



# Full wwPDB X-ray Structure Validation Report

Jun 16, 2014 – 06:05 PM BST

PDB ID : 4V57  
Title : Crystal structure of the bacterial ribosome from Escherichia coli in complex with spectinomycin and neomycin.  
Authors : Borovinskaya, M.A.; Shoji, S.; Holton, J.M.; Fredrick, K.; Cate, J.H.D.  
Deposited on : 2007-07-21  
Resolution : 3.50 Å(reported)

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

---

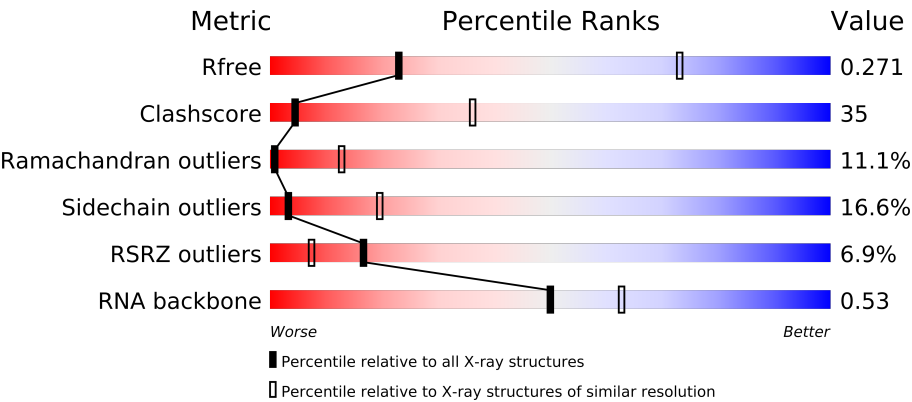
The following versions of software and data (see [references](#)) were used in the production of this report:

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

# 1 Overall quality at a glance i

The reported resolution of this entry is 3.50 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R <sub>free</sub>	66092	1243 (3.70-3.30)
Clashscore	79885	1039 (3.66-3.34)
Ramachandran outliers	78287	1000 (3.66-3.34)
Sidechain outliers	78261	1000 (3.66-3.34)
RSRZ outliers	66119	1243 (3.70-3.30)
RNA backbone	1838	1007 (4.22-2.76)

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

Mol	Chain	Length	Quality of chain
1	AA	1542	<div><div></div><div></div></div>
1	CA	1542	<div><div></div><div></div></div>
2	AC	232	<div><div></div><div></div></div>
2	CC	232	<div><div></div><div></div></div>
3	AD	205	<div><div></div><div></div></div>
3	CD	205	<div><div></div><div></div></div>
4	AE	166	<div><div></div><div></div></div>
4	CE	166	<div><div></div><div></div></div>
5	AF	135	<div><div></div><div></div></div>
5	CF	135	<div><div></div><div></div></div>
6	AG	178	<div><div></div><div></div></div>
6	CG	178	<div><div></div><div></div></div>

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
7	AH	129	
7	CH	129	
8	AI	129	
8	CI	129	
9	AJ	103	
9	CJ	103	
10	AK	128	
10	CK	128	
11	AL	123	
11	CL	123	
12	AM	117	
12	CM	117	
13	AP	82	
13	CP	82	
14	AQ	83	
14	CQ	83	
15	AR	74	
15	CR	74	
16	AS	91	
16	CS	91	
17	AT	86	
17	CT	86	
18	AB	240	
18	CB	240	
19	AU	70	
19	CU	70	
20	AO	89	
20	CO	89	
21	AN	100	
21	CN	100	
22	BA	120	
22	DA	120	
23	BB	2904	
23	DB	2904	
24	BI	141	
24	DI	141	
25	BC	272	
25	DC	272	
26	BD	209	
26	DD	209	
27	BK	123	
27	DK	123	

Continued on next page...

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
28	BP	114	
28	DP	114	
29	BE	201	
29	DE	201	
30	BY	58	
30	DY	58	
31	B0	56	
31	D0	56	
32	B4	38	
32	D4	38	
33	B1	54	
33	D1	54	
34	B3	64	
34	D3	64	
35	BV	94	
35	DV	94	
36	B2	46	
36	D2	46	
37	BL	144	
37	DL	144	
38	BM	136	
38	DM	136	
39	BX	63	
39	DX	63	
40	BH	149	
40	DH	149	
41	BJ	142	
41	DJ	142	
42	BN	127	
42	DN	127	
43	BO	117	
43	DO	117	
44	BQ	117	
44	DQ	117	
45	BS	110	
45	DS	110	
46	BU	103	
46	DU	103	
47	BF	178	
47	DF	178	
48	BG	176	
48	DG	176	

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
49	BR	103	
49	DR	103	
50	BT	100	
50	DT	100	
51	BZ	78	
51	DZ	78	
52	BW	84	
52	DW	84	

The following table lists non-polymeric compounds that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Geometry	Electron density
53	NMY	BB	3001	-	X
53	NMY	CA	1601	-	X
53	NMY	DB	3001	-	X
54	MG	AA	1606	-	X
54	MG	AA	1607	-	X
54	MG	AA	1624	-	X
54	MG	AA	1625	-	X
54	MG	AA	1626	-	X
54	MG	AA	1633	-	X
54	MG	AA	1638	-	X
54	MG	AA	1648	-	X
54	MG	AA	1657	-	X
54	MG	AA	1658	-	X
54	MG	AA	1660	-	X
54	MG	BB	3018	-	X
54	MG	BB	3023	-	X
54	MG	BB	3029	-	X
54	MG	BB	3034	-	X
54	MG	BB	3040	-	X
54	MG	BB	3087	-	X
54	MG	BB	3088	-	X
54	MG	BB	3106	-	X
54	MG	CA	1613	-	X
54	MG	CA	1614	-	X
54	MG	CA	1618	-	X
54	MG	CA	1650	-	X
54	MG	CA	1651	-	X
54	MG	CA	1658	-	X
54	MG	DB	3038	-	X

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Geometry	Electron density
54	MG	DB	3059	-	X
54	MG	DB	3090	-	X
54	MG	DB	3112	-	X

## 2 Entry composition

There are 57 unique types of molecules in this entry. The entry contains 284201 atoms, of which 0 are hydrogen and 0 are deuterium.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	AA	1530	Total	C	N	O	P	0	0	0
			32831	14642	6024	10635	1530			
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 S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AC	206	Total	C	N	O	S	0	0	0
			1624	1028	305	288	3			
2	CC	206	Total	C	N	O	S	0	0	0
			1624	1028	305	288	3			

- Molecule 3 is a protein called 30S ribosomal protein S4.

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

- Molecule 4 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	AE	150	Total	C	N	O	S	0	0	0
			1105	687	211	201	6			
4	CE	150	Total	C	N	O	S	0	0	0
			1105	687	211	201	6			

- Molecule 5 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	AF	100	Total	C	N	O	S	0	0	0
			817	515	148	148	6			
5	CF	100	Total	C	N	O	S	0	0	0
			817	515	148	148	6			

- Molecule 6 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	AG	150	Total	C	N	O	S	0	0	0
			1174	730	226	214	4			
6	CG	152	Total	C	N	O	S	0	0	0
			1196	745	230	217	4			

- Molecule 7 is a protein called 30S ribosomal protein S8.

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

- Molecule 8 is a protein called 30S ribosomal protein S9.

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

- Molecule 9 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	AJ	98	Total	C	N	O	S	0	0	0
			786	493	150	142	1			
9	CJ	98	Total	C	N	O	S	0	0	0
			786	493	150	142	1			

- Molecule 10 is a protein called 30S ribosomal protein S11.

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

*Continued on next page...*



*Continued from previous page...*

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

- Molecule 11 is a protein called 30S ribosomal protein S12.

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

- Molecule 12 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	AM	114	Total	C	N	O	S	0	0	0
			883	546	178	156	3			
12	CM	113	Total	C	N	O	S	0	0	0
			876	541	177	155	3			

- Molecule 13 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AP	82	Total	C	N	O	S	0	0	0
			649	406	128	114	1			
13	CP	80	Total	C	N	O	S	0	0	0
			638	400	126	111	1			

- Molecule 14 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AQ	80	Total	C	N	O	S	0	0	0
			648	411	121	113	3			
14	CQ	81	Total	C	N	O	S	0	0	0
			657	417	122	115	3			

- Molecule 15 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	AR	55	Total	C	N	O	0	0	0
			455	288	86	81			
15	CR	55	Total	C	N	O	0	0	0
			455	288	86	81			

- Molecule 16 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AS	79	Total	C	N	O	S	0	0	0
			637	408	120	107	2			
16	CS	80	Total	C	N	O	S	0	0	0
			644	413	121	108	2			

- Molecule 17 is a protein called 30S ribosomal protein S20.

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

- Molecule 18 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AB	218	Total	C	N	O	S	0	0	0
			1704	1081	305	311	7			
18	CB	218	Total	C	N	O	S	0	0	0
			1704	1081	305	311	7			

- Molecule 19 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AU	51	Total	C	N	O	S	0	0	0
			425	265	86	73	1			
19	CU	51	Total	C	N	O	S	0	0	0
			425	265	86	73	1			

- Molecule 20 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	AO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			
20	CO	88	Total	C	N	O	S	0	0	0
			714	439	144	130	1			

- Molecule 21 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	AN	96	Total	C	N	O	S	0	0	0
			774	483	160	128	3			
21	CN	96	Total	C	N	O	S	0	0	0
			774	483	160	128	3			

- Molecule 22 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	BA	117	Total	C	N	O	P	0	0	0
			2507	1116	459	815	117			
22	DA	117	Total	C	N	O	P	0	0	0
			2507	1116	459	815	117			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BA	120	U	-	INSERTION	GB 85674274
DA	120	U	-	INSERTION	GB 85674274

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	BB	2841	Total	C	N	O	P	0	0	0
			60995	27210	11229	19715	2841			
23	DB	2841	Total	C	N	O	P	0	0	0
			60995	27210	11229	19715	2841			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BB	2903	U	-	INSERTION	GB 85674274
BB	2904	U	-	INSERTION	GB 85674274
DB	2903	U	-	INSERTION	GB 85674274
DB	2904	U	-	INSERTION	GB 85674274

- Molecule 24 is a protein called 50S ribosomal protein L11.

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

- Molecule 25 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	BC	271	Total	C	N	O	S	0	0	0
			2082	1288	423	364	7			
25	DC	271	Total	C	N	O	S	0	0	0
			2082	1288	423	364	7			

- Molecule 26 is a protein called 50S ribosomal protein L3.

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

- Molecule 27 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	BK	121	Total	C	N	O	S	0	0	0
			930	582	179	164	5			
27	DK	121	Total	C	N	O	S	0	0	0
			930	582	179	164	5			

- Molecule 28 is a protein called 50S ribosomal protein L19.

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

- Molecule 29 is a protein called 50S ribosomal protein L4.

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

- Molecule 30 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	BY	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			
30	DY	58	Total	C	N	O	S	0	0	0
			449	281	87	79	2			

- Molecule 31 is a protein called 50S ribosomal protein L32.

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

- Molecule 32 is a protein called 50S ribosomal protein L36.

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

- Molecule 33 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
33	B1	50	Total	C	N	O	0	0	0
			409	263	75	71			
33	D1	50	Total	C	N	O	0	0	0
			409	263	75	71			

- Molecule 34 is a protein called 50S ribosomal protein L35.

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

- Molecule 35 is a protein called 50S ribosomal protein L25.

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

*Continued on next page...*

*Continued from previous page...*

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

- Molecule 36 is a protein called 50S ribosomal protein L34.

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

- Molecule 37 is a protein called 50S ribosomal protein L15.

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

- Molecule 38 is a protein called 50S ribosomal protein L16.

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

- Molecule 39 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	BX	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			
39	DX	63	Total	C	N	O	S	0	0	0
			509	313	99	95	2			

- Molecule 40 is a protein called 50S ribosomal protein L9.

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

- Molecule 41 is a protein called 50S ribosomal protein L13.

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

- Molecule 42 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	BN	120	Total	C	N	O	S	0	0	0
			960	593	196	166	5			
42	DN	120	Total	C	N	O	S	0	0	0
			960	593	196	166	5			

- Molecule 43 is a protein called 50S ribosomal protein L18.

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

- Molecule 44 is a protein called 50S ribosomal protein L20.

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

- Molecule 45 is a protein called 50S ribosomal protein L22.

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

- Molecule 46 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
46	BU	102	Total	C	N	O	0	0	0
			779	492	146	141			
46	DU	102	Total	C	N	O	0	0	0
			779	492	146	141			

- Molecule 47 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	BF	178	Total	C	N	O	S	0	0	0
			1420	905	251	258	6			
47	DF	178	Total	C	N	O	S	0	0	0
			1420	905	251	258	6			

- Molecule 48 is a protein called 50S ribosomal protein L6.

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

- Molecule 49 is a protein called 50S ribosomal protein L21.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	BT	93	Total	C	N	O	S	0	0	0
			738	466	139	131	2			
50	DT	93	Total	C	N	O	S	0	0	0
			738	466	139	131	2			

- Molecule 51 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	BZ	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			

*Continued on next page...*



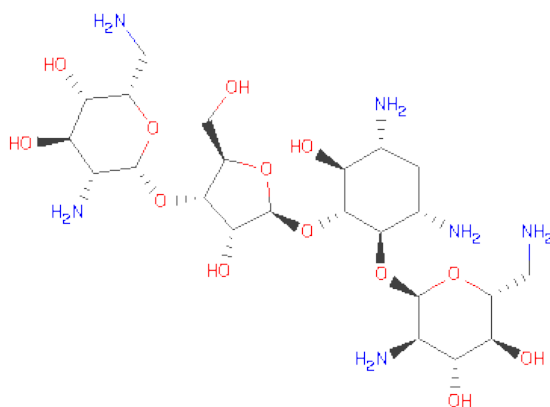
Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	DZ	77	Total	C	N	O	S	0	0	0
			625	388	129	106	2			

- Molecule 52 is a protein called 50S ribosomal protein L27.

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

- Molecule 53 is NEOMYCIN (three-letter code: NMY) (formula:  $C_{23}H_{46}N_6O_{13}$ ).

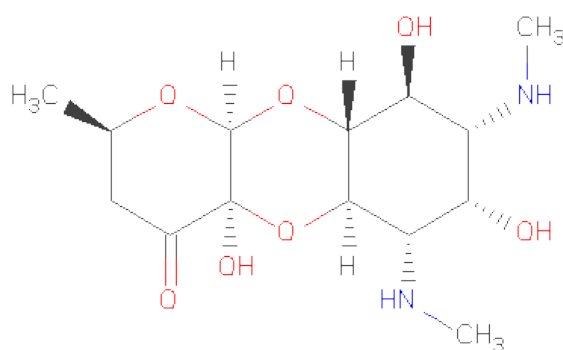


Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
53	AA	1	Total 42	C 23	N 6	O 13	0	0
53	BB	1	Total 42	C 23	N 6	O 13	0	0
53	CA	1	Total 42	C 23	N 6	O 13	0	0
53	DB	1	Total 42	C 23	N 6	O 13	0	0

- Molecule 54 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
54	BB	110	Total	Mg	0	0
			110	110		
54	AA	60	Total	Mg	0	0
			60	60		
54	CA	59	Total	Mg	0	0
			59	59		
54	DB	111	Total	Mg	0	0
			111	111		

- Molecule 55 is SPECTINOMYCIN (three-letter code: SCM) (formula:  $C_{14}H_{24}N_2O_7$ ).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
55	AA	1	Total	C	N	O	0	0
			23	14	2	7		
55	CA	1	Total	C	N	O	0	0
			23	14	2	7		

- Molecule 56 is ZINC ION (three-letter code: ZN) (formula: Zn).

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

- Molecule 57 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
57	AA	290	Total O 290 290	0	0
57	AE	1	Total O 1 1	0	0
57	AK	1	Total O 1 1	0	0
57	AL	4	Total O 4 4	0	0
57	AP	1	Total O 1 1	0	0
57	AT	2	Total O 2 2	0	0
57	AN	1	Total O 1 1	0	0
57	BB	492	Total O 492 492	0	0
57	BC	7	Total O 7 7	0	0
57	BD	1	Total O 1 1	0	0
57	BE	4	Total O 4 4	0	0
57	BL	2	Total O 2 2	0	0
57	BH	1	Total O 1 1	0	0
57	CA	282	Total O 282 282	0	0
57	CE	2	Total O 2 2	0	0
57	CL	4	Total O 4 4	0	0
57	CP	1	Total O 1 1	0	0
57	CT	1	Total O 1 1	0	0
57	CI	1	Total O 1 1	0	0
57	CN	3	Total O 3 3	0	0
57	DB	501	Total O 501 501	0	0
57	DC	4	Total O 4 4	0	0

Continued on next page...

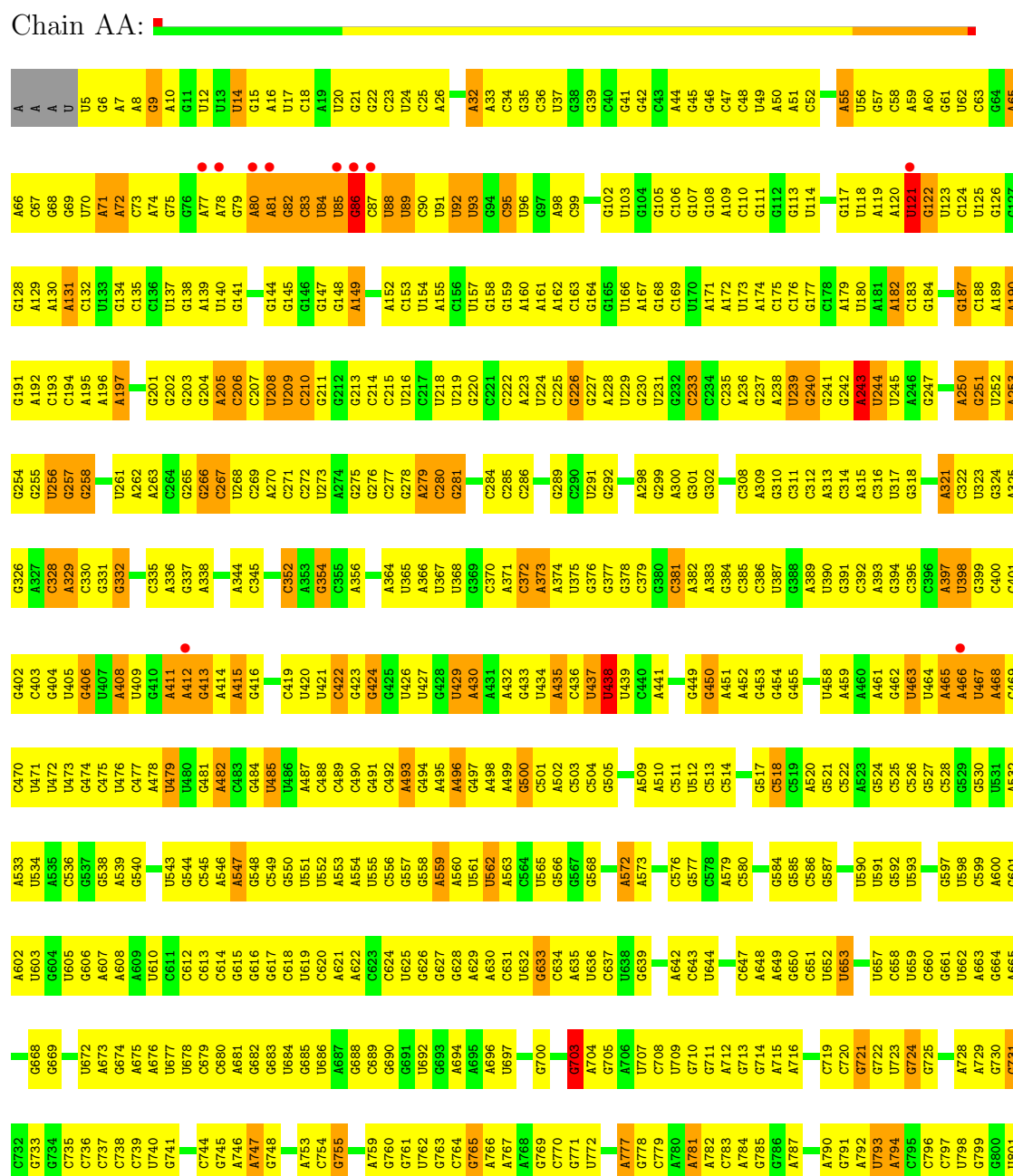
*Continued from previous page...*

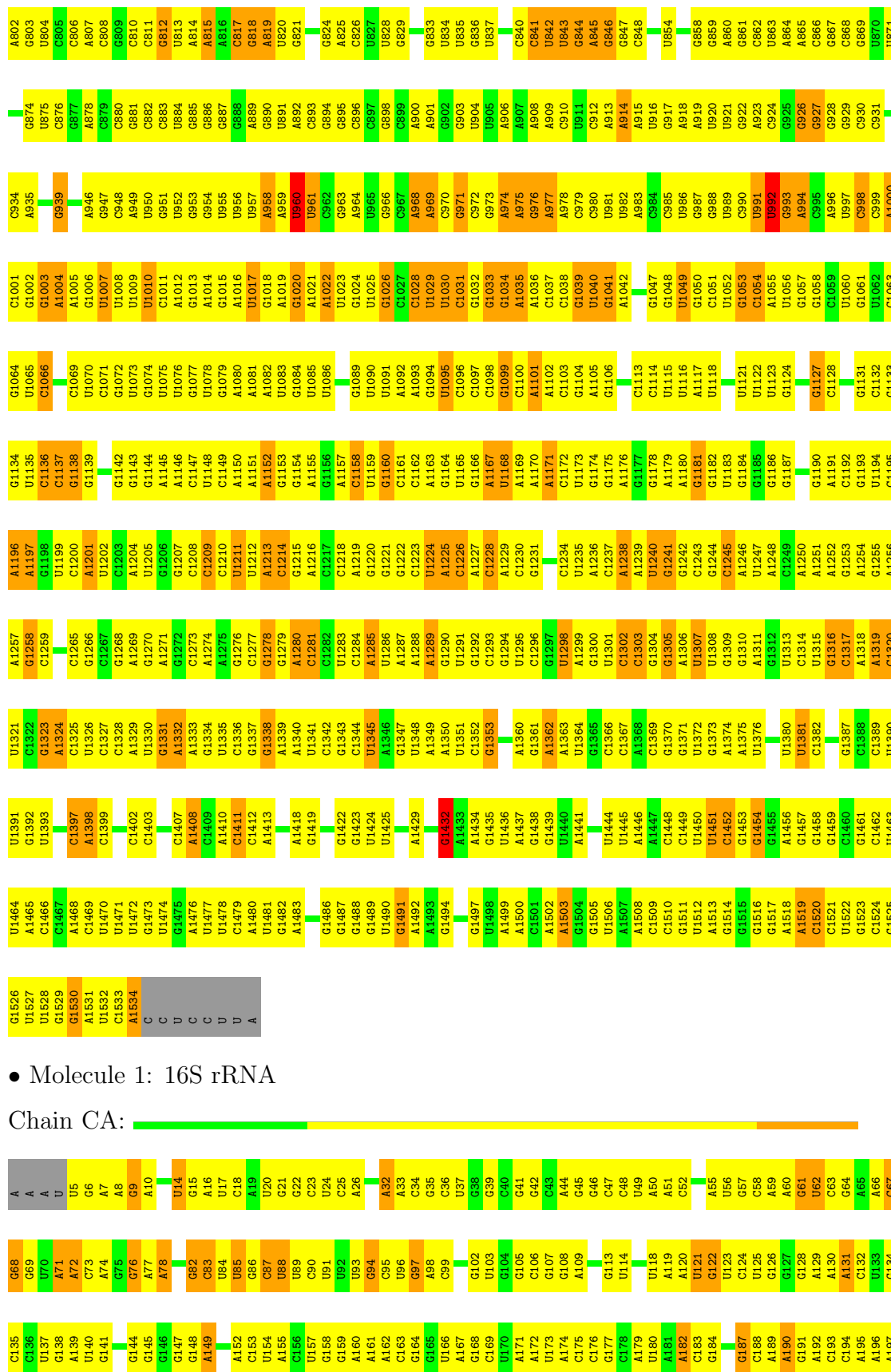
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
57	DD	1	Total	O	0	0
			1	1		
57	DE	2	Total	O	0	0
			2	2		
57	DL	1	Total	O	0	0
			1	1		
57	DN	2	Total	O	0	0
			2	2		
57	DR	1	Total	O	0	0
			1	1		

### 3 Residue-property plots

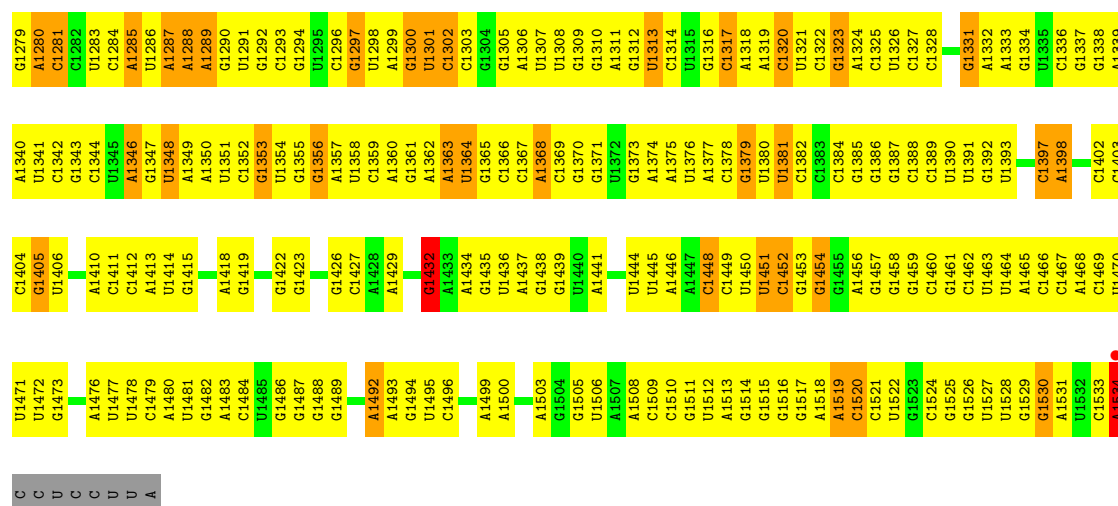
These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according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

#### • Molecule 1: 16S rRNA



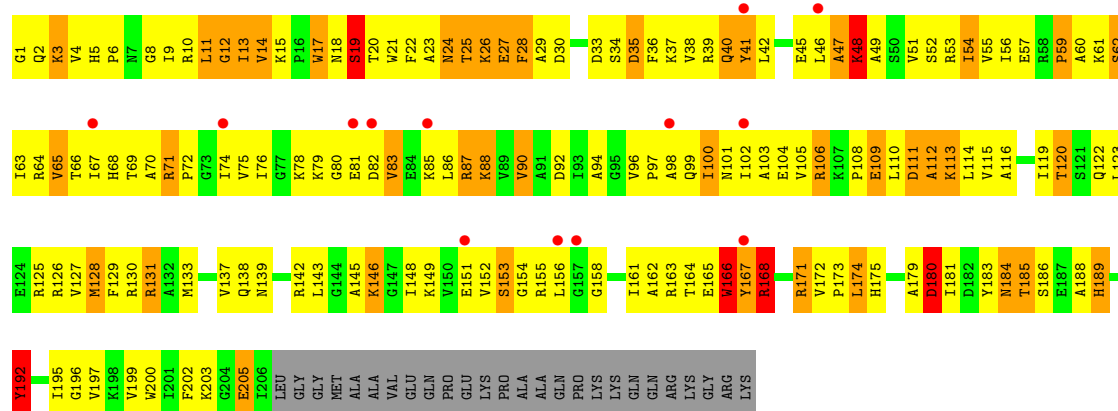


A1216	C1149	U1086	A1022	A959	A889	A816	A746	U678	U610	G544	U479	G410	C335	A262	G200
C1217	A1150	U1090	U1023	U960	G890	C817	A747	C679	C611	C545	U480	A411	C336	A263	G201
C1218	A1151	U1091	G1024	U961	U891	A818	G748	C680	C612	A546	G482	A412	A337	C264	G202
A1219	A1152	U1092	G1025	A964	A892	A819	A749	A681	C613	A547	A482	A413	A338	G265	G203
G1220	G1153	A1093	G1026	U965	C893	G820	C750	G682	C614	G548	C483	A414	A339	G266	G204
G1221	G1094	A1094	C1027	G966	G894	G821	U751	G683	G615	C549	G484	A415	C339	C267	G205
G1222	U1095	U1095	U1028	C967	G895	G824	G755	U684	G616	G550	U485	A416	C340	U268	A205
U1223	C1096	U1029	C1029	A968	C896	A825	G756	G685	G617	U551	U486	U420	C344	C269	C206
U1224	C1096	U1029	C1029	A968	C896	A825	G756	G685	G617	U551	U486	U420	C344	C269	C206
A1225	C1097	U1030	U1030	A969	C897	A826	G757	U686	G618	U552	U487	U421	C345	A270	C207
C1226	C1098	C1031	C1031	C970	C898	U827	G760	A687	A619	A553	C488	U422	C352	C271	U208
C1227	C1099	G1032	G1032	G971	C899	U828	G761	G688	C620	A554	C489	C422	C353	C272	U209
A1228	C1100	G1033	G1033	G972	C900	U829	G762	C689	A621	U555	C490	G423	C354	U273	C210
C1229	A1101	A1036	A1036	G973	G903	G833	G763	G690	C622	C556	C491	G424	C355	G276	G211
A1230	C1102	C1037	C1037	A974	U904	U834	G764	U692	C624	G557	C492	G425	C356	C277	G212
G1231	C1103	C1037	C1037	A975	U905	U835	G765	U693	G625	A558	C493	U426	A356	C278	C214
C1232	A1171	U1040	U1040	G976	A906	U836	A766	A694	G626	A560	A495	U427	A365	A279	C215
C1233	U1041	U1041	U1041	A977	U907	U837	G767	G691	G627	U561	A496	U428	A366	C280	U216
C1234	A1169	G1041	G1041	A978	A908	C840	G769	G700	G628	U562	G497	A430	A367	G281	C217
U1235	A1170	A1042	A1042	C979	A909	C841	C770	U701	A629	A563	A498	A431	U367	U218	U219
A1236	A1171	G1043	G1043	C980	C910	C842	C771	A702	A630	G564	A499	A432	U368	C284	C222
C1237	U1172	U1110	U1110	U981	U911	U842	C772	G703	A631	U565	G500	A433	U369	C285	C223
C1238	U1173	A1111	A1111	U982	C912	U843	C773	A704	C632	U566	C501	U434	C370	C286	U229
A1239	G1174	C1112	C1112	A983	A913	C844	C774	A705	G633	U567	A502	A435	A371	U287	A223
U1240	G1175	U1049	U1049	C984	A914	A845	C775	A706	C634	G568	C503	C436	A372	U288	U224
G1241	A1176	G1050	G1050	C985	C922	C846	C776	U707	A635	A572	C504	U437	A373	C289	C225
C1242	G1177	C1051	C1051	U986	G917	C847	C777	U708	A636	A573	C505	U438	A374	G290	G226
C1243	U1178	U1115	U1115	G987	A918	C848	C778	C709	G637	A574	A509	U439	C378	U291	G227
C1244	U1179	U1116	U1116	U988	A919	C849	C779	U710	G638	A575	A510	A441	C379	G292	A228
G1245	A1180	C1054	C1054	G988	U920	U843	C780	G711	U639	C576	C511	G449	G380	A298	G230
C1246	U1181	U1118	U1118	U989	U921	U844	C781	A712	A642	C577	C512	G450	G381	C299	U231
G1247	G1182	C1119	C1119	C990	G922	A845	C782	A713	C643	A578	C513	G451	G382	A300	G232
U1248	U1183	U1121	U1121	U991	G923	C858	C783	G714	U644	C580	G517	G452	G383	A301	C233
A1248	G1184	C1058	C1058	U992	A924	C859	C784	A715	A647	C581	C518	G453	G384	G302	C234
C1249	U1185	U1122	U1122	A994	G925	C860	C785	A716	C648	C582	C519	G454	G385	A236	C235
A1251	G1186	U1060	U1060	C995	G926	C861	C786	C719	U649	C583	C520	G455	G386	A237	G236
G1252	U1187	G1061	G1061	A996	G927	U864	C787	C720	A648	C584	C521	G456	G387	A309	A238
G1253	A1188	U1126	U1126	U997	G928	C865	C788	G722	U650	C585	G522	U458	G388	G310	U239
A1254	U1189	G1127	C1064	C998	G933	C866	C789	U723	C651	C586	C523	U459	G389	C311	U240
A1255	G1190	U1128	U1128	C999	C934	C867	C790	U724	U652	U590	A524	A460	U390	C312	G241
C1256	A1196	C1132	C1132	U999	A935	C868	C791	G725	U653	U591	G525	A461	G391	A313	G242
G1258	U1197	U1001	U1001	C1000	U936	C869	C792	G726	C654	G592	C526	G462	G392	C314	G243
C1259	G1198	G1002	G1002	C1001	A937	C870	C793	U727	U655	G593	C527	U463	G393	A315	U244
C1260	U1199	U1003	U1003	G1003	A938	U870	C794	A728	G656	U594	G528	U464	G394	U317	U245
C1261	C1200	A1004	A1004	A1004	C940	U871	C795	A729	U657	U595	C529	U465	C395	U318	G246
C1262	U1201	U1005	U1005	U1005	G941	U872	C796	C730	C658	A596	G530	A466	C396	A247	G247
U1264	A1202	G1006	G1006	G1006	A946	U873	C797	G731	U659	A597	G531	A467	U397	A321	A250
C1265	C1203	U1007	U1007	U1007	A947	C874	C798	G732	C660	U598	G532	U468	G398	C322	G251
G1266	U1204	U1008	U1008	G947	C948	C875	C799	G733	G661	C599	A533	A469	C400	U323	U252
C1267	G1206	U1009	U1009	U1009	A949	C876	C800	G734	U662	C600	U534	C470	C401	G324	U253
G1268	G1207	U1010	U1010	U1010	A950	C877	C801	C735	A663	A601	A535	C471	C402	A325	A254
A1269	C1208	A1012	A1012	A1012	G951	C878	C802	C736	U664	G602	U536	C472	A403	G326	G255
C1270	U1209	G1013	G1013	G1013	U952	C879	C803	C737	A665	A603	C536	U473	A404	A327	G256
A1271	C1210	U1014	U1014	A1014	G953	C880	C804	C738	U666	U604	G537	U474	G405	C328	U257
G1272	U1211	G1015	G1015	G1015	G954	C881	C805	C739	U667	G605	G538	G474	U406	A329	G258
C1273	U1212	A1016	A1016	A1016	U955	C882	C806	U740	A672	U606	A539	C475	G407	C330	G259
A1274	C1213	U1017	U1017	U1017	U956	C883	C807	G741	G673	A607	G540	U476	U408	G331	G260
G1275	U1214	C1018	C1018	C1018	U957	C884	C808	C742	G674	G608	G541	C477	A409	G332	G261
G1278	G1215	U1085	U1085	A1019	A958	C885	C809	C743	A675	A609	U543	A478	U409	G333	G262



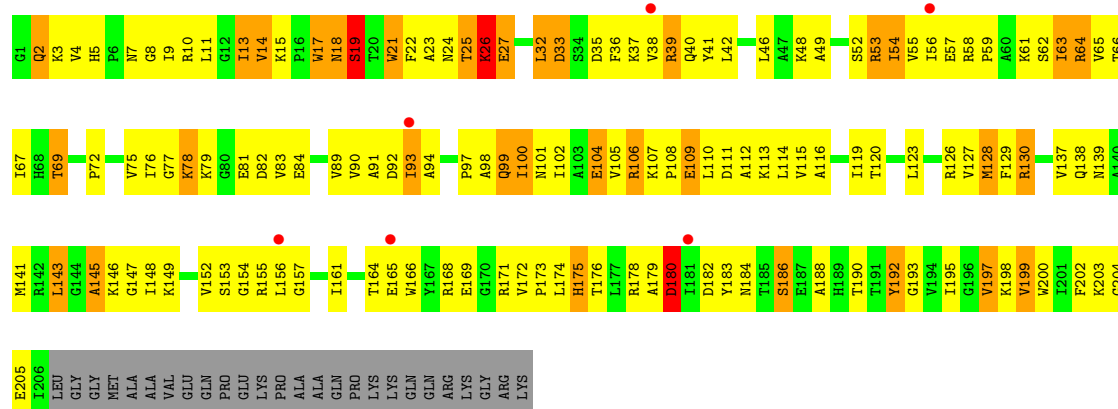
• Molecule 2: 30S ribosomal protein S3

Chain AC:



• Molecule 2: 30S ribosomal protein S3

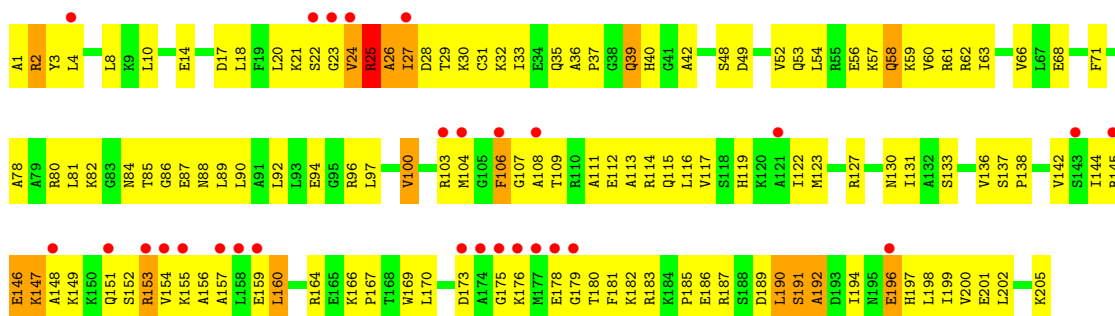
Chain CC:



• Molecule 3: 30S ribosomal protein S4

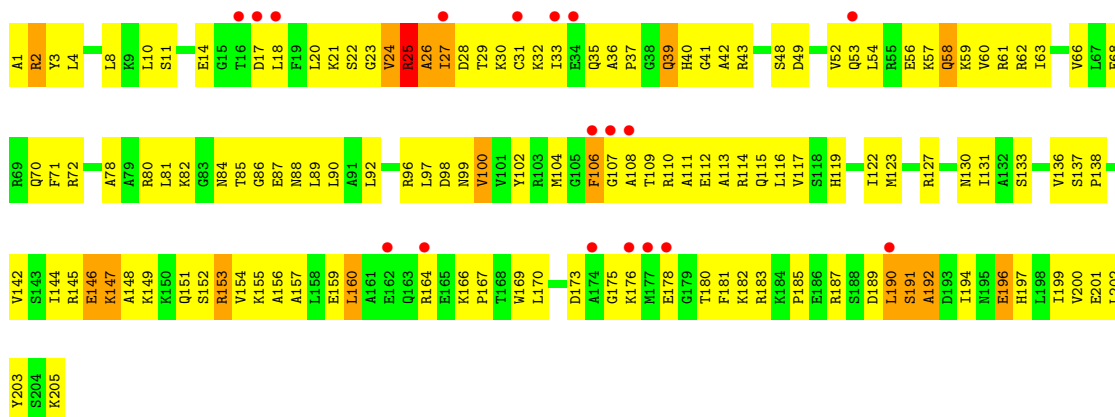
Chain AD:





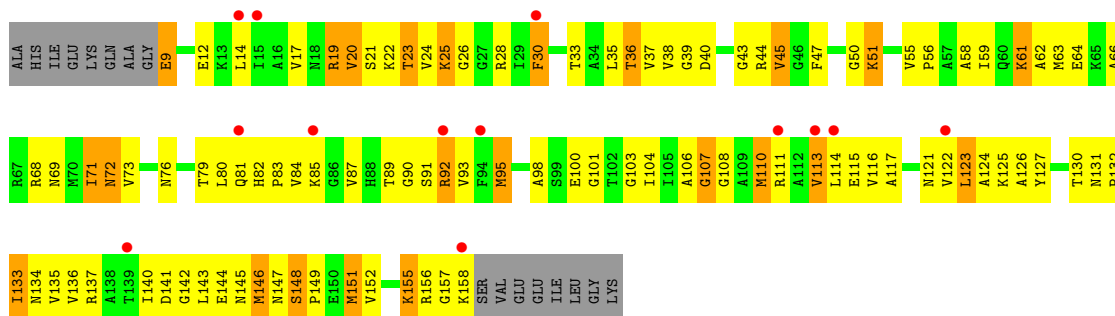
• Molecule 3: 30S ribosomal protein S4

Chain CD:



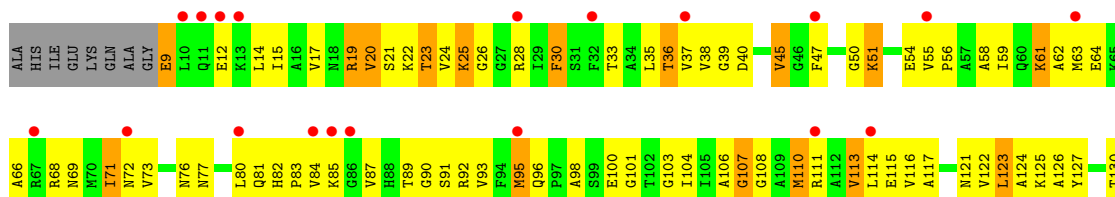
• Molecule 4: 30S ribosomal protein S5

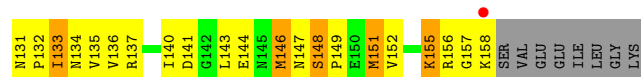
Chain AE:



• Molecule 4: 30S ribosomal protein S5

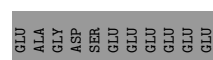
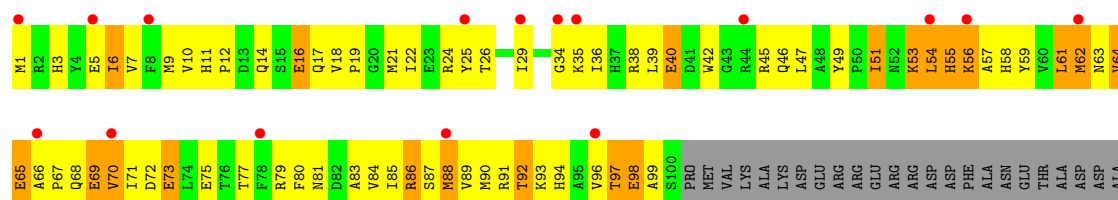
Chain CE:





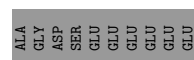
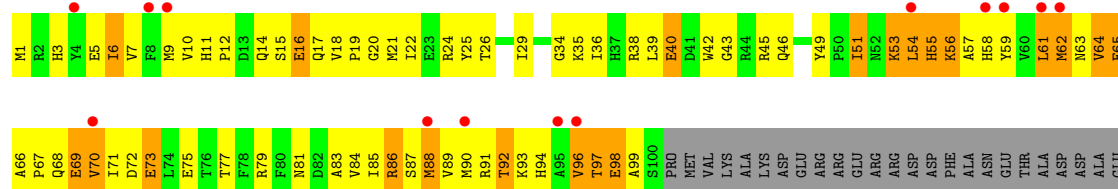
• Molecule 5: 30S ribosomal protein S6

Chain AF:



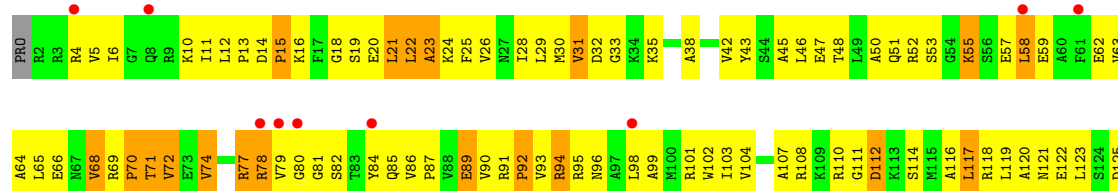
• Molecule 5: 30S ribosomal protein S6

Chain CF:



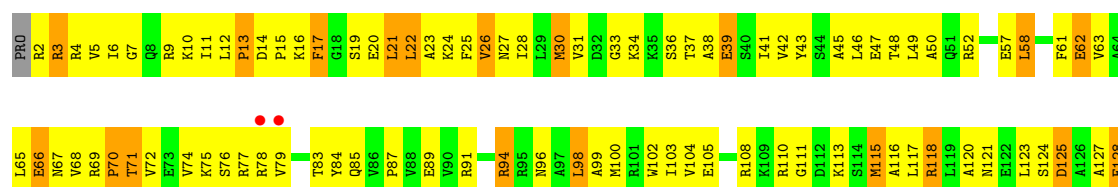
• Molecule 6: 30S ribosomal protein S7

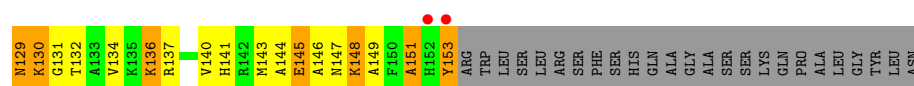
Chain AG:



• Molecule 6: 30S ribosomal protein S7

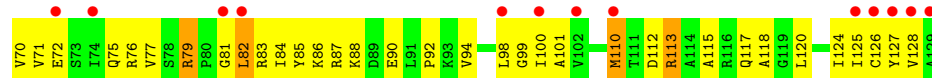
Chain CG:





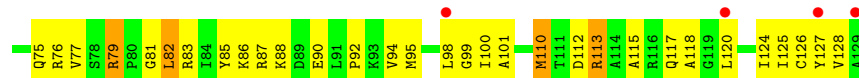
- Molecule 7: 30S ribosomal protein S8

Chain AH: 



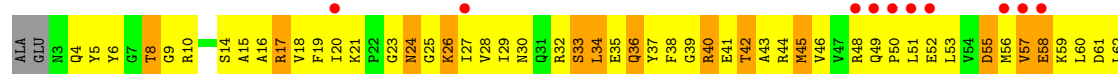
- Molecule 7: 30S ribosomal protein S8

Chain CH: 



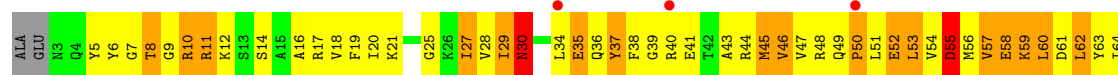
- Molecule 8: 30S ribosomal protein S9

Chain AI: 



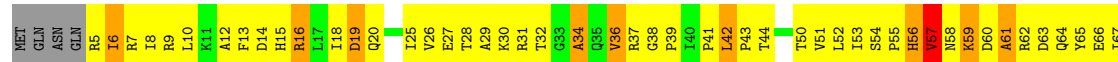
- Molecule 8: 30S ribosomal protein S9

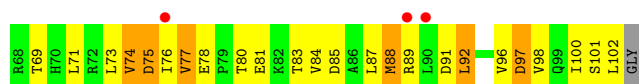
Chain CI: 



- Molecule 9: 30S ribosomal protein S10

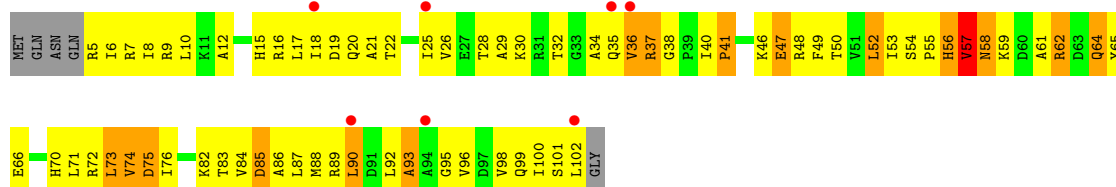
Chain AJ: 





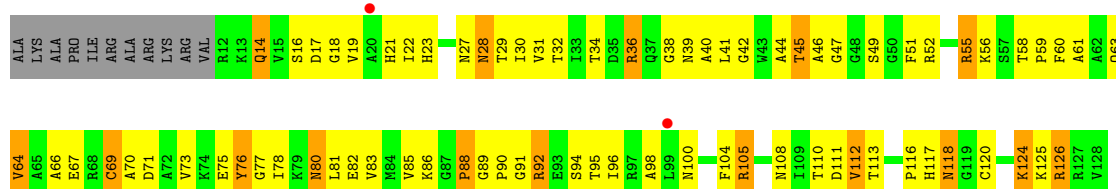
• Molecule 9: 30S ribosomal protein S10

Chain CJ:



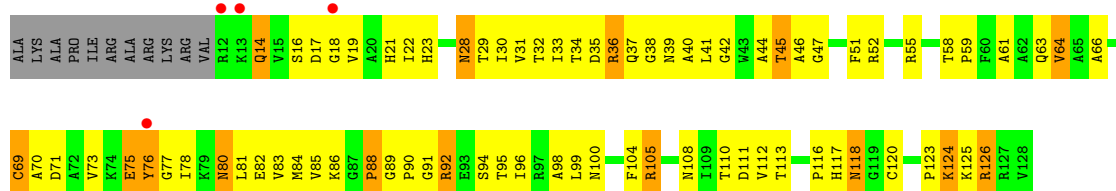
• Molecule 10: 30S ribosomal protein S11

Chain AK:



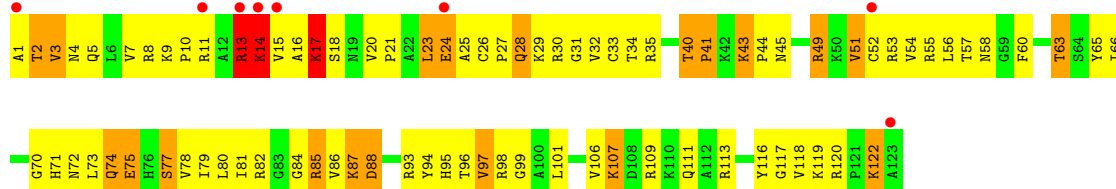
• Molecule 10: 30S ribosomal protein S11

Chain CK:



• Molecule 11: 30S ribosomal protein S12

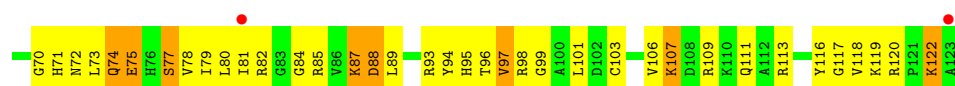
Chain AL:



• Molecule 11: 30S ribosomal protein S12

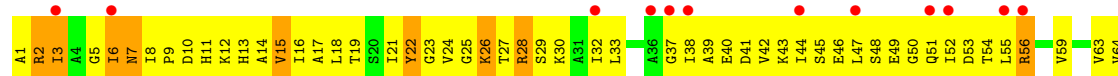
Chain CL:





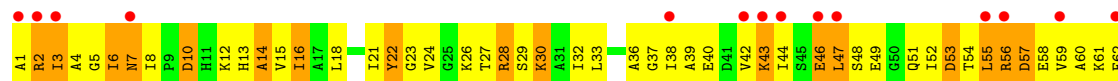
• Molecule 12: 30S ribosomal protein S13

Chain AM:



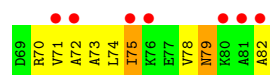
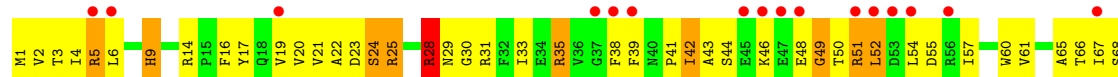
• Molecule 12: 30S ribosomal protein S13

Chain CM:



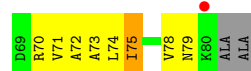
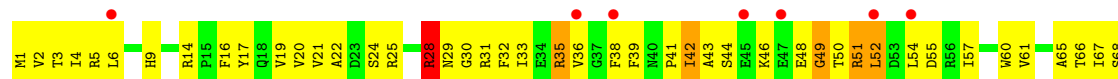
• Molecule 13: 30S ribosomal protein S16

Chain AP:



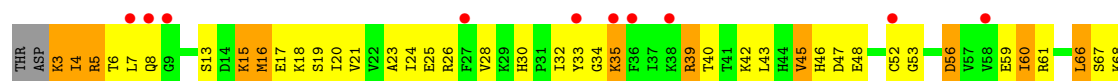
• Molecule 13: 30S ribosomal protein S16

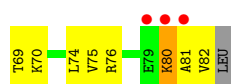
Chain CP:



• Molecule 14: 30S ribosomal protein S17

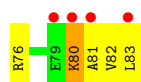
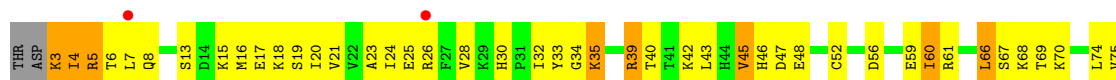
Chain AQ:





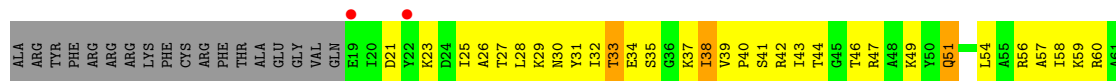
- Molecule 14: 30S ribosomal protein S17

Chain CQ:



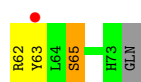
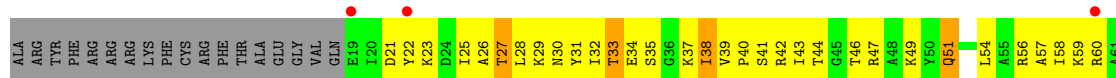
- Molecule 15: 30S ribosomal protein S18

Chain AR:



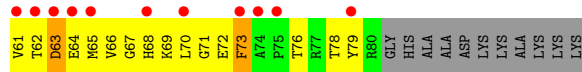
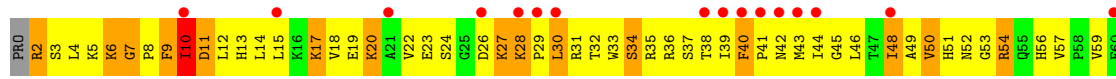
- Molecule 15: 30S ribosomal protein S18

Chain CR:



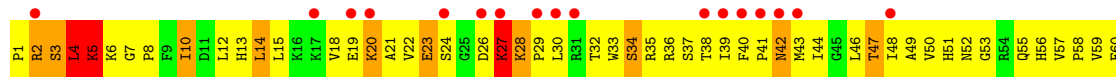
- Molecule 16: 30S ribosomal protein S19

Chain AS:



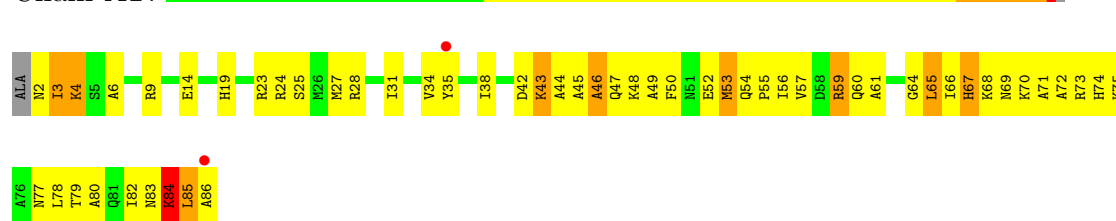
- Molecule 16: 30S ribosomal protein S19

Chain CS:



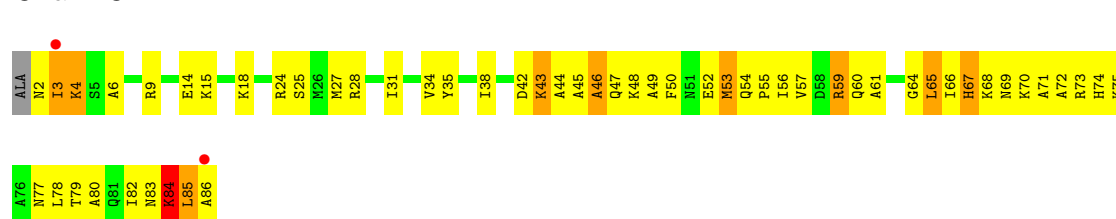
- Molecule 17: 30S ribosomal protein S20

Chain AT:



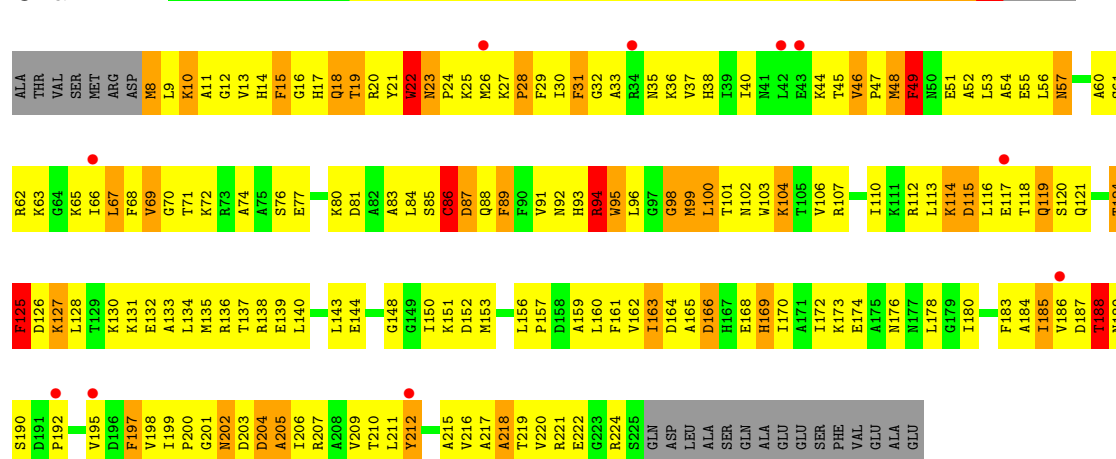
- Molecule 17: 30S ribosomal protein S20

Chain CT:



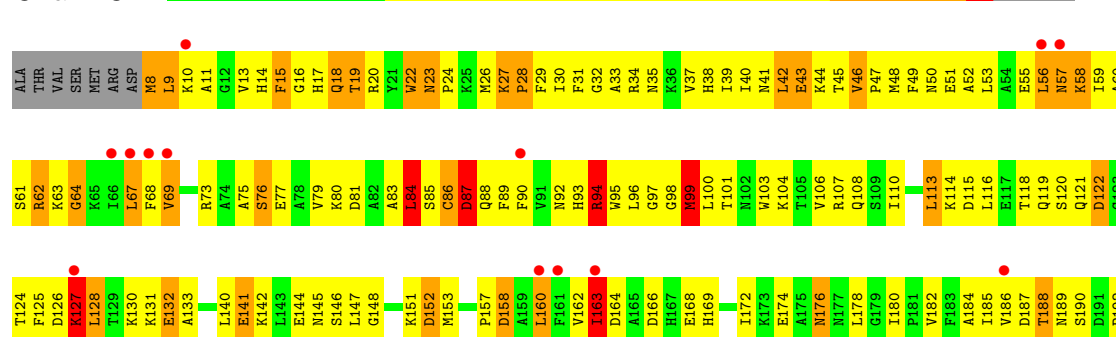
- Molecule 18: 30S ribosomal protein S2

Chain AB:



- Molecule 18: 30S ribosomal protein S2

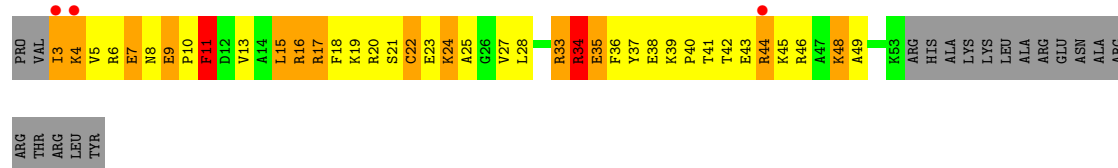
Chain CB:





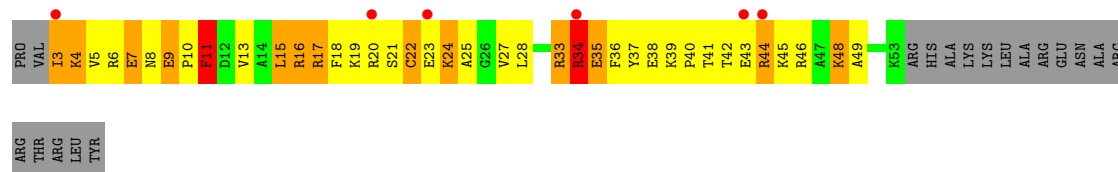
- Molecule 19: 30S ribosomal protein S21

Chain AU:



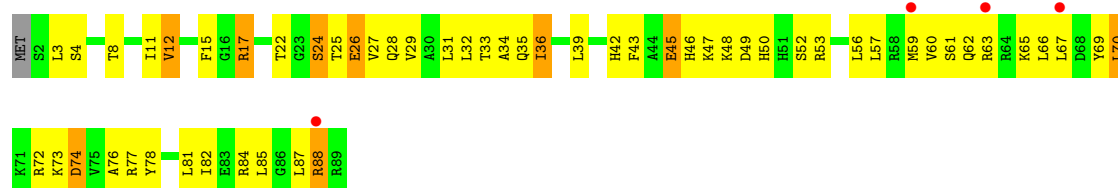
- Molecule 19: 30S ribosomal protein S21

Chain CU:



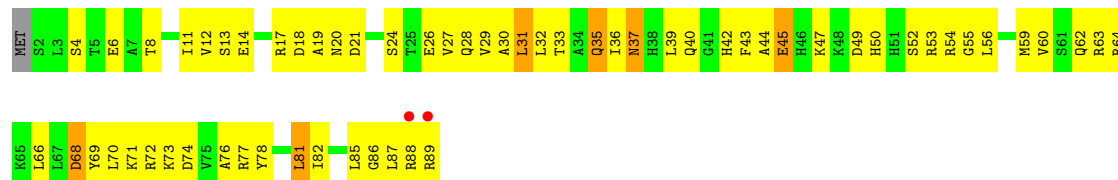
- Molecule 20: 30S ribosomal protein S15

Chain AO:



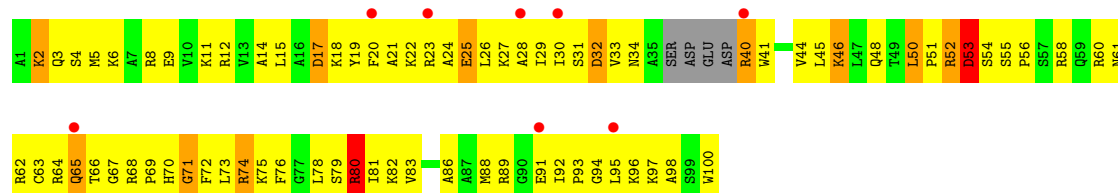
- Molecule 20: 30S ribosomal protein S15

Chain CO:



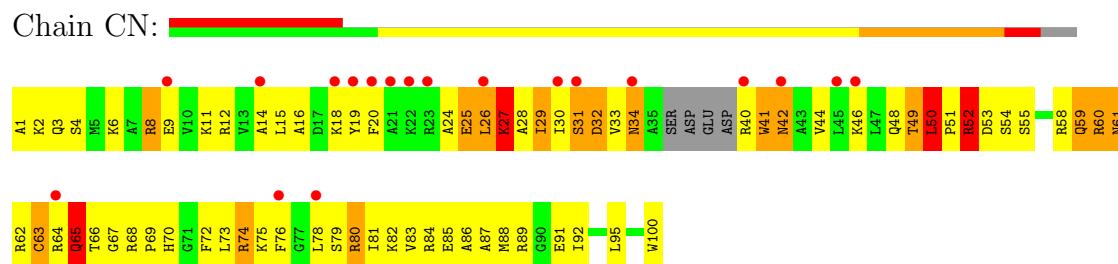
- Molecule 21: 30S ribosomal protein S14

Chain AN:





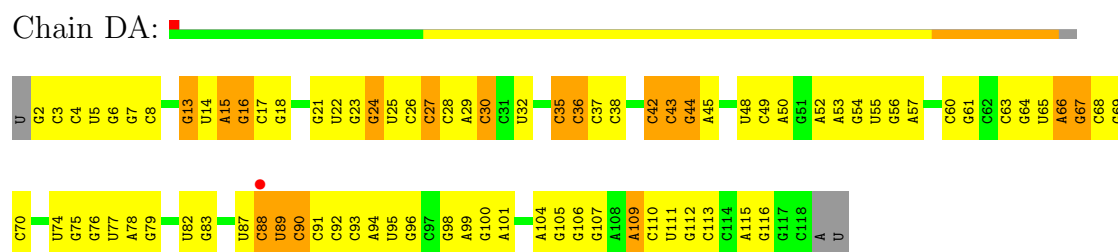
- Molecule 21: 30S ribosomal protein S14



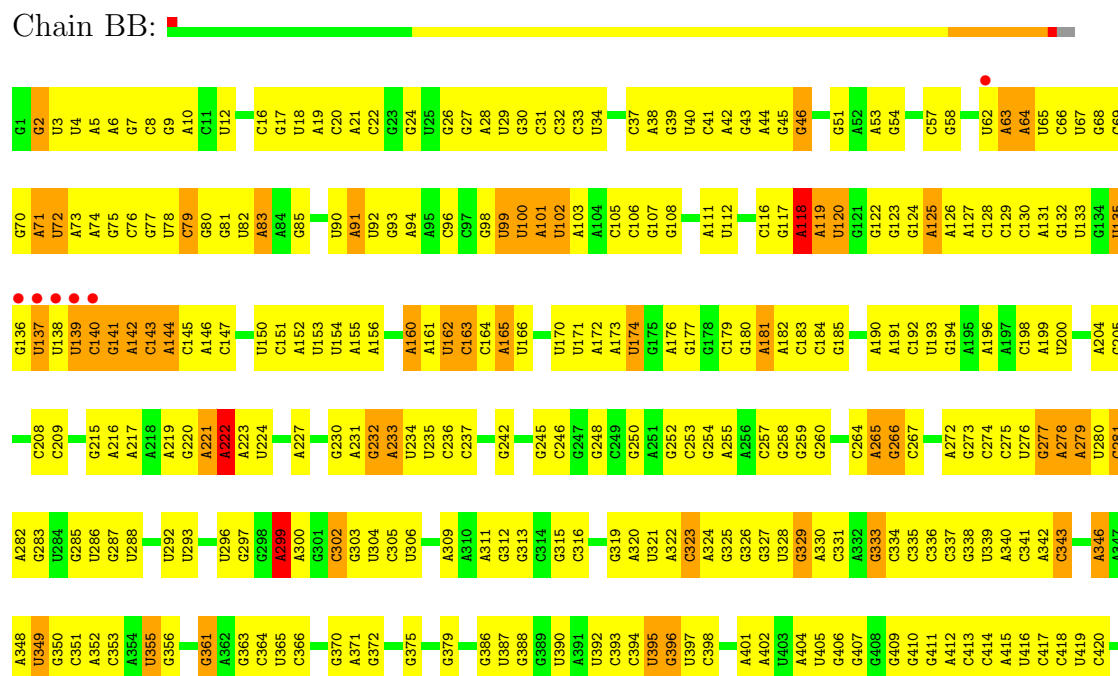
- Molecule 22: 5S rRNA



- Molecule 22: 5S rRNA



- Molecule 23: 23S rRNA



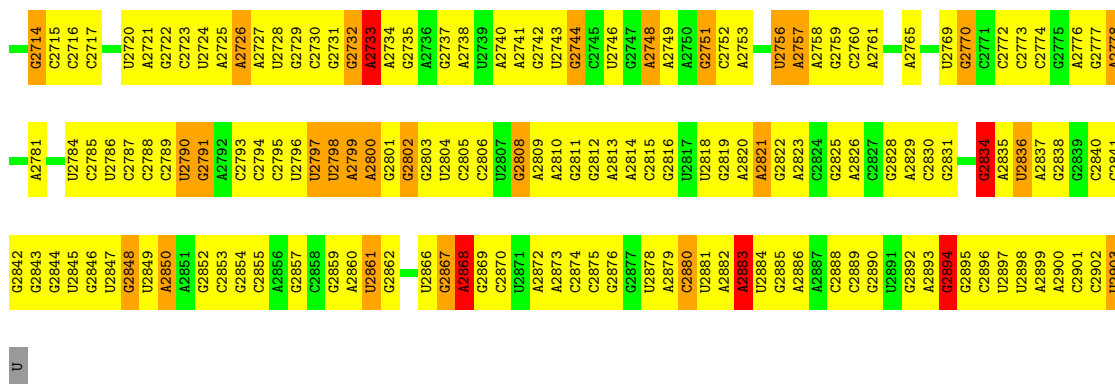
U1440	C1376	A1307	A1237	G1034	U970	G907	U842	U767	G696	A632	U567	G500	A423
G1441	G1377	A1308	G1238	U1035	G971	C908	A845	G768	G697	A633	U570	A501	G424
U1442	A1378	G1309	U1240	G1037	A972	A909	U846	U769	A698	C634	G570	A502	G425
U1443	G1379	G1310	U1241	G1038	A973	A910	U847	G770	A699	C635	U571	A503	G426
G1444	G1380	G1311	U1242	A1039	A975	A911	U848	G771	G700	C636	A572	A504	U427
C1447	G1381	U1312	U1243	A1040	G978	U913	A849	G772	U702	A637	U573	A505	A428
G1448	A1383	U1313	G1244	G1041	G979	G914	U850	G773	U703	C638	A574	A506	U431
G1449	A1384	G1314	U1245	G1042	A979	A915	C851	G774	U704	U639	A575	A507	A432
G1450	G1385	U1315	G1246	G1043	A980	G916	U852	G775	A705	C640	U576	A508	U433
A1453	C1386	G1316	G1248	G1044	A981	A917	U853	G776	A706	U641	G577	A509	U434
C1454	G1387	U1317	U1249	G1045	A982	A918	C854	G777	G707	U642	U578	C510	U435
G1455	G1388	G1318	G1250	G1046	A983	U919	C855	U779	G708	A644	A579	U511	C436
G1456	G1389	C1319	C1251	G1047	A984	A920	C856	G780	U709	C645	G582	G512	U437
U1457	U1390	U1178	G1252	A1048	C985	C921	G857	A781	U710	U647	A513	A514	G438
U1458	U1391	C1178	C1179	C1049	C986	C922	C858	A782	G711	U648	C584	A515	A439
A1395	U1325	G1118	U1180	G1050	A987	G923	C859	A783	G712	U649	G585	G518	C440
G1459	U1326	U1181	U1181	G1051	A988	G924	G862	A784	G713	C650	G586	U519	U441
U1396	U1327	G1182	U1182	A1054	A989	A925	A863	G785	U714	C651	U588	G520	A442
U1397	A1328	U1183	U1183	G1055	C990	G926	A864	G786	A715	G651	U589	G521	C443
C1398	G1329	U1184	U1184	G1056	C991	A927	C865	U787	A716	U652	A590	C522	C445
G1399	C1330	G1185	G1185	A1057	G992	A928	A866	G788	G717	U653	A591	C523	G446
U1400	G1331	G1186	G1186	G1058	G993	U929	U870	A794	A718	A654	A592	G524	
G1401	C1332	U1187	U1187	G1059	C994	G930	U871	G795	C719	A655	U593		U451
U1402	G1334	G1124	U1188	G1060	C995	U931	U872	C796	U720	G656	U594		
A1403	C1335	G1125	A1189	U1061	A996	U932	U873	G797	A721	U657	C595	C527	A454
C1404	A1336	A1126	G1190	G1062	G997	A933	C873	A802	A722	U658	C596	A528	C455
U1405	G1337	U1191	G1191	G1063	C998	U934	C874	U803	G725	G659	U596	A532	C456
U1406	G1338	A1129	U1192	G1064	U999	C935	C875	A804	G726	A661	G597	G533	A457
C1471	G1339	U1130	G1193	G1065	A1000	A936	C876	G805	G727	A675	U598	U534	G458
G1472	G1407	G1131	U1194	U1066	A1001	C937	A877	G806	G728	G664	G600		U459
G1473	G1408	U1132	U1195	U1067	G1002	G938	A878	G809	G729	U665	A538		U460
U1409	U1341	U1133	C1196	A1068	C1005	A941	G	U810	U730	A666	G539	C540	C461
U1410	A1342	A1134	U1197	G1069	C1006	G942	G	U811	C731		G603		
U1411	U1343	C1135	U1198	A1069	C1007	A943	G	C812		G669	A541		U464
U1412	G1344	G1136	U1199	A1070	C1008	C944	G	U813	G738	A670	U607	C544	G465
A1413	U1345	U1137	G1200	G1071	C1009	A945	U	C814	A739	C871	A608	C545	A466
G1416	G1346	G1138	U1201	C1072	U1011	C946	C	C815	C740	C872	A609	U546	G467
C1417	C1347	G1139	U1202	G1073	U1012	A947	U	C816	U741	C873	C810	U547	G468
G1418	U1280	C1140	U1203	U1074	C1013	C948	C	C817	U742	C874	C811	A547	G469
A1419	U1281	U1141	A1204	U1075	U1014	G949	A	C818	A743	A676	G812	G548	A470
G1420	U1282	A1142	A1205	G1076	U1015	G950	U	A819	U744		A613	G549	A471
G1421	G1283	G1206	G1206	C1077	G1016	C951	C		G745	C679	A614	C550	A472
A1422	A1286			U1080	G1017	C952	C	A825	U746	C680	U615	G551	A477
G1423	A1287	G1210	G1210	U1081	U1018	G953	G	U826	U747	C681	A616	U552	A478
C1424	U1288	C1211	G1212	U1082	U1019	C954	A	U827	G748	G682	G617	U553	
G1425	G1289	G1212		U1083	U1020	G955	U	U828		U683	G618	U554	A479
G1426	C1290	A1151	U1219	A1084	A1021	C956	C		A753	U684	G619	G555	A480
A1427	C1291	C1152	G1220	A1085	G1022	U958	U	G831	U754	A685	G620	G556	C481
G1428	G1292	C1153	C1221	A1086	U1023	U959	A	U832	U755	U686	A621	C557	A482
G1429	C1293	G1154	U1222	G1087	G1024	A960	C	A833	G756	U687	G622	U558	A483
A1430	G1361	U1155	G1223	A1088	G1025	C961	C	G834	C758	C687	C523	U559	C484
G1431	C1362	A1156	G1224	G1089	G1026	G962	C	G835	G759	U688	G624	C560	
A1432	U1297	A1157	G1225	G1091	U1027	U963	A	G836		U689	G625	G561	G491
A1433	C1298	G1158	G1226	C1092	A1028	C964	U	C937		G690	A627	U562	A492
A1434	G1299	U1159	G1229	G1093	U1029	C965	U	C938		C691	G628	A563	G493
	U1301	G1160	A1230	A1096	C1030	U967		C939		C692	G629	C564	G494
	A1302	U1161	U1231	U1097	G1031	U968		C940		C693	G630	C565	G495
	A1303	G1163	G1236	U1098	A1032	C969		G941		U695	A631		G496
	C1306			G1099	U1033								

A2450	C2385	A2322	G2253	C2186	A	C2063	A1916	C1843	U1775	U1711	C1639	A1572	A1504
G2454	A2386	G2323	U2257	U2187	G	C2064	U1917	C1844	G1776	U1712	A1640	G1573	A1505
G2455	U2387	U2324	C2258	U2188	C	C2065	A1918	G1845	U1777	A1713	A1641	C1574	U1506
C2456	A2388	G2325	U2259	U2189	C	C2066	A1919	G1846	U1778	U1714	U1647	C1575	C1507
U2457	C2389	U2330	U2260	U2190	U	G2067	C1920	A1847	U1779	G1715	U1648	C1576	A1508
C2458	U2390	A2191	C2261	A2192	U	U2068	U1923	A1848	A1780	U1716	G1649	C1577	A1509
A2459	C2391	U2329	C2262	U2193	U	G2069	C1924	G1849	U1781	A1717	A1650	U1578	G1510
U2460	A2392	G2330	U2263	U2194	G2133	A2071	U1925	G1850	U1782	U1720	G1651	A1579	G1511
C2461	G2331	U2334	C2264	U2195	A2134	C2072	C1926	U1853	A1783	A1721	G1652	A1580	G1512
A2462	A2332	A2135	U2197	A2196	A2136	C2073	A1927	A1854	U1784	G1722	G1653	G1581	U1513
C2463	G2333	U2137	U2198	U2197	U2137	U2074	A1928	A1855	A1785	G1723	A1654	C1582	G1514
U2464	A2334	U2138	C2199	U2199	U2138	U2075	G1930	G1857	A1786	G1724	A1655	U1584	A1515
C2465	A2335	U2139	C2200	U2200	U2139	U2076	U1931	A1858	C1788	U1725	C1656	C1585	G1516
C2466	G2336	U2140	U2201	U2201	U2140	U2077	A1932	A1859	A1789	C1726	U1657	C1586	C1517
C2467	C2337	G2141	U2202	U2202	U2141	C2078	A1933	G1860	C1790	C1727	G1658	G1587	U1518
A2468	A2338	C2142	U2203	U2203	C2142	U2079	C1934	U1864	G1792	U1729	G1659	U1588	G1524
U2469	G2339	C2143	G2204	U2204	C2143	A2080	A1935	U1865	C1793	C1730	G1660	U1589	G1525
C2470	A2340	U2144	U2205	U2205	U2144	U2081	A1936	U1866	A1794	C1731	U1662	A1590	A1526
A2471	G2341	C2145	U2206	U2206	C2145	A2082	A1937	G1867	C1795	G1732	G1663	C1592	G1527
C2472	C2342	U2146	U2207	U2207	U2146	U2083	U1938	A1868	A1796	G1733	A1664	A1593	C1531
U2473	A2343	G2147	U2208	U2208	U2147	U2084	U1939	C1869	U1797	G1734	A1665	U1594	C1532
C2474	U2344	C2148	U2209	U2209	C2148	U2085	U1940	G1870	C1798	G1735	G1666	C1595	A1533
U2475	G2345	U2149	U2210	U2210	U2149	U2086	C1941	A1871	U1799	U1736	G1667	A1596	C1533
A2476	A2346	C2150	U2211	U2211	C2150	U2087	C1942	A1872	C1800	G1737	A1668	A1597	U1534
C2477	C2347	U2151	U2212	U2212	U2151	C2089	U1943	A1873	U1798	G1738	A1669	A1598	A1535
U2478	A2348	C2152	U2213	U2213	C2152	U2090	U1944	C1874	U1799	G1739	A1670	U1599	C1536
C2482	G2349	U2153	U2214	U2214	U2153	U2091	G1945	G1875	A1808	G1740	U1671	C1600	G1537
U2483	A2350	C2154	U2215	U2215	C2154	U2092	U1946	A1876	A1809	C1741	G1674	A1603	G1540
C2484	U2351	U2155	U2216	U2216	U2155	U2093	U1947	C1879	A1810	U1742	C1675	G1541	C1542
U2485	G2352	U2156	U2217	U2217	U2156	U2094	C1948	U1880	G1811	G1743	A1676	C1606	U1543
C2488	A2353	C2157	U2218	U2218	C2157	U2095	U1949	U1881	G1812	A1744	A1677	G1607	G1544
U2489	G2354	U2158	U2219	U2219	U2158	U2096	U1955	U1882	G1813	A1745	A1678	A1608	A1544
C2490	A2355	C2159	U2220	U2220	C2159	U2097	U1956	U1883	G1814	A1746	A1679	A1609	A1545
U2491	U2356	U2160	U2221	U2221	U2160	U2098	C1957	A1884	A1815	U1747	U1680	G1610	G1546
C2492	G2357	U2161	U2222	U2222	U2161	U2099	U1958	U1885	G1816	C1748	G1682	C1611	C1547
U2493	A2358	C2162	U2223	U2223	C2162	U2100	A1959	U1886	G1817	A1749	U1683	G1612	A1548
C2494	U2359	U2163	U2224	U2224	U2163	U2101	C1967	A1900	G1824	G1750	U1684	C1613	A1549
U2495	A2360	C2164	U2225	U2225	C2164	U2102	U1968	A1901	U1825	C1751	G1685	C1550	C1550
C2496	G2361	U2165	U2226	U2226	U2165	U2103	A1969	C1902	G1826	C1752	C1686	A1551	A1551
U2497	A2362	C2166	U2227	U2227	C2166	U2104	U1970	G1903	G1827	A1762	A1616	C1617	A1552
C2498	U2363	U2167	U2228	U2228	U2167	U2105	C1971	A1904	G1828	G1763	U1687	A1618	A1553
U2499	G2364	U2168	U2229	U2229	U2168	U2106	U1972	A1905	G1829	C1764	U1688	U1584	U1584
C2502	A2365	C2169	U2230	U2230	C2169	U2107	C1973	G1906	C1830	U1765	A1689	G1619	G1555
U2503	U2366	U2170	U2231	U2231	U2170	U2108	U1974	G1907	G1831	G1766	A1690	G1622	C1558
C2504	G2367	U2171	U2232	U2232	U2171	U2109	A1981	A1908	U1826	C1767	C1691	G1623	U1559
U2505	A2368	C2172	U2233	U2233	C2172	U2110	U1982	C1909	G1827	A1761	A1698	U1624	U1560
C2506	U2369	U2173	U2234	U2234	U2173	U2111	A1983	C1910	G1828	G1768	G1699	C1625	C1561
U2507	G2370	U2174	U2235	U2235	U2174	U2112	U1984	G1906	G1829	C1765	A1700	A1626	U1562
C2508	A2371	C2175	U2236	U2236	C2175	U2113	C1985	G1907	C1832	U1766	A1701	U1629	U1563
U2509	U2372	U2176	U2237	U2237	U2176	U2114	U1986	A1908	G1833	G1767	C1704	G1633	C1564
C2510	G2373	U2177	U2238	U2238	U2177	U2115	U1987	C1909	G1834	C1768	A1705	A1634	C1565
U2511	U2374	U2178	U2239	U2239	U2178	U2116	U1988	C1910	G1835	C1769	C1705	A1635	G1568
C2512	A2375	C2179	U2240	U2240	C2179	U2117	U1989	C1911	U1836	C1770	G1707	A1636	U1569
U2513	U2376	U2180	U2241	U2241	U2180	U2118	U1990	G1911	C1837	U1771	C1708	U1637	A1570
C2514	G2377	U2181	U2242	U2242	U2181	U2119	C1991	G1912	G1838	A1772	U1709	C1638	G1571
U2515	A2378	C2182	U2243	U2243	C2182	U2120	U1992	A1913	G1839	C1773	G1710		
C2516	U2379	U2183	U2244	U2244	U2183	U2121	U1993	C1914	G1840				
U2517	G2380	U2184	U2245	U2245	U2184	U2122	U1994	U1915	G1841				
C2518	A2381	C2185	U2246	U2246	C2185	U2123	U1995						
U2519	U2382	U2186	U2247	U2247	U2186	U2124	U1996						
C2520	G2383	U2187	U2248	U2248	U2187	U2125	U1997						
U2521	A2384	C2188	U2249	U2249	C2188	U2126	U1998						
C2522	U2385	U2189	U2250	U2250	U2189	U2127	U1999						
U2523	G2386	U2190	U2251	U2251	U2190	U2128	U2000						
C2524	A2387	C2191	U2252	U2252	C2191	U2129	U2001						
U2525	U2388	U2192	U2253	U2253	U2192	U2130	U2002						
C2526	G2389	U2193	U2254	U2254	U2193	U2131	U2003						
U2527	A2390	C2192	U2255	U2255	C2192	U2132	U2004						
C2528	U2391	U2194	U2256	U2256	U2194	U2133	U2005						
U2529	G2392	U2195	U2257	U2257	U2195	U2134	U2006						
C2530	A2393	C2196	U2258	U2258	C2196	U2135	U2007						
U2531	U2394	U2196	U2259	U2259	U2196	U2136	U2008						
C2532	G2395	U2197	U2260	U2260	U2197	U2137	U2009						
U2533	A2396	C2198	U2261	U2261	C2198	U2138	U2010						
C2534	U2397	U2199	U2262	U2262	U2199	U2139	U2011						
U2535	G2398	U2200	U2263	U2263	U2200	U2140	U2012						
C2536	A2399	C2201	U2264	U2264	C2201	U2141	U2013						
U2537	U2400	U2202	U2265	U2265	U2202	U2142	U2014						
C2538	G2401	U2203	U2266	U2266	U2203	U2143	U2015						
U2539	A2402	C2204	U2267	U2267	C2204	U2144	U2016						
C2540	U2403	U2205	U2268	U2268	U2205	U2145	U2017						
U2541	G2404	U2206	U2269	U2269	U2206	U2146	U2018						
C2542	A2405	C2207	U2270	U2270	C2207	U2147	U2019						
U2543	U2406	U2208	U2271	U2271	U2208	U2148	U2020						
C2544	G2407	U2209	U2272	U2272	U2209	U2149	U2021						
U2545	A2408	C2210	U2273	U2273	C2210	U2150	U2022						
C2546	U2409	U2211	U2274	U2274	U2211	U2151	U2023						
U2547	G2410	U2212	U2275	U2275	U2212	U2152	U2024						
C2548	A2411	C2213	U2276	U2276	C2213	U2153	U2025						
U2549	U2412	U2214	U2277	U2277	U2214	U2154	U2026						
C2550	G2413	C2215	U2278	U2278	C2215	U2155	U2027						
U2551	A2414	U2216	U2279	U2279	U2216	U2156	U2028						
C2552	U2415	C2217	U2280	U2280	C2217	U2157	U2029						
U2553	G2416	U2218	U2281	U2281	U2218	U2158	U2030						
C2554	A2417	C2219	U2282	U2282	C2219	U2159	U2031						
U2555	U2418	U2220	U2283	U2283	U2220	U2160	U2032						
C2556	G2419	U2221	U2284	U2284	U2221	U2161	U2033						
U2557	A2420	C2222	U2285	U2285	C2222	U2162	U2034						
C2558	U2421	U2223	U2286	U2286	U2223	U2163	U2035						
U2559	G2422	U2224	U2287	U2287	U2224	U2164	U2036			</			



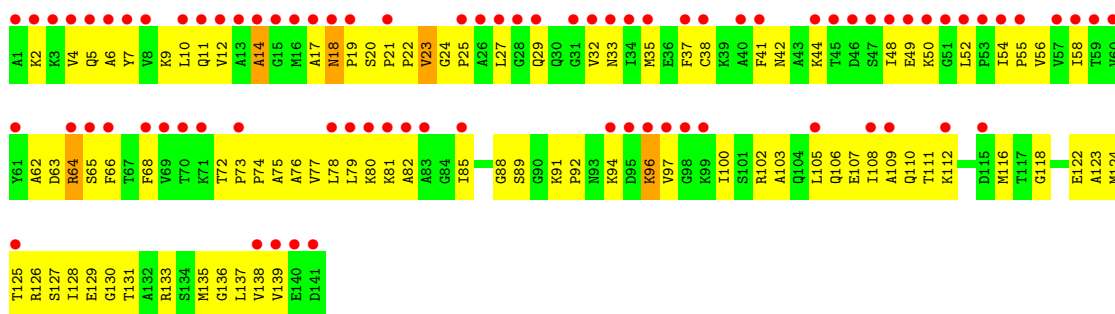
A1640	A1641	G1642	U1643	G1644	A1645	G1646	A1647	G1648	A1649	A1650	G1651	A1652	G1653	A1654	A1655	G1656	A1657	G1658	A1659	G1660	A1661	G1662	A1663	G1664	A1665	A1666	G1667	A1668	G1669	A1670	G1671	A1672	G1673	A1674	G1675	A1676	G1677	A1678	G1679	A1680	G1681	A1682	G1683	A1684	G1685	A1686	G1687	A1688	G1689	A1689	G1690	A1691	G1692	A1693	G1694	A1695	G1696	A1697	G1698	A1699	G1700	A1701	G1702	A1703	G1704	A1705	G1706	C1707	A1708	G1709	A1710	G1711	A1712	G1713	A1714	G1715	A1716	G1717	A1718	G1719	A1720	G1721	A1722	G1723	U1724	G1725	G1726	A1727	G1728	G1729	U1730	G1731	U1732	G1733	A1734	G1735	U1736	G1737	A1738	G1739	U1740	G1741	A1742	A1743	U1744	G1745	U1746	U1747	G1748	U1749	G1750	A1751	G1752	A1753	G1754	U1755	G1756	C1757	U1758	A1759	G1760	U1761	G1762	A1763	G1764	U1765	A1766	G1767	U1768	A1769	G1770	U1771	G1772	U1773	G1774	U1775	G1776	G1777	U1778	G1779	U1780	G1781	U1782	A1783	G1784	U1785	A1786	U1787	G1788	U1789	U1790	G1791	U1792	A1793	G1794	U1795	A1796	G1797	U1798	A1799	G1800	U1801	A1802	G1803	U1804	A1805	G1806	U1807	A1808	G1809	U1810	A1811	G1812	U1813	A1814	G1815	U1816	A1817	G1818	U1819	A1820	G1821	U1822	A1823	G1824	U1825	A1826	G1827	U1828	A1829	G1830	U1831	A1832	G1833	U1834	A1835	G1836	U1837	A1838	G1839	U1840	A1841	G1842	U1843	A1844	G1845	U1846	A1847	G1848	U1849	A1850	G1851	U1852	A1853	G1854	U1855	A1856	G1857	U1858	A1859	G1860	U1861	A1862	G1863	U1864	A1865	G1866	U1867	A1868	G1869	U1870	A1871	G1872	U1873	A1874	G1875	U1876	A1877	G1878	U1879	A1880	G1881	U1882	A1883	G1884	U1885	A1886	U1887	G1888	U1889	A1890	G1891	U1892	A1893	G1894	U1895	A1896	G1897	U1898	A1899	G1900	U1901	A1902	G1903	U1904	A1905	G1906	U1907	A1908	G1909	U1910	A1911	G1912	U1913	A1914	G1915	U1916	A1917	G1918	U1919	A1920	G1921	U1922	A1923	G1924	U1925	A1926	G1927	U1928	A1929	G1930	U1931	A1932	G1933	U1934	A1935	G1936	U1937	A1938	G1939	U1940	A1941	G1942	U1943	A1944	G1945	U1946	A1947	G1948	U1949	A1950	G1951	U1952	A1953	G1954	U1955	A1956	G1957	U1958	A1959	G1960	U1961	A1962	G1963	U1964	A1965	G1966	U1967	A1968	G1969	U1970	A1971	G1972	U1973	A1974	G1975	U1976	A1977	G1978	U1979	A1980	G1981	U1982	A1983	G1984	U1985	A1986	G1987	U1988	A1989	G1990	U1991	A1992	G1993	U1994	A1995	G1996	U1997	A1998	G1999	U2000	A2001	G2002	U2003	A2004	G2005	U2006	A2007	G2008	U2009	A2010	G2011	U2012	A2013	G2014	U2015	A2016	G2017	U2018	A2019	G2020	U2021	A2022	G2023	U2024	A2025	G2026	U2027	A2028	G2029	U2030	A2031	G2032	U2033	A2034	G2035	U2036	A2037	G2038	U2039	A2040	G2041	U2042	A2043	G2044	U2045	A2046	G2047	U2048	A2049	G2050	U2051	A2052	G2053	U2054	A2055	G2056	U2057	A2058	G2059	U2060	A2061	G2062	U2063	A2064	G2065	U2066	A2067	G2068	U2069	A2070	G2071	U2072	A2073	G2074	U2075	A2076	G2077	U2078	A2079	G2080	U2081	A2082	G2083	U2084	A2085	G2086	U2087	A2088	U2089	A2090	G2091	U2092	A2093	G2094	U2095	A2096	G2097	U2098	A2099	G2100	U2101	A2102	G2103	U2104	A2105	G2106	U2107	A2108	G2109	U2110	A2111	G2112	U2113	A2114	G2115	U2116	A2117	G2118	U2119	A2120	G2121	U2122	A2123	G2124	U2125	A2126	G2127	U2128	A2129	G2130	U2131	A2132	G2133	U2134	A2135	G2136	U2137	A2138	G2139	U2140	A2141	G2142	U2143	A2144	G2145	U2146	A2147	G2148	U2149	A2150	G2151	U2152	A2153	G2154	U2155	A2156	G2157	U2158	A2159	G2160	U2161	A2162	G2163	U2164	A2165	G2166	U2167	A2168	G2169	U2170	A2171	G2172	U2173	A2174	G2175	U2176	A2177	G2178	U2179	A2179	G2180	U2181	A2181	G2182	U2183	A2183	G2184	U2185	A2185	G2186	U2187	A2187	G2188	U2189	A2189	G2190	U2191	A2191	G2192	U2193	A2193	G2194	U2195	A2195	G2196	U2197	A2197	G2198	U2199	A2199	G2200	U2201	A2201	G2202	U2203	A2203	G2204	U2205	A2205	G2206	U2207	A2207	G2208	U2209	A2209	G2210	U2211	A2211	G2212	U2213	A2213	G2214	U2215	A2215	G2216	U2217	A2217	G2218	U2219	A2219	G2220	U2221	A2221	G2222	U2223	A2223	G2224	U2225	A2225	G2226	U2227	A2227	G2228	U2229	A2229	G2229	U2230	A2230	G2231	U2232	A2232	G2233	U2234	A2234	G2235	U2236	A2236	G2237	U2238	A2238	G2239	U2240	A2240	G2241	U2242	A2242	G2243	U2244	A2244	G2245	U2246	A2246	G2247	U2248	A2248	G2249	U2250	A2250	G2251	U2252	A2252	G2253	U2254	A2254	G2255	U2256	A2256	G2257	U2258	A2258	G2259	U2259	A2259	G2260	U2261	A2261	G2262	U2263	A2263	G2264	U2265	A2265	G2266	U2267	A2267	G2268	U2269	A2269	G2270	U2271	A2271	G2272	U2273	A2273	G2274	U2275	A2275	G2276	U2277	A2277	G2278	U2279	A2279	G2280	U2281	A2281	G2282	U2283	A2283	G2284	U2285	A2285	G2286	U2287	A2287	G2288	U2289	A2289	G2290	U2291	A2291	G2292	U2293	A2293	G2294	U2295	A2295	G2296	U2297	A2297	G2298	U2299	A2299	G2300	U2301	A2301	G2302	U2303	A2303	G2304	U2305	A2305	G2306	U2307	A2307	G2308	U2309	A2309	G2310	U2311	A2311	G2312	U2313	A2313	G2314	U2315	A2315	G2316	U2317	A2317	G2318	U2319	A2319	G2320	U2321	A2321	G2322	U2323	A2323	G2324	U2325	A2325	G2326	U2327	A2327	G2328	U2329	A2329	G2330	U2331	A2331	G2332	U2333	A2333	G2334	U2335	A2335	G2336	U2337	A2337	G2338	U2339	A2339	G2340	U2341	A2341	G2342	U2343	A2343	G2344	U2345	A2345	G2346	U2347	A2347	G2348	U2349	A2349	G2350	U2351	A2351	G2352	U2353	A2353	G2354	U2355	A2355	G2356	U2357	A2357	G2358	U2359	A2359	G2360	U2361	A2361	G2362	U2363	A2363	G2364	U2365	A2365	G2366	U2367	A2367	G2368	U2369	A2369	G2370	U2371	A2371	G2372	U2373	A2373	G2374	U2375	A2375	G2376	U2377	A2377	G2378	U2379	A2379	G2380	U2381	A2381	G2382	U2383	A2383	G2384	U2385	A2385	G2386	U2387	A2387	G2388	U2389	A2389	G2390	U2391	A2391	G2392	U2393	A2393	G2394	U2395	A2395	G2396	U2397	A2397	G2398	U2399	A2399	G2400	U2401	A2401	G2402	U2403	A2403	G2404	U2405	A2405	G2406	U2407	A2407	G2408	U2409	A2409	G2410	U2411	A2411	G2412	U2413	A2413	G2414	U2415	A2415	G2416	U2417	A2417	G2418	U2419	A2419	G2420	U2421	A2421	G2422	U2423	A2423	G2424	U2425	A2425	G2426	U2427	A2427	G2428	U2429	A2429	G2430	U2431	A2431	G2432	U2433	A2433	G2434	U2435	A2435	G2436	U2437	A2437	G2438	U2439	A2439	G2440	U2441	A2441	G2442	U2443	A2443	G2444	U2445	A2445	G2446	U2447	A2447	G2448	U2449	A2449	G2450	U2451	A2451	G2452	U2453	A2453	G2454	U2455	A2455	G2456	U2457	A2457	G2458	U2459	A2459	G2460	U2461	A2461	G2462	U2463	A2463	G2464	U2465	A2465	G2466	U2467	A2467	G2468	U2469	A2469	G2470	U2471	A2471	G2472	U2473	A2473	G2474	U2475	A2475	G2476	U2477	A2477	G2478	U2479	A2479	G2480	U2481	A2481	G2482	U2483	A2483	G2484	U2485	A2485	G2486	U2487	A2487	G2488	U2489	A2489	G2490	U2491	A2491	G2492	U2493	A2493	G2494	U2495	A2495	G2496	U2497	A2497	G2498	U2499	A2499	G2500	U2501	A2501	G2502	U2503	A2503	G2504	U2505	A2505	G2506	U2507	A2507	G2508	U2509	A2509	G2510	U2511	A2511	G2512	U2513	A2513	G2514	U2515	A2515	G2516	U2517	A2517	G2518	U2519	A2519	G2520	U2521	A2521	G2522	U2523	A2523	G2524	U2525	A2525	G2526	U2527	A2527	G2528	U2529	A2529	G2530	U2531	A2531	G2532	U2533	A2533	G2534	U2535	A2535	G2536	U2537	A2537	G2538	U2539	A2539	G2540	U2541	A2541	G2542	U2543	A2543	G2544	U2545	A2545	G2546	U2547	A2547	G2548	U2549	A2549	G2550	U2551	A2551	G2552	U2553	A2553	G2554	U2555	A2555	G2556	U2557	A2557	G2558	U2559	A2559	G2560	U2561	A2561	G2562	U2563	A2563	G2564	U2565	A2565	G2566	U2567	A2567	G2568	U2569	A2569	G2570	U2571	A2571	G2572	U2573	A2573	G2574	U2575	A2575	G2576	U2577	A2577	G2578	U2579	A2579	G2580	U2581	A2581	G2582	U2583	A2583	G2584	U2585	A2585	G2586	U2587	A2587	G2588	U2589	A2589	G2590	U2591	A2591	G2592	U2593	A2593	G2594	U2595	A2595	G2596	U2597	A2597	G2598	U2599	A2599</
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	---------





• Molecule 24: 50S ribosomal protein L11

Chain BI:



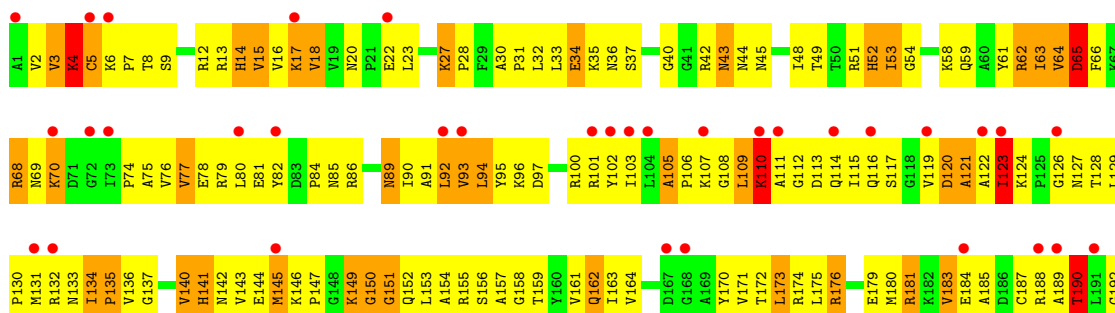
• Molecule 24: 50S ribosomal protein L11

Chain DI:



• Molecule 25: 50S ribosomal protein L2

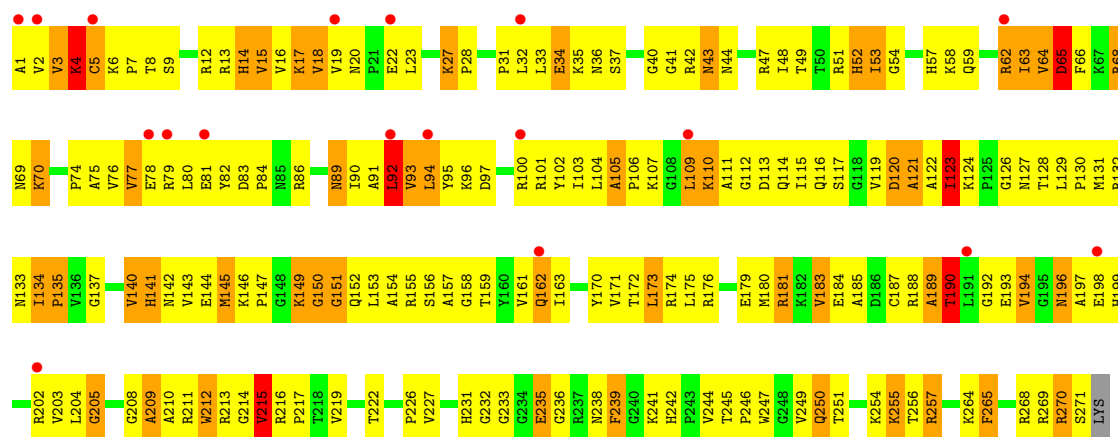
Chain BC:





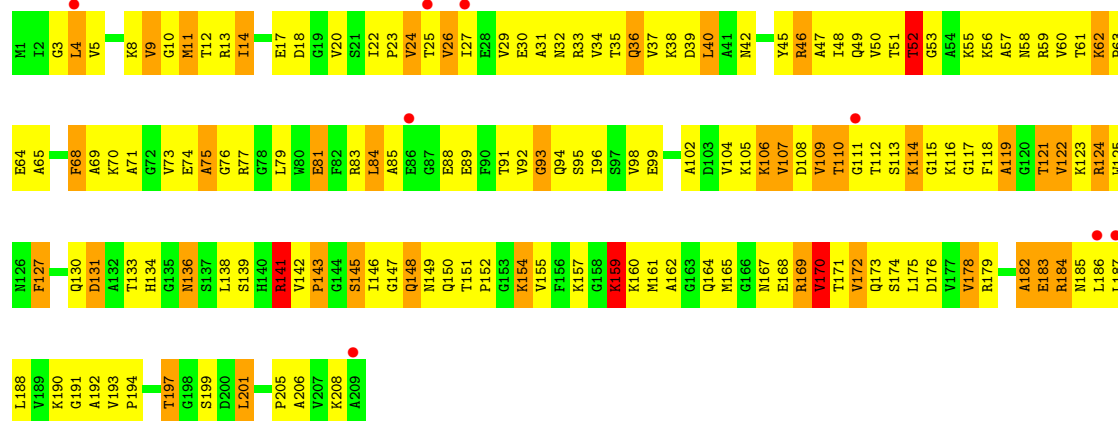
• Molecule 25: 50S ribosomal protein L2

Chain DC:



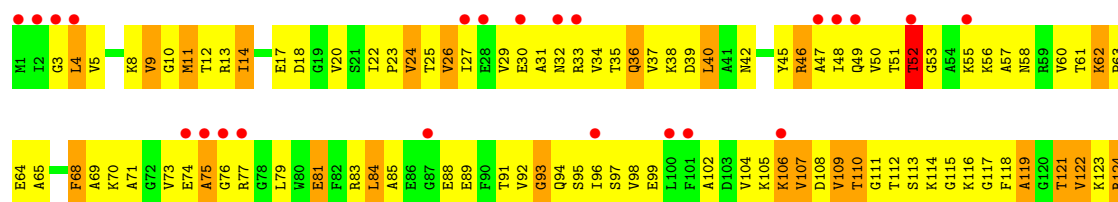
• Molecule 26: 50S ribosomal protein L3

Chain BD:

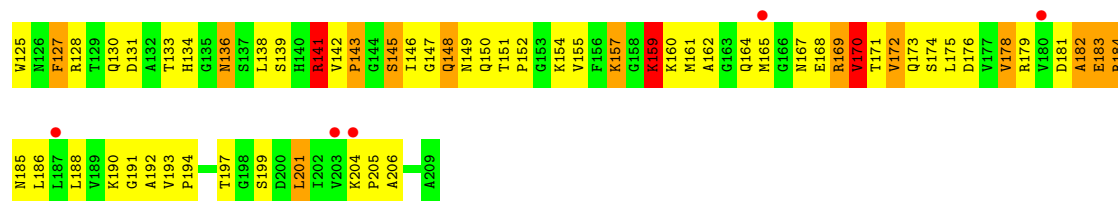


• Molecule 26: 50S ribosomal protein L3

Chain DD:

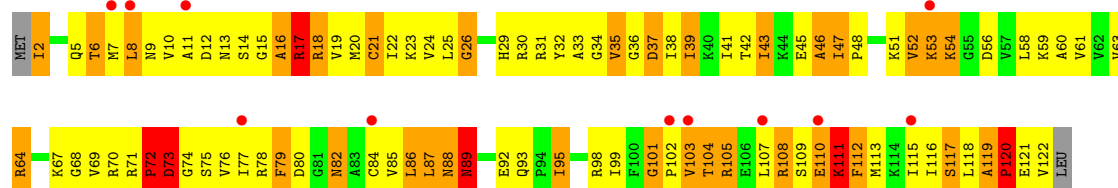






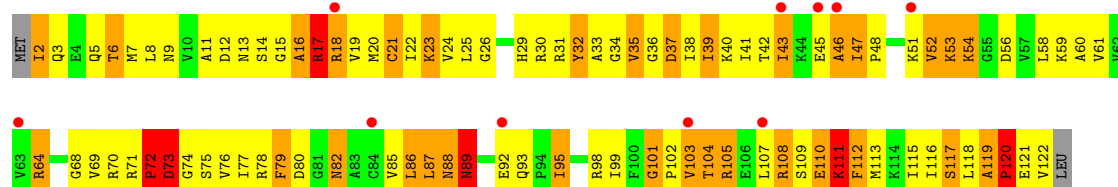
- Molecule 27: 50S ribosomal protein L14

Chain BK:



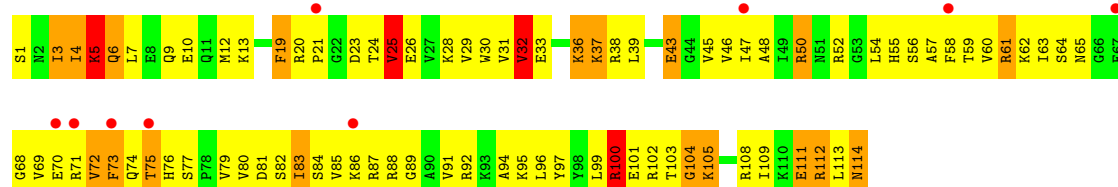
- Molecule 27: 50S ribosomal protein L14

Chain DK:



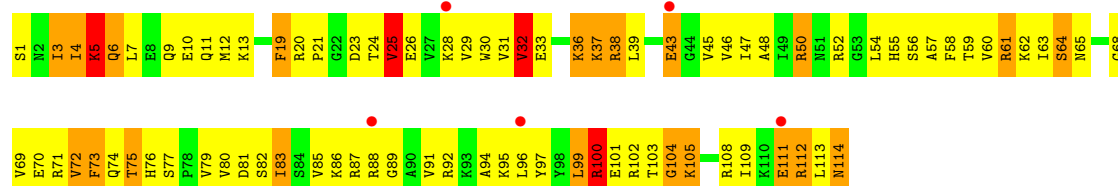
- Molecule 28: 50S ribosomal protein L19

Chain BP:



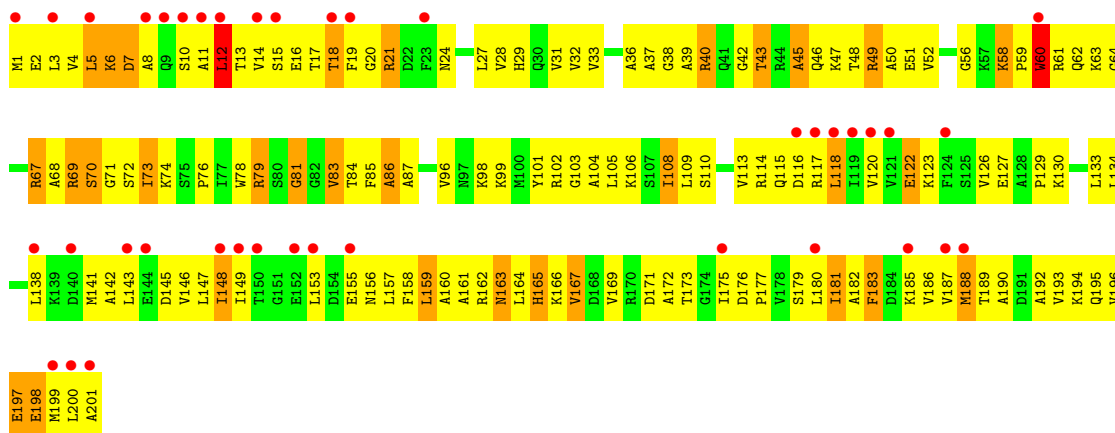
- Molecule 28: 50S ribosomal protein L19

Chain DP:



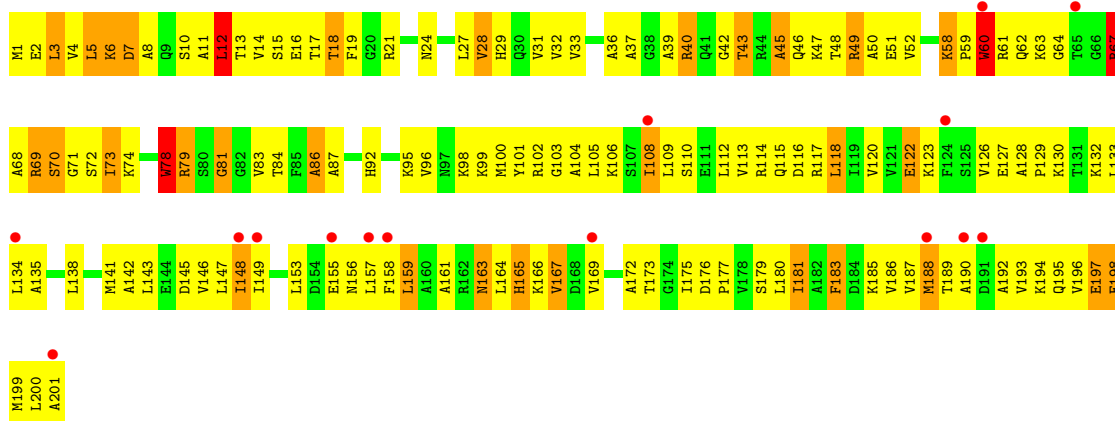
- Molecule 29: 50S ribosomal protein L4

Chain BE:



- Molecule 29: 50S ribosomal protein L4

Chain DE:



- Molecule 30: 50S ribosomal protein L30

Chain BY:



- Molecule 30: 50S ribosomal protein L30

Chain DY:



- Molecule 31: 50S ribosomal protein L32

Chain B0:



- Molecule 31: 50S ribosomal protein L32

Chain D0: 



- Molecule 32: 50S ribosomal protein L36

Chain B4: 



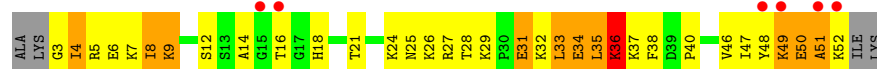
- Molecule 32: 50S ribosomal protein L36

Chain D4: 



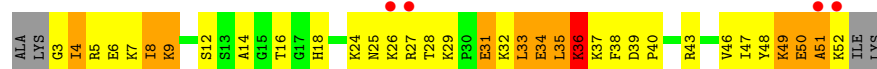
- Molecule 33: 50S ribosomal protein L33

Chain B1:



- Molecule 33: 50S ribosomal protein L33

Chain D1: 



- Molecule 34: 50S ribosomal protein L35

Chain B3:



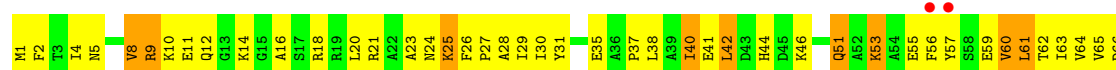
- Molecule 34: 50S ribosomal protein L35

Chain D3:



- Molecule 35: 50S ribosomal protein L25

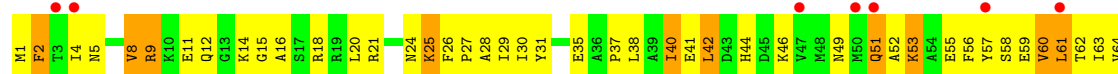
Chain BV: 





- Molecule 35: 50S ribosomal protein L25

Chain DV:



- Molecule 36: 50S ribosomal protein L34

Chain B2:



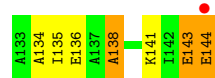
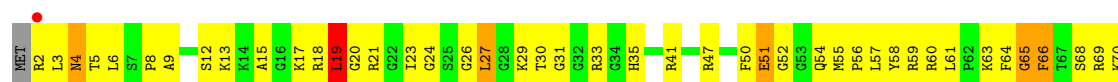
- Molecule 36: 50S ribosomal protein L34

Chain D2:



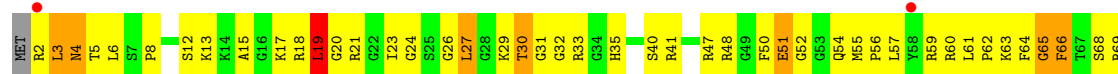
- Molecule 37: 50S ribosomal protein L15

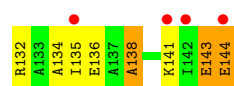
Chain BL:



- Molecule 37: 50S ribosomal protein L15

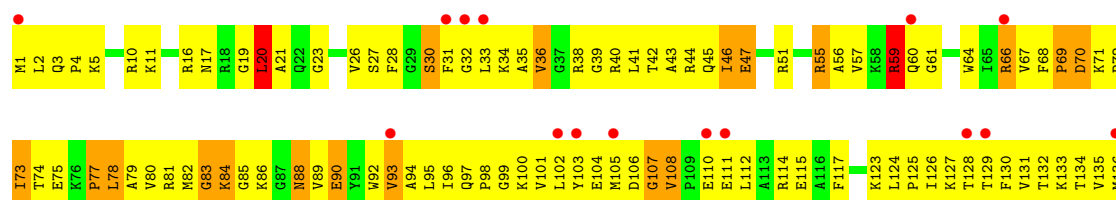
Chain DL:





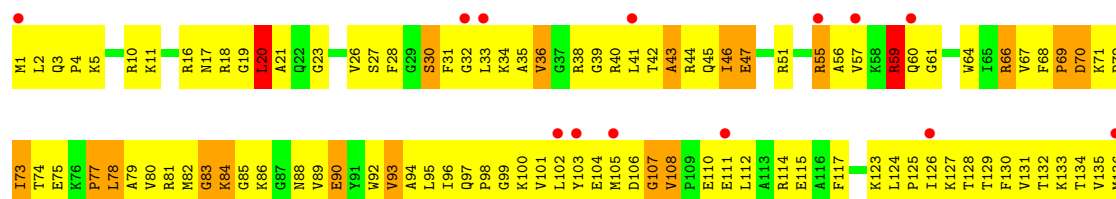
• Molecule 38: 50S ribosomal protein L16

Chain BM:



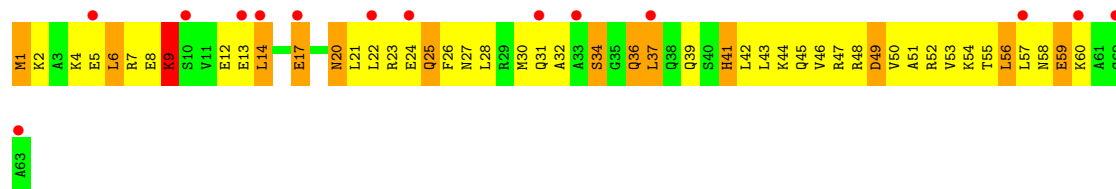
• Molecule 38: 50S ribosomal protein L16

Chain DM:



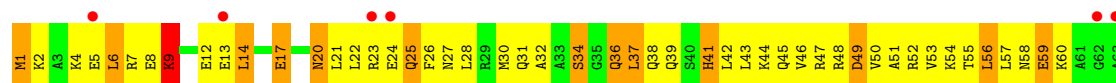
• Molecule 39: 50S ribosomal protein L29

Chain BX:



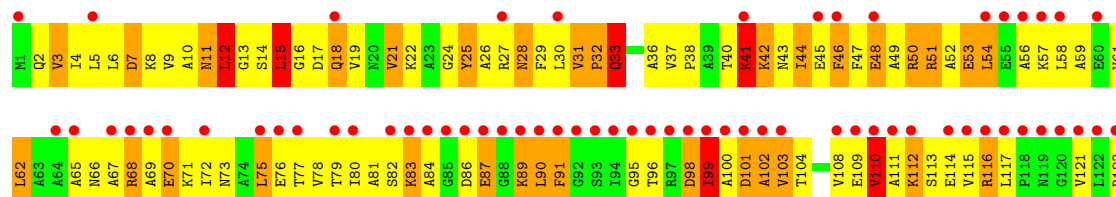
• Molecule 39: 50S ribosomal protein L29

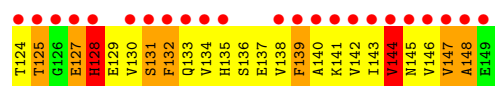
Chain DX:



• Molecule 40: 50S ribosomal protein L9

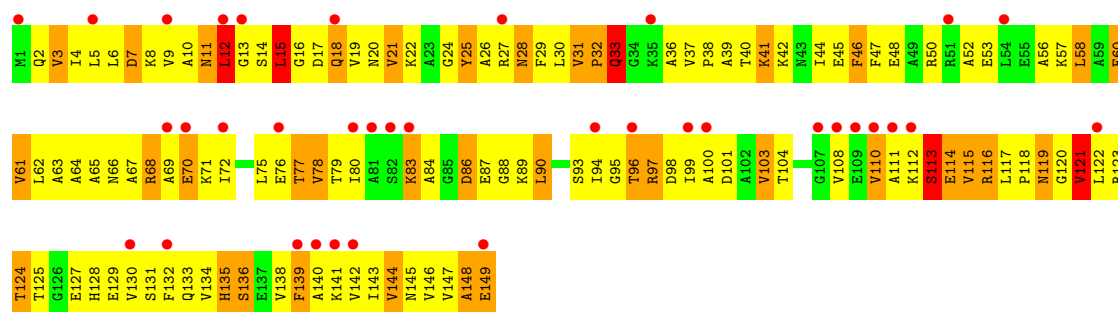
Chain BH:





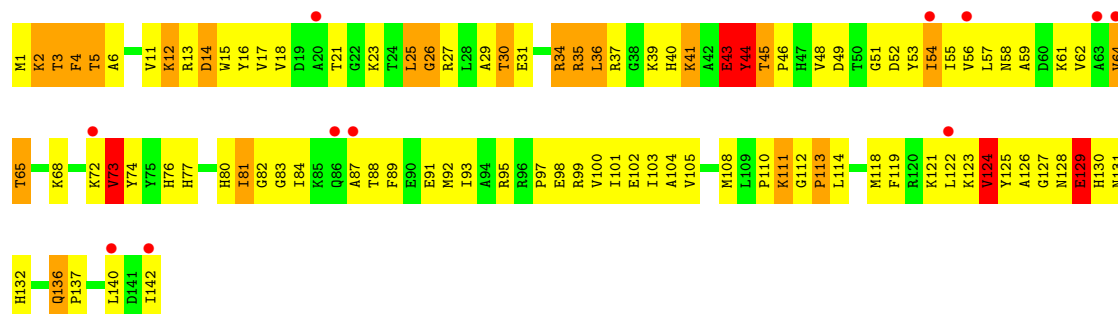
• Molecule 40: 50S ribosomal protein L9

Chain DH:



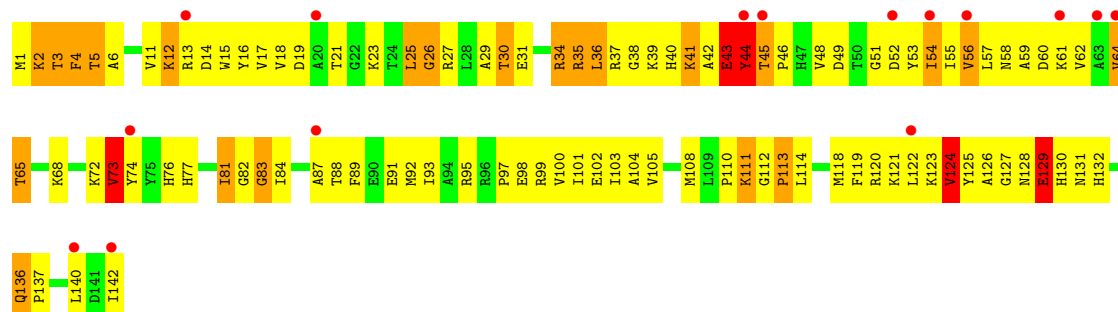
• Molecule 41: 50S ribosomal protein L13

Chain BJ:



• Molecule 41: 50S ribosomal protein L13

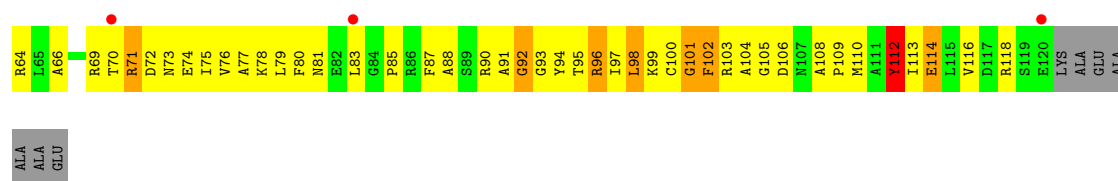
Chain DJ:



• Molecule 42: 50S ribosomal protein L17

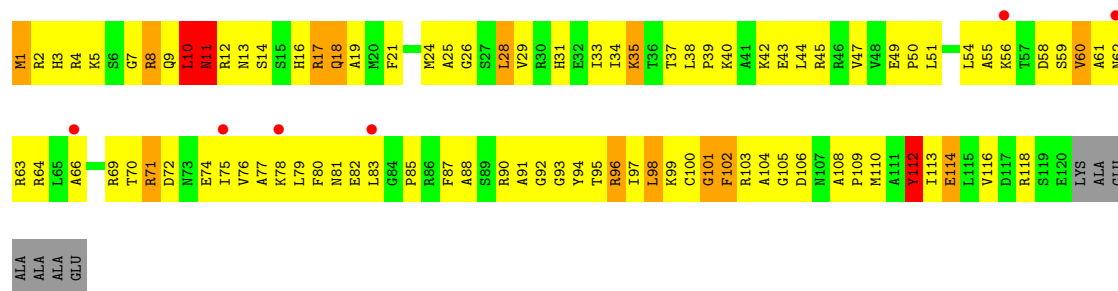
Chain BN:





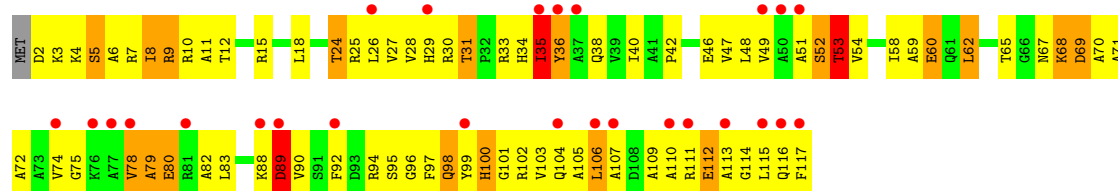
- Molecule 42: 50S ribosomal protein L17

Chain DN:



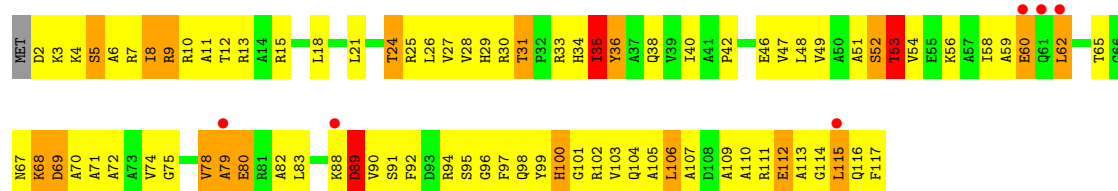
- Molecule 43: 50S ribosomal protein L18

Chain BO:



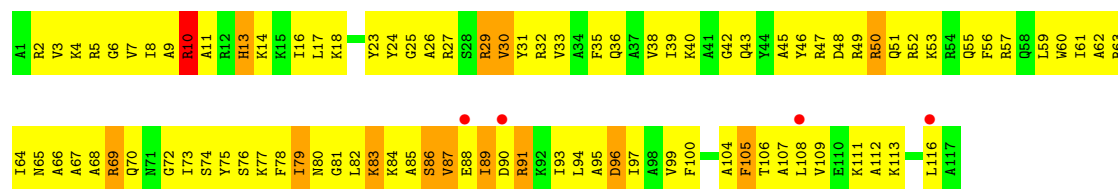
- Molecule 43: 50S ribosomal protein L18

Chain DO:



- Molecule 44: 50S ribosomal protein L20

Chain BQ:



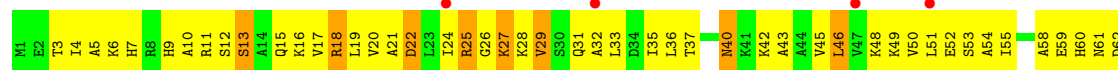
- Molecule 44: 50S ribosomal protein L20

Chain DQ:



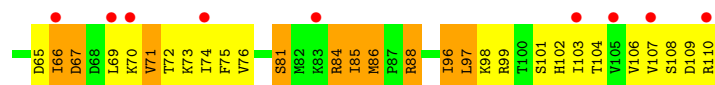
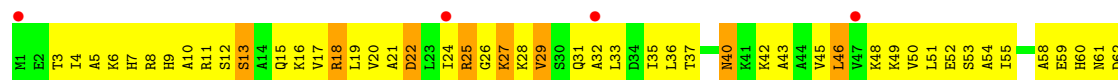
• Molecule 45: 50S ribosomal protein L22

Chain BS:



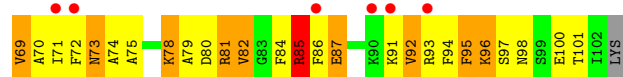
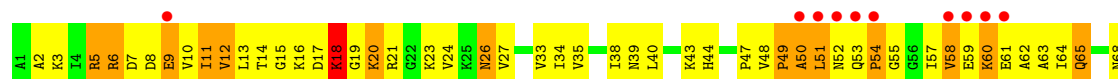
• Molecule 45: 50S ribosomal protein L22

Chain DS:



• Molecule 46: 50S ribosomal protein L24

Chain BU:



• Molecule 46: 50S ribosomal protein L24

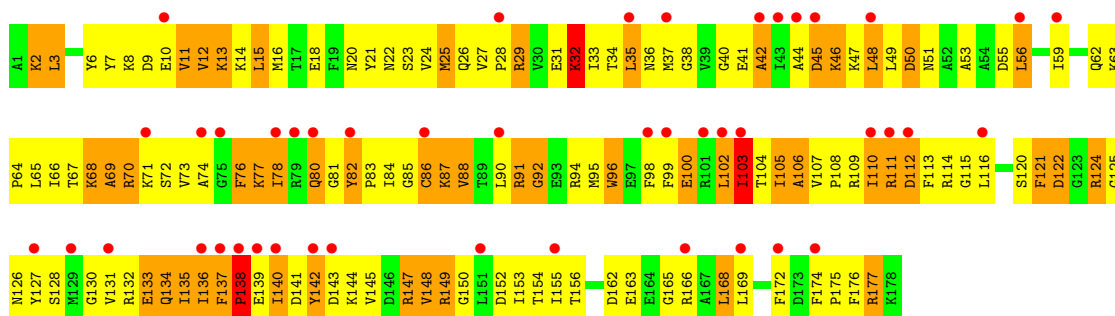
Chain DU:



• Molecule 47: 50S ribosomal protein L5

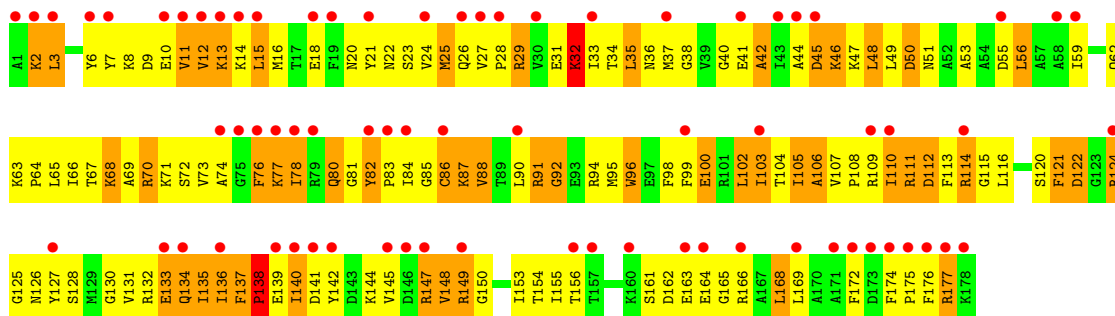
Chain BF:





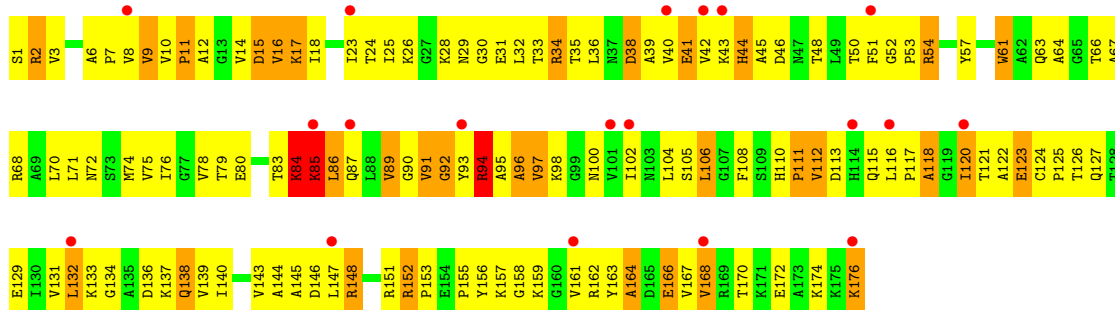
• Molecule 47: 50S ribosomal protein L5

Chain DF:



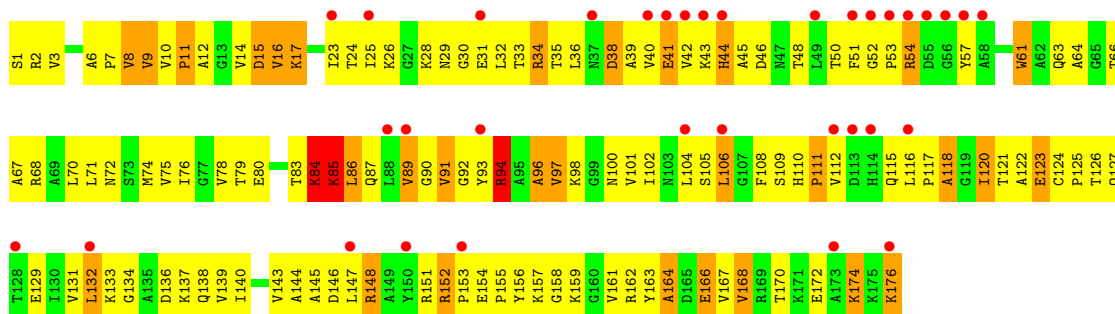
• Molecule 48: 50S ribosomal protein L6

Chain BG:



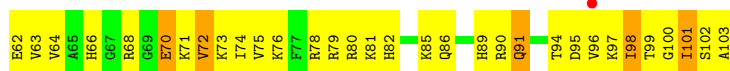
• Molecule 48: 50S ribosomal protein L6

Chain DG:



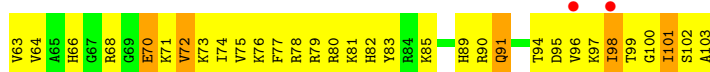
• Molecule 49: 50S ribosomal protein L21

Chain BR:



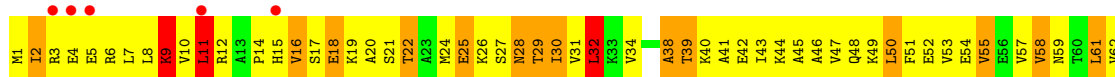
- Molecule 49: 50S ribosomal protein L21

Chain DR:



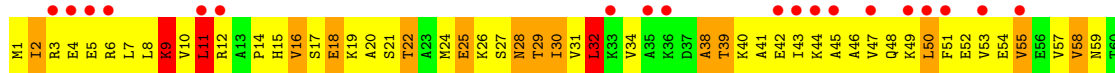
- Molecule 50: 50S ribosomal protein L23

Chain BT:



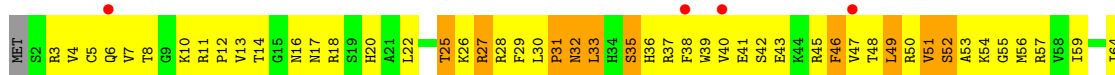
- Molecule 50: 50S ribosomal protein L23

Chain DT:



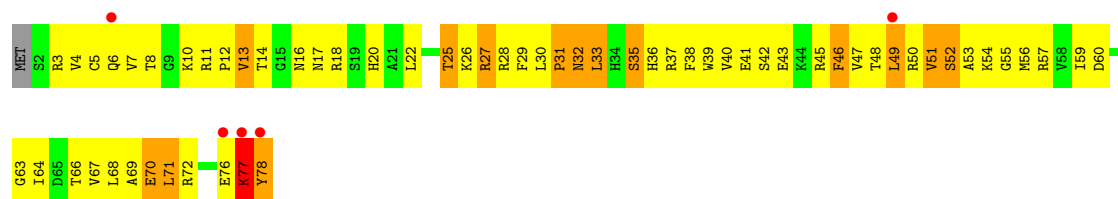
- Molecule 51: 50S ribosomal protein L28

Chain BZ:



- Molecule 51: 50S ribosomal protein L28

Chain DZ:



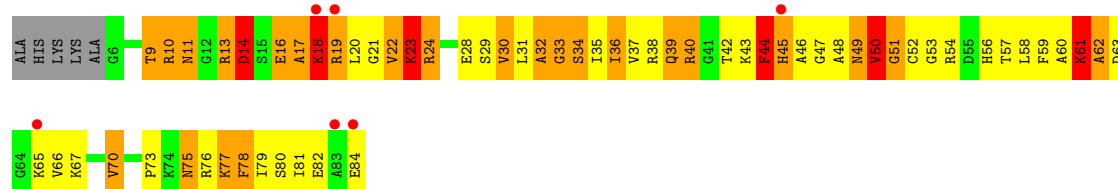
- Molecule 52: 50S ribosomal protein L27

Chain BW:



- Molecule 52: 50S ribosomal protein L27

Chain DW:



## 4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	208.85Å 379.20Å 739.28Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	70.00 – 3.50 182.94 – 3.53	Depositor EDS
% Data completeness (in resolution range)	(Not available) (70.00-3.50) 73.0 (182.94-3.53)	Depositor EDS
$R_{merge}$	0.10	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.69 (at 3.49Å)	Xtriage
Refinement program	CNS	Depositor
R, $R_{free}$	0.264 , 0.306 0.241 , 0.271	Depositor DCC
$R_{free}$ test set	25277 reflections (5.10%)	DCC
Wilson B-factor (Å <sup>2</sup> )	132.6	Xtriage
Anisotropy	0.194	Xtriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.25 , 38.1	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtriage
Outliers	0 of 521228 reflections	Xtriage
$F_o, F_c$ correlation	0.93	EDS
Total number of atoms	284201	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	71.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.41% of the height of the origin peak. No significant pseudotranslation is detected.*

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

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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

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	0.26	1/36762 (0.0%)	0.75	9/57350 (0.0%)
1	CA	0.32	2/36762 (0.0%)	0.77	8/57350 (0.0%)
2	AC	0.23	0/1651	0.45	0/2225
2	CC	0.23	0/1651	0.46	0/2225
3	AD	0.23	0/1665	0.43	0/2227
3	CD	0.23	0/1665	0.43	0/2227
4	AE	0.23	0/1118	0.46	0/1504
4	CE	0.23	0/1118	0.46	0/1504
5	AF	0.24	0/835	0.44	0/1128
5	CF	0.24	0/835	0.44	0/1128
6	AG	0.23	0/1187	0.44	0/1591
6	CG	0.23	0/1211	0.45	0/1624
7	AH	0.23	0/989	0.45	0/1326
7	CH	0.23	0/989	0.44	0/1326
8	AI	0.24	0/1034	0.44	0/1375
8	CI	0.24	0/1034	0.45	0/1375
9	AJ	0.22	0/796	0.48	0/1077
9	CJ	0.23	0/796	0.47	0/1077
10	AK	0.24	0/893	0.45	0/1205
10	CK	0.24	0/893	0.45	0/1205
11	AL	0.22	0/969	0.48	0/1300
11	CL	0.22	0/969	0.48	0/1300
12	AM	0.21	0/892	0.46	0/1193
12	CM	0.21	0/884	0.45	0/1181
13	AP	0.25	0/659	0.46	0/884
13	CP	0.25	0/648	0.46	0/870
14	AQ	0.24	0/657	0.46	0/881
14	CQ	0.24	0/666	0.46	0/892
15	AR	0.23	0/462	0.44	0/621
15	CR	0.23	0/462	0.45	0/621
16	AS	0.25	0/652	0.45	0/877
16	CS	0.25	0/660	0.49	0/888

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	AT	0.24	0/671	0.40	0/888
17	CT	0.23	0/671	0.40	0/888
18	AB	0.25	0/1735	0.44	0/2338
18	CB	0.25	0/1735	0.45	0/2338
19	AU	0.26	0/430	0.46	0/570
19	CU	0.26	0/430	0.46	0/570
20	AO	0.23	0/722	0.44	0/964
20	CO	0.23	0/722	0.43	0/964
21	AN	0.24	0/785	0.43	0/1043
21	CN	0.24	0/785	0.45	0/1043
22	BA	0.25	0/2803	0.75	0/4371
22	DA	0.25	0/2803	0.74	0/4371
23	BB	0.28	6/68314 (0.0%)	0.77	42/106569 (0.0%)
23	DB	0.28	6/68314 (0.0%)	0.77	41/106569 (0.0%)
24	BI	0.24	0/1046	0.46	0/1410
24	DI	0.25	0/1046	0.47	0/1410
25	BC	0.22	0/2121	0.47	0/2852
25	DC	0.22	0/2121	0.47	0/2852
26	BD	0.24	0/1586	0.47	0/2134
26	DD	0.24	0/1586	0.47	0/2134
27	BK	0.23	0/939	0.52	0/1258
27	DK	0.23	0/939	0.52	0/1258
28	BP	0.24	0/929	0.49	0/1242
28	DP	0.24	0/929	0.49	0/1242
29	BE	0.24	0/1571	0.49	0/2113
29	DE	0.24	0/1571	0.49	0/2113
30	BY	0.24	0/453	0.48	0/605
30	DY	0.24	0/453	0.48	0/605
31	B0	0.22	0/450	0.51	0/599
31	D0	0.22	0/450	0.51	0/599
32	B4	0.23	0/303	0.44	0/397
32	D4	0.23	0/303	0.44	0/397
33	B1	0.27	0/416	0.47	0/554
33	D1	0.27	0/416	0.47	0/554
34	B3	0.24	0/513	0.47	0/676
34	D3	0.24	0/513	0.47	0/676
35	BV	0.25	0/766	0.43	0/1025
35	DV	0.25	0/766	0.43	0/1025
36	B2	0.26	0/380	0.47	0/498
36	D2	0.26	0/380	0.47	0/498
37	BL	0.23	0/1054	0.47	0/1403
37	DL	0.23	0/1054	0.47	0/1403
38	BM	0.25	0/1093	0.47	0/1460

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
38	DM	0.25	0/1093	0.47	0/1460
39	BX	0.24	0/510	0.52	0/677
39	DX	0.24	0/510	0.52	0/677
40	BH	0.25	0/1122	0.45	0/1515
40	DH	0.25	0/1122	0.46	0/1515
41	BJ	0.23	0/1152	0.47	0/1551
41	DJ	0.23	0/1152	0.47	0/1551
42	BN	0.24	0/973	0.49	0/1301
42	DN	0.24	0/973	0.49	0/1301
43	BO	0.23	0/902	0.47	0/1209
43	DO	0.23	0/902	0.47	0/1209
44	BQ	0.25	0/960	0.46	0/1278
44	DQ	0.25	0/960	0.46	0/1278
45	BS	0.21	0/864	0.50	0/1156
45	DS	0.21	0/864	0.50	0/1156
46	BU	0.25	0/787	0.45	0/1051
46	DU	0.25	0/787	0.45	0/1051
47	BF	0.25	0/1444	0.50	0/1937
47	DF	0.25	0/1444	0.50	0/1937
48	BG	0.23	0/1343	0.46	0/1816
48	DG	0.23	0/1343	0.46	0/1816
49	BR	0.25	0/829	0.46	0/1107
49	DR	0.25	0/829	0.46	0/1107
50	BT	0.22	0/744	0.51	0/994
50	DT	0.22	0/744	0.51	0/994
51	BZ	0.25	0/635	0.48	0/848
51	DZ	0.25	0/635	0.48	0/848
52	BW	0.28	0/603	0.48	0/797
52	DW	0.27	0/603	0.48	0/797
All	All	0.27	15/306360 (0.0%)	0.70	100/457969 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	0	13
1	CA	0	20
23	BB	0	44
23	DB	0	43
All	All	0	120

All (15) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	BB	1086	A	C5-C6	-15.92	1.26	1.41
23	DB	1086	A	C5-C6	-15.80	1.26	1.41
23	BB	1088	A	C6-N1	-10.61	1.28	1.35
23	DB	1088	A	C6-N1	-10.48	1.28	1.35
23	DB	1060	U	C2-N3	7.81	1.43	1.37
23	BB	1060	U	C2-N3	7.68	1.43	1.37
23	DB	1086	A	N3-C4	-7.68	1.30	1.34
23	BB	1086	A	N3-C4	-7.60	1.30	1.34
1	CA	1257	A	C4'-C3'	-6.26	1.46	1.53
23	DB	1086	A	N7-C5	-6.09	1.35	1.39
23	BB	1086	A	N7-C5	-6.01	1.35	1.39
1	AA	495	A	N3-C4	-5.45	1.31	1.34
1	CA	495	A	N3-C4	-5.32	1.31	1.34
23	BB	2267	A	C6-N6	-5.06	1.29	1.33
23	DB	2267	A	C6-N6	-5.04	1.29	1.33

All (100) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	DB	2204	G	O5'-P-OP1	-29.68	75.09	110.70
23	BB	2204	G	O5'-P-OP2	-28.72	76.23	110.70
23	DB	2791	G	O5'-P-OP2	-27.53	77.67	110.70
23	BB	2791	G	O5'-P-OP1	-27.53	77.67	110.70
23	DB	2791	G	O5'-P-OP1	17.94	132.23	110.70
23	BB	2791	G	O5'-P-OP2	17.87	132.15	110.70
23	BB	2204	G	O5'-P-OP1	17.77	132.02	110.70
23	DB	2204	G	O5'-P-OP2	17.65	131.88	110.70
23	BB	2790	U	OP1-P-O3'	14.65	137.43	105.20
23	DB	2790	U	OP2-P-O3'	14.62	137.37	105.20
23	DB	2203	U	OP1-P-O3'	14.38	136.84	105.20
23	BB	2203	U	OP2-P-O3'	14.05	136.10	105.20
23	BB	1552	A	N9-C1'-C2'	-8.61	102.53	112.00
23	DB	1552	A	N9-C1'-C2'	-8.59	102.55	112.00
1	CA	466	A	C5'-C4'-C3'	8.52	129.64	116.00
23	DB	1088	A	N1-C6-N6	-8.34	113.59	118.60
23	BB	1088	A	N1-C6-N6	-8.26	113.65	118.60
1	CA	765	G	N9-C1'-C2'	-7.90	103.31	112.00
1	AA	765	G	N9-C1'-C2'	-7.86	103.36	112.00
23	BB	1060	U	C5-C4-O4	-7.37	121.48	125.90
23	BB	1086	A	C4-C5-C6	7.35	120.67	117.00
23	DB	1060	U	C5-C4-O4	-7.33	121.50	125.90
1	AA	86	G	N9-C1'-C2'	7.32	123.51	114.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	DB	1086	A	C4-C5-C6	7.11	120.56	117.00
23	BB	2733	A	N9-C1'-C2'	-7.10	104.19	112.00
23	DB	2733	A	N9-C1'-C2'	-7.09	104.20	112.00
1	AA	466	A	C5'-C4'-O4'	-6.87	100.86	109.10
23	DB	1350	C	C5'-C4'-C3'	-6.76	105.18	116.00
23	BB	560	C	C5'-C4'-C3'	-6.68	105.30	116.00
23	BB	1126	A	C5'-C4'-C3'	-6.55	105.53	116.00
1	CA	166	U	C5'-C4'-C3'	-6.47	105.64	116.00
23	BB	2192	U	C5'-C4'-C3'	-6.47	105.64	116.00
23	BB	1439	A	N9-C1'-C2'	-6.46	104.89	112.00
23	DB	1088	A	C5-C6-N6	6.42	128.84	123.70
23	DB	1439	A	N9-C1'-C2'	-6.42	104.94	112.00
23	BB	1088	A	C5-C6-N6	6.34	128.77	123.70
1	AA	166	U	C5'-C4'-C3'	-6.31	105.90	116.00
23	BB	2137	U	N1-C1'-C2'	-6.22	105.16	112.00
23	DB	2471	A	C5'-C4'-C3'	-6.19	106.10	116.00
23	BB	2471	A	C5'-C4'-C3'	-6.16	106.14	116.00
23	BB	2199	A	C5'-C4'-C3'	-6.14	106.18	116.00
23	BB	1350	C	C5'-C4'-C3'	-6.12	106.21	116.00
23	BB	1086	A	C6-C5-N7	-6.11	128.03	132.30
23	DB	560	C	C5'-C4'-C3'	-6.10	106.24	116.00
1	AA	960	U	C2'-C3'-O3'	6.10	123.46	113.70
23	DB	2790	U	O3'-P-O5'	-6.08	92.45	104.00
23	DB	1086	A	C6-C5-N7	-6.06	128.06	132.30
23	BB	2790	U	O3'-P-O5'	-5.96	92.68	104.00
1	CA	243	A	C2'-C3'-O3'	5.93	123.19	113.70
23	DB	2199	A	C5'-C4'-C3'	-5.89	106.58	116.00
1	AA	243	A	C2'-C3'-O3'	5.88	123.11	113.70
23	BB	745	G	C5'-C4'-C3'	-5.83	106.67	116.00
23	DB	1086	A	C2-N3-C4	-5.82	107.69	110.60
1	AA	992	U	N1-C1'-C2'	-5.79	105.62	112.00
23	DB	944	C	C5'-C4'-C3'	-5.77	106.77	116.00
23	DB	773	U	C5'-C4'-C3'	-5.74	106.81	116.00
23	BB	1086	A	C2-N3-C4	-5.72	107.74	110.60
23	DB	1634	A	C5'-C4'-C3'	-5.70	106.88	116.00
23	DB	2072	C	C5'-C4'-C3'	-5.69	106.90	116.00
23	BB	1060	U	N1-C2-O2	-5.66	118.84	122.80
23	BB	2267	A	N9-C1'-C2'	-5.64	105.79	112.00
23	DB	1060	U	N1-C2-O2	-5.64	118.85	122.80
23	DB	2203	U	O3'-P-O5'	-5.63	93.30	104.00
23	DB	2267	A	N9-C1'-C2'	-5.63	105.81	112.00
23	BB	1340	U	C5'-C4'-C3'	-5.60	107.04	116.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	BB	479	A	C4'-C3'-O3'	-5.54	97.77	109.40
23	BB	461	C	C5'-C4'-C3'	-5.49	107.21	116.00
23	DB	2894	G	N9-C1'-C2'	-5.47	105.98	112.00
23	BB	1126	A	O5'-P-OP2	-5.46	100.79	105.70
23	BB	1552	A	C4'-C3'-O3'	5.44	123.89	113.00
23	BB	2894	G	N9-C1'-C2'	-5.43	106.03	112.00
23	BB	2072	C	C5'-C4'-C3'	-5.40	107.36	116.00
23	DB	671	C	C5'-C4'-C3'	-5.38	107.39	116.00
23	DB	386	G	C5'-C4'-C3'	-5.38	107.40	116.00
23	DB	1060	U	N3-C2-O2	5.35	125.94	122.20
1	CA	1534	A	C2'-C3'-O3'	-5.35	97.74	109.50
1	CA	1213	A	O4'-C4'-C3'	5.33	110.36	106.10
23	BB	375	G	C5'-C4'-C3'	-5.32	107.48	116.00
23	BB	973	A	C5'-C4'-C3'	-5.31	107.50	116.00
23	BB	2203	U	O3'-P-O5'	-5.31	93.90	104.00
23	BB	690	G	C5'-C4'-C3'	-5.28	107.55	116.00
23	DB	1600	C	C5'-C4'-C3'	-5.28	107.55	116.00
23	DB	1664	A	C5'-C4'-C3'	-5.28	107.56	116.00
23	BB	1600	C	C5'-C4'-C3'	-5.26	107.58	116.00
23	BB	1060	U	N3-C2-O2	5.25	125.88	122.20
23	DB	1340	U	C5'-C4'-C3'	-5.23	107.63	116.00
23	BB	2137	U	C4'-C3'-O3'	5.22	123.45	113.00
23	DB	745	G	C5'-C4'-C3'	-5.21	107.66	116.00
23	DB	974	G	C4'-C3'-O3'	-5.16	98.56	109.40
1	CA	1432	G	C5'-C4'-C3'	-5.16	107.74	116.00
23	DB	461	C	C5'-C4'-C3'	-5.15	107.75	116.00
23	DB	375	G	C5'-C4'-C3'	-5.15	107.76	116.00
23	DB	1251	C	C5'-C4'-C3'	-5.14	107.78	116.00
23	DB	479	A	C4'-C3'-O3'	-5.11	98.67	109.40
1	CA	1432	G	N9-C1'-C2'	-5.11	106.38	112.00
1	AA	121	U	C5'-C4'-C3'	5.09	124.14	116.00
1	AA	1432	G	N9-C1'-C2'	-5.04	106.45	112.00
23	DB	1552	A	C4'-C3'-O3'	5.04	123.08	113.00
23	BB	671	C	C5'-C4'-C3'	-5.03	107.95	116.00
23	BB	1251	C	C5'-C4'-C3'	-5.03	107.95	116.00

There are no chirality outliers.

All (120) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1039	G	Sidechain
1	AA	1331	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	1432	G	Sidechain
1	AA	1441	A	Sidechain
1	AA	187	G	Sidechain
1	AA	281	G	Sidechain
1	AA	437	U	Sidechain
1	AA	438	U	Sidechain
1	AA	450	G	Sidechain
1	AA	496	A	Sidechain
1	AA	703	G	Sidechain
1	AA	86	G	Sidechain
1	AA	992	U	Sidechain
23	BB	1047	G	Sidechain
23	BB	1060	U	Sidechain
23	BB	1086	A	Sidechain
23	BB	1088	A	Sidechain
23	BB	118	A	Sidechain
23	BB	1306	C	Sidechain
23	BB	1377	G	Sidechain
23	BB	1419	A	Sidechain
23	BB	1439	A	Sidechain
23	BB	1476	U	Sidechain
23	BB	1546	G	Sidechain
23	BB	1572	A	Sidechain
23	BB	1721	G	Sidechain
23	BB	1792	G	Sidechain
23	BB	1814	G	Sidechain
23	BB	1828	G	Sidechain
23	BB	2062	A	Sidechain
23	BB	2156	G	Sidechain
23	BB	221	A	Sidechain
23	BB	222	A	Sidechain
23	BB	2272	U	Sidechain
23	BB	232	G	Sidechain
23	BB	2454	G	Sidechain
23	BB	2471	A	Sidechain
23	BB	2503	A	Sidechain
23	BB	2508	G	Sidechain
23	BB	2638	G	Sidechain
23	BB	2733	A	Sidechain
23	BB	2770	G	Sidechain
23	BB	2834	G	Sidechain
23	BB	2848	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
23	BB	2857	G	Sidechain
23	BB	2868	A	Sidechain
23	BB	2883	A	Sidechain
23	BB	299	A	Sidechain
23	BB	361	G	Sidechain
23	BB	500	G	Sidechain
23	BB	51	G	Sidechain
23	BB	562	U	Sidechain
23	BB	630	G	Sidechain
23	BB	727	A	Sidechain
23	BB	729	G	Sidechain
23	BB	757	G	Sidechain
23	BB	942	G	Sidechain
1	CA	1012	A	Sidechain
1	CA	1027	C	Sidechain
1	CA	1033	G	Sidechain
1	CA	1133	G	Sidechain
1	CA	1144	G	Sidechain
1	CA	1313	U	Sidechain
1	CA	1331	G	Sidechain
1	CA	1356	G	Sidechain
1	CA	1405	G	Sidechain
1	CA	1432	G	Sidechain
1	CA	1441	A	Sidechain
1	CA	187	G	Sidechain
1	CA	281	G	Sidechain
1	CA	437	U	Sidechain
1	CA	438	U	Sidechain
1	CA	450	G	Sidechain
1	CA	496	A	Sidechain
1	CA	703	G	Sidechain
1	CA	82	G	Sidechain
1	CA	935	A	Sidechain
23	DB	1047	G	Sidechain
23	DB	1060	U	Sidechain
23	DB	1086	A	Sidechain
23	DB	1088	A	Sidechain
23	DB	1306	C	Sidechain
23	DB	1377	G	Sidechain
23	DB	1419	A	Sidechain
23	DB	1439	A	Sidechain
23	DB	1476	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
23	DB	1546	G	Sidechain
23	DB	1572	A	Sidechain
23	DB	1721	G	Sidechain
23	DB	1792	G	Sidechain
23	DB	1814	G	Sidechain
23	DB	1828	G	Sidechain
23	DB	2062	A	Sidechain
23	DB	2135	A	Sidechain
23	DB	2136	G	Sidechain
23	DB	221	A	Sidechain
23	DB	222	A	Sidechain
23	DB	2272	U	Sidechain
23	DB	232	G	Sidechain
23	DB	2454	G	Sidechain
23	DB	2471	A	Sidechain
23	DB	2503	A	Sidechain
23	DB	2508	G	Sidechain
23	DB	2638	G	Sidechain
23	DB	2733	A	Sidechain
23	DB	2770	G	Sidechain
23	DB	2834	G	Sidechain
23	DB	2848	G	Sidechain
23	DB	2857	G	Sidechain
23	DB	2868	A	Sidechain
23	DB	2883	A	Sidechain
23	DB	299	A	Sidechain
23	DB	500	G	Sidechain
23	DB	51	G	Sidechain
23	DB	562	U	Sidechain
23	DB	630	G	Sidechain
23	DB	727	A	Sidechain
23	DB	729	G	Sidechain
23	DB	757	G	Sidechain
23	DB	942	G	Sidechain

## 5.2 Close contacts ⓘ

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogens added by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, and the number in parentheses is this value normalized per 1000 atoms of the molecule in the chain. The Symm-Clashes column gives symmetry related clashes, in the same way as for the

Clashes column.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32831	0	16521	1291	0
1	CA	32831	0	16521	1302	0
2	AC	1624	0	1699	189	0
2	CC	1624	0	1699	189	0
3	AD	1643	0	1710	127	0
3	CD	1643	0	1710	128	0
4	AE	1105	0	1148	94	0
4	CE	1105	0	1148	93	0
5	AF	817	0	808	95	0
5	CF	817	0	808	91	0
6	AG	1174	0	1230	150	0
6	CG	1196	0	1246	114	0
7	AH	979	0	1034	68	0
7	CH	979	0	1034	70	0
8	AI	1022	0	1070	146	0
8	CI	1022	0	1070	136	0
9	AJ	786	0	828	100	0
9	CJ	786	0	828	98	0
10	AK	877	0	887	108	0
10	CK	877	0	887	97	0
11	AL	955	0	1019	96	0
11	CL	955	0	1019	97	0
12	AM	883	0	944	160	0
12	CM	876	0	937	116	0
13	AP	649	0	666	58	0
13	CP	638	0	656	50	0
14	AQ	648	0	691	63	0
14	CQ	657	0	702	59	0
15	AR	455	0	478	40	0
15	CR	455	0	478	43	0
16	AS	637	0	665	107	0
16	CS	644	0	675	106	0
17	AT	665	0	714	60	0
17	CT	665	0	714	64	0
18	AB	1704	0	1732	193	0
18	CB	1704	0	1732	210	0
19	AU	425	0	449	74	0
19	CU	425	0	449	67	0
20	AO	714	0	734	65	0
20	CO	714	0	734	50	0
21	AN	774	0	827	109	0
21	CN	774	0	827	113	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	BA	2507	0	1270	104	0
22	DA	2507	0	1270	107	0
23	BB	60995	0	30679	2216	0
23	DB	60995	0	30678	2313	0
24	BI	1032	0	1088	112	0
24	DI	1032	0	1088	176	0
25	BC	2082	0	2157	217	0
25	DC	2082	0	2157	218	0
26	BD	1565	0	1616	206	0
26	DD	1565	0	1616	207	0
27	BK	930	0	1000	130	0
27	DK	930	0	1000	138	0
28	BP	917	0	965	115	0
28	DP	917	0	965	118	0
29	BE	1552	0	1619	199	0
29	DE	1552	0	1619	183	0
30	BY	449	0	491	58	0
30	DY	449	0	491	57	0
31	B0	444	0	461	35	0
31	D0	444	0	461	40	0
32	B4	302	0	340	42	0
32	D4	302	0	340	39	0
33	B1	409	0	440	34	0
33	D1	409	0	440	38	0
34	B3	504	0	574	50	0
34	D3	504	0	574	44	0
35	BV	753	0	780	102	0
35	DV	753	0	780	100	0
36	B2	377	0	418	48	0
36	D2	377	0	418	45	0
37	BL	1045	0	1117	139	0
37	DL	1045	0	1117	153	0
38	BM	1074	0	1157	116	0
38	DM	1074	0	1157	115	0
39	BX	509	0	543	63	0
39	DX	509	0	543	67	0
40	BH	1111	0	1148	193	0
40	DH	1111	0	1148	179	0
41	BJ	1129	0	1162	130	0
41	DJ	1129	0	1162	127	0
42	BN	960	0	1000	115	0
42	DN	960	0	1000	114	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
43	BO	892	0	923	93	0
43	DO	892	0	923	102	0
44	BQ	947	0	1022	143	0
44	DQ	947	0	1022	143	0
45	BS	857	0	922	86	0
45	DS	857	0	922	92	0
46	BU	779	0	834	110	0
46	DU	779	0	834	111	0
47	BF	1420	0	1460	223	0
47	DF	1420	0	1460	216	0
48	BG	1323	0	1374	188	0
48	DG	1323	0	1374	178	0
49	BR	816	0	839	110	0
49	DR	816	0	839	105	0
50	BT	738	0	807	107	0
50	DT	738	0	807	116	0
51	BZ	625	0	652	68	0
51	DZ	625	0	652	67	0
52	BW	596	0	610	134	0
52	DW	596	0	610	127	0
53	AA	42	0	46	0	0
53	BB	42	0	46	0	0
53	CA	42	0	46	0	0
53	DB	42	0	46	1	0
54	AA	60	0	0	0	0
54	BB	110	0	0	0	0
54	CA	59	0	0	0	0
54	DB	111	0	0	0	0
55	AA	23	0	24	5	0
55	CA	23	0	24	1	0
56	B4	1	0	0	0	0
56	D4	1	0	0	0	0
57	AA	290	0	0	2	0
57	AE	1	0	0	0	0
57	AK	1	0	0	0	0
57	AL	4	0	0	0	0
57	AN	1	0	0	0	0
57	AP	1	0	0	0	0
57	AT	2	0	0	0	0
57	BB	492	0	0	4	0
57	BC	7	0	0	0	0
57	BD	1	0	0	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
57	BE	4	0	0	0	0
57	BH	1	0	0	0	0
57	BL	2	0	0	0	0
57	CA	282	0	0	2	0
57	CE	2	0	0	0	0
57	CI	1	0	0	0	0
57	CL	4	0	0	0	0
57	CN	3	0	0	0	0
57	CP	1	0	0	0	0
57	CT	1	0	0	0	0
57	DB	501	0	0	14	0
57	DC	4	0	0	0	0
57	DD	1	0	0	0	0
57	DE	2	0	0	0	0
57	DL	1	0	0	0	0
57	DN	2	0	0	0	0
57	DR	1	0	0	0	0
All	All	284201	0	190895	16740	0

Clashscore is defined as the number of clashes calculated for the entry per 1000 atoms (including hydrogens) of the entry. The overall clashscore for this entry is 35.

All (16740) close contacts within the same asymmetric unit are listed below.

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1099:G:H8	24:DI:3:LYS:N	1.32	1.27
23:BB:2305:U:H1'	47:BF:132:ARG:HA	1.33	1.10
40:BH:125:THR:HA	40:BH:146:VAL:HB	1.28	1.10
18:CB:69:VAL:HG23	18:CB:162:VAL:HB	1.34	1.09
23:DB:1098:A:H3'	24:DI:3:LYS:HA	1.32	1.08
9:CJ:52:LEU:HB2	21:CN:80:ARG:HD2	1.35	1.08
8:CI:35:GLU:HA	8:CI:39:GLY:HA3	1.36	1.07
9:AJ:8:ILE:HA	9:AJ:100:ILE:HG22	1.37	1.07
19:CU:36:PHE:HB3	19:CU:40:PRO:HD3	1.07	1.07
23:BB:855:G:H21	52:BW:23:LYS:HG2	1.16	1.07
18:CB:46:VAL:HG13	18:CB:47:PRO:HD3	1.37	1.06
30:BY:12:ALA:HA	30:BY:15:ARG:HD3	1.37	1.06
23:DB:704:G:H2'	23:DB:726:G:H22	1.21	1.05
1:AA:1296:C:H4'	1:AA:1302:C:H41	1.17	1.05
50:DT:29:THR:HA	50:DT:86:THR:HA	1.37	1.05
19:AU:36:PHE:HB3	19:AU:40:PRO:HD3	1.08	1.05
30:DY:12:ALA:HA	30:DY:15:ARG:HD3	1.37	1.05
23:DB:1099:G:C8	24:DI:3:LYS:N	2.24	1.04

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:545:U:H2'	23:BB:546:U:H5'	1.38	1.04
52:BW:49:ASN:HB2	52:BW:61:LYS:H	1.20	1.04
50:BT:29:THR:HA	50:BT:86:THR:HA	1.35	1.03
23:DB:2305:U:H1'	47:DF:132:ARG:HA	1.37	1.03
52:DW:49:ASN:HB2	52:DW:61:LYS:H	1.19	1.03
23:DB:855:G:H21	52:DW:23:LYS:HG2	1.22	1.03
52:DW:51:GLY:HA3	52:DW:59:PHE:HB3	1.37	1.03
52:DW:48:ALA:HB3	52:DW:81:ILE:HG13	1.40	1.03
9:CJ:40:ILE:HD13	9:CJ:73:LEU:HB3	1.41	1.02
52:BW:51:GLY:HA3	52:BW:59:PHE:HB3	1.39	1.02
42:DN:37:THR:HG22	42:DN:39:PRO:HD2	1.42	1.02
8:CI:98:ARG:HG3	8:CI:103:VAL:HG21	1.37	1.02
6:CG:115:MET:HA	6:CG:118:ARG:HG3	1.39	1.01
9:CJ:55:PRO:HA	21:CN:80:ARG:HH21	1.25	1.01
25:DC:183:VAL:HG13	25:DC:185:ALA:H	1.24	1.01
32:B4:7:VAL:HG13	32:B4:8:LYS:H	1.26	1.00
25:BC:183:VAL:HG13	25:BC:185:ALA:H	1.24	1.00
9:CJ:9:ARG:HB2	9:CJ:99:GLN:HB2	1.38	1.00
32:D4:7:VAL:HG13	32:D4:8:LYS:H	1.27	1.00
23:DB:2502:G:H5'	23:DB:2503:A:H5''	1.43	1.00
23:BB:704:G:H2'	23:BB:726:G:H22	1.23	1.00
37:DL:29:LYS:HG3	37:DL:30:THR:HG23	1.43	0.99
10:AK:86:LYS:HB3	10:AK:112:VAL:HG23	1.42	0.99
25:DC:144:GLU:HG3	25:DC:151:GLY:H	1.25	0.99
48:BG:34:ARG:H	48:BG:34:ARG:HH11	1.03	0.99
26:BD:8:LYS:HB2	26:BD:201:LEU:HD21	1.44	0.99
2:CC:52:SER:HB3	2:CC:114:LEU:HG	1.45	0.99
1:AA:120:A:H2'	1:AA:121:U:H5''	1.44	0.99
26:DD:8:LYS:HB2	26:DD:201:LEU:HD21	1.44	0.99
4:AE:81:GLN:H	4:AE:146:MET:HE3	1.28	0.99
52:BW:48:ALA:HB3	52:BW:81:ILE:HG13	1.40	0.98
35:BV:9:ARG:HH12	35:BV:27:PRO:HB3	1.26	0.98
25:BC:123:ILE:HD12	25:BC:135:PRO:HG2	1.41	0.98
41:BJ:17:VAL:HG23	41:BJ:137:PRO:HB2	1.45	0.98
26:BD:106:LYS:HB3	26:BD:206:ALA:H	1.29	0.98
23:DB:1098:A:H3'	24:DI:3:LYS:CA	1.93	0.98
6:CG:10:LYS:HZ2	6:CG:11:ILE:H	1.09	0.98
35:DV:9:ARG:HH12	35:DV:27:PRO:HB3	1.25	0.98
23:DB:1099:G:O5'	24:DI:4:VAL:N	1.96	0.97
23:DB:1099:G:H8	24:DI:3:LYS:H	0.99	0.97
25:DC:123:ILE:HD12	25:DC:135:PRO:HG2	1.46	0.97
18:AB:13:VAL:HB	18:AB:207:ARG:HE	1.28	0.97

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CC:59:PRO:HG2	2:CC:62:SER:HB2	1.43	0.97
1:CA:120:A:H2'	1:CA:121:U:H5''	1.42	0.97
20:AO:25:THR:HG21	20:AO:70:LEU:HD23	1.47	0.97
52:BW:39:GLN:HG3	52:BW:42:THR:HB	1.46	0.97
19:CU:20:ARG:HG2	19:CU:24:LYS:HZ2	1.30	0.96
21:CN:51:PRO:HB2	21:CN:54:SER:HB3	1.43	0.96
48:DG:34:ARG:HH11	48:DG:34:ARG:H	1.04	0.96
29:BE:110:SER:HB3	29:BE:114:ARG:HH12	1.31	0.96
5:CF:3:HIS:H	5:CF:92:THR:HG23	1.28	0.96
5:AF:3:HIS:H	5:AF:92:THR:HG23	1.30	0.96
41:DJ:17:VAL:HG23	41:DJ:137:PRO:HB2	1.47	0.96
10:CK:86:LYS:HB3	10:CK:112:VAL:HG23	1.43	0.96
9:AJ:7:ARG:HB2	9:AJ:101:SER:H	1.30	0.95
40:BH:54:LEU:HA	40:BH:58:LEU:HB2	1.44	0.95
23:DB:27:G:H22	23:DB:512:G:H2'	1.31	0.95
23:BB:1032:A:H1'	32:B4:23:ILE:HD13	1.48	0.95
14:AQ:16:MET:HB2	14:AQ:19:SER:HB2	1.45	0.95
14:CQ:16:MET:HB2	14:CQ:19:SER:HB2	1.47	0.95
26:DD:106:LYS:HB3	26:DD:206:ALA:H	1.28	0.95
40:BH:79:THR:HG22	40:BH:145:ASN:HB2	1.45	0.95
6:CG:12:LEU:HD22	6:CG:13:PRO:HD2	1.47	0.95
52:DW:39:GLN:HG3	52:DW:42:THR:HB	1.47	0.95
2:CC:53:ARG:HH12	2:CC:55:VAL:HG23	1.30	0.95
23:BB:858:G:N3	23:BB:2268:A:H2'	1.81	0.95
4:CE:81:GLN:H	4:CE:146:MET:HE3	1.29	0.95
29:DE:110:SER:HB3	29:DE:114:ARG:HH12	1.30	0.95
23:BB:143:C:O4'	50:BT:2:ILE:HB	1.67	0.95
23:BB:2502:G:H5'	23:BB:2503:A:H5''	1.45	0.95
40:DH:127:GLU:HA	40:DH:145:ASN:HA	1.49	0.94
44:BQ:8:ILE:H	44:BQ:8:ILE:HD12	1.32	0.94
42:BN:72:ASP:HB3	42:BN:75:ILE:HG12	1.47	0.94
44:DQ:8:ILE:HD12	44:DQ:8:ILE:H	1.32	0.94
37:DL:123:ARG:HA	37:DL:143:GLU:HB3	1.49	0.94
43:BO:53:THR:HG22	43:BO:74:VAL:HG21	1.48	0.94
6:CG:2:ARG:HH11	6:CG:2:ARG:HB3	1.33	0.94
8:AI:18:VAL:HG11	8:AI:82:ILE:HA	1.46	0.94
23:BB:922:C:H1'	52:BW:22:VAL:HG21	1.50	0.94
23:DB:2720:U:H5''	28:DP:52:ARG:HH22	1.33	0.94
9:CJ:52:LEU:H	9:CJ:52:LEU:HD12	1.28	0.93
36:B2:30:VAL:HA	36:B2:33:ARG:HH22	1.33	0.93
12:AM:106:ARG:HE	12:AM:112:ARG:HG2	1.30	0.93
19:AU:16:ARG:HH12	19:AU:19:LYS:HE2	1.32	0.93

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BH:82:SER:HB3	40:BH:146:VAL:HG13	1.49	0.93
42:DN:72:ASP:HB3	42:DN:75:ILE:HG12	1.47	0.93
24:BI:129:GLU:HB3	24:BI:133:ARG:HH12	1.31	0.93
23:DB:138:U:H4'	23:DB:139:U:H3'	1.49	0.93
18:CB:164:ASP:HB2	18:CB:203:ASP:HB2	1.48	0.93
50:BT:67:VAL:HB	50:BT:76:ARG:HG3	1.51	0.93
37:BL:123:ARG:HA	37:BL:143:GLU:HB3	1.51	0.93
43:DO:53:THR:HG22	43:DO:74:VAL:HG21	1.49	0.93
23:DB:858:G:N3	23:DB:2268:A:H2'	1.83	0.93
37:BL:29:LYS:HG3	37:BL:30:THR:HG23	1.50	0.93
10:CK:124:LYS:HA	19:CU:34:ARG:HB3	1.47	0.93
9:AJ:39:PRO:HA	9:AJ:74:VAL:HG22	1.51	0.93
23:DB:1729:U:H3'	23:DB:1730:C:H4'	1.50	0.93
10:AK:124:LYS:HA	19:AU:34:ARG:HB3	1.49	0.92
40:BH:40:THR:H	40:BH:43:ASN:HD22	1.17	0.92
46:BU:34:ILE:HG12	46:BU:63:ALA:HB2	1.52	0.92
3:AD:160:LEU:H	3:AD:160:LEU:HD13	1.34	0.92
48:BG:157:LYS:HB3	48:BG:159:LYS:HG3	1.51	0.92
14:CQ:45:VAL:HG12	14:CQ:46:HIS:H	1.35	0.92
2:AC:62:SER:HB3	2:AC:97:PRO:HG2	1.51	0.92
30:BY:30:ARG:HH11	30:BY:30:ARG:HB2	1.31	0.92
23:BB:1729:U:H3'	23:BB:1730:C:H4'	1.51	0.92
23:BB:2305:U:H4'	47:BF:132:ARG:HG2	1.52	0.92
46:DU:34:ILE:HG12	46:DU:63:ALA:HB2	1.50	0.92
1:CA:9:G:H5'	4:CE:107:GLY:HA3	1.51	0.92
42:BN:37:THR:HG22	42:BN:39:PRO:HD2	1.51	0.92
12:CM:21:ILE:HB	12:CM:24:VAL:HG22	1.52	0.92
19:CU:24:LYS:HZ3	19:CU:25:ALA:H	1.15	0.92
23:BB:27:G:H22	23:BB:512:G:H2'	1.33	0.92
6:CG:125:ASP:HB3	6:CG:130:LYS:HD2	1.52	0.92
30:DY:30:ARG:HB2	30:DY:30:ARG:HH11	1.32	0.92
37:BL:90:VAL:HB	37:BL:122:VAL:HG12	1.52	0.92
15:AR:40:PRO:HD2	15:AR:43:ILE:HD11	1.52	0.92
23:BB:1283:G:H22	23:BB:1286:A:H5'	1.34	0.91
2:AC:149:LYS:HB3	2:AC:200:TRP:HB2	1.52	0.91
8:CI:19:PHE:HB2	8:CI:63:TYR:HB3	1.52	0.91
25:BC:144:GLU:HG3	25:BC:151:GLY:H	1.31	0.91
1:CA:978:A:H5'	1:CA:1362:A:H62	1.36	0.91
37:DL:79:LEU:HB2	37:DL:113:ALA:H	1.34	0.91
48:DG:84:LYS:HG2	48:DG:85:LYS:H	1.36	0.91
10:CK:22:ILE:HG21	10:CK:95:THR:HG21	1.51	0.91
23:DB:2306:C:H3'	23:DB:2307:G:H5'	1.52	0.91

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DW:17:ALA:HA	52:DW:35:ILE:HG23	1.50	0.91
48:DG:157:LYS:HB3	48:DG:159:LYS:HG3	1.53	0.91
19:CU:16:ARG:HH12	19:CU:19:LYS:HE2	1.33	0.91
27:DK:35:VAL:HG23	27:DK:36:GLY:H	1.36	0.91
9:AJ:36:VAL:HG13	9:AJ:76:ILE:HG22	1.53	0.91
48:BG:84:LYS:HG2	48:BG:85:LYS:H	1.35	0.91
23:BB:1046:A:H3'	23:BB:1047:G:H5''	1.51	0.91
42:DN:37:THR:HB	42:DN:40:LYS:HG3	1.53	0.90
37:DL:90:VAL:HB	37:DL:122:VAL:HG12	1.51	0.90
42:DN:70:THR:HB	42:DN:75:ILE:HD11	1.53	0.90
23:DB:1283:G:H22	23:DB:1286:A:H5'	1.34	0.90
18:AB:46:VAL:HG13	18:AB:47:PRO:HD3	1.49	0.90
27:BK:35:VAL:HG23	27:BK:36:GLY:H	1.35	0.90
1:AA:9:G:H5'	4:AE:107:GLY:HA3	1.50	0.90
23:BB:2306:C:H3'	23:BB:2307:G:H5'	1.52	0.90
50:DT:67:VAL:HB	50:DT:76:ARG:HG3	1.51	0.90
52:BW:17:ALA:HA	52:BW:35:ILE:HG23	1.50	0.90
23:BB:2145:C:H3'	23:BB:2146:C:H3'	1.54	0.90
19:AU:20:ARG:HG2	19:AU:24:LYS:HZ2	1.36	0.90
51:DZ:40:VAL:HG21	51:DZ:43:GLU:HB3	1.54	0.90
46:BU:3:LYS:HB3	46:BU:82:VAL:HG21	1.53	0.90
28:DP:4:ILE:HG22	28:DP:5:LYS:H	1.37	0.90
23:DB:1812:U:H1'	25:DC:43:ASN:HD21	1.37	0.90
50:BT:69:ARG:HB3	50:BT:74:ILE:HA	1.54	0.90
27:BK:88:ASN:HD22	27:BK:89:ASN:N	1.70	0.90
40:BH:78:VAL:HB	40:BH:143:ILE:HG13	1.52	0.90
14:AQ:45:VAL:HG12	14:AQ:46:HIS:H	1.36	0.89
10:AK:22:ILE:HG21	10:AK:95:THR:HG21	1.52	0.89
15:CR:40:PRO:HD2	15:CR:43:ILE:HD11	1.53	0.89
23:BB:2720:U:H5''	28:BP:52:ARG:HH22	1.36	0.89
40:BH:80:ILE:HD12	40:BH:99:ILE:HD13	1.53	0.89
23:BB:1060:U:N3	23:BB:1088:A:N7	2.20	0.89
1:CA:406:G:H21	3:CD:115:GLN:HE22	1.19	0.89
35:DV:26:PHE:HE1	35:DV:89:ILE:HD11	1.37	0.89
45:DS:66:ILE:H	45:DS:66:ILE:HD13	1.37	0.89
19:AU:36:PHE:HA	19:AU:39:LYS:HE2	1.54	0.89
37:BL:79:LEU:HB2	37:BL:113:ALA:H	1.34	0.89
3:CD:160:LEU:H	3:CD:160:LEU:HD13	1.37	0.89
21:AN:12:ARG:HE	21:AN:58:ARG:HG3	1.35	0.89
49:BR:3:ALA:HB2	49:BR:101:ILE:HD11	1.54	0.89
40:DH:31:VAL:HB	40:DH:32:PRO:HD3	1.52	0.89
46:DU:3:LYS:HB3	46:DU:82:VAL:HG21	1.54	0.89

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:DQ:105:PHE:HA	44:DQ:108:LEU:HD12	1.55	0.89
40:BH:31:VAL:HB	40:BH:32:PRO:HD3	1.53	0.89
19:CU:36:PHE:HA	19:CU:39:LYS:HE2	1.55	0.89
33:B1:49:LYS:HG3	33:B1:50:GLU:H	1.37	0.89
1:AA:406:G:H21	3:AD:115:GLN:HE22	1.18	0.89
23:DB:1060:U:N3	23:DB:1088:A:N7	2.21	0.89
48:BG:148:ARG:HB2	48:BG:152:ARG:HH11	1.38	0.88
18:AB:57:ASN:HB3	18:AB:219:THR:HB	1.55	0.88
10:AK:80:ASN:HD22	10:AK:80:ASN:H	1.20	0.88
50:DT:69:ARG:HB3	50:DT:74:ILE:HA	1.56	0.88
10:CK:80:ASN:H	10:CK:80:ASN:HD22	1.21	0.88
45:BS:66:ILE:HD13	45:BS:66:ILE:H	1.38	0.88
5:CF:98:GLU:HG2	5:CF:99:ALA:H	1.38	0.88
29:BE:158:PHE:HA	29:BE:169:VAL:HG21	1.55	0.88
37:BL:143:GLU:HG2	37:BL:144:GLU:H	1.39	0.88
23:DB:1168:G:H2'	23:DB:1169:A:C8	2.08	0.88
2:CC:2:GLN:H	2:CC:2:GLN:HE21	1.22	0.88
39:BX:1:MET:HB3	39:BX:4:LYS:HB3	1.56	0.88
26:BD:106:LYS:HB3	26:BD:206:ALA:N	1.89	0.88
26:DD:106:LYS:HB3	26:DD:206:ALA:N	1.89	0.88
19:AU:24:LYS:HZ3	19:AU:25:ALA:H	1.17	0.88
2:AC:34:SER:HA	2:AC:37:LYS:HD3	1.56	0.88
23:DB:704:G:H2'	23:DB:726:G:N2	1.89	0.87
40:BH:67:ALA:HB1	40:BH:71:LYS:HD3	1.53	0.87
42:BN:37:THR:HB	42:BN:40:LYS:HG3	1.56	0.87
1:CA:1060:U:H4'	9:CJ:54:SER:HB2	1.55	0.87
2:CC:190:THR:HG23	2:CC:192:TYR:H	1.39	0.87
3:AD:116:LEU:HB3	3:AD:122:ILE:HD11	1.56	0.87
18:CB:19:THR:HA	18:CB:37:VAL:HA	1.56	0.87
26:DD:11:MET:HE1	26:DD:192:ALA:H	1.38	0.87
51:BZ:40:VAL:HG21	51:BZ:43:GLU:HB3	1.56	0.87
27:DK:88:ASN:HD22	27:DK:89:ASN:N	1.73	0.87
18:CB:172:ILE:HG22	18:CB:176:ASN:HD21	1.40	0.87
8:CI:18:VAL:HG11	8:CI:82:ILE:HA	1.56	0.87
48:DG:148:ARG:HB2	48:DG:152:ARG:HH11	1.39	0.87
51:DZ:4:VAL:HG12	51:DZ:11:ARG:HG2	1.54	0.87
1:AA:1003:G:N2	1:AA:1005:A:H5'	1.89	0.87
43:DO:11:ALA:HB2	43:DO:96:GLY:H	1.40	0.87
48:BG:153:PRO:HG2	48:BG:162:ARG:HB3	1.56	0.87
27:DK:71:ARG:HB3	27:DK:72:PRO:HD2	1.54	0.87
40:DH:69:ALA:HA	40:DH:140:ALA:HB2	1.55	0.87
35:BV:62:THR:HG22	35:BV:71:LYS:HG2	1.57	0.87

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AF:98:GLU:HG2	5:AF:99:ALA:H	1.40	0.87
23:BB:675:A:H5'	29:BE:60:TRP:HE1	1.39	0.86
33:D1:49:LYS:HG3	33:D1:50:GLU:H	1.38	0.86
27:BK:71:ARG:HB3	27:BK:72:PRO:HD2	1.56	0.86
42:BN:70:THR:HB	42:BN:75:ILE:HD11	1.54	0.86
30:BY:4:ILE:HG23	30:BY:58:GLU:HB3	1.56	0.86
24:BI:27:LEU:HD23	24:BI:27:LEU:H	1.40	0.86
23:BB:855:G:N2	52:BW:23:LYS:HG2	1.89	0.86
18:CB:163:ILE:HG23	18:CB:164:ASP:H	1.41	0.86
32:D4:10:LEU:HD12	32:D4:33:HIS:HA	1.56	0.86
9:AJ:42:LEU:HD23	9:AJ:71:LEU:HD11	1.57	0.86
43:DO:28:VAL:HG22	43:DO:29:HIS:H	1.40	0.86
51:BZ:4:VAL:HG12	51:BZ:11:ARG:HG2	1.57	0.86
37:DL:143:GLU:HG2	37:DL:144:GLU:H	1.41	0.86
38:DM:19:GLY:HA2	38:DM:97:GLN:HB2	1.56	0.86
46:BU:12:VAL:HA	46:BU:69:VAL:HA	1.58	0.86
19:AU:36:PHE:CB	19:AU:40:PRO:HD3	2.02	0.86
23:BB:2269:G:H4'	52:BW:19:ARG:HH12	1.38	0.86
52:BW:47:GLY:HA3	52:BW:80:SER:HA	1.58	0.86
47:DF:115:GLY:HA2	47:DF:177:ARG:HH11	1.41	0.86
14:AQ:60:ILE:HG22	14:AQ:74:LEU:HA	1.56	0.86
46:DU:12:VAL:HA	46:DU:69:VAL:HA	1.58	0.86
44:BQ:105:PHE:HA	44:BQ:108:LEU:HD12	1.57	0.86
38:BM:19:GLY:HA2	38:BM:97:GLN:HB2	1.55	0.86
12:AM:109:LYS:HD3	12:AM:110:GLY:H	1.40	0.85
23:DB:1082:U:C4	23:DB:1086:A:C2	2.64	0.85
19:CU:36:PHE:CB	19:CU:40:PRO:HD3	2.01	0.85
12:AM:52:ILE:HD12	12:AM:55:LEU:HD12	1.56	0.85
3:CD:146:GLU:HA	3:CD:149:LYS:HG2	1.56	0.85
12:AM:85:TYR:HA	12:AM:88:LEU:HD12	1.59	0.85
40:DH:77:THR:HG21	40:DH:145:ASN:HD22	1.41	0.85
16:AS:6:LYS:HD2	16:AS:6:LYS:H	1.42	0.85
49:BR:28:ALA:O	49:BR:63:VAL:HG21	1.76	0.85
32:B4:10:LEU:HD12	32:B4:33:HIS:HA	1.58	0.85
16:AS:15:LEU:HD13	21:AN:46:LYS:HZ1	1.40	0.85
28:BP:4:ILE:HG22	28:BP:5:LYS:H	1.38	0.85
23:DB:2346:A:H3'	23:DB:2347:C:H5''	1.59	0.85
43:BO:28:VAL:HG22	43:BO:29:HIS:H	1.42	0.85
49:DR:28:ALA:O	49:DR:63:VAL:HG21	1.76	0.85
8:CI:51:LEU:HD22	8:CI:56:MET:HG2	1.57	0.85
23:BB:1082:U:C4	23:BB:1086:A:C2	2.64	0.85
23:DB:899:A:H3'	23:DB:900:A:H8	1.41	0.85

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CI:66:VAL:HG21	8:CI:74:GLN:HG3	1.57	0.85
21:AN:50:LEU:H	21:AN:51:PRO:HD2	1.40	0.85
48:BG:162:ARG:HB2	48:BG:166:GLU:HG3	1.57	0.85
37:DL:116:VAL:HG13	37:DL:117:THR:H	1.42	0.85
23:DB:2886:A:H62	31:D0:39:ARG:NE	1.73	0.85
5:AF:42:TRP:HE1	5:AF:61:LEU:HD23	1.41	0.85
12:AM:10:ASP:HB3	12:AM:45:SER:HB3	1.59	0.85
47:BF:126:ASN:HB3	47:BF:156:THR:HA	1.58	0.85
23:BB:1913:A:H4'	23:BB:1914:C:H5''	1.55	0.85
29:DE:158:PHE:HA	29:DE:169:VAL:HG21	1.55	0.85
48:DG:153:PRO:HG2	48:DG:162:ARG:HB3	1.55	0.84
47:DF:40:GLY:HA2	47:DF:84:ILE:HA	1.59	0.84
47:DF:110:ILE:HB	47:DF:113:PHE:HB3	1.56	0.84
7:AH:11:THR:HG22	7:AH:14:ARG:HH12	1.42	0.84
30:DY:4:ILE:HG23	30:DY:58:GLU:HB3	1.58	0.84
23:DB:992:C:H4'	49:DR:74:ILE:HD13	1.59	0.84
47:BF:40:GLY:HA2	47:BF:84:ILE:HA	1.59	0.84
46:DU:58:VAL:HG12	46:DU:59:GLU:H	1.42	0.84
1:CA:1086:U:H3	1:CA:1099:G:H22	1.22	0.84
12:AM:53:ASP:HA	12:AM:56:ARG:HD2	1.58	0.84
42:DN:85:PRO:HA	42:DN:88:ALA:HB2	1.60	0.84
23:BB:1203:U:H1'	37:BL:4:ASN:HD21	1.42	0.84
36:D2:30:VAL:HA	36:D2:33:ARG:HH22	1.40	0.84
46:DU:49:PRO:HA	46:DU:53:GLN:HE21	1.41	0.84
23:DB:1024:G:H3'	23:DB:1025:G:H5''	1.56	0.84
12:AM:15:VAL:HG13	12:AM:33:LEU:HD12	1.60	0.84
37:BL:116:VAL:HG13	37:BL:117:THR:H	1.41	0.84
18:AB:83:ALA:O	18:AB:88:GLN:HB2	1.77	0.84
23:BB:704:G:H2'	23:BB:726:G:N2	1.91	0.84
24:DI:11:GLN:HG2	24:DI:55:PRO:HB3	1.60	0.84
43:BO:11:ALA:HB2	43:BO:96:GLY:H	1.43	0.84
46:BU:58:VAL:HG12	46:BU:59:GLU:H	1.41	0.84
46:DU:94:PHE:HA	46:DU:101:THR:HA	1.60	0.84
1:AA:1182:G:H4'	1:AA:1183:U:H5'	1.58	0.84
23:BB:1024:G:H3'	23:BB:1025:G:H5''	1.59	0.84
36:D2:12:ARG:HE	36:D2:44:VAL:HG11	1.43	0.84
23:BB:2346:A:H3'	23:BB:2347:C:H5''	1.60	0.84
13:AP:54:LEU:HB2	13:AP:82:ALA:HB3	1.60	0.84
35:BV:26:PHE:HE1	35:BV:89:ILE:HD11	1.43	0.84
1:CA:978:A:H5'	1:CA:1362:A:N6	1.91	0.84
48:DG:162:ARG:HB2	48:DG:166:GLU:HG3	1.56	0.84
12:AM:79:LEU:HA	12:AM:82:LEU:HG	1.59	0.84

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DR:3:ALA:HB2	49:DR:101:ILE:HD11	1.58	0.84
1:CA:1534:A:H62	19:CU:44:ARG:NH1	1.76	0.84
15:CR:60:ARG:HA	15:CR:63:TYR:HD2	1.43	0.84
9:AJ:55:PRO:HA	21:AN:80:ARG:HH21	1.42	0.84
18:CB:86:CYS:SG	18:CB:88:GLN:HG3	2.17	0.84
47:BF:110:ILE:HB	47:BF:113:PHE:HB3	1.58	0.84
23:BB:45:G:H5'	23:BB:46:G:H5'	1.58	0.84
39:DX:1:MET:HB3	39:DX:4:LYS:HB3	1.60	0.83
23:BB:495:G:H21	45:BS:61:ASN:HD21	1.23	0.83
50:DT:57:VAL:HG22	50:DT:58:VAL:H	1.43	0.83
23:BB:1141:U:H4'	23:BB:1142:A:O4'	1.78	0.83
28:DP:63:ILE:HA	28:DP:68:GLY:HA2	1.60	0.83
47:BF:38:GLY:HA2	47:BF:85:GLY:HA3	1.60	0.83
14:CQ:60:ILE:HG22	14:CQ:74:LEU:HA	1.57	0.83
1:AA:939:G:H4'	6:AG:101:ARG:HH12	1.44	0.83
3:CD:116:LEU:HB3	3:CD:122:ILE:HD11	1.58	0.83
2:AC:69:THR:HG21	2:AC:75:VAL:HG21	1.59	0.83
23:DB:2379:G:H4'	43:DO:21:LEU:HD11	1.59	0.83
40:BH:69:ALA:HA	40:BH:140:ALA:HA	1.58	0.83
29:DE:59:PRO:HB2	29:DE:67:ARG:HH22	1.43	0.83
23:DB:495:G:H21	45:DS:61:ASN:HD21	1.27	0.83
50:BT:29:THR:HA	50:BT:86:THR:CA	2.07	0.83
40:BH:81:ALA:HA	40:BH:147:VAL:HB	1.61	0.83
49:DR:39:LEU:HB2	49:DR:49:ILE:HG12	1.60	0.83
33:D1:36:LYS:HB2	33:D1:47:ILE:HA	1.59	0.83
26:DD:51:THR:HG22	26:DD:52:THR:H	1.44	0.83
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.12	0.83
29:BE:5:LEU:HD12	29:BE:10:SER:HB2	1.59	0.83
26:DD:39:ASP:HB3	26:DD:42:ASN:HB3	1.61	0.83
8:CI:45:MET:HA	8:CI:48:ARG:HD2	1.59	0.83
23:DB:2336:A:H62	52:DW:40:ARG:HB3	1.41	0.83
28:DP:91:VAL:HG11	28:DP:96:LEU:HD11	1.60	0.83
36:B2:10:LEU:HD22	36:B2:14:ARG:HD2	1.60	0.83
3:AD:84:ASN:ND2	4:AE:101:GLY:HA3	1.94	0.83
40:DH:84:ALA:HA	40:DH:90:LEU:HA	1.60	0.83
18:CB:31:PHE:HB2	18:CB:41:ASN:HA	1.61	0.83
8:CI:16:ALA:HA	8:CI:66:VAL:HA	1.60	0.83
47:BF:102:LEU:HD22	47:BF:103:ILE:H	1.44	0.83
23:BB:495:G:N2	45:BS:61:ASN:HD21	1.77	0.83
35:DV:62:THR:HG22	35:DV:71:LYS:HG2	1.59	0.83
23:DB:1141:U:H4'	23:DB:1142:A:O4'	1.78	0.83
23:BB:1056:G:H1'	23:BB:1103:A:H61	1.44	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1338:G:H2'	1:AA:1339:A:C8	2.13	0.83
50:DT:11:LEU:H	50:DT:11:LEU:HD22	1.44	0.83
50:DT:29:THR:HA	50:DT:86:THR:CA	2.09	0.83
1:AA:1236:A:H4'	1:AA:1304:G:H4'	1.59	0.83
18:AB:163:ILE:HG23	18:AB:164:ASP:H	1.43	0.83
47:DF:126:ASN:HB3	47:DF:156:THR:HA	1.59	0.83
47:DF:134:GLN:HE21	47:DF:149:ARG:HG3	1.43	0.83
22:DA:98:G:H1	35:DV:14:LYS:HB2	1.45	0.82
4:CE:132:PRO:HG2	4:CE:133:ILE:HD12	1.59	0.82
26:DD:148:GLN:HG3	26:DD:152:PRO:HG2	1.61	0.82
20:AO:35:GLN:O	20:AO:39:LEU:HB2	1.79	0.82
44:DQ:81:GLY:HA3	44:DQ:112:ALA:HB1	1.61	0.82
50:BT:11:LEU:HD22	50:BT:11:LEU:H	1.45	0.82
1:CA:1000:A:H2'	1:CA:1001:C:C6	2.14	0.82
50:BT:57:VAL:HG22	50:BT:58:VAL:H	1.43	0.82
25:DC:16:VAL:H	25:DC:203:VAL:HB	1.44	0.82
6:CG:87:PRO:HG3	6:CG:148:LYS:HA	1.61	0.82
46:BU:78:LYS:HD3	46:BU:79:ALA:H	1.43	0.82
12:AM:11:HIS:HA	12:AM:43:LYS:HD3	1.61	0.82
23:BB:1021:A:H62	23:BB:1141:U:H3	1.24	0.82
1:CA:17:U:H2'	1:CA:18:C:C6	2.15	0.82
21:CN:59:GLN:N	21:CN:59:GLN:HE21	1.77	0.82
23:BB:100:U:O2	23:BB:100:U:H2'	1.78	0.82
26:BD:11:MET:HE1	26:BD:192:ALA:H	1.43	0.82
23:DB:1021:A:H62	23:DB:1141:U:H3	1.28	0.82
3:CD:166:LYS:HD3	3:CD:167:PRO:HD2	1.62	0.82
50:DT:15:HIS:H	50:DT:32:LEU:HA	1.44	0.82
42:BN:85:PRO:HA	42:BN:88:ALA:HB2	1.62	0.82
23:BB:1060:U:C2	23:BB:1088:A:N7	2.48	0.82
1:AA:1057:G:H5''	2:AC:153:SER:HB2	1.61	0.82
47:BF:134:GLN:HE21	47:BF:149:ARG:HG3	1.44	0.82
24:DI:27:LEU:HD23	24:DI:27:LEU:H	1.45	0.82
23:BB:1993:U:H4'	26:BD:133:THR:HG21	1.61	0.82
1:CA:1297:G:H4'	1:CA:1298:U:H5'	1.60	0.82
2:AC:179:ALA:HA	2:AC:205:GLU:HA	1.60	0.82
17:CT:59:ARG:HB2	17:CT:59:ARG:HH11	1.45	0.82
51:BZ:7:VAL:HG13	51:BZ:8:THR:HG23	1.60	0.82
10:CK:28:ASN:HD21	10:CK:47:GLY:H	1.24	0.82
15:CR:51:GLN:HA	15:CR:51:GLN:HE21	1.45	0.82
25:DC:27:LYS:HG3	25:DC:28:PRO:HD2	1.61	0.82
23:DB:45:G:H5'	23:DB:46:G:H5'	1.60	0.82
47:DF:3:LEU:HD21	47:DF:172:PHE:HB3	1.62	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:126:VAL:HG13	29:BE:156:ASN:HD22	1.44	0.81
40:DH:116:ARG:HE	40:DH:118:PRO:HD3	1.43	0.81
18:CB:85:SER:HB2	18:CB:88:GLN:HE22	1.45	0.81
23:DB:1324:G:H1'	23:DB:1616:A:N6	1.95	0.81
1:AA:926:G:H3'	1:AA:1505:G:H21	1.45	0.81
16:AS:44:ILE:HA	16:AS:61:VAL:HG11	1.62	0.81
1:AA:1191:A:H61	55:AA:1662:SCM:H11	1.44	0.81
26:BD:39:ASP:HB3	26:BD:42:ASN:HB3	1.61	0.81
19:CU:38:GLU:C	19:CU:40:PRO:HD2	2.00	0.81
9:CJ:7:ARG:HE	9:CJ:101:SER:HB3	1.43	0.81
29:DE:58:LYS:C	29:DE:60:TRP:H	1.81	0.81
1:AA:981:U:H4'	21:AN:60:ARG:HD2	1.62	0.81
46:DU:78:LYS:HD3	46:DU:79:ALA:H	1.43	0.81
26:BD:148:GLN:HG3	26:BD:152:PRO:HG2	1.61	0.81
23:BB:2353:G:H1'	52:BW:30:VAL:HG13	1.62	0.81
1:AA:1348:U:H4'	8:AI:121:ARG:HG3	1.62	0.81
17:AT:66:ILE:HG23	17:AT:70:LYS:HB3	1.61	0.81
36:B2:12:ARG:HE	36:B2:44:VAL:HG11	1.46	0.81
46:BU:94:PHE:HA	46:BU:101:THR:HA	1.60	0.81
18:CB:151:LYS:HG3	18:CB:152:ASP:N	1.94	0.81
1:CA:975:A:H4'	1:CA:976:G:O5'	1.80	0.81
44:BQ:91:ARG:HH12	49:BR:10:LYS:HB3	1.45	0.81
43:DO:27:VAL:HG21	43:DO:40:ILE:HD12	1.62	0.81
28:BP:63:ILE:HA	28:BP:68:GLY:HA2	1.62	0.81
29:DE:5:LEU:HD12	29:DE:10:SER:HB2	1.62	0.81
51:DZ:7:VAL:HG13	51:DZ:8:THR:HG23	1.60	0.81
26:BD:51:THR:HG22	26:BD:52:THR:H	1.45	0.81
12:AM:21:ILE:HG22	12:AM:23:GLY:H	1.43	0.81
26:BD:53:GLY:HA3	26:BD:77:ARG:HG3	1.63	0.81
23:BB:1324:G:H1'	23:BB:1616:A:N6	1.95	0.81
24:DI:121:ILE:HD13	24:DI:121:ILE:H	1.45	0.81
7:CH:11:THR:HG22	7:CH:14:ARG:HH12	1.44	0.81
1:AA:1237:C:H3'	1:AA:1238:A:H5'	1.62	0.81
19:AU:38:GLU:C	19:AU:40:PRO:HD2	2.01	0.81
1:AA:437:U:H2'	1:AA:438:U:O4'	1.80	0.81
23:DB:1060:U:C2	23:DB:1088:A:N7	2.49	0.81
9:AJ:32:THR:HG23	9:AJ:83:THR:HG23	1.62	0.81
39:DX:6:LEU:HD13	39:DX:7:ARG:H	1.46	0.81
46:BU:49:PRO:HA	46:BU:53:GLN:HE21	1.45	0.81
23:BB:2269:G:H4'	52:BW:19:ARG:NH1	1.95	0.81
38:DM:19:GLY:HA2	38:DM:98:PRO:HD2	1.63	0.81
3:AD:166:LYS:HD3	3:AD:167:PRO:HD2	1.63	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BO:27:VAL:HG21	43:BO:40:ILE:HD12	1.63	0.81
42:BN:33:ILE:HA	42:BN:114:GLU:HB2	1.63	0.81
46:BU:81:ARG:HG3	46:BU:96:LYS:HD2	1.63	0.81
1:CA:437:U:H2'	1:CA:438:U:O4'	1.80	0.81
33:B1:36:LYS:HB2	33:B1:47:ILE:HA	1.61	0.81
13:CP:4:ILE:HG12	13:CP:21:VAL:HG22	1.63	0.81
1:CA:1412:C:H2'	1:CA:1413:A:H8	1.46	0.81
29:BE:58:LYS:C	29:BE:60:TRP:H	1.81	0.81
27:DK:47:ILE:HG13	27:DK:48:PRO:HD2	1.62	0.81
23:DB:1373:A:H2'	23:DB:1374:G:O4'	1.81	0.81
23:BB:1798:U:H5''	25:BC:257:ARG:HB2	1.62	0.81
17:AT:59:ARG:HH11	17:AT:59:ARG:HB2	1.45	0.81
29:BE:59:PRO:HB2	29:BE:67:ARG:HH22	1.45	0.81
8:CI:35:GLU:HA	8:CI:39:GLY:CA	2.11	0.80
6:CG:2:ARG:HB3	6:CG:2:ARG:NH1	1.95	0.80
47:BF:115:GLY:HA2	47:BF:177:ARG:HH11	1.44	0.80
29:DE:29:HIS:NE2	37:DL:8:PRO:HG3	1.97	0.80
37:BL:93:ASN:ND2	37:BL:94:THR:H	1.79	0.80
28:DP:75:THR:HG23	28:DP:76:HIS:H	1.46	0.80
20:AO:36:ILE:HD11	20:AO:59:MET:HG3	1.62	0.80
4:AE:28:ARG:NH2	4:AE:30:PHE:HA	1.95	0.80
34:D3:54:LEU:HG	34:D3:58:ILE:HD11	1.63	0.80
25:BC:16:VAL:H	25:BC:203:VAL:HB	1.46	0.80
1:AA:203:G:H1'	1:AA:465:A:N1	1.96	0.80
10:CK:126:ARG:HB2	19:CU:33:ARG:HD2	1.63	0.80
30:DY:15:ARG:H	30:DY:15:ARG:HD2	1.46	0.80
50:BT:15:HIS:H	50:BT:32:LEU:HA	1.44	0.80
1:CA:1187:G:H4'	8:CI:112:ARG:HH12	1.45	0.80
23:BB:1287:A:OP1	42:BN:104:ALA:HB3	1.82	0.80
16:AS:44:ILE:HD11	16:AS:63:ASP:HA	1.62	0.80
30:DY:3:THR:HB	30:DY:36:GLU:HG2	1.63	0.80
1:AA:17:U:H2'	1:AA:18:C:C6	2.17	0.80
46:DU:81:ARG:HG3	46:DU:96:LYS:HD2	1.63	0.80
46:DU:50:ALA:H	46:DU:53:GLN:NE2	1.79	0.80
1:AA:973:G:H3'	1:AA:974:A:H5''	1.63	0.80
44:BQ:81:GLY:HA3	44:BQ:112:ALA:HB1	1.61	0.80
2:AC:38:VAL:O	2:AC:42:LEU:HB3	1.81	0.80
1:CA:373:A:H1'	1:CA:481:G:N3	1.97	0.80
23:DB:309:A:H4'	46:DU:15:GLY:HA3	1.64	0.80
39:DX:14:LEU:HD13	39:DX:57:LEU:HD21	1.64	0.80
30:BY:15:ARG:HD2	30:BY:15:ARG:H	1.47	0.80
15:AR:60:ARG:HA	15:AR:63:TYR:HD2	1.45	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1082:U:N3	23:BB:1086:A:C2	2.50	0.80
1:AA:926:G:N2	1:AA:1505:G:H2'	1.97	0.80
23:BB:670:A:H4'	23:BB:671:C:H5'	1.64	0.80
43:BO:49:VAL:HG21	43:BO:82:ALA:HB2	1.63	0.80
42:BN:101:GLY:HA2	42:BN:110:MET:N	1.97	0.80
23:DB:1099:G:H5''	24:DI:3:LYS:N	1.97	0.80
49:BR:39:LEU:HB2	49:BR:49:ILE:HG12	1.64	0.80
9:AJ:51:VAL:HG23	21:AN:80:ARG:HB2	1.64	0.80
4:CE:28:ARG:NH2	4:CE:30:PHE:HA	1.97	0.80
25:DC:77:VAL:HG23	25:DC:112:GLY:H	1.47	0.80
2:AC:25:THR:HG23	21:AN:75:LYS:HD2	1.64	0.80
37:DL:96:LYS:HA	37:DL:101:ILE:HB	1.62	0.80
37:DL:93:ASN:ND2	37:DL:94:THR:H	1.80	0.80
25:BC:27:LYS:HG3	25:BC:28:PRO:HD2	1.62	0.80
40:DH:41:LYS:HA	40:DH:44:ILE:HG12	1.62	0.80
6:AG:12:LEU:HD22	6:AG:13:PRO:HD2	1.63	0.80
2:CC:149:LYS:HD3	2:CC:168:ARG:HD3	1.64	0.80
1:AA:1296:C:H4'	1:AA:1302:C:N4	1.97	0.80
28:BP:75:THR:HG23	28:BP:76:HIS:H	1.47	0.80
29:DE:126:VAL:HG13	29:DE:156:ASN:HD22	1.47	0.80
3:AD:146:GLU:HA	3:AD:149:LYS:HG2	1.62	0.80
43:DO:88:LYS:HE2	43:DO:116:GLN:HB2	1.64	0.80
38:BM:19:GLY:HA2	38:BM:98:PRO:HD2	1.64	0.80
23:BB:2472:G:H2'	23:BB:2475:C:H42	1.46	0.80
40:DH:21:VAL:HG22	40:DH:22:LYS:H	1.46	0.80
24:DI:21:PRO:HB2	24:DI:22:PRO:HD3	1.64	0.80
23:BB:1812:U:H1'	25:BC:43:ASN:HD21	1.45	0.80
13:AP:20:VAL:HG23	13:AP:35:ARG:HA	1.63	0.80
23:BB:1728:C:H2'	23:BB:1729:U:H5''	1.63	0.79
52:DW:47:GLY:HA3	52:DW:80:SER:HA	1.62	0.79
1:AA:1296:C:C4'	1:AA:1302:C:H41	1.93	0.79
51:BZ:45:ARG:HE	51:BZ:47:VAL:HG12	1.46	0.79
47:DF:102:LEU:HD22	47:DF:103:ILE:H	1.46	0.79
36:D2:10:LEU:HD22	36:D2:14:ARG:HD2	1.63	0.79
28:BP:89:GLY:HA2	28:BP:112:ARG:N	1.98	0.79
1:CA:1278:G:H4'	1:CA:1279:G:C5'	2.13	0.79
23:BB:1681:G:N3	23:BB:1762:A:H2'	1.97	0.79
12:CM:47:LEU:HD12	12:CM:51:GLN:HB3	1.61	0.79
38:BM:59:ARG:HH11	38:BM:60:GLN:HB3	1.48	0.79
23:BB:2305:U:C1'	47:BF:132:ARG:HA	2.12	0.79
8:CI:59:LYS:HD2	8:CI:60:LEU:HG	1.65	0.79
26:DD:53:GLY:HA3	26:DD:77:ARG:HG3	1.63	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BU:50:ALA:H	46:BU:53:GLN:NE2	1.80	0.79
37:BL:96:LYS:HA	37:BL:101:ILE:HB	1.64	0.79
23:BB:992:C:H4'	49:BR:74:ILE:HD13	1.62	0.79
40:BH:68:ARG:HE	40:BH:68:ARG:HA	1.46	0.79
8:AI:20:ILE:HG23	8:AI:60:LEU:HD13	1.63	0.79
1:CA:1071:C:H2'	1:CA:1072:G:H8	1.46	0.79
23:BB:280:U:H2'	23:BB:281:C:C6	2.18	0.79
18:AB:63:LYS:HA	18:AB:224:ARG:HH21	1.48	0.79
23:DB:1097:U:H2'	23:DB:1098:A:O4'	1.83	0.79
49:DR:49:ILE:HD13	49:DR:53:PHE:H	1.44	0.79
1:CA:1278:G:H4'	1:CA:1279:G:H5'	1.63	0.79
10:AK:28:ASN:HD21	10:AK:47:GLY:H	1.28	0.79
47:DF:38:GLY:HA2	47:DF:85:GLY:HA3	1.64	0.79
19:CU:23:GLU:HA	19:CU:27:VAL:HG21	1.65	0.79
1:AA:1361:G:H2'	1:AA:1362:A:H5''	1.63	0.79
8:CI:87:MET:O	8:CI:91:GLU:HG2	1.83	0.79
18:AB:198:VAL:HG12	18:AB:200:PRO:HD3	1.63	0.79
1:AA:1032:G:N3	1:AA:1032:G:H3'	1.98	0.79
18:AB:187:ASP:HB3	18:AB:201:GLY:O	1.81	0.79
39:BX:6:LEU:HD13	39:BX:7:ARG:H	1.48	0.79
24:BI:21:PRO:HB2	24:BI:22:PRO:HD3	1.62	0.79
1:AA:190:A:H2'	1:AA:191:G:O4'	1.82	0.79
23:DB:1655:A:H5'	26:DD:118:PHE:HB2	1.64	0.79
39:BX:14:LEU:HD13	39:BX:57:LEU:HD21	1.64	0.79
23:BB:181:A:H2'	23:BB:182:A:C8	2.16	0.79
27:BK:19:VAL:HG12	27:BK:43:ILE:HA	1.64	0.79
4:AE:132:PRO:HG2	4:AE:133:ILE:HD12	1.64	0.79
19:AU:35:GLU:HB2	19:AU:37:TYR:CZ	2.18	0.79
23:DB:1082:U:N3	23:DB:1086:A:C2	2.50	0.79
23:DB:2425:A:H5'	23:DB:2427:C:O4'	1.81	0.79
23:BB:2749:A:H3'	23:BB:2750:A:H5''	1.65	0.79
25:BC:77:VAL:HG23	25:BC:112:GLY:H	1.48	0.79
23:DB:90:U:H3'	23:DB:91:A:H5''	1.64	0.79
48:DG:94:ARG:HB3	48:DG:127:GLN:HG2	1.64	0.79
12:AM:19:THR:HA	12:AM:24:VAL:HG23	1.65	0.79
48:BG:84:LYS:HG3	48:BG:132:LEU:N	1.98	0.79
40:DH:9:VAL:HB	40:DH:13:GLY:HA3	1.65	0.79
1:CA:940:C:H2'	1:CA:941:G:C8	2.17	0.79
10:AK:126:ARG:HB2	19:AU:33:ARG:HD2	1.64	0.78
9:CJ:15:HIS:HA	9:CJ:18:ILE:HG22	1.63	0.78
5:AF:91:ARG:H	5:AF:93:LYS:HZ1	1.30	0.78
37:DL:103:ILE:H	37:DL:103:ILE:HD12	1.47	0.78

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BM:66:ARG:HG3	38:BM:101:VAL:HG22	1.66	0.78
23:BB:784:G:N1	25:BC:227:VAL:HG11	1.98	0.78
42:DN:33:ILE:HA	42:DN:114:GLU:HB2	1.65	0.78
12:AM:2:ARG:HH11	12:AM:6:ILE:HA	1.48	0.78
48:DG:144:ALA:HA	48:DG:147:LEU:HD12	1.64	0.78
40:DH:84:ALA:HB2	40:DH:90:LEU:HD23	1.63	0.78
42:DN:101:GLY:HA2	42:DN:110:MET:N	1.97	0.78
1:CA:1356:G:H2'	1:CA:1357:A:H8	1.47	0.78
44:BQ:68:ALA:HB1	44:BQ:73:ILE:HG23	1.65	0.78
8:AI:40:ARG:N	8:AI:44:ARG:HD3	1.99	0.78
23:BB:1655:A:H5'	26:BD:118:PHE:HB2	1.64	0.78
3:CD:84:ASN:ND2	4:CE:101:GLY:HA3	1.99	0.78
23:BB:558:U:OP1	41:BJ:113:PRO:HG2	1.84	0.78
37:BL:23:ILE:HD12	37:BL:23:ILE:H	1.48	0.78
23:DB:670:A:H4'	23:DB:671:C:H5'	1.64	0.78
24:BI:55:PRO:HD3	24:BI:74:PRO:HD3	1.64	0.78
18:CB:67:LEU:HD12	18:CB:157:PRO:HG3	1.64	0.78
48:BG:167:VAL:HG23	48:BG:168:VAL:H	1.48	0.78
48:DG:97:VAL:HG11	48:DG:123:GLU:HA	1.65	0.78
23:DB:947:A:H2'	23:DB:948:C:C6	2.19	0.78
16:AS:62:THR:HB	16:AS:65:MET:HB3	1.62	0.78
39:DX:14:LEU:HD22	39:DX:57:LEU:HD11	1.65	0.78
3:AD:152:SER:HA	3:AD:155:LYS:HD3	1.64	0.78
19:AU:23:GLU:HA	19:AU:27:VAL:HG21	1.64	0.78
40:DH:86:ASP:HB2	40:DH:89:LYS:HD3	1.64	0.78
41:DJ:81:ILE:HG23	41:DJ:82:GLY:H	1.49	0.78
8:CI:20:ILE:HD12	8:CI:62:LEU:HB3	1.64	0.78
37:BL:57:LEU:HB2	37:BL:60:ARG:HH11	1.48	0.78
23:BB:2886:A:H62	31:B0:39:ARG:NE	1.81	0.78
37:DL:57:LEU:HB2	37:DL:60:ARG:HH11	1.48	0.78
21:CN:1:ALA:HB1	21:CN:6:LYS:NZ	1.99	0.78
8:AI:24:ASN:ND2	8:AI:25:GLY:H	1.81	0.78
24:DI:55:PRO:HD3	24:DI:74:PRO:HD3	1.64	0.78
39:BX:14:LEU:HD22	39:BX:57:LEU:HD11	1.64	0.78
45:DS:6:LYS:HB3	45:DS:104:THR:HG22	1.63	0.78
1:AA:1432:G:H5'	28:BP:105:LYS:HG2	1.66	0.78
12:CM:95:PRO:N	12:CM:108:ARG:HG2	1.98	0.78
24:BI:33:ASN:HD21	24:BI:64:ARG:HH11	1.32	0.78
27:BK:47:ILE:HG13	27:BK:48:PRO:HD2	1.66	0.78
45:BS:6:LYS:HB3	45:BS:104:THR:HG22	1.66	0.78
9:CJ:6:ILE:HD12	9:CJ:76:ILE:HD11	1.66	0.78
28:BP:112:ARG:HB2	28:BP:112:ARG:HH11	1.48	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1047:G:H21	1:AA:1215:G:H4'	1.49	0.78
45:BS:81:SER:HB2	45:BS:97:LEU:HD12	1.64	0.78
40:BH:9:VAL:HB	40:BH:13:GLY:HA3	1.64	0.78
1:AA:1307:U:H2'	1:AA:1308:U:C6	2.19	0.78
40:BH:68:ARG:O	40:BH:72:ILE:HG22	1.84	0.78
47:BF:66:ILE:HD11	47:BF:83:PRO:HB3	1.64	0.78
38:DM:66:ARG:HG3	38:DM:101:VAL:HG22	1.65	0.78
23:BB:1911:U:H2'	23:BB:1918:A:N1	1.97	0.78
23:DB:558:U:OP1	41:DJ:113:PRO:HG2	1.83	0.78
23:DB:1098:A:C8	24:DI:3:LYS:HB3	2.19	0.78
8:AI:27:ILE:HG23	8:AI:62:LEU:HB2	1.66	0.78
2:AC:13:ILE:HG12	2:AC:14:VAL:HG13	1.66	0.78
1:AA:373:A:H1'	1:AA:481:G:N3	1.98	0.78
23:DB:2498:C:O2'	23:DB:2499:C:H5'	1.84	0.78
20:AO:17:ARG:HD2	20:AO:17:ARG:H	1.48	0.78
2:CC:116:ALA:O	2:CC:119:ILE:HG22	1.82	0.78
48:DG:15:ASP:HB2	48:DG:26:LYS:HB3	1.66	0.77
37:DL:82:LEU:HD23	37:DL:90:VAL:HG21	1.66	0.77
8:AI:40:ARG:H	8:AI:44:ARG:HD3	1.49	0.77
37:BL:95:LEU:HA	37:BL:98:ALA:HB3	1.65	0.77
18:CB:99:MET:HA	18:CB:106:VAL:HG21	1.64	0.77
23:DB:1594:U:H2'	23:DB:1595:C:C6	2.19	0.77
43:DO:49:VAL:HG21	43:DO:82:ALA:HB2	1.64	0.77
47:BF:11:VAL:HG12	47:BF:12:VAL:H	1.48	0.77
19:CU:35:GLU:HB2	19:CU:37:TYR:CZ	2.18	0.77
23:DB:1080:A:H4'	24:DI:126:ARG:CD	2.14	0.77
18:AB:99:MET:HA	18:AB:106:VAL:HG21	1.66	0.77
42:BN:101:GLY:HA2	42:BN:110:MET:H	1.47	0.77
42:DN:97:ILE:HD12	42:DN:98:LEU:N	1.99	0.77
17:CT:66:ILE:HG23	17:CT:70:LYS:HB3	1.65	0.77
40:DH:46:PHE:HB3	40:DH:50:ARG:HH22	1.46	0.77
46:BU:40:LEU:H	46:BU:40:LEU:HD12	1.49	0.77
30:DY:16:LEU:H	30:DY:16:LEU:HD22	1.49	0.77
21:CN:50:LEU:H	21:CN:51:PRO:HD2	1.48	0.77
8:AI:4:GLN:HE21	8:AI:21:LYS:HE3	1.49	0.77
37:BL:103:ILE:H	37:BL:103:ILE:HD12	1.49	0.77
42:DN:101:GLY:HA2	42:DN:110:MET:H	1.48	0.77
47:BF:3:LEU:HD21	47:BF:172:PHE:HB3	1.64	0.77
23:BB:1594:U:H2'	23:BB:1595:C:C6	2.19	0.77
3:AD:173:ASP:HB3	3:AD:178:GLU:HB2	1.66	0.77
2:CC:64:ARG:HD3	2:CC:99:GLN:HE22	1.50	0.77
49:BR:49:ILE:HD13	49:BR:53:PHE:H	1.47	0.77

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:DP:89:GLY:HA2	28:DP:112:ARG:N	1.99	0.77
42:DN:102:PHE:H	42:DN:109:PRO:HA	1.49	0.77
23:DB:972:A:H3'	23:DB:973:A:H5''	1.64	0.77
48:BG:97:VAL:HG11	48:BG:123:GLU:HA	1.64	0.77
52:BW:19:ARG:HD3	52:BW:36:ILE:HD11	1.66	0.77
47:DF:66:ILE:HD11	47:DF:83:PRO:HB3	1.65	0.77
23:DB:2579:C:O2'	26:DD:136:ASN:HA	1.85	0.77
1:AA:814:A:H5'	1:AA:1511:G:H4'	1.66	0.77
37:DL:30:THR:O	37:DL:33:ARG:HG2	1.83	0.77
36:B2:33:ARG:HH21	36:B2:33:ARG:HB2	1.48	0.77
40:DH:72:ILE:HG12	40:DH:108:VAL:HG11	1.66	0.77
23:DB:117:G:H5'	23:DB:126:A:H8	1.49	0.77
28:DP:61:ARG:HH21	28:DP:61:ARG:HB3	1.50	0.77
28:BP:91:VAL:HG11	28:BP:96:LEU:HD11	1.65	0.77
18:AB:218:ALA:HA	18:AB:221:ARG:HE	1.50	0.77
4:AE:152:VAL:HG21	7:AH:98:LEU:HB3	1.66	0.77
23:DB:855:G:N2	52:DW:23:LYS:HG2	1.97	0.77
23:DB:1168:G:H2'	23:DB:1169:A:H8	1.50	0.77
23:DB:1420:A:H2'	23:DB:2211:A:H62	1.49	0.77
8:AI:55:ASP:HB2	8:AI:59:LYS:HD2	1.66	0.77
23:DB:71:A:H4'	23:DB:72:U:H5'	1.66	0.77
9:AJ:12:ALA:HB2	9:AJ:96:VAL:HG12	1.66	0.77
23:BB:71:A:H4'	23:BB:72:U:H5'	1.66	0.77
5:CF:91:ARG:H	5:CF:93:LYS:HZ1	1.31	0.77
26:DD:114:LYS:HE3	26:DD:116:LYS:HZ2	1.47	0.77
38:DM:59:ARG:HH11	38:DM:60:GLN:HB3	1.49	0.77
16:CS:30:LEU:HD12	16:CS:48:ILE:HG13	1.66	0.77
1:CA:203:G:H1'	1:CA:465:A:N1	1.99	0.77
28:BP:61:ARG:HH21	28:BP:61:ARG:HB3	1.50	0.77
40:BH:21:VAL:HG22	40:BH:22:LYS:H	1.47	0.77
48:DG:84:LYS:HG3	48:DG:132:LEU:N	1.99	0.77
24:DI:9:LYS:HG2	24:DI:57:VAL:HG13	1.67	0.77
2:CC:26:LYS:HG3	2:CC:27:GLU:H	1.48	0.77
23:BB:2748:A:H1'	48:BG:66:THR:HB	1.67	0.77
40:DH:31:VAL:HB	40:DH:32:PRO:CD	2.15	0.77
23:DB:2572:A:OP1	23:DB:2574:G:H4'	1.85	0.77
21:AN:14:ALA:HB1	21:AN:18:LYS:HE3	1.67	0.77
3:CD:152:SER:HA	3:CD:155:LYS:HD3	1.65	0.77
48:BG:94:ARG:HB3	48:BG:127:GLN:HG2	1.65	0.77
26:BD:5:VAL:HG23	26:BD:32:ASN:HD21	1.50	0.76
27:BK:7:MET:HE3	27:BK:18:ARG:HE	1.50	0.76
9:CJ:29:ALA:O	9:CJ:34:ALA:HB3	1.85	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:300:A:H3'	46:BU:81:ARG:HH12	1.49	0.76
26:DD:5:VAL:HG23	26:DD:32:ASN:HD21	1.50	0.76
47:DF:11:VAL:HG12	47:DF:12:VAL:H	1.50	0.76
43:DO:47:VAL:HG12	43:DO:48:LEU:H	1.48	0.76
6:CG:58:LEU:HD12	6:CG:58:LEU:H	1.49	0.76
23:DB:2472:G:H2'	23:DB:2475:C:H42	1.49	0.76
52:BW:49:ASN:HB2	52:BW:61:LYS:N	1.99	0.76
25:DC:144:GLU:HA	25:DC:151:GLY:HA2	1.66	0.76
35:BV:31:TYR:HB3	35:BV:37:PRO:HG3	1.68	0.76
35:DV:9:ARG:NH1	35:DV:27:PRO:HB3	2.00	0.76
9:AJ:26:VAL:HG22	9:AJ:74:VAL:HG11	1.67	0.76
6:AG:70:PRO:HA	6:AG:137:ARG:HH11	1.50	0.76
23:DB:2867:G:N3	23:DB:2867:G:H2'	2.00	0.76
42:DN:12:ARG:HG2	42:DN:16:HIS:ND1	2.00	0.76
46:DU:40:LEU:H	46:DU:40:LEU:HD12	1.50	0.76
18:CB:40:ILE:HD13	18:CB:201:GLY:HA2	1.68	0.76
1:CA:1238:A:H5'	1:CA:1336:C:H41	1.49	0.76
5:CF:42:TRP:HE1	5:CF:61:LEU:HD23	1.49	0.76
6:CG:130:LYS:H	6:CG:134:VAL:HG21	1.50	0.76
35:DV:31:TYR:HB3	35:DV:37:PRO:HG3	1.67	0.76
18:AB:67:LEU:HD11	18:AB:150:ILE:HD12	1.67	0.76
46:BU:47:PRO:HB3	46:BU:55:GLY:HA3	1.67	0.76
34:B3:54:LEU:HG	34:B3:58:ILE:HD11	1.68	0.76
25:BC:74:PRO:HG2	25:BC:96:LYS:HG3	1.68	0.76
21:AN:71:GLY:O	21:AN:79:SER:HA	1.84	0.76
23:DB:1032:A:H1'	32:D4:23:ILE:HD13	1.66	0.76
27:DK:24:VAL:HG13	27:DK:33:ALA:HB2	1.68	0.76
23:DB:1287:A:OP1	42:DN:104:ALA:HB3	1.85	0.76
23:DB:1728:C:H2'	23:DB:1729:U:H5''	1.67	0.76
30:DY:5:LYS:H	30:DY:5:LYS:HE2	1.50	0.76
35:DV:60:VAL:HG12	35:DV:61:LEU:H	1.51	0.76
43:BO:88:LYS:HE2	43:BO:116:GLN:HB2	1.67	0.76
1:AA:72:A:H2'	1:AA:73:C:H6	1.50	0.76
23:BB:2425:A:H5'	23:BB:2427:C:O4'	1.84	0.76
41:DJ:6:ALA:HB3	41:DJ:45:THR:HG21	1.65	0.76
2:AC:78:LYS:HG2	2:AC:81:GLU:HB2	1.66	0.76
23:DB:27:G:N2	23:DB:512:G:H2'	2.01	0.76
23:BB:1080:A:H1'	24:BI:127:SER:HA	1.67	0.76
48:DG:152:ARG:HD3	48:DG:153:PRO:HD2	1.68	0.76
28:BP:50:ARG:HB2	28:BP:56:SER:HB3	1.68	0.76
1:AA:1316:G:H22	1:AA:1318:A:H3'	1.49	0.76
34:B3:49:VAL:HG23	34:B3:51:LYS:H	1.51	0.76

