



# Full wwPDB X-ray Structure Validation Report ⓘ

Sep 14, 2023 – 02:43 AM EDT

PDB ID : 4V49  
Title : Crystal Structure of a Streptomycin Dependent Ribosome from E. Coli 70S Ribosome.  
Authors : Vila-Sanjurjo, A.; Ridgeway, W.K.; Seymaner, V.; Zhang, W.; Santoso, S.; Yu, K.; Cate, J.H.D.  
Deposited on : 2003-06-13  
Resolution : 8.70 Å(reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

---

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

MolProbity : 4.02b-467  
Xtriage (Phenix) : 1.13  
EDS : 2.35.1  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.35.1

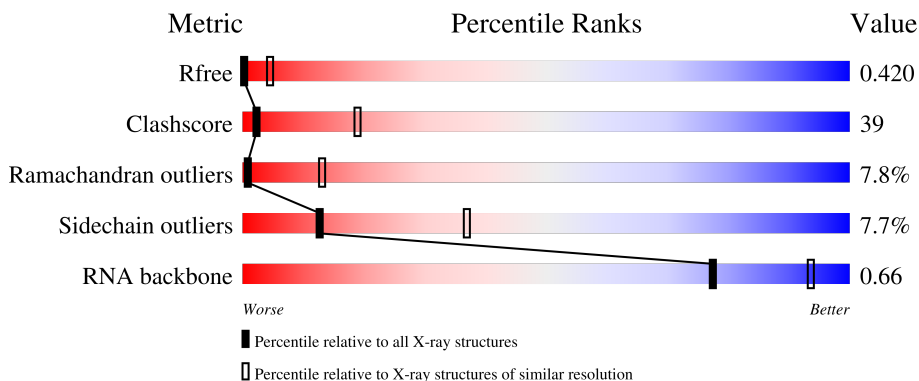
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 8.70 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
$R_{free}$	130704	1005 (11.50-3.90)
Clashscore	141614	1070 (11.50-3.90)
Ramachandran outliers	138981	1003 (11.50-3.90)
Sidechain outliers	138945	1003 (11.50-3.86)
RNA backbone	3102	1079 (11.50-3.00)

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 of the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ .

Mol	Chain	Length	Quality of chain
1	AA	1527	23% (green), 57% (yellow), 16% (orange), 4% (red), 0% (grey)
2	AV	76	36% (green), 39% (yellow), 14% (orange), 11% (red), 0% (grey)
2	AW	76	39% (green), 39% (yellow), 13% (orange), 8% (red), 0% (grey)
3	AU	18	44% (orange), 6% (red), 50% (grey)
4	AB	234	27% (green), 57% (yellow), 13% (orange), 3% (red), 0% (grey)
5	AC	206	30% (green), 51% (yellow), 17% (orange), 2% (red), 0% (grey)

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
6	AD	208	40% 54% 5%
7	AE	150	37% 53% 9%
8	AF	101	40% 58%
9	AG	155	42% 54%
10	AH	138	41% 50% 8%
11	AI	127	31% 60% 8%
12	AJ	98	15% 64% 19%
13	AK	119	24% 69% 7%
14	AL	124	34% 55% 11%
15	AM	125	26% 64% 10%
16	AN	60	22% 65% 13%
17	AO	88	36% 52% 11%
18	AP	83	37% 60%
19	AQ	104	38% 53% 8%
20	AR	73	32% 62% 7%
21	AS	80	22% 64% 14%
22	AT	99	27% 58% 14%
23	B0	2887	40% 47% 11%
24	B9	118	56% 41%
25	BA	270	100%
26	BB	205	100%
27	BC	197	100%
28	BD	178	98%
29	BE	177	100%
30	BF	52	100%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
31	BG	143	98%
32	BH	143	100%
33	BI	132	99%
34	BJ	141	99%
35	BK	124	100%
36	BL	114	99%
37	BM	111	100%
38	BN	125	99%
39	BO	117	100%
40	BP	100	100%
41	BQ	130	100%
42	BR	93	100%
43	BS	113	100%
44	BT	173	100%
45	BU	86	99%
46	BV	16	100%
47	BW	65	100%
48	BX	55	100%
49	BY	73	100%
50	BZ	58	100%
51	B1	53	100%
52	B2	46	100%
53	B3	63	100%
54	B4	35	100%
55	B5	217	94% 6%

## 2 Entry composition [i](#)

There are 55 unique types of molecules in this entry. The entry contains 122017 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
1	AA	1527	32819	14610	6085	10597	1527	0	0	0

- Molecule 2 is a RNA chain called tRNA-Phe.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	AV	76	1625	725	293	531	76	0	0	0
2	AW	76	1625	725	293	531	76	0	0	0

- Molecule 3 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
3	AU	9	176	81	24	62	9	0	0	0

- Molecule 4 is a protein called 30S ribosomal protein S2.

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

- Molecule 5 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
5	AC	206	1612	1016	314	281	1	0	0	0

- Molecule 6 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
6	AD	208	1702	1066	339	290	7	0	0	0

- Molecule 7 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
7	AE	150	1146	724	217	201	4	0	0	0

- Molecule 8 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
8	AF	101	842	531	155	153	3	0	0	0

- Molecule 9 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
9	AG	155	1256	781	252	217	6	0	0	0

- Molecule 10 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
10	AH	138	1115	705	215	192	3	0	0	0

- Molecule 11 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
11	AI	127	1010	639	198	173	0	0	0

- Molecule 12 is a protein called 30S ribosomal protein S10.

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

- Molecule 13 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	AK	119	Total	C	N	O	S	0	0	0
			884	549	168	164	3			

- Molecule 14 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	AL	124	Total	C	N	O	S	0	0	0
			970	611	195	163	1			

- Molecule 15 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	AM	125	Total	C	N	O	S	0	0	0
			996	617	207	170	2			

- Molecule 16 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	AN	60	Total	C	N	O	S	0	0	0
			491	312	104	71	4			

- Molecule 17 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	AO	88	Total	C	N	O	S	0	0	0
			733	459	147	125	2			

- Molecule 18 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	AP	83	Total	C	N	O	S	0	0	0
			700	443	139	117	1			

- Molecule 19 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AQ	104	Total	C	N	O	S	0	0	0
			856	547	161	146	2			

- Molecule 20 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
20	AR	73	596	380	118	98	0	0	0

- Molecule 21 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
21	AS	80	647	414	119	112	2	0	0	0

- Molecule 22 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
22	AT	99	762	469	162	129	2	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
23	B0	2825	60636	27047	11191	19573	2825	0	0	0

- Molecule 24 is a RNA chain called 5S RIBOSOMAL RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
24	B9	118	2519	1124	464	813	118	0	0	0

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf	Trace
25	BA	270	Total	C	0	0	270
			270	270			

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf	Trace
26	BB	205	Total	C	0	0	205
			205	205			

- Molecule 27 is a protein called 50S ribosomal protein L4.



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
27	BC	197	Total C 197 197	0	0	197

- Molecule 28 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
28	BD	178	Total C 178 178	0	0	178

- Molecule 29 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
29	BE	177	Total C 177 177	0	0	177

- Molecule 30 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
30	BF	52	Total C 52 52	0	0	52

- Molecule 31 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
31	BG	143	Total C 143 143	0	0	143

- Molecule 32 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
32	BH	143	Total C 143 143	0	0	143

- Molecule 33 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
33	BI	132	Total C 132 132	0	0	132

- Molecule 34 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
34	BJ	141	Total C 141 141	0	0	141

- Molecule 35 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
35	BK	124	Total C 124 124	0	0	124

- Molecule 36 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
36	BL	114	Total C 114 114	0	0	114

- Molecule 37 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
37	BM	111	Total C 111 111	0	0	111

- Molecule 38 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
38	BN	125	Total C 125 125	0	0	125

- Molecule 39 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
39	BO	117	Total C 117 117	0	0	117

- Molecule 40 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
40	BP	100	Total C 100 100	0	0	100

- Molecule 41 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
41	BQ	130	Total C 130 130	0	0	130

- Molecule 42 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
42	BR	93	Total C 93 93	0	0	93

- Molecule 43 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
43	BS	113	Total C 113 113	0	0	113

- Molecule 44 is a protein called general stress protein Ctc.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
44	BT	173	Total C 173 173	0	0	173

- Molecule 45 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
45	BU	86	Total C 86 86	0	0	86

- Molecule 46 is a protein called 50S RIBOSOMAL PROTEIN L28.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
46	BV	16	Total C 16 16	0	0	16

- Molecule 47 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
47	BW	65	Total C 65 65	0	0	65

- Molecule 48 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
48	BX	55	Total C 55 55	0	0	55

- Molecule 49 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
49	BY	73	Total C 73 73	0	0	73

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
50	BZ	58	Total C 58 58	0	0	58

- Molecule 51 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
51	B1	53	Total C 53 53	0	0	53

- Molecule 52 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
52	B2	46	Total C 46 46	0	0	46

- Molecule 53 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
53	B3	63	Total C 63 63	0	0	63

- Molecule 54 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
54	B4	35	Total C 35 35	0	0	35

- Molecule 55 is a protein called 50S ribosomal protein L1P.

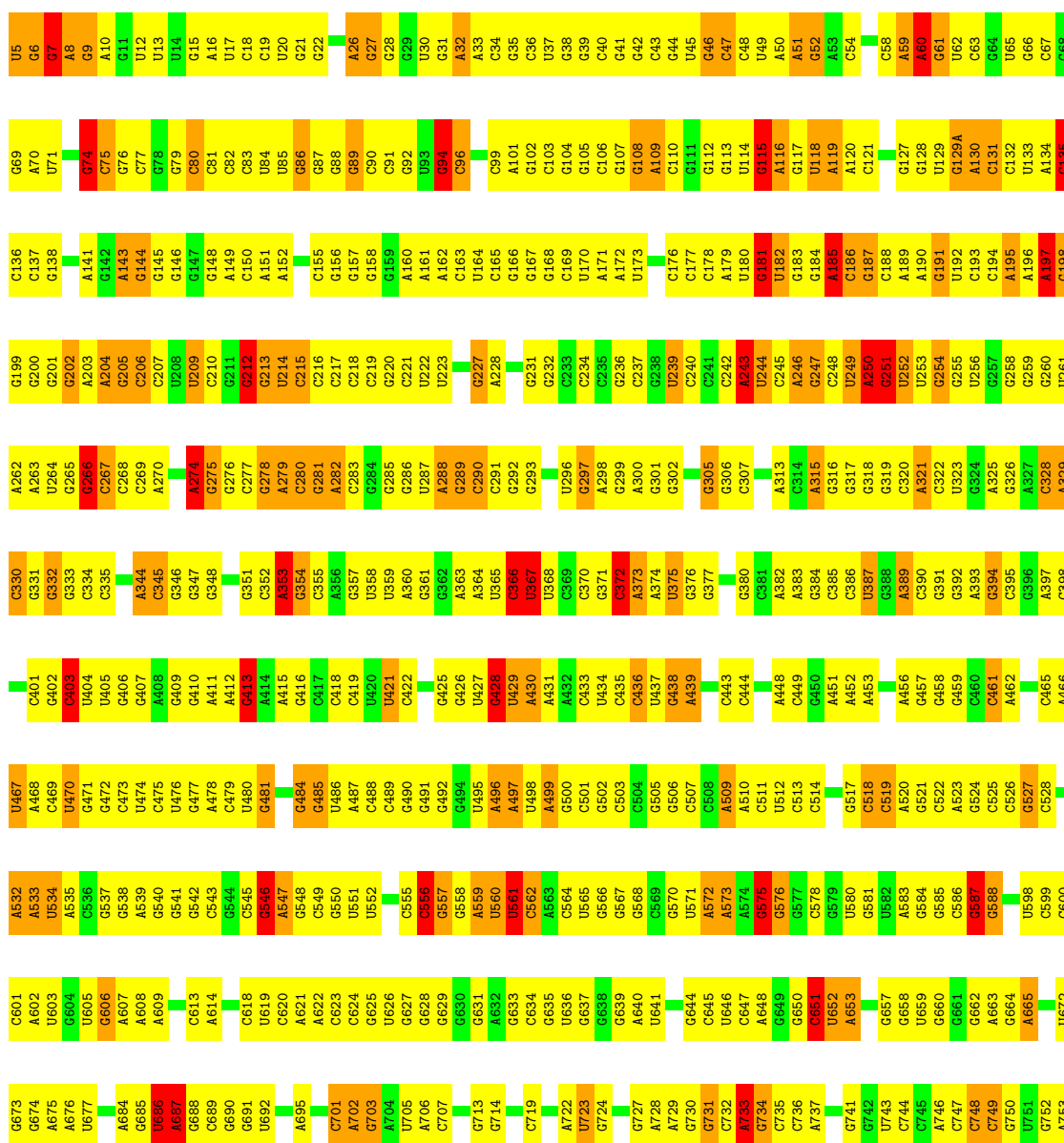
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf	Trace
55	B5	217	Total 217    C 217	0	0	217

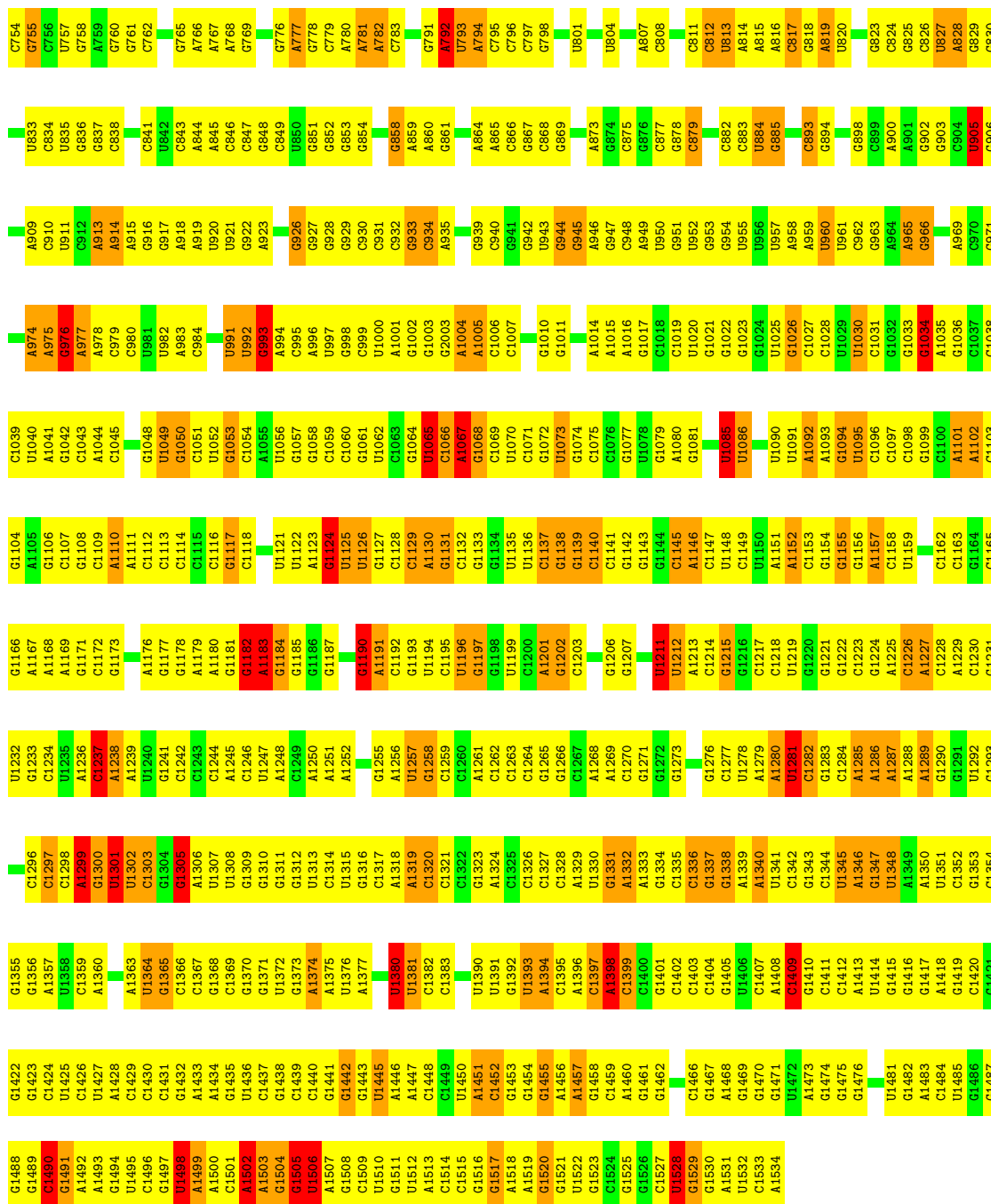
### 3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry. 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. 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.

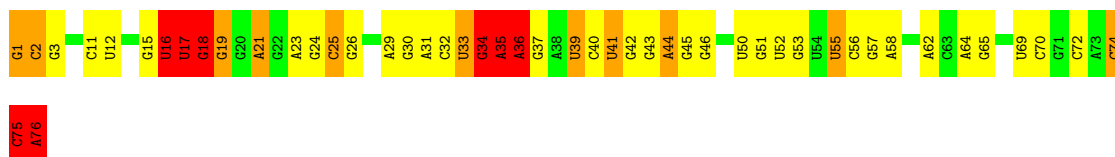
- Molecule 1: 16S RIBOSOMAL RNA

Chain AA: 



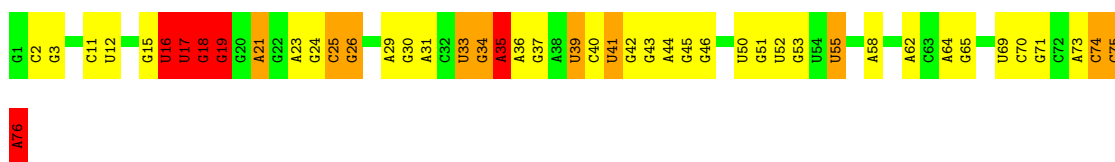


• Molecule 2: tRNA-Phe



• Molecule 2: tRNA-Phe

Chain AW:  39% 39% 13% 8%



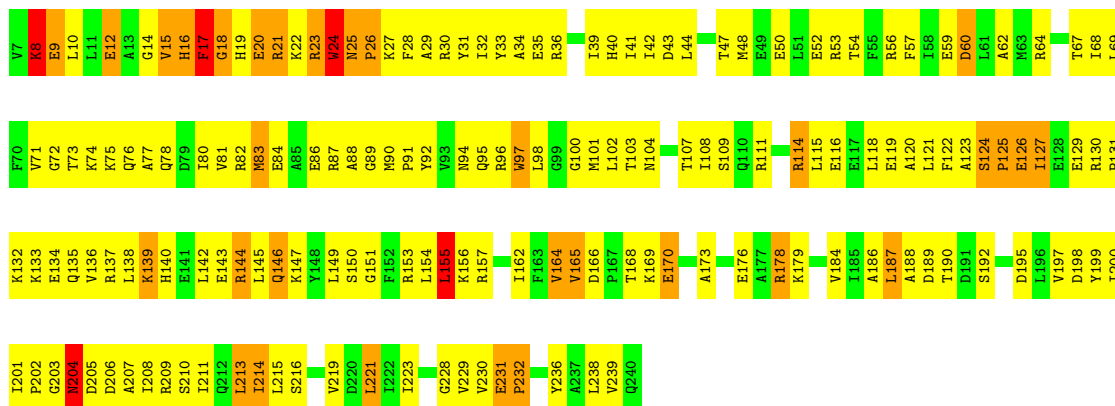
- Molecule 3: mRNA

Chain AU:  44% 6% 50%



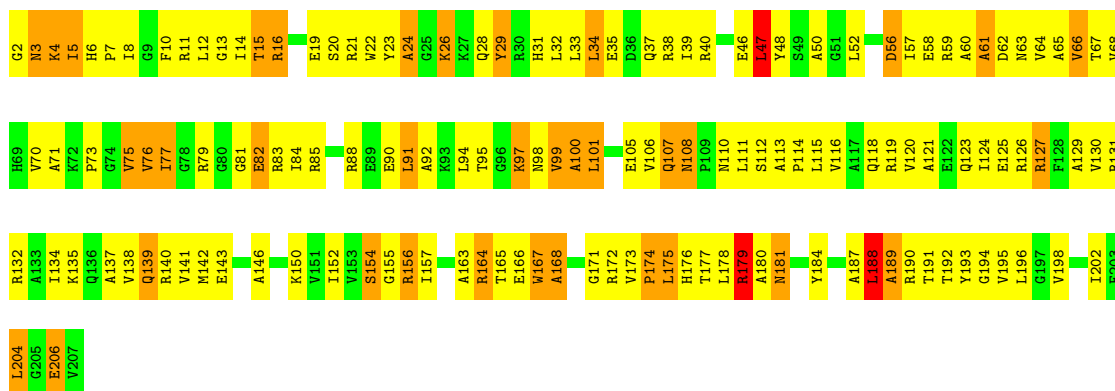
- Molecule 4: 30S ribosomal protein S2

Chain AB:  27% 57% 13%



- Molecule 5: 30S ribosomal protein S3

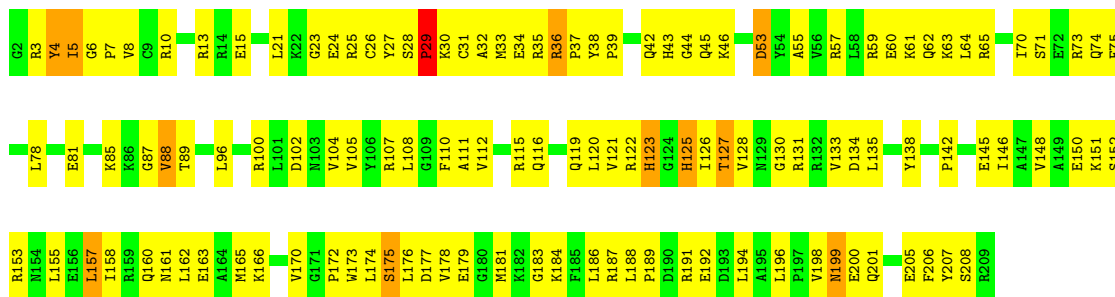
Chain AC:  30% 51% 17%



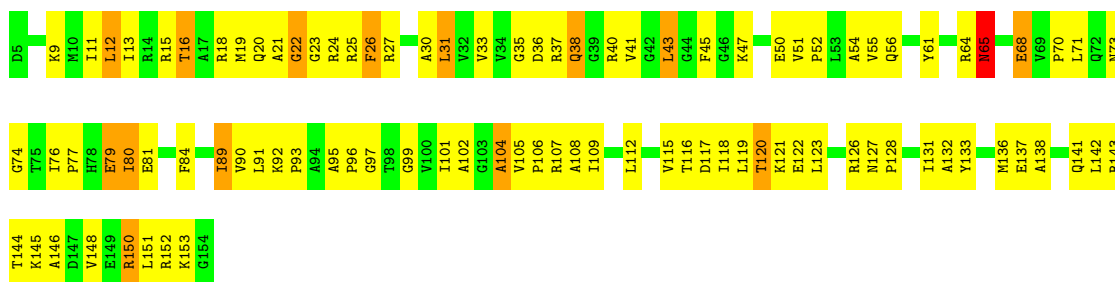
- Molecule 6: 30S ribosomal protein S4

Chain AD:  40% 54% 5%

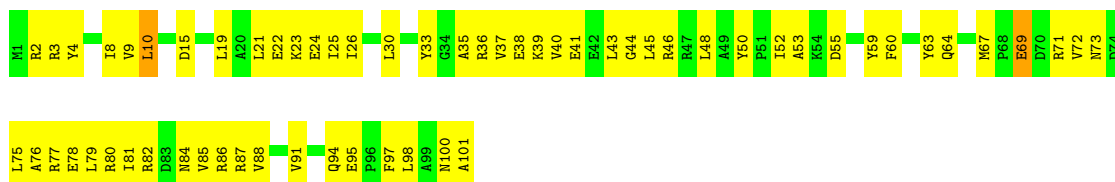




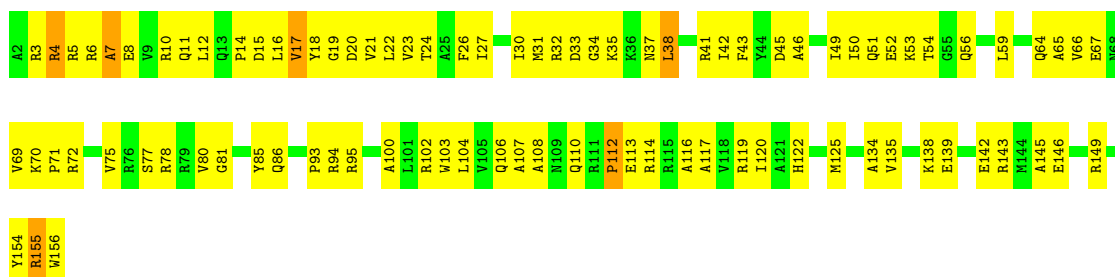
• Molecule 7: 30S ribosomal protein S5



• Molecule 8: 30S ribosomal protein S6



• Molecule 9: 30S ribosomal protein S7

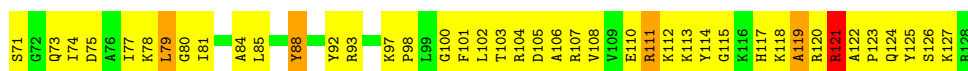
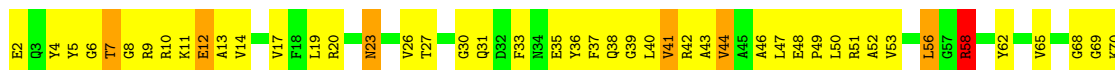
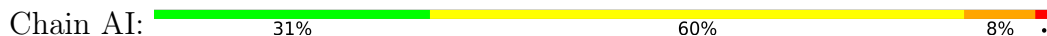


• Molecule 10: 30S ribosomal protein S8

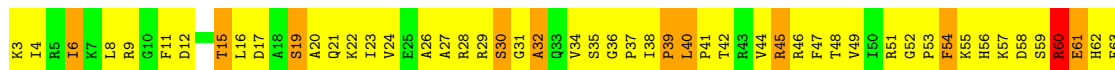
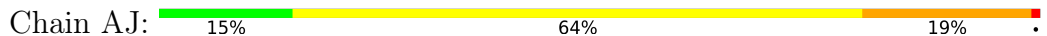




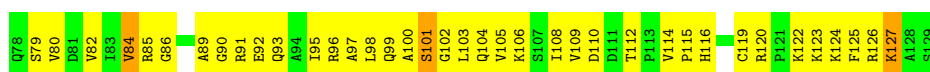
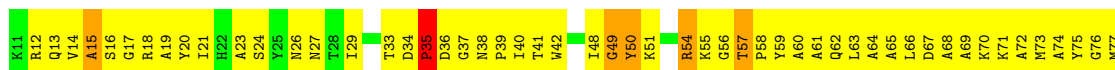
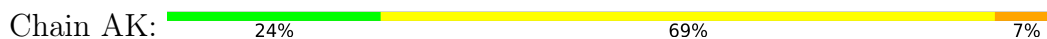
- Molecule 11: 30S ribosomal protein S9



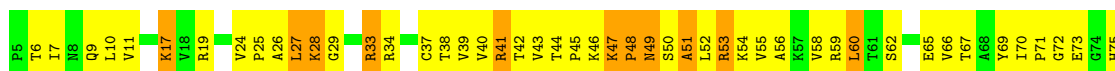
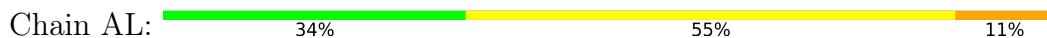
- Molecule 12: 30S ribosomal protein S10



- Molecule 13: 30S ribosomal protein S11

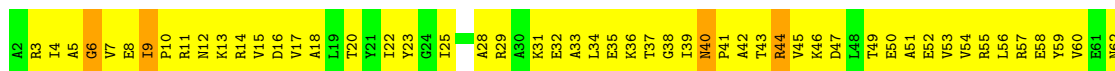


- Molecule 14: 30S ribosomal protein S12

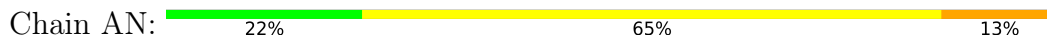


- Molecule 15: 30S ribosomal protein S13

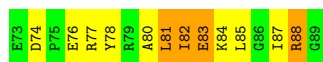
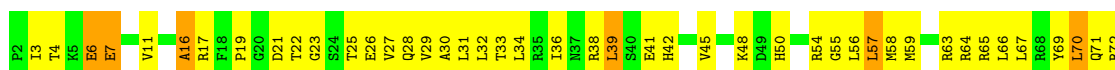




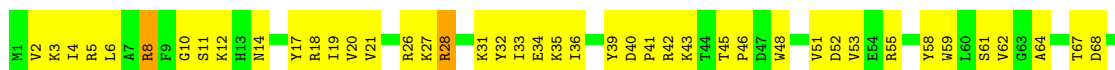
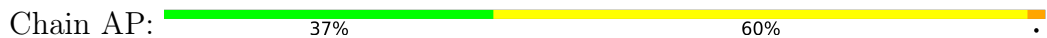
- Molecule 16: 30S ribosomal protein S14



- Molecule 17: 30S ribosomal protein S15



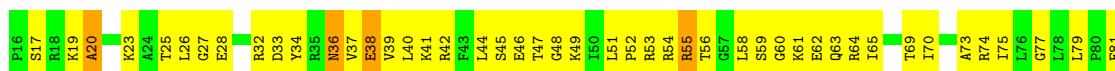
- Molecule 18: 30S ribosomal protein S16

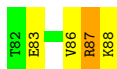


- Molecule 19: 30S ribosomal protein S17

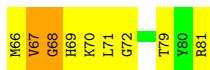
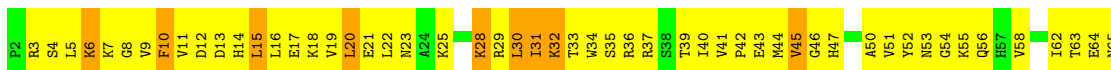
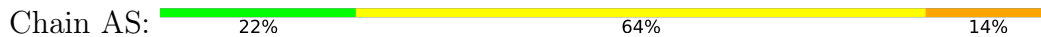


- Molecule 20: 30S ribosomal protein S18

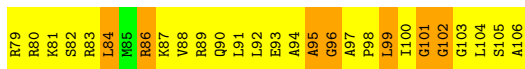
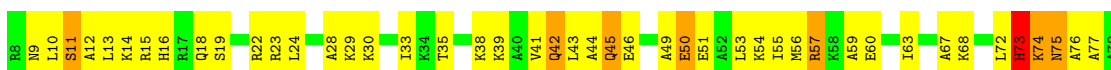




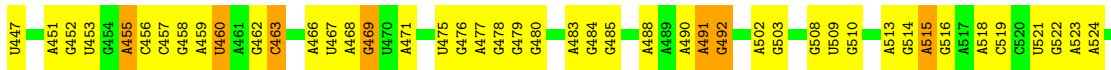
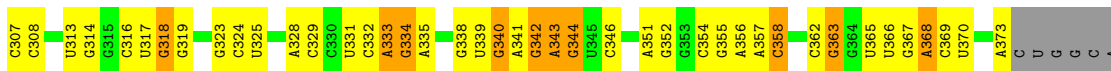
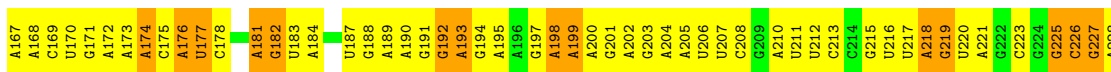
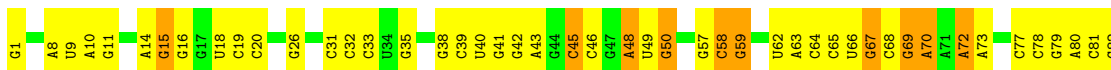
• Molecule 21: 30S ribosomal protein S19



• Molecule 22: 30S ribosomal protein S20



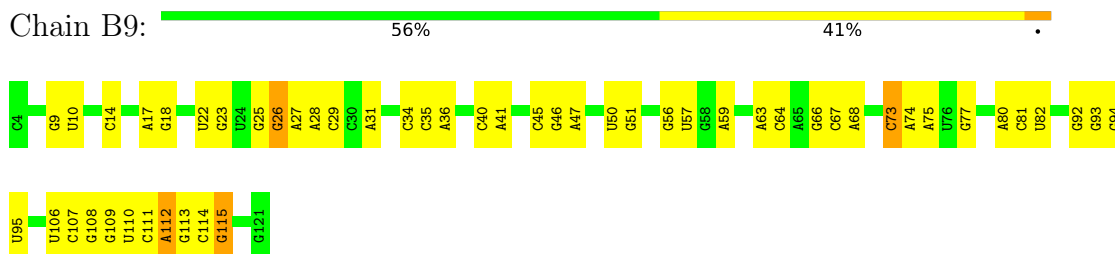
• Molecule 23: 23S RIBOSOMAL RNA



A1634	A1635	G1644	C1648	U1651	A1654	C1655	A1656	A1574	C1575	A1576	G1577	C1481	U1482	G1483	A1408	U1409	G1487	G1488	G1489	U1490	C1491	A1492	A1493	G1494	G1495	G1496	C1497	G1498	A1499	U1500	G1501	G1502	G1503	G1504	U1505	G1508	A1509	U1513	C1514	U1515	A1516	C1517	C1518	G1519	G1520	C1524	G1527	C1528	C1529	U1530	A1531	A1532	G1533	G1542	G1543	A1544	G1545	G1633							
C1582	A1561	A1562	G1566	A1567	A1568	A1571	C1572	A1573	C1574	A1575	G1576	U1577	C1578	G1579	A1581	A1582	G1583	G1584	C1585	G1586	A1587	U1588	A1589	A1590	G1591	G1592	G1593	C1594	G1595	A1596	U1597	C1598	A1599	U1600	G1601	A1603	A1604	A1605	U1611	G1612	G1613	C1614	C1615	G1616	A1617	U1618	C1619	C1620	A1621	G1622	A1623	A1624	G1625	A1626	C1627	A1632	C1633								
A1634	G1635	G1644	C1648	U1651	A1654	C1655	A1656	A1574	C1575	A1576	G1577	C1481	U1482	G1483	A1408	U1409	G1487	G1488	G1489	U1490	C1491	A1492	A1493	G1494	G1495	G1496	C1497	G1498	A1499	U1500	G1501	G1502	G1503	G1504	U1505	G1508	A1509	U1513	C1514	U1515	A1516	C1517	C1518	G1519	G1520	C1524	G1527	C1528	C1529	U1530	A1531	A1532	G1533	G1542	G1543	A1544	G1545	G1633							
U1529	G530	C533	U534	C537	A538	A539	G540	C541	A542	G543	G548	G549	C602	U604	G605	C611	G612	A613	U616	U617	A618	G619	G620	C624	A625	A626	A627	U628	C629	G630	G631	G632	G633	U634	G635	U636	U637	A643	G570	U571	G572	C573	C574	A575	G576	G579	A580	A581	G582	C583	A584	G588	C589	C590	G591	G592	C593	G594	U597	A762	U598				
A599	G600	A601	C602	U604	G605	C611	G612	A613	U616	U617	A618	G619	G620	C624	A625	A626	A627	U628	C629	G630	G631	G632	G633	U634	G635	U636	U637	A643	G570	U571	G572	C573	C574	A575	G576	G579	A580	A581	G582	C583	A584	G588	C589	C590	G591	G592	C593	G594	U597	A762	U598														
A683	C694	G687	U689	A688	A689	A690	A693	G694	G697	U699	A700	U701	A702	A703	G704	A709	U710	U711	A712	U715	U716	G717	U718	U719	U720	U721	U722	U723	U724	U725	U726	U727	U728	U729	U730	U731	U732	U733	U734	U735	U736	U737	U738	U739	G742	A743	C744	A745	G746	U753	G754	U757	C825	U826	C827	G830	G831	A763							
A764	C765	A766	G767	U768	G769	U770	G773	A774	U775	G776	A777	G778	U784	U785	G788	U789	U790	U791	U792	U793	U794	U795	U796	U797	U798	U799	U800	A801	A802	A803	A804	G805	C806	G807	A808	G809	U810	G811	U812	A813	G814	A815	A816	A817	C818	C819	U820	U824	C825	U826	C827	G830	G831	A763											
A833	A834	A838	U839	U840	G841	A842	G844	C847	U852	A856	U857	G858	U859	G860	G861	G862	C863	U864	A865	U868	C869	G870	A871	G872	U873	A874	G875	A876	A877	C878	C879	A879	C880	A883	C884	G887	G888	A891	A892	C892	G893	U894	C895	U897	C898	A899	C899	G899	U900	A900A	G903	U904	U904												
C909	U910	A911	U917	A918	U919	G920	A922	U925	C926	C927	A928	G929	A930	G931	C939	G940	U941	U942	U943	A944	G945	G949	G950	U951	U952	G953	U954	G955	U956	U957	U958	G959	U960	G961	G967	U968	A970	A971	U972	C972	G973	U974	C975	U978	A979	C985	A984	U985	G986	G987	U988	A989	C989	U990	G990	A994									
A995	C996	C997	C998	A999	G1000	A1001	C1002	C1003	A1004	U1005	C1006	A1007	G1008	G1014	U1015	C1016	C1017	C1018	U1019	A1020	U1021	A1022	U1023	G1024	A1025	U1026	C1027	G1028	U1029	U1030	U1031	G1032	U1033	U1034	G1035	G1036	U1037	U1038	A1039	A1040	U1041	U1044	G1047	C1052	G1053	C1054	A1055	U1056	A1057	G1058	G1062	C1063	A1065												
G1066	G1067	A1068	G1069	U1070	U1071	U1072	G1073	C1074	U1075	U1076	U1077	U1078	G1079	A1080	A1081	C1082	C1083	A1084	C1087	A1088	C1089	A1090	A1091	U1092	U1093	C1094	A1095	U1096	A1097	A1098	U1099	A1100	U1101	G1102	C1103	C1111	U1112	C1113	A1114	C1115	G1118	U1119	C1120	G1121	A1122	C1127	G1128	U1129	U1130	A1131	C1132	G1133	A1137	A1138											
A1139	A1140	U1141	G1142	C1145	G1146	G1147	G1148	G1149	U1150	U1151	U1152	A1153	A1154	G1155	U1156	G1164	G1165	A1166	A1167	A1180	C1181	U1182	G1183	G1184	C1185	U1186	A1187	A1188	G1189	C1190	G1191	A1192	G1193	U1194	U1195	G1196	U1197	C1198	U1199	G1200	A1203	G1204	G1205	A1208	A1209	A1290	G1210	G1211	C1214	U1217	U1218	C1219	G1220	A1221	G1222										
G1223	A1224	G1225	A1226	U1231	U1232	A1233	C1234	C1235	G1240	U1241	A1250	G1251	C1252	C1253	U1257	G1258	A1259	C1261	U1262	G1263	C1264	G1265	G1266	U1267	U1268	G1269	C1270	U1271	G1272	U1273	C1274	A1278	G1279	U1280	A1281	U1282	U1283	G1284	A1285	U1286	A1287	A1288	A1289	A1290	G1291	A1292	A1293	G1298	U1301	U1307	C1308														
G1309	C1310	C1311	G1312	U1313	A1314	A1315	G1316	G1317	A1318	C1319	G1323	G1324	U1325	U1326	U1327	U1328	U1329	G1330	G1331	G1332	G1333	A1334	G1337	G1338	G1341	U1342	C1343	C1344	A1349	G1350	G1351	G1352	A1353	A1354	A1355	G1356	U1357	C1358	G1359	U1365	A1366	A1367	G1368	G1373	G1374	C1380	G1381	A1386	G1387	C1389															
G1390	A1391	U1392	G1393	C1394	A1397	G1398	G1401	U1402	G1403	A1408	U1409	U1410	C1411	G1414	C1415	C1418	G1419	G1425	U1426	G1427	G1428	A1429	G1430	U1431	A1432	A1433	G1436	A1437	A1441	C1442	C1443	U1444	A1445	U1446	U1447	A1448	C1449	A1452	C1452	C1455	A1458	U1459	A1464	G1465	C1466	U1467	U1469																		
G1470	G1471	C1472	U1473	A1474	U1475	G1479	G1480	U1481	U1482	G1483	A1408	U1409	U1410	C1411	G1414	C1415	C1418	G1419	G1425	U1426	G1427	G1428	A1429	G1430	U1431	A1432	A1433	G1436	A1437	A1441	C1442	C1443	U1444	A1445	U1446	U1447	A1448	C1449	A1452	C1452	C1455	A1458	U1459	A1464	G1465	C1466	U1467	U1469																	
C1582	A1561	A1562	G1566	A1567	A1568	A1571	C1572	A1573	C1574	A1575	G1576	U1577	C1578	G1579	A1581	A1582	G1583	G1584	C1585	G1586	A1587	U1588	A1589	A1590	G1591	G1592	G1593	C1594	G1595	A1596	U1597	C1598	A1599	U1600	G1601	A1603	A1604	A1605	U1611	G1612	G1613	C1614	C1615	G1616	A1617	U1618	C1619	C1620	A1621	G1622	A1623	A1624	G1625	A1626	C1627	A1632	C1633								
A1634	G1635	G1644	C1648	U1651	A1654	C1655	A1656	A1574	C1575	A1576	G1577	C1481	U1482	G1483	A1408	U1409	G1487	G1488	G1489	U1490	C1491	A1492	A1493	G1494	G1495	G1496	C1497	G1498	A1499	U1500	G1501	G1502	G1503	G1504	U1505	G1508	A1509	U1513	C1514	U1515	A1516	C1517	C1518	G1519	G1520	C1524	G1527	C1528	C1529	U1530	A1531	A1532	G1533	G1542	G1543	A1544	G1545	G1633							
G1678	U1679	U1680	A1681	G1682	G1683	G1684	A1685	A1686	C1687	G1691	U1692	G1693	G1694	U1695	U1696	U1697	G1698	C1699	G1700	A1672	C1673	U1678	U1679	U1680	A1681	G1682	G1683	G1684	A1685	A1686	C1687	G1691	U1692	G1693	G1694	U1695	U1696	U1697	G1698	C1699	G1700	A1672	C1673	U1678	U1679	U1680	A1681	G1682	G1683	G1684	A1685	A1686	C1687	G1691	U1692	G1693	G1694	U1695	U1696	U1697	G1698	C1699	G1700	A1672	C1673



- Molecule 24: 5S RIBOSOMAL RNA



- Molecule 25: 50S ribosomal protein L2



There are no outlier residues recorded for this chain.

- Molecule 26: 50S ribosomal protein L3



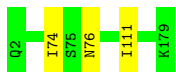
There are no outlier residues recorded for this chain.

- Molecule 27: 50S ribosomal protein L4



There are no outlier residues recorded for this chain.

- Molecule 28: 50S ribosomal protein L5



- Molecule 29: 50S ribosomal protein L6



There are no outlier residues recorded for this chain.

- Molecule 30: 50S ribosomal protein L9



There are no outlier residues recorded for this chain.

- Molecule 31: 50S ribosomal protein L11





- Molecule 32: 50S ribosomal protein L13

Chain BH:  100%

There are no outlier residues recorded for this chain.

- Molecule 33: 50S ribosomal protein L14

Chain BI:  99%



- Molecule 34: 50S ribosomal protein L15

Chain BJ:  99%



- Molecule 35: 50S ribosomal protein L16

Chain BK:  100%

There are no outlier residues recorded for this chain.

- Molecule 36: 50S ribosomal protein L17

Chain BL:  99%



- Molecule 37: 50S ribosomal protein L18

Chain BM:  100%

There are no outlier residues recorded for this chain.

- Molecule 38: 50S ribosomal protein L19

Chain BN:  99%



- Molecule 39: 50S ribosomal protein L20



Chain BO:  100%

There are no outlier residues recorded for this chain.

- Molecule 40: 50S ribosomal protein L21

Chain BP:  100%

There are no outlier residues recorded for this chain.

- Molecule 41: 50S ribosomal protein L22

Chain BQ:  100%

There are no outlier residues recorded for this chain.

- Molecule 42: 50S ribosomal protein L23

Chain BR:  100%

There are no outlier residues recorded for this chain.

- Molecule 43: 50S ribosomal protein L24

Chain BS:  100%

There are no outlier residues recorded for this chain.

- Molecule 44: general stress protein Ctc

Chain BT:  100%

There are no outlier residues recorded for this chain.

- Molecule 45: 50S ribosomal protein L27

Chain BU:  99%



- Molecule 46: 50S RIBOSOMAL PROTEIN L28

Chain BV:  100%

There are no outlier residues recorded for this chain.

- Molecule 47: 50S ribosomal protein L29

Chain BW:  100%

There are no outlier residues recorded for this chain.

- Molecule 48: 50S ribosomal protein L30

Chain BX:  100%

There are no outlier residues recorded for this chain.

- Molecule 49: 50S ribosomal protein L31

Chain BY:  100%

There are no outlier residues recorded for this chain.

- Molecule 50: 50S ribosomal protein L32

Chain BZ:  100%

There are no outlier residues recorded for this chain.

- Molecule 51: 50S ribosomal protein L33

Chain B1:  100%

There are no outlier residues recorded for this chain.

- Molecule 52: 50S ribosomal protein L34

Chain B2:  100%

There are no outlier residues recorded for this chain.

- Molecule 53: 50S ribosomal protein L35

Chain B3:  100%

There are no outlier residues recorded for this chain.

- Molecule 54: 50S ribosomal protein L36

Chain B4:  100%

There are no outlier residues recorded for this chain.

- Molecule 55: 50S ribosomal protein L1P

Chain B5:  94% 6%



## 4 Data and refinement statistics

Property	Value	Source
Space group	I 4 2 2	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	682.32Å 682.32Å 386.36Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	70.00 – 8.70 241.24 – 8.70	Depositor EDS
% Data completeness (in resolution range)	98.5 (70.00-8.70) 93.0 (241.24-8.70)	Depositor EDS
$R_{merge}$	(Not available)	Depositor
$R_{sym}$	0.15	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	2.97 (at 8.45Å)	Xtrriage
Refinement program	CNS	Depositor
R, $R_{free}$	0.394 , 0.415 0.384 , 0.420	Depositor DCC
$R_{free}$ test set	1966 reflections (5.23%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	443.4	Xtrriage
Anisotropy	0.381	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	1.30 , -10.0	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.46$ , $\langle L^2 \rangle = 0.29$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
$F_o, F_c$ correlation	0.83	EDS
Total number of atoms	122017	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	641.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 7.48% of the height of the origin peak. No significant pseudotranslation is detected.*

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

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

## 5 Model quality i

### 5.1 Standard geometry i

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	1.53	69/36688 (0.2%)	1.32	264/57135 (0.5%)
2	AV	2.23	23/1817 (1.3%)	1.84	42/2831 (1.5%)
2	AW	1.75	19/1816 (1.0%)	1.94	32/2827 (1.1%)
3	AU	45.18	35/188 (18.6%)	20.47	49/274 (17.9%)
4	AB	0.37	0/1935	0.68	1/2609 (0.0%)
5	AC	0.38	0/1636	0.66	0/2205
6	AD	0.37	0/1732	0.63	0/2318
7	AE	0.48	0/1162	0.79	0/1564
8	AF	0.34	0/855	0.63	0/1154
9	AG	0.35	0/1275	0.62	0/1709
10	AH	0.44	0/1135	0.74	0/1527
11	AI	0.36	0/1028	0.62	0/1378
12	AJ	0.36	0/807	0.71	0/1085
13	AK	0.39	0/899	0.70	0/1213
14	AL	0.70	1/986 (0.1%)	0.76	1/1320 (0.1%)
15	AM	0.44	1/1007 (0.1%)	1.11	3/1347 (0.2%)
16	AN	0.40	0/500	0.78	0/664
17	AO	0.36	0/744	0.63	1/992 (0.1%)
18	AP	0.43	0/716	0.76	0/963
19	AQ	0.44	0/869	0.75	0/1159
20	AR	0.36	0/602	0.63	0/799
21	AS	0.35	0/661	0.72	1/890 (0.1%)
22	AT	0.39	0/764	0.73	0/1006
23	B0	0.49	17/67885 (0.0%)	0.75	49/105852 (0.0%)
24	B9	0.68	1/2815 (0.0%)	0.76	3/4384 (0.1%)
All	All	1.97	166/130522 (0.1%)	1.25	446/199205 (0.2%)

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

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AA	2	40
2	AV	0	7
2	AW	0	7
23	B0	0	5
All	All	2	59

All (166) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	AU	14	A	C6-N6	279.73	3.57	1.33
3	AU	13	A	C6-N6	279.69	3.57	1.33
3	AU	6	A	C6-N6	279.55	3.57	1.33
3	AU	12	A	C6-N6	279.29	3.57	1.33
3	AU	8	G	C6-O6	259.50	3.57	1.24
1	AA	135	C	O3 <sup>?</sup> -P	-83.90	0.60	1.61
1	AA	214	U	O3 <sup>?</sup> -P	-73.46	0.72	1.61
1	AA	893	C	O3 <sup>?</sup> -P	-61.19	0.87	1.61
1	AA	436	C	O3 <sup>?</sup> -P	-60.64	0.88	1.61
1	AA	905	U	O3 <sup>?</sup> -P	-53.63	0.96	1.61
1	AA	556	C	O3 <sup>?</sup> -P	-49.20	1.02	1.61
1	AA	733	A	O3 <sup>?</sup> -P	47.43	2.18	1.61
1	AA	115	G	O3 <sup>?</sup> -P	47.32	2.17	1.61
1	AA	1331	G	O3 <sup>?</sup> -P	47.30	2.17	1.61
1	AA	1393	U	O3 <sup>?</sup> -P	-46.70	1.05	1.61
23	B0	3107	G	O3 <sup>?</sup> -P	44.35	2.14	1.61
1	AA	367	U	O3 <sup>?</sup> -P	44.09	2.14	1.61
1	AA	1034	G	O3 <sup>?</sup> -P	43.46	2.13	1.61
1	AA	212	G	O3 <sup>?</sup> -P	43.06	2.12	1.61
2	AV	25	C	O3 <sup>?</sup> -P	42.67	2.12	1.61
23	B0	3098	U	O3 <sup>?</sup> -P	42.58	2.12	1.61
1	AA	94	G	O3 <sup>?</sup> -P	-40.86	1.12	1.61
23	B0	3106	U	O3 <sup>?</sup> -P	-40.56	1.12	1.61
1	AA	288	A	O3 <sup>?</sup> -P	39.52	2.08	1.61
1	AA	827	U	O3 <sup>?</sup> -P	38.98	2.08	1.61
1	AA	1211	U	O3 <sup>?</sup> -P	38.81	2.07	1.61
1	AA	118	U	O3 <sup>?</sup> -P	37.95	2.06	1.61
3	AU	11	C	O3 <sup>?</sup> -P	36.67	2.05	1.61
1	AA	239	U	O3 <sup>?</sup> -P	-36.19	1.17	1.61
1	AA	403	C	O3 <sup>?</sup> -P	-35.34	1.18	1.61
2	AV	36	A	O3 <sup>?</sup> -P	-35.27	1.18	1.61

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1409	C	O3 <sup>2</sup> -P	-34.67	1.19	1.61
23	B0	3183	A	O3 <sup>2</sup> -P	34.42	2.02	1.61
24	B9	73	C	O3 <sup>2</sup> -P	33.99	2.02	1.61
1	AA	375	U	O3 <sup>2</sup> -P	33.88	2.01	1.61
1	AA	74	G	O3 <sup>2</sup> -P	-33.76	1.20	1.61
1	AA	576	G	O3 <sup>2</sup> -P	-33.51	1.21	1.61
1	AA	1155	G	O3 <sup>2</sup> -P	33.18	2.00	1.61
23	B0	3149	G	O3 <sup>2</sup> -P	31.47	1.99	1.61
1	AA	89	G	O3 <sup>2</sup> -P	31.38	1.98	1.61
1	AA	1490	C	O3 <sup>2</sup> -P	-31.15	1.23	1.61
1	AA	651	C	O3 <sup>2</sup> -P	-30.60	1.24	1.61
1	AA	1398	A	O3 <sup>2</sup> -P	30.38	1.97	1.61
1	AA	804	U	O3 <sup>2</sup> -P	-29.69	1.25	1.61
1	AA	546	G	O3 <sup>2</sup> -P	29.19	1.96	1.61
23	B0	3102	G	O3 <sup>2</sup> -P	-28.88	1.26	1.61
1	AA	59	A	O3 <sup>2</sup> -P	-28.52	1.26	1.61
1	AA	776	G	O3 <sup>2</sup> -P	-28.42	1.27	1.61
1	AA	1297	C	O3 <sup>2</sup> -P	28.30	1.95	1.61
1	AA	606	G	O3 <sup>2</sup> -P	28.21	1.95	1.61
23	B0	1856	U	O3 <sup>2</sup> -P	27.18	1.93	1.61
2	AV	74	C	O3 <sup>2</sup> -P	-26.99	1.28	1.61
1	AA	1335	C	O3 <sup>2</sup> -P	26.83	1.93	1.61
2	AW	75	C	O3 <sup>2</sup> -P	-26.74	1.29	1.61
1	AA	387	U	O3 <sup>2</sup> -P	26.51	1.93	1.61
1	AA	1110	A	O3 <sup>2</sup> -P	-25.86	1.30	1.61
1	AA	394	G	O3 <sup>2</sup> -P	-25.66	1.30	1.61
2	AV	75	C	O3 <sup>2</sup> -P	-25.65	1.30	1.61
1	AA	26	A	O3 <sup>2</sup> -P	-25.59	1.30	1.61
1	AA	206	C	O3 <sup>2</sup> -P	25.11	1.91	1.61
1	AA	1383	C	O3 <sup>2</sup> -P	-24.75	1.31	1.61
1	AA	461	C	O3 <sup>2</sup> -P	-24.70	1.31	1.61
23	B0	3188	U	O3 <sup>2</sup> -P	24.59	1.90	1.61
2	AW	33	U	O3 <sup>2</sup> -P	-24.01	1.32	1.61
1	AA	227	G	O3 <sup>2</sup> -P	-23.32	1.33	1.61
1	AA	1457	A	O3 <sup>2</sup> -P	-22.16	1.34	1.61
1	AA	1455	G	O3 <sup>2</sup> -P	-22.11	1.34	1.61
23	B0	3141	G	O3 <sup>2</sup> -P	21.50	1.86	1.61
1	AA	1182	G	O3 <sup>2</sup> -P	21.35	1.86	1.61
1	AA	631	G	O3 <sup>2</sup> -P	21.17	1.86	1.61
23	B0	3101	G	O3 <sup>2</sup> -P	20.97	1.86	1.61
1	AA	278	G	O3 <sup>2</sup> -P	20.68	1.85	1.61
1	AA	1345	U	O3 <sup>2</sup> -P	-20.45	1.36	1.61

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	1374	A	O3 <sup>2</sup> -P	20.11	1.85	1.61
1	AA	1237	C	O3 <sup>2</sup> -P	20.05	1.85	1.61
2	AW	34	G	O3 <sup>2</sup> -P	19.74	1.84	1.61
2	AW	46	G	C8-N7	19.74	1.42	1.30
1	AA	274	A	O3 <sup>2</sup> -P	-19.61	1.37	1.61
2	AV	46	G	C8-N7	19.60	1.42	1.30
1	AA	1067	A	O3 <sup>2</sup> -P	-18.95	1.38	1.61
2	AV	16	U	C5-C6	18.71	1.50	1.34
2	AW	16	U	C5-C6	18.61	1.50	1.34
23	B0	3190	G	O3 <sup>2</sup> -P	18.37	1.83	1.61
1	AA	587	G	O3 <sup>2</sup> -P	18.18	1.82	1.61
2	AV	58	A	C6-N6	17.93	1.48	1.33
2	AW	58	A	C6-N6	17.83	1.48	1.33
14	AL	19	ARG	C-N	-17.39	0.94	1.34
2	AW	17	U	C5-C6	17.21	1.49	1.34
2	AV	17	U	C5-C6	17.11	1.49	1.34
23	B0	3874	C	O3 <sup>2</sup> -P	16.97	1.81	1.61
2	AV	44	A	O3 <sup>2</sup> -P	-16.81	1.41	1.61
2	AV	33	U	O3 <sup>2</sup> -P	-16.73	1.41	1.61
2	AV	72	C	O3 <sup>2</sup> -P	-15.79	1.42	1.61
1	AA	1445	U	O3 <sup>2</sup> -P	-15.56	1.42	1.61
23	B0	3186	C	O3 <sup>2</sup> -P	-15.43	1.42	1.61
1	AA	754	C	O3 <sup>2</sup> -P	14.57	1.78	1.61
1	AA	470	U	O3 <sup>2</sup> -P	-14.49	1.43	1.61
2	AV	58	A	C6-N1	13.84	1.45	1.35
2	AW	58	A	C6-N1	13.84	1.45	1.35
1	AA	944	G	O3 <sup>2</sup> -P	-13.66	1.44	1.61
2	AW	25	C	O3 <sup>2</sup> -P	-13.19	1.45	1.61
1	AA	499	A	O3 <sup>2</sup> -P	12.94	1.76	1.61
3	AU	9	U	O3 <sup>2</sup> -P	-12.28	1.46	1.61
3	AU	10	U	O3 <sup>2</sup> -P	-12.23	1.46	1.61
3	AU	13	A	O3 <sup>2</sup> -P	-12.21	1.46	1.61
3	AU	6	A	O3 <sup>2</sup> -P	-12.20	1.46	1.61
3	AU	12	A	O3 <sup>2</sup> -P	-12.18	1.46	1.61
3	AU	7	U	O3 <sup>2</sup> -P	-12.09	1.46	1.61
3	AU	8	G	C2-N2	-12.06	1.22	1.34
1	AA	869	G	O3 <sup>2</sup> -P	-12.01	1.46	1.61
3	AU	11	C	C4-N4	-11.43	1.23	1.33
2	AW	16	U	N1-C6	11.24	1.48	1.38
2	AV	16	U	N1-C6	11.19	1.48	1.38
2	AW	17	U	N1-C6	10.88	1.47	1.38
2	AV	17	U	N1-C6	10.83	1.47	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AV	46	G	N9-C8	10.66	1.45	1.37
2	AW	46	G	N9-C8	10.63	1.45	1.37
1	AA	1033	G	O3'-P	10.61	1.73	1.61
23	B0	3866	A	O3'-P	10.58	1.73	1.61
1	AA	1505	G	O3'-P	-10.26	1.48	1.61
2	AV	17	U	C4-C5	10.19	1.52	1.43
1	AA	109	A	O3'-P	10.17	1.73	1.61
2	AW	17	U	C4-C5	9.84	1.52	1.43
1	AA	46	G	O3'-P	9.19	1.72	1.61
3	AU	8	G	C5-C4	9.16	1.44	1.38
3	AU	13	A	C5-C4	8.94	1.45	1.38
3	AU	8	G	O3'-P	-8.90	1.50	1.61
3	AU	12	A	C5-C4	8.88	1.45	1.38
3	AU	6	A	C5-C4	8.80	1.45	1.38
3	AU	14	A	C5-C4	8.67	1.44	1.38
15	AM	86	CYS	C-N	8.39	1.53	1.34
2	AV	16	U	C4-C5	8.32	1.51	1.43
2	AW	16	U	C4-C5	8.30	1.51	1.43
1	AA	933	G	O3'-P	8.17	1.71	1.61
1	AA	79	G	O3'-P	-8.14	1.51	1.61
2	AV	35	A	O3'-P	8.07	1.70	1.61
3	AU	8	G	C5-C6	-7.50	1.34	1.42
3	AU	8	G	C2-N3	7.04	1.38	1.32
3	AU	12	A	C5-C6	-6.99	1.34	1.41
3	AU	6	A	C5-C6	-6.89	1.34	1.41
3	AU	14	A	C5-C6	-6.87	1.34	1.41
2	AV	39	U	C4-C5	-6.83	1.37	1.43
3	AU	13	A	C5-C6	-6.78	1.34	1.41
1	AA	143	A	O3'-P	6.75	1.69	1.61
2	AW	55	U	C4-C5	-6.72	1.37	1.43
2	AV	39	U	N1-C2	6.69	1.44	1.38
2	AV	58	A	C5-C6	6.65	1.47	1.41
2	AW	39	U	C4-C5	-6.63	1.37	1.43
2	AV	55	U	C4-C5	-6.60	1.37	1.43
2	AW	58	A	C5-C6	6.55	1.47	1.41
2	AV	76	A	C2'-O2'	6.53	1.50	1.41
2	AW	39	U	N1-C2	6.49	1.44	1.38
3	AU	11	C	N3-C4	6.36	1.38	1.33
23	B0	1113	C	P-OP2	6.17	1.59	1.49
2	AW	73	A	O3'-P	6.16	1.68	1.61
3	AU	14	A	N3-C4	6.07	1.38	1.34
3	AU	13	A	N3-C4	5.83	1.38	1.34

*Continued on next page...*



Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	AU	6	A	N3-C4	5.78	1.38	1.34
1	AA	884	U	O3'-P	5.64	1.68	1.61
3	AU	12	A	N3-C4	5.61	1.38	1.34
3	AU	12	A	C2-N3	5.51	1.38	1.33
3	AU	6	A	C2-N3	5.43	1.38	1.33
23	B0	1113	C	C3'-O3'	-5.30	1.34	1.42
3	AU	14	A	C2-N3	5.29	1.38	1.33
3	AU	13	A	C2-N3	5.28	1.38	1.33
23	B0	1112	U	C3'-O3'	-5.17	1.34	1.42

All (446) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AU	8	G	C5-C6-O6	-177.72	21.96	128.60
3	AU	6	A	C5-C6-N6	-127.11	22.02	123.70
3	AU	14	A	C5-C6-N6	-127.08	22.03	123.70
3	AU	12	A	C5-C6-N6	-127.07	22.05	123.70
3	AU	13	A	C5-C6-N6	-127.04	22.07	123.70
1	AA	884	U	P-O3'-C3'	-47.92	62.19	119.70
23	B0	3098	U	P-O3'-C3'	42.74	170.98	119.70
1	AA	274	A	OP1-P-O3'	-41.13	14.71	105.20
2	AW	35	A	P-O3'-C3'	41.11	169.03	119.70
23	B0	3190	G	P-O3'-C3'	38.30	165.66	119.70
1	AA	239	U	P-O3'-C3'	-38.09	73.99	119.70
1	AA	733	A	P-O3'-C3'	38.03	165.33	119.70
1	AA	576	G	P-O3'-C3'	-37.90	74.22	119.70
1	AA	26	A	P-O3'-C3'	-37.85	74.27	119.70
1	AA	436	C	P-O3'-C3'	-36.35	76.08	119.70
2	AW	25	C	P-O3'-C3'	-35.33	77.31	119.70
1	AA	246	A	P-O3'-C3'	-34.91	77.80	119.70
3	AU	8	G	N1-C6-O6	-34.47	99.22	119.90
1	AA	1297	C	P-O3'-C3'	34.38	160.96	119.70
1	AA	1398	A	OP2-P-O3'	-34.17	30.02	105.20
1	AA	74	G	P-O3'-C3'	32.90	159.18	119.70
2	AW	25	C	OP1-P-O3'	32.69	177.13	105.20
1	AA	1183	A	P-O3'-C3'	-32.55	80.63	119.70
3	AU	14	A	N1-C6-N6	-32.43	99.14	118.60
3	AU	6	A	N1-C6-N6	-32.38	99.17	118.60
1	AA	499	A	O3'-P-O5'	-32.34	42.55	104.00
3	AU	13	A	N1-C6-N6	-32.26	99.25	118.60
3	AU	12	A	N1-C6-N6	-32.26	99.25	118.60
3	AU	13	A	C2-N3-C4	31.89	126.55	110.60

