5	22:BA:512:G:C4	3.06	0.44
22:BA:68:G:N2	22:BA:74:A:C4	2.86	0.44
22:BA:83:A:N6	22:BA:101:A:C4	2.86	0.44
22:BA:977:G:O6	56:BA:3585:HOH:O	2.21	0.44
23:BB:13:G:O2'	23:BB:15:A:OP2	2.36	0.44
23:BB:71:C:H2'	23:BB:72:G:H5'	1.99	0.44
24:BC:105:ALA:HA	24:BC:106:PRO:HD2	1.62	0.44
24:BC:203:VAL:HG12	24:BC:204:LEU:N	2.31	0.44
24:BC:246:PRO:HG2	24:BC:247:TRP:CZ2	2.51	0.44
25:BD:114:LYS:CE	25:BD:114:LYS:CA	2.92	0.44
25:BD:105:LYS:CE	25:BD:176:ASP:HB3	2.47	0.44
26:BE:197:GLU:O	26:BE:198:GLU:C	2.56	0.44
26:BE:82:GLY:O	26:BE:83:VAL:HB	2.17	0.44
27:BF:91:ARG:N	27:BF:95:MET:HB2	2.32	0.44
28:BG:112:VAL:HG23	28:BG:113:ASP:H	1.82	0.44
28:BG:66:THR:OG1	28:BG:67:ALA:N	2.51	0.44
29:BH:133:GLN:CA	29:BH:133:GLN:OE1	2.63	0.44
1:AA:346:G:P	37:BP:33:GLU:OE1	2.75	0.44
40:BS:2:GLU:C	40:BS:3:THR:HG22	2.38	0.44
41:BT:38:ALA:HB1	41:BT:43:ILE:HG21	1.99	0.44
42:BU:24:VAL:HA	42:BU:35:VAL:HG22	1.99	0.44
1:CA:1032:G:H2'	1:CA:1033:G:O4'	2.17	0.44
1:CA:1040:U:O2'	1:CA:1041:G:H5'	2.17	0.44
1:CA:1130:A:C5	1:CA:1146:A:C5	3.04	0.44
1:CA:113:G:C1'	1:CA:354:G:H5'	2.46	0.44
1:CA:1213:A:C8	1:CA:1215:G:C5	3.05	0.44
1:CA:1242:G:N2	1:CA:1243:C:H1'	2.31	0.44
1:CA:1473:G:O2'	22:DA:1702:G:H4'	2.16	0.44
1:CA:275:G:O2'	1:CA:276:G:C8	2.67	0.44
1:CA:502:A:C2'	1:CA:503:C:H5'	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:543:U:C2'	1:CA:544:G:C5'	2.95	0.44
1:CA:755:G:C2	1:CA:756:C:C5	3.06	0.44
1:CA:821:G:C2'	1:CA:822:U:H6	2.25	0.44
1:CA:862:C:N3	1:CA:863:U:C4	2.85	0.44
3:CC:26:LYS:HE3	3:CC:26:LYS:CA	2.25	0.44
1:CA:619:U:N3	4:CD:130:ASN:OD1	2.49	0.44
8:CH:78:SER:OG	8:CH:123:GLU:HG3	2.16	0.44
9:CI:27:ILE:O	9:CI:33:SER:HA	2.17	0.44
11:CK:35:ASP:OD1	11:CK:37:GLN:HG3	2.17	0.44
12:CL:33:CYS:HA	12:CL:54:VAL:HG13	1.99	0.44
1:CA:520:A:HO2'	12:CL:69:GLU:HG3	1.83	0.44
12:CL:81:ILE:HD11	12:CL:94:TYR:HB2	1.99	0.44
14:CN:60:ARG:CG	14:CN:61:ASN:N	2.80	0.44
16:CP:44:SER:HB2	16:CP:46:LYS:CG	2.48	0.44
17:CQ:43:LEU:O	17:CQ:45:VAL:HG23	2.17	0.44
19:CS:30:LEU:N	19:CS:30:LEU:HD12	2.32	0.44
19:CS:42:ASN:N	19:CS:42:ASN:OD1	2.51	0.44
22:DA:1065:U:C2	22:DA:1074:G:N1	2.85	0.44
22:DA:1123:C:H2'	22:DA:1124:G:C8	2.52	0.44
22:DA:1206:G:O2'	22:DA:1207:C:O5'	2.36	0.44
22:DA:1495:A:H2'	22:DA:1496:A:O4'	2.17	0.44
22:DA:1498:C:O2'	22:DA:1499:C:C5'	2.65	0.44
22:DA:1500:G:N1	22:DA:1501:G:C5	2.84	0.44
22:DA:1740:G:C2'	22:DA:1741:C:C5'	2.95	0.44
22:DA:1837:C:O2	22:DA:1904:G:C2	2.71	0.44
22:DA:2082:A:H2'	22:DA:2083:G:O5'	2.17	0.44
22:DA:2257:U:O2'	22:DA:2258:C:H5'	2.17	0.44
22:DA:2372:U:H2'	22:DA:2372:U:O2	2.17	0.44
22:DA:2674:G:C6	22:DA:2675:A:C5	3.05	0.44
22:DA:280:U:C5	22:DA:281:C:C4	3.05	0.44
22:DA:329:G:C4'	22:DA:330:A:OP1	2.64	0.44
22:DA:345:A:O2'	22:DA:346:A:C2	2.61	0.44
22:DA:54:G:H2'	22:DA:55:G:O5'	2.18	0.44
22:DA:627:A:O2'	22:DA:628:G:H8	1.98	0.44
22:DA:686:U:P	56:DA:3703:HOH:O	2.75	0.44
22:DA:693:A:C2'	22:DA:694:U:H5'	2.47	0.44
22:DA:732:C:C4	22:DA:733:G:C8	3.04	0.44
22:DA:83:A:P	42:DU:91:LYS:HZ2	2.39	0.44
22:DA:922:C:C4	22:DA:923:G:N7	2.85	0.44
25:DD:110:THR:CB	25:DD:171:THR:HG22	2.47	0.44
22:DA:1205:A:N7	26:DE:165:HIS:CE1	2.85	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:28:VAL:CG2	26:DE:29:HIS:N	2.80	0.44
28:DG:154:GLU:C	28:DG:156:TYR:H	2.20	0.44
32:DK:47:ILE:CG2	32:DK:49:ARG:HG3	2.46	0.44
32:DK:92:GLU:O	32:DK:93:GLN:O	2.36	0.44
34:DM:54:THR:HG22	34:DM:54:THR:O	2.17	0.44
35:DN:104:ALA:O	35:DN:105:GLY:C	2.54	0.44
35:DN:36:THR:HG23	35:DN:41:ALA:HB2	1.98	0.44
35:DN:62:ASN:N	35:DN:62:ASN:OD1	2.50	0.44
35:DN:75:ILE:O	35:DN:79:LEU:HB2	2.16	0.44
38:DQ:4:LYS:O	38:DQ:5:ARG:CB	2.65	0.44
38:DQ:94:LEU:HD13	39:DR:4:VAL:HG12	1.98	0.44
41:DT:68:LYS:O	41:DT:69:ARG:HB3	2.16	0.44
42:DU:17:ASP:CB	42:DU:38:ILE:HA	2.45	0.44
43:DV:21:ARG:NE	43:DV:87:GLN:HG2	2.31	0.44
44:DW:67:LYS:HB3	44:DW:80:SER:HB2	1.99	0.44
45:DX:1:SER:O	45:DX:2:ARG:C	2.55	0.44
46:DY:31:GLN:C	46:DY:33:ALA:N	2.70	0.44
1:AA:1103:C:H3'	1:AA:1103:C:H6	1.83	0.44
1:AA:1160:G:HO2'	1:AA:1161:C:H6	1.66	0.44
1:AA:1171:A:H2'	1:AA:1172:C:H6	1.79	0.44
1:AA:1162:C:C2	1:AA:1175:G:N2	2.85	0.44
1:AA:1263:C:C2'	1:AA:1264:U:H5'	2.46	0.44
1:AA:1424:U:H2'	1:AA:1425:U:O5'	2.17	0.44
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.18	0.44
1:AA:178:C:O2'	1:AA:179:A:H5'	2.18	0.44
1:AA:251:G:N1	1:AA:266:G:O6	2.50	0.44
1:AA:408:A:C6	1:AA:409:U:N3	2.85	0.44
1:AA:466:A:N6	1:AA:468:A:H62	2.15	0.44
1:AA:785:G:N2	1:AA:798:U:C2	2.86	0.44
1:AA:832:G:N3	1:AA:832:G:H2'	2.32	0.44
1:AA:845:A:H8	1:AA:845:A:H3'	1.82	0.44
5:AE:149:PRO:HG2	5:AE:150:GLU:HG2	1.98	0.44
8:AH:66:GLN:HB3	8:AH:67:GLY:H	1.51	0.44
12:AL:113:ARG:O	12:AL:115:LYS:O	2.36	0.44
14:AN:40:ARG:NH1	14:AN:44:VAL:CG1	2.73	0.44
17:AQ:14:ASP:HB2	17:AQ:54:ILE:HG22	1.99	0.44
19:AS:10:ILE:HG22	19:AS:38:THR:H	1.82	0.44
20:AT:53:MET:HE2	20:AT:54:GLN:HA	1.99	0.44
21:AU:13:VAL:O	21:AU:15:LEU:HD12	2.17	0.44
48:B0:10:SER:O	48:B0:14:MET:HG3	2.16	0.44
22:BA:1341:G:C4	41:BT:84:TYR:CD1	3.06	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1398:C:H2'	22:BA:1399:C:H6	1.83	0.44
22:BA:1487:U:N3	22:BA:1503:A:C2	2.85	0.44
22:BA:1721:G:H22	22:BA:1738:G:H2'	1.83	0.44
22:BA:1946:U:C2	22:BA:1947:C:C5	3.05	0.44
22:BA:2023:C:H5''	22:BA:2023:C:C6	2.52	0.44
22:BA:2563:U:H1'	22:BA:2566:A:N6	2.32	0.44
22:BA:2643:G:H2'	22:BA:2644:G:O4'	2.17	0.44
22:BA:2715:C:C4	22:BA:2716:C:C5	3.06	0.44
22:BA:2771:C:H2'	22:BA:2772:C:C6	2.53	0.44
22:BA:2043:C:N3	22:BA:2777:G:C2	2.85	0.44
22:BA:2888:C:O2	22:BA:2888:C:H2'	2.17	0.44
22:BA:304:U:O2'	22:BA:305:C:H5'	2.18	0.44
22:BA:345:A:O2'	22:BA:346:A:N7	2.51	0.44
22:BA:278:A:H2	22:BA:362:A:C8	2.31	0.44
22:BA:369:U:O2'	22:BA:370:G:P	2.75	0.44
22:BA:480:A:H3'	22:BA:481:G:C5'	2.47	0.44
22:BA:497:A:H2'	22:BA:498:G:O4'	2.17	0.44
22:BA:547:A:N1	22:BA:549:G:N2	2.65	0.44
22:BA:597:G:C2	22:BA:661:A:C2	3.05	0.44
22:BA:869:G:H2'	22:BA:870:U:O4'	2.17	0.44
23:BB:70:C:C2'	23:BB:71:C:H5'	2.46	0.44
24:BC:104:LEU:HB3	24:BC:105:ALA:H	1.72	0.44
22:BA:2571:U:HO2'	25:BD:151:THR:CG2	2.30	0.44
22:BA:2571:U:HO2'	25:BD:151:THR:HG21	1.78	0.44
26:BE:24:ASN:C	26:BE:24:ASN:ND2	2.70	0.44
27:BF:106:ALA:C	27:BF:108:PRO:CD	2.85	0.44
31:BJ:70:THR:HA	31:BJ:90:GLU:HG2	1.99	0.44
22:BA:2494:G:O2'	34:BM:79:ALA:HA	2.17	0.44
34:BM:95:LEU:HA	34:BM:95:LEU:HD12	1.60	0.44
37:BP:14:GLN:O	37:BP:15:ASP:HB3	2.17	0.44
38:BQ:15:LYS:O	38:BQ:19:GLN:HG3	2.17	0.44
38:BQ:27:ARG:NH1	38:BQ:27:ARG:HG3	2.31	0.44
38:BQ:59:LEU:HA	38:BQ:59:LEU:HD23	1.65	0.44
39:BR:58:VAL:HG22	39:BR:59:ILE:N	2.31	0.44
39:BR:66:HIS:CE1	39:BR:94:THR:HB	2.52	0.44
45:BX:76:LYS:H	45:BX:76:LYS:HG2	1.65	0.44
1:CA:1071:C:C5'	5:CE:53:ARG:NH1	2.81	0.44
1:CA:1154:G:H2'	1:CA:1155:A:C8	2.50	0.44
1:CA:115:G:C4'	1:CA:116:A:OP1	2.64	0.44
1:CA:1202:U:HO2'	1:CA:1203:C:C4'	2.28	0.44
1:CA:1408:A:C8	1:CA:1409:C:C5	3.05	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:511:C:O2'	1:CA:512:U:H6	2.01	0.44
1:CA:563:A:C4	1:CA:567:G:C8	3.05	0.44
1:CA:728:A:C8	15:CO:53:ARG:NH2	2.85	0.44
1:CA:754:C:H5''	1:CA:754:C:O2	2.17	0.44
1:CA:74:A:C6	1:CA:97:G:C6	3.05	0.44
4:CD:26:ALA:C	4:CD:31:CYS:SG	2.96	0.44
4:CD:29:THR:CB	4:CD:30:LYS:HE3	2.45	0.44
5:CE:75:LEU:HD13	5:CE:79:THR:O	2.16	0.44
8:CH:76:ARG:HD3	8:CH:76:ARG:C	2.37	0.44
11:CK:35:ASP:C	11:CK:37:GLN:N	2.71	0.44
12:CL:20:VAL:N	12:CL:21:PRO:CD	2.80	0.44
12:CL:51:VAL:HG12	12:CL:52:CYS:N	2.31	0.44
13:CM:75:SER:C	13:CM:77:LYS:H	2.21	0.44
16:CP:78:VAL:O	16:CP:80:LYS:N	2.50	0.44
18:CR:54:LEU:O	18:CR:55:ALA:C	2.55	0.44
22:DA:1076:C:O2'	22:DA:1077:A:C8	2.71	0.44
22:DA:1201:U:H2'	22:DA:1202:G:H8	1.82	0.44
22:DA:1207:C:N4	22:DA:1208:C:H41	2.15	0.44
22:DA:1395:A:H4'	22:DA:1397:U:C5	2.51	0.44
22:DA:1442:U:N3	22:DA:1443:U:C5	2.86	0.44
22:DA:155:A:C2	22:DA:172:A:C2	3.05	0.44
22:DA:1570:A:C2	22:DA:1571:A:C2	3.06	0.44
22:DA:1596:A:N1	22:DA:1597:A:N1	2.66	0.44
22:DA:1597:A:H3'	22:DA:1597:A:C8	2.53	0.44
22:DA:1683:U:C2'	22:DA:1684:G:H5'	2.47	0.44
22:DA:1998:A:H2'	22:DA:1999:C:O4'	2.17	0.44
22:DA:199:A:H2	22:DA:2078:C:HO2'	1.61	0.44
22:DA:1264:A:N3	22:DA:2015:A:N6	2.64	0.44
22:DA:2023:C:O2'	22:DA:2024:G:H5'	2.18	0.44
22:DA:2040:G:C6	22:DA:2041:U:C4	3.05	0.44
22:DA:233:A:C2	22:DA:234:U:C2	3.06	0.44
22:DA:2879:A:O2'	22:DA:2880:C:O5'	2.34	0.44
22:DA:2893:A:H5''	22:DA:2894:G:H5'	1.99	0.44
22:DA:301:G:C4	22:DA:302:C:C4	3.06	0.44
22:DA:323:C:N4	22:DA:333:G:N7	2.66	0.44
22:DA:33:C:H2'	22:DA:446:G:H22	1.78	0.44
22:DA:571:U:C6	22:DA:575:A:N6	2.85	0.44
22:DA:685:A:H5'	22:DA:686:U:OP1	2.17	0.44
22:DA:838:C:H2'	22:DA:839:U:C5'	2.47	0.44
22:DA:95:A:C2'	22:DA:96:C:C5'	2.86	0.44
22:DA:973:A:C4'	22:DA:974:G:OP2	2.65	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:995:C:H1'	38:DQ:60:TRP:HZ2	1.82	0.44
23:DB:16:G:C6	23:DB:69:G:C4	3.05	0.44
24:DC:93:VAL:HG13	24:DC:94:LEU:N	2.32	0.44
25:DD:107:VAL:H	25:DD:206:ALA:N	2.13	0.44
25:DD:179:ARG:HB2	25:DD:188:LEU:HD12	1.99	0.44
26:DE:57:LYS:NZ	26:DE:58:LYS:N	2.65	0.44
26:DE:5:LEU:HD12	26:DE:10:SER:HB2	1.99	0.44
26:DE:73:ILE:O	26:DE:73:ILE:CG1	2.64	0.44
28:DG:122:ALA:CB	28:DG:131:VAL:O	2.61	0.44
28:DG:154:GLU:HA	28:DG:154:GLU:OE1	2.17	0.44
28:DG:25:ILE:HG22	28:DG:78:VAL:HG21	1.99	0.44
29:DH:24:GLY:C	29:DH:26:ALA:N	2.70	0.44
30:DI:139:VAL:O	30:DI:140:GLU:HB2	2.18	0.44
32:DK:10:VAL:HG13	32:DK:12:ASP:OD1	2.17	0.44
32:DK:79:PHE:N	32:DK:79:PHE:CD1	2.85	0.44
34:DM:35:ALA:HB2	34:DM:100:LYS:N	2.33	0.44
35:DN:22:ARG:O	35:DN:22:ARG:CG	2.65	0.44
35:DN:67:PHE:HE2	35:DN:73:ASN:ND2	2.16	0.44
22:DA:563:A:H2	38:DQ:36:GLN:OE1	2.00	0.44
39:DR:81:LYS:HA	39:DR:81:LYS:HD3	1.82	0.44
40:DS:49:LYS:HZ3	40:DS:49:LYS:HB3	1.80	0.44
41:DT:20:ALA:HB1	41:DT:31:VAL:HG11	1.99	0.44
42:DU:4:ILE:HG23	42:DU:71:ILE:CG2	2.46	0.44
44:DW:24:ARG:O	44:DW:25:PHE:HB2	2.18	0.44
47:DZ:39:ASP:HA	47:DZ:43:ILE:HD11	1.99	0.44
47:DZ:40:THR:C	47:DZ:42:ALA:H	2.19	0.44
1:AA:1279:G:N3	1:AA:1279:G:C2'	2.68	0.44
1:AA:1282:C:O2'	1:AA:1283:U:C5'	2.65	0.44
1:AA:1478:U:H2'	1:AA:1479:C:H6	1.82	0.44
1:AA:183:C:O2'	1:AA:184:G:C5'	2.65	0.44
1:AA:27:G:H2'	1:AA:28:A:C8	2.52	0.44
1:AA:376:G:H2'	1:AA:377:G:H8	1.83	0.44
1:AA:500:G:C6	1:AA:546:A:C2	3.05	0.44
1:AA:627:G:C2	1:AA:628:G:C4	3.05	0.44
1:AA:650:G:N2	1:AA:651:C:H1'	2.33	0.44
1:AA:860:A:N6	1:AA:861:G:C2	2.85	0.44
1:AA:908:A:C2	1:AA:909:A:C5	3.05	0.44
1:AA:92:U:O2'	1:AA:93:U:H6	1.96	0.44
2:AB:148:GLY:HA2	2:AB:151:LYS:HE3	1.99	0.44
3:AC:108:PRO:C	3:AC:110:LEU:H	2.20	0.44
3:AC:153:SER:HB3	3:AC:164:THR:CG2	2.39	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:109:THR:HG23	4:AD:112:GLU:CB	2.47	0.44
5:AE:81:GLN:HE22	5:AE:146:MET:CE	2.30	0.44
7:AG:78:ARG:HH12	7:AG:81:GLY:C	2.20	0.44
8:AH:20:ASN:HD22	8:AH:64:TYR:HE2	1.65	0.44
9:AI:103:VAL:CG2	9:AI:104:THR:N	2.81	0.44
9:AI:27:ILE:N	9:AI:27:ILE:CD1	2.77	0.44
10:AJ:33:GLY:CA	10:AJ:83:THR:CB	2.96	0.44
11:AK:63:GLN:HG3	11:AK:98:ALA:CB	2.47	0.44
11:AK:87:GLY:O	11:AK:92:ARG:HD2	2.18	0.44
18:AR:28:LEU:C	18:AR:30:ASN:N	2.70	0.44
18:AR:62:ARG:HD3	18:AR:69:TYR:HD2	1.81	0.44
19:AS:50:VAL:HG12	19:AS:74:ALA:CB	2.48	0.44
20:AT:30:PHE:O	20:AT:33:LYS:HB2	2.18	0.44
22:BA:1070:A:C2	22:BA:1097:U:H4'	2.53	0.44
22:BA:117:G:C6	22:BA:119:A:N6	2.86	0.44
22:BA:579:G:C2	22:BA:1262:A:C5	3.06	0.44
22:BA:1304:A:C2	22:BA:1305:C:C6	3.06	0.44
22:BA:1462:C:C2'	22:BA:1463:C:C5'	2.91	0.44
22:BA:1607:C:H4'	22:BA:1608:A:O5'	2.17	0.44
22:BA:1845:G:H2'	22:BA:1846:G:H5'	1.98	0.44
22:BA:2103:C:H2'	22:BA:2104:C:C5'	2.38	0.44
22:BA:2149:U:HO2'	22:BA:2150:C:C4'	2.30	0.44
22:BA:225:C:H2'	22:BA:226:A:O4'	2.18	0.44
22:BA:2463:C:O5'	22:BA:2463:C:H6	2.00	0.44
22:BA:2551:C:H2'	22:BA:2552:U:C6	2.52	0.44
22:BA:483:A:O2'	42:BU:56:GLY:CA	2.57	0.44
22:BA:90:U:H2'	22:BA:91:A:H8	1.82	0.44
23:BB:110:C:H2'	23:BB:111:U:C5'	2.47	0.44
23:BB:78:A:H2'	23:BB:79:G:O4'	2.17	0.44
24:BC:254:LYS:HE3	24:BC:254:LYS:HB3	1.72	0.44
25:BD:125:TRP:O	25:BD:126:ASN:CB	2.65	0.44
26:BE:12:LEU:HD22	26:BE:12:LEU:HA	1.85	0.44
26:BE:85:PHE:O	26:BE:86:ALA:C	2.54	0.44
27:BF:61:GLY:HA3	27:BF:94:ARG:HD2	1.98	0.44
30:BI:107:GLU:HA	30:BI:110:GLN:HB3	1.98	0.44
31:BJ:54:ILE:HD11	31:BJ:56:VAL:CG2	2.48	0.44
32:BK:18:ARG:HB2	32:BK:45:GLU:CB	2.43	0.44
32:BK:2:ILE:HG21	32:BK:39:ILE:HD12	2.00	0.44
37:BP:92:ARG:O	37:BP:93:LYS:CB	2.54	0.44
46:BY:30:MET:O	46:BY:34:SER:HB3	2.18	0.44
1:CA:1192:C:H2'	1:CA:1193:G:O5'	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1221:G:C2	1:CA:1222:G:C1'	3.01	0.44
1:CA:1228:C:HO2'	1:CA:1229:A:P	2.40	0.44
1:CA:1349:A:OP1	9:CI:121:ARG:HB2	2.17	0.44
1:CA:21:G:P	56:CA:1817:HOH:O	2.75	0.44
1:CA:405:U:H1'	1:CA:498:A:H2'	1.99	0.44
1:CA:57:G:H2'	1:CA:58:C:C6	2.53	0.44
1:CA:604:G:C5	1:CA:605:U:C5	3.05	0.44
2:CB:191:ASP:HA	2:CB:192:PRO:HD2	1.92	0.44
2:CB:15:PHE:O	2:CB:39:ILE:HD11	2.18	0.44
2:CB:9:LEU:HG	2:CB:10:LYS:H	1.81	0.44
3:CC:8:GLY:HA3	14:CN:88:MET:SD	2.57	0.44
5:CE:36:THR:CG2	5:CE:63:MET:HE2	2.46	0.44
8:CH:29:SER:OG	8:CH:32:LYS:CB	2.65	0.44
10:CJ:44:THR:CG2	10:CJ:45:ARG:H	2.27	0.44
10:CJ:65:TYR:HD2	14:CN:96:LYS:O	2.01	0.44
11:CK:90:PRO:O	11:CK:91:GLY:C	2.56	0.44
13:CM:14:ALA:HB1	13:CM:33:LEU:CD1	2.47	0.44
16:CP:40:ASN:HA	16:CP:41:PRO:HD3	1.81	0.44
19:CS:79:TYR:CG	19:CS:80:ARG:N	2.86	0.44
50:D2:10:LEU:O	50:D2:10:LEU:HD23	2.17	0.44
22:DA:976:G:N2	22:DA:1155:A:C2	2.86	0.44
22:DA:120:U:N3	22:DA:149:A:N6	2.66	0.44
22:DA:1343:G:N3	22:DA:1344:U:C5	2.85	0.44
22:DA:1481:U:H3	22:DA:1510:G:H1	1.66	0.44
22:DA:165:A:N3	22:DA:166:U:C6	2.86	0.44
22:DA:1712:U:C5	22:DA:1713:A:C5	3.05	0.44
22:DA:1782:U:H1'	22:DA:2609:U:O4'	2.17	0.44
22:DA:1895:C:C4	22:DA:1896:G:N7	2.86	0.44
22:DA:1920:C:H2'	22:DA:1921:G:O4'	2.17	0.44
22:DA:1957:C:H5'	22:DA:1984:G:O2'	2.18	0.44
22:DA:2024:G:C6	22:DA:2040:G:C2	3.05	0.44
22:DA:2027:G:C5	22:DA:2028:U:C5	3.06	0.44
22:DA:2077:A:N7	22:DA:2435:A:C2	2.85	0.44
22:DA:2093:G:N7	22:DA:2225:A:C4	2.85	0.44
22:DA:965:C:C4'	22:DA:2273:A:H1'	2.46	0.44
22:DA:2337:G:C2	22:DA:2338:C:C2	3.06	0.44
22:DA:235:U:O2'	22:DA:236:C:H5'	2.18	0.44
22:DA:2413:G:C2'	22:DA:2414:G:H5'	2.47	0.44
22:DA:2544:G:H2'	22:DA:2545:G:H8	1.80	0.44
22:DA:2672:U:C6	22:DA:2672:U:C3'	3.01	0.44
22:DA:345:A:C2'	22:DA:346:A:OP2	2.64	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:46:G:C2	22:DA:47:C:C4	3.05	0.44
22:DA:560:C:H2'	22:DA:561:G:H5'	1.99	0.44
22:DA:602:A:H5'	22:DA:605:G:OP1	2.17	0.44
22:DA:796:C:O5'	22:DA:796:C:H6	1.98	0.44
22:DA:84:A:OP2	22:DA:84:A:C8	2.65	0.44
22:DA:909:A:C6	22:DA:912:C:C2	3.06	0.44
22:DA:90:U:C5	22:DA:91:A:C5	3.05	0.44
23:DB:115:A:H2'	23:DB:116:G:H8	1.79	0.44
25:DD:125:TRP:CD1	25:DD:160:LYS:HB3	2.53	0.44
25:DD:186:LEU:HD21	37:DP:3:ILE:CD1	2.27	0.44
27:DF:134:GLN:HG3	27:DF:149:ARG:O	2.16	0.44
27:DF:41:GLU:HG2	27:DF:42:ALA:N	2.29	0.44
28:DG:1:SER:CB	28:DG:61:TRP:HE3	2.25	0.44
28:DG:91:VAL:CG2	28:DG:93:TYR:HE2	2.29	0.44
31:DJ:98:GLU:HG2	31:DJ:98:GLU:H	1.60	0.44
37:DP:72:VAL:O	37:DP:72:VAL:HG23	2.18	0.44
22:DA:572:A:OP2	39:DR:80:ARG:NH1	2.48	0.44
45:DX:61:LYS:O	45:DX:65:THR:HB	2.17	0.44
1:AA:1181:G:O2'	1:AA:1182:G:N9	2.51	0.44
1:AA:946:A:C2	1:AA:1236:A:N3	2.85	0.44
1:AA:1242:G:C6	1:AA:1243:C:C5	3.05	0.44
1:AA:1273:C:H2'	1:AA:1274:A:O4'	2.18	0.44
1:AA:1293:C:C5	1:AA:1294:G:N7	2.86	0.44
1:AA:1319:A:N7	1:AA:1323:G:C5	2.85	0.44
1:AA:1448:C:O2'	1:AA:1449:C:H5'	2.17	0.44
1:AA:180:U:C6	1:AA:180:U:C3'	3.01	0.44
1:AA:222:C:O2'	1:AA:223:A:H5'	2.18	0.44
1:AA:274:A:HO2'	1:AA:275:G:C1'	2.31	0.44
1:AA:316:C:C2	1:AA:317:U:C5	3.05	0.44
1:AA:358:U:H2'	1:AA:359:G:O5'	2.17	0.44
1:AA:63:C:P	1:AA:384:G:N2	2.90	0.44
1:AA:409:U:H2'	1:AA:410:G:C8	2.52	0.44
1:AA:487:A:H2'	1:AA:488:C:C6	2.52	0.44
1:AA:617:G:C2	1:AA:618:C:C5	3.05	0.44
1:AA:901:A:C5	1:AA:902:G:H1'	2.52	0.44
1:AA:901:A:N7	1:AA:902:G:H1'	2.33	0.44
2:AB:130:LYS:HZ2	2:AB:130:LYS:HA	1.78	0.44
4:AD:149:LYS:O	4:AD:150:LYS:HG3	2.17	0.44
4:AD:98:ASP:OD2	4:AD:99:ASN:N	2.50	0.44
6:AF:3:HIS:CD2	6:AF:94:HIS:HA	2.52	0.44
7:AG:73:GLU:HA	7:AG:140:VAL:CG1	2.48	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AH:10:LEU:HD22	8:AH:74:ILE:HG13	1.99	0.44
9:AI:49:GLN:C	9:AI:51:LEU:N	2.70	0.44
9:AI:64:ILE:HG21	9:AI:78:ILE:HG23	1.99	0.44
9:AI:86:LEU:HD23	9:AI:93:LEU:CD2	2.48	0.44
10:AJ:17:LEU:HD23	10:AJ:18:ILE:CA	2.48	0.44
11:AK:85:VAL:O	11:AK:112:VAL:HG22	2.17	0.44
12:AL:86:VAL:CG1	12:AL:89:LEU:HD23	2.44	0.44
14:AN:50:LEU:HB3	14:AN:51:PRO:HD2	1.98	0.44
16:AP:74:LEU:HD23	16:AP:74:LEU:N	2.32	0.44
19:AS:40:PHE:HB2	19:AS:42:ASN:ND2	2.33	0.44
20:AT:27:MET:HG3	20:AT:28:ARG:N	2.32	0.44
49:B1:13:SER:OG	49:B1:46:VAL:CG1	2.65	0.44
52:B4:13:ASN:ND2	52:B4:13:ASN:N	2.62	0.44
22:BA:1148:U:H3'	22:BA:1148:U:H6	1.82	0.44
22:BA:1178:C:C4	22:BA:1180:U:C4	3.06	0.44
22:BA:1374:G:C2'	22:BA:1375:U:H5'	2.47	0.44
22:BA:2013:A:N3	40:BS:88:ARG:NH1	2.66	0.44
22:BA:2015:A:C5	48:B0:2:VAL:CG2	3.01	0.44
22:BA:21:A:C2'	22:BA:22:C:H5'	2.47	0.44
22:BA:2415:G:C4	22:BA:2416:C:C6	3.05	0.44
22:BA:197:A:H62	22:BA:2430:A:C2'	2.30	0.44
22:BA:2671:G:H2'	22:BA:2672:U:H5'	1.97	0.44
22:BA:1999:C:H4'	22:BA:2723:C:O2	2.18	0.44
22:BA:2847:U:H2'	22:BA:2848:G:C5'	2.47	0.44
22:BA:417:C:H6	22:BA:417:C:O5'	2.01	0.44
22:BA:460:A:C2	22:BA:470:A:C4	3.06	0.44
23:BB:55:U:H2'	23:BB:56:G:O4'	2.18	0.44
23:BB:5:U:H2'	23:BB:6:G:H8	1.83	0.44
22:BA:1819:A:H5''	24:BC:159:THR:HG21	2.00	0.44
24:BC:269:ARG:HA	24:BC:269:ARG:HD3	1.71	0.44
26:BE:65:THR:O	26:BE:65:THR:HG23	2.17	0.44
28:BG:112:VAL:HG23	28:BG:113:ASP:N	2.32	0.44
28:BG:54:ARG:HG3	28:BG:57:TYR:CD1	2.53	0.44
29:BH:78:VAL:HG23	29:BH:78:VAL:O	2.18	0.44
30:BI:30:GLN:NE2	30:BI:32:VAL:HB	2.33	0.44
31:BJ:18:VAL:CG2	31:BJ:140:LEU:CD1	2.95	0.44
35:BN:24:MET:HE3	35:BN:44:LEU:HB2	2.00	0.44
36:BO:67:ASN:O	36:BO:68:LYS:C	2.55	0.44
36:BO:70:ALA:O	36:BO:71:ALA:C	2.54	0.44
37:BP:86:LYS:HD3	37:BP:86:LYS:HA	1.72	0.44
37:BP:88:ARG:HD3	37:BP:112:ARG:NH2	2.33	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:61:ILE:HG23	38:BQ:75:TYR:CE1	2.53	0.44
38:BQ:4:LYS:CD	38:BQ:7:VAL:HG13	2.46	0.44
39:BR:4:VAL:HG22	39:BR:40:MET:HB3	2.00	0.44
45:BX:6:VAL:HG23	45:BX:66:VAL:HG13	2.00	0.44
1:CA:1084:G:C8	1:CA:1085:U:C6	3.05	0.44
1:CA:1091:U:C2	1:CA:1093:A:OP2	2.71	0.44
1:CA:1138:G:H5''	1:CA:1138:G:N3	2.33	0.44
1:CA:112:G:O2'	1:CA:113:G:H5'	2.17	0.44
1:CA:1133:G:N1	1:CA:1142:G:C6	2.86	0.44
1:CA:1215:G:O2'	1:CA:1216:A:C5'	2.65	0.44
1:CA:1414:U:H2'	1:CA:1415:G:H8	1.83	0.44
1:CA:16:A:C3'	1:CA:17:U:H5'	2.44	0.44
1:CA:325:A:N6	1:CA:326:G:C6	2.86	0.44
1:CA:410:G:OP1	4:CD:25:ARG:NE	2.49	0.44
1:CA:595:A:C5'	1:CA:596:A:OP1	2.66	0.44
1:CA:73:C:HO2'	1:CA:74:A:H8	1.63	0.44
1:CA:973:G:O6	1:CA:974:A:C6	2.70	0.44
2:CB:131:LYS:C	2:CB:131:LYS:HE3	2.37	0.44
3:CC:113:LYS:O	3:CC:116:ALA:HB3	2.17	0.44
3:CC:129:PHE:CE2	3:CC:130:ARG:HG3	2.52	0.44
3:CC:39:ARG:HG2	3:CC:54:ILE:CG2	2.48	0.44
8:CH:29:SER:OG	8:CH:32:LYS:HB2	2.17	0.44
9:CI:51:LEU:HD23	9:CI:60:LEU:HD11	2.00	0.44
11:CK:27:ASN:O	11:CK:56:LYS:HD3	2.17	0.44
13:CM:10:ASP:C	13:CM:44:ILE:HD12	2.38	0.44
1:CA:1309:G:C1'	13:CM:72:ILE:HD11	2.47	0.44
14:CN:61:ASN:ND2	14:CN:72:PHE:CZ	2.85	0.44
20:CT:69:ASN:C	20:CT:69:ASN:ND2	2.70	0.44
22:DA:16:C:O3'	48:D0:10:SER:CB	2.66	0.44
50:D2:5:PHE:HD2	50:D2:6:GLN:N	2.14	0.44
22:DA:2418:A:OP1	51:D3:44:ARG:HD3	2.17	0.44
22:DA:103:A:O2'	22:DA:104:A:O4'	2.31	0.44
22:DA:1120:G:C6	22:DA:1121:C:N4	2.85	0.44
22:DA:1351:C:O2'	22:DA:1571:A:C1'	2.62	0.44
22:DA:1383:A:N3	22:DA:1383:A:H2'	2.31	0.44
22:DA:1667:G:OP1	32:DK:7:MET:N	2.44	0.44
22:DA:1812:U:O2	24:DC:43:ASN:ND2	2.42	0.44
22:DA:1885:A:H2'	22:DA:1886:U:O4'	2.17	0.44
22:DA:2072:C:H2'	22:DA:2073:C:H5'	2.00	0.44
22:DA:2308:G:C8	22:DA:2310:C:N4	2.86	0.44
22:DA:2348:U:C2'	22:DA:2349:G:H8	2.31	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:265:A:O2'	22:DA:266:G:H1'	2.18	0.44
22:DA:2695:U:O2	22:DA:2696:U:C6	2.70	0.44
22:DA:2750:A:HO2'	22:DA:2752:C:H41	1.59	0.44
22:DA:2765:A:C3'	22:DA:2766:A:H5'	2.48	0.44
22:DA:2817:U:C2'	22:DA:2818:U:O5'	2.65	0.44
22:DA:287:G:C2	22:DA:354:A:C2	3.05	0.44
22:DA:452:G:N2	22:DA:457:A:H1'	2.33	0.44
22:DA:547:A:C8	22:DA:549:G:N2	2.86	0.44
22:DA:620:G:H8	22:DA:622:G:O6	2.00	0.44
22:DA:668:A:C2'	22:DA:670:A:H62	2.22	0.44
22:DA:673:C:C4'	26:DE:77:ILE:HD11	2.47	0.44
22:DA:67:U:C2	22:DA:68:G:C8	3.06	0.44
22:DA:70:G:H4'	22:DA:71:A:OP1	2.16	0.44
22:DA:924:G:C2'	22:DA:925:A:H5'	2.48	0.44
22:DA:782:A:O2'	24:DC:223:ALA:O	2.35	0.44
25:DD:121:THR:O	25:DD:122:VAL:HB	2.17	0.44
27:DF:23:SER:HB3	27:DF:26:GLN:HB2	1.98	0.44
27:DF:52:ALA:HB1	27:DF:149:ARG:NE	2.31	0.44
28:DG:25:ILE:HG22	28:DG:25:ILE:O	2.16	0.44
33:DL:99:ASN:O	33:DL:100:ILE:HG22	2.17	0.44
33:DL:120:VAL:CG1	33:DL:121:THR:H	2.26	0.44
26:DE:29:HIS:CB	33:DL:6:LEU:HD21	2.41	0.44
34:DM:102:LEU:HD22	34:DM:102:LEU:H	1.83	0.44
37:DP:3:ILE:O	37:DP:3:ILE:CG1	2.64	0.44
44:DW:57:THR:HG22	44:DW:57:THR:O	2.16	0.44
1:AA:1069:C:C3'	1:AA:1070:U:H5''	2.47	0.44
1:AA:1142:G:O2'	1:AA:1143:G:O4'	2.35	0.44
1:AA:1231:G:C5	1:AA:1232:U:C4	3.05	0.44
1:AA:1399:C:O2	1:AA:1401:G:C6	2.71	0.44
1:AA:1526:G:P	21:AU:38:GLU:HB2	2.58	0.44
1:AA:487:A:C2'	1:AA:488:C:H5'	2.45	0.44
1:AA:53:A:C2'	1:AA:54:C:O5'	2.65	0.44
1:AA:661:G:C2	1:AA:745:G:C2	3.05	0.44
1:AA:858:G:O2'	1:AA:859:G:H5''	2.16	0.44
1:AA:912:C:O2'	1:AA:913:A:H5'	2.18	0.44
1:AA:936:C:H2'	1:AA:936:C:O2	2.17	0.44
2:AB:119:GLN:HA	2:AB:122:ASP:HB2	1.98	0.44
2:AB:71:THR:C	2:AB:72:LYS:HG2	2.38	0.44
3:AC:152:VAL:HG12	3:AC:197:VAL:HG13	1.99	0.44
3:AC:49:ALA:HB1	3:AC:75:VAL:CG2	2.48	0.44
5:AE:82:HIS:CE1	8:AH:95:MET:CE	3.01	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:68:VAL:HG21	7:AG:103:ILE:CG1	2.47	0.44
10:AJ:73:LEU:HA	10:AJ:73:LEU:HD22	1.65	0.44
1:AA:579:A:O2'	15:AO:53:ARG:NH1	2.51	0.44
17:AQ:55:GLY:CA	17:AQ:82:VAL:HG11	2.46	0.44
20:AT:72:ALA:O	20:AT:73:ARG:C	2.56	0.44
22:BA:1052:C:C6	22:BA:1052:C:C3'	3.00	0.44
22:BA:1132:U:H5'	31:BJ:84:ILE:CD1	2.48	0.44
22:BA:1178:C:O2	22:BA:1178:C:C2'	2.65	0.44
22:BA:1337:G:O2'	22:BA:1338:G:H5'	2.18	0.44
22:BA:1912:A:N1	22:BA:1919:A:C5	2.86	0.44
22:BA:1956:U:C2'	22:BA:1957:C:H5'	2.47	0.44
22:BA:2142:A:H2'	22:BA:2143:C:OP2	2.18	0.44
22:BA:2149:U:O2'	22:BA:2150:C:P	2.76	0.44
22:BA:2297:A:C8	22:BA:2297:A:C5'	2.99	0.44
22:BA:2302:U:H3	22:BA:2314:A:H61	1.65	0.44
22:BA:2352:A:O5'	22:BA:2352:A:H8	2.00	0.44
22:BA:2495:G:H2'	22:BA:2496:C:H5'	2.00	0.44
22:BA:2641:G:H5''	31:BJ:78:THR:HB	1.98	0.44
22:BA:286:U:H2'	22:BA:287:G:H8	1.83	0.44
22:BA:287:G:N2	22:BA:353:C:N3	2.61	0.44
22:BA:438:G:H2'	22:BA:439:A:H5'	2.00	0.44
22:BA:867:C:C4	22:BA:868:U:C5	3.05	0.44
23:BB:110:C:C2'	23:BB:111:U:H5'	2.48	0.44
22:BA:1820:U:H3	24:BC:197:ALA:HA	1.82	0.44
25:BD:105:LYS:N	25:BD:106:LYS:HD2	2.32	0.44
25:BD:68:PHE:CB	25:BD:73:VAL:HG12	2.48	0.44
25:BD:69:ALA:CA	25:BD:73:VAL:CG1	2.94	0.44
26:BE:37:ALA:O	26:BE:39:ALA:N	2.51	0.44
28:BG:162:ARG:NH2	28:BG:168:VAL:HG21	2.32	0.44
28:BG:18:ILE:HD12	28:BG:42:VAL:CG1	2.44	0.44
28:BG:61:TRP:O	28:BG:65:GLY:N	2.31	0.44
28:BG:83:THR:C	28:BG:84:LYS:HD3	2.38	0.44
29:BH:9:VAL:HG12	29:BH:13:GLY:H	1.82	0.44
34:BM:103:TYR:N	34:BM:103:TYR:CD1	2.86	0.44
34:BM:46:ILE:CD1	34:BM:46:ILE:C	2.80	0.44
40:BS:28:LYS:O	40:BS:29:VAL:C	2.56	0.44
44:BW:41:GLY:HA2	44:BW:44:PHE:CZ	2.53	0.44
1:CA:1151:A:C2'	1:CA:1152:A:H8	2.29	0.44
1:CA:1282:C:O2'	1:CA:1283:U:O5'	2.36	0.44
1:CA:1296:C:N3	1:CA:1297:G:N2	2.65	0.44
1:CA:161:A:H2'	1:CA:162:A:C8	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:206:C:C6	1:CA:206:C:H3'	2.52	0.44
1:CA:245:U:HO2'	1:CA:246:A:H5'	1.78	0.44
1:CA:652:U:O2'	1:CA:653:U:P	2.76	0.44
1:CA:708:C:C4'	11:CK:38:GLY:HA3	2.48	0.44
1:CA:763:G:H2'	1:CA:764:C:C6	2.48	0.44
1:CA:962:C:C2	1:CA:963:G:N7	2.85	0.44
2:CB:105:THR:HG23	2:CB:108:GLN:OE1	2.18	0.44
3:CC:11:LEU:O	3:CC:13:ILE:N	2.50	0.44
5:CE:55:VAL:N	5:CE:56:PRO:CD	2.79	0.44
6:CF:2:ARG:CG	6:CF:4:TYR:CZ	2.95	0.44
9:CI:87:MET:SD	9:CI:87:MET:N	2.90	0.44
10:CJ:44:THR:HG22	10:CJ:45:ARG:N	2.30	0.44
12:CL:33:CYS:CB	12:CL:77:SER:O	2.66	0.44
14:CN:20:PHE:HB3	14:CN:24:ALA:HB2	1.99	0.44
16:CP:51:ARG:HD3	16:CP:51:ARG:HA	1.62	0.44
16:CP:54:LEU:H	16:CP:54:LEU:CD2	2.27	0.44
1:CA:376:G:H5''	16:CP:5:ARG:HB2	2.00	0.44
18:CR:19:GLU:HG2	18:CR:20:ILE:N	2.33	0.44
18:CR:33:THR:C	18:CR:35:SER:H	2.21	0.44
18:CR:67:LEU:N	18:CR:67:LEU:HD23	2.33	0.44
22:DA:1210:G:H4'	22:DA:1211:C:O5'	2.17	0.44
22:DA:1519:G:N3	22:DA:1519:G:H2'	2.33	0.44
22:DA:1566:A:H5''	24:DC:213:ARG:NH1	2.33	0.44
22:DA:156:A:C2'	22:DA:157:C:O4'	2.64	0.44
22:DA:1914:C:C2'	22:DA:1915:U:C6	3.00	0.44
22:DA:1973:G:O6	22:DA:1974:C:N4	2.51	0.44
22:DA:2103:C:H2'	22:DA:2104:C:C4'	2.48	0.44
22:DA:215:G:O2'	22:DA:216:A:O5'	2.31	0.44
22:DA:2259:U:O4'	22:DA:2427:C:C2'	2.64	0.44
22:DA:2304:G:H2'	22:DA:2305:U:C5'	2.47	0.44
22:DA:2516:A:O2'	22:DA:2517:C:H5'	2.18	0.44
22:DA:2526:G:C2'	52:D4:1:MET:H1	2.31	0.44
22:DA:2572:A:C8	25:DD:150:GLN:HB3	2.52	0.44
22:DA:2668:G:O2'	22:DA:2669:G:O5'	2.35	0.44
22:DA:2784:U:H4'	25:DD:42:ASN:HB3	1.99	0.44
22:DA:2869:G:C8	22:DA:2870:C:C5	3.06	0.44
22:DA:295:G:N2	22:DA:296:U:C6	2.86	0.44
22:DA:319:G:C5	22:DA:320:A:C5	3.06	0.44
22:DA:355:U:H2'	22:DA:356:G:H8	1.83	0.44
22:DA:425:G:C2	22:DA:426:C:C5	3.05	0.44
22:DA:644:A:O2'	22:DA:645:C:C5'	2.64	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:674:G:O3'	26:DE:60:TRP:CZ2	2.71	0.44
22:DA:753:A:O2'	22:DA:754:U:H5'	2.17	0.44
22:DA:762:U:OP1	56:DA:3675:HOH:O	2.21	0.44
22:DA:87:U:HO2'	22:DA:88:G:P	2.41	0.44
22:DA:950:G:C2'	22:DA:951:C:H5'	2.47	0.44
22:DA:961:C:H5	22:DA:2456:C:C5'	2.30	0.44
22:DA:976:G:O2'	22:DA:977:G:C5'	2.66	0.44
23:DB:66:A:N3	23:DB:108:A:N1	2.66	0.44
24:DC:144:GLU:CA	24:DC:151:GLY:HA2	2.38	0.44
25:DD:151:THR:CB	25:DD:152:PRO:HD3	2.48	0.44
26:DE:57:LYS:HZ1	26:DE:58:LYS:N	2.16	0.44
28:DG:103:ASN:HA	28:DG:112:VAL:HB	1.99	0.44
28:DG:162:ARG:HG3	28:DG:166:GLU:HG3	1.98	0.44
29:DH:45:GLU:C	29:DH:47:PHE:H	2.21	0.44
34:DM:23:GLY:O	34:DM:101:VAL:HG12	2.18	0.44
35:DN:38:LEU:N	35:DN:39:PRO:CD	2.81	0.44
36:DO:69:ASP:O	36:DO:72:ALA:HB3	2.18	0.44
37:DP:9:GLN:C	37:DP:11:GLN:N	2.70	0.44
38:DQ:61:ILE:CD1	38:DQ:61:ILE:N	2.81	0.44
40:DS:9:HIS:O	40:DS:10:ALA:C	2.54	0.44
40:DS:40:ASN:OD1	40:DS:41:LYS:N	2.50	0.44
41:DT:10:VAL:O	41:DT:11:LEU:C	2.56	0.44
42:DU:8:ASP:OD1	42:DU:9:GLU:N	2.51	0.44
44:DW:25:PHE:O	44:DW:65:LYS:HA	2.18	0.44
45:DX:2:ARG:CB	45:DX:11:PRO:HD3	2.48	0.44
1:AA:1133:G:N1	1:AA:1142:G:C6	2.85	0.44
1:AA:1293:C:H2'	1:AA:1294:G:O4'	2.18	0.44
1:AA:1331:G:HO2'	1:AA:1332:A:P	2.41	0.44
1:AA:1380:U:C4	7:AG:2:ARG:HA	2.53	0.44
1:AA:149:A:N3	1:AA:149:A:H2'	2.33	0.44
1:AA:471:U:H2'	1:AA:472:U:O4'	2.17	0.44
1:AA:512:U:H2'	1:AA:513:C:C6	2.53	0.44
1:AA:544:G:C5	1:AA:545:C:C5	3.06	0.44
1:AA:669:G:O2'	1:AA:670:G:H5'	2.18	0.44
1:AA:725:G:O2'	1:AA:726:C:H5'	2.18	0.44
1:AA:72:A:H2'	1:AA:73:C:C6	2.52	0.44
1:AA:912:C:H6	1:AA:912:C:O5'	2.01	0.44
1:AA:74:A:C6	1:AA:97:G:C6	3.06	0.44
2:AB:105:THR:O	2:AB:105:THR:HG22	2.18	0.44
3:AC:10:ARG:O	3:AC:11:LEU:C	2.56	0.44
5:AE:103:GLY:HA2	5:AE:121:ASN:CA	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AE:148:SER:O	5:AE:152:VAL:HA	2.17	0.44
5:AE:96:GLN:HE21	5:AE:96:GLN:HA	1.83	0.44
10:AJ:80:THR:H	10:AJ:83:THR:CG2	2.31	0.44
11:AK:127:ARG:NH1	11:AK:127:ARG:HG2	2.32	0.44
12:AL:120:ARG:HA	12:AL:121:PRO:HD2	1.81	0.44
12:AL:34:THR:HG22	12:AL:35:ARG:HH21	1.83	0.44
13:AM:3:ILE:CG1	13:AM:3:ILE:O	2.65	0.44
13:AM:86:ARG:HA	13:AM:96:VAL:HG13	1.98	0.44
14:AN:5:MET:SD	14:AN:8:ARG:NH1	2.91	0.44
16:AP:41:PRO:C	16:AP:42:ILE:HD13	2.37	0.44
18:AR:34:GLU:OE2	21:AU:18:PHE:HE1	2.01	0.44
20:AT:82:ILE:HD12	20:AT:83:ASN:CB	2.48	0.44
22:BA:1021:A:C6	22:BA:1023:U:C5	3.05	0.44
22:BA:1716:U:H2'	22:BA:1717:A:H8	1.78	0.44
22:BA:2244:U:H2'	22:BA:2245:U:O4'	2.18	0.44
22:BA:2697:G:C5	22:BA:2698:U:C5	3.06	0.44
22:BA:2726:A:O2'	22:BA:2727:A:C5'	2.65	0.44
22:BA:553:G:H2'	22:BA:554:U:O4'	2.18	0.44
22:BA:611:C:C2'	22:BA:612:G:C5'	2.94	0.44
22:BA:802:A:H2'	22:BA:803:U:C6	2.53	0.44
22:BA:831:G:C6	22:BA:832:U:C4	3.06	0.44
22:BA:883:G:H2'	22:BA:884:U:O4'	2.18	0.44
25:BD:13:ARG:HD2	37:BP:55:HIS:ND1	2.32	0.44
25:BD:69:ALA:N	25:BD:73:VAL:CG1	2.81	0.44
26:BE:5:LEU:HD13	26:BE:122:GLU:HG3	2.00	0.44
27:BF:174:PHE:HD1	27:BF:176:PHE:CE1	2.35	0.44
29:BH:72:ILE:HD11	29:BH:142:VAL:CG1	2.47	0.44
22:BA:1058:U:H4'	30:BI:117:THR:CG2	2.47	0.44
34:BM:21:ALA:HA	34:BM:97:GLN:HG2	2.00	0.44
35:BN:103:ARG:CZ	35:BN:110:MET:HE1	2.48	0.44
35:BN:78:LYS:O	35:BN:79:LEU:C	2.53	0.44
36:BO:17:LYS:HD3	36:BO:17:LYS:O	2.18	0.44
36:BO:83:LEU:HA	36:BO:83:LEU:HD12	1.56	0.44
37:BP:88:ARG:HD3	37:BP:112:ARG:HH21	1.82	0.44
37:BP:98:TYR:CE2	37:BP:99:LEU:CD1	3.00	0.44
39:BR:15:SER:H	39:BR:18:GLN:NE2	2.16	0.44
41:BT:20:ALA:C	41:BT:22:THR:N	2.70	0.44
41:BT:37:ASP:O	41:BT:38:ALA:O	2.36	0.44
41:BT:8:LEU:HD12	41:BT:46:ALA:CA	2.43	0.44
43:BV:55:GLU:HG3	43:BV:55:GLU:H	1.47	0.44
46:BY:37:LEU:O	46:BY:37:LEU:HD13	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1014:A:H2	1:CA:1219:A:H1'	1.82	0.44
1:CA:1080:A:OP1	5:CE:51:LYS:NZ	2.49	0.44
1:CA:1106:G:H2'	1:CA:1107:C:H6	1.83	0.44
1:CA:1215:G:O2'	1:CA:1216:A:H5'	2.18	0.44
1:CA:1430:A:C2'	1:CA:1431:A:H5'	2.48	0.44
1:CA:1533:C:O5'	1:CA:1533:C:H6	1.98	0.44
1:CA:155:A:H2'	1:CA:156:C:C6	2.53	0.44
1:CA:243:A:H4'	1:CA:244:U:H5'	2.00	0.44
1:CA:506:G:C6	1:CA:507:C:C4	3.05	0.44
1:CA:599:C:O3'	8:CH:121:GLY:HA3	2.17	0.44
1:CA:885:G:O2'	1:CA:886:G:C5'	2.66	0.44
1:CA:889:A:H1'	1:CA:891:U:C6	2.52	0.44
1:CA:942:G:N2	1:CA:1342:C:C1'	2.78	0.44
1:CA:963:G:O6	1:CA:973:G:O6	2.36	0.44
3:CC:15:LYS:HG3	3:CC:16:PRO:HD2	1.98	0.44
3:CC:38:VAL:HG23	3:CC:39:ARG:N	2.33	0.44
4:CD:137:SER:HB2	4:CD:138:PRO:CD	2.43	0.44
6:CF:38:ARG:O	6:CF:62:MET:O	2.36	0.44
7:CG:41:ILE:O	7:CG:45:ALA:HB3	2.18	0.44
7:CG:78:ARG:HG3	7:CG:82:SER:O	2.18	0.44
7:CG:91:ARG:NE	7:CG:92:PRO:HD2	2.33	0.44
8:CH:100:ILE:O	8:CH:100:ILE:HD12	2.17	0.44
8:CH:28:SER:O	8:CH:29:SER:HB3	2.17	0.44
9:CI:14:SER:HB2	9:CI:77:ALA:HB2	1.99	0.44
13:CM:12:LYS:HE2	13:CM:16:ILE:CG2	2.46	0.44
13:CM:47:LEU:HD23	13:CM:48:SER:C	2.38	0.44
14:CN:92:ILE:HD12	14:CN:95:LEU:HD23	2.00	0.44
16:CP:20:VAL:HG23	16:CP:34:GLU:C	2.38	0.44
19:CS:16:LYS:O	19:CS:17:LYS:HD3	2.18	0.44
19:CS:38:THR:N	19:CS:69:LYS:CD	2.78	0.44
21:CU:32:ARG:HB3	21:CU:33:ARG:H	1.67	0.44
21:CU:44:ARG:HG3	21:CU:44:ARG:O	2.17	0.44
51:D3:46:LYS:HD3	51:D3:46:LYS:O	2.18	0.44
22:DA:1146:C:N4	22:DA:1147:A:N6	2.65	0.44
22:DA:1162:G:N2	39:DR:91:GLN:NE2	2.66	0.44
22:DA:1358:G:C5	56:DA:3415:HOH:O	2.70	0.44
22:DA:210:C:H4'	22:DA:1367:A:C1'	2.48	0.44
22:DA:1387:A:O2'	22:DA:1388:G:OP2	2.29	0.44
22:DA:1441:G:C6	22:DA:1442:U:C4	3.05	0.44
22:DA:1529:G:H2'	22:DA:1530:G:O4'	2.18	0.44
22:DA:53:A:H2	22:DA:179:C:H4'	1.78	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1817:G:H5''	24:DC:86:ARG:HH12	1.82	0.44
22:DA:1914:C:O4'	22:DA:1914:C:O2	2.36	0.44
22:DA:1999:C:H2'	22:DA:2000:C:O4'	2.17	0.44
22:DA:2331:G:N1	22:DA:2385:C:N4	2.66	0.44
22:DA:24:G:C6	22:DA:25:U:C4	3.06	0.44
22:DA:2796:U:C5	22:DA:2798:U:O4	2.70	0.44
22:DA:280:U:H5	22:DA:281:C:C4	2.34	0.44
22:DA:388:G:C5	22:DA:390:U:H2'	2.52	0.44
22:DA:45:G:H5'	22:DA:46:G:OP1	2.18	0.44
22:DA:608:A:N7	22:DA:621:A:N7	2.66	0.44
22:DA:607:U:C5	22:DA:619:G:C5	2.87	0.44
22:DA:804:A:H2'	22:DA:806:C:N4	2.33	0.44
22:DA:959:A:C2'	22:DA:960:A:C8	2.98	0.44
24:DC:20:ASN:HA	24:DC:21:PRO:HD3	1.81	0.44
24:DC:229:HIS:CE1	24:DC:230:PRO:HD2	2.53	0.44
24:DC:242:HIS:HA	24:DC:243:PRO:HD3	1.84	0.44
24:DC:2:VAL:HB	24:DC:3:VAL:H	1.34	0.44
25:DD:119:ALA:HB3	25:DD:163:GLY:N	2.32	0.44
26:DE:26:ALA:HB1	33:DL:9:ALA:HB2	1.98	0.44
26:DE:70:SER:O	26:DE:71:GLY:C	2.56	0.44
26:DE:79:ARG:O	26:DE:80:SER:C	2.56	0.44
27:DF:135:ILE:O	27:DF:137:PHE:N	2.51	0.44
29:DH:99:ILE:CG2	29:DH:100:ALA:N	2.73	0.44
29:DH:132:PHE:CD1	29:DH:133:GLN:N	2.85	0.44
29:DH:28:ASN:HA	29:DH:28:ASN:HD22	1.57	0.44
30:DI:37:PHE:CE1	30:DI:56:VAL:CG2	2.99	0.44
30:DI:64:ARG:HB2	30:DI:64:ARG:NH1	2.31	0.44
33:DL:116:VAL:CG1	33:DL:117:THR:N	2.80	0.44
34:DM:63:ILE:CD1	34:DM:105:MET:CE	2.96	0.44
37:DP:85:VAL:C	37:DP:86:LYS:HZ3	2.20	0.44
42:DU:59:GLU:O	42:DU:60:LYS:HD2	2.16	0.44
45:DX:58:ILE:HA	45:DX:66:VAL:HG21	1.99	0.44
1:AA:1072:G:C5	1:AA:1073:U:C4	3.06	0.44
1:AA:137:U:O2	1:AA:137:U:C2'	2.60	0.44
1:AA:198:G:C6	1:AA:220:G:C4	3.05	0.44
1:AA:478:A:H2'	1:AA:479:U:O4'	2.18	0.44
1:AA:487:A:H2'	1:AA:488:C:H6	1.83	0.44
1:AA:966:G:H2'	1:AA:967:C:C6	2.53	0.44
1:AA:993:G:N3	1:AA:993:G:H2'	2.33	0.44
2:AB:14:HIS:O	2:AB:14:HIS:CG	2.71	0.44
3:AC:138:GLN:C	3:AC:140:ALA:H	2.21	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:AC:41:TYR:HD1	3:AC:42:LEU:HD13	1.81	0.44
4:AD:28:ASP:HB2	4:AD:33:ILE:HB	1.98	0.44
8:AH:45:ILE:HD12	8:AH:60:LEU:HD22	1.99	0.44
11:AK:121:ARG:CZ	21:AU:35:GLU:HG3	2.48	0.44
16:AP:46:LYS:NZ	16:AP:48:GLU:H	2.15	0.44
17:AQ:78:VAL:HG12	17:AQ:79:GLU:HG3	2.00	0.44
19:AS:4:LEU:O	19:AS:5:LYS:HB2	2.17	0.44
20:AT:69:ASN:O	20:AT:72:ALA:HB3	2.18	0.44
21:AU:33:ARG:HG2	21:AU:34:ARG:H	1.81	0.44
22:BA:1201:U:H2'	22:BA:1202:G:O4'	2.18	0.44
22:BA:1277:G:H5'	35:BN:20:MET:HE3	1.92	0.44
22:BA:1692:U:H2'	22:BA:1694:C:C4	2.53	0.44
22:BA:1711:A:H2'	22:BA:1712:U:H6	1.83	0.44
22:BA:2365:G:C2'	22:BA:2366:A:C8	3.01	0.44
22:BA:2437:G:O2'	22:BA:2438:U:H5'	2.18	0.44
22:BA:2485:G:OP1	34:BM:45:GLN:NE2	2.50	0.44
22:BA:323:C:C4	22:BA:333:G:C8	3.05	0.44
22:BA:540:C:O2'	22:BA:541:A:H5'	2.17	0.44
22:BA:554:U:C4	22:BA:555:G:C6	3.06	0.44
22:BA:601:C:O2'	22:BA:605:G:OP1	2.32	0.44
22:BA:670:A:H4'	22:BA:671:C:C5'	2.47	0.44
22:BA:752:A:O2'	22:BA:753:A:P	2.75	0.44
22:BA:763:G:O2'	22:BA:764:A:H3'	2.18	0.44
22:BA:869:G:C6	22:BA:870:U:C4	3.06	0.44
22:BA:1654:A:C1'	25:BD:118:PHE:CD1	2.95	0.44
25:BD:9:VAL:CG1	25:BD:28:GLU:HB2	2.48	0.44
25:BD:49:GLN:NE2	25:BD:67:HIS:CE1	2.85	0.44
26:BE:108:ILE:CD1	26:BE:180:LEU:HD13	2.47	0.44
27:BF:109:ARG:HB2	27:BF:136:ILE:HG22	1.96	0.44
28:BG:33:THR:CA	28:BG:34:ARG:NH1	2.76	0.44
28:BG:83:THR:C	28:BG:84:LYS:CD	2.86	0.44
29:BH:134:VAL:HG21	29:BH:139:PHE:C	2.37	0.44
31:BJ:128:ASN:O	31:BJ:128:ASN:CG	2.56	0.44
44:BW:28:GLU:OE2	44:BW:29:SER:N	2.51	0.44
1:CA:1084:G:OP1	1:CA:1086:U:C6	2.71	0.44
1:CA:1102:A:H5''	1:CA:1102:A:C8	2.50	0.44
1:CA:954:G:C2	1:CA:1228:C:N3	2.86	0.44
1:CA:1255:G:O2'	1:CA:1258:G:H1'	2.18	0.44
1:CA:1278:G:OP2	1:CA:1278:G:H8	1.99	0.44
1:CA:1319:A:C2'	1:CA:1320:C:OP2	2.66	0.44
1:CA:139:A:H2'	1:CA:140:U:H5'	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:146:G:C2	1:CA:147:G:C8	3.06	0.44
1:CA:29:U:H5'	1:CA:296:U:OP1	2.17	0.44
1:CA:671:G:N1	1:CA:672:U:C2	2.85	0.44
1:CA:743:A:C6	1:CA:744:C:C4	3.05	0.44
1:CA:844:G:C2	1:CA:846:G:O2'	2.62	0.44
1:CA:844:G:C2'	1:CA:845:A:H5''	2.48	0.44
1:CA:872:A:C5	1:CA:874:G:C8	3.06	0.44
1:CA:998:C:C5	1:CA:999:C:H5	2.35	0.44
2:CB:144:GLU:HG3	2:CB:148:GLY:HA2	1.99	0.44
6:CF:8:PHE:CE2	6:CF:60:VAL:HB	2.53	0.44
6:CF:81:ASN:HD21	6:CF:83:ALA:HB3	1.83	0.44
7:CG:9:ARG:HG3	7:CG:10:LYS:N	2.33	0.44
7:CG:128:GLU:O	7:CG:129:ASN:HB2	2.18	0.44
1:CA:1240:U:O2'	7:CG:37:THR:CG2	2.65	0.44
8:CH:1:SER:O	8:CH:3:GLN:N	2.51	0.44
9:CI:126:PHE:O	9:CI:126:PHE:CG	2.71	0.44
10:CJ:52:LEU:HG	10:CJ:62:ARG:HG2	2.00	0.44
11:CK:126:ARG:O	11:CK:127:ARG:HB2	2.17	0.44
12:CL:5:GLN:HG3	12:CL:9:LYS:HZ3	1.81	0.44
12:CL:6:LEU:H	12:CL:6:LEU:HD12	1.83	0.44
13:CM:57:ASP:C	13:CM:59:VAL:H	2.22	0.44
18:CR:70:THR:OG1	18:CR:71:ASP:N	2.51	0.44
20:CT:50:PHE:O	20:CT:53:MET:HG3	2.18	0.44
21:CU:33:ARG:NH2	21:CU:34:ARG:HD2	2.33	0.44
49:D1:47:ILE:H	49:D1:47:ILE:CD1	2.20	0.44
22:DA:1060:U:H4'	22:DA:1061:U:C2'	2.47	0.44
22:DA:112:U:C5	22:DA:113:U:C4	3.05	0.44
22:DA:1153:C:H2'	22:DA:1154:G:H8	1.78	0.44
22:DA:120:U:H5''	56:DA:3222:HOH:O	2.18	0.44
22:DA:1333:G:O2'	22:DA:1334:G:H5'	2.18	0.44
22:DA:1317:G:N2	22:DA:1336:A:N3	2.66	0.44
22:DA:136:G:H2'	22:DA:137:U:C6	2.53	0.44
22:DA:1416:G:C2	22:DA:1417:C:C5	3.06	0.44
22:DA:1416:G:N3	22:DA:1417:C:C5	2.86	0.44
22:DA:142:A:O2'	22:DA:143:C:O4'	2.36	0.44
22:DA:1464:G:N1	22:DA:1465:G:C5	2.86	0.44
22:DA:1510:G:N2	22:DA:1511:G:C6	2.86	0.44
22:DA:1555:G:H2'	22:DA:1556:C:C6	2.53	0.44
22:DA:1766:G:O6	22:DA:1987:A:C6	2.70	0.44
22:DA:1835:G:N3	22:DA:1836:C:C6	2.86	0.44
22:DA:1868:C:N4	22:DA:1869:G:O6	2.51	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2071:A:H2'	22:DA:2072:C:C6	2.53	0.44
22:DA:2149:U:C6	22:DA:2150:C:H5	2.35	0.44
22:DA:2348:U:O2'	22:DA:2349:G:H8	2.01	0.44
22:DA:2519:U:H1'	22:DA:2520:C:C5	2.47	0.44
22:DA:2657:A:C5	22:DA:2665:A:C5	3.06	0.44
22:DA:310:A:C2	22:DA:330:A:C4	3.06	0.44
22:DA:333:G:O2'	22:DA:334:C:H6	2.01	0.44
22:DA:35:G:O2'	22:DA:36:G:H8	2.01	0.44
22:DA:471:A:O5'	22:DA:471:A:H8	2.00	0.44
22:DA:589:U:H2'	22:DA:590:A:H5'	1.96	0.44
22:DA:916:G:HO2'	22:DA:917:A:P	2.41	0.44
22:DA:991:C:O2'	22:DA:992:C:C5'	2.66	0.44
23:DB:10:G:C8	23:DB:11:C:C5	3.06	0.44
23:DB:16:G:N1	23:DB:17:C:C4	2.86	0.44
23:DB:58:A:O2'	23:DB:59:A:O5'	2.36	0.44
24:DC:230:PRO:HG2	24:DC:245:THR:O	2.17	0.44
25:DD:88:GLU:O	25:DD:89:GLU:HG3	2.18	0.44
22:DA:321:U:HO2'	26:DE:162:ARG:HH11	1.65	0.44
28:DG:145:ALA:HA	28:DG:148:ARG:HG2	1.98	0.44
28:DG:19:ASN:ND2	28:DG:19:ASN:N	2.62	0.44
29:DH:12:LEU:HD13	29:DH:19:VAL:HG21	2.00	0.44
29:DH:38:PRO:O	29:DH:40:THR:HG23	2.18	0.44
30:DI:64:ARG:HB2	30:DI:64:ARG:CZ	2.48	0.44
22:DA:1952:A:OP1	32:DK:42:THR:CG2	2.66	0.44
34:DM:133:LYS:O	34:DM:134:THR:HB	2.18	0.44
36:DO:11:ALA:HB2	36:DO:96:GLY:CA	2.48	0.44
32:DK:76:VAL:HB	37:DP:72:VAL:HG22	1.99	0.44
39:DR:15:SER:OG	39:DR:16:GLU:N	2.49	0.44
40:DS:51:LEU:HD12	40:DS:51:LEU:O	2.18	0.44
44:DW:18:LYS:H	44:DW:36:ILE:HG13	1.77	0.44
1:AA:102:G:C4	1:AA:103:U:C5	3.06	0.44
1:AA:1272:G:C2'	1:AA:1273:C:H5'	2.48	0.44
1:AA:1317:C:OP1	14:AN:20:PHE:HE2	2.01	0.44
1:AA:1444:U:H2'	1:AA:1445:U:C6	2.53	0.44
1:AA:1452:C:O4'	1:AA:1453:G:C2	2.71	0.44
1:AA:1454:G:H2'	1:AA:1455:G:H8	1.81	0.44
1:AA:182:A:O2'	1:AA:184:G:N7	2.46	0.44
1:AA:233:C:H2'	1:AA:234:C:H6	1.82	0.44
1:AA:9:G:C6	1:AA:26:A:N6	2.86	0.44
1:AA:385:C:O2'	1:AA:386:C:H5'	2.18	0.44
1:AA:426:U:HO2'	1:AA:427:U:H5'	1.78	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:486:U:C2'	1:AA:487:A:C5'	2.88	0.44
1:AA:849:G:C6	1:AA:850:U:N3	2.85	0.44
2:AB:110:ILE:HD11	2:AB:150:ILE:HD13	2.00	0.44
4:AD:53:GLN:NE2	4:AD:201:GLU:HG2	2.33	0.44
6:AF:86:ARG:NH1	6:AF:88:MET:HE3	2.33	0.44
11:AK:73:VAL:C	11:AK:75:GLU:H	2.20	0.44
13:AM:15:VAL:HG12	13:AM:33:LEU:HD12	1.99	0.44
15:AO:23:SER:O	15:AO:25:GLU:N	2.51	0.44
15:AO:31:LEU:HA	15:AO:31:LEU:HD23	1.74	0.44
17:AQ:29:LYS:HG3	17:AQ:36:PHE:CZ	2.52	0.44
17:AQ:32:ILE:N	17:AQ:32:ILE:HD12	2.33	0.44
17:AQ:62:GLU:HB2	17:AQ:72:TRP:CE2	2.53	0.44
19:AS:79:TYR:CZ	19:AS:80:ARG:HB2	2.53	0.44
21:AU:27:VAL:O	21:AU:30:GLU:HB3	2.18	0.44
49:B1:49:LYS:O	49:B1:50:GLU:CB	2.56	0.44
22:BA:2755:C:C4	52:B4:19:ARG:NH1	2.85	0.44
22:BA:1376:C:O2'	22:BA:1377:G:H5'	2.17	0.44
22:BA:1471:G:O2'	22:BA:1472:C:H5'	2.18	0.44
22:BA:1494:A:H2'	22:BA:1495:A:C8	2.53	0.44
22:BA:1496:A:H2'	22:BA:1498:C:N4	2.33	0.44
22:BA:1585:C:C2'	22:BA:1586:A:C5'	2.81	0.44
22:BA:1854:A:H2	22:BA:2087:G:N3	2.16	0.44
22:BA:2093:G:OP1	29:BH:24:GLY:N	2.41	0.44
22:BA:2783:U:H2'	22:BA:2784:U:C6	2.53	0.44
22:BA:301:G:O2'	22:BA:302:C:O5'	2.36	0.44
22:BA:396:G:H2'	22:BA:397:U:C6	2.52	0.44
22:BA:704:G:O2'	22:BA:726:G:C2	2.71	0.44
22:BA:900:A:C4	22:BA:901:C:C6	3.06	0.44
27:BF:173:ASP:O	27:BF:174:PHE:O	2.36	0.44
22:BA:1080:A:C3'	30:BI:126:ARG:HG3	2.48	0.44
33:BL:48:ARG:HH21	51:B3:3:ILE:CG2	2.31	0.44
33:BL:75:ALA:HB2	33:BL:105:ILE:CD1	2.48	0.44
37:BP:47:ILE:HA	37:BP:96:LEU:HB2	1.99	0.44
40:BS:59:GLU:HA	40:BS:64:ALA:HB1	1.96	0.44
42:BU:39:ASN:HB3	42:BU:62:ALA:O	2.18	0.44
44:BW:21:GLY:C	44:BW:22:VAL:HG12	2.38	0.44
44:BW:49:ASN:O	44:BW:50:VAL:CG2	2.66	0.44
45:BX:38:TRP:HA	45:BX:45:PHE:CD2	2.53	0.44
45:BX:46:VAL:HG11	45:BX:77:TYR:CD1	2.52	0.44
47:BZ:4:ILE:HG12	47:BZ:37:ARG:O	2.18	0.44
47:BZ:9:THR:HG23	47:BZ:9:THR:O	2.14	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:994:A:C6	1:CA:1216:A:C5'	3.01	0.44
1:CA:127:G:N2	1:CA:235:C:C2	2.86	0.44
1:CA:1308:U:H5	13:CM:97:ARG:CZ	2.29	0.44
1:CA:1452:C:H4'	1:CA:1453:G:C5'	2.45	0.44
1:CA:1453:G:N2	1:CA:1454:G:C5	2.86	0.44
1:CA:199:A:O2'	1:CA:200:G:P	2.76	0.44
1:CA:390:U:H2'	1:CA:391:G:O4'	2.17	0.44
1:CA:671:G:C6	1:CA:672:U:N3	2.85	0.44
1:CA:771:G:C2	1:CA:809:G:N3	2.86	0.44
1:CA:86:G:C2	1:CA:87:C:C4	3.06	0.44
2:CB:124:THR:HG23	2:CB:125:PHE:H	1.82	0.44
2:CB:164:ASP:HB2	2:CB:167:HIS:HB3	1.96	0.44
2:CB:95:TRP:HZ2	2:CB:100:LEU:CD1	2.25	0.44
3:CC:5:HIS:NE2	3:CC:183:TYR:CE2	2.86	0.44
3:CC:89:VAL:O	3:CC:93:ILE:HG22	2.17	0.44
5:CE:73:VAL:CG1	5:CE:143:LEU:HB3	2.48	0.44
9:CI:127:SER:O	9:CI:128:LYS:HB3	2.18	0.44
9:CI:27:ILE:HB	9:CI:34:LEU:CA	2.48	0.44
9:CI:27:ILE:HB	9:CI:34:LEU:HB2	1.99	0.44
11:CK:75:GLU:OE2	11:CK:75:GLU:HA	2.18	0.44
18:CR:46:THR:HG23	18:CR:51:GLN:HB2	1.99	0.44
18:CR:59:LYS:O	18:CR:63:TYR:CD1	2.71	0.44
19:CS:32:THR:C	19:CS:34:SER:H	2.20	0.44
21:CU:35:GLU:O	21:CU:36:PHE:HD2	1.93	0.44
22:DA:1146:C:H42	22:DA:1147:A:N6	2.16	0.44
22:DA:56:A:C2	22:DA:115:C:C2	3.06	0.44
22:DA:128:C:H6	22:DA:128:C:C5'	2.28	0.44
22:DA:1313:U:HO2'	22:DA:1314:C:H5'	1.82	0.44
22:DA:1355:G:C6	22:DA:1377:G:C2	3.06	0.44
22:DA:137:U:H2'	22:DA:138:U:O4'	2.18	0.44
22:DA:1510:G:O2'	22:DA:1511:G:C8	2.66	0.44
22:DA:1558:C:H1'	22:DA:1560:G:C5	2.53	0.44
22:DA:1565:C:O2'	22:DA:1566:A:O5'	2.32	0.44
22:DA:1722:A:C5	22:DA:1739:A:C5	3.06	0.44
22:DA:1716:U:C4	22:DA:1745:A:N6	2.86	0.44
22:DA:2060:A:C2'	26:DE:63:LYS:HZ3	2.27	0.44
22:DA:189:G:N2	22:DA:208:C:N4	2.66	0.44
22:DA:2297:A:C2	22:DA:2298:A:C8	3.06	0.44
22:DA:2618:G:C5	22:DA:2619:C:C5	3.06	0.44
22:DA:2741:A:H2'	22:DA:2742:G:C5'	2.46	0.44
22:DA:2843:G:N2	22:DA:2875:C:C2	2.86	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:302:C:O2'	22:DA:303:G:H5'	2.18	0.44
22:DA:308:G:C2	22:DA:309:A:C2	3.06	0.44
22:DA:3:U:C4	22:DA:4:U:C4	3.06	0.44
22:DA:446:G:O4'	22:DA:449:A:C2	2.71	0.44
22:DA:457:A:H2	22:DA:458:G:N2	2.16	0.44
22:DA:523:C:O2'	22:DA:524:G:H5'	2.17	0.44
22:DA:581:C:C2	22:DA:582:A:N7	2.86	0.44
22:DA:679:C:C2'	22:DA:680:C:O5'	2.66	0.44
23:DB:104:A:H2'	23:DB:105:G:H5'	2.00	0.44
23:DB:42:C:N4	27:DF:87:LYS:CD	2.81	0.44
23:DB:81:G:C4	23:DB:82:U:C5	3.06	0.44
24:DC:196:ASN:O	24:DC:197:ALA:CB	2.64	0.44
24:DC:90:ILE:CG2	24:DC:91:ALA:N	2.81	0.44
26:DE:153:LEU:HD21	26:DE:157:LEU:HG	1.99	0.44
27:DF:99:PHE:C	27:DF:101:ARG:H	2.20	0.44
28:DG:35:THR:C	28:DG:36:LEU:HD12	2.39	0.44
29:DH:9:VAL:HG11	29:DH:12:LEU:CD1	2.48	0.44
30:DI:117:THR:HG22	30:DI:117:THR:O	2.16	0.44
31:DJ:99:ARG:CG	31:DJ:102:GLU:OE2	2.66	0.44
31:DJ:43:GLU:O	31:DJ:44:TYR:C	2.53	0.44
31:DJ:55:ILE:CG1	31:DJ:55:ILE:O	2.65	0.44
31:DJ:67:ASN:O	31:DJ:71:ASP:HB2	2.18	0.44
33:DL:132:ARG:O	33:DL:135:ILE:HG22	2.17	0.44
33:DL:29:LYS:O	33:DL:30:THR:OG1	2.34	0.44
34:DM:33:LEU:HD22	34:DM:128:THR:HB	2.00	0.44
34:DM:66:ARG:HD2	34:DM:101:VAL:HG11	1.98	0.44
37:DP:88:ARG:NH1	37:DP:112:ARG:NH2	2.53	0.44
37:DP:50:ARG:H	37:DP:50:ARG:HG3	1.43	0.44
38:DQ:43:GLN:NE2	39:DR:77:PHE:HB3	2.32	0.44
40:DS:27:LYS:O	40:DS:28:LYS:O	2.35	0.44
43:DV:4:ILE:HD12	43:DV:63:ILE:HD11	2.00	0.44
43:DV:89:ILE:CD1	43:DV:91:PHE:CZ	2.95	0.44
1:AA:1131:G:H2'	1:AA:1132:C:O5'	2.16	0.43
1:AA:1168:U:OP1	1:AA:1168:U:H3'	2.18	0.43
1:AA:1299:A:C5	1:AA:1301:U:C2	3.06	0.43
1:AA:1449:C:C2'	1:AA:1450:U:C5'	2.81	0.43
1:AA:1441:A:N6	1:AA:1461:G:H21	1.91	0.43
1:AA:275:G:C4	1:AA:276:G:C8	3.06	0.43
1:AA:497:G:N2	1:AA:498:A:C6	2.86	0.43
1:AA:528:C:C6	1:AA:528:C:C4'	3.01	0.43
1:AA:709:U:H2'	1:AA:710:G:C8	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:920:U:H2'	1:AA:921:U:C6	2.53	0.43
1:AA:91:U:C2'	1:AA:92:U:O4'	2.65	0.43
2:AB:150:ILE:O	2:AB:151:LYS:C	2.56	0.43
3:AC:136:ALA:O	3:AC:140:ALA:HB2	2.17	0.43
3:AC:6:PRO:O	3:AC:10:ARG:HG2	2.18	0.43
4:AD:53:GLN:HE21	4:AD:202:LEU:N	2.16	0.43
4:AD:4:LEU:N	4:AD:4:LEU:HD12	2.34	0.43
4:AD:56:GLU:OE2	4:AD:195:ASN:N	2.48	0.43
7:AG:14:ASP:OD1	7:AG:17:PHE:CD1	2.71	0.43
7:AG:88:VAL:CG2	7:AG:89:GLU:N	2.81	0.43
9:AI:40:ARG:C	9:AI:44:ARG:HB3	2.39	0.43
10:AJ:16:ARG:O	10:AJ:20:GLN:HG2	2.18	0.43
10:AJ:49:PHE:CZ	14:AN:76:PHE:CZ	3.06	0.43
13:AM:10:ASP:OD2	13:AM:44:ILE:HB	2.18	0.43
1:AA:1216:A:OP1	14:AN:4:SER:HB3	2.18	0.43
15:AO:87:ARG:O	15:AO:87:ARG:HG3	2.18	0.43
21:AU:10:PRO:C	21:AU:11:PHE:HD2	2.20	0.43
48:B0:50:GLY:O	48:B0:51:ARG:C	2.56	0.43
49:B1:8:ILE:CG2	49:B1:9:LYS:H	2.28	0.43
22:BA:1074:G:N3	22:BA:1075:C:C5	2.86	0.43
22:BA:1085:A:H3'	22:BA:1086:A:C2	2.53	0.43
22:BA:749:A:H4'	22:BA:1271:G:N3	2.34	0.43
22:BA:1315:C:C2'	22:BA:1316:U:H5'	2.48	0.43
22:BA:138:U:H3'	22:BA:139:U:C5'	2.47	0.43
22:BA:1566:A:O2'	22:BA:1567:G:H5'	2.18	0.43
22:BA:1662:U:H2'	22:BA:1663:G:O4'	2.18	0.43
22:BA:1735:A:N3	22:BA:1736:U:C6	2.86	0.43
22:BA:1857:G:C1'	22:BA:1884:G:N2	2.80	0.43
22:BA:1918:A:O2'	22:BA:1919:A:N7	2.51	0.43
22:BA:2029:G:H2'	22:BA:2031:A:OP1	2.18	0.43
22:BA:2637:U:O2'	22:BA:2638:G:H5'	2.17	0.43
22:BA:30:G:H2'	22:BA:31:C:C6	2.53	0.43
22:BA:50:U:H4'	22:BA:51:G:OP2	2.18	0.43
22:BA:571:U:C5	22:BA:575:A:C5	3.06	0.43
22:BA:668:A:H2'	22:BA:670:A:N6	2.25	0.43
22:BA:669:G:C5	22:BA:801:G:C6	3.06	0.43
22:BA:855:G:N2	44:BW:23:LYS:HB3	2.33	0.43
22:BA:912:C:H2'	22:BA:913:U:H6	1.83	0.43
24:BC:121:ALA:HB3	24:BC:129:LEU:CD2	2.47	0.43
24:BC:131:MET:O	24:BC:132:ARG:C	2.55	0.43
24:BC:257:ARG:HG3	24:BC:269:ARG:HH12	1.83	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:BC:80:LEU:HA	24:BC:80:LEU:HD23	1.46	0.43
25:BD:149:ASN:O	25:BD:152:PRO:HD2	2.17	0.43
25:BD:53:GLY:O	25:BD:54:ALA:HB2	2.18	0.43
26:BE:196:VAL:HG13	26:BE:200:LEU:HD22	1.99	0.43
27:BF:46:LYS:HE3	27:BF:46:LYS:H	1.82	0.43
31:BJ:49:ASP:C	31:BJ:49:ASP:OD2	2.56	0.43
33:BL:51:GLU:OE2	33:BL:60:ARG:NH1	2.51	0.43
33:BL:62:PRO:HG2	51:B3:24:LYS:HB3	2.00	0.43
35:BN:24:MET:CG	35:BN:44:LEU:HD22	2.33	0.43
36:BO:117:PHE:CD1	36:BO:117:PHE:O	2.70	0.43
37:BP:25:VAL:HG11	37:BP:46:VAL:CG2	2.48	0.43
37:BP:44:GLY:HA3	37:BP:61:ARG:O	2.18	0.43
43:BV:29:ILE:O	43:BV:91:PHE:N	2.50	0.43
44:BW:24:ARG:HD3	44:BW:65:LYS:CD	2.48	0.43
44:BW:24:ARG:NE	44:BW:65:LYS:HE2	2.32	0.43
45:BX:60:LYS:O	45:BX:61:LYS:C	2.57	0.43
1:CA:1322:C:O2'	1:CA:1323:G:C5'	2.58	0.43
1:CA:224:U:O2	1:CA:224:U:H2'	2.18	0.43
1:CA:683:G:H21	11:CK:39:ASN:HD22	1.66	0.43
1:CA:702:A:H5'	1:CA:703:G:C8	2.53	0.43
1:CA:794:A:H8	1:CA:794:A:H5''	1.83	0.43
1:CA:821:G:H2'	1:CA:822:U:C5	2.52	0.43
1:CA:854:U:H2'	1:CA:855:U:C6	2.54	0.43
1:CA:867:G:C5	1:CA:868:C:C5	3.04	0.43
2:CB:103:TRP:HA	2:CB:106:VAL:H	1.83	0.43
4:CD:137:SER:C	4:CD:181:PHE:HD2	2.20	0.43
4:CD:11:SER:HA	4:CD:18:LEU:HG	2.00	0.43
4:CD:72:ARG:O	4:CD:75:TYR:HB3	2.18	0.43
4:CD:84:ASN:HD22	4:CD:85:THR:N	2.13	0.43
5:CE:79:THR:CA	5:CE:121:ASN:ND2	2.79	0.43
1:CA:9:G:OP2	5:CE:125:LYS:HG3	2.17	0.43
7:CG:30:MET:HE3	7:CG:33:GLY:HA2	2.00	0.43
5:CE:157:GLY:HA3	8:CH:63:LYS:NZ	2.33	0.43
10:CJ:92:LEU:H	10:CJ:92:LEU:HD13	1.82	0.43
17:CQ:52:CYS:HB2	17:CQ:53:GLY:H	1.66	0.43
18:CR:72:ARG:HE	18:CR:72:ARG:N	1.99	0.43
21:CU:25:ALA:O	21:CU:28:LEU:N	2.47	0.43
22:DA:126:A:OP2	50:D2:19:ARG:HB2	2.18	0.43
22:DA:1049:C:C5	22:DA:1050:A:N7	2.85	0.43
22:DA:931:U:H5	22:DA:1182:G:H21	1.65	0.43
22:DA:1280:G:C6	22:DA:1281:G:N7	2.86	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1427:A:H4'	22:DA:1428:C:O4'	2.18	0.43
22:DA:1452:G:C5	22:DA:2702:G:N1	2.86	0.43
22:DA:162:U:C5'	22:DA:163:C:OP1	2.60	0.43
22:DA:165:A:H2'	22:DA:166:U:C6	2.44	0.43
22:DA:1970:A:H5'	22:DA:1971:U:OP1	2.17	0.43
22:DA:2152:G:N3	22:DA:2152:G:H2'	2.33	0.43
22:DA:161:A:H2	22:DA:2217:G:H1'	1.82	0.43
22:DA:2373:G:C6	22:DA:2374:C:C4	3.06	0.43
22:DA:2439:A:C8	22:DA:2586:U:H4'	2.52	0.43
22:DA:2579:C:H2'	22:DA:2580:U:O4'	2.17	0.43
22:DA:295:G:C2	22:DA:296:U:C6	3.06	0.43
22:DA:397:U:OP1	45:DX:30:PRO:CA	2.65	0.43
22:DA:538:A:N6	22:DA:555:G:O2'	2.51	0.43
22:DA:618:G:C2	22:DA:619:G:C1'	3.01	0.43
22:DA:668:A:C5	22:DA:670:A:N7	2.85	0.43
22:DA:734:A:H2'	22:DA:735:A:O4'	2.18	0.43
22:DA:749:A:H2'	22:DA:750:A:H8	1.82	0.43
22:DA:749:A:C5	22:DA:750:A:N7	2.86	0.43
22:DA:819:A:H2	22:DA:943:A:O4'	2.01	0.43
22:DA:869:G:C6	22:DA:909:A:N6	2.86	0.43
22:DA:856:G:C2	22:DA:922:C:N3	2.86	0.43
22:DA:927:A:N1	22:DA:928:A:C2	2.86	0.43
22:DA:929:U:H5''	47:DZ:37:ARG:CZ	2.47	0.43
22:DA:971:G:O6	22:DA:972:A:C2	2.71	0.43
23:DB:26:C:H1'	23:DB:117:G:H1'	1.99	0.43
25:DD:1:MET:SD	25:DD:100:LEU:HD11	2.58	0.43
26:DE:20:GLY:H	26:DE:110:SER:CB	2.30	0.43
26:DE:124:PHE:CZ	26:DE:141:MET:CE	3.00	0.43
27:DF:23:SER:HB3	27:DF:26:GLN:CB	2.48	0.43
27:DF:36:ASN:HB3	27:DF:152:ASP:OD2	2.17	0.43
27:DF:65:LEU:CD2	27:DF:65:LEU:H	2.29	0.43
28:DG:25:ILE:HG22	28:DG:78:VAL:HG11	1.99	0.43
30:DI:76:ALA:HB2	30:DI:131:THR:HB	1.99	0.43
31:DJ:36:LEU:HA	31:DJ:36:LEU:HD13	1.88	0.43
31:DJ:45:THR:OG1	31:DJ:48:VAL:CB	2.62	0.43
34:DM:76:LYS:NZ	34:DM:84:LYS:N	2.55	0.43
22:DA:2275:C:O2'	34:DM:84:LYS:HA	2.17	0.43
35:DN:54:LEU:CD1	35:DN:66:ALA:HB2	2.25	0.43
36:DO:12:THR:HG23	36:DO:16:ARG:NH1	2.29	0.43
36:DO:51:ALA:HB3	36:DO:78:VAL:HG22	1.99	0.43
39:DR:72:VAL:HG23	39:DR:72:VAL:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:DR:88:GLY:O	39:DR:89:HIS:CB	2.65	0.43
39:DR:68:ARG:HE	39:DR:90:ARG:HG2	1.83	0.43
41:DT:3:ARG:O	41:DT:4:GLU:C	2.57	0.43
42:DU:73:ASN:HB3	42:DU:95:PHE:HE2	1.82	0.43
43:DV:40:ILE:HB	43:DV:41:GLU:H	1.58	0.43
45:DX:70:LEU:HB3	45:DX:77:TYR:HE2	1.83	0.43
1:AA:1028:C:C4	1:AA:1034:G:C6	3.06	0.43
1:AA:1160:G:C2	1:AA:1161:C:C5	3.06	0.43
1:AA:1118:U:O2	1:AA:1179:A:C6	2.71	0.43
1:AA:1348:U:H4'	9:AI:121:ARG:HG2	2.00	0.43
1:AA:198:G:H2'	1:AA:199:A:C8	2.53	0.43
1:AA:283:U:C4	1:AA:284:C:C4	3.06	0.43
1:AA:450:G:C2'	1:AA:451:A:OP1	2.66	0.43
1:AA:570:G:C4	1:AA:571:U:C5	3.06	0.43
1:AA:620:C:H2'	1:AA:621:A:O4'	2.18	0.43
1:AA:632:U:H2'	1:AA:633:G:OP1	2.18	0.43
1:AA:688:G:C5	1:AA:700:G:C2	3.07	0.43
1:AA:767:A:H2'	1:AA:768:A:C8	2.53	0.43
1:AA:773:G:C6	1:AA:774:G:N7	2.86	0.43
1:AA:89:U:C2	1:AA:90:C:C5	3.06	0.43
1:AA:984:C:O2'	1:AA:985:C:O5'	2.36	0.43
2:AB:113:LEU:HD11	2:AB:144:GLU:CD	2.38	0.43
2:AB:21:TYR:O	2:AB:22:TRP:CD1	2.71	0.43
3:AC:5:HIS:HA	3:AC:6:PRO:HD2	1.77	0.43
5:AE:80:LEU:HD23	5:AE:122:VAL:HG12	1.98	0.43
6:AF:41:ASP:C	6:AF:43:GLY:H	2.22	0.43
7:AG:144:ALA:O	7:AG:146:ALA:N	2.48	0.43
13:AM:15:VAL:HG23	13:AM:16:ILE:HG13	2.00	0.43
14:AN:82:LYS:CE	14:AN:85:GLU:HG3	2.47	0.43
1:AA:668:G:O2'	15:AO:45:HIS:HB3	2.18	0.43
20:AT:8:LYS:CA	20:AT:11:ILE:HG23	2.48	0.43
50:B2:19:ARG:O	50:B2:23:ALA:HB2	2.18	0.43
52:B4:2:LYS:HB2	52:B4:4:ARG:HD3	2.00	0.43
22:BA:1403:A:H2'	22:BA:1404:C:C6	2.53	0.43
22:BA:141:G:H2'	22:BA:142:A:O4'	2.18	0.43
22:BA:1789:A:OP2	24:BC:220:ARG:NH1	2.51	0.43
22:BA:1821:A:H8	22:BA:1821:A:O5'	2.01	0.43
22:BA:1869:G:OP2	22:BA:1869:G:H8	2.01	0.43
22:BA:2144:G:N3	22:BA:2144:G:H3'	2.33	0.43
22:BA:2230:G:O3'	45:BX:29:LEU:HD23	2.19	0.43
22:BA:2684:U:H2'	22:BA:2685:G:O5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:275:C:C4	22:BA:276:U:H6	2.36	0.43
22:BA:2824:C:C2'	22:BA:2825:G:O5'	2.66	0.43
22:BA:2855:C:O5'	22:BA:2855:C:H6	2.00	0.43
22:BA:28:A:C5	22:BA:29:U:C5	3.06	0.43
22:BA:350:G:O2'	22:BA:351:C:H5'	2.18	0.43
22:BA:571:U:C5	22:BA:575:A:C6	3.06	0.43
22:BA:615:U:H4'	22:BA:616:A:OP2	2.18	0.43
22:BA:768:G:C5	22:BA:769:U:C5	3.06	0.43
22:BA:797:G:H2'	22:BA:798:G:O4'	2.19	0.43
25:BD:89:GLU:HG3	25:BD:94:GLN:OE1	2.18	0.43
26:BE:37:ALA:C	26:BE:39:ALA:N	2.71	0.43
27:BF:3:LEU:HD23	27:BF:100:GLU:CG	2.41	0.43
29:BH:67:ALA:C	29:BH:69:ALA:N	2.71	0.43
31:BJ:42:ALA:O	31:BJ:45:THR:HG22	2.18	0.43
32:BK:35:VAL:HG12	32:BK:36:GLY:H	1.78	0.43
33:BL:113:ALA:O	33:BL:114:GLY:O	2.35	0.43
34:BM:100:LYS:HD3	34:BM:100:LYS:HA	1.76	0.43
34:BM:102:LEU:N	34:BM:102:LEU:CD1	2.81	0.43
35:BN:87:PHE:CE1	35:BN:116:VAL:HG12	2.52	0.43
35:BN:96:ARG:HG3	35:BN:96:ARG:O	2.15	0.43
39:BR:49:ILE:CB	39:BR:53:PHE:N	2.81	0.43
42:BU:28:LEU:O	42:BU:30:SER:N	2.51	0.43
45:BX:12:VAL:CG2	45:BX:28:PHE:HB2	2.48	0.43
1:CA:1122:U:C5	1:CA:1123:U:C5	3.06	0.43
1:CA:112:G:H2'	1:CA:113:G:C5'	2.47	0.43
1:CA:1221:G:O3'	19:CS:76:THR:HB	2.18	0.43
1:CA:1244:G:C5	1:CA:1245:C:N4	2.87	0.43
1:CA:1261:A:N7	1:CA:1274:A:H2	2.15	0.43
1:CA:1303:C:H2'	1:CA:1303:C:O2	2.18	0.43
1:CA:1418:A:C2	1:CA:1483:A:C2	3.06	0.43
1:CA:194:C:C2'	1:CA:195:A:H5'	2.47	0.43
1:CA:292:G:C5	1:CA:293:G:H1'	2.52	0.43
1:CA:413:G:C6	4:CD:32:LYS:CE	2.97	0.43
1:CA:571:U:C5'	1:CA:572:A:OP2	2.57	0.43
1:CA:729:A:C2'	1:CA:730:G:O5'	2.65	0.43
1:CA:765:G:C5	1:CA:812:G:C5	3.06	0.43
1:CA:946:A:H2'	1:CA:947:G:C8	2.54	0.43
1:CA:963:G:C6	1:CA:973:G:C6	3.06	0.43
1:CA:997:U:HO2'	1:CA:998:C:C5'	2.31	0.43
2:CB:114:LYS:C	2:CB:117:GLU:HG2	2.38	0.43
2:CB:160:LEU:HB2	2:CB:182:VAL:CG1	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:CC:120:THR:CG2	3:CC:187:GLU:O	2.62	0.43
5:CE:57:ALA:O	5:CE:61:LYS:HG3	2.19	0.43
5:CE:80:LEU:HD23	5:CE:119:VAL:HG11	2.00	0.43
6:CF:3:HIS:CB	6:CF:92:THR:HG23	2.48	0.43
10:CJ:29:ALA:HB2	10:CJ:87:LEU:HG	2.00	0.43
13:CM:106:ARG:HH21	13:CM:112:ARG:CZ	2.32	0.43
14:CN:92:ILE:HA	14:CN:93:PRO:HD3	1.87	0.43
48:D0:32:THR:HG21	48:D0:47:TYR:HE2	1.82	0.43
22:DA:1263:U:C1'	48:D0:6:LYS:HE3	2.47	0.43
22:DA:1080:A:H5'	30:DI:133:ARG:NH2	2.32	0.43
22:DA:1171:G:C2	22:DA:1179:G:C2	3.07	0.43
22:DA:1223:G:N2	22:DA:1226:A:OP2	2.46	0.43
22:DA:1267:U:OP2	22:DA:2012:G:N1	2.36	0.43
22:DA:56:A:H1'	22:DA:127:A:C4	2.53	0.43
22:DA:1799:G:N1	22:DA:1819:A:OP2	2.49	0.43
22:DA:1998:A:H2'	22:DA:1999:C:C6	2.51	0.43
22:DA:204:A:C4	22:DA:206:U:O4	2.71	0.43
22:DA:2217:G:C4	22:DA:2218:G:C8	3.06	0.43
22:DA:2223:G:C3'	22:DA:2224:G:H5'	2.48	0.43
22:DA:2232:C:O5'	22:DA:2232:C:H6	2.00	0.43
22:DA:2306:C:H5	22:DA:2307:G:N2	2.16	0.43
22:DA:2341:G:H2'	22:DA:2342:C:C5'	2.48	0.43
22:DA:2680:U:H6	22:DA:2680:U:O5'	2.00	0.43
22:DA:329:G:H1	42:DU:16:LYS:HG2	1.83	0.43
22:DA:379:G:C5	22:DA:396:G:C6	3.06	0.43
22:DA:519:U:H4'	40:DS:25:ARG:NH2	2.33	0.43
22:DA:584:C:C5	22:DA:585:G:N7	2.87	0.43
22:DA:617:G:C4	22:DA:618:G:C8	3.05	0.43
22:DA:622:G:O2'	22:DA:623:C:C5'	2.66	0.43
22:DA:641:U:C5'	22:DA:642:U:OP2	2.62	0.43
22:DA:739:A:O2'	22:DA:740:C:C6	2.68	0.43
22:DA:79:C:N3	22:DA:107:G:N2	2.55	0.43
23:DB:64:G:C5'	23:DB:65:U:OP2	2.66	0.43
23:DB:6:G:C6	23:DB:115:A:C2	3.06	0.43
22:DA:2060:A:C3'	26:DE:63:LYS:NZ	2.81	0.43
27:DF:35:LEU:HA	27:DF:152:ASP:O	2.18	0.43
27:DF:43:ILE:CG2	27:DF:44:ALA:H	2.23	0.43
28:DG:117:PRO:CD	28:DG:143:VAL:HG11	2.47	0.43
35:DN:47:VAL:CG1	35:DN:47:VAL:O	2.66	0.43
35:DN:58:ASP:HB3	35:DN:59:SER:H	1.61	0.43
36:DO:31:THR:CG2	36:DO:36:TYR:CE2	2.96	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:DP:105:LYS:HD3	37:DP:108:ARG:CZ	2.48	0.43
37:DP:77:SER:OG	37:DP:79:VAL:HG22	2.18	0.43
38:DQ:31:TYR:O	38:DQ:34:ALA:N	2.51	0.43
39:DR:22:LEU:N	39:DR:22:LEU:HD23	2.33	0.43
22:DA:815:C:P	39:DR:85:LYS:HE2	2.58	0.43
39:DR:89:HIS:CE1	39:DR:91:GLN:HB2	2.52	0.43
44:DW:14:ASP:C	44:DW:16:GLU:H	2.21	0.43
1:AA:105:G:H2'	1:AA:106:C:H6	1.79	0.43
1:AA:1088:G:HO2'	1:AA:1089:G:P	2.40	0.43
1:AA:1108:G:C5	1:AA:1109:C:C5	3.06	0.43
1:AA:1150:A:N6	1:AA:1151:A:N6	2.66	0.43
1:AA:1162:C:C2	1:AA:1175:G:C2	3.07	0.43
1:AA:1216:A:OP1	14:AN:4:SER:CB	2.66	0.43
1:AA:1442:G:H2'	1:AA:1443:C:C6	2.54	0.43
1:AA:184:G:O2'	1:AA:185:U:P	2.77	0.43
1:AA:246:A:C4	1:AA:282:A:N6	2.86	0.43
1:AA:258:G:C2	1:AA:259:G:C1'	3.01	0.43
1:AA:513:C:N3	1:AA:539:A:C2	2.86	0.43
1:AA:592:G:C6	1:AA:648:A:C6	3.07	0.43
1:AA:689:C:OP1	11:AK:45:THR:OG1	2.35	0.43
1:AA:775:G:C2	1:AA:776:G:C4	3.06	0.43
1:AA:913:A:HO2'	1:AA:914:A:P	2.41	0.43
1:AA:932:C:O2	1:AA:932:C:C2'	2.67	0.43
2:AB:15:PHE:HB2	2:AB:39:ILE:HG23	2.00	0.43
7:AG:61:PHE:C	7:AG:61:PHE:CD1	2.92	0.43
7:AG:92:PRO:C	7:AG:93:VAL:HG22	2.37	0.43
7:AG:96:ASN:N	7:AG:96:ASN:OD1	2.48	0.43
9:AI:6:TYR:CE2	9:AI:17:ARG:HB2	2.51	0.43
14:AN:52:ARG:HG3	14:AN:58:ARG:NH1	2.33	0.43
16:AP:75:ILE:C	16:AP:77:GLU:N	2.71	0.43
17:AQ:49:ASN:HD22	17:AQ:49:ASN:C	2.20	0.43
19:AS:66:VAL:C	19:AS:68:HIS:H	2.22	0.43
20:AT:77:ASN:HD22	20:AT:77:ASN:H	1.65	0.43
20:AT:77:ASN:O	20:AT:81:GLN:HG3	2.17	0.43
20:AT:82:ILE:HD12	20:AT:83:ASN:HB3	2.01	0.43
21:AU:24:LYS:CG	21:AU:25:ALA:N	2.81	0.43
11:AK:125:LYS:C	21:AU:33:ARG:HH12	2.21	0.43
51:B3:54:LEU:O	51:B3:58:ILE:HG13	2.18	0.43
22:BA:1026:G:H2'	22:BA:1027:A:C8	2.53	0.43
22:BA:1206:G:H2'	22:BA:1207:C:H6	1.83	0.43
22:BA:1269:A:H2'	22:BA:1270:C:C6	2.54	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1857:G:O2'	22:BA:1858:A:OP2	2.34	0.43
22:BA:1972:G:H2'	22:BA:1973:G:H8	1.83	0.43
22:BA:2107:G:C2'	22:BA:2152:G:OP1	2.66	0.43
22:BA:253:C:OP2	51:B3:4:LYS:NZ	2.47	0.43
22:BA:2671:G:C3'	22:BA:2672:U:H5'	2.48	0.43
22:BA:2704:C:C2'	22:BA:2704:C:O2	2.66	0.43
22:BA:613:A:O2'	22:BA:614:A:OP1	2.33	0.43
22:BA:782:A:N1	24:BC:224:MET:HE1	2.33	0.43
24:BC:250:GLN:CD	24:BC:250:GLN:N	2.71	0.43
25:BD:122:VAL:O	25:BD:126:ASN:HA	2.17	0.43
25:BD:163:GLY:O	25:BD:164:GLN:C	2.56	0.43
25:BD:177:VAL:CG2	25:BD:177:VAL:O	2.65	0.43
26:BE:133:LEU:O	26:BE:136:GLN:HB2	2.17	0.43
26:BE:170:ARG:NH1	26:BE:176:ASP:OD2	2.52	0.43
26:BE:149:ILE:CD1	26:BE:172:ALA:HA	2.38	0.43
27:BF:45:ASP:CB	27:BF:48:LEU:HB2	2.41	0.43
28:BG:54:ARG:O	28:BG:57:TYR:HB2	2.19	0.43
30:BI:3:LYS:HD2	30:BI:4:VAL:H	1.82	0.43
32:BK:10:VAL:HG11	32:BK:16:ALA:CB	2.48	0.43
34:BM:97:GLN:HB2	34:BM:98:PRO:CD	2.48	0.43
36:BO:79:ALA:HB2	36:BO:110:ALA:HA	2.00	0.43
38:BQ:26:ALA:CB	38:BQ:30:VAL:CG2	2.92	0.43
40:BS:42:LYS:HE2	40:BS:42:LYS:HB2	1.47	0.43
41:BT:28:ASN:HB2	41:BT:29:THR:H	1.37	0.43
44:BW:9:THR:HG23	44:BW:10:ARG:CG	2.48	0.43
46:BY:40:SER:C	46:BY:42:LEU:N	2.72	0.43
47:BZ:15:ARG:HD3	47:BZ:53:MET:SD	2.57	0.43
1:CA:110:C:H2'	1:CA:111:G:O4'	2.17	0.43
1:CA:1159:U:H5	1:CA:1182:G:O2'	1.99	0.43
1:CA:1462:C:O2'	1:CA:1463:U:H5'	2.18	0.43
1:CA:184:G:C2	1:CA:185:U:N3	2.86	0.43
1:CA:267:C:H2'	1:CA:268:U:H5'	2.00	0.43
1:CA:249:U:N3	1:CA:276:G:C6	2.86	0.43
1:CA:443:C:H6	1:CA:443:C:O5'	2.01	0.43
1:CA:517:G:H4'	1:CA:519:C:C5	2.53	0.43
1:CA:536:C:H2'	1:CA:537:G:H8	1.83	0.43
1:CA:728:A:C6	1:CA:729:A:C6	3.06	0.43
1:CA:775:G:H2'	1:CA:776:G:H5'	1.98	0.43
1:CA:867:G:C6	1:CA:868:C:N4	2.86	0.43
2:CB:195:VAL:HG12	2:CB:197:PHE:C	2.38	0.43
4:CD:75:TYR:CE2	4:CD:203:TYR:HB2	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:CE:148:SER:O	5:CE:151:MET:N	2.47	0.43
5:CE:45:VAL:CG2	5:CE:46:GLY:N	2.81	0.43
7:CG:136:LYS:HD2	7:CG:136:LYS:HA	1.71	0.43
7:CG:6:ILE:HG13	7:CG:7:GLY:N	2.31	0.43
13:CM:19:THR:HA	13:CM:25:GLY:O	2.17	0.43
13:CM:21:ILE:HD12	13:CM:24:VAL:CG2	2.47	0.43
13:CM:19:THR:HG22	13:CM:26:LYS:HA	1.99	0.43
13:CM:1:ALA:HB3	13:CM:8:ILE:HG23	2.00	0.43
16:CP:56:ARG:HE	16:CP:59:HIS:CD2	2.36	0.43
18:CR:66:LEU:HD23	18:CR:66:LEU:N	2.32	0.43
20:CT:30:PHE:CD2	20:CT:33:LYS:HD2	2.53	0.43
51:D3:3:ILE:CG2	51:D3:4:LYS:N	2.57	0.43
51:D3:22:LYS:N	51:D3:48:MET:HB3	2.29	0.43
51:D3:51:LYS:O	51:D3:54:LEU:HB3	2.19	0.43
22:DA:1551:A:C5	22:DA:1552:A:C8	3.06	0.43
22:DA:170:U:C4	22:DA:171:U:C5	3.06	0.43
22:DA:1737:G:C5	22:DA:1738:G:N1	2.86	0.43
22:DA:1716:U:N3	22:DA:1745:A:N6	2.66	0.43
22:DA:1767:G:C2	22:DA:1768:C:C5	3.06	0.43
22:DA:1831:G:C6	22:DA:1832:C:C4	3.07	0.43
22:DA:187:G:C2'	22:DA:1365:A:H2	2.31	0.43
22:DA:1978:A:H2'	22:DA:1979:U:O4'	2.19	0.43
22:DA:2212:A:C8	22:DA:2214:C:C5	3.06	0.43
22:DA:1128:G:O6	22:DA:2491:U:C5	2.71	0.43
22:DA:2765:A:H3'	22:DA:2766:A:H5'	2.00	0.43
22:DA:279:A:N6	22:DA:361:G:C1'	2.75	0.43
22:DA:2:G:C5	22:DA:3:U:C5	3.06	0.43
22:DA:35:G:HO2'	22:DA:36:G:H8	1.61	0.43
22:DA:600:G:O4'	26:DE:100:MET:HE3	2.18	0.43
22:DA:642:U:H3'	22:DA:642:U:H6	1.83	0.43
22:DA:727:A:C6	22:DA:728:G:C6	3.06	0.43
22:DA:841:G:H2'	22:DA:842:U:O4'	2.18	0.43
22:DA:89:A:O2'	22:DA:90:U:H5'	2.18	0.43
22:DA:956:G:C4'	34:DM:82:MET:HE3	2.49	0.43
26:DE:60:TRP:HE3	26:DE:62:GLN:HB2	1.79	0.43
27:DF:102:LEU:C	27:DF:103:ILE:HD12	2.38	0.43
27:DF:111:ARG:CZ	27:DF:113:PHE:CE1	3.01	0.43
27:DF:103:ILE:CG1	27:DF:175:PRO:HD3	2.48	0.43
28:DG:10:VAL:HB	28:DG:14:VAL:HG11	2.00	0.43
32:DK:60:ALA:HB1	32:DK:85:VAL:O	2.18	0.43
33:DL:56:PRO:CB	33:DL:58:TYR:CE2	3.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:DN:35:LYS:HG2	35:DN:112:TYR:CZ	2.54	0.43
35:DN:62:ASN:O	35:DN:63:ARG:HB3	2.18	0.43
36:DO:14:ALA:O	36:DO:18:LEU:N	2.38	0.43
37:DP:98:TYR:CE2	37:DP:99:LEU:CD2	3.01	0.43
39:DR:49:ILE:CG1	39:DR:49:ILE:O	2.66	0.43
42:DU:16:LYS:HB3	42:DU:17:ASP:H	1.54	0.43
42:DU:20:LYS:HD3	42:DU:21:ARG:O	2.19	0.43
22:DA:855:G:N2	44:DW:23:LYS:HG2	2.33	0.43
22:DA:2352:A:N1	44:DW:30:VAL:HG11	2.33	0.43
45:DX:71:ARG:C	45:DX:73:ARG:H	2.21	0.43
1:AA:1154:G:C2	1:AA:1155:A:C5	3.07	0.43
1:AA:119:A:H5''	1:AA:120:A:O5'	2.19	0.43
1:AA:1491:G:C5'	1:AA:1492:A:OP1	2.66	0.43
1:AA:158:G:O2'	1:AA:159:G:H5''	2.18	0.43
1:AA:25:C:C2'	1:AA:26:A:O5'	2.66	0.43
1:AA:430:A:N3	1:AA:431:A:C8	2.86	0.43
1:AA:495:A:N3	1:AA:496:A:C6	2.87	0.43
1:AA:565:U:C4	1:AA:566:G:C5	3.05	0.43
1:AA:675:A:H2'	1:AA:676:A:O4'	2.18	0.43
1:AA:798:U:H2'	1:AA:799:G:O5'	2.18	0.43
1:AA:585:G:N2	1:AA:879:C:C4'	2.81	0.43
1:AA:70:U:N3	1:AA:94:G:C5	2.86	0.43
3:AC:85:LYS:O	3:AC:89:VAL:HG22	2.18	0.43
5:AE:79:THR:HB	5:AE:121:ASN:CG	2.38	0.43
8:AH:48:PHE:HD1	8:AH:48:PHE:N	2.16	0.43
9:AI:46:VAL:CG2	9:AI:75:ALA:HB1	2.47	0.43
11:AK:26:PHE:CE1	11:AK:88:PRO:CG	3.01	0.43
12:AL:55:ARG:NH1	12:AL:61:GLU:OE1	2.50	0.43
15:AO:42:PHE:CD1	15:AO:55:LEU:HD22	2.52	0.43
17:AQ:16:MET:CE	17:AQ:21:VAL:HG12	2.48	0.43
21:AU:7:GLU:HB2	21:AU:11:PHE:CZ	2.52	0.43
22:BA:1050:A:C2	22:BA:2751:G:C4	3.06	0.43
22:BA:1178:C:H2'	22:BA:1179:G:C8	2.53	0.43
22:BA:1185:G:H5''	22:BA:1186:G:P	2.58	0.43
22:BA:1462:C:H2'	22:BA:1463:C:C6	2.53	0.43
22:BA:1733:G:O2'	22:BA:1734:G:C5'	2.66	0.43
22:BA:1759:A:H2'	22:BA:1760:C:C6	2.53	0.43
22:BA:1844:C:H3'	22:BA:1844:C:C6	2.54	0.43
22:BA:2151:U:HO2'	22:BA:2152:G:H8	1.63	0.43
22:BA:2299:U:H6	22:BA:2299:U:O5'	2.01	0.43
22:BA:2663:G:C4	22:BA:2664:G:C8	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2856:A:C2'	22:BA:2857:G:H5'	2.47	0.43
22:BA:2865:U:C2	22:BA:2866:U:H5	2.36	0.43
22:BA:708:G:N2	22:BA:724:U:H1'	2.34	0.43
22:BA:7:G:H2'	22:BA:8:C:C6	2.54	0.43
23:BB:17:C:H2'	23:BB:18:G:C5'	2.48	0.43
23:BB:71:C:H2'	23:BB:72:G:C5'	2.49	0.43
23:BB:6:G:O2'	23:BB:7:G:H5'	2.17	0.43
23:BB:89:U:H3'	23:BB:90:C:C5'	2.49	0.43
24:BC:61:TYR:HA	24:BC:85:ASN:HD21	1.84	0.43
25:BD:121:THR:O	25:BD:122:VAL:CB	2.66	0.43
27:BF:88:VAL:HG13	27:BF:90:LEU:CD1	2.49	0.43
28:BG:68:ARG:O	28:BG:68:ARG:HD2	2.18	0.43
28:BG:72:ASN:O	28:BG:76:ILE:CG2	2.47	0.43
29:BH:134:VAL:HG11	29:BH:140:ALA:HB2	2.00	0.43
31:BJ:37:ARG:HG2	31:BJ:37:ARG:O	2.19	0.43
33:BL:77:ILE:O	33:BL:110:VAL:O	2.37	0.43
33:BL:57:LEU:HD11	33:BL:61:LEU:HD21	2.00	0.43
35:BN:69:ARG:HG2	35:BN:69:ARG:H	1.10	0.43
37:BP:9:GLN:C	37:BP:11:GLN:H	2.22	0.43
22:BA:1266:G:N7	40:BS:16:LYS:HE2	2.33	0.43
40:BS:57:ASN:HA	40:BS:57:ASN:HD22	1.61	0.43
40:BS:86:MET:HG3	40:BS:88:ARG:HD3	1.99	0.43
41:BT:15:HIS:O	41:BT:17:SER:N	2.51	0.43
41:BT:7:LEU:O	41:BT:7:LEU:HG	2.18	0.43
41:BT:29:THR:CB	41:BT:86:THR:HG22	2.47	0.43
44:BW:39:GLN:CG	44:BW:42:THR:N	2.66	0.43
45:BX:19:HIS:C	45:BX:21:LEU:N	2.71	0.43
1:CA:1046:A:H2'	1:CA:1047:G:O4'	2.18	0.43
1:CA:1179:A:N6	1:CA:1180:A:C6	2.86	0.43
1:CA:1231:G:C4	1:CA:1232:U:C5	3.06	0.43
1:CA:1235:U:C3'	1:CA:1235:U:C6	3.02	0.43
1:CA:1269:A:C2'	1:CA:1270:G:H5'	2.49	0.43
1:CA:1268:G:C6	1:CA:1269:A:N6	2.86	0.43
1:CA:126:G:C2'	1:CA:127:G:O5'	2.67	0.43
1:CA:1279:G:C8	1:CA:1282:C:N4	2.86	0.43
1:CA:141:G:H2'	1:CA:142:G:H8	1.83	0.43
1:CA:1527:U:C2	1:CA:1528:U:C5	3.07	0.43
1:CA:182:A:C2	1:CA:184:G:C5	3.06	0.43
1:CA:38:G:N1	1:CA:397:A:OP1	2.47	0.43
1:CA:439:U:H2'	1:CA:440:C:H6	1.81	0.43
1:CA:468:A:C4	1:CA:469:C:C5	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:518:C:H4'	1:CA:519:C:O5'	2.19	0.43
1:CA:92:U:H2'	1:CA:93:U:C5	2.53	0.43
2:CB:162:VAL:CG2	2:CB:163:ILE:N	2.81	0.43
3:CC:153:SER:HB3	3:CC:164:THR:HB	2.00	0.43
3:CC:191:THR:HB	3:CC:192:TYR:CD1	2.54	0.43
3:CC:42:LEU:HD13	3:CC:86:LEU:HD22	2.00	0.43
6:CF:92:THR:C	6:CF:93:LYS:HG2	2.32	0.43
7:CG:20:GLU:O	7:CG:23:ALA:HB3	2.17	0.43
7:CG:78:ARG:CA	7:CG:84:TYR:HB2	2.36	0.43
9:CI:35:GLU:HA	9:CI:39:GLY:N	2.33	0.43
11:CK:92:ARG:HB3	11:CK:93:GLU:H	1.63	0.43
21:CU:34:ARG:O	21:CU:35:GLU:O	2.36	0.43
48:D0:30:ASP:OD2	48:D0:49:ARG:HA	2.19	0.43
51:D3:53:ASP:O	51:D3:54:LEU:C	2.56	0.43
22:DA:1188:U:H2'	22:DA:1189:A:H8	1.83	0.43
22:DA:1249:U:O2'	22:DA:1250:G:OP2	2.27	0.43
22:DA:1286:A:C5	22:DA:1289:C:N3	2.86	0.43
22:DA:1296:G:N2	22:DA:1645:G:C4	2.86	0.43
22:DA:1357:C:N4	22:DA:1358:G:C2	2.86	0.43
22:DA:137:U:O5'	22:DA:137:U:H6	2.02	0.43
22:DA:1341:G:P	22:DA:1397:U:H3	2.41	0.43
22:DA:1575:C:C2	22:DA:1576:U:C6	3.07	0.43
22:DA:2274:A:C5	22:DA:2276:G:C8	3.07	0.43
22:DA:2276:G:O2'	22:DA:2277:G:H5'	2.18	0.43
22:DA:2341:G:C2'	22:DA:2342:C:C5'	2.96	0.43
22:DA:2342:C:N3	22:DA:2343:U:C2	2.86	0.43
22:DA:2395:C:N4	22:DA:2421:G:H1	2.16	0.43
22:DA:2898:U:H2'	22:DA:2899:A:H8	1.83	0.43
22:DA:333:G:O2'	22:DA:334:C:O5'	2.36	0.43
22:DA:394:C:H2'	22:DA:395:U:H5'	1.99	0.43
22:DA:590:A:C6	22:DA:668:A:C2	3.07	0.43
22:DA:685:A:C2	22:DA:689:A:C6	3.06	0.43
22:DA:741:U:O2'	22:DA:742:A:H5'	2.18	0.43
22:DA:68:G:N2	22:DA:74:A:OP2	2.51	0.43
22:DA:858:G:C5	22:DA:2268:A:N1	2.87	0.43
22:DA:91:A:H1'	22:DA:92:U:C6	2.53	0.43
22:DA:992:C:H4'	39:DR:74:ILE:HD13	1.98	0.43
24:DC:20:ASN:HB2	24:DC:23:LEU:CD2	2.43	0.43
24:DC:24:HIS:ND1	24:DC:25:LYS:N	2.63	0.43
24:DC:250:GLN:HG3	24:DC:254:LYS:CG	2.48	0.43
25:DD:106:LYS:CG	25:DD:206:ALA:HB3	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:DD:149:ASN:HD21	25:DD:150:GLN:HB3	1.83	0.43
26:DE:33:VAL:HG12	26:DE:33:VAL:O	2.18	0.43
26:DE:53:THR:OG1	26:DE:54:GLY:N	2.49	0.43
26:DE:60:TRP:CE3	26:DE:62:GLN:CB	2.99	0.43
28:DG:15:ASP:HB3	28:DG:26:LYS:H	1.83	0.43
28:DG:26:LYS:HD3	28:DG:27:GLY:N	2.32	0.43
29:DH:68:ARG:HG2	29:DH:71:LYS:CD	2.48	0.43
31:DJ:1:MET:CE	31:DJ:2:LYS:HZ2	2.32	0.43
31:DJ:88:THR:O	31:DJ:92:MET:N	2.49	0.43
32:DK:69:VAL:HG12	32:DK:70:ARG:N	2.34	0.43
33:DL:29:LYS:O	33:DL:30:THR:CB	2.66	0.43
35:DN:9:GLN:C	35:DN:10:LEU:O	2.54	0.43
36:DO:49:VAL:HG12	36:DO:50:ALA:N	2.33	0.43
40:DS:14:ALA:O	40:DS:18:ARG:HB2	2.18	0.43
22:DA:372:G:P	45:DX:61:LYS:HZ3	2.40	0.43
47:DZ:11:SER:C	47:DZ:13:ILE:H	2.22	0.43
1:AA:1072:G:N1	1:AA:1104:G:C2	2.86	0.43
1:AA:1086:U:O2'	1:AA:1087:G:H5'	2.19	0.43
1:AA:1151:A:N6	1:AA:1152:A:H62	2.15	0.43
1:AA:1162:C:C2'	1:AA:1163:A:H8	2.29	0.43
1:AA:1310:G:O2'	1:AA:1311:A:H5'	2.17	0.43
1:AA:418:C:O5'	1:AA:418:C:H6	2.00	0.43
1:AA:637:C:H2'	1:AA:638:U:C5'	2.48	0.43
2:AB:113:LEU:HD11	2:AB:144:GLU:OE1	2.18	0.43
2:AB:138:ARG:HG3	2:AB:139:GLU:N	2.32	0.43
3:AC:147:GLY:CA	3:AC:202:PHE:HB3	2.49	0.43
3:AC:18:ASN:HB3	3:AC:39:ARG:HH12	1.83	0.43
4:AD:109:THR:CG2	4:AD:112:GLU:CB	2.97	0.43
4:AD:68:GLU:O	4:AD:72:ARG:HG2	2.18	0.43
9:AI:78:ILE:O	9:AI:81:GLY:N	2.51	0.43
10:AJ:80:THR:O	10:AJ:81:GLU:C	2.56	0.43
10:AJ:84:VAL:HG13	10:AJ:85:ASP:N	2.32	0.43
13:AM:106:ARG:NE	13:AM:112:ARG:HB3	2.34	0.43
13:AM:21:ILE:N	13:AM:21:ILE:HD12	2.33	0.43
13:AM:21:ILE:O	13:AM:24:VAL:HG22	2.18	0.43
16:AP:13:LYS:O	16:AP:15:PRO:HD2	2.19	0.43
17:AQ:48:GLU:OE1	17:AQ:48:GLU:CA	2.64	0.43
19:AS:62:THR:O	19:AS:63:ASP:C	2.56	0.43
21:AU:33:ARG:O	21:AU:34:ARG:C	2.57	0.43
51:B3:30:HIS:ND1	51:B3:31:ILE:CG2	2.82	0.43
52:B4:9:LYS:HG3	52:B4:16:ILE:HG13	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1059:G:H4'	30:BI:116:MET:HE1	2.01	0.43
22:BA:1264:A:P	48:B0:15:ARG:HH12	2.42	0.43
22:BA:1281:G:H2'	22:BA:1282:U:C6	2.54	0.43
22:BA:1416:G:O2'	22:BA:1417:C:P	2.76	0.43
22:BA:1567:G:H2'	24:BC:84:PRO:HG3	1.99	0.43
22:BA:1842:G:H2'	22:BA:1843:C:O4'	2.18	0.43
22:BA:1946:U:H2'	22:BA:1947:C:C6	2.53	0.43
22:BA:217:A:P	56:BA:3226:HOH:O	2.76	0.43
22:BA:20:C:O2'	22:BA:21:A:H5'	2.18	0.43
22:BA:2492:U:HO2'	22:BA:2493:U:H5'	1.82	0.43
22:BA:2570:G:C2'	22:BA:2571:U:H5'	2.48	0.43
22:BA:2752:C:O5'	22:BA:2752:C:H6	2.01	0.43
22:BA:527:C:N3	22:BA:2779:U:H2'	2.32	0.43
22:BA:2870:C:C2'	22:BA:2871:U:H5'	2.48	0.43
22:BA:384:A:C2'	22:BA:385:C:H5'	2.44	0.43
22:BA:63:A:HO2'	22:BA:64:A:H5'	1.82	0.43
23:BB:90:C:OP1	34:BM:16:ARG:HB3	2.18	0.43
24:BC:131:MET:CA	24:BC:134:ILE:HD12	2.39	0.43
24:BC:76:VAL:O	24:BC:77:VAL:C	2.56	0.43
25:BD:13:ARG:NE	25:BD:15:PHE:CZ	2.86	0.43
25:BD:72:GLY:O	25:BD:73:VAL:O	2.36	0.43
25:BD:98:VAL:O	25:BD:101:PHE:N	2.47	0.43
26:BE:48:THR:N	26:BE:51:GLU:HG3	2.34	0.43
27:BF:40:GLY:H	27:BF:84:ILE:CD1	2.32	0.43
31:BJ:37:ARG:CG	31:BJ:37:ARG:O	2.66	0.43
31:BJ:44:TYR:HB2	38:BQ:63:ARG:HG2	2.00	0.43
32:BK:107:LEU:HD12	32:BK:107:LEU:HA	1.74	0.43
33:BL:61:LEU:HD23	51:B3:13:PHE:CE1	2.54	0.43
34:BM:47:GLU:O	34:BM:48:ALA:C	2.57	0.43
1:AA:346:G:OP1	37:BP:33:GLU:OE1	2.36	0.43
37:BP:48:ALA:O	37:BP:49:ILE:HG12	2.19	0.43
22:BA:1600:C:OP1	41:BT:81:LYS:NZ	2.52	0.43
42:BU:27:VAL:CG2	42:BU:28:LEU:N	2.82	0.43
43:BV:65:VAL:O	43:BV:66:ASP:OD1	2.37	0.43
43:BV:77:VAL:HG13	43:BV:77:VAL:O	2.17	0.43
47:BZ:8:GLN:O	47:BZ:10:ARG:N	2.52	0.43
1:CA:1381:U:H2'	1:CA:1381:U:O2	2.17	0.43
1:CA:1416:G:H2'	1:CA:1417:G:H5'	2.00	0.43
1:CA:205:A:H2'	1:CA:206:C:C5	2.53	0.43
1:CA:295:C:C4	1:CA:296:U:C5	3.06	0.43
1:CA:645:G:C2	1:CA:646:G:C8	3.06	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:676:A:C2	1:CA:677:U:C4	3.07	0.43
1:CA:67:C:OP1	1:CA:199:A:H5''	2.18	0.43
1:CA:735:C:H2'	1:CA:736:C:H6	1.82	0.43
1:CA:777:A:C2	1:CA:778:G:H1'	2.53	0.43
1:CA:86:G:N1	1:CA:87:C:C5	2.87	0.43
1:CA:881:G:C4	1:CA:882:C:C6	3.06	0.43
2:CB:64:GLY:HA2	2:CB:158:ASP:OD2	2.18	0.43
1:CA:1056:U:H5'	3:CC:162:ALA:HB3	1.99	0.43
4:CD:36:ALA:HA	4:CD:41:GLY:C	2.39	0.43
7:CG:27:ASN:O	7:CG:30:MET:HB2	2.18	0.43
9:CI:27:ILE:HA	9:CI:62:LEU:CB	2.48	0.43
9:CI:87:MET:HG3	9:CI:94:ARG:HE	1.83	0.43
12:CL:9:LYS:HB2	12:CL:9:LYS:HE2	1.69	0.43
18:CR:71:ASP:CB	18:CR:72:ARG:HH21	2.31	0.43
20:CT:12:GLN:CG	20:CT:12:GLN:O	2.59	0.43
21:CU:33:ARG:HH22	21:CU:34:ARG:CD	2.31	0.43
50:D2:11:LYS:NZ	56:D2:101:HOH:O	2.51	0.43
51:D3:57:VAL:HG12	51:D3:61:LEU:HD11	2.01	0.43
22:DA:1000:A:C6	22:DA:1001:A:C2	3.06	0.43
22:DA:987:C:O2'	22:DA:1000:A:N3	2.43	0.43
22:DA:1019:U:O2'	22:DA:1021:A:N1	2.35	0.43
22:DA:1024:G:O2'	22:DA:1025:G:OP1	2.30	0.43
22:DA:1042:G:C6	22:DA:1043:C:C4	3.06	0.43
22:DA:1028:A:N6	22:DA:1125:G:H2'	2.34	0.43
22:DA:1259:G:H2'	22:DA:1260:A:O4'	2.18	0.43
22:DA:126:A:O5'	50:D2:19:ARG:HG3	2.18	0.43
22:DA:1364:G:H1'	22:DA:1368:G:N2	2.34	0.43
22:DA:1380:G:C2	22:DA:1381:G:C8	3.07	0.43
22:DA:1571:A:H2'	22:DA:1572:A:C8	2.53	0.43
22:DA:1667:G:O2'	22:DA:1668:A:OP2	2.35	0.43
22:DA:2142:A:C5	22:DA:2143:C:O2'	2.70	0.43
22:DA:2153:C:C6	22:DA:2153:C:OP2	2.72	0.43
22:DA:2345:G:H4'	22:DA:2346:A:C5'	2.49	0.43
22:DA:2348:U:O2'	22:DA:2349:G:O5'	2.37	0.43
22:DA:2436:G:C2'	22:DA:2437:G:H5'	2.48	0.43
22:DA:2654:A:C4	22:DA:2656:U:C4	3.07	0.43
22:DA:298:G:OP1	42:DU:83:GLY:HA2	2.18	0.43
22:DA:323:C:H3'	26:DE:163:ASN:HD21	1.83	0.43
22:DA:497:A:H2'	22:DA:498:G:C1'	2.49	0.43
22:DA:516:C:O2'	22:DA:517:C:H5'	2.18	0.43
22:DA:531:C:N3	22:DA:563:A:C8	2.87	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:590:A:N6	22:DA:668:A:N1	2.66	0.43
22:DA:605:G:H2'	22:DA:606:U:C6	2.53	0.43
22:DA:679:C:H6	22:DA:679:C:O5'	2.01	0.43
22:DA:732:C:C4	22:DA:733:G:N7	2.87	0.43
22:DA:992:C:O3'	39:DR:74:ILE:HD13	2.18	0.43
24:DC:166:ARG:O	24:DC:167:ASP:C	2.55	0.43
25:DD:179:ARG:NH2	37:DP:11:GLN:HE21	2.16	0.43
25:DD:27:ILE:HD12	25:DD:189:VAL:CG2	2.48	0.43
26:DE:124:PHE:HZ	26:DE:141:MET:CE	2.32	0.43
28:DG:117:PRO:O	28:DG:118:ALA:C	2.56	0.43
29:DH:68:ARG:CB	29:DH:68:ARG:NH1	2.82	0.43
31:DJ:34:ARG:HE	31:DJ:34:ARG:HB3	1.68	0.43
33:DL:93:ASN:CG	33:DL:94:THR:H	2.22	0.43
38:DQ:4:LYS:HE3	38:DQ:7:VAL:HG22	2.00	0.43
38:DQ:87:VAL:CG1	38:DQ:88:GLU:H	2.07	0.43
38:DQ:61:ILE:CG1	38:DQ:92:LYS:HD3	2.49	0.43
39:DR:9:GLY:C	39:DR:10:LYS:HD2	2.39	0.43
40:DS:17:VAL:HG11	40:DS:103:ILE:CD1	2.44	0.43
40:DS:47:VAL:HG23	40:DS:47:VAL:O	2.18	0.43
40:DS:66:ILE:HA	40:DS:69:LEU:HD22	2.01	0.43
41:DT:14:PRO:CG	41:DT:15:HIS:H	2.28	0.43
42:DU:73:ASN:C	42:DU:75:ALA:H	2.22	0.43
47:DZ:17:PRO:O	47:DZ:21:ALA:HB2	2.18	0.43
1:AA:99:C:C2'	1:AA:100:G:OP2	2.65	0.43
1:AA:1138:G:C2	1:AA:1140:C:C4	3.07	0.43
1:AA:1282:C:O2'	1:AA:1283:U:H5'	2.19	0.43
1:AA:1358:U:H5	1:AA:1359:C:N3	2.15	0.43
1:AA:928:G:O2'	1:AA:1533:C:OP1	2.37	0.43
1:AA:374:A:C6	1:AA:375:U:C4	3.07	0.43
1:AA:461:A:C3'	1:AA:461:A:N3	2.76	0.43
1:AA:607:A:H2'	1:AA:608:A:C8	2.54	0.43
1:AA:913:A:H4'	1:AA:914:A:O5'	2.17	0.43
1:AA:949:A:O4'	1:AA:1364:U:C5	2.71	0.43
1:AA:991:U:C5'	1:AA:992:U:OP1	2.66	0.43
3:AC:113:LYS:HD3	3:AC:184:ASN:CG	2.39	0.43
3:AC:13:ILE:H	3:AC:13:ILE:HD13	1.84	0.43
3:AC:63:ILE:O	3:AC:98:ALA:HA	2.18	0.43
5:AE:94:PHE:CD1	5:AE:94:PHE:C	2.92	0.43
7:AG:69:ARG:HG3	7:AG:95:ARG:CG	2.49	0.43
9:AI:8:THR:HG21	9:AI:10:ARG:HH21	1.83	0.43
10:AJ:33:GLY:CA	10:AJ:83:THR:HB	2.48	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AL:75:GLU:OE1	12:AL:75:GLU:HA	2.19	0.43
15:AO:1:SER:O	15:AO:2:LEU:HB2	2.19	0.43
1:AA:230:G:H5''	16:AP:31:ARG:NH2	2.33	0.43
17:AQ:20:ILE:CA	17:AQ:47:ASP:OD1	2.66	0.43
19:AS:79:TYR:C	19:AS:79:TYR:CD2	2.88	0.43
22:BA:1023:U:H5'	22:BA:1023:U:H6	1.79	0.43
22:BA:1680:U:C2'	22:BA:1681:G:H5'	2.49	0.43
22:BA:1689:A:O2'	22:BA:1690:A:H5'	2.19	0.43
22:BA:1889:A:H2'	22:BA:1890:A:O4'	2.18	0.43
22:BA:191:A:H2'	22:BA:192:C:C6	2.54	0.43
22:BA:2151:U:O4	22:BA:2152:G:O6	2.37	0.43
22:BA:2289:G:O2'	22:BA:2290:G:H5'	2.18	0.43
22:BA:2548:U:C2'	22:BA:2549:G:O5'	2.66	0.43
22:BA:2816:G:H2'	22:BA:2817:U:O5'	2.18	0.43
22:BA:2830:C:O3'	25:BD:56:LYS:NZ	2.52	0.43
54:BA:3136:ERY:H321	54:BA:3136:ERY:H8	1.58	0.43
22:BA:464:U:O2'	50:B2:16:HIS:CE1	2.72	0.43
22:BA:659:G:H4'	26:BE:95:LYS:CD	2.48	0.43
22:BA:695:G:C2	22:BA:696:G:C8	3.07	0.43
22:BA:968:C:O2'	22:BA:969:G:H5'	2.18	0.43
23:BB:45:A:C4	23:BB:46:A:C8	3.07	0.43
23:BB:69:G:C2'	23:BB:70:C:H5'	2.49	0.43
24:BC:175:LEU:HD12	24:BC:175:LEU:HA	1.72	0.43
25:BD:25:THR:HG22	25:BD:27:ILE:HG13	2.00	0.43
26:BE:5:LEU:HD21	26:BE:120:VAL:HG22	2.00	0.43
27:BF:102:LEU:HD13	27:BF:102:LEU:C	2.38	0.43
27:BF:103:ILE:HG12	27:BF:103:ILE:H	1.56	0.43
28:BG:84:LYS:HG2	28:BG:85:LYS:N	2.34	0.43
30:BI:79:LEU:HD21	30:BI:132:ALA:HB1	2.00	0.43
31:BJ:101:ILE:O	31:BJ:105:VAL:HG13	2.19	0.43
31:BJ:142:ILE:HG22	31:BJ:142:ILE:OXT	2.19	0.43
22:BA:1007:C:H5''	31:BJ:37:ARG:HH21	1.83	0.43
33:BL:62:PRO:O	51:B3:12:ARG:HG2	2.19	0.43
34:BM:1:MET:CE	34:BM:1:MET:CA	2.97	0.43
40:BS:25:ARG:HE	40:BS:73:LYS:HZ1	1.67	0.43
44:BW:23:LYS:CD	44:BW:24:ARG:HG3	2.44	0.43
1:CA:1293:C:C2	1:CA:1294:G:N7	2.86	0.43
1:CA:1319:A:H5''	19:CS:4:LEU:HD13	1.99	0.43
1:CA:133:U:H2'	1:CA:134:G:OP2	2.18	0.43
1:CA:275:G:O2'	1:CA:276:G:H8	2.02	0.43
1:CA:552:U:O2'	1:CA:553:A:H5'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:691:G:H2'	1:CA:692:U:C6	2.54	0.43
1:CA:718:A:C5'	11:CK:118:ASN:OD1	2.67	0.43
1:CA:948:C:H5''	13:CM:104:ASN:CB	2.40	0.43
2:CB:130:LYS:HD3	2:CB:133:ALA:CB	2.47	0.43
2:CB:163:ILE:CG2	2:CB:203:ASP:HA	2.49	0.43
3:CC:20:THR:HG22	3:CC:57:GLU:HG2	2.00	0.43
7:CG:42:VAL:C	7:CG:44:SER:H	2.22	0.43
1:CA:1368:A:C8	9:CI:113:LYS:HD3	2.54	0.43
10:CJ:74:VAL:O	10:CJ:75:ASP:CB	2.65	0.43
12:CL:106:VAL:HG12	12:CL:109:ARG:HG2	2.00	0.43
13:CM:19:THR:HG22	13:CM:25:GLY:O	2.19	0.43
15:CO:24:THR:O	15:CO:25:GLU:C	2.56	0.43
16:CP:20:VAL:HA	16:CP:36:VAL:HB	2.00	0.43
21:CU:19:LYS:C	21:CU:21:SER:N	2.72	0.43
48:D0:43:THR:OG1	48:D0:47:TYR:HB2	2.19	0.43
22:DA:1059:G:C6	22:DA:1080:A:N1	2.86	0.43
22:DA:1142:A:C4	22:DA:1144:A:N7	2.86	0.43
22:DA:1208:C:C4	22:DA:1239:G:N1	2.86	0.43
22:DA:1358:G:N7	22:DA:1371:G:C6	2.87	0.43
22:DA:1476:U:O2'	22:DA:1477:A:O5'	2.37	0.43
22:DA:1532:A:C6	22:DA:1533:C:C4	3.06	0.43
22:DA:1544:A:C6	22:DA:1545:A:N1	2.86	0.43
22:DA:184:C:N3	22:DA:213:A:H2	2.16	0.43
22:DA:1931:U:HO2'	22:DA:1932:A:H8	1.65	0.43
22:DA:2826:A:C2	22:DA:2827:C:C2	3.07	0.43
22:DA:2850:A:N7	22:DA:2868:A:O2'	2.49	0.43
22:DA:515:A:H2	22:DA:1260:A:N3	2.17	0.43
22:DA:543:G:C2	22:DA:551:G:C5	3.06	0.43
22:DA:841:G:O2'	22:DA:842:U:H5'	2.18	0.43
22:DA:969:G:N2	22:DA:985:C:OP1	2.52	0.43
23:DB:24:G:C8	23:DB:56:G:C5	3.07	0.43
23:DB:34:A:C2'	23:DB:35:C:OP2	2.67	0.43
24:DC:76:VAL:O	24:DC:93:VAL:O	2.36	0.43
22:DA:1657:U:O2'	25:DD:138:LEU:HD12	2.19	0.43
26:DE:101:TYR:C	26:DE:101:TYR:CD2	2.92	0.43
26:DE:130:LYS:H	26:DE:160:ALA:HB2	1.84	0.43
27:DF:107:VAL:H	27:DF:108:PRO:CD	2.32	0.43
27:DF:119:LYS:HD3	27:DF:119:LYS:O	2.18	0.43
27:DF:101:ARG:HH11	27:DF:138:PRO:CB	2.31	0.43
27:DF:11:VAL:HG13	27:DF:171:ALA:HB2	2.01	0.43
27:DF:129:MET:CE	27:DF:174:PHE:CE1	3.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:DF:91:ARG:CA	27:DF:95:MET:SD	2.98	0.43
28:DG:93:TYR:N	28:DG:105:SER:O	2.51	0.43
29:DH:68:ARG:HB3	29:DH:68:ARG:CZ	2.47	0.43
30:DI:32:VAL:HG13	30:DI:58:ILE:HD12	2.00	0.43
35:DN:60:VAL:O	35:DN:64:ARG:HD2	2.18	0.43
37:DP:19:PHE:HE1	37:DP:58:PHE:CZ	2.36	0.43
37:DP:48:ALA:HB3	37:DP:59:THR:HB	2.00	0.43
39:DR:4:VAL:HA	39:DR:12:HIS:O	2.18	0.43
39:DR:22:LEU:HD12	39:DR:25:LEU:HD21	2.01	0.43
39:DR:68:ARG:NE	39:DR:90:ARG:HG2	2.34	0.43
39:DR:9:GLY:C	39:DR:10:LYS:CG	2.87	0.43
22:DA:519:U:H4'	40:DS:25:ARG:HH21	1.82	0.43
22:DA:58:G:OP1	41:DT:78:SER:HB2	2.18	0.43
42:DU:48:VAL:HA	42:DU:49:PRO:HD3	1.82	0.43
42:DU:81:ARG:H	42:DU:81:ARG:HD2	1.81	0.43
43:DV:28:ALA:HB1	43:DV:89:ILE:HG13	2.00	0.43
44:DW:51:GLY:CA	44:DW:59:PHE:O	2.67	0.43
46:DY:52:ARG:HA	46:DY:55:THR:HB	2.00	0.43
1:AA:1016:A:H2'	1:AA:1017:U:O4'	2.19	0.43
1:AA:1283:U:O2'	1:AA:1284:C:C5'	2.67	0.43
1:AA:1246:A:C6	1:AA:1292:G:C6	3.07	0.43
1:AA:976:G:N1	1:AA:1363:A:C2	2.87	0.43
1:AA:1451:U:C5'	1:AA:1452:C:H5	2.31	0.43
1:AA:1533:C:C2'	1:AA:1534:A:H5''	2.48	0.43
1:AA:230:G:H5''	16:AP:31:ARG:HH21	1.84	0.43
1:AA:257:G:H2'	1:AA:258:G:O5'	2.19	0.43
1:AA:2:A:C6	1:AA:3:A:N1	2.86	0.43
1:AA:411:A:N6	1:AA:413:G:H21	2.14	0.43
1:AA:748:G:O6	1:AA:749:A:N6	2.51	0.43
2:AB:95:TRP:CZ2	2:AB:100:LEU:HB2	2.54	0.43
2:AB:161:PHE:HD1	2:AB:183:PHE:HB2	1.84	0.43
2:AB:79:VAL:HA	2:AB:213:LEU:HD21	1.99	0.43
3:AC:38:VAL:CG2	3:AC:56:ILE:HD11	2.49	0.43
3:AC:5:HIS:CG	14:AN:88:MET:HB3	2.54	0.43
3:AC:57:GLU:CG	3:AC:64:ARG:HB3	2.49	0.43
4:AD:160:LEU:CD2	4:AD:160:LEU:N	2.80	0.43
6:AF:98:GLU:O	6:AF:99:ALA:HB3	2.18	0.43
10:AJ:88:MET:HB3	10:AJ:89:ARG:NH1	2.33	0.43
11:AK:58:THR:CB	11:AK:59:PRO:HD2	2.46	0.43
12:AL:111:GLN:O	12:AL:112:ALA:HB3	2.19	0.43
13:AM:10:ASP:O	13:AM:11:HIS:HB2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:25:GLY:O	13:AM:27:THR:N	2.52	0.43
13:AM:84:CYS:O	13:AM:88:LEU:CD1	2.66	0.43
15:AO:15:GLY:O	15:AO:17:ASP:N	2.43	0.43
17:AQ:12:VAL:CG1	17:AQ:13:SER:N	2.52	0.43
17:AQ:20:ILE:HD12	17:AQ:20:ILE:HA	1.63	0.43
17:AQ:18:LYS:O	17:AQ:47:ASP:OD2	2.36	0.43
17:AQ:73:THR:HG22	17:AQ:74:LEU:HD12	2.01	0.43
18:AR:42:ARG:HG3	18:AR:43:ILE:CD1	2.49	0.43
19:AS:14:LEU:HB2	19:AS:32:THR:HG21	2.01	0.43
51:B3:15:LYS:HE2	51:B3:19:GLY:HA2	2.01	0.43
22:BA:1084:A:C6	22:BA:1085:A:N6	2.87	0.43
22:BA:1330:C:O2'	22:BA:1331:G:H5'	2.18	0.43
22:BA:729:G:C2'	22:BA:1775:U:H1'	2.48	0.43
22:BA:2049:G:N2	22:BA:2620:C:C2	2.87	0.43
22:BA:2076:U:O2	22:BA:2076:U:O4'	2.36	0.43
22:BA:2109:U:O4	22:BA:2110:G:C4	2.71	0.43
22:BA:2222:C:H2'	22:BA:2223:G:O5'	2.18	0.43
22:BA:2256:G:O2'	22:BA:2257:U:H5'	2.18	0.43
22:BA:2350:C:C2'	22:BA:2351:G:H5'	2.48	0.43
22:BA:2364:C:C2'	22:BA:2365:G:H5'	2.48	0.43
22:BA:2366:A:C2	22:BA:2367:G:H1'	2.54	0.43
22:BA:2459:A:C8	22:BA:2459:A:O5'	2.72	0.43
22:BA:747:U:H2'	22:BA:2613:U:O4	2.18	0.43
22:BA:2665:A:H2	22:BA:2666:C:C2	2.35	0.43
22:BA:277:G:H4'	22:BA:278:A:C8	2.52	0.43
22:BA:2611:C:H5'	54:BA:3136:ERY:H301	2.01	0.43
22:BA:414:C:O2'	22:BA:415:A:H5'	2.17	0.43
22:BA:553:G:N7	22:BA:554:U:C5	2.87	0.43
22:BA:640:C:C2'	22:BA:641:U:O5'	2.67	0.43
22:BA:666:A:H4'	33:BL:48:ARG:NE	2.31	0.43
22:BA:64:A:N1	22:BA:91:A:N6	2.67	0.43
24:BC:137:GLY:N	24:BC:163:ILE:O	2.51	0.43
24:BC:255:LYS:O	24:BC:256:THR:CB	2.67	0.43
24:BC:33:LEU:HD21	24:BC:62:ARG:CD	2.39	0.43
25:BD:117:GLY:O	25:BD:118:PHE:CD1	2.71	0.43
26:BE:176:ASP:C	26:BE:176:ASP:OD1	2.57	0.43
26:BE:108:ILE:CD1	26:BE:180:LEU:CB	2.88	0.43
27:BF:131:VAL:O	27:BF:132:ARG:C	2.57	0.43
27:BF:46:LYS:CD	27:BF:46:LYS:N	2.81	0.43
28:BG:59:ASP:O	28:BG:60:GLY:O	2.36	0.43
29:BH:68:ARG:NH2	29:BH:69:ALA:HA	2.33	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:59:THR:HG22	30:BI:61:TYR:CE2	2.53	0.43
30:BI:56:VAL:CG2	30:BI:68:PHE:HB2	2.49	0.43
33:BL:55:MET:HE2	33:BL:56:PRO:HD2	2.00	0.43
35:BN:4:ARG:HD2	35:BN:4:ARG:HA	1.90	0.43
37:BP:50:ARG:O	37:BP:51:ASN:HB2	2.17	0.43
22:BA:1753:G:OP1	37:BP:92:ARG:HD3	2.18	0.43
38:BQ:35:PHE:C	38:BQ:37:ALA:N	2.72	0.43
38:BQ:89:ILE:O	38:BQ:90:ASP:CB	2.63	0.43
39:BR:47:VAL:HG12	39:BR:54:VAL:HG11	2.01	0.43
40:BS:19:LEU:O	48:B0:21:LEU:HD12	2.18	0.43
41:BT:29:THR:CG2	41:BT:86:THR:CG2	2.87	0.43
41:BT:67:VAL:HG23	41:BT:68:LYS:N	2.33	0.43
42:BU:4:ILE:O	42:BU:4:ILE:HG22	2.15	0.43
45:BX:44:ARG:HH21	45:BX:46:VAL:CG1	2.32	0.43
1:CA:1003:G:N2	1:CA:1005:A:C5'	2.80	0.43
1:CA:1077:G:C6	1:CA:1081:A:N1	2.87	0.43
1:CA:1140:C:O2'	1:CA:1141:C:C6	2.66	0.43
1:CA:121:U:P	1:CA:121:U:H3'	2.58	0.43
1:CA:1336:C:O2'	1:CA:1337:G:C5	2.71	0.43
1:CA:182:A:C2	1:CA:184:G:C6	3.06	0.43
1:CA:265:G:O2'	1:CA:266:G:H5'	2.19	0.43
1:CA:496:A:O2'	1:CA:497:G:C8	2.67	0.43
1:CA:645:G:O2'	1:CA:646:G:H5'	2.18	0.43
1:CA:723:U:H6	1:CA:723:U:H3'	1.83	0.43
1:CA:728:A:C6	1:CA:729:A:N6	2.86	0.43
1:CA:935:A:O2'	1:CA:936:C:H6	2.00	0.43
2:CB:151:LYS:HG3	2:CB:152:ASP:H	1.82	0.43
3:CC:142:ARG:HG2	3:CC:143:LEU:HD12	2.00	0.43
4:CD:115:GLN:HG3	4:CD:119:HIS:CE1	2.54	0.43
9:CI:30:ASN:OD1	9:CI:65:THR:HG23	2.19	0.43
1:CA:708:C:H4'	11:CK:38:GLY:HA3	2.01	0.43
14:CN:87:ALA:HB2	14:CN:95:LEU:HD23	2.00	0.43
15:CO:10:ILE:HA	15:CO:13:GLU:HB2	2.00	0.43
1:CA:258:G:O3'	20:CT:35:TYR:OH	2.36	0.43
49:D1:10:LEU:HD13	49:D1:10:LEU:N	2.34	0.43
22:DA:1219:U:O2'	22:DA:1220:G:H5'	2.18	0.43
22:DA:1275:A:C8	35:DN:16:HIS:CD2	3.07	0.43
22:DA:1307:A:C2'	22:DA:1308:A:O5'	2.66	0.43
22:DA:1320:C:HO2'	22:DA:1321:A:H8	1.67	0.43
22:DA:1441:G:N3	22:DA:1551:A:C2	2.86	0.43
22:DA:154:U:H2'	22:DA:155:A:O4'	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1655:A:O2'	22:DA:1656:C:C5'	2.67	0.43
22:DA:2064:C:O3'	22:DA:2251:G:N2	2.52	0.43
22:DA:2331:G:O2'	44:DW:40:ARG:HG2	2.18	0.43
22:DA:2385:C:O2'	22:DA:2386:A:O5'	2.36	0.43
22:DA:2748:A:C6	22:DA:2749:A:C6	3.07	0.43
22:DA:274:C:O2'	22:DA:275:C:C5'	2.65	0.43
22:DA:2864:G:H2'	22:DA:2865:U:O4'	2.18	0.43
22:DA:300:A:C2'	22:DA:301:G:C5'	2.97	0.43
22:DA:300:A:C5	22:DA:334:C:C4'	3.01	0.43
22:DA:283:G:N2	22:DA:358:U:C2	2.87	0.43
22:DA:545:U:C6	22:DA:547:A:H5'	2.54	0.43
22:DA:791:C:N4	22:DA:794:A:H1'	2.33	0.43
22:DA:843:G:C6	22:DA:844:A:N6	2.87	0.43
23:DB:64:G:C5	23:DB:65:U:C5	3.07	0.43
25:DD:137:SER:CB	25:DD:138:LEU:CD2	2.95	0.43
26:DE:133:LEU:C	26:DE:133:LEU:CD2	2.87	0.43
27:DF:111:ARG:NH1	27:DF:113:PHE:HE1	2.15	0.43
33:DL:73:ILE:O	33:DL:105:ILE:HD12	2.18	0.43
34:DM:101:VAL:HG13	34:DM:101:VAL:O	2.19	0.43
34:DM:21:ALA:HB2	34:DM:98:PRO:O	2.18	0.43
34:DM:46:ILE:HG12	34:DM:46:ILE:H	1.44	0.43
35:DN:33:ILE:CD1	35:DN:118:ARG:NH2	2.82	0.43
37:DP:9:GLN:HB3	37:DP:12:MET:CE	2.48	0.43
37:DP:22:GLY:HA3	37:DP:91:VAL:HG21	1.99	0.43
37:DP:22:GLY:O	37:DP:89:GLY:HA3	2.19	0.43
1:AA:102:G:H2'	1:AA:103:U:H6	1.82	0.43
1:AA:1321:U:O3'	19:AS:77:ARG:NH2	2.51	0.43
1:AA:1442:G:C6	1:AA:1443:C:C4	3.06	0.43
1:AA:815:A:C2	1:AA:1529:G:C4	3.06	0.43
1:AA:184:G:N3	1:AA:185:U:C6	2.87	0.43
1:AA:184:G:O2'	1:AA:185:U:C5'	2.67	0.43
1:AA:373:A:N3	1:AA:374:A:C8	2.86	0.43
1:AA:585:G:N2	1:AA:879:C:O4'	2.52	0.43
1:AA:617:G:H2'	1:AA:618:C:O5'	2.19	0.43
1:AA:70:U:O2'	1:AA:71:A:N7	2.51	0.43
1:AA:737:C:H2'	1:AA:738:C:C6	2.54	0.43
1:AA:831:A:OP1	2:AB:20:ARG:HG3	2.19	0.43
2:AB:9:LEU:CD2	2:AB:11:ALA:CB	2.92	0.43
4:AD:97:LEU:HD23	4:AD:117:VAL:HG21	1.99	0.43
4:AD:151:GLN:H	4:AD:154:VAL:HG12	1.82	0.43
4:AD:188:SER:O	4:AD:190:LEU:N	2.43	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:84:ASN:C	4:AD:84:ASN:ND2	2.72	0.43
6:AF:50:PRO:HD3	18:AR:73:HIS:HB3	2.01	0.43
8:AH:75:GLN:OE1	8:AH:75:GLN:CA	2.64	0.43
9:AI:8:THR:O	9:AI:81:GLY:HA3	2.19	0.43
10:AJ:47:GLU:OE2	14:AN:75:LYS:NZ	2.44	0.43
10:AJ:80:THR:HG22	10:AJ:82:LYS:H	1.83	0.43
11:AK:125:LYS:O	11:AK:126:ARG:CB	2.66	0.43
13:AM:65:GLU:OE1	13:AM:65:GLU:HA	2.18	0.43
14:AN:46:LYS:C	14:AN:48:GLN:H	2.21	0.43
14:AN:60:ARG:O	14:AN:61:ASN:CB	2.54	0.43
15:AO:24:THR:O	15:AO:25:GLU:C	2.57	0.43
18:AR:39:VAL:HG12	18:AR:44:THR:HG23	2.00	0.43
20:AT:61:ALA:HB2	20:AT:66:ILE:CG2	2.49	0.43
20:AT:4:LYS:O	20:AT:6:ALA:N	2.52	0.43
52:B4:9:LYS:HE2	52:B4:9:LYS:CA	2.49	0.43
22:BA:1265:A:O4'	22:BA:1267:U:C6	2.72	0.43
22:BA:1406:U:HO2'	22:BA:1407:G:H8	1.66	0.43
22:BA:1520:U:H6	22:BA:1520:U:O5'	2.01	0.43
22:BA:153:U:C2'	22:BA:154:U:C5'	2.95	0.43
22:BA:1733:G:N3	22:BA:1734:G:C8	2.86	0.43
22:BA:1802:A:N1	22:BA:1822:C:H1'	2.34	0.43
22:BA:2187:U:C2	22:BA:2188:U:C5	3.07	0.43
22:BA:2641:G:OP1	31:BJ:76:HIS:CE1	2.69	0.43
22:BA:2:G:O2'	22:BA:3:U:H5'	2.18	0.43
22:BA:637:A:H4'	22:BA:638:G:O5'	2.18	0.43
22:BA:65:U:N3	22:BA:66:C:C5	2.87	0.43
22:BA:860:U:C2'	22:BA:861:A:O5'	2.67	0.43
22:BA:998:C:H2'	22:BA:999:U:O5'	2.19	0.43
22:BA:1829:A:N3	24:BC:14:HIS:HE1	2.16	0.43
22:BA:2822:G:P	25:BD:115:GLY:HA3	2.59	0.43
25:BD:124:ARG:HG2	25:BD:125:TRP:CD1	2.54	0.43
25:BD:16:THR:HG1	25:BD:18:ASP:CG	2.22	0.43
25:BD:71:ALA:O	25:BD:73:VAL:N	2.52	0.43
27:BF:59:ILE:HD13	27:BF:137:PHE:CE2	2.54	0.43
27:BF:35:LEU:CD2	27:BF:153:ILE:CG2	2.97	0.43
29:BH:67:ALA:O	29:BH:69:ALA:N	2.41	0.43
29:BH:74:ALA:O	29:BH:75:LEU:HD12	2.18	0.43
31:BJ:140:LEU:HD13	31:BJ:141:ASP:N	2.33	0.43
36:BO:75:GLY:CA	36:BO:106:LEU:HD13	2.43	0.43
39:BR:68:ARG:HH11	39:BR:90:ARG:HH11	1.65	0.43
42:BU:17:ASP:O	42:BU:18:LYS:C	2.56	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:BY:23:ARG:O	46:BY:24:GLU:C	2.57	0.43
1:CA:1214:C:H3'	1:CA:1215:G:C5'	2.49	0.43
1:CA:1314:C:H2'	1:CA:1315:U:O4'	2.17	0.43
1:CA:159:G:C5'	1:CA:160:A:OP2	2.66	0.43
1:CA:317:U:H2'	1:CA:318:G:H8	1.83	0.43
1:CA:377:G:O2'	1:CA:378:G:H5'	2.19	0.43
1:CA:443:C:C6	1:CA:443:C:H3'	2.54	0.43
1:CA:444:G:C2	1:CA:445:G:C4	3.06	0.43
1:CA:634:C:N4	1:CA:635:A:N6	2.66	0.43
1:CA:647:C:C2	1:CA:648:A:C8	3.07	0.43
3:CC:179:ALA:HB1	3:CC:202:PHE:CD1	2.53	0.43
7:CG:12:LEU:HD13	7:CG:12:LEU:N	2.34	0.43
8:CH:37:ASN:HA	8:CH:48:PHE:CE1	2.45	0.43
11:CK:81:LEU:HD11	11:CK:104:PHE:HD2	1.70	0.43
13:CM:47:LEU:HD21	13:CM:52:ILE:HG22	2.01	0.43
16:CP:1:MET:C	16:CP:1:MET:HE2	2.39	0.43
18:CR:63:TYR:CD2	18:CR:69:TYR:OH	2.72	0.43
20:CT:32:LYS:O	20:CT:36:ALA:HB3	2.19	0.43
22:DA:1002:G:H2'	22:DA:1003:G:O4'	2.19	0.43
22:DA:1121:C:H2'	22:DA:1122:G:O4'	2.19	0.43
22:DA:1130:U:O2'	22:DA:1131:G:N7	2.49	0.43
22:DA:1270:C:N3	22:DA:1648:U:C5	2.87	0.43
22:DA:1389:G:O2'	22:DA:1390:U:H5'	2.17	0.43
22:DA:1565:C:H5''	24:DC:17:LYS:HE2	2.01	0.43
22:DA:1681:G:O2'	22:DA:1762:A:O2'	2.26	0.43
22:DA:1731:G:N3	22:DA:1733:G:N7	2.67	0.43
22:DA:1753:G:H2'	22:DA:1754:A:O5'	2.19	0.43
22:DA:1910:G:H1	22:DA:1920:C:N4	2.17	0.43
22:DA:191:A:HO2'	22:DA:192:C:H5'	1.83	0.43
22:DA:1959:G:H2'	22:DA:1960:A:O4'	2.18	0.43
22:DA:1998:A:C4	22:DA:1999:C:C6	3.06	0.43
22:DA:2011:U:H2'	22:DA:2012:G:O4'	2.19	0.43
22:DA:2092:U:H4'	22:DA:2093:G:C5'	2.45	0.43
22:DA:2234:G:C4	22:DA:2235:G:C8	3.07	0.43
22:DA:2077:A:OP1	22:DA:2238:G:N1	2.52	0.43
22:DA:2551:C:C4	22:DA:2552:U:C4	3.07	0.43
22:DA:2552:U:O2	22:DA:2554:U:C5'	2.59	0.43
22:DA:480:A:H2'	22:DA:480:A:N3	2.34	0.43
22:DA:560:C:H2'	22:DA:561:G:C5'	2.49	0.43
22:DA:622:G:O2'	22:DA:623:C:H5'	2.18	0.43
22:DA:900:A:H2'	22:DA:901:C:C6	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:916:G:O2'	22:DA:917:A:O5'	2.34	0.43
22:DA:92:U:O2'	22:DA:93:G:O4'	2.36	0.43
22:DA:943:A:H2'	22:DA:944:C:O5'	2.18	0.43
24:DC:184:GLU:C	24:DC:186:ASP:H	2.20	0.43
26:DE:146:VAL:O	26:DE:167:VAL:HA	2.18	0.43
27:DF:122:ASP:CB	27:DF:126:ASN:ND2	2.82	0.43
27:DF:8:LYS:HG3	27:DF:12:VAL:HG21	2.00	0.43
28:DG:82:PHE:HB3	28:DG:140:ILE:HD11	2.00	0.43
29:DH:5:LEU:HA	29:DH:36:ALA:HB2	2.00	0.43
30:DI:132:ALA:HA	30:DI:137:LEU:HD12	2.01	0.43
31:DJ:1:MET:SD	31:DJ:2:LYS:NZ	2.92	0.43
33:DL:4:ASN:HD22	33:DL:4:ASN:HA	1.53	0.43
22:DA:871:U:OP1	34:DM:4:PRO:HA	2.19	0.43
36:DO:22:GLY:O	36:DO:23:ALA:HB3	2.19	0.43
22:DA:1252:G:C2	38:DQ:32:ARG:HG2	2.53	0.43
38:DQ:43:GLN:O	38:DQ:44:TYR:C	2.57	0.43
44:DW:72:GLY:HA3	44:DW:78:PHE:HE2	1.83	0.43
47:DZ:19:HIS:HD2	47:DZ:52:PHE:HZ	1.67	0.43
1:AA:139:A:N7	1:AA:140:U:H5	2.16	0.43
1:AA:1442:G:H2'	1:AA:1443:C:H6	1.82	0.43
1:AA:205:A:N7	1:AA:206:C:C4	2.87	0.43
1:AA:27:G:H2'	1:AA:28:A:H8	1.84	0.43
1:AA:358:U:C2'	1:AA:359:G:O5'	2.66	0.43
1:AA:414:A:C4	1:AA:415:A:N7	2.87	0.43
1:AA:540:G:H2'	1:AA:541:G:H8	1.84	0.43
1:AA:753:A:H4'	1:AA:754:C:O5'	2.19	0.43
1:AA:865:A:C4	1:AA:866:C:C5	3.07	0.43
1:AA:868:C:H2'	1:AA:869:G:H5'	2.01	0.43
1:AA:79:G:N2	1:AA:91:U:O4	2.52	0.43
2:AB:116:LEU:HB3	2:AB:140:LEU:HD21	2.00	0.43
2:AB:153:MET:O	2:AB:155:GLY:N	2.49	0.43
5:AE:100:GLU:HB2	5:AE:103:GLY:N	2.33	0.43
10:AJ:20:GLN:NE2	10:AJ:20:GLN:CA	2.79	0.43
17:AQ:55:GLY:HA3	17:AQ:82:VAL:CG1	2.47	0.43
1:AA:1458:G:H5''	20:AT:25:SER:HB3	2.00	0.43
21:AU:40:PRO:HA	21:AU:43:GLU:HB2	2.00	0.43
49:B1:6:GLU:O	49:B1:23:THR:HA	2.19	0.43
22:BA:10:A:C5	22:BA:2800:A:C6	3.06	0.43
22:BA:1216:G:H2'	22:BA:1217:U:H6	1.83	0.43
22:BA:141:G:H5'	22:BA:142:A:C8	2.54	0.43
22:BA:1588:G:C2	22:BA:1589:U:C5	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1691:C:H2'	22:BA:1692:U:O5'	2.19	0.43
22:BA:729:G:C4	22:BA:1775:U:C2	3.07	0.43
22:BA:1799:G:C2	24:BC:153:LEU:CD2	3.02	0.43
22:BA:1848:A:O2'	22:BA:1849:G:C5'	2.67	0.43
22:BA:2019:A:H4'	38:BQ:33:VAL:CG2	2.48	0.43
22:BA:2079:U:C2	22:BA:2080:A:C8	3.07	0.43
22:BA:216:A:C4	22:BA:217:A:C8	3.07	0.43
22:BA:2107:G:O6	22:BA:2183:A:C6	2.72	0.43
22:BA:2364:C:O2'	22:BA:2365:G:H5'	2.19	0.43
22:BA:2443:C:O2'	22:BA:2444:G:H5'	2.18	0.43
22:BA:2672:U:H2'	22:BA:2673:G:C5'	2.49	0.43
22:BA:2813:A:C2	22:BA:2887:A:N6	2.73	0.43
22:BA:302:C:O2'	22:BA:303:G:H5'	2.18	0.43
22:BA:616:A:H4'	26:BE:101:TYR:CZ	2.54	0.43
25:BD:139:SER:HA	25:BD:142:VAL:CG1	2.49	0.43
25:BD:13:ARG:HD2	37:BP:55:HIS:CE1	2.54	0.43
28:BG:123:GLU:CD	28:BG:124:CYS:N	2.72	0.43
29:BH:90:LEU:HD22	29:BH:123:ARG:CA	2.45	0.43
22:BA:1007:C:H5''	31:BJ:37:ARG:NH2	2.33	0.43
32:BK:51:LYS:O	32:BK:51:LYS:NZ	2.52	0.43
33:BL:79:LEU:HD13	33:BL:116:VAL:CG1	2.49	0.43
35:BN:93:GLY:C	35:BN:95:THR:H	2.21	0.43
38:BQ:25:GLY:O	38:BQ:29:ARG:HG3	2.19	0.43
22:BA:1161:C:C1'	39:BR:8:GLY:O	2.63	0.43
22:BA:480:A:OP2	42:BU:43:LYS:HD2	2.18	0.43
45:BX:51:SER:O	45:BX:54:GLY:N	2.52	0.43
1:CA:994:A:H62	1:CA:1216:A:H5'	1.81	0.43
1:CA:1527:U:H2'	1:CA:1528:U:C6	2.52	0.43
1:CA:181:A:O2'	1:CA:182:A:O5'	2.35	0.43
1:CA:204:G:H2'	1:CA:205:A:H8	1.83	0.43
1:CA:21:G:H1'	1:CA:914:A:H61	1.84	0.43
1:CA:273:U:O2'	1:CA:274:A:H5'	2.19	0.43
1:CA:289:G:C2	1:CA:290:C:C4	3.06	0.43
1:CA:398:U:H2'	1:CA:398:U:O2	2.19	0.43
1:CA:597:G:N7	1:CA:598:U:C5	2.87	0.43
1:CA:867:G:N3	1:CA:868:C:C6	2.87	0.43
1:CA:99:C:HO2'	1:CA:100:G:H8	1.66	0.43
2:CB:73:ARG:HG3	2:CB:74:ALA:H	1.82	0.43
3:CC:129:PHE:CD2	3:CC:130:ARG:N	2.87	0.43
3:CC:131:ARG:O	3:CC:135:ARG:HB2	2.18	0.43
3:CC:161:ILE:HD13	3:CC:161:ILE:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:163:GLN:CA	4:CD:163:GLN:HE21	2.31	0.43
4:CD:29:THR:CG2	4:CD:30:LYS:HD3	2.44	0.43
7:CG:35:LYS:HB3	7:CG:35:LYS:HZ3	1.82	0.43
7:CG:77:ARG:HD3	7:CG:77:ARG:HA	1.87	0.43
7:CG:91:ARG:CZ	7:CG:92:PRO:HD2	2.49	0.43
8:CH:30:LYS:O	8:CH:33:VAL:N	2.51	0.43
8:CH:78:SER:HG	8:CH:123:GLU:HG3	1.83	0.43
9:CI:59:LYS:HE2	9:CI:59:LYS:HB3	1.68	0.43
13:CM:85:TYR:HE2	13:CM:96:VAL:HG11	1.80	0.43
17:CQ:47:ASP:HB3	17:CQ:74:LEU:HB3	2.00	0.43
19:CS:14:LEU:HD22	19:CS:37:SER:OG	2.19	0.43
19:CS:39:ILE:HG13	19:CS:39:ILE:O	2.19	0.43
1:CA:1319:A:OP1	19:CS:4:LEU:HD22	2.18	0.43
1:CA:1458:G:O3'	20:CT:22:SER:HA	2.19	0.43
20:CT:64:GLY:O	20:CT:67:HIS:HB2	2.19	0.43
50:D2:10:LEU:HD21	50:D2:14:ARG:HH11	1.84	0.43
22:DA:109:C:H2'	22:DA:110:G:O5'	2.18	0.43
22:DA:10:A:O2'	22:DA:11:C:H5'	2.19	0.43
22:DA:118:A:P	22:DA:119:A:H5''	2.59	0.43
22:DA:1203:U:C2	22:DA:1204:A:C6	3.06	0.43
22:DA:141:G:HO2'	22:DA:142:A:P	2.41	0.43
22:DA:1528:A:H2'	22:DA:1529:G:O4'	2.19	0.43
22:DA:1593:A:C2	22:DA:1594:U:C2	3.06	0.43
22:DA:1662:U:H2'	22:DA:1662:U:O2	2.18	0.43
22:DA:1819:A:O4'	22:DA:1821:A:C5	2.71	0.43
22:DA:1870:C:C5'	22:DA:1871:A:H2	1.98	0.43
22:DA:2195:U:C5	22:DA:2196:C:H5	2.36	0.43
22:DA:2199:A:N7	22:DA:2225:A:C6	2.86	0.43
22:DA:2335:A:C4	22:DA:2337:G:N7	2.86	0.43
22:DA:2414:G:H2'	22:DA:2415:G:C5'	2.48	0.43
22:DA:250:G:N1	22:DA:251:A:C2	2.87	0.43
22:DA:2513:A:H2	25:DD:148:GLN:HE21	1.65	0.43
22:DA:2674:G:H4'	32:DK:30:ARG:HD2	2.01	0.43
22:DA:2839:G:C2	22:DA:2880:C:C4	3.06	0.43
22:DA:435:C:C5	22:DA:436:C:C5	3.07	0.43
22:DA:487:C:H2'	22:DA:488:G:O4'	2.19	0.43
22:DA:506:G:H4'	22:DA:507:A:C5'	2.46	0.43
22:DA:548:G:C5'	22:DA:549:G:H5'	2.48	0.43
22:DA:95:A:C2'	22:DA:96:C:H5''	2.39	0.43
23:DB:20:G:N2	23:DB:64:G:H1'	2.34	0.43
23:DB:34:A:N6	23:DB:44:G:C1'	2.81	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:144:GLU:HG3	24:DC:151:GLY:CA	2.49	0.43
24:DC:77:VAL:CG2	24:DC:113:ASP:H	2.31	0.43
24:DC:86:ARG:HD2	24:DC:90:ILE:CD1	2.46	0.43
25:DD:124:ARG:NH1	25:DD:125:TRP:HZ2	2.15	0.43
25:DD:33:ARG:NH2	25:DD:51:THR:HG22	2.33	0.43
27:DF:160:LYS:HD3	27:DF:161:SER:N	2.33	0.43
28:DG:137:LYS:C	28:DG:139:VAL:H	2.22	0.43
30:DI:13:ALA:C	30:DI:15:GLY:H	2.22	0.43
30:DI:89:SER:HB2	30:DI:97:VAL:HG21	2.00	0.43
30:DI:98:GLY:O	30:DI:99:LYS:HD2	2.19	0.43
33:DL:124:GLY:N	33:DL:143:GLU:OE2	2.52	0.43
34:DM:107:GLY:O	34:DM:108:VAL:HB	2.18	0.43
35:DN:37:THR:HA	35:DN:110:MET:CE	2.49	0.43
22:DA:2335:A:OP1	36:DO:13:ARG:HD2	2.17	0.43
37:DP:23:ASP:O	37:DP:24:THR:CG2	2.67	0.43
37:DP:91:VAL:HG11	37:DP:96:LEU:HD21	2.00	0.43
41:DT:60:THR:O	41:DT:61:LEU:HB3	2.18	0.43
42:DU:102:ILE:OXT	42:DU:102:ILE:HG23	2.17	0.43
43:DV:29:ILE:C	43:DV:29:ILE:CD1	2.87	0.43
44:DW:9:THR:HG23	44:DW:10:ARG:H	1.79	0.43
47:DZ:53:MET:O	47:DZ:54:VAL:CG1	2.57	0.43
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.54	0.43
1:AA:949:A:O4'	1:AA:1364:U:H5	2.01	0.43
1:AA:514:C:C2'	1:AA:515:G:H5'	2.49	0.43
1:AA:600:A:H2'	1:AA:601:G:C8	2.54	0.43
1:AA:826:C:H5'	8:AH:12:ARG:NH2	2.31	0.43
1:AA:975:A:C4'	1:AA:976:G:H5''	2.33	0.43
3:AC:149:LYS:HG3	3:AC:200:TRP:HE3	1.84	0.43
4:AD:7:LYS:NZ	4:AD:21:LYS:CG	2.81	0.43
4:AD:26:ALA:O	4:AD:27:ILE:C	2.56	0.43
5:AE:82:HIS:HB2	5:AE:83:PRO:HD2	2.01	0.43
9:AI:5:TYR:CE1	9:AI:88:GLU:OE2	2.72	0.43
9:AI:60:LEU:CD2	9:AI:60:LEU:N	2.82	0.43
1:AA:1124:G:O2'	10:AJ:40:ILE:CD1	2.67	0.43
10:AJ:51:VAL:HB	14:AN:80:ARG:CB	2.31	0.43
10:AJ:63:ASP:HB3	10:AJ:65:TYR:CE2	2.54	0.43
11:AK:21:HIS:O	11:AK:31:VAL:HA	2.18	0.43
15:AO:73:ASP:CB	15:AO:76:ARG:HG3	2.49	0.43
16:AP:73:ALA:O	16:AP:77:GLU:CB	2.52	0.43
48:B0:48:TYR:O	48:B0:49:ARG:HB2	2.18	0.43
22:BA:1062:G:N1	22:BA:1077:A:C6	2.87	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1079:C:C4	22:BA:1080:A:N7	2.87	0.43
22:BA:1488:C:H2'	22:BA:1489:C:C6	2.54	0.43
22:BA:1570:A:C6	22:BA:1571:A:C6	3.06	0.43
22:BA:1834:U:H2'	22:BA:1834:U:O2	2.19	0.43
22:BA:1849:G:H2'	22:BA:1850:G:C8	2.53	0.43
22:BA:2414:G:N2	33:BL:66:PHE:CE2	2.86	0.43
22:BA:2620:C:H2'	22:BA:2621:G:O4'	2.19	0.43
22:BA:273:G:O2'	22:BA:274:C:H5'	2.19	0.43
22:BA:2840:C:H2'	22:BA:2841:C:C6	2.53	0.43
22:BA:528:A:N1	22:BA:2042:A:H2'	2.34	0.43
22:BA:917:A:C2'	22:BA:918:A:H5'	2.49	0.43
24:BC:257:ARG:CG	24:BC:269:ARG:NH2	2.73	0.43
26:BE:153:LEU:HB3	26:BE:171:ASP:HB2	2.00	0.43
26:BE:3:LEU:O	26:BE:11:ALA:HA	2.18	0.43
27:BF:132:ARG:O	27:BF:133:GLU:CB	2.53	0.43
27:BF:134:GLN:HE21	27:BF:134:GLN:CA	2.32	0.43
27:BF:3:LEU:HD13	27:BF:3:LEU:HA	1.68	0.43
27:BF:52:ALA:CB	27:BF:149:ARG:HD3	2.49	0.43
27:BF:98:PHE:HA	27:BF:101:ARG:HG3	2.00	0.43
29:BH:22:LYS:O	29:BH:23:ALA:C	2.57	0.43
31:BJ:97:PRO:O	31:BJ:99:ARG:N	2.52	0.43
32:BK:24:VAL:CG1	32:BK:30:ARG:HD2	2.47	0.43
34:BM:15:GLY:O	34:BM:16:ARG:HD3	2.19	0.43
34:BM:6:ARG:HD2	34:BM:8:LYS:NZ	2.34	0.43
36:BO:48:LEU:N	36:BO:48:LEU:HD23	2.34	0.43
23:BB:116:G:H4'	36:BO:54:VAL:O	2.18	0.43
37:BP:9:GLN:C	37:BP:11:GLN:N	2.72	0.43
42:BU:38:ILE:HG22	42:BU:39:ASN:H	1.79	0.43
43:BV:65:VAL:O	43:BV:65:VAL:HG22	2.19	0.43
44:BW:16:GLU:HA	44:BW:16:GLU:OE2	2.18	0.43
44:BW:39:GLN:HE21	44:BW:42:THR:HB	1.84	0.43
44:BW:42:THR:HG23	44:BW:43:LYS:HZ2	1.84	0.43
22:BA:372:G:H5''	45:BX:60:LYS:HE3	2.00	0.43
47:BZ:2:LYS:C	47:BZ:3:THR:CG2	2.87	0.43
1:CA:102:G:C2	1:CA:103:U:C2	3.07	0.43
1:CA:1249:C:H2'	1:CA:1250:A:C5'	2.35	0.43
1:CA:1413:A:H2'	1:CA:1414:U:C6	2.53	0.43
1:CA:560:A:N7	1:CA:566:G:C4	2.87	0.43
1:CA:58:C:C2'	1:CA:59:A:O5'	2.66	0.43
1:CA:672:U:H2'	1:CA:673:A:C8	2.54	0.43
1:CA:685:G:O2'	1:CA:686:U:H5'	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:711:G:HO2'	1:CA:712:A:H5'	1.82	0.43
1:CA:927:G:C2	1:CA:1391:U:O2	2.72	0.43
1:CA:927:G:N2	1:CA:1391:U:H1'	2.34	0.43
1:CA:929:G:C6	1:CA:930:C:C4	3.07	0.43
1:CA:935:A:C6	1:CA:936:C:N4	2.87	0.43
2:CB:128:LEU:HD22	2:CB:132:GLU:CG	2.48	0.43
2:CB:146:SER:HB2	2:CB:147:LEU:CD1	2.40	0.43
4:CD:170:LEU:HD12	4:CD:170:LEU:O	2.18	0.43
6:CF:54:LEU:HD11	6:CF:56:LYS:O	2.16	0.43
7:CG:71:THR:CG2	7:CG:72:VAL:N	2.82	0.43
9:CI:117:LEU:CD2	9:CI:123:ARG:CD	2.97	0.43
11:CK:28:ASN:CG	11:CK:56:LYS:HE2	2.40	0.43
12:CL:101:LEU:HB3	12:CL:102:ASP:H	1.72	0.43
12:CL:72:ASN:ND2	12:CL:72:ASN:H	2.10	0.43
12:CL:97:VAL:O	12:CL:98:ARG:C	2.57	0.43
13:CM:113:LYS:HD3	13:CM:113:LYS:C	2.39	0.43
14:CN:8:ARG:HD2	14:CN:12:ARG:NH2	2.33	0.43
15:CO:23:SER:HB3	15:CO:26:VAL:CG2	2.49	0.43
17:CQ:7:LEU:N	17:CQ:7:LEU:HD22	2.34	0.43
18:CR:59:LYS:HA	18:CR:62:ARG:HD2	2.00	0.43
48:D0:27:LEU:HD12	48:D0:38:LEU:HD23	2.00	0.43
22:DA:1045:C:H4'	22:DA:1047:G:C4	2.54	0.43
22:DA:1439:A:H1'	22:DA:1553:A:H61	1.84	0.43
22:DA:2056:G:N2	22:DA:2057:G:N9	2.66	0.43
22:DA:2080:A:C2	22:DA:2241:A:C2	3.07	0.43
22:DA:219:A:C5	22:DA:220:G:C5	3.07	0.43
22:DA:2201:G:C6	22:DA:2223:G:C2	3.07	0.43
22:DA:2200:C:N4	22:DA:2224:G:H21	2.14	0.43
22:DA:2307:G:N7	22:DA:2312:U:C5	2.87	0.43
22:DA:2468:A:O2'	22:DA:2469:A:O5'	2.37	0.43
22:DA:2638:G:H2'	22:DA:2775:G:N2	2.34	0.43
22:DA:2683:C:H42	22:DA:2727:A:H1'	1.84	0.43
22:DA:2757:A:C2	22:DA:2758:A:C8	3.07	0.43
22:DA:2824:C:OP2	22:DA:2825:G:N2	2.52	0.43
22:DA:301:G:O3'	42:DU:81:ARG:NH1	2.48	0.43
22:DA:430:A:OP2	22:DA:431:U:H5	2.02	0.43
22:DA:455:C:H42	22:DA:473:G:C5'	2.31	0.43
22:DA:545:U:C3'	22:DA:545:U:C6	3.01	0.43
22:DA:581:C:H6	22:DA:581:C:O5'	2.02	0.43
22:DA:732:C:N4	22:DA:733:G:C5	2.87	0.43
22:DA:82:U:C2	22:DA:83:A:C8	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:21:G:C2'	23:DB:22:U:H5'	2.48	0.43
25:DD:113:SER:HB3	25:DD:168:GLU:H	1.83	0.43
25:DD:172:VAL:CG2	25:DD:194:PRO:CD	2.97	0.43
26:DE:134:LEU:CA	26:DE:137:LYS:HB2	2.49	0.43
22:DA:2060:A:H3'	26:DE:63:LYS:HZ3	1.83	0.43
27:DF:72:SER:HA	27:DF:79:ARG:HA	2.00	0.43
28:DG:85:LYS:HD3	28:DG:164:ALA:O	2.18	0.43
29:DH:62:LEU:C	29:DH:64:ALA:H	2.22	0.43
31:DJ:45:THR:HG23	31:DJ:48:VAL:O	2.19	0.43
31:DJ:51:GLY:CA	31:DJ:121:LYS:HE3	2.48	0.43
32:DK:17:ARG:O	32:DK:45:GLU:HB3	2.19	0.43
33:DL:57:LEU:HA	33:DL:60:ARG:CG	2.49	0.43
22:DA:245:G:OP2	33:DL:67:THR:CG2	2.67	0.43
34:DM:66:ARG:NH2	34:DM:104:GLU:OE2	2.46	0.43
34:DM:29:GLY:CA	34:DM:64:TRP:HZ3	2.32	0.43
35:DN:83:LEU:CD1	35:DN:86:ARG:HH21	2.32	0.43
36:DO:58:ILE:N	36:DO:58:ILE:HD12	2.33	0.43
38:DQ:115:ALA:O	38:DQ:116:LEU:C	2.58	0.43
42:DU:14:THR:CG2	42:DU:15:GLY:N	2.64	0.43
42:DU:9:GLU:OE2	42:DU:23:LYS:HG2	2.18	0.43
45:DX:27:ARG:HG2	45:DX:27:ARG:O	2.19	0.43
1:AA:1004:A:C6	1:AA:1005:A:C4	3.07	0.42
1:AA:1112:C:C4	3:AC:177:LEU:HD22	2.54	0.42
1:AA:1260:G:O5'	1:AA:1284:C:H4'	2.19	0.42
1:AA:1234:C:H5'	1:AA:1365:G:OP1	2.19	0.42
1:AA:927:G:N2	1:AA:1391:U:H1'	2.34	0.42
1:AA:1530:G:O2'	1:AA:1531:A:H5'	2.18	0.42
1:AA:420:U:C2'	1:AA:421:U:C5'	2.96	0.42
1:AA:599:C:H5"	8:AH:87:ARG:HA	2.00	0.42
1:AA:657:U:O2	15:AO:21:THR:HG23	2.18	0.42
1:AA:79:G:C6	1:AA:80:A:C5	3.06	0.42
1:AA:842:U:C3'	1:AA:843:U:C5'	2.80	0.42
1:AA:859:G:OP2	1:AA:869:G:N1	2.51	0.42
1:AA:874:G:C6	1:AA:875:U:C4	3.07	0.42
1:AA:895:G:C5	1:AA:896:C:C5	3.07	0.42
1:AA:94:G:C4'	1:AA:95:C:H5"	2.49	0.42
2:AB:162:VAL:HG22	2:AB:184:ALA:HB2	2.00	0.42
3:AC:156:LEU:HA	3:AC:195:ILE:HD11	2.01	0.42
3:AC:79:LYS:HE3	3:AC:79:LYS:CA	2.49	0.42
4:AD:129:VAL:HG11	4:AD:134:TYR:HB3	2.00	0.42
4:AD:22:SER:O	4:AD:23:GLY:C	2.57	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1080:A:OP1	5:AE:51:LYS:CE	2.64	0.42
6:AF:22:ILE:O	6:AF:26:THR:HG23	2.19	0.42
7:AG:106:ALA:HB1	7:AG:132:THR:HB	2.01	0.42
8:AH:85:TYR:CD2	8:AH:123:GLU:HB2	2.54	0.42
17:AQ:80:LYS:CB	17:AQ:80:LYS:NZ	2.77	0.42
21:AU:36:PHE:O	21:AU:37:TYR:CB	2.66	0.42
50:B2:43:THR:O	50:B2:44:VAL:HG22	2.19	0.42
22:BA:1041:G:O2'	22:BA:1042:G:H5'	2.19	0.42
22:BA:1060:U:C1'	22:BA:1062:G:H5'	2.49	0.42
22:BA:1056:G:C4'	22:BA:1086:A:H8	2.32	0.42
22:BA:1190:G:OP1	33:BL:32:GLY:HA2	2.18	0.42
22:BA:31:C:O2'	22:BA:1238:G:H5'	2.19	0.42
22:BA:1242:U:H2'	22:BA:1243:C:C6	2.54	0.42
22:BA:1246:A:H2'	22:BA:1247:A:O5'	2.19	0.42
22:BA:1324:G:C4	22:BA:1328:A:N6	2.87	0.42
22:BA:1817:G:OP1	24:BC:86:ARG:NH2	2.52	0.42
22:BA:1824:G:C6	22:BA:1825:U:C4	3.07	0.42
22:BA:1952:A:C6	22:BA:1953:A:N1	2.87	0.42
22:BA:209:C:C2'	22:BA:210:C:H5'	2.49	0.42
22:BA:2205:A:C6	22:BA:2206:C:C4	3.07	0.42
22:BA:2328:A:C2'	22:BA:2329:U:H6	2.16	0.42
22:BA:2330:G:H8	22:BA:2330:G:OP2	2.02	0.42
22:BA:2418:A:N7	56:BA:3664:HOH:O	2.37	0.42
22:BA:2661:G:H2'	22:BA:2662:A:O5'	2.19	0.42
22:BA:2890:G:O5'	22:BA:2890:G:H8	2.02	0.42
22:BA:302:C:H2'	22:BA:303:G:H8	1.84	0.42
22:BA:625:G:H2'	22:BA:626:A:O5'	2.19	0.42
22:BA:640:C:H2'	22:BA:641:U:C6	2.54	0.42
22:BA:729:G:H4'	22:BA:763:G:H5'	2.01	0.42
22:BA:910:A:C6	22:BA:911:A:C6	3.06	0.42
23:BB:32:U:O2'	23:BB:33:G:H5'	2.18	0.42
24:BC:29:PHE:CE2	24:BC:31:PRO:CG	3.00	0.42
25:BD:9:VAL:HG22	25:BD:26:VAL:CB	2.48	0.42
26:BE:48:THR:C	26:BE:50:ALA:N	2.72	0.42
29:BH:110:VAL:HG23	29:BH:111:ALA:N	2.33	0.42
29:BH:3:VAL:HB	29:BH:37:VAL:O	2.19	0.42
29:BH:42:LYS:O	29:BH:46:PHE:HB2	2.19	0.42
30:BI:19:PRO:HB2	30:BI:22:PRO:HD2	2.01	0.42
32:BK:57:VAL:C	32:BK:58:LEU:HD23	2.40	0.42
33:BL:80:SER:C	33:BL:81:ASP:O	2.56	0.42
34:BM:80:VAL:HG22	34:BM:81:ARG:O	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BM:80:VAL:HG22	34:BM:81:ARG:N	2.32	0.42
35:BN:85:PRO:HA	35:BN:88:ALA:HB2	2.00	0.42
36:BO:65:THR:O	36:BO:66:GLY:C	2.57	0.42
38:BQ:35:PHE:CE1	38:BQ:39:ILE:CD1	3.02	0.42
40:BS:59:GLU:CA	40:BS:64:ALA:HB2	2.44	0.42
22:BA:1340:U:H3'	41:BT:61:LEU:HD22	1.99	0.42
42:BU:86:PHE:CE1	42:BU:101:THR:HG21	2.54	0.42
45:BX:1:SER:O	45:BX:3:VAL:N	2.52	0.42
46:BY:20:ASN:HB3	46:BY:50:VAL:HG23	2.01	0.42
1:CA:1073:U:N3	1:CA:1074:G:N7	2.67	0.42
1:CA:1133:G:N2	1:CA:1142:G:C5	2.87	0.42
1:CA:1138:G:C2'	1:CA:1139:G:OP1	2.66	0.42
1:CA:1228:C:O2'	1:CA:1229:A:H8	2.02	0.42
1:CA:1393:U:C3'	1:CA:1393:U:H6	2.29	0.42
1:CA:1475:G:O2'	1:CA:1476:A:H5'	2.19	0.42
1:CA:178:C:C2	1:CA:179:A:C8	3.07	0.42
1:CA:322:C:C2	1:CA:332:G:N2	2.87	0.42
1:CA:376:G:O3'	16:CP:5:ARG:NH1	2.49	0.42
1:CA:599:C:H4'	8:CH:121:GLY:C	2.40	0.42
1:CA:786:G:N2	1:CA:787:A:H1'	2.34	0.42
1:CA:826:C:C2'	1:CA:826:C:O2	2.67	0.42
1:CA:847:G:C2	1:CA:848:C:C2	3.06	0.42
1:CA:1074:G:H4'	2:CB:102:ASN:HB2	2.00	0.42
3:CC:11:LEU:C	3:CC:13:ILE:N	2.73	0.42
4:CD:167:PRO:CG	4:CD:170:LEU:HD11	2.49	0.42
4:CD:27:ILE:O	4:CD:28:ASP:HB3	2.19	0.42
7:CG:59:GLU:HB2	7:CG:62:GLU:HB2	2.01	0.42
9:CI:90:ASP:OD1	9:CI:92:SER:N	2.52	0.42
10:CJ:90:LEU:CD2	10:CJ:90:LEU:O	2.67	0.42
16:CP:75:ILE:CA	16:CP:78:VAL:HG23	2.49	0.42
20:CT:64:GLY:O	20:CT:65:LEU:C	2.57	0.42
50:D2:11:LYS:HB3	50:D2:11:LYS:HE2	1.81	0.42
22:DA:1055:G:C2'	22:DA:1056:G:H5'	2.48	0.42
22:DA:1142:A:N9	22:DA:1144:A:N7	2.66	0.42
22:DA:121:G:H2'	22:DA:121:G:N3	2.34	0.42
22:DA:1249:U:P	22:DA:1249:U:H3'	2.59	0.42
22:DA:1498:C:H2'	22:DA:1499:C:C6	2.53	0.42
22:DA:1526:C:C4	22:DA:1527:G:C6	3.07	0.42
22:DA:1568:G:O2'	22:DA:1569:A:OP2	2.29	0.42
22:DA:1593:A:C6	22:DA:1594:U:N3	2.87	0.42
22:DA:179:C:H2'	22:DA:180:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1819:A:C1'	22:DA:1821:A:C6	3.01	0.42
22:DA:1766:G:C6	22:DA:1987:A:N1	2.87	0.42
22:DA:2023:C:O2'	22:DA:2024:G:P	2.76	0.42
22:DA:2235:G:C4	22:DA:2236:U:C5	3.07	0.42
22:DA:2337:G:N3	22:DA:2337:G:C2'	2.82	0.42
22:DA:2370:G:C6	22:DA:2371:G:C5	3.07	0.42
22:DA:2390:U:OP2	51:D3:34:LYS:HE2	2.18	0.42
22:DA:2541:A:C2	22:DA:2765:A:N6	2.84	0.42
22:DA:2550:G:N2	22:DA:2559:C:C2	2.87	0.42
22:DA:2563:U:C1'	22:DA:2566:A:N6	2.82	0.42
22:DA:2654:A:N6	22:DA:2667:C:N4	2.66	0.42
22:DA:265:A:C6	22:DA:428:A:C8	3.06	0.42
22:DA:2694:G:H2'	22:DA:2695:U:H6	1.84	0.42
22:DA:2698:U:C2	22:DA:2699:C:C5	3.07	0.42
22:DA:2748:A:N9	22:DA:2757:A:N6	2.67	0.42
22:DA:1751:U:O4'	22:DA:2860:A:C2	2.72	0.42
22:DA:323:C:O2	22:DA:323:C:O4'	2.36	0.42
22:DA:347:A:N6	22:DA:348:A:N6	2.67	0.42
22:DA:395:U:HO2'	22:DA:396:G:P	2.41	0.42
22:DA:446:G:H4'	22:DA:447:A:OP1	2.19	0.42
22:DA:609:A:H2'	22:DA:610:C:O4'	2.19	0.42
22:DA:627:A:H8	33:DL:78:ARG:NH1	2.17	0.42
22:DA:675:A:N6	22:DA:676:A:N6	2.67	0.42
23:DB:30:C:C2	23:DB:31:C:O4'	2.72	0.42
23:DB:55:U:H1'	27:DF:25:MET:CE	2.49	0.42
23:DB:93:C:O2'	23:DB:94:A:H5'	2.19	0.42
24:DC:35:LYS:CB	24:DC:35:LYS:NZ	2.75	0.42
25:DD:109:VAL:O	25:DD:109:VAL:HG12	2.18	0.42
25:DD:53:GLY:O	25:DD:76:GLY:HA2	2.18	0.42
26:DE:128:ALA:HA	26:DE:156:ASN:ND2	2.34	0.42
26:DE:146:VAL:HG12	26:DE:167:VAL:CG2	2.46	0.42
27:DF:122:ASP:HB3	27:DF:123:GLY:H	1.61	0.42
27:DF:60:SER:C	27:DF:62:GLN:N	2.68	0.42
30:DI:101:SER:C	30:DI:103:ALA:H	2.22	0.42
30:DI:20:SER:N	30:DI:21:PRO:HD2	2.34	0.42
31:DJ:5:THR:HG23	31:DJ:7:LYS:HE2	2.00	0.42
22:DA:2674:G:H4'	32:DK:30:ARG:HG2	2.01	0.42
32:DK:17:ARG:N	32:DK:45:GLU:HG2	2.33	0.42
33:DL:28:GLY:O	33:DL:29:LYS:HB3	2.18	0.42
34:DM:114:ARG:HA	34:DM:130:PHE:HE1	1.78	0.42
34:DM:2:LEU:O	34:DM:3:GLN:HB3	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:DM:72:PRO:O	34:DM:73:ILE:HB	2.19	0.42
37:DP:49:ILE:HG22	37:DP:95:LYS:HZ1	1.82	0.42
37:DP:7:LEU:O	37:DP:7:LEU:HD12	2.18	0.42
38:DQ:61:ILE:H	38:DQ:61:ILE:HD12	1.84	0.42
41:DT:20:ALA:CB	41:DT:31:VAL:HG21	2.44	0.42
41:DT:40:LYS:HE2	41:DT:58:VAL:O	2.19	0.42
42:DU:58:VAL:HG12	42:DU:59:GLU:N	2.34	0.42
23:DB:75:G:H1'	43:DV:29:ILE:HG12	2.00	0.42
43:DV:27:PRO:O	43:DV:88:HIS:HA	2.17	0.42
44:DW:18:LYS:O	44:DW:20:LEU:HD11	2.19	0.42
47:DZ:8:GLN:O	47:DZ:9:THR:HG23	2.19	0.42
1:AA:1129:C:H5''	9:AI:17:ARG:CZ	2.44	0.42
1:AA:1256:A:C1'	1:AA:1258:G:C6	2.99	0.42
1:AA:1433:A:N7	1:AA:1468:A:C6	2.87	0.42
1:AA:13:U:O2'	1:AA:14:U:H5'	2.19	0.42
1:AA:334:C:H6	1:AA:334:C:O5'	2.02	0.42
1:AA:341:C:H2'	1:AA:342:C:C6	2.52	0.42
1:AA:462:G:N7	1:AA:463:U:C5	2.87	0.42
1:AA:53:A:H2'	1:AA:54:C:O5'	2.19	0.42
1:AA:556:C:H2'	1:AA:557:G:O4'	2.19	0.42
1:AA:578:C:C5'	56:AA:1741:HOH:O	2.67	0.42
1:AA:657:U:C2'	1:AA:658:C:H5'	2.49	0.42
1:AA:754:C:H3'	1:AA:755:G:C5'	2.49	0.42
1:AA:766:A:C2	1:AA:814:A:C2	3.07	0.42
1:AA:842:U:C6	1:AA:843:U:H4'	2.54	0.42
1:AA:949:A:H2'	1:AA:950:U:H5'	2.00	0.42
1:AA:973:G:H2'	1:AA:974:A:OP1	2.19	0.42
4:AD:18:LEU:HD22	4:AD:63:ILE:HB	2.00	0.42
6:AF:51:ILE:CG2	6:AF:51:ILE:O	2.67	0.42
11:AK:69:CYS:O	11:AK:73:VAL:HG21	2.19	0.42
12:AL:42:LYS:O	12:AL:43:LYS:C	2.57	0.42
14:AN:27:LYS:CA	14:AN:30:ILE:HB	2.50	0.42
14:AN:68:ARG:HA	14:AN:69:PRO:HD3	1.74	0.42
20:AT:5:SER:OG	20:AT:6:ALA:N	2.50	0.42
21:AU:8:ASN:HD22	21:AU:8:ASN:N	2.17	0.42
52:B4:1:MET:HE2	52:B4:34:LYS:HG2	2.00	0.42
52:B4:16:ILE:CD1	52:B4:25:VAL:HG22	2.48	0.42
22:BA:1054:A:H3'	22:BA:1055:G:H8	1.84	0.42
22:BA:1075:C:H2'	22:BA:1076:C:C6	2.53	0.42
22:BA:1101:U:C4	22:BA:1102:C:C5	3.07	0.42
22:BA:1115:G:O2'	22:BA:1116:G:H5''	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1486:U:H2'	22:BA:1487:U:C6	2.54	0.42
22:BA:1506:U:H6	22:BA:1506:U:H3'	1.83	0.42
22:BA:1652:A:OP1	35:BN:8:ARG:NH2	2.53	0.42
22:BA:1654:A:H4'	25:BD:118:PHE:HZ	1.80	0.42
22:BA:1731:G:C6	22:BA:1733:G:C6	3.06	0.42
22:BA:1737:G:H5''	22:BA:1738:G:OP2	2.19	0.42
22:BA:1738:G:O2'	22:BA:1739:A:P	2.76	0.42
22:BA:1782:U:O4'	22:BA:2609:U:C2	2.72	0.42
22:BA:1848:A:H2'	22:BA:1849:G:H8	1.84	0.42
22:BA:2645:G:H4'	22:BA:2646:C:OP2	2.18	0.42
22:BA:2733:A:O5'	22:BA:2733:A:H8	2.02	0.42
22:BA:2795:C:O2'	22:BA:2796:U:H5'	2.19	0.42
22:BA:319:G:C8	22:BA:333:G:N2	2.87	0.42
22:BA:356:G:O2'	22:BA:357:C:H5'	2.19	0.42
22:BA:418:C:H2'	22:BA:419:U:O4'	2.18	0.42
22:BA:547:A:C8	22:BA:548:G:N3	2.87	0.42
22:BA:608:A:C6	22:BA:609:A:C6	3.07	0.42
22:BA:753:A:H2'	22:BA:754:U:C6	2.54	0.42
22:BA:820:A:H2'	22:BA:821:A:O4'	2.18	0.42
22:BA:855:G:H21	44:BW:23:LYS:HB3	1.83	0.42
26:BE:76:PRO:HA	26:BE:82:GLY:HA3	2.01	0.42
26:BE:88:ARG:HB3	26:BE:89:PRO:HD2	2.01	0.42
27:BF:131:VAL:HG11	27:BF:151:LEU:HD11	2.01	0.42
28:BG:71:LEU:HA	28:BG:71:LEU:HD13	1.83	0.42
32:BK:113:MET:O	32:BK:114:LYS:C	2.57	0.42
33:BL:28:GLY:O	33:BL:29:LYS:O	2.37	0.42
22:BA:2485:G:C5'	34:BM:45:GLN:NE2	2.82	0.42
34:BM:78:LEU:HD23	34:BM:79:ALA:CA	2.49	0.42
35:BN:16:HIS:O	35:BN:16:HIS:CD2	2.71	0.42
35:BN:38:LEU:C	35:BN:38:LEU:HD12	2.37	0.42
39:BR:58:VAL:HG12	39:BR:102:SER:CB	2.45	0.42
40:BS:50:VAL:HG12	40:BS:105:VAL:HB	2.01	0.42
40:BS:5:ALA:CB	40:BS:54:ALA:HB2	2.45	0.42
42:BU:25:LYS:HD2	42:BU:25:LYS:HA	1.85	0.42
42:BU:97:SER:O	42:BU:98:ASN:CG	2.57	0.42
44:BW:22:VAL:CG2	44:BW:23:LYS:N	2.82	0.42
22:BA:2231:U:OP1	45:BX:29:LEU:HD23	2.19	0.42
46:BY:36:GLN:O	46:BY:37:LEU:HB3	2.20	0.42
1:CA:996:A:C6	1:CA:1046:A:H4'	2.54	0.42
1:CA:1215:G:N3	1:CA:1216:A:C8	2.87	0.42
1:CA:1243:C:C2	1:CA:1244:G:N7	2.87	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1281:C:C5'	1:CA:1282:C:C5	2.99	0.42
1:CA:1336:C:O2'	1:CA:1337:G:C4	2.69	0.42
1:CA:1452:C:C4'	1:CA:1453:G:O5'	2.50	0.42
1:CA:184:G:O2'	1:CA:185:U:C6	2.63	0.42
1:CA:197:A:O2'	1:CA:198:G:C8	2.72	0.42
1:CA:489:C:O2'	1:CA:490:C:H5'	2.18	0.42
1:CA:490:C:OP1	4:CD:145:ARG:NH2	2.52	0.42
1:CA:495:A:N1	1:CA:496:A:N6	2.67	0.42
1:CA:603:U:H2'	1:CA:604:G:H8	1.84	0.42
1:CA:704:A:C2'	1:CA:705:G:C8	3.02	0.42
1:CA:934:C:C4'	1:CA:935:A:OP1	2.62	0.42
1:CA:77:A:C2	1:CA:93:U:N3	2.87	0.42
2:CB:35:ASN:O	2:CB:37:VAL:HG12	2.19	0.42
2:CB:59:ILE:HA	2:CB:62:ARG:CD	2.42	0.42
3:CC:88:LYS:HA	3:CC:91:ALA:HB3	2.00	0.42
4:CD:137:SER:O	4:CD:140:ASP:HB2	2.19	0.42
4:CD:187:ARG:C	4:CD:189:ASP:N	2.72	0.42
4:CD:1:ALA:O	4:CD:2:ARG:C	2.56	0.42
5:CE:11:GLN:HB3	5:CE:116:VAL:HB	2.00	0.42
5:CE:14:LEU:HD12	5:CE:15:ILE:H	1.83	0.42
5:CE:81:GLN:HB3	5:CE:82:HIS:H	1.63	0.42
9:CI:51:LEU:HD11	9:CI:82:ILE:HG22	2.00	0.42
11:CK:115:ILE:HA	11:CK:116:PRO:HD2	1.86	0.42
11:CK:125:LYS:HB3	11:CK:126:ARG:H	1.47	0.42
11:CK:13:LYS:O	11:CK:14:GLN:O	2.36	0.42
11:CK:35:ASP:O	11:CK:37:GLN:N	2.53	0.42
13:CM:105:ALA:CB	13:CM:109:LYS:HD3	2.49	0.42
13:CM:5:GLY:O	13:CM:6:ILE:HD12	2.19	0.42
1:CA:1308:U:OP2	13:CM:97:ARG:HD3	2.18	0.42
14:CN:20:PHE:HE1	14:CN:54:SER:HB2	1.84	0.42
15:CO:42:PHE:HZ	15:CO:51:SER:HB2	1.85	0.42
6:CF:90:MET:CE	18:CR:60:ARG:NH1	2.82	0.42
19:CS:62:THR:CG2	19:CS:63:ASP:N	2.82	0.42
20:CT:3:ILE:HD12	20:CT:3:ILE:H	1.84	0.42
21:CU:9:GLU:HB3	21:CU:10:PRO:HD2	1.98	0.42
22:DA:2887:A:O2'	48:D0:26:SER:HB3	2.19	0.42
48:D0:42:ILE:CD1	48:D0:48:TYR:CD2	3.02	0.42
22:DA:1043:C:C4	22:DA:1044:C:C5	3.07	0.42
22:DA:1142:A:C4	22:DA:1144:A:C8	3.07	0.42
22:DA:1162:G:H21	39:DR:91:GLN:NE2	2.17	0.42
22:DA:1164:C:C6	22:DA:1164:C:H3'	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1285:A:C2'	22:DA:1286:A:H5''	2.45	0.42
22:DA:1297:C:C6	22:DA:1297:C:H3'	2.54	0.42
22:DA:1304:A:O2'	22:DA:1305:C:P	2.76	0.42
22:DA:1342:A:H3'	22:DA:1343:G:H5''	1.99	0.42
22:DA:187:G:O2'	22:DA:1365:A:C2	2.71	0.42
22:DA:1525:A:C6	22:DA:1526:C:N3	2.87	0.42
22:DA:1435:G:N1	22:DA:1558:C:N4	2.63	0.42
22:DA:1754:A:C8	37:DP:93:LYS:NZ	2.79	0.42
22:DA:1967:C:C6	22:DA:1967:C:C4'	3.02	0.42
22:DA:1973:G:C5	22:DA:1974:C:C4	3.07	0.42
22:DA:2056:G:N2	48:D0:1:ALA:H1	2.13	0.42
22:DA:2211:A:C4'	22:DA:2211:A:OP2	2.61	0.42
22:DA:2216:G:C4	22:DA:2217:G:C8	3.07	0.42
22:DA:2305:U:H5	22:DA:2312:U:C4	2.37	0.42
22:DA:2314:A:N3	22:DA:2315:G:C8	2.87	0.42
22:DA:2464:G:C2	22:DA:2465:C:H1'	2.54	0.42
22:DA:2810:A:H2'	22:DA:2811:G:O4'	2.19	0.42
22:DA:303:G:O2'	22:DA:304:U:O5'	2.37	0.42
22:DA:455:C:C5	22:DA:472:A:N3	2.88	0.42
22:DA:602:A:C4'	22:DA:604:G:O3'	2.63	0.42
22:DA:622:G:HO2'	22:DA:623:C:H6	1.59	0.42
22:DA:76:C:O3'	46:DY:52:ARG:HG2	2.18	0.42
22:DA:806:C:H2'	22:DA:807:U:C6	2.54	0.42
22:DA:822:G:C5'	56:DA:3358:HOH:O	2.66	0.42
22:DA:838:C:C2'	22:DA:839:U:C5'	2.97	0.42
23:DB:62:C:H2'	23:DB:63:C:O4'	2.18	0.42
22:DA:1788:C:H5'	24:DC:223:ALA:HB1	1.99	0.42
25:DD:116:LYS:HD3	35:DN:1:MET:CE	2.49	0.42
25:DD:106:LYS:CB	25:DD:206:ALA:H	2.31	0.42
26:DE:126:VAL:HG13	26:DE:127:GLU:N	2.34	0.42
26:DE:127:GLU:H	26:DE:127:GLU:CD	2.23	0.42
26:DE:162:ARG:C	26:DE:164:LEU:N	2.71	0.42
27:DF:43:ILE:HG12	27:DF:77:LYS:CG	2.49	0.42
28:DG:105:SER:C	28:DG:106:LEU:HD23	2.40	0.42
31:DJ:25:LEU:CD2	31:DJ:26:GLY:N	2.75	0.42
32:DK:16:ALA:HB3	32:DK:46:ALA:H	1.81	0.42
34:DM:45:GLN:OE1	34:DM:125:PRO:HG3	2.19	0.42
22:DA:2839:G:H21	35:DN:92:GLY:HA3	1.83	0.42
39:DR:5:PHE:O	39:DR:11:GLN:HA	2.19	0.42
40:DS:32:ALA:O	40:DS:33:LEU:CB	2.58	0.42
46:DY:2:LYS:HB2	46:DY:4:LYS:HD3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1113:C:H2'	1:AA:1114:C:H6	1.83	0.42
1:AA:1124:G:C2'	1:AA:1145:A:N6	2.81	0.42
1:AA:1173:U:H2'	1:AA:1174:G:C8	2.55	0.42
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.54	0.42
1:AA:1468:A:C3'	1:AA:1469:C:C5'	2.97	0.42
1:AA:191:G:H2'	1:AA:192:A:H8	1.84	0.42
1:AA:203:G:C2	1:AA:215:C:C4	3.07	0.42
1:AA:224:U:H2'	1:AA:225:C:H6	1.83	0.42
1:AA:35:G:H2'	1:AA:36:C:C6	2.53	0.42
1:AA:393:A:H2'	1:AA:394:G:H8	1.85	0.42
1:AA:712:A:H2'	1:AA:713:G:O4'	2.19	0.42
1:AA:771:G:C5	1:AA:772:U:C5	3.08	0.42
1:AA:783:C:O5'	1:AA:783:C:H6	2.02	0.42
1:AA:800:G:O5'	1:AA:800:G:H8	2.03	0.42
1:AA:926:G:C6	1:AA:1505:G:C6	3.08	0.42
4:AD:151:GLN:O	4:AD:153:ARG:N	2.52	0.42
7:AG:14:ASP:OD1	7:AG:17:PHE:HB2	2.19	0.42
7:AG:51:GLN:C	7:AG:53:SER:H	2.23	0.42
8:AH:100:ILE:HD12	8:AH:128:VAL:HB	2.02	0.42
8:AH:48:PHE:HA	8:AH:60:LEU:HD23	2.01	0.42
10:AJ:88:MET:CE	10:AJ:89:ARG:NH1	2.82	0.42
11:AK:60:PHE:CD2	11:AK:60:PHE:C	2.92	0.42
1:AA:880:C:P	12:AL:4:ASN:HD22	2.42	0.42
15:AO:15:GLY:C	15:AO:17:ASP:N	2.72	0.42
15:AO:41:HIS:HD2	15:AO:42:PHE:CE2	2.37	0.42
16:AP:76:LYS:HE2	16:AP:76:LYS:HA	2.01	0.42
18:AR:33:THR:OG1	18:AR:34:GLU:N	2.52	0.42
21:AU:25:ALA:O	21:AU:29:ALA:HB3	2.19	0.42
22:BA:1013:C:H2'	22:BA:1014:A:C8	2.53	0.42
22:BA:1045:C:H3'	22:BA:1046:A:H5'	1.99	0.42
22:BA:1059:G:C5	22:BA:1060:U:C4	3.08	0.42
22:BA:1114:C:H2'	22:BA:1114:C:O2	2.18	0.42
22:BA:1229:C:C2	22:BA:1230:A:C8	3.07	0.42
22:BA:1586:A:C8	22:BA:1587:G:C8	3.07	0.42
22:BA:1916:A:H2'	22:BA:1917:U:O4'	2.19	0.42
22:BA:2013:A:C2	40:BS:88:ARG:NH1	2.86	0.42
22:BA:2015:A:C4	48:B0:2:VAL:CG2	3.03	0.42
22:BA:2085:U:C2'	22:BA:2086:U:H5'	2.50	0.42
22:BA:2087:G:H2'	22:BA:2088:A:H8	1.84	0.42
22:BA:2286:G:H5''	22:BA:2287:A:O4'	2.19	0.42
22:BA:229:C:H2'	22:BA:230:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2536:G:C6	22:BA:2537:U:C4	3.07	0.42
22:BA:283:G:C5	22:BA:284:U:C5	3.07	0.42
22:BA:289:G:C5	22:BA:290:U:C4	3.07	0.42
22:BA:183:C:O2	22:BA:432:A:H2	2.02	0.42
22:BA:447:A:C2	22:BA:454:A:H2'	2.55	0.42
22:BA:588:U:H1'	26:BE:85:PHE:CG	2.54	0.42
22:BA:2591:C:P	24:BC:237:ARG:HG3	2.59	0.42
24:BC:29:PHE:O	24:BC:30:ALA:C	2.57	0.42
24:BC:33:LEU:HA	24:BC:33:LEU:HD23	1.63	0.42
25:BD:101:PHE:O	25:BD:102:ALA:C	2.57	0.42
25:BD:103:ASP:CG	25:BD:104:VAL:H	2.22	0.42
26:BE:175:ILE:O	26:BE:175:ILE:CG2	2.65	0.42
27:BF:88:VAL:CG1	27:BF:90:LEU:HD13	2.50	0.42
30:BI:53:PRO:HB2	30:BI:74:PRO:CG	2.49	0.42
31:BJ:53:TYR:CE1	31:BJ:121:LYS:HG2	2.53	0.42
31:BJ:20:ALA:O	31:BJ:21:THR:O	2.37	0.42
32:BK:27:GLY:O	32:BK:28:SER:C	2.56	0.42
32:BK:98:ARG:C	32:BK:99:ILE:HD13	2.39	0.42
33:BL:55:MET:HE2	33:BL:56:PRO:CD	2.49	0.42
34:BM:46:ILE:CD1	34:BM:47:GLU:N	2.80	0.42
35:BN:101:GLY:H	48:B0:41:HIS:HD2	1.67	0.42
35:BN:72:ASP:OD1	35:BN:75:ILE:HG23	2.18	0.42
36:BO:85:LYS:HB2	36:BO:87:ILE:HD11	2.02	0.42
38:BQ:51:GLN:HE21	38:BQ:51:GLN:HB3	1.69	0.42
38:BQ:94:LEU:HA	38:BQ:94:LEU:HD13	1.29	0.42
44:BW:19:ARG:NH1	44:BW:22:VAL:CG1	2.79	0.42
46:BY:17:GLU:HB2	46:BY:53:VAL:HG11	2.01	0.42
1:CA:1115:U:C6	1:CA:1115:U:H3'	2.54	0.42
1:CA:1302:C:C2'	1:CA:1303:C:O5'	2.68	0.42
1:CA:1449:C:H2'	1:CA:1450:U:C6	2.54	0.42
1:CA:252:U:H6	1:CA:252:U:C5'	2.29	0.42
1:CA:276:G:O2'	1:CA:277:C:O5'	2.36	0.42
1:CA:316:C:H42	1:CA:337:G:H1	1.66	0.42
1:CA:495:A:C2	1:CA:496:A:N6	2.88	0.42
1:CA:525:C:O2'	1:CA:526:C:H5'	2.20	0.42
1:CA:694:A:H2'	1:CA:695:A:C5'	2.49	0.42
1:CA:728:A:C2'	1:CA:729:A:H5'	2.49	0.42
1:CA:867:G:N3	1:CA:868:C:C5	2.87	0.42
1:CA:91:U:C2	1:CA:92:U:C5	3.07	0.42
2:CB:122:ASP:OD1	2:CB:124:THR:HG22	2.19	0.42
3:CC:60:ALA:O	3:CC:61:LYS:HB2	2.18	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:16:THR:HG22	4:CD:17:ASP:N	2.34	0.42
4:CD:59:LYS:O	4:CD:63:ILE:HG13	2.18	0.42
10:CJ:15:HIS:CE1	10:CJ:68:ARG:CD	2.92	0.42
14:CN:55:SER:HB3	14:CN:58:ARG:HG2	2.01	0.42
15:CO:3:SER:OG	15:CO:6:ALA:CB	2.68	0.42
19:CS:46:LEU:N	19:CS:46:LEU:HD23	2.27	0.42
20:CT:26:MET:O	20:CT:26:MET:HE2	2.20	0.42
20:CT:42:ASP:O	20:CT:44:ALA:N	2.52	0.42
20:CT:61:ALA:CA	20:CT:67:HIS:HA	2.49	0.42
22:DA:2046:G:OP1	48:D0:11:LYS:HE3	2.20	0.42
22:DA:1300:G:H5''	22:DA:1301:A:C5'	2.48	0.42
22:DA:1343:G:C4	22:DA:1344:U:C5	3.07	0.42
22:DA:1363:C:O2	22:DA:1363:C:H2'	2.20	0.42
22:DA:1423:G:O2'	22:DA:1499:C:H1'	2.19	0.42
22:DA:1512:C:HO2'	22:DA:1513:U:C4'	2.31	0.42
22:DA:1438:U:O4	22:DA:1552:A:C2	2.72	0.42
22:DA:729:G:C4	22:DA:1775:U:C2	3.07	0.42
22:DA:1790:C:O2'	24:DC:207:ALA:CB	2.54	0.42
22:DA:1836:C:C2'	22:DA:1836:C:O2	2.66	0.42
22:DA:1857:G:H1'	22:DA:1884:G:H22	1.83	0.42
22:DA:1912:A:N7	22:DA:1917:U:O4	2.52	0.42
22:DA:2083:G:H2'	22:DA:2084:C:C5'	2.49	0.42
22:DA:2286:G:H5''	22:DA:2287:A:H1'	2.01	0.42
22:DA:2348:U:H2'	22:DA:2349:G:H8	1.84	0.42
22:DA:2364:C:C2'	22:DA:2365:G:H5'	2.49	0.42
22:DA:2368:C:O2'	22:DA:2369:A:H5'	2.19	0.42
22:DA:2551:C:H2'	22:DA:2552:U:C6	2.55	0.42
22:DA:2571:U:N3	22:DA:2574:G:C8	2.87	0.42
22:DA:2614:A:C4'	22:DA:2615:U:OP1	2.65	0.42
22:DA:2721:A:H2'	22:DA:2722:G:O4'	2.20	0.42
22:DA:2812:G:N1	22:DA:2813:A:C4	2.87	0.42
22:DA:2901:C:H2'	22:DA:2901:C:O2	2.19	0.42
22:DA:291:G:C5	22:DA:292:U:C4	3.08	0.42
22:DA:291:G:N1	22:DA:350:G:C5	2.88	0.42
22:DA:333:G:C2	22:DA:334:C:C5	3.07	0.42
22:DA:604:G:O6	22:DA:625:G:C6	2.72	0.42
22:DA:674:G:C4'	26:DE:69:ARG:CG	2.95	0.42
22:DA:677:A:C6	22:DA:678:C:C4	3.07	0.42
22:DA:465:G:N2	22:DA:684:G:H1'	2.34	0.42
22:DA:703:U:H2'	22:DA:704:G:O4'	2.19	0.42
22:DA:732:C:H2'	22:DA:733:G:O4'	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:860:U:O2'	22:DA:861:A:C5'	2.67	0.42
22:DA:953:G:H2'	22:DA:954:G:C5'	2.48	0.42
22:DA:674:G:O4'	26:DE:69:ARG:HG2	2.19	0.42
27:DF:25:MET:C	27:DF:27:VAL:N	2.72	0.42
27:DF:82:TYR:HA	27:DF:83:PRO:HD2	1.84	0.42
28:DG:166:GLU:N	28:DG:166:GLU:OE1	2.53	0.42
29:DH:147:VAL:O	29:DH:148:ALA:CB	2.67	0.42
31:DJ:1:MET:HE3	31:DJ:2:LYS:O	2.19	0.42
22:DA:2448:A:H61	33:DL:36:LYS:NZ	2.17	0.42
34:DM:1:MET:O	34:DM:43:ALA:HB1	2.18	0.42
35:DN:7:GLY:HA2	35:DN:46:ARG:NH1	2.34	0.42
37:DP:19:PHE:HE1	37:DP:58:PHE:CE2	2.37	0.42
38:DQ:63:ARG:HG2	38:DQ:63:ARG:H	1.57	0.42
40:DS:66:ILE:N	40:DS:66:ILE:HD13	2.34	0.42
22:DA:2333:A:P	44:DW:76:ARG:HH12	2.42	0.42
45:DX:47:THR:O	45:DX:48:LEU:HD23	2.20	0.42
1:AA:102:G:C2	1:AA:103:U:C5	3.06	0.42
1:AA:1045:C:OP2	1:AA:1045:C:C6	2.72	0.42
1:AA:1046:A:C2'	1:AA:1047:G:C5'	2.98	0.42
1:AA:1136:C:C3'	1:AA:1136:C:O2	2.67	0.42
1:AA:1299:A:HO2'	1:AA:1301:U:H6	1.60	0.42
1:AA:1421:G:C6	1:AA:1422:G:N7	2.88	0.42
1:AA:1478:U:H2'	1:AA:1479:C:C6	2.54	0.42
1:AA:155:A:H2'	1:AA:156:C:H6	1.84	0.42
1:AA:208:U:H3	1:AA:212:G:H21	1.64	0.42
1:AA:198:G:C6	1:AA:220:G:N3	2.87	0.42
1:AA:251:G:C6	1:AA:266:G:O6	2.71	0.42
1:AA:39:G:N3	1:AA:40:C:C6	2.88	0.42
1:AA:428:G:N9	1:AA:430:A:N7	2.67	0.42
1:AA:473:U:C2	1:AA:474:G:N7	2.87	0.42
1:AA:69:G:H2'	1:AA:69:G:N3	2.35	0.42
1:AA:688:G:C4	1:AA:700:G:N2	2.88	0.42
1:AA:665:A:C2	1:AA:732:C:C4	3.07	0.42
1:AA:766:A:N3	1:AA:814:A:C2	2.87	0.42
1:AA:864:A:C2'	1:AA:865:A:C8	3.03	0.42
6:AF:8:PHE:CA	6:AF:87:SER:HB2	2.49	0.42
7:AG:119:LEU:O	7:AG:122:GLU:N	2.50	0.42
5:AE:82:HIS:CE1	8:AH:95:MET:HE2	2.53	0.42
9:AI:34:LEU:HD11	9:AI:47:VAL:HG21	2.01	0.42
11:AK:85:VAL:HG11	11:AK:92:ARG:NH1	2.34	0.42
12:AL:24:GLU:O	12:AL:25:ALA:C	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AM:9:PRO:O	13:AM:10:ASP:HB2	2.19	0.42
15:AO:68:TYR:CE2	15:AO:72:LYS:HG3	2.54	0.42
22:BA:1074:G:C2'	22:BA:1075:C:H6	2.32	0.42
22:BA:1317:G:C2	22:BA:1336:A:C2	3.08	0.42
22:BA:164:C:H2'	22:BA:165:A:O4'	2.19	0.42
22:BA:1693:U:O5'	22:BA:1694:C:H5	2.01	0.42
22:BA:1848:A:H2'	22:BA:1849:G:C8	2.55	0.42
22:BA:2136:G:N3	22:BA:2137:U:C4	2.87	0.42
22:BA:2454:G:C5	22:BA:2455:G:C8	3.07	0.42
22:BA:2531:A:H5'	28:BG:156:TYR:CZ	2.54	0.42
22:BA:2770:G:H5''	22:BA:2771:C:OP2	2.20	0.42
22:BA:2777:G:C8	22:BA:2777:G:O5'	2.73	0.42
22:BA:295:G:C2	22:BA:296:U:C6	3.08	0.42
22:BA:736:C:N3	22:BA:737:C:C5	2.88	0.42
22:BA:792:A:H3'	22:BA:793:A:H5'	2.01	0.42
22:BA:915:C:H6	22:BA:915:C:C5'	2.24	0.42
22:BA:569:U:H1'	22:BA:947:A:O4'	2.20	0.42
23:BB:57:A:O2'	23:BB:58:A:H5'	2.19	0.42
25:BD:178:VAL:O	25:BD:178:VAL:CG1	2.68	0.42
26:BE:137:LYS:O	26:BE:141:MET:HG3	2.19	0.42
30:BI:49:GLU:HG2	30:BI:50:LYS:H	1.83	0.42
31:BJ:49:ASP:OD2	31:BJ:49:ASP:O	2.37	0.42
22:BA:2275:C:O2'	34:BM:84:LYS:HA	2.19	0.42
35:BN:10:LEU:HA	35:BN:10:LEU:HD12	1.75	0.42
38:BQ:77:LYS:HE2	38:BQ:116:LEU:HD23	2.02	0.42
39:BR:3:ALA:HB3	39:BR:59:ILE:HD11	2.01	0.42
41:BT:54:GLU:CB	41:BT:88:LYS:HB2	2.49	0.42
44:BW:18:LYS:HD2	44:BW:36:ILE:HD11	2.01	0.42
1:CA:1236:A:H2'	1:CA:1237:C:C6	2.55	0.42
1:CA:1432:G:H2'	1:CA:1467:C:H42	1.84	0.42
1:CA:1483:A:O5'	1:CA:1483:A:H8	2.02	0.42
1:CA:14:U:O2'	1:CA:15:G:H3'	2.19	0.42
1:CA:164:G:C2'	1:CA:165:G:H5'	2.50	0.42
1:CA:197:A:N6	1:CA:221:C:C4'	2.81	0.42
1:CA:212:G:N2	1:CA:213:G:C8	2.88	0.42
1:CA:223:A:C6	1:CA:224:U:C4	3.06	0.42
1:CA:251:G:C2	1:CA:266:G:C6	3.08	0.42
1:CA:355:C:H4'	1:CA:388:G:O2'	2.20	0.42
1:CA:43:C:H3'	1:CA:43:C:C6	2.55	0.42
1:CA:518:C:C6	1:CA:530:G:C5	3.08	0.42
1:CA:537:G:H2'	1:CA:538:G:C8	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:570:G:H2'	1:CA:571:U:C6	2.55	0.42
1:CA:645:G:C4	1:CA:646:G:C8	3.08	0.42
1:CA:696:A:H8	1:CA:696:A:O5'	2.02	0.42
1:CA:69:G:N2	1:CA:71:A:N6	2.68	0.42
1:CA:900:A:H2'	1:CA:901:A:C8	2.55	0.42
1:CA:922:G:H2'	1:CA:923:A:H8	1.79	0.42
1:CA:953:G:C6	1:CA:954:G:C6	3.06	0.42
1:CA:962:C:O2'	1:CA:963:G:O5'	2.36	0.42
1:CA:982:U:C1'	1:CA:983:A:C8	2.98	0.42
3:CC:11:LEU:C	3:CC:13:ILE:H	2.23	0.42
3:CC:183:TYR:CE1	3:CC:200:TRP:CE2	3.07	0.42
3:CC:87:ARG:HG2	3:CC:100:ILE:HG21	2.01	0.42
4:CD:146:GLU:N	4:CD:146:GLU:CD	2.72	0.42
4:CD:27:ILE:O	4:CD:28:ASP:CB	2.67	0.42
4:CD:77:GLU:HG3	4:CD:81:LEU:HD12	1.90	0.42
4:CD:94:GLU:OE1	4:CD:103:ARG:NE	2.51	0.42
5:CE:80:LEU:HD21	5:CE:143:LEU:CD2	2.50	0.42
6:CF:11:HIS:CE1	6:CF:13:ASP:HB2	2.55	0.42
7:CG:77:ARG:O	7:CG:84:TYR:HB3	2.19	0.42
19:CS:62:THR:CG2	19:CS:64:GLU:HG3	2.49	0.42
22:DA:1060:U:H4'	22:DA:1061:U:H2'	1.91	0.42
22:DA:1074:G:P	22:DA:1074:G:H8	2.42	0.42
22:DA:1324:G:N2	22:DA:1328:A:N1	2.67	0.42
22:DA:1362:C:N3	22:DA:1363:C:C5	2.88	0.42
22:DA:170:U:C5	22:DA:171:U:C5	3.07	0.42
22:DA:1740:G:H2'	22:DA:1741:C:O4'	2.18	0.42
22:DA:1809:A:C2	22:DA:1810:A:C6	3.06	0.42
22:DA:1867:G:C2	22:DA:1868:C:C2	3.07	0.42
22:DA:2093:G:N3	22:DA:2094:A:N7	2.68	0.42
22:DA:415:A:C2	22:DA:2409:G:C5	3.07	0.42
22:DA:2453:A:H8	22:DA:2453:A:O5'	2.02	0.42
22:DA:2462:C:H2'	22:DA:2463:C:C6	2.54	0.42
22:DA:2511:U:O5'	22:DA:2511:U:H6	2.02	0.42
22:DA:2513:A:C4	22:DA:2514:U:C5	3.07	0.42
22:DA:2513:A:C5	22:DA:2514:U:C5	3.07	0.42
22:DA:2636:C:H4'	25:DD:81:GLU:CD	2.38	0.42
22:DA:2837:A:O2'	22:DA:2838:G:O4'	2.29	0.42
22:DA:2790:U:H4'	22:DA:2892:G:O2'	2.19	0.42
22:DA:301:G:C5	22:DA:302:C:N4	2.87	0.42
22:DA:478:A:N1	22:DA:480:A:C5	2.88	0.42
22:DA:56:A:C6	22:DA:57:C:N3	2.88	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:845:A:C2	22:DA:847:U:C2	3.07	0.42
22:DA:85:G:C8	42:DU:6:ARG:NH1	2.85	0.42
22:DA:903:C:H2'	22:DA:904:G:C8	2.54	0.42
23:DB:20:G:C4	23:DB:64:G:N2	2.88	0.42
23:DB:37:C:H2'	23:DB:38:C:C5'	2.49	0.42
24:DC:19:VAL:HG12	24:DC:19:VAL:O	2.19	0.42
24:DC:250:GLN:HG3	24:DC:254:LYS:HG3	2.00	0.42
25:DD:130:GLN:O	25:DD:131:ASP:C	2.57	0.42
25:DD:94:GLN:O	25:DD:95:SER:C	2.57	0.42
26:DE:199:MET:CE	26:DE:200:LEU:CD2	2.97	0.42
27:DF:160:LYS:H	27:DF:160:LYS:HG3	1.69	0.42
27:DF:57:ALA:HA	27:DF:60:SER:HB3	2.01	0.42
28:DG:157:LYS:C	28:DG:159:LYS:N	2.73	0.42
31:DJ:77:HIS:CD2	31:DJ:77:HIS:O	2.73	0.42
32:DK:22:ILE:HG13	32:DK:40:LYS:O	2.19	0.42
32:DK:34:GLY:O	32:DK:35:VAL:CG2	2.67	0.42
32:DK:61:VAL:HG11	32:DK:112:PHE:CE2	2.54	0.42
32:DK:62:VAL:HG12	32:DK:63:VAL:N	2.34	0.42
33:DL:76:GLU:O	33:DL:76:GLU:CG	2.67	0.42
33:DL:81:ASP:C	33:DL:82:LEU:HD12	2.40	0.42
34:DM:17:ASN:C	34:DM:18:ARG:HG2	2.39	0.42
35:DN:28:LEU:CD2	35:DN:115:LEU:HD21	2.14	0.42
23:DB:7:G:H5'	36:DO:29:HIS:CE1	2.54	0.42
36:DO:49:VAL:O	36:DO:50:ALA:HB2	2.19	0.42
37:DP:113:LEU:CD2	37:DP:113:LEU:C	2.85	0.42
37:DP:91:VAL:CG2	37:DP:109:ILE:HD13	2.50	0.42
39:DR:9:GLY:C	39:DR:10:LYS:HG3	2.38	0.42
41:DT:18:GLU:O	41:DT:22:THR:HG23	2.20	0.42
42:DU:102:ILE:HD12	42:DU:102:ILE:HA	1.92	0.42
22:DA:855:G:C2	44:DW:23:LYS:HG2	2.55	0.42
1:AA:1049:U:O4	14:AN:1:ALA:HB1	2.19	0.42
1:AA:1103:C:H2'	1:AA:1104:G:O5'	2.18	0.42
1:AA:110:C:O2'	1:AA:111:G:C5'	2.68	0.42
1:AA:1129:C:H2'	1:AA:1139:G:N7	2.35	0.42
1:AA:1154:G:C2	1:AA:1155:A:C8	3.07	0.42
1:AA:1492:A:C2'	1:AA:1493:A:O5'	2.67	0.42
1:AA:435:A:H2'	1:AA:436:C:H5'	2.01	0.42
1:AA:640:A:O2'	8:AH:106:SER:HB2	2.20	0.42
1:AA:702:A:C4	22:BA:1847:A:C2	3.06	0.42
1:AA:748:G:C6	1:AA:749:A:C5	3.07	0.42
1:AA:993:G:N2	1:AA:996:A:N6	2.67	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:172:ILE:O	2:AB:175:ALA:N	2.53	0.42
2:AB:20:ARG:O	2:AB:22:TRP:N	2.52	0.42
2:AB:60:ALA:HB2	2:AB:220:VAL:HG12	2.01	0.42
5:AE:95:MET:CE	5:AE:114:LEU:HD13	2.50	0.42
5:AE:139:THR:O	5:AE:142:GLY:N	2.52	0.42
9:AI:62:LEU:N	9:AI:62:LEU:CD2	2.83	0.42
11:AK:124:LYS:HE2	11:AK:125:LYS:N	2.34	0.42
11:AK:61:ALA:O	11:AK:64:VAL:HG13	2.19	0.42
12:AL:80:LEU:HB2	12:AL:101:LEU:HD22	2.01	0.42
12:AL:42:LYS:HE2	12:AL:43:LYS:HE3	2.02	0.42
12:AL:72:ASN:O	12:AL:73:LEU:O	2.38	0.42
12:AL:73:LEU:HD11	12:AL:79:ILE:CG2	2.49	0.42
13:AM:19:THR:CA	13:AM:24:VAL:HG23	2.39	0.42
14:AN:1:ALA:O	14:AN:2:LYS:CB	2.67	0.42
14:AN:80:ARG:NH1	14:AN:81:ILE:HG12	2.35	0.42
15:AO:20:ASP:CG	15:AO:23:SER:HB2	2.40	0.42
15:AO:44:GLU:OE2	15:AO:45:HIS:CE1	2.72	0.42
15:AO:57:ARG:HH11	15:AO:57:ARG:CB	2.32	0.42
22:BA:1402:U:C6	22:BA:1402:U:H3'	2.55	0.42
22:BA:1610:A:H5'	22:BA:1610:A:H8	1.84	0.42
22:BA:1744:A:H2'	22:BA:1744:A:N3	2.34	0.42
22:BA:1996:C:OP1	32:BK:31:ARG:NH2	2.51	0.42
22:BA:2087:G:H2'	22:BA:2088:A:C8	2.54	0.42
22:BA:828:U:O4	22:BA:2247:A:H1'	2.19	0.42
22:BA:2262:U:H5'	22:BA:2387:U:O2	2.19	0.42
22:BA:2430:A:C3'	22:BA:2431:U:C5'	2.97	0.42
22:BA:271:G:C4	22:BA:272:A:N7	2.88	0.42
22:BA:423:A:H5''	22:BA:424:G:C5'	2.50	0.42
15:AO:55:LEU:HD21	22:BA:715:A:C2	2.54	0.42
22:BA:920:A:OP1	47:BZ:18:LYS:HE3	2.19	0.42
24:BC:28:PRO:HB2	24:BC:29:PHE:H	1.56	0.42
25:BD:150:GLN:HG3	25:BD:151:THR:N	2.22	0.42
25:BD:9:VAL:HG22	25:BD:26:VAL:HG12	2.01	0.42
25:BD:62:LYS:CB	25:BD:63:PRO:HD3	2.45	0.42
26:BE:12:LEU:O	26:BE:13:THR:CB	2.65	0.42
26:BE:134:LEU:HD12	26:BE:138:LEU:HG	2.02	0.42
27:BF:72:SER:N	27:BF:80:GLN:HB2	2.32	0.42
28:BG:73:SER:HA	28:BG:76:ILE:HG23	2.00	0.42
29:BH:2:GLN:O	29:BH:3:VAL:CG2	2.54	0.42
29:BH:4:ILE:HG12	29:BH:18:GLN:HE22	1.82	0.42
22:BA:1097:U:O2	30:BI:8:VAL:HG12	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:7:LYS:HA	31:BJ:8:PRO:HD3	1.86	0.42
32:BK:43:ILE:HD12	32:BK:52:VAL:HG23	2.01	0.42
36:BO:43:ASN:ND2	36:BO:46:GLU:HG2	2.27	0.42
36:BO:88:LYS:HE3	36:BO:116:GLN:NE2	2.34	0.42
37:BP:95:LYS:CG	37:BP:97:TYR:CZ	2.96	0.42
38:BQ:27:ARG:CG	38:BQ:27:ARG:NH1	2.83	0.42
43:BV:35:GLU:HG3	43:BV:93:ARG:HD3	2.00	0.42
44:BW:39:GLN:HE21	44:BW:42:THR:CG2	2.31	0.42
47:BZ:29:ARG:O	47:BZ:30:ARG:HG3	2.19	0.42
1:CA:1072:G:C6	1:CA:1073:U:C4	3.07	0.42
1:CA:1250:A:N6	1:CA:1251:A:C6	2.87	0.42
1:CA:1352:C:O2	1:CA:1371:G:C2	2.72	0.42
1:CA:1461:G:C5	1:CA:1462:C:C4	3.07	0.42
1:CA:414:A:HO2'	1:CA:415:A:C4'	2.32	0.42
1:CA:635:A:H2'	1:CA:636:U:C6	2.54	0.42
1:CA:657:U:H6	1:CA:657:U:O5'	2.03	0.42
1:CA:82:G:C2'	1:CA:83:C:H4'	2.44	0.42
1:CA:854:U:H2'	1:CA:855:U:H6	1.85	0.42
1:CA:983:A:HO2'	1:CA:984:C:H5'	1.82	0.42
3:CC:137:VAL:HG13	3:CC:148:ILE:HG21	2.01	0.42
3:CC:4:VAL:HG11	3:CC:9:ILE:HD13	2.02	0.42
4:CD:3:TYR:CZ	4:CD:5:GLY:HA3	2.55	0.42
4:CD:69:ARG:HG3	4:CD:69:ARG:NH1	2.13	0.42
4:CD:90:LEU:HD22	4:CD:90:LEU:N	2.34	0.42
7:CG:4:ARG:CD	7:CG:5:VAL:N	2.79	0.42
7:CG:72:VAL:HG12	7:CG:144:ALA:CB	2.50	0.42
8:CH:34:ALA:O	8:CH:38:VAL:HG23	2.19	0.42
8:CH:75:GLN:O	8:CH:126:CYS:HB2	2.19	0.42
9:CI:59:LYS:HE3	9:CI:60:LEU:HD11	2.01	0.42
11:CK:74:LYS:HD2	11:CK:104:PHE:CE1	2.55	0.42
12:CL:120:ARG:HG2	12:CL:121:PRO:O	2.19	0.42
13:CM:53:ASP:HA	13:CM:56:ARG:CZ	2.49	0.42
14:CN:30:ILE:O	14:CN:30:ILE:HG22	2.19	0.42
19:CS:35:ARG:HB3	19:CS:50:VAL:HB	2.01	0.42
19:CS:52:ASN:O	19:CS:54:ARG:HD3	2.19	0.42
20:CT:57:VAL:CG1	20:CT:71:ALA:HB2	2.47	0.42
48:D0:11:LYS:HD2	48:D0:14:MET:HB2	2.01	0.42
48:D0:54:ILE:HB	48:D0:55:ALA:H	1.61	0.42
51:D3:18:LYS:CE	51:D3:19:GLY:H	2.32	0.42
22:DA:1077:A:C2'	22:DA:1078:U:O5'	2.66	0.42
22:DA:1157:G:H2'	22:DA:1158:C:H6	1.79	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1340:U:O2'	22:DA:1341:G:P	2.78	0.42
22:DA:1460:U:OP2	22:DA:1460:U:C6	2.72	0.42
22:DA:1346:G:H1	22:DA:1600:C:H42	1.66	0.42
22:DA:1615:C:C6	22:DA:1617:C:C5	3.08	0.42
22:DA:1653:G:O6	35:DN:10:LEU:O	2.38	0.42
22:DA:1753:G:C2	22:DA:1756:G:C2	3.08	0.42
22:DA:52:A:C2	22:DA:179:C:O4'	2.65	0.42
22:DA:1889:A:C2	22:DA:1890:A:C4	3.07	0.42
22:DA:1895:C:C2	22:DA:1896:G:C8	3.06	0.42
22:DA:1950:G:H1	22:DA:1954:G:H2'	1.84	0.42
22:DA:529:A:C8	22:DA:2042:A:N1	2.88	0.42
22:DA:2143:C:H5''	22:DA:2144:G:N7	2.34	0.42
22:DA:2149:U:C5	22:DA:2150:C:H5	2.38	0.42
22:DA:227:A:O2'	22:DA:228:C:C5'	2.68	0.42
22:DA:2410:G:C2	22:DA:2411:A:H1'	2.54	0.42
22:DA:2503:A:C4'	22:DA:2504:U:OP1	2.60	0.42
22:DA:2526:G:O2'	52:D4:34:LYS:HE3	2.19	0.42
22:DA:285:G:C6	22:DA:286:U:C4	3.06	0.42
22:DA:2889:C:C4	22:DA:2890:G:C6	3.07	0.42
22:DA:387:U:C4'	22:DA:388:G:H5''	2.50	0.42
22:DA:540:C:H2'	22:DA:541:A:C8	2.55	0.42
22:DA:601:C:H6	22:DA:601:C:O5'	2.03	0.42
22:DA:728:G:O2'	22:DA:730:A:H8	2.03	0.42
22:DA:931:U:H4'	22:DA:932:U:OP1	2.17	0.42
22:DA:960:A:H2'	22:DA:962:G:C5'	2.32	0.42
23:DB:85:G:O2'	23:DB:86:G:H5'	2.18	0.42
24:DC:38:LYS:HE3	24:DC:38:LYS:HB3	1.82	0.42
26:DE:180:LEU:HD23	26:DE:180:LEU:N	2.34	0.42
29:DH:37:VAL:CG2	29:DH:38:PRO:CD	2.96	0.42
30:DI:51:GLY:O	30:DI:52:LEU:HB2	2.19	0.42
31:DJ:80:HIS:N	31:DJ:80:HIS:ND1	2.67	0.42
35:DN:65:LEU:H	35:DN:65:LEU:CD1	2.30	0.42
35:DN:83:LEU:HG	35:DN:86:ARG:HH21	1.84	0.42
35:DN:99:LYS:HG2	35:DN:99:LYS:H	1.65	0.42
36:DO:82:ALA:HB3	36:DO:115:LEU:HD12	2.01	0.42
36:DO:54:VAL:HG22	36:DO:54:VAL:O	2.19	0.42
43:DV:21:ARG:HD3	43:DV:87:GLN:HG2	2.00	0.42
44:DW:18:LYS:NZ	44:DW:18:LYS:HA	2.35	0.42
44:DW:20:LEU:CD1	44:DW:20:LEU:N	2.76	0.42
45:DX:58:ILE:HG12	45:DX:66:VAL:CG2	2.46	0.42
1:AA:1052:U:H5''	1:AA:1053:G:OP2	2.19	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1119:C:OP1	9:AI:84:ARG:NH2	2.53	0.42
1:AA:1054:C:H5''	1:AA:1196:A:O2'	2.19	0.42
1:AA:120:A:C6	1:AA:122:G:C6	3.07	0.42
1:AA:1416:G:C2	1:AA:1485:U:O2	2.73	0.42
1:AA:279:A:H5''	1:AA:281:G:C4'	2.50	0.42
1:AA:397:A:C6	1:AA:548:G:N7	2.88	0.42
1:AA:595:A:C6	1:AA:641:U:C5	3.08	0.42
1:AA:846:G:O2'	1:AA:847:G:H5'	2.20	0.42
1:AA:958:A:N1	19:AS:53:GLY:HA3	2.35	0.42
5:AE:114:LEU:HD21	5:AE:122:VAL:HG23	1.96	0.42
1:AA:1080:A:O3'	5:AE:20:VAL:HG21	2.20	0.42
5:AE:93:VAL:HG13	5:AE:94:PHE:N	2.35	0.42
6:AF:8:PHE:HD2	6:AF:8:PHE:H	1.66	0.42
7:AG:25:PHE:HD1	7:AG:100:MET:HB3	1.85	0.42
10:AJ:28:THR:O	10:AJ:32:THR:HG22	2.20	0.42
10:AJ:33:GLY:HA3	10:AJ:83:THR:OG1	2.18	0.42
10:AJ:35:GLN:HA	10:AJ:35:GLN:NE2	2.31	0.42
11:AK:91:GLY:O	11:AK:95:THR:HB	2.19	0.42
11:AK:98:ALA:O	11:AK:102:ALA:HB2	2.20	0.42
12:AL:24:GLU:CB	12:AL:26:CYS:SG	2.90	0.42
12:AL:49:ARG:CG	12:AL:89:LEU:HD21	2.49	0.42
13:AM:90:HIS:HA	13:AM:108:ARG:NH2	2.34	0.42
22:BA:1074:G:O2'	22:BA:1075:C:H5'	2.19	0.42
22:BA:1091:G:O2'	22:BA:1092:C:C5'	2.68	0.42
22:BA:1141:U:H5'	22:BA:1142:A:O4'	2.19	0.42
22:BA:1373:A:O5'	22:BA:1373:A:H8	2.03	0.42
22:BA:1374:G:O2'	22:BA:1375:U:H5'	2.19	0.42
22:BA:1431:A:C2'	22:BA:1432:G:O5'	2.67	0.42
22:BA:1507:C:C5	22:BA:1508:A:H2	2.38	0.42