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:DK:19:VAL:HG12	27:DK:43:ILE:HA	1.66	0.76
23:DB:1681:G:N3	23:DB:1762:A:H2'	2.00	0.76
7:CH:31:LEU:HG	7:CH:35:ILE:HD11	1.68	0.76
23:BB:1373:A:H2'	23:BB:1374:G:O4'	1.84	0.76
44:DQ:68:ALA:HB1	44:DQ:73:ILE:HG23	1.67	0.76
37:DL:23:ILE:HD12	37:DL:23:ILE:H	1.50	0.76
23:BB:2181:U:H2'	23:BB:2182:U:C6	2.20	0.76
33:B1:34:GLU:HB3	33:B1:49:LYS:HD3	1.68	0.76
35:BV:80:HIS:HD2	35:BV:82:TYR:H	1.34	0.76
1:AA:978:A:H5'	1:AA:1362:A:N6	2.01	0.76
7:AH:31:LEU:HG	7:AH:35:ILE:HD11	1.67	0.76
1:AA:554:A:H5'	11:AL:25:ALA:HB1	1.68	0.76
1:AA:1021:A:H2'	1:AA:1022:A:O4'	1.86	0.76
30:BY:16:LEU:H	30:BY:16:LEU:HD22	1.51	0.76
23:BB:972:A:H3'	23:BB:973:A:H5''	1.68	0.76
25:BC:129:LEU:HD22	25:BC:134:ILE:HG22	1.68	0.76
1:CA:973:G:H3'	1:CA:974:A:H5''	1.67	0.76
40:DH:68:ARG:HA	40:DH:68:ARG:CZ	2.16	0.76
37:DL:95:LEU:HA	37:DL:98:ALA:HB3	1.66	0.76
29:DE:129:PRO:HB3	29:DE:159:LEU:HD23	1.68	0.76
24:DI:45:THR:HA	24:DI:48:ILE:HG22	1.66	0.76
37:DL:6:LEU:H	37:DL:6:LEU:HD23	1.50	0.76
23:DB:1579:A:H2'	23:DB:1580:A:C8	2.21	0.76
48:DG:16:VAL:HG22	48:DG:25:ILE:HG13	1.68	0.76
26:DD:20:VAL:HG13	27:DK:72:PRO:HB3	1.67	0.76
30:BY:3:THR:HB	30:BY:36:GLU:HG2	1.66	0.76
12:CM:33:LEU:HD22	12:CM:38:ILE:HB	1.66	0.76
2:CC:116:ALA:HB1	2:CC:186:SER:HB2	1.68	0.76
52:DW:19:ARG:HD3	52:DW:36:ILE:HD11	1.68	0.75
33:D1:9:LYS:H	33:D1:9:LYS:HD3	1.50	0.75
29:DE:127:GLU:HG2	29:DE:133:LEU:HD13	1.68	0.75
18:AB:27:LYS:HB3	18:AB:28:PRO:HD3	1.68	0.75
37:BL:55:MET:HE2	37:BL:56:PRO:HD2	1.66	0.75
12:CM:44:ILE:H	12:CM:44:ILE:HD12	1.51	0.75
3:CD:173:ASP:HB3	3:CD:178:GLU:HB2	1.67	0.75
23:BB:947:A:H2'	23:BB:948:C:C6	2.21	0.75
40:BH:117:LEU:HG	40:BH:130:VAL:HG13	1.67	0.75
12:CM:68:LEU:HD22	12:CM:69:ARG:NH1	2.01	0.75
1:CA:1326:U:H2'	1:CA:1327:C:C6	2.21	0.75
10:CK:111:ASP:HB2	19:CU:19:LYS:HE3	1.68	0.75
40:BH:31:VAL:HB	40:BH:32:PRO:CD	2.15	0.75
28:DP:112:ARG:HB2	28:DP:112:ARG:HH11	1.50	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:14:ASP:HB3	6:AG:19:SER:H	1.50	0.75
45:DS:81:SER:HB2	45:DS:97:LEU:HD12	1.67	0.75
26:DD:159:LYS:HZ3	26:DD:159:LYS:HA	1.50	0.75
27:BK:60:ALA:HB2	27:BK:86:LEU:HA	1.68	0.75
23:DB:181:A:H2'	23:DB:182:A:C8	2.21	0.75
23:BB:90:U:H3'	23:BB:91:A:H5''	1.66	0.75
12:AM:21:ILE:HB	12:AM:24:VAL:HG22	1.65	0.75
26:DD:13:ARG:HH12	28:DP:74:GLN:HE21	1.33	0.75
44:BQ:111:LYS:HB2	49:BR:48:LYS:NZ	2.01	0.75
23:DB:1798:U:H5''	25:DC:257:ARG:HB2	1.68	0.75
42:BN:102:PHE:H	42:BN:109:PRO:HA	1.50	0.75
11:AL:40:THR:HG22	11:AL:41:PRO:HD2	1.67	0.75
23:DB:546:U:H4'	23:DB:548:G:OP2	1.87	0.75
21:CN:27:LYS:HD3	21:CN:28:ALA:H	1.50	0.75
1:CA:1241:G:H2'	1:CA:1242:G:H8	1.51	0.75
23:BB:27:G:N2	23:BB:512:G:H2'	2.01	0.75
44:DQ:91:ARG:HH12	49:DR:10:LYS:HB3	1.49	0.75
1:AA:85:U:O3'	1:AA:86:G:H4'	1.86	0.75
23:DB:458:G:N2	23:DB:469:G:H2'	2.02	0.75
23:DB:1099:G:P	24:DI:4:VAL:H	2.08	0.75
23:BB:2305:U:H5''	47:BF:130:GLY:HA3	1.66	0.75
42:BN:38:LEU:HB3	42:BN:39:PRO:HD3	1.67	0.75
46:BU:95:PHE:HB2	46:BU:100:GLU:HB3	1.67	0.75
49:BR:19:THR:HG22	49:BR:97:LYS:HG3	1.66	0.75
29:BE:29:HIS:NE2	37:BL:8:PRO:HG3	2.00	0.75
1:CA:83:C:O2'	1:CA:84:U:H2'	1.86	0.75
48:DG:148:ARG:HD3	48:DG:152:ARG:HH11	1.52	0.75
23:DB:300:A:H3'	46:DU:81:ARG:HH12	1.51	0.75
28:DP:50:ARG:HB2	28:DP:56:SER:HB3	1.69	0.75
26:DD:148:GLN:HG3	26:DD:152:PRO:CG	2.17	0.75
1:CA:946:A:H2'	1:CA:947:G:C8	2.21	0.75
3:CD:197:HIS:O	3:CD:200:VAL:HG22	1.87	0.75
23:DB:1872:A:H2'	23:DB:1873:G:O4'	1.87	0.75
49:DR:19:THR:HG22	49:DR:97:LYS:HG3	1.68	0.75
1:AA:1389:C:H2'	1:AA:1390:U:C6	2.22	0.75
4:CE:152:VAL:HG21	7:CH:98:LEU:HB3	1.67	0.75
23:BB:796:C:H2'	23:BB:797:G:H8	1.51	0.75
37:DL:73:ILE:HD12	37:DL:106:GLU:HB2	1.68	0.75
48:BG:16:VAL:HG22	48:BG:25:ILE:HG13	1.68	0.75
23:DB:2331:G:O2'	52:DW:40:ARG:HB2	1.86	0.75
37:BL:82:LEU:HD23	37:BL:90:VAL:HG21	1.68	0.75
23:BB:2867:G:H2'	23:BB:2867:G:N3	2.01	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BN:12:ARG:HG2	42:BN:16:HIS:ND1	2.01	0.75
33:B1:9:LYS:HD3	33:B1:9:LYS:H	1.52	0.75
23:DB:1098:A:H2'	24:DI:4:VAL:N	2.00	0.75
23:DB:2306:C:H3'	23:DB:2307:G:C5'	2.17	0.75
52:DW:49:ASN:CB	52:DW:61:LYS:H	1.98	0.75
28:BP:50:ARG:CB	28:BP:56:SER:HB3	2.17	0.75
46:DU:47:PRO:HB3	46:DU:55:GLY:HA3	1.68	0.75
21:AN:5:MET:O	21:AN:8:ARG:HB2	1.86	0.75
44:DQ:57:ARG:HH11	44:DQ:61:ILE:HD11	1.51	0.75
45:DS:84:ARG:HB3	45:DS:96:ILE:HG23	1.69	0.75
1:CA:190:A:H2'	1:CA:191:G:O4'	1.87	0.75
11:CL:40:THR:HG22	11:CL:41:PRO:HD2	1.69	0.75
23:DB:1099:G:H5''	24:DI:2:LYS:C	2.07	0.75
52:BW:49:ASN:CB	52:BW:61:LYS:H	2.00	0.75
23:DB:2305:U:H4'	47:DF:132:ARG:HG2	1.68	0.75
8:AI:71:ILE:HD12	8:AI:71:ILE:H	1.51	0.75
35:BV:80:HIS:CD2	35:BV:83:LYS:H	2.05	0.75
4:CE:133:ILE:H	4:CE:133:ILE:HD12	1.51	0.75
6:CG:58:LEU:HA	6:CG:61:PHE:HB3	1.69	0.75
23:BB:2186:G:H2'	23:BB:2187:U:O4'	1.87	0.75
1:AA:237:G:H5''	14:AQ:26:ARG:NH2	2.02	0.74
29:DE:117:ARG:HH12	37:DL:2:ARG:HB2	1.52	0.74
2:AC:120:THR:HB	2:AC:188:ALA:HB2	1.69	0.74
18:CB:63:LYS:HA	18:CB:224:ARG:NH1	2.02	0.74
1:CA:1218:C:H2'	1:CA:1219:A:C8	2.22	0.74
1:CA:1320:C:H41	16:CS:36:ARG:HG2	1.52	0.74
27:BK:25:LEU:HD13	27:BK:38:ILE:HG22	1.69	0.74
51:DZ:31:PRO:HB2	51:DZ:33:LEU:HD11	1.69	0.74
48:BG:144:ALA:HA	48:BG:147:LEU:HD12	1.68	0.74
41:BJ:81:ILE:HG23	41:BJ:82:GLY:H	1.50	0.74
45:DS:70:LYS:HD3	45:DS:110:ARG:HA	1.68	0.74
48:DG:167:VAL:HG23	48:DG:168:VAL:H	1.50	0.74
23:DB:320:A:H4'	23:DB:322:A:N7	2.02	0.74
1:AA:1003:G:H21	1:AA:1005:A:H5'	1.51	0.74
44:BQ:89:ILE:HG22	44:BQ:91:ARG:H	1.51	0.74
13:AP:4:ILE:HG12	13:AP:21:VAL:HG22	1.68	0.74
1:CA:1412:C:H2'	1:CA:1413:A:C8	2.22	0.74
51:BZ:54:LYS:HA	51:BZ:57:ARG:HD3	1.66	0.74
18:AB:119:GLN:HA	18:AB:124:THR:HG23	1.68	0.74
23:BB:580:U:H2'	23:BB:581:C:C6	2.22	0.74
39:BX:23:ARG:HE	39:BX:27:ASN:HD21	1.32	0.74
2:AC:171:ARG:HB2	2:AC:171:ARG:HH11	1.51	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BU:85:ARG:NH1	46:BU:86:PHE:H	1.85	0.74
39:DX:23:ARG:HE	39:DX:27:ASN:HD21	1.32	0.74
24:BI:77:VAL:HA	24:BI:80:LYS:HE2	1.69	0.74
25:BC:116:GLN:HG2	25:BC:117:SER:H	1.52	0.74
48:BG:120:ILE:HD11	48:BG:132:LEU:HB2	1.67	0.74
47:DF:110:ILE:HA	47:DF:111:ARG:CZ	2.17	0.74
47:BF:87:LYS:HG3	47:BF:88:VAL:H	1.51	0.74
47:BF:64:PRO:HA	47:BF:88:VAL:HG22	1.67	0.74
23:BB:1872:A:H2'	23:BB:1873:G:O4'	1.87	0.74
18:CB:163:ILE:HD12	18:CB:185:ILE:HD12	1.69	0.74
50:DT:39:THR:HG23	50:DT:42:GLU:H	1.50	0.74
26:DD:13:ARG:HH12	28:DP:74:GLN:NE2	1.86	0.74
47:DF:64:PRO:HA	47:DF:88:VAL:HG22	1.68	0.74
52:BW:9:THR:HG23	52:BW:10:ARG:HD3	1.69	0.74
5:AF:38:ARG:NH1	5:AF:99:ALA:HB2	2.02	0.74
5:AF:42:TRP:HB2	5:AF:59:TYR:HB2	1.69	0.74
23:DB:2269:G:H4'	52:DW:19:ARG:NH1	2.02	0.74
48:DG:120:ILE:HD11	48:DG:132:LEU:HB2	1.69	0.74
33:D1:34:GLU:HB3	33:D1:49:LYS:HD3	1.69	0.74
23:BB:2572:A:OP1	23:BB:2574:G:H4'	1.87	0.74
44:DQ:89:ILE:HG22	44:DQ:91:ARG:H	1.52	0.74
27:DK:7:MET:HE3	27:DK:18:ARG:HE	1.51	0.74
20:CO:11:ILE:HA	20:CO:14:GLU:OE2	1.88	0.74
1:CA:408:A:OP1	3:CD:111:ALA:HB3	1.88	0.74
37:BL:30:THR:O	37:BL:33:ARG:HG2	1.86	0.74
9:AJ:77:VAL:HG12	9:AJ:78:GLU:H	1.52	0.74
1:CA:1360:A:H2'	1:CA:1361:G:O4'	1.88	0.74
27:DK:118:LEU:C	27:DK:120:PRO:HD2	2.07	0.74
27:DK:60:ALA:HB2	27:DK:86:LEU:HA	1.68	0.74
1:CA:554:A:H5'	11:CL:25:ALA:HB1	1.68	0.74
4:AE:93:VAL:HG13	4:AE:126:ALA:HB2	1.70	0.74
52:BW:35:ILE:HA	52:BW:57:THR:HG23	1.70	0.74
12:AM:78:ARG:HH12	12:AM:82:LEU:HD11	1.53	0.74
1:CA:923:A:H2'	1:CA:924:C:C6	2.23	0.74
1:CA:1001:C:H2'	1:CA:1002:G:H8	1.52	0.74
7:AH:49:LYS:HB3	7:AH:59:GLU:HB2	1.68	0.74
50:BT:39:THR:HG23	50:BT:42:GLU:H	1.50	0.74
23:BB:2769:U:H2'	23:BB:2770:G:H8	1.53	0.74
51:DZ:64:ILE:HD12	51:DZ:64:ILE:H	1.52	0.74
23:BB:1508:A:H2'	23:BB:1509:A:C2	2.22	0.74
48:BG:15:ASP:HB2	48:BG:26:LYS:HB3	1.69	0.74
48:BG:122:ALA:HB2	48:BG:132:LEU:HB3	1.69	0.74

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:BD:24:VAL:HG21	26:BD:188:LEU:HB3	1.69	0.74
24:BI:27:LEU:HD12	24:BI:32:VAL:HG11	1.69	0.74
23:DB:899:A:H3'	23:DB:900:A:C8	2.22	0.74
26:BD:148:GLN:HG3	26:BD:152:PRO:CG	2.17	0.74
1:CA:243:A:H4'	1:CA:244:U:H5'	1.69	0.74
23:BB:616:A:H4'	29:BE:101:TYR:CE2	2.22	0.74
2:CC:109:GLU:HB3	2:CC:139:ASN:HB3	1.68	0.74
24:DI:105:LEU:HD13	24:DI:129:GLU:HG2	1.68	0.74
43:BO:47:VAL:HG12	43:BO:48:LEU:H	1.50	0.74
9:CJ:36:VAL:HG22	9:CJ:76:ILE:HB	1.70	0.74
25:DC:116:GLN:HG2	25:DC:117:SER:H	1.51	0.74
28:DP:50:ARG:CB	28:DP:56:SER:HB3	2.17	0.74
9:AJ:28:THR:HG22	9:AJ:31:ARG:HH21	1.53	0.74
27:BK:118:LEU:C	27:BK:120:PRO:HD2	2.08	0.74
42:DN:76:VAL:HA	42:DN:79:LEU:HD12	1.68	0.74
25:BC:144:GLU:HA	25:BC:151:GLY:HA2	1.69	0.74
47:BF:110:ILE:HA	47:BF:111:ARG:CZ	2.18	0.74
26:DD:34:VAL:HB	26:DD:48:ILE:HD11	1.70	0.74
23:BB:2353:G:H1'	52:BW:30:VAL:CG1	2.18	0.74
38:BM:59:ARG:NH1	38:BM:60:GLN:HB3	2.02	0.74
31:D0:38:LEU:HB3	31:D0:41:HIS:NE2	2.03	0.74
23:DB:544:C:H2'	23:DB:545:U:C6	2.23	0.74
6:CG:120:ALA:HA	6:CG:123:LEU:HD12	1.68	0.74
23:DB:2389:G:H5''	23:DB:2390:U:O4'	1.87	0.74
8:CI:48:ARG:HA	8:CI:51:LEU:HD12	1.70	0.73
1:CA:1317:C:H2'	1:CA:1318:A:O4'	1.87	0.73
52:DW:37:VAL:HG12	52:DW:38:ARG:H	1.53	0.73
48:DG:122:ALA:HB2	48:DG:132:LEU:HB3	1.69	0.73
29:BE:129:PRO:HB3	29:BE:159:LEU:HD23	1.70	0.73
18:CB:83:ALA:O	18:CB:88:GLN:HB2	1.88	0.73
1:AA:1338:G:H2'	1:AA:1339:A:H8	1.51	0.73
11:CL:23:LEU:HG	11:CL:24:GLU:HG3	1.69	0.73
39:DX:39:GLN:HB3	39:DX:42:LEU:HD13	1.69	0.73
23:DB:1149:G:H2'	23:DB:1150:C:C6	2.23	0.73
17:AT:3:ILE:H	17:AT:3:ILE:HD12	1.52	0.73
23:BB:1579:A:H2'	23:BB:1580:A:C8	2.23	0.73
6:AG:30:MET:HG3	6:AG:35:LYS:HA	1.71	0.73
9:AJ:7:ARG:HB2	9:AJ:101:SER:N	2.01	0.73
42:DN:38:LEU:HB3	42:DN:39:PRO:HD3	1.69	0.73
41:DJ:17:VAL:HG22	41:DJ:55:ILE:HD11	1.70	0.73
32:B4:1:MET:SD	32:B4:36:ARG:HB2	2.29	0.73
49:DR:4:VAL:HG22	49:DR:40:MET:HB2	1.69	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DI:72:THR:HG21	24:DI:112:LYS:HA	1.70	0.73
29:BE:127:GLU:HG2	29:BE:133:LEU:HD13	1.68	0.73
47:DF:87:LYS:HG3	47:DF:88:VAL:H	1.53	0.73
1:AA:80:A:H2'	1:AA:81:A:H4'	1.69	0.73
23:BB:460:A:H4'	50:BT:72:GLN:HB2	1.68	0.73
51:BZ:64:ILE:H	51:BZ:64:ILE:HD12	1.53	0.73
35:BV:60:VAL:HG12	35:BV:61:LEU:H	1.52	0.73
35:BV:9:ARG:NH1	35:BV:27:PRO:HB3	2.02	0.73
29:BE:5:LEU:HD22	29:BE:122:GLU:HG3	1.70	0.73
39:BX:44:LYS:HD2	39:BX:48:ARG:HH22	1.52	0.73
38:DM:59:ARG:NH1	38:DM:60:GLN:HB3	2.03	0.73
23:BB:1420:A:H2'	23:BB:2211:A:H62	1.53	0.73
15:AR:51:GLN:HA	15:AR:51:GLN:HE21	1.51	0.73
40:BH:47:PHE:HA	40:BH:50:ARG:NE	2.03	0.73
46:DU:85:ARG:NE	46:DU:85:ARG:HA	2.03	0.73
8:AI:56:MET:HG3	8:AI:57:VAL:HG23	1.69	0.73
51:DZ:45:ARG:HE	51:DZ:47:VAL:HG12	1.54	0.73
1:AA:1047:G:H21	1:AA:1215:G:C4'	2.01	0.73
23:BB:2389:G:H5''	23:BB:2390:U:O4'	1.88	0.73
1:CA:76:G:H2'	1:CA:77:A:C8	2.23	0.73
23:DB:2723:C:H5''	42:DN:1:MET:HE2	1.71	0.73
18:AB:120:SER:HA	18:AB:125:PHE:HB3	1.70	0.73
23:BB:62:U:H3'	23:BB:63:A:H8	1.53	0.73
2:CC:113:LYS:HA	2:CC:184:ASN:ND2	2.03	0.73
5:CF:38:ARG:NH1	5:CF:99:ALA:HB2	2.04	0.73
23:DB:142:A:H2'	23:DB:143:C:C6	2.23	0.73
48:BG:152:ARG:HD3	48:BG:153:PRO:HD2	1.71	0.73
23:BB:1056:G:H1'	23:BB:1103:A:N6	2.03	0.73
26:BD:34:VAL:HB	26:BD:48:ILE:HD11	1.71	0.73
41:DJ:45:THR:H	41:DJ:46:PRO:HD3	1.54	0.73
32:D4:1:MET:SD	32:D4:36:ARG:HB2	2.28	0.73
42:BN:97:ILE:HD12	42:BN:98:LEU:N	2.04	0.73
4:CE:82:HIS:HB2	4:CE:83:PRO:HD2	1.69	0.73
2:CC:8:GLY:HA2	2:CC:11:LEU:HG	1.69	0.73
23:DB:3:U:H2'	23:DB:4:U:C6	2.23	0.73
1:AA:239:U:H4'	1:AA:239:U:OP1	1.86	0.73
6:CG:131:GLY:O	6:CG:134:VAL:HG22	1.89	0.73
31:D0:28:SER:HB2	31:D0:39:ARG:NE	2.03	0.73
28:BP:47:ILE:HG13	28:BP:48:ALA:H	1.54	0.73
23:DB:126:A:H5'	36:D2:19:ARG:HG3	1.69	0.73
23:DB:1080:A:H4'	24:DI:126:ARG:HD3	1.68	0.73
40:BH:4:ILE:HG13	40:BH:18:GLN:HB2	1.70	0.73

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:D2:21:ARG:HD2	36:D2:43:THR:HG21	1.70	0.73
1:AA:560:A:H4'	1:AA:561:U:H5''	1.70	0.73
23:DB:281:C:H2'	23:DB:282:A:C8	2.24	0.73
44:BQ:10:ARG:NH1	44:BQ:10:ARG:HB2	2.03	0.73
49:DR:72:VAL:HG23	49:DR:89:HIS:HB3	1.68	0.73
13:CP:20:VAL:HG23	13:CP:35:ARG:HA	1.71	0.73
23:BB:2458:G:H8	23:BB:2459:A:H62	1.37	0.73
23:BB:2306:C:H3'	23:BB:2307:G:C5'	2.18	0.73
52:DW:49:ASN:HB2	52:DW:61:LYS:N	1.98	0.73
35:DV:63:ILE:HB	35:DV:70:ILE:HD11	1.70	0.73
48:DG:85:LYS:HA	48:DG:131:VAL:HG12	1.69	0.73
23:BB:62:U:H3'	23:BB:63:A:C8	2.23	0.73
23:BB:161:A:H3'	23:BB:162:U:H5''	1.70	0.73
8:CI:117:LEU:HD22	8:CI:123:ARG:HB3	1.69	0.73
23:DB:1508:A:H2'	23:DB:1509:A:C2	2.22	0.73
23:DB:572:A:H5''	49:DR:80:ARG:HH22	1.54	0.73
1:AA:1060:U:H5''	9:AJ:53:ILE:HG12	1.70	0.73
4:AE:82:HIS:HB2	4:AE:83:PRO:HD2	1.71	0.73
1:AA:243:A:H4'	1:AA:244:U:H5'	1.70	0.73
2:AC:120:THR:HG21	2:AC:186:SER:HB2	1.70	0.73
25:BC:143:VAL:HB	25:BC:153:LEU:HB2	1.71	0.73
19:CU:5:VAL:HG21	19:CU:16:ARG:HH21	1.53	0.73
26:BD:116:LYS:HG3	26:BD:165:MET:SD	2.29	0.73
46:DU:95:PHE:HB2	46:DU:100:GLU:HB3	1.70	0.73
20:CO:8:THR:O	20:CO:11:ILE:HG13	1.89	0.73
46:DU:85:ARG:NH1	46:DU:86:PHE:H	1.87	0.73
39:BX:39:GLN:HB3	39:BX:42:LEU:HD13	1.71	0.73
27:DK:25:LEU:HD13	27:DK:38:ILE:HG22	1.71	0.73
26:BD:9:VAL:HA	26:BD:197:THR:HG22	1.71	0.73
8:AI:20:ILE:HD13	8:AI:85:ALA:HB3	1.70	0.73
48:DG:132:LEU:HD23	48:DG:132:LEU:H	1.53	0.73
29:DE:5:LEU:HD22	29:DE:122:GLU:HG3	1.71	0.73
4:AE:133:ILE:H	4:AE:133:ILE:HD12	1.54	0.73
46:DU:84:PHE:O	46:DU:85:ARG:HB2	1.89	0.73
23:BB:458:G:N2	23:BB:469:G:H2'	2.03	0.73
20:AO:8:THR:HG23	20:AO:31:LEU:HD21	1.71	0.73
20:AO:49:ASP:OD2	20:AO:52:SER:HB2	1.87	0.73
25:BC:80:LEU:HD11	25:BC:109:LEU:HB2	1.71	0.73
1:AA:269:C:H2'	1:AA:270:A:C8	2.24	0.73
35:BV:51:GLN:HG2	35:BV:86:LEU:HD11	1.71	0.73
49:BR:4:VAL:HG22	49:BR:40:MET:HB2	1.71	0.73
45:DS:29:VAL:HG23	45:DS:70:LYS:HA	1.71	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:572:A:H5''	49:DR:80:ARG:NH2	2.03	0.73
23:DB:1935:G:H1'	23:DB:1964:G:N2	2.03	0.73
1:CA:1171:A:H2'	1:CA:1172:C:C6	2.24	0.73
2:AC:35:ASP:HB3	2:AC:39:ARG:NH1	2.03	0.73
25:BC:180:MET:HB2	25:BC:268:ARG:H	1.54	0.73
25:DC:80:LEU:HD23	25:DC:91:ALA:HB2	1.70	0.72
23:BB:142:A:O2'	50:BT:2:ILE:HG21	1.88	0.72
46:DU:12:VAL:HG22	46:DU:69:VAL:HG12	1.71	0.72
27:BK:102:PRO:HB3	27:BK:121:GLU:HB2	1.71	0.72
1:AA:946:A:H2'	1:AA:947:G:C8	2.24	0.72
21:CN:8:ARG:HD3	21:CN:12:ARG:HH12	1.53	0.72
1:CA:814:A:H5'	1:CA:1511:G:H4'	1.69	0.72
44:BQ:57:ARG:HH11	44:BQ:61:ILE:HD11	1.55	0.72
12:AM:108:ARG:HH11	12:AM:108:ARG:HA	1.54	0.72
38:DM:108:VAL:HG21	38:DM:112:LEU:HD12	1.71	0.72
23:DB:351:C:H2'	23:DB:352:A:H8	1.54	0.72
17:CT:3:ILE:H	17:CT:3:ILE:HD12	1.55	0.72
27:DK:53:LYS:H	27:DK:53:LYS:HD3	1.54	0.72
18:CB:44:LYS:O	18:CB:48:MET:HG2	1.89	0.72
12:AM:1:ALA:HB3	12:AM:8:ILE:HG22	1.71	0.72
23:DB:856:G:H1'	52:DW:23:LYS:HB3	1.71	0.72
29:BE:176:ASP:HB3	29:BE:179:SER:HB2	1.70	0.72
23:BB:1060:U:O4	24:BI:131:THR:HG22	1.89	0.72
26:BD:114:LYS:HE3	26:BD:116:LYS:HZ2	1.52	0.72
10:AK:105:ARG:HH21	19:AU:10:PRO:HB3	1.53	0.72
41:DJ:64:VAL:HG22	41:DJ:68:LYS:HD2	1.70	0.72
22:DA:98:G:N1	35:DV:14:LYS:HB2	2.03	0.72
23:BB:2885:G:N2	31:B0:31:LYS:HB3	2.04	0.72
46:BU:85:ARG:HA	46:BU:85:ARG:NE	2.02	0.72
23:DB:580:U:H2'	23:DB:581:C:C6	2.23	0.72
1:CA:958:A:N1	16:CS:53:GLY:HA3	2.05	0.72
3:AD:60:VAL:HA	3:AD:63:ILE:HD12	1.71	0.72
27:BK:24:VAL:HG13	27:BK:33:ALA:HB2	1.69	0.72
45:BS:29:VAL:HG23	45:BS:70:LYS:HA	1.69	0.72
50:DT:34:VAL:HG11	50:DT:43:ILE:HD11	1.71	0.72
23:DB:922:C:H1'	52:DW:22:VAL:HG21	1.71	0.72
18:AB:13:VAL:HB	18:AB:207:ARG:NE	2.02	0.72
30:BY:5:LYS:HE2	30:BY:5:LYS:H	1.53	0.72
41:BJ:64:VAL:HG22	41:BJ:68:LYS:HD2	1.69	0.72
1:AA:1382:C:H4'	6:AG:78:ARG:HH21	1.54	0.72
23:DB:796:C:H2'	23:DB:797:G:H8	1.54	0.72
1:CA:528:C:H41	11:CL:45:ASN:ND2	1.87	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AE:106:ALA:HB1	4:AE:110:MET:HB3	1.71	0.72
35:DV:80:HIS:HD2	35:DV:82:TYR:H	1.36	0.72
39:DX:13:GLU:HB2	39:DX:57:LEU:HD13	1.72	0.72
1:CA:1170:A:H2'	1:CA:1171:A:O4'	1.89	0.72
35:BV:29:ILE:HG13	35:BV:88:HIS:HE1	1.54	0.72
5:AF:42:TRP:NE1	5:AF:61:LEU:HD23	2.03	0.72
23:DB:28:A:H61	23:DB:512:G:H1'	1.54	0.72
20:AO:50:HIS:O	20:AO:53:ARG:HB3	1.90	0.72
23:BB:2189:U:H2'	23:BB:2190:G:H8	1.54	0.72
25:DC:74:PRO:HG2	25:DC:96:LYS:HG3	1.71	0.72
26:BD:159:LYS:HA	26:BD:159:LYS:HZ3	1.54	0.72
2:CC:153:SER:HA	2:CC:164:THR:HG22	1.70	0.72
6:CG:111:GLY:H	6:CG:118:ARG:NH1	1.88	0.72
20:AO:70:LEU:HD11	20:AO:77:ARG:HB2	1.72	0.72
25:BC:64:VAL:O	25:BC:65:ASP:HB3	1.89	0.72
23:DB:1060:U:C4	23:DB:1088:A:N6	2.58	0.72
23:DB:1551:A:H3'	23:DB:1552:A:H5''	1.71	0.72
12:CM:52:ILE:HD12	12:CM:55:LEU:HD12	1.70	0.72
13:AP:39:PHE:HA	13:AP:50:THR:HG23	1.71	0.72
11:CL:78:VAL:HG12	11:CL:101:LEU:HD13	1.72	0.72
12:AM:73:SER:HA	12:AM:76:ILE:HD12	1.71	0.72
23:DB:2336:A:N6	52:DW:40:ARG:HB3	2.05	0.72
23:BB:135:U:H2'	23:BB:136:G:N7	2.05	0.72
1:AA:1147:C:H2'	1:AA:1148:U:C6	2.25	0.72
25:DC:43:ASN:HB2	25:DC:49:THR:HG23	1.72	0.72
44:BQ:91:ARG:NH1	49:BR:11:GLN:H	1.86	0.72
26:BD:32:ASN:HD22	26:BD:50:VAL:HG21	1.55	0.72
24:DI:20:SER:HB3	24:DI:21:PRO:HD3	1.69	0.72
3:CD:84:ASN:ND2	3:CD:86:GLY:H	1.88	0.72
1:AA:1137:C:H1'	1:AA:1138:G:C2	2.25	0.72
27:DK:54:LYS:H	27:DK:54:LYS:HD2	1.55	0.72
23:DB:1019:U:H2'	23:DB:1020:A:C8	2.24	0.72
23:BB:1606:C:H4'	23:BB:1607:C:H5'	1.71	0.72
5:CF:42:TRP:HB2	5:CF:59:TYR:HB2	1.71	0.72
23:BB:1046:A:C3'	23:BB:1047:G:H5''	2.20	0.72
10:CK:105:ARG:HH21	19:CU:10:PRO:HB3	1.54	0.72
40:BH:27:ARG:HE	51:BZ:64:ILE:HD11	1.53	0.72
31:B0:38:LEU:HB3	31:B0:41:HIS:NE2	2.04	0.72
45:BS:70:LYS:HD3	45:BS:110:ARG:HA	1.71	0.72
23:DB:1437:C:H2'	23:DB:1438:U:C6	2.24	0.72
1:AA:1134:G:H21	1:AA:1136:C:N4	1.87	0.72
4:CE:106:ALA:HB1	4:CE:110:MET:HB3	1.72	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CE:93:VAL:HG13	4:CE:126:ALA:HB2	1.70	0.72
51:DZ:54:LYS:HA	51:DZ:57:ARG:HD3	1.70	0.72
23:DB:264:C:C2'	23:DB:265:A:H5''	2.20	0.72
19:CU:39:LYS:N	19:CU:40:PRO:HD2	2.05	0.72
52:BW:24:ARG:HD3	52:BW:65:LYS:HG2	1.72	0.72
50:BT:34:VAL:HG11	50:BT:43:ILE:HD11	1.72	0.72
8:CI:11:ARG:HA	8:CI:105:ARG:CZ	2.20	0.72
1:CA:1324:A:H2'	1:CA:1325:C:C6	2.25	0.72
23:BB:320:A:H4'	23:BB:322:A:N7	2.04	0.72
23:DB:161:A:H3'	23:DB:162:U:H5''	1.72	0.72
11:AL:78:VAL:HG12	11:AL:101:LEU:HD13	1.72	0.72
23:DB:559:G:H21	44:DQ:51:GLN:NE2	1.87	0.72
36:B2:21:ARG:HD2	36:B2:43:THR:HG21	1.71	0.72
45:DS:36:LEU:HD23	45:DS:48:LYS:HA	1.71	0.72
6:CG:14:ASP:HB3	6:CG:19:SER:H	1.55	0.72
1:CA:1534:A:H62	19:CU:44:ARG:HH12	1.38	0.71
35:BV:77:VAL:HG23	35:BV:89:ILE:HG23	1.72	0.71
36:B2:30:VAL:HA	36:B2:33:ARG:NH2	2.04	0.71
10:AK:111:ASP:HB3	19:AU:3:ILE:HD13	1.72	0.71
23:BB:1060:U:C4	23:BB:1088:A:N6	2.58	0.71
48:BG:85:LYS:HA	48:BG:131:VAL:HG12	1.70	0.71
48:BG:132:LEU:HD23	48:BG:132:LEU:H	1.55	0.71
26:BD:20:VAL:HG13	27:BK:72:PRO:HB3	1.71	0.71
18:AB:52:ALA:HA	18:AB:197:PHE:HE1	1.55	0.71
47:BF:147:ARG:HD2	47:BF:148:VAL:HG22	1.72	0.71
25:BC:43:ASN:HB2	25:BC:49:THR:HG23	1.72	0.71
52:DW:9:THR:HG23	52:DW:10:ARG:HD3	1.72	0.71
11:AL:23:LEU:HG	11:AL:24:GLU:HG3	1.71	0.71
7:AH:58:LEU:HD22	7:AH:60:LEU:HB2	1.72	0.71
1:AA:1060:U:H4'	9:AJ:53:ILE:HG23	1.70	0.71
23:DB:2241:A:H2'	23:DB:2242:G:C8	2.25	0.71
23:BB:2591:C:H2'	23:BB:2592:G:C8	2.25	0.71
51:BZ:31:PRO:HB2	51:BZ:33:LEU:HD11	1.71	0.71
49:BR:72:VAL:HG23	49:BR:89:HIS:HB3	1.71	0.71
1:AA:528:C:H41	11:AL:45:ASN:ND2	1.88	0.71
23:BB:2080:A:OP1	51:BZ:20:HIS:HB3	1.89	0.71
19:AU:39:LYS:N	19:AU:40:PRO:HD2	2.05	0.71
40:BH:99:ILE:HG13	40:BH:130:VAL:HG21	1.72	0.71
23:DB:2885:G:N2	31:D0:31:LYS:HB3	2.05	0.71
1:CA:1004:A:H3'	1:CA:1024:G:H22	1.54	0.71
23:DB:90:U:H3'	23:DB:91:A:C5'	2.21	0.71
12:CM:10:ASP:HA	12:CM:44:ILE:HD13	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:DP:47:ILE:HG13	28:DP:48:ALA:H	1.54	0.71
23:BB:1551:A:H3'	23:BB:1552:A:H5''	1.70	0.71
23:BB:930:G:H1'	30:BY:24:LEU:HD11	1.72	0.71
1:AA:505:G:H5'	1:AA:534:U:H2'	1.73	0.71
25:DC:129:LEU:HD22	25:DC:134:ILE:HG22	1.71	0.71
52:BW:37:VAL:HG12	52:BW:38:ARG:H	1.53	0.71
24:BI:122:GLU:O	24:BI:126:ARG:HG3	1.91	0.71
30:BY:30:ARG:NH1	30:BY:30:ARG:HB2	2.05	0.71
35:DV:77:VAL:HG23	35:DV:89:ILE:HG23	1.72	0.71
26:BD:13:ARG:HH12	28:BP:74:GLN:HE21	1.38	0.71
40:DH:4:ILE:HG13	40:DH:18:GLN:HB2	1.71	0.71
40:DH:5:LEU:HD13	40:DH:13:GLY:HA2	1.71	0.71
31:B0:28:SER:HB2	31:B0:39:ARG:NE	2.05	0.71
46:BU:84:PHE:O	46:BU:85:ARG:HB2	1.90	0.71
1:AA:56:U:H2'	1:AA:57:G:H8	1.55	0.71
23:DB:2769:U:H2'	23:DB:2770:G:H8	1.54	0.71
10:AK:16:SER:HA	10:AK:78:ILE:HA	1.71	0.71
11:CL:5:GLN:HA	11:CL:8:ARG:HH21	1.54	0.71
23:DB:140:C:H4'	23:DB:141:G:H5''	1.71	0.71
12:CM:21:ILE:HB	12:CM:24:VAL:CG2	2.20	0.71
23:BB:28:A:H61	23:BB:512:G:H1'	1.54	0.71
26:BD:124:ARG:HB2	26:BD:165:MET:HB2	1.70	0.71
41:BJ:45:THR:H	41:BJ:46:PRO:HD3	1.55	0.71
18:AB:23:ASN:HD21	18:AB:25:LYS:HG3	1.55	0.71
4:AE:37:VAL:HA	4:AE:47:PHE:HA	1.71	0.71
27:DK:112:PHE:O	27:DK:115:ILE:HG22	1.90	0.71
25:BC:80:LEU:HD23	25:BC:91:ALA:HB2	1.72	0.71
2:CC:129:PHE:CZ	2:CC:156:LEU:HD11	2.25	0.71
1:CA:239:U:OP1	1:CA:239:U:H4'	1.90	0.71
43:BO:67:ASN:HB3	43:BO:70:ALA:HB2	1.72	0.71
46:BU:80:ASP:HB2	46:BU:95:PHE:HD2	1.54	0.71
35:DV:51:GLN:HG2	35:DV:86:LEU:HD11	1.71	0.71
23:DB:1175:A:H2'	23:DB:1176:U:H5'	1.71	0.71
23:BB:2444:G:OP2	29:BE:63:LYS:HD2	1.89	0.71
41:BJ:6:ALA:HB3	41:BJ:45:THR:HG21	1.71	0.71
6:AG:28:ILE:HG21	6:AG:101:ARG:HG2	1.73	0.71
41:DJ:25:LEU:HD22	41:DJ:26:GLY:H	1.55	0.71
47:DF:147:ARG:HD2	47:DF:148:VAL:HG22	1.71	0.71
23:BB:580:U:H2'	23:BB:581:C:H6	1.54	0.71
1:CA:238:A:H2'	1:CA:239:U:H5''	1.73	0.71
1:AA:1250:A:H4'	8:AI:69:GLY:N	2.05	0.71
23:BB:264:C:C2'	23:BB:265:A:H5''	2.20	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:192:ALA:HB3	3:AD:194:ILE:HG22	1.72	0.71
44:DQ:10:ARG:HB2	44:DQ:10:ARG:NH1	2.06	0.71
1:CA:237:G:H5''	14:CQ:26:ARG:NH2	2.06	0.71
10:AK:111:ASP:HB2	19:AU:19:LYS:HE3	1.73	0.71
48:DG:87:GLN:HG2	48:DG:164:ALA:HA	1.73	0.71
35:DV:80:HIS:CD2	35:DV:83:LYS:H	2.08	0.71
23:DB:1244:A:H5''	37:DL:8:PRO:HD3	1.71	0.71
16:CS:35:ARG:HA	16:CS:70:LEU:HB3	1.72	0.71
44:DQ:57:ARG:NH1	44:DQ:61:ILE:HD11	2.06	0.71
25:DC:64:VAL:O	25:DC:65:ASP:HB3	1.89	0.71
23:BB:2557:G:H2'	23:BB:2558:C:C6	2.24	0.71
23:DB:784:G:N1	25:DC:227:VAL:HG11	2.04	0.71
23:BB:590:A:H2'	23:BB:591:U:C6	2.26	0.71
1:CA:269:C:H2'	1:CA:270:A:C8	2.26	0.71
49:BR:76:LYS:HB2	49:BR:85:LYS:HB2	1.72	0.71
2:AC:122:GLN:HB3	2:AC:127:VAL:HG21	1.72	0.71
41:DJ:51:GLY:HA3	41:DJ:121:LYS:NZ	2.06	0.71
12:AM:23:GLY:HA3	12:AM:68:LEU:HD21	1.72	0.71
43:DO:67:ASN:HB3	43:DO:70:ALA:HB2	1.71	0.71
46:DU:80:ASP:HB2	46:DU:95:PHE:HD2	1.55	0.71
23:BB:674:G:H1'	29:BE:69:ARG:HD2	1.73	0.71
34:D3:49:VAL:HG23	34:D3:51:LYS:H	1.56	0.71
11:CL:23:LEU:HD23	11:CL:29:LYS:HE3	1.72	0.71
1:CA:182:A:O2'	1:CA:183:C:H3'	1.91	0.71
35:BV:14:LYS:HG2	35:BV:18:ARG:HD2	1.72	0.71
40:BH:96:THR:HB	40:BH:115:VAL:HG11	1.70	0.71
46:BU:12:VAL:HG22	46:BU:69:VAL:HG12	1.72	0.71
49:BR:24:LYS:HA	49:BR:94:THR:HG23	1.73	0.71
9:AJ:55:PRO:O	9:AJ:56:HIS:HB3	1.88	0.71
23:BB:181:A:H2'	23:BB:182:A:H8	1.54	0.71
1:CA:950:U:H3'	12:CM:100:ARG:HH22	1.54	0.71
23:BB:1935:G:H1'	23:BB:1964:G:N2	2.05	0.71
23:DB:1203:U:H1'	37:DL:4:ASN:HD21	1.56	0.71
12:AM:9:PRO:O	12:AM:44:ILE:HB	1.91	0.71
52:DW:23:LYS:HD2	52:DW:24:ARG:HB3	1.73	0.71
25:DC:80:LEU:HD11	25:DC:109:LEU:HB2	1.72	0.71
21:CN:50:LEU:HD12	21:CN:51:PRO:HD3	1.72	0.71
23:BB:1063:G:O2'	24:BI:88:GLY:HA3	1.90	0.71
26:DD:151:THR:HB	26:DD:152:PRO:HD3	1.72	0.71
1:AA:1373:G:H5''	6:AG:35:LYS:HD3	1.71	0.71
46:DU:84:PHE:HB3	46:DU:91:LYS:HG2	1.73	0.71
23:DB:359:G:H2'	23:DB:360:U:H5'	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BS:36:LEU:HD23	45:BS:48:LYS:HA	1.73	0.71
17:AT:38:ILE:HD11	17:AT:82:ILE:HG22	1.71	0.71
23:DB:742:A:H2'	23:DB:743:A:H8	1.55	0.71
23:DB:919:U:H2'	23:DB:920:A:C8	2.26	0.71
38:DM:67:VAL:HG11	38:DM:102:LEU:HD13	1.73	0.71
52:BW:23:LYS:HD2	52:BW:24:ARG:HB3	1.72	0.71
52:DW:39:GLN:HG2	52:DW:40:ARG:H	1.55	0.71
23:BB:858:G:H21	23:BB:2268:A:H3'	1.55	0.71
47:DF:135:ILE:HD11	47:DF:137:PHE:HB3	1.72	0.71
44:BQ:57:ARG:NH1	44:BQ:61:ILE:HD11	2.06	0.71
1:AA:1313:U:H3'	16:AS:5:LYS:HD2	1.71	0.71
9:AJ:56:HIS:H	21:AN:80:ARG:NH2	1.89	0.71
41:BJ:25:LEU:HD22	41:BJ:26:GLY:H	1.55	0.71
27:BK:112:PHE:O	27:BK:115:ILE:HG22	1.91	0.71
23:DB:547:A:C2	23:DB:548:G:H1'	2.25	0.71
40:BH:53:GLU:HA	40:BH:57:LYS:HB3	1.73	0.71
23:DB:2187:U:H2'	23:DB:2188:U:C6	2.25	0.71
11:AL:33:CYS:HA	11:AL:54:VAL:HA	1.72	0.71
6:CG:10:LYS:HZ2	6:CG:11:ILE:N	1.85	0.70
29:DE:176:ASP:HB3	29:DE:179:SER:HB2	1.72	0.70
44:DQ:4:LYS:HE3	44:DQ:8:ILE:HD11	1.72	0.70
43:DO:18:LEU:HD23	43:DO:25:ARG:HD2	1.71	0.70
23:BB:1203:U:H3'	23:BB:1204:A:H5''	1.72	0.70
1:AA:922:G:H2'	1:AA:923:A:C8	2.26	0.70
23:BB:2732:G:H3'	23:BB:2733:A:H5'	1.73	0.70
1:CA:270:A:H2'	1:CA:271:C:C6	2.26	0.70
6:CG:26:VAL:HA	6:CG:42:VAL:HG21	1.71	0.70
28:DP:97:TYR:O	28:DP:100:ARG:HB2	1.91	0.70
38:BM:34:LYS:HB3	38:BM:129:THR:HG22	1.74	0.70
1:CA:56:U:H2'	1:CA:57:G:H8	1.55	0.70
17:CT:38:ILE:HD11	17:CT:82:ILE:HG22	1.73	0.70
1:CA:207:C:H2'	1:CA:208:U:O4'	1.91	0.70
23:DB:705:A:N6	23:DB:726:G:H1'	2.06	0.70
23:BB:705:A:N6	23:BB:726:G:H1'	2.06	0.70
2:AC:137:VAL:HA	2:AC:148:ILE:HD13	1.71	0.70
10:CK:44:ALA:HB2	10:CK:69:CYS:HB3	1.73	0.70
23:BB:675:A:H4'	29:BE:62:GLN:HE22	1.56	0.70
29:BE:60:TRP:O	29:BE:61:ARG:HB2	1.91	0.70
4:AE:113:VAL:HG11	4:AE:136:VAL:HG23	1.73	0.70
1:AA:270:A:H2'	1:AA:271:C:C6	2.25	0.70
23:DB:773:U:H5'	23:DB:774:G:OP2	1.90	0.70
1:AA:370:C:O2'	1:AA:371:A:H5'	1.90	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2557:G:H2'	23:DB:2558:C:C6	2.25	0.70
3:CD:32:LYS:O	3:CD:35:GLN:HB2	1.91	0.70
1:AA:518:C:H2'	1:AA:530:G:C8	2.26	0.70
23:DB:1099:G:O4'	24:DI:3:LYS:C	2.30	0.70
23:BB:544:C:H2'	23:BB:545:U:O4'	1.91	0.70
52:BW:39:GLN:HG2	52:BW:40:ARG:H	1.55	0.70
1:CA:1316:G:H22	1:CA:1318:A:H3'	1.55	0.70
52:DW:35:ILE:HA	52:DW:57:THR:HG23	1.73	0.70
8:AI:21:LYS:O	8:AI:60:LEU:HB2	1.91	0.70
40:DH:31:VAL:O	40:DH:33:GLN:N	2.24	0.70
23:DB:876:C:H42	23:DB:901:C:N4	1.90	0.70
18:CB:218:ALA:HA	18:CB:221:ARG:CZ	2.21	0.70
39:DX:6:LEU:HD13	39:DX:7:ARG:N	2.06	0.70
24:BI:20:SER:HB3	24:BI:21:PRO:HD3	1.72	0.70
26:DD:124:ARG:HB2	26:DD:165:MET:HB2	1.72	0.70
1:CA:82:G:H2'	1:CA:83:C:O4'	1.92	0.70
23:BB:1437:C:H2'	23:BB:1438:U:C6	2.26	0.70
23:DB:1203:U:H3'	23:DB:1204:A:H5''	1.73	0.70
46:DU:35:VAL:HB	46:DU:38:ILE:HG21	1.73	0.70
2:AC:6:PRO:HA	2:AC:9:ILE:HG22	1.73	0.70
1:AA:1144:G:N2	1:AA:1146:A:H62	1.89	0.70
32:B4:7:VAL:HG13	32:B4:8:LYS:N	2.03	0.70
40:BH:31:VAL:O	40:BH:33:GLN:N	2.24	0.70
10:AK:80:ASN:HD22	10:AK:80:ASN:N	1.88	0.70
18:AB:83:ALA:HA	18:AB:88:GLN:HE21	1.56	0.70
1:CA:1219:A:H2'	1:CA:1220:G:H8	1.56	0.70
23:DB:547:A:H3'	23:DB:548:G:H21	1.57	0.70
23:DB:2742:G:OP1	32:D4:36:ARG:HD3	1.91	0.70
23:DB:930:G:H1'	30:DY:24:LEU:HD11	1.72	0.70
14:CQ:83:LEU:H	14:CQ:83:LEU:HD22	1.55	0.70
23:BB:1857:G:N2	23:BB:1884:G:H2'	2.06	0.70
23:DB:2145:C:H3'	23:DB:2146:C:H5''	1.71	0.70
1:CA:1144:G:N2	1:CA:1146:A:H62	1.89	0.70
23:DB:1099:G:P	24:DI:3:LYS:HA	2.32	0.70
9:CJ:6:ILE:HB	9:CJ:76:ILE:HG13	1.73	0.70
52:DW:39:GLN:HG2	52:DW:40:ARG:N	2.07	0.70
1:CA:922:G:H2'	1:CA:923:A:C8	2.26	0.70
1:AA:1308:U:H5''	12:AM:96:VAL:HG23	1.74	0.70
11:AL:5:GLN:HA	11:AL:8:ARG:HH21	1.57	0.70
1:CA:560:A:H4'	1:CA:561:U:H5''	1.73	0.70
1:AA:408:A:OP1	3:AD:111:ALA:HB3	1.91	0.70
13:AP:28:ARG:CD	13:AP:29:ASN:H	2.04	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AQ:66:LEU:HD12	14:AQ:66:LEU:H	1.55	0.70
37:BL:6:LEU:H	37:BL:6:LEU:HD23	1.55	0.70
23:DB:62:U:H3'	23:DB:63:A:C8	2.27	0.70
1:AA:238:A:H2'	1:AA:239:U:H5''	1.74	0.70
1:CA:979:C:H1'	1:CA:1317:C:H41	1.56	0.70
5:AF:5:GLU:HB3	5:AF:90:MET:HB2	1.74	0.70
23:DB:2267:A:C8	23:DB:2267:A:H3'	2.27	0.70
32:B4:5:ALA:HA	32:B4:37:GLN:NE2	2.06	0.70
26:BD:151:THR:HB	26:BD:152:PRO:HD3	1.72	0.70
1:CA:1306:A:N6	1:CA:1331:G:H1'	2.06	0.70
23:DB:580:U:H2'	23:DB:581:C:H6	1.55	0.70
23:DB:351:C:H2'	23:DB:352:A:C8	2.27	0.70
23:BB:364:C:H2'	23:BB:365:U:C6	2.26	0.70
6:AG:145:GLU:HA	6:AG:148:LYS:HB2	1.72	0.70
24:BI:106:GLN:O	24:BI:110:GLN:HG3	1.92	0.70
41:BJ:17:VAL:HG22	41:BJ:55:ILE:HD11	1.71	0.70
14:CQ:8:GLN:HA	14:CQ:59:GLU:HA	1.73	0.70
23:BB:142:A:H2'	23:BB:143:C:C5	2.27	0.70
19:AU:5:VAL:HG21	19:AU:16:ARG:HH21	1.55	0.70
10:CK:17:ASP:HA	10:CK:80:ASN:O	1.91	0.70
10:CK:80:ASN:HD22	10:CK:80:ASN:N	1.89	0.70
1:AA:1081:A:H2'	1:AA:1082:A:H8	1.57	0.70
39:DX:44:LYS:HD2	39:DX:48:ARG:HH22	1.55	0.70
23:BB:350:G:H2'	23:BB:351:C:O4'	1.91	0.70
16:CS:23:GLU:HG3	16:CS:24:SER:N	2.06	0.70
23:DB:1606:C:H4'	23:DB:1607:C:H5'	1.73	0.70
23:DB:2458:G:H8	23:DB:2459:A:H62	1.38	0.70
7:CH:49:LYS:HB3	7:CH:59:GLU:HB2	1.72	0.70
1:CA:1090:U:H2'	1:CA:1091:U:C6	2.27	0.70
23:BB:287:G:H2'	23:BB:288:U:H6	1.56	0.70
7:AH:94:VAL:HG23	7:AH:101:ALA:HB2	1.74	0.70
23:DB:2291:U:H2'	23:DB:2292:U:C6	2.27	0.70
43:BO:18:LEU:HD23	43:BO:25:ARG:HD2	1.73	0.70
23:DB:1387:A:H2'	23:DB:1388:G:H8	1.57	0.70
1:CA:1054:C:O2'	1:CA:1055:A:H5''	1.92	0.70
12:AM:21:ILE:HG21	12:AM:64:VAL:HB	1.72	0.70
42:BN:76:VAL:HA	42:BN:79:LEU:HD12	1.73	0.70
1:AA:1123:U:O2'	1:AA:1124:G:H5'	1.92	0.70
10:CK:111:ASP:HB3	19:CU:3:ILE:HD13	1.72	0.70
32:B4:5:ALA:HA	32:B4:37:GLN:HE22	1.57	0.70
48:BG:84:LYS:HB3	48:BG:132:LEU:O	1.91	0.70
18:AB:63:LYS:HD3	18:AB:224:ARG:HE	1.57	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:85:U:H1'	1:AA:86:G:O4'	1.92	0.70
2:AC:66:THR:HG22	2:AC:103:ALA:HB2	1.73	0.70
23:DB:1301:A:O2'	23:DB:1302:A:H2'	1.92	0.70
1:CA:518:C:H2'	1:CA:530:G:C8	2.27	0.70
6:AG:74:VAL:HA	6:AG:86:VAL:O	1.92	0.70
23:BB:1019:U:H2'	23:BB:1020:A:C8	2.26	0.70
12:AM:33:LEU:HD13	12:AM:39:ALA:O	1.92	0.70
50:DT:11:LEU:HD21	50:DT:46:ALA:HB1	1.74	0.70
32:D4:7:VAL:HG13	32:D4:8:LYS:N	2.04	0.70
23:DB:857:G:C2'	23:DB:858:G:H5'	2.22	0.70
23:DB:495:G:N2	45:DS:61:ASN:HD21	1.90	0.70
35:DV:14:LYS:HG2	35:DV:18:ARG:HD2	1.72	0.70
1:CA:505:G:H5'	1:CA:534:U:H2'	1.72	0.70
1:AA:840:C:H2'	1:AA:842:U:H5''	1.73	0.70
23:BB:919:U:H2'	23:BB:920:A:C8	2.27	0.70
1:CA:1097:C:H2'	1:CA:1098:C:H6	1.56	0.70
23:BB:1000:A:H2'	23:BB:1001:A:C8	2.26	0.70
41:DJ:56:VAL:HG12	41:DJ:57:LEU:H	1.56	0.70
23:DB:1098:A:H2'	24:DI:4:VAL:CA	2.21	0.70
1:CA:1118:U:H2'	1:CA:1119:C:C6	2.27	0.70
8:AI:38:PHE:HZ	8:AI:74:GLN:HB3	1.55	0.70
8:AI:27:ILE:HG12	8:AI:62:LEU:HD23	1.74	0.70
30:DY:30:ARG:NH1	30:DY:30:ARG:HB2	2.07	0.70
24:DI:85:ILE:HD13	24:DI:137:LEU:HD21	1.73	0.70
26:DD:24:VAL:HG21	26:DD:188:LEU:HB3	1.74	0.70
38:BM:19:GLY:N	38:BM:38:ARG:HH12	1.90	0.70
23:BB:1812:U:H2'	23:BB:1813:G:H8	1.57	0.70
1:CA:1071:C:H2'	1:CA:1072:G:C8	2.27	0.70
41:BJ:77:HIS:CD2	41:BJ:84:ILE:H	2.09	0.70
45:BS:84:ARG:HB3	45:BS:96:ILE:HG23	1.74	0.70
16:CS:62:THR:HG22	16:CS:63:ASP:H	1.56	0.70
23:BB:1149:G:H2'	23:BB:1150:C:C6	2.27	0.70
35:BV:72:VAL:HG21	35:BV:91:PHE:HB3	1.74	0.69
23:BB:2328:A:H2'	23:BB:2329:U:C6	2.27	0.69
12:CM:30:LYS:HG2	12:CM:40:GLU:OE1	1.92	0.69
39:BX:6:LEU:HD13	39:BX:7:ARG:N	2.07	0.69
23:BB:90:U:H3'	23:BB:91:A:C5'	2.21	0.69
1:CA:242:G:H2'	1:CA:243:A:H5''	1.74	0.69
51:BZ:28:ARG:HD3	51:BZ:30:LEU:HD21	1.74	0.69
1:CA:21:G:H2'	1:CA:22:G:C8	2.27	0.69
23:DB:2654:A:N1	23:DB:2665:A:H5''	2.07	0.69
38:BM:67:VAL:HG11	38:BM:102:LEU:HD13	1.74	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2591:C:H2'	23:DB:2592:G:C8	2.27	0.69
3:AD:32:LYS:O	3:AD:35:GLN:HB2	1.92	0.69
11:CL:33:CYS:HA	11:CL:54:VAL:HA	1.72	0.69
38:DM:34:LYS:HB3	38:DM:129:THR:HG22	1.74	0.69
13:CP:28:ARG:CD	13:CP:29:ASN:H	2.04	0.69
9:AJ:6:ILE:HA	9:AJ:102:LEU:O	1.92	0.69
23:DB:2336:A:H62	52:DW:40:ARG:CB	2.05	0.69
28:DP:75:THR:HG23	28:DP:76:HIS:N	2.07	0.69
4:CE:37:VAL:HA	4:CE:47:PHE:HA	1.73	0.69
2:AC:10:ARG:HH22	2:AC:181:ILE:HD13	1.56	0.69
23:BB:2241:A:H2'	23:BB:2242:G:C8	2.27	0.69
25:DC:180:MET:HB2	25:DC:268:ARG:H	1.55	0.69
11:CL:20:VAL:HB	11:CL:94:TYR:CE1	2.27	0.69
51:DZ:28:ARG:HD3	51:DZ:30:LEU:HD21	1.73	0.69
1:AA:207:C:H2'	1:AA:208:U:O4'	1.92	0.69
23:BB:2148:G:H2'	23:BB:2149:U:H4'	1.72	0.69
8:CI:19:PHE:O	8:CI:62:LEU:HA	1.93	0.69
12:AM:21:ILE:HG23	12:AM:65:GLU:H	1.57	0.69
29:BE:18:THR:HG22	29:BE:106:LYS:HE2	1.73	0.69
14:AQ:60:ILE:HA	14:AQ:75:VAL:HG13	1.73	0.69
48:DG:84:LYS:HB3	48:DG:132:LEU:O	1.91	0.69
46:BU:71:ILE:HD11	46:BU:81:ARG:O	1.92	0.69
10:CK:17:ASP:HB3	10:CK:80:ASN:HD21	1.57	0.69
24:DI:105:LEU:HD11	24:DI:139:VAL:HG21	1.72	0.69
23:BB:165:A:H2'	23:BB:166:U:C6	2.27	0.69
1:AA:242:G:H2'	1:AA:243:A:H5''	1.73	0.69
23:DB:1440:U:H2'	23:DB:1441:G:H8	1.56	0.69
11:AL:20:VAL:HB	11:AL:94:TYR:CE1	2.26	0.69
23:DB:98:G:H2'	23:DB:99:U:H5''	1.73	0.69
23:DB:1857:G:N2	23:DB:1884:G:H2'	2.07	0.69
48:DG:9:VAL:HA	48:DG:48:THR:HA	1.74	0.69
23:BB:1381:G:C2'	23:BB:1382:G:H5'	2.22	0.69
51:DZ:77:LYS:H	51:DZ:77:LYS:HD3	1.55	0.69
18:CB:79:VAL:HG23	18:CB:213:LEU:HD11	1.75	0.69
1:CA:1316:G:N2	1:CA:1318:A:H3'	2.08	0.69
5:CF:5:GLU:HB3	5:CF:90:MET:HB2	1.73	0.69
10:AK:17:ASP:HA	10:AK:80:ASN:O	1.92	0.69
2:AC:71:ARG:HD2	2:AC:74:ILE:HG22	1.74	0.69
3:AD:197:HIS:O	3:AD:200:VAL:HG22	1.91	0.69
23:BB:1381:G:H2'	23:BB:1382:G:H5'	1.73	0.69
1:AA:182:A:O2'	1:AA:183:C:H3'	1.92	0.69
45:DS:17:VAL:C	45:DS:19:LEU:H	1.96	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CF:42:TRP:NE1	5:CF:61:LEU:HD23	2.07	0.69
18:AB:23:ASN:HD22	18:AB:24:PRO:HD2	1.57	0.69
23:DB:356:G:H2'	23:DB:357:C:C6	2.26	0.69
23:BB:1796:U:H2'	23:BB:1797:G:H8	1.57	0.69
18:AB:116:LEU:HD22	18:AB:140:LEU:HD11	1.74	0.69
1:CA:266:G:O2'	1:CA:267:C:H3'	1.93	0.69
1:AA:664:G:H22	1:AA:741:G:H1	1.40	0.69
1:CA:370:C:O2'	1:CA:371:A:H5'	1.91	0.69
49:BR:71:LYS:HE3	49:BR:73:LYS:NZ	2.07	0.69
4:AE:39:GLY:HA3	4:AE:116:VAL:HB	1.74	0.69
1:AA:1175:G:H2'	1:AA:1176:A:H8	1.56	0.69
50:DT:29:THR:HG22	50:DT:86:THR:HG22	1.73	0.69
50:DT:5:GLU:HA	50:DT:8:LEU:HB2	1.74	0.69
50:BT:11:LEU:HD21	50:BT:46:ALA:HB1	1.73	0.69
6:CG:130:LYS:N	6:CG:134:VAL:HG21	2.08	0.69
35:DV:29:ILE:HG13	35:DV:88:HIS:HE1	1.55	0.69
18:CB:33:ALA:CB	18:CB:38:HIS:HA	2.23	0.69
28:BP:75:THR:HG23	28:BP:76:HIS:N	2.07	0.69
28:BP:1:SER:O	28:BP:5:LYS:HB2	1.93	0.69
12:CM:33:LEU:HD13	12:CM:39:ALA:O	1.92	0.69
2:CC:26:LYS:HG3	2:CC:27:GLU:HG3	1.75	0.69
29:BE:29:HIS:O	29:BE:32:VAL:HG22	1.93	0.69
23:BB:796:C:H2'	23:BB:797:G:C8	2.27	0.69
46:BU:84:PHE:HB3	46:BU:91:LYS:HG2	1.73	0.69
32:D4:5:ALA:HA	32:D4:37:GLN:NE2	2.07	0.69
23:DB:2734:A:H2'	23:DB:2735:G:H5'	1.75	0.69
13:CP:39:PHE:HA	13:CP:50:THR:HG23	1.73	0.69
23:DB:590:A:H2'	23:DB:591:U:C6	2.28	0.69
1:CA:1288:A:N1	1:CA:1371:G:H1'	2.08	0.69
40:DH:101:ASP:HA	40:DH:104:THR:HB	1.74	0.69
1:AA:1407:C:H2'	1:AA:1408:A:H5''	1.74	0.69
1:AA:1163:A:H2'	1:AA:1164:G:C8	2.27	0.69
12:AM:47:LEU:HB3	12:AM:52:ILE:HB	1.74	0.69
52:BW:39:GLN:HG2	52:BW:40:ARG:N	2.07	0.69
44:BQ:87:VAL:HB	49:BR:52:PRO:HG3	1.74	0.69
39:BX:13:GLU:HB2	39:BX:57:LEU:HD13	1.73	0.69
21:CN:27:LYS:HA	21:CN:31:SER:HB3	1.73	0.69
27:DK:102:PRO:HB3	27:DK:121:GLU:HB2	1.75	0.69
23:DB:743:A:O2'	23:DB:744:U:H5'	1.92	0.69
23:DB:2690:U:H3	42:DN:7:GLY:HA3	1.56	0.69
23:BB:2:G:H2'	23:BB:3:U:C6	2.27	0.69
46:BU:35:VAL:HB	46:BU:38:ILE:HG21	1.73	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2086:U:H2'	23:BB:2087:G:C8	2.28	0.69
23:BB:118:A:H5'	23:BB:119:A:H8	1.56	0.69
27:BK:54:LYS:H	27:BK:54:LYS:HD2	1.55	0.69
6:AG:21:LEU:H	6:AG:21:LEU:HD23	1.57	0.69
23:DB:2021:C:OP1	31:D0:8:THR:HG21	1.92	0.69
12:AM:15:VAL:HG13	12:AM:33:LEU:CD1	2.23	0.69
12:AM:33:LEU:HB3	12:AM:38:ILE:O	1.92	0.69
26:DD:9:VAL:HA	26:DD:197:THR:HG22	1.72	0.69
35:BV:63:ILE:HB	35:BV:70:ILE:HD11	1.73	0.69
35:BV:9:ARG:HH12	35:BV:27:PRO:CB	2.04	0.69
48:DG:34:ARG:HH11	48:DG:34:ARG:N	1.85	0.69
2:AC:168:ARG:HH11	2:AC:172:VAL:HG23	1.58	0.69
48:DG:83:THR:HA	48:DG:84:LYS:NZ	2.07	0.69
29:BE:130:LYS:HB2	29:BE:133:LEU:HG	1.75	0.69
16:AS:43:MET:O	16:AS:61:VAL:HG21	1.93	0.69
16:AS:11:ASP:HB2	16:AS:14:LEU:HG	1.74	0.69
12:AM:82:LEU:HD13	16:AS:65:MET:HB2	1.75	0.69
36:D2:33:ARG:HB2	36:D2:33:ARG:HH21	1.58	0.69
23:DB:1024:G:C3'	23:DB:1025:G:H5''	2.23	0.69
23:BB:1993:U:H4'	26:BD:133:THR:CG2	2.22	0.69
18:AB:186:VAL:HG21	18:AB:192:PRO:HB3	1.74	0.69
29:BE:28:VAL:O	29:BE:32:VAL:HG13	1.92	0.69
23:DB:2722:G:H4'	42:DN:4:ARG:HB2	1.75	0.69
6:AG:149:ALA:HB1	10:AK:58:THR:HB	1.75	0.69
7:CH:58:LEU:HD22	7:CH:60:LEU:HB2	1.75	0.69
41:DJ:93:ILE:HA	41:DJ:97:PRO:HG3	1.75	0.69
12:AM:29:SER:O	12:AM:32:ILE:HG22	1.92	0.69
23:BB:38:A:O2'	29:BE:43:THR:HA	1.93	0.69
2:AC:36:PHE:O	2:AC:40:GLN:HG3	1.93	0.69
23:DB:1993:U:H4'	26:DD:133:THR:HG21	1.73	0.69
1:CA:1226:C:H4'	1:CA:1227:A:OP1	1.93	0.69
1:CA:840:C:H2'	1:CA:842:U:H5''	1.74	0.69
18:AB:131:LYS:O	18:AB:135:MET:HG3	1.93	0.69
23:DB:1736:U:H2'	23:DB:1737:G:O4'	1.93	0.69
23:DB:2066:C:O2'	23:DB:2067:G:H5'	1.93	0.69
23:BB:2841:C:H2'	23:BB:2842:G:H8	1.58	0.69
22:DA:104:A:H2'	22:DA:105:G:O4'	1.93	0.69
23:BB:634:C:H2'	23:BB:635:C:H6	1.58	0.69
12:AM:70:ARG:O	12:AM:74:MET:HG2	1.93	0.69
8:CI:27:ILE:HG22	8:CI:62:LEU:HD21	1.75	0.69
40:DH:128:HIS:HB2	40:DH:144:VAL:HB	1.75	0.69
28:DP:1:SER:O	28:DP:5:LYS:HB2	1.93	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BJ:43:GLU:O	41:BJ:45:THR:N	2.25	0.69
16:AS:14:LEU:HD12	16:AS:15:LEU:N	2.08	0.69
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.08	0.69
47:BF:56:LEU:HD22	47:BF:59:ILE:HD12	1.74	0.69
6:AG:13:PRO:HA	6:AG:20:GLU:HA	1.73	0.69
16:CS:10:ILE:HA	16:CS:37:SER:HB2	1.75	0.69
16:CS:18:VAL:O	16:CS:22:VAL:HG23	1.92	0.69
23:DB:1548:A:H2'	23:DB:1549:A:C8	2.28	0.69
23:BB:287:G:H2'	23:BB:288:U:C6	2.28	0.69
41:DJ:57:LEU:HG	41:DJ:128:ASN:H	1.57	0.69
21:CN:52:ARG:HG3	21:CN:58:ARG:HH12	1.55	0.69
23:BB:717:C:H3'	23:BB:718:A:H5''	1.75	0.69
49:DR:76:LYS:HB2	49:DR:85:LYS:HB2	1.73	0.69
41:BJ:57:LEU:HG	41:BJ:128:ASN:H	1.56	0.69
29:BE:117:ARG:HH12	37:BL:2:ARG:HB2	1.57	0.69
23:BB:2680:U:OP2	26:BD:114:LYS:HB3	1.93	0.69
23:DB:1174:U:H1'	23:DB:1176:U:N1	2.07	0.69
23:BB:1287:A:H3'	23:BB:1288:G:N2	2.08	0.69
40:BH:5:LEU:HD13	40:BH:13:GLY:HA2	1.74	0.69
31:B0:42:ILE:HD11	42:BN:98:LEU:HD12	1.73	0.69
18:CB:185:ILE:HA	18:CB:199:ILE:O	1.93	0.68
40:BH:80:ILE:HD13	40:BH:98:ASP:HB2	1.75	0.68
1:CA:920:U:H2'	1:CA:921:U:C6	2.28	0.68
6:CG:145:GLU:HA	6:CG:148:LYS:HB2	1.75	0.68
41:BJ:112:GLY:H	41:BJ:113:PRO:HD2	1.56	0.68
23:BB:322:A:H5'	23:BB:340:A:H1'	1.75	0.68
23:BB:1440:U:H2'	23:BB:1441:G:H8	1.58	0.68
1:CA:1144:G:H21	1:CA:1146:A:H62	1.38	0.68
1:AA:1163:A:H2'	1:AA:1164:G:H8	1.58	0.68
25:DC:75:ALA:HB2	25:DC:95:TYR:HA	1.74	0.68
23:BB:1736:U:H2'	23:BB:1737:G:O4'	1.93	0.68
50:BT:44:LYS:O	50:BT:48:GLN:HG2	1.93	0.68
26:BD:14:ILE:HG23	26:BD:22:ILE:HB	1.74	0.68
23:DB:1381:G:H2'	23:DB:1382:G:H5'	1.76	0.68
7:CH:94:VAL:HG23	7:CH:101:ALA:HB2	1.75	0.68
1:AA:817:C:H1'	1:AA:819:A:H5'	1.74	0.68
30:DY:15:ARG:N	30:DY:15:ARG:HD2	2.08	0.68
50:BT:29:THR:HG22	50:BT:86:THR:HG22	1.75	0.68
35:DV:72:VAL:HG21	35:DV:91:PHE:HB3	1.74	0.68
40:BH:116:ARG:NH2	40:BH:139:PHE:HB3	2.08	0.68
23:DB:1729:U:H3'	23:DB:1730:C:C4'	2.22	0.68
10:CK:44:ALA:HB2	10:CK:69:CYS:CB	2.23	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.58	0.68
28:DP:88:ARG:HB2	28:DP:112:ARG:NH1	2.09	0.68
48:DG:94:ARG:HB3	48:DG:127:GLN:HE21	1.58	0.68
23:DB:2471:A:O2'	23:DB:2472:G:H8	1.76	0.68
46:DU:86:PHE:HB2	46:DU:92:VAL:HB	1.75	0.68
23:DB:276:U:H2'	23:DB:277:G:H8	1.58	0.68
23:DB:414:C:H2'	23:DB:415:A:H8	1.57	0.68
23:BB:2461:A:H2'	23:BB:2462:C:C6	2.28	0.68
23:BB:654:A:H2'	23:BB:655:A:H5''	1.75	0.68
1:AA:1038:C:H2'	1:AA:1039:G:C8	2.27	0.68
23:DB:1447:C:H2'	23:DB:1448:G:H8	1.59	0.68
23:BB:2880:C:O4'	42:BN:91:ALA:HB3	1.92	0.68
21:CN:9:GLU:HB2	21:CN:62:ARG:CZ	2.23	0.68
24:BI:129:GLU:HB3	24:BI:133:ARG:NH1	2.08	0.68
23:DB:1081:U:H5'	24:DI:126:ARG:NH1	2.08	0.68
23:DB:165:A:H2'	23:DB:166:U:C6	2.28	0.68
16:CS:62:THR:H	16:CS:65:MET:HB3	1.58	0.68
23:DB:460:A:H4'	50:DT:72:GLN:HB2	1.75	0.68
23:BB:2021:C:OP1	31:B0:8:THR:HG21	1.93	0.68
21:CN:65:GLN:HE22	21:CN:78:LEU:HG	1.58	0.68
23:BB:936:A:H2'	23:BB:937:C:C6	2.29	0.68
23:DB:636:G:O5'	37:DL:128:THR:HG22	1.93	0.68
22:DA:60:C:H2'	22:DA:61:G:H8	1.59	0.68
1:CA:1328:C:H5''	12:CM:27:THR:HG21	1.75	0.68
10:CK:22:ILE:HG12	10:CK:31:VAL:HG12	1.74	0.68
24:DI:73:PRO:HG2	24:DI:78:LEU:HD21	1.74	0.68
3:AD:84:ASN:ND2	3:AD:86:GLY:H	1.91	0.68
1:AA:923:A:H2'	1:AA:924:C:C6	2.28	0.68
23:DB:2186:G:H2'	23:DB:2187:U:O4'	1.93	0.68
1:CA:56:U:H2'	1:CA:57:G:C8	2.28	0.68
23:BB:1447:C:H2'	23:BB:1448:G:H8	1.57	0.68
23:DB:956:G:H4'	38:DM:82:MET:HE1	1.75	0.68
23:DB:1796:U:H2'	23:DB:1797:G:H8	1.57	0.68
36:B2:3:ARG:HA	36:B2:3:ARG:CZ	2.24	0.68
23:DB:833:A:H1'	37:DL:52:GLY:N	2.08	0.68
23:BB:857:G:C2'	23:BB:858:G:H5'	2.24	0.68
23:DB:322:A:H5'	23:DB:340:A:H1'	1.76	0.68
45:DS:24:ILE:HD11	45:DS:36:LEU:HD21	1.75	0.68
23:DB:2732:G:H3'	23:DB:2733:A:H5'	1.75	0.68
41:BJ:93:ILE:HA	41:BJ:97:PRO:HG3	1.75	0.68
50:BT:50:LEU:H	50:BT:50:LEU:HD22	1.58	0.68
6:CG:43:TYR:O	6:CG:47:GLU:HG2	1.94	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:200:U:H4'	51:BZ:22:LEU:HB2	1.74	0.68
23:BB:2305:U:H2'	23:BB:2306:C:C6	2.28	0.68
52:BW:23:LYS:HD2	52:BW:24:ARG:H	1.59	0.68
23:DB:2305:U:H2'	23:DB:2306:C:C6	2.29	0.68
35:DV:9:ARG:HH12	35:DV:27:PRO:CB	2.01	0.68
14:AQ:8:GLN:HA	14:AQ:59:GLU:HA	1.76	0.68
14:CQ:60:ILE:HA	14:CQ:75:VAL:HG13	1.75	0.68
44:DQ:4:LYS:HZ3	44:DQ:7:VAL:HG22	1.59	0.68
48:BG:83:THR:HA	48:BG:84:LYS:NZ	2.08	0.68
18:AB:161:PHE:HD2	18:AB:183:PHE:HB3	1.59	0.68
20:AO:53:ARG:HD2	23:BB:715:A:N6	2.09	0.68
23:DB:165:A:H2'	23:DB:166:U:H6	1.59	0.68
1:AA:1367:C:H5''	8:AI:115:VAL:HG23	1.75	0.68
23:DB:96:C:H4'	39:DX:41:HIS:CE1	2.29	0.68
23:BB:988:A:P	30:BY:11:SER:HB3	2.33	0.68
1:CA:1257:A:H5''	1:CA:1257:A:N3	2.08	0.68
25:DC:196:ASN:HD22	25:DC:199:HIS:HB2	1.59	0.68
23:BB:98:G:H2'	23:BB:99:U:H5''	1.74	0.68
52:DW:24:ARG:HD3	52:DW:65:LYS:HG2	1.75	0.68
29:DE:60:TRP:O	29:DE:61:ARG:HB2	1.91	0.68
23:BB:704:G:H1'	23:BB:727:A:H61	1.58	0.68
36:D2:30:VAL:HA	36:D2:33:ARG:NH2	2.07	0.68
1:CA:17:U:H2'	1:CA:18:C:H6	1.59	0.68
45:DS:58:ALA:HB1	45:DS:69:LEU:HD21	1.75	0.68
23:DB:1552:A:H2'	23:DB:1553:A:H5'	1.75	0.68
37:DL:4:ASN:HD22	37:DL:4:ASN:N	1.91	0.68
23:DB:2353:G:H21	52:DW:30:VAL:HG22	1.59	0.68
23:DB:2216:G:H2'	23:DB:2217:G:H8	1.58	0.68
23:BB:743:A:O2'	23:BB:744:U:H5'	1.94	0.68
22:BA:60:C:H2'	22:BA:61:G:H8	1.58	0.68
9:CJ:55:PRO:HA	21:CN:80:ARG:NH2	2.03	0.68
2:CC:65:VAL:HG23	2:CC:100:ILE:HA	1.75	0.68
33:B1:47:ILE:H	33:B1:47:ILE:HD12	1.58	0.68
41:DJ:77:HIS:CD2	41:DJ:84:ILE:H	2.12	0.68
10:CK:16:SER:HA	10:CK:78:ILE:HA	1.74	0.68
23:DB:2461:A:H2'	23:DB:2462:C:C6	2.29	0.68
22:BA:104:A:H2'	22:BA:105:G:O4'	1.93	0.68
1:AA:950:U:H2'	1:AA:951:G:C8	2.28	0.68
1:CA:474:G:H2'	1:CA:475:C:C6	2.29	0.68
23:DB:1640:A:H2'	23:DB:1641:A:C8	2.29	0.68
23:DB:936:A:H2'	23:DB:937:C:C6	2.29	0.68
23:BB:1060:U:O2	23:BB:1088:A:N7	2.27	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:DD:32:ASN:HD22	26:DD:50:VAL:HG21	1.59	0.68
23:DB:458:G:H22	23:DB:469:G:H2'	1.59	0.68
25:BC:103:ILE:HG22	25:BC:105:ALA:H	1.58	0.68
26:BD:159:LYS:HZ2	26:BD:160:LYS:N	1.92	0.68
23:DB:62:U:H3'	23:DB:63:A:H8	1.56	0.68
23:DB:1381:G:C2'	23:DB:1382:G:H5'	2.24	0.68
24:BI:10:LEU:HD13	24:BI:12:VAL:HG13	1.74	0.68
1:AA:651:C:H2'	1:AA:652:U:C6	2.29	0.68
1:AA:844:G:N2	1:AA:845:A:H62	1.92	0.68
1:CA:817:C:H1'	1:CA:819:A:H5'	1.75	0.68
36:D2:41:ARG:HH21	36:D2:41:ARG:HB2	1.58	0.68
27:BK:53:LYS:H	27:BK:53:LYS:HD3	1.58	0.68
5:CF:3:HIS:HB2	5:CF:92:THR:HA	1.74	0.68
41:DJ:11:VAL:HA	41:DJ:12:LYS:HZ2	1.57	0.68
14:CQ:59:GLU:O	14:CQ:75:VAL:HG22	1.94	0.68
23:BB:137:U:H2'	23:BB:138:U:C2	2.28	0.68
23:DB:858:G:H21	23:DB:2268:A:H3'	1.58	0.68
48:BG:140:ILE:HA	48:BG:143:VAL:HG22	1.76	0.68
23:BB:2143:C:H2'	23:BB:2144:G:O4'	1.94	0.68
38:DM:126:ILE:H	38:DM:126:ILE:HD12	1.59	0.68
23:BB:934:U:H2'	23:BB:935:C:C6	2.29	0.68
10:CK:63:GLN:HG3	10:CK:98:ALA:HB2	1.74	0.68
23:BB:2291:U:H2'	23:BB:2292:U:C6	2.28	0.68
28:BP:97:TYR:O	28:BP:100:ARG:HB2	1.93	0.68
48:BG:9:VAL:HA	48:BG:48:THR:HA	1.75	0.68
1:AA:1187:G:H4'	8:AI:114:LYS:HZ2	1.57	0.68
1:AA:390:U:H2'	1:AA:391:G:C8	2.29	0.68
38:BM:108:VAL:HG21	38:BM:112:LEU:HD12	1.74	0.68
5:CF:53:LYS:NZ	5:CF:53:LYS:H	1.91	0.68
20:AO:62:GLN:O	20:AO:66:LEU:HD23	1.94	0.68
9:CJ:12:ALA:HB3	9:CJ:18:ILE:HB	1.76	0.67
29:DE:58:LYS:H	29:DE:58:LYS:NZ	1.92	0.67
51:DZ:40:VAL:CG2	51:DZ:43:GLU:HB3	2.24	0.67
1:CA:940:C:H2'	1:CA:941:G:H8	1.59	0.67
23:DB:558:U:H5''	41:DJ:111:LYS:HD3	1.74	0.67
47:BF:11:VAL:HG21	47:BF:172:PHE:CE1	2.29	0.67
27:DK:41:ILE:HG13	27:DK:42:THR:N	2.08	0.67
40:BH:48:GLU:HG2	40:BH:49:ALA:N	2.08	0.67
44:DQ:30:VAL:CG1	44:DQ:33:VAL:HG22	2.24	0.67
2:AC:68:HIS:HA	2:AC:103:ALA:O	1.94	0.67
6:CG:19:SER:OG	6:CG:22:LEU:HB2	1.93	0.67
37:BL:73:ILE:HD12	37:BL:106:GLU:HB2	1.75	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:414:C:H2'	23:DB:415:A:C8	2.28	0.67
26:DD:46:ARG:HB3	26:DD:84:LEU:HD12	1.76	0.67
23:DB:836:G:H2'	23:DB:837:C:C6	2.28	0.67
1:AA:972:C:H4'	9:AJ:59:LYS:HG2	1.75	0.67
37:DL:65:GLY:O	37:DL:66:PHE:HB3	1.93	0.67
23:BB:620:G:H5'	23:BB:620:G:N3	2.09	0.67
10:AK:124:LYS:HA	19:AU:34:ARG:CB	2.24	0.67
5:AF:38:ARG:HB3	5:AF:63:ASN:HB2	1.76	0.67
2:CC:18:ASN:HA	2:CC:53:ARG:HH22	1.58	0.67
48:BG:148:ARG:HD3	48:BG:152:ARG:HH11	1.59	0.67
23:BB:1729:U:H3'	23:BB:1730:C:C4'	2.22	0.67
27:BK:41:ILE:HG13	27:BK:42:THR:N	2.09	0.67
1:CA:1219:A:H2'	1:CA:1220:G:C8	2.29	0.67
23:DB:277:G:H1'	23:DB:278:A:N1	2.09	0.67
23:DB:1019:U:H2'	23:DB:1020:A:H8	1.58	0.67
1:AA:662:U:H2'	1:AA:663:A:C8	2.30	0.67
41:BJ:56:VAL:HG12	41:BJ:57:LEU:H	1.60	0.67
3:CD:2:ARG:NH1	3:CD:114:ARG:HG3	2.09	0.67
52:BW:43:LYS:HD2	52:BW:79:ILE:HD11	1.76	0.67
11:AL:98:ARG:HB2	11:AL:116:TYR:HA	1.77	0.67
23:DB:2841:C:H2'	23:DB:2842:G:H8	1.59	0.67
40:DH:62:LEU:HD12	40:DH:65:ALA:HB3	1.76	0.67
1:CA:1011:C:H2'	1:CA:1012:A:C8	2.29	0.67
50:DT:50:LEU:HD22	50:DT:50:LEU:H	1.59	0.67
50:BT:5:GLU:HA	50:BT:8:LEU:HB2	1.76	0.67
23:BB:2267:A:C8	23:BB:2267:A:H3'	2.28	0.67
8:AI:64:ILE:HG22	8:AI:65:THR:H	1.59	0.67
10:AK:17:ASP:HB3	10:AK:80:ASN:HD21	1.60	0.67
18:CB:18:GLN:HG2	18:CB:189:ASN:HB3	1.75	0.67
38:DM:19:GLY:N	38:DM:38:ARG:HH12	1.93	0.67
38:DM:40:ARG:HD3	38:DM:93:VAL:HG21	1.76	0.67
47:BF:135:ILE:HD11	47:BF:137:PHE:HB3	1.75	0.67
1:AA:1081:A:OP1	4:AE:22:LYS:HB2	1.94	0.67
47:BF:168:LEU:HD13	47:BF:169:LEU:H	1.58	0.67
6:AG:30:MET:HG2	6:AG:31:VAL:H	1.58	0.67
23:DB:1553:A:O2'	23:DB:1554:U:H2'	1.93	0.67
23:DB:742:A:H2'	23:DB:743:A:C8	2.30	0.67
1:CA:382:A:H2'	1:CA:383:A:C8	2.28	0.67
23:DB:106:C:H2'	23:DB:107:G:H8	1.58	0.67
14:AQ:25:GLU:HA	14:AQ:40:THR:HA	1.76	0.67
48:BG:34:ARG:N	48:BG:34:ARG:HH11	1.85	0.67
29:BE:58:LYS:NZ	29:BE:58:LYS:H	1.92	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:60:TRP:HZ3	29:BE:69:ARG:HA	1.57	0.67
12:AM:78:ARG:NH2	12:AM:79:LEU:HB3	2.08	0.67
18:CB:86:CYS:SG	18:CB:87:ASP:N	2.67	0.67
47:BF:102:LEU:HD22	47:BF:103:ILE:N	2.09	0.67
47:DF:11:VAL:HG21	47:DF:172:PHE:CE1	2.29	0.67
6:AG:14:ASP:HB3	6:AG:18:GLY:H	1.58	0.67
1:AA:382:A:H2'	1:AA:383:A:C8	2.30	0.67
1:CA:67:C:H2'	1:CA:68:G:H8	1.59	0.67
51:BZ:77:LYS:H	51:BZ:77:LYS:HD3	1.58	0.67
1:CA:1238:A:H5'	1:CA:1336:C:N4	2.09	0.67
5:CF:38:ARG:HB3	5:CF:63:ASN:HB2	1.77	0.67
23:DB:1788:C:O2'	23:DB:1789:A:H5'	1.95	0.67
31:D0:42:ILE:HD11	42:DN:98:LEU:HD12	1.76	0.67
1:AA:1432:G:C5'	28:BP:105:LYS:HG2	2.25	0.67
32:D4:15:LYS:O	32:D4:16:ILE:HB	1.93	0.67
45:BS:72:THR:HG21	45:BS:108:SER:HB3	1.75	0.67
45:BS:24:ILE:HD11	45:BS:36:LEU:HD21	1.77	0.67
21:CN:65:GLN:H	21:CN:65:GLN:HE21	1.40	0.67
23:BB:2092:U:H4'	23:BB:2093:G:O5'	1.95	0.67
29:DE:48:THR:N	29:DE:51:GLU:HG3	2.10	0.67
1:AA:1513:A:H2'	1:AA:1514:G:C8	2.29	0.67
1:CA:1478:U:H2'	1:CA:1479:C:C6	2.29	0.67
13:AP:22:ALA:HA	13:AP:33:ILE:HG13	1.75	0.67
23:BB:2066:C:O2'	23:BB:2067:G:H5'	1.95	0.67
4:CE:55:VAL:N	4:CE:56:PRO:HD2	2.10	0.67
23:DB:704:G:H1'	23:DB:727:A:H61	1.59	0.67
18:AB:67:LEU:HD21	18:AB:91:VAL:HG23	1.75	0.67
40:BH:47:PHE:HA	40:BH:50:ARG:CZ	2.24	0.67
23:BB:1443:U:H2'	23:BB:1444:G:C8	2.30	0.67
23:BB:265:A:O2'	23:BB:266:G:H4'	1.93	0.67
17:CT:46:ALA:HB1	17:CT:82:ILE:HG22	1.77	0.67
23:BB:2654:A:N1	23:BB:2665:A:H5''	2.10	0.67
17:CT:68:LYS:HA	17:CT:68:LYS:HE2	1.75	0.67
11:CL:98:ARG:HB2	11:CL:116:TYR:HA	1.76	0.67
2:AC:5:HIS:HB3	21:AN:88:MET:SD	2.34	0.67
9:CJ:52:LEU:HA	9:CJ:62:ARG:HA	1.75	0.67
23:DB:1722:A:H2'	23:DB:1723:G:H8	1.60	0.67
48:DG:148:ARG:HD3	48:DG:152:ARG:NH1	2.09	0.67
7:AH:11:THR:HA	7:AH:14:ARG:NH1	2.10	0.67
7:CH:11:THR:HA	7:CH:14:ARG:NH1	2.09	0.67
29:DE:130:LYS:HB2	29:DE:133:LEU:HG	1.75	0.67
8:CI:87:MET:HB2	8:CI:94:ARG:CZ	2.24	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:BK:41:ILE:HG13	27:BK:42:THR:H	1.60	0.67
12:AM:95:PRO:HD3	12:AM:108:ARG:HG2	1.76	0.67
23:BB:76:C:OP1	39:BX:48:ARG:HD3	1.95	0.67
23:DB:1149:G:H2'	23:DB:1150:C:H6	1.58	0.67
23:DB:265:A:O2'	23:DB:266:G:H4'	1.94	0.67
2:CC:13:ILE:H	2:CC:13:ILE:HD13	1.60	0.67
23:BB:836:G:H2'	23:BB:837:C:C6	2.29	0.67
23:BB:1301:A:O2'	23:BB:1302:A:H2'	1.95	0.67
23:DB:718:A:H2'	23:DB:719:C:H5'	1.77	0.67
17:AT:68:LYS:HE2	17:AT:68:LYS:HA	1.75	0.67
1:CA:673:A:H2'	1:CA:674:G:C8	2.30	0.67
52:DW:23:LYS:HD2	52:DW:24:ARG:H	1.58	0.67
8:AI:56:MET:C	8:AI:58:GLU:H	1.98	0.67
42:DN:26:GLY:HA2	42:DN:75:ILE:HD13	1.76	0.67
48:DG:140:ILE:HA	48:DG:143:VAL:HG22	1.76	0.67
23:DB:1060:U:O2	23:DB:1088:A:N7	2.27	0.67
46:DU:9:GLU:HG3	46:DU:72:PHE:HB3	1.77	0.67
8:CI:16:ALA:HB2	8:CI:66:VAL:HG23	1.77	0.67
37:BL:4:ASN:N	37:BL:4:ASN:HD22	1.93	0.67
37:DL:93:ASN:O	37:DL:95:LEU:HD12	1.95	0.67
1:CA:1280:A:H3'	1:CA:1281:C:H5''	1.77	0.67
1:CA:950:U:H3'	12:CM:100:ARG:NH2	2.10	0.67
1:CA:467:U:H5'	1:CA:468:A:H2	1.60	0.67
32:D4:5:ALA:HA	32:D4:37:GLN:HE22	1.58	0.67
23:BB:1553:A:O2'	23:BB:1554:U:H2'	1.94	0.67
23:DB:1386:C:H2'	23:DB:1387:A:C8	2.30	0.67
45:BS:17:VAL:C	45:BS:19:LEU:H	1.96	0.67
23:BB:773:U:H5'	23:BB:774:G:OP2	1.95	0.67
1:AA:1018:G:H2'	1:AA:1019:A:H8	1.59	0.67
23:BB:559:G:H21	44:BQ:51:GLN:NE2	1.91	0.67
23:BB:191:A:H2'	23:BB:192:C:C6	2.29	0.67
36:D2:3:ARG:CZ	36:D2:3:ARG:HA	2.24	0.67
23:DB:1099:G:H8	24:DI:3:LYS:CA	2.06	0.67
29:DE:60:TRP:HZ3	29:DE:69:ARG:HA	1.59	0.67
1:CA:235:C:H2'	1:CA:236:A:C8	2.30	0.67
40:BH:40:THR:O	40:BH:42:LYS:HG3	1.94	0.67
1:CA:406:G:N2	3:CD:115:GLN:HE22	1.91	0.67
44:DQ:111:LYS:HB2	49:DR:48:LYS:NZ	2.10	0.67
21:AN:50:LEU:N	21:AN:51:PRO:HD2	2.09	0.67
23:BB:165:A:H2'	23:BB:166:U:H6	1.58	0.67
3:AD:59:LYS:O	3:AD:63:ILE:HG13	1.94	0.67
23:BB:2591:C:H2'	23:BB:2592:G:H8	1.60	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:CP:54:LEU:HD22	13:CP:75:ILE:HG22	1.75	0.67
23:DB:616:A:H3'	23:DB:617:G:H8	1.59	0.67
23:DB:1000:A:H2'	23:DB:1001:A:C8	2.30	0.67
23:BB:2498:C:O2'	23:BB:2499:C:H5'	1.94	0.67
21:AN:20:PHE:CG	21:AN:24:ALA:HB2	2.29	0.67
6:AG:62:GLU:O	6:AG:66:GLU:HG3	1.95	0.67
12:AM:47:LEU:HG	12:AM:52:ILE:HD13	1.77	0.67
23:DB:2834:G:H1'	23:DB:2883:A:N6	2.09	0.67
9:AJ:56:HIS:O	9:AJ:57:VAL:HG12	1.94	0.67
1:CA:1025:U:H4'	1:CA:1026:G:C8	2.30	0.67
26:BD:109:VAL:HG11	26:BD:193:VAL:HB	1.77	0.67
4:AE:37:VAL:HG11	4:AE:113:VAL:HG12	1.77	0.67
23:DB:1548:A:H2'	23:DB:1549:A:H8	1.60	0.67
23:BB:151:C:H2'	23:BB:152:A:H8	1.60	0.67
23:BB:1170:C:H2'	23:BB:1171:G:C8	2.30	0.67
43:DO:5:SER:HA	43:DO:8:ILE:HD12	1.77	0.67
8:CI:43:ALA:O	8:CI:46:VAL:HG22	1.95	0.67
23:BB:1640:A:H2'	23:BB:1641:A:C8	2.30	0.67
1:CA:1148:U:H2'	1:CA:1149:C:O4'	1.95	0.67
23:BB:1485:U:H2'	23:BB:1486:U:C6	2.29	0.67
3:CD:29:THR:HG22	3:CD:30:LYS:H	1.59	0.67
23:DB:1099:G:OP2	24:DI:3:LYS:HA	1.94	0.66
5:CF:86:ARG:CZ	15:CR:63:TYR:HB3	2.24	0.66
5:AF:3:HIS:HB2	5:AF:92:THR:HA	1.78	0.66
29:BE:155:GLU:HA	29:BE:158:PHE:HB3	1.77	0.66
33:D1:47:ILE:H	33:D1:47:ILE:HD12	1.59	0.66
16:AS:62:THR:HG22	16:AS:63:ASP:H	1.59	0.66
18:AB:95:TRP:HZ2	18:AB:100:LEU:HD13	1.59	0.66
1:AA:72:A:H2'	1:AA:73:C:C6	2.29	0.66
27:DK:61:VAL:HG13	27:DK:87:LEU:HD21	1.76	0.66
27:DK:99:ILE:H	27:DK:118:LEU:HD23	1.59	0.66
6:AG:78:ARG:HH11	6:AG:81:GLY:HA2	1.60	0.66
23:DB:2065:C:H2'	23:DB:2066:C:C6	2.29	0.66
23:DB:967:U:H2'	23:DB:968:C:C6	2.30	0.66
3:AD:169:TRP:NE1	3:AD:170:LEU:HD23	2.10	0.66
23:DB:2098:U:H2'	23:DB:2099:U:O4'	1.95	0.66
23:DB:152:A:H2'	23:DB:153:U:C6	2.30	0.66
23:DB:1911:U:H2'	23:DB:1918:A:C2	2.30	0.66
3:CD:182:LYS:HG2	3:CD:183:ARG:HG3	1.77	0.66
1:AA:806:C:H2'	1:AA:807:A:H8	1.61	0.66
10:CK:124:LYS:HA	19:CU:34:ARG:CB	2.22	0.66
30:BY:15:ARG:HD2	30:BY:15:ARG:N	2.10	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BT:40:LYS:O	50:BT:43:ILE:HG22	1.95	0.66
35:DV:63:ILE:H	35:DV:63:ILE:HD12	1.59	0.66
46:BU:26:ASN:HD21	46:BU:34:ILE:HD12	1.60	0.66
25:BC:140:VAL:O	25:BC:141:HIS:HB2	1.96	0.66
44:DQ:87:VAL:HB	49:DR:52:PRO:HG3	1.76	0.66
1:AA:406:G:N2	3:AD:115:GLN:HE22	1.90	0.66
22:BA:42:C:O4'	47:BF:65:LEU:HB2	1.96	0.66
1:AA:1375:A:H2'	1:AA:1376:U:O4'	1.94	0.66
17:AT:34:VAL:HG11	17:AT:78:LEU:HD22	1.78	0.66
6:AG:52:ARG:HH22	6:AG:121:ASN:HD21	1.44	0.66
44:DQ:30:VAL:HG12	44:DQ:33:VAL:HG22	1.77	0.66
23:BB:1552:A:H2'	23:BB:1553:A:H5'	1.75	0.66
1:AA:1095:U:H2'	1:AA:1096:C:C6	2.30	0.66
50:DT:44:LYS:O	50:DT:48:GLN:HG2	1.95	0.66
41:BJ:51:GLY:HA3	41:BJ:121:LYS:NZ	2.10	0.66
23:BB:570:G:H2'	23:BB:2030:A:N7	2.11	0.66
4:AE:55:VAL:N	4:AE:56:PRO:HD2	2.10	0.66
23:BB:2512:C:H2'	23:BB:2513:A:O4'	1.95	0.66
50:BT:54:GLU:HB3	50:BT:88:LYS:HB2	1.78	0.66
1:CA:1349:A:H1'	1:CA:1374:A:N6	2.10	0.66
14:AQ:45:VAL:HG12	14:AQ:46:HIS:N	2.09	0.66
8:AI:18:VAL:HG21	8:AI:82:ILE:N	2.10	0.66
23:DB:1812:U:H2'	23:DB:1813:G:H8	1.60	0.66
44:BQ:86:SER:HB3	49:BR:51:VAL:HA	1.78	0.66
23:BB:1203:U:H3'	23:BB:1204:A:C5'	2.25	0.66
13:AP:54:LEU:HD22	13:AP:75:ILE:HG22	1.76	0.66
4:AE:23:THR:HA	4:AE:28:ARG:HA	1.78	0.66
44:DQ:60:TRP:O	44:DQ:64:ILE:HG12	1.95	0.66
23:BB:616:A:H3'	23:BB:617:G:H8	1.60	0.66
2:CC:113:LYS:HD2	2:CC:184:ASN:ND2	2.11	0.66
23:DB:796:C:H2'	23:DB:797:G:C8	2.30	0.66
1:AA:462:G:H3'	1:AA:463:U:C6	2.30	0.66
23:DB:570:G:H2'	23:DB:2030:A:N7	2.11	0.66
52:BW:13:ARG:HG3	52:BW:14:ASP:H	1.60	0.66
1:CA:664:G:H22	1:CA:741:G:H1	1.43	0.66
1:CA:651:C:H2'	1:CA:652:U:C6	2.30	0.66
23:DB:441:U:H2'	23:DB:442:G:C8	2.29	0.66
23:BB:222:A:N1	23:BB:233:A:H5''	2.10	0.66
10:AK:63:GLN:HG3	10:AK:98:ALA:HB2	1.78	0.66
14:CQ:20:ILE:HD13	14:CQ:52:CYS:HB2	1.76	0.66
2:AC:59:PRO:HG2	2:AC:62:SER:OG	1.96	0.66
40:DH:32:PRO:O	40:DH:33:GLN:HB2	1.95	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DH:72:ILE:HB	40:DH:140:ALA:HB1	1.78	0.66
23:DB:2885:G:H2'	23:DB:2886:A:O4'	1.96	0.66
22:DA:43:C:O2'	47:DF:91:ARG:HD2	1.96	0.66
1:AA:920:U:H2'	1:AA:921:U:C6	2.30	0.66
18:CB:67:LEU:H	18:CB:160:LEU:HA	1.61	0.66
40:BH:9:VAL:HB	40:BH:13:GLY:CA	2.26	0.66
47:BF:16:MET:O	47:BF:20:ASN:HA	1.96	0.66
23:BB:1506:U:H2'	23:BB:1507:C:C6	2.30	0.66
23:BB:458:G:H22	23:BB:469:G:H2'	1.60	0.66
1:CA:986:U:H2'	1:CA:987:G:O4'	1.94	0.66
1:AA:56:U:H2'	1:AA:57:G:C8	2.29	0.66
23:DB:717:C:H3'	23:DB:718:A:H5''	1.76	0.66
45:BS:58:ALA:HB1	45:BS:69:LEU:HD21	1.77	0.66
52:DW:13:ARG:HG3	52:DW:14:ASP:H	1.60	0.66
1:CA:1142:G:H2'	1:CA:1143:G:O4'	1.94	0.66
3:CD:60:VAL:HA	3:CD:63:ILE:HD12	1.75	0.66
1:CA:1348:U:H4'	8:CI:121:ARG:HG3	1.76	0.66
16:AS:6:LYS:CD	16:AS:6:LYS:H	2.06	0.66
16:AS:6:LYS:HG3	21:AN:40:ARG:CZ	2.26	0.66
47:DF:65:LEU:HD23	47:DF:87:LYS:HD2	1.77	0.66
46:BU:51:LEU:H	46:BU:53:GLN:NE2	1.93	0.66
23:BB:1788:C:O2'	23:BB:1789:A:H5'	1.96	0.66
43:DO:49:VAL:HG11	43:DO:82:ALA:HA	1.78	0.66
44:DQ:63:ARG:HH12	44:DQ:96:ASP:HB2	1.59	0.66
46:BU:86:PHE:HB2	46:BU:92:VAL:HB	1.76	0.66
12:CM:2:ARG:HD3	12:CM:2:ARG:H	1.61	0.66
23:BB:1019:U:H2'	23:BB:1020:A:H8	1.59	0.66
8:AI:26:LYS:HA	8:AI:26:LYS:HE3	1.77	0.66
26:DD:176:ASP:HB2	26:DD:190:LYS:HG2	1.77	0.66
13:CP:22:ALA:HA	13:CP:33:ILE:HG13	1.76	0.66
23:DB:2795:C:H2'	23:DB:2796:U:O4'	1.96	0.66
3:CD:58:GLN:O	3:CD:62:ARG:HG2	1.95	0.66
23:DB:1099:G:H5''	24:DI:2:LYS:HB2	1.78	0.66
18:CB:47:PRO:O	18:CB:51:GLU:HB3	1.95	0.66
8:CI:98:ARG:HG3	8:CI:103:VAL:CG2	2.22	0.66
42:BN:78:LYS:HG3	42:BN:83:LEU:HG	1.77	0.66
10:AK:22:ILE:HG12	10:AK:31:VAL:HG12	1.77	0.66
9:AJ:27:GLU:O	9:AJ:31:ARG:HG2	1.95	0.66
29:DE:29:HIS:O	29:DE:32:VAL:HG22	1.95	0.66
43:BO:49:VAL:HG11	43:BO:82:ALA:HA	1.77	0.66
28:BP:88:ARG:HB2	28:BP:112:ARG:NH1	2.09	0.66
23:BB:2065:C:H2'	23:BB:2066:C:C6	2.30	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:150:U:H2'	23:BB:151:C:H6	1.61	0.66
1:CA:1513:A:H2'	1:CA:1514:G:C8	2.31	0.66
1:CA:423:G:H2'	1:CA:424:G:O4'	1.96	0.66
47:DF:41:GLU:HB3	47:DF:44:ALA:HB3	1.78	0.66
1:AA:1323:G:O6	16:AS:2:ARG:HA	1.95	0.66
23:BB:1494:A:H2'	23:BB:1495:A:C8	2.31	0.66
23:DB:912:C:O2'	23:DB:913:U:H5'	1.96	0.66
2:CC:106:ARG:O	2:CC:106:ARG:HD2	1.94	0.66
25:DC:103:ILE:HG22	25:DC:105:ALA:H	1.60	0.66
23:BB:1722:A:H2'	23:BB:1723:G:H8	1.60	0.66
23:BB:871:U:H2'	23:BB:872:U:H6	1.61	0.66
16:AS:45:GLY:N	16:AS:61:VAL:HB	2.10	0.66
29:DE:155:GLU:HA	29:DE:158:PHE:HB3	1.77	0.66
26:DD:116:LYS:HG3	26:DD:165:MET:SD	2.36	0.66
23:DB:1592:C:H2'	23:DB:1593:A:H8	1.60	0.66
23:BB:72:U:H1'	39:BX:51:ALA:HA	1.77	0.66
16:CS:15:LEU:HA	16:CS:18:VAL:HG12	1.75	0.66
16:CS:14:LEU:HD13	16:CS:34:SER:OG	1.96	0.66
44:BQ:27:ARG:HA	44:BQ:33:VAL:HG23	1.78	0.66
23:BB:2064:C:H2'	23:BB:2065:C:C6	2.30	0.66
23:BB:150:U:H2'	23:BB:151:C:C6	2.31	0.66
3:CD:59:LYS:O	3:CD:63:ILE:HG13	1.95	0.66
23:DB:2086:U:H2'	23:DB:2087:G:C8	2.30	0.66
16:AS:7:GLY:H	16:AS:8:PRO:HD3	1.60	0.66
23:DB:19:A:H2'	23:DB:20:C:C6	2.30	0.66
23:BB:1386:C:H2'	23:BB:1387:A:C8	2.31	0.66
33:D1:31:GLU:H	33:D1:31:GLU:CD	1.99	0.66
3:AD:58:GLN:O	3:AD:62:ARG:HG2	1.96	0.66
5:AF:53:LYS:NZ	5:AF:53:LYS:H	1.92	0.66
48:DG:176:LYS:H	48:DG:176:LYS:HE2	1.59	0.66
18:CB:128:LEU:HD23	18:CB:133:ALA:HA	1.77	0.66
35:DV:44:HIS:NE2	35:DV:85:LYS:HB2	2.11	0.66
16:AS:39:ILE:HB	16:AS:66:VAL:O	1.95	0.66
10:CK:28:ASN:ND2	10:CK:46:ALA:HB3	2.11	0.66
18:CB:116:LEU:O	18:CB:119:GLN:HB2	1.96	0.66
1:CA:1320:C:H5'	16:CS:2:ARG:HG3	1.78	0.66
1:CA:953:G:H2'	1:CA:954:G:O4'	1.96	0.66
23:DB:871:U:H2'	23:DB:872:U:H6	1.61	0.66
18:AB:17:HIS:CG	18:AB:18:GLN:H	2.14	0.66
3:CD:192:ALA:HB3	3:CD:194:ILE:HG22	1.76	0.66
26:BD:176:ASP:HB2	26:BD:190:LYS:HG2	1.78	0.66
23:BB:967:U:H2'	23:BB:968:C:C6	2.30	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:266:G:O2'	1:AA:267:C:H3'	1.95	0.66
1:AA:235:C:H2'	1:AA:236:A:C8	2.31	0.66
35:BV:44:HIS:NE2	35:BV:85:LYS:HB2	2.11	0.66
25:DC:119:VAL:HG13	25:DC:133:ASN:HD21	1.59	0.66
23:DB:2328:A:H2'	23:DB:2329:U:C6	2.29	0.66
23:BB:30:G:H2'	23:BB:31:C:C6	2.31	0.66
28:DP:54:LEU:HA	28:DP:76:HIS:HD2	1.59	0.66
44:BQ:60:TRP:O	44:BQ:64:ILE:HG12	1.94	0.66
1:AA:978:A:H5'	1:AA:1362:A:H62	1.58	0.66
47:BF:125:GLY:HA2	47:BF:162:ASP:HA	1.78	0.66
37:BL:93:ASN:O	37:BL:95:LEU:HD12	1.95	0.66
41:DJ:112:GLY:H	41:DJ:113:PRO:HD2	1.58	0.66
16:CS:35:ARG:HB2	16:CS:71:GLY:HA2	1.77	0.66
27:DK:41:ILE:HG13	27:DK:42:THR:H	1.60	0.66
40:BH:47:PHE:O	40:BH:50:ARG:HB2	1.96	0.66
23:BB:1443:U:H2'	23:BB:1444:G:H8	1.60	0.66
13:CP:28:ARG:HD2	13:CP:29:ASN:H	1.60	0.66
52:BW:44:PHE:CD2	52:BW:76:ARG:HD2	2.31	0.66
26:BD:46:ARG:HB3	26:BD:84:LEU:HD12	1.76	0.66
23:BB:2645:G:H3'	23:BB:2646:C:H5'	1.77	0.66
23:BB:2216:G:H2'	23:BB:2217:G:H8	1.60	0.66
2:CC:161:ILE:H	2:CC:161:ILE:HD12	1.60	0.66
23:DB:2039:U:H2'	23:DB:2040:G:C8	2.31	0.66
25:DC:143:VAL:HB	25:DC:153:LEU:HB2	1.77	0.66
44:BQ:4:LYS:HE3	44:BQ:8:ILE:HD11	1.78	0.66
1:AA:1371:G:O3'	8:AI:70:GLY:HA3	1.94	0.66
27:DK:35:VAL:HG12	27:DK:69:VAL:HG22	1.76	0.66
49:DR:24:LYS:HA	49:DR:94:THR:HG23	1.77	0.66
47:DF:102:LEU:HD22	47:DF:103:ILE:N	2.10	0.66
23:BB:1024:G:C3'	23:BB:1025:G:H5''	2.25	0.66
51:BZ:59:ILE:HA	51:BZ:67:VAL:HG21	1.78	0.66
4:AE:24:VAL:HG23	4:AE:26:GLY:H	1.59	0.66
1:AA:1081:A:H2'	1:AA:1082:A:C8	2.31	0.66
17:CT:34:VAL:HG11	17:CT:78:LEU:HD22	1.77	0.66
48:BG:94:ARG:HB3	48:BG:127:GLN:HE21	1.61	0.66
23:DB:1287:A:H3'	23:DB:1288:G:N2	2.11	0.66
1:AA:370:C:H2'	1:AA:371:A:H8	1.61	0.66
4:CE:39:GLY:HA3	4:CE:116:VAL:HB	1.75	0.66
1:CA:585:G:H4'	11:CL:4:ASN:HD21	1.61	0.66
4:CE:114:LEU:HD13	4:CE:122:VAL:HG21	1.78	0.66
23:DB:2467:C:O2	38:DM:123:LYS:HE2	1.96	0.66
33:B1:31:GLU:H	33:B1:31:GLU:CD	1.99	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:585:G:H4'	11:AL:4:ASN:HD21	1.61	0.66
1:CA:285:C:H2'	1:CA:286:C:H6	1.60	0.66
1:AA:89:U:H2'	1:AA:90:C:C6	2.31	0.66
23:BB:2834:G:H1'	23:BB:2883:A:N6	2.11	0.66
1:AA:423:G:H2'	1:AA:424:G:O4'	1.97	0.66
23:DB:1099:G:C5'	24:DI:3:LYS:N	2.59	0.65
1:CA:1333:A:H2'	1:CA:1334:G:O4'	1.96	0.65
35:BV:63:ILE:HD12	35:BV:63:ILE:H	1.60	0.65
14:AQ:20:ILE:HD13	14:AQ:52:CYS:HB2	1.78	0.65
37:BL:143:GLU:CG	37:BL:144:GLU:H	2.10	0.65
48:BG:87:GLN:HG2	48:BG:164:ALA:HA	1.77	0.65
47:DF:56:LEU:HD22	47:DF:59:ILE:HD12	1.76	0.65
47:DF:125:GLY:HA2	47:DF:162:ASP:HA	1.77	0.65
4:CE:24:VAL:HG23	4:CE:26:GLY:H	1.60	0.65
23:BB:2471:A:O2'	23:BB:2472:G:H8	1.77	0.65
23:DB:1871:A:H2'	23:DB:1872:A:C8	2.31	0.65
1:CA:1480:A:H2'	1:CA:1481:U:C6	2.31	0.65
23:BB:171:U:H2'	23:BB:172:A:C8	2.31	0.65
6:AG:131:GLY:O	6:AG:134:VAL:HG23	1.96	0.65
1:CA:1312:G:H2'	1:CA:1313:U:C6	2.31	0.65
1:CA:1450:U:H2'	1:CA:1452:C:C5	2.31	0.65
23:BB:1657:U:O2'	23:BB:1658:C:H5'	1.95	0.65
1:CA:390:U:H2'	1:CA:391:G:C8	2.31	0.65
3:AD:88:ASN:O	3:AD:92:LEU:HD23	1.96	0.65
26:DD:14:ILE:HG23	26:DD:22:ILE:HB	1.78	0.65
25:DC:140:VAL:O	25:DC:141:HIS:HB2	1.97	0.65
40:BH:114:GLU:HB3	40:BH:134:VAL:HB	1.78	0.65
37:DL:124:GLY:N	37:DL:143:GLU:HG3	2.11	0.65
48:DG:132:LEU:HD23	48:DG:132:LEU:N	2.10	0.65
32:B4:15:LYS:O	32:B4:16:ILE:HB	1.94	0.65
27:BK:35:VAL:HG12	27:BK:69:VAL:HG22	1.77	0.65
16:AS:39:ILE:HB	16:AS:66:VAL:HA	1.78	0.65
4:CE:23:THR:HA	4:CE:28:ARG:HA	1.78	0.65
51:BZ:7:VAL:HG21	51:BZ:59:ILE:CD1	2.26	0.65
47:DF:16:MET:O	47:DF:20:ASN:HA	1.97	0.65
23:BB:2867:G:HO2'	23:BB:2868:A:H8	1.44	0.65
2:CC:26:LYS:HG3	2:CC:27:GLU:N	2.11	0.65
2:CC:8:GLY:HA3	21:CN:88:MET:SD	2.37	0.65
40:BH:2:GLN:O	40:BH:3:VAL:HG22	1.96	0.65
11:CL:79:ILE:C	11:CL:101:LEU:HD12	2.17	0.65
1:AA:735:C:H5'	15:AR:59:LYS:HD3	1.79	0.65
23:DB:609:A:H2'	23:DB:610:C:O4'	1.97	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BM:64:TRP:HB2	38:BM:104:GLU:HB2	1.78	0.65
23:DB:1092:C:H2'	23:DB:1093:G:H5'	1.79	0.65
29:BE:147:LEU:HB3	29:BE:186:VAL:HG23	1.78	0.65
24:DI:1:ALA:HB1	24:DI:2:LYS:HD2	1.78	0.65
1:CA:120:A:C2'	1:CA:121:U:H5''	2.22	0.65
10:CK:31:VAL:HG21	10:CK:66:ALA:HA	1.78	0.65
49:DR:41:ILE:HD11	49:DR:47:VAL:HB	1.78	0.65
40:BH:32:PRO:O	40:BH:33:GLN:HB2	1.96	0.65
18:AB:163:ILE:HD12	18:AB:185:ILE:HD12	1.78	0.65
20:AO:43:PHE:CE1	20:AO:53:ARG:HA	2.32	0.65
23:DB:1080:A:H2'	23:DB:1081:U:H6	1.60	0.65
10:AK:14:GLN:HA	10:AK:76:TYR:O	1.96	0.65
23:BB:1387:A:H2'	23:BB:1388:G:H8	1.61	0.65
19:AU:18:PHE:HA	19:AU:21:SER:HB3	1.78	0.65
13:CP:48:GLU:HG3	13:CP:49:GLY:H	1.61	0.65
10:AK:18:GLY:HA2	10:AK:36:ARG:HG3	1.76	0.65
23:BB:2039:U:H2'	23:BB:2040:G:C8	2.31	0.65
1:CA:1018:G:H2'	1:CA:1019:A:C8	2.31	0.65
23:BB:2180:U:O2	23:BB:2180:U:H2'	1.97	0.65
38:BM:77:PRO:HB2	38:BM:80:VAL:HB	1.78	0.65
1:CA:1238:A:N7	1:CA:1303:C:H1'	2.11	0.65
1:CA:235:C:H2'	1:CA:236:A:H8	1.60	0.65
48:BG:132:LEU:HD23	48:BG:132:LEU:N	2.11	0.65
15:CR:37:LYS:HZ3	19:CU:22:CYS:HB2	1.60	0.65
38:DM:38:ARG:HG2	38:DM:98:PRO:HD3	1.78	0.65
1:AA:1375:A:H4'	6:AG:28:ILE:HD13	1.78	0.65
6:AG:23:ALA:O	6:AG:26:VAL:HG22	1.97	0.65
23:BB:1548:A:H2'	23:BB:1549:A:C8	2.31	0.65
7:AH:101:ALA:HB3	7:AH:112:ASP:HB3	1.77	0.65
23:BB:742:A:H2'	23:BB:743:A:H8	1.62	0.65
23:BB:152:A:H2'	23:BB:153:U:C6	2.31	0.65
2:AC:24:ASN:O	2:AC:26:LYS:HG2	1.97	0.65
13:CP:57:ILE:O	13:CP:61:VAL:HG23	1.96	0.65
1:AA:812:G:H2'	1:AA:812:G:N3	2.12	0.65
23:DB:171:U:H2'	23:DB:172:A:C8	2.31	0.65
3:CD:169:TRP:NE1	3:CD:170:LEU:HD23	2.12	0.65
23:DB:596:U:H2'	23:DB:597:G:H8	1.62	0.65
23:DB:1485:U:H2'	23:DB:1486:U:C6	2.31	0.65
13:AP:57:ILE:O	13:AP:61:VAL:HG23	1.97	0.65
18:CB:187:ASP:HB3	18:CB:201:GLY:O	1.97	0.65
35:DV:72:VAL:HG12	35:DV:93:ARG:HA	1.77	0.65
52:BW:39:GLN:HG3	52:BW:42:THR:CB	2.23	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B4:24:ARG:HG2	32:B4:36:ARG:HG3	1.79	0.65
23:BB:2145:C:H4'	23:BB:2145:C:OP2	1.95	0.65
10:AK:28:ASN:ND2	10:AK:46:ALA:HB3	2.11	0.65
12:AM:6:ILE:HG12	47:BF:143:ASP:HB2	1.79	0.65
18:CB:96:LEU:H	18:CB:99:MET:HE3	1.61	0.65
11:AL:23:LEU:HD23	11:AL:29:LYS:HE3	1.78	0.65
38:BM:105:MET:HB2	38:BM:117:PHE:HZ	1.62	0.65
13:CP:43:ALA:HA	13:CP:46:LYS:HD2	1.79	0.65
29:DE:147:LEU:HB3	29:DE:186:VAL:HG23	1.79	0.65
14:CQ:66:LEU:HD12	14:CQ:66:LEU:H	1.61	0.65
48:BG:34:ARG:NH1	48:BG:34:ARG:H	1.86	0.65
23:DB:2269:G:H4'	52:DW:19:ARG:HH12	1.58	0.65
23:BB:1060:U:OP2	24:BI:74:PRO:HA	1.95	0.65
23:DB:142:A:C2	50:DT:2:ILE:HG21	2.32	0.65
1:AA:1005:A:H3'	1:AA:1006:G:H8	1.61	0.65
1:AA:467:U:H5'	1:AA:468:A:H2	1.62	0.65
23:DB:1654:A:O2'	26:DD:118:PHE:HB2	1.97	0.65
39:BX:52:ARG:O	39:BX:56:LEU:HD22	1.97	0.65
1:CA:642:A:H2'	1:CA:643:C:H6	1.62	0.65
42:BN:97:ILE:HD13	42:BN:99:LYS:HG3	1.79	0.65
23:BB:1440:U:H2'	23:BB:1441:G:C8	2.32	0.65
1:AA:1250:A:H4'	8:AI:69:GLY:H	1.61	0.65
17:AT:79:THR:O	17:AT:82:ILE:HG13	1.97	0.65
1:AA:662:U:H2'	1:AA:663:A:H8	1.62	0.65
23:DB:934:U:H2'	23:DB:935:C:C6	2.31	0.65
4:CE:50:GLY:HA3	4:CE:62:ALA:HB2	1.79	0.65
20:CO:66:LEU:O	20:CO:69:TYR:HB3	1.96	0.65
1:CA:812:G:H2'	1:CA:812:G:N3	2.11	0.65
1:AA:1071:C:H2'	1:AA:1072:G:H8	1.61	0.65
23:BB:414:C:H2'	23:BB:415:A:C8	2.31	0.65
25:BC:75:ALA:HB2	25:BC:95:TYR:HA	1.77	0.65
40:BH:90:LEU:N	40:BH:123:ARG:HB3	2.12	0.65
50:DT:54:GLU:HB3	50:DT:88:LYS:HB2	1.77	0.65
10:AK:44:ALA:HB2	10:AK:69:CYS:HB3	1.78	0.65
37:BL:124:GLY:N	37:BL:143:GLU:HG3	2.12	0.65
35:BV:80:HIS:HD2	35:BV:83:LYS:H	1.44	0.65
3:AD:84:ASN:HD21	4:AE:101:GLY:HA3	1.62	0.65
23:BB:1104:C:H2'	23:BB:1105:U:C6	2.32	0.65
22:DA:42:C:O4'	47:DF:65:LEU:HB2	1.97	0.65
16:CS:38:THR:HA	16:CS:69:LYS:HA	1.78	0.65
2:CC:23:ALA:HB1	2:CC:27:GLU:OE2	1.97	0.65
18:AB:120:SER:HA	18:AB:125:PHE:CB	2.27	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:270:A:H2'	1:AA:271:C:H6	1.62	0.65
29:DE:48:THR:H	29:DE:51:GLU:HG3	1.62	0.65
1:AA:195:A:H2'	1:AA:196:A:C8	2.32	0.65
3:AD:2:ARG:NH1	3:AD:114:ARG:HG3	2.12	0.65
1:CA:844:G:N2	1:CA:845:A:H62	1.94	0.65
23:BB:2795:C:H2'	23:BB:2796:U:O4'	1.97	0.65
50:DT:40:LYS:O	50:DT:43:ILE:HG22	1.97	0.65
35:BV:65:VAL:HG22	35:BV:70:ILE:HD12	1.79	0.65
42:BN:26:GLY:HA2	42:BN:75:ILE:HD13	1.78	0.65
23:BB:2537:U:H2'	23:BB:2538:C:C6	2.32	0.65
51:BZ:40:VAL:HG22	51:BZ:45:ARG:O	1.97	0.65
6:AG:57:GLU:H	6:AG:57:GLU:CD	2.01	0.65
1:CA:1278:G:H4'	1:CA:1279:G:O5'	1.96	0.65
27:DK:2:ILE:HA	27:DK:33:ALA:H	1.62	0.65
1:CA:522:C:H41	11:CL:49:ARG:NH2	1.94	0.65
27:BK:2:ILE:HA	27:BK:33:ALA:H	1.61	0.65
1:CA:370:C:H2'	1:CA:371:A:H8	1.62	0.65
23:DB:2092:U:H4'	23:DB:2093:G:O5'	1.95	0.65
4:AE:50:GLY:HA3	4:AE:62:ALA:HB2	1.79	0.65
23:DB:620:G:H5'	23:DB:620:G:N3	2.11	0.65
1:AA:21:G:H2'	1:AA:22:G:C8	2.31	0.65
19:CU:48:LYS:HG3	19:CU:49:ALA:N	2.12	0.65
23:BB:923:G:H1'	52:BW:23:LYS:HZ1	1.60	0.65
35:DV:41:GLU:C	35:DV:42:LEU:HD23	2.16	0.65
52:DW:18:LYS:HG3	52:DW:19:ARG:CZ	2.27	0.65
43:DO:67:ASN:H	43:DO:70:ALA:HB3	1.61	0.65
46:DU:71:ILE:HD11	46:DU:81:ARG:O	1.97	0.65
38:BM:126:ILE:H	38:BM:126:ILE:HD12	1.62	0.65
38:BM:38:ARG:HG2	38:BM:98:PRO:HD3	1.78	0.65
38:BM:40:ARG:HD3	38:BM:93:VAL:HG21	1.77	0.65
18:CB:116:LEU:HD22	18:CB:140:LEU:HD11	1.79	0.65
18:CB:151:LYS:HG3	18:CB:152:ASP:H	1.60	0.65
42:BN:33:ILE:HD11	42:BN:112:TYR:HD1	1.60	0.65
9:AJ:52:LEU:HA	9:AJ:62:ARG:HA	1.79	0.65
1:CA:1097:C:H2'	1:CA:1098:C:C6	2.31	0.65
37:BL:65:GLY:O	37:BL:66:PHE:HB3	1.94	0.65
10:CK:14:GLN:HA	10:CK:76:TYR:O	1.97	0.65
23:BB:2216:G:H2'	23:BB:2217:G:C8	2.32	0.65
23:DB:2900:A:H2'	23:DB:2901:C:C6	2.31	0.65
37:DL:110:VAL:HB	37:DL:127:VAL:HA	1.78	0.65
42:DN:58:ASP:O	42:DN:59:SER:HB3	1.97	0.65
23:BB:2602:A:N3	23:BB:2602:A:H2'	2.11	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BT:28:ASN:HA	50:BT:91:GLN:HE22	1.61	0.65
23:DB:2387:U:H1'	52:DW:38:ARG:CZ	2.27	0.65
1:AA:1248:A:H4'	8:AI:32:ARG:HH12	1.61	0.65
10:AK:44:ALA:HB2	10:AK:69:CYS:CB	2.26	0.65
44:BQ:63:ARG:HH22	44:BQ:96:ASP:CA	2.10	0.65
1:AA:1014:A:H2'	1:AA:1015:G:O4'	1.97	0.65
47:BF:35:LEU:HD12	47:BF:90:LEU:HD21	1.79	0.65
21:AN:60:ARG:HE	21:AN:62:ARG:HG2	1.61	0.65
21:AN:63:CYS:HB3	21:AN:67:GLY:N	2.12	0.65
47:DF:134:GLN:NE2	47:DF:149:ARG:HG3	2.10	0.65
51:DZ:7:VAL:HG21	51:DZ:59:ILE:CD1	2.27	0.65
13:CP:3:THR:HG22	13:CP:66:THR:HB	1.79	0.65
34:B3:21:PHE:HB2	34:B3:49:VAL:HG12	1.79	0.65
44:BQ:30:VAL:HG12	44:BQ:33:VAL:HG22	1.78	0.65
1:CA:76:G:H2'	1:CA:77:A:H8	1.62	0.65
21:CN:81:ILE:HD12	21:CN:82:LYS:N	2.12	0.65
40:DH:57:LYS:HD2	40:DH:61:VAL:HG21	1.78	0.65
1:AA:1513:A:H2'	1:AA:1514:G:H8	1.61	0.65
1:AA:806:C:H2'	1:AA:807:A:C8	2.32	0.65
23:BB:414:C:H2'	23:BB:415:A:H8	1.60	0.65
1:AA:1458:G:H2'	1:AA:1459:G:H8	1.62	0.65
1:AA:1279:G:H4'	1:AA:1281:C:H5	1.61	0.65
41:BJ:23:LYS:HD2	41:BJ:142:ILE:HG12	1.79	0.65
29:BE:48:THR:N	29:BE:51:GLU:HG3	2.12	0.65
3:AD:29:THR:HG22	3:AD:30:LYS:H	1.62	0.65
43:DO:97:PHE:HB3	43:DO:103:VAL:HG21	1.78	0.65
23:DB:2602:A:N3	23:DB:2602:A:H2'	2.11	0.65
8:CI:40:ARG:N	8:CI:44:ARG:HD3	2.12	0.64
50:DT:87:LEU:HD12	50:DT:91:GLN:HG2	1.79	0.64
41:BJ:11:VAL:HA	41:BJ:12:LYS:HZ2	1.60	0.64
41:DJ:18:VAL:HG12	41:DJ:54:ILE:HD11	1.79	0.64
14:AQ:59:GLU:O	14:AQ:75:VAL:HG22	1.97	0.64
23:DB:2330:G:N3	52:DW:38:ARG:HB3	2.12	0.64
52:BW:18:LYS:HG3	52:BW:19:ARG:CZ	2.27	0.64
37:DL:79:LEU:HG	37:DL:112:LEU:HA	1.79	0.64
23:BB:300:A:H3'	46:BU:81:ARG:NH1	2.12	0.64
40:DH:9:VAL:HB	40:DH:13:GLY:CA	2.27	0.64
23:DB:947:A:H2'	23:DB:948:C:H6	1.61	0.64
23:BB:2885:G:H2'	23:BB:2886:A:O4'	1.96	0.64
23:BB:2734:A:H2'	23:BB:2735:G:H5'	1.77	0.64
12:CM:55:LEU:O	12:CM:59:VAL:HG12	1.97	0.64
7:CH:101:ALA:HB3	7:CH:112:ASP:HB3	1.77	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:609:A:H2'	23:BB:610:C:O4'	1.96	0.64
23:DB:593:U:H2'	23:DB:594:U:C6	2.31	0.64
23:DB:2078:C:H2'	23:DB:2079:U:C6	2.32	0.64
1:AA:858:G:O6	1:AA:869:G:H3'	1.97	0.64
2:AC:76:ILE:HA	2:AC:83:VAL:HG23	1.78	0.64
23:BB:1491:G:H5'	25:BC:97:ASP:OD1	1.97	0.64
32:D4:13:ASN:O	32:D4:27:CYS:HA	1.97	0.64
23:BB:419:U:H2'	23:BB:420:C:C6	2.32	0.64
42:BN:58:ASP:O	42:BN:59:SER:HB3	1.97	0.64
23:BB:955:U:OP1	38:BM:86:LYS:HE2	1.98	0.64
23:DB:2502:G:H5'	23:DB:2503:A:C5'	2.24	0.64
40:BH:40:THR:N	40:BH:43:ASN:HD22	1.92	0.64
23:BB:28:A:N6	23:BB:512:G:H1'	2.13	0.64
49:BR:15:SER:HB3	49:BR:18:GLN:HE21	1.61	0.64
47:BF:65:LEU:HD23	47:BF:87:LYS:HD2	1.78	0.64
4:CE:28:ARG:HH22	4:CE:30:PHE:HA	1.62	0.64
34:D3:21:PHE:HB2	34:D3:49:VAL:HG12	1.79	0.64
1:AA:17:U:H2'	1:AA:18:C:H6	1.63	0.64
2:CC:22:PHE:HB2	9:CJ:95:GLY:O	1.97	0.64
41:DJ:43:GLU:O	41:DJ:45:THR:N	2.29	0.64
45:DS:72:THR:HG21	45:DS:108:SER:HB3	1.79	0.64
1:AA:559:A:H4'	1:AA:560:A:H3'	1.78	0.64
1:CA:1521:C:H2'	1:CA:1522:U:C6	2.32	0.64
23:BB:2199:A:H5'	23:BB:2200:C:OP2	1.98	0.64
23:BB:1038:G:H2'	23:BB:1039:A:C8	2.33	0.64
23:DB:315:G:H2'	23:DB:316:C:C6	2.32	0.64
1:CA:806:C:H2'	1:CA:807:A:C8	2.32	0.64
23:BB:593:U:H2'	23:BB:594:U:C6	2.31	0.64
2:CC:21:TRP:HB3	2:CC:58:ARG:H	1.62	0.64
8:CI:17:ARG:O	8:CI:64:ILE:HA	1.98	0.64
23:DB:1192:G:O2'	23:DB:1193:G:H5'	1.97	0.64
3:CD:100:VAL:HG21	3:CD:136:VAL:HG21	1.79	0.64
8:AI:35:GLU:O	8:AI:39:GLY:HA3	1.97	0.64
8:CI:12:LYS:H	8:CI:105:ARG:NH1	1.95	0.64
52:DW:39:GLN:HG3	52:DW:42:THR:CB	2.24	0.64
8:AI:61:ASP:O	8:AI:62:LEU:HD13	1.97	0.64
1:CA:1323:G:H2'	1:CA:1324:A:C8	2.33	0.64
51:BZ:40:VAL:CG2	51:BZ:43:GLU:HB3	2.27	0.64
26:BD:13:ARG:HH12	28:BP:74:GLN:NE2	1.94	0.64
47:DF:168:LEU:HD13	47:DF:169:LEU:H	1.60	0.64
23:BB:1505:A:H2'	23:BB:1506:U:C6	2.33	0.64
23:BB:634:C:H2'	23:BB:635:C:C6	2.32	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:CN:81:ILE:HD12	21:CN:82:LYS:H	1.61	0.64
23:BB:1447:C:H2'	23:BB:1448:G:C8	2.32	0.64
1:CA:1149:C:H2'	1:CA:1150:A:C8	2.32	0.64
14:CQ:25:GLU:HA	14:CQ:40:THR:HA	1.77	0.64
1:AA:474:G:H2'	1:AA:475:C:C6	2.32	0.64
21:CN:41:TRP:HB3	21:CN:44:VAL:HG23	1.78	0.64
10:CK:42:GLY:HA3	10:CK:73:VAL:HG12	1.79	0.64
23:DB:1105:U:H2'	23:DB:1106:G:H8	1.60	0.64
34:B3:44:ARG:N	34:B3:45:PRO:HD2	2.13	0.64
2:CC:69:THR:HG23	2:CC:72:PRO:HB3	1.79	0.64
35:BV:20:LEU:HB3	35:BV:25:LYS:O	1.98	0.64
23:DB:2720:U:H5''	28:DP:52:ARG:NH2	2.09	0.64
23:DB:137:U:H2'	23:DB:138:U:O4'	1.97	0.64
1:CA:976:G:N1	1:CA:1362:A:H3'	2.13	0.64
48:DG:145:ALA:O	48:DG:148:ARG:HG3	1.98	0.64
1:AA:957:U:H4'	16:AS:78:THR:HB	1.78	0.64
22:BA:43:C:H2'	22:BA:44:G:H5''	1.79	0.64
6:AG:24:LYS:O	6:AG:28:ILE:HG12	1.97	0.64
1:CA:1356:G:H2'	1:CA:1357:A:C8	2.31	0.64
23:DB:2537:U:H2'	23:DB:2538:C:C6	2.33	0.64
23:DB:1440:U:H2'	23:DB:1441:G:C8	2.31	0.64
23:DB:1443:U:H2'	23:DB:1444:G:H8	1.62	0.64
1:CA:270:A:H2'	1:CA:271:C:H6	1.62	0.64
21:CN:78:LEU:HD23	21:CN:82:LYS:HB3	1.79	0.64
23:DB:2216:G:H2'	23:DB:2217:G:C8	2.31	0.64
23:DB:2512:C:H2'	23:DB:2513:A:O4'	1.98	0.64
1:CA:1254:A:H2'	1:CA:1255:G:C8	2.32	0.64
1:CA:41:G:H2'	1:CA:42:G:C8	2.33	0.64
23:BB:651:G:OP1	34:B3:18:LYS:HG2	1.97	0.64
47:DF:74:ALA:HB3	47:DF:78:ILE:HD13	1.79	0.64
23:DB:1535:A:O2'	23:DB:1536:C:H5'	1.98	0.64
23:DB:354:A:H2'	23:DB:355:U:C6	2.32	0.64
23:DB:2751:G:H3'	23:DB:2752:C:H6	1.63	0.64
23:BB:315:G:H2'	23:BB:316:C:C6	2.32	0.64
23:BB:1041:G:H2'	23:BB:1042:G:H8	1.63	0.64
18:AB:166:ASP:OD1	18:AB:190:SER:HA	1.98	0.64
48:BG:23:ILE:HD11	48:BG:42:VAL:HG11	1.80	0.64
1:AA:235:C:H2'	1:AA:236:A:H8	1.62	0.64
40:BH:100:ALA:HB1	40:BH:111:ALA:O	1.97	0.64
40:DH:119:ASN:OD1	40:DH:121:VAL:HG22	1.98	0.64
1:AA:1101:A:H62	18:AB:173:LYS:HE3	1.61	0.64
18:AB:184:ALA:HB3	18:AB:195:VAL:HG21	1.79	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1203:U:H3'	23:DB:1204:A:C5'	2.27	0.64
1:CA:67:C:H2'	1:CA:68:G:C8	2.32	0.64
1:CA:502:A:H2'	1:CA:503:C:C6	2.32	0.64
2:CC:76:ILE:HD11	2:CC:102:ILE:HG21	1.79	0.64
23:BB:1354:A:H2'	23:BB:1355:G:O4'	1.97	0.64
23:DB:79:C:O2'	23:DB:346:A:H1'	1.96	0.64
3:AD:100:VAL:HG21	3:AD:136:VAL:HG21	1.80	0.64
1:AA:1342:C:H2'	1:AA:1343:G:H8	1.62	0.64
43:BO:67:ASN:H	43:BO:70:ALA:HB3	1.61	0.64
25:BC:128:THR:HG23	25:BC:190:THR:HG22	1.80	0.64
47:DF:110:ILE:CB	47:DF:113:PHE:HB3	2.26	0.64
22:DA:43:C:H2'	22:DA:44:G:H5''	1.79	0.64
46:DU:78:LYS:CD	46:DU:79:ALA:H	2.09	0.64
29:DE:5:LEU:HB3	29:DE:122:GLU:OE1	1.98	0.64
1:AA:205:A:H2'	1:AA:206:C:H6	1.63	0.64
38:DM:32:GLY:O	38:DM:131:VAL:HG22	1.98	0.64
23:DB:2065:C:H2'	23:DB:2066:C:H6	1.62	0.64
48:BG:71:LEU:HD13	48:BG:74:MET:SD	2.38	0.64
28:DP:32:VAL:HA	28:DP:37:LYS:HA	1.79	0.64
52:DW:44:PHE:CD2	52:DW:76:ARG:HD2	2.32	0.64
51:DZ:70:GLU:O	51:DZ:72:ARG:N	2.31	0.64
23:DB:825:A:H1'	37:DL:54:GLN:NE2	2.12	0.64
8:CI:56:MET:HE2	8:CI:57:VAL:H	1.62	0.64
19:CU:36:PHE:HD2	19:CU:39:LYS:HE2	1.62	0.64
35:DV:20:LEU:HB3	35:DV:25:LYS:O	1.97	0.64
26:DD:106:LYS:O	26:DD:107:VAL:HB	1.98	0.64
26:DD:113:SER:CB	26:DD:168:GLU:H	2.11	0.64
23:DB:30:G:H2'	23:DB:31:C:C6	2.33	0.64
18:CB:174:GLU:O	18:CB:178:LEU:HG	1.98	0.64
23:BB:1507:C:C3'	23:BB:1508:A:H4'	2.28	0.64
23:BB:162:U:H4'	23:BB:163:C:OP1	1.97	0.64
44:DQ:27:ARG:HA	44:DQ:33:VAL:HG23	1.80	0.64
12:CM:2:ARG:NH1	12:CM:3:ILE:H	1.95	0.64
17:CT:79:THR:O	17:CT:82:ILE:HG13	1.98	0.64
23:DB:1387:A:H5'	23:DB:1469:A:H1'	1.80	0.64
23:DB:37:C:O2'	29:DE:45:ALA:HA	1.98	0.64
11:CL:113:ARG:HG2	11:CL:118:VAL:HB	1.80	0.64
23:BB:1355:G:O2'	23:BB:1356:G:H5'	1.98	0.64
1:AA:285:C:H2'	1:AA:286:C:H6	1.61	0.64
25:BC:239:PHE:O	25:BC:241:LYS:HG3	1.98	0.64
23:BB:912:C:O2'	23:BB:913:U:H5'	1.97	0.64
1:CA:279:A:H5''	1:CA:280:C:H3'	1.79	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:AU:48:LYS:HG3	19:AU:49:ALA:N	2.13	0.64
25:BC:196:ASN:HD22	25:BC:199:HIS:HB2	1.61	0.64
1:CA:858:G:O6	1:CA:869:G:H3'	1.98	0.64
23:DB:2199:A:H5'	23:DB:2200:C:OP2	1.98	0.64
23:DB:575:A:O2'	23:DB:576:U:H5'	1.96	0.64
43:BO:5:SER:HA	43:BO:8:ILE:HD12	1.79	0.64
5:AF:86:ARG:CZ	15:AR:63:TYR:HB3	2.27	0.64
2:AC:183:TYR:HA	2:AC:199:VAL:O	1.96	0.64
44:BQ:63:ARG:HH22	44:BQ:96:ASP:HA	1.62	0.64
16:AS:4:LEU:HD11	16:AS:9:PHE:HB3	1.79	0.64
36:D2:12:ARG:HB2	36:D2:12:ARG:NH2	2.13	0.64
42:DN:102:PHE:N	42:DN:109:PRO:HA	2.13	0.64
23:DB:2394:C:OP1	37:DL:63:LYS:HG2	1.98	0.64
27:DK:43:ILE:HG21	27:DK:46:ALA:HB2	1.80	0.64
20:CO:8:THR:O	20:CO:12:VAL:HG23	1.98	0.64
23:DB:1443:U:H2'	23:DB:1444:G:C8	2.32	0.64
23:BB:1548:A:H2'	23:BB:1549:A:H8	1.62	0.64
23:BB:718:A:H5'	23:BB:719:C:C5	2.33	0.64
23:DB:636:G:N7	37:DL:109:LYS:HE2	2.13	0.64
1:AA:652:U:H1'	1:AA:653:U:C5	2.32	0.64
1:CA:502:A:H2'	1:CA:503:C:H6	1.63	0.64
18:CB:127:LYS:HD2	18:CB:128:LEU:N	2.12	0.64
3:AD:25:ARG:CZ	3:AD:26:ALA:HB2	2.28	0.64
8:AI:35:GLU:CD	8:AI:35:GLU:H	2.00	0.64
23:BB:1041:G:H2'	23:BB:1042:G:C8	2.33	0.64
23:BB:19:A:H2'	23:BB:20:C:C6	2.32	0.64
23:DB:654:A:H2'	23:DB:655:A:H5''	1.80	0.64
23:DB:2103:C:H2'	23:DB:2104:C:C6	2.33	0.64
21:AN:41:TRP:HB3	21:AN:44:VAL:HG23	1.78	0.64
25:DC:12:ARG:HA	25:DC:15:VAL:HG23	1.80	0.64
23:DB:272:A:H2'	23:DB:273:G:C8	2.33	0.64
1:AA:1142:G:H2'	1:AA:1143:G:O4'	1.97	0.64
13:AP:43:ALA:HA	13:AP:46:LYS:HD2	1.80	0.64
48:BG:145:ALA:O	48:BG:148:ARG:HG3	1.98	0.64
46:BU:73:ASN:HB3	46:BU:95:PHE:CZ	2.32	0.64
10:CK:18:GLY:HA2	10:CK:36:ARG:HG3	1.79	0.64
18:AB:162:VAL:HG21	18:AB:168:GLU:HB2	1.80	0.64
25:DC:77:VAL:CG2	25:DC:112:GLY:H	2.11	0.64
23:DB:2841:C:H2'	23:DB:2842:G:C8	2.33	0.64
1:CA:600:A:H5''	7:CH:88:LYS:HD2	1.79	0.64
23:BB:1809:A:H2'	23:BB:1810:A:C8	2.33	0.64
23:BB:441:U:H2'	23:BB:442:G:C8	2.32	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:DR:2:TYR:H	49:DR:42:ALA:CB	2.11	0.64
1:CA:590:U:H2'	1:CA:591:U:C6	2.32	0.64
47:BF:41:GLU:HB3	47:BF:44:ALA:HB3	1.78	0.64
8:CI:5:TYR:O	8:CI:19:PHE:HA	1.97	0.64
26:BD:113:SER:CB	26:BD:168:GLU:H	2.11	0.64
1:AA:1149:C:H2'	1:AA:1150:A:C8	2.33	0.64
1:CA:437:U:H1'	3:CD:115:GLN:NE2	2.12	0.64
23:DB:1064:C:H5''	24:DI:87:SER:OG	1.98	0.64
28:DP:13:LYS:HD2	28:DP:76:HIS:HA	1.79	0.64
33:D1:9:LYS:HD3	33:D1:9:LYS:N	2.12	0.64
1:AA:1219:A:H2'	1:AA:1220:G:H8	1.61	0.64
26:BD:25:THR:HG21	26:BD:193:VAL:CG2	2.28	0.64
23:DB:2680:U:OP2	26:DD:114:LYS:HB3	1.98	0.64
40:DH:14:SER:HB2	40:DH:17:ASP:HB3	1.80	0.64
42:DN:33:ILE:HD11	42:DN:112:TYR:HD1	1.62	0.64
1:CA:948:C:H2'	1:CA:949:A:H8	1.62	0.64
43:BO:90:VAL:HG22	43:BO:115:LEU:HD12	1.80	0.64
25:BC:119:VAL:HG13	25:BC:133:ASN:HD21	1.63	0.64
1:CA:522:C:H41	11:CL:49:ARG:HH22	1.46	0.64
23:BB:2190:G:O2'	23:BB:2191:A:H5'	1.97	0.64
23:BB:1871:A:H2'	23:BB:1872:A:C8	2.33	0.64
23:DB:1505:A:H2'	23:DB:1506:U:C6	2.33	0.64
13:AP:28:ARG:HD2	13:AP:29:ASN:H	1.61	0.64
23:BB:742:A:H2'	23:BB:743:A:C8	2.33	0.64
23:DB:1001:A:H2'	23:DB:1002:G:O4'	1.98	0.64
1:CA:285:C:H2'	1:CA:286:C:C6	2.33	0.64
16:AS:49:ALA:HA	16:AS:57:VAL:O	1.98	0.64
4:CE:95:MET:HA	4:CE:124:ALA:CB	2.28	0.64
22:BA:89:U:O2	23:BB:958:U:H2'	1.98	0.64
23:DB:2645:G:H3'	23:DB:2646:C:H5'	1.80	0.64
18:AB:71:THR:HA	18:AB:92:ASN:O	1.98	0.64
23:BB:572:A:H5''	49:BR:80:ARG:HH22	1.63	0.64
4:AE:92:ARG:HH11	4:AE:92:ARG:HB3	1.63	0.64
33:D1:7:LYS:HD3	34:D3:33:THR:HG21	1.80	0.64
23:DB:466:A:N3	23:DB:683:U:H1'	2.13	0.64
1:AA:1450:U:H2'	1:AA:1452:C:C5	2.33	0.64
18:CB:186:VAL:O	18:CB:200:PRO:HA	1.98	0.63
29:DE:58:LYS:C	29:DE:60:TRP:N	2.51	0.63
1:AA:120:A:C2'	1:AA:121:U:H5''	2.24	0.63
35:BV:41:GLU:C	35:BV:42:LEU:HD23	2.18	0.63
48:DG:23:ILE:HD11	48:DG:42:VAL:HG11	1.80	0.63
23:DB:28:A:N6	23:DB:512:G:H1'	2.12	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:DD:168:GLU:O	26:DD:170:VAL:HG13	1.99	0.63
23:BB:2267:A:C8	23:BB:2267:A:C3'	2.79	0.63
37:BL:125:LEU:H	37:BL:143:GLU:HG3	1.63	0.63
23:BB:2443:C:H2'	23:BB:2444:G:H8	1.62	0.63
51:DZ:59:ILE:HA	51:DZ:67:VAL:HG21	1.81	0.63
18:AB:23:ASN:HD22	18:AB:24:PRO:CD	2.10	0.63
40:BH:5:LEU:HD22	40:BH:13:GLY:HA2	1.81	0.63
24:DI:123:ALA:HA	24:DI:126:ARG:HH12	1.63	0.63
38:DM:105:MET:HB2	38:DM:117:PHE:HZ	1.63	0.63
23:BB:718:A:H2'	23:BB:719:C:H5'	1.80	0.63
23:DB:150:U:H2'	23:DB:151:C:C6	2.33	0.63
23:DB:2039:U:H2'	23:DB:2040:G:H8	1.62	0.63
25:BC:78:GLU:OE1	25:BC:94:LEU:HD22	1.99	0.63
6:CG:48:THR:O	6:CG:52:ARG:HG3	1.98	0.63
23:BB:661:A:H1'	37:BL:12:SER:O	1.97	0.63
1:AA:801:U:H2'	1:AA:802:A:H8	1.63	0.63
48:BG:23:ILE:O	48:BG:34:ARG:HA	1.99	0.63
26:BD:105:LYS:H	26:BD:106:LYS:NZ	1.96	0.63
22:DA:57:A:H1'	47:DF:25:MET:O	1.98	0.63
43:DO:53:THR:HG22	43:DO:74:VAL:CG2	2.28	0.63
32:B4:4:ARG:HG2	32:B4:5:ALA:H	1.62	0.63
23:BB:674:G:C1'	29:BE:69:ARG:HD2	2.28	0.63
26:DD:5:VAL:N	26:DD:32:ASN:HD21	1.95	0.63
47:BF:134:GLN:NE2	47:BF:149:ARG:HG3	2.11	0.63
6:AG:120:ALA:HA	6:AG:123:LEU:HD12	1.80	0.63
1:AA:1308:U:H3'	12:AM:97:ARG:HH11	1.63	0.63
23:DB:163:C:H2'	23:DB:164:C:O4'	1.98	0.63
18:CB:80:LYS:HG3	18:CB:81:ASP:H	1.62	0.63
49:DR:2:TYR:H	49:DR:42:ALA:HB2	1.63	0.63
23:BB:431:U:O2'	23:BB:432:A:H5'	1.99	0.63
23:DB:2814:A:H2'	23:DB:2815:C:C6	2.33	0.63
1:AA:1486:G:H2'	1:AA:1487:G:O4'	1.98	0.63
23:BB:575:A:O2'	23:BB:576:U:H5'	1.98	0.63
37:BL:132:ARG:O	37:BL:135:ILE:HG22	1.98	0.63
23:BB:547:A:C2'	23:BB:548:G:H5'	2.28	0.63
42:DN:78:LYS:HG3	42:DN:83:LEU:HG	1.80	0.63
1:CA:976:G:H1	1:CA:1362:A:H3'	1.64	0.63
49:DR:4:VAL:CG2	49:DR:40:MET:HB2	2.28	0.63
23:DB:1060:U:O4	23:DB:1088:A:N6	2.31	0.63
10:AK:17:ASP:HB3	10:AK:80:ASN:ND2	2.13	0.63
27:DK:71:ARG:CZ	27:DK:72:PRO:HD3	2.28	0.63
6:CG:145:GLU:HG3	6:CG:146:ALA:N	2.12	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:BP:59:THR:OG1	28:BP:72:VAL:HG12	1.97	0.63
36:B2:12:ARG:NH2	36:B2:12:ARG:HB2	2.13	0.63
27:BK:43:ILE:HG21	27:BK:46:ALA:HB2	1.81	0.63
1:CA:658:C:O3'	20:CO:8:THR:HG21	1.99	0.63
27:BK:99:ILE:H	27:BK:118:LEU:HD23	1.62	0.63
12:CM:2:ARG:N	12:CM:8:ILE:HG22	2.12	0.63
23:BB:2841:C:H2'	23:BB:2842:G:C8	2.33	0.63
1:AA:390:U:H2'	1:AA:391:G:H8	1.62	0.63
23:DB:2516:A:O2'	23:DB:2517:C:H5'	1.98	0.63
26:BD:37:VAL:HG23	26:BD:91:THR:HA	1.80	0.63
17:AT:43:LYS:H	17:AT:43:LYS:HD3	1.64	0.63
12:CM:16:ILE:HD13	12:CM:16:ILE:O	1.99	0.63
23:BB:730:A:H3'	57:BB:3594:HOH:O	1.98	0.63
1:AA:590:U:H2'	1:AA:591:U:H6	1.63	0.63
27:BK:51:LYS:HE3	27:BK:52:VAL:HG13	1.80	0.63
1:AA:140:U:H2'	1:AA:141:G:C8	2.32	0.63
2:AC:102:ILE:H	2:AC:102:ILE:HD12	1.64	0.63
9:CJ:36:VAL:HG13	9:CJ:76:ILE:HG22	1.80	0.63
25:DC:153:LEU:HD13	25:DC:175:LEU:HD21	1.79	0.63
35:BV:72:VAL:HG12	35:BV:93:ARG:HA	1.79	0.63
40:BH:147:VAL:HG12	40:BH:148:ALA:H	1.63	0.63
37:DL:143:GLU:CG	37:DL:144:GLU:H	2.11	0.63
23:DB:138:U:H4'	23:DB:139:U:C3'	2.27	0.63
43:DO:36:TYR:HA	43:DO:52:SER:HB3	1.78	0.63
10:CK:17:ASP:HB3	10:CK:80:ASN:ND2	2.12	0.63
28:BP:56:SER:HB2	28:BP:75:THR:HG21	1.79	0.63
29:BE:5:LEU:HB3	29:BE:122:GLU:OE1	1.98	0.63
23:BB:1309:G:H4'	36:B2:7:PRO:HB2	1.80	0.63
2:AC:10:ARG:NH2	2:AC:181:ILE:HD13	2.13	0.63
32:D4:24:ARG:HG2	32:D4:36:ARG:HG3	1.80	0.63
1:CA:1342:C:H2'	1:CA:1343:G:C8	2.33	0.63
27:DK:70:ARG:HB3	27:DK:76:VAL:HG13	1.80	0.63
23:DB:459:U:O2'	23:DB:460:A:H5'	1.99	0.63
23:BB:2065:C:H2'	23:BB:2066:C:H6	1.62	0.63
23:DB:151:C:H2'	23:DB:152:A:H8	1.62	0.63
1:CA:662:U:H2'	1:CA:663:A:C8	2.33	0.63
1:AA:1070:U:H2'	1:AA:1071:C:C6	2.33	0.63
1:CA:806:C:H2'	1:CA:807:A:H8	1.63	0.63
23:DB:2246:G:H2'	23:DB:2247:A:C8	2.34	0.63
2:CC:137:VAL:HG11	2:CC:169:GLU:HG3	1.79	0.63
1:AA:301:G:H2'	1:AA:302:G:H8	1.63	0.63
23:DB:1416:G:HO2'	23:DB:1417:C:H6	1.46	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BR:2:TYR:H	49:BR:42:ALA:CB	2.11	0.63
30:BY:23:LEU:HD13	30:BY:28:LEU:HB2	1.80	0.63
23:BB:2321:U:H3'	23:BB:2322:A:H5''	1.81	0.63
1:CA:1391:U:H2'	1:CA:1392:G:C8	2.33	0.63
23:DB:2150:C:H2'	23:DB:2151:U:H6	1.63	0.63
18:AB:15:PHE:HD1	18:AB:16:GLY:H	1.45	0.63
9:CJ:9:ARG:HE	9:CJ:99:GLN:NE2	1.97	0.63
14:CQ:45:VAL:HG12	14:CQ:46:HIS:N	2.08	0.63
28:BP:13:LYS:HD2	28:BP:76:HIS:HA	1.80	0.63
22:BA:43:C:O2'	47:BF:91:ARG:HD2	1.98	0.63
47:DF:134:GLN:HB3	47:DF:149:ARG:HG3	1.80	0.63
1:CA:1001:C:H2'	1:CA:1002:G:C8	2.32	0.63
18:AB:202:ASN:ND2	18:AB:203:ASP:H	1.97	0.63
1:CA:1320:C:N3	16:CS:35:ARG:HD3	2.13	0.63
16:CS:52:ASN:HD22	16:CS:76:THR:HA	1.63	0.63
23:BB:2769:U:H2'	23:BB:2770:G:C8	2.33	0.63
23:BB:1579:A:H2'	23:BB:1580:A:H8	1.63	0.63
1:CA:1169:A:H2'	1:CA:1170:A:C8	2.33	0.63
23:BB:2039:U:H2'	23:BB:2040:G:H8	1.63	0.63
42:DN:24:MET:HG2	42:DN:44:LEU:HD22	1.79	0.63
10:AK:42:GLY:HA3	10:AK:73:VAL:HG12	1.81	0.63
45:DS:13:SER:OG	45:DS:16:LYS:HB2	1.98	0.63
23:DB:988:A:P	30:DY:11:SER:HB3	2.39	0.63
9:CJ:7:ARG:O	9:CJ:100:ILE:HA	1.99	0.63
52:DW:35:ILE:O	52:DW:35:ILE:HG12	1.98	0.63
48:BG:89:VAL:HB	48:BG:159:LYS:HA	1.80	0.63
18:AB:46:VAL:HA	18:AB:49:PHE:HD2	1.63	0.63
51:DZ:40:VAL:HG22	51:DZ:45:ARG:O	1.98	0.63
28:DP:56:SER:HB2	28:DP:75:THR:HG21	1.79	0.63
28:BP:54:LEU:HA	28:BP:76:HIS:HD2	1.63	0.63
23:BB:2303:G:H4'	47:BF:121:PHE:O	1.99	0.63
47:BF:121:PHE:CE1	47:BF:162:ASP:HB2	2.33	0.63
46:DU:51:LEU:H	46:DU:53:GLN:NE2	1.96	0.63
47:DF:121:PHE:CE1	47:DF:162:ASP:HB2	2.33	0.63
25:BC:12:ARG:HA	25:BC:15:VAL:HG23	1.80	0.63
27:BK:17:ARG:HB3	27:BK:45:GLU:CB	2.29	0.63
42:DN:97:ILE:HD13	42:DN:99:LYS:HG3	1.80	0.63
12:CM:79:LEU:HD12	12:CM:87:GLY:HA2	1.79	0.63
42:BN:102:PHE:N	42:BN:109:PRO:HA	2.12	0.63
23:BB:459:U:O2'	23:BB:460:A:H5'	1.98	0.63
3:CD:113:ALA:O	3:CD:117:VAL:HG23	1.98	0.63
1:CA:462:G:H3'	1:CA:463:U:C6	2.34	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:DP:103:THR:HG22	28:DP:104:GLY:H	1.64	0.63
23:DB:1354:A:H2'	23:DB:1355:G:O4'	1.97	0.63
29:DE:18:THR:HG22	29:DE:106:LYS:HE2	1.80	0.63
23:DB:1494:A:H2'	23:DB:1495:A:C8	2.33	0.63
50:BT:53:VAL:HG12	50:BT:54:GLU:H	1.62	0.63
2:CC:63:ILE:H	2:CC:98:ALA:CB	2.10	0.63
20:AO:26:GLU:HA	20:AO:81:LEU:HD11	1.81	0.63
23:DB:639:U:H2'	23:DB:640:C:H6	1.64	0.63
10:CK:22:ILE:HD12	10:CK:85:VAL:HG22	1.81	0.63
46:BU:9:GLU:HG3	46:BU:72:PHE:HB3	1.79	0.63
21:AN:63:CYS:HB3	21:AN:67:GLY:H	1.63	0.63
1:CA:923:A:H2'	1:CA:924:C:H6	1.63	0.63
1:CA:449:G:H2'	1:CA:450:G:C8	2.34	0.63
24:BI:25:PRO:O	24:BI:29:GLN:HG2	1.99	0.63
34:B3:31:ILE:HD11	34:B3:34:LYS:HD3	1.80	0.63
44:DQ:73:ILE:HD11	44:DQ:77:LYS:HB2	1.80	0.63
23:DB:1579:A:H2'	23:DB:1580:A:H8	1.61	0.63
23:DB:181:A:H2'	23:DB:182:A:H8	1.63	0.63
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.34	0.63
27:DK:12:ASP:OD2	27:DK:85:VAL:HG13	1.99	0.63
23:BB:163:C:H2'	23:BB:164:C:O4'	1.99	0.63
23:DB:1447:C:H2'	23:DB:1448:G:C8	2.34	0.63
23:BB:1170:C:H2'	23:BB:1171:G:H8	1.63	0.63
1:CA:1513:A:H2'	1:CA:1514:G:H8	1.64	0.63
23:BB:1387:A:C4'	23:BB:1469:A:H1'	2.28	0.63
1:AA:1342:C:H2'	1:AA:1343:G:C8	2.33	0.63
23:DB:2814:A:H2'	23:DB:2815:C:H6	1.63	0.63
2:AC:87:ARG:NH2	2:AC:88:LYS:HA	2.13	0.63
18:CB:8:MET:HG3	18:CB:11:ALA:HB3	1.80	0.63
43:BO:97:PHE:HB3	43:BO:103:VAL:HG21	1.79	0.63
38:DM:26:VAL:HG21	38:DM:133:LYS:HA	1.81	0.63
23:DB:365:U:H2'	23:DB:366:C:C6	2.34	0.63
48:BG:176:LYS:H	48:BG:176:LYS:HE2	1.64	0.63
2:AC:63:ILE:HD12	2:AC:98:ALA:HB2	1.80	0.63
35:DV:63:ILE:HD11	35:DV:72:VAL:HG22	1.80	0.63
1:CA:255:G:H2'	1:CA:256:U:C6	2.34	0.63
37:DL:125:LEU:H	37:DL:143:GLU:HG3	1.64	0.63
8:AI:83:THR:HA	8:AI:86:LEU:HD22	1.81	0.63
47:DF:110:ILE:HA	47:DF:111:ARG:NH2	2.14	0.63
28:BP:4:ILE:O	28:BP:6:GLN:N	2.32	0.63
40:DH:2:GLN:O	40:DH:3:VAL:HG22	1.98	0.63
44:BQ:30:VAL:CG1	44:BQ:33:VAL:HG22	2.28	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:264:C:H2'	23:DB:265:A:H5''	1.81	0.63
6:AG:129:ASN:HA	6:AG:134:VAL:HG11	1.80	0.63
1:AA:590:U:H2'	1:AA:591:U:C6	2.33	0.63
7:AH:8:ASP:OD1	7:AH:12:ARG:HD2	1.99	0.63
1:AA:188:C:H2'	1:AA:189:A:O4'	1.99	0.63
5:CF:9:MET:HB2	5:CF:57:ALA:HB1	1.81	0.63
23:BB:2109:U:H3'	23:BB:2110:G:H8	1.64	0.63
38:BM:26:VAL:HG21	38:BM:133:LYS:HA	1.81	0.63
28:BP:30:TRP:CD1	28:BP:39:LEU:HG	2.34	0.63
23:BB:1028:A:H2'	23:BB:1029:A:C8	2.34	0.63
1:AA:1329:A:OP1	12:AM:28:ARG:HB2	1.99	0.63
4:CE:81:GLN:HE21	4:CE:149:PRO:HD3	1.64	0.63
46:DU:5:ARG:HH22	46:DU:93:ARG:HD3	1.64	0.63
38:DM:42:THR:HA	38:DM:93:VAL:HA	1.81	0.63
44:BQ:63:ARG:NH2	44:BQ:96:ASP:HA	2.14	0.63
47:BF:121:PHE:HB2	47:BF:126:ASN:O	1.98	0.63
26:BD:148:GLN:HB2	26:BD:152:PRO:HG2	1.81	0.63
13:CP:67:ILE:HD11	13:CP:71:VAL:HG22	1.81	0.63
39:DX:46:VAL:O	39:DX:50:VAL:HG23	1.99	0.63
44:DQ:91:ARG:NH1	49:DR:11:GLN:H	1.96	0.63
23:DB:1506:U:H2'	23:DB:1507:C:C6	2.33	0.63
23:DB:162:U:H4'	23:DB:163:C:OP1	1.98	0.63
2:CC:129:PHE:CG	2:CC:156:LEU:HD21	2.34	0.63
1:AA:840:C:N3	1:AA:842:U:H4'	2.13	0.63
1:CA:1225:A:O2'	16:CS:77:ARG:HD3	1.99	0.63
18:AB:131:LYS:HA	18:AB:134:LEU:HD12	1.80	0.63
23:DB:596:U:H2'	23:DB:597:G:C8	2.34	0.63
1:AA:36:C:O3'	11:AL:119:LYS:HA	1.99	0.63
34:D3:44:ARG:N	34:D3:45:PRO:HD2	2.12	0.63
23:DB:1138:G:H2'	23:DB:1139:G:O4'	1.98	0.63
23:BB:1535:A:O2'	23:BB:1536:C:H5'	1.99	0.63
45:BS:27:LYS:O	45:BS:32:ALA:HB2	1.99	0.63
38:DM:77:PRO:HB2	38:DM:80:VAL:HB	1.80	0.63
23:DB:446:G:C5'	44:DQ:2:ARG:HH22	2.12	0.63
1:AA:313:A:H2'	1:AA:314:C:C6	2.34	0.63
23:BB:1847:A:H4'	23:BB:1848:A:C8	2.34	0.63
11:CL:35:ARG:HH22	11:CL:75:GLU:HA	1.64	0.63
6:AG:58:LEU:HD23	6:AG:58:LEU:H	1.63	0.63
8:CI:56:MET:SD	8:CI:57:VAL:N	2.72	0.62
9:CJ:18:ILE:O	9:CJ:22:THR:HG23	1.99	0.62
23:BB:2272:U:HO2'	23:BB:2273:A:H8	1.46	0.62
1:AA:1148:U:H5'	8:AI:6:TYR:OH	1.99	0.62

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AK:91:GLY:HA2	10:AK:94:SER:HB3	1.81	0.62
27:DK:73:ASP:O	28:DP:74:GLN:HG3	1.99	0.62
12:AM:84:CYS:O	12:AM:88:LEU:HG	1.99	0.62
1:AA:1271:A:H5'	1:AA:1314:C:H5''	1.80	0.62
24:DI:121:ILE:N	24:DI:121:ILE:HD13	2.13	0.62
46:BU:50:ALA:H	46:BU:53:GLN:HE21	1.45	0.62
2:CC:148:ILE:HA	2:CC:200:TRP:O	1.98	0.62
38:DM:66:ARG:HG3	38:DM:101:VAL:CG2	2.29	0.62
40:BH:50:ARG:HE	40:BH:50:ARG:N	1.96	0.62
17:AT:46:ALA:HB1	17:AT:82:ILE:HG22	1.81	0.62
1:AA:1175:G:H2'	1:AA:1176:A:C8	2.34	0.62
1:CA:777:A:H2'	1:CA:778:G:C8	2.33	0.62
23:DB:594:U:H2'	23:DB:595:C:C6	2.33	0.62
1:AA:285:C:H2'	1:AA:286:C:C6	2.34	0.62
23:DB:2150:C:H2'	23:DB:2151:U:C6	2.34	0.62
51:BZ:70:GLU:O	51:BZ:72:ARG:N	2.31	0.62
23:DB:2809:A:H2'	23:DB:2810:A:C8	2.34	0.62
23:DB:1050:A:H2'	23:DB:1051:G:O4'	1.98	0.62
23:BB:2849:U:H4'	23:BB:2850:A:H5'	1.80	0.62
23:BB:39:G:H2'	23:BB:40:U:C6	2.34	0.62
1:AA:429:U:H1'	1:AA:430:A:H5''	1.81	0.62
25:DC:239:PHE:O	25:DC:241:LYS:HG3	1.97	0.62
23:BB:1947:C:H2'	23:BB:1948:G:H8	1.64	0.62
23:BB:2246:G:H2'	23:BB:2247:A:C8	2.34	0.62
13:AP:48:GLU:HG3	13:AP:49:GLY:H	1.64	0.62
23:DB:191:A:H2'	23:DB:192:C:C6	2.33	0.62
18:CB:40:ILE:HG22	18:CB:41:ASN:H	1.64	0.62
29:DE:58:LYS:CD	29:DE:58:LYS:H	2.12	0.62
26:BD:8:LYS:N	26:BD:201:LEU:HD11	2.14	0.62
35:BV:30:ILE:HB	35:BV:38:LEU:HB3	1.81	0.62
5:AF:29:ILE:HD13	5:AF:64:VAL:HG11	1.81	0.62
44:DQ:4:LYS:NZ	44:DQ:7:VAL:HG22	2.14	0.62
23:DB:634:C:H2'	23:DB:635:C:H6	1.64	0.62
49:BR:16:GLU:HA	49:BR:98:ILE:HG22	1.79	0.62
49:DR:15:SER:HB3	49:DR:18:GLN:HE21	1.64	0.62
46:BU:78:LYS:CD	46:BU:79:ALA:H	2.09	0.62
24:DI:27:LEU:HD12	24:DI:32:VAL:HG11	1.80	0.62
8:AI:113:LYS:HA	8:AI:120:ALA:HB2	1.81	0.62
39:BX:46:VAL:O	39:BX:50:VAL:HG23	1.99	0.62
1:AA:1047:G:H5''	21:AN:3:GLN:HG2	1.81	0.62
24:DI:41:PHE:O	24:DI:45:THR:HG23	1.99	0.62
51:DZ:31:PRO:HB2	51:DZ:33:LEU:CD1	2.27	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:D4:4:ARG:HG2	32:D4:5:ALA:H	1.64	0.62
1:AA:947:G:H4'	12:AM:107:THR:OG1	1.99	0.62
23:DB:2591:C:H2'	23:DB:2592:G:H8	1.63	0.62
3:AD:32:LYS:HA	3:AD:35:GLN:HE21	1.62	0.62
48:DG:71:LEU:HD13	48:DG:74:MET:SD	2.39	0.62
23:DB:19:A:H2'	23:DB:20:C:H6	1.64	0.62
23:BB:1387:A:H5'	23:BB:1469:A:H1'	1.81	0.62
23:DB:2600:A:O2'	23:DB:2601:C:H5'	1.99	0.62
1:AA:1007:U:H2'	1:AA:1008:U:H6	1.64	0.62
3:CD:138:PRO:HA	3:CD:181:PHE:HD2	1.64	0.62
1:CA:810:C:O2'	1:CA:811:C:H5'	1.99	0.62
23:DB:348:A:H2'	23:DB:349:U:O4'	1.98	0.62
23:BB:2847:U:H5''	28:BP:94:ALA:CB	2.29	0.62
1:AA:673:A:H2'	1:AA:674:G:C8	2.33	0.62
23:DB:848:C:H2'	23:DB:849:A:C8	2.34	0.62
12:AM:13:HIS:HB3	12:AM:40:GLU:O	1.99	0.62
12:AM:21:ILE:CG2	12:AM:65:GLU:H	2.10	0.62
50:BT:32:LEU:HG	50:BT:83:ALA:CB	2.30	0.62
26:BD:111:GLY:H	26:BD:194:PRO:HG2	1.65	0.62
36:B2:33:ARG:NH2	36:B2:33:ARG:HB2	2.15	0.62
18:AB:113:LEU:HD21	18:AB:151:LYS:HD2	1.81	0.62
25:BC:77:VAL:CG2	25:BC:112:GLY:H	2.12	0.62
40:DH:5:LEU:HD22	40:DH:13:GLY:HA2	1.80	0.62
48:DG:155:PRO:HA	48:DG:170:THR:HA	1.81	0.62
6:AG:30:MET:SD	6:AG:35:LYS:HD2	2.39	0.62
1:AA:77:A:H2'	1:AA:78:A:C8	2.34	0.62
11:AL:79:ILE:C	11:AL:101:LEU:HD12	2.20	0.62
36:B2:35:ARG:HB2	36:B2:42:LEU:HD21	1.81	0.62
1:CA:559:A:H4'	1:CA:560:A:H3'	1.79	0.62
23:BB:1001:A:H2'	23:BB:1002:G:O4'	1.99	0.62
3:CD:26:ALA:C	3:CD:28:ASP:H	2.03	0.62
2:AC:72:PRO:O	2:AC:76:ILE:HG12	1.99	0.62
23:BB:594:U:H2'	23:BB:595:C:C6	2.34	0.62
23:BB:1353:A:H2'	23:BB:1354:A:C8	2.34	0.62
6:AG:112:ASP:HB2	6:AG:118:ARG:HG2	1.80	0.62
1:AA:74:A:H2'	1:AA:75:G:O4'	1.97	0.62
1:CA:735:C:H5'	15:CR:59:LYS:HD3	1.81	0.62
23:DB:6:A:H2'	23:DB:7:G:H8	1.64	0.62
9:CJ:22:THR:HG21	9:CJ:72:ARG:HG3	1.81	0.62
37:DL:17:LYS:HD2	37:DL:19:LEU:HD11	1.80	0.62
14:CQ:75:VAL:HG23	14:CQ:76:ARG:HG2	1.80	0.62
23:DB:2774:C:OP1	26:DD:169:ARG:HG3	2.00	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:BP:56:SER:HB2	28:BP:75:THR:CG2	2.29	0.62
44:BQ:63:ARG:HH12	44:BQ:96:ASP:HB2	1.64	0.62
44:BQ:111:LYS:HB2	49:BR:48:LYS:HZ3	1.63	0.62
47:BF:110:ILE:CB	47:BF:113:PHE:HB3	2.27	0.62
4:CE:113:VAL:HG11	4:CE:136:VAL:HG23	1.80	0.62
27:DK:7:MET:SD	27:DK:20:MET:HB2	2.39	0.62
1:AA:1332:A:H2'	1:AA:1333:A:C8	2.35	0.62
23:BB:155:A:H2'	23:BB:156:A:C8	2.34	0.62
25:DC:4:LYS:HE2	25:DC:5:CYS:H	1.64	0.62
23:BB:572:A:H5''	49:BR:80:ARG:NH2	2.13	0.62
23:DB:851:C:H2'	23:DB:852:U:C6	2.35	0.62
23:BB:1459:G:H4'	23:BB:1461:C:C4	2.34	0.62
1:CA:140:U:H2'	1:CA:141:G:C8	2.35	0.62
1:CA:925:G:O2'	1:CA:926:G:H5''	1.99	0.62
51:BZ:39:TRP:HB2	51:BZ:46:PHE:CE2	2.35	0.62
23:DB:1100:C:H2'	23:DB:1101:U:H6	1.65	0.62
40:BH:90:LEU:HD22	40:BH:123:ARG:HA	1.80	0.62
50:DT:53:VAL:HG12	50:DT:54:GLU:H	1.64	0.62
2:CC:63:ILE:H	2:CC:98:ALA:HB2	1.65	0.62
44:BQ:4:LYS:NZ	44:BQ:7:VAL:HG22	2.13	0.62
23:BB:1060:U:O4	23:BB:1088:A:N6	2.31	0.62
48:DG:91:VAL:HG23	48:DG:92:GLY:H	1.65	0.62
48:BG:84:LYS:HG2	48:BG:85:LYS:N	2.11	0.62
28:DP:4:ILE:O	28:DP:6:GLN:N	2.32	0.62
18:CB:23:ASN:HB3	18:CB:188:THR:O	1.99	0.62
16:AS:69:LYS:O	16:AS:72:GLU:HG3	2.00	0.62
1:AA:1317:C:OP1	21:AN:56:PRO:HD2	1.99	0.62
24:BI:18:ASN:N	24:BI:19:PRO:HD2	2.13	0.62
38:BM:21:ALA:CB	38:BM:100:LYS:HG2	2.30	0.62
1:CA:947:G:H5''	12:CM:106:ARG:HB2	1.81	0.62
1:CA:205:A:H2'	1:CA:206:C:H6	1.64	0.62
27:DK:19:VAL:C	27:DK:41:ILE:HD11	2.20	0.62
1:AA:522:C:H41	11:AL:49:ARG:NH2	1.98	0.62
1:AA:1132:C:H2'	1:AA:1133:G:C8	2.34	0.62
23:DB:1469:A:H2'	23:DB:1470:A:C8	2.35	0.62
2:CC:46:LEU:HB3	2:CC:49:ALA:HB3	1.80	0.62
34:D3:31:ILE:HD11	34:D3:34:LYS:HD3	1.81	0.62
23:DB:2070:A:H2'	23:DB:2071:A:C8	2.34	0.62
47:BF:78:ILE:HA	47:BF:82:TYR:CG	2.34	0.62
18:CB:9:LEU:O	18:CB:13:VAL:HG23	1.99	0.62
1:CA:188:C:H2'	1:CA:189:A:O4'	1.99	0.62
6:CG:76:SER:HA	6:CG:84:TYR:O	1.99	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2787:C:H4'	26:BD:62:LYS:HB3	1.81	0.62
23:DB:1274:A:N3	23:DB:1297:C:H1'	2.14	0.62
1:AA:411:A:C4	1:AA:413:G:H1'	2.35	0.62
1:AA:797:C:O2'	1:AA:798:U:H5'	1.99	0.62
23:BB:2516:A:O2'	23:BB:2517:C:H5'	1.99	0.62
23:BB:1690:A:H2'	23:BB:1691:C:O4'	1.99	0.62
23:BB:2810:A:H2'	23:BB:2811:G:O4'	1.99	0.62
40:BH:90:LEU:HB2	40:BH:123:ARG:HB3	1.80	0.62
18:CB:44:LYS:C	18:CB:47:PRO:HD2	2.19	0.62
42:DN:38:LEU:HD11	42:DN:42:LYS:HE3	1.81	0.62
35:DV:30:ILE:HB	35:DV:38:LEU:HB3	1.81	0.62
26:DD:10:GLY:HA3	26:DD:26:VAL:N	2.15	0.62
23:DB:2267:A:C8	23:DB:2267:A:C3'	2.79	0.62
37:BL:78:ARG:HB3	37:BL:113:ALA:HB2	1.82	0.62
23:DB:1173:U:H2'	23:DB:1174:U:C6	2.35	0.62
2:CC:190:THR:HG22	2:CC:193:GLY:O	2.00	0.62
16:AS:52:ASN:HD21	16:AS:54:ARG:HD2	1.63	0.62
47:BF:32:LYS:H	47:BF:95:MET:HE1	1.64	0.62
21:AN:60:ARG:HH21	21:AN:69:PRO:HD3	1.63	0.62
47:DF:29:ARG:HB2	47:DF:29:ARG:HH11	1.64	0.62
43:DO:90:VAL:HG22	43:DO:115:LEU:HD12	1.81	0.62
4:AE:37:VAL:HG12	4:AE:47:PHE:HB3	1.82	0.62
23:DB:1080:A:H4'	24:DI:126:ARG:HD2	1.82	0.62
1:CA:1013:G:H2'	1:CA:1015:G:OP2	1.99	0.62
44:DQ:63:ARG:HH22	44:DQ:96:ASP:CA	2.12	0.62
27:DK:17:ARG:HB3	27:DK:45:GLU:CB	2.30	0.62
44:BQ:26:ALA:HB1	44:BQ:30:VAL:HB	1.82	0.62
45:DS:26:GLY:H	45:DS:71:VAL:HG13	1.64	0.62
41:DJ:49:ASP:OD2	41:DJ:121:LYS:HD3	1.99	0.62
23:DB:2352:A:C6	52:DW:30:VAL:HG11	2.35	0.62
1:CA:1479:C:H2'	1:CA:1480:A:H8	1.64	0.62
23:DB:150:U:H2'	23:DB:151:C:H6	1.65	0.62
23:DB:1911:U:H2'	23:DB:1918:A:N1	2.15	0.62
47:BF:74:ALA:HB3	47:BF:78:ILE:HD13	1.82	0.62
23:BB:2809:A:H2'	23:BB:2810:A:C8	2.34	0.62
43:BO:111:ARG:HD2	43:BO:117:PHE:OXT	1.99	0.62
13:AP:74:LEU:O	13:AP:78:VAL:HG12	1.99	0.62
1:CA:1484:C:O2'	23:DB:1961:C:H5'	1.99	0.62
1:CA:1273:C:H2'	1:CA:1274:A:O4'	1.98	0.62
19:CU:18:PHE:HA	19:CU:21:SER:HB3	1.80	0.62
1:CA:1458:G:H2'	1:CA:1459:G:H8	1.65	0.62
45:DS:27:LYS:O	45:DS:32:ALA:HB2	2.00	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BL:110:VAL:HB	37:BL:127:VAL:HA	1.80	0.62
23:DB:1847:A:H4'	23:DB:1848:A:C8	2.34	0.62
8:CI:5:TYR:HB3	8:CI:88:GLU:OE2	1.99	0.62
1:AA:1527:U:O2'	1:AA:1528:U:H5'	1.99	0.62
48:BG:24:THR:HG22	48:BG:32:LEU:HD22	1.82	0.62
29:BE:106:LYS:NZ	29:BE:201:ALA:HB2	2.15	0.62
43:BO:36:TYR:HA	43:BO:52:SER:HB3	1.81	0.62
8:AI:27:ILE:HB	8:AI:34:LEU:HD22	1.81	0.62
12:AM:106:ARG:NE	12:AM:112:ARG:HG2	2.10	0.62
42:BN:37:THR:OG1	42:BN:40:LYS:HE2	2.00	0.62
12:CM:22:TYR:HD1	12:CM:65:GLU:HA	1.63	0.62
15:CR:38:ILE:H	15:CR:38:ILE:HD13	1.65	0.62
30:DY:5:LYS:HE2	30:DY:5:LYS:N	2.15	0.62
23:BB:1241:A:H2'	23:BB:1242:U:H5'	1.82	0.62
18:CB:119:GLN:HE21	18:CB:125:PHE:HB2	1.63	0.62
38:DM:21:ALA:CB	38:DM:100:LYS:HG2	2.29	0.62
27:BK:87:LEU:HD12	27:BK:92:GLU:HA	1.82	0.62
23:BB:2097:A:H2'	23:BB:2098:U:H6	1.65	0.62
23:DB:1387:A:C4'	23:DB:1469:A:H1'	2.29	0.62
23:BB:1469:A:H2'	23:BB:1470:A:C8	2.34	0.62
2:AC:26:LYS:HG3	2:AC:27:GLU:H	1.64	0.62
23:BB:2579:C:O2'	26:BD:136:ASN:HA	1.98	0.62
3:AD:182:LYS:HG2	3:AD:183:ARG:HG3	1.80	0.62
1:CA:1216:A:H5''	21:CN:4:SER:OG	2.00	0.62
23:BB:850:U:O2'	30:BY:22:THR:HG22	2.00	0.62
5:AF:9:MET:HB2	5:AF:57:ALA:HB1	1.81	0.62
16:AS:17:LYS:HD2	16:AS:30:LEU:HD21	1.82	0.62
1:AA:1180:A:P	8:AI:98:ARG:HH22	2.23	0.62
1:CA:411:A:C4	1:CA:413:G:H1'	2.35	0.62
9:CJ:10:LEU:O	9:CJ:71:LEU:HA	2.00	0.62
4:AE:81:GLN:HE21	4:AE:149:PRO:HD3	1.64	0.62
40:BH:116:ARG:HH21	40:BH:139:PHE:HB3	1.63	0.62
23:DB:2330:G:H1'	52:DW:38:ARG:HB2	1.82	0.62
23:BB:146:A:H2'	23:BB:147:C:C6	2.35	0.62
49:BR:14:VAL:HG21	49:BR:98:ILE:HG12	1.81	0.62
44:DQ:86:SER:HB3	49:DR:51:VAL:HA	1.82	0.62
27:BK:71:ARG:CZ	27:BK:72:PRO:HD3	2.29	0.62
35:DV:80:HIS:HD2	35:DV:83:LYS:H	1.46	0.62
23:DB:2052:A:C8	26:DD:146:ILE:HD11	2.35	0.62
23:BB:395:U:H2'	23:BB:396:G:N7	2.14	0.62
51:DZ:5:CYS:HB3	51:DZ:10:LYS:H	1.65	0.62
40:BH:14:SER:HB2	40:BH:17:ASP:HB3	1.79	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:973:G:OP1	1:CA:974:A:H5'	2.00	0.62
27:DK:85:VAL:O	27:DK:87:LEU:HD23	2.00	0.62
23:DB:2182:U:H2'	23:DB:2183:A:C8	2.35	0.62
23:DB:721:A:H2'	23:DB:722:A:H8	1.64	0.62
23:DB:1535:A:H3'	23:DB:1536:C:H6	1.65	0.62
1:CA:590:U:H2'	1:CA:591:U:H6	1.63	0.62
23:DB:1400:U:H2'	23:DB:1401:G:C8	2.34	0.62
34:D3:56:LEU:HD21	37:DL:51:GLU:HG3	1.81	0.62
1:CA:301:G:H2'	1:CA:302:G:H8	1.65	0.62
18:AB:127:LYS:H	18:AB:127:LYS:HD3	1.64	0.62
36:B2:41:ARG:HH21	36:B2:41:ARG:HB2	1.64	0.62
23:DB:2321:U:H3'	23:DB:2322:A:H5''	1.81	0.62
52:DW:32:ALA:C	52:DW:34:SER:H	2.03	0.62
18:CB:44:LYS:O	18:CB:47:PRO:HD2	2.00	0.62
2:CC:39:ARG:CG	2:CC:56:ILE:HD11	2.30	0.62
14:AQ:75:VAL:HG23	14:AQ:76:ARG:HG2	1.81	0.62
26:DD:105:LYS:H	26:DD:106:LYS:NZ	1.98	0.62
26:DD:25:THR:HG21	26:DD:193:VAL:CG2	2.29	0.62
52:BW:35:ILE:HG12	52:BW:35:ILE:O	1.99	0.62
2:AC:116:ALA:O	2:AC:119:ILE:HG22	1.99	0.62
23:DB:639:U:H2'	23:DB:640:C:C6	2.34	0.62
35:DV:51:GLN:HB2	35:DV:57:TYR:OH	2.00	0.62
13:AP:67:ILE:HD11	13:AP:71:VAL:HG22	1.81	0.62
38:BM:66:ARG:HB2	38:BM:101:VAL:O	2.00	0.62
48:BG:155:PRO:HA	48:BG:170:THR:HA	1.82	0.62
47:BF:168:LEU:HD13	47:BF:169:LEU:N	2.15	0.62
23:DB:2867:G:HO2'	23:DB:2868:A:H8	1.47	0.62
44:DQ:63:ARG:NH2	44:DQ:96:ASP:HA	2.15	0.62
25:BC:159:THR:O	25:BC:194:VAL:HG12	2.00	0.62
1:CA:1053:G:H4'	1:CA:1054:C:H5'	1.82	0.62
23:BB:39:G:H2'	23:BB:40:U:H6	1.63	0.62
15:CR:34:GLU:HB2	19:CU:18:PHE:CZ	2.34	0.62
1:CA:429:U:H3'	3:CD:8:LEU:HD23	1.82	0.62
7:CH:8:ASP:OD1	7:CH:12:ARG:HD2	2.00	0.62
45:DS:18:ARG:HB3	45:DS:76:VAL:HG22	1.82	0.62
2:CC:32:LEU:HD21	21:CN:92:ILE:HG13	1.80	0.62
43:DO:111:ARG:HD2	43:DO:117:PHE:OXT	1.99	0.62
1:CA:1461:G:H2'	1:CA:1462:C:C6	2.35	0.62
1:AA:600:A:H5''	7:AH:88:LYS:HD2	1.81	0.62
23:BB:1842:G:H2'	23:BB:1843:C:C6	2.35	0.62
1:CA:195:A:H2'	1:CA:196:A:C8	2.34	0.62
23:DB:288:U:H2'	23:DB:289:G:C8	2.34	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CO:33:THR:HG23	20:CO:63:ARG:NH1	2.15	0.62
29:DE:192:ALA:O	29:DE:196:VAL:HG23	2.00	0.62
40:DH:77:THR:HG23	40:DH:143:ILE:HG22	1.81	0.62
23:BB:1196:C:H2'	23:BB:1197:G:C8	2.35	0.62
37:BL:143:GLU:HG2	37:BL:144:GLU:N	2.13	0.62
48:BG:148:ARG:HB2	48:BG:152:ARG:NH1	2.13	0.62
42:BN:45:ARG:O	42:BN:49:GLU:HG3	2.00	0.62
23:BB:2443:C:O2'	23:BB:2444:G:H5'	2.00	0.62
49:DR:14:VAL:HG21	49:DR:98:ILE:HG12	1.81	0.62
47:DF:31:GLU:O	47:DF:32:LYS:HD3	2.00	0.62
23:DB:581:C:H2'	23:DB:582:A:C8	2.33	0.62
1:CA:840:C:N3	1:CA:842:U:H4'	2.15	0.62
23:BB:639:U:H2'	23:BB:640:C:C6	2.34	0.62
25:DC:196:ASN:ND2	25:DC:199:HIS:HB2	2.14	0.62
1:CA:652:U:H1'	1:CA:653:U:C5	2.35	0.62
3:AD:26:ALA:C	3:AD:28:ASP:H	2.03	0.62
49:BR:2:TYR:H	49:BR:42:ALA:HB2	1.64	0.62
1:AA:674:G:H2'	1:AA:675:A:H8	1.62	0.62
23:DB:1779:U:H5	23:DB:1784:A:N7	1.97	0.62
34:B3:3:ILE:HG21	34:B3:62:PRO:HG2	1.81	0.62
15:AR:37:LYS:HZ3	19:AU:22:CYS:HB2	1.65	0.62
23:DB:1782:U:H3'	57:DB:3606:HOH:O	2.00	0.62
23:BB:2104:C:H2'	23:BB:2105:U:C6	2.34	0.62
3:AD:138:PRO:HA	3:AD:181:PHE:HD2	1.64	0.62
1:AA:441:A:H61	1:AA:493:A:N6	1.97	0.62
1:CA:859:G:H2'	1:CA:860:A:C8	2.35	0.62
23:BB:1400:U:H2'	23:BB:1401:G:C8	2.35	0.62
23:DB:1026:G:H2'	23:DB:1027:A:H8	1.65	0.62
10:AK:31:VAL:HG21	10:AK:66:ALA:HA	1.82	0.61
23:DB:2271:G:H2'	23:DB:2272:U:C5	2.34	0.61
24:DI:72:THR:HG22	24:DI:115:ASP:OD2	1.99	0.61
24:DI:78:LEU:HA	24:DI:81:LYS:HE2	1.81	0.61
18:CB:33:ALA:HB2	18:CB:38:HIS:HA	1.81	0.61
16:AS:44:ILE:HA	16:AS:61:VAL:CG1	2.30	0.61
23:DB:878:A:N3	23:DB:878:A:H2'	2.14	0.61
8:CI:70:GLY:O	8:CI:74:GLN:HB2	2.00	0.61
49:DR:16:GLU:HA	49:DR:98:ILE:HG22	1.82	0.61
26:DD:148:GLN:HB2	26:DD:152:PRO:HG2	1.80	0.61
25:BC:77:VAL:HG23	25:BC:112:GLY:N	2.15	0.61
23:BB:1245:G:OP1	37:BL:13:LYS:HE3	2.00	0.61
23:DB:2143:C:C4	23:DB:2144:G:H1'	2.35	0.61
1:CA:955:U:H1'	1:CA:1227:A:H61	1.64	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:CN:65:GLN:NE2	21:CN:65:GLN:H	1.98	0.61
1:CA:676:A:H1'	10:CK:116:PRO:HB3	1.82	0.61
3:CD:25:ARG:CZ	3:CD:26:ALA:HB2	2.30	0.61
23:DB:441:U:H2'	23:DB:442:G:H8	1.65	0.61
23:DB:851:C:H2'	23:DB:852:U:H6	1.64	0.61
1:CA:429:U:H1'	1:CA:430:A:H5''	1.82	0.61
45:BS:13:SER:OG	45:BS:16:LYS:HB2	2.00	0.61
1:CA:1422:G:O2'	1:CA:1423:G:H5'	2.00	0.61
23:DB:222:A:N1	23:DB:233:A:H5''	2.15	0.61
1:AA:5:U:H1'	1:AA:6:G:N2	2.15	0.61
23:BB:2569:G:O2'	23:BB:2570:G:H5'	2.00	0.61
23:DB:532:A:N3	23:DB:532:A:H2'	2.15	0.61
23:BB:346:A:H5'	23:BB:346:A:N3	2.15	0.61
23:DB:1464:G:H2'	23:DB:1465:G:H8	1.65	0.61
1:CA:313:A:H2'	1:CA:314:C:C6	2.34	0.61
1:AA:714:G:H2'	1:AA:715:A:C8	2.35	0.61
10:AK:124:LYS:CA	19:AU:34:ARG:HB3	2.29	0.61
23:DB:923:G:H1'	52:DW:23:LYS:HZ2	1.65	0.61
25:DC:89:ASN:O	25:DC:105:ALA:HB3	2.00	0.61
2:CC:56:ILE:HG23	2:CC:65:VAL:HG12	1.82	0.61
52:DW:35:ILE:HG13	52:DW:57:THR:OG1	2.00	0.61
10:AK:91:GLY:O	10:AK:95:THR:HG22	2.00	0.61
10:CK:91:GLY:O	10:CK:95:THR:HG22	1.99	0.61
13:AP:3:THR:HG22	13:AP:66:THR:HB	1.82	0.61
41:BJ:64:VAL:O	41:BJ:65:THR:HG22	2.00	0.61
47:DF:121:PHE:HB2	47:DF:126:ASN:O	1.99	0.61
4:AE:28:ARG:HH22	4:AE:30:PHE:HA	1.63	0.61
12:CM:94:LEU:C	12:CM:108:ARG:HG2	2.20	0.61
16:CS:52:ASN:HB2	16:CS:76:THR:HA	1.80	0.61
23:BB:1244:A:H5''	37:BL:8:PRO:HD3	1.82	0.61
28:DP:59:THR:OG1	28:DP:72:VAL:HG12	2.00	0.61
23:DB:845:A:C2	23:DB:847:U:H1'	2.35	0.61
29:DE:48:THR:HG22	29:DE:86:ALA:HB3	1.82	0.61
30:DY:18:LYS:O	30:DY:22:THR:HG23	2.00	0.61
30:BY:18:LYS:O	30:BY:22:THR:HG23	1.99	0.61
23:DB:233:A:H61	23:DB:428:A:N6	1.98	0.61
44:DQ:9:ALA:C	44:DQ:11:ALA:H	2.03	0.61
1:AA:41:G:H2'	1:AA:42:G:C8	2.34	0.61
21:CN:73:LEU:HD12	21:CN:83:VAL:HG21	1.81	0.61
23:DB:1412:U:H2'	23:DB:1413:A:C8	2.35	0.61
1:CA:714:G:H2'	1:CA:715:A:C8	2.35	0.61
23:BB:1274:A:N3	23:BB:1297:C:H1'	2.15	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2760:C:O2'	23:BB:2761:A:H5'	1.99	0.61
23:DB:431:U:O2'	23:DB:432:A:H5'	2.00	0.61
26:BD:174:SER:O	26:BD:175:LEU:HB2	1.99	0.61
1:CA:1381:U:H2'	1:CA:1382:C:H6	1.65	0.61
3:CD:48:SER:O	3:CD:52:VAL:HG23	2.01	0.61
4:AE:114:LEU:HD13	4:AE:122:VAL:HG21	1.81	0.61
1:AA:524:G:H2'	1:AA:525:C:C6	2.36	0.61
23:DB:1390:U:O2'	23:DB:1391:U:H5'	2.00	0.61
12:AM:80:MET:HA	12:AM:87:GLY:HA3	1.81	0.61
50:DT:30:ILE:O	50:DT:85:VAL:HG23	2.00	0.61
1:CA:1347:G:N2	1:CA:1373:G:H2'	2.14	0.61
2:CC:39:ARG:HG2	2:CC:56:ILE:HD11	1.81	0.61
40:BH:66:ASN:HA	40:BH:135:HIS:ND1	2.15	0.61
25:BC:153:LEU:HD13	25:BC:175:LEU:HD21	1.80	0.61
23:DB:1180:U:H2'	23:DB:1181:U:C6	2.33	0.61
40:DH:94:ILE:O	40:DH:122:LEU:HB2	2.00	0.61
44:BQ:57:ARG:HA	44:BQ:60:TRP:CE3	2.34	0.61
47:BF:91:ARG:HD3	47:BF:91:ARG:N	2.15	0.61
30:DY:6:ILE:O	30:DY:34:THR:HA	1.99	0.61
18:AB:85:SER:HB2	18:AB:88:GLN:HE22	1.65	0.61
29:DE:28:VAL:O	29:DE:32:VAL:HG13	1.99	0.61
40:DH:41:LYS:O	40:DH:45:GLU:HG3	1.99	0.61
12:CM:84:CYS:SG	12:CM:86:ARG:HB2	2.40	0.61
16:CS:52:ASN:HB2	16:CS:76:THR:HG22	1.82	0.61
27:BK:61:VAL:HG13	27:BK:87:LEU:HD21	1.82	0.61
51:BZ:31:PRO:HB2	51:BZ:33:LEU:CD1	2.30	0.61
18:CB:81:ASP:HA	18:CB:84:LEU:HD22	1.82	0.61
23:DB:470:A:H61	50:DT:72:GLN:HE22	1.47	0.61
6:AG:62:GLU:HG3	6:AG:69:ARG:HH22	1.65	0.61
23:DB:155:A:H2'	23:DB:156:A:C8	2.35	0.61
1:CA:1521:C:H2'	1:CA:1522:U:H6	1.63	0.61
1:CA:607:A:H2'	1:CA:608:A:C8	2.35	0.61
23:DB:1028:A:H2'	23:DB:1029:A:C8	2.35	0.61
23:BB:129:C:H2'	23:BB:130:C:C6	2.35	0.61
23:DB:1406:U:H2'	23:DB:1407:G:C8	2.35	0.61
41:DJ:23:LYS:HD2	41:DJ:142:ILE:HG12	1.83	0.61
23:DB:1690:A:H2'	23:DB:1691:C:O4'	1.99	0.61
1:AA:745:G:H2'	1:AA:746:A:C8	2.35	0.61
23:BB:466:A:N3	23:BB:683:U:H1'	2.15	0.61
28:DP:30:TRP:CD1	28:DP:39:LEU:HG	2.35	0.61
23:BB:273:G:H2'	23:BB:274:C:C6	2.36	0.61
38:DM:11:LYS:HD3	38:DM:86:LYS:HD3	1.81	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:DE:161:ALA:HA	29:DE:164:LEU:HB2	1.82	0.61
22:DA:48:U:H2'	22:DA:49:C:C6	2.35	0.61
1:CA:854:U:H3'	1:CA:871:U:H3	1.64	0.61
50:DT:53:VAL:HG11	50:DT:87:LEU:HD13	1.82	0.61
8:CI:79:ARG:HB3	8:CI:79:ARG:HH11	1.66	0.61
25:DC:156:SER:O	25:DC:194:VAL:HG11	1.99	0.61
23:DB:1199:U:H2'	23:DB:1200:C:C6	2.35	0.61
1:AA:1288:A:H2'	1:AA:1289:A:O4'	2.00	0.61
48:BG:86:LEU:HG	48:BG:163:TYR:HD1	1.65	0.61
23:BB:27:G:H1'	23:BB:513:A:N6	2.15	0.61
2:AC:168:ARG:NH1	2:AC:172:VAL:HG23	2.16	0.61
27:DK:35:VAL:HG23	27:DK:36:GLY:N	2.13	0.61
50:BT:69:ARG:HB2	50:BT:75:GLY:H	1.65	0.61
46:DU:73:ASN:HB3	46:DU:95:PHE:CZ	2.35	0.61
47:DF:135:ILE:HG12	47:DF:137:PHE:CD1	2.36	0.61
47:BF:110:ILE:HA	47:BF:111:ARG:NH2	2.15	0.61
1:AA:921:U:H2'	1:AA:922:G:C8	2.36	0.61
25:BC:4:LYS:HE2	25:BC:5:CYS:H	1.65	0.61
2:AC:41:TYR:O	2:AC:45:GLU:HG3	2.00	0.61
1:CA:1307:U:H2'	1:CA:1308:U:C6	2.35	0.61
33:B1:9:LYS:N	33:B1:9:LYS:HD3	2.14	0.61
23:BB:2189:U:H2'	23:BB:2190:G:C8	2.36	0.61
23:BB:1149:G:H2'	23:BB:1150:C:H6	1.63	0.61
23:BB:721:A:H2'	23:BB:722:A:H8	1.64	0.61
23:BB:1061:U:O4	24:BI:10:LEU:HA	2.00	0.61
20:AO:67:LEU:HD13	20:AO:88:ARG:HH12	1.65	0.61
1:CA:73:C:H2'	1:CA:74:A:H8	1.66	0.61
38:DM:64:TRP:HB2	38:DM:104:GLU:HB2	1.82	0.61
1:CA:157:U:O2'	1:CA:158:G:H5'	1.99	0.61
49:BR:43:ASN:ND2	49:BR:44:GLY:H	1.98	0.61
1:AA:1476:A:H2'	1:AA:1477:U:C6	2.36	0.61
34:D3:3:ILE:HG21	34:D3:62:PRO:HG2	1.82	0.61
51:DZ:39:TRP:HB2	51:DZ:46:PHE:CE2	2.35	0.61
22:BA:48:U:H2'	22:BA:49:C:C6	2.35	0.61
6:CG:71:THR:HG22	6:CG:141:HIS:NE2	2.16	0.61
7:CH:113:ARG:HH21	7:CH:117:GLN:HB2	1.64	0.61
45:BS:4:ILE:HG22	45:BS:106:VAL:HG22	1.82	0.61
1:AA:1521:C:H2'	1:AA:1522:U:C6	2.35	0.61
23:BB:1230:A:H2'	23:BB:1231:U:H6	1.65	0.61
23:BB:1779:U:H5	23:BB:1784:A:N7	1.97	0.61
23:DB:2135:A:H5''	23:DB:2157:G:N2	2.16	0.61
1:CA:1040:U:H2'	1:CA:1041:G:C8	2.35	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CI:5:TYR:HD1	8:CI:20:ILE:HG22	1.66	0.61
32:B4:13:ASN:O	32:B4:27:CYS:HA	2.00	0.61
1:AA:255:G:H2'	1:AA:256:U:C6	2.36	0.61
40:BH:68:ARG:NH1	40:BH:72:ILE:HD13	2.16	0.61
8:AI:28:VAL:HG13	8:AI:32:ARG:O	2.00	0.61
6:CG:62:GLU:O	6:CG:66:GLU:HG3	1.99	0.61
26:BD:118:PHE:HZ	26:BD:123:LYS:HZ3	1.48	0.61
45:BS:59:GLU:OE2	45:BS:66:ILE:HG23	2.00	0.61
29:BE:58:LYS:C	29:BE:60:TRP:N	2.51	0.61
26:BD:5:VAL:N	26:BD:32:ASN:HD21	1.98	0.61
38:DM:66:ARG:HB2	38:DM:101:VAL:O	1.99	0.61
23:DB:2769:U:H2'	23:DB:2770:G:C8	2.34	0.61
1:CA:239:U:C5'	1:CA:239:U:H6	2.13	0.61
23:DB:2064:C:H2'	23:DB:2065:C:C6	2.34	0.61
26:DD:40:LEU:HD23	26:DD:46:ARG:HG2	1.82	0.61
1:CA:384:G:H2'	1:CA:385:C:C6	2.35	0.61
41:BJ:36:LEU:HD12	41:BJ:121:LYS:HB2	1.83	0.61
23:BB:233:A:H61	23:BB:428:A:N6	1.98	0.61
23:BB:596:U:H2'	23:BB:597:G:C8	2.35	0.61
1:CA:736:C:H2'	1:CA:737:C:C6	2.36	0.61
3:CD:88:ASN:O	3:CD:92:LEU:HD23	2.00	0.61
44:BQ:9:ALA:C	44:BQ:11:ALA:H	2.02	0.61
42:BN:43:GLU:O	42:BN:47:VAL:HG23	2.00	0.61
28:BP:26:GLU:HG3	28:BP:43:GLU:HB2	1.81	0.61
1:AA:607:A:H2'	1:AA:608:A:C8	2.35	0.61
23:BB:2078:C:H2'	23:BB:2079:U:C6	2.35	0.61
1:AA:1077:G:N2	1:AA:1079:G:H3'	2.15	0.61
23:DB:1842:G:H2'	23:DB:1843:C:C6	2.35	0.61
28:BP:32:VAL:HA	28:BP:37:LYS:HA	1.82	0.61
23:DB:27:G:H1'	23:DB:513:A:N6	2.15	0.61
52:DW:37:VAL:HG11	52:DW:38:ARG:HH11	1.65	0.61
48:DG:89:VAL:HB	48:DG:159:LYS:HA	1.81	0.61
46:BU:5:ARG:HH22	46:BU:93:ARG:HD3	1.64	0.61
28:DP:56:SER:HB2	28:DP:75:THR:CG2	2.30	0.61
29:BE:58:LYS:CD	29:BE:58:LYS:H	2.13	0.61
12:AM:79:LEU:HB2	12:AM:84:CYS:SG	2.39	0.61
27:BK:70:ARG:HB3	27:BK:76:VAL:HG13	1.82	0.61
4:AE:152:VAL:HA	4:AE:155:LYS:HD3	1.81	0.61
17:CT:43:LYS:HD3	17:CT:43:LYS:H	1.64	0.61
23:BB:714:U:H1'	23:BB:717:C:H5	1.66	0.61
1:AA:1036:A:H2'	1:AA:1037:C:H5'	1.81	0.61
11:AL:113:ARG:HG2	11:AL:118:VAL:HB	1.82	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DN:59:SER:O	42:DN:63:ARG:HB2	2.00	0.61
21:CN:30:ILE:HG22	21:CN:44:VAL:HG21	1.82	0.61
1:AA:1343:G:H4'	8:AI:123:ARG:O	2.00	0.61
1:CA:312:C:H2'	1:CA:313:A:H8	1.64	0.61
1:CA:801:U:H2'	1:CA:802:A:H8	1.65	0.61
23:DB:1924:C:O2'	23:DB:1925:C:H5'	2.00	0.61
1:AA:1117:A:H5''	8:AI:105:ARG:NH2	2.16	0.61
23:BB:2019:A:H2	23:BB:2035:G:H22	1.49	0.61
23:DB:1531:C:H2'	23:DB:1532:A:C8	2.35	0.61
1:AA:91:U:H2'	1:AA:92:U:C6	2.35	0.61
1:AA:157:U:O2'	1:AA:158:G:H5'	1.99	0.61
23:BB:1138:G:H2'	23:BB:1139:G:O4'	2.01	0.61
50:BT:53:VAL:HG11	50:BT:87:LEU:HD13	1.82	0.61
5:CF:88:MET:HE1	5:CF:90:MET:HG2	1.81	0.61
41:DJ:52:ASP:O	41:DJ:54:ILE:HG22	2.01	0.61
24:BI:11:GLN:HA	24:BI:55:PRO:HA	1.82	0.61
12:CM:22:TYR:HB2	12:CM:65:GLU:CD	2.20	0.61
25:BC:128:THR:HA	25:BC:190:THR:HA	1.83	0.61
18:AB:53:LEU:HD12	18:AB:53:LEU:N	2.16	0.61
50:DT:69:ARG:HG2	50:DT:70:HIS:H	1.65	0.61
30:BY:5:LYS:HG3	30:BY:36:GLU:HG3	1.83	0.61
18:CB:53:LEU:HD22	18:CB:212:TYR:HE1	1.65	0.61
47:DF:32:LYS:H	47:DF:95:MET:HE1	1.66	0.61
1:CA:1006:G:O2'	1:CA:1007:U:H5'	2.00	0.61
28:BP:88:ARG:HB2	28:BP:112:ARG:HH12	1.65	0.61
23:BB:1652:A:H62	42:BN:11:ASN:HD21	1.49	0.61
1:AA:591:U:H2'	1:AA:592:G:C8	2.35	0.61
23:BB:851:C:H2'	23:BB:852:U:H6	1.66	0.61
1:AA:337:G:H2'	1:AA:338:A:H8	1.66	0.61
1:CA:1165:U:H2'	1:CA:1166:G:O4'	2.00	0.61
23:BB:2563:U:H2'	23:BB:2565:A:OP2	2.00	0.61
4:AE:64:GLU:O	4:AE:68:ARG:HG2	2.00	0.61
23:DB:1716:U:H2'	23:DB:1717:A:C8	2.36	0.61
1:CA:1292:G:H2'	1:CA:1293:C:C6	2.36	0.61
52:BW:32:ALA:C	52:BW:34:SER:H	2.04	0.61
1:CA:1028:C:H2'	1:CA:1029:U:O2	2.01	0.61
31:D0:9:ARG:O	31:D0:12:ARG:HB3	2.01	0.61
23:BB:2183:A:H2'	23:BB:2184:A:H8	1.64	0.61
1:AA:1240:U:H4'	1:AA:1241:G:OP2	2.01	0.61
9:CJ:8:ILE:HB	9:CJ:74:VAL:HB	1.82	0.61
5:CF:29:ILE:HD13	5:CF:64:VAL:HG11	1.82	0.61
5:CF:3:HIS:N	5:CF:92:THR:HG23	2.09	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:DE:105:LEU:O	29:DE:109:LEU:HB2	2.01	0.61
10:AK:22:ILE:HD12	10:AK:85:VAL:HG22	1.81	0.61
23:DB:146:A:H2'	23:DB:147:C:C6	2.35	0.61
48:DG:84:LYS:HG2	48:DG:85:LYS:N	2.12	0.61
27:DK:34:GLY:O	27:DK:36:GLY:N	2.34	0.61
37:BL:79:LEU:HG	37:BL:112:LEU:HA	1.82	0.61
3:CD:145:ARG:NH2	3:CD:147:LYS:HE2	2.16	0.61
21:AN:46:LYS:HB3	21:AN:46:LYS:NZ	2.16	0.61
47:BF:121:PHE:CB	47:BF:127:TYR:HA	2.30	0.61
4:CE:37:VAL:HG11	4:CE:113:VAL:HG12	1.81	0.61
26:DD:148:GLN:CG	26:DD:152:PRO:HG2	2.31	0.61
11:CL:41:PRO:HB3	11:CL:49:ARG:NH1	2.16	0.61
23:BB:2185:U:H2'	23:BB:2186:G:C8	2.35	0.61
18:CB:79:VAL:HG13	18:CB:80:LYS:N	2.16	0.61
23:DB:2496:C:OP1	38:DM:82:MET:HB2	2.00	0.61
15:AR:34:GLU:HB2	19:AU:18:PHE:CZ	2.36	0.61
4:CE:64:GLU:O	4:CE:68:ARG:HG2	2.01	0.61
23:BB:1716:U:H2'	23:BB:1717:A:C8	2.36	0.61
23:DB:419:U:H2'	23:DB:420:C:C6	2.35	0.61
23:BB:1558:C:H4'	23:BB:1559:U:C5'	2.30	0.61
23:DB:1558:C:H4'	23:DB:1559:U:C5'	2.31	0.61
1:AA:854:U:H3'	1:AA:871:U:H3	1.65	0.61
24:BI:85:ILE:HD13	24:BI:137:LEU:HD21	1.82	0.61
23:BB:1049:C:H1'	23:BB:1113:U:H4'	1.82	0.61
23:DB:1459:G:H4'	23:DB:1461:C:C4	2.35	0.61
23:BB:533:G:H2'	23:BB:534:U:C6	2.35	0.61
2:CC:182:ASP:HB2	2:CC:203:LYS:HE3	1.82	0.61
1:AA:1461:G:H2'	1:AA:1462:C:C6	2.36	0.61
19:CU:41:THR:O	19:CU:45:LYS:HB2	2.01	0.61
1:AA:1328:C:H2'	1:AA:1329:A:O4'	2.01	0.61
50:DT:28:ASN:HA	50:DT:91:GLN:HE22	1.66	0.61
26:DD:8:LYS:N	26:DD:201:LEU:HD11	2.14	0.61
26:BD:106:LYS:O	26:BD:107:VAL:HB	1.99	0.61
5:AF:93:LYS:O	5:AF:94:HIS:HB2	2.01	0.61
26:DD:109:VAL:HG11	26:DD:193:VAL:HB	1.81	0.61
52:DW:19:ARG:NE	52:DW:19:ARG:H	1.98	0.61
21:AN:12:ARG:NE	21:AN:58:ARG:HG3	2.11	0.61
18:AB:53:LEU:HG	18:AB:216:VAL:HA	1.83	0.61
16:AS:45:GLY:H	16:AS:61:VAL:HB	1.66	0.61
1:AA:1314:C:H2'	1:AA:1315:U:C6	2.36	0.61
1:AA:1218:C:H2'	1:AA:1219:A:C8	2.36	0.61
47:BF:134:GLN:HB3	47:BF:149:ARG:HG3	1.81	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:55:VAL:HG23	2:AC:68:HIS:NE2	2.16	0.61
23:DB:636:G:H3'	37:DL:128:THR:HG21	1.81	0.61
1:AA:384:G:H2'	1:AA:385:C:C6	2.35	0.61
23:BB:233:A:H61	23:BB:428:A:H61	1.47	0.61
23:DB:608:A:H2'	23:DB:609:A:C8	2.36	0.61
37:DL:110:VAL:HG23	37:DL:126:ARG:O	2.00	0.61
23:BB:78:U:O2'	23:BB:79:C:H5'	2.01	0.61
1:AA:1151:A:HO2'	1:AA:1152:A:H8	1.48	0.61
14:CQ:13:SER:HB3	14:CQ:21:VAL:HB	1.82	0.61
1:AA:470:C:H2'	1:AA:471:U:C6	2.36	0.61
24:BI:105:LEU:HD11	24:BI:139:VAL:HG11	1.82	0.61
23:BB:1826:G:H2'	23:BB:1827:U:H6	1.66	0.61
29:BE:161:ALA:HA	29:BE:164:LEU:HB2	1.83	0.61
23:BB:2150:C:H2'	23:BB:2151:U:C6	2.36	0.61
1:CA:692:U:O2	1:CA:694:A:H5''	2.01	0.61
14:AQ:13:SER:HB3	14:AQ:21:VAL:HB	1.83	0.61
18:CB:163:ILE:HD11	18:CB:202:ASN:O	2.00	0.61
9:CJ:10:LEU:HD12	9:CJ:22:THR:HG22	1.83	0.61
40:BH:132:PHE:HB2	40:BH:140:ALA:HB3	1.83	0.61
23:BB:2658:C:C5'	48:BG:159:LYS:HZ2	2.14	0.61
23:DB:635:C:O2'	23:DB:639:U:H5''	2.01	0.61
23:BB:2720:U:H5''	28:BP:52:ARG:NH2	2.11	0.61
28:DP:88:ARG:HB2	28:DP:112:ARG:HH12	1.63	0.61
3:AD:90:LEU:HD21	3:AD:196:GLU:HB3	1.83	0.61
39:BX:14:LEU:CD2	39:BX:57:LEU:HD11	2.31	0.61
27:DK:87:LEU:HD12	27:DK:92:GLU:HA	1.82	0.61
25:BC:89:ASN:O	25:BC:105:ALA:HB3	2.00	0.61
25:BC:156:SER:O	25:BC:194:VAL:HG11	2.00	0.61
1:CA:209:U:H5'	1:CA:210:C:H5	1.66	0.61
23:DB:1796:U:H2'	23:DB:1797:G:C8	2.36	0.61
1:CA:844:G:H2'	1:CA:845:A:H8	1.66	0.61
4:CE:95:MET:HA	4:CE:124:ALA:HB2	1.82	0.61
23:BB:1535:A:H3'	23:BB:1536:C:H6	1.66	0.61
23:BB:851:C:H2'	23:BB:852:U:C6	2.36	0.61
23:DB:1558:C:H4'	23:DB:1559:U:H5''	1.82	0.61
40:DH:27:ARG:NH1	51:DZ:60:ASP:HA	2.16	0.61
37:DL:132:ARG:O	37:DL:135:ILE:HG22	2.00	0.61
1:CA:36:C:O3'	11:CL:119:LYS:HA	2.01	0.61
23:BB:2698:U:H2'	23:BB:2699:C:C6	2.36	0.61
23:DB:997:G:O2'	23:DB:998:C:H5'	2.01	0.61
49:DR:43:ASN:ND2	49:DR:44:GLY:H	1.99	0.61
1:CA:1109:C:H2'	1:CA:1110:A:O4'	2.00	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CE:92:ARG:HB3	4:CE:92:ARG:HH11	1.66	0.61
49:DR:71:LYS:HE3	49:DR:73:LYS:NZ	2.16	0.61
23:BB:1406:U:H2'	23:BB:1407:G:C8	2.35	0.61
52:BW:23:LYS:HD2	52:BW:24:ARG:N	2.15	0.60
50:DT:14:PRO:HA	50:DT:32:LEU:CB	2.31	0.60
10:CK:91:GLY:HA2	10:CK:94:SER:HB3	1.83	0.60
40:DH:110:VAL:HG23	40:DH:132:PHE:CG	2.36	0.60
23:BB:2728:U:H2'	23:BB:2729:G:H8	1.65	0.60
23:DB:321:U:O4'	29:DE:159:LEU:HG	2.01	0.60
47:DF:49:LEU:HD11	47:DF:66:ILE:HD12	1.82	0.60
25:BC:74:PRO:HG2	25:BC:96:LYS:CG	2.31	0.60
23:BB:264:C:H2'	23:BB:265:A:H5''	1.82	0.60
23:DB:714:U:H1'	23:DB:717:C:H5	1.66	0.60
23:BB:1386:C:H5''	23:BB:1396:U:O2	2.01	0.60
18:CB:130:LYS:HA	18:CB:133:ALA:HB3	1.83	0.60
47:DF:78:ILE:HA	47:DF:82:TYR:CG	2.35	0.60
23:DB:233:A:H61	23:DB:428:A:H61	1.48	0.60
1:AA:1521:C:H2'	1:AA:1522:U:H6	1.66	0.60
1:CA:909:A:H2'	1:CA:910:C:O4'	2.00	0.60
43:DO:58:ILE:O	43:DO:62:LEU:HD23	2.01	0.60
23:DB:259:G:H2'	23:DB:260:G:H8	1.66	0.60
1:CA:5:U:H1'	1:CA:6:G:N2	2.16	0.60
23:DB:1657:U:O2'	23:DB:1658:C:H5'	2.01	0.60
23:DB:2849:U:H4'	23:DB:2850:A:H5'	1.83	0.60
1:CA:60:A:H4'	1:CA:61:G:OP1	1.99	0.60
23:DB:2758:A:H2'	23:DB:2759:G:O4'	2.01	0.60
23:BB:1412:U:H2'	23:BB:1413:A:C8	2.36	0.60
23:BB:2814:A:H2'	23:BB:2815:C:H6	1.65	0.60
18:CB:16:GLY:HA2	18:CB:40:ILE:HG13	1.82	0.60
12:AM:48:SER:O	12:AM:52:ILE:HG22	2.00	0.60
23:DB:1197:G:H2'	23:DB:1198:U:H6	1.66	0.60
8:AI:4:GLN:NE2	8:AI:21:LYS:HE3	2.16	0.60
30:BY:30:ARG:H	30:BY:30:ARG:HD3	1.66	0.60
48:DG:102:ILE:HD11	48:DG:116:LEU:HD11	1.83	0.60
23:DB:1060:U:O4	24:DI:131:THR:HG22	2.01	0.60
12:AM:79:LEU:HD13	12:AM:84:CYS:SG	2.40	0.60
18:AB:151:LYS:HG3	18:AB:152:ASP:H	1.65	0.60
47:DF:64:PRO:HA	47:DF:88:VAL:CG2	2.31	0.60
25:DC:77:VAL:HG23	25:DC:112:GLY:N	2.15	0.60
27:BK:7:MET:SD	27:BK:20:MET:HB2	2.41	0.60
38:BM:66:ARG:HG3	38:BM:101:VAL:CG2	2.31	0.60
44:DQ:80:ASN:O	44:DQ:83:LYS:HB3	2.01	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:BK:85:VAL:O	27:BK:87:LEU:HD23	2.01	0.60
11:AL:49:ARG:HH12	11:AL:88:ASP:CB	2.14	0.60
23:DB:1386:C:H2'	23:DB:1387:A:H8	1.66	0.60
23:BB:635:C:O2'	23:BB:639:U:H5''	2.00	0.60
1:AA:502:A:H2'	1:AA:503:C:C6	2.35	0.60
23:BB:2064:C:H2'	23:BB:2065:C:H6	1.66	0.60
1:CA:723:U:O4'	19:CU:48:LYS:HD3	2.00	0.60
23:DB:1923:U:H2'	23:DB:1924:C:H6	1.65	0.60
23:DB:775:G:H4'	23:DB:776:G:H5'	1.82	0.60
23:BB:1346:G:O2'	23:BB:1347:A:H5'	2.01	0.60
44:DQ:29:ARG:HG2	44:DQ:29:ARG:HH11	1.66	0.60
23:BB:296:U:H2'	23:BB:297:G:H8	1.66	0.60
23:BB:979:A:H2'	23:BB:982:C:H41	1.66	0.60
50:DT:32:LEU:HG	50:DT:83:ALA:CB	2.32	0.60
19:AU:40:PRO:HA	19:AU:44:ARG:HB2	1.83	0.60
9:AJ:37:ARG:HE	9:AJ:77:VAL:HG21	1.67	0.60
23:DB:898:C:O3'	23:DB:899:A:H4'	2.00	0.60
1:AA:1084:G:H2'	1:AA:1085:U:C5	2.36	0.60
46:BU:47:PRO:O	46:BU:49:PRO:HD3	2.01	0.60
24:DI:25:PRO:O	24:DI:29:GLN:HG3	2.01	0.60
24:BI:20:SER:O	24:BI:25:PRO:HD2	2.02	0.60
39:BX:50:VAL:O	39:BX:54:LYS:HB2	2.02	0.60
23:DB:357:C:H2'	23:DB:358:U:C6	2.36	0.60
1:CA:985:C:H2'	1:CA:986:U:C6	2.36	0.60
23:DB:160:A:H2'	23:DB:161:A:C8	2.37	0.60
23:BB:591:U:H1'	34:B3:1:PRO:N	2.16	0.60
1:CA:209:U:H5'	1:CA:210:C:C5	2.36	0.60
23:DB:62:U:O2'	23:DB:63:A:H5'	2.01	0.60
23:BB:38:A:N3	29:BE:43:THR:HB	2.15	0.60
25:DC:78:GLU:OE1	25:DC:94:LEU:HD22	2.01	0.60
23:DB:106:C:H2'	23:DB:107:G:C8	2.36	0.60
1:AA:723:U:O4'	19:AU:48:LYS:HD3	2.01	0.60
23:BB:532:A:N3	23:BB:532:A:H2'	2.16	0.60
23:BB:2814:A:H2'	23:BB:2815:C:C6	2.36	0.60
23:BB:775:G:H4'	23:BB:776:G:H5'	1.84	0.60
1:CA:176:C:H2'	1:CA:177:G:N3	2.17	0.60
20:CO:71:LYS:HZ2	20:CO:72:ARG:HG2	1.65	0.60
23:DB:1947:C:H2'	23:DB:1948:G:H8	1.66	0.60
8:CI:49:GLN:C	8:CI:51:LEU:H	2.04	0.60
19:CU:40:PRO:HA	19:CU:44:ARG:HB2	1.81	0.60
12:AM:13:HIS:O	12:AM:16:ILE:HG12	2.02	0.60
8:CI:14:SER:HA	8:CI:68:GLY:O	2.01	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:128:THR:HG23	25:DC:190:THR:HG22	1.82	0.60
35:BV:38:LEU:HG	35:BV:40:ILE:HG23	1.84	0.60
48:DG:24:THR:HG22	48:DG:32:LEU:HD22	1.84	0.60
29:BE:105:LEU:O	29:BE:109:LEU:HB2	2.01	0.60
5:CF:18:VAL:HG11	5:CF:58:HIS:NE2	2.16	0.60
5:AF:38:ARG:HD3	5:AF:97:THR:HA	1.84	0.60
8:AI:5:TYR:HB2	8:AI:20:ILE:HB	1.82	0.60
23:DB:1727:C:H2'	23:DB:1728:C:O4'	2.01	0.60
37:DL:78:ARG:HB3	37:DL:113:ALA:HB2	1.82	0.60
23:DB:1174:U:H1'	23:DB:1176:U:C2	2.36	0.60
26:DD:13:ARG:HD2	28:DP:55:HIS:ND1	2.17	0.60
28:DP:50:ARG:HB2	28:DP:56:SER:CB	2.31	0.60
40:DH:99:ILE:HD12	40:DH:130:VAL:HG11	1.83	0.60
16:AS:15:LEU:HD13	21:AN:46:LYS:NZ	2.15	0.60
16:AS:68:HIS:HB3	16:AS:72:GLU:CD	2.22	0.60
47:BF:64:PRO:HA	47:BF:88:VAL:CG2	2.31	0.60
28:DP:23:ASP:HA	28:DP:88:ARG:HA	1.84	0.60
38:BM:23:GLY:HA3	38:BM:101:VAL:HG12	1.83	0.60
23:DB:1080:A:O2'	24:DI:126:ARG:HD2	2.02	0.60
1:CA:1222:G:H2'	1:CA:1223:C:H6	1.64	0.60
44:DQ:63:ARG:HH22	44:DQ:96:ASP:HA	1.65	0.60
27:DK:60:ALA:CB	27:DK:86:LEU:HA	2.31	0.60
18:AB:117:GLU:HA	18:AB:140:LEU:HD23	1.82	0.60
23:DB:20:C:H2'	23:DB:21:A:H8	1.66	0.60
18:AB:20:ARG:HE	18:AB:38:HIS:CE1	2.20	0.60
1:CA:812:G:O2'	1:CA:813:U:H6	1.83	0.60
29:BE:48:THR:HG22	29:BE:86:ALA:HB3	1.84	0.60
34:D3:57:VAL:C	34:D3:59:ALA:H	2.05	0.60
1:CA:194:C:O2'	1:CA:195:A:H5'	2.02	0.60
1:AA:337:G:H2'	1:AA:338:A:C8	2.36	0.60
23:DB:950:G:H2'	23:DB:951:C:C6	2.36	0.60
22:DA:94:A:H2'	22:DA:95:U:O4'	2.01	0.60
28:BP:103:THR:HG22	28:BP:104:GLY:H	1.66	0.60
13:CP:74:LEU:O	13:CP:78:VAL:HG12	2.01	0.60
40:DH:83:LYS:HB3	40:DH:149:GLU:N	2.16	0.60
1:CA:797:C:O2'	1:CA:798:U:H5'	2.01	0.60
10:CK:124:LYS:CA	19:CU:34:ARG:HB3	2.26	0.60
12:AM:69:ARG:O	12:AM:72:ILE:HB	2.01	0.60
23:BB:546:U:H5''	23:BB:548:G:C6	2.36	0.60
50:BT:30:ILE:O	50:BT:85:VAL:HG23	2.01	0.60
35:BV:63:ILE:HD11	35:BV:72:VAL:HG22	1.83	0.60
23:BB:587:C:O2'	37:BL:19:LEU:HD13	2.01	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1727:C:H2'	23:BB:1728:C:O4'	2.02	0.60
40:DH:95:GLY:O	40:DH:99:ILE:HG12	2.02	0.60
30:BY:5:LYS:N	30:BY:5:LYS:HE2	2.17	0.60
49:BR:4:VAL:CG2	49:BR:40:MET:HB2	2.31	0.60
44:BQ:73:ILE:HD11	44:BQ:77:LYS:HB2	1.83	0.60
23:BB:1592:C:H2'	23:BB:1593:A:H8	1.66	0.60
3:CD:90:LEU:HD21	3:CD:196:GLU:HB3	1.83	0.60
23:DB:2292:U:H2'	23:DB:2293:G:H8	1.67	0.60
23:DB:1387:A:C5'	23:DB:1469:A:H1'	2.32	0.60
25:DC:244:VAL:HB	25:DC:249:VAL:H	1.67	0.60
23:DB:1353:A:H2'	23:DB:1354:A:C8	2.36	0.60
23:DB:1355:G:O2'	23:DB:1356:G:H5'	2.00	0.60
2:AC:63:ILE:HD11	2:AC:94:ALA:HB3	1.84	0.60
1:AA:279:A:H5''	1:AA:280:C:H3'	1.82	0.60
1:AA:1469:C:H2'	1:AA:1470:U:O4'	2.00	0.60
23:DB:1704:C:O2'	23:DB:1705:A:H5'	2.02	0.60
22:DA:52:A:H5''	43:DO:33:ARG:HH21	1.66	0.60
1:AA:415:A:H2'	1:AA:416:G:H5'	1.81	0.60
52:DW:23:LYS:HD2	52:DW:24:ARG:N	2.15	0.60
1:AA:239:U:C5'	1:AA:239:U:H6	2.14	0.60
26:BD:168:GLU:O	26:BD:170:VAL:HG13	2.01	0.60
29:BE:176:ASP:O	29:BE:180:LEU:HG	2.01	0.60
8:AI:50:PRO:HD3	8:AI:79:ARG:HD2	1.82	0.60
43:DO:69:ASP:O	43:DO:72:ALA:HB3	2.02	0.60
23:DB:1724:G:H2'	23:DB:1725:U:H6	1.65	0.60
23:BB:1724:G:H2'	23:BB:1725:U:H6	1.65	0.60
23:DB:1176:U:H2'	23:DB:1177:G:C8	2.37	0.60
30:BY:37:ARG:HG3	30:BY:38:GLU:OE1	2.02	0.60
41:BJ:45:THR:N	41:BJ:46:PRO:HD3	2.17	0.60
1:CA:1298:U:H4'	1:CA:1299:A:C4	2.36	0.60
23:DB:45:G:C5'	23:DB:46:G:H5'	2.32	0.60
18:CB:147:LEU:O	18:CB:151:LYS:HB3	2.00	0.60
13:CP:67:ILE:HG13	13:CP:71:VAL:HG13	1.83	0.60
1:AA:202:G:H1'	1:AA:468:A:H8	1.66	0.60
39:DX:50:VAL:O	39:DX:54:LYS:HB2	2.02	0.60
6:AG:52:ARG:HH12	6:AG:121:ASN:HD22	1.49	0.60
44:DQ:57:ARG:HA	44:DQ:60:TRP:CE3	2.35	0.60
24:DI:42:ASN:HA	24:DI:45:THR:OG1	2.01	0.60
4:CE:152:VAL:HA	4:CE:155:LYS:HD3	1.81	0.60
4:CE:156:ARG:O	4:CE:158:LYS:HG3	2.02	0.60
23:DB:278:A:H3'	23:DB:278:A:OP2	2.00	0.60
44:DQ:26:ALA:HB1	44:DQ:30:VAL:HB	1.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1018:U:O2'	23:DB:1019:U:H5'	2.02	0.60
23:DB:38:A:N3	29:DE:43:THR:HB	2.17	0.60
23:BB:1230:A:H2'	23:BB:1231:U:C6	2.36	0.60
1:CA:1027:C:H2'	1:CA:1028:C:C6	2.37	0.60
1:CA:692:U:H2'	1:CA:694:A:OP2	2.01	0.60
1:CA:405:U:O4	3:CD:1:ALA:HA	2.01	0.60
6:AG:91:ARG:HB3	6:AG:92:PRO:HD2	1.83	0.60
23:DB:1513:U:O2'	23:DB:1514:G:H5'	2.00	0.60
1:AA:859:G:H2'	1:AA:860:A:C8	2.37	0.60
23:BB:2600:A:O2'	23:BB:2601:C:H5'	2.02	0.60
23:BB:1219:U:H2'	23:BB:1220:G:H8	1.67	0.60
23:DB:1118:C:H2'	23:DB:1119:U:O4'	2.02	0.60
23:DB:1491:G:H5'	25:DC:97:ASP:OD1	2.01	0.60
5:AF:40:GLU:HB2	5:AF:61:LEU:HB2	1.84	0.60
26:DD:174:SER:O	26:DD:175:LEU:HB2	2.01	0.60
40:BH:68:ARG:CZ	40:BH:72:ILE:HB	2.32	0.60
23:BB:2271:G:H2'	23:BB:2272:U:C5	2.36	0.60
8:AI:18:VAL:HA	8:AI:64:ILE:HG13	1.84	0.60
8:AI:64:ILE:HG22	8:AI:65:THR:N	2.17	0.60
2:AC:130:ARG:HA	2:AC:133:MET:HE2	1.84	0.60
15:CR:37:LYS:NZ	19:CU:22:CYS:HB2	2.17	0.60
1:AA:437:U:H1'	3:AD:115:GLN:NE2	2.16	0.60
28:BP:74:GLN:O	28:BP:76:HIS:N	2.35	0.60
47:DF:109:ARG:NH1	47:DF:137:PHE:HA	2.17	0.60
44:BQ:78:PHE:CZ	44:BQ:82:LEU:HD11	2.36	0.60
47:DF:121:PHE:CB	47:DF:127:TYR:HA	2.32	0.60
6:CG:145:GLU:CA	6:CG:148:LYS:HB2	2.31	0.60
1:CA:202:G:H1'	1:CA:468:A:H8	1.66	0.60
27:DK:64:ARG:HD2	27:DK:102:PRO:O	2.02	0.60
1:AA:715:A:H2'	1:AA:716:A:C8	2.36	0.60
1:CA:1469:C:H2'	1:CA:1470:U:O4'	2.01	0.60
23:BB:6:A:H2'	23:BB:7:G:H8	1.67	0.60
23:BB:1482:G:H2'	23:BB:1483:G:H8	1.67	0.60
23:BB:2888:C:H2'	23:BB:2889:C:C6	2.37	0.60
34:B3:56:LEU:HD21	37:BL:51:GLU:HG3	1.83	0.60
41:DJ:72:LYS:O	41:DJ:73:VAL:HG13	2.01	0.60
1:AA:724:G:H2'	1:AA:725:G:H8	1.67	0.60
1:CA:1241:G:H2'	1:CA:1242:G:C8	2.36	0.60
29:BE:192:ALA:O	29:BE:196:VAL:HG23	2.01	0.60
40:BH:99:ILE:HG21	40:BH:130:VAL:HB	1.84	0.60
9:AJ:36:VAL:HG12	9:AJ:38:GLY:H	1.66	0.60
48:DG:153:PRO:CG	48:DG:162:ARG:HB3	2.29	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:DO:109:ALA:HA	43:DO:112:GLU:OE2	2.01	0.60
41:BJ:44:TYR:HB2	44:BQ:63:ARG:CD	2.32	0.60
46:BU:58:VAL:HG12	46:BU:59:GLU:N	2.15	0.60
47:BF:135:ILE:HG12	47:BF:137:PHE:CD1	2.36	0.60
24:DI:27:LEU:CD2	24:DI:27:LEU:H	2.14	0.60
1:AA:16:A:O2'	1:AA:17:U:H5'	2.01	0.60
12:AM:94:LEU:HB3	12:AM:95:PRO:HD2	1.83	0.60
1:AA:449:G:H2'	1:AA:450:G:C8	2.37	0.60
11:AL:32:VAL:O	11:AL:33:CYS:HB3	2.02	0.60
23:DB:470:A:H61	50:DT:72:GLN:NE2	1.99	0.60
18:CB:128:LEU:HG	18:CB:132:GLU:HB3	1.84	0.60
29:BE:48:THR:H	29:BE:51:GLU:HG3	1.66	0.60
23:DB:828:U:H4'	23:DB:831:G:N1	2.16	0.60
23:DB:653:U:H5'	23:DB:654:A:H5''	1.83	0.60
1:AA:676:A:H1'	10:AK:116:PRO:HB3	1.82	0.60
23:DB:1656:C:H2'	23:DB:1657:U:H6	1.66	0.60
22:BA:52:A:H5''	43:BO:33:ARG:HH21	1.67	0.60
23:DB:2366:A:H2'	23:DB:2367:G:O4'	2.02	0.60
23:DB:2107:G:H2'	23:DB:2108:A:C8	2.37	0.60
41:BJ:74:TYR:HB2	41:BJ:87:ALA:O	2.02	0.60
41:DJ:74:TYR:HB2	41:DJ:87:ALA:O	2.02	0.60
8:CI:56:MET:CE	8:CI:57:VAL:H	2.14	0.60
12:AM:68:LEU:O	12:AM:72:ILE:HD13	2.01	0.60
40:BH:69:ALA:HA	40:BH:140:ALA:CA	2.31	0.60
46:DU:26:ASN:HD21	46:DU:34:ILE:HD12	1.67	0.60
1:CA:1323:G:H2'	1:CA:1324:A:H8	1.67	0.60
23:DB:1812:U:H2'	23:DB:1813:G:C8	2.37	0.60
50:DT:69:ARG:HB2	50:DT:75:GLY:H	1.67	0.60
38:BM:19:GLY:H	38:BM:38:ARG:HH12	1.48	0.60
46:DU:58:VAL:HG12	46:DU:59:GLU:N	2.16	0.60
41:DJ:25:LEU:HD13	41:DJ:26:GLY:H	1.67	0.60
47:DF:35:LEU:HD12	47:DF:90:LEU:HD21	1.83	0.60
51:BZ:5:CYS:HB2	51:BZ:10:LYS:HB2	1.84	0.60
47:DF:168:LEU:HD13	47:DF:169:LEU:N	2.17	0.60
24:DI:20:SER:O	24:DI:25:PRO:HD2	2.01	0.60
23:BB:1812:U:H2'	23:BB:1813:G:C8	2.36	0.60
28:BP:112:ARG:HB2	28:BP:112:ARG:NH1	2.17	0.60
18:AB:23:ASN:ND2	18:AB:25:LYS:HG3	2.16	0.60
23:DB:1287:A:N7	42:DN:105:GLY:HA3	2.17	0.60
23:BB:62:U:O2'	23:BB:63:A:H5'	2.02	0.60
1:CA:1342:C:O2'	8:CI:125:GLN:HB3	2.02	0.60
23:DB:2019:A:H2	23:DB:2035:G:H22	1.49	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1134:G:C2	1:AA:1135:U:H1'	2.36	0.60
23:BB:1796:U:H2'	23:BB:1797:G:C8	2.35	0.60
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.37	0.60
18:AB:19:THR:HG23	18:AB:20:ARG:H	1.66	0.60
23:BB:1139:G:O2'	23:BB:1140:C:H5'	2.02	0.60
23:BB:2183:A:H2'	23:BB:2184:A:C8	2.37	0.60
38:BM:83:GLY:O	38:BM:84:LYS:HG2	2.02	0.60
45:BS:18:ARG:HB3	45:BS:76:VAL:HG22	1.83	0.60
1:CA:441:A:H61	1:CA:493:A:N6	2.00	0.60
23:BB:845:A:C2	23:BB:847:U:H1'	2.36	0.60
2:AC:110:LEU:HD22	2:AC:145:ALA:HB2	1.83	0.60
25:BC:7:PRO:HB3	25:BC:13:ARG:HG3	1.84	0.60
24:BI:89:SER:HA	24:BI:97:VAL:HG21	1.83	0.60
3:AD:113:ALA:O	3:AD:117:VAL:HG23	2.01	0.60
2:CC:61:LYS:H	2:CC:61:LYS:HZ3	1.49	0.60
2:AC:106:ARG:H	2:AC:106:ARG:HD3	1.66	0.60
9:CJ:52:LEU:HB2	21:CN:80:ARG:CD	2.23	0.60
9:AJ:8:ILE:HD12	9:AJ:75:ASP:HA	1.84	0.60
19:AU:36:PHE:HD2	19:AU:39:LYS:HE2	1.66	0.60
50:BT:31:VAL:HA	50:BT:84:TYR:H	1.67	0.60
15:CR:56:ARG:O	15:CR:60:ARG:HG2	2.01	0.60
43:DO:35:ILE:O	43:DO:53:THR:HG23	2.02	0.60
1:AA:1123:U:H4'	9:AJ:39:PRO:HG2	1.84	0.60
23:BB:1728:C:C2'	23:BB:1729:U:H5''	2.30	0.60
23:DB:634:C:H2'	23:DB:635:C:C6	2.36	0.60
48:DG:148:ARG:HB2	48:DG:152:ARG:NH1	2.13	0.60
16:AS:48:ILE:HG13	16:AS:59:VAL:O	2.02	0.60
16:AS:66:VAL:HG23	16:AS:67:GLY:H	1.67	0.60
18:AB:96:LEU:HB2	18:AB:99:MET:HE2	1.84	0.60
49:DR:60:LYS:H	49:DR:100:GLY:HA3	1.65	0.60
41:DJ:64:VAL:O	41:DJ:65:THR:HG22	2.01	0.60
18:CB:122:ASP:OD2	18:CB:124:THR:HG22	2.01	0.60
3:AD:145:ARG:NH2	3:AD:147:LYS:HE2	2.17	0.60
1:AA:1308:U:H2'	1:AA:1309:G:H8	1.67	0.60
23:BB:160:A:H2'	23:BB:161:A:C8	2.37	0.60
37:DL:4:ASN:ND2	37:DL:4:ASN:N	2.49	0.60
23:DB:2145:C:H3'	23:DB:2146:C:C5'	2.31	0.60
23:BB:286:U:O2'	23:BB:287:G:H5'	2.02	0.60
1:CA:1461:G:H2'	1:CA:1462:C:H6	1.66	0.60
35:DV:55:GLU:H	35:DV:55:GLU:CD	2.04	0.60
24:BI:7:TYR:HB2	24:BI:58:ILE:O	2.01	0.60
23:DB:1047:G:H1'	23:DB:1110:G:N2	2.16	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:834:U:H2'	1:AA:835:U:C6	2.37	0.60
1:AA:1480:A:H2'	1:AA:1481:U:H6	1.66	0.60
23:BB:528:A:C2	23:BB:2042:A:H2'	2.37	0.60
46:DU:17:ASP:HA	46:DU:20:LYS:HE3	1.84	0.60
23:DB:104:A:H2'	23:DB:105:C:H6	1.66	0.60
23:DB:2888:C:H2'	23:DB:2889:C:C6	2.37	0.60
23:BB:855:G:H21	52:BW:23:LYS:CG	2.05	0.59
12:AM:38:ILE:HB	12:AM:55:LEU:HD21	1.82	0.59
50:DT:57:VAL:HG12	50:DT:86:THR:OG1	2.02	0.59
19:AU:41:THR:O	19:AU:45:LYS:HB2	2.01	0.59
48:DG:33:THR:HA	48:DG:34:ARG:NH1	2.16	0.59
23:BB:2688:G:H1'	23:BB:2721:A:N6	2.17	0.59
1:AA:1219:A:H2'	1:AA:1220:G:C8	2.36	0.59
30:DY:5:LYS:HG3	30:DY:36:GLU:HG3	1.84	0.59
18:AB:110:ILE:O	18:AB:113:LEU:HB3	2.01	0.59
41:BJ:25:LEU:HD22	41:BJ:26:GLY:N	2.17	0.59
23:BB:2572:A:N7	26:BD:150:GLN:HB2	2.17	0.59
6:AG:50:ALA:HB2	6:AG:57:GLU:HG3	1.83	0.59
43:DO:89:ASP:HA	43:DO:116:GLN:O	2.01	0.59
23:DB:2241:A:H2'	23:DB:2242:G:H8	1.66	0.59
23:DB:2648:G:H2'	23:DB:2649:C:C6	2.36	0.59
31:B0:8:THR:HG23	31:B0:11:LYS:H	1.67	0.59
1:AA:844:G:H2'	1:AA:845:A:H8	1.66	0.59
1:CA:390:U:H2'	1:CA:391:G:H8	1.65	0.59
18:CB:8:MET:O	18:CB:10:LYS:N	2.35	0.59
1:AA:678:U:H2'	1:AA:679:C:C6	2.37	0.59
1:CA:193:C:H2'	1:CA:194:C:C6	2.37	0.59
23:BB:435:C:H2'	23:BB:436:C:H5'	1.84	0.59
42:DN:2:ARG:HG2	42:DN:5:LYS:HB2	1.84	0.59
25:BC:137:GLY:H	25:BC:163:ILE:HB	1.67	0.59
23:DB:2548:U:O2	27:DK:23:LYS:HE2	2.02	0.59
17:AT:28:ARG:HA	17:AT:31:ILE:HD12	1.83	0.59
23:BB:479:A:O2'	23:BB:481:G:H5'	2.01	0.59
23:BB:1026:G:H2'	23:BB:1027:A:H8	1.66	0.59
23:BB:950:G:H2'	23:BB:951:C:C6	2.37	0.59
23:BB:2455:G:H2'	23:BB:2456:C:C6	2.37	0.59
35:DV:40:ILE:HD13	35:DV:40:ILE:H	1.68	0.59
40:BH:144:VAL:CG1	40:BH:145:ASN:N	2.66	0.59
29:DE:109:LEU:O	29:DE:113:VAL:HG23	2.02	0.59
23:BB:30:G:OP1	44:BQ:4:LYS:HG2	2.02	0.59
44:DQ:8:ILE:CD1	44:DQ:8:ILE:H	2.11	0.59
1:AA:1288:A:N1	1:AA:1371:G:H1'	2.18	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BG:102:ILE:HD11	48:BG:116:LEU:HD11	1.83	0.59
27:BK:34:GLY:O	27:BK:36:GLY:N	2.35	0.59
35:DV:26:PHE:CE1	35:DV:89:ILE:HD11	2.27	0.59
28:BP:50:ARG:HB2	28:BP:56:SER:CB	2.31	0.59
47:BF:31:GLU:O	47:BF:32:LYS:HD3	2.02	0.59
18:CB:61:SER:HA	18:CB:224:ARG:HA	1.82	0.59
23:DB:395:U:H2'	23:DB:396:G:N7	2.17	0.59
23:DB:3:U:H2'	23:DB:4:U:H6	1.64	0.59
48:DG:40:VAL:HG13	48:DG:64:ALA:HA	1.84	0.59
23:BB:639:U:H2'	23:BB:640:C:H6	1.67	0.59
23:BB:741:U:H2'	23:BB:742:A:C8	2.37	0.59
23:BB:1486:U:H2'	23:BB:1487:U:H6	1.67	0.59
23:DB:1853:A:N1	23:DB:2087:G:H1'	2.17	0.59
1:AA:736:C:H2'	1:AA:737:C:C6	2.37	0.59
23:DB:5:A:H2'	23:DB:6:A:C8	2.37	0.59
15:AR:38:ILE:H	15:AR:38:ILE:HD13	1.66	0.59
23:DB:233:A:N6	23:DB:428:A:H61	1.99	0.59
4:AE:95:MET:HA	4:AE:124:ALA:CB	2.32	0.59
23:DB:863:A:H2'	23:DB:864:G:C8	2.37	0.59
1:CA:250:A:H1'	1:CA:252:U:C5	2.37	0.59
1:AA:1053:G:HO2'	1:AA:1199:U:H5	1.49	0.59
2:AC:52:SER:HB3	2:AC:114:LEU:HG	1.83	0.59
4:CE:33:THR:HG22	4:CE:51:LYS:HB3	1.84	0.59
1:AA:250:A:H1'	1:AA:252:U:C5	2.37	0.59
1:AA:909:A:H2'	1:AA:910:C:O4'	2.01	0.59
23:DB:1098:A:OP2	24:DI:3:LYS:HG2	2.02	0.59
23:BB:856:G:H1'	52:BW:23:LYS:HB3	1.83	0.59
50:DT:59:ASN:O	50:DT:84:TYR:HB2	2.03	0.59
1:CA:1242:G:O2'	1:CA:1243:C:H5'	2.02	0.59
26:BD:107:VAL:H	26:BD:205:PRO:HA	1.67	0.59
48:DG:34:ARG:HD3	48:DG:34:ARG:N	2.17	0.59
26:DD:107:VAL:H	26:DD:205:PRO:HA	1.66	0.59
12:AM:106:ARG:HD3	12:AM:110:GLY:O	2.02	0.59
23:DB:1812:U:H1'	25:DC:43:ASN:ND2	2.15	0.59
49:DR:38:VAL:O	49:DR:53:PHE:HB3	2.01	0.59
28:DP:74:GLN:O	28:DP:76:HIS:N	2.35	0.59
46:BU:17:ASP:HA	46:BU:20:LYS:HE3	1.84	0.59
47:DF:177:ARG:HA	47:DF:177:ARG:CZ	2.32	0.59
44:BQ:105:PHE:O	44:BQ:108:LEU:HB2	2.02	0.59
44:BQ:56:PHE:O	44:BQ:59:LEU:HB3	2.02	0.59
23:DB:878:A:H4'	23:DB:900:A:N1	2.17	0.59
18:CB:221:ARG:O	18:CB:224:ARG:HB2	2.01	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DF:91:ARG:HD3	47:DF:91:ARG:N	2.17	0.59
40:DH:46:PHE:HB3	40:DH:50:ARG:NH2	2.14	0.59
11:CL:49:ARG:HH12	11:CL:88:ASP:CB	2.16	0.59
23:BB:2099:U:H2'	23:BB:2100:G:C8	2.37	0.59
6:AG:150:PHE:H	10:AK:55:ARG:NH2	1.99	0.59
23:BB:1061:U:H4'	23:BB:1070:A:O3'	2.03	0.59
11:CL:106:VAL:HG23	11:CL:116:TYR:HB3	1.84	0.59
1:CA:674:G:H2'	1:CA:675:A:H8	1.67	0.59
23:BB:172:A:H2'	23:BB:173:A:H8	1.67	0.59
1:AA:764:C:H3'	1:AA:765:G:H21	1.68	0.59
1:AA:617:G:H4'	13:AP:46:LYS:HD3	1.85	0.59
23:DB:2758:A:C2	23:DB:2759:G:H1'	2.38	0.59
1:CA:337:G:H2'	1:CA:338:A:C8	2.37	0.59
1:CA:1527:U:O2'	1:CA:1528:U:H5'	2.03	0.59
23:BB:1531:C:H2'	23:BB:1532:A:C8	2.37	0.59
7:CH:124:ILE:HG22	7:CH:125:ILE:N	2.16	0.59
23:DB:435:C:H2'	23:DB:436:C:H5'	1.82	0.59
17:CT:28:ARG:HA	17:CT:31:ILE:HD12	1.85	0.59
1:CA:470:C:H2'	1:CA:471:U:C6	2.36	0.59
41:DJ:114:LEU:O	41:DJ:118:MET:HG3	2.03	0.59
27:BK:68:GLY:HA3	27:BK:78:ARG:HB3	1.84	0.59
8:CI:79:ARG:HB3	8:CI:79:ARG:NH1	2.17	0.59
14:AQ:74:LEU:HD22	14:AQ:75:VAL:H	1.67	0.59
30:DY:30:ARG:HD3	30:DY:30:ARG:H	1.66	0.59
2:AC:149:LYS:HB2	2:AC:172:VAL:HG21	1.84	0.59
28:DP:6:GLN:O	28:DP:10:GLU:HB2	2.03	0.59
35:DV:44:HIS:HE1	35:DV:86:LEU:H	1.49	0.59
49:BR:60:LYS:H	49:BR:100:GLY:HA3	1.66	0.59
49:DR:49:ILE:HD13	49:DR:53:PHE:N	2.16	0.59
40:DH:135:HIS:CG	40:DH:136:SER:H	2.19	0.59
27:BK:73:ASP:O	28:BP:74:GLN:HG3	2.02	0.59
46:DU:47:PRO:O	46:DU:49:PRO:HD3	2.02	0.59
26:BD:10:GLY:HA3	26:BD:26:VAL:N	2.16	0.59
10:CK:28:ASN:ND2	10:CK:29:THR:H	2.01	0.59
26:BD:32:ASN:HA	26:BD:51:THR:O	2.03	0.59
1:AA:373:A:H2'	1:AA:374:A:H8	1.68	0.59
17:CT:70:LYS:O	17:CT:73:ARG:HG2	2.02	0.59
41:DJ:45:THR:N	41:DJ:46:PRO:HD3	2.17	0.59
27:BK:60:ALA:CB	27:BK:86:LEU:HA	2.32	0.59
23:BB:2229:U:H2'	23:BB:2230:G:H8	1.67	0.59
23:BB:1441:G:H2'	23:BB:1442:U:C6	2.36	0.59
3:CD:32:LYS:HA	3:CD:35:GLN:HE21	1.65	0.59