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	AU	12	A	C2-N3-C4	31.86	126.53	110.60
3	AU	6	A	C2-N3-C4	31.60	126.40	110.60
3	AU	14	A	C2-N3-C4	31.56	126.38	110.60
1	AA	185	A	OP2-P-O3'	-31.07	36.84	105.20
1	AA	115	G	P-O3'-C3'	-30.96	82.55	119.70
1	AA	499	A	P-O3'-C3'	-29.13	84.74	119.70
3	AU	8	G	N3-C4-C5	-29.07	114.07	128.60
3	AU	8	G	C2-N3-C4	28.99	126.39	111.90
1	AA	556	C	O3'-P-O5'	28.88	158.87	104.00
1	AA	1335	C	P-O3'-C3'	28.61	154.03	119.70
1	AA	1398	A	P-O3'-C3'	-28.26	85.79	119.70
3	AU	12	A	N1-C2-N3	-27.85	115.38	129.30
1	AA	239	U	O3'-P-O5'	-27.73	51.30	104.00
1	AA	884	U	O3'-P-O5'	-27.66	51.44	104.00
3	AU	6	A	N1-C2-N3	-27.65	115.48	129.30
3	AU	8	G	P-O3'-C3'	27.62	152.85	119.70
3	AU	13	A	N1-C2-N3	-27.61	115.49	129.30
3	AU	14	A	N1-C2-N3	-27.58	115.51	129.30
2	AV	33	U	P-O3'-C3'	27.26	152.41	119.70
2	AV	35	A	P-O3'-C3'	27.11	152.24	119.70
23	B0	3107	G	P-O3'-C3'	27.07	152.18	119.70
23	B0	1856	U	OP2-P-O3'	26.51	163.52	105.20
1	AA	278	G	P-O3'-C3'	-26.49	87.91	119.70
1	AA	587	G	O3'-P-O5'	26.39	154.13	104.00
1	AA	1345	U	P-O3'-C3'	26.21	151.15	119.70
23	B0	1856	U	P-O3'-C3'	25.98	150.87	119.70
1	AA	288	A	O3'-P-O5'	-25.94	54.71	104.00
1	AA	387	U	P-O3'-C3'	25.47	150.26	119.70
1	AA	546	G	OP2-P-O3'	-25.30	49.54	105.20
23	B0	3098	U	OP1-P-O3'	25.30	160.85	105.20
23	B0	3190	G	OP2-P-O3'	-25.08	50.03	105.20
1	AA	587	G	P-O3'-C3'	24.60	149.22	119.70
2	AV	74	C	O3'-P-O5'	24.47	150.49	104.00
1	AA	115	G	OP2-P-O3'	24.16	158.36	105.20
1	AA	884	U	OP1-P-O3'	23.92	157.82	105.20
1	AA	246	A	O3'-P-O5'	-23.50	59.35	104.00
1	AA	403	C	P-O3'-C3'	-23.26	91.78	119.70
1	AA	26	A	OP2-P-O3'	23.17	156.17	105.20
2	AW	17	U	C5-C6-N1	-23.09	111.15	122.70
15	AM	86	CYS	O-C-N	-23.06	85.80	122.70
2	AV	17	U	C5-C6-N1	-23.01	111.19	122.70
1	AA	1505	G	OP2-P-O3'	23.00	155.79	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	B0	1072	U	O5'-P-OP1	-22.93	83.19	110.70
1	AA	143	A	P-O3'-C3'	-22.85	92.28	119.70
1	AA	1374	A	P-O3'-C3'	-22.82	92.32	119.70
1	AA	46	G	P-O3'-C3'	-22.78	92.36	119.70
23	B0	1856	U	OP1-P-O3'	-22.54	55.60	105.20
1	AA	1409	C	P-O3'-C3'	-22.43	92.79	119.70
1	AA	1183	A	OP1-P-O3'	22.38	154.44	105.20
1	AA	1505	G	P-O3'-C3'	-21.56	93.83	119.70
1	AA	631	G	P-O3'-C3'	-21.51	93.88	119.70
1	AA	1393	U	O3'-P-O5'	-21.48	63.19	104.00
1	AA	1455	G	P-O3'-C3'	21.41	145.39	119.70
1	AA	94	G	P-O3'-C3'	21.18	145.11	119.70
2	AW	25	C	OP2-P-O3'	-21.16	58.65	105.20
2	AW	16	U	C5-C6-N1	-21.09	112.15	122.70
23	B0	3874	C	P-O3'-C3'	-20.98	94.52	119.70
2	AV	16	U	C5-C6-N1	-20.97	112.22	122.70
23	B0	1071	U	OP1-P-O3'	-20.80	59.44	105.20
23	B0	3190	G	OP1-P-O3'	20.78	150.92	105.20
23	B0	3106	U	O3'-P-O5'	-20.48	65.09	104.00
23	B0	1856	U	O3'-P-O5'	-20.38	65.28	104.00
1	AA	546	G	P-O3'-C3'	20.11	143.84	119.70
1	AA	26	A	OP1-P-O3'	-20.04	61.11	105.20
23	B0	3106	U	P-O3'-C3'	20.03	143.74	119.70
1	AA	576	G	OP1-P-O3'	-19.89	61.43	105.20
1	AA	1305	G	P-O3'-C3'	-19.78	95.97	119.70
2	AW	34	G	O3'-P-O5'	19.77	141.57	104.00
3	AU	11	C	N3-C4-C5	-19.69	114.03	121.90
1	AA	202	G	P-O3'-C3'	-19.54	96.25	119.70
1	AA	1155	G	P-O3'-C3'	-19.38	96.44	119.70
1	AA	869	G	P-O3'-C3'	19.38	142.95	119.70
3	AU	8	G	C5-C6-N1	19.37	121.19	111.50
2	AV	36	A	OP2-P-O3'	-19.29	62.76	105.20
1	AA	1409	C	OP2-P-O3'	19.23	147.51	105.20
1	AA	561	U	O3'-P-O5'	19.19	140.47	104.00
1	AA	436	C	OP1-P-O3'	-19.11	63.16	105.20
1	AA	556	C	OP2-P-O3'	-18.60	64.29	105.20
1	AA	1398	A	OP1-P-O3'	18.55	146.00	105.20
1	AA	461	C	P-O3'-C3'	18.53	141.94	119.70
1	AA	274	A	P-O3'-C3'	18.35	141.72	119.70
24	B9	73	C	O3'-P-O5'	18.34	138.85	104.00
1	AA	46	G	OP1-P-O3'	18.29	145.44	105.20
3	AU	13	A	N3-C4-C5	-18.29	114.00	126.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	556	C	P-O3'-C3'	-18.23	97.82	119.70
3	AU	12	A	N3-C4-C5	-18.20	114.06	126.80
3	AU	14	A	N3-C4-C5	-18.14	114.10	126.80
3	AU	6	A	N3-C4-C5	-18.08	114.14	126.80
24	B9	73	C	P-O3'-C3'	-18.05	98.04	119.70
1	AA	733	A	OP2-P-O3'	-18.04	65.51	105.20
1	AA	576	G	O3'-P-O5'	17.99	138.18	104.00
23	B0	3101	G	O3'-P-O5'	-17.90	69.99	104.00
1	AA	1182	G	P-O3'-C3'	-17.89	98.23	119.70
1	AA	606	G	O3'-P-O5'	-17.85	70.08	104.00
1	AA	631	G	OP2-P-O3'	17.84	144.44	105.20
1	AA	115	G	OP1-P-O3'	-17.74	66.17	105.20
1	AA	1393	U	OP1-P-O3'	17.66	144.05	105.20
1	AA	109	A	P-O3'-C3'	17.62	140.84	119.70
23	B0	3101	G	OP2-P-O3'	17.45	143.59	105.20
1	AA	59	A	OP1-P-O3'	-17.43	66.85	105.20
1	AA	546	G	O3'-P-O5'	17.30	136.87	104.00
1	AA	905	U	P-O3'-C3'	17.30	140.46	119.70
1	AA	1490	C	OP2-P-O3'	-17.20	67.36	105.20
1	AA	212	G	OP2-P-O3'	-17.10	67.58	105.20
1	AA	46	G	O3'-P-O5'	-17.09	71.54	104.00
23	B0	3107	G	OP1-P-O3'	16.93	142.45	105.20
1	AA	214	U	O3'-P-O5'	-16.90	71.89	104.00
1	AA	1033	G	P-O3'-C3'	16.89	139.97	119.70
1	AA	1182	G	OP2-P-O3'	16.86	142.30	105.20
23	B0	3107	G	O3'-P-O5'	-16.78	72.11	104.00
1	AA	893	C	P-O3'-C3'	-16.62	99.75	119.70
15	AM	86	CYS	CA-C-N	16.55	153.60	117.20
1	AA	394	G	O3'-P-O5'	16.37	135.11	104.00
1	AA	499	A	OP2-P-O3'	16.14	140.72	105.20
23	B0	3149	G	O3'-P-O5'	16.00	134.40	104.00
1	AA	1305	G	O3'-P-O5'	-15.96	73.67	104.00
15	AM	86	CYS	C-N-CA	15.89	161.41	121.70
2	AV	36	A	O3'-P-O5'	15.83	134.08	104.00
1	AA	185	A	O3'-P-O5'	15.70	133.84	104.00
23	B0	3098	U	OP2-P-O3'	-15.60	70.89	105.20
1	AA	893	C	OP2-P-O3'	15.58	139.47	105.20
1	AA	278	G	OP2-P-O3'	15.56	139.43	105.20
1	AA	214	U	P-O3'-C3'	15.49	138.29	119.70
2	AW	25	C	O3'-P-O5'	-15.43	74.68	104.00
23	B0	3866	A	P-O3'-C3'	15.31	138.07	119.70
23	B0	1072	U	O5'-P-OP2	-15.20	92.02	105.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	109	A	O3'-P-O5'	-15.19	75.13	104.00
1	AA	1297	C	OP1-P-O3'	-15.17	71.82	105.20
1	AA	1490	C	P-O3'-C3'	15.14	137.87	119.70
1	AA	1297	C	O3'-P-O5'	15.08	132.65	104.00
1	AA	1110	A	OP2-P-O3'	14.94	138.07	105.20
1	AA	1183	A	OP2-P-O3'	-14.80	72.64	105.20
1	AA	651	C	O3'-P-O5'	14.77	132.06	104.00
1	AA	1237	C	O3'-P-O5'	-14.71	76.06	104.00
1	AA	1211	U	O3'-P-O5'	14.60	131.73	104.00
2	AV	35	A	OP1-P-O3'	14.56	137.24	105.20
1	AA	1034	G	P-O3'-C3'	-14.49	102.31	119.70
1	AA	118	U	OP2-P-O3'	14.45	136.98	105.20
1	AA	1393	U	P-O3'-C3'	-14.39	102.44	119.70
1	AA	1345	U	OP1-P-O3'	-14.38	73.55	105.20
1	AA	74	G	OP2-P-O3'	-14.35	73.64	105.20
1	AA	278	G	O3'-P-O5'	-14.33	76.77	104.00
1	AA	1237	C	OP2-P-O3'	14.24	136.53	105.20
1	AA	606	G	P-O3'-C3'	-14.19	102.67	119.70
1	AA	1067	A	P-O3'-C3'	-14.05	102.84	119.70
1	AA	375	U	O3'-P-O5'	-14.03	77.34	104.00
1	AA	288	A	OP1-P-O3'	13.98	135.95	105.20
1	AA	212	G	OP1-P-O3'	13.95	135.89	105.20
2	AV	72	C	O3'-P-O5'	13.95	130.50	104.00
3	AU	8	G	N1-C2-N3	-13.90	115.56	123.90
1	AA	239	U	OP1-P-O3'	13.89	135.76	105.20
1	AA	315	A	OP2-P-O3'	13.79	135.55	105.20
1	AA	387	U	O3'-P-O5'	13.70	130.03	104.00
1	AA	436	C	O3'-P-O5'	13.69	130.01	104.00
2	AW	33	U	P-O3'-C3'	13.64	136.07	119.70
1	AA	1505	G	OP1-P-O3'	-13.55	75.39	105.20
2	AW	75	C	P-O3'-C3'	13.54	135.95	119.70
1	AA	143	A	OP1-P-O3'	13.52	134.94	105.20
3	AU	8	G	O3'-P-O5'	13.44	129.53	104.00
1	AA	1110	A	P-O3'-C3'	-13.43	103.58	119.70
1	AA	74	G	OP1-P-O3'	13.43	134.74	105.20
2	AV	58	A	N1-C6-N6	13.39	126.63	118.60
1	AA	1331	G	P-O3'-C3'	13.37	135.75	119.70
1	AA	315	A	O3'-P-O5'	-13.33	78.67	104.00
1	AA	79	G	P-O3'-C3'	-13.32	103.72	119.70
1	AA	1457	A	O3'-P-O5'	13.31	129.29	104.00
23	B0	1071	U	OP2-P-O3'	-13.30	75.94	105.20
1	AA	1335	C	OP1-P-O3'	-13.15	76.26	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AW	58	A	N1-C6-N6	13.15	126.49	118.60
1	AA	631	G	OP1-P-O3'	-13.02	76.55	105.20
3	AU	11	C	C2-N3-C4	12.95	126.37	119.90
1	AA	1305	G	OP2-P-O3'	12.90	133.58	105.20
1	AA	118	U	O3'-P-O5'	-12.85	79.59	104.00
1	AA	227	G	P-O3'-C3'	12.83	135.10	119.70
1	AA	587	G	OP1-P-O3'	-12.83	76.98	105.20
2	AV	33	U	OP1-P-O3'	12.73	133.20	105.20
2	AV	75	C	P-O3'-C3'	12.71	134.95	119.70
23	B0	3098	U	O3'-P-O5'	-12.59	80.08	104.00
2	AW	73	A	P-O3'-C3'	-12.57	104.62	119.70
23	B0	3866	A	OP1-P-O3'	12.55	132.80	105.20
2	AV	76	A	O5'-P-OP2	-12.54	94.42	105.70
1	AA	1337	G	OP1-P-O3'	12.53	132.77	105.20
1	AA	754	C	P-O3'-C3'	12.34	134.51	119.70
2	AW	58	A	C4-C5-C6	12.31	123.16	117.00
1	AA	89	G	P-O3'-C3'	-12.30	104.93	119.70
2	AV	58	A	C4-C5-C6	12.25	123.12	117.00
1	AA	143	A	O3'-P-O5'	-12.22	80.79	104.00
1	AA	1110	A	O3'-P-O5'	-12.19	80.84	104.00
2	AV	17	U	C4-C5-C6	-12.13	112.42	119.70
1	AA	59	A	P-O3'-C3'	12.03	134.13	119.70
2	AW	17	U	C4-C5-C6	-11.95	112.53	119.70
1	AA	1182	G	OP1-P-O3'	-11.94	78.94	105.20
1	AA	884	U	OP2-P-O3'	-11.87	79.08	105.20
1	AA	89	G	O3'-P-O5'	11.77	126.37	104.00
1	AA	202	G	OP2-P-O3'	11.73	131.02	105.20
2	AV	25	C	O3'-P-O5'	-11.70	81.77	104.00
2	AV	46	G	N7-C8-N9	-11.59	107.31	113.10
2	AW	35	A	OP1-P-O3'	11.48	130.46	105.20
2	AW	46	G	N7-C8-N9	-11.48	107.36	113.10
1	AA	1409	C	O3'-P-O5'	-11.45	82.25	104.00
2	AW	75	C	OP2-P-O3'	11.36	130.19	105.20
1	AA	944	G	P-O3'-C3'	11.31	133.27	119.70
1	AA	403	C	OP1-P-O3'	-11.30	80.33	105.20
1	AA	1505	G	O3'-P-O5'	-11.23	82.66	104.00
23	B0	3106	U	OP1-P-O3'	11.23	129.92	105.20
1	AA	59	A	OP2-P-O3'	11.21	129.86	105.20
1	AA	94	G	OP2-P-O3'	-11.20	80.56	105.20
2	AV	1	G	P-O3'-C3'	11.13	133.06	119.70
23	B0	3186	C	P-O3'-C3'	11.08	133.00	119.70
2	AV	25	C	OP1-P-O3'	11.00	129.40	105.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	651	C	OP2-P-O3'	-10.94	81.13	105.20
1	AA	869	G	O3'-P-O5'	10.90	124.70	104.00
1	AA	893	C	O3'-P-O5'	-10.87	83.35	104.00
1	AA	1374	A	OP1-P-O3'	-10.85	81.33	105.20
23	B0	3101	G	P-O3'-C3'	-10.77	106.78	119.70
1	AA	1033	G	OP2-P-O3'	-10.67	81.72	105.20
1	AA	1374	A	OP2-P-O3'	10.64	128.61	105.20
2	AV	58	A	C5-C6-N1	-10.57	112.41	117.70
1	AA	227	G	O3'-P-O5'	-10.56	83.93	104.00
2	AW	58	A	C5-C6-N1	-10.54	112.43	117.70
2	AV	33	U	O3'-P-O5'	-10.53	83.99	104.00
1	AA	1455	G	O3'-P-O5'	-10.45	84.15	104.00
1	AA	202	G	O3'-P-O5'	-10.38	84.28	104.00
23	B0	3102	G	P-O3'-C3'	-10.35	107.28	119.70
1	AA	94	G	OP1-P-O3'	10.34	127.95	105.20
1	AA	561	U	P-O3'-C3'	-10.32	107.32	119.70
1	AA	606	G	OP1-P-O3'	10.27	127.80	105.20
1	AA	905	U	OP1-P-O3'	10.25	127.75	105.20
1	AA	754	C	OP2-P-O3'	10.22	127.69	105.20
2	AV	74	C	OP2-P-O3'	-10.22	82.71	105.20
23	B0	3149	G	OP2-P-O3'	-10.21	82.73	105.20
1	AA	944	G	OP1-P-O3'	10.18	127.59	105.20
23	B0	3874	C	O3'-P-O5'	10.16	123.31	104.00
2	AW	34	G	OP2-P-O3'	-10.16	82.85	105.20
1	AA	733	A	O3'-P-O5'	10.15	123.28	104.00
1	AA	1490	C	OP1-P-O3'	10.12	127.46	105.20
1	AA	403	C	OP2-P-O3'	10.12	127.45	105.20
2	AW	16	U	C4-C5-C6	-10.00	113.70	119.70
1	AA	387	U	OP2-P-O3'	-9.97	83.26	105.20
1	AA	1498	U	C2'-C3'-O3'	9.95	131.38	109.50
1	AA	1409	C	OP1-P-O3'	-9.93	83.36	105.20
23	B0	3866	A	O3'-P-O5'	-9.93	85.14	104.00
2	AV	16	U	C4-C5-C6	-9.91	113.75	119.70
1	AA	461	C	OP2-P-O3'	-9.81	83.62	105.20
2	AV	35	A	OP2-P-O3'	-9.66	83.95	105.20
2	AV	34	G	O3'-P-O5'	9.61	122.25	104.00
2	AV	44	A	OP2-P-O3'	9.54	126.20	105.20
1	AA	1237	C	P-O3'-C3'	9.50	131.10	119.70
1	AA	243	A	C2'-C3'-O3'	9.47	130.33	109.50
1	AA	1067	A	OP2-P-O3'	9.46	126.01	105.20
1	AA	1155	G	OP1-P-O3'	-9.33	84.68	105.20
2	AV	34	G	OP2-P-O3'	-9.29	84.77	105.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	79	G	O3'-P-O5'	9.28	121.63	104.00
23	B0	3149	G	P-O3'-C3'	-9.21	108.65	119.70
1	AA	181	G	C2'-C3'-O3'	9.13	129.58	109.50
23	B0	3183	A	O3'-P-O5'	9.12	121.32	104.00
1	AA	827	U	P-O3'-C3'	9.10	130.62	119.70
1	AA	559	A	C2'-C3'-O3'	9.10	129.52	109.50
2	AV	72	C	OP1-P-O3'	-9.01	85.37	105.20
1	AA	733	A	OP1-P-O3'	8.99	124.98	105.20
1	AA	118	U	P-O3'-C3'	-8.98	108.92	119.70
2	AW	35	A	O3'-P-O5'	-8.90	87.09	104.00
1	AA	1190	G	O3'-P-O5'	8.89	120.89	104.00
1	AA	394	G	OP2-P-O3'	-8.89	85.65	105.20
1	AA	561	U	OP2-P-O3'	-8.88	85.65	105.20
1	AA	1345	U	O3'-P-O5'	8.87	120.85	104.00
2	AW	76	A	P-O5'-C5'	-8.80	106.83	120.90
1	AA	79	G	OP1-P-O3'	-8.79	85.86	105.20
1	AA	227	G	OP1-P-O3'	8.78	124.52	105.20
1	AA	315	A	P-O3'-C3'	8.65	130.08	119.70
1	AA	1299	A	N9-C1'-C2'	8.55	125.12	114.00
1	AA	375	U	OP2-P-O3'	8.55	124.00	105.20
1	AA	1183	A	O3'-P-O5'	-8.54	87.77	104.00
1	AA	214	U	OP1-P-O3'	8.45	123.79	105.20
2	AV	18	G	C5'-C4'-O4'	-8.45	98.96	109.10
2	AW	18	G	C5'-C4'-O4'	-8.44	98.97	109.10
1	AA	1155	G	OP2-P-O3'	8.36	123.58	105.20
1	AA	1457	A	OP2-P-O3'	-8.23	87.09	105.20
1	AA	1335	C	OP2-P-O3'	8.16	123.15	105.20
2	AV	74	C	P-O3'-C3'	-8.13	109.94	119.70
1	AA	246	A	OP2-P-O3'	8.09	123.00	105.20
1	AA	1528	U	C2'-C3'-O3'	8.03	127.16	109.50
2	AW	33	U	O3'-P-O5'	-7.96	88.87	104.00
2	AV	72	C	P-O3'-C3'	-7.89	110.23	119.70
1	AA	366	C	C2'-C3'-O3'	7.87	126.81	109.50
2	AV	44	A	O3'-P-O5'	-7.85	89.08	104.00
2	AW	58	A	C6-C5-N7	-7.82	126.83	132.30
23	B0	3135	A	O3'-P-O5'	-7.80	89.17	104.00
2	AV	58	A	C6-C5-N7	-7.80	126.84	132.30
1	AA	197	A	N9-C1'-C2'	7.74	124.06	114.00
1	AA	687	A	C2'-C3'-O3'	7.71	126.45	109.50
1	AA	804	U	OP2-P-O3'	-7.69	88.28	105.20
1	AA	575	G	C2'-C3'-O3'	7.67	126.39	109.50
24	B9	73	C	OP1-P-O3'	-7.67	88.33	105.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	754	C	OP1-P-O3'	-7.64	88.38	105.20
2	AV	75	C	O3'-P-O5'	7.61	118.46	104.00
1	AA	266	G	C2'-C3'-O3'	7.61	126.24	109.50
1	AA	115	G	O3'-P-O5'	-7.59	89.58	104.00
1	AA	461	C	OP1-P-O3'	7.57	121.85	105.20
1	AA	274	A	O3'-P-O5'	7.56	118.37	104.00
1	AA	1490	C	O3'-P-O5'	7.56	118.37	104.00
1	AA	1455	G	OP1-P-O3'	7.55	121.80	105.20
1	AA	60	A	C2'-C3'-O3'	7.52	126.05	109.50
3	AU	6	A	C4-C5-C6	7.46	120.73	117.00
3	AU	12	A	C4-C5-C6	7.45	120.72	117.00
3	AU	14	A	C4-C5-C6	7.45	120.72	117.00
1	AA	587	G	OP2-P-O3'	-7.40	88.92	105.20
3	AU	13	A	C4-C5-C6	7.38	120.69	117.00
1	AA	1337	G	P-O3'-C3'	-7.35	110.88	119.70
1	AA	776	G	O3'-P-O5'	-7.33	90.07	104.00
2	AV	75	C	O5'-P-OP1	-7.29	99.14	105.70
3	AU	8	G	N1-C2-N2	7.28	122.75	116.20
3	AU	11	C	C5-C4-N4	7.28	125.30	120.20
3	AU	13	A	C5-C6-N1	7.23	121.31	117.70
1	AA	792	A	C2'-C3'-O3'	7.19	125.32	109.50
3	AU	12	A	C5-C6-N1	7.18	121.29	117.70
1	AA	1345	U	OP2-P-O3'	7.09	120.79	105.20
23	B0	3186	C	OP2-P-O3'	-7.07	89.64	105.20
1	AA	869	G	OP2-P-O3'	-7.07	89.66	105.20
1	AA	1034	G	OP1-P-O3'	-7.04	89.71	105.20
1	AA	1033	G	OP1-P-O3'	6.99	120.57	105.20
3	AU	6	A	C5-C6-N1	6.98	121.19	117.70
1	AA	115	G	N9-C1'-C2'	6.95	123.04	114.00
3	AU	14	A	C5-C6-N1	6.95	121.17	117.70
1	AA	59	A	O3'-P-O5'	6.94	117.18	104.00
2	AW	55	U	C4-C5-C6	6.90	123.84	119.70
1	AA	108	G	P-O3'-C3'	6.89	127.97	119.70
23	B0	1113	C	C5'-C4'-C3'	-6.89	104.97	116.00
23	B0	3117	A	N9-C1'-C2'	6.88	122.94	114.00
23	B0	3135	A	OP2-P-O3'	6.83	120.24	105.20
1	AA	1335	C	O3'-P-O5'	6.82	116.96	104.00
3	AU	11	C	C4-C5-C6	6.79	120.80	117.40
2	AV	39	U	C4-C5-C6	6.79	123.77	119.70
3	AU	11	C	N1-C2-O2	6.75	122.95	118.90
2	AW	39	U	C4-C5-C6	6.72	123.73	119.70
1	AA	1505	G	C2'-C3'-O3'	6.66	124.35	113.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	AV	55	U	C4-C5-C6	6.64	123.68	119.70
1	AA	1067	A	C2'-C3'-O3'	6.56	124.19	113.70
1	AA	1502	A	N9-C1'-C2'	6.55	122.52	114.00
1	AA	367	U	OP2-P-O3'	6.49	119.48	105.20
1	AA	1067	A	OP1-P-O3'	-6.49	90.93	105.20
23	B0	3188	U	OP1-P-O3'	6.49	119.47	105.20
1	AA	1033	G	O3'-P-O5'	6.48	116.31	104.00
1	AA	115	G	C2'-C3'-O3'	6.47	124.06	113.70
1	AA	893	C	OP1-P-O3'	-6.42	91.08	105.20
23	B0	903	G	O3'-P-O5'	-6.41	91.82	104.00
1	AA	1211	U	OP2-P-O3'	-6.39	91.14	105.20
1	AA	7	G	C2'-C3'-O3'	6.38	123.90	113.70
1	AA	372	C	C2'-C3'-O3'	6.37	123.90	113.70
23	B0	3183	A	P-O3'-C3'	-6.34	112.09	119.70
1	AA	1337	G	O3'-P-O5'	-6.31	92.01	104.00
1	AA	509	A	C2'-C3'-O3'	6.30	123.77	113.70
1	AA	556	C	OP1-P-O3'	-6.25	91.45	105.20
1	AA	1331	G	O3'-P-O5'	6.23	115.84	104.00
23	B0	3186	C	O3'-P-O5'	6.21	115.80	104.00
1	AA	1528	U	C4'-C3'-O3'	6.19	125.37	113.00
1	AA	905	U	O3'-P-O5'	-6.14	92.34	104.00
14	AL	19	ARG	O-C-N	-6.13	112.89	122.70
1	AA	46	G	OP2-P-O3'	-6.12	91.73	105.20
1	AA	367	U	O3'-P-O5'	-6.04	92.52	104.00
21	AS	54	GLY	N-CA-C	-6.03	98.02	113.10
2	AV	15	G	N9-C1'-C2'	-5.97	105.43	112.00
2	AW	15	G	N9-C1'-C2'	-5.95	105.45	112.00
3	AU	8	G	OP2-P-O3'	-5.95	92.11	105.20
1	AA	804	U	O3'-P-O5'	5.95	115.30	104.00
2	AW	76	A	O5'-P-OP2	-5.94	100.35	105.70
1	AA	274	A	OP2-P-O3'	5.87	118.11	105.20
3	AU	14	A	C6-N1-C2	5.85	122.11	118.60
1	AA	428	G	C2'-C3'-O3'	5.84	123.05	113.70
1	AA	436	C	OP2-P-O3'	5.81	117.98	105.20
1	AA	944	G	O3'-P-O5'	-5.80	92.97	104.00
3	AU	6	A	C6-N1-C2	5.78	122.07	118.60
1	AA	109	A	OP2-P-O3'	5.74	117.84	105.20
1	AA	63	C	C5'-C4'-C3'	-5.71	106.86	116.00
1	AA	394	G	P-O3'-C3'	-5.71	112.85	119.70
3	AU	12	A	C6-N1-C2	5.70	122.02	118.60
2	AV	74	C	N1-C1'-C2'	5.69	121.40	114.00
1	AA	1124	G	N9-C1'-C2'	5.68	121.39	114.00

*Continued on next page...*

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	26	A	O3'-P-O5'	-5.67	93.23	104.00
1	AA	266	G	C5'-C4'-C3'	-5.66	106.95	116.00
23	B0	1071	U	O3'-P-O5'	5.64	114.73	104.00
23	B0	3874	C	OP1-P-O3'	-5.64	92.80	105.20
1	AA	108	G	OP2-P-O3'	5.63	117.59	105.20
23	B0	1112	U	C4'-C3'-O3'	-5.60	97.63	109.40
1	AA	1337	G	OP2-P-O3'	-5.60	92.89	105.20
3	AU	13	A	C6-N1-C2	5.59	121.95	118.60
1	AA	1380	U	C2'-C3'-O3'	5.55	122.57	113.70
1	AA	353	A	C5'-C4'-O4'	-5.53	102.47	109.10
1	AA	1445	U	OP2-P-O3'	5.49	117.28	105.20
2	AW	33	U	OP1-P-O3'	5.48	117.26	105.20
1	AA	108	G	OP1-P-O3'	-5.46	93.20	105.20
1	AA	1034	G	O3'-P-O5'	5.45	114.34	104.00
1	AA	1065	U	C1'-O4'-C4'	-5.44	105.55	109.90
17	AO	45	VAL	N-CA-C	-5.41	96.40	111.00
4	AB	187	LEU	N-CA-C	-5.39	96.46	111.00
1	AA	1085	U	N1-C1'-C2'	5.33	120.92	114.00
2	AV	46	G	C5-N7-C8	5.30	106.95	104.30
1	AA	108	G	O4'-C1'-N9	5.29	112.43	108.20
1	AA	109	A	OP1-P-O3'	5.28	116.82	105.20
1	AA	389	A	C5'-C4'-C3'	5.28	124.45	116.00
1	AA	1383	C	O3'-P-O5'	5.28	114.03	104.00
1	AA	484	G	C2'-C3'-O3'	5.28	122.14	113.70
3	AU	11	C	N1-C2-N3	-5.24	115.53	119.20
1	AA	181	G	C4'-C3'-O3'	5.23	123.46	113.00
1	AA	89	G	OP1-P-O3'	-5.22	93.72	105.20
3	AU	8	G	C6-N1-C2	-5.20	121.98	125.10
2	AV	55	U	C5-C4-O4	-5.20	122.78	125.90
1	AA	686	U	C5'-C4'-C3'	-5.11	107.82	116.00
1	AA	804	U	OP1-P-O3'	5.10	116.43	105.20
2	AW	46	G	C5-N7-C8	5.10	106.85	104.30
1	AA	470	U	P-O3'-C3'	5.08	125.80	119.70
23	B0	3101	G	OP1-P-O3'	-5.08	94.02	105.20
1	AA	993	G	N9-C1'-C2'	5.07	120.58	114.00
23	B0	1072	U	OP1-P-OP2	5.06	127.19	119.60
2	AV	21	A	C5'-C4'-C3'	5.05	124.08	116.00
1	AA	976	G	C5'-C4'-O4'	5.04	115.15	109.10
2	AW	21	A	C5'-C4'-C3'	5.02	124.03	116.00

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AA	181	G	C3'
1	AA	1528	U	C3'

All (59) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AA	1048	G	Sidechain
1	AA	1073	U	Sidechain
1	AA	1079	G	Sidechain
1	AA	1085	U	Sidechain
1	AA	1092	A	Sidechain
1	AA	1139	G	Sidechain
1	AA	12	U	Sidechain
1	AA	1281	U	Sidechain
1	AA	1289	A	Sidechain
1	AA	1293	G	Sidechain
1	AA	1299	A	Sidechain
1	AA	1301	U	Sidechain
1	AA	1305	G	Sidechain
1	AA	1340	A	Sidechain
1	AA	1360	A	Sidechain
1	AA	1506	U	Sidechain
1	AA	1525	G	Sidechain
1	AA	187	G	Sidechain
1	AA	191	G	Sidechain
1	AA	197	A	Sidechain
1	AA	231	G	Sidechain
1	AA	249	U	Sidechain
1	AA	250	A	Sidechain
1	AA	251	G	Sidechain
1	AA	254	G	Sidechain
1	AA	266	G	Sidechain
1	AA	274	A	Sidechain
1	AA	290	C	Sidechain
1	AA	297	G	Sidechain
1	AA	305	G	Sidechain
1	AA	380	G	Sidechain
1	AA	413	G	Sidechain
1	AA	481	G	Sidechain
1	AA	573	A	Sidechain
1	AA	575	G	Sidechain
1	AA	603	U	Sidechain
1	AA	727	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
1	AA	879	C	Sidechain
1	AA	898	G	Sidechain
1	AA	982	U	Sidechain
2	AV	16	U	Sidechain
2	AV	17	U	Sidechain
2	AV	18	G	Sidechain
2	AV	19	G	Sidechain
2	AV	39	U	Sidechain
2	AV	55	U	Sidechain
2	AV	62	A	Sidechain
2	AW	16	U	Sidechain
2	AW	17	U	Sidechain
2	AW	18	G	Sidechain
2	AW	19	G	Sidechain
2	AW	39	U	Sidechain
2	AW	55	U	Sidechain
2	AW	62	A	Sidechain
23	B0	1071	U	Sidechain
23	B0	1099	A	Sidechain
23	B0	3117	A	Sidechain
23	B0	3168	G	Sidechain
23	B0	873	U	Sidechain

## 5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AA	32819	0	16577	3629	5
2	AV	1625	0	821	141	0
2	AW	1625	0	819	141	0
3	AU	176	0	79	11	0
4	AB	1900	0	1951	231	0
5	AC	1612	0	1676	292	0
6	AD	1702	0	1767	227	4
7	AE	1146	0	1207	233	0
8	AF	842	0	857	81	4
9	AG	1256	0	1294	119	0
10	AH	1115	0	1177	122	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	AI	1010	0	1043	172	0
12	AJ	794	0	838	216	0
13	AK	884	0	903	187	0
14	AL	970	0	1055	157	0
15	AM	996	0	1071	145	0
16	AN	491	0	531	160	0
17	AO	733	0	771	55	0
18	AP	700	0	720	96	0
19	AQ	856	0	926	355	0
20	AR	596	0	667	83	0
21	AS	647	0	673	129	0
22	AT	762	0	848	259	0
23	B0	60636	0	30552	1930	8
24	B9	2519	0	1287	43	0
25	BA	270	0	0	0	0
26	BB	205	0	0	0	0
27	BC	197	0	0	0	0
28	BD	178	0	0	12	0
29	BE	177	0	0	0	0
30	BF	52	0	0	0	0
31	BG	143	0	0	7	0
32	BH	143	0	0	0	0
33	BI	132	0	0	3	0
34	BJ	141	0	0	1	0
35	BK	124	0	0	0	0
36	BL	114	0	0	1	0
37	BM	111	0	0	0	0
38	BN	125	0	0	1	0
39	BO	117	0	0	0	0
40	BP	100	0	0	0	0
41	BQ	130	0	0	0	0
42	BR	93	0	0	0	0
43	BS	113	0	0	0	0
44	BT	173	0	0	0	0
45	BU	86	0	0	1	0
46	BV	16	0	0	0	0
47	BW	65	0	0	0	0
48	BX	55	0	0	0	0
49	BY	73	0	0	0	0
50	BZ	58	0	0	0	0
51	B1	53	0	0	0	0
52	B2	46	0	0	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
53	B3	63	0	0	0	0
54	B4	35	0	0	0	0
55	B5	217	0	0	36	0
All	All	122017	0	70110	7429	12

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 39.

All (7429) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:293:G:H4'	1:AA:609:A:C2	1.16	1.69
1:AA:675:A:H1'	13:AK:116:HIS:CD2	1.26	1.66
1:AA:21:G:C1'	1:AA:914:A:H62	1.08	1.65
6:AD:88:VAL:CA	7:AE:97:GLY:HA3	1.24	1.64
23:B0:3128:G:H4'	23:B0:3174:C:C4'	1.23	1.64
1:AA:1458:G:C8	1:AA:1459:C:H2'	1.27	1.63
1:AA:1398:A:H5'	1:AA:1399:C:P	1.39	1.62
1:AA:1342:C:H5''	11:AI:125:TYR:CE1	1.21	1.62
2:AV:76:A:H5''	23:B0:2564:U:C6	1.12	1.61
2:AW:74:C:C4	23:B0:2534:U:C5	1.85	1.61
1:AA:256:U:C5'	19:AQ:17:LYS:HZ3	0.99	1.59
1:AA:191:G:C6	1:AA:192:U:C2	1.90	1.59
12:AJ:62:HIS:HB3	16:AN:59:ALA:CB	1.28	1.59
12:AJ:62:HIS:CB	16:AN:59:ALA:HB3	1.16	1.58
23:B0:1856:U:C5	23:B0:3865:A:N6	1.69	1.56
1:AA:779:C:H4'	13:AK:120:ARG:CG	1.23	1.56
1:AA:1416:G:C3'	1:AA:1417:G:C5'	1.78	1.56
1:AA:216:C:C4'	1:AA:466:A:H61	1.20	1.54
19:AQ:105:ALA:H	23:B0:727:U:C1'	0.95	1.53
23:B0:891:A:C2	23:B0:892:A:C6	1.91	1.53
6:AD:88:VAL:CG1	7:AE:97:GLY:HA2	1.36	1.52
1:AA:6:G:C4	7:AE:119:LEU:CD1	1.93	1.51
1:AA:828:A:C2	4:AB:26:PRO:HG2	1.45	1.51
1:AA:130:A:C4'	1:AA:264:U:H5'	1.39	1.50
1:AA:161:A:C2	1:AA:348:G:O2'	1.64	1.50
23:B0:3867:G:N2	55:B5:44:GLY:CA	1.75	1.50
1:AA:323:U:C5'	22:AT:22:ARG:HB2	1.42	1.50
1:AA:94:G:O3'	1:AA:96:C:P	1.12	1.50
1:AA:923:A:C1'	1:AA:1398:A:N3	1.75	1.50
1:AA:189:A:C6	22:AT:104:LEU:O	1.65	1.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:538:G:H5''	14:AL:114:LYS:CB	1.06	1.49
1:AA:21:G:H1'	1:AA:914:A:N6	1.28	1.48
1:AA:22:G:H1'	1:AA:913:A:C2	1.45	1.48
1:AA:538:G:C5'	14:AL:114:LYS:HB2	1.02	1.48
19:AQ:104:LYS:HB3	23:B0:727:U:C1'	1.14	1.48
1:AA:684:A:C1'	13:AK:38:ASN:HD22	1.24	1.48
1:AA:38:G:H5'	1:AA:547:A:N6	1.29	1.47
1:AA:456:A:N1	1:AA:477:G:H1'	1.25	1.47
1:AA:1342:C:C5'	11:AI:125:TYR:CE1	1.98	1.47
1:AA:835:U:C5'	20:AR:64:ARG:NH2	1.72	1.47
2:AV:56:C:C4'	28:BD:74:ILE:CA	1.89	1.47
1:AA:262:A:H5'	22:AT:74:LYS:CB	1.42	1.47
1:AA:255:G:C1'	19:AQ:16:GLN:HE21	1.28	1.46
1:AA:293:G:H4'	1:AA:609:A:N1	1.26	1.46
1:AA:322:C:H4'	22:AT:23:ARG:CD	1.39	1.46
1:AA:1060:C:C4'	12:AJ:52:GLY:HA3	1.44	1.46
1:AA:1342:C:O3'	11:AI:125:TYR:CE2	1.69	1.46
2:AV:56:C:H4'	28:BD:74:ILE:CA	0.98	1.45
1:AA:189:A:C5	22:AT:104:LEU:O	1.66	1.45
1:AA:191:G:N1	1:AA:192:U:C2	1.85	1.45
1:AA:255:G:H1'	19:AQ:16:GLN:NE2	1.21	1.45
1:AA:1416:G:H3'	1:AA:1417:G:C5'	1.33	1.45
1:AA:130:A:H5'	19:AQ:63:ARG:NE	1.31	1.45
1:AA:779:C:C4'	13:AK:120:ARG:HG2	1.47	1.45
1:AA:923:A:H1'	1:AA:1398:A:N3	1.21	1.45
1:AA:131:C:O2'	1:AA:262:A:C4	1.68	1.44
1:AA:762:C:H4'	23:B0:729:A:N1	1.12	1.44
1:AA:265:G:C5'	19:AQ:65:ILE:HA	1.46	1.44
1:AA:322:C:C4'	22:AT:23:ARG:HD2	1.48	1.44
1:AA:476:U:N1	1:AA:477:G:H5'	1.26	1.44
1:AA:21:G:C1'	1:AA:914:A:N6	1.79	1.43
2:AW:76:A:C1'	23:B0:2486:C:O4'	1.64	1.43
23:B0:3877:A:C8	23:B0:1861:G:C8	2.06	1.43
1:AA:1014:A:H5''	21:AS:14:HIS:CG	1.53	1.43
15:AM:7:VAL:HG12	28:BD:111:ILE:CA	1.49	1.43
1:AA:131:C:H1'	1:AA:262:A:C2	1.53	1.42
1:AA:262:A:O3'	22:AT:75:ASN:CB	1.64	1.42
1:AA:131:C:H1'	1:AA:262:A:N3	1.32	1.42
1:AA:333:G:H1'	22:AT:16:HIS:CD2	1.55	1.42
1:AA:619:U:N3	6:AD:135:LEU:HG	1.29	1.42
1:AA:332:G:OP2	22:AT:10:LEU:CB	1.66	1.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:6:G:C4	7:AE:119:LEU:HD11	1.49	1.41
1:AA:131:C:O2'	1:AA:262:A:C1'	1.67	1.41
1:AA:1060:C:O2'	12:AJ:56:HIS:CD2	1.70	1.41
1:AA:265:G:H4'	19:AQ:65:ILE:C	1.41	1.41
1:AA:677:U:H1'	13:AK:119:CYS:SG	1.57	1.41
1:AA:190:A:H61	22:AT:104:LEU:N	1.13	1.40
1:AA:38:G:O4'	1:AA:547:A:C6	1.74	1.40
1:AA:190:A:N6	22:AT:104:LEU:H	1.17	1.39
1:AA:1015:A:H1'	1:AA:1219:U:C5'	1.52	1.39
1:AA:675:A:N3	13:AK:116:HIS:HB2	1.34	1.39
6:AD:57:ARG:NH2	7:AE:107:ARG:CD	1.86	1.39
23:B0:891:A:N1	23:B0:892:A:N6	1.70	1.39
1:AA:6:G:C5	7:AE:119:LEU:CD1	2.06	1.38
1:AA:256:U:H5'	19:AQ:17:LYS:NZ	1.07	1.38
1:AA:333:G:C1'	22:AT:16:HIS:CD2	2.06	1.38
1:AA:6:G:C2	7:AE:119:LEU:HD11	1.57	1.38
1:AA:320:C:O4'	1:AA:1434:A:C2	1.76	1.38
1:AA:116:A:N6	1:AA:313:A:H1'	1.36	1.38
19:AQ:105:ALA:N	23:B0:727:U:H1'	1.30	1.37
1:AA:1484:C:H4'	23:B0:1943:A:C1'	1.53	1.37
2:AV:76:A:C5'	23:B0:2564:U:C6	2.05	1.37
1:AA:1416:G:C3'	1:AA:1417:G:H5'	0.90	1.37
2:AW:76:A:N3	23:B0:2486:C:H1'	1.35	1.37
6:AD:88:VAL:HA	7:AE:97:GLY:CA	1.51	1.37
1:AA:675:A:C1'	13:AK:116:HIS:CD2	2.07	1.36
6:AD:88:VAL:HG13	7:AE:97:GLY:CA	1.51	1.36
1:AA:293:G:C4'	1:AA:609:A:N1	1.87	1.36
1:AA:923:A:H1'	1:AA:1398:A:C4	1.59	1.36
23:B0:3865:A:P	23:B0:2388:G:H21	1.48	1.36
1:AA:905:U:O3'	1:AA:906:G:P	0.96	1.36
1:AA:131:C:C1'	1:AA:262:A:N3	1.87	1.35
1:AA:116:A:H61	1:AA:313:A:C1'	1.40	1.35
23:B0:1072:U:H3	31:BG:10:LEU:CA	1.38	1.35
1:AA:707:C:OP1	13:AK:85:ARG:NH1	1.56	1.35
1:AA:191:G:C6	1:AA:192:U:N3	1.94	1.34
1:AA:216:C:H4'	1:AA:466:A:N6	1.03	1.34
2:AW:76:A:C4	23:B0:2562:G:N2	1.94	1.34
1:AA:323:U:H5''	22:AT:22:ARG:CB	1.58	1.34
1:AA:835:U:H5''	20:AR:64:ARG:NH2	1.03	1.34
2:AV:1:G:N2	2:AV:2:C:H41	1.22	1.34
1:AA:131:C:C2'	1:AA:262:A:N3	1.89	1.34

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:397:A:N6	1:AA:547:A:N3	1.75	1.34
1:AA:1474:G:O2'	23:B0:1705:U:H4'	1.27	1.33
23:B0:2075:U:O3'	23:B0:3093:C:H5'	1.18	1.33
23:B0:3128:G:C4'	23:B0:3174:C:H4'	1.56	1.33
1:AA:265:G:C5'	19:AQ:65:ILE:CA	2.04	1.33
1:AA:1190:G:OP1	5:AC:4:LYS:HA	1.15	1.33
1:AA:131:C:O2'	1:AA:262:A:N3	1.57	1.33
23:B0:1098:G:H22	23:B0:1113:C:N4	1.25	1.32
1:AA:27:G:C6	1:AA:557:G:C6	2.15	1.32
1:AA:103:C:O2'	1:AA:171:A:N1	1.60	1.32
1:AA:265:G:H4'	19:AQ:65:ILE:CA	1.58	1.32
1:AA:994:A:C6	16:AN:5:ALA:HA	1.62	1.32
1:AA:1298:C:H2'	9:AG:114:ARG:NH1	1.44	1.32
1:AA:1060:C:H4'	12:AJ:52:GLY:CA	1.59	1.32
2:AV:76:A:C5'	23:B0:2564:U:N1	1.76	1.32
1:AA:923:A:C1'	1:AA:1398:A:C4	2.09	1.31
2:AV:1:G:N2	2:AV:2:C:N4	1.77	1.31
23:B0:3128:G:O2'	23:B0:3174:C:C5'	1.75	1.31
1:AA:323:U:P	22:AT:23:ARG:HA	1.69	1.31
1:AA:619:U:C4	6:AD:135:LEU:HD11	1.63	1.31
23:B0:1856:U:C5	23:B0:3865:A:C6	2.17	1.31
1:AA:836:G:OP1	20:AR:61:LYS:CD	1.76	1.31
1:AA:191:G:C5	1:AA:192:U:C6	2.17	1.31
1:AA:253:U:C1'	1:AA:275:G:O2'	1.77	1.31
1:AA:322:C:O3'	22:AT:23:ARG:HB2	1.20	1.31
1:AA:619:U:N3	6:AD:135:LEU:CG	1.94	1.31
1:AA:1498:U:H4'	1:AA:1519:A:C2	1.63	1.31
1:AA:131:C:O2	1:AA:262:A:C2	1.83	1.30
1:AA:191:G:O6	1:AA:192:U:N3	1.62	1.30
12:AJ:61:GLU:HG3	16:AN:58:LYS:NZ	1.43	1.30
1:AA:828:A:N3	4:AB:26:PRO:HG2	1.44	1.30
1:AA:249:U:H2'	1:AA:250:A:P	1.69	1.30
23:B0:3866:A:O2'	55:B5:194:ALA:CA	1.79	1.30
2:AW:75:C:N4	23:B0:2532:G:O6	1.64	1.30
1:AA:323:U:C4'	22:AT:19:SER:HA	1.61	1.30
1:AA:779:C:H5'	13:AK:120:ARG:O	1.22	1.30
1:AA:836:G:OP1	20:AR:61:LYS:HD2	1.21	1.30
1:AA:1458:G:O3'	22:AT:24:LEU:CD1	1.80	1.30
1:AA:1504:G:OP1	1:AA:1507:A:H4'	1.13	1.30
19:AQ:101:ARG:HD3	23:B0:731:A:N1	1.46	1.30
1:AA:38:G:C5'	1:AA:547:A:N6	1.93	1.29

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:293:G:C5'	1:AA:609:A:N1	1.94	1.29
1:AA:522:C:OP1	14:AL:120:TYR:CE2	1.84	1.29
1:AA:914:A:C2'	1:AA:915:A:O4'	1.77	1.29
1:AA:1298:C:H2'	9:AG:114:ARG:CZ	1.61	1.29
19:AQ:105:ALA:N	23:B0:727:U:C1'	1.80	1.29
1:AA:130:A:OP1	19:AQ:63:ARG:HB2	1.25	1.29
1:AA:323:U:O4'	22:AT:19:SER:HA	1.12	1.29
1:AA:619:U:C5	6:AD:135:LEU:HD11	1.64	1.29
19:AQ:101:ARG:NH1	23:B0:731:A:C2	2.00	1.29
1:AA:236:G:OP1	19:AQ:40:LYS:NZ	1.63	1.29
1:AA:323:U:OP1	22:AT:23:ARG:CA	1.81	1.29
23:B0:891:A:C2	23:B0:892:A:C5	2.21	1.29
1:AA:261:U:C6	22:AT:79:ARG:NH1	2.01	1.29
1:AA:1416:G:C2'	1:AA:1417:G:H5'	1.59	1.29
1:AA:403:C:O2'	1:AA:404:U:H5'	1.20	1.28
1:AA:933:G:OP2	9:AG:3:ARG:HD2	1.14	1.28
1:AA:323:U:OP1	22:AT:23:ARG:HA	1.28	1.28
1:AA:332:G:OP1	22:AT:10:LEU:HG	1.19	1.28
1:AA:499:A:H1'	1:AA:500:G:O4'	1.30	1.28
1:AA:1398:A:C5'	1:AA:1399:C:P	2.19	1.28
1:AA:293:G:C4'	1:AA:609:A:C2	2.13	1.28
1:AA:322:C:O3'	22:AT:23:ARG:CB	1.81	1.28
1:AA:1499:A:C1'	1:AA:1520:G:H5'	1.62	1.28
2:AW:71:G:H5''	23:B0:1925:C:O2	1.23	1.28
1:AA:191:G:C2	1:AA:192:U:H1'	1.68	1.27
1:AA:1394:A:C4	1:AA:1501:C:H4'	1.66	1.27
1:AA:619:U:O2	6:AD:133:VAL:HG13	1.26	1.27
1:AA:22:G:N2	1:AA:913:A:H2'	1.49	1.27
1:AA:994:A:C5	16:AN:5:ALA:HA	1.68	1.27
1:AA:1459:C:OP1	22:AT:28:ALA:C	1.73	1.27
1:AA:836:G:P	20:AR:61:LYS:HD2	1.72	1.27
1:AA:131:C:P	1:AA:263:A:H4'	1.74	1.27
1:AA:923:A:C2	1:AA:1395:C:O2	1.87	1.27
1:AA:1495:U:O2'	23:B0:1902:A:C2	1.87	1.26
19:AQ:93:GLN:C	23:B0:726:G:O4'	1.65	1.26
1:AA:255:G:C5'	19:AQ:17:LYS:HB2	1.64	1.26
1:AA:9:G:OP1	7:AE:122:GLU:HB2	1.10	1.26
1:AA:108:G:N2	22:AT:15:ARG:HH21	1.32	1.26
1:AA:265:G:H5'	19:AQ:64:PRO:O	1.09	1.26
1:AA:376:G:OP2	18:AP:67:THR:HG21	1.36	1.26
1:AA:1393:U:C2	1:AA:1395:C:C4	2.23	1.26

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:128:G:H1'	19:AQ:61:GLU:OE1	1.21	1.26
1:AA:128:G:OP1	19:AQ:2:PRO:N	1.69	1.26
1:AA:232:G:N2	1:AA:263:A:C2	2.03	1.26
1:AA:265:G:H4'	19:AQ:65:ILE:N	1.51	1.26
1:AA:265:G:C4'	19:AQ:65:ILE:C	2.02	1.26
1:AA:6:G:N3	7:AE:119:LEU:HD11	1.50	1.25
1:AA:397:A:N6	1:AA:547:A:H1'	1.50	1.25
1:AA:190:A:C6	22:AT:104:LEU:O	1.88	1.25
1:AA:1484:C:O3'	23:B0:1943:A:O2'	1.52	1.25
1:AA:333:G:H1'	22:AT:16:HIS:NE2	1.51	1.25
1:AA:762:C:C4'	23:B0:729:A:N1	2.00	1.25
23:B0:1098:G:N2	23:B0:1113:C:H42	1.33	1.25
1:AA:161:A:H2	1:AA:348:G:O2'	0.90	1.25
1:AA:1342:C:O3'	11:AI:125:TYR:CZ	1.88	1.25
2:AV:75:C:OP2	23:B0:2581:A:C5'	1.83	1.25
2:AW:74:C:C4	23:B0:2534:U:C4	1.93	1.25
1:AA:46:G:O2'	1:AA:365:U:H1'	1.20	1.25
1:AA:707:C:C5'	13:AK:85:ARG:HH12	1.48	1.25
1:AA:994:A:N1	16:AN:5:ALA:N	1.82	1.25
1:AA:323:U:C4'	22:AT:22:ARG:HB2	1.64	1.24
1:AA:994:A:C2	16:AN:5:ALA:HA	1.72	1.24
1:AA:905:U:C3'	1:AA:906:G:P	2.24	1.24
2:AV:75:C:OP2	23:B0:2581:A:H5'	1.36	1.24
1:AA:265:G:O3'	19:AQ:65:ILE:O	1.55	1.24
1:AA:619:U:O4	6:AD:135:LEU:CD2	1.85	1.24
1:AA:779:C:C4'	13:AK:120:ARG:CG	2.06	1.24
1:AA:262:A:C5'	22:AT:74:LYS:HB2	1.66	1.24
2:AW:71:G:H3'	23:B0:1925:C:O2'	1.28	1.24
1:AA:675:A:H1'	13:AK:116:HIS:CG	1.73	1.24
1:AA:994:A:C2	16:AN:4:LYS:C	2.10	1.24
1:AA:994:A:C6	16:AN:5:ALA:CA	2.21	1.23
1:AA:130:A:O4'	1:AA:264:U:H5'	1.32	1.23
1:AA:236:G:P	19:AQ:40:LYS:NZ	2.11	1.23
1:AA:265:G:C5'	19:AQ:64:PRO:O	1.86	1.23
1:AA:923:A:O4'	1:AA:1398:A:C2	1.89	1.23
1:AA:1457:A:C8	1:AA:1459:C:C2	2.27	1.23
1:AA:131:C:O2'	1:AA:262:A:N9	1.71	1.23
1:AA:22:G:O2'	1:AA:913:A:C6	1.86	1.23
2:AW:75:C:N4	23:B0:2532:G:C6	2.03	1.23
23:B0:1856:U:H3'	23:B0:3865:A:C8	1.73	1.23
23:B0:1912:G:H4'	23:B0:1913:G:C8	1.72	1.23

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:237:C:H5''	19:AQ:25:ARG:NH2	1.50	1.22
1:AA:1298:C:C2'	9:AG:114:ARG:NH1	2.01	1.22
1:AA:323:U:O4'	22:AT:19:SER:CA	1.87	1.22
1:AA:1234:C:C5'	1:AA:1365:G:OP1	1.88	1.22
1:AA:255:G:H5''	19:AQ:17:LYS:CB	1.69	1.22
1:AA:323:U:H5'	22:AT:19:SER:O	1.09	1.22
1:AA:922:G:C2	1:AA:1396:A:C4	2.28	1.22
1:AA:1256:A:H5'	1:AA:1258:G:C1'	1.70	1.22
1:AA:19:C:C1'	1:AA:916:G:H22	1.49	1.21
1:AA:1458:G:C8	1:AA:1459:C:C2'	2.22	1.21
23:B0:3110:G:OP1	23:B0:3148:G:C2'	1.88	1.21
1:AA:247:G:N2	1:AA:282:A:N3	1.88	1.21
1:AA:1044:A:H3'	1:AA:1045:C:C1'	1.54	1.21
1:AA:191:G:N3	1:AA:192:U:H1'	1.56	1.21
1:AA:255:G:O4'	19:AQ:16:GLN:HB2	1.38	1.21
1:AA:619:U:O4	6:AD:135:LEU:HD21	1.06	1.21
2:AW:76:A:O2'	23:B0:2485:U:H2'	1.07	1.21
23:B0:1856:U:C4	23:B0:3865:A:C6	2.29	1.21
1:AA:249:U:C2'	1:AA:250:A:P	2.29	1.21
1:AA:264:U:C1'	19:AQ:64:PRO:HD2	1.68	1.21
6:AD:88:VAL:HG22	7:AE:96:PRO:C	1.59	1.21
15:AM:93:ARG:HD3	23:B0:900:U:O3'	1.35	1.21
23:B0:3149:G:O3'	23:B0:3150:C:P	1.98	1.21
1:AA:476:U:C6	1:AA:477:G:H5'	1.75	1.20
1:AA:815:A:H1'	1:AA:1527:C:O2'	1.36	1.20
2:AW:74:C:N3	23:B0:2534:U:C6	1.84	1.20
6:AD:88:VAL:HG22	7:AE:97:GLY:N	1.53	1.20
1:AA:89:G:O3'	1:AA:90:C:P	1.98	1.20
1:AA:189:A:C6	22:AT:104:LEU:C	2.03	1.20
1:AA:202:G:C4'	1:AA:469:C:OP1	1.88	1.20
1:AA:38:G:O4'	1:AA:547:A:C5	1.94	1.20
1:AA:1054:C:N4	2:AW:34:G:O2'	1.73	1.20
2:AV:76:A:H2'	23:B0:2046:C:O2	1.40	1.20
1:AA:476:U:C2	1:AA:477:G:H5'	1.73	1.20
1:AA:1261:A:O4'	1:AA:1283:G:H4'	1.41	1.20
1:AA:202:G:H4'	1:AA:469:C:OP1	1.02	1.20
4:AB:77:ALA:HB2	4:AB:211:ILE:HD13	1.22	1.20
5:AC:59:ARG:O	12:AJ:92:THR:O	1.59	1.20
19:AQ:104:LYS:CB	23:B0:727:U:C1'	2.10	1.20
1:AA:436:C:N3	1:AA:437:U:C5	2.10	1.19
1:AA:456:A:C6	1:AA:477:G:H1'	1.76	1.19

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1501:C:OP1	1:AA:1508:G:H4'	1.42	1.19
1:AA:1305:G:O2'	1:AA:1306:A:H8	1.23	1.19
23:B0:3867:G:C2	55:B5:44:GLY:CA	2.25	1.19
1:AA:262:A:OP2	22:AT:76:ALA:HB2	1.39	1.19
1:AA:397:A:H62	1:AA:547:A:C1'	1.55	1.19
1:AA:521:G:H5'	14:AL:72:GLY:O	1.42	1.19
1:AA:538:G:H5''	14:AL:114:LYS:HB3	1.21	1.19
1:AA:816:A:P	1:AA:1527:C:H5'	1.82	1.19
23:B0:3110:G:OP1	23:B0:3148:G:O2'	1.58	1.19
1:AA:119:A:N7	1:AA:287:U:N3	1.89	1.19
1:AA:264:U:O2'	19:AQ:64:PRO:O	1.58	1.19
1:AA:675:A:HO2'	13:AK:116:HIS:CE1	1.58	1.19
1:AA:1422:G:H5''	33:BI:60:PRO:CA	1.71	1.19
23:B0:891:A:C2	23:B0:892:A:N6	2.04	1.19
1:AA:265:G:C4'	19:AQ:65:ILE:CA	2.21	1.18
1:AA:1155:G:O3'	1:AA:1156:G:P	2.01	1.18
24:B9:73:C:O3'	24:B9:74:A:P	2.01	1.18
1:AA:6:G:H8	7:AE:92:LYS:NZ	1.41	1.18
1:AA:619:U:C4	6:AD:135:LEU:CG	2.27	1.18
2:AW:33:U:C2	2:AW:35:A:H5'	1.77	1.18
1:AA:1278:U:H5''	1:AA:1279:A:P	1.82	1.18
1:AA:1458:G:O3'	22:AT:24:LEU:HD11	1.01	1.18
23:B0:3128:G:C4'	23:B0:3174:C:C4'	2.16	1.18
1:AA:923:A:C1'	1:AA:1398:A:C2	2.27	1.18
1:AA:994:A:C4	16:AN:5:ALA:HA	1.77	1.18
23:B0:3875:A:H5'	55:B5:42:LYS:CA	1.72	1.18
1:AA:865:A:N3	1:AA:918:A:H4'	1.57	1.18
1:AA:994:A:N1	16:AN:5:ALA:CA	2.07	1.18
6:AD:57:ARG:NH2	7:AE:107:ARG:HD3	1.45	1.18
1:AA:292:G:C2'	1:AA:608:A:N6	2.07	1.17
1:AA:923:A:H2	1:AA:1395:C:O2	1.23	1.17
23:B0:3183:A:O3'	23:B0:3184:C:P	2.02	1.17
1:AA:619:U:C4	6:AD:135:LEU:CD1	2.26	1.17
1:AA:994:A:O2'	16:AN:11:LYS:HE3	1.43	1.17
1:AA:1015:A:H1'	1:AA:1219:U:C4'	1.74	1.17
1:AA:1394:A:N3	1:AA:1501:C:H4'	1.60	1.17
19:AQ:96:GLN:NE2	23:B0:725:C:O2	1.75	1.17
1:AA:300:A:O2'	1:AA:564:C:N3	1.73	1.17
1:AA:375:U:O3'	1:AA:376:G:P	2.01	1.17
12:AJ:62:HIS:O	16:AN:59:ALA:N	1.77	1.17
1:AA:27:G:C5	1:AA:557:G:N1	2.13	1.17

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:191:G:N1	1:AA:192:U:O2	1.78	1.17
1:AA:191:G:N3	1:AA:192:U:C1'	2.08	1.16
1:AA:994:A:C2	16:AN:5:ALA:CA	2.26	1.16
1:AA:6:G:C5	7:AE:119:LEU:HD12	1.70	1.16
1:AA:43:C:OP1	18:AP:12:LYS:HD2	1.46	1.16
1:AA:108:G:H22	22:AT:15:ARG:NH2	1.42	1.16
1:AA:130:A:OP1	19:AQ:63:ARG:CB	1.94	1.16
2:AV:74:C:O3'	23:B0:2581:A:P	2.03	1.16
2:AV:75:C:P	23:B0:2581:A:H5''	1.84	1.16
1:AA:38:G:C4'	1:AA:547:A:N6	2.07	1.16
1:AA:236:G:OP1	19:AQ:40:LYS:CE	1.94	1.16
1:AA:256:U:C5'	19:AQ:17:LYS:NZ	1.74	1.16
1:AA:456:A:N6	1:AA:477:G:C4	2.14	1.16
1:AA:755:G:H1'	10:AH:1:MET:CE	1.74	1.16
1:AA:815:A:N9	1:AA:1527:C:H1'	1.61	1.16
1:AA:1473:A:H4'	23:B0:1719:G:O4'	1.44	1.16
1:AA:865:A:H1'	1:AA:918:A:O2'	1.43	1.16
1:AA:1261:A:C4'	1:AA:1283:G:H4'	1.75	1.16
1:AA:1473:A:H5'	23:B0:1719:G:H4'	1.19	1.16
2:AV:76:A:H5'	23:B0:2564:U:C1'	1.76	1.16
6:AD:57:ARG:HH22	7:AE:107:ARG:CD	1.50	1.16
19:AQ:94:ASN:HA	23:B0:726:G:C1'	1.76	1.16
1:AA:914:A:H2'	1:AA:915:A:O4'	0.99	1.15
23:B0:1098:G:N2	23:B0:1113:C:N4	1.89	1.15
1:AA:9:G:H8	7:AE:126:ARG:NH1	1.44	1.15
1:AA:323:U:C5'	22:AT:19:SER:O	1.93	1.15
2:AW:74:C:C5	23:B0:2533:U:N3	2.05	1.15
6:AD:57:ARG:HH21	7:AE:107:ARG:NE	1.43	1.15
1:AA:261:U:C6	22:AT:79:ARG:CZ	2.24	1.15
1:AA:456:A:N1	1:AA:477:G:C1'	2.10	1.15
1:AA:1014:A:C2	21:AS:34:TRP:CD1	2.34	1.15
6:AD:88:VAL:CA	7:AE:97:GLY:CA	2.15	1.15
19:AQ:93:GLN:O	23:B0:726:G:O4'	1.64	1.15
1:AA:922:G:N2	1:AA:1396:A:C4	2.14	1.15
1:AA:1498:U:C4'	1:AA:1519:A:H2	1.59	1.15
2:AV:76:A:C5'	23:B0:2564:U:C1'	2.25	1.15
1:AA:265:G:O3'	19:AQ:66:SER:HA	1.44	1.14
1:AA:1194:U:H4'	7:AE:22:GLY:HA2	1.15	1.14
1:AA:1416:G:O3'	1:AA:1417:G:H5'	1.41	1.14
19:AQ:94:ASN:HA	23:B0:726:G:H1'	1.25	1.14
1:AA:1081:G:OP1	7:AE:18:ARG:HB2	1.47	1.14

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1112:C:N3	5:AC:178:LEU:N	1.95	1.14
3:AU:11:C:O3'	3:AU:12:A:P	2.05	1.14
1:AA:236:G:P	19:AQ:40:LYS:HZ3	1.68	1.14
1:AA:1434:A:OP2	1:AA:1435:G:C8	2.00	1.14
1:AA:248:C:O2'	1:AA:283:C:H4'	1.47	1.14
1:AA:779:C:C1'	13:AK:120:ARG:HD2	1.77	1.14
1:AA:943:U:C1'	11:AI:124:GLN:HE22	1.60	1.13
1:AA:994:A:C2	16:AN:5:ALA:N	2.16	1.13
1:AA:1394:A:C2	1:AA:1501:C:C4'	2.30	1.13
2:AW:76:A:H4'	23:B0:2486:C:H5'	1.28	1.13
1:AA:37:U:C2'	1:AA:547:A:N1	2.11	1.13
1:AA:118:U:O3'	1:AA:119:A:P	2.06	1.13
1:AA:264:U:H1'	19:AQ:64:PRO:CD	1.76	1.13
1:AA:421:U:C6	5:AC:127:ARG:NH2	2.11	1.13
1:AA:1434:A:OP1	1:AA:1435:G:P	2.07	1.13
1:AA:1458:G:H8	1:AA:1459:C:C2'	1.57	1.13
23:B0:3866:A:H61	55:B5:44:GLY:CA	1.60	1.13
1:AA:27:G:C4	1:AA:557:G:C2	2.37	1.13
1:AA:108:G:N2	22:AT:15:ARG:NH2	1.96	1.13
1:AA:403:C:O2'	1:AA:404:U:C5'	1.95	1.13
1:AA:684:A:C1'	13:AK:38:ASN:ND2	2.10	1.13
1:AA:1234:C:H5'	1:AA:1365:G:OP1	1.46	1.13
1:AA:1255:G:H1'	1:AA:1259:C:H1'	1.23	1.13
2:AW:76:A:H1'	23:B0:2486:C:C1'	1.78	1.13
23:B0:1861:G:OP2	55:B5:38:GLY:CA	1.97	1.13
1:AA:436:C:C2	1:AA:437:U:C6	2.36	1.13
1:AA:521:G:H5'	14:AL:72:GLY:C	1.52	1.13
1:AA:1346:A:H2'	9:AG:10:ARG:HH22	1.05	1.13
7:AE:79:GLU:OE2	10:AH:105:ARG:HD3	1.48	1.13
23:B0:1861:G:OP1	55:B5:37:LYS:CA	1.96	1.13
1:AA:131:C:OP1	1:AA:263:A:H4'	1.47	1.13
1:AA:216:C:H4'	1:AA:466:A:C6	1.83	1.12
1:AA:236:G:C5'	19:AQ:40:LYS:HZ3	1.62	1.13
1:AA:684:A:O4'	13:AK:38:ASN:ND2	1.81	1.13
1:AA:707:C:H5''	13:AK:85:ARG:NH1	1.62	1.13
1:AA:333:G:O4'	22:AT:16:HIS:CD2	2.01	1.12
1:AA:1342:C:H5''	11:AI:125:TYR:CZ	1.83	1.12
2:AW:25:C:C2'	2:AW:26:G:H5'	1.72	1.12
23:B0:1072:U:N3	31:BG:10:LEU:CA	2.12	1.12
1:AA:26:A:C2'	1:AA:27:G:H5'	1.77	1.12
1:AA:129:U:OP1	19:AQ:3:LYS:NZ	1.82	1.12

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:436:C:C2	1:AA:437:U:C5	2.36	1.12
12:AJ:62:HIS:C	16:AN:59:ALA:H	1.52	1.12
1:AA:323:U:P	22:AT:23:ARG:CA	2.37	1.12
1:AA:1211:U:O3'	1:AA:1212:U:P	2.07	1.12
23:B0:1066:G:N2	23:B0:1115:C:N3	1.96	1.12
1:AA:836:G:OP1	20:AR:61:LYS:CE	1.98	1.12
1:AA:943:U:H1'	11:AI:124:GLN:HE22	1.08	1.12
2:AW:76:A:H1'	23:B0:2486:C:C4'	1.79	1.12
1:AA:131:C:O2'	1:AA:262:A:H1'	1.29	1.12
1:AA:187:G:O2'	22:AT:105:SER:N	1.83	1.12
1:AA:288:A:O3'	1:AA:289:G:P	2.08	1.12
1:AA:335:C:O4'	1:AA:1434:A:H4'	1.48	1.12
1:AA:619:U:N3	6:AD:135:LEU:CD1	2.11	1.12
1:AA:1416:G:H3'	1:AA:1417:G:O5'	1.47	1.12
1:AA:1416:G:O3'	1:AA:1417:G:C5'	1.92	1.12
23:B0:891:A:H2	23:B0:892:A:C6	1.46	1.12
23:B0:3128:G:O2'	23:B0:3174:C:H5'	0.97	1.12
1:AA:130:A:O4'	1:AA:264:U:C5'	1.99	1.11
1:AA:19:C:H1'	1:AA:916:G:H22	1.10	1.11
1:AA:27:G:C5	1:AA:557:G:C2	2.38	1.11
1:AA:292:G:C2'	1:AA:608:A:H62	1.63	1.11
1:AA:684:A:H1'	13:AK:38:ASN:HD22	1.05	1.11
1:AA:827:U:O3'	1:AA:828:A:P	2.07	1.11
1:AA:1392:G:H4'	1:AA:1531:A:H5'	1.25	1.11
2:AW:76:A:C2	23:B0:2532:G:N2	2.18	1.11
23:B0:3110:G:OP1	23:B0:3148:G:H2'	1.48	1.11
1:AA:828:A:C2	4:AB:26:PRO:CG	2.33	1.11
1:AA:1394:A:C2	1:AA:1501:C:H5'	1.85	1.11
1:AA:1499:A:H1'	1:AA:1520:G:C5'	1.78	1.11
9:AG:149:ARG:NH1	13:AK:59:TYR:CE1	2.18	1.11
14:AL:41:ARG:HG2	14:AL:42:THR:H	1.03	1.11
1:AA:191:G:O6	1:AA:192:U:C4	2.02	1.11
1:AA:1060:C:C4'	12:AJ:52:GLY:CA	2.23	1.11
1:AA:1484:C:O2'	23:B0:1943:A:H4'	1.51	1.11
2:AW:76:A:O2'	23:B0:2485:U:C2'	1.97	1.11
23:B0:1067:G:H5'	23:B0:1068:A:H5'	1.26	1.11
23:B0:1098:G:N2	23:B0:1113:C:N3	1.97	1.11
1:AA:1499:A:C1'	1:AA:1520:G:C5'	2.29	1.10
12:AJ:51:ARG:O	16:AN:45:ARG:NE	1.83	1.10
1:AA:130:A:H4'	1:AA:264:U:H5'	1.24	1.10
23:B0:1856:U:C4	23:B0:3865:A:N6	2.19	1.10

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:186:C:H1'	22:AT:60:GLU:OE1	1.50	1.10
1:AA:253:U:O2'	19:AQ:15:MET:SD	2.09	1.10
1:AA:292:G:O2'	1:AA:608:A:N6	1.82	1.10
1:AA:319:G:H5'	1:AA:1468:A:H4'	1.16	1.10
1:AA:1483:A:H2'	1:AA:1484:C:C6	1.87	1.10
2:AV:12:U:OP1	23:B0:1891:C:O2'	1.68	1.10
1:AA:22:G:C1'	1:AA:913:A:C2	2.34	1.10
1:AA:1182:G:O2'	1:AA:1183:A:P	2.09	1.10
1:AA:131:C:OP1	1:AA:263:A:C5'	1.99	1.10
1:AA:322:C:C3'	22:AT:23:ARG:HB2	1.82	1.10
11:AI:8:GLY:HA2	11:AI:79:LEU:HD12	1.32	1.10
1:AA:267:C:OP2	19:AQ:67:LYS:CD	1.84	1.09
1:AA:1190:G:OP1	5:AC:4:LYS:CA	2.00	1.09
1:AA:249:U:C3'	1:AA:250:A:P	2.39	1.09
1:AA:798:G:OP1	13:AK:122:LYS:NZ	1.84	1.09
1:AA:1014:A:H1'	21:AS:34:TRP:HB2	1.30	1.09
23:B0:940:G:H3'	23:B0:941:U:H5''	1.19	1.09
1:AA:265:G:C4'	19:AQ:65:ILE:N	2.12	1.09
12:AJ:51:ARG:HB2	12:AJ:59:SER:HB3	1.34	1.09
1:AA:263:A:P	22:AT:75:ASN:HB2	1.91	1.09
1:AA:815:A:C1'	1:AA:1527:C:C1'	2.26	1.09
1:AA:815:A:C1'	1:AA:1527:C:H1'	1.70	1.09
6:AD:57:ARG:HH21	7:AE:107:ARG:CZ	1.66	1.09
1:AA:130:A:C4'	1:AA:264:U:C5'	2.31	1.09
1:AA:1194:U:C4'	7:AE:22:GLY:HA2	1.82	1.09
1:AA:1504:G:OP1	1:AA:1507:A:C4'	2.00	1.09
2:AW:74:C:H42	23:B0:2533:U:C2'	1.48	1.09
15:AM:93:ARG:CD	23:B0:900:U:O3'	2.01	1.09
1:AA:191:G:C5	1:AA:192:U:N1	2.20	1.08
1:AA:191:G:C4	1:AA:192:U:C1'	2.36	1.08
1:AA:320:C:H5'	1:AA:1434:A:N1	1.66	1.08
1:AA:406:G:N2	1:AA:437:U:C2	2.22	1.08
1:AA:619:U:C4	6:AD:135:LEU:HD21	1.87	1.08
1:AA:923:A:O4'	1:AA:1398:A:C6	2.05	1.08
2:AW:76:A:N3	23:B0:2562:G:N2	2.01	1.08
1:AA:264:U:C2'	19:AQ:64:PRO:O	2.00	1.08
23:B0:3875:A:C5'	55:B5:42:LYS:CA	2.32	1.08
1:AA:253:U:H1'	1:AA:275:G:O2'	0.91	1.08
1:AA:797:C:OP1	13:AK:124:LYS:HG3	1.53	1.08
6:AD:150:GLU:HG3	6:AD:153:ARG:HH21	1.19	1.08
23:B0:1098:G:N2	23:B0:1113:C:C4	2.21	1.08

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:3865:A:P	23:B0:2388:G:N2	2.25	1.08
1:AA:9:G:C5'	7:AE:126:ARG:HD3	1.82	1.08
1:AA:1394:A:N1	1:AA:1501:C:H5'	1.68	1.08
2:AV:25:C:O3'	2:AV:26:G:P	2.12	1.08
1:AA:69:G:O4'	1:AA:102:G:C2	2.07	1.07
1:AA:246:A:H4'	1:AA:247:G:H4'	1.36	1.07
1:AA:265:G:H5''	19:AQ:65:ILE:CA	1.73	1.07
1:AA:778:G:O2'	13:AK:120:ARG:N	1.87	1.07
1:AA:1054:C:N4	2:AW:34:G:HO2'	1.47	1.07
1:AA:1394:A:C2	1:AA:1501:C:C5'	2.36	1.07
2:AW:75:C:N3	23:B0:2532:G:N1	2.01	1.07
23:B0:225:G:H3'	23:B0:226:C:H5'	1.30	1.07
23:B0:1119:U:O4	23:B0:1120:C:N4	1.86	1.07
23:B0:3109:U:H5'	23:B0:3150:C:H5'	1.34	1.07
1:AA:128:G:H4'	19:AQ:3:LYS:HA	1.36	1.07
1:AA:212:G:O3'	1:AA:213:G:P	2.12	1.07
1:AA:538:G:H5'	14:AL:114:LYS:HB2	1.26	1.07
1:AA:675:A:O2'	13:AK:116:HIS:CE1	2.05	1.07
5:AC:58:GLU:HB3	12:AJ:92:THR:HG21	1.30	1.07
1:AA:6:G:C4	7:AE:119:LEU:HD13	1.88	1.07
1:AA:13:U:O4	1:AA:915:A:N7	1.87	1.07
1:AA:94:G:C3'	1:AA:96:C:P	2.41	1.07
1:AA:1484:C:H4'	23:B0:1943:A:H1'	1.29	1.07
1:AA:877:C:H5''	10:AH:88:LYS:HD3	1.37	1.07
2:AW:75:C:N4	23:B0:2532:G:N1	2.01	1.07
6:AD:36:ARG:H	6:AD:37:PRO:HD3	1.19	1.07
12:AJ:61:GLU:CG	16:AN:58:LYS:HZ2	1.66	1.07
1:AA:334:C:O2	1:AA:1434:A:O2'	1.70	1.07
1:AA:1298:C:O2'	9:AG:114:ARG:NH1	1.86	1.07
1:AA:1044:A:H3'	1:AA:1045:C:H1'	1.34	1.06
2:AV:76:A:H3'	23:B0:2046:C:O2'	1.54	1.06
2:AW:76:A:C4'	23:B0:2486:C:H5'	1.84	1.06
6:AD:88:VAL:CB	7:AE:97:GLY:CA	2.33	1.06
23:B0:3128:G:H4'	23:B0:3174:C:O4'	1.53	1.06
1:AA:9:G:H5''	7:AE:126:ARG:HD3	1.33	1.06
1:AA:26:A:H2'	1:AA:27:G:H5'	1.12	1.06
1:AA:265:G:H4'	19:AQ:66:SER:N	1.68	1.06
1:AA:933:G:OP2	9:AG:3:ARG:CD	2.01	1.06
1:AA:265:G:H5'	19:AQ:64:PRO:C	1.73	1.06
1:AA:820:U:O2	1:AA:873:A:C8	2.08	1.06
1:AA:1434:A:H3'	1:AA:1435:G:C4'	1.85	1.06

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1476:G:OP1	23:B0:1707:A:OP1	1.73	1.06
23:B0:1912:G:C4'	23:B0:1913:G:H8	1.68	1.06
1:AA:264:U:O2'	19:AQ:63:ARG:C	1.93	1.06
1:AA:1394:A:N1	1:AA:1501:C:C5'	2.18	1.06
1:AA:15:G:H1'	7:AE:19:MET:HE2	1.12	1.06
1:AA:1014:A:C5'	21:AS:14:HIS:CG	2.38	1.06
1:AA:1394:A:C2	1:AA:1501:C:H4'	1.90	1.06
1:AA:1498:U:C4'	1:AA:1519:A:C2	2.35	1.06
23:B0:3098:U:O3'	23:B0:3099:U:P	2.12	1.06
1:AA:262:A:C5'	22:AT:74:LYS:CB	2.28	1.05
1:AA:1393:U:O2	1:AA:1395:C:C4	2.05	1.05
1:AA:1474:G:H4'	23:B0:1717:A:H62	1.19	1.05
1:AA:1489:G:H2'	1:AA:1490:C:H5''	1.37	1.05
1:AA:9:G:C8	7:AE:126:ARG:NH1	2.24	1.05
1:AA:38:G:H4'	1:AA:498:U:O2	1.53	1.05
1:AA:104:G:H5'	1:AA:172:A:N1	1.72	1.05
1:AA:367:U:O3'	1:AA:368:U:P	2.14	1.05
1:AA:1034:G:O3'	1:AA:1035:A:P	2.13	1.05
1:AA:1499:A:H1'	1:AA:1520:G:H5'	1.10	1.05
15:AM:7:VAL:CG1	28:BD:111:ILE:CA	2.33	1.05
1:AA:21:G:O2'	1:AA:914:A:N6	1.89	1.05
1:AA:556:C:O2'	1:AA:557:G:H5'	1.54	1.05
1:AA:779:C:H4'	13:AK:120:ARG:CD	1.84	1.05
1:AA:619:U:C2	6:AD:135:LEU:CD1	2.39	1.05
1:AA:779:C:C5'	13:AK:120:ARG:O	2.05	1.05
1:AA:923:A:O4'	1:AA:1398:A:C4	2.04	1.05
1:AA:1108:G:H5''	5:AC:176:HIS:CE1	1.92	1.05
1:AA:1182:G:O2'	1:AA:1183:A:OP2	1.74	1.05
1:AA:1342:C:C4'	11:AI:125:TYR:CZ	2.40	1.05
1:AA:1474:G:O4'	23:B0:1718:A:N1	1.58	1.05
2:AW:25:C:C2'	2:AW:26:G:C5'	2.34	1.05
23:B0:3107:G:O3'	23:B0:3108:G:P	2.14	1.05
1:AA:9:G:OP1	7:AE:122:GLU:CB	2.04	1.05
1:AA:129:U:H5''	19:AQ:3:LYS:HZ1	1.18	1.05
6:AD:205:GLU:CG	7:AE:107:ARG:HH21	1.67	1.05
15:AM:84:ILE:HG21	21:AS:65:ASN:HD22	1.17	1.05
1:AA:322:C:O3'	22:AT:23:ARG:CA	2.03	1.04
1:AA:866:C:H5'	1:AA:919:A:H5'	1.37	1.04
1:AA:1459:C:OP1	22:AT:29:LYS:N	1.90	1.04
2:AW:76:A:C1'	23:B0:2486:C:C4'	2.32	1.04
1:AA:234:C:O2'	19:AQ:70:ARG:HG2	1.57	1.04

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:499:A:N3	1:AA:500:G:H1'	1.70	1.04
23:B0:3877:A:H3'	23:B0:1861:G:C8	1.91	1.04
1:AA:994:A:C2	16:AN:4:LYS:O	2.10	1.04
1:AA:1015:A:H1'	1:AA:1219:U:H5'	1.34	1.04
7:AE:79:GLU:CD	10:AH:105:ARG:HD3	1.77	1.04
1:AA:132:C:H5'	1:AA:262:A:C1'	1.88	1.04
23:B0:3866:A:N6	55:B5:44:GLY:CA	2.18	1.04
1:AA:320:C:C4'	1:AA:1434:A:C2	2.38	1.04
1:AA:923:A:O4'	1:AA:1398:A:C5	2.10	1.04
1:AA:923:A:C2'	1:AA:1398:A:H2'	1.87	1.04
1:AA:1109:C:OP2	5:AC:176:HIS:CD2	2.10	1.04
1:AA:1393:U:N3	1:AA:1395:C:N4	2.04	1.04
23:B0:3107:G:HO3'	23:B0:3108:G:P	1.80	1.04
1:AA:130:A:C5'	19:AQ:63:ARG:HE	1.70	1.03
1:AA:246:A:O3'	1:AA:247:G:C4'	2.05	1.03
1:AA:834:C:OP1	20:AR:53:ARG:NH2	1.90	1.03
1:AA:1044:A:C3'	1:AA:1045:C:C1'	2.34	1.03
23:B0:3866:A:C6	55:B5:45:ASP:CA	2.41	1.03
1:AA:94:G:HO3'	1:AA:96:C:P	1.13	1.03
1:AA:265:G:O3'	19:AQ:65:ILE:C	1.96	1.03
1:AA:865:A:C2	1:AA:918:A:H4'	1.93	1.03
1:AA:22:G:H21	1:AA:913:A:H2'	1.08	1.03
1:AA:319:G:H21	1:AA:1434:A:H1'	1.14	1.03
1:AA:476:U:N1	1:AA:477:G:C5'	2.22	1.03
4:AB:178:ARG:HH11	4:AB:178:ARG:HG3	1.21	1.03
23:B0:1888:C:H4'	23:B0:1911:A:H2	1.23	1.03
1:AA:299:G:N2	1:AA:566:G:N7	2.06	1.03
1:AA:1015:A:H1'	1:AA:1219:U:H4'	1.38	1.03
6:AD:57:ARG:HH22	7:AE:107:ARG:HD3	0.88	1.03
14:AL:75:HIS:HD2	14:AL:77:LEU:H	1.05	1.03
23:B0:1119:U:C4	23:B0:1120:C:N4	2.26	1.03
1:AA:131:C:C1'	1:AA:262:A:C2	2.32	1.03
1:AA:132:C:H5'	1:AA:262:A:O4'	1.58	1.03
1:AA:190:A:N6	22:AT:104:LEU:C	2.12	1.03
1:AA:243:A:H4'	1:AA:244:U:H5'	1.37	1.03
1:AA:994:A:N1	16:AN:5:ALA:HA	1.65	1.03
6:AD:88:VAL:CB	7:AE:97:GLY:HA3	1.89	1.03
19:AQ:104:LYS:HG2	23:B0:726:G:C6	1.93	1.03
1:AA:473:C:OP1	18:AP:75:ARG:HD3	1.58	1.02
1:AA:707:C:H5''	13:AK:85:ARG:HH12	0.91	1.02
1:AA:1434:A:H3'	1:AA:1435:G:O4'	1.59	1.02