22:BA:1539:U:H2'	22:BA:1540:G:C8	2.47	0.42
22:BA:1753:G:H5''	37:BP:92:ARG:HE	1.84	0.42
22:BA:1827:U:O2'	22:BA:1828:G:H5'	2.20	0.42
22:BA:1868:C:H2'	22:BA:1869:G:O4'	2.19	0.42
22:BA:1922:G:H2'	22:BA:1923:U:O4'	2.19	0.42
22:BA:571:U:C4	22:BA:2030:A:C6	3.07	0.42
22:BA:2032:G:N7	56:BA:3536:HOH:O	2.37	0.42
22:BA:2103:C:C2'	22:BA:2104:C:C5'	2.96	0.42
22:BA:2212:A:H4'	22:BA:2213:U:OP1	2.20	0.42
22:BA:2415:G:C4	22:BA:2416:C:C5	3.08	0.42
22:BA:2471:A:C2'	22:BA:2472:G:H5'	2.48	0.42
22:BA:2821:A:H2'	22:BA:2822:G:H8	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2832:U:O2'	22:BA:2833:U:P	2.77	0.42
22:BA:916:G:H8	22:BA:916:G:O5'	2.02	0.42
24:BC:216:ARG:CB	24:BC:217:PRO:HD2	2.49	0.42
27:BF:136:ILE:HG12	27:BF:136:ILE:H	1.34	0.42
28:BG:93:TYR:O	28:BG:105:SER:O	2.37	0.42
28:BG:171:LYS:CD	28:BG:172:GLU:H	2.32	0.42
28:BG:54:ARG:HG3	28:BG:57:TYR:HD1	1.85	0.42
22:BA:568:U:P	33:BL:36:LYS:HE3	2.60	0.42
34:BM:124:LEU:HD23	34:BM:124:LEU:HA	1.82	0.42
25:BD:15:PHE:N	37:BP:11:GLN:NE2	2.62	0.42
42:BU:73:ASN:ND2	42:BU:75:ALA:HB3	2.34	0.42
47:BZ:2:LYS:O	47:BZ:3:THR:CG2	2.67	0.42
1:CA:1084:G:C6	1:CA:1085:U:C4	3.07	0.42
1:CA:1151:A:H2'	1:CA:1152:A:C8	2.50	0.42
1:CA:1201:A:H4'	1:CA:1203:C:OP2	2.19	0.42
1:CA:1255:G:H21	1:CA:1258:G:H22	1.67	0.42
1:CA:326:G:H5'	1:CA:327:A:OP2	2.20	0.42
1:CA:552:U:H2'	1:CA:553:A:C8	2.52	0.42
1:CA:671:G:C2	1:CA:672:U:C2	3.08	0.42
1:CA:72:A:N6	1:CA:73:C:N4	2.68	0.42
1:CA:952:U:C5	13:CM:102:LYS:NZ	2.87	0.42
1:CA:959:A:H2'	1:CA:960:U:O5'	2.19	0.42
4:CD:118:SER:O	4:CD:130:ASN:HB2	2.20	0.42
4:CD:141:VAL:HG22	4:CD:180:THR:OG1	2.19	0.42
4:CD:176:LYS:CD	4:CD:176:LYS:O	2.68	0.42
5:CE:133:ILE:HG13	5:CE:134:ASN:N	2.30	0.42
6:CF:81:ASN:O	6:CF:82:ASP:C	2.58	0.42
8:CH:100:ILE:CD1	8:CH:100:ILE:C	2.76	0.42
8:CH:124:ILE:CG2	8:CH:127:TYR:HE1	2.31	0.42
8:CH:127:TYR:N	8:CH:127:TYR:CD1	2.87	0.42
7:CG:16:LYS:HG2	9:CI:45:MET:SD	2.59	0.42
13:CM:84:CYS:HB2	19:CS:73:PHE:CE1	2.55	0.42
15:CO:35:ILE:HG23	15:CO:55:LEU:HD11	2.01	0.42
16:CP:8:ARG:HB3	16:CP:28:ARG:NH1	2.34	0.42
20:CT:16:ALA:O	20:CT:20:ASN:ND2	2.53	0.42
22:DA:1025:G:H1'	22:DA:1135:C:O4'	2.19	0.42
22:DA:1411:U:H2'	22:DA:1412:U:C6	2.54	0.42
22:DA:1423:G:H8	22:DA:1423:G:O5'	2.01	0.42
22:DA:1442:U:C4	22:DA:1443:U:C4	3.07	0.42
22:DA:136:G:N2	22:DA:144:A:C2	2.88	0.42
22:DA:1540:G:O2'	22:DA:1541:C:O5'	2.37	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1661:G:C6	22:DA:1662:U:C5	3.07	0.42
22:DA:1738:G:O2'	22:DA:1739:A:P	2.77	0.42
22:DA:1809:A:N3	22:DA:1810:A:N7	2.68	0.42
22:DA:1974:C:H2'	22:DA:1975:G:C8	2.52	0.42
22:DA:202:U:H3'	22:DA:203:A:C8	2.54	0.42
22:DA:2048:G:C6	22:DA:2049:G:C5	3.08	0.42
22:DA:204:A:H4'	22:DA:205:G:O5'	2.19	0.42
22:DA:2157:G:OP2	22:DA:2157:G:N2	2.52	0.42
22:DA:2187:U:N3	22:DA:2188:U:C5	2.88	0.42
22:DA:2285:C:H2'	22:DA:2286:G:H5''	2.01	0.42
22:DA:2291:U:C2	22:DA:2292:U:C5	3.08	0.42
22:DA:2308:G:H2'	22:DA:2309:A:OP1	2.19	0.42
22:DA:2376:A:N3	36:DO:99:TYR:CE2	2.88	0.42
22:DA:2282:G:H1'	22:DA:2390:U:C5	2.55	0.42
22:DA:2653:U:C4	22:DA:2654:A:N6	2.87	0.42
22:DA:2745:C:H41	22:DA:2755:C:H4'	1.85	0.42
22:DA:2828:G:O2'	22:DA:2829:A:H5'	2.19	0.42
22:DA:296:U:H2'	22:DA:297:G:C8	2.55	0.42
22:DA:479:A:H1'	22:DA:480:A:H5''	2.02	0.42
22:DA:618:G:C2	22:DA:619:G:C4	3.08	0.42
22:DA:61:C:H5'	46:DY:43:LEU:HB2	2.01	0.42
22:DA:64:A:H2'	22:DA:65:U:O4'	2.19	0.42
22:DA:674:G:H2'	22:DA:804:A:H61	1.85	0.42
22:DA:755:U:O2'	22:DA:756:A:H5'	2.20	0.42
22:DA:800:A:C4'	22:DA:801:G:O5'	2.64	0.42
22:DA:962:G:O2'	22:DA:963:U:C5'	2.68	0.42
23:DB:109:A:O2'	23:DB:110:C:C5'	2.68	0.42
23:DB:11:C:C4	23:DB:12:C:C5	3.07	0.42
23:DB:17:C:O2'	23:DB:18:G:H8	2.00	0.42
24:DC:124:LYS:HZ3	24:DC:124:LYS:HB3	1.85	0.42
22:DA:1800:C:H5''	24:DC:145:MET:CE	2.49	0.42
24:DC:250:GLN:HB2	24:DC:254:LYS:CG	2.50	0.42
22:DA:1824:G:OP1	24:DC:52:HIS:CE1	2.73	0.42
26:DE:127:GLU:OE2	26:DE:133:LEU:CD2	2.67	0.42
26:DE:5:LEU:CD1	26:DE:10:SER:HB2	2.50	0.42
26:DE:47:LYS:O	26:DE:86:ALA:HB2	2.19	0.42
27:DF:111:ARG:HE	27:DF:111:ARG:N	2.18	0.42
27:DF:47:LYS:N	27:DF:47:LYS:HD2	2.34	0.42
28:DG:157:LYS:HB2	28:DG:157:LYS:HE2	1.90	0.42
29:DH:68:ARG:HD3	29:DH:71:LYS:CB	2.49	0.42
31:DJ:129:GLU:OE1	31:DJ:129:GLU:N	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:DJ:30:THR:HG23	31:DJ:31:GLU:N	2.33	0.42
31:DJ:41:LYS:HE3	31:DJ:50:THR:O	2.19	0.42
32:DK:71:ARG:O	32:DK:72:PRO:C	2.57	0.42
37:DP:20:ARG:HG2	37:DP:112:ARG:HH12	1.84	0.42
38:DQ:6:GLY:N	38:DQ:9:ALA:HB3	2.33	0.42
38:DQ:42:GLY:HA3	39:DR:75:VAL:HG21	2.01	0.42
43:DV:56:PHE:CD1	43:DV:56:PHE:C	2.93	0.42
44:DW:9:THR:CG2	44:DW:10:ARG:HG3	2.40	0.42
22:DA:372:G:P	45:DX:61:LYS:HZ1	2.42	0.42
47:DZ:6:ILE:HG22	47:DZ:7:THR:N	2.34	0.42
1:AA:1002:G:N3	1:AA:1003:G:H1'	2.34	0.42
1:AA:1141:C:C2	1:AA:1142:G:N7	2.88	0.42
1:AA:1477:U:H2'	1:AA:1478:U:C6	2.55	0.42
1:AA:366:A:H4'	1:AA:367:U:OP1	2.18	0.42
1:AA:419:C:C2'	1:AA:420:U:H5'	2.49	0.42
1:AA:523:A:C2	1:AA:527:G:C6	3.07	0.42
1:AA:577:G:C4'	1:AA:816:A:H2'	2.49	0.42
1:AA:626:G:H2'	1:AA:627:G:O4'	2.20	0.42
1:AA:828:U:C6	1:AA:828:U:C3'	3.03	0.42
1:AA:832:G:N2	1:AA:833:G:H1'	2.35	0.42
3:AC:125:ARG:O	3:AC:126:ARG:HB2	2.20	0.42
4:AD:89:LEU:CD2	4:AD:199:ILE:CD1	2.92	0.42
6:AF:85:ILE:O	6:AF:86:ARG:C	2.58	0.42
8:AH:65:PHE:O	8:AH:66:GLN:O	2.37	0.42
56:AA:1813:HOH:O	11:AK:125:LYS:HE2	2.20	0.42
11:AK:92:ARG:O	11:AK:92:ARG:HG2	2.20	0.42
12:AL:98:ARG:HD2	12:AL:103:CYS:SG	2.59	0.42
48:B0:42:ILE:HD12	48:B0:48:TYR:HB2	2.00	0.42
49:B1:16:THR:CB	49:B1:41:VAL:HG21	2.49	0.42
22:BA:1170:C:N4	22:BA:1180:U:C2	2.87	0.42
22:BA:1327:A:C8	22:BA:1327:A:H3'	2.55	0.42
22:BA:141:G:H5''	22:BA:142:A:C8	2.55	0.42
22:BA:1747:U:HO2'	22:BA:1748:C:H5'	1.80	0.42
22:BA:1824:G:C5	22:BA:1825:U:C5	3.08	0.42
22:BA:1858:A:C2'	22:BA:1859:U:C6	3.02	0.42
22:BA:2569:G:C2	22:BA:2570:G:C8	3.08	0.42
22:BA:2599:G:H2'	22:BA:2600:A:H5'	2.00	0.42
22:BA:259:G:C2'	22:BA:260:G:H5'	2.49	0.42
22:BA:2716:C:O2'	22:BA:2717:C:H5'	2.20	0.42
22:BA:319:G:N9	22:BA:333:G:N2	2.67	0.42
22:BA:372:G:N2	22:BA:400:G:H2'	2.35	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:532:A:C8	22:BA:2021:C:C6	3.07	0.42
22:BA:691:C:H2'	22:BA:692:C:H6	1.85	0.42
22:BA:851:C:H2'	22:BA:852:U:O5'	2.19	0.42
22:BA:90:U:C4	22:BA:91:A:C5	3.07	0.42
24:BC:116:GLN:O	24:BC:127:ASN:HB3	2.19	0.42
24:BC:133:ASN:C	24:BC:134:ILE:HG13	2.40	0.42
22:BA:782:A:N1	24:BC:224:MET:CE	2.83	0.42
25:BD:85:ALA:O	25:BD:86:GLU:HG2	2.19	0.42
27:BF:4:HIS:CD2	27:BF:96:TRP:NE1	2.88	0.42
28:BG:123:GLU:CD	28:BG:124:CYS:H	2.22	0.42
29:BH:132:PHE:CD2	29:BH:133:GLN:N	2.87	0.42
29:BH:32:PRO:HB3	45:BX:38:TRP:CG	2.55	0.42
31:BJ:110:PRO:C	31:BJ:111:LYS:HD2	2.40	0.42
31:BJ:17:VAL:HG13	31:BJ:55:ILE:CG1	2.50	0.42
34:BM:96:ILE:HD11	34:BM:126:ILE:CD1	2.49	0.42
35:BN:28:LEU:O	35:BN:32:GLU:N	2.47	0.42
37:BP:57:ALA:HA	37:BP:75:THR:CG2	2.50	0.42
46:BY:17:GLU:HG3	46:BY:18:LEU:H	1.78	0.42
46:BY:2:LYS:HE3	46:BY:52:ARG:CZ	2.49	0.42
1:CA:1104:G:C4	1:CA:1105:A:C8	3.07	0.42
1:CA:1203:C:O2	1:CA:1203:C:H2'	2.20	0.42
1:CA:1287:A:C2	1:CA:1288:A:C2	3.07	0.42
1:CA:1393:U:O2'	1:CA:1394:A:H3'	2.19	0.42
1:CA:1426:G:H2'	1:CA:1427:C:O4'	2.19	0.42
1:CA:1478:U:H2'	1:CA:1479:C:C6	2.55	0.42
1:CA:292:G:N2	1:CA:308:C:O2	2.38	0.42
1:CA:444:G:N2	1:CA:445:G:C4	2.88	0.42
1:CA:554:A:H2'	1:CA:555:U:C6	2.54	0.42
1:CA:688:G:C6	1:CA:700:G:C6	3.07	0.42
1:CA:805:C:H2'	1:CA:806:C:C6	2.54	0.42
1:CA:833:G:C6	1:CA:834:U:C4	3.08	0.42
1:CA:866:C:C5	1:CA:867:G:H1'	2.54	0.42
1:CA:951:G:H1'	1:CA:970:C:O2'	2.19	0.42
1:CA:994:A:O2'	1:CA:995:C:C5'	2.68	0.42
2:CB:187:ASP:C	2:CB:189:ASN:H	2.22	0.42
4:CD:156:ALA:O	4:CD:159:GLU:OE2	2.37	0.42
4:CD:2:ARG:NE	4:CD:114:ARG:HG2	2.34	0.42
6:CF:56:LYS:O	6:CF:57:ALA:HB2	2.19	0.42
8:CH:6:ILE:HG21	8:CH:76:ARG:CZ	2.49	0.42
9:CI:25:GLY:C	9:CI:62:LEU:HD23	2.39	0.42
1:CA:562:U:H1'	12:CL:11:ARG:HD2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:83:ARG:CG	15:CO:83:ARG:O	2.66	0.42
16:CP:60:TRP:O	16:CP:61:VAL:C	2.56	0.42
22:DA:1020:A:H5''	22:DA:1021:A:OP1	2.19	0.42
22:DA:1080:A:C2	22:DA:1081:U:N3	2.88	0.42
22:DA:1117:C:O5'	22:DA:1117:C:H6	2.03	0.42
22:DA:1139:G:C2'	22:DA:1140:C:C5'	2.98	0.42
22:DA:1290:C:C2	22:DA:1291:C:C6	3.08	0.42
22:DA:1351:C:H2'	22:DA:1352:U:O4'	2.19	0.42
22:DA:1361:G:H2'	22:DA:1362:C:O5'	2.19	0.42
22:DA:1386:C:HO2'	22:DA:1387:A:H8	1.64	0.42
22:DA:1438:U:N3	22:DA:1555:G:N1	2.68	0.42
22:DA:1511:G:O2'	22:DA:1512:C:P	2.78	0.42
22:DA:1535:A:C5'	22:DA:1536:C:OP2	2.68	0.42
22:DA:1312:U:N3	22:DA:1603:A:C5	2.87	0.42
22:DA:1654:A:O2'	22:DA:1655:A:C8	2.48	0.42
22:DA:1734:G:C2'	22:DA:1735:A:C8	2.98	0.42
22:DA:1768:C:C2	22:DA:1769:U:C6	3.07	0.42
22:DA:1833:C:N4	22:DA:1834:U:C4	2.87	0.42
22:DA:1860:G:H2'	22:DA:1861:G:O4'	2.20	0.42
1:CA:1517:G:H1'	22:DA:1919:A:O3'	2.20	0.42
22:DA:2039:U:H2'	22:DA:2040:G:C8	2.54	0.42
22:DA:2065:C:O2'	22:DA:2449:U:N3	2.52	0.42
22:DA:2264:C:C2	22:DA:2277:G:N2	2.88	0.42
22:DA:2307:G:C8	22:DA:2312:U:C5	3.08	0.42
22:DA:2330:G:H2'	22:DA:2331:G:C5'	2.49	0.42
22:DA:2504:U:C6	22:DA:2504:U:C3'	3.02	0.42
22:DA:2564:A:OP1	22:DA:2648:G:H4'	2.19	0.42
22:DA:2589:A:C2	22:DA:2590:A:C5	3.08	0.42
22:DA:2692:G:H2'	22:DA:2693:G:C8	2.55	0.42
22:DA:2805:C:H2'	22:DA:2806:C:C6	2.51	0.42
22:DA:301:G:N3	22:DA:302:C:C4	2.87	0.42
22:DA:33:C:H4'	22:DA:34:U:OP1	2.19	0.42
22:DA:370:G:H8	22:DA:370:G:O5'	2.03	0.42
22:DA:478:A:C2	22:DA:480:A:N9	2.88	0.42
22:DA:668:A:N7	22:DA:670:A:C8	2.87	0.42
22:DA:704:G:C2'	22:DA:726:G:N2	2.73	0.42
15:CO:52:ARG:HH11	22:DA:715:A:H61	1.68	0.42
22:DA:793:A:H8	22:DA:793:A:OP2	2.02	0.42
22:DA:998:C:OP2	38:DQ:57:ARG:NH2	2.52	0.42
23:DB:45:A:HO2'	23:DB:46:A:H8	1.59	0.42
23:DB:81:G:C6	23:DB:82:U:C4	3.08	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:DC:183:VAL:CG1	24:DC:185:ALA:H	2.32	0.42
24:DC:6:LYS:HA	24:DC:7:PRO:HD3	1.89	0.42
26:DE:119:ILE:CG1	26:DE:119:ILE:O	2.67	0.42
26:DE:146:VAL:CG1	26:DE:167:VAL:HG23	2.45	0.42
26:DE:55:SER:OG	26:DE:56:GLY:N	2.53	0.42
26:DE:52:VAL:O	26:DE:74:LYS:CE	2.68	0.42
27:DF:110:ILE:CD1	27:DF:110:ILE:H	2.29	0.42
27:DF:42:ALA:HA	27:DF:48:LEU:HD21	2.01	0.42
28:DG:104:LEU:HB3	28:DG:106:LEU:CD2	2.42	0.42
30:DI:27:LEU:HD13	30:DI:32:VAL:HG21	2.00	0.42
32:DK:87:LEU:HA	32:DK:95:ILE:H	1.85	0.42
33:DL:14:LYS:HB3	33:DL:14:LYS:NZ	2.35	0.42
22:DA:2392:A:H2	33:DL:55:MET:HG2	1.78	0.42
33:DL:96:LYS:C	33:DL:98:ALA:N	2.73	0.42
33:DL:96:LYS:O	33:DL:98:ALA:N	2.53	0.42
37:DP:97:TYR:O	37:DP:100:ARG:HG3	2.20	0.42
22:DA:2849:U:OP2	37:DP:92:ARG:HG3	2.18	0.42
39:DR:19:THR:CG2	39:DR:20:VAL:N	2.79	0.42
39:DR:51:VAL:HB	39:DR:52:PRO:CD	2.50	0.42
43:DV:50:MET:HB3	43:DV:50:MET:HE3	1.85	0.42
46:DY:28:LEU:HD23	46:DY:42:LEU:CD1	2.49	0.42
1:AA:1016:A:C8	1:AA:1017:U:C1'	2.97	0.42
1:AA:1142:G:H2'	1:AA:1143:G:C8	2.54	0.42
1:AA:1202:U:C5	1:AA:1203:C:C4	3.07	0.42
1:AA:1216:A:C2	1:AA:1217:C:C4	3.07	0.42
1:AA:1303:C:O2'	1:AA:1304:G:H8	2.01	0.42
1:AA:1317:C:O2'	14:AN:48:GLN:HG2	2.19	0.42
1:AA:191:G:C4	1:AA:192:A:C8	3.08	0.42
1:AA:204:G:N2	1:AA:465:A:C8	2.88	0.42
1:AA:441:A:C5'	1:AA:442:G:OP2	2.66	0.42
1:AA:5:U:H3'	1:AA:5:U:P	2.60	0.42
1:AA:693:G:H2'	1:AA:694:A:H8	1.84	0.42
1:AA:845:A:C8	1:AA:845:A:C3'	3.03	0.42
1:AA:972:C:O2'	1:AA:973:G:P	2.77	0.42
2:AB:44:LYS:O	2:AB:48:MET:HB2	2.18	0.42
3:AC:7:ASN:OD1	3:AC:15:LYS:HG2	2.19	0.42
5:AE:113:VAL:HG13	5:AE:114:LEU:H	1.85	0.42
11:AK:109:ILE:CG2	21:AU:16:ARG:NE	2.75	0.42
11:AK:116:PRO:C	11:AK:118:ASN:H	2.22	0.42
12:AL:41:PRO:HA	12:AL:88:ASP:O	2.19	0.42
13:AM:44:ILE:HA	13:AM:47:LEU:HB2	2.02	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:46:HIS:HB3	17:AQ:73:THR:HA	2.02	0.42
18:AR:50:TYR:O	18:AR:51:GLN:C	2.58	0.42
18:AR:71:ASP:OD1	21:AU:3:ILE:HG21	2.18	0.42
20:AT:29:THR:O	20:AT:33:LYS:HE2	2.19	0.42
21:AU:13:VAL:CG1	21:AU:15:LEU:CG	2.91	0.42
51:B3:21:PHE:HB2	51:B3:49:VAL:HG13	2.01	0.42
22:BA:1074:G:N3	22:BA:1075:C:C6	2.88	0.42
22:BA:1637:A:H2'	22:BA:1638:C:O4'	2.20	0.42
22:BA:182:A:H2'	22:BA:183:C:C6	2.55	0.42
22:BA:1875:G:C2'	22:BA:1876:A:OP2	2.68	0.42
22:BA:1885:A:H2'	22:BA:1886:U:O4'	2.18	0.42
22:BA:227:A:C6	22:BA:2407:A:C8	3.08	0.42
22:BA:2729:G:HO2'	22:BA:2730:C:H5'	1.84	0.42
22:BA:332:A:C2	22:BA:335:C:C5	3.08	0.42
22:BA:336:C:O2'	22:BA:337:C:H5'	2.20	0.42
22:BA:381:G:OP1	45:BX:17:ARG:NH2	2.44	0.42
22:BA:587:C:C6	22:BA:671:C:H1'	2.54	0.42
22:BA:681:G:C2'	22:BA:682:G:O5'	2.67	0.42
22:BA:877:A:N6	22:BA:899:A:N6	2.67	0.42
22:BA:947:A:H2'	22:BA:948:C:C6	2.55	0.42
26:BE:123:LYS:HA	26:BE:123:LYS:HD3	1.94	0.42
28:BG:66:THR:O	28:BG:69:ALA:N	2.53	0.42
33:BL:127:VAL:HG22	33:BL:128:THR:O	2.20	0.42
35:BN:18:GLN:NE2	35:BN:22:ARG:HH12	2.17	0.42
35:BN:76:VAL:O	35:BN:79:LEU:O	2.38	0.42
36:BO:94:ARG:HG3	36:BO:94:ARG:H	1.43	0.42
37:BP:53:GLY:C	37:BP:55:HIS:N	2.71	0.42
37:BP:59:THR:HG23	37:BP:72:VAL:CG1	2.49	0.42
38:BQ:4:LYS:O	38:BQ:5:ARG:HB3	2.20	0.42
38:BQ:52:ARG:HH11	38:BQ:52:ARG:HD2	1.62	0.42
39:BR:46:GLU:O	39:BR:46:GLU:OE1	2.38	0.42
41:BT:54:GLU:HB2	41:BT:88:LYS:HB2	2.02	0.42
44:BW:22:VAL:O	44:BW:23:LYS:C	2.57	0.42
45:BX:40:GLU:HG3	45:BX:43:LYS:HZ2	1.83	0.42
1:CA:1084:G:C5	1:CA:1085:U:C5	3.07	0.42
1:CA:1134:G:C2	1:CA:1141:C:N3	2.88	0.42
1:CA:131:A:C2	1:CA:132:C:N3	2.87	0.42
1:CA:1342:C:H2'	1:CA:1343:G:H8	1.84	0.42
1:CA:239:U:C6	1:CA:239:U:C5'	2.92	0.42
1:CA:291:U:H2'	1:CA:292:G:O5'	2.20	0.42
1:CA:404:G:P	4:CD:2:ARG:NH1	2.93	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:443:C:C2'	1:CA:444:G:H5'	2.50	0.42
1:CA:551:U:C6	1:CA:551:U:H3'	2.54	0.42
1:CA:577:G:C8	1:CA:816:A:N1	2.88	0.42
1:CA:777:A:C2	1:CA:778:G:C1'	3.03	0.42
1:CA:959:A:N6	1:CA:1222:G:H4'	2.34	0.42
2:CB:116:LEU:CB	2:CB:140:LEU:HD13	2.50	0.42
2:CB:185:ILE:CG2	2:CB:199:ILE:CD1	2.98	0.42
4:CD:176:LYS:HG3	4:CD:178:GLU:HB3	1.98	0.42
5:CE:28:ARG:CG	5:CE:29:ILE:N	2.70	0.42
7:CG:77:ARG:O	7:CG:84:TYR:CB	2.67	0.42
10:CJ:53:ILE:HG22	10:CJ:62:ARG:H	1.85	0.42
12:CL:98:ARG:NH2	12:CL:106:VAL:HG22	2.34	0.42
12:CL:42:LYS:CG	12:CL:43:LYS:H	2.16	0.42
12:CL:41:PRO:HD3	12:CL:49:ARG:HD3	2.02	0.42
13:CM:11:HIS:NE2	13:CM:43:LYS:HD2	2.35	0.42
14:CN:87:ALA:CB	14:CN:95:LEU:HD23	2.50	0.42
15:CO:23:SER:HB3	15:CO:26:VAL:HG23	2.01	0.42
15:CO:75:ALA:O	15:CO:79:GLN:HB2	2.19	0.42
16:CP:5:ARG:O	16:CP:19:VAL:HA	2.20	0.42
19:CS:10:ILE:CG2	19:CS:14:LEU:HD11	2.50	0.42
20:CT:26:MET:CE	20:CT:26:MET:C	2.87	0.42
20:CT:84:LYS:HB2	20:CT:84:LYS:NZ	2.34	0.42
21:CU:36:PHE:CB	21:CU:40:PRO:HD3	2.47	0.42
48:D0:22:THR:OG1	48:D0:23:ALA:N	2.52	0.42
49:D1:39:ASP:HA	49:D1:40:PRO:HD3	1.77	0.42
22:DA:1064:C:C6	22:DA:1065:U:C5	3.08	0.42
22:DA:1210:G:H5''	22:DA:1211:C:C3'	2.40	0.42
22:DA:1474:U:H3'	22:DA:1474:U:C6	2.55	0.42
22:DA:1474:U:C3'	22:DA:1475:G:H5'	2.50	0.42
22:DA:1534:U:H1'	22:DA:1538:G:N2	2.34	0.42
22:DA:1557:C:H2'	22:DA:1558:C:C5	2.55	0.42
22:DA:1605:C:H5'	22:DA:1610:A:N6	2.35	0.42
22:DA:155:A:C2	22:DA:172:A:N1	2.88	0.42
22:DA:1807:G:C4	22:DA:1809:A:OP2	2.72	0.42
22:DA:1976:U:O2	22:DA:1976:U:H2'	2.20	0.42
22:DA:2145:C:H2'	22:DA:2146:C:H3'	2.02	0.42
22:DA:1801:A:C8	22:DA:2203:U:C6	3.08	0.42
22:DA:2265:U:C4	22:DA:2266:A:C6	3.08	0.42
22:DA:2313:C:O2'	22:DA:2314:A:C5'	2.68	0.42
22:DA:2350:C:H2'	22:DA:2351:G:C5'	2.50	0.42
22:DA:2377:A:N6	22:DA:2378:A:N6	2.68	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2345:G:C8	22:DA:2381:A:C2	3.08	0.42
22:DA:2520:C:C2'	22:DA:2521:C:H6	2.32	0.42
22:DA:2574:G:C5	22:DA:2575:C:C5	3.08	0.42
22:DA:2643:G:C2'	22:DA:2644:G:H5'	2.49	0.42
22:DA:2657:A:C2	22:DA:2658:C:H1'	2.55	0.42
22:DA:282:A:N1	22:DA:283:G:C6	2.88	0.42
22:DA:291:G:C2	22:DA:350:G:C5	3.07	0.42
22:DA:76:C:P	46:DY:48:ARG:HG2	2.60	0.42
22:DA:82:U:C2'	22:DA:83:A:C5'	2.87	0.42
22:DA:838:C:H2'	22:DA:839:U:H5'	1.99	0.42
22:DA:856:G:C2	22:DA:922:C:C2	3.08	0.42
24:DC:156:SER:O	24:DC:194:VAL:HG11	2.20	0.42
25:DD:127:PHE:CE2	25:DD:160:LYS:HD2	2.55	0.42
29:DH:117:LEU:HD22	29:DH:122:LEU:HD12	2.01	0.42
29:DH:1:MET:HE3	29:DH:1:MET:HB2	1.91	0.42
29:DH:1:MET:CE	29:DH:23:ALA:CB	2.98	0.42
29:DH:73:ASN:C	29:DH:75:LEU:N	2.73	0.42
22:DA:1098:A:O2'	30:DI:6:ALA:HB1	2.20	0.42
31:DJ:25:LEU:O	31:DJ:27:ARG:N	2.48	0.42
34:DM:53:MET:HB2	34:DM:120:ALA:CB	2.50	0.42
35:DN:9:GLN:HG2	35:DN:10:LEU:O	2.20	0.42
35:DN:1:MET:CE	35:DN:3:HIS:CE1	3.02	0.42
25:DD:15:PHE:CE2	37:DP:77:SER:HA	2.54	0.42
39:DR:43:ASN:HD22	39:DR:44:GLY:H	1.62	0.42
22:DA:1162:G:N2	39:DR:89:HIS:HE1	2.17	0.42
41:DT:22:THR:O	41:DT:23:ALA:C	2.58	0.42
45:DX:10:ARG:HB3	45:DX:11:PRO:CD	2.47	0.42
45:DX:32:LEU:N	45:DX:32:LEU:CD2	2.81	0.42
45:DX:57:VAL:C	45:DX:59:ASP:N	2.73	0.42
47:DZ:23:LEU:HD12	47:DZ:28:LEU:CD2	2.46	0.42
1:AA:1031:C:C2'	1:AA:1032:G:OP2	2.68	0.42
1:AA:1084:G:C6	1:AA:1085:U:C4	3.08	0.42
1:AA:1381:U:O2'	1:AA:1382:C:C6	2.61	0.42
1:AA:28:A:C2	1:AA:29:U:C2	3.08	0.42
1:AA:626:G:C4	1:AA:627:G:C8	3.08	0.42
1:AA:782:A:H2'	1:AA:783:C:C5'	2.50	0.42
2:AB:71:THR:O	2:AB:72:LYS:O	2.36	0.42
1:AA:1112:C:N4	3:AC:177:LEU:HD22	2.34	0.42
3:AC:23:ALA:HB1	3:AC:27:GLU:HG2	2.01	0.42
4:AD:25:ARG:H	4:AD:25:ARG:HG3	1.56	0.42
4:AD:60:VAL:CA	4:AD:63:ILE:CG2	2.97	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AD:68:GLU:O	4:AD:69:ARG:C	2.58	0.42
5:AE:134:ASN:O	5:AE:137:ARG:HB3	2.18	0.42
5:AE:158:LYS:HE2	8:AH:63:LYS:HZ3	1.83	0.42
8:AH:10:LEU:HA	8:AH:10:LEU:HD23	1.64	0.42
9:AI:32:ARG:HG2	9:AI:36:GLN:CG	2.45	0.42
9:AI:62:LEU:HD23	9:AI:62:LEU:H	1.85	0.42
9:AI:65:THR:O	9:AI:66:VAL:HB	2.19	0.42
14:AN:15:LEU:O	14:AN:17:ASP:N	2.53	0.42
14:AN:9:GLU:OE2	14:AN:60:ARG:HB3	2.20	0.42
15:AO:3:SER:O	15:AO:7:THR:HG23	2.20	0.42
18:AR:36:GLY:O	18:AR:62:ARG:NH2	2.52	0.42
19:AS:54:ARG:HG3	19:AS:54:ARG:H	1.66	0.42
20:AT:71:ALA:O	20:AT:75:LYS:HG2	2.20	0.42
50:B2:18:PHE:CE1	50:B2:22:MET:HG2	2.55	0.42
51:B3:31:ILE:O	51:B3:31:ILE:CG1	2.67	0.42
22:BA:242:G:C8	51:B3:4:LYS:HG2	2.55	0.42
22:BA:1506:U:C6	22:BA:1506:U:H3'	2.55	0.42
22:BA:153:U:C2'	22:BA:154:U:O5'	2.67	0.42
22:BA:1381:G:O2'	22:BA:1572:A:N1	2.47	0.42
22:BA:157:C:C3'	22:BA:157:C:C6	3.02	0.42
22:BA:1654:A:O3'	25:BD:118:PHE:CE2	2.72	0.42
22:BA:1878:G:C6	22:BA:1879:C:N3	2.88	0.42
22:BA:1943:U:O2	22:BA:1943:U:O4'	2.38	0.42
22:BA:2109:U:C2'	22:BA:2110:G:H5'	2.49	0.42
22:BA:2318:G:C5	22:BA:2319:G:C6	3.08	0.42
22:BA:2607:G:H2'	22:BA:2608:G:O4'	2.19	0.42
22:BA:2627:G:H2'	22:BA:2628:C:C6	2.54	0.42
22:BA:262:A:H5'	22:BA:610:C:O2'	2.19	0.42
22:BA:2887:A:C5	22:BA:2888:C:C5	3.08	0.42
22:BA:640:C:H2'	22:BA:641:U:O5'	2.19	0.42
22:BA:94:A:H2'	22:BA:95:A:O4'	2.20	0.42
22:BA:974:G:N3	22:BA:1186:G:N2	2.67	0.42
23:BB:71:C:C2'	23:BB:72:G:H5'	2.49	0.42
24:BC:181:ARG:HG2	24:BC:182:LYS:O	2.20	0.42
22:BA:321:U:OP1	26:BE:130:LYS:HE3	2.19	0.42
27:BF:151:LEU:H	27:BF:151:LEU:HD12	1.85	0.42
29:BH:96:THR:O	29:BH:97:ARG:CG	2.45	0.42
31:BJ:36:LEU:HD12	31:BJ:36:LEU:HA	1.51	0.42
31:BJ:72:LYS:HB3	31:BJ:89:PHE:HB2	2.02	0.42
32:BK:23:LYS:HE3	32:BK:23:LYS:HB2	1.96	0.42
36:BO:31:THR:O	36:BO:32:PRO:C	2.57	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BQ:69:ARG:CZ	38:BQ:69:ARG:HB2	2.44	0.42
38:BQ:91:ARG:NH1	39:BR:10:LYS:HB3	2.35	0.42
39:BR:36:ALA:N	39:BR:37:GLU:OE2	2.53	0.42
39:BR:61:ALA:HA	39:BR:99:THR:HG23	2.02	0.42
43:BV:80:HIS:CD2	43:BV:83:LYS:HB2	2.55	0.42
22:BA:923:G:N2	44:BW:23:LYS:CE	2.83	0.42
1:CA:1184:G:O2'	1:CA:1185:G:C5'	2.68	0.42
1:CA:1249:C:C2'	1:CA:1250:A:H5''	2.37	0.42
1:CA:1250:A:C8	1:CA:1287:A:N7	2.88	0.42
1:CA:1309:G:H1'	13:CM:72:ILE:HD11	2.01	0.42
1:CA:1315:U:C4	1:CA:1316:G:C6	3.08	0.42
1:CA:978:A:C6	1:CA:1318:A:C6	3.08	0.42
1:CA:1505:G:H2'	1:CA:1505:G:H8	1.68	0.42
1:CA:1515:G:H2'	1:CA:1516:G:H8	1.84	0.42
1:CA:162:A:H3'	1:CA:163:C:H6	1.84	0.42
1:CA:149:A:N6	1:CA:174:A:N6	2.68	0.42
1:CA:198:G:O2'	1:CA:199:A:O5'	2.32	0.42
1:CA:239:U:H6	1:CA:239:U:C4'	2.33	0.42
1:CA:123:U:OP1	1:CA:311:C:O2'	2.37	0.42
1:CA:384:G:H2'	1:CA:385:C:C6	2.54	0.42
1:CA:42:G:O2'	1:CA:43:C:H5'	2.20	0.42
1:CA:443:C:H2'	1:CA:444:G:H5'	2.01	0.42
1:CA:667:G:N1	1:CA:740:U:C2	2.88	0.42
1:CA:748:G:N1	1:CA:749:A:C5	2.88	0.42
1:CA:914:A:O2'	1:CA:915:A:O4'	2.38	0.42
1:CA:922:G:C2	1:CA:923:A:C4	3.08	0.42
1:CA:929:G:C4	1:CA:930:C:C6	3.07	0.42
3:CC:134:LYS:HD3	3:CC:138:GLN:OE1	2.19	0.42
3:CC:93:ILE:O	3:CC:93:ILE:CG1	2.68	0.42
4:CD:148:ALA:CB	4:CD:151:GLN:NE2	2.83	0.42
4:CD:195:ASN:O	4:CD:197:HIS:N	2.53	0.42
7:CG:102:TRP:C	7:CG:104:VAL:H	2.22	0.42
1:CA:1350:A:C2	7:CG:33:GLY:HA3	2.55	0.42
7:CG:55:LYS:N	7:CG:55:LYS:HD2	2.34	0.42
8:CH:10:LEU:HD23	8:CH:10:LEU:N	2.35	0.42
9:CI:37:TYR:CD2	9:CI:37:TYR:N	2.87	0.42
9:CI:58:GLU:HG3	9:CI:59:LYS:N	2.34	0.42
15:CO:2:LEU:HD12	15:CO:2:LEU:HA	1.92	0.42
15:CO:44:GLU:O	15:CO:45:HIS:C	2.57	0.42
16:CP:2:VAL:CG1	16:CP:65:ALA:CB	2.98	0.42
18:CR:39:VAL:HA	18:CR:40:PRO:HD3	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:57:VAL:HA	19:CS:58:PRO:HD2	1.82	0.42
1:CA:1318:A:H4'	19:CS:9:PHE:CE1	2.54	0.42
21:CU:20:ARG:N	21:CU:20:ARG:HD3	2.32	0.42
22:DA:1055:G:C4	22:DA:1056:G:H8	2.37	0.42
22:DA:1125:G:O5'	22:DA:1125:G:H8	2.03	0.42
22:DA:1141:U:O2	22:DA:1142:A:N6	2.52	0.42
22:DA:1206:G:C2	22:DA:1207:C:C2	3.07	0.42
22:DA:1206:G:H2'	22:DA:1207:C:C6	2.54	0.42
22:DA:1220:G:H1	22:DA:1229:C:H42	1.66	0.42
22:DA:1283:G:H22	22:DA:1286:A:H5'	1.84	0.42
22:DA:1307:A:C2'	22:DA:1308:A:C5'	2.98	0.42
22:DA:1345:C:H6	22:DA:1345:C:H2'	1.69	0.42
22:DA:1366:A:H2'	22:DA:1367:A:O4'	2.20	0.42
22:DA:1446:C:N4	22:DA:1447:C:N4	2.68	0.42
22:DA:1506:U:H2'	22:DA:1507:C:O4'	2.19	0.42
22:DA:1525:A:N7	22:DA:1526:C:C5	2.88	0.42
22:DA:1534:U:C2'	22:DA:1536:C:O2	2.63	0.42
22:DA:1754:A:N1	22:DA:1755:A:C2	2.88	0.42
22:DA:1835:G:C6	22:DA:1836:C:C5	3.07	0.42
22:DA:1850:G:C2	22:DA:1893:C:O2	2.73	0.42
22:DA:2185:U:O5'	22:DA:2185:U:H6	2.03	0.42
22:DA:2214:C:H2'	22:DA:2215:C:C5	2.54	0.42
22:DA:224:U:C4	22:DA:225:C:C5	3.08	0.42
22:DA:2305:U:H5	22:DA:2312:U:N3	2.18	0.42
22:DA:2440:C:O2'	22:DA:2441:U:P	2.76	0.42
22:DA:2446:G:C3'	22:DA:2447:G:H5''	2.49	0.42
22:DA:2516:A:C2	22:DA:2569:G:N3	2.88	0.42
22:DA:2519:U:N1	22:DA:2542:A:N6	2.67	0.42
22:DA:2690:U:O4	35:DN:5:LYS:HE2	2.20	0.42
22:DA:305:C:C1'	22:DA:313:G:N2	2.82	0.42
22:DA:315:G:H2'	22:DA:316:C:O4'	2.20	0.42
22:DA:352:A:C6	22:DA:353:C:C2	3.08	0.42
22:DA:439:A:H2'	22:DA:440:C:O4'	2.20	0.42
22:DA:443:A:H61	26:DE:36:ALA:CB	2.30	0.42
22:DA:537:G:C2	22:DA:555:G:C2	3.08	0.42
22:DA:57:C:HO2'	41:DT:36:LYS:HE2	1.81	0.42
24:DC:132:ARG:O	24:DC:132:ARG:HG3	2.18	0.42
22:DA:1566:A:C5'	24:DC:213:ARG:NH1	2.82	0.42
22:DA:2051:A:C4'	25:DD:146:ILE:HG23	2.50	0.42
22:DA:2820:A:C6	25:DD:197:THR:HB	2.55	0.42
25:DD:39:ASP:CG	25:DD:40:LEU:H	2.23	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:153:LEU:HD23	26:DE:154:ASP:O	2.20	0.42
27:DF:24:VAL:HG12	27:DF:24:VAL:O	2.19	0.42
28:DG:60:GLY:O	28:DG:61:TRP:HB2	2.18	0.42
29:DH:132:PHE:CE1	29:DH:133:GLN:O	2.73	0.42
32:DK:78:ARG:HH22	37:DP:72:VAL:HG11	1.85	0.42
22:DA:2428:G:C2	33:DL:54:GLN:NE2	2.88	0.42
35:DN:110:MET:HE2	35:DN:110:MET:HA	2.02	0.42
35:DN:72:ASP:OD1	35:DN:75:ILE:CG2	2.65	0.42
36:DO:15:ARG:HG2	36:DO:93:ASP:OD1	2.19	0.42
37:DP:31:VAL:CG1	37:DP:38:ARG:HG2	2.49	0.42
38:DQ:15:LYS:CD	38:DQ:19:GLN:HE21	2.32	0.42
22:DA:1152:C:HO2'	38:DQ:75:TYR:HE2	1.68	0.42
38:DQ:91:ARG:CZ	39:DR:11:GLN:H	2.33	0.42
39:DR:62:GLU:CD	39:DR:97:LYS:HD2	2.40	0.42
39:DR:68:ARG:HD2	39:DR:92:TRP:CH2	2.55	0.42
41:DT:11:LEU:HD23	41:DT:32:LEU:CD1	2.49	0.42
45:DX:52:ALA:O	45:DX:53:LYS:CB	2.65	0.42
1:AA:1129:C:O2'	1:AA:1130:A:N7	2.49	0.42
1:AA:1144:G:H2'	1:AA:1145:A:O4'	2.20	0.42
1:AA:1191:A:H2'	1:AA:1192:C:C6	2.55	0.42
1:AA:1228:C:O2'	1:AA:1229:A:O4'	2.36	0.42
1:AA:977:A:C3'	1:AA:1362:A:N6	2.76	0.42
1:AA:1511:G:C6	1:AA:1512:U:C4	3.08	0.42
1:AA:198:G:C4	1:AA:199:A:C8	3.07	0.42
1:AA:267:C:C6	1:AA:268:U:H5	2.37	0.42
1:AA:487:A:C2'	1:AA:488:C:C5'	2.98	0.42
1:AA:617:G:N1	1:AA:618:C:C5	2.88	0.42
1:AA:770:C:O2'	1:AA:771:G:H5'	2.20	0.42
1:AA:809:G:C2'	1:AA:810:C:H5'	2.50	0.42
1:AA:97:G:O2'	1:AA:98:A:C5'	2.68	0.42
1:AA:982:U:C2	1:AA:983:A:C6	3.07	0.42
2:AB:86:CYS:HB2	2:AB:88:GLN:HG3	2.02	0.42
5:AE:80:LEU:HD12	5:AE:146:MET:HE3	1.99	0.42
1:AA:1377:A:O2'	7:AG:1:PRO:HB3	2.19	0.42
1:AA:935:A:N6	7:AG:2:ARG:HD2	2.35	0.42
7:AG:74:VAL:CB	7:AG:85:GLN:HE21	2.33	0.42
8:AH:87:ARG:O	8:AH:88:LYS:CB	2.66	0.42
9:AI:23:GLY:N	9:AI:60:LEU:HA	2.24	0.42
13:AM:52:ILE:HG23	13:AM:53:ASP:N	2.34	0.42
15:AO:3:SER:HB3	15:AO:6:ALA:HB2	2.02	0.42
16:AP:39:PHE:CG	16:AP:74:LEU:HD11	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AQ:47:ASP:C	17:AQ:51:GLU:OE2	2.59	0.42
19:AS:40:PHE:CB	19:AS:42:ASN:ND2	2.83	0.42
11:AK:109:ILE:C	21:AU:5:VAL:HG23	2.41	0.42
52:B4:9:LYS:O	52:B4:9:LYS:HE2	2.19	0.42
22:BA:1074:G:C2	22:BA:1075:C:C5	3.07	0.42
22:BA:1411:U:H2'	22:BA:1412:U:O4'	2.20	0.42
22:BA:1459:G:C6	22:BA:1461:C:C4	3.08	0.42
22:BA:1759:A:C2	22:BA:1760:C:C2	3.07	0.42
22:BA:1934:C:C2'	22:BA:1935:G:O5'	2.68	0.42
22:BA:1974:C:C2'	22:BA:1975:G:O5'	2.67	0.42
22:BA:2343:U:H2'	22:BA:2344:U:C6	2.54	0.42
22:BA:2454:G:C4	22:BA:2455:G:C8	3.08	0.42
22:BA:247:G:H4'	22:BA:386:G:C6	2.54	0.42
22:BA:2531:A:C5	22:BA:2532:G:N7	2.88	0.42
22:BA:2765:A:C2'	22:BA:2765:A:N3	2.83	0.42
22:BA:470:A:H61	41:BT:72:GLN:HE22	1.68	0.42
22:BA:51:G:H4'	22:BA:52:A:H5'	2.02	0.42
22:BA:84:A:N1	22:BA:98:G:O2'	2.29	0.42
22:BA:966:G:C5	22:BA:967:U:C4	3.08	0.42
22:BA:915:C:O2	23:BB:100:G:H4'	2.20	0.42
24:BC:146:LYS:O	24:BC:147:PRO:C	2.57	0.42
22:BA:1820:U:N3	24:BC:197:ALA:HA	2.35	0.42
24:BC:229:HIS:HE1	24:BC:231:HIS:ND1	2.16	0.42
25:BD:106:LYS:O	25:BD:107:VAL:HB	2.20	0.42
26:BE:178:VAL:O	26:BE:181:ILE:N	2.47	0.42
26:BE:23:PHE:CZ	26:BE:28:VAL:HG11	2.54	0.42
26:BE:72:SER:C	26:BE:74:LYS:N	2.71	0.42
27:BF:134:GLN:C	27:BF:136:ILE:N	2.72	0.42
27:BF:8:LYS:HA	27:BF:12:VAL:CG1	2.49	0.42
28:BG:124:CYS:HA	28:BG:129:GLU:O	2.20	0.42
28:BG:155:PRO:O	28:BG:171:LYS:N	2.52	0.42
28:BG:93:TYR:HA	28:BG:93:TYR:HD2	1.67	0.42
29:BH:65:ALA:O	29:BH:68:ARG:N	2.45	0.42
29:BH:68:ARG:NH1	29:BH:140:ALA:CB	2.83	0.42
30:BI:56:VAL:CG2	30:BI:57:VAL:N	2.83	0.42
32:BK:80:ASP:OD2	37:BP:61:ARG:NH1	2.53	0.42
33:BL:92:LEU:HA	33:BL:125:LEU:CD2	2.48	0.42
22:BA:958:U:H5''	34:BM:14:LYS:HZ2	1.85	0.42
34:BM:42:THR:HG23	34:BM:45:GLN:OE1	2.20	0.42
34:BM:8:LYS:CE	34:BM:8:LYS:HA	2.39	0.42
37:BP:19:PHE:CD2	37:BP:19:PHE:N	2.86	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:BP:96:LEU:HD12	37:BP:96:LEU:HA	1.62	0.42
39:BR:60:LYS:HB2	39:BR:100:GLY:CA	2.50	0.42
39:BR:36:ALA:HA	39:BR:58:VAL:HG23	2.01	0.42
43:BV:26:PHE:HB2	43:BV:27:PRO:HD3	2.01	0.42
43:BV:46:LYS:O	43:BV:50:MET:HG3	2.20	0.42
46:BY:28:LEU:HD23	46:BY:28:LEU:HA	1.64	0.42
1:CA:1018:G:H2'	1:CA:1019:A:O5'	2.19	0.42
1:CA:994:A:C6	1:CA:1216:A:H5''	2.54	0.42
1:CA:1268:G:C5	1:CA:1269:A:N6	2.88	0.42
1:CA:1284:C:O5'	1:CA:1285:A:H5''	2.19	0.42
1:CA:1310:G:C6	1:CA:1311:A:C6	3.08	0.42
1:CA:1364:U:O2	1:CA:1364:U:O4'	2.38	0.42
1:CA:1367:C:O2'	1:CA:1368:A:O4'	2.38	0.42
1:CA:1515:G:H2'	1:CA:1516:G:C8	2.55	0.42
1:CA:182:A:C4	1:CA:184:G:C8	3.07	0.42
1:CA:251:G:C2	1:CA:266:G:O6	2.73	0.42
1:CA:275:G:O2'	1:CA:276:G:C5'	2.68	0.42
1:CA:317:U:N3	1:CA:337:G:C2	2.88	0.42
1:CA:505:G:C5	1:CA:535:A:C2	3.08	0.42
1:CA:545:C:H2'	1:CA:546:A:H5'	2.01	0.42
1:CA:558:G:H2'	1:CA:559:A:H2	1.85	0.42
1:CA:659:U:C6	1:CA:660:C:H5	2.38	0.42
1:CA:701:U:O2'	1:CA:702:A:OP2	2.29	0.42
1:CA:865:A:H2'	1:CA:866:C:O4'	2.20	0.42
1:CA:827:U:H2'	1:CA:870:U:O4	2.20	0.42
1:CA:82:G:N7	1:CA:89:U:C4	2.87	0.42
1:CA:95:C:O2	1:CA:95:C:H2'	2.19	0.42
1:CA:967:C:O5'	1:CA:967:C:H6	2.03	0.42
2:CB:162:VAL:HG22	2:CB:163:ILE:N	2.35	0.42
2:CB:59:ILE:HD12	2:CB:60:ALA:N	2.35	0.42
2:CB:8:MET:CE	2:CB:9:LEU:HD23	2.50	0.42
3:CC:84:GLU:HA	3:CC:87:ARG:HB2	2.02	0.42
4:CD:107:GLY:HA2	4:CD:112:GLU:OE2	2.20	0.42
1:CA:1071:C:C4'	5:CE:53:ARG:NH1	2.79	0.42
5:CE:80:LEU:HD13	5:CE:80:LEU:O	2.20	0.42
7:CG:16:LYS:HB3	7:CG:16:LYS:NZ	2.35	0.42
7:CG:34:LYS:HZ2	7:CG:34:LYS:HB2	1.85	0.42
7:CG:4:ARG:CG	7:CG:5:VAL:N	2.82	0.42
8:CH:28:SER:HB3	8:CH:56:PRO:HB2	2.02	0.42
12:CL:71:HIS:ND1	12:CL:73:LEU:N	2.59	0.42
18:CR:21:ASP:CG	18:CR:23:LYS:HE3	2.40	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:CR:64:LEU:HB2	18:CR:66:LEU:HG	2.01	0.42
49:D1:33:LEU:N	49:D1:51:ALA:HB3	2.30	0.42
22:DA:1004:U:H4'	22:DA:1010:A:C6	2.54	0.42
22:DA:1127:A:N7	22:DA:2488:G:O2'	2.47	0.42
22:DA:1168:G:C2	22:DA:1182:G:N3	2.88	0.42
22:DA:1179:G:C6	22:DA:1180:U:C4	3.08	0.42
22:DA:1193:G:C2	22:DA:1194:A:C4	3.08	0.42
22:DA:1197:G:H2'	22:DA:1198:U:C6	2.55	0.42
22:DA:1195:G:O2'	22:DA:1226:A:N1	2.37	0.42
22:DA:1307:A:HO2'	22:DA:1308:A:H5'	1.83	0.42
22:DA:1314:C:OP1	22:DA:1332:G:H5''	2.20	0.42
22:DA:1362:C:N3	22:DA:1363:C:C6	2.88	0.42
22:DA:136:G:H1	22:DA:143:C:N4	2.16	0.42
22:DA:1372:U:C2'	22:DA:1373:A:C8	2.97	0.42
22:DA:1378:A:O2'	22:DA:1379:U:O5'	2.38	0.42
22:DA:1421:G:C8	22:DA:1421:G:OP2	2.66	0.42
22:DA:1451:C:H4'	22:DA:1452:G:O5'	2.20	0.42
22:DA:1465:G:C6	22:DA:1466:U:C4	3.07	0.42
22:DA:1686:C:H2'	22:DA:1687:G:O4'	2.20	0.42
22:DA:1774:C:O2	24:DC:10:PRO:HB2	2.20	0.42
22:DA:1803:A:O2'	22:DA:1804:C:C4'	2.67	0.42
22:DA:1808:A:N7	45:DX:27:ARG:NH1	2.67	0.42
22:DA:1936:A:H2	22:DA:1943:U:O4	2.02	0.42
22:DA:1998:A:O2'	22:DA:1999:C:H5'	2.20	0.42
22:DA:2040:G:C2'	22:DA:2041:U:H5'	2.50	0.42
22:DA:2234:G:C6	22:DA:2235:G:C8	3.08	0.42
22:DA:2238:G:H5'	22:DA:2239:G:OP1	2.18	0.42
22:DA:2306:C:OP2	22:DA:2307:G:H5'	2.20	0.42
22:DA:2341:G:H2'	22:DA:2342:C:O4'	2.20	0.42
22:DA:2482:A:H2'	22:DA:2483:C:C6	2.54	0.42
22:DA:2688:G:H1'	22:DA:2721:A:H61	1.82	0.42
22:DA:2705:A:C2'	22:DA:2706:A:H5'	2.50	0.42
22:DA:271:G:C2	22:DA:367:G:C4	3.08	0.42
22:DA:2735:G:C4	22:DA:2736:A:C8	3.07	0.42
22:DA:2805:C:C4	22:DA:2806:C:C5	3.08	0.42
22:DA:2823:A:C6	22:DA:2824:C:C4	3.08	0.42
22:DA:279:A:N1	22:DA:361:G:O2'	2.52	0.42
22:DA:418:C:H2'	22:DA:419:U:O4'	2.20	0.42
22:DA:553:G:C6	22:DA:554:U:N3	2.88	0.42
22:DA:64:A:C2	22:DA:65:U:C2	3.08	0.42
22:DA:963:U:H2'	22:DA:964:C:C6	2.55	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:DB:95:U:H2'	23:DB:96:G:C8	2.55	0.42
25:DD:208:LYS:O	25:DD:209:ALA:HB3	2.20	0.42
25:DD:36:GLN:NE2	25:DD:38:LYS:NZ	2.66	0.42
27:DF:127:TYR:CD2	27:DF:176:PHE:HE2	2.38	0.42
29:DH:120:GLY:O	29:DH:121:VAL:CB	2.67	0.42
29:DH:68:ARG:CD	29:DH:71:LYS:CD	2.93	0.42
29:DH:89:LYS:HB2	29:DH:90:LEU:H	1.68	0.42
32:DK:16:ALA:HB1	32:DK:45:GLU:HG2	2.01	0.42
34:DM:100:LYS:HD3	34:DM:100:LYS:HA	1.87	0.42
35:DN:100:CYS:SG	35:DN:101:GLY:N	2.93	0.42
36:DO:41:ALA:O	36:DO:43:ASN:N	2.46	0.42
40:DS:3:THR:HG21	40:DS:57:ASN:C	2.40	0.42
40:DS:82:MET:CE	40:DS:84:ARG:HH12	2.33	0.42
40:DS:95:ARG:O	40:DS:96:ILE:CG2	2.58	0.42
45:DX:57:VAL:HG13	45:DX:58:ILE:N	2.35	0.42
45:DX:58:ILE:CG1	45:DX:66:VAL:HG21	2.46	0.42
46:DY:21:LEU:CD2	46:DY:25:GLN:NE2	2.83	0.42
1:AA:1135:U:OP2	1:AA:1135:U:H6	2.02	0.41
1:AA:1381:U:O2'	1:AA:1382:C:O5'	2.38	0.41
1:AA:143:A:H2	1:AA:220:G:H1	1.68	0.41
1:AA:1532:U:O5'	1:AA:1532:U:H6	2.03	0.41
1:AA:373:A:C2	1:AA:374:A:C8	3.08	0.41
1:AA:404:G:H2'	1:AA:405:U:O4'	2.19	0.41
1:AA:457:G:C6	1:AA:458:U:C4	3.08	0.41
1:AA:711:G:H2'	1:AA:712:A:H5'	2.00	0.41
1:AA:741:G:H2'	1:AA:742:G:O4'	2.20	0.41
1:AA:756:C:H2'	1:AA:757:U:O4'	2.20	0.41
2:AB:209:VAL:CG2	2:AB:210:THR:H	2.02	0.41
2:AB:9:LEU:HB2	2:AB:42:LEU:HD13	2.02	0.41
3:AC:133:MET:CE	3:AC:167:TYR:HB2	2.48	0.41
1:AA:1111:A:C2	3:AC:176:THR:HG23	2.55	0.41
3:AC:57:GLU:O	3:AC:59:PRO:CD	2.68	0.41
4:AD:14:GLU:HB3	4:AD:59:LYS:HG3	2.02	0.41
4:AD:67:LEU:HD23	4:AD:67:LEU:HA	1.82	0.41
8:AH:2:MET:H	8:AH:2:MET:HG3	1.58	0.41
9:AI:112:ARG:NH2	10:AJ:64:GLN:HE22	2.16	0.41
11:AK:126:ARG:N	21:AU:33:ARG:NH1	2.67	0.41
14:AN:80:ARG:HH11	14:AN:80:ARG:HG3	1.85	0.41
14:AN:96:LYS:HD2	14:AN:97:LYS:O	2.19	0.41
11:AK:126:ARG:CB	21:AU:33:ARG:NH1	2.52	0.41
52:B4:14:CYS:HA	52:B4:26:ILE:O	2.19	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1314:C:H2'	22:BA:1314:C:O2	2.20	0.41
22:BA:1430:G:H2'	22:BA:1431:A:H5'	1.99	0.41
22:BA:1491:G:C6	22:BA:1500:G:C2	3.08	0.41
22:BA:149:A:C5	22:BA:150:U:C5	3.08	0.41
22:BA:1520:U:C2'	22:BA:1521:G:O5'	2.67	0.41
22:BA:1615:C:C5	22:BA:1617:C:C4	3.07	0.41
22:BA:1885:A:O2'	22:BA:1886:U:C5'	2.68	0.41
22:BA:2065:C:H2'	22:BA:2066:C:C6	2.55	0.41
22:BA:2555:U:C6	22:BA:2556:C:C6	3.08	0.41
22:BA:2800:A:C3'	22:BA:2801:G:H5'	2.50	0.41
22:BA:323:C:N4	22:BA:333:G:N7	2.68	0.41
22:BA:398:C:C3'	22:BA:398:C:C6	3.02	0.41
22:BA:479:A:C2	22:BA:480:A:C4	3.08	0.41
22:BA:54:G:C5	22:BA:55:G:C8	3.07	0.41
22:BA:912:C:C6	22:BA:913:U:H5	2.37	0.41
24:BC:57:HIS:ND1	24:BC:58:LYS:N	2.65	0.41
26:BE:176:ASP:CG	26:BE:179:SER:HG	2.23	0.41
26:BE:48:THR:H	26:BE:51:GLU:HG3	1.84	0.41
28:BG:10:VAL:HB	28:BG:14:VAL:CG2	2.50	0.41
32:BK:4:GLU:O	32:BK:5:GLN:CB	2.68	0.41
23:BB:91:C:OP2	34:BM:18:ARG:HG2	2.20	0.41
35:BN:31:HIS:O	35:BN:33:ILE:N	2.49	0.41
38:BQ:94:LEU:O	38:BQ:96:ASP:N	2.51	0.41
38:BQ:111:LYS:HE3	39:BR:50:GLY:HA2	1.95	0.41
38:BQ:111:LYS:NZ	39:BR:50:GLY:HA2	2.35	0.41
42:BU:64:ILE:HG23	42:BU:64:ILE:O	2.19	0.41
42:BU:82:VAL:HG12	42:BU:83:GLY:N	2.34	0.41
43:BV:14:LYS:HD2	56:BV:101:HOH:O	2.20	0.41
45:BX:27:ARG:HH11	45:BX:27:ARG:HD3	1.73	0.41
45:BX:29:LEU:HD22	45:BX:29:LEU:N	2.35	0.41
1:CA:1169:A:O2'	1:CA:1170:A:C5'	2.68	0.41
1:CA:1215:G:C2	1:CA:1216:A:N7	2.87	0.41
1:CA:1278:G:OP2	1:CA:1278:G:C8	2.73	0.41
1:CA:1150:A:H1'	1:CA:1280:A:N6	2.35	0.41
1:CA:132:C:HO2'	1:CA:133:U:C5'	2.33	0.41
1:CA:1499:A:HO2'	1:CA:1500:A:H5'	1.81	0.41
1:CA:16:A:O2'	1:CA:17:U:H5'	2.20	0.41
1:CA:184:G:O2'	1:CA:185:U:O5'	2.38	0.41
1:CA:253:A:N1	1:CA:254:G:C5	2.88	0.41
1:CA:448:A:C8	1:CA:487:A:C6	3.08	0.41
1:CA:603:U:H2'	1:CA:604:G:C8	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:702:A:C8	1:CA:702:A:OP1	2.70	0.41
1:CA:905:U:C5	1:CA:906:A:N7	2.88	0.41
1:CA:864:A:C2	1:CA:917:G:N3	2.88	0.41
2:CB:112:ARG:O	2:CB:112:ARG:CG	2.65	0.41
4:CD:176:LYS:O	4:CD:176:LYS:CG	2.68	0.41
4:CD:43:ARG:C	4:CD:45:PRO:HD3	2.40	0.41
4:CD:79:ALA:O	4:CD:80:ARG:O	2.38	0.41
5:CE:28:ARG:CZ	5:CE:29:ILE:O	2.68	0.41
1:CA:587:G:H4'	8:CH:3:GLN:HA	2.01	0.41
10:CJ:38:GLY:HA2	10:CJ:39:PRO:HD2	1.85	0.41
10:CJ:52:LEU:CG	10:CJ:62:ARG:HG2	2.50	0.41
1:CA:1279:G:C5'	10:CJ:9:ARG:HH22	2.26	0.41
12:CL:6:LEU:HA	12:CL:9:LYS:O	2.20	0.41
13:CM:75:SER:HB2	13:CM:79:LEU:CD1	2.49	0.41
14:CN:55:SER:HB3	14:CN:58:ARG:HD2	2.02	0.41
48:D0:42:ILE:HD13	48:D0:48:TYR:CG	2.54	0.41
22:DA:650:C:C1'	51:D3:22:LYS:HZ1	2.33	0.41
22:DA:1085:A:H2'	22:DA:1086:A:N3	2.35	0.41
22:DA:1262:A:C6	22:DA:1263:U:C2	3.08	0.41
22:DA:1345:C:HO2'	22:DA:1346:G:P	2.42	0.41
22:DA:1355:G:C6	22:DA:1377:G:N2	2.88	0.41
22:DA:1480:C:C2	22:DA:1481:U:C6	3.07	0.41
22:DA:1512:C:O2'	22:DA:1513:U:C4'	2.68	0.41
22:DA:1530:G:H8	22:DA:1530:G:OP2	2.03	0.41
22:DA:160:A:C6	22:DA:161:A:C6	3.07	0.41
22:DA:1833:C:C4	22:DA:1834:U:O4	2.73	0.41
22:DA:1968:G:H5'	56:DA:3481:HOH:O	2.20	0.41
22:DA:200:U:H2'	22:DA:201:C:C6	2.55	0.41
22:DA:204:A:OP1	22:DA:206:U:H1'	2.20	0.41
22:DA:218:A:O2'	22:DA:219:A:C5'	2.68	0.41
22:DA:2376:A:H2	36:DO:92:PHE:CD2	2.38	0.41
22:DA:2516:A:H2'	22:DA:2517:C:O4'	2.20	0.41
22:DA:241:A:N6	22:DA:256:A:C8	2.88	0.41
22:DA:2601:C:H4'	22:DA:2602:A:OP2	2.18	0.41
22:DA:2687:U:C2'	22:DA:2687:U:O2	2.68	0.41
22:DA:28:A:H8	22:DA:28:A:O5'	2.03	0.41
22:DA:2:G:C6	22:DA:3:U:O4	2.73	0.41
22:DA:310:A:C8	22:DA:312:G:C6	3.08	0.41
22:DA:491:G:O2'	22:DA:492:A:C5'	2.68	0.41
22:DA:603:A:H4'	22:DA:604:G:C5'	2.48	0.41
22:DA:61:C:C2	22:DA:94:A:C2	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:633:A:H8	22:DA:633:A:O5'	2.02	0.41
22:DA:776:G:H4'	22:DA:777:G:O5'	2.20	0.41
22:DA:818:G:H5'	22:DA:839:U:OP1	2.20	0.41
22:DA:856:G:H1	22:DA:921:C:N4	2.15	0.41
22:DA:84:A:H2	22:DA:98:G:N3	2.18	0.41
23:DB:109:A:C5	23:DB:110:C:C4	3.08	0.41
23:DB:11:C:H3'	23:DB:12:C:H5'	2.01	0.41
23:DB:25:U:H2'	23:DB:26:C:H5'	2.01	0.41
23:DB:38:C:C2'	23:DB:39:A:H5'	2.50	0.41
24:DC:109:LEU:O	24:DC:110:LYS:C	2.58	0.41
26:DE:57:LYS:HZ2	26:DE:58:LYS:H	1.68	0.41
27:DF:1:ALA:HA	27:DF:97:GLU:CB	2.50	0.41
30:DI:27:LEU:HD12	30:DI:27:LEU:C	2.40	0.41
30:DI:92:PRO:O	30:DI:93:ASN:CB	2.68	0.41
31:DJ:51:GLY:HA3	31:DJ:121:LYS:HE3	2.02	0.41
34:DM:116:ALA:C	34:DM:118:LYS:N	2.73	0.41
34:DM:73:ILE:HG21	34:DM:91:TYR:CZ	2.55	0.41
35:DN:97:ILE:O	35:DN:112:TYR:O	2.38	0.41
22:DA:2882:A:O2'	35:DN:97:ILE:HD11	2.20	0.41
39:DR:101:ILE:O	39:DR:102:SER:C	2.58	0.41
40:DS:4:ILE:HD12	40:DS:5:ALA:CA	2.49	0.41
43:DV:48:MET:O	43:DV:51:GLN:HG3	2.20	0.41
43:DV:2:PHE:CD1	43:DV:50:MET:HE3	2.55	0.41
44:DW:67:LYS:HZ3	44:DW:67:LYS:HB3	1.85	0.41
44:DW:77:LYS:O	44:DW:78:PHE:CD2	2.73	0.41
46:DY:28:LEU:HD22	46:DY:28:LEU:O	2.19	0.41
1:AA:1077:G:C6	1:AA:1081:A:C6	3.08	0.41
1:AA:1126:U:O2	1:AA:1280:A:H5'	2.19	0.41
1:AA:1386:G:N3	1:AA:1387:G:C8	2.88	0.41
1:AA:1401:G:C2	1:AA:1402:C:H1'	2.55	0.41
1:AA:1461:G:H2'	1:AA:1462:C:H6	1.84	0.41
1:AA:233:C:C2	1:AA:234:C:C5	3.08	0.41
1:AA:486:U:H2'	1:AA:487:A:H8	1.84	0.41
1:AA:55:A:C5	1:AA:56:U:C6	3.08	0.41
1:AA:624:C:C4	1:AA:625:U:C4	3.07	0.41
1:AA:872:A:C8	1:AA:874:G:C8	3.08	0.41
1:AA:918:A:O2'	1:AA:919:A:H5'	2.20	0.41
4:AD:172:VAL:CG1	4:AD:173:ASP:H	2.24	0.41
5:AE:32:PHE:O	5:AE:51:LYS:HB2	2.20	0.41
6:AF:92:THR:HB	6:AF:93:LYS:H	1.61	0.41
7:AG:145:GLU:HA	7:AG:148:LYS:HB2	2.01	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:23:ALA:O	7:AG:26:VAL:HG23	2.19	0.41
7:AG:79:VAL:CG1	7:AG:80:GLY:N	2.74	0.41
7:AG:74:VAL:HG21	7:AG:85:GLN:HE21	1.84	0.41
8:AH:85:TYR:HE2	8:AH:123:GLU:OE2	2.03	0.41
9:AI:129:ARG:HA	9:AI:129:ARG:CZ	2.50	0.41
9:AI:93:LEU:HD12	9:AI:94:ARG:H	1.85	0.41
1:AA:564:C:P	12:AL:11:ARG:HE	2.43	0.41
14:AN:63:CYS:HB2	14:AN:79:SER:OG	2.21	0.41
17:AQ:74:LEU:HD13	17:AQ:74:LEU:C	2.40	0.41
48:B0:51:ARG:HB2	48:B0:51:ARG:HE	1.61	0.41
22:BA:1402:U:C6	22:BA:1402:U:C3'	3.03	0.41
22:BA:1445:G:H2'	22:BA:1446:C:C6	2.55	0.41
22:BA:1522:A:HO2'	22:BA:1523:U:P	2.39	0.41
22:BA:1410:G:C2	22:BA:1593:A:N3	2.88	0.41
22:BA:174:U:H2'	22:BA:175:G:O4'	2.20	0.41
22:BA:1795:C:C2	22:BA:1796:U:C6	3.07	0.41
22:BA:1839:G:H2'	22:BA:1840:G:H8	1.84	0.41
22:BA:1965:C:H5''	22:BA:1965:C:H6	1.85	0.41
22:BA:2507:C:C2	22:BA:2508:G:C8	3.09	0.41
22:BA:2663:G:C2'	22:BA:2664:G:H8	2.33	0.41
22:BA:2766:A:C2	22:BA:2767:C:C6	3.08	0.41
22:BA:2794:C:C2	22:BA:2795:C:C5	3.08	0.41
22:BA:2824:C:O5'	22:BA:2824:C:H6	2.03	0.41
22:BA:323:C:N4	22:BA:333:G:C5	2.88	0.41
22:BA:439:A:C8	22:BA:439:A:H3'	2.55	0.41
22:BA:480:A:H3'	22:BA:481:G:H5''	2.02	0.41
22:BA:612:G:H2'	22:BA:614:A:C8	2.55	0.41
22:BA:995:C:P	38:BQ:52:ARG:NH1	2.93	0.41
25:BD:12:THR:HG22	25:BD:24:VAL:CG2	2.50	0.41
13:AM:70:ARG:HD3	27:BF:142:TYR:CE1	2.56	0.41
27:BF:121:PHE:CB	27:BF:162:ASP:OD2	2.67	0.41
28:BG:4:ALA:HB2	28:BG:65:GLY:CA	2.50	0.41
29:BH:78:VAL:HG11	29:BH:145:ASN:HB2	2.00	0.41
29:BH:79:THR:HG22	29:BH:80:ILE:HG12	2.02	0.41
30:BI:123:ALA:C	30:BI:125:THR:N	2.72	0.41
30:BI:58:ILE:HG22	30:BI:60:VAL:CG2	2.50	0.41
31:BJ:42:ALA:O	31:BJ:43:GLU:C	2.58	0.41
31:BJ:76:HIS:CD2	31:BJ:85:LYS:HB2	2.55	0.41
33:BL:73:ILE:C	33:BL:105:ILE:HD13	2.41	0.41
34:BM:6:ARG:CZ	34:BM:6:ARG:CB	2.98	0.41
41:BT:43:ILE:CG1	41:BT:43:ILE:O	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:BW:39:GLN:O	44:BW:41:GLY:CA	2.68	0.41
1:CA:1067:A:O3'	1:CA:1094:G:H5'	2.20	0.41
1:CA:1100:C:OP2	2:CB:94:ARG:HD2	2.21	0.41
1:CA:1111:A:H3'	1:CA:1111:A:C8	2.55	0.41
1:CA:1171:A:C2	1:CA:1172:C:C2	3.08	0.41
1:CA:1277:C:H3'	1:CA:1277:C:H6	1.85	0.41
1:CA:1384:C:H2'	1:CA:1385:G:C8	2.55	0.41
1:CA:1449:C:C5	1:CA:1450:U:C4	3.08	0.41
1:CA:1452:C:HO2'	1:CA:1453:G:P	2.43	0.41
1:CA:158:G:C6	1:CA:164:G:C5	3.08	0.41
1:CA:17:U:O2	1:CA:18:C:C6	2.72	0.41
1:CA:206:C:C6	1:CA:206:C:C3'	3.03	0.41
1:CA:247:G:C6	1:CA:278:G:C2	3.08	0.41
1:CA:279:A:H5'	1:CA:280:C:H3'	1.94	0.41
1:CA:305:G:H8	1:CA:305:G:OP2	2.03	0.41
1:CA:356:A:C2	1:CA:368:U:O2	2.73	0.41
1:CA:376:G:H5''	16:CP:5:ARG:HD2	2.01	0.41
1:CA:367:U:C6	1:CA:394:G:N2	2.88	0.41
1:CA:544:G:H2'	1:CA:545:C:O5'	2.20	0.41
1:CA:82:G:C6	1:CA:89:U:C5	3.08	0.41
1:CA:992:U:H1'	1:CA:993:G:C2	2.55	0.41
2:CB:191:ASP:C	2:CB:193:ASP:N	2.73	0.41
4:CD:116:LEU:HD13	4:CD:116:LEU:HA	1.82	0.41
4:CD:127:ARG:CG	4:CD:127:ARG:NH1	2.81	0.41
5:CE:96:GLN:N	5:CE:123:LEU:O	2.42	0.41
5:CE:157:GLY:CA	8:CH:63:LYS:HZ1	2.33	0.41
5:CE:35:LEU:HD11	5:CE:136:VAL:CG1	2.33	0.41
6:CF:47:LEU:CD1	6:CF:51:ILE:HD12	2.50	0.41
7:CG:116:ALA:HA	7:CG:120:ALA:HB2	2.01	0.41
7:CG:12:LEU:N	7:CG:12:LEU:CD1	2.84	0.41
10:CJ:102:LEU:HD13	10:CJ:102:LEU:C	2.41	0.41
10:CJ:5:ARG:NH1	10:CJ:7:ARG:HH12	2.18	0.41
13:CM:12:LYS:HB3	13:CM:17:ALA:CB	2.47	0.41
14:CN:89:ARG:HG3	14:CN:91:GLU:HG2	1.94	0.41
15:CO:38:LEU:O	15:CO:38:LEU:HD12	2.20	0.41
17:CQ:62:GLU:N	17:CQ:72:TRP:CE3	2.88	0.41
18:CR:31:TYR:C	18:CR:32:ILE:CG2	2.88	0.41
19:CS:4:LEU:HB3	19:CS:5:LYS:H	1.54	0.41
20:CT:11:ILE:C	20:CT:13:SER:N	2.73	0.41
21:CU:3:ILE:CG2	21:CU:18:PHE:CD1	3.00	0.41
48:D0:27:LEU:H	48:D0:27:LEU:HD22	1.85	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:D1:6:GLU:OE1	49:D1:52:LYS:HD3	2.19	0.41
22:DA:1102:C:OP2	22:DA:1102:C:H6	2.03	0.41
22:DA:1429:G:C2	22:DA:1430:G:N7	2.87	0.41
22:DA:149:A:H2'	22:DA:150:U:H5'	2.01	0.41
22:DA:1809:A:H2'	22:DA:1810:A:C8	2.55	0.41
22:DA:192:C:O5'	22:DA:192:C:H6	2.03	0.41
22:DA:1956:U:HO2'	22:DA:1957:C:H5'	1.81	0.41
22:DA:2037:A:H2'	22:DA:2038:G:C8	2.55	0.41
22:DA:45:G:H2'	22:DA:215:G:C5	2.54	0.41
22:DA:237:C:H2'	22:DA:238:C:O5'	2.20	0.41
22:DA:2482:A:H2'	22:DA:2483:C:H6	1.85	0.41
22:DA:2486:C:H2'	22:DA:2487:G:O5'	2.20	0.41
22:DA:1783:A:C2	22:DA:2588:G:O4'	2.73	0.41
22:DA:2595:G:C6	22:DA:2599:G:C6	3.07	0.41
22:DA:269:C:C2	22:DA:270:A:C8	3.08	0.41
22:DA:2776:A:C6	22:DA:2782:G:H1'	2.56	0.41
22:DA:287:G:N1	22:DA:354:A:C6	2.88	0.41
22:DA:310:A:N1	22:DA:330:A:C5	2.88	0.41
22:DA:37:C:C6	22:DA:37:C:C3'	3.03	0.41
22:DA:396:G:C2'	22:DA:397:U:H5'	2.45	0.41
22:DA:425:G:C2	22:DA:426:C:C4	3.08	0.41
22:DA:444:C:O2'	22:DA:445:C:P	2.77	0.41
22:DA:54:G:C5	22:DA:55:G:C8	3.08	0.41
22:DA:590:A:C5	22:DA:591:U:C5	3.07	0.41
22:DA:642:U:C6	22:DA:642:U:C3'	3.03	0.41
22:DA:802:A:O2'	22:DA:803:U:C5'	2.52	0.41
22:DA:870:U:O2'	34:DM:4:PRO:HB3	2.21	0.41
24:DC:196:ASN:OD1	24:DC:199:HIS:HB2	2.20	0.41
26:DE:114:ARG:C	26:DE:116:ASP:H	2.23	0.41
28:DG:18:ILE:CD1	28:DG:42:VAL:CG1	2.95	0.41
31:DJ:12:LYS:HB2	31:DJ:13:ARG:H	1.72	0.41
32:DK:11:ALA:HB1	32:DK:64:ARG:NH1	2.33	0.41
33:DL:110:VAL:HG23	33:DL:126:ARG:O	2.19	0.41
35:DN:38:LEU:CB	35:DN:39:PRO:HD3	2.35	0.41
35:DN:9:GLN:O	35:DN:17:ARG:HD3	2.20	0.41
37:DP:31:VAL:C	37:DP:32:VAL:HG12	2.40	0.41
47:DZ:38:GLU:CD	47:DZ:39:ASP:H	2.23	0.41
1:AA:1058:G:H2'	1:AA:1059:C:H6	1.85	0.41
1:AA:109:A:C6	1:AA:326:G:C6	3.08	0.41
1:AA:1336:C:O2'	1:AA:1337:G:P	2.78	0.41
1:AA:1451:U:O5'	1:AA:1452:C:C5	2.74	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:207:C:H2'	1:AA:207:C:O2	2.19	0.41
1:AA:267:C:C6	1:AA:268:U:C5	3.09	0.41
1:AA:414:A:C2'	1:AA:415:A:C8	2.87	0.41
1:AA:550:G:C6	1:AA:551:U:C4	3.07	0.41
1:AA:739:C:H2'	1:AA:740:U:O4'	2.20	0.41
1:AA:862:C:O2'	1:AA:863:U:H5'	2.19	0.41
1:AA:957:U:C2	1:AA:959:A:OP2	2.74	0.41
2:AB:101:THR:HG22	2:AB:174:GLU:CD	2.38	0.41
5:AE:155:LYS:NZ	5:AE:156:ARG:HG3	2.35	0.41
5:AE:17:VAL:HG22	5:AE:18:ASN:N	2.35	0.41
6:AF:97:THR:CG2	6:AF:98:GLU:N	2.83	0.41
6:AF:99:ALA:O	6:AF:100:SER:CB	2.66	0.41
9:AI:41:GLU:HB3	9:AI:42:THR:H	1.59	0.41
13:AM:30:LYS:O	13:AM:34:ALA:HB3	2.20	0.41
13:AM:15:VAL:CA	13:AM:33:LEU:CD1	2.94	0.41
15:AO:20:ASP:OD2	15:AO:23:SER:HB2	2.20	0.41
16:AP:36:VAL:HG13	16:AP:36:VAL:O	2.20	0.41
16:AP:40:ASN:HA	16:AP:41:PRO:HD2	1.77	0.41
17:AQ:11:VAL:O	17:AQ:12:VAL:HB	2.20	0.41
17:AQ:60:ILE:HG22	17:AQ:72:TRP:HE3	1.80	0.41
18:AR:19:GLU:CD	18:AR:50:TYR:HD1	2.23	0.41
11:AK:125:LYS:C	21:AU:33:ARG:HH22	2.22	0.41
48:B0:39:ARG:HG2	48:B0:40:HIS:CE1	2.52	0.41
49:B1:46:VAL:CG1	49:B1:47:ILE:N	2.81	0.41
22:BA:1313:U:H4'	22:BA:1332:G:H4'	2.02	0.41
22:BA:1460:U:H3'	22:BA:1461:C:H5'	2.02	0.41
22:BA:1324:G:H1'	22:BA:1616:A:N6	2.35	0.41
22:BA:1638:C:N4	22:BA:1639:C:C4	2.88	0.41
22:BA:171:U:H2'	22:BA:172:A:C8	2.55	0.41
22:BA:2007:U:H2'	22:BA:2008:C:C6	2.54	0.41
22:BA:2075:U:H2'	22:BA:2238:G:H22	1.82	0.41
22:BA:2284:A:C2'	22:BA:2285:C:H5'	2.50	0.41
22:BA:2307:G:C2	22:BA:2311:A:N7	2.88	0.41
22:BA:648:G:O2'	22:BA:2351:G:OP1	2.16	0.41
22:BA:2611:C:H6	22:BA:2611:C:C5'	2.34	0.41
22:BA:2698:U:H2'	22:BA:2699:C:C6	2.55	0.41
22:BA:2700:A:N1	22:BA:2708:G:C6	2.89	0.41
22:BA:2800:A:H3'	22:BA:2801:G:H5'	2.01	0.41
22:BA:2842:G:C4	22:BA:2876:G:N2	2.89	0.41
22:BA:2854:G:H2'	22:BA:2855:C:C6	2.56	0.41
22:BA:287:G:C2	22:BA:354:A:C2	3.07	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:350:G:C2'	22:BA:351:C:H5'	2.50	0.41
22:BA:901:C:H2'	22:BA:902:C:C6	2.50	0.41
24:BC:172:THR:HA	24:BC:182:LYS:HA	2.02	0.41
24:BC:236:GLY:O	24:BC:237:ARG:HB2	2.20	0.41
24:BC:7:PRO:HB3	24:BC:13:ARG:HB2	2.01	0.41
25:BD:73:VAL:CG2	25:BD:74:GLU:H	2.29	0.41
27:BF:106:ALA:CA	27:BF:108:PRO:HD2	2.50	0.41
27:BF:47:LYS:NZ	27:BF:47:LYS:CB	2.83	0.41
28:BG:115:GLN:CD	28:BG:115:GLN:N	2.68	0.41
29:BH:131:SER:O	29:BH:132:PHE:HB3	2.21	0.41
30:BI:115:ASP:OD1	30:BI:115:ASP:C	2.59	0.41
30:BI:93:ASN:OD1	30:BI:136:GLY:HA2	2.21	0.41
37:BP:21:PRO:HA	37:BP:46:VAL:CG1	2.50	0.41
39:BR:37:GLU:O	39:BR:37:GLU:OE1	2.38	0.41
39:BR:66:HIS:ND1	39:BR:94:THR:CG2	2.83	0.41
39:BR:81:LYS:O	39:BR:82:HIS:C	2.58	0.41
41:BT:2:ILE:HB	41:BT:3:ARG:CZ	2.50	0.41
41:BT:5:GLU:OE1	46:BY:22:LEU:HD22	2.20	0.41
42:BU:11:ILE:HG13	42:BU:21:ARG:HG3	2.02	0.41
42:BU:5:ARG:O	42:BU:6:ARG:C	2.58	0.41
45:BX:21:LEU:HD23	45:BX:21:LEU:HA	1.70	0.41
45:BX:44:ARG:HG3	45:BX:45:PHE:N	2.35	0.41
41:BT:50:LEU:HD23	46:BY:26:PHE:CD1	2.56	0.41
1:CA:71:A:C6	1:CA:100:G:N7	2.88	0.41
1:CA:1004:A:C4	1:CA:1026:G:N7	2.89	0.41
1:CA:101:A:C5	1:CA:102:G:C8	3.08	0.41
1:CA:1217:C:H6	1:CA:1217:C:H2'	1.62	0.41
1:CA:1250:A:C6	1:CA:1251:A:C5	3.07	0.41
1:CA:1497:G:H2'	1:CA:1498:U:O5'	2.21	0.41
1:CA:276:G:O2'	1:CA:277:C:C5'	2.68	0.41
1:CA:470:C:O5'	1:CA:470:C:H6	2.04	0.41
1:CA:64:G:N7	1:CA:99:C:C4	2.87	0.41
1:CA:835:U:H3'	1:CA:835:U:C6	2.55	0.41
1:CA:885:G:O2'	1:CA:886:G:H5'	2.20	0.41
2:CB:128:LEU:HB3	2:CB:131:LYS:CB	2.38	0.41
4:CD:32:LYS:O	4:CD:33:ILE:CG2	2.55	0.41
5:CE:45:VAL:O	5:CE:71:ILE:HG22	2.19	0.41
6:CF:21:MET:HA	6:CF:24:ARG:NH2	2.35	0.41
6:CF:33:GLU:N	6:CF:33:GLU:CD	2.74	0.41
11:CK:85:VAL:HG12	11:CK:86:LYS:N	2.36	0.41
13:CM:69:ARG:HA	13:CM:72:ILE:CG2	2.50	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:9:HIS:HB3	16:CP:10:GLY:H	1.66	0.41
18:CR:46:THR:HG23	18:CR:46:THR:O	2.20	0.41
20:CT:63:LYS:O	20:CT:63:LYS:HG3	2.20	0.41
21:CU:36:PHE:HB3	21:CU:40:PRO:CD	2.50	0.41
22:DA:1399:C:O2'	22:DA:1400:U:C5'	2.63	0.41
22:DA:1691:C:N4	22:DA:1692:U:C4	2.88	0.41
22:DA:1784:A:P	56:DA:3678:HOH:O	2.78	0.41
22:DA:1905:C:H2'	22:DA:1930:G:C8	2.54	0.41
22:DA:1936:A:H5''	22:DA:1937:A:C5'	2.50	0.41
22:DA:2064:C:H1'	22:DA:2450:A:C6	2.56	0.41
22:DA:2202:U:C5'	22:DA:2203:U:OP1	2.67	0.41
22:DA:2296:U:H4'	22:DA:2297:A:OP1	2.19	0.41
22:DA:2312:U:C5'	27:DF:70:ARG:NH1	2.83	0.41
22:DA:2579:C:C2'	22:DA:2579:C:O2	2.68	0.41
22:DA:2630:G:C8	22:DA:2894:G:C8	3.07	0.41
22:DA:2677:G:H2'	22:DA:2678:C:H6	1.84	0.41
22:DA:270:A:C2	22:DA:369:U:H4'	2.54	0.41
22:DA:271:G:C2	22:DA:367:G:N3	2.88	0.41
22:DA:415:A:O2'	22:DA:1865:U:C5'	2.68	0.41
22:DA:430:A:H2'	22:DA:431:U:H5'	2.01	0.41
22:DA:599:A:N3	22:DA:659:G:C2	2.88	0.41
22:DA:688:U:H1'	22:DA:786:C:O2'	2.20	0.41
22:DA:716:A:H2'	22:DA:717:C:C5'	2.46	0.41
22:DA:686:U:C6	22:DA:788:A:C2	3.08	0.41
22:DA:988:A:H2	22:DA:989:G:C2	2.35	0.41
22:DA:990:A:O2'	22:DA:991:C:H5''	2.19	0.41
23:DB:28:C:H2'	23:DB:29:A:O4'	2.19	0.41
23:DB:64:G:C6	23:DB:65:U:C4	3.07	0.41
25:DD:16:THR:OG1	25:DD:17:GLU:N	2.53	0.41
25:DD:36:GLN:NE2	25:DD:38:LYS:HZ1	2.17	0.41
26:DE:115:GLN:O	26:DE:117:ARG:N	2.53	0.41
26:DE:124:PHE:HZ	26:DE:141:MET:HE1	1.85	0.41
26:DE:25:GLU:O	26:DE:28:VAL:HG22	2.20	0.41
26:DE:6:LYS:HG2	26:DE:7:ASP:OD1	2.21	0.41
27:DF:102:LEU:O	27:DF:103:ILE:HB	2.19	0.41
27:DF:65:LEU:CG	27:DF:67:THR:CG2	2.99	0.41
29:DH:103:VAL:C	29:DH:105:ALA:N	2.73	0.41
29:DH:40:THR:O	29:DH:41:LYS:HB2	2.20	0.41
30:DI:20:SER:H	30:DI:21:PRO:HD3	1.86	0.41
32:DK:27:GLY:O	32:DK:29:HIS:N	2.53	0.41
32:DK:16:ALA:CB	32:DK:45:GLU:CG	2.96	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:DL:112:LEU:HD23	33:DL:112:LEU:H	1.85	0.41
35:DN:60:VAL:O	35:DN:64:ARG:CD	2.68	0.41
35:DN:67:PHE:CD1	35:DN:67:PHE:C	2.94	0.41
37:DP:16:VAL:CG1	37:DP:19:PHE:HE2	2.32	0.41
38:DQ:20:ALA:O	38:DQ:23:TYR:CD1	2.73	0.41
38:DQ:31:TYR:C	38:DQ:31:TYR:CD2	2.93	0.41
40:DS:41:LYS:C	40:DS:43:ALA:N	2.70	0.41
42:DU:96:LYS:O	42:DU:97:SER:CB	2.61	0.41
47:DZ:16:LEU:O	47:DZ:20:LYS:HG3	2.20	0.41
1:AA:1118:U:O2'	1:AA:1119:C:H5'	2.20	0.41
1:AA:1171:A:C2	1:AA:1172:C:C2	3.09	0.41
1:AA:1061:G:C5	1:AA:1197:A:C2	3.09	0.41
1:AA:11:G:H2'	1:AA:12:U:C6	2.54	0.41
1:AA:123:U:H2'	1:AA:124:C:C6	2.55	0.41
1:AA:1258:G:O2'	1:AA:1259:C:P	2.77	0.41
1:AA:1267:C:H2'	1:AA:1268:G:H5'	2.02	0.41
1:AA:922:G:N2	1:AA:1396:A:C5	2.88	0.41
1:AA:1483:A:H2'	1:AA:1484:C:O4'	2.20	0.41
1:AA:1399:C:C4	1:AA:1502:A:C2	3.08	0.41
1:AA:199:A:C2	1:AA:200:G:C4	3.08	0.41
1:AA:211:G:C5	1:AA:212:G:H1'	2.55	0.41
1:AA:243:A:C6	1:AA:246:A:N7	2.89	0.41
1:AA:307:C:O5'	1:AA:307:C:H6	2.03	0.41
1:AA:467:U:H2'	1:AA:467:U:H6	1.68	0.41
1:AA:709:U:H2'	1:AA:710:G:H8	1.86	0.41
1:AA:778:G:H2'	1:AA:779:C:H5'	2.02	0.41
1:AA:868:C:H2'	1:AA:869:G:O4'	2.21	0.41
2:AB:103:TRP:CZ2	2:AB:154:GLY:HA2	2.55	0.41
2:AB:71:THR:CG2	2:AB:72:LYS:N	2.83	0.41
2:AB:94:ARG:HD3	2:AB:94:ARG:HA	1.81	0.41
3:AC:32:LEU:HD13	3:AC:32:LEU:HA	1.91	0.41
4:AD:114:ARG:O	4:AD:115:GLN:C	2.59	0.41
4:AD:124:VAL:HG23	4:AD:125:ASN:N	2.34	0.41
6:AF:6:ILE:HB	6:AF:62:MET:HB3	2.01	0.41
8:AH:112:ASP:O	8:AH:113:ARG:C	2.58	0.41
11:AK:22:ILE:HG22	11:AK:31:VAL:HG13	2.02	0.41
11:AK:70:ALA:O	11:AK:73:VAL:HG22	2.20	0.41
11:AK:96:ILE:O	11:AK:97:ARG:C	2.59	0.41
12:AL:2:THR:HB	12:AL:5:GLN:H	1.85	0.41
14:AN:10:VAL:O	14:AN:14:ALA:HB2	2.21	0.41
17:AQ:78:VAL:C	17:AQ:79:GLU:HG3	2.41	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:1082:U:C4	22:BA:1083:U:N3	2.87	0.41
22:BA:1274:A:N3	22:BA:1297:C:H1'	2.35	0.41
22:BA:1378:A:H4'	22:BA:1379:U:OP1	2.20	0.41
22:BA:153:U:H2'	22:BA:154:U:C5'	2.50	0.41
22:BA:1845:G:C2'	22:BA:1846:G:C5'	2.98	0.41
22:BA:1905:C:H4'	22:BA:1929:G:H8	1.85	0.41
22:BA:2013:A:OP1	40:BS:96:ILE:HA	2.20	0.41
22:BA:2052:A:H2'	22:BA:2053:G:H8	1.86	0.41
22:BA:2209:G:C6	22:BA:2210:U:C4	3.09	0.41
22:BA:2665:A:C2	22:BA:2666:C:C2	3.08	0.41
22:BA:2811:G:H2'	22:BA:2812:G:O4'	2.21	0.41
22:BA:2874:C:H2'	22:BA:2875:C:C6	2.54	0.41
22:BA:288:U:C2'	22:BA:289:G:H5'	2.50	0.41
22:BA:287:G:C4	22:BA:354:A:C2	3.08	0.41
22:BA:407:G:C2'	22:BA:408:G:H5'	2.50	0.41
22:BA:602:A:C2	22:BA:656:G:C5	3.09	0.41
22:BA:797:G:N7	56:BA:3320:HOH:O	2.37	0.41
22:BA:872:U:H2'	22:BA:873:C:H6	1.85	0.41
23:BB:16:G:C5	23:BB:69:G:C2	3.08	0.41
23:BB:49:C:H6	23:BB:49:C:O5'	2.03	0.41
24:BC:32:LEU:HA	24:BC:32:LEU:HD23	1.76	0.41
25:BD:16:THR:OG1	25:BD:18:ASP:OD1	2.32	0.41
26:BE:111:GLU:HG2	26:BE:114:ARG:NH1	2.35	0.41
28:BG:39:ALA:HB1	28:BG:57:TYR:HB3	2.02	0.41
29:BH:27:ARG:HD3	29:BH:27:ARG:HA	1.85	0.41
22:BA:1070:A:N3	30:BI:9:LYS:CG	2.83	0.41
32:BK:13:ASN:C	32:BK:15:GLY:H	2.23	0.41
32:BK:20:MET:O	32:BK:41:ILE:HD12	2.20	0.41
32:BK:71:ARG:HB2	32:BK:72:PRO:CD	2.22	0.41
35:BN:55:ALA:HA	35:BN:80:PHE:CE1	2.55	0.41
35:BN:67:PHE:CE2	35:BN:71:ARG:NH1	2.89	0.41
36:BO:78:VAL:CG2	36:BO:79:ALA:N	2.83	0.41
37:BP:33:GLU:OE2	37:BP:38:ARG:NH1	2.54	0.41
37:BP:53:GLY:O	37:BP:54:LEU:C	2.59	0.41
37:BP:91:VAL:O	37:BP:92:ARG:HG2	2.21	0.41
42:BU:36:GLU:HG3	42:BU:36:GLU:O	2.20	0.41
46:BY:39:GLN:O	46:BY:42:LEU:HB2	2.20	0.41
1:CA:1093:A:H2'	1:CA:1095:U:C6	2.56	0.41
1:CA:1157:A:C2	1:CA:1181:G:C8	3.09	0.41
1:CA:1348:U:OP1	9:CI:111:GLU:N	2.51	0.41
1:CA:237:G:C2'	1:CA:238:A:H5'	2.51	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:247:G:C6	1:CA:278:G:N1	2.88	0.41
1:CA:370:C:C3'	1:CA:371:A:H5'	2.48	0.41
1:CA:62:U:C4'	1:CA:378:G:N2	2.83	0.41
1:CA:659:U:C6	1:CA:660:C:C5	3.09	0.41
1:CA:680:C:H2'	1:CA:681:A:H8	1.85	0.41
1:CA:683:G:C2	1:CA:684:U:C2	3.08	0.41
1:CA:787:A:O2'	1:CA:788:U:H5'	2.21	0.41
1:CA:825:A:C5	1:CA:826:C:C5	3.09	0.41
1:CA:985:C:O2'	1:CA:986:U:C6	2.67	0.41
7:CG:4:ARG:HE	7:CG:6:ILE:HA	1.84	0.41
7:CG:7:GLY:O	7:CG:8:GLN:CB	2.68	0.41
9:CI:79:ARG:O	9:CI:83:THR:HG22	2.20	0.41
11:CK:22:ILE:HD11	11:CK:31:VAL:HG22	2.02	0.41
12:CL:29:LYS:HB2	12:CL:81:ILE:HG22	2.01	0.41
13:CM:16:ILE:CD1	13:CM:16:ILE:N	2.81	0.41
18:CR:62:ARG:HD3	18:CR:69:TYR:CE2	2.55	0.41
19:CS:54:ARG:CG	19:CS:55:GLN:N	2.82	0.41
22:DA:1004:U:C4'	22:DA:1010:A:C6	3.03	0.41
22:DA:1179:G:C2	22:DA:1180:U:N1	2.88	0.41
22:DA:1298:C:C5	22:DA:1643:G:N2	2.88	0.41
22:DA:139:U:C4	41:DT:1:MET:N	2.85	0.41
22:DA:1539:U:O2'	22:DA:1540:G:P	2.78	0.41
22:DA:1555:G:HO2'	22:DA:1556:C:H5'	1.82	0.41
22:DA:1655:A:C5'	25:DD:118:PHE:CE1	3.03	0.41
22:DA:1810:A:C2'	22:DA:1811:G:O4'	2.65	0.41
22:DA:2157:G:C2	22:DA:2157:G:OP2	2.73	0.41
22:DA:2209:G:C6	22:DA:2210:U:C4	3.07	0.41
22:DA:1373:A:C4'	22:DA:2212:A:H1'	2.50	0.41
22:DA:2307:G:O2'	22:DA:2308:G:C8	2.69	0.41
22:DA:2392:A:O3'	51:D3:26:ALA:HB1	2.19	0.41
22:DA:2753:A:O2'	22:DA:2754:U:C5'	2.68	0.41
22:DA:2868:A:O2'	22:DA:2869:G:H5'	2.21	0.41
22:DA:2874:C:O2'	22:DA:2875:C:C5'	2.69	0.41
22:DA:287:G:C6	22:DA:354:A:C6	3.09	0.41
22:DA:289:G:N3	22:DA:352:A:C2	2.89	0.41
22:DA:297:G:C2	22:DA:342:A:C2	3.09	0.41
22:DA:301:G:O2'	22:DA:302:C:P	2.78	0.41
22:DA:352:A:C4	22:DA:353:C:C1'	3.02	0.41
22:DA:469:G:OP2	26:DE:54:GLY:O	2.39	0.41
22:DA:511:U:H5'	22:DA:1236:G:OP1	2.21	0.41
22:DA:583:G:C6	22:DA:584:C:C4	3.08	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:663:G:O6	22:DA:664:G:O6	2.39	0.41
22:DA:728:G:C4	22:DA:730:A:C8	3.08	0.41
22:DA:736:C:C4	22:DA:737:C:C5	3.09	0.41
22:DA:814:C:C2	22:DA:1194:A:C2	3.08	0.41
22:DA:976:G:O2'	22:DA:977:G:H5'	2.20	0.41
25:DD:146:ILE:HG13	25:DD:155:VAL:CG2	2.40	0.41
25:DD:202:ILE:HD12	25:DD:202:ILE:H	1.85	0.41
26:DE:136:GLN:OE1	26:DE:136:GLN:HA	2.19	0.41
26:DE:24:ASN:HB3	26:DE:27:LEU:HB3	2.03	0.41
27:DF:67:THR:HG23	27:DF:86:CYS:HA	2.00	0.41
28:DG:122:ALA:CB	28:DG:132:LEU:HA	2.49	0.41
22:DA:2751:G:H5'	28:DG:2:ARG:HH21	1.85	0.41
29:DH:61:VAL:CG1	29:DH:62:LEU:N	2.77	0.41
30:DI:52:LEU:HD11	30:DI:78:LEU:CD2	2.50	0.41
30:DI:78:LEU:C	30:DI:80:LYS:H	2.23	0.41
33:DL:100:ILE:O	33:DL:100:ILE:HG23	2.20	0.41
33:DL:100:ILE:O	33:DL:101:ILE:HG12	2.21	0.41
35:DN:31:HIS:C	35:DN:33:ILE:N	2.74	0.41
37:DP:65:ASN:HD22	37:DP:65:ASN:N	2.18	0.41
38:DQ:44:TYR:O	38:DQ:45:ALA:C	2.59	0.41
41:DT:7:LEU:C	41:DT:9:LYS:H	2.24	0.41
42:DU:60:LYS:CE	42:DU:60:LYS:HA	2.50	0.41
43:DV:69:GLU:HG2	43:DV:70:ILE:H	1.84	0.41
22:DA:2356:U:C5'	44:DW:16:GLU:HG3	2.51	0.41
1:AA:1087:G:C2	1:AA:1088:G:C5	3.09	0.41
1:AA:1117:A:N1	1:AA:1184:G:C6	2.88	0.41
1:AA:1258:G:O2'	1:AA:1259:C:O5'	2.38	0.41
1:AA:1312:G:N2	1:AA:1313:U:C2	2.88	0.41
1:AA:1418:A:C2	1:AA:1483:A:C2	3.09	0.41
1:AA:20:U:C2'	1:AA:21:G:H5'	2.49	0.41
1:AA:625:U:O2'	1:AA:626:G:C5'	2.68	0.41
1:AA:653:U:H2'	1:AA:653:U:H6	1.65	0.41
1:AA:87:C:HO2'	1:AA:88:U:C4'	2.33	0.41
2:AB:123:GLY:O	2:AB:125:PHE:CD2	2.72	0.41
2:AB:49:PHE:C	2:AB:52:ALA:H	2.23	0.41
3:AC:125:ARG:O	3:AC:126:ARG:HB3	2.20	0.41
4:AD:134:TYR:C	4:AD:134:TYR:CD2	2.93	0.41
4:AD:159:GLU:C	4:AD:161:ALA:N	2.73	0.41
4:AD:94:GLU:HG3	4:AD:99:ASN:HD21	1.83	0.41
5:AE:121:ASN:HD22	5:AE:122:VAL:H	1.69	0.41
6:AF:8:PHE:CE2	6:AF:60:VAL:CG1	3.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AG:7:GLY:O	7:AG:8:GLN:CB	2.68	0.41
9:AI:21:LYS:O	9:AI:61:ASP:N	2.47	0.41
10:AJ:41:PRO:HG2	10:AJ:42:LEU:H	1.86	0.41
10:AJ:41:PRO:O	10:AJ:42:LEU:CB	2.65	0.41
10:AJ:56:HIS:HD2	10:AJ:57:VAL:CG1	2.28	0.41
12:AL:24:GLU:CD	12:AL:29:LYS:NZ	2.74	0.41
20:AT:82:ILE:HD12	20:AT:82:ILE:C	2.41	0.41
21:AU:3:ILE:N	21:AU:19:LYS:HZ1	2.18	0.41
22:BA:1126:A:H4'	22:BA:1127:A:H5''	2.03	0.41
22:BA:1359:A:N7	22:BA:1373:A:C2	2.89	0.41
22:BA:1386:C:H5''	22:BA:1396:U:O2	2.21	0.41
22:BA:1508:A:O2'	22:BA:1509:A:H8	2.02	0.41
22:BA:1733:G:C2	22:BA:1734:G:C8	3.09	0.41
22:BA:182:A:C6	22:BA:183:C:C4	3.08	0.41
22:BA:1858:A:H62	22:BA:1884:G:H1'	1.86	0.41
22:BA:1918:A:C3'	22:BA:1920:C:H41	2.33	0.41
22:BA:2151:U:C5	22:BA:2152:G:N7	2.88	0.41
22:BA:2259:U:C6	22:BA:2427:C:C4	3.09	0.41
22:BA:2527:C:C2'	22:BA:2528:U:H5'	2.51	0.41
22:BA:2701:U:H2'	22:BA:2702:G:OP1	2.20	0.41
22:BA:2808:G:O2'	22:BA:2809:A:P	2.78	0.41
22:BA:310:A:O2'	22:BA:311:A:O5'	2.36	0.41
22:BA:764:A:H3'	22:BA:765:C:H5'	2.02	0.41
22:BA:785:G:C6	22:BA:786:C:C4	3.08	0.41
22:BA:83:A:N6	22:BA:101:A:C5	2.89	0.41
22:BA:866:A:C3'	22:BA:866:A:C8	3.03	0.41
22:BA:93:G:O2'	22:BA:94:A:C5'	2.67	0.41
26:BE:40:ARG:HD2	26:BE:92:HIS:ND1	2.35	0.41
27:BF:16:MET:O	27:BF:20:ASN:CA	2.65	0.41
27:BF:98:PHE:O	27:BF:98:PHE:CD2	2.74	0.41
28:BG:159:LYS:HE2	28:BG:159:LYS:HB3	1.86	0.41
33:BL:3:LEU:HD23	33:BL:3:LEU:HA	1.49	0.41
22:BA:869:G:C4'	34:BM:8:LYS:HD3	2.49	0.41
35:BN:74:GLU:O	35:BN:77:ALA:HB3	2.20	0.41
36:BO:49:VAL:CG1	36:BO:50:ALA:N	2.82	0.41
37:BP:111:GLU:O	37:BP:113:LEU:HD22	2.20	0.41
37:BP:37:LYS:HD3	37:BP:37:LYS:H	1.85	0.41
37:BP:50:ARG:HG2	37:BP:56:SER:HA	2.01	0.41
39:BR:5:PHE:HA	39:BR:39:LEU:CD2	2.50	0.41
22:BA:1187:G:H5''	39:BR:83:TYR:CE2	2.56	0.41
1:CA:1004:A:C2	1:CA:1026:G:C5	3.09	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:1211:U:O2'	1:CA:1213:A:C2	2.71	0.41
1:CA:1219:A:C5	1:CA:1220:G:C8	3.08	0.41
1:CA:145:G:C2	1:CA:146:G:C8	3.08	0.41
1:CA:1494:G:C6	1:CA:1495:U:C4	3.08	0.41
1:CA:247:G:N2	1:CA:248:C:C2	2.88	0.41
1:CA:274:A:O2'	1:CA:275:G:H8	2.04	0.41
1:CA:311:C:C3'	1:CA:311:C:C6	3.02	0.41
1:CA:315:A:H5''	1:CA:317:U:OP2	2.20	0.41
1:CA:593:U:C4	1:CA:594:U:C4	3.09	0.41
1:CA:618:C:H3'	1:CA:619:U:C5'	2.50	0.41
1:CA:644:U:O2'	1:CA:645:G:H5'	2.20	0.41
1:CA:715:A:C2'	1:CA:716:A:H5'	2.50	0.41
1:CA:73:C:O2'	1:CA:74:A:C8	2.72	0.41
1:CA:756:C:C2'	1:CA:757:U:O5'	2.67	0.41
1:CA:877:G:O2'	1:CA:878:A:H5'	2.20	0.41
2:CB:30:ILE:HD11	2:CB:188:THR:HG22	2.01	0.41
3:CC:136:ALA:CA	3:CC:139:ASN:HD21	2.33	0.41
3:CC:46:LEU:HD11	3:CC:86:LEU:HD13	2.01	0.41
4:CD:169:TRP:O	4:CD:182:LYS:HB3	2.21	0.41
1:CA:509:A:OP1	4:CD:50:TYR:CD2	2.73	0.41
9:CI:29:ILE:HA	9:CI:64:ILE:O	2.20	0.41
9:CI:27:ILE:HD13	9:CI:62:LEU:CG	2.51	0.41
1:CA:675:A:H1'	11:CK:117:HIS:ND1	2.36	0.41
11:CK:33:ILE:HG13	11:CK:69:CYS:SG	2.60	0.41
14:CN:41:TRP:HB3	14:CN:44:VAL:CG2	2.51	0.41
15:CO:18:ALA:O	15:CO:19:ASN:HB3	2.19	0.41
15:CO:23:SER:O	15:CO:26:VAL:HB	2.21	0.41
18:CR:28:LEU:O	18:CR:30:ASN:N	2.54	0.41
21:CU:29:ALA:C	21:CU:32:ARG:HB2	2.41	0.41
21:CU:41:THR:O	21:CU:45:LYS:HB3	2.20	0.41
49:D1:19:PHE:N	49:D1:19:PHE:CD1	2.88	0.41
22:DA:686:U:N3	50:D2:12:ARG:HB2	2.17	0.41
22:DA:1139:G:C2'	22:DA:1140:C:O5'	2.68	0.41
22:DA:1196:C:C1'	22:DA:1226:A:C4	3.02	0.41
22:DA:1234:U:H2'	22:DA:1235:G:O4'	2.20	0.41
22:DA:1324:G:H1'	22:DA:1616:A:H62	1.72	0.41
22:DA:1413:A:H2'	22:DA:1414:C:C5	2.52	0.41
22:DA:1553:A:N7	22:DA:1555:G:C5	2.88	0.41
22:DA:1598:A:N1	22:DA:1599:U:C2	2.88	0.41
22:DA:1803:A:H2'	22:DA:1804:C:C6	2.55	0.41
22:DA:1824:G:OP2	22:DA:1824:G:C8	2.73	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1833:C:C6	22:DA:1834:U:C5	3.08	0.41
22:DA:1846:G:H5''	22:DA:1847:A:OP2	2.20	0.41
22:DA:2023:C:O2'	22:DA:2024:G:C5'	2.68	0.41
22:DA:2151:U:C2	22:DA:2152:G:N7	2.88	0.41
22:DA:2217:G:C2'	22:DA:2218:G:H8	2.32	0.41
22:DA:234:U:C4'	22:DA:234:U:C6	3.04	0.41
22:DA:2366:A:C2	22:DA:2367:G:H1'	2.56	0.41
22:DA:2336:A:H1'	22:DA:2385:C:H5''	2.02	0.41
22:DA:2388:A:H5'	22:DA:2389:G:OP2	2.20	0.41
22:DA:2468:A:O2'	22:DA:2469:A:P	2.79	0.41
22:DA:2469:A:H2'	22:DA:2470:G:O5'	2.19	0.41
22:DA:2469:A:C2	22:DA:2482:A:H1'	2.54	0.41
22:DA:2776:A:N1	22:DA:2782:G:H1'	2.36	0.41
22:DA:2825:G:H3'	22:DA:2826:A:C8	2.52	0.41
22:DA:2865:U:C5	22:DA:2866:U:C2	3.08	0.41
22:DA:302:C:O2'	22:DA:303:G:O5'	2.38	0.41
22:DA:406:G:O2'	22:DA:407:G:H8	2.04	0.41
22:DA:308:G:C6	22:DA:501:A:C4	3.08	0.41
22:DA:729:G:C2'	22:DA:729:G:N3	2.83	0.41
22:DA:867:C:O2'	22:DA:868:U:C5'	2.68	0.41
23:DB:15:A:OP1	23:DB:108:A:H5'	2.20	0.41
24:DC:44:ASN:C	24:DC:46:GLY:H	2.24	0.41
26:DE:109:LEU:O	26:DE:112:LEU:CB	2.68	0.41
27:DF:102:LEU:HD22	27:DF:102:LEU:N	2.36	0.41
27:DF:71:LYS:HG3	27:DF:73:VAL:H	1.86	0.41
28:DG:53:PRO:HG3	28:DG:61:TRP:CE2	2.56	0.41
29:DH:4:ILE:O	29:DH:36:ALA:HB1	2.20	0.41
30:DI:112:LYS:HZ1	30:DI:128:ILE:HD12	1.84	0.41
30:DI:23:VAL:O	30:DI:25:PRO:HD2	2.20	0.41
33:DL:120:VAL:CG1	33:DL:121:THR:N	2.83	0.41
33:DL:21:ARG:CZ	33:DL:21:ARG:HB3	2.49	0.41
33:DL:56:PRO:HD2	33:DL:59:ARG:HD3	2.01	0.41
38:DQ:46:TYR:HB2	38:DQ:49:ARG:HH21	1.85	0.41
38:DQ:91:ARG:CZ	38:DQ:93:ILE:HG21	2.51	0.41
39:DR:1:MET:CE	39:DR:1:MET:HA	2.51	0.41
22:DA:492:A:C2	40:DS:49:LYS:HE2	2.55	0.41
42:DU:6:ARG:O	42:DU:24:VAL:HG11	2.21	0.41
44:DW:39:GLN:CG	44:DW:42:THR:HB	2.45	0.41
44:DW:43:LYS:HD2	44:DW:79:ILE:CD1	2.39	0.41
44:DW:54:ARG:O	44:DW:56:HIS:N	2.53	0.41
45:DX:8:GLY:O	45:DX:10:ARG:HG3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1012:A:C6	1:AA:1013:G:C6	3.08	0.41
1:AA:1021:A:H2'	1:AA:1022:A:H5'	1.95	0.41
1:AA:1160:G:C2	1:AA:1161:C:C6	3.08	0.41
1:AA:1210:C:C2'	1:AA:1211:U:C5'	2.84	0.41
1:AA:1219:A:C6	1:AA:1220:G:C6	3.08	0.41
1:AA:178:C:H2'	1:AA:179:A:O4'	2.20	0.41
1:AA:371:A:C2	1:AA:372:C:C5	3.09	0.41
1:AA:39:G:C4	1:AA:40:C:C6	3.08	0.41
1:AA:418:C:H2'	1:AA:419:C:C6	2.55	0.41
1:AA:439:U:H2'	1:AA:440:C:H6	1.85	0.41
1:AA:511:C:H2'	1:AA:534:U:O2	2.20	0.41
1:AA:520:A:N7	1:AA:521:G:C8	2.88	0.41
1:AA:74:A:C2	1:AA:75:G:C5	3.09	0.41
1:AA:858:G:N7	1:AA:869:G:N7	2.69	0.41
1:AA:865:A:H2	1:AA:918:A:H4'	1.85	0.41
1:AA:935:A:N3	1:AA:936:C:C6	2.88	0.41
1:AA:941:G:C2	1:AA:942:G:H1'	2.55	0.41
1:AA:978:A:C2	1:AA:1318:A:C4	3.08	0.41
2:AB:132:GLU:O	2:AB:136:ARG:CB	2.56	0.41
2:AB:49:PHE:O	2:AB:52:ALA:N	2.53	0.41
1:AA:439:U:O4'	4:AD:118:SER:O	2.39	0.41
4:AD:12:ARG:HG2	4:AD:33:ILE:HD12	2.02	0.41
9:AI:90:ASP:OD2	9:AI:92:SER:HB3	2.21	0.41
10:AJ:40:ILE:O	10:AJ:72:ARG:HA	2.20	0.41
13:AM:18:LEU:HA	13:AM:18:LEU:HD13	1.91	0.41
13:AM:21:ILE:H	13:AM:21:ILE:HD12	1.85	0.41
13:AM:94:LEU:CB	13:AM:95:PRO:HD2	2.49	0.41
14:AN:27:LYS:HA	14:AN:30:ILE:CG2	2.50	0.41
15:AO:42:PHE:CE1	15:AO:55:LEU:HB2	2.55	0.41
15:AO:87:ARG:O	15:AO:88:ARG:C	2.59	0.41
22:BA:977:G:N3	22:BA:1001:A:H2	2.18	0.41
22:BA:1078:U:H5''	22:BA:1079:C:O5'	2.20	0.41
22:BA:1344:U:H2'	22:BA:1345:C:OP1	2.21	0.41
22:BA:1459:G:H8	22:BA:1459:G:H2'	1.71	0.41
22:BA:1585:C:O5'	22:BA:1585:C:H6	2.03	0.41
22:BA:1720:U:H5''	22:BA:1721:G:OP2	2.20	0.41
22:BA:1824:G:H2'	22:BA:1825:U:C6	2.55	0.41
22:BA:1996:C:OP1	32:BK:31:ARG:NE	2.51	0.41
22:BA:2095:A:H2'	22:BA:2096:C:C6	2.55	0.41
22:BA:2255:G:C2'	22:BA:2256:G:H5'	2.51	0.41
22:BA:2599:G:O2'	22:BA:2600:A:H5'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:278:A:C2	22:BA:362:A:N7	2.89	0.41
22:BA:404:A:C8	22:BA:406:G:C6	3.08	0.41
22:BA:60:G:O2'	22:BA:61:C:P	2.78	0.41
22:BA:740:C:H2'	22:BA:740:C:O2	2.19	0.41
23:BB:46:A:C4	23:BB:47:C:C6	3.09	0.41
23:BB:88:C:H6	23:BB:88:C:C5'	2.24	0.41
23:BB:90:C:C4'	23:BB:90:C:C6	3.03	0.41
22:BA:782:A:C6	24:BC:224:MET:HE1	2.56	0.41
26:BE:177:PRO:O	26:BE:180:LEU:HB2	2.19	0.41
27:BF:6:TYR:O	27:BF:10:GLU:O	2.39	0.41
27:BF:19:PHE:O	27:BF:20:ASN:C	2.58	0.41
30:BI:111:THR:O	30:BI:113:ALA:N	2.47	0.41
30:BI:41:PHE:CE2	30:BI:45:THR:HG21	2.56	0.41
30:BI:49:GLU:HG2	30:BI:50:LYS:N	2.35	0.41
30:BI:57:VAL:HG12	30:BI:58:ILE:N	2.35	0.41
30:BI:78:LEU:HD13	30:BI:108:ILE:CG2	2.46	0.41
31:BJ:17:VAL:HG13	31:BJ:55:ILE:HG12	2.03	0.41
31:BJ:65:THR:HG23	31:BJ:66:GLY:N	2.36	0.41
32:BK:99:ILE:HG22	32:BK:100:PHE:N	2.36	0.41
33:BL:112:LEU:HD12	33:BL:130:GLY:CA	2.36	0.41
34:BM:46:ILE:HD12	34:BM:47:GLU:CA	2.51	0.41
36:BO:40:ILE:CG1	36:BO:47:VAL:HG12	2.41	0.41
38:BQ:51:GLN:O	38:BQ:52:ARG:C	2.58	0.41
38:BQ:65:ASN:HD22	38:BQ:69:ARG:HH22	1.52	0.41
43:BV:26:PHE:HB2	43:BV:27:PRO:HD2	2.02	0.41
22:BA:2432:A:N1	45:BX:20:ALA:HA	2.36	0.41
47:BZ:33:HIS:O	47:BZ:34:THR:HB	2.20	0.41
1:CA:968:A:C4	1:CA:1062:U:H4'	2.53	0.41
1:CA:1134:G:N1	1:CA:1141:C:N4	2.68	0.41
1:CA:1315:U:C6	1:CA:1316:G:N7	2.89	0.41
1:CA:1375:A:O2'	7:CG:101:ARG:NH2	2.53	0.41
1:CA:1428:A:H2'	1:CA:1429:A:O4'	2.20	0.41
1:CA:204:G:C4	1:CA:205:A:C8	3.09	0.41
1:CA:322:C:H41	1:CA:328:C:H6	1.61	0.41
1:CA:392:C:H2'	1:CA:393:A:C8	2.53	0.41
1:CA:445:G:N3	1:CA:446:G:C8	2.89	0.41
1:CA:557:G:C5	1:CA:558:G:C6	3.09	0.41
1:CA:60:A:HO2'	1:CA:61:G:P	2.44	0.41
1:CA:728:A:N6	1:CA:729:A:N6	2.68	0.41
1:CA:913:A:H4'	1:CA:914:A:C4'	2.50	0.41
1:CA:93:U:HO2'	1:CA:95:C:H5	1.64	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:70:U:C2	1:CA:94:G:C5	3.09	0.41
1:CA:966:G:O2'	1:CA:967:C:H5'	2.20	0.41
1:CA:983:A:HO2'	1:CA:984:C:C5'	2.32	0.41
2:CB:147:LEU:N	2:CB:147:LEU:CD1	2.84	0.41
3:CC:135:ARG:C	3:CC:137:VAL:N	2.74	0.41
1:CA:619:U:H3	4:CD:131:ILE:HD11	1.85	0.41
5:CE:38:VAL:HG23	5:CE:66:ALA:HB1	2.02	0.41
7:CG:74:VAL:H	7:CG:140:VAL:CG1	2.34	0.41
1:CA:643:C:C5'	8:CH:31:LEU:HD13	2.49	0.41
9:CI:27:ILE:HG21	9:CI:34:LEU:HA	2.03	0.41
10:CJ:10:LEU:HB2	10:CJ:72:ARG:HB2	2.02	0.41
10:CJ:84:VAL:CG2	10:CJ:85:ASP:N	2.60	0.41
12:CL:17:LYS:HD3	12:CL:17:LYS:N	2.33	0.41
14:CN:13:VAL:HA	14:CN:59:GLN:NE2	2.36	0.41
14:CN:65:GLN:HA	14:CN:65:GLN:NE2	2.36	0.41
17:CQ:59:GLU:HG3	17:CQ:75:VAL:HG22	2.03	0.41
18:CR:51:GLN:HA	18:CR:51:GLN:OE1	2.20	0.41
21:CU:41:THR:O	21:CU:45:LYS:CB	2.68	0.41
48:D0:42:ILE:HD12	48:D0:48:TYR:CD2	2.56	0.41
22:DA:1090:A:C2	22:DA:1091:G:C1'	3.03	0.41
22:DA:109:C:O2	22:DA:109:C:H2'	2.21	0.41
22:DA:974:G:OP1	22:DA:1187:G:H4'	2.20	0.41
22:DA:1197:G:O2'	22:DA:1198:U:H5'	2.19	0.41
22:DA:136:G:O5'	22:DA:136:G:H8	2.03	0.41
22:DA:1500:G:C2	22:DA:1501:G:C8	3.09	0.41
22:DA:1607:C:H1'	22:DA:1621:U:C4	2.55	0.41
22:DA:1623:G:C6	22:DA:1624:U:C5	3.08	0.41
22:DA:1627:G:C6	22:DA:1640:A:N7	2.88	0.41
22:DA:1707:G:C5	22:DA:1756:G:C6	3.09	0.41
22:DA:1712:U:C5	22:DA:1713:A:C4	3.09	0.41
22:DA:1784:A:H4'	22:DA:1785:A:C5'	2.44	0.41
22:DA:1821:A:O5'	22:DA:1821:A:H8	2.04	0.41
22:DA:1662:U:H3	22:DA:1998:A:H61	1.67	0.41
22:DA:2050:C:O2'	25:DD:146:ILE:HG21	2.21	0.41
22:DA:2107:G:C2	22:DA:2108:A:C5	3.09	0.41
22:DA:2148:G:O2'	22:DA:2149:U:C5	2.74	0.41
22:DA:2206:C:C2	22:DA:2207:C:C6	3.09	0.41
22:DA:2210:U:HO2'	22:DA:2211:A:P	2.44	0.41
22:DA:2662:A:H2'	22:DA:2663:G:C5'	2.51	0.41
22:DA:2756:U:H1'	22:DA:2757:A:H5'	2.01	0.41
22:DA:46:G:N2	22:DA:47:C:C6	2.88	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:587:C:C5	22:DA:671:C:O2	2.73	0.41
22:DA:678:C:H2'	22:DA:679:C:H6	1.69	0.41
22:DA:728:G:C2	22:DA:730:A:C5	3.09	0.41
22:DA:843:G:H2'	22:DA:844:A:H8	1.85	0.41
22:DA:915:C:O2'	22:DA:916:G:C5'	2.56	0.41
22:DA:975:A:C2	22:DA:976:G:N9	2.88	0.41
23:DB:45:A:C5'	27:DF:91:ARG:HD2	2.51	0.41
22:DA:1821:A:H5'	24:DC:156:SER:OG	2.20	0.41
24:DC:181:ARG:HH11	24:DC:265:PHE:HD1	1.64	0.41
24:DC:184:GLU:C	24:DC:186:ASP:N	2.74	0.41
25:DD:4:LEU:HB3	25:DD:32:ASN:HD21	1.86	0.41
26:DE:72:SER:C	26:DE:74:LYS:H	2.24	0.41
27:DF:13:LYS:N	27:DF:13:LYS:HD2	2.35	0.41
28:DG:11:PRO:HD2	28:DG:14:VAL:HG11	2.02	0.41
28:DG:8:VAL:HG11	28:DG:49:LEU:HD23	2.01	0.41
28:DG:85:LYS:O	28:DG:86:LEU:HB2	2.21	0.41
29:DH:49:ALA:O	29:DH:53:GLU:HB2	2.21	0.41
30:DI:116:MET:HB3	30:DI:117:THR:H	1.58	0.41
31:DJ:40:HIS:HE1	31:DJ:52:ASP:OD1	2.04	0.41
31:DJ:86:GLN:O	31:DJ:87:ALA:HB3	2.17	0.41
32:DK:107:LEU:O	32:DK:112:PHE:HB2	2.21	0.41
32:DK:10:VAL:O	32:DK:10:VAL:HG12	2.20	0.41
32:DK:119:ALA:O	32:DK:120:PRO:C	2.59	0.41
34:DM:63:ILE:CD1	34:DM:105:MET:HE2	2.50	0.41
34:DM:74:THR:HG22	34:DM:88:ASN:C	2.41	0.41
25:DD:116:LYS:HD3	35:DN:1:MET:HE2	2.03	0.41
38:DQ:57:ARG:C	38:DQ:59:LEU:N	2.73	0.41
39:DR:38:VAL:O	39:DR:53:PHE:HA	2.21	0.41
42:DU:39:ASN:ND2	42:DU:63:ALA:C	2.74	0.41
44:DW:80:SER:O	44:DW:81:ILE:HG22	2.21	0.41
22:DA:1808:A:N6	45:DX:27:ARG:CD	2.84	0.41
1:AA:1078:U:H3'	1:AA:1078:U:C6	2.55	0.41
1:AA:1165:U:C5	1:AA:1166:G:N7	2.88	0.41
1:AA:131:A:O2'	1:AA:132:C:O4'	2.31	0.41
1:AA:224:U:N3	1:AA:225:C:C5	2.89	0.41
1:AA:552:U:H2'	1:AA:553:A:C8	2.56	0.41
1:AA:567:G:O2'	1:AA:568:G:O5'	2.31	0.41
1:AA:579:A:C4	1:AA:580:C:C5	3.09	0.41
1:AA:718:A:C8	11:AK:117:HIS:HB3	2.56	0.41
1:AA:587:G:C2	1:AA:755:G:C5	3.08	0.41
1:AA:570:G:H1'	1:AA:820:U:C4	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:858:G:C2'	1:AA:859:G:H5'	2.50	0.41
1:AA:880:C:H2'	1:AA:881:G:C8	2.56	0.41
1:AA:950:U:H4'	1:AA:971:G:C2	2.55	0.41
1:AA:75:G:N1	1:AA:96:U:C4	2.88	0.41
2:AB:13:VAL:CG2	2:AB:207:ARG:NH2	2.81	0.41
4:AD:83:GLY:O	4:AD:84:ASN:C	2.58	0.41
4:AD:90:LEU:HD21	4:AD:194:ILE:HD12	2.02	0.41
5:AE:108:GLY:O	5:AE:109:ALA:HB3	2.20	0.41
7:AG:98:LEU:HD22	7:AG:102:TRP:CZ2	2.55	0.41
13:AM:106:ARG:HH11	13:AM:106:ARG:HA	1.85	0.41
15:AO:84:LEU:HA	15:AO:84:LEU:HD12	1.80	0.41
17:AQ:30:HIS:ND1	17:AQ:31:PRO:HD2	2.34	0.41
22:BA:1083:U:H3'	22:BA:1083:U:H6	1.85	0.41
22:BA:1225:G:C6	22:BA:1226:A:N6	2.87	0.41
22:BA:137:U:OP2	22:BA:137:U:C5	2.74	0.41
22:BA:1387:A:C2	22:BA:1401:G:C2	3.09	0.41
22:BA:1444:G:H2'	22:BA:1445:G:O4'	2.21	0.41
22:BA:1792:G:C2'	22:BA:1793:C:H5'	2.51	0.41
22:BA:1876:A:O2'	22:BA:1877:A:H5'	2.21	0.41
22:BA:2031:A:C6	22:BA:2498:C:H1'	2.56	0.41
22:BA:2152:G:HO2'	22:BA:2153:C:C4'	2.30	0.41
22:BA:264:C:O2'	22:BA:265:A:H3'	2.20	0.41
22:BA:276:U:C2'	22:BA:277:G:O5'	2.69	0.41
22:BA:2771:C:H2'	22:BA:2772:C:H6	1.85	0.41
22:BA:2720:U:C4	22:BA:2872:A:N1	2.88	0.41
54:BA:3136:ERY:O13	54:BA:3136:ERY:H343	2.21	0.41
22:BA:548:G:C4'	22:BA:549:G:H5'	2.50	0.41
22:BA:604:G:H2'	22:BA:605:G:H8	1.85	0.41
22:BA:983:A:N6	22:BA:984:A:C2	2.88	0.41
23:BB:66:A:HO2'	23:BB:67:G:P	2.43	0.41
24:BC:33:LEU:HA	24:BC:61:TYR:O	2.21	0.41
25:BD:8:LYS:HB2	25:BD:201:LEU:HD22	2.00	0.41
27:BF:105:ILE:O	27:BF:109:ARG:HD3	2.20	0.41
27:BF:21:TYR:CD1	27:BF:26:GLN:HG2	2.56	0.41
32:BK:61:VAL:HG22	32:BK:112:PHE:CZ	2.56	0.41
35:BN:38:LEU:HB3	35:BN:39:PRO:CD	2.46	0.41
1:AA:345:C:OP1	37:BP:36:LYS:HE2	2.21	0.41
37:BP:85:VAL:HG12	37:BP:86:LYS:H	1.86	0.41
22:BA:995:C:P	38:BQ:52:ARG:HH11	2.43	0.41
41:BT:38:ALA:HB3	41:BT:81:LYS:HE2	2.03	0.41
44:BW:46:ALA:HB3	44:BW:79:ILE:C	2.40	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:BX:30:PRO:C	45:BX:32:LEU:HD13	2.40	0.41
45:BX:67:LEU:O	45:BX:69:GLU:O	2.38	0.41
1:CA:1219:A:OP1	14:CN:52:ARG:CG	2.57	0.41
1:CA:1409:C:H5'	22:DA:1916:A:N1	2.36	0.41
1:CA:369:G:OP2	1:CA:388:G:C2	2.74	0.41
1:CA:443:C:C3'	1:CA:443:C:C6	3.03	0.41
1:CA:663:A:C2'	1:CA:664:G:C5'	2.96	0.41
2:CB:184:ALA:C	2:CB:199:ILE:HG12	2.37	0.41
3:CC:125:ARG:O	3:CC:126:ARG:HB2	2.20	0.41
4:CD:167:PRO:HB3	4:CD:169:TRP:CH2	2.55	0.41
4:CD:198:LEU:HD23	4:CD:198:LEU:HA	1.60	0.41
6:CF:47:LEU:HD13	6:CF:51:ILE:HD12	2.02	0.41
7:CG:71:THR:CG2	7:CG:72:VAL:HG23	2.32	0.41
1:CA:587:G:OP1	8:CH:80:PRO:HB3	2.21	0.41
12:CL:56:LEU:HB2	12:CL:58:ASN:OD1	2.20	0.41
13:CM:36:ALA:HB2	13:CM:55:LEU:HD21	2.02	0.41
14:CN:27:LYS:O	14:CN:45:LEU:HD21	2.21	0.41
14:CN:50:LEU:N	14:CN:51:PRO:CD	2.83	0.41
14:CN:65:GLN:CA	14:CN:65:GLN:HE21	2.32	0.41
15:CO:30:LEU:HA	15:CO:30:LEU:HD23	1.78	0.41
15:CO:68:TYR:C	15:CO:70:LYS:N	2.74	0.41
16:CP:4:ILE:CG2	16:CP:57:ILE:HD11	2.31	0.41
17:CQ:16:MET:HB2	17:CQ:19:SER:O	2.21	0.41
22:DA:1079:C:N4	22:DA:1088:A:C2	2.88	0.41
22:DA:1084:A:H2'	22:DA:1085:A:C5'	2.47	0.41
22:DA:1099:G:C6	22:DA:1100:C:C2	3.08	0.41
22:DA:1206:G:O2'	22:DA:1207:C:H6	2.03	0.41
22:DA:1207:C:O2'	22:DA:1208:C:C6	2.56	0.41
22:DA:1255:U:H6	26:DE:68:ALA:HB2	1.85	0.41
22:DA:1292:G:H2'	22:DA:1293:C:C6	2.55	0.41
22:DA:1299:G:C5'	22:DA:1301:A:O4'	2.69	0.41
22:DA:1357:C:C2'	22:DA:1358:G:H5'	2.51	0.41
22:DA:1507:C:C5'	22:DA:1508:A:OP2	2.66	0.41
22:DA:1776:G:C2	22:DA:1789:A:N3	2.89	0.41
22:DA:2235:G:C5	22:DA:2236:U:C5	3.09	0.41
22:DA:2291:U:H6	22:DA:2291:U:O5'	2.04	0.41
22:DA:2338:C:H2'	22:DA:2338:C:H6	1.56	0.41
22:DA:2559:C:H2'	22:DA:2560:A:C8	2.56	0.41
22:DA:2602:A:OP1	22:DA:2602:A:H2'	2.21	0.41
22:DA:2627:G:H2'	22:DA:2628:C:C6	2.56	0.41
22:DA:2753:A:O2'	22:DA:2754:U:O4'	2.37	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:279:A:N6	22:DA:280:U:H3	2.19	0.41
22:DA:2876:G:O2'	22:DA:2877:G:O4'	2.33	0.41
22:DA:2900:A:N6	22:DA:2901:C:N4	2.68	0.41
22:DA:301:G:C8	22:DA:334:C:O2	2.74	0.41
22:DA:308:G:O6	22:DA:309:A:N6	2.53	0.41
22:DA:342:A:C2'	22:DA:343:C:O5'	2.69	0.41
22:DA:396:G:O2'	22:DA:397:U:H6	2.02	0.41
22:DA:404:A:H4'	22:DA:405:U:C5'	2.47	0.41
22:DA:406:G:H1	22:DA:421:C:H42	1.68	0.41
22:DA:36:G:C2	22:DA:445:C:C4	3.08	0.41
22:DA:533:G:O2'	22:DA:534:U:H5'	2.20	0.41
22:DA:595:C:O2	22:DA:663:G:C2	2.73	0.41
22:DA:605:G:N3	22:DA:657:U:O2'	2.51	0.41
22:DA:600:G:N2	22:DA:605:G:O3'	2.53	0.41
22:DA:635:C:OP2	33:DL:126:ARG:NH1	2.50	0.41
22:DA:672:C:C4'	22:DA:672:C:C6	3.03	0.41
22:DA:689:A:C2	22:DA:779:U:O4'	2.74	0.41
22:DA:788:A:H5''	22:DA:789:A:OP1	2.20	0.41
22:DA:999:U:H2'	22:DA:1000:A:C5'	2.47	0.41
23:DB:66:A:C2	23:DB:108:A:C2	3.09	0.41
24:DC:221:GLY:C	24:DC:223:ALA:N	2.74	0.41
24:DC:30:ALA:O	24:DC:32:LEU:N	2.54	0.41
22:DA:743:A:OP1	25:DD:135:GLY:HA2	2.20	0.41
25:DD:161:MET:O	25:DD:162:ALA:O	2.39	0.41
25:DD:110:THR:HG23	25:DD:171:THR:N	2.36	0.41
25:DD:34:VAL:CG2	25:DD:92:VAL:O	2.68	0.41
26:DE:69:ARG:O	26:DE:70:SER:CB	2.65	0.41
28:DG:115:GLN:HG2	28:DG:116:LEU:H	1.82	0.41
30:DI:105:LEU:HD11	30:DI:129:GLU:HG2	2.02	0.41
30:DI:54:ILE:HA	30:DI:55:PRO:HD2	1.89	0.41
32:DK:121:GLU:O	32:DK:122:VAL:C	2.58	0.41
22:DA:627:A:H3'	33:DL:78:ARG:HH12	1.86	0.41
33:DL:91:ASP:O	33:DL:92:LEU:C	2.58	0.41
34:DM:17:ASN:HB2	34:DM:38:ARG:HH12	1.86	0.41
34:DM:71:LYS:HA	34:DM:72:PRO:HD3	1.62	0.41
37:DP:92:ARG:O	37:DP:93:LYS:CB	2.67	0.41
38:DQ:88:GLU:CD	38:DQ:88:GLU:O	2.59	0.41
39:DR:33:VAL:O	39:DR:61:ALA:HB3	2.20	0.41
40:DS:36:LEU:O	40:DS:39:THR:OG1	2.39	0.41
41:DT:10:VAL:CG2	41:DT:11:LEU:H	2.23	0.41
41:DT:34:VAL:CG1	41:DT:34:VAL:O	2.61	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DX:19:HIS:O	45:DX:21:LEU:N	2.44	0.41
46:DY:57:LEU:CD1	46:DY:60:LYS:CE	2.98	0.41
1:AA:1160:G:N2	1:AA:1161:C:N1	2.69	0.41
1:AA:1284:C:C5	1:AA:1285:A:N7	2.89	0.41
1:AA:1316:G:C5'	1:AA:1317:C:OP2	2.68	0.41
1:AA:1355:G:HO2'	1:AA:1356:G:H5'	1.83	0.41
1:AA:1399:C:C2	1:AA:1401:G:C5	3.09	0.41
1:AA:1425:U:O2	1:AA:1476:A:C2	2.74	0.41
1:AA:16:A:H4'	5:AE:21:SER:H	1.86	0.41
1:AA:519:C:O2'	1:AA:520:A:C5'	2.69	0.41
1:AA:529:G:H4'	1:AA:533:A:C2	2.55	0.41
1:AA:596:A:C2	1:AA:597:G:C8	3.09	0.41
1:AA:914:A:C4	1:AA:915:A:N7	2.89	0.41
2:AB:53:LEU:HD12	2:AB:219:THR:HG21	2.02	0.41
3:AC:86:LEU:O	3:AC:89:VAL:HG23	2.20	0.41
5:AE:109:ALA:HB1	5:AE:136:VAL:HG12	2.03	0.41
6:AF:40:GLU:HB2	6:AF:42:TRP:NE1	2.36	0.41
6:AF:50:PRO:O	6:AF:51:ILE:C	2.59	0.41
7:AG:69:ARG:CG	7:AG:95:ARG:HG2	2.50	0.41
8:AH:87:ARG:O	8:AH:121:GLY:CA	2.67	0.41
13:AM:1:ALA:O	13:AM:9:PRO:HD2	2.21	0.41
17:AQ:64:ARG:HD3	17:AQ:64:ARG:H	1.85	0.41
21:AU:16:ARG:CG	21:AU:19:LYS:HG2	2.51	0.41
48:B0:24:VAL:O	48:B0:25:THR:HG23	2.21	0.41
33:BL:63:LYS:HA	51:B3:12:ARG:HG3	2.02	0.41
51:B3:21:PHE:N	51:B3:48:MET:HE1	2.35	0.41
22:BA:117:G:C6	22:BA:119:A:C6	3.09	0.41
22:BA:1247:A:C2	22:BA:1249:U:C6	3.08	0.41
22:BA:157:C:C2'	22:BA:158:U:O5'	2.68	0.41
22:BA:157:C:H3'	22:BA:157:C:C6	2.55	0.41
22:BA:1692:U:H2'	22:BA:1694:C:C5	2.56	0.41
22:BA:1731:G:C4	22:BA:1733:G:C8	3.09	0.41
22:BA:1999:C:O2	22:BA:2687:U:O2'	2.37	0.41
22:BA:2105:U:H2'	22:BA:2106:U:C6	2.55	0.41
22:BA:2370:G:H2'	22:BA:2371:G:O4'	2.21	0.41
22:BA:2684:U:C2'	22:BA:2685:G:O5'	2.68	0.41
22:BA:1759:A:H8	22:BA:2696:U:H1'	1.84	0.41
22:BA:2838:G:C6	22:BA:2839:G:C5	3.09	0.41
22:BA:286:U:H2'	22:BA:287:G:C8	2.55	0.41
22:BA:314:C:C2'	22:BA:315:G:H5'	2.50	0.41
22:BA:369:U:O2'	22:BA:370:G:OP2	2.38	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:627:A:C4	22:BA:637:A:N7	2.88	0.41
24:BC:77:VAL:CG2	24:BC:111:ALA:HA	2.47	0.41
24:BC:181:ARG:HH21	24:BC:181:ARG:HG2	1.86	0.41
24:BC:29:PHE:CZ	24:BC:31:PRO:HG2	2.53	0.41
25:BD:117:GLY:C	25:BD:118:PHE:CD1	2.94	0.41
33:BL:49:GLY:O	33:BL:50:PHE:C	2.59	0.41
34:BM:134:THR:HG23	34:BM:136:MET:H	1.86	0.41
36:BO:105:ALA:O	36:BO:107:ALA:N	2.51	0.41
39:BR:26:ASP:O	39:BR:27:ILE:C	2.59	0.41
39:BR:52:PRO:O	39:BR:53:PHE:CB	2.69	0.41
41:BT:1:MET:HB2	41:BT:1:MET:HE2	1.86	0.41
41:BT:30:ILE:HG12	41:BT:32:LEU:HD21	2.02	0.41
43:BV:51:GLN:NE2	43:BV:51:GLN:O	2.54	0.41
44:BW:25:PHE:C	44:BW:27:GLY:H	2.24	0.41
1:CA:1012:A:C5	1:CA:1013:G:N7	2.88	0.41
1:CA:1094:G:O2'	1:CA:1095:U:OP2	2.31	0.41
1:CA:1208:C:H2'	1:CA:1209:C:O4'	2.20	0.41
1:CA:1226:C:H5	13:CM:101:THR:C	2.24	0.41
1:CA:1251:A:H2'	1:CA:1369:C:O2'	2.21	0.41
1:CA:1382:C:O2'	1:CA:1383:C:H6	2.03	0.41
1:CA:1409:C:H6	1:CA:1409:C:O5'	2.03	0.41
1:CA:193:C:O2'	1:CA:194:C:H5'	2.20	0.41
1:CA:408:A:C6	1:CA:409:U:C4	3.09	0.41
1:CA:552:U:C2	1:CA:553:A:C8	3.09	0.41
1:CA:776:G:H2'	1:CA:777:A:OP2	2.21	0.41
1:CA:773:G:N2	1:CA:806:C:O2	2.42	0.41
1:CA:913:A:HO2'	1:CA:914:A:P	2.44	0.41
1:CA:945:G:C6	1:CA:946:A:N7	2.89	0.41
1:CA:976:G:O2'	1:CA:1362:A:N6	2.54	0.41
1:CA:978:A:O2'	1:CA:979:C:C5'	2.64	0.41
1:CA:996:A:O2'	1:CA:997:U:H6	1.96	0.41
2:CB:95:TRP:CZ3	2:CB:170:ILE:HG22	2.55	0.41
4:CD:36:ALA:CA	4:CD:41:GLY:HA3	2.51	0.41
6:CF:90:MET:HE3	18:CR:60:ARG:NH1	2.36	0.41
9:CI:51:LEU:C	9:CI:53:LEU:N	2.73	0.41
11:CK:19:VAL:CG1	11:CK:20:ALA:N	2.84	0.41
3:CC:17:TRP:HZ2	14:CN:94:GLY:O	2.03	0.41
17:CQ:51:GLU:HG2	17:CQ:51:GLU:H	1.59	0.41
48:D0:11:LYS:HD2	48:D0:11:LYS:HA	1.64	0.41
22:DA:2887:A:C1'	48:D0:39:ARG:HH22	2.25	0.41
49:D1:12:SER:HA	49:D1:48:TYR:CE1	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2359:C:H4'	51:D3:53:ASP:OD1	2.20	0.41
22:DA:117:G:C2	22:DA:119:A:N6	2.89	0.41
22:DA:1308:A:N6	22:DA:1309:G:C6	2.89	0.41
22:DA:121:G:C2	22:DA:131:A:C6	3.09	0.41
22:DA:1342:A:OP1	41:DT:59:ASN:HB3	2.21	0.41
22:DA:1417:C:O2'	22:DA:1418:G:C8	2.72	0.41
22:DA:1455:G:N3	22:DA:1456:G:C8	2.89	0.41
22:DA:1476:U:H3	22:DA:1515:A:H62	1.68	0.41
22:DA:1524:G:C2	22:DA:1525:A:C4	3.09	0.41
22:DA:729:G:HO2'	22:DA:1775:U:H1'	1.86	0.41
22:DA:183:C:N4	22:DA:184:C:C4	2.89	0.41
22:DA:1878:G:H2'	22:DA:1879:C:O4'	2.20	0.41
22:DA:193:U:H4'	22:DA:802:A:O2'	2.20	0.41
22:DA:2235:G:C4	22:DA:2236:U:C6	3.09	0.41
22:DA:2442:C:O2'	22:DA:2443:C:H5''	2.20	0.41
22:DA:2477:U:O4	52:D4:10:LEU:HD22	2.21	0.41
22:DA:2030:A:N3	22:DA:2499:C:H5''	2.34	0.41
22:DA:289:G:N1	22:DA:352:A:C6	2.89	0.41
22:DA:604:G:O2'	22:DA:605:G:C8	2.46	0.41
22:DA:607:U:H5	22:DA:619:G:C6	2.36	0.41
22:DA:749:A:N3	22:DA:750:A:C8	2.89	0.41
22:DA:943:A:C2'	22:DA:944:C:O5'	2.69	0.41
23:DB:11:C:C3'	23:DB:12:C:H5''	2.51	0.41
24:DC:221:GLY:HA2	24:DC:224:MET:CE	2.50	0.41
24:DC:80:LEU:CD1	24:DC:80:LEU:N	2.83	0.41
25:DD:61:THR:HB	25:DD:63:PRO:HD2	2.01	0.41
26:DE:187:VAL:HG12	26:DE:188:MET:N	2.36	0.41
27:DF:94:ARG:HA	27:DF:94:ARG:HD3	1.83	0.41
28:DG:83:THR:HB	28:DG:84:LYS:H	1.75	0.41
29:DH:41:LYS:C	29:DH:44:ILE:HG12	2.41	0.41
29:DH:8:LYS:HB3	29:DH:15:LEU:CD1	2.50	0.41
30:DI:97:VAL:HG12	30:DI:97:VAL:O	2.21	0.41
36:DO:63:LYS:HD3	36:DO:63:LYS:C	2.41	0.41
37:DP:46:VAL:HG12	37:DP:46:VAL:O	2.20	0.41
38:DQ:46:TYR:HA	38:DQ:49:ARG:NE	2.36	0.41
39:DR:33:VAL:CG2	39:DR:61:ALA:HB3	2.51	0.41
41:DT:24:MET:HA	41:DT:24:MET:HE3	2.01	0.41
44:DW:45:HIS:O	44:DW:46:ALA:CB	2.65	0.41
44:DW:82:GLU:O	44:DW:83:ALA:C	2.59	0.41
45:DX:29:LEU:CB	45:DX:30:PRO:CD	2.95	0.41
46:DY:39:GLN:O	46:DY:42:LEU:HB2	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DY:52:ARG:C	46:DY:54:LYS:N	2.74	0.41
1:AA:1155:A:C2'	1:AA:1156:G:H5'	2.51	0.41
1:AA:1197:A:C5'	1:AA:1197:A:H8	2.33	0.41
1:AA:1055:A:C5	1:AA:1206:G:C2	3.08	0.41
1:AA:1255:G:N1	1:AA:1279:G:C8	2.89	0.41
1:AA:1319:A:C6	1:AA:1323:G:C4	3.08	0.41
1:AA:1368:A:C2'	1:AA:1369:C:H5'	2.50	0.41
1:AA:352:C:C6	1:AA:352:C:C5'	3.02	0.41
1:AA:359:G:H2'	1:AA:360:G:O5'	2.21	0.41
1:AA:384:G:C5	1:AA:385:C:C4	3.09	0.41
1:AA:481:G:H3'	1:AA:481:G:H8	1.85	0.41
1:AA:544:G:C6	1:AA:545:C:C4	3.09	0.41
1:AA:57:G:C6	1:AA:58:C:N3	2.89	0.41
1:AA:66:A:H5''	1:AA:67:C:OP2	2.21	0.41
1:AA:868:C:C2'	1:AA:869:G:H5'	2.50	0.41
1:AA:891:U:H3'	56:AA:1764:HOH:O	2.20	0.41
1:AA:941:G:C2'	1:AA:942:G:O5'	2.68	0.41
1:AA:949:A:C2'	1:AA:950:U:C5'	2.98	0.41
2:AB:184:ALA:HB3	2:AB:195:VAL:HG11	2.03	0.41
3:AC:53:ARG:O	3:AC:68:HIS:HB2	2.21	0.41
3:AC:59:PRO:O	3:AC:60:ALA:O	2.38	0.41
4:AD:57:LYS:C	4:AD:57:LYS:HD2	2.41	0.41
5:AE:94:PHE:CE1	5:AE:96:GLN:HG2	2.56	0.41
7:AG:80:GLY:C	7:AG:82:SER:N	2.74	0.41
8:AH:1:SER:C	8:AH:3:GLN:H	2.24	0.41
11:AK:109:ILE:O	21:AU:5:VAL:HG23	2.20	0.41
14:AN:79:SER:O	14:AN:80:ARG:C	2.59	0.41
16:AP:20:VAL:CG2	16:AP:21:VAL:N	2.83	0.41
1:AA:132:C:H5''	20:AT:68:LYS:HD2	2.01	0.41
49:B1:7:LYS:CA	49:B1:23:THR:HG22	2.41	0.41
51:B3:25:HIS:HB3	51:B3:43:LEU:CD2	2.51	0.41
22:BA:1057:A:C2	22:BA:1082:U:N3	2.88	0.41
22:BA:1260:A:C6	22:BA:1261:C:C4	3.08	0.41
22:BA:1384:A:H1'	22:BA:1405:U:O4'	2.20	0.41
22:BA:1413:A:H2'	22:BA:1414:C:O4'	2.20	0.41
22:BA:1460:U:C3'	22:BA:1461:C:C5'	2.99	0.41
22:BA:1509:A:O2'	22:BA:1510:G:H5'	2.21	0.41
22:BA:1565:C:O2'	22:BA:1566:A:P	2.79	0.41
22:BA:2068:U:C4'	22:BA:2068:U:C6	3.04	0.41
22:BA:2138:G:C5	22:BA:2154:A:C6	3.08	0.41
22:BA:2263:C:H2'	22:BA:2264:C:C6	2.55	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2397:G:C2	22:BA:2420:C:C2	3.09	0.41
22:BA:9:G:H2'	22:BA:2629:U:O4	2.20	0.41
22:BA:2808:G:N1	22:BA:2891:U:C5	2.88	0.41
22:BA:522:A:C6	22:BA:523:C:C4	3.09	0.41
22:BA:976:G:C2	22:BA:977:G:C8	3.08	0.41
23:BB:46:A:C4	23:BB:47:C:C5	3.08	0.41
24:BC:104:LEU:HD13	24:BC:104:LEU:HA	1.76	0.41
22:BA:1792:G:OP1	24:BC:203:VAL:O	2.39	0.41
22:BA:784:G:H5'	24:BC:225:ASN:OD1	2.21	0.41
25:BD:12:THR:HG23	25:BD:13:ARG:H	1.79	0.41
25:BD:149:ASN:CG	25:BD:150:GLN:N	2.71	0.41
27:BF:100:GLU:HG2	27:BF:104:THR:HG1	1.79	0.41
28:BG:96:ALA:HB3	28:BG:103:ASN:HB2	2.02	0.41
28:BG:142:GLN:O	28:BG:145:ALA:HB3	2.21	0.41
28:BG:29:ASN:O	28:BG:78:VAL:HG12	2.21	0.41
29:BH:9:VAL:O	29:BH:10:ALA:O	2.39	0.41
31:BJ:13:ARG:HD3	31:BJ:13:ARG:HA	1.93	0.41
36:BO:15:ARG:CG	36:BO:15:ARG:HH11	2.20	0.41
37:BP:17:PRO:HD2	37:BP:83:ILE:HG23	2.02	0.41
37:BP:67:GLU:CG	37:BP:68:GLY:H	2.24	0.41
38:BQ:4:LYS:CE	38:BQ:8:ILE:HG23	2.51	0.41
42:BU:64:ILE:CG2	42:BU:64:ILE:O	2.69	0.41
1:CA:113:G:H1'	1:CA:353:A:O2'	2.21	0.41
1:CA:1239:A:H1'	1:CA:1241:G:C5	2.55	0.41
1:CA:1284:C:OP2	1:CA:1285:A:H3'	2.20	0.41
1:CA:1335:U:H5''	1:CA:1336:C:H5'	2.03	0.41
1:CA:1368:A:N7	9:CI:113:LYS:HD3	2.36	0.41
1:CA:155:A:C6	1:CA:156:C:C4	3.09	0.41
1:CA:27:G:C5	1:CA:557:G:C2	3.09	0.41
1:CA:317:U:H2'	1:CA:318:G:C8	2.56	0.41
1:CA:321:A:N7	1:CA:328:C:C2	2.89	0.41
1:CA:368:U:H6	1:CA:368:U:H2'	1.63	0.41
1:CA:371:A:O2'	1:CA:372:C:C5'	2.49	0.41
1:CA:393:A:H2'	1:CA:394:G:O4'	2.20	0.41
1:CA:861:G:C5	1:CA:862:C:C5	3.09	0.41
2:CB:151:LYS:CG	2:CB:152:ASP:N	2.83	0.41
2:CB:169:HIS:O	2:CB:173:LYS:HE3	2.21	0.41
2:CB:202:ASN:HB3	2:CB:203:ASP:H	1.66	0.41
2:CB:206:ILE:C	2:CB:208:ALA:H	2.24	0.41
3:CC:124:GLU:CD	3:CC:124:GLU:N	2.74	0.41
4:CD:145:ARG:HG3	4:CD:146:GLU:H	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:CG:4:ARG:CZ	7:CG:6:ILE:CG2	2.99	0.41
8:CH:57:GLU:CG	8:CH:58:LEU:H	2.33	0.41
11:CK:69:CYS:O	11:CK:73:VAL:HG21	2.21	0.41
13:CM:16:ILE:O	13:CM:16:ILE:CG2	2.68	0.41
17:CQ:45:VAL:HG12	17:CQ:74:LEU:N	2.36	0.41
19:CS:38:THR:HB	19:CS:69:LYS:CE	2.51	0.41
21:CU:14:ALA:O	21:CU:15:LEU:O	2.38	0.41
22:DA:100:U:O2'	22:DA:101:A:C4	2.71	0.41
22:DA:1055:G:H2'	22:DA:1056:G:H5'	2.01	0.41
22:DA:1216:G:H2'	22:DA:1217:U:H5'	2.03	0.41
22:DA:511:U:C5'	22:DA:1235:G:H4'	2.49	0.41
22:DA:1273:U:H4'	22:DA:1275:A:P	2.61	0.41
22:DA:1292:G:C6	22:DA:1293:C:N4	2.89	0.41
22:DA:1286:A:C6	22:DA:1329:U:C2	3.09	0.41
22:DA:1342:A:C5	22:DA:1397:U:C6	3.09	0.41
22:DA:1429:G:N3	22:DA:1430:G:C8	2.88	0.41
22:DA:158:U:O2	22:DA:158:U:H2'	2.20	0.41
22:DA:1613:G:H3'	22:DA:1614:A:C5'	2.51	0.41
22:DA:1663:G:O2'	22:DA:1664:A:H8	1.95	0.41
22:DA:1665:A:H2'	22:DA:1666:G:C5'	2.51	0.41
22:DA:1739:A:O2'	22:DA:1740:G:O5'	2.39	0.41
22:DA:1856:U:O4	22:DA:1857:G:C2	2.73	0.41
22:DA:1867:G:H2'	22:DA:1868:C:C6	2.56	0.41
22:DA:188:G:C2'	22:DA:189:G:C5'	2.95	0.41
22:DA:1993:U:H4'	25:DD:133:THR:HG21	2.02	0.41
22:DA:2103:C:O2'	22:DA:2104:C:H5'	2.20	0.41
22:DA:2151:U:C2	22:DA:2152:G:C8	3.09	0.41
22:DA:21:A:H2'	22:DA:22:C:C6	2.56	0.41
22:DA:197:A:N7	22:DA:2430:A:C4	2.88	0.41
22:DA:2454:G:C2	22:DA:2499:C:C2	3.09	0.41
22:DA:2508:G:H3'	22:DA:2508:G:C8	2.55	0.41
22:DA:2731:G:H5''	22:DA:2732:G:OP2	2.21	0.41
22:DA:527:C:C4	22:DA:2779:U:C6	3.09	0.41
22:DA:277:G:O2'	22:DA:278:A:C4	2.74	0.41
22:DA:28:A:C6	22:DA:29:U:C2	3.09	0.41
22:DA:438:G:H2'	22:DA:439:A:O4'	2.21	0.41
22:DA:442:G:C6	22:DA:444:C:N4	2.88	0.41
22:DA:475:C:C5	22:DA:476:G:C6	3.09	0.41
22:DA:584:C:H2'	22:DA:585:G:H8	1.85	0.41
22:DA:77:G:OP1	46:DY:52:ARG:CD	2.69	0.41
22:DA:818:G:H2'	22:DA:819:A:H5''	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:901:C:H2'	22:DA:902:C:H6	1.86	0.41
22:DA:92:U:C2'	22:DA:93:G:O4'	2.69	0.41
22:DA:952:G:H1	22:DA:965:C:H42	1.68	0.41
23:DB:24:G:C8	23:DB:24:G:OP2	2.74	0.41
25:DD:125:TRP:CE3	25:DD:160:LYS:HD3	2.56	0.41
26:DE:129:PRO:HG3	26:DE:159:LEU:HD23	2.03	0.41
26:DE:117:ARG:HG2	26:DE:184:ASP:O	2.21	0.41
27:DF:45:ASP:C	27:DF:47:LYS:N	2.73	0.41
27:DF:59:ILE:HG23	27:DF:137:PHE:CE1	2.51	0.41
28:DG:162:ARG:NH1	28:DG:168:VAL:HG11	2.36	0.41
28:DG:22:VAL:HG13	28:DG:36:LEU:HD12	2.03	0.41
22:DA:1080:A:C5'	30:DI:133:ARG:HH21	2.30	0.41
31:DJ:25:LEU:CB	31:DJ:62:VAL:CG2	2.99	0.41
35:DN:14:SER:O	35:DN:17:ARG:N	2.54	0.41
36:DO:80:GLU:O	36:DO:84:GLU:N	2.54	0.41
39:DR:49:ILE:HD13	39:DR:53:PHE:H	1.86	0.41
41:DT:27:SER:O	41:DT:28:ASN:CB	2.69	0.41
42:DU:16:LYS:HA	42:DU:16:LYS:HD3	1.78	0.41
22:DA:855:G:N3	44:DW:23:LYS:HG2	2.36	0.41
1:AA:1103:C:C6	1:AA:1103:C:C3'	3.04	0.41
1:AA:1157:A:H4'	1:AA:1158:C:H5''	2.03	0.41
1:AA:1227:A:N3	1:AA:1227:A:C2'	2.70	0.41
1:AA:1308:U:OP1	13:AM:95:PRO:HA	2.20	0.41
1:AA:179:A:H2'	1:AA:180:U:H5'	2.03	0.41
1:AA:205:A:C8	1:AA:206:C:C5	3.09	0.41
1:AA:263:A:H2'	1:AA:264:C:H5	1.74	0.41
1:AA:368:U:O2'	1:AA:369:G:P	2.78	0.41
1:AA:369:G:C5	1:AA:393:A:C2	3.09	0.41
1:AA:432:A:H2'	1:AA:433:G:H5'	2.01	0.41
1:AA:453:G:C6	1:AA:454:G:C6	3.09	0.41
1:AA:551:U:C6	1:AA:551:U:C3'	3.03	0.41
1:AA:849:G:N1	1:AA:850:U:C2	2.89	0.41
2:AB:81:ASP:OD1	2:AB:82:ALA:N	2.53	0.41
2:AB:86:CYS:HB2	2:AB:88:GLN:CD	2.41	0.41
3:AC:55:VAL:HG12	3:AC:56:ILE:N	2.36	0.41
1:AA:620:C:C5	4:AD:131:ILE:HG12	2.56	0.41
6:AF:40:GLU:CB	6:AF:42:TRP:HE1	2.32	0.41
6:AF:55:HIS:ND1	6:AF:55:HIS:N	2.69	0.41
5:AE:156:ARG:HH22	8:AH:113:ARG:HH12	1.68	0.41
9:AI:90:ASP:C	9:AI:92:SER:H	2.23	0.41
9:AI:90:ASP:OD1	9:AI:92:SER:HB3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AJ:35:GLN:HB3	10:AJ:36:VAL:H	1.62	0.41
13:AM:10:ASP:O	13:AM:11:HIS:CB	2.68	0.41
14:AN:81:ILE:O	14:AN:85:GLU:HG2	2.20	0.41
14:AN:86:ALA:O	14:AN:91:GLU:CB	2.63	0.41
15:AO:26:VAL:HG12	15:AO:30:LEU:HD11	1.94	0.41
17:AQ:74:LEU:CD1	17:AQ:74:LEU:C	2.89	0.41
19:AS:4:LEU:O	19:AS:5:LYS:CB	2.69	0.41
19:AS:55:GLN:NE2	19:AS:56:HIS:N	2.69	0.41
49:B1:24:LYS:HE3	49:B1:26:LYS:HA	2.03	0.41
52:B4:15:LYS:HE3	52:B4:15:LYS:HB3	1.90	0.41
22:BA:1011:G:H5''	38:BQ:76:SER:HG	1.86	0.41
22:BA:1063:G:P	30:BI:76:ALA:CB	2.96	0.41
22:BA:1090:A:C2	22:BA:1091:G:C8	3.09	0.41
22:BA:1125:G:O5'	22:BA:1125:G:H8	2.04	0.41
22:BA:1179:G:C6	22:BA:1180:U:C1'	2.81	0.41
22:BA:1417:C:O2'	22:BA:1418:G:C5'	2.60	0.41
22:BA:1711:A:H2'	22:BA:1712:U:C6	2.55	0.41
22:BA:1858:A:N6	22:BA:1884:G:H1'	2.36	0.41
22:BA:1909:C:C2'	22:BA:1910:G:H5'	2.51	0.41
22:BA:1839:G:C6	22:BA:1927:A:C5	3.08	0.41
22:BA:2027:G:H2'	22:BA:2028:U:H6	1.86	0.41
22:BA:2063:C:O2	22:BA:2451:A:C2	2.74	0.41
22:BA:2293:G:H2'	22:BA:2294:G:O4'	2.21	0.41
22:BA:2296:U:H4'	22:BA:2297:A:OP1	2.21	0.41
22:BA:2332:C:H5''	22:BA:2333:A:P	2.61	0.41
22:BA:2471:A:C6	22:BA:2472:G:C4	3.08	0.41
22:BA:2735:G:C6	22:BA:2736:A:C5	3.08	0.41
22:BA:2797:U:O2'	22:BA:2798:U:P	2.79	0.41
22:BA:372:G:O4'	45:BX:60:LYS:CE	2.60	0.41
22:BA:563:A:C4	22:BA:2018:G:C2	3.09	0.41
26:BE:43:THR:O	26:BE:43:THR:OG1	2.39	0.41
22:BA:37:C:O2'	26:BE:45:ALA:CB	2.69	0.41
28:BG:84:LYS:HE2	28:BG:84:LYS:H	1.81	0.41
28:BG:96:ALA:HB3	28:BG:103:ASN:CB	2.51	0.41
30:BI:130:GLY:HA2	30:BI:133:ARG:HB3	2.01	0.41
30:BI:50:LYS:HE2	30:BI:50:LYS:HB2	1.88	0.41
22:BA:2639:A:O3'	31:BJ:96:ARG:NH1	2.54	0.41
32:BK:40:LYS:NZ	32:BK:89:ASN:HD21	2.19	0.41
22:BA:1287:A:C5'	35:BN:103:ARG:HD2	2.37	0.41
35:BN:70:THR:O	35:BN:71:ARG:C	2.58	0.41
39:BR:20:VAL:HG21	39:BR:22:LEU:HD21	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:BR:27:ILE:HG12	39:BR:27:ILE:H	1.73	0.41
41:BT:54:GLU:HB3	41:BT:88:LYS:HG3	2.02	0.41
45:BX:40:GLU:C	45:BX:43:LYS:H	2.23	0.41
1:CA:1115:U:C3'	1:CA:1115:U:C6	3.04	0.41
1:CA:1527:U:N3	1:CA:1528:U:C5	2.89	0.41
1:CA:182:A:O2'	1:CA:183:C:C2'	2.68	0.41
1:CA:246:A:N6	1:CA:281:G:N3	2.57	0.41
1:CA:332:G:O2'	1:CA:333:U:H5'	2.21	0.41
1:CA:373:A:N3	1:CA:482:A:C6	2.89	0.41
1:CA:374:A:OP1	1:CA:452:A:N1	2.54	0.41
1:CA:455:G:O6	1:CA:456:A:N6	2.54	0.41
1:CA:580:C:H2'	1:CA:581:G:O4'	2.21	0.41
1:CA:597:G:N2	1:CA:644:U:C2	2.89	0.41
1:CA:611:C:C5	1:CA:612:C:C5	3.09	0.41
1:CA:733:G:O2'	1:CA:734:G:C5'	2.68	0.41
1:CA:86:G:N2	1:CA:87:C:C4	2.89	0.41
1:CA:940:C:H3'	1:CA:940:C:C6	2.56	0.41
1:CA:981:U:O4	1:CA:1222:G:O6	2.39	0.41
1:CA:1206:G:O2'	3:CC:192:TYR:HA	2.21	0.41
4:CD:125:ASN:HA	4:CD:125:ASN:HD22	1.55	0.41
4:CD:195:ASN:O	4:CD:198:LEU:N	2.54	0.41
9:CI:112:ARG:O	9:CI:114:LYS:HG3	2.21	0.41
1:CA:1348:U:O3'	9:CI:121:ARG:HB2	2.21	0.41
9:CI:14:SER:HA	9:CI:68:GLY:O	2.21	0.41
9:CI:51:LEU:CD1	9:CI:82:ILE:CG2	2.99	0.41
9:CI:52:GLU:OE2	9:CI:52:GLU:HA	2.20	0.41
9:CI:85:ALA:HA	9:CI:88:GLU:OE1	2.20	0.41
14:CN:100:TRP:CD1	14:CN:100:TRP:C	2.93	0.41
14:CN:31:SER:OG	14:CN:45:LEU:CD1	2.69	0.41
16:CP:2:VAL:CG1	16:CP:65:ALA:HB2	2.51	0.41
18:CR:63:TYR:CE2	18:CR:69:TYR:OH	2.73	0.41
49:D1:12:SER:CA	49:D1:48:TYR:CE1	3.03	0.41
51:D3:38:LYS:O	51:D3:41:ARG:N	2.54	0.41
22:DA:1006:C:C2	22:DA:1138:G:C2	3.08	0.41
22:DA:1129:A:C4	22:DA:2570:G:H1'	2.56	0.41
22:DA:1297:C:C3'	22:DA:1297:C:C6	3.04	0.41
22:DA:1362:C:N4	22:DA:1363:C:C5	2.89	0.41
22:DA:1465:G:C5	22:DA:1466:U:C4	3.08	0.41
22:DA:1467:U:C2'	22:DA:1468:U:H5'	2.45	0.41
22:DA:1606:C:O2'	22:DA:1607:C:P	2.79	0.41
22:DA:1666:G:O3'	32:DK:6:THR:HA	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:1680:U:O2'	22:DA:1763:G:N7	2.42	0.41
22:DA:1967:C:C6	22:DA:1967:C:C5'	2.92	0.41
22:DA:1999:C:OP1	22:DA:2724:U:H5'	2.20	0.41
22:DA:2041:U:H2'	22:DA:2042:A:C8	2.55	0.41
22:DA:2338:C:O2'	22:DA:2339:C:P	2.79	0.41
22:DA:2290:G:N1	22:DA:2343:U:O2	2.53	0.41
22:DA:2373:G:C6	22:DA:2381:A:N1	2.89	0.41
22:DA:2492:U:C2'	22:DA:2493:U:H6	2.26	0.41
22:DA:2741:A:C8	22:DA:2742:G:C8	3.09	0.41
22:DA:2756:U:C4'	22:DA:2757:A:O5'	2.65	0.41
22:DA:351:C:N4	22:DA:352:A:N6	2.69	0.41
22:DA:383:C:C2'	22:DA:384:A:OP1	2.69	0.41
22:DA:447:A:C2	22:DA:454:A:C8	3.09	0.41
22:DA:16:C:N4	22:DA:524:G:H1	2.19	0.41
22:DA:559:G:H8	22:DA:559:G:O5'	2.03	0.41
22:DA:771:G:H2'	22:DA:772:C:C5'	2.51	0.41
22:DA:669:G:C2	22:DA:801:G:C6	3.09	0.41
23:DB:18:G:C4	23:DB:67:G:N1	2.89	0.41
24:DC:124:LYS:NZ	24:DC:124:LYS:CB	2.84	0.41
22:DA:1799:G:OP1	24:DC:257:ARG:NH1	2.54	0.41
26:DE:199:MET:HE2	26:DE:200:LEU:CD2	2.51	0.41
26:DE:88:ARG:HB3	26:DE:89:PRO:CD	2.50	0.41
28:DG:130:ILE:CG2	28:DG:132:LEU:HD11	2.46	0.41
28:DG:143:VAL:HA	28:DG:146:ASP:OD2	2.21	0.41
22:DA:558:U:OP1	31:DJ:113:PRO:HB2	2.21	0.41
31:DJ:17:VAL:CG1	31:DJ:18:VAL:N	2.83	0.41
33:DL:93:ASN:O	33:DL:94:THR:HB	2.21	0.41
35:DN:82:GLU:O	35:DN:86:ARG:HG3	2.21	0.41
36:DO:62:LEU:C	36:DO:62:LEU:HD13	2.41	0.41
22:DA:995:C:O2'	38:DQ:93:ILE:HD12	2.21	0.41
39:DR:39:LEU:C	39:DR:49:ILE:HG23	2.41	0.41
40:DS:95:ARG:HG3	40:DS:97:LEU:HD22	2.02	0.41
41:DT:28:ASN:O	41:DT:29:THR:HG23	2.20	0.41
43:DV:44:HIS:CE1	43:DV:85:LYS:HD3	2.56	0.41
43:DV:73:LYS:HB3	43:DV:92:VAL:CG2	2.51	0.41
47:DZ:6:ILE:HD11	47:DZ:47:ILE:HD11	1.97	0.41
1:AA:1078:U:C3'	1:AA:1078:U:C6	3.04	0.41
1:AA:1078:U:C5	1:AA:1079:G:N7	2.89	0.41
1:AA:1203:C:O2'	1:AA:1204:A:O4'	2.33	0.41
1:AA:1256:A:N9	1:AA:1258:G:C6	2.89	0.41
1:AA:1299:A:O2'	1:AA:1300:G:H4'	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1322:C:O2'	1:AA:1323:G:P	2.79	0.41
1:AA:1343:G:C5	1:AA:1344:C:C4	3.09	0.41
1:AA:1460:C:C2'	1:AA:1461:G:O5'	2.69	0.41
1:AA:1473:G:C2'	1:AA:1474:U:C5'	2.99	0.41
1:AA:256:U:O2'	1:AA:257:G:H5'	2.21	0.41
1:AA:284:C:H2'	1:AA:285:C:C6	2.56	0.41
1:AA:327:A:HO2'	1:AA:329:A:H5''	1.83	0.41
1:AA:369:G:OP2	1:AA:388:G:N1	2.41	0.41
1:AA:430:A:C4	1:AA:431:A:H8	2.37	0.41
1:AA:506:G:C5	1:AA:507:C:C4	3.09	0.41
1:AA:829:G:O2'	1:AA:830:G:H5'	2.20	0.41
1:AA:879:C:C6	1:AA:879:C:C3'	3.04	0.41
1:AA:890:G:O2'	1:AA:906:A:N6	2.54	0.41
4:AD:31:CYS:SG	4:AD:32:LYS:N	2.94	0.41
5:AE:148:SER:HA	5:AE:149:PRO:HD2	1.78	0.41
8:AH:125:ILE:HG22	8:AH:126:CYS:N	2.36	0.41
8:AH:20:ASN:HA	8:AH:64:TYR:CE2	2.56	0.41
8:AH:85:TYR:C	8:AH:86:LYS:HD2	2.42	0.41
10:AJ:14:ASP:CB	10:AJ:17:LEU:CB	2.84	0.41
1:AA:538:G:OP2	12:AL:111:GLN:HB2	2.21	0.41
12:AL:1:ALA:HB3	12:AL:5:GLN:OE1	2.21	0.41
14:AN:15:LEU:HA	14:AN:18:LYS:CD	2.51	0.41
15:AO:41:HIS:HD2	15:AO:42:PHE:CD2	2.38	0.41
17:AQ:22:VAL:CG2	17:AQ:45:VAL:HG21	2.51	0.41
18:AR:35:SER:HA	18:AR:71:ASP:CB	2.37	0.41
18:AR:42:ARG:O	18:AR:43:ILE:HD13	2.20	0.41
20:AT:43:LYS:HE2	20:AT:86:ALA:HB2	2.03	0.41
20:AT:84:LYS:HD2	20:AT:84:LYS:O	2.21	0.41
21:AU:44:ARG:HD2	21:AU:44:ARG:N	2.35	0.41
33:BL:57:LEU:CD2	51:B3:53:ASP:HB3	2.51	0.41
22:BA:1056:G:O2'	22:BA:1086:A:H8	2.03	0.41
22:BA:1241:A:O2'	22:BA:1242:U:H5'	2.21	0.41
22:BA:142:A:H2'	22:BA:143:C:C6	2.56	0.41
22:BA:1438:U:HO2'	22:BA:1439:A:H5'	1.85	0.41
22:BA:1507:C:N3	22:BA:1508:A:C2	2.89	0.41
22:BA:1609:A:O2'	22:BA:1610:A:C5'	2.66	0.41
22:BA:1624:U:H2'	22:BA:1625:C:C6	2.46	0.41
22:BA:1647:U:OP2	22:BA:1647:U:H3'	2.20	0.41
22:BA:1840:G:C6	22:BA:1841:U:C4	3.09	0.41
22:BA:1930:G:N2	22:BA:1968:G:H2'	2.36	0.41
22:BA:2140:G:C5	22:BA:2152:G:N2	2.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:221:A:C8	22:BA:266:G:O6	2.73	0.41
22:BA:238:C:C6	22:BA:238:C:C3'	3.03	0.41
22:BA:2489:U:C4	22:BA:2490:G:C6	3.09	0.41
22:BA:2728:U:C2'	22:BA:2729:G:H5''	2.51	0.41
22:BA:302:C:HO2'	22:BA:303:G:H8	1.68	0.41
22:BA:306:U:H5''	22:BA:307:G:OP2	2.21	0.41
22:BA:346:A:C2	22:BA:347:A:C1'	3.02	0.41
22:BA:388:G:N7	22:BA:390:U:H2'	2.35	0.41
22:BA:543:G:C2	22:BA:544:C:H1'	2.55	0.41
22:BA:58:G:N2	22:BA:70:G:C5	2.89	0.41
22:BA:870:U:C4	22:BA:871:U:C5	3.09	0.41
23:BB:20:G:C4	23:BB:64:G:N2	2.89	0.41
24:BC:66:PHE:O	24:BC:150:GLY:O	2.39	0.41
26:BE:60:TRP:HD1	26:BE:61:ARG:O	2.04	0.41
26:BE:6:LYS:HG2	26:BE:7:ASP:H	1.84	0.41
27:BF:43:ILE:CG2	27:BF:82:TYR:HE1	2.27	0.41
22:BA:1080:A:C4'	30:BI:126:ARG:HG3	2.51	0.41
31:BJ:130:HIS:HD2	31:BJ:132:HIS:N	2.14	0.41
31:BJ:15:TRP:HA	31:BJ:53:TYR:O	2.21	0.41
31:BJ:38:GLY:C	31:BJ:40:HIS:H	2.24	0.41
32:BK:60:ALA:HB1	32:BK:84:CYS:HB2	2.03	0.41
34:BM:42:THR:OG1	34:BM:45:GLN:CG	2.66	0.41
37:BP:24:THR:HB	37:BP:87:ARG:HB3	2.03	0.41
37:BP:50:ARG:CG	37:BP:56:SER:HA	2.51	0.41
41:BT:22:THR:C	41:BT:25:GLU:H	2.21	0.41
44:BW:37:VAL:CG1	44:BW:38:ARG:H	2.30	0.41
45:BX:63:ILE:HG13	45:BX:63:ILE:H	1.49	0.41
46:BY:7:ARG:H	46:BY:60:LYS:NZ	2.19	0.41
1:CA:1161:C:HO2'	1:CA:1162:C:C5'	2.34	0.41
1:CA:1157:A:H1'	1:CA:1181:G:C2	2.56	0.41
1:CA:124:C:H2'	1:CA:125:U:O5'	2.21	0.41
1:CA:1266:G:C3'	1:CA:1266:G:C8	3.05	0.41
1:CA:1309:G:H2'	1:CA:1310:G:C8	2.55	0.41
1:CA:1513:A:O2'	1:CA:1514:G:H5'	2.20	0.41
1:CA:224:U:O2	1:CA:224:U:C2'	2.69	0.41
1:CA:249:U:O2	1:CA:249:U:H2'	2.21	0.41
1:CA:355:C:H2'	1:CA:356:A:O4'	2.21	0.41
1:CA:391:G:C6	1:CA:392:C:N3	2.89	0.41
1:CA:704:A:C2	1:CA:705:G:C4	3.09	0.41
1:CA:814:A:C8	1:CA:816:A:C8	3.09	0.41
1:CA:821:G:O2'	1:CA:822:U:C5'	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:951:G:O2'	1:CA:952:U:C5'	2.65	0.41
2:CB:10:LYS:C	2:CB:12:GLY:H	2.25	0.41
4:CD:48:SER:O	4:CD:49:ASP:C	2.58	0.41
4:CD:57:LYS:HE3	4:CD:61:ARG:HD3	2.02	0.41
4:CD:89:LEU:HD21	4:CD:199:ILE:CD1	2.48	0.41
5:CE:19:ARG:HG3	5:CE:32:PHE:CD1	2.56	0.41
6:CF:72:ASP:O	6:CF:75:GLU:N	2.53	0.41
10:CJ:17:LEU:HD23	10:CJ:96:VAL:CG1	2.49	0.41
11:CK:86:LYS:HA	11:CK:113:THR:OG1	2.21	0.41
14:CN:80:ARG:HG2	14:CN:81:ILE:H	1.86	0.41
17:CQ:29:LYS:N	17:CQ:36:PHE:CE1	2.89	0.41
17:CQ:66:LEU:O	17:CQ:67:SER:HB3	2.21	0.41
17:CQ:73:THR:HG23	17:CQ:73:THR:O	2.21	0.41
6:CF:59:TYR:CE2	18:CR:66:LEU:CD2	3.02	0.41
20:CT:11:ILE:H	20:CT:11:ILE:HG13	1.48	0.41
21:CU:11:PHE:O	21:CU:11:PHE:HD1	2.04	0.41
22:DA:682:G:H5'	50:D2:26:ASN:OD1	2.21	0.41
52:D4:3:VAL:HG23	52:D4:4:ARG:N	2.36	0.41
22:DA:1244:A:O2'	26:DE:29:HIS:HE1	2.04	0.41
22:DA:1361:G:C6	22:DA:1362:C:C4	3.09	0.41
22:DA:1338:G:O2'	22:DA:1392:A:N6	2.54	0.41
22:DA:1474:U:H3'	22:DA:1474:U:H6	1.86	0.41
22:DA:1435:G:C2	22:DA:1558:C:N4	2.88	0.41
22:DA:1587:G:H21	22:DA:1588:G:H1'	1.86	0.41
22:DA:1324:G:O2'	22:DA:1616:A:N1	2.54	0.41
22:DA:170:U:C6	22:DA:171:U:C5	3.03	0.41
22:DA:170:U:O5'	22:DA:170:U:H6	2.04	0.41
22:DA:1733:G:C2	22:DA:1734:G:C8	3.09	0.41
22:DA:1785:A:N3	22:DA:1787:A:C8	2.89	0.41
22:DA:1941:C:H2'	22:DA:1942:C:C6	2.56	0.41
22:DA:1943:U:H4'	22:DA:1944:U:O5'	2.21	0.41
22:DA:2048:G:H2'	22:DA:2049:G:O5'	2.21	0.41
22:DA:2232:C:P	45:DX:26:ARG:HH12	2.43	0.41
22:DA:2321:U:H3'	22:DA:2321:U:O2	2.20	0.41
22:DA:2345:G:C4	22:DA:2381:A:C2	3.09	0.41
22:DA:2392:A:OP1	51:D3:30:HIS:HB2	2.21	0.41
22:DA:2397:G:C2	22:DA:2420:C:C2	3.09	0.41
22:DA:1051:G:H5'	22:DA:2752:C:H1'	2.03	0.41
22:DA:324:A:C2	22:DA:325:G:C1'	2.96	0.41
22:DA:324:A:N3	22:DA:325:G:C1'	2.82	0.41
22:DA:404:A:N1	22:DA:421:C:N3	2.69	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:510:C:O2'	22:DA:511:U:C5'	2.68	0.41
22:DA:543:G:N2	22:DA:551:G:C5	2.89	0.41
22:DA:704:G:H1'	22:DA:727:A:H61	1.85	0.41
22:DA:704:G:N3	22:DA:726:G:C2	2.89	0.41
22:DA:718:A:H3'	22:DA:719:C:C5'	2.51	0.41
22:DA:808:G:O2'	22:DA:1254:A:H4'	2.21	0.41
22:DA:569:U:C5'	22:DA:821:A:C2	3.04	0.41
22:DA:88:G:C6	22:DA:89:A:N7	2.89	0.41
22:DA:971:G:OP1	22:DA:989:G:N1	2.53	0.41
22:DA:986:C:C4	22:DA:987:C:C5	3.09	0.41
23:DB:66:A:OP2	23:DB:108:A:N6	2.54	0.41
24:DC:212:TRP:HD1	24:DC:212:TRP:C	2.24	0.41
26:DE:147:LEU:C	26:DE:147:LEU:HD13	2.41	0.41
27:DF:122:ASP:CB	27:DF:126:ASN:CB	2.94	0.41
28:DG:162:ARG:NH1	28:DG:168:VAL:HG21	2.35	0.41
30:DI:82:ALA:HB3	30:DI:100:ILE:HD12	2.02	0.41
32:DK:27:GLY:N	32:DK:30:ARG:HD3	2.36	0.41
32:DK:8:LEU:C	32:DK:9:ASN:HD22	2.24	0.41
22:DA:637:A:P	33:DL:112:LEU:HD22	2.60	0.41
36:DO:24:THR:H	36:DO:90:VAL:CG1	2.34	0.41
38:DQ:42:GLY:O	39:DR:75:VAL:HG23	2.21	0.41
40:DS:6:LYS:HZ3	40:DS:104:THR:HG23	1.85	0.41
41:DT:43:ILE:O	41:DT:47:VAL:HG22	2.21	0.41
46:DY:27:ASN:HD22	46:DY:27:ASN:HA	1.75	0.41
47:DZ:15:ARG:CD	47:DZ:15:ARG:H	2.32	0.41
1:AA:1049:U:O2'	1:AA:1050:G:P	2.79	0.40
1:AA:1079:G:N1	1:AA:1080:A:C6	2.89	0.40
1:AA:1126:U:O2'	1:AA:1127:G:H5'	2.21	0.40
1:AA:1049:U:C1'	1:AA:1201:A:N7	2.83	0.40
1:AA:1283:U:O2'	1:AA:1284:C:O5'	2.39	0.40
1:AA:11:G:O2'	1:AA:12:U:H5'	2.21	0.40
1:AA:1312:G:C2	1:AA:1313:U:C2	3.08	0.40
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.56	0.40
1:AA:250:A:O4'	1:AA:252:U:C6	2.75	0.40
1:AA:697:U:H2'	1:AA:698:G:H5'	2.03	0.40
1:AA:764:C:O2'	1:AA:765:G:H5'	2.21	0.40
1:AA:774:G:C4	1:AA:775:G:C8	3.10	0.40
1:AA:943:U:C2'	1:AA:944:G:H5'	2.49	0.40
2:AB:168:GLU:O	2:AB:169:HIS:C	2.59	0.40
2:AB:101:THR:HB	2:AB:174:GLU:HG3	2.03	0.40
2:AB:48:MET:HA	2:AB:48:MET:HE3	2.03	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:52:ALA:O	2:AB:56:LEU:CB	2.69	0.40
2:AB:89:PHE:CE1	2:AB:153:MET:CG	3.03	0.40
3:AC:134:LYS:HG2	3:AC:138:GLN:NE2	2.37	0.40
4:AD:102:TYR:CD2	4:AD:102:TYR:C	2.95	0.40
4:AD:146:GLU:HB3	4:AD:147:LYS:NZ	2.36	0.40
4:AD:59:LYS:O	4:AD:62:ARG:N	2.54	0.40
5:AE:96:GLN:HE21	5:AE:97:PRO:CD	2.31	0.40
6:AF:29:ILE:HG22	6:AF:30:THR:N	2.34	0.40
6:AF:49:TYR:C	6:AF:49:TYR:CD2	2.94	0.40
8:AH:40:LYS:C	8:AH:42:GLU:H	2.24	0.40
8:AH:78:SER:CB	8:AH:84:ILE:H	2.34	0.40
1:AA:1124:G:O2'	10:AJ:40:ILE:HD13	2.20	0.40
11:AK:113:THR:HA	11:AK:114:PRO:HD3	1.81	0.40
12:AL:33:CYS:H	12:AL:54:VAL:HA	1.86	0.40
13:AM:89:ARG:HH11	13:AM:94:LEU:CB	2.34	0.40
15:AO:81:ILE:O	15:AO:82:GLU:C	2.58	0.40
17:AQ:16:MET:O	17:AQ:17:GLU:C	2.59	0.40
17:AQ:27:PHE:C	17:AQ:28:VAL:CG1	2.89	0.40
1:AA:254:G:OP1	17:AQ:68:LYS:O	2.38	0.40
50:B2:1:MET:HE3	50:B2:2:LYS:H	1.85	0.40
22:BA:1176:U:H2'	22:BA:1177:G:C4	2.56	0.40
22:BA:1719:G:C5	22:BA:1720:U:C5	3.09	0.40
22:BA:1894:C:O5'	22:BA:1894:C:H6	2.04	0.40
22:BA:2299:U:O2'	22:BA:2300:C:H5'	2.21	0.40
22:BA:2799:A:C6	22:BA:2801:G:C5	3.09	0.40
22:BA:322:A:C4	22:BA:340:A:C2	3.09	0.40
22:BA:496:G:C5	22:BA:497:A:C8	3.09	0.40
22:BA:760:G:C2'	22:BA:761:A:H5'	2.51	0.40
22:BA:847:U:C6	22:BA:847:U:H5''	2.55	0.40
22:BA:960:A:H2'	22:BA:962:G:H5'	2.02	0.40
23:BB:10:G:C2'	23:BB:11:C:H5'	2.51	0.40
23:BB:81:G:H2'	23:BB:82:U:H5'	2.04	0.40
24:BC:115:ILE:HD12	24:BC:115:ILE:HA	1.89	0.40
24:BC:161:VAL:CG2	24:BC:175:LEU:HD12	2.51	0.40
24:BC:193:GLU:O	24:BC:194:VAL:C	2.60	0.40
25:BD:186:LEU:HD11	37:BP:3:ILE:CD1	2.51	0.40
25:BD:193:VAL:HB	25:BD:194:PRO:HD2	2.03	0.40
26:BE:119:ILE:HD11	26:BE:187:VAL:HG23	1.97	0.40
26:BE:119:ILE:O	26:BE:119:ILE:HG12	2.22	0.40
26:BE:74:LYS:O	26:BE:75:SER:C	2.59	0.40
22:BA:1058:U:C1'	30:BI:117:THR:HG21	2.51	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BJ:119:PHE:CD1	31:BJ:119:PHE:C	2.95	0.40
33:BL:100:ILE:CD1	33:BL:101:ILE:HD13	2.48	0.40
33:BL:95:LEU:HD22	33:BL:100:ILE:CG1	2.51	0.40
34:BM:33:LEU:CD2	34:BM:128:THR:HB	2.51	0.40
35:BN:36:THR:HG23	35:BN:37:THR:N	2.35	0.40
36:BO:31:THR:HG22	36:BO:34:HIS:C	2.38	0.40
40:BS:45:VAL:CG2	40:BS:46:LEU:N	2.82	0.40
41:BT:38:ALA:HB1	41:BT:43:ILE:HG22	2.04	0.40
41:BT:67:VAL:C	41:BT:68:LYS:CD	2.90	0.40
41:BT:67:VAL:CG2	41:BT:68:LYS:N	2.83	0.40
42:BU:85:ARG:HE	42:BU:85:ARG:HB2	1.62	0.40
46:BY:57:LEU:H	46:BY:60:LYS:HB2	1.86	0.40
47:BZ:39:ASP:OD1	47:BZ:44:ARG:NE	2.41	0.40
1:CA:1046:A:H2'	1:CA:1047:G:C8	2.52	0.40
1:CA:1281:C:H5''	1:CA:1282:C:C5	2.36	0.40
1:CA:1348:U:OP1	9:CI:110:VAL:HA	2.21	0.40
1:CA:1434:A:H2'	1:CA:1435:G:O4'	2.21	0.40
1:CA:1436:U:H2'	1:CA:1437:A:H8	1.85	0.40
1:CA:320:A:C2	1:CA:334:C:C2	3.08	0.40
1:CA:531:U:H5''	1:CA:532:A:P	2.61	0.40
1:CA:567:G:C2'	1:CA:568:G:O5'	2.69	0.40
1:CA:73:C:C2	1:CA:74:A:N7	2.89	0.40
1:CA:905:U:H5''	1:CA:906:A:P	2.60	0.40
1:CA:918:A:H2'	1:CA:919:A:C8	2.56	0.40
1:CA:929:G:H2'	1:CA:930:C:C6	2.53	0.40
1:CA:940:C:H3'	1:CA:940:C:H6	1.86	0.40
2:CB:100:LEU:O	2:CB:103:TRP:HE3	2.03	0.40
2:CB:127:LYS:HE3	2:CB:132:GLU:CG	2.42	0.40
2:CB:221:ARG:HG3	2:CB:222:GLU:H	1.86	0.40
3:CC:77:GLY:O	3:CC:79:LYS:N	2.54	0.40
4:CD:3:TYR:CD2	4:CD:4:LEU:N	2.90	0.40
5:CE:96:GLN:CD	5:CE:97:PRO:HD2	2.41	0.40
6:CF:9:MET:HE2	6:CF:59:TYR:CE2	2.56	0.40
7:CG:98:LEU:HB3	7:CG:102:TRP:CZ2	2.56	0.40
7:CG:22:LEU:C	7:CG:22:LEU:CD2	2.89	0.40
7:CG:85:GLN:HE21	7:CG:85:GLN:HB3	1.59	0.40
8:CH:103:VAL:O	8:CH:109:VAL:HA	2.21	0.40
9:CI:37:TYR:HD2	9:CI:37:TYR:N	2.19	0.40
10:CJ:52:LEU:CD2	10:CJ:59:LYS:HA	2.48	0.40
11:CK:69:CYS:SG	11:CK:69:CYS:O	2.79	0.40
16:CP:72:ALA:HA	16:CP:75:ILE:HD12	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:CS:35:ARG:NH2	19:CS:51:HIS:CD2	2.83	0.40
50:D2:18:PHE:O	50:D2:19:ARG:C	2.58	0.40
52:D4:7:VAL:CG2	52:D4:25:VAL:HG23	2.50	0.40
22:DA:1070:A:H61	30:DI:8:VAL:HB	1.85	0.40
22:DA:1209:U:O3'	22:DA:1212:G:H5'	2.21	0.40
22:DA:1225:G:C2	22:DA:1226:A:N1	2.89	0.40
22:DA:1249:U:H3'	22:DA:1249:U:OP1	2.21	0.40
22:DA:1335:C:H2'	22:DA:1336:A:H1'	2.01	0.40
22:DA:1505:A:H8	22:DA:1505:A:O5'	2.04	0.40
22:DA:1812:U:H2'	22:DA:1813:G:C8	2.56	0.40
22:DA:1829:A:N6	22:DA:1977:A:N6	2.69	0.40
22:DA:206:U:O2'	22:DA:207:A:C5'	2.62	0.40
22:DA:2077:A:C2	22:DA:2078:C:C2	3.09	0.40
22:DA:2191:A:C5'	22:DA:2192:U:P	3.08	0.40
22:DA:2075:U:C4	22:DA:2238:G:C5	3.09	0.40
22:DA:2319:G:O2'	22:DA:2320:U:O5'	2.38	0.40
22:DA:2323:G:N2	22:DA:2335:A:H2	2.17	0.40
22:DA:2335:A:O2'	22:DA:2336:A:O5'	2.38	0.40
22:DA:2369:A:C2	22:DA:2370:G:C4	3.09	0.40
22:DA:2407:A:O2'	22:DA:2408:U:C5'	2.66	0.40
22:DA:241:A:C1'	22:DA:243:U:C5	3.00	0.40
22:DA:2576:G:H5''	22:DA:2578:G:N7	2.35	0.40
22:DA:2875:C:O2'	22:DA:2876:G:C5'	2.69	0.40
22:DA:2817:U:O2'	22:DA:2882:A:H2	2.04	0.40
22:DA:406:G:H1	22:DA:421:C:N4	2.19	0.40
22:DA:477:A:N3	22:DA:478:A:C8	2.89	0.40
22:DA:734:A:C8	22:DA:735:A:C8	3.08	0.40
22:DA:78:U:O2'	22:DA:79:C:H6	2.03	0.40
22:DA:83:A:C2	22:DA:84:A:N6	2.89	0.40
22:DA:919:U:C4	22:DA:920:A:N7	2.89	0.40
22:DA:954:G:C5	22:DA:955:U:C5	3.09	0.40
23:DB:18:G:H2'	23:DB:19:C:C6	2.55	0.40
29:DH:65:ALA:O	29:DH:66:ASN:C	2.59	0.40
30:DI:76:ALA:O	30:DI:135:MET:CE	2.69	0.40
33:DL:144:GLU:HG3	33:DL:144:GLU:O	2.21	0.40
34:DM:42:THR:CG2	34:DM:43:ALA:N	2.83	0.40
34:DM:99:GLY:O	34:DM:100:LYS:C	2.60	0.40
39:DR:52:PRO:O	39:DR:53:PHE:CB	2.68	0.40
41:DT:85:VAL:C	41:DT:86:THR:HG23	2.41	0.40
41:DT:87:LEU:HD23	41:DT:87:LEU:C	2.39	0.40
42:DU:91:LYS:O	42:DU:92:VAL:CG2	2.63	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:DV:82:TYR:CD2	43:DV:82:TYR:N	2.89	0.40
43:DV:9:ARG:HG2	43:DV:39:ALA:C	2.41	0.40
1:AA:1032:G:C2	1:AA:1033:G:C1'	3.04	0.40
1:AA:1084:G:C4	1:AA:1085:U:C4	3.09	0.40
1:AA:1256:A:N3	1:AA:1258:G:O6	2.54	0.40
1:AA:923:A:H1'	1:AA:1398:A:N3	2.36	0.40
1:AA:148:G:C2'	1:AA:149:A:O5'	2.69	0.40
1:AA:1513:A:H2'	1:AA:1514:G:C8	2.56	0.40
1:AA:158:G:C2'	1:AA:159:G:H5''	2.50	0.40
1:AA:188:C:O2	1:AA:188:C:C2'	2.70	0.40
1:AA:217:C:C2'	1:AA:218:U:H5'	2.50	0.40
1:AA:257:G:C2	1:AA:258:G:C5	3.09	0.40
1:AA:428:G:C4	1:AA:430:A:N7	2.89	0.40
1:AA:468:A:C2'	1:AA:469:C:C5'	2.98	0.40
1:AA:203:G:H5'	1:AA:468:A:H8	1.85	0.40
1:AA:768:A:H2'	1:AA:769:G:O4'	2.20	0.40
1:AA:838:G:H2'	1:AA:839:C:H6	1.87	0.40
1:AA:878:A:H4'	8:AH:3:GLN:NE2	2.36	0.40
1:AA:77:A:N6	1:AA:90:C:C5	2.87	0.40
1:AA:929:G:C6	1:AA:930:C:C4	3.09	0.40
1:AA:937:A:C2	1:AA:1379:G:O6	2.75	0.40
2:AB:130:LYS:HA	2:AB:130:LYS:CE	2.51	0.40
2:AB:86:CYS:H	2:AB:88:GLN:NE2	2.19	0.40
3:AC:37:LYS:HE3	3:AC:37:LYS:HB2	1.88	0.40
5:AE:96:GLN:O	5:AE:122:VAL:HA	2.21	0.40
7:AG:74:VAL:HG21	7:AG:143:MET:HG2	2.02	0.40
8:AH:33:VAL:HG12	8:AH:34:ALA:N	2.35	0.40
8:AH:79:ARG:CB	8:AH:80:PRO:HD2	2.48	0.40
13:AM:103:THR:HG22	13:AM:104:ASN:H	1.86	0.40
14:AN:42:ASN:ND2	14:AN:46:LYS:NZ	2.65	0.40
15:AO:73:ASP:O	15:AO:74:VAL:C	2.60	0.40
15:AO:74:VAL:O	15:AO:75:ALA:C	2.59	0.40
16:AP:75:ILE:O	16:AP:77:GLU:N	2.54	0.40
16:AP:77:GLU:C	16:AP:79:ASN:N	2.73	0.40
17:AQ:12:VAL:HG12	17:AQ:21:VAL:O	2.20	0.40
22:BA:77:G:N2	22:BA:110:G:H1'	2.36	0.40
22:BA:1359:A:OP1	56:BA:3615:HOH:O	2.22	0.40
22:BA:1429:G:O2'	22:BA:1430:G:C5'	2.57	0.40
22:BA:1442:U:O5'	22:BA:1442:U:H6	2.04	0.40
22:BA:1444:G:N2	22:BA:1548:A:C4	2.90	0.40
22:BA:149:A:H2'	22:BA:150:U:C6	2.56	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2140:G:H2'	22:BA:2141:G:C8	2.55	0.40
22:BA:2150:C:O2'	22:BA:2151:U:O5'	2.39	0.40
22:BA:2190:G:H2'	22:BA:2191:A:H8	1.86	0.40
22:BA:858:G:C5	22:BA:2268:A:C2	3.08	0.40
22:BA:2315:G:C4	22:BA:2316:G:C8	3.09	0.40
22:BA:2331:G:C5	22:BA:2332:C:C4	3.10	0.40
22:BA:2454:G:C5	22:BA:2455:G:N7	2.89	0.40
22:BA:2518:A:H2'	22:BA:2518:A:N3	2.36	0.40
22:BA:409:G:C2'	22:BA:410:G:C5'	3.00	0.40
22:BA:457:A:O4'	22:BA:459:U:C6	2.74	0.40
22:BA:49:A:N6	22:BA:177:G:C4	2.88	0.40
22:BA:832:U:H2'	22:BA:833:A:H8	1.85	0.40
23:BB:25:U:H2'	23:BB:26:C:C6	2.56	0.40
24:BC:159:THR:HG1	24:BC:194:VAL:HG11	1.86	0.40
25:BD:9:VAL:HG22	25:BD:10:GLY:H	1.86	0.40
25:BD:150:GLN:HE21	25:BD:150:GLN:HB2	1.72	0.40
25:BD:3:GLY:C	25:BD:4:LEU:HD12	2.41	0.40
26:BE:46:GLN:HE21	26:BE:87:ALA:H	1.69	0.40
28:BG:15:ASP:O	28:BG:16:VAL:CB	2.69	0.40
29:BH:81:ALA:CB	29:BH:145:ASN:O	2.69	0.40
29:BH:82:SER:O	29:BH:83:LYS:HD3	2.20	0.40
30:BI:41:PHE:N	30:BI:68:PHE:HZ	2.19	0.40
22:BA:2496:C:H5''	34:BM:82:MET:HG3	2.03	0.40
35:BN:42:LYS:O	35:BN:45:ARG:HG3	2.21	0.40
37:BP:50:ARG:HG3	37:BP:50:ARG:H	1.50	0.40
38:BQ:88:GLU:CD	38:BQ:88:GLU:O	2.59	0.40
38:BQ:91:ARG:NE	38:BQ:93:ILE:HG21	2.35	0.40
39:BR:25:LEU:HD12	39:BR:25:LEU:HA	1.86	0.40
40:BS:96:ILE:HD12	40:BS:97:LEU:N	2.34	0.40
42:BU:3:LYS:O	42:BU:82:VAL:HG21	2.22	0.40
42:BU:86:PHE:HB2	42:BU:92:VAL:HB	2.02	0.40
22:BA:396:G:H1'	45:BX:28:PHE:HB3	2.02	0.40
47:BZ:9:THR:HG21	47:BZ:53:MET:C	2.41	0.40
1:CA:1134:G:C6	1:CA:1141:C:N4	2.90	0.40
1:CA:1191:A:OP1	3:CC:2:GLN:NE2	2.54	0.40
1:CA:1266:G:N1	1:CA:1270:G:C6	2.89	0.40
1:CA:1272:G:C2'	1:CA:1273:C:H5'	2.51	0.40
1:CA:1405:G:C8	1:CA:1405:G:C3'	3.05	0.40
1:CA:142:G:C5	1:CA:143:A:C8	3.09	0.40
1:CA:1460:C:H2'	1:CA:1461:G:O4'	2.21	0.40
1:CA:149:A:N1	1:CA:150:U:C2	2.89	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CA:283:U:C2'	1:CA:284:C:H5'	2.52	0.40
1:CA:399:G:C6	1:CA:400:C:N4	2.90	0.40
1:CA:502:A:C4'	1:CA:550:G:H4'	2.50	0.40
1:CA:594:U:H2'	1:CA:595:A:O4'	2.21	0.40
1:CA:764:C:C2'	1:CA:765:G:C5'	2.81	0.40
1:CA:970:C:C5'	1:CA:971:G:OP1	2.64	0.40
1:CA:1190:G:OP1	3:CC:3:LYS:HA	2.21	0.40
3:CC:86:LEU:O	3:CC:90:VAL:HG13	2.21	0.40
3:CC:88:LYS:O	3:CC:92:ASP:HB2	2.21	0.40
5:CE:98:ALA:HB2	5:CE:123:LEU:HG	2.03	0.40
6:CF:41:ASP:C	6:CF:41:ASP:OD2	2.59	0.40
7:CG:114:SER:O	7:CG:118:ARG:HG3	2.21	0.40
1:CA:600:A:P	8:CH:87:ARG:HG2	2.62	0.40
11:CK:15:VAL:HG12	11:CK:17:ASP:N	2.35	0.40
12:CL:11:ARG:HD3	12:CL:11:ARG:HA	1.89	0.40
14:CN:41:TRP:HB3	14:CN:44:VAL:HG23	2.03	0.40
15:CO:55:LEU:C	15:CO:57:ARG:H	2.24	0.40
15:CO:69:LEU:CD1	15:CO:77:TYR:HB2	2.51	0.40
16:CP:12:LYS:O	16:CP:13:LYS:CB	2.68	0.40
17:CQ:61:ARG:C	17:CQ:72:TRP:CE3	2.94	0.40
22:DA:2615:U:N3	48:D0:3:GLN:HA	2.35	0.40
49:D1:10:LEU:HD22	49:D1:20:TYR:HB3	2.01	0.40
49:D1:12:SER:HA	49:D1:48:TYR:CD1	2.56	0.40
50:D2:45:SER:O	50:D2:46:LYS:HD2	2.21	0.40
22:DA:1112:G:H2'	22:DA:1113:U:C6	2.55	0.40
22:DA:734:A:O2'	22:DA:1635:A:H4'	2.21	0.40
22:DA:1707:G:H2'	22:DA:1707:G:N3	2.36	0.40
22:DA:1791:A:C2'	22:DA:1792:G:H5'	2.51	0.40
22:DA:1800:C:C2	22:DA:1802:A:N7	2.90	0.40
22:DA:1816:C:HO2'	22:DA:1817:G:P	2.44	0.40
22:DA:1862:G:O2'	22:DA:1863:G:H5'	2.21	0.40
22:DA:2029:G:N2	22:DA:2033:A:C5	2.90	0.40
22:DA:2069:G:C2'	22:DA:2070:A:H5'	2.52	0.40
22:DA:2308:G:C2'	22:DA:2309:A:OP1	2.70	0.40
22:DA:2386:A:O2'	22:DA:2387:U:C6	2.71	0.40
22:DA:2522:U:C3'	22:DA:2522:U:C6	3.05	0.40
22:DA:2663:G:H2'	22:DA:2664:G:O5'	2.20	0.40
22:DA:2757:A:OP1	52:D4:20:ASP:CA	2.69	0.40
22:DA:2838:G:O2'	35:DN:45:ARG:NH1	2.55	0.40
22:DA:2869:G:C5	22:DA:2870:C:C4	3.09	0.40
22:DA:299:A:H2	22:DA:319:G:N3	2.20	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:335:C:O2'	22:DA:336:C:O5'	2.39	0.40
22:DA:357:C:N3	22:DA:358:U:C5	2.89	0.40
22:DA:377:G:O6	22:DA:378:C:N4	2.54	0.40
22:DA:388:G:H8	22:DA:388:G:H2'	1.74	0.40
22:DA:415:A:H8	22:DA:415:A:O5'	2.04	0.40
22:DA:669:G:N3	22:DA:669:G:H2'	2.37	0.40
22:DA:764:A:H3'	22:DA:765:C:H5'	2.03	0.40
22:DA:867:C:O2'	22:DA:868:U:C6	2.40	0.40
22:DA:89:A:C2	22:DA:90:U:N3	2.89	0.40
22:DA:929:U:H1'	47:DZ:25:GLY:O	2.21	0.40
22:DA:940:G:O5'	22:DA:940:G:H8	2.04	0.40
22:DA:93:G:HO2'	22:DA:94:A:H8	1.69	0.40
22:DA:978:G:C6	22:DA:979:A:C5	3.09	0.40
23:DB:68:C:O2'	23:DB:69:G:C5'	2.69	0.40
25:DD:61:THR:O	25:DD:64:GLU:N	2.54	0.40
26:DE:59:PRO:HB2	26:DE:67:ARG:HH22	1.85	0.40
27:DF:123:GLY:H	27:DF:126:ASN:HD22	1.68	0.40
27:DF:147:ARG:C	27:DF:148:VAL:HG13	2.41	0.40
27:DF:52:ALA:CB	27:DF:149:ARG:HE	2.34	0.40
27:DF:65:LEU:HD21	27:DF:87:LYS:N	2.36	0.40
28:DG:120:ILE:CD1	28:DG:132:LEU:HB3	2.51	0.40
28:DG:38:ASP:O	28:DG:39:ALA:CB	2.69	0.40
29:DH:24:GLY:O	29:DH:26:ALA:N	2.54	0.40
29:DH:62:LEU:C	29:DH:64:ALA:N	2.75	0.40
29:DH:94:ILE:HD12	29:DH:98:ASP:OD1	2.21	0.40
22:DA:529:A:OP2	31:DJ:113:PRO:HG3	2.21	0.40
32:DK:59:LYS:HE3	32:DK:89:ASN:CG	2.41	0.40
33:DL:128:THR:CG2	33:DL:129:LYS:N	2.84	0.40
33:DL:135:ILE:HG23	33:DL:136:GLU:H	1.86	0.40
33:DL:14:LYS:O	33:DL:15:ALA:O	2.40	0.40
34:DM:38:ARG:CZ	34:DM:38:ARG:HB3	2.51	0.40
34:DM:73:ILE:CG2	34:DM:91:TYR:CE1	3.03	0.40
35:DN:16:HIS:HE1	35:DN:20:MET:HE2	1.86	0.40
35:DN:99:LYS:O	48:D0:41:HIS:HB2	2.21	0.40
36:DO:2:ASP:O	36:DO:4:LYS:N	2.55	0.40
37:DP:109:ILE:HB	37:DP:110:LYS:H	1.74	0.40
37:DP:24:THR:CA	37:DP:44:GLY:O	2.69	0.40
38:DQ:41:ALA:O	38:DQ:45:ALA:HB2	2.21	0.40
38:DQ:82:LEU:O	38:DQ:85:ALA:HB3	2.21	0.40
39:DR:49:ILE:CD1	39:DR:53:PHE:H	2.35	0.40
39:DR:68:ARG:CZ	39:DR:90:ARG:HG2	2.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1069:C:C4	1:AA:1070:U:C5	3.10	0.40
1:AA:1115:U:C2	1:AA:1116:U:C5	3.09	0.40
1:AA:1309:G:C2'	1:AA:1310:G:H5'	2.51	0.40
1:AA:1316:G:C5	1:AA:1318:A:OP2	2.74	0.40
1:AA:1331:G:O2'	1:AA:1332:A:P	2.79	0.40
1:AA:1409:C:H2'	1:AA:1410:A:H8	1.85	0.40
1:AA:1422:G:C2	1:AA:1423:G:C8	3.09	0.40
1:AA:1441:A:N7	1:AA:1442:G:N7	2.69	0.40
1:AA:21:G:N2	1:AA:22:G:C6	2.89	0.40
1:AA:232:G:C2'	1:AA:233:C:C5'	2.97	0.40
1:AA:375:U:OP1	16:AP:70:ARG:HD3	2.21	0.40
1:AA:402:G:C5	1:AA:403:C:C5	3.10	0.40
1:AA:483:C:H2'	1:AA:484:G:N7	2.36	0.40
1:AA:600:A:C2	1:AA:639:G:C4	3.09	0.40
1:AA:766:A:C4	1:AA:814:A:C2	3.09	0.40
2:AB:13:VAL:HG23	2:AB:207:ARG:HH22	1.84	0.40
3:AC:49:ALA:O	3:AC:50:SER:C	2.59	0.40
4:AD:165:GLU:H	4:AD:165:GLU:HG3	1.59	0.40
5:AE:112:ALA:O	5:AE:115:GLU:N	2.54	0.40
5:AE:139:THR:HG23	5:AE:140:ILE:H	1.86	0.40
5:AE:76:ASN:ND2	5:AE:76:ASN:C	2.74	0.40
6:AF:51:ILE:O	6:AF:52:ASN:CB	2.70	0.40
7:AG:28:ILE:CG2	7:AG:104:VAL:HG21	2.52	0.40
7:AG:12:LEU:CD2	7:AG:12:LEU:N	2.66	0.40
8:AH:17:GLN:O	8:AH:18:ALA:C	2.59	0.40
8:AH:66:GLN:C	8:AH:68:LYS:H	2.25	0.40
8:AH:17:GLN:CD	8:AH:69:ALA:HB1	2.41	0.40
9:AI:19:PHE:HD2	9:AI:63:TYR:CD1	2.36	0.40
14:AN:40:ARG:HH12	14:AN:44:VAL:CB	2.34	0.40
1:AA:660:C:OP2	15:AO:4:THR:HG21	2.21	0.40
18:AR:22:TYR:HA	18:AR:57:ALA:HB1	2.02	0.40
20:AT:23:ARG:N	20:AT:23:ARG:HD2	2.36	0.40
11:AK:124:LYS:NZ	21:AU:34:ARG:HD2	2.36	0.40
51:B3:51:LYS:HZ1	51:B3:54:LEU:HD23	1.86	0.40
22:BA:1179:G:N7	22:BA:1180:U:C1'	2.85	0.40
22:BA:1606:C:C2'	22:BA:1607:C:OP2	2.68	0.40
22:BA:729:G:O2'	22:BA:1775:U:H1'	2.20	0.40
22:BA:1866:A:C6	22:BA:1876:A:N7	2.90	0.40
22:BA:221:A:N1	22:BA:265:A:O2'	2.45	0.40
22:BA:2531:A:H4'	28:BG:156:TYR:CE1	2.57	0.40
22:BA:2887:A:C2'	22:BA:2887:A:N3	2.75	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:2902:C:O2'	22:BA:2903:U:H5'	2.21	0.40
22:BA:342:A:C2	22:BA:343:C:H1'	2.57	0.40
22:BA:346:A:C2'	22:BA:347:A:O5'	2.70	0.40
22:BA:55:G:C2	22:BA:56:A:C8	3.09	0.40
22:BA:813:U:H2'	22:BA:814:C:H6	1.86	0.40
22:BA:866:A:O2'	22:BA:867:C:H5'	2.21	0.40
23:BB:10:G:H2'	23:BB:11:C:H5'	2.03	0.40
24:BC:83:ASP:HA	24:BC:84:PRO:HD3	1.72	0.40
26:BE:124:PHE:C	26:BE:124:PHE:HD1	2.24	0.40
27:BF:104:THR:HG22	27:BF:105:ILE:HG22	2.04	0.40
27:BF:173:ASP:O	27:BF:174:PHE:C	2.60	0.40
29:BH:82:SER:OG	29:BH:144:VAL:HG11	2.21	0.40
29:BH:2:GLN:HA	29:BH:20:ASN:HA	2.03	0.40
29:BH:16:GLY:C	29:BH:51:ARG:HH21	2.25	0.40
30:BI:52:LEU:HD11	30:BI:81:LYS:HE2	2.03	0.40
31:BJ:88:THR:HG23	31:BJ:90:GLU:HG3	2.03	0.40
34:BM:54:THR:HG22	34:BM:55:ARG:N	2.36	0.40
35:BN:83:LEU:HA	35:BN:83:LEU:HD12	1.72	0.40
36:BO:33:ARG:HG2	36:BO:34:HIS:CE1	2.57	0.40
36:BO:15:ARG:NE	36:BO:93:ASP:OD1	2.49	0.40
22:BA:1011:G:P	38:BQ:76:SER:HG	2.43	0.40
40:BS:50:VAL:O	40:BS:51:LEU:C	2.59	0.40
45:BX:51:SER:O	45:BX:52:ALA:C	2.57	0.40
46:BY:22:LEU:O	46:BY:23:ARG:O	2.40	0.40
47:BZ:20:LYS:O	47:BZ:21:ALA:C	2.60	0.40
1:CA:1130:A:C6	1:CA:1131:G:N7	2.90	0.40
1:CA:1213:A:N7	1:CA:1215:G:C5	2.90	0.40
1:CA:1217:C:O2'	1:CA:1218:C:C6	2.38	0.40
1:CA:1245:C:HO2'	1:CA:1246:A:H8	0.72	0.40
1:CA:141:G:O2'	1:CA:142:G:H5'	2.21	0.40
1:CA:1483:A:C8	1:CA:1484:C:C6	3.09	0.40
1:CA:159:G:N2	1:CA:161:A:H3'	2.36	0.40
1:CA:174:A:H2'	1:CA:174:A:N3	2.35	0.40
1:CA:302:G:N3	1:CA:556:C:H4'	2.36	0.40
1:CA:408:A:N6	1:CA:409:U:C4	2.89	0.40
1:CA:579:A:H2'	1:CA:580:C:C6	2.56	0.40
1:CA:748:G:C2	1:CA:749:A:C5	3.10	0.40
1:CA:790:A:C6	1:CA:791:G:C5	3.09	0.40
1:CA:74:A:N6	1:CA:97:G:O6	2.54	0.40
3:CC:176:THR:HG21	3:CC:178:ARG:HE	1.86	0.40
3:CC:58:ARG:HA	3:CC:59:PRO:HD2	1.84	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:CD:150:LYS:CD	4:CD:150:LYS:N	2.82	0.40
1:CA:405:U:O4	4:CD:1:ALA:HB1	2.19	0.40
5:CE:80:LEU:HD22	5:CE:80:LEU:HA	1.89	0.40
7:CG:98:LEU:HB3	7:CG:102:TRP:CH2	2.56	0.40
7:CG:32:ASP:HB2	7:CG:34:LYS:HD3	2.03	0.40
9:CI:30:ASN:C	9:CI:32:ARG:H	2.24	0.40
10:CJ:66:GLU:CG	14:CN:100:TRP:CZ3	3.02	0.40
12:CL:85:ARG:HH12	12:CL:87:LYS:CB	2.35	0.40
18:CR:34:GLU:HA	18:CR:34:GLU:OE1	2.21	0.40
19:CS:77:ARG:O	19:CS:77:ARG:HG3	2.20	0.40
11:CK:111:ASP:H	21:CU:3:ILE:N	2.20	0.40
50:D2:31:LEU:O	50:D2:34:ARG:HB2	2.20	0.40
50:D2:43:THR:C	50:D2:44:VAL:HG22	2.41	0.40
51:D3:41:ARG:HD2	51:D3:41:ARG:C	2.41	0.40
22:DA:100:U:OP1	22:DA:100:U:N1	2.54	0.40
22:DA:1011:G:O2'	22:DA:1012:U:P	2.80	0.40
22:DA:55:G:N2	22:DA:116:C:C2	2.89	0.40
22:DA:1199:U:O2'	22:DA:1200:C:H5'	2.22	0.40
22:DA:1208:C:N3	22:DA:1209:U:C5	2.89	0.40
22:DA:1331:G:C4	22:DA:1333:G:C8	3.09	0.40
22:DA:1386:C:O2'	22:DA:1387:A:O5'	2.39	0.40
22:DA:1793:C:N4	56:DA:3764:HOH:O	2.54	0.40
22:DA:1813:G:N2	24:DC:50:THR:CG2	2.84	0.40
22:DA:1804:C:H42	22:DA:1814:G:N2	2.16	0.40
22:DA:1857:G:C4	22:DA:1884:G:N1	2.90	0.40
22:DA:188:G:C6	22:DA:189:G:C4	3.10	0.40
22:DA:1896:G:H2'	22:DA:1896:G:N3	2.36	0.40
22:DA:2015:A:C2	48:D0:2:VAL:CG1	3.05	0.40
22:DA:2023:C:O2'	22:DA:2024:G:O5'	2.39	0.40
22:DA:2191:A:C5'	22:DA:2192:U:OP2	2.57	0.40
22:DA:2205:A:N3	22:DA:2206:C:C6	2.89	0.40
22:DA:227:A:H4'	22:DA:228:C:OP1	2.22	0.40
22:DA:2298:A:C2	22:DA:2299:U:C2	3.09	0.40
22:DA:229:C:O2'	22:DA:230:G:O5'	2.33	0.40
22:DA:2333:A:N1	22:DA:2335:A:N6	2.69	0.40
22:DA:2364:C:O2'	22:DA:2365:G:H5'	2.21	0.40
22:DA:2331:G:C6	22:DA:2385:C:N4	2.89	0.40
22:DA:2061:G:C8	22:DA:2501:C:H4'	2.56	0.40
22:DA:2646:C:H6	22:DA:2646:C:H5'	1.85	0.40
22:DA:2656:U:O2'	22:DA:2657:A:H5'	2.21	0.40
22:DA:2753:A:O2'	22:DA:2754:U:H5'	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:2815:C:C2'	22:DA:2816:G:O4'	2.65	0.40
22:DA:2853:C:H2'	22:DA:2854:G:C8	2.56	0.40
22:DA:410:G:N2	22:DA:418:C:O2	2.55	0.40
22:DA:425:G:N1	22:DA:426:C:C4	2.90	0.40
22:DA:35:G:N2	22:DA:450:G:H1'	2.36	0.40
22:DA:460:A:OP2	50:D2:41:ARG:NH1	2.48	0.40
22:DA:477:A:C5	22:DA:478:A:N7	2.90	0.40
22:DA:674:G:H4'	26:DE:69:ARG:CB	2.50	0.40
22:DA:826:U:O2'	33:DL:53:GLY:HA3	2.22	0.40
23:DB:54:G:H21	27:DF:25:MET:HE2	1.84	0.40
24:DC:132:ARG:HA	24:DC:166:ARG:HH22	1.86	0.40
24:DC:172:THR:HA	24:DC:182:LYS:HA	2.04	0.40
22:DA:1654:A:H1'	25:DD:118:PHE:CB	2.52	0.40
25:DD:94:GLN:O	25:DD:94:GLN:CG	2.69	0.40
25:DD:9:VAL:CG1	25:DD:26:VAL:HG12	2.51	0.40
25:DD:9:VAL:O	25:DD:9:VAL:CG2	2.69	0.40
27:DF:45:ASP:O	27:DF:47:LYS:HD3	2.21	0.40
28:DG:162:ARG:C	28:DG:163:TYR:CD2	2.91	0.40
30:DI:57:VAL:CG1	30:DI:58:ILE:N	2.83	0.40
35:DN:33:ILE:HD11	35:DN:118:ARG:HH21	1.87	0.40
35:DN:63:ARG:HD2	35:DN:80:PHE:CD2	2.56	0.40
37:DP:103:THR:O	37:DP:106:ALA:HB3	2.22	0.40
37:DP:32:VAL:HG13	37:DP:32:VAL:O	2.21	0.40
39:DR:39:LEU:N	39:DR:39:LEU:CD2	2.83	0.40
41:DT:60:THR:HB	41:DT:61:LEU:H	1.74	0.40
43:DV:79:ARG:CB	43:DV:79:ARG:NH1	2.84	0.40
43:DV:83:LYS:HA	43:DV:84:PRO:HD3	1.85	0.40
44:DW:23:LYS:CG	44:DW:24:ARG:N	2.79	0.40
44:DW:67:LYS:CB	44:DW:80:SER:HB2	2.52	0.40
45:DX:76:LYS:O	45:DX:77:TYR:CG	2.75	0.40
46:DY:17:GLU:HG3	46:DY:53:VAL:CG1	2.41	0.40
1:AA:1118:U:O4'	1:AA:1179:A:H1'	2.20	0.40
1:AA:1221:G:H2'	1:AA:1222:G:H8	1.86	0.40
1:AA:131:A:C2	1:AA:132:C:C4	3.09	0.40
1:AA:1461:G:C5	1:AA:1462:C:C5	3.10	0.40
1:AA:244:U:H4'	1:AA:245:U:C5'	2.51	0.40
1:AA:251:G:C2	1:AA:266:G:C5	3.08	0.40
1:AA:417:G:C6	1:AA:418:C:N4	2.90	0.40
1:AA:445:G:N3	1:AA:445:G:H2'	2.36	0.40
1:AA:438:U:C6	1:AA:494:G:O6	2.75	0.40
1:AA:582:C:C4	1:AA:583:A:N7	2.90	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:596:A:H5'	1:AA:596:A:H8	1.83	0.40
1:AA:640:A:O2'	8:AH:107:LYS:NZ	2.54	0.40
1:AA:819:A:C4'	1:AA:820:U:OP2	2.67	0.40
1:AA:585:G:N2	1:AA:878:A:O2'	2.55	0.40
1:AA:978:A:OP1	1:AA:980:C:N4	2.54	0.40
2:AB:140:LEU:O	2:AB:142:LYS:N	2.54	0.40
3:AC:190:THR:C	3:AC:192:TYR:H	2.25	0.40
3:AC:21:TRP:CD1	3:AC:58:ARG:HG2	2.57	0.40
4:AD:88:ASN:HA	4:AD:91:ALA:CB	2.48	0.40
5:AE:89:THR:HG21	5:AE:134:ASN:ND2	2.35	0.40
5:AE:48:GLY:HA3	5:AE:65:LYS:HB2	2.02	0.40
8:AH:45:ILE:HA	8:AH:63:LYS:CG	2.49	0.40
10:AJ:73:LEU:O	10:AJ:74:VAL:CB	2.69	0.40
11:AK:85:VAL:HG11	11:AK:92:ARG:HG3	2.03	0.40
20:AT:77:ASN:H	20:AT:77:ASN:ND2	2.19	0.40
20:AT:9:ARG:NH1	20:AT:12:GLN:NE2	2.70	0.40
51:B3:49:VAL:HG23	51:B3:50:SER:O	2.21	0.40
22:BA:1436:G:H2'	22:BA:1437:C:O5'	2.22	0.40
22:BA:1872:A:HO2'	22:BA:1873:G:C4'	2.34	0.40
22:BA:571:U:N3	22:BA:2030:A:C2	2.89	0.40
22:BA:2096:C:O2	22:BA:2096:C:H2'	2.20	0.40
22:BA:233:A:O2'	22:BA:234:U:H5'	2.21	0.40
22:BA:240:C:H2'	22:BA:241:A:C8	2.56	0.40
22:BA:260:G:H2'	22:BA:261:G:O5'	2.22	0.40
22:BA:308:G:C4	22:BA:501:A:C8	3.09	0.40
22:BA:291:G:H1'	22:BA:350:G:N2	2.37	0.40
22:BA:503:A:C2	22:BA:505:A:C4	3.10	0.40
22:BA:535:G:C2	22:BA:559:G:C5	3.10	0.40
22:BA:563:A:C6	22:BA:564:C:C4	3.09	0.40
22:BA:611:C:O2'	22:BA:612:G:H5'	2.21	0.40
22:BA:603:A:C8	22:BA:655:A:C6	3.09	0.40
22:BA:679:C:H2'	22:BA:680:C:C6	2.56	0.40
24:BC:229:HIS:HD2	24:BC:246:PRO:CB	2.34	0.40
24:BC:87:SER:HB2	24:BC:199:HIS:CD2	2.56	0.40
25:BD:90:PHE:C	25:BD:92:VAL:N	2.73	0.40
26:BE:172:ALA:O	26:BE:175:ILE:CG2	2.69	0.40
28:BG:139:VAL:HG12	28:BG:140:ILE:N	2.35	0.40
28:BG:84:LYS:CE	28:BG:84:LYS:N	2.74	0.40
28:BG:90:GLY:O	28:BG:91:VAL:C	2.59	0.40
29:BH:33:GLN:HE21	29:BH:33:GLN:HB2	1.70	0.40
29:BH:40:THR:O	29:BH:41:LYS:HB2	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:BI:56:VAL:HG22	30:BI:68:PHE:HB2	2.03	0.40
22:BA:1009:A:P	31:BJ:39:LYS:HZ1	2.44	0.40
22:BA:1131:G:C4	31:BJ:77:HIS:ND1	2.89	0.40
33:BL:79:LEU:HD23	33:BL:79:LEU:HA	1.70	0.40
35:BN:23:ASN:H	35:BN:23:ASN:ND2	2.19	0.40
35:BN:97:ILE:HG22	35:BN:98:LEU:N	2.36	0.40
36:BO:30:ARG:HG3	36:BO:102:ARG:NH1	2.37	0.40
36:BO:4:LYS:HD3	36:BO:7:ARG:NH2	2.37	0.40
43:BV:65:VAL:O	43:BV:65:VAL:HG23	2.19	0.40
22:BA:855:G:N2	44:BW:23:LYS:CB	2.84	0.40
44:BW:37:VAL:CG1	44:BW:38:ARG:N	2.84	0.40
44:BW:24:ARG:HD3	44:BW:65:LYS:HD3	2.04	0.40
45:BX:60:LYS:O	45:BX:62:GLY:N	2.55	0.40
45:BX:65:THR:O	45:BX:68:ALA:CB	2.63	0.40
46:BY:56:LEU:HA	46:BY:59:GLU:HG3	2.02	0.40
1:CA:865:A:H5'	1:CA:1078:U:C5	2.56	0.40
1:CA:1076:U:N3	1:CA:1082:A:C2	2.90	0.40
1:CA:1161:C:O2'	1:CA:1162:C:C5'	2.69	0.40
1:CA:1200:C:O2'	1:CA:1201:A:OP2	2.32	0.40
1:CA:1477:U:C2	1:CA:1478:U:C5	3.09	0.40
1:CA:277:C:C5	1:CA:278:G:N7	2.90	0.40
1:CA:322:C:O2'	20:CT:17:ARG:HG3	2.22	0.40
1:CA:36:C:H5''	12:CL:119:LYS:HA	2.04	0.40
1:CA:373:A:C2	1:CA:374:A:N7	2.90	0.40
1:CA:461:A:N3	1:CA:461:A:C2'	2.80	0.40
1:CA:567:G:H1'	56:CA:1819:HOH:O	2.22	0.40
1:CA:729:A:C5	1:CA:730:G:N7	2.89	0.40
1:CA:80:A:C5	1:CA:81:A:H1'	2.57	0.40
1:CA:864:A:C5	1:CA:865:A:C6	3.09	0.40
1:CA:90:C:H2'	1:CA:91:U:C5	2.56	0.40
1:CA:948:C:C5	13:CM:104:ASN:OD1	2.75	0.40
1:CA:975:A:C2	1:CA:1365:G:N2	2.89	0.40
2:CB:103:TRP:O	2:CB:103:TRP:CD1	2.74	0.40
5:CE:95:MET:HA	5:CE:123:LEU:O	2.22	0.40
5:CE:14:LEU:HA	5:CE:36:THR:HG22	2.03	0.40
5:CE:94:PHE:O	5:CE:124:ALA:HA	2.22	0.40
6:CF:93:LYS:O	6:CF:94:HIS:HB3	2.22	0.40
8:CH:100:ILE:HD12	8:CH:101:ALA:N	2.35	0.40
8:CH:111:THR:HG22	8:CH:112:ASP:N	2.36	0.40
10:CJ:68:ARG:H	10:CJ:68:ARG:HG2	1.68	0.40
13:CM:3:ILE:HG23	13:CM:56:ARG:CD	2.50	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:CO:69:LEU:HD12	15:CO:77:TYR:HA	2.02	0.40
15:CO:87:ARG:HD2	15:CO:87:ARG:HA	1.76	0.40
18:CR:54:LEU:HG	18:CR:58:ILE:HD11	2.02	0.40
6:CF:88:MET:CE	18:CR:64:LEU:HD11	2.50	0.40
20:CT:9:ARG:CD	20:CT:12:GLN:NE2	2.84	0.40
20:CT:4:LYS:HB3	20:CT:4:LYS:HE3	1.57	0.40
21:CU:28:LEU:O	21:CU:29:ALA:C	2.59	0.40
49:D1:20:TYR:HE2	49:D1:37:LYS:NZ	2.17	0.40
49:D1:10:LEU:HD12	49:D1:50:GLU:O	2.22	0.40
22:DA:102:U:H3	46:DY:2:LYS:HB3	1.86	0.40
22:DA:1059:G:O2'	30:DI:131:THR:HG21	2.22	0.40
22:DA:108:G:C4	22:DA:109:C:C5	3.10	0.40
22:DA:1107:G:C5	22:DA:1108:U:C5	3.09	0.40
22:DA:1203:U:N3	22:DA:1204:A:N6	2.68	0.40
22:DA:1209:U:O2'	22:DA:1237:A:N6	2.47	0.40
22:DA:1252:G:C4	22:DA:1253:A:C2	3.09	0.40
22:DA:1465:G:C4	22:DA:1466:U:C6	3.10	0.40
22:DA:1475:G:O2'	22:DA:1476:U:P	2.80	0.40
22:DA:1529:G:O6	22:DA:1543:G:N2	2.54	0.40
22:DA:1574:C:O5'	22:DA:1574:C:C6	2.58	0.40
22:DA:1649:G:H2'	22:DA:1650:A:C8	2.56	0.40
22:DA:1656:C:H2'	22:DA:1657:U:C5'	2.50	0.40
22:DA:1665:A:H2'	22:DA:1666:G:H5'	2.02	0.40
22:DA:1709:U:H2'	22:DA:1710:G:H8	1.85	0.40
22:DA:1712:U:H2'	22:DA:1713:A:N7	2.36	0.40
22:DA:1816:C:O2'	22:DA:1817:G:P	2.79	0.40
22:DA:413:C:O3'	22:DA:1880:U:H4'	2.21	0.40
22:DA:1941:C:C6	22:DA:1965:C:C4	3.09	0.40
22:DA:45:G:H3'	22:DA:215:G:C8	2.57	0.40
22:DA:2238:G:H4'	22:DA:2239:G:OP1	2.22	0.40
22:DA:2267:A:H8	22:DA:2267:A:H2'	1.49	0.40
22:DA:2308:G:O6	22:DA:2311:A:N7	2.55	0.40
22:DA:2501:C:P	56:DA:3557:HOH:O	2.79	0.40
22:DA:2586:U:O2'	22:DA:2587:A:C5'	2.68	0.40
22:DA:2590:A:O3'	24:DC:237:ARG:CD	2.65	0.40
22:DA:2646:C:C5'	22:DA:2646:C:H6	2.34	0.40
22:DA:2652:C:H2'	22:DA:2653:U:O4'	2.21	0.40
22:DA:225:C:N4	22:DA:419:U:O2'	2.37	0.40
22:DA:602:A:N3	22:DA:656:G:C2	2.90	0.40
22:DA:690:G:H1'	22:DA:779:U:O3'	2.20	0.40
22:DA:825:A:C6	22:DA:826:U:N3	2.89	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:DA:910:A:N6	34:DM:11:LYS:O	2.54	0.40
23:DB:66:A:N6	23:DB:107:G:C8	2.89	0.40
24:DC:74:PRO:HA	24:DC:116:GLN:HG3	2.02	0.40
24:DC:30:ALA:N	24:DC:31:PRO:HD2	2.34	0.40
24:DC:95:TYR:C	24:DC:97:ASP:N	2.74	0.40
25:DD:146:ILE:HD11	25:DD:155:VAL:CG2	2.52	0.40
26:DE:105:LEU:O	26:DE:109:LEU:HB2	2.22	0.40
26:DE:134:LEU:CA	26:DE:137:LYS:CB	2.97	0.40
27:DF:136:ILE:CG2	27:DF:142:TYR:CD1	3.05	0.40
31:DJ:24:THR:HG22	31:DJ:24:THR:O	2.21	0.40
33:DL:3:LEU:HD12	33:DL:4:ASN:CA	2.51	0.40
35:DN:57:THR:O	35:DN:80:PHE:CD1	2.74	0.40
22:DA:2873:A:C4'	35:DN:6:SER:HB2	2.51	0.40
36:DO:80:GLU:O	36:DO:84:GLU:HB2	2.22	0.40
37:DP:48:ALA:O	37:DP:58:PHE:HA	2.22	0.40
38:DQ:46:TYR:HA	38:DQ:49:ARG:NH2	2.36	0.40
38:DQ:9:ALA:C	38:DQ:11:ALA:N	2.73	0.40
40:DS:4:ILE:CD1	40:DS:5:ALA:N	2.73	0.40
40:DS:84:ARG:O	40:DS:95:ARG:O	2.39	0.40
43:DV:50:MET:O	43:DV:53:LYS:N	2.50	0.40
45:DX:10:ARG:CB	45:DX:11:PRO:HD2	2.43	0.40
46:DY:20:ASN:HD22	46:DY:50:VAL:CG2	2.01	0.40
1:AA:1014:A:H5''	19:AS:13:HIS:CB	2.51	0.40
1:AA:1141:C:C2	1:AA:1142:G:C8	3.10	0.40
1:AA:1169:A:O2'	1:AA:1170:A:O4'	2.40	0.40
1:AA:1234:C:C2'	1:AA:1235:U:C5'	2.90	0.40
1:AA:1241:G:N2	1:AA:1242:G:C5	2.90	0.40
1:AA:1256:A:C6	1:AA:1278:G:C2	3.09	0.40
1:AA:1442:G:C4	1:AA:1443:C:C5	3.08	0.40
1:AA:157:U:O2	1:AA:165:G:C2	2.74	0.40
1:AA:198:G:N1	1:AA:220:G:C4	2.89	0.40
1:AA:214:C:C6	1:AA:215:C:C5	3.09	0.40
1:AA:243:A:H5''	1:AA:244:U:OP1	2.21	0.40
1:AA:242:G:C2	1:AA:245:U:C4	3.09	0.40
1:AA:384:G:C6	1:AA:385:C:N3	2.89	0.40
1:AA:464:U:C6	1:AA:466:A:OP2	2.74	0.40
1:AA:202:G:O2'	1:AA:468:A:C8	2.70	0.40
1:AA:698:G:H2'	1:AA:699:C:O4'	2.22	0.40
1:AA:76:G:C2'	1:AA:76:G:N3	2.82	0.40
1:AA:832:G:C2	1:AA:833:G:C8	3.10	0.40
1:AA:909:A:H2'	1:AA:910:C:O5'	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AB:36:LYS:O	2:AB:37:VAL:HB	2.21	0.40
2:AB:71:THR:HG21	2:AB:94:ARG:HA	2.04	0.40
3:AC:55:VAL:O	3:AC:56:ILE:HG13	2.21	0.40
4:AD:175:GLY:C	4:AD:176:LYS:HD3	2.42	0.40
1:AA:509:A:H5'	4:AD:50:TYR:CE2	2.57	0.40
4:AD:56:GLU:O	4:AD:60:VAL:HG23	2.22	0.40
6:AF:38:ARG:HH11	6:AF:61:LEU:HD21	1.83	0.40
6:AF:9:MET:HE2	6:AF:59:TYR:CD2	2.57	0.40
7:AG:28:ILE:HG22	7:AG:104:VAL:HG21	2.03	0.40
1:AA:1117:A:O3'	9:AI:105:ARG:NE	2.55	0.40
9:AI:25:GLY:N	9:AI:58:GLU:HA	2.36	0.40
10:AJ:82:LYS:O	10:AJ:86:ALA:N	2.54	0.40
11:AK:109:ILE:HG22	11:AK:110:THR:N	2.37	0.40
1:AA:36:C:H4'	12:AL:118:VAL:O	2.21	0.40
12:AL:56:LEU:C	12:AL:58:ASN:N	2.73	0.40
15:AO:85:GLY:O	15:AO:86:LEU:HB3	2.21	0.40
19:AS:45:GLY:N	19:AS:61:VAL:CG2	2.72	0.40
1:AA:957:U:H4'	19:AS:78:THR:OG1	2.21	0.40
21:AU:33:ARG:CD	21:AU:34:ARG:HG3	2.50	0.40
21:AU:34:ARG:C	21:AU:36:PHE:H	2.24	0.40
51:B3:21:PHE:N	51:B3:48:MET:CE	2.81	0.40
22:BA:1091:G:O2'	22:BA:1092:C:H5'	2.22	0.40
22:BA:1316:U:H2'	22:BA:1317:G:C8	2.56	0.40
22:BA:1439:A:C2	22:BA:1553:A:C4	3.09	0.40
22:BA:1498:C:C2'	22:BA:1499:C:H6	2.30	0.40
22:BA:1627:G:C2	22:BA:1628:G:N7	2.90	0.40
22:BA:1797:G:C5	22:BA:1798:U:C5	3.10	0.40
22:BA:2098:U:C4	22:BA:2099:U:C4	3.09	0.40
22:BA:2307:G:H1'	22:BA:2308:G:C5	2.57	0.40
22:BA:2506:U:O2'	22:BA:2507:C:H5'	2.21	0.40
22:BA:2436:G:N3	22:BA:2598:A:H2	2.18	0.40
22:BA:274:C:H2'	22:BA:275:C:O4'	2.22	0.40
22:BA:2821:A:H2'	22:BA:2822:G:C8	2.57	0.40
22:BA:2839:G:OP1	35:BN:46:ARG:HD2	2.22	0.40
22:BA:2845:U:O3'	37:BP:52:ARG:NH1	2.54	0.40
22:BA:294:A:C6	22:BA:345:A:N3	2.90	0.40
22:BA:379:G:N1	22:BA:396:G:C6	2.90	0.40
22:BA:846:U:C2'	22:BA:847:U:OP2	2.69	0.40
23:BB:42:C:C5	27:BF:65:LEU:HD22	2.56	0.40
25:BD:142:VAL:HG23	25:BD:143:PRO:HD2	2.03	0.40
25:BD:92:VAL:O	25:BD:94:GLN:N	2.55	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:BE:106:LYS:HD2	26:BE:200:LEU:HB3	2.04	0.40
26:BE:3:LEU:HD12	26:BE:14:VAL:HG11	2.03	0.40
27:BF:107:VAL:N	27:BF:108:PRO:HD2	2.34	0.40
27:BF:162:ASP:OD1	27:BF:162:ASP:N	2.54	0.40
27:BF:5:ASP:O	27:BF:8:LYS:HG2	2.21	0.40
28:BG:140:ILE:HD12	28:BG:141:GLY:H	1.87	0.40
29:BH:12:LEU:HB2	29:BH:19:VAL:HG11	2.03	0.40
29:BH:50:ARG:C	29:BH:52:ALA:N	2.75	0.40
31:BJ:114:LEU:C	31:BJ:114:LEU:HD23	2.41	0.40
31:BJ:31:GLU:CG	31:BJ:142:ILE:HD12	2.50	0.40
31:BJ:54:ILE:C	31:BJ:54:ILE:CD1	2.86	0.40
32:BK:88:ASN:HB3	32:BK:92:GLU:O	2.20	0.40
35:BN:12:ARG:HD3	35:BN:16:HIS:CD2	2.57	0.40
37:BP:33:GLU:OE1	37:BP:34:GLY:N	2.55	0.40
37:BP:91:VAL:O	37:BP:92:ARG:C	2.60	0.40
41:BT:34:VAL:O	41:BT:35:ALA:O	2.39	0.40
43:BV:6:ALA:CB	43:BV:40:ILE:CG2	3.00	0.40
44:BW:67:LYS:O	44:BW:68:PHE:CB	2.59	0.40
46:BY:16:THR:O	46:BY:19:LEU:HB2	2.21	0.40
1:CA:103:U:H2'	1:CA:104:G:H8	1.87	0.40
1:CA:1097:C:C2	1:CA:1098:C:C6	3.10	0.40
1:CA:110:C:O2'	1:CA:111:G:C5'	2.69	0.40
1:CA:1245:C:O2'	1:CA:1246:A:O5'	2.39	0.40
1:CA:126:G:H5''	1:CA:634:C:O2	2.21	0.40
1:CA:1357:A:C5	1:CA:1358:U:C4	3.10	0.40
1:CA:1363:A:C6	1:CA:1365:G:C6	3.09	0.40
1:CA:1494:G:C2	1:CA:1495:U:C6	3.09	0.40
1:CA:486:U:O2	1:CA:486:U:C2'	2.69	0.40
1:CA:71:A:C2	1:CA:72:A:N7	2.89	0.40
1:CA:963:G:O2'	1:CA:964:A:O5'	2.40	0.40
3:CC:163:ARG:O	3:CC:164:THR:CB	2.69	0.40
1:CA:1189:U:H5''	3:CC:4:VAL:HG11	2.03	0.40
4:CD:146:GLU:N	4:CD:146:GLU:OE1	2.55	0.40
7:CG:8:GLN:CD	7:CG:9:ARG:H	2.24	0.40
8:CH:68:LYS:CD	8:CH:69:ALA:N	2.71	0.40
5:CE:155:LYS:NZ	8:CH:72:GLU:CG	2.84	0.40
9:CI:118:ARG:HG3	9:CI:124:PRO:HG3	2.04	0.40
1:CA:1367:C:H5'	10:CJ:62:ARG:NH1	2.36	0.40
12:CL:35:ARG:HA	12:CL:35:ARG:HD3	1.85	0.40
16:CP:2:VAL:HG13	16:CP:65:ALA:CA	2.51	0.40
16:CP:60:TRP:O	16:CP:63:GLN:N	2.55	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:CP:6:LEU:HB2	16:CP:17:TYR:CB	2.49	0.40
17:CQ:30:HIS:CG	17:CQ:31:PRO:CD	3.05	0.40
17:CQ:46:HIS:HB3	17:CQ:66:LEU:HD13	2.03	0.40
18:CR:27:THR:O	18:CR:30:ASN:HB3	2.21	0.40
48:D0:29:VAL:CG2	48:D0:34:GLY:HA2	2.52	0.40
22:DA:1054:A:C2	22:DA:1106:G:C2	3.09	0.40
22:DA:1070:A:H61	30:DI:8:VAL:CB	2.34	0.40
22:DA:1080:A:N3	22:DA:1081:U:C6	2.89	0.40
22:DA:1225:G:C6	22:DA:1226:A:N6	2.89	0.40
22:DA:138:U:H2'	22:DA:140:C:C1'	2.49	0.40
22:DA:1442:U:N3	22:DA:1443:U:C4	2.90	0.40
22:DA:1706:C:O2'	22:DA:1707:G:OP1	2.35	0.40
22:DA:1724:G:H3'	22:DA:1725:U:C6	2.57	0.40
22:DA:1931:U:O2'	22:DA:1932:A:H5'	2.20	0.40
22:DA:204:A:C4	22:DA:206:U:C4	3.09	0.40
22:DA:217:A:O2'	22:DA:218:A:H5'	2.21	0.40
22:DA:2204:G:OP2	24:DC:149:LYS:CD	2.61	0.40
22:DA:228:C:N3	22:DA:418:C:O4'	2.54	0.40
22:DA:2573:C:OP1	22:DA:2575:C:OP2	2.40	0.40
22:DA:2581:G:C5'	22:DA:2582:G:OP1	2.69	0.40
22:DA:2616:C:O2'	22:DA:2617:U:O5'	2.26	0.40
22:DA:2681:C:H4'	22:DA:2682:A:O5'	2.22	0.40
22:DA:2750:A:HO2'	22:DA:2751:G:P	2.44	0.40
22:DA:278:A:N1	22:DA:362:A:C8	2.90	0.40
22:DA:2852:G:H2'	22:DA:2853:C:C6	2.57	0.40
22:DA:301:G:C6	22:DA:317:G:C6	3.10	0.40
22:DA:415:A:C5	22:DA:416:U:C4	3.09	0.40
22:DA:476:G:N2	22:DA:478:A:H2'	2.36	0.40
22:DA:48:G:N3	22:DA:48:G:H2'	2.36	0.40
22:DA:497:A:H3'	22:DA:498:G:H8	1.87	0.40
22:DA:540:C:H2'	22:DA:541:A:H8	1.86	0.40
22:DA:54:G:O5'	22:DA:54:G:H8	2.05	0.40
22:DA:661:A:H2'	22:DA:662:G:O4'	2.22	0.40
22:DA:69:C:H2'	22:DA:70:G:C8	2.56	0.40
22:DA:740:C:H5'	22:DA:1784:A:C3'	2.51	0.40
22:DA:756:A:H2'	22:DA:757:G:O5'	2.21	0.40
22:DA:958:U:H3	34:DM:16:ARG:HB2	1.86	0.40
23:DB:34:A:H2'	23:DB:35:C:OP2	2.22	0.40
24:DC:71:ASP:O	24:DC:73:ILE:HG12	2.21	0.40
25:DD:149:ASN:OD1	25:DD:150:GLN:N	2.50	0.40
25:DD:40:LEU:HA	25:DD:44:GLY:CA	2.46	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:DE:20:GLY:H	26:DE:110:SER:HB3	1.87	0.40
27:DF:160:LYS:HB2	27:DF:160:LYS:HE2	1.93	0.40
27:DF:3:LEU:HG	27:DF:100:GLU:CD	2.40	0.40
29:DH:37:VAL:HG22	29:DH:38:PRO:HD2	2.04	0.40
30:DI:4:VAL:HG22	30:DI:5:GLN:N	2.36	0.40
31:DJ:16:TYR:HB2	31:DJ:54:ILE:CD1	2.52	0.40
22:DA:2818:U:OP2	35:DN:42:LYS:NZ	2.54	0.40
37:DP:105:LYS:HD3	37:DP:105:LYS:HA	1.90	0.40
40:DS:20:VAL:CG1	40:DS:43:ALA:CB	2.86	0.40
42:DU:90:LYS:CB	42:DU:92:VAL:CG1	3.00	0.40
43:DV:65:VAL:HG22	43:DV:65:VAL:O	2.21	0.40