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:CH:49:LYS:HG3	7:CH:50:VAL:N	2.17	0.59
23:DB:591:U:H1'	34:D3:1:PRO:H2	1.68	0.59
1:CA:1250:A:H2	1:CA:1370:G:H1'	1.66	0.59
23:BB:633:A:OP1	37:BL:68:SER:HB2	2.02	0.59
41:BJ:49:ASP:OD2	41:BJ:121:LYS:HD3	2.01	0.59
23:BB:233:A:N6	23:BB:428:A:H61	2.00	0.59
23:BB:596:U:H2'	23:BB:597:G:H8	1.65	0.59
30:BY:31:ILE:HG13	30:BY:32:GLY:H	1.67	0.59
23:BB:848:C:H2'	23:BB:849:A:C8	2.38	0.59
23:DB:2322:A:H8	23:DB:2322:A:H5'	1.67	0.59
22:BA:49:C:H2'	22:BA:50:A:H8	1.67	0.59
23:DB:1039:A:H2'	23:DB:1040:A:H8	1.66	0.59
23:BB:259:G:H2'	23:BB:260:G:H8	1.66	0.59
23:BB:828:U:H4'	23:BB:831:G:N1	2.18	0.59
23:BB:1192:G:O2'	23:BB:1193:G:H5'	2.02	0.59
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.38	0.59
23:BB:1513:U:O2'	23:BB:1514:G:H5'	2.02	0.59
19:CU:36:PHE:HA	19:CU:39:LYS:CE	2.30	0.59
19:AU:39:LYS:N	19:AU:40:PRO:CD	2.65	0.59
52:BW:19:ARG:H	52:BW:19:ARG:NE	1.99	0.59
48:BG:153:PRO:HA	48:BG:159:LYS:O	2.02	0.59
23:BB:2747:G:O6	23:BB:2755:C:H5''	2.03	0.59
27:BK:35:VAL:HG23	27:BK:36:GLY:N	2.12	0.59
46:DU:11:ILE:HG22	46:DU:70:ALA:HB3	1.83	0.59
23:DB:1082:U:C2	23:DB:1086:A:C6	2.91	0.59
51:BZ:5:CYS:HB3	51:BZ:10:LYS:H	1.68	0.59
10:AK:28:ASN:ND2	10:AK:29:THR:H	2.00	0.59
47:BF:29:ARG:HH11	47:BF:29:ARG:HB2	1.67	0.59
1:AA:642:A:H2'	1:AA:643:C:H6	1.67	0.59
7:AH:49:LYS:HG3	7:AH:50:VAL:N	2.18	0.59
42:BN:87:PHE:HE1	42:BN:116:VAL:HG12	1.68	0.59
23:DB:1437:C:H2'	23:DB:1438:U:H6	1.67	0.59
1:AA:57:G:H2'	1:AA:58:C:C6	2.37	0.59
11:CL:107:LYS:H	11:CL:107:LYS:HD2	1.67	0.59
23:BB:151:C:H2'	23:BB:152:A:C8	2.36	0.59
23:BB:1486:U:H2'	23:BB:1487:U:C6	2.37	0.59
23:BB:608:A:H2'	23:BB:609:A:C8	2.38	0.59
49:BR:79:ARG:O	49:BR:81:LYS:HG2	2.03	0.59
23:DB:2810:A:H2'	23:DB:2811:G:O4'	2.01	0.59
23:BB:131:A:H2'	23:BB:132:G:H8	1.67	0.59
23:DB:1559:U:H3'	23:DB:1560:G:H5'	1.84	0.59
4:CE:104:ILE:HD11	4:CE:111:ARG:HA	1.85	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1545:A:H2'	23:BB:1546:G:O4'	2.02	0.59
17:CT:54:GLN:N	17:CT:55:PRO:HD2	2.18	0.59
12:AM:91:ARG:HD3	12:AM:92:ARG:HE	1.68	0.59
21:AN:89:ARG:HB2	21:AN:91:GLU:HG2	1.85	0.59
8:CI:62:LEU:HD22	8:CI:62:LEU:N	2.18	0.59
9:AJ:6:ILE:H	9:AJ:6:ILE:HD12	1.68	0.59
12:AM:3:ILE:HA	12:AM:56:ARG:HG2	1.83	0.59
50:BT:32:LEU:HG	50:BT:83:ALA:HB2	1.84	0.59
25:DC:128:THR:HA	25:DC:190:THR:HA	1.84	0.59
35:BV:44:HIS:HE1	35:BV:86:LEU:H	1.51	0.59
6:CG:10:LYS:NZ	6:CG:10:LYS:HA	2.18	0.59
21:CN:51:PRO:CB	21:CN:54:SER:HB3	2.26	0.59
5:AF:18:VAL:HG11	5:AF:58:HIS:NE2	2.17	0.59
26:DD:111:GLY:H	26:DD:194:PRO:HG2	1.67	0.59
23:DB:2688:G:H1'	23:DB:2721:A:N6	2.18	0.59
9:AJ:38:GLY:O	9:AJ:74:VAL:HA	2.02	0.59
26:BD:122:VAL:HA	26:BD:127:PHE:H	1.68	0.59
38:DM:135:VAL:O	38:DM:136:MET:HG3	2.02	0.59
16:AS:14:LEU:HD21	16:AS:37:SER:HB3	1.84	0.59
46:DU:51:LEU:HD23	46:DU:52:ASN:H	1.67	0.59
13:AP:67:ILE:HG13	13:AP:71:VAL:HG13	1.85	0.59
26:DD:5:VAL:H	26:DD:32:ASN:ND2	2.00	0.59
26:BD:148:GLN:CG	26:BD:152:PRO:HG2	2.31	0.59
42:DN:87:PHE:HE1	42:DN:116:VAL:HG12	1.66	0.59
37:DL:55:MET:HE1	37:DL:59:ARG:CZ	2.32	0.59
23:BB:2261:C:N4	52:BW:10:ARG:HB3	2.18	0.59
1:AA:522:C:H41	11:AL:49:ARG:HH22	1.49	0.59
23:DB:591:U:H1'	34:D3:1:PRO:N	2.17	0.59
23:DB:172:A:H2'	23:DB:173:A:H8	1.68	0.59
18:CB:10:LYS:HA	18:CB:211:LEU:HD11	1.84	0.59
23:DB:1400:U:H2'	23:DB:1401:G:H8	1.67	0.59
1:AA:454:G:H2'	1:AA:455:G:H8	1.67	0.59
1:CA:524:G:H2'	1:CA:525:C:C6	2.37	0.59
6:AG:77:ARG:HE	6:AG:77:ARG:HA	1.67	0.59
6:CG:100:MET:O	6:CG:104:VAL:HG23	2.03	0.59
36:D2:46:LYS:HZ2	36:D2:46:LYS:HA	1.67	0.59
23:BB:2893:A:H5''	23:BB:2894:G:H5'	1.84	0.59
23:DB:39:G:H2'	23:DB:40:U:H6	1.67	0.59
23:DB:584:C:OP1	44:DQ:5:ARG:HB3	2.02	0.59
19:CU:39:LYS:N	19:CU:40:PRO:CD	2.65	0.59
19:CU:41:THR:HA	19:CU:45:LYS:HD2	1.84	0.59
23:DB:855:G:N3	52:DW:23:LYS:HE3	2.17	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1240:U:O2'	6:CG:31:VAL:HG11	2.03	0.59
35:DV:65:VAL:HG22	35:DV:70:ILE:HD12	1.83	0.59
1:CA:1317:C:H3'	1:CA:1318:A:H8	1.67	0.59
40:BH:84:ALA:H	40:BH:148:ALA:HB2	1.67	0.59
23:DB:2720:U:H2'	23:DB:2721:A:C8	2.38	0.59
18:AB:185:ILE:HG23	18:AB:199:ILE:HG22	1.85	0.59
1:CA:921:U:O2	4:CE:23:THR:HG23	2.03	0.59
23:DB:394:C:H2'	23:DB:395:U:O4'	2.03	0.59
38:DM:35:ALA:HB3	38:DM:99:GLY:N	2.18	0.59
43:BO:89:ASP:HA	43:BO:116:GLN:O	2.03	0.59
1:AA:80:A:C5	1:AA:81:A:H1'	2.38	0.59
6:AG:74:VAL:HB	6:AG:85:GLN:HG3	1.84	0.59
21:CN:52:ARG:HG3	21:CN:58:ARG:NH1	2.17	0.59
1:AA:1039:G:H2'	1:AA:1040:U:H6	1.68	0.59
45:BS:4:ILE:HG22	45:BS:106:VAL:HG13	1.85	0.59
23:BB:1114:C:H2'	23:BB:1115:G:O4'	2.03	0.59
34:B3:57:VAL:C	34:B3:59:ALA:H	2.06	0.59
23:DB:1047:G:OP2	23:DB:1047:G:H2'	2.02	0.59
2:CC:91:ALA:HB2	2:CC:97:PRO:HA	1.85	0.59
23:BB:1183:U:H2'	23:BB:1184:U:C6	2.38	0.59
23:DB:1518:C:H2'	23:DB:1519:G:C8	2.37	0.59
22:BA:94:A:H2'	22:BA:95:U:O4'	2.02	0.59
3:AD:48:SER:O	3:AD:52:VAL:HG23	2.02	0.59
41:BJ:102:GLU:HB3	41:BJ:119:PHE:HZ	1.67	0.59
23:BB:208:C:H2'	23:BB:209:C:C6	2.38	0.59
42:BN:2:ARG:HG2	42:BN:5:LYS:HB2	1.84	0.59
50:BT:87:LEU:HD12	50:BT:91:GLN:HG2	1.84	0.59
23:BB:705:A:H61	23:BB:726:G:H1'	1.67	0.59
25:DC:159:THR:O	25:DC:194:VAL:HG12	2.03	0.59
35:BV:51:GLN:HB2	35:BV:57:TYR:OH	2.02	0.59
23:BB:2355:G:H4'	52:BW:20:LEU:CD1	2.33	0.59
23:BB:2356:U:H5''	52:BW:16:GLU:HG3	1.83	0.59
23:DB:1196:C:H2'	23:DB:1197:G:C8	2.38	0.59
23:DB:30:G:OP1	44:DQ:4:LYS:HG2	2.02	0.59
1:AA:1289:A:H61	8:AI:71:ILE:HD11	1.68	0.59
48:BG:148:ARG:HD3	48:BG:152:ARG:NH1	2.16	0.59
23:BB:1654:A:O2'	26:BD:118:PHE:HB2	2.02	0.59
23:BB:2720:U:H2'	23:BB:2721:A:C8	2.37	0.59
28:DP:54:LEU:HA	28:DP:76:HIS:CD2	2.38	0.59
38:BM:42:THR:HA	38:BM:93:VAL:HA	1.84	0.59
1:AA:1317:C:H3'	1:AA:1318:A:H8	1.67	0.59
18:AB:185:ILE:HA	18:AB:199:ILE:HB	1.84	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BF:137:PHE:HB2	47:BF:138:PRO:HD2	1.83	0.59
23:BB:45:G:C5'	23:BB:46:G:H5'	2.31	0.59
1:CA:865:A:H2'	1:CA:866:C:C6	2.38	0.59
17:AT:70:LYS:O	17:AT:73:ARG:HG2	2.03	0.59
6:AG:94:ARG:HD3	6:AG:98:LEU:HD11	1.85	0.59
44:DQ:65:ASN:O	44:DQ:69:ARG:HB2	2.02	0.59
25:DC:74:PRO:HG2	25:DC:96:LYS:CG	2.31	0.59
1:AA:209:U:H5'	1:AA:210:C:C5	2.38	0.59
46:BU:35:VAL:HB	46:BU:38:ILE:CG2	2.32	0.59
1:AA:132:C:H5''	17:AT:68:LYS:NZ	2.17	0.59
23:DB:151:C:H2'	23:DB:152:A:C8	2.37	0.59
26:BD:40:LEU:HD23	26:BD:46:ARG:HG2	1.84	0.59
23:DB:1484:U:H2'	23:DB:1485:U:C6	2.37	0.59
28:BP:24:THR:O	28:BP:25:VAL:HG22	2.03	0.59
23:BB:1704:C:O2'	23:BB:1705:A:H5'	2.03	0.59
29:DE:3:LEU:HB2	29:DE:12:LEU:HG	1.84	0.59
51:BZ:35:SER:HA	51:BZ:50:ARG:HA	1.85	0.59
11:AL:35:ARG:HH22	11:AL:75:GLU:HA	1.68	0.59
23:DB:2819:G:H2'	23:DB:2821:A:N7	2.18	0.59
23:DB:528:A:C2	23:DB:2042:A:H2'	2.38	0.59
23:BB:833:A:H1'	37:BL:52:GLY:N	2.18	0.59
18:AB:77:GLU:O	18:AB:80:LYS:HE2	2.01	0.59
22:DA:76:G:H2'	22:DA:77:U:H6	1.68	0.59
41:BJ:52:ASP:O	41:BJ:54:ILE:HG22	2.03	0.59
4:CE:73:VAL:HG11	4:CE:143:LEU:HB3	1.85	0.59
23:DB:139:U:C2'	50:DT:1:MET:HA	2.33	0.59
45:DS:59:GLU:OE2	45:DS:66:ILE:HG23	2.03	0.59
23:DB:1061:U:O4'	23:DB:1070:A:H1'	2.03	0.59
18:AB:53:LEU:HD12	18:AB:53:LEU:H	1.68	0.59
23:DB:1172:C:H2'	23:DB:1173:U:O4'	2.02	0.59
16:AS:65:MET:HA	16:AS:68:HIS:CE1	2.38	0.59
21:AN:50:LEU:H	21:AN:51:PRO:CD	2.13	0.59
23:BB:1022:G:N2	23:BB:1142:A:N1	2.50	0.59
47:DF:122:ASP:OD2	47:DF:126:ASN:HB2	2.02	0.59
37:BL:101:ILE:HG22	37:BL:102:GLY:N	2.17	0.59
6:AG:29:LEU:HD13	6:AG:42:VAL:HG22	1.85	0.59
37:BL:57:LEU:HA	37:BL:60:ARG:HE	1.68	0.59
49:DR:19:THR:HB	49:DR:97:LYS:HA	1.85	0.59
42:BN:9:GLN:HA	42:BN:17:ARG:NE	2.18	0.59
23:DB:1507:C:C3'	23:DB:1508:A:H4'	2.32	0.59
1:CA:1171:A:H2'	1:CA:1172:C:H6	1.68	0.59
2:AC:39:ARG:CZ	2:AC:56:ILE:HD12	2.33	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:51:VAL:HG23	2:AC:68:HIS:O	2.03	0.59
23:DB:1441:G:H2'	23:DB:1442:U:C6	2.37	0.59
11:CL:73:LEU:HD13	11:CL:79:ILE:HG21	1.84	0.59
46:DU:35:VAL:HB	46:DU:38:ILE:CG2	2.32	0.59
16:CS:5:LYS:O	16:CS:6:LYS:HD2	2.03	0.59
23:BB:441:U:H2'	23:BB:442:G:H8	1.68	0.59
49:DR:1:MET:HA	49:DR:42:ALA:HB3	1.84	0.59
1:CA:591:U:H2'	1:CA:592:G:C8	2.38	0.59
1:AA:777:A:H2'	1:AA:778:G:C8	2.38	0.59
52:BW:21:GLY:HA3	52:BW:33:GLY:HA2	1.85	0.59
2:CC:146:LYS:HG3	2:CC:203:LYS:O	2.03	0.59
17:AT:54:GLN:N	17:AT:55:PRO:HD2	2.17	0.59
23:DB:1230:A:H2'	23:DB:1231:U:C6	2.36	0.59
23:DB:1996:C:H5	27:DK:32:TYR:HH	1.49	0.59
23:BB:680:C:H2'	23:BB:681:G:C8	2.38	0.59
23:DB:1482:G:H2'	23:DB:1483:G:H8	1.68	0.59
26:DD:38:LYS:HG3	26:DD:47:ALA:HB3	1.84	0.59
24:DI:2:LYS:NZ	24:DI:2:LYS:HB3	2.18	0.59
12:AM:21:ILE:HB	12:AM:24:VAL:CG2	2.31	0.59
5:CF:38:ARG:HD3	5:CF:97:THR:HA	1.85	0.59
22:BA:116:G:H4'	43:BO:54:VAL:HG22	1.84	0.59
23:DB:139:U:H2'	50:DT:1:MET:N	2.18	0.59
1:AA:8:A:H61	3:AD:53:GLN:HE22	1.51	0.59
38:DM:19:GLY:H	38:DM:38:ARG:HH12	1.51	0.59
46:BU:11:ILE:HG22	46:BU:70:ALA:HB3	1.85	0.59
21:AN:50:LEU:HG	21:AN:51:PRO:HD3	1.85	0.59
37:BL:4:ASN:N	37:BL:4:ASN:ND2	2.51	0.59
18:CB:60:ALA:HB1	18:CB:220:VAL:HG13	1.84	0.59
1:AA:1337:G:H5''	1:AA:1338:G:OP1	2.03	0.59
27:BK:13:ASN:HD22	27:BK:98:ARG:HG3	1.68	0.59
23:BB:1551:A:C3'	23:BB:1552:A:H5''	2.32	0.59
6:AG:65:LEU:O	6:AG:69:ARG:HB2	2.03	0.59
23:DB:2898:U:H2'	23:DB:2899:A:H8	1.68	0.59
40:DH:27:ARG:HH21	40:DH:27:ARG:HG2	1.68	0.59
10:AK:23:HIS:HB3	10:AK:30:ILE:HG13	1.84	0.59
30:DY:8:GLN:HB3	30:DY:31:ILE:HA	1.84	0.59
8:AI:84:ARG:O	8:AI:87:MET:HG2	2.03	0.59
22:BA:64:G:H2'	22:BA:65:U:C6	2.38	0.59
1:CA:834:U:H2'	1:CA:835:U:C6	2.38	0.59
23:DB:2662:A:H2'	23:DB:2663:G:O4'	2.03	0.59
4:AE:104:ILE:HD11	4:AE:111:ARG:HA	1.84	0.59
1:AA:401:C:H2'	1:AA:402:G:H8	1.67	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:479:A:O2'	23:DB:481:G:H5'	2.03	0.59
5:AF:68:GLN:O	5:AF:71:ILE:HG13	2.03	0.59
50:BT:57:VAL:HG12	50:BT:86:THR:OG1	2.02	0.58
25:BC:183:VAL:HG22	25:BC:187:CYS:SG	2.42	0.58
23:BB:1199:U:H2'	23:BB:1200:C:C6	2.38	0.58
8:AI:17:ARG:HB3	8:AI:17:ARG:HH11	1.68	0.58
22:DA:116:G:H4'	43:DO:54:VAL:HG22	1.85	0.58
23:BB:2142:A:H2'	23:BB:2143:C:C6	2.38	0.58
23:BB:2819:G:H2'	23:BB:2821:A:N7	2.18	0.58
47:DF:137:PHE:HB2	47:DF:138:PRO:HD2	1.83	0.58
49:BR:38:VAL:O	49:BR:53:PHE:HB3	2.02	0.58
38:BM:42:THR:O	38:BM:44:ARG:N	2.36	0.58
38:BM:69:PRO:HA	38:BM:94:ALA:HB2	1.85	0.58
43:BO:11:ALA:HB2	43:BO:96:GLY:N	2.17	0.58
21:AN:60:ARG:NH2	21:AN:69:PRO:HD3	2.18	0.58
6:AG:42:VAL:O	6:AG:46:LEU:HB2	2.03	0.58
12:CM:93:GLY:HA2	12:CM:108:ARG:HH12	1.68	0.58
20:AO:17:ARG:HB3	20:AO:17:ARG:NH1	2.18	0.58
23:DB:972:A:C3'	23:DB:973:A:H5''	2.33	0.58
23:DB:2579:C:H1'	26:DD:130:GLN:HE22	1.68	0.58
34:B3:49:VAL:HG23	34:B3:51:LYS:N	2.17	0.58
1:CA:1342:C:H2'	1:CA:1343:G:H8	1.67	0.58
1:CA:1169:A:H2'	1:CA:1170:A:H8	1.65	0.58
23:BB:591:U:H1'	34:B3:1:PRO:H2	1.68	0.58
6:AG:145:GLU:C	6:AG:147:ASN:H	2.05	0.58
23:DB:718:A:H5'	23:DB:719:C:C5	2.37	0.58
1:CA:662:U:H2'	1:CA:663:A:H8	1.67	0.58
23:BB:19:A:H2'	23:BB:20:C:H6	1.67	0.58
27:DK:68:GLY:HA3	27:DK:78:ARG:HB3	1.84	0.58
42:DN:43:GLU:O	42:DN:47:VAL:HG23	2.03	0.58
23:BB:2710:C:H2'	23:BB:2711:A:H8	1.68	0.58
9:AJ:67:ILE:HG12	21:AN:94:GLY:O	2.03	0.58
1:CA:454:G:H2'	1:CA:455:G:H8	1.67	0.58
41:DJ:34:ARG:HG2	41:DJ:39:LYS:HB3	1.85	0.58
23:DB:1545:A:H2'	23:DB:1546:G:O4'	2.03	0.58
41:DJ:40:HIS:HD1	41:DJ:41:LYS:N	2.01	0.58
23:DB:274:C:H2'	23:DB:275:C:O4'	2.02	0.58
23:BB:2070:A:H2'	23:BB:2071:A:C8	2.38	0.58
20:CO:35:GLN:HB2	20:CO:59:MET:HE1	1.84	0.58
21:AN:65:GLN:HB3	21:AN:82:LYS:HG3	1.85	0.58
9:CJ:52:LEU:CB	21:CN:80:ARG:HD2	2.24	0.58
4:AE:81:GLN:N	4:AE:146:MET:HE3	2.11	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BV:40:ILE:HD13	35:BV:40:ILE:H	1.68	0.58
23:DB:1728:C:C2'	23:DB:1729:U:H5''	2.33	0.58
28:DP:4:ILE:HG22	28:DP:5:LYS:N	2.15	0.58
38:BM:96:ILE:HD11	38:BM:126:ILE:HG12	1.84	0.58
28:BP:6:GLN:O	28:BP:10:GLU:HB2	2.03	0.58
23:BB:1082:U:N3	23:BB:1086:A:C6	2.72	0.58
47:BF:34:THR:O	47:BF:35:LEU:HB2	2.03	0.58
46:BU:51:LEU:HD23	46:BU:52:ASN:H	1.66	0.58
2:CC:172:VAL:HG11	2:CC:200:TRP:HB3	1.85	0.58
12:AM:2:ARG:HD3	12:AM:6:ILE:HA	1.83	0.58
23:DB:76:C:OP1	39:DX:48:ARG:HD3	2.04	0.58
27:DK:2:ILE:HD12	27:DK:2:ILE:N	2.18	0.58
23:DB:545:U:H5	23:DB:546:U:H1'	1.66	0.58
23:BB:633:A:H8	23:BB:633:A:O5'	1.87	0.58
23:BB:1487:U:H2'	23:BB:1488:C:C6	2.38	0.58
23:BB:1387:A:C5'	23:BB:1469:A:H1'	2.32	0.58
21:CN:73:LEU:O	21:CN:74:ARG:C	2.42	0.58
23:BB:1229:C:H2'	23:BB:1230:A:H8	1.67	0.58
25:DC:33:LEU:HD23	25:DC:62:ARG:HA	1.84	0.58
23:BB:2376:A:H2'	23:BB:2377:A:O4'	2.03	0.58
6:AG:125:ASP:OD1	6:AG:130:LYS:HD2	2.03	0.58
7:AH:124:ILE:HG22	7:AH:125:ILE:N	2.18	0.58
25:BC:181:ARG:HH21	25:BC:265:PHE:HB3	1.68	0.58
44:DQ:45:ALA:O	44:DQ:49:ARG:HB2	2.03	0.58
26:DD:37:VAL:HG23	26:DD:91:THR:HA	1.84	0.58
23:BB:2344:U:H4'	23:BB:2345:G:OP1	2.03	0.58
1:AA:1524:C:H2'	1:AA:1525:G:C8	2.39	0.58
23:BB:2898:U:H2'	23:BB:2899:A:C8	2.38	0.58
48:BG:33:THR:HA	48:BG:34:ARG:NH1	2.18	0.58
41:BJ:12:LYS:O	41:BJ:13:ARG:HB2	2.03	0.58
8:AI:43:ALA:O	8:AI:46:VAL:HG22	2.02	0.58
50:BT:69:ARG:HG2	50:BT:70:HIS:H	1.69	0.58
23:BB:321:U:OP2	29:BE:130:LYS:HD3	2.03	0.58
46:DU:50:ALA:H	46:DU:53:GLN:HE21	1.46	0.58
41:BJ:25:LEU:HD13	41:BJ:26:GLY:H	1.69	0.58
28:DP:112:ARG:HB2	28:DP:112:ARG:NH1	2.18	0.58
47:DF:21:TYR:HD2	47:DF:27:VAL:HG12	1.68	0.58
1:AA:205:A:H2'	1:AA:206:C:C6	2.38	0.58
28:BP:23:ASP:HA	28:BP:88:ARG:HA	1.84	0.58
23:BB:2075:U:H2'	23:BB:2238:G:N2	2.19	0.58
20:CO:11:ILE:HA	20:CO:14:GLU:CD	2.24	0.58
20:AO:8:THR:O	20:AO:11:ILE:HG22	2.02	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1439:A:C6	23:DB:1552:A:N7	2.72	0.58
41:DJ:36:LEU:HD12	41:DJ:121:LYS:HB2	1.84	0.58
23:BB:172:A:H2'	23:BB:173:A:C8	2.38	0.58
23:BB:1656:C:H2'	23:BB:1657:U:H6	1.69	0.58
23:DB:173:A:H2'	23:DB:174:U:C6	2.38	0.58
23:DB:1139:G:O2'	23:DB:1140:C:H5'	2.03	0.58
23:DB:850:U:O2'	30:DY:22:THR:HG22	2.04	0.58
52:DW:21:GLY:HA3	52:DW:33:GLY:HA2	1.85	0.58
44:BQ:65:ASN:O	44:BQ:69:ARG:HB2	2.03	0.58
23:BB:753:A:H2'	23:BB:754:U:C6	2.38	0.58
23:DB:2710:C:H2'	23:DB:2711:A:H8	1.67	0.58
23:DB:1183:U:H2'	23:DB:1184:U:C6	2.39	0.58
18:CB:204:ASP:CG	18:CB:205:ALA:H	2.04	0.58
24:BI:96:LYS:N	24:BI:96:LYS:HD2	2.18	0.58
12:AM:52:ILE:HA	12:AM:55:LEU:HD12	1.85	0.58
12:AM:68:LEU:HD12	12:AM:69:ARG:N	2.18	0.58
19:AU:41:THR:HA	19:AU:45:LYS:HD2	1.86	0.58
9:CJ:6:ILE:O	9:CJ:75:ASP:HA	2.03	0.58
20:AO:78:TYR:CZ	20:AO:82:ILE:HD11	2.39	0.58
41:DJ:123:LYS:N	41:DJ:123:LYS:HD2	2.18	0.58
40:BH:121:VAL:HG21	40:BH:128:HIS:NE2	2.18	0.58
37:DL:141:LYS:NZ	37:DL:143:GLU:HA	2.18	0.58
2:AC:119:ILE:HD11	2:AC:133:MET:HA	1.86	0.58
23:BB:2539:C:H5'	32:B4:3:VAL:HG11	1.86	0.58
24:DI:112:LYS:O	24:DI:116:MET:HG3	2.03	0.58
23:DB:1175:A:C2'	23:DB:1176:U:H5'	2.33	0.58
29:BE:60:TRP:CE3	29:BE:60:TRP:HA	2.39	0.58
38:DM:42:THR:O	38:DM:44:ARG:N	2.34	0.58
16:AS:43:MET:O	16:AS:46:LEU:HD23	2.02	0.58
16:AS:6:LYS:HZ3	16:AS:6:LYS:N	2.01	0.58
36:D2:12:ARG:HE	36:D2:44:VAL:CG1	2.15	0.58
26:BD:51:THR:HG22	26:BD:52:THR:N	2.17	0.58
27:BK:19:VAL:C	27:BK:41:ILE:HD11	2.24	0.58
1:CA:950:U:H2'	1:CA:951:G:H8	1.68	0.58
1:CA:205:A:H2'	1:CA:206:C:C6	2.38	0.58
44:DQ:94:LEU:C	44:DQ:96:ASP:H	2.07	0.58
23:DB:279:A:H2'	23:DB:280:U:O4'	2.04	0.58
2:AC:66:THR:HA	2:AC:101:ASN:O	2.03	0.58
1:AA:947:G:H2'	1:AA:948:C:C6	2.39	0.58
11:AL:8:ARG:O	11:AL:10:PRO:HD3	2.03	0.58
23:BB:937:C:H2'	23:BB:938:G:H8	1.68	0.58
1:AA:1017:U:H6	1:AA:1017:U:OP2	1.86	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1173:U:N3	23:BB:1174:U:H1'	2.18	0.58
23:DB:2898:U:H2'	23:DB:2899:A:C8	2.38	0.58
2:CC:46:LEU:HD11	2:CC:75:VAL:HG13	1.84	0.58
4:CE:95:MET:HG3	4:CE:124:ALA:HB2	1.84	0.58
1:AA:591:U:H2'	1:AA:592:G:H8	1.68	0.58
15:AR:37:LYS:NZ	19:AU:22:CYS:HB2	2.18	0.58
23:DB:532:A:N1	23:DB:2020:A:H1'	2.18	0.58
1:CA:337:G:H2'	1:CA:338:A:H8	1.68	0.58
44:BQ:45:ALA:O	44:BQ:49:ARG:HB2	2.03	0.58
52:DW:70:VAL:HG23	52:DW:75:ASN:HD22	1.68	0.58
23:DB:2836:U:H2'	23:DB:2837:A:H8	1.67	0.58
1:CA:745:G:H2'	1:CA:746:A:C8	2.38	0.58
1:AA:1048:G:H4'	21:AN:2:LYS:HZ3	1.68	0.58
10:CK:34:THR:HA	10:CK:41:LEU:HG	1.84	0.58
21:AN:73:LEU:HB2	21:AN:76:PHE:HB2	1.83	0.58
1:AA:176:C:H2'	1:AA:177:G:N3	2.18	0.58
25:DC:2:VAL:HG23	25:DC:3:VAL:H	1.69	0.58
12:AM:18:LEU:HD11	12:AM:33:LEU:HD21	1.85	0.58
50:BT:32:LEU:N	50:BT:83:ALA:HB3	2.18	0.58
25:DC:102:TYR:O	25:DC:103:ILE:HG13	2.04	0.58
48:BG:34:ARG:HD3	48:BG:34:ARG:N	2.19	0.58
48:DG:23:ILE:O	48:DG:34:ARG:HA	2.02	0.58
29:BE:109:LEU:O	29:BE:113:VAL:HG23	2.04	0.58
43:BO:53:THR:HG22	43:BO:74:VAL:CG2	2.28	0.58
40:DH:141:LYS:H	40:DH:141:LYS:HD2	1.67	0.58
9:AJ:56:HIS:H	21:AN:80:ARG:HH22	1.50	0.58
41:DJ:25:LEU:HD22	41:DJ:26:GLY:N	2.17	0.58
1:CA:16:A:O2'	1:CA:17:U:H5'	2.03	0.58
1:AA:1191:A:N6	55:AA:1662:SCM:H11	2.16	0.58
27:BK:85:VAL:HG21	27:BK:115:ILE:HD11	1.86	0.58
23:BB:2230:G:H2'	23:BB:2231:U:C6	2.39	0.58
38:BM:105:MET:HB2	38:BM:117:PHE:CZ	2.38	0.58
29:DE:46:GLN:HG3	29:DE:87:ALA:HB3	1.86	0.58
42:BN:59:SER:O	42:BN:63:ARG:HB2	2.03	0.58
52:DW:43:LYS:HD2	52:DW:79:ILE:HD11	1.84	0.58
51:DZ:71:LEU:HD13	51:DZ:76:GLU:HB3	1.85	0.58
47:BF:77:LYS:HG3	47:BF:78:ILE:N	2.18	0.58
15:AR:32:ILE:HD11	15:AR:58:ILE:HG23	1.85	0.58
23:BB:1716:U:H2'	23:BB:1717:A:H8	1.68	0.58
23:BB:1558:C:H4'	23:BB:1559:U:H5''	1.83	0.58
20:CO:78:TYR:CZ	20:CO:82:ILE:HD11	2.38	0.58
1:AA:272:C:H2'	1:AA:273:U:H6	1.69	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:863:A:H2'	23:BB:864:G:C8	2.38	0.58
2:CC:77:GLY:HA3	2:CC:81:GLU:HB3	1.84	0.58
38:DM:4:PRO:HG2	38:DM:70:ASP:HA	1.85	0.58
23:DB:680:C:H2'	23:DB:681:G:C8	2.38	0.58
23:BB:1178:C:H2'	23:BB:1179:G:C8	2.38	0.58
1:AA:810:C:O2'	1:AA:811:C:H5'	2.02	0.58
45:DS:4:ILE:HG22	45:DS:106:VAL:HG13	1.85	0.58
23:BB:1390:U:O2'	23:BB:1391:U:H5'	2.03	0.58
23:DB:2784:U:H2'	23:DB:2785:C:H6	1.68	0.58
46:BU:64:ILE:HG13	46:BU:65:GLN:N	2.17	0.58
23:BB:975:A:H1'	23:BB:990:A:C2	2.39	0.58
18:CB:162:VAL:O	18:CB:184:ALA:HA	2.04	0.58
41:DJ:12:LYS:O	41:DJ:13:ARG:HB2	2.03	0.58
40:BH:59:ALA:O	40:BH:62:LEU:HG	2.04	0.58
14:CQ:68:LYS:HG2	14:CQ:69:THR:HG23	1.85	0.58
23:DB:2330:G:H1'	52:DW:38:ARG:CB	2.33	0.58
23:BB:1197:G:H2'	23:BB:1198:U:H6	1.68	0.58
6:CG:2:ARG:HH11	6:CG:2:ARG:CB	2.13	0.58
2:AC:96:VAL:HB	2:AC:97:PRO:HD2	1.85	0.58
26:BD:124:ARG:HA	26:BD:165:MET:HE3	1.86	0.58
1:AA:437:U:H5"	3:AD:151:GLN:HE21	1.68	0.58
24:BI:27:LEU:CD2	24:BI:27:LEU:H	2.16	0.58
47:BF:35:LEU:HD23	47:BF:153:ILE:HG12	1.86	0.58
46:DU:53:GLN:HG2	46:DU:53:GLN:O	2.03	0.58
23:BB:1141:U:H5"	41:BJ:27:ARG:HH21	1.67	0.58
4:CE:37:VAL:HG12	4:CE:47:PHE:HB3	1.84	0.58
37:DL:93:ASN:O	37:DL:95:LEU:N	2.36	0.58
37:DL:57:LEU:HA	37:DL:60:ARG:HE	1.68	0.58
47:BF:15:LEU:HA	47:BF:18:GLU:HB2	1.84	0.58
16:CS:10:ILE:HA	16:CS:37:SER:CB	2.34	0.58
23:BB:581:C:H2'	23:BB:582:A:C8	2.38	0.58
11:CL:8:ARG:O	11:CL:10:PRO:HD3	2.04	0.58
3:AD:35:GLN:O	3:AD:37:PRO:HD3	2.03	0.58
1:AA:502:A:H2'	1:AA:503:C:H6	1.67	0.58
1:AA:193:C:H2'	1:AA:194:C:C6	2.38	0.58
23:DB:594:U:H2'	23:DB:595:C:H6	1.68	0.58
23:DB:418:C:H2'	23:DB:419:U:C6	2.38	0.58
1:AA:1048:G:H4'	21:AN:2:LYS:NZ	2.18	0.58
1:CA:1435:G:H2'	1:CA:1436:U:C6	2.39	0.58
25:BC:33:LEU:HD23	25:BC:62:ARG:HA	1.84	0.58
23:BB:2788:C:H2'	23:BB:2789:C:C6	2.38	0.58
23:BB:696:G:O2'	23:BB:697:G:H5'	2.03	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2262:U:H2'	23:BB:2263:C:H6	1.68	0.58
9:AJ:7:ARG:O	9:AJ:8:ILE:HG13	2.04	0.58
22:BA:74:U:H1'	35:BV:37:PRO:HG2	1.85	0.58
25:DC:131:MET:HA	25:DC:134:ILE:HG23	1.86	0.58
10:CK:80:ASN:HB3	10:CK:105:ARG:HB3	1.86	0.58
28:BP:13:LYS:CD	28:BP:76:HIS:HA	2.34	0.58
30:BY:6:ILE:O	30:BY:34:THR:HA	2.04	0.58
46:DU:51:LEU:H	46:DU:53:GLN:HE22	1.51	0.58
26:BD:5:VAL:H	26:BD:32:ASN:ND2	2.02	0.58
46:BU:51:LEU:H	46:BU:53:GLN:HE22	1.50	0.58
1:CA:373:A:H2'	1:CA:374:A:H8	1.69	0.58
39:DX:52:ARG:O	39:DX:56:LEU:HD22	2.02	0.58
48:BG:126:THR:H	48:BG:129:GLU:HB3	1.68	0.58
23:BB:2099:U:H2'	23:BB:2100:G:H8	1.68	0.58
27:DK:99:ILE:H	27:DK:118:LEU:CD2	2.16	0.58
23:DB:1551:A:C3'	23:DB:1552:A:H5''	2.32	0.58
23:DB:833:A:H1'	37:DL:52:GLY:H	1.67	0.58
23:DB:1486:U:H2'	23:DB:1487:U:H6	1.68	0.58
47:DF:77:LYS:HG3	47:DF:78:ILE:N	2.18	0.58
30:BY:8:GLN:HB3	30:BY:31:ILE:HA	1.85	0.58
23:DB:852:U:H2'	23:DB:853:C:C6	2.38	0.58
23:DB:1716:U:H2'	23:DB:1717:A:H8	1.67	0.58
23:DB:1230:A:H2'	23:DB:1231:U:H6	1.68	0.58
35:BV:55:GLU:CD	35:BV:55:GLU:H	2.06	0.58
11:CL:13:ARG:O	11:CL:14:LYS:HB3	2.04	0.58
1:CA:731:G:OP1	1:CA:766:A:H1'	2.04	0.58
1:CA:555:U:H2'	1:CA:556:C:C6	2.39	0.58
23:DB:2569:G:O2'	23:DB:2570:G:H5'	2.04	0.58
1:CA:1384:C:H2'	1:CA:1385:G:H8	1.67	0.58
23:BB:1859:U:H2'	23:BB:1860:G:C8	2.38	0.58
1:AA:1020:G:H2'	1:AA:1020:G:N3	2.18	0.58
23:DB:1647:U:H3'	23:DB:1647:U:P	2.43	0.58
27:DK:51:LYS:HE3	27:DK:52:VAL:HG13	1.85	0.58
23:BB:12:U:O2	23:BB:2626:C:H4'	2.04	0.58
1:CA:981:U:H4'	21:CN:60:ARG:HD2	1.86	0.58
12:AM:65:GLU:O	12:AM:68:LEU:HG	2.03	0.58
50:DT:57:VAL:HG13	50:DT:58:VAL:N	2.19	0.58
50:BT:14:PRO:HA	50:BT:32:LEU:CB	2.33	0.58
42:DN:45:ARG:O	42:DN:49:GLU:HG3	2.03	0.58
48:BG:17:LYS:HB3	48:BG:24:THR:HB	1.86	0.58
14:CQ:74:LEU:HD22	14:CQ:75:VAL:H	1.68	0.58
48:BG:89:VAL:HG12	48:BG:90:GLY:H	1.68	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BN:38:LEU:HD11	42:BN:42:LYS:HE3	1.84	0.58
12:CM:22:TYR:CD1	12:CM:65:GLU:HA	2.39	0.58
2:AC:149:LYS:HA	2:AC:168:ARG:HG3	1.85	0.58
23:BB:2820:A:OP1	42:BN:4:ARG:HA	2.03	0.58
44:DQ:105:PHE:O	44:DQ:108:LEU:HB2	2.04	0.58
27:DK:73:ASP:HB2	28:DP:77:SER:OG	2.03	0.58
28:DP:13:LYS:CD	28:DP:76:HIS:HA	2.33	0.58
41:BJ:44:TYR:CE2	44:BQ:59:LEU:HD11	2.38	0.58
17:AT:64:GLY:HA2	17:AT:67:HIS:HD2	1.69	0.58
38:DM:23:GLY:HA3	38:DM:101:VAL:HG12	1.86	0.58
39:BX:23:ARG:NE	39:BX:27:ASN:HD21	2.02	0.58
1:AA:77:A:O5'	1:AA:77:A:H8	1.86	0.58
31:D0:8:THR:HG23	31:D0:11:LYS:H	1.67	0.58
21:AN:32:ASP:OD2	21:AN:33:VAL:HG23	2.04	0.58
47:DF:41:GLU:HB3	47:DF:44:ALA:CB	2.34	0.58
23:DB:172:A:H2'	23:DB:173:A:C8	2.38	0.58
1:CA:715:A:H2'	1:CA:716:A:C8	2.39	0.58
23:DB:1684:G:H2'	23:DB:1685:C:C6	2.39	0.58
23:DB:2698:U:H2'	23:DB:2699:C:C6	2.38	0.58
23:DB:2443:C:H2'	23:DB:2444:G:H8	1.69	0.58
23:DB:234:U:H2'	23:DB:235:U:H6	1.68	0.58
31:B0:9:ARG:O	31:B0:12:ARG:HB3	2.02	0.58
26:DD:33:ARG:HA	26:DD:95:SER:HA	1.86	0.58
23:DB:1577:C:H2'	23:DB:1578:U:C6	2.39	0.58
3:CD:57:LYS:O	3:CD:61:ARG:HB2	2.04	0.58
33:D1:32:LYS:HE3	33:D1:52:LYS:HG2	1.85	0.58
24:DI:99:LYS:HD3	24:DI:99:LYS:H	1.69	0.58
9:CJ:25:ILE:HA	9:CJ:90:LEU:HD13	1.86	0.58
1:CA:1118:U:H2'	1:CA:1119:C:H6	1.67	0.58
29:BE:200:LEU:O	29:BE:201:ALA:HB3	2.02	0.58
40:BH:80:ILE:HD11	40:BH:102:ALA:HB2	1.86	0.58
52:BW:35:ILE:HG13	52:BW:57:THR:OG1	2.03	0.58
6:CG:99:ALA:O	6:CG:103:ILE:HG13	2.03	0.58
48:DG:162:ARG:HE	48:DG:166:GLU:CD	2.07	0.58
47:DF:106:ALA:HA	47:DF:135:ILE:HD13	1.84	0.58
23:BB:1082:U:C2	23:BB:1086:A:C6	2.91	0.58
1:AA:958:A:N1	16:AS:53:GLY:HA3	2.19	0.58
16:AS:52:ASN:CG	16:AS:53:GLY:H	2.07	0.58
37:BL:93:ASN:O	37:BL:95:LEU:N	2.37	0.58
37:BL:55:MET:HE1	37:BL:59:ARG:CZ	2.34	0.58
6:AG:71:THR:HG22	6:AG:141:HIS:NE2	2.19	0.58
23:DB:1487:U:H2'	23:DB:1488:C:C6	2.39	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CC:75:VAL:O	2:CC:82:ASP:HB2	2.04	0.58
23:DB:987:C:H2'	23:DB:988:A:O4'	2.04	0.58
23:DB:6:A:H2'	23:DB:7:G:C8	2.39	0.58
45:BS:13:SER:HB3	45:BS:16:LYS:HE2	1.86	0.58
23:BB:2150:C:H2'	23:BB:2151:U:H6	1.68	0.58
1:AA:1053:G:N7	1:AA:1200:C:H5''	2.19	0.58
23:DB:2298:A:OP1	47:DF:70:ARG:HD3	2.04	0.58
5:CF:68:GLN:O	5:CF:71:ILE:HG13	2.04	0.58
22:BA:76:G:H2'	22:BA:77:U:H6	1.69	0.58
23:DB:664:G:H2'	23:DB:665:U:H6	1.69	0.58
29:DE:60:TRP:CE3	29:DE:60:TRP:HA	2.39	0.58
25:DC:153:LEU:HD13	25:DC:175:LEU:CD2	2.34	0.58
5:CF:39:LEU:HD13	5:CF:40:GLU:N	2.19	0.58
5:CF:93:LYS:O	5:CF:94:HIS:HB2	2.03	0.58
8:AI:24:ASN:CG	8:AI:25:GLY:H	2.05	0.58
37:BL:141:LYS:NZ	37:BL:143:GLU:HA	2.19	0.58
19:AU:24:LYS:HD2	19:AU:25:ALA:N	2.18	0.58
28:BP:58:PHE:CE2	28:BP:75:THR:HB	2.39	0.58
44:BQ:91:ARG:NH1	49:BR:10:LYS:HB3	2.19	0.58
47:DF:35:LEU:HD23	47:DF:153:ILE:HG12	1.84	0.58
26:BD:25:THR:HG21	26:BD:193:VAL:HG21	1.86	0.58
39:DX:20:ASN:H	39:DX:20:ASN:HD22	1.52	0.58
9:AJ:53:ILE:HG22	9:AJ:61:ALA:HB1	1.86	0.58
1:AA:947:G:H2'	1:AA:948:C:H6	1.68	0.58
23:DB:2728:U:H2'	23:DB:2729:G:H8	1.68	0.58
1:CA:57:G:H2'	1:CA:58:C:C6	2.39	0.58
11:CL:32:VAL:O	11:CL:33:CYS:HB3	2.03	0.58
28:DP:103:THR:HG22	28:DP:104:GLY:N	2.19	0.58
1:AA:312:C:H2'	1:AA:313:A:H8	1.68	0.58
51:BZ:71:LEU:HD13	51:BZ:76:GLU:HB3	1.84	0.58
1:CA:607:A:H2'	1:CA:608:A:H8	1.68	0.58
1:AA:607:A:H2'	1:AA:608:A:H8	1.69	0.58
1:AA:160:A:H2'	1:AA:161:A:O4'	2.04	0.58
23:BB:1219:U:H2'	23:BB:1220:G:C8	2.39	0.58
23:DB:2836:U:H2'	23:DB:2837:A:C8	2.38	0.58
23:DB:1774:C:O2	23:DB:1774:C:H2'	2.04	0.58
23:DB:1219:U:H2'	23:DB:1220:G:C8	2.39	0.58
46:DU:64:ILE:HG13	46:DU:65:GLN:N	2.19	0.58
23:BB:1464:G:H2'	23:BB:1465:G:H8	1.68	0.58
1:CA:649:A:H2'	1:CA:650:G:O4'	2.04	0.58
8:CI:93:LEU:H	8:CI:93:LEU:HD23	1.69	0.58
25:BC:79:ARG:HD2	25:BC:81:GLU:HG3	1.86	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:3:LEU:HB2	29:BE:12:LEU:HG	1.86	0.58
34:D3:20:GLY:HA3	34:D3:48:MET:HE1	1.84	0.58
1:CA:230:G:H5''	13:CP:31:ARG:NH2	2.19	0.58
23:DB:208:C:H2'	23:DB:209:C:C6	2.39	0.58
18:CB:40:ILE:HG22	18:CB:41:ASN:N	2.19	0.57
50:BT:57:VAL:HG13	50:BT:58:VAL:N	2.18	0.57
6:CG:27:ASN:O	6:CG:30:MET:HB3	2.03	0.57
48:DG:24:THR:HA	48:DG:33:THR:O	2.04	0.57
29:BE:108:ILE:HD11	29:BE:181:ILE:HG13	1.86	0.57
29:BE:117:ARG:HA	29:BE:185:LYS:HG2	1.86	0.57
5:CF:40:GLU:HB2	5:CF:61:LEU:HB2	1.86	0.57
40:BH:68:ARG:HD3	40:BH:132:PHE:CE2	2.39	0.57
52:BW:18:LYS:HA	52:BW:36:ILE:HG12	1.84	0.57
29:DE:176:ASP:O	29:DE:180:LEU:HG	2.04	0.57
43:BO:35:ILE:O	43:BO:53:THR:HG23	2.04	0.57
43:BO:69:ASP:O	43:BO:72:ALA:HB3	2.04	0.57
42:DN:79:LEU:HA	42:DN:83:LEU:HB2	1.86	0.57
23:BB:2658:C:H5'	48:BG:159:LYS:HZ2	1.69	0.57
48:BG:153:PRO:CG	48:BG:162:ARG:HB3	2.30	0.57
23:DB:1813:G:H1'	25:DC:49:THR:OG1	2.03	0.57
23:BB:2723:C:H5''	42:BN:1:MET:HE2	1.85	0.57
28:DP:58:PHE:CE2	28:DP:75:THR:HB	2.39	0.57
52:BW:47:GLY:HA3	52:BW:80:SER:CA	2.34	0.57
23:BB:1309:G:OP1	36:B2:9:VAL:HG12	2.04	0.57
24:DI:32:VAL:HG22	24:DI:60:VAL:HG21	1.86	0.57
18:CB:116:LEU:HB3	18:CB:140:LEU:HG	1.86	0.57
13:CP:1:MET:C	13:CP:1:MET:HE3	2.25	0.57
3:CD:84:ASN:HD21	4:CE:101:GLY:HA3	1.67	0.57
41:DJ:44:TYR:HB2	44:DQ:63:ARG:CD	2.34	0.57
37:DL:6:LEU:H	37:DL:6:LEU:CD2	2.16	0.57
27:BK:12:ASP:OD2	27:BK:85:VAL:HG13	2.03	0.57
21:CN:26:LEU:HD23	21:CN:27:LYS:H	1.67	0.57
23:BB:470:A:H61	50:BT:72:GLN:HE22	1.51	0.57
45:BS:72:THR:CG2	45:BS:108:SER:HB3	2.34	0.57
23:DB:1387:A:H2'	23:DB:1388:G:C8	2.37	0.57
23:BB:1387:A:H2'	23:BB:1388:G:C8	2.39	0.57
23:DB:1486:U:H2'	23:DB:1487:U:C6	2.38	0.57
1:AA:194:C:O2'	1:AA:195:A:H5'	2.03	0.57
1:CA:160:A:H2'	1:CA:161:A:O4'	2.03	0.57
23:BB:1229:C:H2'	23:BB:1230:A:C8	2.39	0.57
45:BS:15:GLN:HA	45:BS:18:ARG:HD2	1.86	0.57
30:DY:31:ILE:HG13	30:DY:32:GLY:H	1.69	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AQ:6:THR:HG22	14:AQ:61:ARG:HB3	1.84	0.57
2:CC:41:TYR:OH	2:CC:89:VAL:HG21	2.04	0.57
15:CR:21:ASP:OD1	15:CR:23:LYS:HE3	2.03	0.57
42:BN:24:MET:HG2	42:BN:44:LEU:HD22	1.86	0.57
38:DM:83:GLY:O	38:DM:84:LYS:HG2	2.03	0.57
23:DB:1666:G:H4'	27:DK:6:THR:HG23	1.85	0.57
1:AA:999:C:H2'	1:AA:1000:A:C8	2.39	0.57
9:CJ:93:ALA:O	9:CJ:96:VAL:HG22	2.04	0.57
23:DB:942:G:H2'	23:DB:943:A:O4'	2.04	0.57
23:BB:2639:A:H2'	23:BB:2640:G:O4'	2.03	0.57
23:DB:1429:G:H2'	23:DB:1430:G:H8	1.70	0.57
50:DT:27:SER:O	50:DT:28:ASN:HB3	2.05	0.57
50:BT:25:GLU:C	50:BT:27:SER:H	2.08	0.57
50:BT:59:ASN:O	50:BT:84:TYR:HB2	2.04	0.57
1:CA:1347:G:H22	1:CA:1373:G:H2'	1.68	0.57
23:DB:673:C:C2'	23:DB:674:G:H5'	2.34	0.57
41:BJ:123:LYS:HD2	41:BJ:123:LYS:N	2.18	0.57
35:DV:38:LEU:HG	35:DV:40:ILE:HG23	1.86	0.57
14:CQ:16:MET:CB	14:CQ:19:SER:HB2	2.29	0.57
23:BB:2502:G:H5'	23:BB:2503:A:C5'	2.27	0.57
8:AI:20:ILE:HD13	8:AI:85:ALA:CB	2.34	0.57
8:AI:51:LEU:HB3	8:AI:56:MET:CB	2.34	0.57
23:DB:1063:G:H4'	24:DI:135:MET:HG2	1.85	0.57
40:DH:116:ARG:NE	40:DH:118:PRO:HD3	2.18	0.57
35:BV:80:HIS:CD2	35:BV:82:TYR:H	2.19	0.57
28:DP:26:GLU:HG3	28:DP:43:GLU:HB2	1.85	0.57
36:B2:10:LEU:CD2	36:B2:14:ARG:HD2	2.33	0.57
1:AA:923:A:H2'	1:AA:924:C:H6	1.67	0.57
47:BF:177:ARG:CZ	47:BF:177:ARG:HA	2.34	0.57
18:CB:153:MET:SD	18:CB:157:PRO:HD3	2.45	0.57
6:AG:71:THR:N	6:AG:141:HIS:HE1	2.02	0.57
23:BB:947:A:H2'	23:BB:948:C:H6	1.67	0.57
23:DB:2740:A:H2'	23:DB:2741:A:C8	2.38	0.57
23:DB:572:A:C2	23:DB:2033:A:C2	2.92	0.57
12:CM:1:ALA:O	12:CM:3:ILE:HG13	2.03	0.57
23:BB:1386:C:H2'	23:BB:1387:A:H8	1.69	0.57
23:DB:78:U:O2'	23:DB:79:C:H5'	2.04	0.57
1:AA:429:U:H3'	3:AD:8:LEU:HD23	1.86	0.57
23:BB:1459:G:H4'	23:BB:1461:C:N4	2.18	0.57
1:CA:312:C:H2'	1:CA:313:A:C8	2.38	0.57
23:DB:224:U:O4	23:DB:420:C:H5'	2.04	0.57
4:AE:95:MET:HG3	4:AE:124:ALA:HB2	1.86	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:39:G:H2'	23:DB:40:U:C6	2.38	0.57
23:BB:2898:U:H2'	23:BB:2899:A:H8	1.69	0.57
23:DB:2344:U:H4'	23:DB:2345:G:OP1	2.05	0.57
23:BB:2756:U:H1'	23:BB:2757:A:H5'	1.85	0.57
23:DB:925:A:O2'	23:DB:926:G:H5'	2.03	0.57
10:CK:23:HIS:HB3	10:CK:30:ILE:HG13	1.85	0.57
2:AC:48:LYS:H	2:AC:48:LYS:HD3	1.68	0.57
1:CA:783:C:O2'	1:CA:784:A:H5'	2.03	0.57
23:DB:2229:U:H2'	23:DB:2230:G:H8	1.69	0.57
2:CC:78:LYS:HZ2	2:CC:79:LYS:HB2	1.69	0.57
23:BB:1518:C:H2'	23:BB:1519:G:C8	2.39	0.57
8:CI:56:MET:HA	8:CI:59:LYS:CB	2.35	0.57
26:DD:169:ARG:O	26:DD:170:VAL:HG22	2.04	0.57
22:BA:57:A:H1'	47:BF:25:MET:O	2.04	0.57
1:AA:980:C:H1'	21:AN:58:ARG:HD2	1.85	0.57
38:DM:1:MET:HB3	38:DM:47:GLU:HG3	1.84	0.57
38:BM:1:MET:HB3	38:BM:47:GLU:HG3	1.86	0.57
26:DD:32:ASN:HA	26:DD:51:THR:O	2.03	0.57
1:AA:918:A:H2'	1:AA:919:A:C8	2.39	0.57
23:DB:1245:G:OP1	37:DL:13:LYS:HE3	2.04	0.57
29:DE:33:VAL:O	29:DE:36:ALA:HB3	2.05	0.57
37:DL:101:ILE:HG22	37:DL:102:GLY:N	2.19	0.57
39:BX:46:VAL:O	39:BX:49:ASP:HB2	2.05	0.57
1:CA:984:C:O2'	1:CA:985:C:H5'	2.05	0.57
25:BC:239:PHE:HD1	25:BC:241:LYS:H	1.51	0.57
49:BR:1:MET:HA	49:BR:42:ALA:HB3	1.86	0.57
45:DS:15:GLN:HA	45:DS:18:ARG:HD2	1.86	0.57
23:DB:533:G:H2'	23:DB:534:U:C6	2.39	0.57
1:CA:161:A:H2'	1:CA:162:A:H8	1.68	0.57
1:CA:35:G:H2'	1:CA:36:C:C6	2.39	0.57
20:CO:71:LYS:HZ3	20:CO:72:ARG:HA	1.68	0.57
23:BB:5:A:H2'	23:BB:6:A:C8	2.39	0.57
1:CA:784:A:H2'	1:CA:785:G:H8	1.69	0.57
23:BB:446:G:C5'	44:BQ:2:ARG:HH22	2.18	0.57
14:CQ:6:THR:HG22	14:CQ:61:ARG:HB3	1.86	0.57
23:BB:925:A:O2'	23:BB:926:G:H5'	2.03	0.57
23:DB:296:U:H2'	23:DB:297:G:H8	1.70	0.57
23:BB:786:C:O2'	23:BB:787:C:H5'	2.04	0.57
26:BD:56:LYS:C	26:BD:58:ASN:H	2.08	0.57
50:DT:25:GLU:C	50:DT:27:SER:H	2.07	0.57
50:DT:38:ALA:O	50:DT:39:THR:HB	2.04	0.57
35:BV:4:ILE:HB	35:BV:63:ILE:HA	1.85	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BH:115:VAL:O	40:BH:133:GLN:HB2	2.04	0.57
37:DL:143:GLU:HG2	37:DL:144:GLU:N	2.15	0.57
8:AI:17:ARG:NH1	8:AI:17:ARG:HB3	2.19	0.57
8:AI:17:ARG:O	8:AI:64:ILE:HA	2.04	0.57
23:DB:1722:A:H2'	23:DB:1723:G:C8	2.39	0.57
23:BB:1722:A:H2'	23:BB:1723:G:C8	2.38	0.57
10:AK:80:ASN:HB3	10:AK:105:ARG:HB3	1.86	0.57
9:CJ:53:ILE:HG13	21:CN:84:ARG:NE	2.20	0.57
23:BB:2443:C:H2'	23:BB:2444:G:C8	2.38	0.57
1:CA:1023:U:H2'	1:CA:1024:G:O4'	2.03	0.57
6:AG:16:LYS:HB3	6:AG:43:TYR:CE1	2.40	0.57
47:BF:21:TYR:HD2	47:BF:27:VAL:HG12	1.68	0.57
1:AA:131:A:H2'	1:AA:132:C:C6	2.38	0.57
1:CA:777:A:H2'	1:CA:778:G:H8	1.68	0.57
23:DB:2243:U:H2'	23:DB:2244:U:C6	2.40	0.57
45:DS:18:ARG:HB3	45:DS:76:VAL:CG2	2.35	0.57
29:DE:134:LEU:HD23	29:DE:161:ALA:HB2	1.87	0.57
23:BB:532:A:N1	23:BB:2020:A:H1'	2.19	0.57
1:AA:1461:G:H2'	1:AA:1462:C:H6	1.67	0.57
49:DR:43:ASN:HD22	49:DR:44:GLY:H	1.52	0.57
25:DC:62:ARG:N	25:DC:62:ARG:HD2	2.19	0.57
23:DB:1212:G:H1'	23:DB:1236:G:N2	2.19	0.57
23:BB:2737:G:H2'	23:BB:2738:A:C8	2.39	0.57
23:BB:1774:C:O2	23:BB:1774:C:H2'	2.04	0.57
45:BS:5:ALA:HB3	45:BS:54:ALA:HB2	1.85	0.57
23:DB:1826:G:H2'	23:DB:1827:U:H6	1.70	0.57
1:AA:993:G:N3	1:AA:993:G:H2'	2.19	0.57
23:DB:286:U:H2'	23:DB:287:G:C8	2.39	0.57
21:CN:20:PHE:CB	21:CN:24:ALA:HB2	2.34	0.57
1:CA:1235:U:H2'	1:CA:1236:A:O4'	2.04	0.57
23:DB:2804:U:H2'	23:DB:2805:C:C6	2.39	0.57
26:BD:169:ARG:O	26:BD:170:VAL:HG22	2.05	0.57
35:DV:70:ILE:HD13	35:DV:70:ILE:N	2.19	0.57
23:DB:2262:U:H2'	23:DB:2263:C:H6	1.69	0.57
29:DE:117:ARG:HA	29:DE:185:LYS:HG2	1.86	0.57
29:DE:108:ILE:HD11	29:DE:181:ILE:HG13	1.85	0.57
19:AU:16:ARG:NH1	19:AU:19:LYS:HE2	2.11	0.57
22:DA:8:C:O2'	43:DO:40:ILE:HD13	2.05	0.57
38:DM:96:ILE:HD11	38:DM:126:ILE:HG12	1.86	0.57
38:DM:43:ALA:O	38:DM:46:ILE:HG13	2.04	0.57
47:BF:102:LEU:HA	47:BF:106:ALA:CB	2.34	0.57
1:CA:1005:A:H3'	1:CA:1006:G:H8	1.68	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1349:A:H2'	1:AA:1350:A:O4'	2.04	0.57
51:DZ:5:CYS:HB2	51:DZ:10:LYS:HB2	1.86	0.57
12:CM:33:LEU:HB3	12:CM:38:ILE:O	2.04	0.57
40:DH:89:LYS:H	40:DH:89:LYS:HD2	1.69	0.57
18:CB:101:THR:HG22	18:CB:174:GLU:CD	2.25	0.57
23:BB:611:C:H2'	23:BB:612:G:H5'	1.85	0.57
23:BB:418:C:H2'	23:BB:419:U:C6	2.40	0.57
1:AA:476:U:O2'	1:AA:477:C:H5'	2.04	0.57
23:BB:2322:A:H5'	23:BB:2322:A:H8	1.68	0.57
23:DB:364:C:H2'	23:DB:365:U:C6	2.39	0.57
23:BB:1400:U:H2'	23:BB:1401:G:H8	1.67	0.57
22:BA:49:C:H2'	22:BA:50:A:C8	2.40	0.57
23:DB:104:A:H2'	23:DB:105:C:C6	2.40	0.57
4:AE:95:MET:HA	4:AE:124:ALA:HB2	1.87	0.57
38:BM:4:PRO:HG2	38:BM:70:ASP:HA	1.85	0.57
8:CI:10:ARG:H	8:CI:80:HIS:CD2	2.22	0.57
23:BB:1990:C:H2'	23:BB:1991:U:C6	2.39	0.57
23:DB:699:A:H4'	23:DB:1634:A:N7	2.19	0.57
1:CA:1181:G:O2'	1:CA:1182:G:N7	2.37	0.57
23:DB:2573:C:H3'	57:DB:3628:HOH:O	2.04	0.57
52:BW:23:LYS:C	52:BW:66:VAL:HB	2.25	0.57
12:AM:15:VAL:HG12	12:AM:30:LYS:HA	1.86	0.57
12:AM:22:TYR:HB2	12:AM:65:GLU:HA	1.87	0.57
9:CJ:8:ILE:HG12	9:CJ:100:ILE:HG22	1.86	0.57
6:CG:30:MET:CE	6:CG:33:GLY:H	2.18	0.57
26:BD:113:SER:HB3	26:BD:168:GLU:H	1.70	0.57
23:BB:141:G:H5''	23:BB:142:A:O4'	2.04	0.57
48:BG:162:ARG:HE	48:BG:166:GLU:CD	2.08	0.57
23:BB:2742:G:O2'	23:BB:2743:U:H5'	2.04	0.57
35:DV:24:ASN:O	35:DV:44:HIS:HB2	2.03	0.57
2:CC:2:GLN:NE2	2:CC:2:GLN:H	1.95	0.57
23:BB:871:U:H2'	23:BB:872:U:C6	2.40	0.57
47:BF:106:ALA:HA	47:BF:135:ILE:HD13	1.86	0.57
28:DP:24:THR:O	28:DP:25:VAL:HG22	2.05	0.57
23:DB:125:A:H3'	23:DB:126:A:H5''	1.87	0.57
1:CA:1320:C:N4	16:CS:36:ARG:HG2	2.20	0.57
6:AG:71:THR:H	6:AG:141:HIS:HE1	1.52	0.57
33:B1:7:LYS:HD3	34:B3:33:THR:HG21	1.86	0.57
11:AL:41:PRO:HB3	11:AL:49:ARG:NH1	2.20	0.57
21:CN:27:LYS:CD	21:CN:28:ALA:H	2.16	0.57
23:BB:2097:A:H2'	23:BB:2098:U:C6	2.39	0.57
23:DB:1386:C:H5''	23:DB:1396:U:O2	2.05	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1285:A:O2'	1:CA:1286:U:H2'	2.04	0.57
23:BB:638:G:H2'	23:BB:639:U:C6	2.40	0.57
23:DB:171:U:H2'	23:DB:172:A:H8	1.70	0.57
8:CI:29:ILE:HG21	8:CI:37:TYR:CD2	2.40	0.57
23:DB:1777:U:O2'	23:DB:1778:U:H5'	2.05	0.57
45:BS:76:VAL:HG12	45:BS:103:ILE:HA	1.87	0.57
7:CH:86:LYS:HB3	7:CH:90:GLU:HB3	1.87	0.57
30:DY:8:GLN:CB	30:DY:31:ILE:HA	2.35	0.57
23:DB:1684:G:H2'	23:DB:1685:C:H6	1.70	0.57
47:DF:70:ARG:NH2	47:DF:71:LYS:HB2	2.19	0.57
1:AA:927:G:H4'	1:AA:1503:A:N7	2.19	0.57
23:DB:2861:U:H2'	23:DB:2862:G:H8	1.69	0.57
22:BA:102:G:H2'	22:BA:103:U:H6	1.69	0.57
50:DT:18:GLU:O	50:DT:20:ALA:N	2.35	0.57
1:CA:472:U:H2'	1:CA:473:U:C6	2.39	0.57
26:BD:38:LYS:HG3	26:BD:47:ALA:HB3	1.86	0.57
29:BE:189:THR:O	29:BE:193:VAL:HG23	2.04	0.57
23:BB:1583:A:H5''	23:BB:1584:U:OP1	2.03	0.57
29:DE:31:VAL:HG21	29:DE:104:ALA:CB	2.35	0.57
23:DB:2561:U:O3'	27:DK:40:LYS:HE2	2.04	0.57
23:DB:1098:A:C2'	24:DI:4:VAL:N	2.67	0.57
1:CA:1179:A:H2'	1:CA:1180:A:O4'	2.05	0.57
35:BV:4:ILE:HG22	35:BV:63:ILE:HG23	1.86	0.57
23:BB:1199:U:H5'	44:BQ:4:LYS:HD3	1.86	0.57
3:AD:160:LEU:N	3:AD:160:LEU:HD13	2.12	0.57
23:DB:2746:U:H5''	48:DG:137:LYS:HG2	1.86	0.57
48:DG:86:LEU:HG	48:DG:163:TYR:HD1	1.69	0.57
38:DM:69:PRO:HA	38:DM:94:ALA:HB2	1.86	0.57
23:DB:1082:U:N3	23:DB:1086:A:C6	2.71	0.57
47:DF:134:GLN:C	47:DF:136:ILE:H	2.06	0.57
23:DB:1794:A:H2'	23:DB:1795:C:H6	1.68	0.57
1:CA:1414:U:H2'	1:CA:1415:G:H8	1.69	0.57
1:AA:205:A:O2'	1:AA:206:C:H5'	2.04	0.57
44:BQ:80:ASN:O	44:BQ:83:LYS:HB3	2.05	0.57
38:DM:100:LYS:HD3	38:DM:101:VAL:N	2.20	0.57
25:BC:102:TYR:O	25:BC:103:ILE:HG13	2.04	0.57
27:BK:2:ILE:HG23	27:BK:33:ALA:O	2.05	0.57
23:DB:1993:U:H4'	26:DD:133:THR:CG2	2.35	0.57
23:BB:191:A:H2'	23:BB:192:C:H6	1.68	0.57
23:BB:594:U:H2'	23:BB:595:C:H6	1.68	0.57
1:CA:602:A:O2'	1:CA:603:U:H5'	2.05	0.57
47:BF:41:GLU:HB3	47:BF:44:ALA:CB	2.35	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:445:C:O2'	23:DB:446:G:H5'	2.05	0.57
23:BB:272:A:H2'	23:BB:273:G:C8	2.40	0.57
1:AA:1477:U:H2'	1:AA:1478:U:C6	2.39	0.57
2:CC:179:ALA:HB1	2:CC:202:PHE:CE1	2.39	0.57
1:CA:493:A:H5'	1:CA:494:G:OP2	2.04	0.57
30:DY:23:LEU:HD13	30:DY:28:LEU:HB2	1.85	0.57
23:BB:2710:C:H2'	23:BB:2711:A:C8	2.40	0.57
45:DS:4:ILE:HG22	45:DS:106:VAL:HG22	1.86	0.57
25:BC:62:ARG:HD2	25:BC:62:ARG:N	2.19	0.57
43:BO:58:ILE:O	43:BO:62:LEU:HD23	2.05	0.57
23:BB:2298:A:OP1	47:BF:70:ARG:HD3	2.05	0.57
23:DB:2639:A:H2'	23:DB:2640:G:O4'	2.05	0.57
8:AI:127:SER:HB2	8:AI:128:LYS:HD3	1.86	0.57
29:DE:189:THR:O	29:DE:193:VAL:HG23	2.05	0.57
23:DB:1346:G:O2'	23:DB:1347:A:H5'	2.04	0.57
23:BB:1577:C:H2'	23:BB:1578:U:C6	2.40	0.57
23:BB:546:U:H5''	23:BB:548:G:C5	2.39	0.57
9:CJ:40:ILE:HD12	9:CJ:74:VAL:H	1.69	0.57
35:BV:70:ILE:HD13	35:BV:70:ILE:N	2.19	0.57
5:AF:1:MET:SD	5:AF:67:PRO:HD3	2.45	0.57
1:CA:254:G:OP1	14:CQ:68:LYS:O	2.22	0.57
37:DL:123:ARG:CZ	37:DL:143:GLU:HB2	2.35	0.57
8:AI:36:GLN:N	8:AI:36:GLN:NE2	2.53	0.57
10:AK:22:ILE:HD13	10:AK:95:THR:CG2	2.35	0.57
23:BB:1724:G:H2'	23:BB:1725:U:C6	2.40	0.57
1:AA:8:A:C6	3:AD:205:LYS:HB2	2.39	0.57
40:DH:134:VAL:HG23	40:DH:138:VAL:HG11	1.86	0.57
43:DO:28:VAL:HG22	43:DO:29:HIS:N	2.16	0.57
47:DF:102:LEU:HA	47:DF:106:ALA:CB	2.35	0.57
47:DF:137:PHE:O	47:DF:139:GLU:N	2.38	0.57
18:CB:58:LYS:HD3	18:CB:59:ILE:HG23	1.85	0.57
47:BF:137:PHE:O	47:BF:139:GLU:N	2.37	0.57
23:DB:2052:A:OP1	26:DD:145:SER:HA	2.04	0.57
47:DF:15:LEU:HA	47:DF:18:GLU:HB2	1.85	0.57
24:DI:121:ILE:CD1	24:DI:121:ILE:H	2.15	0.57
34:D3:49:VAL:HG23	34:D3:51:LYS:N	2.20	0.57
1:AA:1308:U:H5'	12:AM:108:ARG:HH21	1.70	0.57
23:DB:1592:C:H2'	23:DB:1593:A:C8	2.38	0.57
39:DX:26:PHE:HD1	39:DX:27:ASN:HD22	1.51	0.57
27:BK:64:ARG:HD2	27:BK:102:PRO:O	2.05	0.57
46:DU:85:ARG:HD3	46:DU:86:PHE:N	2.19	0.57
36:D2:35:ARG:HB2	36:D2:42:LEU:HD21	1.85	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2228:G:H2'	23:BB:2229:U:C6	2.40	0.57
3:CD:35:GLN:O	3:CD:37:PRO:HD3	2.05	0.57
6:AG:149:ALA:HB3	10:AK:55:ARG:NH2	2.20	0.57
23:BB:653:U:H5'	23:BB:654:A:H5''	1.85	0.57
23:BB:2292:U:H2'	23:BB:2293:G:H8	1.70	0.57
48:BG:40:VAL:HG13	48:BG:64:ALA:HA	1.87	0.57
11:AL:107:LYS:HD2	11:AL:107:LYS:H	1.70	0.57
23:BB:2648:G:H2'	23:BB:2649:C:C6	2.39	0.57
23:BB:173:A:H2'	23:BB:174:U:C6	2.40	0.57
38:BM:11:LYS:HD3	38:BM:86:LYS:HD3	1.86	0.57
52:DW:43:LYS:HB3	52:DW:79:ILE:HD11	1.86	0.57
29:DE:17:THR:C	29:DE:19:PHE:H	2.08	0.57
1:CA:401:C:H2'	1:CA:402:G:H8	1.69	0.57
24:BI:58:ILE:N	24:BI:58:ILE:HD12	2.19	0.57
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.87	0.57
17:CT:56:ILE:O	17:CT:60:GLN:HG2	2.05	0.57
7:AH:86:LYS:HB3	7:AH:90:GLU:HB3	1.87	0.57
23:DB:2710:C:H2'	23:DB:2711:A:C8	2.40	0.57
23:DB:2299:U:H2'	23:DB:2300:C:C6	2.39	0.57
1:CA:994:A:H2'	1:CA:994:A:N3	2.18	0.57
37:DL:131:ALA:HA	37:DL:134:ALA:HB3	1.85	0.57
41:BJ:114:LEU:O	41:BJ:118:MET:HG3	2.04	0.57
33:B1:32:LYS:HE3	33:B1:52:LYS:HG2	1.87	0.57
9:AJ:92:LEU:H	9:AJ:92:LEU:HD22	1.69	0.57
23:DB:397:U:H2'	23:DB:398:C:C6	2.40	0.57
12:CM:105:ALA:HB3	12:CM:109:LYS:HE3	1.86	0.57
2:AC:155:ARG:HD2	2:AC:192:TYR:CD1	2.38	0.57
9:CJ:22:THR:HA	9:CJ:25:ILE:HD12	1.87	0.57
5:CF:66:ALA:HB1	5:CF:67:PRO:HD2	1.87	0.57
5:AF:66:ALA:HB1	5:AF:67:PRO:HD2	1.87	0.57
15:AR:56:ARG:O	15:AR:60:ARG:HG2	2.04	0.57
40:BH:61:VAL:HG13	40:BH:62:LEU:HD23	1.86	0.57
23:DB:1199:U:H5'	44:DQ:4:LYS:HD3	1.85	0.57
37:BL:17:LYS:HD2	37:BL:19:LEU:HD11	1.86	0.57
23:BB:1799:G:C5	25:BC:175:LEU:HD13	2.40	0.57
26:DD:12:THR:O	26:DD:24:VAL:HG12	2.05	0.57
28:BP:47:ILE:HD11	28:BP:59:THR:HG22	1.87	0.57
23:BB:2352:A:C6	52:BW:30:VAL:HG11	2.40	0.57
1:AA:1349:A:OP1	8:AI:121:ARG:HB2	2.05	0.57
41:DJ:44:TYR:CE2	44:DQ:59:LEU:HD11	2.40	0.57
49:DR:79:ARG:O	49:DR:81:LYS:HG2	2.04	0.57
23:DB:2184:A:H2'	23:DB:2185:U:C6	2.40	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:AB:140:LEU:H	18:AB:140:LEU:HD12	1.69	0.57
23:BB:37:C:O2'	29:BE:45:ALA:HA	2.05	0.57
18:CB:127:LYS:NZ	18:CB:128:LEU:HB2	2.19	0.57
18:CB:128:LEU:O	18:CB:133:ALA:HB2	2.04	0.57
1:CA:617:G:H4'	13:CP:46:LYS:HD3	1.86	0.57
1:CA:1296:C:H4'	1:CA:1302:C:H41	1.69	0.57
1:CA:859:G:H2'	1:CA:860:A:H8	1.70	0.57
1:CA:161:A:H2'	1:CA:162:A:C8	2.40	0.57
7:AH:86:LYS:HD2	7:AH:90:GLU:HG2	1.86	0.57
23:DB:1219:U:H2'	23:DB:1220:G:H8	1.68	0.57
2:AC:19:SER:O	21:AN:93:PRO:HB3	2.05	0.57
23:BB:348:A:H2'	23:BB:349:U:C6	2.40	0.57
23:DB:979:A:H2'	23:DB:982:C:H41	1.69	0.57
23:BB:277:G:N3	23:BB:277:G:H2'	2.20	0.57
23:DB:1205:A:H4'	23:DB:1206:G:OP2	2.05	0.57
24:DI:5:GLN:O	24:DI:6:ALA:HB3	2.05	0.57
8:CI:41:GLU:O	8:CI:44:ARG:HG2	2.05	0.57
12:AM:39:ALA:HB3	12:AM:42:VAL:HG13	1.86	0.57
37:DL:29:LYS:C	37:DL:31:GLY:H	2.08	0.57
5:CF:88:MET:CE	5:CF:90:MET:HG2	2.34	0.57
37:DL:123:ARG:NH1	37:DL:143:GLU:HB2	2.20	0.57
23:BB:2538:C:H2'	23:BB:2539:C:H6	1.68	0.57
23:BB:2720:U:H2'	23:BB:2721:A:H8	1.70	0.57
18:CB:33:ALA:HA	18:CB:39:ILE:H	1.70	0.57
27:BK:73:ASP:HB2	28:BP:77:SER:OG	2.05	0.57
38:BM:43:ALA:O	38:BM:46:ILE:HG13	2.05	0.57
47:DF:134:GLN:NE2	47:DF:136:ILE:HD13	2.20	0.57
23:BB:2728:U:H2'	23:BB:2729:G:C8	2.40	0.57
42:BN:33:ILE:HD11	42:BN:112:TYR:CD1	2.39	0.57
6:AG:29:LEU:HD11	6:AG:119:LEU:HD22	1.86	0.57
1:AA:994:A:C5	1:AA:1216:A:H4'	2.40	0.57
44:DQ:56:PHE:O	44:DQ:59:LEU:HB3	2.05	0.57
1:CA:268:U:H2'	1:CA:269:C:C6	2.40	0.57
23:BB:987:C:H2'	23:BB:988:A:O4'	2.05	0.57
23:BB:1484:U:H2'	23:BB:1485:U:C6	2.39	0.57
23:DB:170:U:H2'	23:DB:171:U:C6	2.40	0.57
25:BC:94:LEU:HD13	25:BC:100:ARG:HD3	1.87	0.57
1:AA:195:A:H1'	1:AA:222:C:O2'	2.04	0.57
1:CA:1129:C:H5''	8:CI:17:ARG:NH2	2.19	0.57
1:AA:1007:U:H2'	1:AA:1008:U:C6	2.40	0.57
1:AA:677:U:H2'	1:AA:678:U:H6	1.70	0.57
23:BB:479:A:N3	23:BB:481:G:H5''	2.20	0.57