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AW:71:G:C3'	23:B0:1925:C:O2'	2.07	1.02
1:AA:332:G:OP2	22:AT:10:LEU:HB2	0.86	1.02
1:AA:923:A:H2	1:AA:1395:C:C2	1.75	1.02
1:AA:1331:G:O3'	1:AA:1332:A:P	2.17	1.02
1:AA:27:G:C6	1:AA:557:G:N1	2.27	1.02
1:AA:27:G:O6	1:AA:557:G:C6	2.10	1.02
1:AA:187:G:C2'	22:AT:105:SER:H	1.73	1.02
1:AA:835:U:H5''	20:AR:64:ARG:CZ	1.89	1.02
1:AA:922:G:N3	1:AA:1398:A:C2	2.27	1.02
23:B0:1096:A:O2'	23:B0:1115:C:H1'	1.56	1.02
1:AA:38:G:C1'	1:AA:547:A:C5	2.43	1.02
1:AA:131:C:OP1	1:AA:263:A:C4'	2.06	1.02
1:AA:254:G:C1'	19:AQ:15:MET:HB3	1.90	1.02
1:AA:262:A:H5'	22:AT:74:LYS:HB3	1.41	1.02
1:AA:265:G:C4'	19:AQ:64:PRO:C	2.28	1.02
14:AL:60:LEU:HD11	14:AL:85:ILE:HD12	1.39	1.02
23:B0:1572:C:H2'	23:B0:1573:G:H5''	1.39	1.02
1:AA:22:G:O2'	1:AA:913:A:N6	1.92	1.02
1:AA:115:G:O3'	1:AA:116:A:P	2.17	1.02
1:AA:323:U:OP1	22:AT:23:ARG:N	1.93	1.02
1:AA:733:A:O3'	1:AA:734:G:P	2.18	1.02
1:AA:865:A:C1'	1:AA:918:A:O2'	2.07	1.02
1:AA:922:G:C6	1:AA:1396:A:C6	2.48	1.02
1:AA:38:G:C4'	1:AA:547:A:C6	2.40	1.01
1:AA:190:A:N6	22:AT:104:LEU:N	1.87	1.01
1:AA:254:G:H1'	19:AQ:15:MET:HB3	1.37	1.01
1:AA:254:G:H4'	19:AQ:18:THR:CB	1.89	1.01
1:AA:1484:C:C4'	23:B0:1943:A:H1'	1.90	1.01
1:AA:173:U:H5'	1:AA:197:A:O4'	1.60	1.01
1:AA:1458:G:HO3'	22:AT:24:LEU:CD1	1.62	1.01
1:AA:1484:C:C5'	23:B0:1943:A:H1'	1.89	1.01
19:AQ:96:GLN:OE1	23:B0:725:C:H2'	1.59	1.01
22:AT:39:LYS:HD2	22:AT:55:ILE:HD13	1.41	1.01
1:AA:288:A:O2'	1:AA:289:G:O3'	1.77	1.01
1:AA:332:G:P	22:AT:10:LEU:CB	2.48	1.01
1:AA:762:C:H4'	23:B0:729:A:C6	1.94	1.01
1:AA:779:C:C4'	13:AK:120:ARG:CD	2.38	1.01
1:AA:864:A:N1	1:AA:917:G:O2'	1.94	1.01
1:AA:905:U:C5	1:AA:906:G:C5	2.48	1.01
1:AA:1393:U:O2	1:AA:1395:C:C5	2.13	1.01
19:AQ:94:ASN:N	23:B0:726:G:O4'	1.93	1.01

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AS:28:LYS:HG2	21:AS:29:ARG:H	1.26	1.01
1:AA:922:G:N3	1:AA:1396:A:C2	2.28	1.01
1:AA:1014:A:H5''	21:AS:14:HIS:CB	1.90	1.01
1:AA:1086:U:H3	1:AA:1099:G:H22	1.08	1.01
1:AA:1194:U:C5'	7:AE:22:GLY:CA	2.39	1.01
1:AA:1256:A:C5'	1:AA:1258:G:H1'	1.90	1.01
19:AQ:94:ASN:N	23:B0:726:G:C4'	2.16	1.01
23:B0:3877:A:P	23:B0:1861:G:OP2	2.19	1.01
1:AA:265:G:O3'	19:AQ:66:SER:CA	2.07	1.01
1:AA:322:C:H4'	22:AT:23:ARG:CG	1.90	1.01
1:AA:619:U:C2	6:AD:135:LEU:HD12	1.95	1.01
1:AA:619:U:C6	6:AD:135:LEU:HD11	1.96	1.01
1:AA:815:A:N6	1:AA:1508:G:H21	1.56	1.01
1:AA:865:A:O2'	1:AA:918:A:O2'	1.78	1.01
1:AA:1014:A:H4'	21:AS:14:HIS:CD2	1.96	1.01
5:AC:5:ILE:HG23	12:AJ:51:ARG:HH12	1.26	1.01
23:B0:3128:G:C3'	23:B0:3174:C:H4'	1.90	1.01
1:AA:15:G:H1'	7:AE:19:MET:CE	1.90	1.00
1:AA:39:G:C5	1:AA:498:U:O4	2.15	1.00
1:AA:288:A:O3'	1:AA:289:G:O5'	1.74	1.00
1:AA:542:G:OP1	6:AD:10:ARG:NH2	1.94	1.00
1:AA:815:A:H1'	1:AA:1527:C:C2'	1.91	1.00
1:AA:923:A:O4'	1:AA:1398:A:N1	1.95	1.00
1:AA:1015:A:C1'	1:AA:1219:U:C5'	2.39	1.00
1:AA:1340:A:H1'	2:AV:31:A:O2'	1.61	1.00
23:B0:2668:U:H4'	23:B0:2669:C:H5'	1.40	1.00
1:AA:104:G:H5'	1:AA:172:A:C2	1.97	1.00
1:AA:866:C:H5'	1:AA:919:A:C5'	1.92	1.00
1:AA:1484:C:H4'	23:B0:1943:A:O4'	1.60	1.00
2:AW:75:C:N4	23:B0:2532:G:H1	1.58	1.00
19:AQ:105:ALA:N	23:B0:727:U:O4'	1.92	1.00
23:B0:1252:C:H2'	23:B0:1253:C:H5''	1.43	1.00
24:B9:107:C:H3'	24:B9:108:G:P	2.01	1.00
1:AA:46:G:O2'	1:AA:365:U:C1'	2.08	1.00
1:AA:293:G:O5'	1:AA:609:A:N6	1.94	1.00
1:AA:922:G:C4	1:AA:1396:A:C2	2.48	1.00
1:AA:1014:A:N3	1:AA:1219:U:O2'	1.91	1.00
1:AA:265:G:H5''	19:AQ:65:ILE:HA	1.02	1.00
1:AA:1256:A:H5'	1:AA:1258:G:H1'	1.03	1.00
1:AA:1346:A:H2'	9:AG:10:ARG:NH2	1.74	1.00
6:AD:205:GLU:HB3	7:AE:107:ARG:NH2	1.75	1.00

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:7:G:N2	7:AE:123:LEU:HD11	1.76	1.00
1:AA:191:G:C2	1:AA:192:U:C1'	2.45	1.00
1:AA:1497:G:O2'	1:AA:1518:A:N1	1.95	1.00
2:AW:75:C:O2	23:B0:2486:C:O2'	1.79	1.00
1:AA:59:A:H3'	1:AA:331:G:H22	1.26	0.99
1:AA:130:A:C2	1:AA:264:U:C4	2.50	0.99
1:AA:191:G:C4	1:AA:192:U:N1	2.29	0.99
1:AA:205:G:N2	1:AA:207:C:C5	2.30	0.99
1:AA:653:A:O4'	10:AH:56:LYS:HE2	1.61	0.99
2:AW:74:C:N4	23:B0:2533:U:C2'	2.23	0.99
2:AV:74:C:O3'	23:B0:2581:A:C5'	2.10	0.99
2:AW:74:C:N3	23:B0:2534:U:C5	1.88	0.99
23:B0:3110:G:OP1	23:B0:3149:G:H5'	1.62	0.99
1:AA:262:A:H5'	22:AT:74:LYS:HB2	1.00	0.99
1:AA:1474:G:O2'	23:B0:1705:U:C4'	2.10	0.99
12:AJ:62:HIS:ND1	16:AN:61:TRP:CZ3	2.30	0.99
15:AM:84:ILE:CG2	21:AS:65:ASN:HD22	1.74	0.99
1:AA:1061:G:C5'	12:AJ:56:HIS:HB3	1.93	0.99
1:AA:1484:C:C3'	23:B0:1943:A:O2'	2.11	0.99
23:B0:3877:A:N3	23:B0:1861:G:N3	2.09	0.99
1:AA:397:A:N6	1:AA:547:A:C4	2.30	0.99
2:AV:75:C:P	23:B0:2581:A:C5'	2.49	0.99
2:AV:76:A:H5''	23:B0:2564:U:N1	1.02	0.99
1:AA:6:G:C5	7:AE:119:LEU:HD11	1.82	0.99
24:B9:107:C:O3'	24:B9:108:G:P	2.21	0.99
2:AW:75:C:C4	23:B0:2532:G:N1	2.30	0.99
1:AA:599:C:H4'	10:AH:130:GLY:C	1.82	0.99
1:AA:1484:C:C4'	23:B0:1943:A:C1'	2.40	0.99
2:AW:76:A:C2'	23:B0:2562:G:H22	1.76	0.99
23:B0:3866:A:N1	55:B5:45:ASP:CA	2.25	0.99
1:AA:391:G:H5'	18:AP:28:ARG:NH2	1.78	0.99
1:AA:1069:C:O4'	1:AA:1191:A:H2	1.44	0.99
1:AA:1393:U:C2	1:AA:1395:C:N4	2.29	0.99
1:AA:21:G:C2'	1:AA:914:A:N6	2.25	0.98
1:AA:1457:A:N9	1:AA:1459:C:C2	2.30	0.98
1:AA:755:G:C1'	10:AH:1:MET:HE3	1.92	0.98
2:AW:25:C:H2'	2:AW:26:G:C5'	1.91	0.98
2:AW:74:C:H42	23:B0:2533:U:H2'	1.25	0.98
1:AA:189:A:OP2	22:AT:105:SER:CB	2.11	0.98
1:AA:255:G:O4'	19:AQ:16:GLN:CB	2.10	0.98
1:AA:161:A:H2	1:AA:348:G:C2'	1.75	0.98

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:186:C:H4'	22:AT:81:LYS:CB	1.94	0.98
1:AA:188:C:O2	22:AT:106:ALA:O	1.79	0.98
1:AA:318:G:N2	1:AA:1433:A:H2	1.62	0.98
1:AA:974:A:OP1	16:AN:31:ARG:HG2	1.62	0.98
1:AA:1498:U:H4'	1:AA:1519:A:N1	1.78	0.98
1:AA:6:G:C6	7:AE:119:LEU:CD1	2.47	0.98
1:AA:1261:A:O2'	1:AA:1283:G:H5''	1.62	0.98
1:AA:473:C:OP1	18:AP:75:ARG:NH1	1.97	0.98
1:AA:1190:G:H3'	5:AC:3:ASN:HB2	1.46	0.98
1:AA:1292:U:OP2	9:AG:41:ARG:NH2	1.95	0.98
10:AH:113:SER:HB2	10:AH:134:ILE:HD11	1.43	0.98
1:AA:1060:C:H4'	12:AJ:52:GLY:HA3	1.00	0.98
1:AA:115:G:HO3'	1:AA:116:A:P	1.87	0.98
1:AA:191:G:C6	1:AA:192:U:C4	2.50	0.98
1:AA:323:U:OP1	22:AT:22:ARG:C	2.02	0.98
1:AA:397:A:H62	1:AA:547:A:H1'	0.85	0.98
1:AA:547:A:H4'	1:AA:548:G:P	2.04	0.98
2:AV:74:C:N4	23:B0:2231:G:N1	2.12	0.98
24:B9:114:C:H2'	24:B9:115:G:H5''	1.45	0.98
1:AA:1116:C:H2'	1:AA:1117:G:H5''	1.46	0.98
1:AA:677:U:C1'	13:AK:119:CYS:SG	2.52	0.97
23:B0:1199:U:H3'	23:B0:1200:G:H5''	1.44	0.97
1:AA:619:U:C4	6:AD:135:LEU:CD2	2.44	0.97
1:AA:38:G:O2'	1:AA:39:G:C8	2.17	0.97
1:AA:333:G:C1'	22:AT:16:HIS:HD2	1.78	0.97
1:AA:476:U:C2	1:AA:477:G:C5'	2.30	0.97
1:AA:755:G:H1'	10:AH:1:MET:HE3	0.99	0.97
2:AW:33:U:O2	2:AW:35:A:H5'	1.64	0.97
23:B0:1119:U:C4	23:B0:1120:C:C4	2.52	0.97
23:B0:1861:G:H4'	55:B5:198:THR:CA	1.94	0.97
23:B0:2548:G:H2'	23:B0:2549:G:H5''	1.45	0.97
1:AA:128:G:OP1	19:AQ:2:PRO:CD	2.12	0.97
1:AA:203:A:O4'	1:AA:468:A:H4'	1.62	0.97
1:AA:293:G:O5'	1:AA:609:A:N1	1.96	0.97
1:AA:319:G:H5'	1:AA:1468:A:C4'	1.95	0.97
1:AA:684:A:H1'	13:AK:38:ASN:ND2	1.75	0.97
1:AA:191:G:N7	1:AA:192:U:C5	2.33	0.97
1:AA:278:G:N2	1:AA:279:A:H62	1.61	0.97
1:AA:1069:C:O2'	1:AA:1192:C:H1'	1.64	0.97
23:B0:1856:U:C3'	23:B0:3865:A:C8	2.47	0.97
19:AQ:101:ARG:HD3	23:B0:731:A:C6	2.00	0.97

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:129:U:H5''	19:AQ:3:LYS:NZ	1.79	0.97
1:AA:522:C:H5''	14:AL:120:TYR:OH	1.63	0.97
1:AA:1342:C:C3'	11:AI:125:TYR:CZ	2.48	0.97
1:AA:1394:A:N3	1:AA:1501:C:C4'	2.27	0.97
1:AA:1194:U:H5'	7:AE:22:GLY:HA3	1.47	0.97
15:AM:94:ARG:NH2	21:AS:81:ARG:HD3	1.80	0.97
23:B0:3118:U:H3	23:B0:3149:G:H5'	1.26	0.97
1:AA:1194:U:C5'	7:AE:22:GLY:HA2	1.95	0.96
1:AA:1459:C:OP1	22:AT:28:ALA:O	1.82	0.96
1:AA:865:A:N3	1:AA:918:A:C4'	2.28	0.96
1:AA:923:A:C2	1:AA:1395:C:C2	2.51	0.96
1:AA:979:C:O2	16:AN:19:ARG:NE	1.97	0.96
1:AA:264:U:H1'	19:AQ:64:PRO:HD2	0.98	0.96
1:AA:332:G:OP1	22:AT:10:LEU:CG	2.14	0.96
1:AA:279:A:OP2	19:AQ:95:TYR:HE2	1.47	0.96
1:AA:837:G:HO3'	1:AA:838:C:H6	1.09	0.96
1:AA:1392:G:H5'	1:AA:1531:A:H5''	1.44	0.96
12:AJ:45:ARG:HH22	16:AN:36:PHE:HD2	1.01	0.96
12:AJ:61:GLU:CG	16:AN:58:LYS:NZ	2.24	0.96
13:AK:54:ARG:HB3	13:AK:54:ARG:HH11	1.26	0.96
1:AA:38:G:H1'	1:AA:547:A:C4	2.01	0.96
1:AA:1392:G:H4'	1:AA:1531:A:C5'	1.95	0.96
1:AA:1434:A:O3'	1:AA:1435:G:H5'	1.64	0.96
2:AV:75:C:N3	23:B0:2230:G:N2	2.13	0.96
1:AA:249:U:O3'	1:AA:250:A:OP1	1.84	0.96
19:AQ:104:LYS:HE3	23:B0:729:A:N7	1.79	0.96
1:AA:323:U:H5''	22:AT:22:ARG:HB2	0.97	0.96
1:AA:1256:A:N3	1:AA:1258:G:N1	2.14	0.96
2:AV:32:C:OP2	11:AI:127:LYS:HG3	1.63	0.96
2:AW:76:A:H2'	23:B0:2562:G:H22	1.27	0.96
23:B0:891:A:H2	23:B0:892:A:C5	1.67	0.96
1:AA:186:C:H4'	22:AT:81:LYS:HB3	1.48	0.96
1:AA:497:A:O2'	1:AA:498:U:P	2.23	0.96
1:AA:779:C:O2'	13:AK:120:ARG:CD	2.13	0.96
23:B0:2075:U:HO3'	23:B0:3093:C:H5'	1.23	0.96
1:AA:335:C:H1'	1:AA:1434:A:O4'	1.65	0.96
1:AA:521:G:C5'	14:AL:72:GLY:C	2.34	0.96
1:AA:837:G:O3'	1:AA:838:C:P	2.24	0.96
1:AA:1101:A:H4'	1:AA:1102:A:O5'	1.65	0.96
1:AA:1278:U:OP1	1:AA:1279:A:OP1	1.84	0.96
2:AV:74:C:N4	23:B0:2231:G:H1	1.64	0.96

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:3877:A:O5'	23:B0:3877:A:H8	1.47	0.96
1:AA:323:U:H5''	22:AT:22:ARG:CA	1.96	0.95
23:B0:1912:G:H4'	23:B0:1913:G:H8	1.11	0.95
1:AA:1044:A:H2'	1:AA:1045:C:O2'	1.66	0.95
1:AA:1473:A:C5'	23:B0:1719:G:H4'	1.97	0.95
12:AJ:31:GLY:HA2	12:AJ:78:ASN:HD22	1.32	0.95
23:B0:1747:G:H4'	23:B0:1749:G:H1'	1.47	0.95
23:B0:3867:G:H5'	55:B5:193:LYS:CA	1.95	0.95
1:AA:815:A:C1'	1:AA:1527:C:O2'	2.12	0.95
1:AA:1060:C:H4'	12:AJ:52:GLY:N	1.81	0.95
5:AC:14:ILE:HG22	5:AC:15:THR:H	1.32	0.95
12:AJ:63:PHE:HA	16:AN:57:ARG:O	1.66	0.95
23:B0:2075:U:O3'	23:B0:3093:C:C5'	2.12	0.95
1:AA:191:G:C6	1:AA:192:U:N1	2.34	0.95
1:AA:1489:G:C2'	1:AA:1490:C:H5''	1.96	0.95
2:AW:76:A:N3	23:B0:2486:C:C1'	2.29	0.95
5:AC:52:LEU:H	5:AC:52:LEU:HD23	1.26	0.95
23:B0:1066:G:N1	23:B0:1115:C:N4	2.14	0.95
1:AA:46:G:HO2'	1:AA:365:U:H1'	1.25	0.95
1:AA:191:G:N7	1:AA:192:U:C6	2.34	0.95
1:AA:236:G:P	19:AQ:40:LYS:HZ1	1.83	0.95
1:AA:401:C:HO2'	1:AA:621:A:H2	0.98	0.95
1:AA:1409:C:O2'	1:AA:1410:G:H5'	1.66	0.95
15:AM:49:THR:HG22	15:AM:51:ALA:H	1.26	0.95
1:AA:128:G:H5''	19:AQ:2:PRO:C	1.86	0.94
1:AA:675:A:H1'	13:AK:116:HIS:HD2	1.32	0.94
1:AA:825:G:H21	10:AH:11:THR:HG21	1.31	0.94
1:AA:130:A:O3'	1:AA:263:A:H4'	1.65	0.94
1:AA:279:A:OP2	19:AQ:95:TYR:CE2	2.19	0.94
1:AA:1238:A:O3'	1:AA:1239:A:P	2.25	0.94
1:AA:1320:C:H41	21:AS:37:ARG:HD3	1.32	0.94
1:AA:261:U:H6	22:AT:79:ARG:NH1	1.65	0.94
23:B0:367:G:H2'	23:B0:368:A:H5''	1.48	0.94
23:B0:3128:G:C5'	23:B0:3174:C:O2'	2.15	0.94
1:AA:191:G:C5	1:AA:192:U:C5	2.55	0.94
1:AA:288:A:O2'	1:AA:290:C:P	2.25	0.94
12:AJ:62:HIS:CE1	16:AN:61:TRP:CH2	2.55	0.94
1:AA:65:U:O4'	1:AA:200:G:H4'	1.67	0.94
1:AA:254:G:O2'	19:AQ:16:GLN:O	1.86	0.94
1:AA:332:G:P	22:AT:10:LEU:HG	2.06	0.94
1:AA:922:G:N1	1:AA:1396:A:C5	2.36	0.94

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AB:124:SER:HB2	4:AB:125:PRO:HD2	1.49	0.94
15:AM:93:ARG:CG	23:B0:900:U:O3'	2.16	0.94
8:AF:94:GLN:HE21	20:AR:32:ARG:HD3	1.32	0.94
23:B0:929:A:H3'	23:B0:930:A:H5''	1.47	0.94
1:AA:9:G:O5'	7:AE:126:ARG:NH1	2.00	0.94
1:AA:538:G:C5'	14:AL:114:LYS:CB	1.89	0.94
1:AA:905:U:O3'	1:AA:906:G:OP2	1.86	0.94
1:AA:1416:G:H2'	1:AA:1417:G:C4'	1.98	0.94
23:B0:3867:G:H21	55:B5:44:GLY:CA	1.59	0.94
1:AA:236:G:H5''	19:AQ:40:LYS:HZ3	1.32	0.94
4:AB:195:ASP:HB3	10:AH:74:PRO:CD	1.98	0.94
19:AQ:105:ALA:H	23:B0:727:U:H1'	0.80	0.94
23:B0:2607:C:H3'	23:B0:2608:A:H5'	1.49	0.94
1:AA:320:C:O4'	1:AA:1434:A:H2	1.33	0.93
1:AA:675:A:N3	13:AK:116:HIS:CB	2.28	0.93
23:B0:3128:G:H5''	23:B0:3174:C:O2'	1.68	0.93
1:AA:6:G:N1	7:AE:119:LEU:HD11	1.82	0.93
1:AA:130:A:C8	19:AQ:63:ARG:HG3	2.03	0.93
1:AA:499:A:C1'	1:AA:500:G:O4'	2.17	0.93
1:AA:815:A:H1'	1:AA:1527:C:C1'	1.91	0.93
1:AA:828:A:N3	4:AB:26:PRO:CG	2.28	0.93
1:AA:1305:G:N2	1:AA:1331:G:O2'	2.01	0.93
2:AW:75:C:O2'	23:B0:2486:C:H4'	1.67	0.93
1:AA:22:G:H1'	1:AA:913:A:N1	1.83	0.93
1:AA:293:G:O5'	1:AA:609:A:C6	2.21	0.93
1:AA:397:A:C5	1:AA:547:A:O2'	2.18	0.93
1:AA:437:U:O2'	6:AD:123:HIS:HD2	1.52	0.93
1:AA:522:C:OP1	14:AL:120:TYR:HE2	1.40	0.93
1:AA:664:G:H22	1:AA:741:G:H1	1.16	0.93
1:AA:923:A:O2'	1:AA:1398:A:H2'	1.68	0.93
2:AV:75:C:N4	23:B0:2231:G:C2	2.37	0.93
13:AK:54:ARG:O	13:AK:57:THR:HG22	1.66	0.93
1:AA:33:A:OP2	1:AA:398:C:H4'	1.68	0.93
1:AA:37:U:H2'	1:AA:547:A:N1	1.83	0.93
1:AA:104:G:C4'	1:AA:172:A:C2	2.51	0.93
1:AA:190:A:N6	22:AT:102:GLY:O	2.01	0.93
1:AA:202:G:H1'	1:AA:468:A:O2'	1.66	0.93
1:AA:323:U:O2'	22:AT:22:ARG:HD2	1.65	0.93
1:AA:922:G:N3	1:AA:1398:A:H2	1.64	0.93
1:AA:66:G:H5''	1:AA:199:G:O2'	1.69	0.93
1:AA:921:U:O4	1:AA:1396:A:N6	2.01	0.93

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1224:G:O3'	1:AA:1225:A:P	2.27	0.93
12:AJ:62:HIS:HB2	16:AN:59:ALA:HB3	1.51	0.93
5:AC:91:LEU:HD21	5:AC:99:VAL:HG13	1.48	0.93
23:B0:1066:G:N2	23:B0:1115:C:C2	2.36	0.93
24:B9:107:C:C3'	24:B9:108:G:P	2.57	0.93
1:AA:265:G:C5'	19:AQ:64:PRO:C	2.34	0.93
1:AA:994:A:C6	16:AN:5:ALA:CB	2.50	0.93
1:AA:128:G:H5'	19:AQ:2:PRO:O	1.68	0.92
1:AA:190:A:N6	22:AT:104:LEU:CA	2.31	0.92
5:AC:195:VAL:O	5:AC:196:LEU:HD23	1.69	0.92
14:AL:41:ARG:HG2	14:AL:42:THR:N	1.83	0.92
1:AA:1016:A:C1'	1:AA:1218:C:H4'	1.99	0.92
1:AA:1483:A:H2'	1:AA:1484:C:H6	1.28	0.92
1:AA:319:G:N2	1:AA:1434:A:H1'	1.82	0.92
1:AA:707:C:P	13:AK:85:ARG:NH1	2.41	0.92
1:AA:1329:A:P	15:AM:28:ALA:HB3	2.09	0.92
15:AM:40:ASN:HD22	15:AM:41:PRO:CD	1.82	0.92
23:B0:104:C:H2'	23:B0:105:G:H5''	1.49	0.92
1:AA:6:G:C8	7:AE:92:LYS:NZ	2.25	0.92
1:AA:191:G:C2	1:AA:192:U:C2	2.56	0.92
1:AA:893:C:O2'	1:AA:894:G:H5'	1.69	0.92
1:AA:1392:G:C5'	1:AA:1531:A:H5''	2.00	0.92
19:AQ:104:LYS:HE3	23:B0:729:A:C5	2.05	0.92
23:B0:226:C:HO2'	23:B0:227:G:H8	0.97	0.92
1:AA:130:A:C5'	19:AQ:63:ARG:NE	2.28	0.92
1:AA:323:U:C5'	22:AT:22:ARG:CB	2.28	0.92
1:AA:619:U:O2	6:AD:133:VAL:CG1	2.15	0.92
23:B0:1656:U:H2'	23:B0:1657:A:H5''	1.52	0.92
1:AA:922:G:C2	1:AA:1396:A:N3	2.37	0.92
2:AV:76:A:H5''	23:B0:2564:U:C1'	1.96	0.92
23:B0:1066:G:H1	23:B0:1115:C:N4	1.65	0.92
23:B0:1096:A:HO2'	23:B0:1115:C:H1'	1.31	0.92
1:AA:619:U:H3	6:AD:135:LEU:HG	0.90	0.92
1:AA:848:G:O3'	1:AA:849:C:C5'	2.18	0.92
5:AC:131:ARG:HG2	5:AC:135:LYS:HE3	1.50	0.92
1:AA:232:G:N2	1:AA:263:A:H2	1.61	0.92
1:AA:264:U:O2'	19:AQ:64:PRO:N	2.02	0.92
1:AA:291:C:O3'	1:AA:292:G:P	2.28	0.92
1:AA:333:G:C1'	22:AT:16:HIS:NE2	2.22	0.92
1:AA:994:A:C2'	16:AN:11:LYS:HE3	1.93	0.92
1:AA:128:G:C1'	19:AQ:61:GLU:OE1	2.15	0.92

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:266:G:H5'	19:AQ:66:SER:HA	1.52	0.92
1:AA:737:A:O2'	8:AF:73:ASN:ND2	2.03	0.92
1:AA:922:G:N2	1:AA:1396:A:N9	2.18	0.92
1:AA:1317:C:C6	16:AN:16:PHE:CD2	2.58	0.91
1:AA:1393:U:H2'	1:AA:1395:C:H5	1.35	0.91
21:AS:31:ILE:HG22	21:AS:32:LYS:H	1.34	0.91
1:AA:247:G:N3	1:AA:282:A:C2	2.37	0.91
1:AA:779:C:O2'	13:AK:120:ARG:HD3	1.71	0.91
7:AE:81:GLU:HG2	7:AE:90:VAL:HG22	1.52	0.91
23:B0:1090:C:O2'	31:BG:129:GLY:CA	2.19	0.91
1:AA:26:A:H2'	1:AA:27:G:C5'	1.98	0.91
1:AA:921:U:N3	1:AA:1396:A:N1	2.18	0.91
2:AV:1:G:H22	2:AV:2:C:N4	1.65	0.91
19:AQ:94:ASN:N	23:B0:726:G:H4'	1.83	0.91
23:B0:1182:U:H2'	23:B0:1183:C:H5''	1.49	0.91
1:AA:265:G:C3'	19:AQ:65:ILE:C	2.37	0.91
1:AA:865:A:C2'	1:AA:918:A:O2'	2.17	0.91
12:AJ:45:ARG:NH2	16:AN:36:PHE:CD2	2.37	0.91
1:AA:94:G:C5	1:AA:96:C:C5	2.59	0.91
1:AA:320:C:C5'	1:AA:1434:A:N1	2.32	0.91
1:AA:932:C:H5''	9:AG:3:ARG:HD3	1.50	0.91
1:AA:1238:A:H2	1:AA:1241:G:HO2'	0.96	0.91
1:AA:131:C:C2	1:AA:262:A:C2	2.58	0.91
1:AA:403:C:HO2'	1:AA:404:U:H5'	1.30	0.91
1:AA:816:A:OP1	1:AA:1527:C:H5'	1.70	0.91
1:AA:1342:C:O3'	11:AI:125:TYR:HE2	1.41	0.91
1:AA:1473:A:C4'	23:B0:1719:G:O4'	2.19	0.91
23:B0:3128:G:H4'	23:B0:3174:C:H4'	0.92	0.91
1:AA:6:G:C2	7:AE:119:LEU:CD1	2.52	0.91
1:AA:173:U:C5'	1:AA:197:A:O4'	2.19	0.91
1:AA:256:U:H5'	19:AQ:17:LYS:HZ1	1.10	0.91
1:AA:606:G:H3'	1:AA:607:A:H5'	1.52	0.91
1:AA:1305:G:O2'	1:AA:1306:A:C8	2.07	0.91
18:AP:58:TYR:O	18:AP:61:SER:HB3	1.68	0.91
1:AA:6:G:C6	7:AE:119:LEU:HD11	2.04	0.91
1:AA:15:G:O2'	7:AE:24:ARG:NH1	2.04	0.91
1:AA:19:C:H1'	1:AA:916:G:N2	1.85	0.91
1:AA:191:G:C4	1:AA:192:U:C6	2.59	0.91
1:AA:397:A:C6	1:AA:547:A:H1'	2.04	0.91
2:AW:41:U:H5'	2:AW:41:U:H6	1.35	0.91
23:B0:892:A:H5'	23:B0:892:A:H8	1.35	0.91

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1066:G:C2	23:B0:1115:C:N3	2.39	0.91
1:AA:37:U:O2'	1:AA:547:A:N1	2.02	0.91
1:AA:191:G:C4	1:AA:192:U:O4'	2.18	0.91
1:AA:702:A:N1	23:B0:1838:G:H2'	1.86	0.91
1:AA:1392:G:C4'	1:AA:1531:A:C5'	2.49	0.91
2:AW:76:A:O4'	23:B0:2486:C:C4'	2.19	0.91
23:B0:1912:G:C4'	23:B0:1913:G:C8	2.47	0.91
1:AA:262:A:C5'	22:AT:75:ASN:H	1.84	0.91
1:AA:299:G:N1	1:AA:566:G:O6	2.03	0.91
1:AA:1261:A:H4'	1:AA:1283:G:O3'	1.70	0.91
1:AA:1434:A:C3'	1:AA:1435:G:H5'	2.00	0.91
1:AA:1502:A:H2	1:AA:1505:G:H1	1.19	0.91
1:AA:8:A:N6	6:AD:205:GLU:O	2.04	0.90
1:AA:779:C:C2'	13:AK:120:ARG:HD2	2.01	0.90
1:AA:1137:C:H4'	1:AA:1138:G:C2	2.05	0.90
1:AA:69:G:C1'	1:AA:102:G:C2	2.53	0.90
2:AV:41:U:H6	2:AV:41:U:H5'	1.34	0.90
4:AB:59:GLU:HG2	4:AB:221:LEU:HD11	1.51	0.90
1:AA:456:A:C2	1:AA:477:G:H1'	2.07	0.90
1:AA:1342:C:O3'	11:AI:125:TYR:OH	1.89	0.90
2:AV:75:C:C4	23:B0:2231:G:N2	2.39	0.90
1:AA:187:G:O2'	22:AT:104:LEU:HA	1.70	0.90
1:AA:1430:C:H5''	23:B0:1721:G:H4'	1.54	0.90
1:AA:1497:G:O2'	1:AA:1498:U:H5'	1.71	0.90
2:AV:33:U:C2	2:AV:35:A:H5'	2.06	0.90
2:AW:75:C:C4	23:B0:2533:U:O2	2.24	0.90
1:AA:255:G:C1'	19:AQ:16:GLN:HB2	2.02	0.90
1:AA:797:C:OP1	13:AK:124:LYS:CG	2.18	0.90
2:AW:76:A:H1'	23:B0:2486:C:O4'	0.72	0.90
1:AA:19:C:C1'	1:AA:916:G:N2	2.33	0.90
1:AA:267:C:OP2	19:AQ:67:LYS:HD2	1.08	0.90
1:AA:278:G:H21	1:AA:279:A:H62	1.16	0.90
1:AA:1057:G:H5''	5:AC:154:SER:HB2	1.53	0.90
1:AA:1061:G:H5'	12:AJ:56:HIS:HB3	1.52	0.90
1:AA:1155:G:C3'	1:AA:1156:G:P	2.58	0.90
11:AI:70:LYS:O	11:AI:74:ILE:HG13	1.72	0.90
23:B0:128:C:H2'	23:B0:129:A:H5''	1.51	0.90
1:AA:104:G:C4'	1:AA:172:A:H2	1.83	0.90
1:AA:456:A:N6	1:AA:477:G:N3	2.19	0.90
1:AA:1342:C:H5''	11:AI:125:TYR:HE1	1.09	0.90
2:AV:76:A:C3'	23:B0:2046:C:O2'	2.20	0.90

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:AJ:8:LEU:HD21	12:AJ:96:ILE:HG12	1.54	0.90
1:AA:1342:C:H4'	11:AI:125:TYR:CE2	2.05	0.90
23:B0:1856:U:H5	23:B0:3865:A:N6	1.28	0.90
1:AA:22:G:O2'	1:AA:913:A:N1	1.95	0.90
1:AA:323:U:C4'	22:AT:19:SER:CA	2.46	0.90
1:AA:476:U:C6	1:AA:477:G:C5'	2.54	0.90
1:AA:1430:C:C5'	23:B0:1721:G:H4'	2.02	0.90
1:AA:1505:G:O2'	1:AA:1506:U:OP2	1.87	0.90
1:AA:13:U:C4	1:AA:915:A:N7	2.38	0.90
1:AA:292:G:HO2'	1:AA:608:A:H62	1.16	0.90
1:AA:733:A:HO3'	1:AA:734:G:P	1.91	0.90
1:AA:994:A:H2	16:AN:4:LYS:C	1.68	0.90
1:AA:905:U:O3'	1:AA:906:G:O5'	1.89	0.89
1:AA:1015:A:C1'	1:AA:1219:U:H5'	2.00	0.89
1:AA:1112:C:O2	5:AC:179:ARG:HB3	1.71	0.89
2:AV:75:C:OP2	23:B0:2581:A:H5''	1.62	0.89
2:AW:71:G:C5'	23:B0:1925:C:O2	2.16	0.89
19:AQ:105:ALA:C	23:B0:727:U:C4'	2.41	0.89
1:AA:236:G:C5'	19:AQ:40:LYS:NZ	2.35	0.89
1:AA:236:G:H5''	19:AQ:40:LYS:NZ	1.87	0.89
1:AA:253:U:H1'	1:AA:275:G:C2'	2.02	0.89
1:AA:476:U:H2'	1:AA:477:G:H5''	1.54	0.89
19:AQ:104:LYS:HB3	23:B0:727:U:H1'	1.16	0.89
1:AA:1497:G:H1'	1:AA:1518:A:C2	2.07	0.89
1:AA:1497:G:N2	1:AA:1519:A:H1'	1.87	0.89
2:AW:25:C:H2'	2:AW:26:G:O4'	1.71	0.89
1:AA:835:U:OP1	20:AR:64:ARG:NH2	2.04	0.89
1:AA:1190:G:P	5:AC:4:LYS:HA	2.12	0.89
1:AA:436:C:O2	1:AA:437:U:C6	2.25	0.89
7:AE:51:VAL:HB	7:AE:52:PRO:HD3	1.55	0.89
1:AA:1416:G:O5'	1:AA:1417:G:P	2.30	0.89
1:AA:1447:A:O3'	1:AA:1448:C:P	2.29	0.89
2:AV:57:G:H5''	28:BD:76:ASN:CA	2.03	0.89
9:AG:149:ARG:CZ	13:AK:59:TYR:CE1	2.56	0.89
1:AA:1474:G:H4'	23:B0:1717:A:N6	1.86	0.89
1:AA:1427:U:O2'	23:B0:1704:G:H5''	1.70	0.89
1:AA:113:G:H1'	1:AA:354:G:H5'	1.55	0.89
1:AA:702:A:H5'	23:B0:1840:A:H5'	1.54	0.88
1:AA:932:C:C5'	9:AG:3:ARG:HD3	2.02	0.88
1:AA:943:U:H1'	11:AI:124:GLN:NE2	1.88	0.88
1:AA:1016:A:C5'	16:AN:15:LYS:HE3	2.02	0.88

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1261:A:H4'	1:AA:1283:G:C4'	2.02	0.88
23:B0:891:A:N1	23:B0:892:A:C6	2.25	0.88
1:AA:202:G:N3	1:AA:468:A:O2'	2.04	0.88
1:AA:1255:G:H2'	1:AA:1258:G:H21	1.36	0.88
1:AA:1261:A:C4'	1:AA:1283:G:C4'	2.51	0.88
1:AA:1416:G:H3'	1:AA:1417:G:P	2.13	0.88
23:B0:3111:C:H4'	23:B0:3112:G:OP1	1.73	0.88
1:AA:436:C:N3	1:AA:437:U:C4	2.41	0.88
1:AA:1109:C:P	5:AC:176:HIS:CD2	2.66	0.88
2:AW:76:A:N9	23:B0:2562:G:N2	2.21	0.88
7:AE:79:GLU:OE2	10:AH:105:ARG:CD	2.21	0.88
19:AQ:104:LYS:CB	23:B0:727:U:H1'	1.92	0.88
1:AA:130:A:H5'	19:AQ:63:ARG:CZ	2.04	0.88
1:AA:1298:C:C5	9:AG:114:ARG:HD3	2.08	0.88
4:AB:116:GLU:HG2	4:AB:153:ARG:HH12	1.39	0.88
12:AJ:65:LEU:HA	16:AN:55:GLY:O	1.73	0.88
19:AQ:97:SER:HB2	19:AQ:102:GLY:C	1.93	0.88
19:AQ:96:GLN:CD	23:B0:725:C:H1'	1.93	0.88
1:AA:1495:U:O2'	23:B0:1902:A:H2	1.49	0.88
2:AW:74:C:H5	23:B0:2533:U:N3	1.23	0.88
1:AA:191:G:H21	22:AT:103:GLY:HA2	1.38	0.88
1:AA:994:A:N6	16:AN:5:ALA:HB2	1.88	0.88
1:AA:1015:A:N3	1:AA:1219:U:O4'	2.06	0.88
1:AA:1060:C:HO2'	12:AJ:56:HIS:CD2	1.70	0.88
1:AA:1342:C:C3'	11:AI:125:TYR:CE2	2.55	0.88
19:AQ:101:ARG:CZ	23:B0:731:A:C2	2.57	0.88
1:AA:253:U:H4'	1:AA:276:G:H4'	1.56	0.88
1:AA:619:U:C4	6:AD:135:LEU:HG	2.02	0.88
19:AQ:105:ALA:C	23:B0:727:U:H4'	1.93	0.88
23:B0:3874:C:N4	23:B0:3875:A:C5	2.41	0.88
1:AA:262:A:O3'	22:AT:75:ASN:HB2	1.06	0.88
1:AA:1343:G:O3'	11:AI:122:ALA:HB3	1.73	0.88
8:AF:10:LEU:HD12	8:AF:59:TYR:HB3	1.55	0.88
23:B0:1888:C:H4'	23:B0:1911:A:C2	2.08	0.88
1:AA:1014:A:C1'	21:AS:34:TRP:HB2	2.02	0.88
2:AV:75:C:H4'	23:B0:2047:C:OP1	1.72	0.88
6:AD:36:ARG:N	6:AD:37:PRO:HD3	1.88	0.88
1:AA:588:G:C8	1:AA:753:A:C2	2.61	0.87
1:AA:893:C:C4	1:AA:894:G:N7	2.42	0.87
1:AA:922:G:N1	1:AA:1396:A:C6	2.42	0.87
6:AD:205:GLU:CG	7:AE:107:ARG:NH2	2.36	0.87

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AG:149:ARG:NH2	13:AK:59:TYR:OH	2.07	0.87
23:B0:665:A:H3'	23:B0:666:U:H5''	1.54	0.87
23:B0:1912:G:O3'	23:B0:1913:G:H3'	1.72	0.87
1:AA:254:G:H4'	19:AQ:18:THR:HB	1.52	0.87
23:B0:1856:U:H3'	23:B0:3865:A:H8	1.34	0.87
23:B0:3877:A:O2'	55:B5:198:THR:CA	2.22	0.87
23:B0:2633:A:H4'	23:B0:2634:G:H4'	1.54	0.87
1:AA:293:G:P	1:AA:609:A:H61	1.96	0.87
1:AA:587:G:OP1	10:AH:92:ARG:NH1	2.07	0.87
1:AA:1112:C:O2	5:AC:178:LEU:C	2.12	0.87
1:AA:1131:G:H1	1:AA:1143:G:H21	1.22	0.87
1:AA:1458:G:C8	1:AA:1459:C:C2	2.61	0.87
12:AJ:62:HIS:O	16:AN:58:LYS:HA	1.73	0.87
1:AA:1483:A:C5	1:AA:1484:C:C4	2.63	0.87
24:B9:73:C:C3'	24:B9:74:A:P	2.63	0.87
1:AA:820:U:C2	1:AA:873:A:N7	2.43	0.87
1:AA:835:U:H5'	20:AR:64:ARG:NH2	1.88	0.87
1:AA:1457:A:C8	1:AA:1459:C:N3	2.41	0.87
15:AM:3:ARG:HG2	15:AM:9:ILE:HG23	1.56	0.87
1:AA:1110:A:H2'	1:AA:1111:A:O4'	1.74	0.87
1:AA:1269:A:C2	1:AA:1313:U:O4'	2.27	0.87
2:AW:76:A:O4'	23:B0:2486:C:H4'	1.74	0.87
1:AA:9:G:H8	7:AE:126:ARG:HH12	0.87	0.87
1:AA:923:A:O2'	1:AA:1398:A:C2'	2.21	0.87
19:AQ:96:GLN:OE1	23:B0:725:C:C2'	2.17	0.87
1:AA:19:C:C2'	1:AA:916:G:H22	1.87	0.87
1:AA:922:G:C2	1:AA:1396:A:C2	2.63	0.87
1:AA:922:G:C2	1:AA:1396:A:C5	2.62	0.87
1:AA:1429:C:HO2'	23:B0:1720:G:HO2'	1.15	0.87
1:AA:1458:G:C8	1:AA:1459:C:O2	2.28	0.87
4:AB:91:PRO:HG2	4:AB:155:LEU:HD23	1.54	0.87
23:B0:3877:A:H3'	23:B0:1861:G:H8	1.32	0.87
1:AA:232:G:H1'	1:AA:262:A:H61	1.39	0.86
1:AA:1340:A:O3'	2:AV:32:C:H4'	1.74	0.86
23:B0:1119:U:N3	23:B0:1120:C:C4	2.42	0.86
23:B0:3877:A:C2	23:B0:1861:G:N3	2.12	0.86
23:B0:918:A:H2'	23:B0:919:U:H5''	1.57	0.86
1:AA:5:U:O4	7:AE:95:ALA:HB2	1.74	0.86
1:AA:250:A:H4'	1:AA:251:G:O5'	1.76	0.86
1:AA:473:C:OP1	18:AP:75:ARG:CZ	2.23	0.86
1:AA:651:C:N3	1:AA:652:U:C4	2.42	0.86

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1342:C:H4'	11:AI:125:TYR:CD2	2.09	0.86
23:B0:88:G:H3'	23:B0:89:A:H5''	1.57	0.86
1:AA:255:G:H5''	19:AQ:17:LYS:HB2	0.87	0.86
1:AA:538:G:H4'	14:AL:114:LYS:CE	2.04	0.86
1:AA:94:G:C6	1:AA:96:C:C4	2.63	0.86
1:AA:1318:A:H4'	21:AS:10:PHE:CD1	2.11	0.86
1:AA:1435:G:H2'	1:AA:1436:U:C6	2.10	0.86
1:AA:38:G:O2'	1:AA:39:G:H8	1.55	0.86
1:AA:69:G:C4	1:AA:102:G:C6	2.63	0.86
1:AA:130:A:O4'	1:AA:264:U:C4'	2.23	0.86
1:AA:905:U:HO3'	1:AA:906:G:P	1.15	0.86
1:AA:994:A:C5	16:AN:5:ALA:CA	2.53	0.86
2:AV:75:C:N4	23:B0:2230:G:H1	1.72	0.86
5:AC:58:GLU:HB3	12:AJ:92:THR:CG2	2.05	0.86
8:AF:30:LEU:HD23	8:AF:75:LEU:HD21	1.57	0.86
15:AM:10:PRO:HB2	15:AM:18:ALA:HB1	1.57	0.86
1:AA:265:G:O4'	19:AQ:64:PRO:C	2.14	0.86
1:AA:836:G:OP1	20:AR:61:LYS:HE3	1.76	0.86
1:AA:1256:A:O4'	1:AA:1258:G:C4	2.29	0.86
12:AJ:22:LYS:HE2	12:AJ:90:LEU:HD12	1.57	0.86
1:AA:588:G:C5	1:AA:753:A:C4	2.63	0.86
1:AA:1298:C:C2'	9:AG:114:ARG:HH12	1.72	0.86
23:B0:3098:U:HO3'	23:B0:3099:U:P	1.95	0.86
1:AA:69:G:N9	1:AA:102:G:C6	2.44	0.86
1:AA:260:G:C8	22:AT:83:ARG:NH1	2.26	0.86
1:AA:473:C:OP1	18:AP:75:ARG:CD	2.23	0.86
1:AA:538:G:H4'	14:AL:114:LYS:HD3	1.58	0.86
9:AG:149:ARG:NH2	13:AK:59:TYR:CZ	2.44	0.86
1:AA:104:G:C5'	1:AA:172:A:C2	2.59	0.86
1:AA:1064:G:H4'	1:AA:1065:U:H5'	1.58	0.86
7:AE:115:VAL:HG11	7:AE:118:ILE:HG13	1.57	0.86
23:B0:1072:U:H4'	23:B0:1081:A:O2'	1.75	0.86
1:AA:288:A:O2'	1:AA:290:C:OP1	1.94	0.85
1:AA:651:C:C4	1:AA:652:U:O4	2.29	0.85
1:AA:778:G:H4'	13:AK:119:CYS:HB3	1.56	0.85
2:AW:74:C:N4	23:B0:2534:U:C5	2.42	0.85
23:B0:3098:U:H2'	23:B0:3099:U:C6	2.10	0.85
1:AA:237:C:C5'	19:AQ:25:ARG:NH2	2.37	0.85
1:AA:958:A:C4	21:AS:55:LYS:HD2	2.10	0.85
1:AA:994:A:H2	16:AN:4:LYS:O	1.56	0.85
1:AA:1060:C:O4'	12:AJ:52:GLY:HA3	1.77	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AC:29:TYR:CE1	12:AJ:65:LEU:HD11	2.10	0.85
5:AC:52:LEU:HD21	5:AC:118:GLN:HE22	1.40	0.85
1:AA:27:G:C6	1:AA:557:G:C5	2.64	0.85
1:AA:522:C:P	14:AL:72:GLY:H	1.99	0.85
1:AA:1459:C:OP1	22:AT:29:LYS:CA	2.24	0.85
1:AA:556:C:O2'	1:AA:557:G:C5'	2.24	0.85
1:AA:67:C:H2'	1:AA:69:G:P	2.17	0.85
1:AA:260:G:H8	22:AT:83:ARG:HH12	1.25	0.85
2:AW:75:C:N3	23:B0:2532:G:N2	2.23	0.85
2:AW:76:A:N1	23:B0:2532:G:C2	2.44	0.85
1:AA:130:A:O4'	1:AA:264:U:O4'	1.94	0.85
1:AA:191:G:C2	1:AA:192:U:O2	2.30	0.85
1:AA:261:U:H6	22:AT:79:ARG:CZ	1.81	0.85
1:AA:292:G:H2'	1:AA:608:A:N6	1.90	0.85
1:AA:297:G:H4'	1:AA:557:G:H4'	1.59	0.85
1:AA:588:G:C5	1:AA:753:A:C5	2.65	0.85
1:AA:1499:A:O4'	1:AA:1520:G:C5'	2.24	0.85
19:AQ:101:ARG:CD	23:B0:731:A:N1	2.36	0.85
1:AA:332:G:P	22:AT:10:LEU:CG	2.64	0.85
1:AA:1181:G:O2'	1:AA:1184:G:H5'	1.75	0.85
5:AC:70:VAL:HG21	5:AC:76:VAL:HG21	1.58	0.85
5:AC:110:ASN:HD21	5:AC:140:ARG:HB3	1.40	0.85
23:B0:542:A:H2'	23:B0:543:G:H5'	1.59	0.85
23:B0:1312:G:H5''	23:B0:1313:U:H5'	1.59	0.85
23:B0:3103:A:H61	23:B0:3186:C:H42	1.24	0.85
23:B0:3127:G:C4'	23:B0:3173:A:N1	2.33	0.85
1:AA:27:G:O6	1:AA:557:G:O6	1.95	0.85
2:AV:32:C:OP2	11:AI:127:LYS:CG	2.24	0.85
12:AJ:62:HIS:ND1	16:AN:61:TRP:HZ3	1.74	0.85
1:AA:247:G:OP2	19:AQ:100:LYS:HE2	1.77	0.85
1:AA:865:A:O2'	1:AA:919:A:H5'	1.76	0.85
6:AD:150:GLU:HG3	6:AD:153:ARG:NH2	1.90	0.85
1:AA:187:G:H2'	22:AT:105:SER:HB3	1.57	0.85
1:AA:588:G:C4	1:AA:753:A:C6	2.64	0.85
1:AA:1255:G:C2'	1:AA:1258:G:H21	1.90	0.85
1:AA:1457:A:C4	1:AA:1459:C:O2	2.30	0.85
5:AC:64:VAL:HB	5:AC:99:VAL:HB	1.58	0.85
6:AD:205:GLU:CB	7:AE:107:ARG:NH2	2.39	0.85
14:AL:25:PRO:C	14:AL:27:LEU:H	1.79	0.85
1:AA:322:C:O2'	22:AT:19:SER:O	1.95	0.84
1:AA:994:A:C6	16:AN:5:ALA:HB2	2.10	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1342:C:C4'	11:AI:125:TYR:CE1	2.56	0.84
5:AC:190:ARG:HB3	5:AC:190:ARG:NH1	1.91	0.84
1:AA:27:G:N1	1:AA:557:G:C5	2.45	0.84
1:AA:1239:A:O2'	1:AA:1298:C:N4	2.08	0.84
4:AB:102:LEU:HD21	4:AB:162:ILE:HD11	1.57	0.84
5:AC:135:LYS:HE2	7:AE:50:GLU:OE2	1.77	0.84
1:AA:9:G:O5'	7:AE:126:ARG:HD3	1.77	0.84
1:AA:865:A:C2	1:AA:918:A:C4'	2.60	0.84
1:AA:1014:A:C5'	21:AS:14:HIS:CB	2.52	0.84
1:AA:1319:A:H5''	21:AS:5:LEU:HD21	1.58	0.84
6:AD:57:ARG:HH21	7:AE:107:ARG:CD	1.72	0.84
23:B0:3187:U:O3'	23:B0:3188:U:P	2.35	0.84
1:AA:21:G:C2'	1:AA:914:A:H62	1.88	0.84
1:AA:1270:C:O2'	1:AA:1314:C:H5'	1.77	0.84
1:AA:1484:C:O3'	23:B0:1943:A:C2'	2.25	0.84
23:B0:1098:G:H1	23:B0:1113:C:N4	1.75	0.84
23:B0:1953:A:H1'	23:B0:1955:G:H1'	1.58	0.84
1:AA:521:G:C5'	14:AL:72:GLY:O	2.25	0.84
1:AA:820:U:O2	1:AA:873:A:H8	1.59	0.84
1:AA:676:A:O4'	13:AK:115:PRO:HA	1.77	0.84
1:AA:779:C:H1'	13:AK:120:ARG:HD2	1.56	0.84
1:AA:1238:A:C2	1:AA:1241:G:O2'	2.31	0.84
1:AA:1495:U:O2'	23:B0:1902:A:N3	1.92	0.84
19:AQ:27:PHE:CZ	19:AQ:36:ILE:HD11	2.12	0.84
23:B0:1071:U:H3	23:B0:1099:A:H2	1.21	0.84
1:AA:69:G:H1'	1:AA:102:G:C4	2.13	0.84
5:AC:190:ARG:HB3	5:AC:190:ARG:HH11	1.43	0.84
6:AD:104:VAL:HG11	6:AD:146:ILE:HD12	1.58	0.84
6:AD:205:GLU:OE2	7:AE:107:ARG:NE	2.11	0.84
1:AA:323:U:C1'	22:AT:19:SER:HA	2.06	0.84
1:AA:1014:A:N3	21:AS:34:TRP:CD1	2.45	0.84
1:AA:1393:U:N3	1:AA:1395:C:C4	2.43	0.84
1:AA:1434:A:O3'	1:AA:1435:G:C5'	2.25	0.84
1:AA:6:G:C6	7:AE:119:LEU:HD12	2.10	0.84
1:AA:259:G:OP1	22:AT:83:ARG:HB3	1.78	0.84
1:AA:323:U:H4'	22:AT:19:SER:HA	1.60	0.84
1:AA:848:G:C2'	1:AA:849:C:O4'	2.26	0.84
1:AA:1108:G:H5''	5:AC:176:HIS:ND1	1.93	0.84
1:AA:1238:A:C3'	1:AA:1239:A:P	2.66	0.84
1:AA:26:A:C2'	1:AA:27:G:C5'	2.53	0.84
1:AA:1393:U:H2'	1:AA:1395:C:C5	2.12	0.84

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1505:G:H4'	1:AA:1506:U:O5'	1.76	0.84
11:AI:8:GLY:HA2	11:AI:79:LEU:CD1	2.08	0.84
23:B0:2548:G:C2'	23:B0:2549:G:H5''	2.08	0.84
1:AA:27:G:C2	1:AA:557:G:C4	2.65	0.83
1:AA:130:A:H4'	1:AA:264:U:C5'	2.04	0.83
1:AA:131:C:O3'	1:AA:262:A:O2'	1.95	0.83
1:AA:436:C:C4	1:AA:437:U:C5	2.66	0.83
1:AA:779:C:O4'	13:AK:120:ARG:HB3	1.78	0.83
1:AA:1499:A:O4'	1:AA:1520:G:H5'	1.78	0.83
2:AW:75:C:N3	23:B0:2532:G:C2	2.46	0.83
23:B0:616:U:H2'	23:B0:617:U:H5''	1.59	0.83
23:B0:847:C:H41	23:B0:955:G:H21	1.25	0.83
23:B0:2198:U:H3'	23:B0:2199:C:H5''	1.59	0.83
1:AA:27:G:C4	1:AA:557:G:N2	2.46	0.83
1:AA:131:C:P	1:AA:263:A:C4'	2.64	0.83
1:AA:1234:C:H5''	1:AA:1365:G:OP1	1.77	0.83
12:AJ:19:SER:HB2	12:AJ:91:PRO:HG3	1.60	0.83
1:AA:7:G:H22	7:AE:123:LEU:HD11	1.37	0.83
1:AA:320:C:C4'	1:AA:1434:A:N1	2.40	0.83
1:AA:820:U:N3	1:AA:873:A:N7	2.27	0.83
1:AA:1459:C:P	22:AT:28:ALA:O	2.36	0.83
5:AC:172:ARG:HH12	5:AC:174:PRO:HG3	1.43	0.83
6:AD:61:LYS:HD2	6:AD:207:TYR:OH	1.79	0.83
23:B0:109:A:H3'	23:B0:110:U:H5''	1.60	0.83
1:AA:322:C:C5'	22:AT:23:ARG:HD2	2.09	0.83
1:AA:1393:U:C2	1:AA:1395:C:C5	2.66	0.83
19:AQ:94:ASN:CA	23:B0:726:G:O4'	2.27	0.83
1:AA:116:A:C6	1:AA:313:A:H1'	2.10	0.83
1:AA:190:A:N6	22:AT:104:LEU:O	2.11	0.83
1:AA:216:C:H5'	1:AA:465:C:N4	1.93	0.83
1:AA:737:A:C2'	8:AF:73:ASN:ND2	2.42	0.83
1:AA:1126:U:OP2	1:AA:1281:U:O2	1.94	0.83
1:AA:1194:U:H5'	7:AE:22:GLY:CA	2.07	0.83
1:AA:1416:G:P	1:AA:1417:G:OP2	2.36	0.83
7:AE:105:VAL:HB	7:AE:106:PRO:HD3	1.60	0.83
15:AM:50:GLU:O	15:AM:54:VAL:HG23	1.77	0.83
1:AA:37:U:O2'	1:AA:547:A:N6	2.11	0.83
1:AA:38:G:C4'	1:AA:547:A:H62	1.88	0.83
1:AA:436:C:O2'	1:AA:437:U:H5'	1.79	0.83
1:AA:914:A:H2'	1:AA:915:A:C1'	2.07	0.83
1:AA:1458:G:O3'	22:AT:24:LEU:CG	2.26	0.83

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1473:A:O2'	23:B0:1718:A:C2	2.32	0.83
1:AA:1497:G:C2'	1:AA:1498:U:H5'	2.08	0.83
1:AA:69:G:O4'	1:AA:102:G:N2	2.12	0.83
1:AA:131:C:C2	1:AA:262:A:H2	1.95	0.83
1:AA:653:A:N9	10:AH:56:LYS:HG2	1.93	0.83
1:AA:779:C:H5'	13:AK:120:ARG:C	1.98	0.83
1:AA:1015:A:O2'	1:AA:1219:U:H5'	1.79	0.83
1:AA:1342:C:C5'	11:AI:125:TYR:CZ	2.46	0.83
21:AS:55:LYS:HG2	21:AS:56:GLN:HE21	1.42	0.83
1:AA:1060:C:HO2'	12:AJ:56:HIS:HD2	0.85	0.83
2:AW:74:C:N4	23:B0:2533:U:H2'	1.89	0.83
1:AA:264:U:H2'	19:AQ:64:PRO:O	1.78	0.83
1:AA:707:C:H4'	13:AK:20:TYR:CE2	2.13	0.83
1:AA:994:A:N3	16:AN:5:ALA:HA	1.92	0.83
1:AA:1255:G:H21	1:AA:1276:G:N2	1.76	0.83
8:AF:36:ARG:HH12	8:AF:38:GLU:HG2	1.44	0.83
19:AQ:104:LYS:C	23:B0:727:U:H1'	1.99	0.83
23:B0:3877:A:N9	23:B0:1861:G:N9	2.26	0.83
1:AA:36:C:O2	1:AA:501:C:H4'	1.79	0.82
23:B0:1181:C:H2'	23:B0:1182:U:H5''	1.60	0.82
1:AA:22:G:C1'	1:AA:913:A:N1	2.41	0.82
1:AA:38:G:H1'	1:AA:547:A:C5	2.11	0.82
1:AA:293:G:H4'	1:AA:609:A:H2	1.00	0.82
1:AA:323:U:H5''	22:AT:23:ARG:N	1.94	0.82
1:AA:333:G:O2'	22:AT:16:HIS:NE2	2.11	0.82
1:AA:572:A:N3	1:AA:917:G:H1'	1.94	0.82
2:AV:11:C:H4'	23:B0:1892:C:O4'	1.78	0.82
2:AV:56:C:C3'	28:BD:74:ILE:CA	2.57	0.82
23:B0:1098:G:N1	23:B0:1113:C:N4	2.27	0.82
1:AA:112:G:N2	1:AA:354:G:H5'	1.94	0.82
1:AA:266:G:C5'	19:AQ:66:SER:HA	2.08	0.82
1:AA:323:U:C5'	22:AT:23:ARG:N	2.42	0.82
1:AA:1061:G:H5'	12:AJ:56:HIS:CB	1.88	0.82
5:AC:91:LEU:HD23	5:AC:92:ALA:N	1.94	0.82
1:AA:815:A:C4	1:AA:1527:C:H1'	2.15	0.82
1:AA:865:A:HO2'	1:AA:918:A:HO2'	1.24	0.82
1:AA:406:G:C4	1:AA:496:A:C5	2.67	0.82
1:AA:816:A:P	1:AA:1527:C:C5'	2.65	0.82
1:AA:1014:A:C2	21:AS:34:TRP:NE1	2.48	0.82
1:AA:1015:A:C1'	1:AA:1219:U:H4'	2.08	0.82
2:AW:25:C:H2'	2:AW:26:G:C4'	2.10	0.82

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:653:G:H2'	23:B0:654:A:H4'	1.62	0.82
1:AA:1342:C:C5'	11:AI:125:TYR:CD1	2.62	0.82
1:AA:1473:A:H5'	23:B0:1719:G:C4'	2.07	0.82
23:B0:166:G:H21	23:B0:184:A:H62	1.27	0.82
1:AA:323:U:H4'	22:AT:22:ARG:HB2	1.60	0.82
1:AA:865:A:C2'	1:AA:918:A:HO2'	1.91	0.82
1:AA:1112:C:O2	5:AC:178:LEU:O	1.98	0.82
2:AV:33:U:O2	2:AV:35:A:H3'	1.80	0.82
2:AV:76:A:H5'	23:B0:2564:U:H1'	1.61	0.82
12:AJ:62:HIS:O	16:AN:58:LYS:CA	2.27	0.82
1:AA:116:A:H61	1:AA:313:A:H1'	0.66	0.82
1:AA:131:C:H4'	1:AA:262:A:O2'	1.78	0.82
1:AA:322:C:O2'	22:AT:19:SER:C	2.18	0.82
1:AA:1459:C:OP1	22:AT:29:LYS:HA	1.80	0.82
2:AV:25:C:H2'	2:AV:26:G:O4'	1.80	0.82
15:AM:78:ILE:HA	15:AM:81:LEU:HD21	1.62	0.82
23:B0:1964:A:H3'	23:B0:1965:U:H5'	1.60	0.82
1:AA:128:G:C5'	19:AQ:2:PRO:C	2.48	0.82
1:AA:437:U:O2'	6:AD:123:HIS:CD2	2.32	0.82
6:AD:205:GLU:CD	7:AE:107:ARG:HH21	1.81	0.82
19:AQ:104:LYS:CE	23:B0:729:A:N7	2.42	0.82
1:AA:38:G:H4'	1:AA:547:A:H62	1.43	0.82
1:AA:212:G:HO3'	1:AA:213:G:P	1.99	0.82
1:AA:376:G:P	18:AP:67:THR:HG21	2.19	0.82
1:AA:406:G:C5	1:AA:496:A:N7	2.48	0.82
1:AA:1256:A:C5'	1:AA:1258:G:C1'	2.50	0.82
1:AA:1501:C:OP1	1:AA:1508:G:C4'	2.27	0.82
7:AE:118:ILE:HG22	7:AE:119:LEU:N	1.95	0.82
1:AA:653:A:O5'	10:AH:56:LYS:CE	2.27	0.81
1:AA:893:C:N4	1:AA:894:G:O6	2.13	0.81
1:AA:1190:G:O2'	1:AA:1191:A:P	2.39	0.81
1:AA:1298:C:H2'	9:AG:114:ARG:NH2	1.94	0.81
2:AW:76:A:N3	23:B0:2562:G:C2	2.47	0.81
12:AJ:62:HIS:CB	16:AN:59:ALA:CB	2.11	0.81
20:AR:55:ARG:HB3	20:AR:55:ARG:NH1	1.95	0.81
21:AS:29:ARG:O	21:AS:30:LEU:HB2	1.80	0.81
23:B0:831:G:H21	23:B0:1203:A:H62	1.25	0.81
23:B0:1062:G:O3'	23:B0:1063:C:P	2.38	0.81
1:AA:335:C:O4'	1:AA:1434:A:C4'	2.26	0.81
1:AA:502:G:H1'	1:AA:550:G:H5'	1.63	0.81
1:AA:1060:C:O2'	12:AJ:56:HIS:HD2	1.24	0.81

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AD:205:GLU:CD	7:AE:107:ARG:NH2	2.34	0.81
1:AA:108:G:C8	22:AT:12:ALA:HB1	2.15	0.81
1:AA:877:C:H5''	10:AH:88:LYS:CD	2.09	0.81
1:AA:1015:A:C2'	1:AA:1219:U:H5'	2.10	0.81
1:AA:1060:C:C5'	12:AJ:52:GLY:CA	2.59	0.81
1:AA:1069:C:O4'	1:AA:1191:A:C2	2.32	0.81
1:AA:1194:U:H4'	7:AE:22:GLY:CA	2.07	0.81
1:AA:1416:G:C5'	1:AA:1417:G:P	2.68	0.81
6:AD:205:GLU:CD	7:AE:107:ARG:HE	1.82	0.81
9:AG:75:VAL:CG1	9:AG:86:GLN:HB3	2.10	0.81
23:B0:789:G:H21	23:B0:806:A:H62	1.25	0.81
23:B0:1856:U:C5	23:B0:3865:A:C5	2.67	0.81
23:B0:3866:A:HO2'	55:B5:194:ALA:CA	1.93	0.81
23:B0:3118:U:N3	23:B0:3149:G:H5'	1.88	0.81
1:AA:236:G:O5'	19:AQ:40:LYS:NZ	2.08	0.81
1:AA:1256:A:H4'	1:AA:1258:G:C8	2.16	0.81
23:B0:3108:G:C2	23:B0:3109:U:C5	2.69	0.81
1:AA:45:U:OP1	1:AA:307:C:O2'	1.98	0.81
1:AA:264:U:O2'	19:AQ:64:PRO:C	2.18	0.81
1:AA:323:U:O4'	22:AT:19:SER:CB	2.29	0.81
1:AA:406:G:C5	1:AA:496:A:C5	2.69	0.81
2:AV:75:C:N4	23:B0:2231:G:N2	2.29	0.81
23:B0:1034:U:H1'	23:B0:1133:G:H5''	1.61	0.81
1:AA:69:G:O2'	1:AA:101:A:H2	1.63	0.81
1:AA:319:G:O2'	1:AA:1434:A:N1	2.14	0.81
1:AA:323:U:OP1	22:AT:22:ARG:O	1.97	0.81
4:AB:132:LYS:HA	4:AB:135:GLN:HB3	1.63	0.81
1:AA:69:G:C2'	1:AA:101:A:N1	2.44	0.81
1:AA:248:C:O2'	1:AA:283:C:C4'	2.28	0.81
1:AA:538:G:H4'	14:AL:114:LYS:CD	2.10	0.81
1:AA:919:A:C2	1:AA:1080:A:H2	1.97	0.81
5:AC:8:ILE:HG23	5:AC:16:ARG:HG2	1.60	0.81
6:AD:150:GLU:HA	6:AD:153:ARG:HE	1.44	0.81
17:AO:78:TYR:CZ	17:AO:82:ILE:HD11	2.15	0.81
1:AA:99:C:O2	1:AA:101:A:N7	2.14	0.81
1:AA:1356:G:H2'	1:AA:1357:A:C8	2.15	0.81
1:AA:1394:A:C6	1:AA:1501:C:H5''	2.16	0.81
2:AV:12:U:OP1	23:B0:1891:C:H1'	1.81	0.81
6:AD:88:VAL:CG1	7:AE:97:GLY:CA	2.17	0.81
22:AT:43:LEU:HD13	22:AT:51:GLU:HG3	1.62	0.81
23:B0:1807:A:H4'	23:B0:1808:C:H5'	1.61	0.81

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:131:C:C2'	1:AA:262:A:H1'	2.10	0.81
1:AA:131:C:O2	1:AA:262:A:H2	1.61	0.81
1:AA:190:A:H61	22:AT:104:LEU:CA	1.90	0.81
1:AA:237:C:H5''	19:AQ:25:ARG:CZ	2.11	0.81
1:AA:376:G:OP1	18:AP:5:ARG:HB2	1.80	0.81
1:AA:866:C:C5'	1:AA:919:A:H5'	2.11	0.81
1:AA:1484:C:C4'	23:B0:1943:A:O2'	2.29	0.81
23:B0:2227:C:H2'	23:B0:2228:U:H5'	1.63	0.81
1:AA:319:G:C5'	1:AA:1468:A:H4'	2.06	0.80
1:AA:619:U:O2'	6:AD:138:TYR:CE1	2.34	0.80
1:AA:1190:G:HO2'	1:AA:1191:A:P	2.04	0.80
1:AA:1194:U:H5''	7:AE:22:GLY:O	1.81	0.80
1:AA:1281:U:H5'	1:AA:1282:C:H5	1.44	0.80
1:AA:1392:G:C4'	1:AA:1531:A:H5'	2.06	0.80
1:AA:1483:A:C4	1:AA:1484:C:C5	2.69	0.80
2:AV:12:U:P	23:B0:1891:C:O2'	2.39	0.80
6:AD:205:GLU:HG2	7:AE:107:ARG:HH21	1.45	0.80
23:B0:878:C:H42	23:B0:921:A:H62	1.28	0.80
24:B9:73:C:HO3'	24:B9:74:A:P	2.03	0.80
1:AA:826:C:H1'	10:AH:15:ASN:ND2	1.96	0.80
1:AA:1015:A:O2'	1:AA:1219:U:C5'	2.28	0.80
1:AA:1499:A:H4'	1:AA:1520:G:O3'	1.81	0.80
4:AB:27:LYS:HD3	4:AB:195:ASP:OD2	1.82	0.80
4:AB:101:MET:HA	4:AB:108:ILE:HD12	1.63	0.80
1:AA:262:A:H5''	22:AT:75:ASN:H	1.45	0.80
1:AA:651:C:C4	1:AA:652:U:C4	2.69	0.80
1:AA:995:C:O2	16:AN:4:LYS:HD3	1.80	0.80
1:AA:1014:A:C6	21:AS:34:TRP:CE2	2.70	0.80
1:AA:66:G:H4'	1:AA:199:G:H4'	1.63	0.80
1:AA:976:G:OP1	16:AN:32:SER:HA	1.82	0.80
1:AA:1155:G:H3'	1:AA:1156:G:P	2.21	0.80
1:AA:1422:G:OP1	33:BI:60:PRO:CA	2.30	0.80
1:AA:113:G:H1'	1:AA:354:G:C5'	2.12	0.80
1:AA:237:C:C5'	19:AQ:25:ARG:CZ	2.60	0.80
1:AA:526:C:OP1	14:AL:91:LYS:HE2	1.81	0.80
6:AD:205:GLU:CD	7:AE:107:ARG:NE	2.35	0.80
9:AG:75:VAL:HG11	9:AG:86:GLN:HB3	1.63	0.80
12:AJ:47:PHE:CE2	16:AN:37:PHE:CE1	2.70	0.80
1:AA:38:G:H5'	1:AA:547:A:H61	0.98	0.80
1:AA:848:G:O2'	1:AA:849:C:O4'	1.99	0.80
6:AD:57:ARG:NH2	7:AE:107:ARG:HD2	1.94	0.80