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:BA:138:U:O4	22:DA:305:C:OP1[3_545]	2.02	0.18

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AB	216/218 (99%)	133 (62%)	51 (24%)	32 (15%)	0	0
2	CB	216/218 (99%)	158 (73%)	38 (18%)	20 (9%)	0	3
3	AC	204/206 (99%)	144 (71%)	36 (18%)	24 (12%)	0	1
3	CC	204/206 (99%)	138 (68%)	47 (23%)	19 (9%)	0	3
4	AD	203/205 (99%)	127 (63%)	43 (21%)	33 (16%)	0	0
4	CD	203/205 (99%)	138 (68%)	40 (20%)	25 (12%)	0	1
5	AE	148/150 (99%)	97 (66%)	28 (19%)	23 (16%)	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	CE	148/150 (99%)	111 (75%)	21 (14%)	16 (11%)	0	2
6	AF	98/100 (98%)	71 (72%)	15 (15%)	12 (12%)	0	1
6	CF	98/100 (98%)	66 (67%)	19 (19%)	13 (13%)	0	1
7	AG	149/151 (99%)	100 (67%)	37 (25%)	12 (8%)	1	5
7	CG	148/151 (98%)	96 (65%)	38 (26%)	14 (10%)	0	3
8	AH	127/129 (98%)	101 (80%)	15 (12%)	11 (9%)	1	4
8	CH	127/129 (98%)	96 (76%)	23 (18%)	8 (6%)	1	8
9	AI	125/127 (98%)	81 (65%)	28 (22%)	16 (13%)	0	1
9	CI	125/127 (98%)	84 (67%)	32 (26%)	9 (7%)	1	6
10	AJ	96/98 (98%)	69 (72%)	10 (10%)	17 (18%)	0	0
10	CJ	96/98 (98%)	61 (64%)	21 (22%)	14 (15%)	0	1
11	AK	115/117 (98%)	80 (70%)	20 (17%)	15 (13%)	0	1
11	CK	115/117 (98%)	87 (76%)	16 (14%)	12 (10%)	0	3
12	AL	121/123 (98%)	88 (73%)	21 (17%)	12 (10%)	0	3
12	CL	121/123 (98%)	84 (69%)	24 (20%)	13 (11%)	0	2
13	AM	112/114 (98%)	83 (74%)	19 (17%)	10 (9%)	1	4
13	CM	112/114 (98%)	62 (55%)	37 (33%)	13 (12%)	0	2
14	AN	92/100 (92%)	60 (65%)	18 (20%)	14 (15%)	0	0
14	CN	91/100 (91%)	57 (63%)	26 (29%)	8 (9%)	1	4
15	AO	86/88 (98%)	59 (69%)	19 (22%)	8 (9%)	0	3
15	CO	86/88 (98%)	53 (62%)	30 (35%)	3 (4%)	3	20
16	AP	80/82 (98%)	59 (74%)	12 (15%)	9 (11%)	0	2
16	CP	79/82 (96%)	48 (61%)	23 (29%)	8 (10%)	0	3
17	AQ	78/80 (98%)	48 (62%)	24 (31%)	6 (8%)	1	5
17	CQ	78/80 (98%)	59 (76%)	11 (14%)	8 (10%)	0	3
18	AR	53/55 (96%)	40 (76%)	10 (19%)	3 (6%)	1	10
18	CR	53/55 (96%)	33 (62%)	17 (32%)	3 (6%)	1	10
19	AS	77/79 (98%)	51 (66%)	15 (20%)	11 (14%)	0	1
19	CS	77/79 (98%)	46 (60%)	24 (31%)	7 (9%)	1	4
20	AT	83/85 (98%)	57 (69%)	21 (25%)	5 (6%)	1	9
20	CT	83/85 (98%)	52 (63%)	21 (25%)	10 (12%)	0	1