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:951:C:O2'	23:BB:952:G:H5'	2.05	0.57
6:CG:25:PHE:HB2	6:CG:100:MET:SD	2.44	0.57
23:DB:2443:C:O2'	23:DB:2444:G:H5'	2.04	0.57
52:BW:70:VAL:HG23	52:BW:75:ASN:HD22	1.69	0.57
23:BB:1097:U:H2'	23:BB:1098:A:H5'	1.87	0.57
9:CJ:37:ARG:HG3	9:CJ:38:GLY:N	2.19	0.57
23:DB:611:C:H2'	23:DB:612:G:H5'	1.85	0.57
18:AB:205:ALA:O	18:AB:209:VAL:HG22	2.05	0.57
23:DB:1809:A:H2'	23:DB:1810:A:C8	2.39	0.57
26:BD:33:ARG:HA	26:BD:95:SER:HA	1.86	0.57
1:AA:317:U:H2'	1:AA:318:G:H8	1.69	0.57
25:DC:7:PRO:HB3	25:DC:13:ARG:HG3	1.86	0.57
12:CM:15:VAL:HA	12:CM:29:SER:OG	2.04	0.57
20:CO:54:ARG:HG2	20:CO:54:ARG:HH11	1.70	0.57
23:BB:404:A:H4'	23:BB:405:U:H5'	1.86	0.57
3:AD:39:GLN:HG3	3:AD:40:HIS:N	2.19	0.57
23:DB:1100:C:OP2	24:DI:2:LYS:HB3	2.05	0.56
52:BW:49:ASN:HB3	52:BW:81:ILE:CD1	2.35	0.56
23:BB:1429:G:H2'	23:BB:1430:G:H8	1.70	0.56
23:BB:137:U:H3'	23:BB:138:U:C5	2.39	0.56
42:BN:72:ASP:O	42:BN:76:VAL:HG13	2.05	0.56
48:BG:91:VAL:HG23	48:BG:92:GLY:H	1.70	0.56
2:AC:185:THR:HG22	2:AC:186:SER:H	1.69	0.56
1:CA:719:C:H1'	15:CR:37:LYS:HB2	1.87	0.56
1:AA:436:C:O2'	1:AA:437:U:H5'	2.05	0.56
23:BB:321:U:OP2	29:BE:130:LYS:HA	2.05	0.56
28:BP:54:LEU:HA	28:BP:76:HIS:CD2	2.40	0.56
23:DB:2376:A:H2'	23:DB:2377:A:O4'	2.05	0.56
43:BO:109:ALA:HA	43:BO:112:GLU:OE2	2.05	0.56
43:BO:28:VAL:HG22	43:BO:29:HIS:N	2.17	0.56
23:DB:2885:G:H21	31:D0:31:LYS:HB3	1.69	0.56
18:CB:61:SER:HB2	18:CB:62:ARG:NH1	2.20	0.56
28:DP:88:ARG:HH21	28:DP:112:ARG:NH2	2.03	0.56
1:CA:1000:A:H2'	1:CA:1001:C:H6	1.66	0.56
1:CA:1005:A:H3'	1:CA:1006:G:C8	2.39	0.56
47:BF:134:GLN:C	47:BF:136:ILE:H	2.07	0.56
18:AB:186:VAL:O	18:AB:200:PRO:HA	2.05	0.56
26:DD:136:ASN:HD21	26:DD:139:SER:C	2.08	0.56
1:AA:1508:A:H2'	1:AA:1509:C:C6	2.40	0.56
42:DN:9:GLN:HA	42:DN:17:ARG:NE	2.19	0.56
39:BX:26:PHE:HD1	39:BX:27:ASN:HD22	1.52	0.56
46:BU:85:ARG:HD3	46:BU:86:PHE:N	2.20	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DI:125:THR:O	24:DI:129:GLU:HG3	2.05	0.56
32:D4:16:ILE:HG12	32:D4:25:VAL:HG22	1.87	0.56
1:AA:244:U:O4	1:AA:906:A:H1'	2.05	0.56
38:DM:105:MET:HB2	38:DM:117:PHE:CZ	2.39	0.56
1:AA:370:C:H2'	1:AA:371:A:C8	2.40	0.56
23:DB:2292:U:H2'	23:DB:2293:G:C8	2.40	0.56
38:BM:32:GLY:O	38:BM:131:VAL:HG22	2.05	0.56
1:CA:370:C:H2'	1:CA:371:A:C8	2.40	0.56
23:BB:1853:A:N1	23:BB:2087:G:H1'	2.20	0.56
22:DA:60:C:H2'	22:DA:61:G:C8	2.40	0.56
1:CA:1128:C:H4'	1:CA:1148:U:O2	2.05	0.56
1:CA:1127:G:H22	1:CA:1145:A:H2	1.53	0.56
2:CC:104:GLU:HG2	2:CC:105:VAL:H	1.69	0.56
1:AA:812:G:O2'	1:AA:813:U:H6	1.87	0.56
23:DB:2104:C:H2'	23:DB:2105:U:C6	2.40	0.56
23:DB:1779:U:C5	23:DB:1784:A:N7	2.73	0.56
22:DA:49:C:H2'	22:DA:50:A:H8	1.70	0.56
1:CA:1163:A:H2'	1:CA:1164:G:C8	2.39	0.56
1:CA:32:A:H2'	1:CA:33:A:C8	2.40	0.56
23:BB:296:U:H2'	23:BB:297:G:C8	2.40	0.56
22:DA:32:U:H4'	22:DA:52:A:N6	2.20	0.56
17:AT:56:ILE:O	17:AT:60:GLN:HG2	2.04	0.56
21:AN:86:ALA:HB1	21:AN:91:GLU:HB2	1.87	0.56
23:BB:208:C:H2'	23:BB:209:C:H6	1.70	0.56
23:BB:2757:A:H2'	23:BB:2758:A:H5'	1.87	0.56
10:CK:30:ILE:HG22	10:CK:45:THR:HB	1.87	0.56
1:CA:335:C:H2'	1:CA:336:A:H8	1.70	0.56
1:AA:1465:A:H2'	1:AA:1466:C:C6	2.40	0.56
7:AH:113:ARG:HH21	7:AH:117:GLN:HB2	1.70	0.56
23:DB:696:G:O2'	23:DB:697:G:H5'	2.05	0.56
25:DC:82:TYR:HE1	25:DC:84:PRO:HG3	1.70	0.56
41:DJ:102:GLU:HB3	41:DJ:119:PHE:HZ	1.68	0.56
1:CA:724:G:H2'	1:CA:725:G:H8	1.69	0.56
6:AG:143:MET:N	6:AG:143:MET:SD	2.78	0.56
51:DZ:35:SER:HA	51:DZ:50:ARG:HA	1.86	0.56
23:BB:564:C:H1'	44:BQ:36:GLN:OE1	2.05	0.56
23:DB:2860:A:H8	23:DB:2860:A:O5'	1.88	0.56
1:AA:613:C:H2'	1:AA:614:C:C6	2.39	0.56
23:BB:704:G:H1'	23:BB:727:A:N6	2.19	0.56
21:CN:48:GLN:O	21:CN:50:LEU:HG	2.05	0.56
23:DB:1724:G:H2'	23:DB:1725:U:C6	2.40	0.56
47:DF:111:ARG:O	47:DF:112:ASP:HB2	2.05	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:BQ:94:LEU:HD12	49:BR:13:ARG:HB2	1.88	0.56
47:BF:111:ARG:O	47:BF:112:ASP:HB2	2.05	0.56
26:DD:51:THR:HG21	26:DD:76:GLY:HA3	1.87	0.56
23:DB:1792:G:OP1	25:DC:204:LEU:HD12	2.05	0.56
13:CP:68:SER:HB3	13:CP:71:VAL:HG12	1.86	0.56
1:CA:986:U:H1'	16:CS:53:GLY:O	2.05	0.56
25:DC:94:LEU:HD13	25:DC:100:ARG:HD3	1.86	0.56
1:AA:652:U:H1'	1:AA:653:U:H5	1.69	0.56
23:BB:2645:G:H3'	23:BB:2646:C:C5'	2.35	0.56
1:AA:222:C:H2'	1:AA:223:A:C8	2.40	0.56
23:BB:1559:U:H3'	23:BB:1560:G:H5'	1.87	0.56
23:BB:680:C:H2'	23:BB:681:G:H8	1.70	0.56
1:AA:272:C:H2'	1:AA:273:U:C6	2.41	0.56
1:CA:555:U:H2'	1:CA:556:C:H6	1.70	0.56
23:DB:1316:U:O2'	23:DB:1317:G:H5'	2.05	0.56
52:BW:45:HIS:HB3	52:BW:52:CYS:HB2	1.87	0.56
51:DZ:51:VAL:O	51:DZ:52:SER:HB3	2.04	0.56
23:DB:2297:A:N6	23:DB:2319:G:H1'	2.21	0.56
1:AA:230:G:H5''	13:AP:31:ARG:NH2	2.20	0.56
22:DA:89:U:O2	23:DB:958:U:H2'	2.04	0.56
1:CA:598:U:H2'	1:CA:599:C:C6	2.41	0.56
23:DB:2788:C:H2'	23:DB:2789:C:C6	2.40	0.56
4:AE:100:GLU:HA	4:AE:121:ASN:ND2	2.20	0.56
16:AS:24:SER:HB2	16:AS:27:LYS:HE2	1.86	0.56
23:DB:704:G:H1'	23:DB:727:A:N6	2.19	0.56
12:AM:13:HIS:HA	12:AM:41:ASP:O	2.05	0.56
50:DT:31:VAL:HA	50:DT:84:TYR:H	1.70	0.56
50:BT:28:ASN:CA	50:BT:91:GLN:HE22	2.18	0.56
8:CI:11:ARG:HD3	8:CI:76:GLY:HA3	1.86	0.56
38:BM:135:VAL:O	38:BM:136:MET:HG3	2.06	0.56
23:BB:2774:C:OP1	26:BD:169:ARG:HG3	2.06	0.56
1:CA:121:U:H4'	1:CA:122:G:N7	2.20	0.56
48:DG:34:ARG:H	48:DG:34:ARG:NH1	1.86	0.56
5:CF:17:GLN:O	5:CF:21:MET:HG3	2.06	0.56
52:BW:37:VAL:HG12	52:BW:38:ARG:N	2.19	0.56
1:CA:1380:U:O4	6:CG:2:ARG:HB2	2.05	0.56
40:BH:31:VAL:CB	40:BH:32:PRO:HD3	2.32	0.56
24:DI:108:ILE:HG22	24:DI:128:ILE:HD13	1.87	0.56
3:AD:153:ARG:HG3	3:AD:154:VAL:H	1.70	0.56
18:AB:69:VAL:HA	18:AB:91:VAL:O	2.05	0.56
1:CA:16:A:C2'	1:CA:17:U:H5'	2.34	0.56
23:BB:2472:G:C2'	23:BB:2475:C:H42	2.17	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DG:126:THR:H	48:DG:129:GLU:HB3	1.68	0.56
47:BF:24:VAL:O	47:BF:27:VAL:HG22	2.06	0.56
16:CS:15:LEU:HA	16:CS:18:VAL:CG1	2.35	0.56
6:AG:138:GLU:HA	6:AG:141:HIS:HB2	1.88	0.56
23:DB:996:A:H4'	44:DQ:91:ARG:HG2	1.87	0.56
50:BT:38:ALA:O	50:BT:39:THR:HB	2.05	0.56
50:BT:39:THR:CG2	50:BT:42:GLU:H	2.15	0.56
27:BK:2:ILE:HD12	27:BK:2:ILE:N	2.20	0.56
23:DB:2674:G:H2'	23:DB:2675:A:H8	1.69	0.56
23:DB:2674:G:H2'	23:DB:2675:A:C8	2.41	0.56
23:BB:2557:G:H2'	23:BB:2558:C:H6	1.70	0.56
23:DB:741:U:H2'	23:DB:742:A:C8	2.40	0.56
1:CA:131:A:H2'	1:CA:132:C:C6	2.39	0.56
23:BB:192:C:H2'	23:BB:193:U:H5'	1.86	0.56
23:DB:616:A:H4'	29:DE:101:TYR:CE2	2.40	0.56
23:DB:871:U:H2'	23:DB:872:U:C6	2.40	0.56
29:BE:46:GLN:HG3	29:BE:87:ALA:HB3	1.87	0.56
51:BZ:51:VAL:O	51:BZ:52:SER:HB3	2.05	0.56
23:DB:2199:A:H3'	23:DB:2200:C:H6	1.69	0.56
6:AG:114:SER:O	6:AG:118:ARG:HG3	2.05	0.56
1:AA:602:A:O2'	1:AA:603:U:H5'	2.05	0.56
1:CA:222:C:H2'	1:CA:223:A:C8	2.40	0.56
23:BB:242:G:H5''	34:B3:63:TYR:CE2	2.41	0.56
1:AA:337:G:O2'	1:AA:338:A:H5'	2.05	0.56
1:CA:35:G:H2'	1:CA:36:C:H6	1.70	0.56
23:BB:1405:U:H2'	23:BB:1406:U:C6	2.41	0.56
23:DB:2784:U:H2'	23:DB:2785:C:C6	2.39	0.56
23:DB:2300:C:H2'	23:DB:2301:C:C6	2.40	0.56
1:AA:562:U:H1'	11:AL:11:ARG:HB3	1.87	0.56
4:CE:100:GLU:HA	4:CE:121:ASN:ND2	2.20	0.56
1:AA:323:U:H2'	1:AA:324:G:O4'	2.05	0.56
15:AR:21:ASP:OD1	15:AR:23:LYS:HE3	2.06	0.56
50:DT:7:LEU:C	50:DT:9:LYS:HE3	2.26	0.56
23:DB:1936:A:N6	23:DB:1963:U:N3	2.53	0.56
1:AA:32:A:H2'	1:AA:33:A:C8	2.40	0.56
23:BB:2825:G:H3'	23:BB:2826:A:H8	1.70	0.56
11:AL:13:ARG:O	11:AL:14:LYS:HB3	2.04	0.56
23:DB:2529:G:H5''	48:DG:174:LYS:HD2	1.87	0.56
23:BB:997:G:O2'	23:BB:998:C:H5'	2.05	0.56
1:CA:1258:G:H2'	1:CA:1259:C:C6	2.41	0.56
4:AE:33:THR:HG22	4:AE:51:LYS:HB3	1.87	0.56
41:BJ:72:LYS:O	41:BJ:73:VAL:HG13	2.05	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BC:2:VAL:HG23	25:BC:3:VAL:H	1.70	0.56
23:BB:942:G:H2'	23:BB:943:A:O4'	2.05	0.56
23:BB:2804:U:H2'	23:BB:2805:C:C6	2.40	0.56
40:BH:90:LEU:HD21	40:BH:146:VAL:CG1	2.36	0.56
52:DW:23:LYS:C	52:DW:66:VAL:HB	2.25	0.56
4:AE:73:VAL:HG11	4:AE:143:LEU:HB3	1.87	0.56
48:DG:17:LYS:HB3	48:DG:24:THR:HB	1.87	0.56
14:CQ:19:SER:O	14:CQ:20:ILE:HG13	2.05	0.56
26:DD:106:LYS:HG3	26:DD:206:ALA:HB3	1.86	0.56
40:BH:68:ARG:NE	40:BH:72:ILE:HB	2.21	0.56
52:DW:18:LYS:HA	52:DW:36:ILE:HG12	1.87	0.56
52:DW:37:VAL:HG12	52:DW:38:ARG:N	2.19	0.56
19:AU:16:ARG:HA	19:AU:16:ARG:NE	2.20	0.56
49:DR:37:GLU:HG3	49:DR:53:PHE:CZ	2.39	0.56
38:DM:71:LYS:HG2	38:DM:93:VAL:HG12	1.88	0.56
16:AS:70:LEU:HA	16:AS:73:PHE:CE1	2.41	0.56
1:AA:1220:G:H2'	1:AA:1221:G:H8	1.69	0.56
23:DB:2834:G:H1'	23:DB:2883:A:H61	1.70	0.56
47:BF:122:ASP:OD2	47:BF:126:ASN:HB2	2.05	0.56
40:DH:7:ASP:CG	40:DH:8:LYS:H	2.09	0.56
23:BB:784:G:H1	25:BC:227:VAL:HG11	1.69	0.56
9:AJ:18:ILE:HG23	9:AJ:19:ASP:N	2.20	0.56
23:DB:2742:G:O2'	23:DB:2743:U:H5'	2.04	0.56
2:AC:6:PRO:O	2:AC:9:ILE:HG22	2.05	0.56
1:AA:841:C:H5'	1:AA:843:U:OP2	2.06	0.56
36:B2:3:ARG:NE	36:B2:3:ARG:HA	2.19	0.56
1:CA:678:U:H2'	1:CA:679:C:C6	2.40	0.56
6:AG:62:GLU:CG	6:AG:69:ARG:HH22	2.18	0.56
1:CA:41:G:H2'	1:CA:42:G:H8	1.70	0.56
23:BB:20:C:H2'	23:BB:21:A:H8	1.70	0.56
23:DB:852:U:H2'	23:DB:853:C:H6	1.71	0.56
47:BF:78:ILE:HA	47:BF:82:TYR:CD1	2.41	0.56
1:CA:1272:G:O2'	1:CA:1273:C:H5'	2.05	0.56
52:BW:34:SER:HB3	52:BW:58:LEU:HD23	1.88	0.56
23:BB:982:C:O4'	23:BB:982:C:O2	2.23	0.56
6:AG:93:VAL:HA	6:AG:96:ASN:HD21	1.71	0.56
23:DB:1636:U:H2'	23:DB:1637:A:H8	1.71	0.56
23:DB:680:C:H2'	23:DB:681:G:H8	1.70	0.56
23:BB:1771:C:H2'	23:BB:1772:A:C8	2.41	0.56
26:DD:69:ALA:HA	26:DD:73:VAL:HB	1.88	0.56
23:BB:2662:A:H2'	23:BB:2663:G:O4'	2.06	0.56
23:BB:1936:A:N6	23:BB:1963:U:N3	2.54	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1030:C:O2'	23:BB:1031:G:H5'	2.05	0.56
23:BB:2366:A:H2'	23:BB:2367:G:O4'	2.06	0.56
8:CI:44:ARG:HE	8:CI:48:ARG:HH22	1.53	0.56
18:CB:42:LEU:HA	18:CB:45:THR:HB	1.88	0.56
12:AM:73:SER:HA	12:AM:76:ILE:CD1	2.35	0.56
50:DT:32:LEU:N	50:DT:83:ALA:HB3	2.21	0.56
19:AU:36:PHE:HA	19:AU:39:LYS:CE	2.31	0.56
26:BD:106:LYS:HG3	26:BD:206:ALA:HB3	1.87	0.56
19:CU:24:LYS:HD2	19:CU:25:ALA:N	2.20	0.56
24:BI:76:ALA:O	24:BI:80:LYS:HG3	2.05	0.56
1:CA:8:A:H61	3:CD:53:GLN:HE22	1.52	0.56
47:DF:110:ILE:HG22	47:DF:113:PHE:HD2	1.71	0.56
28:BP:4:ILE:HG22	28:BP:5:LYS:N	2.16	0.56
47:BF:49:LEU:HD11	47:BF:66:ILE:HD12	1.86	0.56
8:AI:118:ARG:HH22	8:AI:122:ARG:NH2	2.03	0.56
46:BU:53:GLN:O	46:BU:53:GLN:HG2	2.05	0.56
24:DI:17:ALA:O	24:DI:18:ASN:CB	2.53	0.56
24:BI:17:ALA:O	24:BI:18:ASN:HB3	2.05	0.56
23:DB:1654:A:H2'	23:DB:1655:A:H8	1.70	0.56
12:AM:2:ARG:HD3	12:AM:6:ILE:H	1.71	0.56
1:AA:1308:U:H5'	12:AM:108:ARG:NH2	2.20	0.56
39:DX:23:ARG:NE	39:DX:27:ASN:HD21	2.02	0.56
27:BK:99:ILE:H	27:BK:118:LEU:CD2	2.18	0.56
23:DB:163:C:O4'	23:DB:163:C:O2	2.23	0.56
1:CA:1287:A:H2'	1:CA:1288:A:C8	2.41	0.56
23:DB:660:C:H2'	23:DB:661:A:C8	2.40	0.56
42:BN:59:SER:C	42:BN:61:ALA:H	2.08	0.56
30:BY:8:GLN:CB	30:BY:31:ILE:HA	2.36	0.56
1:AA:493:A:H5'	1:AA:494:G:OP2	2.06	0.56
23:DB:2230:G:H2'	23:DB:2231:U:C6	2.40	0.56
1:CA:613:C:H2'	1:CA:614:C:C6	2.41	0.56
25:DC:137:GLY:H	25:DC:163:ILE:HB	1.71	0.56
41:BJ:40:HIS:HD1	41:BJ:41:LYS:N	2.04	0.56
23:DB:1153:C:H2'	23:DB:1154:G:O4'	2.05	0.56
1:AA:586:C:H5''	7:AH:81:GLY:HA2	1.87	0.56
23:DB:522:A:H2'	23:DB:523:C:C6	2.40	0.56
1:CA:49:U:O2'	1:CA:50:A:H2'	2.06	0.56
23:DB:2562:U:H2'	23:DB:2563:U:H5'	1.87	0.56
1:AA:1254:A:H2'	1:AA:1255:G:C8	2.41	0.56
23:DB:1764:C:H2'	23:DB:1765:U:H6	1.70	0.56
12:AM:12:LYS:O	12:AM:43:LYS:HA	2.05	0.56
14:AQ:19:SER:O	14:AQ:20:ILE:HG13	2.06	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:AI:24:ASN:HA	8:AI:58:GLU:O	2.06	0.56
8:AI:51:LEU:HB3	8:AI:56:MET:HB3	1.87	0.56
2:AC:112:ALA:HB1	2:AC:184:ASN:HB2	1.87	0.56
25:BC:66:PHE:HB2	25:BC:150:GLY:O	2.06	0.56
48:DG:89:VAL:HG12	48:DG:90:GLY:H	1.71	0.56
28:DP:3:ILE:O	28:DP:3:ILE:HD13	2.05	0.56
44:BQ:94:LEU:C	44:BQ:96:ASP:H	2.06	0.56
22:BA:6:G:H2'	22:BA:7:G:C8	2.40	0.56
23:DB:2033:A:O2'	23:DB:2035:G:OP2	2.23	0.56
23:BB:1488:C:O2'	23:BB:1489:C:H5'	2.06	0.56
23:BB:170:U:H2'	23:BB:171:U:C6	2.40	0.56
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.70	0.56
1:AA:1458:G:H5''	17:AT:25:SER:HB2	1.87	0.56
1:CA:926:G:H5'	1:CA:927:G:H5''	1.87	0.56
1:AA:719:C:H1'	15:AR:37:LYS:HB2	1.87	0.56
49:BR:43:ASN:HD22	49:BR:44:GLY:H	1.53	0.56
23:DB:417:C:H2'	23:DB:418:C:C6	2.41	0.56
29:DE:3:LEU:O	29:DE:12:LEU:HB2	2.04	0.56
23:BB:1636:U:H2'	23:BB:1637:A:C8	2.40	0.56
23:DB:1636:U:H2'	23:DB:1637:A:C8	2.40	0.56
23:BB:2496:C:OP1	38:BM:82:MET:HB2	2.06	0.56
23:DB:2787:C:H4'	26:DD:62:LYS:HB3	1.88	0.56
1:AA:69:G:H2'	1:AA:70:U:C6	2.41	0.56
29:DE:72:SER:C	29:DE:74:LYS:H	2.09	0.56
1:AA:731:G:OP1	1:AA:766:A:H1'	2.04	0.56
23:DB:1164:C:H2'	23:DB:1165:A:H8	1.71	0.56
23:BB:1747:U:H2'	23:BB:1748:C:C6	2.41	0.56
23:DB:2008:C:H2'	23:DB:2009:A:H8	1.70	0.56
22:BA:13:G:H1'	22:BA:69:G:N2	2.21	0.56
50:BT:7:LEU:C	50:BT:9:LYS:HE3	2.26	0.56
1:AA:783:C:O2'	1:AA:784:A:H5'	2.05	0.56
36:B2:13:ASN:O	36:B2:17:GLY:N	2.39	0.56
48:BG:36:LEU:HD22	48:BG:36:LEU:N	2.21	0.56
1:CA:415:A:H2'	1:CA:416:G:H5'	1.87	0.56
8:CI:56:MET:C	8:CI:58:GLU:H	2.08	0.56
23:DB:705:A:H61	23:DB:726:G:H1'	1.69	0.56
35:BV:75:GLN:O	38:BM:136:MET:HE1	2.06	0.56
52:DW:39:GLN:CG	52:DW:40:ARG:N	2.69	0.56
1:CA:8:A:C6	3:CD:205:LYS:HB2	2.41	0.56
1:CA:1366:C:O2'	1:CA:1367:C:H5'	2.06	0.56
23:BB:2314:A:H1'	47:BF:154:THR:HG21	1.88	0.56
44:BQ:81:GLY:HA2	44:BQ:116:LEU:HD21	1.88	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DH:7:ASP:HA	40:DH:15:LEU:HD23	1.88	0.56
42:DN:33:ILE:HD11	42:DN:112:TYR:CD1	2.40	0.56
17:CT:64:GLY:HA2	17:CT:67:HIS:HD2	1.69	0.56
42:DN:103:ARG:HG2	42:DN:104:ALA:H	1.71	0.56
40:BH:27:ARG:HG2	40:BH:27:ARG:HH21	1.71	0.56
2:CC:152:VAL:HG11	2:CC:156:LEU:HD23	1.88	0.56
1:CA:1250:A:H4'	8:CI:69:GLY:O	2.04	0.56
23:BB:118:A:OP2	23:BB:119:A:H2'	2.06	0.56
36:D2:3:ARG:NE	36:D2:3:ARG:HA	2.20	0.56
36:D2:3:ARG:HH21	36:D2:3:ARG:HG2	1.71	0.56
23:BB:17:G:H2'	23:BB:18:U:C6	2.41	0.56
23:DB:2246:G:H2'	23:DB:2247:A:H8	1.71	0.56
23:BB:2109:U:H2'	23:BB:2110:G:O4'	2.05	0.56
25:DC:239:PHE:HD1	25:DC:241:LYS:H	1.54	0.56
23:BB:2246:G:H2'	23:BB:2247:A:H8	1.71	0.56
23:BB:1461:C:H2'	23:BB:1462:C:H6	1.69	0.56
1:AA:1117:A:H4'	8:AI:105:ARG:NH1	2.21	0.56
28:BP:103:THR:HG22	28:BP:104:GLY:N	2.20	0.56
1:AA:1480:A:H2'	1:AA:1481:U:C6	2.41	0.56
23:DB:1229:C:H2'	23:DB:1230:A:H8	1.70	0.56
30:DY:29:ARG:H	30:DY:33:HIS:CD2	2.24	0.56
47:BF:70:ARG:NH2	47:BF:71:LYS:HB2	2.20	0.56
48:DG:36:LEU:N	48:DG:36:LEU:HD22	2.20	0.56
1:AA:759:A:H2'	1:AA:760:G:O4'	2.06	0.56
23:BB:2860:A:O5'	23:BB:2860:A:H8	1.88	0.56
24:DI:37:PHE:CZ	24:DI:58:ILE:HD11	2.41	0.56
22:BA:66:A:H61	22:BA:107:G:H2'	1.70	0.56
2:CC:37:LYS:HA	2:CC:40:GLN:HE21	1.71	0.56
23:DB:811:U:OP2	37:DL:20:GLY:HA2	2.04	0.56
23:BB:770:G:P	36:B2:11:LYS:HE2	2.45	0.56
11:AL:51:VAL:HG12	11:AL:52:CYS:H	1.71	0.56
1:CA:1405:G:O2'	1:CA:1406:U:H5'	2.06	0.56
52:BW:49:ASN:HB3	52:BW:81:ILE:HG12	1.88	0.56
23:DB:854:C:O2'	23:DB:855:G:H5'	2.06	0.56
1:CA:236:A:H2'	1:CA:237:G:H8	1.70	0.56
40:BH:40:THR:H	40:BH:43:ASN:ND2	1.97	0.56
23:DB:340:A:H2'	23:DB:341:C:O4'	2.06	0.56
46:DU:81:ARG:HG3	46:DU:81:ARG:HH21	1.70	0.56
40:DH:116:ARG:CD	40:DH:131:SER:H	2.19	0.56
16:AS:35:ARG:HA	16:AS:50:VAL:HG11	1.87	0.56
23:DB:877:A:O2'	23:DB:878:A:H5'	2.05	0.56
23:DB:876:C:H5'	23:DB:877:A:OP2	2.05	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:899:A:H2'	23:DB:900:A:O4'	2.06	0.56
23:BB:1106:G:H2'	23:BB:1107:G:H8	1.71	0.56
18:CB:110:ILE:O	18:CB:113:LEU:HB3	2.05	0.56
4:AE:131:ASN:HD21	4:AE:133:ILE:HB	1.71	0.56
4:AE:152:VAL:HG12	4:AE:156:ARG:HE	1.69	0.56
16:CS:35:ARG:HB2	16:CS:71:GLY:CA	2.35	0.56
16:CS:43:MET:C	16:CS:46:LEU:HD23	2.25	0.56
1:CA:182:A:HO2'	1:CA:183:C:H3'	1.70	0.56
23:BB:365:U:H2'	23:BB:366:C:C6	2.41	0.56
1:CA:1227:A:H2'	1:CA:1228:C:O4'	2.06	0.56
23:BB:559:G:H1'	44:BQ:55:GLN:NE2	2.21	0.56
18:CB:131:LYS:HG3	18:CB:132:GLU:N	2.20	0.56
1:CA:763:G:H2'	1:CA:764:C:H6	1.71	0.56
4:AE:92:ARG:NH1	4:AE:92:ARG:HB3	2.21	0.56
37:BL:110:VAL:HG23	37:BL:126:ARG:O	2.05	0.56
23:BB:2579:C:H1'	26:BD:130:GLN:HE22	1.71	0.56
45:DS:76:VAL:HG12	45:DS:103:ILE:HA	1.86	0.56
1:CA:860:A:H2'	1:CA:861:G:O4'	2.06	0.56
1:AA:713:G:H2'	1:AA:714:G:C8	2.40	0.56
44:BQ:9:ALA:O	44:BQ:11:ALA:N	2.39	0.56
23:BB:532:A:H4'	23:BB:533:G:C8	2.40	0.56
23:DB:951:C:O2'	23:DB:952:G:H5'	2.05	0.56
1:AA:860:A:H2'	1:AA:861:G:O4'	2.05	0.56
45:BS:15:GLN:HA	45:BS:18:ARG:CD	2.36	0.56
4:CE:17:VAL:HG23	4:CE:33:THR:O	2.05	0.56
23:DB:479:A:N3	23:DB:481:G:H5''	2.21	0.56
23:BB:1248:G:O2'	44:BQ:2:ARG:HA	2.06	0.56
23:BB:1773:A:N7	23:BB:1829:A:H1'	2.21	0.56
1:AA:649:A:H2'	1:AA:650:G:O4'	2.06	0.56
1:CA:108:G:C6	17:CT:9:ARG:HG2	2.41	0.56
26:BD:49:GLN:HE21	26:BD:79:LEU:HD12	1.71	0.56
9:CJ:52:LEU:HG	9:CJ:62:ARG:HE	1.71	0.56
25:DC:146:LYS:HB3	25:DC:147:PRO:HD2	1.88	0.56
5:AF:86:ARG:HH12	5:AF:88:MET:HG3	1.71	0.56
40:DH:127:GLU:H	40:DH:127:GLU:CD	2.08	0.56
10:CK:22:ILE:HD13	10:CK:95:THR:CG2	2.36	0.56
43:BO:106:LEU:HG	43:BO:107:ALA:N	2.21	0.56
23:DB:900:A:O2'	23:DB:901:C:H5'	2.05	0.56
9:AJ:28:THR:HG22	9:AJ:31:ARG:NH2	2.19	0.56
38:BM:66:ARG:HB3	38:BM:66:ARG:NH1	2.20	0.56
18:CB:95:TRP:CZ2	18:CB:100:LEU:HD13	2.41	0.56
1:CA:1218:C:H2'	1:CA:1219:A:H8	1.70	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:CS:50:VAL:CG2	16:CS:70:LEU:HG	2.35	0.56
23:BB:2185:U:H2'	23:BB:2186:G:H8	1.71	0.56
1:CA:244:U:O4	1:CA:906:A:H1'	2.06	0.56
1:AA:80:A:C2'	1:AA:81:A:H4'	2.36	0.56
23:DB:1241:A:H2'	23:DB:1242:U:H5'	1.87	0.56
28:DP:100:ARG:HB3	28:DP:101:GLU:OE2	2.06	0.56
1:CA:1286:U:O2	1:CA:1286:U:O4'	2.23	0.56
23:BB:1061:U:H5'	24:BI:9:LYS:NZ	2.21	0.56
29:DE:106:LYS:NZ	29:DE:201:ALA:HB2	2.21	0.56
6:AG:110:ARG:HD2	6:AG:122:GLU:HB2	1.87	0.56
1:CA:195:A:H1'	1:CA:222:C:O2'	2.06	0.56
23:BB:1779:U:C5	23:BB:1784:A:N7	2.74	0.56
23:BB:1406:U:H2'	23:BB:1407:G:H8	1.71	0.56
23:BB:6:A:H2'	23:BB:7:G:C8	2.40	0.56
1:AA:1054:C:H1'	1:AA:1196:A:C2	2.41	0.56
5:AF:79:ARG:HH22	5:AF:87:SER:HB3	1.70	0.56
23:BB:1166:G:H2'	23:BB:1167:C:C6	2.41	0.56
23:DB:975:A:H1'	23:DB:990:A:C2	2.40	0.56
9:CJ:57:VAL:O	9:CJ:58:ASN:HB2	2.04	0.56
1:AA:1410:A:H2'	1:AA:1411:C:C6	2.41	0.56
11:AL:17:LYS:N	11:AL:17:LYS:HE3	2.21	0.56
25:DC:173:LEU:H	25:DC:173:LEU:HD13	1.71	0.56
23:BB:1794:A:O2'	23:BB:1795:C:H5'	2.06	0.56
24:DI:1:ALA:CB	24:DI:2:LYS:HD2	2.35	0.56
23:DB:1799:G:N2	23:DB:1818:U:O2'	2.39	0.56
1:CA:1317:C:OP1	21:CN:55:SER:HB3	2.05	0.56
52:BW:37:VAL:HG11	52:BW:38:ARG:HH11	1.70	0.56
23:BB:145:C:H2'	23:BB:146:A:H8	1.71	0.56
37:DL:122:VAL:O	37:DL:143:GLU:HB3	2.06	0.56
23:DB:139:U:H2'	50:DT:1:MET:HA	1.88	0.56
23:DB:139:U:O2'	50:DT:1:MET:HA	2.06	0.56
2:AC:119:ILE:HG21	2:AC:197:VAL:HG11	1.88	0.56
3:CD:160:LEU:HD23	3:CD:164:ARG:NH2	2.21	0.56
40:DH:72:ILE:HA	40:DH:108:VAL:HG21	1.88	0.56
38:BM:71:LYS:HG2	38:BM:93:VAL:HG12	1.87	0.56
1:AA:1190:G:OP1	2:AC:3:LYS:HA	2.06	0.56
23:BB:558:U:H5''	41:BJ:111:LYS:HD3	1.87	0.56
37:BL:56:PRO:O	37:BL:60:ARG:HG3	2.06	0.56
37:DL:55:MET:HE2	37:DL:56:PRO:HD2	1.87	0.56
4:AE:156:ARG:O	4:AE:158:LYS:HG3	2.05	0.56
1:CA:1014:A:C2	1:CA:1219:A:H1'	2.40	0.56
2:CC:26:LYS:HE2	2:CC:27:GLU:N	2.21	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CE:152:VAL:HG12	4:CE:156:ARG:HE	1.71	0.56
24:DI:129:GLU:HB3	24:DI:133:ARG:HH12	1.70	0.56
39:DX:39:GLN:HB2	39:DX:42:LEU:HD22	1.88	0.56
23:DB:278:A:H2'	23:DB:279:A:C8	2.41	0.56
23:BB:1439:A:C6	23:BB:1552:A:N7	2.74	0.56
45:BS:24:ILE:HG22	45:BS:71:VAL:HG11	1.88	0.56
23:DB:2064:C:H2'	23:DB:2065:C:H6	1.71	0.56
28:BP:100:ARG:HB3	28:BP:101:GLU:OE2	2.06	0.56
23:DB:2847:U:H5''	28:DP:94:ALA:CB	2.36	0.56
23:BB:1173:U:H2'	23:BB:1174:U:H4'	1.87	0.56
1:CA:1157:A:H5'	1:CA:1158:C:C6	2.41	0.56
23:BB:2834:G:H1'	23:BB:2883:A:H61	1.70	0.56
23:DB:170:U:H2'	23:DB:171:U:H6	1.71	0.56
45:DS:10:ALA:HB3	45:DS:101:SER:OG	2.07	0.56
22:DA:52:A:H5''	43:DO:33:ARG:NH2	2.22	0.56
23:DB:1047:G:O3'	23:DB:1048:A:H8	1.89	0.56
1:CA:337:G:O2'	1:CA:338:A:H5'	2.06	0.56
1:CA:470:C:H2'	1:CA:471:U:H6	1.71	0.56
1:AA:405:U:O4	3:AD:1:ALA:HA	2.06	0.56
27:DK:15:GLY:HA3	27:DK:52:VAL:HG23	1.88	0.56
23:DB:1682:G:H2'	23:DB:1683:U:C6	2.41	0.56
34:D3:15:LYS:HA	34:D3:20:GLY:O	2.06	0.56
2:AC:19:SER:HB3	2:AC:21:TRP:HE1	1.70	0.56
26:DD:62:LYS:HB2	26:DD:63:PRO:HD3	1.88	0.56
26:DD:56:LYS:C	26:DD:58:ASN:H	2.07	0.56
1:AA:555:U:H2'	1:AA:556:C:C6	2.40	0.56
6:CG:50:ALA:HB2	6:CG:57:GLU:HA	1.88	0.56
1:CA:1465:A:H2'	1:CA:1466:C:C6	2.41	0.56
23:DB:1190:G:P	37:DL:32:GLY:HA2	2.46	0.56
9:AJ:88:MET:HA	9:AJ:91:ASP:OD1	2.06	0.56
23:DB:2880:C:O4'	42:DN:91:ALA:HB3	2.06	0.56
27:BK:109:SER:HB2	27:BK:111:LYS:HE2	1.88	0.56
27:DK:58:LEU:N	27:DK:58:LEU:HD23	2.21	0.56
44:BQ:29:ARG:HG2	44:BQ:29:ARG:HH11	1.71	0.56
23:BB:235:U:H2'	23:BB:236:C:C6	2.41	0.56
21:CN:62:ARG:HB3	21:CN:67:GLY:HA2	1.88	0.55
30:BY:15:ARG:O	30:BY:20:LYS:HE3	2.06	0.55
52:BW:49:ASN:HA	52:BW:61:LYS:HB2	1.89	0.55
1:CA:1244:G:H2'	1:CA:1245:C:C6	2.41	0.55
19:CU:24:LYS:NZ	19:CU:25:ALA:H	1.97	0.55
21:CN:50:LEU:N	21:CN:51:PRO:HD2	2.19	0.55
29:BE:17:THR:C	29:BE:19:PHE:H	2.09	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AF:17:GLN:O	5:AF:21:MET:HG3	2.06	0.55
5:AF:1:MET:HB2	5:AF:65:GLU:O	2.06	0.55
29:DE:108:ILE:HD12	29:DE:180:LEU:HB3	1.89	0.55
12:AM:109:LYS:HD3	12:AM:110:GLY:N	2.16	0.55
23:DB:138:U:C4'	23:DB:139:U:H3'	2.32	0.55
23:BB:2466:C:OP1	32:B4:4:ARG:HG2	2.05	0.55
23:BB:2746:U:H5''	48:BG:137:LYS:HG2	1.88	0.55
1:CA:720:C:OP1	15:CR:40:PRO:HG3	2.06	0.55
40:DH:68:ARG:NH2	40:DH:71:LYS:HB3	2.22	0.55
49:BR:41:ILE:HD11	49:BR:47:VAL:HB	1.87	0.55
38:BM:39:GLY:O	38:BM:96:ILE:HG13	2.06	0.55
39:DX:46:VAL:O	39:DX:49:ASP:HB2	2.05	0.55
39:DX:14:LEU:CD2	39:DX:57:LEU:HD11	2.33	0.55
2:CC:149:LYS:O	2:CC:200:TRP:HE3	1.89	0.55
18:CB:96:LEU:N	18:CB:99:MET:HE3	2.21	0.55
23:DB:2538:C:H2'	23:DB:2539:C:H6	1.69	0.55
36:B2:42:LEU:O	36:B2:43:THR:HG23	2.05	0.55
23:BB:1437:C:H2'	23:BB:1438:U:H6	1.70	0.55
1:CA:1054:C:H1'	1:CA:1196:A:C2	2.41	0.55
1:CA:677:U:H2'	1:CA:678:U:H6	1.71	0.55
6:AG:63:VAL:HA	6:AG:66:GLU:CD	2.27	0.55
23:DB:21:A:O2'	23:DB:22:C:H5'	2.06	0.55
3:CD:187:ARG:O	3:CD:191:SER:HB3	2.05	0.55
23:BB:170:U:H2'	23:BB:171:U:H6	1.72	0.55
23:DB:1248:G:O2'	44:DQ:2:ARG:HA	2.06	0.55
26:BD:136:ASN:HD21	26:BD:139:SER:C	2.09	0.55
45:BS:10:ALA:HB3	45:BS:101:SER:OG	2.06	0.55
1:CA:73:C:H2'	1:CA:74:A:C8	2.41	0.55
23:DB:2135:A:H2'	23:DB:2136:G:H8	1.71	0.55
22:BA:32:U:H4'	22:BA:52:A:N6	2.21	0.55
7:CH:124:ILE:HG22	7:CH:125:ILE:H	1.70	0.55
23:BB:176:A:O2'	23:BB:177:G:H5'	2.06	0.55
1:AA:692:U:O2	1:AA:694:A:H5''	2.06	0.55
1:CA:1115:U:O2'	1:CA:1116:U:H5'	2.06	0.55
38:BM:78:LEU:HD12	38:BM:78:LEU:H	1.71	0.55
23:BB:2690:U:H3	42:BN:7:GLY:HA3	1.71	0.55
23:DB:388:G:N7	23:DB:390:U:H2'	2.21	0.55
45:DS:5:ALA:HB3	45:DS:54:ALA:HB2	1.88	0.55
23:BB:854:C:O2'	23:BB:855:G:H5'	2.06	0.55
50:DT:39:THR:CG2	50:DT:42:GLU:H	2.15	0.55
52:DW:49:ASN:HB3	52:DW:81:ILE:HG12	1.87	0.55
1:CA:1240:U:H3'	1:CA:1241:G:H5'	1.86	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:183:VAL:HG22	25:DC:187:CYS:SG	2.46	0.55
35:BV:44:HIS:CE1	35:BV:85:LYS:HB2	2.40	0.55
5:CF:1:MET:HB2	5:CF:65:GLU:O	2.07	0.55
14:AQ:68:LYS:HG2	14:AQ:69:THR:HG23	1.88	0.55
46:DU:3:LYS:CB	46:DU:82:VAL:HG21	2.32	0.55
21:AN:51:PRO:HB2	21:AN:54:SER:HB2	1.88	0.55
47:BF:126:ASN:HD22	47:BF:156:THR:HA	1.71	0.55
27:BK:70:ARG:HB3	27:BK:76:VAL:HG22	1.87	0.55
47:BF:134:GLN:NE2	47:BF:136:ILE:HD13	2.21	0.55
47:DF:7:TYR:O	47:DF:11:VAL:HB	2.06	0.55
1:AA:922:G:N3	1:AA:1398:A:H2	2.03	0.55
22:BA:8:C:O2'	43:BO:40:ILE:HD13	2.05	0.55
1:CA:449:G:H2'	1:CA:450:G:H8	1.71	0.55
38:BM:100:LYS:HD3	38:BM:101:VAL:N	2.21	0.55
23:DB:1080:A:H2'	23:DB:1081:U:C6	2.40	0.55
2:CC:57:GLU:HB2	2:CC:64:ARG:HB3	1.87	0.55
1:CA:977:A:C2	1:CA:1223:C:H2'	2.42	0.55
23:DB:2472:G:C2'	23:DB:2475:C:H42	2.16	0.55
1:CA:642:A:H2'	1:CA:643:C:C6	2.41	0.55
23:DB:357:C:H2'	23:DB:358:U:H6	1.71	0.55
23:DB:1549:A:H2'	23:DB:1550:C:C6	2.42	0.55
1:CA:1369:C:H2'	1:CA:1370:G:C8	2.41	0.55
1:CA:476:U:O2'	1:CA:477:C:H5'	2.07	0.55
23:BB:2291:U:O2'	23:BB:2374:C:H1'	2.06	0.55
23:DB:155:A:H2'	23:DB:156:A:H8	1.70	0.55
23:BB:21:A:O2'	23:BB:22:C:H5'	2.07	0.55
1:AA:470:C:H2'	1:AA:471:U:H6	1.71	0.55
48:BG:35:THR:HG22	48:BG:36:LEU:N	2.21	0.55
3:CD:39:GLN:HG3	3:CD:40:HIS:N	2.19	0.55
23:DB:404:A:H4'	23:DB:405:U:H5'	1.86	0.55
1:AA:472:U:H2'	1:AA:473:U:C6	2.41	0.55
2:CC:180:ASP:HB3	2:CC:204:GLY:O	2.06	0.55
50:DT:38:ALA:HB3	50:DT:81:LYS:NZ	2.20	0.55
48:DG:42:VAL:HA	48:DG:50:THR:O	2.06	0.55
5:AF:39:LEU:HD13	5:AF:40:GLU:N	2.20	0.55
23:BB:2330:G:N3	52:BW:38:ARG:HB3	2.22	0.55
8:AI:56:MET:HE2	8:AI:57:VAL:H	1.71	0.55
37:BL:122:VAL:O	37:BL:143:GLU:HB3	2.07	0.55
29:BE:157:LEU:HG	29:BE:169:VAL:HG11	1.88	0.55
18:CB:26:MET:HG2	18:CB:192:PRO:HD3	1.89	0.55
44:BQ:91:ARG:HD3	49:BR:11:GLN:OE1	2.06	0.55
18:AB:85:SER:HB2	18:AB:88:GLN:NE2	2.22	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BF:104:THR:HG22	47:BF:105:ILE:HG13	1.89	0.55
47:DF:90:LEU:HB3	47:DF:95:MET:HA	1.88	0.55
23:BB:2471:A:HO2'	23:BB:2472:G:H8	1.51	0.55
21:CN:1:ALA:HB1	21:CN:6:LYS:HZ2	1.69	0.55
17:CT:61:ALA:HA	17:CT:67:HIS:H	1.72	0.55
12:CM:84:CYS:O	12:CM:88:LEU:HG	2.06	0.55
23:DB:1652:A:H62	42:DN:11:ASN:HD21	1.53	0.55
18:AB:125:PHE:HD2	18:AB:125:PHE:N	2.04	0.55
23:BB:163:C:O2	23:BB:163:C:O4'	2.23	0.55
23:DB:164:C:H2'	23:DB:165:A:H5'	1.88	0.55
45:DS:24:ILE:HD11	45:DS:36:LEU:HD11	1.87	0.55
23:BB:2229:U:H2'	23:BB:2230:G:C8	2.40	0.55
17:CT:79:THR:HG22	17:CT:83:ASN:ND2	2.22	0.55
52:BW:44:PHE:HD2	52:BW:76:ARG:HD2	1.70	0.55
52:BW:43:LYS:HB3	52:BW:79:ILE:HD11	1.87	0.55
29:DE:48:THR:C	29:DE:50:ALA:H	2.09	0.55
3:CD:56:GLU:O	3:CD:60:VAL:HG12	2.07	0.55
23:BB:2199:A:H3'	23:BB:2200:C:H6	1.70	0.55
8:CI:17:ARG:HB2	8:CI:65:THR:HB	1.87	0.55
18:AB:71:THR:CG2	18:AB:94:ARG:H	2.19	0.55
23:BB:1947:C:H2'	23:BB:1948:G:C8	2.40	0.55
37:BL:77:ILE:HB	37:BL:109:LYS:O	2.07	0.55
15:AR:58:ILE:O	15:AR:62:ARG:HG3	2.06	0.55
45:BS:18:ARG:HB3	45:BS:76:VAL:CG2	2.37	0.55
29:BE:3:LEU:O	29:BE:12:LEU:HB2	2.05	0.55
8:AI:128:LYS:N	8:AI:128:LYS:HD3	2.22	0.55
23:BB:1151:A:H2'	23:BB:1152:C:C6	2.41	0.55
1:CA:1346:A:H2'	6:CG:9:ARG:NH2	2.22	0.55
23:BB:1777:U:O2'	23:BB:1778:U:H5'	2.06	0.55
23:BB:711:G:H2'	23:BB:712:G:O4'	2.06	0.55
23:DB:2195:U:O2'	23:DB:2196:C:H5'	2.07	0.55
1:AA:224:U:H2'	1:AA:225:C:C6	2.41	0.55
3:AD:57:LYS:O	3:AD:61:ARG:HB2	2.07	0.55
2:AC:111:ASP:O	2:AC:115:VAL:HG23	2.06	0.55
50:BT:61:LEU:HD12	50:BT:62:VAL:O	2.06	0.55
11:AL:80:LEU:HD23	11:AL:97:VAL:HG21	1.88	0.55
23:DB:1859:U:H2'	23:DB:1860:G:C8	2.41	0.55
52:DW:49:ASN:HA	52:DW:61:LYS:HB2	1.87	0.55
23:BB:705:A:N6	23:BB:726:G:O2'	2.40	0.55
5:CF:6:ILE:HD12	5:CF:7:VAL:N	2.21	0.55
5:CF:91:ARG:N	5:CF:93:LYS:HZ1	2.03	0.55
2:AC:166:TRP:HA	2:AC:166:TRP:CE3	2.41	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DG:153:PRO:HA	48:DG:159:LYS:O	2.05	0.55
23:BB:2743:U:H2'	23:BB:2744:G:O4'	2.06	0.55
18:AB:57:ASN:CB	18:AB:219:THR:HB	2.31	0.55
40:DH:68:ARG:O	40:DH:72:ILE:HG13	2.06	0.55
33:D1:37:LYS:H	33:D1:48:TYR:HD2	1.54	0.55
12:CM:70:ARG:HH12	47:DF:109:ARG:HD3	1.71	0.55
23:DB:1082:U:O4	23:DB:1086:A:C2	2.59	0.55
47:BF:90:LEU:HB3	47:BF:95:MET:HA	1.89	0.55
20:AO:39:LEU:HD23	20:AO:56:LEU:HD13	1.87	0.55
26:BD:92:VAL:O	26:BD:94:GLN:N	2.40	0.55
23:BB:2751:G:H5'	48:BG:2:ARG:HD3	1.87	0.55
23:DB:91:A:H1'	23:DB:92:U:C6	2.41	0.55
1:CA:1310:G:O2'	1:CA:1311:A:H5'	2.06	0.55
23:DB:2869:G:H2'	23:DB:2870:C:C6	2.42	0.55
25:BC:131:MET:HA	25:BC:134:ILE:HG23	1.88	0.55
27:BK:99:ILE:HD13	27:BK:118:LEU:HD22	1.89	0.55
23:BB:1606:C:C4'	23:BB:1607:C:H5'	2.36	0.55
23:BB:340:A:H2'	23:BB:341:C:O4'	2.06	0.55
7:AH:94:VAL:HG21	7:AH:100:ILE:O	2.06	0.55
1:CA:1253:G:N1	1:CA:1285:A:N6	2.53	0.55
41:BJ:93:ILE:O	41:BJ:97:PRO:HG3	2.06	0.55
5:AF:53:LYS:H	5:AF:53:LYS:HZ2	1.54	0.55
1:CA:1518:A:H2'	1:CA:1519:A:C8	2.41	0.55
23:BB:1050:A:H2'	23:BB:1051:G:O4'	2.07	0.55
23:BB:533:G:H5'	44:BQ:23:TYR:CE2	2.40	0.55
24:BI:105:LEU:HD11	24:BI:139:VAL:CG1	2.37	0.55
29:BE:134:LEU:HD23	29:BE:161:ALA:HB2	1.88	0.55
23:BB:259:G:H2'	23:BB:260:G:C8	2.40	0.55
23:DB:208:C:H2'	23:DB:209:C:H6	1.72	0.55
23:BB:404:A:H4'	23:BB:405:U:C5'	2.36	0.55
4:AE:17:VAL:HG23	4:AE:33:THR:O	2.07	0.55
7:AH:54:THR:HG23	7:AH:55:LYS:HG3	1.88	0.55
1:CA:1175:G:O2'	1:CA:1176:A:H5'	2.06	0.55
1:CA:562:U:H4'	1:CA:563:A:O5'	2.07	0.55
45:DS:20:VAL:C	45:DS:22:ASP:H	2.09	0.55
23:BB:397:U:H2'	23:BB:398:C:C6	2.41	0.55
46:DU:23:LYS:HD2	46:DU:23:LYS:N	2.21	0.55
18:AB:66:ILE:HD12	18:AB:159:ALA:HB3	1.89	0.55
1:CA:982:U:H4'	1:CA:983:A:O4'	2.07	0.55
1:AA:1330:U:H2'	1:AA:1331:G:H5'	1.87	0.55
26:BD:113:SER:HB2	26:BD:168:GLU:O	2.07	0.55
52:BW:39:GLN:CG	52:BW:40:ARG:N	2.70	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BH:58:LEU:C	40:BH:62:LEU:HD21	2.27	0.55
26:DD:110:THR:HG23	26:DD:171:THR:HA	1.87	0.55
40:BH:99:ILE:HD12	40:BH:144:VAL:HG11	1.88	0.55
23:DB:1198:U:H2'	23:DB:1199:U:C6	2.42	0.55
8:AI:30:ASN:H	8:AI:65:THR:HA	1.72	0.55
23:DB:2272:U:HO2'	23:DB:2273:A:H8	1.55	0.55
1:CA:1206:G:H2'	1:CA:1207:G:O4'	2.07	0.55
18:CB:20:ARG:HA	18:CB:38:HIS:CE1	2.42	0.55
1:AA:1002:G:H2'	1:AA:1003:G:C8	2.42	0.55
44:BQ:91:ARG:HD3	49:BR:11:GLN:HB2	1.89	0.55
1:AA:1494:G:H5'	23:BB:1913:A:C6	2.41	0.55
47:BF:113:PHE:HZ	47:BF:175:PRO:HB2	1.71	0.55
1:CA:922:G:N3	1:CA:1398:A:H2	2.05	0.55
26:BD:51:THR:HG21	26:BD:76:GLY:HA3	1.89	0.55
1:CA:876:C:H1'	7:CH:11:THR:HG21	1.89	0.55
37:BL:23:ILE:N	37:BL:23:ILE:HD12	2.20	0.55
40:BH:7:ASP:CG	40:BH:8:LYS:H	2.09	0.55
43:BO:88:LYS:HE3	43:BO:114:GLY:O	2.06	0.55
23:BB:1549:A:H2'	23:BB:1550:C:C6	2.41	0.55
23:BB:2556:C:H2'	23:BB:2557:G:O4'	2.07	0.55
17:CT:47:GLN:HG2	17:CT:82:ILE:HD13	1.88	0.55
7:CH:49:LYS:O	7:CH:58:LEU:HA	2.06	0.55
1:AA:182:A:HO2'	1:AA:183:C:H3'	1.71	0.55
1:CA:1225:A:H5''	1:CA:1226:C:H5	1.71	0.55
25:DC:93:VAL:HG12	25:DC:101:ARG:H	1.71	0.55
50:BT:49:LYS:HB3	50:BT:50:LEU:HD22	1.89	0.55
23:DB:937:C:H2'	23:DB:938:G:H8	1.71	0.55
1:AA:1458:G:H2'	1:AA:1459:G:C8	2.41	0.55
23:DB:2243:U:O2'	23:DB:2244:U:H5'	2.06	0.55
1:CA:1390:U:H2'	1:CA:1391:U:C6	2.42	0.55
26:BD:62:LYS:HB2	26:BD:63:PRO:HD3	1.88	0.55
23:DB:1947:C:H2'	23:DB:1948:G:C8	2.42	0.55
1:CA:403:C:O2'	1:CA:404:G:H5'	2.07	0.55
23:DB:1030:C:O2'	23:DB:1031:G:H5'	2.06	0.55
20:AO:85:LEU:HB2	20:AO:87:LEU:HG	1.89	0.55
1:CA:1524:C:H2'	1:CA:1525:G:C8	2.41	0.55
23:DB:1889:A:H2'	23:DB:1890:A:H8	1.72	0.55
7:CH:54:THR:HG23	7:CH:55:LYS:HG3	1.87	0.55
23:DB:711:G:H2'	23:DB:712:G:O4'	2.06	0.55
1:CA:1133:G:H2'	1:CA:1134:G:H8	1.71	0.55
23:DB:67:U:H2'	23:DB:68:G:H8	1.71	0.55
23:BB:2547:A:H2'	23:BB:2548:U:C6	2.40	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:CM:28:ARG:HG3	12:CM:62:PHE:CZ	2.42	0.55
48:BG:24:THR:HA	48:BG:33:THR:O	2.07	0.55
41:DJ:98:GLU:HB3	41:DJ:124:VAL:HG21	1.89	0.55
1:CA:1378:C:C5	1:CA:1379:G:H1'	2.41	0.55
48:BG:83:THR:HA	48:BG:84:LYS:HZ1	1.71	0.55
23:DB:1061:U:H4'	23:DB:1070:A:O3'	2.06	0.55
18:CB:20:ARG:HA	18:CB:38:HIS:HE1	1.70	0.55
40:DH:108:VAL:HG12	40:DH:110:VAL:HG12	1.88	0.55
49:BR:37:GLU:HG3	49:BR:53:PHE:CZ	2.40	0.55
16:AS:10:ILE:HG21	16:AS:40:PHE:CE2	2.42	0.55
21:AN:50:LEU:N	21:AN:51:PRO:CD	2.70	0.55
9:AJ:57:VAL:O	9:AJ:58:ASN:HB2	2.06	0.55
1:CA:1300:G:H1'	1:CA:1301:U:C5	2.41	0.55
4:AE:156:ARG:HB3	7:AH:43:GLY:O	2.07	0.55
1:CA:1311:A:N7	16:CS:1:PRO:HD2	2.22	0.55
23:BB:580:U:O2'	23:BB:581:C:H5'	2.07	0.55
18:AB:125:PHE:N	18:AB:125:PHE:CD2	2.75	0.55
25:BC:158:GLY:N	25:BC:194:VAL:HG13	2.22	0.55
1:AA:1382:C:H4'	6:AG:78:ARG:NH2	2.20	0.55
12:CM:7:ASN:H	12:CM:7:ASN:ND2	2.04	0.55
23:BB:1000:A:H2'	23:BB:1001:A:H8	1.70	0.55
25:BC:244:VAL:HB	25:BC:249:VAL:H	1.72	0.55
18:AB:130:LYS:O	18:AB:134:LEU:HG	2.06	0.55
24:BI:10:LEU:HD12	24:BI:10:LEU:O	2.06	0.55
23:BB:2292:U:H2'	23:BB:2293:G:C8	2.42	0.55
11:AL:106:VAL:HG23	11:AL:116:TYR:HB3	1.88	0.55
2:AC:8:GLY:HA3	21:AN:88:MET:SD	2.46	0.55
23:DB:1454:C:C5	42:DN:64:ARG:HG2	2.42	0.55
23:DB:728:G:H4'	25:DC:12:ARG:HD2	1.89	0.55
1:AA:601:G:H2'	1:AA:602:A:C8	2.41	0.55
23:DB:259:G:H2'	23:DB:260:G:C8	2.41	0.55
17:CT:27:MET:O	17:CT:31:ILE:HG13	2.06	0.55
51:BZ:35:SER:HB3	51:BZ:50:ARG:HG3	1.88	0.55
23:DB:1229:C:H2'	23:DB:1230:A:C8	2.41	0.55
23:DB:235:U:H2'	23:DB:236:C:C6	2.41	0.55
34:D3:40:LYS:O	34:D3:43:LEU:HB2	2.07	0.55
23:DB:1666:G:O3'	27:DK:6:THR:HG23	2.06	0.55
41:BJ:72:LYS:HB2	41:BJ:89:PHE:HB2	1.89	0.55
23:BB:942:G:O2'	23:BB:943:A:H5'	2.07	0.55
48:DG:35:THR:HG22	48:DG:36:LEU:N	2.22	0.55
4:CE:45:VAL:HG13	4:CE:117:ALA:HA	1.89	0.55
1:AA:108:G:C6	17:AT:9:ARG:HG2	2.41	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2455:G:H2'	23:DB:2456:C:C6	2.41	0.55
1:AA:1025:U:H4'	1:AA:1026:G:H8	1.71	0.55
23:DB:2737:G:H2'	23:DB:2738:A:C8	2.42	0.55
49:DR:27:ILE:HG13	49:DR:33:VAL:HG11	1.88	0.55
23:BB:1923:U:H2'	23:BB:1924:C:C6	2.42	0.55
23:DB:176:A:O2'	23:DB:177:G:H5'	2.06	0.55
23:BB:2339:C:H2'	23:BB:2340:A:C8	2.42	0.55
23:DB:1187:G:HO2'	23:DB:1188:U:H6	1.52	0.55
23:BB:1764:C:H2'	23:BB:1765:U:H6	1.70	0.55
23:DB:2677:G:H2'	23:DB:2678:C:C6	2.41	0.55
1:CA:499:A:H4'	1:CA:500:G:OP1	2.06	0.55
23:BB:1416:G:HO2'	23:BB:1417:C:H6	1.54	0.55
37:BL:131:ALA:HA	37:BL:134:ALA:HB3	1.86	0.55
21:CN:9:GLU:OE2	21:CN:60:ARG:HG2	2.07	0.55
8:CI:34:LEU:HD21	8:CI:48:ARG:HH21	1.70	0.55
23:BB:545:U:H2'	23:BB:546:U:C5'	2.26	0.55
9:CJ:22:THR:CG2	9:CJ:72:ARG:HG3	2.36	0.55
1:CA:1243:C:H2'	1:CA:1244:G:C8	2.42	0.55
26:DD:113:SER:HB3	26:DD:167:ASN:CA	2.36	0.55
40:BH:121:VAL:HG21	40:BH:128:HIS:CD2	2.42	0.55
23:DB:2720:U:H2'	23:DB:2721:A:H8	1.71	0.55
6:CG:67:ASN:HB3	6:CG:137:ARG:NH2	2.21	0.55
19:CU:16:ARG:NE	19:CU:16:ARG:HA	2.21	0.55
1:AA:1002:G:H2'	1:AA:1003:G:H8	1.72	0.55
23:BB:1082:U:O4	23:BB:1086:A:C2	2.59	0.55
47:DF:148:VAL:O	47:DF:149:ARG:HG2	2.07	0.55
36:B2:12:ARG:HE	36:B2:44:VAL:CG1	2.18	0.55
23:BB:728:G:H4'	25:BC:12:ARG:HD2	1.88	0.55
43:DO:79:ALA:HA	43:DO:115:LEU:HD23	1.89	0.55
26:DD:122:VAL:HA	26:DD:127:PHE:H	1.71	0.55
4:AE:132:PRO:O	4:AE:136:VAL:HG12	2.06	0.55
2:AC:10:ARG:HD2	2:AC:14:VAL:HG21	1.89	0.55
24:DI:45:THR:CA	24:DI:48:ILE:HG22	2.36	0.55
46:DU:85:ARG:HD3	46:DU:86:PHE:H	1.72	0.55
44:BQ:10:ARG:HH11	44:BQ:10:ARG:HB2	1.69	0.55
39:BX:39:GLN:HB2	39:BX:42:LEU:HD22	1.88	0.55
6:CG:14:ASP:CB	6:CG:19:SER:H	2.19	0.55
1:CA:1225:A:H3'	1:CA:1226:C:C6	2.41	0.55
50:DT:49:LYS:HB3	50:DT:50:LEU:HD22	1.89	0.55
23:BB:2093:G:O5'	40:BH:24:GLY:HA3	2.07	0.55
23:DB:661:A:H1'	37:DL:12:SER:O	2.06	0.55
30:BY:29:ARG:H	30:BY:33:HIS:CD2	2.25	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:713:G:H2'	1:CA:714:G:C8	2.41	0.55
1:CA:715:A:O2'	1:CA:716:A:H5'	2.07	0.55
23:DB:955:U:OP1	38:DM:86:LYS:HE2	2.07	0.55
1:AA:161:A:H2'	1:AA:162:A:H8	1.72	0.55
23:DB:1459:G:H4'	23:DB:1461:C:N4	2.22	0.55
23:DB:2760:C:O2'	23:DB:2761:A:H5'	2.07	0.55
23:DB:1166:G:H2'	23:DB:1167:C:H6	1.71	0.55
23:BB:1794:A:H2'	23:BB:1795:C:H6	1.72	0.55
12:CM:28:ARG:CZ	12:CM:62:PHE:HB2	2.36	0.55
1:AA:1243:C:H2'	1:AA:1244:G:C8	2.42	0.55
23:DB:2893:A:H5''	23:DB:2894:G:H5'	1.87	0.55
23:BB:959:A:O2'	23:BB:960:A:H5'	2.06	0.55
1:AA:49:U:O2'	1:AA:50:A:H2'	2.07	0.55
6:AG:68:VAL:HG11	6:AG:133:ALA:HB1	1.87	0.55
6:AG:135:LYS:HD3	6:AG:136:LYS:N	2.21	0.55
8:AI:109:GLN:OE1	8:AI:110:VAL:HG23	2.06	0.55
24:BI:14:ALA:HB1	24:BI:50:LYS:HA	1.88	0.55
22:BA:91:C:H2'	22:BA:92:C:C6	2.42	0.55
23:DB:2469:A:H4'	38:DM:55:ARG:NE	2.22	0.55
8:CI:7:GLY:O	8:CI:8:THR:C	2.45	0.55
16:CS:4:LEU:HD13	16:CS:8:PRO:HA	1.88	0.55
23:DB:1916:A:H2'	23:DB:1917:U:O4'	2.06	0.55
20:AO:46:HIS:O	20:AO:48:LYS:N	2.35	0.55
21:CN:68:ARG:CZ	21:CN:80:ARG:HH12	2.20	0.55
23:DB:856:G:C1'	52:DW:23:LYS:HB3	2.35	0.55
5:CF:1:MET:SD	5:CF:67:PRO:HD3	2.47	0.55
23:BB:2328:A:H2'	23:BB:2329:U:H6	1.72	0.55
8:AI:19:PHE:O	8:AI:62:LEU:HA	2.07	0.55
43:DO:51:ALA:HB3	43:DO:78:VAL:HG22	1.88	0.55
46:BU:5:ARG:NH2	46:BU:93:ARG:HD3	2.21	0.55
1:CA:1206:G:H4'	2:CC:192:TYR:HA	1.89	0.55
22:DA:6:G:H2'	22:DA:7:G:C8	2.42	0.55
38:DM:19:GLY:N	38:DM:38:ARG:HH22	2.04	0.55
41:BJ:45:THR:OG1	41:BJ:48:VAL:HB	2.07	0.55
44:BQ:108:LEU:O	44:BQ:111:LYS:HB3	2.07	0.55
23:BB:492:A:H2'	23:BB:493:G:O4'	2.06	0.55
26:DD:5:VAL:HG23	26:DD:32:ASN:ND2	2.20	0.55
23:DB:1141:U:OP2	41:DJ:65:THR:HG21	2.06	0.55
29:DE:122:GLU:H	29:DE:122:GLU:CD	2.09	0.55
6:AG:16:LYS:HB3	6:AG:43:TYR:OH	2.07	0.55
23:DB:2393:U:H5''	37:DL:62:PRO:HG3	1.89	0.55
12:CM:89:ARG:NH1	12:CM:94:LEU:HD13	2.21	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:994:A:C2	21:AN:4:SER:HA	2.42	0.55
45:DS:96:ILE:HG23	45:DS:96:ILE:O	2.05	0.55
23:BB:2674:G:H2'	23:BB:2675:A:H8	1.72	0.55
23:BB:934:U:H2'	23:BB:935:C:H6	1.72	0.55
1:AA:950:U:H2'	1:AA:951:G:H8	1.70	0.55
23:BB:155:A:H2'	23:BB:156:A:H8	1.70	0.55
1:AA:462:G:N3	1:AA:462:G:H2'	2.20	0.55
23:BB:1040:A:O2'	23:BB:1041:G:H5'	2.06	0.55
1:AA:601:G:H2'	1:AA:602:A:H8	1.71	0.55
1:CA:222:C:H2'	1:CA:223:A:H8	1.72	0.55
1:AA:745:G:H2'	1:AA:746:A:H8	1.70	0.55
23:BB:1412:U:H2'	23:BB:1413:A:H8	1.72	0.55
29:DE:1:MET:HB2	29:DE:16:GLU:HA	1.88	0.55
22:BA:102:G:O2'	22:BA:103:U:H5'	2.06	0.55
36:B2:19:ARG:NH2	36:B2:19:ARG:HB3	2.22	0.55
25:DC:79:ARG:HD2	25:DC:81:GLU:HG3	1.89	0.55
23:BB:2836:U:H2'	23:BB:2837:A:H8	1.71	0.55
23:BB:309:A:H4'	46:BU:15:GLY:HA3	1.89	0.55
23:DB:2825:G:H3'	23:DB:2826:A:H8	1.71	0.55
2:AC:131:ARG:HD2	2:AC:131:ARG:H	1.72	0.55
1:AA:1499:A:H2'	1:AA:1500:A:H8	1.72	0.55
23:BB:2861:U:H2'	23:BB:2862:G:H8	1.71	0.55
30:BY:40:THR:O	30:BY:43:ILE:HG23	2.07	0.55
44:BQ:42:GLY:HA3	49:BR:75:VAL:HG21	1.89	0.55
1:CA:1289:A:H3'	1:CA:1290:G:H8	1.72	0.55
23:DB:553:G:O2'	23:DB:554:U:H5'	2.07	0.55
46:BU:23:LYS:HD2	46:BU:23:LYS:N	2.22	0.55
25:BC:82:TYR:HE1	25:BC:84:PRO:HG3	1.71	0.55
11:CL:51:VAL:HG12	11:CL:52:CYS:H	1.72	0.55
23:DB:1583:A:H5''	23:DB:1584:U:OP1	2.07	0.55
50:DT:47:VAL:HB	50:DT:55:VAL:HG21	1.89	0.55
9:CJ:7:ARG:NE	9:CJ:101:SER:HB3	2.17	0.55
24:BI:112:LYS:O	24:BI:116:MET:HG3	2.07	0.55
48:DG:137:LYS:O	48:DG:140:ILE:HG13	2.07	0.55
1:AA:954:G:H2'	1:AA:955:U:C6	2.42	0.55
13:AP:1:MET:C	13:AP:1:MET:HE3	2.27	0.55
23:BB:495:G:H21	45:BS:61:ASN:ND2	1.98	0.55
47:DF:126:ASN:HD22	47:DF:156:THR:HA	1.71	0.55
47:DF:31:GLU:HB3	47:DF:156:THR:O	2.07	0.55
23:DB:2393:U:O2'	23:DB:2394:C:H5'	2.07	0.55
1:AA:1168:U:H4'	1:AA:1169:A:OP2	2.06	0.55
46:BU:6:ARG:O	46:BU:24:VAL:HB	2.07	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1039:G:H2'	1:AA:1040:U:C6	2.42	0.55
23:DB:1640:A:H2'	23:DB:1641:A:H8	1.72	0.55
23:DB:936:A:H2'	23:DB:937:C:H6	1.72	0.55
3:CD:104:MET:SD	3:CD:142:VAL:HB	2.47	0.55
25:BC:196:ASN:ND2	25:BC:199:HIS:HB2	2.20	0.55
1:AA:1518:A:H2'	1:AA:1519:A:C8	2.41	0.55
23:DB:2888:C:H2'	23:DB:2889:C:H6	1.72	0.55
23:DB:2228:G:H2'	23:DB:2229:U:C6	2.42	0.55
23:BB:564:C:O2'	23:BB:565:C:H5'	2.07	0.55
1:AA:586:C:O2'	1:AA:587:G:H5'	2.07	0.55
23:DB:1889:A:H2'	23:DB:1890:A:C8	2.42	0.55
10:AK:34:THR:HA	10:AK:41:LEU:HG	1.88	0.55
4:CE:87:VAL:HG23	4:CE:91:SER:O	2.06	0.55
5:CF:69:GLU:O	5:CF:72:ASP:HB3	2.07	0.55
23:DB:1747:U:H2'	23:DB:1748:C:C6	2.42	0.55
1:CA:847:G:H2'	1:CA:848:C:C6	2.42	0.55
1:CA:759:A:H2'	1:CA:760:G:O4'	2.07	0.55
50:DT:32:LEU:HG	50:DT:83:ALA:HB2	1.89	0.55
30:DY:9:THR:HB	30:DY:53:MET:O	2.06	0.55
52:DW:51:GLY:CA	52:DW:59:PHE:HB3	2.26	0.55
41:DJ:11:VAL:HA	41:DJ:12:LYS:NZ	2.22	0.55
14:AQ:74:LEU:HD22	14:AQ:75:VAL:N	2.22	0.55
23:DB:142:A:H2	50:DT:2:ILE:HD12	1.72	0.55
25:BC:153:LEU:HD13	25:BC:175:LEU:CD2	2.37	0.55
48:BG:137:LYS:O	48:BG:140:ILE:HG13	2.06	0.55
1:CA:437:U:H5''	3:CD:151:GLN:HE21	1.71	0.55
35:DV:44:HIS:CE1	35:DV:85:LYS:HB2	2.41	0.55
30:DY:35:VAL:HG11	30:DY:37:ARG:HH12	1.72	0.55
18:CB:83:ALA:C	18:CB:85:SER:H	2.10	0.55
26:DD:55:LYS:HD3	26:DD:77:ARG:HA	1.89	0.55
47:DF:34:THR:O	47:DF:35:LEU:HB2	2.06	0.55
51:DZ:7:VAL:HG13	51:DZ:8:THR:CG2	2.34	0.55
23:BB:729:G:OP1	25:BC:12:ARG:HB2	2.07	0.55
25:BC:12:ARG:HA	25:BC:15:VAL:CG2	2.37	0.55
24:DI:126:ARG:HB3	24:DI:126:ARG:HH11	1.72	0.55
12:CM:76:ILE:O	12:CM:79:LEU:HG	2.07	0.55
44:DQ:91:ARG:NH1	49:DR:10:LYS:HB3	2.19	0.55
23:DB:1874:C:H2'	23:DB:1875:G:O4'	2.07	0.55
27:DK:85:VAL:HG21	27:DK:115:ILE:HD11	1.87	0.55
6:AG:30:MET:CG	6:AG:35:LYS:HA	2.35	0.55
23:BB:164:C:H2'	23:BB:165:A:H5'	1.89	0.55
23:DB:1438:U:H2'	23:DB:1439:A:O4'	2.07	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2075:U:H2'	23:DB:2238:G:N2	2.21	0.55
17:CT:79:THR:HG22	17:CT:83:ASN:HD21	1.72	0.55
23:BB:1018:U:O2'	23:BB:1019:U:H5'	2.06	0.55
1:AA:1407:C:C2'	1:AA:1408:A:H5''	2.37	0.55
23:BB:1487:U:H2'	23:BB:1488:C:H6	1.71	0.55
23:DB:1487:U:H2'	23:DB:1488:C:H6	1.72	0.55
23:DB:345:A:H1'	23:DB:346:A:C2	2.42	0.55
27:BK:15:GLY:HA3	27:BK:52:VAL:HG23	1.88	0.55
1:AA:301:G:H2'	1:AA:302:G:C8	2.41	0.55
1:AA:35:G:H2'	1:AA:36:C:H6	1.72	0.55
1:AA:430:A:OP1	3:AD:8:LEU:HB2	2.07	0.55
22:DA:49:C:H2'	22:DA:50:A:C8	2.42	0.55
1:AA:859:G:H2'	1:AA:860:A:H8	1.72	0.55
25:BC:146:LYS:HB3	25:BC:147:PRO:HD2	1.88	0.55
18:AB:118:THR:HA	18:AB:121:GLN:HB3	1.88	0.55
9:AJ:80:THR:O	9:AJ:84:VAL:HG23	2.06	0.55
26:DD:157:LYS:NZ	26:DD:157:LYS:HB3	2.22	0.55
26:BD:69:ALA:HA	26:BD:73:VAL:HB	1.89	0.55
29:BE:1:MET:HB2	29:BE:16:GLU:HA	1.89	0.55
5:AF:69:GLU:O	5:AF:72:ASP:HB3	2.06	0.55
50:BT:27:SER:O	50:BT:28:ASN:HB3	2.05	0.54
1:AA:236:A:H2'	1:AA:237:G:H8	1.72	0.54
6:CG:10:LYS:HA	6:CG:10:LYS:HZ3	1.71	0.54
40:BH:100:ALA:CB	40:BH:112:LYS:HA	2.37	0.54
40:BH:100:ALA:HB3	40:BH:112:LYS:HA	1.88	0.54
29:DE:108:ILE:HA	37:DL:2:ARG:HH12	1.71	0.54
40:DH:128:HIS:O	40:DH:143:ILE:HA	2.08	0.54
42:BN:25:ALA:O	42:BN:29:VAL:HG23	2.07	0.54
42:BN:79:LEU:HA	42:BN:83:LEU:HB2	1.87	0.54
1:AA:1148:U:H2'	1:AA:1149:C:H5'	1.89	0.54
37:BL:123:ARG:NH1	37:BL:143:GLU:HB2	2.23	0.54
37:DL:113:ALA:HB3	37:DL:115:GLU:OE1	2.07	0.54
28:DP:56:SER:O	28:DP:75:THR:HG22	2.07	0.54
49:BR:49:ILE:HD13	49:BR:53:PHE:N	2.19	0.54
13:AP:68:SER:HB3	13:AP:71:VAL:HG12	1.88	0.54
6:AG:11:ILE:HG12	6:AG:24:LYS:HG3	1.88	0.54
1:AA:1398:A:H8	1:AA:1398:A:H5'	1.72	0.54
26:BD:5:VAL:HG23	26:BD:32:ASN:ND2	2.21	0.54
42:BN:103:ARG:HG2	42:BN:104:ALA:H	1.72	0.54
37:BL:23:ILE:H	37:BL:23:ILE:CD1	2.20	0.54
23:DB:182:A:O2'	23:DB:183:C:H5'	2.07	0.54
11:AL:73:LEU:HD13	11:AL:79:ILE:HG21	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:590:A:H2'	23:BB:591:U:H6	1.71	0.54
1:AA:209:U:H5'	1:AA:210:C:H5	1.69	0.54
1:CA:1313:U:OP2	16:CS:5:LYS:HA	2.07	0.54
23:DB:2078:C:H2'	23:DB:2079:U:H6	1.71	0.54
23:BB:2322:A:H2'	23:BB:2323:G:O4'	2.07	0.54
1:AA:312:C:H2'	1:AA:313:A:C8	2.41	0.54
23:DB:1464:G:H2'	23:DB:1465:G:C8	2.42	0.54
20:CO:82:ILE:O	20:CO:86:GLY:N	2.37	0.54
23:DB:584:C:P	44:DQ:5:ARG:HD3	2.47	0.54
23:DB:1518:C:H2'	23:DB:1519:G:H8	1.72	0.54
23:BB:1166:G:H2'	23:BB:1167:C:H6	1.72	0.54
1:AA:108:G:H5'	1:AA:109:A:H5''	1.89	0.54
6:AG:132:THR:O	6:AG:135:LYS:HB3	2.06	0.54
35:DV:1:MET:HG2	35:DV:59:GLU:OE1	2.06	0.54
23:BB:1682:G:H2'	23:BB:1683:U:C6	2.43	0.54
52:DW:45:HIS:HB3	52:DW:52:CYS:HB2	1.88	0.54
1:AA:659:U:H2'	1:AA:660:C:C6	2.42	0.54
2:CC:17:TRP:C	2:CC:19:SER:H	2.10	0.54
1:CA:1108:G:H5'	2:CC:175:HIS:CD2	2.41	0.54
23:DB:642:U:O2	23:DB:644:A:H3'	2.07	0.54
11:CL:87:LYS:HE2	11:CL:87:LYS:HA	1.89	0.54
23:DB:1292:G:H2'	23:DB:1293:C:C6	2.42	0.54
22:DA:67:G:O2'	22:DA:68:C:H5'	2.07	0.54
2:AC:139:ASN:HA	2:AC:142:ARG:NH2	2.22	0.54
1:CA:586:C:H5''	7:CH:81:GLY:HA2	1.89	0.54
35:DV:4:ILE:HB	35:DV:63:ILE:HA	1.88	0.54
21:CN:50:LEU:H	21:CN:51:PRO:CD	2.20	0.54
48:DG:25:ILE:O	48:DG:32:LEU:HA	2.08	0.54
5:AF:36:ILE:HG12	5:AF:64:VAL:HG12	1.89	0.54
43:DO:75:GLY:O	43:DO:78:VAL:HG23	2.07	0.54
37:DL:68:SER:C	37:DL:70:LYS:H	2.11	0.54
48:DG:84:LYS:HB2	48:DG:132:LEU:H	1.72	0.54
10:CK:111:ASP:HB2	19:CU:19:LYS:CE	2.37	0.54
1:CA:436:C:O2'	1:CA:437:U:H5'	2.08	0.54
49:BR:19:THR:HB	49:BR:97:LYS:HA	1.87	0.54
1:AA:406:G:H21	3:AD:115:GLN:NE2	1.98	0.54
35:BV:80:HIS:CG	35:BV:83:LYS:HB2	2.43	0.54
12:AM:78:ARG:HH21	12:AM:79:LEU:HD23	1.71	0.54
47:DF:155:ILE:HD12	47:DF:155:ILE:H	1.71	0.54
22:DA:42:C:H4'	47:DF:63:LYS:O	2.07	0.54
1:CA:1298:U:N3	6:CG:113:LYS:HA	2.22	0.54
1:AA:919:A:O2'	1:AA:920:U:H5'	2.07	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:120:SER:HA	18:CB:125:PHE:CD2	2.42	0.54
39:DX:45:GLN:O	39:DX:47:ARG:N	2.36	0.54
47:BF:7:TYR:O	47:BF:11:VAL:HB	2.06	0.54
17:CT:66:ILE:HG22	17:CT:67:HIS:N	2.22	0.54
44:DQ:59:LEU:C	44:DQ:59:LEU:HD13	2.27	0.54
4:AE:85:LYS:HG3	4:AE:93:VAL:O	2.07	0.54
26:BD:159:LYS:O	26:BD:161:MET:HG2	2.08	0.54
11:AL:74:GLN:H	11:AL:77:SER:CB	2.20	0.54
17:AT:47:GLN:HG2	17:AT:82:ILE:HD13	1.90	0.54
1:AA:1165:U:H2'	1:AA:1166:G:O4'	2.08	0.54
23:BB:1061:U:H5'	24:BI:9:LYS:HZ1	1.72	0.54
23:BB:1038:G:H2'	23:BB:1039:A:H8	1.72	0.54
21:CN:29:ILE:HG22	21:CN:30:ILE:N	2.22	0.54
52:DW:44:PHE:HD2	52:DW:76:ARG:HD2	1.70	0.54
29:DE:15:SER:OG	29:DE:18:THR:HG23	2.07	0.54
7:AH:8:ASP:O	7:AH:12:ARG:HB2	2.07	0.54
23:DB:192:C:H2'	23:DB:193:U:H5'	1.89	0.54
23:BB:79:C:O2'	23:BB:346:A:H1'	2.06	0.54
23:DB:699:A:H2'	23:DB:700:G:O4'	2.08	0.54
51:DZ:35:SER:HB3	51:DZ:50:ARG:HG3	1.89	0.54
23:BB:565:C:H2'	23:BB:566:U:O4'	2.07	0.54
23:DB:1166:G:H2'	23:DB:1167:C:C6	2.41	0.54
23:DB:404:A:H4'	23:DB:405:U:C5'	2.37	0.54
1:AA:989:U:O2'	1:AA:990:C:H5'	2.07	0.54
25:BC:18:VAL:O	25:BC:18:VAL:HG13	2.07	0.54
1:CA:1082:A:H2'	1:CA:1083:U:C6	2.42	0.54
23:BB:1542:U:H2'	23:BB:1543:G:O4'	2.07	0.54
23:BB:2244:U:H2'	23:BB:2245:U:O4'	2.07	0.54
16:CS:64:GLU:C	16:CS:66:VAL:H	2.09	0.54
11:AL:87:LYS:HA	11:AL:87:LYS:HE2	1.89	0.54
26:BD:157:LYS:HB3	26:BD:157:LYS:NZ	2.22	0.54
1:AA:997:U:O2'	1:AA:998:C:H5'	2.07	0.54
23:BB:2134:A:N1	23:BB:2157:G:H1'	2.22	0.54
35:DV:30:ILE:HA	35:DV:91:PHE:O	2.07	0.54
2:CC:59:PRO:HG2	2:CC:62:SER:CB	2.28	0.54
23:BB:857:G:O2'	23:BB:858:G:H5'	2.07	0.54
22:DA:28:C:H2'	22:DA:29:A:H8	1.72	0.54
23:BB:1723:G:H3'	23:BB:1724:G:H8	1.72	0.54
37:DL:80:SER:HA	37:DL:115:GLU:HB2	1.90	0.54
23:DB:300:A:H3'	46:DU:81:ARG:NH1	2.20	0.54
27:DK:71:ARG:HB3	27:DK:72:PRO:CD	2.33	0.54
3:CD:147:LYS:HG3	3:CD:148:ALA:N	2.21	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AP:54:LEU:HD12	13:AP:82:ALA:H	1.71	0.54
18:CB:57:ASN:HB3	18:CB:219:THR:HB	1.90	0.54
1:AA:939:G:C4'	6:AG:101:ARG:HH12	2.19	0.54
1:CA:865:A:H2	1:CA:918:A:H4'	1.73	0.54
23:BB:1792:G:P	25:BC:204:LEU:HD12	2.47	0.54
1:AA:16:A:C2'	1:AA:17:U:H5'	2.36	0.54
23:DB:126:A:H5'	36:D2:19:ARG:CG	2.36	0.54
42:DN:96:ARG:HB3	42:DN:98:LEU:HD22	1.90	0.54
23:BB:91:A:H1'	23:BB:92:U:C6	2.41	0.54
29:BE:33:VAL:O	29:BE:36:ALA:HB3	2.07	0.54
23:DB:2741:A:H2'	23:DB:2742:G:O4'	2.07	0.54
21:CN:8:ARG:HB3	21:CN:12:ARG:NH1	2.22	0.54
12:CM:2:ARG:HH22	12:CM:56:ARG:HH11	1.54	0.54
22:BA:98:G:H1	35:BV:14:LYS:HB2	1.71	0.54
6:CG:23:ALA:O	6:CG:26:VAL:HG22	2.08	0.54
23:BB:2148:G:H2'	23:BB:2149:U:C4'	2.37	0.54
48:DG:53:PRO:HG3	48:DG:61:TRP:HA	1.89	0.54
23:BB:2085:U:O2'	23:BB:2086:U:H5'	2.07	0.54
23:BB:936:A:H2'	23:BB:937:C:H6	1.70	0.54
40:DH:58:LEU:HA	40:DH:61:VAL:HG12	1.89	0.54
6:AG:65:LEU:HB2	6:AG:69:ARG:HH21	1.70	0.54
42:DN:59:SER:C	42:DN:61:ALA:H	2.09	0.54
29:BE:48:THR:C	29:BE:50:ALA:H	2.10	0.54
1:AA:35:G:H2'	1:AA:36:C:C6	2.43	0.54
1:CA:926:G:H5'	1:CA:927:G:C5'	2.37	0.54
23:DB:1406:U:H2'	23:DB:1407:G:H8	1.71	0.54
1:CA:1029:U:O4'	1:CA:1029:U:O2	2.21	0.54
23:BB:2888:C:H2'	23:BB:2889:C:H6	1.72	0.54
6:AG:77:ARG:HG3	6:AG:79:VAL:HG23	1.88	0.54
23:BB:2299:U:H2'	23:BB:2300:C:C6	2.42	0.54
23:BB:2300:C:H2'	23:BB:2301:C:C6	2.41	0.54
1:AA:562:U:H4'	1:AA:563:A:O5'	2.07	0.54
17:AT:42:ASP:OD1	17:AT:44:ALA:HB3	2.08	0.54
1:CA:272:C:H2'	1:CA:273:U:H6	1.73	0.54
45:DS:31:GLN:O	45:DS:35:ILE:HG12	2.07	0.54
34:B3:15:LYS:HA	34:B3:20:GLY:O	2.07	0.54
23:BB:67:U:H2'	23:BB:68:G:H8	1.72	0.54
1:AA:328:C:H4'	1:AA:329:A:H5''	1.89	0.54
22:DA:13:G:H2'	22:DA:70:C:O2'	2.06	0.54
1:CA:328:C:H4'	1:CA:329:A:H5''	1.89	0.54
12:CM:57:ASP:O	12:CM:60:ALA:HB3	2.07	0.54
1:AA:539:A:H2'	1:AA:540:G:C8	2.42	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:CI:48:ARG:O	8:CI:51:LEU:HB2	2.08	0.54
8:CI:51:LEU:HB3	8:CI:56:MET:CG	2.38	0.54
18:CB:163:ILE:HG23	18:CB:164:ASP:N	2.18	0.54
23:DB:2305:U:C4'	47:DF:132:ARG:HG2	2.36	0.54
25:DC:141:HIS:HB3	25:DC:190:THR:O	2.07	0.54
21:CN:19:TYR:HB2	21:CN:54:SER:OG	2.07	0.54
5:AF:88:MET:HE1	5:AF:90:MET:HG2	1.88	0.54
40:BH:54:LEU:HD23	40:BH:54:LEU:N	2.22	0.54
26:DD:108:ASP:OD2	26:DD:206:ALA:HA	2.08	0.54
23:DB:857:G:H2'	23:DB:858:G:H5'	1.89	0.54
23:DB:1729:U:O2	23:DB:1729:U:H2'	2.07	0.54
2:CC:2:GLN:N	2:CC:2:GLN:HE21	1.99	0.54
35:DV:80:HIS:CD2	35:DV:82:TYR:H	2.22	0.54
47:DF:139:GLU:CD	47:DF:140:ILE:H	2.11	0.54
44:BQ:67:ALA:HB1	44:BQ:105:PHE:CZ	2.42	0.54
18:AB:163:ILE:HG13	18:AB:164:ASP:N	2.22	0.54
49:DR:14:VAL:HG22	49:DR:15:SER:N	2.22	0.54
23:BB:1103:A:H2'	23:BB:1104:C:H5'	1.88	0.54
47:DF:33:ILE:HD13	47:DF:98:PHE:HD2	1.72	0.54
20:AO:36:ILE:CD1	20:AO:59:MET:HG3	2.35	0.54
17:AT:61:ALA:HA	17:AT:67:HIS:H	1.72	0.54
39:DX:52:ARG:O	39:DX:55:THR:HB	2.07	0.54
8:CI:87:MET:HG2	8:CI:91:GLU:CD	2.28	0.54
40:BH:7:ASP:HA	40:BH:15:LEU:HD23	1.88	0.54
22:DA:83:G:H4'	30:DY:52:PHE:CD2	2.42	0.54
1:CA:950:U:H2'	1:CA:951:G:C8	2.42	0.54
16:CS:10:ILE:HD12	16:CS:10:ILE:H	1.72	0.54
41:DJ:44:TYR:O	41:DJ:45:THR:HB	2.07	0.54
23:BB:1507:C:H2'	23:BB:1508:A:H4'	1.90	0.54
23:BB:1438:U:H2'	23:BB:1439:A:O4'	2.08	0.54
23:DB:919:U:H6	23:DB:919:U:O5'	1.91	0.54
7:CH:94:VAL:HG21	7:CH:100:ILE:O	2.07	0.54
22:BA:60:C:H2'	22:BA:61:G:C8	2.39	0.54
23:BB:836:G:H2'	23:BB:837:C:H6	1.72	0.54
16:AS:2:ARG:HH11	16:AS:2:ARG:HB3	1.72	0.54
1:CA:430:A:OP1	3:CD:8:LEU:HB2	2.08	0.54
1:AA:598:U:H2'	1:AA:599:C:C6	2.42	0.54
1:CA:1041:G:H2'	1:CA:1042:A:H8	1.73	0.54
23:DB:1560:G:H2'	23:DB:1561:C:H6	1.72	0.54
23:DB:1461:C:H2'	23:DB:1462:C:H6	1.72	0.54
23:DB:2547:A:H2'	23:DB:2548:U:C6	2.43	0.54
11:CL:14:LYS:HG2	11:CL:16:ALA:H	1.72	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2443:C:H2'	23:DB:2444:G:C8	2.42	0.54
23:DB:296:U:H2'	23:DB:297:G:C8	2.43	0.54
1:AA:784:A:H2'	1:AA:785:G:H8	1.72	0.54
23:BB:1164:C:H2'	23:BB:1165:A:H8	1.71	0.54
23:BB:67:U:H2'	23:BB:68:G:C8	2.42	0.54
45:BS:20:VAL:C	45:BS:22:ASP:H	2.11	0.54
50:BT:10:VAL:O	50:BT:12:ARG:N	2.41	0.54
29:DE:4:VAL:C	29:DE:6:LYS:H	2.11	0.54
1:CA:1074:G:H2'	1:CA:1075:U:C6	2.42	0.54
23:BB:738:G:H1'	23:BB:759:G:N2	2.23	0.54
23:DB:2026:U:H2'	23:DB:2027:G:H8	1.72	0.54
8:CI:71:ILE:H	8:CI:71:ILE:HD12	1.73	0.54
1:CA:317:U:H2'	1:CA:318:G:H8	1.72	0.54
14:CQ:74:LEU:HD22	14:CQ:75:VAL:N	2.22	0.54
8:AI:74:GLN:CA	8:AI:74:GLN:HE21	2.20	0.54
42:DN:72:ASP:O	42:DN:76:VAL:HG13	2.08	0.54
23:BB:1081:U:H4'	24:BI:123:ALA:HB1	1.89	0.54
23:DB:857:G:O2'	23:DB:858:G:H5'	2.06	0.54
3:CD:49:ASP:O	3:CD:53:GLN:HG3	2.07	0.54
23:DB:633:A:O5'	23:DB:633:A:H8	1.89	0.54
23:BB:1654:A:H2'	23:BB:1655:A:H8	1.72	0.54
49:BR:27:ILE:HG13	49:BR:33:VAL:HG11	1.88	0.54
24:DI:71:LYS:HB3	24:DI:115:ASP:OD2	2.07	0.54
40:DH:99:ILE:HD11	40:DH:117:LEU:HD22	1.88	0.54
49:BR:21:ARG:HB3	49:BR:95:ASP:OD1	2.08	0.54
23:DB:492:A:H2'	23:DB:493:G:O4'	2.07	0.54
6:CG:144:ALA:O	6:CG:146:ALA:N	2.37	0.54
1:CA:1298:U:P	6:CG:113:LYS:HZ1	2.30	0.54
1:AA:926:G:H21	1:AA:1505:G:H2'	1.70	0.54
48:BG:167:VAL:HG23	48:BG:168:VAL:N	2.21	0.54
38:DM:66:ARG:NH1	38:DM:66:ARG:HB3	2.22	0.54
2:AC:14:VAL:O	2:AC:15:LYS:HD2	2.07	0.54
43:DO:47:VAL:HG12	43:DO:48:LEU:N	2.20	0.54
23:DB:359:G:C2'	23:DB:360:U:H5'	2.37	0.54
49:DR:80:ARG:O	49:DR:81:LYS:HD3	2.07	0.54
38:DM:33:LEU:HD22	38:DM:128:THR:OG1	2.08	0.54
45:BS:96:ILE:HG23	45:BS:96:ILE:O	2.08	0.54
1:CA:817:C:H1'	1:CA:819:A:C5'	2.37	0.54
23:DB:2085:U:O2'	23:DB:2086:U:H5'	2.08	0.54
23:BB:2646:C:H2'	23:BB:2647:U:O4'	2.07	0.54
23:DB:2897:U:H2'	23:DB:2898:U:C6	2.43	0.54
47:DF:78:ILE:HA	47:DF:82:TYR:CD1	2.42	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:591:U:H2'	1:CA:592:G:H8	1.71	0.54
23:DB:418:C:H2'	23:DB:419:U:H6	1.73	0.54
1:AA:1152:A:H2'	1:AA:1153:G:H8	1.73	0.54
41:DJ:72:LYS:HB2	41:DJ:89:PHE:HB2	1.89	0.54
36:D2:13:ASN:O	36:D2:17:GLY:N	2.40	0.54
29:DE:3:LEU:N	29:DE:3:LEU:HD22	2.22	0.54
1:AA:401:C:H2'	1:AA:402:G:C8	2.42	0.54
23:BB:2896:C:H2'	23:BB:2897:U:C6	2.42	0.54
22:BA:13:G:H2'	22:BA:70:C:O2'	2.08	0.54
23:DB:2340:A:H2'	23:DB:2341:G:H8	1.72	0.54
23:BB:2008:C:H2'	23:BB:2009:A:H8	1.72	0.54
41:BJ:34:ARG:HG2	41:BJ:39:LYS:HB3	1.89	0.54
1:CA:545:C:H5''	3:CD:68:GLU:HG2	1.89	0.54
47:BF:141:ASP:O	47:BF:144:LYS:N	2.40	0.54
23:BB:1292:G:H2'	23:BB:1293:C:C6	2.42	0.54
8:AI:96:GLU:HA	8:AI:99:LYS:NZ	2.22	0.54
23:BB:2297:A:N6	23:BB:2319:G:H1'	2.21	0.54
23:BB:1205:A:H4'	23:BB:1206:G:OP2	2.07	0.54
23:BB:782:A:C8	25:BC:219:VAL:HG21	2.42	0.54
24:DI:2:LYS:C	24:DI:3:LYS:HD2	2.28	0.54
26:BD:108:ASP:OD2	26:BD:173:GLN:HA	2.05	0.54
2:CC:67:ILE:HD11	2:CC:100:ILE:HD11	1.89	0.54
26:DD:113:SER:HB3	26:DD:168:GLU:H	1.72	0.54
2:CC:53:ARG:HH12	2:CC:55:VAL:CG2	2.12	0.54
43:BO:75:GLY:O	43:BO:78:VAL:HG23	2.08	0.54
8:AI:33:SER:HB3	8:AI:36:GLN:NE2	2.23	0.54
8:AI:41:GLU:O	8:AI:44:ARG:HG2	2.08	0.54
22:DA:29:A:H2'	22:DA:30:C:C6	2.43	0.54
46:BU:73:ASN:HB3	46:BU:95:PHE:CE2	2.43	0.54
40:DH:31:VAL:CB	40:DH:32:PRO:HD3	2.32	0.54
33:B1:37:LYS:H	33:B1:48:TYR:HD2	1.55	0.54
38:BM:2:LEU:HD23	38:BM:46:ILE:HD11	1.90	0.54
1:AA:1219:A:H5''	21:AN:52:ARG:NH2	2.22	0.54
51:DZ:5:CYS:SG	51:DZ:8:THR:HG23	2.47	0.54
1:CA:889:A:H5'	1:CA:891:U:H1'	1.89	0.54
23:DB:1244:A:H5''	37:DL:8:PRO:CD	2.36	0.54
36:D2:19:ARG:HB3	36:D2:19:ARG:NH2	2.23	0.54
23:BB:2869:G:H2'	23:BB:2870:C:C6	2.42	0.54
23:DB:2728:U:H2'	23:DB:2729:G:C8	2.42	0.54
23:DB:2073:C:H5''	25:DC:227:VAL:HG12	1.89	0.54
23:DB:2144:G:H3'	23:DB:2145:C:H4'	1.88	0.54
1:CA:22:G:H4'	1:CA:885:G:C8	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:882:C:O2'	1:CA:883:C:H5'	2.06	0.54
23:DB:2748:A:H4'	48:DG:3:VAL:HG21	1.88	0.54
1:AA:1035:A:H2'	1:AA:1036:A:C8	2.42	0.54
23:DB:845:A:C8	23:DB:846:U:H5''	2.43	0.54
1:AA:251:G:N3	1:AA:266:G:O6	2.41	0.54
25:BC:93:VAL:HG12	25:BC:101:ARG:H	1.72	0.54
23:BB:2276:G:O2'	23:BB:2277:G:H5'	2.08	0.54
18:AB:93:HIS:O	18:AB:94:ARG:HG2	2.07	0.54
30:BY:8:GLN:OE1	30:BY:23:LEU:HD11	2.06	0.54
1:AA:6:G:HO2'	1:AA:7:A:H8	1.54	0.54
23:DB:1412:U:H2'	23:DB:1413:A:H8	1.72	0.54
1:AA:161:A:H2'	1:AA:162:A:C8	2.42	0.54
23:DB:1773:A:N7	23:DB:1829:A:H1'	2.22	0.54
23:DB:2563:U:H2'	23:DB:2565:A:OP2	2.06	0.54
23:DB:2008:C:H2'	23:DB:2009:A:C8	2.43	0.54
23:BB:2859:G:H2'	23:BB:2860:A:C8	2.42	0.54
1:AA:555:U:H2'	1:AA:556:C:H6	1.73	0.54
23:BB:2836:U:H2'	23:BB:2837:A:C8	2.42	0.54
23:DB:2027:G:O2'	23:DB:2028:U:H5'	2.08	0.54
1:AA:1114:C:H2'	1:AA:1115:U:O4'	2.08	0.54
23:BB:2677:G:H2'	23:BB:2678:C:C6	2.43	0.54
23:BB:1100:C:H2'	23:BB:1101:U:H6	1.72	0.54
6:CG:143:MET:O	6:CG:147:ASN:HB2	2.08	0.54
23:DB:738:G:H1'	23:DB:759:G:N2	2.21	0.54
19:CU:42:THR:C	19:CU:46:ARG:HE	2.11	0.54
29:DE:58:LYS:HD3	29:DE:58:LYS:H	1.73	0.54
35:BV:29:ILE:HG13	35:BV:88:HIS:CE1	2.39	0.54
41:BJ:13:ARG:O	41:BJ:52:ASP:HA	2.07	0.54
1:AA:254:G:OP1	14:AQ:68:LYS:O	2.25	0.54
26:DD:25:THR:HG21	26:DD:193:VAL:HG21	1.89	0.54
40:BH:116:ARG:HH22	40:BH:132:PHE:C	2.10	0.54
3:AD:160:LEU:HD23	3:AD:164:ARG:NH2	2.23	0.54
23:BB:2745:C:H3'	23:BB:2746:U:C6	2.43	0.54
44:DQ:67:ALA:HB1	44:DQ:105:PHE:CZ	2.42	0.54
23:DB:1178:C:H2'	23:DB:1179:G:C8	2.42	0.54
43:DO:106:LEU:HG	43:DO:107:ALA:N	2.22	0.54
16:AS:15:LEU:O	16:AS:15:LEU:HD23	2.08	0.54
22:BA:6:G:H2'	22:BA:7:G:H8	1.70	0.54
30:DY:37:ARG:HG3	30:DY:38:GLU:OE1	2.08	0.54
47:DF:45:ASP:HB3	47:DF:48:LEU:HD22	1.89	0.54
23:DB:1794:A:H2'	23:DB:1795:C:C6	2.42	0.54
51:BZ:7:VAL:HG21	51:BZ:59:ILE:HD11	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:BP:88:ARG:HH21	28:BP:112:ARG:NH2	2.05	0.54
1:CA:1354:U:O2'	1:CA:1355:G:H5'	2.08	0.54
3:AD:152:SER:O	3:AD:155:LYS:HG2	2.07	0.54
31:B0:32:THR:OG1	31:B0:50:GLY:HA2	2.07	0.54
37:DL:56:PRO:O	37:DL:60:ARG:HG3	2.07	0.54
1:CA:1308:U:O2'	1:CA:1309:G:H5'	2.08	0.54
43:BO:88:LYS:HA	43:BO:115:LEU:HD13	1.88	0.54
23:DB:996:A:O3'	44:DQ:91:ARG:HG2	2.08	0.54
44:DQ:63:ARG:HH12	44:DQ:96:ASP:CB	2.20	0.54
12:CM:52:ILE:HG23	12:CM:56:ARG:NH2	2.22	0.54
45:DS:24:ILE:HG22	45:DS:71:VAL:HG11	1.90	0.54
11:CL:5:GLN:HG3	11:CL:8:ARG:NH2	2.23	0.54
23:DB:1470:A:H3'	23:DB:1471:G:H8	1.73	0.54
45:BS:86:MET:HG3	45:BS:96:ILE:HD12	1.88	0.54
23:BB:718:A:H5'	23:BB:719:C:H5	1.71	0.54
5:CF:53:LYS:H	5:CF:53:LYS:HZ3	1.56	0.54
23:BB:1470:A:H3'	23:BB:1471:G:H8	1.73	0.54
25:DC:12:ARG:HA	25:DC:15:VAL:CG2	2.37	0.54
1:CA:462:G:H5'	1:CA:463:U:OP2	2.08	0.54
23:BB:2104:C:H2'	23:BB:2105:U:H6	1.72	0.54
23:BB:131:A:H2'	23:BB:132:G:C8	2.42	0.54
1:AA:1151:A:O2'	1:AA:1152:A:H8	1.89	0.54
33:D1:24:LYS:HD3	33:D1:52:LYS:O	2.08	0.54
23:BB:1464:G:H2'	23:BB:1465:G:C8	2.43	0.54
12:CM:29:SER:O	12:CM:32:ILE:HG22	2.08	0.54
23:BB:234:U:H2'	23:BB:235:U:H6	1.72	0.54
23:DB:1582:C:H3'	23:DB:1583:A:C2	2.43	0.54
22:DA:66:A:H61	22:DA:107:G:H2'	1.72	0.54
23:DB:1151:A:H2'	23:DB:1152:C:C6	2.43	0.54
7:CH:79:ARG:NH2	7:CH:82:LEU:HB2	2.23	0.54
23:DB:565:C:H2'	23:DB:566:U:O4'	2.06	0.54
23:BB:1120:G:O2'	23:BB:1121:C:H5'	2.08	0.54
23:DB:2691:C:H2'	23:DB:2692:G:H8	1.73	0.54
20:CO:31:LEU:HD13	20:CO:32:LEU:HD23	1.89	0.54
6:AG:104:VAL:O	6:AG:108:ARG:HG3	2.07	0.54
23:BB:1599:U:H2'	23:BB:1600:C:C6	2.43	0.54
23:DB:1100:C:H2'	23:DB:1101:U:C6	2.43	0.54
35:BV:24:ASN:O	35:BV:44:HIS:HB2	2.07	0.54
35:BV:30:ILE:HA	35:BV:91:PHE:O	2.08	0.54
21:CN:11:LYS:O	21:CN:15:LEU:HG	2.07	0.54
41:DJ:122:LEU:C	41:DJ:123:LYS:HD2	2.28	0.54
14:CQ:46:HIS:HB2	14:CQ:70:LYS:HE2	1.90	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1251:C:H5''	44:BQ:5:ARG:HH11	1.73	0.54
10:CK:31:VAL:CG2	10:CK:44:ALA:HB3	2.38	0.54
19:AU:24:LYS:HZ3	19:AU:24:LYS:HB3	1.73	0.54
46:DU:5:ARG:NH2	46:DU:93:ARG:HD3	2.22	0.54
24:DI:49:GLU:CB	24:DI:52:LEU:HD12	2.38	0.54
47:DF:113:PHE:HZ	47:DF:175:PRO:HB2	1.71	0.54
28:BP:3:ILE:HD13	28:BP:3:ILE:O	2.07	0.54
47:BF:110:ILE:HG22	47:BF:113:PHE:HD2	1.73	0.54
47:BF:113:PHE:HE1	47:BF:116:LEU:N	2.05	0.54
23:DB:1022:G:N2	23:DB:1142:A:N1	2.56	0.54
27:BK:76:VAL:O	28:BP:71:ARG:HA	2.08	0.54
2:AC:42:LEU:O	2:AC:46:LEU:HD23	2.07	0.54
40:DH:41:LYS:CA	40:DH:44:ILE:HG12	2.37	0.54
30:DY:16:LEU:CD2	30:DY:16:LEU:H	2.20	0.54
23:BB:1874:C:H2'	23:BB:1875:G:O4'	2.08	0.54
27:DK:11:ALA:HB3	27:DK:85:VAL:CG2	2.38	0.54
23:BB:2674:G:H2'	23:BB:2675:A:C8	2.43	0.54
21:CN:8:ARG:HB3	21:CN:12:ARG:HH11	1.72	0.54
12:CM:2:ARG:NH1	12:CM:3:ILE:N	2.56	0.54
23:DB:1606:C:C4'	23:DB:1607:C:H5'	2.38	0.54
41:DJ:93:ILE:O	41:DJ:97:PRO:HG3	2.07	0.54
23:DB:660:C:H2'	23:DB:661:A:H8	1.72	0.54
1:AA:1489:G:H2'	1:AA:1490:U:C6	2.43	0.54
23:BB:2847:U:H5''	28:BP:94:ALA:HB3	1.90	0.54
23:BB:518:G:H4'	45:BS:18:ARG:NH2	2.23	0.54
9:AJ:67:ILE:HG13	21:AN:95:LEU:HD13	1.90	0.54
23:DB:2229:U:H2'	23:DB:2230:G:C8	2.43	0.54
1:CA:586:C:O2'	1:CA:587:G:H5'	2.08	0.54
23:BB:127:A:H5''	23:BB:128:C:C6	2.42	0.54
1:CA:520:A:N1	1:CA:536:C:H1'	2.23	0.54
24:BI:48:ILE:HG22	24:BI:49:GLU:HG2	1.89	0.54
24:BI:5:GLN:HG2	24:BI:6:ALA:N	2.23	0.54
5:CF:79:ARG:HH22	5:CF:87:SER:HB3	1.71	0.54
23:DB:1258:U:H2'	23:DB:1259:G:C8	2.43	0.54
50:DT:12:ARG:NH1	50:DT:12:ARG:HB3	2.23	0.54
34:B3:7:ARG:HH11	34:B3:7:ARG:HG3	1.73	0.54
23:DB:2134:A:N3	23:DB:2134:A:H2'	2.22	0.54
40:BH:90:LEU:HD11	40:BH:146:VAL:HG11	1.90	0.54
35:BV:25:LYS:HE2	35:BV:41:GLU:OE1	2.07	0.54
41:BJ:11:VAL:HA	41:BJ:12:LYS:NZ	2.23	0.54
41:DJ:54:ILE:HD12	41:DJ:55:ILE:N	2.23	0.54
8:AI:51:LEU:HB3	8:AI:56:MET:SD	2.48	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BG:84:LYS:HB2	48:BG:132:LEU:H	1.73	0.54
1:AA:8:A:N6	3:AD:205:LYS:HB2	2.23	0.54
1:AA:1317:C:H3'	1:AA:1318:A:C8	2.43	0.54
1:AA:1313:U:H3'	16:AS:5:LYS:CD	2.38	0.54
23:BB:1287:A:N7	42:BN:105:GLY:HA3	2.22	0.54
29:DE:127:GLU:H	29:DE:127:GLU:CD	2.09	0.54
4:AE:37:VAL:HG12	4:AE:47:PHE:CB	2.37	0.54
1:CA:205:A:O2'	1:CA:206:C:H5'	2.08	0.54
7:AH:35:ILE:O	7:AH:39:LEU:HG	2.07	0.54
1:CA:191:G:H2'	1:CA:192:A:C8	2.43	0.54
23:BB:1870:C:H5''	23:BB:1871:A:N7	2.23	0.54
40:BH:27:ARG:NE	51:BZ:64:ILE:HD11	2.20	0.54
46:DU:85:ARG:CZ	46:DU:86:PHE:H	2.21	0.54
10:AK:58:THR:HB	10:AK:59:PRO:HD2	1.90	0.54
1:AA:389:A:H3'	1:AA:390:U:H6	1.73	0.54
23:BB:2093:G:O2'	23:BB:2094:A:H5'	2.07	0.54
23:DB:721:A:H2'	23:DB:722:A:C8	2.43	0.54
1:CA:1512:U:H2'	1:CA:1513:A:H8	1.73	0.54
26:BD:46:ARG:NH1	26:BD:85:ALA:HA	2.23	0.54
1:CA:1018:G:H2'	1:CA:1019:A:H8	1.72	0.54
23:DB:1534:U:H2'	23:DB:1536:C:C5	2.43	0.54
23:BB:2815:C:H2'	23:BB:2816:G:H8	1.73	0.54
11:AL:14:LYS:HG2	11:AL:16:ALA:H	1.73	0.54
1:AA:1025:U:H4'	1:AA:1026:G:C8	2.43	0.54
6:CG:147:ASN:C	6:CG:149:ALA:H	2.10	0.54
24:BI:52:LEU:HD21	24:BI:81:LYS:HZ2	1.73	0.54
1:AA:1463:U:H2'	1:AA:1464:U:C6	2.43	0.54
23:BB:748:G:OP2	45:BS:88:ARG:HG3	2.07	0.54
23:BB:2784:U:H2'	23:BB:2785:C:H6	1.73	0.54
23:BB:2615:U:C2	31:B0:3:GLN:HA	2.43	0.54
17:CT:45:ALA:HA	17:CT:48:LYS:HB3	1.89	0.54
23:DB:1098:A:C3'	24:DI:4:VAL:N	2.71	0.54
18:CB:69:VAL:O	18:CB:162:VAL:HG23	2.07	0.54
21:CN:60:ARG:HE	21:CN:62:ARG:HG2	1.71	0.54
1:AA:1238:A:C8	1:AA:1303:C:H1'	2.42	0.54
23:BB:2336:A:H1'	23:BB:2385:C:O4'	2.08	0.54
41:DJ:13:ARG:O	41:DJ:52:ASP:HA	2.08	0.54
23:DB:2385:C:H2'	23:DB:2386:A:C8	2.43	0.54
42:DN:25:ALA:O	42:DN:29:VAL:HG23	2.08	0.54
37:BL:123:ARG:CZ	37:BL:143:GLU:HB2	2.37	0.54
24:DI:52:LEU:HD22	24:DI:81:LYS:HD3	1.89	0.54
40:DH:94:ILE:HG23	40:DH:98:ASP:HB2	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BM:19:GLY:CA	38:BM:97:GLN:HB2	2.34	0.54
1:AA:1270:G:H2'	1:AA:1271:A:H8	1.73	0.54
44:DQ:78:PHE:CZ	44:DQ:82:LEU:HD11	2.42	0.54
27:BK:70:ARG:HD3	27:BK:76:VAL:HG22	1.90	0.54
23:BB:394:C:H2'	23:BB:395:U:O4'	2.07	0.54
47:DF:168:LEU:O	47:DF:169:LEU:HB2	2.08	0.54
9:AJ:12:ALA:HB3	9:AJ:18:ILE:HB	1.90	0.54
1:AA:1390:U:H2'	1:AA:1391:U:C6	2.43	0.54
7:AH:49:LYS:O	7:AH:58:LEU:HA	2.09	0.54
40:BH:50:ARG:HE	40:BH:50:ARG:H	1.55	0.54
23:BB:161:A:C3'	23:BB:162:U:H5''	2.37	0.54
27:DK:76:VAL:H	28:DP:72:VAL:HG23	1.73	0.54
30:DY:21:ALA:O	30:DY:24:LEU:HB3	2.07	0.54
18:CB:80:LYS:HG3	18:CB:81:ASP:N	2.23	0.54
1:AA:1036:A:C2'	1:AA:1037:C:H5'	2.37	0.54
23:BB:1061:U:O4'	23:BB:1070:A:H1'	2.08	0.54
23:BB:171:U:H2'	23:BB:172:A:H8	1.71	0.54
25:BC:92:LEU:HD12	25:BC:93:VAL:H	1.73	0.54
23:DB:2093:G:O2'	23:DB:2094:A:H5'	2.08	0.54
51:BZ:38:PHE:HE2	51:BZ:51:VAL:HG21	1.73	0.54
1:CA:802:A:H2'	1:CA:803:G:O4'	2.07	0.54
23:DB:2849:U:H4'	23:DB:2850:A:C5'	2.38	0.54
51:DZ:38:PHE:HE2	51:DZ:51:VAL:HG21	1.73	0.54
1:AA:692:U:H2'	1:AA:694:A:OP2	2.08	0.54
20:CO:28:GLN:O	20:CO:32:LEU:HG	2.08	0.54
23:BB:1153:C:H2'	23:BB:1154:G:O4'	2.08	0.54
4:AE:140:ILE:O	4:AE:144:GLU:HG3	2.08	0.54
23:DB:2438:U:O2'	23:DB:2439:A:H5''	2.08	0.54
23:DB:12:U:O2	23:DB:2626:C:H4'	2.08	0.54
23:DB:1599:U:H2'	23:DB:1600:C:C6	2.43	0.54
23:DB:2012:G:OP1	45:DS:98:LYS:HG2	2.08	0.54
1:CA:769:G:O2'	1:CA:770:C:H5'	2.07	0.54
6:CG:21:LEU:H	6:CG:21:LEU:HD23	1.73	0.54
5:CF:51:ILE:HG23	5:CF:51:ILE:O	2.08	0.54
23:BB:1939:U:H6	23:BB:1939:U:H5'	1.73	0.54
2:CC:123:LEU:HA	2:CC:127:VAL:HG22	1.90	0.54
50:DT:25:GLU:OE1	50:DT:30:ILE:HA	2.08	0.53
23:DB:2305:U:C1'	47:DF:132:ARG:HA	2.24	0.53
9:CJ:7:ARG:HG3	9:CJ:102:LEU:C	2.29	0.53
48:BG:42:VAL:HA	48:BG:50:THR:O	2.07	0.53
35:DV:4:ILE:HG22	35:DV:63:ILE:HG23	1.90	0.53
14:AQ:46:HIS:HB2	14:AQ:70:LYS:HE2	1.88	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2384:U:H5''	23:DB:2386:A:OP1	2.08	0.53
2:CC:53:ARG:HB3	2:CC:53:ARG:CZ	2.39	0.53
22:BA:28:C:H2'	22:BA:29:A:H8	1.72	0.53
8:AI:6:TYR:HB2	8:AI:19:PHE:CE1	2.43	0.53
23:BB:2688:G:H1'	23:BB:2721:A:H61	1.71	0.53
40:BH:31:VAL:CB	40:BH:32:PRO:CD	2.86	0.53
24:DI:57:VAL:HG23	24:DI:71:LYS:NZ	2.23	0.53
23:DB:1174:U:H1'	23:DB:1176:U:C1'	2.38	0.53
18:CB:30:ILE:HG23	18:CB:39:ILE:O	2.08	0.53
28:BP:56:SER:O	28:BP:75:THR:HG22	2.09	0.53
38:DM:19:GLY:HA3	38:DM:38:ARG:HH22	1.74	0.53
16:AS:35:ARG:HD2	16:AS:51:HIS:O	2.08	0.53
16:AS:62:THR:HG22	16:AS:63:ASP:N	2.22	0.53
26:DD:92:VAL:O	26:DD:94:GLN:N	2.41	0.53
22:DA:98:G:C6	35:DV:14:LYS:HB2	2.43	0.53
4:CE:37:VAL:HG12	4:CE:47:PHE:CB	2.39	0.53
23:DB:1790:C:H2'	23:DB:1791:A:C8	2.43	0.53
26:BD:55:LYS:HD3	26:BD:77:ARG:HA	1.90	0.53
23:BB:1813:G:H1'	25:BC:49:THR:OG1	2.07	0.53
2:AC:13:ILE:C	2:AC:15:LYS:H	2.12	0.53
52:BW:10:ARG:O	52:BW:11:ASN:HB2	2.08	0.53
26:DD:159:LYS:O	26:DD:161:MET:HG2	2.09	0.53
23:DB:545:U:C5	23:DB:546:U:H1'	2.43	0.53
1:AA:1389:C:H2'	1:AA:1390:U:H6	1.72	0.53
1:CA:190:A:O5'	1:CA:190:A:H8	1.91	0.53
23:DB:2722:G:H2'	23:DB:2723:C:C6	2.43	0.53
1:AA:1135:U:H4'	1:AA:1136:C:C5	2.43	0.53
45:DS:24:ILE:CG1	45:DS:36:LEU:HD11	2.38	0.53
1:AA:57:G:H2'	1:AA:58:C:H6	1.72	0.53
46:DU:6:ARG:O	46:DU:24:VAL:HB	2.08	0.53
1:CA:883:C:O2'	1:CA:884:U:H5'	2.07	0.53
1:AA:1167:A:N3	1:AA:1167:A:H2'	2.23	0.53
1:CA:954:G:H2'	1:CA:955:U:C6	2.43	0.53
23:BB:713:G:H21	23:BB:718:A:H2	1.55	0.53
23:DB:959:A:O2'	23:DB:960:A:H5'	2.08	0.53
23:DB:2353:G:H1'	52:DW:30:VAL:HG13	1.89	0.53
1:CA:652:U:H1'	1:CA:653:U:H5	1.72	0.53
1:AA:1449:C:H2'	1:AA:1450:U:O4'	2.07	0.53
49:BR:2:TYR:CG	49:BR:42:ALA:HB2	2.43	0.53
45:DS:13:SER:O	45:DS:101:SER:HB3	2.08	0.53
51:BZ:3:ARG:HA	51:BZ:50:ARG:HH11	1.73	0.53
23:BB:1636:U:H2'	23:BB:1637:A:H8	1.73	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BT:12:ARG:NH1	50:BT:12:ARG:HB3	2.23	0.53
23:DB:2626:C:H2'	23:DB:2627:G:O4'	2.08	0.53
11:CL:80:LEU:HD23	11:CL:97:VAL:HG21	1.89	0.53
1:CA:893:C:H2'	1:CA:894:G:H8	1.73	0.53
23:DB:132:G:H2'	23:DB:133:U:C6	2.43	0.53
17:AT:45:ALA:HA	17:AT:48:LYS:HB3	1.90	0.53
23:DB:437:U:H2'	23:DB:438:G:C8	2.43	0.53
22:DA:2:G:H2'	22:DA:3:C:C6	2.43	0.53
23:BB:1313:U:O2	23:BB:1313:U:H2'	2.07	0.53
1:CA:87:C:H2'	1:CA:88:U:C6	2.43	0.53
18:CB:163:ILE:HD12	18:CB:185:ILE:CD1	2.37	0.53
30:BY:9:THR:HB	30:BY:53:MET:O	2.07	0.53
5:AF:3:HIS:N	5:AF:92:THR:HG23	2.13	0.53
23:DB:2385:C:H2'	23:DB:2386:A:H8	1.71	0.53
24:BI:109:ALA:HB1	24:BI:124:MET:HG3	1.90	0.53
9:AJ:36:VAL:HG22	9:AJ:76:ILE:CG2	2.38	0.53
23:BB:2466:C:H5'	32:B4:6:SER:OG	2.08	0.53
35:DV:29:ILE:HG13	35:DV:88:HIS:CE1	2.40	0.53
37:BL:113:ALA:HB3	37:BL:115:GLU:OE1	2.07	0.53
49:BR:3:ALA:HB3	49:BR:14:VAL:O	2.08	0.53
29:BE:127:GLU:H	29:BE:127:GLU:CD	2.12	0.53
38:DM:47:GLU:OE2	38:DM:51:ARG:HG3	2.07	0.53
38:DM:40:ARG:HB2	38:DM:93:VAL:HG22	1.89	0.53
23:DB:876:C:H42	23:DB:901:C:H42	1.54	0.53
25:DC:14:HIS:O	25:DC:203:VAL:HG11	2.08	0.53
23:BB:2052:A:C8	26:BD:146:ILE:HD11	2.43	0.53
23:DB:2260:C:O2'	23:DB:2261:C:H5'	2.08	0.53
52:BW:9:THR:OG1	52:BW:10:ARG:N	2.41	0.53
27:BK:108:ARG:HG3	27:BK:108:ARG:O	2.08	0.53
50:BT:38:ALA:HB3	50:BT:81:LYS:NZ	2.23	0.53
36:D2:21:ARG:HH21	36:D2:43:THR:HG22	1.74	0.53
1:CA:1053:G:C4'	1:CA:1054:C:H5'	2.38	0.53
16:CS:44:ILE:CD1	16:CS:63:ASP:HA	2.38	0.53
23:DB:20:C:H2'	23:DB:21:A:C8	2.42	0.53
23:DB:1488:C:O2'	23:DB:1489:C:H5'	2.09	0.53
23:BB:417:C:H2'	23:BB:418:C:C6	2.43	0.53
10:CK:117:HIS:O	10:CK:118:ASN:HB2	2.08	0.53
23:DB:417:C:H2'	23:DB:418:C:H6	1.73	0.53
23:DB:1039:A:H2'	23:DB:1040:A:C8	2.43	0.53
1:CA:1384:C:H2'	1:CA:1385:G:C8	2.43	0.53
2:CC:78:LYS:HD2	2:CC:79:LYS:HE3	1.90	0.53
7:AH:4:ASP:OD1	7:AH:7:ALA:HB2	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:69:ASN:O	25:DC:70:LYS:C	2.47	0.53
23:DB:2520:C:O2'	23:DB:2521:C:H5'	2.08	0.53
23:BB:2101:A:H2'	23:BB:2102:G:O4'	2.08	0.53
30:DY:40:THR:O	30:DY:43:ILE:HG23	2.08	0.53
39:BX:31:GLN:O	39:BX:36:GLN:HB2	2.07	0.53
23:DB:1649:G:O2'	23:DB:1650:A:H5'	2.08	0.53
23:BB:388:G:N7	23:BB:390:U:H2'	2.23	0.53
23:BB:1666:G:H4'	27:BK:6:THR:HG23	1.89	0.53
23:BB:107:G:O2'	23:BB:108:G:H5'	2.09	0.53
5:AF:51:ILE:O	5:AF:51:ILE:HG23	2.08	0.53
23:BB:2543:G:H8	23:BB:2543:G:H5'	1.73	0.53
38:DM:78:LEU:HD12	38:DM:78:LEU:H	1.73	0.53
24:BI:2:LYS:NZ	24:BI:2:LYS:HB3	2.24	0.53
23:BB:1647:U:H3'	23:BB:1647:U:P	2.49	0.53
23:BB:302:C:H2'	23:BB:303:G:H8	1.74	0.53
23:BB:1319:C:O2'	23:BB:1320:C:H5'	2.08	0.53
1:AA:66:A:H5'	1:AA:173:U:O4	2.08	0.53
18:CB:48:MET:HA	18:CB:51:GLU:OE2	2.08	0.53
50:DT:28:ASN:CA	50:DT:91:GLN:HE22	2.22	0.53
48:DG:10:VAL:HG12	48:DG:14:VAL:HG23	1.89	0.53
40:BH:145:ASN:O	40:BH:147:VAL:HG23	2.08	0.53
52:DW:37:VAL:CG1	52:DW:38:ARG:HH11	2.22	0.53
23:BB:138:U:H2'	23:BB:140:C:O2	2.07	0.53
44:BQ:4:LYS:HZ3	44:BQ:7:VAL:HG22	1.73	0.53
42:DN:29:VAL:HG11	42:DN:75:ILE:HB	1.90	0.53
23:DB:2271:G:H2'	23:DB:2272:U:C6	2.43	0.53
2:AC:129:PHE:HE2	2:AC:165:GLU:HG2	1.72	0.53
32:B4:16:ILE:HG12	32:B4:25:VAL:HG22	1.91	0.53
23:BB:1033:U:H4'	23:BB:1034:G:OP1	2.08	0.53
46:BU:80:ASP:OD1	46:BU:97:SER:HB3	2.07	0.53
35:DV:28:ALA:HB2	35:DV:89:ILE:HD12	1.90	0.53
47:DF:113:PHE:HE1	47:DF:116:LEU:N	2.06	0.53
47:DF:51:ASN:O	47:DF:55:ASP:HB2	2.08	0.53
41:BJ:44:TYR:O	41:BJ:45:THR:HB	2.08	0.53
3:CD:144:ILE:HG22	3:CD:145:ARG:N	2.23	0.53
49:DR:3:ALA:HB3	49:DR:14:VAL:O	2.08	0.53
26:DD:5:VAL:H	26:DD:32:ASN:HD21	1.56	0.53
47:DF:134:GLN:H	47:DF:149:ARG:HB3	1.74	0.53
20:AO:43:PHE:HE1	20:AO:53:ARG:HA	1.72	0.53
44:DQ:81:GLY:HA2	44:DQ:116:LEU:HD21	1.90	0.53
3:AD:147:LYS:HG3	3:AD:148:ALA:N	2.23	0.53
1:CA:1306:A:H61	1:CA:1331:G:H1'	1.72	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DS:81:SER:HB3	45:DS:99:ARG:HA	1.90	0.53
23:DB:1870:C:H5''	23:DB:1871:A:N7	2.23	0.53
27:DK:116:ILE:HG13	27:DK:117:SER:N	2.23	0.53
40:BH:47:PHE:HD1	40:BH:50:ARG:HG2	1.74	0.53
1:CA:1287:A:N6	1:CA:1288:A:N6	2.57	0.53
23:BB:721:A:H2'	23:BB:722:A:C8	2.43	0.53
36:B2:3:ARG:HH21	36:B2:3:ARG:HG2	1.74	0.53
1:CA:815:A:H4'	1:CA:817:C:C4	2.43	0.53
48:BG:53:PRO:HG3	48:BG:61:TRP:HA	1.88	0.53
23:BB:2651:C:O2'	23:BB:2652:C:H5'	2.08	0.53
23:DB:153:U:O2'	23:DB:154:U:H5'	2.09	0.53
41:BJ:36:LEU:C	41:BJ:121:LYS:HZ1	2.11	0.53
16:CS:6:LYS:NZ	16:CS:6:LYS:HA	2.24	0.53
1:CA:764:C:H3'	1:CA:765:G:H21	1.72	0.53
23:BB:660:C:H2'	23:BB:661:A:C8	2.43	0.53
44:DQ:9:ALA:O	44:DQ:11:ALA:N	2.40	0.53
23:BB:1826:G:H2'	23:BB:1827:U:C6	2.43	0.53
22:BA:52:A:H5''	43:BO:33:ARG:NH2	2.23	0.53
35:DV:53:LYS:NZ	35:DV:53:LYS:HA	2.23	0.53
10:AK:30:ILE:HG22	10:AK:45:THR:HA	1.90	0.53
23:BB:329:G:O4'	23:BB:477:A:H1'	2.08	0.53
9:AJ:88:MET:SD	9:AJ:88:MET:N	2.82	0.53
23:DB:2194:U:H2'	23:DB:2195:U:C6	2.43	0.53
39:DX:31:GLN:O	39:DX:36:GLN:HB2	2.09	0.53
1:AA:1283:U:O2'	1:AA:1284:C:H5'	2.09	0.53
7:AH:115:ALA:O	7:AH:120:LEU:HD23	2.07	0.53
23:BB:699:A:H4'	23:BB:1634:A:N7	2.22	0.53
1:AA:847:G:H2'	1:AA:848:C:C6	2.43	0.53
23:BB:554:U:H2'	23:BB:555:G:O4'	2.09	0.53
23:BB:53:A:H1'	23:BB:179:C:O2'	2.07	0.53
22:DA:37:C:H2'	22:DA:38:C:O4'	2.08	0.53
29:DE:73:ILE:HG12	29:DE:73:ILE:O	2.08	0.53
1:CA:496:A:H2'	1:CA:497:G:C8	2.43	0.53
34:B3:25:HIS:HB2	34:B3:43:LEU:O	2.09	0.53
23:DB:753:A:H2'	23:DB:754:U:C6	2.43	0.53
23:BB:2063:C:O2	23:BB:2450:A:N1	2.41	0.53
1:CA:323:U:H2'	1:CA:324:G:O4'	2.09	0.53
50:BT:31:VAL:HA	50:BT:83:ALA:HB3	1.90	0.53
25:DC:189:ALA:C	25:DC:190:THR:HG23	2.28	0.53
41:BJ:18:VAL:HG12	41:BJ:54:ILE:HD11	1.90	0.53
23:BB:143:C:H6	23:BB:143:C:O5'	1.91	0.53
24:BI:125:THR:O	24:BI:129:GLU:HG3	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:153:SER:O	2:AC:164:THR:HA	2.07	0.53
2:AC:116:ALA:HB1	2:AC:186:SER:HB3	1.90	0.53
48:BG:120:ILE:HB	48:BG:140:ILE:HG22	1.91	0.53
15:CR:58:ILE:O	15:CR:62:ARG:HG3	2.09	0.53
43:DO:11:ALA:HB2	43:DO:96:GLY:N	2.16	0.53
44:BQ:91:ARG:HD3	49:BR:11:GLN:CD	2.29	0.53
1:AA:986:U:H2'	1:AA:987:G:O4'	2.07	0.53
1:AA:876:C:H1'	7:AH:11:THR:HG21	1.90	0.53
1:AA:973:G:O2'	9:AJ:56:HIS:HA	2.09	0.53
26:DD:51:THR:HG22	26:DD:52:THR:N	2.17	0.53
1:AA:865:A:H2'	1:AA:866:C:C6	2.43	0.53
1:CA:135:C:O2	13:CP:1:MET:HB2	2.09	0.53
3:AD:144:ILE:HG22	3:AD:145:ARG:N	2.24	0.53
40:DH:25:TYR:CD1	40:DH:30:LEU:HG	2.43	0.53
23:BB:2749:A:C3'	23:BB:2750:A:H5''	2.36	0.53
40:BH:15:LEU:HD13	40:BH:16:GLY:N	2.23	0.53
23:BB:1593:A:H2'	23:BB:1594:U:C6	2.43	0.53
21:CN:26:LEU:HD23	21:CN:27:LYS:N	2.24	0.53
12:CM:56:ARG:HB2	12:CM:56:ARG:CZ	2.38	0.53
27:DK:70:ARG:HB2	27:DK:75:SER:O	2.07	0.53
6:AG:149:ALA:HB1	10:AK:58:THR:CB	2.38	0.53
23:DB:2651:C:O2'	23:DB:2652:C:H5'	2.08	0.53
3:CD:10:LEU:HB3	3:CD:62:ARG:HD3	1.91	0.53
1:CA:462:G:H2'	1:CA:462:G:N3	2.21	0.53
3:AD:8:LEU:HD21	3:AD:21:LYS:HG2	1.91	0.53
23:BB:852:U:H2'	23:BB:853:C:C6	2.43	0.53
23:BB:2699:C:H2'	23:BB:2700:A:H8	1.73	0.53
6:AG:82:SER:HB2	6:AG:84:TYR:CE2	2.43	0.53
26:DD:47:ALA:HB2	26:DD:83:ARG:HD2	1.90	0.53
21:AN:76:PHE:O	21:AN:78:LEU:HD13	2.08	0.53
23:DB:329:G:O4'	23:DB:477:A:H1'	2.09	0.53
23:DB:1783:A:H5'	23:DB:2608:G:H4'	1.91	0.53
23:DB:1771:C:H2'	23:DB:1772:A:C8	2.44	0.53
23:BB:1187:G:HO2'	23:BB:1188:U:H6	1.57	0.53
23:DB:2642:G:O2'	23:DB:2643:G:H5'	2.08	0.53
23:BB:1742:U:H2'	23:BB:1743:G:C8	2.43	0.53
25:DC:18:VAL:O	25:DC:18:VAL:HG13	2.08	0.53
19:CU:7:GLU:HB3	19:CU:11:PHE:HZ	1.74	0.53
27:DK:109:SER:HB2	27:DK:111:LYS:HE2	1.91	0.53
23:BB:855:G:C2	52:BW:23:LYS:HG2	2.43	0.53
9:CJ:70:HIS:CD2	9:CJ:70:HIS:H	2.26	0.53
25:DC:127:ASN:O	25:DC:190:THR:HA	2.08	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BG:30:GLY:HA3	48:BG:78:VAL:HG12	1.91	0.53
1:AA:121:U:H4'	1:AA:122:G:N7	2.23	0.53
1:AA:121:U:O4	1:AA:236:A:N7	2.42	0.53
14:AQ:26:ARG:HG2	14:AQ:39:ARG:O	2.09	0.53
35:DV:63:ILE:N	35:DV:63:ILE:HD12	2.22	0.53
40:BH:54:LEU:O	40:BH:59:ALA:HB2	2.09	0.53
23:BB:1729:U:O2	23:BB:1729:U:H2'	2.09	0.53
1:AA:720:C:OP1	15:AR:40:PRO:HG3	2.08	0.53
25:BC:189:ALA:C	25:BC:190:THR:HG23	2.29	0.53
23:DB:2757:A:N3	23:DB:2757:A:H2'	2.21	0.53
23:BB:2145:C:C3'	23:BB:2146:C:H5''	2.38	0.53
46:BU:3:LYS:CB	46:BU:82:VAL:HG21	2.33	0.53
15:CR:32:ILE:HD11	15:CR:58:ILE:HG23	1.90	0.53
3:CD:160:LEU:N	3:CD:160:LEU:HD13	2.14	0.53
49:BR:14:VAL:HG22	49:BR:15:SER:N	2.24	0.53
1:CA:1060:U:H4'	9:CJ:54:SER:CB	2.34	0.53
49:DR:21:ARG:HB3	49:DR:95:ASP:OD1	2.09	0.53
22:BA:42:C:H4'	47:BF:63:LYS:O	2.08	0.53
23:BB:1106:G:H2'	23:BB:1107:G:C8	2.44	0.53
26:BD:146:ILE:HD12	26:BD:155:VAL:HG21	1.90	0.53
17:AT:66:ILE:HG22	17:AT:67:HIS:N	2.21	0.53
23:DB:115:C:O2'	23:DB:116:C:H5'	2.08	0.53
39:BX:8:GLU:HB3	39:BX:12:GLU:CB	2.39	0.53
24:BI:18:ASN:N	24:BI:19:PRO:CD	2.71	0.53
52:DW:9:THR:OG1	52:DW:10:ARG:N	2.41	0.53
1:CA:1222:G:O2'	1:CA:1223:C:H5'	2.08	0.53
9:CJ:29:ALA:O	9:CJ:32:THR:HG22	2.08	0.53
43:BO:79:ALA:HA	43:BO:115:LEU:HD23	1.91	0.53
37:DL:23:ILE:HD12	37:DL:23:ILE:N	2.21	0.53
1:CA:1167:A:H2'	1:CA:1169:A:C5	2.43	0.53
23:DB:62:U:C2'	23:DB:63:A:H5'	2.39	0.53
23:DB:2648:G:H2'	23:DB:2649:C:H6	1.72	0.53
1:CA:677:U:H2'	1:CA:678:U:C6	2.44	0.53
1:AA:462:G:H5'	1:AA:463:U:OP2	2.09	0.53
23:DB:17:G:H2'	23:DB:18:U:C6	2.43	0.53
1:AA:884:U:H4'	1:AA:885:G:H5''	1.90	0.53
23:DB:2244:U:H2'	23:DB:2245:U:O4'	2.07	0.53
7:CH:8:ASP:O	7:CH:12:ARG:HB2	2.09	0.53
44:DQ:9:ALA:O	44:DQ:13:HIS:HB2	2.09	0.53
17:AT:27:MET:O	17:AT:31:ILE:HG13	2.08	0.53
24:DI:99:LYS:HD3	24:DI:99:LYS:N	2.24	0.53
23:BB:1684:G:H2'	23:BB:1685:C:C6	2.44	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1310:G:H21	23:BB:1610:A:H8	1.55	0.53
3:AD:156:ALA:O	3:AD:159:GLU:HB2	2.08	0.53
1:CA:709:U:H2'	1:CA:710:G:C8	2.44	0.53
1:CA:1387:G:H2'	1:CA:1388:C:H6	1.74	0.53
22:DA:64:G:H2'	22:DA:65:U:C6	2.43	0.53
29:BE:4:VAL:C	29:BE:6:LYS:H	2.11	0.53
1:CA:224:U:H2'	1:CA:225:C:C6	2.43	0.53
9:CJ:52:LEU:CD1	9:CJ:52:LEU:H	2.07	0.53
12:AM:56:ARG:O	12:AM:59:VAL:HG12	2.09	0.53
19:AU:34:ARG:NE	19:AU:39:LYS:HE3	2.24	0.53
29:BE:175:ILE:HD11	29:BE:180:LEU:HD11	1.90	0.53
5:CF:86:ARG:NH2	15:CR:63:TYR:HB3	2.23	0.53
5:AF:91:ARG:N	5:AF:93:LYS:HZ1	2.04	0.53
23:BB:2061:G:H5''	23:BB:2503:A:C2	2.44	0.53
23:DB:2271:G:O2'	23:DB:2272:U:H5'	2.07	0.53
37:BL:18:ARG:O	37:BL:19:LEU:HD12	2.08	0.53
37:BL:29:LYS:C	37:BL:31:GLY:H	2.12	0.53
49:BR:59:ILE:HA	49:BR:100:GLY:HA3	1.91	0.53
46:DU:73:ASN:HD22	46:DU:73:ASN:N	2.07	0.53
9:AJ:10:LEU:O	9:AJ:71:LEU:HA	2.08	0.53
38:BM:47:GLU:OE2	38:BM:51:ARG:HG3	2.08	0.53
12:AM:79:LEU:HA	12:AM:82:LEU:CG	2.34	0.53
1:AA:1315:U:H3'	1:AA:1316:G:C8	2.44	0.53
26:DD:55:LYS:H	26:DD:75:ALA:HB1	1.74	0.53
1:CA:921:U:H2'	1:CA:922:G:C8	2.43	0.53
27:BK:75:SER:HA	28:BP:72:VAL:O	2.09	0.53
43:DO:88:LYS:HA	43:DO:115:LEU:HD13	1.90	0.53
47:BF:3:LEU:HB2	47:BF:100:GLU:OE1	2.09	0.53
44:DQ:91:ARG:HD3	49:DR:11:GLN:OE1	2.09	0.53
42:BN:17:ARG:C	42:BN:19:ALA:H	2.12	0.53
27:BK:25:LEU:HD12	27:BK:25:LEU:H	1.73	0.53
2:AC:171:ARG:NH1	2:AC:171:ARG:HB2	2.22	0.53
2:AC:171:ARG:CB	2:AC:171:ARG:HH11	2.21	0.53
1:AA:269:C:H2'	1:AA:270:A:H8	1.69	0.53
1:CA:961:U:O4'	1:CA:961:U:O2	2.26	0.53
1:AA:1135:U:H2'	1:AA:1137:C:O2	2.07	0.53
1:CA:1053:G:C3'	1:CA:1054:C:H5'	2.39	0.53
25:DC:75:ALA:CB	25:DC:95:TYR:HA	2.37	0.53
23:DB:636:G:H3'	37:DL:128:THR:CG2	2.38	0.53
23:DB:718:A:H5'	23:DB:719:C:H5	1.74	0.53
1:CA:1449:C:H2'	1:CA:1450:U:O4'	2.09	0.53
1:AA:222:C:H2'	1:AA:223:A:H8	1.73	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1142:G:H3'	1:AA:1143:G:H8	1.71	0.53
1:AA:674:G:H2'	1:AA:675:A:C8	2.42	0.53
23:BB:130:C:O2'	23:BB:131:A:H5'	2.08	0.53
23:DB:1561:C:H2'	23:DB:1562:U:C6	2.43	0.53
22:DA:76:G:H1	22:DA:101:A:N6	2.07	0.53
22:BA:75:G:N1	22:BA:102:G:N2	2.56	0.53
23:BB:1889:A:H2'	23:BB:1890:A:C8	2.44	0.53
20:CO:49:ASP:OD1	20:CO:52:SER:HB2	2.09	0.53
9:AJ:66:GLU:HB3	21:AN:98:ALA:HB2	1.90	0.53
45:BS:49:LYS:HA	45:BS:52:GLU:HG2	1.90	0.53
38:DM:75:GLU:OE1	38:DM:90:GLU:HG2	2.09	0.53
23:BB:2691:C:H2'	23:BB:2692:G:H8	1.73	0.53
1:AA:147:G:H2'	1:AA:148:G:C8	2.43	0.53
29:BE:73:ILE:O	29:BE:73:ILE:HG12	2.09	0.53
1:CA:965:U:H5'	1:CA:965:U:H6	1.73	0.53
18:CB:31:PHE:N	18:CB:41:ASN:HB2	2.24	0.53
50:BT:40:LYS:HA	50:BT:43:ILE:CG2	2.39	0.53
26:BD:113:SER:HB3	26:BD:167:ASN:CA	2.38	0.53
40:BH:116:ARG:HB3	40:BH:130:VAL:HA	1.91	0.53
40:BH:133:GLN:O	40:BH:133:GLN:HG2	2.08	0.53
43:BO:70:ALA:O	43:BO:74:VAL:HG23	2.09	0.53
23:DB:2688:G:H1'	23:DB:2721:A:H61	1.73	0.53
37:BL:18:ARG:C	37:BL:19:LEU:HD12	2.29	0.53
23:DB:1726:C:H2'	23:DB:1727:C:C6	2.44	0.53
2:AC:112:ALA:CB	2:AC:184:ASN:HB2	2.39	0.53
23:DB:638:G:H2'	23:DB:639:U:C6	2.44	0.53
23:BB:2722:G:H2'	23:BB:2723:C:C6	2.44	0.53
1:CA:406:G:H21	3:CD:115:GLN:NE2	1.99	0.53
46:DU:80:ASP:OD1	46:DU:97:SER:HB3	2.08	0.53
40:DH:116:ARG:HD2	40:DH:131:SER:H	1.74	0.53
46:BU:21:ARG:HD3	46:BU:72:PHE:CD2	2.44	0.53
47:DF:115:GLY:HA3	47:DF:177:ARG:HD2	1.91	0.53
16:AS:66:VAL:C	16:AS:68:HIS:H	2.12	0.53
22:BA:7:G:H1'	43:BO:38:GLN:HE22	1.73	0.53
29:DE:157:LEU:HG	29:DE:169:VAL:HG11	1.90	0.53
36:D2:33:ARG:HB2	36:D2:33:ARG:NH2	2.22	0.53
49:DR:61:ALA:HB2	49:DR:98:ILE:HA	1.90	0.53
47:BF:102:LEU:HA	47:BF:106:ALA:HB2	1.91	0.53
41:DJ:25:LEU:HD13	41:DJ:26:GLY:N	2.23	0.53
47:BF:148:VAL:O	47:BF:149:ARG:HG2	2.08	0.53
10:CK:61:ALA:O	10:CK:64:VAL:HG13	2.09	0.53
34:D3:21:PHE:HB2	34:D3:49:VAL:CG1	2.38	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:AG:15:PRO:HG2	6:AG:43:TYR:OH	2.09	0.53
43:DO:88:LYS:HE3	43:DO:114:GLY:O	2.09	0.53
27:BK:43:ILE:HD12	27:BK:56:ASP:HB2	1.91	0.53
23:DB:2425:A:H5''	23:DB:2426:A:H3'	1.90	0.53
38:BM:35:ALA:HB3	38:BM:99:GLY:N	2.23	0.53
47:BF:27:VAL:O	47:BF:29:ARG:HD2	2.09	0.53
28:DP:60:VAL:O	28:DP:70:GLU:HA	2.08	0.53
44:DQ:59:LEU:O	44:DQ:62:ALA:HB3	2.07	0.53
1:AA:642:A:H2'	1:AA:643:C:C6	2.44	0.53
25:BC:129:LEU:HD21	25:BC:133:ASN:HB2	1.91	0.53
46:BU:85:ARG:CZ	46:BU:86:PHE:H	2.20	0.53
1:AA:1332:A:H2'	1:AA:1333:A:H8	1.72	0.53
45:DS:26:GLY:N	45:DS:71:VAL:HG13	2.23	0.53
37:BL:6:LEU:H	37:BL:6:LEU:CD2	2.21	0.53
1:AA:1164:G:H2'	1:AA:1165:U:C6	2.43	0.53
23:DB:1733:G:H2'	23:DB:1734:G:C8	2.44	0.53
10:CK:63:GLN:HG3	10:CK:98:ALA:CB	2.39	0.53
15:CR:34:GLU:HB2	19:CU:18:PHE:CE1	2.43	0.53
10:AK:117:HIS:O	10:AK:118:ASN:HB2	2.09	0.53
22:DA:49:C:O3'	43:DO:68:LYS:HE3	2.08	0.53
1:CA:159:G:N2	1:CA:161:A:H3'	2.24	0.53
44:BQ:9:ALA:O	44:BQ:13:HIS:HB2	2.09	0.53
23:BB:2636:C:H2'	23:BB:2637:U:C6	2.44	0.53
26:BD:47:ALA:HB2	26:BD:83:ARG:HD2	1.90	0.53
23:DB:982:C:O2	23:DB:982:C:O4'	2.22	0.53
1:AA:612:C:H2'	1:AA:613:C:C6	2.44	0.53
23:BB:2798:U:H4'	23:BB:2800:A:N1	2.24	0.53
23:BB:2340:A:H2'	23:BB:2341:G:H8	1.72	0.53
50:DT:10:VAL:O	50:DT:12:ARG:N	2.41	0.53
23:BB:2449:U:H4'	23:BB:2450:A:OP1	2.09	0.53
23:DB:302:C:H2'	23:DB:303:G:H8	1.72	0.53
23:BB:2828:G:O2'	23:BB:2829:A:H5'	2.09	0.53
1:AA:545:C:H5''	3:AD:68:GLU:HG2	1.90	0.53
45:DS:49:LYS:HA	45:DS:52:GLU:HG2	1.91	0.53
40:BH:90:LEU:HD21	40:BH:146:VAL:HG11	1.88	0.53
6:CG:10:LYS:NZ	6:CG:11:ILE:H	1.95	0.53
41:DJ:15:TRP:HB3	41:DJ:137:PRO:HB3	1.90	0.53
12:CM:68:LEU:HD22	12:CM:69:ARG:HH11	1.74	0.53
23:BB:2740:A:H2'	23:BB:2741:A:C8	2.44	0.53
47:DF:104:THR:HG22	47:DF:105:ILE:HG13	1.90	0.53
1:AA:1315:U:H3'	1:AA:1316:G:H8	1.74	0.53
18:AB:98:GLY:C	18:AB:100:LEU:H	2.12	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:57:ASN:HA	18:CB:220:VAL:HA	1.91	0.53
1:CA:1398:A:H8	1:CA:1398:A:H5'	1.74	0.53
47:DF:27:VAL:O	47:DF:29:ARG:HD2	2.08	0.53
2:AC:13:ILE:O	2:AC:14:VAL:HG22	2.09	0.53
2:AC:180:ASP:C	2:AC:181:ILE:HD12	2.29	0.53
16:CS:50:VAL:HG21	16:CS:70:LEU:HG	1.89	0.53
6:AG:70:PRO:HA	6:AG:137:ARG:NH1	2.21	0.53
44:BQ:30:VAL:HG13	44:BQ:31:TYR:N	2.24	0.53
25:BC:91:ALA:CB	25:BC:105:ALA:HB2	2.39	0.53
1:AA:268:U:H2'	1:AA:269:C:C6	2.43	0.53
23:BB:1439:A:H1'	23:BB:1553:A:N6	2.24	0.53
17:AT:79:THR:HG22	17:AT:83:ASN:ND2	2.24	0.53
23:DB:2144:G:H2'	23:DB:2145:C:O3'	2.09	0.53
23:DB:1387:A:H4'	23:DB:1469:A:H1'	1.90	0.53
48:DG:1:SER:H1	48:DG:61:TRP:HE3	1.57	0.53
23:DB:2748:A:H1'	48:DG:66:THR:HB	1.90	0.53
1:CA:1226:C:N4	12:CM:102:LYS:HB3	2.24	0.53
23:DB:2353:G:H1'	52:DW:30:VAL:CG1	2.39	0.53
1:AA:763:G:H2'	1:AA:764:C:H6	1.74	0.53
1:AA:883:C:O2'	1:AA:884:U:H5'	2.09	0.53
3:AD:104:MET:SD	3:AD:142:VAL:HB	2.49	0.53
23:DB:657:U:H2'	23:DB:658:U:C6	2.43	0.53
45:DS:13:SER:HB3	45:DS:16:LYS:HE2	1.91	0.53
1:CA:1458:G:H5''	17:CT:25:SER:HB2	1.89	0.53
23:DB:532:A:H4'	23:DB:533:G:C8	2.43	0.53
1:AA:41:G:H2'	1:AA:42:G:H8	1.73	0.53
23:BB:2813:A:H2'	23:BB:2814:A:C8	2.44	0.53
1:CA:401:C:H2'	1:CA:402:G:C8	2.44	0.53
1:CA:469:C:H2'	1:CA:470:C:C6	2.44	0.53
23:DB:39:G:O2'	23:DB:40:U:H5'	2.09	0.53
30:DY:8:GLN:OE1	30:DY:23:LEU:HD11	2.09	0.53
10:CK:30:ILE:HG22	10:CK:45:THR:HA	1.91	0.53
23:DB:69:C:O2'	23:DB:70:G:H5'	2.08	0.53
1:CA:1074:G:H2'	1:CA:1075:U:H6	1.74	0.53
23:BB:1258:U:H2'	23:BB:1259:G:C8	2.42	0.53
48:BG:72:ASN:O	48:BG:76:ILE:HG12	2.08	0.53
23:BB:1181:U:H2'	23:BB:1182:G:H8	1.74	0.53
23:BB:204:A:H4'	23:BB:205:G:OP1	2.09	0.53
1:CA:729:A:H2'	1:CA:730:G:C8	2.43	0.53
19:AU:7:GLU:HB3	19:AU:11:PHE:HZ	1.73	0.53
23:DB:53:A:H1'	23:DB:179:C:O2'	2.08	0.53
1:AA:420:U:H2'	1:AA:422:C:C5	2.44	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
53:DB:3001:NMY:H5	53:DB:3001:NMY:H91	1.74	0.53
23:DB:2543:G:H8	23:DB:2543:G:H5'	1.73	0.53
23:BB:2137:U:O2	23:BB:2137:U:H2'	2.09	0.53
23:DB:1939:U:H5'	23:DB:1939:U:H6	1.74	0.53
1:CA:1499:A:H2'	1:CA:1500:A:H8	1.73	0.53
26:DD:49:GLN:HE21	26:DD:79:LEU:HD12	1.73	0.53
8:CI:49:GLN:HB3	8:CI:102:PHE:CZ	2.44	0.53
8:CI:34:LEU:HD11	8:CI:44:ARG:HB2	1.91	0.53
50:DT:29:THR:CG2	50:DT:86:THR:HG22	2.39	0.53
25:DC:129:LEU:HD21	25:DC:133:ASN:HB2	1.91	0.53
48:DG:30:GLY:HA3	48:DG:78:VAL:HG12	1.91	0.53
14:CQ:45:VAL:CG1	14:CQ:46:HIS:H	2.17	0.53
40:BH:101:ASP:C	40:BH:103:VAL:H	2.11	0.53
8:AI:40:ARG:H	8:AI:44:ARG:CD	2.20	0.53
23:BB:1059:G:H2'	23:BB:1060:U:C5	2.43	0.53
23:DB:1723:G:H3'	23:DB:1724:G:H8	1.74	0.53
46:BU:26:ASN:ND2	46:BU:34:ILE:HD12	2.22	0.53
2:AC:129:PHE:O	2:AC:133:MET:HG3	2.08	0.53
40:DH:116:ARG:O	40:DH:130:VAL:HG13	2.08	0.53
33:D1:49:LYS:HG3	33:D1:50:GLU:N	2.18	0.53
47:BF:155:ILE:H	47:BF:155:ILE:HD12	1.72	0.53
30:DY:56:VAL:HG12	30:DY:58:GLU:H	1.74	0.53
23:BB:1021:A:H61	23:BB:1142:A:N6	2.06	0.53
3:CD:153:ARG:HG3	3:CD:154:VAL:H	1.74	0.53
29:BE:5:LEU:CD1	29:BE:10:SER:HB2	2.37	0.53
47:DF:12:VAL:O	47:DF:16:MET:HG2	2.09	0.53
47:DF:24:VAL:O	47:DF:27:VAL:HG22	2.08	0.53
8:AI:119:LYS:O	8:AI:120:ALA:HB3	2.09	0.53
47:BF:115:GLY:HA3	47:BF:177:ARG:HD2	1.91	0.53
23:DB:309:A:H4'	46:DU:15:GLY:CA	2.36	0.53
1:AA:191:G:H2'	1:AA:192:A:C8	2.44	0.53
23:BB:2393:U:O2'	23:BB:2394:C:H5'	2.09	0.53
2:CC:119:ILE:CG2	2:CC:197:VAL:HG21	2.39	0.53
23:BB:1592:C:H2'	23:BB:1593:A:C8	2.44	0.53
44:DQ:91:ARG:HD3	49:DR:11:GLN:HB2	1.90	0.53
12:CM:10:ASP:CA	12:CM:44:ILE:HD13	2.38	0.53
23:BB:1244:A:H5''	37:BL:8:PRO:CD	2.38	0.53
27:DK:108:ARG:HG3	27:DK:108:ARG:O	2.07	0.53
1:AA:1060:U:O2'	9:AJ:54:SER:HB2	2.08	0.53
27:DK:70:ARG:HD3	27:DK:76:VAL:HG22	1.91	0.53
11:CL:2:THR:OG1	11:CL:5:GLN:HB2	2.09	0.53
17:CT:43:LYS:HA	17:CT:85:LEU:HD11	1.90	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:98:G:C2'	23:BB:99:U:H5''	2.39	0.53
26:DD:46:ARG:NH1	26:DD:85:ALA:HA	2.24	0.53
23:DB:38:A:O2'	29:DE:43:THR:HA	2.09	0.53
3:AD:10:LEU:HB3	3:AD:62:ARG:HD3	1.90	0.53
3:AD:29:THR:HB	3:AD:30:LYS:NZ	2.23	0.53
1:CA:601:G:H2'	1:CA:602:A:C8	2.44	0.53
23:DB:2645:G:H3'	23:DB:2646:C:C5'	2.37	0.53
23:DB:2322:A:H2'	23:DB:2323:G:O4'	2.08	0.53
9:CJ:65:TYR:HB2	21:CN:95:LEU:HD11	1.91	0.53
23:BB:1560:G:H2'	23:BB:1561:C:H6	1.73	0.53
23:BB:2756:U:C1'	23:BB:2757:A:H5''	2.39	0.53
23:DB:2025:C:H2'	23:DB:2026:U:C6	2.44	0.53
23:BB:2784:U:H2'	23:BB:2785:C:C6	2.44	0.53
11:CL:80:LEU:HB3	11:CL:97:VAL:HG23	1.91	0.53
23:BB:257:C:H2'	23:BB:258:G:O4'	2.09	0.53
23:DB:324:A:H2'	23:DB:325:G:O4'	2.09	0.53
1:AA:1011:C:H2'	1:AA:1012:A:C8	2.44	0.53
1:AA:1208:C:H2'	1:AA:1209:C:C6	2.44	0.53
21:CN:86:ALA:HB1	21:CN:91:GLU:HB2	1.90	0.53
1:AA:496:A:H2'	1:AA:497:G:C8	2.44	0.53
23:BB:9:G:H21	23:BB:10:A:N6	2.06	0.53
1:AA:1222:G:O2'	1:AA:1223:C:H5'	2.09	0.53
18:CB:166:ASP:CG	18:CB:190:SER:HA	2.29	0.53
5:AF:55:HIS:ND1	5:AF:55:HIS:N	2.57	0.53
46:DU:13:LEU:HA	46:DU:18:LYS:CE	2.39	0.53
1:AA:95:C:H2'	1:AA:96:U:H6	1.72	0.53
7:AH:29:SER:O	7:AH:33:VAL:HG23	2.09	0.53
49:DR:62:GLU:O	49:DR:96:VAL:HA	2.08	0.53
8:CI:85:ALA:O	8:CI:89:TYR:HB3	2.09	0.53
18:CB:51:GLU:HG2	18:CB:52:ALA:N	2.24	0.53
23:BB:2384:U:H5''	23:BB:2386:A:OP1	2.09	0.53
41:DJ:124:VAL:HG23	41:DJ:125:TYR:H	1.74	0.53
40:BH:116:ARG:H	40:BH:130:VAL:HG12	1.72	0.53
2:CC:53:ARG:HB3	2:CC:53:ARG:NH1	2.24	0.53
1:AA:1150:A:H4'	9:AJ:43:PRO:HB3	1.91	0.53
27:BK:88:ASN:C	27:BK:88:ASN:HD22	2.06	0.53
18:AB:173:LYS:HA	18:AB:176:ASN:HD21	1.73	0.53
41:BJ:25:LEU:O	41:BJ:27:ARG:N	2.41	0.53
1:CA:1300:G:HO2'	1:CA:1301:U:H6	1.57	0.53
1:AA:923:A:OP1	4:AE:25:LYS:HB3	2.09	0.53
37:DL:93:ASN:CG	37:DL:94:THR:H	2.12	0.53
44:DQ:30:VAL:HG13	44:DQ:31:TYR:N	2.24	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
8:AI:14:SER:HB2	8:AI:77:ALA:HB2	1.90	0.53
44:DQ:10:ARG:HB2	44:DQ:10:ARG:HH11	1.71	0.53
46:DU:24:VAL:HA	46:DU:35:VAL:HA	1.90	0.53
11:CL:54:VAL:HG12	11:CL:55:ARG:N	2.24	0.53
50:DT:50:LEU:HD22	50:DT:50:LEU:N	2.24	0.53
23:DB:1854:A:H2	23:DB:2087:G:N3	2.07	0.53
1:AA:736:C:H2'	1:AA:737:C:H6	1.74	0.53
1:AA:22:G:H4'	1:AA:885:G:C8	2.44	0.53
1:AA:777:A:H2'	1:AA:778:G:H8	1.74	0.53
46:DU:20:LYS:HE2	46:DU:20:LYS:N	2.23	0.53
23:BB:1183:U:H2'	23:BB:1184:U:H6	1.74	0.53
29:BE:3:LEU:N	29:BE:3:LEU:HD22	2.23	0.53
23:BB:445:C:O2'	23:BB:446:G:H5'	2.08	0.53
1:AA:562:U:H5''	1:AA:563:A:C4	2.44	0.53
36:B2:46:LYS:HA	36:B2:46:LYS:HZ2	1.74	0.53
22:BA:91:C:H2'	22:BA:92:C:H6	1.74	0.53
10:AK:32:THR:HG22	10:AK:34:THR:HG22	1.90	0.53
23:BB:252:G:O2'	23:BB:253:C:H5'	2.08	0.53
1:AA:1157:A:H4'	1:AA:1158:C:O5'	2.09	0.53
23:BB:1175:A:H3'	23:BB:1176:U:C6	2.44	0.53
1:AA:1293:C:H2'	1:AA:1294:G:C8	2.44	0.53
23:DB:2449:U:H4'	23:DB:2450:A:OP1	2.09	0.53
1:AA:499:A:H4'	1:AA:500:G:OP1	2.08	0.53
1:CA:1368:A:H5''	8:CI:113:LYS:HB3	1.91	0.53
33:B1:3:GLY:O	33:B1:5:ARG:HG2	2.09	0.53
23:BB:2527:C:O2'	23:BB:2528:U:H5'	2.09	0.53
47:BF:45:ASP:HB3	47:BF:48:LEU:HD22	1.91	0.53
8:CI:56:MET:HB3	8:CI:59:LYS:NZ	2.24	0.52
12:AM:33:LEU:HD13	12:AM:40:GLU:HA	1.91	0.52
29:DE:60:TRP:C	29:DE:62:GLN:H	2.12	0.52
25:DC:91:ALA:CB	25:DC:105:ALA:HB2	2.39	0.52
41:BJ:15:TRP:HB3	41:BJ:137:PRO:HB3	1.91	0.52
29:BE:15:SER:OG	29:BE:18:THR:HG23	2.09	0.52
5:CF:21:MET:HA	5:CF:24:ARG:HD3	1.90	0.52
5:AF:88:MET:CE	5:AF:90:MET:HG2	2.39	0.52
40:BH:132:PHE:CD1	40:BH:142:VAL:HG21	2.45	0.52
40:BH:75:LEU:HD12	40:BH:75:LEU:H	1.75	0.52
10:AK:95:THR:HG23	10:AK:96:ILE:H	1.73	0.52
37:BL:123:ARG:HA	37:BL:143:GLU:CB	2.33	0.52
2:AC:166:TRP:HA	2:AC:166:TRP:HE3	1.74	0.52
19:CU:16:ARG:NH1	19:CU:19:LYS:HE2	2.13	0.52
23:BB:2742:G:OP1	32:B4:36:ARG:HD3	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DH:31:VAL:CB	40:DH:32:PRO:CD	2.86	0.52
40:DH:119:ASN:O	40:DH:121:VAL:HG23	2.08	0.52
40:DH:96:THR:HG23	40:DH:97:ARG:HD2	1.90	0.52
23:BB:673:C:C2'	23:BB:674:G:H5'	2.39	0.52
29:BE:60:TRP:C	29:BE:62:GLN:H	2.12	0.52
29:BE:61:ARG:NH1	29:BE:64:GLY:HA3	2.24	0.52
33:D1:35:LEU:HD11	33:D1:37:LYS:HE3	1.90	0.52
9:AJ:42:LEU:HD23	9:AJ:71:LEU:CD1	2.36	0.52
49:BR:4:VAL:HA	49:BR:12:HIS:O	2.10	0.52
16:AS:61:VAL:HG12	16:AS:62:THR:N	2.24	0.52
13:AP:1:MET:HE2	13:AP:3:THR:HG22	1.90	0.52
23:BB:1107:G:H2'	23:BB:1108:U:C6	2.44	0.52
47:BF:134:GLN:H	47:BF:149:ARG:HB3	1.74	0.52
1:AA:865:A:H2	1:AA:918:A:H4'	1.74	0.52
2:CC:174:LEU:HD21	2:CC:200:TRP:NE1	2.24	0.52
26:DD:124:ARG:HA	26:DD:165:MET:HE3	1.92	0.52
39:BX:20:ASN:H	39:BX:20:ASN:HD22	1.56	0.52
39:BX:45:GLN:O	39:BX:47:ARG:N	2.36	0.52
40:DH:15:LEU:HD13	40:DH:16:GLY:N	2.24	0.52
23:BB:783:A:H2'	23:BB:784:G:O5'	2.09	0.52
1:AA:449:G:H2'	1:AA:450:G:H8	1.73	0.52
16:CS:10:ILE:HG12	16:CS:40:PHE:CE1	2.44	0.52
3:CD:152:SER:O	3:CD:155:LYS:HG2	2.10	0.52
34:B3:21:PHE:HB2	34:B3:49:VAL:CG1	2.39	0.52
27:DK:2:ILE:HG23	27:DK:33:ALA:O	2.09	0.52
45:DS:72:THR:CG2	45:DS:108:SER:HB3	2.39	0.52
48:DG:168:VAL:HG12	48:DG:170:THR:CG2	2.39	0.52
46:DU:86:PHE:CG	46:DU:87:GLU:N	2.77	0.52
32:D4:3:VAL:HG23	32:D4:4:ARG:H	1.74	0.52
23:DB:2141:G:H2'	23:DB:2142:A:H8	1.75	0.52
37:BL:68:SER:C	37:BL:70:LYS:H	2.12	0.52
1:CA:132:C:H5''	17:CT:68:LYS:NZ	2.23	0.52
23:BB:154:U:H2'	23:BB:155:A:C8	2.44	0.52
15:AR:34:GLU:HB2	19:AU:18:PHE:CE1	2.44	0.52
23:DB:2094:A:H2'	23:DB:2095:A:C8	2.45	0.52
1:CA:868:C:H2'	1:CA:869:G:O4'	2.08	0.52
23:BB:845:A:C8	23:BB:846:U:H5''	2.44	0.52
6:CG:96:ASN:O	6:CG:100:MET:HG3	2.09	0.52
1:CA:648:A:H2'	1:CA:649:A:C8	2.44	0.52
1:AA:556:C:O2'	1:AA:557:G:H5'	2.09	0.52
16:CS:7:GLY:H	16:CS:8:PRO:HD3	1.74	0.52
11:CL:65:TYR:C	11:CL:66:ILE:HD12	2.29	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:181:ARG:HH21	25:DC:265:PHE:HB3	1.73	0.52
35:BV:1:MET:HG2	35:BV:59:GLU:OE1	2.09	0.52
45:BS:31:GLN:O	45:BS:35:ILE:HG12	2.09	0.52
1:CA:1444:U:H2'	1:CA:1445:U:C6	2.44	0.52
23:DB:257:C:H2'	23:DB:258:G:O4'	2.10	0.52
40:DH:125:THR:HA	40:DH:146:VAL:CG1	2.39	0.52
23:DB:1099:G:C8	24:DI:3:LYS:CA	2.89	0.52
35:DV:63:ILE:CD1	35:DV:72:VAL:HG22	2.38	0.52
14:CQ:45:VAL:HG11	14:CQ:60:ILE:HG21	1.91	0.52
26:DD:113:SER:HB2	26:DD:168:GLU:O	2.09	0.52
26:DD:108:ASP:OD2	26:DD:173:GLN:HA	2.09	0.52
43:BO:51:ALA:HB3	43:BO:78:VAL:HG22	1.91	0.52
23:BB:1059:G:O2'	24:BI:112:LYS:HE2	2.10	0.52
23:BB:2741:A:H2'	23:BB:2742:G:O4'	2.08	0.52
23:BB:2722:G:H4'	42:BN:4:ARG:HB2	1.91	0.52
44:DQ:108:LEU:O	44:DQ:111:LYS:HB3	2.10	0.52
33:B1:46:VAL:HG22	33:B1:47:ILE:H	1.75	0.52
24:DI:54:ILE:C	24:DI:54:ILE:HD13	2.29	0.52
1:AA:1313:U:H5	16:AS:3:SER:HG	1.57	0.52
36:D2:26:ASN:O	36:D2:30:VAL:HG23	2.09	0.52
29:BE:5:LEU:HB2	29:BE:10:SER:H	1.73	0.52
18:CB:116:LEU:HD13	18:CB:140:LEU:HD12	1.90	0.52
18:CB:114:LYS:O	18:CB:118:THR:HG23	2.10	0.52
38:DM:36:VAL:HB	38:DM:127:LYS:O	2.09	0.52
30:DY:16:LEU:N	30:DY:16:LEU:HD22	2.22	0.52
41:DJ:4:PHE:HB3	41:DJ:44:TYR:CD1	2.44	0.52
1:AA:85:U:H1'	1:AA:86:G:C4'	2.40	0.52
27:DK:99:ILE:HB	27:DK:118:LEU:HD22	1.91	0.52
23:DB:276:U:H2'	23:DB:277:G:C8	2.43	0.52
20:AO:8:THR:HG23	20:AO:31:LEU:CD2	2.37	0.52
23:DB:1550:C:H2'	23:DB:1551:A:H8	1.75	0.52
11:AL:74:GLN:H	11:AL:77:SER:HB3	1.75	0.52
45:BS:26:GLY:H	45:BS:71:VAL:HG13	1.75	0.52
1:CA:57:G:H2'	1:CA:58:C:H6	1.72	0.52
23:BB:118:A:H5'	23:BB:119:A:C8	2.41	0.52
12:AM:71:GLU:CD	12:AM:71:GLU:H	2.11	0.52
25:DC:92:LEU:HD12	25:DC:93:VAL:H	1.74	0.52
1:AA:1018:G:H2'	1:AA:1019:A:C8	2.43	0.52
18:AB:17:HIS:CG	18:AB:18:GLN:N	2.77	0.52
18:AB:32:GLY:O	18:AB:38:HIS:HA	2.09	0.52
23:BB:2849:U:H4'	23:BB:2850:A:C5'	2.39	0.52
23:DB:2323:G:O2'	23:DB:2324:U:H5'	2.08	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:274:C:H2'	23:BB:275:C:C6	2.43	0.52
23:DB:1843:C:O2'	23:DB:1844:C:H5'	2.09	0.52
2:CC:91:ALA:CB	2:CC:97:PRO:HA	2.38	0.52
1:CA:745:G:H2'	1:CA:746:A:H8	1.74	0.52
2:AC:128:MET:SD	2:AC:131:ARG:HD3	2.49	0.52
23:DB:1582:C:H2'	23:DB:1583:A:O4'	2.08	0.52
23:DB:2339:C:H2'	23:DB:2340:A:C8	2.44	0.52
23:BB:771:G:O2'	23:BB:772:C:H5'	2.08	0.52
23:BB:1904:G:O2'	23:BB:1905:C:H5'	2.09	0.52
21:CN:85:GLU:O	21:CN:89:ARG:HG3	2.08	0.52
12:CM:18:LEU:H	12:CM:18:LEU:HD12	1.74	0.52
1:CA:386:C:C2'	1:CA:387:U:H5'	2.39	0.52
23:BB:1940:U:H5''	23:BB:1940:U:O2	2.10	0.52
40:DH:147:VAL:HG12	40:DH:148:ALA:N	2.24	0.52
50:DT:61:LEU:HD12	50:DT:62:VAL:O	2.09	0.52
8:CI:48:ARG:O	8:CI:52:GLU:HG2	2.10	0.52
50:BT:29:THR:CG2	50:BT:86:THR:HG22	2.40	0.52
23:DB:855:G:H21	52:DW:23:LYS:CG	2.09	0.52
23:BB:1198:U:H2'	23:BB:1199:U:C6	2.45	0.52
50:DT:2:ILE:N	50:DT:2:ILE:HD13	2.24	0.52
1:CA:1362:A:H4'	1:CA:1363:A:OP1	2.09	0.52
35:DV:28:ALA:HA	35:DV:88:HIS:HD1	1.74	0.52
51:BZ:45:ARG:NE	51:BZ:47:VAL:HG12	2.20	0.52
22:DA:6:G:H2'	22:DA:7:G:H8	1.73	0.52
44:BQ:59:LEU:O	44:BQ:62:ALA:HB3	2.08	0.52
38:BM:40:ARG:HB2	38:BM:93:VAL:HG22	1.90	0.52
18:AB:65:LYS:HB2	18:AB:157:PRO:HA	1.89	0.52
49:DR:59:ILE:HA	49:DR:100:GLY:HA3	1.91	0.52
47:DF:147:ARG:O	47:DF:148:VAL:HG22	2.09	0.52
1:CA:918:A:H2'	1:CA:919:A:C8	2.44	0.52
1:AA:921:U:O2	4:AE:23:THR:HG23	2.09	0.52
1:AA:922:G:H4'	4:AE:24:VAL:HA	1.91	0.52
25:BC:14:HIS:O	25:BC:16:VAL:HG23	2.09	0.52
2:AC:46:LEU:HD21	2:AC:86:LEU:HD21	1.92	0.52
39:DX:20:ASN:N	39:DX:20:ASN:HD22	2.06	0.52
26:DD:121:THR:C	26:DD:123:LYS:H	2.13	0.52
1:AA:1307:U:H4'	12:AM:108:ARG:HD2	1.91	0.52
23:DB:1593:A:H2'	23:DB:1594:U:C6	2.45	0.52
47:BF:168:LEU:O	47:BF:169:LEU:HB2	2.09	0.52
44:DQ:91:ARG:HD3	49:DR:11:GLN:CD	2.30	0.52
48:DG:168:VAL:HG12	48:DG:170:THR:HG22	1.91	0.52
7:AH:48:PHE:HB3	7:AH:60:LEU:HD12	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:281:C:H2'	23:DB:282:A:H8	1.71	0.52
23:DB:360:U:H2'	23:DB:361:G:C8	2.44	0.52
27:DK:25:LEU:HD12	27:DK:25:LEU:H	1.74	0.52
23:BB:813:U:H2'	23:BB:814:C:C6	2.44	0.52
2:AC:125:ARG:O	2:AC:126:ARG:HB2	2.08	0.52
23:DB:2590:A:H2'	23:DB:2591:C:C6	2.44	0.52
23:DB:98:G:C2'	23:DB:99:U:H5''	2.38	0.52
1:CA:1370:G:O2'	1:CA:1371:G:H5'	2.09	0.52
23:DB:1734:G:O2'	23:DB:1735:A:H5'	2.09	0.52
23:BB:1734:G:O2'	23:BB:1735:A:H5'	2.10	0.52
50:BT:50:LEU:N	50:BT:50:LEU:HD22	2.24	0.52
23:BB:741:U:H2'	23:BB:742:A:H8	1.74	0.52
29:DE:46:GLN:HB3	29:DE:86:ALA:HA	1.92	0.52
2:CC:106:ARG:CZ	2:CC:106:ARG:H	2.22	0.52
23:DB:18:U:H2'	23:DB:19:A:H8	1.74	0.52
23:DB:2704:C:H2'	23:DB:2705:A:O4'	2.09	0.52
29:BE:46:GLN:HB3	29:BE:86:ALA:HA	1.91	0.52
11:CL:35:ARG:NH2	11:CL:75:GLU:HA	2.23	0.52
23:BB:1842:G:H2'	23:BB:1843:C:H6	1.74	0.52
23:BB:2041:U:H2'	23:BB:2042:A:C8	2.45	0.52
23:DB:2636:C:H2'	23:DB:2637:U:C6	2.44	0.52
38:BM:4:PRO:CG	38:BM:70:ASP:HA	2.39	0.52
1:AA:927:G:O2'	1:AA:928:G:H5'	2.09	0.52
1:CA:562:U:H1'	11:CL:11:ARG:HB3	1.90	0.52
1:AA:1243:C:H2'	1:AA:1244:G:H8	1.74	0.52
23:DB:2604:U:O2'	23:DB:2605:U:H5'	2.09	0.52
1:AA:1273:C:H2'	1:AA:1274:A:O4'	2.10	0.52
6:CG:36:SER:HA	6:CG:39:GLU:OE2	2.09	0.52
23:BB:437:U:H2'	23:BB:438:G:C8	2.45	0.52
23:BB:355:U:H2'	23:BB:356:G:H8	1.75	0.52
1:AA:1298:U:H4'	1:AA:1299:A:C5'	2.39	0.52
23:BB:1456:G:O2'	23:BB:1457:U:H5'	2.10	0.52
1:CA:633:G:H2'	1:CA:634:C:C6	2.44	0.52
23:BB:1750:G:H2'	23:BB:1751:U:C6	2.45	0.52
29:BE:148:ILE:HG13	29:BE:167:VAL:HG23	1.90	0.52
10:CK:58:THR:HB	10:CK:59:PRO:HD2	1.91	0.52
47:BF:2:LYS:H	47:BF:2:LYS:CD	2.22	0.52
37:DL:89:VAL:HG13	37:DL:89:VAL:O	2.10	0.52
1:AA:1491:G:N3	1:AA:1491:G:H2'	2.24	0.52
11:CL:17:LYS:HE3	11:CL:17:LYS:N	2.24	0.52
1:AA:1186:G:H4'	8:AI:111:GLU:OE2	2.09	0.52
1:AA:1074:G:H4'	18:AB:102:ASN:HB2	1.92	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:633:G:H2'	1:AA:634:C:C6	2.44	0.52
8:CI:61:ASP:C	8:CI:62:LEU:HD13	2.30	0.52
26:BD:110:THR:HG23	26:BD:171:THR:HA	1.90	0.52
35:DV:72:VAL:CG1	35:DV:93:ARG:HA	2.39	0.52
23:DB:1198:U:H2'	23:DB:1199:U:H6	1.74	0.52
23:DB:139:U:H2'	50:DT:1:MET:CA	2.40	0.52
37:BL:80:SER:HA	37:BL:115:GLU:HB2	1.90	0.52
47:DF:102:LEU:HA	47:DF:106:ALA:HB2	1.92	0.52
3:CD:145:ARG:O	3:CD:148:ALA:N	2.42	0.52
1:AA:1318:A:H5''	1:AA:1319:A:OP2	2.09	0.52
47:BF:31:GLU:HB3	47:BF:156:THR:O	2.10	0.52
47:BF:109:ARG:HB3	47:BF:135:ILE:HD12	1.91	0.52
47:BF:109:ARG:NH1	47:BF:137:PHE:HA	2.24	0.52
26:DD:5:VAL:H	26:DD:32:ASN:CG	2.13	0.52
4:CE:132:PRO:O	4:CE:136:VAL:HG12	2.09	0.52
29:DE:5:LEU:CD1	29:DE:10:SER:HB2	2.38	0.52
1:AA:205:A:C2'	1:AA:206:C:H5'	2.40	0.52
23:DB:1309:G:OP1	36:D2:9:VAL:HG12	2.09	0.52
23:BB:2074:U:H2'	23:BB:2075:U:C6	2.44	0.52
47:BF:3:LEU:HD12	47:BF:96:TRP:CD1	2.45	0.52
42:DN:13:ASN:OD1	42:DN:16:HIS:HB2	2.08	0.52
44:DQ:73:ILE:HD11	44:DQ:77:LYS:CB	2.39	0.52
30:BY:16:LEU:N	30:BY:16:LEU:HD22	2.23	0.52
23:BB:972:A:C3'	23:BB:973:A:H5''	2.36	0.52
23:DB:545:U:H2'	23:DB:548:G:H5'	1.91	0.52
4:CE:152:VAL:HG11	4:CE:156:ARG:HH21	1.75	0.52
42:BN:13:ASN:OD1	42:BN:16:HIS:HB2	2.09	0.52
1:CA:657:U:O2'	1:CA:658:C:H5'	2.09	0.52
36:D2:42:LEU:O	36:D2:43:THR:HG23	2.08	0.52
23:BB:2230:G:H2'	23:BB:2231:U:H6	1.75	0.52
1:CA:1010:U:H2'	1:CA:1011:C:O4'	2.10	0.52
1:AA:1512:U:H2'	1:AA:1513:A:H8	1.73	0.52
23:BB:1172:C:H3'	23:BB:1173:U:C6	2.45	0.52
23:BB:1640:A:H2'	23:BB:1641:A:H8	1.72	0.52
3:CD:100:VAL:O	3:CD:104:MET:HG3	2.08	0.52
23:BB:2323:G:O2'	23:BB:2324:U:H5'	2.09	0.52
23:DB:446:G:H5''	44:DQ:2:ARG:HH22	1.75	0.52
23:BB:2248:C:H2'	23:BB:2249:U:O4'	2.09	0.52
45:BS:13:SER:CB	45:BS:16:LYS:HE2	2.40	0.52
23:DB:1410:G:H2'	23:DB:1411:U:C6	2.44	0.52
20:CO:81:LEU:HD23	20:CO:82:ILE:N	2.25	0.52
38:DM:4:PRO:CG	38:DM:70:ASP:HA	2.39	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1826:G:H2'	23:DB:1827:U:C6	2.45	0.52
2:AC:192:TYR:HE1	2:AC:195:ILE:HD11	1.73	0.52
23:BB:1764:C:H2'	23:BB:1765:U:C6	2.44	0.52
23:DB:2024:G:O2'	23:DB:2025:C:H5'	2.09	0.52
23:BB:2008:C:H2'	23:BB:2009:A:C8	2.44	0.52
23:BB:1175:A:C5	23:BB:1176:U:H1'	2.44	0.52
4:AE:87:VAL:HG23	4:AE:91:SER:O	2.09	0.52
1:CA:434:U:H3'	1:CA:435:A:H8	1.74	0.52
1:CA:1263:C:O2'	1:CA:1264:U:H5'	2.09	0.52
9:CJ:26:VAL:CG1	9:CJ:30:LYS:HE2	2.38	0.52
20:CO:74:ASP:OD1	20:CO:76:ALA:HB3	2.09	0.52
23:BB:2026:U:H2'	23:BB:2027:G:H8	1.74	0.52
18:CB:27:LYS:HB3	18:CB:28:PRO:HD3	1.92	0.52
23:DB:2828:G:O2'	23:DB:2829:A:H5'	2.09	0.52
23:DB:2015:A:H2'	23:DB:2016:U:O4'	2.09	0.52
17:CT:42:ASP:OD1	17:CT:44:ALA:HB3	2.10	0.52
4:CE:19:ARG:O	4:CE:20:VAL:HB	2.10	0.52
23:DB:2586:U:H2'	23:DB:2587:A:C8	2.44	0.52
12:CM:61:LYS:HE2	12:CM:61:LYS:HA	1.91	0.52
23:BB:401:A:H2'	23:BB:402:A:C8	2.45	0.52
23:BB:198:C:H6	23:BB:198:C:O5'	1.93	0.52
27:BK:58:LEU:N	27:BK:58:LEU:HD23	2.24	0.52
1:CA:85:U:O2	1:CA:85:U:O4'	2.26	0.52
10:AK:92:ARG:O	10:AK:92:ARG:HD2	2.09	0.52
43:DO:15:ARG:HH21	43:DO:95:SER:CB	2.22	0.52
1:AA:1444:U:H2'	1:AA:1445:U:C6	2.45	0.52
23:BB:2467:C:O2	38:BM:123:LYS:HE2	2.08	0.52
11:CL:74:GLN:H	11:CL:77:SER:HB3	1.73	0.52
8:CI:27:ILE:HD13	8:CI:34:LEU:HB3	1.92	0.52
25:DC:91:ALA:HB2	25:DC:105:ALA:HB2	1.91	0.52
26:DD:171:THR:OG1	26:DD:172:VAL:N	2.41	0.52
40:BH:144:VAL:HG13	40:BH:145:ASN:N	2.24	0.52
42:BN:29:VAL:HG11	42:BN:75:ILE:HB	1.92	0.52
1:AA:1147:C:H2'	1:AA:1148:U:H6	1.71	0.52
2:AC:186:SER:OG	2:AC:197:VAL:HB	2.10	0.52
1:CA:1325:C:O2'	1:CA:1326:U:H5'	2.10	0.52
1:CA:1366:C:H2'	1:CA:1367:C:H6	1.74	0.52
23:DB:1283:G:N2	23:DB:1286:A:H5'	2.16	0.52
19:AU:24:LYS:NZ	19:AU:25:ALA:H	1.99	0.52
46:BU:73:ASN:HD22	46:BU:73:ASN:N	2.06	0.52
49:BR:14:VAL:HG11	49:BR:98:ILE:HG12	1.91	0.52
51:DZ:11:ARG:HB3	51:DZ:12:PRO:HD2	1.92	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:BQ:59:LEU:C	44:BQ:59:LEU:HD13	2.30	0.52
18:AB:101:THR:HA	18:AB:178:LEU:HD21	1.91	0.52
18:AB:85:SER:CB	18:AB:88:GLN:HE22	2.23	0.52
41:DJ:25:LEU:O	41:DJ:27:ARG:N	2.42	0.52
20:AO:32:LEU:HD12	20:AO:59:MET:O	2.10	0.52
27:BK:76:VAL:H	28:BP:72:VAL:HG23	1.74	0.52
26:BD:55:LYS:H	26:BD:75:ALA:HB1	1.74	0.52
1:CA:1414:U:H2'	1:CA:1415:G:C8	2.44	0.52
36:D2:10:LEU:CD2	36:D2:14:ARG:HD2	2.38	0.52
23:DB:126:A:H5'	36:D2:19:ARG:HD2	1.90	0.52
48:BG:168:VAL:HG12	48:BG:170:THR:CG2	2.39	0.52
16:CS:47:THR:HG23	16:CS:60:PHE:CE2	2.44	0.52
23:DB:2471:A:O2'	23:DB:2472:G:O5'	2.28	0.52
23:BB:1374:G:O2'	23:BB:1375:U:H5'	2.10	0.52
23:DB:1011:G:O2'	23:DB:1013:C:H5''	2.10	0.52
41:BJ:84:ILE:O	41:BJ:84:ILE:HG13	2.10	0.52
23:DB:582:A:H2'	23:DB:583:G:C8	2.45	0.52
26:BD:159:LYS:HZ2	26:BD:160:LYS:H	1.58	0.52
23:DB:161:A:C3'	23:DB:162:U:H5''	2.39	0.52
2:CC:129:PHE:CG	2:CC:130:ARG:N	2.77	0.52
23:BB:1733:G:H2'	23:BB:1734:G:C8	2.44	0.52
23:DB:934:U:H2'	23:DB:935:C:H6	1.73	0.52
2:AC:26:LYS:CG	2:AC:27:GLU:H	2.23	0.52
23:DB:1105:U:H2'	23:DB:1106:G:C8	2.43	0.52
23:DB:2646:C:H2'	23:DB:2647:U:O4'	2.10	0.52
23:BB:660:C:H2'	23:BB:661:A:H8	1.75	0.52
1:AA:314:C:O2'	1:AA:315:A:H5'	2.10	0.52
1:AA:685:G:O2'	1:AA:686:U:H5'	2.09	0.52
23:BB:2515:C:H2'	23:BB:2516:A:H8	1.75	0.52
1:CA:1216:A:H2'	1:CA:1217:C:C6	2.45	0.52
23:BB:242:G:H5''	34:B3:63:TYR:CZ	2.44	0.52
7:CH:86:LYS:HD2	7:CH:90:GLU:HG2	1.91	0.52
7:AH:124:ILE:HG22	7:AH:125:ILE:H	1.73	0.52
23:BB:974:G:OP2	49:BR:78:ARG:HD3	2.09	0.52
1:CA:993:G:N2	1:CA:996:A:N6	2.58	0.52
23:DB:1764:C:H2'	23:DB:1765:U:C6	2.44	0.52
23:DB:990:A:N1	49:DR:78:ARG:NH1	2.58	0.52
1:CA:1151:A:HO2'	1:CA:1152:A:H8	1.56	0.52
1:AA:895:G:H2'	1:AA:896:C:C6	2.45	0.52
23:DB:1238:G:O2'	23:DB:1239:G:H5'	2.10	0.52
23:DB:794:A:H2'	23:DB:795:C:H6	1.75	0.52
1:AA:572:A:N3	1:AA:917:G:H1'	2.25	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:598:U:H2'	23:DB:599:A:H8	1.75	0.52
4:AE:45:VAL:HG13	4:AE:117:ALA:HA	1.90	0.52
23:DB:1739:A:H2'	23:DB:1740:G:O4'	2.10	0.52
1:CA:761:G:H2'	1:CA:762:U:C6	2.45	0.52
25:BC:69:ASN:O	25:BC:70:LYS:C	2.47	0.52
23:BB:2333:A:H5'	23:BB:2335:A:H1'	1.92	0.52
50:DT:43:ILE:CG2	50:DT:58:VAL:HG21	2.39	0.52
50:BT:25:GLU:OE1	50:BT:30:ILE:HA	2.09	0.52
1:CA:236:A:H2'	1:CA:237:G:C8	2.44	0.52
10:AK:31:VAL:CG2	10:AK:44:ALA:HB3	2.40	0.52
23:BB:1079:C:O2	24:BI:130:GLY:HA3	2.09	0.52
23:BB:513:A:O5'	23:BB:513:A:H8	1.92	0.52
3:AD:49:ASP:O	3:AD:53:GLN:HG3	2.09	0.52
18:CB:37:VAL:HG22	18:CB:38:HIS:N	2.25	0.52
40:DH:141:LYS:N	40:DH:141:LYS:HD2	2.25	0.52
29:BE:58:LYS:H	29:BE:58:LYS:HD3	1.74	0.52
28:DP:85:VAL:HG21	28:DP:88:ARG:NH1	2.24	0.52
26:DD:146:ILE:HG13	26:DD:147:GLY:N	2.25	0.52
23:DB:1309:G:H4'	36:D2:7:PRO:HB2	1.92	0.52
1:AA:481:G:O2'	1:AA:482:A:H8	1.92	0.52
28:BP:91:VAL:O	28:BP:92:ARG:HB3	2.10	0.52
42:DN:9:GLN:O	42:DN:11:ASN:N	2.43	0.52
2:AC:35:ASP:HB3	2:AC:39:ARG:HH12	1.73	0.52
1:AA:948:C:H5'	1:AA:1306:A:O2'	2.09	0.52
45:BS:24:ILE:HD11	45:BS:36:LEU:HD11	1.91	0.52
23:BB:363:G:H2'	23:BB:364:C:C6	2.44	0.52
23:BB:918:A:H2'	23:BB:919:U:H5'	1.92	0.52
51:DZ:27:ARG:HD3	51:DZ:28:ARG:H	1.74	0.52
23:BB:1854:A:H2	23:BB:2087:G:N3	2.06	0.52
1:CA:1226:C:H5''	12:CM:101:THR:HB	1.91	0.52
1:CA:1480:A:H2'	1:CA:1481:U:H6	1.74	0.52
23:BB:20:C:H2'	23:BB:21:A:C8	2.44	0.52
17:AT:43:LYS:HA	17:AT:85:LEU:HD11	1.91	0.52
1:AA:678:U:H2'	1:AA:679:C:H6	1.75	0.52
23:DB:1958:C:H2'	23:DB:1959:G:H8	1.74	0.52
29:DE:2:GLU:OE2	29:DE:13:THR:HA	2.10	0.52
23:DB:942:G:O2'	23:DB:943:A:H5'	2.10	0.52
23:DB:2798:U:H4'	23:DB:2800:A:N1	2.25	0.52
27:DK:58:LEU:H	27:DK:58:LEU:HD23	1.74	0.52
23:BB:2837:A:H2'	23:BB:2838:G:C8	2.44	0.52
23:DB:564:C:O2'	23:DB:565:C:H5'	2.08	0.52
23:BB:1666:G:O3'	27:BK:6:THR:HG23	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DS:51:LEU:C	45:DS:53:SER:H	2.13	0.52
1:AA:1292:G:H2'	1:AA:1293:C:C6	2.44	0.52
11:CL:74:GLN:H	11:CL:77:SER:CB	2.22	0.52
23:DB:1033:U:H4'	23:DB:1034:G:OP1	2.10	0.52
44:BQ:47:ARG:HH11	44:BQ:48:ASP:CG	2.13	0.52
23:BB:1739:A:H2'	23:BB:1740:G:O4'	2.10	0.52
1:AA:761:G:H2'	1:AA:762:U:C6	2.44	0.52
49:BR:62:GLU:O	49:BR:96:VAL:HA	2.09	0.52
23:BB:467:G:O2'	23:BB:468:G:H5'	2.10	0.52
10:CK:88:PRO:HG3	19:CU:28:LEU:HD21	1.92	0.52
23:BB:2047:C:H2'	23:BB:2048:G:H8	1.74	0.52
1:CA:1036:A:H2'	1:CA:1037:C:C6	2.44	0.52
12:AM:50:GLY:O	12:AM:54:THR:HG23	2.09	0.52
23:BB:2411:A:H2'	23:BB:2412:A:C8	2.45	0.52
2:AC:146:LYS:HA	2:AC:146:LYS:HE3	1.90	0.52
23:DB:2076:U:O2	23:DB:2076:U:O4'	2.28	0.52
23:BB:2473:U:H2'	23:BB:2473:U:O2	2.09	0.52
2:CC:171:ARG:HH11	2:CC:171:ARG:HG3	1.75	0.52
35:BV:69:GLU:CD	35:BV:69:GLU:H	2.13	0.52
26:BD:171:THR:O	26:BD:172:VAL:HG23	2.10	0.52
23:BB:2267:A:OP2	23:BB:2268:A:H5''	2.10	0.52
8:AI:48:ARG:HB3	8:AI:56:MET:SD	2.49	0.52
46:BU:71:ILE:HD11	46:BU:82:VAL:HG22	1.91	0.52
30:BY:56:VAL:HG12	30:BY:58:GLU:H	1.75	0.52
37:BL:116:VAL:HG13	37:BL:117:THR:N	2.20	0.52
13:AP:38:PHE:CE2	13:AP:51:ARG:HD3	2.45	0.52
47:BF:51:ASN:O	47:BF:55:ASP:HB2	2.09	0.52
23:DB:1791:A:H1'	25:DC:205:GLY:O	2.10	0.52
1:CA:1299:A:N7	1:CA:1301:U:H1'	2.25	0.52
7:CH:11:THR:HA	7:CH:14:ARG:HH12	1.74	0.52
39:DX:8:GLU:HB3	39:DX:12:GLU:CB	2.40	0.52
24:BI:17:ALA:O	24:BI:18:ASN:CB	2.58	0.52
25:BC:91:ALA:HB2	25:BC:105:ALA:HB2	1.92	0.52
23:BB:2241:A:H2'	23:BB:2242:G:H8	1.70	0.52
1:AA:1144:G:H21	1:AA:1146:A:H62	1.56	0.52
1:CA:884:U:H4'	1:CA:885:G:H5''	1.91	0.52
11:AL:20:VAL:HG23	11:AL:20:VAL:O	2.10	0.52
23:DB:813:U:H2'	23:DB:814:C:C6	2.44	0.52
1:AA:1038:C:H2'	1:AA:1039:G:H8	1.74	0.52
1:AA:1039:G:H2'	1:AA:1040:U:O4'	2.10	0.52
21:AN:30:ILE:C	21:AN:32:ASP:H	2.12	0.52
23:BB:154:U:H2'	23:BB:155:A:H8	1.75	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:24:ASN:O	2:AC:26:LYS:N	2.43	0.52
23:BB:1490:A:H2'	25:BC:97:ASP:OD1	2.10	0.52
10:CK:70:ALA:HA	10:CK:73:VAL:HG22	1.90	0.52
1:AA:677:U:H2'	1:AA:678:U:C6	2.44	0.52
23:BB:2359:C:O2'	23:BB:2360:G:H5'	2.10	0.52
23:DB:1482:G:H2'	23:DB:1483:G:C8	2.45	0.52
29:BE:2:GLU:OE2	29:BE:13:THR:HA	2.10	0.52
2:CC:78:LYS:CD	2:CC:79:LYS:HE3	2.40	0.52
23:BB:2298:A:H2'	23:BB:2299:U:O4'	2.10	0.52
1:CA:1124:G:H5'	9:CJ:37:ARG:CZ	2.39	0.52
1:CA:847:G:H2'	1:CA:848:C:H6	1.74	0.52
1:CA:272:C:H2'	1:CA:273:U:C6	2.44	0.52
23:BB:69:C:O2'	23:BB:70:G:H5'	2.10	0.52
23:DB:2026:U:H2'	23:DB:2027:G:C8	2.45	0.52
24:BI:81:LYS:HG3	24:BI:82:ALA:N	2.23	0.52
27:DK:13:ASN:HD22	27:DK:98:ARG:HG3	1.74	0.52
23:BB:2015:A:H2'	23:BB:2016:U:O4'	2.10	0.52
23:BB:1919:A:H2'	23:BB:1920:C:H5'	1.91	0.52
23:DB:1310:G:H21	23:DB:1610:A:H8	1.57	0.52
23:BB:779:U:OP1	25:BC:48:ILE:HG13	2.09	0.52
23:DB:1099:G:C8	24:DI:3:LYS:HB2	2.45	0.52
18:CB:14:HIS:O	18:CB:15:PHE:C	2.47	0.52
25:DC:171:VAL:HB	25:DC:183:VAL:HG12	1.91	0.52
35:BV:77:VAL:CG2	35:BV:89:ILE:HG23	2.40	0.52
26:DD:10:GLY:HA3	26:DD:26:VAL:H	1.75	0.52
23:BB:857:G:H2'	23:BB:858:G:H5'	1.91	0.52
22:BA:54:G:H21	47:BF:25:MET:CE	2.23	0.52
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.44	0.52
8:AI:28:VAL:HA	8:AI:33:SER:O	2.10	0.52
40:DH:134:VAL:H	40:DH:138:VAL:HG11	1.73	0.52
38:DM:19:GLY:CA	38:DM:38:ARG:HH22	2.23	0.52
38:DM:39:GLY:O	38:DM:96:ILE:HG13	2.10	0.52
35:DV:80:HIS:CG	35:DV:83:LYS:HB2	2.44	0.52
16:AS:15:LEU:CD1	21:AN:46:LYS:HZ1	2.16	0.52
2:AC:74:ILE:HG13	2:AC:74:ILE:O	2.08	0.52
23:DB:2303:G:H4'	47:DF:121:PHE:O	2.09	0.52
26:BD:146:ILE:HG13	26:BD:147:GLY:N	2.24	0.52
37:BL:93:ASN:CG	37:BL:94:THR:H	2.12	0.52
40:DH:41:LYS:HA	40:DH:44:ILE:CG1	2.39	0.52
6:AG:45:ALA:HA	6:AG:120:ALA:HB2	1.92	0.52
18:CB:95:TRP:CH2	18:CB:99:MET:HG3	2.44	0.52
23:BB:2187:U:H2'	23:BB:2188:U:C6	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:659:U:H2'	1:CA:660:C:C6	2.44	0.52
23:DB:282:A:OP2	23:DB:282:A:H3'	2.10	0.52
39:BX:32:ALA:HB2	39:BX:37:LEU:HD12	1.92	0.52
23:DB:1547:C:H2'	23:DB:1548:A:C8	2.44	0.52
2:CC:152:VAL:HB	2:CC:165:GLU:HB2	1.92	0.52
2:CC:156:LEU:HG	2:CC:165:GLU:HG2	1.91	0.52
1:AA:1033:G:H2'	1:AA:1034:G:C8	2.44	0.52
48:BG:67:ALA:O	48:BG:71:LEU:HD23	2.09	0.52
3:CD:191:SER:O	3:CD:192:ALA:HB2	2.10	0.52
2:CC:161:ILE:N	2:CC:161:ILE:HD12	2.24	0.52
23:DB:1534:U:H2'	23:DB:1536:C:C4	2.45	0.52
7:CH:115:ALA:O	7:CH:120:LEU:HD23	2.09	0.52
49:DR:2:TYR:CG	49:DR:42:ALA:HB2	2.45	0.52
1:AA:802:A:H2'	1:AA:803:G:O4'	2.09	0.52
45:BS:13:SER:O	45:BS:101:SER:HB3	2.10	0.52
23:BB:1824:G:O2'	23:BB:1825:U:H5'	2.10	0.52
22:BA:75:G:H1	22:BA:102:G:N2	2.07	0.52
33:B1:24:LYS:HD3	33:B1:52:LYS:O	2.09	0.52
23:DB:67:U:H2'	23:DB:68:G:C8	2.44	0.52
1:AA:1208:C:H2'	1:AA:1209:C:H6	1.74	0.52
22:BA:35:C:H2'	22:BA:36:C:O4'	2.10	0.52
29:BE:102:ARG:HG3	29:BE:102:ARG:HH21	1.74	0.52
43:DO:9:ARG:HA	43:DO:12:THR:OG1	2.10	0.52
44:DQ:40:LYS:HA	44:DQ:43:GLN:OE1	2.10	0.52
23:DB:2286:G:H4'	23:DB:2287:A:O4'	2.09	0.52
1:AA:213:G:H3'	1:AA:214:C:H6	1.74	0.52
23:BB:65:U:H2'	23:BB:66:C:H6	1.75	0.52
23:BB:1126:A:H8	23:BB:1126:A:OP1	1.92	0.52
23:BB:2438:U:O2'	23:BB:2439:A:H5''	2.10	0.52
1:AA:709:U:H2'	1:AA:710:G:C8	2.45	0.52
43:DO:2:ASP:OD2	43:DO:4:LYS:HB3	2.09	0.52
33:D1:8:ILE:CD1	33:D1:51:ALA:HA	2.39	0.52
1:CA:90:C:H2'	1:CA:91:U:H6	1.74	0.52
41:DJ:21:THR:HG23	41:DJ:61:LYS:HB3	1.92	0.52
23:DB:41:C:O2'	23:DB:42:A:H5'	2.10	0.52
23:DB:765:C:H2'	23:DB:766:U:C6	2.45	0.52
23:DB:765:C:H2'	23:DB:766:U:H6	1.75	0.52
23:DB:1099:G:C5'	24:DI:2:LYS:HB2	2.39	0.52
8:CI:49:GLN:HB3	8:CI:102:PHE:HZ	1.74	0.52
18:CB:46:VAL:CG1	18:CB:47:PRO:HD3	2.24	0.52
23:DB:705:A:N6	23:DB:726:G:O2'	2.42	0.52
1:CA:1180:A:OP1	8:CI:104:THR:HG22	2.09	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:CG:38:ALA:O	6:CG:41:ILE:HB	2.09	0.52
41:BJ:122:LEU:C	41:BJ:123:LYS:HD2	2.31	0.52
35:DV:35:GLU:HB2	35:DV:93:ARG:NH1	2.25	0.52
25:DC:129:LEU:CD2	25:DC:133:ASN:HB2	2.39	0.52
14:CQ:26:ARG:HG2	14:CQ:39:ARG:O	2.10	0.52
23:BB:2271:G:O2'	23:BB:2272:U:H5'	2.09	0.52
23:DB:1197:G:H2'	23:DB:1198:U:C6	2.45	0.52
12:AM:106:ARG:NH1	12:AM:109:LYS:NZ	2.58	0.52
12:CM:21:ILE:HG22	12:CM:23:GLY:H	1.75	0.52
2:AC:186:SER:O	2:AC:196:GLY:HA2	2.10	0.52
48:DG:83:THR:HA	48:DG:84:LYS:HZ1	1.72	0.52
48:DG:148:ARG:HG2	48:DG:163:TYR:CZ	2.45	0.52
46:DU:73:ASN:HB3	46:DU:95:PHE:CE2	2.44	0.52
24:DI:54:ILE:HD13	24:DI:55:PRO:N	2.24	0.52
22:DA:7:G:H1'	43:DO:38:GLN:HE22	1.74	0.52
23:BB:494:G:O2'	23:BB:495:G:H5'	2.10	0.52
29:BE:122:GLU:H	29:BE:122:GLU:CD	2.11	0.52
48:BG:155:PRO:CA	48:BG:170:THR:HA	2.40	0.52
16:CS:33:TRP:C	16:CS:35:ARG:H	2.14	0.52
27:DK:43:ILE:HD12	27:DK:56:ASP:HB2	1.91	0.52
7:CH:35:ILE:O	7:CH:39:LEU:HG	2.10	0.52
42:BN:19:ALA:C	42:BN:21:PHE:H	2.13	0.52
23:DB:2742:G:P	32:D4:36:ARG:HH11	2.33	0.52
12:CM:5:GLY:O	12:CM:6:ILE:C	2.48	0.52
51:BZ:32:ASN:C	51:BZ:33:LEU:HD12	2.31	0.52
28:DP:47:ILE:HG13	28:DP:48:ALA:N	2.22	0.52
3:AD:187:ARG:O	3:AD:191:SER:HB3	2.08	0.52
23:DB:918:A:H2'	23:DB:919:U:H5'	1.91	0.52
11:CL:20:VAL:O	11:CL:20:VAL:HG23	2.10	0.52
38:BM:61:GLY:HA2	38:BM:107:GLY:HA3	1.92	0.52
23:BB:417:C:H2'	23:BB:418:C:H6	1.75	0.52
23:DB:2813:A:H2'	23:DB:2814:A:C8	2.45	0.52
23:BB:39:G:O2'	23:BB:40:U:H5'	2.10	0.52
1:AA:778:G:H2'	1:AA:779:C:C6	2.45	0.52
1:CA:736:C:H2'	1:CA:737:C:H6	1.72	0.52
23:DB:1405:U:H2'	23:DB:1406:U:C6	2.45	0.52
1:CA:6:G:HO2'	1:CA:7:A:H8	1.58	0.52
10:AK:30:ILE:HG22	10:AK:45:THR:HB	1.91	0.52
23:DB:2798:U:H1'	23:DB:2800:A:N6	2.25	0.52
12:CM:15:VAL:HG13	12:CM:29:SER:HB3	1.91	0.52
1:AA:847:G:H2'	1:AA:848:C:H6	1.75	0.52
40:DH:125:THR:HA	40:DH:146:VAL:HB	1.92	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:154:U:H2'	1:CA:155:A:C8	2.45	0.52
23:DB:2527:C:O2'	23:DB:2528:U:H5'	2.10	0.52
45:BS:33:LEU:HD23	45:BS:37:THR:HG23	1.92	0.52
9:AJ:44:THR:HG23	9:AJ:69:THR:O	2.10	0.52
6:CG:45:ALA:HB2	6:CG:116:ALA:O	2.09	0.52
1:CA:552:U:H2'	1:CA:553:A:H8	1.75	0.52
23:BB:1007:C:O3'	41:BJ:110:PRO:HB3	2.10	0.52
23:DB:464:U:H1'	23:DB:686:U:H5	1.75	0.52
45:DS:33:LEU:HD23	45:DS:37:THR:HG23	1.92	0.52
48:DG:72:ASN:O	48:DG:76:ILE:HG12	2.10	0.52
14:AQ:30:HIS:HB3	14:AQ:34:GLY:N	2.25	0.52
23:DB:9:G:H21	23:DB:10:A:N6	2.07	0.52
1:CA:1230:C:H2'	1:CA:1231:G:H8	1.74	0.52
40:BH:90:LEU:H	40:BH:123:ARG:HB3	1.73	0.52
23:DB:1431:A:H2'	23:DB:1432:G:C8	2.44	0.52
52:BW:51:GLY:CA	52:BW:59:PHE:HB3	2.28	0.52
5:AF:21:MET:HA	5:AF:24:ARG:HD3	1.92	0.52
5:AF:26:THR:HA	5:AF:36:ILE:HD11	1.93	0.52
26:DD:10:GLY:O	26:DD:11:MET:HB2	2.10	0.52
22:DA:28:C:H2'	22:DA:29:A:O4'	2.09	0.52
22:DA:57:A:C4	47:DF:25:MET:HB3	2.45	0.52
23:DB:1060:U:C5	24:DI:131:THR:HG22	2.45	0.52
18:CB:33:ALA:HB1	18:CB:37:VAL:O	2.10	0.52
1:AA:1101:A:H61	18:AB:101:THR:HG21	1.74	0.52
23:BB:2353:G:H21	52:BW:30:VAL:HG22	1.73	0.52
18:CB:122:ASP:CG	18:CB:124:THR:HG22	2.30	0.52
29:DE:28:VAL:HG23	29:DE:29:HIS:N	2.24	0.52
23:BB:2260:C:O2'	23:BB:2261:C:H5'	2.10	0.52
46:BU:85:ARG:HD3	46:BU:86:PHE:H	1.74	0.52
27:DK:70:ARG:HB3	27:DK:76:VAL:HG22	1.91	0.52
23:BB:1441:G:H2'	23:BB:1442:U:H6	1.74	0.52
3:AD:191:SER:O	3:AD:192:ALA:HB2	2.10	0.52
7:CH:48:PHE:HB3	7:CH:60:LEU:HD12	1.91	0.52
46:BU:24:VAL:HA	46:BU:35:VAL:HA	1.90	0.52
23:BB:638:G:O2'	23:BB:639:U:H5'	2.10	0.52
1:CA:674:G:H2'	1:CA:675:A:C8	2.44	0.52
23:BB:153:U:O2'	23:BB:154:U:H5'	2.09	0.52
45:BS:55:ILE:O	45:BS:58:ALA:HB3	2.10	0.52
2:CC:104:GLU:HG2	2:CC:105:VAL:N	2.25	0.52
1:AA:868:C:H2'	1:AA:869:G:O4'	2.09	0.52
23:BB:1353:A:H2'	23:BB:1354:A:H8	1.74	0.52
3:AD:100:VAL:O	3:AD:104:MET:HG3	2.10	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:601:G:H2'	1:CA:602:A:H8	1.74	0.52
1:CA:1458:G:H2'	1:CA:1459:G:C8	2.44	0.52
23:BB:849:A:H2'	23:BB:850:U:C6	2.45	0.52
1:CA:796:C:O2'	1:CA:797:C:H5'	2.10	0.52
25:BC:137:GLY:N	25:BC:163:ILE:HB	2.24	0.52
17:CT:60:GLN:HB3	17:CT:65:LEU:HD23	1.91	0.52
23:DB:2837:A:H2'	23:DB:2838:G:C8	2.44	0.52
16:AS:27:LYS:HG3	16:AS:28:LYS:H	1.74	0.52
1:CA:426:U:H4'	3:CD:39:GLN:HA	1.92	0.52
25:BC:146:LYS:CB	25:BC:147:PRO:HD2	2.40	0.52
23:DB:2341:G:H2'	23:DB:2342:C:C6	2.45	0.52
25:BC:42:ARG:NH2	25:BC:48:ILE:HD11	2.25	0.52
20:CO:56:LEU:O	20:CO:60:VAL:HG23	2.10	0.52
22:BA:37:C:H2'	22:BA:38:C:O4'	2.10	0.52
45:BS:46:LEU:O	45:BS:50:VAL:HG23	2.10	0.52
6:CG:77:ARG:O	6:CG:79:VAL:HG23	2.10	0.52
1:CA:215:C:H2'	1:CA:216:U:C6	2.45	0.52
23:BB:2520:C:O2'	23:BB:2521:C:H5'	2.09	0.52
29:BE:31:VAL:HG21	29:BE:104:ALA:CB	2.41	0.52
37:BL:89:VAL:O	37:BL:89:VAL:HG13	2.10	0.52
23:DB:204:A:H4'	23:DB:205:G:OP1	2.10	0.52
1:CA:1047:G:O2'	1:CA:1048:G:H5'	2.10	0.52
23:BB:324:A:H2'	23:BB:325:G:O4'	2.10	0.52
10:CK:92:ARG:HD2	10:CK:92:ARG:O	2.09	0.52
1:CA:1131:G:O2'	1:CA:1132:C:H5'	2.10	0.51
50:DT:51:PHE:HB3	50:DT:53:VAL:HG23	1.92	0.51
26:BD:171:THR:OG1	26:BD:172:VAL:N	2.40	0.51
1:CA:121:U:O4	1:CA:236:A:N7	2.43	0.51
23:BB:2356:U:C5'	52:BW:16:GLU:HG3	2.40	0.51
32:B4:3:VAL:HG23	32:B4:4:ARG:H	1.75	0.51
18:AB:47:PRO:O	18:AB:51:GLU:HB3	2.10	0.51
1:AA:8:A:N6	3:AD:53:GLN:HE22	2.09	0.51
23:DB:299:A:N6	23:DB:322:A:H1'	2.26	0.51
24:DI:78:LEU:HD13	24:DI:108:ILE:HG23	1.92	0.51
3:CD:146:GLU:CD	3:CD:146:GLU:N	2.63	0.51
16:AS:44:ILE:HG13	16:AS:62:THR:O	2.10	0.51
22:BA:42:C:C5	47:BF:65:LEU:HD22	2.45	0.51
47:DF:40:GLY:HA2	47:DF:84:ILE:CA	2.38	0.51
47:BF:139:GLU:CD	47:BF:140:ILE:H	2.13	0.51
23:DB:1021:A:H61	23:DB:1142:A:N6	2.08	0.51
47:DF:87:LYS:C	47:DF:88:VAL:HG23	2.30	0.51
1:CA:1411:C:O2'	1:CA:1412:C:H5'	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:481:G:O2'	1:CA:482:A:H8	1.93	0.51
2:CC:198:LYS:HD3	2:CC:200:TRP:CH2	2.45	0.51
47:DF:66:ILE:HA	47:DF:85:GLY:O	2.10	0.51
39:BX:52:ARG:O	39:BX:55:THR:HB	2.09	0.51
52:DW:10:ARG:O	52:DW:11:ASN:HB2	2.08	0.51
48:DG:94:ARG:HB3	48:DG:127:GLN:NE2	2.24	0.51
18:CB:160:LEU:HD21	18:CB:182:VAL:HG22	1.91	0.51
28:BP:19:PHE:O	28:BP:20:ARG:HB2	2.10	0.51
3:CD:89:LEU:HD22	3:CD:199:ILE:HD11	1.92	0.51
39:DX:32:ALA:HB2	39:DX:37:LEU:HD12	1.92	0.51
20:AO:27:VAL:HG12	20:AO:31:LEU:HD12	1.92	0.51
1:CA:1508:A:H2'	1:CA:1509:C:C6	2.45	0.51
23:DB:1439:A:H1'	23:DB:1553:A:N6	2.25	0.51
23:BB:2088:A:H2'	23:BB:2089:C:C6	2.45	0.51
23:DB:836:G:H2'	23:DB:837:C:H6	1.71	0.51
23:BB:2649:C:H2'	23:BB:2650:U:H6	1.74	0.51
18:CB:128:LEU:CG	18:CB:132:GLU:HB3	2.40	0.51
8:CI:30:ASN:ND2	8:CI:65:THR:HG23	2.24	0.51
23:DB:1051:G:H2'	23:DB:1052:C:C6	2.46	0.51
23:DB:850:U:H2'	23:DB:851:C:C6	2.45	0.51
47:BF:74:ALA:C	47:BF:76:PHE:H	2.13	0.51
1:CA:1292:G:H2'	1:CA:1293:C:H6	1.74	0.51
1:CA:833:G:H2'	1:CA:834:U:C6	2.44	0.51
10:CK:34:THR:HG22	10:CK:40:ALA:HA	1.91	0.51
23:BB:2626:C:H2'	23:BB:2627:G:O4'	2.08	0.51
23:DB:927:A:H2'	23:DB:928:A:C8	2.45	0.51
23:BB:1097:U:C2'	23:BB:1098:A:H5'	2.39	0.51
23:BB:2798:U:H1'	23:BB:2800:A:N6	2.25	0.51
1:AA:648:A:H2'	1:AA:649:A:C8	2.45	0.51
1:AA:547:A:H4'	1:AA:548:G:O5'	2.11	0.51
23:BB:540:C:O2'	23:BB:541:A:H5'	2.10	0.51
23:DB:786:C:O2'	23:DB:787:C:H5'	2.10	0.51
23:BB:2586:U:H2'	23:BB:2587:A:C8	2.44	0.51
23:BB:2308:G:HO2'	23:BB:2310:C:H5	1.57	0.51
9:AJ:9:ARG:O	9:AJ:98:VAL:HA	2.11	0.51
6:CG:121:ASN:HD22	6:CG:121:ASN:N	2.08	0.51
1:CA:1051:C:H2'	1:CA:1052:U:C6	2.45	0.51
44:BQ:39:ILE:O	44:BQ:43:GLN:HG3	2.10	0.51
24:BI:23:VAL:HG23	24:BI:24:GLY:N	2.26	0.51
12:AM:48:SER:HB2	12:AM:51:GLN:HG3	1.91	0.51
41:BJ:124:VAL:HG23	41:BJ:125:TYR:H	1.73	0.51
5:CF:6:ILE:HG23	5:CF:62:MET:HB3	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:BA:28:C:H2'	22:BA:29:A:O4'	2.09	0.51
8:AI:38:PHE:O	8:AI:44:ARG:HB3	2.08	0.51
24:BI:75:ALA:HB2	24:BI:112:LYS:HE2	1.92	0.51
23:DB:138:U:H1'	23:DB:141:G:H1	1.75	0.51
23:BB:1726:C:H2'	23:BB:1727:C:C6	2.45	0.51
1:CA:978:A:HO2'	1:CA:1322:C:H5	1.57	0.51
23:DB:630:G:N2	23:DB:632:A:H3'	2.25	0.51
40:DH:134:VAL:H	40:DH:138:VAL:CG1	2.23	0.51
46:BU:11:ILE:O	46:BU:12:VAL:HB	2.10	0.51
47:BF:32:LYS:HB2	47:BF:90:LEU:O	2.10	0.51
49:DR:14:VAL:HG11	49:DR:98:ILE:HG12	1.92	0.51
18:CB:56:LEU:HD22	18:CB:216:VAL:HB	1.92	0.51
47:DF:134:GLN:O	47:DF:136:ILE:N	2.44	0.51
1:CA:1078:U:H4'	4:CE:137:ARG:NH1	2.25	0.51
23:DB:2572:A:N7	26:DD:150:GLN:HB2	2.25	0.51
20:AO:33:THR:HG23	20:AO:63:ARG:NH1	2.25	0.51
27:BK:70:ARG:HB2	27:BK:75:SER:O	2.10	0.51
18:AB:45:THR:HG23	18:AB:200:PRO:HG2	1.91	0.51
39:BX:20:ASN:HD22	39:BX:20:ASN:N	2.07	0.51
48:DG:94:ARG:HB3	48:DG:127:GLN:CG	2.38	0.51
44:BQ:73:ILE:HD11	44:BQ:77:LYS:CB	2.40	0.51
1:AA:1432:G:H1'	1:AA:1468:A:N6	2.26	0.51
45:BS:81:SER:HB3	45:BS:99:ARG:HA	1.91	0.51
1:CA:948:C:H2'	1:CA:949:A:C8	2.45	0.51
16:CS:48:ILE:HG21	16:CS:70:LEU:HD21	1.91	0.51
42:BN:9:GLN:O	42:BN:17:ARG:HD3	2.10	0.51
1:CA:554:A:H5'	11:CL:25:ALA:CB	2.38	0.51
23:BB:62:U:C2'	23:BB:63:A:H5'	2.41	0.51
23:DB:2143:C:H3'	23:DB:2144:G:O4'	2.10	0.51
23:DB:2291:U:O2'	23:DB:2374:C:H1'	2.10	0.51
16:CS:44:ILE:HD11	16:CS:63:ASP:HA	1.91	0.51
1:AA:952:U:H2'	1:AA:953:G:C8	2.45	0.51
23:DB:2415:G:H2'	23:DB:2416:C:H6	1.75	0.51
23:DB:1910:G:O2'	23:DB:1911:U:H5'	2.10	0.51
23:DB:2088:A:H2'	23:DB:2089:C:C6	2.44	0.51
23:BB:1387:A:H4'	23:BB:1469:A:H1'	1.90	0.51
1:CA:584:G:O2'	1:CA:585:G:H5'	2.09	0.51
25:BC:75:ALA:HB1	25:BC:93:VAL:HG22	1.92	0.51
1:CA:1254:A:H2'	1:CA:1255:G:H8	1.73	0.51
23:DB:729:G:H2'	23:DB:1775:U:H1'	1.92	0.51
17:AT:43:LYS:HD2	17:AT:86:ALA:OXT	2.10	0.51
23:DB:1779:U:H5''	23:DB:1780:A:H5''	1.92	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CC:78:LYS:O	2:CC:78:LYS:HG3	2.09	0.51
23:BB:1794:A:H2'	23:BB:1795:C:C6	2.44	0.51
23:DB:598:U:H2'	23:DB:599:A:C8	2.45	0.51
23:BB:245:G:H2'	23:BB:246:C:H6	1.76	0.51
48:DG:39:ALA:HB2	48:DG:57:TYR:CD2	2.45	0.51
38:BM:36:VAL:HB	38:BM:127:LYS:O	2.10	0.51
23:DB:1542:U:H2'	23:DB:1543:G:O4'	2.09	0.51
23:DB:1456:G:O2'	23:DB:1457:U:H5'	2.10	0.51
1:CA:1486:G:H2'	1:CA:1487:G:O4'	2.10	0.51
1:AA:1234:C:O2'	1:AA:1235:U:H5'	2.11	0.51
22:BA:83:G:H4'	30:BY:52:PHE:CD2	2.45	0.51
39:DX:9:LYS:HE3	39:DX:9:LYS:HA	1.92	0.51
21:CN:62:ARG:HB3	21:CN:67:GLY:CA	2.41	0.51
23:BB:922:C:H2'	23:BB:923:G:H8	1.74	0.51
18:CB:185:ILE:HG23	18:CB:199:ILE:O	2.10	0.51
50:DT:14:PRO:HA	50:DT:32:LEU:HB3	1.92	0.51
25:DC:146:LYS:CB	25:DC:147:PRO:HD2	2.41	0.51
35:BV:63:ILE:HD12	35:BV:63:ILE:N	2.23	0.51
35:BV:63:ILE:CD1	35:BV:72:VAL:HG22	2.40	0.51
23:BB:2336:A:H62	52:BW:40:ARG:HB3	1.76	0.51
5:AF:5:GLU:HG3	5:AF:63:ASN:HD21	1.74	0.51
40:BH:116:ARG:H	40:BH:130:VAL:CG1	2.23	0.51
29:DE:108:ILE:HD13	37:DL:2:ARG:HH22	1.76	0.51
23:DB:145:C:H2'	23:DB:146:A:H8	1.74	0.51
6:CG:63:VAL:HA	6:CG:66:GLU:CD	2.31	0.51
18:AB:53:LEU:HB3	18:AB:219:THR:OG1	2.11	0.51
18:CB:26:MET:HE2	18:CB:188:THR:H	1.74	0.51
30:BY:56:VAL:HG12	30:BY:58:GLU:HG3	1.93	0.51
1:AA:1320:C:O2'	1:AA:1321:U:H5'	2.10	0.51
31:D0:48:TYR:C	31:D0:50:GLY:H	2.12	0.51
18:CB:216:VAL:O	18:CB:220:VAL:HG23	2.11	0.51
18:CB:53:LEU:HA	18:CB:56:LEU:HD12	1.92	0.51
23:BB:496:G:H1'	45:BS:61:ASN:ND2	2.26	0.51
28:DP:91:VAL:O	28:DP:92:ARG:HB3	2.10	0.51
51:DZ:7:VAL:HG21	51:DZ:59:ILE:HD11	1.91	0.51
26:BD:53:GLY:C	26:BD:76:GLY:HA2	2.31	0.51
13:CP:1:MET:HE2	13:CP:3:THR:HG22	1.92	0.51
23:DB:1593:A:H2'	23:DB:1594:U:O4'	2.10	0.51
3:CD:71:PHE:CE1	3:CD:89:LEU:HD11	2.45	0.51
42:BN:12:ARG:HG3	42:BN:13:ASN:OD1	2.10	0.51
45:DS:29:VAL:HG23	45:DS:70:LYS:CA	2.40	0.51
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.26	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:322:A:H5'	23:BB:340:A:C1'	2.40	0.51
23:BB:657:U:H2'	23:BB:658:U:C6	2.45	0.51
23:DB:935:C:O2'	23:DB:936:A:H5'	2.11	0.51
5:CF:53:LYS:N	5:CF:53:LYS:NZ	2.58	0.51
1:CA:1476:A:H2'	1:CA:1477:U:O4'	2.11	0.51
1:CA:502:A:H4'	1:CA:550:G:H4'	1.93	0.51
13:CP:72:ALA:O	13:CP:75:ILE:HG13	2.10	0.51
21:AN:27:LYS:C	21:AN:29:ILE:H	2.13	0.51
4:AE:55:VAL:N	4:AE:56:PRO:CD	2.74	0.51
18:CB:130:LYS:HE2	18:CB:130:LYS:N	2.25	0.51
1:CA:389:A:H3'	1:CA:390:U:H6	1.74	0.51
25:BC:75:ALA:CB	25:BC:93:VAL:HG22	2.39	0.51
23:DB:1454:C:H5'	42:DN:63:ARG:NE	2.25	0.51
23:DB:2813:A:H2'	23:DB:2814:A:H8	1.75	0.51
23:DB:1923:U:O2'	23:DB:1924:C:H5'	2.11	0.51
23:BB:2033:A:O2'	23:BB:2035:G:OP2	2.28	0.51
23:BB:1561:C:H2'	23:BB:1562:U:C6	2.45	0.51
4:CE:92:ARG:HB3	4:CE:92:ARG:NH1	2.24	0.51
23:BB:1410:G:H2'	23:BB:1411:U:C6	2.45	0.51
23:BB:2455:G:H2'	23:BB:2456:C:H6	1.74	0.51
1:AA:404:G:H2'	1:AA:405:U:C6	2.45	0.51
23:DB:1764:C:O2'	23:DB:1765:U:H5'	2.09	0.51
23:DB:974:G:H1'	23:DB:975:A:C8	2.46	0.51
1:CA:69:G:N2	1:CA:71:A:H62	2.08	0.51
23:BB:2024:G:O2'	23:BB:2025:C:H5'	2.10	0.51
1:CA:130:A:H1'	1:CA:263:A:O2'	2.10	0.51
1:AA:399:G:H2'	1:AA:400:C:C6	2.46	0.51
22:BA:2:G:H2'	22:BA:3:C:C6	2.45	0.51
3:CD:156:ALA:O	3:CD:159:GLU:HB2	2.11	0.51
23:DB:1526:C:H2'	23:DB:1527:G:O4'	2.10	0.51
4:CE:140:ILE:O	4:CE:144:GLU:HG3	2.10	0.51
26:DD:142:VAL:HB	26:DD:143:PRO:HD2	1.92	0.51
4:AE:14:LEU:HA	4:AE:36:THR:HB	1.92	0.51
3:CD:22:SER:HB3	3:CD:109:THR:HG22	1.93	0.51
31:D0:33:SER:C	31:D0:35:GLU:H	2.13	0.51
1:AA:144:G:O2'	1:AA:145:G:H5'	2.11	0.51
23:DB:1477:A:H2'	23:DB:1478:G:O4'	2.10	0.51
26:DD:36:GLN:O	26:DD:36:GLN:HG3	2.10	0.51
23:DB:1099:G:O5'	24:DI:4:VAL:HG12	2.10	0.51
8:CI:34:LEU:HD11	8:CI:44:ARG:CB	2.40	0.51
50:DT:4:GLU:OE2	50:DT:5:GLU:HG2	2.09	0.51
23:BB:548:G:H3'	23:BB:548:G:OP2	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BT:43:ILE:CG2	50:BT:58:VAL:HG21	2.40	0.51
52:DW:49:ASN:HB3	52:DW:81:ILE:CD1	2.40	0.51
42:DN:37:THR:OG1	42:DN:40:LYS:HE2	2.10	0.51
29:BE:108:ILE:HD12	29:BE:180:LEU:HB3	1.92	0.51
40:BH:114:GLU:CA	40:BH:133:GLN:H	2.22	0.51
40:DH:77:THR:HG22	40:DH:145:ASN:H	1.74	0.51
22:BA:29:A:H2'	22:BA:30:C:C6	2.45	0.51
1:AA:1248:A:H4'	8:AI:32:ARG:NH1	2.24	0.51
8:AI:82:ILE:O	8:AI:86:LEU:HD13	2.10	0.51
23:BB:1060:U:O2	23:BB:1088:A:C8	2.64	0.51
23:BB:1060:U:P	24:BI:74:PRO:HA	2.49	0.51
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.09	0.51
46:BU:73:ASN:HD22	46:BU:74:ALA:N	2.08	0.51
40:DH:110:VAL:O	40:DH:110:VAL:HG22	2.09	0.51
1:AA:956:U:O2'	16:AS:79:TYR:HA	2.10	0.51
47:BF:127:TYR:HB2	47:BF:155:ILE:HD13	1.91	0.51
30:DY:56:VAL:HG12	30:DY:58:GLU:HG3	1.91	0.51
1:AA:135:C:O2	13:AP:1:MET:HB2	2.10	0.51
13:AP:6:LEU:HD11	13:AP:71:VAL:HB	1.91	0.51
1:AA:922:G:H2'	1:AA:923:A:H8	1.73	0.51
23:BB:1792:G:OP1	25:BC:204:LEU:HD12	2.09	0.51
6:AG:22:LEU:O	6:AG:26:VAL:HG13	2.10	0.51
37:BL:57:LEU:HB2	37:BL:60:ARG:NH1	2.22	0.51
12:CM:90:HIS:HA	12:CM:108:ARG:HH21	1.75	0.51
27:BK:16:ALA:HB3	27:BK:47:ILE:HD13	1.92	0.51
39:DX:44:LYS:CD	39:DX:48:ARG:HH12	2.23	0.51
48:DG:155:PRO:CA	48:DG:170:THR:HA	2.40	0.51
2:CC:113:LYS:HA	2:CC:184:ASN:HD22	1.75	0.51
1:CA:985:C:H2'	1:CA:986:U:H6	1.75	0.51
12:CM:6:ILE:HG22	12:CM:7:ASN:N	2.25	0.51
1:AA:1135:U:H5'	1:AA:1136:C:OP1	2.11	0.51
17:AT:79:THR:HG22	17:AT:83:ASN:HD21	1.75	0.51
23:DB:2144:G:O2'	23:DB:2146:C:H5'	2.11	0.51
21:AN:27:LYS:HG3	21:AN:28:ALA:H	1.75	0.51
23:DB:1454:C:H5'	42:DN:63:ARG:HE	1.75	0.51
23:BB:418:C:H2'	23:BB:419:U:H6	1.76	0.51
23:BB:2199:A:H5''	23:BB:2200:C:H5	1.75	0.51
47:DF:74:ALA:C	47:DF:76:PHE:H	2.13	0.51
23:DB:2751:G:H3'	23:DB:2752:C:C6	2.44	0.51
1:AA:600:A:OP2	7:AH:87:ARG:HG2	2.10	0.51
23:BB:129:C:H2'	23:BB:130:C:H6	1.73	0.51
43:DO:100:HIS:C	43:DO:104:GLN:HB2	2.30	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2562:U:H2'	23:BB:2563:U:H5'	1.92	0.51
22:DA:32:U:C4'	22:DA:52:A:H62	2.24	0.51
1:CA:404:G:H2'	1:CA:405:U:C6	2.46	0.51
7:AH:77:VAL:HG23	7:AH:126:CYS:HA	1.93	0.51
23:BB:2345:G:N3	23:BB:2381:A:H2'	2.26	0.51
23:DB:1824:G:O2'	23:DB:1825:U:H5'	2.10	0.51
11:AL:14:LYS:HD3	11:AL:14:LYS:N	2.26	0.51
27:BK:104:THR:H	27:BK:107:LEU:HD13	1.75	0.51
1:AA:1246:A:H2'	1:AA:1247:U:C6	2.44	0.51
1:AA:1207:G:H2'	1:AA:1208:C:O4'	2.11	0.51
47:BF:67:THR:C	47:BF:68:LYS:HD2	2.30	0.51
23:BB:2478:A:OP1	32:B4:32:LYS:HD3	2.11	0.51
21:AN:17:ASP:O	21:AN:21:ALA:HB2	2.10	0.51
28:BP:28:LYS:HE3	28:BP:82:SER:OG	2.10	0.51
22:BA:67:G:O2'	22:BA:68:C:H5'	2.10	0.51
1:CA:478:A:H2'	1:CA:479:U:O4'	2.11	0.51
23:BB:2604:U:O2'	23:BB:2605:U:H5'	2.09	0.51
23:BB:2076:U:O4'	23:BB:2076:U:O2	2.28	0.51
5:CF:55:HIS:N	5:CF:55:HIS:ND1	2.58	0.51
10:AK:52:ARG:NH1	10:AK:52:ARG:HB3	2.26	0.51
1:AA:434:U:H3'	1:AA:435:A:H8	1.75	0.51
52:DW:49:ASN:ND2	52:DW:60:ALA:HA	2.25	0.51
48:BG:25:ILE:O	48:BG:32:LEU:HA	2.10	0.51
1:AA:236:A:H2'	1:AA:237:G:C8	2.45	0.51
35:BV:72:VAL:CG2	35:BV:91:PHE:HB3	2.40	0.51
15:AR:60:ARG:HA	15:AR:63:TYR:CD2	2.36	0.51
41:DJ:12:LYS:NZ	41:DJ:12:LYS:H	2.08	0.51
23:BB:142:A:H2'	23:BB:143:C:H5	1.75	0.51
8:AI:23:GLY:H	8:AI:60:LEU:HA	1.76	0.51
24:BI:11:GLN:O	24:BI:11:GLN:HG3	2.10	0.51
25:BC:128:THR:HA	25:BC:190:THR:CA	2.41	0.51
27:DK:59:LYS:HD2	27:DK:89:ASN:HD22	1.75	0.51
12:CM:77:LYS:HE2	47:DF:112:ASP:HB2	1.93	0.51
38:BM:19:GLY:N	38:BM:38:ARG:HH22	2.08	0.51
47:BF:147:ARG:HG2	47:BF:148:VAL:HG13	1.92	0.51
2:AC:42:LEU:HD12	2:AC:46:LEU:HD23	1.92	0.51
39:DX:57:LEU:N	39:DX:59:GLU:OE2	2.44	0.51
6:AG:47:GLU:OE1	6:AG:57:GLU:HG2	2.10	0.51
3:AD:146:GLU:N	3:AD:146:GLU:CD	2.64	0.51
3:AD:145:ARG:O	3:AD:148:ALA:N	2.42	0.51
12:CM:38:ILE:HD12	12:CM:47:LEU:HD11	1.93	0.51
1:CA:1070:U:H2'	1:CA:1071:C:C6	2.45	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:BK:17:ARG:HB3	27:BK:45:GLU:HB3	1.93	0.51
27:BK:7:MET:HE1	27:BK:18:ARG:HB3	1.92	0.51
2:AC:13:ILE:O	2:AC:15:LYS:N	2.44	0.51
1:CA:1103:C:H2'	1:CA:1104:G:O4'	2.11	0.51
48:BG:123:GLU:HG2	48:BG:124:CYS:N	2.26	0.51
1:CA:1220:G:H4'	16:CS:33:TRP:HB3	1.92	0.51
1:CA:1308:U:H5''	12:CM:96:VAL:HG23	1.92	0.51
12:CM:76:ILE:O	12:CM:80:MET:HG3	2.10	0.51
44:DQ:90:ASP:O	44:DQ:94:LEU:HB2	2.10	0.51
44:DQ:94:LEU:HD12	49:DR:13:ARG:HB2	1.92	0.51
37:DL:23:ILE:H	37:DL:23:ILE:CD1	2.21	0.51
1:AA:1060:U:C5'	9:AJ:53:ILE:HG12	2.39	0.51
23:BB:1819:A:OP1	25:BC:159:THR:HG21	2.10	0.51
23:DB:559:G:H1'	44:DQ:55:GLN:NE2	2.24	0.51
6:AG:149:ALA:N	10:AK:55:ARG:NH2	2.59	0.51
23:BB:630:G:N2	23:BB:632:A:H3'	2.25	0.51
1:AA:501:C:O2'	1:AA:502:A:H5'	2.09	0.51
1:AA:1324:A:H2'	1:AA:1325:C:H6	1.75	0.51
5:AF:53:LYS:NZ	5:AF:53:LYS:N	2.59	0.51
23:DB:2093:G:O5'	40:DH:24:GLY:HA3	2.11	0.51
27:BK:51:LYS:HE2	27:BK:95:ILE:HD11	1.92	0.51
23:DB:193:U:H2'	23:DB:194:G:H8	1.74	0.51
1:CA:861:G:O2'	1:CA:862:C:H5'	2.10	0.51
1:CA:1028:C:H2'	1:CA:1028:C:O2	2.10	0.51
23:BB:1482:G:H2'	23:BB:1483:G:C8	2.45	0.51
22:BA:32:U:C4'	22:BA:52:A:H62	2.23	0.51
1:AA:403:C:O2'	1:AA:404:G:H5'	2.11	0.51
2:AC:48:LYS:CD	2:AC:48:LYS:H	2.24	0.51
1:CA:1234:C:O2'	1:CA:1235:U:H5'	2.10	0.51
23:BB:1582:C:H3'	23:BB:1583:A:C2	2.45	0.51
1:CA:612:C:H2'	1:CA:613:C:C6	2.46	0.51
23:BB:1747:U:H2'	23:BB:1748:C:H6	1.76	0.51
9:CJ:57:VAL:HG22	9:CJ:58:ASN:H	1.76	0.51
23:BB:699:A:H2'	23:BB:700:G:O4'	2.09	0.51
1:CA:1263:C:H2'	1:CA:1264:U:H6	1.76	0.51
48:DG:28:LYS:NZ	48:DG:29:ASN:HB2	2.26	0.51
23:DB:1313:U:O2	23:DB:1313:U:H2'	2.10	0.51
1:AA:478:A:H2'	1:AA:479:U:O4'	2.10	0.51
5:AF:10:VAL:HA	5:AF:84:VAL:HA	1.92	0.51
1:CA:213:G:H3'	1:CA:214:C:H6	1.75	0.51
9:CJ:50:THR:OG1	9:CJ:64:GLN:HB3	2.10	0.51
23:BB:664:G:H2'	23:BB:665:U:H6	1.74	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
11:CL:7:VAL:HG22	14:CQ:33:TYR:HD1	1.75	0.51
23:DB:1126:A:OP1	23:DB:1126:A:H8	1.93	0.51
1:AA:520:A:N1	1:AA:536:C:H1'	2.26	0.51
1:AA:1160:G:H2'	1:AA:1161:C:H6	1.75	0.51
23:DB:922:C:H2'	23:DB:923:G:H8	1.75	0.51
9:CJ:9:ARG:HE	9:CJ:99:GLN:HE22	1.58	0.51
35:BV:28:ALA:HB2	35:BV:89:ILE:HD12	1.93	0.51
35:BV:35:GLU:HB2	35:BV:93:ARG:NH1	2.25	0.51
14:AQ:45:VAL:HG11	14:AQ:60:ILE:HG21	1.92	0.51
40:BH:114:GLU:HA	40:BH:133:GLN:H	1.76	0.51
23:BB:1060:U:C4	24:BI:131:THR:HG22	2.45	0.51
37:BL:82:LEU:O	37:BL:85:VAL:HG12	2.10	0.51
23:BB:1725:U:O2'	23:BB:1726:C:H5'	2.11	0.51
1:CA:1326:U:H2'	1:CA:1327:C:H6	1.73	0.51
46:BU:73:ASN:HD22	46:BU:73:ASN:H	1.57	0.51
49:BR:34:GLU:HG2	49:BR:60:LYS:HG2	1.92	0.51
23:DB:1175:A:H2'	23:DB:1175:A:N3	2.24	0.51
33:D1:36:LYS:CB	33:D1:47:ILE:HA	2.34	0.51
49:BR:4:VAL:CG2	49:BR:39:LEU:HG	2.40	0.51
24:DI:32:VAL:HG22	24:DI:60:VAL:CG2	2.41	0.51
23:DB:125:A:C6	36:D2:10:LEU:HG	2.45	0.51
10:AK:61:ALA:O	10:AK:64:VAL:HG13	2.10	0.51
42:DN:106:ASP:OD1	42:DN:108:ALA:HB3	2.09	0.51
40:BH:14:SER:HB2	40:BH:17:ASP:CB	2.41	0.51
25:BC:130:PRO:HA	25:BC:188:ARG:HA	1.92	0.51
27:BK:11:ALA:HB3	27:BK:85:VAL:CG2	2.40	0.51
1:AA:521:G:O2'	1:AA:522:C:H5'	2.11	0.51
23:DB:2181:U:H2'	23:DB:2182:U:O4'	2.11	0.51
23:DB:2557:G:H2'	23:DB:2558:C:H6	1.70	0.51
6:AG:149:ALA:N	10:AK:55:ARG:HH22	2.09	0.51
1:CA:1095:U:H2'	1:CA:1096:C:C6	2.46	0.51
23:DB:2353:G:N3	52:DW:30:VAL:HG13	2.26	0.51
1:CA:475:C:H2'	1:CA:476:U:H6	1.76	0.51
2:CC:13:ILE:HD13	2:CC:13:ILE:N	2.24	0.51
2:AC:63:ILE:HD11	2:AC:94:ALA:CB	2.41	0.51
1:CA:908:A:O2'	1:CA:909:A:H5'	2.10	0.51
23:DB:1490:A:H2'	25:DC:97:ASP:OD1	2.10	0.51
7:CH:77:VAL:HG23	7:CH:126:CYS:HA	1.92	0.51
12:AM:92:ARG:HA	12:AM:92:ARG:NE	2.25	0.51
23:BB:990:A:N1	49:BR:78:ARG:NH1	2.59	0.51
23:BB:277:G:N3	23:BB:277:G:C2'	2.73	0.51
23:DB:323:C:H6	23:DB:1205:A:N1	2.09	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:613:C:P	3:CD:80:ARG:HH21	2.33	0.51
1:CA:108:G:H5'	1:CA:109:A:H5''	1.92	0.51
23:DB:1585:C:H2'	23:DB:1586:A:C8	2.46	0.51
22:DA:13:G:H1'	22:DA:69:G:N2	2.23	0.51
23:BB:665:U:O2'	23:BB:666:A:H5'	2.11	0.51
23:BB:1867:G:O2'	23:BB:1868:C:H5'	2.11	0.51
1:AA:335:C:H2'	1:AA:336:A:H8	1.75	0.51
1:AA:889:A:H5'	1:AA:891:U:H1'	1.92	0.51
23:DB:2630:G:O2'	23:DB:2631:G:H5'	2.09	0.51
48:DG:41:GLU:HB2	48:DG:52:GLY:O	2.10	0.51
23:BB:41:C:H2'	23:BB:42:A:O4'	2.11	0.51
23:BB:41:C:O2'	23:BB:42:A:H5'	2.11	0.51
23:BB:1472:C:H2'	23:BB:1473:G:C8	2.45	0.51
23:BB:2409:G:H2'	23:BB:2410:G:O4'	2.10	0.51
1:CA:240:G:H5'	1:CA:240:G:H8	1.75	0.51
25:BC:173:LEU:H	25:BC:173:LEU:HD13	1.76	0.51
42:DN:71:ARG:HG2	42:DN:71:ARG:HH21	1.75	0.51
10:CK:52:ARG:HB3	10:CK:52:ARG:NH1	2.25	0.51
24:DI:63:ASP:O	24:DI:64:ARG:HB2	2.09	0.51
25:BC:210:ALA:O	25:BC:215:VAL:HG23	2.11	0.51
23:BB:123:G:H2'	23:BB:124:G:C8	2.46	0.51
40:BH:90:LEU:HB2	40:BH:123:ARG:CB	2.41	0.51
23:BB:547:A:H2'	23:BB:548:G:H5'	1.93	0.51
41:BJ:98:GLU:HB3	41:BJ:124:VAL:HG21	1.91	0.51
23:BB:2336:A:N6	52:BW:40:ARG:HB3	2.26	0.51
40:BH:115:VAL:H	40:BH:133:GLN:HB3	1.75	0.51
23:BB:145:C:H2'	23:BB:146:A:C8	2.45	0.51
40:DH:77:THR:HG21	40:DH:145:ASN:ND2	2.17	0.51
8:AI:6:TYR:HE2	8:AI:17:ARG:HA	1.76	0.51
36:B2:26:ASN:O	36:B2:30:VAL:HG23	2.11	0.51
43:DO:70:ALA:O	43:DO:74:VAL:HG23	2.10	0.51
23:DB:2267:A:OP2	23:DB:2268:A:H5''	2.10	0.51
1:CA:1366:C:H2'	1:CA:1367:C:C6	2.45	0.51
23:BB:2537:U:H2'	23:BB:2538:C:H6	1.72	0.51
46:BU:81:ARG:HG3	46:BU:81:ARG:HH21	1.75	0.51
27:BK:88:ASN:HD22	27:BK:89:ASN:H	1.52	0.51
24:DI:79:LEU:HD11	24:DI:131:THR:OG1	2.10	0.51
33:D1:46:VAL:HG22	33:D1:47:ILE:H	1.75	0.51
1:AA:1314:C:C5	16:AS:5:LYS:HD3	2.46	0.51
18:AB:172:ILE:HD12	18:AB:172:ILE:H	1.76	0.51
18:CB:86:CYS:C	18:CB:88:GLN:H	2.13	0.51
26:DD:4:LEU:HD12	26:DD:32:ASN:HB2	1.92	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1107:G:H2'	23:BB:1108:U:H6	1.75	0.51
47:DF:134:GLN:HB3	47:DF:149:ARG:CG	2.40	0.51
29:DE:122:GLU:O	29:DE:123:LYS:HB2	2.09	0.51
26:BD:34:VAL:HG13	26:BD:93:GLY:HA2	1.92	0.51
46:BU:54:PRO:HG2	46:BU:55:GLY:H	1.76	0.51
23:BB:1789:A:H2'	23:BB:1790:C:O4'	2.11	0.51
24:BI:29:GLN:HA	24:BI:29:GLN:HE21	1.76	0.51
12:AM:2:ARG:HD3	12:AM:6:ILE:N	2.26	0.51
48:DG:123:GLU:HG2	48:DG:124:CYS:N	2.25	0.51
16:CS:50:VAL:O	16:CS:57:VAL:N	2.44	0.51
23:BB:2391:G:P	34:B3:34:LYS:HZ3	2.34	0.51
30:BY:16:LEU:H	30:BY:16:LEU:CD2	2.21	0.51
51:BZ:54:LYS:O	51:BZ:57:ARG:HB2	2.11	0.51
23:DB:2074:U:H2'	23:DB:2075:U:C6	2.46	0.51
23:DB:2147:A:H4'	23:DB:2148:G:C8	2.45	0.51
1:CA:1250:A:C2	1:CA:1370:G:H1'	2.44	0.51
1:AA:1164:G:H2'	1:AA:1165:U:H6	1.75	0.51
25:DC:93:VAL:HG13	25:DC:94:LEU:N	2.25	0.51
37:DL:77:ILE:HB	37:DL:109:LYS:O	2.11	0.51
48:BG:1:SER:H1	48:BG:61:TRP:HE3	1.56	0.51
23:DB:154:U:H2'	23:DB:155:A:C8	2.46	0.51
42:BN:62:ASN:N	42:BN:62:ASN:HD22	2.09	0.51
27:BK:51:LYS:HG3	27:BK:52:VAL:N	2.25	0.51
10:AK:70:ALA:HA	10:AK:73:VAL:HG22	1.93	0.51
23:BB:852:U:H2'	23:BB:853:C:H6	1.76	0.51
1:CA:158:G:H1	1:CA:163:C:H42	1.58	0.51
1:AA:162:A:H2'	1:AA:163:C:O4'	2.11	0.51
23:BB:2897:U:H2'	23:BB:2898:U:C6	2.46	0.51
23:BB:974:G:H1'	23:BB:975:A:C8	2.46	0.51
23:DB:285:G:H2'	23:DB:286:U:O4'	2.10	0.51
1:CA:770:C:O2'	1:CA:771:G:H5'	2.11	0.51
1:AA:1293:C:H2'	1:AA:1294:G:H8	1.74	0.51
11:CL:82:ARG:HG2	11:CL:82:ARG:HH11	1.76	0.51
14:CQ:30:HIS:HB3	14:CQ:34:GLY:N	2.25	0.51
22:BA:17:C:O2'	22:BA:18:G:H5'	2.11	0.51
1:CA:618:C:H1'	13:CP:14:ARG:NH1	2.26	0.51
23:DB:782:A:C8	25:DC:219:VAL:HG21	2.46	0.51
1:AA:65:A:C2	1:AA:381:C:H2'	2.44	0.51
23:DB:245:G:H2'	23:DB:246:C:H6	1.76	0.51
48:BG:96:ALA:HB1	48:BG:98:LYS:HE3	1.93	0.51
1:AA:215:C:H2'	1:AA:216:U:C6	2.45	0.51
22:DA:35:C:H2'	22:DA:36:C:O4'	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2309:A:N3	23:DB:2309:A:H2'	2.26	0.51
23:BB:527:C:O4'	23:BB:527:C:O2	2.29	0.51
1:AA:1252:A:H2'	1:AA:1253:G:O4'	2.11	0.51
23:BB:2336:A:H62	52:BW:40:ARG:CB	2.24	0.51
12:AM:106:ARG:HH11	12:AM:106:ARG:HA	1.75	0.51
9:AJ:30:LYS:HB2	9:AJ:36:VAL:HG21	1.92	0.51
48:BG:91:VAL:C	48:BG:93:TYR:H	2.14	0.51
10:CK:110:THR:CA	19:CU:19:LYS:HZ1	2.24	0.51
23:BB:2526:G:N3	32:B4:1:MET:N	2.58	0.51
46:DU:73:ASN:HD22	46:DU:73:ASN:H	1.57	0.51
49:DR:7:SER:HB2	49:DR:22:LEU:HD13	1.93	0.51
40:DH:96:THR:OG1	40:DH:112:LYS:HB2	2.11	0.51
51:BZ:11:ARG:HB3	51:BZ:12:PRO:HD2	1.92	0.51
38:BM:40:ARG:HB2	38:BM:93:VAL:CG2	2.40	0.51
1:AA:978:A:C2'	1:AA:979:C:H5'	2.41	0.51
18:AB:56:LEU:HB2	18:AB:183:PHE:HE2	1.76	0.51
1:AA:981:U:H5	1:AA:982:U:HO2'	1.57	0.51
18:CB:63:LYS:HA	18:CB:224:ARG:CZ	2.40	0.51
23:DB:1792:G:P	25:DC:204:LEU:HD12	2.50	0.51
23:BB:729:G:H2'	23:BB:1775:U:H1'	1.92	0.51
10:AK:28:ASN:HD22	10:AK:29:THR:H	1.59	0.51
12:AM:6:ILE:O	12:AM:7:ASN:C	2.49	0.51
45:BS:81:SER:HA	45:BS:99:ARG:HA	1.92	0.51
23:BB:1753:G:H5''	28:BP:92:ARG:HD3	1.93	0.51
38:DM:61:GLY:HA2	38:DM:107:GLY:HA3	1.91	0.51
23:DB:784:G:H1	25:DC:227:VAL:HG11	1.75	0.51
48:DG:67:ALA:O	48:DG:71:LEU:HD23	2.11	0.51
45:DS:17:VAL:C	45:DS:19:LEU:N	2.63	0.51
40:DH:56:ALA:C	40:DH:58:LEU:H	2.14	0.51
23:BB:2648:G:H2'	23:BB:2649:C:H6	1.76	0.51
1:CA:1125:U:O2'	1:CA:1126:U:H2'	2.11	0.51
29:BE:118:LEU:HA	29:BE:186:VAL:HG13	1.92	0.51
25:BC:75:ALA:CB	25:BC:95:TYR:HA	2.39	0.51
23:DB:6:A:H4'	41:DJ:131:ASN:O	2.11	0.51
26:BD:175:LEU:HD22	26:BD:191:GLY:H	1.75	0.51
24:BI:100:ILE:O	24:BI:139:VAL:HA	2.11	0.51
17:AT:24:ARG:HG3	17:AT:65:LEU:HD11	1.92	0.51
11:AL:35:ARG:NH2	11:AL:75:GLU:HA	2.26	0.51
1:AA:33:A:H2'	1:AA:34:C:C6	2.45	0.51
23:DB:523:C:H4'	23:DB:540:C:O2	2.11	0.51
23:BB:1764:C:O2'	23:BB:1765:U:H5'	2.11	0.51
23:BB:68:G:H2'	23:BB:69:C:H6	1.76	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:DK:109:SER:OG	27:DK:111:LYS:HG2	2.11	0.51
23:BB:1258:U:H2'	23:BB:1259:G:H8	1.75	0.51
23:BB:2286:G:H4'	23:BB:2287:A:O4'	2.11	0.51
23:DB:1965:C:H3'	23:DB:1966:A:H8	1.76	0.51
25:DC:226:PRO:HA	25:DC:232:GLY:HA3	1.92	0.51
4:AE:59:ILE:O	4:AE:63:MET:HG2	2.10	0.51
3:CD:36:ALA:HB2	3:CD:42:ALA:HA	1.93	0.51
19:CU:4:LYS:HD3	19:CU:4:LYS:H	1.76	0.51
33:D1:18:HIS:CD2	33:D1:40:PRO:HD2	2.46	0.51
1:CA:147:G:H2'	1:CA:148:G:C8	2.46	0.51
1:AA:626:G:H2'	1:AA:627:G:C8	2.46	0.51
23:DB:1098:A:H3'	24:DI:3:LYS:C	2.32	0.51
8:CI:53:LEU:HD12	8:CI:96:GLU:OE2	2.11	0.51
6:CG:30:MET:HG2	6:CG:31:VAL:N	2.26	0.51
23:DB:587:C:O2'	37:DL:19:LEU:HD13	2.11	0.51
25:DC:146:LYS:HB2	25:DC:149:LYS:HB2	1.93	0.51
35:BV:72:VAL:CG1	35:BV:93:ARG:HA	2.40	0.51
5:CF:26:THR:HA	5:CF:36:ILE:HD11	1.93	0.51
5:AF:39:LEU:C	5:AF:40:GLU:HG2	2.31	0.51
40:BH:131:SER:HA	40:BH:142:VAL:HB	1.93	0.51
40:BH:78:VAL:HG12	40:BH:144:VAL:HG23	1.92	0.51
23:DB:633:A:OP1	37:DL:68:SER:HB2	2.10	0.51
48:DG:84:LYS:CB	48:DG:132:LEU:H	2.24	0.51
48:DG:153:PRO:HD3	48:DG:161:VAL:O	2.11	0.51
18:AB:44:LYS:O	18:AB:47:PRO:HD2	2.11	0.51
1:CA:1060:U:C4'	9:CJ:54:SER:HB2	2.35	0.51
27:BK:71:ARG:HB3	27:BK:72:PRO:CD	2.36	0.51
38:DM:2:LEU:HD23	38:DM:46:ILE:HD11	1.91	0.51
28:BP:6:GLN:HA	28:BP:9:GLN:CD	2.31	0.51
47:BF:87:LYS:C	47:BF:88:VAL:HG23	2.31	0.51
1:AA:1084:G:H5'	1:AA:1102:A:OP2	2.10	0.51
18:AB:150:ILE:O	18:AB:150:ILE:HG12	2.10	0.51
28:DP:19:PHE:O	28:DP:20:ARG:HB2	2.11	0.51
4:CE:35:LEU:HD22	4:CE:133:ILE:HA	1.92	0.51
26:DD:148:GLN:CB	26:DD:152:PRO:HG2	2.41	0.51
2:AC:179:ALA:HA	2:AC:205:GLU:CA	2.39	0.51
1:AA:920:U:H2'	1:AA:921:U:H6	1.76	0.51
12:CM:39:ALA:HB3	12:CM:42:VAL:HG13	1.93	0.51
18:AB:27:LYS:C	18:AB:29:PHE:H	2.14	0.51
48:DG:105:SER:OG	48:DG:111:PRO:HA	2.11	0.51
18:CB:158:ASP:HA	18:CB:180:ILE:HD12	1.92	0.51
41:DJ:84:ILE:HG13	41:DJ:84:ILE:O	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
27:DK:99:ILE:HD13	27:DK:118:LEU:HD22	1.93	0.51
27:BK:64:ARG:O	27:BK:82:ASN:HA	2.11	0.51
23:DB:2556:C:H2'	23:DB:2557:G:O4'	2.11	0.51
23:BB:37:C:O2'	23:BB:38:A:H5'	2.11	0.51
23:BB:1454:C:H5'	42:BN:63:ARG:HE	1.75	0.51
23:DB:354:A:H2'	23:DB:355:U:H6	1.76	0.51
26:BD:63:PRO:C	26:BD:65:ALA:H	2.14	0.51
1:AA:159:G:N2	1:AA:161:A:H3'	2.26	0.51
1:CA:1027:C:O2	1:CA:1027:C:H2'	2.10	0.51
1:CA:33:A:H2'	1:CA:34:C:C6	2.46	0.51
1:CA:492:C:H2'	1:CA:493:A:N3	2.26	0.51
35:DV:53:LYS:HB3	35:DV:55:GLU:OE1	2.11	0.51
22:DA:76:G:N1	22:DA:101:A:N6	2.59	0.51
27:DK:51:LYS:HE2	27:DK:95:ILE:HD11	1.93	0.51
23:DB:235:U:H2'	23:DB:236:C:H6	1.76	0.51
23:BB:1518:C:H2'	23:BB:1519:G:H8	1.74	0.51
1:AA:613:C:P	3:AD:80:ARG:HH21	2.32	0.51
26:DD:63:PRO:C	26:DD:65:ALA:H	2.14	0.51
12:CM:28:ARG:NH2	12:CM:62:PHE:HB2	2.26	0.51
45:BS:51:LEU:C	45:BS:53:SER:H	2.14	0.51
23:BB:438:G:H2'	23:BB:439:A:H8	1.76	0.51
23:BB:2586:U:H2'	23:BB:2587:A:H8	1.75	0.51
1:CA:605:U:H2'	1:CA:606:G:C8	2.46	0.51
4:AE:89:THR:HG22	4:AE:90:GLY:N	2.26	0.51
1:CA:895:G:H2'	1:CA:896:C:C6	2.46	0.51
23:DB:401:A:H2'	23:DB:402:A:C8	2.46	0.51
7:CH:29:SER:O	7:CH:33:VAL:HG23	2.10	0.51
23:DB:1785:A:H2'	23:DB:1787:A:N7	2.26	0.51
31:B0:33:SER:C	31:B0:35:GLU:H	2.14	0.51
23:BB:910:A:H2'	23:BB:911:A:C8	2.46	0.51
23:DB:2685:G:O2'	23:DB:2686:G:H5'	2.11	0.51
25:BC:40:GLY:O	25:BC:53:ILE:HG23	2.11	0.51
1:CA:1471:U:O2'	1:CA:1472:U:H5'	2.11	0.51
44:DQ:104:ALA:HA	49:DR:46:GLU:OE1	2.10	0.51
23:DB:2180:U:O4'	23:DB:2180:U:O2	2.28	0.51
23:DB:57:C:H2'	23:DB:58:G:O4'	2.11	0.51
25:DC:52:HIS:O	25:DC:53:ILE:HB	2.11	0.51
19:CU:34:ARG:NE	19:CU:39:LYS:HE3	2.26	0.51
23:DB:1431:A:H2'	23:DB:1432:G:H8	1.76	0.51
30:DY:15:ARG:O	30:DY:20:LYS:HE3	2.10	0.51
20:AO:70:LEU:HD12	20:AO:78:TYR:HB2	1.93	0.51
15:CR:60:ARG:HA	15:CR:63:TYR:CD2	2.34	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:AF:45:ARG:HG2	5:AF:46:GLN:N	2.26	0.51
5:AF:97:THR:HB	5:AF:98:GLU:OE1	2.11	0.51
41:DJ:18:VAL:CG1	41:DJ:54:ILE:HD11	2.39	0.51
40:BH:83:LYS:HD2	40:BH:91:PHE:HB2	1.93	0.51
52:DW:35:ILE:O	52:DW:37:VAL:N	2.44	0.51
52:BW:19:ARG:HE	52:BW:19:ARG:H	1.59	0.51
1:CA:1379:G:N7	6:CG:2:ARG:CZ	2.74	0.51
24:BI:77:VAL:HA	24:BI:80:LYS:CE	2.38	0.51
46:BU:39:ASN:HB3	46:BU:62:ALA:N	2.26	0.51
23:BB:26:G:H1'	23:BB:514:A:N6	2.26	0.51
25:BC:127:ASN:O	25:BC:190:THR:HA	2.11	0.51
37:DL:79:LEU:HB3	37:DL:115:GLU:O	2.11	0.51
48:DG:120:ILE:HB	48:DG:140:ILE:HG22	1.92	0.51
46:BU:96:LYS:O	46:BU:97:SER:HB3	2.11	0.51
38:DM:40:ARG:HB2	38:DM:93:VAL:CG2	2.40	0.51
38:DM:19:GLY:CA	38:DM:97:GLN:HB2	2.35	0.51
46:BU:20:LYS:HE2	46:BU:20:LYS:N	2.25	0.51
47:DF:102:LEU:O	47:DF:103:ILE:HB	2.11	0.51
47:BF:33:ILE:HG13	47:BF:95:MET:HG2	1.93	0.51
30:DY:35:VAL:HG22	30:DY:36:GLU:N	2.26	0.51
13:AP:6:LEU:HB3	13:AP:17:TYR:HB3	1.92	0.51
18:CB:53:LEU:HB2	18:CB:212:TYR:OH	2.11	0.51
47:DF:127:TYR:HB2	47:DF:155:ILE:HD13	1.93	0.51
1:CA:1004:A:H2'	1:CA:1005:A:O4'	2.10	0.51
1:CA:1025:U:H5''	1:CA:1026:G:O5'	2.10	0.51
23:BB:1275:A:H2'	23:BB:1276:A:O4'	2.11	0.51
23:BB:1791:A:H1'	25:BC:205:GLY:O	2.10	0.51
1:AA:202:G:H1'	1:AA:468:A:C8	2.45	0.51
23:BB:2885:G:H21	31:B0:31:LYS:HB3	1.72	0.51
31:B0:39:ARG:O	31:B0:40:HIS:HB2	2.11	0.51
24:BI:33:ASN:HD21	24:BI:64:ARG:NH1	2.04	0.51
16:CS:1:PRO:O	16:CS:2:ARG:HB2	2.11	0.51
11:AL:23:LEU:O	11:AL:25:ALA:N	2.44	0.51
43:BO:47:VAL:HG12	43:BO:48:LEU:N	2.22	0.51
23:DB:572:A:C5'	49:DR:80:ARG:HH22	2.21	0.51
23:BB:1820:U:H3	25:BC:197:ALA:HA	1.75	0.51
45:BS:70:LYS:O	45:BS:72:THR:N	2.44	0.51
27:DK:75:SER:HA	28:DP:72:VAL:O	2.11	0.51
1:CA:269:C:H2'	1:CA:270:A:H8	1.72	0.51
23:DB:2141:G:H2'	23:DB:2142:A:C8	2.46	0.51
1:CA:841:C:H5'	1:CA:843:U:OP2	2.11	0.51
1:CA:679:C:O2'	1:CA:680:C:H5'	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AK:63:GLN:HG3	10:AK:98:ALA:CB	2.41	0.51
23:BB:1656:C:H2'	23:BB:1657:U:C6	2.46	0.51
1:CA:764:C:C2'	1:CA:765:G:H5'	2.40	0.51
1:CA:862:C:O2'	1:CA:863:U:H5'	2.11	0.51
1:CA:715:A:H2'	1:CA:716:A:H8	1.76	0.51
44:BQ:9:ALA:C	44:BQ:11:ALA:N	2.64	0.51
21:AN:2:LYS:O	21:AN:6:LYS:HG3	2.11	0.51
33:D1:26:LYS:NZ	33:D1:52:LYS:HB3	2.26	0.51
23:DB:664:G:H2'	23:DB:665:U:C6	2.46	0.51
2:AC:21:TRP:CZ3	2:AC:23:ALA:HB2	2.46	0.51
23:DB:974:G:OP2	49:DR:78:ARG:HD3	2.11	0.51
23:DB:1599:U:H2'	23:DB:1600:C:H6	1.76	0.51
18:CB:27:LYS:C	18:CB:29:PHE:H	2.14	0.51
1:CA:90:C:H2'	1:CA:91:U:C6	2.46	0.51
1:AA:1089:G:C2'	1:AA:1090:U:H5'	2.41	0.51
23:DB:688:U:H2'	23:DB:689:A:H8	1.76	0.51
1:AA:154:U:H2'	1:AA:155:A:C8	2.46	0.51
40:BH:52:ALA:O	40:BH:56:ALA:HB3	2.11	0.51
50:BT:18:GLU:O	50:BT:20:ALA:N	2.33	0.51
23:DB:425:G:H2'	23:DB:426:C:H6	1.75	0.51
1:CA:547:A:H4'	1:CA:548:G:O5'	2.10	0.51
1:CA:62:U:O2'	1:CA:379:C:H1'	2.11	0.51
23:BB:1477:A:H2'	23:BB:1478:G:O4'	2.11	0.51
18:AB:133:ALA:O	18:AB:137:THR:HG23	2.11	0.51
1:AA:605:U:H2'	1:AA:606:G:C8	2.46	0.51
6:AG:53:SER:O	6:AG:55:LYS:HG2	2.11	0.51
33:D1:3:GLY:O	33:D1:5:ARG:HG2	2.11	0.51
23:BB:2630:G:O2'	23:BB:2631:G:H5'	2.10	0.51
20:AO:69:TYR:HA	20:AO:72:ARG:NE	2.26	0.51
18:CB:48:MET:HG3	18:CB:200:PRO:HD2	1.93	0.50
12:AM:33:LEU:CD1	12:AM:40:GLU:HA	2.41	0.50
50:BT:47:VAL:HB	50:BT:55:VAL:HG21	1.91	0.50
50:BT:53:VAL:HG12	50:BT:54:GLU:N	2.26	0.50
25:DC:140:VAL:HG11	25:DC:143:VAL:HG22	1.93	0.50
48:BG:10:VAL:HG12	48:BG:14:VAL:HG23	1.91	0.50
5:AF:80:PHE:CE1	25:BC:123:ILE:HD13	2.47	0.50
23:BB:2385:C:H2'	23:BB:2386:A:C8	2.46	0.50
10:AK:95:THR:HG23	10:AK:96:ILE:N	2.25	0.50
48:DG:93:TYR:HA	48:DG:106:LEU:HA	1.93	0.50
49:DR:39:LEU:CB	49:DR:49:ILE:HG12	2.39	0.50
33:B1:35:LEU:HD11	33:B1:37:LYS:HE3	1.93	0.50
24:DI:75:ALA:O	24:DI:79:LEU:HG	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:60:TRP:CZ3	29:BE:69:ARG:HA	2.43	0.50
49:BR:7:SER:OG	49:BR:12:HIS:HE1	1.94	0.50
1:AA:1313:U:OP2	16:AS:5:LYS:HG2	2.11	0.50
47:BF:40:GLY:HA2	47:BF:84:ILE:CA	2.38	0.50
47:BF:103:ILE:HD11	47:BF:174:PHE:CD1	2.46	0.50
26:DD:34:VAL:CG1	26:DD:94:GLN:H	2.24	0.50
29:BE:122:GLU:O	29:BE:123:LYS:HB2	2.10	0.50
28:DP:20:ARG:O	28:DP:46:VAL:HG21	2.10	0.50
1:AA:1339:A:H2'	1:AA:1340:A:H5'	1.94	0.50
23:DB:2052:A:N7	26:DD:146:ILE:HD11	2.26	0.50
23:DB:45:G:H5'	23:DB:46:G:OP1	2.11	0.50
18:AB:202:ASN:ND2	18:AB:203:ASP:N	2.59	0.50
39:BX:20:ASN:O	39:BX:24:GLU:HB3	2.11	0.50
23:BB:433:C:O2'	23:BB:434:U:H5'	2.11	0.50
47:BF:7:TYR:O	47:BF:12:VAL:HG23	2.11	0.50
12:CM:86:ARG:HA	12:CM:96:VAL:HG13	1.94	0.50
42:BN:9:GLN:O	42:BN:11:ASN:N	2.45	0.50
46:BU:86:PHE:CG	46:BU:87:GLU:N	2.77	0.50
23:BB:63:A:H2'	23:BB:63:A:OP2	2.11	0.50
23:DB:559:G:H21	44:DQ:51:GLN:HE22	1.59	0.50
45:BS:24:ILE:CG1	45:BS:36:LEU:HD11	2.41	0.50
6:AG:149:ALA:HB2	10:AK:60:PHE:HB3	1.93	0.50
23:DB:460:A:H2'	23:DB:461:C:O4'	2.11	0.50
23:DB:2840:C:H2'	23:DB:2841:C:C6	2.46	0.50
11:CL:107:LYS:C	11:CL:109:ARG:H	2.14	0.50
23:DB:2896:C:H2'	23:DB:2897:U:C6	2.46	0.50
23:DB:729:G:OP1	25:DC:12:ARG:HB2	2.10	0.50
23:DB:533:G:H5'	44:DQ:23:TYR:CE2	2.46	0.50
2:CC:33:ASP:HB2	21:CN:64:ARG:HG3	1.92	0.50
23:DB:1923:U:H2'	23:DB:1924:C:C6	2.45	0.50
23:BB:2699:C:H2'	23:BB:2700:A:C8	2.46	0.50
23:BB:2813:A:H2'	23:BB:2814:A:H8	1.75	0.50
17:CT:53:MET:HA	17:CT:56:ILE:HD12	1.93	0.50
23:DB:2041:U:H2'	23:DB:2042:A:C8	2.46	0.50
23:DB:1582:C:H3'	23:DB:1583:A:N3	2.26	0.50
1:AA:657:U:O2'	1:AA:658:C:H5'	2.11	0.50
23:BB:323:C:H6	23:BB:1205:A:N1	2.09	0.50
47:BF:47:LYS:HA	47:BF:50:ASP:OD1	2.11	0.50
23:DB:2257:U:O2'	23:DB:2258:C:H5'	2.11	0.50
7:CH:38:VAL:O	7:CH:42:GLU:HB2	2.10	0.50
23:DB:1742:U:H2'	23:DB:1743:G:C8	2.47	0.50
6:CG:72:VAL:HG12	6:CG:89:GLU:HG3	1.93	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1077:A:H4'	24:DI:93:ASN:OD1	2.10	0.50
43:BO:15:ARG:HH21	43:BO:95:SER:CB	2.24	0.50
47:DF:141:ASP:O	47:DF:144:LYS:N	2.40	0.50
23:BB:1785:A:H2'	23:BB:1787:A:N7	2.26	0.50
1:AA:620:C:C2	3:AD:131:ILE:HD13	2.46	0.50
8:CI:20:ILE:HA	8:CI:61:ASP:O	2.12	0.50
12:AM:13:HIS:HB2	12:AM:16:ILE:HG12	1.93	0.50
50:DT:40:LYS:HA	50:DT:43:ILE:CG2	2.41	0.50
25:DC:66:PHE:HB2	25:DC:150:GLY:O	2.10	0.50
40:BH:114:GLU:HB2	40:BH:132:PHE:CG	2.46	0.50
23:DB:2336:A:N6	52:DW:40:ARG:HD2	2.25	0.50
43:DO:36:TYR:HD2	43:DO:36:TYR:N	2.10	0.50
23:DB:1725:U:O2'	23:DB:1726:C:H5'	2.11	0.50
23:BB:27:G:H1'	23:BB:513:A:H61	1.76	0.50
2:AC:119:ILE:O	2:AC:123:LEU:HG	2.11	0.50
18:CB:20:ARG:HH11	18:CB:20:ARG:HG3	1.76	0.50
47:DF:135:ILE:HG13	47:DF:137:PHE:H	1.75	0.50
23:BB:1241:A:H2'	23:BB:1242:U:C5'	2.41	0.50
1:AA:1182:G:C4'	1:AA:1183:U:H5'	2.34	0.50
49:DR:60:LYS:H	49:DR:100:GLY:CA	2.23	0.50
18:CB:63:LYS:H	18:CB:224:ARG:HD3	1.76	0.50
47:BF:116:LEU:HB3	47:BF:176:PHE:HA	1.94	0.50
47:DF:32:LYS:HB2	47:DF:90:LEU:O	2.10	0.50
22:DA:43:C:H4'	47:DF:91:ARG:NE	2.26	0.50
23:DB:1794:A:O2'	23:DB:1795:C:H5'	2.11	0.50
28:BP:47:ILE:HG13	28:BP:48:ALA:N	2.23	0.50
47:DF:15:LEU:HD12	47:DF:27:VAL:HB	1.93	0.50
18:CB:148:GLY:O	18:CB:151:LYS:HG2	2.11	0.50
39:DX:20:ASN:O	39:DX:24:GLU:HB3	2.12	0.50
1:AA:1028:C:H2'	1:AA:1028:C:O2	2.11	0.50
39:BX:57:LEU:N	39:BX:59:GLU:OE2	2.44	0.50
17:CT:71:ALA:O	17:CT:74:HIS:HB2	2.11	0.50
25:BC:129:LEU:CD2	25:BC:133:ASN:HB2	2.40	0.50
4:CE:156:ARG:HB3	7:CH:43:GLY:O	2.12	0.50
23:BB:582:A:H2'	23:BB:583:G:C8	2.46	0.50
1:AA:890:G:O2'	1:AA:906:A:N6	2.44	0.50
27:DK:76:VAL:O	28:DP:71:ARG:HA	2.11	0.50
23:BB:1550:C:H2'	23:BB:1551:A:H8	1.76	0.50
1:AA:846:G:H2'	1:AA:846:G:N3	2.25	0.50
1:CA:815:A:H4'	1:CA:817:C:C5	2.46	0.50
25:BC:93:VAL:HG13	25:BC:94:LEU:N	2.25	0.50
23:DB:2901:C:O2'	23:DB:2902:C:H5'	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2896:C:H2'	23:BB:2897:U:H6	1.77	0.50
18:CB:205:ALA:O	18:CB:209:VAL:HG22	2.12	0.50
23:DB:2298:A:H2'	23:DB:2299:U:O4'	2.11	0.50
23:BB:1582:C:H2'	23:BB:1583:A:O4'	2.11	0.50
23:BB:2797:U:H4'	23:BB:2798:U:OP2	2.11	0.50
23:DB:1189:A:H2'	23:DB:1190:G:O4'	2.10	0.50
1:AA:224:U:H2'	1:AA:225:C:H6	1.75	0.50
1:CA:1075:U:H2'	1:CA:1076:U:H6	1.77	0.50
23:DB:438:G:H2'	23:DB:439:A:H8	1.76	0.50
27:DK:107:LEU:HD12	27:DK:107:LEU:H	1.76	0.50
1:CA:1387:G:H2'	1:CA:1388:C:C6	2.46	0.50
18:CB:166:ASP:OD2	18:CB:190:SER:HA	2.12	0.50
1:AA:1075:U:H2'	1:AA:1076:U:C6	2.47	0.50
43:DO:6:ALA:HB1	43:DO:10:ARG:HH11	1.77	0.50
14:CQ:32:ILE:HG23	14:CQ:33:TYR:CD2	2.46	0.50
45:DS:43:ALA:HA	45:DS:46:LEU:HD12	1.94	0.50
45:DS:46:LEU:O	45:DS:50:VAL:HG23	2.10	0.50
37:DL:119:PRO:HG3	37:DL:138:ALA:HB1	1.93	0.50
1:CA:620:C:C2	3:CD:131:ILE:HD13	2.46	0.50
1:CA:393:A:H2'	1:CA:394:G:H8	1.75	0.50
17:AT:4:LYS:HE3	17:AT:6:ALA:HB2	1.93	0.50
22:BA:117:G:N2	22:BA:118:C:H1'	2.26	0.50
17:AT:72:ALA:HA	17:AT:75:LYS:HD3	1.93	0.50
23:BB:2054:A:H2'	31:B0:4:GLN:OE1	2.12	0.50
44:DQ:109:VAL:HG12	44:DQ:113:LYS:HE3	1.92	0.50
23:BB:116:C:O2'	23:BB:117:G:H5'	2.10	0.50
1:AA:1051:C:H2'	1:AA:1052:U:C6	2.47	0.50
21:AN:68:ARG:NH1	21:AN:70:HIS:HB2	2.25	0.50
23:DB:2411:A:H2'	23:DB:2412:A:C8	2.47	0.50
1:AA:171:A:H2'	1:AA:172:A:C8	2.46	0.50
1:CA:1492:A:H2'	1:CA:1493:A:C8	2.46	0.50
1:CA:1130:A:H5'	8:CI:19:PHE:CE2	2.46	0.50
52:BW:49:ASN:ND2	52:BW:60:ALA:HA	2.26	0.50
50:BT:51:PHE:HB3	50:BT:53:VAL:HG23	1.93	0.50
50:BT:4:GLU:OE2	50:BT:5:GLU:HG2	2.11	0.50
4:AE:143:LEU:O	4:AE:146:MET:HG2	2.11	0.50
23:BB:141:G:H1	50:BT:1:MET:HA	1.76	0.50
23:DB:138:U:H2'	23:DB:140:C:C2	2.46	0.50
1:AA:1123:U:H4'	9:AJ:39:PRO:CG	2.41	0.50
46:BU:39:ASN:ND2	46:BU:62:ALA:HB3	2.26	0.50
26:BD:114:LYS:HB2	26:BD:116:LYS:HE3	1.93	0.50
24:DI:85:ILE:CD1	24:DI:137:LEU:HD21	2.41	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
30:BY:35:VAL:HG11	30:BY:37:ARG:HH12	1.76	0.50
1:AA:1270:G:H2'	1:AA:1271:A:C8	2.45	0.50
46:DU:54:PRO:HG2	46:DU:55:GLY:H	1.76	0.50
2:AC:49:ALA:HA	2:AC:74:ILE:HG21	1.92	0.50
29:DE:59:PRO:HB2	29:DE:67:ARG:NH2	2.21	0.50
23:BB:1102:C:H2'	23:BB:1103:A:H8	1.76	0.50
26:BD:34:VAL:CG1	26:BD:94:GLN:H	2.24	0.50
27:DK:16:ALA:HB3	27:DK:47:ILE:HD13	1.93	0.50
8:CI:87:MET:HB2	8:CI:94:ARG:NH1	2.25	0.50
23:BB:2073:C:H5''	25:BC:227:VAL:HG12	1.92	0.50
12:AM:95:PRO:CB	12:AM:99:GLN:HB2	2.42	0.50
16:CS:35:ARG:HB3	16:CS:50:VAL:CG1	2.40	0.50
16:CS:49:ALA:O	16:CS:56:HIS:HB3	2.12	0.50
51:DZ:32:ASN:O	51:DZ:33:LEU:O	2.29	0.50
48:DG:167:VAL:HG23	48:DG:168:VAL:N	2.23	0.50
51:BZ:53:ALA:O	51:BZ:55:GLY:N	2.42	0.50
23:BB:2388:A:H5'	23:BB:2389:G:OP2	2.11	0.50
45:BS:45:VAL:O	45:BS:48:LYS:HB3	2.12	0.50
14:CQ:83:LEU:HD22	14:CQ:83:LEU:N	2.26	0.50
23:BB:1737:G:H5'	23:BB:1738:G:OP2	2.12	0.50
4:CE:55:VAL:N	4:CE:56:PRO:CD	2.74	0.50
23:BB:2665:A:C2'	23:BB:2666:C:H5'	2.42	0.50
45:BS:17:VAL:C	45:BS:19:LEU:N	2.64	0.50
23:DB:908:C:O2'	23:DB:909:A:H5'	2.11	0.50
18:AB:18:GLN:HG2	18:AB:189:ASN:OD1	2.11	0.50
23:BB:1454:C:C5	42:BN:64:ARG:HG2	2.45	0.50
47:DF:72:SER:HB2	47:DF:80:GLN:OE1	2.11	0.50
23:BB:1534:U:H2'	23:BB:1536:C:C5	2.46	0.50
1:CA:1163:A:H2'	1:CA:1164:G:H8	1.76	0.50
14:CQ:5:ARG:C	14:CQ:5:ARG:HD3	2.32	0.50
23:DB:2861:U:H2'	23:DB:2862:G:C8	2.46	0.50
1:AA:107:G:O6	17:AT:9:ARG:HD3	2.12	0.50
23:BB:1312:U:H4'	23:BB:1313:U:O5'	2.11	0.50
23:DB:53:A:H2'	23:DB:54:G:O4'	2.11	0.50
41:DJ:58:ASN:HB3	41:DJ:61:LYS:HB2	1.94	0.50
1:CA:552:U:H2'	1:CA:553:A:C8	2.47	0.50
1:CA:420:U:H2'	1:CA:422:C:C5	2.46	0.50
4:CE:59:ILE:O	4:CE:63:MET:HG2	2.11	0.50
23:DB:409:G:H2'	23:DB:410:G:C8	2.46	0.50
37:BL:119:PRO:HG3	37:BL:138:ALA:HB1	1.94	0.50
23:BB:2704:C:H2'	23:BB:2705:A:O4'	2.11	0.50
23:BB:1674:G:N2	23:BB:1677:A:N1	2.53	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1340:U:O2	23:DB:1340:U:O4'	2.29	0.50
43:BO:2:ASP:OD2	43:BO:4:LYS:HB3	2.11	0.50
43:BO:4:LYS:C	43:BO:6:ALA:H	2.15	0.50
8:CI:98:ARG:HA	8:CI:103:VAL:HG13	1.94	0.50
1:AA:239:U:H5''	1:AA:239:U:H6	1.75	0.50
35:BV:61:LEU:O	35:BV:71:LYS:HA	2.11	0.50
35:DV:72:VAL:CG2	35:DV:91:PHE:HB3	2.42	0.50
2:CC:35:ASP:HB3	2:CC:39:ARG:NH1	2.26	0.50
5:AF:86:ARG:NH2	15:AR:63:TYR:HB3	2.26	0.50
26:DD:110:THR:HG21	26:DD:169:ARG:HH11	1.76	0.50
26:DD:171:THR:O	26:DD:172:VAL:HG23	2.10	0.50
26:DD:172:VAL:HG23	26:DD:194:PRO:HD3	1.94	0.50
23:BB:2330:G:H1'	52:BW:38:ARG:CB	2.40	0.50
29:DE:143:LEU:HB3	29:DE:146:VAL:HG21	1.93	0.50
8:AI:17:ARG:C	8:AI:64:ILE:HG23	2.30	0.50
46:BU:39:ASN:HB3	46:BU:62:ALA:H	1.76	0.50
6:CG:129:ASN:HA	6:CG:134:VAL:HG11	1.93	0.50
1:CA:1361:G:H2'	1:CA:1362:A:H5'	1.92	0.50
46:BU:98:ASN:OD1	46:BU:100:GLU:HB2	2.11	0.50
35:DV:44:HIS:HE1	35:DV:86:LEU:N	2.10	0.50
23:BB:321:U:O4'	29:BE:159:LEU:HG	2.11	0.50
44:BQ:63:ARG:HH12	44:BQ:96:ASP:CB	2.24	0.50
44:BQ:90:ASP:O	44:BQ:94:LEU:HB2	2.12	0.50
1:AA:1014:A:H5''	16:AS:13:HIS:HB3	1.93	0.50
23:BB:1203:U:H4'	37:BL:3:LEU:HD12	1.93	0.50
26:BD:5:VAL:H	26:BD:32:ASN:HD21	1.58	0.50
23:BB:1790:C:H2'	23:BB:1791:A:C8	2.47	0.50
23:BB:2598:A:H5''	25:BC:233:GLY:O	2.11	0.50
23:DB:2578:G:H4'	23:DB:2578:G:OP2	2.10	0.50
1:CA:960:U:O2'	1:CA:1223:C:H4'	2.11	0.50
1:CA:202:G:H1'	1:CA:468:A:C8	2.45	0.50
41:DJ:45:THR:OG1	41:DJ:48:VAL:HB	2.11	0.50
44:DQ:83:LYS:HG3	44:DQ:84:LYS:N	2.26	0.50
27:DK:101:GLY:O	27:DK:120:PRO:HB3	2.11	0.50
23:DB:580:U:O2'	23:DB:581:C:H5'	2.11	0.50
23:BB:2592:G:H2'	23:BB:2593:U:O4'	2.11	0.50
1:AA:1250:A:O3'	8:AI:68:GLY:HA2	2.11	0.50
48:DG:9:VAL:HG12	48:DG:11:PRO:HD3	1.94	0.50
40:DH:62:LEU:HD23	40:DH:62:LEU:H	1.76	0.50
23:DB:1000:A:H2'	23:DB:1001:A:H8	1.77	0.50
23:BB:2834:G:O6	23:BB:2879:A:H2'	2.11	0.50
23:DB:2104:C:H2'	23:DB:2105:U:H6	1.76	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:850:U:H2'	23:BB:851:C:C6	2.47	0.50
44:DQ:9:ALA:C	44:DQ:11:ALA:N	2.65	0.50
27:DK:21:CYS:SG	27:DK:39:ILE:HD12	2.51	0.50
23:BB:1704:C:H2'	23:BB:1705:A:C8	2.47	0.50
23:DB:1183:U:H2'	23:DB:1184:U:H6	1.74	0.50
29:DE:31:VAL:HG21	29:DE:104:ALA:HB2	1.94	0.50
1:CA:335:C:H2'	1:CA:336:A:C8	2.46	0.50
23:BB:2804:U:H2'	23:BB:2805:C:H6	1.77	0.50
36:B2:13:ASN:HD21	36:B2:46:LYS:NZ	2.09	0.50
23:BB:2861:U:H2'	23:BB:2862:G:C8	2.46	0.50
23:BB:927:A:H2'	23:BB:928:A:C8	2.47	0.50
23:DB:554:U:H2'	23:DB:555:G:O4'	2.11	0.50
1:CA:1081:A:H5'	4:CE:22:LYS:HD2	1.93	0.50
18:CB:93:HIS:HB2	18:CB:146:SER:HA	1.93	0.50
29:BE:37:ALA:O	29:BE:39:ALA:N	2.41	0.50
23:DB:95:A:H4'	39:DX:38:GLN:O	2.10	0.50
23:BB:1035:U:H2'	23:BB:1036:G:H8	1.77	0.50
22:DA:17:C:O2'	22:DA:18:G:H5'	2.11	0.50
40:BH:25:TYR:CD1	40:BH:30:LEU:HG	2.46	0.50
23:DB:65:U:H2'	23:DB:66:C:H6	1.77	0.50
23:DB:1849:G:H2'	23:DB:1850:G:H8	1.77	0.50
9:CJ:59:LYS:HB2	9:CJ:62:ARG:NH2	2.26	0.50
8:CI:18:VAL:HG21	8:CI:82:ILE:N	2.26	0.50
8:CI:12:LYS:H	8:CI:105:ARG:HH12	1.59	0.50
23:DB:675:A:H5'	29:DE:60:TRP:HE1	1.75	0.50
23:BB:1431:A:H2'	23:BB:1432:G:C8	2.46	0.50
25:DC:68:ARG:NE	25:DC:128:THR:OG1	2.45	0.50
25:DC:158:GLY:N	25:DC:194:VAL:HG13	2.27	0.50
1:AA:238:A:C2'	1:AA:239:U:H5''	2.41	0.50
26:BD:105:LYS:H	26:BD:106:LYS:HZ3	1.58	0.50
29:BE:143:LEU:HB3	29:BE:146:VAL:HG21	1.94	0.50
5:CF:5:GLU:HG3	5:CF:63:ASN:HD21	1.77	0.50
5:AF:38:ARG:HD3	5:AF:97:THR:CA	2.41	0.50
52:DW:19:ARG:HE	52:DW:19:ARG:H	1.60	0.50
29:DE:108:ILE:HD13	29:DE:108:ILE:O	2.12	0.50
40:BH:40:THR:O	40:BH:42:LYS:N	2.45	0.50
48:DG:120:ILE:HG13	48:DG:140:ILE:HG22	1.93	0.50
26:BD:121:THR:C	26:BD:123:LYS:H	2.14	0.50
45:BS:66:ILE:HG12	45:BS:67:ASP:N	2.26	0.50
40:DH:119:ASN:CG	40:DH:121:VAL:HG22	2.31	0.50
23:BB:996:A:H4'	44:BQ:91:ARG:HG2	1.94	0.50
49:DR:64:VAL:HB	49:DR:95:ASP:HB3	1.93	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1057:A:H62	23:BB:1086:A:H2'	1.77	0.50
23:BB:1913:A:H4'	23:BB:1914:C:C5'	2.35	0.50
18:AB:174:GLU:O	18:AB:178:LEU:HG	2.11	0.50
13:AP:72:ALA:O	13:AP:75:ILE:HG13	2.09	0.50
9:AJ:57:VAL:HG22	9:AJ:58:ASN:H	1.75	0.50
47:DF:7:TYR:O	47:DF:12:VAL:HG23	2.10	0.50
29:DE:29:HIS:O	29:DE:33:VAL:HG23	2.12	0.50
34:D3:54:LEU:HG	34:D3:58:ILE:CD1	2.39	0.50
39:DX:49:ASP:O	39:DX:53:VAL:HG23	2.11	0.50
40:DH:3:VAL:CG2	40:DH:36:ALA:HB1	2.42	0.50
52:DW:47:GLY:HA3	52:DW:80:SER:CA	2.37	0.50
39:BX:17:GLU:HB3	39:BX:53:VAL:HG11	1.93	0.50
39:BX:21:LEU:HD21	39:BX:50:VAL:HG11	1.92	0.50
28:BP:61:ARG:CB	28:BP:61:ARG:HH21	2.22	0.50
29:BE:29:HIS:HE2	37:BL:8:PRO:HG3	1.75	0.50
23:BB:1507:C:H3'	23:BB:1508:A:H4'	1.93	0.50
23:BB:460:A:H2'	23:BB:461:C:O4'	2.11	0.50
23:DB:2722:G:O2'	23:DB:2723:C:H5'	2.11	0.50
32:D4:2:LYS:HD3	32:D4:4:ARG:NH2	2.27	0.50
42:BN:96:ARG:HB3	42:BN:98:LEU:HD22	1.92	0.50
1:CA:985:C:O2'	1:CA:986:U:H5'	2.11	0.50
23:DB:1439:A:N7	23:DB:1440:U:C2	2.80	0.50
1:CA:251:G:N3	1:CA:266:G:O6	2.44	0.50
23:DB:590:A:H2'	23:DB:591:U:H6	1.75	0.50
1:CA:955:U:C1'	1:CA:1227:A:H61	2.23	0.50
23:BB:2845:U:O2'	23:BB:2846:G:H5'	2.10	0.50
40:DH:60:GLU:HA	40:DH:60:GLU:OE1	2.10	0.50
23:DB:154:U:H2'	23:DB:155:A:H8	1.77	0.50
23:BB:224:U:O4	23:BB:420:C:H5'	2.11	0.50
23:BB:1454:C:H5'	42:BN:63:ARG:NE	2.27	0.50
23:BB:2247:A:O2'	23:BB:2248:C:H5'	2.11	0.50
23:DB:2071:A:H2'	23:DB:2072:C:C6	2.46	0.50
1:AA:1519:A:H3'	1:AA:1520:C:C5'	2.42	0.50
23:DB:1704:C:H2'	23:DB:1705:A:C8	2.47	0.50
1:AA:862:C:O2'	1:AA:863:U:H5'	2.10	0.50
26:DD:38:LYS:HD3	26:DD:45:TYR:OH	2.12	0.50
11:CL:14:LYS:HD3	11:CL:14:LYS:N	2.26	0.50
23:BB:1586:A:H2'	23:BB:1587:G:O4'	2.11	0.50
23:DB:2859:G:H2'	23:DB:2860:A:C8	2.45	0.50
1:AA:33:A:H2'	1:AA:34:C:H6	1.76	0.50
1:CA:224:U:H2'	1:CA:225:C:H6	1.77	0.50
23:DB:2412:A:H2'	23:DB:2413:G:O4'	2.11	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:68:G:H5'	1:AA:171:A:O2'	2.11	0.50
1:AA:708:C:H4'	10:AK:38:GLY:HA3	1.94	0.50
23:BB:688:U:O2'	23:BB:689:A:H5'	2.11	0.50
1:CA:1122:U:H2'	1:CA:1123:U:C6	2.47	0.50
8:CI:122:ARG:HG3	8:CI:122:ARG:HH11	1.76	0.50
23:BB:1767:G:O2'	23:BB:1768:C:H5'	2.11	0.50
23:DB:910:A:H2'	23:DB:911:A:C8	2.47	0.50
44:DQ:42:GLY:HA3	49:DR:75:VAL:HG21	1.94	0.50
1:AA:621:A:H2'	1:AA:622:A:C8	2.46	0.50
1:CA:981:U:H4'	21:CN:60:ARG:CD	2.41	0.50
9:AJ:7:ARG:O	9:AJ:100:ILE:HB	2.12	0.50
23:BB:2385:C:H2'	23:BB:2386:A:H8	1.77	0.50
14:AQ:45:VAL:CG1	14:AQ:46:HIS:H	2.17	0.50
40:BH:143:ILE:O	40:BH:144:VAL:HG23	2.11	0.50
40:BH:83:LYS:H	40:BH:148:ALA:HA	1.77	0.50
40:BH:68:ARG:CZ	40:BH:72:ILE:HD13	2.42	0.50
29:DE:175:ILE:HD11	29:DE:180:LEU:HD11	1.94	0.50
29:DE:108:ILE:CD1	29:DE:181:ILE:HG13	2.41	0.50
23:BB:139:U:O2'	23:BB:141:G:N2	2.44	0.50
37:DL:123:ARG:HA	37:DL:143:GLU:CB	2.31	0.50
43:BO:36:TYR:HD2	43:BO:36:TYR:N	2.10	0.50
8:AI:30:ASN:C	8:AI:32:ARG:H	2.14	0.50
37:BL:92:LEU:HD22	37:BL:124:GLY:HA3	1.92	0.50
43:DO:34:HIS:O	43:DO:35:ILE:HG12	2.12	0.50
1:AA:1124:G:H5''	9:AJ:37:ARG:O	2.12	0.50
1:CA:8:A:N6	3:CD:53:GLN:HE22	2.10	0.50
23:BB:2748:A:H1'	48:BG:66:THR:CB	2.40	0.50
28:DP:9:GLN:HA	28:DP:12:MET:SD	2.51	0.50
46:DU:73:ASN:HD22	46:DU:74:ALA:N	2.10	0.50
39:BX:1:MET:O	39:BX:5:GLU:HG2	2.10	0.50
1:AA:1005:A:H2'	1:AA:1006:G:O4'	2.11	0.50
47:DF:116:LEU:HB3	47:DF:176:PHE:HA	1.93	0.50
46:DU:11:ILE:O	46:DU:11:ILE:HD13	2.12	0.50
49:BR:41:ILE:HD13	49:BR:41:ILE:N	2.27	0.50
38:BM:94:ALA:O	38:BM:96:ILE:HG23	2.11	0.50
18:AB:163:ILE:HA	18:AB:185:ILE:HD12	1.94	0.50
18:AB:161:PHE:CD2	18:AB:183:PHE:HB3	2.44	0.50
41:BJ:25:LEU:HD13	41:BJ:26:GLY:N	2.25	0.50
3:AD:89:LEU:HD22	3:AD:199:ILE:HD11	1.93	0.50
47:DF:90:LEU:C	47:DF:91:ARG:HD3	2.32	0.50
6:AG:45:ALA:HB1	6:AG:120:ALA:HB2	1.92	0.50
24:DI:21:PRO:CB	24:DI:22:PRO:HD3	2.38	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:DD:124:ARG:HA	26:DD:165:MET:CE	2.42	0.50
37:BL:57:LEU:CB	37:BL:60:ARG:HH11	2.21	0.50
18:CB:98:GLY:C	18:CB:100:LEU:H	2.15	0.50
27:DK:20:MET:C	27:DK:41:ILE:HD12	2.32	0.50
1:AA:554:A:H5'	11:AL:25:ALA:CB	2.38	0.50
23:DB:543:G:C4	23:DB:544:C:H1'	2.45	0.50
51:BZ:27:ARG:HD3	51:BZ:28:ARG:H	1.77	0.50
23:BB:919:U:H6	23:BB:919:U:O5'	1.94	0.50
23:BB:718:A:H3'	23:BB:719:C:H6	1.76	0.50
1:AA:502:A:H4'	1:AA:550:G:H4'	1.94	0.50
23:DB:606:U:OP1	29:DE:99:LYS:HD2	2.11	0.50
21:AN:26:LEU:HA	21:AN:29:ILE:HD12	1.94	0.50
2:CC:72:PRO:O	2:CC:76:ILE:HG12	2.11	0.50
1:CA:600:A:OP2	7:CH:87:ARG:HG2	2.11	0.50
23:BB:1461:C:H2'	23:BB:1462:C:C6	2.47	0.50
21:CN:79:SER:O	21:CN:83:VAL:HG23	2.11	0.50
1:AA:469:C:H2'	1:AA:470:C:C6	2.47	0.50
12:AM:92:ARG:HA	12:AM:92:ARG:CZ	2.42	0.50
23:DB:2299:U:H2'	23:DB:2300:C:H6	1.75	0.50
52:BW:73:PRO:C	52:BW:75:ASN:H	2.14	0.50
23:DB:68:G:H2'	23:DB:69:C:H6	1.77	0.50
2:AC:142:ARG:HG2	2:AC:143:LEU:HD23	1.94	0.50
50:DT:61:LEU:HD21	50:DT:82:LYS:HD3	1.93	0.50
1:AA:635:A:H2'	1:AA:636:U:C6	2.46	0.50
50:BT:18:GLU:C	50:BT:20:ALA:H	2.12	0.50
48:BG:41:GLU:HB2	48:BG:52:GLY:O	2.12	0.50
1:AA:728:A:H2'	1:AA:729:A:C8	2.46	0.50
23:BB:1915:U:H2'	23:BB:1916:A:C8	2.47	0.50
1:AA:113:G:H2'	1:AA:114:U:C6	2.47	0.50
23:BB:464:U:H1'	23:BB:686:U:H5	1.76	0.50
23:BB:2037:A:H2'	23:BB:2038:G:C8	2.47	0.50
24:BI:72:THR:HG21	24:BI:111:THR:O	2.12	0.50
23:BB:2708:G:H2'	23:BB:2709:G:H8	1.77	0.50
29:DE:98:LYS:O	29:DE:102:ARG:HG2	2.12	0.50
7:AH:17:GLN:OE1	7:AH:69:ALA:HB1	2.11	0.50
18:CB:121:GLN:HG2	18:CB:121:GLN:O	2.12	0.50
39:BX:9:LYS:HE3	39:BX:9:LYS:HA	1.92	0.50
23:DB:527:C:O2	23:DB:527:C:O4'	2.28	0.50
23:BB:2309:A:H2'	23:BB:2309:A:N3	2.27	0.50
26:BD:36:GLN:O	26:BD:36:GLN:HG3	2.12	0.50
1:CA:144:G:O2'	1:CA:145:G:H5'	2.12	0.50
23:BB:598:U:H2'	23:BB:599:A:H8	1.77	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AJ:8:ILE:CD1	9:AJ:75:ASP:HA	2.42	0.50
19:CU:42:THR:HB	19:CU:46:ARG:NE	2.26	0.50
50:DT:54:GLU:CB	50:DT:88:LYS:HB2	2.42	0.50
9:CJ:70:HIS:N	9:CJ:70:HIS:CD2	2.79	0.50
1:CA:1117:A:H4'	8:CI:105:ARG:CZ	2.42	0.50
23:DB:1799:G:C5	25:DC:175:LEU:HD13	2.46	0.50
26:BD:108:ASP:OD2	26:BD:206:ALA:HA	2.12	0.50
5:CF:86:ARG:HH12	5:CF:88:MET:HG3	1.76	0.50
23:DB:2328:A:H2'	23:DB:2329:U:H6	1.76	0.50
23:BB:2271:G:H2'	23:BB:2272:U:C6	2.46	0.50
23:BB:138:U:O3'	23:BB:139:U:H2'	2.12	0.50
1:AA:1148:U:C2'	1:AA:1149:C:H5'	2.42	0.50
12:AM:102:LYS:HG3	12:AM:103:THR:N	2.26	0.50
25:BC:141:HIS:HB3	25:BC:190:THR:O	2.11	0.50
10:CK:95:THR:HG23	10:CK:96:ILE:N	2.27	0.50
26:BD:124:ARG:HA	26:BD:165:MET:CE	2.41	0.50
49:DR:7:SER:OG	49:DR:12:HIS:HE1	1.95	0.50
3:AD:116:LEU:HD21	3:AD:153:ARG:HD3	1.92	0.50
30:BY:35:VAL:HG22	30:BY:36:GLU:N	2.26	0.50
44:BQ:87:VAL:CB	49:BR:52:PRO:HG3	2.39	0.50
13:AP:21:VAL:HG21	13:AP:60:TRP:CD1	2.46	0.50
3:AD:71:PHE:CE1	3:AD:89:LEU:HD11	2.47	0.50
10:CK:46:ALA:HB1	10:CK:61:ALA:HB1	1.93	0.50
17:AT:71:ALA:O	17:AT:74:HIS:HB2	2.12	0.50
29:DE:5:LEU:HB2	29:DE:10:SER:H	1.77	0.50
13:CP:6:LEU:HB3	13:CP:17:TYR:HB3	1.94	0.50
2:CC:172:VAL:HG12	2:CC:174:LEU:CD1	2.41	0.50
10:AK:28:ASN:HD22	10:AK:46:ALA:HB3	1.77	0.50
26:DD:116:LYS:HB3	26:DD:118:PHE:CE2	2.47	0.50
21:CN:1:ALA:HB1	21:CN:6:LYS:HZ1	1.74	0.50
18:CB:96:LEU:O	18:CB:99:MET:HG2	2.12	0.50
28:DP:61:ARG:CB	28:DP:61:ARG:HH21	2.23	0.50
23:BB:2848:G:H1'	23:BB:2868:A:N6	2.26	0.50
34:B3:54:LEU:O	34:B3:58:ILE:HG13	2.12	0.50
23:BB:2181:U:H2'	23:BB:2182:U:H6	1.76	0.50
45:DS:81:SER:HA	45:DS:99:ARG:HA	1.94	0.50
27:BK:116:ILE:HG13	27:BK:117:SER:N	2.27	0.50
1:AA:82:G:C6	1:AA:88:U:O2	2.64	0.50
29:BE:28:VAL:HG23	29:BE:29:HIS:N	2.26	0.50
11:CL:30:ARG:HB3	11:CL:57:THR:CG2	2.41	0.50
27:BK:13:ASN:HD21	27:BK:98:ARG:H	1.59	0.50
23:DB:1507:C:H2'	23:DB:1508:A:H4'	1.94	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1060:U:H2'	1:AA:1061:G:C8	2.47	0.50
1:AA:1305:G:H1'	1:AA:1332:A:N6	2.27	0.50
3:AD:56:GLU:O	3:AD:60:VAL:HG12	2.11	0.50
23:BB:1547:C:H2'	23:BB:1548:A:C8	2.47	0.50
23:BB:1883:U:H2'	23:BB:1884:G:H1'	1.94	0.50
1:CA:1519:A:H3'	1:CA:1520:C:C5'	2.41	0.50
3:CD:97:LEU:O	3:CD:100:VAL:HG23	2.12	0.50
23:DB:2199:A:H5''	23:DB:2200:C:H5	1.77	0.50
47:BF:72:SER:O	47:BF:78:ILE:HB	2.11	0.50
1:CA:1463:U:H2'	1:CA:1464:U:C6	2.47	0.50
1:CA:162:A:H2'	1:CA:163:C:O4'	2.11	0.50
23:BB:2078:C:H2'	23:BB:2079:U:H6	1.76	0.50
1:AA:158:G:H1	1:AA:163:C:H42	1.60	0.50
22:DA:94:A:O2'	22:DA:95:U:H5'	2.12	0.50
1:CA:1434:A:H2'	1:CA:1435:G:C8	2.47	0.50
35:BV:53:LYS:HA	35:BV:53:LYS:NZ	2.26	0.50
1:CA:993:G:H21	1:CA:996:A:N6	2.09	0.50
31:B0:2:VAL:HG12	31:B0:3:GLN:H	1.77	0.50
23:BB:1320:C:H5	23:BB:1329:U:H5''	1.76	0.50
23:BB:190:A:H5''	23:BB:204:A:H61	1.76	0.50
26:DD:79:LEU:HD22	26:DD:79:LEU:N	2.27	0.50
23:DB:2063:C:O2	23:DB:2450:A:N1	2.45	0.50
23:DB:794:A:H2'	23:DB:795:C:C6	2.47	0.50
23:BB:523:C:H4'	23:BB:540:C:O2	2.11	0.50
24:BI:23:VAL:HG23	24:BI:24:GLY:H	1.76	0.50
20:AO:69:TYR:CZ	20:AO:73:LYS:HG3	2.46	0.50
1:CA:1438:G:C2'	1:CA:1439:G:H5'	2.42	0.50
23:DB:1786:A:H1'	23:DB:1938:A:N6	2.27	0.50
29:BE:72:SER:C	29:BE:74:LYS:H	2.13	0.50
23:BB:454:A:H3'	23:BB:455:C:H5'	1.94	0.50
23:DB:2822:G:H2'	23:DB:2823:A:H5''	1.92	0.50
23:BB:1189:A:H2'	23:BB:1190:G:O4'	2.10	0.50
23:DB:834:G:O2'	23:DB:835:C:H5'	2.12	0.50
1:CA:1432:G:H1'	1:CA:1468:A:N6	2.26	0.50
23:DB:1083:U:H2'	23:DB:1085:A:OP2	2.12	0.50
14:CQ:80:LYS:HZ3	14:CQ:81:ALA:N	2.10	0.50
2:AC:54:ILE:O	2:AC:54:ILE:HG12	2.11	0.50
23:BB:1315:C:H2'	23:BB:1316:U:C6	2.47	0.50
23:BB:2257:U:O2'	23:BB:2258:C:H5'	2.12	0.50
1:AA:618:C:H1'	13:AP:14:ARG:NH1	2.27	0.50
23:DB:1750:G:H2'	23:DB:1751:U:C6	2.46	0.50
5:CF:10:VAL:HA	5:CF:84:VAL:HA	1.93	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1958:C:H2'	23:BB:1959:G:H8	1.75	0.50
23:DB:1098:A:C3'	24:DI:3:LYS:HA	2.24	0.50
1:AA:1238:A:N7	1:AA:1303:C:H1'	2.27	0.50
48:BG:14:VAL:O	48:BG:14:VAL:HG23	2.12	0.50
23:DB:26:G:H1'	23:DB:514:A:N6	2.26	0.50
14:CQ:7:LEU:O	14:CQ:60:ILE:HD13	2.12	0.50
40:BH:114:GLU:HG3	40:BH:132:PHE:CZ	2.47	0.50
40:BH:140:ALA:C	40:BH:141:LYS:HD3	2.32	0.50
42:BN:72:ASP:C	42:BN:74:GLU:H	2.16	0.50
23:DB:144:A:H2'	23:DB:145:C:C6	2.47	0.50
48:BG:84:LYS:CB	48:BG:132:LEU:H	2.24	0.50
49:BR:3:ALA:HB1	49:BR:59:ILE:HD13	1.92	0.50
46:DU:73:ASN:C	46:DU:75:ALA:H	2.16	0.50
49:DR:4:VAL:CG2	49:DR:39:LEU:HG	2.42	0.50
49:DR:41:ILE:HD13	49:DR:41:ILE:N	2.26	0.50
3:AD:115:GLN:HG3	3:AD:119:HIS:CE1	2.47	0.50
23:DB:1059:G:H2'	23:DB:1060:U:C5	2.47	0.50
27:DK:88:ASN:HD22	27:DK:89:ASN:H	1.52	0.50
22:DA:7:G:H4'	43:DO:29:HIS:CD2	2.47	0.50
47:DF:115:GLY:HA2	47:DF:177:ARG:NH1	2.20	0.50
28:BP:1:SER:H1	28:BP:4:ILE:HD12	1.77	0.50
37:DL:116:VAL:HG13	37:DL:117:THR:N	2.21	0.50
31:D0:39:ARG:O	31:D0:40:HIS:HB2	2.11	0.50
1:CA:920:U:H2'	1:CA:921:U:H6	1.74	0.50
26:DD:146:ILE:HD12	26:DD:155:VAL:HG21	1.93	0.50
47:BF:134:GLN:HB3	47:BF:149:ARG:CG	2.41	0.50
15:CR:41:SER:HB3	15:CR:51:GLN:HG2	1.94	0.50
46:BU:51:LEU:N	46:BU:53:GLN:NE2	2.60	0.50
4:AE:19:ARG:O	4:AE:20:VAL:HB	2.11	0.50
43:BO:49:VAL:HG11	43:BO:82:ALA:CA	2.40	0.50
40:DH:14:SER:HB2	40:DH:17:ASP:CB	2.42	0.50
31:B0:48:TYR:C	31:B0:50:GLY:H	2.15	0.50
16:CS:30:LEU:HG	16:CS:47:THR:O	2.11	0.50
23:DB:2743:U:H2'	23:DB:2744:G:H5''	1.93	0.50
14:CQ:83:LEU:H	14:CQ:83:LEU:CD2	2.24	0.50
8:AI:112:ARG:HD3	8:AI:114:LYS:HZ3	1.77	0.50
11:AL:107:LYS:C	11:AL:109:ARG:H	2.15	0.50
1:AA:764:C:N4	1:AA:812:G:H1	2.10	0.50
1:AA:22:G:H2'	1:AA:23:C:C6	2.47	0.50
18:AB:166:ASP:CG	18:AB:190:SER:HA	2.32	0.50
1:AA:712:A:O2'	1:AA:713:G:H5'	2.12	0.50
1:AA:715:A:H2'	1:AA:716:A:H8	1.74	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BO:100:HIS:C	43:BO:104:GLN:HB2	2.32	0.50
1:CA:801:U:H2'	1:CA:802:A:C8	2.47	0.50
1:AA:1116:U:O2'	1:AA:1117:A:H5'	2.12	0.50
1:CA:744:C:H2'	1:CA:745:G:C8	2.47	0.50
27:DK:51:LYS:HG3	27:DK:52:VAL:N	2.26	0.50
23:DB:1629:U:O2	23:DB:2698:U:H5''	2.12	0.50
23:DB:2700:A:H2'	23:DB:2701:U:H6	1.76	0.50
8:CI:93:LEU:N	8:CI:93:LEU:HD23	2.27	0.50
23:DB:2798:U:H4'	23:DB:2800:A:C2	2.47	0.50
9:CJ:37:ARG:HE	9:CJ:37:ARG:C	2.14	0.50
23:DB:1164:C:H2'	23:DB:1165:A:C8	2.46	0.50
46:BU:13:LEU:HA	46:BU:18:LYS:CE	2.42	0.50
25:BC:146:LYS:HB2	25:BC:149:LYS:HB2	1.94	0.50
23:BB:538:A:H2'	23:BB:539:G:O4'	2.12	0.50
23:BB:2027:G:O2'	23:BB:2028:U:H5'	2.12	0.50
1:AA:605:U:H2'	1:AA:606:G:H8	1.77	0.50
23:BB:1340:U:H3'	23:BB:1341:G:H5'	1.93	0.50
1:AA:62:U:O2'	1:AA:379:C:H1'	2.12	0.50
40:BH:86:ASP:O	40:BH:87:GLU:HG3	2.11	0.50
23:BB:1661:G:O2'	23:BB:1662:U:H5'	2.11	0.50
47:BF:163:GLU:HA	47:BF:166:ARG:HH11	1.77	0.50
27:BK:79:PHE:CD1	27:BK:79:PHE:N	2.80	0.50
5:AF:73:GLU:O	5:AF:77:THR:HG23	2.11	0.50
23:DB:1429:G:O2'	23:DB:1430:G:H5'	2.12	0.50
19:AU:42:THR:C	19:AU:46:ARG:HE	2.14	0.50
29:DE:62:GLN:HG2	29:DE:63:LYS:H	1.75	0.50
2:CC:38:VAL:O	2:CC:42:LEU:HD23	2.12	0.50
5:AF:5:GLU:HG3	5:AF:63:ASN:ND2	2.26	0.50
5:AF:6:ILE:HG23	5:AF:62:MET:HB3	1.92	0.50
5:AF:6:ILE:HD12	5:AF:7:VAL:N	2.27	0.50
48:BG:89:VAL:HG12	48:BG:90:GLY:N	2.26	0.50
37:DL:79:LEU:HD12	37:DL:112:LEU:HB2	1.93	0.50
1:AA:9:G:H2'	1:AA:10:A:H8	1.77	0.50
47:DF:109:ARG:HB3	47:DF:135:ILE:HD12	1.94	0.50
3:CD:145:ARG:HH22	3:CD:147:LYS:HE2	1.77	0.50
28:BP:3:ILE:HG23	28:BP:4:ILE:N	2.26	0.50
47:BF:33:ILE:HD13	47:BF:98:PHE:HD2	1.75	0.50
18:AB:184:ALA:HB3	18:AB:195:VAL:CG2	2.42	0.50
20:AO:33:THR:HG23	20:AO:63:ARG:HH12	1.77	0.50
47:DF:3:LEU:HB2	47:DF:100:GLU:OE1	2.12	0.50
6:AG:117:LEU:HD23	6:AG:120:ALA:HB3	1.94	0.50
42:DN:28:LEU:N	42:DN:34:ILE:HD11	2.27	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:558:U:P	41:DJ:113:PRO:HG2	2.51	0.50
2:AC:10:ARG:HH11	2:AC:10:ARG:HG3	1.77	0.50
23:DB:2848:G:H1'	23:DB:2868:A:N6	2.27	0.50
27:DK:118:LEU:O	27:DK:120:PRO:HD2	2.12	0.50
6:CG:26:VAL:CA	6:CG:42:VAL:HG21	2.41	0.50
11:AL:2:THR:OG1	11:AL:5:GLN:HB2	2.12	0.50
23:BB:935:C:O2'	23:BB:936:A:H5'	2.10	0.50
23:DB:847:U:O4'	23:DB:847:U:O2	2.29	0.50
23:DB:969:G:H2'	23:DB:970:U:C6	2.47	0.50
21:CN:30:ILE:HA	21:CN:34:ASN:HB2	1.93	0.50
1:AA:1489:G:H2'	1:AA:1490:U:H6	1.76	0.50
1:CA:1271:A:H2'	1:CA:1272:G:H8	1.76	0.50
1:AA:492:C:H2'	1:AA:493:A:N3	2.26	0.50
2:CC:33:ASP:OD2	21:CN:64:ARG:HB3	2.12	0.50
21:AN:86:ALA:HA	21:AN:91:GLU:HG3	1.93	0.50
9:AJ:67:ILE:HA	21:AN:94:GLY:O	2.12	0.50
34:D3:25:HIS:HB2	34:D3:43:LEU:O	2.11	0.50
23:BB:2758:A:C2'	23:BB:2759:G:H5'	2.41	0.50
23:DB:1210:G:H5'	23:DB:1212:G:H5'	1.94	0.50
23:DB:2194:U:H2'	23:DB:2195:U:H6	1.77	0.50
20:CO:31:LEU:HD22	20:CO:31:LEU:O	2.12	0.50
23:DB:2615:U:C2	31:D0:3:GLN:HA	2.46	0.50
1:CA:605:U:H2'	1:CA:606:G:H8	1.77	0.50
23:BB:1316:U:O2'	23:BB:1317:G:H5'	2.11	0.50
18:CB:104:LYS:O	18:CB:108:GLN:HG2	2.12	0.50
23:BB:1349:C:H2'	23:BB:1350:C:H6	1.77	0.50
1:CA:626:G:H2'	1:CA:627:G:C8	2.47	0.50
23:BB:642:U:O2	23:BB:644:A:H3'	2.11	0.50
23:BB:2778:A:O2'	23:BB:2781:A:H5'	2.12	0.50
23:BB:2315:G:H2'	23:BB:2316:G:H8	1.76	0.50
23:BB:2156:G:H8	23:BB:2156:G:O5'	1.95	0.50
1:AA:538:G:OP2	11:AL:111:GLN:HB2	2.11	0.50
23:DB:1275:A:H2'	23:DB:1276:A:O4'	2.11	0.50
17:CT:72:ALA:HA	17:CT:75:LYS:HD3	1.94	0.50
23:BB:1973:G:O2'	23:BB:1974:C:H5'	2.12	0.50
23:BB:1054:A:H2'	23:BB:1055:G:C8	2.46	0.50
18:CB:48:MET:HB3	18:CB:199:ILE:HA	1.93	0.49
50:DT:53:VAL:HG12	50:DT:54:GLU:N	2.26	0.49
52:BW:59:PHE:O	52:BW:60:ALA:HB3	2.12	0.49
1:CA:1349:A:N6	1:CA:1373:G:H1'	2.26	0.49
26:BD:104:VAL:HG12	26:BD:106:LYS:HE2	1.94	0.49
5:CF:66:ALA:HB1	5:CF:70:VAL:HG21	1.94	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BW:35:ILE:O	52:BW:37:VAL:N	2.45	0.49
4:CE:76:ASN:HB2	4:CE:81:GLN:NE2	2.26	0.49
8:AI:34:LEU:H	8:AI:36:GLN:NE2	2.10	0.49
23:BB:28:A:N6	23:BB:512:G:O2'	2.45	0.49
28:DP:3:ILE:HG23	28:DP:4:ILE:N	2.27	0.49
49:BR:61:ALA:HB2	49:BR:98:ILE:HA	1.93	0.49
1:AA:1001:C:H2'	1:AA:1002:G:C8	2.47	0.49
23:BB:674:G:OP1	29:BE:71:GLY:HA3	2.12	0.49
46:DU:10:VAL:HA	46:DU:70:ALA:O	2.12	0.49
1:AA:954:G:H2'	1:AA:955:U:H6	1.76	0.49
37:DL:116:VAL:HG22	37:DL:117:THR:N	2.27	0.49
23:DB:2886:A:N6	31:D0:39:ARG:NE	2.54	0.49
22:BA:43:C:C2'	22:BA:44:G:H5''	2.41	0.49
18:AB:103:TRP:O	18:AB:107:ARG:HG2	2.12	0.49
21:AN:80:ARG:HG3	21:AN:81:ILE:N	2.26	0.49
39:DX:1:MET:O	39:DX:5:GLU:HG2	2.12	0.49
47:DF:13:LYS:HA	47:DF:16:MET:HG2	1.94	0.49
23:DB:126:A:H5'	36:D2:19:ARG:CD	2.42	0.49
27:BK:17:ARG:HH11	27:BK:45:GLU:HG3	1.76	0.49
1:AA:994:A:H2	21:AN:4:SER:HA	1.76	0.49
47:BF:8:LYS:HA	47:BF:12:VAL:HG21	1.94	0.49
47:BF:12:VAL:O	47:BF:16:MET:HG2	2.12	0.49
23:BB:1593:A:H2'	23:BB:1594:U:O4'	2.12	0.49
2:CC:64:ARG:HD3	2:CC:99:GLN:NE2	2.22	0.49
48:BG:94:ARG:HB3	48:BG:127:GLN:NE2	2.26	0.49
51:DZ:54:LYS:O	51:DZ:57:ARG:HB2	2.12	0.49
30:BY:21:ALA:O	30:BY:24:LEU:HB3	2.12	0.49
37:DL:3:LEU:O	37:DL:5:THR:HG23	2.12	0.49
23:DB:2665:A:O2'	23:DB:2666:C:H5'	2.12	0.49
1:AA:182:A:H1'	1:AA:183:C:C5	2.47	0.49
1:CA:678:U:H4'	1:CA:778:G:OP1	2.12	0.49
23:BB:2030:A:H4'	23:BB:2031:A:H5'	1.94	0.49
45:BS:69:LEU:HB3	45:BS:107:VAL:CG2	2.42	0.49
23:BB:1846:G:H2'	23:BB:1847:A:O4'	2.12	0.49
45:DS:15:GLN:HA	45:DS:18:ARG:CD	2.41	0.49
2:CC:179:ALA:HB1	2:CC:202:PHE:HE1	1.76	0.49
1:CA:33:A:H2'	1:CA:34:C:H6	1.76	0.49
44:DQ:24:TYR:CD1	44:DQ:25:GLY:N	2.80	0.49
34:B3:57:VAL:O	34:B3:59:ALA:N	2.41	0.49
23:BB:847:U:O4'	23:BB:847:U:O2	2.29	0.49
23:BB:1026:G:OP2	23:BB:1134:A:H1'	2.12	0.49
23:DB:2799:A:H4'	23:DB:2800:A:C1'	2.42	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:21:TRP:HZ3	2:AC:23:ALA:HB2	1.77	0.49
1:AA:317:U:H2'	1:AA:318:G:C8	2.46	0.49
11:AL:65:TYR:HB3	11:AL:95:HIS:HD2	1.77	0.49
26:BD:79:LEU:N	26:BD:79:LEU:HD22	2.27	0.49
23:DB:2455:G:H2'	23:DB:2456:C:H6	1.77	0.49
23:BB:2339:C:H2'	23:BB:2340:A:H8	1.77	0.49
23:DB:1258:U:H2'	23:DB:1259:G:H8	1.76	0.49
38:DM:90:GLU:HA	38:DM:90:GLU:OE1	2.11	0.49
18:CB:166:ASP:O	18:CB:169:HIS:HB3	2.11	0.49
1:CA:386:C:O2'	1:CA:387:U:H5'	2.11	0.49
23:DB:2828:G:H2'	23:DB:2829:A:H8	1.77	0.49
27:BK:58:LEU:H	27:BK:58:LEU:HD23	1.77	0.49
9:CJ:47:GLU:HB3	9:CJ:49:PHE:CZ	2.47	0.49
23:BB:598:U:H2'	23:BB:599:A:C8	2.47	0.49
23:DB:1041:G:H2'	23:DB:1042:G:H8	1.77	0.49
47:DF:42:ALA:O	47:DF:46:LYS:HG3	2.12	0.49
23:DB:2037:A:H2'	23:DB:2038:G:C8	2.47	0.49
33:B1:18:HIS:CD2	33:B1:40:PRO:HD2	2.47	0.49
23:DB:1708:C:O2'	23:DB:1709:U:H5'	2.12	0.49
23:BB:57:C:H2'	23:BB:58:G:O4'	2.12	0.49
22:BA:109:A:O2'	22:BA:110:C:H5'	2.12	0.49
1:AA:968:A:H4'	1:AA:969:A:OP2	2.11	0.49
33:B1:8:ILE:CD1	33:B1:51:ALA:HA	2.42	0.49
23:DB:1472:C:H2'	23:DB:1473:G:C8	2.47	0.49
1:AA:610:U:O2	1:AA:610:U:O4'	2.30	0.49
31:D0:56:LYS:O	31:D0:56:LYS:HD3	2.12	0.49
31:B0:56:LYS:O	31:B0:56:LYS:HD3	2.12	0.49
34:B3:50:SER:C	34:B3:52:GLY:H	2.15	0.49
23:DB:2047:C:H2'	23:DB:2048:G:H8	1.76	0.49
47:DF:163:GLU:HA	47:DF:166:ARG:HH11	1.75	0.49
38:BM:75:GLU:OE1	38:BM:90:GLU:HG2	2.12	0.49
38:BM:90:GLU:HA	38:BM:90:GLU:OE1	2.12	0.49
21:CN:60:ARG:NE	21:CN:69:PRO:HB3	2.27	0.49
50:BT:14:PRO:HA	50:BT:32:LEU:HB3	1.94	0.49
26:DD:201:LEU:HD12	26:DD:201:LEU:H	1.77	0.49
41:BJ:54:ILE:HD12	41:BJ:55:ILE:N	2.27	0.49
5:CF:39:LEU:C	5:CF:40:GLU:HG2	2.32	0.49
5:CF:91:ARG:H	5:CF:93:LYS:NZ	2.07	0.49
6:CG:12:LEU:CD2	6:CG:13:PRO:HD2	2.31	0.49
37:DL:82:LEU:O	37:DL:85:VAL:HG12	2.11	0.49
43:DO:36:TYR:N	43:DO:36:TYR:CD2	2.80	0.49
15:CR:33:THR:HG23	15:CR:37:LYS:O	2.11	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:DU:96:LYS:O	46:DU:97:SER:HB3	2.12	0.49
24:DI:76:ALA:HA	24:DI:135:MET:SD	2.52	0.49
40:DH:131:SER:HB2	40:DH:140:ALA:C	2.32	0.49
47:DF:103:ILE:HD11	47:DF:174:PHE:CD1	2.47	0.49
38:BM:19:GLY:HA3	38:BM:38:ARG:HH22	1.77	0.49
16:AS:37:SER:OG	16:AS:70:LEU:HD13	2.12	0.49
47:BF:90:LEU:C	47:BF:91:ARG:HD3	2.32	0.49
23:BB:1021:A:H2'	23:BB:1023:U:H5''	1.94	0.49
47:BF:147:ARG:O	47:BF:148:VAL:HG22	2.13	0.49
26:BD:148:GLN:CB	26:BD:152:PRO:HG2	2.42	0.49
26:BD:4:LEU:HD12	26:BD:32:ASN:HB2	1.94	0.49
23:BB:182:A:O2'	23:BB:183:C:H5'	2.10	0.49
48:BG:168:VAL:HG12	48:BG:170:THR:HG22	1.95	0.49
23:BB:2884:U:H2'	23:BB:2885:G:C8	2.47	0.49
37:DL:57:LEU:HB2	37:DL:60:ARG:NH1	2.22	0.49
43:DO:49:VAL:HG11	43:DO:82:ALA:CA	2.41	0.49
24:DI:126:ARG:HB3	24:DI:126:ARG:NH1	2.27	0.49
23:BB:2391:G:O6	23:BB:2425:A:H8	1.95	0.49
44:DQ:65:ASN:HB2	44:DQ:75:TYR:HB2	1.94	0.49
1:AA:85:U:O2'	1:AA:86:G:H5''	2.12	0.49
29:BE:29:HIS:O	29:BE:33:VAL:HG23	2.13	0.49
45:DS:55:ILE:O	45:DS:58:ALA:HB3	2.12	0.49
23:BB:470:A:H61	50:BT:72:GLN:NE2	2.10	0.49
15:AR:41:SER:HB3	15:AR:51:GLN:HG2	1.94	0.49
23:DB:2722:G:H2'	23:DB:2723:C:H6	1.77	0.49
1:AA:1305:G:H1'	1:AA:1332:A:H62	1.77	0.49
45:BS:29:VAL:HG23	45:BS:70:LYS:CA	2.39	0.49
1:CA:182:A:H1'	1:CA:183:C:C5	2.46	0.49
6:AG:145:GLU:C	6:AG:147:ASN:N	2.65	0.49
6:AG:144:ALA:O	6:AG:145:GLU:HB3	2.12	0.49
23:DB:2649:C:H2'	23:DB:2650:U:H6	1.77	0.49
1:AA:817:C:H1'	1:AA:819:A:C5'	2.42	0.49
23:BB:2880:C:O2'	23:BB:2881:U:H5'	2.12	0.49
50:BT:50:LEU:C	50:BT:52:GLU:H	2.16	0.49
23:DB:18:U:H2'	23:DB:19:A:C8	2.47	0.49
29:DE:148:ILE:HG13	29:DE:167:VAL:HG23	1.93	0.49
1:AA:1486:G:H2'	1:AA:1487:G:C1'	2.41	0.49
1:CA:139:A:O2'	1:CA:140:U:H5'	2.13	0.49
1:CA:301:G:H2'	1:CA:302:G:C8	2.44	0.49
23:BB:276:U:O2'	23:BB:278:A:N7	2.45	0.49
20:AO:67:LEU:HD12	20:AO:88:ARG:HH22	1.76	0.49
17:AT:60:GLN:HB3	17:AT:65:LEU:HD23	1.93	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:908:A:O2'	1:AA:909:A:H5'	2.12	0.49
17:CT:50:PHE:O	17:CT:53:MET:HG3	2.12	0.49
7:AH:86:LYS:HG3	7:AH:124:ILE:HD11	1.93	0.49
23:DB:611:C:C2'	23:DB:612:G:H5'	2.42	0.49
23:DB:2880:C:O2'	23:DB:2881:U:H5'	2.12	0.49
11:AL:80:LEU:HB3	11:AL:97:VAL:HG23	1.94	0.49
16:CS:64:GLU:CD	16:CS:64:GLU:N	2.65	0.49
24:BI:49:GLU:CG	24:BI:54:ILE:HD11	2.42	0.49
44:DQ:39:ILE:O	44:DQ:43:GLN:HG3	2.11	0.49
23:BB:522:A:H2'	23:BB:523:C:C6	2.46	0.49
1:AA:398:U:H2'	1:AA:399:G:H8	1.77	0.49
5:AF:12:PRO:HD3	5:AF:56:LYS:O	2.12	0.49
6:AG:53:SER:C	6:AG:55:LYS:H	2.15	0.49
23:BB:685:A:H1'	23:BB:688:U:O4	2.12	0.49
20:CO:45:GLU:O	20:CO:47:LYS:N	2.41	0.49
14:CQ:23:ALA:C	14:CQ:24:ILE:HD12	2.32	0.49
23:DB:2708:G:H2'	23:DB:2709:G:H8	1.76	0.49
20:CO:50:HIS:O	20:CO:53:ARG:HB3	2.12	0.49
23:DB:1334:G:O2'	23:DB:1335:C:H5'	2.13	0.49
25:DC:51:ARG:NH2	25:DC:246:PRO:HG2	2.26	0.49
2:AC:99:GLN:O	2:AC:100:ILE:HB	2.11	0.49
28:DP:62:LYS:HB3	28:DP:69:VAL:HG22	1.93	0.49
23:BB:227:A:C2	23:BB:2407:A:H1'	2.47	0.49
6:CG:136:LYS:O	6:CG:140:VAL:HG23	2.13	0.49
23:BB:1668:A:N3	23:BB:1670:C:C4	2.80	0.49
1:AA:740:U:H4'	20:AO:42:HIS:CD2	2.47	0.49
23:DB:198:C:H6	23:DB:198:C:O5'	1.95	0.49
1:AA:1360:A:H8	1:AA:1360:A:OP1	1.95	0.49
27:DK:79:PHE:N	27:DK:79:PHE:CD1	2.79	0.49
8:AI:53:LEU:O	8:AI:53:LEU:HD13	2.12	0.49
22:DA:78:A:H2'	22:DA:79:G:O4'	2.12	0.49
21:CN:60:ARG:O	21:CN:62:ARG:N	2.46	0.49
50:BT:34:VAL:HG21	50:BT:43:ILE:HD11	1.94	0.49
9:CJ:28:THR:HG21	9:CJ:90:LEU:HD22	1.94	0.49
26:BD:110:THR:HG21	26:BD:169:ARG:HH11	1.77	0.49
14:AQ:75:VAL:HG23	14:AQ:76:ARG:N	2.28	0.49
40:BH:81:ALA:HA	40:BH:147:VAL:CB	2.38	0.49
23:DB:2355:G:H4'	52:DW:20:LEU:CD1	2.42	0.49
29:DE:141:MET:O	29:DE:143:LEU:HG	2.12	0.49
43:BO:30:ARG:HA	43:BO:35:ILE:HD13	1.93	0.49
43:BO:30:ARG:HG2	43:BO:31:THR:H	1.77	0.49
1:AA:1288:A:H1'	1:AA:1352:C:O2'	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AJ:5:ARG:N	9:AJ:76:ILE:O	2.45	0.49
9:AJ:77:VAL:HG12	9:AJ:78:GLU:N	2.23	0.49
46:DU:39:ASN:ND2	46:DU:62:ALA:HB3	2.27	0.49
23:BB:2722:G:H2'	23:BB:2723:C:H6	1.78	0.49
33:B1:49:LYS:HG3	33:B1:50:GLU:N	2.18	0.49
23:DB:1172:C:H3'	23:DB:1173:U:H6	1.77	0.49
28:DP:75:THR:CG2	28:DP:76:HIS:H	2.23	0.49
26:BD:13:ARG:HD2	28:BP:55:HIS:ND1	2.27	0.49
46:BU:10:VAL:HA	46:BU:70:ALA:O	2.12	0.49
8:CI:66:VAL:CG2	8:CI:74:GLN:HG3	2.38	0.49
1:AA:958:A:OP1	16:AS:78:THR:HG21	2.12	0.49
23:DB:2884:U:H2'	23:DB:2885:G:C8	2.48	0.49
23:DB:2303:G:H2'	23:DB:2304:G:O4'	2.12	0.49
47:DF:33:ILE:HG13	47:DF:95:MET:HG2	1.94	0.49
47:DF:147:ARG:HG2	47:DF:148:VAL:HG13	1.93	0.49
47:DF:47:LYS:HA	47:DF:50:ASP:OD1	2.13	0.49
25:DC:14:HIS:O	25:DC:16:VAL:HG23	2.12	0.49
51:BZ:5:CYS:SG	51:BZ:8:THR:HG23	2.52	0.49
24:BI:21:PRO:CB	24:BI:22:PRO:HD3	2.39	0.49
1:AA:1308:U:H2'	1:AA:1309:G:C8	2.46	0.49
23:DB:2579:C:O5'	23:DB:2579:C:H6	1.95	0.49
1:CA:1306:A:H61	1:CA:1331:G:C1'	2.25	0.49
6:AG:70:PRO:HG3	6:AG:102:TRP:CH2	2.48	0.49
23:BB:1507:C:C2'	23:BB:1508:A:H4'	2.42	0.49
27:BK:102:PRO:HD3	28:BP:65:ASN:HB2	1.93	0.49
23:DB:2388:A:H5'	23:DB:2389:G:OP2	2.12	0.49
38:DM:32:GLY:HA3	38:DM:103:TYR:O	2.12	0.49
1:AA:1137:C:O2'	1:AA:1138:G:H5''	2.13	0.49
36:B2:31:LEU:O	36:B2:35:ARG:HB3	2.13	0.49
23:BB:1439:A:N7	23:BB:1440:U:C2	2.80	0.49
1:CA:238:A:C2'	1:CA:239:U:H5''	2.41	0.49
23:DB:2594:C:H2'	23:DB:2595:G:C8	2.47	0.49
23:BB:632:A:H1'	37:BL:66:PHE:HE2	1.76	0.49
1:CA:1476:A:O2'	1:CA:1477:U:H5'	2.12	0.49
11:CL:113:ARG:CG	11:CL:118:VAL:HB	2.42	0.49
3:CD:29:THR:HB	3:CD:30:LYS:NZ	2.28	0.49
1:CA:1157:A:H4'	1:CA:1158:C:O5'	2.12	0.49
47:DF:72:SER:O	47:DF:78:ILE:HB	2.12	0.49
1:CA:900:A:H2'	1:CA:901:A:C8	2.48	0.49
23:BB:1843:C:O2'	23:BB:1844:C:H5'	2.13	0.49
23:BB:78:U:H2'	23:BB:79:C:C6	2.47	0.49
1:CA:712:A:O2'	1:CA:713:G:H5'	2.11	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
36:D2:13:ASN:HD21	36:D2:46:LYS:NZ	2.10	0.49
44:BQ:75:TYR:O	44:BQ:79:ILE:HG22	2.12	0.49
10:CK:32:THR:HG22	10:CK:34:THR:HG22	1.94	0.49
2:CC:89:VAL:O	2:CC:92:ASP:HB2	2.13	0.49
23:DB:2804:U:H2'	23:DB:2805:C:H6	1.76	0.49
23:BB:1585:C:H2'	23:BB:1586:A:C8	2.47	0.49
9:AJ:92:LEU:HD13	9:AJ:92:LEU:N	2.26	0.49
26:DD:69:ALA:C	26:DD:71:ALA:H	2.14	0.49
23:DB:523:C:O2'	23:DB:524:G:H5'	2.12	0.49
23:BB:2496:C:H5'	38:BM:82:MET:HG3	1.95	0.49
17:CT:45:ALA:O	17:CT:48:LYS:HB3	2.12	0.49
23:BB:553:G:O2'	23:BB:554:U:H5'	2.12	0.49
1:CA:635:A:H2'	1:CA:636:U:C6	2.46	0.49
1:AA:62:U:H2'	1:AA:63:C:C6	2.46	0.49
23:BB:2642:G:O2'	23:BB:2643:G:H5'	2.12	0.49
1:CA:1352:C:H2'	1:CA:1353:G:C8	2.48	0.49
23:DB:2308:G:HO2'	23:DB:2310:C:H5	1.58	0.49
23:BB:648:G:O2'	23:BB:649:G:H5'	2.11	0.49
41:BJ:88:THR:HG22	41:BJ:91:GLU:OE1	2.13	0.49
1:CA:399:G:H2'	1:CA:400:C:C6	2.46	0.49
23:BB:586:A:H5'	29:BE:84:THR:OG1	2.12	0.49
48:BG:39:ALA:HB2	48:BG:57:TYR:CD2	2.47	0.49
1:AA:1236:A:H2'	1:AA:1237:C:O4'	2.13	0.49
12:AM:33:LEU:HD22	12:AM:38:ILE:CG2	2.42	0.49
35:DV:38:LEU:HD21	35:DV:65:VAL:HG21	1.95	0.49
29:BE:108:ILE:O	29:BE:108:ILE:HD13	2.12	0.49
23:DB:26:G:H1'	23:DB:514:A:H61	1.77	0.49
29:DE:196:VAL:O	29:DE:200:LEU:HD23	2.12	0.49
8:AI:30:ASN:HA	8:AI:65:THR:HG22	1.93	0.49
43:DO:30:ARG:HA	43:DO:35:ILE:HD13	1.94	0.49
2:AC:129:PHE:CG	2:AC:130:ARG:N	2.79	0.49
2:AC:148:ILE:HA	2:AC:200:TRP:O	2.12	0.49
35:DV:77:VAL:CG2	35:DV:89:ILE:HG23	2.40	0.49
23:DB:1064:C:H5'	24:DI:88:GLY:HA3	1.94	0.49
23:DB:1175:A:C3'	23:DB:1176:U:H5'	2.43	0.49
26:BD:12:THR:O	26:BD:24:VAL:HG12	2.11	0.49
9:AJ:42:LEU:HB3	9:AJ:71:LEU:HD21	1.94	0.49
23:DB:2377:A:O2'	23:DB:2378:A:H5'	2.12	0.49
21:AN:51:PRO:HB2	21:AN:54:SER:CB	2.42	0.49
18:AB:85:SER:HB2	18:AB:88:GLN:OE1	2.12	0.49
49:DR:60:LYS:N	49:DR:100:GLY:HA3	2.28	0.49
1:AA:981:U:H4'	21:AN:60:ARG:CD	2.39	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:63:LYS:HE2	18:CB:87:ASP:OD2	2.13	0.49
35:DV:61:LEU:O	35:DV:71:LYS:HA	2.13	0.49
55:AA:1662:SCM:H2M1	4:AE:26:GLY:HA2	1.93	0.49
23:DB:125:A:C2	36:D2:10:LEU:HA	2.47	0.49
12:CM:38:ILE:HG22	12:CM:42:VAL:HG21	1.94	0.49
1:AA:1032:G:N3	1:AA:1032:G:C3'	2.73	0.49
1:AA:190:A:O5'	1:AA:190:A:H8	1.95	0.49
12:AM:2:ARG:HD3	12:AM:6:ILE:CA	2.41	0.49
16:CS:40:PHE:HB2	16:CS:42:ASN:ND2	2.26	0.49
48:BG:94:ARG:HB3	48:BG:127:GLN:CG	2.38	0.49
27:DK:17:ARG:HB3	27:DK:45:GLU:HB3	1.94	0.49
23:DB:543:G:H2'	23:DB:544:C:O4'	2.12	0.49
23:BB:1244:A:O2'	23:BB:1245:G:H5'	2.12	0.49
11:CL:23:LEU:HD23	11:CL:29:LYS:CE	2.42	0.49
11:AL:54:VAL:HG12	11:AL:55:ARG:N	2.26	0.49
1:AA:1169:A:H2'	1:AA:1170:A:C8	2.47	0.49
23:DB:1737:G:H5'	23:DB:1738:G:OP2	2.13	0.49
23:DB:813:U:H2'	23:DB:814:C:H6	1.77	0.49
25:DC:75:ALA:CB	25:DC:93:VAL:HG22	2.42	0.49
25:DC:95:TYR:HE1	25:DC:101:ARG:HD2	1.76	0.49
23:DB:2840:C:H2'	23:DB:2841:C:H6	1.76	0.49
1:CA:1158:C:O2'	18:CB:131:LYS:HB2	2.11	0.49
8:CI:29:ILE:O	8:CI:29:ILE:HG22	2.12	0.49
21:AN:41:TRP:HB3	21:AN:44:VAL:CG2	2.43	0.49
25:DC:4:LYS:HE2	25:DC:5:CYS:N	2.27	0.49
3:CD:8:LEU:HD21	3:CD:21:LYS:HG2	1.94	0.49
29:DE:134:LEU:CD2	29:DE:161:ALA:HB2	2.42	0.49
23:DB:1460:U:H3'	23:DB:1461:C:H5'	1.94	0.49
23:DB:1037:G:O2'	23:DB:1038:G:H5'	2.11	0.49
4:AE:58:ALA:HA	4:AE:61:LYS:HG2	1.94	0.49
23:DB:1165:A:H2'	23:DB:1166:G:H8	1.77	0.49
23:BB:1683:U:H2'	23:BB:1684:G:C8	2.48	0.49
23:DB:566:U:H2'	23:DB:567:U:O4'	2.12	0.49
23:BB:1599:U:H2'	23:BB:1600:C:H6	1.76	0.49
23:BB:2284:A:OP2	33:B1:5:ARG:HG3	2.12	0.49
47:BF:50:ASP:O	47:BF:53:ALA:HB3	2.13	0.49
23:DB:41:C:H2'	23:DB:42:A:O4'	2.12	0.49
23:BB:1340:U:O2	23:BB:1340:U:O4'	2.29	0.49
7:CH:4:ASP:OD1	7:CH:7:ALA:HB2	2.12	0.49
23:DB:2370:G:H2'	23:DB:2371:G:O4'	2.12	0.49
20:CO:30:ALA:HA	20:CO:85:LEU:HD21	1.94	0.49
1:AA:1041:G:O2'	1:AA:1042:A:H5'	2.12	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1849:G:H2'	23:BB:1850:G:H8	1.77	0.49
1:AA:793:U:O2	1:AA:1516:G:H4'	2.12	0.49
11:AL:82:ARG:HH11	11:AL:82:ARG:HG2	1.78	0.49
1:CA:981:U:H2'	1:CA:982:U:C5	2.48	0.49
18:CB:42:LEU:HA	18:CB:45:THR:CB	2.42	0.49
12:AM:13:HIS:HB2	12:AM:16:ILE:HG23	1.94	0.49
12:AM:72:ILE:O	12:AM:76:ILE:HG13	2.13	0.49
50:DT:30:ILE:HG12	50:DT:32:LEU:HD23	1.95	0.49
50:BT:54:GLU:CB	50:BT:88:LYS:HB2	2.43	0.49
52:DW:49:ASN:O	52:DW:50:VAL:HG13	2.13	0.49
42:DN:42:LYS:O	42:DN:45:ARG:HB3	2.13	0.49
26:DD:113:SER:HB2	26:DD:168:GLU:H	1.75	0.49
1:CA:1379:G:O2'	1:CA:1380:U:H5'	2.12	0.49
1:AA:1229:A:H2'	1:AA:1230:C:H6	1.76	0.49
25:BC:140:VAL:HG11	25:BC:143:VAL:HG22	1.94	0.49
48:DG:120:ILE:HD12	48:DG:143:VAL:HG21	1.93	0.49
48:DG:84:LYS:HG3	48:DG:131:VAL:C	2.32	0.49
46:DU:81:ARG:HG3	46:DU:81:ARG:NH2	2.27	0.49
40:DH:135:HIS:CG	40:DH:136:SER:N	2.80	0.49
38:DM:2:LEU:O	38:DM:69:PRO:HG3	2.12	0.49
38:DM:94:ALA:O	38:DM:96:ILE:HG23	2.12	0.49
44:BQ:93:ILE:HG23	44:BQ:94:LEU:HD22	1.93	0.49
21:AN:46:LYS:HZ3	21:AN:46:LYS:HB3	1.76	0.49
26:DD:34:VAL:HG13	26:DD:93:GLY:HA2	1.93	0.49
3:CD:166:LYS:CD	3:CD:167:PRO:HD2	2.39	0.49
47:DF:8:LYS:HA	47:DF:12:VAL:HG21	1.93	0.49
1:AA:1387:G:H5''	55:AA:1662:SCM:H8M3	1.95	0.49
1:AA:1349:A:H1'	1:AA:1374:A:N6	2.27	0.49
18:CB:119:GLN:HE22	18:CB:124:THR:CG2	2.24	0.49
26:BD:5:VAL:H	26:BD:32:ASN:CG	2.15	0.49
2:AC:45:GLU:C	2:AC:46:LEU:HD22	2.32	0.49
1:CA:1107:C:H4'	2:CC:168:ARG:NH1	2.28	0.49
23:DB:116:C:O2'	23:DB:126:A:C8	2.63	0.49
10:AK:46:ALA:HB1	10:AK:61:ALA:HB1	1.93	0.49
26:DD:114:LYS:HB2	26:DD:116:LYS:HE3	1.93	0.49
23:BB:783:A:H8	23:BB:784:G:H4'	1.78	0.49
1:AA:1308:U:H3'	12:AM:97:ARG:NH1	2.28	0.49
23:BB:2869:G:H2'	23:BB:2870:C:H6	1.78	0.49
48:BG:94:ARG:HH21	48:BG:105:SER:H	1.59	0.49
23:DB:433:C:O2'	23:DB:434:U:H5'	2.12	0.49
27:DK:105:ARG:O	27:DK:108:ARG:HG2	2.12	0.49
1:CA:890:G:O2'	1:CA:906:A:N6	2.46	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:265:A:HO2'	23:BB:266:G:H4'	1.77	0.49
23:DB:783:A:H2'	23:DB:784:G:O5'	2.12	0.49
1:CA:208:U:H2'	1:CA:210:C:C5	2.47	0.49
23:DB:2665:A:C2'	23:DB:2666:C:H5'	2.41	0.49
23:BB:1733:G:H2'	23:BB:1734:G:H8	1.78	0.49
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.76	0.49
1:CA:778:G:H2'	1:CA:779:C:C6	2.47	0.49
1:AA:475:C:H2'	1:AA:476:U:H6	1.77	0.49
1:AA:284:C:O2'	1:AA:285:C:H5'	2.12	0.49
23:BB:18:U:H2'	23:BB:19:A:H8	1.76	0.49
23:DB:446:G:H5'	44:DQ:2:ARG:HH22	1.76	0.49
21:CN:72:PHE:O	21:CN:73:LEU:HD23	2.12	0.49
23:DB:1028:A:N6	23:DB:1125:G:H2'	2.27	0.49
20:CO:71:LYS:HE2	20:CO:71:LYS:O	2.12	0.49
4:CE:58:ALA:HA	4:CE:61:LYS:HG2	1.94	0.49
7:CH:76:ARG:HD2	7:CH:125:ILE:O	2.13	0.49
17:CT:24:ARG:HG3	17:CT:65:LEU:HD11	1.95	0.49
23:DB:2300:C:H2'	23:DB:2301:C:H6	1.77	0.49
1:AA:309:A:H2'	1:AA:310:G:H8	1.78	0.49
1:CA:598:U:H4'	7:CH:85:TYR:CG	2.47	0.49
23:DB:2787:C:H1'	26:DD:63:PRO:HG3	1.94	0.49
11:AL:66:ILE:HG21	11:AL:71:HIS:HB3	1.94	0.49
23:DB:1747:U:H2'	23:DB:1748:C:H6	1.76	0.49
23:BB:1350:C:H5'	23:BB:1351:C:OP2	2.13	0.49
24:DI:102:ARG:HG3	24:DI:141:ASP:HB2	1.94	0.49
23:BB:2369:A:O2'	23:BB:2370:G:H5'	2.12	0.49
23:BB:1526:C:H2'	23:BB:1527:G:O4'	2.11	0.49
23:BB:1649:G:O2'	23:BB:1650:A:H5'	2.13	0.49
23:BB:2875:C:H2'	23:BB:2876:G:C8	2.47	0.49
23:DB:1908:C:O2'	23:DB:1909:C:H5'	2.12	0.49
4:CE:14:LEU:HA	4:CE:36:THR:HB	1.94	0.49
17:CT:4:LYS:HE3	17:CT:6:ALA:HB2	1.94	0.49
1:AA:240:G:H8	1:AA:240:G:H5'	1.76	0.49
25:BC:226:PRO:HA	25:BC:232:GLY:HA3	1.94	0.49
1:CA:1348:U:O2'	1:CA:1349:A:H5'	2.12	0.49
25:BC:171:VAL:HB	25:BC:183:VAL:HG12	1.94	0.49
26:BD:9:VAL:HG22	26:BD:9:VAL:O	2.13	0.49
20:AO:25:THR:O	20:AO:29:VAL:HG23	2.13	0.49
29:BE:173:THR:HA	29:BE:199:MET:SD	2.51	0.49
29:BE:108:ILE:CD1	29:BE:181:ILE:HG13	2.43	0.49
14:CQ:75:VAL:HG23	14:CQ:76:ARG:N	2.28	0.49
40:BH:69:ALA:HB3	40:BH:70:GLU:OE2	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:DE:108:ILE:HD13	37:DL:2:ARG:NH2	2.28	0.49
23:BB:1197:G:H2'	23:BB:1198:U:C6	2.45	0.49
42:DN:72:ASP:C	42:DN:74:GLU:H	2.15	0.49
23:DB:138:U:H1'	23:DB:141:G:N1	2.27	0.49
48:BG:84:LYS:HG3	48:BG:131:VAL:C	2.32	0.49
28:DP:4:ILE:HA	28:DP:7:LEU:HB3	1.95	0.49
27:BK:59:LYS:HD2	27:BK:89:ASN:HD22	1.77	0.49
46:DU:98:ASN:OD1	46:DU:100:GLU:HB2	2.13	0.49
40:DH:139:PHE:HB2	40:DH:141:LYS:NZ	2.26	0.49
49:BR:63:VAL:HA	49:BR:95:ASP:O	2.13	0.49
1:AA:1014:A:C2	1:AA:1219:A:H1'	2.48	0.49
1:AA:1085:U:H3'	1:AA:1086:U:C6	2.48	0.49
1:AA:1340:A:H2'	1:AA:1341:U:O4'	2.12	0.49
22:DA:42:C:C5	47:DF:65:LEU:HD22	2.47	0.49
6:CG:145:GLU:H	6:CG:148:LYS:HB2	1.76	0.49
26:BD:149:ASN:O	26:BD:152:PRO:HD2	2.13	0.49
7:CH:14:ARG:HE	7:CH:75:GLN:HE22	1.60	0.49
26:DD:118:PHE:O	26:DD:119:ALA:HB3	2.12	0.49
23:BB:2751:G:H5'	48:BG:2:ARG:CD	2.42	0.49
17:CT:66:ILE:HG21	17:CT:71:ALA:HB2	1.93	0.49
27:DK:77:ILE:HA	28:DP:70:GLU:O	2.13	0.49
4:AE:152:VAL:HG11	4:AE:156:ARG:HH21	1.76	0.49
48:BG:94:ARG:NH2	48:BG:104:LEU:HA	2.27	0.49
42:DN:12:ARG:HG3	42:DN:13:ASN:OD1	2.11	0.49
23:DB:547:A:H2'	23:DB:548:G:O4'	2.12	0.49
11:CL:23:LEU:O	11:CL:25:ALA:N	2.45	0.49
27:BK:13:ASN:ND2	27:BK:98:ARG:H	2.11	0.49
1:AA:78:A:H2'	1:AA:79:G:C8	2.47	0.49
36:B2:21:ARG:HH21	36:B2:43:THR:HG22	1.76	0.49
23:BB:929:U:O2'	23:BB:930:G:H5'	2.12	0.49
11:AL:20:VAL:HG12	11:AL:93:ARG:HB3	1.94	0.49
25:BC:242:HIS:O	25:BC:244:VAL:HG13	2.12	0.49
1:AA:1175:G:O2'	1:AA:1176:A:H5'	2.13	0.49
1:CA:1328:C:OP1	12:CM:27:THR:HG21	2.12	0.49
48:BG:6:ALA:HB3	48:BG:68:ARG:CD	2.41	0.49
8:CI:28:VAL:O	8:CI:64:ILE:HB	2.13	0.49
47:DF:74:ALA:HB1	47:DF:76:PHE:CD2	2.48	0.49
23:DB:2105:U:H2'	23:DB:2106:U:C6	2.47	0.49
23:BB:730:A:O2'	23:BB:731:C:H5'	2.12	0.49
1:AA:299:G:H2'	1:AA:300:A:C8	2.47	0.49
23:BB:1534:U:H2'	23:BB:1536:C:C4	2.47	0.49
1:CA:299:G:H2'	1:CA:300:A:C8	2.48	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
15:AR:33:THR:HG22	15:AR:39:VAL:HG12	1.95	0.49
1:AA:441:A:H61	1:AA:493:A:H62	1.59	0.49
7:CH:124:ILE:C	7:CH:125:ILE:HD12	2.33	0.49
22:BA:95:U:H2'	22:BA:96:G:C8	2.47	0.49
23:BB:2262:U:H2'	23:BB:2263:C:C6	2.47	0.49
1:CA:556:C:O2'	1:CA:557:G:H5'	2.12	0.49
23:DB:2345:G:N3	23:DB:2381:A:H2'	2.28	0.49
29:BE:149:ILE:O	29:BE:188:MET:HA	2.12	0.49
23:BB:2800:A:H2'	23:BB:2801:G:O4'	2.13	0.49
1:CA:1114:C:H2'	1:CA:1115:U:C6	2.48	0.49
23:DB:2677:G:H2'	23:DB:2678:C:H6	1.78	0.49
10:AK:34:THR:HG22	10:AK:40:ALA:HA	1.94	0.49
17:AT:45:ALA:O	17:AT:48:LYS:HB3	2.12	0.49
22:DA:2:G:H2'	22:DA:3:C:H6	1.77	0.49
1:CA:184:G:H5'	1:CA:224:U:O2'	2.12	0.49
23:BB:1889:A:H2'	23:BB:1890:A:H8	1.76	0.49
23:BB:2026:U:H2'	23:BB:2027:G:C8	2.47	0.49
43:DO:4:LYS:C	43:DO:6:ALA:H	2.16	0.49
23:DB:1312:U:H4'	23:DB:1313:U:O5'	2.13	0.49
25:DC:40:GLY:O	25:DC:53:ILE:HG23	2.12	0.49
1:CA:62:U:H4'	1:CA:378:G:N2	2.28	0.49
20:AO:69:TYR:HA	20:AO:72:ARG:NH2	2.27	0.49
1:CA:394:G:H2'	1:CA:395:C:H6	1.77	0.49
42:BN:77:ALA:O	42:BN:81:ASN:HB2	2.13	0.49
23:DB:1990:C:H2'	23:DB:1991:U:C6	2.47	0.49
23:BB:1831:G:O2'	23:BB:1832:C:H5'	2.12	0.49
33:D1:25:ASN:OD1	33:D1:27:ARG:HB2	2.13	0.49
51:BZ:17:ASN:HB2	51:BZ:25:THR:HB	1.93	0.49
23:BB:1210:G:H5'	23:BB:1212:G:O4'	2.12	0.49
1:CA:1347:G:O2'	1:CA:1348:U:P	2.70	0.49
25:DC:128:THR:HA	25:DC:190:THR:CA	2.43	0.49
23:BB:26:G:H1'	23:BB:514:A:H61	1.77	0.49
23:BB:2722:G:O2'	23:BB:2723:C:H5'	2.12	0.49
35:DV:28:ALA:HA	35:DV:88:HIS:ND1	2.28	0.49
37:BL:115:GLU:OE1	37:BL:115:GLU:N	2.46	0.49
49:BR:60:LYS:H	49:BR:100:GLY:CA	2.25	0.49
49:DR:4:VAL:HA	49:DR:12:HIS:O	2.13	0.49
23:DB:1060:U:O2	23:DB:1088:A:C8	2.65	0.49
40:DH:67:ALA:O	40:DH:71:LYS:HB2	2.11	0.49
38:BM:41:LEU:HA	38:BM:45:GLN:OE1	2.12	0.49
1:CA:919:A:O2'	1:CA:920:U:H5'	2.12	0.49
20:AO:43:PHE:CE1	20:AO:56:LEU:HD22	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:DL:95:LEU:HB3	37:DL:100:ILE:HG23	1.94	0.49
23:BB:2471:A:O2'	23:BB:2472:G:O5'	2.30	0.49
34:B3:21:PHE:CE1	34:B3:58:ILE:HG12	2.48	0.49
23:DB:1013:C:H2'	23:DB:1014:A:C8	2.48	0.49
23:DB:1013:C:H2'	23:DB:1014:A:H8	1.77	0.49
45:DS:70:LYS:O	45:DS:72:THR:N	2.45	0.49
11:CL:29:LYS:HB3	11:CL:56:LEU:HD22	1.94	0.49
17:CT:2:ASN:CG	17:CT:3:ILE:H	2.15	0.49
1:CA:239:U:H5''	1:CA:239:U:H6	1.76	0.49
23:DB:2598:A:H5''	25:DC:233:GLY:O	2.11	0.49
41:DJ:36:LEU:C	41:DJ:121:LYS:HZ1	2.16	0.49
23:DB:62:U:H2'	23:DB:63:A:O4'	2.12	0.49
23:DB:1883:U:H2'	23:DB:1884:G:H1'	1.94	0.49
23:DB:37:C:O2'	23:DB:38:A:H5'	2.13	0.49
2:CC:5:HIS:CD2	2:CC:7:ASN:H	2.31	0.49
23:BB:193:U:H2'	23:BB:194:G:H8	1.77	0.49
3:CD:97:LEU:HA	3:CD:100:VAL:HG23	1.94	0.49
1:CA:1390:U:H2'	1:CA:1391:U:H6	1.78	0.49
1:AA:684:U:H2'	1:AA:685:G:O4'	2.13	0.49
2:CC:32:LEU:HD21	21:CN:92:ILE:CG1	2.43	0.49
23:DB:1409:U:H2'	23:DB:1410:G:H8	1.78	0.49
23:DB:873:C:H2'	23:DB:874:G:H8	1.77	0.49
52:DW:73:PRO:C	52:DW:75:ASN:H	2.16	0.49
21:AN:76:PHE:HE1	21:AN:92:ILE:HD13	1.77	0.49
1:AA:184:G:H5'	1:AA:224:U:O2'	2.12	0.49
23:DB:1915:U:H2'	23:DB:1916:A:O4'	2.13	0.49
23:DB:564:C:H1'	44:DQ:36:GLN:OE1	2.12	0.49
22:DA:2:G:O2'	22:DA:3:C:H5'	2.13	0.49
45:BS:49:LYS:O	45:BS:53:SER:HB2	2.13	0.49
47:BF:2:LYS:CE	47:BF:2:LYS:H	2.25	0.49
1:AA:1186:G:H21	21:AN:100:TRP:C	2.15	0.49
23:BB:523:C:O2'	23:BB:524:G:H5'	2.12	0.49
44:BQ:40:LYS:HA	44:BQ:43:GLN:OE1	2.12	0.49
1:CA:1432:G:H5'	28:DP:105:LYS:HG2	1.94	0.49
23:BB:2469:A:H4'	38:BM:55:ARG:NE	2.28	0.49
15:CR:25:ILE:O	15:CR:29:LYS:HG3	2.13	0.49
16:AS:31:ARG:HG3	16:AS:56:HIS:CE1	2.47	0.49
26:DD:29:VAL:HB	26:DD:98:VAL:CG1	2.42	0.49
43:BO:9:ARG:HA	43:BO:12:THR:OG1	2.12	0.49
23:BB:765:C:H2'	23:BB:766:U:C6	2.47	0.49
1:CA:683:G:O2'	1:CA:684:U:H5'	2.12	0.49
23:DB:1676:A:H2'	23:DB:1677:A:O4'	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1098:A:H2'	24:DI:4:VAL:C	2.34	0.49
12:AM:21:ILE:CG2	12:AM:64:VAL:HB	2.42	0.49
1:CA:1240:U:H3'	1:CA:1241:G:C5'	2.42	0.49
23:DB:27:G:H1'	23:DB:513:A:H61	1.78	0.49
40:BH:96:THR:HB	40:BH:115:VAL:HG21	1.94	0.49
22:BA:27:C:H5'	43:BO:34:HIS:CD2	2.48	0.49
43:BO:34:HIS:O	43:BO:35:ILE:HG12	2.12	0.49
1:AA:10:A:OP2	4:AE:130:THR:HB	2.13	0.49
28:DP:6:GLN:HA	28:DP:9:GLN:CD	2.33	0.49
37:BL:79:LEU:HB3	37:BL:115:GLU:O	2.12	0.49
23:DB:322:A:H5'	23:DB:340:A:C1'	2.41	0.49
18:CB:18:GLN:HB2	18:CB:188:THR:OG1	2.13	0.49
9:AJ:10:LEU:HA	9:AJ:97:ASP:O	2.13	0.49
23:BB:996:A:O3'	44:BQ:91:ARG:HG2	2.13	0.49
7:AH:11:THR:HA	7:AH:14:ARG:HH12	1.77	0.49
13:AP:52:LEU:HD21	13:AP:75:ILE:HG23	1.95	0.49
23:BB:45:G:H5'	23:BB:46:G:OP1	2.12	0.49
28:DP:20:ARG:HG3	28:DP:21:PRO:HD2	1.95	0.49
47:DF:155:ILE:HD12	47:DF:155:ILE:N	2.27	0.49
6:AG:45:ALA:CA	6:AG:120:ALA:HB2	2.43	0.49
43:DO:88:LYS:HG2	43:DO:89:ASP:N	2.27	0.49
36:D2:9:VAL:HG13	36:D2:10:LEU:N	2.28	0.49
39:BX:8:GLU:O	39:BX:12:GLU:HB2	2.11	0.49
23:DB:1654:A:O2'	26:DD:118:PHE:CB	2.60	0.49
47:BF:15:LEU:HD12	47:BF:27:VAL:HB	1.93	0.49
23:BB:1589:U:H2'	23:BB:1590:A:C8	2.47	0.49
23:DB:2471:A:O2'	23:DB:2472:G:C8	2.57	0.49
42:DN:17:ARG:C	42:DN:19:ALA:H	2.15	0.49
23:BB:299:A:N6	23:BB:322:A:H1'	2.28	0.49
17:CT:43:LYS:HD2	17:CT:86:ALA:OXT	2.12	0.49
23:DB:929:U:O2'	23:DB:930:G:H5'	2.12	0.49
51:DZ:14:THR:HA	51:DZ:28:ARG:HA	1.94	0.49
23:DB:2748:A:H2'	23:DB:2749:A:O4'	2.12	0.49
41:BJ:58:ASN:HB3	41:BJ:61:LYS:HB2	1.94	0.49
23:DB:718:A:H3'	23:DB:719:C:H6	1.78	0.49
1:AA:584:G:O2'	1:AA:585:G:H5'	2.13	0.49
23:BB:873:C:H2'	23:BB:874:G:H8	1.77	0.49
1:CA:764:C:H2'	1:CA:765:G:H5'	1.95	0.49
23:DB:2544:G:H1'	23:DB:2646:C:H5'	1.95	0.49
23:DB:1051:G:H2'	23:DB:1052:C:H6	1.78	0.49
3:CD:138:PRO:HA	3:CD:181:PHE:CD2	2.46	0.49
28:BP:94:ALA:O	28:BP:95:LYS:HD2	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:BI:56:VAL:CG2	24:BI:68:PHE:HB2	2.42	0.49
23:BB:528:A:H2	23:BB:2043:C:H4'	1.77	0.49
29:DE:3:LEU:HD21	29:DE:14:VAL:HG22	1.94	0.49
29:DE:3:LEU:HB2	29:DE:12:LEU:CG	2.43	0.49
1:CA:833:G:H2'	1:CA:834:U:H6	1.77	0.49
23:BB:2798:U:H4'	23:BB:2800:A:C2	2.48	0.49
1:AA:328:C:H1'	1:AA:329:A:OP2	2.13	0.49
47:BF:141:ASP:CG	47:BF:144:LYS:HB2	2.33	0.49
19:CU:7:GLU:OE2	19:CU:15:LEU:HG	2.13	0.49
27:DK:104:THR:H	27:DK:107:LEU:HD13	1.78	0.49
1:CA:89:U:O2'	1:CA:90:C:H5'	2.13	0.49
43:BO:6:ALA:HB1	43:BO:10:ARG:HH11	1.78	0.49
1:CA:628:G:H2'	1:CA:629:A:H8	1.76	0.49
23:DB:981:A:H4'	23:DB:2037:A:H5'	1.95	0.49
23:DB:1709:U:H2'	23:DB:1710:G:C8	2.48	0.49
23:BB:1210:G:H5'	23:BB:1212:G:H5'	1.94	0.49
1:AA:386:C:C2'	1:AA:387:U:H5'	2.43	0.49
3:AD:22:SER:HB3	3:AD:109:THR:HG22	1.95	0.49
1:CA:276:G:O2'	1:CA:277:C:H5'	2.12	0.49
1:AA:769:G:O2'	1:AA:770:C:H5'	2.13	0.49
21:CN:14:ALA:O	21:CN:18:LYS:HG3	2.13	0.49
23:DB:455:C:N3	23:DB:472:A:H2'	2.28	0.49
7:AH:38:VAL:O	7:AH:42:GLU:HB2	2.13	0.49
2:AC:29:ALA:HB2	21:AN:74:ARG:O	2.12	0.49
50:DT:85:VAL:C	50:DT:86:THR:HG23	2.32	0.49
1:CA:1240:U:OP1	6:CG:115:MET:HB2	2.13	0.49
35:BV:44:HIS:HE1	35:BV:86:LEU:N	2.11	0.49
35:BV:26:PHE:CE1	35:BV:89:ILE:HD11	2.34	0.49
48:DG:14:VAL:HG23	48:DG:14:VAL:O	2.13	0.49
6:CG:12:LEU:HD13	6:CG:13:PRO:CD	2.43	0.49
23:DB:2262:U:O2'	23:DB:2263:C:H5'	2.13	0.49
37:BL:82:LEU:C	37:BL:84:LYS:H	2.14	0.49
22:DA:28:C:OP1	43:DO:31:THR:HG21	2.12	0.49
23:DB:1729:U:H5	23:DB:1731:G:H21	1.55	0.49
23:BB:1729:U:H3'	23:BB:1730:C:C5'	2.43	0.49
42:BN:42:LYS:O	42:BN:45:ARG:HB3	2.13	0.49
23:BB:2000:C:O2'	23:BB:2001:C:H5'	2.13	0.49
37:BL:79:LEU:HD12	37:BL:112:LEU:HB2	1.95	0.49
40:BH:31:VAL:O	40:BH:32:PRO:C	2.51	0.49
23:DB:1170:C:H2'	23:DB:1171:G:C8	2.47	0.49
40:DH:116:ARG:HH21	40:DH:118:PRO:HG2	1.78	0.49
22:BA:7:G:H4'	43:BO:29:HIS:CD2	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BF:121:PHE:HB2	47:BF:127:TYR:HA	1.93	0.49
18:AB:68:PHE:HA	18:AB:161:PHE:O	2.13	0.49
18:AB:95:TRP:CH2	18:AB:174:GLU:HB2	2.48	0.49
18:AB:91:VAL:HG11	18:AB:95:TRP:CD1	2.48	0.49
47:BF:102:LEU:O	47:BF:103:ILE:HB	2.12	0.49
36:B2:9:VAL:HG13	36:B2:10:LEU:N	2.28	0.49
25:BC:203:VAL:HG12	25:BC:205:GLY:N	2.28	0.49
23:BB:2751:G:N3	23:BB:2751:G:H2'	2.27	0.49
23:DB:2428:G:H5''	23:DB:2429:G:OP1	2.13	0.49
16:CS:15:LEU:O	16:CS:19:GLU:HB2	2.13	0.49
23:DB:2867:G:N3	23:DB:2867:G:C2'	2.74	0.49
42:DN:9:GLN:O	42:DN:17:ARG:HD3	2.13	0.49
23:BB:2425:A:H5''	23:BB:2426:A:H3'	1.94	0.49
18:AB:120:SER:HA	18:AB:125:PHE:CG	2.48	0.49
23:BB:160:A:H2'	23:BB:161:A:H8	1.78	0.49
9:AJ:52:LEU:HD12	9:AJ:53:ILE:N	2.27	0.49
2:CC:165:GLU:HA	2:CC:165:GLU:OE1	2.12	0.49
18:AB:114:LYS:O	18:AB:117:GLU:HB3	2.13	0.49
25:DC:254:LYS:HB3	25:DC:255:LYS:H	1.48	0.49
23:DB:1092:C:C2'	23:DB:1093:G:H5'	2.43	0.49
13:CP:48:GLU:CG	13:CP:49:GLY:H	2.26	0.49
29:DE:118:LEU:HA	29:DE:186:VAL:HG13	1.94	0.49
23:BB:1902:C:H2'	23:BB:1903:G:O4'	2.12	0.49
1:AA:803:G:H2'	1:AA:804:U:O4'	2.13	0.49
1:AA:598:U:H4'	7:AH:85:TYR:CG	2.47	0.49
22:BA:50:A:OP1	43:BO:68:LYS:HG3	2.13	0.49
29:BE:134:LEU:CD2	29:BE:161:ALA:HB2	2.43	0.49
23:DB:1210:G:H5'	23:DB:1212:G:O4'	2.13	0.49
23:BB:2799:A:H4'	23:BB:2800:A:C1'	2.42	0.49
23:BB:1151:A:H2'	23:BB:1152:C:H6	1.78	0.49
34:B3:40:LYS:O	34:B3:43:LEU:HB2	2.11	0.49
47:BF:2:LYS:N	47:BF:2:LYS:HE3	2.28	0.49
1:CA:435:A:H2'	1:CA:435:A:N3	2.28	0.49
23:DB:2586:U:H2'	23:DB:2587:A:H8	1.77	0.49
29:BE:98:LYS:O	29:BE:102:ARG:HG2	2.13	0.49
5:CF:12:PRO:HD3	5:CF:56:LYS:O	2.12	0.49
17:AT:49:ALA:HA	17:AT:52:GLU:HB3	1.94	0.49
23:DB:2488:G:H2'	23:DB:2489:U:C6	2.48	0.49
9:CJ:82:LYS:HD2	9:CJ:82:LYS:N	2.28	0.49
23:DB:1886:U:H6	23:DB:1886:U:O5'	1.95	0.49
23:DB:1660:G:O2'	23:DB:1661:G:H5'	2.12	0.49
10:AK:124:LYS:O	19:AU:33:ARG:NE	2.42	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:185:ALA:C	25:DC:187:CYS:H	2.16	0.49
32:D4:7:VAL:HG22	32:D4:8:LYS:N	2.28	0.49
23:BB:1431:A:H2'	23:BB:1432:G:H8	1.78	0.49
5:CF:62:MET:HG3	5:CF:64:VAL:HG13	1.95	0.49
23:DB:2772:C:H2'	23:DB:2773:C:H6	1.78	0.49
4:CE:81:GLN:N	4:CE:146:MET:HE3	2.11	0.49
1:AA:1289:A:H2'	1:AA:1290:G:H5'	1.95	0.49
22:DA:24:G:N7	22:DA:56:G:H2'	2.28	0.49
48:BG:148:ARG:HG2	48:BG:163:TYR:CZ	2.47	0.49
27:BK:35:VAL:HG12	27:BK:69:VAL:CG2	2.43	0.49
46:DU:11:ILE:O	46:DU:12:VAL:HB	2.12	0.49
35:BV:80:HIS:HB3	35:BV:83:LYS:O	2.13	0.49
16:AS:4:LEU:HD13	16:AS:9:PHE:H	1.78	0.49
16:AS:4:LEU:CD1	16:AS:9:PHE:HB3	2.42	0.49
28:BP:4:ILE:HA	28:BP:7:LEU:HB3	1.94	0.49
1:AA:958:A:C2	16:AS:54:ARG:HG3	2.47	0.49
23:DB:2886:A:N7	31:D0:39:ARG:NH2	2.54	0.49
26:DD:148:GLN:HG3	26:DD:152:PRO:CB	2.43	0.49
44:DQ:82:LEU:HB3	44:DQ:88:GLU:OE1	2.12	0.49
23:BB:2729:G:H2'	23:BB:2730:C:C6	2.48	0.49
37:DL:55:MET:CE	37:DL:56:PRO:HD2	2.42	0.49
18:AB:218:ALA:O	18:AB:222:GLU:HG2	2.13	0.49
18:AB:217:ALA:O	18:AB:220:VAL:HB	2.13	0.49
23:DB:545:U:H3'	23:DB:546:U:H4'	1.94	0.49
17:AT:2:ASN:CG	17:AT:3:ILE:H	2.15	0.49
25:BC:161:VAL:HG12	25:BC:162:GLN:N	2.27	0.49
1:AA:1095:U:H2'	1:AA:1096:C:H6	1.76	0.49
1:CA:1392:G:H5'	1:CA:1531:A:H5''	1.95	0.49
1:AA:744:C:H2'	1:AA:745:G:C8	2.48	0.49
23:BB:1409:U:H2'	23:BB:1410:G:H8	1.78	0.49
20:CO:71:LYS:NZ	20:CO:72:ARG:HG2	2.27	0.49
1:AA:833:G:H2'	1:AA:834:U:C6	2.47	0.49
23:BB:528:A:C2	23:BB:2043:C:H4'	2.47	0.49
22:BA:93:C:O2'	22:BA:94:A:H5'	2.13	0.49
22:BA:12:C:N4	52:BW:73:PRO:HD3	2.28	0.49
51:DZ:3:ARG:HA	51:DZ:50:ARG:HH11	1.77	0.49
1:CA:597:G:H2'	1:CA:598:U:H5'	1.94	0.49
11:AL:52:CYS:SG	11:AL:66:ILE:HD11	2.53	0.49
23:BB:1164:C:H2'	23:BB:1165:A:C8	2.47	0.49
11:CL:66:ILE:HG21	11:CL:71:HIS:HB3	1.95	0.49
23:BB:1100:C:H2'	23:BB:1101:U:C6	2.47	0.49
23:BB:2025:C:H2'	23:BB:2026:U:C6	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:D1:8:ILE:HD12	33:D1:51:ALA:HA	1.94	0.49
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.47	0.49
8:CI:118:ARG:NH2	8:CI:122:ARG:HE	2.10	0.49
1:CA:684:U:H2'	1:CA:685:G:O4'	2.12	0.49
1:AA:824:G:O2'	1:AA:825:A:H5'	2.13	0.49
34:D3:50:SER:C	34:D3:52:GLY:H	2.17	0.49
26:BD:142:VAL:HB	26:BD:143:PRO:HD2	1.95	0.49
23:BB:1708:C:O2'	23:BB:1709:U:H5'	2.12	0.49
1:AA:291:U:H2'	1:AA:292:G:C8	2.48	0.49
1:CA:539:A:H2'	1:CA:540:G:C8	2.47	0.49
1:CA:46:G:O2'	1:CA:365:U:H1'	2.13	0.49
42:DN:77:ALA:O	42:DN:81:ASN:HB2	2.13	0.49
7:CH:66:GLN:HB3	7:CH:67:GLY:H	1.45	0.49
23:DB:443:A:N7	29:DE:40:ARG:HG2	2.28	0.49
1:AA:130:A:H1'	1:AA:263:A:O2'	2.13	0.49
1:CA:113:G:H2'	1:CA:114:U:C6	2.48	0.49
26:DD:138:LEU:N	26:DD:138:LEU:HD22	2.27	0.49
23:BB:1145:C:O2'	23:BB:1146:C:H5'	2.13	0.49
1:AA:1239:A:H4'	1:AA:1240:U:C5'	2.42	0.48
50:DT:43:ILE:HG21	50:DT:58:VAL:HG21	1.94	0.48
52:BW:49:ASN:O	52:BW:50:VAL:HG13	2.12	0.48
23:DB:2222:C:H4'	25:DC:184:GLU:CD	2.34	0.48
4:AE:76:ASN:HB2	4:AE:81:GLN:NE2	2.28	0.48
5:AF:98:GLU:HG2	5:AF:99:ALA:N	2.20	0.48
10:AK:110:THR:CA	19:AU:19:LYS:HZ1	2.25	0.48
23:BB:1080:A:O2'	23:BB:1081:U:H5'	2.12	0.48
2:AC:59:PRO:HG2	2:AC:62:SER:CB	2.43	0.48
1:CA:8:A:N6	3:CD:205:LYS:HB2	2.27	0.48
32:B4:2:LYS:HD3	32:B4:4:ARG:NH2	2.28	0.48
48:BG:120:ILE:HG13	48:BG:140:ILE:HG22	1.94	0.48
26:BD:116:LYS:HB3	26:BD:118:PHE:CE2	2.49	0.48
24:DI:79:LEU:HD12	24:DI:135:MET:SD	2.53	0.48
40:DH:110:VAL:HG23	40:DH:132:PHE:CD1	2.48	0.48
44:BQ:63:ARG:NH1	44:BQ:96:ASP:HA	2.28	0.48
22:BA:42:C:C6	47:BF:65:LEU:HD22	2.48	0.48
18:AB:163:ILE:HG23	18:AB:164:ASP:N	2.21	0.48
41:BJ:25:LEU:CD2	41:BJ:26:GLY:H	2.26	0.48
1:CA:865:A:C2	1:CA:918:A:H4'	2.48	0.48
4:CE:136:VAL:HG13	4:CE:137:ARG:H	1.78	0.48
39:BX:13:GLU:O	39:BX:17:GLU:HG3	2.12	0.48
1:CA:949:A:O2'	1:CA:950:U:H5'	2.13	0.48
6:AG:72:VAL:HA	6:AG:89:GLU:HA	1.93	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:DQ:83:LYS:C	44:DQ:85:ALA:H	2.17	0.48
1:CA:1343:G:H2'	1:CA:1344:C:C6	2.48	0.48
23:DB:2073:C:H2'	23:DB:2074:U:H6	1.78	0.48
23:BB:999:U:O2'	23:BB:1000:A:H5'	2.14	0.48
48:DG:6:ALA:HB3	48:DG:68:ARG:CD	2.43	0.48
23:BB:655:A:H4'	23:BB:656:G:OP1	2.13	0.48
23:BB:2831:G:OP1	23:BB:2834:G:H4'	2.13	0.48
23:DB:1535:A:H3'	23:DB:1536:C:C6	2.48	0.48
23:DB:655:A:H4'	23:DB:656:G:OP1	2.13	0.48
3:AD:138:PRO:HA	3:AD:181:PHE:CD2	2.46	0.48
2:CC:176:THR:HB	2:CC:179:ALA:HB2	1.95	0.48
23:DB:1656:C:H2'	23:DB:1657:U:C6	2.45	0.48
23:DB:2547:A:H5''	27:DK:29:HIS:NE2	2.28	0.48
1:AA:1434:A:H2'	1:AA:1435:G:C8	2.47	0.48
23:BB:2758:A:H2'	23:BB:2759:G:H5'	1.95	0.48
23:BB:2299:U:H2'	23:BB:2300:C:H6	1.78	0.48
29:DE:149:ILE:O	29:DE:188:MET:HA	2.13	0.48
23:DB:521:U:H2'	23:DB:522:A:C8	2.47	0.48
44:BQ:24:TYR:CD1	44:BQ:25:GLY:N	2.80	0.48
1:AA:990:C:H2'	1:AA:991:U:O4'	2.12	0.48
34:B3:7:ARG:HG3	34:B3:7:ARG:NH1	2.27	0.48
31:D0:2:VAL:HG12	31:D0:3:GLN:H	1.78	0.48
31:D0:35:GLU:OE1	31:D0:44:ALA:HB3	2.12	0.48
23:BB:1395:A:H4'	23:BB:1397:U:C5	2.48	0.48
23:BB:642:U:H2'	23:BB:644:A:OP2	2.13	0.48
22:DA:91:C:H2'	22:DA:92:C:C6	2.47	0.48
28:DP:28:LYS:HE3	28:DP:82:SER:OG	2.13	0.48
1:CA:989:U:O2'	1:CA:990:C:H5'	2.13	0.48
36:D2:22:MET:SD	36:D2:28:ARG:HG3	2.53	0.48
23:BB:2660:A:H2'	23:BB:2661:G:O4'	2.12	0.48
1:CA:824:G:O2'	1:CA:825:A:H5'	2.13	0.48
11:CL:34:THR:N	11:CL:53:ARG:O	2.46	0.48
1:CA:291:U:H2'	1:CA:292:G:C8	2.48	0.48
1:AA:1225:A:H5'	1:AA:1226:C:OP2	2.13	0.48
10:AK:88:PRO:HG3	19:AU:28:LEU:HD21	1.94	0.48
1:CA:610:U:O4'	1:CA:610:U:O2	2.30	0.48
2:CC:178:ARG:O	2:CC:178:ARG:HG2	2.13	0.48
1:CA:846:G:H2'	1:CA:846:G:N3	2.26	0.48
23:BB:409:G:H2'	23:BB:410:G:C8	2.47	0.48
23:DB:2418:A:H2'	23:DB:2419:U:O4'	2.13	0.48
19:CU:42:THR:HB	19:CU:46:ARG:HE	1.79	0.48
12:AM:44:ILE:HA	12:AM:47:LEU:HB2	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:CJ:100:ILE:O	9:CJ:100:ILE:HD12	2.13	0.48
23:DB:674:G:OP1	29:DE:71:GLY:HA3	2.13	0.48
23:DB:675:A:H4'	29:DE:62:GLN:HE22	1.78	0.48
23:BB:727:A:OP1	23:BB:1431:A:O2'	2.30	0.48
26:BD:113:SER:HB3	26:BD:167:ASN:HA	1.95	0.48
52:DW:17:ALA:O	52:DW:18:LYS:HD2	2.13	0.48
29:DE:117:ARG:NH1	37:DL:2:ARG:HB2	2.23	0.48
37:BL:120:VAL:HG12	37:BL:121:THR:N	2.28	0.48
40:BH:40:THR:OG1	40:BH:43:ASN:ND2	2.46	0.48
46:DU:26:ASN:ND2	46:DU:34:ILE:HD12	2.27	0.48
48:DG:152:ARG:HD3	48:DG:153:PRO:CD	2.42	0.48
49:DR:23:GLU:O	49:DR:25:LEU:HD22	2.13	0.48
24:DI:128:ILE:HA	24:DI:131:THR:HG23	1.94	0.48
24:DI:85:ILE:HD12	24:DI:87:SER:O	2.13	0.48
49:BR:40:MET:C	49:BR:41:ILE:HD13	2.34	0.48
31:D0:32:THR:OG1	31:D0:50:GLY:HA2	2.13	0.48
23:DB:2834:G:O6	23:DB:2879:A:H2'	2.13	0.48
3:CD:116:LEU:HD21	3:CD:153:ARG:HD3	1.95	0.48
47:DF:147:ARG:HB3	47:DF:147:ARG:CZ	2.43	0.48
9:AJ:29:ALA:HA	9:AJ:32:THR:HG22	1.95	0.48
28:BP:85:VAL:HG21	28:BP:88:ARG:NH1	2.28	0.48
48:DG:94:ARG:HH21	48:DG:105:SER:N	2.11	0.48
42:DN:108:ALA:O	42:DN:110:MET:HE2	2.13	0.48
2:CC:119:ILE:HG23	2:CC:197:VAL:HG21	1.95	0.48
16:CS:38:THR:HG22	16:CS:39:ILE:N	2.28	0.48
7:CH:6:ILE:HD11	7:CH:31:LEU:HD23	1.95	0.48
27:BK:101:GLY:O	27:BK:120:PRO:HB3	2.12	0.48
2:CC:8:GLY:HA2	2:CC:11:LEU:CG	2.42	0.48
25:BC:162:GLN:NE2	25:BC:174:ARG:HH22	2.11	0.48
23:DB:2729:G:H2'	23:DB:2730:C:C6	2.48	0.48
23:DB:2144:G:N2	23:DB:2148:G:N3	2.62	0.48
23:BB:364:C:H2'	23:BB:365:U:C5	2.48	0.48
1:CA:672:U:H2'	1:CA:673:A:C8	2.47	0.48
23:DB:2087:G:H2'	23:DB:2088:A:C8	2.48	0.48
23:BB:611:C:C2'	23:BB:612:G:H5'	2.43	0.48
23:BB:18:U:H2'	23:BB:19:A:C8	2.48	0.48
22:BA:90:C:OP1	38:BM:16:ARG:HB2	2.13	0.48
23:BB:1629:U:O2	23:BB:2698:U:H5''	2.14	0.48
22:BA:52:A:OP1	22:BA:52:A:H4'	2.13	0.48
35:DV:55:GLU:N	35:DV:55:GLU:CD	2.67	0.48
35:BV:53:LYS:HB3	35:BV:55:GLU:OE1	2.13	0.48
34:D3:20:GLY:HA3	34:D3:48:MET:CE	2.42	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:286:U:H2'	23:DB:287:G:H8	1.77	0.48
23:DB:1810:A:H2'	23:DB:1811:G:O4'	2.12	0.48
23:BB:2800:A:H2'	23:BB:2801:G:C8	2.49	0.48
6:AG:135:LYS:HG2	6:AG:139:ASP:OD2	2.13	0.48
23:BB:1684:G:H2'	23:BB:1685:C:H6	1.76	0.48
34:B3:20:GLY:HA3	34:B3:48:MET:HE1	1.94	0.48
23:BB:780:G:H2'	23:BB:782:A:N7	2.28	0.48
1:CA:125:U:H2'	1:CA:126:G:C8	2.49	0.48
47:DF:141:ASP:CG	47:DF:144:LYS:HB2	2.34	0.48
23:DB:1340:U:H3'	23:DB:1341:G:H5'	1.94	0.48
1:AA:707:U:H4'	10:AK:21:HIS:CD2	2.48	0.48
1:CA:332:G:OP2	17:CT:4:LYS:HB2	2.12	0.48
23:BB:1709:U:H2'	23:BB:1710:G:H8	1.78	0.48
23:BB:279:A:N6	23:BB:361:G:H1'	2.28	0.48
37:BL:24:GLY:C	37:BL:26:GLY:H	2.16	0.48
1:CA:1190:G:OP1	2:CC:4:VAL:N	2.45	0.48
5:CF:16:GLU:CD	5:CF:16:GLU:H	2.16	0.48
47:DF:2:LYS:HE3	47:DF:2:LYS:N	2.28	0.48
23:DB:2778:A:O2'	23:DB:2781:A:H5'	2.13	0.48
23:DB:1479:G:O2'	23:DB:1480:C:H5'	2.13	0.48
23:DB:1099:G:H4'	24:DI:4:VAL:CG1	2.43	0.48
35:BV:38:LEU:HD21	35:BV:65:VAL:HG21	1.95	0.48
5:CF:38:ARG:HD3	5:CF:97:THR:CA	2.42	0.48
14:AQ:7:LEU:O	14:AQ:60:ILE:HD13	2.12	0.48
40:BH:128:HIS:CB	40:BH:144:VAL:HG12	2.43	0.48
23:DB:2336:A:H1'	23:DB:2385:C:O4'	2.12	0.48
23:BB:2329:U:H2'	23:BB:2330:G:C8	2.48	0.48
48:DG:91:VAL:C	48:DG:93:TYR:H	2.16	0.48
45:DS:66:ILE:HG12	45:DS:67:ASP:N	2.28	0.48
47:DF:131:VAL:C	47:DF:133:GLU:H	2.16	0.48
46:DU:21:ARG:HD3	46:DU:72:PHE:CD2	2.48	0.48
47:BF:121:PHE:N	47:BF:121:PHE:CD2	2.81	0.48
49:DR:3:ALA:HB1	49:DR:59:ILE:HD13	1.95	0.48
47:BF:107:VAL:N	47:BF:108:PRO:CD	2.76	0.48
23:DB:494:G:O2'	23:DB:495:G:H5'	2.13	0.48
23:BB:2730:C:H2'	23:BB:2731:G:H8	1.78	0.48
27:BK:70:ARG:CB	27:BK:76:VAL:HG22	2.43	0.48
47:BF:147:ARG:HB3	47:BF:147:ARG:CZ	2.43	0.48
1:AA:1190:G:O2'	2:AC:2:GLN:HB3	2.14	0.48
23:BB:2052:A:OP1	26:BD:145:SER:HA	2.12	0.48
13:CP:6:LEU:HD11	13:CP:71:VAL:HB	1.95	0.48
42:DN:97:ILE:HD12	42:DN:98:LEU:H	1.76	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DX:44:LYS:HG3	39:DX:48:ARG:HH12	1.77	0.48
34:B3:33:THR:HG23	34:B3:34:LYS:N	2.29	0.48
26:DD:125:TRP:CD2	26:DD:160:LYS:HB3	2.47	0.48
1:CA:521:G:O2'	1:CA:522:C:H5'	2.13	0.48
23:BB:2100:G:C6	23:BB:2190:G:C6	3.01	0.48
27:BK:99:ILE:HB	27:BK:118:LEU:HD22	1.96	0.48
23:BB:2590:A:H2'	23:BB:2591:C:C6	2.48	0.48
51:BZ:32:ASN:O	51:BZ:33:LEU:O	2.31	0.48
23:DB:2595:G:H1	25:DC:238:ASN:HD21	1.61	0.48
23:BB:2665:A:O2'	23:BB:2666:C:H5'	2.14	0.48
23:DB:2087:G:H2'	23:DB:2088:A:H8	1.78	0.48
1:AA:764:C:C2'	1:AA:765:G:H5'	2.43	0.48
1:AA:882:C:O2'	1:AA:883:C:H5'	2.13	0.48
21:CN:41:TRP:HB3	21:CN:44:VAL:CG2	2.41	0.48
3:AD:97:LEU:HA	3:AD:100:VAL:HG23	1.94	0.48
1:AA:1343:G:H2'	1:AA:1344:C:H6	1.78	0.48
1:CA:279:A:C5'	1:CA:280:C:H3'	2.42	0.48
1:AA:1488:G:O2'	1:AA:1489:G:H5'	2.13	0.48
23:DB:2515:C:H2'	23:DB:2516:A:H8	1.78	0.48
2:AC:63:ILE:HG22	2:AC:64:ARG:N	2.28	0.48
1:AA:676:A:H2'	1:AA:677:U:C6	2.48	0.48
1:AA:679:C:O2'	1:AA:680:C:H5'	2.13	0.48
1:AA:715:A:O2'	1:AA:716:A:H5'	2.13	0.48
23:DB:1843:C:H2'	23:DB:1844:C:H6	1.78	0.48
23:BB:1562:U:H2'	23:BB:1563:U:C6	2.48	0.48
1:CA:402:G:H2'	1:CA:403:C:H6	1.77	0.48
17:AT:50:PHE:O	17:AT:53:MET:HG3	2.12	0.48
23:DB:327:G:O2'	23:DB:328:U:H5'	2.13	0.48
1:CA:229:U:H2'	1:CA:230:G:C8	2.49	0.48
23:DB:2230:G:H2'	23:DB:2231:U:H6	1.77	0.48
22:BA:102:G:H2'	22:BA:103:U:C6	2.49	0.48
1:CA:724:G:H3'	1:CA:724:G:OP2	2.14	0.48
1:CA:107:G:O6	17:CT:9:ARG:HD3	2.13	0.48
25:DC:173:LEU:N	25:DC:173:LEU:HD13	2.28	0.48
1:AA:989:U:C2'	1:AA:990:C:H5'	2.44	0.48
22:DA:106:G:H2'	22:DA:107:G:O4'	2.12	0.48
1:AA:960:U:O2'	1:AA:1223:C:H4'	2.13	0.48
23:DB:780:G:H2'	23:DB:782:A:N7	2.29	0.48
1:AA:620:C:C2	3:AD:131:ILE:HG21	2.49	0.48
18:CB:103:TRP:CZ3	18:CB:107:ARG:HD2	2.48	0.48
1:AA:386:C:O2'	1:AA:387:U:H5'	2.13	0.48
1:AA:893:C:H2'	1:AA:894:G:H8	1.77	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2507:C:O2'	23:BB:2508:G:H5'	2.13	0.48
1:AA:792:A:H1'	1:AA:794:A:N7	2.29	0.48
2:CC:111:ASP:O	2:CC:115:VAL:HG23	2.14	0.48
23:DB:1113:U:O2'	23:DB:1114:C:H5'	2.14	0.48
8:CI:56:MET:HA	8:CI:59:LYS:HB3	1.94	0.48
50:BT:30:ILE:CG2	50:BT:85:VAL:HB	2.43	0.48
9:CJ:73:LEU:O	9:CJ:74:VAL:HB	2.12	0.48
6:CG:110:ARG:H	6:CG:118:ARG:HH11	1.60	0.48
32:B4:7:VAL:HG23	32:B4:35:GLN:HB2	1.95	0.48
32:D4:7:VAL:HG23	32:D4:35:GLN:HB2	1.95	0.48
23:DB:2061:G:H5''	23:DB:2503:A:C2	2.47	0.48
1:CA:1317:C:H3'	1:CA:1318:A:C8	2.48	0.48
29:BE:110:SER:O	29:BE:113:VAL:HB	2.13	0.48
23:BB:143:C:H2'	23:BB:144:A:C1'	2.42	0.48
8:AI:43:ALA:HA	8:AI:46:VAL:HG13	1.95	0.48
10:AK:111:ASP:HB3	19:AU:3:ILE:CD1	2.41	0.48
25:BC:68:ARG:NE	25:BC:128:THR:OG1	2.46	0.48
23:BB:1654:A:H2'	23:BB:1655:A:C8	2.48	0.48
3:CD:115:GLN:HG3	3:CD:119:HIS:CE1	2.48	0.48
49:BR:7:SER:HB2	49:BR:22:LEU:HD13	1.95	0.48
12:AM:79:LEU:HD21	12:AM:86:ARG:HE	1.78	0.48
23:BB:2303:G:H2'	23:BB:2304:G:O4'	2.13	0.48
18:CB:218:ALA:HA	18:CB:221:ARG:NH1	2.28	0.48
47:DF:33:ILE:HB	47:DF:90:LEU:HB2	1.96	0.48
20:AO:33:THR:HA	20:AO:36:ILE:HB	1.96	0.48
1:CA:1004:A:H3'	1:CA:1024:G:N2	2.26	0.48
25:DC:210:ALA:O	25:DC:215:VAL:HG23	2.14	0.48
26:BD:11:MET:H	26:BD:25:THR:HA	1.78	0.48
39:DX:8:GLU:O	39:DX:12:GLU:HB2	2.12	0.48
29:DE:127:GLU:N	29:DE:127:GLU:CD	2.66	0.48
40:DH:21:VAL:HG22	40:DH:22:LYS:N	2.21	0.48
39:BX:8:GLU:HB3	39:BX:12:GLU:HB2	1.95	0.48
12:AM:95:PRO:HA	12:AM:108:ARG:HE	1.78	0.48
47:BF:24:VAL:C	47:BF:26:GLN:H	2.16	0.48
16:CS:18:VAL:HG21	16:CS:43:MET:HE3	1.94	0.48
16:CS:50:VAL:O	16:CS:57:VAL:HG22	2.12	0.48
1:CA:1320:C:C2	16:CS:71:GLY:HA3	2.48	0.48
27:BK:77:ILE:HA	28:BP:70:GLU:O	2.13	0.48
42:DN:103:ARG:CG	42:DN:104:ALA:H	2.26	0.48
11:AL:23:LEU:HD23	11:AL:29:LYS:CE	2.43	0.48
1:AA:560:A:H4'	1:AA:561:U:C5'	2.42	0.48
1:CA:1232:U:OP1	8:CI:125:GLN:HG3	2.13	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DJ:36:LEU:HD12	41:DJ:121:LYS:HE3	1.96	0.48
23:BB:1857:G:H22	23:BB:1884:G:H2'	1.79	0.48
23:DB:814:C:O2'	23:DB:815:C:H5'	2.13	0.48
37:DL:109:LYS:HB3	37:DL:111:ILE:HD11	1.95	0.48
1:CA:1011:C:H2'	1:CA:1012:A:H8	1.74	0.48
50:DT:50:LEU:C	50:DT:52:GLU:H	2.16	0.48
1:CA:1128:C:H1'	1:CA:1148:U:O4	2.12	0.48
18:AB:30:ILE:HD13	18:AB:38:HIS:CD2	2.48	0.48
1:CA:764:C:N4	1:CA:812:G:H1	2.11	0.48
23:DB:2900:A:H2'	23:DB:2901:C:H6	1.78	0.48
23:BB:1810:A:H2'	23:BB:1811:G:O4'	2.14	0.48
22:BA:49:C:O3'	43:BO:68:LYS:HE3	2.13	0.48
45:BS:4:ILE:CG2	45:BS:106:VAL:HG22	2.42	0.48
23:DB:776:G:H4'	23:DB:777:G:O5'	2.14	0.48
1:AA:724:G:H3'	1:AA:724:G:OP2	2.14	0.48
23:BB:2790:U:H5'	23:BB:2893:A:N7	2.28	0.48
22:BA:95:U:H2'	22:BA:96:G:H8	1.78	0.48
23:DB:2699:C:H2'	23:DB:2700:A:H8	1.77	0.48
50:DT:18:GLU:C	50:DT:20:ALA:H	2.13	0.48
23:DB:1315:C:H2'	23:DB:1316:U:H6	1.78	0.48
22:BA:106:G:H2'	22:BA:107:G:O4'	2.13	0.48
1:CA:562:U:H5''	1:CA:563:A:C4	2.48	0.48
27:DK:111:LYS:C	27:DK:113:MET:H	2.17	0.48
33:D1:38:PHE:O	33:D1:40:PRO:HD3	2.13	0.48
1:AA:626:G:H2'	1:AA:627:G:H8	1.78	0.48
23:BB:1786:A:H1'	23:BB:1938:A:N6	2.28	0.48
1:CA:397:A:H5'	1:CA:398:U:OP1	2.13	0.48
23:BB:1709:U:H2'	23:BB:1710:G:C8	2.49	0.48
23:DB:2417:C:O2'	23:DB:2418:A:H5'	2.14	0.48
7:AH:79:ARG:NH2	7:AH:82:LEU:HB2	2.28	0.48
23:DB:1319:C:O2'	23:DB:1320:C:H5'	2.13	0.48
42:DN:62:ASN:HD22	42:DN:62:ASN:N	2.11	0.48
35:DV:21:ARG:HE	35:DV:87:GLN:HB3	1.77	0.48
6:AG:48:THR:O	6:AG:51:GLN:HB3	2.12	0.48
12:CM:36:ALA:HB2	12:CM:58:GLU:OE1	2.13	0.48
23:DB:1099:G:H3'	24:DI:2:LYS:HA	1.95	0.48
12:AM:3:ILE:HA	12:AM:56:ARG:HB3	1.94	0.48
9:CJ:5:ARG:N	9:CJ:76:ILE:O	2.46	0.48
35:BV:9:ARG:HD3	35:BV:20:LEU:HD11	1.95	0.48
5:AF:21:MET:HB3	5:AF:25:TYR:CZ	2.48	0.48
14:CQ:52:CYS:SG	14:CQ:74:LEU:HG	2.53	0.48
40:BH:133:GLN:HA	40:BH:139:PHE:HD2	1.79	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:DL:92:LEU:HD22	37:DL:124:GLY:HA3	1.96	0.48
23:DB:145:C:H2'	23:DB:146:A:C8	2.47	0.48
23:DB:638:G:O2'	23:DB:639:U:H5'	2.14	0.48
23:BB:2723:C:H2'	23:BB:2724:U:O4'	2.14	0.48
27:DK:71:ARG:NE	27:DK:72:PRO:HD3	2.28	0.48
47:DF:110:ILE:CG2	47:DF:113:PHE:HB3	2.43	0.48
41:BJ:4:PHE:HB3	41:BJ:44:TYR:CD1	2.48	0.48
1:AA:957:U:H2'	1:AA:959:A:OP2	2.13	0.48
49:DR:34:GLU:HG2	49:DR:60:LYS:HG2	1.94	0.48
21:AN:9:GLU:HB2	21:AN:62:ARG:NE	2.28	0.48
47:BF:111:ARG:HG2	47:BF:133:GLU:OE1	2.13	0.48
47:BF:66:ILE:HA	47:BF:85:GLY:O	2.14	0.48
22:DA:43:C:C2'	22:DA:44:G:H5''	2.42	0.48
4:CE:136:VAL:HG13	4:CE:137:ARG:N	2.28	0.48
42:BN:106:ASP:OD1	42:BN:108:ALA:HB3	2.12	0.48
18:AB:61:SER:HA	18:AB:224:ARG:HA	1.95	0.48
23:BB:2073:C:H2'	23:BB:2074:U:H6	1.78	0.48
38:DM:35:ALA:HB2	38:DM:100:LYS:CB	2.44	0.48
46:BU:40:LEU:HA	46:BU:60:LYS:O	2.13	0.48
44:DQ:63:ARG:NH1	44:DQ:96:ASP:HA	2.28	0.48
23:DB:547:A:C5'	23:DB:548:G:H21	2.27	0.48
45:DS:69:LEU:HB3	45:DS:107:VAL:CG2	2.44	0.48
27:DK:64:ARG:O	27:DK:82:ASN:HA	2.14	0.48
1:AA:946:A:O2'	1:AA:1333:A:N3	2.45	0.48
23:DB:1439:A:N7	23:DB:1440:U:N1	2.62	0.48
4:CE:85:LYS:HG3	4:CE:93:VAL:O	2.13	0.48
51:BZ:14:THR:HA	51:BZ:28:ARG:HA	1.95	0.48
23:BB:815:C:OP2	49:BR:85:LYS:HE2	2.14	0.48
1:AA:840:C:C2	1:AA:842:U:H5''	2.48	0.48
48:BG:9:VAL:HG12	48:BG:11:PRO:HD3	1.95	0.48
23:DB:2030:A:H4'	23:DB:2031:A:H5'	1.95	0.48
32:D4:12:ARG:HG3	32:D4:13:ASN:ND2	2.28	0.48
1:AA:1342:C:O2'	8:AI:125:GLN:HB3	2.13	0.48
1:AA:489:C:H2'	1:AA:490:C:C6	2.49	0.48
23:DB:1842:G:H2'	23:DB:1843:C:H6	1.75	0.48
17:AT:53:MET:HA	17:AT:56:ILE:HD12	1.95	0.48
23:BB:753:A:H2'	23:BB:754:U:H6	1.78	0.48
1:CA:309:A:H2'	1:CA:310:G:H8	1.78	0.48
23:BB:566:U:H2'	23:BB:567:U:O4'	2.13	0.48
50:BT:61:LEU:HD21	50:BT:82:LYS:HD3	1.94	0.48
23:DB:819:A:OP2	23:DB:1187:G:N2	2.46	0.48
1:AA:1245:C:O2'	1:AA:1246:A:H5'	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DW:45:HIS:ND1	52:DW:45:HIS:N	2.58	0.48
1:AA:998:C:H6	1:AA:998:C:OP2	1.97	0.48
23:BB:2101:A:H2'	23:BB:2102:G:C1'	2.44	0.48
26:DD:142:VAL:HB	26:DD:143:PRO:CD	2.43	0.48
23:BB:1830:C:H2'	23:BB:1831:G:H8	1.78	0.48
1:AA:261:U:H2'	1:AA:263:A:OP2	2.13	0.48
26:BD:29:VAL:HB	26:BD:98:VAL:CG1	2.43	0.48
23:BB:1268:A:H2'	23:BB:1269:A:O4'	2.13	0.48
23:DB:2599:G:N7	25:DC:235:GLU:HB2	2.28	0.48
4:CE:89:THR:HG22	4:CE:90:GLY:N	2.29	0.48
1:AA:1211:U:OP1	1:AA:1213:A:H4'	2.14	0.48
41:DJ:30:THR:OG1	41:DJ:31:GLU:N	2.45	0.48
23:BB:1479:G:O2'	23:BB:1480:C:H5'	2.12	0.48
23:DB:2100:G:H2'	23:DB:2101:A:C8	2.47	0.48
25:BC:51:ARG:NH2	25:BC:246:PRO:HG2	2.29	0.48
1:AA:509:A:H3'	57:AA:1775:HOH:O	2.12	0.48
23:DB:83:A:OP2	23:DB:83:A:H8	1.96	0.48
23:DB:2179:C:H2'	23:DB:2179:C:O2	2.13	0.48
1:CA:1402:C:H2'	1:CA:1403:C:O4'	2.14	0.48
12:AM:26:LYS:O	12:AM:30:LYS:HB2	2.13	0.48
1:CA:1349:A:H2'	1:CA:1350:A:O4'	2.13	0.48
32:B4:7:VAL:HG22	32:B4:8:LYS:N	2.29	0.48
41:BJ:12:LYS:NZ	41:BJ:12:LYS:H	2.12	0.48
26:BD:113:SER:HB2	26:BD:168:GLU:H	1.77	0.48
35:DV:9:ARG:HD3	35:DV:20:LEU:HD11	1.96	0.48
25:DC:130:PRO:HA	25:DC:188:ARG:HA	1.94	0.48
41:DJ:136:GLN:N	41:DJ:137:PRO:HD3	2.28	0.48
23:DB:28:A:N6	23:DB:512:G:O2'	2.47	0.48
4:CE:143:LEU:O	4:CE:146:MET:HG2	2.14	0.48
23:BB:142:A:C2	23:BB:143:C:N4	2.81	0.48
22:BA:28:C:H2'	22:BA:29:A:C8	2.48	0.48
22:BA:28:C:OP1	43:BO:31:THR:HG21	2.14	0.48
1:AA:1229:A:H2'	1:AA:1230:C:C6	2.48	0.48
10:AK:44:ALA:HB2	10:AK:69:CYS:HB2	1.96	0.48
23:DB:1729:U:H5'	23:DB:1730:C:O4'	2.14	0.48
23:BB:1999:C:H5''	23:BB:2723:C:O2'	2.13	0.48
49:BR:19:THR:CB	49:BR:97:LYS:HA	2.44	0.48
1:AA:438:U:H4'	3:AD:119:HIS:HD2	1.79	0.48
44:BQ:90:ASP:H	49:BR:39:LEU:HD11	1.78	0.48
21:AN:5:MET:HB3	21:AN:62:ARG:HH12	1.79	0.48
2:AC:69:THR:O	2:AC:104:GLU:HA	2.13	0.48
29:BE:5:LEU:HD13	29:BE:122:GLU:CG	2.43	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:DD:149:ASN:O	26:DD:152:PRO:HD2	2.13	0.48
6:CG:145:GLU:N	6:CG:148:LYS:HB2	2.28	0.48
47:BF:134:GLN:O	47:BF:136:ILE:N	2.46	0.48
10:CK:28:ASN:HD22	10:CK:46:ALA:HB3	1.76	0.48
42:BN:28:LEU:N	42:BN:34:ILE:HD11	2.28	0.48
6:AG:45:ALA:CB	6:AG:120:ALA:HB2	2.43	0.48
52:DW:9:THR:HG23	52:DW:10:ARG:CD	2.42	0.48
23:DB:1278:C:O3'	42:DN:34:ILE:HG23	2.13	0.48
47:BF:13:LYS:HA	47:BF:16:MET:HG2	1.95	0.48
1:AA:86:G:C2	1:AA:87:C:N4	2.81	0.48
51:DZ:32:ASN:C	51:DZ:33:LEU:HD12	2.32	0.48
31:B0:41:HIS:HB2	42:BN:99:LYS:O	2.13	0.48
23:BB:2458:G:H2'	23:BB:2458:G:N3	2.29	0.48
23:BB:1439:A:N7	23:BB:1440:U:N1	2.62	0.48
2:CC:156:LEU:HD22	2:CC:157:GLY:N	2.28	0.48
23:DB:63:A:H2'	23:DB:63:A:OP2	2.14	0.48
16:CS:62:THR:H	16:CS:65:MET:CB	2.26	0.48
23:DB:2590:A:H2'	23:DB:2591:C:H6	1.79	0.48
12:AM:71:GLU:HA	12:AM:74:MET:CG	2.44	0.48
11:AL:106:VAL:HA	11:AL:107:LYS:NZ	2.29	0.48
23:DB:2098:U:C2	23:DB:2099:U:H1'	2.48	0.48
3:AD:25:ARG:NE	3:AD:26:ALA:HB2	2.29	0.48
2:AC:63:ILE:HG22	2:AC:65:VAL:HG23	1.95	0.48
34:D3:57:VAL:O	34:D3:59:ALA:N	2.39	0.48
1:AA:598:U:H4'	7:AH:85:TYR:CD2	2.49	0.48
2:CC:61:LYS:H	2:CC:61:LYS:NZ	2.12	0.48
23:DB:1315:C:H2'	23:DB:1316:U:C6	2.49	0.48
23:DB:1586:A:H2'	23:DB:1587:G:O4'	2.13	0.48
1:AA:636:U:H2'	1:AA:637:C:C6	2.49	0.48
11:AL:7:VAL:HG22	14:AQ:33:TYR:HD1	1.79	0.48
23:DB:1707:G:H2'	23:DB:1708:C:O4'	2.13	0.48
2:CC:115:VAL:HB	2:CC:199:VAL:HG11	1.95	0.48
23:DB:1311:G:H21	23:DB:1603:A:H62	1.61	0.48
1:CA:432:A:H2'	1:CA:433:G:H5'	1.94	0.48
23:DB:789:A:H5''	57:DB:3668:HOH:O	2.14	0.48
43:BO:80:GLU:HA	43:BO:83:LEU:HB2	1.96	0.48
25:DC:222:THR:HA	25:DC:231:HIS:O	2.13	0.48
11:AL:30:ARG:HB3	11:AL:57:THR:CG2	2.44	0.48
1:CA:458:U:H2'	1:CA:459:A:H8	1.78	0.48
47:DF:67:THR:C	47:DF:68:LYS:HD2	2.33	0.48
23:DB:1349:C:H2'	23:DB:1350:C:H6	1.78	0.48
1:AA:1310:G:H2'	1:AA:1311:A:O4'	2.13	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:111:A:H2'	23:BB:112:U:O4'	2.13	0.48
23:BB:1965:C:H3'	23:BB:1966:A:H8	1.78	0.48
23:BB:875:G:H2'	23:BB:876:C:H5'	1.94	0.48
23:DB:2409:G:H2'	23:DB:2410:G:O4'	2.12	0.48
8:CI:56:MET:HA	8:CI:59:LYS:HB2	1.95	0.48
30:BY:50:VAL:HB	30:BY:53:MET:HB2	1.95	0.48
12:AM:52:ILE:HD12	12:AM:55:LEU:CD1	2.37	0.48
50:DT:39:THR:HG21	50:DT:42:GLU:HB3	1.96	0.48
32:B4:8:LYS:HG2	32:B4:9:LYS:HD3	1.96	0.48
32:D4:8:LYS:HG2	32:D4:9:LYS:HD3	1.94	0.48
26:BD:107:VAL:N	26:BD:206:ALA:H	2.10	0.48
5:CF:36:ILE:HG12	5:CF:64:VAL:HG12	1.96	0.48
5:CF:92:THR:HG22	5:CF:94:HIS:H	1.79	0.48
10:CK:86:LYS:HB2	10:CK:113:THR:HA	1.96	0.48
26:DD:104:VAL:HG12	26:DD:106:LYS:HE2	1.96	0.48
26:DD:107:VAL:N	26:DD:206:ALA:H	2.12	0.48
37:DL:82:LEU:C	37:DL:84:LYS:H	2.15	0.48
43:BO:36:TYR:CD2	43:BO:36:TYR:N	2.80	0.48
10:AK:22:ILE:HD13	10:AK:95:THR:HG21	1.94	0.48
46:DU:39:ASN:HB3	46:DU:62:ALA:H	1.79	0.48
6:CG:63:VAL:HA	6:CG:66:GLU:OE2	2.14	0.48
48:BG:118:ALA:C	48:BG:120:ILE:H	2.16	0.48
26:DD:186:LEU:CD2	28:DP:3:ILE:HD11	2.43	0.48
49:DR:49:ILE:HB	49:DR:51:VAL:O	2.13	0.48
23:DB:1082:U:C2	23:DB:1086:A:N1	2.82	0.48
49:BR:64:VAL:HB	49:BR:95:ASP:HB3	1.96	0.48
22:BA:5:U:H2'	22:BA:6:G:H8	1.78	0.48
47:BF:133:GLU:HA	47:BF:150:GLY:HA2	1.93	0.48
41:BJ:29:ALA:HB1	41:BJ:105:VAL:HG12	1.95	0.48
1:AA:1339:A:C2'	1:AA:1340:A:H5'	2.44	0.48
47:DF:121:PHE:CD2	47:DF:121:PHE:N	2.81	0.48
47:DF:3:LEU:HG	47:DF:99:PHE:CD2	2.49	0.48
37:BL:95:LEU:HB3	37:BL:100:ILE:CG2	2.43	0.48
42:BN:103:ARG:CG	42:BN:104:ALA:H	2.26	0.48
39:DX:13:GLU:O	39:DX:17:GLU:HG3	2.14	0.48
23:BB:2595:G:H1	25:BC:238:ASN:HD21	1.62	0.48
42:DN:34:ILE:HG22	42:DN:35:LYS:N	2.28	0.48
40:BH:5:LEU:HD11	40:BH:19:VAL:HG22	1.94	0.48
23:BB:2210:U:H4'	23:BB:2211:A:O5'	2.14	0.48
42:BN:19:ALA:C	42:BN:21:PHE:N	2.66	0.48
9:AJ:61:ALA:O	9:AJ:62:ARG:HB2	2.14	0.48
3:AD:14:GLU:HG3	3:AD:59:LYS:HA	1.96	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1550:C:H2'	23:DB:1551:A:C8	2.49	0.48
23:DB:2728:U:H5'	27:DK:70:ARG:NH2	2.27	0.48
23:DB:1241:A:H2'	23:DB:1242:U:C5'	2.44	0.48
23:DB:2458:G:N3	23:DB:2458:G:H2'	2.29	0.48
3:AD:36:ALA:HB2	3:AD:42:ALA:HA	1.94	0.48
23:BB:717:C:H2'	23:BB:718:A:O4'	2.14	0.48
23:BB:2373:G:H2'	23:BB:2374:C:C6	2.48	0.48
2:CC:10:ARG:O	2:CC:13:ILE:O	2.31	0.48
21:AN:19:TYR:O	21:AN:23:ARG:HG3	2.13	0.48
23:BB:1171:G:H2'	23:BB:1172:C:O4'	2.14	0.48
23:DB:78:U:H2'	23:DB:79:C:C6	2.49	0.48
51:DZ:72:ARG:HB2	51:DZ:78:TYR:CE2	2.49	0.48
34:D3:33:THR:HG23	34:D3:34:LYS:N	2.27	0.48
23:DB:2815:C:H2'	23:DB:2816:G:H8	1.77	0.48
22:DA:48:U:H2'	22:DA:49:C:H6	1.79	0.48
24:BI:89:SER:HA	24:BI:97:VAL:CG2	2.44	0.48
23:BB:1184:U:O2'	23:BB:1185:G:H5'	2.13	0.48
23:DB:1638:C:H4'	23:DB:2710:C:O2	2.14	0.48
23:BB:1773:A:H2'	23:BB:1774:C:O4'	2.13	0.48
23:DB:2800:A:H2'	23:DB:2801:G:O4'	2.13	0.48
23:DB:2802:G:H2'	23:DB:2803:G:C8	2.49	0.48
52:BW:45:HIS:N	52:BW:45:HIS:ND1	2.58	0.48
23:DB:1936:A:H61	23:DB:1963:U:H3	1.60	0.48
27:BK:109:SER:OG	27:BK:111:LYS:HG2	2.13	0.48
20:AO:45:GLU:CD	20:AO:46:HIS:H	2.16	0.48
26:BD:69:ALA:C	26:BD:71:ALA:H	2.16	0.48
1:CA:728:A:H2'	1:CA:729:A:C8	2.49	0.48
25:DC:265:PHE:N	25:DC:265:PHE:CD2	2.82	0.48
23:BB:2412:A:H2'	23:BB:2413:G:O4'	2.14	0.48
24:DI:92:PRO:O	24:DI:93:ASN:HB2	2.13	0.48
23:DB:1709:U:H2'	23:DB:1710:G:H8	1.78	0.48
1:AA:1154:G:O2'	1:AA:1155:A:H5'	2.14	0.48
1:CA:707:U:H4'	10:CK:21:HIS:CD2	2.48	0.48
23:BB:1083:U:H2'	23:BB:1085:A:OP2	2.13	0.48
1:CA:621:A:H2'	1:CA:622:A:C8	2.48	0.48
23:BB:817:C:O2	23:BB:839:U:H4'	2.14	0.48
16:CS:28:LYS:H	16:CS:28:LYS:HD2	1.78	0.48
5:CF:73:GLU:O	5:CF:77:THR:HG23	2.13	0.48
10:AK:81:LEU:HD22	10:AK:104:PHE:CD1	2.49	0.48
1:CA:26:A:N6	1:CA:558:G:H1'	2.29	0.48
1:CA:747:A:H2'	1:CA:748:G:O4'	2.13	0.48
22:BA:112:G:O2'	22:BA:113:C:H5'	2.13	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:AD:123:MET:HG3	3:AD:127:ARG:C	2.34	0.48
23:BB:83:A:H8	23:BB:83:A:OP2	1.97	0.48
18:AB:156:LEU:N	18:AB:156:LEU:HD12	2.29	0.48
25:BC:86:ARG:HD2	25:BC:90:ILE:HD11	1.95	0.48
37:DL:74:THR:HA	37:DL:107:PHE:O	2.13	0.48
24:DI:2:LYS:N	24:DI:2:LYS:HD2	2.28	0.48
23:DB:727:A:OP1	23:DB:1431:A:O2'	2.31	0.48
50:DT:30:ILE:CG2	50:DT:85:VAL:HB	2.44	0.48
50:DT:57:VAL:HG22	50:DT:58:VAL:N	2.21	0.48
50:BT:32:LEU:H	50:BT:83:ALA:HB3	1.77	0.48
1:CA:1237:C:H2'	1:CA:1336:C:C5	2.48	0.48
29:DE:58:LYS:CE	29:DE:58:LYS:H	2.27	0.48
35:BV:28:ALA:HA	35:BV:88:HIS:ND1	2.28	0.48
25:DC:119:VAL:HG13	25:DC:133:ASN:ND2	2.28	0.48
1:CA:254:G:H4'	14:CQ:19:SER:OG	2.13	0.48
26:DD:11:MET:H	26:DD:25:THR:HA	1.78	0.48
52:DW:39:GLN:O	52:DW:40:ARG:HG2	2.14	0.48
42:DN:55:ALA:HA	42:DN:80:PHE:CD1	2.48	0.48
23:BB:587:C:N3	37:BL:33:ARG:NH2	2.61	0.48
23:DB:1729:U:H3'	23:DB:1730:C:C5'	2.43	0.48
23:BB:1729:U:H5'	23:BB:1730:C:O4'	2.14	0.48
10:CK:44:ALA:HB2	10:CK:69:CYS:HB2	1.95	0.48
27:DK:35:VAL:HG12	27:DK:69:VAL:CG2	2.42	0.48
18:AB:46:VAL:HA	18:AB:49:PHE:CD2	2.46	0.48
46:DU:3:LYS:CE	46:DU:82:VAL:HB	2.43	0.48
24:DI:49:GLU:HB3	24:DI:52:LEU:HD12	1.96	0.48
23:DB:1181:U:H2'	23:DB:1182:G:H8	1.78	0.48
26:DD:23:PRO:O	26:DD:24:VAL:HB	2.14	0.48
40:DH:122:LEU:HD22	40:DH:122:LEU:N	2.29	0.48
47:DF:107:VAL:N	47:DF:108:PRO:CD	2.76	0.48
38:BM:40:ARG:NH2	38:BM:73:ILE:HD12	2.29	0.48
16:AS:10:ILE:HG21	16:AS:40:PHE:HE2	1.78	0.48
16:AS:32:THR:OG1	16:AS:50:VAL:HA	2.13	0.48
1:AA:1271:A:H5'	1:AA:1314:C:C5'	2.44	0.48
1:AA:1314:C:H2'	1:AA:1315:U:H6	1.78	0.48
16:AS:6:LYS:HG3	21:AN:40:ARG:NH2	2.27	0.48
28:BP:9:GLN:HA	28:BP:12:MET:SD	2.53	0.48
18:CB:86:CYS:CB	18:CB:88:GLN:HE21	2.27	0.48
47:BF:131:VAL:C	47:BF:133:GLU:H	2.16	0.48
47:BF:135:ILE:HG13	47:BF:137:PHE:H	1.78	0.48
23:BB:1141:U:OP2	41:BJ:65:THR:HG21	2.14	0.48
23:DB:2314:A:H1'	47:DF:154:THR:HG21	1.96	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DF:3:LEU:HD12	47:DF:96:TRP:CD1	2.48	0.48
23:DB:396:G:H1'	51:DZ:29:PHE:HB3	1.96	0.48
26:BD:32:ASN:HB3	26:BD:50:VAL:HG21	1.96	0.48
23:DB:2210:U:N3	23:DB:2212:A:N7	2.61	0.48
34:D3:21:PHE:CE1	34:D3:58:ILE:HG12	2.49	0.48
39:DX:56:LEU:HA	39:DX:59:GLU:CD	2.33	0.48
24:DI:19:PRO:HB2	24:DI:22:PRO:HD2	1.96	0.48
4:AE:35:LEU:HD22	4:AE:133:ILE:HA	1.94	0.48
44:BQ:83:LYS:HG3	44:BQ:84:LYS:N	2.28	0.48
28:DP:61:ARG:HD3	28:DP:70:GLU:CD	2.34	0.48
28:BP:21:PRO:HB2	28:BP:96:LEU:CD1	2.44	0.48
1:CA:1222:G:H2'	1:CA:1223:C:C6	2.47	0.48
40:BH:21:VAL:HG22	40:BH:22:LYS:N	2.21	0.48
42:DN:19:ALA:C	42:DN:21:PHE:H	2.15	0.48
1:AA:87:C:H6	1:AA:87:C:O5'	1.96	0.48
49:DR:19:THR:CB	49:DR:97:LYS:HA	2.43	0.48
23:DB:582:A:H2'	23:DB:583:G:H8	1.79	0.48
23:DB:1441:G:H2'	23:DB:1442:U:H6	1.77	0.48
1:AA:1131:G:H22	1:AA:1144:G:H4'	1.79	0.48
18:AB:117:GLU:HA	18:AB:140:LEU:CD2	2.43	0.48
3:CD:2:ARG:HB3	3:CD:114:ARG:NH2	2.28	0.48
1:AA:544:G:OP1	3:AD:58:GLN:HG2	2.14	0.48
1:CA:1302:C:C6	12:CM:16:ILE:HG13	2.49	0.48
1:CA:1389:C:H2'	1:CA:1390:U:C6	2.48	0.48
1:CA:735:C:H2'	1:CA:736:C:H6	1.78	0.48
52:DW:32:ALA:O	52:DW:34:SER:N	2.46	0.48
1:AA:489:C:H2'	1:AA:490:C:H6	1.78	0.48
1:CA:158:G:H1	1:CA:163:C:N4	2.12	0.48
1:AA:1477:U:H2'	1:AA:1478:U:H6	1.79	0.48
1:CA:1164:G:H2'	1:CA:1165:U:C6	2.49	0.48
20:CO:26:GLU:HG3	20:CO:70:LEU:HD11	1.94	0.48
1:AA:833:G:O2'	1:AA:834:U:H5'	2.14	0.48
23:DB:1773:A:H2'	23:DB:1774:C:O4'	2.13	0.48
14:AQ:5:ARG:C	14:AQ:5:ARG:HD3	2.34	0.48
23:DB:2797:U:H4'	23:DB:2798:U:OP2	2.14	0.48
25:BC:2:VAL:HG23	25:BC:3:VAL:N	2.29	0.48
23:BB:1745:A:H2'	23:BB:1746:A:O4'	2.14	0.48
27:BK:107:LEU:HD12	27:BK:107:LEU:H	1.78	0.48
23:BB:2243:U:H2'	23:BB:2244:U:C6	2.49	0.48
23:BB:53:A:H2'	23:BB:54:G:O4'	2.14	0.48
23:BB:8:C:O2'	23:BB:9:G:H5'	2.13	0.48
23:DB:685:A:H1'	23:DB:688:U:O4	2.14	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1315:C:H2'	23:BB:1316:U:H6	1.77	0.48
23:BB:1317:G:H2'	23:BB:1318:U:O4'	2.14	0.48
1:CA:825:A:H2'	1:CA:826:C:H6	1.79	0.48
1:AA:46:G:O2'	1:AA:365:U:H1'	2.13	0.48
23:DB:2333:A:H5'	23:DB:2335:A:H1'	1.94	0.48
41:DJ:88:THR:HG22	41:DJ:91:GLU:OE1	2.13	0.48
1:CA:1160:G:H2'	1:CA:1161:C:H6	1.79	0.48
23:DB:1145:C:O2'	23:DB:1146:C:H5'	2.14	0.48
46:DU:27:VAL:HG23	46:DU:33:VAL:HG12	1.95	0.48
44:DQ:16:ILE:HG21	44:DQ:35:PHE:HA	1.96	0.48
23:DB:1688:U:H2'	23:DB:1698:A:N6	2.28	0.48
44:DQ:47:ARG:HH11	44:DQ:48:ASP:CG	2.16	0.48
23:BB:841:G:O2'	23:BB:842:U:H5'	2.14	0.48
23:DB:1900:A:N1	23:DB:1970:A:C5	2.82	0.48
23:BB:392:U:O2'	23:BB:393:C:H5'	2.14	0.48
25:DC:34:GLU:HG3	25:DC:34:GLU:O	2.14	0.48
23:DB:2133:G:H5''	23:DB:2133:G:C8	2.49	0.48
23:BB:93:G:H2'	23:BB:94:A:C8	2.49	0.48
1:AA:1303:C:H2'	1:AA:1304:G:C8	2.49	0.48
1:AA:1327:C:H2'	1:AA:1328:C:C6	2.49	0.48
12:AM:65:GLU:HB3	12:AM:66:GLY:H	1.47	0.48
50:DT:31:VAL:HA	50:DT:83:ALA:HB3	1.94	0.48
50:BT:28:ASN:HA	50:BT:91:GLN:NE2	2.28	0.48
50:BT:30:ILE:HG12	50:BT:32:LEU:HD23	1.96	0.48
1:CA:1332:A:H2'	1:CA:1333:A:C8	2.48	0.48
23:BB:1432:G:O2'	23:BB:1433:A:H5'	2.14	0.48
37:DL:18:ARG:O	37:DL:19:LEU:HD12	2.14	0.48
37:DL:19:LEU:HA	37:DL:27:LEU:HD13	1.96	0.48
48:BG:34:ARG:NH1	48:BG:34:ARG:HG2	2.29	0.48
41:BJ:124:VAL:O	41:BJ:125:TYR:HB2	2.14	0.48
20:AO:15:PHE:HE2	20:AO:84:ARG:HD3	1.78	0.48
5:AF:3:HIS:CE1	5:AF:65:GLU:HG3	2.49	0.48
29:DE:173:THR:C	29:DE:175:ILE:H	2.17	0.48
29:DE:116:ASP:O	29:DE:185:LYS:HE3	2.14	0.48
23:BB:143:C:H2'	23:BB:144:A:O4'	2.14	0.48
37:DL:122:VAL:HB	37:DL:143:GLU:OE2	2.13	0.48
8:AI:23:GLY:O	8:AI:61:ASP:HB3	2.14	0.48
8:AI:29:ILE:HA	8:AI:64:ILE:O	2.13	0.48
23:BB:1059:G:H2'	23:BB:1060:U:C6	2.49	0.48
6:CG:125:ASP:HB3	6:CG:130:LYS:HB3	1.95	0.48
10:CK:111:ASP:HB3	19:CU:3:ILE:CD1	2.41	0.48
10:CK:95:THR:HG23	10:CK:96:ILE:H	1.79	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:58:LYS:CE	29:BE:58:LYS:H	2.27	0.48
24:BI:32:VAL:HG13	24:BI:66:PHE:CD2	2.49	0.48
47:DF:111:ARG:HG2	47:DF:133:GLU:OE1	2.14	0.48
23:DB:901:C:H2'	23:DB:902:C:O4'	2.14	0.48
37:BL:116:VAL:HG22	37:BL:117:THR:N	2.29	0.48
39:DX:8:GLU:HB3	39:DX:12:GLU:HB2	1.96	0.48
23:BB:1278:C:O3'	42:BN:34:ILE:HG23	2.13	0.48
34:D3:54:LEU:O	34:D3:58:ILE:HG13	2.14	0.48
23:BB:1092:C:OP1	23:BB:2475:C:H4'	2.13	0.48
23:DB:2391:G:O6	23:DB:2425:A:H8	1.96	0.48
48:DG:126:THR:HG22	48:DG:127:GLN:H	1.78	0.48
39:DX:44:LYS:HG3	39:DX:48:ARG:NH1	2.28	0.48
23:DB:2869:G:H2'	23:DB:2870:C:H6	1.78	0.48
49:DR:10:LYS:N	49:DR:10:LYS:HD2	2.28	0.48
11:AL:23:LEU:HD22	11:AL:58:ASN:CG	2.34	0.48
26:DD:159:LYS:HZ2	26:DD:160:LYS:N	2.12	0.48
11:CL:41:PRO:CB	11:CL:88:ASP:HB3	2.44	0.48
6:AG:30:MET:HA	6:AG:38:ALA:CB	2.44	0.48
40:BH:47:PHE:CD1	40:BH:50:ARG:HG2	2.49	0.48
42:BN:96:ARG:HE	42:BN:116:VAL:HA	1.79	0.48
40:BH:3:VAL:CG2	40:BH:36:ALA:HB1	2.43	0.48
23:DB:283:G:H2'	23:DB:284:U:O4'	2.14	0.48
27:DK:53:LYS:N	27:DK:53:LYS:HD3	2.26	0.48
12:CM:6:ILE:O	12:CM:7:ASN:C	2.51	0.48
23:DB:2373:G:H2'	23:DB:2374:C:C6	2.49	0.48
18:CB:79:VAL:CG1	18:CB:80:LYS:N	2.76	0.48
18:CB:84:LEU:O	18:CB:84:LEU:HG	2.14	0.48
1:CA:836:G:H2'	1:CA:837:U:C6	2.49	0.48
3:CD:14:GLU:HG3	3:CD:59:LYS:HA	1.96	0.48
1:CA:279:A:H5'	1:CA:281:G:H5'	1.95	0.48
30:BY:31:ILE:HG13	30:BY:32:GLY:N	2.28	0.48
23:DB:1846:G:H2'	23:DB:1847:A:O4'	2.12	0.48
22:DA:95:U:H2'	22:DA:96:G:C8	2.49	0.48
23:BB:2893:A:H4'	23:BB:2894:G:O5'	2.14	0.48
25:DC:2:VAL:HG23	25:DC:3:VAL:N	2.28	0.48
11:CL:65:TYR:HB3	11:CL:95:HIS:HD2	1.79	0.48
23:DB:642:U:H2'	23:DB:644:A:OP2	2.13	0.48
1:CA:317:U:H2'	1:CA:318:G:C8	2.48	0.48
23:DB:132:G:O2'	23:DB:133:U:H5'	2.14	0.48
23:BB:1320:C:C5	23:BB:1329:U:H5''	2.49	0.48
47:BF:42:ALA:O	47:BF:46:LYS:HG3	2.13	0.48
1:CA:636:U:H2'	1:CA:637:C:C6	2.49	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:DO:7:ARG:HA	43:DO:10:ARG:NE	2.28	0.48
21:AN:17:ASP:C	21:AN:21:ALA:HB2	2.34	0.48
1:AA:628:G:H2'	1:AA:629:A:H8	1.77	0.48
44:DQ:104:ALA:HA	49:DR:46:GLU:CD	2.34	0.48
37:DL:119:PRO:HA	37:DL:138:ALA:O	2.13	0.48
23:BB:1676:A:H2'	23:BB:1677:A:O4'	2.13	0.48
1:CA:628:G:H2'	1:CA:629:A:C8	2.48	0.48
23:DB:1042:G:H2'	23:DB:1043:C:C6	2.49	0.48
23:BB:765:C:H2'	23:BB:766:U:H6	1.79	0.48
10:AK:88:PRO:HD3	19:AU:28:LEU:HD13	1.94	0.48
23:DB:467:G:O2'	23:DB:468:G:H5'	2.14	0.48
49:BR:68:ARG:NH1	49:BR:90:ARG:HD3	2.29	0.48
23:DB:1564:C:H2'	23:DB:1565:C:C6	2.48	0.48
23:DB:2220:U:H2'	23:DB:2221:G:H8	1.79	0.48
23:DB:2315:G:H2'	23:DB:2316:G:H8	1.78	0.48
29:DE:145:ASP:OD1	29:DE:183:PHE:HA	2.13	0.48
1:CA:790:A:H2'	1:CA:791:G:C8	2.49	0.48
1:CA:1057:G:H2'	1:CA:1058:G:C8	2.49	0.48
21:CN:68:ARG:NH2	21:CN:80:ARG:HH12	2.12	0.48
8:CI:5:TYR:CD2	8:CI:89:TYR:HB2	2.49	0.48
8:CI:86:LEU:HA	8:CI:89:TYR:HD2	1.78	0.48
25:BC:183:VAL:HG22	25:BC:184:GLU:H	1.78	0.48
23:DB:1820:U:H3	25:DC:197:ALA:HA	1.79	0.48
48:BG:15:ASP:O	48:BG:16:VAL:HB	2.14	0.48
35:BV:4:ILE:O	35:BV:64:VAL:N	2.47	0.48
41:BJ:136:GLN:N	41:BJ:137:PRO:HD3	2.29	0.48
14:AQ:16:MET:CB	14:AQ:19:SER:HB2	2.30	0.48
1:AA:254:G:H4'	14:AQ:19:SER:OG	2.14	0.48
26:DD:25:THR:HG21	26:DD:193:VAL:HG22	1.95	0.48
23:BB:1199:U:H2'	23:BB:1200:C:H6	1.79	0.48
42:DN:29:VAL:CG1	42:DN:75:ILE:HB	2.44	0.48
23:DB:136:G:H2'	23:DB:137:U:C6	2.49	0.48
23:DB:138:U:H5''	23:DB:139:U:O5'	2.14	0.48
6:CG:130:LYS:H	6:CG:134:VAL:CG2	2.23	0.48
26:BD:117:GLY:HA2	26:BD:164:GLN:NE2	2.29	0.48
45:BS:66:ILE:HD13	45:BS:66:ILE:N	2.19	0.48
40:DH:111:ALA:C	40:DH:113:SER:H	2.16	0.48
40:DH:96:THR:HG23	40:DH:97:ARG:H	1.79	0.48
44:BQ:88:GLU:HA	49:BR:49:ILE:HD11	1.95	0.48
16:AS:61:VAL:HG12	16:AS:62:THR:H	1.78	0.48
23:DB:899:A:C2	23:DB:900:A:H1'	2.49	0.48
47:BF:155:ILE:N	47:BF:155:ILE:HD12	2.29	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BF:91:ARG:O	47:BF:92:GLY:C	2.52	0.48
47:DF:134:GLN:NE2	47:DF:136:ILE:HA	2.29	0.48
26:BD:5:VAL:N	26:BD:32:ASN:ND2	2.59	0.48
12:CM:33:LEU:CD2	12:CM:38:ILE:HB	2.40	0.48
23:BB:2594:C:H2'	23:BB:2595:G:C8	2.49	0.48
39:BX:44:LYS:CD	39:BX:48:ARG:HH12	2.26	0.48
1:CA:1306:A:O2'	1:CA:1307:U:H5'	2.13	0.48
46:DU:40:LEU:HA	46:DU:60:LYS:O	2.13	0.48
23:DB:2539:C:O2'	23:DB:2540:C:H5'	2.14	0.48
23:DB:359:G:H2'	23:DB:360:U:C5'	2.42	0.48
6:AG:149:ALA:HB3	10:AK:55:ARG:CZ	2.44	0.48
23:DB:1387:A:H5'	23:DB:1469:A:O2'	2.12	0.48
1:AA:1407:C:C3'	1:AA:1408:A:H5''	2.44	0.48
48:BG:70:LEU:O	48:BG:74:MET:HG3	2.14	0.48
11:AL:113:ARG:CG	11:AL:118:VAL:HB	2.44	0.48
1:CA:501:C:O2'	1:CA:502:A:H5'	2.14	0.48
23:BB:2794:C:H2'	23:BB:2795:C:C6	2.48	0.48
23:DB:2751:G:H5''	23:DB:2752:C:H5	1.79	0.48
25:DC:5:CYS:HB2	25:DC:15:VAL:O	2.14	0.48
23:DB:851:C:O4'	30:DY:46:MET:HG2	2.13	0.48
1:AA:1479:C:H2'	1:AA:1480:A:H8	1.78	0.48
23:BB:1026:G:H2'	23:BB:1027:A:C8	2.47	0.48
23:DB:528:A:H2	23:DB:2043:C:H4'	1.79	0.48
31:B0:9:ARG:HB2	31:B0:12:ARG:NH2	2.28	0.48
1:AA:426:U:H4'	3:AD:39:GLN:HA	1.96	0.48
1:CA:598:U:H4'	7:CH:85:TYR:CD2	2.48	0.48
11:AL:65:TYR:C	11:AL:66:ILE:HD12	2.33	0.48
1:CA:98:A:H2'	1:CA:99:C:C6	2.49	0.48
23:DB:1745:A:H2'	23:DB:1746:A:O4'	2.13	0.48
23:BB:2243:U:O2'	23:BB:2244:U:H5'	2.13	0.48
12:CM:82:LEU:HD21	16:CS:64:GLU:OE2	2.13	0.48
22:DA:13:G:O2'	22:DA:14:U:H5''	2.14	0.48
24:BI:52:LEU:HD12	24:BI:52:LEU:N	2.29	0.48
10:AK:108:ASN:ND2	19:AU:6:ARG:HB2	2.29	0.48
19:AU:6:ARG:O	19:AU:7:GLU:O	2.32	0.48
23:BB:1740:G:H2'	23:BB:1741:C:H6	1.78	0.48
41:DJ:21:THR:O	41:DJ:62:VAL:HA	2.14	0.48
23:BB:615:U:O4	29:BE:39:ALA:HB2	2.13	0.48
1:AA:729:A:H2'	1:AA:730:G:C8	2.48	0.48
1:CA:685:G:O2'	1:CA:686:U:H5'	2.13	0.48
11:AL:30:ARG:O	11:AL:57:THR:HG23	2.14	0.48
28:BP:62:LYS:HB3	28:BP:69:VAL:HG22	1.96	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2276:G:O2'	23:DB:2277:G:H5'	2.13	0.48
23:DB:1830:C:H2'	23:DB:1831:G:H8	1.79	0.48
1:AA:1402:C:H2'	1:AA:1403:C:O4'	2.14	0.48
23:DB:2660:A:H2'	23:DB:2661:G:O4'	2.14	0.48
23:DB:2473:U:H2'	23:DB:2473:U:O2	2.13	0.48
23:DB:1015:U:H2'	23:DB:1016:G:H8	1.78	0.48
6:AG:99:ALA:O	6:AG:103:ILE:HG13	2.14	0.48
10:CK:19:VAL:HG12	10:CK:82:GLU:HB2	1.95	0.48
21:CN:66:THR:C	21:CN:68:ARG:H	2.17	0.47
8:CI:56:MET:HB3	8:CI:59:LYS:HZ2	1.79	0.47
42:DN:90:ARG:HB3	42:DN:94:TYR:HE1	1.79	0.47
19:CU:24:LYS:HZ3	19:CU:25:ALA:N	1.97	0.47
23:DB:513:A:O5'	23:DB:513:A:H8	1.96	0.47
23:BB:584:C:OP1	44:BQ:5:ARG:HB3	2.14	0.47
48:BG:153:PRO:HG2	48:BG:162:ARG:HD2	1.96	0.47
23:BB:2539:C:O2'	23:BB:2540:C:H5'	2.13	0.47
23:BB:2720:U:C5'	28:BP:52:ARG:HH22	2.19	0.47
49:BR:14:VAL:HG22	49:BR:15:SER:H	1.77	0.47
40:DH:113:SER:C	40:DH:115:VAL:H	2.17	0.47
38:BM:19:GLY:CA	38:BM:38:ARG:HH12	2.27	0.47
7:AH:14:ARG:HE	7:AH:75:GLN:HE22	1.61	0.47
18:AB:95:TRP:CZ2	18:AB:100:LEU:HD13	2.45	0.47
18:CB:60:ALA:HA	18:CB:64:GLY:CA	2.44	0.47
26:DD:53:GLY:C	26:DD:76:GLY:HA2	2.35	0.47
23:DB:1141:U:H5''	41:DJ:27:ARG:HH21	1.78	0.47
1:CA:865:A:H5'	1:CA:1078:U:C4	2.49	0.47
20:AO:33:THR:O	20:AO:36:ILE:HB	2.14	0.47
23:BB:396:G:H5''	51:BZ:10:LYS:HZ3	1.79	0.47
23:DB:2210:U:H4'	23:DB:2211:A:O5'	2.14	0.47
42:BN:108:ALA:O	42:BN:110:MET:HE2	2.14	0.47
6:AG:45:ALA:HB2	6:AG:116:ALA:O	2.14	0.47
23:BB:2531:A:H5'	48:BG:156:TYR:CE2	2.49	0.47
2:CC:120:THR:HG21	2:CC:186:SER:HB3	1.95	0.47
27:DK:7:MET:HE1	27:DK:18:ARG:HB3	1.95	0.47
11:AL:29:LYS:HB3	11:AL:56:LEU:HD22	1.96	0.47
50:BT:39:THR:HG21	50:BT:42:GLU:HB3	1.95	0.47
24:DI:100:ILE:O	24:DI:139:VAL:HG13	2.14	0.47
6:AG:30:MET:HE3	6:AG:33:GLY:H	1.79	0.47
12:CM:2:ARG:O	12:CM:4:ALA:N	2.47	0.47
12:CM:6:ILE:O	12:CM:8:ILE:HG23	2.13	0.47
45:DS:45:VAL:O	45:DS:48:LYS:HB3	2.14	0.47
28:DP:47:ILE:HD11	28:DP:59:THR:HG22	1.95	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:122:GLN:O	2:AC:127:VAL:HG22	2.13	0.47
23:DB:744:U:H2'	23:DB:745:G:O4'	2.14	0.47
23:DB:1733:G:H2'	23:DB:1734:G:H8	1.79	0.47
48:BG:8:VAL:O	48:BG:9:VAL:HB	2.13	0.47
1:CA:501:C:H2'	1:CA:502:A:H8	1.79	0.47
23:DB:2099:U:O2	23:DB:2099:U:H2'	2.14	0.47
23:BB:1494:A:H2'	23:BB:1495:A:H8	1.79	0.47
23:DB:21:A:H2'	23:DB:22:C:C6	2.49	0.47
23:BB:1387:A:H5'	23:BB:1469:A:O2'	2.13	0.47
1:AA:1277:C:O2'	1:AA:1279:G:C8	2.65	0.47
3:AD:104:MET:SD	3:AD:179:GLY:HA3	2.54	0.47
18:AB:16:GLY:HA2	18:AB:40:ILE:HG13	1.95	0.47
1:AA:1483:A:H1'	23:BB:1948:G:H1'	1.95	0.47
22:BA:48:U:H2'	22:BA:49:C:H6	1.79	0.47
23:DB:1946:U:O2'	23:DB:1947:C:H5'	2.14	0.47
22:DA:100:G:H2'	22:DA:101:A:O4'	2.15	0.47
1:CA:993:G:H4'	1:CA:994:A:OP2	2.14	0.47
23:DB:68:G:H2'	23:DB:69:C:C6	2.49	0.47
23:BB:2341:G:H2'	23:BB:2342:C:C6	2.49	0.47
27:DK:110:GLU:C	27:DK:111:LYS:HD3	2.34	0.47
10:CK:88:PRO:HG3	19:CU:28:LEU:CD2	2.44	0.47
23:BB:1007:C:H4'	41:BJ:110:PRO:HB3	1.96	0.47
22:BA:2:G:H2'	22:BA:3:C:C5	2.48	0.47
23:BB:664:G:H2'	23:BB:665:U:C6	2.49	0.47
34:D3:61:LEU:HD23	34:D3:61:LEU:N	2.29	0.47
9:AJ:63:ASP:OD2	9:AJ:64:GLN:N	2.46	0.47
1:CA:1456:A:H2'	1:CA:1457:G:O4'	2.14	0.47
1:AA:1121:U:O2'	1:AA:1122:U:H5'	2.14	0.47
48:BG:28:LYS:NZ	48:BG:29:ASN:HB2	2.28	0.47
23:BB:81:G:H2'	23:BB:82:U:O4'	2.14	0.47
41:DJ:35:ARG:C	41:DJ:37:ARG:H	2.17	0.47
23:DB:184:C:H2'	23:DB:185:G:H8	1.79	0.47
19:AU:4:LYS:HD3	19:AU:4:LYS:H	1.77	0.47
6:CG:91:ARG:HD2	6:CG:91:ARG:H	1.79	0.47
1:CA:751:U:H4'	20:CO:24:SER:HA	1.96	0.47
23:DB:1007:C:O3'	41:DJ:110:PRO:HB3	2.14	0.47
15:AR:25:ILE:O	15:AR:29:LYS:HG3	2.13	0.47
10:AK:19:VAL:HG12	10:AK:82:GLU:HB2	1.95	0.47
23:BB:425:G:H2'	23:BB:426:C:H6	1.79	0.47
1:AA:1329:A:H5''	12:AM:24:VAL:HA	1.96	0.47
5:CF:5:GLU:HG3	5:CF:63:ASN:ND2	2.29	0.47
6:CG:13:PRO:HB3	6:CG:20:GLU:HG2	1.95	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:DL:90:VAL:CB	37:DL:122:VAL:HG12	2.35	0.47
22:BA:24:G:N7	22:BA:56:G:H2'	2.29	0.47
1:AA:1149:C:H2'	1:AA:1150:A:H8	1.78	0.47
1:AA:1230:C:H2'	1:AA:1231:G:H8	1.79	0.47
43:DO:52:SER:C	43:DO:54:VAL:H	2.16	0.47
9:AJ:37:ARG:HE	9:AJ:77:VAL:CG2	2.26	0.47
2:AC:116:ALA:O	2:AC:120:THR:HG23	2.14	0.47
37:DL:115:GLU:N	37:DL:115:GLU:OE1	2.47	0.47
48:DG:116:LEU:HD23	48:DG:120:ILE:HD13	1.96	0.47
48:DG:118:ALA:C	48:DG:120:ILE:H	2.16	0.47
23:BB:1119:U:OP1	35:BV:83:LYS:HE3	2.13	0.47
16:AS:37:SER:O	16:AS:69:LYS:HA	2.14	0.47
23:BB:496:G:H1'	45:BS:61:ASN:HD22	1.78	0.47
25:DC:202:ARG:HH11	25:DC:213:ARG:NE	2.12	0.47
26:BD:25:THR:HG21	26:BD:193:VAL:HG22	1.94	0.47
24:DI:24:GLY:HA2	24:DI:34:ILE:HD12	1.96	0.47
23:DB:1244:A:O2'	23:DB:1245:G:H5'	2.13	0.47
23:BB:1792:G:O2'	23:BB:1793:C:H5'	2.14	0.47
25:BC:4:LYS:HE2	25:BC:5:CYS:N	2.27	0.47
1:CA:939:G:H2'	1:CA:940:C:C6	2.49	0.47
40:DH:89:LYS:N	40:DH:89:LYS:HD2	2.28	0.47
23:BB:2867:G:N3	23:BB:2867:G:C2'	2.74	0.47
28:BP:20:ARG:O	28:BP:46:VAL:HG21	2.13	0.47
28:BP:91:VAL:HG11	28:BP:96:LEU:CD1	2.40	0.47
27:DK:17:ARG:HH11	27:DK:45:GLU:HG3	1.79	0.47
1:CA:643:C:H5'	7:CH:31:LEU:HD13	1.96	0.47
44:DQ:65:ASN:CB	44:DQ:75:TYR:HB2	2.43	0.47
44:DQ:75:TYR:O	44:DQ:79:ILE:HG22	2.14	0.47
26:DD:159:LYS:HZ3	26:DD:159:LYS:CA	2.23	0.47
27:BK:105:ARG:O	27:BK:108:ARG:HG2	2.14	0.47
23:DB:1439:A:N7	23:DB:1440:U:C6	2.82	0.47
1:CA:560:A:H5'	1:CA:566:G:N2	2.30	0.47
48:DG:7:PRO:O	48:DG:8:VAL:HB	2.13	0.47
1:CA:952:U:O2'	1:CA:953:G:H5'	2.14	0.47
23:BB:773:U:H4'	25:BC:45:ASN:O	2.15	0.47
13:CP:52:LEU:HD21	13:CP:75:ILE:HG23	1.95	0.47
30:DY:46:MET:O	30:DY:49:ALA:HB3	2.15	0.47
1:AA:1118:U:H1'	1:AA:1179:A:C4	2.49	0.47
2:CC:173:PRO:HD2	2:CC:202:PHE:CD1	2.49	0.47
23:BB:2700:A:H2'	23:BB:2701:U:H6	1.78	0.47
23:DB:1637:A:H2'	23:DB:1638:C:C6	2.49	0.47
23:BB:2300:C:H2'	23:BB:2301:C:H6	1.78	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B1:26:LYS:NZ	33:B1:52:LYS:HB3	2.29	0.47
1:AA:328:C:H4'	1:AA:329:A:C5'	2.44	0.47
23:DB:2643:G:H2'	23:DB:2644:G:O4'	2.13	0.47
23:DB:190:A:H5''	23:DB:204:A:H61	1.79	0.47
1:AA:397:A:H5'	1:AA:398:U:OP1	2.15	0.47
31:B0:35:GLU:OE1	31:B0:44:ALA:HB3	2.14	0.47
23:BB:1341:G:H3'	23:BB:1397:U:O2	2.14	0.47
1:CA:708:C:H4'	10:CK:38:GLY:HA3	1.95	0.47
14:AQ:80:LYS:HZ3	14:AQ:81:ALA:N	2.12	0.47
23:DB:2436:G:O2'	23:DB:2437:G:H5'	2.14	0.47
15:AR:31:TYR:CD1	15:AR:54:LEU:HD21	2.48	0.47
23:BB:901:C:H2'	23:BB:902:C:O4'	2.13	0.47
1:CA:24:U:O2'	1:CA:25:C:H5'	2.15	0.47
23:BB:2488:G:H2'	23:BB:2489:U:C6	2.50	0.47
23:DB:1905:C:O2'	23:DB:1929:G:H1'	2.13	0.47
6:CG:128:GLU:CD	6:CG:128:GLU:N	2.68	0.47
23:BB:1238:G:O2'	23:BB:1239:G:H5'	2.13	0.47
1:CA:1359:C:OP1	21:CN:61:ASN:ND2	2.47	0.47
10:CK:125:LYS:O	19:CU:33:ARG:CZ	2.62	0.47
12:AM:1:ALA:HA	12:AM:56:ARG:HH22	1.80	0.47
42:DN:49:GLU:HA	42:DN:94:TYR:HD2	1.79	0.47
1:CA:1118:U:H1'	1:CA:1179:A:C5	2.48	0.47
23:BB:1430:G:H2'	23:BB:1431:A:C8	2.49	0.47
29:BE:106:LYS:HZ1	29:BE:201:ALA:HB2	1.79	0.47
40:BH:68:ARG:HG3	40:BH:134:VAL:HG11	1.94	0.47
29:DE:105:LEU:HA	29:DE:108:ILE:HG22	1.96	0.47
23:BB:1079:C:H5	23:BB:1088:A:OP1	1.97	0.47
23:DB:138:U:H5'	50:DT:1:MET:N	2.30	0.47
46:DU:39:ASN:HB3	46:DU:62:ALA:N	2.28	0.47
42:BN:38:LEU:CB	42:BN:39:PRO:HD3	2.41	0.47
25:BC:151:GLY:C	25:BC:152:GLN:HG3	2.35	0.47
10:CK:22:ILE:HB	10:CK:85:VAL:HG22	1.96	0.47
26:BD:118:PHE:O	26:BD:119:ALA:HB3	2.15	0.47
33:B1:36:LYS:CB	33:B1:47:ILE:HA	2.37	0.47
23:DB:1063:G:O2'	24:DI:88:GLY:HA3	2.15	0.47
40:DH:103:VAL:CG2	40:DH:108:VAL:HB	2.44	0.47
30:BY:2:LYS:HG2	30:BY:3:THR:H	1.79	0.47
43:DO:105:ALA:C	43:DO:107:ALA:H	2.18	0.47
47:DF:133:GLU:HA	47:DF:150:GLY:HA2	1.96	0.47
44:BQ:64:ILE:HD12	44:BQ:95:ALA:CB	2.43	0.47
49:BR:23:GLU:O	49:BR:25:LEU:HD22	2.15	0.47
8:CI:66:VAL:HG21	8:CI:74:GLN:CG	2.37	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BF:121:PHE:N	47:BF:121:PHE:HD2	2.12	0.47
22:BA:43:C:H1'	47:BF:91:ARG:HD2	1.95	0.47
46:DU:51:LEU:N	46:DU:53:GLN:NE2	2.62	0.47
18:AB:103:TRP:HA	18:AB:106:VAL:CG2	2.45	0.47
1:CA:922:G:H2'	1:CA:923:A:H8	1.74	0.47
1:CA:922:G:H4'	4:CE:24:VAL:HA	1.96	0.47
10:CK:28:ASN:HD22	10:CK:29:THR:H	1.61	0.47
3:AD:106:PHE:CG	3:AD:144:ILE:HD11	2.49	0.47
39:BX:17:GLU:O	39:BX:20:ASN:HB2	2.14	0.47
38:DM:57:VAL:O	38:DM:57:VAL:HG12	2.15	0.47
48:BG:105:SER:OG	48:BG:111:PRO:HA	2.13	0.47
27:DK:102:PRO:HD3	28:DP:65:ASN:HB2	1.95	0.47
11:CL:23:LEU:HD22	11:CL:58:ASN:CG	2.35	0.47
24:DI:129:GLU:CB	24:DI:133:ARG:HH12	2.27	0.47
1:AA:80:A:C6	1:AA:81:A:H1'	2.48	0.47
18:AB:125:PHE:CD2	18:AB:126:ASP:N	2.79	0.47
23:DB:2080:A:OP1	51:DZ:20:HIS:HB3	2.14	0.47
23:BB:1439:A:N7	23:BB:1440:U:C6	2.82	0.47
23:BB:2840:C:H2'	23:BB:2841:C:C6	2.49	0.47
1:AA:1037:C:O2'	1:AA:1038:C:H5'	2.14	0.47
1:CA:676:A:H2'	1:CA:677:U:C6	2.49	0.47
23:BB:1172:C:H3'	23:BB:1173:U:H6	1.79	0.47
13:CP:48:GLU:HG3	13:CP:49:GLY:N	2.26	0.47
23:DB:2895:G:H2'	23:DB:2896:C:C6	2.49	0.47
49:BR:80:ARG:O	49:BR:81:LYS:HD3	2.14	0.47
23:BB:242:G:N2	23:BB:254:G:H2'	2.30	0.47
1:AA:5:U:H1'	1:AA:6:G:H22	1.78	0.47
1:CA:490:C:H2'	1:CA:491:G:O4'	2.14	0.47
23:BB:1637:A:H2'	23:BB:1638:C:C6	2.49	0.47
23:BB:1638:C:H4'	23:BB:2710:C:O2	2.14	0.47
44:BQ:65:ASN:HB2	44:BQ:75:TYR:HB2	1.96	0.47
2:CC:89:VAL:HA	2:CC:92:ASP:OD2	2.13	0.47
14:CQ:5:ARG:HD3	14:CQ:6:THR:N	2.29	0.47
4:AE:51:LYS:O	4:AE:61:LYS:HD2	2.14	0.47
29:DE:49:ARG:NH1	29:DE:72:SER:HB3	2.29	0.47
23:BB:235:U:H2'	23:BB:236:C:H6	1.78	0.47
23:BB:236:C:O2'	23:BB:237:C:H5'	2.13	0.47
23:DB:538:A:H2'	23:DB:539:G:O4'	2.14	0.47
23:BB:68:G:H2'	23:BB:69:C:C6	2.48	0.47
10:CK:108:ASN:ND2	19:CU:6:ARG:HB2	2.30	0.47
1:CA:1198:G:H2'	1:CA:1199:U:C6	2.50	0.47
1:CA:635:A:H2'	1:CA:636:U:H6	1.80	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1121:U:H2'	1:CA:1122:U:C6	2.49	0.47
23:BB:1212:G:H1'	23:BB:1236:G:N2	2.29	0.47
23:DB:771:G:O2'	23:DB:772:C:H5'	2.14	0.47
51:DZ:16:ASN:OD1	51:DZ:26:LYS:HD2	2.14	0.47
23:DB:817:C:O2	23:DB:839:U:H4'	2.14	0.47
23:BB:1403:A:O2'	23:BB:1404:C:H5'	2.15	0.47
9:CJ:83:THR:C	9:CJ:85:ASP:H	2.17	0.47
23:BB:794:A:H2'	23:BB:795:C:H6	1.78	0.47
40:BH:90:LEU:HB2	40:BH:123:ARG:CG	2.45	0.47
9:AJ:73:LEU:HD13	9:AJ:75:ASP:HB2	1.96	0.47
52:BW:24:ARG:CD	52:BW:65:LYS:HG2	2.41	0.47
52:DW:59:PHE:O	52:DW:60:ALA:HB3	2.14	0.47
32:B4:12:ARG:HG3	32:B4:13:ASN:ND2	2.28	0.47
26:BD:8:LYS:O	26:BD:9:VAL:HB	2.13	0.47
5:AF:92:THR:HG22	5:AF:94:HIS:H	1.78	0.47
48:BG:153:PRO:HB3	48:BG:158:GLY:HA2	1.96	0.47
2:AC:165:GLU:HG3	2:AC:166:TRP:H	1.79	0.47
48:BG:120:ILE:HD12	48:BG:143:VAL:HG21	1.96	0.47
1:CA:438:U:H4'	3:CD:119:HIS:HD2	1.79	0.47
23:DB:1060:U:C4	24:DI:131:THR:HG22	2.49	0.47
40:DH:117:LEU:HG	40:DH:119:ASN:O	2.14	0.47
30:BY:6:ILE:HG23	30:BY:56:VAL:HG22	1.97	0.47
44:BQ:91:ARG:HE	44:BQ:94:LEU:CD2	2.27	0.47
22:BA:43:C:H4'	47:BF:91:ARG:NE	2.28	0.47
1:AA:982:U:N3	1:AA:983:A:N6	2.63	0.47
22:DA:43:C:H1'	47:DF:91:ARG:HD2	1.96	0.47
13:CP:21:VAL:HG21	13:CP:60:TRP:CD1	2.48	0.47
25:BC:5:CYS:HB2	25:BC:15:VAL:O	2.14	0.47
39:DX:20:ASN:O	39:DX:25:GLN:HB2	2.15	0.47
12:CM:47:LEU:HA	12:CM:51:GLN:OE1	2.15	0.47
31:D0:41:HIS:HB2	42:DN:99:LYS:O	2.15	0.47
37:DL:57:LEU:CB	37:DL:60:ARG:HH11	2.23	0.47
18:CB:95:TRP:HZ3	18:CB:98:GLY:H	1.62	0.47
16:CS:29:PRO:HA	16:CS:47:THR:HB	1.95	0.47
16:CS:46:LEU:O	16:CS:48:ILE:HD12	2.14	0.47
6:AG:94:ARG:NH1	6:AG:98:LEU:HD21	2.29	0.47
1:AA:1530:G:H2'	1:AA:1531:A:C8	2.50	0.47
23:DB:1507:C:H3'	23:DB:1508:A:H4'	1.97	0.47
23:DB:160:A:H2'	23:DB:161:A:H8	1.76	0.47
23:BB:813:U:H2'	23:BB:814:C:H6	1.79	0.47
1:CA:208:U:H2'	1:CA:210:C:C4	2.50	0.47
25:DC:161:VAL:HG12	25:DC:162:GLN:N	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:174:ARG:HG3	25:DC:180:MET:HE1	1.97	0.47
1:CA:265:G:N2	1:CA:267:C:H5'	2.30	0.47
1:CA:841:C:H3'	1:CA:843:U:OP2	2.15	0.47
23:BB:630:G:H4'	23:BB:640:C:O2'	2.13	0.47
26:BD:14:ILE:CG2	26:BD:22:ILE:HB	2.44	0.47
1:CA:1479:C:H2'	1:CA:1480:A:C8	2.47	0.47
1:CA:678:U:H2'	1:CA:679:C:H6	1.79	0.47
23:BB:866:A:H61	23:BB:913:U:C1'	2.27	0.47
23:DB:849:A:H2'	23:DB:850:U:C6	2.49	0.47
15:AR:33:THR:HG23	15:AR:37:LYS:O	2.13	0.47
23:BB:5:A:H2'	23:BB:6:A:H8	1.77	0.47
23:DB:1317:G:H2'	23:DB:1318:U:O4'	2.15	0.47
4:CE:45:VAL:HG11	4:CE:117:ALA:HB2	1.95	0.47
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.14	0.47
19:AU:7:GLU:OE2	19:AU:15:LEU:HG	2.14	0.47
1:AA:125:U:H2'	1:AA:126:G:C8	2.49	0.47
23:DB:1397:U:H5''	23:DB:1398:C:H5	1.80	0.47
1:CA:681:A:H2'	1:CA:682:G:C8	2.50	0.47
23:DB:770:G:O2'	23:DB:771:G:H5'	2.14	0.47
23:DB:1867:G:O2'	23:DB:1868:C:H5'	2.15	0.47
23:BB:2553:G:H2'	23:BB:2554:U:O4'	2.14	0.47
1:AA:552:U:H2'	1:AA:553:A:H8	1.79	0.47
28:DP:31:VAL:C	28:DP:33:GLU:H	2.18	0.47
5:CF:81:ASN:OD1	5:CF:83:ALA:HB3	2.15	0.47
1:CA:572:A:N3	1:CA:917:G:H1'	2.30	0.47
29:BE:165:HIS:CD2	29:BE:166:LYS:HG3	2.50	0.47
23:BB:1474:U:H2'	23:BB:1475:G:H5'	1.96	0.47
29:BE:145:ASP:OD1	29:BE:183:PHE:HA	2.14	0.47
24:BI:91:LYS:HB2	24:BI:94:LYS:HD2	1.94	0.47
23:BB:1886:U:O5'	23:BB:1886:U:H6	1.97	0.47
23:DB:1668:A:N3	23:DB:1670:C:C4	2.82	0.47
1:CA:1373:G:H4'	6:CG:33:GLY:O	2.13	0.47
29:DE:61:ARG:NH1	29:DE:64:GLY:HA3	2.29	0.47
25:DC:141:HIS:CG	25:DC:142:ASN:H	2.33	0.47
35:DV:25:LYS:HA	35:DV:42:LEU:O	2.14	0.47
2:CC:67:ILE:CD1	2:CC:100:ILE:HD11	2.43	0.47
20:AO:26:GLU:CD	20:AO:26:GLU:H	2.18	0.47
1:AA:256:U:H3'	1:AA:257:G:H8	1.77	0.47
14:CQ:59:GLU:C	14:CQ:75:VAL:HG22	2.35	0.47
26:DD:113:SER:HB3	26:DD:167:ASN:HA	1.94	0.47
23:BB:2355:G:H4'	52:BW:20:LEU:HD13	1.96	0.47
22:DA:28:C:H2'	22:DA:29:A:C8	2.48	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
6:CG:65:LEU:O	6:CG:69:ARG:HG3	2.14	0.47
2:AC:113:LYS:O	2:AC:116:ALA:HB3	2.13	0.47
28:DP:1:SER:H1	28:DP:4:ILE:HD12	1.80	0.47
23:DB:320:A:C2	29:DE:163:ASN:HB3	2.50	0.47
40:DH:133:GLN:HA	40:DH:138:VAL:O	2.15	0.47
1:AA:978:A:H2'	1:AA:979:C:H5'	1.96	0.47
1:AA:1319:A:OP1	16:AS:4:LEU:HD12	2.15	0.47
23:BB:1082:U:C2	23:BB:1086:A:N1	2.82	0.47
28:DP:21:PRO:HB2	28:DP:96:LEU:CD1	2.44	0.47
47:BF:134:GLN:NE2	47:BF:136:ILE:HA	2.30	0.47
25:BC:43:ASN:ND2	25:BC:44:ASN:H	2.11	0.47
23:DB:2259:U:O2'	23:DB:2260:C:H5'	2.15	0.47
48:DG:94:ARG:HH21	48:DG:105:SER:H	1.62	0.47
48:DG:126:THR:HG22	48:DG:127:GLN:N	2.30	0.47
18:CB:95:TRP:CZ2	18:CB:100:LEU:HD22	2.49	0.47
47:BF:3:LEU:HG	47:BF:99:PHE:CD2	2.49	0.47
43:BO:88:LYS:HG2	43:BO:89:ASP:N	2.29	0.47
21:CN:28:ALA:O	21:CN:32:ASP:HB3	2.14	0.47
1:AA:1392:G:H5'	1:AA:1531:A:H5''	1.97	0.47
45:DS:86:MET:HG3	45:DS:96:ILE:HD12	1.95	0.47
23:BB:2096:C:H2'	23:BB:2097:A:C8	2.50	0.47
36:D2:21:ARG:C	36:D2:23:ALA:H	2.18	0.47
2:AC:39:ARG:NH1	2:AC:56:ILE:HD12	2.30	0.47
12:CM:2:ARG:H	12:CM:2:ARG:CD	2.23	0.47
36:B2:31:LEU:HD22	36:B2:42:LEU:CD1	2.44	0.47
45:DS:36:LEU:HD23	45:DS:48:LYS:CA	2.42	0.47
25:BC:249:VAL:O	25:BC:250:GLN:C	2.52	0.47
23:BB:744:U:H2'	23:BB:745:G:O4'	2.15	0.47
3:AD:97:LEU:O	3:AD:100:VAL:HG23	2.15	0.47
1:AA:672:U:H2'	1:AA:673:A:C8	2.50	0.47
1:AA:675:A:H2'	1:AA:676:A:H8	1.79	0.47
23:BB:2579:C:O5'	23:BB:2579:C:H6	1.96	0.47
1:CA:711:G:O2'	1:CA:712:A:H5'	2.14	0.47
23:DB:1562:U:H2'	23:DB:1563:U:C6	2.49	0.47
23:BB:1113:U:H2'	23:BB:1114:C:C6	2.49	0.47
20:CO:70:LEU:HD22	20:CO:78:TYR:HB2	1.96	0.47
23:DB:950:G:H2'	23:DB:951:C:H6	1.79	0.47
22:DA:52:A:H4'	22:DA:52:A:OP1	2.14	0.47
23:BB:825:A:H2'	23:BB:826:U:O4'	2.14	0.47
23:BB:833:A:H1'	37:BL:52:GLY:H	1.79	0.47
29:BE:188:MET:HG2	29:BE:193:VAL:CG2	2.44	0.47
23:BB:1582:C:H3'	23:BB:1583:A:N3	2.28	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1347:A:H2'	23:DB:1348:C:O4'	2.15	0.47
1:AA:229:U:H2'	1:AA:230:G:C8	2.49	0.47
23:BB:2803:G:H2'	23:BB:2804:U:H6	1.79	0.47
26:DD:68:PHE:CD2	26:DD:68:PHE:N	2.83	0.47
1:AA:648:A:H2'	1:AA:649:A:H8	1.80	0.47
1:CA:1075:U:H2'	1:CA:1076:U:C6	2.50	0.47
23:BB:1312:U:O4	50:BT:64:LYS:HG2	2.14	0.47
23:BB:1751:U:H2'	23:BB:1752:C:C6	2.50	0.47
23:DB:2014:A:H2'	23:DB:2015:A:C8	2.49	0.47
14:AQ:32:ILE:HG23	14:AQ:33:TYR:CD2	2.49	0.47
45:BS:43:ALA:HA	45:BS:46:LEU:HD12	1.96	0.47
1:CA:1438:G:O2'	1:CA:1439:G:H5'	2.15	0.47
23:BB:2135:A:H61	23:BB:2156:G:C2'	2.26	0.47
23:DB:1335:C:H2'	23:DB:1336:A:H8	1.78	0.47
23:DB:2334:U:H4'	23:DB:2335:A:OP2	2.14	0.47
23:BB:1076:C:H2'	23:BB:1077:A:C8	2.49	0.47
5:CF:45:ARG:HG2	5:CF:46:GLN:N	2.29	0.47
40:BH:41:LYS:O	40:BH:44:ILE:HD12	2.15	0.47
1:CA:344:A:H5''	1:CA:345:C:C5	2.49	0.47
23:BB:2753:A:O2'	23:BB:2754:U:H5'	2.13	0.47
10:CK:81:LEU:HD22	10:CK:104:PHE:CD1	2.49	0.47
23:BB:1011:G:P	44:BQ:76:SER:HG	2.38	0.47
23:BB:1281:G:H2'	23:BB:1282:U:C6	2.49	0.47
29:DE:165:HIS:CD2	29:DE:166:LYS:HG3	2.49	0.47
23:BB:1422:G:H4'	23:BB:1493:C:OP1	2.15	0.47
37:BL:74:THR:HA	37:BL:107:PHE:O	2.13	0.47
23:DB:1940:U:H5''	23:DB:1940:U:O2	2.15	0.47
42:BN:71:ARG:HG2	42:BN:71:ARG:HH21	1.79	0.47
5:AF:16:GLU:CD	5:AF:16:GLU:H	2.17	0.47
12:AM:9:PRO:HB2	12:AM:17:ALA:HB1	1.96	0.47
50:DT:34:VAL:HG21	50:DT:43:ILE:HD11	1.95	0.47
1:CA:1243:C:H2'	1:CA:1244:G:H8	1.79	0.47
37:DL:17:LYS:CD	37:DL:19:LEU:HD11	2.44	0.47
35:DV:69:GLU:CD	35:DV:69:GLU:H	2.18	0.47
5:AF:3:HIS:CD2	5:AF:65:GLU:HG3	2.49	0.47
40:BH:81:ALA:HB1	40:BH:148:ALA:O	2.15	0.47
23:DB:2262:U:H2'	23:DB:2263:C:C6	2.47	0.47
23:BB:2271:G:H2'	23:BB:2272:U:H5	1.79	0.47
52:BW:37:VAL:CG1	52:BW:38:ARG:HH11	2.27	0.47
37:BL:125:LEU:N	37:BL:143:GLU:HG3	2.27	0.47
25:BC:145:MET:HB2	25:BC:152:GLN:HE22	1.78	0.47
26:BD:121:THR:O	26:BD:122:VAL:HB	2.15	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BU:11:ILE:O	46:BU:11:ILE:HD13	2.14	0.47
47:DF:107:VAL:HB	47:DF:108:PRO:HD3	1.96	0.47
46:DU:9:GLU:OE2	46:DU:21:ARG:HG2	2.15	0.47
23:BB:994:C:H3'	44:BQ:53:LYS:NZ	2.29	0.47
38:BM:2:LEU:O	38:BM:69:PRO:HG3	2.13	0.47
49:DR:14:VAL:HG22	49:DR:15:SER:H	1.77	0.47
26:DD:51:THR:CG2	26:DD:76:GLY:HA3	2.43	0.47
47:DF:122:ASP:C	47:DF:124:ARG:H	2.17	0.47
20:AO:56:LEU:O	20:AO:60:VAL:HG23	2.15	0.47
37:DL:103:ILE:H	37:DL:103:ILE:CD1	2.23	0.47
39:BX:43:LEU:O	39:BX:47:ARG:HG3	2.15	0.47
48:DG:94:ARG:NH2	48:DG:104:LEU:HA	2.29	0.47
2:AC:12:GLY:HA3	21:AN:96:LYS:NZ	2.29	0.47
47:BF:11:VAL:O	47:BF:13:LYS:N	2.48	0.47
17:CT:77:ASN:OD1	17:CT:78:LEU:N	2.47	0.47
12:CM:84:CYS:O	12:CM:87:GLY:N	2.47	0.47
1:CA:201:G:H2'	1:CA:202:G:C8	2.49	0.47
37:DL:6:LEU:N	37:DL:6:LEU:HD23	2.24	0.47
23:DB:2537:U:H2'	23:DB:2538:C:H6	1.76	0.47
1:CA:1343:G:H4'	8:CI:123:ARG:O	2.14	0.47
25:BC:192:GLY:O	25:BC:193:GLU:HG3	2.14	0.47
25:BC:193:GLU:O	25:BC:194:VAL:C	2.53	0.47
23:BB:2240:U:O2'	23:BB:2241:A:H5'	2.14	0.47
23:DB:2142:A:H2'	23:DB:2143:C:O4'	2.14	0.47
1:AA:841:C:H42	1:AA:843:U:H5	1.61	0.47
23:BB:969:G:H2'	23:BB:970:U:C6	2.50	0.47
1:AA:735:C:H2'	1:AA:736:C:H6	1.80	0.47
3:CD:169:TRP:CD2	3:CD:185:PRO:HB3	2.50	0.47
23:DB:593:U:H2'	23:DB:594:U:H6	1.79	0.47
23:DB:825:A:H2'	23:DB:826:U:O4'	2.15	0.47
1:CA:279:A:H5'	1:CA:281:G:C5'	2.45	0.47
29:DE:15:SER:C	29:DE:17:THR:H	2.17	0.47
48:BG:176:LYS:CE	48:BG:176:LYS:H	2.27	0.47
51:BZ:72:ARG:HB2	51:BZ:78:TYR:CE2	2.49	0.47
1:CA:1110:A:H2'	1:CA:1111:A:H8	1.79	0.47
34:B3:56:LEU:O	34:B3:59:ALA:HB3	2.15	0.47
1:CA:441:A:H61	1:CA:493:A:H62	1.60	0.47
7:CH:86:LYS:HG3	7:CH:124:ILE:HD11	1.97	0.47
29:BE:12:LEU:HD12	29:BE:14:VAL:CG1	2.45	0.47
27:BK:111:LYS:C	27:BK:113:MET:H	2.18	0.47
20:AO:85:LEU:N	20:AO:85:LEU:HD12	2.30	0.47
23:DB:2676:C:O2'	23:DB:2677:G:H5'	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2828:G:H2'	23:BB:2829:A:H8	1.78	0.47
29:BE:148:ILE:HD13	29:BE:187:VAL:CG2	2.44	0.47
9:CJ:26:VAL:HG13	9:CJ:30:LYS:HE2	1.96	0.47
23:BB:64:A:H2'	23:BB:65:U:C6	2.50	0.47
1:AA:709:U:H2'	1:AA:710:G:H8	1.80	0.47
1:CA:261:U:H2'	1:CA:263:A:OP2	2.14	0.47
1:AA:335:C:H2'	1:AA:336:A:C8	2.49	0.47
1:AA:628:G:H2'	1:AA:629:A:C8	2.49	0.47
37:DL:136:GLU:C	37:DL:138:ALA:H	2.18	0.47
33:B1:38:PHE:O	33:B1:40:PRO:HD3	2.15	0.47
1:CA:398:U:H2'	1:CA:399:G:H8	1.79	0.47
1:AA:825:A:H2'	1:AA:826:C:H6	1.78	0.47
16:CS:27:LYS:HG2	16:CS:28:LYS:H	1.79	0.47
23:DB:2220:U:O2'	23:DB:2221:G:H5'	2.14	0.47
23:BB:338:G:N2	23:BB:339:U:H1'	2.29	0.47
23:DB:81:G:H2'	23:DB:82:U:O4'	2.14	0.47
23:DB:406:G:O2'	23:DB:407:G:H5'	2.15	0.47
23:BB:1909:C:O2'	23:BB:1910:G:H5'	2.15	0.47
1:AA:393:A:H2'	1:AA:394:G:H8	1.79	0.47
27:BK:21:CYS:SG	27:BK:39:ILE:HD12	2.54	0.47
1:AA:1127:G:O2'	1:AA:1128:C:H5'	2.14	0.47
22:BA:78:A:H2'	22:BA:79:G:O4'	2.14	0.47
25:DC:20:ASN:HB3	25:DC:23:LEU:HD13	1.97	0.47
23:DB:2671:G:H2'	23:DB:2672:U:C6	2.49	0.47
23:DB:2497:A:H5''	57:DB:3698:HOH:O	2.13	0.47
21:AN:66:THR:H	21:AN:66:THR:HG1	1.57	0.47
22:DA:112:G:O2'	22:DA:113:C:H5'	2.15	0.47
32:D4:17:VAL:HG11	32:D4:19:ARG:HE	1.79	0.47
23:BB:1334:G:O2'	23:BB:1335:C:H5'	2.14	0.47
23:BB:855:G:N3	52:BW:23:LYS:HG2	2.30	0.47
18:CB:48:MET:CG	18:CB:200:PRO:HD2	2.45	0.47
12:AM:3:ILE:H	12:AM:56:ARG:HH11	1.63	0.47
12:AM:77:LYS:HA	12:AM:80:MET:HB2	1.96	0.47
30:DY:50:VAL:HB	30:DY:53:MET:HB2	1.95	0.47
52:DW:49:ASN:HB2	52:DW:60:ALA:HA	1.96	0.47
23:DB:922:C:H2'	23:DB:923:G:C8	2.50	0.47
25:DC:170:TYR:HA	25:DC:183:VAL:O	2.14	0.47
23:BB:1429:G:O2'	23:BB:1430:G:H5'	2.14	0.47
25:DC:193:GLU:O	25:DC:194:VAL:C	2.53	0.47
35:BV:26:PHE:CE2	35:BV:44:HIS:HA	2.49	0.47
35:DV:30:ILE:HG12	35:DV:91:PHE:HB2	1.97	0.47
5:AF:18:VAL:O	5:AF:22:ILE:HG13	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BH:100:ALA:O	40:BH:101:ASP:HB2	2.15	0.47
40:BH:95:GLY:O	40:BH:99:ILE:HG12	2.14	0.47
23:DB:2772:C:H2'	23:DB:2773:C:C6	2.50	0.47
23:DB:2329:U:H2'	23:DB:2330:G:C8	2.50	0.47
52:BW:18:LYS:HA	52:BW:18:LYS:HE3	1.96	0.47
29:DE:110:SER:O	29:DE:113:VAL:HB	2.14	0.47
23:BB:1198:U:H2'	23:BB:1199:U:H6	1.79	0.47
44:BQ:8:ILE:CD1	44:BQ:8:ILE:H	2.11	0.47
37:DL:120:VAL:HG12	37:DL:121:THR:N	2.29	0.47
12:AM:100:ARG:CZ	12:AM:102:LYS:HD3	2.45	0.47
12:AM:106:ARG:HH11	12:AM:106:ARG:CA	2.28	0.47
10:AK:22:ILE:HB	10:AK:85:VAL:HG22	1.97	0.47
24:BI:74:PRO:O	24:BI:77:VAL:HG22	2.14	0.47
24:BI:124:MET:O	24:BI:128:ILE:HG12	2.15	0.47
37:BL:122:VAL:HB	37:BL:143:GLU:OE2	2.15	0.47
43:DO:35:ILE:HG21	43:DO:71:ALA:HB1	1.95	0.47
23:DB:1723:G:C2'	23:DB:1724:G:H5'	2.44	0.47
3:AD:160:LEU:H	3:AD:160:LEU:CD1	2.15	0.47
48:BG:93:TYR:HA	48:BG:106:LEU:HA	1.97	0.47
23:BB:1731:G:O2'	23:BB:1732:C:H5''	2.15	0.47
42:BN:49:GLU:HA	42:BN:94:TYR:HD2	1.80	0.47
51:DZ:40:VAL:O	51:DZ:42:SER:N	2.46	0.47
15:CR:33:THR:HG22	15:CR:39:VAL:HG12	1.96	0.47
49:BR:34:GLU:OE1	49:BR:60:LYS:HE2	2.15	0.47
24:DI:52:LEU:HD13	24:DI:81:LYS:NZ	2.30	0.47
40:DH:100:ALA:O	40:DH:103:VAL:HG13	2.15	0.47
40:DH:94:ILE:HG22	40:DH:122:LEU:HG	1.97	0.47
28:BP:50:ARG:HB3	28:BP:57:ALA:N	2.30	0.47
23:DB:2376:A:N1	43:DO:92:PHE:HD2	2.12	0.47
49:BR:49:ILE:HB	49:BR:51:VAL:O	2.14	0.47
38:BM:19:GLY:CA	38:BM:38:ARG:HH22	2.27	0.47
16:AS:66:VAL:C	16:AS:68:HIS:N	2.68	0.47
16:AS:14:LEU:HD23	16:AS:34:SER:OG	2.14	0.47
16:AS:66:VAL:O	16:AS:68:HIS:N	2.48	0.47
1:AA:1220:G:P	21:AN:52:ARG:HH22	2.38	0.47
47:BF:122:ASP:C	47:BF:124:ARG:H	2.18	0.47
30:DY:2:LYS:CG	30:DY:3:THR:H	2.28	0.47
30:DY:2:LYS:HG2	30:DY:3:THR:H	1.80	0.47
18:AB:68:PHE:CD1	18:AB:83:ALA:HB2	2.49	0.47
47:BF:113:PHE:CZ	47:BF:175:PRO:HB2	2.50	0.47
23:BB:1102:C:H2'	23:BB:1103:A:C8	2.49	0.47
47:DF:121:PHE:HD2	47:DF:121:PHE:N	2.12	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:CE:131:ASN:HD21	4:CE:133:ILE:HB	1.78	0.47
47:DF:24:VAL:C	47:DF:26:GLN:H	2.17	0.47
17:AT:74:HIS:HA	17:AT:77:ASN:HD21	1.78	0.47
23:DB:2210:U:C4	23:DB:2212:A:N7	2.83	0.47
25:BC:14:HIS:O	25:BC:203:VAL:HG11	2.15	0.47
1:CA:1187:G:C4'	8:CI:112:ARG:HH12	2.24	0.47
38:BM:57:VAL:O	38:BM:57:VAL:HG12	2.15	0.47
24:BI:19:PRO:HB2	24:BI:22:PRO:HD2	1.97	0.47
38:BM:35:ALA:HB2	38:BM:100:LYS:CB	2.45	0.47
23:BB:2394:C:OP1	37:BL:63:LYS:HG2	2.15	0.47
40:DH:50:ARG:C	40:DH:52:ALA:H	2.18	0.47
28:BP:45:VAL:N	28:BP:60:VAL:HG13	2.29	0.47
41:DJ:6:ALA:HB3	41:DJ:45:THR:CG2	2.40	0.47
37:DL:73:ILE:O	37:DL:105:ILE:HG23	2.14	0.47
27:DK:120:PRO:O	27:DK:121:GLU:HG3	2.14	0.47
11:CL:30:ARG:O	11:CL:57:THR:HG23	2.14	0.47
24:DI:100:ILE:O	24:DI:139:VAL:HA	2.15	0.47
36:D2:31:LEU:O	36:D2:35:ARG:HB3	2.15	0.47
44:DQ:30:VAL:HG22	44:DQ:31:TYR:H	1.79	0.47
9:AJ:53:ILE:HG22	9:AJ:61:ALA:CB	2.44	0.47
23:DB:581:C:H2'	23:DB:582:A:H8	1.80	0.47
25:BC:106:PRO:O	25:BC:109:LEU:HD23	2.14	0.47
51:DZ:53:ALA:O	51:DZ:55:GLY:N	2.42	0.47
23:DB:2595:G:H1	25:DC:238:ASN:ND2	2.11	0.47
37:DL:3:LEU:O	37:DL:5:THR:N	2.47	0.47
13:AP:28:ARG:HD2	13:AP:29:ASN:N	2.29	0.47
6:AG:87:PRO:HG3	6:AG:147:ASN:HB2	1.97	0.47
1:CA:1091:U:H3'	6:CG:3:ARG:HH12	1.79	0.47
23:DB:99:U:O2	23:DB:99:U:H5'	2.15	0.47
49:BR:71:LYS:HE3	49:BR:73:LYS:HZ2	1.78	0.47
1:CA:1252:A:H2'	1:CA:1253:G:O4'	2.15	0.47
1:CA:840:C:C2	1:CA:842:U:H5''	2.50	0.47
21:CN:81:ILE:HG13	21:CN:81:ILE:H	1.53	0.47
25:DC:250:GLN:CG	25:DC:254:LYS:HG2	2.44	0.47
25:DC:244:VAL:HB	25:DC:249:VAL:N	2.29	0.47
23:BB:200:U:O2'	51:BZ:22:LEU:HD12	2.14	0.47
1:AA:389:A:H2'	1:AA:389:A:N3	2.30	0.47
23:DB:2845:U:O2'	23:DB:2846:G:H5'	2.14	0.47
3:AD:169:TRP:CD2	3:AD:185:PRO:HB3	2.50	0.47
1:CA:662:U:O2'	1:CA:836:G:H5''	2.14	0.47
23:BB:222:A:N6	23:BB:232:G:H1'	2.29	0.47
18:AB:33:ALA:HA	18:AB:38:HIS:HA	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:389:A:H2'	1:CA:389:A:N3	2.28	0.47
25:BC:95:TYR:HE1	25:BC:101:ARG:HD2	1.80	0.47
42:DN:58:ASP:O	42:DN:59:SER:CB	2.63	0.47
23:BB:419:U:H2'	23:BB:420:C:H6	1.76	0.47
18:AB:76:SER:HA	18:AB:92:ASN:HD22	1.80	0.47
4:CE:95:MET:HG3	4:CE:124:ALA:CB	2.44	0.47
23:BB:1946:U:O2'	23:BB:1947:C:H5'	2.15	0.47
1:AA:682:G:O2'	1:AA:683:G:H5'	2.14	0.47
23:DB:349:U:H2'	23:DB:350:G:H8	1.80	0.47
23:DB:5:A:H2'	23:DB:6:A:H8	1.76	0.47
47:BF:72:SER:HB2	47:BF:80:GLN:OE1	2.15	0.47
34:B3:3:ILE:CG2	34:B3:62:PRO:HG2	2.45	0.47
23:DB:1026:G:OP2	23:DB:1134:A:H1'	2.15	0.47
31:D0:9:ARG:HB2	31:D0:12:ARG:NH2	2.30	0.47
23:DB:1461:C:H2'	23:DB:1462:C:C6	2.49	0.47
1:AA:861:G:O2'	1:AA:862:C:H5'	2.14	0.47
1:AA:402:G:H2'	1:AA:403:C:H6	1.79	0.47
25:BC:265:PHE:CD2	25:BC:265:PHE:N	2.82	0.47
44:BQ:65:ASN:CB	44:BQ:75:TYR:HB2	2.44	0.47
23:DB:2837:A:H2'	23:DB:2838:G:H8	1.79	0.47
23:DB:329:G:OP2	46:DU:64:ILE:HD11	2.14	0.47
25:BC:79:ARG:HD2	25:BC:81:GLU:CG	2.44	0.47
23:DB:2800:A:H2'	23:DB:2801:G:C8	2.50	0.47
21:CN:20:PHE:HB3	21:CN:24:ALA:HB2	1.96	0.47
23:BB:770:G:OP2	36:B2:11:LYS:HE2	2.15	0.47
9:CJ:56:HIS:O	9:CJ:57:VAL:HG12	2.15	0.47
1:AA:26:A:N6	1:AA:558:G:H1'	2.29	0.47
1:AA:1244:G:H2'	1:AA:1245:C:C6	2.49	0.47
23:DB:2339:C:H2'	23:DB:2340:A:H8	1.79	0.47
1:CA:709:U:H2'	1:CA:710:G:H8	1.78	0.47
1:AA:497:G:H2'	1:AA:498:A:C8	2.49	0.47
47:BF:2:LYS:HE3	47:BF:2:LYS:H	1.80	0.47
23:DB:1740:G:H2'	23:DB:1741:C:H6	1.79	0.47
4:AE:12:GLU:HB3	4:AE:63:MET:CE	2.44	0.47
25:BC:52:HIS:O	25:BC:53:ILE:HB	2.14	0.47
1:CA:620:C:C2	3:CD:131:ILE:HG21	2.50	0.47
37:BL:119:PRO:HA	37:BL:138:ALA:O	2.15	0.47
23:BB:981:A:H4'	23:BB:2037:A:H5'	1.95	0.47
48:BG:39:ALA:HA	48:BG:54:ARG:HG3	1.96	0.47
1:CA:538:G:OP2	11:CL:111:GLN:HB2	2.15	0.47
23:DB:1049:C:O2	23:DB:1113:U:H4'	2.13	0.47
1:CA:432:A:C2'	1:CA:433:G:H5'	2.44	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1160:G:O2'	1:CA:1161:C:H5'	2.15	0.47
1:CA:1056:U:O2'	1:CA:1057:G:H5'	2.15	0.47
23:DB:1831:G:O2'	23:DB:1832:C:H5'	2.15	0.47
14:AQ:80:LYS:NZ	14:AQ:80:LYS:H	2.13	0.47
1:AA:394:G:H2'	1:AA:395:C:H6	1.79	0.47
1:AA:747:A:H2'	1:AA:748:G:O4'	2.14	0.47
23:DB:2359:C:O2'	23:DB:2360:G:H5'	2.15	0.47
21:AN:11:LYS:O	21:AN:15:LEU:HG	2.15	0.47
23:BB:2776:A:H4'	23:BB:2777:G:H5''	1.97	0.47
24:DI:46:ASP:HA	24:DI:50:LYS:HE2	1.96	0.47
1:CA:933:G:O2'	1:CA:934:C:H5'	2.15	0.47
2:CC:143:LEU:O	2:CC:143:LEU:HD13	2.14	0.47
23:DB:2623:G:O2'	23:DB:2624:G:H5'	2.15	0.47
23:BB:184:C:H2'	23:BB:185:G:H8	1.80	0.47
23:DB:1422:G:H4'	23:DB:1493:C:OP1	2.15	0.47
8:AI:9:GLY:CA	8:AI:80:HIS:HB3	2.44	0.47
2:AC:70:ALA:HB2	2:AC:105:VAL:HG23	1.96	0.47
42:DN:14:SER:O	42:DN:18:GLN:HB2	2.15	0.47
6:CG:70:PRO:HB3	6:CG:102:TRP:CH2	2.50	0.47
18:AB:86:CYS:HB3	18:AB:87:ASP:H	1.52	0.47
17:CT:49:ALA:HA	17:CT:52:GLU:HB3	1.97	0.47
23:DB:1932:A:H2'	23:DB:1933:G:O4'	2.15	0.47
34:B3:60:CYS:HB2	34:B3:61:LEU:HD23	1.96	0.47
25:BC:222:THR:HA	25:BC:231:HIS:O	2.14	0.47
23:BB:1424:G:H2'	23:BB:1425:G:O4'	2.15	0.47
25:DC:171:VAL:HG23	25:DC:185:ALA:HB2	1.96	0.47
25:DC:151:GLY:C	25:DC:152:GLN:HG3	2.34	0.47
48:BG:16:VAL:HA	48:BG:25:ILE:HA	1.97	0.47
48:BG:34:ARG:HG2	48:BG:34:ARG:HH11	1.80	0.47
26:BD:199:SER:O	26:BD:201:LEU:HG	2.14	0.47
48:DG:34:ARG:HG2	48:DG:34:ARG:NH1	2.30	0.47
29:DE:173:THR:HA	29:DE:199:MET:SD	2.55	0.47
40:DH:127:GLU:CD	40:DH:127:GLU:N	2.68	0.47
23:BB:1251:C:O2'	23:BB:1252:G:H3'	2.15	0.47
8:AI:42:THR:HA	8:AI:45:MET:HE1	1.97	0.47
43:DO:30:ARG:HG2	43:DO:31:THR:H	1.79	0.47
23:DB:1731:G:O2'	23:DB:1732:C:H5''	2.15	0.47
48:BG:153:PRO:HD3	48:BG:161:VAL:O	2.14	0.47
48:DG:89:VAL:HG12	48:DG:90:GLY:N	2.29	0.47
1:CA:720:C:H5''	15:CR:40:PRO:HA	1.96	0.47
35:DV:44:HIS:CE1	35:DV:86:LEU:H	2.31	0.47
44:DQ:107:ALA:HB1	49:DR:48:LYS:HE3	1.97	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DI:72:THR:CG2	24:DI:112:LYS:HD2	2.45	0.47
29:BE:129:PRO:HG3	29:BE:156:ASN:OD1	2.15	0.47
1:AA:1001:C:H2'	1:AA:1002:G:O4'	2.14	0.47
1:AA:1004:A:H2'	1:AA:1005:A:O4'	2.14	0.47
29:BE:60:TRP:HB3	29:BE:61:ARG:H	1.45	0.47
30:BY:6:ILE:O	30:BY:34:THR:HG23	2.15	0.47
44:BQ:63:ARG:HH12	44:BQ:96:ASP:HA	1.80	0.47
23:DB:2831:G:OP1	23:DB:2834:G:H4'	2.15	0.47
30:DY:6:ILE:HG23	30:DY:56:VAL:HG22	1.97	0.47
1:AA:1101:A:H4'	1:AA:1102:A:O5'	2.15	0.47
1:AA:202:G:H2'	1:AA:203:G:C8	2.50	0.47
37:DL:95:LEU:HB3	37:DL:100:ILE:CG2	2.44	0.47
24:DI:17:ALA:O	24:DI:18:ASN:HB3	2.14	0.47
1:AA:1309:G:OP1	12:AM:90:HIS:NE2	2.48	0.47
47:BF:27:VAL:O	47:BF:27:VAL:HG23	2.15	0.47
23:BB:2868:A:H2'	23:BB:2869:G:C8	2.50	0.47
1:CA:1221:G:H2'	1:CA:1222:G:H8	1.79	0.47
16:CS:33:TRP:CD1	16:CS:51:HIS:HB3	2.50	0.47
23:BB:582:A:H2'	23:BB:583:G:H8	1.80	0.47
27:DK:115:ILE:HG23	27:DK:116:ILE:N	2.30	0.47
23:BB:591:U:H1'	34:B3:1:PRO:CD	2.45	0.47
23:DB:2666:C:O2	23:DB:2666:C:O5'	2.33	0.47
3:AD:35:GLN:HB3	3:AD:36:ALA:H	1.58	0.47
23:BB:2087:G:H2'	23:BB:2088:A:C8	2.49	0.47
50:DT:72:GLN:HG2	50:DT:72:GLN:H	1.50	0.47
40:DH:57:LYS:C	40:DH:61:VAL:HB	2.34	0.47
1:AA:807:A:H2'	1:AA:808:C:C6	2.50	0.47
1:AA:543:U:O2'	1:AA:544:G:H5'	2.14	0.47
47:DF:78:ILE:N	47:DF:78:ILE:HD12	2.30	0.47
23:DB:346:A:H5'	23:DB:346:A:N3	2.29	0.47
1:CA:1530:G:H2'	1:CA:1531:A:C8	2.50	0.47
23:BB:636:G:O5'	37:BL:128:THR:HG22	2.14	0.47
5:AF:49:TYR:CE1	15:AR:65:SER:HA	2.50	0.47
23:DB:2108:A:N3	23:DB:2108:A:H2'	2.29	0.47
29:BE:3:LEU:HB2	29:BE:12:LEU:CG	2.44	0.47
1:CA:614:C:O2'	1:CA:615:G:H5'	2.15	0.47
24:DI:37:PHE:HB2	24:DI:66:PHE:CE2	2.50	0.47
1:AA:105:G:H2'	1:AA:106:C:C6	2.50	0.47
1:AA:996:A:H2'	1:AA:997:U:C6	2.50	0.47
23:DB:438:G:H2'	23:DB:439:A:C8	2.50	0.47
1:AA:546:A:P	3:AD:68:GLU:HB3	2.54	0.47
23:BB:2016:U:H2'	23:BB:2017:U:C6	2.49	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1486:G:H2'	1:CA:1487:G:C8	2.50	0.47
22:DA:35:C:H2'	22:DA:36:C:C5'	2.45	0.47
23:DB:2685:G:H2'	23:DB:2686:G:H8	1.79	0.47
23:DB:64:A:H2'	23:DB:65:U:C6	2.49	0.47
1:AA:130:A:N1	1:AA:233:C:H1'	2.30	0.47
23:DB:1351:C:H2'	23:DB:1352:U:O4'	2.14	0.47
23:DB:1350:C:H5'	23:DB:1351:C:OP2	2.14	0.47
1:AA:552:U:H2'	1:AA:553:A:C8	2.50	0.47
1:AA:458:U:H2'	1:AA:459:A:H8	1.79	0.47
28:DP:29:VAL:HA	28:DP:79:VAL:O	2.15	0.47
23:DB:2251:G:H2'	23:DB:2252:G:C8	2.50	0.47
37:DL:129:LYS:HG3	37:DL:130:GLY:N	2.29	0.47
23:BB:379:G:O4'	23:BB:2232:C:H5''	2.14	0.47
9:CJ:48:ARG:HG2	9:CJ:66:GLU:CB	2.45	0.47
23:BB:1760:C:H2'	23:BB:1761:C:O4'	2.15	0.47
23:DB:915:C:H3'	23:DB:916:G:H8	1.79	0.47
44:BQ:14:LYS:HA	44:BQ:17:LEU:HB3	1.97	0.47
28:DP:114:ASN:HA	28:DP:114:ASN:HD22	1.57	0.47
51:BZ:16:ASN:OD1	51:BZ:26:LYS:HD2	2.15	0.47
1:AA:24:U:O2'	1:AA:25:C:H5'	2.15	0.47
23:DB:1099:G:OP2	24:DI:2:LYS:O	2.33	0.47
12:AM:64:VAL:HA	12:AM:68:LEU:HD23	1.97	0.47
50:DT:32:LEU:H	50:DT:83:ALA:HB3	1.79	0.47
50:BT:29:THR:CA	50:BT:86:THR:HA	2.24	0.47
9:CJ:40:ILE:CD1	9:CJ:74:VAL:H	2.28	0.47
37:DL:29:LYS:C	37:DL:31:GLY:N	2.68	0.47
23:DB:1819:A:OP1	25:DC:159:THR:HG21	2.15	0.47
23:DB:1818:U:HO2'	23:DB:1819:A:P	2.37	0.47
23:BB:2772:C:H2'	23:BB:2773:C:H6	1.79	0.47
5:CF:3:HIS:CD2	5:CF:65:GLU:HG3	2.50	0.47
23:BB:2272:U:O2'	23:BB:2273:A:H8	1.97	0.47
8:AI:45:MET:SD	8:AI:45:MET:N	2.81	0.47
23:BB:1723:G:C2'	23:BB:1724:G:H5'	2.45	0.47
1:CA:10:A:OP2	4:CE:130:THR:HB	2.14	0.47
12:CM:66:GLY:C	12:CM:68:LEU:H	2.18	0.47
2:AC:149:LYS:CA	2:AC:168:ARG:HG3	2.45	0.47
48:DG:153:PRO:HG2	48:DG:162:ARG:HD2	1.97	0.47
23:DB:299:A:H2'	23:DB:300:A:C8	2.50	0.47
44:DQ:111:LYS:HB2	49:DR:48:LYS:HZ3	1.79	0.47
28:DP:50:ARG:HB3	28:DP:57:ALA:N	2.30	0.47
1:AA:1313:U:H2'	1:AA:1314:C:C6	2.49	0.47
26:DD:5:VAL:N	26:DD:32:ASN:ND2	2.57	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:865:A:C2	1:AA:918:A:H4'	2.50	0.47
2:AC:82:ASP:O	2:AC:86:LEU:HG	2.14	0.47
42:BN:106:ASP:C	42:BN:108:ALA:H	2.18	0.47
23:DB:126:A:O2'	23:DB:127:A:H5'	2.15	0.47
26:DD:118:PHE:HZ	26:DD:123:LYS:HZ3	1.62	0.47
18:CB:180:ILE:O	18:CB:182:VAL:HG23	2.15	0.47
2:CC:186:SER:O	2:CC:197:VAL:HG23	2.15	0.47
16:CS:47:THR:HA	16:CS:60:PHE:CE2	2.49	0.47
11:AL:41:PRO:CB	11:AL:88:ASP:HB3	2.45	0.47
24:DI:129:GLU:HB3	24:DI:133:ARG:NH1	2.29	0.47
20:AO:8:THR:O	20:AO:12:VAL:HG23	2.15	0.47
1:CA:1168:U:H4'	1:CA:1169:A:OP2	2.13	0.47
11:CL:20:VAL:HG12	11:CL:93:ARG:HB3	1.96	0.47
48:DG:70:LEU:O	48:DG:74:MET:HG3	2.15	0.47
48:DG:8:VAL:O	48:DG:9:VAL:HB	2.15	0.47
18:AB:112:ARG:HD2	18:AB:116:LEU:HD12	1.97	0.47
41:BJ:21:THR:HG23	41:BJ:61:LYS:HB3	1.96	0.47
40:DH:60:GLU:HA	40:DH:62:LEU:HD23	1.96	0.47
50:DT:50:LEU:O	50:DT:52:GLU:N	2.46	0.47
2:CC:7:ASN:OD1	2:CC:15:LYS:HE3	2.15	0.47
23:DB:606:U:P	29:DE:99:LYS:HD2	2.55	0.47
23:DB:1092:C:H2'	23:DB:1093:G:C5'	2.44	0.47
23:DB:2199:A:H3'	23:DB:2200:C:C6	2.49	0.47
1:AA:36:C:O2'	1:AA:37:U:H5'	2.15	0.47
22:BA:49:C:OP1	43:BO:101:GLY:HA3	2.15	0.47
6:AG:91:ARG:CB	6:AG:92:PRO:HD2	2.45	0.47
23:BB:2889:C:H2'	23:BB:2890:G:O4'	2.15	0.47
2:AC:106:ARG:HG2	2:AC:106:ARG:O	2.15	0.47
4:CE:51:LYS:O	4:CE:61:LYS:HD2	2.15	0.47
41:DJ:114:LEU:HG	41:DJ:118:MET:HE2	1.97	0.47
25:DC:137:GLY:N	25:DC:163:ILE:HB	2.30	0.47
23:DB:540:C:O2'	23:DB:541:A:H5'	2.15	0.47
1:CA:1404:C:H2'	1:CA:1405:G:C8	2.50	0.47
23:DB:710:U:H2'	23:DB:711:G:H8	1.79	0.47
23:BB:819:A:OP2	23:BB:1187:G:N2	2.48	0.47
45:DS:49:LYS:O	45:DS:53:SER:HB2	2.15	0.47
23:BB:438:G:H2'	23:BB:439:A:C8	2.50	0.47
1:AA:635:A:H2'	1:AA:636:U:H6	1.80	0.47
27:DK:13:ASN:HD21	27:DK:98:ARG:H	1.63	0.47
9:CJ:50:THR:HA	9:CJ:64:GLN:HA	1.96	0.47
8:CI:122:ARG:NH1	8:CI:122:ARG:HG3	2.30	0.47
1:AA:61:G:H2'	1:AA:62:U:O4'	2.15	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:BG:39:ALA:HB1	48:BG:54:ARG:HB2	1.96	0.47
23:BB:2370:G:H2'	23:BB:2371:G:O4'	2.13	0.47
1:AA:179:A:H2'	1:AA:180:U:O4'	2.15	0.47
22:BA:11:C:OP1	52:BW:71:LYS:HG2	2.15	0.47
23:DB:1306:C:O2'	23:DB:1307:A:H5'	2.15	0.47
13:CP:41:PRO:O	13:CP:42:ILE:HD13	2.15	0.47
4:AE:148:SER:OG	4:AE:151:MET:HB2	2.15	0.47
23:DB:1338:G:O2'	23:DB:1339:G:H5'	2.15	0.47
46:BU:27:VAL:HG23	46:BU:33:VAL:HG12	1.97	0.47
23:DB:1268:A:H2'	23:DB:1269:A:O4'	2.14	0.47
23:BB:2236:U:O2'	23:BB:2237:G:H5'	2.14	0.47
23:DB:2875:C:H2'	23:DB:2876:G:C8	2.50	0.47
10:CK:124:LYS:HA	19:CU:34:ARG:CG	2.44	0.47
50:DT:29:THR:CA	50:DT:86:THR:HA	2.26	0.47
10:AK:125:LYS:O	19:AU:33:ARG:CZ	2.63	0.47
23:DB:921:C:H2'	23:DB:922:C:H6	1.79	0.47
25:DC:107:LYS:N	25:DC:193:GLU:O	2.48	0.47
37:DL:125:LEU:H	37:DL:143:GLU:CG	2.28	0.47
37:DL:125:LEU:N	37:DL:143:GLU:HG3	2.28	0.47
43:BO:52:SER:C	43:BO:54:VAL:H	2.17	0.47
32:B4:15:LYS:O	32:B4:16:ILE:CB	2.60	0.47
23:DB:1176:U:O5'	23:DB:1176:U:H6	1.98	0.47
40:DH:114:GLU:OE1	40:DH:133:GLN:HB2	2.14	0.47
43:DO:28:VAL:HG21	43:DO:106:LEU:HD21	1.97	0.47
23:BB:2314:A:H4'	47:BF:34:THR:HG21	1.96	0.47
23:BB:1242:U:H2'	23:BB:1243:C:C6	2.50	0.47
18:CB:60:ALA:O	18:CB:224:ARG:HG2	2.14	0.47
13:CP:66:THR:HG22	13:CP:67:ILE:N	2.30	0.47
39:BX:56:LEU:HA	39:BX:59:GLU:CD	2.35	0.47
40:DH:5:LEU:HD11	40:DH:19:VAL:HG22	1.97	0.47
1:CA:205:A:C2'	1:CA:206:C:H5'	2.45	0.47
42:DN:17:ARG:HH21	42:DN:17:ARG:HB2	1.79	0.47
1:AA:71:A:O2'	1:AA:72:A:H5''	2.14	0.47
10:AK:16:SER:HA	10:AK:77:GLY:O	2.15	0.47
40:BH:53:GLU:CA	40:BH:57:LYS:HB3	2.42	0.47
1:AA:836:G:H2'	1:AA:837:U:C6	2.50	0.47
23:BB:3:U:H2'	23:BB:4:U:C6	2.49	0.47
23:BB:2462:C:H2'	23:BB:2463:C:C6	2.50	0.47
1:CA:1202:U:O2	21:CN:81:ILE:HD13	2.15	0.47
23:DB:968:C:O2'	23:DB:969:G:H5'	2.15	0.47
50:DT:48:GLN:HA	50:DT:48:GLN:NE2	2.30	0.47
2:CC:46:LEU:HD12	2:CC:75:VAL:HG22	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DS:13:SER:CB	45:DS:16:LYS:HE2	2.45	0.47
2:AC:63:ILE:HD12	2:AC:90:VAL:HG12	1.97	0.47
34:D3:3:ILE:CG2	34:D3:62:PRO:HG2	2.45	0.47
23:DB:2889:C:H2'	23:DB:2890:G:O4'	2.15	0.47
23:DB:528:A:C2	23:DB:2043:C:H4'	2.50	0.47
23:BB:2899:A:O2'	23:BB:2900:A:H5'	2.15	0.47
52:DW:70:VAL:CG2	52:DW:75:ASN:HD22	2.27	0.47
23:BB:2757:A:H2'	23:BB:2757:A:N3	2.30	0.47
26:BD:38:LYS:HA	26:BD:38:LYS:HE2	1.96	0.47
41:BJ:35:ARG:C	41:BJ:37:ARG:H	2.18	0.47
23:DB:538:A:N6	23:DB:555:G:O2'	2.46	0.47
23:DB:1291:C:O2'	23:DB:1292:G:H5'	2.15	0.47
1:CA:328:C:H4'	1:CA:329:A:C5'	2.44	0.47
23:DB:782:A:N7	25:DC:219:VAL:HG21	2.30	0.47
23:DB:1341:G:H3'	23:DB:1397:U:O2	2.14	0.47
23:BB:688:U:H2'	23:BB:689:A:H8	1.80	0.47
14:CQ:80:LYS:O	14:CQ:81:ALA:HB3	2.15	0.47
23:BB:2643:G:H2'	23:BB:2644:G:O4'	2.14	0.47
23:DB:1904:G:O2'	23:DB:1905:C:H5'	2.15	0.47
1:CA:345:C:P	28:DP:36:LYS:HZ2	2.38	0.47
23:BB:2776:A:H3'	23:BB:2776:A:OP1	2.15	0.47
23:BB:588:U:H1'	29:BE:85:PHE:CD2	2.49	0.47
44:DQ:14:LYS:HA	44:DQ:17:LEU:HB3	1.97	0.47
23:DB:312:G:H2'	23:DB:313:G:H8	1.80	0.47
42:BN:14:SER:O	42:BN:18:GLN:HB2	2.15	0.47
1:AA:971:G:H3'	1:AA:971:G:OP1	2.14	0.47
23:DB:392:U:O2'	23:DB:393:C:H5'	2.15	0.47
23:DB:1760:C:H2'	23:DB:1761:C:O4'	2.15	0.47
6:CG:30:MET:HA	6:CG:38:ALA:HB2	1.97	0.46
1:AA:119:A:H4'	1:AA:120:A:O4'	2.15	0.46
35:BV:21:ARG:HE	35:BV:87:GLN:HB3	1.80	0.46
29:BE:105:LEU:HA	29:BE:108:ILE:HG22	1.97	0.46
23:DB:27:G:HO2'	23:DB:28:A:H8	1.53	0.46
40:BH:65:ALA:O	40:BH:135:HIS:HB2	2.15	0.46
40:BH:147:VAL:HG12	40:BH:148:ALA:N	2.30	0.46
37:DL:141:LYS:HZ2	37:DL:143:GLU:HA	1.80	0.46
1:AA:1248:A:C4'	8:AI:32:ARG:HH12	2.27	0.46
12:AM:106:ARG:NH1	12:AM:109:LYS:HD2	2.30	0.46
1:AA:720:C:H5''	15:AR:40:PRO:HA	1.97	0.46
32:B4:4:ARG:CG	32:B4:5:ALA:H	2.27	0.46
48:BG:136:ASP:O	48:BG:140:ILE:HG23	2.15	0.46
46:BU:81:ARG:HG3	46:BU:81:ARG:NH2	2.31	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:DV:31:TYR:CB	35:DV:37:PRO:HG3	2.43	0.46
40:DH:67:ALA:O	40:DH:70:GLU:HG3	2.15	0.46
13:AP:6:LEU:CD1	13:AP:71:VAL:HB	2.46	0.46
47:BF:104:THR:O	47:BF:108:PRO:HG2	2.15	0.46
47:BF:110:ILE:CG2	47:BF:113:PHE:HB3	2.45	0.46
47:BF:116:LEU:HD22	47:BF:175:PRO:HG2	1.97	0.46
26:DD:32:ASN:HB3	26:DD:50:VAL:HG21	1.96	0.46
47:DF:121:PHE:HB2	47:DF:127:TYR:HA	1.95	0.46
47:DF:50:ASP:O	47:DF:53:ALA:HB3	2.15	0.46
25:DC:203:VAL:HG12	25:DC:205:GLY:N	2.29	0.46
23:BB:2727:A:H2'	23:BB:2728:U:C6	2.50	0.46
3:AD:145:ARG:HH22	3:AD:147:LYS:HE2	1.79	0.46
23:BB:2472:G:O6	23:BB:2476:A:H4'	2.15	0.46
24:DI:18:ASN:N	24:DI:19:PRO:CD	2.77	0.46
23:BB:2595:G:H1	25:BC:238:ASN:ND2	2.13	0.46
1:AA:643:C:H5'	7:AH:31:LEU:HD13	1.98	0.46
39:DX:22:LEU:HG	39:DX:23:ARG:HG2	1.96	0.46
23:DB:2734:A:C2'	23:DB:2735:G:H5'	2.44	0.46
45:BS:71:VAL:HG22	45:BS:71:VAL:O	2.14	0.46
28:DP:94:ALA:O	28:DP:95:LYS:HD2	2.15	0.46
23:BB:2649:C:H2'	23:BB:2650:U:C6	2.50	0.46
2:CC:13:ILE:HG12	2:CC:14:VAL:HG22	1.97	0.46
2:AC:87:ARG:CZ	2:AC:88:LYS:HA	2.45	0.46
18:CB:10:LYS:O	18:CB:211:LEU:HG	2.16	0.46
38:BM:26:VAL:CG2	38:BM:133:LYS:HA	2.44	0.46
13:AP:48:GLU:CG	13:AP:49:GLY:H	2.28	0.46
1:AA:683:G:O2'	1:AA:684:U:H5'	2.15	0.46
26:BD:61:THR:OG1	26:BD:63:PRO:HD2	2.16	0.46
1:AA:6:G:H4'	1:AA:298:A:H4'	1.95	0.46
1:CA:803:G:H2'	1:CA:804:U:O4'	2.14	0.46
23:BB:1564:C:H2'	23:BB:1565:C:C6	2.50	0.46
1:CA:5:U:H1'	1:CA:6:G:H22	1.80	0.46
22:BA:32:U:H1'	22:BA:52:A:N7	2.31	0.46
23:DB:2637:U:OP1	26:DD:83:ARG:HD3	2.16	0.46
35:BV:55:GLU:CD	35:BV:55:GLU:N	2.69	0.46
23:DB:1683:U:H2'	23:DB:1684:G:C8	2.50	0.46
8:CI:10:ARG:H	8:CI:80:HIS:HD2	1.63	0.46
52:BW:70:VAL:CG2	52:BW:75:ASN:HD22	2.27	0.46
51:DZ:36:HIS:HB3	51:DZ:38:PHE:CE2	2.50	0.46
1:CA:1114:C:H2'	1:CA:1115:U:H6	1.80	0.46
1:CA:1174:G:O2'	1:CA:1175:G:H5'	2.15	0.46
19:CU:6:ARG:O	19:CU:7:GLU:O	2.33	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:265:PHE:N	25:DC:265:PHE:HD2	2.13	0.46
12:CM:14:ALA:O	12:CM:18:LEU:HD12	2.15	0.46
10:CK:88:PRO:HD3	19:CU:28:LEU:HD13	1.97	0.46
1:CA:339:C:OP2	27:DK:98:ARG:CZ	2.63	0.46
1:AA:435:A:N3	1:AA:435:A:H2'	2.28	0.46
1:AA:124:C:O2'	1:AA:125:U:H5'	2.15	0.46
1:AA:113:G:O4'	1:AA:354:G:H4'	2.15	0.46
23:BB:1351:C:H2'	23:BB:1352:U:O4'	2.14	0.46
23:DB:2488:G:O2'	23:DB:2489:U:H5'	2.15	0.46
23:DB:1322:A:H2'	23:DB:1323:C:H5'	1.97	0.46
11:AL:34:THR:N	11:AL:53:ARG:O	2.47	0.46
23:DB:509:C:H5'	23:DB:510:C:OP2	2.15	0.46
7:CH:17:GLN:OE1	7:CH:69:ALA:HB1	2.15	0.46
1:AA:1210:C:H4'	1:AA:1214:C:C5	2.50	0.46
23:BB:1932:A:H2'	23:BB:1933:G:O4'	2.15	0.46
23:DB:1815:A:OP1	23:DB:1822:C:H4'	2.15	0.46
23:DB:1475:G:H4'	23:DB:1476:U:O5'	2.16	0.46
23:BB:2250:G:O5'	23:BB:2250:G:H8	1.98	0.46
23:BB:932:U:O4'	23:BB:932:U:O2	2.31	0.46
23:DB:1995:U:H1'	27:DK:3:GLN:NE2	2.29	0.46
23:BB:781:A:OP1	25:BC:216:ARG:NH2	2.48	0.46
1:AA:903:G:H2'	1:AA:904:U:C6	2.50	0.46
18:CB:187:ASP:OD1	18:CB:203:ASP:HB3	2.16	0.46
12:AM:59:VAL:HG22	12:AM:64:VAL:HG11	1.96	0.46
50:DT:32:LEU:O	50:DT:34:VAL:HG13	2.15	0.46
9:CJ:15:HIS:HA	9:CJ:18:ILE:CG2	2.40	0.46
23:DB:673:C:H2'	23:DB:674:G:H5'	1.97	0.46
29:DE:58:LYS:O	29:DE:60:TRP:N	2.47	0.46
25:DC:145:MET:HB2	25:DC:152:GLN:HE22	1.80	0.46
26:BD:201:LEU:H	26:BD:201:LEU:HD12	1.79	0.46
35:BV:76:ASP:HA	38:BM:136:MET:HE3	1.96	0.46
26:BD:172:VAL:HG23	26:BD:194:PRO:HD3	1.96	0.46
20:AO:70:LEU:HD11	20:AO:77:ARG:CB	2.42	0.46
29:BE:196:VAL:O	29:BE:200:LEU:HD23	2.14	0.46
14:AQ:52:CYS:SG	14:AQ:74:LEU:HG	2.55	0.46
40:BH:135:HIS:CE1	40:BH:138:VAL:HB	2.50	0.46
37:DL:84:LYS:C	37:DL:86:GLU:H	2.19	0.46
1:AA:1352:C:H2'	1:AA:1353:G:O4'	2.15	0.46
10:AK:111:ASP:HB2	19:AU:19:LYS:CE	2.43	0.46
43:DO:35:ILE:HG21	43:DO:71:ALA:CB	2.45	0.46
46:BU:73:ASN:C	46:BU:75:ALA:H	2.18	0.46
44:BQ:94:LEU:C	44:BQ:96:ASP:N	2.68	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
38:BM:97:GLN:HB2	38:BM:98:PRO:HD2	1.97	0.46
43:BO:28:VAL:HG21	43:BO:106:LEU:HD21	1.96	0.46
47:BF:36:ASN:HA	47:BF:87:LYS:HA	1.95	0.46
28:DP:63:ILE:CA	28:DP:68:GLY:HA2	2.39	0.46
26:BD:10:GLY:HA3	26:BD:26:VAL:H	1.76	0.46
26:BD:51:THR:CG2	26:BD:76:GLY:HA3	2.44	0.46
37:BL:95:LEU:HB3	37:BL:100:ILE:HG23	1.95	0.46
39:DX:21:LEU:HD21	39:DX:50:VAL:HG11	1.97	0.46
39:DX:56:LEU:C	39:DX:58:ASN:H	2.18	0.46
23:DB:1654:A:H2'	23:DB:1655:A:C8	2.48	0.46
23:DB:2261:C:N4	52:DW:10:ARG:HB3	2.30	0.46
42:DN:34:ILE:O	42:DN:112:TYR:HA	2.15	0.46
42:DN:19:ALA:C	42:DN:21:PHE:N	2.69	0.46
41:DJ:45:THR:H	41:DJ:46:PRO:CD	2.24	0.46
44:DQ:64:ILE:HD12	44:DQ:95:ALA:CB	2.45	0.46
23:BB:62:U:H2'	23:BB:63:A:O4'	2.14	0.46
32:D4:15:LYS:O	32:D4:16:ILE:CB	2.60	0.46
31:B0:42:ILE:HG12	42:BN:99:LYS:O	2.15	0.46
1:AA:560:A:H5'	1:AA:566:G:N2	2.30	0.46
23:BB:1820:U:OP1	25:BC:176:ARG:HD2	2.14	0.46
25:BC:157:ALA:HA	25:BC:194:VAL:CG2	2.46	0.46
23:DB:2769:U:O2'	23:DB:2770:G:H5'	2.14	0.46
23:DB:2074:U:H1'	23:DB:2598:A:N3	2.31	0.46
22:BA:98:G:N1	35:BV:14:LYS:HB2	2.30	0.46
23:DB:741:U:H2'	23:DB:742:A:H8	1.79	0.46
25:DC:162:GLN:NE2	25:DC:174:ARG:HH22	2.13	0.46
11:CL:81:ILE:HG23	11:CL:94:TYR:HB3	1.96	0.46
23:BB:2840:C:H2'	23:BB:2841:C:H6	1.81	0.46
25:DC:249:VAL:O	25:DC:250:GLN:C	2.54	0.46
23:DB:937:C:H2'	23:DB:938:G:C8	2.50	0.46
48:BG:7:PRO:O	48:BG:8:VAL:HB	2.15	0.46
23:DB:2415:G:H2'	23:DB:2416:C:C6	2.49	0.46
1:CA:171:A:H2'	1:CA:172:A:C8	2.50	0.46
1:CA:501:C:H2'	1:CA:502:A:C8	2.50	0.46
23:DB:2097:A:H2'	23:DB:2098:U:C6	2.50	0.46
1:AA:265:G:N2	1:AA:267:C:H5'	2.30	0.46
13:CP:43:ALA:HA	13:CP:46:LYS:CD	2.44	0.46
29:BE:48:THR:HG23	29:BE:51:GLU:OE2	2.15	0.46
23:BB:908:C:O2'	23:BB:909:A:H5'	2.14	0.46
23:DB:2247:A:O2'	23:DB:2248:C:H5'	2.14	0.46
29:DE:103:GLY:HA2	29:DE:106:LYS:HB2	1.96	0.46
1:CA:300:A:H2'	1:CA:301:G:O4'	2.14	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:314:C:O2'	1:CA:315:A:H5'	2.15	0.46
1:CA:1041:G:H2'	1:CA:1042:A:C8	2.50	0.46
52:BW:32:ALA:O	52:BW:34:SER:N	2.48	0.46
23:DB:1458:U:H5'	23:DB:1459:G:OP1	2.15	0.46
20:CO:71:LYS:HB2	20:CO:78:TYR:CD2	2.50	0.46
1:CA:833:G:O2'	1:CA:834:U:H5'	2.14	0.46
23:BB:1774:C:C2'	23:BB:1774:C:O2	2.64	0.46
23:DB:2800:A:O2'	23:DB:2801:G:H5'	2.16	0.46
26:BD:38:LYS:HD3	26:BD:45:TYR:OH	2.15	0.46
1:CA:1259:C:H6	1:CA:1259:C:O5'	1.97	0.46
1:AA:658:C:O2'	1:AA:659:U:H5'	2.15	0.46
23:BB:1291:C:O2'	23:BB:1292:G:H5'	2.15	0.46
1:AA:1464:U:P	28:BP:108:ARG:HH22	2.38	0.46
1:AA:961:U:P	1:AA:1222:G:H21	2.37	0.46
46:DU:13:LEU:HA	46:DU:18:LYS:HE3	1.97	0.46
23:BB:1721:G:H1'	23:BB:1739:A:N6	2.30	0.46
23:BB:455:C:N3	23:BB:472:A:H2'	2.31	0.46
5:CF:10:VAL:HG12	5:CF:11:HIS:N	2.30	0.46
23:BB:1707:G:H2'	23:BB:1708:C:O4'	2.15	0.46
10:AK:88:PRO:HG3	19:AU:28:LEU:CD2	2.45	0.46
23:BB:1013:C:H2'	23:BB:1014:A:H8	1.80	0.46
23:DB:1474:U:H2'	23:DB:1475:G:H5'	1.96	0.46
1:AA:276:G:O2'	1:AA:277:C:H5'	2.15	0.46
1:CA:517:G:H22	1:CA:533:A:P	2.38	0.46
23:DB:1664:A:H1'	23:DB:2726:A:C2	2.49	0.46
1:CA:451:A:H4'	1:CA:452:A:O4'	2.15	0.46
23:DB:1838:C:N4	23:DB:1898:U:H2'	2.30	0.46
23:BB:1836:C:O2'	23:BB:1837:C:H5'	2.15	0.46
23:DB:1623:G:O2'	23:DB:1624:U:H5'	2.14	0.46
1:CA:1032:G:H3'	1:CA:1032:G:N3	2.30	0.46
1:AA:689:C:H2'	1:AA:690:G:C8	2.51	0.46
23:BB:2418:A:H2'	23:BB:2419:U:O4'	2.15	0.46
28:BP:29:VAL:HA	28:BP:79:VAL:O	2.15	0.46
23:BB:443:A:H1'	23:BB:1201:U:O4'	2.15	0.46
35:DV:11:GLU:HB2	35:DV:16:ALA:HB2	1.98	0.46
23:BB:2153:C:H2'	23:BB:2153:C:O2	2.15	0.46
23:BB:2154:A:OP1	23:BB:2154:A:H8	1.98	0.46
23:DB:1107:G:H2'	23:DB:1108:U:C6	2.50	0.46
23:DB:2716:C:O2'	23:DB:2717:C:H5'	2.16	0.46
1:CA:966:G:H2'	1:CA:967:C:C6	2.50	0.46
23:BB:1501:G:O2'	23:BB:1502:A:H5'	2.15	0.46
23:BB:1326:U:H2'	23:BB:1327:A:H8	1.80	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:14:HIS:O	18:CB:16:GLY:N	2.48	0.46
23:DB:1429:G:H2'	23:DB:1430:G:C8	2.50	0.46
23:DB:1430:G:H2'	23:DB:1431:A:C8	2.50	0.46
50:BT:32:LEU:O	50:BT:34:VAL:HG13	2.15	0.46
48:DG:136:ASP:O	48:DG:140:ILE:HG23	2.14	0.46
10:CK:31:VAL:HG11	10:CK:95:THR:OG1	2.15	0.46
23:BB:2539:C:C5'	32:B4:3:VAL:HG11	2.45	0.46
23:BB:2821:A:OP2	42:BN:3:HIS:NE2	2.48	0.46
23:BB:673:C:H5''	29:BE:76:PRO:HD2	1.98	0.46
43:DO:106:LEU:HA	43:DO:109:ALA:HB3	1.97	0.46
35:DV:80:HIS:HB3	35:DV:83:LYS:O	2.14	0.46
38:BM:38:ARG:NH1	38:BM:38:ARG:HG2	2.30	0.46
23:DB:1057:A:H62	23:DB:1086:A:H2'	1.80	0.46
49:DR:63:VAL:HA	49:DR:95:ASP:O	2.15	0.46
47:BF:127:TYR:CB	47:BF:155:ILE:HD13	2.46	0.46
47:BF:62:GLN:CG	47:BF:91:ARG:HH11	2.28	0.46
1:AA:982:U:H4'	1:AA:983:A:O4'	2.15	0.46
28:DP:91:VAL:HG21	28:DP:96:LEU:HD21	1.98	0.46
23:BB:1105:U:H2'	23:BB:1106:G:H8	1.80	0.46
47:DF:120:SER:O	47:DF:121:PHE:HB3	2.15	0.46
47:DF:91:ARG:O	47:DF:92:GLY:C	2.52	0.46
23:DB:1789:A:H2'	23:DB:1790:C:O4'	2.15	0.46
25:BC:203:VAL:O	25:BC:204:LEU:HB2	2.15	0.46
4:AE:136:VAL:HG13	4:AE:137:ARG:N	2.30	0.46
1:CA:1102:A:O2'	1:CA:1103:C:H5'	2.15	0.46
23:DB:2579:C:H1'	26:DD:130:GLN:NE2	2.29	0.46
1:CA:1306:A:O2'	12:CM:107:THR:HG21	2.15	0.46
44:DQ:59:LEU:HD13	44:DQ:60:TRP:N	2.30	0.46
1:AA:86:G:H1'	1:AA:87:C:H5	1.81	0.46
1:AA:1390:U:H2'	1:AA:1391:U:H6	1.79	0.46
36:B2:21:ARG:C	36:B2:23:ALA:H	2.19	0.46
23:DB:2727:A:H2'	23:DB:2728:U:C6	2.50	0.46
10:AK:76:TYR:HB3	10:AK:78:ILE:HD11	1.98	0.46
25:DC:242:HIS:O	25:DC:244:VAL:HG13	2.16	0.46
23:DB:713:G:H21	23:DB:718:A:H2	1.63	0.46
1:AA:1017:U:C6	1:AA:1017:U:OP2	2.66	0.46
29:DE:99:LYS:C	29:DE:101:TYR:H	2.18	0.46
23:BB:970:U:H1'	23:BB:985:C:P	2.55	0.46
51:BZ:6:GLN:HG3	51:BZ:76:GLU:OE1	2.15	0.46
1:AA:796:C:O2'	1:AA:797:C:H5'	2.15	0.46
1:AA:490:C:H2'	1:AA:491:G:O4'	2.15	0.46
23:BB:132:G:H2'	23:BB:133:U:C6	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:275:C:H2'	23:BB:276:U:O4'	2.15	0.46
51:DZ:39:TRP:NE1	51:DZ:41:GLU:HG2	2.31	0.46
24:BI:102:ARG:HA	24:BI:105:LEU:HD12	1.97	0.46
22:DA:93:C:O2'	22:DA:94:A:H5'	2.16	0.46
29:DE:12:LEU:HD12	29:DE:14:VAL:CG1	2.45	0.46
8:AI:81:GLY:O	8:AI:84:ARG:HB2	2.16	0.46
23:BB:2071:A:H2'	23:BB:2072:C:C6	2.50	0.46
23:BB:1584:U:H3'	23:BB:1585:C:H5'	1.96	0.46
23:BB:770:G:H3'	36:B2:11:LYS:NZ	2.29	0.46
23:DB:2893:A:H4'	23:DB:2894:G:O5'	2.15	0.46
11:CL:66:ILE:N	11:CL:66:ILE:HD12	2.30	0.46
10:AK:34:THR:HB	10:AK:39:ASN:O	2.15	0.46
23:DB:1151:A:H2'	23:DB:1152:C:H6	1.81	0.46
1:CA:1499:A:O2'	1:CA:1500:A:H5'	2.14	0.46
37:BL:136:GLU:C	37:BL:138:ALA:H	2.18	0.46
23:BB:1351:C:O2'	23:BB:1571:A:H1'	2.15	0.46
22:BA:110:C:H2'	22:BA:111:U:O4'	2.15	0.46
23:DB:2533:U:H2'	23:DB:2534:A:O4'	2.15	0.46
16:CS:79:TYR:O	16:CS:80:ARG:HB2	2.16	0.46
23:BB:2685:G:O2'	23:BB:2686:G:H5'	2.15	0.46
24:DI:69:VAL:O	24:DI:69:VAL:HG23	2.15	0.46
23:DB:2400:G:O2'	23:DB:2401:U:H5'	2.15	0.46
23:DB:379:G:O4'	23:DB:2232:C:H5''	2.15	0.46
37:BL:129:LYS:HG3	37:BL:130:GLY:N	2.29	0.46
23:DB:841:G:O2'	23:DB:842:U:H5'	2.16	0.46
38:BM:114:ARG:HG3	38:BM:130:PHE:CD2	2.50	0.46
23:BB:2428:G:H5''	23:BB:2429:G:OP1	2.15	0.46
30:BY:46:MET:O	30:BY:49:ALA:HB3	2.15	0.46
23:DB:1589:U:H2'	23:DB:1590:A:C8	2.51	0.46
1:AA:631:C:H3'	1:AA:632:U:H5'	1.96	0.46
9:AJ:7:ARG:CB	9:AJ:101:SER:H	2.15	0.46
50:DT:11:LEU:N	50:DT:11:LEU:HD22	2.23	0.46
1:CA:1237:C:H4'	1:CA:1334:G:N2	2.31	0.46
29:BE:103:GLY:HA2	29:BE:106:LYS:HB2	1.97	0.46
29:BE:141:MET:O	29:BE:143:LEU:HG	2.15	0.46
5:CF:38:ARG:NH2	5:CF:63:ASN:HD21	2.13	0.46
40:BH:114:GLU:C	40:BH:133:GLN:H	2.19	0.46
23:BB:2746:U:H5''	48:BG:137:LYS:CG	2.46	0.46
48:BG:84:LYS:HG3	48:BG:132:LEU:H	1.78	0.46
35:DV:26:PHE:CE2	35:DV:44:HIS:HA	2.50	0.46
29:BE:68:ALA:O	29:BE:69:ARG:O	2.32	0.46
27:BK:71:ARG:NE	27:BK:72:PRO:HD3	2.30	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2883:A:OP1	31:D0:48:TYR:CE1	2.69	0.46
41:BJ:30:THR:OG1	41:BJ:31:GLU:N	2.47	0.46
3:AD:199:ILE:HG13	3:AD:200:VAL:N	2.31	0.46
47:DF:65:LEU:O	47:DF:86:CYS:HA	2.15	0.46
18:CB:118:THR:O	18:CB:122:ASP:HB3	2.15	0.46
42:BN:34:ILE:HG22	42:BN:35:LYS:N	2.29	0.46
6:AG:14:ASP:OD2	6:AG:22:LEU:HD13	2.16	0.46
43:DO:89:ASP:CG	43:DO:116:GLN:HB3	2.36	0.46
42:DN:97:ILE:HG22	42:DN:113:ILE:HD12	1.97	0.46
23:BB:1596:A:O2'	23:BB:1597:A:H5'	2.16	0.46
16:CS:39:ILE:HG21	16:CS:61:VAL:HG21	1.96	0.46
23:DB:2472:G:O6	23:DB:2476:A:H4'	2.15	0.46
42:DN:16:HIS:O	42:DN:19:ALA:N	2.49	0.46
1:CA:658:C:O2'	1:CA:659:U:H5'	2.16	0.46
11:CL:23:LEU:HD22	11:CL:58:ASN:CB	2.45	0.46
6:AG:30:MET:O	6:AG:31:VAL:HB	2.14	0.46
23:DB:1997:C:O2'	23:DB:1998:A:H5'	2.16	0.46
23:DB:1999:C:H5''	23:DB:2723:C:O2'	2.16	0.46
6:AG:147:ASN:C	10:AK:55:ARG:HH22	2.19	0.46
23:BB:978:G:O4'	23:BB:1001:A:H2	1.97	0.46
25:BC:254:LYS:HB3	25:BC:255:LYS:H	1.48	0.46
18:AB:132:GLU:HA	18:AB:135:MET:CE	2.46	0.46
41:BJ:128:ASN:C	41:BJ:129:GLU:HG3	2.35	0.46
27:BK:53:LYS:H	27:BK:53:LYS:CD	2.28	0.46
1:CA:1009:U:C2'	1:CA:1010:U:H5'	2.46	0.46
2:CC:105:VAL:HA	2:CC:106:ARG:NH2	2.30	0.46
42:BN:61:ALA:C	42:BN:63:ARG:N	2.68	0.46
23:BB:2199:A:H3'	23:BB:2200:C:C6	2.50	0.46
1:AA:1487:G:O2'	1:AA:1488:G:H5'	2.14	0.46
1:CA:187:G:N2	1:CA:189:A:H3'	2.30	0.46
21:CN:76:PHE:HZ	21:CN:95:LEU:HD13	1.80	0.46
23:BB:533:G:H2'	23:BB:534:U:H6	1.81	0.46
1:AA:279:A:C5'	1:AA:280:C:H3'	2.45	0.46
23:BB:6:A:H4'	41:BJ:131:ASN:O	2.16	0.46
23:DB:1184:U:O2'	23:DB:1185:G:H5'	2.15	0.46
2:AC:154:GLY:HA2	2:AC:163:ARG:O	2.15	0.46
1:AA:310:G:H5''	13:AP:31:ARG:HB2	1.98	0.46
23:BB:2799:A:H4'	23:BB:2800:A:O4'	2.16	0.46
23:DB:1153:C:O2'	23:DB:1154:G:H5'	2.16	0.46
23:BB:1745:A:H2'	23:BB:1746:A:C8	2.50	0.46
26:BD:68:PHE:N	26:BD:68:PHE:HD2	2.14	0.46
1:CA:586:C:C2'	1:CA:587:G:H5'	2.45	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:328:C:H1'	1:CA:329:A:OP2	2.15	0.46
6:CG:147:ASN:C	6:CG:149:ALA:N	2.69	0.46
1:CA:1291:U:OP1	6:CG:36:SER:HB2	2.16	0.46
10:AK:52:ARG:HB3	10:AK:52:ARG:HH11	1.80	0.46
48:DG:28:LYS:HZ2	48:DG:29:ASN:HB2	1.79	0.46
1:AA:332:G:OP2	17:AT:4:LYS:HB2	2.15	0.46
23:BB:2135:A:C2	23:BB:2136:G:H1'	2.51	0.46
1:CA:113:G:O4'	1:CA:354:G:H4'	2.16	0.46
23:BB:1013:C:H2'	23:BB:1014:A:C8	2.51	0.46
1:CA:1032:G:H5''	1:CA:1032:G:N3	2.30	0.46
2:AC:173:PRO:C	2:AC:175:HIS:H	2.18	0.46
1:AA:1471:U:O2'	1:AA:1472:U:H5'	2.16	0.46
44:BQ:104:ALA:C	44:BQ:106:THR:H	2.19	0.46
44:BQ:109:VAL:HG12	44:BQ:113:LYS:HE3	1.97	0.46
15:CR:31:TYR:CD1	15:CR:54:LEU:HD21	2.51	0.46
18:AB:10:LYS:C	18:AB:12:GLY:H	2.19	0.46
1:CA:179:A:H2'	1:CA:180:U:O4'	2.15	0.46
1:CA:912:C:O2'	1:CA:913:A:H5'	2.16	0.46
2:AC:4:VAL:HG21	21:AN:97:LYS:NZ	2.31	0.46
23:DB:1625:C:O2'	23:DB:1626:A:H5'	2.15	0.46
3:AD:108:ALA:H	3:AD:112:GLU:CD	2.19	0.46
1:AA:344:A:H5''	1:AA:345:C:C5	2.50	0.46
23:DB:1103:A:H3'	23:DB:1104:C:C6	2.50	0.46
12:AM:77:LYS:HA	12:AM:80:MET:HG3	1.96	0.46
25:DC:86:ARG:HD2	25:DC:90:ILE:HD11	1.96	0.46
26:DD:199:SER:O	26:DD:201:LEU:HG	2.14	0.46
26:DD:9:VAL:O	26:DD:9:VAL:HG22	2.15	0.46
35:BV:30:ILE:HG12	35:BV:91:PHE:HB2	1.96	0.46
25:DC:130:PRO:HG2	25:DC:133:ASN:ND2	2.31	0.46
48:DG:16:VAL:HA	48:DG:25:ILE:HA	1.97	0.46
29:BE:108:ILE:HA	37:BL:2:ARG:HH12	1.80	0.46
14:CQ:20:ILE:HD12	14:CQ:47:ASP:CB	2.46	0.46
40:BH:133:GLN:HA	40:BH:139:PHE:CD2	2.51	0.46
23:BB:136:G:H2'	23:BB:137:U:O4'	2.15	0.46
42:BN:29:VAL:CG1	42:BN:75:ILE:HB	2.45	0.46
8:AI:64:ILE:HD12	8:AI:64:ILE:N	2.31	0.46
37:BL:125:LEU:H	37:BL:143:GLU:CG	2.27	0.46
28:BP:75:THR:CG2	28:BP:76:HIS:H	2.23	0.46
1:AA:975:A:H4'	1:AA:976:G:OP2	2.15	0.46
1:AA:1375:A:H4'	6:AG:28:ILE:CD1	2.43	0.46
28:DP:91:VAL:HG11	28:DP:96:LEU:CD1	2.36	0.46
23:DB:2052:A:H4'	26:DD:148:GLN:O	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:AT:74:HIS:O	17:AT:78:LEU:HG	2.15	0.46
29:DE:8:ALA:HB3	29:DE:122:GLU:OE1	2.15	0.46
23:DB:1374:G:O2'	23:DB:1375:U:H5'	2.16	0.46
6:AG:13:PRO:HA	6:AG:23:ALA:HB2	1.97	0.46
16:CS:48:ILE:O	16:CS:58:PRO:HA	2.14	0.46
23:DB:2868:A:H2'	23:DB:2869:G:C8	2.50	0.46
23:BB:2261:C:H41	52:BW:10:ARG:HB3	1.81	0.46
27:DK:20:MET:O	27:DK:41:ILE:HD12	2.16	0.46
11:AL:23:LEU:HD22	11:AL:58:ASN:CB	2.46	0.46
11:CL:26:CYS:SG	11:CL:29:LYS:HE2	2.55	0.46
23:BB:1819:A:OP1	25:BC:154:ALA:HA	2.16	0.46
25:BC:107:LYS:N	25:BC:193:GLU:O	2.49	0.46
23:DB:783:A:H8	23:DB:784:G:H4'	1.79	0.46
23:DB:1468:U:HO2'	23:DB:1469:A:H8	1.62	0.46
18:CB:75:ALA:O	18:CB:79:VAL:HB	2.15	0.46
41:BJ:58:ASN:HA	41:BJ:127:GLY:HA3	1.98	0.46
23:DB:2462:C:H2'	23:DB:2463:C:C6	2.49	0.46
1:CA:131:A:H2'	1:CA:132:C:H6	1.81	0.46
50:DT:45:ALA:HA	50:DT:48:GLN:CG	2.45	0.46
42:DN:61:ALA:C	42:DN:63:ARG:N	2.67	0.46
23:DB:2248:C:H2'	23:DB:2249:U:O4'	2.15	0.46
23:BB:1028:A:N6	23:BB:1125:G:H2'	2.30	0.46
23:DB:1560:G:H2'	23:DB:1561:C:C6	2.51	0.46
22:BA:94:A:O2'	22:BA:95:U:H5'	2.16	0.46
21:AN:76:PHE:CE1	21:AN:92:ILE:HD13	2.51	0.46
23:BB:2262:U:O2'	23:BB:2263:C:H5'	2.15	0.46
23:DB:1576:U:O2'	23:DB:1577:C:H5'	2.16	0.46
23:BB:446:G:H5'	44:BQ:2:ARG:HH22	1.80	0.46
41:BJ:114:LEU:HG	41:BJ:118:MET:HE2	1.98	0.46
1:AA:613:C:H2'	1:AA:614:C:H6	1.80	0.46
26:DD:68:PHE:HD2	26:DD:68:PHE:N	2.13	0.46
23:DB:1187:G:H5''	49:DR:83:TYR:CE2	2.50	0.46
1:AA:1246:A:H2'	1:AA:1247:U:H6	1.80	0.46
5:AF:72:ASP:HA	5:AF:75:GLU:OE1	2.15	0.46
34:B3:20:GLY:HA3	34:B3:48:MET:CE	2.45	0.46
23:DB:2023:C:O2'	23:DB:2024:G:H5'	2.15	0.46
27:DK:98:ARG:HH11	27:DK:98:ARG:HG2	1.80	0.46
21:AN:68:ARG:HH11	21:AN:70:HIS:HB2	1.80	0.46
4:CE:12:GLU:HB3	4:CE:63:MET:CE	2.45	0.46
23:BB:1915:U:O5'	23:BB:1915:U:H6	1.98	0.46
29:DE:102:ARG:HG3	29:DE:102:ARG:HH21	1.80	0.46
23:DB:443:A:H1'	23:DB:1201:U:O4'	2.14	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1338:G:C2'	23:DB:1339:G:H5'	2.46	0.46
44:BQ:104:ALA:HA	49:BR:46:GLU:OE1	2.15	0.46
18:AB:8:MET:O	18:AB:10:LYS:N	2.47	0.46
1:AA:1456:A:H2'	1:AA:1457:G:O4'	2.15	0.46
38:DM:114:ARG:HG3	38:DM:130:PHE:CD2	2.51	0.46
23:DB:1326:U:H2'	23:DB:1327:A:H8	1.80	0.46
23:DB:252:G:O2'	23:DB:253:C:H5'	2.16	0.46
1:CA:1283:U:O2'	1:CA:1284:C:H5'	2.15	0.46
23:DB:447:A:H2'	57:DB:3369:HOH:O	2.15	0.46
40:DH:88:GLY:O	40:DH:124:THR:HA	2.15	0.46
11:CL:43:LYS:CE	11:CL:44:PRO:HD3	2.46	0.46
26:BD:138:LEU:N	26:BD:138:LEU:HD22	2.30	0.46
1:AA:60:A:H8	1:AA:60:A:P	2.39	0.46
23:BB:219:A:O2'	23:BB:220:G:H5'	2.15	0.46
25:BC:211:ARG:HD3	25:BC:217:PRO:HD3	1.98	0.46
41:BJ:130:HIS:HD2	41:BJ:132:HIS:HB2	1.81	0.46
1:AA:624:C:O2'	1:AA:625:U:H5'	2.16	0.46
23:BB:1311:G:H21	23:BB:1603:A:H62	1.62	0.46
8:CI:50:PRO:HG2	8:CI:82:ILE:HG21	1.97	0.46
18:CB:52:ALA:HA	18:CB:55:GLU:HG2	1.98	0.46
50:BT:85:VAL:C	50:BT:86:THR:HG23	2.34	0.46
52:DW:49:ASN:CB	52:DW:60:ALA:HA	2.46	0.46
52:DW:23:LYS:CG	52:DW:24:ARG:N	2.79	0.46
9:CJ:71:LEU:N	9:CJ:71:LEU:HD23	2.31	0.46
35:BV:69:GLU:C	35:BV:70:ILE:HD13	2.35	0.46
48:DG:15:ASP:O	48:DG:16:VAL:HB	2.15	0.46
29:BE:146:VAL:HA	29:BE:185:LYS:O	2.16	0.46
14:AQ:59:GLU:C	14:AQ:75:VAL:HG22	2.36	0.46
52:DW:18:LYS:HE3	52:DW:18:LYS:HA	1.97	0.46
23:BB:135:U:H2'	23:BB:136:G:C8	2.50	0.46
23:BB:1080:A:O2'	24:BI:126:ARG:HB2	2.16	0.46
23:BB:1080:A:H2'	23:BB:1081:U:H6	1.80	0.46
23:DB:135:U:O2'	23:DB:136:G:H5'	2.15	0.46
25:BC:141:HIS:CG	25:BC:142:ASN:H	2.33	0.46
48:DG:84:LYS:HG3	48:DG:131:VAL:HB	1.98	0.46
10:CK:22:ILE:HD13	10:CK:95:THR:HG21	1.96	0.46
48:DG:91:VAL:HG23	48:DG:92:GLY:N	2.29	0.46
46:BU:73:ASN:HD22	46:BU:74:ALA:H	1.64	0.46
49:BR:60:LYS:N	49:BR:100:GLY:HA3	2.28	0.46
40:DH:116:ARG:HB3	40:DH:131:SER:O	2.15	0.46
30:BY:2:LYS:HE2	30:BY:4:ILE:CD1	2.46	0.46
16:AS:62:THR:HB	16:AS:65:MET:CB	2.40	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:AB:162:VAL:HG13	18:AB:184:ALA:HB2	1.97	0.46
47:DF:121:PHE:HB3	47:DF:127:TYR:HA	1.98	0.46
26:BD:10:GLY:O	26:BD:11:MET:HB2	2.14	0.46
47:DF:11:VAL:O	47:DF:13:LYS:N	2.48	0.46
1:AA:921:U:H2'	1:AA:922:G:H8	1.75	0.46
18:CB:110:ILE:HG12	18:CB:147:LEU:HD13	1.97	0.46
39:BX:49:ASP:O	39:BX:53:VAL:HG23	2.14	0.46
47:BF:12:VAL:O	47:BF:16:MET:N	2.48	0.46
47:BF:23:SER:O	47:BF:26:GLN:HB2	2.15	0.46
16:CS:52:ASN:ND2	16:CS:76:THR:HA	2.28	0.46
44:BQ:26:ALA:HB1	44:BQ:30:VAL:CG1	2.46	0.46
27:DK:37:ASP:O	27:DK:61:VAL:HA	2.16	0.46
27:BK:120:PRO:O	27:BK:121:GLU:HG3	2.15	0.46
1:CA:961:U:O2'	1:CA:984:C:H5'	2.16	0.46
26:BD:125:TRP:CD2	26:BD:160:LYS:HB3	2.50	0.46
23:DB:2730:C:H2'	23:DB:2731:G:H8	1.80	0.46
23:DB:1242:U:H2'	23:DB:1243:C:C6	2.50	0.46
23:DB:2652:C:H2'	23:DB:2653:U:O4'	2.16	0.46
23:BB:2087:G:H2'	23:BB:2088:A:H8	1.81	0.46
48:BG:6:ALA:HB3	48:BG:68:ARG:HD3	1.96	0.46
1:CA:1476:A:H2'	1:CA:1477:U:H6	1.81	0.46
23:DB:866:A:H61	23:DB:913:U:C1'	2.29	0.46
3:AD:78:ALA:C	3:AD:85:THR:HG23	2.36	0.46
25:BC:94:LEU:O	25:BC:94:LEU:HG	2.15	0.46
21:CN:29:ILE:O	21:CN:33:VAL:N	2.49	0.46
42:DN:24:MET:CE	42:DN:44:LEU:HB2	2.46	0.46
21:CN:63:CYS:SG	21:CN:64:ARG:N	2.89	0.46
28:BP:25:VAL:O	28:BP:43:GLU:HG2	2.15	0.46
52:BW:32:ALA:C	52:BW:34:SER:N	2.69	0.46
23:BB:1825:U:H2'	23:BB:1826:G:C8	2.50	0.46
22:DA:95:U:H2'	22:DA:96:G:H8	1.80	0.46
7:CH:76:ARG:HD2	7:CH:77:VAL:H	1.80	0.46
44:BQ:79:ILE:HD13	44:BQ:79:ILE:O	2.15	0.46
23:BB:1178:C:H2'	23:BB:1179:G:H8	1.79	0.46
23:DB:2699:C:H2'	23:DB:2700:A:C8	2.50	0.46
23:DB:1316:U:H2'	23:DB:1317:G:H8	1.80	0.46
23:BB:768:G:O2'	23:BB:769:U:H5'	2.16	0.46
23:BB:1163:G:O2'	23:BB:1164:C:H5'	2.16	0.46
27:BK:110:GLU:C	27:BK:111:LYS:HD3	2.36	0.46
44:BQ:25:GLY:O	44:BQ:29:ARG:HD2	2.16	0.46
23:DB:1745:A:H2'	23:DB:1746:A:C8	2.50	0.46
23:BB:538:A:N6	23:BB:555:G:O2'	2.45	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AE:45:VAL:HG11	4:AE:117:ALA:HB2	1.97	0.46
29:BE:49:ARG:NH1	29:BE:72:SER:HB3	2.31	0.46
33:B1:18:HIS:NE2	33:B1:40:PRO:HD2	2.31	0.46
46:DU:27:VAL:CB	46:DU:33:VAL:HG12	2.46	0.46
34:D3:60:CYS:HB2	34:D3:61:LEU:HD23	1.96	0.46
29:BE:195:GLN:C	29:BE:197:GLU:H	2.19	0.46
1:CA:167:A:O2'	1:CA:168:G:H5'	2.16	0.46
23:DB:506:G:H1'	23:DB:507:A:C8	2.50	0.46
1:AA:1105:A:O2'	1:AA:1106:G:H5'	2.16	0.46
7:CH:92:PRO:HG3	7:CH:127:TYR:OH	2.15	0.46
1:AA:1010:U:H4'	1:AA:1010:U:OP1	2.15	0.46
23:DB:292:U:O2'	23:DB:293:U:H5'	2.16	0.46
23:BB:223:A:N1	23:BB:407:G:O2'	2.43	0.46
15:AR:28:LEU:C	15:AR:30:ASN:H	2.18	0.46
23:DB:1767:G:O2'	23:DB:1768:C:H5'	2.16	0.46
8:CI:18:VAL:HG21	8:CI:81:GLY:C	2.36	0.46
23:BB:922:C:H2'	23:BB:923:G:C8	2.50	0.46
1:AA:1302:C:H4'	1:AA:1303:C:OP1	2.16	0.46
8:CI:76:GLY:HA2	8:CI:79:ARG:NH1	2.31	0.46
1:CA:1244:G:H2'	1:CA:1245:C:H6	1.80	0.46
35:BV:8:VAL:HG12	35:BV:9:ARG:N	2.31	0.46
5:CF:18:VAL:O	5:CF:22:ILE:HG13	2.15	0.46
5:AF:25:TYR:O	5:AF:29:ILE:HG13	2.16	0.46
14:CQ:46:HIS:NE2	14:CQ:48:GLU:HG2	2.30	0.46
40:BH:114:GLU:HA	40:BH:133:GLN:N	2.30	0.46
52:DW:18:LYS:HE2	52:DW:19:ARG:NH2	2.31	0.46
23:BB:858:G:H21	23:BB:2268:A:C3'	2.25	0.46
1:AA:1229:A:N6	12:AM:103:THR:HG22	2.30	0.46
23:DB:858:G:H21	23:DB:2268:A:C3'	2.28	0.46
3:CD:54:LEU:HA	3:CD:202:LEU:HD22	1.98	0.46
2:AC:168:ARG:NH1	2:AC:172:VAL:H	2.14	0.46
23:DB:319:G:H2'	23:DB:320:A:O4'	2.16	0.46
24:DI:11:GLN:HA	24:DI:55:PRO:HA	1.96	0.46
22:DA:5:U:H2'	22:DA:6:G:H8	1.81	0.46
38:DM:19:GLY:HA3	38:DM:38:ARG:NH2	2.31	0.46
38:DM:71:LYS:O	38:DM:92:TRP:HA	2.16	0.46
16:AS:52:ASN:ND2	16:AS:54:ARG:HD2	2.29	0.46
30:DY:7:THR:HG23	30:DY:34:THR:OG1	2.15	0.46
18:AB:172:ILE:HG22	18:AB:176:ASN:HD22	1.81	0.46
29:BE:8:ALA:HB3	29:BE:122:GLU:OE1	2.15	0.46
3:AD:196:GLU:O	3:AD:199:ILE:HG13	2.16	0.46
23:DB:1021:A:H2'	23:DB:1023:U:H5''	1.97	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:DF:127:TYR:CB	47:DF:155:ILE:HD13	2.46	0.46
47:DF:33:ILE:HG22	47:DF:34:THR:N	2.30	0.46
44:DQ:82:LEU:HD23	44:DQ:112:ALA:HB2	1.98	0.46
42:BN:34:ILE:O	42:BN:112:TYR:HA	2.16	0.46
13:CP:67:ILE:HD11	13:CP:71:VAL:CG2	2.46	0.46
24:DI:18:ASN:HB2	24:DI:38:CYS:SG	2.56	0.46
1:CA:1070:U:H2'	1:CA:1071:C:H6	1.80	0.46
38:DM:101:VAL:HG13	38:DM:101:VAL:O	2.15	0.46
18:CB:95:TRP:HZ2	18:CB:100:LEU:HD13	1.80	0.46
2:CC:24:ASN:O	2:CC:26:LYS:N	2.49	0.46
25:BC:130:PRO:HG2	25:BC:133:ASN:ND2	2.31	0.46
51:BZ:54:LYS:C	51:BZ:54:LYS:HD3	2.36	0.46
23:DB:2000:C:O2'	23:DB:2001:C:H5'	2.15	0.46
36:D2:31:LEU:HD22	36:D2:42:LEU:CD1	2.45	0.46
11:CL:79:ILE:HG22	11:CL:103:CYS:HB2	1.98	0.46
18:CB:76:SER:O	18:CB:79:VAL:HG12	2.16	0.46
18:AB:116:LEU:O	18:AB:140:LEU:HD21	2.16	0.46
1:AA:501:C:H2'	1:AA:502:A:C8	2.50	0.46
23:DB:2843:G:O2'	23:DB:2844:G:H5'	2.16	0.46
23:DB:717:C:H2'	23:DB:718:A:O4'	2.16	0.46
23:DB:999:U:O2'	23:DB:1000:A:H5'	2.16	0.46
1:CA:1512:U:H2'	1:CA:1513:A:C8	2.50	0.46
23:DB:1853:A:H2'	23:DB:1854:A:C8	2.51	0.46
18:AB:33:ALA:HA	18:AB:37:VAL:O	2.15	0.46
1:CA:812:G:HO2'	1:CA:813:U:H6	1.62	0.46
3:AD:2:ARG:HB3	3:AD:114:ARG:NH2	2.31	0.46
23:DB:2902:C:O2'	23:DB:2903:U:H4'	2.15	0.46
23:BB:16:C:H2'	23:BB:17:G:C8	2.51	0.46
1:AA:300:A:H1'	1:AA:565:U:O2	2.15	0.46
1:AA:187:G:N2	1:AA:189:A:H3'	2.30	0.46
23:DB:1902:C:H2'	23:DB:1903:G:O4'	2.15	0.46
47:BF:78:ILE:HD12	47:BF:78:ILE:N	2.30	0.46
23:BB:2786:U:O2'	23:BB:2787:C:H5'	2.16	0.46
23:DB:1961:C:O2'	23:DB:1962:C:H5'	2.16	0.46
23:DB:231:A:H3'	23:DB:232:G:C8	2.51	0.46
21:CN:63:CYS:HB2	21:CN:79:SER:N	2.30	0.46
23:DB:1117:C:H2'	23:DB:1118:C:C6	2.51	0.46
23:DB:862:G:H2'	23:DB:863:A:C8	2.51	0.46
29:DE:2:GLU:O	29:DE:3:LEU:HD13	2.16	0.46
7:AH:76:ARG:HD2	7:AH:125:ILE:O	2.15	0.46
42:BN:24:MET:CE	42:BN:44:LEU:HB2	2.46	0.46
45:BS:5:ALA:CB	45:BS:54:ALA:HB2	2.46	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2800:A:H2'	23:BB:2801:G:H8	1.80	0.46
41:BJ:35:ARG:HG3	41:BJ:40:HIS:NE2	2.31	0.46
23:DB:2341:G:H2'	23:DB:2342:C:H6	1.80	0.46
23:BB:106:C:H2'	23:BB:107:G:C8	2.50	0.46
23:BB:2334:U:H4'	23:BB:2335:A:OP2	2.15	0.46
9:CJ:49:PHE:O	9:CJ:64:GLN:HA	2.16	0.46
25:BC:173:LEU:N	25:BC:173:LEU:HD13	2.31	0.46
10:CK:52:ARG:HH11	10:CK:52:ARG:HB3	1.80	0.46
23:BB:1397:U:H5'	23:BB:1398:C:H5	1.80	0.46
23:BB:1710:G:O2'	23:BB:1711:A:H5'	2.16	0.46
23:DB:2334:U:O3'	43:DO:13:ARG:HD3	2.16	0.46
46:DU:27:VAL:HB	46:DU:33:VAL:HG12	1.98	0.46
23:BB:337:C:H2'	23:BB:338:G:O4'	2.16	0.46
3:CD:108:ALA:H	3:CD:112:GLU:CD	2.19	0.46
1:AA:568:G:O6	11:AL:1:ALA:HB2	2.16	0.46
1:CA:721:G:H4'	1:CA:722:G:O4'	2.16	0.46
48:DG:96:ALA:HB1	48:DG:98:LYS:HE3	1.98	0.46
23:BB:282:A:O2'	23:BB:283:G:H5'	2.16	0.46
23:DB:586:A:H5'	29:DE:84:THR:OG1	2.15	0.46
1:CA:1494:G:O2'	1:CA:1495:U:H5'	2.15	0.46
26:BD:30:GLU:HA	26:BD:185:ASN:OD1	2.16	0.46
1:CA:957:U:H2'	1:CA:959:A:OP2	2.16	0.46
44:BQ:97:ILE:C	44:BQ:99:VAL:H	2.19	0.46
1:CA:1314:C:N4	16:CS:3:SER:HB2	2.31	0.46
1:AA:1399:C:H1'	57:AA:1971:HOH:O	2.16	0.46
37:DL:24:GLY:C	37:DL:26:GLY:H	2.19	0.46
23:DB:51:G:H1'	23:DB:118:A:N6	2.31	0.46
1:AA:1438:G:C2'	1:AA:1439:G:H5'	2.46	0.46
22:DA:109:A:O2'	22:DA:110:C:H5'	2.15	0.46
23:BB:1688:U:H2'	23:BB:1698:A:N6	2.31	0.46
20:CO:40:GLN:O	20:CO:44:ALA:N	2.48	0.46
23:BB:2364:C:H2'	23:BB:2365:G:O4'	2.16	0.46
23:DB:1097:U:H3'	23:DB:1098:A:H8	1.81	0.46
1:AA:1303:C:H2'	1:AA:1304:G:O4'	2.16	0.46
52:BW:49:ASN:HB2	52:BW:60:ALA:HA	1.96	0.46
52:DW:24:ARG:CD	52:DW:65:LYS:HG2	2.43	0.46
23:DB:2222:C:O2'	23:DB:2223:G:H5'	2.14	0.46
35:BV:25:LYS:HA	35:BV:42:LEU:O	2.15	0.46
41:BJ:54:ILE:O	41:BJ:122:LEU:HA	2.16	0.46
35:DV:41:GLU:O	35:DV:42:LEU:HD23	2.15	0.46
48:DG:34:ARG:HH11	48:DG:34:ARG:HG2	1.81	0.46
29:BE:15:SER:C	29:BE:17:THR:H	2.18	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:173:THR:C	29:BE:175:ILE:H	2.18	0.46
26:DD:113:SER:HB3	26:DD:167:ASN:N	2.30	0.46
40:BH:131:SER:HA	40:BH:142:VAL:H	1.81	0.46
52:DW:18:LYS:HG3	52:DW:19:ARG:NH1	2.31	0.46
43:BO:34:HIS:HB3	43:BO:36:TYR:HE2	1.81	0.46
23:BB:2657:A:O3'	48:BG:159:LYS:NZ	2.49	0.46
48:DG:83:THR:C	48:DG:84:LYS:HD3	2.36	0.46
10:CK:85:VAL:O	10:CK:111:ASP:HA	2.16	0.46
23:BB:2746:U:O2'	23:BB:2747:G:H5'	2.16	0.46
40:DH:31:VAL:O	40:DH:32:PRO:C	2.51	0.46
23:DB:1064:C:H2'	23:DB:1065:U:O4'	2.16	0.46
9:CJ:53:ILE:CG2	9:CJ:61:ALA:HB1	2.46	0.46
29:BE:58:LYS:HB2	29:BE:58:LYS:HE2	1.71	0.46
38:DM:19:GLY:CA	38:DM:38:ARG:HH12	2.28	0.46
1:AA:1220:G:H2'	1:AA:1221:G:C8	2.51	0.46
1:AA:956:U:O2'	1:AA:957:U:H5'	2.15	0.46
41:DJ:26:GLY:O	41:DJ:29:ALA:N	2.48	0.46
23:BB:1104:C:H2'	23:BB:1105:U:H6	1.75	0.46
24:DI:23:VAL:HG12	24:DI:24:GLY:N	2.31	0.46
1:CA:1300:G:H1'	1:CA:1301:U:H5	1.80	0.46
26:BD:148:GLN:HG3	26:BD:152:PRO:CB	2.45	0.46
40:DH:3:VAL:HG12	40:DH:38:PRO:HA	1.98	0.46
23:BB:2468:A:H2'	23:BB:2476:A:C5	2.51	0.46
24:BI:29:GLN:HA	24:BI:29:GLN:NE2	2.31	0.46
26:DD:117:GLY:HA2	26:DD:164:GLN:NE2	2.31	0.46
23:DB:2428:G:N2	37:DL:60:ARG:NH2	2.64	0.46
18:CB:99:MET:CA	18:CB:106:VAL:HG21	2.41	0.46
47:BF:169:LEU:HA	47:BF:172:PHE:HD2	1.81	0.46
23:BB:1595:C:O2'	23:BB:1596:A:H5'	2.16	0.46
23:BB:2867:G:N7	28:BP:20:ARG:CZ	2.78	0.46
28:BP:91:VAL:HG21	28:BP:96:LEU:HD21	1.97	0.46
39:BX:44:LYS:HD2	39:BX:48:ARG:NH2	2.25	0.46
48:BG:94:ARG:HH21	48:BG:105:SER:N	2.12	0.46
23:BB:1374:G:H2'	23:BB:1375:U:C6	2.51	0.46
27:BK:37:ASP:O	27:BK:61:VAL:HA	2.16	0.46
42:BN:17:ARG:HB2	42:BN:17:ARG:HH21	1.81	0.46
39:BX:22:LEU:HG	39:BX:23:ARG:HG2	1.97	0.46
1:CA:660:C:H2'	1:CA:661:G:O4'	2.16	0.46
27:BK:118:LEU:O	27:BK:120:PRO:HD2	2.15	0.46
23:DB:200:U:H4'	51:DZ:22:LEU:HB2	1.97	0.46
6:CG:26:VAL:HB	6:CG:42:VAL:HG21	1.98	0.46
6:CG:42:VAL:O	6:CG:46:LEU:HD13	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1607:C:N4	23:DB:1622:G:N7	2.63	0.46
41:DJ:128:ASN:C	41:DJ:129:GLU:HG3	2.36	0.46
16:CS:62:THR:HG22	16:CS:63:ASP:N	2.27	0.46
23:DB:2592:G:H2'	23:DB:2593:U:O4'	2.14	0.46
23:DB:589:U:O2'	23:DB:590:A:H5'	2.16	0.46
50:BT:45:ALA:HA	50:BT:48:GLN:CG	2.45	0.46
23:DB:631:A:HO2'	37:DL:66:PHE:HD2	1.62	0.46
3:CD:25:ARG:NE	3:CD:26:ALA:HB2	2.30	0.46
23:DB:970:U:H1'	23:DB:985:C:P	2.56	0.46
23:DB:16:C:H2'	23:DB:17:G:C8	2.51	0.46
23:DB:21:A:H2'	23:DB:22:C:H6	1.80	0.46
25:BC:75:ALA:O	25:BC:114:GLN:HA	2.16	0.46
23:DB:2896:C:H2'	23:DB:2897:U:H6	1.80	0.46
23:DB:2078:C:O2'	23:DB:2079:U:H5'	2.16	0.46
1:CA:600:A:H2'	1:CA:601:G:H8	1.80	0.46
1:AA:676:A:O2'	1:AA:677:U:H5'	2.16	0.46
23:BB:1458:U:H5''	23:BB:1459:G:OP1	2.14	0.46
47:BF:74:ALA:HB1	47:BF:76:PHE:CD2	2.51	0.46
52:DW:34:SER:HB3	52:DW:58:LEU:HD23	1.98	0.46
23:BB:1843:C:H2'	23:BB:1844:C:H6	1.79	0.46
1:AA:279:A:H5'	1:AA:281:G:C5'	2.46	0.46
7:AH:76:ARG:HD2	7:AH:77:VAL:H	1.81	0.46
45:DS:4:ILE:CG2	45:DS:106:VAL:HG22	2.45	0.46
29:DE:188:MET:HG2	29:DE:193:VAL:HG22	1.98	0.46
23:DB:1936:A:H2	23:DB:1943:U:O4	1.98	0.46
23:BB:1165:A:H2'	23:BB:1166:G:H8	1.79	0.46
1:CA:729:A:H2'	1:CA:730:G:H8	1.80	0.46
23:BB:523:C:H2'	23:BB:524:G:H8	1.80	0.46
23:DB:454:A:H3'	23:DB:455:C:H5'	1.97	0.46
23:BB:876:C:H6	23:BB:876:C:H5'	1.81	0.46
9:CJ:48:ARG:HG2	9:CJ:66:GLU:HB3	1.97	0.46
1:CA:967:C:OP1	1:CA:969:A:H5'	2.15	0.46
1:AA:1104:G:H2'	1:AA:1105:A:C8	2.51	0.46
1:AA:1098:C:H2'	1:AA:1099:G:O4'	2.16	0.46
1:CA:1062:U:H2'	1:CA:1063:C:C6	2.50	0.46
23:DB:693:A:O2'	23:DB:694:U:H5'	2.16	0.46
23:BB:1900:A:N1	23:BB:1970:A:C5	2.84	0.46
26:BD:178:VAL:HG12	26:BD:179:ARG:HG3	1.97	0.46
18:AB:211:LEU:O	18:AB:215:ALA:HB2	2.16	0.46
23:BB:2415:G:H2'	23:BB:2416:C:H6	1.80	0.46
25:BC:202:ARG:HH11	25:BC:213:ARG:NE	2.14	0.46
47:DF:10:GLU:O	47:DF:14:LYS:HB2	2.16	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:500:G:N2	23:BB:502:A:H3'	2.31	0.46
23:BB:1511:G:H2'	23:BB:1512:C:H6	1.81	0.46
1:AA:451:A:H4'	1:AA:452:A:O4'	2.16	0.46
18:CB:203:ASP:C	18:CB:203:ASP:OD2	2.53	0.46
50:BT:55:VAL:HA	50:BT:87:LEU:HA	1.98	0.46
50:BT:43:ILE:HG21	50:BT:58:VAL:HG21	1.97	0.46
25:DC:106:PRO:O	25:DC:109:LEU:HD23	2.15	0.46
21:CN:15:LEU:HD12	21:CN:53:ASP:HB3	1.97	0.46
23:DB:2386:A:C2	52:DW:38:ARG:HD2	2.51	0.46
4:CE:81:GLN:NE2	4:CE:149:PRO:HD3	2.29	0.46
43:BO:35:ILE:C	43:BO:36:TYR:HD2	2.19	0.46
8:AI:56:MET:O	8:AI:58:GLU:N	2.48	0.46
22:DA:27:C:H5'	43:DO:34:HIS:CD2	2.51	0.46
2:AC:133:MET:O	2:AC:137:VAL:HG23	2.16	0.46
18:AB:46:VAL:O	18:AB:49:PHE:HB2	2.16	0.46
26:BD:118:PHE:HZ	26:BD:123:LYS:NZ	2.14	0.46
3:CD:157:ALA:O	3:CD:160:LEU:HD22	2.16	0.46
23:DB:1365:A:O3'	51:DZ:11:ARG:NH1	2.49	0.46
23:BB:2060:A:H3'	29:BE:63:LYS:NZ	2.31	0.46
29:BE:61:ARG:HH12	29:BE:64:GLY:HA3	1.80	0.46
26:BD:24:VAL:CG2	26:BD:188:LEU:HB3	2.41	0.46
38:DM:97:GLN:HB2	38:DM:98:PRO:HD2	1.97	0.46
2:AC:71:ARG:O	2:AC:75:VAL:HG23	2.15	0.46
22:DA:42:C:C6	47:DF:65:LEU:HD22	2.50	0.46
1:CA:922:G:N3	1:CA:1398:A:C2	2.84	0.46
1:AA:1029:U:H1'	1:AA:1032:G:O6	2.15	0.46
39:BX:45:GLN:O	39:BX:46:VAL:HB	2.16	0.46
27:BK:20:MET:C	27:BK:41:ILE:HD12	2.35	0.46
40:BH:8:LYS:O	40:BH:13:GLY:HA3	2.16	0.46
7:AH:43:GLY:HA2	7:AH:63:LYS:HZ1	1.81	0.46
1:CA:1016:A:H4'	1:CA:1218:C:H4'	1.97	0.46
44:DQ:91:ARG:HE	44:DQ:94:LEU:CD2	2.29	0.46
23:DB:548:G:C3'	23:DB:549:G:H5''	2.46	0.46
40:BH:45:GLU:C	40:BH:47:PHE:H	2.20	0.46
25:BC:106:PRO:HB2	25:BC:193:GLU:H	1.79	0.46
51:DZ:54:LYS:HD3	51:DZ:54:LYS:C	2.35	0.46
1:CA:1225:A:H3'	1:CA:1226:C:H6	1.81	0.46
23:BB:2290:G:H2'	23:BB:2291:U:C6	2.51	0.46
29:DE:48:THR:HG23	29:DE:51:GLU:OE2	2.16	0.46
2:CC:9:ILE:HG23	2:CC:10:ARG:HG3	1.97	0.46
23:DB:2793:C:H2'	23:DB:2794:C:C6	2.51	0.46
18:AB:18:GLN:O	18:AB:37:VAL:HG23	2.16	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:BN:63:ARG:O	42:BN:66:ALA:HB3	2.16	0.46
52:DW:76:ARG:O	52:DW:77:LYS:HD3	2.16	0.46
23:DB:2102:G:O2'	23:DB:2103:C:H5'	2.15	0.46
23:BB:576:U:H2'	23:BB:577:G:C8	2.51	0.46
38:DM:26:VAL:CG2	38:DM:133:LYS:HA	2.45	0.46
1:CA:1483:A:H2'	1:CA:1484:C:O4'	2.16	0.46
1:AA:488:C:O2'	1:AA:489:C:H5'	2.16	0.46
23:DB:1410:G:H2'	23:DB:1411:U:H6	1.79	0.46
23:BB:1347:A:H2'	23:BB:1348:C:O4'	2.16	0.46
23:BB:979:A:H2'	23:BB:982:C:N4	2.29	0.46
1:CA:404:G:H4'	1:CA:439:U:O2	2.16	0.46
1:CA:489:C:H2'	1:CA:490:C:H6	1.81	0.46
24:BI:89:SER:HB2	24:BI:136:GLY:HA3	1.96	0.46
23:DB:435:C:C2'	23:DB:436:C:H5'	2.45	0.46
26:DD:38:LYS:HA	26:DD:38:LYS:HE2	1.97	0.46
23:DB:1544:A:H2'	23:DB:1545:A:C8	2.51	0.46
25:BC:265:PHE:HD2	25:BC:265:PHE:N	2.14	0.46
23:DB:1774:C:O2	23:DB:1774:C:C2'	2.63	0.46
21:CN:20:PHE:CG	21:CN:24:ALA:HB2	2.51	0.46
1:AA:26:A:H61	1:AA:558:G:H1'	1.80	0.46
23:DB:2469:A:C2	23:DB:2482:A:H1'	2.51	0.46
1:CA:1152:A:H2'	1:CA:1153:G:H8	1.80	0.46
1:CA:1488:G:H2'	1:CA:1489:G:H8	1.80	0.46
23:DB:1710:G:O2'	23:DB:1711:A:H5'	2.16	0.46
23:DB:1674:G:N2	23:DB:1677:A:N1	2.53	0.46
1:CA:991:U:C4	1:CA:1212:U:H1'	2.51	0.46
1:AA:1310:G:O2'	1:AA:1311:A:H5'	2.16	0.46
16:CS:27:LYS:HG2	16:CS:28:LYS:HD2	1.97	0.46
49:BR:90:ARG:O	49:BR:91:GLN:HB3	2.16	0.46
23:BB:1076:C:H1'	24:BI:92:PRO:HD2	1.97	0.46
6:CG:70:PRO:HG3	6:CG:98:LEU:HD13	1.96	0.46
25:BC:245:THR:C	25:BC:247:TRP:H	2.20	0.46
23:DB:2250:G:H8	23:DB:2250:G:O5'	1.99	0.46
23:DB:648:G:O2'	23:DB:649:G:H5'	2.16	0.46
31:D0:53:VAL:O	31:D0:54:ILE:HB	2.16	0.46
23:DB:2137:U:O2'	23:DB:2138:G:H5'	2.16	0.46
23:BB:923:G:H1'	52:BW:23:LYS:NZ	2.31	0.46
1:AA:1330:U:C2'	1:AA:1331:G:H5'	2.46	0.46
50:DT:16:VAL:H	50:DT:31:VAL:HG23	1.82	0.46
50:DT:29:THR:HG22	50:DT:86:THR:CG2	2.44	0.46
25:BC:170:TYR:HA	25:BC:183:VAL:O	2.16	0.46
32:D4:33:HIS:O	32:D4:35:GLN:HG3	2.16	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:DV:42:LEU:HD11	35:DV:91:PHE:HE1	1.81	0.46
8:AI:52:GLU:HG2	8:AI:56:MET:SD	2.55	0.46
1:AA:1229:A:H62	12:AM:103:THR:HG22	1.80	0.46
2:AC:112:ALA:O	2:AC:113:LYS:C	2.54	0.46
48:BG:116:LEU:HD23	48:BG:120:ILE:HD13	1.96	0.46
18:AB:49:PHE:O	18:AB:212:TYR:OH	2.31	0.46
1:CA:719:C:H2'	15:CR:38:ILE:CD1	2.46	0.46
26:BD:164:GLN:HE21	26:BD:165:MET:N	2.14	0.46
23:BB:2442:C:H2'	23:BB:2443:C:H6	1.80	0.46
30:BY:2:LYS:CG	30:BY:3:THR:H	2.28	0.46
43:DO:28:VAL:HB	43:DO:92:PHE:CE1	2.50	0.46
41:BJ:45:THR:HG23	41:BJ:45:THR:O	2.16	0.46
3:CD:106:PHE:CG	3:CD:144:ILE:HD11	2.51	0.46
47:BF:120:SER:O	47:BF:121:PHE:HB3	2.16	0.46
18:AB:103:TRP:CD2	18:AB:107:ARG:HB3	2.51	0.46
21:AN:63:CYS:HB2	21:AN:79:SER:HB3	1.97	0.46
47:DF:62:GLN:NE2	47:DF:90:LEU:HD13	2.31	0.46
29:DE:5:LEU:HD13	29:DE:122:GLU:CG	2.46	0.46
9:AJ:25:ILE:O	9:AJ:29:ALA:HB3	2.16	0.46
23:BB:670:A:H4'	23:BB:671:C:C5'	2.41	0.46
40:DH:3:VAL:HA	40:DH:37:VAL:O	2.16	0.46
6:AG:50:ALA:CB	6:AG:57:GLU:HG3	2.45	0.46
23:BB:2471:A:O2'	23:BB:2472:G:C8	2.58	0.46
39:BX:20:ASN:O	39:BX:25:GLN:HB2	2.16	0.46
39:BX:59:GLU:OE2	39:BX:59:GLU:N	2.49	0.46
44:BQ:83:LYS:C	44:BQ:85:ALA:H	2.18	0.46
23:DB:547:A:N3	23:DB:548:G:H1'	2.29	0.46
3:CD:196:GLU:O	3:CD:199:ILE:HG13	2.16	0.46
44:BQ:30:VAL:HG22	44:BQ:31:TYR:H	1.81	0.46
43:BO:47:VAL:O	43:BO:48:LEU:HD23	2.16	0.46
2:AC:55:VAL:C	2:AC:56:ILE:HG13	2.36	0.46
23:DB:1439:A:N6	23:DB:1440:U:O2	2.48	0.46
25:BC:244:VAL:HB	25:BC:249:VAL:N	2.31	0.46
26:DD:133:THR:HG23	26:DD:134:HIS:N	2.30	0.46
41:BJ:58:ASN:O	41:BJ:126:ALA:O	2.34	0.46
52:BW:76:ARG:HD3	52:BW:76:ARG:HA	1.78	0.46
23:BB:2650:U:H2'	23:BB:2651:C:C6	2.50	0.46
1:CA:543:U:H2'	1:CA:544:G:H8	1.81	0.46
1:CA:544:G:OP1	3:CD:58:GLN:HG2	2.16	0.46
1:AA:764:C:H2'	1:AA:765:G:H5'	1.98	0.46
25:BC:93:VAL:HG12	25:BC:101:ARG:O	2.16	0.46
3:AD:30:LYS:N	3:AD:30:LYS:HD3	2.31	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
21:CN:30:ILE:CG2	21:CN:44:VAL:HG21	2.45	0.46
23:DB:79:C:H2'	23:DB:80:G:H8	1.81	0.46
23:BB:597:G:H21	37:BL:12:SER:HA	1.80	0.46
23:DB:2812:G:H2'	23:DB:2813:A:O4'	2.16	0.46
1:CA:1392:G:O2'	1:CA:1393:U:H5'	2.16	0.46
23:DB:191:A:H2'	23:DB:192:C:H6	1.78	0.46
23:DB:2043:C:H2'	23:DB:2044:C:H6	1.81	0.46
7:AH:124:ILE:C	7:AH:125:ILE:HD12	2.35	0.46
29:BE:3:LEU:HD21	29:BE:14:VAL:HG22	1.98	0.46
23:DB:1825:U:H2'	23:DB:1826:G:C8	2.51	0.46
23:DB:2799:A:H4'	23:DB:2800:A:O4'	2.16	0.46
23:DB:1315:C:O2'	23:DB:1316:U:H5'	2.16	0.46
23:DB:2297:A:H61	23:DB:2319:G:H1'	1.81	0.46
23:BB:1771:C:H2'	23:BB:1772:A:H8	1.79	0.46
1:CA:965:U:OP1	1:CA:1198:G:H5''	2.16	0.46
44:BQ:47:ARG:NH1	44:BQ:48:ASP:OD2	2.49	0.46
23:DB:2369:A:O2'	23:DB:2370:G:H5'	2.15	0.46
23:BB:2875:C:H2'	23:BB:2876:G:H8	1.81	0.46
23:BB:794:A:H2'	23:BB:795:C:C6	2.51	0.46
46:BU:27:VAL:HB	46:BU:33:VAL:HG12	1.97	0.46
1:AA:912:C:O2'	1:AA:913:A:H5'	2.16	0.46
1:AA:102:G:O2'	1:AA:103:U:H5'	2.16	0.46
23:BB:1360:G:H2'	23:BB:1361:G:O4'	2.16	0.46
48:DG:44:HIS:O	48:DG:45:ALA:HB3	2.16	0.46
23:BB:2617:U:O2'	23:BB:2618:G:H5'	2.16	0.46
44:BQ:16:ILE:HG21	44:BQ:35:PHE:HA	1.97	0.46
2:AC:161:ILE:N	2:AC:161:ILE:HD12	2.31	0.46
8:CI:81:GLY:O	8:CI:84:ARG:HB2	2.16	0.45
25:DC:86:ARG:HB3	25:DC:86:ARG:NH1	2.31	0.45
48:BG:14:VAL:HA	48:BG:26:LYS:O	2.16	0.45
4:AE:81:GLN:NE2	4:AE:149:PRO:HD3	2.29	0.45
21:CN:50:LEU:N	21:CN:51:PRO:CD	2.79	0.45
5:CF:90:MET:HB3	5:CF:93:LYS:HZ3	1.80	0.45
41:DJ:55:ILE:HG22	41:DJ:123:LYS:HB2	1.98	0.45
26:DD:175:LEU:HD22	26:DD:191:GLY:H	1.81	0.45
26:DD:10:GLY:HA2	26:DD:26:VAL:HB	1.97	0.45
40:BH:69:ALA:HB2	40:BH:139:PHE:O	2.16	0.45
4:CE:84:VAL:CG1	4:CE:146:MET:HB3	2.45	0.45
37:DL:81:ASP:HA	37:DL:84:LYS:CE	2.46	0.45
8:AI:61:ASP:C	8:AI:62:LEU:HD22	2.36	0.45
19:AU:16:ARG:NH2	19:AU:19:LYS:HD3	2.31	0.45
48:BG:157:LYS:HB3	48:BG:159:LYS:CG	2.36	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BC:140:VAL:HG12	25:BC:141:HIS:H	1.80	0.45
26:BD:115:GLY:O	42:BN:3:HIS:NE2	2.44	0.45
46:DU:71:ILE:HD11	46:DU:82:VAL:HG22	1.97	0.45
23:DB:1060:U:OP2	24:DI:74:PRO:HA	2.15	0.45
18:CB:34:ARG:HG3	18:CB:34:ARG:O	2.16	0.45
28:DP:75:THR:O	28:DP:80:VAL:HG11	2.16	0.45
40:DH:135:HIS:N	40:DH:138:VAL:HG21	2.31	0.45
38:DM:41:LEU:O	38:DM:94:ALA:N	2.49	0.45
44:BQ:82:LEU:HB3	44:BQ:88:GLU:OE1	2.16	0.45
44:BQ:64:ILE:HD12	44:BQ:95:ALA:HB3	1.98	0.45
49:BR:49:ILE:HG22	49:BR:54:VAL:HB	1.98	0.45
38:BM:71:LYS:O	38:BM:92:TRP:HA	2.15	0.45
25:DC:204:LEU:HB3	25:DC:209:ALA:HB3	1.98	0.45
17:AT:77:ASN:OD1	17:AT:78:LEU:N	2.50	0.45
26:BD:34:VAL:HA	26:BD:50:VAL:HA	1.98	0.45
29:BE:59:PRO:HB2	29:BE:67:ARG:NH2	2.23	0.45
6:AG:52:ARG:HH22	6:AG:121:ASN:ND2	2.11	0.45
23:BB:2531:A:C5'	48:BG:156:TYR:CZ	2.99	0.45
28:BP:20:ARG:HG3	28:BP:21:PRO:HD2	1.97	0.45
44:DQ:63:ARG:CZ	44:DQ:96:ASP:HA	2.46	0.45
11:AL:26:CYS:SG	11:AL:29:LYS:HE2	2.56	0.45
21:CN:27:LYS:CG	21:CN:28:ALA:H	2.29	0.45
1:AA:1531:A:C6	1:AA:1532:U:N3	2.84	0.45
29:BE:99:LYS:C	29:BE:101:TYR:H	2.18	0.45
6:AG:31:VAL:HG22	6:AG:32:ASP:N	2.31	0.45
17:CT:2:ASN:OD1	17:CT:3:ILE:N	2.49	0.45
27:DK:53:LYS:H	27:DK:53:LYS:CD	2.25	0.45
27:DK:70:ARG:CB	27:DK:76:VAL:HG22	2.46	0.45
52:DW:28:GLU:O	52:DW:30:VAL:N	2.49	0.45
23:BB:1640:A:O2'	23:BB:1641:A:H5'	2.15	0.45
1:CA:543:U:O2'	1:CA:544:G:H5'	2.15	0.45
23:BB:2544:G:H1'	23:BB:2646:C:H5'	1.97	0.45
23:BB:416:U:H2'	23:BB:417:C:C6	2.51	0.45
1:AA:139:A:O2'	1:AA:140:U:H5'	2.16	0.45
1:AA:778:G:H2'	1:AA:779:C:H6	1.79	0.45
1:AA:1178:G:H2'	1:AA:1180:A:OP2	2.17	0.45
34:D3:3:ILE:HG22	34:D3:4:LYS:N	2.30	0.45
1:CA:489:C:H2'	1:CA:490:C:C6	2.51	0.45
27:DK:22:ILE:O	27:DK:23:LYS:HD2	2.16	0.45
18:AB:80:LYS:O	18:AB:84:LEU:HD13	2.16	0.45
9:AJ:65:TYR:HB3	21:AN:95:LEU:HD11	1.96	0.45
18:CB:204:ASP:CG	18:CB:205:ALA:N	2.69	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
14:AQ:5:ARG:HD3	14:AQ:6:THR:N	2.32	0.45
23:BB:2637:U:OP1	26:BD:83:ARG:HD3	2.16	0.45
50:DT:7:LEU:O	50:DT:7:LEU:HD22	2.16	0.45
23:DB:1936:A:H2	23:DB:1943:U:C4	2.34	0.45
11:AL:15:VAL:O	11:AL:16:ALA:C	2.54	0.45
23:BB:126:A:O5'	36:B2:19:ARG:HG3	2.16	0.45
23:BB:2837:A:H2'	23:BB:2838:G:H8	1.79	0.45
26:BD:68:PHE:N	26:BD:68:PHE:CD2	2.83	0.45
1:AA:539:A:H2'	1:AA:540:G:H8	1.81	0.45
1:CA:1262:C:H2'	1:CA:1263:C:C6	2.52	0.45
23:DB:1720:U:O2'	23:DB:1721:G:H5'	2.15	0.45
23:BB:2469:A:C2	23:BB:2482:A:H1'	2.50	0.45
23:DB:1661:G:O2'	23:DB:1662:U:H5'	2.16	0.45
41:DJ:130:HIS:HD2	41:DJ:132:HIS:HB2	1.80	0.45
1:AA:1069:C:O2'	1:AA:1192:C:H1'	2.16	0.45
15:CR:44:THR:C	15:CR:46:THR:H	2.19	0.45
1:CA:105:G:H2'	1:CA:106:C:C6	2.50	0.45
23:DB:560:C:H3'	23:DB:561:G:C8	2.51	0.45
1:AA:1268:G:H2'	1:AA:1269:A:C8	2.51	0.45
19:AU:42:THR:HB	19:AU:46:ARG:NE	2.32	0.45
8:CI:11:ARG:O	8:CI:14:SER:HB2	2.16	0.45
1:CA:1238:A:N3	1:CA:1238:A:H2'	2.30	0.45
23:BB:2222:C:O2'	23:BB:2223:G:H5'	2.16	0.45
29:DE:68:ALA:O	29:DE:69:ARG:O	2.34	0.45
35:BV:29:ILE:HD13	35:BV:31:TYR:CE2	2.51	0.45
2:CC:100:ILE:HG23	2:CC:100:ILE:O	2.17	0.45
29:BE:138:LEU:HD22	29:BE:143:LEU:HB2	1.98	0.45
5:CF:3:HIS:CE1	5:CF:65:GLU:HG3	2.51	0.45
5:AF:18:VAL:HG21	5:AF:58:HIS:CG	2.51	0.45
41:DJ:16:TYR:N	41:DJ:137:PRO:HB3	2.31	0.45
23:DB:2773:C:H2'	23:DB:2774:C:H6	1.80	0.45
40:BH:116:ARG:O	40:BH:117:LEU:HD23	2.16	0.45
37:BL:85:VAL:O	37:BL:85:VAL:HG22	2.15	0.45
22:DA:30:C:O2	22:DA:30:C:H2'	2.16	0.45
23:BB:1729:U:H5	23:BB:1731:G:H21	1.57	0.45
40:DH:72:ILE:HG22	40:DH:142:VAL:HG21	1.97	0.45
28:BP:3:ILE:CG2	28:BP:4:ILE:N	2.79	0.45
23:DB:2886:A:H62	31:D0:39:ARG:CZ	2.27	0.45
47:BF:121:PHE:HB3	47:BF:127:TYR:HA	1.97	0.45
47:BF:62:GLN:NE2	47:BF:90:LEU:HD13	2.30	0.45
30:DY:2:LYS:HE2	30:DY:4:ILE:CD1	2.46	0.45
13:AP:67:ILE:HD11	13:AP:71:VAL:CG2	2.45	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BJ:101:ILE:O	41:BJ:105:VAL:HG22	2.15	0.45
23:BB:1105:U:H2'	23:BB:1106:G:C8	2.51	0.45
23:BB:715:A:H2'	23:BB:716:A:O4'	2.16	0.45
1:CA:1300:G:O2'	1:CA:1301:U:P	2.74	0.45
1:CA:1411:C:H2'	1:CA:1412:C:C6	2.52	0.45
18:AB:23:ASN:HB3	18:AB:188:THR:O	2.17	0.45
23:BB:2074:U:H1'	23:BB:2598:A:N3	2.32	0.45
18:CB:96:LEU:H	18:CB:99:MET:CE	2.28	0.45
23:BB:76:C:O2'	23:BB:77:G:H5'	2.15	0.45
16:CS:14:LEU:O	16:CS:18:VAL:HG12	2.15	0.45
34:B3:49:VAL:HG21	34:B3:54:LEU:HD13	1.98	0.45
23:BB:2259:U:O2'	23:BB:2260:C:H5'	2.16	0.45
23:BB:2210:U:N3	23:BB:2212:A:N7	2.64	0.45
2:CC:109:GLU:C	2:CC:110:LEU:HD12	2.37	0.45
1:CA:77:A:H2'	1:CA:78:A:C8	2.50	0.45
12:CM:7:ASN:ND2	12:CM:7:ASN:N	2.64	0.45
23:DB:2595:G:N2	23:DB:2598:A:OP2	2.42	0.45
23:BB:814:C:O2'	23:BB:815:C:H5'	2.16	0.45
24:BI:107:GLU:HA	24:BI:110:GLN:OE1	2.16	0.45
25:DC:75:ALA:HB1	25:DC:93:VAL:HG22	1.97	0.45
1:AA:652:U:H1'	1:AA:653:U:C6	2.52	0.45
40:DH:57:LYS:HG3	40:DH:57:LYS:O	2.16	0.45
1:CA:1477:U:H2'	1:CA:1478:U:C6	2.51	0.45
2:CC:13:ILE:O	2:CC:15:LYS:N	2.49	0.45
1:CA:663:A:H5''	15:CR:49:LYS:NZ	2.32	0.45
38:BM:28:PHE:HB3	38:BM:64:TRP:CE2	2.51	0.45
23:DB:826:U:H2'	23:DB:828:U:O4'	2.17	0.45
1:AA:801:U:H2'	1:AA:802:A:C8	2.46	0.45
1:AA:300:A:H2'	1:AA:301:G:O4'	2.16	0.45
51:BZ:39:TRP:NE1	51:BZ:41:GLU:HG2	2.32	0.45
23:BB:636:G:N7	37:BL:109:LYS:HE2	2.31	0.45
23:BB:2578:G:H4'	23:BB:2578:G:OP2	2.16	0.45
23:DB:1026:G:H2'	23:DB:1027:A:C8	2.47	0.45
23:BB:776:G:H4'	23:BB:777:G:O5'	2.17	0.45
23:BB:950:G:H2'	23:BB:951:C:H6	1.79	0.45
23:BB:1859:U:H2'	23:BB:1860:G:H8	1.81	0.45
27:BK:107:LEU:HD12	27:BK:107:LEU:N	2.31	0.45
44:DQ:43:GLN:NE2	49:DR:77:PHE:HD1	2.14	0.45
29:BE:31:VAL:HG21	29:BE:104:ALA:HB2	1.98	0.45
33:D1:18:HIS:NE2	33:D1:40:PRO:HD2	2.31	0.45
45:DS:7:HIS:HB2	45:DS:50:VAL:HG22	1.99	0.45
22:BA:117:G:H2'	22:BA:118:C:O4'	2.17	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:B1:8:ILE:HD12	33:B1:51:ALA:HA	1.97	0.45
1:AA:770:C:O2'	1:AA:771:G:H5'	2.16	0.45
1:CA:707:U:H2'	1:CA:708:C:C6	2.51	0.45
46:BU:27:VAL:CB	46:BU:33:VAL:HG12	2.47	0.45
1:AA:625:U:H4'	13:AP:16:PHE:CE2	2.51	0.45
1:AA:152:A:H3'	1:AA:153:C:H6	1.81	0.45
26:DD:178:VAL:HG12	26:DD:179:ARG:HG3	1.98	0.45
23:BB:811:U:N3	37:BL:21:ARG:NH2	2.65	0.45
23:BB:2220:U:H2'	23:BB:2221:G:H8	1.82	0.45
23:BB:1754:A:H4'	28:BP:102:ARG:HH21	1.80	0.45
28:BP:114:ASN:HA	28:BP:114:ASN:HD22	1.57	0.45
6:CG:24:LYS:O	6:CG:28:ILE:HG12	2.17	0.45
1:CA:321:A:O2'	1:CA:322:C:H5'	2.15	0.45
1:CA:1358:U:H2'	1:CA:1359:C:O4'	2.16	0.45
8:CI:44:ARG:NE	8:CI:48:ARG:HH22	2.15	0.45
52:BW:23:LYS:CG	52:BW:24:ARG:N	2.78	0.45
1:AA:1329:A:O2'	1:AA:1330:U:H5'	2.16	0.45
12:AM:12:LYS:HB3	12:AM:16:ILE:HD11	1.98	0.45
9:CJ:40:ILE:O	9:CJ:72:ARG:HA	2.16	0.45
23:DB:587:C:N3	37:DL:33:ARG:NH2	2.61	0.45
48:BG:34:ARG:N	48:BG:34:ARG:CD	2.79	0.45
1:CA:122:G:H8	1:CA:122:G:O5'	1.99	0.45
29:BE:138:LEU:O	29:BE:142:ALA:N	2.49	0.45
40:BH:61:VAL:CG1	40:BH:62:LEU:HD23	2.46	0.45
1:CA:256:U:H3'	1:CA:257:G:H8	1.81	0.45
29:DE:138:LEU:O	29:DE:142:ALA:N	2.49	0.45
40:DH:77:THR:HA	40:DH:143:ILE:O	2.16	0.45
40:DH:77:THR:HG22	40:DH:78:VAL:H	1.81	0.45
19:AU:16:ARG:HH22	19:AU:19:LYS:HD3	1.81	0.45
24:BI:122:GLU:CD	24:BI:122:GLU:H	2.19	0.45
37:BL:84:LYS:C	37:BL:86:GLU:H	2.19	0.45
43:DO:51:ALA:N	43:DO:78:VAL:HG13	2.32	0.45
48:BG:84:LYS:HG3	48:BG:131:VAL:HB	1.99	0.45
25:DC:43:ASN:ND2	25:DC:44:ASN:H	2.15	0.45
49:DR:39:LEU:HA	49:DR:49:ILE:HG21	1.99	0.45
49:DR:40:MET:C	49:DR:41:ILE:HD13	2.36	0.45
10:CK:80:ASN:CB	10:CK:105:ARG:HB3	2.46	0.45
23:BB:675:A:OP1	29:BE:60:TRP:NE1	2.50	0.45
43:BO:105:ALA:O	43:BO:107:ALA:N	2.43	0.45
13:AP:66:THR:HG22	13:AP:67:ILE:N	2.31	0.45
2:AC:47:ALA:C	2:AC:49:ALA:H	2.20	0.45
28:DP:20:ARG:CG	28:DP:21:PRO:HD2	2.47	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1753:G:H5'	28:DP:92:ARG:HD3	1.97	0.45
40:DH:90:LEU:HG	40:DH:123:ARG:O	2.15	0.45
41:DJ:105:VAL:O	41:DJ:108:MET:HB2	2.16	0.45
47:DF:33:ILE:HG22	47:DF:34:THR:H	1.81	0.45
47:DF:91:ARG:C	47:DF:95:MET:HB2	2.36	0.45
20:AO:32:LEU:O	20:AO:36:ILE:HG12	2.16	0.45
25:DC:202:ARG:HH21	25:DC:202:ARG:HB2	1.81	0.45
17:CT:59:ARG:HB2	17:CT:59:ARG:NH1	2.23	0.45
47:DF:27:VAL:O	47:DF:27:VAL:HG23	2.16	0.45
23:BB:2352:A:H2'	23:BB:2353:G:O4'	2.16	0.45
25:BC:4:LYS:HB3	25:BC:5:CYS:H	1.57	0.45
39:DX:45:GLN:O	39:DX:46:VAL:HB	2.16	0.45
6:AG:13:PRO:HB2	6:AG:18:GLY:C	2.37	0.45
29:DE:130:LYS:CB	29:DE:133:LEU:HG	2.45	0.45
23:DB:117:G:H5'	23:DB:126:A:C8	2.39	0.45
1:AA:1422:G:H5'	27:BK:48:PRO:HB3	1.98	0.45
12:AM:89:ARG:CZ	12:AM:94:LEU:HD13	2.45	0.45
17:CT:74:HIS:HA	17:CT:77:ASN:HD21	1.81	0.45
1:AA:1508:A:H2'	1:AA:1509:C:H6	1.81	0.45
39:BX:48:ARG:O	39:BX:51:ALA:HB3	2.16	0.45
12:CM:88:LEU:O	12:CM:92:ARG:HG3	2.17	0.45
3:CD:199:ILE:HG13	3:CD:200:VAL:N	2.31	0.45
23:DB:1871:A:H2'	23:DB:1872:A:H8	1.81	0.45
23:DB:279:A:H3'	23:DB:280:U:C6	2.51	0.45
12:CM:52:ILE:HD12	12:CM:55:LEU:CD1	2.43	0.45
1:AA:1132:C:H2'	1:AA:1133:G:H8	1.77	0.45
23:DB:1203:U:H4'	37:DL:3:LEU:HD12	1.98	0.45
38:BM:33:LEU:HD22	38:BM:128:THR:OG1	2.16	0.45
18:CB:77:GLU:O	18:CB:80:LYS:HG2	2.17	0.45
25:DC:75:ALA:O	25:DC:114:GLN:HA	2.16	0.45
11:AL:107:LYS:H	11:AL:107:LYS:CD	2.29	0.45
1:AA:1512:U:H2'	1:AA:1513:A:C8	2.50	0.45
1:CA:1126:U:O2'	1:CA:1127:G:O5'	2.32	0.45
23:DB:969:G:H2'	23:DB:970:U:H6	1.81	0.45
2:CC:106:ARG:N	2:CC:106:ARG:CZ	2.80	0.45
1:AA:1343:G:O2'	1:AA:1344:C:H5'	2.17	0.45
1:CA:1463:U:OP1	28:DP:108:ARG:HD2	2.16	0.45
23:DB:2135:A:C8	23:DB:2157:G:N3	2.85	0.45
1:CA:1293:C:H2'	1:CA:1294:G:C8	2.52	0.45
1:AA:1152:A:H2'	1:AA:1153:G:C8	2.51	0.45
23:BB:1220:G:H2'	23:BB:1221:C:C6	2.52	0.45
1:AA:833:G:H2'	1:AA:834:U:H6	1.81	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:103:A:H3'	23:DB:104:A:H8	1.82	0.45
36:D2:46:LYS:NZ	36:D2:46:LYS:HA	2.30	0.45
5:AF:68:GLN:HA	5:AF:71:ILE:HD11	1.99	0.45
23:BB:329:G:OP2	46:BU:64:ILE:HD11	2.16	0.45
1:CA:229:U:H2'	1:CA:230:G:H8	1.82	0.45
23:DB:523:C:H2'	23:DB:524:G:H8	1.81	0.45
1:CA:1525:G:O2'	1:CA:1526:G:H5'	2.16	0.45
4:CE:45:VAL:O	4:CE:71:ILE:HG22	2.16	0.45
23:BB:2340:A:H2'	23:BB:2341:G:C8	2.50	0.45
23:DB:1584:U:H3'	23:DB:1585:C:H5'	1.98	0.45
1:AA:633:G:H2'	1:AA:634:C:H6	1.81	0.45
23:BB:2605:U:H2'	23:BB:2606:C:C6	2.52	0.45
23:DB:1751:U:H2'	23:DB:1752:C:C6	2.50	0.45
14:CQ:24:ILE:N	14:CQ:24:ILE:HD12	2.31	0.45
20:CO:43:PHE:CE1	20:CO:53:ARG:HA	2.51	0.45
1:CA:1351:U:O2'	1:CA:1352:C:H5'	2.15	0.45
2:CC:183:TYR:HA	2:CC:199:VAL:O	2.16	0.45
23:DB:1351:C:O2'	23:DB:1571:A:H1'	2.16	0.45
23:DB:1831:G:H2'	23:DB:1832:C:H6	1.80	0.45
15:AR:31:TYR:CG	15:AR:54:LEU:HD21	2.51	0.45
23:BB:2752:C:H3'	23:BB:2753:A:H8	1.81	0.45
23:DB:1322:A:C2'	23:DB:1323:C:H5'	2.46	0.45
1:CA:168:G:O2'	1:CA:169:C:H5'	2.16	0.45
29:BE:52:VAL:HG11	29:BE:81:GLY:HA3	1.98	0.45
3:CD:123:MET:HG3	3:CD:127:ARG:C	2.36	0.45
41:BJ:1:MET:HG2	41:BJ:2:LYS:HE2	1.99	0.45
19:AU:17:ARG:HA	19:AU:17:ARG:HE	1.80	0.45
29:BE:21:ARG:HH21	29:BE:21:ARG:HB2	1.82	0.45
48:BG:44:HIS:O	48:BG:45:ALA:HB3	2.17	0.45
23:DB:1499:C:H2'	23:DB:1500:G:H8	1.80	0.45
24:DI:4:VAL:O	24:DI:5:GLN:O	2.35	0.45
23:BB:921:C:H2'	23:BB:922:C:H6	1.81	0.45
12:AM:21:ILE:C	12:AM:23:GLY:H	2.19	0.45
2:CC:39:ARG:HH11	2:CC:39:ARG:HG3	1.82	0.45
26:DD:191:GLY:O	26:DD:192:ALA:HB3	2.16	0.45
37:DL:85:VAL:O	37:DL:85:VAL:HG22	2.15	0.45
12:AM:106:ARG:HH11	12:AM:106:ARG:N	2.15	0.45
42:DN:55:ALA:HA	42:DN:80:PHE:CE1	2.52	0.45
37:BL:108:ALA:O	37:BL:125:LEU:HD23	2.17	0.45
37:BL:17:LYS:CD	37:BL:19:LEU:HD11	2.47	0.45
23:BB:1725:U:H2'	23:BB:1726:C:C6	2.51	0.45
48:BG:84:LYS:CG	48:BG:132:LEU:N	2.76	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1062:G:H2'	23:DB:1063:G:H8	1.80	0.45
40:DH:114:GLU:CD	40:DH:133:GLN:HB2	2.37	0.45
44:BQ:63:ARG:CZ	44:BQ:96:ASP:HA	2.47	0.45
47:BF:33:ILE:HB	47:BF:90:LEU:HB2	1.97	0.45
1:AA:981:U:H5''	21:AN:5:MET:HE3	1.98	0.45
47:DF:134:GLN:C	47:DF:136:ILE:N	2.69	0.45
1:CA:1006:G:H2'	1:CA:1007:U:H6	1.80	0.45
26:BD:3:GLY:O	26:BD:4:LEU:HD13	2.17	0.45
1:CA:372:C:H1'	1:CA:373:A:OP2	2.16	0.45
40:DH:39:ALA:HA	40:DH:44:ILE:CG2	2.47	0.45
29:DE:128:ALA:O	29:DE:130:LYS:N	2.47	0.45
29:DE:129:PRO:HG3	29:DE:156:ASN:OD1	2.15	0.45
52:DW:67:LYS:HB3	52:DW:80:SER:OG	2.17	0.45
12:CM:33:LEU:CD1	12:CM:40:GLU:HA	2.46	0.45
18:AB:21:TYR:O	18:AB:22:TRP:O	2.34	0.45
23:BB:2886:A:N7	31:B0:39:ARG:NH2	2.58	0.45
2:AC:10:ARG:O	2:AC:12:GLY:N	2.49	0.45
1:CA:977:A:OP1	21:CN:70:HIS:HE1	1.98	0.45
16:CS:43:MET:O	16:CS:46:LEU:HB2	2.16	0.45
28:BP:60:VAL:O	28:BP:70:GLU:HA	2.16	0.45
6:AG:71:THR:HA	6:AG:90:VAL:HG22	1.98	0.45
1:AA:1022:A:C2	1:AA:1023:U:H1'	2.51	0.45
27:BK:115:ILE:HG23	27:BK:116:ILE:N	2.32	0.45
40:BH:3:VAL:HA	40:BH:37:VAL:O	2.17	0.45
1:CA:1096:C:H2'	1:CA:1097:C:C6	2.50	0.45
23:DB:2690:U:N3	42:DN:7:GLY:HA3	2.27	0.45
23:BB:37:C:H4'	23:BB:451:U:OP1	2.16	0.45
23:DB:1864:U:O2'	23:DB:1865:U:H5'	2.17	0.45
27:BK:53:LYS:N	27:BK:53:LYS:HD3	2.30	0.45
37:DL:65:GLY:O	37:DL:66:PHE:CB	2.64	0.45
1:AA:501:C:H2'	1:AA:502:A:H8	1.80	0.45
23:BB:192:C:C2'	23:BB:193:U:H5'	2.46	0.45
6:AG:59:GLU:O	6:AG:63:VAL:HG23	2.17	0.45
52:DW:76:ARG:HD3	52:DW:76:ARG:HA	1.75	0.45
23:DB:1902:C:H4'	25:DC:241:LYS:O	2.17	0.45
23:BB:2847:U:OP1	28:BP:95:LYS:HD3	2.17	0.45
23:BB:1460:U:H3'	23:BB:1461:C:H5'	1.99	0.45
52:DW:32:ALA:C	52:DW:34:SER:N	2.69	0.45
1:AA:487:A:H2'	1:AA:488:C:O4'	2.16	0.45
1:CA:1381:U:H2'	1:CA:1382:C:C6	2.48	0.45
23:DB:873:C:H4'	38:DM:64:TRP:HE1	1.81	0.45
1:AA:158:G:H1	1:AA:163:C:N4	2.13	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:491:G:O2'	1:CA:492:C:H5'	2.17	0.45
30:DY:31:ILE:HG13	30:DY:32:GLY:N	2.31	0.45
52:DW:70:VAL:O	52:DW:70:VAL:HG13	2.17	0.45
23:BB:1465:G:H2'	23:BB:1466:U:O4'	2.17	0.45
23:DB:1316:U:H2'	23:DB:1317:G:C8	2.52	0.45
1:CA:426:U:H2'	1:CA:427:U:C6	2.52	0.45
31:B0:2:VAL:HG12	31:B0:3:GLN:N	2.32	0.45
23:BB:2047:C:O2'	23:BB:2048:G:H5'	2.16	0.45
40:BH:86:ASP:C	40:BH:87:GLU:HG3	2.37	0.45
1:CA:626:G:H2'	1:CA:627:G:H8	1.80	0.45
1:CA:682:G:O2'	1:CA:683:G:H5'	2.17	0.45
1:CA:26:A:H61	1:CA:558:G:H1'	1.81	0.45
23:DB:817:C:O2'	23:DB:839:U:H5''	2.17	0.45
29:BE:165:HIS:NE2	29:BE:166:LYS:HG3	2.31	0.45
23:DB:121:G:H2'	23:DB:122:G:H8	1.80	0.45
23:DB:219:A:O2'	23:DB:220:G:H5'	2.16	0.45
1:CA:1247:U:O2'	1:CA:1248:A:H5'	2.16	0.45
15:CR:28:LEU:C	15:CR:30:ASN:H	2.20	0.45
23:DB:93:G:H2'	23:DB:94:A:C8	2.51	0.45
33:B1:25:ASN:OD1	33:B1:27:ARG:HB2	2.17	0.45
6:CG:78:ARG:HD3	6:CG:83:THR:HG22	1.98	0.45
23:BB:1783:A:H5'	23:BB:2608:G:H4'	1.97	0.45
23:DB:1383:A:P	23:DB:1383:A:H3'	2.57	0.45
23:BB:1044:C:O5'	23:BB:1044:C:H6	1.99	0.45
23:BB:327:G:O2'	23:BB:328:U:H5'	2.17	0.45
52:BW:61:LYS:HB3	52:BW:62:ALA:H	1.53	0.45
9:CJ:25:ILE:HG13	9:CJ:25:ILE:H	1.55	0.45
10:AK:86:LYS:HB2	10:AK:113:THR:HA	1.98	0.45
41:BJ:55:ILE:HG22	41:BJ:123:LYS:HB2	1.98	0.45
5:CF:25:TYR:O	5:CF:29:ILE:HG13	2.16	0.45
5:CF:97:THR:HB	5:CF:98:GLU:OE1	2.16	0.45
5:AF:62:MET:HG3	5:AF:64:VAL:HG13	1.98	0.45
14:AQ:20:ILE:CD1	14:AQ:52:CYS:HB2	2.46	0.45
26:DD:110:THR:HG23	26:DD:171:THR:CA	2.46	0.45
40:BH:69:ALA:HA	40:BH:140:ALA:CB	2.45	0.45
42:BN:55:ALA:HA	42:BN:80:PHE:CD1	2.51	0.45
43:BO:35:ILE:HG21	43:BO:71:ALA:HB1	1.98	0.45
8:AI:66:VAL:HG11	8:AI:74:GLN:HG3	1.98	0.45
1:AA:1228:C:H5'	1:AA:1229:A:OP2	2.16	0.45
24:BI:79:LEU:HD11	24:BI:131:THR:OG1	2.15	0.45
25:BC:145:MET:HB2	25:BC:152:GLN:NE2	2.32	0.45
50:BT:69:ARG:HB2	50:BT:75:GLY:N	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
5:CF:49:TYR:HE1	15:CR:62:ARG:O	2.00	0.45
23:BB:1655:A:C2	23:BB:2049:G:H4'	2.51	0.45
23:BB:1999:C:O2'	23:BB:2000:C:H5'	2.16	0.45
29:BE:127:GLU:N	29:BE:127:GLU:CD	2.69	0.45
49:BR:10:LYS:HD2	49:BR:10:LYS:N	2.30	0.45
35:BV:80:HIS:CD2	35:BV:83:LYS:HB2	2.51	0.45
16:AS:68:HIS:N	16:AS:68:HIS:CD2	2.84	0.45
9:AJ:55:PRO:O	9:AJ:56:HIS:CB	2.61	0.45
41:DJ:25:LEU:CD2	41:DJ:26:GLY:H	2.25	0.45
26:BD:10:GLY:HA2	26:BD:26:VAL:HB	1.97	0.45
1:CA:1300:G:C2'	1:CA:1301:U:OP2	2.64	0.45
36:B2:12:ARG:HB2	36:B2:12:ARG:CZ	2.47	0.45
51:DZ:13:VAL:HG23	51:DZ:29:PHE:HB2	1.98	0.45
37:DL:100:ILE:O	37:DL:100:ILE:HG12	2.17	0.45
12:CM:26:LYS:O	12:CM:30:LYS:HB2	2.17	0.45
41:DJ:81:ILE:HG12	41:DJ:82:GLY:N	2.31	0.45
28:DP:45:VAL:N	28:DP:60:VAL:HG13	2.31	0.45
1:CA:1320:C:H5''	16:CS:2:ARG:NE	2.32	0.45
16:CS:72:GLU:C	16:CS:74:ALA:H	2.20	0.45
44:DQ:63:ARG:HH21	44:DQ:64:ILE:HD11	1.81	0.45
23:BB:1873:G:O2'	23:BB:1874:C:H5'	2.17	0.45
15:AR:41:SER:HB3	15:AR:51:GLN:CG	2.47	0.45
44:DQ:26:ALA:HB1	44:DQ:30:VAL:CG1	2.47	0.45
1:AA:1250:A:H5''	8:AI:68:GLY:H	1.82	0.45
46:DU:8:ASP:O	46:DU:24:VAL:HG23	2.16	0.45
1:AA:1164:G:O2'	1:AA:1165:U:H5'	2.15	0.45
1:CA:841:C:H42	1:CA:843:U:H5	1.63	0.45
23:DB:2354:C:H4'	52:DW:31:LEU:HD23	1.99	0.45
10:CK:16:SER:HA	10:CK:77:GLY:O	2.15	0.45
40:DH:60:GLU:C	40:DH:62:LEU:N	2.68	0.45
1:CA:501:C:OP1	11:CL:113:ARG:NH2	2.50	0.45
2:CC:106:ARG:HD2	2:CC:106:ARG:C	2.37	0.45
6:AG:129:ASN:HA	6:AG:134:VAL:HG21	1.97	0.45
13:AP:43:ALA:HA	13:AP:46:LYS:CD	2.44	0.45
23:BB:1809:A:C6	23:BB:1810:A:C6	3.04	0.45
23:DB:1845:G:O2'	23:DB:1846:G:H5'	2.17	0.45
23:BB:1560:G:H2'	23:BB:1561:C:C6	2.52	0.45
1:CA:60:A:P	1:CA:60:A:H8	2.39	0.45
6:AG:77:ARG:HB3	6:AG:84:TYR:O	2.17	0.45
23:DB:665:U:O2'	23:DB:666:A:H5'	2.17	0.45
34:D3:22:LYS:HA	34:D3:48:MET:HA	1.99	0.45
52:BW:70:VAL:HG13	52:BW:70:VAL:O	2.15	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:598:U:H2'	1:CA:599:C:H6	1.80	0.45
27:BK:107:LEU:C	27:BK:109:SER:H	2.19	0.45
1:CA:586:C:O2'	1:CA:878:A:H4'	2.17	0.45
23:BB:1175:A:H3'	23:BB:1176:U:O4'	2.16	0.45
10:AK:90:PRO:C	10:AK:92:ARG:H	2.20	0.45
23:DB:1721:G:H1'	23:DB:1739:A:N6	2.30	0.45
23:BB:521:U:H2'	23:BB:522:A:C8	2.52	0.45
5:AF:10:VAL:HG12	5:AF:11:HIS:N	2.30	0.45
1:AA:1089:G:H2'	1:AA:1090:U:H5'	1.97	0.45
23:BB:2630:G:H2'	23:BB:2631:G:H8	1.81	0.45
1:AA:753:A:OP1	20:AO:73:LYS:HE3	2.17	0.45
20:AO:69:TYR:HA	20:AO:72:ARG:CZ	2.47	0.45
1:AA:1127:G:H5'	1:AA:1280:A:O2'	2.17	0.45
23:BB:2220:U:O2'	23:BB:2221:G:H5'	2.16	0.45
23:BB:995:C:P	44:BQ:52:ARG:HH11	2.39	0.45
29:DE:195:GLN:C	29:DE:197:GLU:H	2.20	0.45
23:DB:603:A:H4'	23:DB:604:G:O5'	2.17	0.45
25:BC:20:ASN:HB3	25:BC:23:LEU:HD13	1.98	0.45
1:CA:1186:G:H21	21:CN:100:TRP:C	2.20	0.45
7:AH:92:PRO:HG3	7:AH:127:TYR:OH	2.16	0.45
23:BB:1015:U:H2'	23:BB:1016:G:H8	1.81	0.45
1:CA:1049:U:H1'	1:CA:1201:A:C5	2.52	0.45
23:BB:2581:G:H2'	23:BB:2581:G:N3	2.31	0.45
28:BP:31:VAL:C	28:BP:33:GLU:H	2.19	0.45
23:BB:2714:G:O2'	23:BB:2715:C:H5'	2.17	0.45
7:AH:25:THR:O	7:AH:26:MET:HB3	2.16	0.45
23:DB:2222:C:H4'	25:DC:184:GLU:OE2	2.17	0.45
29:DE:60:TRP:HE3	29:DE:60:TRP:HA	1.81	0.45
25:DC:102:TYR:C	25:DC:103:ILE:HG13	2.37	0.45
5:AF:86:ARG:NH1	5:AF:88:MET:HG3	2.31	0.45
52:BW:17:ALA:HB2	52:BW:37:VAL:HG23	1.99	0.45
23:BB:1079:C:O2'	24:BI:133:ARG:NH2	2.49	0.45
37:BL:19:LEU:HA	37:BL:27:LEU:HD13	1.97	0.45
23:DB:2756:U:H1'	23:DB:2757:A:H5''	1.97	0.45
23:DB:1170:C:H2'	23:DB:1171:G:H8	1.82	0.45
40:DH:72:ILE:HB	40:DH:140:ALA:CB	2.43	0.45
23:DB:2378:A:N3	43:DO:18:LEU:HD11	2.32	0.45
38:DM:38:ARG:HG2	38:DM:38:ARG:NH1	2.31	0.45
47:DF:104:THR:O	47:DF:108:PRO:HG2	2.16	0.45
49:BR:4:VAL:HG23	49:BR:39:LEU:HG	1.97	0.45
1:AA:1103:C:H5'	18:AB:96:LEU:HD12	1.99	0.45
18:AB:153:MET:CE	18:AB:157:PRO:HB3	2.47	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DI:27:LEU:HD23	24:DI:27:LEU:N	2.22	0.45
9:AJ:29:ALA:HA	9:AJ:32:THR:CG2	2.47	0.45
46:BU:53:GLN:O	46:BU:53:GLN:CG	2.65	0.45
1:AA:201:G:H2'	1:AA:202:G:C8	2.51	0.45
37:DL:95:LEU:HB2	37:DL:101:ILE:CG1	2.47	0.45
1:AA:1029:U:O5'	1:AA:1029:U:H6	1.99	0.45
40:BH:15:LEU:C	40:BH:17:ASP:H	2.20	0.45
2:AC:10:ARG:HD2	2:AC:14:VAL:CG2	2.46	0.45
27:DK:43:ILE:CG2	27:DK:46:ALA:HB2	2.44	0.45
39:DX:30:MET:C	39:DX:32:ALA:H	2.20	0.45
40:BH:49:ALA:H	40:BH:50:ARG:HH21	1.65	0.45
18:AB:120:SER:HA	18:AB:125:PHE:CD1	2.51	0.45
31:B0:41:HIS:HB3	42:BN:99:LYS:HB2	1.99	0.45
40:BH:4:ILE:CG1	40:BH:18:GLN:HB2	2.43	0.45
23:DB:1507:C:C2'	23:DB:1508:A:H4'	2.47	0.45
23:BB:319:G:H2'	23:BB:320:A:O4'	2.16	0.45
45:BS:45:VAL:HA	45:BS:48:LYS:HB3	1.98	0.45
23:DB:1607:C:H5''	23:DB:1608:A:H5'	1.99	0.45
23:DB:2650:U:H2'	23:DB:2651:C:C6	2.52	0.45
1:AA:501:C:OP1	11:AL:113:ARG:NH2	2.50	0.45
23:DB:608:A:H2'	23:DB:609:A:H8	1.79	0.45
29:DE:148:ILE:HD13	29:DE:187:VAL:CG2	2.46	0.45
1:AA:1071:C:H2'	1:AA:1072:G:C8	2.47	0.45
51:BZ:36:HIS:HB3	51:BZ:38:PHE:CE2	2.52	0.45
47:DF:74:ALA:CB	47:DF:78:ILE:HD13	2.45	0.45
8:AI:117:LEU:HD22	8:AI:123:ARG:HD2	1.98	0.45
1:AA:592:G:H2'	1:AA:593:U:C6	2.52	0.45
23:BB:2109:U:O2'	23:BB:2110:G:H5'	2.17	0.45
23:DB:349:U:H2'	23:DB:350:G:C8	2.52	0.45
23:BB:1459:G:H4'	23:BB:1461:C:N3	2.32	0.45
13:AP:78:VAL:O	13:AP:79:ASN:C	2.54	0.45
1:CA:1216:A:H2'	1:CA:1217:C:H6	1.82	0.45
1:CA:300:A:H1'	1:CA:565:U:O2	2.17	0.45
34:B3:3:ILE:HG22	34:B3:4:LYS:N	2.31	0.45
23:DB:222:A:N6	23:DB:232:G:H1'	2.31	0.45
23:DB:2759:G:O2'	23:DB:2760:C:H5'	2.17	0.45
23:BB:2812:G:H2'	23:BB:2813:A:O4'	2.17	0.45
1:AA:279:A:H5'	1:AA:281:G:H5'	1.98	0.45
1:AA:861:G:H2'	1:AA:862:C:H6	1.81	0.45
1:CA:488:C:O2'	1:CA:489:C:H5'	2.17	0.45
23:BB:679:C:H2'	23:BB:680:C:H6	1.81	0.45
22:BA:63:C:H2'	22:BA:64:G:H8	1.81	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2801:G:H2'	23:DB:2802:G:C8	2.51	0.45
23:DB:2803:G:H2'	23:DB:2804:U:H6	1.81	0.45
29:DE:149:ILE:HD11	29:DE:172:ALA:HA	1.99	0.45
2:AC:156:LEU:C	2:AC:158:GLY:H	2.18	0.45
2:AC:156:LEU:HD12	2:AC:163:ARG:HG3	1.97	0.45
41:DJ:102:GLU:HB3	41:DJ:119:PHE:CZ	2.50	0.45
23:BB:2802:G:H2'	23:BB:2803:G:C8	2.51	0.45
23:DB:2892:G:H5''	23:DB:2894:G:N2	2.31	0.45
30:BY:43:ILE:O	30:BY:47:ILE:HG12	2.17	0.45
23:DB:2340:A:H2'	23:DB:2341:G:C8	2.50	0.45
1:CA:546:A:P	3:CD:68:GLU:HB3	2.57	0.45
23:BB:782:A:N7	25:BC:219:VAL:HG21	2.32	0.45
1:CA:1386:G:O3'	55:CA:1661:SCM:H1M2	2.15	0.45
10:CK:90:PRO:C	10:CK:92:ARG:H	2.20	0.45
48:DG:39:ALA:HA	48:DG:54:ARG:HG3	1.98	0.45
1:AA:1225:A:N3	1:AA:1225:A:H2'	2.32	0.45
34:B3:61:LEU:HD23	34:B3:61:LEU:N	2.32	0.45
1:CA:1066:C:H2'	1:CA:1067:A:C8	2.52	0.45
1:AA:1195:C:H2'	1:AA:1197:A:O4'	2.17	0.45
27:BK:22:ILE:O	27:BK:23:LYS:HD2	2.16	0.45
35:BV:11:GLU:HB2	35:BV:16:ALA:HB2	1.97	0.45
23:BB:2400:G:O2'	23:BB:2401:U:H5'	2.16	0.45
46:BU:43:LYS:O	46:BU:57:ILE:HA	2.17	0.45
38:BM:31:PHE:CE2	38:BM:110:GLU:HB3	2.52	0.45
23:BB:2694:G:H2'	23:BB:2695:U:C6	2.51	0.45
1:AA:513:C:H2'	1:AA:514:C:H6	1.82	0.45
23:BB:693:A:H2'	23:BB:694:U:C6	2.52	0.45
18:CB:31:PHE:CD1	18:CB:43:GLU:HG3	2.51	0.45
12:AM:1:ALA:HA	12:AM:56:ARG:HH12	1.82	0.45
9:CJ:36:VAL:HG22	9:CJ:76:ILE:CB	2.44	0.45
25:DC:116:GLN:H	25:DC:127:ASN:ND2	2.15	0.45
25:DC:151:GLY:O	25:DC:152:GLN:HG3	2.16	0.45
41:BJ:18:VAL:CG1	41:BJ:54:ILE:HD11	2.46	0.45
2:CC:63:ILE:HD12	2:CC:98:ALA:HB3	1.98	0.45
29:BE:109:LEU:HD13	29:BE:180:LEU:HD13	1.99	0.45
23:DB:2331:G:H2'	23:DB:2332:C:C6	2.52	0.45
29:DE:146:VAL:HA	29:DE:185:LYS:O	2.16	0.45
22:BA:115:A:H2'	22:BA:116:G:C8	2.52	0.45
43:BO:35:ILE:HG21	43:BO:71:ALA:CB	2.47	0.45
48:DG:153:PRO:HB3	48:DG:158:GLY:HA2	1.98	0.45
49:BR:8:GLY:HA3	49:BR:23:GLU:HB2	1.98	0.45
43:BO:106:LEU:CA	43:BO:109:ALA:HB3	2.46	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:987:G:O2'	1:AA:988:G:H5'	2.17	0.45
23:DB:2886:A:C5	31:D0:39:ARG:NH2	2.85	0.45
47:BF:107:VAL:HB	47:BF:108:PRO:HD3	1.97	0.45
41:DJ:29:ALA:HB1	41:DJ:105:VAL:HG12	1.99	0.45
23:DB:2302:U:O2'	23:DB:2303:G:H5'	2.17	0.45
25:DC:210:ALA:O	25:DC:213:ARG:N	2.42	0.45
42:BN:31:HIS:O	42:BN:33:ILE:HG22	2.17	0.45
37:BL:103:ILE:CD1	37:BL:103:ILE:H	2.24	0.45
1:CA:1280:A:H3'	1:CA:1281:C:C5'	2.44	0.45
2:AC:13:ILE:H	2:AC:13:ILE:HD13	1.81	0.45
18:CB:100:LEU:HB2	18:CB:174:GLU:OE1	2.17	0.45
23:DB:1591:A:H2'	23:DB:1592:C:O4'	2.17	0.45
28:BP:61:ARG:HD3	28:BP:70:GLU:CD	2.37	0.45
48:BG:126:THR:HG22	48:BG:127:GLN:H	1.81	0.45
48:BG:126:THR:HG22	48:BG:127:GLN:N	2.31	0.45
44:BQ:10:ARG:CZ	44:BQ:10:ARG:HB2	2.47	0.45
23:BB:1550:C:H2'	23:BB:1551:A:C8	2.51	0.45
1:CA:560:A:H4'	1:CA:561:U:C5'	2.45	0.45
16:CS:21:ALA:HA	16:CS:24:SER:OG	2.17	0.45
48:DG:6:ALA:HB3	48:DG:68:ARG:HD3	1.99	0.45
41:BJ:21:THR:O	41:BJ:62:VAL:HA	2.16	0.45
23:DB:2847:U:H5''	28:DP:94:ALA:HB3	1.98	0.45
23:DB:978:G:O4'	23:DB:1001:A:H2	2.00	0.45
1:AA:543:U:H2'	1:AA:544:G:H8	1.82	0.45
3:AD:81:LEU:HB2	3:AD:88:ASN:HD22	1.82	0.45
38:BM:77:PRO:HD2	38:BM:80:VAL:HG11	1.99	0.45
23:BB:1864:U:O2'	23:BB:1865:U:H5'	2.17	0.45
21:CN:30:ILE:HA	21:CN:34:ASN:CB	2.47	0.45
1:AA:140:U:H2'	1:AA:141:G:H8	1.80	0.45
1:CA:140:U:H2'	1:CA:141:G:H8	1.82	0.45
1:AA:411:A:O3'	1:AA:412:A:H4'	2.16	0.45
1:AA:597:G:H2'	1:AA:598:U:H5'	1.99	0.45
1:AA:453:G:H2'	1:AA:454:G:C8	2.52	0.45
23:DB:2442:C:H2'	23:DB:2443:C:C6	2.52	0.45
23:DB:328:U:O3'	46:DU:65:GLN:HG3	2.17	0.45
1:CA:1234:C:H1'	1:CA:1364:U:O2	2.17	0.45
18:AB:209:VAL:HG23	18:AB:210:THR:H	1.80	0.45
26:DD:61:THR:OG1	26:DD:63:PRO:HD2	2.17	0.45
23:BB:1746:A:H2'	23:BB:1747:U:C6	2.51	0.45
24:BI:49:GLU:OE1	24:BI:52:LEU:HD22	2.17	0.45
23:BB:1180:U:H2'	23:BB:1181:U:C6	2.52	0.45
23:BB:190:A:H5''	23:BB:204:A:N6	2.31	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:93:HIS:HD2	18:CB:94:ARG:HH12	1.65	0.45
23:BB:1830:C:H2'	23:BB:1831:G:C8	2.52	0.45
6:CG:91:ARG:HD2	6:CG:91:ARG:N	2.32	0.45
23:BB:1064:C:H2'	23:BB:1065:U:O4'	2.17	0.45
1:CA:152:A:H3'	1:CA:153:C:H6	1.81	0.45
23:DB:1281:G:H2'	23:DB:1282:U:C6	2.52	0.45
23:BB:342:A:H2'	23:BB:343:C:O4'	2.17	0.45
1:AA:44:A:H2'	1:AA:45:G:H8	1.82	0.45
1:CA:356:A:H1'	1:CA:368:U:O2'	2.17	0.45
1:CA:568:G:O6	11:CL:1:ALA:HB2	2.16	0.45
19:CU:17:ARG:HE	19:CU:17:ARG:HA	1.81	0.45
23:BB:1306:C:O2'	23:BB:1307:A:H5'	2.16	0.45
26:DD:30:GLU:HA	26:DD:185:ASN:OD1	2.17	0.45
52:BW:54:ARG:C	52:BW:56:HIS:H	2.20	0.45
23:DB:2236:U:O2'	23:DB:2237:G:H5'	2.16	0.45
30:BY:12:ALA:HB2	30:BY:53:MET:CE	2.47	0.45
50:BT:17:SER:N	50:BT:21:SER:OG	2.50	0.45
25:DC:192:GLY:O	25:DC:193:GLU:HG3	2.17	0.45
48:BG:43:LYS:HB2	48:BG:50:THR:HB	1.99	0.45
5:AF:66:ALA:HB1	5:AF:70:VAL:HG21	1.98	0.45
14:CQ:18:LYS:HA	14:CQ:47:ASP:O	2.17	0.45
52:DW:17:ALA:HB2	52:DW:37:VAL:HG23	1.98	0.45
8:AI:41:GLU:C	8:AI:43:ALA:H	2.19	0.45
37:BL:29:LYS:C	37:BL:31:GLY:N	2.70	0.45
35:DV:29:ILE:HD13	35:DV:31:TYR:CE2	2.51	0.45
27:DK:71:ARG:CB	27:DK:72:PRO:HD2	2.35	0.45
23:BB:674:G:H1'	29:BE:69:ARG:CD	2.46	0.45
26:BD:12:THR:HG22	26:BD:13:ARG:H	1.80	0.45
28:BP:75:THR:O	28:BP:80:VAL:HG11	2.17	0.45
30:BY:7:THR:HG23	30:BY:34:THR:OG1	2.16	0.45
38:DM:46:ILE:HG13	38:DM:47:GLU:N	2.32	0.45
47:DF:36:ASN:HA	47:DF:87:LYS:HA	1.97	0.45
26:BD:133:THR:HG23	26:BD:134:HIS:N	2.32	0.45
1:CA:1300:G:O2'	1:CA:1301:U:H6	1.99	0.45
1:AA:1397:C:H4'	1:AA:1398:A:OP2	2.16	0.45
46:BU:47:PRO:CB	46:BU:55:GLY:HA3	2.43	0.45
23:DB:321:U:OP2	29:DE:130:LYS:HD3	2.17	0.45
4:AE:131:ASN:O	4:AE:135:VAL:HG23	2.16	0.45
38:BM:101:VAL:HG13	38:BM:101:VAL:O	2.17	0.45
42:DN:106:ASP:C	42:DN:108:ALA:H	2.19	0.45
38:DM:100:LYS:HD3	38:DM:101:VAL:H	1.81	0.45
1:AA:450:G:N7	1:AA:481:G:O6	2.49	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:CS:35:ARG:HB3	16:CS:50:VAL:HG13	1.98	0.45
2:AC:81:GLU:O	2:AC:85:LYS:HB2	2.16	0.45
23:DB:2466:C:OP1	32:D4:4:ARG:HG2	2.17	0.45
12:CM:3:ILE:HG12	12:CM:52:ILE:HD11	1.98	0.45
23:BB:1607:C:H5''	23:BB:1608:A:H5'	1.98	0.45
11:AL:79:ILE:HD12	11:AL:96:THR:CG2	2.46	0.45
1:CA:22:G:H2'	1:CA:23:C:C6	2.51	0.45
48:DG:51:PHE:CZ	48:DG:71:LEU:HG	2.52	0.45
18:AB:140:LEU:H	18:AB:140:LEU:CD1	2.29	0.45
23:DB:457:A:N1	23:DB:470:A:H5''	2.32	0.45
23:BB:937:C:H2'	23:BB:938:G:C8	2.49	0.45
1:CA:778:G:H2'	1:CA:779:C:H6	1.82	0.45
23:DB:2752:C:H2'	23:DB:2753:A:O4'	2.17	0.45
1:AA:675:A:H2'	1:AA:676:A:C8	2.52	0.45
23:BB:2579:C:H1'	26:BD:130:GLN:NE2	2.31	0.45
1:CA:36:C:O2'	1:CA:37:U:H5'	2.17	0.45
23:BB:1411:U:H2'	23:BB:1412:U:C6	2.51	0.45
10:CK:34:THR:HB	10:CK:39:ASN:O	2.16	0.45
1:CA:230:G:H2'	1:CA:231:U:O4'	2.16	0.45
29:DE:149:ILE:HG23	29:DE:188:MET:HA	1.99	0.45
46:BU:13:LEU:HA	46:BU:18:LYS:HE3	1.98	0.45
5:CF:72:ASP:O	5:CF:75:GLU:HB2	2.17	0.45
23:BB:2677:G:H2'	23:BB:2678:C:H6	1.80	0.45
1:CA:893:C:H2'	1:CA:894:G:C8	2.52	0.45
46:DU:18:LYS:HD3	46:DU:19:GLY:N	2.31	0.45
23:DB:2829:A:O2'	23:DB:2830:C:H5'	2.16	0.45
23:DB:599:A:O2'	23:DB:600:G:H5'	2.17	0.45
27:DK:13:ASN:ND2	27:DK:98:ARG:H	2.14	0.45
43:DO:6:ALA:CB	43:DO:10:ARG:HH11	2.30	0.45
1:AA:707:U:H2'	1:AA:708:C:C6	2.51	0.45
23:BB:599:A:O2'	23:BB:600:G:H5'	2.16	0.45
23:DB:2047:C:O2'	23:DB:2048:G:H5'	2.17	0.45
1:CA:538:G:O2'	1:CA:539:A:H5'	2.16	0.45
23:BB:1076:C:H2'	23:BB:1077:A:H8	1.80	0.45
1:CA:345:C:OP1	28:DP:38:ARG:HD2	2.17	0.45
23:BB:693:A:O2'	23:BB:694:U:H5'	2.17	0.45
25:DC:115:ILE:HB	25:DC:126:GLY:O	2.17	0.45
25:BC:115:ILE:HB	25:BC:126:GLY:O	2.17	0.45
1:CA:1209:C:O2'	1:CA:1210:C:H5'	2.16	0.45
12:CM:12:LYS:O	12:CM:43:LYS:HA	2.16	0.45
18:AB:74:ALA:HB1	18:AB:206:ILE:CD1	2.46	0.45
23:DB:1361:G:H2'	23:DB:1362:C:C6	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:367:G:N2	23:DB:368:A:H1'	2.32	0.45
23:DB:2581:G:N3	23:DB:2581:G:H2'	2.31	0.45
1:AA:1258:G:O2'	1:AA:1259:C:H5'	2.17	0.45
23:BB:2533:U:H2'	23:BB:2534:A:O4'	2.17	0.45
23:DB:2507:C:O2'	23:DB:2508:G:H5'	2.17	0.45
13:AP:2:VAL:HG13	13:AP:65:ALA:HA	1.99	0.45
1:CA:972:C:P	9:CJ:59:LYS:HD3	2.56	0.45
8:CI:49:GLN:C	8:CI:51:LEU:N	2.70	0.45
19:CU:41:THR:C	19:CU:45:LYS:HB2	2.38	0.45
18:CB:55:GLU:HG3	18:CB:197:PHE:CZ	2.52	0.45
12:AM:38:ILE:HG21	12:AM:55:LEU:HD11	1.99	0.45
12:AM:3:ILE:HG23	12:AM:56:ARG:HG2	1.99	0.45
1:AA:1527:U:H2'	1:AA:1528:U:C6	2.52	0.45
52:BW:49:ASN:CB	52:BW:60:ALA:HA	2.46	0.45
9:CJ:18:ILE:HG23	9:CJ:19:ASP:N	2.32	0.45
48:BG:25:ILE:CG2	48:BG:78:VAL:HG21	2.47	0.45
29:BE:116:ASP:O	29:BE:185:LYS:HE3	2.17	0.45
5:AF:61:LEU:HD12	5:AF:62:MET:H	1.81	0.45
5:AF:96:VAL:HG12	5:AF:97:THR:H	1.82	0.45
23:DB:2355:G:H4'	52:DW:20:LEU:HD13	1.99	0.45
23:DB:2272:U:O2'	23:DB:2273:A:H8	1.99	0.45
1:CA:1363:A:H2'	1:CA:1363:A:N3	2.31	0.45
32:B4:5:ALA:CA	32:B4:37:GLN:HE22	2.28	0.45
49:DR:23:GLU:O	49:DR:24:LYS:C	2.55	0.45
49:DR:40:MET:HG2	49:DR:48:LYS:HA	1.99	0.45
33:B1:35:LEU:O	33:B1:36:LYS:HB3	2.17	0.45
38:DM:41:LEU:HA	38:DM:45:GLN:OE1	2.17	0.45
41:BJ:6:ALA:HB3	41:BJ:45:THR:CG2	2.45	0.45
1:AA:988:G:H1'	1:AA:1015:G:H1	1.81	0.45
46:DU:53:GLN:CG	46:DU:53:GLN:O	2.64	0.45
1:AA:977:A:H1'	1:AA:982:U:O4	2.17	0.45
18:CB:60:ALA:CB	18:CB:220:VAL:HG13	2.47	0.45
47:BF:111:ARG:H	47:BF:111:ARG:HD2	1.82	0.45
28:DP:25:VAL:O	28:DP:43:GLU:HG2	2.16	0.45
47:BF:134:GLN:C	47:BF:136:ILE:N	2.70	0.45
43:DO:110:ALA:O	43:DO:115:LEU:HB2	2.17	0.45
39:BX:56:LEU:C	39:BX:58:ASN:H	2.19	0.45
23:DB:670:A:H4'	23:DB:671:C:C5'	2.40	0.45
23:DB:2578:G:O2'	23:DB:2579:C:H5'	2.16	0.45
16:CS:39:ILE:HG22	16:CS:40:PHE:N	2.31	0.45
16:CS:47:THR:HG23	16:CS:60:PHE:CZ	2.51	0.45
43:BO:89:ASP:CG	43:BO:116:GLN:HB3	2.37	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:DQ:89:ILE:O	44:DQ:90:ASP:HB2	2.17	0.45
44:DQ:94:LEU:C	44:DQ:96:ASP:N	2.69	0.45
42:BN:16:HIS:O	42:BN:19:ALA:N	2.49	0.45
27:BK:119:ALA:O	27:BK:120:PRO:C	2.55	0.45
42:BN:97:ILE:HD12	42:BN:98:LEU:H	1.82	0.45
11:AL:81:ILE:HG23	11:AL:94:TYR:HB3	1.98	0.45
18:AB:140:LEU:HD12	18:AB:140:LEU:N	2.31	0.45
23:BB:38:A:H1'	29:BE:43:THR:HB	1.98	0.45
23:DB:959:A:H62	38:DM:82:MET:HE3	1.82	0.45
23:BB:740:C:O2'	23:BB:741:U:H5'	2.16	0.45
48:BG:9:VAL:C	48:BG:11:PRO:HD3	2.37	0.45
1:AA:383:A:H2'	1:AA:384:G:O4'	2.17	0.45
3:CD:25:ARG:HH21	3:CD:30:LYS:HE3	1.81	0.45
26:DD:14:ILE:O	26:DD:14:ILE:HG12	2.17	0.45
23:BB:1356:G:O2'	23:BB:1357:C:H5'	2.16	0.45
23:BB:16:C:H2'	23:BB:17:G:H8	1.82	0.45
23:DB:1356:G:O2'	23:DB:1357:C:H5'	2.17	0.45
44:DQ:25:GLY:O	44:DQ:29:ARG:HD2	2.17	0.45
20:CO:87:LEU:C	20:CO:89:ARG:H	2.20	0.45
23:BB:2892:G:H5''	23:BB:2894:G:N2	2.32	0.45
29:DE:3:LEU:HD21	29:DE:14:VAL:CG2	2.47	0.45
23:BB:2377:A:O2'	23:BB:2378:A:H5'	2.16	0.45
1:CA:689:C:H2'	1:CA:690:G:C8	2.52	0.45
47:BF:71:LYS:HE2	47:BF:73:VAL:HB	1.98	0.45
29:DE:188:MET:HG2	29:DE:193:VAL:CG2	2.47	0.45
2:AC:192:TYR:CE1	2:AC:195:ILE:HD11	2.50	0.45
23:BB:2801:G:H2'	23:BB:2802:G:C8	2.51	0.45
1:CA:98:A:H2'	1:CA:99:C:H6	1.81	0.45
46:BU:14:THR:HG23	46:BU:15:GLY:N	2.32	0.45
46:BU:18:LYS:HD3	46:BU:19:GLY:N	2.32	0.45
22:DA:14:U:H4'	22:DA:70:C:O2	2.17	0.45
22:DA:63:C:H2'	22:DA:64:G:H8	1.81	0.45
23:BB:1181:U:H2'	23:BB:1182:G:C8	2.52	0.45
1:AA:761:G:H2'	1:AA:762:U:H6	1.81	0.45
11:AL:3:VAL:O	11:AL:7:VAL:HG23	2.16	0.45
45:BS:7:HIS:HB2	45:BS:50:VAL:HG22	1.99	0.45
11:CL:3:VAL:O	11:CL:7:VAL:HG23	2.17	0.45
18:AB:156:LEU:HD12	18:AB:156:LEU:H	1.81	0.45
23:DB:1900:A:N1	23:DB:1970:A:C6	2.85	0.45
23:DB:1015:U:H2'	23:DB:1016:G:C8	2.52	0.45
23:BB:1908:C:O2'	23:BB:1909:C:H5'	2.16	0.45
1:CA:1032:G:H2'	1:CA:1033:G:C4'	2.46	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1754:A:N1	23:BB:2716:C:O2'	2.49	0.45
1:CA:1065:U:H1'	1:CA:1066:C:OP2	2.17	0.45
1:CA:1340:A:H2'	1:CA:1341:U:O4'	2.16	0.45
1:CA:631:C:H3'	1:CA:632:U:H5'	1.97	0.45
23:DB:2392:A:H5''	34:D3:27:ASN:HD22	1.82	0.45
1:CA:579:A:H2'	1:CA:580:C:C6	2.51	0.45
23:DB:2054:A:H2'	31:D0:4:GLN:OE1	2.17	0.45
23:DB:2694:G:H2'	23:DB:2695:U:C6	2.52	0.45
14:AQ:23:ALA:C	14:AQ:24:ILE:HD12	2.38	0.45
40:BH:90:LEU:H	40:BH:123:ARG:HD3	1.81	0.45
8:CI:49:GLN:O	8:CI:51:LEU:N	2.50	0.45
19:CU:43:GLU:HB3	19:CU:44:ARG:NH2	2.32	0.45
12:AM:43:LYS:C	12:AM:47:LEU:HD23	2.38	0.45
30:DY:12:ALA:HB2	30:DY:53:MET:CE	2.47	0.45
35:BV:35:GLU:HB2	35:BV:93:ARG:CZ	2.47	0.45
41:BJ:16:TYR:N	41:BJ:137:PRO:HB3	2.32	0.45
1:CA:119:A:H4'	1:CA:120:A:O4'	2.17	0.45
19:CU:24:LYS:HB3	19:CU:24:LYS:NZ	2.32	0.45
48:DG:75:VAL:HA	48:DG:78:VAL:HG22	2.00	0.45
52:BW:18:LYS:HG3	52:BW:19:ARG:NH1	2.31	0.45
4:CE:84:VAL:HG11	4:CE:146:MET:HB3	1.98	0.45
8:AI:51:LEU:CB	8:AI:56:MET:SD	3.05	0.45
8:AI:24:ASN:O	8:AI:60:LEU:N	2.50	0.45
25:BC:116:GLN:H	25:BC:127:ASN:ND2	2.14	0.45
1:CA:976:G:N2	1:CA:1363:A:C2	2.85	0.45
48:BG:122:ALA:HB2	48:BG:132:LEU:CB	2.44	0.45
3:AD:54:LEU:HA	3:AD:202:LEU:HD22	1.98	0.45
26:BD:123:LYS:HD3	26:BD:165:MET:SD	2.57	0.45
50:DT:69:ARG:HG2	50:DT:70:HIS:N	2.29	0.45
23:DB:1177:G:H2'	23:DB:1178:C:H6	1.82	0.45
21:CN:84:ARG:HG3	21:CN:84:ARG:HH11	1.82	0.45
23:BB:675:A:H4'	29:BE:60:TRP:CZ2	2.51	0.45
29:BE:58:LYS:O	29:BE:60:TRP:N	2.49	0.45
26:BD:24:VAL:HG21	26:BD:188:LEU:HD13	1.99	0.45
28:BP:50:ARG:CD	28:BP:56:SER:HB3	2.47	0.45
43:BO:105:ALA:C	43:BO:107:ALA:H	2.19	0.45
43:BO:106:LEU:HA	43:BO:109:ALA:HB3	1.97	0.45
30:DY:5:LYS:CE	30:DY:58:GLU:HA	2.47	0.45
47:DF:62:GLN:CG	47:DF:91:ARG:HH11	2.30	0.45
17:AT:34:VAL:CG1	17:AT:78:LEU:HD22	2.46	0.45
7:CH:14:ARG:HH21	7:CH:75:GLN:NE2	2.15	0.45
37:BL:103:ILE:O	37:BL:103:ILE:HG22	2.16	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:450:G:N7	1:CA:481:G:O6	2.50	0.45
6:AG:14:ASP:O	6:AG:18:GLY:HA2	2.16	0.45
2:CC:174:LEU:HD21	2:CC:200:TRP:CD1	2.52	0.45
26:DD:114:LYS:HE3	26:DD:116:LYS:NZ	2.27	0.45
27:BK:43:ILE:CG2	27:BK:46:ALA:HB2	2.44	0.45
44:BQ:77:LYS:O	44:BQ:80:ASN:HB3	2.17	0.45
1:CA:204:G:H2'	1:CA:205:A:O4'	2.17	0.45
23:BB:2259:U:H1'	23:BB:2427:C:C2	2.52	0.45
23:BB:2096:C:H2'	23:BB:2097:A:H8	1.82	0.45
17:AT:2:ASN:OD1	17:AT:3:ILE:N	2.49	0.45
23:DB:1998:A:H2'	23:DB:1999:C:C6	2.52	0.45
11:AL:77:SER:O	11:AL:79:ILE:HG23	2.17	0.45
1:CA:208:U:H3'	1:CA:210:C:H41	1.82	0.45
1:AA:841:C:H3'	1:AA:843:U:OP2	2.16	0.45
38:BM:33:LEU:HB2	38:BM:102:LEU:HB2	1.99	0.45
40:DH:101:ASP:HA	40:DH:104:THR:CB	2.44	0.45
23:DB:2352:A:H2'	23:DB:2353:G:O4'	2.17	0.45
23:BB:607:U:O4	23:BB:620:G:H5''	2.17	0.45
23:DB:2897:U:H2'	23:DB:2898:U:H6	1.79	0.45
3:AD:25:ARG:HH21	3:AD:30:LYS:HE3	1.82	0.45
1:CA:592:G:H2'	1:CA:593:U:C6	2.52	0.45
1:CA:1389:C:H2'	1:CA:1390:U:H6	1.82	0.45
23:BB:1846:G:N2	23:BB:1848:A:N6	2.65	0.45
23:BB:1847:A:H4'	23:BB:1848:A:H8	1.79	0.45
1:AA:711:G:O2'	1:AA:712:A:H5'	2.17	0.45
45:BS:73:LYS:HE3	45:BS:74:ILE:H	1.82	0.45
4:AE:95:MET:HG3	4:AE:124:ALA:CB	2.47	0.45
23:BB:1704:C:H2'	23:BB:1705:A:H8	1.82	0.45
1:AA:404:G:H4'	1:AA:439:U:O2	2.17	0.45
23:DB:1220:G:H2'	23:DB:1221:C:C6	2.51	0.45
1:CA:648:A:H2'	1:CA:649:A:H8	1.80	0.45
23:DB:2800:A:H2'	23:DB:2801:G:H8	1.81	0.45
6:AG:140:VAL:HA	6:AG:143:MET:SD	2.57	0.45
25:DC:79:ARG:HD2	25:DC:81:GLU:CG	2.47	0.45
24:BI:52:LEU:HD21	24:BI:81:LYS:NZ	2.31	0.45
23:BB:2047:C:H2'	23:BB:2048:G:C8	2.51	0.45
14:AQ:34:GLY:O	14:AQ:35:LYS:C	2.55	0.45
1:CA:1121:U:O2'	1:CA:1122:U:H5'	2.16	0.45
23:BB:877:A:H2	23:BB:900:A:N7	2.15	0.45
29:DE:165:HIS:NE2	29:DE:166:LYS:HG3	2.32	0.45
23:DB:963:U:H2'	23:DB:964:C:C6	2.51	0.45
23:BB:809:G:H2'	23:BB:810:U:C6	2.52	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:624:C:O2'	1:CA:625:U:H5'	2.17	0.45
23:DB:1613:G:H2'	23:DB:1617:C:H42	1.82	0.45
40:BH:127:GLU:O	40:BH:129:GLU:HG3	2.17	0.45
51:DZ:68:LEU:O	51:DZ:69:ALA:C	2.55	0.45
23:BB:1117:C:H2'	23:BB:1118:C:H6	1.82	0.45
9:CJ:92:LEU:HD22	9:CJ:92:LEU:N	2.32	0.45
24:DI:10:LEU:HD12	24:DI:10:LEU:O	2.16	0.45
40:BH:76:GLU:H	40:BH:76:GLU:CD	2.19	0.45
24:DI:91:LYS:N	24:DI:91:LYS:HD2	2.31	0.45
1:AA:1240:U:H5'	1:AA:1241:G:C8	2.52	0.44
52:DW:61:LYS:HB3	52:DW:62:ALA:H	1.53	0.44
42:DN:38:LEU:CB	42:DN:39:PRO:HD3	2.42	0.44
1:CA:1374:A:H2'	1:CA:1375:A:H8	1.81	0.44
48:BG:25:ILE:HD12	48:BG:25:ILE:H	1.82	0.44
35:DV:69:GLU:C	35:DV:70:ILE:HD13	2.36	0.44
25:DC:134:ILE:HD12	25:DC:135:PRO:N	2.32	0.44
14:AQ:60:ILE:N	14:AQ:60:ILE:HD13	2.32	0.44
52:BW:17:ALA:O	52:BW:18:LYS:HD2	2.17	0.44
23:BB:1196:C:H2'	23:BB:1197:G:H8	1.80	0.44
9:AJ:34:ALA:CB	9:AJ:78:GLU:HB2	2.46	0.44
2:AC:120:THR:HA	2:AC:123:LEU:HD12	1.97	0.44
48:DG:84:LYS:O	48:DG:85:LYS:HG2	2.17	0.44
23:DB:1064:C:H5''	24:DI:88:GLY:H	1.81	0.44
51:BZ:40:VAL:O	51:BZ:42:SER:N	2.48	0.44
40:DH:72:ILE:HG12	40:DH:108:VAL:CG1	2.42	0.44
16:AS:50:VAL:HG21	16:AS:70:LEU:HB3	1.99	0.44
16:AS:44:ILE:CD1	16:AS:63:ASP:HA	2.39	0.44
26:BD:186:LEU:CD2	28:BP:3:ILE:HD11	2.47	0.44
1:AA:959:A:H2	1:AA:1221:G:N3	2.15	0.44
7:AH:11:THR:CG2	7:AH:14:ARG:HH12	2.22	0.44
46:DU:51:LEU:CD2	46:DU:52:ASN:H	2.30	0.44
36:D2:12:ARG:NE	36:D2:44:VAL:HG11	2.22	0.44
26:DD:34:VAL:HA	26:DD:50:VAL:HA	1.98	0.44
29:BE:5:LEU:HD13	29:BE:122:GLU:HG3	1.99	0.44
1:CA:1003:G:N2	1:CA:1005:A:H5'	2.32	0.44
47:DF:12:VAL:O	47:DF:16:MET:N	2.48	0.44
17:AT:66:ILE:HG21	17:AT:71:ALA:HB2	1.99	0.44
13:CP:4:ILE:O	13:CP:71:VAL:HG11	2.17	0.44
39:DX:17:GLU:O	39:DX:20:ASN:HB2	2.16	0.44
3:AD:152:SER:HA	3:AD:155:LYS:CD	2.42	0.44
12:CM:85:TYR:HA	12:CM:88:LEU:CD1	2.47	0.44
44:DQ:79:ILE:O	44:DQ:79:ILE:HD13	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:659:U:O2'	1:CA:660:C:H5'	2.17	0.44
24:DI:101:SER:OG	24:DI:104:GLN:HG3	2.17	0.44
39:BX:30:MET:C	39:BX:32:ALA:H	2.21	0.44
23:BB:814:C:H2'	23:BB:815:C:H6	1.82	0.44
6:CG:26:VAL:CB	6:CG:42:VAL:HG21	2.48	0.44
1:AA:517:G:H22	1:AA:533:A:P	2.40	0.44
23:BB:2843:G:O2'	23:BB:2844:G:H5'	2.16	0.44
40:DH:53:GLU:OE2	40:DH:57:LYS:HB3	2.17	0.44
23:DB:720:U:H2'	23:DB:721:A:C8	2.52	0.44
43:DO:5:SER:HA	43:DO:8:ILE:CD1	2.44	0.44
23:DB:152:A:H2'	23:DB:153:U:H6	1.80	0.44
1:CA:663:A:O2'	1:CA:664:G:H5'	2.16	0.44
23:DB:2794:C:H2'	23:DB:2795:C:C6	2.52	0.44
23:BB:1495:A:O2'	23:BB:1496:A:H5'	2.17	0.44
2:CC:105:VAL:HG12	2:CC:105:VAL:O	2.16	0.44
23:BB:2793:C:H2'	23:BB:2794:C:C6	2.52	0.44
42:BN:59:SER:C	42:BN:61:ALA:N	2.70	0.44
8:CI:29:ILE:HA	8:CI:64:ILE:HB	1.99	0.44
10:CK:42:GLY:HA3	10:CK:73:VAL:CG1	2.47	0.44
2:CC:72:PRO:O	2:CC:75:VAL:N	2.49	0.44
51:DZ:72:ARG:HB2	51:DZ:78:TYR:CD2	2.53	0.44
23:BB:909:A:H2'	23:BB:912:C:H5	1.82	0.44
1:AA:1451:U:O5'	1:AA:1452:C:H5	2.01	0.44
23:DB:1495:A:O2'	23:DB:1496:A:H5'	2.16	0.44
51:BZ:70:GLU:O	51:BZ:71:LEU:C	2.56	0.44
23:DB:1779:U:H2'	57:DB:3607:HOH:O	2.17	0.44
23:BB:2699:C:O2'	23:BB:2700:A:H5'	2.17	0.44
23:BB:2900:A:H2'	23:BB:2901:C:C6	2.52	0.44
2:CC:81:GLU:OE1	2:CC:81:GLU:HA	2.17	0.44
22:BA:76:G:H2'	22:BA:77:U:C6	2.51	0.44
11:AL:13:ARG:HB2	11:AL:14:LYS:H	1.62	0.44
11:AL:66:ILE:N	11:AL:66:ILE:HD12	2.32	0.44
1:CA:1081:A:O2'	1:CA:1082:A:H5'	2.16	0.44
23:DB:1251:C:O2'	23:DB:1252:G:H3'	2.17	0.44
23:DB:1939:U:O2	23:DB:1967:C:H4'	2.17	0.44
23:DB:2016:U:H2'	23:DB:2017:U:C6	2.51	0.44
23:DB:600:G:H1'	29:DE:100:MET:HG2	1.99	0.44
14:AQ:30:HIS:CE1	14:AQ:32:ILE:HG22	2.52	0.44
23:DB:190:A:H5''	23:DB:204:A:N6	2.32	0.44
1:CA:1472:U:O2'	1:CA:1473:G:H5'	2.17	0.44
23:BB:1570:A:H2'	23:BB:1571:A:C8	2.52	0.44
23:BB:57:C:H2'	23:BB:58:G:H8	1.82	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:817:C:O2'	23:BB:839:U:H5''	2.17	0.44
23:BB:2776:A:H4'	23:BB:2777:G:C5'	2.47	0.44
15:CR:31:TYR:CG	15:CR:54:LEU:HD21	2.52	0.44
23:BB:1360:G:H2'	23:BB:1361:G:C5'	2.48	0.44
23:BB:2618:G:O2'	26:BD:154:LYS:HB2	2.18	0.44
1:CA:1067:A:H4'	1:CA:1068:G:O5'	2.18	0.44
35:BV:11:GLU:HB2	35:BV:16:ALA:CB	2.47	0.44
23:DB:1424:G:H2'	23:DB:1425:G:O4'	2.16	0.44
11:AL:43:LYS:N	11:AL:44:PRO:HD2	2.32	0.44
23:BB:560:C:H3'	23:BB:561:G:C8	2.52	0.44
43:DO:80:GLU:HA	43:DO:83:LEU:HB2	1.99	0.44
1:CA:93:U:H6	1:CA:93:U:O5'	2.00	0.44
48:BG:115:GLN:CD	48:BG:115:GLN:H	2.21	0.44
9:AJ:14:ASP:OD1	9:AJ:16:ARG:HB2	2.17	0.44
23:DB:1099:G:H4'	24:DI:4:VAL:HG12	1.98	0.44
12:AM:33:LEU:HD22	12:AM:38:ILE:HG22	1.99	0.44
12:AM:13:HIS:CG	12:AM:41:ASP:HA	2.51	0.44
10:AK:124:LYS:HA	19:AU:34:ARG:CG	2.47	0.44
1:CA:1238:A:H2	1:CA:1241:G:N3	2.15	0.44
25:DC:185:ALA:C	25:DC:187:CYS:N	2.70	0.44
23:BB:2222:C:H4'	25:BC:184:GLU:CD	2.37	0.44
25:BC:123:ILE:HG12	25:BC:123:ILE:O	2.16	0.44
23:BB:2772:C:H2'	23:BB:2773:C:C6	2.52	0.44
52:BW:39:GLN:O	52:BW:40:ARG:HG2	2.16	0.44
5:CF:21:MET:HB3	5:CF:25:TYR:CZ	2.52	0.44
2:CC:18:ASN:CG	2:CC:53:ARG:HH21	2.20	0.44
44:BQ:6:GLY:N	44:BQ:8:ILE:HD13	2.32	0.44
22:BA:57:A:C4	47:BF:25:MET:HB3	2.52	0.44
23:BB:1080:A:H4'	24:BI:126:ARG:HB3	1.99	0.44
23:DB:2271:G:H2'	23:DB:2272:U:H5	1.77	0.44
48:DG:121:THR:HG22	48:DG:122:ALA:N	2.32	0.44
48:DG:84:LYS:CG	48:DG:132:LEU:N	2.77	0.44
1:AA:9:G:H5'	4:AE:107:GLY:CA	2.36	0.44
51:DZ:45:ARG:NE	51:DZ:47:VAL:HG12	2.27	0.44
28:DP:3:ILE:C	28:DP:3:ILE:HD13	2.37	0.44
50:BT:69:ARG:HG2	50:BT:70:HIS:N	2.31	0.44
15:CR:38:ILE:HG22	15:CR:58:ILE:HG21	1.98	0.44
45:BS:66:ILE:CD1	45:BS:66:ILE:H	2.18	0.44
23:DB:2683:C:H5''	28:DP:55:HIS:HB3	1.99	0.44
41:BJ:44:TYR:CZ	44:BQ:59:LEU:HD11	2.53	0.44
1:AA:1361:G:C2'	1:AA:1362:A:H5''	2.41	0.44
28:BP:3:ILE:HD13	28:BP:3:ILE:C	2.38	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2302:U:O2'	23:BB:2303:G:H5'	2.18	0.44
41:BJ:26:GLY:O	41:BJ:30:THR:HG23	2.17	0.44
47:DF:65:LEU:H	47:DF:88:VAL:HG22	1.83	0.44
1:CA:923:A:OP1	4:CE:25:LYS:HB3	2.17	0.44
20:AO:28:GLN:O	20:AO:32:LEU:HD23	2.17	0.44
1:CA:998:C:H2'	1:CA:999:C:H6	1.83	0.44
9:AJ:28:THR:HA	9:AJ:31:ARG:HE	1.82	0.44
23:DB:1374:G:H2'	23:DB:1375:U:C6	2.52	0.44
17:AT:59:ARG:HB2	17:AT:59:ARG:NH1	2.23	0.44
39:DX:21:LEU:HA	39:DX:25:GLN:HB3	1.98	0.44
23:BB:1072:C:N3	23:BB:1092:C:N4	2.65	0.44
23:BB:1812:U:H1'	25:BC:43:ASN:ND2	2.24	0.44
1:AA:1028:C:H2'	1:AA:1029:U:O5'	2.16	0.44
39:BX:21:LEU:HA	39:BX:25:GLN:HB3	1.98	0.44
23:BB:1911:U:H2'	23:BB:1918:A:C2	2.53	0.44
25:BC:76:VAL:HG23	25:BC:96:LYS:NZ	2.33	0.44
24:DI:45:THR:HA	24:DI:48:ILE:CG2	2.40	0.44
18:AB:115:ASP:O	18:AB:119:GLN:HG2	2.17	0.44
23:BB:1869:G:O2'	23:BB:1871:A:N6	2.47	0.44
24:DI:138:VAL:HG12	24:DI:139:VAL:N	2.32	0.44
11:CL:79:ILE:HD12	11:CL:96:THR:CG2	2.47	0.44
44:DQ:51:GLN:O	44:DQ:55:GLN:HG3	2.17	0.44
23:DB:2589:A:H2'	23:DB:2590:A:C8	2.52	0.44
1:AA:208:U:H2'	1:AA:210:C:C5	2.53	0.44
23:BB:1853:A:H2'	23:BB:1854:A:C8	2.52	0.44
23:BB:2086:U:H2'	23:BB:2087:G:H8	1.79	0.44
7:CH:94:VAL:CG2	7:CH:101:ALA:HB2	2.46	0.44
22:BA:60:C:O2'	22:BA:61:G:H5'	2.17	0.44
10:CK:76:TYR:HB3	10:CK:78:ILE:HD11	1.99	0.44
6:AG:66:GLU:N	6:AG:69:ARG:HH21	2.15	0.44
1:CA:664:G:N2	1:CA:741:G:H1	2.13	0.44
23:BB:231:A:H3'	23:BB:232:G:C8	2.53	0.44
2:CC:106:ARG:NE	2:CC:106:ARG:H	2.14	0.44
26:BD:40:LEU:HD23	26:BD:46:ARG:CG	2.46	0.44
33:B1:29:LYS:HA	33:B1:31:GLU:OE1	2.17	0.44
1:CA:763:G:H2'	1:CA:764:C:C6	2.53	0.44
23:BB:2794:C:H2'	23:BB:2795:C:H6	1.81	0.44
1:CA:1147:C:O2	8:CI:17:ARG:NH2	2.50	0.44
21:CN:41:TRP:HA	21:CN:41:TRP:CE3	2.52	0.44
23:DB:576:U:H2'	23:DB:577:G:C8	2.52	0.44
23:BB:21:A:H2'	23:BB:22:C:C6	2.52	0.44
13:AP:41:PRO:O	13:AP:42:ILE:HD13	2.16	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:BA:87:U:C2'	22:BA:88:C:O5'	2.66	0.44
1:AA:681:A:H2'	1:AA:682:G:C8	2.52	0.44
34:D3:56:LEU:O	34:D3:59:ALA:HB3	2.17	0.44
1:CA:1028:C:H3'	1:CA:1029:U:N3	2.32	0.44
2:AC:108:PRO:C	2:AC:110:LEU:H	2.20	0.44
23:BB:506:G:H1'	23:BB:507:A:C8	2.53	0.44
22:DA:76:G:H2'	22:DA:77:U:C6	2.50	0.44
23:DB:2700:A:H2'	23:DB:2701:U:C6	2.52	0.44
24:DI:140:GLU:CD	24:DI:140:GLU:H	2.20	0.44
29:BE:149:ILE:HG23	29:BE:188:MET:HA	2.00	0.44
2:AC:154:GLY:O	2:AC:155:ARG:HB2	2.16	0.44
23:BB:1313:U:O2	23:BB:1313:U:C2'	2.64	0.44
1:AA:1298:U:H4'	1:AA:1299:A:H5'	1.98	0.44
1:CA:1263:C:H2'	1:CA:1264:U:C6	2.52	0.44
5:AF:81:ASN:OD1	5:AF:83:ALA:HB3	2.17	0.44
23:DB:64:A:H2'	23:DB:65:U:H6	1.81	0.44
7:AH:68:LYS:HG3	7:AH:69:ALA:H	1.82	0.44
10:AK:88:PRO:HD3	19:AU:28:LEU:CD1	2.48	0.44
6:CG:70:PRO:HB3	6:CG:102:TRP:HH2	1.82	0.44
11:CL:43:LYS:N	11:CL:44:PRO:HD2	2.31	0.44
1:CA:1210:C:N4	1:CA:1211:U:N3	2.65	0.44
22:BA:21:G:O2'	22:BA:22:U:H5'	2.16	0.44
8:AI:8:THR:O	8:AI:16:ALA:HB3	2.18	0.44
23:DB:2265:U:H3'	23:DB:2266:A:H5''	1.99	0.44
3:AD:17:ASP:OD2	3:AD:27:ILE:HG22	2.17	0.44
4:AE:38:VAL:HG23	4:AE:66:ALA:HB1	1.99	0.44
1:AA:123:U:H5''	1:AA:311:C:O2'	2.17	0.44
32:B4:17:VAL:HG11	32:B4:19:ARG:HE	1.83	0.44
23:BB:2431:U:H2'	23:BB:2433:A:OP2	2.17	0.44
1:AA:616:G:H2'	1:AA:616:G:N3	2.32	0.44
16:AS:20:LYS:HB3	16:AS:20:LYS:HE3	1.86	0.44
23:BB:1961:C:O2'	23:BB:1962:C:H5'	2.17	0.44
44:DQ:97:ILE:C	44:DQ:99:VAL:H	2.19	0.44
29:BE:190:ALA:O	29:BE:194:LYS:HG3	2.17	0.44
1:CA:792:A:H1'	1:CA:794:A:N7	2.32	0.44
9:CJ:52:LEU:HD13	21:CN:80:ARG:HD2	1.98	0.44
21:CN:9:GLU:HB2	21:CN:62:ARG:NH2	2.32	0.44
1:AA:1328:C:H5''	12:AM:27:THR:HB	2.00	0.44
25:DC:150:GLY:O	25:DC:151:GLY:O	2.36	0.44
35:BV:72:VAL:HA	35:BV:94:ALA:H	1.81	0.44
26:BD:107:VAL:CG1	26:BD:108:ASP:N	2.80	0.44
21:CN:53:ASP:C	21:CN:55:SER:H	2.21	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DG:14:VAL:HA	48:DG:26:LYS:O	2.18	0.44
48:DG:34:ARG:N	48:DG:34:ARG:CD	2.78	0.44
29:BE:109:LEU:CD1	29:BE:180:LEU:HD13	2.48	0.44
5:CF:98:GLU:HG2	5:CF:99:ALA:N	2.18	0.44
23:BB:1032:A:C1'	32:B4:23:ILE:HD13	2.35	0.44
26:DD:107:VAL:CG1	26:DD:108:ASP:N	2.80	0.44
43:BO:30:ARG:HG2	43:BO:102:ARG:NH1	2.33	0.44
8:AI:41:GLU:O	8:AI:44:ARG:NH1	2.51	0.44
37:BL:81:ASP:HA	37:BL:84:LYS:CE	2.47	0.44
9:AJ:26:VAL:CG2	9:AJ:74:VAL:HG11	2.44	0.44
42:BN:90:ARG:HB3	42:BN:94:TYR:HE1	1.82	0.44
23:BB:2744:G:H5''	23:BB:2755:C:C5	2.53	0.44
46:BU:73:ASN:H	46:BU:73:ASN:ND2	2.14	0.44
35:DV:24:ASN:HB3	35:DV:44:HIS:HB3	2.00	0.44
35:DV:51:GLN:HA	35:DV:56:PHE:CG	2.53	0.44
45:DS:66:ILE:N	45:DS:66:ILE:HD13	2.19	0.44
49:DR:39:LEU:HD23	49:DR:39:LEU:N	2.32	0.44
40:DH:121:VAL:HB	40:DH:122:LEU:HD22	1.99	0.44
28:BP:80:VAL:HG13	28:BP:81:ASP:N	2.32	0.44
43:DO:106:LEU:CA	43:DO:109:ALA:HB3	2.47	0.44
35:DV:80:HIS:CD2	35:DV:81:PRO:HD2	2.53	0.44
47:DF:102:LEU:HA	47:DF:106:ALA:HB3	1.99	0.44
1:AA:1314:C:OP2	16:AS:5:LYS:HD2	2.18	0.44
46:DU:50:ALA:N	46:DU:53:GLN:HE21	2.13	0.44
18:AB:68:PHE:HD1	18:AB:89:PHE:O	2.00	0.44
18:AB:99:MET:O	18:AB:100:LEU:HD12	2.17	0.44
4:CE:15:ILE:HB	4:CE:35:LEU:O	2.18	0.44
6:AG:22:LEU:O	6:AG:25:PHE:HB3	2.18	0.44
26:DD:121:THR:O	26:DD:122:VAL:HB	2.17	0.44
1:AA:1078:U:H4'	4:AE:137:ARG:NH1	2.32	0.44
42:DN:102:PHE:CE2	45:DS:40:ASN:HB3	2.52	0.44
23:BB:2393:U:H5'	37:BL:60:ARG:O	2.18	0.44
1:AA:373:A:P	1:AA:373:A:H3'	2.58	0.44
39:BX:44:LYS:HG3	39:BX:48:ARG:HH12	1.82	0.44
1:CA:1221:G:H4'	16:CS:76:THR:HG21	1.99	0.44
34:B3:54:LEU:HG	34:B3:58:ILE:CD1	2.44	0.44
27:BK:108:ARG:HA	27:BK:116:ILE:HD13	2.00	0.44
20:CO:13:SER:C	20:CO:14:GLU:HG3	2.36	0.44
23:BB:2769:U:O2'	23:BB:2770:G:H5'	2.18	0.44
23:DB:2526:G:N3	32:D4:1:MET:N	2.65	0.44
20:AO:24:SER:OG	20:AO:27:VAL:HG23	2.17	0.44
2:AC:53:ARG:HH21	2:AC:55:VAL:HG22	1.82	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1552:A:H2'	23:DB:1553:A:C5'	2.47	0.44
7:CH:94:VAL:HG12	7:CH:99:GLY:HA3	2.00	0.44
23:DB:2844:G:O2'	23:DB:2845:U:H5'	2.16	0.44
13:CP:51:ARG:O	13:CP:52:LEU:HB2	2.16	0.44
41:BJ:36:LEU:HD12	41:BJ:121:LYS:HE3	1.98	0.44
48:DG:176:LYS:H	48:DG:176:LYS:CE	2.26	0.44
1:CA:1147:C:H1'	8:CI:17:ARG:NH1	2.32	0.44
18:AB:165:ALA:O	18:AB:166:ASP:C	2.56	0.44
23:BB:1902:C:H4'	25:BC:241:LYS:O	2.17	0.44
23:BB:2109:U:C2'	23:BB:2110:G:H5'	2.47	0.44
38:DM:77:PRO:HD2	38:DM:80:VAL:HG11	2.00	0.44
23:BB:2247:A:H3'	57:BB:3266:HOH:O	2.17	0.44
3:CD:78:ALA:C	3:CD:85:THR:HG23	2.37	0.44
23:BB:2078:C:O2'	23:BB:2079:U:H5'	2.17	0.44
24:BI:56:VAL:HG13	24:BI:58:ILE:HD11	2.00	0.44
23:DB:862:G:H2'	23:DB:863:A:H8	1.82	0.44
1:AA:1200:C:H4'	1:AA:1201:A:H5'	2.00	0.44
21:AN:64:ARG:HB3	21:AN:78:LEU:HD12	1.98	0.44
23:DB:679:C:H2'	23:DB:680:C:H6	1.81	0.44
47:DF:71:LYS:HG2	47:DF:71:LYS:O	2.18	0.44
1:AA:426:U:H2'	1:AA:427:U:C6	2.51	0.44
50:BT:7:LEU:O	50:BT:7:LEU:HD22	2.17	0.44
22:BA:35:C:H2'	22:BA:36:C:C5'	2.47	0.44
23:DB:8:C:O2'	23:DB:9:G:H5'	2.17	0.44
18:CB:107:ARG:HG3	18:CB:108:GLN:N	2.33	0.44
26:BD:142:VAL:HB	26:BD:143:PRO:CD	2.47	0.44
23:DB:121:G:H2'	23:DB:122:G:C8	2.52	0.44
6:CG:6:ILE:HG22	6:CG:7:GLY:N	2.32	0.44
41:DJ:103:ILE:HG13	41:DJ:104:ALA:N	2.32	0.44
23:DB:338:G:N2	23:DB:339:U:H1'	2.32	0.44
23:DB:2776:A:OP1	23:DB:2776:A:H3'	2.17	0.44
40:DH:40:THR:O	40:DH:42:LYS:N	2.48	0.44
47:BF:10:GLU:O	47:BF:14:LYS:HB2	2.18	0.44
24:BI:4:VAL:HG13	24:BI:4:VAL:O	2.16	0.44
38:BM:10:ARG:HH21	38:BM:10:ARG:HG3	1.82	0.44
23:DB:1098:A:C2'	24:DI:4:VAL:C	2.86	0.44
40:BH:124:THR:O	40:BH:146:VAL:HG11	2.18	0.44
12:AM:76:ILE:HG22	12:AM:80:MET:SD	2.58	0.44
25:BC:185:ALA:C	25:BC:187:CYS:H	2.20	0.44
23:BB:1429:G:H2'	23:BB:1430:G:C8	2.52	0.44
48:BG:12:ALA:C	48:BG:14:VAL:H	2.20	0.44
48:BG:18:ILE:HD12	48:BG:42:VAL:HG22	1.99	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
35:BV:51:GLN:HA	35:BV:56:PHE:CG	2.52	0.44
48:DG:43:LYS:HB2	48:DG:50:THR:HB	2.00	0.44
5:AF:91:ARG:H	5:AF:93:LYS:NZ	2.09	0.44
26:DD:105:LYS:H	26:DD:106:LYS:HZ3	1.64	0.44
40:BH:83:LYS:HA	40:BH:148:ALA:CB	2.47	0.44
52:BW:19:ARG:O	52:BW:20:LEU:HD23	2.17	0.44
29:DE:108:ILE:HD12	29:DE:180:LEU:CB	2.47	0.44
8:AI:56:MET:C	8:AI:58:GLU:N	2.66	0.44
48:DG:84:LYS:HG3	48:DG:132:LEU:H	1.80	0.44
35:DV:76:ASP:HA	38:DM:136:MET:HE3	2.00	0.44
44:DQ:111:LYS:NZ	49:DR:50:GLY:HA2	2.32	0.44
49:DR:49:ILE:HG22	49:DR:54:VAL:HB	1.98	0.44
49:DR:8:GLY:HA3	49:DR:23:GLU:HB2	1.99	0.44
40:DH:132:PHE:O	40:DH:139:PHE:HA	2.16	0.44
29:BE:62:GLN:HG2	29:BE:63:LYS:H	1.81	0.44
38:BM:38:ARG:HG2	38:BM:38:ARG:HH11	1.81	0.44
1:AA:1319:A:H4'	1:AA:1320:C:OP1	2.17	0.44
47:BF:33:ILE:HG22	47:BF:34:THR:H	1.82	0.44
47:BF:65:LEU:H	47:BF:88:VAL:HG22	1.82	0.44
30:DY:2:LYS:H	30:DY:2:LYS:HD3	1.82	0.44
18:AB:89:PHE:CE2	18:AB:153:MET:HA	2.52	0.44
47:BF:55:ASP:HA	47:BF:139:GLU:OE2	2.17	0.44
23:DB:2572:A:OP2	26:DD:149:ASN:HB3	2.17	0.44
1:CA:1004:A:H2'	1:CA:1005:A:C8	2.52	0.44
1:CA:998:C:O2'	1:CA:999:C:H5'	2.18	0.44
1:AA:922:G:N3	1:AA:1398:A:C2	2.83	0.44
23:BB:2572:A:OP2	26:BD:152:PRO:HD3	2.16	0.44
46:BU:50:ALA:N	46:BU:53:GLN:HE21	2.12	0.44
37:BL:100:ILE:O	37:BL:100:ILE:HG12	2.17	0.44
43:DO:88:LYS:HG2	43:DO:89:ASP:H	1.81	0.44
23:DB:125:A:H3'	23:DB:126:A:C5'	2.47	0.44
1:CA:1355:G:O2'	1:CA:1356:G:H5'	2.17	0.44
38:DM:57:VAL:O	38:DM:59:ARG:N	2.50	0.44
1:CA:1320:C:C5	16:CS:36:ARG:HA	2.52	0.44
41:DJ:45:THR:HG23	41:DJ:45:THR:O	2.17	0.44
27:DK:108:ARG:HA	27:DK:116:ILE:HD13	1.99	0.44
27:DK:119:ALA:O	27:DK:120:PRO:C	2.55	0.44
23:DB:2538:C:H2'	23:DB:2539:C:C6	2.51	0.44
23:DB:280:U:H2'	23:DB:281:C:C6	2.53	0.44
23:DB:282:A:H2'	23:DB:283:G:C8	2.52	0.44
23:BB:2457:U:O2'	23:BB:2458:G:H5'	2.18	0.44
23:DB:1551:A:H5"	23:DB:1552:A:OP2	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:DS:42:LYS:O	45:DS:45:VAL:HG22	2.17	0.44
23:DB:2187:U:H2'	23:DB:2188:U:H6	1.75	0.44
38:BM:32:GLY:HA3	38:BM:103:TYR:O	2.16	0.44
48:DG:51:PHE:CD2	48:DG:68:ARG:HG2	2.52	0.44
25:DC:93:VAL:HG12	25:DC:101:ARG:O	2.16	0.44
8:AI:115:VAL:O	8:AI:115:VAL:HG13	2.18	0.44
23:BB:99:U:O2	23:BB:99:U:H5'	2.16	0.44
52:BW:46:ALA:HB2	52:BW:78:PHE:HD1	1.83	0.44
21:AN:22:LYS:C	21:AN:25:GLU:HG2	2.37	0.44
1:CA:1127:G:H2'	1:CA:1128:C:C6	2.53	0.44
23:DB:1854:A:C2	23:DB:2087:G:N3	2.85	0.44
1:AA:1344:C:H2'	1:AA:1345:U:H5'	2.00	0.44
52:DW:43:LYS:HD3	52:DW:77:LYS:HG2	2.00	0.44
1:CA:619:U:N3	3:CD:130:ASN:OD1	2.49	0.44
6:AG:110:ARG:HH11	6:AG:118:ARG:HA	1.82	0.44
34:D3:57:VAL:C	34:D3:59:ALA:N	2.70	0.44
15:AR:38:ILE:HG22	15:AR:58:ILE:HG21	1.99	0.44
20:AO:67:LEU:CD1	20:AO:88:ARG:HH22	2.30	0.44
1:CA:1110:A:H2'	1:CA:1111:A:C8	2.52	0.44
20:CO:86:GLY:O	20:CO:87:LEU:HD23	2.17	0.44
1:CA:487:A:H2'	1:CA:488:C:O4'	2.18	0.44
29:BE:188:MET:HG2	29:BE:193:VAL:HG22	1.97	0.44
23:BB:1744:A:H2'	23:BB:1745:A:C8	2.52	0.44
4:CE:87:VAL:HA	4:CE:91:SER:O	2.18	0.44
1:AA:660:C:H2'	1:AA:661:G:O4'	2.16	0.44
23:BB:1290:C:H2'	23:BB:1291:C:C6	2.53	0.44
24:BI:49:GLU:HG3	24:BI:54:ILE:HD11	1.99	0.44
1:CA:87:C:OP1	1:CA:87:C:H4'	2.18	0.44
23:DB:2605:U:H2'	23:DB:2606:C:C6	2.52	0.44
29:BE:148:ILE:HG13	29:BE:167:VAL:CG2	2.47	0.44
1:CA:130:A:N1	1:CA:233:C:H1'	2.33	0.44
1:AA:144:G:H2'	1:AA:145:G:O4'	2.18	0.44
1:CA:144:G:H2'	1:CA:145:G:O4'	2.17	0.44
23:DB:2233:U:H2'	23:DB:2234:G:C8	2.53	0.44
14:AQ:3:LYS:HG3	14:AQ:4:ILE:H	1.82	0.44
52:DW:54:ARG:C	52:DW:56:HIS:H	2.20	0.44
23:DB:2081:U:H2'	23:DB:2082:A:C8	2.52	0.44
1:CA:102:G:O2'	1:CA:103:U:H5'	2.16	0.44
23:BB:24:G:H1'	45:BS:77:ASP:HB3	2.00	0.44
23:DB:659:G:H4'	29:DE:95:LYS:HB3	2.00	0.44
25:BC:34:GLU:O	25:BC:34:GLU:HG3	2.16	0.44
12:CM:48:SER:O	12:CM:49:GLU:C	2.54	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DJ:2:LYS:H	41:DJ:2:LYS:CD	2.31	0.44
23:BB:2305:U:C4'	47:BF:132:ARG:HG2	2.34	0.44
48:DG:25:ILE:CG2	48:DG:78:VAL:HG21	2.46	0.44
5:CF:18:VAL:HG21	5:CF:58:HIS:CG	2.52	0.44
37:DL:123:ARG:CZ	37:DL:124:GLY:H	2.29	0.44
23:BB:1079:C:H2'	23:BB:1080:A:H8	1.83	0.44
24:BI:116:MET:SD	24:BI:124:MET:HB2	2.57	0.44
37:BL:121:THR:HB	37:BL:141:LYS:HB3	1.99	0.44
9:AJ:36:VAL:HA	9:AJ:76:ILE:HB	1.98	0.44
1:AA:8:A:H1'	4:AE:107:GLY:HA2	1.98	0.44
25:DC:43:ASN:HB2	25:DC:49:THR:CG2	2.45	0.44
26:BD:122:VAL:HA	26:BD:127:PHE:N	2.33	0.44
10:CK:80:ASN:ND2	10:CK:80:ASN:N	2.61	0.44
29:BE:60:TRP:HE3	29:BE:60:TRP:HA	1.82	0.44
29:BE:60:TRP:CZ2	29:BE:62:GLN:NE2	2.86	0.44
26:BD:23:PRO:O	26:BD:24:VAL:HB	2.17	0.44
49:BR:39:LEU:CB	49:BR:49:ILE:HG12	2.41	0.44
1:AA:1015:G:O2'	1:AA:1016:A:H5'	2.17	0.44
30:DY:6:ILE:O	30:DY:34:THR:HG23	2.16	0.44
15:CR:41:SER:HB3	15:CR:51:GLN:CG	2.48	0.44
47:DF:169:LEU:HA	47:DF:172:PHE:HD2	1.81	0.44
18:CB:113:LEU:HD12	18:CB:144:GLU:HA	1.99	0.44
25:BC:43:ASN:HB2	25:BC:49:THR:CG2	2.45	0.44
18:AB:27:LYS:O	18:AB:29:PHE:N	2.49	0.44
18:AB:25:LYS:O	18:AB:28:PRO:HD2	2.18	0.44
24:BI:62:ALA:C	24:BI:64:ARG:H	2.21	0.44
2:CC:57:GLU:O	2:CC:64:ARG:N	2.51	0.44
43:DO:47:VAL:O	43:DO:48:LEU:HD23	2.16	0.44
44:DQ:63:ARG:HH12	44:DQ:96:ASP:HA	1.82	0.44
23:DB:2723:C:H2'	23:DB:2724:U:O4'	2.16	0.44
23:DB:1547:C:H2'	23:DB:1548:A:H8	1.82	0.44
8:AI:10:ARG:HA	8:AI:77:ALA:HB1	1.99	0.44
23:DB:2144:G:H3'	23:DB:2145:C:C5'	2.47	0.44
18:AB:116:LEU:HD21	18:AB:136:ARG:HD3	2.00	0.44
23:DB:1864:U:C2'	23:DB:1865:U:H5'	2.48	0.44
13:CP:19:VAL:H	13:CP:38:PHE:HA	1.83	0.44
21:AN:24:ALA:O	21:AN:27:LYS:HG2	2.18	0.44
21:AN:26:LEU:HB2	21:AN:30:ILE:CD1	2.47	0.44
1:CA:652:U:H1'	1:CA:653:U:C6	2.53	0.44
23:BB:233:A:N6	23:BB:428:A:N6	2.63	0.44
43:DO:94:ARG:HD2	43:DO:97:PHE:O	2.17	0.44
23:BB:2276:G:OP2	38:BM:85:GLY:N	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CC:137:VAL:O	2:CC:141:MET:HB2	2.17	0.44
23:BB:1846:G:N2	23:BB:1848:A:H62	2.15	0.44
23:DB:1847:A:H4'	23:DB:1848:A:H8	1.79	0.44
23:BB:79:C:H2'	23:BB:80:G:H8	1.82	0.44
35:DV:53:LYS:HZ3	35:DV:53:LYS:HA	1.83	0.44
23:DB:236:C:O2'	23:DB:237:C:H5'	2.17	0.44
29:BE:149:ILE:HD11	29:BE:172:ALA:HA	1.99	0.44
1:AA:229:U:H2'	1:AA:230:G:H8	1.81	0.44
1:AA:586:C:C2'	1:AA:587:G:H5'	2.47	0.44
50:BT:7:LEU:CA	50:BT:9:LYS:HE3	2.48	0.44
10:AK:34:THR:HB	10:AK:39:ASN:C	2.38	0.44
5:CF:72:ASP:HA	5:CF:75:GLU:OE1	2.16	0.44
23:BB:1259:G:O2'	23:BB:1260:A:H5'	2.17	0.44
33:D1:33:LEU:HD23	33:D1:51:ALA:HB1	1.99	0.44
48:DG:39:ALA:HB1	48:DG:54:ARG:HB2	1.99	0.44
1:CA:990:C:H2'	1:CA:991:U:C6	2.52	0.44
8:AI:9:GLY:HA3	8:AI:80:HIS:HB3	1.99	0.44
6:CG:78:ARG:CD	6:CG:83:THR:HG22	2.47	0.44
23:DB:1596:A:O2'	23:DB:1597:A:H5'	2.17	0.44
23:DB:2714:G:O2'	23:DB:2715:C:H5'	2.17	0.44
27:BK:26:GLY:HA3	27:BK:30:ARG:HH11	1.82	0.44
23:BB:32:C:O2'	23:BB:33:C:H5'	2.16	0.44
22:DA:15:A:O2'	22:DA:16:G:H5'	2.18	0.44
36:B2:18:PHE:CE1	36:B2:22:MET:HG3	2.53	0.44
23:DB:342:A:H2'	23:DB:343:C:O4'	2.17	0.44
31:B0:53:VAL:O	31:B0:54:ILE:HB	2.18	0.44
20:AO:3:LEU:HG	20:AO:4:SER:H	1.82	0.44
25:DC:57:HIS:ND1	25:DC:58:LYS:N	2.63	0.44
23:DB:779:U:OP1	25:DC:48:ILE:HG13	2.18	0.44
46:DU:43:LYS:O	46:DU:57:ILE:HA	2.18	0.44
29:DE:37:ALA:C	29:DE:39:ALA:H	2.20	0.44
21:CN:62:ARG:HB3	21:CN:67:GLY:C	2.38	0.44
23:BB:855:G:H1'	52:BW:23:LYS:HD3	2.00	0.44
50:BT:24:MET:O	50:BT:28:ASN:N	2.46	0.44
9:CJ:15:HIS:H	9:CJ:70:HIS:CE1	2.36	0.44
25:DC:145:MET:HB2	25:DC:152:GLN:NE2	2.32	0.44
35:DV:8:VAL:HG12	35:DV:9:ARG:N	2.32	0.44
41:DJ:124:VAL:O	41:DJ:125:TYR:HB2	2.18	0.44
14:AQ:46:HIS:NE2	14:AQ:48:GLU:HG2	2.33	0.44
14:CQ:20:ILE:CD1	14:CQ:52:CYS:HB2	2.44	0.44
8:AI:66:VAL:HG22	8:AI:67:LYS:N	2.33	0.44
48:BG:84:LYS:O	48:BG:85:LYS:HG2	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:DI:73:PRO:HA	24:DI:74:PRO:HD3	1.93	0.44
23:DB:1181:U:H2'	23:DB:1182:G:C8	2.52	0.44
30:BY:2:LYS:HD3	30:BY:2:LYS:H	1.83	0.44
1:AA:957:U:H4'	16:AS:78:THR:O	2.17	0.44
47:BF:102:LEU:HA	47:BF:106:ALA:HB3	2.00	0.44
23:BB:1141:U:H4'	23:BB:1142:A:C1'	2.47	0.44
25:DC:203:VAL:O	25:DC:204:LEU:HB2	2.17	0.44
26:BD:25:THR:O	26:BD:27:ILE:HG13	2.18	0.44
47:DF:11:VAL:HG21	47:DF:172:PHE:HE1	1.79	0.44
39:DX:59:GLU:N	39:DX:59:GLU:OE2	2.50	0.44
37:DL:103:ILE:O	37:DL:103:ILE:HG22	2.17	0.44
2:CC:149:LYS:HG3	2:CC:168:ARG:HB2	1.99	0.44
26:DD:123:LYS:HD3	26:DD:165:MET:SD	2.57	0.44
2:CC:120:THR:CG2	2:CC:186:SER:HB3	2.47	0.44
1:CA:1103:C:H5''	18:CB:96:LEU:HD22	1.99	0.44
8:AI:55:ASP:CB	8:AI:59:LYS:HD2	2.42	0.44
2:CC:26:LYS:NZ	2:CC:27:GLU:HB3	2.32	0.44
6:AG:90:VAL:HB	6:AG:94:ARG:HD2	1.99	0.44
12:CM:54:THR:OG1	12:CM:55:LEU:HD23	2.16	0.44
23:BB:322:A:H3'	29:BE:163:ASN:HD21	1.82	0.44
6:CG:19:SER:CB	6:CG:22:LEU:HB2	2.47	0.44
23:BB:2590:A:H2'	23:BB:2591:C:H6	1.82	0.44
2:CC:156:LEU:HD22	2:CC:157:GLY:H	1.83	0.44
23:DB:1204:A:N1	23:DB:1241:A:N1	2.66	0.44
37:BL:6:LEU:N	37:BL:6:LEU:HD23	2.28	0.44
6:AG:148:LYS:H	10:AK:55:ARG:HH12	1.65	0.44
23:DB:96:C:H4'	39:DX:41:HIS:ND1	2.33	0.44
11:CL:116:TYR:O	11:CL:118:VAL:HG23	2.18	0.44
23:DB:719:C:H2'	23:DB:720:U:O4'	2.18	0.44
13:CP:38:PHE:CE2	13:CP:51:ARG:HD3	2.52	0.44
23:BB:1488:C:C2'	23:BB:1489:C:H5'	2.47	0.44
3:CD:18:LEU:HB2	3:CD:20:LEU:HG	1.99	0.44
23:DB:169:G:O2'	23:DB:170:U:H5'	2.17	0.44
23:DB:656:G:H2'	23:DB:657:U:C6	2.53	0.44
1:AA:678:U:H4'	1:AA:778:G:OP1	2.17	0.44
23:DB:1465:G:H2'	23:DB:1466:U:O4'	2.18	0.44
23:BB:273:G:H2'	23:BB:274:C:H6	1.80	0.44
23:BB:1779:U:H5''	23:BB:1780:A:H5''	1.99	0.44
23:BB:845:A:H3'	23:BB:845:A:H8	1.83	0.44
46:DU:17:ASP:CA	46:DU:20:LYS:HE3	2.46	0.44
1:CA:1527:U:H2'	1:CA:1528:U:C6	2.52	0.44
23:DB:2818:U:O2'	23:DB:2819:G:H5'	2.18	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
37:BL:50:PHE:O	37:BL:52:GLY:N	2.50	0.44
23:DB:1228:G:H2'	23:DB:1229:C:C6	2.52	0.44
42:DN:8:ARG:HG2	42:DN:10:LEU:HD22	1.98	0.44
11:CL:15:VAL:O	11:CL:16:ALA:C	2.55	0.44
23:DB:2700:A:O2'	23:DB:2701:U:H5'	2.18	0.44
29:BE:2:GLU:OE1	29:BE:13:THR:N	2.50	0.44
23:BB:446:G:H5''	44:BQ:2:ARG:HH22	1.82	0.44
23:BB:1576:U:O2'	23:BB:1577:C:H5'	2.17	0.44
22:DA:90:C:OP1	38:DM:16:ARG:HB2	2.17	0.44
23:BB:1936:A:H61	23:BB:1963:U:H3	1.60	0.44
23:BB:709:U:H2'	23:BB:710:U:C6	2.53	0.44
1:CA:1133:G:H2'	1:CA:1134:G:C8	2.52	0.44
6:AG:68:VAL:CG1	6:AG:133:ALA:HB1	2.46	0.44
1:AA:659:U:H2'	1:AA:660:C:H6	1.82	0.44
24:BI:44:LYS:O	24:BI:48:ILE:HG13	2.17	0.44
7:AH:110:MET:SD	7:AH:115:ALA:HB2	2.58	0.44
27:DK:107:LEU:N	27:DK:107:LEU:HD12	2.32	0.44
1:AA:960:U:H6	1:AA:1222:G:HO2'	1.61	0.44
23:BB:64:A:H2'	23:BB:65:U:H6	1.82	0.44
1:CA:125:U:H2'	1:CA:126:G:H8	1.83	0.44
36:D2:18:PHE:CE1	36:D2:22:MET:HG3	2.53	0.44
23:BB:406:G:O2'	23:BB:407:G:H5'	2.18	0.44
22:DA:110:C:H2'	22:DA:111:U:O4'	2.17	0.44
23:BB:1838:C:N4	23:BB:1898:U:H2'	2.33	0.44
13:AP:70:ARG:O	13:AP:73:ALA:HB3	2.18	0.44
18:AB:144:GLU:HA	18:AB:148:GLY:CA	2.48	0.44
23:DB:242:G:N2	23:DB:254:G:H2'	2.33	0.44
23:BB:915:C:H3'	23:BB:916:G:H8	1.81	0.44
25:BC:32:LEU:O	25:BC:63:ILE:HG12	2.17	0.44
23:BB:1426:G:H1'	23:BB:1572:A:N6	2.32	0.44
1:AA:325:A:H2'	1:AA:326:G:O4'	2.17	0.44
1:AA:880:C:H2'	1:AA:881:G:H8	1.81	0.44
20:CO:68:ASP:N	20:CO:68:ASP:OD1	2.47	0.44
8:CI:36:GLN:HG2	8:CI:36:GLN:O	2.18	0.44
36:B2:39:ARG:HH11	36:B2:39:ARG:HG3	1.82	0.44
23:DB:1426:G:H1'	23:DB:1572:A:N6	2.33	0.44
23:DB:756:A:H2'	23:DB:757:G:O4'	2.18	0.44
1:AA:1171:A:O2'	1:AA:1172:C:H5'	2.18	0.44
1:CA:325:A:H2'	1:CA:326:G:O4'	2.17	0.44
23:DB:1099:G:C5'	24:DI:4:VAL:HG12	2.48	0.44
23:BB:2307:G:N7	23:BB:2311:A:H5''	2.32	0.44
8:CI:21:LYS:HB3	8:CI:61:ASP:OD2	2.17	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1328:C:H5''	12:AM:27:THR:CB	2.47	0.44
23:BB:547:A:O2'	23:BB:548:G:H5'	2.18	0.44
25:DC:183:VAL:HG22	25:DC:184:GLU:H	1.82	0.44
25:BC:171:VAL:HG23	25:BC:185:ALA:HB2	2.00	0.44
25:DC:143:VAL:HG12	25:DC:144:GLU:N	2.32	0.44
25:DC:149:LYS:HG2	25:DC:152:GLN:HE22	1.82	0.44
35:BV:86:LEU:O	35:BV:87:GLN:HG3	2.18	0.44
26:BD:172:VAL:HG12	26:BD:173:GLN:O	2.18	0.44
35:DV:35:GLU:HB2	35:DV:93:ARG:CZ	2.48	0.44
35:DV:4:ILE:O	35:DV:64:VAL:N	2.50	0.44
2:CC:35:ASP:HA	2:CC:38:VAL:HG22	1.99	0.44
2:CC:62:SER:C	2:CC:63:ILE:HG13	2.37	0.44
23:BB:141:G:N1	50:BT:1:MET:HA	2.33	0.44
37:DL:121:THR:HB	37:DL:141:LYS:HB3	1.98	0.44
22:BA:30:C:H2'	22:BA:30:C:O2	2.18	0.44
1:AA:1290:G:H2'	1:AA:1291:U:C6	2.53	0.44
23:DB:1725:U:H2'	23:DB:1726:C:C6	2.53	0.44
23:BB:1159:U:OP1	30:BY:30:ARG:NH2	2.50	0.44
2:AC:149:LYS:O	2:AC:200:TRP:HE3	2.01	0.44
1:CA:978:A:O2'	1:CA:1322:C:H5	2.01	0.44
15:CR:42:ARG:HG3	15:CR:43:ILE:H	1.83	0.44
23:BB:1654:A:O2'	26:BD:118:PHE:CB	2.66	0.44
23:BB:1998:A:H2'	23:BB:1999:C:C6	2.53	0.44
33:B1:35:LEU:HD23	33:B1:36:LYS:N	2.32	0.44
24:DI:57:VAL:HG23	24:DI:71:LYS:HZ1	1.81	0.44
27:DK:72:PRO:O	27:DK:74:GLY:N	2.51	0.44
43:DO:112:GLU:OE1	43:DO:113:ALA:N	2.51	0.44
47:BF:91:ARG:C	47:BF:95:MET:HB2	2.37	0.44
18:CB:68:PHE:O	18:CB:90:PHE:HA	2.17	0.44
23:BB:496:G:C1'	45:BS:61:ASN:HD22	2.30	0.44
23:DB:2314:A:H4'	47:DF:34:THR:HG21	1.98	0.44
1:CA:1397:C:H4'	1:CA:1398:A:OP2	2.17	0.44
1:CA:865:A:H5'	1:CA:1078:U:O4	2.18	0.44
4:CE:132:PRO:HG2	4:CE:133:ILE:H	1.82	0.44
1:AA:926:G:H3'	1:AA:1505:G:N2	2.23	0.44
1:CA:1411:C:H2'	1:CA:1412:C:H6	1.83	0.44
57:DB:3474:HOH:O	37:DL:99:ASN:HA	2.17	0.44
23:DB:2621:G:P	26:DD:124:ARG:HH22	2.41	0.44
23:DB:2259:U:H1'	23:DB:2427:C:C2	2.53	0.44
42:DN:31:HIS:O	42:DN:33:ILE:HG22	2.17	0.44
23:DB:2393:U:H5'	37:DL:60:ARG:O	2.18	0.44
38:DM:35:ALA:CB	38:DM:100:LYS:H	2.30	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:947:G:H2'	1:CA:948:C:C6	2.53	0.44
12:CM:72:ILE:HG23	12:CM:73:SER:N	2.32	0.44
16:CS:48:ILE:HB	16:CS:59:VAL:O	2.18	0.44
23:DB:1999:C:O2'	23:DB:2000:C:H5'	2.18	0.44
40:BH:4:ILE:O	40:BH:36:ALA:HA	2.18	0.44
38:DM:106:ASP:O	38:DM:108:VAL:N	2.51	0.44
11:CL:79:ILE:O	11:CL:101:LEU:HD12	2.18	0.44
27:DK:26:GLY:HA3	27:DK:30:ARG:HH11	1.83	0.44
1:CA:880:C:H2'	1:CA:881:G:H8	1.82	0.44
45:BS:26:GLY:N	45:BS:71:VAL:HG13	2.32	0.44
13:CP:28:ARG:HD2	13:CP:29:ASN:N	2.28	0.44
23:DB:188:G:OP1	51:DZ:14:THR:HG22	2.18	0.44
1:AA:815:A:H4'	1:AA:817:C:C4	2.52	0.44
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.52	0.44
1:CA:284:C:O2'	1:CA:285:C:H5'	2.17	0.44
1:AA:737:C:H2'	1:AA:738:C:H6	1.82	0.44
23:DB:607:U:O4	23:DB:620:G:H5''	2.17	0.44
21:CN:25:GLU:O	21:CN:29:ILE:HG13	2.18	0.44
1:CA:1296:C:H4'	1:CA:1302:C:N4	2.33	0.44
1:CA:926:G:N2	1:CA:1505:G:H2'	2.32	0.44
23:DB:1411:U:H2'	23:DB:1412:U:C6	2.53	0.44
2:AC:109:GLU:O	2:AC:110:LEU:HD23	2.18	0.44
23:DB:1047:G:H3'	23:DB:1048:A:H5'	2.00	0.44
42:DN:2:ARG:HG2	42:DN:2:ARG:O	2.18	0.44
41:DJ:114:LEU:HG	41:DJ:118:MET:CE	2.47	0.44
23:BB:1544:A:H2'	23:BB:1545:A:C8	2.53	0.44
23:BB:2901:C:H2'	23:BB:2902:C:H5'	1.99	0.44
1:AA:1048:G:O3'	1:AA:1049:U:H3'	2.17	0.44
26:BD:56:LYS:O	26:BD:58:ASN:N	2.51	0.44
21:CN:20:PHE:CD2	21:CN:24:ALA:HB2	2.53	0.44
23:BB:2805:C:O2'	23:BB:2806:C:H5'	2.17	0.44
23:BB:1936:A:H2	23:BB:1943:U:O4	2.01	0.44
1:AA:105:G:H2'	1:AA:106:C:H6	1.83	0.44
23:BB:325:G:H2'	23:BB:326:G:H8	1.83	0.44
31:D0:35:GLU:HG3	31:D0:45:ASP:OD1	2.18	0.44
31:B0:35:GLU:HG3	31:B0:45:ASP:OD1	2.17	0.44
1:AA:620:C:O2	3:AD:131:ILE:HG21	2.18	0.44
23:DB:1395:A:H4'	23:DB:1397:U:C5	2.52	0.44
47:DF:2:LYS:CD	47:DF:2:LYS:H	2.30	0.44
23:DB:510:C:O2'	23:DB:511:U:H5'	2.18	0.44
23:DB:1754:A:N1	23:DB:2716:C:O2'	2.50	0.44
2:AC:4:VAL:HG21	21:AN:97:LYS:HZ2	1.82	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BC:20:ASN:OD1	25:BC:22:GLU:HG2	2.17	0.44
23:BB:2694:G:H2'	23:BB:2695:U:H6	1.83	0.44
1:CA:1453:G:H2'	1:CA:1454:G:O4'	2.17	0.44
25:BC:212:TRP:CD1	25:BC:212:TRP:C	2.90	0.44
23:BB:963:U:H2'	23:BB:964:C:C6	2.53	0.44
23:BB:509:C:H5'	23:BB:510:C:OP2	2.17	0.44
10:CK:124:LYS:O	19:CU:33:ARG:NE	2.44	0.44
1:AA:1328:C:H5''	12:AM:27:THR:HG21	1.99	0.44
50:DT:28:ASN:HA	50:DT:91:GLN:NE2	2.32	0.44
50:DT:58:VAL:HA	50:DT:84:TYR:O	2.17	0.44
52:BW:59:PHE:CE2	52:BW:61:LYS:HA	2.52	0.44
50:BT:27:SER:O	50:BT:28:ASN:CB	2.66	0.44
50:BT:29:THR:HG22	50:BT:86:THR:CG2	2.46	0.44
9:CJ:12:ALA:CB	9:CJ:18:ILE:HB	2.47	0.44
6:CG:30:MET:HE3	6:CG:33:GLY:H	1.81	0.44
35:BV:26:PHE:HE2	35:BV:44:HIS:HA	1.83	0.44
2:CC:63:ILE:HG22	2:CC:65:VAL:HG13	1.98	0.44
5:AF:3:HIS:NE2	5:AF:65:GLU:HG3	2.33	0.44
1:AA:255:G:H5'	14:AQ:17:GLU:O	2.17	0.44
14:AQ:18:LYS:HA	14:AQ:47:ASP:O	2.18	0.44
40:BH:116:ARG:HB2	40:BH:116:ARG:CZ	2.47	0.44
40:BH:99:ILE:CD1	40:BH:144:VAL:HG11	2.47	0.44
40:BH:75:LEU:HD13	40:BH:78:VAL:HG21	1.99	0.44
43:BO:30:ARG:HG3	43:BO:30:ARG:HH11	1.83	0.44
1:AA:1351:U:O2'	1:AA:1352:C:H5'	2.17	0.44
42:DN:70:THR:C	42:DN:72:ASP:H	2.21	0.44
43:DO:35:ILE:C	43:DO:36:TYR:HD2	2.21	0.44
43:DO:34:HIS:HB3	43:DO:36:TYR:HE2	1.83	0.44
9:AJ:5:ARG:N	9:AJ:77:VAL:HA	2.33	0.44
48:BG:163:TYR:O	48:BG:164:ALA:C	2.56	0.44
32:B4:16:ILE:HG23	32:B4:24:ARG:O	2.18	0.44
48:BG:38:ASP:OD2	48:BG:63:GLN:HG2	2.17	0.44
28:DP:3:ILE:CG2	28:DP:4:ILE:N	2.80	0.44
46:DU:73:ASN:ND2	46:DU:73:ASN:H	2.15	0.44
26:DD:12:THR:HG22	26:DD:13:ARG:H	1.83	0.44
23:BB:2442:C:H2'	23:BB:2443:C:C6	2.53	0.44
28:BP:80:VAL:CG1	28:BP:81:ASP:N	2.81	0.44
38:DM:40:ARG:NH2	38:DM:73:ILE:HD12	2.33	0.44
12:CM:70:ARG:HH11	12:CM:70:ARG:HG2	1.82	0.44
44:BQ:89:ILE:O	44:BQ:90:ASP:HB2	2.17	0.44
1:AA:1314:C:H5	16:AS:5:LYS:HD3	1.83	0.44
43:BO:28:VAL:HB	43:BO:92:PHE:CE1	2.52	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:955:U:O2'	1:AA:956:U:H5'	2.18	0.44
47:BF:33:ILE:HG22	47:BF:34:THR:N	2.32	0.44
1:CA:1085:U:H3'	1:CA:1086:U:C5	2.53	0.44
18:AB:52:ALA:HA	18:AB:197:PHE:CE1	2.43	0.44
18:CB:57:ASN:HB3	18:CB:219:THR:C	2.38	0.44
23:DB:1141:U:H4'	23:DB:1142:A:C1'	2.46	0.44
41:DJ:101:ILE:O	41:DJ:105:VAL:HG22	2.18	0.44
1:CA:1005:A:H2'	1:CA:1006:G:O4'	2.18	0.44
1:CA:1007:U:O2'	1:CA:1008:U:H5'	2.18	0.44
23:BB:2729:G:H2'	23:BB:2730:C:H6	1.83	0.44
46:BU:51:LEU:CD2	46:BU:52:ASN:H	2.30	0.44
17:AT:59:ARG:HH11	17:AT:59:ARG:CB	2.25	0.44
23:BB:1287:A:H3'	23:BB:1288:G:H21	1.82	0.44
46:DU:14:THR:HG23	46:DU:15:GLY:N	2.33	0.44
40:DH:4:ILE:CG1	40:DH:18:GLN:HB2	2.44	0.44
18:AB:187:ASP:OD1	18:AB:203:ASP:HB3	2.18	0.44
38:BM:100:LYS:HD3	38:BM:101:VAL:H	1.82	0.44
41:DJ:82:GLY:O	41:DJ:84:ILE:HG22	2.18	0.44
6:AG:137:ARG:HD3	6:AG:141:HIS:CE1	2.53	0.44
24:DI:100:ILE:HG23	24:DI:104:GLN:OE1	2.18	0.44
1:AA:1372:U:H2'	1:AA:1373:G:O4'	2.17	0.44
23:DB:1553:A:H2'	23:DB:1555:G:N7	2.33	0.44
12:CM:2:ARG:HH22	12:CM:56:ARG:NH1	2.16	0.44
23:BB:930:G:C1'	30:BY:24:LEU:HD11	2.44	0.44
28:DP:100:ARG:HB3	28:DP:101:GLU:H	1.68	0.44
11:CL:81:ILE:CG2	11:CL:94:TYR:HB3	2.47	0.44
50:BT:50:LEU:O	50:BT:52:GLU:N	2.46	0.44
40:DH:60:GLU:OE2	40:DH:63:ALA:HA	2.18	0.44
16:CS:5:LYS:HB2	16:CS:6:LYS:H	1.47	0.44
23:DB:1488:C:C2'	23:DB:1489:C:H5'	2.48	0.44
22:BA:87:U:H2'	22:BA:88:C:C5'	2.48	0.44
23:DB:2420:C:OP1	34:D3:33:THR:HB	2.18	0.44
1:AA:137:U:H2'	1:AA:138:G:H8	1.83	0.44
23:DB:1353:A:H2'	23:DB:1354:A:H8	1.78	0.44
1:AA:1008:U:O2	1:AA:1008:U:H2'	2.17	0.44
1:AA:719:C:H2'	15:AR:38:ILE:CD1	2.48	0.44
22:DA:50:A:OP1	43:DO:68:LYS:HG3	2.17	0.44
3:CD:78:ALA:HB1	3:CD:88:ASN:HB2	2.00	0.44
23:BB:1409:U:H2'	23:BB:1410:G:C8	2.53	0.44
1:CA:252:U:H2'	1:CA:253:A:C8	2.52	0.44
6:AG:80:GLY:C	6:AG:82:SER:H	2.21	0.44
23:BB:329:G:H22	46:BU:16:LYS:HE3	1.83	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:303:G:H2'	23:DB:304:U:C6	2.53	0.44
23:DB:325:G:H2'	23:DB:326:G:H8	1.82	0.44
1:CA:636:U:H2'	1:CA:637:C:H6	1.83	0.44
31:D0:2:VAL:HG12	31:D0:3:GLN:N	2.33	0.44
43:DO:7:ARG:HA	43:DO:10:ARG:CD	2.48	0.44
23:DB:1313:U:O2	23:DB:1313:U:C2'	2.66	0.44
1:CA:124:C:O2'	1:CA:125:U:H5'	2.18	0.44
18:CB:93:HIS:O	18:CB:94:ARG:C	2.56	0.44
1:AA:790:A:H2'	1:AA:791:G:C8	2.53	0.44
23:BB:2419:U:H5''	33:B1:21:THR:HG21	1.99	0.44
35:DV:11:GLU:HB2	35:DV:16:ALA:CB	2.48	0.44
1:AA:1438:G:O2'	1:AA:1439:G:H5'	2.17	0.44
25:BC:202:ARG:HB2	25:BC:202:ARG:HH21	1.83	0.44
25:DC:42:ARG:NH2	25:DC:48:ILE:HD11	2.32	0.44
7:AH:5:PRO:HB2	7:AH:32:LYS:NZ	2.33	0.44
23:DB:1403:A:O2'	23:DB:1404:C:H5'	2.18	0.44
23:BB:2484:G:O2'	23:BB:2485:G:H5'	2.17	0.44
3:CD:17:ASP:OD2	3:CD:27:ILE:HG22	2.17	0.44
1:AA:963:G:O2'	1:AA:964:A:H5'	2.17	0.44
48:DG:115:GLN:H	48:DG:115:GLN:CD	2.21	0.44
23:BB:312:G:H2'	23:BB:313:G:H8	1.83	0.44
23:BB:690:G:H2'	23:BB:691:C:O4'	2.17	0.44
1:AA:167:A:O2'	1:AA:168:G:H5'	2.18	0.44
1:AA:1265:C:O2'	1:AA:1266:G:H5'	2.18	0.44
23:DB:43:G:H2'	23:DB:44:A:O4'	2.18	0.44
1:AA:1453:G:H2'	1:AA:1454:G:O4'	2.18	0.44
23:BB:1338:G:C2'	23:BB:1339:G:H5'	2.48	0.44
8:CI:5:TYR:CD1	8:CI:20:ILE:HG22	2.50	0.44
50:DT:55:VAL:HA	50:DT:87:LEU:HA	1.98	0.44
50:BT:30:ILE:HG23	50:BT:85:VAL:HB	1.98	0.44
52:DW:50:VAL:HG23	52:DW:61:LYS:CE	2.48	0.44
48:BG:25:ILE:HG22	48:BG:78:VAL:HG21	2.00	0.44
29:BE:196:VAL:HG12	29:BE:200:LEU:HD23	1.99	0.44
1:CA:255:G:H5'	14:CQ:17:GLU:O	2.18	0.44
12:AM:106:ARG:NH1	12:AM:109:LYS:HZ3	2.16	0.44
10:AK:85:VAL:O	10:AK:111:ASP:HA	2.18	0.44
23:BB:2658:C:H5'	48:BG:159:LYS:NZ	2.32	0.44
6:CG:67:ASN:HB3	6:CG:137:ARG:HH21	1.82	0.44
1:CA:719:C:H2'	15:CR:38:ILE:HD11	2.00	0.44
44:DQ:87:VAL:CB	49:DR:52:PRO:HG3	2.46	0.44
18:AB:53:LEU:HB3	18:AB:219:THR:CG2	2.48	0.44
26:DD:24:VAL:CG2	26:DD:188:LEU:HB3	2.45	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DH:133:GLN:HA	40:DH:138:VAL:HB	2.00	0.44
30:BY:5:LYS:CE	30:BY:58:GLU:HA	2.48	0.44
35:BV:81:PRO:HG2	38:BM:20:LEU:HD12	2.00	0.44
38:BM:71:LYS:HB3	38:BM:93:VAL:O	2.18	0.44
1:AA:1270:G:H4'	1:AA:1313:U:O2'	2.18	0.44
31:D0:28:SER:HB2	31:D0:39:ARG:HE	1.80	0.44
37:BL:116:VAL:O	37:BL:118:THR:N	2.51	0.44
18:AB:113:LEU:HD12	18:AB:143:LEU:HB3	1.99	0.44
18:CB:218:ALA:O	18:CB:222:GLU:HG2	2.18	0.44
6:AG:11:ILE:O	6:AG:11:ILE:HD12	2.18	0.44
29:DE:5:LEU:HD13	29:DE:122:GLU:HG3	2.00	0.44
23:BB:729:G:H4'	23:BB:763:G:O5'	2.18	0.44
6:AG:117:LEU:HD22	6:AG:121:ASN:ND2	2.32	0.44
6:AG:20:GLU:O	6:AG:23:ALA:HB3	2.18	0.44
40:DH:6:LEU:O	40:DH:7:ASP:HB2	2.18	0.44
23:BB:2595:G:N2	23:BB:2598:A:OP2	2.42	0.44
37:BL:55:MET:HE1	37:BL:59:ARG:NE	2.33	0.44
2:AC:15:LYS:HE3	2:AC:181:ILE:O	2.18	0.44
1:CA:947:G:H4'	12:CM:107:THR:HG23	1.99	0.44
16:CS:35:ARG:HH12	16:CS:76:THR:CG2	2.31	0.44
49:DR:6:GLN:HE22	49:DR:10:LYS:N	2.16	0.44
27:DK:19:VAL:HB	27:DK:41:ILE:CG1	2.47	0.44
27:BK:11:ALA:HB3	27:BK:85:VAL:HG23	1.98	0.44
26:DD:115:GLY:O	42:DN:3:HIS:NE2	2.49	0.44
1:AA:842:U:H2'	1:AA:843:U:O3'	2.18	0.44
23:BB:719:C:H2'	23:BB:720:U:O4'	2.17	0.44
23:DB:2496:C:H5'	38:DM:82:MET:HG3	1.99	0.44
11:AL:120:ARG:HG3	11:AL:120:ARG:HH11	1.83	0.44
11:CL:107:LYS:H	11:CL:107:LYS:CD	2.28	0.44
2:CC:104:GLU:CG	2:CC:105:VAL:N	2.81	0.44
2:CC:105:VAL:HA	2:CC:106:ARG:CZ	2.47	0.44
23:DB:16:C:H2'	23:DB:17:G:H8	1.82	0.44
1:AA:737:C:H2'	1:AA:738:C:C6	2.52	0.44
23:BB:873:C:H2'	23:BB:874:G:C8	2.53	0.44
10:AK:18:GLY:HA2	10:AK:36:ARG:CG	2.45	0.44
23:BB:414:C:H1'	23:BB:1864:U:H1'	2.00	0.44
3:AD:24:VAL:HG23	3:AD:25:ARG:H	1.83	0.44
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.52	0.44
23:DB:2249:U:N3	23:DB:2253:G:OP2	2.51	0.44
6:AG:111:GLY:HA2	6:AG:118:ARG:NH1	2.33	0.44
5:AF:49:TYR:HE1	15:AR:62:ARG:O	2.00	0.44
21:CN:72:PHE:CG	21:CN:73:LEU:N	2.86	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
24:BI:135:MET:HG3	24:BI:137:LEU:HG	2.00	0.44
23:BB:2700:A:H2'	23:BB:2701:U:C6	2.53	0.44
1:CA:6:G:H4'	1:CA:298:A:H4'	1.98	0.44
23:DB:1808:A:H5''	23:DB:1809:A:OP2	2.18	0.44
45:DS:5:ALA:CB	45:DS:54:ALA:HB2	2.48	0.44
23:BB:708:G:H2'	23:BB:709:U:C6	2.53	0.44
5:CF:79:ARG:NH2	5:CF:87:SER:HB3	2.33	0.44
23:DB:1259:G:O2'	23:DB:1260:A:H5'	2.17	0.44
23:BB:1153:C:O2'	23:BB:1154:G:H5'	2.17	0.44
30:DY:40:THR:HG22	30:DY:42:ALA:H	1.82	0.44
1:AA:1073:U:O2'	18:AB:104:LYS:HE3	2.17	0.44
23:BB:2014:A:H2'	23:BB:2015:A:C8	2.53	0.44
44:DQ:104:ALA:C	44:DQ:106:THR:H	2.20	0.44
23:DB:688:U:O2'	23:DB:689:A:H5'	2.17	0.44
23:DB:1341:G:N2	23:DB:1398:C:H4'	2.33	0.44
23:DB:1320:C:H5	23:DB:1329:U:H5''	1.82	0.44
23:BB:2488:G:O2'	23:BB:2489:U:H5'	2.17	0.44
23:DB:2725:A:HO2'	23:DB:2726:A:P	2.41	0.44
1:AA:1437:A:H2'	1:AA:1438:G:H8	1.82	0.44
23:BB:1623:G:O2'	23:BB:1624:U:H5'	2.18	0.44
23:DB:1985:C:O2'	23:DB:1986:C:H5'	2.18	0.44
23:BB:370:G:O2'	23:BB:423:A:H3'	2.18	0.44
23:BB:43:G:H2'	23:BB:44:A:O4'	2.17	0.44
23:DB:1836:C:O2'	23:DB:1837:C:H5'	2.17	0.44
23:DB:715:A:H2'	23:DB:716:A:O4'	2.18	0.44
26:BD:70:LYS:HD3	26:BD:70:LYS:O	2.18	0.44
47:DF:114:ARG:HA	47:DF:114:ARG:HH21	1.83	0.44
18:CB:69:VAL:CG2	18:CB:162:VAL:HB	2.25	0.43
50:BT:89:GLU:C	50:BT:91:GLN:H	2.22	0.43
9:CJ:9:ARG:NE	9:CJ:99:GLN:NE2	2.66	0.43
23:DB:1819:A:H4'	23:DB:1820:U:H5''	2.00	0.43
23:BB:2773:C:H2'	23:BB:2774:C:H6	1.83	0.43
29:BE:108:ILE:HD11	29:BE:181:ILE:CA	2.48	0.43
1:CA:254:G:O2'	1:CA:255:G:H5'	2.18	0.43
14:CQ:60:ILE:HD13	14:CQ:60:ILE:N	2.32	0.43
40:BH:109:GLU:O	40:BH:110:VAL:HG13	2.18	0.43
52:BW:18:LYS:HE2	52:BW:19:ARG:NH2	2.33	0.43
29:DE:109:LEU:HD13	29:DE:180:LEU:HD13	1.99	0.43
22:DA:115:A:H2'	22:DA:116:G:C8	2.53	0.43
48:BG:91:VAL:HG23	48:BG:92:GLY:N	2.32	0.43
46:DU:26:ASN:ND2	46:DU:26:ASN:N	2.65	0.43
15:AR:42:ARG:HG3	15:AR:43:ILE:H	1.81	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
19:CU:3:ILE:HG21	19:CU:19:LYS:HA	2.00	0.43
32:B4:36:ARG:O	32:B4:37:GLN:C	2.56	0.43
23:BB:2146:C:OP1	23:BB:2146:C:H2'	2.18	0.43
26:BD:117:GLY:HA2	26:BD:164:GLN:HE22	1.83	0.43
28:BP:50:ARG:HB3	28:BP:56:SER:HB3	2.00	0.43
47:DF:113:PHE:CZ	47:DF:175:PRO:HB2	2.50	0.43
23:DB:2886:A:N6	31:D0:39:ARG:CZ	2.81	0.43
13:AP:38:PHE:CZ	13:AP:51:ARG:HD3	2.52	0.43
28:DP:20:ARG:HD2	28:DP:21:PRO:HD2	2.00	0.43
1:CA:1003:G:H21	1:CA:1005:A:H5'	1.82	0.43
25:BC:204:LEU:HB3	25:BC:209:ALA:HB3	1.99	0.43
40:DH:4:ILE:HD13	40:DH:44:ILE:HG22	2.00	0.43
1:AA:1030:U:H5'	1:AA:1031:C:C5	2.53	0.43
4:AE:132:PRO:HG2	4:AE:133:ILE:H	1.83	0.43
1:AA:372:C:H1'	1:AA:373:A:OP2	2.18	0.43
1:CA:1320:C:H42	16:CS:35:ARG:CD	2.31	0.43
4:AE:93:VAL:HA	4:AE:126:ALA:CB	2.47	0.43
23:BB:1509:A:H4'	23:BB:1510:G:O5'	2.17	0.43
32:D4:16:ILE:HG12	32:D4:25:VAL:CG2	2.48	0.43
40:BH:3:VAL:HG12	40:BH:38:PRO:HA	2.00	0.43
39:BX:32:ALA:C	39:BX:34:SER:H	2.22	0.43
12:CM:2:ARG:HA	12:CM:7:ASN:O	2.18	0.43
2:AC:6:PRO:HA	2:AC:9:ILE:CG2	2.45	0.43
23:DB:2649:C:H2'	23:DB:2650:U:C6	2.53	0.43
48:DG:63:GLN:O	48:DG:66:THR:HG22	2.17	0.43
41:DJ:93:ILE:CA	41:DJ:97:PRO:HG3	2.46	0.43
1:AA:820:U:H4'	1:AA:821:G:OP2	2.18	0.43
1:CA:475:C:O2'	1:CA:476:U:H5'	2.17	0.43
38:BM:107:GLY:O	38:BM:108:VAL:HB	2.18	0.43
1:AA:503:C:O2'	1:AA:504:C:H5'	2.18	0.43
23:DB:107:G:C2	23:DB:108:G:C8	3.06	0.43
23:BB:2180:U:O2	23:BB:2180:U:C2'	2.65	0.43
29:BE:46:GLN:HB3	29:BE:86:ALA:CA	2.48	0.43
2:CC:76:ILE:CD1	2:CC:102:ILE:HG21	2.47	0.43
23:BB:1946:U:H2'	23:BB:1947:C:H6	1.83	0.43
1:AA:676:A:H2'	1:AA:677:U:H6	1.83	0.43
15:AR:33:THR:HG22	15:AR:39:VAL:CG1	2.48	0.43
23:DB:1409:U:H2'	23:DB:1410:G:C8	2.52	0.43
23:BB:131:A:O2'	23:BB:132:G:H5'	2.18	0.43
1:AA:91:U:H6	1:AA:91:U:O5'	2.01	0.43
52:BW:33:GLY:O	52:BW:34:SER:HB2	2.18	0.43
23:BB:1410:G:H2'	23:BB:1411:U:H6	1.82	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:BA:32:U:H4'	22:BA:52:A:H62	1.81	0.43
23:BB:435:C:C2'	23:BB:436:C:H5'	2.48	0.43
23:DB:1517:G:O2'	23:DB:1518:C:H5'	2.18	0.43
23:DB:697:G:H2'	23:DB:698:C:C6	2.53	0.43
1:CA:613:C:H2'	1:CA:614:C:H6	1.83	0.43
23:DB:1745:A:H2'	23:DB:1746:A:H8	1.83	0.43
11:CL:82:ARG:HG2	11:CL:82:ARG:NH1	2.32	0.43
1:CA:1229:A:H2'	1:CA:1230:C:C6	2.52	0.43
14:CQ:34:GLY:O	14:CQ:35:LYS:C	2.56	0.43
23:BB:1785:A:O2'	23:BB:1786:A:H2'	2.18	0.43
1:CA:620:C:O2	3:CD:131:ILE:HG21	2.18	0.43
1:AA:969:A:O2'	1:AA:970:C:H5'	2.17	0.43
29:DE:37:ALA:O	29:DE:39:ALA:N	2.38	0.43
23:DB:2611:C:O2'	23:DB:2612:C:H5'	2.18	0.43
38:DM:74:THR:HG22	38:DM:89:VAL:HA	1.98	0.43
9:CJ:17:LEU:O	9:CJ:20:GLN:HB2	2.18	0.43
49:BR:57:GLY:HA2	49:BR:103:ALA:HA	2.00	0.43
1:AA:83:C:HO2'	1:AA:84:U:P	2.41	0.43
23:BB:944:C:H5'	23:BB:945:A:C5'	2.48	0.43
4:AE:9:GLU:O	4:AE:40:ASP:HA	2.18	0.43
1:CA:258:G:N3	1:CA:258:G:H2'	2.33	0.43
25:DC:6:LYS:C	25:DC:8:THR:H	2.21	0.43
8:CI:56:MET:O	8:CI:57:VAL:HB	2.18	0.43
12:AM:3:ILE:HA	12:AM:56:ARG:CG	2.46	0.43
50:BT:34:VAL:HG21	50:BT:43:ILE:CD1	2.47	0.43
1:CA:1117:A:O2'	1:CA:1118:U:H5'	2.18	0.43
1:CA:1119:C:O2'	1:CA:1120:C:H5'	2.17	0.43
23:BB:726:G:HO2'	23:BB:727:A:P	2.40	0.43
4:AE:84:VAL:CG1	4:AE:146:MET:HB3	2.47	0.43
35:DV:25:LYS:HE2	35:DV:41:GLU:OE1	2.18	0.43
48:DG:25:ILE:HD12	48:DG:25:ILE:H	1.83	0.43
29:BE:108:ILE:HD13	37:BL:2:ARG:HH22	1.82	0.43
5:AF:98:GLU:O	5:AF:99:ALA:HB3	2.18	0.43
40:BH:59:ALA:HA	40:BH:62:LEU:HD11	2.00	0.43
14:AQ:20:ILE:HD12	14:AQ:47:ASP:CB	2.48	0.43
23:BB:917:A:H5''	23:BB:2268:A:H61	1.83	0.43
42:BN:79:LEU:O	42:BN:80:PHE:HB2	2.19	0.43
43:BO:51:ALA:N	43:BO:78:VAL:HG13	2.33	0.43
37:BL:141:LYS:HZ2	37:BL:143:GLU:HA	1.82	0.43
43:DO:30:ARG:HG2	43:DO:102:ARG:NH1	2.33	0.43
23:DB:1730:C:O2'	23:DB:1731:G:N2	2.51	0.43
12:CM:21:ILE:HG23	12:CM:65:GLU:OE2	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DG:163:TYR:O	48:DG:164:ALA:C	2.56	0.43
32:B4:16:ILE:HG12	32:B4:25:VAL:CG2	2.47	0.43
48:BG:139:VAL:O	48:BG:143:VAL:HG13	2.18	0.43
45:DS:66:ILE:CD1	45:DS:66:ILE:H	2.16	0.43
28:DP:50:ARG:CD	28:DP:56:SER:HB3	2.48	0.43
41:BJ:45:THR:N	41:BJ:46:PRO:CD	2.81	0.43
49:BR:23:GLU:O	49:BR:24:LYS:C	2.55	0.43
16:AS:39:ILE:HD13	16:AS:68:HIS:HB2	1.99	0.43
21:AN:52:ARG:O	21:AN:54:SER:N	2.50	0.43
13:AP:19:VAL:H	13:AP:38:PHE:HA	1.83	0.43
23:BB:1141:U:H5'	41:BJ:27:ARG:NH2	2.32	0.43
24:DI:23:VAL:HG12	24:DI:27:LEU:HD21	1.99	0.43
1:CA:202:G:H2'	1:CA:203:G:C8	2.53	0.43
3:CD:152:SER:HA	3:CD:155:LYS:CD	2.42	0.43
7:AH:6:ILE:HD11	7:AH:31:LEU:HD23	1.99	0.43
23:DB:1419:A:H1'	23:DB:1579:A:N6	2.33	0.43
1:AA:87:C:N4	1:AA:88:U:C2	2.86	0.43
1:CA:191:G:H2'	1:CA:192:A:H8	1.83	0.43
23:BB:2191:A:H2'	23:BB:2192:U:C6	2.54	0.43
23:DB:2539:C:H4'	32:D4:3:VAL:HG11	2.00	0.43
23:DB:279:A:H3'	23:DB:280:U:H6	1.82	0.43
1:AA:241:G:O2'	1:AA:242:G:H5'	2.19	0.43
23:DB:2733:A:H3'	23:DB:2733:A:C8	2.54	0.43
1:CA:1253:G:OP1	9:CJ:46:LYS:HE2	2.18	0.43
1:CA:819:A:H4'	1:CA:820:U:OP2	2.16	0.43
23:BB:2373:G:H2'	23:BB:2374:C:H6	1.82	0.43
1:AA:549:C:H2'	1:AA:550:G:C8	2.53	0.43
1:CA:1476:A:H2'	1:CA:1477:U:C6	2.53	0.43
11:CL:106:VAL:HA	11:CL:107:LYS:NZ	2.34	0.43
36:D2:3:ARG:NH2	36:D2:3:ARG:HG2	2.31	0.43
1:AA:1324:A:H2'	1:AA:1325:C:C6	2.52	0.43
23:BB:2215:C:H2'	23:BB:2216:G:H8	1.82	0.43
16:CS:6:LYS:HZ3	16:CS:6:LYS:HA	1.81	0.43
23:DB:2895:G:H2'	23:DB:2896:C:H6	1.84	0.43
23:DB:825:A:H1'	37:DL:54:GLN:HE21	1.79	0.43
11:CL:35:ARG:HA	11:CL:35:ARG:NE	2.33	0.43
23:DB:2808:G:HO2'	23:DB:2809:A:H8	1.66	0.43
23:DB:192:C:C2'	23:DB:193:U:H5'	2.47	0.43
1:CA:1272:G:H2'	1:CA:1273:C:C6	2.53	0.43
44:DQ:11:ALA:C	44:DQ:13:HIS:N	2.72	0.43
1:AA:1476:A:H2'	1:AA:1477:U:H6	1.80	0.43
23:BB:1049:C:H2'	23:BB:1050:A:H8	1.82	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:DE:1:MET:HB3	29:DE:14:VAL:O	2.18	0.43
23:DB:522:A:H2'	23:DB:523:C:H6	1.82	0.43
1:CA:71:A:O2'	1:CA:72:A:H5''	2.18	0.43
22:DA:91:C:H2'	22:DA:92:C:H6	1.84	0.43
41:DJ:88:THR:HG22	41:DJ:91:GLU:HG3	2.00	0.43
1:CA:1061:G:H2'	1:CA:1062:U:O4'	2.17	0.43
23:DB:337:C:H2'	23:DB:338:G:O4'	2.17	0.43
29:DE:190:ALA:O	29:DE:194:LYS:HG3	2.19	0.43
23:DB:2484:G:O2'	23:DB:2485:G:H5'	2.18	0.43
26:DD:141:ARG:O	26:DD:141:ARG:HG3	2.18	0.43
23:BB:1330:C:H2'	23:BB:1331:G:H8	1.83	0.43
24:DI:1:ALA:C	24:DI:2:LYS:HD2	2.39	0.43
12:AM:38:ILE:CB	12:AM:55:LEU:HD21	2.48	0.43
1:AA:1523:G:P	10:AK:124:LYS:HZ1	2.41	0.43
50:BT:58:VAL:HA	50:BT:84:TYR:O	2.18	0.43
9:CJ:7:ARG:O	9:CJ:100:ILE:HG22	2.18	0.43
1:CA:1238:A:C2	1:CA:1241:G:N3	2.86	0.43
23:DB:2060:A:H3'	29:DE:63:LYS:NZ	2.34	0.43
1:AA:122:G:O5'	1:AA:122:G:H8	2.01	0.43
48:DG:15:ASP:OD1	48:DG:26:LYS:HD2	2.18	0.43
29:BE:108:ILE:HD11	29:BE:181:ILE:N	2.34	0.43
5:AF:38:ARG:NH2	5:AF:63:ASN:HD21	2.17	0.43
23:DB:2773:C:O2'	23:DB:2774:C:H5'	2.19	0.43
40:BH:68:ARG:C	40:BH:72:ILE:HG22	2.39	0.43
2:CC:18:ASN:HA	2:CC:53:ARG:NH2	2.29	0.43
23:BB:857:G:O2'	52:BW:19:ARG:HD2	2.18	0.43
29:DE:108:ILE:HD11	29:DE:181:ILE:N	2.33	0.43
42:BN:73:ASN:C	42:BN:76:VAL:HG22	2.38	0.43
23:DB:138:U:O3'	23:DB:139:U:H3'	2.18	0.43
23:DB:141:G:H5'	23:DB:142:A:OP2	2.19	0.43
48:BG:90:GLY:HA3	48:BG:93:TYR:CE1	2.52	0.43
23:BB:2144:G:N2	23:BB:2146:C:O4'	2.50	0.43
45:BS:59:GLU:CD	45:BS:66:ILE:HG23	2.39	0.43
44:BQ:59:LEU:HD13	44:BQ:60:TRP:N	2.33	0.43
18:AB:161:PHE:HA	18:AB:183:PHE:O	2.17	0.43
18:AB:184:ALA:O	18:AB:199:ILE:HB	2.18	0.43
18:CB:68:PHE:CE1	18:CB:88:GLN:HB3	2.52	0.43
18:CB:85:SER:HB2	18:CB:88:GLN:NE2	2.24	0.43
23:DB:493:G:H2'	23:DB:494:G:O4'	2.18	0.43
20:AO:57:LEU:O	20:AO:60:VAL:HB	2.18	0.43
51:BZ:7:VAL:HG13	51:BZ:8:THR:CG2	2.40	0.43
26:BD:149:ASN:OD1	26:BD:150:GLN:N	2.51	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:110:ILE:HG21	18:CB:151:LYS:O	2.18	0.43
13:CP:6:LEU:CD1	13:CP:71:VAL:HB	2.47	0.43
1:CA:481:G:HO2'	1:CA:482:A:H8	1.64	0.43
24:DI:21:PRO:HB2	24:DI:22:PRO:CD	2.43	0.43
23:BB:992:C:O2'	23:BB:993:G:H5'	2.19	0.43
23:BB:2749:A:OP1	23:BB:2751:G:H5''	2.19	0.43
23:DB:946:C:H2'	23:DB:947:A:H8	1.84	0.43
31:B0:31:LYS:HG2	31:B0:32:THR:N	2.33	0.43
16:CS:39:ILE:HG21	16:CS:61:VAL:CG2	2.48	0.43
2:CC:25:THR:O	2:CC:26:LYS:C	2.56	0.43
41:BJ:81:ILE:HG12	41:BJ:82:GLY:N	2.32	0.43
23:BB:2734:A:C2'	23:BB:2735:G:H5'	2.46	0.43
36:D2:31:LEU:HB3	36:D2:42:LEU:HD11	2.01	0.43
20:AO:22:THR:HA	20:AO:27:VAL:HG11	2.00	0.43
1:CA:1167:A:H2'	1:CA:1169:A:N7	2.32	0.43
25:BC:174:ARG:HG3	25:BC:180:MET:HE1	1.99	0.43
23:BB:2080:A:N6	23:BB:2241:A:N6	2.66	0.43
23:DB:2075:U:H2'	23:DB:2238:G:H22	1.83	0.43
37:DL:50:PHE:O	37:DL:52:GLY:N	2.52	0.43
24:BI:12:VAL:HG23	24:BI:41:PHE:CE2	2.54	0.43
1:CA:1481:U:O2'	1:CA:1482:G:H5'	2.17	0.43
23:BB:2666:C:O5'	23:BB:2666:C:O2	2.37	0.43
23:BB:1299:G:H4'	23:BB:1301:A:H1'	2.01	0.43
8:CI:46:VAL:CG2	8:CI:75:ALA:HB1	2.48	0.43
1:AA:1093:A:N3	1:AA:1095:U:H5'	2.32	0.43
23:BB:968:C:H2'	23:BB:969:G:H8	1.84	0.43
23:DB:597:G:H21	37:DL:12:SER:HA	1.84	0.43
34:B3:44:ARG:N	34:B3:45:PRO:CD	2.80	0.43
23:BB:1808:A:H5''	23:BB:1809:A:OP2	2.18	0.43
23:BB:1401:G:H2'	23:BB:1402:U:C6	2.53	0.43
28:DP:39:LEU:HD12	28:DP:39:LEU:N	2.33	0.43
23:DB:416:U:H2'	23:DB:417:C:C6	2.53	0.43
1:CA:692:U:C2	1:CA:694:A:H5''	2.53	0.43
1:CA:1111:A:O2'	1:CA:1112:C:H5'	2.18	0.43
29:DE:2:GLU:OE1	29:DE:13:THR:N	2.52	0.43
23:BB:833:A:H2'	23:BB:834:G:C8	2.54	0.43
23:BB:679:C:H2'	23:BB:680:C:C6	2.52	0.43
41:DJ:40:HIS:HD1	41:DJ:41:LYS:H	1.66	0.43
23:BB:2895:G:H2'	23:BB:2896:C:C6	2.53	0.43
47:DF:71:LYS:HE2	47:DF:73:VAL:HB	1.99	0.43
1:CA:992:U:H2'	1:CA:1043:G:N7	2.33	0.43
5:AF:79:ARG:NH2	5:AF:87:SER:HB3	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
7:AH:54:THR:HG23	7:AH:55:LYS:N	2.33	0.43
19:CU:11:PHE:CE1	19:CU:13:VAL:HG12	2.52	0.43
23:BB:1720:U:O2'	23:BB:1721:G:H5'	2.18	0.43
14:CQ:30:HIS:CG	14:CQ:33:TYR:HB2	2.54	0.43
1:CA:62:U:H2'	1:CA:63:C:C6	2.53	0.43
1:AA:126:G:OP1	1:AA:605:U:O2'	2.37	0.43
23:DB:2405:G:H1'	23:DB:2412:A:N6	2.33	0.43
23:DB:409:G:H2'	23:DB:410:G:H8	1.83	0.43
23:DB:2369:A:H2'	23:DB:2370:G:H8	1.83	0.43
24:DI:102:ARG:HG3	24:DI:141:ASP:CB	2.48	0.43
23:DB:443:A:C8	29:DE:40:ARG:HD3	2.53	0.43
23:BB:2752:C:H2'	23:BB:2753:A:O4'	2.18	0.43
32:D4:19:ARG:O	32:D4:20:ASP:HB2	2.18	0.43
23:BB:2415:G:H2'	23:BB:2416:C:C6	2.53	0.43
32:D4:31:PRO:O	32:D4:34:LYS:HB3	2.18	0.43
23:DB:1686:C:H2'	23:DB:1687:G:O4'	2.18	0.43
23:BB:2835:A:H61	23:BB:2878:U:H2'	1.83	0.43
23:DB:500:G:N2	23:DB:502:A:H3'	2.33	0.43
23:DB:2617:U:O2'	23:DB:2618:G:H5'	2.19	0.43
29:DE:7:ASP:OD2	29:DE:7:ASP:N	2.51	0.43
2:AC:189:HIS:ND1	2:AC:189:HIS:N	2.66	0.43
1:CA:64:G:H3'	1:CA:64:G:OP1	2.18	0.43
23:DB:370:G:O2'	23:DB:423:A:H3'	2.18	0.43
4:CE:38:VAL:HG23	4:CE:66:ALA:HB1	2.01	0.43
23:DB:1930:G:H22	23:DB:1969:A:P	2.40	0.43
23:DB:2139:U:O2'	23:DB:2140:G:H5'	2.18	0.43
1:AA:721:G:H4'	1:AA:722:G:O4'	2.18	0.43
49:DR:68:ARG:NH1	49:DR:90:ARG:HD3	2.34	0.43
21:CN:9:GLU:OE1	21:CN:61:ASN:N	2.52	0.43
50:DT:17:SER:N	50:DT:21:SER:OG	2.51	0.43
37:DL:18:ARG:C	37:DL:19:LEU:HD12	2.38	0.43
35:DV:72:VAL:HA	35:DV:94:ALA:H	1.82	0.43
48:DG:12:ALA:C	48:DG:14:VAL:H	2.22	0.43
48:DG:16:VAL:HG13	48:DG:23:ILE:CG2	2.48	0.43
40:BH:104:THR:HA	40:BH:109:GLU:OE2	2.18	0.43
40:BH:117:LEU:HD21	40:BH:130:VAL:HG22	1.98	0.43
12:AM:105:ALA:O	12:AM:109:LYS:HG3	2.18	0.43
10:AK:83:VAL:HG11	10:AK:96:ILE:HG12	2.01	0.43
23:BB:1159:U:O2'	23:BB:1160:G:H5'	2.18	0.43
48:DG:139:VAL:O	48:DG:143:VAL:HG13	2.18	0.43
24:DI:72:THR:OG1	24:DI:73:PRO:HD2	2.18	0.43
10:CK:17:ASP:OD2	10:CK:36:ARG:HD3	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
33:D1:35:LEU:HD23	33:D1:36:LYS:N	2.32	0.43
47:DF:106:ALA:HA	47:DF:135:ILE:CD1	2.48	0.43
12:CM:74:MET:HE3	47:DF:111:ARG:HB3	1.99	0.43
41:BJ:4:PHE:CG	41:BJ:5:THR:N	2.87	0.43
18:CB:86:CYS:SG	18:CB:88:GLN:NE2	2.88	0.43
45:BS:60:HIS:CG	45:BS:61:ASN:H	2.36	0.43
51:BZ:5:CYS:O	51:BZ:7:VAL:N	2.46	0.43
47:DF:23:SER:O	47:DF:26:GLN:HB2	2.19	0.43
1:AA:1191:A:H5''	2:AC:3:LYS:HE3	2.00	0.43
17:AT:73:ARG:O	17:AT:77:ASN:ND2	2.51	0.43
26:BD:3:GLY:C	26:BD:4:LEU:HD13	2.38	0.43
1:CA:134:G:H2'	1:CA:135:C:O4'	2.18	0.43
26:DD:118:PHE:HZ	26:DD:123:LYS:NZ	2.16	0.43
26:DD:116:LYS:HD3	26:DD:123:LYS:HE2	2.00	0.43
23:BB:2259:U:H2'	23:BB:2260:C:H6	1.84	0.43
41:BJ:81:ILE:HG23	41:BJ:82:GLY:N	2.27	0.43
50:BT:39:THR:C	50:BT:41:ALA:H	2.22	0.43
23:BB:2733:A:H2'	23:BB:2734:A:O4'	2.19	0.43
23:BB:2589:A:H2'	23:BB:2590:A:C8	2.53	0.43
27:DK:70:ARG:CD	27:DK:76:VAL:HG22	2.49	0.43
45:BS:42:LYS:O	45:BS:45:VAL:HG22	2.19	0.43
23:DB:2185:U:H2'	23:DB:2186:G:H8	1.84	0.43
48:DG:6:ALA:HB3	48:DG:68:ARG:NE	2.33	0.43
23:DB:470:A:N6	50:DT:72:GLN:HE22	2.14	0.43
48:BG:6:ALA:HB3	48:BG:68:ARG:NE	2.33	0.43
23:BB:593:U:H2'	23:BB:594:U:H6	1.79	0.43
1:CA:735:C:H2'	1:CA:736:C:C6	2.53	0.43
1:CA:735:C:O2'	1:CA:736:C:H5'	2.18	0.43
1:AA:598:U:H2'	1:AA:599:C:H6	1.82	0.43
3:CD:81:LEU:HB2	3:CD:88:ASN:HD22	1.83	0.43
20:CO:87:LEU:O	20:CO:89:ARG:N	2.41	0.43
22:DA:32:U:H4'	22:DA:52:A:H62	1.81	0.43
23:DB:397:U:H2'	23:DB:398:C:H6	1.79	0.43
23:DB:2562:U:C2'	23:DB:2563:U:H5'	2.48	0.43
26:DD:56:LYS:C	26:DD:58:ASN:N	2.72	0.43
23:DB:1746:A:H2'	23:DB:1747:U:C6	2.53	0.43
23:BB:1683:U:H2'	23:BB:1684:G:H8	1.82	0.43
34:B3:22:LYS:HA	34:B3:48:MET:HA	2.00	0.43
24:BI:52:LEU:O	24:BI:54:ILE:HG13	2.19	0.43
30:DY:43:ILE:O	30:DY:47:ILE:HG12	2.18	0.43
23:DB:753:A:H2'	23:DB:754:U:H6	1.84	0.43
29:BE:7:ASP:OD2	29:BE:7:ASP:N	2.51	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
4:AE:45:VAL:O	4:AE:71:ILE:HG22	2.19	0.43
29:BE:98:LYS:HG2	29:BE:102:ARG:NH1	2.34	0.43
23:BB:1660:G:O2'	23:BB:1661:G:H5'	2.18	0.43
1:CA:627:G:H2'	1:CA:628:G:C8	2.53	0.43
41:BJ:88:THR:HG22	41:BJ:91:GLU:HG3	2.01	0.43
9:CJ:82:LYS:CD	9:CJ:82:LYS:N	2.81	0.43
23:BB:1708:C:H2'	23:BB:1709:U:H6	1.84	0.43
23:BB:1900:A:N1	23:BB:1970:A:C6	2.86	0.43
1:AA:152:A:H3'	1:AA:153:C:C6	2.54	0.43
23:BB:1700:A:H3'	23:BB:1701:A:H8	1.83	0.43
25:DC:122:ALA:O	25:DC:124:LYS:N	2.50	0.43
2:CC:145:ALA:C	2:CC:147:GLY:N	2.72	0.43
23:DB:2190:G:O2'	23:DB:2191:A:H5'	2.18	0.43
1:CA:44:A:H2'	1:CA:45:G:H8	1.82	0.43
23:BB:1499:C:H2'	23:BB:1500:G:H8	1.83	0.43
23:DB:730:A:O2'	23:DB:731:C:H5'	2.17	0.43
24:DI:70:THR:O	24:DI:70:THR:HG23	2.18	0.43
1:CA:616:G:H2'	1:CA:616:G:N3	2.32	0.43
1:AA:93:U:O5'	1:AA:93:U:H6	2.02	0.43
25:BC:122:ALA:O	25:BC:124:LYS:N	2.51	0.43
3:AD:96:ARG:NH1	3:AD:133:SER:HA	2.33	0.43
21:CN:60:ARG:NH2	21:CN:69:PRO:HD3	2.33	0.43
23:DB:1431:A:O2'	23:DB:1432:G:H5'	2.19	0.43
1:AA:1534:A:N6	19:AU:43:GLU:HG2	2.33	0.43
19:AU:41:THR:C	19:AU:45:LYS:HB2	2.38	0.43
23:DB:2305:U:H5''	47:DF:130:GLY:HA3	2.00	0.43
23:DB:921:C:H2'	23:DB:922:C:C6	2.53	0.43
1:CA:1333:A:C2	1:CA:1334:G:H1'	2.53	0.43
48:BG:24:THR:HG23	48:BG:34:ARG:HD3	2.01	0.43
26:DD:8:LYS:O	26:DD:9:VAL:HB	2.17	0.43
35:BV:60:VAL:HG12	35:BV:61:LEU:N	2.27	0.43
35:BV:4:ILE:HG21	35:BV:63:ILE:HG13	2.01	0.43
26:BD:110:THR:HG23	26:BD:171:THR:CA	2.48	0.43
15:AR:57:ALA:HA	15:AR:60:ARG:HH11	1.84	0.43
40:BH:104:THR:HA	40:BH:109:GLU:OE1	2.17	0.43
50:BT:2:ILE:N	50:BT:2:ILE:HD13	2.33	0.43
44:DQ:6:GLY:N	44:DQ:8:ILE:HD13	2.34	0.43
24:BI:78:LEU:HD13	24:BI:108:ILE:HG23	1.99	0.43
37:BL:81:ASP:HA	37:BL:84:LYS:HE2	2.01	0.43
3:AD:157:ALA:O	3:AD:160:LEU:HD22	2.17	0.43
2:AC:61:LYS:O	2:AC:97:PRO:HD2	2.19	0.43
23:DB:1062:G:H2'	23:DB:1063:G:C8	2.54	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DH:112:LYS:O	40:DH:115:VAL:HG12	2.18	0.43
35:DV:80:HIS:CD2	35:DV:83:LYS:HB2	2.53	0.43
1:AA:1085:U:H3'	1:AA:1086:U:C5	2.54	0.43
18:AB:95:TRP:CZ3	18:AB:170:ILE:HG22	2.53	0.43
36:B2:10:LEU:O	36:B2:14:ARG:HG3	2.18	0.43
20:AO:57:LEU:HD11	23:BB:715:A:N7	2.33	0.43
8:AI:118:ARG:NH2	8:AI:122:ARG:NH2	2.65	0.43
42:DN:96:ARG:HE	42:DN:116:VAL:HA	1.84	0.43
2:AC:11:LEU:O	2:AC:12:GLY:C	2.54	0.43
48:BG:94:ARG:NH2	48:BG:105:SER:N	2.66	0.43
23:DB:2468:A:H2'	23:DB:2476:A:C5	2.52	0.43
23:BB:580:U:H4'	44:BQ:30:VAL:HG21	2.00	0.43
27:DK:105:ARG:H	27:DK:105:ARG:HD3	1.84	0.43
19:AU:8:ASN:O	19:AU:9:GLU:HB3	2.18	0.43
2:CC:11:LEU:HD11	21:CN:87:ALA:O	2.17	0.43
23:BB:1442:U:H2'	23:BB:1443:U:C6	2.54	0.43
2:AC:125:ARG:HB3	2:AC:127:VAL:HG13	2.00	0.43
6:CG:3:ARG:HB3	6:CG:4:ARG:H	1.55	0.43
46:BU:8:ASP:O	46:BU:24:VAL:HG23	2.19	0.43
50:BT:48:GLN:NE2	50:BT:48:GLN:HA	2.33	0.43
23:BB:656:G:H2'	23:BB:657:U:C6	2.54	0.43
22:DA:60:C:O2'	22:DA:61:G:H5'	2.18	0.43
48:BG:9:VAL:HA	48:BG:48:THR:HG22	1.99	0.43
1:CA:1126:U:O2'	1:CA:1127:G:H8	2.01	0.43
23:BB:968:C:O2'	23:BB:969:G:H5'	2.17	0.43
1:CA:1381:U:O2'	1:CA:1382:C:H5'	2.18	0.43
42:BN:8:ARG:HG2	42:BN:10:LEU:HD22	2.00	0.43
22:DA:32:U:H1'	22:DA:52:A:N7	2.33	0.43
34:B3:57:VAL:C	34:B3:59:ALA:N	2.71	0.43
17:AT:54:GLN:N	17:AT:55:PRO:CD	2.81	0.43
11:AL:35:ARG:HA	11:AL:35:ARG:NE	2.33	0.43
23:DB:2442:C:H2'	23:DB:2443:C:H6	1.83	0.43
23:DB:237:C:O2'	23:DB:238:C:H5'	2.19	0.43
1:AA:230:G:H2'	1:AA:231:U:O4'	2.17	0.43
22:BA:15:A:O2'	22:BA:16:G:H5'	2.19	0.43
1:CA:71:A:HO2'	1:CA:72:A:H5''	1.82	0.43
30:BY:40:THR:HG22	30:BY:42:ALA:H	1.84	0.43
1:AA:636:U:H2'	1:AA:637:C:H6	1.82	0.43
44:BQ:38:VAL:O	44:BQ:39:ILE:C	2.57	0.43
7:CH:5:PRO:HB2	7:CH:32:LYS:NZ	2.34	0.43
33:D1:3:GLY:O	33:D1:4:ILE:HG12	2.19	0.43
20:AO:69:TYR:HA	20:AO:72:ARG:HE	1.83	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1076:C:H2'	23:DB:1077:A:C8	2.54	0.43
29:BE:37:ALA:C	29:BE:39:ALA:H	2.20	0.43
1:CA:1437:A:H2'	1:CA:1438:G:H8	1.84	0.43
28:DP:105:LYS:HD3	28:DP:105:LYS:HA	1.90	0.43
23:DB:1711:A:H2'	23:DB:1712:U:C6	2.53	0.43
23:DB:1688:U:O2	23:DB:1700:A:H5'	2.19	0.43
1:AA:1121:U:H2'	1:AA:1122:U:O4'	2.18	0.43
49:DR:90:ARG:O	49:DR:91:GLN:HB3	2.19	0.43
1:AA:197:A:N1	1:AA:220:G:O2'	2.50	0.43
23:DB:2553:G:H2'	23:DB:2554:U:O4'	2.18	0.43
40:DH:79:THR:HG22	40:DH:80:ILE:O	2.18	0.43
1:AA:227:G:O2'	1:AA:228:A:H5'	2.18	0.43
5:AF:54:LEU:N	5:AF:54:LEU:HD22	2.33	0.43
23:DB:932:U:O2	23:DB:932:U:O4'	2.32	0.43
23:BB:2081:U:H2'	23:BB:2082:A:C8	2.52	0.43
1:AA:174:A:O2'	1:AA:175:C:H5'	2.17	0.43
23:DB:944:C:H5'	23:DB:945:A:C5'	2.48	0.43
23:BB:1669:A:O3'	23:BB:2549:G:H5'	2.19	0.43
23:DB:1099:G:N7	24:DI:3:LYS:CD	2.81	0.43
1:CA:1203:C:H4'	21:CN:66:THR:HG22	2.00	0.43
8:CI:27:ILE:CG2	8:CI:62:LEU:HD21	2.47	0.43
19:CU:40:PRO:HG2	19:CU:41:THR:H	1.83	0.43
18:CB:185:ILE:HG12	18:CB:199:ILE:HB	1.99	0.43
12:AM:52:ILE:HG12	12:AM:56:ARG:NH2	2.34	0.43
50:BT:57:VAL:HG22	50:BT:58:VAL:N	2.22	0.43
9:CJ:87:LEU:HA	9:CJ:90:LEU:HG	2.01	0.43
35:BV:41:GLU:O	35:BV:42:LEU:HD23	2.19	0.43
2:CC:39:ARG:NH1	2:CC:39:ARG:HG3	2.34	0.43
21:CN:48:GLN:HG3	21:CN:49:THR:N	2.34	0.43
29:BE:18:THR:HA	29:BE:106:LYS:HG2	2.00	0.43
5:CF:18:VAL:N	5:CF:19:PRO:HD2	2.34	0.43
5:AF:18:VAL:N	5:AF:19:PRO:HD2	2.34	0.43
5:AF:62:MET:O	5:AF:63:ASN:HB2	2.18	0.43
26:DD:172:VAL:HG11	26:DD:175:LEU:HD11	2.01	0.43
23:DB:143:C:H2'	23:DB:144:A:C8	2.53	0.43
37:BL:123:ARG:CZ	37:BL:124:GLY:H	2.30	0.43
6:CG:63:VAL:O	6:CG:67:ASN:ND2	2.51	0.43
23:DB:637:A:C5'	37:DL:112:LEU:HD21	2.48	0.43
18:AB:49:PHE:HA	18:AB:212:TYR:OH	2.18	0.43
3:CD:160:LEU:HD23	3:CD:164:ARG:HH22	1.83	0.43
46:BU:17:ASP:CA	46:BU:20:LYS:HE3	2.47	0.43
47:DF:176:PHE:HB3	47:DF:177:ARG:H	1.59	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BR:6:GLN:HE22	49:BR:10:LYS:N	2.17	0.43
28:DP:24:THR:N	28:DP:87:ARG:O	2.51	0.43
41:DJ:26:GLY:O	41:DJ:27:ARG:C	2.57	0.43
23:DB:1792:G:O2'	23:DB:1793:C:H5'	2.19	0.43
10:CK:51:PHE:HZ	10:CK:61:ALA:HA	1.84	0.43
28:BP:63:ILE:CA	28:BP:68:GLY:HA2	2.41	0.43
1:CA:891:U:O2'	1:CA:892:A:H5'	2.19	0.43
39:DX:43:LEU:O	39:DX:47:ARG:HG3	2.17	0.43
39:BX:56:LEU:O	39:BX:57:LEU:HB3	2.19	0.43
12:CM:93:GLY:HA2	12:CM:108:ARG:NH1	2.32	0.43
1:CA:1084:G:H5'	1:CA:1102:A:OP2	2.19	0.43
18:CB:98:GLY:C	18:CB:100:LEU:N	2.72	0.43
47:BF:11:VAL:HG12	47:BF:15:LEU:HD11	2.00	0.43
17:CT:74:HIS:O	17:CT:78:LEU:HG	2.18	0.43
7:AH:64:TYR:CA	7:AH:70:VAL:HG23	2.49	0.43
1:AA:1392:G:O2'	1:AA:1393:U:H5'	2.18	0.43
27:DK:99:ILE:N	27:DK:118:LEU:CD2	2.82	0.43
17:AT:2:ASN:CG	17:AT:3:ILE:N	2.72	0.43
23:DB:277:G:H1'	23:DB:278:A:C2	2.53	0.43
23:DB:1509:A:H4'	23:DB:1510:G:O5'	2.18	0.43
25:BC:102:TYR:C	25:BC:103:ILE:HG13	2.38	0.43
23:DB:2674:G:H4'	27:DK:30:ARG:HD2	2.01	0.43
23:DB:1607:C:N4	23:DB:1622:G:C5	2.85	0.43
18:CB:80:LYS:HE2	18:CB:81:ASP:OD1	2.18	0.43
25:BC:250:GLN:CG	25:BC:254:LYS:HG2	2.48	0.43
1:AA:664:G:N2	1:AA:741:G:H1	2.11	0.43
1:AA:1166:G:N1	1:AA:1169:A:OP2	2.48	0.43
23:BB:1854:A:C2	23:BB:2087:G:N3	2.85	0.43
3:AD:78:ALA:HB1	3:AD:88:ASN:HB2	2.00	0.43
26:DD:14:ILE:HA	28:DP:11:GLN:HE22	1.84	0.43
23:DB:2899:A:O2'	23:DB:2900:A:H5'	2.18	0.43
1:AA:1276:G:O2'	1:AA:1277:C:H5'	2.19	0.43
21:CN:34:ASN:N	21:CN:40:ARG:N	2.66	0.43
23:DB:353:C:N4	23:DB:354:A:N6	2.66	0.43
3:CD:117:VAL:O	3:CD:130:ASN:HA	2.19	0.43
13:AP:48:GLU:HG3	13:AP:49:GLY:N	2.30	0.43
1:AA:681:A:H2'	1:AA:682:G:H8	1.84	0.43
1:CA:1270:G:H2'	1:CA:1271:A:C8	2.52	0.43
26:BD:130:GLN:O	26:BD:131:ASP:C	2.57	0.43
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.18	0.43
23:DB:518:G:H4'	45:DS:18:ARG:NH2	2.34	0.43
23:DB:873:C:H2'	23:DB:874:G:C8	2.53	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
28:BP:24:THR:N	28:BP:87:ARG:O	2.52	0.43
1:CA:34:C:H2'	1:CA:35:G:C8	2.54	0.43
23:DB:1704:C:H2'	23:DB:1705:A:H8	1.81	0.43
23:DB:679:C:H2'	23:DB:680:C:C6	2.53	0.43
23:DB:2784:U:O2'	23:DB:2785:C:H5'	2.19	0.43
23:DB:979:A:H2'	23:DB:982:C:N4	2.32	0.43
18:AB:159:ALA:HA	18:AB:180:ILE:HG23	2.01	0.43
20:AO:45:GLU:HB3	20:AO:46:HIS:ND1	2.34	0.43
1:CA:497:G:H2'	1:CA:498:A:C8	2.53	0.43
23:BB:2411:A:H2'	23:BB:2412:A:H8	1.82	0.43
23:DB:425:G:O2'	23:DB:426:C:H5'	2.18	0.43
23:BB:2037:A:H2'	23:BB:2038:G:H8	1.82	0.43
23:DB:2037:A:H2'	23:DB:2038:G:H8	1.83	0.43
14:AQ:80:LYS:O	14:AQ:82:VAL:N	2.49	0.43
1:CA:105:G:H2'	1:CA:106:C:H6	1.83	0.43
32:B4:19:ARG:O	32:B4:20:ASP:HB2	2.18	0.43
7:CH:25:THR:O	7:CH:26:MET:HB3	2.18	0.43
4:AE:142:GLY:HA2	4:AE:145:ASN:ND2	2.33	0.43
1:AA:409:U:OP1	3:AD:23:GLY:HA3	2.19	0.43
23:BB:2671:G:H2'	23:BB:2672:U:C6	2.53	0.43
4:CE:148:SER:OG	4:CE:151:MET:HB2	2.18	0.43
24:DI:68:PHE:N	24:DI:68:PHE:CD1	2.87	0.43
1:AA:258:G:H2'	1:AA:258:G:N3	2.33	0.43
3:AD:82:LYS:NZ	3:AD:82:LYS:HB3	2.34	0.43
25:DC:212:TRP:C	25:DC:212:TRP:CD1	2.91	0.43
25:DC:54:GLY:O	25:DC:214:GLY:HA2	2.19	0.43
24:DI:5:GLN:O	24:DI:6:ALA:CB	2.67	0.43
8:CI:47:VAL:O	8:CI:50:PRO:HD2	2.19	0.43
12:AM:1:ALA:CB	12:AM:8:ILE:HG22	2.44	0.43
19:AU:40:PRO:HG2	19:AU:41:THR:H	1.82	0.43
23:DB:2307:G:N7	23:DB:2311:A:H5''	2.34	0.43
32:D4:35:GLN:HB2	32:D4:35:GLN:HE21	1.59	0.43
35:BV:89:ILE:HD13	35:BV:91:PHE:CE1	2.54	0.43
29:BE:117:ARG:NH1	37:BL:2:ARG:HB2	2.31	0.43
40:BH:72:ILE:O	40:BH:142:VAL:HG22	2.19	0.43
23:DB:2331:G:H2'	23:DB:2332:C:H6	1.84	0.43
42:BN:70:THR:C	42:BN:72:ASP:H	2.22	0.43
1:AA:1229:A:OP2	12:AM:112:ARG:HD3	2.19	0.43
22:DA:54:G:O2'	22:DA:55:U:H5'	2.18	0.43
46:BU:26:ASN:ND2	46:BU:26:ASN:O	2.51	0.43
6:CG:125:ASP:HB3	6:CG:130:LYS:CD	2.34	0.43
23:BB:1283:G:N2	23:BB:1286:A:H5'	2.16	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:CA:1365:G:H2'	1:CA:1366:C:C6	2.54	0.43
48:BG:140:ILE:CA	48:BG:143:VAL:HG22	2.47	0.43
24:DI:54:ILE:HD11	24:DI:71:LYS:N	2.33	0.43
18:CB:26:MET:HE2	18:CB:188:THR:N	2.33	0.43
33:D1:34:GLU:HA	33:D1:48:TYR:O	2.19	0.43
43:DO:105:ALA:O	43:DO:107:ALA:N	2.43	0.43
41:BJ:45:THR:H	41:BJ:46:PRO:CD	2.25	0.43
3:CD:145:ARG:O	3:CD:146:GLU:C	2.56	0.43
16:AS:59:VAL:HG11	16:AS:73:PHE:O	2.19	0.43
37:DL:116:VAL:O	37:DL:118:THR:N	2.52	0.43
37:BL:3:LEU:O	37:BL:5:THR:HG23	2.18	0.43
18:AB:197:PHE:O	18:AB:199:ILE:HG13	2.18	0.43
13:AP:1:MET:O	13:AP:3:THR:HG23	2.19	0.43
13:AP:1:MET:HB3	13:AP:24:SER:OG	2.18	0.43
18:CB:57:ASN:HB3	18:CB:219:THR:O	2.19	0.43
26:DD:32:ASN:ND2	26:DD:50:VAL:HG21	2.31	0.43
3:AD:166:LYS:CD	3:AD:167:PRO:HD2	2.41	0.43
1:CA:892:A:O2'	1:CA:1415:G:H4'	2.18	0.43
39:DX:20:ASN:HA	39:DX:24:GLU:OE1	2.19	0.43
6:AG:14:ASP:HB3	6:AG:19:SER:N	2.28	0.43
18:CB:89:PHE:CE2	18:CB:153:MET:HA	2.53	0.43
40:BH:6:LEU:O	40:BH:7:ASP:HB2	2.19	0.43
23:BB:1912:A:N7	23:BB:1918:A:C2	2.86	0.43
26:DD:130:GLN:O	26:DD:131:ASP:C	2.56	0.43
42:BN:102:PHE:CE2	45:BS:40:ASN:HB3	2.54	0.43
23:DB:543:G:C2	23:DB:544:C:H1'	2.54	0.43
45:DS:29:VAL:HG11	45:DS:55:ILE:CD1	2.49	0.43
51:BZ:54:LYS:HA	51:BZ:57:ARG:CD	2.42	0.43
27:DK:103:VAL:HG23	27:DK:122:VAL:O	2.19	0.43
23:BB:2733:A:H3'	23:BB:2733:A:C8	2.53	0.43
27:BK:98:ARG:HG2	27:BK:98:ARG:HH11	1.83	0.43
23:DB:2874:C:H5''	42:DN:4:ARG:NH2	2.33	0.43
1:CA:1509:C:H2'	1:CA:1510:C:H6	1.84	0.43
17:CT:38:ILE:HD11	17:CT:82:ILE:CG2	2.45	0.43
13:AP:28:ARG:HD3	13:AP:29:ASN:H	1.81	0.43
23:BB:351:C:H2'	23:BB:352:A:H8	1.83	0.43
48:DG:9:VAL:CA	48:DG:48:THR:HA	2.47	0.43
48:DG:51:PHE:HZ	48:DG:71:LEU:HG	1.83	0.43
1:CA:1250:A:H2'	1:CA:1251:A:C8	2.54	0.43
37:BL:73:ILE:O	37:BL:105:ILE:HG23	2.18	0.43
23:DB:2353:G:H21	52:DW:30:VAL:CG2	2.26	0.43
23:DB:2354:C:H4'	52:DW:31:LEU:CD2	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2462:C:H2'	23:DB:2463:C:H6	1.82	0.43
23:DB:933:A:H5'	23:DB:934:U:OP2	2.19	0.43
1:CA:820:U:H4'	1:CA:821:G:OP2	2.19	0.43
1:CA:67:C:O2	1:CA:171:A:H2	2.02	0.43
1:CA:1265:C:O2'	1:CA:1266:G:H5'	2.19	0.43
1:CA:1451:U:O5'	1:CA:1452:C:H5	2.02	0.43
29:BE:83:VAL:CG1	29:BE:86:ALA:HA	2.48	0.43
51:DZ:70:GLU:O	51:DZ:71:LEU:C	2.57	0.43
23:DB:987:C:O2'	23:DB:988:A:H5'	2.19	0.43
51:BZ:72:ARG:HB2	51:BZ:78:TYR:CD2	2.53	0.43
8:AI:98:ARG:HA	8:AI:103:VAL:HG22	1.99	0.43
1:AA:5:U:H1'	1:AA:6:G:C2	2.54	0.43
1:AA:619:U:N3	3:AD:130:ASN:OD1	2.49	0.43
25:BC:136:VAL:HG12	25:BC:137:GLY:N	2.34	0.43
23:BB:826:U:H2'	23:BB:828:U:O4'	2.19	0.43
41:BJ:102:GLU:HB3	41:BJ:119:PHE:CZ	2.49	0.43
23:BB:477:A:H2'	23:BB:478:A:C8	2.54	0.43
35:BV:53:LYS:HA	35:BV:53:LYS:HZ3	1.82	0.43
1:AA:309:A:O2'	1:AA:310:G:H5'	2.19	0.43
23:BB:2800:A:O2'	23:BB:2801:G:H5'	2.18	0.43
23:DB:1163:G:O2'	23:DB:1164:C:H5'	2.19	0.43
7:CH:54:THR:HG23	7:CH:55:LYS:N	2.34	0.43
23:BB:105:C:O2'	23:BB:106:C:H5'	2.18	0.43
1:CA:633:G:H2'	1:CA:634:C:H6	1.82	0.43
1:CA:148:G:H2'	1:CA:149:A:H5''	2.00	0.43
23:DB:1849:G:H2'	23:DB:1850:G:C8	2.53	0.43
47:BF:163:GLU:C	47:BF:165:GLY:H	2.21	0.43
23:BB:2315:G:H2'	23:BB:2316:G:C8	2.53	0.43
1:CA:681:A:H2'	1:CA:682:G:H8	1.82	0.43
1:CA:364:A:H2'	1:CA:365:U:O2	2.18	0.43
23:BB:1076:C:H5''	24:BI:94:LYS:NZ	2.33	0.43
7:CH:22:ALA:O	7:CH:62:LEU:HB2	2.18	0.43
23:DB:1821:A:H2'	23:DB:1822:C:C6	2.54	0.43
23:DB:649:G:H2'	23:DB:650:C:C6	2.53	0.43
41:DJ:1:MET:HG2	41:DJ:2:LYS:HE2	2.01	0.43
23:DB:1568:G:H4'	25:DC:58:LYS:HB3	2.01	0.43
38:BM:124:LEU:HA	38:BM:125:PRO:HD3	1.89	0.43
1:AA:168:G:O2'	1:AA:169:C:H5'	2.19	0.43
3:AD:18:LEU:HB2	3:AD:20:LEU:HG	1.99	0.43
23:BB:1449:G:O2'	23:BB:1450:G:H5'	2.19	0.43
23:DB:758:C:O2	23:DB:1981:A:H2	2.01	0.43
1:AA:1204:A:H2'	1:AA:1205:U:O4'	2.18	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:613:A:H2'	23:DB:613:A:N3	2.34	0.43
24:DI:35:MET:HE3	24:DI:39:LYS:HG2	2.01	0.43
10:CK:75:GLU:N	10:CK:75:GLU:CD	2.71	0.43
41:DJ:140:LEU:O	41:DJ:140:LEU:HD23	2.19	0.43
23:BB:1664:A:H1'	23:BB:2726:A:C2	2.54	0.43
23:BB:758:C:O2	23:BB:1981:A:H2	2.00	0.43
8:CI:38:PHE:O	8:CI:44:ARG:HB3	2.18	0.43
18:CB:42:LEU:O	18:CB:46:VAL:HG12	2.19	0.43
19:AU:42:THR:HB	19:AU:46:ARG:HE	1.84	0.43
19:AU:43:GLU:HB3	19:AU:44:ARG:NH2	2.34	0.43
52:BW:49:ASN:HB3	52:BW:81:ILE:CG1	2.49	0.43
9:CJ:100:ILE:HG13	9:CJ:100:ILE:H	1.63	0.43
35:BV:4:ILE:O	35:BV:63:ILE:HA	2.19	0.43
1:CA:123:U:H5''	1:CA:311:C:O2'	2.18	0.43
52:BW:39:GLN:HG2	52:BW:42:THR:H	1.84	0.43
48:DG:25:ILE:HG22	48:DG:78:VAL:HG21	2.00	0.43
5:CF:96:VAL:HG12	5:CF:97:THR:H	1.84	0.43
23:DB:1199:U:C5'	44:DQ:4:LYS:HD3	2.47	0.43
37:DL:108:ALA:HB3	37:DL:125:LEU:HD21	2.00	0.43
8:AI:49:GLN:HB2	8:AI:50:PRO:CD	2.49	0.43
8:AI:67:LYS:HD3	8:AI:67:LYS:C	2.39	0.43
43:DO:34:HIS:ND1	43:DO:53:THR:OG1	2.49	0.43
37:BL:79:LEU:CG	37:BL:112:LEU:HA	2.49	0.43
49:DR:39:LEU:HB2	49:DR:49:ILE:CG1	2.39	0.43
24:DI:131:THR:O	24:DI:135:MET:HG3	2.18	0.43
23:BB:673:C:H2'	23:BB:674:G:H5'	2.01	0.43
46:BU:10:VAL:HB	46:BU:69:VAL:HB	2.00	0.43
49:BR:39:LEU:N	49:BR:39:LEU:HD23	2.34	0.43
16:AS:40:PHE:CB	16:AS:41:PRO:HD2	2.49	0.43
47:BF:137:PHE:O	47:BF:138:PRO:C	2.57	0.43
22:DA:42:C:O2'	47:DF:91:ARG:NH1	2.52	0.43
4:CE:131:ASN:O	4:CE:135:VAL:HG23	2.19	0.43
20:AO:60:VAL:HG11	23:BB:715:A:O4'	2.18	0.43
1:AA:204:G:H2'	1:AA:205:A:O4'	2.18	0.43
25:DC:77:VAL:HG23	25:DC:77:VAL:O	2.18	0.43
36:D2:10:LEU:O	36:D2:14:ARG:HG3	2.19	0.43
40:DH:8:LYS:O	40:DH:13:GLY:HA3	2.19	0.43
12:AM:5:GLY:O	12:AM:7:ASN:ND2	2.51	0.43
23:DB:669:G:O2'	23:DB:670:A:H5'	2.19	0.43
23:BB:1591:A:H2'	23:BB:1592:C:O4'	2.18	0.43
23:BB:581:C:H2'	23:BB:582:A:H8	1.84	0.43
39:BX:23:ARG:HA	39:BX:27:ASN:ND2	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2539:C:H5'	32:D4:3:VAL:HG11	2.00	0.43
45:BS:45:VAL:C	45:BS:48:LYS:HB3	2.39	0.43
23:DB:740:C:O2'	23:DB:741:U:H5'	2.18	0.43
23:DB:2557:G:C6	23:DB:2558:C:N4	2.87	0.43
48:DG:9:VAL:HA	48:DG:48:THR:HG22	2.01	0.43
23:BB:1797:G:O3'	25:BC:255:LYS:O	2.37	0.43
1:AA:1162:C:H2'	1:AA:1163:A:C8	2.54	0.43
25:DC:250:GLN:OE1	25:DC:250:GLN:N	2.51	0.43
48:BG:64:ALA:O	48:BG:68:ARG:N	2.52	0.43
1:AA:501:C:H1'	1:AA:549:C:H1'	2.00	0.43
23:BB:2652:C:H2'	23:BB:2653:U:O4'	2.18	0.43
1:CA:132:C:H5''	17:CT:68:LYS:HZ2	1.84	0.43
11:CL:106:VAL:CG2	11:CL:116:TYR:HB3	2.49	0.43
23:DB:722:A:H2'	23:DB:723:C:C6	2.54	0.43
44:BQ:51:GLN:O	44:BQ:55:GLN:HG3	2.18	0.43
21:AN:25:GLU:O	21:AN:29:ILE:HG13	2.19	0.43
23:DB:156:A:O2'	23:DB:157:C:H5'	2.19	0.43
1:AA:735:C:H2'	1:AA:736:C:C6	2.53	0.43
42:BN:62:ASN:N	42:BN:62:ASN:ND2	2.66	0.43
18:AB:71:THR:O	18:AB:72:LYS:C	2.57	0.43
23:BB:572:A:C5'	49:BR:80:ARG:HH22	2.32	0.43
1:AA:686:U:O4	1:AA:703:G:H1'	2.19	0.43
1:AA:677:U:H1'	10:AK:120:CYS:SG	2.59	0.43
1:CA:177:G:N3	1:CA:177:G:O4'	2.52	0.43
6:AG:82:SER:HB2	6:AG:84:TYR:CZ	2.54	0.43
29:DE:149:ILE:HG23	29:DE:188:MET:CA	2.48	0.43
23:DB:958:U:O4	38:DM:16:ARG:HA	2.19	0.43
41:BJ:40:HIS:O	44:BQ:66:ALA:HB1	2.19	0.43
26:DD:56:LYS:O	26:DD:58:ASN:N	2.50	0.43
1:CA:965:U:H5'	1:CA:965:U:C6	2.53	0.43
1:AA:1253:G:N1	1:AA:1285:A:N6	2.66	0.43
1:AA:629:A:O2'	1:AA:630:A:H5'	2.19	0.43
1:AA:621:A:H2'	1:AA:622:A:H8	1.82	0.43
29:DE:98:LYS:HG2	29:DE:102:ARG:NH1	2.34	0.43
23:BB:649:G:H2'	23:BB:650:C:C6	2.54	0.43
47:DF:2:LYS:H	47:DF:2:LYS:HE3	1.84	0.43
23:DB:1320:C:C5	23:DB:1329:U:H5''	2.53	0.43
23:BB:184:C:H4'	23:BB:217:A:C2	2.54	0.43
1:AA:179:A:O2'	1:AA:180:U:H5'	2.18	0.43
1:CA:152:A:H3'	1:CA:153:C:C6	2.54	0.43
2:CC:145:ALA:C	2:CC:147:GLY:H	2.22	0.43
1:AA:915:A:H2'	1:AA:916:U:H5'	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:644:U:H4'	7:AH:83:ARG:NH2	2.33	0.43
23:DB:2431:U:H2'	23:DB:2433:A:OP2	2.18	0.43
1:AA:1193:G:O2'	1:AA:1194:U:H5'	2.19	0.43
29:DE:52:VAL:HG11	29:DE:81:GLY:HA3	1.99	0.43
51:BZ:66:THR:O	51:BZ:69:ALA:HB3	2.19	0.43
23:BB:2853:C:O2'	23:BB:2854:G:H5'	2.19	0.43
23:DB:1257:C:H5'	29:DE:78:TRP:CZ3	2.53	0.43
23:BB:551:G:O2'	23:BB:552:U:H5'	2.19	0.43
23:DB:1344:U:O2'	23:DB:1385:A:H2'	2.18	0.43
22:DA:21:G:O2'	22:DA:22:U:H5'	2.19	0.43
33:D1:12:SER:C	33:D1:14:ALA:H	2.21	0.43
23:BB:756:A:H2'	23:BB:757:G:O4'	2.19	0.43
3:CD:41:GLY:C	3:CD:43:ARG:H	2.22	0.43
1:AA:874:G:O2'	1:AA:875:U:H5'	2.19	0.43
23:BB:613:A:H2'	23:BB:613:A:N3	2.33	0.43
23:BB:1930:G:H22	23:BB:1969:A:P	2.41	0.43
7:AH:22:ALA:O	7:AH:62:LEU:HB2	2.19	0.43
8:CI:39:GLY:C	8:CI:41:GLU:H	2.22	0.43
23:BB:547:A:H3'	23:BB:547:A:OP2	2.18	0.43
50:BT:11:LEU:HD13	50:BT:11:LEU:N	2.34	0.43
50:BT:11:LEU:HA	50:BT:34:VAL:HG12	1.99	0.43
1:CA:1349:A:H61	1:CA:1373:G:H1'	1.83	0.43
29:DE:60:TRP:HB3	29:DE:61:ARG:H	1.45	0.43
29:DE:60:TRP:CZ3	29:DE:69:ARG:HA	2.46	0.43
26:BD:113:SER:HB3	26:BD:167:ASN:N	2.34	0.43
14:AQ:17:GLU:C	14:AQ:19:SER:H	2.22	0.43
12:CM:68:LEU:HD22	12:CM:69:ARG:HH12	1.81	0.43
1:CA:1323:G:O2'	1:CA:1362:A:O4'	2.36	0.43
37:DL:79:LEU:CG	37:DL:112:LEU:HA	2.47	0.43
48:BG:140:ILE:O	48:BG:143:VAL:HG22	2.19	0.43
49:DR:51:VAL:HB	49:DR:52:PRO:HD2	2.01	0.43
23:DB:1059:G:H2'	23:DB:1060:U:C6	2.54	0.43
40:DH:96:THR:HG23	40:DH:97:ARG:CD	2.48	0.43
46:DU:10:VAL:HB	46:DU:69:VAL:HB	1.99	0.43
43:BO:112:GLU:OE1	43:BO:113:ALA:N	2.52	0.43
22:BA:42:C:O2'	47:BF:91:ARG:NH1	2.52	0.43
47:BF:65:LEU:O	47:BF:86:CYS:HA	2.17	0.43
47:BF:32:LYS:HA	47:BF:95:MET:HG3	2.01	0.43
41:BJ:105:VAL:O	41:BJ:108:MET:HB2	2.19	0.43
23:BB:1103:A:C2'	23:BB:1104:C:H5'	2.49	0.43
2:AC:179:ALA:HB1	2:AC:202:PHE:CE1	2.54	0.43
51:DZ:56:MET:O	51:DZ:59:ILE:HG12	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:1082:A:O2'	1:AA:1083:U:H5'	2.18	0.43
24:DI:17:ALA:C	24:DI:19:PRO:HD3	2.39	0.43
1:AA:1031:C:H1'	1:AA:1032:G:C6	2.54	0.43
4:AE:136:VAL:HG13	4:AE:137:ARG:H	1.83	0.43
18:CB:101:THR:HG22	18:CB:174:GLU:OE1	2.18	0.43
17:CT:34:VAL:CG1	17:CT:78:LEU:HD22	2.46	0.43
6:AG:71:THR:O	6:AG:72:VAL:HG13	2.19	0.43
2:AC:81:GLU:O	2:AC:85:LYS:HD2	2.19	0.43
23:BB:1871:A:H2'	23:BB:1872:A:H8	1.83	0.43
27:BK:119:ALA:N	27:BK:120:PRO:HD2	2.34	0.43
39:DX:32:ALA:C	39:DX:34:SER:H	2.21	0.43
25:BC:157:ALA:C	25:BC:159:THR:H	2.22	0.43
17:CT:2:ASN:CG	17:CT:3:ILE:N	2.72	0.43
51:DZ:20:HIS:C	51:DZ:22:LEU:H	2.22	0.43
23:DB:2733:A:H2'	23:DB:2734:A:O4'	2.19	0.43
11:CL:55:ARG:HG3	11:CL:61:GLU:OE2	2.18	0.43
11:AL:81:ILE:CG2	11:AL:94:TYR:HB3	2.48	0.43
23:DB:1883:U:H2'	23:DB:1884:G:C1'	2.48	0.43
48:DG:8:VAL:HG21	48:DG:51:PHE:HE2	1.83	0.43
23:BB:85:G:OP1	46:BU:6:ARG:N	2.52	0.43
41:BJ:58:ASN:HA	41:BJ:127:GLY:CA	2.48	0.43
23:DB:870:U:O2'	23:DB:871:U:H5'	2.18	0.43
23:DB:2705:A:H2	42:DN:64:ARG:NH1	2.16	0.43
42:DN:63:ARG:O	42:DN:66:ALA:HB3	2.18	0.43
29:BE:47:LYS:HB3	29:BE:51:GLU:HB2	2.01	0.43
1:AA:1344:C:C2'	1:AA:1345:U:H5'	2.49	0.43
23:BB:907:G:C2'	23:BB:908:C:H5'	2.48	0.43
23:DB:2105:U:H2'	23:DB:2106:U:H6	1.83	0.43
34:D3:44:ARG:N	34:D3:45:PRO:CD	2.80	0.43
1:AA:600:A:H2'	1:AA:601:G:H8	1.84	0.43
1:AA:1520:C:H2'	1:AA:1521:C:C6	2.54	0.43
23:BB:1825:U:H2'	23:BB:1826:G:H8	1.84	0.43
44:DQ:29:ARG:HG2	44:DQ:29:ARG:NH1	2.31	0.43
41:DJ:72:LYS:CB	41:DJ:89:PHE:HB2	2.49	0.43
23:DB:1045:C:C2	23:DB:1047:G:N2	2.87	0.43
23:BB:481:G:OP2	46:BU:44:HIS:HB2	2.19	0.43
1:AA:252:U:H2'	1:AA:253:A:C8	2.54	0.43
20:CO:55:GLY:O	20:CO:59:MET:HG2	2.18	0.43
10:CK:34:THR:HB	10:CK:39:ASN:C	2.39	0.43
1:CA:308:C:H2'	1:CA:309:A:C8	2.53	0.43
23:DB:323:C:H6	23:DB:1205:A:C2	2.37	0.43
4:CE:103:GLY:O	4:CE:121:ASN:HA	2.19	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:710:U:H2'	23:BB:711:G:H8	1.82	0.43
11:CL:80:LEU:HB3	11:CL:97:VAL:CG2	2.49	0.43
22:DA:2:G:H3'	22:DA:2:G:OP2	2.18	0.43
18:CB:27:LYS:O	18:CB:29:PHE:N	2.51	0.43
23:BB:1740:G:H2'	23:BB:1741:C:C6	2.54	0.43
41:DJ:58:ASN:HA	41:DJ:127:GLY:HA3	2.00	0.43
23:DB:425:G:H2'	23:DB:426:C:C6	2.54	0.43
23:BB:409:G:H2'	23:BB:410:G:H8	1.83	0.43
23:DB:1830:C:H2'	23:DB:1831:G:C8	2.54	0.43
9:AJ:50:THR:HA	9:AJ:63:ASP:O	2.19	0.43
15:AR:28:LEU:C	15:AR:30:ASN:N	2.72	0.43
23:BB:692:C:H2'	23:BB:693:A:C8	2.54	0.43
11:AL:43:LYS:CE	11:AL:44:PRO:HD3	2.48	0.43
1:CA:59:A:N6	1:CA:331:G:H1'	2.33	0.43
4:AE:98:ALA:HB2	4:AE:123:LEU:HG	2.01	0.43
31:B0:25:THR:O	31:B0:26:SER:HB2	2.19	0.43
33:B1:12:SER:C	33:B1:14:ALA:H	2.22	0.43
41:BJ:100:VAL:O	41:BJ:104:ALA:HB2	2.19	0.43
1:AA:1424:U:H2'	1:AA:1425:U:C6	2.54	0.43
12:AM:72:ILE:HG22	12:AM:73:SER:N	2.33	0.43
50:DT:34:VAL:HG21	50:DT:43:ILE:CD1	2.48	0.43
50:BT:11:LEU:HD22	50:BT:11:LEU:N	2.23	0.43
52:DW:49:ASN:HB3	52:DW:81:ILE:CG1	2.49	0.43
9:CJ:8:ILE:HD12	9:CJ:74:VAL:HG11	2.00	0.43
48:BG:16:VAL:HG13	48:BG:23:ILE:CG2	2.49	0.43
2:CC:38:VAL:CG2	2:CC:56:ILE:HD13	2.48	0.43
48:DG:30:GLY:O	48:DG:78:VAL:HG12	2.18	0.43
5:CF:98:GLU:O	5:CF:99:ALA:HB3	2.19	0.43
5:AF:61:LEU:HD12	5:AF:63:ASN:OD1	2.19	0.43
8:AI:66:VAL:CG1	8:AI:74:GLN:HG3	2.49	0.43
15:AR:72:ARG:HE	19:AU:3:ILE:HD11	1.84	0.43
23:BB:28:A:O2'	23:BB:29:U:H5'	2.19	0.43
6:CG:68:VAL:HG21	6:CG:103:ILE:HG12	2.00	0.43
37:DL:70:LYS:C	37:DL:72:ALA:H	2.22	0.43
23:BB:1033:U:C5	32:B4:15:LYS:HE3	2.54	0.43
33:B1:34:GLU:HA	33:B1:48:TYR:O	2.19	0.43
40:DH:114:GLU:HB2	40:DH:133:GLN:O	2.19	0.43
40:DH:96:THR:OG1	40:DH:112:LYS:HE3	2.19	0.43
22:DA:7:G:O2'	22:DA:8:C:H5'	2.19	0.43
43:DO:28:VAL:O	43:DO:29:HIS:HB2	2.19	0.43
35:DV:81:PRO:HG2	38:DM:20:LEU:HD12	2.00	0.43
47:DF:116:LEU:HD22	47:DF:175:PRO:HG2	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
13:AP:51:ARG:O	13:AP:52:LEU:HB2	2.19	0.43
18:CB:53:LEU:HA	18:CB:56:LEU:CD1	2.48	0.43
47:BF:105:ILE:HA	47:BF:108:PRO:HB2	2.01	0.43
26:DD:150:GLN:O	26:DD:151:THR:C	2.57	0.43
25:DC:14:HIS:C	25:DC:203:VAL:HG11	2.39	0.43
47:DF:11:VAL:HG12	47:DF:15:LEU:HD11	2.01	0.43
26:BD:4:LEU:HD22	26:BD:4:LEU:N	2.34	0.43
9:AJ:28:THR:OG1	9:AJ:29:ALA:N	2.51	0.43
34:D3:49:VAL:HG21	34:D3:54:LEU:HD13	2.01	0.43
23:BB:669:G:O2'	23:BB:670:A:H5'	2.19	0.43
37:DL:96:LYS:HE2	37:DL:103:ILE:HA	2.00	0.43
23:BB:1091:G:O2'	23:BB:1092:C:H5'	2.19	0.43
12:CM:33:LEU:HD12	12:CM:40:GLU:CD	2.39	0.43
1:CA:939:G:H2'	1:CA:940:C:H6	1.83	0.43
12:CM:94:LEU:HB3	12:CM:95:PRO:HD2	2.00	0.43
12:AM:89:ARG:NH1	12:AM:94:LEU:HD13	2.34	0.43
48:BG:123:GLU:O	48:BG:125:PRO:HD3	2.19	0.43
39:BX:44:LYS:HG3	39:BX:48:ARG:NH1	2.34	0.43
16:CS:51:HIS:HA	16:CS:56:HIS:HA	2.00	0.43
6:AG:72:VAL:HG22	6:AG:141:HIS:CE1	2.54	0.43
44:DQ:93:ILE:HG23	44:DQ:94:LEU:N	2.34	0.43
23:BB:948:C:H2'	23:BB:949:G:H8	1.83	0.43
45:DS:84:ARG:HB3	45:DS:96:ILE:CG2	2.45	0.43
11:CL:41:PRO:HB2	11:CL:88:ASP:HB3	1.99	0.43
45:DS:70:LYS:HD3	45:DS:110:ARG:CA	2.44	0.43
42:BN:96:ARG:HG2	42:BN:96:ARG:HH21	1.84	0.43
45:DS:71:VAL:O	45:DS:71:VAL:HG13	2.18	0.43
23:DB:1299:G:H4'	23:DB:1301:A:H1'	2.01	0.43
48:DG:3:VAL:O	48:DG:68:ARG:HG3	2.19	0.43
48:DG:64:ALA:O	48:DG:68:ARG:N	2.51	0.43
48:DG:71:LEU:O	48:DG:74:MET:HB2	2.19	0.43
1:AA:662:U:O2'	1:AA:836:G:H5''	2.19	0.43
37:BL:70:LYS:C	37:BL:72:ALA:H	2.23	0.43
23:DB:845:A:H8	23:DB:845:A:H3'	1.84	0.43
1:AA:1096:C:H2'	1:AA:1097:C:H6	1.84	0.43
23:DB:2094:A:H2'	23:DB:2095:A:H8	1.83	0.43
3:CD:97:LEU:HA	3:CD:100:VAL:CG2	2.49	0.43
23:DB:271:G:HO2'	23:DB:272:A:H8	1.65	0.43
7:CH:118:ALA:HB3	7:CH:120:LEU:CD2	2.49	0.43
1:CA:1302:C:C5	12:CM:16:ILE:HG13	2.54	0.43
23:BB:1158:C:O4'	30:BY:31:ILE:HD11	2.19	0.43
17:AT:53:MET:O	17:AT:57:VAL:HG22	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DJ:40:HIS:CE1	41:DJ:41:LYS:HG3	2.54	0.43
23:DB:1210:G:C5'	23:DB:1212:G:H5'	2.49	0.43
1:AA:308:C:H2'	1:AA:309:A:C8	2.54	0.43
50:DT:7:LEU:CA	50:DT:9:LYS:HE3	2.49	0.43
50:DT:7:LEU:O	50:DT:7:LEU:HD13	2.19	0.43
23:DB:1744:A:H2'	23:DB:1745:A:C8	2.53	0.43
5:AF:72:ASP:O	5:AF:75:GLU:HB2	2.18	0.43
1:AA:321:A:O2'	1:AA:322:C:H5'	2.19	0.43
1:AA:1113:C:H2'	1:AA:1114:C:H6	1.83	0.43
19:AU:11:PHE:CE1	19:AU:13:VAL:HG12	2.54	0.43
23:BB:1007:C:O2'	41:BJ:110:PRO:HB3	2.19	0.43
23:BB:520:G:O2'	23:BB:521:U:H5'	2.19	0.43
23:DB:1340:U:H3'	23:DB:1341:G:C5'	2.48	0.43
1:CA:1057:G:H5''	2:CC:154:GLY:H	1.83	0.43
23:DB:1007:C:H4'	41:DJ:110:PRO:HB3	2.00	0.43
23:BB:1475:G:H4'	23:BB:1476:U:O5'	2.18	0.43
23:BB:2233:U:H2'	23:BB:2234:G:C8	2.53	0.43
18:AB:8:MET:O	18:AB:9:LEU:HB3	2.19	0.43
22:DA:109:A:H2'	22:DA:110:C:C6	2.53	0.43
15:CR:26:ALA:C	15:CR:28:LEU:H	2.22	0.43
18:AB:144:GLU:HA	18:AB:148:GLY:HA3	2.01	0.43
23:DB:1879:C:H2'	23:DB:1880:U:O4'	2.19	0.43
23:DB:702:U:H2'	23:DB:703:U:C6	2.54	0.43
28:DP:99:LEU:HD22	28:DP:99:LEU:HA	1.88	0.43
23:DB:2010:G:H2'	23:DB:2011:U:C6	2.54	0.43
1:AA:696:A:O2'	1:AA:697:U:H5'	2.18	0.43
49:DR:57:GLY:HA2	49:DR:103:ALA:HA	2.01	0.43
23:DB:550:C:H2'	23:DB:551:G:H8	1.84	0.43
34:D3:14:LYS:O	34:D3:14:LYS:HD2	2.19	0.43
24:DI:59:THR:O	24:DI:59:THR:HG23	2.19	0.43
21:CN:42:ASN:O	21:CN:46:LYS:HG3	2.19	0.43
38:BM:74:THR:HB	38:BM:88:ASN:O	2.19	0.43
1:AA:1173:U:H2'	1:AA:1174:G:O4'	2.18	0.43
23:DB:1432:G:O2'	23:DB:1433:A:H5'	2.18	0.42
52:DW:59:PHE:CE2	52:DW:61:LYS:HA	2.54	0.42
42:DN:49:GLU:HB2	42:DN:50:PRO:HD3	2.00	0.42
8:CI:103:VAL:HG23	8:CI:104:THR:N	2.33	0.42
1:CA:1238:A:C8	1:CA:1303:C:H1'	2.54	0.42
1:CA:1375:A:O2'	1:CA:1376:U:H5'	2.19	0.42
1:CA:121:U:H3'	1:CA:121:U:OP1	2.18	0.42
29:BE:108:ILE:HD13	37:BL:2:ARG:NH2	2.34	0.42
5:CF:43:GLY:HA2	5:CF:58:HIS:NE2	2.34	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
26:DD:25:THR:O	26:DD:27:ILE:HG13	2.18	0.42
40:BH:72:ILE:HG23	40:BH:142:VAL:CG2	2.49	0.42
23:BB:2329:U:H2'	23:BB:2330:G:H8	1.83	0.42
23:DB:1199:U:H2'	23:DB:1200:C:H6	1.77	0.42
22:DA:28:C:H5	22:DA:56:G:H1	1.67	0.42
43:DO:53:THR:OG1	43:DO:65:THR:HB	2.19	0.42
12:CM:22:TYR:CB	12:CM:65:GLU:HA	2.49	0.42
12:CM:64:VAL:HA	12:CM:68:LEU:HD12	2.00	0.42
6:CG:125:ASP:CB	6:CG:130:LYS:HB3	2.49	0.42
25:BC:189:ALA:O	25:BC:190:THR:O	2.37	0.42
23:DB:630:G:H4'	23:DB:640:C:O2'	2.19	0.42
48:DG:132:LEU:CD2	48:DG:132:LEU:N	2.81	0.42
10:CK:31:VAL:HG23	10:CK:44:ALA:HB3	2.01	0.42
18:AB:46:VAL:N	18:AB:47:PRO:CD	2.81	0.42
35:DV:29:ILE:CD1	35:DV:90:ASP:HA	2.49	0.42
49:DR:4:VAL:HG23	49:DR:39:LEU:HG	2.00	0.42
23:DB:1079:C:H5	23:DB:1088:A:OP1	2.02	0.42
24:DI:78:LEU:HD23	24:DI:81:LYS:HE2	2.01	0.42
40:DH:72:ILE:CG1	40:DH:108:VAL:HG11	2.44	0.42
47:DF:55:ASP:O	47:DF:59:ILE:HG13	2.18	0.42
18:AB:89:PHE:CD1	18:AB:89:PHE:N	2.87	0.42
23:BB:1025:G:H8	23:BB:1025:G:OP1	2.01	0.42
49:DR:34:GLU:OE1	49:DR:60:LYS:HE2	2.19	0.42
47:BF:37:MET:SD	47:BF:56:LEU:HD23	2.59	0.42
47:DF:33:ILE:HB	47:DF:90:LEU:HD23	2.00	0.42
23:BB:2052:A:H4'	26:BD:148:GLN:O	2.18	0.42
37:BL:96:LYS:HE2	37:BL:103:ILE:HA	2.01	0.42
12:CM:33:LEU:O	12:CM:37:GLY:N	2.49	0.42
27:BK:19:VAL:HB	27:BK:41:ILE:CG1	2.49	0.42
48:DG:123:GLU:O	48:DG:125:PRO:HD3	2.19	0.42
40:BH:15:LEU:C	40:BH:17:ASP:N	2.73	0.42
23:DB:529:A:OP2	41:DJ:113:PRO:HD3	2.19	0.42
28:BP:20:ARG:CG	28:BP:21:PRO:HD2	2.49	0.42
2:AC:78:LYS:O	2:AC:79:LYS:HB2	2.19	0.42
27:DK:41:ILE:CG1	27:DK:42:THR:N	2.81	0.42
23:DB:544:C:O2'	23:DB:545:U:P	2.76	0.42
23:BB:2732:G:P	26:BD:208:LYS:HZ3	2.42	0.42
1:CA:241:G:O2'	1:CA:242:G:H5'	2.18	0.42
32:D4:36:ARG:O	32:D4:37:GLN:C	2.56	0.42
1:CA:1509:C:O2'	1:CA:1510:C:H5'	2.18	0.42
4:CE:106:ALA:HB1	4:CE:110:MET:CB	2.46	0.42
28:DP:48:ALA:HB3	28:DP:59:THR:CB	2.49	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1883:U:H2'	23:BB:1884:G:C1'	2.49	0.42
7:AH:94:VAL:CG2	7:AH:101:ALA:HB2	2.46	0.42
23:DB:2589:A:H2'	23:DB:2590:A:H8	1.84	0.42
23:BB:2844:G:O2'	23:BB:2845:U:H5'	2.19	0.42
23:DB:1804:C:OP1	25:DC:256:THR:HB	2.19	0.42
25:DC:255:LYS:C	25:DC:256:THR:HG23	2.38	0.42
48:BG:51:PHE:CD2	48:BG:68:ARG:HG2	2.53	0.42
1:CA:549:C:H2'	1:CA:550:G:C8	2.53	0.42
3:CD:30:LYS:HD3	3:CD:30:LYS:N	2.34	0.42
33:D1:29:LYS:HA	33:D1:31:GLU:OE1	2.18	0.42
23:DB:1093:G:O2'	23:DB:1094:U:H5'	2.18	0.42
1:AA:764:C:N4	1:AA:812:G:N1	2.67	0.42
42:DN:59:SER:C	42:DN:61:ALA:N	2.71	0.42
52:DW:44:PHE:O	52:DW:78:PHE:HA	2.19	0.42
43:BO:5:SER:HA	43:BO:8:ILE:CD1	2.46	0.42
38:BM:17:ASN:HD21	38:BM:95:LEU:HD23	1.84	0.42
29:DE:106:LYS:HZ3	29:DE:201:ALA:HB2	1.83	0.42
23:DB:364:C:H2'	23:DB:365:U:O4'	2.19	0.42
23:DB:1050:A:O2'	23:DB:1051:G:H5'	2.19	0.42
1:AA:429:U:H4'	1:AA:430:A:O5'	2.18	0.42
1:CA:1027:C:H2'	1:CA:1028:C:H6	1.84	0.42
23:DB:419:U:H2'	23:DB:420:C:H6	1.82	0.42
41:DJ:89:PHE:O	41:DJ:92:MET:HB2	2.19	0.42
29:BE:149:ILE:HG23	29:BE:188:MET:CA	2.49	0.42
41:BJ:40:HIS:CE1	41:BJ:41:LYS:HG3	2.54	0.42
23:BB:397:U:H2'	23:BB:398:C:H6	1.83	0.42
8:CI:71:ILE:HD12	8:CI:71:ILE:N	2.33	0.42
1:CA:184:G:H4'	1:CA:224:U:O3'	2.18	0.42
1:AA:419:C:O2'	1:AA:420:U:H5'	2.18	0.42
23:DB:2448:A:H4'	23:DB:2449:U:OP2	2.19	0.42
1:CA:89:U:H2'	1:CA:90:C:O4'	2.19	0.42
1:AA:398:U:H2'	1:AA:399:G:C8	2.54	0.42
23:BB:1677:A:H2'	23:BB:1678:A:C8	2.53	0.42
44:DQ:47:ARG:NH1	44:DQ:48:ASP:OD2	2.52	0.42
23:BB:1011:G:H5'	44:BQ:76:SER:OG	2.19	0.42
21:AN:11:LYS:HB3	21:AN:15:LEU:HD11	2.01	0.42
23:DB:692:C:H2'	23:DB:693:A:C8	2.54	0.42
41:BJ:2:LYS:CD	41:BJ:2:LYS:H	2.32	0.42
23:DB:1360:G:H2'	23:DB:1361:G:O4'	2.19	0.42
3:CD:72:ARG:HD3	3:CD:203:TYR:CE2	2.54	0.42
23:BB:1613:G:H2'	23:BB:1617:C:H42	1.84	0.42
18:CB:141:GLU:O	18:CB:145:ASN:ND2	2.52	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2197:U:O2'	23:BB:2198:A:H2'	2.19	0.42
11:AL:27:PRO:O	11:AL:28:GLN:NE2	2.52	0.42
6:CG:124:SER:O	6:CG:127:ALA:HB3	2.19	0.42
23:BB:2436:G:O2'	23:BB:2437:G:H5'	2.19	0.42
13:CP:36:VAL:O	13:CP:36:VAL:HG13	2.20	0.42
40:BH:51:ARG:HD2	40:BH:51:ARG:H	1.84	0.42
51:BZ:13:VAL:HG23	51:BZ:29:PHE:HB2	2.01	0.42
23:DB:1099:G:C8	24:DI:3:LYS:CB	3.02	0.42
8:CI:20:ILE:HD13	8:CI:85:ALA:HB3	2.01	0.42
1:AA:1302:C:H42	12:AM:16:ILE:HD13	1.84	0.42
50:BT:29:THR:CB	50:BT:86:THR:HG22	2.49	0.42
50:BT:16:VAL:H	50:BT:31:VAL:HG23	1.84	0.42
8:CI:98:ARG:C	8:CI:100:ALA:H	2.22	0.42
29:DE:58:LYS:CD	29:DE:58:LYS:N	2.80	0.42
35:BV:38:LEU:HG	35:BV:40:ILE:CG2	2.46	0.42
35:BV:63:ILE:HB	35:BV:70:ILE:CD1	2.46	0.42
40:BH:128:HIS:HB3	40:BH:144:VAL:HG12	2.01	0.42
23:DB:1728:C:H2'	23:DB:1728:C:O2	2.19	0.42
6:CG:68:VAL:O	6:CG:137:ARG:HG3	2.20	0.42
2:AC:151:GLU:HB2	2:AC:200:TRP:HZ3	1.84	0.42
10:AK:80:ASN:CB	10:AK:105:ARG:HB3	2.48	0.42
23:DB:1171:G:H2'	23:DB:1172:C:C6	2.54	0.42
18:CB:22:TRP:O	18:CB:189:ASN:HA	2.19	0.42
18:CB:34:ARG:HG2	18:CB:39:ILE:HG13	2.01	0.42
40:DH:118:PRO:HB2	40:DH:119:ASN:HD22	1.83	0.42
29:BE:56:GLY:O	29:BE:58:LYS:HD3	2.18	0.42
27:BK:74:GLY:HA3	28:BP:74:GLN:HE21	1.84	0.42
38:DM:38:ARG:O	38:DM:126:ILE:HG12	2.19	0.42
44:BQ:93:ILE:HG23	44:BQ:94:LEU:N	2.34	0.42
16:AS:40:PHE:HB2	16:AS:42:ASN:OD1	2.20	0.42
23:BB:1204:A:N1	23:BB:1241:A:N1	2.67	0.42
21:AN:79:SER:O	21:AN:83:VAL:HG23	2.19	0.42
18:CB:223:GLY:O	18:CB:225:SER:N	2.51	0.42
47:BF:55:ASP:O	47:BF:59:ILE:HG13	2.19	0.42
39:DX:1:MET:HB2	39:DX:5:GLU:OE1	2.19	0.42
23:BB:493:G:H2'	23:BB:494:G:O4'	2.19	0.42
45:DS:60:HIS:CG	45:DS:61:ASN:H	2.37	0.42
1:AA:1341:U:O3'	8:AI:129:ARG:NH2	2.52	0.42
21:CN:59:GLN:H	21:CN:59:GLN:HE21	1.61	0.42
23:BB:1276:A:O2'	23:BB:1277:G:H5'	2.19	0.42
1:AA:1080:A:H2'	1:AA:1081:A:H5'	2.00	0.42
39:DX:56:LEU:O	39:DX:58:ASN:N	2.45	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2476:A:N3	23:BB:2476:A:H2'	2.34	0.42
48:DG:94:ARG:CB	48:DG:127:GLN:HE21	2.29	0.42
42:DN:87:PHE:CE1	42:DN:116:VAL:HG12	2.51	0.42
39:DX:44:LYS:HD2	39:DX:48:ARG:NH2	2.27	0.42
23:DB:2476:A:N3	23:DB:2476:A:H2'	2.34	0.42
34:B3:31:ILE:HD11	34:B3:34:LYS:CD	2.49	0.42
41:DJ:4:PHE:CG	41:DJ:5:THR:N	2.87	0.42
23:BB:2210:U:C4	23:BB:2212:A:N7	2.87	0.42
44:DQ:77:LYS:O	44:DQ:80:ASN:HB3	2.19	0.42
45:DS:81:SER:HB3	45:DS:99:ARG:HB3	2.01	0.42
27:BK:60:ALA:HA	27:BK:87:LEU:CD2	2.49	0.42
23:BB:2675:A:N1	23:BB:2732:G:O6	2.53	0.42
45:DS:24:ILE:O	45:DS:25:ARG:C	2.57	0.42
45:DS:45:VAL:HA	45:DS:48:LYS:HB3	2.00	0.42
23:BB:285:G:H2'	23:BB:286:U:C6	2.54	0.42
23:BB:2842:G:O2'	23:BB:2843:G:H5'	2.19	0.42
1:AA:1039:G:O2'	1:AA:1040:U:H5'	2.18	0.42
23:DB:909:A:H2'	23:DB:912:C:H5	1.84	0.42
52:DW:46:ALA:HB2	52:DW:78:PHE:HD1	1.84	0.42
23:DB:2247:A:H3'	57:DB:3577:HOH:O	2.20	0.42
1:CA:859:G:O2'	1:CA:860:A:H5'	2.18	0.42
45:BS:10:ALA:O	45:BS:12:SER:N	2.45	0.42
23:DB:1463:C:H2'	23:DB:1464:G:C8	2.54	0.42
1:CA:402:G:H2'	1:CA:403:C:C6	2.54	0.42
23:BB:2358:A:H61	37:BL:54:GLN:HE22	1.67	0.42
1:AA:402:G:H2'	1:AA:403:C:C6	2.55	0.42
42:DN:8:ARG:HB3	42:DN:43:GLU:OE2	2.19	0.42
25:DC:33:LEU:CD2	25:DC:62:ARG:HA	2.49	0.42
7:AH:77:VAL:HG12	7:AH:84:ILE:HD12	2.00	0.42
29:BE:2:GLU:O	29:BE:3:LEU:HD13	2.19	0.42
16:AS:28:LYS:HD3	16:AS:28:LYS:H	1.83	0.42
23:DB:2786:U:O2'	23:DB:2787:C:H5'	2.20	0.42
23:BB:769:U:H2'	23:BB:770:G:C8	2.54	0.42
1:CA:98:A:H2'	1:CA:99:C:O4'	2.19	0.42
27:DK:107:LEU:C	27:DK:109:SER:H	2.22	0.42
23:DB:2015:A:N3	31:D0:2:VAL:HG22	2.34	0.42
44:DQ:38:VAL:O	44:DQ:39:ILE:C	2.56	0.42
41:DJ:58:ASN:O	41:DJ:126:ALA:O	2.37	0.42
1:CA:896:C:O2'	1:CA:897:C:H5'	2.19	0.42
23:DB:426:C:O2'	23:DB:427:U:H5'	2.18	0.42
6:CG:136:LYS:NZ	6:CG:136:LYS:HB2	2.34	0.42
47:DF:2:LYS:H	47:DF:2:LYS:CE	2.31	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1144:A:O2'	23:DB:1145:C:H5'	2.18	0.42
23:DB:2359:C:H2'	23:DB:2360:G:C8	2.55	0.42
1:CA:956:U:O2'	1:CA:957:U:H5'	2.19	0.42
1:AA:1399:C:N3	1:AA:1502:A:N1	2.66	0.42
23:DB:693:A:H2'	23:DB:694:U:C6	2.54	0.42
23:BB:2081:U:H2'	23:BB:2082:A:H8	1.84	0.42
23:DB:613:A:C2'	23:DB:613:A:N3	2.81	0.42
32:B4:30:GLU:HA	32:B4:31:PRO:HD3	1.94	0.42
1:CA:174:A:O2'	1:CA:175:C:H5'	2.19	0.42
23:BB:1568:G:H4'	25:BC:58:LYS:HB3	2.01	0.42
25:DC:1:ALA:N	25:DC:19:VAL:O	2.47	0.42
1:CA:577:G:O2'	1:CA:578:C:H5'	2.19	0.42
38:DM:17:ASN:ND2	38:DM:95:LEU:HD23	2.33	0.42
2:CC:54:ILE:HG12	2:CC:54:ILE:O	2.19	0.42
19:CU:8:ASN:O	19:CU:9:GLU:HB3	2.18	0.42
1:AA:12:U:H4'	1:AA:526:C:H4'	2.01	0.42
4:CE:9:GLU:O	4:CE:40:ASP:HA	2.18	0.42
16:AS:22:VAL:HB	16:AS:23:GLU:OE1	2.19	0.42
25:DC:179:GLU:HB2	25:DC:270:ARG:HB3	2.01	0.42
24:DI:89:SER:HA	24:DI:97:VAL:HG11	2.01	0.42
8:CI:120:ALA:O	8:CI:121:ARG:HG2	2.20	0.42
32:B4:27:CYS:CB	32:B4:33:HIS:HB2	2.49	0.42
23:DB:1819:A:OP1	25:DC:154:ALA:HA	2.19	0.42
25:DC:106:PRO:HB2	25:DC:193:GLU:H	1.82	0.42
14:CQ:45:VAL:O	14:CQ:70:LYS:HE3	2.19	0.42
6:CG:13:PRO:HB3	6:CG:20:GLU:CG	2.49	0.42
29:DE:108:ILE:HD11	29:DE:181:ILE:CA	2.49	0.42
29:DE:115:GLN:C	29:DE:117:ARG:H	2.23	0.42
43:BO:53:THR:OG1	43:BO:65:THR:HB	2.18	0.42
1:CA:1378:C:O2	1:CA:1378:C:O4'	2.34	0.42
12:AM:106:ARG:HD2	12:AM:111:PRO:HA	2.02	0.42
37:BL:141:LYS:HZ3	37:BL:143:GLU:HA	1.84	0.42
12:CM:21:ILE:HD12	12:CM:24:VAL:HG21	2.01	0.42
37:DL:79:LEU:HD23	37:DL:79:LEU:HA	1.91	0.42
48:DG:121:THR:O	48:DG:133:LYS:N	2.52	0.42
46:BU:3:LYS:CE	46:BU:82:VAL:HB	2.49	0.42
46:BU:82:VAL:HG13	46:BU:93:ARG:HB3	2.00	0.42
29:BE:126:VAL:HG13	29:BE:156:ASN:ND2	2.24	0.42
23:DB:1169:A:O2'	23:DB:1170:C:H5'	2.19	0.42
28:DP:80:VAL:CG1	28:DP:81:ASP:N	2.82	0.42
38:DM:93:VAL:HG22	38:DM:94:ALA:H	1.83	0.42
47:DF:116:LEU:HA	47:DF:116:LEU:HD12	1.92	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:BJ:3:THR:HB	41:BJ:44:TYR:CE1	2.53	0.42
18:AB:168:GLU:O	18:AB:172:ILE:HD12	2.19	0.42
47:BF:66:ILE:HD11	47:BF:83:PRO:CB	2.44	0.42
26:BD:149:ASN:CG	26:BD:150:GLN:H	2.22	0.42
1:AA:204:G:C5	1:AA:465:A:N3	2.87	0.42
6:AG:16:LYS:HB3	6:AG:43:TYR:HE1	1.82	0.42
1:CA:1279:G:O2'	1:CA:1281:C:OP2	2.34	0.42
4:AE:131:ASN:ND2	4:AE:134:ASN:H	2.17	0.42
40:DH:15:LEU:C	40:DH:17:ASP:H	2.22	0.42
40:DH:87:GLU:HB2	40:DH:89:LYS:NZ	2.33	0.42
22:DA:82:U:O2'	22:DA:83:G:H5'	2.19	0.42
23:DB:76:C:O2'	23:DB:77:G:H5'	2.20	0.42
1:CA:1320:C:C5'	16:CS:2:ARG:HG3	2.49	0.42
16:CS:48:ILE:HG22	16:CS:49:ALA:N	2.35	0.42
27:BK:105:ARG:HD3	27:BK:105:ARG:H	1.83	0.42
42:BN:12:ARG:HG3	42:BN:13:ASN:N	2.33	0.42
27:DK:86:LEU:HG	27:DK:86:LEU:H	1.51	0.42
1:AA:948:C:O2'	1:AA:949:A:H5'	2.18	0.42
23:DB:1439:A:C5	23:DB:1552:A:N6	2.87	0.42
1:AA:1133:G:O2'	1:AA:1134:G:H5'	2.19	0.42
1:AA:1135:U:H4'	1:AA:1136:C:H5	1.85	0.42
23:DB:2183:A:H2'	23:DB:2184:A:C8	2.54	0.42
23:DB:2290:G:H2'	23:DB:2291:U:C6	2.54	0.42
48:DG:9:VAL:C	48:DG:11:PRO:HD3	2.40	0.42
23:DB:2461:A:H1'	23:DB:2492:U:N3	2.33	0.42
38:BM:106:ASP:O	38:BM:108:VAL:N	2.52	0.42
26:DD:40:LEU:HD23	26:DD:46:ARG:CG	2.47	0.42
23:BB:152:A:H2'	23:BB:153:U:H6	1.82	0.42
3:AD:185:PRO:HB2	3:AD:190:LEU:HD12	2.01	0.42
23:DB:570:G:O2'	23:DB:571:U:H5'	2.19	0.42
3:AD:24:VAL:HG23	3:AD:25:ARG:N	2.34	0.42
51:DZ:70:GLU:HG2	51:DZ:71:LEU:N	2.34	0.42
23:BB:958:U:O4	38:BM:16:ARG:HA	2.19	0.42
23:DB:2149:U:H2'	23:DB:2150:C:C6	2.54	0.42
29:DE:17:THR:C	29:DE:19:PHE:N	2.73	0.42
23:DB:848:C:H2'	23:DB:849:A:H8	1.82	0.42
23:DB:1846:G:N2	23:DB:1848:A:N6	2.67	0.42
1:CA:411:A:O3'	1:CA:412:A:H4'	2.19	0.42
1:AA:599:C:O2'	1:AA:600:A:H5'	2.19	0.42
23:BB:254:G:O6	34:B3:4:LYS:HG3	2.19	0.42
1:AA:524:G:H2'	1:AA:525:C:H6	1.84	0.42
38:DM:28:PHE:HB3	38:DM:64:TRP:CE2	2.55	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
45:BS:4:ILE:CG2	45:BS:106:VAL:HG13	2.48	0.42
45:BS:74:ILE:O	45:BS:75:PHE:HB3	2.19	0.42
23:BB:1824:G:H2'	23:BB:1825:U:H6	1.85	0.42
1:AA:1200:C:C3'	1:AA:1201:A:H5'	2.50	0.42
2:CC:41:TYR:CZ	2:CC:89:VAL:HG11	2.54	0.42
23:DB:1827:U:O2'	23:DB:1828:G:H5'	2.19	0.42
23:BB:1714:U:H3'	23:BB:1715:G:C5'	2.49	0.42
27:BK:109:SER:C	27:BK:111:LYS:H	2.23	0.42
23:DB:1292:G:O2'	23:DB:1293:C:H5'	2.19	0.42
1:CA:1073:U:O2'	1:CA:1074:G:H5'	2.19	0.42
27:BK:5:GLN:O	27:BK:6:THR:O	2.38	0.42
1:AA:1222:G:OP1	16:AS:76:THR:HG21	2.18	0.42
23:DB:2630:G:H2'	23:DB:2631:G:H8	1.84	0.42
1:CA:366:A:H1'	1:CA:395:C:O2	2.19	0.42
23:BB:1316:U:H2'	23:BB:1317:G:H8	1.83	0.42
48:BG:54:ARG:HA	48:BG:54:ARG:HE	1.85	0.42
16:AS:31:ARG:HG3	16:AS:56:HIS:NE2	2.34	0.42
23:BB:1711:A:H2'	23:BB:1712:U:C6	2.54	0.42
23:DB:1570:A:H2'	23:DB:1571:A:C8	2.54	0.42
23:BB:817:C:H2'	23:BB:818:G:O4'	2.18	0.42
1:CA:750:C:O2'	20:CO:21:ASP:HB2	2.19	0.42
23:BB:1403:A:H2'	23:BB:1404:C:C6	2.54	0.42
23:BB:613:A:C2'	23:BB:613:A:N3	2.81	0.42
15:AR:44:THR:C	15:AR:46:THR:H	2.22	0.42
25:DC:211:ARG:HD3	25:DC:217:PRO:HD3	2.00	0.42
14:CQ:42:LYS:C	14:CQ:43:LEU:HD12	2.39	0.42
17:CT:15:LYS:HD3	17:CT:18:LYS:HE3	2.01	0.42
1:AA:110:C:H2'	1:AA:111:G:O4'	2.19	0.42
24:BI:63:ASP:O	24:BI:65:SER:N	2.52	0.42
23:DB:708:G:H2'	23:DB:709:U:C6	2.54	0.42
11:CL:27:PRO:O	11:CL:28:GLN:NE2	2.53	0.42
26:BD:141:ARG:HG3	26:BD:141:ARG:O	2.18	0.42
1:CA:484:G:H3'	1:CA:484:G:OP2	2.18	0.42
23:BB:1879:C:H2'	23:BB:1880:U:O4'	2.19	0.42
1:CA:227:G:O2'	1:CA:228:A:H5'	2.20	0.42
1:AA:755:G:OP2	20:AO:65:LYS:HD3	2.19	0.42
23:BB:120:U:H5''	23:BB:122:G:OP2	2.19	0.42
24:DI:1:ALA:C	24:DI:2:LYS:HZ3	2.23	0.42
1:CA:981:U:H2'	1:CA:982:U:H5	1.83	0.42
12:AM:38:ILE:HG22	12:AM:39:ALA:O	2.20	0.42
12:AM:44:ILE:H	12:AM:44:ILE:HD12	1.84	0.42
50:DT:30:ILE:HG23	50:DT:85:VAL:HB	2.00	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
32:B4:7:VAL:CG1	32:B4:8:LYS:N	2.73	0.42
29:BE:115:GLN:C	29:BE:117:ARG:H	2.22	0.42
5:CF:3:HIS:NE2	5:CF:65:GLU:HG3	2.35	0.42
14:CQ:45:VAL:CG1	14:CQ:60:ILE:HG21	2.49	0.42
26:DD:172:VAL:HG12	26:DD:173:GLN:O	2.19	0.42
23:DB:2386:A:N3	52:DW:38:ARG:HD2	2.34	0.42
52:DW:37:VAL:O	52:DW:39:GLN:N	2.46	0.42
29:DE:198:GLU:C	29:DE:200:LEU:N	2.72	0.42
23:BB:144:A:H2'	23:BB:145:C:C6	2.55	0.42
40:DH:77:THR:HG21	40:DH:145:ASN:HB2	2.01	0.42
8:AI:27:ILE:O	8:AI:34:LEU:HB2	2.20	0.42
23:DB:1730:C:H2'	23:DB:1731:G:H5''	2.02	0.42
12:CM:65:GLU:O	12:CM:68:LEU:HB3	2.20	0.42
25:BC:143:VAL:HG12	25:BC:144:GLU:N	2.34	0.42
48:BG:121:THR:O	48:BG:133:LYS:N	2.52	0.42
48:BG:122:ALA:HA	48:BG:132:LEU:HA	2.01	0.42
48:BG:134:GLY:HA3	48:BG:140:ILE:HG21	2.02	0.42
48:BG:140:ILE:HA	48:BG:143:VAL:CG2	2.45	0.42
35:DV:26:PHE:HE2	35:DV:44:HIS:HA	1.84	0.42
46:DU:82:VAL:HG13	46:DU:93:ARG:HB3	2.01	0.42
49:DR:36:ALA:C	49:DR:38:VAL:H	2.22	0.42
49:DR:7:SER:OG	49:DR:8:GLY:N	2.52	0.42
23:DB:1060:U:C1'	23:DB:1062:G:H5'	2.49	0.42
33:D1:35:LEU:O	33:D1:36:LYS:HB3	2.19	0.42
44:BQ:57:ARG:HG2	44:BQ:57:ARG:HH11	1.85	0.42
49:BR:24:LYS:HA	49:BR:94:THR:CG2	2.47	0.42
16:AS:15:LEU:O	16:AS:18:VAL:HG12	2.19	0.42
16:AS:14:LEU:CD2	16:AS:37:SER:HB3	2.49	0.42
18:AB:107:ARG:HA	18:AB:110:ILE:CD1	2.49	0.42
23:DB:494:G:OP1	45:DS:8:ARG:HD3	2.20	0.42
47:DF:45:ASP:OD1	47:DF:47:LYS:HB2	2.19	0.42
1:CA:1022:A:H2'	1:CA:1023:U:H5'	2.00	0.42
1:CA:999:C:H3'	1:CA:1000:A:H8	1.84	0.42
37:DL:103:ILE:N	37:DL:103:ILE:HD12	2.26	0.42
8:CI:94:ARG:O	8:CI:95:SER:C	2.57	0.42
25:BC:237:ARG:O	25:BC:238:ASN:HB2	2.19	0.42
1:AA:1510:C:H2'	1:AA:1511:G:C8	2.55	0.42
1:CA:1309:G:H1'	12:CM:72:ILE:HD12	2.01	0.42
16:CS:51:HIS:HB2	16:CS:56:HIS:CD2	2.54	0.42
23:DB:1869:G:O2'	23:DB:1871:A:N6	2.47	0.42
2:CC:128:MET:O	2:CC:129:PHE:C	2.58	0.42
2:CC:129:PHE:CD1	2:CC:156:LEU:HD21	2.54	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2238:G:N3	23:DB:2238:G:H2'	2.34	0.42
48:DG:8:VAL:HG21	48:DG:51:PHE:CE2	2.55	0.42
45:DS:17:VAL:O	45:DS:19:LEU:N	2.51	0.42
26:BD:14:ILE:HG22	26:BD:22:ILE:O	2.19	0.42
23:BB:2462:C:H2'	23:BB:2463:C:H6	1.83	0.42
48:BG:71:LEU:HA	48:BG:74:MET:SD	2.59	0.42
1:CA:1128:C:H4'	1:CA:1148:U:C2	2.54	0.42
3:CD:26:ALA:C	3:CD:28:ASP:N	2.71	0.42
33:D1:28:THR:O	33:D1:29:LYS:HD2	2.19	0.42
1:CA:807:A:H2'	1:CA:808:C:C6	2.53	0.42
1:AA:475:C:O2'	1:AA:476:U:H5'	2.20	0.42
21:CN:29:ILE:HG22	21:CN:30:ILE:H	1.84	0.42
1:AA:138:G:O2'	1:AA:139:A:H5'	2.20	0.42
28:BP:39:LEU:N	28:BP:39:LEU:HD12	2.34	0.42
23:BB:1948:G:O2'	23:BB:1949:G:H5'	2.19	0.42
23:BB:2808:G:HO2'	23:BB:2809:A:H8	1.67	0.42
1:CA:861:G:H2'	1:CA:862:C:H6	1.83	0.42
23:DB:873:C:H4'	38:DM:64:TRP:NE1	2.34	0.42
24:BI:138:VAL:HG12	24:BI:139:VAL:N	2.34	0.42
23:DB:1945:G:H2'	23:DB:1946:U:C6	2.55	0.42
1:CA:1418:A:H2	23:DB:1948:G:N3	2.18	0.42
30:DY:31:ILE:C	30:DY:33:HIS:H	2.22	0.42
2:AC:21:TRP:HE3	2:AC:22:PHE:O	2.03	0.42
22:DA:87:U:H2'	22:DA:88:C:C5'	2.50	0.42
26:DD:68:PHE:HB3	26:DD:73:VAL:HA	2.01	0.42
23:DB:1859:U:H2'	23:DB:1860:G:H8	1.84	0.42
23:BB:1923:U:H2'	23:BB:1924:C:H6	1.84	0.42
1:AA:66:A:O2'	1:AA:67:C:H5'	2.19	0.42
47:BF:45:ASP:OD1	47:BF:47:LYS:HB2	2.19	0.42
10:AK:89:GLY:O	10:AK:92:ARG:HB2	2.19	0.42
1:CA:154:U:O2'	1:CA:155:A:H5'	2.18	0.42
31:B0:33:SER:C	31:B0:35:GLU:N	2.73	0.42
21:AN:70:HIS:O	21:AN:72:PHE:N	2.52	0.42
43:BO:7:ARG:HA	43:BO:10:ARG:NE	2.34	0.42
14:CQ:80:LYS:H	14:CQ:80:LYS:NZ	2.17	0.42
14:CQ:80:LYS:C	14:CQ:80:LYS:HD2	2.38	0.42
23:BB:876:C:H2'	23:BB:877:A:O4'	2.20	0.42
23:DB:2875:C:H2'	23:DB:2876:G:H8	1.84	0.42
7:CH:17:GLN:HE21	7:CH:62:LEU:HD23	1.83	0.42
30:BY:46:MET:HB3	30:BY:46:MET:HE2	1.86	0.42
23:DB:2445:G:O2'	23:DB:2446:G:H5'	2.20	0.42
1:AA:929:G:O2'	1:AA:930:C:H5'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:556:A:C8	23:BB:557:C:C5	3.07	0.42
23:DB:1009:A:H3'	57:DB:3694:HOH:O	2.19	0.42
25:BC:132:ARG:O	25:BC:132:ARG:HG3	2.19	0.42
23:DB:294:A:H2'	23:DB:295:G:H5'	2.02	0.42
23:BB:603:A:H4'	23:BB:604:G:O5'	2.20	0.42
23:BB:1515:A:H3'	23:BB:1516:G:H8	1.85	0.42
23:DB:1098:A:C4	24:DI:3:LYS:O	2.72	0.42
23:BB:2305:U:H2'	23:BB:2306:C:O4'	2.19	0.42
1:CA:1130:A:H2'	1:CA:1131:G:C8	2.54	0.42
23:DB:674:G:C1'	29:DE:69:ARG:HD2	2.50	0.42
5:AF:38:ARG:O	5:AF:39:LEU:HB2	2.18	0.42
14:CQ:17:GLU:C	14:CQ:19:SER:H	2.22	0.42
8:AI:45:MET:O	8:AI:49:GLN:HG3	2.19	0.42
19:AU:3:ILE:HG21	19:AU:19:LYS:HA	2.02	0.42
1:AA:1124:G:O2'	1:AA:1145:A:C6	2.72	0.42
23:BB:1730:C:H2'	23:BB:1731:G:H5''	2.00	0.42
48:BG:83:THR:C	48:BG:84:LYS:HD3	2.39	0.42
35:DV:26:PHE:HE1	35:DV:89:ILE:CD1	2.21	0.42
46:DU:81:ARG:HH21	46:DU:96:LYS:HD2	1.84	0.42
29:BE:155:GLU:O	29:BE:159:LEU:HB2	2.20	0.42
27:BK:71:ARG:CB	27:BK:72:PRO:HD2	2.37	0.42
46:BU:10:VAL:O	46:BU:21:ARG:HA	2.19	0.42
52:BW:67:LYS:HB3	52:BW:80:SER:OG	2.18	0.42
44:BQ:91:ARG:CZ	49:BR:11:GLN:H	2.33	0.42
38:BM:68:PHE:CG	38:BM:69:PRO:HD2	2.55	0.42
16:AS:10:ILE:HB	16:AS:11:ASP:H	1.54	0.42
16:AS:68:HIS:HB3	16:AS:72:GLU:OE1	2.19	0.42
7:AH:14:ARG:HH21	7:AH:75:GLN:NE2	2.18	0.42
18:AB:83:ALA:CA	18:AB:88:GLN:HE21	2.29	0.42
21:AN:80:ARG:HG3	21:AN:81:ILE:H	1.84	0.42
4:CE:131:ASN:HD22	4:CE:134:ASN:HB2	1.83	0.42
20:AO:53:ARG:NH1	23:BB:715:A:N1	2.66	0.42
47:BF:136:ILE:HG22	47:BF:136:ILE:O	2.20	0.42
1:AA:920:U:C2	1:AA:921:U:C5	3.08	0.42
2:AC:1:GLY:C	2:AC:2:GLN:HG3	2.38	0.42
52:BW:28:GLU:H	52:BW:31:LEU:HD11	1.83	0.42
47:BF:115:GLY:CA	47:BF:177:ARG:HD2	2.49	0.42
1:AA:1080:A:H5''	4:AE:20:VAL:HG11	2.02	0.42
24:BI:19:PRO:HG2	24:BI:22:PRO:HB2	2.02	0.42
1:AA:191:G:H2'	1:AA:192:A:H8	1.83	0.42
25:BC:77:VAL:O	25:BC:77:VAL:HG23	2.19	0.42
38:BM:35:ALA:CB	38:BM:100:LYS:H	2.32	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:556:A:C8	23:DB:557:C:C5	3.07	0.42
17:CT:61:ALA:HA	17:CT:67:HIS:N	2.33	0.42
3:AD:178:GLU:OE1	3:AD:178:GLU:HA	2.19	0.42
1:CA:1221:G:H4'	16:CS:52:ASN:O	2.18	0.42
16:CS:18:VAL:HG11	16:CS:43:MET:CE	2.50	0.42
2:CC:24:ASN:O	2:CC:25:THR:C	2.56	0.42
42:DN:12:ARG:HG3	42:DN:13:ASN:N	2.35	0.42
41:DJ:42:ALA:O	41:DJ:44:TYR:N	2.52	0.42
23:DB:1680:U:H2'	23:DB:1681:G:O4'	2.20	0.42
23:DB:182:A:H2	23:DB:433:C:O2	2.03	0.42
41:BJ:82:GLY:O	41:BJ:84:ILE:HG22	2.20	0.42
1:CA:656:G:O2'	1:CA:657:U:H5'	2.20	0.42
23:DB:2282:G:H4'	23:DB:2389:G:O2'	2.19	0.42
23:BB:1438:U:N3	23:BB:1552:A:N6	2.67	0.42
23:BB:1553:A:H2'	23:BB:1555:G:N7	2.33	0.42
44:DQ:10:ARG:HB2	44:DQ:10:ARG:CZ	2.49	0.42
45:BS:24:ILE:O	45:BS:25:ARG:C	2.57	0.42
23:BB:1735:A:H2'	23:BB:1736:U:O4'	2.19	0.42
1:AA:1034:G:C2'	1:AA:1035:A:H5'	2.49	0.42
23:DB:2415:G:C4'	37:DL:66:PHE:HB2	2.48	0.42
40:DH:62:LEU:HD12	40:DH:65:ALA:CB	2.48	0.42
23:DB:37:C:H4'	23:DB:451:U:OP1	2.20	0.42
1:CA:501:C:H1'	1:CA:549:C:H1'	2.02	0.42
1:CA:1448:C:H2'	1:CA:1449:C:H6	1.84	0.42
38:BM:85:GLY:O	38:BM:86:LYS:C	2.57	0.42
30:DY:46:MET:HB3	30:DY:46:MET:HE2	1.85	0.42
23:BB:1994:C:OP1	26:BD:131:ASP:HA	2.19	0.42
23:DB:1778:U:H2'	23:DB:1784:A:H62	1.84	0.42
1:CA:312:C:O2'	1:CA:313:A:H5'	2.19	0.42
51:DZ:39:TRP:HE1	51:DZ:41:GLU:HG2	1.85	0.42
22:BA:48:U:O2'	43:BO:100:HIS:HE1	2.03	0.42
23:DB:2547:A:H5'	23:DB:2566:A:C2	2.55	0.42
23:DB:863:A:H2'	23:DB:864:G:H8	1.83	0.42
22:BA:64:G:H2'	22:BA:65:U:H6	1.83	0.42
18:CB:204:ASP:O	18:CB:209:VAL:HG13	2.19	0.42
41:BJ:72:LYS:CG	41:BJ:89:PHE:HB2	2.49	0.42
23:BB:956:G:H4'	38:BM:82:MET:HE1	2.00	0.42
23:BB:956:G:O2'	38:BM:82:MET:HE1	2.19	0.42
23:BB:1715:G:N2	23:BB:1744:A:OP2	2.52	0.42
22:BA:14:U:H4'	22:BA:70:C:O2	2.19	0.42
36:B2:46:LYS:HA	36:B2:46:LYS:NZ	2.34	0.42
36:B2:19:ARG:HH21	36:B2:19:ARG:HB3	1.83	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2676:C:O2'	23:BB:2677:G:H5'	2.19	0.42
7:AH:118:ALA:HB3	7:AH:120:LEU:HD22	2.01	0.42
1:AA:1292:G:H2'	1:AA:1293:C:H6	1.85	0.42
29:BE:148:ILE:HD13	29:BE:187:VAL:HG21	2.00	0.42
4:AE:87:VAL:HA	4:AE:91:SER:O	2.20	0.42
1:CA:761:G:H2'	1:CA:762:U:H6	1.82	0.42
23:DB:9:G:H21	23:DB:10:A:H62	1.67	0.42
1:CA:970:C:O2	1:CA:1231:G:H1'	2.19	0.42
23:DB:1312:U:O4	50:DT:64:LYS:HG2	2.19	0.42
1:AA:154:U:H2'	1:AA:155:A:H8	1.84	0.42
1:AA:154:U:O2'	1:AA:155:A:H5'	2.19	0.42
23:BB:1849:G:H2'	23:BB:1850:G:C8	2.54	0.42
17:AT:49:ALA:O	17:AT:52:GLU:HB3	2.20	0.42
34:D3:6:VAL:HG23	34:D3:60:CYS:O	2.19	0.42
23:BB:1403:A:H2'	23:BB:1404:C:H6	1.84	0.42
23:BB:1011:G:O2'	23:BB:1013:C:H5''	2.19	0.42
23:DB:962:G:N2	23:DB:2250:G:H1	2.17	0.42
23:BB:995:C:N4	41:BJ:2:LYS:HA	2.34	0.42
23:DB:613:A:OP2	23:DB:614:A:H2	2.01	0.42
1:CA:793:U:O2	1:CA:1516:G:H4'	2.20	0.42
51:DZ:17:ASN:HB2	51:DZ:25:THR:HB	2.00	0.42
50:BT:22:THR:O	50:BT:26:LYS:HG2	2.19	0.42
23:BB:903:C:H2'	23:BB:904:G:H8	1.84	0.42
14:CQ:3:LYS:HG3	14:CQ:4:ILE:H	1.84	0.42
23:DB:1159:U:O2'	23:DB:1160:G:H5'	2.20	0.42
50:DT:22:THR:O	50:DT:26:LYS:HG2	2.19	0.42
1:AA:886:G:O2'	1:AA:887:G:H5'	2.20	0.42
52:BW:84:GLU:CD	52:BW:84:GLU:H	2.23	0.42
1:CA:594:U:H2'	1:CA:595:A:O4'	2.19	0.42
23:BB:2623:G:O2'	23:BB:2624:G:H5'	2.19	0.42
1:CA:509:A:C6	1:CA:510:A:N1	2.88	0.42
8:CI:51:LEU:HB3	8:CI:56:MET:SD	2.60	0.42
1:AA:1329:A:H5'	12:AM:28:ARG:HG3	2.00	0.42
12:AM:3:ILE:H	12:AM:56:ARG:NH1	2.17	0.42
23:BB:1430:G:H2'	23:BB:1431:A:H8	1.85	0.42
41:BJ:54:ILE:HD12	41:BJ:55:ILE:H	1.84	0.42
2:CC:35:ASP:O	2:CC:38:VAL:HG22	2.20	0.42
29:BE:108:ILE:HD12	29:BE:180:LEU:CB	2.50	0.42
5:CF:22:ILE:O	5:CF:26:THR:HG23	2.20	0.42
5:CF:29:ILE:HG23	5:CF:66:ALA:HB2	2.02	0.42
26:DD:10:GLY:CA	26:DD:26:VAL:H	2.32	0.42
40:BH:80:ILE:H	40:BH:144:VAL:HG13	1.85	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2329:U:H2'	23:DB:2330:G:H8	1.85	0.42
29:DE:138:LEU:HD22	29:DE:143:LEU:HB2	2.00	0.42
40:DH:76:GLU:O	40:DH:143:ILE:HB	2.19	0.42
37:DL:108:ALA:O	37:DL:125:LEU:HD23	2.19	0.42
24:BI:79:LEU:HD23	24:BI:108:ILE:CD1	2.50	0.42
46:BU:62:ALA:O	46:BU:63:ALA:HB3	2.19	0.42
23:BB:1728:C:O2	23:BB:1728:C:H2'	2.19	0.42
23:BB:2538:C:H2'	23:BB:2539:C:C6	2.51	0.42
42:BN:3:HIS:O	42:BN:4:ARG:HB2	2.20	0.42
23:DB:2682:A:O2'	23:DB:2683:C:H5'	2.20	0.42
40:DH:118:PRO:HB2	40:DH:119:ASN:ND2	2.35	0.42
49:BR:40:MET:HG2	49:BR:48:LYS:HA	2.02	0.42
31:D0:31:LYS:HG2	31:D0:32:THR:N	2.35	0.42
23:DB:495:G:H21	45:DS:61:ASN:ND2	2.07	0.42
26:DD:149:ASN:C	26:DD:152:PRO:HD2	2.40	0.42
25:DC:209:ALA:O	25:DC:213:ARG:HB2	2.20	0.42
23:BB:2727:A:H2'	23:BB:2728:U:H6	1.84	0.42
23:DB:114:U:H2'	23:DB:115:C:C6	2.54	0.42
23:DB:1655:A:C2	23:DB:2049:G:H4'	2.54	0.42
31:B0:28:SER:HB2	31:B0:39:ARG:HE	1.81	0.42
44:DQ:93:ILE:HG23	44:DQ:94:LEU:HD22	2.00	0.42
11:CL:49:ARG:HG2	11:CL:89:LEU:HD21	2.00	0.42
39:DX:26:PHE:HD1	39:DX:27:ASN:ND2	2.17	0.42
39:DX:23:ARG:HA	39:DX:27:ASN:ND2	2.34	0.42
27:DK:119:ALA:N	27:DK:120:PRO:HD2	2.34	0.42
39:DX:30:MET:C	39:DX:32:ALA:N	2.73	0.42
23:DB:1998:A:H2'	23:DB:1999:C:H6	1.84	0.42
32:D4:16:ILE:HG23	32:D4:24:ARG:O	2.20	0.42
23:DB:362:A:N3	23:DB:362:A:H2'	2.35	0.42
12:CM:7:ASN:HD22	12:CM:7:ASN:N	2.17	0.42
23:BB:2228:G:H2'	23:BB:2229:U:H6	1.81	0.42
23:BB:2230:G:H4'	51:BZ:31:PRO:O	2.19	0.42
23:BB:1442:U:H2'	23:BB:1443:U:H6	1.84	0.42
1:CA:238:A:C3'	1:CA:239:U:H5''	2.50	0.42
38:DM:33:LEU:HB2	38:DM:102:LEU:HB2	2.01	0.42
17:CT:43:LYS:O	17:CT:46:ALA:HB3	2.19	0.42
11:AL:5:GLN:HG3	11:AL:8:ARG:NH2	2.35	0.42
23:DB:2654:A:H61	23:DB:2665:A:H3'	1.85	0.42
1:AA:208:U:H2'	1:AA:210:C:C4	2.54	0.42
1:AA:663:A:H5''	15:AR:49:LYS:NZ	2.34	0.42
37:BL:65:GLY:O	37:BL:66:PHE:CB	2.65	0.42
23:DB:414:C:H1'	23:DB:1864:U:H1'	2.02	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:BW:76:ARG:O	52:BW:77:LYS:HD3	2.19	0.42
23:BB:2653:U:H3'	23:BB:2654:A:H2'	2.02	0.42
11:CL:120:ARG:HG3	11:CL:120:ARG:HH11	1.85	0.42
6:AG:65:LEU:CB	6:AG:69:ARG:HH21	2.32	0.42
20:CO:69:TYR:CZ	20:CO:73:LYS:HG3	2.54	0.42
1:CA:1520:C:H2'	1:CA:1521:C:C6	2.54	0.42
51:DZ:6:GLN:HG3	51:DZ:76:GLU:OE1	2.19	0.42
23:DB:657:U:H2'	23:DB:658:U:H6	1.83	0.42
30:BY:31:ILE:C	30:BY:33:HIS:H	2.22	0.42
38:DM:85:GLY:O	38:DM:86:LYS:C	2.55	0.42
23:DB:1047:G:H1'	23:DB:1110:G:H22	1.82	0.42
1:CA:309:A:O2'	1:CA:310:G:H5'	2.19	0.42
48:DG:35:THR:CG2	48:DG:36:LEU:N	2.83	0.42
23:DB:2790:U:H5'	23:DB:2893:A:N7	2.34	0.42
7:AH:118:ALA:HB3	7:AH:120:LEU:CD2	2.49	0.42
25:DC:17:LYS:HB3	25:DC:18:VAL:H	1.73	0.42
23:BB:2829:A:O2'	23:BB:2830:C:H5'	2.19	0.42
1:AA:1073:U:O2'	1:AA:1074:G:H5'	2.20	0.42
1:AA:627:G:H2'	1:AA:628:G:C8	2.54	0.42
23:DB:1076:C:H2'	23:DB:1077:A:H8	1.84	0.42
11:AL:82:ARG:HG2	11:AL:82:ARG:NH1	2.34	0.42
1:AA:791:G:C6	1:AA:792:A:N7	2.88	0.42
23:DB:2315:G:H2'	23:DB:2316:G:C8	2.54	0.42
17:CT:49:ALA:O	17:CT:52:GLU:HB3	2.19	0.42
23:DB:2694:G:H2'	23:DB:2695:U:H6	1.85	0.42
23:DB:1984:G:O2'	23:DB:1985:C:H5'	2.20	0.42
1:CA:44:A:H2'	1:CA:45:G:C8	2.55	0.42
41:BJ:103:ILE:HG13	41:BJ:104:ALA:N	2.35	0.42
23:BB:903:C:H2'	23:BB:904:G:C8	2.55	0.42
1:AA:275:G:H5'	14:AQ:15:LYS:HG2	2.01	0.42
10:AK:27:ASN:O	10:AK:56:LYS:HE3	2.20	0.42
27:BK:103:VAL:HG23	27:BK:122:VAL:O	2.20	0.42
25:BC:61:TYR:HA	25:BC:85:ASN:ND2	2.35	0.42
1:CA:903:G:H2'	1:CA:904:U:C6	2.54	0.42
13:CP:2:VAL:HG13	13:CP:65:ALA:HA	2.02	0.42
45:DS:9:HIS:H	45:DS:102:HIS:CE1	2.36	0.42
1:AA:117:G:H2'	1:AA:118:U:O4'	2.18	0.42
23:BB:292:U:H2'	23:BB:293:U:O4'	2.19	0.42
25:BC:6:LYS:C	25:BC:8:THR:H	2.23	0.42
23:DB:2854:G:H2'	23:DB:2855:C:C6	2.55	0.42
23:BB:333:G:H2'	23:BB:333:G:N3	2.34	0.42
23:BB:2106:U:H6	23:BB:2106:U:O5'	2.02	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:DC:132:ARG:HG3	25:DC:132:ARG:O	2.20	0.42
17:CT:80:ALA:O	17:CT:84:LYS:HD2	2.19	0.42
24:DI:2:LYS:O	24:DI:3:LYS:HG3	2.18	0.42
40:BH:89:LYS:HA	40:BH:123:ARG:O	2.20	0.42
23:DB:725:G:H2'	23:DB:726:G:O4'	2.20	0.42
1:AA:1239:A:H4'	1:AA:1240:U:H5'	2.01	0.42
6:CG:37:THR:O	6:CG:38:ALA:C	2.57	0.42
37:DL:29:LYS:O	37:DL:31:GLY:N	2.53	0.42
15:CR:57:ALA:HA	15:CR:60:ARG:HH11	1.84	0.42
40:BH:114:GLU:HB3	40:BH:134:VAL:H	1.85	0.42
8:AI:46:VAL:HA	8:AI:49:GLN:CD	2.40	0.42
10:AK:31:VAL:HG11	10:AK:95:THR:OG1	2.19	0.42
43:DO:67:ASN:O	43:DO:69:ASP:N	2.52	0.42
9:AJ:36:VAL:HG12	9:AJ:38:GLY:N	2.34	0.42
23:DB:1727:C:H2'	23:DB:1728:C:H6	1.85	0.42
1:CA:8:A:H1'	4:CE:107:GLY:HA2	2.01	0.42
12:CM:22:TYR:HB2	12:CM:65:GLU:OE2	2.19	0.42
27:BK:88:ASN:C	27:BK:88:ASN:ND2	2.72	0.42
23:BB:321:U:C2	29:BE:159:LEU:HD21	2.55	0.42
40:DH:115:VAL:HA	40:DH:132:PHE:HD1	1.84	0.42
33:D1:49:LYS:CG	33:D1:50:GLU:H	2.17	0.42
23:BB:870:U:O2'	23:BB:871:U:H5'	2.19	0.42
16:AS:48:ILE:HD12	16:AS:70:LEU:HD21	2.00	0.42
23:DB:1025:G:H8	23:DB:1025:G:OP1	2.03	0.42
36:D2:12:ARG:CZ	36:D2:12:ARG:HB2	2.50	0.42
13:AP:4:ILE:O	13:AP:71:VAL:HG11	2.20	0.42
21:AN:5:MET:SD	21:AN:8:ARG:NH1	2.92	0.42
28:DP:20:ARG:CD	28:DP:21:PRO:HD2	2.50	0.42
47:DF:136:ILE:O	47:DF:136:ILE:HG22	2.19	0.42
1:CA:1300:G:H1'	1:CA:1301:U:C6	2.55	0.42
47:DF:6:TYR:O	47:DF:11:VAL:HG23	2.20	0.42
1:AA:864:A:H2'	1:AA:865:A:C8	2.54	0.42
26:BD:149:ASN:C	26:BD:152:PRO:HD2	2.40	0.42
17:AT:66:ILE:CG2	17:AT:70:LYS:HB3	2.43	0.42
7:CH:14:ARG:NH2	7:CH:75:GLN:HE21	2.17	0.42
1:CA:373:A:O2'	1:CA:374:A:H5'	2.20	0.42
40:DH:2:GLN:O	40:DH:3:VAL:O	2.37	0.42
27:BK:18:ARG:HB2	27:BK:45:GLU:CG	2.49	0.42
23:DB:948:C:H2'	23:DB:949:G:H8	1.84	0.42
16:CS:10:ILE:N	16:CS:10:ILE:HD12	2.34	0.42
48:BG:94:ARG:HB2	48:BG:95:ALA:H	1.71	0.42
52:BW:8:SER:HA	52:BW:10:ARG:HH12	1.85	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
44:DQ:83:LYS:HA	44:DQ:83:LYS:NZ	2.35	0.42
23:DB:182:A:H2'	23:DB:183:C:H6	1.84	0.42
23:BB:1132:U:H5''	41:BJ:84:ILE:HD11	2.01	0.42
13:CP:20:VAL:CG2	13:CP:32:PHE:HB2	2.49	0.42
25:DC:76:VAL:HG23	25:DC:96:LYS:NZ	2.34	0.42
23:BB:1607:C:N4	23:BB:1622:G:C5	2.88	0.42
51:DZ:53:ALA:O	51:DZ:54:LYS:HB3	2.20	0.42
23:BB:322:A:C2	23:BB:340:A:C6	3.08	0.42
23:DB:2729:G:H2'	23:DB:2730:C:H6	1.83	0.42
28:DP:48:ALA:HB3	28:DP:59:THR:HB	2.00	0.42
23:BB:589:U:O2'	23:BB:590:A:H5'	2.19	0.42
45:BS:36:LEU:HD23	45:BS:48:LYS:CA	2.46	0.42
1:AA:370:C:C2'	1:AA:371:A:H5'	2.50	0.42
25:BC:243:PRO:O	25:BC:250:GLN:HA	2.20	0.42
23:DB:814:C:H2'	23:DB:815:C:H6	1.85	0.42
25:DC:94:LEU:HG	25:DC:94:LEU:O	2.19	0.42
1:AA:815:A:H4'	1:AA:817:C:C5	2.54	0.42
23:BB:657:U:H2'	23:BB:658:U:H6	1.84	0.42
25:DC:250:GLN:HG2	25:DC:254:LYS:HG2	2.01	0.42
41:BJ:93:ILE:CA	41:BJ:97:PRO:HG3	2.46	0.42
23:DB:1640:A:O2'	23:DB:1641:A:H5'	2.19	0.42
1:CA:1127:G:H2'	1:CA:1128:C:H6	1.84	0.42
3:CD:29:THR:H	3:CD:33:ILE:CG2	2.33	0.42
41:BJ:51:GLY:HA3	41:BJ:121:LYS:HZ2	1.84	0.42
23:BB:570:G:O2'	23:BB:571:U:H5'	2.19	0.42
1:CA:1269:A:H2	1:CA:1312:G:N3	2.16	0.42
23:BB:1864:U:C2'	23:BB:1865:U:H5'	2.50	0.42
23:DB:1191:G:H2'	23:DB:1192:G:H8	1.85	0.42
23:DB:1191:G:O2'	23:DB:1192:G:H5'	2.18	0.42
23:BB:2109:U:H3'	23:BB:2110:G:C8	2.50	0.42
1:AA:491:G:O2'	1:AA:492:C:H5'	2.20	0.42
1:CA:716:A:N3	10:CK:118:ASN:O	2.52	0.42
22:DA:48:U:O2'	43:DO:100:HIS:HE1	2.03	0.42
23:BB:2700:A:O2'	23:BB:2701:U:H5'	2.20	0.42
23:BB:1220:G:H2'	23:BB:1221:C:H6	1.84	0.42
17:AT:24:ARG:HA	17:AT:27:MET:HE1	2.01	0.42
23:BB:260:G:H1'	23:BB:621:A:H1'	2.02	0.42
12:AM:91:ARG:C	12:AM:93:GLY:H	2.23	0.42
29:BE:3:LEU:HD21	29:BE:14:VAL:CG2	2.50	0.42
23:BB:2803:G:H2'	23:BB:2804:U:C6	2.54	0.42
41:BJ:40:HIS:HD1	41:BJ:41:LYS:HG3	1.83	0.42
23:BB:1745:A:H2'	23:BB:1746:A:H8	1.84	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
22:BA:13:G:O2'	22:BA:14:U:H5''	2.19	0.42
1:AA:784:A:N6	1:AA:799:G:C6	2.88	0.42
1:CA:1466:C:H2'	1:CA:1467:C:O4'	2.20	0.42
23:DB:941:A:H2	23:DB:1189:A:H2	1.67	0.42
23:BB:1290:C:H2'	23:BB:1291:C:H6	1.83	0.42
23:DB:1771:C:H2'	23:DB:1772:A:H8	1.84	0.42
1:AA:148:G:H2'	1:AA:149:A:H5''	2.01	0.42
23:BB:2405:G:H1'	23:BB:2412:A:N6	2.34	0.42
14:AQ:30:HIS:CG	14:AQ:33:TYR:HB2	2.55	0.42
1:CA:629:A:O2'	1:CA:630:A:H5'	2.18	0.42
23:DB:1480:C:H2'	23:DB:1481:U:O4'	2.20	0.42
23:DB:817:C:H2'	23:DB:818:G:O4'	2.19	0.42
23:BB:1335:C:H2'	23:BB:1336:A:H8	1.84	0.42
1:AA:913:A:H4'	1:AA:914:A:OP1	2.20	0.42
23:BB:1360:G:H2'	23:BB:1361:G:H5'	2.01	0.42
1:CA:625:U:H4'	13:CP:16:PHE:CE2	2.55	0.42
23:BB:2485:G:H5''	38:BM:125:PRO:HG3	2.02	0.42
23:BB:2854:G:H2'	23:BB:2855:C:C6	2.54	0.42
23:DB:551:G:O2'	23:DB:552:U:H5'	2.20	0.42
11:AL:28:GLN:HB3	11:AL:28:GLN:HE21	1.54	0.42
23:DB:1973:G:O2'	23:DB:1974:C:H5'	2.19	0.42
23:BB:2218:G:O2'	23:BB:2219:U:H5'	2.20	0.42
25:DC:245:THR:C	25:DC:247:TRP:H	2.22	0.42
1:AA:781:A:H2'	1:AA:782:A:H5'	2.00	0.42
4:AE:43:GLY:O	4:AE:72:ASN:HA	2.19	0.42
5:AF:34:GLY:O	5:AF:35:LYS:HB2	2.19	0.42
8:CI:126:PHE:CD1	8:CI:127:SER:N	2.87	0.42
23:DB:196:A:N3	23:DB:196:A:H2'	2.35	0.42
39:BX:41:HIS:CD2	39:BX:41:HIS:N	2.88	0.42
16:CS:20:LYS:HE3	16:CS:20:LYS:HB3	1.83	0.42
28:DP:111:GLU:CD	28:DP:111:GLU:N	2.73	0.42
26:DD:182:ALA:O	26:DD:183:GLU:C	2.58	0.42
14:AQ:42:LYS:C	14:AQ:43:LEU:HD12	2.39	0.42
8:CI:49:GLN:HB2	8:CI:50:PRO:CD	2.50	0.42
18:CB:40:ILE:H	18:CB:40:ILE:HG13	1.73	0.42
29:DE:61:ARG:HH12	29:DE:64:GLY:HA3	1.84	0.42
4:AE:84:VAL:HG11	4:AE:146:MET:HB3	2.01	0.42
35:BV:24:ASN:HB3	35:BV:44:HIS:HB3	2.01	0.42
41:BJ:140:LEU:HD23	41:BJ:140:LEU:O	2.20	0.42
35:DV:63:ILE:HB	35:DV:70:ILE:CD1	2.43	0.42
5:CF:20:GLY:O	5:CF:24:ARG:HG3	2.20	0.42
1:AA:254:G:O2'	1:AA:255:G:H5'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:BH:101:ASP:HA	40:BH:110:VAL:HG23	2.02	0.42
40:BH:113:SER:O	40:BH:115:VAL:HG22	2.19	0.42
40:BH:144:VAL:HG13	40:BH:145:ASN:H	1.84	0.42
42:BN:85:PRO:HA	42:BN:88:ALA:CB	2.42	0.42
22:DA:54:G:H21	47:DF:25:MET:CE	2.33	0.42
9:AJ:39:PRO:HA	9:AJ:74:VAL:CG2	2.37	0.42
23:DB:637:A:H4'	23:DB:638:G:O5'	2.19	0.42
23:BB:2465:C:O2'	23:BB:2466:C:H5'	2.19	0.42
49:BR:58:VAL:HG22	49:BR:59:ILE:N	2.35	0.42
23:DB:299:A:N6	23:DB:322:A:O2'	2.47	0.42
23:DB:1061:U:C4	24:DI:11:GLN:HG3	2.54	0.42
9:CJ:53:ILE:HG23	9:CJ:54:SER:H	1.84	0.42
27:DK:74:GLY:HA3	28:DP:74:GLN:HE21	1.85	0.42
47:DF:137:PHE:O	47:DF:138:PRO:C	2.57	0.42
49:BR:48:LYS:O	49:BR:49:ILE:C	2.58	0.42
46:DU:47:PRO:CB	46:DU:55:GLY:HA3	2.44	0.42
1:AA:134:G:H2'	1:AA:135:C:O4'	2.20	0.42
13:AP:6:LEU:HD12	13:AP:6:LEU:N	2.35	0.42
21:AN:60:ARG:O	21:AN:62:ARG:N	2.53	0.42
18:CB:62:ARG:H	18:CB:62:ARG:HD2	1.85	0.42
47:BF:102:LEU:C	47:BF:104:THR:H	2.22	0.42
45:BS:60:HIS:CG	45:BS:61:ASN:N	2.88	0.42
28:DP:24:THR:C	28:DP:25:VAL:HG13	2.40	0.42
17:CT:59:ARG:CB	17:CT:59:ARG:HH11	2.24	0.42
26:BD:39:ASP:CB	26:BD:42:ASN:HB3	2.41	0.42
12:CM:47:LEU:HD12	12:CM:51:GLN:CB	2.41	0.42
48:DG:94:ARG:NH2	48:DG:105:SER:N	2.67	0.42
23:DB:2577:A:H5''	23:DB:2578:G:H5'	2.01	0.42
28:BP:20:ARG:HD2	28:BP:21:PRO:HD2	2.00	0.42
1:CA:1320:C:O2'	1:CA:1321:U:H5'	2.19	0.42
6:AG:70:PRO:O	6:AG:95:ARG:HD3	2.20	0.42
6:AG:71:THR:N	6:AG:141:HIS:CE1	2.86	0.42
4:CE:82:HIS:CD2	7:CH:95:MET:HG3	2.54	0.42
23:DB:356:G:H2'	23:DB:357:C:H6	1.80	0.42
23:DB:580:U:H4'	44:DQ:30:VAL:HG21	2.02	0.42
2:AC:35:ASP:HB3	2:AC:39:ARG:HH11	1.82	0.42
1:CA:1096:C:H2'	1:CA:1097:C:H6	1.84	0.42
1:AA:663:A:O2'	1:AA:664:G:H5'	2.20	0.42
23:DB:1735:A:H2'	23:DB:1736:U:O4'	2.20	0.42
21:CN:52:ARG:HA	21:CN:52:ARG:HD3	1.87	0.42
25:DC:94:LEU:CD1	25:DC:100:ARG:HD3	2.50	0.42
1:AA:131:A:H2'	1:AA:132:C:H6	1.80	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DW:13:ARG:HD2	52:DW:13:ARG:HA	1.86	0.42
2:CC:106:ARG:HD3	2:CC:107:LYS:HE2	2.01	0.42
18:AB:30:ILE:HG22	18:AB:31:PHE:N	2.35	0.42
1:CA:1312:G:H2'	1:CA:1313:U:H6	1.83	0.42
23:BB:873:C:H4'	38:BM:64:TRP:NE1	2.35	0.42
23:DB:2703:C:N4	23:DB:2704:C:H41	2.18	0.42
2:CC:46:LEU:O	2:CC:49:ALA:HB3	2.20	0.42
23:BB:1845:G:O2'	23:BB:1846:G:H5'	2.20	0.42
51:BZ:70:GLU:HG2	51:BZ:71:LEU:N	2.35	0.42
1:AA:411:A:N9	1:AA:413:G:H1'	2.35	0.42
23:BB:2515:C:H2'	23:BB:2516:A:C8	2.55	0.42
23:DB:1459:G:H4'	23:DB:1461:C:N3	2.34	0.42
1:CA:1418:A:H1'	23:DB:1959:G:O4'	2.18	0.42
35:DV:55:GLU:HA	35:DV:58:SER:HB2	2.01	0.42
1:AA:1200:C:C4'	1:AA:1201:A:H5'	2.50	0.42
1:AA:177:G:N3	1:AA:177:G:O4'	2.52	0.42
23:DB:926:G:O2'	23:DB:927:A:H5'	2.20	0.42
1:CA:1181:G:H4'	1:CA:1182:G:OP1	2.19	0.42
23:BB:2636:C:H2'	23:BB:2637:U:H6	1.83	0.42
41:BJ:72:LYS:CB	41:BJ:89:PHE:HB2	2.48	0.42
1:CA:415:A:N3	1:CA:415:A:O4'	2.53	0.42
23:BB:1292:G:O2'	23:BB:1293:C:H5'	2.19	0.42
1:AA:1223:C:OP1	1:AA:1224:U:H3'	2.20	0.42
47:BF:45:ASP:C	47:BF:46:LYS:HE2	2.39	0.42
1:CA:339:C:P	27:DK:98:ARG:NH1	2.93	0.42
1:CA:1487:G:O2'	1:CA:1488:G:H5'	2.20	0.42
31:D0:33:SER:C	31:D0:35:GLU:N	2.72	0.42
5:AF:81:ASN:HB3	5:AF:84:VAL:HG12	2.02	0.42
23:BB:2703:C:N4	23:BB:2704:C:H41	2.18	0.42
23:DB:1276:A:O2'	23:DB:1277:G:H5'	2.19	0.42
23:BB:57:C:H2'	23:BB:58:G:C8	2.54	0.42
33:B1:33:LEU:HD23	33:B1:51:ALA:HB1	2.01	0.42
47:DF:163:GLU:C	47:DF:165:GLY:H	2.23	0.42
44:DQ:16:ILE:HD12	44:DQ:16:ILE:H	1.84	0.42
14:AQ:80:LYS:N	14:AQ:80:LYS:NZ	2.68	0.42
6:CG:94:ARG:HD3	6:CG:98:LEU:HB2	2.02	0.42
44:BQ:16:ILE:HD12	44:BQ:16:ILE:H	1.85	0.42
38:DM:124:LEU:HA	38:DM:125:PRO:HD3	1.89	0.42
24:BI:63:ASP:C	24:BI:65:SER:H	2.22	0.42
1:CA:532:A:N6	2:CC:126:ARG:HE	2.18	0.42
1:CA:1338:G:H2'	1:CA:1339:A:O4'	2.19	0.42
23:DB:1376:C:H3'	57:DB:3278:HOH:O	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1501:G:O2'	23:DB:1502:A:H5'	2.20	0.42
23:DB:2218:G:O2'	23:DB:2219:U:H5'	2.19	0.42
1:AA:1418:A:N6	1:AA:1482:G:H1'	2.34	0.42
1:AA:668:G:O2'	1:AA:669:G:H5'	2.20	0.42
8:CI:107:ALA:O	8:CI:108:ARG:C	2.58	0.42
18:CB:43:GLU:H	18:CB:43:GLU:HG2	1.44	0.42
1:AA:1240:U:H3'	1:AA:1241:G:H5'	2.02	0.42
50:DT:39:THR:C	50:DT:41:ALA:H	2.22	0.42
48:BG:30:GLY:O	48:BG:78:VAL:HG12	2.20	0.42
35:BV:4:ILE:HB	35:BV:62:THR:O	2.19	0.42
2:CC:63:ILE:O	2:CC:98:ALA:HB1	2.19	0.42
23:DB:2772:C:H4'	26:DD:171:THR:HG21	2.00	0.42
52:DW:19:ARG:O	52:DW:20:LEU:HD23	2.19	0.42
2:CC:55:VAL:HB	2:CC:66:THR:OG1	2.20	0.42
29:DE:108:ILE:HG12	29:DE:181:ILE:HG13	2.01	0.42
8:AI:44:ARG:HH11	8:AI:44:ARG:HG2	1.85	0.42
12:AM:102:LYS:HG3	12:AM:103:THR:H	1.84	0.42
23:BB:1060:U:C1'	23:BB:1062:G:H5'	2.50	0.42
40:BH:42:LYS:O	40:BH:46:PHE:HB2	2.19	0.42
23:BB:26:G:H2'	23:BB:27:G:O4'	2.19	0.42
6:CG:63:VAL:C	6:CG:65:LEU:H	2.23	0.42
23:BB:2141:G:H2'	23:BB:2142:A:C8	2.54	0.42
49:DR:48:LYS:O	49:DR:49:ILE:C	2.58	0.42
23:DB:1178:C:H3'	23:DB:1179:G:H8	1.84	0.42
23:BB:674:G:H4'	29:BE:69:ARG:HB3	2.02	0.42
38:DM:38:ARG:HG2	38:DM:38:ARG:HH11	1.85	0.42
44:BQ:91:ARG:NH2	44:BQ:93:ILE:HG21	2.35	0.42
49:BR:39:LEU:HB2	49:BR:49:ILE:CG1	2.43	0.42
47:BF:92:GLY:O	47:BF:95:MET:HB3	2.20	0.42
21:AN:80:ARG:HG2	21:AN:80:ARG:HH11	1.85	0.42
3:AD:197:HIS:O	3:AD:201:GLU:HG3	2.20	0.42
47:DF:32:LYS:HA	47:DF:95:MET:HG3	2.02	0.42
25:DC:14:HIS:N	25:DC:14:HIS:ND1	2.67	0.42
23:BB:2052:A:H4'	26:BD:148:GLN:C	2.40	0.42
17:AT:61:ALA:HA	17:AT:67:HIS:N	2.34	0.42
29:DE:28:VAL:HG23	29:DE:29:HIS:H	1.84	0.42
37:BL:100:ILE:O	37:BL:101:ILE:HG12	2.19	0.42
23:DB:2049:G:O2'	23:DB:2050:C:H5'	2.20	0.42
42:DN:31:HIS:C	42:DN:33:ILE:H	2.24	0.42
1:CA:1321:U:H5''	12:CM:85:TYR:CE2	2.55	0.42
6:AG:71:THR:H	6:AG:141:HIS:CE1	2.33	0.42
34:B3:14:LYS:O	34:B3:14:LYS:HD2	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BO:88:LYS:HG2	43:BO:89:ASP:H	1.83	0.42
44:DQ:94:LEU:HD13	44:DQ:94:LEU:HA	1.92	0.42
44:DQ:65:ASN:HA	44:DQ:75:TYR:HB2	2.02	0.42
25:BC:119:VAL:HG13	25:BC:133:ASN:ND2	2.32	0.42
27:DK:116:ILE:C	27:DK:118:LEU:H	2.23	0.42
2:CC:108:PRO:C	2:CC:110:LEU:H	2.22	0.42
41:DJ:121:LYS:HB2	41:DJ:121:LYS:HE3	1.83	0.42
38:BM:102:LEU:HB3	38:BM:103:TYR:CD1	2.55	0.42
11:AL:84:GLY:H	11:AL:94:TYR:HA	1.84	0.42
48:DG:6:ALA:HA	48:DG:7:PRO:HD3	1.84	0.42
51:DZ:77:LYS:H	51:DZ:77:LYS:CD	2.24	0.42
1:CA:842:U:H2'	1:CA:843:U:O3'	2.20	0.42
23:DB:413:C:H2'	23:DB:414:C:C6	2.54	0.42
48:BG:9:VAL:CA	48:BG:48:THR:HA	2.47	0.42
48:BG:8:VAL:HG21	48:BG:51:PHE:HE2	1.84	0.42
1:CA:200:G:O2'	1:CA:381:C:N4	2.53	0.42
1:CA:381:C:O2'	1:CA:382:A:O4'	2.38	0.42
23:BB:1639:C:O2'	23:BB:1640:A:H5'	2.20	0.42
2:CC:104:GLU:OE2	2:CC:106:ARG:N	2.52	0.42
1:CA:600:A:H5'	7:CH:120:LEU:HA	2.02	0.42
45:DS:10:ALA:O	45:DS:12:SER:N	2.42	0.42
1:CA:737:C:H2'	1:CA:738:C:H6	1.85	0.42
20:CO:33:THR:O	20:CO:37:ASN:HB2	2.20	0.42
23:DB:233:A:N6	23:DB:428:A:N6	2.63	0.42
23:BB:1561:C:H2'	23:BB:1562:U:H6	1.84	0.42
24:BI:85:ILE:CD1	24:BI:137:LEU:HD21	2.49	0.42
2:CC:146:LYS:HB2	2:CC:202:PHE:CD2	2.55	0.42
1:CA:5:U:H1'	1:CA:6:G:C2	2.55	0.42
24:BI:37:PHE:HZ	24:BI:56:VAL:HG11	1.85	0.42
25:BC:163:ILE:HG22	25:BC:164:VAL:N	2.35	0.42
23:BB:834:G:O2'	23:BB:835:C:H5'	2.20	0.42
1:CA:453:G:H2'	1:CA:454:G:C8	2.54	0.42
25:BC:181:ARG:NH2	25:BC:265:PHE:HB3	2.33	0.42
44:BQ:65:ASN:HA	44:BQ:75:TYR:HB2	2.01	0.42
2:AC:30:ASP:HA	21:AN:64:ARG:HH12	1.84	0.42
23:BB:862:G:H2'	23:BB:863:A:C8	2.54	0.42
6:AG:140:VAL:C	6:AG:142:ARG:H	2.22	0.42
41:BJ:89:PHE:O	41:BJ:92:MET:HB2	2.20	0.42
22:BA:14:U:HO2'	22:BA:15:A:P	2.41	0.42
1:CA:425:G:H2'	1:CA:426:U:C6	2.54	0.42
20:CO:31:LEU:CD1	20:CO:32:LEU:HD23	2.49	0.42
1:CA:1151:A:C4'	9:CJ:41:PRO:HB2	2.50	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DG:54:ARG:HA	48:DG:54:ARG:HE	1.85	0.42
23:BB:1340:U:H3'	23:BB:1341:G:C5'	2.47	0.42
23:DB:1904:G:H1'	23:DB:1927:A:N1	2.34	0.42
23:DB:1269:A:H2'	23:DB:1270:C:C6	2.54	0.42
15:CR:28:LEU:C	15:CR:30:ASN:N	2.72	0.42
14:AQ:24:ILE:HD12	14:AQ:24:ILE:N	2.34	0.42
28:DP:99:LEU:HA	28:DP:102:ARG:HG3	2.02	0.42
38:DM:17:ASN:HD21	38:DM:95:LEU:HD23	1.84	0.42
23:DB:709:U:O5'	23:DB:709:U:H6	2.02	0.42
8:CI:126:PHE:HD1	8:CI:127:SER:N	2.18	0.42
23:BB:702:U:H2'	23:BB:703:U:C6	2.55	0.42
23:BB:2597:G:OP1	25:BC:240:GLY:HA3	2.20	0.42
23:BB:1625:C:O2'	23:BB:1626:A:H5'	2.19	0.42
48:BG:79:THR:HG22	48:BG:80:GLU:N	2.34	0.42
1:AA:218:U:H2'	1:AA:219:U:C6	2.55	0.42
23:BB:1342:A:HO2'	23:BB:1344:U:P	2.43	0.42
1:CA:118:U:O4	1:CA:288:A:H2'	2.20	0.42
45:DS:85:ILE:HD12	45:DS:85:ILE:N	2.35	0.42
3:CD:82:LYS:NZ	3:CD:82:LYS:HB3	2.35	0.42
23:DB:2225:A:H4'	23:DB:2226:C:H6	1.85	0.42
23:BB:305:C:H2'	23:BB:306:U:C6	2.55	0.42
23:BB:335:C:O2'	23:BB:336:C:H5'	2.20	0.42
40:BH:90:LEU:HD22	40:BH:123:ARG:CA	2.48	0.42
9:AJ:6:ILE:HD13	9:AJ:8:ILE:HD11	2.01	0.42
19:CU:43:GLU:N	19:CU:46:ARG:HE	2.17	0.42
18:CB:45:THR:O	18:CB:48:MET:HB2	2.20	0.42
1:AA:1237:C:H4'	1:AA:1334:G:N2	2.35	0.42
1:CA:1179:A:O2'	1:CA:1180:A:H5'	2.19	0.42
32:B4:11:CYS:SG	32:B4:33:HIS:CE1	3.13	0.42
35:BV:44:HIS:CE1	35:BV:86:LEU:H	2.33	0.42
2:CC:35:ASP:O	2:CC:36:PHE:C	2.57	0.42
5:CF:61:LEU:HD12	5:CF:63:ASN:OD1	2.20	0.42
5:AF:38:ARG:CG	5:AF:39:LEU:N	2.83	0.42
14:AQ:45:VAL:CG1	14:AQ:60:ILE:HG21	2.50	0.42
40:BH:128:HIS:N	40:BH:144:VAL:O	2.53	0.42
19:AU:16:ARG:HH22	19:AU:19:LYS:CE	2.33	0.42
1:CA:9:G:H2'	1:CA:10:A:H8	1.83	0.42
6:CG:134:VAL:HB	6:CG:137:ARG:NH2	2.35	0.42
2:AC:133:MET:SD	2:AC:152:VAL:HG21	2.60	0.42
10:CK:22:ILE:HD12	10:CK:85:VAL:CG2	2.48	0.42
35:DV:77:VAL:HG12	38:DM:136:MET:HE2	2.01	0.42
23:DB:1177:G:H2'	23:DB:1178:C:C6	2.55	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:CB:32:GLY:O	18:CB:39:ILE:HB	2.20	0.42
28:BP:74:GLN:HB2	28:BP:77:SER:HB2	2.02	0.42
38:DM:18:ARG:C	38:DM:38:ARG:HH22	2.23	0.42
47:DF:102:LEU:C	47:DF:104:THR:H	2.22	0.42
47:DF:105:ILE:HA	47:DF:108:PRO:HB2	2.02	0.42
44:BQ:107:ALA:C	49:BR:48:LYS:HE2	2.40	0.42
23:BB:871:U:H4'	38:BM:68:PHE:CZ	2.54	0.42
38:BM:41:LEU:O	38:BM:94:ALA:N	2.52	0.42
16:AS:35:ARG:HB3	16:AS:71:GLY:HA2	2.01	0.42
16:AS:5:LYS:CB	16:AS:6:LYS:HD2	2.49	0.42
16:AS:5:LYS:HB2	16:AS:6:LYS:HD2	2.02	0.42
1:AA:876:C:O2'	7:AH:11:THR:HG21	2.19	0.42
23:BB:2312:U:H1'	47:BF:84:ILE:HG21	2.01	0.42
47:BF:40:GLY:CA	47:BF:84:ILE:HG23	2.50	0.42
18:AB:101:THR:HG22	18:AB:174:GLU:OE1	2.19	0.42
21:AN:60:ARG:NE	21:AN:62:ARG:HG2	2.33	0.42
18:CB:59:ILE:HA	18:CB:62:ARG:CZ	2.50	0.42
40:DH:120:GLY:O	40:DH:123:ARG:HD2	2.19	0.42
1:CA:920:U:C2	1:CA:921:U:C5	3.08	0.42
1:CA:921:U:H2'	1:CA:922:G:H8	1.84	0.42
1:CA:1004:A:H8	1:CA:1025:U:H1'	1.85	0.42
1:AA:16:A:O2'	1:AA:1080:A:H4'	2.20	0.42
39:DX:56:LEU:O	39:DX:57:LEU:HB3	2.20	0.42
3:AD:145:ARG:O	3:AD:146:GLU:C	2.56	0.42
38:BM:57:VAL:O	38:BM:59:ARG:N	2.49	0.42
1:AA:190:A:C4	1:AA:191:G:H1'	2.54	0.42
26:DD:127:PHE:HB3	26:DD:128:ARG:H	1.73	0.42
42:DN:28:LEU:HD21	42:DN:113:ILE:HG23	2.02	0.42
12:CM:108:ARG:HG3	12:CM:108:ARG:NH1	2.35	0.42
1:AA:994:A:H61	1:AA:1047:G:H1'	1.85	0.42
23:DB:1873:G:O2'	23:DB:1874:C:H5'	2.19	0.42
23:BB:2191:A:H2'	23:BB:2192:U:H6	1.85	0.42
41:BJ:80:HIS:HB3	41:BJ:81:ILE:H	1.75	0.42
51:BZ:53:ALA:O	51:BZ:54:LYS:HB3	2.20	0.42
39:DX:28:LEU:HD13	39:DX:37:LEU:HD11	2.01	0.42
40:BH:27:ARG:HH11	51:BZ:64:ILE:CD1	2.32	0.42
13:CP:20:VAL:HG21	13:CP:32:PHE:CG	2.55	0.42
23:BB:1607:C:N4	23:BB:1622:G:N7	2.67	0.42
51:DZ:54:LYS:HA	51:DZ:57:ARG:CD	2.45	0.42
23:BB:1552:A:H2'	23:BB:1553:A:C5'	2.45	0.42
23:BB:264:C:O2'	23:BB:265:A:H5''	2.19	0.42
11:AL:31:GLY:HA3	11:AL:54:VAL:CG1	2.50	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
17:CT:46:ALA:HB1	17:CT:82:ILE:CG2	2.48	0.42
6:AG:149:ALA:HB2	10:AK:60:PHE:CB	2.50	0.42
6:AG:150:PHE:H	10:AK:55:ARG:HH22	1.65	0.42
24:BI:103:ALA:O	24:BI:107:GLU:HG3	2.20	0.42
1:CA:1091:U:H2'	1:CA:1093:A:OP2	2.19	0.42
23:DB:1857:G:H22	23:DB:1884:G:H2'	1.82	0.42
52:DW:28:GLU:H	52:DW:31:LEU:HD11	1.85	0.42
1:AA:1187:G:O5'	8:AI:114:LYS:HE3	2.19	0.42
29:DE:46:GLN:HB3	29:DE:86:ALA:CA	2.49	0.42
45:BS:17:VAL:O	45:BS:19:LEU:N	2.53	0.42
1:AA:1096:C:H2'	1:AA:1097:C:C6	2.55	0.42
1:CA:836:G:H2'	1:CA:837:U:H6	1.84	0.42
23:DB:2899:A:H2'	23:DB:2900:A:C8	2.55	0.42
28:BP:30:TRP:HD1	28:BP:39:LEU:HG	1.82	0.42
1:CA:137:U:H2'	1:CA:138:G:H8	1.83	0.42
2:CC:32:LEU:HD11	21:CN:92:ILE:HG12	2.02	0.42
43:DO:59:ALA:HA	43:DO:62:LEU:HB2	2.02	0.42
6:AG:93:VAL:HA	6:AG:96:ASN:ND2	2.33	0.42
23:DB:1038:G:O2'	23:DB:1039:A:H5'	2.20	0.42
41:BJ:99:ARG:HA	41:BJ:102:GLU:HB2	2.02	0.42
23:DB:2043:C:H2'	23:DB:2044:C:C6	2.54	0.42
23:BB:2897:U:H2'	23:BB:2898:U:H6	1.83	0.42
23:BB:329:G:H1	46:BU:16:LYS:HE3	1.83	0.42
1:CA:784:A:H2'	1:CA:785:G:C8	2.51	0.42
8:AI:128:LYS:HD3	8:AI:128:LYS:H	1.85	0.42
1:CA:993:G:H2'	1:CA:993:G:N3	2.35	0.42
25:DC:83:ASP:HA	25:DC:84:PRO:HD3	1.90	0.42
22:DA:87:U:C2'	22:DA:88:C:O5'	2.67	0.42
26:DD:69:ALA:C	26:DD:71:ALA:N	2.73	0.42
1:CA:1465:A:H8	1:CA:1465:A:O5'	2.03	0.42
2:AC:131:ARG:N	2:AC:131:ARG:HD2	2.34	0.42
23:DB:1292:G:H2'	23:DB:1293:C:H6	1.82	0.42
1:CA:496:A:H2'	1:CA:497:G:N7	2.35	0.42
1:CA:1387:G:O2'	1:CA:1388:C:H5'	2.20	0.42
23:BB:2691:C:H2'	23:BB:2692:G:C8	2.54	0.42
3:CD:102:TYR:CE1	3:CD:109:THR:HA	2.55	0.42
1:CA:213:G:C8	1:CA:214:C:C5	3.08	0.42
14:CQ:30:HIS:CE1	14:CQ:32:ILE:HG22	2.55	0.42
23:DB:1965:C:H3'	23:DB:1966:A:C8	2.55	0.42
43:BO:6:ALA:CB	43:BO:10:ARG:HH11	2.32	0.42
23:DB:64:A:O2'	23:DB:65:U:H5'	2.19	0.42
1:AA:729:A:H2'	1:AA:730:G:H8	1.85	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1350:C:H2'	23:BB:1350:C:O2	2.20	0.42
23:DB:1700:A:H3'	23:DB:1701:A:H8	1.83	0.42
20:CO:18:ASP:O	20:CO:19:ALA:HB2	2.20	0.42
20:CO:21:ASP:OD2	20:CO:24:SER:HB2	2.19	0.42
14:AQ:80:LYS:O	14:AQ:81:ALA:HB3	2.20	0.42
1:CA:913:A:H4'	1:CA:914:A:OP1	2.20	0.42
23:BB:1015:U:H2'	23:BB:1016:G:C8	2.54	0.42
23:DB:2776:A:H4'	23:DB:2777:G:O5'	2.20	0.42
23:BB:1838:C:H4'	23:BB:1839:G:H8	1.85	0.42
3:CD:11:SER:HB3	3:CD:17:ASP:HA	2.02	0.42
23:BB:2193:G:H2'	23:BB:2194:U:H6	1.85	0.42
23:DB:2350:C:O2'	23:DB:2351:G:H5'	2.20	0.42
4:CE:98:ALA:HB2	4:CE:123:LEU:HG	2.02	0.42
1:AA:579:A:H2'	1:AA:580:C:C6	2.55	0.42
43:DO:60:GLU:H	43:DO:60:GLU:HG2	1.69	0.42
43:DO:56:LYS:HG2	43:DO:60:GLU:OE1	2.20	0.42
26:BD:182:ALA:O	26:BD:183:GLU:C	2.59	0.42
1:CA:409:U:OP1	3:CD:23:GLY:HA3	2.19	0.42
23:BB:2331:G:H2'	23:BB:2332:C:C6	2.55	0.42
41:DJ:120:ARG:HG2	41:DJ:120:ARG:H	1.73	0.42
23:BB:2251:G:H2'	23:BB:2252:G:C8	2.55	0.42
23:BB:1383:A:P	23:BB:1383:A:H3'	2.60	0.42
23:DB:55:G:O2'	23:DB:56:A:H5'	2.20	0.42
23:DB:1671:U:H2'	23:DB:1673:G:OP2	2.20	0.42
9:AJ:101:SER:OG	9:AJ:102:LEU:N	2.53	0.41
23:BB:921:C:H2'	23:BB:922:C:C6	2.55	0.41
50:DT:8:LEU:HD22	50:DT:46:ALA:HA	2.02	0.41
1:AA:238:A:C3'	1:AA:239:U:H5''	2.51	0.41
26:DD:172:VAL:CG2	26:DD:194:PRO:HD3	2.50	0.41
23:DB:2262:U:OP1	52:DW:38:ARG:NH2	2.53	0.41
19:AU:3:ILE:HB	19:AU:19:LYS:HD2	2.02	0.41
25:BC:142:ASN:CG	25:BC:142:ASN:O	2.59	0.41
37:DL:112:LEU:O	37:DL:112:LEU:HD23	2.20	0.41
48:DG:134:GLY:HA3	48:DG:140:ILE:HG21	2.02	0.41
19:CU:3:ILE:HB	19:CU:19:LYS:HD2	2.01	0.41
23:BB:2746:U:C4'	48:BG:138:GLN:HA	2.50	0.41
15:CR:33:THR:HG22	15:CR:39:VAL:CG1	2.50	0.41
3:CD:160:LEU:HD23	3:CD:164:ARG:CZ	2.50	0.41
46:DU:73:ASN:HD22	46:DU:74:ALA:H	1.67	0.41
49:DR:49:ILE:HG21	49:DR:53:PHE:C	2.40	0.41
24:DI:54:ILE:O	24:DI:54:ILE:HG23	2.19	0.41
23:DB:1168:G:C6	23:DB:1182:G:C6	3.08	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:1172:C:H3'	23:DB:1173:U:C6	2.55	0.41
1:AA:1005:A:C2	1:AA:1006:G:H1'	2.54	0.41
44:BQ:60:TRP:C	44:BQ:64:ILE:HG12	2.41	0.41
38:BM:19:GLY:HA3	38:BM:38:ARG:NH2	2.34	0.41
16:AS:40:PHE:HD1	16:AS:43:MET:HB2	1.84	0.41
16:AS:50:VAL:HG13	16:AS:70:LEU:HD23	2.02	0.41
18:AB:91:VAL:HG11	18:AB:95:TRP:HD1	1.85	0.41
49:DR:61:ALA:HB1	49:DR:98:ILE:H	1.85	0.41
3:AD:86:GLY:O	3:AD:196:GLU:HG3	2.20	0.41
20:AO:35:GLN:HB2	20:AO:59:MET:CE	2.50	0.41
20:AO:33:THR:HA	20:AO:63:ARG:HH11	1.85	0.41
26:BD:150:GLN:O	26:BD:151:THR:C	2.57	0.41
52:BW:28:GLU:O	52:BW:30:VAL:N	2.53	0.41
18:CB:122:ASP:OD1	18:CB:124:THR:HG22	2.20	0.41
18:AB:202:ASN:CG	18:AB:204:ASP:H	2.23	0.41
38:DM:35:ALA:C	38:DM:36:VAL:HG23	2.40	0.41
23:BB:1594:U:H2'	23:BB:1595:C:H6	1.81	0.41
9:AJ:18:ILE:HG23	9:AJ:19:ASP:H	1.85	0.41
16:CS:35:ARG:HH12	16:CS:76:THR:HG23	1.84	0.41
43:BO:24:THR:O	43:BO:90:VAL:HB	2.20	0.41
44:DQ:91:ARG:NH2	44:DQ:93:ILE:HG21	2.35	0.41
23:BB:1420:A:HO2'	23:BB:1421:G:P	2.43	0.41
23:DB:1011:G:P	44:DQ:69:ARG:HH22	2.43	0.41
4:AE:125:LYS:HD2	4:AE:126:ALA:N	2.35	0.41
1:AA:78:A:H2'	1:AA:79:G:H8	1.85	0.41
1:AA:79:G:H2'	1:AA:80:A:N7	2.35	0.41
32:D4:4:ARG:CG	32:D4:5:ALA:H	2.29	0.41
4:AE:106:ALA:HB1	4:AE:110:MET:CB	2.45	0.41
3:AD:192:ALA:C	3:AD:194:ILE:H	2.23	0.41
11:CL:84:GLY:H	11:CL:94:TYR:HA	1.84	0.41
1:CA:369:G:O2'	1:CA:370:C:H5'	2.20	0.41
7:CH:100:ILE:CG1	7:CH:128:VAL:HB	2.50	0.41
48:BG:3:VAL:O	48:BG:68:ARG:HG3	2.19	0.41
1:AA:384:G:H2'	1:AA:385:C:H6	1.83	0.41
1:CA:779:C:H5''	10:CK:123:PRO:HB3	2.02	0.41
23:DB:2794:C:H2'	23:DB:2795:C:H6	1.85	0.41
1:AA:1071:C:O2'	1:AA:1072:G:H5'	2.19	0.41
23:DB:2245:U:H5''	23:DB:2246:G:H5'	2.02	0.41
1:CA:1391:U:H2'	1:CA:1392:G:H8	1.83	0.41
23:DB:1846:G:N2	23:DB:1848:A:H62	2.18	0.41
17:CT:54:GLN:N	17:CT:55:PRO:CD	2.82	0.41
23:DB:2636:C:O5'	26:DD:81:GLU:HB2	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:CK:30:ILE:HG22	10:CK:45:THR:CB	2.50	0.41
29:BE:120:VAL:HG23	29:BE:188:MET:O	2.19	0.41
47:BF:71:LYS:HG2	47:BF:71:LYS:O	2.19	0.41
50:BT:7:LEU:O	50:BT:7:LEU:HD13	2.20	0.41
27:BK:63:VAL:HG13	27:BK:107:LEU:HD21	2.02	0.41
11:CL:51:VAL:HG12	11:CL:63:THR:HG22	2.01	0.41
24:BI:5:GLN:HG2	24:BI:6:ALA:H	1.82	0.41
23:BB:2784:U:O2'	23:BB:2785:C:H5'	2.20	0.41
1:CA:771:G:H2'	1:CA:772:U:C6	2.55	0.41
23:BB:303:G:H2'	23:BB:304:U:C6	2.54	0.41
23:BB:1310:G:H1'	23:BB:1611:C:H5'	2.02	0.41
23:BB:1740:G:O2'	23:BB:1741:C:H5'	2.19	0.41
1:CA:551:U:O2'	11:CL:82:ARG:HD2	2.20	0.41
23:DB:2405:G:H1'	23:DB:2412:A:H61	1.84	0.41
1:AA:707:U:H2'	1:AA:708:C:H6	1.85	0.41
1:CA:1122:U:O2'	1:CA:1123:U:H5'	2.20	0.41
5:CF:12:PRO:C	5:CF:14:GLN:H	2.24	0.41
23:DB:1708:C:H2'	23:DB:1709:U:H6	1.85	0.41
26:DD:97:SER:OG	26:DD:98:VAL:N	2.53	0.41
1:AA:291:U:H2'	1:AA:292:G:H8	1.86	0.41
29:DE:40:ARG:NH2	29:DE:92:HIS:NE2	2.68	0.41
1:AA:509:A:C6	1:AA:510:A:N1	2.88	0.41
1:AA:364:A:H2'	1:AA:365:U:O2	2.20	0.41
28:BP:62:LYS:HB3	28:BP:69:VAL:CG2	2.49	0.41
23:DB:2659:G:O2'	23:DB:2661:G:N7	2.46	0.41
1:CA:1032:G:H2'	1:CA:1033:G:O4'	2.20	0.41
44:BQ:104:ALA:HA	49:BR:46:GLU:CD	2.40	0.41
23:DB:690:G:H2'	23:DB:691:C:O4'	2.20	0.41
23:DB:962:G:H21	23:DB:2250:G:H1	1.68	0.41
1:AA:512:U:H2'	1:AA:513:C:C6	2.55	0.41
51:DZ:66:THR:O	51:DZ:69:ALA:HB3	2.20	0.41
20:AO:3:LEU:CG	20:AO:4:SER:H	2.32	0.41
23:BB:1249:U:O4'	44:BQ:3:VAL:HG21	2.20	0.41
45:BS:9:HIS:H	45:BS:102:HIS:CE1	2.38	0.41
31:D0:18:HIS:C	31:D0:20:ALA:H	2.23	0.41
31:B0:47:TYR:CE1	31:B0:52:LYS:HG3	2.55	0.41
27:BK:8:LEU:HD13	27:BK:84:CYS:SG	2.60	0.41
34:B3:9:ALA:HA	37:BL:58:TYR:HB2	2.02	0.41
23:DB:333:G:N3	23:DB:333:G:H2'	2.35	0.41
47:DF:161:SER:HB3	47:DF:164:GLU:HG3	2.02	0.41
23:BB:2519:U:C6	23:BB:2542:A:N6	2.88	0.41
12:AM:19:THR:HG22	12:AM:25:GLY:O	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
12:AM:22:TYR:HB2	12:AM:65:GLU:CA	2.49	0.41
12:AM:11:HIS:CA	12:AM:43:LYS:HD3	2.40	0.41
50:DT:11:LEU:HD13	50:DT:11:LEU:N	2.35	0.41
50:BT:43:ILE:O	50:BT:47:VAL:HG23	2.20	0.41
23:DB:2305:U:H2'	23:DB:2306:C:O4'	2.19	0.41
35:DV:4:ILE:O	35:DV:63:ILE:HA	2.20	0.41
2:CC:63:ILE:H	2:CC:98:ALA:HB1	1.83	0.41
48:DG:15:ASP:CG	48:DG:26:LYS:HD2	2.40	0.41
48:DG:42:VAL:HG13	48:DG:42:VAL:O	2.20	0.41
5:AF:45:ARG:HG2	5:AF:46:GLN:H	1.85	0.41
41:DJ:54:ILE:O	41:DJ:122:LEU:HA	2.20	0.41
40:BH:73:ASN:OD1	40:BH:141:LYS:HB2	2.20	0.41
52:DW:39:GLN:HG2	52:DW:42:THR:H	1.84	0.41
29:DE:198:GLU:HG3	29:DE:199:MET:N	2.34	0.41
22:BA:28:C:H5	22:BA:56:G:H1	1.66	0.41
36:B2:27:GLY:O	36:B2:30:VAL:HB	2.20	0.41
43:DO:30:ARG:HG3	43:DO:30:ARG:HH11	1.85	0.41
25:BC:151:GLY:O	25:BC:152:GLN:HG3	2.20	0.41
48:DG:122:ALA:HA	48:DG:132:LEU:HA	2.02	0.41
10:CK:95:THR:O	10:CK:99:LEU:HB2	2.21	0.41
26:BD:114:LYS:HB2	26:BD:116:LYS:NZ	2.35	0.41
26:BD:121:THR:HB	26:BD:127:PHE:CD1	2.55	0.41
24:DI:52:LEU:HD13	24:DI:81:LYS:HZ3	1.83	0.41
28:DP:50:ARG:HB3	28:DP:56:SER:HB3	1.99	0.41
28:DP:80:VAL:HG13	28:DP:81:ASP:N	2.34	0.41
40:DH:68:ARG:CG	40:DH:134:VAL:HG21	2.50	0.41
38:DM:68:PHE:CG	38:DM:69:PRO:HD2	2.55	0.41
44:BQ:63:ARG:HH21	44:BQ:64:ILE:HD11	1.84	0.41
23:DB:992:C:O2'	23:DB:993:G:H5'	2.20	0.41
13:AP:71:VAL:HG13	13:AP:72:ALA:N	2.35	0.41
47:BF:116:LEU:HD12	47:BF:116:LEU:HA	1.91	0.41
4:CE:131:ASN:ND2	4:CE:134:ASN:H	2.18	0.41
42:BN:28:LEU:HD21	42:BN:113:ILE:HG23	2.02	0.41
1:AA:202:G:H2'	1:AA:203:G:H8	1.84	0.41
37:DL:95:LEU:HB2	37:DL:101:ILE:HG12	2.02	0.41
40:DH:4:ILE:HD12	40:DH:4:ILE:N	2.35	0.41
6:AG:16:LYS:HB3	6:AG:43:TYR:CZ	2.55	0.41
26:DD:114:LYS:HB2	26:DD:116:LYS:NZ	2.35	0.41
39:BX:20:ASN:HA	39:BX:24:GLU:OE1	2.19	0.41
39:BX:57:LEU:O	39:BX:60:LYS:HB2	2.20	0.41
23:BB:2886:A:H62	31:B0:39:ARG:CZ	2.31	0.41
40:BH:11:ASN:O	40:BH:12:LEU:HB3	2.20	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:373:A:O2'	1:AA:374:A:H5'	2.20	0.41
47:BF:11:VAL:HG21	47:BF:172:PHE:HE1	1.79	0.41
28:BP:20:ARG:CD	28:BP:21:PRO:HD2	2.50	0.41
1:CA:1014:A:H2'	1:CA:1015:G:O4'	2.20	0.41
2:CC:26:LYS:CG	2:CC:27:GLU:N	2.81	0.41
52:BW:9:THR:HG23	52:BW:10:ARG:CD	2.45	0.41
26:DD:159:LYS:NZ	26:DD:160:LYS:N	2.68	0.41
46:DU:84:PHE:O	46:DU:85:ARG:CB	2.64	0.41
23:BB:1438:U:C4	23:BB:1552:A:N6	2.88	0.41
25:DC:249:VAL:O	25:DC:251:THR:N	2.53	0.41
23:DB:1797:G:O3'	25:DC:255:LYS:O	2.38	0.41
36:B2:3:ARG:HG2	36:B2:3:ARG:NH2	2.34	0.41
23:BB:987:C:O2'	23:BB:988:A:H5'	2.20	0.41
1:CA:821:G:H4'	57:CA:1751:HOH:O	2.20	0.41
4:CE:54:GLU:C	4:CE:56:PRO:HD2	2.40	0.41
1:CA:502:A:OP1	11:CL:113:ARG:N	2.53	0.41
23:BB:1485:U:H2'	23:BB:1486:U:H6	1.83	0.41
23:DB:968:C:H2'	23:DB:969:G:H8	1.85	0.41
10:AK:63:GLN:O	10:AK:67:GLU:HG2	2.20	0.41
2:AC:26:LYS:HG3	2:AC:27:GLU:N	2.31	0.41
7:CH:110:MET:SD	7:CH:115:ALA:HB2	2.60	0.41
4:CE:80:LEU:CD1	4:CE:95:MET:HB3	2.50	0.41
47:BF:81:GLY:O	47:BF:82:TYR:C	2.58	0.41
1:CA:429:U:H4'	1:CA:430:A:O5'	2.19	0.41
21:CN:76:PHE:HD1	21:CN:83:VAL:HG13	1.84	0.41
45:BS:73:LYS:O	45:BS:106:VAL:N	2.53	0.41
28:BP:36:LYS:HB3	28:BP:37:LYS:H	1.70	0.41
23:BB:1407:G:H2'	23:BB:1408:G:H8	1.85	0.41
23:DB:777:G:H2'	23:DB:778:G:H8	1.84	0.41
41:DJ:72:LYS:CG	41:DJ:89:PHE:HB2	2.50	0.41
17:CT:53:MET:O	17:CT:57:VAL:HG22	2.20	0.41
23:DB:2636:C:H2'	23:DB:2637:U:H6	1.85	0.41
45:DS:4:ILE:CG2	45:DS:106:VAL:HG13	2.48	0.41
23:BB:2262:U:OP2	52:BW:12:GLY:HA3	2.20	0.41
33:D1:32:LYS:HG2	33:D1:52:LYS:HA	2.01	0.41
1:CA:308:C:H2'	1:CA:309:A:H8	1.85	0.41
41:DJ:99:ARG:HA	41:DJ:102:GLU:HB2	2.02	0.41
1:AA:614:C:O2'	1:AA:615:G:H5'	2.20	0.41
23:DB:1936:A:H2	23:DB:1943:U:C5	2.37	0.41
26:DD:68:PHE:HB3	26:DD:73:VAL:HG23	2.01	0.41
35:DV:1:MET:HG3	35:DV:2:PHE:CD2	2.55	0.41
23:DB:132:G:H2'	23:DB:133:U:H6	1.84	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
41:DJ:58:ASN:O	41:DJ:60:ASP:N	2.51	0.41
1:CA:154:U:H2'	1:CA:155:A:H8	1.84	0.41
1:AA:891:U:O2'	1:AA:892:A:H5'	2.20	0.41
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.55	0.41
23:DB:471:A:H2'	23:DB:472:A:O4'	2.20	0.41
23:BB:1480:C:H2'	23:BB:1481:U:O4'	2.19	0.41
14:AQ:53:GLY:O	14:AQ:56:ASP:HB2	2.20	0.41
23:DB:768:G:O2'	23:DB:769:U:H5'	2.20	0.41
1:CA:934:C:H5''	57:CA:1895:HOH:O	2.20	0.41
23:DB:1360:G:H2'	23:DB:1361:G:C5'	2.50	0.41
23:DB:2081:U:H2'	23:DB:2082:A:H8	1.85	0.41
23:DB:995:C:N4	41:DJ:2:LYS:HA	2.35	0.41
36:B2:22:MET:SD	36:B2:28:ARG:HG3	2.59	0.41
38:DM:124:LEU:HA	38:DM:124:LEU:HD23	1.93	0.41
23:BB:1344:U:O2'	23:BB:1385:A:H2'	2.19	0.41
46:DU:66:VAL:C	46:DU:68:ASN:H	2.22	0.41
38:BM:30:SER:O	38:BM:132:THR:HA	2.20	0.41
35:DV:49:ASN:O	35:DV:52:ALA:HB3	2.20	0.41
23:BB:1686:C:H2'	23:BB:1687:G:O4'	2.19	0.41
38:DM:31:PHE:CE2	38:DM:110:GLU:HB3	2.55	0.41
3:CD:96:ARG:NH1	3:CD:133:SER:HA	2.35	0.41
1:CA:1188:A:C2'	1:CA:1189:U:H5'	2.50	0.41
23:DB:519:U:H2'	23:DB:520:G:H8	1.85	0.41
29:BE:160:ALA:C	29:BE:162:ARG:H	2.24	0.41
13:AP:23:ASP:OD1	13:AP:25:ARG:NE	2.50	0.41
23:BB:1109:C:H2'	23:BB:1110:G:C4	2.55	0.41
23:BB:1866:A:C4	23:BB:1876:A:C6	3.08	0.41
25:BC:120:ASP:CG	25:BC:121:ALA:H	2.23	0.41
23:DB:1678:A:H2'	23:DB:1679:A:O4'	2.20	0.41
18:CB:41:ASN:C	18:CB:43:GLU:N	2.72	0.41
1:AA:1240:U:C3'	1:AA:1241:G:H5'	2.50	0.41
12:AM:21:ILE:HG23	12:AM:65:GLU:N	2.32	0.41
50:DT:55:VAL:HG13	50:DT:85:VAL:HG12	2.01	0.41
52:BW:50:VAL:HG23	52:BW:61:LYS:CE	2.51	0.41
50:BT:8:LEU:HD22	50:BT:46:ALA:HA	2.02	0.41
25:DC:140:VAL:HG12	25:DC:141:HIS:H	1.85	0.41
35:BV:31:TYR:O	35:BV:92:VAL:HA	2.20	0.41
29:BE:198:GLU:C	29:BE:200:LEU:N	2.74	0.41
37:DL:81:ASP:HA	37:DL:84:LYS:HE2	2.01	0.41
43:BO:51:ALA:O	43:BO:74:VAL:HG12	2.20	0.41
19:AU:16:ARG:CA	19:AU:16:ARG:NE	2.83	0.41
24:BI:11:GLN:NE2	24:BI:74:PRO:HG2	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
3:CD:53:GLN:O	3:CD:202:LEU:HD22	2.20	0.41
23:BB:27:G:HO2'	23:BB:28:A:H8	1.60	0.41
2:AC:184:ASN:O	2:AC:199:VAL:HG22	2.20	0.41
23:DB:633:A:H2'	23:DB:634:C:O4'	2.20	0.41
48:DG:93:TYR:CG	48:DG:106:LEU:HB3	2.55	0.41
46:DU:3:LYS:HE2	46:DU:82:VAL:HB	2.03	0.41
2:AC:33:ASP:O	2:AC:37:LYS:HG3	2.19	0.41
29:BE:58:LYS:CD	29:BE:58:LYS:N	2.80	0.41
23:DB:2376:A:C2	43:DO:92:PHE:HB3	2.55	0.41
47:DF:111:ARG:H	47:DF:111:ARG:HD2	1.85	0.41
47:DF:37:MET:O	47:DF:37:MET:HG2	2.20	0.41
47:DF:55:ASP:HA	47:DF:139:GLU:OE2	2.20	0.41
49:BR:36:ALA:C	49:BR:38:VAL:H	2.23	0.41
47:BF:87:LYS:HG3	47:BF:88:VAL:N	2.28	0.41
18:AB:169:HIS:CD2	18:AB:170:ILE:H	2.39	0.41
18:AB:169:HIS:NE2	18:AB:170:ILE:HG12	2.34	0.41
25:DC:203:VAL:C	25:DC:205:GLY:H	2.22	0.41
1:AA:1350:A:OP1	8:AI:122:ARG:HD2	2.21	0.41
1:CA:1413:A:O2'	1:CA:1414:U:H5'	2.21	0.41
40:DH:44:ILE:O	40:DH:48:GLU:HG2	2.20	0.41
18:AB:29:PHE:CZ	18:AB:198:VAL:HG11	2.56	0.41
26:DD:122:VAL:HA	26:DD:127:PHE:N	2.35	0.41
23:BB:182:A:H2'	23:BB:183:C:H6	1.84	0.41
23:BB:2075:U:H2'	23:BB:2238:G:H22	1.82	0.41
1:AA:1432:G:H1'	1:AA:1468:A:H61	1.85	0.41
2:AC:11:LEU:O	2:AC:13:ILE:N	2.54	0.41
1:AA:1509:C:O2'	1:AA:1510:C:H5'	2.20	0.41
41:DJ:45:THR:N	41:DJ:46:PRO:CD	2.81	0.41
27:DK:18:ARG:HB2	27:DK:45:GLU:CG	2.49	0.41
24:DI:129:GLU:O	24:DI:133:ARG:HG3	2.20	0.41
24:DI:96:LYS:HD3	24:DI:138:VAL:HG21	2.01	0.41
23:DB:2526:G:C2'	32:D4:1:MET:H1	2.32	0.41
23:DB:280:U:H3	23:DB:360:U:H3	1.68	0.41
23:DB:358:U:H2'	23:DB:359:G:C8	2.55	0.41
23:DB:1439:A:N1	23:DB:1552:A:N7	2.68	0.41
45:DS:26:GLY:O	45:DS:28:LYS:N	2.54	0.41
51:BZ:30:LEU:HA	51:BZ:31:PRO:HD3	1.96	0.41
6:CG:23:ALA:O	6:CG:26:VAL:HG13	2.20	0.41
23:DB:2373:G:H2'	23:DB:2374:C:H6	1.84	0.41
1:AA:836:G:H2'	1:AA:837:U:H6	1.84	0.41
23:DB:589:U:H2'	23:DB:590:A:C8	2.56	0.41
23:BB:2839:G:O2'	23:BB:2840:C:H5'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
39:DX:41:HIS:N	39:DX:41:HIS:CD2	2.88	0.41
52:BW:43:LYS:HD3	52:BW:77:LYS:HG2	2.03	0.41
40:DH:58:LEU:O	40:DH:58:LEU:HD23	2.20	0.41
23:BB:2511:U:H2'	23:BB:2512:C:C6	2.55	0.41
1:AA:738:C:H2'	1:AA:739:C:C6	2.55	0.41
23:BB:2199:A:O2'	51:BZ:36:HIS:HE1	2.03	0.41
7:CH:118:ALA:HB3	7:CH:120:LEU:HD22	2.02	0.41
2:CC:137:VAL:CG1	2:CC:169:GLU:HG3	2.47	0.41
22:DA:52:A:C2'	22:DA:53:A:H5'	2.50	0.41
1:AA:859:G:O2'	1:AA:860:A:H5'	2.20	0.41
17:AT:53:MET:C	17:AT:55:PRO:HD2	2.41	0.41
1:CA:1124:G:OP1	9:CJ:38:GLY:HA3	2.20	0.41
25:DC:82:TYR:CE1	25:DC:84:PRO:HG3	2.53	0.41
23:DB:957:C:O2'	23:DB:958:U:H5''	2.20	0.41
23:BB:125:A:H5'	36:B2:19:ARG:HD3	2.02	0.41
23:BB:927:A:C2	30:BY:42:ALA:HB1	2.56	0.41
23:DB:1583:A:H5'	23:DB:1585:C:C2	2.56	0.41
23:BB:1258:U:O4'	29:BE:79:ARG:HD2	2.20	0.41
23:BB:1905:C:O2'	23:BB:1929:G:H1'	2.20	0.41
6:AG:55:LYS:HB2	6:AG:55:LYS:NZ	2.35	0.41
42:DN:62:ASN:N	42:DN:62:ASN:ND2	2.68	0.41
23:BB:1223:G:OP2	49:BR:68:ARG:NH1	2.53	0.41
40:BH:41:LYS:HE3	40:BH:41:LYS:H	1.86	0.41
23:DB:312:G:H2'	23:DB:313:G:C8	2.55	0.41
23:BB:480:A:O5'	46:BU:43:LYS:HE2	2.20	0.41
40:DH:42:LYS:O	40:DH:42:LYS:HD3	2.20	0.41
1:AA:375:U:OP1	13:AP:70:ARG:HB2	2.20	0.41
23:DB:1342:A:HO2'	23:DB:1344:U:P	2.43	0.41
1:CA:594:U:O2'	1:CA:595:A:H5'	2.20	0.41
25:DC:32:LEU:O	25:DC:63:ILE:HG12	2.20	0.41
23:DB:1511:G:H2'	23:DB:1512:C:H6	1.85	0.41
48:DG:108:PHE:C	48:DG:110:HIS:H	2.23	0.41
31:D0:25:THR:O	31:D0:26:SER:HB2	2.20	0.41
15:AR:27:THR:O	15:AR:27:THR:HG22	2.20	0.41
23:DB:2337:G:H2'	23:DB:2337:G:N3	2.35	0.41
5:CF:54:LEU:N	5:CF:54:LEU:HD22	2.35	0.41
18:AB:48:MET:HG2	18:AB:48:MET:H	1.44	0.41
25:BC:54:GLY:O	25:BC:214:GLY:HA2	2.20	0.41
23:BB:1123:C:H2'	23:BB:1124:G:H8	1.85	0.41
8:CI:25:GLY:HA2	8:CI:60:LEU:O	2.18	0.41
8:CI:27:ILE:HD12	8:CI:27:ILE:H	1.85	0.41
8:CI:55:ASP:O	8:CI:59:LYS:HE3	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:923:G:N3	52:BW:23:LYS:HE3	2.36	0.41
12:AM:14:ALA:N	12:AM:42:VAL:O	2.53	0.41
50:DT:14:PRO:HA	50:DT:32:LEU:HB2	2.00	0.41
50:DT:11:LEU:HA	50:DT:34:VAL:HG12	2.00	0.41
50:DT:43:ILE:O	50:DT:47:VAL:HG23	2.21	0.41
23:DB:672:C:O2'	23:DB:673:C:H5'	2.20	0.41
35:BV:31:TYR:CB	35:BV:37:PRO:HG3	2.45	0.41
35:BV:75:GLN:HB2	35:BV:90:ASP:O	2.20	0.41
2:CC:63:ILE:N	2:CC:98:ALA:HB2	2.33	0.41
48:DG:25:ILE:HD12	48:DG:25:ILE:N	2.35	0.41
40:BH:98:ASP:C	40:BH:100:ALA:H	2.24	0.41
52:DW:37:VAL:HG12	52:DW:38:ARG:HD3	2.02	0.41
8:AI:74:GLN:HE21	8:AI:74:GLN:N	2.19	0.41
23:DB:2720:U:C5'	28:DP:52:ARG:HH22	2.16	0.41
42:DN:80:PHE:O	42:DN:85:PRO:HD3	2.20	0.41
43:DO:51:ALA:O	43:DO:74:VAL:HG12	2.21	0.41
42:BN:92:GLY:O	42:BN:94:TYR:N	2.53	0.41
10:CK:83:VAL:HG12	10:CK:85:VAL:HG23	2.02	0.41
23:BB:1047:G:HO2'	23:BB:1048:A:P	2.43	0.41
45:DS:59:GLU:CD	45:DS:66:ILE:HG23	2.40	0.41
22:DA:4:C:H2'	22:DA:5:U:C6	2.55	0.41
38:DM:19:GLY:C	38:DM:20:LEU:HD22	2.40	0.41
47:DF:108:PRO:C	47:DF:110:ILE:H	2.24	0.41
35:BV:80:HIS:CD2	35:BV:81:PRO:HD2	2.56	0.41
16:AS:35:ARG:HB3	16:AS:71:GLY:CA	2.50	0.41
16:AS:4:LEU:O	16:AS:4:LEU:HD23	2.19	0.41
18:AB:67:LEU:HD22	18:AB:68:PHE:H	1.84	0.41
18:CB:59:ILE:C	18:CB:59:ILE:HD12	2.40	0.41
26:DD:4:LEU:N	26:DD:4:LEU:HD22	2.35	0.41
28:DP:23:ASP:O	28:DP:46:VAL:HG22	2.20	0.41
1:CA:1002:G:N2	1:CA:1003:G:H1'	2.35	0.41
18:CB:113:LEU:HD23	18:CB:114:LYS:N	2.35	0.41
40:DH:2:GLN:OE1	40:DH:20:ASN:HA	2.20	0.41
31:D0:42:ILE:HG12	42:DN:99:LYS:O	2.20	0.41
23:BB:1589:U:H2'	23:BB:1590:A:H8	1.83	0.41
16:CS:71:GLY:O	16:CS:72:GLU:C	2.58	0.41
34:B3:31:ILE:O	34:B3:31:ILE:HG12	2.20	0.41
23:DB:994:C:O2	49:DR:10:LYS:HE3	2.20	0.41
23:DB:996:A:H4'	44:DQ:91:ARG:CD	2.50	0.41
11:AL:23:LEU:HB2	11:AL:58:ASN:ND2	2.36	0.41
1:CA:190:A:O5'	1:CA:190:A:C8	2.73	0.41
6:AG:33:GLY:C	6:AG:35:LYS:H	2.23	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DN:3:HIS:O	42:DN:4:ARG:HB2	2.20	0.41
36:D2:21:ARG:HH21	36:D2:43:THR:CG2	2.31	0.41
23:DB:361:G:O2'	23:DB:362:A:H5'	2.20	0.41
1:CA:1510:C:H2'	1:CA:1511:G:C8	2.55	0.41
12:CM:53:ASP:HA	12:CM:56:ARG:NE	2.35	0.41
23:BB:1439:A:C8	23:BB:1440:U:C6	3.08	0.41
1:CA:238:A:H2'	1:CA:239:U:C5'	2.48	0.41
41:DJ:51:GLY:HA3	41:DJ:121:LYS:HZ2	1.83	0.41
38:BM:32:GLY:HA2	38:BM:117:PHE:CZ	2.56	0.41
1:AA:818:G:C2'	1:AA:819:A:H5''	2.50	0.41
40:DH:61:VAL:C	40:DH:63:ALA:H	2.24	0.41
1:CA:383:A:H2'	1:CA:384:G:O4'	2.21	0.41
25:BC:196:ASN:C	25:BC:198:GLU:H	2.23	0.41
38:BM:17:ASN:HD21	38:BM:95:LEU:HB3	1.85	0.41
38:BM:17:ASN:ND2	38:BM:95:LEU:HD23	2.34	0.41
1:CA:737:C:H2'	1:CA:738:C:C6	2.55	0.41
23:BB:2569:G:C2	23:BB:2570:G:C8	3.09	0.41
23:DB:1561:C:H2'	23:DB:1562:U:H6	1.82	0.41
23:BB:777:G:H2'	23:BB:778:G:H8	1.84	0.41
42:BN:2:ARG:HG2	42:BN:2:ARG:O	2.21	0.41
51:BZ:50:ARG:HH21	51:BZ:50:ARG:HG2	1.85	0.41
23:DB:1228:G:H2'	23:DB:1229:C:H6	1.85	0.41
30:DY:23:LEU:HD22	30:DY:23:LEU:HA	1.88	0.41
23:DB:237:C:H2'	23:DB:238:C:H6	1.86	0.41
23:BB:1463:C:H2'	23:BB:1464:G:C8	2.54	0.41
23:BB:2756:U:H4'	23:BB:2757:A:OP1	2.20	0.41
1:CA:689:C:OP1	10:CK:45:THR:OG1	2.38	0.41
4:AE:103:GLY:O	4:AE:121:ASN:HA	2.20	0.41
41:BJ:40:HIS:ND1	41:BJ:41:LYS:HG3	2.36	0.41
1:AA:184:G:H4'	1:AA:224:U:O3'	2.20	0.41
26:BD:68:PHE:HB3	26:BD:73:VAL:HA	2.02	0.41
9:AJ:66:GLU:HB3	21:AN:98:ALA:CB	2.50	0.41
1:AA:1207:G:O2'	1:AA:1208:C:H5'	2.21	0.41
1:AA:1294:G:H2'	1:AA:1295:U:C6	2.56	0.41
23:BB:1904:G:H1'	23:BB:1927:A:N1	2.35	0.41
10:CK:88:PRO:HD3	19:CU:28:LEU:CD1	2.50	0.41
43:DO:7:ARG:O	43:DO:10:ARG:HB2	2.21	0.41
33:D1:33:LEU:O	33:D1:51:ALA:HB3	2.20	0.41
5:AF:12:PRO:C	5:AF:14:GLN:H	2.22	0.41
23:BB:1678:A:H2'	23:BB:1679:A:O4'	2.20	0.41
23:BB:2369:A:H2'	23:BB:2370:G:H8	1.84	0.41
23:DB:1831:G:H2'	23:DB:1832:C:C6	2.54	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:223:A:N1	23:DB:407:G:O2'	2.43	0.41
7:CH:68:LYS:HG3	7:CH:69:ALA:H	1.84	0.41
1:CA:179:A:O2'	1:CA:180:U:H5'	2.21	0.41
23:BB:1361:G:H2'	23:BB:1362:C:C6	2.55	0.41
23:BB:706:A:H2'	23:BB:707:G:H8	1.85	0.41
23:BB:2397:G:O2'	23:BB:2398:U:H5'	2.19	0.41
31:B0:37:HIS:HB3	31:B0:43:THR:HG22	2.02	0.41
36:B2:32:ALA:O	36:B2:36:ALA:HB2	2.21	0.41
23:DB:903:C:H2'	23:DB:904:G:H8	1.85	0.41
17:AT:80:ALA:O	17:AT:84:LYS:HD2	2.21	0.41
20:CO:17:ARG:NH1	20:CO:17:ARG:HA	2.34	0.41
46:DU:48:VAL:HG13	46:DU:48:VAL:O	2.20	0.41
1:CA:687:A:C2	1:CA:704:A:C5	3.08	0.41
49:DR:55:ASP:OD2	49:DR:55:ASP:N	2.54	0.41
30:BY:41:PRO:HA	30:BY:44:ARG:HB3	2.03	0.41
8:CI:62:LEU:HD22	8:CI:62:LEU:H	1.84	0.41
12:AM:21:ILE:O	12:AM:23:GLY:N	2.52	0.41
19:AU:35:GLU:HB3	19:AU:36:PHE:H	1.64	0.41
1:CA:1374:A:O2'	1:CA:1375:A:H5'	2.20	0.41
1:AA:237:G:H2'	1:AA:238:A:H8	1.86	0.41
21:CN:51:PRO:O	21:CN:53:ASP:N	2.53	0.41
29:BE:17:THR:C	29:BE:19:PHE:N	2.74	0.41
5:CF:38:ARG:O	5:CF:39:LEU:HB2	2.19	0.41
5:CF:90:MET:HE2	5:CF:90:MET:HA	2.02	0.41
5:CF:97:THR:O	5:CF:99:ALA:N	2.53	0.41
5:AF:17:GLN:HB3	5:AF:17:GLN:HE21	1.74	0.41
40:BH:68:ARG:HD3	40:BH:132:PHE:CD2	2.56	0.41
40:BH:134:VAL:HG13	40:BH:135:HIS:N	2.36	0.41
1:AA:1287:A:H2'	1:AA:1288:A:C8	2.55	0.41
24:BI:109:ALA:HB1	24:BI:124:MET:CG	2.50	0.41
37:BL:108:ALA:HB3	37:BL:125:LEU:HD21	2.03	0.41
48:DG:84:LYS:HB2	48:DG:132:LEU:HD23	2.02	0.41
23:BB:2145:C:H3'	23:BB:2146:C:H5''	2.01	0.41
26:BD:116:LYS:HD3	26:BD:123:LYS:HE2	2.02	0.41
35:DV:31:TYR:O	35:DV:92:VAL:HA	2.20	0.41
49:BR:97:LYS:O	49:BR:98:ILE:HB	2.21	0.41
49:BR:14:VAL:CG2	49:BR:98:ILE:HG12	2.49	0.41
23:DB:299:A:C8	23:DB:322:A:C2	3.09	0.41
38:DM:71:LYS:CG	38:DM:93:VAL:HG12	2.50	0.41
41:BJ:44:TYR:HB2	44:BQ:63:ARG:HD3	2.02	0.41
49:BR:51:VAL:HB	49:BR:52:PRO:HD2	2.03	0.41
38:BM:51:ARG:HG2	38:BM:51:ARG:HH11	1.85	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
16:AS:50:VAL:HG22	16:AS:70:LEU:HD23	2.01	0.41
36:D2:27:GLY:O	36:D2:30:VAL:HB	2.20	0.41
18:AB:67:LEU:HD23	18:AB:89:PHE:O	2.21	0.41
2:AC:71:ARG:HD2	2:AC:71:ARG:O	2.21	0.41
47:DF:32:LYS:O	47:DF:155:ILE:O	2.39	0.41
23:BB:2728:U:H5'	27:BK:70:ARG:NH2	2.36	0.41
36:B2:12:ARG:NE	36:B2:44:VAL:HG11	2.25	0.41
39:DX:6:LEU:C	39:DX:8:GLU:H	2.24	0.41
46:BU:48:VAL:C	46:BU:53:GLN:HG3	2.41	0.41
37:BL:98:ALA:O	37:BL:99:ASN:C	2.58	0.41
26:DD:164:GLN:HE21	26:DD:165:MET:N	2.19	0.41
52:DW:10:ARG:HD3	52:DW:10:ARG:N	2.35	0.41
23:DB:1080:A:O2'	23:DB:1081:U:H5'	2.20	0.41
16:CS:38:THR:HG23	16:CS:68:HIS:O	2.21	0.41
16:CS:40:PHE:HB3	16:CS:41:PRO:HD2	2.02	0.41
23:DB:2867:G:O2'	23:DB:2868:A:H8	2.03	0.41
43:BO:24:THR:CG2	43:BO:42:PRO:HD3	2.50	0.41
11:AL:49:ARG:HH12	11:AL:88:ASP:HB2	1.84	0.41
1:CA:190:A:C4	1:CA:191:G:H1'	2.56	0.41
51:DZ:63:GLY:O	51:DZ:64:ILE:C	2.59	0.41
23:BB:2282:G:H4'	23:BB:2389:G:O2'	2.21	0.41
9:AJ:52:LEU:HD12	9:AJ:53:ILE:H	1.85	0.41
38:DM:107:GLY:O	38:DM:108:VAL:HB	2.20	0.41
23:DB:1442:U:H2'	23:DB:1443:U:C6	2.55	0.41
4:CE:93:VAL:HA	4:CE:126:ALA:CB	2.51	0.41
36:B2:21:ARG:HH21	36:B2:43:THR:CG2	2.33	0.41
45:DS:24:ILE:CD1	45:DS:36:LEU:HD11	2.48	0.41
8:AI:14:SER:HA	8:AI:68:GLY:O	2.21	0.41
2:AC:122:GLN:O	2:AC:127:VAL:HG13	2.21	0.41
7:AH:94:VAL:HG12	7:AH:99:GLY:HA3	2.02	0.41
23:BB:633:A:H2'	23:BB:634:C:O4'	2.21	0.41
23:BB:720:U:H2'	23:BB:721:A:C8	2.55	0.41
1:AA:819:A:H4'	1:AA:820:U:OP2	2.19	0.41
6:CG:15:PRO:HG2	6:CG:43:TYR:OH	2.20	0.41
1:AA:845:A:H5''	1:AA:846:G:C8	2.55	0.41
11:AL:116:TYR:O	11:AL:118:VAL:HG23	2.20	0.41
23:DB:2842:G:O2'	23:DB:2843:G:H5'	2.20	0.41
1:CA:675:A:H2'	1:CA:676:A:H8	1.86	0.41
33:D1:31:GLU:N	33:D1:31:GLU:CD	2.71	0.41
23:BB:969:G:H2'	23:BB:970:U:H6	1.85	0.41
1:CA:1268:G:H2'	1:CA:1269:A:C8	2.55	0.41
23:BB:413:C:H2'	23:BB:414:C:C6	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:CC:46:LEU:HB3	2:CC:49:ALA:CB	2.49	0.41
23:BB:651:G:OP2	34:B3:18:LYS:HD3	2.21	0.41
43:BO:94:ARG:HD2	43:BO:97:PHE:O	2.21	0.41
23:BB:1535:A:H3'	23:BB:1536:C:C6	2.50	0.41
23:BB:1945:G:H2'	23:BB:1946:U:C6	2.55	0.41
47:BF:69:ALA:HB3	47:BF:80:GLN:O	2.20	0.41
23:DB:1401:G:H2'	23:DB:1402:U:C6	2.56	0.41
1:CA:429:U:C1'	1:CA:430:A:H5''	2.50	0.41
44:DQ:11:ALA:C	44:DQ:13:HIS:H	2.22	0.41
23:DB:1410:G:O2'	23:DB:1411:U:H5'	2.20	0.41
1:CA:1028:C:C2	1:CA:1029:U:N3	2.88	0.41
23:BB:1563:U:O2'	23:BB:1564:C:H5'	2.20	0.41
20:CO:70:LEU:HD21	20:CO:77:ARG:HB3	2.01	0.41
23:DB:104:A:O2'	23:DB:105:C:H5'	2.21	0.41
10:AK:45:THR:O	10:AK:49:SER:N	2.53	0.41
1:AA:1524:C:H2'	1:AA:1525:G:H8	1.84	0.41
1:AA:1049:U:H2'	21:AN:2:LYS:HD3	2.02	0.41
34:D3:25:HIS:NE2	34:D3:47:ALA:HB2	2.36	0.41
27:DK:5:GLN:O	27:DK:6:THR:O	2.39	0.41
2:AC:155:ARG:H	2:AC:162:ALA:HB1	1.84	0.41
23:DB:2529:G:H4'	48:DG:174:LYS:HE2	2.02	0.41
1:AA:557:G:N1	1:AA:558:G:C2	2.89	0.41
2:AC:138:GLN:O	2:AC:142:ARG:HB3	2.20	0.41
20:CO:32:LEU:O	20:CO:36:ILE:HG12	2.20	0.41
23:DB:131:A:H2'	23:DB:132:G:H8	1.85	0.41
23:DB:1341:G:H2'	23:DB:1397:U:O2'	2.19	0.41
23:BB:1210:G:C5'	23:BB:1212:G:H5'	2.50	0.41
23:DB:1349:C:H2'	23:DB:1350:C:C6	2.55	0.41
23:BB:2232:C:O2'	23:BB:2233:U:H5'	2.21	0.41
1:AA:1010:U:H2'	1:AA:1010:U:O2	2.20	0.41
23:DB:691:C:O2'	23:DB:692:C:H5'	2.21	0.41
23:DB:2022:U:O2'	23:DB:2617:U:H5'	2.20	0.41
22:DA:22:U:H2'	22:DA:23:G:C8	2.55	0.41
2:CC:54:ILE:O	2:CC:54:ILE:HG23	2.21	0.41
1:CA:512:U:H2'	1:CA:513:C:C6	2.56	0.41
23:BB:627:A:H4'	23:BB:628:G:OP1	2.21	0.41
24:BI:38:CYS:O	24:BI:42:ASN:ND2	2.53	0.41
23:BB:2573:C:H3'	57:BB:3610:HOH:O	2.21	0.41
23:BB:1376:C:H5''	57:BB:3499:HOH:O	2.21	0.41
1:CA:218:U:H2'	1:CA:219:U:C6	2.56	0.41
23:DB:748:G:OP2	45:DS:88:ARG:HG3	2.21	0.41
34:D3:7:ARG:NH1	34:D3:7:ARG:HG3	2.36	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
10:AK:75:GLU:N	10:AK:75:GLU:CD	2.74	0.41
5:CF:34:GLY:O	5:CF:35:LYS:HB2	2.20	0.41
40:BH:124:THR:HG22	40:BH:125:THR:N	2.35	0.41
21:CN:60:ARG:CG	21:CN:62:ARG:HE	2.34	0.41
50:DT:89:GLU:C	50:DT:91:GLN:H	2.23	0.41
10:AK:126:ARG:HA	10:AK:126:ARG:NE	2.35	0.41
50:BT:16:VAL:HA	50:BT:21:SER:CB	2.50	0.41
32:D4:10:LEU:HA	32:D4:10:LEU:HD23	1.91	0.41
25:DC:157:ALA:C	25:DC:159:THR:H	2.23	0.41
48:BG:25:ILE:HD12	48:BG:25:ILE:N	2.35	0.41
35:BV:29:ILE:CD1	35:BV:90:ASP:HA	2.50	0.41
40:BH:115:VAL:H	40:BH:133:GLN:CB	2.33	0.41
23:DB:2387:U:H1'	52:DW:38:ARG:NH2	2.36	0.41
52:BW:18:LYS:HE3	52:BW:36:ILE:HG12	2.02	0.41
42:BN:55:ALA:HA	42:BN:80:PHE:CE1	2.54	0.41
22:BA:54:G:O2'	22:BA:55:U:H5'	2.20	0.41
8:AI:70:GLY:O	8:AI:74:GLN:HB2	2.21	0.41
43:DO:53:THR:CG2	43:DO:74:VAL:HG21	2.36	0.41
9:AJ:77:VAL:HB	9:AJ:78:GLU:OE2	2.20	0.41
2:AC:152:VAL:O	2:AC:164:THR:HG23	2.21	0.41
23:BB:2747:G:H2'	23:BB:2748:A:C8	2.56	0.41
48:BG:84:LYS:HB2	48:BG:132:LEU:HD23	2.02	0.41
46:BU:73:ASN:ND2	46:BU:74:ALA:N	2.69	0.41
5:CF:49:TYR:CE1	15:CR:65:SER:HA	2.55	0.41
18:CB:23:ASN:HD22	18:CB:24:PRO:HD2	1.85	0.41
40:DH:132:PHE:CE2	40:DH:134:VAL:HA	2.55	0.41
22:DA:4:C:H2'	22:DA:5:U:H6	1.85	0.41
49:BR:7:SER:OG	49:BR:8:GLY:N	2.54	0.41
38:BM:46:ILE:HG13	38:BM:47:GLU:N	2.35	0.41
38:BM:71:LYS:CG	38:BM:93:VAL:HG12	2.50	0.41
21:AN:79:SER:O	21:AN:80:ARG:C	2.59	0.41
18:CB:63:LYS:HB3	18:CB:87:ASP:OD2	2.20	0.41
26:DD:3:GLY:C	26:DD:4:LEU:HD13	2.40	0.41
20:AO:53:ARG:O	20:AO:56:LEU:HB3	2.20	0.41
24:DI:27:LEU:HB2	24:DI:32:VAL:HG21	2.02	0.41
18:CB:113:LEU:CD1	18:CB:144:GLU:HA	2.51	0.41
25:BC:203:VAL:HG12	25:BC:205:GLY:H	1.86	0.41
1:AA:203:G:N2	1:AA:205:A:N6	2.68	0.41
6:AG:26:VAL:HG12	6:AG:42:VAL:HG11	2.02	0.41
37:DL:55:MET:HE1	37:DL:59:ARG:NE	2.35	0.41
2:CC:119:ILE:CG2	2:CC:120:THR:N	2.84	0.41
1:CA:1103:C:C4	1:CA:1104:G:N7	2.89	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
9:AJ:12:ALA:CB	9:AJ:18:ILE:HB	2.51	0.41
1:CA:1307:U:H2'	1:CA:1308:U:H6	1.81	0.41
16:CS:57:VAL:HG23	16:CS:57:VAL:O	2.21	0.41
1:CA:203:G:N2	1:CA:205:A:N6	2.68	0.41
1:CA:204:G:C5	1:CA:465:A:N3	2.89	0.41
27:BK:86:LEU:H	27:BK:86:LEU:HG	1.52	0.41
23:BB:2095:A:O2'	23:BB:2096:C:H5'	2.21	0.41
2:AC:66:THR:HG23	2:AC:101:ASN:HB2	2.03	0.41
23:BB:2080:A:C6	23:BB:2241:A:C6	3.09	0.41
7:AH:100:ILE:CG1	7:AH:128:VAL:HB	2.50	0.41
1:AA:1167:A:H2'	1:AA:1168:U:H5''	2.02	0.41
26:DD:133:THR:O	26:DD:134:HIS:C	2.58	0.41
1:CA:1225:A:H5''	1:CA:1226:C:C5	2.53	0.41
41:BJ:57:LEU:HB3	41:BJ:58:ASN:H	1.59	0.41
23:DB:845:A:H2'	23:DB:846:U:H5''	2.03	0.41
2:CC:104:GLU:O	2:CC:106:ARG:NH2	2.53	0.41
33:B1:28:THR:O	33:B1:29:LYS:HD2	2.20	0.41
23:BB:172:A:O2'	23:BB:173:A:H5'	2.21	0.41
3:CD:185:PRO:HB2	3:CD:190:LEU:HD12	2.03	0.41
29:BE:46:GLN:HG3	29:BE:87:ALA:N	2.35	0.41
8:CI:6:TYR:HE2	8:CI:17:ARG:HB3	1.86	0.41
22:BA:90:C:H5'	38:BM:17:ASN:O	2.19	0.41
1:CA:1296:C:C4'	1:CA:1302:C:N4	2.84	0.41
23:BB:2323:G:C2'	23:BB:2324:U:H5'	2.51	0.41
51:BZ:6:GLN:NE2	51:BZ:49:LEU:HB2	2.36	0.41
23:DB:2809:A:H2'	23:DB:2810:A:H8	1.84	0.41
23:BB:2578:G:O2'	23:BB:2579:C:H5'	2.20	0.41
45:BS:73:LYS:HD2	45:BS:73:LYS:HA	1.74	0.41
23:BB:1191:G:H2'	23:BB:1192:G:H8	1.85	0.41
1:CA:647:C:H2'	1:CA:648:A:C8	2.55	0.41
23:BB:2857:G:N2	23:BB:2859:G:H3'	2.35	0.41
23:DB:1290:C:H2'	23:DB:1291:C:C6	2.56	0.41
23:DB:2024:G:H2'	23:DB:2025:C:H6	1.86	0.41
17:CT:45:ALA:CA	17:CT:48:LYS:HB3	2.51	0.41
1:CA:1386:G:H2'	1:CA:1387:G:H8	1.86	0.41
9:AJ:66:GLU:OE2	21:AN:98:ALA:HA	2.19	0.41
23:BB:2024:G:H2'	23:BB:2025:C:H6	1.85	0.41
23:DB:1740:G:H2'	23:DB:1741:C:C6	2.55	0.41
10:CK:89:GLY:O	10:CK:92:ARG:HB2	2.20	0.41
23:BB:1315:C:O2'	23:BB:1316:U:H5'	2.21	0.41
20:CO:24:SER:O	20:CO:27:VAL:HB	2.21	0.41
14:AQ:56:ASP:N	14:AQ:81:ALA:HB2	2.36	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:2417:C:O2'	23:BB:2418:A:H5'	2.20	0.41
1:AA:1472:U:O2'	1:AA:1473:G:H5'	2.21	0.41
1:CA:1495:U:O2'	1:CA:1496:C:H5'	2.21	0.41
25:BC:202:ARG:HB2	25:BC:202:ARG:NH2	2.35	0.41
1:AA:44:A:H2'	1:AA:45:G:C8	2.55	0.41
23:DB:995:C:P	44:DQ:52:ARG:HH11	2.44	0.41
23:DB:730:A:H3'	57:DB:3609:HOH:O	2.20	0.41
16:AS:23:GLU:OE1	16:AS:23:GLU:N	2.53	0.41
24:BI:63:ASP:C	24:BI:65:SER:N	2.74	0.41
23:BB:2010:G:H2'	23:BB:2011:U:C6	2.55	0.41
23:BB:1068:G:H21	23:BB:1096:A:H5'	1.84	0.41
6:CG:74:VAL:HG12	6:CG:85:GLN:O	2.21	0.41
23:DB:1714:U:H3'	23:DB:1715:G:C5'	2.49	0.41
23:DB:1359:A:OP2	23:DB:1371:G:N1	2.49	0.41
23:DB:308:G:O2'	46:DU:16:LYS:HE3	2.21	0.41
2:CC:188:ALA:HB3	2:CC:195:ILE:O	2.20	0.41
23:DB:2506:U:H2'	23:DB:2506:U:O2	2.21	0.41
1:AA:1181:G:H2'	1:AA:1181:G:OP2	2.20	0.41
1:AA:485:U:H2'	1:AA:485:U:O2	2.21	0.41
38:DM:10:ARG:HG3	38:DM:10:ARG:HH21	1.85	0.41
23:BB:2350:C:O2'	23:BB:2351:G:H5'	2.20	0.41
9:CJ:59:LYS:HB2	9:CJ:62:ARG:HH22	1.84	0.41
21:CN:68:ARG:HA	21:CN:69:PRO:HD2	1.93	0.41
10:CK:126:ARG:NE	10:CK:126:ARG:HA	2.35	0.41
1:AA:1241:G:H8	1:AA:1241:G:OP2	2.03	0.41
25:DC:189:ALA:O	25:DC:190:THR:O	2.39	0.41
48:BG:75:VAL:HA	48:BG:78:VAL:HG22	2.01	0.41
14:AQ:46:HIS:CB	14:AQ:70:LYS:HE2	2.51	0.41
14:CQ:18:LYS:O	14:CQ:47:ASP:N	2.54	0.41
40:BH:71:LYS:C	40:BH:73:ASN:H	2.23	0.41
23:BB:2266:A:H4'	23:BB:2267:A:O5'	2.21	0.41
29:DE:112:LEU:HD11	29:DE:180:LEU:O	2.20	0.41
22:BA:55:U:H1'	47:BF:25:MET:HE3	2.02	0.41
8:AI:56:MET:O	8:AI:58:GLU:HG2	2.20	0.41
42:DN:78:LYS:CG	42:DN:83:LEU:HG	2.50	0.41
23:BB:2540:C:O2'	23:BB:2541:A:H5'	2.20	0.41
23:BB:2721:A:H2'	23:BB:2722:G:C8	2.55	0.41
1:AA:1004:A:H2'	1:AA:1005:A:C8	2.56	0.41
40:DH:93:SER:O	40:DH:94:ILE:HD12	2.21	0.41
43:DO:28:VAL:CG2	43:DO:29:HIS:H	2.22	0.41
46:BU:21:ARG:HG3	46:BU:21:ARG:HH11	1.85	0.41
49:BR:39:LEU:HA	49:BR:49:ILE:HG21	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BR:49:ILE:HG21	49:BR:53:PHE:C	2.41	0.41
38:BM:20:LEU:HA	38:BM:98:PRO:O	2.20	0.41
28:BP:6:GLN:HA	28:BP:9:GLN:HG2	2.02	0.41
23:DB:900:A:C2'	23:DB:901:C:H5'	2.51	0.41
1:AA:985:C:O2'	1:AA:986:U:H5'	2.20	0.41
47:BF:34:THR:OG1	47:BF:154:THR:HB	2.21	0.41
47:BF:108:PRO:C	47:BF:110:ILE:H	2.23	0.41
1:CA:865:A:H2'	1:CA:866:C:H6	1.81	0.41
25:DC:202:ARG:NH2	25:DC:202:ARG:HB2	2.35	0.41
37:BL:95:LEU:HB2	37:BL:101:ILE:CG1	2.51	0.41
57:DB:3473:HOH:O	37:DL:99:ASN:HB2	2.19	0.41
40:DH:41:LYS:HE3	40:DH:45:GLU:CG	2.51	0.41
40:DH:4:ILE:CD1	40:DH:44:ILE:HG22	2.51	0.41
40:DH:26:ALA:HA	40:DH:30:LEU:HB2	2.02	0.41
23:BB:182:A:H2	23:BB:433:C:O2	2.04	0.41
23:BB:2238:G:H2'	23:BB:2238:G:N3	2.36	0.41
44:BQ:83:LYS:NZ	44:BQ:83:LYS:HA	2.36	0.41
2:CC:119:ILE:HG23	2:CC:120:THR:N	2.35	0.41
23:BB:2867:G:O2'	23:BB:2868:A:H8	2.02	0.41
7:AH:63:LYS:CD	7:AH:70:VAL:HG21	2.50	0.41
1:CA:1221:G:OP1	16:CS:35:ARG:HD2	2.21	0.41
41:DJ:44:TYR:HB2	44:DQ:63:ARG:HD3	2.03	0.41
23:BB:1373:A:H4'	23:BB:2212:A:N3	2.36	0.41
44:DQ:79:ILE:HG23	44:DQ:80:ASN:N	2.36	0.41
1:AA:87:C:H3'	1:AA:87:C:OP2	2.21	0.41
4:CE:152:VAL:CG1	4:CE:156:ARG:HH21	2.32	0.41
23:BB:2188:U:O2'	23:BB:2189:U:H5'	2.20	0.41
27:DK:103:VAL:HG22	27:DK:121:GLU:O	2.21	0.41
7:AH:50:VAL:O	7:AH:50:VAL:HG13	2.21	0.41
1:AA:77:A:H2'	1:AA:78:A:H8	1.85	0.41
38:DM:32:GLY:HA2	38:DM:117:PHE:CZ	2.56	0.41
4:CE:125:LYS:HD2	4:CE:126:ALA:N	2.36	0.41
45:BS:24:ILE:CG2	45:BS:71:VAL:HG11	2.49	0.41
48:DG:38:ASP:OD2	48:DG:63:GLN:HG2	2.21	0.41
41:BJ:59:ALA:C	41:BJ:61:LYS:H	2.24	0.41
23:BB:2461:A:H1'	23:BB:2492:U:N3	2.36	0.41
39:DX:41:HIS:CD2	39:DX:41:HIS:H	2.39	0.41
48:BG:51:PHE:CZ	48:BG:71:LEU:HG	2.55	0.41
52:BW:44:PHE:CE2	52:BW:76:ARG:HD2	2.55	0.41
40:DH:62:LEU:HG	40:DH:66:ASN:HD21	1.84	0.41
1:CA:677:U:H1'	10:CK:120:CYS:SG	2.61	0.41
1:CA:1266:G:N2	1:CA:1268:G:H3'	2.35	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1657:U:C2'	23:BB:1658:C:H5'	2.49	0.41
25:BC:93:VAL:CG1	25:BC:94:LEU:N	2.84	0.41
18:AB:93:HIS:HD2	18:AB:94:ARG:NH2	2.19	0.41
47:BF:74:ALA:CB	47:BF:78:ILE:HD13	2.48	0.41
23:BB:2787:C:H1'	26:BD:63:PRO:HG3	2.02	0.41
23:BB:845:A:H2'	23:BB:846:U:H5''	2.01	0.41
23:BB:481:G:C2	23:BB:507:A:C4	3.09	0.41
45:DS:73:LYS:HD2	45:DS:73:LYS:HA	1.74	0.41
34:D3:22:LYS:HG3	34:D3:47:ALA:O	2.21	0.41
29:DE:120:VAL:HG23	29:DE:188:MET:O	2.20	0.41
1:AA:784:A:H2'	1:AA:785:G:C8	2.53	0.41
11:AL:65:TYR:HB2	11:AL:86:VAL:HG21	2.02	0.41
1:AA:225:C:H2'	1:AA:226:G:O4'	2.21	0.41
23:BB:2547:A:H5''	27:BK:29:HIS:NE2	2.36	0.41
46:BU:14:THR:O	46:BU:18:LYS:HA	2.20	0.41
23:BB:2297:A:H61	23:BB:2319:G:H1'	1.85	0.41
23:DB:1252:G:H1	44:DQ:36:GLN:CG	2.34	0.41
27:DK:109:SER:C	27:DK:111:LYS:H	2.24	0.41
18:CB:27:LYS:HE3	18:CB:27:LYS:HB3	1.92	0.41
41:DJ:59:ALA:O	41:DJ:62:VAL:HG12	2.21	0.41
1:CA:552:U:H5'	11:CL:82:ARG:HH11	1.85	0.41
23:DB:57:C:H2'	23:DB:58:G:C8	2.56	0.41
23:DB:57:C:H2'	23:DB:58:G:H8	1.85	0.41
18:AB:133:ALA:O	18:AB:137:THR:N	2.54	0.41
1:CA:393:A:H2'	1:CA:394:G:C8	2.54	0.41
1:CA:394:G:H2'	1:CA:395:C:C6	2.55	0.41
23:BB:1316:U:H2'	23:BB:1317:G:C8	2.55	0.41
23:BB:2685:G:H2'	23:BB:2686:G:H8	1.85	0.41
20:CO:39:LEU:O	20:CO:40:GLN:C	2.57	0.41
23:BB:811:U:OP2	37:BL:20:GLY:HA2	2.20	0.41
24:DI:90:GLY:C	24:DI:91:LYS:HD2	2.40	0.41
43:DO:56:LYS:O	43:DO:60:GLU:HG2	2.21	0.41
23:BB:1984:G:O2'	23:BB:1985:C:H5'	2.21	0.41
23:DB:2153:C:H2'	23:DB:2154:A:H8	1.85	0.41
48:DG:79:THR:HG22	48:DG:80:GLU:N	2.35	0.41
23:DB:1449:G:O2'	23:DB:1450:G:H5'	2.21	0.41
23:DB:453:A:H5''	57:DB:3501:HOH:O	2.21	0.41
23:DB:2203:U:C2'	23:DB:2204:G:OP2	2.69	0.41
23:DB:2582:G:H3'	57:DB:3622:HOH:O	2.20	0.41
6:AG:6:ILE:HG13	6:AG:6:ILE:H	1.74	0.41
18:AB:35:ASN:HD22	18:AB:35:ASN:N	2.19	0.41
23:BB:1365:A:N3	23:BB:1365:A:H2'	2.35	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
52:DW:84:GLU:H	52:DW:84:GLU:CD	2.24	0.41
23:DB:485:C:O2'	23:DB:486:C:H5'	2.21	0.41
8:CI:51:LEU:C	8:CI:53:LEU:H	2.23	0.41
12:AM:15:VAL:CG1	12:AM:30:LYS:HA	2.51	0.41
12:AM:1:ALA:O	12:AM:3:ILE:HG13	2.19	0.41
12:AM:38:ILE:HG13	12:AM:55:LEU:CG	2.51	0.41
50:DT:27:SER:O	50:DT:28:ASN:CB	2.66	0.41
50:DT:34:VAL:HG23	50:DT:81:LYS:HB3	2.02	0.41
23:BB:2222:C:H4'	25:BC:184:GLU:OE2	2.21	0.41
29:BE:198:GLU:HG3	29:BE:199:MET:N	2.35	0.41
5:CF:67:PRO:HG2	5:CF:70:VAL:HG22	2.03	0.41
5:AF:45:ARG:HD3	5:AF:59:TYR:CE1	2.56	0.41
41:DJ:123:LYS:O	41:DJ:124:VAL:HG13	2.21	0.41
41:DJ:18:VAL:HG22	41:DJ:19:ASP:N	2.36	0.41
23:DB:26:G:H2'	23:DB:27:G:O4'	2.20	0.41
23:BB:136:G:O5'	23:BB:136:G:H8	2.03	0.41
23:BB:143:C:N4	23:BB:144:A:C6	2.89	0.41
44:BQ:5:ARG:CA	44:BQ:8:ILE:HD13	2.50	0.41
42:BN:29:VAL:HG13	42:BN:83:LEU:CD1	2.51	0.41
8:AI:24:ASN:CG	8:AI:25:GLY:N	2.72	0.41
8:AI:79:ARG:O	8:AI:83:THR:HG22	2.20	0.41
50:BT:76:ARG:HG2	50:BT:77:ARG:N	2.36	0.41
37:DL:78:ARG:CZ	37:DL:113:ALA:HB1	2.51	0.41
29:BE:130:LYS:CB	29:BE:133:LEU:HG	2.47	0.41
28:DP:74:GLN:HB2	28:DP:77:SER:HB2	2.02	0.41
28:BP:57:ALA:HA	28:BP:73:PHE:O	2.21	0.41
38:DM:1:MET:SD	38:DM:51:ARG:NH2	2.94	0.41
16:AS:40:PHE:CD1	16:AS:43:MET:HB2	2.55	0.41
1:AA:976:G:N2	1:AA:1362:A:H3'	2.36	0.41
1:AA:876:C:C1'	7:AH:11:THR:HG21	2.50	0.41
21:AN:5:MET:O	21:AN:62:ARG:NH1	2.54	0.41
18:CB:83:ALA:C	18:CB:85:SER:N	2.74	0.41
36:B2:14:ARG:H	36:B2:14:ARG:HG3	1.57	0.41
1:AA:866:C:H2'	1:AA:867:G:O4'	2.21	0.41
1:AA:1348:U:O3'	8:AI:121:ARG:HG3	2.21	0.41
29:DE:5:LEU:HG	29:DE:11:ALA:O	2.20	0.41
13:CP:66:THR:CG2	13:CP:67:ILE:N	2.84	0.41
40:DH:4:ILE:O	40:DH:36:ALA:HA	2.21	0.41
6:AG:14:ASP:CG	6:AG:15:PRO:HD2	2.41	0.41
39:BX:56:LEU:O	39:BX:58:ASN:N	2.46	0.41
40:BH:5:LEU:HD21	40:BH:12:LEU:HD12	2.01	0.41
2:AC:13:ILE:HD13	2:AC:13:ILE:N	2.34	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
47:BF:21:TYR:CD2	47:BF:27:VAL:HG12	2.53	0.41
17:CT:73:ARG:O	17:CT:77:ASN:ND2	2.54	0.41
22:DA:83:G:OP1	30:DY:16:LEU:HD21	2.21	0.41
23:BB:1590:A:H2'	23:BB:1591:A:H8	1.85	0.41
18:AB:217:ALA:O	18:AB:221:ARG:HG2	2.20	0.41
44:DQ:74:SER:O	44:DQ:75:TYR:C	2.59	0.41
23:DB:545:U:H3'	23:DB:546:U:C4'	2.51	0.41
23:BB:1653:G:O6	42:BN:11:ASN:HA	2.21	0.41
9:AJ:53:ILE:HG23	9:AJ:54:SER:N	2.36	0.41
23:BB:1819:A:H4'	23:BB:1820:U:H5''	2.03	0.41
1:AA:1381:U:H2'	1:AA:1382:C:O4'	2.21	0.41
23:DB:1439:A:C8	23:DB:1440:U:C6	3.09	0.41
23:DB:2143:C:C5	23:DB:2144:G:H1'	2.56	0.41
23:DB:2147:A:H4'	23:DB:2148:G:N7	2.35	0.41
25:BC:250:GLN:HG2	25:BC:254:LYS:HG2	2.03	0.41
26:DD:133:THR:HG23	26:DD:134:HIS:CD2	2.55	0.41
1:CA:1228:C:OP1	12:CM:113:LYS:HD3	2.21	0.41
37:BL:70:LYS:O	37:BL:73:ILE:HG12	2.21	0.41
3:CD:25:ARG:HH22	3:CD:30:LYS:HG2	1.86	0.41
1:CA:663:A:H5''	15:CR:49:LYS:HZ2	1.86	0.41
13:AP:78:VAL:HG13	13:AP:78:VAL:O	2.20	0.41
52:DW:58:LEU:N	52:DW:58:LEU:HD22	2.36	0.41
23:DB:1407:G:H2'	23:DB:1408:G:H8	1.86	0.41
42:BN:8:ARG:HB3	42:BN:43:GLU:OE2	2.20	0.41
1:AA:1469:C:H3'	1:AA:1470:U:H6	1.86	0.41
3:AD:117:VAL:O	3:AD:130:ASN:HA	2.21	0.41
9:AJ:67:ILE:HG13	21:AN:95:LEU:CD1	2.50	0.41
29:BE:171:ASP:CG	29:BE:172:ALA:N	2.74	0.41
2:AC:19:SER:HB3	2:AC:21:TRP:NE1	2.34	0.41
23:DB:811:U:N3	37:DL:21:ARG:NH2	2.68	0.41
11:AL:51:VAL:HG12	11:AL:63:THR:HG22	2.03	0.41
9:CJ:57:VAL:HG13	9:CJ:58:ASN:N	2.35	0.41
1:AA:659:U:O2'	1:AA:660:C:H5'	2.21	0.41
23:DB:1260:A:H2'	23:DB:1261:C:C6	2.55	0.41
23:BB:1742:U:H2'	23:BB:1743:G:H8	1.81	0.41
27:DK:109:SER:CB	27:DK:111:LYS:HE2	2.50	0.41
5:AF:47:LEU:HD12	5:AF:55:HIS:C	2.41	0.41
23:BB:519:U:H2'	23:BB:520:G:H8	1.86	0.41
23:BB:523:C:H2'	23:BB:524:G:C8	2.55	0.41
1:CA:126:G:OP1	1:CA:605:U:O2'	2.37	0.41
23:DB:65:U:H2'	23:DB:66:C:C6	2.56	0.41
23:DB:2047:C:H2'	23:DB:2048:G:C8	2.53	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:443:A:H5''	23:DB:444:C:O5'	2.20	0.41
9:CJ:83:THR:C	9:CJ:85:ASP:N	2.74	0.41
23:DB:1838:C:H4'	23:DB:1839:G:H8	1.86	0.41
23:DB:1103:A:H3'	23:DB:1104:C:H6	1.85	0.41
1:CA:1136:C:OP2	1:CA:1137:C:OP2	2.39	0.41
23:DB:615:U:O4	29:DE:39:ALA:HB2	2.21	0.41
1:AA:875:U:H1'	7:AH:15:ASN:OD1	2.21	0.41
1:AA:1423:G:H2'	1:AA:1424:U:C6	2.55	0.41
38:BM:74:THR:HG22	38:BM:89:VAL:HA	2.03	0.41
39:BX:41:HIS:CD2	39:BX:41:HIS:H	2.39	0.41
44:BQ:46:TYR:O	44:BQ:50:ARG:HD2	2.21	0.41
33:D1:39:ASP:O	33:D1:43:ARG:N	2.51	0.41
25:BC:179:GLU:HB2	25:BC:270:ARG:HB3	2.02	0.41
3:CD:110:ARG:HG3	3:CD:110:ARG:HH11	1.85	0.41
1:AA:704:A:C2	1:AA:705:G:C1'	3.04	0.41
1:AA:432:A:H2'	1:AA:433:G:H5'	2.01	0.41
21:CN:60:ARG:NH2	21:CN:62:ARG:HD3	2.36	0.41
23:BB:922:C:H1'	52:BW:22:VAL:CG2	2.35	0.41
52:BW:23:LYS:CD	52:BW:24:ARG:N	2.84	0.41
1:AA:1238:A:H2	1:AA:1241:G:N3	2.19	0.41
1:AA:1303:C:O2'	1:AA:1304:G:H5'	2.21	0.41
50:DT:16:VAL:HA	50:DT:21:SER:CB	2.51	0.41
19:AU:43:GLU:N	19:AU:46:ARG:HE	2.19	0.41
23:DB:855:G:C2	52:DW:23:LYS:HG2	2.55	0.41
9:CJ:21:ALA:O	9:CJ:25:ILE:HG13	2.20	0.41
1:CA:1178:G:H3'	8:CI:98:ARG:NH2	2.36	0.41
32:B4:33:HIS:O	32:B4:35:GLN:HG3	2.21	0.41
23:BB:705:A:H8	23:BB:705:A:O5'	2.04	0.41
48:BG:42:VAL:O	48:BG:42:VAL:HG13	2.21	0.41
41:BJ:16:TYR:O	41:BJ:55:ILE:HG12	2.20	0.41
23:BB:2773:C:O2'	23:BB:2774:C:H5'	2.21	0.41
35:DV:65:VAL:O	35:DV:67:GLY:N	2.53	0.41
35:DV:8:VAL:HA	35:DV:40:ILE:HG22	2.02	0.41
25:DC:123:ILE:O	25:DC:123:ILE:HG12	2.20	0.41
5:CF:61:LEU:HD12	5:CF:62:MET:H	1.85	0.41
41:DJ:12:LYS:HZ3	41:DJ:12:LYS:H	1.69	0.41
41:DJ:16:TYR:O	41:DJ:55:ILE:HG12	2.21	0.41
14:AQ:45:VAL:O	14:AQ:70:LYS:HE3	2.21	0.41
23:BB:1251:C:H5''	44:BQ:5:ARG:NH1	2.35	0.41
43:BO:35:ILE:HG13	43:BO:71:ALA:HB2	2.03	0.41
1:AA:1289:A:H61	8:AI:71:ILE:CD1	2.32	0.41
8:AI:18:VAL:HG11	8:AI:82:ILE:CA	2.33	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DN:79:LEU:O	42:DN:80:PHE:HB2	2.21	0.41
23:BB:1058:U:O2'	23:BB:1059:G:H5'	2.21	0.41
37:BL:90:VAL:CB	37:BL:122:VAL:HG12	2.36	0.41
23:BB:1732:C:O5'	23:BB:1732:C:H6	2.03	0.41
46:DU:62:ALA:O	46:DU:63:ALA:HB3	2.21	0.41
42:BN:49:GLU:HB2	42:BN:50:PRO:HD3	2.02	0.41
2:AC:149:LYS:CB	2:AC:168:ARG:HG3	2.50	0.41
23:BB:1799:G:N2	23:BB:1818:U:O2'	2.54	0.41
1:CA:1363:A:O2'	1:CA:1365:G:N7	2.45	0.41
48:DG:90:GLY:HA3	48:DG:93:TYR:CE1	2.55	0.41
48:BG:63:GLN:O	48:BG:66:THR:HG22	2.21	0.41
49:BR:15:SER:HB3	49:BR:18:GLN:NE2	2.33	0.41
23:DB:322:A:C2	23:DB:340:A:C6	3.08	0.41
49:DR:25:LEU:HA	49:DR:25:LEU:HD13	1.89	0.41
24:DI:73:PRO:CG	24:DI:78:LEU:HD21	2.48	0.41
2:AC:33:ASP:CG	2:AC:37:LYS:HD2	2.40	0.41
18:CB:17:HIS:ND1	18:CB:18:GLN:N	2.65	0.41
23:BB:675:A:H5'	29:BE:60:TRP:NE1	2.19	0.41
26:BD:187:LEU:O	26:BD:188:LEU:HD23	2.21	0.41
28:BP:50:ARG:HE	28:BP:58:PHE:HE2	1.69	0.41
30:BY:6:ILE:HG22	30:BY:7:THR:H	1.86	0.41
38:DM:51:ARG:HH11	38:DM:51:ARG:HG2	1.85	0.41
46:DU:10:VAL:O	46:DU:21:ARG:HA	2.20	0.41
16:AS:46:LEU:HB2	16:AS:61:VAL:CG2	2.51	0.41
26:BD:184:ARG:HG3	26:BD:186:LEU:HB2	2.02	0.41
26:BD:186:LEU:HD13	28:BP:3:ILE:HG13	2.03	0.41
23:DB:899:A:C4	23:DB:900:A:H1'	2.56	0.41
47:BF:31:GLU:O	47:BF:32:LYS:O	2.39	0.41
47:DF:40:GLY:CA	47:DF:84:ILE:HG23	2.51	0.41
46:DU:50:ALA:N	46:DU:53:GLN:NE2	2.60	0.41
1:AA:1100:C:C2	1:AA:1102:A:H5'	2.56	0.41
18:AB:55:GLU:HB2	18:AB:197:PHE:CZ	2.56	0.41
46:DU:94:PHE:CA	46:DU:101:THR:HA	2.42	0.41
29:BE:5:LEU:HG	29:BE:11:ALA:O	2.20	0.41
47:DF:48:LEU:HB2	47:DF:147:ARG:NH2	2.36	0.41
47:DF:33:ILE:HB	47:DF:90:LEU:CG	2.51	0.41
1:CA:1300:G:N3	1:CA:1301:U:H5	2.19	0.41
51:BZ:56:MET:O	51:BZ:59:ILE:HG12	2.21	0.41
23:BB:2052:A:N7	26:BD:146:ILE:HD11	2.36	0.41
8:AI:122:ARG:HH11	8:AI:122:ARG:HG3	1.86	0.41
18:CB:119:GLN:HE22	18:CB:124:THR:HG23	1.86	0.41
1:CA:876:C:C1'	7:CH:11:THR:HG21	2.49	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
46:BU:48:VAL:HG22	46:BU:48:VAL:O	2.20	0.41
1:AA:14:U:O2	1:AA:17:U:H5	2.04	0.41
2:CC:149:LYS:N	2:CC:200:TRP:O	2.54	0.41
10:AK:51:PHE:HZ	10:AK:61:ALA:HA	1.86	0.41
26:DD:114:LYS:HB2	26:DD:116:LYS:CE	2.51	0.41
27:BK:20:MET:O	27:BK:41:ILE:HD12	2.21	0.41
40:DH:11:ASN:O	40:DH:12:LEU:HB3	2.21	0.41
40:DH:5:LEU:HD21	40:DH:12:LEU:HD12	2.03	0.41
12:AM:95:PRO:CG	12:AM:99:GLN:HB2	2.51	0.41
2:AC:180:ASP:OD1	2:AC:203:LYS:HB2	2.20	0.41
47:BF:6:TYR:O	47:BF:11:VAL:HG23	2.21	0.41
22:DA:83:G:H4'	30:DY:52:PHE:CE2	2.56	0.41
39:DX:48:ARG:O	39:DX:51:ALA:HB3	2.21	0.41
1:CA:1308:U:H2'	1:CA:1309:G:H8	1.85	0.41
1:AA:71:A:O2'	1:AA:72:A:C5'	2.69	0.41
41:DJ:44:TYR:O	41:DJ:45:THR:CB	2.69	0.41
24:DI:12:VAL:HG13	24:DI:41:PHE:CE2	2.56	0.41
3:CD:178:GLU:HA	3:CD:178:GLU:OE1	2.21	0.41
23:BB:2097:A:O2'	23:BB:2098:U:H5'	2.19	0.41
45:DS:108:SER:OG	45:DS:109:ASP:N	2.53	0.41
23:BB:2732:G:N3	23:BB:2732:G:O4'	2.54	0.41
19:AU:9:GLU:HG2	2:CC:109:GLU:CG	2.51	0.41
31:B0:38:LEU:HD13	31:B0:41:HIS:NE2	2.36	0.41
23:DB:796:C:O2'	23:DB:797:G:H5'	2.21	0.41
23:BB:299:A:C8	23:BB:322:A:C2	3.09	0.41
45:DS:45:VAL:C	45:DS:48:LYS:HB3	2.41	0.41
23:DB:2080:A:N6	23:DB:2241:A:N6	2.69	0.41
23:DB:2675:A:N1	23:DB:2732:G:O6	2.54	0.41
23:BB:589:U:H2'	23:BB:590:A:C8	2.56	0.41
45:BS:26:GLY:O	45:BS:28:LYS:N	2.54	0.41
1:AA:517:G:O2'	1:AA:530:G:H4'	2.20	0.41
6:AG:150:PHE:N	10:AK:55:ARG:NH2	2.68	0.41
7:AH:100:ILE:HG13	7:AH:100:ILE:O	2.21	0.41
1:CA:20:U:H2'	1:CA:21:G:O4'	2.21	0.41
23:DB:2653:U:H3'	23:DB:2654:A:H2'	2.03	0.41
23:BB:2148:G:C2'	23:BB:2149:U:H4'	2.46	0.41
23:BB:637:A:H4'	23:BB:638:G:O5'	2.20	0.41
41:BJ:57:LEU:HA	41:BJ:57:LEU:HD12	1.83	0.41
41:BJ:59:ALA:C	41:BJ:61:LYS:N	2.74	0.41
25:DC:92:LEU:HD12	25:DC:93:VAL:N	2.36	0.41
23:DB:1802:A:H2'	23:DB:1803:A:C8	2.56	0.41
25:DC:196:ASN:C	25:DC:198:GLU:H	2.24	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2460:U:H2'	23:DB:2461:A:O4'	2.21	0.41
23:DB:1641:A:H2'	23:DB:1642:G:O4'	2.21	0.41
48:BG:7:PRO:O	48:BG:8:VAL:CB	2.69	0.41
11:AL:106:VAL:HA	11:AL:107:LYS:HZ3	1.86	0.41
1:CA:132:C:H4'	17:CT:68:LYS:HD2	2.03	0.41
3:CD:29:THR:C	3:CD:31:CYS:N	2.74	0.41
1:CA:1514:G:O2'	1:CA:1515:G:H5'	2.21	0.41
3:AD:29:THR:H	3:AD:33:ILE:CG2	2.34	0.41
23:BB:610:C:O2'	23:BB:611:C:H5'	2.20	0.41
42:BN:62:ASN:O	42:BN:66:ALA:HB2	2.21	0.41
2:CC:69:THR:O	2:CC:72:PRO:HD3	2.20	0.41
47:DF:81:GLY:O	47:DF:82:TYR:C	2.58	0.41
51:DZ:6:GLN:NE2	51:DZ:49:LEU:HB2	2.36	0.41
23:BB:909:A:H2'	23:BB:912:C:C5	2.56	0.41
1:CA:278:G:N2	1:CA:279:A:H62	2.19	0.41
1:AA:1142:G:C2	1:AA:1143:G:H1'	2.56	0.41
22:BA:87:U:O2	22:BA:89:U:OP2	2.38	0.41
12:CM:13:HIS:O	12:CM:16:ILE:HG22	2.21	0.41
10:AK:42:GLY:HA3	10:AK:73:VAL:CG1	2.50	0.41
1:AA:429:U:C1'	1:AA:430:A:H5''	2.49	0.41
1:AA:680:C:H2'	1:AA:681:A:H8	1.86	0.41
23:DB:850:U:O2'	30:DY:22:THR:HA	2.21	0.41
1:CA:738:C:H2'	1:CA:739:C:C6	2.56	0.41
1:CA:1459:G:H2'	1:CA:1460:C:H6	1.85	0.41
37:BL:77:ILE:O	37:BL:110:VAL:O	2.39	0.41
52:DW:33:GLY:O	52:DW:34:SER:HB2	2.21	0.41
45:DS:76:VAL:HG12	45:DS:103:ILE:HG12	2.02	0.41
23:BB:79:C:C2	23:BB:80:G:C8	3.08	0.41
1:AA:716:A:N3	10:AK:118:ASN:O	2.54	0.41
41:DJ:23:LYS:HE3	41:DJ:142:ILE:HD11	2.02	0.41
23:BB:274:C:H2'	23:BB:275:C:H6	1.82	0.41
23:DB:2135:A:H2'	23:DB:2136:G:C8	2.52	0.41
23:DB:1948:G:O2'	23:DB:1949:G:H5'	2.21	0.41
1:CA:1469:C:H3'	1:CA:1470:U:H6	1.86	0.41
27:DK:23:LYS:O	27:DK:39:ILE:HD13	2.21	0.41
23:BB:825:A:H1'	37:BL:54:GLN:NE2	2.36	0.41
29:DE:3:LEU:HD23	29:DE:12:LEU:HG	2.03	0.41
1:AA:1525:G:O2'	1:AA:1526:G:H5'	2.21	0.41
23:BB:2899:A:H2'	23:BB:2900:A:C8	2.56	0.41
23:DB:666:A:H4'	37:DL:48:ARG:HD2	2.03	0.41
1:CA:310:G:H5''	13:CP:31:ARG:HB2	2.02	0.41
33:B1:32:LYS:HG2	33:B1:52:LYS:HA	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
48:DG:174:LYS:O	48:DG:174:LYS:HD3	2.20	0.41
1:AA:586:C:O2'	1:AA:878:A:H4'	2.21	0.41
23:DB:1166:G:O2'	23:DB:1167:C:H5'	2.21	0.41
48:BG:35:THR:CG2	48:BG:36:LEU:N	2.82	0.41
23:DB:2881:U:H2'	23:DB:2882:A:O4'	2.20	0.41
44:BQ:29:ARG:NH1	44:BQ:29:ARG:HG2	2.34	0.41
11:AL:80:LEU:HB3	11:AL:97:VAL:CG2	2.51	0.41
23:DB:2678:C:H2'	23:DB:2679:A:C8	2.56	0.41
6:AG:64:ALA:O	6:AG:68:VAL:HG23	2.21	0.41
46:BU:13:LEU:HD12	46:BU:68:ASN:O	2.21	0.41
23:BB:125:A:OP2	36:B2:19:ARG:NH2	2.53	0.41
26:BD:68:PHE:HB3	26:BD:73:VAL:HG23	2.02	0.41
2:CC:17:TRP:O	2:CC:19:SER:N	2.53	0.41
23:BB:1292:G:H2'	23:BB:1293:C:H6	1.83	0.41
23:DB:2691:C:H2'	23:DB:2692:G:C8	2.54	0.41
23:DB:1258:U:O4'	29:DE:79:ARG:HD2	2.21	0.41
23:BB:1260:A:H2'	23:BB:1261:C:C6	2.55	0.41
33:B1:3:GLY:O	33:B1:4:ILE:HG12	2.21	0.41
1:AA:634:C:H2'	1:AA:635:A:H8	1.86	0.41
1:CA:634:C:H2'	1:CA:635:A:H8	1.86	0.41
23:BB:2405:G:H1'	23:BB:2412:A:H61	1.86	0.41
23:DB:464:U:H1'	23:DB:686:U:C5	2.55	0.41
1:CA:1047:G:C2'	1:CA:1048:G:H5'	2.51	0.41
1:AA:65:A:H2	1:AA:381:C:H2'	1.84	0.41
25:DC:41:GLY:HA3	25:DC:53:ILE:HG21	2.03	0.41
1:AA:125:U:H2'	1:AA:126:G:H8	1.84	0.41
23:DB:1742:U:H2'	23:DB:1743:G:H8	1.86	0.41
40:BH:26:ALA:HA	40:BH:30:LEU:HB2	2.03	0.41
47:BF:163:GLU:C	47:BF:165:GLY:N	2.73	0.41
23:BB:1349:C:H2'	23:BB:1350:C:C6	2.55	0.41
1:CA:398:U:H2'	1:CA:399:G:C8	2.56	0.41
23:BB:766:U:H2'	23:BB:767:U:H6	1.86	0.41
1:AA:771:G:H2'	1:AA:772:U:C6	2.55	0.41
23:BB:1965:C:H3'	23:BB:1966:A:C8	2.56	0.41
48:BG:28:LYS:HZ2	48:BG:29:ASN:HB2	1.86	0.41
23:DB:2358:A:H2'	23:DB:2359:C:C6	2.56	0.41
1:CA:517:G:H4'	1:CA:519:C:C6	2.56	0.41
1:CA:1283:U:H2'	1:CA:1284:C:C6	2.55	0.41
23:BB:693:A:H2'	23:BB:694:U:H6	1.85	0.41
23:DB:1360:G:H2'	23:DB:1361:G:H5'	2.03	0.41
23:BB:1338:G:O2'	23:BB:1339:G:H5'	2.20	0.41
51:BZ:68:LEU:O	51:BZ:69:ALA:C	2.58	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BC:61:TYR:HA	25:BC:85:ASN:HD21	1.86	0.41
23:DB:903:C:H2'	23:DB:904:G:C8	2.56	0.41
6:CG:151:ALA:HB3	6:CG:153:TYR:CE1	2.55	0.41
23:DB:305:C:H2'	23:DB:306:U:C6	2.55	0.41
25:DC:120:ASP:CG	25:DC:121:ALA:H	2.24	0.41
48:BG:112:VAL:HG12	48:BG:113:ASP:N	2.36	0.41
23:DB:1978:A:O2'	23:DB:1979:U:H5'	2.20	0.41
23:BB:1279:G:H2'	23:BB:1280:G:H8	1.84	0.41
29:BE:38:GLY:C	29:BE:40:ARG:H	2.23	0.41
1:AA:356:A:H1'	1:AA:368:U:O2'	2.20	0.41
1:CA:96:U:H2'	1:CA:97:G:C8	2.55	0.41
1:AA:376:G:H5''	13:AP:5:ARG:CB	2.51	0.41
1:AA:377:G:H2'	1:AA:378:G:H8	1.86	0.41
23:DB:1515:A:H3'	23:DB:1516:G:H8	1.85	0.41
23:DB:516:C:O2'	23:DB:517:C:H5'	2.21	0.41
23:BB:1821:A:H2'	23:BB:1822:C:C6	2.55	0.41
1:AA:128:G:H2'	1:AA:129:A:C8	2.55	0.41
34:B3:23:HIS:HD1	34:B3:24:LYS:C	2.23	0.41
23:DB:32:C:O2'	23:DB:33:C:H5'	2.21	0.41
23:BB:2337:G:N3	23:BB:2337:G:H2'	2.36	0.41
15:CR:27:THR:HG22	15:CR:27:THR:O	2.21	0.41
43:BO:26:LEU:O	43:BO:26:LEU:HG	2.21	0.41
31:D0:47:TYR:CE1	31:D0:52:LYS:HG3	2.56	0.41
26:BD:60:VAL:HA	26:BD:64:GLU:OE2	2.20	0.41
22:DA:74:U:H2'	22:DA:75:G:C8	2.56	0.41
1:AA:59:A:N6	1:AA:331:G:H1'	2.35	0.41
1:CA:886:G:O2'	1:CA:887:G:H5'	2.21	0.41
23:DB:1098:A:P	24:DI:3:LYS:HG2	2.61	0.41
18:CB:163:ILE:HG13	18:CB:164:ASP:N	2.36	0.41
25:DC:184:GLU:O	25:DC:185:ALA:HB3	2.21	0.41
32:D4:7:VAL:CG1	32:D4:8:LYS:N	2.74	0.41
23:DB:2060:A:O2'	23:DB:2061:G:OP2	2.38	0.41
29:DE:58:LYS:HE2	29:DE:60:TRP:HB2	2.03	0.41
35:BV:4:ILE:O	35:BV:64:VAL:HG23	2.21	0.41
41:BJ:13:ARG:O	41:BJ:14:ASP:HB2	2.20	0.41
20:AO:15:PHE:HB3	20:AO:26:GLU:HB3	2.03	0.41
21:CN:16:ALA:HA	21:CN:54:SER:OG	2.21	0.41
5:CF:15:SER:HA	5:CF:18:VAL:HG23	2.03	0.41
5:AF:1:MET:O	5:AF:65:GLU:HG2	2.21	0.41
14:AQ:68:LYS:C	14:AQ:70:LYS:H	2.24	0.41
14:CQ:67:SER:HB3	14:CQ:70:LYS:HB3	2.03	0.41
42:BN:80:PHE:O	42:BN:85:PRO:HD3	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:1081:U:O2'	24:BI:118:GLY:HA2	2.21	0.41
23:BB:1728:C:C3'	23:BB:1729:U:H5''	2.51	0.41
42:BN:49:GLU:N	42:BN:50:PRO:CD	2.84	0.41
2:AC:129:PHE:CE2	2:AC:165:GLU:HG2	2.55	0.41
25:BC:64:VAL:HG11	25:BC:66:PHE:CZ	2.56	0.41
26:DD:181:ASP:OD2	26:DD:184:ARG:HG2	2.21	0.41
27:BK:89:ASN:C	27:BK:89:ASN:HD22	2.23	0.41
35:DV:28:ALA:CB	35:DV:89:ILE:HD12	2.51	0.41
40:DH:64:ALA:O	40:DH:68:ARG:HG2	2.20	0.41
38:BM:38:ARG:O	38:BM:126:ILE:HG12	2.21	0.41
38:BM:93:VAL:HG22	38:BM:94:ALA:H	1.85	0.41
23:DB:992:C:H2'	23:DB:993:G:H8	1.86	0.41
2:AC:75:VAL:HG12	2:AC:75:VAL:O	2.21	0.41
23:DB:496:G:H1'	45:DS:61:ASN:ND2	2.36	0.41
45:DS:60:HIS:CG	45:DS:61:ASN:N	2.88	0.41
28:DP:19:PHE:CE2	28:DP:25:VAL:HG11	2.56	0.41
1:AA:923:A:O5'	1:AA:923:A:H8	2.04	0.41
23:DB:1373:A:H4'	23:DB:2212:A:N3	2.35	0.41
8:CI:87:MET:HG2	8:CI:91:GLU:OE2	2.21	0.41
1:AA:1029:U:O2'	1:AA:1032:G:N7	2.53	0.41
18:AB:26:MET:HE2	18:AB:187:ASP:HA	2.02	0.41
1:CA:1356:G:O2'	1:CA:1357:A:H5'	2.21	0.41
23:DB:946:C:H2'	23:DB:947:A:C8	2.55	0.41
41:DJ:81:ILE:HG23	41:DJ:82:GLY:N	2.25	0.41
37:BL:57:LEU:HA	37:BL:60:ARG:NE	2.36	0.41
1:CA:1221:G:H2'	1:CA:1222:G:C8	2.56	0.41
16:CS:38:THR:HG23	16:CS:68:HIS:C	2.40	0.41
1:CA:201:G:H2'	1:CA:202:G:H8	1.86	0.41
41:DJ:3:THR:HB	41:DJ:44:TYR:CE1	2.55	0.41
27:BK:10:VAL:HG12	27:BK:12:ASP:H	1.86	0.41
23:BB:2733:A:C3'	23:BB:2733:A:C8	3.04	0.41
27:BK:98:ARG:C	27:BK:99:ILE:HD12	2.41	0.41
6:CG:49:LEU:HD13	6:CG:123:LEU:HB2	2.03	0.41
6:AG:30:MET:SD	6:AG:35:LYS:HA	2.62	0.41
23:DB:283:G:H2'	23:DB:284:U:C1'	2.51	0.41
39:BX:30:MET:C	39:BX:32:ALA:N	2.74	0.41
23:BB:1439:A:N3	23:BB:1553:A:C6	2.89	0.41
2:AC:122:GLN:C	2:AC:127:VAL:HG22	2.42	0.41
23:DB:2143:C:H2'	23:DB:2144:G:H4'	2.03	0.41
7:CH:50:VAL:HG22	7:CH:50:VAL:O	2.21	0.41
51:DZ:27:ARG:CG	51:DZ:28:ARG:N	2.83	0.41
1:CA:1287:A:C6	1:CA:1288:A:C6	3.09	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:629:G:O2'	23:BB:630:G:H5'	2.21	0.41
48:BG:61:TRP:O	48:BG:64:ALA:N	2.53	0.41
52:BW:44:PHE:O	52:BW:78:PHE:HA	2.21	0.41
23:DB:2846:G:H2'	23:DB:2847:U:C6	2.56	0.41
40:DH:60:GLU:CA	40:DH:62:LEU:HD23	2.51	0.41
23:DB:2098:U:H2'	23:DB:2099:U:C1'	2.51	0.41
23:BB:222:A:H61	23:BB:232:G:H1'	1.86	0.41
1:CA:1448:C:H2'	1:CA:1449:C:C6	2.55	0.41
23:BB:873:C:H4'	38:BM:64:TRP:HE1	1.86	0.41
25:BC:92:LEU:HD12	25:BC:93:VAL:N	2.34	0.41
1:AA:20:U:H2'	1:AA:21:G:O4'	2.20	0.41
23:DB:1453:A:H4'	23:DB:1454:C:OP2	2.21	0.41
3:AD:25:ARG:HH22	3:AD:30:LYS:HG2	1.86	0.41
21:CN:34:ASN:H	21:CN:40:ARG:N	2.19	0.41
23:DB:353:C:H3'	23:DB:354:A:H8	1.85	0.41
29:DE:18:THR:HA	29:DE:106:LYS:HG2	2.02	0.41
1:CA:138:G:O2'	1:CA:139:A:H5'	2.21	0.41
23:BB:1228:G:H2'	23:BB:1229:C:C6	2.56	0.41
23:BB:1564:C:O2'	23:BB:1565:C:H5'	2.20	0.41
40:DH:27:ARG:CG	40:DH:27:ARG:HH21	2.34	0.41
23:BB:2887:A:C2	23:BB:2888:C:C6	3.09	0.41
23:DB:1996:C:H5	27:DK:32:TYR:OH	2.01	0.41
44:BQ:74:SER:O	44:BQ:75:TYR:C	2.59	0.41
23:BB:2758:A:H2'	23:BB:2759:G:O4'	2.21	0.41
46:DU:23:LYS:H	46:DU:23:LYS:HD2	1.85	0.41
8:CI:8:THR:OG1	8:CI:9:GLY:N	2.52	0.41
23:DB:1585:C:H2'	23:DB:1586:A:O4'	2.21	0.41
1:AA:322:C:H5	1:AA:328:C:H5	1.68	0.41
1:AA:1113:C:O2'	1:AA:1114:C:H5'	2.21	0.41
23:BB:1633:G:O2'	23:BB:1634:A:H5''	2.20	0.41
1:AA:496:A:H2'	1:AA:497:G:N7	2.35	0.41
40:DH:147:VAL:HG12	40:DH:148:ALA:H	1.85	0.41
23:DB:2603:G:O2'	23:DB:2604:U:H5'	2.21	0.41
23:DB:600:G:H1'	29:DE:100:MET:CG	2.51	0.41
23:DB:1740:G:O2'	23:DB:1741:C:H5'	2.21	0.41
41:DJ:59:ALA:C	41:DJ:61:LYS:N	2.74	0.41
20:AO:73:LYS:O	20:AO:74:ASP:HB2	2.20	0.41
23:DB:1711:A:O2'	23:DB:1712:U:H5'	2.21	0.41
22:BA:109:A:H2'	22:BA:110:C:C6	2.55	0.41
25:BC:86:ARG:NH1	25:BC:86:ARG:HB3	2.36	0.41
1:CA:1057:G:OP1	2:CC:154:GLY:HA3	2.21	0.41
23:BB:426:C:O2'	23:BB:427:U:H5'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
29:BE:182:ALA:O	29:BE:183:PHE:HB2	2.21	0.41
25:DC:20:ASN:OD1	25:DC:22:GLU:HG2	2.21	0.41
25:DC:20:ASN:O	25:DC:23:LEU:HD13	2.20	0.41
1:AA:1473:G:H2'	1:AA:1474:U:O4'	2.21	0.41
23:BB:2716:C:O2'	23:BB:2717:C:H5'	2.21	0.41
34:D3:26:ALA:O	34:D3:27:ASN:HB2	2.20	0.41
24:DI:10:LEU:C	24:DI:10:LEU:HD12	2.41	0.41
41:DJ:100:VAL:O	41:DJ:104:ALA:HB2	2.20	0.41
23:DB:242:G:H5''	34:D3:63:TYR:CZ	2.56	0.41
23:DB:1403:A:H2'	23:DB:1404:C:C6	2.56	0.41
1:AA:84:U:O2	1:AA:84:U:O4'	2.34	0.41
32:B4:31:PRO:O	32:B4:34:LYS:HB3	2.21	0.41
34:D3:7:ARG:HG3	34:D3:7:ARG:HH11	1.85	0.41
23:BB:802:A:H2'	23:BB:803:U:C6	2.55	0.41
1:AA:55:A:OP2	1:AA:352:C:N4	2.54	0.41
30:DY:41:PRO:HA	30:DY:44:ARG:HB3	2.03	0.41
23:DB:1330:C:H2'	23:DB:1331:G:H8	1.86	0.41
1:CA:740:U:H4'	20:CO:42:HIS:CD2	2.56	0.41
23:DB:623:C:H2'	23:DB:624:C:H6	1.86	0.41
1:CA:128:G:H2'	1:CA:129:A:C8	2.56	0.41
1:CA:66:A:H4'	1:CA:173:U:C4	2.56	0.41
23:DB:2207:C:H2'	23:DB:2208:C:C6	2.56	0.41
26:BD:59:ARG:HG2	26:BD:59:ARG:HH21	1.86	0.41
1:CA:211:G:H3'	1:CA:211:G:N3	2.35	0.41
28:BP:111:GLU:CD	28:BP:111:GLU:N	2.74	0.41
1:AA:754:C:H3'	1:AA:754:C:O2	2.21	0.41
1:AA:211:G:H3'	1:AA:211:G:N3	2.36	0.41
9:AJ:73:LEU:O	9:AJ:75:ASP:N	2.54	0.40
50:DT:24:MET:O	50:DT:28:ASN:N	2.46	0.40
23:BB:546:U:H4'	23:BB:547:A:OP2	2.21	0.40
23:BB:725:G:H2'	23:BB:726:G:O4'	2.21	0.40
25:DC:104:LEU:O	25:DC:105:ALA:HB3	2.21	0.40
35:BV:42:LEU:HD11	35:BV:91:PHE:HE1	1.83	0.40
35:BV:87:GLN:HE21	35:BV:87:GLN:HB2	1.69	0.40
41:BJ:15:TRP:HB3	41:BJ:137:PRO:CB	2.51	0.40
48:DG:24:THR:HG23	48:DG:34:ARG:HD3	2.02	0.40
5:CF:62:MET:O	5:CF:63:ASN:HB2	2.21	0.40
5:AF:97:THR:O	5:AF:99:ALA:N	2.54	0.40
41:DJ:15:TRP:HB3	41:DJ:137:PRO:HG3	2.03	0.40
40:BH:117:LEU:HD22	40:BH:121:VAL:CG2	2.51	0.40
23:BB:2355:G:H4'	52:BW:20:LEU:HD12	2.03	0.40
23:BB:1199:U:C5'	44:BQ:4:LYS:HD3	2.49	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
43:BO:67:ASN:H	43:BO:70:ALA:CB	2.33	0.40
8:AI:15:ALA:O	8:AI:66:VAL:HA	2.21	0.40
48:BG:152:ARG:HD3	48:BG:153:PRO:CD	2.44	0.40
12:CM:65:GLU:HB2	12:CM:66:GLY:H	1.55	0.40
23:DB:2756:U:H4'	23:DB:2757:A:OP1	2.19	0.40
19:AU:24:LYS:NZ	19:AU:24:LYS:HB3	2.35	0.40
46:BU:71:ILE:CD1	46:BU:82:VAL:HG22	2.50	0.40
26:DD:184:ARG:HG3	26:DD:186:LEU:HB2	2.02	0.40
26:BD:118:PHE:HE2	42:BN:1:MET:SD	2.44	0.40
18:CB:18:GLN:O	18:CB:37:VAL:HG23	2.21	0.40
27:DK:71:ARG:HD2	27:DK:71:ARG:HA	1.79	0.40
28:DP:57:ALA:HA	28:DP:73:PHE:O	2.21	0.40
29:BE:58:LYS:HZ2	29:BE:58:LYS:H	1.64	0.40
26:BD:24:VAL:HG21	26:BD:188:LEU:CB	2.46	0.40
47:DF:108:PRO:O	47:DF:110:ILE:HG23	2.20	0.40
47:DF:135:ILE:CD1	47:DF:137:PHE:HB3	2.48	0.40
23:BB:994:C:O2	49:BR:10:LYS:HE3	2.21	0.40
49:BR:7:SER:CB	49:BR:22:LEU:HD22	2.51	0.40
16:AS:11:ASP:N	16:AS:11:ASP:OD1	2.53	0.40
47:BF:121:PHE:HB3	47:BF:127:TYR:CD2	2.55	0.40
47:BF:33:ILE:HB	47:BF:90:LEU:HD23	2.03	0.40
49:DR:14:VAL:CG2	49:DR:18:GLN:HG3	2.52	0.40
21:AN:67:GLY:O	21:AN:69:PRO:HD3	2.21	0.40
47:DF:3:LEU:HG	47:DF:99:PHE:HD2	1.86	0.40
23:BB:2353:G:H21	52:BW:30:VAL:CG2	2.34	0.40
51:DZ:5:CYS:SG	51:DZ:7:VAL:HG12	2.61	0.40
25:BC:14:HIS:N	25:BC:14:HIS:ND1	2.68	0.40
25:BC:4:LYS:CD	25:BC:16:VAL:HG22	2.52	0.40
39:DX:57:LEU:O	39:DX:60:LYS:HB2	2.20	0.40
3:AD:106:PHE:N	3:AD:106:PHE:CD1	2.89	0.40
23:BB:2468:A:H2'	23:BB:2476:A:C6	2.56	0.40
23:BB:1680:U:H2'	23:BB:1681:G:O4'	2.21	0.40
1:AA:829:G:H4'	18:AB:24:PRO:HG3	2.02	0.40
39:BX:6:LEU:C	39:BX:8:GLU:H	2.24	0.40
31:D0:38:LEU:HB3	31:D0:41:HIS:CD2	2.55	0.40
1:AA:1308:U:OP1	12:AM:95:PRO:HA	2.21	0.40
23:DB:557:C:H2'	23:DB:558:U:C6	2.56	0.40
47:BF:11:VAL:HG12	47:BF:12:VAL:N	2.26	0.40
1:AA:814:A:H4'	1:AA:1510:C:O2'	2.22	0.40
4:AE:156:ARG:HB2	7:AH:43:GLY:HA3	2.03	0.40
43:BO:110:ALA:O	43:BO:115:LEU:HB2	2.20	0.40
23:BB:2279:G:N7	52:BW:10:ARG:NH2	2.69	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:994:C:H3'	44:DQ:53:LYS:NZ	2.36	0.40
44:DQ:56:PHE:HA	44:DQ:56:PHE:HD2	1.79	0.40
3:CD:197:HIS:O	3:CD:201:GLU:HG3	2.20	0.40
23:BB:2098:U:C2'	23:BB:2099:U:H5'	2.50	0.40
23:BB:1131:G:C5	41:BJ:77:HIS:ND1	2.87	0.40
23:DB:2540:C:O2'	23:DB:2541:A:H5'	2.20	0.40
39:BX:28:LEU:HD13	39:BX:37:LEU:HD11	2.02	0.40
17:AT:38:ILE:HD11	17:AT:82:ILE:CG2	2.46	0.40
11:AL:85:ARG:HA	11:AL:93:ARG:HA	2.02	0.40
48:DG:7:PRO:O	48:DG:8:VAL:CB	2.69	0.40
1:CA:1251:A:O2'	1:CA:1252:A:H5'	2.20	0.40
23:BB:933:A:H5'	23:BB:934:U:OP2	2.21	0.40
52:BW:13:ARG:HD2	52:BW:13:ARG:HA	1.86	0.40
1:AA:22:G:H2'	1:AA:23:C:H6	1.85	0.40
3:AD:29:THR:C	3:AD:31:CYS:N	2.74	0.40
32:D4:11:CYS:SG	32:D4:13:ASN:HB2	2.61	0.40
23:BB:1454:C:H1'	42:BN:60:VAL:HG13	2.03	0.40
1:CA:1521:C:O2'	1:CA:1522:U:H5'	2.21	0.40
23:DB:729:G:H4'	23:DB:763:G:C5'	2.51	0.40
18:AB:71:THR:HG23	18:AB:94:ARG:H	1.86	0.40
30:BY:23:LEU:HA	30:BY:23:LEU:HD22	1.90	0.40
23:DB:445:C:H2'	23:DB:446:G:O4'	2.21	0.40
23:DB:193:U:H2'	23:DB:194:G:C8	2.55	0.40
1:CA:811:C:H4'	1:CA:900:A:N6	2.36	0.40
23:BB:1824:G:N2	25:BC:252:LYS:HE2	2.36	0.40
1:CA:6:G:O2'	1:CA:7:A:H8	2.04	0.40
13:CP:78:VAL:O	13:CP:78:VAL:HG13	2.22	0.40
23:DB:863:A:H2'	23:DB:864:G:O4'	2.21	0.40
7:CH:124:ILE:CG2	7:CH:125:ILE:N	2.84	0.40
17:CT:53:MET:C	17:CT:55:PRO:HD2	2.41	0.40
24:DI:99:LYS:HB2	24:DI:140:GLU:OE1	2.21	0.40
23:DB:1665:A:O2'	23:DB:1666:G:H5'	2.21	0.40
1:AA:999:C:H2'	1:AA:1000:A:H8	1.83	0.40
2:AC:48:LYS:N	2:AC:48:LYS:HE2	2.36	0.40
23:DB:1824:G:H2'	23:DB:1825:U:H6	1.86	0.40
51:DZ:50:ARG:HG2	51:DZ:50:ARG:HH21	1.85	0.40
2:CC:37:LYS:HD3	2:CC:93:ILE:HG22	2.02	0.40
2:AC:131:ARG:HG2	2:AC:131:ARG:HH11	1.84	0.40
1:AA:1463:U:H2'	1:AA:1464:U:H6	1.86	0.40
23:BB:1939:U:O2	23:BB:1967:C:H4'	2.20	0.40
47:BF:48:LEU:H	47:BF:48:LEU:CD2	2.34	0.40
33:D1:8:ILE:HA	33:D1:8:ILE:HD13	1.91	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
42:DN:54:LEU:HD11	42:DN:62:ASN:HB3	2.03	0.40
23:DB:769:U:H2'	23:DB:770:G:C8	2.57	0.40
9:CJ:83:THR:HA	9:CJ:86:ALA:HB3	2.02	0.40
15:AR:26:ALA:C	15:AR:28:LEU:H	2.24	0.40
9:AJ:13:PHE:O	9:AJ:14:ASP:HB3	2.20	0.40
9:CJ:16:ARG:O	9:CJ:20:GLN:HG3	2.21	0.40
23:BB:2852:G:H2'	23:BB:2853:C:C6	2.55	0.40
4:AE:43:GLY:C	4:AE:44:ARG:HD2	2.42	0.40
3:CD:98:ASP:OD2	3:CD:99:ASN:N	2.54	0.40
38:DM:30:SER:O	38:DM:132:THR:HA	2.21	0.40
13:CP:70:ARG:O	13:CP:73:ALA:HB3	2.21	0.40
23:DB:248:G:N7	23:DB:250:G:N3	2.69	0.40
23:BB:2599:G:N7	25:BC:235:GLU:HB2	2.36	0.40
23:BB:2422:C:H5	34:B3:30:HIS:HE1	1.69	0.40
43:BO:60:GLU:H	43:BO:60:GLU:HG2	1.71	0.40
27:BK:67:LYS:HD3	27:BK:67:LYS:C	2.42	0.40
34:D3:23:HIS:HD1	34:D3:24:LYS:C	2.23	0.40
48:DG:154:GLU:O	48:DG:156:TYR:N	2.48	0.40
43:DO:24:THR:CG2	43:DO:42:PRO:HD3	2.50	0.40
23:DB:1098:A:O2'	24:DI:4:VAL:C	2.59	0.40
8:CI:34:LEU:O	8:CI:38:PHE:N	2.54	0.40
52:BW:23:LYS:O	52:BW:66:VAL:HB	2.21	0.40
50:DT:25:GLU:C	50:DT:27:SER:N	2.74	0.40
52:BW:49:ASN:ND2	52:BW:50:VAL:N	2.69	0.40
9:CJ:74:VAL:HG12	9:CJ:75:ASP:N	2.36	0.40
1:CA:1336:C:O4'	1:CA:1337:G:C2	2.73	0.40
32:D4:10:LEU:HD12	32:D4:33:HIS:CA	2.40	0.40
35:BV:23:ALA:O	35:BV:24:ASN:HB2	2.21	0.40
41:BJ:16:TYR:CD2	41:BJ:140:LEU:HB2	2.56	0.40
29:BE:105:LEU:O	29:BE:108:ILE:HG22	2.21	0.40
37:DL:143:GLU:CG	37:DL:144:GLU:N	2.80	0.40
22:BA:55:U:H2'	22:BA:56:G:C8	2.56	0.40
43:BO:67:ASN:O	43:BO:69:ASP:N	2.54	0.40
8:AI:46:VAL:HA	8:AI:49:GLN:HG3	2.03	0.40
42:DN:82:GLU:O	42:DN:85:PRO:HD2	2.21	0.40
23:BB:1062:G:H2'	23:BB:1063:G:H8	1.85	0.40
24:BI:73:PRO:HA	24:BI:74:PRO:HD3	1.99	0.40
22:DA:55:U:H2'	22:DA:56:G:C8	2.56	0.40
3:AD:160:LEU:HD23	3:AD:164:ARG:HH22	1.85	0.40
23:BB:2539:C:C2'	23:BB:2540:C:H5'	2.51	0.40
23:BB:300:A:H2'	23:BB:334:C:H1'	2.03	0.40
24:DI:80:LYS:NZ	24:DI:135:MET:HE3	2.36	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
40:DH:75:LEU:O	40:DH:142:VAL:HG13	2.20	0.40
27:BK:72:PRO:O	27:BK:74:GLY:N	2.55	0.40
46:BU:20:LYS:HB3	46:BU:21:ARG:H	1.69	0.40
46:BU:21:ARG:HD3	46:BU:72:PHE:CE2	2.56	0.40
16:AS:9:PHE:HA	21:AN:45:LEU:HD11	2.04	0.40
23:DB:2886:A:H62	31:D0:39:ARG:CD	2.33	0.40
13:AP:66:THR:CG2	13:AP:67:ILE:N	2.84	0.40
47:BF:133:GLU:CA	47:BF:150:GLY:HA2	2.51	0.40
26:DD:3:GLY:O	26:DD:4:LEU:HD13	2.20	0.40
1:AA:1336:C:O4'	1:AA:1337:G:C2	2.74	0.40
47:BF:134:GLN:HE21	47:BF:134:GLN:HB3	1.52	0.40
47:BF:136:ILE:HG22	47:BF:142:TYR:CB	2.51	0.40
1:AA:1348:U:C4'	8:AI:121:ARG:HG3	2.44	0.40
18:CB:115:ASP:OD1	18:CB:116:LEU:N	2.54	0.40
23:DB:396:G:H5''	51:DZ:10:LYS:HZ3	1.86	0.40
1:CA:876:C:O2'	7:CH:11:THR:HG21	2.22	0.40
40:DH:37:VAL:HG11	40:DH:47:PHE:HE2	1.86	0.40
23:BB:992:C:H2'	23:BB:993:G:H8	1.86	0.40
44:BQ:68:ALA:HB1	44:BQ:73:ILE:CG2	2.43	0.40
48:BG:156:TYR:N	48:BG:170:THR:HB	2.37	0.40
12:AM:94:LEU:CB	12:AM:95:PRO:HD2	2.51	0.40
2:AC:13:ILE:C	2:AC:15:LYS:N	2.73	0.40
23:DB:72:U:H1'	39:DX:51:ALA:HA	2.03	0.40
6:AG:94:ARG:CD	6:AG:98:LEU:HD11	2.51	0.40
34:B3:14:LYS:O	34:B3:21:PHE:O	2.38	0.40
44:DQ:93:ILE:HG23	44:DQ:94:LEU:H	1.86	0.40
11:AL:21:PRO:C	11:AL:23:LEU:H	2.25	0.40
11:AL:41:PRO:HB2	11:AL:88:ASP:HB3	2.03	0.40
11:AL:40:THR:CG2	11:AL:41:PRO:HD2	2.45	0.40
27:DK:11:ALA:HB3	27:DK:85:VAL:HG22	2.03	0.40
40:BH:4:ILE:HD12	40:BH:4:ILE:N	2.36	0.40
1:AA:1133:G:C2	1:AA:1134:G:C8	3.10	0.40
23:BB:1547:C:H2'	23:BB:1548:A:H8	1.85	0.40
1:CA:239:U:C6	1:CA:239:U:C5'	2.99	0.40
41:DJ:38:GLY:H	41:DJ:51:GLY:HA2	1.87	0.40
1:AA:1187:G:H4'	8:AI:114:LYS:NZ	2.31	0.40
1:AA:502:A:OP1	11:AL:113:ARG:N	2.53	0.40
1:AA:550:G:H2'	1:AA:551:U:H6	1.85	0.40
11:AL:113:ARG:HH21	11:AL:120:ARG:HB2	1.86	0.40
11:AL:120:ARG:NH1	11:AL:120:ARG:HG3	2.36	0.40
1:CA:676:A:H2'	1:CA:677:U:H6	1.86	0.40
23:BB:559:G:H21	44:BQ:51:GLN:HE22	1.64	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:BB:570:G:N7	23:BB:2030:A:N6	2.69	0.40
23:DB:570:G:N7	23:DB:2030:A:N6	2.69	0.40
23:DB:1454:C:H1'	42:DN:60:VAL:HG13	2.03	0.40
29:BE:48:THR:C	29:BE:50:ALA:N	2.75	0.40
3:AD:97:LEU:HA	3:AD:100:VAL:CG2	2.51	0.40
1:AA:137:U:O2'	1:AA:138:G:H5'	2.22	0.40
23:BB:2249:U:N3	23:BB:2253:G:OP2	2.54	0.40
1:AA:676:A:C1'	10:AK:116:PRO:HB3	2.48	0.40
44:BQ:11:ALA:C	44:BQ:13:HIS:N	2.74	0.40
1:AA:91:U:H2'	1:AA:92:U:H6	1.85	0.40
1:AA:159:G:N1	1:AA:163:C:N4	2.69	0.40
52:BW:58:LEU:N	52:BW:58:LEU:HD22	2.36	0.40
23:DB:1117:C:H2'	23:DB:1118:C:H6	1.84	0.40
1:AA:1479:C:O2'	1:AA:1480:A:H5'	2.21	0.40
23:DB:2041:U:H2'	23:DB:2042:A:H8	1.84	0.40
23:BB:697:G:H2'	23:BB:698:C:C6	2.56	0.40
11:CL:13:ARG:HB2	11:CL:14:LYS:H	1.62	0.40
11:CL:14:LYS:HG2	11:CL:15:VAL:N	2.36	0.40
23:DB:1683:U:H2'	23:DB:1684:G:H8	1.85	0.40
23:BB:1585:C:H2'	23:BB:1586:A:O4'	2.21	0.40
1:AA:766:A:H2'	1:AA:767:A:O4'	2.22	0.40
2:CC:90:VAL:O	2:CC:93:ILE:HG13	2.21	0.40
1:AA:106:C:O2'	1:AA:107:G:H5'	2.22	0.40
1:CA:225:C:H2'	1:CA:226:G:O4'	2.21	0.40
1:AA:1299:A:H2'	1:AA:1301:U:C1'	2.51	0.40
1:AA:1074:G:H2'	1:AA:1075:U:O4'	2.20	0.40
1:AA:1251:A:H1'	1:AA:1369:C:O2'	2.22	0.40
1:CA:628:G:O2'	1:CA:629:A:H5'	2.20	0.40
23:DB:407:G:O2'	23:DB:408:G:H5'	2.22	0.40
23:BB:217:A:O5'	23:BB:217:A:H8	2.05	0.40
23:DB:2232:C:O2'	23:DB:2233:U:H5'	2.20	0.40
1:AA:625:U:OP1	13:AP:9:HIS:HB3	2.21	0.40
25:BC:30:ALA:C	25:BC:32:LEU:H	2.25	0.40
4:AE:142:GLY:HA2	4:AE:145:ASN:HD22	1.86	0.40
23:BB:2398:U:H2'	23:BB:2399:G:C8	2.56	0.40
1:CA:1426:G:O2'	1:CA:1427:C:H5'	2.21	0.40
17:AT:19:HIS:O	17:AT:23:ARG:HG2	2.21	0.40
23:DB:781:A:OP1	25:DC:216:ARG:NH2	2.54	0.40
23:DB:2519:U:C6	23:DB:2542:A:N6	2.90	0.40
23:DB:2835:A:H61	23:DB:2878:U:H2'	1.85	0.40
23:BB:483:A:H2'	23:BB:484:C:O4'	2.20	0.40
23:DB:2852:G:H2'	23:DB:2853:C:C6	2.56	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
18:AB:138:ARG:O	18:AB:139:GLU:C	2.59	0.40
43:DO:26:LEU:HG	43:DO:26:LEU:O	2.22	0.40
3:CD:70:GLN:HB2	3:CD:70:GLN:HE21	1.75	0.40
3:AD:198:LEU:HA	3:AD:198:LEU:HD23	1.92	0.40
23:BB:2138:G:P	23:BB:2138:G:H8	2.44	0.40
45:DS:74:ILE:O	45:DS:75:PHE:HB3	2.21	0.40
1:CA:875:U:H1'	7:CH:15:ASN:OD1	2.21	0.40
1:AA:1527:U:OP2	19:AU:38:GLU:CD	2.60	0.40
52:BW:81:ILE:O	52:BW:81:ILE:HG13	2.20	0.40
52:DW:81:ILE:O	52:DW:81:ILE:HG13	2.21	0.40
42:DN:49:GLU:N	42:DN:50:PRO:CD	2.85	0.40
1:CA:1237:C:H5''	1:CA:1238:A:O4'	2.21	0.40
25:DC:90:ILE:HG22	25:DC:91:ALA:N	2.36	0.40
41:BJ:123:LYS:O	41:BJ:124:VAL:HG13	2.22	0.40
1:CA:122:G:O2'	1:CA:123:U:H5'	2.21	0.40
14:AQ:67:SER:HB3	14:AQ:70:LYS:HB3	2.03	0.40
40:DH:77:THR:HG23	40:DH:143:ILE:CG2	2.49	0.40
42:BN:29:VAL:HG13	42:BN:83:LEU:HD11	2.03	0.40
8:AI:6:TYR:CE2	8:AI:17:ARG:HA	2.55	0.40
8:AI:25:GLY:O	8:AI:27:ILE:HG13	2.22	0.40
8:AI:71:ILE:CD1	8:AI:71:ILE:H	2.28	0.40
24:BI:75:ALA:HB3	24:BI:131:THR:HG21	2.03	0.40
48:BG:163:TYR:O	48:BG:166:GLU:HB3	2.22	0.40
48:DG:140:ILE:HA	48:DG:143:VAL:CG2	2.47	0.40
48:BG:121:THR:HG22	48:BG:122:ALA:N	2.36	0.40
3:AD:53:GLN:O	3:AD:202:LEU:HD22	2.22	0.40
26:BD:114:LYS:HB2	26:BD:116:LYS:CE	2.51	0.40
50:DT:69:ARG:HB2	50:DT:75:GLY:N	2.34	0.40
27:DK:89:ASN:C	27:DK:89:ASN:HD22	2.25	0.40
46:DU:21:ARG:HG3	46:DU:21:ARG:HH11	1.85	0.40
16:AS:9:PHE:HB2	21:AN:45:LEU:HD21	2.03	0.40
18:AB:56:LEU:HB2	18:AB:183:PHE:CE2	2.54	0.40
18:CB:61:SER:HA	18:CB:223:GLY:O	2.22	0.40
41:BJ:26:GLY:O	41:BJ:27:ARG:C	2.59	0.40
47:DF:48:LEU:CD2	47:DF:48:LEU:H	2.34	0.40
23:DB:1793:C:H2'	23:DB:1794:A:C8	2.56	0.40
25:DC:208:GLY:O	25:DC:210:ALA:N	2.54	0.40
27:BK:70:ARG:CD	27:BK:76:VAL:HG22	2.51	0.40
1:AA:1066:C:O2	55:AA:1662:SCM:N10	2.52	0.40
23:BB:1277:G:H2'	23:BB:1278:C:C6	2.56	0.40
42:BN:31:HIS:C	42:BN:33:ILE:H	2.24	0.40
1:CA:135:C:C2	13:CP:1:MET:HB2	2.57	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
2:AC:28:PHE:HD1	21:AN:75:LYS:HE3	1.86	0.40
6:AG:45:ALA:HB3	6:AG:119:LEU:HD23	2.04	0.40
6:AG:46:LEU:HG	6:AG:57:GLU:HB3	2.03	0.40
28:BP:84:SER:OG	28:BP:85:VAL:N	2.55	0.40
18:AB:23:ASN:HD22	18:AB:24:PRO:N	2.18	0.40
26:DD:117:GLY:HA2	26:DD:164:GLN:HE22	1.85	0.40
40:DH:5:LEU:HD13	40:DH:13:GLY:CA	2.46	0.40
42:DN:96:ARG:O	42:DN:113:ILE:HA	2.21	0.40
1:CA:1101:A:O3'	1:CA:1102:A:O4'	2.40	0.40
17:CT:61:ALA:O	17:CT:67:HIS:HA	2.20	0.40
23:BB:1590:A:H2'	23:BB:1591:A:C8	2.56	0.40
1:CA:1320:C:OP2	16:CS:69:LYS:HE3	2.22	0.40
44:DQ:64:ILE:HD12	44:DQ:95:ALA:HB3	2.02	0.40
44:BQ:26:ALA:HB1	44:BQ:30:VAL:CB	2.49	0.40
23:BB:1870:C:H3'	23:BB:1871:A:C8	2.56	0.40
31:B0:38:LEU:HB3	31:B0:41:HIS:CD2	2.54	0.40
12:CM:54:THR:OG1	12:CM:55:LEU:N	2.55	0.40
45:DS:24:ILE:CG2	45:DS:71:VAL:HG11	2.51	0.40
23:DB:2240:U:O2'	23:DB:2241:A:H5'	2.21	0.40
51:BZ:32:ASN:N	51:BZ:33:LEU:HD12	2.36	0.40
23:BB:1439:A:N6	23:BB:1440:U:O2	2.47	0.40
23:DB:2732:G:O4'	23:DB:2732:G:N3	2.54	0.40
2:AC:6:PRO:CA	2:AC:9:ILE:HG22	2.47	0.40
13:CP:28:ARG:HD3	13:CP:29:ASN:H	1.81	0.40
48:DG:1:SER:O	48:DG:3:VAL:N	2.55	0.40
25:BC:249:VAL:O	25:BC:251:THR:N	2.54	0.40
25:BC:255:LYS:C	25:BC:256:THR:HG23	2.41	0.40
1:CA:1251:A:H1'	1:CA:1369:C:O2'	2.21	0.40
1:CA:954:G:H2'	1:CA:955:U:O4'	2.22	0.40
23:DB:815:C:OP2	49:DR:85:LYS:HE2	2.20	0.40
23:DB:1803:A:O3'	25:DC:256:THR:HB	2.21	0.40
23:BB:607:U:C4	23:BB:620:G:O4'	2.74	0.40
52:BW:46:ALA:HB3	52:BW:78:PHE:HB3	2.03	0.40
23:DB:451:U:OP1	29:DE:47:LYS:HE2	2.22	0.40
29:DE:47:LYS:HB3	29:DE:51:GLU:HB2	2.03	0.40
1:CA:503:C:O2'	1:CA:504:C:H5'	2.21	0.40
3:CD:24:VAL:HG23	3:CD:25:ARG:H	1.87	0.40
29:DE:147:LEU:C	29:DE:148:ILE:HG12	2.42	0.40
13:AP:42:ILE:HG22	13:AP:43:ALA:N	2.36	0.40
23:DB:446:G:H5'	44:DQ:2:ARG:NH2	2.35	0.40
1:CA:1462:C:H2'	1:CA:1463:U:C6	2.57	0.40
1:AA:441:A:N6	1:AA:493:A:N6	2.68	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
1:AA:6:G:O2'	1:AA:7:A:H8	2.04	0.40
31:D0:12:ARG:HD2	31:D0:16:ARG:NH1	2.36	0.40
23:BB:1827:U:O2'	23:BB:1828:G:H5'	2.21	0.40
23:BB:2041:U:H2'	23:BB:2042:A:H8	1.83	0.40
23:BB:2358:A:H2'	23:BB:2359:C:C6	2.57	0.40
23:DB:2803:G:H2'	23:DB:2804:U:C6	2.55	0.40
23:DB:2805:C:O2'	23:DB:2806:C:H5'	2.21	0.40
52:BW:73:PRO:C	52:BW:75:ASN:N	2.75	0.40
1:AA:1254:A:H2'	1:AA:1255:G:H8	1.86	0.40
23:DB:2196:C:O2'	23:DB:2197:U:H5'	2.21	0.40
23:BB:2341:G:H2'	23:BB:2342:C:H6	1.86	0.40
11:CL:52:CYS:SG	11:CL:66:ILE:HD11	2.61	0.40
29:DE:4:VAL:C	29:DE:6:LYS:N	2.74	0.40
23:BB:2007:U:O2'	23:BB:2008:C:H5'	2.21	0.40
23:DB:766:U:H2'	23:DB:767:U:H6	1.87	0.40
22:DA:35:C:H5'	22:DA:35:C:O2	2.20	0.40
7:CH:29:SER:H	7:CH:32:LYS:HB2	1.86	0.40
28:DP:62:LYS:HE3	28:DP:64:SER:OG	2.22	0.40
1:CA:824:G:C6	1:CA:877:G:C6	3.09	0.40
23:BB:1269:A:H2'	23:BB:1270:C:C6	2.57	0.40
16:CS:27:LYS:CG	16:CS:28:LYS:HD2	2.51	0.40
23:BB:1076:C:O3'	24:BI:94:LYS:HE3	2.21	0.40
34:B3:6:VAL:HG23	34:B3:60:CYS:O	2.21	0.40
1:CA:966:G:H8	1:CA:966:G:O5'	2.03	0.40
1:CA:957:U:H4'	16:CS:78:THR:O	2.20	0.40
6:CG:5:VAL:HG12	6:CG:6:ILE:N	2.36	0.40
23:DB:2776:A:H4'	23:DB:2777:G:C5'	2.51	0.40
14:AQ:3:LYS:HA	14:AQ:3:LYS:HE2	2.03	0.40
23:BB:312:G:H2'	23:BB:313:G:C8	2.57	0.40
21:CN:42:ASN:C	21:CN:42:ASN:HD22	2.25	0.40
48:BG:108:PHE:C	48:BG:110:HIS:H	2.24	0.40
26:DD:60:VAL:HA	26:DD:64:GLU:OE2	2.22	0.40
1:CA:644:U:H4'	7:CH:83:ARG:NH2	2.37	0.40
3:AD:94:GLU:OE1	3:AD:103:ARG:NE	2.54	0.40
9:CJ:84:VAL:HG12	9:CJ:84:VAL:O	2.21	0.40
24:BI:35:MET:C	24:BI:35:MET:SD	2.99	0.40
49:BR:86:GLN:HE21	49:BR:86:GLN:HB2	1.62	0.40
1:AA:900:A:H2'	1:AA:901:A:C8	2.56	0.40
1:CA:1130:A:H2'	1:CA:1131:G:H8	1.85	0.40
8:CI:51:LEU:HD13	8:CI:56:MET:CE	2.52	0.40
1:AA:1334:G:H2'	1:AA:1335:U:H5'	2.03	0.40
23:BB:547:A:O3'	23:BB:549:G:N2	2.54	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
50:BT:25:GLU:C	50:BT:27:SER:N	2.75	0.40
1:CA:1376:U:H2'	1:CA:1377:A:C8	2.56	0.40
35:DV:9:ARG:HH11	35:DV:20:LEU:CD1	2.34	0.40
29:BE:138:LEU:HB3	29:BE:143:LEU:O	2.22	0.40
14:AQ:18:LYS:O	14:AQ:47:ASP:N	2.55	0.40
23:BB:2269:G:O3'	52:BW:18:LYS:HG2	2.22	0.40
23:BB:30:G:H2'	23:BB:31:C:H6	1.85	0.40
37:DL:141:LYS:HZ3	37:DL:143:GLU:HA	1.86	0.40
42:DN:29:VAL:HG13	42:DN:83:LEU:HD11	2.03	0.40
24:BI:116:MET:HE1	24:BI:124:MET:O	2.21	0.40
23:DB:1732:C:O5'	23:DB:1732:C:H6	2.05	0.40
48:BG:89:VAL:CG2	48:BG:162:ARG:HD3	2.52	0.40
6:CG:68:VAL:HG11	6:CG:103:ILE:HG13	2.02	0.40
26:BD:116:LYS:HE2	42:BN:1:MET:HE3	2.04	0.40
35:DV:51:GLN:HB2	35:DV:51:GLN:HE21	1.67	0.40
40:DH:118:PRO:C	40:DH:119:ASN:HD22	2.24	0.40
40:DH:97:ARG:H	40:DH:97:ARG:HD2	1.87	0.40
23:BB:673:C:C5'	29:BE:76:PRO:HD2	2.52	0.40
33:D1:9:LYS:HE2	33:D1:50:GLU:CG	2.52	0.40
12:AM:75:SER:O	12:AM:78:ARG:HB3	2.21	0.40
1:AA:955:U:H2'	1:AA:956:U:O4'	2.21	0.40
18:AB:95:TRP:CH2	18:AB:100:LEU:HB2	2.57	0.40
49:DR:58:VAL:HG22	49:DR:59:ILE:N	2.36	0.40
18:CB:221:ARG:HG3	18:CB:222:GLU:N	2.37	0.40
47:BF:105:ILE:C	47:BF:108:PRO:HD2	2.42	0.40
47:BF:104:THR:C	47:BF:108:PRO:HG2	2.42	0.40
41:BJ:26:GLY:O	41:BJ:29:ALA:N	2.55	0.40
23:BB:2052:A:O4'	26:BD:147:GLY:HA3	2.21	0.40
46:BU:94:PHE:CA	46:BU:101:THR:HA	2.42	0.40
7:CH:11:THR:CG2	7:CH:14:ARG:HH12	2.23	0.40
40:DH:21:VAL:HG21	40:DH:30:LEU:HD11	2.03	0.40
18:AB:22:TRP:CG	18:AB:23:ASN:N	2.89	0.40
40:DH:15:LEU:C	40:DH:17:ASP:N	2.74	0.40
23:BB:2073:C:H2'	23:BB:2074:U:C6	2.57	0.40
42:DN:101:GLY:O	42:DN:102:PHE:HB2	2.22	0.40
23:BB:2531:A:H5''	48:BG:156:TYR:CZ	2.57	0.40
40:DH:50:ARG:C	40:DH:52:ALA:N	2.75	0.40
9:AJ:15:HIS:HB2	9:AJ:19:ASP:OD1	2.21	0.40
16:CS:38:THR:HG22	16:CS:39:ILE:H	1.86	0.40
2:CC:22:PHE:CD2	2:CC:23:ALA:N	2.90	0.40
41:DJ:44:TYR:CD1	44:DQ:63:ARG:HD3	2.57	0.40
44:DQ:63:ARG:O	44:DQ:64:ILE:C	2.59	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:547:A:C4	23:DB:548:G:H1'	2.57	0.40
11:CL:30:ARG:O	11:CL:56:LEU:HA	2.22	0.40
39:BX:37:LEU:C	39:BX:39:GLN:H	2.24	0.40
38:DM:105:MET:SD	38:DM:108:VAL:HG11	2.61	0.40
45:DS:71:VAL:O	45:DS:71:VAL:HG22	2.21	0.40
23:BB:1439:A:C5	23:BB:1552:A:N6	2.89	0.40
23:DB:2733:A:C8	23:DB:2733:A:C3'	3.05	0.40
1:CA:881:G:OP2	11:CL:8:ARG:NH2	2.55	0.40
23:BB:619:G:H3'	23:BB:620:G:H21	1.86	0.40
11:CL:113:ARG:HH21	11:CL:120:ARG:HB2	1.86	0.40
1:AA:132:C:H5''	17:AT:68:LYS:HZ2	1.83	0.40
23:BB:191:A:O2'	23:BB:192:C:H5'	2.21	0.40
23:BB:150:U:O2'	23:BB:151:C:H5'	2.22	0.40
41:BJ:121:LYS:HB2	41:BJ:121:LYS:HE3	1.81	0.40
10:CK:33:ILE:N	10:CK:42:GLY:O	2.54	0.40
4:CE:80:LEU:HD13	4:CE:95:MET:HB3	2.03	0.40
23:DB:1494:A:H2'	23:DB:1495:A:H8	1.82	0.40
2:AC:57:GLU:HB2	2:AC:64:ARG:CB	2.52	0.40
51:BZ:71:LEU:HB3	51:BZ:72:ARG:H	1.71	0.40
6:AG:107:ALA:HB1	6:AG:118:ARG:O	2.21	0.40
18:CB:13:VAL:HG12	18:CB:13:VAL:O	2.20	0.40
22:DA:49:C:OP1	43:DO:101:GLY:HA3	2.21	0.40
43:BO:98:GLN:O	43:BO:100:HIS:N	2.55	0.40
1:AA:278:G:N2	1:AA:279:A:H62	2.19	0.40
23:DB:2107:G:H2'	23:DB:2108:A:H8	1.86	0.40
46:DU:64:ILE:CG1	46:DU:65:GLN:N	2.84	0.40
15:CR:22:TYR:CE2	15:CR:23:LYS:HE2	2.57	0.40
23:BB:2636:C:OP1	26:BD:81:GLU:HB2	2.21	0.40
43:BO:59:ALA:HA	43:BO:62:LEU:HB2	2.04	0.40
22:DA:87:U:O2	22:DA:89:U:OP2	2.38	0.40
23:BB:1942:C:N3	23:BB:1943:U:C4	2.89	0.40
23:BB:770:G:H1'	23:BB:1379:U:C4	2.57	0.40
29:BE:16:GLU:O	29:BE:20:GLY:HA3	2.22	0.40
25:BC:17:LYS:HB3	25:BC:18:VAL:H	1.72	0.40
29:BE:6:LYS:HB3	29:BE:7:ASP:H	1.59	0.40
23:DB:257:C:H3'	23:DB:258:G:H8	1.86	0.40
1:CA:85:U:H1'	1:CA:86:G:C5	2.56	0.40
1:CA:339:C:H5''	27:DK:98:ARG:HH22	1.86	0.40
1:AA:1160:G:H2'	1:AA:1161:C:C6	2.56	0.40
24:DI:63:ASP:O	24:DI:63:ASP:OD1	2.40	0.40
23:BB:2630:G:H2'	23:BB:2631:G:C8	2.56	0.40
46:DU:27:VAL:CG2	46:DU:33:VAL:HG12	2.51	0.40