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:94:ARG:HH22	21:AS:81:ARG:NH1	1.79	0.80
1:AA:13:U:H1'	1:AA:914:A:H5'	1.63	0.80
1:AA:38:G:C5'	1:AA:547:A:H62	1.91	0.80
1:AA:59:A:H3'	1:AA:331:G:N2	1.94	0.80
1:AA:262:A:OP2	22:AT:76:ALA:CB	2.28	0.80
1:AA:305:G:O3'	1:AA:306:G:P	2.40	0.80
1:AA:815:A:N6	1:AA:1508:G:N2	2.28	0.80
1:AA:1111:A:N1	5:AC:177:THR:HA	1.95	0.80
2:AV:32:C:OP2	11:AI:127:LYS:CE	2.29	0.80
14:AL:67:THR:HG22	14:AL:96:VAL:HG13	1.63	0.80
23:B0:225:G:H3'	23:B0:226:C:C5'	2.09	0.80
1:AA:128:G:H1'	19:AQ:61:GLU:CD	2.02	0.80
1:AA:1285:A:H4'	1:AA:1286:A:O5'	1.82	0.80
2:AV:1:G:H22	2:AV:2:C:H41	1.25	0.80
2:AV:74:C:N3	23:B0:2231:G:N2	2.30	0.80
6:AD:88:VAL:CG2	7:AE:96:PRO:C	2.48	0.80
1:AA:104:G:H4'	1:AA:172:A:C2	2.17	0.80
1:AA:322:C:H4'	22:AT:23:ARG:HD2	0.80	0.80
1:AA:376:G:H5''	18:AP:5:ARG:HD2	1.61	0.80
1:AA:1060:C:C2'	12:AJ:56:HIS:CD2	2.64	0.80
12:AJ:8:LEU:CD2	12:AJ:96:ILE:HG12	2.11	0.80
14:AL:28:LYS:HD2	14:AL:33:ARG:HH22	1.47	0.80
15:AM:22:ILE:HD12	15:AM:25:ILE:HD12	1.61	0.80
23:B0:1072:U:C4	31:BG:10:LEU:CA	2.64	0.80
1:AA:264:U:O2'	19:AQ:63:ARG:HD2	1.82	0.80
1:AA:547:A:C4'	1:AA:548:G:P	2.70	0.80
1:AA:829:G:O2'	4:AB:24:TRP:NE1	2.14	0.80
1:AA:1016:A:H5'	16:AN:15:LYS:HE3	1.63	0.80
7:AE:79:GLU:CD	10:AH:105:ARG:CD	2.50	0.80
8:AF:30:LEU:HB3	8:AF:35:ALA:HB3	1.62	0.80
12:AJ:45:ARG:NH2	16:AN:36:PHE:CE2	2.50	0.80
1:AA:9:G:O5'	7:AE:126:ARG:CZ	2.30	0.79
1:AA:128:G:C5'	19:AQ:2:PRO:O	2.29	0.79
1:AA:132:C:H5'	1:AA:262:A:H1'	1.63	0.79
1:AA:188:C:C2	22:AT:105:SER:O	2.35	0.79
1:AA:914:A:C3'	1:AA:915:A:O4'	2.29	0.79
1:AA:1182:G:H5'	1:AA:1184:G:H5'	1.64	0.79
2:AW:76:A:C2	23:B0:2486:C:O2	2.34	0.79
9:AG:149:ARG:CZ	13:AK:59:TYR:CZ	2.65	0.79
1:AA:255:G:C4'	19:AQ:17:LYS:HB2	2.12	0.79
1:AA:1116:C:C2'	1:AA:1117:G:H5''	2.12	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1341:U:H5'	2:AV:32:C:H5''	1.64	0.79
10:AH:90:GLY:O	10:AH:91:ARG:HB2	1.83	0.79
1:AA:255:G:C1'	19:AQ:16:GLN:CB	2.60	0.79
1:AA:588:G:C8	1:AA:753:A:N3	2.50	0.79
1:AA:673:G:H2'	1:AA:674:G:C8	2.17	0.79
1:AA:835:U:OP1	20:AR:60:GLY:C	2.19	0.79
23:B0:3874:C:C4	23:B0:3875:A:C5	2.70	0.79
1:AA:323:U:C4'	22:AT:22:ARG:CB	2.53	0.79
2:AV:11:C:C5'	23:B0:1892:C:H4'	2.12	0.79
4:AB:195:ASP:HB3	10:AH:74:PRO:HD2	1.64	0.79
5:AC:15:THR:O	5:AC:16:ARG:HB2	1.82	0.79
5:AC:191:THR:HG22	5:AC:193:TYR:H	1.44	0.79
13:AK:54:ARG:HB3	13:AK:54:ARG:NH1	1.97	0.79
1:AA:779:C:C5'	13:AK:120:ARG:HG2	2.11	0.79
1:AA:1490:C:H5'	1:AA:1490:C:H6	1.47	0.79
19:AQ:96:GLN:CD	23:B0:725:C:C1'	2.38	0.79
23:B0:1098:G:C2	23:B0:1113:C:N4	2.41	0.79
23:B0:3877:A:N9	23:B0:1861:G:C8	2.51	0.79
1:AA:131:C:H1'	1:AA:262:A:H2	1.41	0.79
1:AA:266:G:H5'	19:AQ:66:SER:CA	2.13	0.79
1:AA:707:C:C5'	13:AK:85:ARG:NH1	2.32	0.79
2:AW:74:C:H5	23:B0:2533:U:H3	0.83	0.79
23:B0:1572:C:C2'	23:B0:1573:G:H5''	2.11	0.79
1:AA:185:A:O2'	1:AA:186:C:P	2.41	0.79
1:AA:1190:G:OP1	5:AC:5:ILE:N	2.16	0.79
1:AA:1342:C:C4'	11:AI:125:TYR:CE2	2.65	0.79
1:AA:190:A:C5	22:AT:104:LEU:O	2.36	0.79
1:AA:265:G:C5'	19:AQ:65:ILE:N	2.42	0.79
1:AA:1238:A:H2	1:AA:1241:G:O2'	1.64	0.79
1:AA:1416:G:O3'	1:AA:1417:G:H5''	1.81	0.79
19:AQ:93:GLN:NE2	23:B0:727:U:OP2	2.15	0.79
22:AT:54:LYS:HG3	22:AT:100:ILE:CD1	2.13	0.79
1:AA:265:G:O4'	19:AQ:64:PRO:CB	2.31	0.79
4:AB:84:GLU:OE1	4:AB:216:SER:HA	1.83	0.79
1:AA:160:A:N6	1:AA:347:G:H21	1.80	0.79
1:AA:779:C:C2'	13:AK:120:ARG:CD	2.59	0.79
1:AA:1410:G:C2	1:AA:1491:G:N1	2.51	0.79
1:AA:1434:A:C3'	1:AA:1435:G:C4'	2.60	0.79
1:AA:1484:C:O3'	23:B0:1943:A:C3'	2.31	0.79
1:AA:1499:A:O4'	1:AA:1520:G:H4'	1.82	0.79
6:AD:25:ARG:C	6:AD:27:TYR:H	1.85	0.79

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:322:C:O3'	22:AT:23:ARG:HA	1.74	0.78
1:AA:653:A:C4'	10:AH:56:LYS:HE2	2.13	0.78
1:AA:205:G:N2	1:AA:207:C:H5	1.80	0.78
1:AA:1416:G:C3'	1:AA:1417:G:P	2.69	0.78
12:AJ:47:PHE:CE2	16:AN:37:PHE:HE1	2.01	0.78
1:AA:189:A:OP2	22:AT:105:SER:HB2	1.83	0.78
1:AA:256:U:C5'	19:AQ:17:LYS:CE	2.61	0.78
1:AA:401:C:O2'	1:AA:621:A:C2	2.35	0.78
1:AA:651:C:H2'	1:AA:652:U:C6	2.17	0.78
1:AA:815:A:C5	1:AA:1527:C:O2	2.36	0.78
1:AA:1014:A:C5'	21:AS:14:HIS:HB3	2.12	0.78
23:B0:471:A:H62	23:B0:480:G:H21	1.31	0.78
1:AA:212:G:O2'	1:AA:213:G:H5'	1.82	0.78
1:AA:318:G:N2	1:AA:1433:A:C2	2.49	0.78
21:AS:31:ILE:HG22	21:AS:32:LYS:N	1.99	0.78
1:AA:236:G:OP1	19:AQ:40:LYS:HE2	1.82	0.78
1:AA:619:U:O2'	6:AD:138:TYR:HE1	1.66	0.78
1:AA:825:G:N2	10:AH:11:THR:HG21	1.97	0.78
1:AA:923:A:C4'	1:AA:1398:A:C6	2.66	0.78
6:AD:150:GLU:H	6:AD:150:GLU:CD	1.86	0.78
23:B0:895:G:H5'	23:B0:895:G:H8	1.48	0.78
1:AA:264:U:O2'	19:AQ:63:ARG:CG	2.31	0.78
1:AA:377:G:P	18:AP:3:LYS:NZ	2.56	0.78
1:AA:406:G:C6	1:AA:496:A:C8	2.72	0.78
1:AA:893:C:H2'	1:AA:894:G:H8	1.49	0.78
1:AA:1483:A:H2'	1:AA:1484:C:C5	2.19	0.78
6:AD:205:GLU:OE2	7:AE:107:ARG:CZ	2.32	0.78
7:AE:43:LEU:HD11	7:AE:132:ALA:HB1	1.64	0.78
9:AG:66:VAL:HG12	9:AG:70:LYS:HE3	1.65	0.78
14:AL:126:LYS:H	14:AL:126:LYS:HD2	1.48	0.78
1:AA:9:G:OP2	7:AE:126:ARG:CZ	2.32	0.78
1:AA:43:C:OP1	18:AP:12:LYS:CD	2.30	0.78
1:AA:129:U:P	19:AQ:3:LYS:HZ2	2.05	0.78
1:AA:837:G:H2'	1:AA:838:C:C6	2.18	0.78
1:AA:1014:A:H5''	21:AS:14:HIS:HB3	1.65	0.78
1:AA:1090:U:O4'	1:AA:1169:A:H2	1.67	0.78
1:AA:1366:C:H2'	1:AA:1367:C:H6	1.48	0.78
1:AA:1496:C:O2	1:AA:1517:G:N2	2.17	0.78
1:AA:1505:G:O2'	1:AA:1506:U:P	2.41	0.78
14:AL:70:ILE:HD13	14:AL:77:LEU:HD12	1.63	0.78
15:AM:84:ILE:CG2	21:AS:65:ASN:ND2	2.46	0.78

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:93:ARG:HH11	23:B0:900:U:H5''	1.46	0.78
16:AN:14:PRO:C	16:AN:16:PHE:H	1.86	0.78
1:AA:22:G:N2	1:AA:913:A:C2'	2.42	0.78
1:AA:191:G:C8	1:AA:192:U:C6	2.71	0.78
1:AA:1343:G:P	11:AI:125:TYR:OH	2.41	0.78
2:AW:17:U:O4	23:B0:895:G:OP1	2.00	0.78
22:AT:54:LYS:HG3	22:AT:100:ILE:HD13	1.65	0.78
23:B0:403:A:H4'	23:B0:425:A:H5'	1.63	0.78
23:B0:1252:C:C2'	23:B0:1253:C:H5''	2.13	0.78
1:AA:188:C:N1	22:AT:105:SER:O	2.17	0.78
1:AA:262:A:H5''	22:AT:75:ASN:N	1.99	0.78
1:AA:1318:A:H4'	21:AS:10:PHE:CE1	2.19	0.78
1:AA:1458:G:N7	1:AA:1459:C:C2	2.52	0.78
5:AC:150:LYS:HE2	5:AC:152:ILE:HD11	1.66	0.78
23:B0:225:G:C3'	23:B0:226:C:H5'	2.13	0.78
23:B0:1679:U:H3'	23:B0:1680:U:H5''	1.66	0.78
1:AA:319:G:H21	1:AA:1434:A:C1'	1.93	0.78
1:AA:1014:A:C4	21:AS:34:TRP:CG	2.72	0.78
1:AA:1271:G:H5'	1:AA:1314:C:H5''	1.66	0.78
1:AA:1483:A:C4	1:AA:1484:C:C6	2.72	0.78
1:AA:1484:C:H5''	23:B0:1943:A:O2'	1.84	0.78
4:AB:8:LYS:O	4:AB:9:GLU:HB2	1.81	0.78
19:AQ:94:ASN:CA	23:B0:726:G:C1'	2.62	0.78
5:AC:5:ILE:CG2	12:AJ:51:ARG:HH12	1.96	0.77
6:AD:57:ARG:NH2	7:AE:107:ARG:CZ	2.47	0.77
14:AL:120:TYR:O	14:AL:122:THR:HG23	1.83	0.77
18:AP:21:VAL:HG21	18:AP:59:TRP:CD1	2.19	0.77
1:AA:13:U:H4'	1:AA:914:A:OP1	1.84	0.77
1:AA:923:A:N9	1:AA:1398:A:C2	2.52	0.77
1:AA:1342:C:H4'	11:AI:125:TYR:CZ	2.13	0.77
1:AA:1394:A:C5	1:AA:1501:C:H4'	2.19	0.77
4:AB:77:ALA:HB2	4:AB:211:ILE:CD1	2.10	0.77
1:AA:186:C:C1'	22:AT:60:GLU:OE1	2.31	0.77
1:AA:243:A:C4'	1:AA:244:U:H5'	2.14	0.77
1:AA:929:G:P	1:AA:1533:C:H41	2.07	0.77
1:AA:1458:G:N9	1:AA:1459:C:H2'	1.95	0.77
5:AC:23:TYR:CE1	12:AJ:67:THR:HG23	2.19	0.77
5:AC:135:LYS:CE	7:AE:50:GLU:OE2	2.32	0.77
8:AF:95:GLU:H	8:AF:95:GLU:CD	1.85	0.77
1:AA:254:G:H21	19:AQ:16:GLN:CD	1.87	0.77
7:AE:64:ARG:O	7:AE:65:ASN:HB3	1.84	0.77

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AE:151:LEU:HD11	10:AH:77:GLU:OE2	1.83	0.77
14:AL:41:ARG:CG	14:AL:42:THR:H	1.88	0.77
1:AA:130:A:C6	1:AA:264:U:C2	2.72	0.77
1:AA:161:A:N3	1:AA:348:G:O2'	2.16	0.77
1:AA:545:C:O2'	1:AA:549:C:OP1	2.03	0.77
1:AA:1340:A:C1'	2:AV:31:A:O2'	2.33	0.77
1:AA:1416:G:C2'	1:AA:1417:G:C5'	2.40	0.77
1:AA:1434:A:H3'	1:AA:1435:G:C5'	2.14	0.77
1:AA:9:G:P	7:AE:126:ARG:CZ	2.72	0.77
1:AA:234:C:HO2'	19:AQ:70:ARG:HG2	1.48	0.77
1:AA:1305:G:C2'	1:AA:1306:A:H8	1.97	0.77
8:AF:100:ASN:HD22	20:AR:23:LYS:HG2	1.49	0.77
23:B0:3118:U:N3	23:B0:3148:G:O2'	2.08	0.77
23:B0:2491:C:H2'	23:B0:2492:G:H5''	1.67	0.77
1:AA:13:U:C4'	1:AA:914:A:OP1	2.33	0.77
1:AA:923:A:O2'	1:AA:1398:A:H3'	1.85	0.77
1:AA:1498:U:O4'	1:AA:1519:A:H2	1.68	0.77
2:AW:75:C:C2	23:B0:2532:G:N2	2.53	0.77
23:B0:1067:G:H5'	23:B0:1068:A:C5'	2.11	0.77
23:B0:3185:U:H6	23:B0:3185:U:H5'	1.49	0.77
1:AA:89:G:C3'	1:AA:90:C:P	2.72	0.77
1:AA:397:A:C5	1:AA:547:A:H1'	2.19	0.77
1:AA:436:C:H2'	1:AA:437:U:H6	1.50	0.77
1:AA:1014:A:C4'	21:AS:14:HIS:CD2	2.68	0.77
17:AO:16:ALA:HB1	17:AO:21:ASP:HB3	1.64	0.77
1:AA:7:G:N3	7:AE:121:LYS:HG2	2.00	0.77
1:AA:69:G:O2'	1:AA:101:A:C2	2.37	0.77
1:AA:538:G:C4'	14:AL:114:LYS:HD3	2.15	0.77
1:AA:958:A:C2	21:AS:55:LYS:HB2	2.19	0.77
2:AW:25:C:O2'	2:AW:26:G:H5'	1.85	0.77
9:AG:95:ARG:HH11	9:AG:95:ARG:HG3	1.50	0.77
14:AL:75:HIS:CD2	14:AL:77:LEU:H	1.97	0.77
23:B0:940:G:H3'	23:B0:941:U:C5'	2.07	0.77
1:AA:216:C:H5'	1:AA:465:C:H41	1.49	0.76
1:AA:848:G:O3'	1:AA:849:C:H5'	1.85	0.76
23:B0:894:G:H2'	23:B0:895:G:H5''	1.65	0.76
23:B0:2808:U:H3'	23:B0:2809:A:H5'	1.67	0.76
1:AA:421:U:N1	5:AC:127:ARG:NH2	2.33	0.76
4:AB:36:ARG:HD2	4:AB:41:ILE:HD12	1.68	0.76
23:B0:1856:U:C6	23:B0:3865:A:N7	2.53	0.76
23:B0:3128:G:C4'	23:B0:3174:C:O4'	2.29	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:762:C:H5'	23:B0:729:A:H61	1.51	0.76
8:AF:67:MET:HE1	8:AF:72:VAL:HA	1.66	0.76
14:AL:75:HIS:HD2	14:AL:77:LEU:N	1.82	0.76
23:B0:3109:U:C5'	23:B0:3150:C:H5'	2.15	0.76
1:AA:253:U:O2	1:AA:275:G:O2'	1.97	0.76
1:AA:264:U:HO2'	19:AQ:64:PRO:C	1.87	0.76
1:AA:265:G:O4'	19:AQ:64:PRO:HB2	1.85	0.76
1:AA:893:C:H2'	1:AA:894:G:C8	2.21	0.76
2:AV:75:C:OP1	23:B0:2581:A:H5''	1.84	0.76
14:AL:126:LYS:H	14:AL:126:LYS:CD	1.96	0.76
17:AO:17:ARG:HH11	17:AO:17:ARG:HG3	1.49	0.76
23:B0:1067:G:C5'	23:B0:1068:A:H5'	2.10	0.76
23:B0:3128:G:HO2'	23:B0:3174:C:C5'	1.76	0.76
1:AA:1409:C:C2	1:AA:1410:G:C8	2.74	0.76
1:AA:1483:A:O2'	1:AA:1484:C:P	2.43	0.76
2:AW:33:U:C2	2:AW:35:A:C5'	2.65	0.76
4:AB:57:PHE:O	4:AB:60:ASP:HB3	1.85	0.76
1:AA:456:A:C6	1:AA:477:G:N3	2.54	0.76
1:AA:1014:A:N3	21:AS:34:TRP:CG	2.54	0.76
1:AA:1497:G:O2'	1:AA:1518:A:C2	2.36	0.76
1:AA:323:U:P	22:AT:23:ARG:N	2.56	0.76
1:AA:333:G:HO2'	22:AT:16:HIS:CE1	2.03	0.76
1:AA:452:A:H4'	18:AP:72:ARG:NH2	2.00	0.76
1:AA:588:G:C6	1:AA:753:A:C8	2.74	0.76
1:AA:653:A:C8	10:AH:56:LYS:HG2	2.21	0.76
1:AA:1428:A:O2'	23:B0:1703:C:H1'	1.86	0.76
1:AA:1473:A:O2'	23:B0:1718:A:C6	2.39	0.76
22:AT:14:LYS:O	22:AT:18:GLN:HG3	1.86	0.76
23:B0:1113:C:O3'	23:B0:1114:A:OP2	2.04	0.76
23:B0:1528:C:H2'	23:B0:1529:C:H5''	1.67	0.76
1:AA:188:C:C2	22:AT:89:ARG:NH1	2.45	0.76
1:AA:319:G:H2'	1:AA:1434:A:C2	2.21	0.76
1:AA:893:C:C4	1:AA:894:G:C5	2.73	0.76
1:AA:1014:A:C5'	21:AS:14:HIS:CD2	2.69	0.76
1:AA:1226:C:H4'	1:AA:1227:A:OP1	1.84	0.76
1:AA:1321:C:H42	21:AS:37:ARG:CZ	1.98	0.76
2:AW:76:A:C2	23:B0:2532:G:C2	2.74	0.76
6:AD:162:LEU:HD13	6:AD:181:MET:HG2	1.68	0.76
11:AI:118:LYS:O	11:AI:119:ALA:HB3	1.85	0.76
19:AQ:94:ASN:HA	23:B0:726:G:O4'	1.83	0.76
20:AR:55:ARG:HB3	20:AR:55:ARG:HH11	1.50	0.76

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1505:G:HO2'	1:AA:1506:U:P	2.09	0.76
14:AL:59:ARG:HD3	14:AL:65:GLU:HG3	1.68	0.76
21:AS:40:ILE:HD13	21:AS:62:ILE:HD13	1.68	0.76
23:B0:357:A:H2'	23:B0:358:C:H5'	1.66	0.76
24:B9:107:C:H2'	24:B9:108:G:H5'	1.68	0.76
1:AA:249:U:H3'	1:AA:250:A:P	2.26	0.75
1:AA:1256:A:H5'	1:AA:1258:G:N9	2.00	0.75
2:AV:1:G:H21	2:AV:2:C:N4	1.81	0.75
5:AC:19:GLU:HB3	5:AC:40:ARG:HH21	1.50	0.75
5:AC:110:ASN:O	5:AC:111:LEU:HD23	1.85	0.75
19:AQ:97:SER:OG	19:AQ:103:GLY:HA2	1.85	0.75
23:B0:68:C:H1'	23:B0:72:A:H1'	1.68	0.75
1:AA:246:A:C4'	1:AA:247:G:H4'	2.16	0.75
1:AA:328:C:O2	1:AA:328:C:H2'	1.85	0.75
1:AA:826:C:H1'	10:AH:15:ASN:HD22	1.50	0.75
1:AA:866:C:H4'	1:AA:919:A:OP1	1.86	0.75
1:AA:1392:G:C4'	1:AA:1531:A:H5''	2.15	0.75
1:AA:1473:A:O4'	23:B0:1719:G:H1'	1.85	0.75
4:AB:139:LYS:O	4:AB:143:GLU:HG2	1.86	0.75
8:AF:86:ARG:O	8:AF:87:ARG:HG2	1.85	0.75
12:AJ:51:ARG:O	16:AN:45:ARG:CZ	2.34	0.75
15:AM:4:ILE:HG22	15:AM:5:ALA:N	2.00	0.75
23:B0:3874:C:N4	23:B0:3875:A:C6	2.54	0.75
23:B0:3874:C:C4	23:B0:3875:A:N7	2.54	0.75
23:B0:1919:A:H5''	23:B0:1920:A:O5'	1.86	0.75
1:AA:556:C:C2	1:AA:557:G:C8	2.73	0.75
1:AA:992:U:H4'	1:AA:993:G:O5'	1.86	0.75
1:AA:1206:G:H4'	5:AC:192:THR:O	1.86	0.75
1:AA:1405:G:N3	1:AA:1518:A:O2'	2.19	0.75
4:AB:16:HIS:NE2	4:AB:214:ILE:HG12	2.01	0.75
7:AE:79:GLU:OE1	10:AH:105:ARG:HD3	1.85	0.75
18:AP:74:LEU:O	18:AP:79:VAL:HG23	1.86	0.75
23:B0:3866:A:N6	55:B5:45:ASP:CA	2.49	0.75
1:AA:1025:U:H2'	1:AA:1026:G:C8	2.21	0.75
1:AA:1484:C:O2'	23:B0:1943:A:C4'	2.34	0.75
2:AV:76:A:H5'	23:B0:2564:U:O4'	1.87	0.75
19:AQ:95:TYR:C	19:AQ:97:SER:H	1.89	0.75
23:B0:2806:G:H1'	23:B0:2858:A:H2'	1.68	0.75
1:AA:265:G:O3'	19:AQ:66:SER:N	2.18	0.75
1:AA:653:A:C8	10:AH:56:LYS:HB3	2.22	0.75
1:AA:820:U:O2	1:AA:873:A:N7	2.20	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1391:U:H2'	1:AA:1392:G:C8	2.22	0.75
1:AA:1492:A:H2'	1:AA:1493:A:O4'	1.87	0.75
6:AD:88:VAL:CG2	7:AE:97:GLY:N	2.42	0.75
19:AQ:101:ARG:NH1	23:B0:731:A:N3	2.32	0.75
23:B0:1199:U:H3'	23:B0:1200:G:C5'	2.17	0.75
1:AA:69:G:C1'	1:AA:102:G:N1	2.50	0.75
1:AA:572:A:C2	1:AA:917:G:H1'	2.22	0.75
1:AA:676:A:O2'	13:AK:115:PRO:HB3	1.86	0.75
2:AW:74:C:C4	23:B0:2534:U:C6	2.50	0.75
4:AB:197:VAL:HB	4:AB:200:ILE:HG12	1.66	0.75
23:B0:1094:C:HO2'	23:B0:1096:A:H2	1.32	0.75
1:AA:292:G:C2'	1:AA:608:A:H61	1.98	0.75
5:AC:52:LEU:HD23	5:AC:52:LEU:N	2.02	0.75
6:AD:57:ARG:NH2	7:AE:107:ARG:NE	2.15	0.75
12:AJ:61:GLU:OE2	16:AN:58:LYS:NZ	2.19	0.75
1:AA:27:G:N9	1:AA:557:G:N2	2.34	0.75
1:AA:651:C:N4	1:AA:652:U:O4	2.20	0.75
1:AA:757:U:O2'	1:AA:879:C:H1'	1.87	0.75
1:AA:1075:C:OP1	4:AB:179:LYS:NZ	2.17	0.75
1:AA:1190:G:O2'	1:AA:1191:A:OP2	2.05	0.75
5:AC:50:ALA:HB1	5:AC:70:VAL:HG11	1.68	0.75
15:AM:49:THR:HG22	15:AM:51:ALA:N	2.02	0.75
1:AA:497:A:HO2'	1:AA:498:U:P	2.08	0.75
1:AA:893:C:C5	1:AA:894:G:N7	2.55	0.75
1:AA:1342:C:H4'	11:AI:125:TYR:CG	2.22	0.75
1:AA:1398:A:H5'	1:AA:1399:C:OP1	1.86	0.75
12:AJ:45:ARG:NH1	16:AN:36:PHE:CD2	2.54	0.75
24:B9:114:C:C2'	24:B9:115:G:H5''	2.17	0.75
1:AA:816:A:OP2	1:AA:1527:C:H5'	1.87	0.74
1:AA:1060:C:H5'	12:AJ:52:GLY:HA2	1.68	0.74
2:AW:75:C:C2'	23:B0:2486:C:O2'	2.34	0.74
12:AJ:82:ILE:O	12:AJ:86:MET:HB2	1.86	0.74
19:AQ:95:TYR:O	19:AQ:97:SER:N	2.19	0.74
1:AA:848:G:H2'	1:AA:849:C:C1'	2.18	0.74
5:AC:52:LEU:H	5:AC:52:LEU:CD2	2.00	0.74
13:AK:110:ASP:OD2	20:AR:88:LYS:NZ	2.20	0.74
23:B0:3877:A:C8	23:B0:1861:G:N7	2.23	0.74
1:AA:274:A:H2	1:AA:275:G:H1'	1.52	0.74
1:AA:421:U:C2	5:AC:127:ARG:NH2	2.42	0.74
1:AA:866:C:C5'	1:AA:919:A:C5'	2.65	0.74
1:AA:1256:A:O4'	1:AA:1258:G:C5	2.41	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:76:A:C2'	23:B0:2046:C:O2	2.30	0.74
2:AW:76:A:C2'	23:B0:2485:U:H2'	2.17	0.74
4:AB:23:ARG:NH1	4:AB:24:TRP:N	2.35	0.74
5:AC:116:VAL:HG21	5:AC:202:ILE:HD11	1.68	0.74
23:B0:1856:U:H3'	23:B0:3865:A:N7	2.02	0.74
1:AA:1255:G:C1'	1:AA:1259:C:H1'	2.13	0.74
14:AL:24:VAL:HG13	14:AL:98:TYR:HE2	1.50	0.74
23:B0:1029:C:H2'	23:B0:1030:U:H5''	1.68	0.74
23:B0:1915:A:H62	23:B0:1951:G:H21	1.35	0.74
23:B0:3128:G:O3'	23:B0:3174:C:H4'	1.86	0.74
15:AM:93:ARG:HD3	23:B0:900:U:C3'	2.18	0.74
1:AA:9:G:O5'	7:AE:126:ARG:CD	2.35	0.74
1:AA:66:G:C5'	1:AA:199:G:O2'	2.34	0.74
1:AA:1497:G:H21	1:AA:1519:A:H1'	1.52	0.74
2:AW:76:A:C1'	23:B0:2562:G:H22	2.01	0.74
4:AB:95:GLN:O	4:AB:96:ARG:HD2	1.88	0.74
5:AC:107:GLN:H	5:AC:107:GLN:CD	1.88	0.74
23:B0:221:A:H62	23:B0:231:G:H21	1.34	0.74
1:AA:188:C:H3'	22:AT:105:SER:OG	1.88	0.74
1:AA:323:U:C3'	22:AT:22:ARG:HB2	2.18	0.74
1:AA:922:G:N3	1:AA:1396:A:N3	2.35	0.74
1:AA:1343:G:H4'	11:AI:122:ALA:HB3	1.70	0.74
4:AB:23:ARG:HH11	4:AB:24:TRP:N	1.86	0.74
14:AL:27:LEU:O	14:AL:29:GLY:N	2.21	0.74
1:AA:323:U:H5''	22:AT:22:ARG:C	2.08	0.74
1:AA:476:U:H2'	1:AA:477:G:C5'	2.16	0.74
1:AA:1261:A:O2'	1:AA:1283:G:C5'	2.35	0.74
1:AA:1416:G:OP1	1:AA:1417:G:OP2	2.05	0.74
4:AB:91:PRO:HG3	4:AB:154:LEU:HB2	1.69	0.74
12:AJ:96:ILE:HG22	12:AJ:97:GLU:H	1.52	0.74
23:B0:67:G:N2	23:B0:72:A:H2'	2.02	0.74
1:AA:188:C:C3'	22:AT:105:SER:OG	2.35	0.74
1:AA:319:G:H2'	1:AA:1434:A:H2	1.52	0.74
1:AA:827:U:HO3'	1:AA:828:A:P	2.07	0.74
1:AA:1075:C:OP1	4:AB:179:LYS:CD	2.35	0.74
10:AH:91:ARG:HG2	14:AL:7:ILE:HG21	1.70	0.74
15:AM:3:ARG:HA	15:AM:8:GLU:O	1.86	0.74
21:AS:16:LEU:O	21:AS:19:VAL:HG12	1.87	0.74
21:AS:17:GLU:O	21:AS:21:GLU:HG3	1.87	0.74
23:B0:1856:U:C6	23:B0:3865:A:C5	2.75	0.74
1:AA:297:G:C4'	1:AA:557:G:H4'	2.17	0.74

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:578:C:O2'	1:AA:728:A:H1'	1.88	0.74
1:AA:923:A:C4'	1:AA:1398:A:C5	2.71	0.74
1:AA:1393:U:O2'	1:AA:1394:A:H2'	1.88	0.74
1:AA:1409:C:C2'	1:AA:1410:G:H5'	2.18	0.74
4:AB:72:GLY:HA3	4:AB:81:VAL:HG21	1.69	0.74
4:AB:178:ARG:HG3	4:AB:178:ARG:NH1	1.92	0.74
6:AD:64:LEU:HD12	6:AD:75:PHE:HZ	1.53	0.74
8:AF:69:GLU:HA	8:AF:72:VAL:HG23	1.70	0.74
1:AA:112:G:H21	1:AA:354:G:C5'	2.01	0.73
1:AA:161:A:H2'	1:AA:162:A:C8	2.23	0.73
1:AA:319:G:O2'	1:AA:1434:A:C2	2.41	0.73
9:AG:23:VAL:HG12	9:AG:27:ILE:HD11	1.70	0.73
10:AH:108:GLY:HA3	10:AH:138:TRP:HB3	1.70	0.73
23:B0:2636:A:H62	23:B0:2643:G:H21	1.36	0.73
1:AA:1321:C:N4	21:AS:37:ARG:NH1	2.35	0.73
1:AA:1434:A:OP2	1:AA:1435:G:N7	2.19	0.73
2:AW:76:A:C4	23:B0:2486:C:H1'	2.20	0.73
23:B0:109:A:C3'	23:B0:110:U:H5''	2.18	0.73
1:AA:353:A:H8	1:AA:353:A:H5'	1.53	0.73
1:AA:792:A:H4'	1:AA:793:U:H5''	1.68	0.73
1:AA:1256:A:N3	1:AA:1258:G:C6	2.57	0.73
1:AA:1279:A:H5''	1:AA:1280:A:OP1	1.88	0.73
1:AA:266:G:P	19:AQ:66:SER:HA	2.27	0.73
1:AA:538:G:C5'	14:AL:114:LYS:HD3	2.18	0.73
1:AA:848:G:O3'	1:AA:849:C:O5'	2.05	0.73
1:AA:893:C:C2	1:AA:894:G:C8	2.76	0.73
1:AA:1261:A:H4'	1:AA:1283:G:C3'	2.18	0.73
2:AV:76:A:H5''	23:B0:2564:U:C5	2.10	0.73
11:AI:44:VAL:HG13	11:AI:51:ARG:HH22	1.52	0.73
1:AA:249:U:HO3'	1:AA:250:A:P	2.10	0.73
1:AA:406:G:C2	1:AA:437:U:C2	2.77	0.73
1:AA:522:C:OP1	14:AL:120:TYR:CZ	2.41	0.73
1:AA:1270:C:O3'	1:AA:1314:C:C5'	2.37	0.73
1:AA:1270:C:O3'	1:AA:1314:C:H4'	1.88	0.73
23:B0:891:A:C6	23:B0:892:A:N6	2.56	0.73
23:B0:1912:G:O3'	23:B0:1913:G:C3'	2.36	0.73
23:B0:2522:G:H21	23:B0:2625:U:H5''	1.53	0.73
1:AA:130:A:C8	19:AQ:63:ARG:CG	2.72	0.73
1:AA:406:G:C8	1:AA:496:A:C4	2.76	0.73
1:AA:828:A:H2	4:AB:26:PRO:HG2	1.44	0.73
5:AC:59:ARG:H	12:AJ:92:THR:HG22	1.54	0.73

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AL:27:LEU:HG	14:AL:28:LYS:H	1.53	0.73
1:AA:265:G:H1'	19:AQ:64:PRO:HB3	1.69	0.73
1:AA:292:G:C1'	1:AA:608:A:N6	2.50	0.73
1:AA:406:G:C5	1:AA:496:A:C8	2.77	0.73
1:AA:588:G:N9	1:AA:753:A:C2	2.56	0.73
11:AI:4:TYR:CE2	11:AI:88:TYR:HA	2.24	0.73
1:AA:262:A:H5''	22:AT:74:LYS:HB2	1.68	0.73
1:AA:476:U:C1'	1:AA:477:G:H5'	2.19	0.73
1:AA:1060:C:O2'	12:AJ:56:HIS:CG	2.41	0.73
5:AC:23:TYR:HE1	12:AJ:67:THR:HG23	1.52	0.73
12:AJ:62:HIS:CE1	16:AN:61:TRP:CZ3	2.77	0.73
1:AA:246:A:O3'	1:AA:247:G:O4'	2.06	0.73
1:AA:254:G:C5'	19:AQ:18:THR:HG21	2.19	0.73
1:AA:434:U:H2'	1:AA:435:C:C6	2.24	0.73
1:AA:922:G:C5	1:AA:1396:A:N1	2.56	0.73
1:AA:928:G:O3'	1:AA:1533:C:N4	2.21	0.73
1:AA:1064:G:H4'	1:AA:1065:U:C5'	2.18	0.73
12:AJ:45:ARG:CZ	16:AN:36:PHE:CE2	2.72	0.73
1:AA:27:G:C8	1:AA:557:G:N2	2.57	0.73
1:AA:397:A:N7	1:AA:547:A:C1'	2.39	0.73
1:AA:653:A:C1'	10:AH:56:LYS:HG2	2.19	0.73
12:AJ:61:GLU:OE2	16:AN:58:LYS:HD3	1.88	0.73
19:AQ:104:LYS:HG2	23:B0:726:G:C5	2.24	0.73
20:AR:26:LEU:HD12	20:AR:27:GLY:H	1.53	0.73
1:AA:391:G:H5'	18:AP:28:ARG:HH22	1.52	0.72
1:AA:1112:C:N3	5:AC:178:LEU:HB3	2.02	0.72
14:AL:48:PRO:HG2	14:AL:49:ASN:H	1.52	0.72
1:AA:130:A:C2	1:AA:263:A:C2	2.77	0.72
1:AA:735:C:H1'	20:AR:75:ILE:HD11	1.71	0.72
1:AA:1434:A:C3'	1:AA:1435:G:C5'	2.66	0.72
2:AV:32:C:OP2	11:AI:127:LYS:HE3	1.89	0.72
10:AH:1:MET:HG2	10:AH:2:LEU:N	2.04	0.72
17:AO:33:THR:HG23	17:AO:63:ARG:NH1	2.03	0.72
19:AQ:104:LYS:NZ	23:B0:730:C:N4	2.37	0.72
19:AQ:104:LYS:HB2	23:B0:726:G:C4	2.24	0.72
23:B0:3118:U:N3	23:B0:3149:G:C5'	2.51	0.72
1:AA:69:G:H1'	1:AA:102:G:C2	2.24	0.72
1:AA:819:A:C5	1:AA:1529:G:C2	2.77	0.72
1:AA:835:U:P	20:AR:64:ARG:HH21	2.11	0.72
1:AA:1483:A:N7	1:AA:1484:C:C4	2.57	0.72
23:B0:552:C:H2'	23:B0:553:C:H4'	1.72	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1119:U:H2'	23:B0:1120:C:O4'	1.90	0.72
23:B0:1908:C:H2'	23:B0:1909:U:H4'	1.71	0.72
1:AA:104:G:O4'	1:AA:172:A:H2	1.72	0.72
1:AA:588:G:C4	1:AA:753:A:C5	2.77	0.72
1:AA:1503:A:C4	1:AA:1531:A:C2	2.77	0.72
19:AQ:59:ILE:HG23	19:AQ:71:PHE:HB3	1.69	0.72
23:B0:367:G:C2'	23:B0:368:A:H5''	2.19	0.72
23:B0:951:G:H2'	23:B0:952:A:H5''	1.70	0.72
1:AA:685:G:OP1	13:AK:12:ARG:NH2	2.23	0.72
1:AA:748:C:H1'	1:AA:749:C:H5	1.53	0.72
1:AA:1111:A:N1	5:AC:177:THR:CB	2.52	0.72
1:AA:1409:C:C2'	1:AA:1410:G:C5'	2.67	0.72
2:AV:32:C:P	11:AI:127:LYS:HE3	2.29	0.72
8:AF:26:ILE:HG21	8:AF:63:TYR:HE2	1.54	0.72
10:AH:1:MET:HG2	10:AH:2:LEU:H	1.54	0.72
1:AA:570:G:O2'	1:AA:819:A:H2'	1.89	0.72
1:AA:1488:G:H2'	1:AA:1489:G:C8	2.24	0.72
12:AJ:61:GLU:CD	16:AN:58:LYS:HZ3	1.92	0.72
22:AT:10:LEU:O	22:AT:12:ALA:N	2.22	0.72
23:B0:3877:A:H2	23:B0:1861:G:N2	1.86	0.72
23:B0:2236:U:H2'	23:B0:2237:C:H5''	1.72	0.72
1:AA:132:C:H4'	22:AT:74:LYS:HD2	1.71	0.72
1:AA:216:C:O4'	1:AA:466:A:N1	2.22	0.72
1:AA:319:G:H4'	1:AA:1468:A:O4'	1.89	0.72
1:AA:501:C:H2'	1:AA:502:G:H8	1.53	0.72
1:AA:556:C:N3	1:AA:557:G:N7	2.38	0.72
1:AA:864:A:C2	1:AA:917:G:O2'	2.40	0.72
1:AA:914:A:C2'	1:AA:915:A:C4'	2.66	0.72
2:AW:71:G:H3'	23:B0:1925:C:C2'	2.19	0.72
14:AL:24:VAL:HG13	14:AL:98:TYR:CE2	2.23	0.72
1:AA:9:G:OP2	7:AE:126:ARG:NH2	2.23	0.72
1:AA:27:G:N1	1:AA:557:G:C4	2.58	0.72
1:AA:38:G:C4'	1:AA:547:A:C5	2.68	0.72
1:AA:779:C:C4'	13:AK:120:ARG:CB	2.67	0.72
1:AA:1398:A:C4'	1:AA:1399:C:P	2.60	0.72
1:AA:1483:A:N9	1:AA:1484:C:C5	2.58	0.72
23:B0:762:A:H5'	23:B0:1284:G:H1'	1.71	0.72
1:AA:556:C:HO2'	1:AA:557:G:H5'	1.49	0.72
1:AA:1014:A:C2	1:AA:1219:U:H1'	2.25	0.72
1:AA:1281:U:H5'	1:AA:1282:C:C5	2.25	0.72
1:AA:1351:U:H2'	1:AA:1352:C:H6	1.55	0.72

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AQ:96:GLN:NE2	23:B0:725:C:H1'	2.05	0.72
1:AA:37:U:O2'	1:AA:547:A:C6	2.39	0.72
1:AA:815:A:N9	1:AA:1527:C:C1'	2.48	0.72
1:AA:1182:G:HO2'	1:AA:1183:A:P	2.00	0.72
1:AA:1256:A:C4'	1:AA:1258:G:C4	2.73	0.72
1:AA:1412:C:H2'	1:AA:1413:A:C8	2.24	0.72
2:AV:75:C:N4	23:B0:2230:G:N1	2.37	0.72
5:AC:13:GLY:HA3	16:AN:57:ARG:HH21	1.54	0.72
23:B0:9:U:H3	23:B0:2608:A:H62	1.37	0.72
23:B0:2426:G:H5'	23:B0:2480:C:H41	1.55	0.72
1:AA:376:G:OP2	18:AP:67:THR:CG2	2.28	0.71
1:AA:403:C:N3	1:AA:404:U:C5	2.58	0.71
1:AA:778:G:O2'	13:AK:120:ARG:O	2.07	0.71
1:AA:1111:A:C6	5:AC:177:THR:HA	2.25	0.71
23:B0:1141:U:N3	23:B0:2008:C:H5''	2.04	0.71
23:B0:1966:C:H4'	23:B0:2585:C:H4'	1.71	0.71
1:AA:46:G:O2'	1:AA:365:U:O2'	2.07	0.71
1:AA:456:A:C6	1:AA:477:G:C1'	2.61	0.71
5:AC:23:TYR:HA	12:AJ:11:PHE:CE1	2.24	0.71
12:AJ:39:PRO:O	12:AJ:40:LEU:HB2	1.89	0.71
13:AK:84:VAL:HG11	13:AK:95:ILE:HD11	1.70	0.71
19:AQ:45:HIS:HB2	19:AQ:65:ILE:HD13	1.71	0.71
19:AQ:101:ARG:NH1	23:B0:731:A:H2	1.84	0.71
23:B0:688:A:H62	23:B0:816:U:H3	1.38	0.71
23:B0:3123:G:O2'	55:B5:166:GLN:CA	2.38	0.71
23:B0:2503:G:C3'	23:B0:2504:G:H5''	2.21	0.71
1:AA:6:G:N3	7:AE:119:LEU:CD1	2.28	0.71
1:AA:21:G:O4'	1:AA:914:A:N6	2.22	0.71
1:AA:367:U:OP1	1:AA:395:C:O2	2.07	0.71
1:AA:830:G:OP1	4:AB:22:LYS:HE2	1.90	0.71
1:AA:1065:U:H4'	1:AA:1066:C:O5'	1.89	0.71
1:AA:1238:A:H3'	1:AA:1239:A:P	2.30	0.71
2:AW:44:A:O3'	2:AW:45:G:P	2.48	0.71
4:AB:116:GLU:HG2	4:AB:153:ARG:NH1	2.04	0.71
11:AI:97:LYS:HG2	11:AI:102:LEU:HD12	1.72	0.71
23:B0:2503:G:H3'	23:B0:2504:G:H5''	1.72	0.71
1:AA:69:G:H2'	1:AA:101:A:N1	2.06	0.71
1:AA:293:G:H5'	1:AA:609:A:N1	2.01	0.71
1:AA:332:G:P	22:AT:10:LEU:HB2	2.13	0.71
1:AA:406:G:N9	1:AA:496:A:C6	2.58	0.71
1:AA:923:A:O2'	1:AA:1398:A:C3'	2.38	0.71

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:977:A:H2'	1:AA:978:A:H5''	1.72	0.71
1:AA:1416:G:C5	1:AA:1417:G:H1'	2.25	0.71
1:AA:1458:G:OP2	1:AA:1459:C:C6	2.36	0.71
1:AA:1499:A:O2'	1:AA:1520:G:H5''	1.91	0.71
2:AW:76:A:H2	23:B0:2486:C:O2	1.71	0.71
20:AR:33:ASP:OD2	20:AR:36:ASN:HB2	1.90	0.71
23:B0:202:A:H2'	23:B0:203:G:O4'	1.89	0.71
1:AA:893:C:N4	1:AA:894:G:C6	2.59	0.71
23:B0:1487:C:H2'	23:B0:1488:G:H8	1.56	0.71
23:B0:3866:A:C2'	55:B5:194:ALA:CA	2.67	0.71
1:AA:37:U:C1'	1:AA:547:A:N1	2.54	0.71
1:AA:236:G:H5''	19:AQ:42:TYR:OH	1.91	0.71
1:AA:265:G:C3'	19:AQ:65:ILE:O	2.38	0.71
1:AA:829:G:HO2'	4:AB:24:TRP:HE1	1.35	0.71
1:AA:1256:A:C4'	1:AA:1258:G:N9	2.53	0.71
11:AI:65:VAL:HG21	11:AI:73:GLN:HB3	1.72	0.71
23:B0:3149:G:C3'	23:B0:3150:C:P	2.78	0.71
1:AA:46:G:C5	1:AA:366:C:C4	2.79	0.71
1:AA:278:G:H21	1:AA:279:A:N6	1.89	0.71
1:AA:1014:A:C4	21:AS:34:TRP:CD2	2.79	0.71
1:AA:1112:C:N3	5:AC:178:LEU:CB	2.54	0.71
1:AA:1411:C:H2'	1:AA:1412:C:C6	2.26	0.71
2:AW:75:C:O2'	23:B0:2486:C:C4'	2.38	0.71
1:AA:130:A:C2	1:AA:264:U:C5	2.78	0.71
1:AA:197:A:H4'	1:AA:198:G:O5'	1.90	0.71
1:AA:262:A:H5'	22:AT:74:LYS:CG	2.20	0.71
1:AA:392:G:H2'	1:AA:393:A:H8	1.55	0.71
1:AA:914:A:H2'	1:AA:915:A:C4'	2.19	0.71
1:AA:1394:A:C6	1:AA:1501:C:C5'	2.73	0.71
1:AA:1410:G:C2	1:AA:1491:G:C2	2.78	0.71
1:AA:1489:G:C3'	1:AA:1490:C:H5''	2.21	0.71
23:B0:57:G:H2'	23:B0:58:C:H5''	1.73	0.71
23:B0:2274:C:H2'	23:B0:2275:U:H5'	1.73	0.71
1:AA:263:A:P	22:AT:75:ASN:CB	2.66	0.71
1:AA:588:G:N7	1:AA:753:A:C4	2.59	0.71
1:AA:815:A:C4	1:AA:1527:C:O2	2.43	0.71
1:AA:815:A:C6	1:AA:1508:G:N2	2.59	0.71
1:AA:1239:A:C2'	1:AA:1298:C:H42	2.03	0.71
1:AA:1430:C:H5'	23:B0:1721:G:C4'	2.21	0.71
2:AW:76:A:H2'	23:B0:2562:G:N2	2.02	0.71
12:AJ:45:ARG:NH1	16:AN:36:PHE:CE2	2.58	0.71

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:195:A:O2'	1:AA:222:U:O2'	2.06	0.71
1:AA:223:U:H5''	22:AT:68:LYS:NZ	2.05	0.71
1:AA:651:C:C5	1:AA:752:G:O2'	2.43	0.71
1:AA:1473:A:C5'	23:B0:1719:G:C4'	2.65	0.71
1:AA:1491:G:H2'	1:AA:1492:A:C8	2.26	0.71
2:AW:75:C:O2'	23:B0:2486:C:O3'	2.08	0.71
6:AD:201:GLN:HE22	7:AE:99:GLY:HA2	1.56	0.71
11:AI:111:ARG:HD3	11:AI:112:LYS:N	2.06	0.71
12:AJ:65:LEU:O	12:AJ:65:LEU:HD23	1.91	0.71
15:AM:40:ASN:HB3	15:AM:43:THR:HG23	1.73	0.71
23:B0:1182:U:C2'	23:B0:1183:C:H5''	2.20	0.71
23:B0:1746:A:H2'	23:B0:1747:G:H5'	1.72	0.71
1:AA:107:G:C2'	1:AA:108:G:H5'	2.21	0.70
1:AA:406:G:C6	1:AA:496:A:N7	2.59	0.70
1:AA:994:A:O2'	16:AN:8:GLU:HA	1.91	0.70
1:AA:1343:G:H2'	1:AA:1344:C:C6	2.26	0.70
1:AA:1499:A:C1'	1:AA:1520:G:H5''	2.18	0.70
12:AJ:35:SER:HB2	12:AJ:72:VAL:O	1.90	0.70
12:AJ:78:ASN:O	12:AJ:80:LYS:N	2.24	0.70
1:AA:128:G:P	19:AQ:2:PRO:N	2.63	0.70
1:AA:254:G:H4'	19:AQ:18:THR:CG2	2.21	0.70
1:AA:779:C:O2'	13:AK:120:ARG:HD2	1.87	0.70
1:AA:1148:U:H2'	1:AA:1149:C:O4'	1.90	0.70
7:AE:102:ALA:HB1	7:AE:120:THR:HG21	1.73	0.70
20:AR:39:VAL:O	20:AR:42:ARG:HB2	1.90	0.70
23:B0:3877:A:C8	23:B0:1861:G:N9	2.59	0.70
1:AA:131:C:OP1	1:AA:263:A:H5''	1.88	0.70
1:AA:406:G:C4	1:AA:496:A:C6	2.79	0.70
1:AA:606:G:H3'	1:AA:607:A:C5'	2.21	0.70
1:AA:818:G:C3'	1:AA:819:A:H5''	2.21	0.70
1:AA:1413:A:H2	1:AA:1487:G:H22	1.39	0.70
1:AA:1483:A:C8	1:AA:1484:C:C5	2.79	0.70
1:AA:1484:C:C5'	23:B0:1943:A:O2'	2.39	0.70
21:AS:70:LYS:O	21:AS:72:GLY:N	2.24	0.70
23:B0:1002:C:H5'	23:B0:1200:G:OP2	1.90	0.70
23:B0:1077:U:O2'	23:B0:1079:G:N7	2.21	0.70
23:B0:3874:C:C5	23:B0:3875:A:N7	2.59	0.70
23:B0:3098:U:C5	23:B0:3099:U:O4	2.44	0.70
23:B0:2680:U:H3'	23:B0:2681:A:H5'	1.72	0.70
1:AA:46:G:H2'	1:AA:366:C:H5	1.56	0.70
1:AA:419:C:H5''	1:AA:513:C:O4'	1.90	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:438:G:H4'	1:AA:439:A:OP1	1.90	0.70
1:AA:499:A:H1'	1:AA:500:G:C4'	2.21	0.70
1:AA:1015:A:H1'	1:AA:1219:U:H5''	1.65	0.70
1:AA:1168:A:H2'	1:AA:1169:A:C8	2.27	0.70
1:AA:1309:G:P	15:AM:88:ARG:HH21	2.14	0.70
1:AA:1416:G:H2'	1:AA:1417:G:C5'	2.18	0.70
15:AM:40:ASN:HD22	15:AM:41:PRO:HD2	1.55	0.70
18:AP:20:VAL:HG11	18:AP:32:TYR:HB3	1.74	0.70
23:B0:1073:G:H1'	23:B0:1099:A:C2	2.27	0.70
1:AA:249:U:O3'	1:AA:250:A:P	2.46	0.70
1:AA:1014:A:N1	21:AS:34:TRP:NE1	2.40	0.70
1:AA:1485:U:P	23:B0:1943:A:O2'	2.49	0.70
1:AA:1485:U:P	23:B0:1944:C:H5'	2.32	0.70
17:AO:17:ARG:NH1	17:AO:77:ARG:NH1	2.40	0.70
21:AS:15:LEU:HD12	21:AS:16:LEU:N	2.06	0.70
1:AA:13:U:N3	1:AA:915:A:C8	2.60	0.70
1:AA:293:G:C4'	1:AA:609:A:H2	1.78	0.70
1:AA:588:G:H1'	1:AA:753:A:N1	2.07	0.70
1:AA:765:G:O3'	1:AA:766:A:P	2.50	0.70
1:AA:1342:C:H4'	11:AI:125:TYR:CE1	2.25	0.70
5:AC:52:LEU:HD21	5:AC:118:GLN:NE2	2.07	0.70
6:AD:28:SER:O	6:AD:30:LYS:N	2.25	0.70
8:AF:10:LEU:HD11	8:AF:59:TYR:HD2	1.54	0.70
15:AM:11:ARG:HG2	15:AM:12:ASN:N	2.07	0.70
23:B0:874:A:H62	23:B0:928:G:H21	1.39	0.70
1:AA:115:G:N2	1:AA:116:A:H62	1.89	0.70
1:AA:352:C:H4'	1:AA:354:G:OP1	1.91	0.70
1:AA:1034:G:C3'	1:AA:1035:A:P	2.80	0.70
1:AA:1151:A:C5'	12:AJ:41:PRO:HA	2.22	0.70
5:AC:6:HIS:CD2	5:AC:8:ILE:HB	2.27	0.70
23:B0:104:C:C2'	23:B0:105:G:H5''	2.22	0.70
1:AA:477:G:H2'	1:AA:478:A:H8	1.56	0.70
1:AA:893:C:H2'	1:AA:894:G:O4'	1.90	0.70
6:AD:150:GLU:CG	6:AD:153:ARG:HH21	2.02	0.70
6:AD:158:ILE:HG22	6:AD:181:MET:HE2	1.71	0.70
19:AQ:96:GLN:CD	23:B0:725:C:O2	2.29	0.70
23:B0:3101:G:H2'	23:B0:3102:G:O4'	1.90	0.70
1:AA:38:G:H4'	1:AA:547:A:N6	1.98	0.70
1:AA:112:G:H21	1:AA:354:G:C4'	2.05	0.70
1:AA:319:G:C2'	1:AA:1434:A:C2	2.75	0.70
1:AA:538:G:C5'	14:AL:114:LYS:CG	2.69	0.70

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1256:A:H4'	1:AA:1258:G:N9	2.06	0.70
1:AA:1342:C:H1'	11:AI:124:GLN:HB2	1.73	0.70
2:AW:34:G:H8	2:AW:34:G:OP1	1.75	0.70
6:AD:88:VAL:HG22	7:AE:97:GLY:CA	2.21	0.70
11:AI:97:LYS:CG	11:AI:102:LEU:HD12	2.22	0.70
12:AJ:46:ARG:HH11	12:AJ:64:GLU:CB	2.05	0.70
15:AM:6:GLY:O	15:AM:7:VAL:HG22	1.91	0.70
19:AQ:24:GLU:OE2	19:AQ:37:LYS:HD3	1.92	0.70
1:AA:391:G:C5'	18:AP:28:ARG:HH22	2.05	0.70
1:AA:819:A:N7	1:AA:1529:G:N2	2.40	0.70
1:AA:1141:C:H2'	1:AA:1142:G:H8	1.57	0.70
1:AA:1181:G:H4'	1:AA:1184:G:O4'	1.92	0.70
1:AA:1255:G:N2	1:AA:1276:G:N2	2.39	0.70
1:AA:1319:A:H5''	21:AS:5:LEU:CD2	2.22	0.70
12:AJ:61:GLU:HG3	16:AN:58:LYS:HZ2	0.71	0.70
17:AO:39:LEU:HD13	17:AO:56:LEU:HB2	1.74	0.70
23:B0:3128:G:H5'	23:B0:3174:C:O2'	1.91	0.70
1:AA:315:A:H5''	1:AA:317:G:OP2	1.91	0.69
1:AA:375:U:O2	18:AP:28:ARG:NE	2.24	0.69
15:AM:84:ILE:HG21	21:AS:65:ASN:ND2	2.01	0.69
21:AS:5:LEU:O	21:AS:6:LYS:HB2	1.92	0.69
22:AT:45:GLN:HA	22:AT:91:LEU:HD22	1.74	0.69
1:AA:21:G:H1'	1:AA:914:A:C6	2.19	0.69
1:AA:265:G:C5'	19:AQ:65:ILE:C	2.50	0.69
1:AA:344:A:H4'	1:AA:345:C:OP2	1.91	0.69
1:AA:499:A:O2'	1:AA:500:G:C8	2.44	0.69
1:AA:1137:C:H4'	1:AA:1138:G:N2	2.06	0.69
1:AA:1320:C:H41	21:AS:37:ARG:CD	2.02	0.69
1:AA:1430:C:H4'	23:B0:1721:G:C5'	2.22	0.69
7:AE:151:LEU:CD1	10:AH:77:GLU:OE2	2.40	0.69
12:AJ:32:ALA:HB2	12:AJ:76:ASN:HD22	1.57	0.69
23:B0:814:G:H3'	23:B0:815:A:H5'	1.73	0.69
23:B0:892:A:H5'	23:B0:892:A:C8	2.24	0.69
1:AA:130:A:OP1	19:AQ:63:ARG:HB3	1.90	0.69
1:AA:837:G:O3'	1:AA:838:C:O5'	2.09	0.69
1:AA:923:A:O4'	1:AA:1398:A:N3	2.05	0.69
14:AL:126:LYS:HD2	14:AL:126:LYS:N	2.08	0.69
15:AM:94:ARG:HH22	21:AS:81:ARG:CZ	2.05	0.69
23:B0:3146:A:H4'	23:B0:3147:C:OP2	1.92	0.69
23:B0:2607:C:H3'	23:B0:2608:A:C5'	2.23	0.69
1:AA:186:C:O2	22:AT:60:GLU:OE1	2.09	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:264:U:O2'	19:AQ:63:ARG:CD	2.37	0.69
1:AA:837:G:C2'	1:AA:838:C:C6	2.75	0.69
1:AA:905:U:C5	1:AA:906:G:C6	2.81	0.69
1:AA:1190:G:C3'	5:AC:3:ASN:HB2	2.22	0.69
2:AV:34:G:H8	2:AV:34:G:OP1	1.75	0.69
6:AD:70:ILE:HD11	6:AD:100:ARG:CZ	2.21	0.69
1:AA:115:G:O3'	1:AA:116:A:OP1	2.08	0.69
1:AA:187:G:O2'	22:AT:104:LEU:CA	2.40	0.69
1:AA:216:C:C4'	1:AA:466:A:C6	2.65	0.69
1:AA:522:C:C5'	14:AL:120:TYR:OH	2.39	0.69
1:AA:994:A:O3'	16:AN:11:LYS:HE2	1.92	0.69
1:AA:1409:C:C4	1:AA:1410:G:N7	2.60	0.69
13:AK:77:MET:HE3	13:AK:80:VAL:HG22	1.74	0.69
23:B0:1679:U:C3'	23:B0:1680:U:H5''	2.22	0.69
23:B0:1774:A:H1'	23:B0:2586:G:H21	1.58	0.69
1:AA:131:C:OP1	1:AA:263:A:H5'	1.89	0.69
1:AA:248:C:H4'	1:AA:283:C:O2'	1.92	0.69
1:AA:254:G:H5''	19:AQ:18:THR:HG21	1.73	0.69
1:AA:377:G:OP1	18:AP:3:LYS:CE	2.39	0.69
1:AA:686:U:HO2'	1:AA:687:A:H8	1.39	0.69
1:AA:692:U:OP1	13:AK:124:LYS:HE3	1.92	0.69
1:AA:1255:G:H1'	1:AA:1259:C:C1'	2.14	0.69
5:AC:7:PRO:HG2	5:AC:184:TYR:HB2	1.73	0.69
23:B0:226:C:O2'	23:B0:227:G:H8	1.73	0.69
23:B0:1791:C:O2'	23:B0:1793:A:H5'	1.93	0.69
1:AA:323:U:C5'	22:AT:23:ARG:H	2.02	0.69
1:AA:675:A:C2	13:AK:116:HIS:HB2	2.25	0.69
1:AA:1149:C:O2'	1:AA:1280:A:N1	2.25	0.69
1:AA:1182:G:H4'	1:AA:1183:A:O5'	1.93	0.69
2:AV:12:U:OP1	23:B0:1891:C:C1'	2.40	0.69
2:AW:76:A:C2	23:B0:2562:G:N3	2.61	0.69
5:AC:38:ARG:HH11	5:AC:38:ARG:HG3	1.58	0.69
15:AM:81:LEU:O	15:AM:86:CYS:HB3	1.92	0.69
23:B0:1004:A:H2'	23:B0:1005:U:H5''	1.74	0.69
23:B0:3874:C:C4	23:B0:3875:A:C8	2.81	0.69
23:B0:3108:G:O2'	23:B0:3109:U:OP2	2.09	0.69
23:B0:2495:G:H2'	23:B0:2496:C:C6	2.27	0.69
1:AA:19:C:C2'	1:AA:916:G:N2	2.54	0.69
1:AA:187:G:N3	22:AT:105:SER:HB2	2.08	0.69
1:AA:232:G:N2	1:AA:263:A:N3	2.24	0.69
1:AA:246:A:O3'	1:AA:247:G:H4'	1.92	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:382:A:H2'	1:AA:383:A:C8	2.28	0.69
1:AA:427:U:H1'	1:AA:541:G:OP1	1.92	0.69
1:AA:828:A:H2	4:AB:26:PRO:CG	2.01	0.69
1:AA:954:G:H5''	15:AM:120:LYS:HD3	1.73	0.69
1:AA:1014:A:H5''	21:AS:14:HIS:CD2	2.19	0.69
1:AA:1061:G:H5''	12:AJ:56:HIS:HB3	1.75	0.69
1:AA:1337:G:H5''	1:AA:1338:G:OP1	1.93	0.69
4:AB:22:LYS:HD2	4:AB:35:GLU:OE1	1.93	0.69
5:AC:130:VAL:HG21	5:AC:157:ILE:HG23	1.75	0.69
6:AD:151:LYS:N	6:AD:151:LYS:HD2	2.08	0.69
12:AJ:30:SER:O	12:AJ:78:ASN:HB2	1.92	0.69
19:AQ:104:LYS:HE3	23:B0:729:A:C6	2.27	0.69
23:B0:1428:G:H5''	23:B0:1429:A:H5'	1.73	0.69
23:B0:1749:G:O6	23:B0:2674:C:H4'	1.92	0.69
23:B0:1807:A:H4'	23:B0:1808:C:C5'	2.22	0.69
23:B0:2380:U:H2'	23:B0:2381:A:H5'	1.75	0.69
23:B0:2617:G:H22	23:B0:2755:A:H2'	1.57	0.69
1:AA:815:A:H62	1:AA:1508:G:H21	1.36	0.69
1:AA:939:G:H2'	1:AA:940:C:C6	2.28	0.69
1:AA:1270:C:O3'	1:AA:1314:C:H5''	1.93	0.69
6:AD:64:LEU:HD12	6:AD:75:PHE:CZ	2.28	0.69
15:AM:81:LEU:H	15:AM:81:LEU:HD23	1.56	0.69
23:B0:588:G:H4'	23:B0:2001:G:H4'	1.73	0.69
23:B0:1223:G:H21	23:B0:1225:G:H21	1.40	0.69
23:B0:2245:A:H5'	23:B0:2246:A:C8	2.27	0.69
1:AA:22:G:H21	1:AA:913:A:C2'	1.96	0.69
1:AA:401:C:H4'	1:AA:622:A:H1'	1.73	0.69
1:AA:676:A:C4'	13:AK:115:PRO:HA	2.22	0.69
1:AA:905:U:C5	1:AA:906:G:N7	2.61	0.69
1:AA:1194:U:H5''	7:AE:22:GLY:CA	2.23	0.69
1:AA:1394:A:N1	1:AA:1501:C:H5''	2.06	0.69
8:AF:100:ASN:ND2	20:AR:23:LYS:HG2	2.08	0.69
12:AJ:30:SER:HB2	12:AJ:80:LYS:HB3	1.74	0.69
14:AL:47:LYS:HB2	14:AL:48:PRO:CD	2.23	0.69
23:B0:3867:G:C5'	55:B5:193:LYS:CA	2.72	0.69
1:AA:131:C:O2'	1:AA:262:A:C2'	2.40	0.68
1:AA:179:A:N6	1:AA:196:A:OP2	2.23	0.68
1:AA:377:G:OP1	18:AP:3:LYS:HD2	1.93	0.68
1:AA:496:A:H4'	1:AA:497:A:OP1	1.91	0.68
5:AC:180:ALA:O	5:AC:181:ASN:HB3	1.92	0.68
6:AD:199:ASN:ND2	6:AD:201:GLN:HB2	2.08	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AN:22:THR:HB	16:AN:33:VAL:HG21	1.73	0.68
21:AS:41:VAL:HG23	21:AS:43:GLU:HG2	1.75	0.68
1:AA:256:U:H5''	19:AQ:17:LYS:NZ	1.99	0.68
1:AA:922:G:C4	1:AA:1396:A:N1	2.62	0.68
6:AD:64:LEU:HD23	6:AD:198:VAL:HG21	1.75	0.68
1:AA:943:U:C1'	11:AI:124:GLN:NE2	2.45	0.68
1:AA:1344:C:H4'	11:AI:120:ARG:HB3	1.74	0.68
1:AA:1484:C:H4'	23:B0:1943:A:C2'	2.23	0.68
2:AV:11:C:H5'	23:B0:1892:C:H4'	1.74	0.68
6:AD:157:LEU:CD2	6:AD:161:ASN:HD21	2.05	0.68
14:AL:47:LYS:CB	14:AL:48:PRO:CD	2.71	0.68
14:AL:55:VAL:HG12	14:AL:56:ALA:H	1.57	0.68
23:B0:1953:A:H1'	23:B0:1955:G:C1'	2.23	0.68
23:B0:2624:G:H4'	23:B0:2712:G:H2'	1.75	0.68
1:AA:216:C:C4'	1:AA:466:A:N1	2.57	0.68
1:AA:216:C:C4'	1:AA:466:A:N6	2.00	0.68
1:AA:266:G:P	19:AQ:65:ILE:O	2.51	0.68
1:AA:351:G:O3'	1:AA:352:C:P	2.51	0.68
1:AA:367:U:OP1	1:AA:395:C:H1'	1.93	0.68
1:AA:948:C:OP1	15:AM:109:THR:HG22	1.94	0.68
1:AA:1064:G:C4'	1:AA:1065:U:H5'	2.23	0.68
1:AA:1416:G:H2'	1:AA:1417:G:H4'	1.74	0.68
1:AA:1484:C:O3'	23:B0:1943:A:H4'	1.93	0.68
2:AV:76:A:H3'	23:B0:2046:C:C2'	2.23	0.68
2:AW:75:C:O2	23:B0:2532:G:N2	2.27	0.68
5:AC:52:LEU:CD2	5:AC:118:GLN:HE22	2.05	0.68
19:AQ:66:SER:O	19:AQ:70:ARG:NH1	2.26	0.68
20:AR:45:SER:C	20:AR:47:THR:H	1.97	0.68
23:B0:939:C:H2'	23:B0:940:G:C8	2.28	0.68
23:B0:1838:G:H2'	23:B0:1839:A:H5'	1.75	0.68
23:B0:2058:U:H4'	23:B0:2575:U:H3	1.58	0.68
23:B0:2440:C:H1'	23:B0:2471:U:H3	1.56	0.68
23:B0:2691:C:H3'	23:B0:2692:A:H5''	1.74	0.68
1:AA:17:U:H2'	1:AA:18:C:C6	2.28	0.68
1:AA:39:G:C4	1:AA:498:U:O4	2.46	0.68
1:AA:105:G:H2'	1:AA:106:C:C6	2.29	0.68
1:AA:128:G:H4'	19:AQ:3:LYS:CA	2.20	0.68
1:AA:129:U:C5'	19:AQ:3:LYS:NZ	2.56	0.68
1:AA:266:G:C3'	19:AQ:67:LYS:H	2.06	0.68
1:AA:332:G:P	22:AT:10:LEU:HB3	2.33	0.68
1:AA:397:A:N7	1:AA:547:A:O2'	1.94	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:798:G:P	13:AK:122:LYS:NZ	2.66	0.68
2:AV:12:U:P	23:B0:1891:C:HO2'	2.13	0.68
2:AV:57:G:C5'	28:BD:76:ASN:CA	2.72	0.68
6:AD:30:LYS:C	6:AD:32:ALA:H	1.97	0.68
6:AD:88:VAL:CG2	7:AE:97:GLY:CA	2.70	0.68
12:AJ:61:GLU:OE2	16:AN:58:LYS:CD	2.41	0.68
23:B0:181:A:H4'	23:B0:182:G:H4'	1.76	0.68
23:B0:2377:U:H2'	23:B0:2378:G:C8	2.28	0.68
1:AA:5:U:O4	7:AE:95:ALA:CB	2.40	0.68
1:AA:104:G:C5'	1:AA:172:A:N1	2.55	0.68
1:AA:130:A:C2	1:AA:264:U:N3	2.61	0.68
1:AA:328:C:H4'	1:AA:329:A:O5'	1.94	0.68
1:AA:653:A:O5'	10:AH:56:LYS:HE2	1.93	0.68
1:AA:1281:U:H4'	1:AA:1282:C:OP2	1.92	0.68
1:AA:1342:C:H4'	11:AI:125:TYR:CD1	2.28	0.68
1:AA:1342:C:H5'	11:AI:125:TYR:CE1	2.24	0.68
2:AV:12:U:O2'	23:B0:1907:C:O4'	2.12	0.68
6:AD:205:GLU:HB3	7:AE:107:ARG:HH22	1.57	0.68
12:AJ:42:THR:HG23	12:AJ:67:THR:O	1.93	0.68
18:AP:34:GLU:OE2	18:AP:55:ARG:HD3	1.93	0.68
23:B0:940:G:C3'	23:B0:941:U:H5''	2.11	0.68
1:AA:322:C:C4'	22:AT:23:ARG:HB2	2.23	0.68
1:AA:512:U:H1'	6:AD:42:GLN:OE1	1.92	0.68
1:AA:626:U:OP1	18:AP:35:LYS:NZ	2.27	0.68
1:AA:954:G:C5'	15:AM:120:LYS:HD3	2.23	0.68
1:AA:1068:G:N2	1:AA:1191:A:N3	2.34	0.68
1:AA:1339:A:C4	2:AV:31:A:O2'	2.44	0.68
1:AA:1427:U:O2'	23:B0:1704:G:C5'	2.42	0.68
1:AA:1503:A:C2	1:AA:1531:A:H2	2.12	0.68
2:AW:71:G:H5''	23:B0:1925:C:C2	2.23	0.68
1:AA:191:G:N3	1:AA:192:U:O4'	2.25	0.68
1:AA:265:G:C3'	19:AQ:66:SER:N	2.57	0.68
1:AA:701:C:H5'	1:AA:703:G:O4'	1.93	0.68
11:AI:114:TYR:CE2	12:AJ:60:ARG:HG2	2.29	0.68
23:B0:2381:A:H4'	23:B0:2382:C:C5	2.29	0.68
1:AA:69:G:C1'	1:AA:101:A:N1	2.56	0.68
1:AA:586:C:H5''	10:AH:90:GLY:H	1.59	0.68
1:AA:1347:G:H3'	11:AI:108:VAL:O	1.93	0.68
1:AA:1459:C:O3'	22:AT:28:ALA:HB2	1.92	0.68
1:AA:1504:G:P	1:AA:1507:A:H4'	2.32	0.68
4:AB:187:LEU:HD12	4:AB:205:ASP:HA	1.74	0.68

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AD:3:ARG:HH22	6:AD:74:GLN:CD	1.98	0.68
6:AD:205:GLU:CD	7:AE:107:ARG:CZ	2.62	0.68
23:B0:26:G:H21	23:B0:524:A:H62	1.41	0.68
1:AA:397:A:N7	1:AA:547:A:H1'	2.09	0.68
1:AA:436:C:C4	1:AA:437:U:C4	2.82	0.68
1:AA:865:A:H2	1:AA:918:A:H5'	1.58	0.68
1:AA:915:A:H2'	1:AA:916:G:H5'	1.76	0.68
1:AA:979:C:N3	16:AN:19:ARG:HG2	2.08	0.68
4:AB:124:SER:HB2	4:AB:125:PRO:CD	2.21	0.68
5:AC:190:ARG:HH11	5:AC:190:ARG:CB	2.07	0.68
23:B0:3877:A:C8	23:B0:3877:A:O5'	2.39	0.68
23:B0:3101:G:H1	23:B0:3188:U:H3	1.41	0.68
1:AA:265:G:C1'	19:AQ:64:PRO:CB	2.72	0.67
1:AA:600:C:H5'	10:AH:129:VAL:HA	1.75	0.67
1:AA:640:A:N3	10:AH:115:SER:CB	2.57	0.67
1:AA:1255:G:N2	1:AA:1276:G:H21	1.90	0.67
1:AA:1416:G:C5	1:AA:1417:G:C1'	2.76	0.67
5:AC:59:ARG:N	12:AJ:92:THR:HG22	2.07	0.67
8:AF:75:LEU:O	8:AF:79:LEU:HG	1.94	0.67
11:AI:93:ARG:HD3	11:AI:97:LYS:HE3	1.74	0.67
23:B0:1033:G:H22	23:B0:1150:C:H2'	1.58	0.67
23:B0:1955:G:H2'	23:B0:1956:G:H5'	1.76	0.67
1:AA:538:G:H5''	14:AL:114:LYS:CG	2.16	0.67
1:AA:1502:A:H2	1:AA:1505:G:N1	1.90	0.67
5:AC:26:LYS:H	5:AC:26:LYS:HD3	1.58	0.67
1:AA:375:U:O3'	1:AA:376:G:H5'	1.94	0.67
1:AA:653:A:C8	10:AH:56:LYS:CG	2.77	0.67
1:AA:778:G:C4'	13:AK:119:CYS:HB3	2.25	0.67
1:AA:960:U:O3'	1:AA:961:U:P	2.53	0.67
7:AE:51:VAL:O	7:AE:55:VAL:HG23	1.93	0.67
19:AQ:67:LYS:HA	19:AQ:70:ARG:HH12	1.60	0.67
23:B0:1021:A:H1'	23:B0:1164:C:H1'	1.76	0.67
23:B0:3875:A:C4'	55:B5:42:LYS:CA	2.73	0.67
23:B0:2261:G:H4'	23:B0:2262:C:OP2	1.94	0.67
1:AA:538:G:O5'	14:AL:114:LYS:HB2	1.88	0.67
1:AA:587:G:O2'	1:AA:588:G:OP2	2.10	0.67
1:AA:848:G:H2'	1:AA:849:C:N1	2.08	0.67
1:AA:1278:U:C5'	1:AA:1279:A:P	2.73	0.67
4:AB:25:ASN:HD22	4:AB:25:ASN:C	1.97	0.67
21:AS:33:THR:HG22	21:AS:35:SER:H	1.60	0.67
23:B0:998:C:H2'	23:B0:999:A:O4'	1.94	0.67