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
21	AU	49/51 (96%)	25 (51%)	12 (24%)	12 (24%)	0	0
21	CU	49/51 (96%)	20 (41%)	13 (26%)	16 (33%)	0	0
24	BC	269/271 (99%)	197 (73%)	46 (17%)	26 (10%)	0	3
24	DC	269/271 (99%)	174 (65%)	64 (24%)	31 (12%)	0	2
25	BD	207/209 (99%)	141 (68%)	32 (16%)	34 (16%)	0	0
25	DD	207/209 (99%)	131 (63%)	41 (20%)	35 (17%)	0	0
26	BE	199/201 (99%)	144 (72%)	35 (18%)	20 (10%)	0	3
26	DE	199/201 (99%)	115 (58%)	54 (27%)	30 (15%)	0	0
27	BF	176/178 (99%)	124 (70%)	36 (20%)	16 (9%)	1	4
27	DF	176/178 (99%)	87 (49%)	58 (33%)	31 (18%)	0	0
28	BG	174/176 (99%)	111 (64%)	38 (22%)	25 (14%)	0	1
28	DG	174/176 (99%)	99 (57%)	40 (23%)	35 (20%)	0	0
29	BH	147/149 (99%)	62 (42%)	50 (34%)	35 (24%)	0	0
29	DH	147/149 (99%)	70 (48%)	54 (37%)	23 (16%)	0	0
30	BI	139/141 (99%)	84 (60%)	41 (30%)	14 (10%)	0	3
30	DI	139/141 (99%)	75 (54%)	48 (34%)	16 (12%)	0	2
31	BJ	140/142 (99%)	104 (74%)	24 (17%)	12 (9%)	1	4
31	DJ	140/142 (99%)	92 (66%)	28 (20%)	20 (14%)	0	1
32	BK	120/122 (98%)	89 (74%)	17 (14%)	14 (12%)	0	1
32	DK	120/122 (98%)	76 (63%)	17 (14%)	27 (22%)	0	0
33	BL	141/143 (99%)	100 (71%)	30 (21%)	11 (8%)	1	5
33	DL	141/143 (99%)	77 (55%)	44 (31%)	20 (14%)	0	1
34	BM	134/136 (98%)	96 (72%)	18 (13%)	20 (15%)	0	0
34	DM	134/136 (98%)	90 (67%)	26 (19%)	18 (13%)	0	1
35	BN	118/120 (98%)	91 (77%)	16 (14%)	11 (9%)	0	3
35	DN	118/120 (98%)	74 (63%)	25 (21%)	19 (16%)	0	0
36	BO	114/116 (98%)	85 (75%)	18 (16%)	11 (10%)	0	3
36	DO	114/116 (98%)	74 (65%)	30 (26%)	10 (9%)	1	4
37	BP	112/114 (98%)	78 (70%)	20 (18%)	14 (12%)	0	1
37	DP	112/114 (98%)	60 (54%)	31 (28%)	21 (19%)	0	0
38	BQ	115/117 (98%)	100 (87%)	7 (6%)	8 (7%)	1	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
38	DQ	115/117 (98%)	75 (65%)	27 (24%)	13 (11%)	0	2
39	BR	101/103 (98%)	76 (75%)	14 (14%)	11 (11%)	0	2
39	DR	101/103 (98%)	64 (63%)	24 (24%)	13 (13%)	0	1
40	BS	108/110 (98%)	89 (82%)	14 (13%)	5 (5%)	2	15
40	DS	108/110 (98%)	72 (67%)	25 (23%)	11 (10%)	0	3
41	BT	91/93 (98%)	49 (54%)	26 (29%)	16 (18%)	0	0
41	DT	91/93 (98%)	41 (45%)	26 (29%)	24 (26%)	0	0
42	BU	100/102 (98%)	66 (66%)	16 (16%)	18 (18%)	0	0
42	DU	100/102 (98%)	52 (52%)	22 (22%)	26 (26%)	0	0
43	BV	92/94 (98%)	75 (82%)	15 (16%)	2 (2%)	6	29
43	DV	92/94 (98%)	60 (65%)	24 (26%)	8 (9%)	1	4
44	BW	77/79 (98%)	31 (40%)	22 (29%)	24 (31%)	0	0
44	DW	77/79 (98%)	30 (39%)	25 (32%)	22 (29%)	0	0
45	BX	75/77 (97%)	58 (77%)	10 (13%)	7 (9%)	0	3
45	DX	75/77 (97%)	44 (59%)	20 (27%)	11 (15%)	0	0
46	BY	61/63 (97%)	38 (62%)	15 (25%)	8 (13%)	0	1
46	DY	61/63 (97%)	40 (66%)	16 (26%)	5 (8%)	1	5
47	BZ	56/58 (97%)	47 (84%)	5 (9%)	4 (7%)	1	6
47	DZ	56/58 (97%)	31 (55%)	20 (36%)	5 (9%)	1	4
48	B0	54/56 (96%)	41 (76%)	9 (17%)	4 (7%)	1	6
48	D0	54/56 (96%)	33 (61%)	16 (30%)	5 (9%)	0	3
49	B1	48/50 (96%)	37 (77%)	6 (12%)	5 (10%)	0	3
49	D1	48/50 (96%)	35 (73%)	8 (17%)	5 (10%)	0	3
50	B2	44/46 (96%)	37 (84%)	7 (16%)	0	100	100
50	D2	44/46 (96%)	29 (66%)	10 (23%)	5 (11%)	0	2
51	B3	62/64 (97%)	53 (86%)	5 (8%)	4 (6%)	1	8
51	D3	62/64 (97%)	42 (68%)	12 (19%)	8 (13%)	0	1
52	B4	36/38 (95%)	24 (67%)	9 (25%)	3 (8%)	1	5
52	D4	36/38 (95%)	21 (58%)	9 (25%)	6 (17%)	0	0
All	All	11241/11452 (98%)	7412 (66%)	2420 (22%)	1409 (12%)	0	1