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
20:CO:19:ALA:C	20:CO:21:ASP:H	2.25	0.40
23:DB:1102:C:O2'	23:DB:1103:A:H5'	2.21	0.40
35:BV:10:LYS:HG2	35:BV:11:GLU:HG3	2.03	0.40
38:DM:89:VAL:O	38:DM:89:VAL:HG23	2.21	0.40
23:DB:2485:G:H5''	38:DM:125:PRO:HG3	2.03	0.40
23:DB:1223:G:P	49:DR:68:ARG:HH12	2.44	0.40
25:DC:270:ARG:HH11	25:DC:270:ARG:HG2	1.86	0.40
23:BB:1168:G:H2'	23:BB:1169:A:O4'	2.21	0.40
23:BB:623:C:H2'	23:BB:624:C:H6	1.86	0.40
23:DB:2363:G:O2'	23:DB:2364:C:H5'	2.21	0.40
29:DE:132:LYS:O	29:DE:135:ALA:HB3	2.21	0.40
23:BB:101:A:H2'	23:BB:102:U:OP2	2.21	0.40
23:BB:1573:G:H2'	23:BB:1574:C:H5'	2.03	0.40
21:AN:53:ASP:C	21:AN:55:SER:H	2.25	0.40
44:BQ:18:LYS:C	44:BQ:18:LYS:HD2	2.41	0.40
25:DC:47:ARG:HG3	25:DC:47:ARG:NH1	2.37	0.40
16:AS:36:ARG:H	16:AS:36:ARG:HG2	1.70	0.40
26:DD:70:LYS:O	26:DD:70:LYS:HD3	2.21	0.40
4:AE:79:THR:OG1	4:AE:80:LEU:N	2.52	0.40
1:CA:94:G:H4'	1:CA:95:C:O5'	2.22	0.40
23:DB:1099:G:H5''	24:DI:2:LYS:CB	2.49	0.40
23:DB:1100:C:H41	24:DI:1:ALA:N	2.19	0.40
23:BB:2305:U:H6	47:BF:152:ASP:OD2	2.04	0.40
9:AJ:100:ILE:HG13	9:AJ:100:ILE:O	2.21	0.40
50:DT:29:THR:CB	50:DT:86:THR:HG22	2.52	0.40
25:BC:185:ALA:C	25:BC:187:CYS:N	2.74	0.40
20:AO:77:ARG:O	20:AO:81:LEU:HB2	2.21	0.40
5:AF:22:ILE:O	5:AF:26:THR:HG23	2.22	0.40
5:AF:64:VAL:HG23	5:AF:65:GLU:N	2.36	0.40
40:BH:72:ILE:HG12	40:BH:132:PHE:CE1	2.56	0.40
40:BH:99:ILE:CD1	40:BH:128:HIS:HD1	2.33	0.40
6:CG:12:LEU:HD13	6:CG:13:PRO:N	2.37	0.40
52:DW:18:LYS:HE3	52:DW:36:ILE:HG12	2.03	0.40
52:BW:16:GLU:HB2	52:BW:17:ALA:H	1.71	0.40
23:BB:585:G:H2'	23:BB:1251:C:H42	1.86	0.40
42:BN:78:LYS:CG	42:BN:83:LEU:HG	2.48	0.40
43:BO:34:HIS:ND1	43:BO:53:THR:OG1	2.52	0.40
8:AI:34:LEU:C	8:AI:36:GLN:H	2.24	0.40
8:AI:38:PHE:CZ	8:AI:75:ALA:HB2	2.57	0.40
42:DN:72:ASP:OD1	42:DN:75:ILE:HG23	2.22	0.40
23:DB:1729:U:C5	23:DB:1731:G:N2	2.81	0.40
2:AC:165:GLU:HA	2:AC:165:GLU:OE2	2.22	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
25:BC:150:GLY:O	25:BC:151:GLY:O	2.40	0.40
23:BB:1818:U:N3	25:BC:152:GLN:HB3	2.37	0.40
23:BB:2742:G:P	32:B4:36:ARG:HH11	2.44	0.40
50:DT:76:ARG:HG2	50:DT:77:ARG:N	2.37	0.40
15:CR:39:VAL:HA	15:CR:40:PRO:HD3	1.97	0.40
49:BR:33:VAL:O	49:BR:60:LYS:HA	2.21	0.40
22:DA:6:G:O2'	22:DA:7:G:H5'	2.21	0.40
47:DF:37:MET:SD	47:DF:56:LEU:HD23	2.62	0.40
46:DU:72:PHE:HE1	46:DU:77:GLY:HA2	1.86	0.40
47:BF:126:ASN:HD22	47:BF:156:THR:CA	2.32	0.40
1:AA:1084:G:H2'	1:AA:1085:U:C6	2.57	0.40
47:DF:126:ASN:HD22	47:DF:156:THR:CA	2.33	0.40
23:DB:2052:A:O4'	26:DD:147:GLY:HA3	2.21	0.40
26:DD:149:ASN:CG	26:DD:150:GLN:H	2.25	0.40
1:CA:14:U:O2	1:CA:17:U:H5	2.03	0.40
23:BB:2729:G:H1'	26:BD:192:ALA:HB3	2.04	0.40
8:AI:118:ARG:O	8:AI:119:LYS:HB2	2.21	0.40
13:CP:6:LEU:HD12	13:CP:6:LEU:N	2.35	0.40
37:DL:98:ALA:O	37:DL:99:ASN:C	2.59	0.40
23:DB:124:G:N2	23:DB:126:A:H4'	2.36	0.40
1:CA:938:A:N6	1:CA:939:G:C6	2.90	0.40
41:DJ:83:GLY:O	41:DJ:84:ILE:C	2.60	0.40
45:BS:81:SER:HB3	45:BS:99:ARG:HB3	2.03	0.40
12:AM:89:ARG:NH1	12:AM:94:LEU:HB3	2.36	0.40
47:BF:3:LEU:HG	47:BF:99:PHE:HD2	1.86	0.40
18:AB:60:ALA:CB	18:AB:220:VAL:HA	2.51	0.40
1:CA:1014:A:C5'	16:CS:13:HIS:HB3	2.52	0.40
16:CS:18:VAL:HG11	16:CS:43:MET:HE1	2.03	0.40
6:AG:70:PRO:HA	6:AG:141:HIS:CE1	2.57	0.40
11:CL:49:ARG:HH12	11:CL:88:ASP:HB2	1.86	0.40
27:DK:60:ALA:HA	27:DK:87:LEU:CD2	2.51	0.40
27:BK:102:PRO:CB	27:BK:121:GLU:HB2	2.47	0.40
39:DX:37:LEU:C	39:DX:39:GLN:H	2.24	0.40
23:DB:281:C:O2	23:DB:281:C:H2'	2.20	0.40
23:DB:2019:A:H4'	44:DQ:33:VAL:HG11	2.03	0.40
9:AJ:52:LEU:HG	9:AJ:54:SER:O	2.21	0.40
12:CM:5:GLY:O	12:CM:7:ASN:N	2.55	0.40
36:B2:31:LEU:HB3	36:B2:42:LEU:HD11	2.02	0.40
23:DB:2727:A:O2'	27:DK:70:ARG:NH2	2.54	0.40
2:CC:129:PHE:HZ	2:CC:130:ARG:NH1	2.19	0.40
17:CT:43:LYS:HD3	17:CT:43:LYS:N	2.33	0.40
23:BB:1733:G:H2'	23:BB:1734:G:O4'	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Distance(Å)	Clash(Å)
23:DB:2215:C:H2'	23:DB:2216:G:H8	1.86	0.40
1:AA:951:G:O2'	1:AA:952:U:H5'	2.21	0.40
48:BG:51:PHE:HZ	48:BG:71:LEU:HG	1.86	0.40
23:DB:2415:G:O2'	23:DB:2416:C:H5'	2.22	0.40
23:BB:2065:C:C2	23:BB:2066:C:C5	3.09	0.40
1:AA:1017:U:H2'	1:AA:1018:G:C8	2.57	0.40
21:AN:23:ARG:O	21:AN:26:LEU:HD22	2.21	0.40
3:CD:18:LEU:HB3	3:CD:63:ILE:HG12	2.02	0.40
1:AA:1325:C:H2'	1:AA:1326:U:H6	1.85	0.40
29:DE:148:ILE:HG13	29:DE:167:VAL:CG2	2.50	0.40
51:BZ:51:VAL:HG12	51:BZ:52:SER:N	2.37	0.40
23:DB:346:A:O4'	23:DB:346:A:N3	2.54	0.40
23:DB:79:C:C2	23:DB:80:G:C8	3.10	0.40
23:BB:2809:A:H2'	23:BB:2810:A:H8	1.84	0.40
1:CA:702:A:C6	23:DB:1848:A:C6	3.09	0.40
23:BB:275:C:C2'	23:BB:276:U:H5'	2.52	0.40
6:AG:92:PRO:HG2	6:AG:93:VAL:H	1.86	0.40
1:AA:811:C:H5''	1:AA:898:G:H4'	2.04	0.40
45:DS:73:LYS:O	45:DS:106:VAL:N	2.51	0.40
23:DB:1346:G:HO2'	23:DB:1347:A:H5'	1.87	0.40
1:CA:992:U:H1'	1:CA:993:G:C2	2.57	0.40
1:AA:647:C:H2'	1:AA:648:A:C8	2.56	0.40
1:AA:1242:G:O2'	1:AA:1243:C:H5'	2.21	0.40
24:BI:14:ALA:CB	24:BI:50:LYS:HA	2.50	0.40
23:DB:1252:G:N1	44:DQ:36:GLN:OE1	2.53	0.40
1:CA:1368:A:OP2	8:CI:113:LYS:HD3	2.21	0.40
10:AK:90:PRO:C	10:AK:92:ARG:N	2.75	0.40
23:DB:2295:C:OP2	43:DO:10:ARG:HG2	2.22	0.40
5:AF:11:HIS:CG	5:AF:12:PRO:HD2	2.57	0.40
1:AA:708:C:C4'	10:AK:38:GLY:HA3	2.51	0.40
1:AA:113:G:H2'	1:AA:114:U:H6	1.87	0.40
1:CA:1432:G:H1'	1:CA:1468:A:H61	1.86	0.40
5:CF:11:HIS:CG	5:CF:12:PRO:HD2	2.56	0.40
1:CA:355:C:O2'	1:CA:356:A:H5'	2.22	0.40
1:AA:1258:G:N1	1:AA:1278:G:N1	2.70	0.40
1:AA:1453:G:N3	1:AA:1453:G:H3'	2.36	0.40
23:BB:1930:G:H2'	23:BB:1968:G:O6	2.22	0.40
11:CL:28:GLN:HE21	11:CL:28:GLN:HB3	1.53	0.40
4:CE:96:GLN:HB3	4:CE:123:LEU:CD1	2.51	0.40
1:AA:704:A:C2	1:AA:705:G:H1'	2.57	0.40
1:AA:377:G:O2'	1:AA:378:G:H5'	2.22	0.40
23:BB:802:A:C5	23:BB:803:U:C4	3.10	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Distance(Å)	Clash(Å)
49:BR:31:GLU:HG2	49:BR:32:THR:N	2.37	0.40
25:BC:108:GLY:C	25:BC:110:LYS:H	2.25	0.40
23:DB:335:C:O2'	23:DB:336:C:H5'	2.21	0.40
7:CH:64:TYR:CA	7:CH:70:VAL:HG23	2.52	0.40
10:CK:35:ASP:C	10:CK:37:GLN:H	2.24	0.40
36:D2:32:ALA:O	36:D2:36:ALA:HB2	2.21	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles