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1181:C:C2'	23:B0:1182:U:H5''	2.23	0.67
23:B0:2381:A:H4'	23:B0:2382:C:H5	1.60	0.67
1:AA:69:G:C4	1:AA:102:G:O6	2.47	0.67
1:AA:130:A:C2	1:AA:263:A:N3	2.63	0.67
1:AA:650:G:O2'	1:AA:651:C:H5'	1.94	0.67
1:AA:691:G:C8	13:AK:26:ASN:ND2	2.63	0.67
5:AC:82:GLU:O	5:AC:85:ARG:HB3	1.94	0.67
8:AF:36:ARG:NH1	8:AF:38:GLU:HG2	2.08	0.67
15:AM:40:ASN:HD22	15:AM:41:PRO:N	1.91	0.67
15:AM:81:LEU:H	15:AM:81:LEU:CD2	2.08	0.67
21:AS:62:ILE:HD12	21:AS:66:MET:HG3	1.75	0.67
1:AA:212:G:O2'	1:AA:213:G:C5'	2.41	0.67
1:AA:320:C:H5'	1:AA:1434:A:C2	2.29	0.67
1:AA:797:C:OP1	13:AK:124:LYS:HB2	1.94	0.67
1:AA:1183:A:O2'	1:AA:1184:G:OP2	2.09	0.67
11:AI:93:ARG:NH1	11:AI:97:LYS:HZ1	1.93	0.67
23:B0:539:A:H62	23:B0:2024:U:H3	1.40	0.67
23:B0:1112:U:C2'	23:B0:1113:C:H5''	2.24	0.67
23:B0:2324:G:H4'	23:B0:2326:C:H5''	1.76	0.67
1:AA:322:C:HO2'	1:AA:323:U:H5'	1.59	0.67
1:AA:376:G:H5''	18:AP:5:ARG:CD	2.24	0.67
20:AR:26:LEU:HD21	20:AR:39:VAL:CG2	2.25	0.67
1:AA:253:U:H4'	1:AA:276:G:C4'	2.25	0.67
1:AA:1067:A:N3	1:AA:1068:G:H1'	2.09	0.67
1:AA:1113:C:H1'	5:AC:178:LEU:HD21	1.77	0.67
5:AC:179:ARG:HD3	5:AC:206:GLU:HG2	1.76	0.67
12:AJ:62:HIS:O	16:AN:58:LYS:C	2.33	0.67
23:B0:3875:A:H4'	55:B5:42:LYS:CA	2.24	0.67
23:B0:2508:G:H5''	23:B0:2509:A:H5''	1.76	0.67
1:AA:1455:G:H2'	1:AA:1456:A:O4'	1.95	0.67
9:AG:85:TYR:HD1	9:AG:154:TYR:HE1	1.42	0.67
13:AK:14:VAL:HG21	13:AK:40:ILE:HD11	1.77	0.67
15:AM:34:LEU:HD13	15:AM:41:PRO:HA	1.77	0.67
23:B0:1926:U:O2'	23:B0:1928:G:H5'	1.95	0.67
23:B0:3110:G:P	23:B0:3149:G:H4'	2.34	0.67
1:AA:394:G:C6	1:AA:395:C:N4	2.63	0.67
1:AA:403:C:C2'	1:AA:404:U:C5'	2.72	0.67
1:AA:436:C:N4	1:AA:437:U:O4	2.27	0.67
1:AA:1016:A:H2'	1:AA:1017:G:O4'	1.94	0.67
4:AB:18:GLY:HA2	4:AB:42:ILE:H	1.59	0.67
15:AM:33:ALA:HA	15:AM:59:TYR:HE2	1.59	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AN:14:PRO:HB2	16:AN:16:PHE:O	1.95	0.67
22:AT:56:MET:HE2	22:AT:88:VAL:HG11	1.76	0.67
23:B0:33:C:H42	23:B0:466:A:H61	1.41	0.67
23:B0:665:A:H3'	23:B0:666:U:C5'	2.24	0.67
1:AA:265:G:H5''	19:AQ:65:ILE:C	2.14	0.66
1:AA:376:G:OP1	18:AP:67:THR:OG1	2.07	0.66
1:AA:865:A:O2'	1:AA:919:A:C5'	2.43	0.66
1:AA:929:G:P	1:AA:1533:C:N4	2.68	0.66
1:AA:994:A:C4	16:AN:5:ALA:CA	2.67	0.66
6:AD:36:ARG:H	6:AD:37:PRO:CD	2.02	0.66
13:AK:14:VAL:O	13:AK:15:ALA:HB3	1.95	0.66
17:AO:33:THR:HG23	17:AO:63:ARG:HH12	1.59	0.66
23:B0:1112:U:H2'	23:B0:1113:C:H5''	1.75	0.66
23:B0:1473:U:H4'	23:B0:1474:A:C8	2.29	0.66
1:AA:130:A:H5'	19:AQ:63:ARG:HE	0.87	0.66
1:AA:662:G:H2'	1:AA:663:A:C8	2.30	0.66
1:AA:1057:G:O2'	1:AA:1058:G:H5'	1.95	0.66
1:AA:1270:C:O2'	1:AA:1314:C:C5'	2.43	0.66
2:AV:44:A:C2'	2:AV:45:G:H5'	2.25	0.66
2:AW:19:G:N7	23:B0:895:G:O2'	2.28	0.66
12:AJ:49:VAL:O	12:AJ:60:ARG:HA	1.95	0.66
23:B0:1223:G:H4'	23:B0:1224:A:O5'	1.96	0.66
23:B0:1312:G:H5'	23:B0:1314:A:H1'	1.77	0.66
23:B0:1856:U:C4	23:B0:3865:A:N1	2.62	0.66
1:AA:103:C:O2'	1:AA:171:A:C6	2.45	0.66
1:AA:292:G:N2	1:AA:608:A:C2	2.60	0.66
1:AA:606:G:C3'	1:AA:607:A:H5'	2.23	0.66
1:AA:1366:C:H2'	1:AA:1367:C:C6	2.30	0.66
1:AA:1412:C:H2'	1:AA:1413:A:H8	1.59	0.66
12:AJ:96:ILE:HG22	12:AJ:97:GLU:N	2.10	0.66
17:AO:55:GLY:O	17:AO:59:MET:HG3	1.94	0.66
19:AQ:97:SER:OG	19:AQ:103:GLY:CA	2.44	0.66
21:AS:28:LYS:HG2	21:AS:29:ARG:N	2.06	0.66
23:B0:1380:C:H2'	23:B0:1381:G:H5'	1.76	0.66
1:AA:835:U:P	20:AR:64:ARG:NH2	2.67	0.66
1:AA:1111:A:C2	5:AC:177:THR:OG1	2.48	0.66
1:AA:1346:A:C2'	9:AG:10:ARG:HH22	1.97	0.66
1:AA:1368:G:O2'	1:AA:1369:C:H5'	1.95	0.66
10:AH:6:ILE:HD11	10:AH:31:PHE:CD2	2.31	0.66
12:AJ:94:VAL:HG12	12:AJ:95:GLU:N	2.10	0.66
1:AA:320:C:C5'	1:AA:1434:A:C2	2.75	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:371:G:O2'	1:AA:372:C:H5'	1.94	0.66
1:AA:702:A:O4'	23:B0:1840:A:OP1	2.12	0.66
1:AA:737:A:C2'	8:AF:73:ASN:HD21	2.09	0.66
6:AD:187:ARG:HH21	6:AD:188:LEU:HD12	1.60	0.66
11:AI:10:ARG:HG2	11:AI:75:ASP:HB2	1.76	0.66
14:AL:33:ARG:HD3	14:AL:62:SER:HB3	1.77	0.66
19:AQ:101:ARG:CZ	23:B0:731:A:H2	2.07	0.66
23:B0:1141:U:H3	23:B0:2008:C:H5''	1.61	0.66
23:B0:1529:C:H2'	23:B0:1530:U:O4'	1.94	0.66
1:AA:247:G:C2	1:AA:282:A:N3	2.63	0.66
1:AA:254:G:N2	19:AQ:16:GLN:CD	2.49	0.66
1:AA:748:C:H1'	1:AA:749:C:C5	2.30	0.66
1:AA:1112:C:N3	5:AC:178:LEU:CA	2.59	0.66
1:AA:1476:G:OP1	23:B0:1707:A:P	2.54	0.66
1:AA:1484:C:O3'	23:B0:1943:A:C4'	2.44	0.66
5:AC:107:GLN:H	5:AC:107:GLN:NE2	1.94	0.66
5:AC:172:ARG:NH1	5:AC:172:ARG:HB3	2.11	0.66
5:AC:188:LEU:O	5:AC:189:ALA:HB2	1.96	0.66
23:B0:1066:G:N1	23:B0:1115:C:C4	2.64	0.66
1:AA:216:C:C3'	1:AA:466:A:H61	2.04	0.66
1:AA:375:U:H2'	1:AA:376:G:O4'	1.96	0.66
1:AA:377:G:P	18:AP:3:LYS:HZ1	2.18	0.66
1:AA:427:U:O2'	1:AA:541:G:OP1	2.03	0.66
1:AA:978:A:C6	1:AA:1318:A:C6	2.84	0.66
5:AC:59:ARG:N	12:AJ:92:THR:CG2	2.59	0.66
5:AC:195:VAL:C	5:AC:196:LEU:HD23	2.15	0.66
7:AE:150:ARG:HH11	7:AE:150:ARG:HG3	1.60	0.66
9:AG:16:LEU:HG	11:AI:41:VAL:O	1.95	0.66
19:AQ:105:ALA:CA	23:B0:727:U:H4'	2.25	0.66
23:B0:897:A:N6	23:B0:898:C:N4	2.43	0.66
23:B0:3149:G:O2'	23:B0:3150:C:H5'	1.96	0.66
1:AA:281:G:O2'	1:AA:282:A:OP2	2.12	0.66
1:AA:1016:A:O2'	1:AA:1218:C:H4'	1.96	0.66
1:AA:1340:A:H4'	2:AV:32:C:C4'	2.25	0.66
1:AA:1425:U:H2'	1:AA:1426:C:C6	2.31	0.66
6:AD:151:LYS:HD2	6:AD:151:LYS:H	1.60	0.66
13:AK:66:LEU:HB3	13:AK:70:LYS:HE3	1.77	0.66
20:AR:45:SER:OG	20:AR:49:LYS:HB2	1.94	0.66
23:B0:1978:U:H3'	23:B0:1979:C:H5''	1.77	0.66
1:AA:586:C:H5''	10:AH:90:GLY:N	2.11	0.66
1:AA:893:C:C2'	1:AA:894:G:C5'	2.74	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1319:A:C5'	21:AS:5:LEU:HD21	2.24	0.66
22:AT:87:LYS:O	22:AT:91:LEU:HD12	1.96	0.66
23:B0:439:C:H2'	23:B0:440:U:O4'	1.95	0.66
23:B0:515:A:H2'	23:B0:516:G:H5'	1.77	0.66
1:AA:186:C:C2	22:AT:60:GLU:OE1	2.49	0.66
1:AA:186:C:H5'	22:AT:81:LYS:HZ3	1.60	0.66
1:AA:247:G:P	19:AQ:100:LYS:HE2	2.36	0.66
1:AA:335:C:C1'	1:AA:1434:A:C4'	2.74	0.66
1:AA:394:G:C6	1:AA:395:C:C4	2.84	0.66
1:AA:427:U:OP1	6:AD:13:ARG:NH2	2.29	0.66
1:AA:526:C:P	14:AL:91:LYS:HE2	2.36	0.66
1:AA:538:G:C5'	14:AL:114:LYS:CD	2.74	0.66
1:AA:719:C:H1'	20:AR:49:LYS:HG2	1.78	0.66
1:AA:1317:C:C2	16:AN:16:PHE:CE2	2.84	0.66
1:AA:1473:A:O2'	23:B0:1718:A:N1	2.29	0.66
23:B0:1191:G:H2'	23:B0:1192:A:H8	1.61	0.66
23:B0:3197:U:O2'	23:B0:2181:A:P	2.53	0.66
1:AA:474:U:H2'	1:AA:475:C:C6	2.31	0.65
1:AA:524:G:H2'	1:AA:525:C:C6	2.31	0.65
2:AV:75:C:O2'	23:B0:2047:C:O5'	2.10	0.65
5:AC:155:GLY:O	5:AC:156:ARG:HB2	1.96	0.65
6:AD:187:ARG:NH2	6:AD:188:LEU:HD12	2.10	0.65
7:AE:80:ILE:HD11	7:AE:91:LEU:HD12	1.76	0.65
12:AJ:90:LEU:H	12:AJ:91:PRO:HD2	1.61	0.65
19:AQ:104:LYS:HB2	23:B0:727:U:C6	2.29	0.65
23:B0:128:C:C2'	23:B0:129:A:H5''	2.23	0.65
1:AA:232:G:C2	1:AA:263:A:C2	2.83	0.65
1:AA:685:G:O4'	13:AK:39:PRO:HG2	1.97	0.65
1:AA:779:C:O4'	13:AK:120:ARG:HD2	1.96	0.65
1:AA:865:A:H2	1:AA:918:A:C5'	2.08	0.65
4:AB:18:GLY:HA3	4:AB:41:ILE:HA	1.79	0.65
5:AC:172:ARG:HB3	5:AC:172:ARG:HH11	1.61	0.65
7:AE:40:ARG:HG2	7:AE:68:GLU:OE2	1.96	0.65
11:AI:26:VAL:HB	11:AI:33:PHE:HB2	1.76	0.65
15:AM:33:ALA:HA	15:AM:59:TYR:CE2	2.32	0.65
15:AM:94:ARG:CZ	21:AS:81:ARG:HD3	2.26	0.65
21:AS:17:GLU:HA	21:AS:20:LEU:HD11	1.78	0.65
23:B0:1471:G:H1	23:B0:2682:C:H42	1.44	0.65
1:AA:112:G:H21	1:AA:354:G:H5'	1.57	0.65
1:AA:173:U:C6	1:AA:197:A:C2	2.85	0.65
1:AA:322:C:H4'	22:AT:23:ARG:CB	2.25	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:778:G:H4'	13:AK:119:CYS:CB	2.26	0.65
1:AA:797:C:OP1	13:AK:124:LYS:CB	2.44	0.65
1:AA:815:A:C4	1:AA:1527:C:C1'	2.72	0.65
1:AA:923:A:N9	1:AA:1398:A:N3	2.43	0.65
1:AA:929:G:OP1	1:AA:1533:C:N4	2.28	0.65
1:AA:1016:A:O2'	1:AA:1218:C:C4'	2.44	0.65
1:AA:1430:C:H4'	23:B0:1721:G:H5'	1.76	0.65
1:AA:1475:G:H2'	1:AA:1476:G:H8	1.62	0.65
12:AJ:38:ILE:CG1	12:AJ:71:LEU:HB3	2.26	0.65
12:AJ:60:ARG:O	12:AJ:61:GLU:HB3	1.95	0.65
19:AQ:104:LYS:CE	23:B0:729:A:H62	2.10	0.65
23:B0:1856:U:C3'	23:B0:3865:A:H8	1.99	0.65
1:AA:848:G:HO3'	1:AA:849:C:C5'	2.02	0.65
1:AA:923:A:N3	1:AA:1395:C:O2	2.28	0.65
1:AA:1178:G:OP2	11:AI:97:LYS:NZ	2.28	0.65
1:AA:1402:C:H2'	1:AA:1403:C:O4'	1.97	0.65
5:AC:64:VAL:HB	5:AC:99:VAL:CB	2.27	0.65
7:AE:12:LEU:HD13	7:AE:31:LEU:HB2	1.77	0.65
23:B0:1098:G:H3'	23:B0:1099:A:H5''	1.79	0.65
23:B0:3128:G:HO2'	23:B0:3174:C:H5'	0.79	0.65
23:B0:2794:G:H3'	23:B0:2796:A:H62	1.61	0.65
1:AA:39:G:C8	1:AA:498:U:C4	2.85	0.65
1:AA:94:G:C4	1:AA:96:C:C5	2.84	0.65
1:AA:1111:A:N1	5:AC:177:THR:CA	2.59	0.65
1:AA:1182:G:H5'	1:AA:1184:G:C5'	2.26	0.65
1:AA:1321:C:H42	21:AS:37:ARG:NH1	1.94	0.65
1:AA:1495:U:H2'	1:AA:1496:C:C6	2.31	0.65
1:AA:1522:U:O2'	1:AA:1523:G:H5'	1.96	0.65
4:AB:84:GLU:HB3	4:AB:219:VAL:HG21	1.78	0.65
15:AM:65:LYS:HG3	15:AM:69:GLU:OE2	1.96	0.65
23:B0:542:A:C2'	23:B0:543:G:H5'	2.26	0.65
23:B0:1918:G:H4'	23:B0:1920:A:N3	2.10	0.65
23:B0:2236:U:C3'	23:B0:2237:C:H5''	2.26	0.65
1:AA:99:C:H1'	1:AA:101:A:OP2	1.96	0.65
1:AA:391:G:H5'	18:AP:28:ARG:HH21	1.57	0.65
1:AA:815:A:N6	1:AA:1529:G:O2'	2.29	0.65
1:AA:905:U:C4	1:AA:906:G:C5	2.84	0.65
4:AB:15:VAL:CG2	4:AB:209:ARG:HG3	2.26	0.65
4:AB:71:VAL:O	4:AB:165:VAL:HG23	1.96	0.65
6:AD:131:ARG:H	6:AD:131:ARG:HD2	1.62	0.65
13:AK:48:ILE:HG22	13:AK:49:GLY:H	1.61	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:651:C:H2'	23:B0:652:C:H5''	1.78	0.65
23:B0:1472:C:C2'	23:B0:1473:U:H5'	2.27	0.65
23:B0:2822:U:H2'	23:B0:2823:G:O4'	1.97	0.65
1:AA:33:A:OP2	1:AA:398:C:C4'	2.43	0.65
1:AA:186:C:H5'	22:AT:81:LYS:HD3	1.77	0.65
1:AA:274:A:C2	1:AA:275:G:H1'	2.31	0.65
1:AA:393:A:OP2	18:AP:12:LYS:HE2	1.97	0.65
1:AA:677:U:H3	1:AA:713:G:H22	1.45	0.65
1:AA:918:A:H2'	1:AA:919:A:C8	2.32	0.65
1:AA:1422:G:C5'	33:BI:60:PRO:CA	2.63	0.65
1:AA:1430:C:C5'	23:B0:1721:G:C4'	2.73	0.65
4:AB:74:LYS:HZ1	4:AB:206:ASP:HA	1.61	0.65
4:AB:215:LEU:O	4:AB:219:VAL:HG23	1.97	0.65
14:AL:86:ARG:HH11	14:AL:86:ARG:HG3	1.61	0.65
20:AR:47:THR:HG23	20:AR:83:GLU:H	1.61	0.65
23:B0:2047:C:H42	23:B0:2425:G:H1	1.43	0.65
23:B0:3127:G:H4'	23:B0:3173:A:N1	2.10	0.65
1:AA:99:C:C1'	1:AA:101:A:OP2	2.17	0.65
1:AA:391:G:C5'	18:AP:28:ARG:NH2	2.57	0.65
1:AA:456:A:N6	1:AA:477:G:N9	2.45	0.65
1:AA:923:A:C1'	1:AA:1398:A:H2'	2.26	0.65
1:AA:1347:G:C4	11:AI:107:ARG:NH1	2.65	0.65
1:AA:1393:U:O2	1:AA:1395:C:C6	2.49	0.65
1:AA:1442:G:H2'	1:AA:1442:G:N3	2.11	0.65
1:AA:1497:G:H2'	1:AA:1498:U:H5'	1.78	0.65
7:AE:15:ARG:HD2	7:AE:15:ARG:O	1.96	0.65
8:AF:100:ASN:HD22	20:AR:23:LYS:CG	2.10	0.65
12:AJ:61:GLU:OE2	16:AN:49:HIS:HE1	1.79	0.65
23:B0:3875:A:H1'	55:B5:44:GLY:CA	2.26	0.65
1:AA:130:A:N1	1:AA:264:U:N3	2.44	0.65
1:AA:261:U:H3'	22:AT:79:ARG:HH12	1.61	0.65
1:AA:619:U:C6	6:AD:135:LEU:CD1	2.76	0.65
1:AA:919:A:N3	1:AA:1080:A:H2	1.95	0.65
2:AV:76:A:C3'	23:B0:2046:C:HO2'	2.07	0.65
9:AG:50:ILE:O	9:AG:54:THR:HB	1.96	0.65
19:AQ:104:LYS:HZ1	23:B0:730:C:N4	1.94	0.65
1:AA:922:G:C4	1:AA:1398:A:H2	2.14	0.65
1:AA:1153:C:H2'	1:AA:1154:G:H8	1.62	0.65
1:AA:1474:G:C4'	23:B0:1717:A:N6	2.57	0.65
1:AA:1484:C:O3'	23:B0:1943:A:O3'	2.15	0.65
2:AV:1:G:N2	2:AV:2:C:C4	2.61	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AB:95:GLN:OE1	4:AB:95:GLN:HA	1.97	0.65
8:AF:21:LEU:O	8:AF:24:GLU:HB3	1.97	0.65
14:AL:55:VAL:HG12	14:AL:56:ALA:N	2.12	0.65
14:AL:110:VAL:O	14:AL:122:THR:HG21	1.97	0.65
15:AM:36:LYS:HD2	15:AM:59:TYR:CZ	2.32	0.65
23:B0:727:U:H2'	23:B0:728:G:H5''	1.78	0.65
23:B0:927:C:H2'	23:B0:928:G:O4'	1.97	0.65
23:B0:1119:U:H2'	23:B0:1120:C:C1'	2.27	0.65
23:B0:1656:U:C2'	23:B0:1657:A:H5''	2.25	0.65
1:AA:458:G:H2'	1:AA:459:G:H8	1.62	0.64
1:AA:1075:C:P	4:AB:179:LYS:HZ2	2.20	0.64
7:AE:115:VAL:CG1	7:AE:118:ILE:HG13	2.25	0.64
19:AQ:101:ARG:HA	19:AQ:101:ARG:HE	1.62	0.64
22:AT:50:GLU:HG2	22:AT:100:ILE:HG13	1.79	0.64
23:B0:1472:C:H2'	23:B0:1473:U:H5'	1.79	0.64
23:B0:1811:A:O2'	23:B0:1812:U:H5''	1.97	0.64
1:AA:186:C:H1'	22:AT:60:GLU:CD	2.16	0.64
1:AA:287:U:O2'	1:AA:288:A:H5'	1.97	0.64
1:AA:353:A:H5'	1:AA:353:A:C8	2.31	0.64
1:AA:392:G:H2'	1:AA:393:A:C8	2.32	0.64
1:AA:443:C:H2'	1:AA:444:C:H6	1.61	0.64
1:AA:1393:U:C4	1:AA:1395:C:N4	2.66	0.64
1:AA:1410:G:N3	1:AA:1491:G:C2	2.65	0.64
19:AQ:105:ALA:CA	23:B0:727:U:C4'	2.74	0.64
23:B0:1432:G:H21	23:B0:1596:A:H62	1.45	0.64
1:AA:15:G:C1'	7:AE:19:MET:HE2	2.07	0.64
1:AA:499:A:N3	1:AA:500:G:C1'	2.53	0.64
1:AA:651:C:O2'	1:AA:652:U:O5'	2.14	0.64
1:AA:922:G:C6	1:AA:1396:A:N6	2.65	0.64
1:AA:1466:C:H2'	1:AA:1467:G:N7	2.13	0.64
23:B0:897:A:C6	23:B0:898:C:C4	2.85	0.64
1:AA:69:G:N9	1:AA:102:G:N1	2.45	0.64
1:AA:921:U:C4	1:AA:1396:A:N1	2.65	0.64
1:AA:974:A:P	16:AN:29:ARG:HH22	2.20	0.64
5:AC:29:TYR:OH	16:AN:54:PRO:HG2	1.98	0.64
5:AC:177:THR:CG2	5:AC:180:ALA:HB2	2.28	0.64
7:AE:79:GLU:HG3	7:AE:93:PRO:HD2	1.79	0.64
23:B0:2422:C:H2'	23:B0:2423:G:H8	1.62	0.64
1:AA:522:C:H5''	14:AL:120:TYR:CZ	2.32	0.64
1:AA:1141:C:H2'	1:AA:1142:G:C8	2.33	0.64
1:AA:1256:A:H5'	1:AA:1258:G:C4	2.33	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AI:114:TYR:CD2	12:AJ:60:ARG:HG2	2.32	0.64
13:AK:40:ILE:HG22	13:AK:41:THR:HG23	1.80	0.64
17:AO:17:ARG:CZ	17:AO:77:ARG:HH11	2.11	0.64
23:B0:1436:G:H1'	23:B0:1508:G:H21	1.60	0.64
1:AA:236:G:C5'	19:AQ:42:TYR:OH	2.44	0.64
1:AA:438:G:OP1	6:AD:125:HIS:HE1	1.79	0.64
1:AA:819:A:C8	1:AA:1529:G:N2	2.66	0.64
1:AA:828:A:H2	4:AB:26:PRO:CD	2.11	0.64
1:AA:922:G:N2	1:AA:1396:A:C1'	2.60	0.64
1:AA:1292:U:P	9:AG:41:ARG:NH2	2.70	0.64
5:AC:135:LYS:NZ	7:AE:50:GLU:OE2	2.30	0.64
9:AG:71:PRO:HD3	9:AG:103:TRP:CZ3	2.33	0.64
11:AI:49:PRO:O	11:AI:52:ALA:HB3	1.97	0.64
23:B0:1861:G:P	55:B5:37:LYS:CA	2.86	0.64
1:AA:37:U:O2'	1:AA:500:G:H4'	1.98	0.64
1:AA:204:A:H5''	1:AA:205:G:OP1	1.98	0.64
1:AA:248:C:O4'	1:AA:282:A:H2	1.81	0.64
1:AA:702:A:C5'	23:B0:1840:A:H5'	2.27	0.64
1:AA:818:G:H3'	1:AA:819:A:C5'	2.28	0.64
1:AA:1234:C:H1'	1:AA:1364:U:O2	1.97	0.64
17:AO:29:VAL:HG12	17:AO:85:LEU:CD1	2.26	0.64
21:AS:64:GLU:O	21:AS:67:VAL:HG23	1.97	0.64
23:B0:1474:A:H2'	23:B0:1475:U:H5'	1.79	0.64
23:B0:3184:C:O2'	23:B0:3185:U:H5''	1.98	0.64
1:AA:255:G:O3'	19:AQ:17:LYS:NZ	2.22	0.64
1:AA:260:G:H8	22:AT:83:ARG:NH1	1.86	0.64
1:AA:588:G:C6	1:AA:753:A:N7	2.66	0.64
1:AA:1040:U:H2'	1:AA:1041:A:C8	2.33	0.64
2:AW:11:C:O2'	23:B0:1898:U:C5'	2.45	0.64
7:AE:115:VAL:HG11	7:AE:118:ILE:CG1	2.28	0.64
8:AF:9:VAL:HB	8:AF:87:ARG:HB2	1.80	0.64
13:AK:18:ARG:HB2	13:AK:33:THR:HG23	1.78	0.64
16:AN:22:THR:CB	16:AN:33:VAL:HG21	2.27	0.64
23:B0:891:A:N3	23:B0:892:A:C5	2.65	0.64
23:B0:894:G:C2'	23:B0:895:G:H5''	2.27	0.64
23:B0:1047:G:H1	23:B0:1130:U:H3	1.46	0.64
23:B0:1072:U:O4	31:BG:10:LEU:CA	2.46	0.64
1:AA:187:G:C2	22:AT:105:SER:HB2	2.33	0.64
1:AA:188:C:H3'	22:AT:105:SER:CB	2.27	0.64
1:AA:191:G:C6	1:AA:192:U:C5	2.86	0.64
1:AA:266:G:H3'	19:AQ:67:LYS:H	1.63	0.64