All (1409) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AB	21	TYR
2	AB	33	ALA
2	AB	37	VAL
2	AB	72	LYS
2	AB	75	ALA
2	AB	119	GLN
2	AB	150	ILE
3	AC	16	PRO
3	AC	17	TRP
3	AC	60	ALA
3	AC	126	ARG
3	AC	165	GLU
3	AC	192	TYR
3	AC	205	GLU
4	AD	24	VAL
4	AD	25	ARG
4	AD	26	ALA
4	AD	28	ASP
4	AD	29	THR
4	AD	32	LYS
4	AD	33	ILE
4	AD	34	GLU
4	AD	36	ALA
4	AD	147	LYS
4	AD	152	SER
4	AD	159	GLU
4	AD	172	VAL
4	AD	173	ASP
4	AD	191	SER
4	AD	192	ALA
5	AE	97	PRO
5	AE	110	MET
5	AE	137	ARG
5	AE	153	ALA
6	AF	91	ARG
7	AG	93	VAL
8	AH	48	PHE
8	AH	49	LYS
8	AH	66	GLN
8	AH	88	LYS
9	AI	8	THR
9	AI	40	ARG
9	AI	43	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AI	71	ILE
9	AI	119	LYS
9	AI	128	LYS
10	AJ	57	VAL
10	AJ	101	SER
11	AK	46	ALA
11	AK	126	ARG
12	AL	23	LEU
12	AL	43	LYS
12	AL	73	LEU
12	AL	75	GLU
12	AL	88	ASP
13	AM	2	ARG
13	AM	46	GLU
14	AN	27	LYS
14	AN	33	VAL
14	AN	51	PRO
14	AN	52	ARG
15	AO	17	ASP
15	AO	24	THR
15	AO	72	LYS
16	AP	11	ALA
16	AP	80	LYS
17	AQ	12	VAL
17	AQ	50	ASN
17	AQ	52	CYS
17	AQ	75	VAL
18	AR	47	ARG
19	AS	27	LYS
20	AT	3	ILE
20	AT	67	HIS
21	AU	11	PHE
21	AU	12	ASP
21	AU	23	GLU
24	BC	77	VAL
24	BC	104	LEU
24	BC	105	ALA
24	BC	142	ASN
24	BC	239	PHE
25	BD	43	ASP
25	BD	73	VAL
25	BD	92	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	99	GLU
25	BD	103	ASP
25	BD	122	VAL
26	BE	6	LYS
26	BE	8	ALA
26	BE	62	GLN
26	BE	69	ARG
26	BE	79	ARG
26	BE	175	ILE
27	BF	11	VAL
27	BF	61	GLY
27	BF	134	GLN
27	BF	174	PHE
27	BF	175	PRO
28	BG	8	VAL
28	BG	28	LYS
28	BG	31	GLU
28	BG	38	ASP
28	BG	44	HIS
28	BG	45	ALA
28	BG	61	TRP
28	BG	84	LYS
28	BG	118	ALA
28	BG	170	THR
29	BH	10	ALA
29	BH	11	ASN
29	BH	14	SER
29	BH	15	LEU
29	BH	23	ALA
29	BH	28	ASN
29	BH	32	PRO
29	BH	33	GLN
29	BH	81	ALA
29	BH	83	LYS
30	BI	65	SER
30	BI	92	PRO
31	BJ	13	ARG
31	BJ	21	THR
31	BJ	41	LYS
31	BJ	45	THR
31	BJ	73	VAL
31	BJ	81	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BK	49	ARG
32	BK	71	ARG
32	BK	108	ARG
33	BL	66	PHE
33	BL	88	GLY
34	BM	35	ALA
34	BM	36	VAL
34	BM	56	ALA
34	BM	69	PRO
35	BN	11	ASN
35	BN	80	PHE
35	BN	102	PHE
36	BO	3	LYS
36	BO	57	ALA
36	BO	58	ILE
37	BP	15	ASP
37	BP	20	ARG
37	BP	25	VAL
37	BP	33	GLU
37	BP	93	LYS
37	BP	105	LYS
38	BQ	90	ASP
38	BQ	91	ARG
39	BR	27	ILE
39	BR	55	ASP
39	BR	91	GLN
40	BS	14	ALA
41	BT	27	SER
41	BT	29	THR
41	BT	35	ALA
41	BT	36	LYS
41	BT	69	ARG
41	BT	86	THR
41	BT	89	GLU
42	BU	6	ARG
42	BU	16	LYS
42	BU	18	LYS
42	BU	29	SER
42	BU	51	LEU
42	BU	88	ASP
43	BV	69	GLU
44	BW	9	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
44	BW	10	ARG
44	BW	18	LYS
44	BW	23	LYS
44	BW	30	VAL
44	BW	40	ARG
44	BW	47	GLY
44	BW	50	VAL
44	BW	51	GLY
45	BX	53	LYS
46	BY	22	LEU
46	BY	23	ARG
46	BY	24	GLU
48	B0	51	ARG
48	B0	54	ILE
49	B1	16	THR
52	B4	4	ARG
2	CB	81	ASP
2	CB	102	ASN
2	CB	129	THR
3	CC	59	PRO
3	CC	164	THR
3	CC	180	ASP
3	CC	205	GLU
4	CD	24	VAL
4	CD	26	ALA
4	CD	35	GLN
4	CD	39	GLN
4	CD	80	ARG
4	CD	191	SER
4	CD	192	ALA
5	CE	31	SER
5	CE	69	ASN
5	CE	75	LEU
6	CF	82	ASP
6	CF	98	GLU
6	CF	99	ALA
7	CG	8	GLN
7	CG	29	LEU
7	CG	30	MET
7	CG	31	VAL
7	CG	52	ARG
8	CH	29	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
8	CH	30	LYS
8	CH	58	LEU
8	CH	82	LEU
9	CI	11	ARG
9	CI	54	VAL
9	CI	71	ILE
10	CJ	44	THR
10	CJ	46	LYS
10	CJ	87	LEU
11	CK	14	GLN
11	CK	88	PRO
11	CK	90	PRO
11	CK	118	ASN
11	CK	126	ARG
11	CK	127	ARG
12	CL	25	ALA
12	CL	43	LYS
12	CL	47	ALA
13	CM	4	ALA
14	CN	21	ALA
14	CN	95	LEU
16	CP	31	ARG
16	CP	63	GLN
17	CQ	52	CYS
17	CQ	68	LYS
20	CT	3	ILE
20	CT	43	LYS
20	CT	61	ALA
20	CT	65	LEU
20	CT	82	ILE
21	CU	4	LYS
21	CU	9	GLU
21	CU	15	LEU
21	CU	23	GLU
21	CU	32	ARG
21	CU	34	ARG
21	CU	35	GLU
21	CU	36	PHE
21	CU	38	GLU
21	CU	43	GLU
24	DC	9	SER
24	DC	28	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DC	43	ASN
24	DC	45	ASN
24	DC	94	LEU
24	DC	141	HIS
24	DC	237	ARG
24	DC	269	ARG
25	DD	14	ILE
25	DD	43	ASP
25	DD	74	GLU
25	DD	95	SER
25	DD	102	ALA
25	DD	118	PHE
25	DD	119	ALA
25	DD	150	GLN
25	DD	162	ALA
25	DD	174	SER
25	DD	194	PRO
26	DE	24	ASN
26	DE	41	GLN
26	DE	62	GLN
26	DE	71	GLY
26	DE	99	LYS
26	DE	116	ASP
26	DE	127	GLU
27	DF	10	GLU
27	DF	12	VAL
27	DF	32	LYS
27	DF	36	ASN
27	DF	41	GLU
27	DF	76	PHE
27	DF	112	ASP
27	DF	113	PHE
27	DF	116	LEU
27	DF	137	PHE
28	DG	39	ALA
28	DG	49	LEU
28	DG	59	ASP
28	DG	83	THR
28	DG	86	LEU
28	DG	93	TYR
28	DG	118	ALA
28	DG	165	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DH	9	VAL
29	DH	10	ALA
29	DH	61	VAL
29	DH	66	ASN
29	DH	72	ILE
29	DH	76	GLU
29	DH	97	ARG
29	DH	98	ASP
29	DH	102	ALA
30	DI	9	LYS
30	DI	22	PRO
30	DI	69	VAL
30	DI	140	GLU
31	DJ	45	THR
31	DJ	81	ILE
31	DJ	83	GLY
31	DJ	87	ALA
31	DJ	95	ARG
32	DK	2	ILE
32	DK	3	GLN
32	DK	16	ALA
32	DK	18	ARG
32	DK	29	HIS
32	DK	49	ARG
32	DK	71	ARG
32	DK	93	GLN
32	DK	110	GLU
32	DK	119	ALA
32	DK	120	PRO
33	DL	4	ASN
33	DL	66	PHE
33	DL	85	VAL
33	DL	89	VAL
33	DL	100	ILE
33	DL	101	ILE
34	DM	2	LEU
34	DM	14	LYS
34	DM	69	PRO
34	DM	77	PRO
34	DM	135	VAL
35	DN	2	ARG
35	DN	104	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DO	8	ILE
36	DO	90	VAL
37	DP	25	VAL
37	DP	50	ARG
37	DP	51	ASN
37	DP	83	ILE
37	DP	94	ALA
37	DP	108	ARG
37	DP	112	ARG
38	DQ	4	LYS
38	DQ	5	ARG
39	DR	3	ALA
39	DR	98	ILE
40	DS	28	LYS
40	DS	40	ASN
41	DT	14	PRO
41	DT	15	HIS
41	DT	20	ALA
41	DT	29	THR
41	DT	39	THR
42	DU	8	ASP
42	DU	41	VAL
42	DU	65	GLN
42	DU	92	VAL
42	DU	96	LYS
42	DU	97	SER
43	DV	56	PHE
44	DW	9	THR
44	DW	25	PHE
44	DW	30	VAL
44	DW	33	GLY
44	DW	34	SER
44	DW	35	ILE
44	DW	46	ALA
45	DX	21	LEU
45	DX	34	SER
46	DY	22	LEU
46	DY	46	VAL
47	DZ	4	ILE
47	DZ	13	ILE
48	D0	32	THR
49	D1	4	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	D2	24	THR
50	D2	40	ALA
51	D3	3	ILE
51	D3	29	ARG
51	D3	51	LYS
52	D4	20	ASP
2	AB	17	HIS
2	AB	18	GLN
2	AB	20	ARG
2	AB	40	ILE
2	AB	44	LYS
2	AB	63	LYS
2	AB	96	LEU
2	AB	125	PHE
2	AB	133	ALA
2	AB	169	HIS
2	AB	209	VAL
2	AB	210	THR
2	AB	219	THR
3	AC	148	ILE
4	AD	23	GLY
4	AD	35	GLN
4	AD	124	VAL
4	AD	132	ALA
4	AD	167	PRO
4	AD	174	ALA
4	AD	195	ASN
4	AD	196	GLU
4	AD	197	HIS
5	AE	11	GLN
5	AE	50	GLY
5	AE	75	LEU
5	AE	103	GLY
5	AE	108	GLY
5	AE	112	ALA
5	AE	113	VAL
5	AE	121	ASN
5	AE	157	GLY
6	AF	54	LEU
6	AF	69	GLU
6	AF	86	ARG
7	AG	8	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	79	VAL
7	AG	84	TYR
8	AH	2	MET
8	AH	74	ILE
9	AI	30	ASN
10	AJ	34	ALA
10	AJ	61	ALA
10	AJ	74	VAL
10	AJ	92	LEU
11	AK	88	PRO
11	AK	102	ALA
12	AL	33	CYS
12	AL	117	GLY
12	AL	122	LYS
13	AM	6	ILE
13	AM	104	ASN
13	AM	113	LYS
14	AN	22	LYS
14	AN	41	TRP
14	AN	43	ALA
14	AN	80	ARG
15	AO	74	VAL
15	AO	85	GLY
16	AP	24	SER
17	AQ	67	SER
19	AS	79	TYR
20	AT	5	SER
21	AU	8	ASN
21	AU	35	GLU
21	AU	37	TYR
24	BC	110	LYS
24	BC	120	ASP
24	BC	121	ALA
24	BC	140	VAL
24	BC	196	ASN
24	BC	243	PRO
24	BC	255	LYS
25	BD	54	ALA
25	BD	71	ALA
25	BD	72	GLY
25	BD	93	GLY
25	BD	104	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	106	LYS
25	BD	118	PHE
25	BD	144	GLY
25	BD	145	SER
25	BD	183	GLU
25	BD	184	ARG
25	BD	191	GLY
26	BE	46	GLN
26	BE	153	LEU
27	BF	111	ARG
27	BF	128	SER
28	BG	9	VAL
28	BG	30	GLY
28	BG	60	GLY
28	BG	164	ALA
28	BG	168	VAL
29	BH	3	VAL
29	BH	13	GLY
29	BH	29	PHE
29	BH	34	GLY
29	BH	35	LYS
29	BH	89	LYS
29	BH	97	ARG
29	BH	107	GLY
29	BH	111	ALA
29	BH	121	VAL
29	BH	131	SER
29	BH	138	VAL
30	BI	30	GLN
30	BI	105	LEU
32	BK	3	GLN
32	BK	13	ASN
32	BK	35	VAL
32	BK	48	PRO
32	BK	72	PRO
33	BL	15	ALA
33	BL	29	LYS
33	BL	69	ARG
33	BL	82	LEU
33	BL	111	ILE
33	BL	114	GLY
34	BM	2	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	BM	14	LYS
34	BM	54	THR
34	BM	55	ARG
34	BM	73	ILE
34	BM	110	GLU
35	BN	2	ARG
35	BN	118	ARG
35	BN	119	SER
36	BO	22	GLY
36	BO	59	ALA
36	BO	100	HIS
36	BO	112	GLU
37	BP	54	LEU
37	BP	92	ARG
37	BP	103	THR
37	BP	104	GLY
37	BP	113	LEU
38	BQ	5	ARG
38	BQ	86	SER
38	BQ	88	GLU
39	BR	29	THR
39	BR	64	VAL
40	BS	3	THR
41	BT	16	VAL
42	BU	38	ILE
42	BU	50	ALA
42	BU	92	VAL
42	BU	97	SER
44	BW	12	GLY
44	BW	48	ALA
44	BW	52	CYS
44	BW	70	VAL
44	BW	77	LYS
45	BX	2	ARG
46	BY	36	GLN
47	BZ	3	THR
48	B0	34	GLY
49	B1	4	ILE
51	B3	27	ASN
2	CB	26	MET
2	CB	73	ARG
2	CB	84	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	148	GLY
2	CB	177	ASN
2	CB	203	ASP
2	CB	218	ALA
3	CC	24	ASN
3	CC	63	ILE
3	CC	87	ARG
3	CC	130	ARG
3	CC	136	ALA
3	CC	140	ALA
3	CC	178	ARG
4	CD	2	ARG
4	CD	79	ALA
4	CD	107	GLY
4	CD	187	ARG
5	CE	68	ARG
5	CE	74	ALA
5	CE	77	ASN
5	CE	89	THR
5	CE	104	ILE
5	CE	108	GLY
5	CE	144	GLU
6	CF	44	ARG
6	CF	68	GLN
6	CF	92	THR
7	CG	36	SER
7	CG	62	GLU
7	CG	113	LYS
8	CH	2	MET
8	CH	57	GLU
8	CH	119	GLY
9	CI	44	ARG
9	CI	52	GLU
9	CI	58	GLU
9	CI	119	LYS
10	CJ	34	ALA
10	CJ	57	VAL
10	CJ	74	VAL
10	CJ	93	ALA
11	CK	70	ALA
11	CK	91	GLY
12	CL	7	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	CL	16	ALA
12	CL	33	CYS
12	CL	85	ARG
12	CL	98	ARG
13	CM	11	HIS
13	CM	65	GLU
14	CN	53	ASP
14	CN	60	ARG
14	CN	99	SER
15	CO	6	ALA
16	CP	46	LYS
17	CQ	69	THR
18	CR	72	ARG
19	CS	4	LEU
19	CS	46	LEU
20	CT	12	GLN
21	CU	7	GLU
21	CU	8	ASN
21	CU	11	PHE
21	CU	26	GLY
24	DC	3	VAL
24	DC	36	ASN
24	DC	121	ALA
24	DC	123	ILE
24	DC	140	VAL
24	DC	195	GLY
24	DC	217	PRO
24	DC	232	GLY
24	DC	238	ASN
25	DD	31	ALA
25	DD	93	GLY
25	DD	113	SER
25	DD	143	PRO
25	DD	164	GLN
25	DD	170	VAL
25	DD	175	LEU
26	DE	7	ASP
26	DE	45	ALA
26	DE	55	SER
26	DE	61	ARG
26	DE	98	LYS
26	DE	126	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DE	148	ILE
26	DE	153	LEU
26	DE	163	ASN
26	DE	187	VAL
26	DE	188	MET
27	DF	8	LYS
27	DF	37	MET
27	DF	42	ALA
27	DF	43	ILE
27	DF	67	THR
27	DF	86	CYS
27	DF	114	ARG
27	DF	122	ASP
27	DF	133	GLU
27	DF	136	ILE
27	DF	138	PRO
27	DF	141	ASP
27	DF	145	VAL
27	DF	148	VAL
28	DG	9	VAL
28	DG	85	LYS
28	DG	91	VAL
28	DG	95	ALA
28	DG	125	PRO
28	DG	149	ALA
28	DG	164	ALA
29	DH	3	VAL
29	DH	39	ALA
29	DH	86	ASP
29	DH	99	ILE
29	DH	143	ILE
29	DH	144	VAL
30	DI	23	VAL
30	DI	62	ALA
30	DI	119	ALA
31	DJ	72	LYS
31	DJ	84	ILE
32	DK	35	VAL
32	DK	46	ALA
32	DK	88	ASN
32	DK	98	ARG
32	DK	104	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	DL	15	ALA
33	DL	42	SER
33	DL	82	LEU
33	DL	96	LYS
33	DL	99	ASN
33	DL	111	ILE
34	DM	16	ARG
34	DM	35	ALA
34	DM	111	GLU
34	DM	132	THR
35	DN	10	LEU
35	DN	15	SER
35	DN	29	VAL
35	DN	61	ALA
35	DN	71	ARG
35	DN	82	GLU
35	DN	102	PHE
35	DN	105	GLY
36	DO	3	LYS
36	DO	72	ALA
37	DP	63	ILE
37	DP	93	LYS
37	DP	104	GLY
38	DQ	23	TYR
38	DQ	32	ARG
38	DQ	86	SER
38	DQ	87	VAL
39	DR	40	MET
39	DR	57	GLY
39	DR	89	HIS
40	DS	33	LEU
40	DS	72	THR
41	DT	47	VAL
41	DT	53	VAL
41	DT	68	LYS
41	DT	74	ILE
41	DT	88	LYS
42	DU	6	ARG
42	DU	34	ILE
42	DU	40	LEU
42	DU	54	PRO
42	DU	82	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DU	87	GLU
42	DU	88	ASP
42	DU	89	GLY
42	DU	99	SER
43	DV	79	ARG
44	DW	10	ARG
44	DW	26	GLY
44	DW	39	GLN
44	DW	44	PHE
44	DW	49	ASN
44	DW	57	THR
44	DW	71	LYS
44	DW	78	PHE
45	DX	2	ARG
45	DX	63	ILE
48	D0	54	ILE
49	D1	35	LEU
49	D1	36	LYS
51	D3	22	LYS
51	D3	39	ARG
52	D4	3	VAL
2	AB	22	TRP
2	AB	41	ASN
2	AB	71	THR
2	AB	73	ARG
2	AB	148	GLY
3	AC	11	LEU
3	AC	50	SER
3	AC	62	SER
3	AC	145	ALA
4	AD	22	SER
4	AD	31	CYS
4	AD	148	ALA
4	AD	165	GLU
4	AD	189	ASP
5	AE	23	THR
5	AE	25	LYS
5	AE	44	ARG
5	AE	98	ALA
5	AE	156	ARG
6	AF	53	LYS
6	AF	92	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	AF	94	HIS
7	AG	129	ASN
7	AG	130	LYS
7	AG	147	ASN
9	AI	38	PHE
9	AI	56	MET
9	AI	88	GLU
9	AI	90	ASP
9	AI	120	ALA
10	AJ	81	GLU
11	AK	40	ALA
11	AK	51	PHE
13	AM	3	ILE
13	AM	4	ALA
14	AN	14	ALA
14	AN	16	ALA
14	AN	61	ASN
14	AN	91	GLU
15	AO	2	LEU
15	AO	16	ARG
16	AP	76	LYS
18	AR	33	THR
19	AS	4	LEU
19	AS	5	LYS
19	AS	26	ASP
19	AS	42	ASN
21	AU	25	ALA
24	BC	28	PRO
24	BC	64	VAL
24	BC	256	THR
25	BD	11	MET
25	BD	91	THR
25	BD	169	ARG
25	BD	173	GLN
25	BD	175	LEU
25	BD	192	ALA
26	BE	71	GLY
26	BE	83	VAL
26	BE	86	ALA
26	BE	197	GLU
27	BF	20	ASN
27	BF	113	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BF	127	TYR
27	BF	132	ARG
27	BF	149	ARG
28	BG	7	PRO
28	BG	53	PRO
29	BH	12	LEU
29	BH	125	THR
29	BH	135	HIS
30	BI	59	THR
31	BJ	44	TYR
31	BJ	98	GLU
31	BJ	125	TYR
32	BK	16	ALA
33	BL	41	ARG
34	BM	78	LEU
34	BM	84	LYS
34	BM	111	GLU
35	BN	32	GLU
35	BN	117	ASP
36	BO	60	GLU
36	BO	77	ALA
38	BQ	85	ALA
38	BQ	101	ASP
39	BR	98	ILE
40	BS	64	ALA
40	BS	95	ARG
40	BS	96	ILE
41	BT	38	ALA
41	BT	49	LYS
41	BT	55	VAL
41	BT	68	LYS
41	BT	70	HIS
41	BT	84	TYR
42	BU	45	GLN
42	BU	87	GLU
44	BW	14	ASP
44	BW	25	PHE
44	BW	39	GLN
44	BW	41	GLY
45	BX	34	SER
45	BX	61	LYS
45	BX	69	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
45	BX	76	LYS
46	BY	9	LYS
46	BY	17	GLU
46	BY	37	LEU
48	B0	35	GLU
49	B1	50	GLU
49	B1	51	ALA
51	B3	31	ILE
52	B4	16	ILE
2	CB	86	CYS
2	CB	128	LEU
2	CB	150	ILE
2	CB	176	ASN
2	CB	205	ALA
3	CC	78	LYS
4	CD	29	THR
4	CD	33	ILE
4	CD	40	HIS
4	CD	119	HIS
4	CD	188	SER
5	CE	38	VAL
6	CF	86	ARG
7	CG	10	LYS
7	CG	59	GLU
8	CH	34	ALA
10	CJ	35	GLN
10	CJ	82	LYS
11	CK	16	SER
11	CK	92	ARG
13	CM	14	ALA
13	CM	45	SER
13	CM	49	GLU
13	CM	76	ILE
13	CM	93	GLY
14	CN	69	PRO
16	CP	47	GLU
16	CP	78	VAL
17	CQ	79	GLU
19	CS	7	GLY
20	CT	62	ALA
24	DC	13	ARG
24	DC	59	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DC	196	ASN
24	DC	239	PHE
24	DC	256	THR
25	DD	11	MET
25	DD	44	GLY
25	DD	99	GLU
25	DD	107	VAL
25	DD	112	THR
25	DD	114	LYS
25	DD	136	ASN
25	DD	169	ARG
25	DD	182	ALA
26	DE	165	HIS
26	DE	166	LYS
26	DE	172	ALA
26	DE	174	GLY
27	DF	31	GLU
27	DF	120	SER
28	DG	11	PRO
28	DG	45	ALA
28	DG	80	GLU
28	DG	159	LYS
28	DG	169	ARG
29	DH	25	TYR
29	DH	53	GLU
29	DH	121	VAL
30	DI	19	PRO
30	DI	51	GLY
30	DI	87	SER
30	DI	116	MET
31	DJ	25	LEU
31	DJ	43	GLU
31	DJ	56	VAL
31	DJ	74	TYR
31	DJ	113	PRO
31	DJ	125	TYR
32	DK	5	GLN
32	DK	14	SER
32	DK	92	GLU
32	DK	103	VAL
33	DL	28	GLY
33	DL	93	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	DM	72	PRO
34	DM	95	LEU
34	DM	127	LYS
35	DN	13	ASN
35	DN	32	GLU
35	DN	85	PRO
35	DN	91	ALA
36	DO	60	GLU
36	DO	65	THR
36	DO	107	ALA
37	DP	23	ASP
37	DP	56	SER
38	DQ	45	ALA
38	DQ	58	GLN
38	DQ	88	GLU
39	DR	55	ASP
39	DR	91	GLN
40	DS	3	THR
40	DS	50	VAL
40	DS	61	ASN
41	DT	19	LYS
41	DT	66	LYS
41	DT	86	THR
42	DU	35	VAL
42	DU	95	PHE
42	DU	101	THR
43	DV	55	GLU
43	DV	57	TYR
44	DW	53	GLY
44	DW	55	ASP
44	DW	83	ALA
45	DX	25	LYS
46	DY	2	LYS
46	DY	9	LYS
46	DY	37	LEU
47	DZ	38	GLU
48	D0	26	SER
48	D0	55	ALA
49	D1	51	ALA
50	D2	8	SER
51	D3	38	LYS
2	AB	141	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	65	VAL
3	AC	106	ARG
3	AC	139	ASN
4	AD	6	PRO
4	AD	166	LYS
5	AE	74	ALA
5	AE	77	ASN
6	AF	39	LEU
6	AF	51	ILE
6	AF	56	LYS
6	AF	63	ASN
7	AG	112	ASP
8	AH	47	ASP
8	AH	77	VAL
9	AI	12	LYS
10	AJ	35	GLN
10	AJ	36	VAL
10	AJ	41	PRO
10	AJ	62	ARG
10	AJ	75	ASP
11	AK	13	LYS
11	AK	16	SER
11	AK	97	ARG
11	AK	124	LYS
12	AL	57	THR
13	AM	26	LYS
13	AM	84	CYS
14	AN	2	LYS
16	AP	42	ILE
19	AS	3	SER
19	AS	48	ILE
19	AS	63	ASP
20	AT	17	ARG
20	AT	72	ALA
21	AU	36	PHE
24	BC	109	LEU
24	BC	157	ALA
24	BC	230	PRO
24	BC	235	GLU
24	BC	248	GLY
25	BD	53	GLY
25	BD	86	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	107	VAL
25	BD	170	VAL
25	BD	182	ALA
26	BE	9	GLN
26	BE	67	ARG
26	BE	70	SER
27	BF	133	GLU
29	BH	8	LYS
29	BH	9	VAL
29	BH	25	TYR
30	BI	6	ALA
30	BI	83	ALA
30	BI	89	SER
32	BK	14	SER
32	BK	93	GLN
32	BK	119	ALA
34	BM	51	ARG
34	BM	53	MET
34	BM	58	LYS
34	BM	60	GLN
34	BM	77	PRO
34	BM	134	THR
37	BP	65	ASN
37	BP	86	LYS
38	BQ	87	VAL
39	BR	65	ALA
41	BT	20	ALA
41	BT	21	SER
42	BU	26	ASN
42	BU	83	GLY
42	BU	85	ARG
42	BU	101	THR
44	BW	22	VAL
44	BW	33	GLY
44	BW	74	LYS
44	BW	76	ARG
47	BZ	34	THR
49	B1	15	GLY
52	B4	8	LYS
2	CB	179	GLY
2	CB	188	THR
3	CC	128	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	CC	173	PRO
4	CD	4	LEU
4	CD	9	LYS
4	CD	32	LYS
4	CD	47	LEU
6	CF	18	VAL
6	CF	63	ASN
7	CG	99	ALA
9	CI	55	ASP
11	CK	36	ARG
12	CL	5	GLN
12	CL	97	VAL
13	CM	42	VAL
13	CM	77	LYS
15	CO	13	GLU
15	CO	45	HIS
16	CP	64	GLY
17	CQ	12	VAL
18	CR	56	ARG
18	CR	70	THR
19	CS	3	SER
20	CT	24	ARG
20	CT	67	HIS
21	CU	30	GLU
24	DC	34	GLU
24	DC	37	SER
24	DC	69	ASN
24	DC	98	GLY
25	DD	134	HIS
25	DD	197	THR
26	DE	69	ARG
26	DE	73	ILE
26	DE	96	VAL
26	DE	132	LYS
27	DF	70	ARG
27	DF	94	ARG
28	DG	123	GLU
28	DG	136	ASP
28	DG	166	GLU
28	DG	174	LYS
29	DH	134	VAL
30	DI	14	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	DI	30	GLN
30	DI	83	ALA
31	DJ	13	ARG
31	DJ	44	TYR
31	DJ	112	GLY
32	DK	17	ARG
32	DK	89	ASN
32	DK	108	ARG
34	DM	117	PHE
35	DN	80	PHE
35	DN	90	ARG
37	DP	32	VAL
37	DP	33	GLU
37	DP	42	PHE
37	DP	113	LEU
38	DQ	91	ARG
39	DR	43	ASN
39	DR	90	ARG
41	DT	4	GLU
41	DT	8	LEU
41	DT	11	LEU
41	DT	50	LEU
41	DT	84	TYR
42	DU	17	ASP
42	DU	33	VAL
42	DU	44	HIS
42	DU	52	ASN
42	DU	67	SER
44	DW	16	GLU
44	DW	18	LYS
44	DW	36	ILE
45	DX	40	GLU
45	DX	76	LYS
48	D0	40	HIS
50	D2	9	VAL
52	D4	8	LYS
2	AB	42	LEU
2	AB	154	GLY
2	AB	157	PRO
3	AC	14	VAL
3	AC	21	TRP
3	AC	35	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	36	PHE
3	AC	107	LYS
3	AC	186	SER
6	AF	99	ALA
8	AH	41	GLU
8	AH	95	MET
9	AI	31	GLN
9	AI	32	ARG
10	AJ	42	LEU
11	AK	14	GLN
12	AL	24	GLU
12	AL	77	SER
13	AM	9	PRO
15	AO	45	HIS
16	AP	79	ASN
19	AS	8	PRO
21	AU	24	LYS
21	AU	26	GLY
24	BC	40	GLY
24	BC	135	PRO
24	BC	204	LEU
26	BE	96	VAL
26	BE	116	ASP
26	BE	188	MET
27	BF	2	LYS
28	BG	16	VAL
28	BG	33	THR
28	BG	94	ARG
28	BG	97	VAL
29	BH	31	VAL
29	BH	40	THR
29	BH	53	GLU
29	BH	91	PHE
29	BH	124	THR
29	BH	137	GLU
30	BI	3	LYS
30	BI	20	SER
31	BJ	14	ASP
32	BK	73	ASP
33	BL	19	LEU
35	BN	41	ALA
35	BN	42	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BO	89	ASP
37	BP	51	ASN
39	BR	40	MET
42	BU	53	GLN
45	BX	17	ARG
47	BZ	39	ASP
51	B3	22	LYS
2	CB	72	LYS
2	CB	208	ALA
3	CC	155	ARG
4	CD	27	ILE
4	CD	34	GLU
4	CD	37	PRO
5	CE	119	VAL
6	CF	22	ILE
9	CI	50	PRO
10	CJ	36	VAL
10	CJ	41	PRO
10	CJ	75	ASP
12	CL	34	THR
12	CL	76	HIS
13	CM	46	GLU
16	CP	49	GLY
16	CP	79	ASN
17	CQ	67	SER
17	CQ	76	ARG
19	CS	49	ALA
19	CS	79	TYR
20	CT	72	ALA
21	CU	10	PRO
24	DC	2	VAL
24	DC	31	PRO
24	DC	64	VAL
24	DC	96	LYS
25	DD	109	VAL
25	DD	156	PHE
26	DE	46	GLN
27	DF	40	GLY
28	DG	46	ASP
28	DG	150	TYR
28	DG	155	PRO
28	DG	170	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DH	15	LEU
30	DI	64	ARG
31	DJ	12	LYS
31	DJ	42	ALA
32	DK	48	PRO
32	DK	72	PRO
33	DL	19	LEU
33	DL	41	ARG
33	DL	97	ALA
34	DM	70	ASP
34	DM	73	ILE
35	DN	3	HIS
35	DN	59	SER
35	DN	72	ASP
37	DP	20	ARG
37	DP	24	THR
37	DP	66	GLY
37	DP	92	ARG
39	DR	2	TYR
40	DS	10	ALA
41	DT	33	LYS
41	DT	56	GLU
41	DT	61	LEU
43	DV	84	PRO
45	DX	27	ARG
45	DX	69	GLU
50	D2	39	ARG
51	D3	6	VAL
51	D3	54	LEU
52	D4	16	ILE
52	D4	37	GLN
2	AB	211	LEU
3	AC	191	THR
5	AE	148	SER
7	AG	52	ARG
8	AH	26	MET
9	AI	66	VAL
10	AJ	93	ALA
11	AK	77	GLY
16	AP	9	HIS
16	AP	13	LYS
18	AR	54	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	AU	9	GLU
24	BC	30	ALA
24	BC	37	SER
24	BC	69	ASN
25	BD	95	SER
25	BD	109	VAL
25	BD	159	LYS
27	BF	83	PRO
30	BI	7	TYR
31	BJ	65	THR
32	BK	46	ALA
36	BO	66	GLY
39	BR	53	PHE
44	BW	68	PHE
44	BW	78	PHE
2	CB	163	ILE
3	CC	65	VAL
4	CD	166	LYS
5	CE	81	GLN
5	CE	111	ARG
10	CJ	62	ARG
14	CN	55	SER
19	CS	54	ARG
25	DD	2	ILE
25	DD	9	VAL
25	DD	151	THR
26	DE	13	THR
26	DE	136	GLN
27	DF	88	VAL
28	DG	3	VAL
28	DG	8	VAL
28	DG	152	ARG
29	DH	148	ALA
31	DJ	79	GLY
33	DL	5	THR
37	DP	109	ILE
39	DR	56	GLY
40	DS	74	ILE
41	DT	28	ASN
41	DT	38	ALA
42	DU	12	VAL
42	DU	14	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	DV	22	ALA
43	DV	46	LYS
44	DW	24	ARG
45	DX	58	ILE
47	DZ	27	GLY
2	AB	70	GLY
10	AJ	33	GLY
16	AP	78	VAL
17	AQ	11	VAL
29	BH	103	VAL
30	BI	97	VAL
31	BJ	124	VAL
33	BL	87	GLY
34	BM	26	VAL
39	BR	49	ILE
42	BU	54	PRO
3	CC	100	ILE
5	CE	29	ILE
6	CF	51	ILE
7	CG	68	VAL
13	CM	111	PRO
27	DF	82	TYR
28	DG	92	GLY
28	DG	117	PRO
29	DH	126	GLY
29	DH	147	VAL
32	DK	50	GLY
32	DK	63	VAL
34	DM	36	VAL
38	DQ	7	VAL
49	D1	30	PRO
52	D4	23	ILE
2	AB	200	PRO
3	AC	93	ILE
4	AD	44	LYS
5	AE	104	ILE
5	AE	149	PRO
7	AG	6	ILE
10	AJ	39	PRO
11	AK	73	VAL
19	AS	44	ILE
26	BE	177	PRO