### 5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	AC	204/232 (88%)	130 (64%)	44 (22%)	30 (15%)	0	6
2	CC	204/232 (88%)	137 (67%)	49 (24%)	18 (9%)	1	19
3	AD	203/205 (99%)	153 (75%)	40 (20%)	10 (5%)	3	37
3	CD	203/205 (99%)	153 (75%)	40 (20%)	10 (5%)	3	37
4	AE	148/166 (89%)	116 (78%)	24 (16%)	8 (5%)	3	35
4	CE	148/166 (89%)	114 (77%)	25 (17%)	9 (6%)	2	30
5	AF	98/135 (73%)	63 (64%)	25 (26%)	10 (10%)	1	14
5	CF	98/135 (73%)	64 (65%)	24 (24%)	10 (10%)	1	14
6	AG	148/178 (83%)	110 (74%)	30 (20%)	8 (5%)	3	35
6	CG	150/178 (84%)	111 (74%)	28 (19%)	11 (7%)	2	25
7	AH	127/129 (98%)	92 (72%)	31 (24%)	4 (3%)	7	53
7	CH	127/129 (98%)	92 (72%)	31 (24%)	4 (3%)	7	53
8	AI	125/129 (97%)	80 (64%)	35 (28%)	10 (8%)	1	21
8	CI	125/129 (97%)	80 (64%)	34 (27%)	11 (9%)	1	19
9	AJ	96/103 (93%)	59 (62%)	25 (26%)	12 (12%)	1	10
9	CJ	96/103 (93%)	64 (67%)	22 (23%)	10 (10%)	1	14