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:292:G:N3	1:AA:608:A:N1	2.45	0.64
1:AA:393:A:O2'	1:AA:394:G:H5'	1.98	0.64
1:AA:922:G:H2'	1:AA:923:A:C8	2.32	0.64
1:AA:1131:G:H1	1:AA:1143:G:N2	1.95	0.64
5:AC:112:SER:HB2	5:AC:115:LEU:HD12	1.79	0.64
6:AD:70:ILE:HD11	6:AD:100:ARG:NE	2.13	0.64
16:AN:27:CYS:SG	16:AN:29:ARG:HB2	2.38	0.64
23:B0:2245:A:H5'	23:B0:2246:A:N7	2.12	0.64
23:B0:2690:A:OP2	23:B0:2694:G:H5'	1.98	0.64
1:AA:69:G:H1'	1:AA:102:G:C5	2.33	0.64
1:AA:118:U:C3'	1:AA:119:A:P	2.86	0.64
5:AC:155:GLY:O	5:AC:196:LEU:HD22	1.98	0.64
11:AI:48:GLU:N	11:AI:49:PRO:HD2	2.13	0.64
21:AS:40:ILE:HB	21:AS:67:VAL:O	1.98	0.64
21:AS:43:GLU:CD	21:AS:43:GLU:H	2.00	0.64
23:B0:65:C:H2'	23:B0:66:U:O4'	1.97	0.64
23:B0:3876:A:H1'	55:B5:46:LEU:CA	2.28	0.64
1:AA:262:A:C5'	22:AT:74:LYS:HB3	2.12	0.63
1:AA:375:U:H1'	18:AP:28:ARG:NE	2.13	0.63
1:AA:816:A:OP2	1:AA:1527:C:C5'	2.45	0.63
1:AA:830:G:OP1	4:AB:22:LYS:CE	2.46	0.63
1:AA:837:G:O3'	1:AA:838:C:C6	2.49	0.63
1:AA:1499:A:O4'	1:AA:1520:G:C4'	2.46	0.63
5:AC:64:VAL:CB	5:AC:99:VAL:HB	2.27	0.63
9:AG:42:ILE:HG22	9:AG:120:ILE:HD12	1.79	0.63
18:AP:18:ARG:HD3	18:AP:35:LYS:HE3	1.79	0.63
21:AS:44:MET:O	21:AS:47:HIS:HB2	1.97	0.63
23:B0:1075:C:H2'	23:B0:1076:U:O4'	1.99	0.63
23:B0:2510:A:H61	23:B0:2641:A:H61	1.46	0.63
1:AA:38:G:C1'	1:AA:547:A:C4	2.72	0.63
1:AA:375:U:C2'	18:AP:28:ARG:HD3	2.29	0.63
1:AA:1484:C:C2'	23:B0:1943:A:H4'	2.28	0.63
2:AV:76:A:C5'	23:B0:2564:U:O4'	2.42	0.63
2:AW:76:A:N1	23:B0:2532:G:N2	2.42	0.63
23:B0:1341:G:H22	23:B0:1664:G:H1	1.46	0.63
23:B0:1458:A:H3'	23:B0:1459:U:C5'	2.28	0.63
1:AA:33:A:OP2	1:AA:398:C:H5'	1.97	0.63
1:AA:322:C:C4'	22:AT:23:ARG:CG	2.73	0.63
1:AA:434:U:H2'	1:AA:435:C:H6	1.63	0.63
1:AA:762:C:C5'	23:B0:729:A:H61	2.12	0.63
1:AA:877:C:OP1	10:AH:88:LYS:HE2	1.97	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:994:A:H1'	16:AN:8:GLU:HB3	1.80	0.63
1:AA:1298:C:C4	9:AG:114:ARG:HD3	2.33	0.63
1:AA:1346:A:C4	9:AG:10:ARG:NH2	2.67	0.63
7:AE:120:THR:CG2	7:AE:121:LYS:N	2.61	0.63
12:AJ:45:ARG:CZ	16:AN:36:PHE:CD2	2.81	0.63
19:AQ:104:LYS:HB3	23:B0:727:U:O4'	1.92	0.63
23:B0:1715:A:H1'	23:B0:1717:A:O4'	1.99	0.63
23:B0:2491:C:C2'	23:B0:2492:G:H5''	2.29	0.63
1:AA:168:G:O2'	1:AA:169:C:H5'	1.97	0.63
1:AA:188:C:N3	22:AT:106:ALA:HA	2.12	0.63
1:AA:473:C:OP1	18:AP:75:ARG:NE	2.30	0.63
1:AA:685:G:H4'	13:AK:39:PRO:O	1.99	0.63
1:AA:1015:A:N3	1:AA:1218:C:O2'	2.30	0.63
1:AA:1016:A:C2'	1:AA:1218:C:H4'	2.27	0.63
1:AA:1142:G:H2'	1:AA:1143:G:O4'	1.97	0.63
1:AA:1151:A:H5'	12:AJ:41:PRO:HA	1.81	0.63
1:AA:1416:G:C4	1:AA:1417:G:O4'	2.52	0.63
13:AK:18:ARG:HB2	13:AK:33:THR:CG2	2.28	0.63
1:AA:130:A:N3	1:AA:264:U:C6	2.65	0.63
1:AA:202:G:C1'	1:AA:468:A:O2'	2.45	0.63
1:AA:255:G:H1'	19:AQ:16:GLN:CB	2.27	0.63
1:AA:377:G:P	18:AP:3:LYS:HZ2	2.21	0.63
6:AD:148:VAL:HG11	6:AD:158:ILE:HG21	1.81	0.63
12:AJ:63:PHE:CA	16:AN:57:ARG:O	2.44	0.63
19:AQ:102:GLY:O	23:B0:726:G:N1	2.32	0.63
1:AA:21:G:H1'	1:AA:914:A:H62	0.46	0.63
1:AA:191:G:C2	1:AA:192:U:N1	2.66	0.63
1:AA:893:C:HO2'	1:AA:894:G:H5'	1.62	0.63
2:AV:11:C:H4'	23:B0:1892:C:C1'	2.28	0.63
7:AE:116:THR:HG23	7:AE:117:ASP:OD2	1.98	0.63
15:AM:93:ARG:HD3	23:B0:900:U:C4'	2.28	0.63
23:B0:3149:G:C2'	23:B0:3150:C:P	2.87	0.63
1:AA:13:U:C1'	1:AA:914:A:H5'	2.29	0.63
1:AA:39:G:C4	1:AA:498:U:C4	2.87	0.63
1:AA:212:G:O3'	1:AA:213:G:OP2	2.08	0.63
1:AA:237:C:H4'	19:AQ:25:ARG:NH1	2.14	0.63
1:AA:274:A:H2	1:AA:275:G:C1'	2.11	0.63
1:AA:1229:A:OP2	15:AM:114:ARG:HD3	1.99	0.63
5:AC:177:THR:HG23	5:AC:180:ALA:HB2	1.81	0.63
9:AG:114:ARG:HG2	9:AG:114:ARG:HH11	1.64	0.63
23:B0:2198:U:C3'	23:B0:2199:C:H5''	2.27	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:188:C:C6	22:AT:105:SER:O	2.51	0.63
1:AA:243:A:H4'	1:AA:244:U:C5'	2.22	0.63
1:AA:255:G:C4'	19:AQ:16:GLN:CB	2.76	0.63
1:AA:1112:C:C2	5:AC:178:LEU:O	2.51	0.63
1:AA:1347:G:O2'	1:AA:1348:U:OP2	2.16	0.63
1:AA:1483:A:C6	1:AA:1484:C:C2	2.87	0.63
4:AB:74:LYS:NZ	4:AB:206:ASP:HA	2.13	0.63
5:AC:58:GLU:CB	12:AJ:92:THR:HG21	2.19	0.63
6:AD:152:SER:HB3	6:AD:155:LEU:HD12	1.80	0.63
9:AG:26:PHE:CE2	9:AG:30:ILE:HD11	2.33	0.63
11:AI:118:LYS:O	11:AI:119:ALA:CB	2.45	0.63
23:B0:3183:A:C3'	23:B0:3184:C:P	2.87	0.63
1:AA:116:A:N6	1:AA:313:A:C4	2.67	0.63
1:AA:254:G:H1'	19:AQ:15:MET:CB	2.14	0.63
1:AA:733:A:O3'	1:AA:734:G:OP2	2.06	0.63
1:AA:836:G:OP2	20:AR:61:LYS:HD2	1.99	0.63
1:AA:1278:U:OP1	1:AA:1279:A:P	2.56	0.63
1:AA:1473:A:O4'	23:B0:1719:G:C1'	2.47	0.63
2:AW:11:C:O2'	23:B0:1898:U:H5'	1.98	0.63
7:AE:150:ARG:HG3	7:AE:150:ARG:NH1	2.14	0.63
12:AJ:30:SER:OG	12:AJ:81:THR:HA	1.99	0.63
18:AP:8:ARG:HB2	18:AP:28:ARG:NH1	2.14	0.63
21:AS:52:TYR:HA	21:AS:56:GLN:O	1.99	0.63
23:B0:514:G:H2'	23:B0:514:G:N3	2.12	0.63
23:B0:1464:A:H4'	23:B0:1545:G:H4'	1.81	0.63
23:B0:1711:C:H4'	23:B0:1712:G:C2	2.34	0.63
1:AA:262:A:C4'	22:AT:75:ASN:H	2.11	0.62
1:AA:265:G:C4'	19:AQ:66:SER:N	2.44	0.62
1:AA:1410:G:N1	1:AA:1491:G:C6	2.68	0.62
1:AA:1505:G:H4'	1:AA:1506:U:C5'	2.29	0.62
9:AG:155:ARG:O	9:AG:156:TRP:HB3	1.98	0.62
1:AA:69:G:C5	1:AA:102:G:O6	2.52	0.62
1:AA:191:G:C6	1:AA:192:U:C6	2.77	0.62
1:AA:375:U:O2'	18:AP:28:ARG:HD3	1.99	0.62
1:AA:546:G:OP1	6:AD:73:ARG:HB2	2.00	0.62
1:AA:1053:G:C3'	1:AA:1054:C:H5'	2.29	0.62
1:AA:1097:C:O2'	1:AA:1168:A:H1'	1.97	0.62
4:AB:73:THR:HB	4:AB:170:GLU:OE2	1.99	0.62
5:AC:13:GLY:HA3	16:AN:57:ARG:NH2	2.14	0.62
21:AS:39:THR:HA	21:AS:70:LYS:HG2	1.81	0.62
23:B0:3877:A:H5''	23:B0:1861:G:P	2.39	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1014:A:C5	21:AS:34:TRP:CE2	2.88	0.62
1:AA:1496:C:H1'	1:AA:1517:G:N2	2.14	0.62
4:AB:184:VAL:N	4:AB:198:ASP:OD2	2.32	0.62
19:AQ:21:VAL:HG21	19:AQ:59:ILE:HD11	1.82	0.62
1:AA:119:A:N7	1:AA:287:U:C4	2.68	0.62
1:AA:248:C:HO2'	1:AA:283:C:H4'	1.64	0.62
1:AA:264:U:O2'	19:AQ:64:PRO:CA	2.47	0.62
1:AA:288:A:C2'	1:AA:289:G:O3'	2.48	0.62
1:AA:919:A:N3	1:AA:1080:A:C2	2.67	0.62
1:AA:1067:A:H4'	1:AA:1068:G:O5'	1.99	0.62
5:AC:60:ALA:O	5:AC:61:ALA:HB2	2.00	0.62
5:AC:120:VAL:O	5:AC:124:ILE:HG13	1.99	0.62
7:AE:102:ALA:CB	7:AE:120:THR:HG21	2.29	0.62
9:AG:23:VAL:O	9:AG:27:ILE:HG13	1.99	0.62
18:AP:45:THR:HB	18:AP:46:PRO:HD2	1.80	0.62
1:AA:265:G:C1'	19:AQ:64:PRO:HB2	2.28	0.62
1:AA:675:A:O4'	13:AK:116:HIS:CD2	2.53	0.62
1:AA:1132:C:H2'	1:AA:1133:G:H8	1.64	0.62
1:AA:1420:C:H4'	23:B0:1933:G:OP1	2.00	0.62
14:AL:33:ARG:CD	14:AL:62:SER:HB3	2.29	0.62
23:B0:1429:A:H62	23:B0:1601:U:H5''	1.65	0.62
23:B0:2236:U:C2'	23:B0:2237:C:H5''	2.29	0.62
23:B0:2607:C:H1'	23:B0:2761:A:H2'	1.79	0.62
23:B0:2756:A:H4'	23:B0:2758:A:OP1	1.98	0.62
1:AA:255:G:H5''	19:AQ:17:LYS:CA	2.30	0.62
1:AA:320:C:H4'	1:AA:1434:A:N1	2.14	0.62
1:AA:448:A:H2'	1:AA:449:C:H6	1.64	0.62
1:AA:923:A:H5'	1:AA:1398:A:N6	2.15	0.62
1:AA:1483:A:N7	1:AA:1484:C:N4	2.48	0.62
4:AB:82:ARG:O	4:AB:86:GLU:HG3	1.98	0.62
5:AC:23:TYR:CD1	12:AJ:11:PHE:CE2	2.87	0.62
6:AD:57:ARG:NH2	7:AE:107:ARG:NH1	2.47	0.62
9:AG:139:GLU:O	9:AG:143:ARG:HG3	2.00	0.62
22:AT:50:GLU:HG3	22:AT:99:LEU:HD12	1.82	0.62
1:AA:815:A:O3'	1:AA:1527:C:H4'	1.99	0.62
11:AI:19:LEU:O	11:AI:20:ARG:HG3	1.99	0.62
12:AJ:71:LEU:O	12:AJ:72:VAL:HB	2.00	0.62
14:AL:43:VAL:HG12	14:AL:44:THR:N	2.14	0.62
23:B0:1066:G:C6	23:B0:1115:C:N4	2.62	0.62
23:B0:1196:G:H2'	23:B0:1197:U:O4'	2.00	0.62
1:AA:113:G:C1'	1:AA:354:G:C5'	2.77	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:186:C:H4'	22:AT:81:LYS:HB2	1.82	0.62
1:AA:292:G:H2'	1:AA:608:A:H61	1.58	0.62
1:AA:1347:G:O2'	1:AA:1348:U:P	2.57	0.62
1:AA:1501:C:P	1:AA:1508:G:H4'	2.39	0.62
4:AB:132:LYS:HG2	4:AB:135:GLN:OE1	1.99	0.62
4:AB:142:LEU:HD22	4:AB:146:GLN:NE2	2.15	0.62
8:AF:94:GLN:NE2	20:AR:32:ARG:HD3	2.09	0.62
16:AN:53:LEU:HB3	16:AN:56:VAL:HG21	1.81	0.62
1:AA:187:G:H2'	22:AT:105:SER:CB	2.30	0.62
1:AA:333:G:O4'	22:AT:16:HIS:HD2	1.74	0.62
1:AA:1106:G:OP1	5:AC:172:ARG:HG2	2.00	0.62
1:AA:1320:C:N4	21:AS:37:ARG:HD3	2.12	0.62
6:AD:61:LYS:NZ	6:AD:62:GLN:HE21	1.98	0.62
12:AJ:46:ARG:HH11	12:AJ:64:GLU:HB3	1.65	0.62
14:AL:40:VAL:O	14:AL:40:VAL:HG12	1.99	0.62
15:AM:84:ILE:O	15:AM:86:CYS:N	2.32	0.62
17:AO:29:VAL:HG12	17:AO:85:LEU:HD11	1.82	0.62
21:AS:31:ILE:CG2	21:AS:32:LYS:H	2.10	0.62
23:B0:1528:C:C2'	23:B0:1529:C:H5''	2.30	0.62
23:B0:2571:G:H2'	23:B0:2572:U:C6	2.34	0.62
1:AA:13:U:O4'	1:AA:914:A:P	2.58	0.62
1:AA:74:G:H2'	1:AA:75:C:C6	2.34	0.62
1:AA:323:U:H5'	22:AT:23:ARG:H	1.65	0.62
1:AA:675:A:C1'	13:AK:116:HIS:CG	2.63	0.62
1:AA:905:U:C6	1:AA:906:G:N7	2.68	0.62
1:AA:932:C:H5'	9:AG:3:ARG:HD3	1.78	0.62
1:AA:1020:U:H2'	1:AA:1021:G:H8	1.63	0.62
1:AA:1176:A:H2'	1:AA:1177:G:C8	2.35	0.62
1:AA:1473:A:O2'	23:B0:1718:A:C5	2.53	0.62
1:AA:1487:G:O2'	1:AA:1488:G:H5'	1.99	0.62
2:AW:40:C:H2'	2:AW:41:U:H5'	1.82	0.62
2:AW:76:A:C1'	23:B0:2562:G:N2	2.61	0.62
4:AB:186:ALA:HB3	4:AB:197:VAL:HG11	1.82	0.62
6:AD:148:VAL:CG1	6:AD:158:ILE:HD13	2.30	0.62
9:AG:78:ARG:HB2	9:AG:156:TRP:HZ3	1.65	0.62
18:AP:67:THR:HG22	18:AP:68:ASP:N	2.15	0.62
19:AQ:76:LEU:HD23	19:AQ:77:VAL:N	2.15	0.62
23:B0:1580:C:H2'	23:B0:1581:C:C6	2.35	0.62
23:B0:2668:U:H4'	23:B0:2669:C:C5'	2.25	0.62
1:AA:254:G:O2'	19:AQ:15:MET:HB3	1.98	0.61
1:AA:837:G:O2'	1:AA:838:C:O4'	2.12	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1110:A:C2'	1:AA:1111:A:H5'	2.30	0.61
1:AA:1132:C:H2'	1:AA:1133:G:C8	2.35	0.61
1:AA:1342:C:O2'	11:AI:124:GLN:HA	2.00	0.61
1:AA:1370:G:O2'	1:AA:1371:G:H5'	2.00	0.61
1:AA:1440:C:H2'	1:AA:1441:G:H5'	1.82	0.61
1:AA:1457:A:C5	1:AA:1459:C:O2	2.53	0.61
4:AB:115:LEU:HG	4:AB:153:ARG:NH2	2.14	0.61
6:AD:191:ARG:HD2	6:AD:191:ARG:O	2.00	0.61
22:AT:54:LYS:HE3	22:AT:100:ILE:HD11	1.82	0.61
23:B0:788:G:H5'	23:B0:790:A:H1'	1.81	0.61
23:B0:1250:A:O2'	23:B0:1251:G:H4'	2.00	0.61
1:AA:193:C:H2'	1:AA:194:C:C6	2.36	0.61
1:AA:254:G:O2'	19:AQ:16:GLN:N	2.33	0.61
1:AA:262:A:H4'	22:AT:75:ASN:H	1.64	0.61
1:AA:386:C:O2'	1:AA:387:U:H5'	2.00	0.61
1:AA:653:A:O4'	10:AH:56:LYS:HG2	2.00	0.61
1:AA:675:A:C4	13:AK:116:HIS:HB2	2.29	0.61
1:AA:812:C:O2'	1:AA:813:U:OP2	2.17	0.61
1:AA:1225:A:H2'	1:AA:1225:A:N3	2.14	0.61
2:AW:75:C:N3	23:B0:2533:U:O2	2.31	0.61
2:AW:75:C:O2'	23:B0:2486:C:C3'	2.48	0.61
4:AB:69:LEU:HD12	4:AB:155:LEU:HD11	1.82	0.61
11:AI:4:TYR:CZ	11:AI:88:TYR:HD1	2.17	0.61
23:B0:973:U:H2'	23:B0:974:U:C6	2.35	0.61
23:B0:1147:G:H2'	23:B0:1148:G:C8	2.35	0.61
23:B0:2522:G:N2	23:B0:2625:U:H5''	2.15	0.61
1:AA:116:A:N6	1:AA:313:A:C1'	2.21	0.61
1:AA:128:G:OP1	19:AQ:2:PRO:HD3	1.96	0.61
1:AA:246:A:H1'	1:AA:247:G:C1'	2.30	0.61
1:AA:406:G:N7	1:AA:496:A:C4	2.68	0.61
1:AA:1425:U:H2'	1:AA:1426:C:H6	1.65	0.61
2:AV:12:U:OP1	23:B0:1891:C:C2'	2.48	0.61
2:AW:76:A:N1	23:B0:2532:G:N1	2.48	0.61
4:AB:20:GLU:HG2	4:AB:189:ASP:OD2	1.99	0.61
4:AB:122:PHE:HE2	4:AB:139:LYS:HG2	1.65	0.61
7:AE:120:THR:HG23	7:AE:121:LYS:N	2.15	0.61
9:AG:149:ARG:NH1	13:AK:59:TYR:CD1	2.67	0.61
19:AQ:105:ALA:H	23:B0:727:U:C2'	1.99	0.61
23:B0:1920:A:H3'	23:B0:1920:A:OP2	2.01	0.61
1:AA:223:U:H5''	22:AT:68:LYS:HZ2	1.64	0.61
1:AA:403:C:C2	1:AA:404:U:C6	2.89	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:436:C:O2'	1:AA:437:U:C5'	2.47	0.61
1:AA:598:U:H4'	10:AH:94:TYR:CG	2.35	0.61
6:AD:23:GLY:HA3	6:AD:112:VAL:CG1	2.30	0.61
14:AL:27:LEU:C	14:AL:29:GLY:H	2.04	0.61
23:B0:116:A:N3	23:B0:155:G:H1'	2.15	0.61
23:B0:1518:C:H2'	23:B0:1519:G:C8	2.35	0.61
23:B0:2727:G:H1	23:B0:2735:C:H5''	1.64	0.61
1:AA:551:U:H2'	1:AA:552:U:H6	1.64	0.61
1:AA:691:G:H3'	13:AK:26:ASN:HD21	1.65	0.61
1:AA:1067:A:N3	1:AA:1068:G:C1'	2.64	0.61
1:AA:1112:C:C2	5:AC:178:LEU:N	2.68	0.61
1:AA:1484:C:H2'	1:AA:1485:U:H6	1.65	0.61
1:AA:1490:C:H6	1:AA:1490:C:C5'	2.13	0.61
4:AB:80:ILE:HD11	4:AB:208:ILE:HG23	1.81	0.61
13:AK:19:ALA:HB2	13:AK:80:VAL:HG11	1.82	0.61
19:AQ:104:LYS:CB	23:B0:726:G:C4	2.83	0.61
23:B0:2548:G:H2'	23:B0:2549:G:C5'	2.27	0.61
1:AA:837:G:C3'	1:AA:838:C:C6	2.83	0.61
1:AA:954:G:H21	1:AA:1227:A:H62	1.49	0.61
1:AA:1226:C:N4	15:AM:104:ARG:HD2	2.16	0.61
1:AA:1269:A:C2	1:AA:1313:U:C1'	2.83	0.61
1:AA:1473:A:C1'	23:B0:1719:G:H1'	2.30	0.61
2:AV:74:C:C4	23:B0:2231:G:N1	2.69	0.61
5:AC:50:ALA:O	5:AC:70:VAL:HG12	1.99	0.61
5:AC:83:ARG:C	5:AC:85:ARG:H	2.04	0.61
13:AK:48:ILE:HG22	13:AK:49:GLY:N	2.16	0.61
13:AK:84:VAL:CG1	13:AK:95:ILE:HD11	2.31	0.61
19:AQ:76:LEU:HD23	19:AQ:76:LEU:C	2.20	0.61
20:AR:52:PRO:O	20:AR:56:THR:HG23	2.00	0.61
1:AA:253:U:N1	1:AA:275:G:O2'	2.32	0.61
1:AA:300:A:H1'	1:AA:565:U:C2	2.36	0.61
1:AA:335:C:C1'	1:AA:1434:A:O4'	2.47	0.61
1:AA:905:U:H2'	1:AA:906:G:O4'	2.00	0.61
4:AB:97:TRP:HZ2	4:AB:102:LEU:HD13	1.66	0.61
9:AG:78:ARG:HB2	9:AG:156:TRP:CZ3	2.36	0.61
14:AL:27:LEU:C	14:AL:29:GLY:N	2.54	0.61
14:AL:46:LYS:HG2	14:AL:47:LYS:N	2.16	0.61
23:B0:3877:A:C3'	23:B0:1861:G:C8	2.76	0.61
1:AA:131:C:O3'	1:AA:262:A:H1'	2.01	0.61
1:AA:390:C:H2'	1:AA:391:G:H8	1.66	0.61
1:AA:501:C:H2'	1:AA:502:G:C8	2.34	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:779:C:O2'	13:AK:120:ARG:NH1	2.31	0.61
2:AW:76:A:O4'	23:B0:2486:C:C5'	2.48	0.61
6:AD:61:LYS:NZ	6:AD:62:GLN:NE2	2.49	0.61
7:AE:80:ILE:CD1	7:AE:91:LEU:HB2	2.30	0.61
11:AI:44:VAL:HG12	11:AI:51:ARG:HH12	1.66	0.61
15:AM:10:PRO:O	15:AM:45:VAL:HG11	2.01	0.61
15:AM:54:VAL:O	15:AM:58:GLU:HG2	2.01	0.61
15:AM:84:ILE:HG22	21:AS:65:ASN:ND2	2.15	0.61
22:AT:96:GLY:O	22:AT:97:ALA:HB3	2.01	0.61
23:B0:1093:U:O4	23:B0:1094:C:C4	2.54	0.61
23:B0:2223:U:H2'	23:B0:2224:U:O4'	2.01	0.61
1:AA:37:U:H5'	1:AA:501:C:OP1	2.00	0.61
1:AA:179:A:N1	1:AA:196:A:N7	2.48	0.61
1:AA:265:G:H5'	19:AQ:65:ILE:N	2.10	0.61
1:AA:333:G:O2'	22:AT:16:HIS:CE1	2.52	0.61
1:AA:438:G:OP1	6:AD:125:HIS:CE1	2.54	0.61
1:AA:779:C:O4'	13:AK:120:ARG:CB	2.48	0.61
1:AA:796:C:OP1	13:AK:123:LYS:HE2	2.01	0.61
1:AA:1255:G:H2'	1:AA:1258:G:N2	2.13	0.61
2:AV:44:A:O2'	2:AV:45:G:H5'	2.00	0.61
5:AC:129:ALA:HB3	5:AC:132:ARG:HD2	1.82	0.61
14:AL:28:LYS:HD2	14:AL:33:ARG:HH12	1.65	0.61
23:B0:362:C:H2'	23:B0:363:G:H4'	1.82	0.61
23:B0:1094:C:O2'	23:B0:1096:A:H2	1.83	0.61
23:B0:3874:C:H2'	23:B0:3875:A:C5'	2.30	0.61
23:B0:3184:C:C2'	23:B0:3185:U:H5''	2.31	0.61
1:AA:27:G:C2	1:AA:557:G:N3	2.69	0.61
1:AA:266:G:H5'	19:AQ:67:LYS:N	2.15	0.61
1:AA:319:G:C5'	1:AA:1468:A:C4'	2.74	0.61
1:AA:377:G:OP1	18:AP:3:LYS:NZ	2.34	0.61
1:AA:953:G:H1'	15:AM:125:ARG:CB	2.31	0.61
1:AA:1492:A:OP1	14:AL:47:LYS:HA	2.00	0.61
4:AB:114:ARG:NH1	4:AB:118:LEU:HD21	2.15	0.61
5:AC:47:LEU:HD23	5:AC:68:VAL:HG11	1.83	0.61
6:AD:25:ARG:O	6:AD:27:TYR:N	2.33	0.61
15:AM:40:ASN:ND2	15:AM:41:PRO:HD2	2.15	0.61
19:AQ:104:LYS:HE3	23:B0:729:A:N6	2.15	0.61
23:B0:181:A:H5''	23:B0:182:G:OP1	2.00	0.61
23:B0:891:A:N3	23:B0:892:A:N7	2.48	0.61
23:B0:1500:U:H3	23:B0:1520:G:H22	1.48	0.61
1:AA:102:G:N3	1:AA:151:A:H2	1.98	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:247:G:C2	1:AA:282:A:C2	2.89	0.60
1:AA:456:A:C6	1:AA:477:G:C4	2.86	0.60
1:AA:476:U:C2'	1:AA:477:G:C5'	2.79	0.60
1:AA:651:C:C2	1:AA:652:U:C5	2.89	0.60
19:AQ:104:LYS:O	19:AQ:105:ALA:HB2	2.01	0.60
22:AT:43:LEU:HD12	22:AT:55:ILE:HD12	1.81	0.60
23:B0:161:U:H4'	23:B0:194:G:H21	1.66	0.60
1:AA:299:G:C2	1:AA:566:G:O6	2.55	0.60
1:AA:1190:G:C2'	1:AA:1191:A:OP2	2.50	0.60
1:AA:1434:A:H3'	1:AA:1435:G:H5'	1.75	0.60
1:AA:1470:G:O2'	1:AA:1471:G:H5'	2.02	0.60
1:AA:1483:A:C2'	1:AA:1484:C:C5	2.85	0.60
4:AB:140:HIS:O	4:AB:143:GLU:HB2	2.01	0.60
5:AC:191:THR:CG2	5:AC:192:THR:N	2.64	0.60
23:B0:1427:G:H2'	23:B0:1428:G:H5'	1.82	0.60
1:AA:39:G:N1	1:AA:404:U:C4	2.69	0.60
1:AA:675:A:O2'	13:AK:116:HIS:ND1	2.33	0.60
1:AA:893:C:N3	1:AA:894:G:C5	2.69	0.60
5:AC:191:THR:HG22	5:AC:192:THR:N	2.15	0.60
6:AD:157:LEU:HD22	6:AD:161:ASN:ND2	2.16	0.60
12:AJ:30:SER:HB3	12:AJ:84:GLN:HE21	1.67	0.60
19:AQ:101:ARG:HA	19:AQ:101:ARG:NE	2.16	0.60
23:B0:317:U:C3'	23:B0:318:G:H5''	2.31	0.60
23:B0:1139:A:H1'	23:B0:2496:C:H5'	1.83	0.60
1:AA:46:G:C6	1:AA:366:C:C2	2.89	0.60
1:AA:293:G:C5'	1:AA:609:A:C6	2.81	0.60
1:AA:835:U:P	20:AR:60:GLY:HA3	2.40	0.60
1:AA:893:C:O2'	1:AA:894:G:C5'	2.47	0.60
1:AA:1247:U:O2'	1:AA:1248:A:H5'	2.02	0.60
1:AA:1256:A:C5'	1:AA:1258:G:N9	2.63	0.60
1:AA:1475:G:H2'	1:AA:1476:G:C8	2.36	0.60
4:AB:34:ALA:O	4:AB:41:ILE:N	2.31	0.60
5:AC:20:SER:HB3	5:AC:22:TRP:HE1	1.67	0.60
5:AC:26:LYS:HD3	5:AC:26:LYS:N	2.17	0.60
16:AN:11:LYS:O	16:AN:13:THR:N	2.35	0.60
19:AQ:104:LYS:CA	23:B0:727:U:H1'	2.30	0.60
23:B0:414:A:H2'	23:B0:415:A:O4'	2.01	0.60
23:B0:540:G:H2'	23:B0:541:C:H4'	1.82	0.60
23:B0:1352:G:H2'	23:B0:1353:A:H8	1.66	0.60
23:B0:1576:G:H8	23:B0:1576:G:OP2	1.85	0.60
1:AA:108:G:C8	22:AT:12:ALA:CB	2.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:322:C:C4'	22:AT:23:ARG:CD	2.31	0.60
1:AA:848:G:H2'	1:AA:849:C:C6	2.36	0.60
1:AA:1297:C:P	15:AM:44:ARG:NH2	2.75	0.60
1:AA:1416:G:H5''	1:AA:1417:G:P	2.41	0.60
1:AA:1474:G:C2'	23:B0:1705:U:H4'	2.27	0.60
2:AV:40:C:H2'	2:AV:41:U:H5'	1.82	0.60
6:AD:32:ALA:C	6:AD:34:GLU:H	2.04	0.60
7:AE:76:ILE:HD13	7:AE:142:LEU:HD11	1.84	0.60
18:AP:52:ASP:OD2	18:AP:55:ARG:HG3	2.00	0.60
23:B0:941:U:H2'	23:B0:942:U:O4'	2.02	0.60
23:B0:1763:G:H2'	23:B0:1764:A:H4'	1.83	0.60
23:B0:3877:A:C2	23:B0:1861:G:N2	2.20	0.60
1:AA:1003:G:H2'	1:AA:2003:G:C8	2.36	0.60
1:AA:1091:U:O2	1:AA:1093:A:C8	2.54	0.60
1:AA:1117:G:H5'	1:AA:1117:G:H8	1.66	0.60
1:AA:1434:A:OP1	1:AA:1435:G:OP2	2.19	0.60
4:AB:33:TYR:O	4:AB:34:ALA:HB2	2.01	0.60
4:AB:143:GLU:O	4:AB:147:LYS:HG3	2.00	0.60
13:AK:69:ALA:O	13:AK:73:MET:HG2	2.02	0.60
23:B0:742:G:H2'	23:B0:1766:U:H1'	1.83	0.60
1:AA:18:C:O2	1:AA:918:A:C6	2.54	0.60
1:AA:227:G:H2'	1:AA:228:A:O4'	2.01	0.60
1:AA:333:G:C2'	22:AT:16:HIS:NE2	2.64	0.60
1:AA:377:G:OP2	18:AP:3:LYS:NZ	2.33	0.60
1:AA:991:U:O2'	1:AA:992:U:H5'	2.02	0.60
1:AA:1016:A:O4'	1:AA:1218:C:H4'	2.01	0.60
1:AA:1053:G:C4'	1:AA:1054:C:H5'	2.31	0.60
5:AC:33:LEU:HD11	16:AN:53:LEU:CD2	2.32	0.60
5:AC:79:ARG:HE	5:AC:82:GLU:HG2	1.66	0.60
9:AG:38:LEU:HD12	9:AG:38:LEU:O	2.01	0.60
16:AN:8:GLU:O	16:AN:11:LYS:HB2	2.02	0.60
23:B0:2783:U:H2'	23:B0:2785:A:N7	2.16	0.60
1:AA:259:G:OP2	22:AT:83:ARG:HG2	2.01	0.60
1:AA:317:G:OP1	1:AA:353:A:N6	2.21	0.60
1:AA:323:U:C3'	22:AT:22:ARG:CB	2.67	0.60
1:AA:375:U:O3'	1:AA:376:G:C5'	2.49	0.60
1:AA:905:U:C3'	1:AA:906:G:O5'	2.49	0.60
1:AA:923:A:C2	1:AA:1395:C:N3	2.69	0.60
1:AA:1376:U:H2'	1:AA:1377:A:C8	2.36	0.60
2:AV:56:C:O3'	28:BD:74:ILE:CA	2.49	0.60
18:AP:4:ILE:HG13	18:AP:64:ALA:HB1	1.83	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:83:A:H4'	23:B0:84:G:O4'	2.01	0.60
23:B0:1073:G:H1'	23:B0:1099:A:N1	2.17	0.60
23:B0:1127:C:H2'	23:B0:1128:G:H8	1.66	0.60
23:B0:1337:G:H1'	23:B0:1632:A:N6	2.17	0.60
1:AA:28:G:O2'	1:AA:296:U:H5''	2.01	0.60
1:AA:254:G:H4'	19:AQ:18:THR:HG21	1.83	0.60
1:AA:293:G:P	1:AA:609:A:N6	2.68	0.60
1:AA:425:G:O2'	1:AA:426:G:H5'	2.02	0.60
1:AA:919:A:C2	1:AA:1080:A:C2	2.84	0.60
1:AA:1014:A:C5	21:AS:34:TRP:CD2	2.89	0.60
1:AA:1111:A:H61	5:AC:176:HIS:C	2.05	0.60
4:AB:115:LEU:O	4:AB:119:GLU:HG3	2.00	0.60
14:AL:24:VAL:O	14:AL:24:VAL:HG12	2.02	0.60
23:B0:317:U:H2'	23:B0:318:G:H5''	1.82	0.60
23:B0:1194:U:H2'	23:B0:1195:U:C6	2.37	0.60
23:B0:1685:A:H1'	23:B0:1686:A:C5	2.36	0.60
23:B0:1686:A:H2'	23:B0:1686:A:N3	2.17	0.60
23:B0:3866:A:H1'	55:B5:194:ALA:CA	2.32	0.60
23:B0:1921:A:H2'	23:B0:1922:U:H5''	1.83	0.60
1:AA:216:C:C5'	1:AA:465:C:H41	2.14	0.60
1:AA:246:A:H1'	1:AA:247:G:H1'	1.84	0.60
1:AA:292:G:C2	1:AA:608:A:N1	2.70	0.60
1:AA:323:U:O4'	22:AT:19:SER:HB2	2.02	0.60
1:AA:345:C:OP1	38:BN:49:ALA:CA	2.50	0.60
1:AA:458:G:H2'	1:AA:459:G:C8	2.36	0.60
1:AA:1067:A:C4'	1:AA:1068:G:O5'	2.50	0.60
1:AA:1473:A:O2'	23:B0:1718:A:C4	2.55	0.60
2:AW:44:A:H3'	2:AW:45:G:P	2.41	0.60
2:AW:75:C:HO2'	23:B0:2486:C:C3'	2.15	0.60
6:AD:23:GLY:HA3	6:AD:112:VAL:HG12	1.84	0.60
7:AE:24:ARG:HG2	7:AE:24:ARG:HH11	1.66	0.60
9:AG:72:ARG:HG2	9:AG:142:GLU:OE1	2.02	0.60
10:AH:64:LYS:HG2	10:AH:79:VAL:HG21	1.84	0.60
24:B9:67:C:H2'	24:B9:68:A:H5'	1.84	0.60
1:AA:132:C:C5'	1:AA:262:A:O4'	2.43	0.59
1:AA:406:G:C8	1:AA:496:A:C5	2.90	0.59
1:AA:537:G:H5''	14:AL:113:ARG:CZ	2.32	0.59
1:AA:1016:A:H1'	1:AA:1218:C:H4'	1.79	0.59
2:AV:74:C:N3	23:B0:2231:G:C2	2.70	0.59
5:AC:6:HIS:HD2	5:AC:8:ILE:HB	1.66	0.59
23:B0:3127:G:N2	23:B0:3173:A:O2'	2.27	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:246:A:H4'	1:AA:247:G:C4'	2.23	0.59
1:AA:274:A:C2	1:AA:275:G:C1'	2.85	0.59
1:AA:397:A:C8	1:AA:547:A:O2'	2.54	0.59
1:AA:402:G:H5'	1:AA:621:A:N3	2.17	0.59
1:AA:474:U:H2'	1:AA:475:C:H6	1.65	0.59
1:AA:513:C:O2'	1:AA:514:C:H5'	2.03	0.59
1:AA:538:G:H5'	14:AL:114:LYS:HD3	1.83	0.59
1:AA:653:A:O4'	10:AH:56:LYS:CE	2.46	0.59
1:AA:959:A:H3'	1:AA:960:U:H5''	1.82	0.59
1:AA:996:A:H2'	1:AA:997:U:C6	2.37	0.59
6:AD:33:MET:O	6:AD:37:PRO:HG3	2.02	0.59
18:AP:81:ARG:HG3	18:AP:83:GLU:HG2	1.84	0.59
21:AS:13:ASP:HA	21:AS:16:LEU:HB3	1.83	0.59
23:B0:366:U:H2'	23:B0:367:G:H8	1.67	0.59
23:B0:766:A:H2'	23:B0:767:G:C8	2.37	0.59
23:B0:1066:G:H21	23:B0:1096:A:H8	1.50	0.59
23:B0:1119:U:C2'	23:B0:1120:C:O4'	2.50	0.59
23:B0:3128:G:C2'	23:B0:3174:C:H5'	2.22	0.59
23:B0:3148:G:C2'	23:B0:3149:G:H5'	2.33	0.59
23:B0:2691:C:H3'	23:B0:2692:A:C5'	2.32	0.59
1:AA:107:G:H2'	1:AA:108:G:H5'	1.83	0.59
1:AA:205:G:H21	1:AA:207:C:H5	1.44	0.59
1:AA:246:A:C2	1:AA:278:G:N3	2.71	0.59
1:AA:397:A:N6	1:AA:547:A:C1'	2.32	0.59
1:AA:815:A:O3'	1:AA:1527:C:C4'	2.50	0.59
1:AA:1430:C:C4'	23:B0:1721:G:H5'	2.31	0.59
2:AW:41:U:H2'	2:AW:42:G:O4'	2.03	0.59
5:AC:6:HIS:NE2	5:AC:8:ILE:HD12	2.17	0.59
6:AD:25:ARG:C	6:AD:27:TYR:N	2.55	0.59
7:AE:80:ILE:HD11	7:AE:91:LEU:HB2	1.83	0.59
12:AJ:15:THR:HG23	12:AJ:94:VAL:HG22	1.85	0.59
23:B0:81:C:H2'	23:B0:82:G:O4'	2.02	0.59
23:B0:2185:U:H2'	23:B0:2186:G:C8	2.37	0.59
1:AA:109:A:H2'	1:AA:326:G:N2	2.17	0.59
1:AA:253:U:C2	1:AA:275:G:O2'	2.37	0.59
1:AA:265:G:H5'	19:AQ:65:ILE:HA	1.45	0.59
1:AA:393:A:OP1	18:AP:12:LYS:HD3	2.02	0.59
1:AA:600:C:C5'	10:AH:129:VAL:HA	2.32	0.59
1:AA:1381:U:O2'	1:AA:1382:C:H5'	2.02	0.59
5:AC:91:LEU:CD2	5:AC:99:VAL:HG13	2.27	0.59
12:AJ:60:ARG:N	12:AJ:60:ARG:HD2	2.17	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:94:ARG:HH22	21:AS:81:ARG:HD3	1.65	0.59
23:B0:198:A:H5''	23:B0:199:A:H5'	1.82	0.59
23:B0:895:G:H5'	23:B0:895:G:C8	2.35	0.59
23:B0:3127:G:O2'	23:B0:3174:C:H1'	2.03	0.59
23:B0:3128:G:O2'	23:B0:3174:C:H5''	1.93	0.59
1:AA:69:G:C2'	1:AA:101:A:C2	2.85	0.59
1:AA:246:A:N3	1:AA:247:G:H1'	2.17	0.59
1:AA:619:U:C2	6:AD:135:LEU:HG	2.29	0.59
1:AA:737:A:H1'	8:AF:73:ASN:ND2	2.17	0.59
1:AA:1473:A:H4'	23:B0:1719:G:C4'	2.31	0.59
1:AA:1484:C:H5''	23:B0:1943:A:H1'	1.81	0.59
2:AV:74:C:O3'	23:B0:2581:A:OP2	2.20	0.59
7:AE:65:ASN:O	7:AE:65:ASN:CG	2.40	0.59
7:AE:118:ILE:HG22	7:AE:119:LEU:H	1.66	0.59
11:AI:79:LEU:HD23	11:AI:101:PHE:O	2.02	0.59
12:AJ:46:ARG:NH1	12:AJ:64:GLU:HG2	2.18	0.59
23:B0:860:U:C2'	23:B0:861:G:H5'	2.32	0.59
23:B0:918:A:C2'	23:B0:919:U:H5''	2.30	0.59
23:B0:1057:A:H3'	23:B0:1058:G:C5'	2.32	0.59
23:B0:1147:G:H2'	23:B0:1148:G:H8	1.67	0.59
23:B0:1455:C:O2'	23:B0:1644:G:H5''	2.03	0.59
23:B0:2217:G:H4'	23:B0:2219:U:H5	1.68	0.59
1:AA:69:G:C1'	1:AA:102:G:C6	2.85	0.59
1:AA:248:C:O4'	1:AA:282:A:C2	2.55	0.59
1:AA:254:G:HO2'	1:AA:255:G:H5'	1.63	0.59
1:AA:518:C:H5''	1:AA:519:C:C6	2.38	0.59
1:AA:757:U:H4'	1:AA:878:G:N2	2.17	0.59
1:AA:1308:U:C5	15:AM:99:ARG:NH1	2.71	0.59
1:AA:1473:A:C4'	23:B0:1719:G:C4'	2.80	0.59
1:AA:1521:G:H2'	1:AA:1522:U:C6	2.38	0.59
4:AB:97:TRP:HH2	4:AB:176:GLU:CD	2.06	0.59
7:AE:122:GLU:O	7:AE:123:LEU:HD23	2.03	0.59
23:B0:241:C:O2'	23:B0:242:A:H5''	2.03	0.59
23:B0:3867:G:N3	55:B5:44:GLY:CA	2.62	0.59
23:B0:2018:G:H3'	23:B0:2019:C:C5'	2.32	0.59
1:AA:255:G:C1'	19:AQ:16:GLN:NE2	2.11	0.59
1:AA:435:C:H2'	1:AA:436:C:H6	1.67	0.59
1:AA:735:C:O2'	20:AR:75:ILE:HD12	2.03	0.59
1:AA:1306:A:N6	1:AA:1331:G:H1'	2.17	0.59
1:AA:1352:C:H2'	1:AA:1353:G:C8	2.37	0.59
2:AV:74:C:O3'	23:B0:2581:A:H5'	1.90	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AE:118:ILE:CG2	7:AE:119:LEU:N	2.65	0.59
17:AO:11:VAL:HG21	17:AO:34:LEU:HD12	1.83	0.59
22:AT:57:ARG:HH21	22:AT:100:ILE:CG2	2.16	0.59
1:AA:99:C:O2	1:AA:101:A:C8	2.56	0.59
1:AA:131:C:C4'	1:AA:262:A:O2'	2.49	0.59
1:AA:254:G:H5'	19:AQ:43:LEU:HD13	1.85	0.59
1:AA:377:G:OP1	18:AP:3:LYS:CD	2.51	0.59
1:AA:406:G:N2	1:AA:437:U:O2	2.33	0.59
1:AA:705:U:O3'	1:AA:706:A:P	2.60	0.59
1:AA:737:A:C1'	8:AF:73:ASN:ND2	2.65	0.59
1:AA:921:U:O4	1:AA:1396:A:C6	2.56	0.59
1:AA:1064:G:H1'	1:AA:1190:G:H21	1.68	0.59
1:AA:1123:A:O2'	12:AJ:38:ILE:HG22	2.03	0.59
1:AA:1211:U:H5'	1:AA:1212:U:P	2.43	0.59
1:AA:1269:A:N1	1:AA:1313:U:O4'	2.35	0.59
1:AA:1484:C:C5'	23:B0:1943:A:C1'	2.74	0.59
4:AB:120:ALA:O	4:AB:124:SER:HB3	2.02	0.59
6:AD:151:LYS:H	6:AD:151:LYS:CD	2.16	0.59
9:AG:51:GLN:OE1	9:AG:51:GLN:HA	2.02	0.59
9:AG:122:HIS:HA	9:AG:125:MET:HE3	1.85	0.59
16:AN:12:ARG:O	16:AN:14:PRO:N	2.36	0.59
1:AA:21:G:O2'	1:AA:914:A:C6	2.55	0.59
1:AA:258:G:O3'	22:AT:87:LYS:HE2	2.01	0.59
1:AA:686:U:O2'	1:AA:687:A:H8	1.84	0.59
1:AA:1069:C:HO2'	1:AA:1192:C:H1'	1.66	0.59
1:AA:1072:G:H2'	1:AA:1073:U:C6	2.38	0.59
1:AA:1234:C:C4'	1:AA:1365:G:OP1	2.49	0.59
1:AA:1345:U:H5''	11:AI:120:ARG:HH11	1.67	0.59
2:AV:41:U:H2'	2:AV:42:G:O4'	2.03	0.59
4:AB:98:LEU:O	4:AB:101:MET:HG3	2.01	0.59
4:AB:101:MET:CA	4:AB:108:ILE:HD12	2.33	0.59
5:AC:47:LEU:CD1	5:AC:47:LEU:H	2.15	0.59
5:AC:64:VAL:HB	5:AC:99:VAL:CG2	2.33	0.59
8:AF:10:LEU:CD1	8:AF:59:TYR:HB3	2.29	0.59
9:AG:42:ILE:HG23	9:AG:117:ALA:HA	1.84	0.59
10:AH:83:ILE:HG23	10:AH:83:ILE:O	2.03	0.59
23:B0:67:G:H21	23:B0:72:A:H2'	1.67	0.59
23:B0:830:C:O2'	23:B0:852:U:H5''	2.03	0.59
23:B0:1621:C:H4'	23:B0:1626:A:H61	1.68	0.59
23:B0:2181:A:H2'	23:B0:2182:A:H5'	1.85	0.59
23:B0:2368:G:H5''	23:B0:2369:U:O4'	2.02	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:B9:25:G:H2'	24:B9:26:G:H5'	1.84	0.59
24:B9:67:C:C2'	24:B9:68:A:H5'	2.32	0.59
1:AA:20:U:H3	1:AA:915:A:N6	1.85	0.59
1:AA:39:G:O2'	1:AA:40:C:H5'	2.03	0.59
1:AA:265:G:C1'	19:AQ:64:PRO:HB3	2.33	0.59
1:AA:332:G:OP2	22:AT:10:LEU:CG	2.47	0.59
1:AA:1110:A:N6	1:AA:1111:A:C6	2.71	0.59
1:AA:1255:G:O2'	1:AA:1258:G:N2	2.35	0.59
2:AW:76:A:O4'	23:B0:2486:C:H5'	2.03	0.59
5:AC:10:PHE:CZ	5:AC:178:LEU:HD13	2.38	0.59
12:AJ:62:HIS:C	16:AN:59:ALA:N	2.38	0.59
15:AM:81:LEU:HD23	15:AM:81:LEU:N	2.17	0.59
21:AS:25:LYS:H	21:AS:25:LYS:HD2	1.68	0.59
23:B0:576:A:H2	23:B0:580:A:H62	1.51	0.59
23:B0:1088:A:H2'	23:B0:1089:C:O4'	2.03	0.59
1:AA:104:G:C5'	1:AA:172:A:H2	2.09	0.58
1:AA:505:G:H2'	1:AA:506:G:C8	2.37	0.58
1:AA:547:A:P	1:AA:548:G:O5'	2.61	0.58
1:AA:736:C:H2'	1:AA:737:A:C8	2.38	0.58
1:AA:815:A:C2	1:AA:1528:U:C6	2.91	0.58
1:AA:1109:C:P	5:AC:176:HIS:NE2	2.76	0.58
1:AA:1348:U:OP1	11:AI:110:GLU:HB3	2.03	0.58
1:AA:1392:G:O4'	1:AA:1531:A:H4'	2.02	0.58
1:AA:1497:G:H1'	1:AA:1518:A:H2	1.62	0.58
9:AG:95:ARG:HG3	9:AG:95:ARG:NH1	2.17	0.58
16:AN:24:CYS:HB3	16:AN:28:GLY:H	1.66	0.58
18:AP:51:VAL:O	18:AP:51:VAL:HG12	2.02	0.58
23:B0:191:G:O2'	23:B0:192:G:H5'	2.03	0.58
23:B0:1029:C:C2'	23:B0:1030:U:H5''	2.33	0.58
23:B0:3877:A:OP1	23:B0:1861:G:OP2	2.20	0.58
23:B0:2547:C:H2'	23:B0:2548:G:C8	2.38	0.58
23:B0:2727:G:O2'	23:B0:2728:A:H5''	2.03	0.58
1:AA:651:C:H2'	1:AA:652:U:H6	1.67	0.58
1:AA:1014:A:H5'	21:AS:14:HIS:CB	2.33	0.58
1:AA:1416:G:C2'	1:AA:1417:G:C4'	2.70	0.58
1:AA:1483:A:C8	1:AA:1484:C:C4	2.91	0.58
2:AV:41:U:H5'	2:AV:41:U:C6	2.26	0.58
2:AW:16:U:O2'	2:AW:17:U:OP2	2.21	0.58
4:AB:130:ARG:HD2	4:AB:131:PRO:HD2	1.85	0.58
6:AD:157:LEU:HD22	6:AD:161:ASN:HD21	1.67	0.58
12:AJ:45:ARG:O	12:AJ:64:GLU:HA	2.03	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AS:5:LEU:O	21:AS:6:LYS:CB	2.52	0.58
23:B0:181:A:H4'	23:B0:182:G:C5'	2.33	0.58
23:B0:800:U:H3'	23:B0:804:C:N4	2.17	0.58
23:B0:877:G:H21	23:B0:926:C:H41	1.50	0.58
1:AA:113:G:C1'	1:AA:354:G:H5'	2.32	0.58
1:AA:234:C:O2'	19:AQ:70:ARG:CG	2.43	0.58
1:AA:798:G:P	13:AK:122:LYS:HZ3	2.26	0.58
1:AA:1130:A:H3'	1:AA:1130:A:OP2	2.02	0.58
1:AA:1317:C:C5	16:AN:16:PHE:CG	2.91	0.58
1:AA:1441:G:H4'	1:AA:1442:G:N7	2.18	0.58
1:AA:1496:C:O2'	1:AA:1517:G:C6	2.56	0.58
4:AB:133:LYS:O	4:AB:137:ARG:HG3	2.04	0.58
4:AB:156:LYS:O	4:AB:156:LYS:HD3	2.03	0.58
11:AI:93:ARG:NH1	11:AI:97:LYS:NZ	2.51	0.58
22:AT:10:LEU:HD12	22:AT:12:ALA:HB3	1.85	0.58
23:B0:45:C:H5''	23:B0:192:G:N7	2.19	0.58
23:B0:1181:C:C3'	23:B0:1182:U:H5''	2.32	0.58
23:B0:3098:U:C5	23:B0:3099:U:C4	2.90	0.58
1:AA:69:G:C8	1:AA:102:G:N1	2.72	0.58
1:AA:191:G:N2	22:AT:103:GLY:HA2	2.15	0.58
1:AA:1231:G:H5''	11:AI:126:SER:OG	2.04	0.58
5:AC:3:ASN:C	5:AC:4:LYS:HG2	2.23	0.58
12:AJ:3:LYS:N	12:AJ:77:PRO:HD3	2.18	0.58
13:AK:74:ALA:C	13:AK:76:GLY:H	2.06	0.58
19:AQ:69:LYS:C	19:AQ:70:ARG:HD2	2.24	0.58
20:AR:47:THR:HG22	20:AR:48:GLY:N	2.18	0.58
23:B0:805:G:H5''	23:B0:806:A:O5'	2.03	0.58
23:B0:2547:C:H2'	23:B0:2548:G:H8	1.67	0.58
23:B0:2668:U:C4'	23:B0:2669:C:H5'	2.25	0.58
1:AA:130:A:O4'	19:AQ:63:ARG:HG3	2.02	0.58
1:AA:253:U:O4'	1:AA:276:G:O4'	2.21	0.58
1:AA:264:U:O2'	19:AQ:63:ARG:O	2.21	0.58
1:AA:405:U:O3'	1:AA:406:G:P	2.62	0.58
1:AA:651:C:C4	1:AA:752:G:O2'	2.56	0.58
1:AA:676:A:O2'	13:AK:115:PRO:CB	2.52	0.58
1:AA:723:U:O2	1:AA:723:U:H2'	2.04	0.58
1:AA:1054:C:OP1	1:AA:1197:G:OP1	2.21	0.58
2:AV:74:C:N4	23:B0:2231:G:C6	2.68	0.58
4:AB:10:LEU:HD23	4:AB:48:MET:HG3	1.86	0.58
12:AJ:61:GLU:CD	16:AN:58:LYS:NZ	2.55	0.58
14:AL:55:VAL:CG1	14:AL:67:THR:HG23	2.33	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:175:C:H1'	23:B0:2413:A:H61	1.69	0.58
23:B0:2045:A:H4'	23:B0:2421:C:OP2	2.03	0.58
23:B0:2236:U:H3'	23:B0:2237:C:H5''	1.85	0.58
23:B0:2422:C:H2'	23:B0:2423:G:C8	2.37	0.58
1:AA:66:G:H4'	1:AA:199:G:C4'	2.33	0.58
1:AA:254:G:N2	19:AQ:16:GLN:NE2	2.51	0.58
1:AA:322:C:H4'	22:AT:23:ARG:HB2	1.85	0.58
1:AA:390:C:H2'	1:AA:391:G:C8	2.38	0.58
1:AA:707:C:OP1	13:AK:85:ARG:CZ	2.44	0.58
1:AA:779:C:C3'	13:AK:120:ARG:CD	2.82	0.58
1:AA:1484:C:H4'	23:B0:1943:A:C4'	2.33	0.58
1:AA:1504:G:H3'	1:AA:1504:G:OP2	2.04	0.58
2:AV:57:G:H4'	28:BD:76:ASN:CA	2.33	0.58
2:AW:41:U:H6	2:AW:41:U:C5'	2.13	0.58
11:AI:5:TYR:O	11:AI:84:ALA:HA	2.03	0.58
11:AI:11:LYS:O	11:AI:11:LYS:HG2	2.03	0.58
11:AI:111:ARG:HD3	11:AI:112:LYS:C	2.24	0.58
14:AL:92:ASP:O	14:AL:94:PRO:HD3	2.04	0.58
23:B0:1119:U:C4	23:B0:1120:C:C5	2.91	0.58
23:B0:3108:G:C2'	23:B0:3109:U:OP2	2.51	0.58
1:AA:46:G:C4	1:AA:366:C:C5	2.91	0.58
1:AA:1484:C:C3'	23:B0:1943:A:H4'	2.34	0.58
5:AC:14:ILE:O	5:AC:16:ARG:N	2.36	0.58
12:AJ:47:PHE:CD2	16:AN:37:PHE:HE1	2.21	0.58
23:B0:2329:C:H2'	23:B0:2330:G:H5'	1.84	0.58
1:AA:265:G:C3'	19:AQ:66:SER:CA	2.82	0.58
1:AA:653:A:C8	10:AH:56:LYS:CB	2.87	0.58
1:AA:1014:A:C6	21:AS:34:TRP:CZ2	2.92	0.58
1:AA:1060:C:C5	5:AC:2:GLY:HA3	2.39	0.58
1:AA:1256:A:C5'	1:AA:1258:G:C4	2.87	0.58
2:AW:64:A:H2'	2:AW:65:G:O4'	2.04	0.58
4:AB:209:ARG:HE	4:AB:239:VAL:HG11	1.69	0.58
12:AJ:82:ILE:O	12:AJ:82:ILE:HG22	2.03	0.58
21:AS:40:ILE:HG21	21:AS:62:ILE:CD1	2.33	0.58
23:B0:3110:G:OP1	23:B0:3149:G:C5'	2.44	0.58
1:AA:18:C:H1'	1:AA:918:A:C2	2.39	0.58
1:AA:560:U:H4'	1:AA:561:U:H5''	1.83	0.58
1:AA:757:U:H2'	1:AA:758:G:O4'	2.03	0.58
1:AA:817:C:H42	1:AA:1529:G:H1	1.51	0.58
1:AA:878:G:H5'	10:AH:89:PRO:HG2	1.85	0.58
1:AA:1261:A:C4'	1:AA:1283:G:O3'	2.48	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AL:25:PRO:C	14:AL:27:LEU:N	2.52	0.58
14:AL:28:LYS:HD2	14:AL:33:ARG:NH2	2.16	0.58
15:AM:15:VAL:HG23	15:AM:43:THR:O	2.04	0.58
23:B0:653:G:H4'	23:B0:2328:G:H4'	1.86	0.58
23:B0:876:A:H2'	23:B0:877:G:C8	2.39	0.58
23:B0:3098:U:C4	23:B0:3099:U:O4	2.57	0.58
23:B0:2434:G:H2'	23:B0:2435:C:C6	2.39	0.58
23:B0:2491:C:C3'	23:B0:2492:G:H5''	2.34	0.58
23:B0:2858:A:H3'	23:B0:2859:U:H5'	1.85	0.58
24:B9:14:C:H4'	24:B9:17:A:N6	2.19	0.58
1:AA:6:G:N9	7:AE:119:LEU:HD13	2.19	0.58
1:AA:46:G:O2'	1:AA:365:U:C2'	2.52	0.58
1:AA:239:U:H5''	1:AA:240:C:OP1	2.02	0.58
1:AA:714:G:N3	1:AA:777:A:H1'	2.19	0.58
1:AA:812:C:O2'	1:AA:813:U:P	2.62	0.58
1:AA:1075:C:OP1	4:AB:179:LYS:HD3	2.04	0.58
1:AA:1095:U:H2'	1:AA:1096:C:C6	2.39	0.58
1:AA:1223:C:OP1	1:AA:1224:G:H3'	2.04	0.58
1:AA:1248:A:O2'	11:AI:70:LYS:CE	2.52	0.58
1:AA:1496:C:O2'	1:AA:1517:G:N1	2.31	0.58
12:AJ:24:VAL:HG12	12:AJ:28:ARG:HE	1.68	0.58
17:AO:17:ARG:NH1	17:AO:77:ARG:HH11	2.01	0.58
17:AO:87:ILE:O	17:AO:88:ARG:HB2	2.04	0.58
23:B0:2035:G:H2'	23:B0:2036:G:H8	1.69	0.58
1:AA:46:G:C2'	1:AA:365:U:HO2'	2.16	0.57
1:AA:264:U:O2'	19:AQ:63:ARG:HG2	1.82	0.57
1:AA:1194:U:H5''	7:AE:22:GLY:HA2	1.85	0.57
1:AA:1241:G:H2'	1:AA:1242:C:C6	2.39	0.57
6:AD:30:LYS:C	6:AD:32:ALA:N	2.58	0.57
11:AI:114:TYR:CZ	12:AJ:60:ARG:HB2	2.39	0.57
15:AM:13:LYS:O	15:AM:45:VAL:HG23	2.04	0.57
15:AM:84:ILE:C	15:AM:86:CYS:H	2.07	0.57
16:AN:29:ARG:HG2	16:AN:29:ARG:HH11	1.69	0.57
17:AO:36:ILE:HA	17:AO:59:MET:HE3	1.86	0.57
19:AQ:95:TYR:C	19:AQ:97:SER:N	2.58	0.57
20:AR:25:THR:O	20:AR:26:LEU:HB2	2.04	0.57
20:AR:86:VAL:O	20:AR:87:ARG:HB2	2.03	0.57
22:AT:53:LEU:O	22:AT:57:ARG:HD2	2.04	0.57
23:B0:118:U:H1'	23:B0:143:A:C8	2.39	0.57
23:B0:331:U:H2'	23:B0:332:C:H5''	1.85	0.57
23:B0:2854:G:H4'	23:B0:2855:C:H5	1.69	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:22:G:C2'	1:AA:913:A:N1	2.67	0.57
1:AA:119:A:C2	1:AA:240:C:C5	2.92	0.57
1:AA:135:C:C2'	1:AA:136:C:H5'	2.34	0.57
1:AA:527:G:O2'	1:AA:535:A:N1	2.32	0.57
1:AA:702:A:N1	23:B0:1838:G:C2'	2.64	0.57
1:AA:2003:G:C2	1:AA:1004:A:H1'	2.39	0.57
1:AA:1250:A:H4'	11:AI:68:GLY:H	1.68	0.57
4:AB:16:HIS:NE2	4:AB:214:ILE:CG1	2.66	0.57
11:AI:7:THR:HG21	11:AI:9:ARG:NH1	2.19	0.57
16:AN:36:PHE:CD1	16:AN:36:PHE:O	2.58	0.57
23:B0:1195:U:H2'	23:B0:1196:G:C8	2.38	0.57
23:B0:1856:U:C2'	23:B0:3865:A:C8	2.87	0.57
1:AA:60:A:H4'	1:AA:61:G:O5'	2.03	0.57
1:AA:66:G:O3'	1:AA:199:G:H4'	2.04	0.57
1:AA:160:A:H61	1:AA:348:G:H1'	1.69	0.57
1:AA:192:U:O2'	1:AA:193:C:H5'	2.05	0.57
1:AA:619:U:N1	6:AD:135:LEU:CD1	2.66	0.57
1:AA:779:C:C4'	13:AK:120:ARG:HD2	2.22	0.57
1:AA:995:C:C2	16:AN:4:LYS:HD3	2.39	0.57
1:AA:1194:U:C4'	7:AE:22:GLY:CA	2.65	0.57
1:AA:1316:G:N2	1:AA:1318:A:H3'	2.19	0.57
1:AA:1392:G:C5'	1:AA:1531:A:C5'	2.77	0.57
15:AM:120:LYS:HE2	15:AM:123:ALA:HB2	1.86	0.57
16:AN:24:CYS:HB3	16:AN:28:GLY:N	2.19	0.57
21:AS:7:LYS:O	21:AS:7:LYS:HG3	2.04	0.57
23:B0:218:A:O2'	23:B0:219:G:H4'	2.05	0.57
23:B0:1188:A:H2'	23:B0:1189:G:O4'	2.02	0.57
1:AA:67:C:H2'	1:AA:69:G:OP2	2.03	0.57
1:AA:1416:G:C6	1:AA:1417:G:H1'	2.39	0.57
2:AV:36:A:H61	3:AU:6:A:N6	2.02	0.57
4:AB:76:GLN:HG3	4:AB:206:ASP:OD1	2.03	0.57
5:AC:10:PHE:CE2	5:AC:178:LEU:HD13	2.38	0.57
9:AG:15:ASP:OD1	9:AG:17:VAL:N	2.37	0.57
11:AI:46:ALA:HB1	11:AI:77:ILE:HG22	1.85	0.57
13:AK:40:ILE:HG23	13:AK:75:TYR:CD2	2.39	0.57
23:B0:521:U:H4'	23:B0:1248:G:O2'	2.04	0.57
23:B0:1916:G:H2'	23:B0:1917:C:C6	2.40	0.57
23:B0:3184:C:H2'	23:B0:3185:U:C5'	2.34	0.57
23:B0:2641:A:H2'	23:B0:2642:G:O4'	2.05	0.57
1:AA:69:G:H1'	1:AA:102:G:N3	2.20	0.57
1:AA:130:A:O3'	1:AA:263:A:C4'	2.48	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:130:A:N9	1:AA:264:U:O4'	2.38	0.57
1:AA:185:A:H2'	1:AA:186:C:C6	2.39	0.57
1:AA:547:A:H5'	1:AA:548:G:P	2.45	0.57
1:AA:779:C:H4'	13:AK:120:ARG:HG2	0.60	0.57
1:AA:828:A:H2	4:AB:26:PRO:HD2	1.69	0.57
1:AA:957:U:H4'	21:AS:79:THR:HB	1.86	0.57
1:AA:1228:C:OP1	15:AM:115:LYS:HG3	2.03	0.57
2:AV:74:C:N4	23:B0:2232:G:C2	2.73	0.57
2:AV:75:C:C2	23:B0:2230:G:N2	2.70	0.57
5:AC:121:ALA:O	5:AC:125:GLU:HG3	2.04	0.57
5:AC:188:LEU:HD13	5:AC:195:VAL:HG13	1.86	0.57
5:AC:191:THR:HG21	5:AC:193:TYR:CZ	2.39	0.57
6:AD:201:GLN:NE2	7:AE:99:GLY:HA2	2.18	0.57
9:AG:149:ARG:HH12	13:AK:59:TYR:HE1	1.48	0.57
11:AI:5:TYR:CD2	11:AI:6:GLY:N	2.71	0.57
23:B0:879:A:C2'	23:B0:880:C:H5'	2.35	0.57
23:B0:1001:A:H62	23:B0:1200:G:H1'	1.69	0.57
23:B0:1187:A:H2'	23:B0:1188:A:H8	1.69	0.57
23:B0:3877:A:C5'	23:B0:1861:G:P	2.92	0.57
1:AA:205:G:N2	1:AA:207:C:C4	2.71	0.57
1:AA:546:G:H4'	1:AA:548:G:O3'	2.04	0.57
1:AA:675:A:C2'	13:AK:116:HIS:CD2	2.87	0.57
1:AA:780:A:O2'	1:AA:781:A:H5''	2.05	0.57
1:AA:818:G:C3'	1:AA:819:A:C5'	2.83	0.57
1:AA:1297:C:OP1	15:AM:44:ARG:NH2	2.37	0.57
1:AA:1317:C:H2'	1:AA:1318:A:O4'	2.04	0.57
1:AA:1347:G:N2	1:AA:1373:G:H2'	2.19	0.57
1:AA:1503:A:C4	1:AA:1531:A:H2	2.22	0.57
2:AV:44:A:H2'	2:AV:45:G:O4'	2.04	0.57
2:AW:76:A:C4'	23:B0:2486:C:C5'	2.71	0.57
4:AB:12:GLU:C	4:AB:14:GLY:H	2.07	0.57
4:AB:23:ARG:NH1	4:AB:23:ARG:C	2.58	0.57
6:AD:7:PRO:HG2	6:AD:10:ARG:HD2	1.87	0.57
8:AF:3:ARG:HH21	8:AF:64:GLN:NE2	2.01	0.57
12:AJ:61:GLU:CG	16:AN:58:LYS:HD2	2.34	0.57
14:AL:85:ILE:HG23	14:AL:98:TYR:HB3	1.86	0.57
19:AQ:59:ILE:HG22	19:AQ:71:PHE:CD1	2.39	0.57
23:B0:176:A:H5''	23:B0:177:U:H5	1.69	0.57
23:B0:1458:A:H3'	23:B0:1459:U:H5'	1.86	0.57
23:B0:1861:G:C4'	55:B5:198:THR:CA	2.76	0.57
23:B0:1947:G:OP1	23:B0:1947:G:H3'	2.05	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2726:U:H2'	23:B0:2727:G:O4'	2.05	0.57
1:AA:94:G:C5	1:AA:96:C:C4	2.91	0.57
1:AA:119:A:C4	1:AA:240:C:C4	2.93	0.57
1:AA:406:G:H1'	1:AA:496:A:C6	2.39	0.57
1:AA:411:A:N9	1:AA:413:G:H1'	2.19	0.57
1:AA:737:A:C1'	8:AF:73:ASN:HD21	2.18	0.57
1:AA:814:A:N6	1:AA:816:A:C2	2.73	0.57
1:AA:860:A:H2'	1:AA:861:G:O4'	2.03	0.57
1:AA:1474:G:H5''	23:B0:1717:A:N6	2.19	0.57
2:AV:64:A:H2'	2:AV:65:G:O4'	2.04	0.57
2:AW:41:U:H5'	2:AW:41:U:C6	2.27	0.57
4:AB:144:ARG:HG3	4:AB:145:LEU:N	2.19	0.57
5:AC:29:TYR:CZ	16:AN:54:PRO:HG2	2.40	0.57
11:AI:9:ARG:HA	11:AI:13:ALA:O	2.05	0.57
14:AL:50:SER:O	14:AL:51:ALA:HB2	2.05	0.57
19:AQ:104:LYS:NZ	23:B0:730:C:H42	2.02	0.57
23:B0:1517:C:H2'	23:B0:1518:C:C6	2.40	0.57
1:AA:538:G:H4'	14:AL:114:LYS:HE2	1.86	0.57
1:AA:818:G:C2'	1:AA:819:A:H5''	2.34	0.57
1:AA:1109:C:OP2	5:AC:176:HIS:CG	2.57	0.57
1:AA:1340:A:H4'	2:AV:32:C:H4'	1.86	0.57
2:AW:33:U:O2'	2:AW:35:A:N7	2.36	0.57
2:AW:76:A:C2'	23:B0:2562:G:N2	2.60	0.57
10:AH:17:THR:HG22	10:AH:63:LEU:HG	1.86	0.57
23:B0:59:G:N2	23:B0:73:A:H61	2.03	0.57
23:B0:369:C:H2'	23:B0:370:U:O4'	2.05	0.57
23:B0:804:C:O2'	23:B0:806:A:H4'	2.05	0.57
23:B0:1791:C:H1'	23:B0:1793:A:O4'	2.05	0.57
23:B0:1807:A:H5'	23:B0:1809:G:O4'	2.05	0.57
1:AA:128:G:C1'	19:AQ:61:GLU:CD	2.70	0.57
1:AA:131:C:H4'	1:AA:263:A:O4'	2.05	0.57
1:AA:382:A:H2'	1:AA:383:A:H8	1.70	0.57
1:AA:762:C:O2'	23:B0:729:A:C2	2.53	0.57
1:AA:893:C:O3'	1:AA:894:G:C5'	2.36	0.57
1:AA:958:A:C4	21:AS:55:LYS:CD	2.87	0.57
1:AA:1014:A:H2'	1:AA:1015:A:C8	2.39	0.57
1:AA:1178:G:P	11:AI:97:LYS:HZ2	2.28	0.57
1:AA:1261:A:C2'	1:AA:1283:G:H5''	2.35	0.57
1:AA:1394:A:C2	1:AA:1501:C:O4'	2.57	0.57
1:AA:1499:A:C4'	1:AA:1520:G:H4'	2.35	0.57
5:AC:33:LEU:HD11	16:AN:53:LEU:HD22	1.87	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AF:2:ARG:CD	8:AF:69:GLU:HG2	2.35	0.57
8:AF:97:PHE:HB2	20:AR:32:ARG:CZ	2.34	0.57
10:AH:60:ARG:HH11	10:AH:60:ARG:HG3	1.70	0.57
11:AI:17:VAL:HG21	11:AI:80:GLY:HA3	1.86	0.57
11:AI:97:LYS:O	11:AI:100:GLY:N	2.36	0.57
23:B0:1358:C:H2'	23:B0:1359:G:C5'	2.34	0.57
1:AA:346:G:C2'	1:AA:347:G:H5'	2.35	0.57
1:AA:376:G:H5''	18:AP:5:ARG:CG	2.34	0.57
1:AA:505:G:H2'	1:AA:506:G:H8	1.69	0.57
1:AA:762:C:C4'	23:B0:729:A:H61	2.17	0.57
1:AA:1015:A:H2'	1:AA:1016:A:C8	2.40	0.57
1:AA:1255:G:C2'	1:AA:1258:G:N2	2.64	0.57
8:AF:80:ARG:NH1	8:AF:88:VAL:HB	2.19	0.57
10:AH:29:SER:OG	10:AH:32:LYS:HB2	2.05	0.57
12:AJ:31:GLY:HA2	12:AJ:78:ASN:ND2	2.12	0.57
21:AS:10:PHE:CD2	21:AS:11:VAL:N	2.73	0.57
1:AA:375:U:H1'	18:AP:28:ARG:CD	2.35	0.56
1:AA:406:G:C1'	1:AA:496:A:C6	2.88	0.56
1:AA:571:U:H5''	1:AA:819:A:C2	2.40	0.56
1:AA:657:G:H4'	17:AO:28:GLN:HG2	1.87	0.56
1:AA:828:A:C2	4:AB:26:PRO:CD	2.87	0.56
1:AA:923:A:H5'	1:AA:1398:A:C6	2.40	0.56
1:AA:1374:A:H2'	1:AA:1375:A:H5'	1.87	0.56
1:AA:1414:U:O2'	1:AA:1415:G:H5'	2.05	0.56
5:AC:33:LEU:HD23	5:AC:33:LEU:O	2.04	0.56
6:AD:88:VAL:HA	7:AE:97:GLY:HA3	0.57	0.56
10:AH:103:VAL:HG21	10:AH:110:ALA:HB2	1.87	0.56
14:AL:47:LYS:CB	14:AL:48:PRO:HD3	2.35	0.56
15:AM:13:LYS:HD3	15:AM:17:VAL:HG11	1.86	0.56
23:B0:317:U:H3'	23:B0:318:G:H5''	1.86	0.56
23:B0:1289:A:H62	23:B0:1662:G:H1	1.53	0.56
23:B0:2268:G:H22	23:B0:2323:U:H4'	1.68	0.56
1:AA:130:A:N3	1:AA:264:U:C5	2.73	0.56
1:AA:923:A:H2'	1:AA:1398:A:H2'	1.81	0.56
1:AA:1111:A:H61	5:AC:177:THR:N	2.03	0.56
1:AA:1409:C:H2'	1:AA:1410:G:C5'	2.36	0.56
1:AA:1484:C:C4'	23:B0:1943:A:C2'	2.82	0.56
4:AB:12:GLU:C	4:AB:14:GLY:N	2.59	0.56
4:AB:115:LEU:HG	4:AB:153:ARG:HH21	1.69	0.56
6:AD:35:ARG:O	6:AD:36:ARG:HB2	2.04	0.56
6:AD:89:THR:N	7:AE:97:GLY:O	2.38	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AL:26:ALA:O	14:AL:27:LEU:O	2.22	0.56
15:AM:117:VAL:HG12	15:AM:118:ALA:H	1.70	0.56
16:AN:3:ARG:NH1	16:AN:6:LEU:HD11	2.20	0.56
16:AN:14:PRO:C	16:AN:16:PHE:N	2.56	0.56
23:B0:1971:C:H2'	23:B0:1972:G:C8	2.40	0.56
23:B0:1976:U:H2'	23:B0:1977:C:H5'	1.87	0.56
1:AA:27:G:C6	1:AA:557:G:C2	2.87	0.56
1:AA:32:A:C5'	1:AA:398:C:O2'	2.53	0.56
1:AA:246:A:H1'	1:AA:247:G:O4'	2.05	0.56
1:AA:253:U:C4'	1:AA:276:G:C4'	2.83	0.56
1:AA:335:C:H1'	1:AA:1434:A:C4'	2.35	0.56
1:AA:403:C:C2	1:AA:404:U:C5	2.93	0.56
1:AA:675:A:C1'	13:AK:116:HIS:HD2	1.97	0.56
1:AA:974:A:P	16:AN:31:ARG:HG2	2.46	0.56
1:AA:1016:A:C4'	1:AA:1218:C:H4'	2.36	0.56
1:AA:1230:C:H1'	15:AM:126:LYS:HA	1.86	0.56
1:AA:1339:A:H2'	1:AA:1340:A:O4'	2.06	0.56
1:AA:1458:G:N7	1:AA:1459:C:O2	2.38	0.56
2:AV:11:C:H5''	23:B0:1892:C:H4'	1.87	0.56
2:AV:25:C:HO2'	23:B0:1905:G:HO2'	1.47	0.56
2:AV:25:C:HO3'	2:AV:26:G:P	2.26	0.56
2:AW:12:U:H5'	23:B0:1898:U:H4'	1.86	0.56
2:AW:75:C:H2'	23:B0:2486:C:O2'	2.05	0.56
5:AC:7:PRO:CG	5:AC:184:TYR:HB2	2.35	0.56
5:AC:32:LEU:HD23	5:AC:32:LEU:O	2.05	0.56
6:AD:107:ARG:HH21	6:AD:194:LEU:HD12	1.70	0.56
7:AE:79:GLU:OE1	10:AH:105:ARG:CD	2.53	0.56
10:AH:19:VAL:HG23	10:AH:21:LYS:HD3	1.86	0.56
11:AI:39:GLY:O	11:AI:40:LEU:HD23	2.05	0.56
14:AL:6:THR:OG1	14:AL:9:GLN:HG3	2.05	0.56
15:AM:31:LYS:O	15:AM:35:GLU:HB2	2.05	0.56
18:AP:17:TYR:HE1	18:AP:41:PRO:HG2	1.69	0.56
19:AQ:5:VAL:HG22	19:AQ:60:ILE:HG12	1.87	0.56
22:AT:67:ALA:HA	22:AT:73:HIS:H	1.70	0.56
23:B0:874:A:N6	23:B0:928:G:H21	2.03	0.56
23:B0:879:A:O2'	23:B0:880:C:H5'	2.05	0.56
23:B0:984:A:H2'	23:B0:1200:G:H22	1.71	0.56
23:B0:1923:U:H4'	23:B0:1948:C:H41	1.71	0.56
23:B0:2058:U:H4'	23:B0:2575:U:N3	2.20	0.56
23:B0:2270:U:H2'	23:B0:2271:C:C6	2.40	0.56
23:B0:2402:U:H5'	23:B0:2404:A:C5	2.41	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:676:A:C1'	13:AK:115:PRO:HA	2.34	0.56
1:AA:1319:A:H5'	1:AA:1320:C:OP1	2.06	0.56
1:AA:1410:G:C2	1:AA:1491:G:C6	2.94	0.56
4:AB:126:GLU:HG2	4:AB:129:GLU:OE1	2.05	0.56
4:AB:178:ARG:NH1	4:AB:178:ARG:CG	2.67	0.56
6:AD:24:GLU:H	6:AD:112:VAL:CG1	2.19	0.56
12:AJ:12:ASP:HB3	12:AJ:15:THR:HB	1.88	0.56
15:AM:49:THR:HB	15:AM:52:GLU:HG3	1.86	0.56
23:B0:33:C:N4	23:B0:466:A:H61	2.03	0.56
23:B0:1092:U:H2'	23:B0:1093:U:C6	2.41	0.56
23:B0:1093:U:C4	23:B0:1094:C:C4	2.94	0.56
1:AA:173:U:O4'	1:AA:197:A:C4	2.59	0.56
1:AA:1329:A:OP1	15:AM:28:ALA:HB3	2.06	0.56
1:AA:1343:G:C4'	11:AI:122:ALA:HB3	2.35	0.56
1:AA:1351:U:H2'	1:AA:1352:C:C6	2.40	0.56
8:AF:25:ILE:HD12	8:AF:82:ARG:HD2	1.88	0.56
10:AH:105:ARG:HH11	10:AH:105:ARG:HG3	1.71	0.56
17:AO:3:ILE:HG22	17:AO:7:GLU:HB3	1.86	0.56
22:AT:94:ALA:O	22:AT:95:ALA:HB3	2.06	0.56
23:B0:368:A:H2'	23:B0:369:C:O4'	2.06	0.56
23:B0:891:A:C2	23:B0:892:A:N7	2.71	0.56
23:B0:2466:G:H2'	23:B0:2467:A:C8	2.40	0.56
1:AA:89:G:C2'	1:AA:90:C:P	2.93	0.56
1:AA:448:A:H2'	1:AA:449:C:C6	2.40	0.56
1:AA:1086:U:H3	1:AA:1099:G:N2	1.91	0.56
1:AA:1269:A:N3	1:AA:1313:U:H1'	2.20	0.56
2:AV:74:C:C2	23:B0:2231:G:N2	2.74	0.56
4:AB:88:ALA:C	4:AB:90:MET:H	2.09	0.56
18:AP:5:ARG:HB2	18:AP:67:THR:HG1	1.71	0.56
19:AQ:67:LYS:O	19:AQ:68:ARG:HB3	2.05	0.56
23:B0:584:A:H4'	23:B0:2479:U:H5'	1.87	0.56
23:B0:689:A:H2'	23:B0:690:A:H5'	1.87	0.56
23:B0:1103:C:OP1	23:B0:2454:C:O2'	2.23	0.56
1:AA:8:A:H5''	7:AE:121:LYS:HD3	1.88	0.56
1:AA:1004:A:H5''	1:AA:1025:U:C5	2.40	0.56
1:AA:1195:C:H3'	1:AA:1196:U:C5'	2.35	0.56
1:AA:1250:A:H5'	11:AI:68:GLY:O	2.04	0.56
4:AB:124:SER:CB	4:AB:125:PRO:HD2	2.32	0.56
5:AC:84:ILE:O	5:AC:88:ARG:HB2	2.05	0.56
12:AJ:81:THR:O	12:AJ:85:LEU:HG	2.06	0.56
14:AL:47:LYS:HB2	14:AL:48:PRO:HD2	1.88	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:8:GLU:OE1	15:AM:22:ILE:HG12	2.05	0.56
21:AS:63:THR:HG22	21:AS:64:GLU:H	1.71	0.56
23:B0:795:A:H4'	23:B0:796:A:N7	2.20	0.56
23:B0:813:A:O2'	23:B0:815:A:H5'	2.05	0.56
23:B0:1057:A:H3'	23:B0:1058:G:H5'	1.87	0.56
23:B0:1669:A:H2'	23:B0:1670:G:H4'	1.87	0.56
23:B0:1825:C:O2'	23:B0:1826:U:H5'	2.06	0.56
23:B0:2503:G:H2'	23:B0:2504:G:H5''	1.88	0.56
1:AA:547:A:OP1	1:AA:548:G:O5'	2.23	0.56
1:AA:837:G:H2'	1:AA:838:C:N1	2.19	0.56
1:AA:946:A:H2'	1:AA:947:G:C8	2.40	0.56
1:AA:983:A:H5'	1:AA:984:C:OP2	2.06	0.56
1:AA:1092:A:OP2	9:AG:4:ARG:NH1	2.39	0.56
1:AA:1346:A:H4'	1:AA:1347:G:O5'	2.06	0.56
1:AA:1430:C:H5'	23:B0:1721:G:H4'	1.77	0.56
1:AA:1473:A:C4'	23:B0:1719:G:C1'	2.84	0.56
5:AC:46:GLU:O	5:AC:48:TYR:N	2.33	0.56
6:AD:6:GLY:O	6:AD:8:VAL:HG23	2.06	0.56
15:AM:17:VAL:O	15:AM:20:THR:HB	2.05	0.56
19:AQ:103:GLY:O	19:AQ:104:LYS:O	2.24	0.56
22:AT:35:THR:O	22:AT:39:LYS:HB2	2.05	0.56
23:B0:1093:U:O4	23:B0:1094:C:N4	2.39	0.56
23:B0:1567:A:H2'	23:B0:1568:A:O4'	2.06	0.56
23:B0:3110:G:O2'	23:B0:3120:G:H5'	2.06	0.56
1:AA:237:C:H5''	19:AQ:25:ARG:HH21	1.57	0.56
1:AA:401:C:H4'	1:AA:622:A:C1'	2.36	0.56
1:AA:619:U:C2	6:AD:135:LEU:CG	2.79	0.56
1:AA:915:A:C2'	1:AA:916:G:H5'	2.35	0.56
1:AA:1034:G:HO3'	1:AA:1035:A:P	2.28	0.56
1:AA:1255:G:O2'	1:AA:1258:G:C2	2.59	0.56
1:AA:1395:C:H4'	1:AA:1401:G:H21	1.70	0.56
2:AW:25:C:C4	2:AW:26:G:C8	2.94	0.56
5:AC:91:LEU:HD11	5:AC:99:VAL:HG13	1.87	0.56
7:AE:80:ILE:HD12	7:AE:80:ILE:O	2.05	0.56
23:B0:1191:G:H2'	23:B0:1192:A:C8	2.41	0.56
23:B0:2402:U:H5'	23:B0:2404:A:N7	2.21	0.56
1:AA:254:G:C2'	19:AQ:15:MET:HB3	2.36	0.56
1:AA:866:C:C5'	1:AA:919:A:H5''	2.35	0.56
1:AA:1040:U:H2'	1:AA:1041:A:H8	1.70	0.56
1:AA:1042:G:O2'	1:AA:1043:C:H5'	2.06	0.56
1:AA:1147:C:H4'	11:AI:5:TYR:CE1	2.41	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1257:U:H4'	1:AA:1258:G:O5'	2.06	0.56
17:AO:41:GLU:HA	17:AO:41:GLU:OE2	2.05	0.56
22:AT:86:ARG:O	22:AT:90:GLN:HG3	2.05	0.56
23:B0:533:C:H2'	23:B0:534:U:O4'	2.06	0.56
23:B0:1426:U:H2'	23:B0:1427:G:O4'	2.05	0.56
1:AA:135:C:H2'	1:AA:136:C:H5'	1.88	0.55
1:AA:256:U:H5''	19:AQ:17:LYS:CE	2.33	0.55
1:AA:319:G:C4'	1:AA:1468:A:O4'	2.54	0.55
1:AA:411:A:C4	1:AA:413:G:H1'	2.41	0.55
1:AA:476:U:C5	1:AA:477:G:C5'	2.89	0.55
1:AA:893:C:C2'	1:AA:894:G:H5'	2.34	0.55
1:AA:1067:A:N3	1:AA:1068:G:N9	2.54	0.55
1:AA:1202:G:O2'	1:AA:1203:C:H5'	2.06	0.55
4:AB:74:LYS:HZ1	4:AB:206:ASP:CA	2.18	0.55
4:AB:223:ILE:HG21	4:AB:230:VAL:CG2	2.35	0.55
8:AF:46:ARG:HB2	8:AF:60:PHE:HE1	1.71	0.55
12:AJ:51:ARG:HG2	16:AN:45:ARG:HH12	1.70	0.55
15:AM:40:ASN:ND2	15:AM:42:ALA:H	2.05	0.55
20:AR:53:ARG:HD3	20:AR:63:GLN:CB	2.36	0.55
21:AS:40:ILE:HG21	21:AS:62:ILE:HD11	1.88	0.55
23:B0:68:C:H2'	23:B0:69:G:C8	2.40	0.55
23:B0:2299:A:N3	23:B0:2299:A:H2'	2.21	0.55
1:AA:406:G:N1	1:AA:437:U:N3	2.54	0.55
1:AA:547:A:C5'	1:AA:548:G:P	2.94	0.55
1:AA:588:G:C6	1:AA:753:A:C5	2.94	0.55
1:AA:848:G:H2'	1:AA:849:C:O4'	2.04	0.55
1:AA:939:G:H2'	1:AA:940:C:H6	1.71	0.55
1:AA:1006:C:H2'	1:AA:1007:C:H6	1.72	0.55
1:AA:1297:C:P	15:AM:44:ARG:HH22	2.29	0.55
15:AM:29:ARG:HB3	15:AM:64:TRP:CH2	2.42	0.55
22:AT:82:SER:O	22:AT:86:ARG:HB2	2.07	0.55
23:B0:952:A:O2'	23:B0:1204:G:H4'	2.06	0.55
23:B0:2549:G:H2'	23:B0:2550:C:O4'	2.06	0.55
1:AA:26:A:N6	1:AA:558:G:H1'	2.21	0.55
1:AA:477:G:H2'	1:AA:478:A:C8	2.40	0.55
1:AA:1483:A:C5	1:AA:1484:C:C5	2.94	0.55
5:AC:3:ASN:ND2	5:AC:4:LYS:HE2	2.21	0.55
9:AG:116:ALA:HA	9:AG:119:ARG:NH2	2.21	0.55
9:AG:146:GLU:HA	9:AG:149:ARG:HB2	1.87	0.55
23:B0:1971:C:H2'	23:B0:1972:G:H8	1.70	0.55
23:B0:3116:G:H4'	23:B0:3117:A:OP1	2.04	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2755:A:O2'	23:B0:2756:A:H5'	2.06	0.55
23:B0:2759:U:H4'	23:B0:2760:G:OP2	2.05	0.55
1:AA:128:G:H5''	19:AQ:2:PRO:N	2.21	0.55
1:AA:130:A:C5	1:AA:264:U:C2	2.94	0.55
1:AA:254:G:C4'	19:AQ:18:THR:HG21	2.36	0.55
1:AA:292:G:H1'	1:AA:608:A:N6	2.21	0.55
1:AA:737:A:N3	8:AF:73:ASN:ND2	2.54	0.55
1:AA:843:C:H2'	1:AA:844:A:O4'	2.07	0.55
12:AJ:4:ILE:HA	12:AJ:100:THR:HA	1.88	0.55
14:AL:43:VAL:HG12	14:AL:44:THR:H	1.72	0.55
23:B0:26:G:N2	23:B0:524:A:H62	2.03	0.55
1:AA:129:U:H5''	19:AQ:3:LYS:CE	2.37	0.55
1:AA:217:C:H4'	1:AA:469:C:O2	2.06	0.55
1:AA:335:C:C1'	1:AA:1434:A:H4'	2.33	0.55
1:AA:551:U:H2'	1:AA:552:U:C6	2.41	0.55
1:AA:599:C:H4'	10:AH:131:GLY:N	2.22	0.55
1:AA:724:G:OP1	1:AA:854:G:O2'	2.24	0.55
1:AA:1090:U:O4'	1:AA:1169:A:C2	2.53	0.55
1:AA:1111:A:N6	5:AC:177:THR:HA	2.21	0.55
2:AW:25:C:C5	2:AW:26:G:C8	2.95	0.55
4:AB:17:PHE:CD1	4:AB:18:GLY:N	2.75	0.55
6:AD:24:GLU:HG2	6:AD:25:ARG:N	2.21	0.55
6:AD:176:LEU:HA	6:AD:183:GLY:HA2	1.87	0.55
6:AD:177:ASP:OD1	6:AD:179:GLU:HB2	2.07	0.55
23:B0:597:U:H3	23:B0:683:A:H2'	1.71	0.55
23:B0:611:C:H2'	23:B0:612:G:O4'	2.07	0.55
23:B0:1316:G:H2'	23:B0:1317:G:C8	2.41	0.55
23:B0:3874:C:C5	23:B0:3875:A:C8	2.94	0.55
1:AA:6:G:N1	7:AE:119:LEU:CD1	2.59	0.55
1:AA:187:G:O2'	22:AT:104:LEU:C	2.44	0.55
1:AA:227:G:H2'	1:AA:228:A:C8	2.41	0.55
1:AA:476:U:O2	1:AA:477:G:H4'	2.01	0.55
1:AA:923:A:C8	1:AA:1398:A:C2	2.94	0.55
1:AA:1333:A:H2'	1:AA:1334:G:O4'	2.07	0.55
1:AA:1416:G:HO3'	1:AA:1417:G:P	2.29	0.55
5:AC:58:GLU:H	5:AC:65:ALA:HB3	1.72	0.55
7:AE:15:ARG:O	7:AE:27:ARG:O	2.25	0.55
17:AO:70:LEU:HD11	17:AO:77:ARG:HB2	1.89	0.55
19:AQ:59:ILE:CG2	19:AQ:71:PHE:HB3	2.36	0.55
23:B0:784:U:H2'	23:B0:785:U:C6	2.41	0.55
23:B0:892:A:H2'	23:B0:893:G:O4'	2.07	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2261:G:H5''	23:B0:2262:C:O5'	2.06	0.55