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BF	150	GLY
28	BG	167	VAL
46	BY	46	VAL
47	BZ	35	VAL
51	B3	6	VAL
3	CC	12	GLY
3	CC	54	ILE
5	CE	43	GLY
6	CF	64	VAL
7	CG	13	PRO
13	CM	50	GLY
14	CN	56	PRO
24	DC	150	GLY
26	DE	129	PRO
28	DG	97	VAL
30	DI	8	VAL
36	DO	87	ILE
40	DS	29	VAL
40	DS	96	ILE
45	DX	50	VAL
47	DZ	54	VAL
7	AG	5	VAL
7	AG	7	GLY
12	AL	41	PRO
25	BD	151	THR
28	BG	78	VAL
28	BG	153	PRO
30	BI	23	VAL
43	BV	67	GLY
6	CF	85	ILE
11	CK	73	VAL
12	CL	86	VAL
17	CQ	31	PRO
28	DG	16	VAL
33	DL	114	GLY
34	DM	87	GLY
34	DM	125	PRO
38	DQ	6	GLY
42	DU	64	ILE
43	DV	40	ILE
10	AJ	100	ILE
11	AK	38	GLY

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
11	AK	89	GLY
14	AN	44	VAL
25	BD	63	PRO
26	BE	73	ILE
30	BI	31	GLY
35	BN	101	GLY
39	BR	100	GLY
4	CD	101	VAL
7	CG	134	VAL
10	CJ	38	GLY
25	DD	22	ILE
33	DL	88	GLY
36	DO	42	PRO
38	DQ	39	ILE
39	DR	27	ILE
41	DT	71	GLY
3	AC	59	PRO
21	AU	52	VAL
28	BG	91	VAL
31	DJ	46	PRO
36	DO	27	VAL
39	DR	52	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	180/180 (100%)	142 (79%)	38 (21%)	1	5
2	CB	180/180 (100%)	154 (86%)	26 (14%)	3	14
3	AC	170/170 (100%)	136 (80%)	34 (20%)	1	5
3	CC	170/170 (100%)	153 (90%)	17 (10%)	7	28
4	AD	172/172 (100%)	138 (80%)	34 (20%)	1	5
4	CD	172/172 (100%)	131 (76%)	41 (24%)	0	2
5	AE	113/113 (100%)	77 (68%)	36 (32%)	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	CE	113/113 (100%)	89 (79%)	24 (21%)	1	5
6	AF	87/87 (100%)	71 (82%)	16 (18%)	1	7
6	CF	87/87 (100%)	73 (84%)	14 (16%)	2	10
7	AG	124/124 (100%)	111 (90%)	13 (10%)	7	26
7	CG	123/124 (99%)	101 (82%)	22 (18%)	2	8
8	AH	104/104 (100%)	83 (80%)	21 (20%)	1	5
8	CH	104/104 (100%)	91 (88%)	13 (12%)	4	18
9	AI	105/105 (100%)	82 (78%)	23 (22%)	1	4
9	CI	105/105 (100%)	89 (85%)	16 (15%)	3	12
10	AJ	86/86 (100%)	70 (81%)	16 (19%)	1	7
10	CJ	86/86 (100%)	73 (85%)	13 (15%)	3	12
11	AK	90/90 (100%)	73 (81%)	17 (19%)	1	6
11	CK	90/90 (100%)	79 (88%)	11 (12%)	5	19
12	AL	103/103 (100%)	76 (74%)	27 (26%)	0	1
12	CL	103/103 (100%)	78 (76%)	25 (24%)	0	2
13	AM	92/92 (100%)	84 (91%)	8 (9%)	10	36
13	CM	91/92 (99%)	81 (89%)	10 (11%)	6	25
14	AN	79/83 (95%)	71 (90%)	8 (10%)	7	28
14	CN	79/83 (95%)	69 (87%)	10 (13%)	4	18
15	AO	76/76 (100%)	59 (78%)	17 (22%)	1	3
15	CO	76/76 (100%)	69 (91%)	7 (9%)	9	33
16	AP	65/65 (100%)	54 (83%)	11 (17%)	2	9
16	CP	65/65 (100%)	50 (77%)	15 (23%)	1	3
17	AQ	74/74 (100%)	60 (81%)	14 (19%)	1	6
17	CQ	74/74 (100%)	62 (84%)	12 (16%)	2	10
18	AR	48/48 (100%)	44 (92%)	4 (8%)	11	38
18	CR	48/48 (100%)	40 (83%)	8 (17%)	2	9
19	AS	70/70 (100%)	63 (90%)	7 (10%)	7	28
19	CS	70/70 (100%)	64 (91%)	6 (9%)	10	37
20	AT	65/65 (100%)	48 (74%)	17 (26%)	0	1
20	CT	65/65 (100%)	52 (80%)	13 (20%)	1	5

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
21	AU	44/44 (100%)	36 (82%)	8 (18%)	1	7
21	CU	44/44 (100%)	29 (66%)	15 (34%)	0	0
24	BC	216/216 (100%)	170 (79%)	46 (21%)	1	4
24	DC	216/216 (100%)	178 (82%)	38 (18%)	2	8
25	BD	164/164 (100%)	133 (81%)	31 (19%)	1	6
25	DD	164/164 (100%)	131 (80%)	33 (20%)	1	5
26	BE	165/165 (100%)	111 (67%)	54 (33%)	0	0
26	DE	165/165 (100%)	143 (87%)	22 (13%)	4	16
27	BF	148/149 (99%)	116 (78%)	32 (22%)	1	4
27	DF	149/149 (100%)	124 (83%)	25 (17%)	2	9
28	BG	137/137 (100%)	106 (77%)	31 (23%)	1	3
28	DG	137/137 (100%)	117 (85%)	20 (15%)	3	13
29	BH	114/114 (100%)	96 (84%)	18 (16%)	2	11
29	DH	114/114 (100%)	90 (79%)	24 (21%)	1	5
30	BI	109/109 (100%)	91 (84%)	18 (16%)	2	10
30	DI	109/109 (100%)	103 (94%)	6 (6%)	21	53
31	BJ	116/116 (100%)	92 (79%)	24 (21%)	1	5
31	DJ	116/116 (100%)	101 (87%)	15 (13%)	4	18
32	BK	103/103 (100%)	77 (75%)	26 (25%)	0	1
32	DK	103/103 (100%)	84 (82%)	19 (18%)	1	7
33	BL	102/102 (100%)	82 (80%)	20 (20%)	1	6
33	DL	102/102 (100%)	89 (87%)	13 (13%)	4	18
34	BM	109/109 (100%)	81 (74%)	28 (26%)	0	1
34	DM	109/109 (100%)	98 (90%)	11 (10%)	7	28
35	BN	100/100 (100%)	82 (82%)	18 (18%)	1	7
35	DN	100/100 (100%)	85 (85%)	15 (15%)	3	12
36	BO	86/86 (100%)	67 (78%)	19 (22%)	1	4
36	DO	86/86 (100%)	79 (92%)	7 (8%)	11	39
37	BP	99/99 (100%)	66 (67%)	33 (33%)	0	0
37	DP	99/99 (100%)	88 (89%)	11 (11%)	6	24
38	BQ	89/89 (100%)	68 (76%)	21 (24%)	1	2

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
38	DQ	89/89 (100%)	69 (78%)	20 (22%)	1	3
39	BR	84/84 (100%)	66 (79%)	18 (21%)	1	4
39	DR	84/84 (100%)	69 (82%)	15 (18%)	2	8
40	BS	93/93 (100%)	72 (77%)	21 (23%)	1	3
40	DS	93/93 (100%)	72 (77%)	21 (23%)	1	3
41	BT	80/80 (100%)	53 (66%)	27 (34%)	0	0
41	DT	80/80 (100%)	75 (94%)	5 (6%)	18	48
42	BU	83/83 (100%)	66 (80%)	17 (20%)	1	5
42	DU	83/83 (100%)	72 (87%)	11 (13%)	4	16
43	BV	78/78 (100%)	62 (80%)	16 (20%)	1	5
43	DV	78/78 (100%)	66 (85%)	12 (15%)	2	11
44	BW	59/59 (100%)	38 (64%)	21 (36%)	0	0
44	DW	59/59 (100%)	45 (76%)	14 (24%)	1	2
45	BX	67/67 (100%)	51 (76%)	16 (24%)	0	2
45	DX	67/67 (100%)	55 (82%)	12 (18%)	2	8
46	BY	55/55 (100%)	42 (76%)	13 (24%)	1	2
46	DY	55/55 (100%)	51 (93%)	4 (7%)	14	43
47	BZ	48/48 (100%)	35 (73%)	13 (27%)	0	1
47	DZ	48/48 (100%)	38 (79%)	10 (21%)	1	5
48	B0	47/47 (100%)	39 (83%)	8 (17%)	2	9
48	D0	47/47 (100%)	38 (81%)	9 (19%)	1	6
49	B1	45/45 (100%)	37 (82%)	8 (18%)	2	8
49	D1	45/45 (100%)	38 (84%)	7 (16%)	2	11
50	B2	38/38 (100%)	27 (71%)	11 (29%)	0	1
50	D2	38/38 (100%)	33 (87%)	5 (13%)	4	17
51	B3	51/51 (100%)	42 (82%)	9 (18%)	2	8
51	D3	51/51 (100%)	37 (72%)	14 (28%)	0	1
52	B4	34/34 (100%)	28 (82%)	6 (18%)	2	8
52	D4	34/34 (100%)	30 (88%)	4 (12%)	5	21
All	All	9331/9342 (100%)	7599 (81%)	1732 (19%)	1	7

All (1732) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AB	10	LYS
2	AB	13	VAL
2	AB	15	PHE
2	AB	19	THR
2	AB	20	ARG
2	AB	22	TRP
2	AB	26	MET
2	AB	36	LYS
2	AB	38	HIS
2	AB	48	MET
2	AB	57	ASN
2	AB	67	LEU
2	AB	73	ARG
2	AB	81	ASP
2	AB	87	ASP
2	AB	88	GLN
2	AB	90	PHE
2	AB	94	ARG
2	AB	100	LEU
2	AB	102	ASN
2	AB	108	GLN
2	AB	112	ARG
2	AB	119	GLN
2	AB	122	ASP
2	AB	124	THR
2	AB	128	LEU
2	AB	130	LYS
2	AB	136	ARG
2	AB	138	ARG
2	AB	143	LEU
2	AB	156	LEU
2	AB	158	ASP
2	AB	170	ILE
2	AB	193	ASP
2	AB	206	ILE
2	AB	211	LEU
2	AB	219	THR
2	AB	221	ARG
3	AC	2	GLN
3	AC	13	ILE
3	AC	15	LYS
3	AC	17	TRP
3	AC	22	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	AC	24	ASN
3	AC	25	THR
3	AC	26	LYS
3	AC	27	GLU
3	AC	32	LEU
3	AC	35	ASP
3	AC	36	PHE
3	AC	42	LEU
3	AC	50	SER
3	AC	54	ILE
3	AC	58	ARG
3	AC	69	THR
3	AC	79	LYS
3	AC	89	VAL
3	AC	99	GLN
3	AC	102	ILE
3	AC	106	ARG
3	AC	133	MET
3	AC	139	ASN
3	AC	143	LEU
3	AC	148	ILE
3	AC	150	VAL
3	AC	165	GLU
3	AC	166	TRP
3	AC	177	LEU
3	AC	184	ASN
3	AC	186	SER
3	AC	189	HIS
3	AC	199	VAL
4	AD	19	PHE
4	AD	21	LYS
4	AD	25	ARG
4	AD	30	LYS
4	AD	31	CYS
4	AD	47	LEU
4	AD	52	VAL
4	AD	54	LEU
4	AD	55	ARG
4	AD	57	LYS
4	AD	63	ILE
4	AD	69	ARG
4	AD	84	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	AD	88	ASN
4	AD	89	LEU
4	AD	92	LEU
4	AD	101	VAL
4	AD	102	TYR
4	AD	115	GLN
4	AD	122	ILE
4	AD	127	ARG
4	AD	131	ILE
4	AD	145	ARG
4	AD	147	LYS
4	AD	153	ARG
4	AD	160	LEU
4	AD	162	GLU
4	AD	163	GLN
4	AD	165	GLU
4	AD	166	LYS
4	AD	170	LEU
4	AD	193	ASP
4	AD	199	ILE
4	AD	205	LYS
5	AE	9	GLU
5	AE	10	LEU
5	AE	11	GLN
5	AE	14	LEU
5	AE	18	ASN
5	AE	24	VAL
5	AE	25	LYS
5	AE	29	ILE
5	AE	31	SER
5	AE	37	VAL
5	AE	42	ASN
5	AE	47	PHE
5	AE	53	ARG
5	AE	59	ILE
5	AE	68	ARG
5	AE	75	LEU
5	AE	76	ASN
5	AE	79	THR
5	AE	81	GLN
5	AE	92	ARG
5	AE	93	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	AE	95	MET
5	AE	96	GLN
5	AE	113	VAL
5	AE	116	VAL
5	AE	119	VAL
5	AE	121	ASN
5	AE	123	LEU
5	AE	135	VAL
5	AE	136	VAL
5	AE	139	THR
5	AE	140	ILE
5	AE	141	ASP
5	AE	152	VAL
5	AE	155	LYS
5	AE	156	ARG
6	AF	7	VAL
6	AF	14	GLN
6	AF	15	SER
6	AF	17	GLN
6	AF	24	ARG
6	AF	36	ILE
6	AF	54	LEU
6	AF	55	HIS
6	AF	64	VAL
6	AF	68	GLN
6	AF	69	GLU
6	AF	77	THR
6	AF	84	VAL
6	AF	86	ARG
6	AF	89	VAL
6	AF	93	LYS
7	AG	3	ARG
7	AG	4	ARG
7	AG	8	GLN
7	AG	12	LEU
7	AG	22	LEU
7	AG	26	VAL
7	AG	37	THR
7	AG	47	GLU
7	AG	72	VAL
7	AG	93	VAL
7	AG	121	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	123	LEU
7	AG	143	MET
8	AH	12	ARG
8	AH	21	LYS
8	AH	24	VAL
8	AH	41	GLU
8	AH	48	PHE
8	AH	50	VAL
8	AH	54	THR
8	AH	58	LEU
8	AH	66	GLN
8	AH	72	GLU
8	AH	76	ARG
8	AH	82	LEU
8	AH	86	LYS
8	AH	89	ASP
8	AH	90	GLU
8	AH	98	LEU
8	AH	103	VAL
8	AH	106	SER
8	AH	110	MET
8	AH	120	LEU
8	AH	124	ILE
9	AI	13	SER
9	AI	21	LYS
9	AI	27	ILE
9	AI	29	ILE
9	AI	37	TYR
9	AI	44	ARG
9	AI	47	VAL
9	AI	48	ARG
9	AI	56	MET
9	AI	60	LEU
9	AI	62	LEU
9	AI	64	ILE
9	AI	67	LYS
9	AI	84	ARG
9	AI	86	LEU
9	AI	87	MET
9	AI	93	LEU
9	AI	105	ARG
9	AI	106	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
9	AI	110	VAL
9	AI	115	VAL
9	AI	126	PHE
9	AI	128	LYS
10	AJ	6	ILE
10	AJ	7	ARG
10	AJ	8	ILE
10	AJ	17	LEU
10	AJ	19	ASP
10	AJ	22	THR
10	AJ	35	GLN
10	AJ	48	ARG
10	AJ	59	LYS
10	AJ	63	ASP
10	AJ	70	HIS
10	AJ	73	LEU
10	AJ	84	VAL
10	AJ	87	LEU
10	AJ	89	ARG
10	AJ	98	VAL
11	AK	15	VAL
11	AK	17	ASP
11	AK	30	ILE
11	AK	45	THR
11	AK	51	PHE
11	AK	55	ARG
11	AK	57	SER
11	AK	64	VAL
11	AK	78	ILE
11	AK	82	GLU
11	AK	96	ILE
11	AK	100	ASN
11	AK	106	ILE
11	AK	124	LYS
11	AK	125	LYS
11	AK	127	ARG
11	AK	128	VAL
12	AL	6	LEU
12	AL	9	LYS
12	AL	13	ARG
12	AL	17	LYS
12	AL	18	SER

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	AL	26	CYS
12	AL	32	VAL
12	AL	33	CYS
12	AL	35	ARG
12	AL	40	THR
12	AL	43	LYS
12	AL	45	ASN
12	AL	49	ARG
12	AL	51	VAL
12	AL	57	THR
12	AL	63	THR
12	AL	64	SER
12	AL	66	ILE
12	AL	72	ASN
12	AL	73	LEU
12	AL	82	ARG
12	AL	87	LYS
12	AL	88	ASP
12	AL	89	LEU
12	AL	96	THR
12	AL	101	LEU
12	AL	109	ARG
13	AM	3	ILE
13	AM	6	ILE
13	AM	7	ASN
13	AM	18	LEU
13	AM	47	LEU
13	AM	71	GLU
13	AM	100	ARG
13	AM	103	THR
14	AN	17	ASP
14	AN	27	LYS
14	AN	58	ARG
14	AN	59	GLN
14	AN	83	VAL
14	AN	84	ARG
14	AN	88	MET
14	AN	96	LYS
15	AO	5	GLU
15	AO	7	THR
15	AO	10	ILE
15	AO	16	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
15	AO	21	THR
15	AO	30	LEU
15	AO	38	LEU
15	AO	39	GLN
15	AO	47	LYS
15	AO	56	LEU
15	AO	57	ARG
15	AO	60	SER
15	AO	63	ARG
15	AO	65	LEU
15	AO	78	THR
15	AO	82	GLU
15	AO	86	LEU
16	AP	1	MET
16	AP	3	THR
16	AP	6	LEU
16	AP	19	VAL
16	AP	28	ARG
16	AP	29	ASN
16	AP	46	LYS
16	AP	55	ASP
16	AP	63	GLN
16	AP	68	SER
16	AP	77	GLU
17	AQ	3	LYS
17	AQ	8	GLN
17	AQ	16	MET
17	AQ	20	ILE
17	AQ	21	VAL
17	AQ	37	ILE
17	AQ	48	GLU
17	AQ	49	ASN
17	AQ	51	GLU
17	AQ	54	ILE
17	AQ	64	ARG
17	AQ	74	LEU
17	AQ	75	VAL
17	AQ	80	LYS
18	AR	28	LEU
18	AR	33	THR
18	AR	60	ARG
18	AR	70	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AS	20	LYS
19	AS	42	ASN
19	AS	54	ARG
19	AS	55	GLN
19	AS	60	PHE
19	AS	64	GLU
19	AS	79	TYR
20	AT	2	ASN
20	AT	4	LYS
20	AT	7	LYS
20	AT	11	ILE
20	AT	17	ARG
20	AT	26	MET
20	AT	27	MET
20	AT	33	LYS
20	AT	35	TYR
20	AT	38	ILE
20	AT	42	ASP
20	AT	48	LYS
20	AT	53	MET
20	AT	65	LEU
20	AT	75	LYS
20	AT	77	ASN
20	AT	84	LYS
21	AU	4	LYS
21	AU	5	VAL
21	AU	15	LEU
21	AU	18	PHE
21	AU	27	VAL
21	AU	31	VAL
21	AU	39	LYS
21	AU	42	THR
24	BC	2	VAL
24	BC	3	VAL
24	BC	8	THR
24	BC	12	ARG
24	BC	17	LYS
24	BC	18	VAL
24	BC	20	ASN
24	BC	35	LYS
24	BC	38	LYS
24	BC	43	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	BC	49	THR
24	BC	69	ASN
24	BC	70	LYS
24	BC	73	ILE
24	BC	76	VAL
24	BC	77	VAL
24	BC	79	ARG
24	BC	85	ASN
24	BC	90	ILE
24	BC	93	VAL
24	BC	103	ILE
24	BC	104	LEU
24	BC	109	LEU
24	BC	114	GLN
24	BC	115	ILE
24	BC	119	VAL
24	BC	120	ASP
24	BC	123	ILE
24	BC	142	ASN
24	BC	152	GLN
24	BC	155	ARG
24	BC	172	THR
24	BC	173	LEU
24	BC	175	LEU
24	BC	176	ARG
24	BC	193	GLU
24	BC	202	ARG
24	BC	203	VAL
24	BC	212	TRP
24	BC	216	ARG
24	BC	227	VAL
24	BC	243	PRO
24	BC	250	GLN
24	BC	252	LYS
24	BC	254	LYS
24	BC	257	ARG
25	BD	9	VAL
25	BD	12	THR
25	BD	13	ARG
25	BD	16	THR
25	BD	25	THR
25	BD	43	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
25	BD	46	ARG
25	BD	64	GLU
25	BD	70	LYS
25	BD	73	VAL
25	BD	89	GLU
25	BD	90	PHE
25	BD	91	THR
25	BD	98	VAL
25	BD	105	LYS
25	BD	106	LYS
25	BD	114	LYS
25	BD	118	PHE
25	BD	124	ARG
25	BD	142	VAL
25	BD	150	GLN
25	BD	151	THR
25	BD	159	LYS
25	BD	170	VAL
25	BD	176	ASP
25	BD	183	GLU
25	BD	186	LEU
25	BD	197	THR
25	BD	201	LEU
25	BD	203	VAL
25	BD	207	VAL
26	BE	12	LEU
26	BE	18	THR
26	BE	24	ASN
26	BE	32	VAL
26	BE	41	GLN
26	BE	43	THR
26	BE	44	ARG
26	BE	46	GLN
26	BE	51	GLU
26	BE	55	SER
26	BE	61	ARG
26	BE	62	GLN
26	BE	63	LYS
26	BE	65	THR
26	BE	69	ARG
26	BE	70	SER
26	BE	77	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	BE	78	TRP
26	BE	80	SER
26	BE	88	ARG
26	BE	90	GLN
26	BE	91	ASP
26	BE	107	SER
26	BE	108	ILE
26	BE	109	LEU
26	BE	110	SER
26	BE	113	VAL
26	BE	116	ASP
26	BE	118	LEU
26	BE	119	ILE
26	BE	121	VAL
26	BE	123	LYS
26	BE	124	PHE
26	BE	125	SER
26	BE	127	GLU
26	BE	132	LYS
26	BE	136	GLN
26	BE	145	ASP
26	BE	146	VAL
26	BE	147	LEU
26	BE	148	ILE
26	BE	149	ILE
26	BE	153	LEU
26	BE	159	LEU
26	BE	163	ASN
26	BE	167	VAL
26	BE	169	VAL
26	BE	170	ARG
26	BE	171	ASP
26	BE	175	ILE
26	BE	178	VAL
26	BE	186	VAL
26	BE	198	GLU
26	BE	200	LEU
27	BF	3	LEU
27	BF	8	LYS
27	BF	9	ASP
27	BF	12	VAL
27	BF	17	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
27	BF	18	GLU
27	BF	24	VAL
27	BF	27	VAL
27	BF	34	THR
27	BF	35	LEU
27	BF	36	ASN
27	BF	37	MET
27	BF	46	LYS
27	BF	56	LEU
27	BF	65	LEU
27	BF	80	GLN
27	BF	88	VAL
27	BF	90	LEU
27	BF	103	ILE
27	BF	105	ILE
27	BF	107	VAL
27	BF	109	ARG
27	BF	111	ARG
27	BF	114	ARG
27	BF	132	ARG
27	BF	134	GLN
27	BF	136	ILE
27	BF	151	LEU
27	BF	153	ILE
27	BF	154	THR
27	BF	162	ASP
27	BF	166	ARG
28	BG	3	VAL
28	BG	7	PRO
28	BG	8	VAL
28	BG	18	ILE
28	BG	34	ARG
28	BG	35	THR
28	BG	40	VAL
28	BG	50	THR
28	BG	55	ASP
28	BG	59	ASP
28	BG	68	ARG
28	BG	76	ILE
28	BG	78	VAL
28	BG	80	GLU
28	BG	84	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	BG	86	LEU
28	BG	93	TYR
28	BG	101	VAL
28	BG	103	ASN
28	BG	105	SER
28	BG	116	LEU
28	BG	120	ILE
28	BG	123	GLU
28	BG	132	LEU
28	BG	138	GLN
28	BG	140	ILE
28	BG	142	GLN
28	BG	159	LYS
28	BG	165	ASP
28	BG	170	THR
28	BG	174	LYS
29	BH	2	GLN
29	BH	6	LEU
29	BH	12	LEU
29	BH	14	SER
29	BH	18	GLN
29	BH	28	ASN
29	BH	31	VAL
29	BH	43	ASN
29	BH	50	ARG
29	BH	54	LEU
29	BH	62	LEU
29	BH	68	ARG
29	BH	75	LEU
29	BH	83	LYS
29	BH	96	THR
29	BH	104	THR
29	BH	130	VAL
29	BH	135	HIS
30	BI	2	LYS
30	BI	10	LEU
30	BI	11	GLN
30	BI	12	VAL
30	BI	23	VAL
30	BI	30	GLN
30	BI	37	PHE
30	BI	39	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
30	BI	49	GLU
30	BI	61	TYR
30	BI	71	LYS
30	BI	81	LYS
30	BI	86	LYS
30	BI	95	ASP
30	BI	107	GLU
30	BI	124	MET
30	BI	126	ARG
30	BI	135	MET
31	BJ	1	MET
31	BJ	2	LYS
31	BJ	3	THR
31	BJ	17	VAL
31	BJ	24	THR
31	BJ	25	LEU
31	BJ	30	THR
31	BJ	36	LEU
31	BJ	40	HIS
31	BJ	41	LYS
31	BJ	44	TYR
31	BJ	54	ILE
31	BJ	55	ILE
31	BJ	57	LEU
31	BJ	64	VAL
31	BJ	72	LYS
31	BJ	78	THR
31	BJ	85	LYS
31	BJ	90	GLU
31	BJ	103	ILE
31	BJ	111	LYS
31	BJ	129	GLU
31	BJ	135	GLN
31	BJ	140	LEU
32	BK	8	LEU
32	BK	13	ASN
32	BK	18	ARG
32	BK	21	CYS
32	BK	23	LYS
32	BK	30	ARG
32	BK	39	ILE
32	BK	45	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
32	BK	47	ILE
32	BK	51	LYS
32	BK	52	VAL
32	BK	54	LYS
32	BK	57	VAL
32	BK	58	LEU
32	BK	63	VAL
32	BK	67	LYS
32	BK	73	ASP
32	BK	77	ILE
32	BK	92	GLU
32	BK	93	GLN
32	BK	95	ILE
32	BK	105	ARG
32	BK	108	ARG
32	BK	111	LYS
32	BK	114	LYS
32	BK	118	LEU
33	BL	3	LEU
33	BL	4	ASN
33	BL	6	LEU
33	BL	19	LEU
33	BL	27	LEU
33	BL	30	THR
33	BL	39	LYS
33	BL	48	ARG
33	BL	55	MET
33	BL	61	LEU
33	BL	66	PHE
33	BL	74	THR
33	BL	85	VAL
33	BL	93	ASN
33	BL	94	THR
33	BL	101	ILE
33	BL	110	VAL
33	BL	111	ILE
33	BL	118	THR
33	BL	127	VAL
34	BM	2	LEU
34	BM	3	GLN
34	BM	5	LYS
34	BM	8	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
34	BM	10	ARG
34	BM	13	HIS
34	BM	14	LYS
34	BM	24	THR
34	BM	27	SER
34	BM	33	LEU
34	BM	36	VAL
34	BM	51	ARG
34	BM	57	VAL
34	BM	60	GLN
34	BM	70	ASP
34	BM	72	PRO
34	BM	75	GLU
34	BM	80	VAL
34	BM	90	GLU
34	BM	95	LEU
34	BM	96	ILE
34	BM	97	GLN
34	BM	100	LYS
34	BM	110	GLU
34	BM	115	GLU
34	BM	129	THR
34	BM	131	VAL
34	BM	134	THR
35	BN	10	LEU
35	BN	14	SER
35	BN	18	GLN
35	BN	31	HIS
35	BN	33	ILE
35	BN	35	LYS
35	BN	38	LEU
35	BN	51	LEU
35	BN	65	LEU
35	BN	69	ARG
35	BN	71	ARG
35	BN	75	ILE
35	BN	83	LEU
35	BN	86	ARG
35	BN	95	THR
35	BN	109	PRO
35	BN	117	ASP
35	BN	118	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	BO	2	ASP
36	BO	4	LYS
36	BO	9	ARG
36	BO	16	ARG
36	BO	17	LYS
36	BO	18	LEU
36	BO	58	ILE
36	BO	80	GLU
36	BO	81	ARG
36	BO	83	LEU
36	BO	84	GLU
36	BO	89	ASP
36	BO	94	ARG
36	BO	100	HIS
36	BO	103	VAL
36	BO	106	LEU
36	BO	111	ARG
36	BO	115	LEU
36	BO	116	GLN
37	BP	3	ILE
37	BP	6	GLN
37	BP	7	LEU
37	BP	9	GLN
37	BP	14	GLN
37	BP	16	VAL
37	BP	18	SER
37	BP	19	PHE
37	BP	20	ARG
37	BP	24	THR
37	BP	28	LYS
37	BP	35	SER
37	BP	36	LYS
37	BP	37	LYS
37	BP	38	ARG
37	BP	39	LEU
37	BP	40	GLN
37	BP	52	ARG
37	BP	56	SER
37	BP	61	ARG
37	BP	64	SER
37	BP	69	VAL
37	BP	75	THR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
37	BP	80	VAL
37	BP	83	ILE
37	BP	85	VAL
37	BP	87	ARG
37	BP	91	VAL
37	BP	92	ARG
37	BP	95	LYS
37	BP	96	LEU
37	BP	99	LEU
37	BP	109	ILE
38	BQ	2	ARG
38	BQ	8	ILE
38	BQ	10	ARG
38	BQ	17	LEU
38	BQ	29	ARG
38	BQ	40	LYS
38	BQ	43	GLN
38	BQ	50	ARG
38	BQ	58	GLN
38	BQ	59	LEU
38	BQ	63	ARG
38	BQ	65	ASN
38	BQ	69	ARG
38	BQ	73	ILE
38	BQ	87	VAL
38	BQ	88	GLU
38	BQ	89	ILE
38	BQ	94	LEU
38	BQ	96	ASP
38	BQ	97	ILE
38	BQ	106	THR
39	BR	1	MET
39	BR	10	LYS
39	BR	18	GLN
39	BR	37	GLU
39	BR	39	LEU
39	BR	45	GLU
39	BR	46	GLU
39	BR	47	VAL
39	BR	48	LYS
39	BR	51	VAL
39	BR	54	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	BR	55	ASP
39	BR	72	VAL
39	BR	74	ILE
39	BR	94	THR
39	BR	97	LYS
39	BR	99	THR
39	BR	102	SER
40	BS	1	MET
40	BS	4	ILE
40	BS	7	HIS
40	BS	24	ILE
40	BS	29	VAL
40	BS	30	SER
40	BS	33	LEU
40	BS	37	THR
40	BS	41	LYS
40	BS	42	LYS
40	BS	45	VAL
40	BS	47	VAL
40	BS	48	LYS
40	BS	66	ILE
40	BS	69	LEU
40	BS	73	LYS
40	BS	74	ILE
40	BS	76	VAL
40	BS	88	ARG
40	BS	96	ILE
40	BS	101	SER
41	BT	2	ILE
41	BT	3	ARG
41	BT	4	GLU
41	BT	17	SER
41	BT	18	GLU
41	BT	28	ASN
41	BT	29	THR
41	BT	30	ILE
41	BT	32	LEU
41	BT	36	LYS
41	BT	37	ASP
41	BT	43	ILE
41	BT	48	GLN
41	BT	50	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
41	BT	54	GLU
41	BT	58	VAL
41	BT	61	LEU
41	BT	64	LYS
41	BT	67	VAL
41	BT	68	LYS
41	BT	69	ARG
41	BT	73	ARG
41	BT	74	ILE
41	BT	77	ARG
41	BT	82	LYS
41	BT	89	GLU
41	BT	93	LEU
42	BU	4	ILE
42	BU	5	ARG
42	BU	8	ASP
42	BU	10	VAL
42	BU	14	THR
42	BU	18	LYS
42	BU	29	SER
42	BU	30	SER
42	BU	33	VAL
42	BU	42	LYS
42	BU	43	LYS
42	BU	52	ASN
42	BU	61	GLU
42	BU	67	SER
42	BU	71	ILE
42	BU	86	PHE
42	BU	102	ILE
43	BV	1	MET
43	BV	3	THR
43	BV	5	ASN
43	BV	10	LYS
43	BV	12	GLN
43	BV	20	LEU
43	BV	29	ILE
43	BV	35	GLU
43	BV	41	GLU
43	BV	42	LEU
43	BV	46	LYS
43	BV	51	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
43	BV	55	GLU
43	BV	60	VAL
43	BV	65	VAL
43	BV	84	PRO
44	BW	13	ARG
44	BW	14	ASP
44	BW	15	SER
44	BW	16	GLU
44	BW	19	ARG
44	BW	22	VAL
44	BW	23	LYS
44	BW	24	ARG
44	BW	25	PHE
44	BW	28	GLU
44	BW	31	LEU
44	BW	38	ARG
44	BW	40	ARG
44	BW	42	THR
44	BW	45	HIS
44	BW	49	ASN
44	BW	54	ARG
44	BW	58	LEU
44	BW	67	LYS
44	BW	76	ARG
44	BW	77	LYS
45	BX	10	ARG
45	BX	17	ARG
45	BX	19	HIS
45	BX	24	THR
45	BX	26	ARG
45	BX	27	ARG
45	BX	29	LEU
45	BX	34	SER
45	BX	39	VAL
45	BX	46	VAL
45	BX	47	THR
45	BX	58	ILE
45	BX	65	THR
45	BX	70	LEU
45	BX	73	ARG
45	BX	77	TYR
46	BY	14	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	BY	16	THR
46	BY	19	LEU
46	BY	21	LEU
46	BY	22	LEU
46	BY	29	ARG
46	BY	39	GLN
46	BY	42	LEU
46	BY	47	ARG
46	BY	55	THR
46	BY	56	LEU
46	BY	57	LEU
46	BY	59	GLU
47	BZ	2	LYS
47	BZ	3	THR
47	BZ	8	GLN
47	BZ	9	THR
47	BZ	15	ARG
47	BZ	23	LEU
47	BZ	24	LEU
47	BZ	31	ILE
47	BZ	37	ARG
47	BZ	43	ILE
47	BZ	44	ARG
47	BZ	54	VAL
47	BZ	56	VAL
48	B0	2	VAL
48	B0	5	ASN
48	B0	9	ARG
48	B0	17	SER
48	B0	25	THR
48	B0	26	SER
48	B0	28	SER
48	B0	39	ARG
49	B1	9	LYS
49	B1	21	THR
49	B1	29	LYS
49	B1	33	LEU
49	B1	35	LEU
49	B1	41	VAL
49	B1	42	VAL
49	B1	45	HIS
50	B2	1	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
50	B2	3	ARG
50	B2	9	VAL
50	B2	12	ARG
50	B2	21	ARG
50	B2	22	MET
50	B2	26	ASN
50	B2	39	ARG
50	B2	42	LEU
50	B2	43	THR
50	B2	44	VAL
51	B3	5	THR
51	B3	7	ARG
51	B3	29	ARG
51	B3	30	HIS
51	B3	31	ILE
51	B3	49	VAL
51	B3	51	LYS
51	B3	54	LEU
51	B3	56	LEU
52	B4	4	ARG
52	B4	9	LYS
52	B4	13	ASN
52	B4	14	CYS
52	B4	20	ASP
52	B4	27	CYS
2	CB	8	MET
2	CB	14	HIS
2	CB	21	TYR
2	CB	22	TRP
2	CB	26	MET
2	CB	31	PHE
2	CB	34	ARG
2	CB	36	LYS
2	CB	39	ILE
2	CB	46	VAL
2	CB	69	VAL
2	CB	84	LEU
2	CB	88	GLN
2	CB	103	TRP
2	CB	124	THR
2	CB	125	PHE
2	CB	131	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	147	LEU
2	CB	164	ASP
2	CB	166	ASP
2	CB	177	ASN
2	CB	182	VAL
2	CB	191	ASP
2	CB	196	ASP
2	CB	204	ASP
2	CB	212	TYR
3	CC	26	LYS
3	CC	30	ASP
3	CC	35	ASP
3	CC	41	TYR
3	CC	53	ARG
3	CC	58	ARG
3	CC	106	ARG
3	CC	123	LEU
3	CC	126	ARG
3	CC	134	LYS
3	CC	139	ASN
3	CC	152	VAL
3	CC	161	ILE
3	CC	164	THR
3	CC	166	TRP
3	CC	178	ARG
3	CC	185	THR
4	CD	2	ARG
4	CD	8	LEU
4	CD	12	ARG
4	CD	20	LEU
4	CD	21	LYS
4	CD	24	VAL
4	CD	25	ARG
4	CD	30	LYS
4	CD	34	GLU
4	CD	55	ARG
4	CD	57	LYS
4	CD	62	ARG
4	CD	69	ARG
4	CD	80	ARG
4	CD	84	ASN
4	CD	96	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
4	CD	106	PHE
4	CD	116	LEU
4	CD	119	HIS
4	CD	125	ASN
4	CD	127	ARG
4	CD	128	VAL
4	CD	137	SER
4	CD	142	VAL
4	CD	144	ILE
4	CD	146	GLU
4	CD	147	LYS
4	CD	151	GLN
4	CD	152	SER
4	CD	153	ARG
4	CD	160	LEU
4	CD	163	GLN
4	CD	170	LEU
4	CD	172	VAL
4	CD	183	ARG
4	CD	184	LYS
4	CD	190	LEU
4	CD	195	ASN
4	CD	199	ILE
4	CD	200	VAL
4	CD	204	SER
5	CE	11	GLN
5	CE	13	LYS
5	CE	18	ASN
5	CE	25	LYS
5	CE	33	THR
5	CE	35	LEU
5	CE	45	VAL
5	CE	59	ILE
5	CE	73	VAL
5	CE	75	LEU
5	CE	76	ASN
5	CE	80	LEU
5	CE	84	VAL
5	CE	87	VAL
5	CE	95	MET
5	CE	100	GLU
5	CE	104	ILE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
5	CE	119	VAL
5	CE	131	ASN
5	CE	133	ILE
5	CE	136	VAL
5	CE	137	ARG
5	CE	140	ILE
5	CE	144	GLU
6	CF	7	VAL
6	CF	10	VAL
6	CF	33	GLU
6	CF	38	ARG
6	CF	44	ARG
6	CF	54	LEU
6	CF	56	LYS
6	CF	61	LEU
6	CF	72	ASP
6	CF	81	ASN
6	CF	85	ILE
6	CF	86	ARG
6	CF	89	VAL
6	CF	98	GLU
7	CG	3	ARG
7	CG	5	VAL
7	CG	6	ILE
7	CG	10	LYS
7	CG	12	LEU
7	CG	16	LYS
7	CG	49	LEU
7	CG	51	GLN
7	CG	55	LYS
7	CG	56	SER
7	CG	57	GLU
7	CG	58	LEU
7	CG	65	LEU
7	CG	66	GLU
7	CG	75	LYS
7	CG	78	ARG
7	CG	100	MET
7	CG	119	LEU
7	CG	123	LEU
7	CG	137	ARG
7	CG	139	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	CG	148	LYS
8	CH	12	ARG
8	CH	25	THR
8	CH	37	ASN
8	CH	42	GLU
8	CH	50	VAL
8	CH	59	GLU
8	CH	76	ARG
8	CH	82	LEU
8	CH	84	ILE
8	CH	89	ASP
8	CH	93	LYS
8	CH	110	MET
8	CH	128	VAL
9	CI	3	ASN
9	CI	4	GLN
9	CI	5	TYR
9	CI	37	TYR
9	CI	45	MET
9	CI	46	VAL
9	CI	53	LEU
9	CI	54	VAL
9	CI	60	LEU
9	CI	63	TYR
9	CI	83	THR
9	CI	87	MET
9	CI	93	LEU
9	CI	105	ARG
9	CI	125	GLN
9	CI	129	ARG
10	CJ	5	ARG
10	CJ	11	LYS
10	CJ	15	HIS
10	CJ	32	THR
10	CJ	48	ARG
10	CJ	50	THR
10	CJ	59	LYS
10	CJ	67	ILE
10	CJ	69	THR
10	CJ	75	ASP
10	CJ	82	LYS
10	CJ	87	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
10	CJ	92	LEU
11	CK	12	ARG
11	CK	22	ILE
11	CK	27	ASN
11	CK	39	ASN
11	CK	73	VAL
11	CK	78	ILE
11	CK	81	LEU
11	CK	92	ARG
11	CK	95	THR
11	CK	105	ARG
11	CK	117	HIS
12	CL	3	VAL
12	CL	5	GLN
12	CL	6	LEU
12	CL	9	LYS
12	CL	14	LYS
12	CL	17	LYS
12	CL	18	SER
12	CL	19	ASN
12	CL	28	GLN
12	CL	38	THR
12	CL	39	THR
12	CL	40	THR
12	CL	48	LEU
12	CL	49	ARG
12	CL	57	THR
12	CL	72	ASN
12	CL	77	SER
12	CL	81	ILE
12	CL	82	ARG
12	CL	88	ASP
12	CL	96	THR
12	CL	102	ASP
12	CL	107	LYS
12	CL	113	ARG
12	CL	120	ARG
13	CM	12	LYS
13	CM	24	VAL
13	CM	28	ARG
13	CM	32	ILE
13	CM	53	ASP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	CM	77	LYS
13	CM	91	ARG
13	CM	92	ARG
13	CM	100	ARG
13	CM	113	LYS
14	CN	3	GLN
14	CN	27	LYS
14	CN	41	TRP
14	CN	52	ARG
14	CN	53	ASP
14	CN	61	ASN
14	CN	65	GLN
14	CN	72	PHE
14	CN	81	ILE
14	CN	96	LYS
15	CO	16	ARG
15	CO	34	GLN
15	CO	38	LEU
15	CO	39	GLN
15	CO	45	HIS
15	CO	79	GLN
15	CO	80	LEU
16	CP	1	MET
16	CP	4	ILE
16	CP	6	LEU
16	CP	17	TYR
16	CP	19	VAL
16	CP	25	ARG
16	CP	29	ASN
16	CP	32	PHE
16	CP	35	ARG
16	CP	36	VAL
16	CP	46	LYS
16	CP	54	LEU
16	CP	55	ASP
16	CP	56	ARG
16	CP	57	ILE
17	CQ	3	LYS
17	CQ	6	THR
17	CQ	7	LEU
17	CQ	20	ILE
17	CQ	27	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
17	CQ	32	ILE
17	CQ	37	ILE
17	CQ	39	ARG
17	CQ	42	LYS
17	CQ	43	LEU
17	CQ	51	GLU
17	CQ	80	LYS
18	CR	25	ILE
18	CR	30	ASN
18	CR	32	ILE
18	CR	47	ARG
18	CR	49	LYS
18	CR	58	ILE
18	CR	67	LEU
18	CR	72	ARG
19	CS	5	LYS
19	CS	10	ILE
19	CS	11	ASP
19	CS	42	ASN
19	CS	52	ASN
19	CS	54	ARG
20	CT	11	ILE
20	CT	12	GLN
20	CT	26	MET
20	CT	30	PHE
20	CT	35	TYR
20	CT	47	GLN
20	CT	53	MET
20	CT	68	LYS
20	CT	69	ASN
20	CT	73	ARG
20	CT	74	HIS
20	CT	78	LEU
20	CT	82	ILE
21	CU	4	LYS
21	CU	11	PHE
21	CU	13	VAL
21	CU	16	ARG
21	CU	17	ARG
21	CU	18	PHE
21	CU	27	VAL
21	CU	28	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
21	CU	32	ARG
21	CU	36	PHE
21	CU	37	TYR
21	CU	39	LYS
21	CU	43	GLU
21	CU	50	SER
21	CU	53	LYS
24	DC	2	VAL
24	DC	18	VAL
24	DC	23	LEU
24	DC	35	LYS
24	DC	43	ASN
24	DC	44	ASN
24	DC	49	THR
24	DC	51	ARG
24	DC	53	ILE
24	DC	57	HIS
24	DC	62	ARG
24	DC	63	ILE
24	DC	77	VAL
24	DC	97	ASP
24	DC	102	TYR
24	DC	117	SER
24	DC	124	LYS
24	DC	136	VAL
24	DC	152	GLN
24	DC	156	SER
24	DC	171	VAL
24	DC	172	THR
24	DC	173	LEU
24	DC	174	ARG
24	DC	183	VAL
24	DC	186	ASP
24	DC	187	CYS
24	DC	188	ARG
24	DC	190	THR
24	DC	196	ASN
24	DC	203	VAL
24	DC	212	TRP
24	DC	220	ARG
24	DC	228	ASP
24	DC	235	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
24	DC	256	THR
24	DC	260	LYS
24	DC	269	ARG
25	DD	12	THR
25	DD	16	THR
25	DD	24	VAL
25	DD	32	ASN
25	DD	33	ARG
25	DD	38	LYS
25	DD	48	ILE
25	DD	55	LYS
25	DD	56	LYS
25	DD	58	ASN
25	DD	62	LYS
25	DD	79	LEU
25	DD	81	GLU
25	DD	96	ILE
25	DD	98	VAL
25	DD	106	LYS
25	DD	110	THR
25	DD	113	SER
25	DD	121	THR
25	DD	129	THR
25	DD	131	ASP
25	DD	138	LEU
25	DD	139	SER
25	DD	140	HIS
25	DD	141	ARG
25	DD	148	GLN
25	DD	150	GLN
25	DD	159	LYS
25	DD	168	GLU
25	DD	173	GLN
25	DD	189	VAL
25	DD	193	VAL
25	DD	203	VAL
26	DE	44	ARG
26	DE	53	THR
26	DE	57	LYS
26	DE	61	ARG
26	DE	63	LYS
26	DE	67	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
26	DE	69	ARG
26	DE	77	ILE
26	DE	78	TRP
26	DE	84	THR
26	DE	88	ARG
26	DE	92	HIS
26	DE	101	TYR
26	DE	108	ILE
26	DE	117	ARG
26	DE	126	VAL
26	DE	139	LYS
26	DE	149	ILE
26	DE	157	LEU
26	DE	163	ASN
26	DE	164	LEU
26	DE	166	LYS
27	DF	9	ASP
27	DF	33	ILE
27	DF	47	LYS
27	DF	48	LEU
27	DF	49	LEU
27	DF	71	LYS
27	DF	77	LYS
27	DF	94	ARG
27	DF	97	GLU
27	DF	110	ILE
27	DF	111	ARG
27	DF	113	PHE
27	DF	119	LYS
27	DF	134	GLN
27	DF	135	ILE
27	DF	139	GLU
27	DF	142	TYR
27	DF	147	ARG
27	DF	148	VAL
27	DF	151	LEU
27	DF	160	LYS
27	DF	166	ARG
27	DF	169	LEU
27	DF	172	PHE
27	DF	177	ARG
28	DG	2	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DG	18	ILE
28	DG	19	ASN
28	DG	21	GLN
28	DG	34	ARG
28	DG	35	THR
28	DG	41	GLU
28	DG	51	PHE
28	DG	71	LEU
28	DG	72	ASN
28	DG	84	LYS
28	DG	86	LEU
28	DG	93	TYR
28	DG	109	SER
28	DG	120	ILE
28	DG	132	LEU
28	DG	162	ARG
28	DG	163	TYR
28	DG	166	GLU
28	DG	176	LYS
29	DH	8	LYS
29	DH	15	LEU
29	DH	22	LYS
29	DH	25	TYR
29	DH	27	ARG
29	DH	28	ASN
29	DH	50	ARG
29	DH	54	LEU
29	DH	57	LYS
29	DH	58	LEU
29	DH	62	LEU
29	DH	66	ASN
29	DH	68	ARG
29	DH	71	LYS
29	DH	76	GLU
29	DH	86	ASP
29	DH	90	LEU
29	DH	91	PHE
29	DH	98	ASP
29	DH	103	VAL
29	DH	109	GLU
29	DH	119	ASN
29	DH	132	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	DH	144	VAL
30	DI	16	MET
30	DI	30	GLN
30	DI	58	ILE
30	DI	68	PHE
30	DI	72	THR
30	DI	93	ASN
31	DJ	2	LYS
31	DJ	3	THR
31	DJ	25	LEU
31	DJ	36	LEU
31	DJ	43	GLU
31	DJ	47	HIS
31	DJ	57	LEU
31	DJ	70	THR
31	DJ	72	LYS
31	DJ	80	HIS
31	DJ	95	ARG
31	DJ	106	LYS
31	DJ	129	GLU
31	DJ	138	GLN
31	DJ	139	VAL
32	DK	2	ILE
32	DK	7	MET
32	DK	13	ASN
32	DK	25	LEU
32	DK	35	VAL
32	DK	39	ILE
32	DK	49	ARG
32	DK	52	VAL
32	DK	54	LYS
32	DK	65	THR
32	DK	71	ARG
32	DK	73	ASP
32	DK	77	ILE
32	DK	79	PHE
32	DK	103	VAL
32	DK	104	THR
32	DK	105	ARG
32	DK	107	LEU
32	DK	111	LYS
33	DL	3	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
33	DL	4	ASN
33	DL	18	ARG
33	DL	47	ARG
33	DL	48	ARG
33	DL	68	SER
33	DL	69	ARG
33	DL	79	LEU
33	DL	99	ASN
33	DL	103	ILE
33	DL	111	ILE
33	DL	112	LEU
33	DL	141	LYS
34	DM	8	LYS
34	DM	38	ARG
34	DM	46	ILE
34	DM	47	GLU
34	DM	78	LEU
34	DM	89	VAL
34	DM	95	LEU
34	DM	96	ILE
34	DM	105	MET
34	DM	115	GLU
34	DM	119	LEU
35	DN	10	LEU
35	DN	14	SER
35	DN	18	GLN
35	DN	29	VAL
35	DN	33	ILE
35	DN	34	ILE
35	DN	54	LEU
35	DN	62	ASN
35	DN	63	ARG
35	DN	69	ARG
35	DN	71	ARG
35	DN	75	ILE
35	DN	90	ARG
35	DN	94	TYR
35	DN	114	GLU
36	DO	17	LYS
36	DO	31	THR
36	DO	68	LYS
36	DO	90	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
36	DO	108	ASP
36	DO	115	LEU
36	DO	117	PHE
37	DP	3	ILE
37	DP	6	GLN
37	DP	13	LYS
37	DP	31	VAL
37	DP	52	ARG
37	DP	67	GLU
37	DP	83	ILE
37	DP	86	LYS
37	DP	95	LYS
37	DP	96	LEU
37	DP	101	GLU
38	DQ	3	VAL
38	DQ	8	ILE
38	DQ	10	ARG
38	DQ	12	ARG
38	DQ	13	HIS
38	DQ	15	LYS
38	DQ	16	ILE
38	DQ	35	PHE
38	DQ	43	GLN
38	DQ	46	TYR
38	DQ	47	ARG
38	DQ	49	ARG
38	DQ	54	ARG
38	DQ	57	ARG
38	DQ	63	ARG
38	DQ	69	ARG
38	DQ	79	ILE
38	DQ	90	ASP
38	DQ	93	ILE
38	DQ	96	ASP
39	DR	10	LYS
39	DR	13	ARG
39	DR	22	LEU
39	DR	37	GLU
39	DR	39	LEU
39	DR	48	LYS
39	DR	66	HIS
39	DR	70	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DR	75	VAL
39	DR	80	ARG
39	DR	81	LYS
39	DR	86	GLN
39	DR	89	HIS
39	DR	90	ARG
39	DR	93	PHE
40	DS	4	ILE
40	DS	6	LYS
40	DS	23	LEU
40	DS	31	GLN
40	DS	33	LEU
40	DS	35	ILE
40	DS	39	THR
40	DS	46	LEU
40	DS	47	VAL
40	DS	65	ASP
40	DS	66	ILE
40	DS	68	ASP
40	DS	70	LYS
40	DS	72	THR
40	DS	76	VAL
40	DS	77	ASP
40	DS	84	ARG
40	DS	85	ILE
40	DS	86	MET
40	DS	88	ARG
40	DS	108	SER
41	DT	9	LYS
41	DT	12	ARG
41	DT	18	GLU
41	DT	39	THR
41	DT	54	GLU
42	DU	13	LEU
42	DU	20	LYS
42	DU	21	ARG
42	DU	40	LEU
42	DU	41	VAL
42	DU	42	LYS
42	DU	45	GLN
42	DU	71	ILE
42	DU	85	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
42	DU	94	PHE
42	DU	95	PHE
43	DV	26	PHE
43	DV	40	ILE
43	DV	41	GLU
43	DV	45	ASP
43	DV	51	GLN
43	DV	57	TYR
43	DV	61	LEU
43	DV	65	VAL
43	DV	70	ILE
43	DV	73	LYS
43	DV	76	ASP
43	DV	90	ASP
44	DW	18	LYS
44	DW	20	LEU
44	DW	22	VAL
44	DW	23	LYS
44	DW	30	VAL
44	DW	40	ARG
44	DW	44	PHE
44	DW	58	LEU
44	DW	67	LYS
44	DW	68	PHE
44	DW	76	ARG
44	DW	77	LYS
44	DW	80	SER
44	DW	81	ILE
45	DX	5	GLN
45	DX	6	VAL
45	DX	26	ARG
45	DX	29	LEU
45	DX	31	ASN
45	DX	44	ARG
45	DX	47	THR
45	DX	53	LYS
45	DX	57	VAL
45	DX	63	ILE
45	DX	73	ARG
45	DX	77	TYR
46	DY	1	MET
46	DY	4	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
46	DY	28	LEU
46	DY	43	LEU
47	DZ	15	ARG
47	DZ	16	LEU
47	DZ	19	HIS
47	DZ	24	LEU
47	DZ	28	LEU
47	DZ	29	ARG
47	DZ	30	ARG
47	DZ	34	THR
47	DZ	53	MET
47	DZ	54	VAL
48	D0	5	ASN
48	D0	9	ARG
48	D0	22	THR
48	D0	27	LEU
48	D0	35	GLU
48	D0	41	HIS
48	D0	45	ASP
48	D0	48	TYR
48	D0	49	ARG
49	D1	10	LEU
49	D1	20	TYR
49	D1	35	LEU
49	D1	44	GLN
49	D1	45	HIS
49	D1	47	ILE
49	D1	50	GLU
50	D2	5	PHE
50	D2	8	SER
50	D2	26	ASN
50	D2	33	ARG
50	D2	46	LYS
51	D3	12	ARG
51	D3	14	LYS
51	D3	27	ASN
51	D3	29	ARG
51	D3	30	HIS
51	D3	33	THR
51	D3	34	LYS
51	D3	41	ARG
51	D3	46	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
51	D3	48	MET
51	D3	49	VAL
51	D3	51	LYS
51	D3	56	LEU
51	D3	61	LEU
52	D4	2	LYS
52	D4	9	LYS
52	D4	15	LYS
52	D4	17	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (360) such sidechains are listed below:

Mol	Chain	Res	Type
2	AB	57	ASN
2	AB	102	ASN
2	AB	108	GLN
2	AB	119	GLN
2	AB	169	HIS
2	AB	176	ASN
3	AC	5	HIS
3	AC	24	ASN
3	AC	68	HIS
3	AC	138	GLN
3	AC	139	ASN
3	AC	184	ASN
4	AD	53	GLN
4	AD	58	GLN
4	AD	73	ASN
4	AD	84	ASN
4	AD	163	GLN
5	AE	11	GLN
5	AE	42	ASN
5	AE	72	ASN
5	AE	76	ASN
5	AE	77	ASN
5	AE	81	GLN
5	AE	88	HIS
5	AE	96	GLN
5	AE	121	ASN
6	AF	11	HIS
6	AF	46	GLN
6	AF	68	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
7	AG	85	GLN
7	AG	121	ASN
8	AH	3	GLN
8	AH	15	ASN
8	AH	17	GLN
8	AH	20	ASN
8	AH	117	GLN
9	AI	4	GLN
9	AI	74	GLN
9	AI	80	HIS
9	AI	125	GLN
10	AJ	20	GLN
10	AJ	35	GLN
10	AJ	56	HIS
10	AJ	99	GLN
11	AK	21	HIS
11	AK	108	ASN
11	AK	118	ASN
12	AL	4	ASN
12	AL	45	ASN
12	AL	58	ASN
13	AM	7	ASN
13	AM	90	HIS
14	AN	34	ASN
14	AN	42	ASN
14	AN	61	ASN
15	AO	19	ASN
15	AO	36	ASN
15	AO	45	HIS
15	AO	61	GLN
16	AP	9	HIS
16	AP	18	GLN
16	AP	26	ASN
16	AP	29	ASN
16	AP	59	HIS
16	AP	63	GLN
17	AQ	8	GLN
17	AQ	44	HIS
17	AQ	46	HIS
17	AQ	49	ASN
18	AR	53	GLN
19	AS	13	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
19	AS	42	ASN
19	AS	55	GLN
20	AT	47	GLN
20	AT	54	GLN
20	AT	60	GLN
20	AT	74	HIS
20	AT	77	ASN
21	AU	8	ASN
24	BC	14	HIS
24	BC	20	ASN
24	BC	59	GLN
24	BC	89	ASN
24	BC	114	GLN
24	BC	141	HIS
24	BC	142	ASN
24	BC	152	GLN
24	BC	199	HIS
24	BC	229	HIS
24	BC	238	ASN
24	BC	242	HIS
24	BC	250	GLN
25	BD	32	ASN
25	BD	42	ASN
25	BD	49	GLN
25	BD	126	ASN
25	BD	130	GLN
25	BD	150	GLN
26	BE	24	ASN
26	BE	29	HIS
26	BE	30	GLN
26	BE	41	GLN
26	BE	46	GLN
26	BE	62	GLN
26	BE	97	ASN
26	BE	136	GLN
27	BF	4	HIS
27	BF	22	ASN
27	BF	26	GLN
27	BF	134	GLN
28	BG	72	ASN
28	BG	100	ASN
28	BG	103	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
29	BH	18	GLN
29	BH	20	ASN
29	BH	33	GLN
29	BH	43	ASN
29	BH	145	ASN
30	BI	5	GLN
30	BI	30	GLN
30	BI	110	GLN
31	BJ	40	HIS
31	BJ	58	ASN
31	BJ	76	HIS
31	BJ	77	HIS
31	BJ	130	HIS
32	BK	3	GLN
32	BK	5	GLN
32	BK	88	ASN
32	BK	89	ASN
33	BL	4	ASN
33	BL	54	GLN
33	BL	93	ASN
33	BL	104	GLN
34	BM	3	GLN
34	BM	88	ASN
35	BN	9	GLN
35	BN	11	ASN
35	BN	18	GLN
35	BN	62	ASN
35	BN	73	ASN
35	BN	107	ASN
36	BO	19	GLN
36	BO	34	HIS
36	BO	38	GLN
36	BO	98	GLN
36	BO	116	GLN
37	BP	9	GLN
37	BP	11	GLN
37	BP	40	GLN
37	BP	65	ASN
37	BP	74	GLN
38	BQ	43	GLN
38	BQ	51	GLN
38	BQ	55	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
38	BQ	65	ASN
39	BR	18	GLN
39	BR	43	ASN
40	BS	15	GLN
40	BS	40	ASN
40	BS	57	ASN
40	BS	61	ASN
41	BT	48	GLN
41	BT	72	GLN
41	BT	91	GLN
42	BU	52	ASN
42	BU	65	GLN
42	BU	73	ASN
43	BV	5	ASN
43	BV	44	HIS
43	BV	80	HIS
43	BV	88	HIS
44	BW	39	GLN
45	BX	5	GLN
45	BX	22	ASN
46	BY	15	ASN
46	BY	20	ASN
46	BY	27	ASN
46	BY	41	HIS
46	BY	58	ASN
48	B0	3	GLN
48	B0	4	GLN
48	B0	41	HIS
50	B2	6	GLN
50	B2	13	ASN
50	B2	16	HIS
51	B3	27	ASN
51	B3	30	HIS
52	B4	13	ASN
52	B4	35	GLN
52	B4	37	GLN
2	CB	18	GLN
2	CB	38	HIS
2	CB	119	GLN
2	CB	145	ASN
2	CB	167	HIS
2	CB	176	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	CB	177	ASN
3	CC	2	GLN
3	CC	18	ASN
3	CC	31	ASN
3	CC	139	ASN
3	CC	184	ASN
4	CD	40	HIS
4	CD	70	GLN
4	CD	73	ASN
4	CD	84	ASN
4	CD	115	GLN
4	CD	119	HIS
4	CD	125	ASN
4	CD	163	GLN
5	CE	11	GLN
5	CE	60	GLN
5	CE	76	ASN
5	CE	77	ASN
5	CE	121	ASN
5	CE	131	ASN
6	CF	11	HIS
6	CF	14	GLN
6	CF	17	GLN
6	CF	37	HIS
6	CF	58	HIS
6	CF	81	ASN
7	CG	67	ASN
7	CG	85	GLN
8	CH	17	GLN
8	CH	37	ASN
9	CI	3	ASN
9	CI	4	GLN
9	CI	49	GLN
9	CI	74	GLN
9	CI	109	GLN
9	CI	125	GLN
10	CJ	15	HIS
10	CJ	35	GLN
10	CJ	70	HIS
11	CK	21	HIS
11	CK	27	ASN
11	CK	39	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
12	CL	5	GLN
12	CL	19	ASN
12	CL	72	ASN
12	CL	74	GLN
12	CL	111	GLN
13	CM	90	HIS
13	CM	104	ASN
14	CN	65	GLN
15	CO	27	GLN
16	CP	18	GLN
16	CP	26	ASN
16	CP	59	HIS
16	CP	63	GLN
17	CQ	49	ASN
18	CR	30	ASN
19	CS	13	HIS
19	CS	51	HIS
19	CS	52	ASN
19	CS	56	HIS
20	CT	12	GLN
20	CT	51	ASN
20	CT	60	GLN
20	CT	69	ASN
20	CT	74	HIS
24	DC	14	HIS
24	DC	20	ASN
24	DC	57	HIS
24	DC	85	ASN
24	DC	116	GLN
24	DC	141	HIS
24	DC	152	GLN
24	DC	196	ASN
25	DD	36	GLN
25	DD	49	GLN
25	DD	67	HIS
25	DD	136	ASN
25	DD	140	HIS
25	DD	150	GLN
25	DD	173	GLN
26	DE	29	HIS
26	DE	30	GLN
27	DF	126	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
28	DG	19	ASN
28	DG	37	ASN
28	DG	138	GLN
28	DG	142	GLN
29	DH	2	GLN
29	DH	66	ASN
30	DI	93	ASN
30	DI	106	GLN
31	DJ	40	HIS
31	DJ	77	HIS
31	DJ	136	GLN
31	DJ	138	GLN
32	DK	3	GLN
32	DK	9	ASN
32	DK	13	ASN
32	DK	89	ASN
33	DL	4	ASN
33	DL	54	GLN
34	DM	13	HIS
35	DN	3	HIS
35	DN	11	ASN
35	DN	16	HIS
35	DN	23	ASN
35	DN	73	ASN
36	DO	29	HIS
36	DO	34	HIS
36	DO	38	GLN
37	DP	2	ASN
37	DP	6	GLN
37	DP	9	GLN
37	DP	11	GLN
37	DP	65	ASN
37	DP	74	GLN
38	DQ	19	GLN
38	DQ	43	GLN
38	DQ	70	GLN
38	DQ	71	ASN
38	DQ	80	ASN
39	DR	6	GLN
39	DR	43	ASN
39	DR	82	HIS
39	DR	86	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
39	DR	87	GLN
39	DR	91	GLN
40	DS	31	GLN
40	DS	57	ASN
41	DT	15	HIS
41	DT	48	GLN
41	DT	70	HIS
41	DT	91	GLN
41	DT	92	ASN
42	DU	39	ASN
42	DU	45	GLN
42	DU	52	ASN
42	DU	53	GLN
42	DU	68	ASN
43	DV	24	ASN
43	DV	51	GLN
43	DV	80	HIS
43	DV	88	HIS
44	DW	56	HIS
45	DX	15	ASN
45	DX	22	ASN
45	DX	31	ASN
45	DX	35	HIS
46	DY	15	ASN
46	DY	20	ASN
46	DY	41	HIS
47	DZ	19	HIS
48	D0	3	GLN
48	D0	5	ASN
48	D0	41	HIS
49	D1	44	GLN
50	D2	6	GLN
50	D2	26	ASN
50	D2	29	GLN
51	D3	30	HIS
51	D3	42	HIS
52	D4	37	GLN

5.3.3 RNA ⓘ

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1532/1533 (99%)	518 (33%)	236 (15%)
1	CA	1529/1533 (99%)	572 (37%)	242 (15%)
22	BA	2850/2904 (98%)	913 (32%)	429 (15%)
22	DA	2839/2904 (97%)	1105 (38%)	498 (17%)
23	BB	117/118 (99%)	34 (29%)	17 (14%)
23	DB	116/118 (98%)	44 (37%)	16 (13%)
All	All	8983/9110 (98%)	3186 (35%)	1438 (16%)