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	AK	115/128 (90%)	87 (76%)	23 (20%)	5 (4%)	4	42
10	CK	115/128 (90%)	86 (75%)	24 (21%)	5 (4%)	4	42
11	AL	121/123 (98%)	69 (57%)	37 (31%)	15 (12%)	1	10
11	CL	121/123 (98%)	72 (60%)	34 (28%)	15 (12%)	1	10
12	AM	112/117 (96%)	74 (66%)	25 (22%)	13 (12%)	1	12
12	CM	111/117 (95%)	78 (70%)	21 (19%)	12 (11%)	1	13
13	AP	80/82 (98%)	53 (66%)	20 (25%)	7 (9%)	1	19
13	CP	78/82 (95%)	52 (67%)	19 (24%)	7 (9%)	1	18
14	AQ	78/83 (94%)	59 (76%)	15 (19%)	4 (5%)	3	36
14	CQ	79/83 (95%)	57 (72%)	18 (23%)	4 (5%)	3	36
15	AR	53/74 (72%)	40 (76%)	13 (24%)	0	100	100
15	CR	53/74 (72%)	41 (77%)	11 (21%)	1 (2%)	12	64
16	AS	77/91 (85%)	49 (64%)	24 (31%)	4 (5%)	3	35
16	CS	78/91 (86%)	57 (73%)	16 (20%)	5 (6%)	2	29
17	AT	83/86 (96%)	62 (75%)	16 (19%)	5 (6%)	2	31
17	CT	83/86 (96%)	63 (76%)	15 (18%)	5 (6%)	2	31
18	AB	216/240 (90%)	135 (62%)	56 (26%)	25 (12%)	1	12
18	CB	216/240 (90%)	145 (67%)	52 (24%)	19 (9%)	1	19
19	AU	49/70 (70%)	29 (59%)	14 (29%)	6 (12%)	1	11
19	CU	49/70 (70%)	29 (59%)	14 (29%)	6 (12%)	1	11
20	AO	86/89 (97%)	62 (72%)	18 (21%)	6 (7%)	2	26
20	CO	86/89 (97%)	60 (70%)	25 (29%)	1 (1%)	19	75
21	AN	92/100 (92%)	53 (58%)	30 (33%)	9 (10%)	1	16
21	CN	92/100 (92%)	49 (53%)	31 (34%)	12 (13%)	0	10
24	BI	139/141 (99%)	118 (85%)	17 (12%)	4 (3%)	7	54
24	DI	139/141 (99%)	115 (83%)	19 (14%)	5 (4%)	5	49
25	BC	269/272 (99%)	163 (61%)	63 (23%)	43 (16%)	0	5
25	DC	269/272 (99%)	162 (60%)	61 (23%)	46 (17%)	0	4
26	BD	207/209 (99%)	118 (57%)	57 (28%)	32 (16%)	0	5
26	DD	207/209 (99%)	118 (57%)	58 (28%)	31 (15%)	0	6
27	BK	119/123 (97%)	70 (59%)	27 (23%)	22 (18%)	0	3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
27	DK	119/123 (97%)	69 (58%)	29 (24%)	21 (18%)	0	4
28	BP	112/114 (98%)	66 (59%)	29 (26%)	17 (15%)	0	6
28	DP	112/114 (98%)	66 (59%)	29 (26%)	17 (15%)	0	6
29	BE	199/201 (99%)	124 (62%)	51 (26%)	24 (12%)	1	11
29	DE	199/201 (99%)	124 (62%)	48 (24%)	27 (14%)	0	8
30	BY	56/58 (97%)	39 (70%)	12 (21%)	5 (9%)	1	18
30	DY	56/58 (97%)	40 (71%)	11 (20%)	5 (9%)	1	18
31	B0	54/56 (96%)	36 (67%)	12 (22%)	6 (11%)	1	13
31	D0	54/56 (96%)	36 (67%)	12 (22%)	6 (11%)	1	13
32	B4	36/38 (95%)	20 (56%)	9 (25%)	7 (19%)	0	3
32	D4	36/38 (95%)	21 (58%)	8 (22%)	7 (19%)	0	3
33	B1	48/54 (89%)	35 (73%)	9 (19%)	4 (8%)	1	20
33	D1	48/54 (89%)	35 (73%)	9 (19%)	4 (8%)	1	20
34	B3	62/64 (97%)	39 (63%)	17 (27%)	6 (10%)	1	16
34	D3	62/64 (97%)	39 (63%)	18 (29%)	5 (8%)	1	21
35	BV	92/94 (98%)	60 (65%)	22 (24%)	10 (11%)	1	13
35	DV	92/94 (98%)	59 (64%)	23 (25%)	10 (11%)	1	13
36	B2	44/46 (96%)	25 (57%)	16 (36%)	3 (7%)	2	27
36	D2	44/46 (96%)	24 (54%)	16 (36%)	4 (9%)	1	18
37	BL	141/144 (98%)	78 (55%)	44 (31%)	19 (14%)	0	8
37	DL	141/144 (98%)	78 (55%)	42 (30%)	21 (15%)	0	6
38	BM	134/136 (98%)	90 (67%)	28 (21%)	16 (12%)	1	11
38	DM	134/136 (98%)	91 (68%)	26 (19%)	17 (13%)	0	10
39	BX	61/63 (97%)	35 (57%)	22 (36%)	4 (7%)	2	28
39	DX	61/63 (97%)	35 (57%)	22 (36%)	4 (7%)	2	28
40	BH	147/149 (99%)	74 (50%)	42 (29%)	31 (21%)	0	2
40	DH	147/149 (99%)	86 (58%)	38 (26%)	23 (16%)	0	5
41	BJ	140/142 (99%)	88 (63%)	33 (24%)	19 (14%)	0	8
41	DJ	140/142 (99%)	88 (63%)	32 (23%)	20 (14%)	0	7
42	BN	118/127 (93%)	74 (63%)	31 (26%)	13 (11%)	1	13
42	DN	118/127 (93%)	74 (63%)	32 (27%)	12 (10%)	1	14

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
43	BO	114/117 (97%)	79 (69%)	26 (23%)	9 (8%)	1	22
43	DO	114/117 (97%)	79 (69%)	25 (22%)	10 (9%)	1	19
44	BQ	115/117 (98%)	76 (66%)	32 (28%)	7 (6%)	2	30
44	DQ	115/117 (98%)	75 (65%)	33 (29%)	7 (6%)	2	30
45	BS	108/110 (98%)	67 (62%)	28 (26%)	13 (12%)	1	11
45	DS	108/110 (98%)	67 (62%)	28 (26%)	13 (12%)	1	11
46	BU	100/103 (97%)	50 (50%)	35 (35%)	15 (15%)	0	6
46	DU	100/103 (97%)	54 (54%)	31 (31%)	15 (15%)	0	6
47	BF	176/178 (99%)	102 (58%)	48 (27%)	26 (15%)	0	6
47	DF	176/178 (99%)	102 (58%)	48 (27%)	26 (15%)	0	6
48	BG	174/176 (99%)	111 (64%)	40 (23%)	23 (13%)	0	9
48	DG	174/176 (99%)	110 (63%)	40 (23%)	24 (14%)	0	8
49	BR	101/103 (98%)	59 (58%)	31 (31%)	11 (11%)	1	13
49	DR	101/103 (98%)	59 (58%)	31 (31%)	11 (11%)	1	13
50	BT	91/100 (91%)	49 (54%)	25 (28%)	17 (19%)	0	3
50	DT	91/100 (91%)	47 (52%)	27 (30%)	17 (19%)	0	3
51	BZ	75/78 (96%)	50 (67%)	17 (23%)	8 (11%)	1	13
51	DZ	75/78 (96%)	48 (64%)	19 (25%)	8 (11%)	1	13
52	BW	77/84 (92%)	26 (34%)	26 (34%)	25 (32%)	0	0
52	DW	77/84 (92%)	26 (34%)	25 (32%)	26 (34%)	0	0
All	All	11241/11914 (94%)	7227 (64%)	2767 (25%)	1247 (11%)	1	13

All (1247) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	AC	11	LEU
2	AC	14	VAL
2	AC	25	THR
2	AC	54	ILE
2	AC	83	VAL
2	AC	112	ALA
2	AC	153	SER
2	AC	205	GLU
3	AD	27	ILE
5	AF	92	THR

Continued on next page...