23:B0:2727:G:C2'	23:B0:2728:A:H5''	2.36	0.55
1:AA:394:G:N1	1:AA:395:C:C4	2.75	0.55
1:AA:397:A:N7	1:AA:547:A:HO2'	1.45	0.55
1:AA:1059:C:O2'	12:AJ:53:PRO:HD3	2.06	0.55
1:AA:1236:A:H2'	1:AA:1237:C:C6	2.41	0.55
1:AA:1270:C:HO2'	1:AA:1314:C:H5'	1.71	0.55
1:AA:1342:C:H5'	11:AI:125:TYR:CD1	2.42	0.55
1:AA:1474:G:O2'	23:B0:1705:U:O3'	2.25	0.55
2:AV:74:C:C4	23:B0:2232:G:C2	2.95	0.55
4:AB:15:VAL:HG22	4:AB:209:ARG:HG3	1.88	0.55
4:AB:17:PHE:HD1	4:AB:18:GLY:N	2.04	0.55
17:AO:87:ILE:O	17:AO:88:ARG:CB	2.54	0.55
18:AP:81:ARG:CG	18:AP:83:GLU:HG2	2.36	0.55
19:AQ:18:THR:HG23	19:AQ:69:LYS:HE3	1.88	0.55
23:B0:223:C:H4'	23:B0:398:C:H1'	1.88	0.55
23:B0:582:G:H2'	23:B0:583:C:H3'	1.88	0.55
23:B0:805:G:H4'	23:B0:806:A:OP2	2.05	0.55
23:B0:951:G:C2'	23:B0:952:A:H5''	2.35	0.55
23:B0:1528:C:C3'	23:B0:1529:C:H5''	2.36	0.55
23:B0:2222:U:H2'	23:B0:2223:U:C6	2.41	0.55
1:AA:394:G:C4	1:AA:395:C:C5	2.95	0.55
1:AA:865:A:O2'	1:AA:919:A:C4'	2.54	0.55
1:AA:866:C:C4'	1:AA:919:A:H5'	2.36	0.55
1:AA:905:U:C6	1:AA:906:G:C8	2.95	0.55
1:AA:923:A:H1'	1:AA:1398:A:N9	2.18	0.55
1:AA:1268:A:H2'	1:AA:1269:A:C8	2.42	0.55
8:AF:76:ALA:O	8:AF:80:ARG:HG3	2.06	0.55
15:AM:125:ARG:HD2	15:AM:125:ARG:C	2.27	0.55
18:AP:21:VAL:O	18:AP:33:ILE:HB	2.07	0.55
23:B0:64:C:H2'	23:B0:65:C:C6	2.42	0.55
23:B0:3128:G:H4'	23:B0:3174:C:C1'	2.36	0.55
1:AA:46:G:C6	1:AA:366:C:N3	2.75	0.55
1:AA:166:G:O2'	1:AA:167:G:H5'	2.06	0.55
1:AA:212:G:O2'	1:AA:213:G:P	2.65	0.55
1:AA:255:G:C1'	19:AQ:16:GLN:HB3	2.37	0.55
1:AA:281:G:O2'	1:AA:282:A:P	2.65	0.55
1:AA:1234:C:H4'	1:AA:1364:U:H1'	1.89	0.55
1:AA:1271:G:H5'	1:AA:1314:C:OP1	2.07	0.55
1:AA:1409:C:H2'	1:AA:1410:G:H8	1.72	0.55
4:AB:33:TYR:HB2	4:AB:43:ASP:HB2	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AH:36:LEU:HD12	10:AH:59:LEU:HD13	1.88	0.55
12:AJ:51:ARG:H	12:AJ:59:SER:HB2	1.72	0.55
17:AO:27:VAL:O	17:AO:31:LEU:HD13	2.07	0.55
18:AP:26:ARG:HD2	18:AP:31:LYS:O	2.06	0.55
19:AQ:68:ARG:N	19:AQ:70:ARG:NH1	2.55	0.55
23:B0:103:U:H2'	23:B0:104:C:C6	2.41	0.55
23:B0:121:G:O2'	23:B0:1389:C:H4'	2.05	0.55
23:B0:728:G:H2'	23:B0:729:A:O4'	2.06	0.55
23:B0:1975:G:H4'	23:B0:1976:U:H5	1.72	0.55
23:B0:2544:A:H2'	23:B0:2545:A:H4'	1.88	0.55
24:B9:45:C:H3'	24:B9:46:G:H5'	1.89	0.55
1:AA:141:A:O4'	1:AA:182:U:O2	2.25	0.55
1:AA:300:A:H1'	1:AA:565:U:N3	2.22	0.55
1:AA:429:U:H2'	6:AD:25:ARG:NH1	2.22	0.55
1:AA:438:G:C4'	1:AA:439:A:OP1	2.53	0.55
1:AA:490:G:H2'	1:AA:491:G:H8	1.72	0.55
1:AA:588:G:C1'	1:AA:753:A:N1	2.69	0.55
1:AA:954:G:H2'	1:AA:955:U:C6	2.42	0.55
1:AA:1044:A:C3'	1:AA:1045:C:H1'	2.18	0.55
1:AA:1110:A:O2'	1:AA:1111:A:H5'	2.07	0.55
1:AA:1251:A:H2'	1:AA:1252:A:C8	2.41	0.55
1:AA:1460:A:H2'	1:AA:1461:G:O4'	2.07	0.55
2:AV:75:C:C4	23:B0:2231:G:C2	2.90	0.55
4:AB:23:ARG:HD3	4:AB:23:ARG:N	2.22	0.55
5:AC:116:VAL:O	5:AC:120:VAL:HG23	2.07	0.55
6:AD:57:ARG:HB3	6:AD:206:PHE:HB2	1.88	0.55
15:AM:65:LYS:HE3	15:AM:69:GLU:OE2	2.07	0.55
19:AQ:79:SER:O	19:AQ:80:GLY:O	2.25	0.55
23:B0:942:U:C2'	23:B0:943:U:H5'	2.37	0.55
23:B0:1994:U:H2'	23:B0:1995:G:O4'	2.07	0.55
23:B0:2503:G:C2'	23:B0:2504:G:H5''	2.37	0.55
1:AA:54:C:H2'	1:AA:352:C:H41	1.71	0.54
1:AA:101:A:O2'	1:AA:102:G:H5'	2.07	0.54
1:AA:115:G:N2	1:AA:116:A:N6	2.55	0.54
1:AA:188:C:H3'	22:AT:105:SER:HB3	1.88	0.54
1:AA:676:A:H1'	13:AK:115:PRO:HB3	1.89	0.54
1:AA:825:G:H21	10:AH:11:THR:CG2	2.14	0.54
1:AA:1112:C:C2	5:AC:178:LEU:C	2.80	0.54
1:AA:1255:G:H21	1:AA:1276:G:H22	1.53	0.54
1:AA:1343:G:O3'	11:AI:122:ALA:CB	2.49	0.54
2:AW:44:A:C3'	2:AW:45:G:P	2.95	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1514:C:H2'	23:B0:1515:U:O4'	2.07	0.54
23:B0:3110:G:H4'	23:B0:3111:C:OP2	2.07	0.54
1:AA:46:G:C2'	1:AA:365:U:O2'	2.56	0.54
1:AA:302:G:O2'	1:AA:556:C:H5''	2.07	0.54
1:AA:425:G:H4'	6:AD:45:GLN:HE22	1.73	0.54
1:AA:522:C:P	14:AL:72:GLY:N	2.76	0.54
1:AA:779:C:O4'	13:AK:120:ARG:CG	2.56	0.54
1:AA:1026:G:O3'	1:AA:1027:C:P	2.65	0.54
1:AA:1060:C:OP1	16:AN:45:ARG:NH2	2.40	0.54
1:AA:1416:G:P	1:AA:1417:G:P	3.04	0.54
2:AV:29:A:O2'	2:AV:30:G:H5'	2.06	0.54
2:AW:29:A:O2'	2:AW:30:G:H5'	2.06	0.54
4:AB:47:THR:HA	4:AB:202:PRO:HG2	1.87	0.54
12:AJ:24:VAL:HG21	12:AJ:37:PRO:HD3	1.88	0.54
22:AT:72:LEU:HD21	22:AT:80:ARG:CZ	2.38	0.54
23:B0:788:G:C5'	23:B0:790:A:H1'	2.37	0.54
23:B0:798:G:O2'	23:B0:1770:U:H4'	2.07	0.54
23:B0:1976:U:C2'	23:B0:1977:C:H5'	2.38	0.54
1:AA:9:G:H5''	7:AE:126:ARG:CD	2.22	0.54
1:AA:9:G:P	7:AE:126:ARG:NH1	2.80	0.54
1:AA:33:A:H2'	1:AA:34:C:H6	1.72	0.54
1:AA:161:A:H2	1:AA:348:G:C1'	2.19	0.54
1:AA:185:A:O2'	1:AA:186:C:O5'	2.24	0.54
1:AA:429:U:H2'	6:AD:25:ARG:HH12	1.73	0.54
1:AA:755:G:OP2	17:AO:65:ARG:HD2	2.07	0.54
1:AA:779:C:C4'	13:AK:120:ARG:HB3	2.36	0.54
1:AA:1147:C:H4'	11:AI:5:TYR:HE1	1.72	0.54
1:AA:1374:A:C2'	1:AA:1375:A:H5'	2.37	0.54
2:AW:33:U:O2	2:AW:35:A:H3'	2.07	0.54
4:AB:21:ARG:HG3	4:AB:23:ARG:HD2	1.88	0.54
5:AC:59:ARG:O	12:AJ:92:THR:HG22	2.06	0.54
11:AI:7:THR:HG22	11:AI:8:GLY:N	2.22	0.54
23:B0:1187:A:H2'	23:B0:1188:A:C8	2.43	0.54
23:B0:1358:C:H2'	23:B0:1359:G:H5''	1.89	0.54
23:B0:3098:U:C2'	23:B0:3099:U:C6	2.89	0.54
1:AA:21:G:C4'	1:AA:914:A:H61	2.20	0.54
1:AA:46:G:H2'	1:AA:366:C:C5	2.39	0.54
1:AA:69:G:O2'	1:AA:70:A:H5'	2.08	0.54
1:AA:651:C:C2	1:AA:652:U:C4	2.95	0.54
1:AA:905:U:C4	1:AA:906:G:C4	2.94	0.54
1:AA:1232:U:OP1	11:AI:125:TYR:HA	2.06	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1305:G:C2'	1:AA:1306:A:C8	2.80	0.54
1:AA:1328:C:O3'	15:AM:28:ALA:HB3	2.08	0.54
1:AA:1434:A:C3'	1:AA:1435:G:H4'	2.38	0.54
2:AW:16:U:H1'	2:AW:17:U:OP2	2.08	0.54
2:AW:76:A:C2'	23:B0:2486:C:O4'	2.50	0.54
5:AC:91:LEU:HD21	5:AC:99:VAL:CG1	2.30	0.54
5:AC:174:PRO:HB2	5:AC:177:THR:HG22	1.89	0.54
6:AD:199:ASN:HD21	6:AD:201:GLN:HB2	1.71	0.54
7:AE:137:GLU:O	7:AE:141:GLN:HG3	2.07	0.54
10:AH:123:GLU:O	10:AH:127:LEU:HD23	2.05	0.54
12:AJ:4:ILE:HG12	12:AJ:100:THR:HB	1.90	0.54
12:AJ:51:ARG:O	16:AN:45:ARG:CD	2.55	0.54
15:AM:93:ARG:HH11	23:B0:900:U:C5'	2.19	0.54
19:AQ:26:GLN:HE21	19:AQ:37:LYS:HE2	1.71	0.54
20:AR:61:LYS:O	20:AR:65:ILE:HG13	2.08	0.54
23:B0:873:U:H1'	23:B0:2246:A:OP1	2.07	0.54
23:B0:1356:G:H1'	23:B0:1613:G:C2	2.43	0.54
23:B0:1496:G:H1	23:B0:1527:G:H1	1.55	0.54
23:B0:3098:U:C4	23:B0:3099:U:C4	2.96	0.54
1:AA:39:G:C5	1:AA:498:U:C4	2.94	0.54
1:AA:407:G:O2'	6:AD:116:GLN:HG3	2.07	0.54
1:AA:1015:A:C1'	1:AA:1219:U:H5''	2.30	0.54
1:AA:1193:G:O2'	1:AA:1194:U:H5'	2.07	0.54
1:AA:1234:C:H4'	1:AA:1364:U:C1'	2.38	0.54
1:AA:1317:C:C5	16:AN:16:PHE:CD2	2.95	0.54
2:AV:16:U:H1'	2:AV:17:U:OP2	2.08	0.54
7:AE:21:ALA:O	7:AE:23:GLY:N	2.40	0.54
13:AK:13:GLN:HA	13:AK:75:TYR:O	2.08	0.54
15:AM:60:VAL:O	15:AM:63:THR:HG22	2.07	0.54
23:B0:918:A:H2'	23:B0:919:U:C5'	2.35	0.54
23:B0:1319:C:H41	23:B0:1622:G:H2'	1.73	0.54
23:B0:2437:G:H2'	23:B0:2469:G:C2	2.42	0.54
23:B0:2516:U:H2'	23:B0:2517:C:C6	2.42	0.54
1:AA:22:G:C2	1:AA:913:A:H2'	2.35	0.54
1:AA:86:G:H4'	1:AA:87:G:OP2	2.07	0.54
1:AA:173:U:H5''	1:AA:197:A:O4'	2.05	0.54
1:AA:278:G:N2	1:AA:279:A:N6	2.44	0.54
1:AA:300:A:H2'	1:AA:301:G:O4'	2.08	0.54
1:AA:778:G:H4'	13:AK:119:CYS:SG	2.48	0.54
1:AA:893:C:N1	1:AA:894:G:C8	2.76	0.54
1:AA:1497:G:C1'	1:AA:1518:A:C2	2.87	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AB:195:ASP:HB3	10:AH:74:PRO:HD3	1.85	0.54
5:AC:38:ARG:HB3	5:AC:94:LEU:HD21	1.88	0.54
5:AC:130:VAL:O	5:AC:134:ILE:HG13	2.07	0.54
8:AF:4:TYR:OH	8:AF:69:GLU:HB3	2.07	0.54
17:AO:32:LEU:O	17:AO:36:ILE:HG13	2.07	0.54
19:AQ:90:ILE:HG23	23:B0:727:U:OP1	2.08	0.54
23:B0:357:A:C2'	23:B0:358:C:H5'	2.38	0.54
23:B0:635:C:H3'	23:B0:636:G:H5''	1.90	0.54
23:B0:2677:U:H2'	23:B0:2678:C:C6	2.43	0.54
1:AA:38:G:C4'	1:AA:498:U:O2	2.42	0.54
1:AA:38:G:H1'	1:AA:547:A:C8	2.43	0.54
1:AA:532:A:H2'	1:AA:533:A:H5''	1.89	0.54
1:AA:588:G:C1'	1:AA:753:A:C2	2.91	0.54
1:AA:639:G:O2'	1:AA:640:A:H5'	2.08	0.54
1:AA:735:C:H1'	20:AR:75:ILE:CD1	2.38	0.54
1:AA:818:G:O2'	1:AA:819:A:H5''	2.08	0.54
1:AA:864:A:C2	1:AA:917:G:C2'	2.90	0.54
1:AA:977:A:C2	1:AA:1224:G:C6	2.95	0.54
1:AA:1187:G:N3	16:AN:60:SER:OG	2.38	0.54
1:AA:1261:A:O4'	1:AA:1283:G:C4'	2.34	0.54
1:AA:1402:C:O2	1:AA:1500:A:N1	2.41	0.54
1:AA:1458:G:C5	1:AA:1459:C:O2	2.61	0.54
1:AA:1474:G:C5'	23:B0:1717:A:N6	2.70	0.54
4:AB:33:TYR:HB3	4:AB:41:ILE:O	2.08	0.54
4:AB:67:THR:HG22	4:AB:68:ILE:N	2.21	0.54
6:AD:32:ALA:C	6:AD:34:GLU:N	2.60	0.54
23:B0:317:U:C2'	23:B0:318:G:H5''	2.38	0.54
23:B0:857:U:H2'	23:B0:858:G:H5'	1.89	0.54
23:B0:1615:C:H2'	23:B0:1616:C:C6	2.42	0.54
23:B0:1713:G:H2'	23:B0:1714:A:O4'	2.08	0.54
23:B0:2510:A:H61	23:B0:2641:A:N6	2.06	0.54
1:AA:128:G:H5''	19:AQ:2:PRO:CA	2.37	0.54
1:AA:203:A:H4'	1:AA:468:A:H5'	1.88	0.54
1:AA:300:A:O2'	1:AA:564:C:C2	2.58	0.54
1:AA:323:U:C4'	22:AT:19:SER:O	2.56	0.54
1:AA:403:C:C4	1:AA:404:U:C5	2.96	0.54
1:AA:403:C:C4	1:AA:404:U:H5	2.26	0.54
1:AA:438:G:H5'	6:AD:123:HIS:CG	2.43	0.54
1:AA:640:A:N3	10:AH:115:SER:HB2	2.23	0.54
1:AA:653:A:C5'	10:AH:56:LYS:HE2	2.38	0.54
1:AA:750:G:H1'	17:AO:22:THR:OG1	2.08	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1066:C:O2'	1:AA:1067:A:H5'	2.07	0.54
1:AA:1117:G:O3'	1:AA:1118:C:P	2.66	0.54
1:AA:1408:A:H4'	23:B0:1900:U:H3	1.73	0.54
5:AC:37:GLN:NE2	16:AN:52:GLN:OE1	2.40	0.54
8:AF:69:GLU:HA	8:AF:72:VAL:CG2	2.37	0.54
11:AI:85:LEU:O	11:AI:92:TYR:HD1	1.91	0.54
20:AR:86:VAL:O	20:AR:87:ARG:CB	2.55	0.54
23:B0:2227:C:C2'	23:B0:2228:U:H5'	2.35	0.54
23:B0:2446:C:H2'	23:B0:2447:G:C8	2.43	0.54
1:AA:35:G:H2'	1:AA:36:C:C6	2.43	0.54
1:AA:37:U:H2'	1:AA:547:A:C6	2.43	0.54
1:AA:299:G:N2	1:AA:566:G:C5	2.64	0.54
1:AA:476:U:C2'	1:AA:477:G:H5''	2.32	0.54
1:AA:685:G:C5'	13:AK:39:PRO:O	2.55	0.54
1:AA:1053:G:H4'	1:AA:1054:C:H5'	1.88	0.54
1:AA:1261:A:C5'	1:AA:1283:G:O3'	2.56	0.54
1:AA:1494:G:O2'	1:AA:1495:U:H5'	2.08	0.54
4:AB:187:LEU:HD23	4:AB:214:ILE:HG21	1.90	0.54
5:AC:139:GLN:O	5:AC:143:GLU:N	2.37	0.54
7:AE:80:ILE:HD13	7:AE:138:ALA:HB1	1.90	0.54
9:AG:113:GLU:HG2	9:AG:119:ARG:HG2	1.90	0.54
15:AM:8:GLU:OE1	15:AM:22:ILE:HA	2.08	0.54
18:AP:43:LYS:HB3	18:AP:48:TRP:CD1	2.43	0.54
23:B0:201:G:H2'	23:B0:202:A:C8	2.42	0.54
23:B0:319:G:H21	23:B0:340:G:H21	1.55	0.54
23:B0:3128:G:H5'	23:B0:3174:C:H1'	1.89	0.54
23:B0:3184:C:H2'	23:B0:3185:U:H5'	1.89	0.54
23:B0:2379:G:H2'	23:B0:2380:U:O4'	2.07	0.54
1:AA:476:U:H3'	1:AA:477:G:OP1	2.08	0.54
1:AA:826:C:O2'	10:AH:15:ASN:CB	2.56	0.54
1:AA:905:U:O4	1:AA:906:G:C2	2.61	0.54
1:AA:1184:G:H2'	1:AA:1185:G:H8	1.73	0.54
1:AA:1218:C:H2'	1:AA:1219:U:C6	2.42	0.54
1:AA:1340:A:C3'	2:AV:32:C:H4'	2.38	0.54
5:AC:14:ILE:HG22	5:AC:15:THR:N	2.12	0.54
6:AD:148:VAL:HG11	6:AD:158:ILE:HD13	1.89	0.54
9:AG:18:TYR:CE2	9:AG:59:LEU:HB2	2.42	0.54
9:AG:138:LYS:HE2	9:AG:142:GLU:OE1	2.08	0.54
12:AJ:62:HIS:CE1	16:AN:61:TRP:HH2	2.16	0.54
15:AM:37:THR:O	15:AM:37:THR:HG22	2.07	0.54
18:AP:11:SER:OG	18:AP:14:ASN:HB3	2.08	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:7:G:O2'	7:AE:120:THR:O	2.12	0.53
1:AA:264:U:C1'	19:AQ:64:PRO:CD	2.55	0.53
1:AA:332:G:OP2	22:AT:10:LEU:HB3	1.91	0.53
1:AA:743:U:H2'	1:AA:744:C:C6	2.43	0.53
1:AA:866:C:C4'	1:AA:919:A:OP1	2.55	0.53
1:AA:905:U:C3'	1:AA:906:G:OP2	2.51	0.53
1:AA:1068:G:OP2	1:AA:1068:G:H8	1.91	0.53
1:AA:1250:A:H4'	11:AI:68:GLY:N	2.23	0.53
1:AA:1344:C:H5'	11:AI:120:ARG:O	2.09	0.53
1:AA:1475:G:O3'	23:B0:1706:A:H5''	2.07	0.53
5:AC:112:SER:CB	5:AC:115:LEU:HD12	2.36	0.53
7:AE:76:ILE:O	7:AE:93:PRO:HB3	2.07	0.53
7:AE:101:ILE:O	7:AE:120:THR:HB	2.08	0.53
9:AG:69:VAL:HG12	9:AG:100:ALA:HA	1.89	0.53
9:AG:116:ALA:HA	9:AG:119:ARG:CZ	2.37	0.53
10:AH:8:ASP:O	10:AH:12:ARG:HG3	2.08	0.53
10:AH:56:LYS:N	10:AH:56:LYS:HD2	2.23	0.53
10:AH:119:LEU:HD12	10:AH:124:ALA:HA	1.89	0.53
12:AJ:3:LYS:N	12:AJ:75:ILE:HA	2.22	0.53
12:AJ:81:THR:C	12:AJ:83:GLU:H	2.10	0.53
19:AQ:27:PHE:CE1	19:AQ:36:ILE:HD11	2.42	0.53
21:AS:51:VAL:HG12	21:AS:52:TYR:N	2.23	0.53
23:B0:800:U:H3'	23:B0:804:C:H41	1.73	0.53
23:B0:968:C:H2'	23:B0:970:A:OP1	2.08	0.53
23:B0:1137:A:H5''	23:B0:1138:A:H5''	1.90	0.53
23:B0:1316:G:H2'	23:B0:1317:G:H8	1.72	0.53
23:B0:2241:U:H1'	23:B0:2307:A:H1'	1.90	0.53
23:B0:2246:A:H2'	23:B0:2246:A:N3	2.23	0.53
1:AA:193:C:H2'	1:AA:194:C:H6	1.72	0.53
1:AA:279:A:OP2	19:AQ:95:TYR:CZ	2.61	0.53
1:AA:620:C:H2'	1:AA:621:A:O4'	2.07	0.53
1:AA:818:G:H3'	1:AA:819:A:H5''	1.87	0.53
1:AA:1003:G:C2	1:AA:2003:G:C6	2.96	0.53
1:AA:1128:C:H2'	1:AA:1129:C:H5''	1.90	0.53
2:AV:16:U:O2'	2:AV:17:U:OP2	2.21	0.53
4:AB:18:GLY:CA	4:AB:42:ILE:H	2.20	0.53
5:AC:181:ASN:HD21	5:AC:204:LEU:HD12	1.72	0.53
7:AE:18:ARG:HG2	7:AE:19:MET:N	2.24	0.53
16:AN:9:LYS:C	16:AN:9:LYS:HD3	2.28	0.53
16:AN:44:LEU:C	16:AN:44:LEU:HD12	2.29	0.53
19:AQ:104:LYS:HD3	23:B0:729:A:H62	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:45:C:H5''	23:B0:192:G:C8	2.43	0.53
23:B0:3196:G:O2'	23:B0:3197:U:P	2.66	0.53
23:B0:2316:G:H2'	23:B0:2317:G:H8	1.74	0.53
1:AA:255:G:C4'	19:AQ:17:LYS:CB	2.86	0.53
1:AA:317:G:P	1:AA:353:A:H61	2.29	0.53
1:AA:1038:C:H2'	1:AA:1039:C:C6	2.43	0.53
1:AA:1190:G:OP1	5:AC:4:LYS:C	2.47	0.53
1:AA:1298:C:C6	9:AG:114:ARG:HD3	2.43	0.53
1:AA:1315:U:H5	21:AS:6:LYS:HZ1	1.54	0.53
5:AC:33:LEU:HD23	5:AC:33:LEU:C	2.29	0.53
9:AG:71:PRO:HD3	9:AG:103:TRP:HZ3	1.74	0.53
14:AL:53:ARG:NH1	14:AL:92:ASP:OD2	2.42	0.53
22:AT:67:ALA:HB2	22:AT:77:ALA:HB2	1.88	0.53
23:B0:239:A:H4'	23:B0:620:G:H5'	1.89	0.53
23:B0:658:G:H4'	23:B0:2331:A:H5'	1.90	0.53
23:B0:1217:U:H2'	23:B0:1218:C:C6	2.43	0.53
23:B0:2392:G:H2'	23:B0:2393:G:C8	2.44	0.53
23:B0:2483:U:H2'	23:B0:2484:G:H5'	1.91	0.53
23:B0:2623:A:H2'	23:B0:2624:G:O4'	2.09	0.53
1:AA:397:A:N6	1:AA:547:A:N9	2.52	0.53
1:AA:588:G:N3	1:AA:753:A:C6	2.75	0.53
1:AA:685:G:C4'	13:AK:39:PRO:O	2.56	0.53
1:AA:1015:A:C2'	1:AA:1219:U:C5'	2.81	0.53
1:AA:1367:C:OP2	11:AI:112:LYS:NZ	2.41	0.53
1:AA:1405:G:H21	1:AA:1518:A:H1'	1.74	0.53
1:AA:1457:A:C8	1:AA:1459:C:O2	2.60	0.53
1:AA:1516:G:H2'	1:AA:1518:A:OP2	2.08	0.53
4:AB:75:LYS:O	4:AB:75:LYS:HD3	2.08	0.53
12:AJ:22:LYS:CE	12:AJ:90:LEU:HD12	2.33	0.53
14:AL:53:ARG:HG2	14:AL:69:TYR:HE1	1.73	0.53
19:AQ:104:LYS:CD	23:B0:729:A:H62	2.21	0.53
21:AS:42:PRO:O	21:AS:45:VAL:HG23	2.09	0.53
23:B0:412:U:H2'	23:B0:413:G:O4'	2.08	0.53
23:B0:757:U:O2'	23:B0:758:G:H5'	2.09	0.53
23:B0:1141:U:H5'	23:B0:2549:G:N2	2.23	0.53
1:AA:80:C:H2'	1:AA:81:C:C6	2.43	0.53
1:AA:130:A:C4	1:AA:264:U:N1	2.76	0.53
1:AA:252:U:H2'	1:AA:253:U:C6	2.44	0.53
1:AA:256:U:H5''	19:AQ:17:LYS:HE2	1.90	0.53
1:AA:300:A:H1'	1:AA:565:U:O2	2.09	0.53
1:AA:319:G:N3	1:AA:1434:A:N3	2.57	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:737:A:H1'	8:AF:73:ASN:CG	2.29	0.53
1:AA:960:U:H5'	1:AA:960:U:O2	2.08	0.53
1:AA:1157:A:H4'	1:AA:1158:C:O5'	2.08	0.53
2:AW:76:A:C2	23:B0:2562:G:C2	2.96	0.53
4:AB:73:THR:HG23	4:AB:95:GLN:O	2.09	0.53
7:AE:31:LEU:HD22	7:AE:43:LEU:CD2	2.39	0.53
11:AI:44:VAL:HG13	11:AI:51:ARG:NH2	2.23	0.53
15:AM:53:VAL:O	15:AM:57:ARG:HB2	2.08	0.53
23:B0:459:A:H1'	23:B0:466:A:N7	2.23	0.53
23:B0:1298:G:N2	23:B0:1341:G:H5''	2.23	0.53
23:B0:1861:G:P	55:B5:38:GLY:CA	2.96	0.53
23:B0:2494:C:H2'	23:B0:2495:G:C8	2.44	0.53
1:AA:677:U:O2	13:AK:119:CYS:SG	2.67	0.53
1:AA:814:A:O3'	1:AA:815:A:P	2.67	0.53
1:AA:864:A:H2	1:AA:917:G:C2'	2.22	0.53
1:AA:1309:G:P	15:AM:88:ARG:NH2	2.80	0.53
1:AA:1503:A:C4	1:AA:1531:A:N3	2.77	0.53
4:AB:32:ILE:HD13	4:AB:40:HIS:CD2	2.44	0.53
4:AB:124:SER:O	4:AB:127:ILE:HG13	2.08	0.53
5:AC:113:ALA:HB3	5:AC:114:PRO:HD3	1.90	0.53
5:AC:150:LYS:CE	5:AC:152:ILE:HD11	2.37	0.53
6:AD:160:GLN:O	6:AD:163:GLU:HB3	2.08	0.53
10:AH:80:ILE:O	10:AH:80:ILE:HG22	2.08	0.53
11:AI:81:ILE:O	11:AI:85:LEU:HB2	2.08	0.53
13:AK:14:VAL:O	13:AK:15:ALA:CB	2.57	0.53
14:AL:55:VAL:HG11	14:AL:67:THR:HG23	1.91	0.53
23:B0:394:U:H2'	23:B0:395:G:H8	1.74	0.53
23:B0:1479:G:N2	23:B0:1543:G:H21	2.06	0.53
23:B0:1838:G:C2'	23:B0:1839:A:H5'	2.37	0.53
23:B0:2445:C:H2'	23:B0:2446:C:O4'	2.08	0.53
1:AA:9:G:O5'	7:AE:126:ARG:NE	2.41	0.53
1:AA:375:U:C3'	1:AA:376:G:P	2.96	0.53
1:AA:922:G:C2	1:AA:1396:A:C6	2.95	0.53
1:AA:1075:C:H5''	4:AB:179:LYS:NZ	2.23	0.53
1:AA:1343:G:P	11:AI:125:TYR:CE2	2.99	0.53
1:AA:1347:G:C2'	1:AA:1348:U:OP2	2.56	0.53
5:AC:32:LEU:HD21	5:AC:59:ARG:HD2	1.91	0.53
9:AG:69:VAL:HG21	9:AG:104:LEU:HD21	1.89	0.53
10:AH:25:ASP:OD1	10:AH:60:ARG:HD3	2.09	0.53
12:AJ:44:VAL:HG22	12:AJ:66:ARG:HB3	1.91	0.53
14:AL:55:VAL:HG11	14:AL:67:THR:CG2	2.39	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:102:ARG:NH1	15:AM:102:ARG:HB2	2.24	0.53
23:B0:616:U:C2'	23:B0:617:U:H5''	2.35	0.53
23:B0:917:U:H2'	23:B0:918:A:O4'	2.09	0.53
23:B0:1288:A:O2'	23:B0:1289:A:H5'	2.08	0.53
23:B0:1746:A:C2'	23:B0:1747:G:H5'	2.36	0.53
23:B0:2322:U:O2'	23:B0:2323:U:H5'	2.09	0.53
1:AA:7:G:H5'	1:AA:298:A:H5'	1.89	0.53
1:AA:66:G:C4'	1:AA:199:G:H4'	2.37	0.53
1:AA:94:G:C4	1:AA:96:C:C6	2.97	0.53
1:AA:101:A:H2'	1:AA:102:G:H8	1.74	0.53
1:AA:191:G:O3'	1:AA:192:U:OP1	2.26	0.53
1:AA:1015:A:O2'	1:AA:1219:U:H5''	2.06	0.53
1:AA:1409:C:H2'	1:AA:1410:G:O4'	2.09	0.53
5:AC:138:VAL:HG21	5:AC:168:ALA:HB1	1.89	0.53
11:AI:17:VAL:HG11	11:AI:81:ILE:HA	1.90	0.53
14:AL:47:LYS:HB3	14:AL:48:PRO:HD3	1.91	0.53
16:AN:44:LEU:HD12	16:AN:44:LEU:O	2.08	0.53
23:B0:216:U:H5''	23:B0:601:A:N6	2.23	0.53
23:B0:513:A:H4'	23:B0:515:A:H5'	1.90	0.53
23:B0:1791:C:H2'	23:B0:1792:C:H5''	1.91	0.53
23:B0:3102:G:H2'	23:B0:3103:A:H8	1.74	0.53
23:B0:2470:U:O2'	23:B0:2471:U:H5'	2.08	0.53
1:AA:27:G:N7	1:AA:557:G:N1	2.54	0.53
1:AA:32:A:OP1	1:AA:398:C:H1'	2.08	0.53
1:AA:108:G:N7	22:AT:12:ALA:HB1	2.23	0.53
1:AA:217:C:H1'	1:AA:469:C:O2'	2.09	0.53
1:AA:266:G:H5'	19:AQ:66:SER:C	2.28	0.53
1:AA:953:G:H2'	1:AA:954:G:O4'	2.09	0.53
1:AA:977:A:C2'	1:AA:978:A:H5''	2.38	0.53
1:AA:1468:A:H2'	1:AA:1469:G:O4'	2.09	0.53
1:AA:1483:A:C6	1:AA:1484:C:N3	2.76	0.53
1:AA:1498:U:O4'	1:AA:1519:A:C2	2.55	0.53
5:AC:130:VAL:HG12	5:AC:134:ILE:HD11	1.91	0.53
8:AF:3:ARG:NH2	8:AF:64:GLN:NE2	2.57	0.53
11:AI:23:ASN:C	11:AI:23:ASN:HD22	2.12	0.53
14:AL:46:LYS:CG	14:AL:47:LYS:N	2.71	0.53
15:AM:94:ARG:NH2	21:AS:81:ARG:NH1	2.55	0.53
19:AQ:67:LYS:CA	19:AQ:70:ARG:HH12	2.21	0.53
20:AR:73:ALA:HB3	20:AR:79:LEU:HD12	1.91	0.53
22:AT:76:ALA:O	22:AT:80:ARG:HG2	2.09	0.53
23:B0:366:U:H2'	23:B0:367:G:C8	2.43	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:605:G:H4'	23:B0:949:G:O2'	2.08	0.53
23:B0:1286:U:H5''	23:B0:1663:C:H42	1.73	0.53
23:B0:1730:G:H2'	23:B0:1731:C:C6	2.43	0.53
23:B0:1789:U:C2'	23:B0:1790:G:H5'	2.39	0.53
23:B0:2057:U:H1'	23:B0:2577:A:H1'	1.90	0.53
1:AA:9:G:C5'	7:AE:126:ARG:CD	2.71	0.53
1:AA:33:A:H2'	1:AA:34:C:C6	2.44	0.53
1:AA:150:C:C3'	1:AA:151:A:P	2.97	0.53
1:AA:386:C:C2'	1:AA:387:U:H5'	2.39	0.53
1:AA:475:C:H2'	1:AA:476:U:C6	2.44	0.53
1:AA:623:C:O2'	1:AA:624:C:H5'	2.09	0.53
1:AA:791:G:H2'	1:AA:792:A:H5'	1.91	0.53
1:AA:835:U:OP2	20:AR:60:GLY:HA3	2.08	0.53
1:AA:1113:C:N1	5:AC:178:LEU:HD23	2.24	0.53
1:AA:1232:U:OP1	11:AI:126:SER:N	2.42	0.53
1:AA:1257:U:O2'	1:AA:1258:G:OP2	2.21	0.53
1:AA:1481:U:O2'	1:AA:1482:G:H5'	2.09	0.53
1:AA:1513:A:H2'	1:AA:1514:C:C6	2.44	0.53
6:AD:57:ARG:HH21	7:AE:107:ARG:NH1	2.00	0.53
6:AD:126:ILE:HG22	6:AD:127:THR:N	2.23	0.53
15:AM:11:ARG:CG	15:AM:12:ASN:N	2.72	0.53
23:B0:192:G:C4'	23:B0:193:A:H4'	2.38	0.53
23:B0:665:A:OP2	23:B0:666:U:H5'	2.09	0.53
23:B0:1474:A:H3'	23:B0:1474:A:N3	2.23	0.53
23:B0:2010:G:H2'	23:B0:2011:U:O4'	2.09	0.53
23:B0:2025:A:H2'	23:B0:2026:C:H5''	1.91	0.53
24:B9:81:C:H2'	24:B9:82:U:O4'	2.09	0.53
1:AA:13:U:C4	1:AA:915:A:C8	2.97	0.52
1:AA:13:U:O4'	1:AA:914:A:OP1	2.27	0.52
1:AA:21:G:C1'	1:AA:914:A:H61	2.05	0.52
1:AA:188:C:C2	22:AT:106:ALA:HA	2.44	0.52
1:AA:370:C:O2'	1:AA:371:G:H5'	2.09	0.52
1:AA:545:C:O2'	1:AA:549:C:H5''	2.09	0.52
1:AA:621:A:H2'	1:AA:622:A:C8	2.44	0.52
1:AA:835:U:O5'	20:AR:64:ARG:NH2	2.39	0.52
1:AA:1003:G:N2	1:AA:1039:C:C2	2.77	0.52
1:AA:1211:U:C3'	1:AA:1212:U:P	2.96	0.52
1:AA:1347:G:C5	11:AI:107:ARG:NH1	2.78	0.52
1:AA:1359:C:C5	16:AN:35:ARG:CZ	2.92	0.52
4:AB:134:GLU:C	4:AB:136:VAL:H	2.12	0.52
15:AM:88:ARG:HG3	15:AM:98:VAL:CG1	2.40	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:AP:19:ILE:HG22	18:AP:36:ILE:HG13	1.90	0.52
21:AS:53:ASN:HB2	21:AS:56:GLN:H	1.73	0.52
23:B0:468:A:H2'	23:B0:469:G:H4'	1.90	0.52
23:B0:669:G:H2'	23:B0:670:U:C6	2.44	0.52
23:B0:1289:A:O2'	23:B0:1290:A:H5'	2.09	0.52
1:AA:247:G:N2	1:AA:282:A:C2	2.69	0.52
1:AA:357:G:O2'	1:AA:358:U:H5'	2.10	0.52
1:AA:762:C:C4'	23:B0:729:A:N6	2.71	0.52
1:AA:976:G:OP1	16:AN:31:ARG:O	2.27	0.52
1:AA:1006:C:H2'	1:AA:1007:C:C6	2.44	0.52
1:AA:1121:U:H2'	1:AA:1122:U:H6	1.73	0.52
4:AB:10:LEU:C	4:AB:12:GLU:H	2.12	0.52
5:AC:23:TYR:CD2	5:AC:24:ALA:N	2.78	0.52
5:AC:83:ARG:C	5:AC:85:ARG:N	2.62	0.52
7:AE:79:GLU:CD	10:AH:105:ARG:NE	2.62	0.52
14:AL:82:VAL:N	14:AL:106:ASP:OD1	2.34	0.52
23:B0:579:G:H2'	23:B0:2013:A:N6	2.24	0.52
23:B0:2860:C:H2'	23:B0:2861:A:O4'	2.09	0.52
1:AA:115:G:N2	1:AA:117:G:O6	2.42	0.52
1:AA:134:A:H1'	1:AA:325:A:C4	2.44	0.52
1:AA:148:G:H2'	1:AA:149:A:H8	1.74	0.52
1:AA:186:C:C5'	22:AT:81:LYS:HZ3	2.21	0.52
1:AA:828:A:N3	4:AB:26:PRO:CB	2.72	0.52
1:AA:1393:U:O2	1:AA:1395:C:N3	2.42	0.52
5:AC:22:TRP:CZ2	16:AN:54:PRO:HG3	2.44	0.52
5:AC:77:ILE:HG22	5:AC:81:GLY:HA2	1.90	0.52
7:AE:74:GLY:HA3	7:AE:116:THR:HG22	1.92	0.52
13:AK:17:GLY:O	13:AK:80:VAL:HA	2.09	0.52
14:AL:42:THR:HG21	14:AL:52:LEU:HB3	1.91	0.52
19:AQ:45:HIS:HB2	19:AQ:65:ILE:CD1	2.37	0.52
19:AQ:104:LYS:HE3	23:B0:729:A:H62	1.74	0.52
23:B0:490:A:O2'	23:B0:491:A:H5'	2.09	0.52
23:B0:1278:A:H4'	23:B0:1279:G:O5'	2.08	0.52
23:B0:2329:C:C2'	23:B0:2330:G:H5'	2.39	0.52
1:AA:299:G:H2'	1:AA:300:A:C8	2.44	0.52
1:AA:476:U:C2'	1:AA:477:G:H5'	2.39	0.52
1:AA:1234:C:C4'	1:AA:1364:U:H1'	2.40	0.52
1:AA:1239:A:C2'	1:AA:1298:C:N4	2.68	0.52
1:AA:1424:C:O2'	1:AA:1425:U:H5'	2.09	0.52
1:AA:1428:A:H2'	1:AA:1429:C:C6	2.44	0.52
1:AA:1435:G:H2'	1:AA:1436:U:H6	1.69	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1511:G:H2'	1:AA:1512:U:O4'	2.09	0.52
5:AC:20:SER:HB3	5:AC:22:TRP:NE1	2.24	0.52
19:AQ:104:LYS:CG	23:B0:726:G:C5	2.91	0.52
21:AS:10:PHE:CD2	21:AS:10:PHE:C	2.83	0.52
21:AS:13:ASP:O	21:AS:17:GLU:HG2	2.10	0.52
23:B0:839:U:H2'	23:B0:841:G:O4'	2.09	0.52
23:B0:841:G:H3'	23:B0:841:G:N3	2.24	0.52
23:B0:3875:A:O2'	55:B5:44:GLY:CA	2.57	0.52
23:B0:3098:U:C6	23:B0:3099:U:C5	2.98	0.52
23:B0:3148:G:H2'	23:B0:3149:G:H5'	1.91	0.52
23:B0:2240:C:H2'	23:B0:2241:U:H5'	1.90	0.52
23:B0:2418:A:H4'	23:B0:2420:C:OP2	2.10	0.52
1:AA:13:U:C1'	1:AA:914:A:C5'	2.87	0.52
1:AA:134:A:H1'	1:AA:325:A:C5	2.44	0.52
1:AA:216:C:C5'	1:AA:466:A:H61	2.10	0.52
1:AA:252:U:H1'	1:AA:275:G:C2	2.44	0.52
1:AA:323:U:H4'	22:AT:19:SER:CA	2.30	0.52
1:AA:501:C:H1'	1:AA:549:C:H1'	1.91	0.52
1:AA:588:G:O6	1:AA:753:A:C8	2.62	0.52
1:AA:979:C:H2'	1:AA:980:C:H5'	1.91	0.52
1:AA:994:A:C5	16:AN:5:ALA:CB	2.89	0.52
1:AA:1202:G:H2'	1:AA:1203:C:O4'	2.10	0.52
1:AA:1317:C:N1	16:AN:16:PHE:CD2	2.77	0.52
1:AA:1409:C:N3	1:AA:1410:G:N7	2.57	0.52
4:AB:15:VAL:HG11	4:AB:209:ARG:C	2.30	0.52
4:AB:23:ARG:O	4:AB:24:TRP:O	2.27	0.52
15:AM:117:VAL:HG12	15:AM:118:ALA:N	2.24	0.52
23:B0:509:U:H3	23:B0:513:A:H62	1.58	0.52
23:B0:860:U:H2'	23:B0:861:G:H5'	1.90	0.52
23:B0:942:U:O2'	23:B0:943:U:H5'	2.09	0.52
24:B9:50:U:H2'	24:B9:51:G:C8	2.44	0.52
1:AA:69:G:C8	1:AA:102:G:C6	2.96	0.52
1:AA:130:A:H2	1:AA:263:A:C2	2.25	0.52
1:AA:538:G:P	14:AL:114:LYS:HB2	2.49	0.52
1:AA:546:G:H5'	1:AA:549:C:OP1	2.09	0.52
1:AA:1027:C:O3'	1:AA:1028:C:P	2.68	0.52
1:AA:1128:C:H1'	1:AA:1146:A:H61	1.75	0.52
8:AF:43:LEU:CD2	8:AF:43:LEU:H	2.23	0.52
9:AG:85:TYR:HD1	9:AG:154:TYR:CE1	2.27	0.52
11:AI:48:GLU:OE1	11:AI:51:ARG:HD2	2.09	0.52
11:AI:127:LYS:N	11:AI:127:LYS:HD2	2.25	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:AR:19:LYS:O	20:AR:20:ALA:HB2	2.10	0.52
23:B0:176:A:H1'	23:B0:2221:G:H21	1.75	0.52
23:B0:1856:U:H2'	23:B0:3865:A:C8	2.45	0.52
23:B0:2533:U:H2'	23:B0:2534:U:C6	2.45	0.52
23:B0:2698:G:H2'	23:B0:2699:G:C8	2.45	0.52
1:AA:114:U:H1'	1:AA:353:A:H1'	1.91	0.52
1:AA:131:C:N1	1:AA:262:A:C2	2.77	0.52
1:AA:373:A:O2'	1:AA:374:A:H5'	2.09	0.52
1:AA:476:U:C5	1:AA:477:G:O5'	2.62	0.52
1:AA:600:C:OP1	10:AH:97:VAL:HG12	2.10	0.52
1:AA:844:A:H2'	1:AA:845:A:C8	2.44	0.52
1:AA:921:U:O4	1:AA:1396:A:N1	2.43	0.52
1:AA:994:A:N1	16:AN:4:LYS:C	2.38	0.52
1:AA:1296:C:C5'	15:AM:14:ARG:HD2	2.40	0.52
4:AB:26:PRO:O	4:AB:29:ALA:HB2	2.10	0.52
5:AC:94:LEU:HD22	5:AC:95:THR:HG23	1.92	0.52
12:AJ:27:ALA:HB1	12:AJ:81:THR:HG23	1.92	0.52
16:AN:33:VAL:HA	16:AN:40:CYS:HA	1.91	0.52
22:AT:50:GLU:O	22:AT:100:ILE:HD12	2.09	0.52
22:AT:93:GLU:HA	22:AT:93:GLU:OE2	2.09	0.52
23:B0:3866:A:N7	23:B0:3875:A:H2	2.07	0.52
23:B0:3877:A:C8	23:B0:3877:A:C3'	2.92	0.52
23:B0:3128:G:H5'	23:B0:3174:C:C1'	2.39	0.52
1:AA:21:G:N3	1:AA:914:A:N7	2.57	0.52
1:AA:239:U:C5'	1:AA:240:C:OP1	2.58	0.52
1:AA:473:C:O2'	1:AA:474:U:H5'	2.09	0.52
1:AA:819:A:N7	1:AA:1529:G:C2	2.77	0.52
1:AA:1038:C:H2'	1:AA:1039:C:H6	1.75	0.52
1:AA:1367:C:H5'	11:AI:114:TYR:HB2	1.91	0.52
1:AA:1426:C:H2'	1:AA:1427:U:C6	2.44	0.52
1:AA:1483:A:C5	1:AA:1484:C:N3	2.78	0.52
8:AF:8:ILE:HD11	8:AF:79:LEU:HD13	1.92	0.52
10:AH:14:ARG:O	10:AH:18:ARG:HD3	2.10	0.52
12:AJ:62:HIS:CB	16:AN:59:ALA:CA	2.87	0.52
15:AM:93:ARG:HD3	23:B0:900:U:H4'	1.92	0.52
23:B0:929:A:H3'	23:B0:930:A:C5'	2.30	0.52
23:B0:1018:C:H2'	23:B0:1019:U:C5	2.44	0.52
23:B0:3877:A:C8	23:B0:3877:A:H3'	2.45	0.52
23:B0:2401:A:H2'	23:B0:2403:C:C5	2.45	0.52
24:B9:107:C:C2'	24:B9:108:G:H5'	2.39	0.52
1:AA:779:C:HO2'	13:AK:120:ARG:HH11	1.57	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1256:A:C4'	1:AA:1258:G:C8	2.90	0.52
1:AA:1397:C:H4'	1:AA:1398:A:OP2	2.09	0.52
1:AA:1505:G:C4'	1:AA:1506:U:O5'	2.41	0.52
4:AB:142:LEU:HD22	4:AB:146:GLN:HE22	1.73	0.52
6:AD:88:VAL:HG13	7:AE:97:GLY:HA2	0.59	0.52
9:AG:42:ILE:CG2	9:AG:120:ILE:HD12	2.39	0.52
10:AH:24:THR:HG23	10:AH:61:VAL:HB	1.92	0.52
12:AJ:69:ASN:O	12:AJ:70:ARG:HD3	2.10	0.52
14:AL:119:LYS:O	14:AL:120:TYR:HB2	2.10	0.52
15:AM:73:GLU:O	15:AM:76:ALA:HB3	2.09	0.52
15:AM:77:ASN:O	15:AM:80:ARG:HB3	2.10	0.52
16:AN:3:ARG:O	16:AN:4:LYS:C	2.48	0.52
23:B0:476:G:H2'	23:B0:477:A:C8	2.45	0.52
23:B0:1325:U:H4'	23:B0:1326:U:C5	2.45	0.52
23:B0:1686:A:H2'	23:B0:1687:C:H5'	1.92	0.52
23:B0:1856:U:O4	23:B0:3865:A:N6	2.39	0.52
1:AA:36:C:O2'	1:AA:501:C:H5''	2.10	0.52
1:AA:163:C:O2'	1:AA:164:U:H5'	2.10	0.52
1:AA:170:U:C2'	1:AA:171:A:H5'	2.39	0.52
1:AA:376:G:C5'	18:AP:5:ARG:HD2	2.36	0.52
1:AA:406:G:H1'	1:AA:496:A:N6	2.25	0.52
1:AA:684:A:C4'	13:AK:38:ASN:ND2	2.73	0.52
1:AA:794:A:H2'	1:AA:795:C:C6	2.45	0.52
1:AA:853:G:O2'	1:AA:854:G:H5'	2.10	0.52
1:AA:1152:A:H2'	1:AA:1153:C:C6	2.45	0.52
1:AA:1251:A:H4'	11:AI:12:GLU:OE2	2.10	0.52
1:AA:1296:C:H5''	15:AM:14:ARG:HD2	1.91	0.52
1:AA:1428:A:C4'	23:B0:1704:G:H5'	2.40	0.52
1:AA:1458:G:O3'	22:AT:24:LEU:HD21	2.10	0.52
1:AA:1518:A:H2'	1:AA:1519:A:C8	2.45	0.52
5:AC:108:ASN:C	5:AC:110:ASN:H	2.12	0.52
7:AE:12:LEU:C	7:AE:12:LEU:HD22	2.30	0.52
7:AE:13:ILE:HG22	7:AE:30:ALA:CB	2.40	0.52
10:AH:49:GLU:HG2	10:AH:62:TYR:HE2	1.75	0.52
12:AJ:38:ILE:HG13	12:AJ:71:LEU:HB3	1.90	0.52
16:AN:57:ARG:HG2	16:AN:58:LYS:H	1.75	0.52
19:AQ:45:HIS:CB	19:AQ:65:ILE:HD13	2.39	0.52
23:B0:81:C:H4'	23:B0:307:C:H5'	1.92	0.52
23:B0:758:G:H2'	23:B0:759:C:H5'	1.92	0.52
23:B0:959:C:H5''	23:B0:972:C:O2'	2.10	0.52
23:B0:986:A:H2'	23:B0:987:G:H5'	1.92	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1029:C:C3'	23:B0:1030:U:H5''	2.40	0.52
23:B0:1140:A:H61	23:B0:2470:U:H6	1.58	0.52
23:B0:3093:C:C2	23:B0:2204:A:N6	2.78	0.52
23:B0:2245:A:H4'	23:B0:2246:A:O5'	2.10	0.52
24:B9:73:C:H3'	24:B9:74:A:P	2.48	0.52
1:AA:33:A:OP2	1:AA:398:C:C5'	2.57	0.51
1:AA:277:C:OP1	19:AQ:41:LYS:HE3	2.10	0.51
1:AA:472:G:O2'	1:AA:473:C:H5'	2.10	0.51
1:AA:1129:C:O2'	1:AA:1130:A:OP2	2.24	0.51
1:AA:1241:G:H2'	1:AA:1242:C:H6	1.75	0.51
2:AV:41:U:H6	2:AV:41:U:C5'	2.13	0.51
2:AV:75:C:O2'	23:B0:2047:C:P	2.68	0.51
2:AV:76:A:OP1	23:B0:2564:U:O4'	2.28	0.51
5:AC:70:VAL:O	5:AC:106:VAL:HG23	2.09	0.51
7:AE:40:ARG:HG2	7:AE:40:ARG:HH11	1.76	0.51
8:AF:10:LEU:HD11	8:AF:59:TYR:CD2	2.41	0.51
12:AJ:22:LYS:NZ	12:AJ:91:PRO:HD3	2.25	0.51
23:B0:77:C:H2'	23:B0:78:C:C6	2.45	0.51
23:B0:441:A:H2'	23:B0:442:A:O4'	2.10	0.51
23:B0:451:A:H2'	23:B0:452:G:C8	2.45	0.51
23:B0:840:U:H4'	23:B0:841:G:C2	2.45	0.51
23:B0:1038:U:O2	23:B0:2466:G:H4'	2.10	0.51
23:B0:1431:U:H2'	23:B0:1432:G:O4'	2.09	0.51
1:AA:588:G:N9	1:AA:753:A:N1	2.58	0.51
1:AA:791:G:H2'	1:AA:792:A:C5'	2.40	0.51
1:AA:1085:U:O3'	1:AA:1086:U:C6	2.64	0.51
1:AA:1191:A:H2'	1:AA:1192:C:C6	2.45	0.51
1:AA:1261:A:H4'	1:AA:1283:G:C5'	2.40	0.51
1:AA:1457:A:C4	1:AA:1459:C:C2	2.89	0.51
1:AA:1458:G:H8	1:AA:1458:G:O5'	1.91	0.51
5:AC:84:ILE:O	5:AC:84:ILE:HG12	2.10	0.51
5:AC:177:THR:HG23	5:AC:177:THR:O	2.10	0.51
6:AD:65:ARG:HB2	6:AD:75:PHE:CE1	2.45	0.51
11:AI:31:GLN:HB3	11:AI:35:GLU:HB3	1.92	0.51
13:AK:27:ASN:HA	13:AK:56:GLY:HA2	1.92	0.51
13:AK:62:GLN:HG3	13:AK:97:ALA:HB2	1.92	0.51
20:AR:46:GLU:H	20:AR:46:GLU:CD	2.13	0.51
23:B0:230:C:H2'	23:B0:231:G:O4'	2.10	0.51
23:B0:513:A:C4'	23:B0:515:A:H5'	2.40	0.51
23:B0:652:C:H42	23:B0:657:A:H61	1.56	0.51
23:B0:864:C:H2'	23:B0:865:A:C8	2.46	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:925:U:H4'	23:B0:926:C:C6	2.45	0.51
23:B0:1029:C:OP1	23:B0:1047:G:H4'	2.10	0.51
23:B0:1031:C:H1'	23:B0:1151:U:O2	2.09	0.51
23:B0:2038:C:H5'	23:B0:2039:G:H5'	1.91	0.51
1:AA:37:U:C1'	1:AA:547:A:C2	2.94	0.51
1:AA:148:G:H2'	1:AA:149:A:C8	2.45	0.51
1:AA:246:A:N6	1:AA:281:G:H1'	2.24	0.51
1:AA:375:U:O3'	1:AA:376:G:O5'	2.28	0.51
1:AA:580:U:H2'	1:AA:581:G:O4'	2.11	0.51
1:AA:846:C:O2'	1:AA:847:C:H5'	2.10	0.51
1:AA:911:U:P	14:AL:97:ARG:HH21	2.33	0.51
1:AA:1021:G:C2	1:AA:1022:G:H1'	2.45	0.51
1:AA:1423:G:O2'	1:AA:1424:C:H5'	2.09	0.51
1:AA:1473:A:C2'	23:B0:1718:A:C2	2.93	0.51
2:AW:25:C:H2'	2:AW:26:G:H5'	1.58	0.51
7:AE:115:VAL:HG12	7:AE:116:THR:N	2.24	0.51
19:AQ:102:GLY:O	23:B0:726:G:C2	2.63	0.51
23:B0:215:G:H4'	23:B0:617:U:O2'	2.09	0.51
23:B0:341:A:H1'	23:B0:1223:G:O6	2.10	0.51
23:B0:1220:G:H2'	23:B0:1221:C:C6	2.45	0.51
23:B0:1807:A:H5'	23:B0:1809:G:C1'	2.40	0.51
23:B0:2217:G:H4'	23:B0:2219:U:C5	2.46	0.51
23:B0:2841:U:O2	23:B0:2843:A:H1'	2.11	0.51
1:AA:80:C:H2'	1:AA:81:C:H6	1.76	0.51
1:AA:572:A:H4'	1:AA:917:G:H5'	1.92	0.51
1:AA:605:U:O2'	1:AA:606:G:H5'	2.10	0.51
1:AA:707:C:H4'	13:AK:20:TYR:CD2	2.45	0.51
1:AA:828:A:H2'	1:AA:829:G:O4'	2.10	0.51
1:AA:943:U:O4'	11:AI:124:GLN:NE2	2.43	0.51
1:AA:974:A:OP2	16:AN:29:ARG:NH2	2.42	0.51
1:AA:999:C:H2'	1:AA:1000:U:C6	2.46	0.51
1:AA:1194:U:H5''	7:AE:22:GLY:C	2.31	0.51
1:AA:1305:G:C8	1:AA:1305:G:OP2	2.64	0.51
2:AV:40:C:H2'	2:AV:41:U:C5'	2.40	0.51
2:AW:69:U:H2'	2:AW:70:C:C6	2.46	0.51
4:AB:206:ASP:O	4:AB:207:ALA:HB3	2.11	0.51
5:AC:47:LEU:CD1	5:AC:47:LEU:N	2.74	0.51
11:AI:125:TYR:CD2	11:AI:125:TYR:N	2.78	0.51
12:AJ:39:PRO:O	12:AJ:40:LEU:CB	2.57	0.51
13:AK:126:ARG:O	13:AK:127:LYS:C	2.48	0.51
21:AS:50:ALA:HA	21:AS:58:VAL:O	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1712:G:H2'	23:B0:1713:G:H5'	1.91	0.51
23:B0:1818:G:H2'	23:B0:1819:U:C6	2.45	0.51
23:B0:2205:C:H2'	23:B0:2206:C:C6	2.46	0.51
1:AA:112:G:OP1	18:AP:27:LYS:HE3	2.11	0.51
1:AA:129:U:H5'	19:AQ:3:LYS:HE3	1.92	0.51
1:AA:261:U:H3'	22:AT:79:ARG:NH1	2.24	0.51
1:AA:322:C:C2'	22:AT:23:ARG:HB2	2.41	0.51
1:AA:1113:C:C2	5:AC:178:LEU:CD2	2.94	0.51
1:AA:1167:A:H2'	1:AA:1168:A:C8	2.45	0.51
1:AA:1179:A:H2'	1:AA:1180:A:O4'	2.11	0.51
4:AB:17:PHE:HD1	4:AB:17:PHE:C	2.14	0.51
4:AB:166:ASP:OD2	4:AB:169:LYS:HB2	2.09	0.51
5:AC:97:LYS:O	5:AC:98:ASN:HB3	2.10	0.51
5:AC:154:SER:O	5:AC:165:THR:HA	2.09	0.51
5:AC:167:TRP:O	5:AC:168:ALA:HB3	2.11	0.51
6:AD:43:HIS:CE1	6:AD:46:LYS:HZ2	2.28	0.51
8:AF:69:GLU:OE1	8:AF:69:GLU:N	2.44	0.51
10:AH:126:LYS:C	10:AH:128:GLY:H	2.14	0.51
11:AI:44:VAL:CG1	11:AI:51:ARG:HH12	2.23	0.51
12:AJ:23:ILE:HD12	12:AJ:23:ILE:N	2.26	0.51
15:AM:49:THR:CG2	15:AM:51:ALA:H	2.13	0.51
22:AT:39:LYS:HD2	22:AT:55:ILE:CD1	2.27	0.51
23:B0:192:G:H4'	23:B0:193:A:H4'	1.91	0.51
23:B0:1597:A:H2'	23:B0:1598:C:C6	2.46	0.51
23:B0:1625:A:H2'	23:B0:1625:A:N3	2.25	0.51
23:B0:1955:G:C2'	23:B0:1956:G:H5'	2.38	0.51
23:B0:2320:G:H2'	23:B0:2321:C:O4'	2.09	0.51
1:AA:588:G:C8	1:AA:753:A:C4	2.98	0.51
1:AA:760:G:H1	19:AQ:105:ALA:HB2	1.76	0.51
1:AA:1097:C:H2'	1:AA:1098:C:C6	2.45	0.51
1:AA:1162:C:H2'	1:AA:1163:C:C6	2.46	0.51
1:AA:1329:A:O2'	1:AA:1330:U:H5'	2.11	0.51
2:AV:75:C:P	23:B0:2581:A:H5'	2.36	0.51
4:AB:121:LEU:O	4:AB:127:ILE:HG12	2.11	0.51
4:AB:126:GLU:O	4:AB:129:GLU:HB2	2.11	0.51
5:AC:34:LEU:HD23	5:AC:34:LEU:O	2.10	0.51
6:AD:8:VAL:HG13	6:AD:21:LEU:HD13	1.92	0.51
7:AE:15:ARG:O	7:AE:16:THR:O	2.28	0.51
12:AJ:51:ARG:HB2	12:AJ:59:SER:CB	2.23	0.51
12:AJ:62:HIS:HB2	16:AN:59:ALA:C	2.31	0.51
22:AT:41:VAL:O	22:AT:45:GLN:HB2	2.10	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:AT:43:LEU:CD1	22:AT:55:ILE:HD12	2.40	0.51
23:B0:484:G:O2'	23:B0:485:G:H5'	2.11	0.51
23:B0:630:G:H2'	23:B0:631:G:H5'	1.92	0.51
23:B0:1210:C:H2'	23:B0:1211:G:O4'	2.09	0.51
23:B0:1251:G:H2'	23:B0:1252:C:C6	2.46	0.51
23:B0:1373:G:H1	23:B0:2192:U:H3	1.58	0.51
23:B0:2245:A:O2'	23:B0:2246:A:OP2	2.24	0.51
1:AA:38:G:H1'	1:AA:547:A:N9	2.25	0.51
1:AA:160:A:N6	1:AA:347:G:N2	2.55	0.51
1:AA:650:G:C2'	1:AA:651:C:H5'	2.40	0.51
1:AA:707:C:H5''	13:AK:85:ARG:CZ	2.36	0.51
1:AA:944:G:O6	1:AA:1337:G:H8	1.94	0.51
1:AA:2003:G:N1	1:AA:1004:A:H1'	2.25	0.51
1:AA:1014:A:H5'	21:AS:33:THR:HG23	1.93	0.51
1:AA:1021:G:C2'	1:AA:1022:G:H5'	2.40	0.51
1:AA:1044:A:C2'	1:AA:1045:C:O2'	2.51	0.51
1:AA:1059:C:O2'	1:AA:1060:C:H5'	2.11	0.51
1:AA:1404:C:O2	1:AA:1519:A:O2'	2.29	0.51
1:AA:1430:C:H4'	23:B0:1721:G:H5''	1.93	0.51
2:AW:40:C:H2'	2:AW:41:U:C5'	2.40	0.51
4:AB:33:TYR:HB3	4:AB:41:ILE:HG22	1.93	0.51
4:AB:186:ALA:HB3	4:AB:197:VAL:CG1	2.41	0.51
5:AC:79:ARG:HG2	5:AC:82:GLU:HG2	1.92	0.51
5:AC:134:ILE:HG21	5:AC:167:TRP:O	2.10	0.51
5:AC:188:LEU:CD1	5:AC:195:VAL:HG13	2.41	0.51
7:AE:12:LEU:CD1	7:AE:31:LEU:HB2	2.39	0.51
16:AN:22:THR:OG1	16:AN:33:VAL:HG21	2.11	0.51
23:B0:66:U:H2'	23:B0:67:G:C8	2.46	0.51
23:B0:604:U:H2'	23:B0:605:G:C8	2.46	0.51
23:B0:2404:A:H5''	23:B0:2405:A:H3'	1.93	0.51
1:AA:113:G:H1'	1:AA:354:G:H5''	1.91	0.51
1:AA:131:C:C4'	1:AA:263:A:O4'	2.58	0.51
1:AA:675:A:HO2'	13:AK:116:HIS:CD2	2.27	0.51
1:AA:692:U:H5	13:AK:26:ASN:OD1	1.93	0.51
1:AA:922:G:C6	1:AA:1396:A:N1	2.73	0.51
1:AA:1057:G:H5''	5:AC:154:SER:CB	2.34	0.51
1:AA:1067:A:C2'	1:AA:1068:G:OP2	2.58	0.51
1:AA:1110:A:C2'	1:AA:1111:A:C5'	2.89	0.51
1:AA:1248:A:O2'	11:AI:70:LYS:NZ	2.44	0.51
1:AA:1314:C:C5	21:AS:6:LYS:HD3	2.45	0.51
2:AW:76:A:N3	23:B0:2486:C:O2	2.43	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AE:121:LYS:HE3	7:AE:123:LEU:HD21	1.93	0.51
15:AM:93:ARG:NH1	23:B0:900:U:H5''	2.22	0.51
23:B0:333:A:H1'	23:B0:351:A:C4	2.45	0.51
23:B0:795:A:H4'	23:B0:796:A:C8	2.46	0.51
23:B0:832:A:H2'	23:B0:833:A:O4'	2.11	0.51
23:B0:841:G:H4'	23:B0:844:G:N1	2.26	0.51
23:B0:1087:C:H2'	23:B0:1088:A:O4'	2.11	0.51
23:B0:1492:A:H2	23:B0:1531:C:H41	1.59	0.51
23:B0:1712:G:C2'	23:B0:1713:G:H5'	2.40	0.51
23:B0:2038:C:H5'	23:B0:2039:G:C5'	2.41	0.51
1:AA:130:A:N1	1:AA:264:U:C2	2.78	0.51
1:AA:203:A:O2'	1:AA:206:C:H4'	2.10	0.51
1:AA:497:A:O3'	1:AA:498:U:P	2.69	0.51
1:AA:619:U:C2	6:AD:135:LEU:HD11	2.29	0.51
1:AA:848:G:O3'	1:AA:849:C:O4'	2.29	0.51
1:AA:1094:G:H5''	1:AA:1095:U:H5	1.75	0.51
2:AV:69:U:H2'	2:AV:70:C:C6	2.46	0.51
4:AB:53:ARG:NH1	4:AB:53:ARG:HG2	2.26	0.51
4:AB:96:ARG:O	4:AB:98:LEU:HD23	2.11	0.51
6:AD:170:VAL:CG1	6:AD:174:LEU:HB2	2.39	0.51
7:AE:89:ILE:HD13	7:AE:90:VAL:H	1.75	0.51
9:AG:18:TYR:HD2	9:AG:59:LEU:HD22	1.76	0.51
9:AG:102:ARG:O	9:AG:106:GLN:HG3	2.10	0.51
11:AI:10:ARG:HG2	11:AI:75:ASP:CB	2.41	0.51
14:AL:45:PRO:HD3	14:AL:51:ALA:O	2.11	0.51
16:AN:28:GLY:O	16:AN:30:ALA:N	2.43	0.51
23:B0:18:U:H2'	23:B0:19:C:C6	2.46	0.51
23:B0:80:A:H2'	23:B0:81:C:O4'	2.11	0.51
23:B0:579:G:H2'	23:B0:2013:A:H62	1.75	0.51
23:B0:804:C:O2	23:B0:807:A:H5'	2.11	0.51
23:B0:1181:C:H2'	23:B0:1182:U:C5'	2.38	0.51
23:B0:1532:A:H2'	23:B0:1533:G:C8	2.46	0.51
23:B0:1611:U:H2'	23:B0:1612:U:O4'	2.11	0.51
24:B9:111:C:H5''	24:B9:112:A:H5''	1.93	0.51
1:AA:814:A:N7	1:AA:816:A:C6	2.79	0.51
1:AA:1298:C:O5'	9:AG:114:ARG:NH2	2.44	0.51
4:AB:17:PHE:CD1	4:AB:17:PHE:C	2.85	0.51
5:AC:38:ARG:HG3	5:AC:38:ARG:NH1	2.26	0.51
5:AC:139:GLN:HA	5:AC:139:GLN:NE2	2.25	0.51
10:AH:38:ILE:HD12	10:AH:38:ILE:N	2.27	0.51
13:AK:65:ALA:HB3	13:AK:97:ALA:HB3	1.93	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AO:3:ILE:CG2	17:AO:7:GLU:HB3	2.41	0.51
20:AR:87:ARG:HG2	20:AR:87:ARG:HH11	1.76	0.51
23:B0:394:U:H2'	23:B0:395:G:C8	2.45	0.51
23:B0:460:U:H3	23:B0:592:G:H1'	1.75	0.51
23:B0:942:U:H2'	23:B0:943:U:O4'	2.11	0.51
23:B0:2011:U:H2'	23:B0:2012:A:C8	2.46	0.51
23:B0:2565:C:O2'	23:B0:2566:A:H5'	2.11	0.51
23:B0:2795:A:H2'	23:B0:2795:A:N3	2.24	0.51
1:AA:130:A:N3	1:AA:263:A:N3	2.59	0.50
1:AA:130:A:C4	1:AA:264:U:C6	2.99	0.50
1:AA:1021:G:H2'	1:AA:1022:G:O4'	2.11	0.50
4:AB:19:HIS:NE2	4:AB:206:ASP:HB3	2.26	0.50
11:AI:27:THR:HG23	11:AI:30:GLY:O	2.11	0.50
11:AI:46:ALA:HA	11:AI:78:LYS:HB2	1.93	0.50
12:AJ:20:ALA:O	12:AJ:24:VAL:HG23	2.11	0.50
13:AK:48:ILE:HD13	13:AK:63:LEU:HB3	1.93	0.50
19:AQ:104:LYS:CE	23:B0:729:A:N6	2.73	0.50
23:B0:635:C:C3'	23:B0:636:G:H5''	2.41	0.50
23:B0:1040:A:H2'	23:B0:1041:G:H5'	1.93	0.50
23:B0:1495:G:H2'	23:B0:1496:G:C8	2.47	0.50
23:B0:1586:A:H2'	23:B0:1587:A:C8	2.46	0.50
23:B0:1779:C:H2'	23:B0:1780:A:O4'	2.10	0.50
23:B0:1807:A:O2'	23:B0:1808:C:O5'	2.24	0.50
23:B0:2058:U:H5'	23:B0:2576:G:H1'	1.93	0.50
23:B0:2213:G:H2'	23:B0:2214:G:C8	2.46	0.50
23:B0:2321:C:O2'	23:B0:2353:G:H5''	2.11	0.50
23:B0:2769:C:O2'	23:B0:2770:A:H5'	2.11	0.50
1:AA:218:C:H2'	1:AA:219:C:H6	1.76	0.50
1:AA:470:U:H2'	1:AA:471:G:H8	1.77	0.50
1:AA:659:U:O2'	1:AA:660:G:H5'	2.11	0.50
1:AA:685:G:H5'	13:AK:39:PRO:O	2.11	0.50
1:AA:779:C:C2'	13:AK:120:ARG:HD3	2.34	0.50
1:AA:992:U:HO2'	1:AA:993:G:P	2.33	0.50
1:AA:1075:C:OP1	4:AB:179:LYS:HD2	2.10	0.50
1:AA:1114:C:O2	16:AN:60:SER:OG	2.29	0.50
1:AA:1416:G:N9	1:AA:1417:G:O4'	2.44	0.50
1:AA:1458:G:O3'	22:AT:24:LEU:CD2	2.58	0.50
4:AB:221:LEU:HD13	4:AB:221:LEU:O	2.11	0.50
5:AC:61:ALA:O	5:AC:63:ASN:N	2.44	0.50
6:AD:61:LYS:HZ1	6:AD:62:GLN:NE2	2.09	0.50
15:AM:93:ARG:HA	23:B0:900(A):A:H8	1.76	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1661:C:O2'	23:B0:1662:G:H5'	2.11	0.50
23:B0:2272:A:H2'	23:B0:2273:C:C6	2.46	0.50
1:AA:215:C:O2'	1:AA:216:C:H5'	2.12	0.50
1:AA:255:G:O6	1:AA:266:G:O6	2.29	0.50
1:AA:443:C:H2'	1:AA:444:C:C6	2.43	0.50
1:AA:824:C:H2'	1:AA:825:G:H8	1.76	0.50
1:AA:1102:A:H2'	1:AA:1103:C:C6	2.46	0.50
1:AA:1416:G:C4	1:AA:1417:G:C1'	2.94	0.50
5:AC:58:GLU:O	5:AC:59:ARG:HG2	2.11	0.50
5:AC:137:ALA:HA	5:AC:140:ARG:NH1	2.26	0.50
5:AC:139:GLN:CA	5:AC:139:GLN:HE21	2.23	0.50
6:AD:24:GLU:O	6:AD:25:ARG:HB3	2.10	0.50
6:AD:126:ILE:CG2	6:AD:127:THR:N	2.75	0.50
8:AF:26:ILE:HG21	8:AF:63:TYR:CE2	2.40	0.50
11:AI:17:VAL:CG2	11:AI:80:GLY:HA3	2.41	0.50
14:AL:46:LYS:HG2	14:AL:47:LYS:HG3	1.93	0.50
15:AM:102:ARG:HB2	15:AM:102:ARG:HH11	1.75	0.50
23:B0:95:G:H2'	23:B0:96:C:C6	2.46	0.50
23:B0:429:C:H2'	23:B0:430:C:O4'	2.11	0.50
23:B0:689:A:H61	23:B0:815:A:H61	1.59	0.50
23:B0:798:G:H2'	23:B0:799:C:H5'	1.93	0.50
23:B0:3874:C:H2'	23:B0:3875:A:H5'	1.91	0.50
23:B0:2235:G:H2'	23:B0:2236:U:C6	2.46	0.50
1:AA:222:U:H2'	1:AA:223:U:C6	2.47	0.50
1:AA:375:U:O2'	18:AP:28:ARG:CD	2.59	0.50
1:AA:406:G:C2	1:AA:437:U:N3	2.80	0.50
1:AA:992:U:H2'	1:AA:1043:C:H5	1.77	0.50
1:AA:1194:U:O2'	1:AA:1195:C:H5'	2.12	0.50
1:AA:1250:A:H2'	1:AA:1251:A:C8	2.47	0.50
1:AA:1306:A:H2'	1:AA:1307:U:O4'	2.12	0.50
1:AA:1337:G:H5''	1:AA:1338:G:P	2.51	0.50
1:AA:1440:C:C2'	1:AA:1441:G:H5'	2.41	0.50
4:AB:53:ARG:HG2	4:AB:53:ARG:HH11	1.75	0.50
5:AC:23:TYR:CE2	12:AJ:9:ARG:HD3	2.47	0.50
15:AM:81:LEU:HD12	15:AM:88:ARG:HD3	1.93	0.50
18:AP:20:VAL:CG1	18:AP:32:TYR:HB3	2.40	0.50
18:AP:51:VAL:O	18:AP:51:VAL:CG1	2.60	0.50
19:AQ:78:GLU:HG3	19:AQ:78:GLU:O	2.12	0.50
23:B0:775:U:O2	23:B0:1445:A:H5''	2.11	0.50
24:B9:113:G:H2'	24:B9:114:C:C6	2.47	0.50
1:AA:37:U:C2'	1:AA:547:A:C6	2.88	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:39:G:C2	1:AA:404:U:C2	3.00	0.50
1:AA:113:G:C1'	1:AA:354:G:H5''	2.41	0.50
1:AA:130:A:C1'	1:AA:264:U:O4'	2.59	0.50
1:AA:149:A:O2'	1:AA:150:C:H5'	2.11	0.50
1:AA:556:C:H2'	1:AA:557:G:H8	1.77	0.50
1:AA:779:C:C3'	13:AK:120:ARG:HD3	2.42	0.50
1:AA:1343:G:C3'	11:AI:122:ALA:HB3	2.40	0.50
1:AA:1447:A:N7	1:AA:1456:A:H2	2.09	0.50
2:AV:11:C:C5'	23:B0:1892:C:C4'	2.88	0.50
12:AJ:71:LEU:O	12:AJ:72:VAL:CB	2.60	0.50
13:AK:82:VAL:HG23	13:AK:105:VAL:HG13	1.93	0.50
23:B0:127:C:H2'	23:B0:128:C:C6	2.47	0.50
23:B0:868:U:H2'	23:B0:869:C:C6	2.46	0.50
23:B0:897:A:C6	23:B0:898:C:N4	2.79	0.50
23:B0:1272:G:H2'	23:B0:1273:G:C8	2.46	0.50
23:B0:1727:C:H4'	23:B0:2833:C:O2	2.12	0.50
23:B0:1865:C:H2'	23:B0:1866:G:O4'	2.12	0.50
24:B9:107:C:O3'	24:B9:108:G:OP1	2.29	0.50
1:AA:185:A:H2'	1:AA:186:C:C5	2.47	0.50
1:AA:205:G:N2	1:AA:207:C:N4	2.60	0.50
1:AA:279:A:H5''	1:AA:280:C:H3'	1.94	0.50
1:AA:499:A:C2'	1:AA:500:G:O4'	2.60	0.50
1:AA:556:C:C4	1:AA:557:G:N7	2.79	0.50
1:AA:653:A:O5'	10:AH:56:LYS:NZ	2.44	0.50
1:AA:1025:U:OP1	1:AA:1025:U:H4'	2.11	0.50
1:AA:1035:A:H2'	1:AA:1036:G:H8	1.76	0.50
1:AA:1292:U:P	9:AG:41:ARG:HH22	2.24	0.50
1:AA:1367:C:OP1	11:AI:115:GLY:N	2.33	0.50
1:AA:1458:G:HO3'	22:AT:24:LEU:HD11	0.67	0.50
2:AV:30:G:O2'	2:AV:31:A:H5'	2.12	0.50
2:AW:25:C:C5	2:AW:26:G:N7	2.80	0.50
5:AC:23:TYR:HA	12:AJ:11:PHE:CD1	2.47	0.50
6:AD:61:LYS:HZ2	6:AD:62:GLN:HE21	1.59	0.50
10:AH:113:SER:HB2	10:AH:134:ILE:CD1	2.29	0.50
13:AK:23:ALA:CB	13:AK:91:ARG:HB2	2.42	0.50
23:B0:68:C:H2'	23:B0:69:G:H8	1.76	0.50
23:B0:168:A:H2'	23:B0:169:C:C6	2.47	0.50
23:B0:612:G:O3'	23:B0:613:A:H4'	2.11	0.50
23:B0:791:G:H2'	23:B0:792:U:C6	2.47	0.50
23:B0:897:A:O3'	23:B0:898:C:P	2.70	0.50
23:B0:1886:G:H2'	23:B0:1887:G:C8	2.46	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:393:A:OP2	18:AP:12:LYS:CE	2.59	0.50
1:AA:619:U:N1	6:AD:135:LEU:HD11	2.25	0.50
1:AA:1014:A:H5''	21:AS:14:HIS:ND1	2.15	0.50
1:AA:1262:C:H42	1:AA:1273:G:H1	1.59	0.50
1:AA:1270:C:O3'	1:AA:1314:C:C4'	2.58	0.50
1:AA:1305:G:O2'	1:AA:1306:A:O4'	2.30	0.50
1:AA:1391:U:H2'	1:AA:1392:G:H8	1.74	0.50
1:AA:1483:A:C2'	1:AA:1484:C:P	2.99	0.50
11:AI:47:LEU:C	11:AI:49:PRO:HD2	2.32	0.50
23:B0:177:U:H2'	23:B0:178:C:C6	2.46	0.50
23:B0:1326:U:O2	23:B0:1326:U:H2'	2.10	0.50
1:AA:46:G:H2'	1:AA:365:U:O2'	2.12	0.50
1:AA:220:G:O2'	1:AA:221:C:H5'	2.12	0.50
1:AA:323:U:C1'	22:AT:19:SER:CB	2.90	0.50
1:AA:393:A:C2	1:AA:394:G:C8	3.00	0.50
1:AA:478:A:O2'	1:AA:479:C:H5'	2.11	0.50
1:AA:625:G:H2'	1:AA:626:U:C6	2.47	0.50
1:AA:1151:A:H5''	12:AJ:41:PRO:HA	1.93	0.50
1:AA:1323:G:H2'	1:AA:1324:A:C8	2.47	0.50
2:AW:30:G:O2'	2:AW:31:A:H5'	2.12	0.50
4:AB:88:ALA:O	4:AB:90:MET:N	2.45	0.50
5:AC:171:GLY:O	5:AC:173:VAL:HG23	2.12	0.50
6:AD:8:VAL:HG11	6:AD:21:LEU:HB3	1.94	0.50
6:AD:78:LEU:HD22	6:AD:96:LEU:HB3	1.94	0.50
7:AE:92:LYS:HB3	7:AE:119:LEU:HB2	1.94	0.50
11:AI:9:ARG:HG2	11:AI:14:VAL:HG22	1.92	0.50
12:AJ:27:ALA:C	12:AJ:29:ARG:H	2.15	0.50
15:AM:40:ASN:ND2	15:AM:41:PRO:CD	2.62	0.50
16:AN:29:ARG:O	16:AN:33:VAL:HG13	2.11	0.50
22:AT:101:GLY:O	22:AT:102:GLY:O	2.30	0.50
23:B0:847:C:N4	23:B0:955:G:H21	2.03	0.50
23:B0:899:G:O2'	23:B0:900:U:H5'	2.12	0.50
23:B0:1052:C:H2'	23:B0:1053:G:C8	2.46	0.50
23:B0:1571:G:H2'	23:B0:1572:C:C6	2.46	0.50
23:B0:2383:C:H2'	23:B0:2384:G:O4'	2.11	0.50
1:AA:325:A:H2'	1:AA:326:G:O4'	2.12	0.50
1:AA:438:G:H5'	6:AD:123:HIS:CD2	2.46	0.50
1:AA:686:U:H1'	13:AK:42:TRP:HE1	1.76	0.50
1:AA:893:C:C2'	1:AA:894:G:H8	2.23	0.50
1:AA:1107:C:OP1	5:AC:173:VAL:N	2.37	0.50
1:AA:1136:U:H5''	1:AA:1137:C:OP2	2.12	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1416:G:H2'	1:AA:1417:G:O4'	2.12	0.50
9:AG:69:VAL:HG12	9:AG:69:VAL:O	2.12	0.50
14:AL:115:LYS:O	14:AL:117:ARG:N	2.37	0.50
19:AQ:27:PHE:HB2	19:AQ:28:PRO:HD2	1.94	0.50
23:B0:165:G:H2'	23:B0:166:G:O4'	2.12	0.50
23:B0:192:G:H4'	23:B0:193:A:O5'	2.12	0.50
23:B0:212:U:H2'	23:B0:213:C:C6	2.47	0.50
23:B0:638:A:O2'	23:B0:639:G:H5'	2.12	0.50
23:B0:1747:G:H1'	23:B0:1749:G:N3	2.26	0.50
23:B0:2301:A:H2'	23:B0:2302:G:O4'	2.11	0.50
23:B0:2357:A:H2'	23:B0:2358:C:O4'	2.12	0.50
23:B0:2426:G:O6	23:B0:2479:U:H2'	2.11	0.50
1:AA:1016:A:H1'	1:AA:1218:C:O2'	2.12	0.49
1:AA:1096:C:H2'	1:AA:1097:C:H6	1.77	0.49
1:AA:1106:G:OP1	5:AC:172:ARG:CD	2.60	0.49
1:AA:1308:U:C5	15:AM:99:ARG:CZ	2.95	0.49
2:AW:64:A:C4'	23:B0:2461:G:O2'	2.60	0.49
5:AC:23:TYR:HE1	12:AJ:67:THR:CG2	2.23	0.49
6:AD:81:GLU:O	6:AD:85:LYS:HG3	2.11	0.49
8:AF:9:VAL:HG22	8:AF:60:PHE:CE2	2.47	0.49
12:AJ:3:LYS:HA	12:AJ:75:ILE:HA	1.94	0.49
12:AJ:51:ARG:HG2	16:AN:45:ARG:NH1	2.27	0.49
13:AK:51:LYS:O	13:AK:55:LYS:HE3	2.11	0.49
13:AK:79:SER:OG	13:AK:106:LYS:HG2	2.12	0.49
21:AS:81:ARG:HG2	21:AS:81:ARG:O	2.11	0.49
23:B0:521:U:H2'	23:B0:522:G:H5'	1.93	0.49
23:B0:618:A:H2'	23:B0:619:A:O4'	2.11	0.49
23:B0:775:U:H4'	23:B0:776:G:C8	2.46	0.49
23:B0:1323:G:H2'	23:B0:1324:G:H4'	1.94	0.49
23:B0:1386:A:H2'	23:B0:1387:G:O4'	2.12	0.49
23:B0:1391:A:H2'	23:B0:1392:U:C6	2.47	0.49
23:B0:2310:G:H2'	23:B0:2311:U:O4'	2.12	0.49
23:B0:2324:G:C4'	23:B0:2326:C:H5''	2.42	0.49
23:B0:2658:A:H2'	23:B0:2659:C:C6	2.47	0.49
1:AA:160:A:H61	1:AA:347:G:H21	1.58	0.49
1:AA:255:G:C4'	19:AQ:16:GLN:HB3	2.42	0.49
1:AA:819:A:C5	1:AA:1529:G:N1	2.80	0.49
1:AA:1172:C:O2'	1:AA:1173:G:H5'	2.11	0.49
1:AA:1230:C:O2'	1:AA:1231:G:H5'	2.12	0.49
1:AA:1283:G:O2'	1:AA:1284:C:H5'	2.11	0.49
8:AF:48:LEU:HD13	8:AF:52:ILE:HG13	1.95	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AI:36:TYR:HD2	11:AI:37:PHE:CE2	2.30	0.49
12:AJ:38:ILE:HG13	12:AJ:71:LEU:CB	2.42	0.49
16:AN:21:TYR:HE2	16:AN:23:ARG:NE	2.09	0.49
19:AQ:10:VAL:O	19:AQ:53:LEU:HD12	2.12	0.49
19:AQ:97:SER:HB2	19:AQ:103:GLY:N	2.26	0.49
23:B0:597:U:H2'	23:B0:598:U:C6	2.47	0.49
23:B0:693:A:H2'	23:B0:694:G:C8	2.46	0.49
23:B0:971:A:H2	23:B0:2475:C:H1'	1.77	0.49
23:B0:1111:C:C4	23:B0:1112:U:C5	3.00	0.49
23:B0:1286:U:H5''	23:B0:1663:C:N4	2.27	0.49
23:B0:1683:G:C2'	23:B0:1684:G:H5'	2.43	0.49
23:B0:1949:A:H1'	23:B0:2572:U:C4'	2.42	0.49
23:B0:2313:G:H2'	23:B0:2314:A:H5'	1.94	0.49
23:B0:2435:C:H2'	23:B0:2436:U:C6	2.47	0.49
23:B0:2459:C:H2'	23:B0:2460:G:H5'	1.94	0.49
23:B0:2858:A:H3'	23:B0:2859:U:C5'	2.42	0.49
1:AA:61:G:H2'	1:AA:62:U:O4'	2.12	0.49
1:AA:212:G:O2'	1:AA:213:G:O5'	2.30	0.49
1:AA:491:G:H2'	1:AA:492:G:H8	1.78	0.49
1:AA:538:G:C8	14:AL:115:LYS:HE3	2.47	0.49
1:AA:675:A:O2'	13:AK:116:HIS:CD2	2.65	0.49
1:AA:836:G:P	20:AR:61:LYS:CD	2.65	0.49
1:AA:893:C:C4	1:AA:894:G:C6	2.99	0.49
1:AA:929:G:C5'	1:AA:1533:C:H41	2.25	0.49
1:AA:1458:G:C1'	1:AA:1459:C:H2'	2.41	0.49
1:AA:1503:A:N3	1:AA:1531:A:H2	2.09	0.49
2:AV:23:A:O2'	2:AV:24:G:H5'	2.12	0.49
2:AV:75:C:N4	23:B0:2231:G:N1	2.60	0.49
2:AW:23:A:O2'	2:AW:24:G:H5'	2.12	0.49
4:AB:132:LYS:O	4:AB:136:VAL:HG23	2.12	0.49
12:AJ:63:PHE:HE2	16:AN:58:LYS:HG2	1.76	0.49
14:AL:28:LYS:CD	14:AL:33:ARG:HH12	2.24	0.49
17:AO:36:ILE:HA	17:AO:59:MET:CE	2.42	0.49
23:B0:189:A:H2'	23:B0:190:A:C8	2.47	0.49
23:B0:568:G:H5''	23:B0:1019:U:H5'	1.93	0.49
23:B0:652:C:H42	23:B0:657:A:N6	2.10	0.49
23:B0:1180:A:H2'	23:B0:1181:C:C6	2.47	0.49
23:B0:1223:G:O2'	23:B0:1224:A:OP2	2.26	0.49
23:B0:2536:G:H2'	23:B0:2537:C:C6	2.47	0.49
1:AA:46:G:C4	1:AA:366:C:C4	3.00	0.49
1:AA:245:C:O2	1:AA:283:C:N3	2.46	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:430:A:C2'	1:AA:431:A:H5'	2.42	0.49
1:AA:722:A:H4'	1:AA:723:U:C5	2.48	0.49
1:AA:926:G:H22	3:AU:6:A:P	2.35	0.49
2:AW:25:C:N4	2:AW:26:G:C5	2.80	0.49
4:AB:35:GLU:HA	4:AB:39:ILE:O	2.13	0.49
4:AB:97:TRP:CH2	4:AB:173:ALA:HA	2.48	0.49
4:AB:168:THR:OG1	4:AB:192:SER:HB3	2.12	0.49
6:AD:36:ARG:N	6:AD:37:PRO:CD	2.66	0.49
7:AE:104:ALA:O	7:AE:105:VAL:C	2.49	0.49
12:AJ:32:ALA:HB2	12:AJ:76:ASN:HB2	1.94	0.49
15:AM:5:ALA:O	15:AM:6:GLY:C	2.51	0.49
23:B0:601:A:H3'	23:B0:602:C:C5'	2.42	0.49
23:B0:960:U:H2'	23:B0:961:G:C8	2.48	0.49
23:B0:1268:U:H5''	23:B0:1269:G:H5''	1.95	0.49
23:B0:1715:A:H1'	23:B0:1717:A:C1'	2.42	0.49
23:B0:1923:U:H4'	23:B0:1948:C:N4	2.27	0.49
23:B0:1993:G:H2'	23:B0:1994:U:C6	2.47	0.49
23:B0:2312:A:H4'	23:B0:2313:G:N7	2.26	0.49
23:B0:2321:C:H2'	23:B0:2322:U:O4'	2.12	0.49
23:B0:2805:G:O2'	23:B0:2806:G:H5'	2.12	0.49
1:AA:15:G:C8	1:AA:1396:A:O2'	2.64	0.49
1:AA:129:U:C5'	19:AQ:3:LYS:HE3	2.43	0.49
1:AA:346:G:H2'	1:AA:347:G:H5'	1.94	0.49
1:AA:376:G:OP1	18:AP:67:THR:CB	2.60	0.49
1:AA:746:A:O2'	1:AA:747:C:H5'	2.11	0.49
1:AA:834:C:H2'	1:AA:835:U:C6	2.48	0.49
1:AA:847:C:O2'	1:AA:848:G:H5'	2.13	0.49
1:AA:1367:C:H5''	11:AI:114:TYR:CB	2.43	0.49
1:AA:1430:C:C5'	23:B0:1721:G:C5'	2.90	0.49
1:AA:1500:A:H4'	1:AA:1509:C:OP1	2.12	0.49
2:AW:75:C:O2'	23:B0:2486:C:O2'	2.30	0.49
5:AC:47:LEU:N	5:AC:47:LEU:HD12	2.27	0.49
6:AD:7:PRO:HB2	6:AD:10:ARG:HD2	1.93	0.49
7:AE:84:PHE:CE2	7:AE:133:TYR:HD1	2.31	0.49
8:AF:100:ASN:O	20:AR:28:GLU:HG3	2.13	0.49
20:AR:41:LYS:HG2	20:AR:41:LYS:O	2.13	0.49
23:B0:628:A:H2'	23:B0:629:C:C6	2.48	0.49
23:B0:703:A:H2'	23:B0:704:G:H8	1.77	0.49
23:B0:1007:A:H2'	23:B0:1008:G:C8	2.47	0.49
23:B0:1199:U:H2'	23:B0:1200:G:C8	2.46	0.49
23:B0:1218:C:H2'	23:B0:1219:C:C6	2.47	0.49