All (3186) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	5	U
1	AA	6	G
1	AA	7	A
1	AA	8	A
1	AA	9	G
1	AA	13	U
1	AA	14	U
1	AA	22	G
1	AA	31	G
1	AA	32	A
1	AA	33	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	50	A
1	AA	51	A
1	AA	55	A
1	AA	61	G
1	AA	63	C
1	AA	65	A
1	AA	66	A
1	AA	67	C
1	AA	70	U
1	AA	71	A
1	AA	72	A
1	AA	73	C
1	AA	74	A
1	AA	75	G
1	AA	76	G
1	AA	77	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	79	G
1	AA	82	G
1	AA	83	C
1	AA	85	U
1	AA	86	G
1	AA	87	C
1	AA	88	U
1	AA	89	U
1	AA	90	C
1	AA	91	U
1	AA	92	U
1	AA	93	U
1	AA	94	G
1	AA	95	C
1	AA	97	G
1	AA	98	A
1	AA	109	A
1	AA	110	C
1	AA	111	G
1	AA	116	A
1	AA	117	G
1	AA	120	A
1	AA	121	U
1	AA	122	G
1	AA	127	G
1	AA	129	A
1	AA	130	A
1	AA	131	A
1	AA	132	C
1	AA	140	U
1	AA	141	G
1	AA	142	G
1	AA	143	A
1	AA	151	A
1	AA	159	G
1	AA	163	C
1	AA	164	G
1	AA	166	U
1	AA	174	A
1	AA	175	C
1	AA	181	A
1	AA	182	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	183	C
1	AA	185	U
1	AA	186	C
1	AA	197	A
1	AA	198	G
1	AA	199	A
1	AA	200	G
1	AA	202	G
1	AA	205	A
1	AA	208	U
1	AA	209	U
1	AA	210	C
1	AA	211	G
1	AA	212	G
1	AA	214	C
1	AA	243	A
1	AA	244	U
1	AA	245	U
1	AA	247	G
1	AA	250	A
1	AA	251	G
1	AA	252	U
1	AA	253	A
1	AA	258	G
1	AA	266	G
1	AA	267	C
1	AA	268	U
1	AA	274	A
1	AA	275	G
1	AA	276	G
1	AA	279	A
1	AA	280	C
1	AA	285	C
1	AA	289	G
1	AA	305	G
1	AA	306	A
1	AA	307	C
1	AA	315	A
1	AA	316	C
1	AA	328	C
1	AA	329	A
1	AA	330	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	331	G
1	AA	332	G
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	347	G
1	AA	352	C
1	AA	353	A
1	AA	354	G
1	AA	365	U
1	AA	366	A
1	AA	367	U
1	AA	368	U
1	AA	369	G
1	AA	373	A
1	AA	374	A
1	AA	382	A
1	AA	384	G
1	AA	385	C
1	AA	388	G
1	AA	389	A
1	AA	390	U
1	AA	392	C
1	AA	398	U
1	AA	401	C
1	AA	406	G
1	AA	411	A
1	AA	412	A
1	AA	413	G
1	AA	414	A
1	AA	415	A
1	AA	421	U
1	AA	422	C
1	AA	423	G
1	AA	424	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	431	A
1	AA	439	U
1	AA	440	C
1	AA	451	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	452	A
1	AA	453	G
1	AA	456	A
1	AA	458	U
1	AA	459	A
1	AA	461	A
1	AA	462	G
1	AA	463	U
1	AA	464	U
1	AA	466	A
1	AA	467	U
1	AA	468	A
1	AA	469	C
1	AA	470	C
1	AA	476	U
1	AA	478	A
1	AA	481	G
1	AA	482	A
1	AA	484	G
1	AA	485	U
1	AA	486	U
1	AA	487	A
1	AA	488	C
1	AA	489	C
1	AA	490	C
1	AA	496	A
1	AA	497	G
1	AA	498	A
1	AA	499	A
1	AA	500	G
1	AA	501	C
1	AA	508	U
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	512	U
1	AA	513	C
1	AA	514	C
1	AA	517	G
1	AA	518	C
1	AA	519	C
1	AA	520	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	522	C
1	AA	527	G
1	AA	532	A
1	AA	534	U
1	AA	535	A
1	AA	536	C
1	AA	537	G
1	AA	546	A
1	AA	548	G
1	AA	549	C
1	AA	550	G
1	AA	552	U
1	AA	556	C
1	AA	557	G
1	AA	559	A
1	AA	560	A
1	AA	562	U
1	AA	563	A
1	AA	564	C
1	AA	566	G
1	AA	567	G
1	AA	570	G
1	AA	572	A
1	AA	573	A
1	AA	575	G
1	AA	576	C
1	AA	577	G
1	AA	588	G
1	AA	595	A
1	AA	596	A
1	AA	597	G
1	AA	615	G
1	AA	620	C
1	AA	642	A
1	AA	643	C
1	AA	652	U
1	AA	653	U
1	AA	654	G
1	AA	655	A
1	AA	663	A
1	AA	665	A
1	AA	682	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	688	G
1	AA	689	C
1	AA	695	A
1	AA	701	U
1	AA	702	A
1	AA	703	G
1	AA	704	A
1	AA	705	G
1	AA	717	U
1	AA	718	A
1	AA	719	C
1	AA	721	G
1	AA	722	G
1	AA	723	U
1	AA	731	G
1	AA	748	G
1	AA	752	G
1	AA	753	A
1	AA	754	C
1	AA	755	G
1	AA	777	A
1	AA	782	A
1	AA	792	A
1	AA	793	U
1	AA	794	A
1	AA	795	C
1	AA	809	G
1	AA	813	U
1	AA	814	A
1	AA	815	A
1	AA	816	A
1	AA	817	C
1	AA	818	G
1	AA	828	U
1	AA	829	G
1	AA	832	G
1	AA	841	C
1	AA	843	U
1	AA	845	A
1	AA	846	G
1	AA	849	G
1	AA	859	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	871	U
1	AA	874	G
1	AA	875	U
1	AA	885	G
1	AA	889	A
1	AA	890	G
1	AA	910	C
1	AA	913	A
1	AA	914	A
1	AA	915	A
1	AA	920	U
1	AA	926	G
1	AA	927	G
1	AA	932	C
1	AA	934	C
1	AA	935	A
1	AA	936	C
1	AA	942	G
1	AA	960	U
1	AA	961	U
1	AA	962	C
1	AA	966	G
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	972	C
1	AA	973	G
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	979	C
1	AA	982	U
1	AA	983	A
1	AA	984	C
1	AA	985	C
1	AA	989	U
1	AA	992	U
1	AA	993	G
1	AA	994	A
1	AA	995	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1003	G
1	AA	1004	A
1	AA	1008	U
1	AA	1018	G
1	AA	1022	A
1	AA	1026	G
1	AA	1028	C
1	AA	1030	U
1	AA	1031	C
1	AA	1032	G
1	AA	1033	G
1	AA	1034	G
1	AA	1037	C
1	AA	1050	G
1	AA	1051	C
1	AA	1053	G
1	AA	1054	C
1	AA	1055	A
1	AA	1064	G
1	AA	1065	U
1	AA	1066	C
1	AA	1068	G
1	AA	1069	C
1	AA	1070	U
1	AA	1078	U
1	AA	1079	G
1	AA	1085	U
1	AA	1086	U
1	AA	1088	G
1	AA	1089	G
1	AA	1090	U
1	AA	1091	U
1	AA	1092	A
1	AA	1094	G
1	AA	1095	U
1	AA	1096	C
1	AA	1101	A
1	AA	1102	A
1	AA	1103	C
1	AA	1104	G
1	AA	1113	C
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	1127	G
1	AA	1128	C
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1133	G
1	AA	1135	U
1	AA	1137	C
1	AA	1138	G
1	AA	1140	C
1	AA	1141	C
1	AA	1142	G
1	AA	1143	G
1	AA	1144	G
1	AA	1145	A
1	AA	1151	A
1	AA	1152	A
1	AA	1153	G
1	AA	1154	G
1	AA	1158	C
1	AA	1159	U
1	AA	1160	G
1	AA	1161	C
1	AA	1162	C
1	AA	1163	A
1	AA	1167	A
1	AA	1168	U
1	AA	1169	A
1	AA	1170	A
1	AA	1178	G
1	AA	1181	G
1	AA	1182	G
1	AA	1183	U
1	AA	1184	G
1	AA	1185	G
1	AA	1190	G
1	AA	1191	A
1	AA	1192	C
1	AA	1196	A
1	AA	1197	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1198	G
1	AA	1200	C
1	AA	1201	A
1	AA	1202	U
1	AA	1203	C
1	AA	1212	U
1	AA	1213	A
1	AA	1215	G
1	AA	1216	A
1	AA	1224	U
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1228	C
1	AA	1229	A
1	AA	1238	A
1	AA	1239	A
1	AA	1240	U
1	AA	1241	G
1	AA	1242	G
1	AA	1256	A
1	AA	1259	C
1	AA	1260	G
1	AA	1275	A
1	AA	1278	G
1	AA	1279	G
1	AA	1280	A
1	AA	1282	C
1	AA	1283	U
1	AA	1284	C
1	AA	1285	A
1	AA	1286	U
1	AA	1287	A
1	AA	1293	C
1	AA	1299	A
1	AA	1301	U
1	AA	1303	C
1	AA	1304	G
1	AA	1305	G
1	AA	1315	U
1	AA	1316	G
1	AA	1317	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1318	A
1	AA	1319	A
1	AA	1320	C
1	AA	1321	U
1	AA	1322	C
1	AA	1323	G
1	AA	1324	A
1	AA	1325	C
1	AA	1332	A
1	AA	1333	A
1	AA	1337	G
1	AA	1338	G
1	AA	1346	A
1	AA	1348	U
1	AA	1349	A
1	AA	1353	G
1	AA	1362	A
1	AA	1364	U
1	AA	1365	G
1	AA	1370	G
1	AA	1379	G
1	AA	1380	U
1	AA	1381	U
1	AA	1382	C
1	AA	1394	A
1	AA	1395	C
1	AA	1396	A
1	AA	1397	C
1	AA	1398	A
1	AA	1399	C
1	AA	1400	C
1	AA	1402	C
1	AA	1411	C
1	AA	1414	U
1	AA	1432	G
1	AA	1433	A
1	AA	1441	A
1	AA	1446	A
1	AA	1448	C
1	AA	1449	C
1	AA	1451	U
1	AA	1452	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1453	G
1	AA	1454	G
1	AA	1455	G
1	AA	1469	C
1	AA	1470	U
1	AA	1491	G
1	AA	1492	A
1	AA	1494	G
1	AA	1497	G
1	AA	1498	U
1	AA	1499	A
1	AA	1502	A
1	AA	1503	A
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1508	A
1	AA	1509	C
1	AA	1517	G
1	AA	1522	U
1	AA	1526	G
1	AA	1528	U
1	AA	1529	G
1	AA	1530	G
1	AA	1531	A
1	AA	1532	U
22	BA	10	A
22	BA	13	A
22	BA	14	A
22	BA	15	G
22	BA	23	G
22	BA	27	G
22	BA	28	A
22	BA	31	C
22	BA	34	U
22	BA	35	G
22	BA	36	G
22	BA	39	G
22	BA	42	A
22	BA	43	G
22	BA	45	G
22	BA	46	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	49	A
22	BA	50	U
22	BA	52	A
22	BA	53	A
22	BA	58	G
22	BA	61	C
22	BA	63	A
22	BA	64	A
22	BA	70	G
22	BA	71	A
22	BA	74	A
22	BA	75	G
22	BA	76	C
22	BA	78	U
22	BA	82	U
22	BA	84	A
22	BA	85	G
22	BA	86	G
22	BA	92	U
22	BA	93	G
22	BA	101	A
22	BA	118	A
22	BA	119	A
22	BA	120	U
22	BA	121	G
22	BA	126	A
22	BA	127	A
22	BA	128	C
22	BA	131	A
22	BA	134	G
22	BA	137	U
22	BA	138	U
22	BA	139	U
22	BA	140	C
22	BA	141	G
22	BA	142	A
22	BA	143	C
22	BA	144	A
22	BA	145	C
22	BA	147	C
22	BA	162	U
22	BA	163	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	164	C
22	BA	165	A
22	BA	166	U
22	BA	196	A
22	BA	197	A
22	BA	198	C
22	BA	199	A
22	BA	200	U
22	BA	204	A
22	BA	205	G
22	BA	206	U
22	BA	207	A
22	BA	214	G
22	BA	216	A
22	BA	221	A
22	BA	222	A
22	BA	223	A
22	BA	224	U
22	BA	225	C
22	BA	226	A
22	BA	227	A
22	BA	228	C
22	BA	230	G
22	BA	231	A
22	BA	232	G
22	BA	233	A
22	BA	239	C
22	BA	241	A
22	BA	242	G
22	BA	243	U
22	BA	244	A
22	BA	248	G
22	BA	249	C
22	BA	250	G
22	BA	255	A
22	BA	265	A
22	BA	266	G
22	BA	267	C
22	BA	268	C
22	BA	271	G
22	BA	272	A
22	BA	273	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	274	C
22	BA	276	U
22	BA	279	A
22	BA	281	C
22	BA	285	G
22	BA	291	G
22	BA	299	A
22	BA	301	G
22	BA	302	C
22	BA	303	G
22	BA	306	U
22	BA	310	A
22	BA	312	G
22	BA	313	G
22	BA	322	A
22	BA	329	G
22	BA	330	A
22	BA	331	C
22	BA	341	C
22	BA	346	A
22	BA	347	A
22	BA	349	U
22	BA	353	C
22	BA	359	G
22	BA	361	G
22	BA	369	U
22	BA	370	G
22	BA	371	A
22	BA	372	G
22	BA	373	U
22	BA	375	G
22	BA	383	C
22	BA	386	G
22	BA	387	U
22	BA	388	G
22	BA	389	G
22	BA	391	A
22	BA	396	G
22	BA	399	U
22	BA	404	A
22	BA	405	U
22	BA	406	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	411	G
22	BA	412	A
22	BA	413	C
22	BA	422	A
22	BA	423	A
22	BA	424	G
22	BA	425	G
22	BA	435	C
22	BA	439	A
22	BA	440	C
22	BA	443	A
22	BA	446	G
22	BA	447	A
22	BA	452	G
22	BA	454	A
22	BA	455	C
22	BA	457	A
22	BA	459	U
22	BA	460	A
22	BA	474	G
22	BA	475	C
22	BA	476	G
22	BA	479	A
22	BA	480	A
22	BA	481	G
22	BA	482	A
22	BA	489	G
22	BA	490	C
22	BA	491	G
22	BA	492	A
22	BA	504	A
22	BA	505	A
22	BA	507	A
22	BA	508	A
22	BA	509	C
22	BA	510	C
22	BA	512	G
22	BA	513	A
22	BA	514	A
22	BA	522	A
22	BA	528	A
22	BA	529	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	530	G
22	BA	531	C
22	BA	532	A
22	BA	533	G
22	BA	538	A
22	BA	544	C
22	BA	546	U
22	BA	547	A
22	BA	548	G
22	BA	549	G
22	BA	550	C
22	BA	555	G
22	BA	556	A
22	BA	563	A
22	BA	571	U
22	BA	572	A
22	BA	573	U
22	BA	574	A
22	BA	575	A
22	BA	581	C
22	BA	582	A
22	BA	586	A
22	BA	587	C
22	BA	588	U
22	BA	604	G
22	BA	605	G
22	BA	613	A
22	BA	614	A
22	BA	615	U
22	BA	621	A
22	BA	626	A
22	BA	627	A
22	BA	628	G
22	BA	631	A
22	BA	637	A
22	BA	638	G
22	BA	641	U
22	BA	645	C
22	BA	646	U
22	BA	647	G
22	BA	648	G
22	BA	651	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	653	U
22	BA	654	A
22	BA	655	A
22	BA	656	G
22	BA	664	G
22	BA	685	A
22	BA	686	U
22	BA	698	C
22	BA	705	A
22	BA	727	A
22	BA	728	G
22	BA	729	G
22	BA	730	A
22	BA	738	G
22	BA	740	C
22	BA	747	U
22	BA	748	G
22	BA	755	U
22	BA	762	U
22	BA	763	G
22	BA	764	A
22	BA	765	C
22	BA	774	G
22	BA	775	G
22	BA	776	G
22	BA	782	A
22	BA	784	G
22	BA	785	G
22	BA	788	A
22	BA	789	A
22	BA	791	C
22	BA	792	A
22	BA	801	G
22	BA	803	U
22	BA	805	G
22	BA	806	C
22	BA	812	C
22	BA	819	A
22	BA	822	G
22	BA	827	U
22	BA	828	U
22	BA	829	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	830	G
22	BA	836	G
22	BA	845	A
22	BA	846	U
22	BA	847	U
22	BA	848	C
22	BA	852	U
22	BA	858	G
22	BA	859	G
22	BA	860	U
22	BA	861	A
22	BA	865	C
22	BA	866	A
22	BA	867	C
22	BA	876	C
22	BA	877	A
22	BA	878	A
22	BA	879	G
22	BA	885	C
22	BA	896	A
22	BA	897	C
22	BA	910	A
22	BA	914	G
22	BA	915	C
22	BA	916	G
22	BA	932	U
22	BA	933	A
22	BA	934	U
22	BA	941	A
22	BA	945	A
22	BA	946	C
22	BA	955	U
22	BA	956	G
22	BA	958	U
22	BA	959	A
22	BA	961	C
22	BA	962	G
22	BA	974	G
22	BA	977	G
22	BA	983	A
22	BA	985	C
22	BA	989	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	990	A
22	BA	991	C
22	BA	995	C
22	BA	996	A
22	BA	997	G
22	BA	1009	A
22	BA	1011	G
22	BA	1012	U
22	BA	1013	C
22	BA	1020	A
22	BA	1021	A
22	BA	1022	G
22	BA	1023	U
22	BA	1024	G
22	BA	1025	G
22	BA	1026	G
22	BA	1027	A
22	BA	1033	U
22	BA	1034	G
22	BA	1040	A
22	BA	1044	C
22	BA	1045	C
22	BA	1046	A
22	BA	1047	G
22	BA	1057	A
22	BA	1060	U
22	BA	1061	U
22	BA	1062	G
22	BA	1063	G
22	BA	1064	C
22	BA	1065	U
22	BA	1066	U
22	BA	1070	A
22	BA	1071	G
22	BA	1073	A
22	BA	1074	G
22	BA	1075	C
22	BA	1078	U
22	BA	1080	A
22	BA	1081	U
22	BA	1083	U
22	BA	1084	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1088	A
22	BA	1098	A
22	BA	1111	A
22	BA	1112	G
22	BA	1115	G
22	BA	1120	G
22	BA	1128	G
22	BA	1129	A
22	BA	1130	U
22	BA	1132	U
22	BA	1133	A
22	BA	1135	C
22	BA	1136	G
22	BA	1139	G
22	BA	1142	A
22	BA	1144	A
22	BA	1145	C
22	BA	1151	A
22	BA	1154	G
22	BA	1156	A
22	BA	1157	G
22	BA	1158	C
22	BA	1162	G
22	BA	1172	C
22	BA	1175	A
22	BA	1176	U
22	BA	1180	U
22	BA	1181	U
22	BA	1185	G
22	BA	1186	G
22	BA	1189	A
22	BA	1190	G
22	BA	1204	A
22	BA	1205	A
22	BA	1206	G
22	BA	1210	G
22	BA	1213	A
22	BA	1238	G
22	BA	1247	A
22	BA	1248	G
22	BA	1249	U
22	BA	1250	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1251	C
22	BA	1253	A
22	BA	1254	A
22	BA	1255	U
22	BA	1256	G
22	BA	1262	A
22	BA	1266	G
22	BA	1271	G
22	BA	1272	A
22	BA	1273	U
22	BA	1276	A
22	BA	1284	A
22	BA	1287	A
22	BA	1288	G
22	BA	1289	C
22	BA	1290	C
22	BA	1297	C
22	BA	1300	G
22	BA	1301	A
22	BA	1303	G
22	BA	1319	C
22	BA	1320	C
22	BA	1321	A
22	BA	1324	G
22	BA	1325	U
22	BA	1327	A
22	BA	1328	A
22	BA	1329	U
22	BA	1330	C
22	BA	1336	A
22	BA	1340	U
22	BA	1341	G
22	BA	1343	G
22	BA	1344	U
22	BA	1345	C
22	BA	1349	C
22	BA	1350	C
22	BA	1352	U
22	BA	1356	G
22	BA	1360	G
22	BA	1365	A
22	BA	1368	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1377	G
22	BA	1378	A
22	BA	1379	U
22	BA	1380	G
22	BA	1383	A
22	BA	1386	C
22	BA	1395	A
22	BA	1397	U
22	BA	1398	C
22	BA	1399	C
22	BA	1403	A
22	BA	1407	G
22	BA	1415	U
22	BA	1416	G
22	BA	1417	C
22	BA	1418	G
22	BA	1419	A
22	BA	1420	A
22	BA	1421	G
22	BA	1422	G
22	BA	1425	G
22	BA	1427	A
22	BA	1428	C
22	BA	1429	G
22	BA	1434	A
22	BA	1435	G
22	BA	1436	G
22	BA	1440	U
22	BA	1452	G
22	BA	1453	A
22	BA	1455	G
22	BA	1459	G
22	BA	1460	U
22	BA	1461	C
22	BA	1462	C
22	BA	1463	C
22	BA	1475	G
22	BA	1476	U
22	BA	1477	A
22	BA	1482	G
22	BA	1490	A
22	BA	1491	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1492	G
22	BA	1494	A
22	BA	1495	A
22	BA	1497	U
22	BA	1498	C
22	BA	1499	C
22	BA	1504	A
22	BA	1507	C
22	BA	1509	A
22	BA	1510	G
22	BA	1511	G
22	BA	1512	C
22	BA	1515	A
22	BA	1522	A
22	BA	1523	U
22	BA	1527	G
22	BA	1528	A
22	BA	1533	C
22	BA	1534	U
22	BA	1535	A
22	BA	1536	C
22	BA	1537	G
22	BA	1538	G
22	BA	1540	G
22	BA	1554	U
22	BA	1555	G
22	BA	1558	C
22	BA	1559	U
22	BA	1564	C
22	BA	1566	A
22	BA	1569	A
22	BA	1574	C
22	BA	1578	U
22	BA	1581	G
22	BA	1583	A
22	BA	1584	U
22	BA	1585	C
22	BA	1588	G
22	BA	1603	A
22	BA	1606	C
22	BA	1607	C
22	BA	1608	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1609	A
22	BA	1610	A
22	BA	1613	G
22	BA	1615	C
22	BA	1616	A
22	BA	1627	G
22	BA	1628	G
22	BA	1634	A
22	BA	1635	A
22	BA	1639	C
22	BA	1647	U
22	BA	1648	U
22	BA	1649	G
22	BA	1651	G
22	BA	1652	A
22	BA	1654	A
22	BA	1674	G
22	BA	1675	C
22	BA	1695	G
22	BA	1696	G
22	BA	1698	A
22	BA	1699	G
22	BA	1700	A
22	BA	1701	A
22	BA	1707	G
22	BA	1708	C
22	BA	1713	A
22	BA	1714	U
22	BA	1715	G
22	BA	1716	U
22	BA	1717	A
22	BA	1720	U
22	BA	1729	U
22	BA	1730	C
22	BA	1732	C
22	BA	1733	G
22	BA	1734	G
22	BA	1735	A
22	BA	1736	U
22	BA	1737	G
22	BA	1738	G
22	BA	1739	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1740	G
22	BA	1744	A
22	BA	1754	A
22	BA	1755	A
22	BA	1758	U
22	BA	1759	A
22	BA	1760	C
22	BA	1764	C
22	BA	1769	U
22	BA	1773	A
22	BA	1776	G
22	BA	1782	U
22	BA	1783	A
22	BA	1785	A
22	BA	1786	A
22	BA	1787	A
22	BA	1788	C
22	BA	1791	A
22	BA	1798	U
22	BA	1799	G
22	BA	1800	C
22	BA	1801	A
22	BA	1802	A
22	BA	1807	G
22	BA	1808	A
22	BA	1815	A
22	BA	1816	C
22	BA	1817	G
22	BA	1819	A
22	BA	1821	A
22	BA	1829	A
22	BA	1838	C
22	BA	1839	G
22	BA	1848	A
22	BA	1849	G
22	BA	1857	G
22	BA	1858	A
22	BA	1859	U
22	BA	1866	A
22	BA	1867	G
22	BA	1871	A
22	BA	1872	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1873	G
22	BA	1885	A
22	BA	1886	U
22	BA	1900	A
22	BA	1906	G
22	BA	1907	G
22	BA	1913	A
22	BA	1914	C
22	BA	1918	A
22	BA	1919	A
22	BA	1920	C
22	BA	1926	U
22	BA	1927	A
22	BA	1929	G
22	BA	1930	G
22	BA	1931	U
22	BA	1932	A
22	BA	1935	G
22	BA	1936	A
22	BA	1937	A
22	BA	1938	A
22	BA	1941	C
22	BA	1943	U
22	BA	1944	U
22	BA	1945	G
22	BA	1946	U
22	BA	1955	U
22	BA	1960	A
22	BA	1962	C
22	BA	1963	U
22	BA	1964	G
22	BA	1966	A
22	BA	1967	C
22	BA	1968	G
22	BA	1970	A
22	BA	1971	U
22	BA	1972	G
22	BA	1975	G
22	BA	1979	U
22	BA	1980	G
22	BA	1981	A
22	BA	1986	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1991	U
22	BA	1993	U
22	BA	1996	C
22	BA	1997	C
22	BA	2011	U
22	BA	2022	U
22	BA	2023	C
22	BA	2030	A
22	BA	2031	A
22	BA	2032	G
22	BA	2033	A
22	BA	2036	C
22	BA	2043	C
22	BA	2049	G
22	BA	2051	A
22	BA	2052	A
22	BA	2055	C
22	BA	2056	G
22	BA	2060	A
22	BA	2061	G
22	BA	2062	A
22	BA	2063	C
22	BA	2064	C
22	BA	2068	U
22	BA	2069	G
22	BA	2072	C
22	BA	2086	U
22	BA	2092	U
22	BA	2093	G
22	BA	2104	C
22	BA	2106	U
22	BA	2107	G
22	BA	2109	U
22	BA	2110	G
22	BA	2134	A
22	BA	2135	A
22	BA	2136	G
22	BA	2137	U
22	BA	2138	G
22	BA	2140	G
22	BA	2143	C
22	BA	2144	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2145	C
22	BA	2147	A
22	BA	2148	G
22	BA	2149	U
22	BA	2150	C
22	BA	2155	U
22	BA	2156	G
22	BA	2180	U
22	BA	2181	U
22	BA	2183	A
22	BA	2184	A
22	BA	2190	G
22	BA	2197	U
22	BA	2198	A
22	BA	2199	A
22	BA	2200	C
22	BA	2203	U
22	BA	2204	G
22	BA	2210	U
22	BA	2211	A
22	BA	2212	A
22	BA	2214	C
22	BA	2215	C
22	BA	2225	A
22	BA	2226	C
22	BA	2230	G
22	BA	2238	G
22	BA	2239	G
22	BA	2243	U
22	BA	2248	C
22	BA	2250	G
22	BA	2258	C
22	BA	2259	U
22	BA	2262	U
22	BA	2267	A
22	BA	2268	A
22	BA	2269	G
22	BA	2273	A
22	BA	2275	C
22	BA	2276	G
22	BA	2278	A
22	BA	2283	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2284	A
22	BA	2286	G
22	BA	2287	A
22	BA	2296	U
22	BA	2297	A
22	BA	2305	U
22	BA	2307	G
22	BA	2308	G
22	BA	2309	A
22	BA	2310	C
22	BA	2312	U
22	BA	2320	U
22	BA	2321	U
22	BA	2322	A
22	BA	2325	G
22	BA	2326	C
22	BA	2327	A
22	BA	2330	G
22	BA	2333	A
22	BA	2334	U
22	BA	2335	A
22	BA	2336	A
22	BA	2337	G
22	BA	2338	C
22	BA	2344	U
22	BA	2345	G
22	BA	2347	C
22	BA	2353	G
22	BA	2358	A
22	BA	2361	G
22	BA	2383	G
22	BA	2385	C
22	BA	2389	G
22	BA	2392	A
22	BA	2402	U
22	BA	2403	C
22	BA	2406	A
22	BA	2407	A
22	BA	2408	U
22	BA	2418	A
22	BA	2423	U
22	BA	2424	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2425	A
22	BA	2426	A
22	BA	2427	C
22	BA	2428	G
22	BA	2429	G
22	BA	2430	A
22	BA	2431	U
22	BA	2432	A
22	BA	2435	A
22	BA	2439	A
22	BA	2440	C
22	BA	2441	U
22	BA	2447	G
22	BA	2448	A
22	BA	2459	A
22	BA	2460	U
22	BA	2468	A
22	BA	2469	A
22	BA	2476	A
22	BA	2477	U
22	BA	2482	A
22	BA	2490	G
22	BA	2491	U
22	BA	2497	A
22	BA	2501	C
22	BA	2502	G
22	BA	2503	A
22	BA	2504	U
22	BA	2505	G
22	BA	2507	C
22	BA	2508	G
22	BA	2515	C
22	BA	2518	A
22	BA	2520	C
22	BA	2525	G
22	BA	2529	G
22	BA	2542	A
22	BA	2547	A
22	BA	2550	G
22	BA	2554	U
22	BA	2566	A
22	BA	2567	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2572	A
22	BA	2573	C
22	BA	2574	G
22	BA	2576	G
22	BA	2580	U
22	BA	2582	G
22	BA	2585	U
22	BA	2586	U
22	BA	2603	G
22	BA	2604	U
22	BA	2609	U
22	BA	2610	C
22	BA	2611	C
22	BA	2613	U
22	BA	2615	U
22	BA	2616	C
22	BA	2621	G
22	BA	2622	U
22	BA	2623	G
22	BA	2629	U
22	BA	2630	G
22	BA	2632	A
22	BA	2638	G
22	BA	2639	A
22	BA	2646	C
22	BA	2652	C
22	BA	2654	A
22	BA	2655	G
22	BA	2656	U
22	BA	2657	A
22	BA	2660	A
22	BA	2662	A
22	BA	2663	G
22	BA	2669	G
22	BA	2672	U
22	BA	2673	G
22	BA	2674	G
22	BA	2680	U
22	BA	2681	C
22	BA	2682	A
22	BA	2689	U
22	BA	2690	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2712	C
22	BA	2713	U
22	BA	2714	G
22	BA	2716	C
22	BA	2724	U
22	BA	2726	A
22	BA	2727	A
22	BA	2729	G
22	BA	2730	C
22	BA	2731	G
22	BA	2732	G
22	BA	2733	A
22	BA	2743	U
22	BA	2748	A
22	BA	2750	A
22	BA	2751	G
22	BA	2756	U
22	BA	2757	A
22	BA	2758	A
22	BA	2765	A
22	BA	2771	C
22	BA	2777	G
22	BA	2778	A
22	BA	2779	U
22	BA	2781	A
22	BA	2791	G
22	BA	2798	U
22	BA	2799	A
22	BA	2800	A
22	BA	2801	G
22	BA	2806	C
22	BA	2808	G
22	BA	2809	A
22	BA	2820	A
22	BA	2821	A
22	BA	2825	G
22	BA	2832	U
22	BA	2833	U
22	BA	2835	A
22	BA	2836	U
22	BA	2848	G
22	BA	2849	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2861	U
22	BA	2862	G
22	BA	2866	U
22	BA	2867	G
22	BA	2873	A
22	BA	2874	C
22	BA	2879	A
22	BA	2880	C
22	BA	2883	A
22	BA	2884	U
22	BA	2886	A
22	BA	2890	G
22	BA	2893	A
22	BA	2894	G
22	BA	2895	G
23	BB	9	G
23	BB	12	C
23	BB	13	G
23	BB	15	A
23	BB	16	G
23	BB	24	G
23	BB	25	U
23	BB	26	C
23	BB	35	C
23	BB	37	C
23	BB	40	U
23	BB	41	G
23	BB	42	C
23	BB	43	C
23	BB	44	G
23	BB	45	A
23	BB	46	A
23	BB	52	A
23	BB	53	A
23	BB	56	G
23	BB	57	A
23	BB	58	A
23	BB	66	A
23	BB	67	G
23	BB	74	U
23	BB	84	G
23	BB	87	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	BB	88	C
23	BB	89	U
23	BB	90	C
23	BB	91	C
23	BB	93	C
23	BB	99	A
23	BB	109	A
1	CA	6	G
1	CA	7	A
1	CA	9	G
1	CA	13	U
1	CA	14	U
1	CA	15	G
1	CA	16	A
1	CA	17	U
1	CA	31	G
1	CA	32	A
1	CA	33	A
1	CA	39	G
1	CA	40	C
1	CA	45	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	52	C
1	CA	53	A
1	CA	61	G
1	CA	65	A
1	CA	66	A
1	CA	67	C
1	CA	68	G
1	CA	70	U
1	CA	71	A
1	CA	72	A
1	CA	73	C
1	CA	74	A
1	CA	75	G
1	CA	76	G
1	CA	77	A
1	CA	80	A
1	CA	81	A
1	CA	82	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	83	C
1	CA	85	U
1	CA	86	G
1	CA	87	C
1	CA	88	U
1	CA	89	U
1	CA	90	C
1	CA	92	U
1	CA	93	U
1	CA	94	G
1	CA	95	C
1	CA	96	U
1	CA	98	A
1	CA	110	C
1	CA	115	G
1	CA	116	A
1	CA	119	A
1	CA	120	A
1	CA	121	U
1	CA	122	G
1	CA	130	A
1	CA	131	A
1	CA	132	C
1	CA	141	G
1	CA	143	A
1	CA	144	G
1	CA	155	A
1	CA	160	A
1	CA	164	G
1	CA	173	U
1	CA	174	A
1	CA	175	C
1	CA	178	C
1	CA	181	A
1	CA	182	A
1	CA	184	G
1	CA	185	U
1	CA	198	G
1	CA	199	A
1	CA	200	G
1	CA	201	G
1	CA	206	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	207	C
1	CA	208	U
1	CA	209	U
1	CA	210	C
1	CA	211	G
1	CA	212	G
1	CA	213	G
1	CA	214	C
1	CA	239	U
1	CA	240	G
1	CA	241	G
1	CA	243	A
1	CA	244	U
1	CA	245	U
1	CA	246	A
1	CA	247	G
1	CA	248	C
1	CA	249	U
1	CA	250	A
1	CA	251	G
1	CA	252	U
1	CA	253	A
1	CA	266	G
1	CA	267	C
1	CA	268	U
1	CA	275	G
1	CA	276	G
1	CA	277	C
1	CA	278	G
1	CA	280	C
1	CA	282	A
1	CA	283	U
1	CA	289	G
1	CA	294	U
1	CA	298	A
1	CA	300	A
1	CA	301	G
1	CA	305	G
1	CA	306	A
1	CA	307	C
1	CA	315	A
1	CA	316	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	317	U
1	CA	321	A
1	CA	327	A
1	CA	328	C
1	CA	329	A
1	CA	330	C
1	CA	331	G
1	CA	332	G
1	CA	338	A
1	CA	344	A
1	CA	345	C
1	CA	346	G
1	CA	347	G
1	CA	348	G
1	CA	349	A
1	CA	351	G
1	CA	352	C
1	CA	353	A
1	CA	354	G
1	CA	367	U
1	CA	369	G
1	CA	371	A
1	CA	372	C
1	CA	373	A
1	CA	374	A
1	CA	375	U
1	CA	381	C
1	CA	382	A
1	CA	383	A
1	CA	384	G
1	CA	389	A
1	CA	390	U
1	CA	396	C
1	CA	397	A
1	CA	398	U
1	CA	406	G
1	CA	411	A
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	415	A
1	CA	421	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	422	C
1	CA	423	G
1	CA	424	G
1	CA	425	G
1	CA	428	G
1	CA	429	U
1	CA	430	A
1	CA	435	A
1	CA	438	U
1	CA	439	U
1	CA	440	C
1	CA	448	A
1	CA	452	A
1	CA	453	G
1	CA	454	G
1	CA	456	A
1	CA	457	G
1	CA	458	U
1	CA	459	A
1	CA	461	A
1	CA	462	G
1	CA	463	U
1	CA	464	U
1	CA	466	A
1	CA	467	U
1	CA	468	A
1	CA	469	C
1	CA	474	G
1	CA	476	U
1	CA	478	A
1	CA	479	U
1	CA	481	G
1	CA	482	A
1	CA	483	C
1	CA	484	G
1	CA	485	U
1	CA	486	U
1	CA	487	A
1	CA	496	A
1	CA	497	G
1	CA	499	A
1	CA	500	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	501	C
1	CA	505	G
1	CA	508	U
1	CA	509	A
1	CA	511	C
1	CA	512	U
1	CA	513	C
1	CA	514	C
1	CA	516	U
1	CA	517	G
1	CA	518	C
1	CA	519	C
1	CA	520	A
1	CA	521	G
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	535	A
1	CA	536	C
1	CA	537	G
1	CA	545	C
1	CA	548	G
1	CA	559	A
1	CA	560	A
1	CA	562	U
1	CA	563	A
1	CA	564	C
1	CA	565	U
1	CA	566	G
1	CA	567	G
1	CA	568	G
1	CA	572	A
1	CA	573	A
1	CA	575	G
1	CA	576	C
1	CA	577	G
1	CA	578	C
1	CA	596	A
1	CA	597	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	617	G
1	CA	642	A
1	CA	643	C
1	CA	644	U
1	CA	653	U
1	CA	654	G
1	CA	655	A
1	CA	665	A
1	CA	688	G
1	CA	689	C
1	CA	695	A
1	CA	700	G
1	CA	701	U
1	CA	702	A
1	CA	703	G
1	CA	704	A
1	CA	717	U
1	CA	719	C
1	CA	721	G
1	CA	722	G
1	CA	723	U
1	CA	728	A
1	CA	730	G
1	CA	731	G
1	CA	733	G
1	CA	734	G
1	CA	735	C
1	CA	748	G
1	CA	753	A
1	CA	754	C
1	CA	755	G
1	CA	756	C
1	CA	757	U
1	CA	765	G
1	CA	776	G
1	CA	777	A
1	CA	781	A
1	CA	782	A
1	CA	784	A
1	CA	785	G
1	CA	792	A
1	CA	793	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	794	A
1	CA	795	C
1	CA	803	G
1	CA	812	G
1	CA	813	U
1	CA	815	A
1	CA	816	A
1	CA	817	C
1	CA	818	G
1	CA	821	G
1	CA	828	U
1	CA	829	G
1	CA	841	C
1	CA	842	U
1	CA	843	U
1	CA	844	G
1	CA	845	A
1	CA	846	G
1	CA	847	G
1	CA	849	G
1	CA	870	U
1	CA	871	U
1	CA	874	G
1	CA	875	U
1	CA	885	G
1	CA	886	G
1	CA	889	A
1	CA	890	G
1	CA	891	U
1	CA	892	A
1	CA	899	C
1	CA	906	A
1	CA	914	A
1	CA	915	A
1	CA	922	G
1	CA	926	G
1	CA	927	G
1	CA	934	C
1	CA	935	A
1	CA	936	C
1	CA	937	A
1	CA	938	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	942	G
1	CA	945	G
1	CA	960	U
1	CA	961	U
1	CA	962	C
1	CA	963	G
1	CA	964	A
1	CA	966	G
1	CA	968	A
1	CA	969	A
1	CA	970	C
1	CA	971	G
1	CA	972	C
1	CA	974	A
1	CA	975	A
1	CA	976	G
1	CA	978	A
1	CA	980	C
1	CA	981	U
1	CA	982	U
1	CA	983	A
1	CA	985	C
1	CA	986	U
1	CA	987	G
1	CA	990	C
1	CA	991	U
1	CA	992	U
1	CA	993	G
1	CA	995	C
1	CA	996	A
1	CA	997	U
1	CA	998	C
1	CA	1000	A
1	CA	1004	A
1	CA	1006	G
1	CA	1016	A
1	CA	1019	A
1	CA	1020	G
1	CA	1022	A
1	CA	1026	G
1	CA	1029	U
1	CA	1031	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1032	G
1	CA	1036	A
1	CA	1037	C
1	CA	1049	U
1	CA	1050	G
1	CA	1051	C
1	CA	1052	U
1	CA	1053	G
1	CA	1054	C
1	CA	1055	A
1	CA	1064	G
1	CA	1065	U
1	CA	1066	C
1	CA	1067	A
1	CA	1068	G
1	CA	1085	U
1	CA	1086	U
1	CA	1087	G
1	CA	1088	G
1	CA	1089	G
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1102	A
1	CA	1103	C
1	CA	1113	C
1	CA	1124	G
1	CA	1125	U
1	CA	1127	G
1	CA	1128	C
1	CA	1129	C
1	CA	1130	A
1	CA	1131	G
1	CA	1136	C
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1141	C
1	CA	1142	G
1	CA	1143	G
1	CA	1144	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1145	A
1	CA	1146	A
1	CA	1147	C
1	CA	1148	U
1	CA	1149	C
1	CA	1151	A
1	CA	1152	A
1	CA	1153	G
1	CA	1158	C
1	CA	1159	U
1	CA	1160	G
1	CA	1161	C
1	CA	1162	C
1	CA	1167	A
1	CA	1168	U
1	CA	1169	A
1	CA	1170	A
1	CA	1176	A
1	CA	1178	G
1	CA	1181	G
1	CA	1183	U
1	CA	1184	G
1	CA	1185	G
1	CA	1190	G
1	CA	1191	A
1	CA	1192	C
1	CA	1193	G
1	CA	1196	A
1	CA	1197	A
1	CA	1198	G
1	CA	1200	C
1	CA	1201	A
1	CA	1202	U
1	CA	1203	C
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1214	C
1	CA	1215	G
1	CA	1216	A
1	CA	1217	C
1	CA	1218	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1219	A
1	CA	1222	G
1	CA	1224	U
1	CA	1225	A
1	CA	1226	C
1	CA	1227	A
1	CA	1228	C
1	CA	1229	A
1	CA	1230	C
1	CA	1231	G
1	CA	1232	U
1	CA	1238	A
1	CA	1240	U
1	CA	1241	G
1	CA	1243	C
1	CA	1246	A
1	CA	1250	A
1	CA	1251	A
1	CA	1256	A
1	CA	1257	A
1	CA	1258	G
1	CA	1260	G
1	CA	1266	G
1	CA	1273	C
1	CA	1278	G
1	CA	1279	G
1	CA	1280	A
1	CA	1281	C
1	CA	1282	C
1	CA	1283	U
1	CA	1284	C
1	CA	1285	A
1	CA	1286	U
1	CA	1287	A
1	CA	1288	A
1	CA	1289	A
1	CA	1290	G
1	CA	1294	G
1	CA	1295	U
1	CA	1297	G
1	CA	1299	A
1	CA	1300	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1301	U
1	CA	1302	C
1	CA	1303	C
1	CA	1305	G
1	CA	1312	G
1	CA	1316	G
1	CA	1317	C
1	CA	1320	C
1	CA	1322	C
1	CA	1323	G
1	CA	1324	A
1	CA	1332	A
1	CA	1333	A
1	CA	1338	G
1	CA	1346	A
1	CA	1349	A
1	CA	1350	A
1	CA	1359	C
1	CA	1362	A
1	CA	1364	U
1	CA	1365	G
1	CA	1368	A
1	CA	1370	G
1	CA	1378	C
1	CA	1379	G
1	CA	1381	U
1	CA	1382	C
1	CA	1383	C
1	CA	1384	C
1	CA	1395	C
1	CA	1396	A
1	CA	1397	C
1	CA	1398	A
1	CA	1400	C
1	CA	1406	U
1	CA	1411	C
1	CA	1419	G
1	CA	1429	A
1	CA	1431	A
1	CA	1432	G
1	CA	1441	A
1	CA	1442	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1446	A
1	CA	1447	A
1	CA	1448	C
1	CA	1449	C
1	CA	1450	U
1	CA	1451	U
1	CA	1452	C
1	CA	1453	G
1	CA	1454	G
1	CA	1455	G
1	CA	1456	A
1	CA	1491	G
1	CA	1493	A
1	CA	1494	G
1	CA	1495	U
1	CA	1497	G
1	CA	1498	U
1	CA	1499	A
1	CA	1500	A
1	CA	1501	C
1	CA	1502	A
1	CA	1503	A
1	CA	1505	G
1	CA	1507	A
1	CA	1517	G
1	CA	1519	A
1	CA	1520	C
1	CA	1528	U
1	CA	1529	G
1	CA	1530	G
1	CA	1531	A
1	CA	1532	U
1	CA	1534	A
22	DA	13	A
22	DA	14	A
22	DA	15	G
22	DA	16	C
22	DA	26	G
22	DA	27	G
22	DA	29	U
22	DA	30	G
22	DA	34	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	35	G
22	DA	36	G
22	DA	37	C
22	DA	39	G
22	DA	46	G
22	DA	49	A
22	DA	50	U
22	DA	52	A
22	DA	53	A
22	DA	61	C
22	DA	62	U
22	DA	64	A
22	DA	70	G
22	DA	71	A
22	DA	74	A
22	DA	75	G
22	DA	76	C
22	DA	77	G
22	DA	78	U
22	DA	79	C
22	DA	83	A
22	DA	84	A
22	DA	85	G
22	DA	86	G
22	DA	87	U
22	DA	88	G
22	DA	91	A
22	DA	92	U
22	DA	93	G
22	DA	94	A
22	DA	96	C
22	DA	100	U
22	DA	101	A
22	DA	102	U
22	DA	104	A
22	DA	105	C
22	DA	110	G
22	DA	118	A
22	DA	119	A
22	DA	120	U
22	DA	121	G
22	DA	122	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	123	G
22	DA	126	A
22	DA	128	C
22	DA	129	C
22	DA	130	C
22	DA	134	G
22	DA	139	U
22	DA	140	C
22	DA	141	G
22	DA	142	A
22	DA	144	A
22	DA	145	C
22	DA	155	A
22	DA	156	A
22	DA	160	A
22	DA	162	U
22	DA	163	C
22	DA	164	C
22	DA	165	A
22	DA	166	U
22	DA	177	G
22	DA	180	G
22	DA	181	A
22	DA	196	A
22	DA	197	A
22	DA	198	C
22	DA	199	A
22	DA	200	U
22	DA	201	C
22	DA	204	A
22	DA	205	G
22	DA	206	U
22	DA	207	A
22	DA	208	C
22	DA	216	A
22	DA	217	A
22	DA	218	A
22	DA	222	A
22	DA	223	A
22	DA	224	U
22	DA	227	A
22	DA	228	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	229	C
22	DA	230	G
22	DA	231	A
22	DA	232	G
22	DA	233	A
22	DA	234	U
22	DA	235	U
22	DA	241	A
22	DA	242	G
22	DA	243	U
22	DA	244	A
22	DA	245	G
22	DA	248	G
22	DA	249	C
22	DA	250	G
22	DA	251	A
22	DA	255	A
22	DA	256	A
22	DA	264	C
22	DA	265	A
22	DA	266	G
22	DA	271	G
22	DA	272	A
22	DA	273	G
22	DA	274	C
22	DA	275	C
22	DA	277	G
22	DA	278	A
22	DA	281	C
22	DA	284	U
22	DA	285	G
22	DA	294	A
22	DA	295	G
22	DA	299	A
22	DA	301	G
22	DA	302	C
22	DA	303	G
22	DA	304	U
22	DA	305	C
22	DA	311	A
22	DA	312	G
22	DA	313	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	314	C
22	DA	322	A
22	DA	323	C
22	DA	324	A
22	DA	325	G
22	DA	329	G
22	DA	330	A
22	DA	334	C
22	DA	335	C
22	DA	336	C
22	DA	337	C
22	DA	343	C
22	DA	349	U
22	DA	351	C
22	DA	353	C
22	DA	354	A
22	DA	362	A
22	DA	367	G
22	DA	371	A
22	DA	372	G
22	DA	374	A
22	DA	375	G
22	DA	376	G
22	DA	383	C
22	DA	385	C
22	DA	386	G
22	DA	387	U
22	DA	388	G
22	DA	391	A
22	DA	392	U
22	DA	393	C
22	DA	395	U
22	DA	396	G
22	DA	397	U
22	DA	398	C
22	DA	399	U
22	DA	401	A
22	DA	404	A
22	DA	405	U
22	DA	406	G
22	DA	407	G
22	DA	411	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	412	A
22	DA	413	C
22	DA	421	C
22	DA	424	G
22	DA	430	A
22	DA	436	C
22	DA	443	A
22	DA	444	C
22	DA	445	C
22	DA	446	G
22	DA	447	A
22	DA	450	G
22	DA	451	U
22	DA	455	C
22	DA	456	C
22	DA	457	A
22	DA	459	U
22	DA	460	A
22	DA	461	C
22	DA	462	C
22	DA	475	C
22	DA	476	G
22	DA	477	A
22	DA	478	A
22	DA	479	A
22	DA	480	A
22	DA	481	G
22	DA	485	C
22	DA	488	G
22	DA	490	C
22	DA	491	G
22	DA	492	A
22	DA	493	G
22	DA	498	G
22	DA	502	A
22	DA	504	A
22	DA	505	A
22	DA	507	A
22	DA	509	C
22	DA	510	C
22	DA	511	U
22	DA	512	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	528	A
22	DA	529	A
22	DA	530	G
22	DA	531	C
22	DA	532	A
22	DA	533	G
22	DA	534	U
22	DA	535	G
22	DA	544	C
22	DA	545	U
22	DA	546	U
22	DA	547	A
22	DA	548	G
22	DA	549	G
22	DA	554	U
22	DA	562	U
22	DA	563	A
22	DA	567	U
22	DA	571	U
22	DA	572	A
22	DA	573	U
22	DA	574	A
22	DA	575	A
22	DA	576	U
22	DA	586	A
22	DA	588	U
22	DA	589	U
22	DA	590	A
22	DA	603	A
22	DA	604	G
22	DA	605	G
22	DA	606	U
22	DA	608	A
22	DA	610	C
22	DA	613	A
22	DA	614	A
22	DA	615	U
22	DA	616	A
22	DA	617	G
22	DA	618	G
22	DA	619	G
22	DA	621	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	622	G
22	DA	623	C
22	DA	627	A
22	DA	628	G
22	DA	629	G
22	DA	637	A
22	DA	638	G
22	DA	639	U
22	DA	645	C
22	DA	646	U
22	DA	653	U
22	DA	654	A
22	DA	655	A
22	DA	656	G
22	DA	657	U
22	DA	663	G
22	DA	668	A
22	DA	669	G
22	DA	671	C
22	DA	672	C
22	DA	686	U
22	DA	687	C
22	DA	688	U
22	DA	699	A
22	DA	705	A
22	DA	717	C
22	DA	726	G
22	DA	727	A
22	DA	728	G
22	DA	729	G
22	DA	730	A
22	DA	739	A
22	DA	740	C
22	DA	741	U
22	DA	747	U
22	DA	749	A
22	DA	751	A
22	DA	753	A
22	DA	763	G
22	DA	764	A
22	DA	765	C
22	DA	766	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	775	G
22	DA	776	G
22	DA	777	G
22	DA	778	G
22	DA	779	U
22	DA	781	A
22	DA	782	A
22	DA	783	A
22	DA	784	G
22	DA	785	G
22	DA	789	A
22	DA	790	U
22	DA	791	C
22	DA	792	A
22	DA	793	A
22	DA	794	A
22	DA	798	G
22	DA	800	A
22	DA	801	G
22	DA	802	A
22	DA	803	U
22	DA	805	G
22	DA	806	C
22	DA	807	U
22	DA	812	C
22	DA	819	A
22	DA	827	U
22	DA	828	U
22	DA	829	A
22	DA	830	G
22	DA	831	G
22	DA	832	U
22	DA	846	U
22	DA	847	U
22	DA	857	G
22	DA	858	G
22	DA	859	G
22	DA	860	U
22	DA	861	A
22	DA	862	G
22	DA	866	A
22	DA	867	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	868	U
22	DA	869	G
22	DA	875	G
22	DA	877	A
22	DA	878	A
22	DA	902	C
22	DA	903	C
22	DA	910	A
22	DA	912	C
22	DA	914	G
22	DA	915	C
22	DA	916	G
22	DA	917	A
22	DA	918	A
22	DA	922	C
22	DA	932	U
22	DA	933	A
22	DA	934	U
22	DA	935	C
22	DA	941	A
22	DA	944	C
22	DA	946	C
22	DA	947	A
22	DA	958	U
22	DA	959	A
22	DA	960	A
22	DA	961	C
22	DA	962	G
22	DA	963	U
22	DA	973	A
22	DA	974	G
22	DA	975	A
22	DA	976	G
22	DA	977	G
22	DA	982	C
22	DA	983	A
22	DA	984	A
22	DA	985	C
22	DA	989	G
22	DA	990	A
22	DA	991	C
22	DA	992	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	995	C
22	DA	996	A
22	DA	1008	A
22	DA	1009	A
22	DA	1010	A
22	DA	1011	G
22	DA	1012	U
22	DA	1013	C
22	DA	1020	A
22	DA	1021	A
22	DA	1022	G
22	DA	1023	U
22	DA	1024	G
22	DA	1025	G
22	DA	1026	G
22	DA	1027	A
22	DA	1028	A
22	DA	1033	U
22	DA	1034	G
22	DA	1035	U
22	DA	1044	C
22	DA	1045	C
22	DA	1046	A
22	DA	1051	G
22	DA	1052	C
22	DA	1055	G
22	DA	1056	G
22	DA	1057	A
22	DA	1060	U
22	DA	1061	U
22	DA	1063	G
22	DA	1064	C
22	DA	1065	U
22	DA	1066	U
22	DA	1068	G
22	DA	1070	A
22	DA	1071	G
22	DA	1072	C
22	DA	1073	A
22	DA	1074	G
22	DA	1075	C
22	DA	1076	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1077	A
22	DA	1078	U
22	DA	1079	C
22	DA	1080	A
22	DA	1081	U
22	DA	1082	U
22	DA	1083	U
22	DA	1088	A
22	DA	1089	A
22	DA	1091	G
22	DA	1097	U
22	DA	1100	C
22	DA	1103	A
22	DA	1111	A
22	DA	1112	G
22	DA	1113	U
22	DA	1114	C
22	DA	1115	G
22	DA	1116	G
22	DA	1126	A
22	DA	1127	A
22	DA	1128	G
22	DA	1129	A
22	DA	1130	U
22	DA	1131	G
22	DA	1132	U
22	DA	1133	A
22	DA	1134	A
22	DA	1135	C
22	DA	1136	G
22	DA	1139	G
22	DA	1142	A
22	DA	1144	A
22	DA	1156	A
22	DA	1157	G
22	DA	1158	C
22	DA	1163	G
22	DA	1169	A
22	DA	1172	C
22	DA	1174	U
22	DA	1176	U
22	DA	1193	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1204	A
22	DA	1205	A
22	DA	1206	G
22	DA	1207	C
22	DA	1208	C
22	DA	1209	U
22	DA	1211	C
22	DA	1213	A
22	DA	1214	A
22	DA	1227	G
22	DA	1231	U
22	DA	1235	G
22	DA	1236	G
22	DA	1237	A
22	DA	1238	G
22	DA	1241	A
22	DA	1242	U
22	DA	1246	A
22	DA	1247	A
22	DA	1248	G
22	DA	1249	U
22	DA	1250	G
22	DA	1253	A
22	DA	1255	U
22	DA	1256	G
22	DA	1257	C
22	DA	1258	U
22	DA	1262	A
22	DA	1265	A
22	DA	1266	G
22	DA	1267	U
22	DA	1268	A
22	DA	1271	G
22	DA	1272	A
22	DA	1273	U
22	DA	1274	A
22	DA	1275	A
22	DA	1276	A
22	DA	1277	G
22	DA	1286	A
22	DA	1287	A
22	DA	1288	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1290	C
22	DA	1291	C
22	DA	1292	G
22	DA	1300	G
22	DA	1301	A
22	DA	1304	A
22	DA	1305	C
22	DA	1306	C
22	DA	1311	G
22	DA	1313	U
22	DA	1317	G
22	DA	1318	U
22	DA	1321	A
22	DA	1324	G
22	DA	1325	U
22	DA	1326	U
22	DA	1327	A
22	DA	1328	A
22	DA	1329	U
22	DA	1330	C
22	DA	1331	G
22	DA	1332	G
22	DA	1333	G
22	DA	1334	G
22	DA	1336	A
22	DA	1337	G
22	DA	1340	U
22	DA	1341	G
22	DA	1342	A
22	DA	1343	G
22	DA	1345	C
22	DA	1346	G
22	DA	1347	A
22	DA	1349	C
22	DA	1352	U
22	DA	1359	A
22	DA	1365	A
22	DA	1368	G
22	DA	1374	G
22	DA	1379	U
22	DA	1380	G
22	DA	1382	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1383	A
22	DA	1385	A
22	DA	1386	C
22	DA	1387	A
22	DA	1388	G
22	DA	1389	G
22	DA	1390	U
22	DA	1391	U
22	DA	1397	U
22	DA	1398	C
22	DA	1399	C
22	DA	1400	U
22	DA	1401	G
22	DA	1402	U
22	DA	1403	A
22	DA	1404	C
22	DA	1416	G
22	DA	1417	C
22	DA	1418	G
22	DA	1419	A
22	DA	1421	G
22	DA	1427	A
22	DA	1428	C
22	DA	1430	G
22	DA	1431	A
22	DA	1435	G
22	DA	1438	U
22	DA	1444	G
22	DA	1452	G
22	DA	1453	A
22	DA	1455	G
22	DA	1456	G
22	DA	1457	U
22	DA	1459	G
22	DA	1460	U
22	DA	1461	C
22	DA	1462	C
22	DA	1476	U
22	DA	1477	A
22	DA	1478	G
22	DA	1482	G
22	DA	1483	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1484	U
22	DA	1490	A
22	DA	1491	G
22	DA	1492	G
22	DA	1493	C
22	DA	1494	A
22	DA	1497	U
22	DA	1498	C
22	DA	1499	C
22	DA	1503	A
22	DA	1504	A
22	DA	1507	C
22	DA	1508	A
22	DA	1509	A
22	DA	1510	G
22	DA	1511	G
22	DA	1512	C
22	DA	1513	U
22	DA	1520	U
22	DA	1522	A
22	DA	1524	G
22	DA	1526	C
22	DA	1530	G
22	DA	1531	C
22	DA	1532	A
22	DA	1534	U
22	DA	1535	A
22	DA	1536	C
22	DA	1537	G
22	DA	1538	G
22	DA	1539	U
22	DA	1540	G
22	DA	1541	C
22	DA	1542	U
22	DA	1554	U
22	DA	1555	G
22	DA	1556	C
22	DA	1558	C
22	DA	1559	U
22	DA	1560	G
22	DA	1561	C
22	DA	1564	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1565	C
22	DA	1567	G
22	DA	1568	G
22	DA	1569	A
22	DA	1570	A
22	DA	1583	A
22	DA	1584	U
22	DA	1585	C
22	DA	1586	A
22	DA	1587	G
22	DA	1600	C
22	DA	1603	A
22	DA	1604	C
22	DA	1607	C
22	DA	1608	A
22	DA	1610	A
22	DA	1611	C
22	DA	1612	C
22	DA	1613	G
22	DA	1615	C
22	DA	1616	A
22	DA	1618	A
22	DA	1627	G
22	DA	1628	G
22	DA	1633	G
22	DA	1635	A
22	DA	1636	U
22	DA	1640	A
22	DA	1641	A
22	DA	1646	C
22	DA	1647	U
22	DA	1648	U
22	DA	1649	G
22	DA	1653	G
22	DA	1654	A
22	DA	1655	A
22	DA	1656	C
22	DA	1663	G
22	DA	1664	A
22	DA	1665	A
22	DA	1667	G
22	DA	1668	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1669	A
22	DA	1670	C
22	DA	1671	U
22	DA	1673	G
22	DA	1674	G
22	DA	1675	C
22	DA	1676	A
22	DA	1682	G
22	DA	1683	U
22	DA	1694	C
22	DA	1695	G
22	DA	1696	G
22	DA	1698	A
22	DA	1699	G
22	DA	1700	A
22	DA	1701	A
22	DA	1707	G
22	DA	1713	A
22	DA	1714	U
22	DA	1715	G
22	DA	1717	A
22	DA	1718	G
22	DA	1722	A
22	DA	1723	G
22	DA	1728	C
22	DA	1729	U
22	DA	1730	C
22	DA	1731	G
22	DA	1732	C
22	DA	1733	G
22	DA	1734	G
22	DA	1735	A
22	DA	1736	U
22	DA	1739	A
22	DA	1740	G
22	DA	1744	A
22	DA	1750	G
22	DA	1758	U
22	DA	1759	A
22	DA	1760	C
22	DA	1764	C
22	DA	1772	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1773	A
22	DA	1776	G
22	DA	1780	A
22	DA	1781	U
22	DA	1782	U
22	DA	1783	A
22	DA	1785	A
22	DA	1786	A
22	DA	1787	A
22	DA	1788	C
22	DA	1794	A
22	DA	1800	C
22	DA	1802	A
22	DA	1803	A
22	DA	1804	C
22	DA	1808	A
22	DA	1809	A
22	DA	1810	A
22	DA	1811	G
22	DA	1815	A
22	DA	1816	C
22	DA	1817	G
22	DA	1818	U
22	DA	1820	U
22	DA	1821	A
22	DA	1822	C
22	DA	1824	G
22	DA	1827	U
22	DA	1829	A
22	DA	1832	C
22	DA	1838	C
22	DA	1839	G
22	DA	1840	G
22	DA	1847	A
22	DA	1848	A
22	DA	1857	G
22	DA	1858	A
22	DA	1859	U
22	DA	1870	C
22	DA	1875	G
22	DA	1877	A
22	DA	1884	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1889	A
22	DA	1901	A
22	DA	1902	C
22	DA	1903	G
22	DA	1906	G
22	DA	1913	A
22	DA	1914	C
22	DA	1915	U
22	DA	1919	A
22	DA	1920	C
22	DA	1927	A
22	DA	1930	G
22	DA	1931	U
22	DA	1932	A
22	DA	1937	A
22	DA	1938	A
22	DA	1939	U
22	DA	1941	C
22	DA	1942	C
22	DA	1943	U
22	DA	1944	U
22	DA	1945	G
22	DA	1946	U
22	DA	1955	U
22	DA	1956	U
22	DA	1963	U
22	DA	1964	G
22	DA	1966	A
22	DA	1967	C
22	DA	1968	G
22	DA	1970	A
22	DA	1971	U
22	DA	1972	G
22	DA	1973	G
22	DA	1975	G
22	DA	1981	A
22	DA	1982	U
22	DA	1989	G
22	DA	1991	U
22	DA	1993	U
22	DA	1994	C
22	DA	1996	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1997	C
22	DA	1998	A
22	DA	2002	G
22	DA	2020	A
22	DA	2021	C
22	DA	2022	U
22	DA	2023	C
22	DA	2024	G
22	DA	2030	A
22	DA	2031	A
22	DA	2032	G
22	DA	2033	A
22	DA	2035	G
22	DA	2036	C
22	DA	2037	A
22	DA	2043	C
22	DA	2049	G
22	DA	2052	A
22	DA	2055	C
22	DA	2056	G
22	DA	2060	A
22	DA	2061	G
22	DA	2062	A
22	DA	2063	C
22	DA	2064	C
22	DA	2068	U
22	DA	2069	G
22	DA	2079	U
22	DA	2080	A
22	DA	2083	G
22	DA	2092	U
22	DA	2093	G
22	DA	2094	A
22	DA	2095	A
22	DA	2096	C
22	DA	2104	C
22	DA	2108	A
22	DA	2109	U
22	DA	2110	G
22	DA	2134	A
22	DA	2135	A
22	DA	2136	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2137	U
22	DA	2138	G
22	DA	2139	U
22	DA	2143	C
22	DA	2144	G
22	DA	2145	C
22	DA	2147	A
22	DA	2150	C
22	DA	2151	U
22	DA	2152	G
22	DA	2153	C
22	DA	2154	A
22	DA	2156	G
22	DA	2157	G
22	DA	2180	U
22	DA	2181	U
22	DA	2183	A
22	DA	2191	A
22	DA	2192	U
22	DA	2194	U
22	DA	2199	A
22	DA	2203	U
22	DA	2204	G
22	DA	2210	U
22	DA	2211	A
22	DA	2212	A
22	DA	2213	U
22	DA	2214	C
22	DA	2215	C
22	DA	2216	G
22	DA	2217	G
22	DA	2218	G
22	DA	2225	A
22	DA	2226	C
22	DA	2227	A
22	DA	2231	U
22	DA	2238	G
22	DA	2239	G
22	DA	2243	U
22	DA	2249	U
22	DA	2250	G
22	DA	2259	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2260	C
22	DA	2266	A
22	DA	2267	A
22	DA	2268	A
22	DA	2273	A
22	DA	2275	C
22	DA	2276	G
22	DA	2277	G
22	DA	2279	G
22	DA	2283	C
22	DA	2284	A
22	DA	2286	G
22	DA	2289	G
22	DA	2297	A
22	DA	2298	A
22	DA	2299	U
22	DA	2300	C
22	DA	2301	C
22	DA	2305	U
22	DA	2306	C
22	DA	2307	G
22	DA	2308	G
22	DA	2309	A
22	DA	2310	C
22	DA	2311	A
22	DA	2312	U
22	DA	2313	C
22	DA	2314	A
22	DA	2315	G
22	DA	2320	U
22	DA	2321	U
22	DA	2324	U
22	DA	2325	G
22	DA	2326	C
22	DA	2334	U
22	DA	2335	A
22	DA	2336	A
22	DA	2337	G
22	DA	2338	C
22	DA	2339	C
22	DA	2340	A
22	DA	2345	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2347	C
22	DA	2348	U
22	DA	2349	G
22	DA	2350	C
22	DA	2358	A
22	DA	2361	G
22	DA	2379	G
22	DA	2382	G
22	DA	2383	G
22	DA	2384	U
22	DA	2385	C
22	DA	2386	A
22	DA	2387	U
22	DA	2388	A
22	DA	2390	U
22	DA	2392	A
22	DA	2402	U
22	DA	2405	G
22	DA	2406	A
22	DA	2407	A
22	DA	2409	G
22	DA	2410	G
22	DA	2424	C
22	DA	2425	A
22	DA	2426	A
22	DA	2427	C
22	DA	2428	G
22	DA	2429	G
22	DA	2430	A
22	DA	2431	U
22	DA	2435	A
22	DA	2439	A
22	DA	2440	C
22	DA	2441	U
22	DA	2447	G
22	DA	2448	A
22	DA	2452	C
22	DA	2459	A
22	DA	2460	U
22	DA	2469	A
22	DA	2475	C
22	DA	2476	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2484	G
22	DA	2490	G
22	DA	2491	U
22	DA	2492	U
22	DA	2493	U
22	DA	2494	G
22	DA	2497	A
22	DA	2498	C
22	DA	2499	C
22	DA	2502	G
22	DA	2503	A
22	DA	2504	U
22	DA	2505	G
22	DA	2518	A
22	DA	2520	C
22	DA	2521	C
22	DA	2529	G
22	DA	2534	A
22	DA	2542	A
22	DA	2543	G
22	DA	2544	G
22	DA	2547	A
22	DA	2554	U
22	DA	2567	G
22	DA	2569	G
22	DA	2573	C
22	DA	2574	G
22	DA	2577	A
22	DA	2578	G
22	DA	2579	C
22	DA	2581	G
22	DA	2582	G
22	DA	2583	G
22	DA	2585	U
22	DA	2586	U
22	DA	2589	A
22	DA	2602	A
22	DA	2603	G
22	DA	2610	C
22	DA	2611	C
22	DA	2612	C
22	DA	2613	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2614	A
22	DA	2615	U
22	DA	2616	C
22	DA	2617	U
22	DA	2629	U
22	DA	2630	G
22	DA	2632	A
22	DA	2639	A
22	DA	2640	G
22	DA	2646	C
22	DA	2654	A
22	DA	2655	G
22	DA	2656	U
22	DA	2657	A
22	DA	2658	C
22	DA	2664	G
22	DA	2667	C
22	DA	2668	G
22	DA	2669	G
22	DA	2670	A
22	DA	2682	A
22	DA	2683	C
22	DA	2690	U
22	DA	2691	C
22	DA	2692	G
22	DA	2713	U
22	DA	2714	G
22	DA	2715	C
22	DA	2718	G
22	DA	2725	A
22	DA	2726	A
22	DA	2727	A
22	DA	2728	U
22	DA	2731	G
22	DA	2732	G
22	DA	2736	A
22	DA	2748	A
22	DA	2750	A
22	DA	2751	G
22	DA	2753	A
22	DA	2754	U
22	DA	2756	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2757	A
22	DA	2758	A
22	DA	2765	A
22	DA	2766	A
22	DA	2777	G
22	DA	2778	A
22	DA	2779	U
22	DA	2791	G
22	DA	2796	U
22	DA	2799	A
22	DA	2800	A
22	DA	2801	G
22	DA	2803	G
22	DA	2808	G
22	DA	2820	A
22	DA	2822	G
22	DA	2826	A
22	DA	2833	U
22	DA	2834	G
22	DA	2835	A
22	DA	2836	U
22	DA	2837	A
22	DA	2838	G
22	DA	2848	G
22	DA	2850	A
22	DA	2851	A
22	DA	2861	U
22	DA	2866	U
22	DA	2867	G
22	DA	2868	A
22	DA	2869	G
22	DA	2872	A
22	DA	2873	A
22	DA	2874	C
22	DA	2875	C
22	DA	2876	G
22	DA	2877	G
22	DA	2878	U
22	DA	2879	A
22	DA	2880	C
22	DA	2881	U
22	DA	2883	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2894	G
22	DA	2895	G
22	DA	2896	C
22	DA	2903	U
23	DB	12	C
23	DB	13	G
23	DB	14	U
23	DB	15	A
23	DB	16	G
23	DB	17	C
23	DB	18	G
23	DB	23	G
23	DB	24	G
23	DB	25	U
23	DB	30	C
23	DB	31	C
23	DB	35	C
23	DB	36	C
23	DB	40	U
23	DB	41	G
23	DB	42	C
23	DB	43	C
23	DB	44	G
23	DB	45	A
23	DB	46	A
23	DB	47	C
23	DB	48	U
23	DB	57	A
23	DB	58	A
23	DB	59	A
23	DB	63	C
23	DB	64	G
23	DB	65	U
23	DB	66	A
23	DB	67	G
23	DB	68	C
23	DB	69	G
23	DB	70	C
23	DB	87	U
23	DB	88	C
23	DB	89	U
23	DB	90	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
23	DB	91	C
23	DB	99	A
23	DB	109	A
23	DB	110	C
23	DB	111	U
23	DB	112	G

All (1438) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	7	A
1	AA	13	U
1	AA	14	U
1	AA	30	U
1	AA	32	A
1	AA	47	C
1	AA	52	C
1	AA	60	A
1	AA	61	G
1	AA	64	G
1	AA	66	A
1	AA	71	A
1	AA	72	A
1	AA	74	A
1	AA	87	C
1	AA	91	U
1	AA	93	U
1	AA	94	G
1	AA	95	C
1	AA	97	G
1	AA	109	A
1	AA	110	C
1	AA	115	G
1	AA	119	A
1	AA	121	U
1	AA	122	G
1	AA	129	A
1	AA	131	A
1	AA	141	G
1	AA	173	U
1	AA	174	A
1	AA	180	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	185	U
1	AA	197	A
1	AA	198	G
1	AA	199	A
1	AA	243	A
1	AA	246	A
1	AA	247	G
1	AA	250	A
1	AA	251	G
1	AA	252	U
1	AA	257	G
1	AA	266	G
1	AA	267	C
1	AA	274	A
1	AA	275	G
1	AA	279	A
1	AA	305	G
1	AA	306	A
1	AA	327	A
1	AA	330	C
1	AA	331	G
1	AA	344	A
1	AA	345	C
1	AA	346	G
1	AA	351	G
1	AA	352	C
1	AA	366	A
1	AA	368	U
1	AA	372	C
1	AA	373	A
1	AA	388	G
1	AA	389	A
1	AA	411	A
1	AA	414	A
1	AA	421	U
1	AA	424	G
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	438	U
1	AA	439	U
1	AA	451	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	452	A
1	AA	462	G
1	AA	463	U
1	AA	466	A
1	AA	468	A
1	AA	469	C
1	AA	484	G
1	AA	486	U
1	AA	487	A
1	AA	488	C
1	AA	495	A
1	AA	496	A
1	AA	497	G
1	AA	499	A
1	AA	500	G
1	AA	501	C
1	AA	508	U
1	AA	509	A
1	AA	511	C
1	AA	512	U
1	AA	517	G
1	AA	519	C
1	AA	531	U
1	AA	534	U
1	AA	535	A
1	AA	536	C
1	AA	537	G
1	AA	547	A
1	AA	548	G
1	AA	559	A
1	AA	563	A
1	AA	566	G
1	AA	575	G
1	AA	577	G
1	AA	595	A
1	AA	596	A
1	AA	642	A
1	AA	652	U
1	AA	654	G
1	AA	686	U
1	AA	688	G
1	AA	701	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	704	A
1	AA	717	U
1	AA	718	A
1	AA	721	G
1	AA	722	G
1	AA	752	G
1	AA	754	C
1	AA	755	G
1	AA	792	A
1	AA	794	A
1	AA	812	G
1	AA	813	U
1	AA	815	A
1	AA	816	A
1	AA	817	C
1	AA	870	U
1	AA	874	G
1	AA	884	U
1	AA	889	A
1	AA	913	A
1	AA	914	A
1	AA	934	C
1	AA	935	A
1	AA	960	U
1	AA	961	U
1	AA	965	U
1	AA	968	A
1	AA	969	A
1	AA	972	C
1	AA	974	A
1	AA	976	G
1	AA	977	A
1	AA	978	A
1	AA	982	U
1	AA	984	C
1	AA	991	U
1	AA	994	A
1	AA	1031	C
1	AA	1049	U
1	AA	1050	G
1	AA	1053	G
1	AA	1064	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1066	C
1	AA	1068	G
1	AA	1085	U
1	AA	1087	G
1	AA	1088	G
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1102	A
1	AA	1126	U
1	AA	1127	G
1	AA	1130	A
1	AA	1131	G
1	AA	1136	C
1	AA	1142	G
1	AA	1152	A
1	AA	1153	G
1	AA	1157	A
1	AA	1162	C
1	AA	1168	U
1	AA	1169	A
1	AA	1181	G
1	AA	1184	G
1	AA	1190	G
1	AA	1191	A
1	AA	1196	A
1	AA	1197	A
1	AA	1200	C
1	AA	1201	A
1	AA	1202	U
1	AA	1203	C
1	AA	1215	G
1	AA	1224	U
1	AA	1228	C
1	AA	1239	A
1	AA	1241	G
1	AA	1258	G
1	AA	1259	C
1	AA	1278	G
1	AA	1282	C
1	AA	1283	U
1	AA	1284	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AA	1298	U
1	AA	1303	C
1	AA	1304	G
1	AA	1319	A
1	AA	1320	C
1	AA	1322	C
1	AA	1323	G
1	AA	1331	G
1	AA	1332	A
1	AA	1336	C
1	AA	1337	G
1	AA	1345	U
1	AA	1348	U
1	AA	1349	A
1	AA	1365	G
1	AA	1380	U
1	AA	1381	U
1	AA	1382	C
1	AA	1394	A
1	AA	1395	C
1	AA	1396	A
1	AA	1398	A
1	AA	1399	C
1	AA	1432	G
1	AA	1447	A
1	AA	1448	C
1	AA	1451	U
1	AA	1453	G
1	AA	1454	G
1	AA	1498	U
1	AA	1502	A
1	AA	1505	G
1	AA	1506	U
1	AA	1507	A
1	AA	1528	U
1	AA	1531	A
22	BA	13	A
22	BA	14	A
22	BA	27	G
22	BA	33	C
22	BA	34	U
22	BA	35	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	36	G
22	BA	49	A
22	BA	52	A
22	BA	60	G
22	BA	62	U
22	BA	63	A
22	BA	70	G
22	BA	73	A
22	BA	74	A
22	BA	75	G
22	BA	84	A
22	BA	85	G
22	BA	91	A
22	BA	92	U
22	BA	100	U
22	BA	119	A
22	BA	125	A
22	BA	126	A
22	BA	137	U
22	BA	143	C
22	BA	144	A
22	BA	162	U
22	BA	164	C
22	BA	165	A
22	BA	177	G
22	BA	196	A
22	BA	199	A
22	BA	204	A
22	BA	206	U
22	BA	215	G
22	BA	221	A
22	BA	223	A
22	BA	227	A
22	BA	229	C
22	BA	232	G
22	BA	238	C
22	BA	239	C
22	BA	241	A
22	BA	243	U
22	BA	249	C
22	BA	265	A
22	BA	266	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	271	G
22	BA	273	G
22	BA	301	G
22	BA	302	C
22	BA	310	A
22	BA	312	G
22	BA	321	U
22	BA	324	A
22	BA	345	A
22	BA	346	A
22	BA	369	U
22	BA	373	U
22	BA	386	G
22	BA	388	G
22	BA	390	U
22	BA	403	U
22	BA	404	A
22	BA	411	G
22	BA	412	A
22	BA	413	C
22	BA	421	C
22	BA	422	A
22	BA	434	U
22	BA	435	C
22	BA	442	G
22	BA	443	A
22	BA	446	G
22	BA	454	A
22	BA	459	U
22	BA	474	G
22	BA	475	C
22	BA	479	A
22	BA	480	A
22	BA	481	G
22	BA	482	A
22	BA	489	G
22	BA	491	G
22	BA	503	A
22	BA	506	G
22	BA	507	A
22	BA	509	C
22	BA	512	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	513	A
22	BA	527	C
22	BA	529	A
22	BA	531	C
22	BA	555	G
22	BA	571	U
22	BA	572	A
22	BA	573	U
22	BA	587	C
22	BA	603	A
22	BA	604	G
22	BA	613	A
22	BA	620	G
22	BA	627	A
22	BA	637	A
22	BA	645	C
22	BA	654	A
22	BA	655	A
22	BA	669	G
22	BA	683	U
22	BA	685	A
22	BA	704	G
22	BA	726	G
22	BA	727	A
22	BA	729	G
22	BA	746	U
22	BA	747	U
22	BA	753	A
22	BA	762	U
22	BA	763	G
22	BA	764	A
22	BA	765	C
22	BA	774	G
22	BA	788	A
22	BA	790	U
22	BA	800	A
22	BA	802	A
22	BA	805	G
22	BA	829	A
22	BA	846	U
22	BA	847	U
22	BA	858	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	860	U
22	BA	865	C
22	BA	866	A
22	BA	914	G
22	BA	915	C
22	BA	931	U
22	BA	933	A
22	BA	934	U
22	BA	945	A
22	BA	946	C
22	BA	957	C
22	BA	958	U
22	BA	961	C
22	BA	973	A
22	BA	984	A
22	BA	988	A
22	BA	990	A
22	BA	995	C
22	BA	996	A
22	BA	1008	A
22	BA	1009	A
22	BA	1011	G
22	BA	1013	C
22	BA	1020	A
22	BA	1021	A
22	BA	1022	G
22	BA	1023	U
22	BA	1025	G
22	BA	1026	G
22	BA	1033	U
22	BA	1045	C
22	BA	1046	A
22	BA	1048	A
22	BA	1060	U
22	BA	1062	G
22	BA	1063	G
22	BA	1074	G
22	BA	1112	G
22	BA	1116	G
22	BA	1128	G
22	BA	1135	C
22	BA	1141	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1150	C
22	BA	1151	A
22	BA	1157	G
22	BA	1204	A
22	BA	1206	G
22	BA	1210	G
22	BA	1213	A
22	BA	1236	G
22	BA	1247	A
22	BA	1249	U
22	BA	1250	G
22	BA	1254	A
22	BA	1255	U
22	BA	1267	U
22	BA	1275	A
22	BA	1276	A
22	BA	1286	A
22	BA	1287	A
22	BA	1288	G
22	BA	1289	C
22	BA	1300	G
22	BA	1303	G
22	BA	1311	G
22	BA	1320	C
22	BA	1321	A
22	BA	1324	G
22	BA	1327	A
22	BA	1329	U
22	BA	1330	C
22	BA	1340	U
22	BA	1343	G
22	BA	1359	A
22	BA	1360	G
22	BA	1378	A
22	BA	1379	U
22	BA	1386	C
22	BA	1396	U
22	BA	1398	C
22	BA	1403	A
22	BA	1407	G
22	BA	1416	G
22	BA	1417	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1419	A
22	BA	1421	G
22	BA	1427	A
22	BA	1429	G
22	BA	1434	A
22	BA	1435	G
22	BA	1451	C
22	BA	1455	G
22	BA	1458	U
22	BA	1459	G
22	BA	1461	C
22	BA	1475	G
22	BA	1476	U
22	BA	1490	A
22	BA	1491	G
22	BA	1493	C
22	BA	1494	A
22	BA	1497	U
22	BA	1498	C
22	BA	1508	A
22	BA	1510	G
22	BA	1522	A
22	BA	1535	A
22	BA	1537	G
22	BA	1554	U
22	BA	1555	G
22	BA	1558	C
22	BA	1565	C
22	BA	1602	U
22	BA	1603	A
22	BA	1606	C
22	BA	1615	C
22	BA	1626	A
22	BA	1627	G
22	BA	1634	A
22	BA	1644	C
22	BA	1647	U
22	BA	1653	G
22	BA	1654	A
22	BA	1674	G
22	BA	1675	C
22	BA	1693	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1695	G
22	BA	1698	A
22	BA	1700	A
22	BA	1706	C
22	BA	1707	G
22	BA	1713	A
22	BA	1714	U
22	BA	1716	U
22	BA	1717	A
22	BA	1732	C
22	BA	1734	G
22	BA	1735	A
22	BA	1738	G
22	BA	1739	A
22	BA	1757	A
22	BA	1759	A
22	BA	1782	U
22	BA	1784	A
22	BA	1786	A
22	BA	1787	A
22	BA	1799	G
22	BA	1808	A
22	BA	1815	A
22	BA	1816	C
22	BA	1818	U
22	BA	1838	C
22	BA	1847	A
22	BA	1848	A
22	BA	1857	G
22	BA	1858	A
22	BA	1865	U
22	BA	1866	A
22	BA	1870	C
22	BA	1871	A
22	BA	1872	A
22	BA	1884	G
22	BA	1885	A
22	BA	1900	A
22	BA	1918	A
22	BA	1919	A
22	BA	1920	C
22	BA	1929	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	1931	U
22	BA	1936	A
22	BA	1941	C
22	BA	1942	C
22	BA	1943	U
22	BA	1945	G
22	BA	1954	G
22	BA	1962	C
22	BA	1963	U
22	BA	1965	C
22	BA	1966	A
22	BA	1967	C
22	BA	1970	A
22	BA	1971	U
22	BA	1980	G
22	BA	1993	U
22	BA	1996	C
22	BA	1997	C
22	BA	2023	C
22	BA	2030	A
22	BA	2035	G
22	BA	2036	C
22	BA	2051	A
22	BA	2060	A
22	BA	2063	C
22	BA	2068	U
22	BA	2092	U
22	BA	2093	G
22	BA	2137	U
22	BA	2146	C
22	BA	2197	U
22	BA	2199	A
22	BA	2200	C
22	BA	2210	U
22	BA	2214	C
22	BA	2225	A
22	BA	2238	G
22	BA	2249	U
22	BA	2250	G
22	BA	2258	C
22	BA	2267	A
22	BA	2275	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2282	G
22	BA	2283	C
22	BA	2286	G
22	BA	2296	U
22	BA	2297	A
22	BA	2307	G
22	BA	2309	A
22	BA	2311	A
22	BA	2319	G
22	BA	2321	U
22	BA	2324	U
22	BA	2325	G
22	BA	2326	C
22	BA	2327	A
22	BA	2333	A
22	BA	2335	A
22	BA	2337	G
22	BA	2344	U
22	BA	2382	G
22	BA	2383	G
22	BA	2391	G
22	BA	2392	A
22	BA	2405	G
22	BA	2407	A
22	BA	2423	U
22	BA	2425	A
22	BA	2427	C
22	BA	2430	A
22	BA	2431	U
22	BA	2439	A
22	BA	2440	C
22	BA	2450	A
22	BA	2458	G
22	BA	2459	A
22	BA	2468	A
22	BA	2490	G
22	BA	2503	A
22	BA	2517	C
22	BA	2520	C
22	BA	2541	A
22	BA	2543	G
22	BA	2566	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2572	A
22	BA	2573	C
22	BA	2581	G
22	BA	2602	A
22	BA	2603	G
22	BA	2609	U
22	BA	2611	C
22	BA	2615	U
22	BA	2629	U
22	BA	2638	G
22	BA	2645	G
22	BA	2654	A
22	BA	2656	U
22	BA	2662	A
22	BA	2672	U
22	BA	2673	G
22	BA	2681	C
22	BA	2689	U
22	BA	2712	C
22	BA	2725	A
22	BA	2727	A
22	BA	2728	U
22	BA	2729	G
22	BA	2732	G
22	BA	2750	A
22	BA	2752	C
22	BA	2756	U
22	BA	2757	A
22	BA	2777	G
22	BA	2778	A
22	BA	2781	A
22	BA	2790	U
22	BA	2791	G
22	BA	2797	U
22	BA	2800	A
22	BA	2808	G
22	BA	2820	A
22	BA	2832	U
22	BA	2835	A
22	BA	2848	G
22	BA	2866	U
22	BA	2873	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	BA	2879	A
22	BA	2893	A
22	BA	2894	G
23	BB	12	C
23	BB	14	U
23	BB	16	G
23	BB	24	G
23	BB	25	U
23	BB	40	U
23	BB	42	C
23	BB	44	G
23	BB	45	A
23	BB	52	A
23	BB	56	G
23	BB	57	A
23	BB	66	A
23	BB	87	U
23	BB	90	C
23	BB	108	A
23	BB	109	A
1	CA	6	G
1	CA	9	G
1	CA	13	U
1	CA	14	U
1	CA	15	G
1	CA	30	U
1	CA	32	A
1	CA	47	C
1	CA	52	C
1	CA	60	A
1	CA	61	G
1	CA	66	A
1	CA	68	G
1	CA	70	U
1	CA	71	A
1	CA	74	A
1	CA	83	C
1	CA	86	G
1	CA	92	U
1	CA	93	U
1	CA	94	G
1	CA	95	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	109	A
1	CA	110	C
1	CA	115	G
1	CA	119	A
1	CA	130	A
1	CA	131	A
1	CA	132	C
1	CA	173	U
1	CA	174	A
1	CA	181	A
1	CA	184	G
1	CA	197	A
1	CA	199	A
1	CA	200	G
1	CA	209	U
1	CA	213	G
1	CA	214	C
1	CA	240	G
1	CA	243	A
1	CA	245	U
1	CA	247	G
1	CA	248	C
1	CA	251	G
1	CA	252	U
1	CA	274	A
1	CA	277	C
1	CA	279	A
1	CA	282	A
1	CA	305	G
1	CA	306	A
1	CA	315	A
1	CA	316	C
1	CA	327	A
1	CA	328	C
1	CA	330	C
1	CA	331	G
1	CA	344	A
1	CA	347	G
1	CA	348	G
1	CA	351	G
1	CA	352	C
1	CA	366	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	368	U
1	CA	369	G
1	CA	372	C
1	CA	373	A
1	CA	374	A
1	CA	382	A
1	CA	388	G
1	CA	389	A
1	CA	411	A
1	CA	414	A
1	CA	421	U
1	CA	423	G
1	CA	424	G
1	CA	428	G
1	CA	429	U
1	CA	430	A
1	CA	439	U
1	CA	451	A
1	CA	452	A
1	CA	453	G
1	CA	481	G
1	CA	482	A
1	CA	484	G
1	CA	486	U
1	CA	495	A
1	CA	496	A
1	CA	497	G
1	CA	499	A
1	CA	500	G
1	CA	508	U
1	CA	511	C
1	CA	512	U
1	CA	517	G
1	CA	519	C
1	CA	520	A
1	CA	531	U
1	CA	532	A
1	CA	534	U
1	CA	535	A
1	CA	536	C
1	CA	547	A
1	CA	548	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	559	A
1	CA	563	A
1	CA	564	C
1	CA	566	G
1	CA	567	G
1	CA	575	G
1	CA	577	G
1	CA	595	A
1	CA	596	A
1	CA	641	U
1	CA	642	A
1	CA	643	C
1	CA	652	U
1	CA	654	G
1	CA	686	U
1	CA	688	G
1	CA	701	U
1	CA	704	A
1	CA	718	A
1	CA	721	G
1	CA	722	G
1	CA	733	G
1	CA	734	G
1	CA	753	A
1	CA	755	G
1	CA	792	A
1	CA	794	A
1	CA	815	A
1	CA	816	A
1	CA	817	C
1	CA	821	G
1	CA	870	U
1	CA	874	G
1	CA	884	U
1	CA	885	G
1	CA	889	A
1	CA	891	U
1	CA	913	A
1	CA	914	A
1	CA	934	C
1	CA	937	A
1	CA	941	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	960	U
1	CA	962	C
1	CA	963	G
1	CA	969	A
1	CA	974	A
1	CA	978	A
1	CA	980	C
1	CA	982	U
1	CA	986	U
1	CA	992	U
1	CA	996	A
1	CA	997	U
1	CA	1049	U
1	CA	1051	C
1	CA	1052	U
1	CA	1064	G
1	CA	1066	C
1	CA	1067	A
1	CA	1068	G
1	CA	1085	U
1	CA	1086	U
1	CA	1087	G
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1102	A
1	CA	1124	G
1	CA	1127	G
1	CA	1128	C
1	CA	1138	G
1	CA	1139	G
1	CA	1141	C
1	CA	1143	G
1	CA	1145	A
1	CA	1146	A
1	CA	1148	U
1	CA	1151	A
1	CA	1152	A
1	CA	1157	A
1	CA	1158	C
1	CA	1160	G
1	CA	1161	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1167	A
1	CA	1169	A
1	CA	1181	G
1	CA	1184	G
1	CA	1190	G
1	CA	1191	A
1	CA	1200	C
1	CA	1201	A
1	CA	1202	U
1	CA	1218	C
1	CA	1224	U
1	CA	1227	A
1	CA	1230	C
1	CA	1245	C
1	CA	1256	A
1	CA	1257	A
1	CA	1278	G
1	CA	1282	C
1	CA	1283	U
1	CA	1284	C
1	CA	1285	A
1	CA	1288	A
1	CA	1289	A
1	CA	1298	U
1	CA	1302	C
1	CA	1331	G
1	CA	1332	A
1	CA	1345	U
1	CA	1348	U
1	CA	1349	A
1	CA	1367	C
1	CA	1380	U
1	CA	1381	U
1	CA	1383	C
1	CA	1394	A
1	CA	1395	C
1	CA	1396	A
1	CA	1398	A
1	CA	1399	C
1	CA	1447	A
1	CA	1449	C
1	CA	1450	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	CA	1452	C
1	CA	1453	G
1	CA	1455	G
1	CA	1498	U
1	CA	1499	A
1	CA	1502	A
1	CA	1505	G
1	CA	1507	A
1	CA	1528	U
1	CA	1531	A
22	DA	13	A
22	DA	14	A
22	DA	15	G
22	DA	33	C
22	DA	35	G
22	DA	49	A
22	DA	52	A
22	DA	70	G
22	DA	73	A
22	DA	78	U
22	DA	84	A
22	DA	86	G
22	DA	87	U
22	DA	91	A
22	DA	92	U
22	DA	93	G
22	DA	101	A
22	DA	103	A
22	DA	104	A
22	DA	105	C
22	DA	119	A
22	DA	121	G
22	DA	122	G
22	DA	125	A
22	DA	128	C
22	DA	129	C
22	DA	141	G
22	DA	144	A
22	DA	162	U
22	DA	163	C
22	DA	164	C
22	DA	196	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	197	A
22	DA	200	U
22	DA	204	A
22	DA	206	U
22	DA	207	A
22	DA	215	G
22	DA	217	A
22	DA	218	A
22	DA	221	A
22	DA	222	A
22	DA	223	A
22	DA	227	A
22	DA	229	C
22	DA	230	G
22	DA	231	A
22	DA	232	G
22	DA	234	U
22	DA	235	U
22	DA	241	A
22	DA	243	U
22	DA	244	A
22	DA	249	C
22	DA	250	G
22	DA	271	G
22	DA	273	G
22	DA	274	C
22	DA	301	G
22	DA	304	U
22	DA	312	G
22	DA	321	U
22	DA	324	A
22	DA	329	G
22	DA	335	C
22	DA	336	C
22	DA	370	G
22	DA	374	A
22	DA	375	G
22	DA	386	G
22	DA	388	G
22	DA	390	U
22	DA	391	A
22	DA	392	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	395	U
22	DA	397	U
22	DA	398	C
22	DA	404	A
22	DA	406	G
22	DA	407	G
22	DA	411	G
22	DA	412	A
22	DA	413	C
22	DA	442	G
22	DA	445	C
22	DA	449	A
22	DA	454	A
22	DA	459	U
22	DA	474	G
22	DA	476	G
22	DA	477	A
22	DA	478	A
22	DA	479	A
22	DA	480	A
22	DA	485	C
22	DA	489	G
22	DA	492	A
22	DA	503	A
22	DA	505	A
22	DA	510	C
22	DA	527	C
22	DA	528	A
22	DA	530	G
22	DA	533	G
22	DA	571	U
22	DA	572	A
22	DA	573	U
22	DA	575	A
22	DA	587	C
22	DA	588	U
22	DA	603	A
22	DA	604	G
22	DA	605	G
22	DA	615	U
22	DA	618	G
22	DA	620	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	621	A
22	DA	622	G
22	DA	627	A
22	DA	628	G
22	DA	637	A
22	DA	638	G
22	DA	655	A
22	DA	656	G
22	DA	670	A
22	DA	672	C
22	DA	685	A
22	DA	687	C
22	DA	704	G
22	DA	705	A
22	DA	726	G
22	DA	727	A
22	DA	739	A
22	DA	740	C
22	DA	749	A
22	DA	762	U
22	DA	763	G
22	DA	765	C
22	DA	775	G
22	DA	777	G
22	DA	778	G
22	DA	782	A
22	DA	783	A
22	DA	788	A
22	DA	800	A
22	DA	802	A
22	DA	806	C
22	DA	829	A
22	DA	831	G
22	DA	858	G
22	DA	860	U
22	DA	861	A
22	DA	865	C
22	DA	868	U
22	DA	913	U
22	DA	915	C
22	DA	916	G
22	DA	931	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	933	A
22	DA	934	U
22	DA	945	A
22	DA	946	C
22	DA	947	A
22	DA	957	C
22	DA	958	U
22	DA	959	A
22	DA	961	C
22	DA	962	G
22	DA	973	A
22	DA	976	G
22	DA	982	C
22	DA	983	A
22	DA	989	G
22	DA	990	A
22	DA	991	C
22	DA	1008	A
22	DA	1009	A
22	DA	1011	G
22	DA	1013	C
22	DA	1020	A
22	DA	1021	A
22	DA	1023	U
22	DA	1024	G
22	DA	1025	G
22	DA	1026	G
22	DA	1027	A
22	DA	1033	U
22	DA	1034	G
22	DA	1051	G
22	DA	1060	U
22	DA	1064	C
22	DA	1065	U
22	DA	1069	A
22	DA	1077	A
22	DA	1078	U
22	DA	1081	U
22	DA	1110	G
22	DA	1112	G
22	DA	1126	A
22	DA	1129	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1130	U
22	DA	1135	C
22	DA	1136	G
22	DA	1141	U
22	DA	1144	A
22	DA	1156	A
22	DA	1157	G
22	DA	1204	A
22	DA	1206	G
22	DA	1207	C
22	DA	1208	C
22	DA	1210	G
22	DA	1213	A
22	DA	1236	G
22	DA	1247	A
22	DA	1249	U
22	DA	1252	G
22	DA	1254	A
22	DA	1255	U
22	DA	1256	G
22	DA	1265	A
22	DA	1267	U
22	DA	1272	A
22	DA	1276	A
22	DA	1289	C
22	DA	1291	C
22	DA	1300	G
22	DA	1303	G
22	DA	1305	C
22	DA	1312	U
22	DA	1313	U
22	DA	1325	U
22	DA	1327	A
22	DA	1328	A
22	DA	1329	U
22	DA	1333	G
22	DA	1340	U
22	DA	1346	G
22	DA	1347	A
22	DA	1385	A
22	DA	1386	C
22	DA	1389	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1397	U
22	DA	1398	C
22	DA	1399	C
22	DA	1400	U
22	DA	1401	G
22	DA	1402	U
22	DA	1415	U
22	DA	1417	C
22	DA	1418	G
22	DA	1419	A
22	DA	1427	A
22	DA	1430	G
22	DA	1451	C
22	DA	1455	G
22	DA	1456	G
22	DA	1460	U
22	DA	1475	G
22	DA	1476	U
22	DA	1483	G
22	DA	1489	C
22	DA	1491	G
22	DA	1492	G
22	DA	1497	U
22	DA	1498	C
22	DA	1508	A
22	DA	1510	G
22	DA	1512	C
22	DA	1536	C
22	DA	1540	G
22	DA	1541	C
22	DA	1554	U
22	DA	1555	G
22	DA	1558	C
22	DA	1560	G
22	DA	1565	C
22	DA	1569	A
22	DA	1602	U
22	DA	1603	A
22	DA	1606	C
22	DA	1611	C
22	DA	1612	C
22	DA	1615	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1619	G
22	DA	1626	A
22	DA	1627	G
22	DA	1634	A
22	DA	1635	A
22	DA	1647	U
22	DA	1648	U
22	DA	1653	G
22	DA	1654	A
22	DA	1655	A
22	DA	1664	A
22	DA	1667	G
22	DA	1669	A
22	DA	1674	G
22	DA	1675	C
22	DA	1681	G
22	DA	1682	G
22	DA	1693	U
22	DA	1695	G
22	DA	1698	A
22	DA	1700	A
22	DA	1706	C
22	DA	1713	A
22	DA	1717	A
22	DA	1721	G
22	DA	1722	A
22	DA	1731	G
22	DA	1733	G
22	DA	1735	A
22	DA	1738	G
22	DA	1739	A
22	DA	1758	U
22	DA	1759	A
22	DA	1780	A
22	DA	1782	U
22	DA	1784	A
22	DA	1785	A
22	DA	1786	A
22	DA	1787	A
22	DA	1799	G
22	DA	1803	A
22	DA	1808	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	1809	A
22	DA	1810	A
22	DA	1815	A
22	DA	1817	G
22	DA	1821	A
22	DA	1828	G
22	DA	1838	C
22	DA	1839	G
22	DA	1858	A
22	DA	1900	A
22	DA	1901	A
22	DA	1913	A
22	DA	1915	U
22	DA	1918	A
22	DA	1919	A
22	DA	1929	G
22	DA	1931	U
22	DA	1936	A
22	DA	1941	C
22	DA	1943	U
22	DA	1945	G
22	DA	1954	G
22	DA	1956	U
22	DA	1962	C
22	DA	1963	U
22	DA	1965	C
22	DA	1967	C
22	DA	1972	G
22	DA	1980	G
22	DA	1981	A
22	DA	1982	U
22	DA	1992	G
22	DA	1993	U
22	DA	1996	C
22	DA	1997	C
22	DA	2021	C
22	DA	2023	C
22	DA	2024	G
22	DA	2030	A
22	DA	2036	C
22	DA	2051	A
22	DA	2060	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2062	A
22	DA	2063	C
22	DA	2067	G
22	DA	2068	U
22	DA	2092	U
22	DA	2094	A
22	DA	2095	A
22	DA	2133	G
22	DA	2137	U
22	DA	2143	C
22	DA	2150	C
22	DA	2151	U
22	DA	2179	C
22	DA	2197	U
22	DA	2199	A
22	DA	2210	U
22	DA	2214	C
22	DA	2217	G
22	DA	2225	A
22	DA	2226	C
22	DA	2238	G
22	DA	2239	G
22	DA	2249	U
22	DA	2258	C
22	DA	2259	U
22	DA	2266	A
22	DA	2267	A
22	DA	2275	C
22	DA	2276	G
22	DA	2282	G
22	DA	2283	C
22	DA	2286	G
22	DA	2288	A
22	DA	2289	G
22	DA	2296	U
22	DA	2298	A
22	DA	2299	U
22	DA	2300	C
22	DA	2311	A
22	DA	2314	A
22	DA	2319	G
22	DA	2320	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2324	U
22	DA	2325	G
22	DA	2334	U
22	DA	2337	G
22	DA	2340	A
22	DA	2344	U
22	DA	2347	C
22	DA	2348	U
22	DA	2382	G
22	DA	2383	G
22	DA	2384	U
22	DA	2386	A
22	DA	2387	U
22	DA	2391	G
22	DA	2406	A
22	DA	2407	A
22	DA	2425	A
22	DA	2428	G
22	DA	2439	A
22	DA	2440	C
22	DA	2447	G
22	DA	2450	A
22	DA	2458	G
22	DA	2459	A
22	DA	2468	A
22	DA	2469	A
22	DA	2490	G
22	DA	2492	U
22	DA	2497	A
22	DA	2498	C
22	DA	2502	G
22	DA	2503	A
22	DA	2504	U
22	DA	2520	C
22	DA	2542	A
22	DA	2543	G
22	DA	2566	A
22	DA	2573	C
22	DA	2581	G
22	DA	2582	G
22	DA	2601	C
22	DA	2603	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2611	C
22	DA	2613	U
22	DA	2615	U
22	DA	2616	C
22	DA	2638	G
22	DA	2645	G
22	DA	2646	C
22	DA	2654	A
22	DA	2656	U
22	DA	2657	A
22	DA	2666	C
22	DA	2669	G
22	DA	2681	C
22	DA	2682	A
22	DA	2689	U
22	DA	2691	C
22	DA	2712	C
22	DA	2725	A
22	DA	2727	A
22	DA	2750	A
22	DA	2752	C
22	DA	2753	A
22	DA	2756	U
22	DA	2757	A
22	DA	2758	A
22	DA	2776	A
22	DA	2777	G
22	DA	2778	A
22	DA	2781	A
22	DA	2798	U
22	DA	2800	A
22	DA	2832	U
22	DA	2836	U
22	DA	2837	A
22	DA	2850	A
22	DA	2866	U
22	DA	2868	A
22	DA	2873	A
22	DA	2874	C
22	DA	2875	C
22	DA	2876	G
22	DA	2877	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
22	DA	2879	A
22	DA	2880	C
22	DA	2893	A
22	DA	2895	G
23	DB	12	C
23	DB	13	G
23	DB	16	G
23	DB	18	G
23	DB	45	A
23	DB	46	A
23	DB	56	G
23	DB	58	A
23	DB	66	A
23	DB	68	C
23	DB	69	G
23	DB	87	U
23	DB	90	C
23	DB	108	A
23	DB	110	C
23	DB	111	U

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

Of 364 ligands modelled in this entry, 363 are monoatomic - leaving 1 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
54	ERY	BA	3136	-	53,53,53	0.79	1 (1%)	82,82,82	1.66	19 (23%)

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
54	ERY	BA	3136	-	-	7/72/107/107	0/3/3/3

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	BA	3136	ERY	C6-C5	2.34	1.59	1.55

All (19) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	BA	3136	ERY	C25-C24-C23	-5.00	102.77	109.97
54	BA	3136	ERY	O7-C5-C6	-4.81	100.45	106.39
54	BA	3136	ERY	O2-C1-O1	-3.57	117.27	123.94
54	BA	3136	ERY	C3-C2-C1	-3.44	102.98	110.01
54	BA	3136	ERY	C27-C26-C25	-3.10	108.53	113.40
54	BA	3136	ERY	C32-C6-C7	-2.87	106.24	111.09
54	BA	3136	ERY	O3-C14-C15	-2.68	104.40	109.01
54	BA	3136	ERY	O6-C17-C18	-2.60	104.83	109.39
54	BA	3136	ERY	O3-C3-C4	-2.57	105.13	108.22
54	BA	3136	ERY	O3-C3-C2	-2.45	106.88	111.14
54	BA	3136	ERY	C19-C16-C17	2.41	116.17	111.24
54	BA	3136	ERY	O11-C9-C8	-2.33	116.95	121.26
54	BA	3136	ERY	C32-C6-C5	2.29	114.14	110.12
54	BA	3136	ERY	O2-C13-C12	-2.27	103.58	107.29
54	BA	3136	ERY	C6-C7-C8	-2.19	110.70	115.38
54	BA	3136	ERY	C16-C17-C18	-2.17	107.81	111.14
54	BA	3136	ERY	C8-C9-C10	2.12	122.79	119.10
54	BA	3136	ERY	C15-C16-C17	-2.05	103.99	107.67
54	BA	3136	ERY	C33-C8-C7	2.02	113.53	109.81

There are no chirality outliers.

All (7) torsion outliers are listed below:

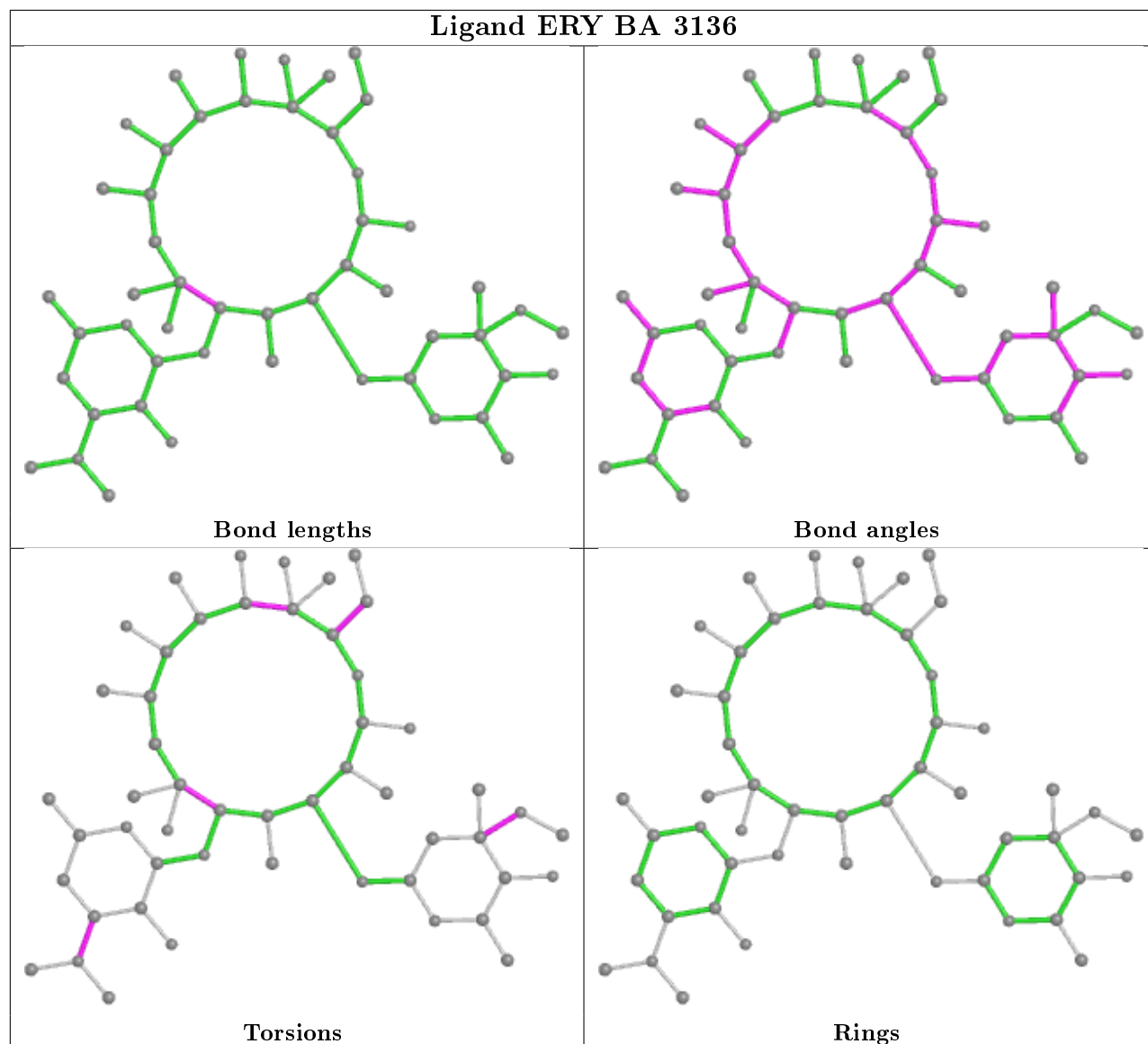
Mol	Chain	Res	Type	Atoms
54	BA	3136	ERY	C15-C16-O5-C20
54	BA	3136	ERY	C19-C16-O5-C20
54	BA	3136	ERY	C10-C11-C12-O13
54	BA	3136	ERY	C25-C24-N1-C28
54	BA	3136	ERY	C4-C5-C6-C32
54	BA	3136	ERY	C17-C16-O5-C20
54	BA	3136	ERY	O2-C13-C36-C37

There are no ring outliers.