*Continued from previous page...*

Mol	Chain	Res	Type
6	AG	71	THR
7	AH	66	GLN
8	AI	33	SER
8	AI	57	VAL
8	AI	119	LYS
9	AJ	57	VAL
9	AJ	61	ALA
10	AK	126	ARG
11	AL	3	VAL
11	AL	13	ARG
11	AL	24	GLU
11	AL	75	GLU
12	AM	26	LYS
12	AM	49	GLU
12	AM	65	GLU
12	AM	105	ALA
13	AP	44	SER
16	AS	10	ILE
16	AS	29	PRO
18	AB	19	THR
18	AB	22	TRP
18	AB	49	PHE
18	AB	86	CYS
18	AB	94	ARG
18	AB	163	ILE
19	AU	7	GLU
19	AU	11	PHE
19	AU	22	CYS
19	AU	35	GLU
20	AO	34	ALA
21	AN	32	ASP
21	AN	50	LEU
24	BI	18	ASN
25	BC	15	VAL
25	BC	18	VAL
25	BC	53	ILE
25	BC	135	PRO
25	BC	141	HIS
25	BC	145	MET
25	BC	239	PHE
26	BD	9	VAL
26	BD	74	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	BD	107	VAL
26	BD	121	THR
26	BD	143	PRO
26	BD	169	ARG
26	BD	184	ARG
27	BK	6	THR
27	BK	31	ARG
27	BK	35	VAL
27	BK	72	PRO
27	BK	89	ASN
27	BK	120	PRO
28	BP	25	VAL
28	BP	50	ARG
28	BP	64	SER
28	BP	75	THR
29	BE	7	ASP
29	BE	45	ALA
29	BE	60	TRP
29	BE	69	ARG
29	BE	79	ARG
31	B0	42	ILE
35	BV	25	LYS
35	BV	75	GLN
36	B2	44	VAL
37	BL	89	VAL
37	BL	94	THR
37	BL	100	ILE
37	BL	116	VAL
37	BL	143	GLU
38	BM	36	VAL
38	BM	69	PRO
39	BX	2	LYS
40	BH	3	VAL
40	BH	31	VAL
40	BH	32	PRO
40	BH	33	GLN
40	BH	101	ASP
40	BH	125	THR
40	BH	139	PHE
40	BH	144	VAL
41	BJ	44	TYR
41	BJ	45	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
41	BJ	73	VAL
41	BJ	124	VAL
42	BN	11	ASN
45	BS	3	THR
45	BS	27	LYS
46	BU	6	ARG
46	BU	18	LYS
46	BU	50	ALA
46	BU	85	ARG
47	BF	9	ASP
47	BF	32	LYS
47	BF	77	LYS
47	BF	92	GLY
47	BF	112	ASP
47	BF	138	PRO
47	BF	148	VAL
48	BG	11	PRO
48	BG	85	LYS
48	BG	94	ARG
49	BR	49	ILE
50	BT	11	LEU
50	BT	28	ASN
50	BT	39	THR
50	BT	58	VAL
51	BZ	33	LEU
51	BZ	70	GLU
51	BZ	77	LYS
52	BW	9	THR
52	BW	14	ASP
52	BW	16	GLU
52	BW	36	ILE
52	BW	50	VAL
52	BW	62	ALA
52	BW	70	VAL
3	CD	27	ILE
5	CF	92	THR
7	CH	66	GLN
10	CK	126	ARG
11	CL	3	VAL
11	CL	13	ARG
11	CL	24	GLU
11	CL	75	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
13	CP	44	SER
19	CU	7	GLU
19	CU	11	PHE
19	CU	22	CYS
19	CU	35	GLU
2	CC	25	THR
2	CC	54	ILE
2	CC	83	VAL
2	CC	100	ILE
6	CG	3	ARG
8	CI	8	THR
9	CJ	37	ARG
9	CJ	57	VAL
12	CM	6	ILE
12	CM	47	LEU
12	CM	56	ARG
21	CN	27	LYS
21	CN	29	ILE
21	CN	50	LEU
21	CN	61	ASN
21	CN	75	LYS
16	CS	4	LEU
18	CB	15	PHE
18	CB	22	TRP
18	CB	94	ARG
18	CB	163	ILE
24	DI	5	GLN
24	DI	18	ASN
25	DC	15	VAL
25	DC	18	VAL
25	DC	53	ILE
25	DC	135	PRO
25	DC	141	HIS
25	DC	145	MET
26	DD	9	VAL
26	DD	74	GLU
26	DD	107	VAL
26	DD	121	THR
26	DD	143	PRO
26	DD	169	ARG
26	DD	184	ARG
27	DK	6	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	DK	31	ARG
27	DK	35	VAL
27	DK	72	PRO
27	DK	89	ASN
27	DK	120	PRO
28	DP	25	VAL
28	DP	50	ARG
28	DP	64	SER
28	DP	75	THR
29	DE	7	ASP
29	DE	45	ALA
29	DE	60	TRP
29	DE	69	ARG
29	DE	79	ARG
31	D0	42	ILE
34	D3	31	ILE
35	DV	75	GLN
36	D2	44	VAL
37	DL	89	VAL
37	DL	94	THR
37	DL	100	ILE
37	DL	116	VAL
38	DM	36	VAL
38	DM	69	PRO
39	DX	2	LYS
40	DH	3	VAL
40	DH	31	VAL
40	DH	32	PRO
40	DH	33	GLN
40	DH	110	VAL
40	DH	113	SER
40	DH	121	VAL
41	DJ	44	TYR
41	DJ	45	THR
41	DJ	73	VAL
41	DJ	124	VAL
42	DN	11	ASN
45	DS	3	THR
45	DS	27	LYS
46	DU	6	ARG
46	DU	18	LYS
46	DU	50	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	DU	85	ARG
47	DF	9	ASP
47	DF	32	LYS
47	DF	77	LYS
47	DF	92	GLY
47	DF	112	ASP
47	DF	138	PRO
47	DF	148	VAL
48	DG	11	PRO
48	DG	85	LYS
48	DG	94	ARG
49	DR	49	ILE
50	DT	11	LEU
50	DT	28	ASN
50	DT	39	THR
50	DT	58	VAL
51	DZ	33	LEU
51	DZ	70	GLU
51	DZ	77	LYS
52	DW	9	THR
52	DW	14	ASP
52	DW	16	GLU
52	DW	36	ILE
52	DW	50	VAL
52	DW	62	ALA
52	DW	70	VAL
2	AC	3	LYS
2	AC	17	TRP
2	AC	47	ALA
2	AC	65	VAL
2	AC	168	ARG
2	AC	180	ASP
3	AD	24	VAL
3	AD	25	ARG
3	AD	175	GLY
3	AD	191	SER
3	AD	192	ALA
4	AE	20	VAL
4	AE	71	ILE
4	AE	108	GLY
5	AF	62	MET
5	AF	65	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	AF	85	ILE
5	AF	89	VAL
5	AF	98	GLU
6	AG	15	PRO
6	AG	23	ALA
8	AI	34	LEU
8	AI	106	ASP
9	AJ	34	ALA
9	AJ	36	VAL
9	AJ	74	VAL
9	AJ	77	VAL
10	AK	14	GLN
10	AK	88	PRO
11	AL	14	LYS
11	AL	17	LYS
11	AL	23	LEU
11	AL	117	GLY
11	AL	122	LYS
12	AM	3	ILE
12	AM	6	ILE
12	AM	7	ASN
12	AM	22	TYR
12	AM	76	ILE
13	AP	28	ARG
13	AP	52	LEU
16	AS	63	ASP
18	AB	188	THR
18	AB	205	ALA
19	AU	34	ARG
21	AN	2	LYS
21	AN	61	ASN
21	AN	71	GLY
24	BI	14	ALA
24	BI	23	VAL
24	BI	64	ARG
25	BC	4	LYS
25	BC	17	LYS
25	BC	35	LYS
25	BC	36	ASN
25	BC	77	VAL
25	BC	93	VAL
25	BC	123	ILE

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
25	BC	151	GLY
25	BC	190	THR
25	BC	215	VAL
25	BC	250	GLN
25	BC	255	LYS
26	BD	14	ILE
26	BD	24	VAL
26	BD	26	VAL
26	BD	31	ALA
26	BD	52	THR
26	BD	93	GLY
26	BD	112	THR
26	BD	122	VAL
26	BD	136	ASN
26	BD	170	VAL
26	BD	172	VAL
26	BD	183	GLU
28	BP	4	ILE
28	BP	32	VAL
28	BP	36	LYS
28	BP	86	LYS
28	BP	100	ARG
29	BE	70	SER
29	BE	73	ILE
29	BE	153	LEU
29	BE	167	VAL
30	BY	30	ARG
30	BY	33	HIS
31	B0	48	TYR
32	B4	7	VAL
32	B4	16	ILE
32	B4	34	LYS
34	B3	29	ARG
34	B3	31	ILE
34	B3	58	ILE
35	BV	12	GLN
37	BL	19	LEU
37	BL	51	GLU
37	BL	101	ILE
37	BL	111	ILE
37	BL	117	THR
38	BM	20	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	BM	27	SER
38	BM	30	SER
38	BM	59	ARG
38	BM	79	ALA
38	BM	83	GLY
38	BM	107	GLY
40	BH	12	LEU
40	BH	15	LEU
40	BH	21	VAL
40	BH	28	ASN
40	BH	41	LYS
40	BH	77	THR
40	BH	83	LYS
40	BH	110	VAL
40	BH	127	GLU
40	BH	128	HIS
40	BH	137	GLU
41	BJ	4	PHE
41	BJ	5	THR
41	BJ	26	GLY
41	BJ	41	LYS
41	BJ	64	VAL
41	BJ	65	THR
41	BJ	81	ILE
41	BJ	129	GLU
42	BN	93	GLY
42	BN	100	CYS
42	BN	101	GLY
42	BN	112	TYR
43	BO	8	ILE
43	BO	99	TYR
44	BQ	10	ARG
44	BQ	87	VAL
44	BQ	89	ILE
45	BS	65	ASP
45	BS	71	VAL
45	BS	96	ILE
46	BU	2	ALA
46	BU	12	VAL
46	BU	54	PRO
46	BU	82	VAL
47	BF	11	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	BF	45	ASP
47	BF	87	LYS
47	BF	106	ALA
47	BF	135	ILE
47	BF	140	ILE
47	BF	145	VAL
48	BG	9	VAL
48	BG	38	ASP
48	BG	84	LYS
48	BG	96	ALA
48	BG	117	PRO
48	BG	118	ALA
48	BG	152	ARG
49	BR	7	SER
49	BR	24	LYS
50	BT	9	LYS
50	BT	16	VAL
50	BT	18	GLU
50	BT	19	LYS
51	BZ	31	PRO
51	BZ	35	SER
51	BZ	51	VAL
51	BZ	52	SER
51	BZ	71	LEU
52	BW	13	ARG
52	BW	30	VAL
52	BW	32	ALA
52	BW	40	ARG
52	BW	51	GLY
3	CD	24	VAL
3	CD	25	ARG
3	CD	175	GLY
3	CD	191	SER
3	CD	192	ALA
4	CE	20	VAL
4	CE	71	ILE
4	CE	157	GLY
5	CF	62	MET
5	CF	65	GLU
5	CF	85	ILE
5	CF	89	VAL
5	CF	98	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
10	CK	88	PRO
11	CL	14	LYS
11	CL	23	LEU
11	CL	117	GLY
11	CL	122	LYS
13	CP	30	GLY
13	CP	52	LEU
14	CQ	82	VAL
19	CU	34	ARG
2	CC	18	ASN
2	CC	166	TRP
2	CC	205	GLU
6	CG	17	PHE
6	CG	71	THR
6	CG	130	LYS
9	CJ	36	VAL
9	CJ	62	ARG
9	CJ	74	VAL
12	CM	14	ALA
12	CM	104	ASN
12	CM	105	ALA
12	CM	111	PRO
21	CN	52	ARG
21	CN	74	ARG
18	CB	9	LEU
18	CB	18	GLN
18	CB	84	LEU
18	CB	97	GLY
18	CB	127	LYS
25	DC	4	LYS
25	DC	17	LYS
25	DC	35	LYS
25	DC	36	ASN
25	DC	59	GLN
25	DC	77	VAL
25	DC	123	ILE
25	DC	151	GLY
25	DC	190	THR
25	DC	215	VAL
25	DC	239	PHE
25	DC	250	GLN
25	DC	255	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	DD	14	ILE
26	DD	24	VAL
26	DD	26	VAL
26	DD	31	ALA
26	DD	52	THR
26	DD	93	GLY
26	DD	109	VAL
26	DD	112	THR
26	DD	122	VAL
26	DD	136	ASN
26	DD	170	VAL
26	DD	172	VAL
26	DD	183	GLU
28	DP	4	ILE
28	DP	32	VAL
28	DP	36	LYS
28	DP	86	LYS
28	DP	100	ARG
29	DE	70	SER
29	DE	73	ILE
29	DE	86	ALA
29	DE	153	LEU
29	DE	167	VAL
30	DY	30	ARG
30	DY	33	HIS
31	D0	23	ALA
31	D0	48	TYR
32	D4	7	VAL
32	D4	16	ILE
32	D4	34	LYS
34	D3	29	ARG
34	D3	58	ILE
35	DV	12	GLN
35	DV	25	LYS
36	D2	5	PHE
37	DL	19	LEU
37	DL	51	GLU
37	DL	81	ASP
37	DL	101	ILE
37	DL	111	ILE
37	DL	138	ALA
37	DL	143	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	DM	20	LEU
38	DM	27	SER
38	DM	30	SER
38	DM	59	ARG
38	DM	79	ALA
38	DM	83	GLY
38	DM	107	GLY
40	DH	12	LEU
40	DH	15	LEU
40	DH	21	VAL
40	DH	28	ASN
40	DH	86	ASP
40	DH	136	SER
40	DH	148	ALA
41	DJ	5	THR
41	DJ	26	GLY
41	DJ	41	LYS
41	DJ	43	GLU
41	DJ	64	VAL
41	DJ	65	THR
41	DJ	81	ILE
41	DJ	129	GLU
42	DN	93	GLY
42	DN	100	CYS
42	DN	101	GLY
42	DN	112	TYR
43	DO	8	ILE
43	DO	99	TYR
44	DQ	10	ARG
44	DQ	87	VAL
44	DQ	89	ILE
45	DS	65	ASP
45	DS	71	VAL
45	DS	96	ILE
46	DU	2	ALA
46	DU	5	ARG
46	DU	12	VAL
46	DU	54	PRO
46	DU	82	VAL
47	DF	11	VAL
47	DF	45	ASP
47	DF	87	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	DF	106	ALA
47	DF	135	ILE
47	DF	140	ILE
47	DF	145	VAL
48	DG	9	VAL
48	DG	38	ASP
48	DG	84	LYS
48	DG	96	ALA
48	DG	117	PRO
48	DG	118	ALA
48	DG	152	ARG
49	DR	7	SER
49	DR	24	LYS
50	DT	9	LYS
50	DT	16	VAL
50	DT	18	GLU
50	DT	19	LYS
51	DZ	31	PRO
51	DZ	35	SER
51	DZ	51	VAL
51	DZ	52	SER
51	DZ	71	LEU
52	DW	13	ARG
52	DW	29	SER
52	DW	30	VAL
52	DW	32	ALA
52	DW	40	ARG
52	DW	51	GLY
2	AC	60	ALA
2	AC	67	ILE
2	AC	167	TYR
2	AC	192	TYR
4	AE	157	GLY
5	AF	54	LEU
5	AF	69	GLU
6	AG	31	VAL
7	AH	82	LEU
8	AI	8	THR
8	AI	24	ASN
8	AI	55	ASP
9	AJ	75	ASP
11	AL	72	ASN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
11	AL	88	ASP
12	AM	104	ASN
12	AM	109	LYS
13	AP	30	GLY
14	AQ	28	VAL
16	AS	7	GLY
17	AT	46	ALA
18	AB	14	HIS
18	AB	15	PHE
18	AB	18	GLN
18	AB	70	GLY
18	AB	99	MET
18	AB	104	LYS
18	AB	114	LYS
18	AB	125	PHE
18	AB	204	ASP
19	AU	9	GLU
21	AN	34	ASN
21	AN	53	ASP
25	BC	37	SER
25	BC	52	HIS
25	BC	59	GLN
25	BC	68	ARG
25	BC	94	LEU
25	BC	110	LYS
25	BC	120	ASP
25	BC	121	ALA
25	BC	140	VAL
25	BC	149	LYS
25	BC	150	GLY
25	BC	205	GLY
25	BC	236	GLY
26	BD	75	ALA
26	BD	109	VAL
26	BD	182	ALA
27	BK	14	SER
27	BK	46	ALA
27	BK	111	LYS
27	BK	112	PHE
28	BP	5	LYS
28	BP	37	LYS
28	BP	38	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	BE	42	GLY
29	BE	43	THR
29	BE	86	ALA
29	BE	183	PHE
30	BY	2	LYS
30	BY	4	ILE
31	B0	23	ALA
31	B0	54	ILE
32	B4	4	ARG
32	B4	8	LYS
32	B4	9	LYS
33	B1	50	GLU
33	B1	51	ALA
35	BV	66	ASP
36	B2	5	PHE
36	B2	45	SER
37	BL	81	ASP
37	BL	138	ALA
38	BM	72	PRO
38	BM	84	LYS
38	BM	134	THR
39	BX	9	LYS
39	BX	36	GLN
40	BH	7	ASP
40	BH	10	ALA
40	BH	99	ILE
40	BH	102	ALA
40	BH	148	ALA
41	BJ	43	GLU
41	BJ	111	LYS
42	BN	10	LEU
42	BN	56	LYS
43	BO	5	SER
43	BO	60	GLU
43	BO	68	LYS
43	BO	79	ALA
44	BQ	86	SER
44	BQ	91	ARG
45	BS	13	SER
45	BS	18	ARG
45	BS	25	ARG
46	BU	5	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	BU	96	LYS
47	BF	12	VAL
47	BF	42	ALA
47	BF	69	ALA
47	BF	78	ILE
47	BF	80	GLN
47	BF	136	ILE
48	BG	2	ARG
48	BG	61	TRP
48	BG	100	ASN
48	BG	111	PRO
48	BG	151	ARG
49	BR	3	ALA
50	BT	86	THR
52	BW	17	ALA
52	BW	23	LYS
52	BW	29	SER
52	BW	34	SER
52	BW	53	GLY
52	BW	61	LYS
4	CE	108	GLY
5	CF	54	LEU
5	CF	69	GLU
7	CH	82	LEU
10	CK	14	GLN
10	CK	124	LYS
11	CL	17	LYS
11	CL	70	GLY
11	CL	72	ASN
11	CL	88	ASP
13	CP	28	ARG
14	CQ	28	VAL
17	CT	46	ALA
17	CT	67	HIS
19	CU	9	GLU
2	CC	3	LYS
2	CC	180	ASP
6	CG	129	ASN
8	CI	57	VAL
8	CI	117	LEU
8	CI	127	SER
9	CJ	58	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	CM	46	GLU
21	CN	32	ASP
21	CN	34	ASN
16	CS	27	LYS
16	CS	65	MET
18	CB	141	GLU
18	CB	205	ALA
24	DI	23	VAL
25	DC	37	SER
25	DC	52	HIS
25	DC	68	ARG
25	DC	93	VAL
25	DC	94	LEU
25	DC	110	LYS
25	DC	120	ASP
25	DC	121	ALA
25	DC	140	VAL
25	DC	149	LYS
25	DC	150	GLY
25	DC	205	GLY
26	DD	75	ALA
26	DD	182	ALA
27	DK	14	SER
27	DK	18	ARG
27	DK	46	ALA
27	DK	73	ASP
27	DK	111	LYS
27	DK	112	PHE
27	DK	117	SER
28	DP	37	LYS
28	DP	38	ARG
28	DP	72	VAL
29	DE	43	THR
29	DE	49	ARG
29	DE	183	PHE
30	DY	2	LYS
30	DY	4	ILE
31	D0	54	ILE
32	D4	4	ARG
32	D4	8	LYS
33	D1	50	GLU
33	D1	51	ALA

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
35	DV	66	ASP
36	D2	45	SER
37	DL	3	LEU
37	DL	41	ARG
37	DL	117	THR
38	DM	56	ALA
38	DM	72	PRO
38	DM	84	LYS
38	DM	134	THR
39	DX	9	LYS
40	DH	7	ASP
40	DH	10	ALA
40	DH	29	PHE
40	DH	58	LEU
40	DH	114	GLU
40	DH	135	HIS
41	DJ	4	PHE
42	DN	8	ARG
42	DN	10	LEU
42	DN	56	LYS
43	DO	5	SER
43	DO	60	GLU
43	DO	68	LYS
43	DO	79	ALA
44	DQ	86	SER
44	DQ	91	ARG
45	DS	18	ARG
45	DS	25	ARG
46	DU	96	LYS
47	DF	12	VAL
47	DF	42	ALA
47	DF	69	ALA
47	DF	78	ILE
47	DF	80	GLN
47	DF	136	ILE
48	DG	2	ARG
48	DG	61	TRP
48	DG	100	ASN
48	DG	111	PRO
48	DG	164	ALA
49	DR	3	ALA
50	DT	38	ALA

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
50	DT	86	THR
52	DW	17	ALA
52	DW	23	LYS
52	DW	34	SER
52	DW	53	GLY
52	DW	61	LYS
52	DW	78	PHE
2	AC	19	SER
2	AC	166	TRP
2	AC	174	LEU
3	AD	3	TYR
3	AD	107	GLY
4	AE	110	MET
4	AE	146	MET
8	AI	42	THR
9	AJ	81	GLU
10	AK	124	LYS
11	AL	41	PRO
11	AL	70	GLY
11	AL	77	SER
11	AL	99	GLY
12	AM	70	ARG
13	AP	49	GLY
14	AQ	35	LYS
17	AT	67	HIS
17	AT	84	LYS
18	AB	11	ALA
18	AB	54	ALA
18	AB	202	ASN
18	AB	218	ALA
20	AO	74	ASP
20	AO	76	ALA
21	AN	31	SER
25	BC	3	VAL
25	BC	70	LYS
25	BC	196	ASN
26	BD	57	ALA
26	BD	159	LYS
26	BD	162	ALA
26	BD	178	VAL
27	BK	16	ALA
27	BK	17	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	BK	18	ARG
27	BK	110	GLU
27	BK	117	SER
28	BP	72	VAL
28	BP	73	PHE
28	BP	104	GLY
28	BP	105	LYS
29	BE	5	LEU
29	BE	12	LEU
29	BE	27	LEU
29	BE	49	ARG
29	BE	81	GLY
31	B0	51	ARG
33	B1	36	LYS
37	BL	41	ARG
37	BL	65	GLY
37	BL	66	PHE
37	BL	127	VAL
38	BM	56	ALA
39	BX	37	LEU
40	BH	29	PHE
40	BH	136	SER
41	BJ	36	LEU
42	BN	8	ARG
42	BN	98	LEU
43	BO	89	ASP
45	BS	40	ASN
46	BU	49	PRO
46	BU	92	VAL
47	BF	28	PRO
47	BF	70	ARG
48	BG	89	VAL
48	BG	112	VAL
48	BG	164	ALA
49	BR	47	VAL
49	BR	52	PRO
49	BR	70	GLU
49	BR	98	ILE
50	BT	29	THR
50	BT	30	ILE
50	BT	38	ALA
50	BT	88	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
50	BT	91	GLN
52	BW	10	ARG
52	BW	11	ASN
52	BW	78	PHE
3	CD	3	TYR
3	CD	26	ALA
3	CD	107	GLY
4	CE	110	MET
11	CL	41	PRO
11	CL	99	GLY
13	CP	42	ILE
13	CP	49	GLY
14	CQ	35	LYS
17	CT	65	LEU
17	CT	84	LYS
2	CC	19	SER
2	CC	21	TRP
2	CC	94	ALA
2	CC	145	ALA
6	CG	66	GLU
8	CI	67	LYS
9	CJ	56	HIS
9	CJ	75	ASP
12	CM	7	ASN
21	CN	2	LYS
16	CS	5	LYS
16	CS	34	SER
18	CB	87	ASP
18	CB	128	LEU
25	DC	3	VAL
25	DC	34	GLU
25	DC	63	ILE
25	DC	70	LYS
25	DC	196	ASN
25	DC	236	GLY
26	DD	57	ALA
26	DD	119	ALA
26	DD	127	PHE
26	DD	159	LYS
26	DD	178	VAL
27	DK	110	GLU
28	DP	5	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
28	DP	104	GLY
28	DP	105	LYS
29	DE	5	LEU
29	DE	12	LEU
29	DE	27	LEU
29	DE	42	GLY
29	DE	81	GLY
32	D4	9	LYS
33	D1	36	LYS
37	DL	65	GLY
37	DL	66	PHE
39	DX	36	GLN
39	DX	37	LEU
40	DH	68	ARG
41	DJ	36	LEU
41	DJ	111	LYS
42	DN	98	LEU
43	DO	53	THR
43	DO	89	ASP
45	DS	11	ARG
45	DS	13	SER
45	DS	21	ALA
46	DU	49	PRO
46	DU	92	VAL
47	DF	28	PRO
47	DF	70	ARG
48	DG	89	VAL
48	DG	151	ARG
49	DR	52	PRO
49	DR	70	GLU
49	DR	98	ILE
50	DT	30	ILE
50	DT	88	LYS
52	DW	10	ARG
52	DW	11	ASN
2	AC	26	LYS
2	AC	48	LYS
2	AC	100	ILE
2	AC	113	LYS
3	AD	26	ALA
6	AG	10	LYS
6	AG	92	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	AH	22	ALA
9	AJ	16	ARG
9	AJ	56	HIS
12	AM	37	GLY
13	AP	24	SER
13	AP	42	ILE
14	AQ	16	MET
17	AT	3	ILE
17	AT	65	LEU
18	AB	10	LYS
18	AB	28	PRO
20	AO	47	LYS
21	AN	80	ARG
25	BC	34	GLU
25	BC	63	ILE
25	BC	105	ALA
26	BD	102	ALA
26	BD	119	ALA
26	BD	127	PHE
26	BD	145	SER
27	BK	73	ASP
27	BK	93	GLN
27	BK	101	GLY
29	BE	83	VAL
29	BE	96	VAL
29	BE	148	ILE
29	BE	188	MET
34	B3	49	VAL
35	BV	2	PHE
35	BV	8	VAL
35	BV	71	LYS
37	BL	9	ALA
37	BL	15	ALA
37	BL	85	VAL
40	BH	11	ASN
40	BH	89	LYS
40	BH	131	SER
41	BJ	14	ASP
41	BJ	53	TYR
42	BN	19	ALA
42	BN	102	PHE
43	BO	53	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
44	BQ	32	ARG
45	BS	11	ARG
45	BS	21	ALA
45	BS	46	LEU
46	BU	9	GLU
48	BG	91	VAL
48	BG	97	VAL
49	BR	91	GLN
49	BR	101	ILE
50	BT	55	VAL
50	BT	65	GLY
52	BW	18	LYS
52	BW	33	GLY
52	BW	44	PHE
4	CE	77	ASN
4	CE	146	MET
7	CH	22	ALA
10	CK	36	ARG
13	CP	24	SER
2	CC	26	LYS
2	CC	53	ARG
6	CG	39	GLU
6	CG	70	PRO
6	CG	151	ALA
8	CI	55	ASP
8	CI	71	ILE
9	CJ	93	ALA
21	CN	8	ARG
21	CN	65	GLN
18	CB	28	PRO
18	CB	49	PHE
18	CB	99	MET
18	CB	188	THR
24	DI	6	ALA
24	DI	14	ALA
25	DC	92	LEU
25	DC	105	ALA
25	DC	111	ALA
25	DC	209	ALA
26	DD	102	ALA
26	DD	141	ARG
26	DD	145	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	DD	162	ALA
27	DK	16	ALA
27	DK	17	ARG
27	DK	93	GLN
27	DK	119	ALA
28	DP	73	PHE
29	DE	18	THR
29	DE	78	TRP
29	DE	83	VAL
29	DE	96	VAL
29	DE	148	ILE
29	DE	188	MET
30	DY	34	THR
31	D0	26	SER
31	D0	51	ARG
34	D3	22	LYS
34	D3	49	VAL
35	DV	2	PHE
35	DV	60	VAL
36	D2	14	ARG
37	DL	15	ALA
37	DL	30	THR
37	DL	85	VAL
37	DL	127	VAL
40	DH	11	ASN
41	DJ	14	ASP
45	DS	40	ASN
46	DU	9	GLU
47	DF	35	LEU
48	DG	91	VAL
48	DG	97	VAL
48	DG	112	VAL
49	DR	47	VAL
49	DR	91	GLN
49	DR	101	ILE
49	DR	102	SER
50	DT	29	THR
50	DT	55	VAL
50	DT	65	GLY
50	DT	91	GLN
52	DW	18	LYS
52	DW	33	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
52	DW	44	PHE
52	DW	63	ASP
2	AC	12	GLY
2	AC	109	GLU
9	AJ	42	LEU
10	AK	36	ARG
18	AB	166	ASP
20	AO	36	ILE
25	BC	65	ASP
25	BC	111	ALA
25	BC	194	VAL
26	BD	114	LYS
26	BD	141	ARG
27	BK	43	ILE
27	BK	119	ALA
29	BE	18	THR
30	BY	34	THR
31	B0	26	SER
32	B4	37	GLN
34	B3	22	LYS
35	BV	60	VAL
35	BV	84	PRO
38	BM	73	ILE
44	BQ	72	GLY
47	BF	35	LEU
48	BG	16	VAL
49	BR	102	SER
50	BT	32	LEU
4	CE	133	ILE
11	CL	77	SER
15	CR	27	THR
17	CT	3	ILE
2	CC	112	ALA
6	CG	148	LYS
8	CI	30	ASN
12	CM	65	GLU
18	CB	58	LYS
25	DC	65	ASP
25	DC	189	ALA
25	DC	194	VAL
27	DK	43	ILE
27	DK	101	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	DE	67	ARG
32	D4	37	GLN
35	DV	84	PRO
37	DL	40	SER
38	DM	43	ALA
38	DM	73	ILE
40	DH	115	VAL
41	DJ	53	TYR
41	DJ	83	GLY
42	DN	102	PHE
43	DO	115	LEU
44	DQ	88	GLU
45	DS	46	LEU
48	DG	16	VAL
48	DG	109	SER
50	DT	32	LEU
2	AC	80	GLY
5	AF	64	VAL
18	AB	98	GLY
25	BC	64	VAL
28	BP	83	ILE
33	B1	4	ILE
38	BM	77	PRO
38	BM	108	VAL
40	BH	147	VAL
41	BJ	83	GLY
47	BF	88	VAL
6	CG	13	PRO
12	CM	3	ILE
18	CB	64	GLY
25	DC	64	VAL
28	DP	83	ILE
33	D1	4	ILE
38	DM	77	PRO
44	DQ	72	GLY
47	DF	88	VAL
52	DW	22	VAL
2	AC	59	PRO
2	AC	90	VAL
4	AE	133	ILE
8	AI	110	VAL
9	AJ	41	PRO

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
45	BS	29	VAL
48	BG	168	VAL
52	BW	22	VAL
3	CD	66	VAL
5	CF	64	VAL
2	CC	14	VAL
8	CI	29	ILE
8	CI	50	PRO
35	DV	8	VAL
38	DM	108	VAL
47	DF	103	ILE
48	DG	168	VAL
3	AD	66	VAL
5	AF	51	ILE
6	AG	68	VAL
6	AG	70	PRO
7	AH	71	VAL
14	AQ	45	VAL
27	BK	103	VAL
41	BJ	113	PRO
42	BN	60	VAL
46	BU	69	VAL
47	BF	103	ILE
47	BF	110	ILE
5	CF	51	ILE
14	CQ	45	VAL
8	CI	124	PRO
12	CM	63	VAL
20	CO	29	VAL
27	DK	103	VAL
41	DJ	113	PRO
43	DO	35	ILE
45	DS	29	VAL
46	DU	69	VAL
47	DF	110	ILE
25	BC	31	PRO
34	B3	19	GLY
35	BV	70	ILE
40	BH	108	VAL
42	BN	92	GLY
43	BO	35	ILE
48	BG	92	GLY

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
4	CE	107	GLY
7	CH	71	VAL
2	CC	93	ILE
25	DC	31	PRO
29	DE	177	PRO
42	DN	92	GLY
4	AE	107	GLY
20	AO	12	VAL
27	BK	26	GLY
29	BE	177	PRO
46	BU	58	VAL
9	CJ	41	PRO
29	DE	28	VAL
35	DV	15	GLY
35	DV	70	ILE
41	DJ	56	VAL
42	DN	60	VAL
46	DU	58	VAL
48	DG	8	VAL

### 5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution. The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	AC	170/189 (90%)	137 (81%)	33 (19%)	2	12
2	CC	170/189 (90%)	139 (82%)	31 (18%)	2	14
3	AD	172/172 (100%)	153 (89%)	19 (11%)	9	43
3	CD	172/172 (100%)	154 (90%)	18 (10%)	10	46
4	AE	113/125 (90%)	90 (80%)	23 (20%)	2	10
4	CE	113/125 (90%)	91 (80%)	22 (20%)	2	12
5	AF	87/116 (75%)	75 (86%)	12 (14%)	5	29
5	CF	87/116 (75%)	74 (85%)	13 (15%)	4	26
6	AG	123/146 (84%)	104 (85%)	19 (15%)	4	24
6	CG	125/146 (86%)	102 (82%)	23 (18%)	2	14

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	AH	104/104 (100%)	96 (92%)	8 (8%)	18	64
7	CH	104/104 (100%)	97 (93%)	7 (7%)	23	70
8	AI	105/106 (99%)	88 (84%)	17 (16%)	3	21
8	CI	105/106 (99%)	77 (73%)	28 (27%)	1	5
9	AJ	86/90 (96%)	74 (86%)	12 (14%)	5	28
9	CJ	86/90 (96%)	75 (87%)	11 (13%)	6	33
10	AK	90/98 (92%)	77 (86%)	13 (14%)	5	27
10	CK	90/98 (92%)	76 (84%)	14 (16%)	4	23
11	AL	103/103 (100%)	84 (82%)	19 (18%)	2	14
11	CL	103/103 (100%)	84 (82%)	19 (18%)	2	14
12	AM	92/95 (97%)	79 (86%)	13 (14%)	5	28
12	CM	91/95 (96%)	70 (77%)	21 (23%)	1	7
13	AP	65/65 (100%)	56 (86%)	9 (14%)	5	29
13	CP	65/65 (100%)	56 (86%)	9 (14%)	5	29
14	AQ	74/77 (96%)	65 (88%)	9 (12%)	7	36
14	CQ	75/77 (97%)	66 (88%)	9 (12%)	7	37
15	AR	48/64 (75%)	42 (88%)	6 (12%)	7	35
15	CR	48/64 (75%)	42 (88%)	6 (12%)	7	35
16	AS	70/78 (90%)	48 (69%)	22 (31%)	0	3
16	CS	71/78 (91%)	53 (75%)	18 (25%)	1	5
17	AT	65/65 (100%)	56 (86%)	9 (14%)	5	29
17	CT	65/65 (100%)	56 (86%)	9 (14%)	5	29
18	AB	180/198 (91%)	149 (83%)	31 (17%)	3	18
18	CB	180/198 (91%)	141 (78%)	39 (22%)	1	9
19	AU	44/60 (73%)	33 (75%)	11 (25%)	1	6
19	CU	44/60 (73%)	33 (75%)	11 (25%)	1	6
20	AO	76/77 (99%)	69 (91%)	7 (9%)	13	53
20	CO	76/77 (99%)	64 (84%)	12 (16%)	4	23
21	AN	79/83 (95%)	69 (87%)	10 (13%)	6	33
21	CN	79/83 (95%)	64 (81%)	15 (19%)	2	13
24	BI	109/109 (100%)	108 (99%)	1 (1%)	87	97

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
24	DI	109/109 (100%)	103 (94%)	6 (6%)	30	77
25	BC	216/217 (100%)	184 (85%)	32 (15%)	4	26
25	DC	216/217 (100%)	184 (85%)	32 (15%)	4	26
26	BD	164/164 (100%)	136 (83%)	28 (17%)	3	18
26	DD	164/164 (100%)	136 (83%)	28 (17%)	3	18
27	BK	102/104 (98%)	74 (72%)	28 (28%)	0	4
27	DK	102/104 (98%)	73 (72%)	29 (28%)	0	4
28	BP	99/99 (100%)	83 (84%)	16 (16%)	3	21
28	DP	99/99 (100%)	83 (84%)	16 (16%)	3	21
29	BE	165/165 (100%)	146 (88%)	19 (12%)	8	39
29	DE	165/165 (100%)	145 (88%)	20 (12%)	7	36
30	BY	48/48 (100%)	38 (79%)	10 (21%)	2	10
30	DY	48/48 (100%)	37 (77%)	11 (23%)	1	7
31	B0	47/47 (100%)	38 (81%)	9 (19%)	2	13
31	D0	47/47 (100%)	38 (81%)	9 (19%)	2	13
32	B4	34/34 (100%)	31 (91%)	3 (9%)	14	57
32	D4	34/34 (100%)	31 (91%)	3 (9%)	14	57
33	B1	45/48 (94%)	35 (78%)	10 (22%)	1	8
33	D1	45/48 (94%)	35 (78%)	10 (22%)	1	8
34	B3	51/51 (100%)	48 (94%)	3 (6%)	28	75
34	D3	51/51 (100%)	48 (94%)	3 (6%)	28	75
35	BV	78/78 (100%)	65 (83%)	13 (17%)	3	19
35	DV	78/78 (100%)	65 (83%)	13 (17%)	3	19
36	B2	38/38 (100%)	28 (74%)	10 (26%)	1	5
36	D2	38/38 (100%)	28 (74%)	10 (26%)	1	5
37	BL	102/103 (99%)	85 (83%)	17 (17%)	3	19
37	DL	102/103 (99%)	85 (83%)	17 (17%)	3	19
38	BM	109/109 (100%)	93 (85%)	16 (15%)	4	26
38	DM	109/109 (100%)	93 (85%)	16 (15%)	4	26
39	BX	55/55 (100%)	43 (78%)	12 (22%)	1	8
39	DX	55/55 (100%)	43 (78%)	12 (22%)	1	8

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
40	BH	114/114 (100%)	83 (73%)	31 (27%)	0	4
40	DH	114/114 (100%)	87 (76%)	27 (24%)	1	7
41	BJ	116/116 (100%)	100 (86%)	16 (14%)	5	29
41	DJ	116/116 (100%)	100 (86%)	16 (14%)	5	29
42	BN	100/103 (97%)	86 (86%)	14 (14%)	5	28
42	DN	100/103 (97%)	85 (85%)	15 (15%)	4	26
43	BO	86/87 (99%)	68 (79%)	18 (21%)	1	10
43	DO	86/87 (99%)	67 (78%)	19 (22%)	1	8
44	BQ	89/89 (100%)	77 (86%)	12 (14%)	6	30
44	DQ	89/89 (100%)	77 (86%)	12 (14%)	6	30
45	BS	93/93 (100%)	85 (91%)	8 (9%)	15	58
45	DS	93/93 (100%)	83 (89%)	10 (11%)	9	44
46	BU	83/84 (99%)	68 (82%)	15 (18%)	2	15
46	DU	83/84 (99%)	68 (82%)	15 (18%)	2	15
47	BF	149/149 (100%)	111 (74%)	38 (26%)	1	5
47	DF	149/149 (100%)	112 (75%)	37 (25%)	1	6
48	BG	137/137 (100%)	114 (83%)	23 (17%)	3	19
48	DG	137/137 (100%)	113 (82%)	24 (18%)	3	17
49	BR	84/84 (100%)	71 (84%)	13 (16%)	4	24
49	DR	84/84 (100%)	72 (86%)	12 (14%)	5	28
50	BT	80/84 (95%)	66 (82%)	14 (18%)	3	17
50	DT	80/84 (95%)	66 (82%)	14 (18%)	3	17
51	BZ	67/68 (98%)	57 (85%)	10 (15%)	4	26
51	DZ	67/68 (98%)	56 (84%)	11 (16%)	3	20
52	BW	59/62 (95%)	44 (75%)	15 (25%)	1	5
52	DW	59/62 (95%)	44 (75%)	15 (25%)	1	5
All	All	9333/9700 (96%)	7780 (83%)	1553 (17%)	3	19

All (1553) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	AC	13	ILE
2	AC	17	TRP

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type
2	AC	18	ASN
2	AC	19	SER
2	AC	20	THR
2	AC	24	ASN
2	AC	27	GLU
2	AC	28	PHE
2	AC	35	ASP
2	AC	40	GLN
2	AC	41	TYR
2	AC	48	LYS
2	AC	62	SER
2	AC	71	ARG
2	AC	87	ARG
2	AC	88	LYS
2	AC	92	ASP
2	AC	106	ARG
2	AC	111	ASP
2	AC	120	THR
2	AC	128	MET
2	AC	131	ARG
2	AC	146	LYS
2	AC	166	TRP
2	AC	167	TYR
2	AC	168	ARG
2	AC	171	ARG
2	AC	174	LEU
2	AC	180	ASP
2	AC	184	ASN
2	AC	185	THR
2	AC	189	HIS
2	AC	192	TYR
3	AD	2	ARG
3	AD	4	LEU
3	AD	25	ARG
3	AD	39	GLN
3	AD	58	GLN
3	AD	87	GLU
3	AD	100	VAL
3	AD	106	PHE
3	AD	137	SER
3	AD	146	GLU
3	AD	147	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	AD	153	ARG
3	AD	160	LEU
3	AD	176	LYS
3	AD	180	THR
3	AD	186	GLU
3	AD	189	ASP
3	AD	190	LEU
3	AD	196	GLU
4	AE	9	GLU
4	AE	19	ARG
4	AE	21	SER
4	AE	23	THR
4	AE	25	LYS
4	AE	30	PHE
4	AE	36	THR
4	AE	45	VAL
4	AE	51	LYS
4	AE	61	LYS
4	AE	69	ASN
4	AE	72	ASN
4	AE	92	ARG
4	AE	95	MET
4	AE	113	VAL
4	AE	115	GLU
4	AE	123	LEU
4	AE	127	TYR
4	AE	141	ASP
4	AE	147	ASN
4	AE	148	SER
4	AE	151	MET
4	AE	155	LYS
5	AF	6	ILE
5	AF	16	GLU
5	AF	40	GLU
5	AF	53	LYS
5	AF	55	HIS
5	AF	56	LYS
5	AF	61	LEU
5	AF	70	VAL
5	AF	73	GLU
5	AF	86	ARG
5	AF	88	MET

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
5	AF	97	THR
6	AG	4	ARG
6	AG	5	VAL
6	AG	21	LEU
6	AG	22	LEU
6	AG	55	LYS
6	AG	58	LEU
6	AG	72	VAL
6	AG	74	VAL
6	AG	77	ARG
6	AG	78	ARG
6	AG	89	GLU
6	AG	94	ARG
6	AG	112	ASP
6	AG	117	LEU
6	AG	134	VAL
6	AG	137	ARG
6	AG	141	HIS
6	AG	143	MET
6	AG	148	LYS
7	AH	46	GLU
7	AH	57	GLU
7	AH	61	THR
7	AH	66	GLN
7	AH	72	GLU
7	AH	79	ARG
7	AH	110	MET
7	AH	113	ARG
8	AI	17	ARG
8	AI	26	LYS
8	AI	36	GLN
8	AI	37	TYR
8	AI	40	ARG
8	AI	45	MET
8	AI	58	GLU
8	AI	67	LYS
8	AI	74	GLN
8	AI	79	ARG
8	AI	91	GLU
8	AI	92	SER
8	AI	106	ASP
8	AI	108	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
8	AI	109	GLN
8	AI	111	GLU
8	AI	129	ARG
9	AJ	6	ILE
9	AJ	19	ASP
9	AJ	20	GLN
9	AJ	57	VAL
9	AJ	59	LYS
9	AJ	60	ASP
9	AJ	85	ASP
9	AJ	87	LEU
9	AJ	88	MET
9	AJ	89	ARG
9	AJ	92	LEU
9	AJ	97	ASP
10	AK	28	ASN
10	AK	45	THR
10	AK	55	ARG
10	AK	64	VAL
10	AK	69	CYS
10	AK	71	ASP
10	AK	76	TYR
10	AK	80	ASN
10	AK	92	ARG
10	AK	100	ASN
10	AK	105	ARG
10	AK	112	VAL
10	AK	118	ASN
11	AL	2	THR
11	AL	9	LYS
11	AL	13	ARG
11	AL	14	LYS
11	AL	17	LYS
11	AL	18	SER
11	AL	28	GLN
11	AL	40	THR
11	AL	43	LYS
11	AL	49	ARG
11	AL	51	VAL
11	AL	60	PHE
11	AL	63	THR
11	AL	74	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	AL	85	ARG
11	AL	87	LYS
11	AL	97	VAL
11	AL	107	LYS
11	AL	122	LYS
12	AM	2	ARG
12	AM	15	VAL
12	AM	28	ARG
12	AM	46	GLU
12	AM	56	ARG
12	AM	63	VAL
12	AM	89	ARG
12	AM	91	ARG
12	AM	99	GLN
12	AM	100	ARG
12	AM	101	THR
12	AM	102	LYS
12	AM	109	LYS
13	AP	5	ARG
13	AP	9	HIS
13	AP	25	ARG
13	AP	28	ARG
13	AP	35	ARG
13	AP	51	ARG
13	AP	55	ASP
13	AP	75	ILE
13	AP	79	ASN
14	AQ	3	LYS
14	AQ	4	ILE
14	AQ	5	ARG
14	AQ	15	LYS
14	AQ	39	ARG
14	AQ	56	ASP
14	AQ	60	ILE
14	AQ	66	LEU
14	AQ	80	LYS
15	AR	33	THR
15	AR	35	SER
15	AR	38	ILE
15	AR	47	ARG
15	AR	51	GLN
15	AR	65	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
16	AS	2	ARG
16	AS	6	LYS
16	AS	9	PHE
16	AS	10	ILE
16	AS	11	ASP
16	AS	12	LEU
16	AS	17	LYS
16	AS	19	GLU
16	AS	20	LYS
16	AS	26	ASP
16	AS	27	LYS
16	AS	28	LYS
16	AS	30	LEU
16	AS	33	TRP
16	AS	34	SER
16	AS	38	THR
16	AS	40	PHE
16	AS	48	ILE
16	AS	50	VAL
16	AS	54	ARG
16	AS	64	GLU
16	AS	73	PHE
17	AT	4	LYS
17	AT	14	GLU
17	AT	35	TYR
17	AT	43	LYS
17	AT	53	MET
17	AT	59	ARG
17	AT	69	ASN
17	AT	84	LYS
17	AT	85	LEU
18	AB	8	MET
18	AB	22	TRP
18	AB	23	ASN
18	AB	31	PHE
18	AB	36	LYS
18	AB	46	VAL
18	AB	48	MET
18	AB	49	PHE
18	AB	57	ASN
18	AB	62	ARG
18	AB	67	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
18	AB	69	VAL
18	AB	81	ASP
18	AB	86	CYS
18	AB	87	ASP
18	AB	89	PHE
18	AB	94	ARG
18	AB	95	TRP
18	AB	100	LEU
18	AB	115	ASP
18	AB	119	GLN
18	AB	124	THR
18	AB	125	PHE
18	AB	127	LYS
18	AB	128	LEU
18	AB	160	LEU
18	AB	169	HIS
18	AB	185	ILE
18	AB	188	THR
18	AB	197	PHE
18	AB	212	TYR
19	AU	3	ILE
19	AU	4	LYS
19	AU	11	PHE
19	AU	15	LEU
19	AU	16	ARG
19	AU	17	ARG
19	AU	24	LYS
19	AU	33	ARG
19	AU	34	ARG
19	AU	44	ARG
19	AU	48	LYS
20	AO	17	ARG
20	AO	24	SER
20	AO	26	GLU
20	AO	45	GLU
20	AO	61	SER
20	AO	70	LEU
20	AO	88	ARG
21	AN	17	ASP
21	AN	25	GLU
21	AN	40	ARG
21	AN	46	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	AN	48	GLN
21	AN	52	ARG
21	AN	53	ASP
21	AN	65	GLN
21	AN	74	ARG
21	AN	80	ARG
24	BI	96	LYS
25	BC	4	LYS
25	BC	5	CYS
25	BC	9	SER
25	BC	14	HIS
25	BC	27	LYS
25	BC	43	ASN
25	BC	62	ARG
25	BC	65	ASP
25	BC	89	ASN
25	BC	92	LEU
25	BC	109	LEU
25	BC	110	LYS
25	BC	113	ASP
25	BC	123	ILE
25	BC	134	ILE
25	BC	155	ARG
25	BC	162	GLN
25	BC	172	THR
25	BC	173	LEU
25	BC	176	ARG
25	BC	181	ARG
25	BC	183	VAL
25	BC	190	THR
25	BC	212	TRP
25	BC	215	VAL
25	BC	235	GLU
25	BC	257	ARG
25	BC	264	LYS
25	BC	265	PHE
25	BC	269	ARG
25	BC	270	ARG
25	BC	271	SER
26	BD	4	LEU
26	BD	11	MET
26	BD	17	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	BD	18	ASP
26	BD	35	THR
26	BD	36	GLN
26	BD	40	LEU
26	BD	46	ARG
26	BD	52	THR
26	BD	62	LYS
26	BD	68	PHE
26	BD	81	GLU
26	BD	84	LEU
26	BD	88	GLU
26	BD	89	GLU
26	BD	96	ILE
26	BD	99	GLU
26	BD	106	LYS
26	BD	110	THR
26	BD	124	ARG
26	BD	131	ASP
26	BD	141	ARG
26	BD	148	GLN
26	BD	154	LYS
26	BD	159	LYS
26	BD	170	VAL
26	BD	197	THR
26	BD	201	LEU
27	BK	2	ILE
27	BK	8	LEU
27	BK	9	ASN
27	BK	17	ARG
27	BK	21	CYS
27	BK	32	TYR
27	BK	37	ASP
27	BK	39	ILE
27	BK	47	ILE
27	BK	52	VAL
27	BK	53	LYS
27	BK	54	LYS
27	BK	64	ARG
27	BK	72	PRO
27	BK	73	ASP
27	BK	79	PHE
27	BK	80	ASP

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
27	BK	82	ASN
27	BK	86	LEU
27	BK	87	LEU
27	BK	88	ASN
27	BK	89	ASN
27	BK	95	ILE
27	BK	104	THR
27	BK	105	ARG
27	BK	108	ARG
27	BK	111	LYS
27	BK	120	PRO
28	BP	3	ILE
28	BP	5	LYS
28	BP	6	GLN
28	BP	19	PHE
28	BP	25	VAL
28	BP	32	VAL
28	BP	43	GLU
28	BP	61	ARG
28	BP	83	ILE
28	BP	99	LEU
28	BP	100	ARG
28	BP	109	ILE
28	BP	111	GLU
28	BP	112	ARG
28	BP	113	LEU
28	BP	114	ASN
29	BE	6	LYS
29	BE	12	LEU
29	BE	21	ARG
29	BE	24	ASN
29	BE	40	ARG
29	BE	58	LYS
29	BE	60	TRP
29	BE	67	ARG
29	BE	70	SER
29	BE	78	TRP
29	BE	108	ILE
29	BE	118	LEU
29	BE	122	GLU
29	BE	159	LEU
29	BE	163	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	BE	165	HIS
29	BE	181	ILE
29	BE	197	GLU
29	BE	198	GLU
30	BY	2	LYS
30	BY	6	ILE
30	BY	15	ARG
30	BY	23	LEU
30	BY	30	ARG
30	BY	37	ARG
30	BY	43	ILE
30	BY	48	ASN
30	BY	57	GLU
30	BY	58	GLU
31	B0	5	ASN
31	B0	21	LEU
31	B0	27	LEU
31	B0	31	LYS
31	B0	37	HIS
31	B0	38	LEU
31	B0	41	HIS
31	B0	45	ASP
31	B0	56	LYS
32	B4	9	LYS
32	B4	26	ILE
32	B4	35	GLN
33	B1	6	GLU
33	B1	8	ILE
33	B1	9	LYS
33	B1	16	THR
33	B1	31	GLU
33	B1	33	LEU
33	B1	34	GLU
33	B1	35	LEU
33	B1	36	LYS
33	B1	49	LYS
34	B3	7	ARG
34	B3	14	LYS
34	B3	61	LEU
35	BV	5	ASN
35	BV	9	ARG
35	BV	40	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
35	BV	42	LEU
35	BV	46	LYS
35	BV	51	GLN
35	BV	53	LYS
35	BV	61	LEU
35	BV	69	GLU
35	BV	70	ILE
35	BV	75	GLN
35	BV	79	ARG
35	BV	89	ILE
36	B2	3	ARG
36	B2	10	LEU
36	B2	12	ARG
36	B2	16	HIS
36	B2	33	ARG
36	B2	39	ARG
36	B2	41	ARG
36	B2	42	LEU
36	B2	43	THR
36	B2	46	LYS
37	BL	4	ASN
37	BL	19	LEU
37	BL	27	LEU
37	BL	35	HIS
37	BL	47	ARG
37	BL	61	LEU
37	BL	64	PHE
37	BL	69	ARG
37	BL	92	LEU
37	BL	94	THR
37	BL	95	LEU
37	BL	118	THR
37	BL	122	VAL
37	BL	125	LEU
37	BL	128	THR
37	BL	129	LYS
37	BL	144	GLU
38	BM	3	GLN
38	BM	5	LYS
38	BM	20	LEU
38	BM	46	ILE
38	BM	47	GLU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	BM	55	ARG
38	BM	59	ARG
38	BM	66	ARG
38	BM	70	ASP
38	BM	78	LEU
38	BM	81	ARG
38	BM	88	ASN
38	BM	90	GLU
38	BM	93	VAL
38	BM	111	GLU
38	BM	115	GLU
39	BX	1	MET
39	BX	6	LEU
39	BX	9	LYS
39	BX	14	LEU
39	BX	17	GLU
39	BX	20	ASN
39	BX	25	GLN
39	BX	34	SER
39	BX	41	HIS
39	BX	49	ASP
39	BX	56	LEU
39	BX	59	GLU
40	BH	12	LEU
40	BH	15	LEU
40	BH	18	GLN
40	BH	25	TYR
40	BH	28	ASN
40	BH	33	GLN
40	BH	41	LYS
40	BH	42	LYS
40	BH	44	ILE
40	BH	46	PHE
40	BH	48	GLU
40	BH	50	ARG
40	BH	51	ARG
40	BH	53	GLU
40	BH	54	LEU
40	BH	62	LEU
40	BH	68	ARG
40	BH	70	GLU
40	BH	75	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	BH	87	GLU
40	BH	90	LEU
40	BH	91	PHE
40	BH	98	ASP
40	BH	99	ILE
40	BH	103	VAL
40	BH	110	VAL
40	BH	112	LYS
40	BH	116	ARG
40	BH	128	HIS
40	BH	132	PHE
40	BH	144	VAL
41	BJ	2	LYS
41	BJ	3	THR
41	BJ	12	LYS
41	BJ	25	LEU
41	BJ	30	THR
41	BJ	34	ARG
41	BJ	35	ARG
41	BJ	43	GLU
41	BJ	44	TYR
41	BJ	54	ILE
41	BJ	73	VAL
41	BJ	76	HIS
41	BJ	95	ARG
41	BJ	124	VAL
41	BJ	129	GLU
41	BJ	136	GLN
42	BN	1	MET
42	BN	10	LEU
42	BN	11	ASN
42	BN	17	ARG
42	BN	18	GLN
42	BN	35	LYS
42	BN	51	LEU
42	BN	69	ARG
42	BN	71	ARG
42	BN	95	THR
42	BN	96	ARG
42	BN	112	TYR
42	BN	114	GLU
42	BN	118	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	BO	3	LYS
43	BO	9	ARG
43	BO	24	THR
43	BO	31	THR
43	BO	35	ILE
43	BO	36	TYR
43	BO	46	GLU
43	BO	52	SER
43	BO	53	THR
43	BO	62	LEU
43	BO	69	ASP
43	BO	78	VAL
43	BO	80	GLU
43	BO	89	ASP
43	BO	98	GLN
43	BO	100	HIS
43	BO	106	LEU
43	BO	112	GLU
44	BQ	10	ARG
44	BQ	13	HIS
44	BQ	29	ARG
44	BQ	30	VAL
44	BQ	50	ARG
44	BQ	69	ARG
44	BQ	70	GLN
44	BQ	79	ILE
44	BQ	83	LYS
44	BQ	96	ASP
44	BQ	100	PHE
44	BQ	105	PHE
45	BS	22	ASP
45	BS	62	ASP
45	BS	66	ILE
45	BS	67	ASP
45	BS	84	ARG
45	BS	86	MET
45	BS	88	ARG
45	BS	97	LEU
46	BU	7	ASP
46	BU	11	ILE
46	BU	18	LYS
46	BU	20	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
46	BU	26	ASN
46	BU	51	LEU
46	BU	60	LYS
46	BU	61	GLU
46	BU	65	GLN
46	BU	73	ASN
46	BU	78	LYS
46	BU	81	ARG
46	BU	85	ARG
46	BU	87	GLU
46	BU	95	PHE
47	BF	2	LYS
47	BF	3	LEU
47	BF	13	LYS
47	BF	15	LEU
47	BF	22	ASN
47	BF	25	MET
47	BF	29	ARG
47	BF	32	LYS
47	BF	46	LYS
47	BF	48	LEU
47	BF	50	ASP
47	BF	56	LEU
47	BF	68	LYS
47	BF	76	PHE
47	BF	82	TYR
47	BF	86	CYS
47	BF	91	ARG
47	BF	94	ARG
47	BF	96	TRP
47	BF	100	GLU
47	BF	102	LEU
47	BF	103	ILE
47	BF	105	ILE
47	BF	111	ARG
47	BF	114	ARG
47	BF	121	PHE
47	BF	122	ASP
47	BF	124	ARG
47	BF	128	SER
47	BF	133	GLU
47	BF	134	GLN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
47	BF	137	PHE
47	BF	138	PRO
47	BF	142	TYR
47	BF	147	ARG
47	BF	149	ARG
47	BF	168	LEU
47	BF	177	ARG
48	BG	15	ASP
48	BG	17	LYS
48	BG	31	GLU
48	BG	34	ARG
48	BG	41	GLU
48	BG	44	HIS
48	BG	46	ASP
48	BG	54	ARG
48	BG	84	LYS
48	BG	85	LYS
48	BG	86	LEU
48	BG	94	ARG
48	BG	106	LEU
48	BG	120	ILE
48	BG	123	GLU
48	BG	132	LEU
48	BG	138	GLN
48	BG	146	ASP
48	BG	148	ARG
48	BG	166	GLU
48	BG	172	GLU
48	BG	174	LYS
48	BG	176	LYS
49	BR	15	SER
49	BR	19	THR
49	BR	29	THR
49	BR	37	GLU
49	BR	39	LEU
49	BR	40	MET
49	BR	41	ILE
49	BR	48	LYS
49	BR	66	HIS
49	BR	70	GLU
49	BR	72	VAL
49	BR	82	HIS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
49	BR	99	THR
50	BT	2	ILE
50	BT	3	ARG
50	BT	6	ARG
50	BT	9	LYS
50	BT	11	LEU
50	BT	22	THR
50	BT	25	GLU
50	BT	32	LEU
50	BT	50	LEU
50	BT	61	LEU
50	BT	64	LYS
50	BT	68	LYS
50	BT	72	GLN
50	BT	86	THR
51	BZ	18	ARG
51	BZ	25	THR
51	BZ	27	ARG
51	BZ	32	ASN
51	BZ	37	ARG
51	BZ	46	PHE
51	BZ	48	THR
51	BZ	49	LEU
51	BZ	77	LYS
51	BZ	78	TYR
52	BW	14	ASP
52	BW	16	GLU
52	BW	18	LYS
52	BW	19	ARG
52	BW	23	LYS
52	BW	24	ARG
52	BW	39	GLN
52	BW	44	PHE
52	BW	45	HIS
52	BW	49	ASN
52	BW	50	VAL
52	BW	61	LYS
52	BW	75	ASN
52	BW	77	LYS
52	BW	82	GLU
3	CD	2	ARG
3	CD	4	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
3	CD	25	ARG
3	CD	39	GLN
3	CD	58	GLN
3	CD	87	GLU
3	CD	100	VAL
3	CD	106	PHE
3	CD	137	SER
3	CD	146	GLU
3	CD	147	LYS
3	CD	153	ARG
3	CD	160	LEU
3	CD	176	LYS
3	CD	180	THR
3	CD	189	ASP
3	CD	190	LEU
3	CD	196	GLU
4	CE	9	GLU
4	CE	19	ARG
4	CE	21	SER
4	CE	23	THR
4	CE	25	LYS
4	CE	30	PHE
4	CE	36	THR
4	CE	45	VAL
4	CE	51	LYS
4	CE	61	LYS
4	CE	69	ASN
4	CE	72	ASN
4	CE	95	MET
4	CE	113	VAL
4	CE	115	GLU
4	CE	123	LEU
4	CE	127	TYR
4	CE	141	ASP
4	CE	147	ASN
4	CE	148	SER
4	CE	151	MET
4	CE	155	LYS
5	CF	6	ILE
5	CF	16	GLU
5	CF	40	GLU
5	CF	53	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	CF	55	HIS
5	CF	56	LYS
5	CF	61	LEU
5	CF	70	VAL
5	CF	73	GLU
5	CF	86	ARG
5	CF	88	MET
5	CF	96	VAL
5	CF	97	THR
7	CH	46	GLU
7	CH	57	GLU
7	CH	61	THR
7	CH	66	GLN
7	CH	79	ARG
7	CH	110	MET
7	CH	113	ARG
10	CK	28	ASN
10	CK	45	THR
10	CK	55	ARG
10	CK	64	VAL
10	CK	69	CYS
10	CK	71	ASP
10	CK	75	GLU
10	CK	76	TYR
10	CK	80	ASN
10	CK	84	MET
10	CK	92	ARG
10	CK	100	ASN
10	CK	105	ARG
10	CK	118	ASN
11	CL	2	THR
11	CL	9	LYS
11	CL	13	ARG
11	CL	14	LYS
11	CL	17	LYS
11	CL	18	SER
11	CL	28	GLN
11	CL	40	THR
11	CL	43	LYS
11	CL	49	ARG
11	CL	51	VAL
11	CL	60	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	CL	63	THR
11	CL	74	GLN
11	CL	85	ARG
11	CL	87	LYS
11	CL	97	VAL
11	CL	107	LYS
11	CL	122	LYS
13	CP	5	ARG
13	CP	9	HIS
13	CP	25	ARG
13	CP	28	ARG
13	CP	35	ARG
13	CP	51	ARG
13	CP	55	ASP
13	CP	75	ILE
13	CP	79	ASN
14	CQ	3	LYS
14	CQ	4	ILE
14	CQ	5	ARG
14	CQ	15	LYS
14	CQ	39	ARG
14	CQ	56	ASP
14	CQ	60	ILE
14	CQ	66	LEU
14	CQ	80	LYS
15	CR	33	THR
15	CR	35	SER
15	CR	38	ILE
15	CR	47	ARG
15	CR	51	GLN
15	CR	65	SER
17	CT	4	LYS
17	CT	14	GLU
17	CT	35	TYR
17	CT	43	LYS
17	CT	53	MET
17	CT	59	ARG
17	CT	69	ASN
17	CT	84	LYS
17	CT	85	LEU
19	CU	3	ILE
19	CU	4	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
19	CU	11	PHE
19	CU	15	LEU
19	CU	16	ARG
19	CU	17	ARG
19	CU	24	LYS
19	CU	33	ARG
19	CU	34	ARG
19	CU	44	ARG
19	CU	48	LYS
2	CC	2	GLN
2	CC	13	ILE
2	CC	17	TRP
2	CC	19	SER
2	CC	26	LYS
2	CC	27	GLU
2	CC	32	LEU
2	CC	33	ASP
2	CC	39	ARG
2	CC	48	LYS
2	CC	63	ILE
2	CC	64	ARG
2	CC	69	THR
2	CC	78	LYS
2	CC	84	GLU
2	CC	99	GLN
2	CC	101	ASN
2	CC	104	GLU
2	CC	106	ARG
2	CC	109	GLU
2	CC	128	MET
2	CC	130	ARG
2	CC	138	GLN
2	CC	143	LEU
2	CC	155	ARG
2	CC	175	HIS
2	CC	180	ASP
2	CC	186	SER
2	CC	192	TYR
2	CC	197	VAL
2	CC	199	VAL
6	CG	16	LYS
6	CG	17	PHE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	CG	21	LEU
6	CG	22	LEU
6	CG	26	VAL
6	CG	30	MET
6	CG	34	LYS
6	CG	58	LEU
6	CG	62	GLU
6	CG	75	LYS
6	CG	94	ARG
6	CG	98	LEU
6	CG	105	GLU
6	CG	108	ARG
6	CG	115	MET
6	CG	117	LEU
6	CG	118	ARG
6	CG	125	ASP
6	CG	128	GLU
6	CG	132	THR
6	CG	136	LYS
6	CG	145	GLU
6	CG	153	TYR
8	CI	10	ARG
8	CI	11	ARG
8	CI	27	ILE
8	CI	30	ASN
8	CI	35	GLU
8	CI	37	TYR
8	CI	45	MET
8	CI	46	VAL
8	CI	52	GLU
8	CI	53	LEU
8	CI	54	VAL
8	CI	55	ASP
8	CI	58	GLU
8	CI	59	LYS
8	CI	60	LEU
8	CI	62	LEU
8	CI	74	GLN
8	CI	84	ARG
8	CI	88	GLU
8	CI	89	TYR
8	CI	93	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
8	CI	94	ARG
8	CI	96	GLU
8	CI	98	ARG
8	CI	106	ASP
8	CI	118	ARG
8	CI	126	PHE
8	CI	128	LYS
9	CJ	35	GLN
9	CJ	47	GLU
9	CJ	52	LEU
9	CJ	57	VAL
9	CJ	64	GLN
9	CJ	73	LEU
9	CJ	85	ASP
9	CJ	88	MET
9	CJ	89	ARG
9	CJ	90	LEU
9	CJ	98	VAL
12	CM	2	ARG
12	CM	10	ASP
12	CM	16	ILE
12	CM	22	TYR
12	CM	28	ARG
12	CM	30	LYS
12	CM	43	LYS
12	CM	46	GLU
12	CM	53	ASP
12	CM	55	LEU
12	CM	57	ASP
12	CM	64	VAL
12	CM	65	GLU
12	CM	77	LYS
12	CM	78	ARG
12	CM	79	LEU
12	CM	81	ASP
12	CM	88	LEU
12	CM	90	HIS
12	CM	91	ARG
12	CM	102	LYS
21	CN	3	GLN
21	CN	25	GLU
21	CN	26	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	CN	27	LYS
21	CN	31	SER
21	CN	41	TRP
21	CN	42	ASN
21	CN	49	THR
21	CN	50	LEU
21	CN	52	ARG
21	CN	59	GLN
21	CN	60	ARG
21	CN	63	CYS
21	CN	65	GLN
21	CN	80	ARG
16	CS	2	ARG
16	CS	3	SER
16	CS	4	LEU
16	CS	5	LYS
16	CS	10	ILE
16	CS	12	LEU
16	CS	14	LEU
16	CS	20	LYS
16	CS	23	GLU
16	CS	26	ASP
16	CS	27	LYS
16	CS	28	LYS
16	CS	32	THR
16	CS	42	ASN
16	CS	47	THR
16	CS	55	GLN
16	CS	64	GLU
16	CS	80	ARG
18	CB	8	MET
18	CB	19	THR
18	CB	23	ASN
18	CB	27	LYS
18	CB	35	ASN
18	CB	42	LEU
18	CB	43	GLU
18	CB	46	VAL
18	CB	50	ASN
18	CB	56	LEU
18	CB	57	ASN
18	CB	62	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
18	CB	67	LEU
18	CB	69	VAL
18	CB	73	ARG
18	CB	76	SER
18	CB	84	LEU
18	CB	86	CYS
18	CB	87	ASP
18	CB	92	ASN
18	CB	94	ARG
18	CB	99	MET
18	CB	113	LEU
18	CB	122	ASP
18	CB	126	ASP
18	CB	127	LYS
18	CB	132	GLU
18	CB	142	LYS
18	CB	152	ASP
18	CB	158	ASP
18	CB	160	LEU
18	CB	163	ILE
18	CB	168	GLU
18	CB	176	ASN
18	CB	196	ASP
18	CB	199	ILE
18	CB	211	LEU
18	CB	213	LEU
18	CB	224	ARG
20	CO	4	SER
20	CO	6	GLU
20	CO	20	ASN
20	CO	31	LEU
20	CO	35	GLN
20	CO	37	ASN
20	CO	45	GLU
20	CO	62	GLN
20	CO	64	ARG
20	CO	68	ASP
20	CO	81	LEU
20	CO	88	ARG
24	DI	2	LYS
24	DI	54	ILE
24	DI	91	LYS

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	DI	99	LYS
24	DI	121	ILE
24	DI	140	GLU
25	DC	4	LYS
25	DC	5	CYS
25	DC	9	SER
25	DC	14	HIS
25	DC	27	LYS
25	DC	43	ASN
25	DC	62	ARG
25	DC	65	ASP
25	DC	89	ASN
25	DC	92	LEU
25	DC	109	LEU
25	DC	110	LYS
25	DC	113	ASP
25	DC	123	ILE
25	DC	134	ILE
25	DC	155	ARG
25	DC	162	GLN
25	DC	172	THR
25	DC	173	LEU
25	DC	176	ARG
25	DC	181	ARG
25	DC	183	VAL
25	DC	190	THR
25	DC	212	TRP
25	DC	215	VAL
25	DC	235	GLU
25	DC	257	ARG
25	DC	264	LYS
25	DC	265	PHE
25	DC	269	ARG
25	DC	270	ARG
25	DC	271	SER
26	DD	4	LEU
26	DD	11	MET
26	DD	17	GLU
26	DD	18	ASP
26	DD	35	THR
26	DD	36	GLN
26	DD	40	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	DD	46	ARG
26	DD	52	THR
26	DD	62	LYS
26	DD	68	PHE
26	DD	81	GLU
26	DD	84	LEU
26	DD	88	GLU
26	DD	89	GLU
26	DD	96	ILE
26	DD	99	GLU
26	DD	106	LYS
26	DD	110	THR
26	DD	124	ARG
26	DD	141	ARG
26	DD	148	GLN
26	DD	154	LYS
26	DD	157	LYS
26	DD	159	LYS
26	DD	170	VAL
26	DD	201	LEU
26	DD	204	LYS
27	DK	2	ILE
27	DK	8	LEU
27	DK	9	ASN
27	DK	17	ARG
27	DK	21	CYS
27	DK	23	LYS
27	DK	32	TYR
27	DK	37	ASP
27	DK	39	ILE
27	DK	47	ILE
27	DK	52	VAL
27	DK	53	LYS
27	DK	54	LYS
27	DK	64	ARG
27	DK	72	PRO
27	DK	73	ASP
27	DK	79	PHE
27	DK	80	ASP
27	DK	82	ASN
27	DK	86	LEU
27	DK	87	LEU

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
27	DK	88	ASN
27	DK	89	ASN
27	DK	95	ILE
27	DK	104	THR
27	DK	105	ARG
27	DK	108	ARG
27	DK	111	LYS
27	DK	120	PRO
28	DP	3	ILE
28	DP	5	LYS
28	DP	6	GLN
28	DP	19	PHE
28	DP	25	VAL
28	DP	32	VAL
28	DP	43	GLU
28	DP	61	ARG
28	DP	83	ILE
28	DP	99	LEU
28	DP	100	ARG
28	DP	109	ILE
28	DP	111	GLU
28	DP	112	ARG
28	DP	113	LEU
28	DP	114	ASN
29	DE	3	LEU
29	DE	6	LYS
29	DE	12	LEU
29	DE	21	ARG
29	DE	24	ASN
29	DE	40	ARG
29	DE	58	LYS
29	DE	60	TRP
29	DE	67	ARG
29	DE	70	SER
29	DE	78	TRP
29	DE	108	ILE
29	DE	118	LEU
29	DE	122	GLU
29	DE	159	LEU
29	DE	163	ASN
29	DE	165	HIS
29	DE	181	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
29	DE	197	GLU
29	DE	198	GLU
30	DY	2	LYS
30	DY	6	ILE
30	DY	15	ARG
30	DY	23	LEU
30	DY	30	ARG
30	DY	37	ARG
30	DY	43	ILE
30	DY	48	ASN
30	DY	53	MET
30	DY	57	GLU
30	DY	58	GLU
31	D0	5	ASN
31	D0	21	LEU
31	D0	27	LEU
31	D0	31	LYS
31	D0	37	HIS
31	D0	38	LEU
31	D0	41	HIS
31	D0	45	ASP
31	D0	56	LYS
32	D4	9	LYS
32	D4	26	ILE
32	D4	35	GLN
33	D1	6	GLU
33	D1	8	ILE
33	D1	9	LYS
33	D1	16	THR
33	D1	31	GLU
33	D1	33	LEU
33	D1	34	GLU
33	D1	35	LEU
33	D1	36	LYS
33	D1	49	LYS
34	D3	7	ARG
34	D3	14	LYS
34	D3	61	LEU
35	DV	5	ASN
35	DV	9	ARG
35	DV	40	ILE
35	DV	42	LEU

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
35	DV	46	LYS
35	DV	51	GLN
35	DV	53	LYS
35	DV	61	LEU
35	DV	69	GLU
35	DV	70	ILE
35	DV	75	GLN
35	DV	79	ARG
35	DV	89	ILE
36	D2	3	ARG
36	D2	10	LEU
36	D2	12	ARG
36	D2	16	HIS
36	D2	33	ARG
36	D2	39	ARG
36	D2	41	ARG
36	D2	42	LEU
36	D2	43	THR
36	D2	46	LYS
37	DL	4	ASN
37	DL	19	LEU
37	DL	27	LEU
37	DL	35	HIS
37	DL	47	ARG
37	DL	61	LEU
37	DL	64	PHE
37	DL	69	ARG
37	DL	92	LEU
37	DL	94	THR
37	DL	95	LEU
37	DL	118	THR
37	DL	122	VAL
37	DL	125	LEU
37	DL	128	THR
37	DL	129	LYS
37	DL	144	GLU
38	DM	3	GLN
38	DM	5	LYS
38	DM	20	LEU
38	DM	46	ILE
38	DM	47	GLU
38	DM	55	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
38	DM	59	ARG
38	DM	66	ARG
38	DM	70	ASP
38	DM	78	LEU
38	DM	81	ARG
38	DM	88	ASN
38	DM	90	GLU
38	DM	93	VAL
38	DM	111	GLU
38	DM	115	GLU
39	DX	1	MET
39	DX	6	LEU
39	DX	9	LYS
39	DX	14	LEU
39	DX	17	GLU
39	DX	20	ASN
39	DX	25	GLN
39	DX	34	SER
39	DX	41	HIS
39	DX	49	ASP
39	DX	56	LEU
39	DX	59	GLU
40	DH	12	LEU
40	DH	15	LEU
40	DH	18	GLN
40	DH	25	TYR
40	DH	28	ASN
40	DH	33	GLN
40	DH	41	LYS
40	DH	46	PHE
40	DH	60	GLU
40	DH	61	VAL
40	DH	70	GLU
40	DH	77	THR
40	DH	78	VAL
40	DH	83	LYS
40	DH	90	LEU
40	DH	96	THR
40	DH	97	ARG
40	DH	103	VAL
40	DH	113	SER
40	DH	116	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
40	DH	119	ASN
40	DH	121	VAL
40	DH	124	THR
40	DH	129	GLU
40	DH	139	PHE
40	DH	144	VAL
40	DH	149	GLU
41	DJ	2	LYS
41	DJ	3	THR
41	DJ	12	LYS
41	DJ	25	LEU
41	DJ	30	THR
41	DJ	34	ARG
41	DJ	35	ARG
41	DJ	43	GLU
41	DJ	44	TYR
41	DJ	54	ILE
41	DJ	73	VAL
41	DJ	76	HIS
41	DJ	95	ARG
41	DJ	124	VAL
41	DJ	129	GLU
41	DJ	136	GLN
42	DN	1	MET
42	DN	10	LEU
42	DN	11	ASN
42	DN	17	ARG
42	DN	18	GLN
42	DN	28	LEU
42	DN	35	LYS
42	DN	51	LEU
42	DN	69	ARG
42	DN	71	ARG
42	DN	95	THR
42	DN	96	ARG
42	DN	112	TYR
42	DN	114	GLU
42	DN	118	ARG
43	DO	3	LYS
43	DO	9	ARG
43	DO	24	THR
43	DO	31	THR

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
43	DO	35	ILE
43	DO	36	TYR
43	DO	46	GLU
43	DO	52	SER
43	DO	53	THR
43	DO	62	LEU
43	DO	69	ASP
43	DO	78	VAL
43	DO	80	GLU
43	DO	89	ASP
43	DO	91	SER
43	DO	98	GLN
43	DO	100	HIS
43	DO	106	LEU
43	DO	112	GLU
44	DQ	10	ARG
44	DQ	13	HIS
44	DQ	29	ARG
44	DQ	30	VAL
44	DQ	50	ARG
44	DQ	69	ARG
44	DQ	70	GLN
44	DQ	79	ILE
44	DQ	83	LYS
44	DQ	96	ASP
44	DQ	100	PHE
44	DQ	105	PHE
45	DS	22	ASP
45	DS	62	ASP
45	DS	66	ILE
45	DS	67	ASP
45	DS	81	SER
45	DS	84	ARG
45	DS	85	ILE
45	DS	86	MET
45	DS	88	ARG
45	DS	97	LEU
46	DU	7	ASP
46	DU	11	ILE
46	DU	18	LYS
46	DU	20	LYS
46	DU	26	ASN

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
46	DU	51	LEU
46	DU	60	LYS
46	DU	61	GLU
46	DU	65	GLN
46	DU	73	ASN
46	DU	78	LYS
46	DU	81	ARG
46	DU	85	ARG
46	DU	87	GLU
46	DU	95	PHE
47	DF	2	LYS
47	DF	3	LEU
47	DF	13	LYS
47	DF	15	LEU
47	DF	22	ASN
47	DF	25	MET
47	DF	29	ARG
47	DF	32	LYS
47	DF	46	LYS
47	DF	48	LEU
47	DF	50	ASP
47	DF	56	LEU
47	DF	68	LYS
47	DF	76	PHE
47	DF	82	TYR
47	DF	86	CYS
47	DF	91	ARG
47	DF	94	ARG
47	DF	96	TRP
47	DF	100	GLU
47	DF	102	LEU
47	DF	105	ILE
47	DF	111	ARG
47	DF	114	ARG
47	DF	121	PHE
47	DF	122	ASP
47	DF	124	ARG
47	DF	128	SER
47	DF	133	GLU
47	DF	134	GLN
47	DF	137	PHE
47	DF	138	PRO

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
47	DF	142	TYR
47	DF	147	ARG
47	DF	149	ARG
47	DF	168	LEU
47	DF	177	ARG
48	DG	15	ASP
48	DG	17	LYS
48	DG	31	GLU
48	DG	34	ARG
48	DG	41	GLU
48	DG	44	HIS
48	DG	46	ASP
48	DG	54	ARG
48	DG	84	LYS
48	DG	85	LYS
48	DG	86	LEU
48	DG	94	ARG
48	DG	101	VAL
48	DG	106	LEU
48	DG	120	ILE
48	DG	123	GLU
48	DG	132	LEU
48	DG	138	GLN
48	DG	146	ASP
48	DG	148	ARG
48	DG	166	GLU
48	DG	172	GLU
48	DG	174	LYS
48	DG	176	LYS
49	DR	19	THR
49	DR	29	THR
49	DR	37	GLU
49	DR	39	LEU
49	DR	40	MET
49	DR	41	ILE
49	DR	48	LYS
49	DR	66	HIS
49	DR	70	GLU
49	DR	72	VAL
49	DR	82	HIS
49	DR	99	THR
50	DT	2	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
50	DT	3	ARG
50	DT	6	ARG
50	DT	9	LYS
50	DT	11	LEU
50	DT	22	THR
50	DT	25	GLU
50	DT	32	LEU
50	DT	50	LEU
50	DT	61	LEU
50	DT	64	LYS
50	DT	68	LYS
50	DT	72	GLN
50	DT	86	THR
51	DZ	13	VAL
51	DZ	18	ARG
51	DZ	25	THR
51	DZ	27	ARG
51	DZ	32	ASN
51	DZ	37	ARG
51	DZ	46	PHE
51	DZ	48	THR
51	DZ	49	LEU
51	DZ	77	LYS
51	DZ	78	TYR
52	DW	14	ASP
52	DW	16	GLU
52	DW	18	LYS
52	DW	19	ARG
52	DW	23	LYS
52	DW	24	ARG
52	DW	39	GLN
52	DW	44	PHE
52	DW	45	HIS
52	DW	49	ASN
52	DW	50	VAL
52	DW	61	LYS
52	DW	75	ASN
52	DW	77	LYS
52	DW	82	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (349) such sidechains are listed below:



Mol	Chain	Res	Type
2	AC	99	GLN
2	AC	139	ASN
3	AD	35	GLN
3	AD	53	GLN
3	AD	70	GLN
3	AD	73	ASN
3	AD	84	ASN
3	AD	115	GLN
3	AD	119	HIS
3	AD	135	GLN
3	AD	151	GLN
3	AD	195	ASN
4	AE	72	ASN
4	AE	131	ASN
4	AE	145	ASN
5	AF	3	HIS
5	AF	17	GLN
6	AG	96	ASN
6	AG	121	ASN
6	AG	141	HIS
6	AG	147	ASN
7	AH	3	GLN
7	AH	37	ASN
7	AH	66	GLN
7	AH	75	GLN
7	AH	117	GLN
8	AI	4	GLN
8	AI	24	ASN
8	AI	31	GLN
8	AI	36	GLN
8	AI	74	GLN
8	AI	80	HIS
9	AJ	20	GLN
9	AJ	56	HIS
9	AJ	99	GLN
10	AK	21	HIS
10	AK	28	ASN
10	AK	39	ASN
10	AK	80	ASN
11	AL	4	ASN
11	AL	19	ASN
11	AL	28	GLN
11	AL	45	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
11	AL	74	GLN
12	AM	7	ASN
13	AP	18	GLN
14	AQ	8	GLN
15	AR	51	GLN
16	AS	68	HIS
17	AT	74	HIS
17	AT	83	ASN
18	AB	17	HIS
18	AB	18	GLN
18	AB	23	ASN
18	AB	35	ASN
18	AB	38	HIS
18	AB	88	GLN
18	AB	145	ASN
18	AB	169	HIS
18	AB	177	ASN
20	AO	37	ASN
20	AO	40	GLN
21	AN	48	GLN
21	AN	59	GLN
21	AN	61	ASN
21	AN	65	GLN
24	BI	11	GLN
24	BI	29	GLN
24	BI	33	ASN
24	BI	93	ASN
25	BC	36	ASN
25	BC	43	ASN
25	BC	45	ASN
25	BC	59	GLN
25	BC	85	ASN
25	BC	89	ASN
25	BC	133	ASN
25	BC	152	GLN
25	BC	162	GLN
25	BC	196	ASN
25	BC	238	ASN
26	BD	32	ASN
26	BD	36	GLN
26	BD	49	GLN
26	BD	130	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	BD	136	ASN
26	BD	148	GLN
26	BD	164	GLN
27	BK	3	GLN
27	BK	13	ASN
27	BK	88	ASN
27	BK	89	ASN
28	BP	6	GLN
28	BP	40	GLN
28	BP	74	GLN
28	BP	76	HIS
28	BP	114	ASN
29	BE	24	ASN
29	BE	30	GLN
29	BE	62	GLN
29	BE	90	GLN
29	BE	97	ASN
29	BE	156	ASN
29	BE	163	ASN
29	BE	195	GLN
30	BY	33	HIS
30	BY	48	ASN
31	B0	3	GLN
32	B4	13	ASN
32	B4	35	GLN
32	B4	37	GLN
34	B3	27	ASN
34	B3	30	HIS
35	BV	49	ASN
35	BV	51	GLN
35	BV	80	HIS
35	BV	87	GLN
35	BV	88	HIS
36	B2	13	ASN
37	BL	4	ASN
37	BL	35	HIS
37	BL	54	GLN
37	BL	93	ASN
37	BL	99	ASN
38	BM	3	GLN
38	BM	17	ASN
39	BX	20	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
39	BX	25	GLN
39	BX	27	ASN
39	BX	31	GLN
39	BX	41	HIS
39	BX	45	GLN
40	BH	28	ASN
40	BH	43	ASN
41	BJ	58	ASN
41	BJ	86	GLN
41	BJ	130	HIS
42	BN	11	ASN
42	BN	62	ASN
42	BN	107	ASN
43	BO	19	GLN
43	BO	38	GLN
43	BO	61	GLN
43	BO	100	HIS
44	BQ	51	GLN
44	BQ	55	GLN
44	BQ	80	ASN
45	BS	57	ASN
45	BS	61	ASN
46	BU	26	ASN
46	BU	53	GLN
46	BU	65	GLN
46	BU	68	ASN
46	BU	73	ASN
47	BF	51	ASN
47	BF	126	ASN
47	BF	134	GLN
48	BG	127	GLN
49	BR	6	GLN
49	BR	12	HIS
49	BR	18	GLN
49	BR	43	ASN
49	BR	86	GLN
50	BT	48	GLN
50	BT	72	GLN
50	BT	91	GLN
50	BT	92	ASN
51	BZ	6	GLN
51	BZ	17	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
51	BZ	23	ASN
51	BZ	34	HIS
51	BZ	36	HIS
52	BW	11	ASN
52	BW	49	ASN
52	BW	75	ASN
3	CD	35	GLN
3	CD	53	GLN
3	CD	70	GLN
3	CD	73	ASN
3	CD	84	ASN
3	CD	115	GLN
3	CD	119	HIS
3	CD	135	GLN
3	CD	151	GLN
3	CD	195	ASN
4	CE	72	ASN
4	CE	131	ASN
4	CE	145	ASN
5	CF	3	HIS
5	CF	17	GLN
7	CH	3	GLN
7	CH	37	ASN
7	CH	66	GLN
7	CH	75	GLN
7	CH	117	GLN
10	CK	21	HIS
10	CK	28	ASN
10	CK	39	ASN
10	CK	80	ASN
11	CL	4	ASN
11	CL	19	ASN
11	CL	28	GLN
11	CL	45	ASN
11	CL	74	GLN
13	CP	18	GLN
14	CQ	8	GLN
15	CR	51	GLN
17	CT	74	HIS
17	CT	83	ASN
2	CC	2	GLN
2	CC	31	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
2	CC	40	GLN
2	CC	68	HIS
2	CC	139	ASN
2	CC	184	ASN
6	CG	27	ASN
6	CG	67	ASN
6	CG	121	ASN
6	CG	152	HIS
8	CI	30	ASN
8	CI	31	GLN
8	CI	80	HIS
9	CJ	20	GLN
9	CJ	70	HIS
9	CJ	99	GLN
12	CM	7	ASN
21	CN	48	GLN
21	CN	59	GLN
21	CN	65	GLN
21	CN	70	HIS
16	CS	42	ASN
18	CB	35	ASN
18	CB	38	HIS
18	CB	50	ASN
18	CB	92	ASN
18	CB	119	GLN
18	CB	176	ASN
20	CO	35	GLN
20	CO	38	HIS
20	CO	62	GLN
24	DI	5	GLN
24	DI	11	GLN
24	DI	33	ASN
25	DC	36	ASN
25	DC	43	ASN
25	DC	45	ASN
25	DC	59	GLN
25	DC	89	ASN
25	DC	133	ASN
25	DC	152	GLN
25	DC	162	GLN
25	DC	196	ASN
25	DC	238	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
26	DD	32	ASN
26	DD	49	GLN
26	DD	130	GLN
26	DD	136	ASN
26	DD	148	GLN
26	DD	164	GLN
27	DK	3	GLN
27	DK	13	ASN
27	DK	88	ASN
27	DK	89	ASN
28	DP	6	GLN
28	DP	40	GLN
28	DP	74	GLN
28	DP	76	HIS
28	DP	114	ASN
29	DE	24	ASN
29	DE	30	GLN
29	DE	62	GLN
29	DE	90	GLN
29	DE	97	ASN
29	DE	156	ASN
29	DE	195	GLN
30	DY	33	HIS
30	DY	48	ASN
31	D0	3	GLN
32	D4	13	ASN
32	D4	35	GLN
32	D4	37	GLN
34	D3	27	ASN
34	D3	30	HIS
35	DV	49	ASN
35	DV	51	GLN
35	DV	80	HIS
35	DV	87	GLN
36	D2	13	ASN
36	D2	16	HIS
37	DL	4	ASN
37	DL	35	HIS
37	DL	54	GLN
37	DL	93	ASN
37	DL	99	ASN
38	DM	3	GLN

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
38	DM	17	ASN
39	DX	20	ASN
39	DX	25	GLN
39	DX	27	ASN
39	DX	31	GLN
39	DX	41	HIS
39	DX	45	GLN
40	DH	28	ASN
40	DH	66	ASN
40	DH	119	ASN
40	DH	135	HIS
40	DH	145	ASN
41	DJ	58	ASN
41	DJ	86	GLN
41	DJ	130	HIS
42	DN	11	ASN
42	DN	62	ASN
42	DN	107	ASN
43	DO	19	GLN
43	DO	38	GLN
43	DO	61	GLN
43	DO	100	HIS
44	DQ	51	GLN
44	DQ	55	GLN
44	DQ	80	ASN
45	DS	57	ASN
45	DS	61	ASN
46	DU	26	ASN
46	DU	53	GLN
46	DU	65	GLN
46	DU	68	ASN
46	DU	73	ASN
47	DF	51	ASN
47	DF	126	ASN
47	DF	134	GLN
48	DG	127	GLN
49	DR	6	GLN
49	DR	12	HIS
49	DR	18	GLN
49	DR	43	ASN
49	DR	82	HIS
49	DR	86	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
50	DT	48	GLN
50	DT	72	GLN
50	DT	91	GLN
50	DT	92	ASN
51	DZ	6	GLN
51	DZ	17	ASN
51	DZ	23	ASN
51	DZ	36	HIS
52	DW	11	ASN
52	DW	49	ASN
52	DW	56	HIS
52	DW	75	ASN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1529/1542 (99%)	285 (18%)	20 (1%)
1	CA	1529/1542 (99%)	255 (16%)	20 (1%)
22	BA	116/120 (96%)	21 (18%)	1 (0%)
22	DA	116/120 (96%)	20 (17%)	1 (0%)
23	BB	2837/2904 (97%)	444 (15%)	16 (0%)
23	DB	2838/2904 (97%)	437 (15%)	20 (0%)
All	All	8965/9132 (98%)	1462 (16%)	78 (0%)

All (1462) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	9	G
1	AA	14	U
1	AA	15	G
1	AA	32	A
1	AA	39	G
1	AA	47	C
1	AA	48	C
1	AA	51	A
1	AA	52	C
1	AA	55	A
1	AA	65	A
1	AA	71	A
1	AA	72	A
1	AA	80	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	81	A
1	AA	82	G
1	AA	83	C
1	AA	84	U
1	AA	85	U
1	AA	86	G
1	AA	88	U
1	AA	89	U
1	AA	92	U
1	AA	93	U
1	AA	95	C
1	AA	98	A
1	AA	99	C
1	AA	121	U
1	AA	122	G
1	AA	131	A
1	AA	149	A
1	AA	164	G
1	AA	182	A
1	AA	190	A
1	AA	197	A
1	AA	205	A
1	AA	206	C
1	AA	208	U
1	AA	209	U
1	AA	210	C
1	AA	226	G
1	AA	233	C
1	AA	239	U
1	AA	240	G
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	253	A
1	AA	256	U
1	AA	257	G
1	AA	258	G
1	AA	262	A
1	AA	266	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	267	C
1	AA	280	C
1	AA	289	G
1	AA	316	C
1	AA	321	A
1	AA	328	C
1	AA	329	A
1	AA	330	C
1	AA	332	G
1	AA	352	C
1	AA	354	G
1	AA	367	U
1	AA	372	C
1	AA	373	A
1	AA	381	C
1	AA	392	C
1	AA	397	A
1	AA	398	U
1	AA	406	G
1	AA	408	A
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	424	G
1	AA	429	U
1	AA	430	A
1	AA	435	A
1	AA	438	U
1	AA	461	A
1	AA	463	U
1	AA	464	U
1	AA	465	A
1	AA	466	A
1	AA	467	U
1	AA	468	A
1	AA	479	U
1	AA	482	A
1	AA	484	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	485	U
1	AA	493	A
1	AA	500	G
1	AA	511	C
1	AA	518	C
1	AA	527	G
1	AA	532	A
1	AA	547	A
1	AA	559	A
1	AA	562	U
1	AA	572	A
1	AA	573	A
1	AA	576	C
1	AA	577	G
1	AA	633	G
1	AA	639	G
1	AA	653	U
1	AA	665	A
1	AA	688	G
1	AA	700	G
1	AA	703	G
1	AA	721	G
1	AA	724	G
1	AA	731	G
1	AA	733	G
1	AA	747	A
1	AA	755	G
1	AA	777	A
1	AA	781	A
1	AA	787	A
1	AA	793	U
1	AA	794	A
1	AA	812	G
1	AA	815	A
1	AA	817	C
1	AA	818	G
1	AA	819	A
1	AA	828	U
1	AA	841	C
1	AA	842	U
1	AA	843	U
1	AA	844	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	845	A
1	AA	846	G
1	AA	914	A
1	AA	926	G
1	AA	927	G
1	AA	931	C
1	AA	934	C
1	AA	935	A
1	AA	939	G
1	AA	958	A
1	AA	960	U
1	AA	961	U
1	AA	966	G
1	AA	968	A
1	AA	969	A
1	AA	971	G
1	AA	974	A
1	AA	976	G
1	AA	977	A
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	994	A
1	AA	998	C
1	AA	1000	A
1	AA	1003	G
1	AA	1004	A
1	AA	1007	U
1	AA	1009	U
1	AA	1010	U
1	AA	1013	G
1	AA	1017	U
1	AA	1020	G
1	AA	1022	A
1	AA	1024	G
1	AA	1026	G
1	AA	1028	C
1	AA	1029	U
1	AA	1030	U
1	AA	1031	C
1	AA	1033	G
1	AA	1034	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1035	A
1	AA	1040	U
1	AA	1041	G
1	AA	1049	U
1	AA	1050	G
1	AA	1053	G
1	AA	1054	C
1	AA	1055	A
1	AA	1056	U
1	AA	1063	C
1	AA	1064	G
1	AA	1065	U
1	AA	1066	C
1	AA	1091	U
1	AA	1092	A
1	AA	1094	G
1	AA	1095	U
1	AA	1099	G
1	AA	1101	A
1	AA	1127	G
1	AA	1136	C
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1152	A
1	AA	1158	C
1	AA	1159	U
1	AA	1160	G
1	AA	1167	A
1	AA	1168	U
1	AA	1171	A
1	AA	1181	G
1	AA	1184	G
1	AA	1196	A
1	AA	1197	A
1	AA	1201	A
1	AA	1202	U
1	AA	1209	C
1	AA	1211	U
1	AA	1212	U
1	AA	1213	A
1	AA	1214	C

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1224	U
1	AA	1225	A
1	AA	1226	C
1	AA	1227	A
1	AA	1228	C
1	AA	1238	A
1	AA	1240	U
1	AA	1241	G
1	AA	1245	C
1	AA	1256	A
1	AA	1257	A
1	AA	1258	G
1	AA	1278	G
1	AA	1280	A
1	AA	1281	C
1	AA	1285	A
1	AA	1286	U
1	AA	1289	A
1	AA	1298	U
1	AA	1300	G
1	AA	1302	C
1	AA	1303	C
1	AA	1305	G
1	AA	1307	U
1	AA	1316	G
1	AA	1317	C
1	AA	1319	A
1	AA	1320	C
1	AA	1323	G
1	AA	1324	A
1	AA	1332	A
1	AA	1338	G
1	AA	1345	U
1	AA	1353	G
1	AA	1362	A
1	AA	1363	A
1	AA	1364	U
1	AA	1380	U
1	AA	1381	U
1	AA	1398	A
1	AA	1408	A
1	AA	1411	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1419	G
1	AA	1429	A
1	AA	1432	G
1	AA	1446	A
1	AA	1448	C
1	AA	1452	C
1	AA	1454	G
1	AA	1491	G
1	AA	1492	A
1	AA	1497	G
1	AA	1503	A
1	AA	1506	U
1	AA	1517	G
1	AA	1519	A
1	AA	1520	C
1	AA	1529	G
1	AA	1530	G
1	AA	1533	C
1	AA	1534	A
22	BA	13	G
22	BA	15	A
22	BA	16	G
22	BA	24	G
22	BA	25	U
22	BA	26	C
22	BA	27	C
22	BA	30	C
22	BA	35	C
22	BA	36	C
22	BA	42	C
22	BA	43	C
22	BA	44	G
22	BA	45	A
22	BA	56	G
22	BA	67	G
22	BA	88	C
22	BA	89	U
22	BA	90	C
22	BA	99	A
22	BA	109	A
23	BB	2	G
23	BB	34	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	46	G
23	BB	63	A
23	BB	64	A
23	BB	71	A
23	BB	72	U
23	BB	73	A
23	BB	74	A
23	BB	75	G
23	BB	79	C
23	BB	83	A
23	BB	91	A
23	BB	96	C
23	BB	99	U
23	BB	100	U
23	BB	101	A
23	BB	102	U
23	BB	103	A
23	BB	118	A
23	BB	119	A
23	BB	120	U
23	BB	125	A
23	BB	135	U
23	BB	137	U
23	BB	139	U
23	BB	140	C
23	BB	141	G
23	BB	142	A
23	BB	143	C
23	BB	144	A
23	BB	160	A
23	BB	162	U
23	BB	163	C
23	BB	165	A
23	BB	174	U
23	BB	180	G
23	BB	181	A
23	BB	196	A
23	BB	199	A
23	BB	215	G
23	BB	216	A
23	BB	221	A
23	BB	222	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	230	G
23	BB	233	A
23	BB	248	G
23	BB	250	G
23	BB	255	A
23	BB	265	A
23	BB	266	G
23	BB	267	C
23	BB	277	G
23	BB	278	A
23	BB	279	A
23	BB	281	C
23	BB	299	A
23	BB	302	C
23	BB	311	A
23	BB	323	C
23	BB	329	G
23	BB	330	A
23	BB	331	C
23	BB	333	G
23	BB	343	C
23	BB	346	A
23	BB	349	U
23	BB	353	C
23	BB	355	U
23	BB	371	A
23	BB	372	G
23	BB	386	G
23	BB	387	U
23	BB	395	U
23	BB	396	G
23	BB	411	G
23	BB	412	A
23	BB	424	G
23	BB	451	U
23	BB	455	C
23	BB	456	C
23	BB	457	A
23	BB	479	A
23	BB	480	A
23	BB	481	G
23	BB	491	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	504	A
23	BB	505	A
23	BB	508	A
23	BB	509	C
23	BB	512	G
23	BB	527	C
23	BB	532	A
23	BB	533	G
23	BB	544	C
23	BB	546	U
23	BB	547	A
23	BB	548	G
23	BB	549	G
23	BB	550	C
23	BB	563	A
23	BB	573	U
23	BB	575	A
23	BB	588	U
23	BB	603	A
23	BB	613	A
23	BB	614	A
23	BB	615	U
23	BB	616	A
23	BB	622	G
23	BB	627	A
23	BB	632	A
23	BB	637	A
23	BB	645	C
23	BB	646	U
23	BB	654	A
23	BB	655	A
23	BB	671	C
23	BB	686	U
23	BB	704	G
23	BB	718	A
23	BB	719	C
23	BB	730	A
23	BB	747	U
23	BB	757	G
23	BB	775	G
23	BB	782	A
23	BB	784	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	785	G
23	BB	786	C
23	BB	805	G
23	BB	812	C
23	BB	819	A
23	BB	827	U
23	BB	828	U
23	BB	847	U
23	BB	859	G
23	BB	876	C
23	BB	878	A
23	BB	899	A
23	BB	910	A
23	BB	912	C
23	BB	931	U
23	BB	932	U
23	BB	933	A
23	BB	941	A
23	BB	946	C
23	BB	961	C
23	BB	973	A
23	BB	974	G
23	BB	983	A
23	BB	990	A
23	BB	991	C
23	BB	995	C
23	BB	996	A
23	BB	1005	C
23	BB	1012	U
23	BB	1013	C
23	BB	1022	G
23	BB	1023	U
23	BB	1024	G
23	BB	1025	G
23	BB	1033	U
23	BB	1045	C
23	BB	1046	A
23	BB	1047	G
23	BB	1055	G
23	BB	1056	G
23	BB	1062	G
23	BB	1070	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	1088	A
23	BB	1110	G
23	BB	1111	A
23	BB	1112	G
23	BB	1126	A
23	BB	1129	A
23	BB	1132	U
23	BB	1133	A
23	BB	1135	C
23	BB	1136	G
23	BB	1139	G
23	BB	1141	U
23	BB	1142	A
23	BB	1156	A
23	BB	1174	U
23	BB	1177	G
23	BB	1179	G
23	BB	1186	G
23	BB	1195	G
23	BB	1205	A
23	BB	1211	C
23	BB	1212	G
23	BB	1237	A
23	BB	1238	G
23	BB	1242	U
23	BB	1250	G
23	BB	1251	C
23	BB	1253	A
23	BB	1256	G
23	BB	1266	G
23	BB	1271	G
23	BB	1272	A
23	BB	1273	U
23	BB	1275	A
23	BB	1276	A
23	BB	1301	A
23	BB	1302	A
23	BB	1324	G
23	BB	1325	U
23	BB	1330	C
23	BB	1337	G
23	BB	1341	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	1345	C
23	BB	1350	C
23	BB	1352	U
23	BB	1365	A
23	BB	1368	G
23	BB	1379	U
23	BB	1383	A
23	BB	1384	A
23	BB	1386	C
23	BB	1396	U
23	BB	1397	U
23	BB	1416	G
23	BB	1419	A
23	BB	1421	G
23	BB	1427	A
23	BB	1428	C
23	BB	1434	A
23	BB	1453	A
23	BB	1454	C
23	BB	1459	G
23	BB	1460	U
23	BB	1461	C
23	BB	1470	A
23	BB	1476	U
23	BB	1477	A
23	BB	1482	G
23	BB	1493	C
23	BB	1504	A
23	BB	1507	C
23	BB	1508	A
23	BB	1509	A
23	BB	1524	G
23	BB	1535	A
23	BB	1537	G
23	BB	1540	G
23	BB	1552	A
23	BB	1559	U
23	BB	1569	A
23	BB	1578	U
23	BB	1584	U
23	BB	1588	G
23	BB	1599	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	1607	C
23	BB	1608	A
23	BB	1610	A
23	BB	1613	G
23	BB	1616	A
23	BB	1619	G
23	BB	1626	A
23	BB	1634	A
23	BB	1635	A
23	BB	1647	U
23	BB	1648	U
23	BB	1674	G
23	BB	1700	A
23	BB	1714	U
23	BB	1715	G
23	BB	1724	G
23	BB	1729	U
23	BB	1730	C
23	BB	1731	G
23	BB	1733	G
23	BB	1738	G
23	BB	1758	U
23	BB	1764	C
23	BB	1773	A
23	BB	1781	U
23	BB	1800	C
23	BB	1801	A
23	BB	1816	C
23	BB	1829	A
23	BB	1870	C
23	BB	1871	A
23	BB	1884	G
23	BB	1906	G
23	BB	1915	U
23	BB	1927	A
23	BB	1929	G
23	BB	1930	G
23	BB	1936	A
23	BB	1938	A
23	BB	1939	U
23	BB	1940	U
23	BB	1955	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	1967	C
23	BB	1970	A
23	BB	1971	U
23	BB	1972	G
23	BB	1991	U
23	BB	1993	U
23	BB	1997	C
23	BB	2022	U
23	BB	2023	C
23	BB	2031	A
23	BB	2033	A
23	BB	2034	U
23	BB	2035	G
23	BB	2043	C
23	BB	2055	C
23	BB	2056	G
23	BB	2060	A
23	BB	2061	G
23	BB	2062	A
23	BB	2069	G
23	BB	2071	A
23	BB	2072	C
23	BB	2100	G
23	BB	2102	G
23	BB	2103	C
23	BB	2110	G
23	BB	2134	A
23	BB	2138	G
23	BB	2139	U
23	BB	2142	A
23	BB	2143	C
23	BB	2144	G
23	BB	2145	C
23	BB	2146	C
23	BB	2147	A
23	BB	2149	U
23	BB	2153	C
23	BB	2154	A
23	BB	2155	U
23	BB	2180	U
23	BB	2181	U
23	BB	2193	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	2198	A
23	BB	2199	A
23	BB	2203	U
23	BB	2204	G
23	BB	2211	A
23	BB	2212	A
23	BB	2213	U
23	BB	2214	C
23	BB	2225	A
23	BB	2238	G
23	BB	2239	G
23	BB	2250	G
23	BB	2266	A
23	BB	2283	C
23	BB	2287	A
23	BB	2304	G
23	BB	2305	U
23	BB	2307	G
23	BB	2308	G
23	BB	2309	A
23	BB	2311	A
23	BB	2321	U
23	BB	2322	A
23	BB	2325	G
23	BB	2333	A
23	BB	2335	A
23	BB	2337	G
23	BB	2345	G
23	BB	2347	C
23	BB	2361	G
23	BB	2379	G
23	BB	2383	G
23	BB	2385	C
23	BB	2396	G
23	BB	2402	U
23	BB	2406	A
23	BB	2423	U
23	BB	2426	A
23	BB	2429	G
23	BB	2430	A
23	BB	2439	A
23	BB	2441	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	2448	A
23	BB	2472	G
23	BB	2476	A
23	BB	2477	U
23	BB	2491	U
23	BB	2492	U
23	BB	2494	G
23	BB	2502	G
23	BB	2505	G
23	BB	2506	U
23	BB	2518	A
23	BB	2535	G
23	BB	2554	U
23	BB	2566	A
23	BB	2567	G
23	BB	2572	A
23	BB	2573	C
23	BB	2574	G
23	BB	2577	A
23	BB	2586	U
23	BB	2602	A
23	BB	2609	U
23	BB	2613	U
23	BB	2629	U
23	BB	2639	A
23	BB	2646	C
23	BB	2654	A
23	BB	2666	C
23	BB	2682	A
23	BB	2689	U
23	BB	2690	U
23	BB	2714	G
23	BB	2726	A
23	BB	2744	G
23	BB	2748	A
23	BB	2750	A
23	BB	2751	G
23	BB	2752	C
23	BB	2757	A
23	BB	2765	A
23	BB	2778	A
23	BB	2791	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	BB	2797	U
23	BB	2798	U
23	BB	2799	A
23	BB	2800	A
23	BB	2802	G
23	BB	2808	G
23	BB	2820	A
23	BB	2821	A
23	BB	2834	G
23	BB	2836	U
23	BB	2850	A
23	BB	2861	U
23	BB	2866	U
23	BB	2867	G
23	BB	2868	A
23	BB	2872	A
23	BB	2873	A
23	BB	2880	C
23	BB	2883	A
23	BB	2894	G
23	BB	2901	C
23	BB	2903	U
1	CA	9	G
1	CA	14	U
1	CA	15	G
1	CA	32	A
1	CA	39	G
1	CA	47	C
1	CA	48	C
1	CA	51	A
1	CA	52	C
1	CA	55	A
1	CA	61	G
1	CA	62	U
1	CA	67	C
1	CA	68	G
1	CA	71	A
1	CA	72	A
1	CA	76	G
1	CA	78	A
1	CA	83	C
1	CA	85	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	87	C
1	CA	88	U
1	CA	94	G
1	CA	97	G
1	CA	121	U
1	CA	122	G
1	CA	131	A
1	CA	149	A
1	CA	164	G
1	CA	182	A
1	CA	190	A
1	CA	197	A
1	CA	205	A
1	CA	206	C
1	CA	208	U
1	CA	209	U
1	CA	210	C
1	CA	226	G
1	CA	239	U
1	CA	240	G
1	CA	243	A
1	CA	244	U
1	CA	245	U
1	CA	247	G
1	CA	250	A
1	CA	251	G
1	CA	253	A
1	CA	256	U
1	CA	257	G
1	CA	258	G
1	CA	262	A
1	CA	266	G
1	CA	267	C
1	CA	280	C
1	CA	289	G
1	CA	316	C
1	CA	321	A
1	CA	328	C
1	CA	329	A
1	CA	332	G
1	CA	352	C
1	CA	354	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	367	U
1	CA	372	C
1	CA	373	A
1	CA	381	C
1	CA	392	C
1	CA	397	A
1	CA	406	G
1	CA	408	A
1	CA	411	A
1	CA	412	A
1	CA	413	G
1	CA	414	A
1	CA	415	A
1	CA	421	U
1	CA	422	C
1	CA	424	G
1	CA	429	U
1	CA	430	A
1	CA	435	A
1	CA	438	U
1	CA	461	A
1	CA	463	U
1	CA	464	U
1	CA	465	A
1	CA	466	A
1	CA	467	U
1	CA	468	A
1	CA	479	U
1	CA	482	A
1	CA	484	G
1	CA	485	U
1	CA	493	A
1	CA	500	G
1	CA	511	C
1	CA	518	C
1	CA	527	G
1	CA	532	A
1	CA	547	A
1	CA	559	A
1	CA	562	U
1	CA	572	A
1	CA	573	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	576	C
1	CA	577	G
1	CA	633	G
1	CA	639	G
1	CA	653	U
1	CA	665	A
1	CA	688	G
1	CA	700	G
1	CA	703	G
1	CA	721	G
1	CA	724	G
1	CA	731	G
1	CA	733	G
1	CA	747	A
1	CA	755	G
1	CA	777	A
1	CA	781	A
1	CA	787	A
1	CA	793	U
1	CA	794	A
1	CA	812	G
1	CA	815	A
1	CA	817	C
1	CA	818	G
1	CA	819	A
1	CA	828	U
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	914	A
1	CA	926	G
1	CA	934	C
1	CA	935	A
1	CA	960	U
1	CA	961	U
1	CA	964	A
1	CA	969	A
1	CA	971	G
1	CA	974	A

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	976	G
1	CA	977	A
1	CA	978	A
1	CA	983	A
1	CA	984	C
1	CA	993	G
1	CA	1003	G
1	CA	1004	A
1	CA	1010	U
1	CA	1019	A
1	CA	1026	G
1	CA	1029	U
1	CA	1030	U
1	CA	1031	C
1	CA	1033	G
1	CA	1043	G
1	CA	1050	G
1	CA	1053	G
1	CA	1054	C
1	CA	1064	G
1	CA	1065	U
1	CA	1066	C
1	CA	1068	G
1	CA	1085	U
1	CA	1094	G
1	CA	1095	U
1	CA	1101	A
1	CA	1109	C
1	CA	1124	G
1	CA	1125	U
1	CA	1127	G
1	CA	1128	C
1	CA	1136	C
1	CA	1137	C
1	CA	1138	G
1	CA	1139	G
1	CA	1140	C
1	CA	1145	A
1	CA	1158	C
1	CA	1159	U
1	CA	1160	G
1	CA	1168	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1171	A
1	CA	1184	G
1	CA	1196	A
1	CA	1197	A
1	CA	1201	A
1	CA	1202	U
1	CA	1211	U
1	CA	1212	U
1	CA	1213	A
1	CA	1215	G
1	CA	1225	A
1	CA	1226	C
1	CA	1227	A
1	CA	1236	A
1	CA	1237	C
1	CA	1238	A
1	CA	1240	U
1	CA	1241	G
1	CA	1248	A
1	CA	1250	A
1	CA	1256	A
1	CA	1257	A
1	CA	1258	G
1	CA	1270	G
1	CA	1273	C
1	CA	1278	G
1	CA	1280	A
1	CA	1281	C
1	CA	1285	A
1	CA	1287	A
1	CA	1288	A
1	CA	1289	A
1	CA	1297	G
1	CA	1301	U
1	CA	1302	C
1	CA	1305	G
1	CA	1317	C
1	CA	1319	A
1	CA	1320	C
1	CA	1323	G
1	CA	1346	A
1	CA	1348	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	CA	1353	G
1	CA	1363	A
1	CA	1364	U
1	CA	1368	A
1	CA	1379	G
1	CA	1381	U
1	CA	1398	A
1	CA	1410	A
1	CA	1419	G
1	CA	1429	A
1	CA	1432	G
1	CA	1446	A
1	CA	1448	C
1	CA	1452	C
1	CA	1454	G
1	CA	1492	A
1	CA	1503	A
1	CA	1506	U
1	CA	1517	G
1	CA	1519	A
1	CA	1520	C
1	CA	1529	G
1	CA	1530	G
1	CA	1533	C
1	CA	1534	A
22	DA	13	G
22	DA	15	A
22	DA	16	G
22	DA	24	G
22	DA	25	U
22	DA	26	C
22	DA	27	C
22	DA	30	C
22	DA	35	C
22	DA	36	C
22	DA	42	C
22	DA	43	C
22	DA	44	G
22	DA	45	A
22	DA	67	G
22	DA	88	C
22	DA	89	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
22	DA	90	C
22	DA	99	A
22	DA	109	A
23	DB	3	U
23	DB	14	A
23	DB	34	U
23	DB	46	G
23	DB	63	A
23	DB	64	A
23	DB	71	A
23	DB	72	U
23	DB	73	A
23	DB	74	A
23	DB	75	G
23	DB	79	C
23	DB	83	A
23	DB	91	A
23	DB	96	C
23	DB	99	U
23	DB	100	U
23	DB	101	A
23	DB	102	U
23	DB	103	A
23	DB	118	A
23	DB	119	A
23	DB	120	U
23	DB	125	A
23	DB	139	U
23	DB	140	C
23	DB	141	G
23	DB	144	A
23	DB	160	A
23	DB	162	U
23	DB	163	C
23	DB	165	A
23	DB	174	U
23	DB	180	G
23	DB	181	A
23	DB	196	A
23	DB	199	A
23	DB	215	G
23	DB	216	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	221	A
23	DB	222	A
23	DB	230	G
23	DB	233	A
23	DB	248	G
23	DB	250	G
23	DB	255	A
23	DB	265	A
23	DB	266	G
23	DB	267	C
23	DB	277	G
23	DB	278	A
23	DB	281	C
23	DB	282	A
23	DB	284	U
23	DB	287	G
23	DB	299	A
23	DB	302	C
23	DB	311	A
23	DB	323	C
23	DB	329	G
23	DB	330	A
23	DB	331	C
23	DB	333	G
23	DB	343	C
23	DB	346	A
23	DB	353	C
23	DB	354	A
23	DB	363	G
23	DB	371	A
23	DB	372	G
23	DB	386	G
23	DB	387	U
23	DB	395	U
23	DB	396	G
23	DB	411	G
23	DB	412	A
23	DB	424	G
23	DB	451	U
23	DB	455	C
23	DB	456	C
23	DB	457	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	479	A
23	DB	480	A
23	DB	481	G
23	DB	491	G
23	DB	504	A
23	DB	505	A
23	DB	508	A
23	DB	509	C
23	DB	512	G
23	DB	527	C
23	DB	531	C
23	DB	532	A
23	DB	533	G
23	DB	545	U
23	DB	546	U
23	DB	547	A
23	DB	548	G
23	DB	549	G
23	DB	550	C
23	DB	563	A
23	DB	573	U
23	DB	575	A
23	DB	588	U
23	DB	603	A
23	DB	613	A
23	DB	614	A
23	DB	615	U
23	DB	616	A
23	DB	622	G
23	DB	627	A
23	DB	632	A
23	DB	637	A
23	DB	645	C
23	DB	646	U
23	DB	654	A
23	DB	655	A
23	DB	671	C
23	DB	686	U
23	DB	704	G
23	DB	718	A
23	DB	719	C
23	DB	730	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	747	U
23	DB	757	G
23	DB	775	G
23	DB	782	A
23	DB	784	G
23	DB	785	G
23	DB	786	C
23	DB	805	G
23	DB	812	C
23	DB	819	A
23	DB	827	U
23	DB	828	U
23	DB	847	U
23	DB	859	G
23	DB	876	C
23	DB	878	A
23	DB	899	A
23	DB	910	A
23	DB	912	C
23	DB	931	U
23	DB	932	U
23	DB	933	A
23	DB	941	A
23	DB	946	C
23	DB	961	C
23	DB	973	A
23	DB	974	G
23	DB	983	A
23	DB	990	A
23	DB	991	C
23	DB	995	C
23	DB	996	A
23	DB	1005	C
23	DB	1012	U
23	DB	1013	C
23	DB	1022	G
23	DB	1023	U
23	DB	1024	G
23	DB	1025	G
23	DB	1033	U
23	DB	1047	G
23	DB	1048	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	1070	A
23	DB	1088	A
23	DB	1112	G
23	DB	1115	G
23	DB	1116	G
23	DB	1126	A
23	DB	1129	A
23	DB	1132	U
23	DB	1133	A
23	DB	1135	C
23	DB	1136	G
23	DB	1139	G
23	DB	1141	U
23	DB	1142	A
23	DB	1156	A
23	DB	1174	U
23	DB	1176	U
23	DB	1179	G
23	DB	1186	G
23	DB	1195	G
23	DB	1205	A
23	DB	1211	C
23	DB	1212	G
23	DB	1237	A
23	DB	1238	G
23	DB	1242	U
23	DB	1250	G
23	DB	1251	C
23	DB	1253	A
23	DB	1256	G
23	DB	1266	G
23	DB	1271	G
23	DB	1272	A
23	DB	1273	U
23	DB	1275	A
23	DB	1276	A
23	DB	1301	A
23	DB	1302	A
23	DB	1324	G
23	DB	1325	U
23	DB	1330	C
23	DB	1337	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	1341	G
23	DB	1345	C
23	DB	1350	C
23	DB	1352	U
23	DB	1365	A
23	DB	1368	G
23	DB	1379	U
23	DB	1383	A
23	DB	1384	A
23	DB	1386	C
23	DB	1396	U
23	DB	1397	U
23	DB	1416	G
23	DB	1419	A
23	DB	1421	G
23	DB	1427	A
23	DB	1428	C
23	DB	1434	A
23	DB	1453	A
23	DB	1454	C
23	DB	1459	G
23	DB	1460	U
23	DB	1461	C
23	DB	1470	A
23	DB	1476	U
23	DB	1477	A
23	DB	1482	G
23	DB	1493	C
23	DB	1504	A
23	DB	1507	C
23	DB	1508	A
23	DB	1509	A
23	DB	1524	G
23	DB	1535	A
23	DB	1537	G
23	DB	1540	G
23	DB	1552	A
23	DB	1559	U
23	DB	1569	A
23	DB	1578	U
23	DB	1584	U
23	DB	1588	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	1599	U
23	DB	1607	C
23	DB	1608	A
23	DB	1610	A
23	DB	1613	G
23	DB	1616	A
23	DB	1619	G
23	DB	1626	A
23	DB	1634	A
23	DB	1635	A
23	DB	1647	U
23	DB	1648	U
23	DB	1674	G
23	DB	1700	A
23	DB	1701	A
23	DB	1714	U
23	DB	1715	G
23	DB	1724	G
23	DB	1729	U
23	DB	1730	C
23	DB	1731	G
23	DB	1733	G
23	DB	1738	G
23	DB	1758	U
23	DB	1764	C
23	DB	1773	A
23	DB	1781	U
23	DB	1800	C
23	DB	1801	A
23	DB	1816	C
23	DB	1829	A
23	DB	1870	C
23	DB	1871	A
23	DB	1884	G
23	DB	1906	G
23	DB	1913	A
23	DB	1914	C
23	DB	1927	A
23	DB	1929	G
23	DB	1930	G
23	DB	1936	A
23	DB	1938	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	1939	U
23	DB	1940	U
23	DB	1955	U
23	DB	1967	C
23	DB	1970	A
23	DB	1971	U
23	DB	1972	G
23	DB	1991	U
23	DB	1993	U
23	DB	1997	C
23	DB	2022	U
23	DB	2023	C
23	DB	2031	A
23	DB	2033	A
23	DB	2034	U
23	DB	2035	G
23	DB	2043	C
23	DB	2055	C
23	DB	2056	G
23	DB	2060	A
23	DB	2061	G
23	DB	2062	A
23	DB	2069	G
23	DB	2072	C
23	DB	2096	C
23	DB	2099	U
23	DB	2108	A
23	DB	2109	U
23	DB	2110	G
23	DB	2134	A
23	DB	2135	A
23	DB	2138	G
23	DB	2144	G
23	DB	2145	C
23	DB	2147	A
23	DB	2148	G
23	DB	2157	G
23	DB	2180	U
23	DB	2181	U
23	DB	2184	A
23	DB	2188	U
23	DB	2191	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	2193	G
23	DB	2198	A
23	DB	2199	A
23	DB	2203	U
23	DB	2204	G
23	DB	2211	A
23	DB	2212	A
23	DB	2213	U
23	DB	2214	C
23	DB	2225	A
23	DB	2238	G
23	DB	2239	G
23	DB	2266	A
23	DB	2283	C
23	DB	2287	A
23	DB	2297	A
23	DB	2304	G
23	DB	2305	U
23	DB	2307	G
23	DB	2308	G
23	DB	2309	A
23	DB	2311	A
23	DB	2321	U
23	DB	2322	A
23	DB	2325	G
23	DB	2333	A
23	DB	2335	A
23	DB	2337	G
23	DB	2345	G
23	DB	2347	C
23	DB	2361	G
23	DB	2379	G
23	DB	2383	G
23	DB	2385	C
23	DB	2396	G
23	DB	2402	U
23	DB	2406	A
23	DB	2423	U
23	DB	2426	A
23	DB	2429	G
23	DB	2430	A
23	DB	2434	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	2441	U
23	DB	2448	A
23	DB	2472	G
23	DB	2476	A
23	DB	2477	U
23	DB	2491	U
23	DB	2492	U
23	DB	2494	G
23	DB	2501	C
23	DB	2502	G
23	DB	2505	G
23	DB	2506	U
23	DB	2518	A
23	DB	2535	G
23	DB	2554	U
23	DB	2566	A
23	DB	2567	G
23	DB	2572	A
23	DB	2573	C
23	DB	2574	G
23	DB	2577	A
23	DB	2586	U
23	DB	2602	A
23	DB	2609	U
23	DB	2613	U
23	DB	2629	U
23	DB	2639	A
23	DB	2646	C
23	DB	2654	A
23	DB	2682	A
23	DB	2689	U
23	DB	2690	U
23	DB	2714	G
23	DB	2726	A
23	DB	2744	G
23	DB	2748	A
23	DB	2751	G
23	DB	2757	A
23	DB	2765	A
23	DB	2778	A
23	DB	2791	G
23	DB	2797	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	2798	U
23	DB	2799	A
23	DB	2800	A
23	DB	2802	G
23	DB	2808	G
23	DB	2820	A
23	DB	2821	A
23	DB	2834	G
23	DB	2836	U
23	DB	2850	A
23	DB	2861	U
23	DB	2866	U
23	DB	2867	G
23	DB	2868	A
23	DB	2872	A
23	DB	2873	A
23	DB	2880	C
23	DB	2883	A
23	DB	2894	G
23	DB	2903	U

All (78) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	51	A
1	AA	239	U
1	AA	243	A
1	AA	279	A
1	AA	328	C
1	AA	366	A
1	AA	372	C
1	AA	429	U
1	AA	484	G
1	AA	960	U
1	AA	975	A
1	AA	1049	U
1	AA	1054	C
1	AA	1065	U
1	AA	1201	A
1	AA	1302	C
1	AA	1319	A
1	AA	1362	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
1	AA	1397	C
1	AA	1451	U
22	BA	66	A
23	BB	63	A
23	BB	162	U
23	BB	670	A
23	BB	1210	G
23	BB	1301	A
23	BB	1607	C
23	BB	1647	U
23	BB	2062	A
23	BB	2213	U
23	BB	2282	G
23	BB	2324	U
23	BB	2336	A
23	BB	2425	A
23	BB	2756	U
23	BB	2867	G
23	BB	2894	G
1	CA	51	A
1	CA	239	U
1	CA	243	A
1	CA	279	A
1	CA	328	C
1	CA	366	A
1	CA	372	C
1	CA	429	U
1	CA	484	G
1	CA	960	U
1	CA	975	A
1	CA	1049	U
1	CA	1065	U
1	CA	1067	A
1	CA	1201	A
1	CA	1226	C
1	CA	1300	G
1	CA	1301	U
1	CA	1397	C
1	CA	1451	U
22	DA	66	A
23	DB	63	A
23	DB	139	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
23	DB	162	U
23	DB	544	C
23	DB	670	A
23	DB	1126	A
23	DB	1210	G
23	DB	1301	A
23	DB	1607	C
23	DB	2062	A
23	DB	2133	G
23	DB	2213	U
23	DB	2282	G
23	DB	2324	U
23	DB	2336	A
23	DB	2425	A
23	DB	2732	G
23	DB	2756	U
23	DB	2867	G
23	DB	2894	G

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

There are no non-standard protein/DNA/RNA residues in this entry.

## 5.5 Carbohydrates ⓘ

There are no carbohydrates in this entry.

## 5.6 Ligand geometry ⓘ

Of 348 ligands modelled in this entry, 342 are monoatomic - leaving 6 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
53	NMY	AA	1601	-	45,45,45	1.92	13 (28%)	67,67,67	1.16	7 (10%)
55	SCM	AA	1662	-	25,25,25	1.80	9 (36%)	39,39,39	2.28	5 (12%)
53	NMY	BB	3001	-	45,45,45	1.84	13 (28%)	67,67,67	1.21	7 (10%)
53	NMY	CA	1601	-	45,45,45	1.83	13 (28%)	67,67,67	1.17	6 (8%)
55	SCM	CA	1661	-	25,25,25	1.81	9 (36%)	39,39,39	2.31	6 (15%)
53	NMY	DB	3001	-	45,45,45	1.88	13 (28%)	67,67,67	1.23	7 (10%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
53	NMY	AA	1601	-	-	0/18/94/94	0/4/4/4
55	SCM	AA	1662	-	-	0/4/57/57	0/3/3/3
53	NMY	BB	3001	-	-	0/18/94/94	0/4/4/4
53	NMY	CA	1601	-	-	0/18/94/94	0/4/4/4
55	SCM	CA	1661	-	-	0/4/57/57	0/3/3/3
53	NMY	DB	3001	-	-	0/18/94/94	0/4/4/4

All (70) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	CA	1601	NMY	O22-C18	4.70	1.53	1.41
53	AA	1601	NMY	O22-C18	4.63	1.53	1.41
53	BB	3001	NMY	O22-C18	4.61	1.53	1.41
53	DB	3001	NMY	O22-C18	4.60	1.53	1.41
53	AA	1601	NMY	C3-C2	4.45	1.59	1.53
53	AA	1601	NMY	O16-C13	4.41	1.49	1.41
53	BB	3001	NMY	C3-C2	4.39	1.59	1.53
53	DB	3001	NMY	C3-C2	4.37	1.59	1.53
53	CA	1601	NMY	C3-C2	4.17	1.59	1.53
55	CA	1661	SCM	O1B-C5	3.98	1.47	1.43
55	AA	1662	SCM	O1B-C5	3.88	1.47	1.43
53	CA	1601	NMY	O5-C1	3.62	1.51	1.41
53	AA	1601	NMY	O5-C1	3.55	1.50	1.41
53	DB	3001	NMY	O5-C1	3.53	1.50	1.41
53	BB	3001	NMY	O5-C1	3.51	1.50	1.41

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
53	DB	3001	NMY	O16-C13	3.33	1.47	1.41
55	AA	1662	SCM	C3-C2	2.96	1.57	1.51
55	CA	1661	SCM	C3-C2	2.96	1.57	1.51
53	DB	3001	NMY	C23-C22	2.91	1.59	1.51
53	BB	3001	NMY	C23-C22	2.89	1.59	1.51
53	AA	1601	NMY	C23-C22	2.88	1.59	1.51
53	CA	1601	NMY	C23-C22	2.87	1.59	1.51
55	CA	1661	SCM	C9-C8	2.77	1.58	1.53
55	AA	1662	SCM	C9-C8	2.75	1.58	1.53
53	DB	3001	NMY	C19-N23	2.73	1.51	1.47
53	CA	1601	NMY	O16-C13	2.71	1.46	1.41
53	BB	3001	NMY	C19-N23	2.69	1.51	1.47
53	CA	1601	NMY	C19-N23	2.63	1.51	1.47
53	AA	1601	NMY	C19-N23	2.62	1.51	1.47
53	AA	1601	NMY	O22-C22	2.62	1.50	1.44
53	CA	1601	NMY	O22-C22	2.60	1.50	1.44
53	DB	3001	NMY	O22-C22	2.53	1.50	1.44
53	BB	3001	NMY	O22-C22	2.52	1.50	1.44
55	AA	1662	SCM	C12-C7	2.45	1.57	1.52
55	CA	1661	SCM	O2B-C6	2.44	1.46	1.41
55	CA	1661	SCM	C3-C4	2.38	1.54	1.50
53	CA	1601	NMY	O5-C5	2.36	1.50	1.44
55	CA	1661	SCM	C12-C7	2.35	1.56	1.52
55	AA	1662	SCM	O2B-C6	2.33	1.46	1.41
53	BB	3001	NMY	O5-C5	2.32	1.50	1.44
53	BB	3001	NMY	C12-C7	2.32	1.58	1.53
53	AA	1601	NMY	C12-C7	2.32	1.58	1.53
53	AA	1601	NMY	C14-C15	2.30	1.58	1.53
53	CA	1601	NMY	C12-C7	2.27	1.58	1.53
53	CA	1601	NMY	C4-C5	2.27	1.58	1.53
53	AA	1601	NMY	O5-C5	2.26	1.50	1.44
53	DB	3001	NMY	O5-C5	2.26	1.50	1.44
53	BB	3001	NMY	C14-C15	2.26	1.58	1.53
53	DB	3001	NMY	C14-C15	2.25	1.58	1.53
53	CA	1601	NMY	C14-C15	2.25	1.58	1.53
53	BB	3001	NMY	C4-C5	2.23	1.57	1.53
55	AA	1662	SCM	C3-C4	2.21	1.54	1.50
55	CA	1661	SCM	O2B-C12	2.21	1.47	1.43
53	DB	3001	NMY	C4-C5	2.21	1.57	1.53
53	AA	1601	NMY	C4-C5	2.21	1.57	1.53
53	BB	3001	NMY	C6-C5	2.20	1.57	1.51
53	DB	3001	NMY	C12-C7	2.19	1.58	1.53

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
55	AA	1662	SCM	O5-C5	2.18	1.43	1.39
55	AA	1662	SCM	O2B-C12	2.16	1.47	1.43
53	BB	3001	NMY	C20-C21	2.16	1.58	1.52
55	CA	1661	SCM	O5-C5	2.15	1.43	1.39
53	AA	1601	NMY	C6-C5	2.15	1.57	1.51
53	DB	3001	NMY	C20-C21	2.14	1.58	1.52
53	CA	1601	NMY	C6-C5	2.14	1.57	1.51
53	DB	3001	NMY	C6-C5	2.11	1.57	1.51
53	AA	1601	NMY	C20-C21	2.07	1.57	1.52
55	AA	1662	SCM	C8-N8	2.06	1.51	1.47
53	CA	1601	NMY	C20-C21	2.05	1.57	1.52
55	CA	1661	SCM	C10-N10	-2.04	1.44	1.47
53	BB	3001	NMY	O18-C15	2.02	1.48	1.43

All (38) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
55	CA	1661	SCM	O5-C5-O1B	-8.92	103.08	111.54
55	AA	1662	SCM	O5-C5-O1B	-8.67	103.32	111.54
55	AA	1662	SCM	C1M-N10-C10	-7.66	107.61	113.65
55	CA	1661	SCM	C1M-N10-C10	-7.61	107.64	113.65
53	DB	3001	NMY	O11-C13-O16	4.38	115.82	111.57
55	CA	1661	SCM	C2M-C2-C3	-4.33	108.15	113.66
55	AA	1662	SCM	C2M-C2-C3	-4.22	108.28	113.66
55	CA	1661	SCM	O1-C2-C3	4.17	113.74	108.49
55	AA	1662	SCM	O1-C2-C3	4.12	113.68	108.49
53	BB	3001	NMY	O18-C18-C19	3.22	114.44	108.08
53	CA	1601	NMY	O18-C18-C19	3.20	114.41	108.08
53	CA	1601	NMY	O22-C22-C23	3.12	111.91	105.97
53	AA	1601	NMY	O22-C22-C23	3.05	111.79	105.97
53	AA	1601	NMY	O18-C18-C19	3.05	114.11	108.08
53	DB	3001	NMY	O18-C18-C19	3.05	114.10	108.08
53	DB	3001	NMY	O22-C22-C23	3.05	111.77	105.97
53	BB	3001	NMY	O22-C22-C23	3.01	111.69	105.97
53	CA	1601	NMY	C18-O22-C22	2.96	119.45	113.73
53	BB	3001	NMY	O11-C13-O16	2.95	114.43	111.57
53	AA	1601	NMY	C18-O22-C22	2.93	119.39	113.73
55	CA	1661	SCM	O1B-C5-C4	2.92	111.97	102.26
55	AA	1662	SCM	O1B-C5-C4	2.89	111.87	102.26
53	BB	3001	NMY	C18-O22-C22	2.85	119.24	113.73
53	DB	3001	NMY	C18-O22-C22	2.84	119.23	113.73
53	BB	3001	NMY	O11-C13-C14	2.77	112.44	107.50

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	AA	1601	NMY	O11-C13-C14	2.70	112.32	107.50
53	CA	1601	NMY	O11-C13-C14	2.64	112.21	107.50
53	DB	3001	NMY	O11-C13-C14	2.56	112.07	107.50
53	BB	3001	NMY	O5-C5-C6	2.50	110.74	105.97
53	AA	1601	NMY	O5-C5-C6	2.47	110.68	105.97
53	DB	3001	NMY	O5-C5-C6	2.46	110.66	105.97
53	CA	1601	NMY	O5-C5-C6	2.43	110.60	105.97
53	DB	3001	NMY	O14-C14-C15	2.42	118.31	111.20
53	BB	3001	NMY	O14-C14-C15	2.36	118.14	111.20
53	AA	1601	NMY	O14-C14-C15	2.20	117.67	111.20
53	CA	1601	NMY	O14-C14-C15	2.13	117.45	111.20
55	CA	1661	SCM	C3-C4-C5	2.04	118.77	115.58
53	AA	1601	NMY	O11-C13-O16	-2.04	109.60	111.57

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

## 5.7 Other polymers ⓘ

There are no such residues in this entry.

## 5.8 Polymer linkage issues

There are no chain breaks in this entry.

## 6 Fit of model and data ⓘ

### 6.1 Protein, DNA and RNA chains ⓘ

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

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
1	AA	1530/1542 (99%)	-0.70	10 (0%) 84 56	16, 81, 159, 180	0
1	CA	1530/1542 (99%)	-0.64	2 (0%) 93 84	9, 57, 133, 180	0
2	AC	206/232 (88%)	0.72	13 (6%) 19 8	9, 76, 136, 180	0
2	CC	206/232 (88%)	0.47	6 (2%) 49 23	7, 75, 127, 180	0
3	AD	205/205 (100%)	0.94	28 (13%) 4 3	24, 92, 157, 180	0
3	CD	205/205 (100%)	0.76	18 (8%) 10 6	10, 64, 139, 180	0
4	AE	150/166 (90%)	0.66	13 (8%) 10 6	11, 74, 139, 176	0
4	CE	150/166 (90%)	0.94	20 (13%) 4 3	5, 61, 132, 180	0
5	AF	100/135 (74%)	1.10	16 (16%) 3 2	11, 86, 144, 172	0
5	CF	100/135 (74%)	0.95	13 (13%) 4 3	7, 83, 173, 180	0
6	AG	150/178 (84%)	0.40	9 (6%) 21 9	23, 104, 153, 180	0
6	CG	152/178 (85%)	0.34	4 (2%) 53 24	27, 90, 147, 180	0
7	AH	129/129 (100%)	1.05	25 (19%) 2 2	13, 88, 155, 180	0
7	CH	129/129 (100%)	0.66	7 (5%) 25 10	5, 61, 127, 180	0
8	AI	127/129 (98%)	0.49	12 (9%) 9 5	36, 91, 150, 180	0
8	CI	127/129 (98%)	0.46	4 (3%) 47 22	20, 92, 148, 180	0
9	AJ	98/103 (95%)	0.61	3 (3%) 47 22	22, 94, 151, 180	0
9	CJ	98/103 (95%)	0.74	7 (7%) 16 7	17, 89, 156, 180	0
10	AK	117/128 (91%)	0.34	2 (1%) 67 34	14, 67, 125, 180	0
10	CK	117/128 (91%)	0.36	4 (3%) 43 19	5, 56, 125, 178	0
11	AL	123/123 (100%)	0.59	8 (6%) 18 8	19, 80, 133, 180	0
11	CL	123/123 (100%)	0.35	4 (3%) 44 20	7, 51, 135, 180	0
12	AM	114/117 (97%)	1.02	22 (19%) 2 2	56, 120, 166, 180	0
12	CM	113/117 (96%)	0.90	18 (15%) 3 2	38, 109, 165, 180	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
13	AP	82/82 (100%)	1.90	23 (28%) 1 1	38, 91, 152, 180	0
13	CP	80/82 (97%)	0.72	8 (10%) 8 5	6, 63, 141, 180	0
14	AQ	80/83 (96%)	0.97	13 (16%) 2 2	37, 99, 151, 180	0
14	CQ	81/83 (97%)	0.70	6 (7%) 14 7	17, 71, 129, 180	0
15	AR	55/74 (74%)	0.62	2 (3%) 41 18	16, 76, 149, 180	0
15	CR	55/74 (74%)	0.56	4 (7%) 15 7	21, 66, 126, 180	0
16	AS	79/91 (86%)	1.54	27 (34%) 1 1	55, 121, 180, 180	0
16	CS	80/91 (87%)	1.39	23 (28%) 1 1	70, 109, 174, 180	0
17	AT	85/86 (98%)	0.23	2 (2%) 56 26	49, 106, 179, 180	0
17	CT	85/86 (98%)	0.21	2 (2%) 56 26	19, 65, 143, 159	0
18	AB	218/240 (90%)	0.43	10 (4%) 31 14	22, 94, 153, 180	0
18	CB	218/240 (90%)	0.66	18 (8%) 11 6	19, 102, 160, 180	0
19	AU	51/70 (72%)	0.58	3 (5%) 22 9	29, 101, 151, 180	0
19	CU	51/70 (72%)	0.77	6 (11%) 5 4	24, 113, 155, 180	0
20	AO	88/89 (98%)	0.62	4 (4%) 32 14	18, 83, 137, 179	0
20	CO	88/89 (98%)	0.31	2 (2%) 57 27	7, 60, 118, 161	0
21	AN	96/100 (96%)	0.78	8 (8%) 11 6	13, 98, 151, 180	0
21	CN	96/100 (96%)	0.99	19 (19%) 2 2	12, 81, 150, 180	0
22	BA	117/120 (97%)	-0.23	3 (2%) 53 24	35, 74, 117, 167	0
22	DA	117/120 (97%)	-0.47	1 (0%) 81 51	36, 86, 127, 180	0
23	BB	2841/2904 (97%)	-0.40	28 (0%) 79 47	6, 54, 148, 180	0
23	DB	2841/2904 (97%)	-0.42	16 (0%) 86 59	5, 48, 146, 180	0
24	BI	141/141 (100%)	2.65	81 (57%) 0 1	95, 172, 180, 180	0
24	DI	141/141 (100%)	1.88	51 (36%) 1 1	91, 179, 180, 180	0
25	BC	271/272 (99%)	0.88	35 (12%) 4 3	5, 50, 103, 180	0
25	DC	271/272 (99%)	0.68	18 (6%) 18 8	5, 40, 100, 146	0
26	BD	209/209 (100%)	0.34	8 (3%) 38 17	7, 68, 146, 180	0
26	DD	209/209 (100%)	0.93	28 (13%) 4 3	5, 49, 129, 180	0
27	BK	121/123 (98%)	0.88	11 (9%) 9 5	7, 69, 139, 180	0
27	DK	121/123 (98%)	0.87	10 (8%) 11 6	5, 41, 118, 180	0
28	BP	114/114 (100%)	0.83	9 (7%) 13 7	26, 85, 142, 175	0

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
28	DP	114/114 (100%)	0.65	5 (4%) 33 14	5, 49, 103, 145	0
29	BE	201/201 (100%)	1.05	39 (19%) 2 2	5, 63, 143, 180	0
29	DE	201/201 (100%)	0.57	15 (7%) 14 7	5, 70, 144, 180	0
30	BY	58/58 (100%)	0.62	5 (8%) 11 6	20, 62, 140, 180	0
30	DY	58/58 (100%)	0.22	0 100 100	5, 66, 116, 142	0
31	B0	56/56 (100%)	0.34	2 (3%) 41 18	20, 80, 163, 180	0
31	D0	56/56 (100%)	0.32	3 (5%) 25 10	12, 58, 116, 165	0
32	B4	38/38 (100%)	0.48	1 (2%) 53 24	5, 75, 120, 137	0
32	D4	38/38 (100%)	0.13	0 100 100	7, 60, 114, 135	0
33	B1	50/54 (92%)	1.22	6 (12%) 5 4	15, 70, 135, 180	0
33	D1	50/54 (92%)	0.69	4 (8%) 12 7	20, 69, 142, 157	0
34	B3	64/64 (100%)	0.65	4 (6%) 19 8	13, 50, 102, 148	0
34	D3	64/64 (100%)	0.55	2 (3%) 47 22	5, 42, 88, 133	0
35	BV	94/94 (100%)	0.72	6 (6%) 19 8	21, 89, 143, 180	0
35	DV	94/94 (100%)	0.55	9 (9%) 8 5	9, 96, 151, 169	0
36	B2	46/46 (100%)	0.58	3 (6%) 18 8	5, 43, 120, 143	0
36	D2	46/46 (100%)	0.42	1 (2%) 59 28	11, 43, 103, 159	0
37	BL	143/144 (99%)	0.48	7 (4%) 28 12	8, 67, 133, 172	0
37	DL	143/144 (99%)	0.80	21 (14%) 3 3	5, 56, 119, 164	0
38	BM	136/136 (100%)	0.81	15 (11%) 6 4	9, 59, 117, 170	0
38	DM	136/136 (100%)	0.70	13 (9%) 8 5	7, 60, 116, 137	0
39	BX	63/63 (100%)	1.23	14 (22%) 1 2	6, 86, 135, 180	0
39	DX	63/63 (100%)	0.74	6 (9%) 8 5	38, 106, 178, 180	0
40	BH	149/149 (100%)	2.55	87 (58%) 0 1	26, 134, 177, 180	0
40	DH	149/149 (100%)	1.30	36 (24%) 1 2	11, 112, 162, 180	0
41	BJ	142/142 (100%)	0.65	11 (7%) 13 7	5, 74, 127, 180	0
41	DJ	142/142 (100%)	0.87	15 (10%) 7 4	5, 59, 125, 180	0
42	BN	120/127 (94%)	0.51	3 (2%) 54 25	20, 65, 126, 180	0
42	DN	120/127 (94%)	0.49	6 (5%) 28 12	5, 43, 103, 180	0
43	BO	116/117 (99%)	1.10	26 (22%) 1 2	12, 77, 140, 180	0
43	DO	116/117 (99%)	0.60	6 (5%) 26 11	32, 85, 152, 180	0

*Continued on next page...*



Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å <sup>2</sup> )	Q<0.9
44	BQ	117/117 (100%)	0.11	4 (3%) 43 19	6, 57, 133, 175	0
44	DQ	117/117 (100%)	0.43	4 (3%) 43 19	5, 52, 112, 161	0
45	BS	110/110 (100%)	0.75	7 (6%) 19 8	5, 50, 125, 180	0
45	DS	110/110 (100%)	0.97	13 (11%) 5 4	5, 52, 131, 180	0
46	BU	102/103 (99%)	0.99	16 (15%) 3 2	5, 70, 146, 180	0
46	DU	102/103 (99%)	0.29	0 100 100	22, 97, 158, 180	0
47	BF	178/178 (100%)	1.43	45 (25%) 1 2	52, 123, 180, 180	0
47	DF	178/178 (100%)	1.87	72 (40%) 1 1	33, 110, 176, 180	0
48	BG	176/176 (100%)	0.84	19 (10%) 6 4	26, 104, 165, 180	0
48	DG	176/176 (100%)	1.05	34 (19%) 2 2	26, 98, 169, 180	0
49	BR	103/103 (100%)	0.70	9 (8%) 10 6	11, 76, 142, 180	0
49	DR	103/103 (100%)	0.75	8 (7%) 13 7	13, 79, 144, 180	0
50	BT	93/100 (93%)	1.04	9 (9%) 8 5	16, 75, 150, 180	0
50	DT	93/100 (93%)	1.18	24 (25%) 1 2	13, 79, 154, 180	0
51	BZ	77/78 (98%)	0.95	10 (12%) 4 3	5, 53, 122, 137	0
51	DZ	77/78 (98%)	0.45	5 (6%) 18 8	5, 47, 124, 144	0
52	BW	79/84 (94%)	1.09	11 (13%) 4 3	8, 74, 121, 180	0
52	DW	79/84 (94%)	0.60	6 (7%) 14 7	9, 77, 144, 164	0
All	All	20417/21046 (97%)	0.24	1414 (6%) 17 7	5, 69, 155, 180	0

All (1414) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	AP	82	ALA	17.2
13	AP	81	ALA	12.0
23	BB	140	C	11.6
24	BI	49	GLU	10.5
13	AP	80	LYS	9.9
23	BB	136	G	9.6
24	BI	60	VAL	9.2
24	BI	48	ILE	9.2
24	BI	52	LEU	9.2
13	AP	47	GLU	8.9
33	B1	52	LYS	8.8
8	CI	129	ARG	8.8
33	D1	52	LYS	8.4

Continued on next page...



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
23	DB	140	C	7.8
47	DF	139	GLU	7.4
23	BB	139	U	7.3
40	BH	80	ILE	7.0
24	BI	51	GLY	7.0
3	AD	178	GLU	6.9
52	BW	84	GLU	6.9
3	AD	177	MET	6.8
23	BB	1728	C	6.8
47	DF	75	GLY	6.7
13	AP	54	LEU	6.7
24	DI	137	LEU	6.6
16	AS	65	MET	6.6
24	BI	97	VAL	6.6
24	BI	14	ALA	6.6
40	BH	142	VAL	6.5
24	DI	99	LYS	6.5
40	BH	132	PHE	6.5
47	BF	139	GLU	6.5
51	BZ	76	GLU	6.4
15	AR	19	GLU	6.4
24	BI	50	LYS	6.4
40	BH	130	VAL	6.3
39	DX	63	ALA	6.2
16	AS	40	PHE	6.2
40	BH	128	HIS	6.2
16	CS	65	MET	6.2
24	BI	53	PRO	6.1
24	BI	141	ASP	6.1
47	DF	10	GLU	6.1
13	AP	52	LEU	6.0
5	CF	90	MET	6.0
1	AA	86	G	6.0
23	BB	1730	C	6.0
23	BB	137	U	5.9
40	BH	88	GLY	5.9
23	BB	1727	C	5.9
24	BI	3	LYS	5.8
24	BI	11	GLN	5.8
41	BJ	142	ILE	5.8
50	BT	91	GLN	5.8
47	DF	82	TYR	5.8

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
7	AH	129	ALA	5.8
38	BM	136	MET	5.7
24	BI	17	ALA	5.7
16	AS	41	PRO	5.7
40	DH	140	ALA	5.6
24	DI	83	ALA	5.6
40	BH	146	VAL	5.6
24	BI	54	ILE	5.6
40	BH	133	GLN	5.5
8	AI	129	ARG	5.4
40	BH	117	LEU	5.4
40	BH	131	SER	5.4
23	BB	1175	A	5.4
51	BZ	78	TYR	5.4
40	BH	84	ALA	5.3
8	AI	57	VAL	5.3
40	BH	45	GLU	5.3
47	DF	140	ILE	5.3
40	BH	48	GLU	5.3
24	BI	47	SER	5.3
24	BI	66	PHE	5.3
22	DA	88	C	5.3
24	BI	68	PHE	5.3
24	DI	84	GLY	5.2
47	DF	44	ALA	5.2
40	BH	92	GLY	5.2
49	BR	46	GLU	5.2
9	CJ	102	LEU	5.2
50	DT	5	GLU	5.2
24	BI	2	LYS	5.1
24	DI	138	VAL	5.1
52	DW	84	GLU	5.1
24	DI	85	ILE	5.1
40	BH	122	LEU	5.1
51	DZ	78	TYR	5.1
48	DG	56	GLY	5.0
24	DI	80	LYS	5.0
23	BB	2309	A	5.0
24	DI	7	TYR	5.0
24	BI	140	GLU	5.0
24	DI	100	ILE	4.9
37	BL	144	GLU	4.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
48	DG	57	TYR	4.9
40	BH	124	THR	4.9
40	BH	123	ARG	4.9
40	BH	87	GLU	4.9
47	BF	44	ALA	4.9
48	BG	42	VAL	4.9
21	CN	22	LYS	4.8
41	DJ	20	ALA	4.8
40	BH	85	GLY	4.8
47	DF	79	ARG	4.8
40	BH	93	SER	4.8
16	CS	40	PHE	4.8
24	BI	45	THR	4.7
24	BI	79	LEU	4.7
29	DE	155	GLU	4.7
24	BI	58	ILE	4.7
23	DB	2309	A	4.7
47	DF	43	ILE	4.7
50	BT	5	GLU	4.7
47	BF	142	TYR	4.7
26	DD	1	MET	4.7
45	DS	110	ARG	4.6
40	BH	116	ARG	4.6
40	BH	115	VAL	4.6
12	AM	82	LEU	4.6
16	AS	73	PHE	4.6
24	DI	6	ALA	4.6
40	BH	127	GLU	4.6
40	BH	101	ASP	4.6
24	DI	82	ALA	4.6
24	BI	59	THR	4.6
47	DF	174	PHE	4.6
23	DB	1730	C	4.5
30	BY	58	GLU	4.5
47	DF	142	TYR	4.5
52	BW	45	HIS	4.5
3	AD	159	GLU	4.5
16	AS	64	GLU	4.5
40	DH	141	LYS	4.5
24	DI	98	GLY	4.5
40	BH	76	GLU	4.5
26	DD	32	ASN	4.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
40	BH	102	ALA	4.5
33	B1	51	ALA	4.4
47	DF	55	ASP	4.4
24	BI	98	GLY	4.4
47	DF	134	GLN	4.4
12	AM	55	LEU	4.4
29	BE	153	LEU	4.4
49	DR	46	GLU	4.4
50	DT	3	ARG	4.4
9	AJ	89	ARG	4.4
40	DH	110	VAL	4.4
12	AM	56	ARG	4.4
29	BE	143	LEU	4.4
3	CD	27	ILE	4.4
29	BE	11	ALA	4.3
40	BH	140	ALA	4.3
40	BH	139	PHE	4.3
40	BH	103	VAL	4.3
24	BI	29	GLN	4.3
47	BF	103	ILE	4.3
40	BH	114	GLU	4.3
18	CB	68	PHE	4.3
46	BU	51	LEU	4.3
1	CA	1534	A	4.3
24	BI	108	ILE	4.3
40	BH	94	ILE	4.3
40	BH	60	GLU	4.3
40	BH	141	LYS	4.3
43	BO	51	ALA	4.3
47	BF	43	ILE	4.3
2	CC	165	GLU	4.3
24	DI	125	THR	4.3
24	BI	18	ASN	4.3
38	BM	33	LEU	4.3
13	CP	47	GLU	4.3
26	DD	77	ARG	4.3
23	BB	1731	G	4.2
25	DC	79	ARG	4.2
38	BM	32	GLY	4.2
3	AD	145	ARG	4.2
26	BD	186	LEU	4.2
21	CN	30	ILE	4.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
23	BB	1726	C	4.2
24	BI	15	GLY	4.2
23	DB	1175	A	4.2
8	AI	56	MET	4.2
47	DF	3	LEU	4.2
49	DR	48	LYS	4.2
24	DI	53	PRO	4.2
35	BV	57	TYR	4.1
24	BI	6	ALA	4.1
16	AS	29	PRO	4.1
40	BH	145	ASN	4.1
48	DG	42	VAL	4.1
9	CJ	90	LEU	4.1
18	CB	160	LEU	4.1
52	DW	65	LYS	4.1
21	AN	40	ARG	4.1
24	BI	5	GLN	4.1
40	BH	86	ASP	4.1
47	DF	77	LYS	4.1
29	BE	188	MET	4.1
33	D1	51	ALA	4.0
40	DH	142	VAL	4.0
47	BF	140	ILE	4.0
16	CS	63	ASP	4.0
52	DW	45	HIS	4.0
39	BX	5	GLU	4.0
40	BH	144	VAL	4.0
13	CP	80	LYS	4.0
3	AD	27	ILE	4.0
38	DM	1	MET	4.0
49	BR	48	LYS	4.0
47	BF	127	TYR	4.0
3	AD	104	MET	4.0
6	CG	152	HIS	4.0
40	BH	57	LYS	4.0
48	DG	44	HIS	4.0
49	DR	50	GLY	4.0
47	BF	112	ASP	4.0
7	CH	62	LEU	4.0
40	DH	81	ALA	4.0
8	AI	50	PRO	4.0
46	BU	52	ASN	4.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
4	CE	12	GLU	4.0
48	DG	40	VAL	4.0
37	DL	123	ARG	3.9
16	AS	43	MET	3.9
12	AM	78	ARG	3.9
37	DL	82	LEU	3.9
12	CM	44	ILE	3.9
40	DH	99	ILE	3.9
51	BZ	71	LEU	3.9
25	BC	22	GLU	3.9
43	BO	106	LEU	3.9
21	CN	46	LYS	3.9
18	AB	42	LEU	3.9
24	DI	94	LYS	3.9
38	BM	103	TYR	3.9
16	CS	29	PRO	3.9
42	BN	120	GLU	3.9
47	DF	78	ILE	3.9
40	BH	46	PHE	3.9
16	CS	61	VAL	3.9
30	BY	1	ALA	3.9
29	BE	155	GLU	3.8
3	AD	106	PHE	3.8
39	DX	62	GLY	3.8
6	CG	78	ARG	3.8
16	AS	26	ASP	3.8
41	DJ	44	TYR	3.8
24	DI	136	GLY	3.8
24	BI	109	ALA	3.8
50	DT	11	LEU	3.8
39	BX	62	GLY	3.8
24	BI	34	ILE	3.8
24	BI	19	PRO	3.8
43	DO	115	LEU	3.8
18	CB	161	PHE	3.8
23	DB	645	C	3.7
47	BF	174	PHE	3.7
47	BF	35	LEU	3.7
19	AU	3	ILE	3.7
12	AM	52	ILE	3.7
26	DD	33	ARG	3.7
39	BX	14	LEU	3.7

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
16	CS	39	ILE	3.7
24	BI	1	ALA	3.7
12	CM	3	ILE	3.7
40	BH	27	ARG	3.7
40	DH	149	GLU	3.7
23	BB	613	A	3.7
2	AC	156	LEU	3.7
16	AS	39	ILE	3.7
40	BH	89	LYS	3.6
47	DF	28	PRO	3.6
24	BI	7	TYR	3.6
49	BR	3	ALA	3.6
8	CI	40	ARG	3.6
12	AM	51	GLN	3.6
40	BH	119	ASN	3.6
43	BO	110	ALA	3.6
12	CM	82	LEU	3.6
38	DM	32	GLY	3.6
33	D1	26	LYS	3.6
40	BH	90	LEU	3.6
43	BO	117	PHE	3.6
24	BI	16	MET	3.6
29	BE	119	ILE	3.6
50	DT	91	GLN	3.6
16	AS	60	PHE	3.6
40	BH	1	MET	3.6
24	DI	49	GLU	3.6
24	DI	79	LEU	3.6
3	AD	153	ARG	3.6
4	CE	158	LYS	3.6
1	AA	85	U	3.6
47	DF	169	LEU	3.6
40	BH	134	VAL	3.6
51	BZ	74	ARG	3.6
29	BE	124	PHE	3.5
2	AC	74	ILE	3.5
24	DI	52	LEU	3.5
50	DT	12	ARG	3.5
18	CB	56	LEU	3.5
23	BB	715	A	3.5
29	BE	14	VAL	3.5
13	CP	54	LEU	3.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
38	DM	60	GLN	3.5
40	DH	82	SER	3.5
24	BI	78	LEU	3.5
33	B1	15	GLY	3.5
27	BK	84	CYS	3.5
23	BB	62	U	3.5
39	BX	13	GLU	3.5
42	DN	83	LEU	3.5
47	DF	58	ALA	3.5
29	DE	188	MET	3.5
37	BL	124	GLY	3.5
37	DL	2	ARG	3.5
45	DS	70	LYS	3.5
50	DT	72	GLN	3.5
7	AH	128	VAL	3.5
47	DF	173	ASP	3.5
47	DF	127	TYR	3.5
47	BF	79	ARG	3.5
23	BB	1176	U	3.4
43	BO	26	LEU	3.4
12	CM	1	ALA	3.4
16	CS	30	LEU	3.4
48	DG	43	LYS	3.4
24	DI	9	LYS	3.4
36	D2	46	LYS	3.4
40	DH	51	ARG	3.4
47	DF	149	ARG	3.4
14	AQ	7	LEU	3.4
24	DI	95	ASP	3.4
21	AN	20	PHE	3.4
5	AF	35	LYS	3.4
40	BH	148	ALA	3.4
12	CM	56	ARG	3.4
47	BF	129	MET	3.4
31	D0	56	LYS	3.4
13	AP	6	LEU	3.4
21	CN	40	ARG	3.4
25	DC	109	LEU	3.4
11	AL	24	GLU	3.4
39	BX	63	ALA	3.4
29	DE	124	PHE	3.4
47	BF	10	GLU	3.4

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
24	BI	27	LEU	3.4
12	AM	38	ILE	3.4
23	BB	1729	U	3.4
47	DF	146	ASP	3.4
23	BB	645	C	3.4
23	DB	2306	C	3.4
48	DG	114	HIS	3.4
34	B3	60	CYS	3.4
6	CG	153	TYR	3.3
28	BP	75	THR	3.3
52	BW	83	ALA	3.3
13	AP	46	LYS	3.3
28	BP	86	LYS	3.3
48	DG	153	PRO	3.3
48	DG	41	GLU	3.3
52	BW	64	GLY	3.3
7	AH	126	CYS	3.3
16	CS	41	PRO	3.3
24	BI	38	CYS	3.3
24	DI	48	ILE	3.3
24	DI	58	ILE	3.3
5	AF	62	MET	3.3
4	CE	37	VAL	3.3
33	B1	16	THR	3.3
35	BV	83	LYS	3.3
10	CK	13	LYS	3.3
47	DF	24	VAL	3.3
18	CB	163	ILE	3.3
7	CH	129	ALA	3.3
28	BP	47	ILE	3.3
50	BT	4	GLU	3.3
51	BZ	77	LYS	3.3
7	AH	60	LEU	3.3
52	BW	52	CYS	3.3
47	DF	7	TYR	3.3
37	DL	85	VAL	3.3
50	DT	42	GLU	3.3
18	AB	192	PRO	3.3
24	DI	103	ALA	3.3
47	BF	37	MET	3.3
24	DI	70	THR	3.3
6	AG	4	ARG	3.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
25	BC	70	LYS	3.3
5	CF	4	TYR	3.3
3	CD	176	LYS	3.3
47	DF	172	PHE	3.3
38	BM	1	MET	3.2
24	BI	112	LYS	3.2
49	DR	37	GLU	3.2
47	BF	82	TYR	3.2
40	DH	130	VAL	3.2
41	DJ	140	LEU	3.2
46	BU	86	PHE	3.2
40	BH	126	GLY	3.2
2	AC	167	TYR	3.2
47	BF	131	VAL	3.2
8	AI	20	ILE	3.2
31	B0	54	ILE	3.2
16	CS	26	ASP	3.2
24	BI	41	PHE	3.2
25	BC	131	MET	3.2
39	DX	24	GLU	3.2
47	DF	21	TYR	3.2
24	DI	139	VAL	3.2
38	BM	105	MET	3.2
16	AS	28	LYS	3.2
21	CN	34	ASN	3.2
12	AM	79	LEU	3.2
35	DV	57	TYR	3.2
47	DF	136	ILE	3.2
26	BD	111	GLY	3.2
26	DD	87	GLY	3.2
13	CP	45	GLU	3.2
24	DI	107	GLU	3.2
45	DS	1	MET	3.2
24	BI	61	TYR	3.2
40	BH	56	ALA	3.2
18	CB	216	VAL	3.2
18	CB	213	LEU	3.2
16	CS	20	LYS	3.2
34	B3	22	LYS	3.2
24	DI	78	LEU	3.2
33	B1	49	LYS	3.2
24	BI	13	ALA	3.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
44	DQ	117	ALA	3.2
15	CR	19	GLU	3.2
4	AE	114	LEU	3.2
40	BH	68	ARG	3.2
5	AF	78	PHE	3.2
24	BI	4	VAL	3.2
11	CL	13	ARG	3.2
26	DD	52	THR	3.2
2	AC	41	TYR	3.2
40	BH	120	GLY	3.2
25	DC	1	ALA	3.2
48	BG	40	VAL	3.1
49	BR	50	GLY	3.1
19	CU	43	GLU	3.1
25	BC	72	GLY	3.1
16	CS	19	GLU	3.1
47	DF	103	ILE	3.1
11	AL	52	CYS	3.1
48	DG	55	ASP	3.1
4	CE	55	VAL	3.1
24	BI	85	ILE	3.1
3	CD	108	ALA	3.1
40	DH	111	ALA	3.1
24	BI	8	VAL	3.1
47	DF	37	MET	3.1
12	CM	55	LEU	3.1
21	CN	21	ALA	3.1
26	DD	75	ALA	3.1
47	DF	74	ALA	3.1
25	DC	198	GLU	3.1
13	AP	5	ARG	3.1
11	AL	11	ARG	3.1
29	DE	108	ILE	3.1
40	BH	121	VAL	3.1
5	AF	66	ALA	3.1
13	AP	48	GLU	3.1
7	AH	81	GLY	3.1
24	DI	5	GLN	3.1
29	DE	148	ILE	3.1
48	DG	54	ARG	3.1
4	CE	13	LYS	3.1
38	DM	33	LEU	3.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
43	BO	113	ALA	3.1
13	AP	51	ARG	3.1
47	BF	111	ARG	3.1
25	DC	78	GLU	3.1
1	AA	78	A	3.1
47	BF	151	LEU	3.1
48	DG	88	LEU	3.1
24	BI	57	VAL	3.1
50	DT	6	ARG	3.1
47	DF	84	ILE	3.1
26	DD	30	GLU	3.1
47	DF	33	ILE	3.1
2	AC	151	GLU	3.1
44	BQ	88	GLU	3.1
3	CD	107	GLY	3.1
7	AH	110	MET	3.1
40	BH	135	HIS	3.1
40	DH	122	LEU	3.1
24	DI	54	ILE	3.0
16	AS	42	ASN	3.0
27	BK	8	LEU	3.0
31	B0	56	LYS	3.0
6	AG	58	LEU	3.0
50	DT	87	LEU	3.0
10	CK	18	GLY	3.0
23	BB	2306	C	3.0
7	AH	47	ASP	3.0
7	AH	74	ILE	3.0
47	DF	171	ALA	3.0
47	BF	71	LYS	3.0
23	DB	1729	U	3.0
24	BI	96	LYS	3.0
3	AD	103	ARG	3.0
47	BF	75	GLY	3.0
50	DT	4	GLU	3.0
20	AO	59	MET	3.0
12	AM	113	LYS	3.0
47	DF	114	ARG	3.0
43	DO	61	GLN	3.0
25	DC	62	ARG	3.0
14	AQ	36	PHE	3.0
3	CD	177	MET	3.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
39	DX	23	ARG	3.0
29	BE	150	THR	3.0
41	BJ	20	ALA	3.0
49	BR	12	HIS	3.0
24	BI	37	PHE	3.0
43	BO	115	LEU	3.0
51	BZ	72	ARG	3.0
43	BO	29	HIS	3.0
4	CE	10	LEU	3.0
8	AI	48	ARG	3.0
8	AI	51	LEU	3.0
27	BK	7	MET	3.0
25	BC	167	ASP	3.0
11	CL	123	ALA	3.0
16	CS	43	MET	3.0
48	BG	176	LYS	3.0
4	AE	85	LYS	3.0
25	BC	17	LYS	3.0
48	BG	147	LEU	3.0
7	AH	127	TYR	2.9
5	AF	56	LYS	2.9
41	BJ	64	VAL	2.9
48	DG	49	LEU	2.9
18	AB	26	MET	2.9
23	BB	138	U	2.9
24	BI	12	VAL	2.9
26	DD	48	ILE	2.9
40	BH	99	ILE	2.9
21	CN	31	SER	2.9
45	BS	51	LEU	2.9
47	BF	90	LEU	2.9
26	DD	49	GLN	2.9
28	BP	71	ARG	2.9
37	DL	77	ILE	2.9
52	BW	40	ARG	2.9
8	AI	128	LYS	2.9
11	AL	13	ARG	2.9
21	CN	23	ARG	2.9
11	AL	123	ALA	2.9
16	AS	48	ILE	2.9
43	BO	92	PHE	2.9
47	BF	172	PHE	2.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
40	BH	110	VAL	2.9
50	DT	50	LEU	2.9
5	CF	59	TYR	2.9
24	DI	96	LYS	2.9
29	BE	152	GLU	2.9
33	D1	27	ARG	2.9
23	BB	2145	C	2.9
23	DB	2310	C	2.9
43	BO	37	ALA	2.9
50	DT	35	ALA	2.9
39	BX	57	LEU	2.9
25	BC	168	GLY	2.9
40	BH	77	THR	2.9
15	CR	63	TYR	2.9
29	BE	1	MET	2.9
26	DD	4	LEU	2.9
16	AS	61	VAL	2.9
40	DH	107	GLY	2.9
47	DF	27	VAL	2.9
40	DH	109	GLU	2.9
41	BJ	63	ALA	2.9
1	AA	87	C	2.9
43	BO	99	TYR	2.9
13	CP	52	LEU	2.9
45	BS	103	ILE	2.9
14	AQ	81	ALA	2.9
24	DI	101	SER	2.9
38	BM	111	GLU	2.9
40	BH	98	ASP	2.9
24	BI	40	ALA	2.9
3	AD	151	GLN	2.9
23	BB	2147	A	2.9
38	DM	136	MET	2.9
47	DF	6	TYR	2.9
25	BC	73	ILE	2.9
46	BU	72	PHE	2.9
43	BO	88	LYS	2.9
12	AM	32	ILE	2.9
27	BK	110	GLU	2.9
37	DL	144	GLU	2.9
48	BG	116	LEU	2.9
4	AE	158	LYS	2.9

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
25	BC	122	ALA	2.9
3	AD	173	ASP	2.9
16	CS	62	THR	2.9
18	CB	212	TYR	2.9
13	AP	38	PHE	2.9
34	B3	14	LYS	2.9
35	BV	56	PHE	2.9
40	DH	139	PHE	2.9
18	CB	67	LEU	2.9
29	BE	12	LEU	2.9
15	CR	22	TYR	2.9
24	BI	139	VAL	2.9
29	BE	118	LEU	2.9
24	BI	70	THR	2.9
6	AG	84	TYR	2.9
10	CK	12	ARG	2.8
25	DC	191	LEU	2.8
40	DH	5	LEU	2.8
47	BF	80	GLN	2.8
8	AI	49	GLN	2.8
17	CT	86	ALA	2.8
25	DC	22	GLU	2.8
25	BC	110	LYS	2.8
47	DF	18	GLU	2.8
21	CN	19	TYR	2.8
18	AB	195	VAL	2.8
40	BH	100	ALA	2.8
29	BE	9	GLN	2.8
41	DJ	64	VAL	2.8
25	BC	107	LYS	2.8
5	CF	88	MET	2.8
38	DM	103	TYR	2.8
50	DT	70	HIS	2.8
14	AQ	52	CYS	2.8
2	AC	81	GLU	2.8
40	BH	143	ILE	2.8
5	AF	1	MET	2.8
26	BD	25	THR	2.8
46	BU	93	ARG	2.8
12	AM	84	CYS	2.8
24	DI	81	LYS	2.8
26	DD	2	ILE	2.8

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
26	DD	28	GLU	2.8
29	DE	169	VAL	2.8
39	BX	17	GLU	2.8
40	BH	125	THR	2.8
13	AP	72	ALA	2.8
26	DD	76	GLY	2.8
4	CE	95	MET	2.8
13	AP	75	ILE	2.8
26	DD	27	ILE	2.8
40	DH	9	VAL	2.8
24	DI	104	GLN	2.8
44	DQ	116	LEU	2.8
14	AQ	8	GLN	2.8
45	DS	32	ALA	2.8
12	AM	85	TYR	2.8
40	BH	147	VAL	2.8
48	DG	173	ALA	2.8
37	DL	135	ILE	2.8
12	AM	114	PRO	2.8
4	CE	114	LEU	2.7
40	BH	95	GLY	2.7
16	AS	44	ILE	2.7
40	BH	91	PHE	2.7
12	AM	37	GLY	2.7
24	DI	124	MET	2.7
4	CE	86	GLY	2.7
24	BI	69	VAL	2.7
25	BC	80	LEU	2.7
29	DE	201	ALA	2.7
47	DF	83	PRO	2.7
40	DH	72	ILE	2.7
4	AE	14	LEU	2.7
12	CM	62	PHE	2.7
13	AP	39	PHE	2.7
14	AQ	9	GLY	2.7
40	BH	138	VAL	2.7
50	BT	15	HIS	2.7
2	AC	67	ILE	2.7
12	CM	43	LYS	2.7
21	CN	45	LEU	2.7
24	DI	21	PRO	2.7
24	BI	10	LEU	2.7

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
24	BI	99	LYS	2.7
37	DL	92	LEU	2.7
40	BH	108	VAL	2.7
40	DH	1	MET	2.7
13	AP	71	VAL	2.7
38	BM	31	PHE	2.7
2	CC	56	ILE	2.7
40	DH	100	ALA	2.7
37	BL	123	ARG	2.7
50	BT	3	ARG	2.7
47	DF	2	LYS	2.7
48	DG	113	ASP	2.7
40	BH	5	LEU	2.7
41	DJ	142	ILE	2.7
29	BE	199	MET	2.7
40	DH	76	GLU	2.7
25	DC	5	CYS	2.7
35	DV	50	MET	2.7
36	B2	46	LYS	2.7
40	BH	65	ALA	2.7
45	DS	107	VAL	2.7
48	BG	51	PHE	2.7
11	CL	24	GLU	2.7
38	BM	110	GLU	2.7
35	DV	51	GLN	2.7
24	BI	35	MET	2.7
25	DC	19	VAL	2.7
48	BG	120	ILE	2.7
40	BH	70	GLU	2.7
24	DI	102	ARG	2.7
47	DF	147	ARG	2.7
44	BQ	90	ASP	2.7
9	CJ	36	VAL	2.7
14	AQ	58	VAL	2.7
45	BS	47	VAL	2.7
25	BC	92	LEU	2.7
35	BV	94	ALA	2.7
43	BO	107	ALA	2.7
45	DS	69	LEU	2.7
5	AF	29	ILE	2.6
14	CQ	81	ALA	2.6
47	DF	178	LYS	2.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
4	CE	11	GLN	2.6
5	AF	44	ARG	2.6
7	AH	36	ALA	2.6
29	BE	138	LEU	2.6
30	BY	55	LYS	2.6
37	DL	83	ALA	2.6
48	BG	114	HIS	2.6
37	DL	124	GLY	2.6
51	DZ	76	GLU	2.6
16	AS	79	TYR	2.6
29	DE	190	ALA	2.6
36	B2	1	MET	2.6
24	BI	94	LYS	2.6
10	AK	20	ALA	2.6
12	CM	59	VAL	2.6
18	AB	43	GLU	2.6
6	AG	8	GLN	2.6
24	BI	81	LYS	2.6
27	BK	107	LEU	2.6
25	BC	188	ARG	2.6
13	CP	38	PHE	2.6
38	DM	57	VAL	2.6
3	CD	162	GLU	2.6
13	AP	76	LYS	2.6
24	BI	64	ARG	2.6
48	BG	132	LEU	2.6
24	BI	83	ALA	2.6
24	DI	110	GLN	2.6
7	AH	100	ILE	2.6
24	DI	132	ALA	2.6
25	DC	100	ARG	2.6
7	AH	35	ILE	2.6
16	CS	31	ARG	2.6
21	CN	78	LEU	2.6
32	B4	7	VAL	2.6
21	AN	65	GLN	2.6
24	DI	97	VAL	2.6
29	BE	19	PHE	2.6
45	DS	103	ILE	2.6
3	CD	18	LEU	2.6
4	CE	28	ARG	2.6
25	BC	193	GLU	2.6

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
45	DS	83	LYS	2.6
3	CD	33	ILE	2.6
9	AJ	76	ILE	2.6
29	BE	175	ILE	2.6
47	DF	110	ILE	2.6
4	CE	80	LEU	2.6
19	CU	20	ARG	2.6
23	DB	139	U	2.6
30	BY	39	ASP	2.6
24	BI	44	LYS	2.6
47	BF	169	LEU	2.6
48	DG	51	PHE	2.6
24	DI	129	GLU	2.6
26	DD	96	ILE	2.6
21	AN	28	ALA	2.6
36	B2	12	ARG	2.6
43	BO	78	VAL	2.6
3	AD	154	VAL	2.6
3	CD	106	PHE	2.6
23	DB	1728	C	2.6
41	BJ	87	ALA	2.6
24	BI	105	LEU	2.6
29	BE	10	SER	2.6
37	DL	141	LYS	2.6
40	BH	97	ARG	2.6
43	BO	76	LYS	2.6
27	BK	102	PRO	2.6
40	BH	109	GLU	2.6
13	AP	19	VAL	2.6
39	BX	10	SER	2.6
41	DJ	122	LEU	2.6
5	AF	5	GLU	2.6
8	AI	58	GLU	2.6
47	DF	133	GLU	2.6
12	AM	47	LEU	2.6
20	AO	67	LEU	2.6
40	DH	132	PHE	2.6
41	DJ	61	LYS	2.6
4	AE	113	VAL	2.5
43	BO	35	ILE	2.5
50	DT	53	VAL	2.5
26	DD	187	LEU	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
38	BM	60	GLN	2.5
38	BM	102	LEU	2.5
18	CB	127	LYS	2.5
29	BE	201	ALA	2.5
48	DG	52	GLY	2.5
3	CD	17	ASP	2.5
29	BE	149	ILE	2.5
40	DH	13	GLY	2.5
40	BH	64	ALA	2.5
41	DJ	56	VAL	2.5
47	DF	175	PRO	2.5
47	BF	56	LEU	2.5
21	AN	91	GLU	2.5
24	BI	115	ASP	2.5
28	BP	67	GLU	2.5
47	BF	116	LEU	2.5
48	DG	25	ILE	2.5
5	AF	34	GLY	2.5
37	DL	79	LEU	2.5
18	AB	212	TYR	2.5
19	CU	34	ARG	2.5
40	DH	112	LYS	2.5
19	CU	3	ILE	2.5
25	BC	116	GLN	2.5
23	BB	878	A	2.5
47	BF	78	ILE	2.5
48	BG	161	VAL	2.5
19	AU	44	ARG	2.5
35	DV	94	ALA	2.5
44	DQ	73	ILE	2.5
48	BG	102	ILE	2.5
19	CU	23	GLU	2.5
30	BY	38	GLU	2.5
48	BG	43	LYS	2.5
49	DR	40	MET	2.5
21	CN	20	PHE	2.5
28	DP	28	LYS	2.5
24	BI	46	ASP	2.5
29	DE	60	TRP	2.5
7	CH	98	LEU	2.5
24	BI	21	PRO	2.5
24	BI	65	SER	2.5

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
46	BU	71	ILE	2.5
47	DF	59	ILE	2.5
7	AH	59	GLU	2.5
47	DF	124	ARG	2.5
6	AG	61	PHE	2.5
26	BD	27	ILE	2.5
26	DD	3	GLY	2.5
29	BE	140	ASP	2.5
50	DT	55	VAL	2.5
26	DD	101	PHE	2.5
39	BX	31	GLN	2.5
29	DE	191	ASP	2.5
47	DF	1	ALA	2.5
3	CD	164	ARG	2.5
23	DB	2146	C	2.5
50	DT	49	LYS	2.5
29	BE	148	ILE	2.5
40	DH	94	ILE	2.5
11	AL	14	LYS	2.5
27	DK	46	ALA	2.5
47	DF	109	ARG	2.5
49	BR	35	PHE	2.5
51	BZ	38	PHE	2.5
1	AA	412	A	2.5
50	DT	43	ILE	2.5
51	DZ	49	LEU	2.5
40	DH	69	ALA	2.5
26	BD	4	LEU	2.5
27	DK	43	ILE	2.5
29	BE	3	LEU	2.5
50	DT	47	VAL	2.5
5	AF	54	LEU	2.5
24	BI	32	VAL	2.5
27	DK	103	VAL	2.5
35	BV	82	TYR	2.5
41	DJ	87	ALA	2.5
48	DG	112	VAL	2.5
4	CE	111	ARG	2.5
16	AS	63	ASP	2.4
3	AD	176	LYS	2.4
26	DD	55	LYS	2.4
43	DO	79	ALA	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
40	DH	27	ARG	2.4
12	AM	65	GLU	2.4
24	BI	55	PRO	2.4
25	DC	2	VAL	2.4
29	BE	187	VAL	2.4
8	AI	27	ILE	2.4
47	BF	59	ILE	2.4
47	BF	143	ASP	2.4
7	AH	98	LEU	2.4
48	DG	106	LEU	2.4
15	AR	22	TYR	2.4
3	AD	179	GLY	2.4
10	AK	99	LEU	2.4
16	CS	70	LEU	2.4
40	BH	58	LEU	2.4
14	AQ	38	LYS	2.4
48	DG	176	LYS	2.4
48	DG	37	ASN	2.4
47	BF	28	PRO	2.4
25	DC	162	GLN	2.4
41	BJ	54	ILE	2.4
20	CO	88	ARG	2.4
21	CN	64	ARG	2.4
14	AQ	80	LYS	2.4
47	DF	145	VAL	2.4
23	BB	653	U	2.4
12	CM	92	ARG	2.4
20	AO	63	ARG	2.4
26	DD	47	ALA	2.4
16	AS	70	LEU	2.4
35	BV	84	PRO	2.4
28	BP	70	GLU	2.4
29	BE	144	GLU	2.4
3	CD	31	CYS	2.4
24	DI	116	MET	2.4
3	CD	34	GLU	2.4
47	DF	41	GLU	2.4
38	DM	41	LEU	2.4
24	DI	114	ALA	2.4
23	BB	1174	U	2.4
47	DF	164	GLU	2.4
48	DG	31	GLU	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
9	AJ	90	LEU	2.4
25	BC	132	ARG	2.4
29	BE	23	PHE	2.4
47	DF	76	PHE	2.4
18	CB	186	VAL	2.4
41	BJ	56	VAL	2.4
47	DF	30	VAL	2.4
28	DP	111	GLU	2.4
24	BI	25	PRO	2.4
27	DK	18	ARG	2.4
48	DG	147	LEU	2.4
37	DL	142	ILE	2.4
42	DN	75	ILE	2.4
47	BF	102	LEU	2.4
47	DF	157	THR	2.4
29	BE	8	ALA	2.4
29	BE	121	VAL	2.4
47	DF	11	VAL	2.4
13	CP	6	LEU	2.4
43	BO	49	VAL	2.4
3	AD	108	ALA	2.4
2	AC	85	LYS	2.4
19	AU	4	LYS	2.4
23	DB	100	U	2.4
23	DB	1458	U	2.4
5	CF	62	MET	2.4
5	CF	54	LEU	2.4
18	AB	66	ILE	2.4
16	AS	38	THR	2.4
43	BO	81	ARG	2.4
50	BT	11	LEU	2.4
21	CN	42	ASN	2.4
25	BC	103	ILE	2.4
45	BS	74	ILE	2.4
7	AH	24	VAL	2.4
50	DT	90	GLY	2.4
39	BX	37	LEU	2.4
49	DR	16	GLU	2.4
34	D3	28	LEU	2.4
3	CD	174	ALA	2.4
5	CF	96	VAL	2.4
12	CM	38	ILE	2.4

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
27	DK	45	GLU	2.4
24	DI	111	THR	2.3
7	AH	62	LEU	2.3
26	BD	86	GLU	2.3
40	BH	69	ALA	2.3
4	CE	85	LYS	2.3
16	CS	48	ILE	2.3
25	BC	123	ILE	2.3
40	DH	80	ILE	2.3
9	CJ	35	GLN	2.3
18	CB	217	ALA	2.3
48	DG	132	LEU	2.3
13	AP	45	GLU	2.3
25	BC	102	TYR	2.3
47	BF	166	ARG	2.3
26	DD	106	LYS	2.3
50	DT	51	PHE	2.3
2	CC	93	ILE	2.3
3	AD	121	ALA	2.3
12	AM	6	ILE	2.3
18	CB	66	ILE	2.3
45	BS	24	ILE	2.3
43	BO	104	GLN	2.3
35	DV	61	LEU	2.3
43	DO	62	LEU	2.3
48	BG	101	VAL	2.3
49	DR	96	VAL	2.3
52	BW	19	ARG	2.3
7	AH	17	GLN	2.3
12	CM	7	ASN	2.3
7	AH	72	GLU	2.3
1	AA	77	A	2.3
1	AA	466	A	2.3
23	DB	613	A	2.3
2	AC	98	ALA	2.3
29	DE	157	LEU	2.3
47	BF	42	ALA	2.3
37	DL	96	LYS	2.3
23	DB	1731	G	2.3
24	BI	82	ALA	2.3
7	AH	46	GLU	2.3
7	CH	127	TYR	2.3

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
14	AQ	79	GLU	2.3
42	DN	78	LYS	2.3
49	BR	20	VAL	2.3
3	AD	4	LEU	2.3
7	AH	44	PHE	2.3
31	D0	54	ILE	2.3
43	BO	89	ASP	2.3
47	DF	99	PHE	2.3
16	AS	75	PRO	2.3
19	CU	44	ARG	2.3
48	DG	128	THR	2.3
23	BB	1459	G	2.3
25	BC	1	ALA	2.3
4	CE	63	MET	2.3
26	DD	204	LYS	2.3
29	DE	158	PHE	2.3
40	BH	96	THR	2.3
5	AF	25	TYR	2.3
29	DE	134	LEU	2.3
34	D3	3	ILE	2.3
47	DF	15	LEU	2.3
5	CF	58	HIS	2.3
13	CP	36	VAL	2.3
48	BG	23	ILE	2.3
48	DG	116	LEU	2.3
46	BU	53	GLN	2.3
47	BF	136	ILE	2.3
27	DK	92	GLU	2.3
46	BU	59	GLU	2.3
24	BI	31	GLY	2.3
47	DF	177	ARG	2.3
1	AA	121	U	2.3
16	AS	30	LEU	2.3
28	BP	58	PHE	2.3
48	DG	150	TYR	2.3
2	AC	157	GLY	2.3
16	CS	38	THR	2.3
21	AN	23	ARG	2.3
24	DI	8	VAL	2.3
47	BF	101	ARG	2.3
18	AB	117	GLU	2.3
28	BP	21	PRO	2.3

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
5	AF	70	VAL	2.3
27	DK	63	VAL	2.3
4	AE	94	PHE	2.3
17	CT	3	ILE	2.3
40	DH	83	LYS	2.3
47	BF	98	PHE	2.3
47	DF	14	LYS	2.3
3	AD	23	GLY	2.3
25	BC	119	VAL	2.3
40	BH	79	THR	2.3
47	DF	12	VAL	2.3
52	BW	82	GLU	2.3
47	DF	26	GLN	2.3
52	DW	19	ARG	2.3
25	DC	94	LEU	2.3
2	AC	46	LEU	2.3
14	AQ	35	LYS	2.3
21	CN	14	ALA	2.3
27	BK	53	LYS	2.3
41	BJ	140	LEU	2.3
50	BT	88	LYS	2.3
24	DI	73	PRO	2.3
46	BU	54	PRO	2.3
25	BC	145	MET	2.2
38	DM	105	MET	2.2
45	BS	32	ALA	2.2
46	BU	50	ALA	2.2
47	DF	13	LYS	2.2
40	DH	70	GLU	2.2
47	DF	156	THR	2.2
3	CD	53	GLN	2.2
20	AO	88	ARG	2.2
24	BI	28	GLY	2.2
25	BC	114	GLN	2.2
48	BG	93	TYR	2.2
40	BH	75	LEU	2.2
3	AD	24	VAL	2.2
13	AP	37	GLY	2.2
18	AB	34	ARG	2.2
21	CN	26	LEU	2.2
24	BI	26	ALA	2.2
41	BJ	86	GLN	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
43	BO	77	ALA	2.2
47	BF	74	ALA	2.2
12	AM	83	GLY	2.2
34	B3	13	PHE	2.2
7	AH	39	LEU	2.2
18	CB	10	LYS	2.2
47	DF	90	LEU	2.2
48	BG	87	GLN	2.2
41	DJ	45	THR	2.2
47	DF	45	ASP	2.2
12	AM	3	ILE	2.2
37	DL	111	ILE	2.2
21	CN	18	LYS	2.2
37	DL	78	ARG	2.2
46	BU	60	LYS	2.2
25	BC	5	CYS	2.2
1	CA	412	A	2.2
4	CE	32	PHE	2.2
49	DR	98	ILE	2.2
4	CE	84	VAL	2.2
27	DK	51	LYS	2.2
41	DJ	63	ALA	2.2
42	BN	83	LEU	2.2
52	DW	18	LYS	2.2
47	DF	176	PHE	2.2
24	DI	35	MET	2.2
47	BF	86	CYS	2.2
7	AH	58	LEU	2.2
14	CQ	83	LEU	2.2
24	BI	80	LYS	2.2
27	BK	11	ALA	2.2
43	DO	88	LYS	2.2
46	BU	61	GLU	2.2
12	CM	47	LEU	2.2
13	AP	56	ARG	2.2
16	CS	68	HIS	2.2
17	AT	86	ALA	2.2
47	DF	166	ARG	2.2
13	AP	67	ILE	2.2
7	CH	120	LEU	2.2
12	CM	79	LEU	2.2
24	BI	95	ASP	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
40	BH	83	LYS	2.2
40	DH	35	LYS	2.2
18	AB	186	VAL	2.2
28	BP	73	PHE	2.2
12	AM	87	GLY	2.2
16	CS	17	LYS	2.2
22	BA	25	U	2.2
25	BC	104	LEU	2.2
37	BL	126	ARG	2.2
39	BX	22	LEU	2.2
40	BH	41	LYS	2.2
17	AT	35	TYR	2.2
40	DH	18	GLN	2.2
11	AL	1	ALA	2.2
16	AS	74	ALA	2.2
52	DW	83	ALA	2.2
40	DH	54	LEU	2.2
27	BK	115	ILE	2.2
37	BL	113	ALA	2.2
24	DI	71	LYS	2.2
26	DD	74	GLU	2.2
4	AE	122	VAL	2.2
16	CS	27	LYS	2.2
25	BC	93	VAL	2.2
26	DD	100	LEU	2.2
40	BH	149	GLU	2.2
23	BB	654	A	2.2
33	B1	48	TYR	2.2
45	DS	105	VAL	2.2
49	BR	96	VAL	2.2
12	CM	2	ARG	2.2
38	BM	128	THR	2.2
13	AP	53	ASP	2.2
21	CN	9	GLU	2.2
22	BA	88	C	2.2
40	BH	118	PRO	2.2
3	CD	190	LEU	2.2
26	BD	187	LEU	2.2
27	DK	107	LEU	2.2
43	BO	36	TYR	2.2
20	CO	89	ARG	2.2
6	AG	79	VAL	2.2

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
7	AH	102	VAL	2.2
40	BH	72	ILE	2.2
12	CM	46	GLU	2.2
50	DT	45	ALA	2.2
6	AG	98	LEU	2.2
10	CK	76	TYR	2.2
6	AG	80	GLY	2.2
12	AM	36	ALA	2.2
14	AQ	33	TYR	2.2
29	DE	65	THR	2.2
41	DJ	74	TYR	2.2
45	DS	74	ILE	2.2
14	CQ	79	GLU	2.2
24	DI	38	CYS	2.2
25	BC	111	ALA	2.2
39	DX	13	GLU	2.2
43	DO	60	GLU	2.2
3	AD	158	LEU	2.2
5	CF	9	MET	2.2
47	BF	48	LEU	2.2
52	BW	43	LYS	2.2
25	DC	202	ARG	2.2
24	BI	73	PRO	2.1
7	CH	71	VAL	2.1
48	DG	89	VAL	2.1
48	DG	104	LEU	2.1
50	BT	84	TYR	2.1
50	DT	33	LYS	2.1
28	DP	88	ARG	2.1
22	BA	52	A	2.1
37	DL	95	LEU	2.1
38	DM	111	GLU	2.1
44	BQ	116	LEU	2.1
5	AF	8	PHE	2.1
37	DL	58	TYR	2.1
8	AI	52	GLU	2.1
21	AN	95	LEU	2.1
3	AD	22	SER	2.1
3	AD	143	SER	2.1
16	CS	2	ARG	2.1
18	CB	90	PHE	2.1
35	DV	47	VAL	2.1

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>RSRZ</b>
46	BU	58	VAL	2.1
3	AD	174	ALA	2.1
28	DP	43	GLU	2.1
39	BX	60	LYS	2.1
4	CE	67	ARG	2.1
48	DG	53	PRO	2.1
52	BW	46	ALA	2.1
3	AD	196	GLU	2.1
21	CN	76	PHE	2.1
28	DP	96	LEU	2.1
47	BF	137	PHE	2.1
25	BC	82	TYR	2.1
5	AF	96	VAL	2.1
7	CH	44	PHE	2.1
40	BH	82	SER	2.1
25	DC	32	LEU	2.1
3	AD	175	GLY	2.1
25	DC	81	GLU	2.1
29	BE	18	THR	2.1
40	DH	96	THR	2.1
51	BZ	6	GLN	2.1
5	AF	88	MET	2.1
18	CB	220	VAL	2.1
26	DD	203	VAL	2.1
27	BK	103	VAL	2.1
47	BF	99	PHE	2.1
41	DJ	54	ILE	2.1
24	BI	71	LYS	2.1
46	BU	9	GLU	2.1
38	BM	66	ARG	2.1
43	BO	74	VAL	2.1
44	DQ	63	ARG	2.1
23	BB	1067	A	2.1
41	BJ	122	LEU	2.1
48	DG	23	ILE	2.1
24	DI	106	GLN	2.1
51	BZ	40	VAL	2.1
16	AS	10	ILE	2.1
23	BB	2310	C	2.1
40	DH	12	LEU	2.1
44	BQ	108	LEU	2.1
45	DS	66	ILE	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
3	AD	155	LYS	2.1
14	CQ	26	ARG	2.1
16	CS	42	ASN	2.1
39	BX	24	GLU	2.1
29	BE	117	ARG	2.1
50	BT	76	ARG	2.1
8	CI	50	PRO	2.1
14	CQ	7	LEU	2.1
21	AN	30	ILE	2.1
24	BI	125	THR	2.1
25	DC	92	LEU	2.1
52	BW	77	LYS	2.1
39	BX	33	ALA	2.1
3	CD	16	THR	2.1
5	CF	61	LEU	2.1
26	DD	180	VAL	2.1
50	DT	44	LYS	2.1
3	AD	157	ALA	2.1
25	BC	189	ALA	2.1
7	AH	125	ILE	2.1
43	BO	116	GLN	2.1
1	AA	80	A	2.1
18	CB	57	ASN	2.1
42	DN	56	LYS	2.1
47	DF	160	LYS	2.1
50	DT	36	LYS	2.1
6	CG	79	VAL	2.1
24	BI	138	VAL	2.1
16	AS	15	LEU	2.1
16	AS	62	THR	2.1
51	DZ	77	LYS	2.1
3	CD	178	GLU	2.1
12	CM	42	VAL	2.1
16	AS	68	HIS	2.1
38	DM	55	ARG	2.1
40	BH	111	ALA	2.1
41	DJ	13	ARG	2.1
7	AH	82	LEU	2.1
25	BC	126	GLY	2.1
15	CR	60	ARG	2.1
16	AS	21	ALA	2.1
37	DL	110	VAL	2.1

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
43	BO	50	ALA	2.1
2	AC	102	ILE	2.1
4	AE	81	GLN	2.1
8	CI	34	LEU	2.1
27	DK	84	CYS	2.1
3	AD	148	ALA	2.1
29	BE	60	TRP	2.1
38	DM	126	ILE	2.1
4	CE	47	PHE	2.1
38	BM	129	THR	2.1
25	BC	6	LYS	2.1
31	D0	45	ASP	2.1
38	BM	93	VAL	2.1
37	BL	2	ARG	2.1
48	DG	93	TYR	2.1
29	BE	116	ASP	2.1
29	BE	120	VAL	2.1
47	DF	163	GLU	2.1
9	CJ	18	ILE	2.1
27	BK	77	ILE	2.1
37	BL	90	VAL	2.1
47	BF	155	ILE	2.1
47	BF	138	PRO	2.1
47	DF	86	CYS	2.1
37	DL	91	ASP	2.1
23	DB	2602	A	2.0
40	BH	67	ALA	2.0
41	BJ	72	LYS	2.0
48	BG	85	LYS	2.0
9	CJ	25	ILE	2.0
11	CL	81	ILE	2.0
16	CS	24	SER	2.0
18	CB	69	VAL	2.0
37	DL	107	PHE	2.0
48	BG	168	VAL	2.0
2	AC	82	ASP	2.0
4	AE	139	THR	2.0
4	CE	72	ASN	2.0
24	DI	140	GLU	2.0
38	DM	102	LEU	2.0
5	CF	70	VAL	2.0
26	BD	209	ALA	2.0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
46	BU	90	LYS	2.0
2	CC	156	LEU	2.0
4	AE	92	ARG	2.0
25	BC	101	ARG	2.0
35	DV	82	TYR	2.0
41	DJ	52	ASP	2.0
25	BC	184	GLU	2.0
29	BE	15	SER	2.0
29	DE	149	ILE	2.0
40	BH	18	GLN	2.0
45	DS	24	ILE	2.0
51	DZ	6	GLN	2.0
5	CF	8	PHE	2.0
25	BC	191	LEU	2.0
29	BE	200	LEU	2.0
49	BR	13	ARG	2.0
4	AE	15	ILE	2.0
42	DN	66	ALA	2.0
42	DN	62	ASN	2.0
2	CC	38	VAL	2.0
40	DH	108	VAL	2.0
43	BO	111	ARG	2.0
1	AA	81	A	2.0
5	CF	95	ALA	2.0
12	AM	44	ILE	2.0
35	DV	4	ILE	2.0
40	BH	112	LYS	2.0
14	AQ	27	PHE	2.0
24	BI	33	ASN	2.0
47	DF	141	ASP	2.0
29	BE	180	LEU	2.0
12	CM	113	LYS	2.0
4	AE	30	PHE	2.0
11	AL	15	VAL	2.0
45	DS	47	VAL	2.0
51	BZ	47	VAL	2.0
29	BE	5	LEU	2.0
45	BS	110	ARG	2.0
2	CC	181	ILE	2.0
29	BE	185	LYS	2.0
39	DX	5	GLU	2.0
40	BH	55	GLU	2.0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	RSRZ
47	BF	45	ASP	2.0
47	BF	110	ILE	2.0
48	DG	58	ALA	2.0
35	DV	3	THR	2.0
48	BG	8	VAL	2.0
6	AG	78	ARG	2.0
26	DD	165	MET	2.0
40	BH	30	LEU	2.0
40	BH	54	LEU	2.0
9	CJ	94	ALA	2.0
42	BN	70	THR	2.0
4	AE	111	ARG	2.0
47	DF	19	PHE	2.0
14	CQ	80	LYS	2.0
46	BU	91	LYS	2.0

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

There are no non-standard protein/DNA/RNA residues in this entry.

## 6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

## 6.4 Ligands ⓘ

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

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors(Å <sup>2</sup> )	Q<0.9
54	MG	CA	1651	1/1	0.28	36.33	161,161,161,161	0
54	MG	DB	3059	1/1	0.64	26.17	180,180,180,180	0
54	MG	AA	1660	1/1	0.38	25.37	148,148,148,148	0
53	NMY	BB	3001	42/42	0.86	21.80	89,89,89,89	42
54	MG	BB	3034	1/1	0.31	20.26	130,130,130,130	0
54	MG	AA	1624	1/1	0.34	13.53	13,13,13,13	1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
53	NMY	DB	3001	42/42	0.51	13.50	68,68,68,68	42
54	MG	AA	1606	1/1	0.19	11.37	56,56,56,56	0
54	MG	CA	1650	1/1	0.37	10.98	180,180,180,180	0
54	MG	DB	3038	1/1	0.20	10.01	10,10,10,10	0
54	MG	BB	3088	1/1	0.25	7.58	87,87,87,87	0
54	MG	DB	3090	1/1	0.26	7.26	99,99,99,99	0
54	MG	AA	1633	1/1	0.13	6.00	65,65,65,65	0
54	MG	AA	1625	1/1	0.16	5.68	102,102,102,102	0
54	MG	BB	3106	1/1	0.22	5.35	11,11,11,11	0
54	MG	CA	1614	1/1	0.25	5.30	139,139,139,139	0
54	MG	AA	1658	1/1	0.22	4.88	120,120,120,120	0
54	MG	AA	1657	1/1	0.19	4.25	95,95,95,95	0
54	MG	BB	3087	1/1	0.22	4.10	23,23,23,23	0
54	MG	CA	1618	1/1	0.16	4.00	104,104,104,104	0
54	MG	AA	1626	1/1	0.15	3.62	87,87,87,87	1
54	MG	AA	1648	1/1	0.32	3.36	110,110,110,110	0
54	MG	DB	3112	1/1	0.23	3.22	87,87,87,87	0
54	MG	BB	3029	1/1	0.22	3.09	21,21,21,21	0
54	MG	AA	1638	1/1	0.22	2.86	126,126,126,126	0
54	MG	BB	3018	1/1	0.18	2.75	31,31,31,31	0
54	MG	AA	1607	1/1	0.14	2.69	93,93,93,93	0
54	MG	BB	3040	1/1	0.22	2.68	44,44,44,44	0
53	NMY	CA	1601	42/42	0.21	2.52	47,47,47,47	0
54	MG	CA	1613	1/1	0.21	2.46	108,108,108,108	0
54	MG	CA	1658	1/1	0.15	2.41	50,50,50,50	0
54	MG	BB	3023	1/1	0.22	2.12	12,12,12,12	0
54	MG	BB	3037	1/1	0.21	1.85	35,35,35,35	0
54	MG	AA	1636	1/1	0.16	1.55	121,121,121,121	0
54	MG	AA	1618	1/1	0.17	1.50	160,160,160,160	0
54	MG	AA	1661	1/1	0.14	1.46	62,62,62,62	0
54	MG	CA	1607	1/1	0.15	1.36	129,129,129,129	0
53	NMY	AA	1601	42/42	0.24	1.31	75,75,75,75	0
54	MG	DB	3106	1/1	0.17	1.26	53,53,53,53	0
54	MG	BB	3008	1/1	0.21	1.21	81,81,81,81	0
54	MG	AA	1640	1/1	0.18	1.14	110,110,110,110	0
54	MG	CA	1652	1/1	0.11	1.00	128,128,128,128	0
54	MG	AA	1641	1/1	0.16	0.96	88,88,88,88	0
54	MG	AA	1634	1/1	0.14	0.95	88,88,88,88	0
54	MG	BB	3012	1/1	0.20	0.91	33,33,33,33	0
54	MG	BB	3105	1/1	0.17	0.90	18,18,18,18	0
55	SCM	CA	1661	23/23	0.16	0.84	37,37,37,37	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BB	3078	1/1	0.17	0.70	47,47,47,47	0
54	MG	CA	1631	1/1	0.16	0.62	43,43,43,43	0
54	MG	CA	1639	1/1	0.11	0.54	108,108,108,108	0
54	MG	BB	3084	1/1	0.18	0.52	61,61,61,61	0
55	SCM	AA	1662	23/23	0.15	0.52	23,23,23,23	0
54	MG	BB	3026	1/1	0.18	0.49	68,68,68,68	0
54	MG	AA	1647	1/1	0.13	0.45	133,133,133,133	0
54	MG	DB	3102	1/1	0.18	0.39	6,6,6,6	0
54	MG	BB	3043	1/1	0.25	0.37	145,145,145,145	0
54	MG	DB	3075	1/1	0.18	0.30	58,58,58,58	0
54	MG	DB	3013	1/1	0.17	0.26	12,12,12,12	0
54	MG	CA	1634	1/1	0.14	0.23	75,75,75,75	0
54	MG	CA	1640	1/1	0.15	0.17	43,43,43,43	0
54	MG	BB	3076	1/1	0.18	0.06	33,33,33,33	0
54	MG	BB	3041	1/1	0.17	0.06	34,34,34,34	0
54	MG	DB	3093	1/1	0.14	0.04	98,98,98,98	0
54	MG	DB	3098	1/1	0.15	-0.04	41,41,41,41	0
54	MG	BB	3110	1/1	0.14	-0.06	61,61,61,61	0
54	MG	CA	1623	1/1	0.12	-0.12	21,21,21,21	0
54	MG	BB	3101	1/1	0.14	-0.20	157,157,157,157	0
54	MG	CA	1641	1/1	0.14	-0.25	61,61,61,61	0
54	MG	CA	1643	1/1	0.11	-0.30	75,75,75,75	0
54	MG	BB	3111	1/1	0.11	-0.33	90,90,90,90	0
54	MG	DB	3012	1/1	0.17	-0.35	32,32,32,32	0
54	MG	AA	1613	1/1	0.11	-0.35	80,80,80,80	0
54	MG	BB	3024	1/1	0.18	-0.40	12,12,12,12	0
54	MG	AA	1623	1/1	0.16	-0.43	157,157,157,157	0
54	MG	DB	3014	1/1	0.14	-0.46	80,80,80,80	0
54	MG	BB	3027	1/1	0.16	-0.48	42,42,42,42	0
54	MG	BB	3019	1/1	0.13	-0.53	44,44,44,44	0
54	MG	DB	3006	1/1	0.17	-0.53	13,13,13,13	0
54	MG	CA	1603	1/1	0.13	-0.57	25,25,25,25	0
54	MG	DB	3008	1/1	0.17	-0.63	41,41,41,41	0
54	MG	DB	3100	1/1	0.15	-0.82	6,6,6,6	0
54	MG	DB	3111	1/1	0.09	-0.83	36,36,36,36	0
54	MG	AA	1604	1/1	0.14	-0.86	43,43,43,43	0
54	MG	BB	3086	1/1	0.15	-0.87	18,18,18,18	0
54	MG	CA	1622	1/1	0.13	-0.93	44,44,44,44	0
54	MG	DB	3091	1/1	0.06	-0.94	55,55,55,55	0
54	MG	CA	1647	1/1	0.07	-1.00	153,153,153,153	0
54	MG	AA	1616	1/1	0.08	-1.01	113,113,113,113	0
54	MG	BB	3052	1/1	0.14	-1.01	67,67,67,67	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DB	3015	1/1	0.07	-1.03	37,37,37,37	0
54	MG	CA	1654	1/1	0.10	-1.04	82,82,82,82	0
54	MG	AA	1653	1/1	0.09	-1.04	110,110,110,110	0
54	MG	DB	3002	1/1	0.15	-1.06	5,5,5,5	0
54	MG	BB	3100	1/1	0.13	-1.06	34,34,34,34	0
54	MG	DB	3007	1/1	0.16	-1.12	9,9,9,9	0
54	MG	DB	3061	1/1	0.21	-1.13	117,117,117,117	0
54	MG	BB	3054	1/1	0.07	-1.14	46,46,46,46	0
54	MG	DB	3097	1/1	0.15	-1.16	12,12,12,12	0
54	MG	DB	3079	1/1	0.12	-1.17	80,80,80,80	0
54	MG	CA	1642	1/1	0.11	-1.17	49,49,49,49	0
54	MG	BB	3039	1/1	0.09	-1.19	107,107,107,107	0
54	MG	DB	3016	1/1	0.11	-1.20	53,53,53,53	0
54	MG	CA	1630	1/1	0.11	-1.21	81,81,81,81	0
54	MG	DB	3074	1/1	0.14	-1.21	29,29,29,29	0
54	MG	BB	3085	1/1	0.15	-1.22	43,43,43,43	0
54	MG	AA	1612	1/1	0.05	-1.24	70,70,70,70	0
54	MG	CA	1656	1/1	0.10	-1.25	135,135,135,135	0
54	MG	DB	3026	1/1	0.09	-1.30	16,16,16,16	0
54	MG	BB	3108	1/1	0.13	-1.33	36,36,36,36	0
54	MG	DB	3025	1/1	0.12	-1.39	47,47,47,47	0
54	MG	CA	1608	1/1	0.04	-1.40	31,31,31,31	0
54	MG	AA	1614	1/1	0.05	-1.42	66,66,66,66	0
54	MG	CA	1653	1/1	0.09	-1.45	96,96,96,96	0
54	MG	CA	1648	1/1	0.06	-1.46	69,69,69,69	0
54	MG	DB	3092	1/1	0.15	-1.46	12,12,12,12	0
54	MG	DB	3101	1/1	0.12	-1.47	20,20,20,20	0
54	MG	CA	1660	1/1	0.09	-1.47	77,77,77,77	0
54	MG	CA	1644	1/1	0.08	-1.53	49,49,49,49	0
54	MG	BB	3006	1/1	0.12	-1.55	9,9,9,9	0
54	MG	AA	1611	1/1	0.04	-1.56	73,73,73,73	0
54	MG	BB	3025	1/1	0.11	-1.56	32,32,32,32	0
54	MG	AA	1619	1/1	0.08	-1.61	48,48,48,48	0
54	MG	AA	1654	1/1	0.08	-1.62	49,49,49,49	0
54	MG	DB	3058	1/1	0.07	-1.62	39,39,39,39	0
54	MG	BB	3099	1/1	0.13	-1.62	23,23,23,23	0
54	MG	AA	1621	1/1	0.08	-1.63	82,82,82,82	0
54	MG	AA	1632	1/1	0.10	-1.63	29,29,29,29	0
54	MG	AA	1629	1/1	0.09	-1.65	55,55,55,55	0
54	MG	AA	1644	1/1	0.10	-1.66	42,42,42,42	0
54	MG	DB	3005	1/1	0.13	-1.68	23,23,23,23	0
54	MG	AA	1620	1/1	0.08	-1.70	132,132,132,132	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DB	3095	1/1	0.05	-1.70	39,39,39,39	0
54	MG	AA	1608	1/1	0.08	-1.71	53,53,53,53	0
54	MG	DB	3018	1/1	0.14	-1.73	5,5,5,5	0
56	ZN	D4	101	1/1	0.06	-1.74	40,40,40,40	0
54	MG	BB	3093	1/1	0.07	-1.74	32,32,32,32	0
54	MG	DB	3096	1/1	0.07	-1.77	115,115,115,115	0
54	MG	AA	1651	1/1	0.08	-1.77	97,97,97,97	0
54	MG	BB	3055	1/1	0.06	-1.80	46,46,46,46	0
54	MG	BB	3002	1/1	0.08	-1.85	19,19,19,19	0
54	MG	DB	3017	1/1	0.12	-1.87	29,29,29,29	0
54	MG	AA	1605	1/1	0.09	-1.92	46,46,46,46	0
54	MG	CA	1646	1/1	0.04	-1.92	52,52,52,52	0
54	MG	CA	1655	1/1	0.07	-1.94	52,52,52,52	0
54	MG	BB	3074	1/1	0.10	-1.94	28,28,28,28	0
54	MG	DB	3110	1/1	0.09	-1.96	17,17,17,17	0
54	MG	DB	3068	1/1	0.12	-1.97	36,36,36,36	0
54	MG	DB	3050	1/1	0.12	-1.98	6,6,6,6	0
54	MG	DB	3051	1/1	0.12	-2.00	67,67,67,67	0
54	MG	BB	3072	1/1	0.08	-2.06	54,54,54,54	0
54	MG	BB	3013	1/1	0.10	-2.06	81,81,81,81	0
54	MG	CA	1611	1/1	0.09	-2.07	5,5,5,5	0
54	MG	BB	3068	1/1	0.11	-2.10	65,65,65,65	0
54	MG	DB	3088	1/1	0.15	-2.13	37,37,37,37	0
56	ZN	B4	101	1/1	0.05	-2.14	49,49,49,49	0
54	MG	AA	1635	1/1	0.06	-2.14	86,86,86,86	0
54	MG	BB	3098	1/1	0.09	-2.15	85,85,85,85	0
54	MG	DB	3024	1/1	0.07	-2.16	32,32,32,32	0
54	MG	AA	1646	1/1	0.07	-2.18	89,89,89,89	0
54	MG	BB	3104	1/1	0.12	-2.19	6,6,6,6	0
54	MG	AA	1643	1/1	0.11	-2.19	43,43,43,43	0
54	MG	DB	3031	1/1	0.14	-2.20	21,21,21,21	0
54	MG	BB	3011	1/1	0.10	-2.22	62,62,62,62	0
54	MG	BB	3045	1/1	0.12	-2.31	42,42,42,42	0
54	MG	DB	3099	1/1	0.12	-2.36	9,9,9,9	0
54	MG	DB	3048	1/1	0.15	-2.38	14,14,14,14	0
54	MG	BB	3007	1/1	0.09	-2.40	37,37,37,37	0
54	MG	DB	3046	1/1	0.08	-2.42	104,104,104,104	0
54	MG	DB	3020	1/1	0.11	-2.42	6,6,6,6	0
54	MG	BB	3003	1/1	0.10	-2.43	17,17,17,17	0
54	MG	DB	3023	1/1	0.08	-2.43	7,7,7,7	0
54	MG	BB	3047	1/1	0.11	-2.46	66,66,66,66	0
54	MG	CA	1617	1/1	0.07	-2.48	83,83,83,83	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	CA	1649	1/1	0.08	-2.49	92,92,92,92	0
54	MG	AA	1617	1/1	0.10	-2.54	47,47,47,47	0
54	MG	BB	3038	1/1	0.13	-2.56	46,46,46,46	0
54	MG	BB	3021	1/1	0.14	-2.56	30,30,30,30	0
54	MG	AA	1610	1/1	0.11	-2.56	5,5,5,5	0
54	MG	AA	1630	1/1	0.08	-2.57	36,36,36,36	0
54	MG	DB	3004	1/1	0.12	-2.60	41,41,41,41	0
54	MG	DB	3021	1/1	0.12	-2.62	5,5,5,5	0
54	MG	AA	1656	1/1	0.09	-2.65	95,95,95,95	0
54	MG	DB	3034	1/1	0.10	-2.66	5,5,5,5	0
54	MG	DB	3010	1/1	0.11	-2.67	8,8,8,8	0
54	MG	DB	3070	1/1	0.15	-2.67	38,38,38,38	0
54	MG	BB	3083	1/1	0.12	-2.68	5,5,5,5	0
54	MG	BB	3035	1/1	0.06	-2.69	41,41,41,41	0
54	MG	AA	1649	1/1	0.10	-2.69	31,31,31,31	0
54	MG	DB	3084	1/1	0.14	-2.69	109,109,109,109	0
54	MG	DB	3072	1/1	0.09	-2.74	36,36,36,36	0
54	MG	BB	3092	1/1	0.10	-2.77	5,5,5,5	0
54	MG	BB	3066	1/1	0.06	-2.78	10,10,10,10	0
54	MG	BB	3050	1/1	0.07	-2.83	16,16,16,16	0
54	MG	DB	3108	1/1	0.08	-2.86	27,27,27,27	0
54	MG	CA	1610	1/1	0.09	-2.86	103,103,103,103	0
54	MG	AA	1642	1/1	0.05	-2.88	51,51,51,51	0
54	MG	AA	1652	1/1	0.04	-2.90	101,101,101,101	0
54	MG	DB	3067	1/1	0.09	-2.92	137,137,137,137	0
54	MG	BB	3094	1/1	0.10	-2.93	75,75,75,75	0
54	MG	CA	1645	1/1	0.08	-2.94	70,70,70,70	0
54	MG	CA	1615	1/1	0.04	-2.94	29,29,29,29	0
54	MG	DB	3104	1/1	0.11	-2.96	31,31,31,31	0
54	MG	CA	1626	1/1	0.07	-2.99	117,117,117,117	0
54	MG	DB	3105	1/1	0.09	-3.02	41,41,41,41	0
54	MG	DB	3022	1/1	0.08	-3.07	5,5,5,5	0
54	MG	DB	3073	1/1	0.08	-3.07	62,62,62,62	0
54	MG	CA	1659	1/1	0.06	-3.08	45,45,45,45	0
54	MG	AA	1631	1/1	0.05	-3.08	84,84,84,84	0
54	MG	AA	1645	1/1	0.08	-3.10	67,67,67,67	0
54	MG	CA	1609	1/1	0.07	-3.10	110,110,110,110	0
54	MG	DB	3056	1/1	0.11	-3.11	34,34,34,34	0
54	MG	DB	3009	1/1	0.09	-3.12	49,49,49,49	0
54	MG	BB	3046	1/1	0.10	-3.12	50,50,50,50	0
54	MG	DB	3086	1/1	0.10	-3.20	41,41,41,41	0
54	MG	DB	3087	1/1	0.07	-3.20	11,11,11,11	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BB	3061	1/1	0.12	-3.29	5,5,5,5	0
54	MG	DB	3043	1/1	0.10	-3.38	32,32,32,32	0
54	MG	DB	3065	1/1	0.06	-3.41	20,20,20,20	0
54	MG	CA	1628	1/1	0.09	-3.41	41,41,41,41	0
54	MG	BB	3090	1/1	0.08	-3.42	54,54,54,54	0
54	MG	DB	3030	1/1	0.10	-3.44	81,81,81,81	0
54	MG	BB	3044	1/1	0.11	-3.47	118,118,118,118	0
54	MG	DB	3049	1/1	0.12	-3.49	66,66,66,66	0
54	MG	AA	1650	1/1	0.05	-3.51	105,105,105,105	0
54	MG	BB	3015	1/1	0.03	-3.53	32,32,32,32	0
54	MG	DB	3103	1/1	0.11	-3.55	14,14,14,14	0
54	MG	DB	3036	1/1	0.09	-3.61	85,85,85,85	0
54	MG	DB	3089	1/1	0.09	-3.62	13,13,13,13	0
54	MG	BB	3063	1/1	0.12	-3.63	7,7,7,7	0
54	MG	CA	1627	1/1	0.06	-3.64	40,40,40,40	0
54	MG	AA	1637	1/1	0.04	-3.66	62,62,62,62	0
54	MG	AA	1609	1/1	0.06	-3.68	107,107,107,107	0
54	MG	CA	1629	1/1	0.08	-3.71	57,57,57,57	0
54	MG	CA	1621	1/1	0.11	-3.74	34,34,34,34	0
54	MG	BB	3022	1/1	0.07	-3.77	35,35,35,35	0
54	MG	CA	1636	1/1	0.07	-3.79	37,37,37,37	0
54	MG	BB	3082	1/1	0.11	-3.81	34,34,34,34	0
54	MG	DB	3060	1/1	0.08	-3.83	96,96,96,96	0
54	MG	DB	3033	1/1	0.07	-3.86	82,82,82,82	0
54	MG	DB	3041	1/1	0.09	-3.86	9,9,9,9	0
54	MG	DB	3019	1/1	0.09	-3.87	25,25,25,25	0
54	MG	DB	3077	1/1	0.13	-3.88	28,28,28,28	0
54	MG	CA	1637	1/1	0.08	-3.90	26,26,26,26	0
54	MG	BB	3014	1/1	0.07	-3.91	11,11,11,11	0
54	MG	DB	3069	1/1	0.07	-3.91	8,8,8,8	0
54	MG	CA	1633	1/1	0.07	-3.96	48,48,48,48	0
54	MG	DB	3057	1/1	0.08	-3.98	11,11,11,11	0
54	MG	BB	3075	1/1	0.09	-3.99	6,6,6,6	0
54	MG	BB	3031	1/1	0.07	-4.08	53,53,53,53	0
54	MG	AA	1639	1/1	0.06	-4.22	65,65,65,65	0
54	MG	DB	3078	1/1	0.09	-4.23	24,24,24,24	0
54	MG	DB	3032	1/1	0.15	-4.25	5,5,5,5	0
54	MG	DB	3082	1/1	0.08	-4.27	9,9,9,9	0
54	MG	AA	1627	1/1	0.11	-4.33	5,5,5,5	1
54	MG	CA	1612	1/1	0.06	-4.35	25,25,25,25	0
54	MG	BB	3062	1/1	0.08	-4.36	38,38,38,38	0
54	MG	BB	3089	1/1	0.07	-4.38	7,7,7,7	0

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	DB	3094	1/1	0.13	-4.40	5,5,5,5	0
54	MG	DB	3109	1/1	0.07	-4.41	33,33,33,33	0
54	MG	CA	1619	1/1	0.09	-4.43	53,53,53,53	0
54	MG	DB	3066	1/1	0.06	-4.47	32,32,32,32	0
54	MG	DB	3071	1/1	0.13	-4.52	93,93,93,93	0
54	MG	BB	3107	1/1	0.08	-4.56	30,30,30,30	0
54	MG	DB	3011	1/1	0.08	-4.64	9,9,9,9	0
54	MG	AA	1655	1/1	0.04	-4.65	73,73,73,73	0
54	MG	CA	1635	1/1	0.07	-4.68	64,64,64,64	0
54	MG	DB	3052	1/1	0.11	-4.75	40,40,40,40	0
54	MG	BB	3091	1/1	0.05	-4.79	105,105,105,105	0
54	MG	BB	3071	1/1	0.10	-4.81	33,33,33,33	0
54	MG	BB	3030	1/1	0.10	-4.84	16,16,16,16	0
54	MG	CA	1625	1/1	0.06	-4.87	36,36,36,36	0
54	MG	DB	3080	1/1	0.09	-4.88	46,46,46,46	0
54	MG	BB	3109	1/1	0.09	-4.94	19,19,19,19	0
54	MG	CA	1657	1/1	0.06	-4.95	14,14,14,14	0
54	MG	BB	3016	1/1	0.08	-4.95	31,31,31,31	0
54	MG	DB	3085	1/1	0.12	-4.98	12,12,12,12	0
54	MG	DB	3039	1/1	0.10	-4.99	19,19,19,19	0
54	MG	DB	3042	1/1	0.08	-5.01	17,17,17,17	0
54	MG	BB	3070	1/1	0.10	-5.08	9,9,9,9	0
54	MG	AA	1603	1/1	0.08	-5.10	100,100,100,100	0
54	MG	CA	1620	1/1	0.07	-5.11	62,62,62,62	0
54	MG	BB	3102	1/1	0.11	-5.11	10,10,10,10	0
54	MG	BB	3097	1/1	0.08	-5.15	5,5,5,5	0
54	MG	BB	3096	1/1	0.07	-5.23	5,5,5,5	0
54	MG	BB	3080	1/1	0.10	-5.29	44,44,44,44	0
54	MG	DB	3055	1/1	0.10	-5.29	22,22,22,22	0
54	MG	AA	1622	1/1	0.05	-5.45	24,24,24,24	0
54	MG	DB	3037	1/1	0.10	-5.46	23,23,23,23	0
54	MG	CA	1632	1/1	0.04	-5.57	31,31,31,31	0
54	MG	BB	3095	1/1	0.08	-5.64	36,36,36,36	0
54	MG	CA	1616	1/1	0.08	-5.66	15,15,15,15	0
54	MG	DB	3040	1/1	0.07	-5.66	78,78,78,78	0
54	MG	DB	3083	1/1	0.07	-5.68	37,37,37,37	0
54	MG	CA	1638	1/1	0.08	-5.72	123,123,123,123	0
54	MG	BB	3077	1/1	0.10	-5.74	5,5,5,5	0
54	MG	CA	1604	1/1	0.06	-5.78	66,66,66,66	0
54	MG	DB	3027	1/1	0.11	-5.78	72,72,72,72	0
54	MG	DB	3064	1/1	0.04	-5.82	34,34,34,34	0
54	MG	DB	3062	1/1	0.05	-5.93	75,75,75,75	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BB	3079	1/1	0.07	-5.99	68,68,68,68	0
54	MG	CA	1606	1/1	0.07	-6.01	7,7,7,7	0
54	MG	BB	3032	1/1	0.07	-6.05	38,38,38,38	0
54	MG	DB	3003	1/1	0.08	-6.07	21,21,21,21	0
54	MG	BB	3067	1/1	0.08	-6.11	26,26,26,26	0
54	MG	DB	3047	1/1	0.07	-6.19	27,27,27,27	0
54	MG	AA	1602	1/1	0.05	-6.24	28,28,28,28	0
54	MG	BB	3020	1/1	0.11	-6.32	28,28,28,28	0
54	MG	BB	3004	1/1	0.09	-6.34	31,31,31,31	0
54	MG	DB	3044	1/1	0.07	-6.41	11,11,11,11	0
54	MG	DB	3054	1/1	0.11	-6.43	80,80,80,80	0
54	MG	DB	3045	1/1	0.05	-6.43	32,32,32,32	0
54	MG	BB	3056	1/1	0.14	-6.46	23,23,23,23	0
54	MG	DB	3076	1/1	0.05	-6.54	22,22,22,22	0
54	MG	BB	3010	1/1	0.06	-6.58	123,123,123,123	0
54	MG	DB	3063	1/1	0.04	-6.63	50,50,50,50	0
54	MG	BB	3009	1/1	0.08	-6.81	80,80,80,80	0
54	MG	AA	1628	1/1	0.07	-6.82	53,53,53,53	0
54	MG	DB	3107	1/1	0.07	-7.13	20,20,20,20	0
54	MG	BB	3017	1/1	0.09	-7.19	43,43,43,43	0
54	MG	BB	3059	1/1	0.05	-7.29	13,13,13,13	0
54	MG	BB	3073	1/1	0.08	-7.32	35,35,35,35	0
54	MG	CA	1602	1/1	0.05	-7.32	7,7,7,7	0
54	MG	DB	3035	1/1	0.10	-7.35	80,80,80,80	0
54	MG	BB	3033	1/1	0.06	-7.76	25,25,25,25	0
54	MG	BB	3036	1/1	0.07	-7.83	26,26,26,26	0
54	MG	BB	3081	1/1	0.09	-7.84	77,77,77,77	0
54	MG	BB	3048	1/1	0.08	-7.90	145,145,145,145	0
54	MG	BB	3065	1/1	0.09	-8.04	24,24,24,24	0
54	MG	BB	3057	1/1	0.05	-8.06	15,15,15,15	0
54	MG	BB	3051	1/1	0.07	-8.10	34,34,34,34	0
54	MG	BB	3069	1/1	0.07	-8.50	41,41,41,41	0
54	MG	BB	3028	1/1	0.07	-8.69	24,24,24,24	0
54	MG	BB	3005	1/1	0.07	-9.15	29,29,29,29	0
54	MG	DB	3028	1/1	0.10	-9.45	17,17,17,17	0
54	MG	BB	3042	1/1	0.11	-10.09	10,10,10,10	0
54	MG	BB	3060	1/1	0.06	-10.16	5,5,5,5	0
54	MG	BB	3103	1/1	0.12	-10.42	25,25,25,25	0
54	MG	DB	3081	1/1	0.08	-11.41	35,35,35,35	0
54	MG	CA	1624	1/1	0.09	-11.69	21,21,21,21	0
54	MG	BB	3064	1/1	0.09	-11.75	10,10,10,10	0
54	MG	CA	1605	1/1	0.06	-12.25	12,12,12,12	0

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Atoms	RSR	LLDF	B-factors( $\text{\AA}^2$ )	Q<0.9
54	MG	BB	3053	1/1	0.08	-13.57	30,30,30,30	0
54	MG	DB	3053	1/1	0.07	-14.30	90,90,90,90	0
54	MG	AA	1659	1/1	0.06	-14.88	111,111,111,111	0
54	MG	DB	3029	1/1	0.04	-19.39	30,30,30,30	0
54	MG	BB	3058	1/1	0.12	-21.00	63,63,63,63	0
54	MG	BB	3049	1/1	0.05	-30.51	24,24,24,24	0
54	MG	AA	1615	1/1	0.08	-	123,123,123,123	0

## 6.5 Other polymers

There are no such residues in this entry.