1 monomer is involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
54	BA	3136	ERY	4	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

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	1533/1533 (100%)	-0.57	15 (0%) 82 67	21, 74, 188, 404	0
1	CA	1530/1533 (99%)	0.03	42 (2%) 54 31	38, 102, 287, 422	0
2	AB	218/218 (100%)	1.58	71 (32%) 0 0	72, 142, 202, 237	0
2	CB	218/218 (100%)	1.57	68 (31%) 0 0	98, 165, 222, 272	0
3	AC	206/206 (100%)	0.65	24 (11%) 4 2	54, 101, 149, 187	0
3	CC	206/206 (100%)	1.14	47 (22%) 0 0	80, 139, 210, 243	0
4	AD	205/205 (100%)	-0.07	8 (3%) 39 20	38, 80, 182, 310	0
4	CD	205/205 (100%)	-0.27	1 (0%) 91 81	29, 54, 103, 236	0
5	AE	150/150 (100%)	-0.10	3 (2%) 65 44	37, 70, 136, 207	0
5	CE	150/150 (100%)	0.33	2 (1%) 77 59	38, 87, 150, 253	0
6	AF	100/100 (100%)	-0.17	0 100 100	43, 85, 149, 174	0
6	CF	100/100 (100%)	0.03	4 (4%) 38 19	58, 109, 180, 202	0
7	AG	151/151 (100%)	0.24	9 (5%) 21 10	82, 155, 235, 286	0
7	CG	150/151 (99%)	2.32	69 (46%) 0 0	112, 196, 246, 272	0
8	AH	129/129 (100%)	-0.04	3 (2%) 60 39	41, 69, 120, 203	0
8	CH	129/129 (100%)	0.63	11 (8%) 10 4	52, 107, 161, 197	0
9	AI	127/127 (100%)	0.87	17 (13%) 3 1	68, 153, 256, 288	0
9	CI	127/127 (100%)	1.84	48 (37%) 0 0	102, 200, 285, 325	0
10	AJ	98/98 (100%)	0.61	16 (16%) 1 1	60, 119, 200, 251	0
10	CJ	98/98 (100%)	2.80	53 (54%) 0 0	102, 192, 267, 283	0
11	AK	117/117 (100%)	0.64	11 (9%) 8 3	38, 104, 176, 222	0
11	CK	117/117 (100%)	0.27	4 (3%) 45 24	53, 102, 161, 200	0
12	AL	123/123 (100%)	-0.34	2 (1%) 72 51	16, 49, 111, 187	0
12	CL	123/123 (100%)	0.19	2 (1%) 72 51	41, 81, 128, 173	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	AM	114/114 (100%)	0.45	11 (9%) 8 2	69, 139, 213, 258	0
13	CM	114/114 (100%)	2.29	60 (52%) 0 0	190, 427, 522, 545	0
14	AN	96/100 (96%)	0.38	6 (6%) 20 8	68, 111, 199, 266	0
14	CN	95/100 (95%)	2.08	42 (44%) 0 0	112, 209, 319, 350	0
15	AO	88/88 (100%)	-0.41	0 100 100	34, 70, 111, 172	0
15	CO	88/88 (100%)	-0.14	1 (1%) 80 64	68, 112, 187, 286	0
16	AP	82/82 (100%)	0.70	9 (10%) 5 2	45, 68, 174, 288	0
16	CP	81/82 (98%)	0.71	10 (12%) 4 1	46, 97, 157, 229	0
17	AQ	80/80 (100%)	0.40	6 (7%) 14 5	35, 71, 134, 209	0
17	CQ	80/80 (100%)	0.81	12 (15%) 2 1	47, 103, 151, 188	0
18	AR	55/55 (100%)	0.10	3 (5%) 25 11	50, 80, 154, 211	0
18	CR	55/55 (100%)	-0.07	2 (3%) 42 22	51, 87, 157, 235	0
19	AS	79/79 (100%)	1.51	28 (35%) 0 0	81, 150, 212, 259	0
19	CS	79/79 (100%)	2.83	45 (56%) 0 0	217, 411, 508, 531	0
20	AT	85/85 (100%)	-0.32	0 100 100	35, 69, 129, 176	0
20	CT	85/85 (100%)	0.82	11 (12%) 3 1	66, 130, 204, 226	0
21	AU	51/51 (100%)	1.68	19 (37%) 0 0	90, 146, 226, 252	0
21	CU	51/51 (100%)	0.56	7 (13%) 3 1	54, 109, 189, 269	0
22	BA	2854/2904 (98%)	-0.49	36 (1%) 77 59	6, 25, 148, 390	0
22	DA	2841/2904 (97%)	0.23	91 (3%) 47 25	55, 116, 270, 526	0
23	BB	118/118 (100%)	-0.64	0 100 100	12, 40, 73, 109	0
23	DB	117/118 (99%)	-0.13	2 (1%) 70 49	88, 164, 221, 243	0
24	BC	271/271 (100%)	-0.36	6 (2%) 62 41	8, 35, 82, 192	0
24	DC	271/271 (100%)	0.52	21 (7%) 13 5	42, 95, 151, 215	0
25	BD	209/209 (100%)	-0.45	0 100 100	6, 21, 69, 179	0
25	DD	209/209 (100%)	0.73	24 (11%) 4 2	55, 115, 199, 284	0
26	BE	201/201 (100%)	-0.45	0 100 100	7, 36, 86, 151	0
26	DE	201/201 (100%)	1.57	63 (31%) 0 0	61, 235, 398, 470	0
27	BF	178/178 (100%)	-0.04	3 (1%) 70 49	21, 63, 136, 167	0
27	DF	178/178 (100%)	2.18	88 (49%) 0 0	142, 219, 259, 301	0
28	BG	176/176 (100%)	-0.03	2 (1%) 80 64	20, 61, 131, 192	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
28	DG	176/176 (100%)	1.49	53 (30%) 0 0	88, 239, 337, 389	0
29	BH	149/149 (100%)	3.01	62 (41%) 0 0	40, 171, 260, 304	0
29	DH	149/149 (100%)	2.59	62 (41%) 0 0	68, 188, 268, 298	0
30	BI	141/141 (100%)	2.38	60 (42%) 0 0	170, 245, 289, 301	0
30	DI	141/141 (100%)	3.15	95 (67%) 0 0	178, 312, 349, 370	0
31	BJ	142/142 (100%)	-0.56	1 (0%) 87 75	7, 16, 60, 137	0
31	DJ	142/142 (100%)	0.44	6 (4%) 36 18	50, 106, 169, 198	0
32	BK	122/122 (100%)	-0.41	1 (0%) 86 72	11, 24, 69, 242	0
32	DK	122/122 (100%)	0.58	13 (10%) 6 2	59, 97, 147, 210	0
33	BL	143/143 (100%)	-0.48	0 100 100	6, 30, 71, 123	0
33	DL	143/143 (100%)	1.31	28 (19%) 1 0	59, 164, 279, 354	0
34	BM	136/136 (100%)	-0.54	0 100 100	7, 22, 59, 147	0
34	DM	136/136 (100%)	0.78	16 (11%) 4 2	37, 112, 192, 250	0
35	BN	120/120 (100%)	-0.55	0 100 100	8, 17, 40, 149	0
35	DN	120/120 (100%)	1.36	32 (26%) 0 0	63, 131, 211, 305	0
36	BO	116/116 (100%)	-0.36	0 100 100	21, 41, 72, 113	0
36	DO	116/116 (100%)	1.44	33 (28%) 0 0	106, 172, 240, 273	0
37	BP	114/114 (100%)	-0.44	1 (0%) 84 69	12, 32, 87, 176	0
37	DP	114/114 (100%)	0.82	16 (14%) 2 1	50, 110, 175, 196	0
38	BQ	117/117 (100%)	-0.62	1 (0%) 84 69	6, 15, 39, 225	0
38	DQ	117/117 (100%)	0.90	18 (15%) 2 1	65, 113, 193, 331	0
39	BR	103/103 (100%)	-0.54	1 (0%) 82 67	6, 26, 67, 184	0
39	DR	103/103 (100%)	1.92	45 (43%) 0 0	73, 144, 238, 305	0
40	BS	110/110 (100%)	-0.57	0 100 100	7, 15, 48, 172	0
40	DS	110/110 (100%)	1.46	37 (33%) 0 0	71, 132, 214, 254	0
41	BT	93/93 (100%)	-0.02	3 (3%) 47 25	13, 43, 123, 233	0
41	DT	93/93 (100%)	2.36	47 (50%) 0 0	124, 265, 379, 423	0
42	BU	102/102 (100%)	-0.21	1 (0%) 82 67	21, 45, 131, 240	0
42	DU	102/102 (100%)	3.11	62 (60%) 0 0	148, 305, 420, 554	0
43	BV	94/94 (100%)	-0.31	0 100 100	14, 38, 78, 135	0
43	DV	94/94 (100%)	0.97	18 (19%) 1 0	88, 136, 193, 236	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
44	BW	79/79 (100%)	-0.15	2 (2%) 57 34	13, 29, 98, 213	0
44	DW	79/79 (100%)	2.08	34 (43%) 0 0	73, 169, 279, 323	0
45	BX	77/77 (100%)	-0.58	0 100 100	13, 37, 77, 108	0
45	DX	77/77 (100%)	0.76	11 (14%) 2 1	62, 118, 215, 280	0
46	BY	63/63 (100%)	-0.14	1 (1%) 72 51	27, 59, 126, 209	0
46	DY	63/63 (100%)	1.59	18 (28%) 0 0	152, 379, 492, 508	0
47	BZ	58/58 (100%)	-0.61	0 100 100	9, 16, 47, 61	0
47	DZ	58/58 (100%)	0.45	5 (8%) 10 4	68, 143, 251, 271	0
48	B0	56/56 (100%)	-0.69	0 100 100	6, 18, 71, 138	0
48	D0	56/56 (100%)	1.43	17 (30%) 0 0	63, 144, 246, 262	0
49	B1	50/50 (100%)	0.12	3 (6%) 21 10	27, 47, 93, 115	0
49	D1	50/50 (100%)	1.55	14 (28%) 0 0	97, 154, 208, 231	0
50	B2	46/46 (100%)	-0.55	0 100 100	10, 19, 43, 195	0
50	D2	46/46 (100%)	1.23	8 (17%) 1 0	59, 119, 184, 211	0
51	B3	64/64 (100%)	-0.54	0 100 100	8, 22, 38, 65	0
51	D3	64/64 (100%)	1.11	12 (18%) 1 0	64, 122, 197, 255	0
52	B4	38/38 (100%)	0.27	2 (5%) 26 12	25, 49, 94, 97	0
52	D4	38/38 (100%)	3.07	26 (68%) 0 0	87, 173, 235, 241	0
All	All	20434/20562 (99%)	0.30	2003 (9%) 7 2	6, 93, 274, 554	0

All (2003) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
29	DH	92	GLY	21.2
29	DH	124	THR	18.3
29	DH	91	PHE	16.3
29	BH	118	PRO	15.6
16	AP	81	ALA	15.5
29	BH	122	LEU	15.5
29	BH	93	SER	14.4
29	BH	123	ARG	13.9
46	DY	63	ALA	13.8
29	BH	84	ALA	13.2
19	CS	28	LYS	13.0
29	DH	93	SER	12.6
41	DT	15	HIS	12.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
27	DF	129	MET	12.4
22	BA	138	U	12.3
30	BI	67	THR	12.0
14	CN	33	VAL	12.0
42	DU	35	VAL	12.0
30	BI	13	ALA	11.7
29	BH	85	GLY	11.6
29	BH	125	THR	11.3
29	BH	90	LEU	10.8
29	DH	87	GLU	10.7
42	DU	76	THR	10.6
1	CA	209	U	10.6
9	CI	127	SER	10.6
33	DL	144	GLU	10.6
29	BH	117	LEU	10.5
17	AQ	82	VAL	10.5
29	DH	105	ALA	10.4
10	CJ	76	ILE	10.4
29	BH	119	ASN	10.4
7	CG	65	LEU	10.3
29	DH	86	ASP	10.1
29	DH	131	SER	10.0
46	DY	62	GLY	10.0
10	CJ	74	VAL	10.0
29	DH	123	ARG	9.9
28	DG	8	VAL	9.8
29	BH	80	ILE	9.7
27	DF	10	GLU	9.7
30	BI	2	LYS	9.6
22	BA	2147	A	9.5
30	DI	58	ILE	9.4
29	DH	88	GLY	9.4
29	BH	92	GLY	9.4
42	DU	77	GLY	9.3
29	BH	88	GLY	9.2
30	DI	51	GLY	9.2
27	DF	105	ILE	9.1
30	DI	120	ASP	9.1
10	CJ	71	LEU	9.0
22	BA	2154	A	9.0
52	D4	33	HIS	9.0
7	CG	87	PRO	9.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	124	THR	8.9
19	CS	29	PRO	8.9
29	BH	79	THR	8.9
29	DH	127	GLU	8.8
29	BH	128	HIS	8.7
29	BH	91	PHE	8.7
29	BH	143	ILE	8.7
29	BH	145	ASN	8.7
10	CJ	72	ARG	8.6
49	D1	35	LEU	8.6
29	DH	125	THR	8.6
29	DH	85	GLY	8.5
10	CJ	8	ILE	8.4
10	CJ	75	ASP	8.3
42	DU	86	PHE	8.3
30	BI	46	ASP	8.3
42	DU	50	ALA	8.3
30	DI	93	ASN	8.1
29	DH	126	GLY	8.1
29	BH	98	ASP	8.1
16	AP	82	ALA	8.1
7	CG	64	ALA	8.1
29	BH	105	ALA	8.1
41	DT	2	ILE	8.0
42	DU	87	GLU	8.0
10	CJ	99	GLN	8.0
52	D4	1	MET	8.0
29	DH	119	ASN	7.9
29	BH	86	ASP	7.9
29	DH	145	ASN	7.9
13	CM	94	LEU	7.9
22	BA	2179	C	7.9
29	BH	73	ASN	7.9
22	DA	2146	C	7.8
42	DU	12	VAL	7.8
10	CJ	7	ARG	7.8
41	DT	55	VAL	7.8
9	CI	42	THR	7.7
41	DT	34	VAL	7.7
27	DF	9	ASP	7.7
1	CA	461	A	7.7
29	DH	89	LYS	7.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	7	PRO	7.6
29	BH	120	GLY	7.6
52	D4	10	LEU	7.6
29	BH	74	ALA	7.6
30	BI	132	ALA	7.6
29	BH	148	ALA	7.5
30	BI	52	LEU	7.5
30	DI	15	GLY	7.5
10	CJ	10	LEU	7.4
9	CI	66	VAL	7.4
29	BH	147	VAL	7.4
22	BA	2143	C	7.3
26	DE	144	GLU	7.3
25	DD	186	LEU	7.3
29	DH	106	ALA	7.3
30	DI	43	ALA	7.3
9	AI	89	TYR	7.3
26	DE	122	GLU	7.3
29	DH	143	ILE	7.3
7	CG	71	THR	7.3
30	BI	21	PRO	7.2
22	DA	2799	A	7.2
29	BH	121	VAL	7.2
16	CP	47	GLU	7.2
41	DT	3	ARG	7.1
26	DE	119	ILE	7.1
30	DI	119	ALA	7.1
30	DI	57	VAL	7.1
1	CA	210	C	7.0
10	CJ	91	ASP	7.0
30	BI	16	MET	7.0
7	CG	150	PHE	7.0
42	DU	37	GLY	6.9
7	CG	69	ARG	6.9
7	CG	132	THR	6.9
19	CS	23	GLU	6.9
44	DW	21	GLY	6.9
29	BH	149	GLU	6.9
22	BA	2146	C	6.8
29	DH	90	LEU	6.8
39	DR	96	VAL	6.8
19	CS	73	PHE	6.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	CM	93	GLY	6.8
22	DA	139	U	6.8
7	CG	58	LEU	6.7
7	CG	72	VAL	6.7
29	BH	89	LYS	6.7
30	DI	5	GLN	6.7
29	BH	131	SER	6.7
29	DH	133	GLN	6.7
9	AI	42	THR	6.7
14	CN	32	ASP	6.7
30	BI	77	VAL	6.7
19	AS	38	THR	6.7
30	DI	66	PHE	6.7
7	CG	151	ALA	6.7
22	BA	2138	G	6.7
29	DH	146	VAL	6.7
46	DY	21	LEU	6.6
37	DP	109	ILE	6.6
19	CS	36	ARG	6.6
7	CG	7	GLY	6.6
42	DU	2	ALA	6.6
52	D4	9	LYS	6.5
2	AB	26	MET	6.5
14	CN	52	ARG	6.5
42	DU	97	SER	6.5
30	BI	12	VAL	6.5
30	BI	68	PHE	6.5
46	DY	36	GLN	6.5
14	CN	34	ASN	6.4
29	BH	113	SER	6.4
29	DH	120	GLY	6.4
22	DA	613	A	6.4
9	CI	16	ALA	6.4
30	BI	66	PHE	6.4
29	BH	126	GLY	6.4
30	BI	3	LYS	6.3
19	CS	24	SER	6.3
42	DU	75	ALA	6.3
19	CS	38	THR	6.3
22	DA	1536	C	6.3
30	BI	86	LYS	6.3
30	DI	125	THR	6.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	80	ASP	6.3
8	CH	129	ALA	6.3
10	CJ	101	SER	6.3
13	CM	54	THR	6.3
30	DI	122	GLU	6.2
39	DR	52	PRO	6.2
30	DI	50	LYS	6.2
29	BH	116	ARG	6.2
19	CS	65	MET	6.2
33	DL	92	LEU	6.2
27	DF	94	ARG	6.2
29	BH	134	VAL	6.2
42	DU	36	GLU	6.1
30	DI	97	VAL	6.1
9	CI	15	ALA	6.1
27	DF	141	ASP	6.1
16	AP	80	LYS	6.0
22	DA	1172	C	6.0
2	AB	28	PRO	6.0
7	CG	75	LYS	6.0
44	DW	51	GLY	6.0
29	DH	128	HIS	6.0
36	DO	61	GLN	6.0
30	DI	4	VAL	5.9
39	DR	103	ALA	5.9
7	CG	38	ALA	5.9
30	DI	121	ILE	5.9
19	CS	12	LEU	5.9
30	DI	68	PHE	5.9
42	DU	30	SER	5.9
22	BA	2180	U	5.9
13	CM	111	PRO	5.8
35	DN	29	VAL	5.8
10	CJ	11	LYS	5.8
30	DI	95	ASP	5.8
49	D1	52	LYS	5.8
48	D0	56	LYS	5.8
7	CG	143	MET	5.8
4	AD	27	ILE	5.8
3	AC	98	ALA	5.8
7	CG	70	PRO	5.8
46	DY	24	GLU	5.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	53	ASP	5.7
9	CI	67	LYS	5.7
29	DH	112	LYS	5.7
41	DT	83	ALA	5.7
9	CI	57	VAL	5.7
2	AB	27	LYS	5.7
13	CM	31	ALA	5.7
42	DU	19	GLY	5.7
10	CJ	6	ILE	5.7
13	CM	105	ALA	5.7
1	CA	1534	A	5.7
14	CN	48	GLN	5.7
29	DH	121	VAL	5.7
14	CN	49	THR	5.6
27	DF	117	SER	5.6
39	DR	22	LEU	5.6
22	BA	2155	U	5.6
22	BA	2144	G	5.6
10	AJ	102	LEU	5.6
44	DW	42	THR	5.6
10	CJ	73	LEU	5.6
19	CS	30	LEU	5.6
2	CB	106	VAL	5.6
28	DG	32	LEU	5.6
1	AA	1030	U	5.5
1	CA	1224	U	5.5
22	DA	1535	A	5.5
33	DL	88	GLY	5.5
51	D3	20	GLY	5.5
27	DF	127	TYR	5.5
13	CM	114	PRO	5.5
21	CU	8	ASN	5.5
2	CB	129	THR	5.5
19	CS	47	THR	5.5
22	DA	1537	G	5.5
36	DO	64	TYR	5.5
13	CM	80	MET	5.5
19	CS	66	VAL	5.5
9	AI	38	PHE	5.5
27	DF	155	ILE	5.4
39	DR	50	GLY	5.4
35	DN	113	ILE	5.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	21	PRO	5.4
2	CB	147	LEU	5.4
29	BH	87	GLU	5.4
1	CA	1271	A	5.4
7	CG	102	TRP	5.4
30	DI	83	ALA	5.4
22	BA	139	U	5.4
27	DF	31	GLU	5.4
42	DU	27	VAL	5.4
42	DU	85	ARG	5.3
42	DU	51	LEU	5.3
30	DI	46	ASP	5.3
7	CG	53	SER	5.3
2	AB	29	PHE	5.3
1	CA	211	G	5.3
26	DE	148	ILE	5.3
30	DI	65	SER	5.3
28	DG	33	THR	5.3
28	DG	85	LYS	5.3
29	DH	118	PRO	5.3
36	DO	63	LYS	5.3
7	CG	106	ALA	5.3
30	BI	60	VAL	5.3
19	CS	60	PHE	5.3
29	DH	129	GLU	5.3
35	DN	63	ARG	5.3
19	CS	79	TYR	5.2
30	DI	22	PRO	5.2
29	BH	71	LYS	5.2
41	DT	36	LYS	5.2
30	DI	123	ALA	5.2
30	DI	67	THR	5.2
30	BI	139	VAL	5.2
39	DR	63	VAL	5.2
3	CC	143	LEU	5.2
13	CM	38	ILE	5.2
42	DU	13	LEU	5.2
30	DI	140	GLU	5.2
28	DG	51	PHE	5.2
26	DE	127	GLU	5.2
9	CI	3	ASN	5.1
22	DA	1075	C	5.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	79	ALA	5.1
26	DE	175	ILE	5.1
38	DQ	36	GLN	5.1
22	DA	137	U	5.1
28	DG	61	TRP	5.1
2	AB	220	VAL	5.1
13	CM	97	ARG	5.1
36	DO	51	ALA	5.1
1	AA	86	G	5.1
41	DT	32	LEU	5.1
33	DL	101	ILE	5.0
19	CS	26	ASP	5.0
3	AC	64	ARG	5.0
19	CS	25	GLY	5.0
9	CI	56	MET	5.0
52	D4	35	GLN	5.0
22	BA	1175	A	5.0
48	D0	26	SER	5.0
30	DI	2	LYS	5.0
52	D4	15	LYS	5.0
40	DS	40	ASN	5.0
10	AJ	101	SER	5.0
14	AN	30	ILE	5.0
27	DF	130	GLY	5.0
27	DF	110	ILE	5.0
40	DS	48	LYS	5.0
39	DR	87	GLN	5.0
41	DT	72	GLN	5.0
2	CB	146	SER	5.0
7	CG	136	LYS	5.0
16	AP	47	GLU	5.0
42	DU	4	ILE	5.0
30	DI	47	SER	4.9
30	DI	138	VAL	4.9
9	AI	129	ARG	4.9
41	DT	35	ALA	4.9
26	DE	128	ALA	4.9
33	DL	108	ALA	4.9
33	DL	82	LEU	4.9
42	DU	78	LYS	4.9
19	CS	64	GLU	4.9
44	DW	62	ALA	4.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DE	12	LEU	4.9
30	BI	78	LEU	4.9
18	AR	19	GLU	4.9
2	AB	66	ILE	4.9
7	CG	149	ALA	4.9
19	AS	14	LEU	4.9
42	DU	11	ILE	4.9
42	DU	42	LYS	4.9
29	DH	82	SER	4.9
30	BI	47	SER	4.9
26	DE	121	VAL	4.9
39	DR	20	VAL	4.9
47	DZ	33	HIS	4.9
10	CJ	80	THR	4.9
27	DF	11	VAL	4.9
43	DV	42	LEU	4.9
11	AK	18	GLY	4.9
32	DK	69	VAL	4.9
42	DU	38	ILE	4.9
34	DM	17	ASN	4.9
29	BH	146	VAL	4.9
2	CB	39	ILE	4.9
2	AB	38	HIS	4.9
36	DO	52	SER	4.9
29	DH	142	VAL	4.8
30	BI	22	PRO	4.8
28	DG	83	THR	4.8
27	DF	115	GLY	4.8
35	DN	24	MET	4.8
7	CG	86	VAL	4.8
30	DI	12	VAL	4.8
30	BI	42	ASN	4.8
2	AB	186	VAL	4.8
30	DI	56	VAL	4.8
22	BA	2110	G	4.8
7	CG	90	VAL	4.8
30	BI	33	ASN	4.8
39	DR	26	ASP	4.7
22	BA	2139	U	4.7
46	DY	37	LEU	4.7
10	CJ	26	VAL	4.7
30	DI	17	ALA	4.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	102	ILE	4.7
27	DF	114	ARG	4.7
22	BA	2150	C	4.7
26	DE	147	LEU	4.7
29	BH	81	ALA	4.7
41	DT	33	LYS	4.7
22	DA	2107	G	4.7
30	DI	55	PRO	4.7
29	DH	84	ALA	4.7
7	CG	85	GLN	4.7
7	CG	13	PRO	4.7
13	CM	62	PHE	4.7
19	CS	59	VAL	4.7
42	DU	24	VAL	4.7
26	DE	104	ALA	4.7
28	DG	104	LEU	4.7
35	DN	46	ARG	4.7
19	CS	13	HIS	4.7
41	DT	58	VAL	4.7
29	BH	78	VAL	4.6
22	BA	2142	A	4.6
2	AB	135	MET	4.6
10	CJ	40	ILE	4.6
14	AN	20	PHE	4.6
13	CM	67	ASP	4.6
27	DF	152	ASP	4.6
29	DH	74	ALA	4.6
26	DE	164	LEU	4.6
28	DG	81	GLY	4.6
14	CN	62	ARG	4.6
36	DO	56	LYS	4.6
19	CS	58	PRO	4.6
30	BI	98	GLY	4.6
29	DH	73	ASN	4.6
41	BT	16	VAL	4.6
44	DW	29	SER	4.6
29	BH	76	GLU	4.6
3	AC	63	ILE	4.6
27	DF	153	ILE	4.6
10	CJ	41	PRO	4.6
22	BA	546	U	4.6
22	DA	1077	A	4.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	BI	58	ILE	4.6
2	CB	148	GLY	4.6
25	DD	26	VAL	4.6
2	AB	67	LEU	4.6
27	DF	112	ASP	4.5
29	BH	94	ILE	4.5
39	DR	88	GLY	4.5
27	DF	51	ASN	4.5
7	CG	74	VAL	4.5
2	CB	163	ILE	4.5
7	CG	16	LYS	4.5
42	DU	5	ARG	4.5
7	CG	19	SER	4.5
26	DE	180	LEU	4.5
14	CN	59	GLN	4.5
10	CJ	63	ASP	4.5
30	BI	51	GLY	4.5
44	DW	41	GLY	4.5
29	BH	77	THR	4.5
22	BA	2145	C	4.5
13	CM	74	MET	4.5
44	DW	50	VAL	4.5
7	CG	88	VAL	4.5
10	CJ	39	PRO	4.5
12	AL	123	ALA	4.5
4	CD	27	ILE	4.5
41	DT	16	VAL	4.5
32	DK	75	SER	4.5
30	DI	61	TYR	4.5
19	CS	37	SER	4.4
30	DI	82	ALA	4.4
13	CM	73	SER	4.4
33	DL	142	ILE	4.4
13	CM	63	VAL	4.4
30	BI	11	GLN	4.4
22	DA	2157	G	4.4
26	DE	198	GLU	4.4
27	DF	128	SER	4.4
4	AD	26	ALA	4.4
44	DW	52	CYS	4.4
33	DL	5	THR	4.4
27	DF	93	GLU	4.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	41	PHE	4.4
22	DA	2147	A	4.4
13	CM	108	ARG	4.4
36	DO	40	ILE	4.4
7	CG	73	GLU	4.4
22	DA	846	U	4.4
10	CJ	100	ILE	4.4
19	CS	70	LEU	4.3
3	CC	194	VAL	4.3
13	CM	79	LEU	4.3
32	DK	68	GLY	4.3
2	AB	68	PHE	4.3
30	DI	44	LYS	4.3
52	D4	26	ILE	4.3
7	CG	61	PHE	4.3
7	CG	95	ARG	4.3
41	DT	76	ARG	4.3
26	DE	190	ALA	4.3
10	CJ	98	VAL	4.3
26	DE	197	GLU	4.3
36	DO	60	GLU	4.3
7	CG	54	GLY	4.3
27	DF	30	VAL	4.3
9	CI	37	TYR	4.3
42	DU	88	ASP	4.3
29	DH	15	LEU	4.3
30	DI	33	ASN	4.3
22	DA	2145	C	4.3
9	CI	107	ALA	4.3
19	AS	2	ARG	4.3
52	D4	8	LYS	4.3
32	DK	89	ASN	4.3
29	BH	75	LEU	4.3
29	BH	130	VAL	4.3
17	AQ	19	SER	4.3
29	DH	95	GLY	4.3
26	DE	48	THR	4.2
3	CC	41	TYR	4.2
12	CL	123	ALA	4.2
10	CJ	34	ALA	4.2
19	CS	62	THR	4.2
42	DU	41	VAL	4.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	AI	40	ARG	4.2
52	D4	24	ARG	4.2
10	CJ	102	LEU	4.2
36	DO	62	LEU	4.2
22	DA	1066	U	4.2
42	DU	74	ALA	4.2
28	DG	57	TYR	4.2
28	DG	101	VAL	4.2
35	DN	76	VAL	4.2
19	AS	48	ILE	4.2
14	CN	26	LEU	4.2
30	DI	59	THR	4.2
22	DA	1078	U	4.2
29	BH	144	VAL	4.2
29	BH	70	GLU	4.2
19	CS	31	ARG	4.2
34	DM	136	MET	4.2
25	DD	91	THR	4.2
29	DH	144	VAL	4.2
30	DI	98	GLY	4.2
35	DN	25	ALA	4.1
9	AI	62	LEU	4.1
13	CM	82	LEU	4.1
26	DE	143	LEU	4.1
41	DT	43	ILE	4.1
9	CI	65	THR	4.1
30	DI	109	ALA	4.1
22	DA	1175	A	4.1
41	DT	60	THR	4.1
28	DG	55	ASP	4.1
11	AK	125	LYS	4.1
26	DE	24	ASN	4.1
13	CM	89	ARG	4.1
16	CP	39	PHE	4.1
39	DR	33	VAL	4.1
13	CM	30	LYS	4.1
19	CS	27	LYS	4.1
30	DI	48	ILE	4.1
22	BA	2149	U	4.1
26	DE	172	ALA	4.1
13	CM	46	GLU	4.1
30	DI	23	VAL	4.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
33	DL	26	GLY	4.1
29	DH	122	LEU	4.1
30	BI	38	CYS	4.1
8	CH	1	SER	4.1
44	DW	58	LEU	4.1
51	D3	21	PHE	4.1
18	AR	73	HIS	4.1
2	AB	188	THR	4.1
25	DD	43	ASP	4.1
7	CG	8	GLN	4.1
30	DI	84	GLY	4.1
13	CM	109	LYS	4.1
2	CB	40	ILE	4.1
2	AB	73	ARG	4.0
2	CB	109	SER	4.0
13	CM	98	GLY	4.0
14	CN	1	ALA	4.0
30	DI	118	GLY	4.0
39	DR	62	GLU	4.0
30	DI	42	ASN	4.0
39	DR	32	THR	4.0
14	AN	29	ILE	4.0
20	CT	66	ILE	4.0
2	CB	17	HIS	4.0
3	CC	28	PHE	4.0
13	CM	113	LYS	4.0
44	DW	45	HIS	4.0
49	D1	46	VAL	4.0
48	D0	32	THR	4.0
49	D1	23	THR	4.0
30	BI	18	ASN	4.0
30	BI	35	MET	4.0
43	DV	94	ALA	4.0
13	CM	29	SER	4.0
9	CI	38	PHE	4.0
36	DO	50	ALA	4.0
40	DS	47	VAL	4.0
27	DF	104	THR	4.0
2	AB	8	MET	4.0
40	DS	31	GLN	4.0
29	BH	100	ALA	4.0
52	D4	36	ARG	3.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
24	DC	232	GLY	3.9
29	DH	116	ARG	3.9
27	DF	140	ILE	3.9
7	CG	59	GLU	3.9
34	DM	24	THR	3.9
3	CC	38	VAL	3.9
3	CC	42	LEU	3.9
38	DQ	22	GLY	3.9
22	BA	2136	G	3.9
22	DA	1171	G	3.9
52	D4	14	CYS	3.9
31	DJ	44	TYR	3.9
27	DF	34	THR	3.9
27	DF	116	LEU	3.9
28	DG	128	THR	3.9
33	DL	28	GLY	3.9
13	CM	28	ARG	3.9
41	DT	70	HIS	3.9
30	BI	37	PHE	3.9
32	BK	71	ARG	3.9
36	DO	46	GLU	3.9
14	CN	19	TYR	3.9
2	CB	160	LEU	3.9
40	DS	19	LEU	3.9
7	CG	128	GLU	3.9
48	D0	33	SER	3.9
42	DU	26	ASN	3.9
21	AU	22	CYS	3.9
30	DI	14	ALA	3.9
42	DU	59	GLU	3.9
7	AG	80	GLY	3.9
33	DL	4	ASN	3.9
13	AM	4	ALA	3.9
10	CJ	51	VAL	3.9
1	AA	1534	A	3.9
9	CI	4	GLN	3.9
19	CS	11	ASP	3.9
19	AS	70	LEU	3.9
46	DY	14	LEU	3.9
27	DF	135	ILE	3.9
29	BH	102	ALA	3.9
9	CI	89	TYR	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DE	42	GLY	3.8
47	DZ	32	GLY	3.8
3	CC	108	PRO	3.8
35	DN	119	SER	3.8
13	CM	100	ARG	3.8
19	AS	43	MET	3.8
30	DI	88	GLY	3.8
30	DI	129	GLU	3.8
30	DI	24	GLY	3.8
30	DI	94	LYS	3.8
3	CC	160	GLU	3.8
41	DT	14	PRO	3.8
22	BA	2141	G	3.8
35	DN	111	ALA	3.8
2	CB	15	PHE	3.8
7	CG	17	PHE	3.8
7	CG	55	LYS	3.8
22	DA	318	C	3.8
44	DW	59	PHE	3.8
27	DF	171	ALA	3.8
13	AM	94	LEU	3.8
28	DG	147	LEU	3.8
46	DY	35	GLY	3.8
16	CP	52	LEU	3.8
30	DI	18	ASN	3.8
44	DW	35	ILE	3.8
30	BI	141	ASP	3.8
33	DL	89	VAL	3.8
9	CI	68	GLY	3.8
22	DA	1044	C	3.8
41	DT	81	LYS	3.8
48	D0	25	THR	3.8
26	DE	55	SER	3.8
14	CN	78	LEU	3.8
22	DA	2181	U	3.8
26	DE	188	MET	3.8
10	CJ	37	ARG	3.8
48	D0	22	THR	3.8
44	DW	37	VAL	3.8
42	DU	31	GLY	3.8
7	CG	67	ASN	3.8
7	CG	84	TYR	3.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
50	D2	43	THR	3.8
2	CB	186	VAL	3.8
3	AC	103	ALA	3.7
22	DA	1173	U	3.7
48	D0	45	ASP	3.7
1	CA	954	G	3.7
2	AB	45	THR	3.7
25	DD	25	THR	3.7
2	CB	181	PRO	3.7
7	CG	15	PRO	3.7
30	DI	86	LYS	3.7
33	DL	122	VAL	3.7
2	AB	48	MET	3.7
28	DG	110	HIS	3.7
30	DI	124	MET	3.7
43	DV	54	ALA	3.7
1	CA	1317	C	3.7
28	DG	140	ILE	3.7
7	CG	140	VAL	3.7
30	BI	17	ALA	3.7
1	CA	212	G	3.7
46	DY	13	GLU	3.7
40	DS	70	LYS	3.7
30	DI	85	ILE	3.7
7	AG	4	ARG	3.7
42	DU	73	ASN	3.7
21	AU	34	ARG	3.7
10	CJ	77	VAL	3.7
24	DC	26	GLY	3.7
52	D4	38	GLY	3.7
3	CC	32	LEU	3.7
2	CB	158	ASP	3.7
41	DT	54	GLU	3.7
1	AA	87	C	3.7
41	DT	31	VAL	3.7
10	CJ	38	GLY	3.7
19	CS	15	LEU	3.7
30	BI	10	LEU	3.7
21	AU	37	TYR	3.7
27	DF	154	THR	3.7
37	DP	111	GLU	3.7
9	CI	128	LYS	3.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
29	BH	106	ALA	3.7
2	CB	30	ILE	3.7
22	DA	1083	U	3.7
36	DO	112	GLU	3.7
30	DI	53	PRO	3.7
31	DJ	128	ASN	3.7
2	AB	87	ASP	3.6
4	AD	24	VAL	3.6
51	D3	60	CYS	3.6
30	BI	65	SER	3.6
20	CT	8	LYS	3.6
1	AA	1031	C	3.6
46	DY	29	ARG	3.6
1	CA	208	U	3.6
27	DF	156	THR	3.6
41	DT	10	VAL	3.6
25	DD	38	LYS	3.6
20	CT	67	HIS	3.6
13	CM	104	ASN	3.6
29	BH	127	GLU	3.6
30	DI	141	ASP	3.6
2	CB	27	LYS	3.6
30	BI	39	LYS	3.6
44	DW	73	PRO	3.6
22	DA	138	U	3.6
37	DP	73	PHE	3.6
39	DR	75	VAL	3.6
50	D2	33	ARG	3.6
1	CA	1314	C	3.6
14	CN	72	PHE	3.6
28	DG	45	ALA	3.6
30	BI	40	ALA	3.6
39	DR	27	ILE	3.6
40	DS	110	ARG	3.6
4	AD	28	ASP	3.6
19	AS	39	ILE	3.6
27	DF	39	VAL	3.6
41	DT	42	GLU	3.6
48	D0	36	LYS	3.6
29	DH	140	ALA	3.6
42	DU	25	LYS	3.6
42	DU	70	ALA	3.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	CQ	7	LEU	3.6
44	DW	22	VAL	3.6
13	CM	110	GLY	3.6
51	D3	19	GLY	3.6
52	D4	12	ARG	3.6
30	DI	103	ALA	3.6
27	DF	150	GLY	3.6
3	CC	36	PHE	3.5
11	CK	125	LYS	3.5
16	AP	19	VAL	3.5
13	CM	37	GLY	3.5
35	DN	38	LEU	3.5
30	BI	87	SER	3.5
7	CG	68	VAL	3.5
4	AD	35	GLN	3.5
10	AJ	89	ARG	3.5
24	DC	46	GLY	3.5
27	DF	126	ASN	3.5
27	DF	172	PHE	3.5
22	DA	1076	C	3.5
49	D1	34	GLU	3.5
27	DF	168	LEU	3.5
19	CS	74	ALA	3.5
28	DG	84	LYS	3.5
35	DN	116	VAL	3.5
1	AA	461	A	3.5
22	DA	1067	A	3.5
39	DR	37	GLU	3.5
3	CC	195	ILE	3.5
7	CG	144	ALA	3.5
24	DC	29	PHE	3.5
27	DF	1	ALA	3.5
26	DE	135	ALA	3.5
22	DA	2110	G	3.5
39	DR	8	GLY	3.5
13	CM	75	SER	3.5
36	DO	20	GLU	3.5
39	DR	7	SER	3.5
43	DV	35	GLU	3.5
2	AB	95	TRP	3.4
2	CB	24	PRO	3.4
7	CG	48	THR	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	CM	96	VAL	3.4
10	CJ	9	ARG	3.4
39	DR	29	THR	3.4
19	CS	40	PHE	3.4
27	DF	38	GLY	3.4
2	CB	33	ALA	3.4
37	DP	11	GLN	3.4
52	D4	19	ARG	3.4
2	AB	84	LEU	3.4
33	DL	77	ILE	3.4
7	CG	18	GLY	3.4
33	DL	106	GLU	3.4
14	CN	60	ARG	3.4
28	DG	165	ASP	3.4
26	DE	103	GLY	3.4
7	CG	66	GLU	3.4
37	DP	37	LYS	3.4
13	CM	4	ALA	3.4
19	CS	20	LYS	3.4
2	AB	30	ILE	3.4
2	CB	70	GLY	3.4
49	D1	15	GLY	3.4
22	DA	345	A	3.4
14	CN	73	LEU	3.4
22	DA	1074	G	3.4
7	CG	76	SER	3.4
13	AM	42	VAL	3.4
17	CQ	77	VAL	3.4
27	DF	24	VAL	3.4
21	AU	30	GLU	3.4
33	DL	143	GLU	3.4
2	AB	200	PRO	3.4
41	DT	1	MET	3.4
13	CM	112	ARG	3.4
14	CN	50	LEU	3.4
20	CT	2	ASN	3.4
44	DW	19	ARG	3.4
33	DL	121	THR	3.4
44	DW	34	SER	3.4
2	CB	38	HIS	3.4
19	AS	45	GLY	3.4
13	CM	70	ARG	3.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
1	CA	203	G	3.4
10	CJ	21	ALA	3.4
21	AU	8	ASN	3.4
21	AU	41	THR	3.4
41	DT	12	ARG	3.4
39	DR	55	ASP	3.4
40	DS	44	ALA	3.4
51	D3	27	ASN	3.4
35	DN	36	THR	3.4
36	DO	65	THR	3.4
26	DE	120	VAL	3.3
2	AB	89	PHE	3.3
22	DA	2106	U	3.3
42	DU	72	PHE	3.3
10	CJ	78	GLU	3.3
14	CN	77	GLY	3.3
46	DY	31	GLN	3.3
28	DG	48	THR	3.3
30	DI	60	VAL	3.3
14	CN	100	TRP	3.3
2	AB	51	GLU	3.3
27	DF	55	ASP	3.3
2	AB	71	THR	3.3
32	DK	104	THR	3.3
52	D4	25	VAL	3.3
52	D4	16	ILE	3.3
25	DD	10	GLY	3.3
42	DU	94	PHE	3.3
22	DA	228	C	3.3
25	DD	97	SER	3.3
3	AC	167	TYR	3.3
37	DP	84	SER	3.3
11	AK	41	LEU	3.3
9	AI	18	VAL	3.3
36	DO	27	VAL	3.3
27	DF	174	PHE	3.3
36	DO	57	ALA	3.3
10	CJ	33	GLY	3.3
14	CN	40	ARG	3.3
1	CA	1270	G	3.3
2	CB	82	ALA	3.3
30	DI	75	ALA	3.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
41	DT	20	ALA	3.3
9	AI	61	ASP	3.3
26	DE	56	GLY	3.3
1	CA	86	G	3.3
10	CJ	5	ARG	3.3
7	AG	82	SER	3.3
9	CI	13	SER	3.3
49	D1	22	THR	3.3
30	BI	1	ALA	3.3
39	DR	61	ALA	3.3
22	DA	1090	A	3.3
3	CC	166	TRP	3.3
2	CB	87	ASP	3.3
38	DQ	1	ALA	3.3
9	CI	126	PHE	3.3
30	DI	126	ARG	3.2
17	CQ	6	THR	3.2
52	D4	23	ILE	3.2
1	CA	1138	G	3.2
9	CI	6	TYR	3.2
19	CS	63	ASP	3.2
10	CJ	96	VAL	3.2
1	AA	1492	A	3.2
27	DF	125	GLY	3.2
40	DS	69	LEU	3.2
26	DE	40	ARG	3.2
29	BH	99	ILE	3.2
2	CB	165	ALA	3.2
13	CM	60	ALA	3.2
10	CJ	97	ASP	3.2
1	CA	1031	C	3.2
29	BH	129	GLU	3.2
29	DH	141	LYS	3.2
1	AA	85	U	3.2
3	CC	205	GLU	3.2
21	CU	23	GLU	3.2
13	AM	32	ILE	3.2
30	BI	48	ILE	3.2
2	AB	24	PRO	3.2
13	AM	91	ARG	3.2
39	DR	43	ASN	3.2
51	D3	13	PHE	3.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
17	AQ	6	THR	3.2
21	AU	23	GLU	3.2
41	DT	39	THR	3.2
33	DL	31	GLY	3.2
41	DT	69	ARG	3.2
19	AS	60	PHE	3.2
20	CT	62	ALA	3.2
27	DF	54	ALA	3.2
21	AU	4	LYS	3.2
7	CG	9	ARG	3.2
30	BI	41	PHE	3.2
30	DI	69	VAL	3.2
44	DW	7	GLY	3.2
2	CB	32	GLY	3.2
2	CB	225	SER	3.2
10	AJ	75	ASP	3.2
22	BA	1172	C	3.2
16	CP	81	ALA	3.2
3	CC	86	LEU	3.2
13	CM	61	LYS	3.2
42	DU	34	ILE	3.2
44	DW	18	LYS	3.2
22	DA	344	A	3.2
10	AJ	91	ASP	3.2
24	DC	244	VAL	3.2
44	DW	56	HIS	3.2
49	D1	30	PRO	3.2
2	AB	25	LYS	3.2
26	DE	131	THR	3.2
33	DL	90	VAL	3.2
40	DS	5	ALA	3.2
2	CB	115	ASP	3.2
29	BH	72	ILE	3.1
29	DH	13	GLY	3.1
28	DG	82	PHE	3.1
40	DS	20	VAL	3.1
41	DT	67	VAL	3.1
2	CB	128	LEU	3.1
25	DD	185	ASN	3.1
5	AE	102	THR	3.1
3	CC	172	VAL	3.1
22	DA	1084	A	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	12	U	3.1
24	BC	235	GLU	3.1
28	DG	42	VAL	3.1
40	DS	49	LYS	3.1
22	DA	549	G	3.1
22	DA	645	C	3.1
29	DH	18	GLN	3.1
17	CQ	43	LEU	3.1
24	DC	238	ASN	3.1
9	CI	64	ILE	3.1
29	DH	94	ILE	3.1
44	DW	36	ILE	3.1
14	CN	76	PHE	3.1
2	CB	79	VAL	3.1
14	CN	98	ALA	3.1
22	BA	2181	U	3.1
2	CB	190	SER	3.1
17	CQ	60	ILE	3.1
27	DF	120	SER	3.1
40	DS	32	ALA	3.1
49	D1	49	LYS	3.1
30	BI	20	SER	3.1
1	CA	204	G	3.1
22	BA	277	G	3.1
22	DA	2307	G	3.1
10	AJ	35	GLN	3.1
16	CP	57	ILE	3.1
19	CS	71	GLY	3.1
29	BH	139	PHE	3.1
2	CB	13	VAL	3.1
21	AU	20	ARG	3.1
39	DR	38	VAL	3.1
40	DS	84	ARG	3.1
25	DD	103	ASP	3.1
37	DP	96	LEU	3.1
36	DO	87	ILE	3.1
14	CN	64	ARG	3.1
13	CM	84	CYS	3.1
28	DG	6	ALA	3.1
10	CJ	12	ALA	3.1
17	CQ	37	ILE	3.1
19	CS	22	VAL	3.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	61	ASN	3.1
30	DI	40	ALA	3.1
38	DQ	28	SER	3.1
3	AC	99	GLN	3.1
28	DG	52	GLY	3.1
41	DT	75	GLY	3.1
14	CN	16	ALA	3.1
14	CN	56	PRO	3.0
9	CI	14	SER	3.0
28	DG	100	ASN	3.0
35	DN	28	LEU	3.0
1	AA	78	A	3.0
35	DN	75	ILE	3.0
42	DU	49	PRO	3.0
27	DF	164	GLU	3.0
28	DG	166	GLU	3.0
10	CJ	89	ARG	3.0
9	AI	128	LYS	3.0
13	CM	26	LYS	3.0
9	CI	5	TYR	3.0
11	AK	42	GLY	3.0
30	DI	25	PRO	3.0
48	D0	34	GLY	3.0
2	CB	103	TRP	3.0
22	DA	2306	C	3.0
35	DN	118	ARG	3.0
2	CB	66	ILE	3.0
13	AM	83	GLY	3.0
35	DN	100	CYS	3.0
36	DO	58	ILE	3.0
3	CC	171	ARG	3.0
19	AS	15	LEU	3.0
25	DD	187	LEU	3.0
1	CA	950	U	3.0
26	DE	87	ALA	3.0
2	AB	17	HIS	3.0
10	CJ	66	GLU	3.0
24	DC	47	ARG	3.0
39	DR	34	GLU	3.0
2	CB	28	PRO	3.0
21	AU	31	VAL	3.0
10	AJ	63	ASP	3.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
21	AU	36	PHE	3.0
10	CJ	22	THR	3.0
30	DI	130	GLY	3.0
39	DR	31	GLU	3.0
34	DM	80	VAL	3.0
30	BI	5	GLN	3.0
9	CI	129	ARG	3.0
2	AB	150	ILE	3.0
7	CG	89	GLU	3.0
43	DV	63	ILE	3.0
10	CJ	50	THR	3.0
34	DM	135	VAL	3.0
39	DR	19	THR	3.0
1	AA	88	U	3.0
44	DW	39	GLN	3.0
42	DU	89	GLY	3.0
1	CA	955	U	3.0
19	CS	43	MET	3.0
28	DG	21	GLN	3.0
28	DG	53	PRO	3.0
8	CH	124	ILE	3.0
22	DA	1870	C	3.0
17	CQ	22	VAL	3.0
34	DM	36	VAL	3.0
1	CA	202	G	3.0
42	DU	20	LYS	3.0
1	CA	1235	U	3.0
29	DH	148	ALA	3.0
34	DM	33	LEU	3.0
2	CB	114	LYS	3.0
22	BA	2108	A	3.0
30	DI	20	SER	3.0
2	CB	214	GLY	2.9
34	DM	72	PRO	3.0
2	AB	180	ILE	2.9
27	DF	96	TRP	2.9
24	DC	102	TYR	2.9
50	D2	36	ALA	2.9
3	CC	92	ASP	2.9
39	DR	24	LYS	2.9
41	DT	68	LYS	2.9
17	AQ	13	SER	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	71	GLY	2.9
27	DF	157	THR	2.9
2	AB	56	LEU	2.9
14	CN	75	LYS	2.9
24	DC	241	LYS	2.9
37	DP	30	TRP	2.9
22	BA	2148	G	2.9
52	D4	20	ASP	2.9
14	CN	97	LYS	2.9
21	AU	40	PRO	2.9
9	CI	51	LEU	2.9
39	DR	28	ALA	2.9
33	DL	81	ASP	2.9
3	AC	169	GLU	2.9
42	DU	98	ASN	2.9
34	DM	31	PHE	2.9
2	AB	166	ASP	2.9
1	CA	1313	U	2.9
35	DN	20	MET	2.9
2	AB	160	LEU	2.9
21	AU	3	ILE	2.9
13	AM	114	PRO	2.9
45	DX	17	ARG	2.9
19	CS	16	LYS	2.9
21	AU	35	GLU	2.9
44	DW	71	LYS	2.9
2	CB	99	MET	2.9
9	AI	27	ILE	2.9
22	DA	931	U	2.9
2	CB	41	ASN	2.9
9	CI	10	ARG	2.9
36	DO	25	ARG	2.9
29	BH	112	LYS	2.9
43	DV	68	LYS	2.9
2	AB	201	GLY	2.9
39	DR	25	LEU	2.9
44	DW	14	ASP	2.9
22	DA	546	U	2.9
27	DF	175	PRO	2.9
33	DL	80	SER	2.9
30	BI	59	THR	2.9
2	CB	67	LEU	2.9

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
9	CI	31	GLN	2.9
3	CC	43	THR	2.9
29	DH	147	VAL	2.9
14	CN	69	PRO	2.9
2	AB	50	ASN	2.9
2	CB	113	LEU	2.9
26	DE	43	THR	2.9
26	DE	118	LEU	2.9
41	DT	30	ILE	2.9
2	AB	192	PRO	2.9
24	BC	236	GLY	2.9
51	D3	22	LYS	2.9
10	AJ	10	LEU	2.9
26	DE	186	VAL	2.9
9	CI	8	THR	2.9
26	DE	183	PHE	2.9
38	DQ	105	PHE	2.9
39	DR	53	PHE	2.9
7	CG	43	TYR	2.9
2	AB	44	LYS	2.9
27	DF	77	LYS	2.9
7	AG	81	GLY	2.9
24	DC	240	GLY	2.9
37	DP	7	LEU	2.9
2	CB	110	ILE	2.8
2	CB	150	ILE	2.8
42	DU	39	ASN	2.8
11	AK	95	THR	2.8
2	CB	144	GLU	2.8
30	DI	39	LYS	2.8
13	CM	95	PRO	2.8
28	DG	130	ILE	2.8
29	DH	19	VAL	2.8
36	DO	103	VAL	2.8
38	DQ	87	VAL	2.8
43	DV	60	VAL	2.8
3	CC	52	SER	2.8
13	CM	92	ARG	2.8
37	DP	42	PHE	2.8
27	DF	44	ALA	2.8
28	DG	41	GLU	2.8
28	DG	96	ALA	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	3	LYS	2.8
19	AS	47	THR	2.8
36	DO	113	ALA	2.8
3	AC	65	VAL	2.8
3	CC	90	VAL	2.8
7	AG	79	VAL	2.8
19	AS	8	PRO	2.8
41	DT	74	ILE	2.8
2	AB	151	LYS	2.8
13	AM	113	LYS	2.8
3	CC	27	GLU	2.8
22	DA	1459	G	2.8
13	CM	24	VAL	2.8
9	CI	102	PHE	2.8
39	DR	59	ILE	2.8
52	D4	32	LYS	2.8
43	DV	69	GLU	2.8
39	DR	6	GLN	2.8
38	DQ	81	GLY	2.8
19	CS	39	ILE	2.8
28	DG	120	ILE	2.8
14	CN	57	SER	2.8
19	AS	42	ASN	2.8
30	DI	137	LEU	2.8
2	AB	59	ILE	2.8
4	AD	36	ALA	2.8
36	DO	26	LEU	2.8
2	AB	41	ASN	2.8
29	DH	40	THR	2.8
36	DO	24	THR	2.8
1	CA	1255	G	2.8
1	CA	1312	G	2.8
38	BQ	86	SER	2.8
39	DR	35	PHE	2.8
30	DI	45	THR	2.8
3	AC	97	PRO	2.8
42	DU	17	ASP	2.8
2	AB	157	PRO	2.8
22	DA	1174	U	2.8
30	DI	87	SER	2.8
22	DA	2104	C	2.8
3	CC	77	GLY	2.8

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
11	CK	18	GLY	2.8
25	DD	23	PRO	2.8
26	DE	89	PRO	2.8
30	DI	62	ALA	2.8
6	CF	8	PHE	2.8
15	CO	88	ARG	2.8
19	AS	31	ARG	2.8
31	DJ	142	ILE	2.8
22	DA	62	U	2.8
22	DA	2602	A	2.8
2	AB	195	VAL	2.8
14	CN	29	ILE	2.7
22	DA	1118	C	2.8
30	DI	19	PRO	2.8
30	DI	91	LYS	2.7
30	DI	127	SER	2.7
40	DS	97	LEU	2.7
1	CA	1236	A	2.7
3	CC	170	GLY	2.7
22	DA	1089	A	2.7
24	DC	236	GLY	2.7
25	DD	6	GLY	2.7
49	B1	52	LYS	2.7
27	DF	131	VAL	2.7
14	CN	25	GLU	2.7
2	CB	95	TRP	2.7
2	CB	153	MET	2.7
7	AG	3	ARG	2.7
8	AH	1	SER	2.7
9	AI	92	SER	2.7
10	CJ	49	PHE	2.7
25	DD	24	VAL	2.7
1	CA	1441	A	2.7
9	CI	41	GLU	2.7
19	CS	41	PRO	2.7
40	DS	68	ASP	2.7
43	DV	48	MET	2.7
26	DE	32	VAL	2.7
33	DL	107	PHE	2.7
52	B4	29	ALA	2.7
2	CB	185	ILE	2.7
35	DN	114	GLU	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	81	LYS	2.7
27	DF	118	ALA	2.7
29	BH	64	ALA	2.7
38	DQ	31	TYR	2.7
40	DS	43	ALA	2.7
9	CI	58	GLU	2.7
3	CC	61	LYS	2.7
29	DH	113	SER	2.7
30	BI	134	SER	2.7
26	DE	41	GLN	2.7
2	AB	99	MET	2.7
7	CG	37	THR	2.7
35	DN	98	LEU	2.7
5	AE	101	GLY	2.7
19	CS	67	GLY	2.7
44	DW	53	GLY	2.7
8	CH	102	VAL	2.7
26	DE	169	VAL	2.7
3	CC	106	ARG	2.7
39	DR	101	ILE	2.7
22	DA	1043	C	2.7
27	DF	169	LEU	2.7
7	CG	147	ASN	2.7
2	AB	64	GLY	2.7
9	CI	106	ASP	2.7
29	DH	139	PHE	2.7
3	CC	60	ALA	2.7
12	CL	22	ALA	2.7
29	DH	51	ARG	2.7
30	BI	114	ALA	2.7
44	DW	77	LYS	2.7
49	D1	36	LYS	2.7
52	D4	34	LYS	2.7
25	DD	96	ILE	2.7
7	CG	14	ASP	2.7
42	DU	32	LYS	2.7
11	CK	20	ALA	2.7
1	CA	958	A	2.7
27	DF	111	ARG	2.7
28	DG	44	HIS	2.7
40	DS	16	LYS	2.7
9	CI	61	ASP	2.7

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	DA	343	C	2.7
48	D0	35	GLU	2.7
2	AB	72	LYS	2.7
24	DC	243	PRO	2.7
2	AB	168	GLU	2.7
10	CJ	27	GLU	2.7
2	AB	164	ASP	2.7
1	CA	1242	G	2.7
22	DA	329	G	2.7
22	DA	1079	C	2.7
2	CB	200	PRO	2.7
7	CG	34	LYS	2.6
19	AS	9	PHE	2.6
27	DF	83	PRO	2.6
42	DU	46	LYS	2.6
7	AG	77	ARG	2.6
9	AI	120	ALA	2.6
10	CJ	92	LEU	2.6
35	DN	112	TYR	2.6
42	DU	40	LEU	2.6
2	CB	81	ASP	2.6
30	DI	63	ASP	2.6
3	CC	154	GLY	2.6
30	DI	16	MET	2.6
36	DO	66	GLY	2.6
21	CU	7	GLU	2.6
2	AB	138	ARG	2.6
20	CT	3	ILE	2.6
30	DI	128	ILE	2.6
40	DS	33	LEU	2.6
51	D3	23	HIS	2.6
14	AN	54	SER	2.6
7	CG	129	ASN	2.6
48	D0	24	VAL	2.6
19	AS	30	LEU	2.6
30	DI	54	ILE	2.6
43	DV	84	PRO	2.6
7	CG	44	SER	2.6
25	DD	4	LEU	2.6
41	DT	84	TYR	2.6
30	DI	38	CYS	2.6
27	DF	41	GLU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	3	GLN	2.6
19	AS	46	LEU	2.6
28	DG	137	LYS	2.6
30	BI	44	LYS	2.6
16	CP	60	TRP	2.6
26	DE	193	VAL	2.6
28	DG	168	VAL	2.6
38	DQ	38	VAL	2.6
26	DE	179	SER	2.6
25	DD	14	ILE	2.6
45	DX	20	ALA	2.6
7	CG	52	ARG	2.6
28	DG	50	THR	2.6
16	CP	20	VAL	2.6
41	DT	65	GLY	2.6
40	DS	4	ILE	2.6
27	DF	76	PHE	2.6
36	DO	117	PHE	2.6
40	DS	34	ASP	2.6
17	CQ	45	VAL	2.6
25	DD	29	VAL	2.6
49	D1	31	GLU	2.6
22	DA	2062	A	2.6
13	CM	88	LEU	2.6
25	DD	27	ILE	2.6
26	DE	90	GLN	2.6
39	DR	60	LYS	2.6
2	CB	192	PRO	2.6
21	AU	10	PRO	2.6
30	DI	117	THR	2.6
41	DT	24	MET	2.6
11	AK	33	ILE	2.6
1	AA	79	G	2.6
1	CA	1032	G	2.6
9	AI	31	GLN	2.6
51	D3	9	ALA	2.6
25	DD	8	LYS	2.6
29	DH	14	SER	2.6
7	CG	142	ARG	2.6
44	DW	38	ARG	2.6
45	DX	12	VAL	2.6
2	CB	134	LEU	2.6

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
5	CE	79	THR	2.6
16	AP	4	ILE	2.6
19	CS	21	ALA	2.5
29	DH	83	LYS	2.5
30	BI	75	ALA	2.5
35	DN	77	ALA	2.5
2	CB	155	GLY	2.5
11	CK	99	LEU	2.5
45	DX	16	ASN	2.5
13	CM	77	LYS	2.5
26	DE	60	TRP	2.5
26	DE	126	VAL	2.5
22	DA	101	A	2.5
51	D3	14	LYS	2.5
22	DA	1116	G	2.5
35	DN	23	ASN	2.5
28	DG	87	GLN	2.5
38	DQ	43	GLN	2.5
2	AB	199	ILE	2.5
26	DE	88	ARG	2.5
16	CP	17	TYR	2.5
27	DF	106	ALA	2.5
24	DC	249	VAL	2.5
33	DL	19	LEU	2.5
47	DZ	55	LYS	2.5
10	AJ	8	ILE	2.5
39	DR	23	GLU	2.5
22	BA	613	A	2.5
52	D4	7	VAL	2.5
2	CB	20	ARG	2.5
1	CA	94	G	2.5
13	CM	76	ILE	2.5
24	BC	239	PHE	2.5
16	AP	45	GLU	2.5
29	BH	55	GLU	2.5
10	AJ	74	VAL	2.5
30	BI	138	VAL	2.5
46	DY	32	ALA	2.5
47	DZ	1	ALA	2.5
2	AB	23	ASN	2.5
9	CI	117	LEU	2.5
1	CA	207	C	2.5

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
22	BA	1072	C	2.5
3	CC	144	GLY	2.5
13	CM	57	ASP	2.5
26	DE	150	THR	2.5
35	DN	70	THR	2.5
2	CB	25	LYS	2.5
41	BT	1	MET	2.5
2	CB	31	PHE	2.5
22	DA	2402	U	2.5
28	DG	19	ASN	2.5
34	DM	1	MET	2.5
40	DS	37	THR	2.5
2	CB	159	ALA	2.5
7	CG	146	ALA	2.5
30	BI	4	VAL	2.5
30	BI	97	VAL	2.5
30	DI	31	GLY	2.5
42	DU	48	VAL	2.5
30	BI	53	PRO	2.5
2	CB	26	MET	2.5
42	DU	61	GLU	2.5
50	D2	12	ARG	2.5
3	CC	91	ALA	2.5
45	DX	32	LEU	2.5
3	CC	202	PHE	2.5
14	CN	22	LYS	2.5
28	DG	1	SER	2.5
41	BT	24	MET	2.5
45	DX	2	ARG	2.5
13	CM	23	GLY	2.5
26	DE	5	LEU	2.5
36	DO	28	VAL	2.5
29	DH	2	GLN	2.5
2	AB	167	HIS	2.5
2	AB	170	ILE	2.5
2	AB	224	ARG	2.5
22	DA	1538	G	2.5
27	DF	33	ILE	2.5
1	CA	1036	A	2.4
3	AC	90	VAL	2.4
17	CQ	58	VAL	2.4
27	DF	151	LEU	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
28	DG	132	LEU	2.4
2	AB	52	ALA	2.4
7	CG	83	THR	2.4
22	DA	2180	U	2.4
29	DH	77	THR	2.4
9	CI	20	ILE	2.4
10	AJ	100	ILE	2.4
13	CM	51	GLN	2.4
14	CN	23	ARG	2.4
24	BC	237	ARG	2.4
24	DC	99	GLU	2.4
27	DF	173	ASP	2.4
31	BJ	142	ILE	2.4
38	DQ	90	ASP	2.4
22	DA	1450	G	2.4
42	DU	58	VAL	2.4
1	CA	81	A	2.4
9	AI	19	PHE	2.4
19	AS	73	PHE	2.4
22	DA	1205	A	2.4
26	DE	173	THR	2.4
27	DF	98	PHE	2.4
41	DT	91	GLN	2.4
42	DU	71	ILE	2.4
9	CI	90	ASP	2.4
27	DF	32	LYS	2.4
44	DW	61	LYS	2.4
2	AB	213	LEU	2.4
40	DS	21	ALA	2.4
43	DV	6	ALA	2.4
46	DY	33	ALA	2.4
1	AA	1032	G	2.4
7	CG	51	GLN	2.4
27	DF	17	THR	2.4
20	CT	7	LYS	2.4
22	BA	1065	U	2.4
9	CI	9	GLY	2.4
13	CM	81	ASP	2.4
30	BI	137	LEU	2.4
40	DS	101	SER	2.4
19	CS	49	ALA	2.4
3	CC	139	ASN	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
26	DE	98	LYS	2.4
30	DI	100	ILE	2.4
27	DF	138	PRO	2.4
44	BW	40	ARG	2.4
7	CG	139	ASP	2.4
36	DO	41	ALA	2.4
3	CC	31	ASN	2.4
7	AG	78	ARG	2.4
19	AS	55	GLN	2.4
35	DN	9	GLN	2.4
26	DE	200	LEU	2.4
45	DX	48	LEU	2.4
49	D1	21	THR	2.4
28	DG	56	GLY	2.4
22	DA	1064	C	2.4
8	CH	85	TYR	2.4
27	DF	6	TYR	2.4
30	BI	99	LYS	2.4
48	D0	55	ALA	2.4
14	CN	31	SER	2.4
50	D2	17	GLY	2.4
31	DJ	119	PHE	2.4
11	AK	20	ALA	2.4
1	CA	1027	C	2.4
2	CB	117	GLU	2.4
3	AC	188	ALA	2.4
26	DE	171	ASP	2.4
10	CJ	25	ILE	2.4
19	AS	37	SER	2.4
28	DG	105	SER	2.4
29	DH	27	ARG	2.4
46	DY	34	SER	2.4
52	D4	28	SER	2.4
13	CM	59	VAL	2.4
23	DB	18	G	2.4
41	DT	59	ASN	2.4
18	CR	63	TYR	2.4
10	AJ	14	ASP	2.4
19	AS	10	ILE	2.4
39	DR	92	TRP	2.4
9	CI	125	GLN	2.4
42	DU	3	LYS	2.4

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	CC	129	PHE	2.4
9	CI	63	TYR	2.4
32	DK	110	GLU	2.4
43	DV	44	HIS	2.4
19	AS	63	ASP	2.4
10	AJ	90	LEU	2.4
3	AC	80	GLY	2.4
37	DP	40	GLN	2.4
22	DA	1117	C	2.4
3	CC	104	GLU	2.4
30	BI	19	PRO	2.4
9	CI	43	ALA	2.4
3	AC	148	ILE	2.4
17	AQ	15	LYS	2.4
19	AS	32	THR	2.4
28	BG	25	ILE	2.4
39	DR	12	HIS	2.4
21	AU	12	ASP	2.4
22	DA	467	G	2.4
37	DP	33	GLU	2.4
6	CF	6	ILE	2.4
13	AM	31	ALA	2.4
27	DF	53	ALA	2.4
38	DQ	16	ILE	2.4
38	DQ	41	ALA	2.4
52	D4	13	ASN	2.4
6	CF	74	LEU	2.4
30	DI	139	VAL	2.3
46	BY	23	ARG	2.3
17	CQ	38	LYS	2.3
52	D4	2	LYS	2.3
21	CU	37	TYR	2.3
30	DI	78	LEU	2.3
32	DK	77	ILE	2.3
41	DT	13	ALA	2.3
13	CM	18	LEU	2.3
26	DE	191	ASP	2.3
27	DF	113	PHE	2.3
27	DF	178	LYS	2.3
1	AA	412	A	2.3
3	AC	81	GLU	2.3
9	AI	16	ALA	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
14	CN	51	PRO	2.3
22	DA	653	U	2.3
34	DM	41	LEU	2.3
48	D0	23	ALA	2.3
2	AB	16	GLY	2.3
11	AK	83	VAL	2.3
29	DH	115	VAL	2.3
22	BA	2885	G	2.3
3	AC	100	ILE	2.3
5	AE	114	LEU	2.3
16	AP	22	ALA	2.3
36	DO	59	ALA	2.3
41	DT	46	ALA	2.3
7	AG	150	PHE	2.3
26	DE	47	LYS	2.3
27	DF	61	GLY	2.3
49	D1	29	LYS	2.3
2	AB	19	THR	2.3
30	DI	104	GLN	2.3
33	DL	91	ASP	2.3
8	CH	60	LEU	2.3
18	AR	50	TYR	2.3
30	DI	52	LEU	2.3
31	DJ	63	ALA	2.3
32	DK	33	ALA	2.3
35	DN	21	PHE	2.3
38	DQ	7	VAL	2.3
50	D2	30	VAL	2.3
22	DA	790	U	2.3
7	CG	138	GLU	2.3
24	BC	238	ASN	2.3
39	DR	45	GLU	2.3
38	DQ	94	LEU	2.3
39	DR	98	ILE	2.3
40	DS	98	LYS	2.3
46	DY	28	LEU	2.3
1	CA	1013	G	2.3
45	DX	18	SER	2.3
22	DA	1065	U	2.3
20	CT	84	LYS	2.3
28	BG	116	LEU	2.3
29	DH	117	LEU	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
42	DU	52	ASN	2.3
3	CC	94	ALA	2.3
10	CJ	65	TYR	2.3
13	CM	22	TYR	2.3
19	AS	44	ILE	2.3
14	CN	20	PHE	2.3
26	DE	4	VAL	2.3
33	DL	114	GLY	2.3
2	AB	190	SER	2.3
10	CJ	35	GLN	2.3
39	DR	66	HIS	2.3
27	DF	84	ILE	2.3
1	CA	466	A	2.3
2	AB	216	VAL	2.3
33	DL	68	SER	2.3
52	D4	11	CYS	2.3
9	CI	86	LEU	2.3
24	DC	201	LEU	2.3
10	AJ	76	ILE	2.3
2	AB	191	ASP	2.3
37	BP	65	ASN	2.3
5	CE	157	GLY	2.3
3	AC	205	GLU	2.3
22	DA	1168	G	2.3
27	DF	139	GLU	2.3
44	DW	67	LYS	2.3
52	D4	31	PRO	2.3
46	DY	40	SER	2.3
13	CM	39	ALA	2.3
20	CT	23	ARG	2.3
28	DG	9	VAL	2.3
4	AD	21	LYS	2.3
19	AS	62	THR	2.3
22	BA	2182	U	2.3
29	BH	83	LYS	2.3
2	AB	156	LEU	2.3
22	DA	93	G	2.3
13	CM	44	ILE	2.3
29	DH	138	VAL	2.3
29	DH	16	GLY	2.3
2	AB	124	THR	2.3
13	CM	27	THR	2.3

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
40	DS	39	THR	2.3
9	CI	62	LEU	2.3
10	CJ	52	LEU	2.3
17	CQ	5	ARG	2.3
27	DF	109	ARG	2.3
28	DG	68	ARG	2.3
28	DG	106	LEU	2.3
2	CB	151	LYS	2.3
50	D2	18	PHE	2.3
21	CU	9	GLU	2.2
22	DA	805	G	2.2
26	DE	54	GLY	2.2
3	AC	168	ARG	2.2
3	CC	123	LEU	2.2
40	DS	3	THR	2.2
19	CS	75	PRO	2.2
22	DA	1170	C	2.2
35	DN	42	LYS	2.2
25	DD	104	VAL	2.2
27	DF	99	PHE	2.2
37	DP	29	VAL	2.2
3	CC	204	GLY	2.2
7	CG	40	SER	2.2
27	BF	74	ALA	2.2
13	CM	91	ARG	2.2
22	BA	654	A	2.2
22	DA	1046	A	2.2
30	BI	120	ASP	2.2
40	DS	67	ASP	2.2
44	DW	74	LYS	2.2
22	DA	1094	U	2.2
22	DA	1176	U	2.2
3	CC	73	GLY	2.2
22	DA	33	C	2.2
26	DE	9	GLN	2.2
26	DE	155	GLU	2.2
26	DE	201	ALA	2.2
29	DH	8	LYS	2.2
45	DX	29	LEU	2.2
17	AQ	52	CYS	2.2
19	CS	61	VAL	2.2
48	D0	29	VAL	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
13	CM	66	GLY	2.2
30	BI	24	GLY	2.2
39	DR	36	ALA	2.2
44	BW	51	GLY	2.2
22	DA	1045	C	2.2
22	DA	2313	C	2.2
26	DE	134	LEU	2.2
50	D2	42	LEU	2.2
2	AB	152	ASP	2.2
2	AB	43	GLU	2.2
2	CB	21	TYR	2.2
37	DP	114	ASN	2.2
8	CH	126	CYS	2.2
27	BF	77	LYS	2.2
36	DO	88	LYS	2.2
38	DQ	34	ALA	2.2
42	DU	1	ALA	2.2
22	BA	2151	U	2.2
1	CA	1209	C	2.2
31	DJ	92	MET	2.2
10	AJ	98	VAL	2.2
36	DO	78	VAL	2.2
14	AN	42	ASN	2.2
21	CU	34	ARG	2.2
32	DK	103	VAL	2.2
42	DU	21	ARG	2.2
44	DW	43	LYS	2.2
22	DA	1202	G	2.2
24	BC	234	GLY	2.2
27	DF	40	GLY	2.2
43	DV	22	ALA	2.2
43	DV	45	ASP	2.2
2	CB	45	THR	2.2
48	D0	38	LEU	2.2
3	AC	85	LYS	2.2
21	AU	6	ARG	2.2
27	DF	124	ARG	2.2
42	DU	23	LYS	2.2
7	CG	56	SER	2.2
21	AU	27	VAL	2.2
30	DI	89	SER	2.2
2	AB	133	ALA	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	DI	13	ALA	2.2
43	DV	82	TYR	2.2
3	AC	82	ASP	2.2
9	CI	118	ARG	2.2
22	DA	1278	C	2.2
40	DS	36	LEU	2.2
41	DT	37	ASP	2.2
51	D3	56	LEU	2.2
8	CH	44	PHE	2.2
25	DD	114	LYS	2.2
26	DE	57	LYS	2.2
42	DU	14	THR	2.2
3	AC	201	ILE	2.2
13	CM	42	VAL	2.2
42	BU	87	GLU	2.2
46	DY	10	SER	2.2
1	AA	1441	A	2.2
22	DA	1420	A	2.2
11	AK	81	LEU	2.2
8	CH	92	PRO	2.2
13	AM	2	ARG	2.2
26	DE	44	ARG	2.2
35	DN	45	ARG	2.2
30	BI	49	GLU	2.2
22	DA	1530	G	2.2
40	DS	26	GLY	2.2
2	AB	33	ALA	2.2
7	CG	101	ARG	2.2
41	DT	7	LEU	2.2
43	DV	23	ALA	2.2
45	DX	21	LEU	2.2
49	D1	33	LEU	2.2
2	CB	88	GLN	2.2
29	BH	18	GLN	2.2
9	CI	111	GLU	2.2
16	CP	48	GLU	2.2
26	DE	189	THR	2.2
28	DG	72	ASN	2.2
29	BH	4	ILE	2.2
43	DV	5	ASN	2.2
25	DD	188	LEU	2.2
27	DF	35	LEU	2.2

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
37	DP	110	LYS	2.2
28	DG	164	ALA	2.2
30	DI	132	ALA	2.2
40	DS	54	ALA	2.2
2	CB	180	ILE	2.2
8	AH	53	ASP	2.2
27	DF	108	PRO	2.2
26	DE	149	ILE	2.2
42	DU	82	VAL	2.2
21	CU	44	ARG	2.2
22	DA	1103	A	2.2
2	CB	22	TRP	2.1
24	DC	231	HIS	2.2
14	CN	43	ALA	2.1
27	DF	7	TYR	2.1
14	CN	65	GLN	2.1
2	CB	157	PRO	2.1
9	AI	91	GLU	2.1
21	AU	9	GLU	2.1
27	DF	66	ILE	2.1
29	BH	51	ARG	2.1
34	DM	110	GLU	2.1
44	DW	6	GLY	2.1
2	CB	42	LEU	2.1
3	AC	179	ALA	2.1
28	DG	94	ARG	2.1
52	B4	12	ARG	2.1
41	DT	71	GLY	2.1
19	CS	76	THR	2.1
35	DN	102	PHE	2.1
18	CR	19	GLU	2.1
19	CS	5	LYS	2.1
28	DG	127	GLN	2.1
39	DR	18	GLN	2.1
41	DT	56	GLU	2.1
33	DL	20	GLY	2.1
3	CC	180	ASP	2.1
7	CG	50	ALA	2.1
29	DH	11	ASN	2.1
38	DQ	111	LYS	2.1
41	DT	40	LYS	2.1
48	D0	1	ALA	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
3	AC	102	ILE	2.1
10	CJ	47	GLU	2.1
10	CJ	67	ILE	2.1
48	D0	54	ILE	2.1
28	DG	49	LEU	2.1
3	CC	126	ARG	2.1
11	AK	52	ARG	2.1
23	DB	118	C	2.1
29	DH	10	ALA	2.1
33	DL	70	LYS	2.1
41	DT	64	LYS	2.1
10	CJ	20	GLN	2.1
27	DF	59	ILE	2.1
27	DF	148	VAL	2.1
40	DS	105	VAL	2.1
3	AC	79	LYS	2.1
34	DM	16	ARG	2.1
34	DM	40	ARG	2.1
35	DN	96	ARG	2.1
14	AN	32	ASP	2.1
36	DO	77	ALA	2.1
9	CI	82	ILE	2.1
47	DZ	7	THR	2.1
14	CN	47	LEU	2.1
3	CC	145	ALA	2.1
7	CG	60	ALA	2.1
20	CT	40	ALA	2.1
27	DF	163	GLU	2.1
32	DK	16	ALA	2.1
49	B1	51	ALA	2.1
1	CA	1360	A	2.1
13	CM	87	GLY	2.1
22	DA	1715	G	2.1
22	DA	2667	C	2.1
24	DC	109	LEU	2.1
24	DC	248	GLY	2.1
3	CC	70	ALA	2.1
9	AI	88	GLU	2.1
30	BI	43	ALA	2.1
26	DE	33	VAL	2.1
3	CC	196	GLY	2.1
10	AJ	87	LEU	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
39	DR	86	GLN	2.1
49	B1	3	GLY	2.1
22	DA	932	U	2.1
32	DK	112	PHE	2.1
51	D3	5	THR	2.1
16	AP	48	GLU	2.1
27	DF	82	TYR	2.1
27	DF	27	VAL	2.1
38	DQ	14	LYS	2.1
24	DC	103	ILE	2.1
27	DF	78	ILE	2.1
42	DU	69	VAL	2.1
10	CJ	42	LEU	2.1
17	CQ	44	HIS	2.1
10	CJ	64	GLN	2.1
27	DF	62	GLN	2.1
39	BR	50	GLY	2.1
2	CB	68	PHE	2.1
2	AB	101	THR	2.1
24	DC	45	ASN	2.1
2	AB	63	LYS	2.1
3	CC	142	ARG	2.1
12	AL	24	GLU	2.1
16	CP	45	GLU	2.1
27	DF	2	LYS	2.1
2	CB	152	ASP	2.1
22	BA	1171	G	2.1
22	DA	317	G	2.1
9	CI	109	GLN	2.1
40	DS	15	GLN	2.1
46	DY	45	GLN	2.1
3	CC	44	LYS	2.1
36	DO	55	GLU	2.1
2	CB	75	ALA	2.1
19	AS	18	VAL	2.1
25	DD	5	VAL	2.1
42	DU	10	VAL	2.1
43	DV	37	PRO	2.1
1	AA	1362	A	2.1
1	CA	1257	A	2.1
10	CJ	90	LEU	2.1
19	CS	48	ILE	2.1

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
20	CT	56	ILE	2.1
30	BI	54	ILE	2.1
24	DC	233	GLY	2.1
35	DN	27	SER	2.1
2	AB	193	ASP	2.1
40	DS	73	LYS	2.0
40	DS	2	GLU	2.0
2	AB	113	LEU	2.0
22	BA	2106	U	2.0
35	DN	39	PRO	2.0
35	DN	115	LEU	2.0
44	DW	64	GLY	2.0
1	CA	532	A	2.0
11	AK	36	ARG	2.0
13	AM	92	ARG	2.0
37	DP	71	ARG	2.0
40	DS	95	ARG	2.0
19	AS	23	GLU	2.0
8	AH	23	ALA	2.0
19	AS	61	VAL	2.0
30	DI	131	THR	2.0
34	DM	23	GLY	2.0
44	DW	20	LEU	2.0
45	DX	13	THR	2.0
22	DA	92	U	2.0
22	DA	810	U	2.0
3	CC	35	ASP	2.0
42	DU	99	SER	2.0
1	CA	87	C	2.0
3	AC	143	LEU	2.0
27	BF	116	LEU	2.0
32	DK	39	ILE	2.0
6	CF	62	MET	2.0
2	AB	22	TRP	2.0
27	DF	146	ASP	2.0
39	DR	54	VAL	2.0
2	AB	128	LEU	2.0
3	CC	181	ILE	2.0
4	AD	20	LEU	2.0
13	CM	36	ALA	2.0
28	DG	131	VAL	2.0
30	BI	63	ASP	2.0

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	RSRZ
30	BI	95	ASP	2.0
30	DI	96	LYS	2.0
32	DK	78	ARG	2.0
40	DS	30	SER	2.0
8	CH	35	ILE	2.0
36	DO	11	ALA	2.0
9	CI	73	GLY	2.0
22	BA	2107	G	2.0
22	DA	1622	G	2.0
7	CG	62	GLU	2.0
30	DI	107	GLU	2.0
34	DM	132	THR	2.0
41	DT	49	LYS	2.0
8	CH	82	LEU	2.0
9	CI	122	ARG	2.0
30	DI	32	VAL	2.0

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

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates [i](#)

There are no carbohydrates in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DJ	201	1/1	-0.33	3.04	284,284,284,284	0
53	MG	DA	3016	1/1	-0.03	0.67	231,231,231,231	0
53	MG	DA	3099	1/1	0.00	0.23	180,180,180,180	0
53	MG	DA	3028	1/1	0.04	1.00	262,262,262,262	0
53	MG	DA	3003	1/1	0.08	1.79	268,268,268,268	0
53	MG	DA	3109	1/1	0.10	0.71	176,176,176,176	0
53	MG	DA	3130	1/1	0.12	2.63	279,279,279,279	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DA	3133	1/1	0.18	0.46	239,239,239,239	0
53	MG	DA	3111	1/1	0.22	0.40	127,127,127,127	0
53	MG	CA	1622	1/1	0.22	0.08	208,208,208,208	0
53	MG	CA	1636	1/1	0.28	0.18	155,155,155,155	0
53	MG	DA	3062	1/1	0.30	1.10	193,193,193,193	0
53	MG	DA	3064	1/1	0.31	1.24	230,230,230,230	0
53	MG	DA	3110	1/1	0.32	0.17	183,183,183,183	0
53	MG	DA	3078	1/1	0.38	1.03	210,210,210,210	0
53	MG	DA	3043	1/1	0.43	0.44	213,213,213,213	0
53	MG	DA	3082	1/1	0.51	0.36	189,189,189,189	0
53	MG	CA	1614	1/1	0.51	1.04	231,231,231,231	0
53	MG	DA	3087	1/1	0.54	0.17	164,164,164,164	0
53	MG	DA	3083	1/1	0.55	0.20	224,224,224,224	0
53	MG	DA	3014	1/1	0.56	0.29	128,128,128,128	0
53	MG	BA	3047	1/1	0.57	0.16	152,152,152,152	0
53	MG	DA	3127	1/1	0.57	0.59	199,199,199,199	0
53	MG	DA	3058	1/1	0.57	0.49	235,235,235,235	0
53	MG	CA	1628	1/1	0.57	1.56	236,236,236,236	0
53	MG	CA	1602	1/1	0.58	0.20	175,175,175,175	0
53	MG	DA	3033	1/1	0.59	0.53	149,149,149,149	0
53	MG	DA	3059	1/1	0.59	0.22	183,183,183,183	0
53	MG	DA	3010	1/1	0.60	0.50	171,171,171,171	0
53	MG	DA	3013	1/1	0.60	0.88	185,185,185,185	0
53	MG	DA	3074	1/1	0.60	1.20	240,240,240,240	0
53	MG	DA	3045	1/1	0.61	0.49	233,233,233,233	0
53	MG	DA	3047	1/1	0.62	0.19	136,136,136,136	0
53	MG	DA	3015	1/1	0.62	0.40	145,145,145,145	0
53	MG	DA	3039	1/1	0.62	0.13	99,99,99,99	0
53	MG	DA	3084	1/1	0.62	0.18	182,182,182,182	0
53	MG	DA	3018	1/1	0.63	0.25	232,232,232,232	0
53	MG	DA	3038	1/1	0.63	0.12	204,204,204,204	0
53	MG	DA	3106	1/1	0.64	0.15	205,205,205,205	0
53	MG	DA	3097	1/1	0.65	0.25	116,116,116,116	0
53	MG	CA	1640	1/1	0.67	0.21	149,149,149,149	0
53	MG	DA	3020	1/1	0.67	0.51	218,218,218,218	0
53	MG	CA	1627	1/1	0.67	0.21	198,198,198,198	0
53	MG	DA	3006	1/1	0.67	0.21	267,267,267,267	0
53	MG	DA	3002	1/1	0.67	0.32	160,160,160,160	0
53	MG	CA	1620	1/1	0.67	0.10	170,170,170,170	0
53	MG	DA	3132	1/1	0.68	0.10	175,175,175,175	0
53	MG	BA	3130	1/1	0.70	0.47	205,205,205,205	0
53	MG	DA	3092	1/1	0.70	0.12	121,121,121,121	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DA	3026	1/1	0.71	0.98	244,244,244,244	0
53	MG	CA	1607	1/1	0.71	0.26	154,154,154,154	0
53	MG	CA	1601	1/1	0.71	0.12	179,179,179,179	0
53	MG	BB	201	1/1	0.71	0.32	236,236,236,236	0
53	MG	AA	1634	1/1	0.72	0.15	199,199,199,199	0
53	MG	DA	3125	1/1	0.72	0.31	163,163,163,163	0
53	MG	CA	1637	1/1	0.72	0.13	63,63,63,63	0
53	MG	DA	3007	1/1	0.72	0.45	253,253,253,253	0
53	MG	DA	3027	1/1	0.73	0.10	144,144,144,144	0
53	MG	DA	3063	1/1	0.73	2.07	192,192,192,192	0
53	MG	AA	1618	1/1	0.74	0.09	164,164,164,164	0
53	MG	DA	3050	1/1	0.74	0.13	125,125,125,125	0
53	MG	CA	1629	1/1	0.74	0.20	217,217,217,217	0
53	MG	DA	3032	1/1	0.74	0.14	100,100,100,100	0
53	MG	CA	1610	1/1	0.74	0.09	175,175,175,175	0
53	MG	DA	3095	1/1	0.74	0.21	116,116,116,116	0
53	MG	CA	1617	1/1	0.75	0.17	280,280,280,280	0
53	MG	DA	3009	1/1	0.76	0.17	101,101,101,101	0
53	MG	DA	3001	1/1	0.76	0.12	130,130,130,130	0
53	MG	BA	3057	1/1	0.76	0.23	161,161,161,161	0
53	MG	BA	3048	1/1	0.76	0.18	104,104,104,104	0
53	MG	BA	3132	1/1	0.76	0.23	165,165,165,165	0
53	MG	DA	3122	1/1	0.77	0.11	72,72,72,72	0
53	MG	DA	3073	1/1	0.78	0.11	162,162,162,162	0
53	MG	DA	3049	1/1	0.78	0.32	235,235,235,235	0
53	MG	DA	3051	1/1	0.78	0.21	124,124,124,124	0
53	MG	DA	3036	1/1	0.79	0.16	211,211,211,211	0
53	MG	DA	3116	1/1	0.79	0.18	66,66,66,66	0
53	MG	AA	1638	1/1	0.79	0.12	102,102,102,102	0
53	MG	DA	3008	1/1	0.80	0.14	142,142,142,142	0
53	MG	BA	3083	1/1	0.80	0.20	113,113,113,113	0
53	MG	AA	1619	1/1	0.80	0.15	125,125,125,125	0
53	MG	DB	201	1/1	0.80	0.09	114,114,114,114	0
53	MG	DA	3057	1/1	0.80	0.50	212,212,212,212	0
53	MG	CA	1603	1/1	0.80	0.32	165,165,165,165	0
53	MG	CA	1618	1/1	0.80	0.31	139,139,139,139	0
53	MG	DA	3114	1/1	0.81	0.16	123,123,123,123	0
53	MG	DA	3070	1/1	0.81	0.11	56,56,56,56	0
53	MG	DA	3108	1/1	0.81	0.41	172,172,172,172	0
53	MG	AA	1607	1/1	0.81	0.15	119,119,119,119	0
53	MG	DA	3079	1/1	0.81	0.63	150,150,150,150	0
53	MG	AA	1604	1/1	0.82	0.14	120,120,120,120	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DA	3098	1/1	0.82	0.15	118,118,118,118	0
53	MG	DA	3022	1/1	0.82	0.27	162,162,162,162	0
53	MG	CA	1632	1/1	0.82	0.16	163,163,163,163	0
53	MG	AA	1617	1/1	0.82	0.68	203,203,203,203	0
53	MG	DA	3023	1/1	0.82	0.12	78,78,78,78	0
53	MG	BA	3091	1/1	0.82	0.26	113,113,113,113	0
53	MG	DA	3042	1/1	0.83	0.17	94,94,94,94	0
53	MG	DA	3120	1/1	0.83	0.23	76,76,76,76	0
53	MG	DA	3075	1/1	0.83	0.39	140,140,140,140	0
53	MG	CA	1633	1/1	0.83	0.10	77,77,77,77	0
53	MG	CA	1613	1/1	0.83	0.11	114,114,114,114	0
53	MG	DA	3115	1/1	0.83	0.25	139,139,139,139	0
53	MG	DA	3094	1/1	0.83	0.09	96,96,96,96	0
53	MG	DA	3101	1/1	0.84	0.21	104,104,104,104	0
53	MG	AA	1628	1/1	0.84	0.18	183,183,183,183	0
53	MG	CA	1639	1/1	0.84	0.10	226,226,226,226	0
53	MG	DA	3061	1/1	0.84	0.11	134,134,134,134	0
53	MG	CA	1630	1/1	0.84	0.09	123,123,123,123	0
53	MG	BA	3011	1/1	0.84	0.30	131,131,131,131	0
53	MG	DA	3017	1/1	0.84	0.13	68,68,68,68	0
53	MG	BA	3112	1/1	0.84	0.28	89,89,89,89	0
53	MG	BA	3090	1/1	0.85	0.07	73,73,73,73	0
53	MG	BA	3061	1/1	0.85	0.28	223,223,223,223	0
53	MG	DA	3035	1/1	0.86	0.17	84,84,84,84	0
53	MG	BA	3002	1/1	0.86	0.11	77,77,77,77	0
53	MG	BA	3084	1/1	0.86	0.20	50,50,50,50	0
53	MG	BA	3004	1/1	0.86	0.24	147,147,147,147	0
53	MG	DA	3131	1/1	0.86	0.16	70,70,70,70	0
53	MG	CA	1612	1/1	0.86	0.39	120,120,120,120	0
53	MG	DA	3126	1/1	0.86	0.10	76,76,76,76	0
53	MG	DA	3053	1/1	0.86	0.12	80,80,80,80	0
53	MG	DA	3088	1/1	0.86	0.14	141,141,141,141	0
53	MG	DA	3123	1/1	0.86	0.20	165,165,165,165	0
53	MG	DA	3089	1/1	0.86	0.24	69,69,69,69	0
53	MG	DA	3029	1/1	0.86	0.47	151,151,151,151	0
53	MG	CA	1631	1/1	0.86	0.22	88,88,88,88	0
53	MG	BA	3082	1/1	0.86	0.19	85,85,85,85	0
53	MG	DA	3104	1/1	0.86	0.17	34,34,34,34	0
53	MG	DA	3011	1/1	0.87	0.17	152,152,152,152	0
53	MG	AA	1610	1/1	0.87	0.12	210,210,210,210	0
53	MG	CA	1616	1/1	0.87	0.35	232,232,232,232	0
53	MG	DA	3072	1/1	0.87	0.14	132,132,132,132	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DA	3069	1/1	0.87	0.19	202,202,202,202	0
53	MG	BA	3059	1/1	0.87	0.22	109,109,109,109	0
53	MG	BA	3098	1/1	0.87	0.16	51,51,51,51	0
53	MG	BA	3007	1/1	0.87	0.10	69,69,69,69	0
53	MG	BA	3119	1/1	0.88	0.11	12,12,12,12	0
53	MG	DA	3005	1/1	0.88	1.07	309,309,309,309	0
53	MG	DA	3024	1/1	0.88	0.15	106,106,106,106	0
53	MG	DA	3086	1/1	0.88	0.16	94,94,94,94	0
53	MG	DA	3004	1/1	0.88	0.12	80,80,80,80	0
53	MG	DC	301	1/1	0.88	0.12	124,124,124,124	0
53	MG	CA	1638	1/1	0.88	0.15	139,139,139,139	0
53	MG	BA	3075	1/1	0.88	0.19	69,69,69,69	0
53	MG	CA	1611	1/1	0.88	0.20	122,122,122,122	0
53	MG	CA	1623	1/1	0.88	0.13	120,120,120,120	0
53	MG	DA	3054	1/1	0.88	0.08	71,71,71,71	0
53	MG	BA	3086	1/1	0.88	0.18	88,88,88,88	0
53	MG	AA	1616	1/1	0.88	0.16	78,78,78,78	0
53	MG	BA	3033	1/1	0.88	0.16	10,10,10,10	0
53	MG	DA	3025	1/1	0.88	0.12	110,110,110,110	0
53	MG	DC	302	1/1	0.88	0.27	121,121,121,121	0
53	MG	BA	3125	1/1	0.89	0.18	41,41,41,41	0
53	MG	AA	1626	1/1	0.89	0.18	106,106,106,106	0
53	MG	DA	3071	1/1	0.89	0.19	52,52,52,52	0
53	MG	BA	3073	1/1	0.89	0.18	135,135,135,135	0
53	MG	BA	3089	1/1	0.89	0.09	30,30,30,30	0
53	MG	DA	3096	1/1	0.89	0.09	92,92,92,92	0
53	MG	BA	3055	1/1	0.89	0.32	191,191,191,191	0
53	MG	CA	1608	1/1	0.89	0.15	51,51,51,51	0
53	MG	DA	3118	1/1	0.89	0.12	70,70,70,70	0
53	MG	CA	1619	1/1	0.89	0.15	201,201,201,201	0
53	MG	DA	3076	1/1	0.89	0.28	158,158,158,158	0
53	MG	CA	1625	1/1	0.89	0.30	91,91,91,91	0
53	MG	BA	3092	1/1	0.89	0.07	38,38,38,38	0
53	MG	BA	3087	1/1	0.89	0.17	125,125,125,125	0
53	MG	AA	1630	1/1	0.89	0.14	87,87,87,87	0
53	MG	DA	3068	1/1	0.89	0.11	78,78,78,78	0
53	MG	DA	3031	1/1	0.90	0.10	79,79,79,79	0
53	MG	DA	3046	1/1	0.90	0.10	76,76,76,76	0
53	MG	AA	1622	1/1	0.90	0.13	97,97,97,97	0
53	MG	BA	3060	1/1	0.90	0.48	174,174,174,174	0
53	MG	DA	3129	1/1	0.90	0.73	203,203,203,203	0
53	MG	AA	1635	1/1	0.90	0.10	88,88,88,88	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	AA	1633	1/1	0.90	0.08	75,75,75,75	0
53	MG	AA	1602	1/1	0.90	0.12	119,119,119,119	0
53	MG	DA	3060	1/1	0.90	0.50	161,161,161,161	0
53	MG	AA	1639	1/1	0.90	0.15	126,126,126,126	0
53	MG	DA	3090	1/1	0.90	0.10	91,91,91,91	0
53	MG	DA	3085	1/1	0.90	0.29	148,148,148,148	0
53	MG	DA	3091	1/1	0.91	0.38	200,200,200,200	0
53	MG	DA	3103	1/1	0.91	0.16	98,98,98,98	0
53	MG	BA	3028	1/1	0.91	0.11	32,32,32,32	0
53	MG	DA	3080	1/1	0.91	0.15	137,137,137,137	0
53	MG	DA	3065	1/1	0.91	0.22	83,83,83,83	0
53	MG	AA	1603	1/1	0.91	0.17	121,121,121,121	0
53	MG	DA	3040	1/1	0.91	0.17	52,52,52,52	0
53	MG	DA	3093	1/1	0.91	0.16	228,228,228,228	0
53	MG	DA	3112	1/1	0.91	0.14	66,66,66,66	0
53	MG	BA	3078	1/1	0.91	0.08	41,41,41,41	0
53	MG	CA	1624	1/1	0.91	0.69	179,179,179,179	0
53	MG	CA	1615	1/1	0.91	0.09	124,124,124,124	0
53	MG	AA	1612	1/1	0.91	0.20	104,104,104,104	0
53	MG	AA	1614	1/1	0.91	0.14	197,197,197,197	0
53	MG	DA	3034	1/1	0.91	0.09	89,89,89,89	0
53	MG	BA	3069	1/1	0.91	0.10	176,176,176,176	0
53	MG	DA	3119	1/1	0.91	0.14	88,88,88,88	0
53	MG	DA	3037	1/1	0.91	0.14	81,81,81,81	0
53	MG	BA	3115	1/1	0.91	0.15	10,10,10,10	0
53	MG	AA	1606	1/1	0.91	0.11	58,58,58,58	0
53	MG	CA	1641	1/1	0.92	0.14	80,80,80,80	0
53	MG	BA	3114	1/1	0.92	0.16	144,144,144,144	0
53	MG	CA	1626	1/1	0.92	0.26	29,29,29,29	0
53	MG	DA	3030	1/1	0.92	0.17	111,111,111,111	0
53	MG	BA	3062	1/1	0.92	0.15	15,15,15,15	0
53	MG	DA	3044	1/1	0.92	0.17	83,83,83,83	0
53	MG	BA	3131	1/1	0.92	0.11	140,140,140,140	0
53	MG	DA	3048	1/1	0.92	0.18	132,132,132,132	0
53	MG	BA	3025	1/1	0.92	0.46	119,119,119,119	0
53	MG	CA	1609	1/1	0.92	0.20	80,80,80,80	0
53	MG	BA	3123	1/1	0.92	0.45	118,118,118,118	0
53	MG	AA	1636	1/1	0.92	0.08	25,25,25,25	0
53	MG	AA	1623	1/1	0.92	0.09	72,72,72,72	0
53	MG	BA	3001	1/1	0.92	0.14	110,110,110,110	0
53	MG	DA	3100	1/1	0.92	0.19	93,93,93,93	0
53	MG	BB	202	1/1	0.93	0.07	43,43,43,43	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DA	3107	1/1	0.93	0.18	121,121,121,121	0
53	MG	BA	3034	1/1	0.93	0.30	154,154,154,154	0
53	MG	BA	3079	1/1	0.93	0.18	30,30,30,30	0
53	MG	AN	202	1/1	0.93	0.15	169,169,169,169	0
53	MG	BB	203	1/1	0.93	0.12	17,17,17,17	0
53	MG	DA	3052	1/1	0.93	0.10	49,49,49,49	0
55	ZN	D4	101	1/1	0.93	0.09	151,151,151,151	0
53	MG	CA	1634	1/1	0.93	0.12	153,153,153,153	0
53	MG	DA	3128	1/1	0.93	0.24	123,123,123,123	0
53	MG	DA	3121	1/1	0.93	0.23	119,119,119,119	0
53	MG	BA	3122	1/1	0.93	0.11	21,21,21,21	0
53	MG	DA	3012	1/1	0.93	0.09	51,51,51,51	0
53	MG	CA	1606	1/1	0.93	0.14	63,63,63,63	0
53	MG	AA	1629	1/1	0.93	0.07	183,183,183,183	0
53	MG	BA	3134	1/1	0.93	0.22	143,143,143,143	0
53	MG	BA	3042	1/1	0.93	0.14	18,18,18,18	0
53	MG	BA	3099	1/1	0.93	0.10	18,18,18,18	0
53	MG	DA	3041	1/1	0.94	0.13	122,122,122,122	0
53	MG	DA	3113	1/1	0.94	0.07	96,96,96,96	0
53	MG	BA	3117	1/1	0.94	0.08	83,83,83,83	0
53	MG	DA	3056	1/1	0.94	0.13	112,112,112,112	0
53	MG	DA	3105	1/1	0.94	0.14	51,51,51,51	0
53	MG	BA	3052	1/1	0.94	0.12	25,25,25,25	0
53	MG	BA	3014	1/1	0.94	0.21	42,42,42,42	0
53	MG	AA	1615	1/1	0.94	0.05	128,128,128,128	0
53	MG	BA	3103	1/1	0.94	0.20	7,7,7,7	0
53	MG	BA	3015	1/1	0.94	0.13	38,38,38,38	0
53	MG	AA	1609	1/1	0.94	0.06	28,28,28,28	0
53	MG	BA	3003	1/1	0.94	0.12	42,42,42,42	0
53	MG	BA	3036	1/1	0.94	0.39	169,169,169,169	0
53	MG	BA	3110	1/1	0.94	0.20	102,102,102,102	0
53	MG	DA	3117	1/1	0.94	0.17	71,71,71,71	0
53	MG	CA	1621	1/1	0.94	0.21	55,55,55,55	0
53	MG	DA	3019	1/1	0.94	0.20	224,224,224,224	0
53	MG	DA	3077	1/1	0.95	0.26	114,114,114,114	0
53	MG	BA	3076	1/1	0.95	0.06	32,32,32,32	0
53	MG	AA	1637	1/1	0.95	0.09	104,104,104,104	0
53	MG	BA	3100	1/1	0.95	0.21	24,24,24,24	0
53	MG	BA	3070	1/1	0.95	0.24	134,134,134,134	0
53	MG	AA	1605	1/1	0.95	0.16	35,35,35,35	0
53	MG	BA	3108	1/1	0.95	0.18	8,8,8,8	0
53	MG	BA	3018	1/1	0.95	0.16	40,40,40,40	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	DA	3102	1/1	0.95	0.06	62,62,62,62	0
53	MG	AA	1625	1/1	0.95	0.31	121,121,121,121	0
53	MG	BA	3097	1/1	0.95	0.14	80,80,80,80	0
53	MG	AA	1613	1/1	0.95	0.08	57,57,57,57	0
53	MG	DA	3055	1/1	0.95	0.10	84,84,84,84	0
53	MG	BA	3101	1/1	0.95	0.13	64,64,64,64	0
53	MG	BA	3005	1/1	0.95	0.10	93,93,93,93	0
53	MG	CA	1605	1/1	0.95	0.21	40,40,40,40	0
53	MG	BA	3104	1/1	0.95	0.19	12,12,12,12	0
53	MG	BA	3009	1/1	0.95	0.13	13,13,13,13	0
53	MG	BA	3120	1/1	0.95	0.10	53,53,53,53	0
53	MG	BA	3010	1/1	0.95	0.08	19,19,19,19	0
53	MG	BA	3102	1/1	0.95	0.13	23,23,23,23	0
53	MG	BA	3118	1/1	0.95	0.37	168,168,168,168	0
53	MG	AA	1627	1/1	0.95	0.06	78,78,78,78	0
53	MG	BA	3050	1/1	0.95	0.12	37,37,37,37	0
53	MG	BA	3031	1/1	0.95	0.09	34,34,34,34	0
53	MG	AA	1621	1/1	0.95	0.14	91,91,91,91	0
53	MG	AA	1611	1/1	0.96	0.06	54,54,54,54	0
53	MG	BA	3046	1/1	0.96	0.15	16,16,16,16	0
53	MG	DA	3021	1/1	0.96	0.19	41,41,41,41	0
53	MG	BA	3135	1/1	0.96	0.44	196,196,196,196	0
53	MG	BA	3040	1/1	0.96	0.21	8,8,8,8	0
53	MG	BA	3021	1/1	0.96	0.08	43,43,43,43	0
53	MG	BA	3066	1/1	0.96	0.15	11,11,11,11	0
53	MG	BA	3016	1/1	0.96	0.13	7,7,7,7	0
53	MG	BA	3019	1/1	0.96	0.31	10,10,10,10	0
53	MG	BA	3067	1/1	0.96	0.12	10,10,10,10	0
53	MG	BA	3071	1/1	0.96	0.15	112,112,112,112	0
53	MG	AA	1601	1/1	0.96	0.13	78,78,78,78	0
53	MG	BA	3093	1/1	0.96	0.07	45,45,45,45	0
53	MG	BA	3096	1/1	0.96	0.11	45,45,45,45	0
53	MG	BA	3023	1/1	0.96	0.10	7,7,7,7	0
53	MG	AA	1608	1/1	0.96	0.15	32,32,32,32	0
53	MG	BA	3080	1/1	0.96	0.13	11,11,11,11	0
53	MG	BA	3106	1/1	0.96	0.15	25,25,25,25	0
53	MG	AN	201	1/1	0.96	0.07	105,105,105,105	0
53	MG	BA	3133	1/1	0.96	0.18	10,10,10,10	0
53	MG	BA	3113	1/1	0.96	0.09	21,21,21,21	0
53	MG	DA	3124	1/1	0.96	0.12	48,48,48,48	0
54	ERY	BA	3136	51/51	0.96	0.23	5,11,15,16	0
53	MG	BA	3128	1/1	0.96	0.17	7,7,7,7	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	BA	3121	1/1	0.96	0.18	10,10,10,10	0
53	MG	BA	3049	1/1	0.96	0.16	11,11,11,11	0
53	MG	CA	1604	1/1	0.96	0.07	60,60,60,60	0
53	MG	BA	3111	1/1	0.96	0.16	74,74,74,74	0
53	MG	BA	3058	1/1	0.97	0.07	35,35,35,35	0
53	MG	BA	3038	1/1	0.97	0.13	7,7,7,7	0
53	MG	CA	1642	1/1	0.97	0.05	58,58,58,58	0
53	MG	AA	1631	1/1	0.97	0.13	69,69,69,69	0
53	MG	BA	3077	1/1	0.97	0.15	121,121,121,121	0
53	MG	BA	3027	1/1	0.97	0.19	109,109,109,109	0
53	MG	BA	3022	1/1	0.97	0.14	9,9,9,9	0
53	MG	BA	3043	1/1	0.97	0.12	29,29,29,29	0
53	MG	BA	3116	1/1	0.97	0.07	17,17,17,17	0
53	MG	BA	3008	1/1	0.97	0.14	13,13,13,13	0
53	MG	BA	3127	1/1	0.97	0.15	15,15,15,15	0
53	MG	BA	3064	1/1	0.97	0.10	6,6,6,6	0
53	MG	AA	1641	1/1	0.97	0.12	39,39,39,39	0
53	MG	BA	3072	1/1	0.97	0.12	10,10,10,10	0
53	MG	BA	3012	1/1	0.97	0.15	6,6,6,6	0
53	MG	DA	3066	1/1	0.97	0.08	48,48,48,48	0
53	MG	DA	3081	1/1	0.97	0.10	92,92,92,92	0
53	MG	BA	3065	1/1	0.97	0.09	7,7,7,7	0
53	MG	BA	3056	1/1	0.97	0.24	233,233,233,233	0
53	MG	BA	3035	1/1	0.97	0.12	11,11,11,11	0
53	MG	BA	3017	1/1	0.97	0.09	30,30,30,30	0
53	MG	AA	1620	1/1	0.97	0.19	28,28,28,28	0
53	MG	BA	3129	1/1	0.97	0.12	14,14,14,14	0
53	MG	AA	1624	1/1	0.97	0.24	31,31,31,31	0
53	MG	CA	1635	1/1	0.97	0.08	85,85,85,85	0
53	MG	DA	3067	1/1	0.97	0.10	38,38,38,38	0
53	MG	BB	204	1/1	0.97	0.09	20,20,20,20	0
53	MG	BA	3041	1/1	0.98	0.19	13,13,13,13	0
53	MG	BA	3095	1/1	0.98	0.10	22,22,22,22	0
53	MG	BA	3054	1/1	0.98	0.10	25,25,25,25	0
53	MG	BA	3074	1/1	0.98	0.15	18,18,18,18	0
53	MG	BA	3024	1/1	0.98	0.11	17,17,17,17	0
53	MG	BA	3006	1/1	0.98	0.06	31,31,31,31	0
53	MG	AA	1640	1/1	0.98	0.18	17,17,17,17	0
53	MG	BA	3030	1/1	0.98	0.22	15,15,15,15	0
53	MG	BA	3088	1/1	0.98	0.05	11,11,11,11	0
53	MG	BA	3124	1/1	0.98	0.15	16,16,16,16	0
53	MG	BA	3020	1/1	0.98	0.15	35,35,35,35	0

Continued on next page...

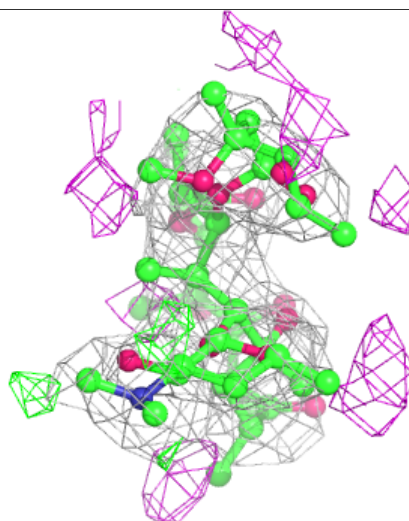
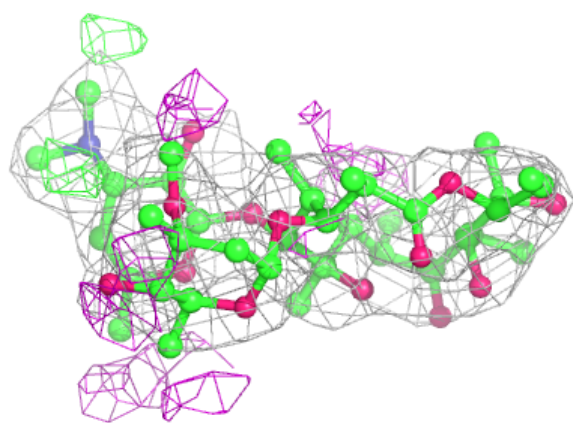
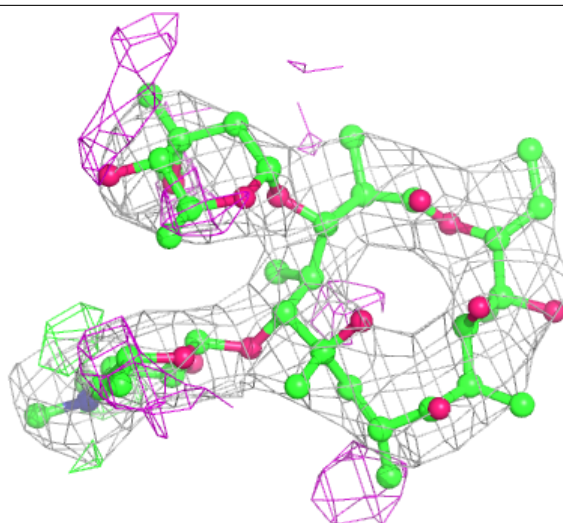
Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
53	MG	BA	3029	1/1	0.98	0.09	66,66,66,66	0
53	MG	BA	3107	1/1	0.98	0.17	8,8,8,8	0
53	MG	BA	3105	1/1	0.98	0.14	9,9,9,9	0
53	MG	BA	3026	1/1	0.98	0.07	19,19,19,19	0
53	MG	BA	3037	1/1	0.98	0.13	17,17,17,17	0
53	MG	BA	3109	1/1	0.98	0.06	57,57,57,57	0
53	MG	BA	3081	1/1	0.98	0.08	39,39,39,39	0
53	MG	BA	3032	1/1	0.98	0.13	16,16,16,16	0
53	MG	BA	3094	1/1	0.98	0.09	24,24,24,24	0
53	MG	BA	3085	1/1	0.98	0.13	6,6,6,6	0
53	MG	BA	3068	1/1	0.99	0.10	20,20,20,20	0
53	MG	BA	3044	1/1	0.99	0.22	14,14,14,14	0
55	ZN	B4	101	1/1	0.99	0.10	84,84,84,84	0
53	MG	AA	1632	1/1	0.99	0.11	31,31,31,31	0
53	MG	BA	3126	1/1	0.99	0.11	18,18,18,18	0
53	MG	BA	3039	1/1	0.99	0.17	20,20,20,20	0
53	MG	BA	3051	1/1	0.99	0.12	10,10,10,10	0
53	MG	BA	3053	1/1	0.99	0.09	9,9,9,9	0
53	MG	BA	3063	1/1	0.99	0.18	13,13,13,13	0
53	MG	BA	3045	1/1	0.99	0.13	17,17,17,17	0
53	MG	BA	3013	1/1	0.99	0.17	9,9,9,9	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around ERY BA 3136:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



6.5 Other polymers [i](#)

There are no such residues in this entry.