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2249:U:H2'	23:B0:2250:G:O4'	2.13	0.49
23:B0:2397:A:H2'	23:B0:2398:U:O4'	2.12	0.49
23:B0:2492:G:H2'	23:B0:2493:U:O4'	2.12	0.49
23:B0:2717:G:H2'	23:B0:2718:A:C8	2.48	0.49
1:AA:128:G:O3'	19:AQ:3:LYS:CG	2.61	0.49
1:AA:149:A:H2'	1:AA:150:C:C6	2.48	0.49
1:AA:161:A:C2	1:AA:348:G:C1'	2.95	0.49
1:AA:255:G:C4	19:AQ:16:GLN:NE2	2.80	0.49
1:AA:322:C:C4'	22:AT:23:ARG:CB	2.88	0.49
1:AA:489:C:H2'	1:AA:490:G:H8	1.77	0.49
1:AA:606:G:C3'	1:AA:607:A:C5'	2.88	0.49
1:AA:778:G:O2'	13:AK:119:CYS:C	2.47	0.49
1:AA:826:C:C1'	10:AH:15:ASN:HD22	2.21	0.49
1:AA:932:C:H5''	9:AG:3:ARG:CD	2.33	0.49
1:AA:1102:A:H2'	1:AA:1103:C:H6	1.77	0.49
1:AA:1121:U:H2'	1:AA:1122:U:C6	2.48	0.49
4:AB:12:GLU:HG2	4:AB:213:LEU:HD11	1.95	0.49
10:AH:13:ILE:O	10:AH:17:THR:HG23	2.13	0.49
23:B0:117:A:H4'	23:B0:118:U:C6	2.47	0.49
23:B0:1164:C:H2'	23:B0:1165:G:O4'	2.12	0.49
23:B0:1532:A:H2'	23:B0:1533:G:H8	1.77	0.49
23:B0:1949:A:O2'	23:B0:2572:U:H5'	2.12	0.49
23:B0:1998:A:H2'	23:B0:1999:U:H5'	1.94	0.49
23:B0:2274:C:C2'	23:B0:2275:U:H5'	2.40	0.49
1:AA:218:C:H2'	1:AA:219:C:C6	2.47	0.49
1:AA:261:U:O5'	22:AT:79:ARG:NH1	2.46	0.49
1:AA:269:C:H2'	1:AA:270:A:C8	2.48	0.49
1:AA:406:G:N9	1:AA:496:A:C5	2.81	0.49
1:AA:586:C:O2'	1:AA:587:G:H5'	2.12	0.49
1:AA:624:C:O2'	1:AA:625:G:H5'	2.13	0.49
1:AA:864:A:H2	1:AA:917:G:H2'	1.78	0.49
1:AA:866:C:C4'	1:AA:919:A:C5'	2.90	0.49
1:AA:923:A:H1'	1:AA:1398:A:H2'	1.93	0.49
1:AA:958:A:O4'	21:AS:55:LYS:NZ	2.46	0.49
1:AA:1110:A:C6	1:AA:1111:A:C5	3.00	0.49
1:AA:1126:U:H1'	1:AA:1280:A:C6	2.48	0.49
1:AA:1413:A:O2'	1:AA:1414:U:H5'	2.12	0.49
4:AB:230:VAL:HG13	4:AB:231:GLU:OE2	2.13	0.49
5:AC:112:SER:O	5:AC:116:VAL:HG23	2.11	0.49
12:AJ:65:LEU:O	12:AJ:65:LEU:CD2	2.59	0.49
14:AL:34:ARG:HG3	14:AL:34:ARG:O	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AL:53:ARG:HB3	14:AL:93:LEU:HD11	1.94	0.49
16:AN:15:LYS:HB3	16:AN:16:PHE:CD1	2.47	0.49
17:AO:30:ALA:HA	17:AO:85:LEU:HD21	1.94	0.49
19:AQ:45:HIS:NE2	19:AQ:47:PRO:HG3	2.27	0.49
22:AT:38:LYS:O	22:AT:39:LYS:C	2.51	0.49
23:B0:427:C:H2'	23:B0:428:A:C8	2.47	0.49
23:B0:483:A:H2'	23:B0:484:G:H5'	1.93	0.49
23:B0:599:A:H2'	23:B0:600:G:C8	2.48	0.49
23:B0:879:A:H2'	23:B0:880:C:H5'	1.94	0.49
23:B0:1829:C:H2'	23:B0:1830:C:H5'	1.95	0.49
23:B0:3184:C:C2'	23:B0:3185:U:C5'	2.91	0.49
23:B0:2260:C:H4'	23:B0:2368:G:H21	1.77	0.49
23:B0:2821:G:H2'	23:B0:2822:U:C6	2.48	0.49
23:B0:2852:G:H2'	23:B0:2853:U:O4'	2.12	0.49
1:AA:184:G:H2'	1:AA:185:A:H8	1.77	0.49
1:AA:521:G:O2'	1:AA:522:C:H5'	2.12	0.49
1:AA:659:U:H2'	1:AA:660:G:O4'	2.13	0.49
1:AA:865:A:O2'	1:AA:919:A:O4'	2.29	0.49
1:AA:979:C:C2	16:AN:19:ARG:HG2	2.48	0.49
1:AA:1051:C:O2'	1:AA:1052:U:H5'	2.13	0.49
1:AA:1085:U:O3'	1:AA:1086:U:H6	1.95	0.49
1:AA:1238:A:N7	1:AA:1303:C:H1'	2.28	0.49
1:AA:1393:U:O2'	1:AA:1394:A:C2'	2.60	0.49
1:AA:1434:A:O3'	1:AA:1435:G:C4'	2.61	0.49
1:AA:1474:G:O2'	23:B0:1705:U:C3'	2.61	0.49
5:AC:116:VAL:O	5:AC:119:ARG:HB3	2.13	0.49
9:AG:108:ALA:O	9:AG:119:ARG:HB3	2.12	0.49
11:AI:23:ASN:C	11:AI:23:ASN:ND2	2.66	0.49
15:AM:78:ILE:O	15:AM:82:MET:HB2	2.12	0.49
23:B0:807:A:H2'	23:B0:808:C:C6	2.48	0.49
23:B0:1223:G:H1'	23:B0:1225:G:C4	2.48	0.49
23:B0:3877:A:H1'	55:B5:196:VAL:CA	2.42	0.49
23:B0:1982:C:H2'	23:B0:1983:G:H8	1.78	0.49
1:AA:109:A:OP2	1:AA:110:C:H5	1.96	0.49
1:AA:209:U:H5'	1:AA:210:C:C5	2.48	0.49
1:AA:236:G:H4'	19:AQ:42:TYR:OH	2.13	0.49
1:AA:255:G:C5'	19:AQ:17:LYS:CB	2.51	0.49
1:AA:397:A:C5	1:AA:547:A:C1'	2.89	0.49
1:AA:1108:G:OP1	5:AC:175:LEU:HB2	2.12	0.49
1:AA:1310:G:O2'	1:AA:1311:G:H5'	2.12	0.49
1:AA:1365:G:O2'	1:AA:1366:C:H5'	2.12	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:75:C:H1'	23:B0:2047:C:H4'	1.94	0.49
2:AW:74:C:C5	23:B0:2534:U:C5	2.55	0.49
4:AB:44:LEU:HA	4:AB:47:THR:OG1	2.12	0.49
4:AB:102:LEU:CD2	4:AB:162:ILE:HD11	2.37	0.49
5:AC:3:ASN:HD22	5:AC:4:LYS:HG2	1.78	0.49
12:AJ:16:LEU:HD23	12:AJ:94:VAL:HG22	1.95	0.49
17:AO:4:THR:HB	17:AO:6:GLU:HG2	1.94	0.49
17:AO:25:THR:HG21	17:AO:70:LEU:HD23	1.94	0.49
19:AQ:68:ARG:O	19:AQ:69:LYS:HB2	2.13	0.49
21:AS:5:LEU:HD11	21:AS:70:LYS:NZ	2.28	0.49
23:B0:114:C:O2'	23:B0:124:A:H1'	2.12	0.49
23:B0:653:G:N2	23:B0:655:A:H1'	2.27	0.49
23:B0:1489:C:H3'	23:B0:1490:U:H5'	1.95	0.49
23:B0:1856:U:O4	23:B0:3865:A:C6	2.63	0.49
23:B0:1970:G:H2'	23:B0:1971:C:C6	2.48	0.49
1:AA:15:G:N7	1:AA:1396:A:O2'	2.44	0.49
1:AA:136:C:H2'	1:AA:137:C:H6	1.77	0.49
1:AA:237:C:H4'	19:AQ:25:ARG:CZ	2.43	0.49
1:AA:262:A:C4'	22:AT:74:LYS:HB3	2.42	0.49
1:AA:265:G:O2'	1:AA:266:G:H5'	2.13	0.49
1:AA:555:C:H2'	1:AA:556:C:C6	2.48	0.49
1:AA:942:G:O2'	1:AA:943:U:H5'	2.12	0.49
1:AA:959:A:H2'	1:AA:960:U:O4'	2.12	0.49
1:AA:1396:A:H4'	1:AA:1397:C:H5''	1.93	0.49
1:AA:1416:G:O3'	1:AA:1417:G:P	2.69	0.49
1:AA:1497:G:C1'	1:AA:1518:A:H2	2.26	0.49
1:AA:1499:A:O2'	1:AA:1500:A:H5'	2.12	0.49
2:AW:76:A:C1'	23:B0:2486:C:H4'	2.29	0.49
4:AB:30:ARG:HG3	4:AB:31:TYR:CD2	2.48	0.49
6:AD:38:TYR:CE1	6:AD:45:GLN:HG3	2.48	0.49
6:AD:105:VAL:HG13	6:AD:110:PHE:HB2	1.95	0.49
9:AG:38:LEU:O	9:AG:42:ILE:HG13	2.12	0.49
13:AK:124:LYS:HD2	13:AK:125:PHE:CE1	2.48	0.49
14:AL:83:VAL:HG22	14:AL:84:LEU:N	2.28	0.49
15:AM:94:ARG:NH2	21:AS:81:ARG:CD	2.65	0.49
18:AP:52:ASP:OD2	18:AP:55:ARG:HB2	2.13	0.49
19:AQ:26:GLN:O	19:AQ:27:PHE:HB3	2.12	0.49
19:AQ:56:VAL:HG12	19:AQ:77:VAL:HB	1.95	0.49
21:AS:45:VAL:HG12	21:AS:46:GLY:N	2.26	0.49
23:B0:216:U:H2'	23:B0:217:U:O4'	2.12	0.49
23:B0:930:A:H4'	23:B0:930:A:OP1	2.11	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1380:C:C2'	23:B0:1381:G:H5'	2.41	0.49
23:B0:1617:G:H2'	23:B0:1618:U:H5'	1.95	0.49
23:B0:3102:G:H2'	23:B0:3103:A:C8	2.48	0.49
23:B0:2380:U:C2'	23:B0:2381:A:H5'	2.42	0.49
23:B0:2392:G:H2'	23:B0:2393:G:H8	1.77	0.49
1:AA:69:G:H1'	1:AA:102:G:C6	2.48	0.48
1:AA:94:G:H2'	1:AA:96:C:H6	1.78	0.48
1:AA:135:C:C5	1:AA:136:C:C5	3.01	0.48
1:AA:217:C:O2'	1:AA:218:C:H5'	2.12	0.48
1:AA:394:G:C5	1:AA:395:C:C5	3.01	0.48
1:AA:560:U:O2'	1:AA:561:U:OP2	2.27	0.48
1:AA:651:C:N4	1:AA:752:G:O2'	2.46	0.48
1:AA:707:C:P	13:AK:85:ARG:HH12	2.17	0.48
1:AA:1068:G:N3	1:AA:1191:A:C2	2.81	0.48
1:AA:1329:A:C2'	1:AA:1330:U:H5'	2.43	0.48
1:AA:1369:C:H2'	1:AA:1370:G:C8	2.48	0.48
1:AA:1497:G:H2'	1:AA:1498:U:C5'	2.42	0.48
2:AW:75:C:C1'	23:B0:2486:C:O2'	2.61	0.48
5:AC:180:ALA:O	5:AC:181:ASN:CB	2.61	0.48
6:AD:57:ARG:NH2	6:AD:205:GLU:OE2	2.46	0.48
7:AE:31:LEU:HD22	7:AE:43:LEU:HD21	1.94	0.48
8:AF:67:MET:CE	8:AF:72:VAL:HA	2.40	0.48
10:AH:60:ARG:HG3	10:AH:60:ARG:NH1	2.28	0.48
13:AK:58:PRO:HB2	13:AK:93:GLN:HG3	1.95	0.48
14:AL:119:LYS:O	14:AL:120:TYR:CB	2.61	0.48
20:AR:36:ASN:CG	20:AR:39:VAL:HG12	2.34	0.48
23:B0:338:G:H1	23:B0:346:C:H42	1.60	0.48
23:B0:1090:C:HO2'	31:BG:129:GLY:CA	2.24	0.48
23:B0:2809:A:C2'	23:B0:2810:A:H5'	2.43	0.48
1:AA:135:C:H2'	1:AA:136:C:C5'	2.43	0.48
1:AA:419:C:OP1	1:AA:513:C:H1'	2.13	0.48
1:AA:826:C:O2'	10:AH:15:ASN:HB2	2.12	0.48
1:AA:923:A:C5'	1:AA:1398:A:C6	2.95	0.48
1:AA:959:A:H2	1:AA:1221:G:HO2'	1.58	0.48
1:AA:1067:A:O2'	1:AA:1068:G:OP2	2.29	0.48
1:AA:1165:C:O2'	1:AA:1166:G:H5'	2.12	0.48
1:AA:1255:G:O2'	1:AA:1259:C:N1	2.45	0.48
1:AA:1268:A:H1'	1:AA:1326:C:O2'	2.13	0.48
1:AA:1279:A:O2'	1:AA:1282:C:N4	2.46	0.48
1:AA:1286:A:H2'	1:AA:1287:A:H4'	1.96	0.48
1:AA:1319:A:P	21:AS:5:LEU:HD22	2.53	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AB:97:TRP:CH2	4:AB:176:GLU:CD	2.85	0.48
4:AB:144:ARG:HG3	4:AB:145:LEU:H	1.77	0.48
4:AB:144:ARG:O	4:AB:147:LYS:N	2.42	0.48
4:AB:188:ALA:O	4:AB:202:PRO:HA	2.13	0.48
6:AD:3:ARG:O	6:AD:5:ILE:HG13	2.13	0.48
6:AD:3:ARG:NH2	6:AD:74:GLN:OE1	2.44	0.48
6:AD:174:LEU:O	6:AD:175:SER:HB3	2.13	0.48
7:AE:13:ILE:HG13	7:AE:13:ILE:O	2.11	0.48
8:AF:38:GLU:O	8:AF:39:LYS:HB3	2.12	0.48
8:AF:43:LEU:HD22	8:AF:43:LEU:N	2.27	0.48
8:AF:46:ARG:HB2	8:AF:60:PHE:CE1	2.48	0.48
9:AG:6:ARG:O	9:AG:7:ALA:C	2.52	0.48
11:AI:111:ARG:HG3	11:AI:111:ARG:NH1	2.28	0.48
12:AJ:94:VAL:HG12	12:AJ:95:GLU:H	1.76	0.48
15:AM:93:ARG:NH1	23:B0:900:U:C5'	2.77	0.48
20:AR:39:VAL:HG13	20:AR:40:LEU:N	2.28	0.48
21:AS:32:LYS:HG3	21:AS:32:LYS:O	2.13	0.48
22:AT:29:LYS:O	22:AT:33:ILE:HG13	2.13	0.48
23:B0:58:C:H1'	23:B0:72:A:C8	2.48	0.48
23:B0:737:C:H2'	23:B0:738:G:O4'	2.14	0.48
23:B0:1099:A:H3'	23:B0:1100:G:H5'	1.94	0.48
23:B0:1895:A:H2'	23:B0:1896:A:O4'	2.13	0.48
23:B0:1949:A:H1'	23:B0:2572:U:H4'	1.95	0.48
23:B0:1964:A:H5''	23:B0:1965:U:OP2	2.13	0.48
24:B9:112:A:H2'	24:B9:113:G:C8	2.49	0.48
1:AA:27:G:C5	1:AA:557:G:N2	2.77	0.48
1:AA:46:G:N2	1:AA:366:C:O4'	2.45	0.48
1:AA:131:C:C3'	1:AA:262:A:O2'	2.61	0.48
1:AA:401:C:C4'	1:AA:622:A:H1'	2.42	0.48
1:AA:815:A:H1'	1:AA:1527:C:C4'	2.42	0.48
1:AA:1030:U:H5'	1:AA:1031:C:C5	2.48	0.48
1:AA:1112:C:C2	5:AC:178:LEU:HB3	2.48	0.48
1:AA:1270:C:H4'	1:AA:1314:C:H5'	1.95	0.48
1:AA:1346:A:H1'	1:AA:1348:U:C5	2.47	0.48
1:AA:1484:C:H5'	23:B0:1943:A:H1'	1.85	0.48
4:AB:25:ASN:O	4:AB:27:LYS:N	2.47	0.48
4:AB:108:ILE:O	4:AB:108:ILE:HG22	2.13	0.48
4:AB:204:ASN:ND2	4:AB:206:ASP:H	2.12	0.48
5:AC:23:TYR:O	5:AC:24:ALA:HB2	2.14	0.48
5:AC:135:LYS:NZ	7:AE:50:GLU:CD	2.67	0.48
6:AD:119:GLN:HG2	6:AD:123:HIS:CD2	2.47	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AE:61:TYR:O	7:AE:64:ARG:O	2.29	0.48
17:AO:34:LEU:HD23	17:AO:34:LEU:O	2.12	0.48
23:B0:126:C:H2'	23:B0:127:C:C6	2.48	0.48
23:B0:742:G:H2'	23:B0:742:G:N3	2.29	0.48
23:B0:1190:C:H2'	23:B0:1191:G:C8	2.48	0.48
23:B0:1312:G:C5'	23:B0:1313:U:H5'	2.39	0.48
23:B0:1356:G:H5'	23:B0:1614:C:OP2	2.12	0.48
23:B0:2754:C:H2'	23:B0:2755:A:O4'	2.14	0.48
1:AA:18:C:C2	1:AA:918:A:C6	3.01	0.48
1:AA:43:C:OP1	18:AP:12:LYS:HB3	2.13	0.48
1:AA:170:U:O2'	1:AA:171:A:H5'	2.14	0.48
1:AA:170:U:H3'	1:AA:171:A:P	2.54	0.48
1:AA:254:G:O2'	19:AQ:16:GLN:C	2.52	0.48
1:AA:265:G:H5'	19:AQ:65:ILE:CA	2.05	0.48
1:AA:266:G:HO2'	19:AQ:67:LYS:HD2	1.78	0.48
1:AA:421:U:H5'	1:AA:422:C:C5	2.48	0.48
1:AA:647:C:H2'	1:AA:648:A:H8	1.78	0.48
1:AA:1343:G:P	11:AI:125:TYR:HE2	2.37	0.48
2:AV:32:C:OP2	11:AI:127:LYS:HE2	2.11	0.48
4:AB:97:TRP:CZ2	4:AB:102:LEU:HD13	2.45	0.48
4:AB:111:ARG:HB3	4:AB:149:LEU:HD11	1.95	0.48
6:AD:7:PRO:CG	6:AD:10:ARG:HD2	2.43	0.48
9:AG:64:GLN:O	9:AG:67:GLU:HB3	2.14	0.48
14:AL:53:ARG:HG2	14:AL:93:LEU:HD11	1.95	0.48
15:AM:94:ARG:HH22	21:AS:81:ARG:CD	2.26	0.48
23:B0:422:C:H2'	23:B0:423:G:H8	1.78	0.48
23:B0:1343:C:H2'	23:B0:1344:C:C6	2.48	0.48
23:B0:3869:G:H2'	23:B0:3871:A:OP2	2.13	0.48
23:B0:1930:C:H2'	23:B0:1931:G:H8	1.78	0.48
1:AA:128:G:P	19:AQ:2:PRO:CD	3.01	0.48
1:AA:178:C:O2'	1:AA:179:A:H5'	2.13	0.48
1:AA:1016:A:H1'	1:AA:1218:C:C4'	2.41	0.48
1:AA:1339:A:N3	2:AV:31:A:O2'	2.46	0.48
1:AA:1342:C:O2'	1:AA:1343:G:H5'	2.13	0.48
1:AA:1366:C:C2	1:AA:1367:C:C5	3.00	0.48
6:AD:151:LYS:N	6:AD:151:LYS:CD	2.75	0.48
7:AE:51:VAL:O	7:AE:54:ALA:HB3	2.13	0.48
12:AJ:6:ILE:HG23	12:AJ:98:ILE:HG12	1.94	0.48
22:AT:67:ALA:O	22:AT:73:HIS:ND1	2.47	0.48
23:B0:31:C:H2'	23:B0:32:C:O4'	2.14	0.48
23:B0:703:A:H2'	23:B0:704:G:C8	2.49	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:929:A:H2'	23:B0:930:A:H4'	1.95	0.48
23:B0:1301:U:H2'	23:B0:1664:G:H21	1.79	0.48
23:B0:2437:G:N2	23:B0:2469:G:H2'	2.28	0.48
23:B0:2504:G:H2'	23:B0:2505:G:C8	2.49	0.48
23:B0:2642:G:H2'	23:B0:2643:G:O4'	2.13	0.48
23:B0:2808:U:H3'	23:B0:2809:A:C5'	2.40	0.48
1:AA:38:G:C1'	1:AA:547:A:N7	2.76	0.48
1:AA:41:G:H2'	1:AA:42:G:C8	2.49	0.48
1:AA:143:A:O3'	1:AA:144:G:H8	1.96	0.48
1:AA:255:G:N9	19:AQ:16:GLN:NE2	2.60	0.48
1:AA:407:G:H5''	6:AD:115:ARG:HB3	1.95	0.48
1:AA:476:U:C6	1:AA:477:G:P	3.07	0.48
1:AA:1067:A:H1'	1:AA:1068:G:OP2	2.13	0.48
1:AA:1111:A:N1	5:AC:177:THR:OG1	2.45	0.48
1:AA:1394:A:N3	1:AA:1501:C:O4'	2.47	0.48
1:AA:1420:C:C4'	23:B0:1933:G:OP1	2.62	0.48
5:AC:23:TYR:HD1	12:AJ:11:PHE:CD2	2.30	0.48
5:AC:138:VAL:O	5:AC:142:MET:HB2	2.13	0.48
7:AE:11:ILE:HB	7:AE:31:LEU:HB3	1.93	0.48
7:AE:36:ASP:O	7:AE:37:ARG:HB2	2.13	0.48
7:AE:107:ARG:HG2	7:AE:108:ALA:N	2.29	0.48
8:AF:43:LEU:H	8:AF:43:LEU:HD22	1.77	0.48
10:AH:65:TYR:HA	10:AH:79:VAL:HG23	1.95	0.48
14:AL:45:PRO:HB2	14:AL:49:ASN:O	2.13	0.48
19:AQ:12:SER:HB3	19:AQ:20:THR:HB	1.95	0.48
23:B0:340:G:H1'	23:B0:488:A:C4	2.49	0.48
23:B0:477:A:H2'	23:B0:478:G:H5'	1.95	0.48
23:B0:490:A:C5	23:B0:492:G:H1'	2.48	0.48
23:B0:634:G:H2'	23:B0:635:C:C6	2.49	0.48
23:B0:2017:U:O2'	23:B0:2018:G:H5'	2.13	0.48
1:AA:38:G:O2'	1:AA:39:G:N7	2.46	0.48
1:AA:119:A:C2	1:AA:240:C:C6	3.01	0.48
1:AA:150:C:O3'	1:AA:151:A:P	2.71	0.48
1:AA:170:U:C3'	1:AA:171:A:P	3.02	0.48
1:AA:798:G:P	13:AK:122:LYS:HZ2	2.30	0.48
1:AA:819:A:C6	1:AA:1529:G:C6	3.02	0.48
1:AA:1106:G:OP1	5:AC:172:ARG:CG	2.62	0.48
1:AA:1106:G:OP1	5:AC:172:ARG:HD3	2.14	0.48
1:AA:1126:U:OP2	1:AA:1281:U:C2	2.66	0.48
1:AA:1152:A:OP1	12:AJ:68:HIS:ND1	2.44	0.48
5:AC:130:VAL:CG2	5:AC:157:ILE:HG23	2.41	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:AH:103:VAL:CG2	10:AH:110:ALA:HB2	2.43	0.48
20:AR:34:TYR:HA	20:AR:69:THR:HG23	1.93	0.48
20:AR:36:ASN:HD22	20:AR:38:GLU:HG2	1.78	0.48
22:AT:89:ARG:HE	22:AT:104:LEU:HD22	1.78	0.48
23:B0:1023:U:H1'	23:B0:1154:A:N7	2.28	0.48
23:B0:1231:A:H2'	23:B0:1232:U:O4'	2.13	0.48
23:B0:1418:C:H2'	23:B0:1419:G:H8	1.79	0.48
23:B0:2308:A:H2'	23:B0:2309:G:C8	2.48	0.48
1:AA:69:G:O4'	1:AA:102:G:N1	2.43	0.48
1:AA:427:U:C4'	1:AA:541:G:H5''	2.43	0.48
1:AA:556:C:C2'	1:AA:557:G:C5'	2.91	0.48
1:AA:825:G:H2'	1:AA:826:C:H6	1.78	0.48
1:AA:911:U:OP2	14:AL:97:ARG:NH2	2.46	0.48
1:AA:923:A:H4'	1:AA:1398:A:C5	2.49	0.48
1:AA:1418:A:H2'	1:AA:1419:G:O4'	2.12	0.48
1:AA:1503:A:N3	1:AA:1531:A:C2	2.82	0.48
1:AA:1505:G:C8	1:AA:1505:G:H3'	2.48	0.48
5:AC:35:GLU:O	5:AC:38:ARG:N	2.47	0.48
5:AC:173:VAL:N	5:AC:174:PRO:CD	2.76	0.48
11:AI:117:HIS:HB2	11:AI:121:ARG:HD2	1.94	0.48
14:AL:86:ARG:HG3	14:AL:86:ARG:NH1	2.28	0.48
18:AP:6:LEU:HB3	18:AP:17:TYR:CD2	2.49	0.48
23:B0:324:C:H2'	23:B0:325:U:O4'	2.14	0.48
23:B0:446:C:H2'	23:B0:447:U:C6	2.49	0.48
23:B0:951:G:C3'	23:B0:952:A:H5''	2.43	0.48
23:B0:1130:U:H2'	23:B0:1131:G:C8	2.48	0.48
23:B0:2319:G:H2'	23:B0:2320:G:C8	2.49	0.48
1:AA:6:G:C8	7:AE:92:LYS:CE	2.95	0.48
1:AA:131:C:N1	1:AA:262:A:H2	2.09	0.48
1:AA:406:G:C1'	1:AA:496:A:N1	2.77	0.48
1:AA:538:G:O2'	1:AA:539:A:H5'	2.13	0.48
1:AA:865:A:C2	1:AA:918:A:C5'	2.90	0.48
1:AA:893:C:N3	1:AA:894:G:N7	2.62	0.48
1:AA:1067:A:H1'	1:AA:1068:G:C8	2.49	0.48
1:AA:1162:C:H2'	1:AA:1163:C:H6	1.78	0.48
1:AA:1255:G:O2'	1:AA:1258:G:N3	2.46	0.48
1:AA:1533:C:O2'	1:AA:1534:A:H5'	2.14	0.48
4:AB:17:PHE:HA	4:AB:44:LEU:HD21	1.95	0.48
6:AD:111:ALA:HB1	6:AD:116:GLN:HB3	1.96	0.48
7:AE:71:LEU:HD21	7:AE:115:VAL:HG22	1.96	0.48
14:AL:110:VAL:O	14:AL:122:THR:CG2	2.62	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:AN:12:ARG:O	16:AN:13:THR:C	2.52	0.48
21:AS:39:THR:HG22	21:AS:40:ILE:N	2.29	0.48
23:B0:974:U:H1'	23:B0:2229:G:N2	2.28	0.48
23:B0:1427:G:C2'	23:B0:1428:G:H5'	2.42	0.48
23:B0:2759:U:H5''	23:B0:2760:G:O5'	2.14	0.48
1:AA:37:U:HO2'	1:AA:547:A:N6	2.04	0.48
1:AA:119:A:C6	1:AA:240:C:C2	3.02	0.48
1:AA:436:C:C2'	1:AA:437:U:C5'	2.90	0.48
1:AA:662:G:H2'	1:AA:663:A:H8	1.79	0.48
1:AA:719:C:O2'	20:AR:49:LYS:HB3	2.14	0.48
4:AB:187:LEU:CD2	4:AB:214:ILE:HG13	2.43	0.48
7:AE:51:VAL:HB	7:AE:52:PRO:CD	2.37	0.48
14:AL:83:VAL:HG21	14:AL:100:ILE:HD13	1.95	0.48
19:AQ:17:LYS:HA	19:AQ:46:ASP:O	2.14	0.48
23:B0:387:A:H2'	23:B0:388:G:O4'	2.14	0.48
23:B0:1028:G:H2'	23:B0:1029:C:C6	2.49	0.48
23:B0:2321:C:C2'	23:B0:2322:U:H5'	2.44	0.48
1:AA:131:C:C3'	1:AA:262:A:H1'	2.44	0.47
1:AA:255:G:H1'	19:AQ:16:GLN:HE21	0.39	0.47
1:AA:322:C:H5''	22:AT:23:ARG:HG3	1.95	0.47
1:AA:684:A:O3'	1:AA:685:G:P	2.72	0.47
1:AA:729:A:H2	1:AA:765:G:O4'	1.97	0.47
1:AA:768:A:H2'	1:AA:769:G:O4'	2.14	0.47
1:AA:1488:G:H2'	1:AA:1489:G:H8	1.77	0.47
4:AB:115:LEU:O	4:AB:115:LEU:HD12	2.13	0.47
5:AC:178:LEU:O	5:AC:179:ARG:CB	2.60	0.47
6:AD:127:THR:CG2	6:AD:128:VAL:N	2.75	0.47
11:AI:65:VAL:O	11:AI:65:VAL:HG13	2.13	0.47
12:AJ:27:ALA:HB2	12:AJ:85:LEU:HD21	1.96	0.47
17:AO:17:ARG:HG3	17:AO:17:ARG:NH1	2.23	0.47
23:B0:457:C:H2'	23:B0:458:G:O4'	2.13	0.47
23:B0:1825:C:C2'	23:B0:1826:U:H5'	2.44	0.47
23:B0:3110:G:P	23:B0:3149:G:H5'	2.53	0.47
23:B0:3171:A:H4'	23:B0:3172:U:OP1	2.13	0.47
23:B0:3176:A:H2'	23:B0:3177:C:C6	2.48	0.47
1:AA:109:A:H5'	1:AA:110:C:C5	2.50	0.47
1:AA:119:A:C4	1:AA:240:C:N4	2.82	0.47
1:AA:170:U:O3'	1:AA:171:A:P	2.72	0.47
1:AA:209:U:H5'	1:AA:210:C:H5	1.80	0.47
1:AA:236:G:H5''	19:AQ:40:LYS:CE	2.44	0.47
1:AA:319:G:H1'	1:AA:1433:A:N1	2.28	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:518:C:H5''	1:AA:519:C:H6	1.78	0.47
1:AA:613:C:O2'	1:AA:614:A:H5'	2.14	0.47
1:AA:792:A:H4'	1:AA:793:U:C5'	2.40	0.47
1:AA:848:G:O3'	1:AA:849:C:P	2.72	0.47
1:AA:905:U:H3'	1:AA:906:G:P	2.42	0.47
1:AA:952:U:O2'	1:AA:953:G:H5'	2.14	0.47
1:AA:1014:A:H1'	21:AS:34:TRP:CB	2.22	0.47
1:AA:1416:G:C8	1:AA:1417:G:C8	3.02	0.47
2:AW:76:A:OP1	23:B0:2552:C:N3	2.47	0.47
4:AB:213:LEU:C	4:AB:213:LEU:CD2	2.83	0.47
6:AD:6:GLY:O	6:AD:7:PRO:C	2.50	0.47
8:AF:2:ARG:NE	8:AF:69:GLU:HG2	2.29	0.47
8:AF:75:LEU:HD13	8:AF:75:LEU:C	2.34	0.47
12:AJ:63:PHE:CE2	16:AN:58:LYS:HG2	2.49	0.47
12:AJ:94:VAL:CG1	12:AJ:95:GLU:N	2.77	0.47
13:AK:86:GLY:H	13:AK:112:THR:HG23	1.79	0.47
19:AQ:94:ASN:H	23:B0:726:G:H4'	1.73	0.47
23:B0:88:G:H3'	23:B0:89:A:C5'	2.37	0.47
23:B0:611:C:O2'	23:B0:612:G:H5'	2.14	0.47
23:B0:952:A:H2'	23:B0:953:G:O4'	2.14	0.47
23:B0:1002:C:H2'	23:B0:1003:C:C6	2.49	0.47
23:B0:1182:U:C3'	23:B0:1183:C:H5''	2.45	0.47
23:B0:1260:A:N6	23:B0:1262:U:H1'	2.29	0.47
23:B0:1572:C:C3'	23:B0:1573:G:H5''	2.43	0.47
23:B0:3093:C:C4	23:B0:2204:A:N7	2.82	0.47
23:B0:2407:G:H4'	23:B0:2408:G:C8	2.49	0.47
23:B0:2794:G:H2'	23:B0:2796:A:N7	2.29	0.47
1:AA:113:G:O4'	1:AA:354:G:H4'	2.14	0.47
1:AA:513:C:H2'	1:AA:514:C:C6	2.50	0.47
1:AA:826:C:O2'	10:AH:15:ASN:ND2	2.45	0.47
1:AA:913:A:O2'	1:AA:914:A:P	2.73	0.47
1:AA:914:A:H3'	1:AA:915:A:H8	1.79	0.47
4:AB:18:GLY:CA	4:AB:41:ILE:HA	2.44	0.47
4:AB:50:GLU:HB3	4:AB:200:ILE:O	2.15	0.47
6:AD:111:ALA:HB2	6:AD:120:LEU:HD12	1.96	0.47
9:AG:75:VAL:CG1	9:AG:86:GLN:HE21	2.27	0.47
9:AG:75:VAL:HG13	9:AG:86:GLN:HB3	1.95	0.47
13:AK:48:ILE:HD11	13:AK:64:ALA:HA	1.95	0.47
14:AL:28:LYS:O	14:AL:29:GLY:C	2.50	0.47
17:AO:64:ARG:NH2	23:B0:728:G:OP1	2.48	0.47
20:AR:47:THR:HA	20:AR:83:GLU:HB2	1.96	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:646:C:H2'	23:B0:647:G:O4'	2.14	0.47
23:B0:831:G:N2	23:B0:1203:A:H62	2.01	0.47
23:B0:1313:U:C4	23:B0:1651:U:H5'	2.49	0.47
23:B0:1930:C:H2'	23:B0:1931:G:C8	2.49	0.47
23:B0:1938:U:C2'	23:B0:1939:U:H5'	2.44	0.47
1:AA:51:A:H4'	1:AA:52:G:C5'	2.45	0.47
1:AA:51:A:H4'	1:AA:52:G:O5'	2.15	0.47
1:AA:104:G:O4'	1:AA:172:A:C2	2.61	0.47
1:AA:180:U:H2'	1:AA:181:G:H5'	1.96	0.47
1:AA:190:A:C6	22:AT:102:GLY:O	2.67	0.47
1:AA:204:A:H4'	1:AA:205:G:O5'	2.15	0.47
1:AA:258:G:O3'	22:AT:87:LYS:CE	2.62	0.47
1:AA:278:G:O4'	1:AA:282:A:H1'	2.14	0.47
1:AA:600:C:OP1	10:AH:97:VAL:N	2.33	0.47
1:AA:625:G:H2'	1:AA:626:U:H6	1.79	0.47
1:AA:657:G:O2'	1:AA:658:G:H5'	2.14	0.47
1:AA:819:A:N6	1:AA:1529:G:C4	2.82	0.47
1:AA:1070:U:O2'	1:AA:1071:C:H5'	2.13	0.47
1:AA:1451:A:O2'	1:AA:1452:C:OP1	2.26	0.47
9:AG:23:VAL:HG12	9:AG:27:ILE:CD1	2.41	0.47
10:AH:6:ILE:HD12	10:AH:35:ILE:HD12	1.96	0.47
12:AJ:39:PRO:HA	12:AJ:70:ARG:HH11	1.78	0.47
14:AL:27:LEU:HG	14:AL:28:LYS:N	2.25	0.47
14:AL:48:PRO:HG2	14:AL:49:ASN:N	2.25	0.47
15:AM:78:ILE:HA	15:AM:81:LEU:CD2	2.38	0.47
16:AN:21:TYR:HE2	16:AN:23:ARG:HE	1.63	0.47
20:AR:28:GLU:OE1	20:AR:28:GLU:N	2.46	0.47
20:AR:53:ARG:HD3	20:AR:63:GLN:HB3	1.95	0.47
23:B0:109:A:C2'	23:B0:110:U:H5''	2.44	0.47
23:B0:393:U:H2'	23:B0:394:U:C6	2.49	0.47
23:B0:598:U:H2'	23:B0:599:A:C8	2.49	0.47
23:B0:636:G:H2'	23:B0:637:G:H5'	1.95	0.47
23:B0:910:U:H2'	23:B0:911:A:H5'	1.95	0.47
23:B0:1071:U:N3	23:B0:1099:A:H2	2.02	0.47
23:B0:1598:C:H2'	23:B0:1599:G:O4'	2.14	0.47
23:B0:3866:A:C1'	55:B5:194:ALA:CA	2.92	0.47
23:B0:2307:A:H2'	23:B0:2308:A:C8	2.49	0.47
23:B0:2437:G:C2	23:B0:2469:G:H2'	2.50	0.47
1:AA:130:A:C2	1:AA:264:U:C2	3.03	0.47
1:AA:264:U:H2'	19:AQ:64:PRO:HB2	1.96	0.47
1:AA:403:C:H2'	1:AA:404:U:H6	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:435:C:O2'	1:AA:436:C:H5'	2.15	0.47
1:AA:538:G:H4'	14:AL:114:LYS:NZ	2.27	0.47
1:AA:665:A:C2	1:AA:732:C:C2	3.03	0.47
1:AA:762:C:C4'	23:B0:729:A:C6	2.74	0.47
1:AA:834:C:H2'	1:AA:835:U:H6	1.80	0.47
1:AA:1221:G:O2'	1:AA:1222:G:H5'	2.15	0.47
1:AA:1261:A:C4'	1:AA:1283:G:C5'	2.92	0.47
1:AA:1262:C:H2'	1:AA:1263:C:H6	1.79	0.47
1:AA:1394:A:C4	1:AA:1501:C:C4'	2.62	0.47
2:AW:11:C:O2'	23:B0:1898:U:H5''	2.14	0.47
2:AW:64:A:O4'	23:B0:2461:G:O2'	2.32	0.47
4:AB:15:VAL:HG12	4:AB:210:SER:HB2	1.97	0.47
5:AC:173:VAL:O	5:AC:173:VAL:HG12	2.14	0.47
8:AF:4:TYR:CZ	8:AF:72:VAL:HG21	2.49	0.47
8:AF:53:ALA:C	8:AF:55:ASP:H	2.18	0.47
9:AG:77:SER:O	9:AG:156:TRP:HZ3	1.97	0.47
15:AM:39:ILE:CD1	15:AM:56:LEU:HG	2.44	0.47
15:AM:97:PRO:HB2	15:AM:101:GLN:OE1	2.14	0.47
20:AR:47:THR:HG22	20:AR:48:GLY:H	1.79	0.47
22:AT:94:ALA:O	22:AT:95:ALA:CB	2.63	0.47
23:B0:242:A:O2'	23:B0:243:G:P	2.72	0.47
23:B0:1365:U:H5'	23:B0:1587:A:H1'	1.96	0.47
23:B0:1489:C:H3'	23:B0:1490:U:C5'	2.45	0.47
23:B0:1494:G:H2'	23:B0:1495:G:C8	2.50	0.47
23:B0:2062:U:H4'	23:B0:2412:A:H2	1.78	0.47
23:B0:3181:C:H2'	23:B0:3182:U:C6	2.50	0.47
23:B0:2220:A:H2'	23:B0:2221:G:C8	2.48	0.47
23:B0:2455:A:O2'	23:B0:2456:U:H5'	2.15	0.47
23:B0:2799:C:H2'	23:B0:2800:C:O4'	2.14	0.47
1:AA:297:G:C5'	1:AA:557:G:H4'	2.44	0.47
1:AA:299:G:N2	1:AA:566:G:C6	2.78	0.47
1:AA:528:C:H5'	1:AA:535:A:C6	2.49	0.47
1:AA:1057:G:C2'	1:AA:1058:G:H5'	2.44	0.47
1:AA:1127:G:N2	1:AA:1147:C:N4	2.62	0.47
1:AA:1158:C:N3	1:AA:1181:G:N2	2.61	0.47
1:AA:1515:C:H2'	1:AA:1516:G:C8	2.50	0.47
7:AE:92:LYS:O	7:AE:118:ILE:HG23	2.15	0.47
7:AE:102:ALA:HB2	7:AE:120:THR:HB	1.97	0.47
7:AE:127:ASN:O	7:AE:128:PRO:C	2.53	0.47
8:AF:50:TYR:CE1	20:AR:77:GLY:HA2	2.49	0.47
9:AG:54:THR:HG22	9:AG:56:GLN:H	1.79	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:94:ARG:HH22	21:AS:81:ARG:HH11	1.61	0.47
16:AN:14:PRO:O	16:AN:16:PHE:N	2.44	0.47
19:AQ:104:LYS:CB	23:B0:726:G:C5	2.97	0.47
20:AR:45:SER:C	20:AR:47:THR:N	2.65	0.47
23:B0:404:A:H2'	23:B0:405:C:C6	2.50	0.47
23:B0:1074:G:O2'	23:B0:1075:C:H5'	2.15	0.47
23:B0:1101:U:O4	23:B0:1113:C:N4	2.48	0.47
23:B0:1279:G:HO2'	23:B0:1280:U:H6	1.62	0.47
23:B0:1286:U:H2'	23:B0:2692:A:H2	1.80	0.47
23:B0:1497:C:O2'	23:B0:1498:G:H5'	2.14	0.47
23:B0:1591:U:H2'	23:B0:1592:U:O4'	2.14	0.47
23:B0:1654:A:H2'	23:B0:1655:C:C6	2.49	0.47
23:B0:1918:G:H4'	23:B0:1920:A:C2	2.50	0.47
23:B0:1922:U:H1'	23:B0:2570:C:O2'	2.15	0.47
1:AA:37:U:H1'	1:AA:500:G:O2'	2.13	0.47
1:AA:155:C:H2'	1:AA:156:G:H8	1.79	0.47
1:AA:173:U:C2	1:AA:197:A:N1	2.82	0.47
1:AA:292:G:H21	1:AA:608:A:H2	1.51	0.47
1:AA:588:G:N7	1:AA:753:A:N3	2.63	0.47
1:AA:633:G:H2'	1:AA:634:C:C6	2.49	0.47
1:AA:702:A:C6	23:B0:1838:G:H2'	2.48	0.47
1:AA:707:C:H4'	13:AK:20:TYR:CZ	2.50	0.47
1:AA:780:A:C2	1:AA:801:U:C5	3.02	0.47
1:AA:893:C:C6	1:AA:894:G:N7	2.82	0.47
1:AA:947:G:H2'	1:AA:948:C:O4'	2.15	0.47
1:AA:992:U:O2'	1:AA:993:G:OP2	2.26	0.47
1:AA:1004:A:N6	1:AA:1035:A:H62	2.13	0.47
1:AA:1060:C:H5'	12:AJ:52:GLY:CA	2.27	0.47
1:AA:1128:C:O2'	1:AA:1130:A:C8	2.62	0.47
1:AA:1393:U:C2'	1:AA:1395:C:C5	2.93	0.47
2:AV:57:G:C4'	28:BD:76:ASN:CA	2.92	0.47
4:AB:78:GLN:O	4:AB:94:ASN:OD1	2.33	0.47
4:AB:215:LEU:O	4:AB:216:SER:C	2.52	0.47
5:AC:19:GLU:HB3	5:AC:40:ARG:NH2	2.25	0.47
5:AC:100:ALA:O	5:AC:101:LEU:HB2	2.14	0.47
6:AD:57:ARG:HH22	7:AE:107:ARG:HD2	1.60	0.47
7:AE:33:VAL:HG11	7:AE:109:ILE:HA	1.96	0.47
7:AE:148:VAL:O	7:AE:152:ARG:HG3	2.14	0.47
10:AH:75:ARG:HA	10:AH:76:PRO:HD3	1.70	0.47
11:AI:48:GLU:N	11:AI:49:PRO:CD	2.77	0.47
12:AJ:51:ARG:HA	16:AN:45:ARG:NH1	2.30	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:AL:28:LYS:HD2	14:AL:33:ARG:NH1	2.29	0.47
14:AL:42:THR:CG2	14:AL:52:LEU:HB3	2.44	0.47
19:AQ:101:ARG:HD3	23:B0:731:A:C2	2.36	0.47
22:AT:50:GLU:HG3	22:AT:99:LEU:CD1	2.45	0.47
23:B0:9:U:H2'	23:B0:10:A:C8	2.49	0.47
23:B0:367:G:C3'	23:B0:368:A:H5''	2.44	0.47
23:B0:619:A:H2'	23:B0:620:G:C8	2.49	0.47
23:B0:930:A:H3'	23:B0:931:G:H8	1.79	0.47
23:B0:1088:A:C2	23:B0:1099:A:C8	3.03	0.47
23:B0:1189:G:O2'	23:B0:1190:C:H5'	2.14	0.47
23:B0:1829:C:C2'	23:B0:1830:C:H5'	2.44	0.47
23:B0:1886:G:H2'	23:B0:1887:G:H8	1.79	0.47
23:B0:2008:C:H2'	23:B0:2009:U:C6	2.49	0.47
23:B0:2376:G:H2'	23:B0:2377:U:C6	2.50	0.47
24:B9:22:U:H2'	24:B9:23:G:H8	1.79	0.47
24:B9:80:A:H2'	24:B9:81:C:O4'	2.15	0.47
1:AA:27:G:N3	1:AA:557:G:N3	2.63	0.47
1:AA:41:G:H2'	1:AA:42:G:H8	1.79	0.47
1:AA:128:G:O3'	19:AQ:3:LYS:HG2	2.13	0.47
1:AA:247:G:OP2	19:AQ:100:LYS:CE	2.56	0.47
1:AA:264:U:C2'	19:AQ:64:PRO:N	2.77	0.47
1:AA:572:A:N3	1:AA:917:G:C1'	2.72	0.47
1:AA:672:U:O3'	1:AA:673:G:P	2.72	0.47
1:AA:975:A:H4'	1:AA:976:G:H5'	1.97	0.47
1:AA:1194:U:H2'	1:AA:1195:C:C6	2.50	0.47
1:AA:1255:G:N3	1:AA:1259:C:O2	2.48	0.47
1:AA:1391:U:H1'	1:AA:1532:U:OP1	2.15	0.47
5:AC:79:ARG:HG2	5:AC:82:GLU:CG	2.45	0.47
7:AE:20:GLN:C	7:AE:21:ALA:O	2.50	0.47
8:AF:67:MET:HE2	8:AF:72:VAL:HG22	1.97	0.47
13:AK:50:TYR:HD1	13:AK:60:ALA:HB2	1.80	0.47
23:B0:38:G:H2'	23:B0:39:C:C6	2.49	0.47
23:B0:537:C:C6	23:B0:2759:U:H2'	2.50	0.47
23:B0:859:U:H4'	23:B0:860:U:C5	2.49	0.47
23:B0:3149:G:O3'	23:B0:3150:C:OP2	2.33	0.47
23:B0:2238:G:H2'	23:B0:2239:C:C6	2.49	0.47
1:AA:88:G:O2'	1:AA:89:G:H5'	2.14	0.47
1:AA:129(A):G:O2'	1:AA:130:A:OP2	2.28	0.47
1:AA:141:A:C1'	1:AA:182:U:O2	2.63	0.47
1:AA:215:C:O2'	1:AA:465:C:N4	2.45	0.47
1:AA:300:A:H1'	1:AA:565:U:H3	1.79	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:457:G:O2'	1:AA:458:G:H5'	2.15	0.47
1:AA:521:G:H4'	14:AL:73:GLU:CG	2.44	0.47
1:AA:560:U:O5'	1:AA:560:U:H6	1.98	0.47
1:AA:586:C:C5'	10:AH:90:GLY:N	2.78	0.47
1:AA:944:G:H3'	1:AA:945:G:H5'	1.97	0.47
1:AA:1001:A:H2'	1:AA:1002:G:H8	1.79	0.47
1:AA:1074:G:O3'	4:AB:103:THR:CG2	2.63	0.47
1:AA:1427:U:HO2'	23:B0:1704:G:H5''	1.77	0.47
1:AA:1428:A:O4'	23:B0:1704:G:H5'	2.15	0.47
5:AC:174:PRO:O	5:AC:177:THR:HG22	2.15	0.47
10:AH:23:SER:OG	10:AH:60:ARG:HD2	2.15	0.47
12:AJ:8:LEU:HD12	12:AJ:20:ALA:HB2	1.97	0.47
18:AP:20:VAL:CG1	18:AP:21:VAL:N	2.76	0.47
19:AQ:90:ILE:O	23:B0:726:G:H4'	2.15	0.47
22:AT:42:GLN:O	22:AT:42:GLN:NE2	2.47	0.47
23:B0:558:G:H5''	23:B0:559:C:C5	2.50	0.47
23:B0:810:U:H2'	23:B0:811:G:C8	2.49	0.47
23:B0:1789:U:H2'	23:B0:1790:G:H5'	1.95	0.47
23:B0:1974:U:H2'	23:B0:1975:G:H5''	1.95	0.47
23:B0:3098:U:H3'	23:B0:3099:U:C5	2.49	0.47
23:B0:3171:A:O2'	23:B0:3172:U:H6	1.98	0.47
1:AA:517:G:H5'	1:AA:519:C:C2	2.50	0.47
1:AA:932:C:C5'	9:AG:3:ARG:CD	2.86	0.47
1:AA:1491:G:OP1	14:AL:46:LYS:NZ	2.48	0.47
2:AW:25:C:C4	2:AW:26:G:N7	2.83	0.47
5:AC:188:LEU:O	5:AC:189:ALA:CB	2.59	0.47
6:AD:3:ARG:NE	6:AD:71:SER:HB3	2.30	0.47
6:AD:145:GLU:HG2	6:AD:184:LYS:HE2	1.96	0.47
8:AF:30:LEU:HB3	8:AF:35:ALA:CB	2.41	0.47
13:AK:80:VAL:HG21	13:AK:103:LEU:HD13	1.97	0.47
19:AQ:80:GLY:O	19:AQ:81:ARG:HB3	2.15	0.47
21:AS:10:PHE:HE2	21:AS:12:ASP:OD1	1.97	0.47
23:B0:85:C:O2'	23:B0:86:U:H5'	2.15	0.47
23:B0:342:G:O2'	23:B0:343:A:OP1	2.27	0.47
23:B0:462:G:H2'	23:B0:463:C:H5'	1.97	0.47
23:B0:564:U:H2'	23:B0:565:A:C8	2.50	0.47
23:B0:1091:C:H4'	31:BG:126:THR:CA	2.44	0.47
23:B0:3185:U:H5'	23:B0:3185:U:C6	2.40	0.47
23:B0:2199:C:H2'	23:B0:2200:G:C8	2.50	0.47
23:B0:2429:A:O2'	23:B0:2430:A:H5'	2.16	0.47
1:AA:132:C:O2'	1:AA:133:U:H5'	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:421:U:H5'	1:AA:422:C:H5	1.80	0.46
1:AA:521:G:H4'	14:AL:73:GLU:HG2	1.96	0.46
1:AA:1110:A:C5	1:AA:1111:A:C5	3.03	0.46
1:AA:1153:C:H2'	1:AA:1154:G:C8	2.46	0.46
1:AA:1300:G:O2'	1:AA:1301:U:P	2.73	0.46
1:AA:1410:G:N1	1:AA:1491:G:N1	2.63	0.46
4:AB:53:ARG:NH1	4:AB:199:TYR:CD2	2.82	0.46
6:AD:29:PRO:C	6:AD:30:LYS:HG3	2.35	0.46
6:AD:87:GLY:O	6:AD:88:VAL:C	2.53	0.46
7:AE:118:ILE:CG2	7:AE:119:LEU:H	2.27	0.46
9:AG:135:VAL:O	9:AG:139:GLU:HG3	2.15	0.46
11:AI:33:PHE:CE2	11:AI:47:LEU:HD11	2.50	0.46
13:AK:59:TYR:O	13:AK:62:GLN:HB3	2.15	0.46
14:AL:38:THR:HG22	14:AL:39:VAL:HG23	1.97	0.46
17:AO:77:ARG:O	17:AO:80:ALA:HB3	2.15	0.46
18:AP:42:ARG:O	18:AP:43:LYS:C	2.51	0.46
19:AQ:104:LYS:HZ1	23:B0:730:C:H42	1.59	0.46
20:AR:59:SER:OG	20:AR:62:GLU:HG3	2.15	0.46
21:AS:15:LEU:HD12	21:AS:16:LEU:H	1.77	0.46
23:B0:351:A:H2'	23:B0:352:G:O4'	2.15	0.46
23:B0:1155:G:H2'	23:B0:1156:U:O4'	2.16	0.46
23:B0:1184:G:H2'	23:B0:1185:C:H5'	1.97	0.46
23:B0:1223:G:H5'	23:B0:1225:G:OP1	2.15	0.46
23:B0:3131:A:H5''	23:B0:3133:G:O4'	2.16	0.46
23:B0:3181:C:O3'	23:B0:3182:U:P	2.73	0.46
23:B0:2432:A:H4'	23:B0:2551:A:O2'	2.15	0.46
24:B9:34:C:H2'	24:B9:35:C:C6	2.50	0.46
1:AA:253:U:C2'	19:AQ:15:MET:SD	3.02	0.46
1:AA:538:G:C8	14:AL:115:LYS:CE	2.98	0.46
1:AA:743:U:H2'	1:AA:744:C:H6	1.79	0.46
1:AA:1190:G:H3'	5:AC:3:ASN:CB	2.33	0.46
1:AA:1195:C:H2'	1:AA:1197:G:H5'	1.96	0.46
1:AA:1445:U:O2'	1:AA:1446:A:H5'	2.15	0.46
4:AB:75:LYS:HE3	4:AB:78:GLN:OE1	2.14	0.46
5:AC:21:ARG:NH2	5:AC:56:ASP:OD2	2.49	0.46
5:AC:23:TYR:CE1	12:AJ:67:THR:CG2	2.96	0.46
5:AC:167:TRP:O	5:AC:168:ALA:CB	2.63	0.46
8:AF:44:GLY:HA2	8:AF:59:TYR:CE1	2.51	0.46
9:AG:77:SER:O	9:AG:156:TRP:CZ3	2.69	0.46
14:AL:77:LEU:HD21	14:AL:107:ALA:HB2	1.97	0.46
18:AP:43:LYS:HG2	18:AP:48:TRP:CE2	2.50	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:AQ:105:ALA:C	23:B0:727:U:O3'	2.48	0.46
23:B0:566:U:H2'	23:B0:567:G:C8	2.50	0.46
23:B0:1313:U:O4	23:B0:1651:U:H5'	2.15	0.46
23:B0:1445:A:H2'	23:B0:1446:U:O4'	2.14	0.46
23:B0:2560:G:H3'	23:B0:2560:G:N3	2.31	0.46
1:AA:214:U:H5'	1:AA:215:C:OP2	2.15	0.46
1:AA:265:G:C4'	19:AQ:64:PRO:O	2.46	0.46
1:AA:321:A:O2'	1:AA:322:C:H5'	2.15	0.46
1:AA:521:G:O4'	14:AL:73:GLU:OE2	2.33	0.46
1:AA:542:G:H2'	1:AA:543:C:H6	1.80	0.46
1:AA:599:C:H5'	10:AH:131:GLY:HA2	1.96	0.46
1:AA:1261:A:H4'	1:AA:1283:G:H5''	1.97	0.46
1:AA:1474:G:O2'	1:AA:1475:G:H5'	2.16	0.46
1:AA:1497:G:N2	1:AA:1519:A:N3	2.63	0.46
7:AE:18:ARG:HG2	7:AE:19:MET:H	1.81	0.46
7:AE:79:GLU:CD	10:AH:105:ARG:HE	2.18	0.46
14:AL:54:LYS:N	14:AL:54:LYS:HD2	2.30	0.46
23:B0:397:U:H2'	23:B0:398:C:C6	2.51	0.46
23:B0:1280:U:O2'	23:B0:1281:A:H5'	2.15	0.46
23:B0:1333:G:N2	23:B0:1344:C:H41	2.13	0.46
23:B0:1840:A:H2'	23:B0:1841:G:H5'	1.98	0.46
23:B0:3093:C:O2'	23:B0:3094:A:H5'	2.15	0.46
23:B0:2277:A:H2'	23:B0:2278:A:O4'	2.16	0.46
23:B0:2498:U:H5''	23:B0:2499:C:OP1	2.15	0.46
23:B0:2512:A:H2'	23:B0:2513:A:O4'	2.15	0.46
24:B9:22:U:H2'	24:B9:23:G:C8	2.50	0.46
1:AA:128:G:C5'	19:AQ:2:PRO:N	2.78	0.46
1:AA:130:A:N9	19:AQ:63:ARG:HG3	2.28	0.46
1:AA:406:G:C4	1:AA:496:A:N7	2.82	0.46
1:AA:619:U:N1	6:AD:135:LEU:HD12	2.26	0.46
1:AA:761:G:H4'	23:B0:726:G:H22	1.80	0.46
1:AA:1234:C:H4'	1:AA:1365:G:OP1	2.13	0.46
1:AA:1256:A:C2	1:AA:1258:G:N1	2.72	0.46
1:AA:1342:C:C4'	11:AI:125:TYR:CD1	2.93	0.46
1:AA:1481:U:H2'	1:AA:1482:G:O4'	2.15	0.46
1:AA:1499:A:C2'	1:AA:1520:G:H5''	2.45	0.46
2:AV:76:A:C5'	23:B0:2564:U:C5	2.85	0.46
2:AV:76:A:C3'	23:B0:2046:C:C2'	2.91	0.46
5:AC:139:GLN:NE2	5:AC:139:GLN:CA	2.78	0.46
6:AD:24:GLU:CG	6:AD:25:ARG:N	2.77	0.46
9:AG:20:ASP:OD1	9:AG:22:LEU:HB3	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AG:21:VAL:HG23	9:AG:22:LEU:N	2.29	0.46
12:AJ:22:LYS:HE2	12:AJ:90:LEU:HB2	1.97	0.46
12:AJ:45:ARG:NH2	16:AN:36:PHE:HD2	1.84	0.46
13:AK:72:ALA:HB1	13:AK:77:MET:HG3	1.97	0.46
13:AK:93:GLN:HE21	13:AK:96:ARG:NH2	2.13	0.46
14:AL:82:VAL:O	14:AL:106:ASP:HB2	2.15	0.46
15:AM:59:TYR:O	15:AM:63:THR:HB	2.15	0.46
17:AO:66:LEU:O	17:AO:69:TYR:HB3	2.15	0.46
23:B0:323:G:H2'	23:B0:324:C:C6	2.50	0.46
23:B0:584:A:H4'	23:B0:2479:U:C5'	2.45	0.46
23:B0:1947:G:P	23:B0:1947:G:H8	2.38	0.46
23:B0:2061:C:H1'	23:B0:2413:A:H1'	1.97	0.46
23:B0:3109:U:H5'	23:B0:3150:C:C5'	2.24	0.46
23:B0:2669:C:H41	36:BL:15:SER:CA	2.28	0.46
23:B0:2784:A:H4'	23:B0:2786:G:OP2	2.15	0.46
1:AA:253:U:H5'	1:AA:276:G:C1'	2.46	0.46
1:AA:390:C:H6	1:AA:390:C:O5'	1.99	0.46
1:AA:419:C:H5''	1:AA:513:C:C1'	2.44	0.46
1:AA:476:U:C4	1:AA:477:G:C5'	2.97	0.46
1:AA:961:U:OP1	1:AA:1223:C:H4'	2.15	0.46
1:AA:1056:U:O2'	1:AA:1057:G:H5'	2.14	0.46
1:AA:1152:A:O2'	1:AA:1153:C:H5'	2.16	0.46
1:AA:1300:G:O2'	1:AA:1301:U:H6	1.98	0.46
1:AA:1320:C:N3	21:AS:36:ARG:HG3	2.30	0.46
4:AB:129:GLU:O	4:AB:130:ARG:HB2	2.15	0.46
5:AC:28:GLN:O	5:AC:31:HIS:N	2.46	0.46
5:AC:129:ALA:HB3	5:AC:132:ARG:CD	2.45	0.46
9:AG:85:TYR:CD1	9:AG:154:TYR:HE1	2.28	0.46
9:AG:154:TYR:O	9:AG:156:TRP:N	2.49	0.46
9:AG:155:ARG:O	9:AG:156:TRP:CB	2.64	0.46
12:AJ:61:GLU:HG3	16:AN:58:LYS:CE	2.36	0.46
14:AL:46:LYS:O	14:AL:47:LYS:C	2.54	0.46
22:AT:63:ILE:HG23	22:AT:72:LEU:CD1	2.46	0.46
23:B0:203:G:O2'	23:B0:204:A:H5'	2.15	0.46
23:B0:508:G:H22	23:B0:516:G:H22	1.63	0.46
23:B0:645:G:H2'	23:B0:646:C:C6	2.51	0.46
23:B0:670:U:H2'	23:B0:671:A:C8	2.50	0.46
23:B0:887:G:O2'	23:B0:888:G:H5'	2.15	0.46
23:B0:1912:G:O4'	23:B0:1913:G:H8	1.95	0.46
23:B0:3108:G:N3	23:B0:3109:U:C5	2.84	0.46
23:B0:2321:C:H2'	23:B0:2322:U:H5'	1.97	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:58:C:O2'	1:AA:59:A:H5'	2.16	0.46
1:AA:127:G:OP1	1:AA:635:G:H1'	2.15	0.46
1:AA:201:G:H21	1:AA:469:C:H4'	1.81	0.46
1:AA:760:G:N1	19:AQ:105:ALA:HB2	2.31	0.46
1:AA:1064:G:H1'	1:AA:1190:G:N2	2.28	0.46
1:AA:1255:G:O2'	1:AA:1259:C:C2	2.58	0.46
1:AA:1466:C:H2'	1:AA:1467:G:C8	2.50	0.46
4:AB:23:ARG:HH11	4:AB:23:ARG:C	2.16	0.46
4:AB:142:LEU:HB3	4:AB:146:GLN:HE22	1.80	0.46
5:AC:59:ARG:O	12:AJ:92:THR:CG2	2.64	0.46
7:AE:35:GLY:HA3	7:AE:112:LEU:HB3	1.98	0.46
7:AE:143:ARG:HA	7:AE:143:ARG:HD3	1.71	0.46
10:AH:92:ARG:HG2	10:AH:94:TYR:OH	2.16	0.46
15:AM:46:LYS:HG3	15:AM:47:ASP:N	2.30	0.46
15:AM:51:ALA:O	15:AM:55:ARG:HG3	2.16	0.46
19:AQ:97:SER:O	19:AQ:98:LEU:C	2.54	0.46
19:AQ:105:ALA:N	23:B0:727:U:C4'	2.78	0.46
21:AS:20:LEU:O	21:AS:23:ASN:HB2	2.15	0.46
22:AT:59:ALA:O	22:AT:63:ILE:HG13	2.14	0.46
23:B0:84:G:H2'	23:B0:85:C:C6	2.50	0.46
23:B0:753:U:H2'	23:B0:754:G:H5'	1.97	0.46
23:B0:831:G:H5'	23:B0:852:U:OP1	2.15	0.46
23:B0:1036:G:H1'	23:B0:1145:C:C4'	2.45	0.46
23:B0:1226:A:N1	23:B0:1250:A:H1'	2.30	0.46
23:B0:1358:C:H2'	23:B0:1359:G:H5'	1.97	0.46
23:B0:1414:G:H2'	23:B0:1415:C:C6	2.50	0.46
23:B0:2825:A:H2'	23:B0:2826:C:C6	2.51	0.46
24:B9:59:A:N3	24:B9:59:A:H2'	2.31	0.46
1:AA:7:G:O2'	7:AE:121:LYS:HB2	2.16	0.46
1:AA:118:U:H3'	1:AA:119:A:P	2.56	0.46
1:AA:411:A:C6	1:AA:429:U:C4	3.04	0.46
1:AA:815:A:N1	1:AA:1528:U:N1	2.55	0.46
1:AA:905:U:O4	1:AA:906:G:N1	2.49	0.46
1:AA:954:G:H2'	1:AA:955:U:H6	1.78	0.46
1:AA:1030:U:H5'	1:AA:1031:C:H5	1.80	0.46
1:AA:1245:A:H2'	1:AA:1246:C:C6	2.50	0.46
1:AA:1497:G:C2'	1:AA:1498:U:C5'	2.87	0.46
2:AV:33:U:O2	2:AV:35:A:H5'	2.13	0.46
4:AB:15:VAL:CG1	4:AB:209:ARG:HG3	2.46	0.46
4:AB:25:ASN:C	4:AB:25:ASN:ND2	2.68	0.46
4:AB:69:LEU:C	4:AB:69:LEU:HD23	2.36	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AD:104:VAL:HG11	6:AD:146:ILE:CD1	2.37	0.46
6:AD:121:VAL:O	6:AD:134:ASP:HA	2.16	0.46
7:AE:68:GLU:O	7:AE:70:PRO:HD3	2.15	0.46
8:AF:101:ALA:HB2	20:AR:28:GLU:HB3	1.97	0.46
9:AG:15:ASP:O	9:AG:19:GLY:HA2	2.16	0.46
13:AK:84:VAL:HG23	13:AK:109:VAL:O	2.16	0.46
14:AL:60:LEU:HD21	14:AL:66:VAL:HG22	1.97	0.46
14:AL:71:PRO:O	14:AL:102:ARG:HD2	2.16	0.46
15:AM:39:ILE:HD12	15:AM:56:LEU:HG	1.98	0.46
18:AP:72:ARG:O	18:AP:72:ARG:HG2	2.16	0.46
23:B0:181:A:H4'	23:B0:182:G:C4'	2.44	0.46
23:B0:575:U:H2'	23:B0:576:A:C8	2.51	0.46
23:B0:1269:G:H2'	23:B0:1270:C:C6	2.50	0.46
23:B0:3876:A:H5''	55:B5:39:ILE:CA	2.45	0.46
23:B0:2021:G:H2'	23:B0:2022:C:C6	2.51	0.46
1:AA:255:G:C5'	19:AQ:17:LYS:CA	2.91	0.46
1:AA:322:C:C5'	22:AT:23:ARG:CD	2.86	0.46
1:AA:547:A:OP1	1:AA:548:G:P	2.74	0.46
1:AA:645:C:O2'	1:AA:646:U:H5'	2.16	0.46
1:AA:651:C:N4	1:AA:753:A:OP2	2.44	0.46
1:AA:778:G:HO2'	1:AA:779:C:H5'	1.80	0.46
1:AA:1314:C:C5	21:AS:6:LYS:CD	2.99	0.46
1:AA:1390:U:H2'	1:AA:1391:U:C6	2.51	0.46
5:AC:157:ILE:HD11	5:AC:166:GLU:HB2	1.97	0.46
6:AD:173:TRP:CD2	6:AD:189:PRO:HB3	2.51	0.46
9:AG:46:ALA:O	9:AG:50:ILE:HG13	2.15	0.46
9:AG:107:ALA:O	9:AG:110:GLN:HB2	2.16	0.46
14:AL:59:ARG:NH1	14:AL:65:GLU:HG2	2.30	0.46
21:AS:15:LEU:O	21:AS:19:VAL:N	2.48	0.46
21:AS:67:VAL:O	21:AS:69:HIS:N	2.49	0.46
23:B0:313:U:H2'	23:B0:314:G:C8	2.51	0.46
23:B0:317:U:H3'	23:B0:318:G:C5'	2.46	0.46
23:B0:1921:A:C3'	23:B0:1922:U:H5''	2.46	0.46
1:AA:186:C:C5'	22:AT:81:LYS:NZ	2.69	0.46
1:AA:355:C:H5'	1:AA:389:A:OP2	2.16	0.46
1:AA:998:G:O2'	1:AA:999:C:H5'	2.15	0.46
1:AA:1039:C:O2'	1:AA:1040:U:H5'	2.16	0.46
1:AA:1237:C:H2'	1:AA:1336:C:C5	2.51	0.46
1:AA:1483:A:N3	1:AA:1484:C:C6	2.84	0.46
4:AB:100:GLY:O	4:AB:104:ASN:N	2.45	0.46
5:AC:64:VAL:CG2	5:AC:99:VAL:HB	2.45	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AF:2:ARG:HD2	8:AF:69:GLU:HG2	1.96	0.46
11:AI:48:GLU:OE1	11:AI:48:GLU:HA	2.16	0.46
11:AI:112:LYS:C	11:AI:112:LYS:HD3	2.37	0.46
13:AK:16:SER:O	13:AK:35:PRO:HD3	2.16	0.46
13:AK:34:ASP:O	13:AK:36:ASP:N	2.48	0.46
19:AQ:66:SER:OG	19:AQ:69:LYS:HB3	2.15	0.46
19:AQ:96:GLN:CD	19:AQ:96:GLN:O	2.54	0.46
20:AR:48:GLY:O	20:AR:74:ARG:NH2	2.41	0.46
21:AS:18:LYS:O	21:AS:18:LYS:HG2	2.16	0.46
23:B0:42:G:H2'	23:B0:43:A:O4'	2.16	0.46
23:B0:471:A:H62	23:B0:480:G:N2	2.07	0.46
23:B0:502:A:H2'	23:B0:503:G:O4'	2.15	0.46
23:B0:644:A:H2'	23:B0:645:G:H5'	1.98	0.46
23:B0:1193:G:H2'	23:B0:1194:U:C6	2.50	0.46
23:B0:3877:A:OP2	23:B0:1861:G:OP2	2.34	0.46
23:B0:2800:C:H2'	23:B0:2801:A:O4'	2.15	0.46
23:B0:2809:A:C6	23:B0:2854:G:H2'	2.50	0.46
1:AA:9:G:OP2	7:AE:126:ARG:NH1	2.48	0.46
1:AA:778:G:C4'	13:AK:119:CYS:SG	3.04	0.46
1:AA:847:C:H2'	1:AA:848:G:H8	1.81	0.46
1:AA:1090:U:C4'	1:AA:1169:A:C2	2.99	0.46
1:AA:1277:C:C2'	1:AA:1278:U:H5'	2.46	0.46
1:AA:1320:C:H2'	1:AA:1321:C:O4'	2.16	0.46
4:AB:19:HIS:HD2	4:AB:189:ASP:OD2	1.99	0.46
4:AB:22:LYS:O	4:AB:23:ARG:HG3	2.16	0.46
5:AC:92:ALA:C	5:AC:94:LEU:H	2.17	0.46
5:AC:131:ARG:O	5:AC:135:LYS:HG3	2.16	0.46
6:AD:152:SER:HA	6:AD:155:LEU:HG	1.97	0.46
10:AH:91:ARG:HG3	14:AL:7:ILE:HG13	1.97	0.46
14:AL:37:CYS:O	14:AL:79:GLU:O	2.34	0.46
15:AM:5:ALA:O	15:AM:8:GLU:N	2.45	0.46
15:AM:49:THR:O	15:AM:53:VAL:HG23	2.16	0.46
20:AR:36:ASN:ND2	20:AR:38:GLU:HG2	2.29	0.46
23:B0:556:A:H2'	23:B0:557:U:H5'	1.98	0.46
23:B0:590:C:H2'	23:B0:591:G:C8	2.51	0.46
23:B0:599:A:H2'	23:B0:600:G:H8	1.80	0.46
23:B0:1312:G:H5''	23:B0:1313:U:C5'	2.39	0.46
23:B0:1352:G:H2'	23:B0:1353:A:C8	2.49	0.46
23:B0:1586:A:H2'	23:B0:1587:A:H8	1.81	0.46
23:B0:1750:A:H1'	23:B0:2690:A:C2	2.51	0.46
23:B0:3874:C:C2'	23:B0:3875:A:H5'	2.46	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2448:A:H2'	23:B0:2449:G:O4'	2.16	0.46
24:B9:74:A:H2'	24:B9:75:A:C8	2.51	0.46
1:AA:19:C:H2'	1:AA:20:U:H6	1.80	0.45
1:AA:39:G:N9	1:AA:498:U:C4	2.85	0.45
1:AA:135:C:C2'	1:AA:136:C:C5'	2.94	0.45
1:AA:151:A:H2'	1:AA:152:A:O4'	2.15	0.45
1:AA:600:C:H4'	10:AH:128:GLY:O	2.16	0.45
1:AA:702:A:C2	23:B0:1838:G:C2'	2.99	0.45
1:AA:1049:U:H4'	1:AA:1050:G:OP2	2.16	0.45
1:AA:1230:C:H2'	1:AA:1231:G:H8	1.81	0.45
1:AA:1475:G:H5'	23:B0:1705:U:O3'	2.16	0.45
1:AA:1510:U:H2'	1:AA:1511:G:C8	2.50	0.45
1:AA:1532:U:O5'	1:AA:1532:U:H6	2.00	0.45
2:AW:76:A:H2	23:B0:2532:G:N2	1.98	0.45
4:AB:97:TRP:CH2	4:AB:176:GLU:OE2	2.69	0.45
6:AD:4:TYR:O	6:AD:5:ILE:HB	2.16	0.45
7:AE:102:ALA:HB2	7:AE:120:THR:CB	2.46	0.45
11:AI:120:ARG:O	11:AI:121:ARG:C	2.55	0.45
15:AM:62:ASN:O	15:AM:63:THR:HB	2.16	0.45
16:AN:53:LEU:HB3	16:AN:56:VAL:CG2	2.45	0.45
23:B0:162:C:H4'	23:B0:195:A:O2'	2.16	0.45
23:B0:403:A:H4'	23:B0:425:A:C5'	2.39	0.45
23:B0:689:A:H3'	23:B0:689:A:N3	2.31	0.45
23:B0:839:U:OP1	23:B0:2407:G:H3'	2.16	0.45
23:B0:1203:A:H2'	23:B0:1204:G:H5'	1.98	0.45
23:B0:1223:G:H1'	23:B0:1225:G:N3	2.31	0.45
23:B0:1683:G:H2'	23:B0:1684:G:O4'	2.16	0.45
23:B0:1684:G:H2'	23:B0:1974:U:O4	2.16	0.45
23:B0:2429:A:H5''	23:B0:2476:A:C6	2.51	0.45
23:B0:2437:G:H2'	23:B0:2469:G:N2	2.31	0.45
23:B0:2640:G:H2'	23:B0:2641:A:O4'	2.16	0.45
1:AA:5:U:O2'	1:AA:6:G:P	2.73	0.45
1:AA:8:A:H62	6:AD:208:SER:HB2	1.82	0.45
1:AA:82:C:H2'	1:AA:83:C:O4'	2.17	0.45
1:AA:112:G:H4'	1:AA:389:A:H5''	1.96	0.45
1:AA:119:A:C2	1:AA:240:C:C4	3.04	0.45
1:AA:556:C:C2	1:AA:557:G:N7	2.84	0.45
1:AA:599:C:H4'	10:AH:130:GLY:CA	2.45	0.45
1:AA:702:A:C1'	23:B0:1840:A:OP1	2.64	0.45
1:AA:826:C:H2'	1:AA:827:U:H6	1.82	0.45
1:AA:905:U:C4	1:AA:906:G:C6	3.04	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:928:G:O2'	1:AA:1533:C:H5	1.99	0.45
1:AA:934:C:C4	1:AA:1345:U:C5	3.04	0.45
1:AA:1250:A:H5''	11:AI:68:GLY:N	2.32	0.45
1:AA:1261:A:C4'	1:AA:1283:G:H5''	2.46	0.45
1:AA:1401:G:OP1	3:AU:9:U:OP2	2.34	0.45
1:AA:1515:C:H2'	1:AA:1516:G:H8	1.81	0.45
4:AB:23:ARG:CZ	4:AB:23:ARG:HB2	2.47	0.45
4:AB:83:MET:HG3	4:AB:238:LEU:CD1	2.46	0.45
5:AC:23:TYR:CG	5:AC:24:ALA:N	2.84	0.45
7:AE:80:ILE:CD1	7:AE:91:LEU:HD12	2.46	0.45
8:AF:19:LEU:HD23	8:AF:19:LEU:C	2.36	0.45
19:AQ:105:ALA:CA	23:B0:727:U:O4'	2.64	0.45
21:AS:22:LEU:CD1	21:AS:31:ILE:HD11	2.46	0.45
23:B0:508:G:H2'	23:B0:509:U:C6	2.50	0.45
23:B0:523:A:H2	23:B0:591:G:H4'	1.81	0.45
23:B0:629:C:H2'	23:B0:630:G:H5'	1.98	0.45
23:B0:715:U:H2'	23:B0:716:U:C6	2.51	0.45
23:B0:831:G:C2'	23:B0:832:A:H5''	2.46	0.45
23:B0:1199:U:H2'	23:B0:1200:G:H8	1.80	0.45
23:B0:3872:A:H2'	23:B0:3873:G:O4'	2.16	0.45
23:B0:2009:U:H2'	23:B0:2010:G:C8	2.51	0.45
23:B0:2610:G:C4'	23:B0:2866:A:H4'	2.47	0.45
1:AA:132:C:O2'	22:AT:74:LYS:NZ	2.48	0.45
1:AA:248:C:H4'	1:AA:283:C:H1'	1.98	0.45
1:AA:260:G:O2'	1:AA:261:U:H5'	2.16	0.45
1:AA:624:C:H2'	1:AA:625:G:H8	1.81	0.45
1:AA:690:G:H2'	1:AA:691:G:O4'	2.16	0.45
1:AA:909:A:H2'	1:AA:910:C:O4'	2.16	0.45
1:AA:1111:A:N1	5:AC:177:THR:HB	2.30	0.45
1:AA:1196:U:H4'	1:AA:1197:G:OP2	2.15	0.45
1:AA:1461:G:O2'	1:AA:1462:G:H5'	2.16	0.45
4:AB:32:ILE:HG21	4:AB:40:HIS:HD2	1.80	0.45
5:AC:108:ASN:OD1	5:AC:110:ASN:HB2	2.16	0.45
6:AD:162:LEU:HD13	6:AD:181:MET:CE	2.46	0.45
9:AG:143:ARG:O	9:AG:145:ALA:O	2.34	0.45
10:AH:45:ILE:HG13	10:AH:45:ILE:O	2.16	0.45
12:AJ:48:THR:OG1	12:AJ:62:HIS:CD2	2.69	0.45
12:AJ:53:PRO:O	12:AJ:54:PHE:O	2.34	0.45
15:AM:37:THR:HG23	15:AM:55:ARG:CB	2.46	0.45
16:AN:26:ARG:NH1	16:AN:47:LEU:HD21	2.32	0.45
23:B0:129:A:H2'	23:B0:130:C:C6	2.51	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:560:G:H2'	23:B0:561:U:C6	2.52	0.45
23:B0:666:U:H2'	23:B0:668:A:OP1	2.16	0.45
23:B0:930:A:H3'	23:B0:931:G:C8	2.51	0.45
23:B0:1578:U:H2'	23:B0:1579:G:C8	2.51	0.45
23:B0:3108:G:HO2'	23:B0:3109:U:P	2.39	0.45
23:B0:2451:G:H2'	23:B0:2508:G:N2	2.32	0.45
1:AA:65:U:C1'	1:AA:200:G:H4'	2.47	0.45
1:AA:91:C:O2'	1:AA:92:G:H5'	2.15	0.45
1:AA:237:C:H5'	19:AQ:25:ARG:CZ	2.45	0.45
1:AA:258:G:H2'	1:AA:259:G:H8	1.82	0.45
1:AA:702:A:C8	23:B0:1840:A:C8	3.04	0.45
1:AA:882:C:O2'	1:AA:883:C:H5'	2.16	0.45
1:AA:951:G:O2'	1:AA:952:U:H5'	2.15	0.45
1:AA:1171:G:H2'	1:AA:1172:C:C6	2.51	0.45
1:AA:1225:A:H5'	1:AA:1226:C:OP2	2.16	0.45
1:AA:1410:G:C4	1:AA:1491:G:N2	2.84	0.45
1:AA:1483:A:H3'	1:AA:1484:C:H5	1.82	0.45
4:AB:52:GLU:O	4:AB:56:ARG:HB2	2.17	0.45
5:AC:11:ARG:NH1	5:AC:177:THR:O	2.50	0.45
5:AC:99:VAL:CG2	5:AC:100:ALA:N	2.80	0.45
5:AC:164:ARG:HB3	5:AC:164:ARG:HH11	1.80	0.45
6:AD:187:ARG:HA	6:AD:187:ARG:HD2	1.81	0.45
7:AE:144:THR:C	7:AE:146:ALA:N	2.67	0.45
8:AF:33:TYR:HB2	8:AF:75:LEU:HD23	1.98	0.45
11:AI:19:LEU:C	11:AI:20:ARG:HG3	2.37	0.45
11:AI:50:LEU:C	11:AI:52:ALA:N	2.69	0.45
12:AJ:24:VAL:CG1	12:AJ:28:ARG:HE	2.29	0.45
12:AJ:30:SER:CB	12:AJ:84:GLN:HE21	2.29	0.45
12:AJ:62:HIS:HB2	16:AN:59:ALA:CB	2.23	0.45
22:AT:24:LEU:HD12	22:AT:24:LEU:O	2.17	0.45
23:B0:515:A:C2'	23:B0:516:G:H5'	2.43	0.45
23:B0:701:U:H2'	23:B0:702:A:O4'	2.15	0.45
23:B0:1349:A:H2'	23:B0:1350:G:C8	2.51	0.45
23:B0:3875:A:H5''	55:B5:42:LYS:CA	2.39	0.45
23:B0:1861:G:O2'	23:B0:1862:C:H5'	2.17	0.45
23:B0:2421:C:O2'	23:B0:2422:C:H5'	2.16	0.45
1:AA:265:G:H5''	19:AQ:65:ILE:O	2.17	0.45
1:AA:521:G:H4'	14:AL:73:GLU:N	2.31	0.45
1:AA:627:G:O2'	1:AA:628:G:H5'	2.17	0.45
1:AA:953:G:H1'	15:AM:125:ARG:HB3	1.99	0.45
1:AA:1193:G:H4'	7:AE:25:ARG:HH21	1.80	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1233:G:OP1	11:AI:123:PRO:HB2	2.16	0.45
1:AA:1305:G:N2	1:AA:1331:G:HO2'	2.10	0.45
4:AB:42:ILE:HD12	4:AB:203:GLY:HA2	1.97	0.45
5:AC:60:ALA:O	5:AC:61:ALA:CB	2.63	0.45
5:AC:131:ARG:HA	5:AC:134:ILE:HD12	1.96	0.45
5:AC:154:SER:OG	5:AC:155:GLY:N	2.48	0.45
7:AE:15:ARG:NE	7:AE:26:PHE:CD2	2.84	0.45
7:AE:45:PHE:CD2	7:AE:47:LYS:HE3	2.51	0.45
9:AG:16:LEU:CG	11:AI:41:VAL:O	2.64	0.45
11:AI:36:TYR:CD2	11:AI:37:PHE:CE2	3.04	0.45
11:AI:40:LEU:O	11:AI:42:ARG:N	2.50	0.45
11:AI:121:ARG:HG2	11:AI:121:ARG:HH11	1.81	0.45
12:AJ:51:ARG:HG3	12:AJ:60:ARG:O	2.17	0.45
13:AK:74:ALA:C	13:AK:76:GLY:N	2.69	0.45
16:AN:12:ARG:O	16:AN:14:PRO:HD3	2.16	0.45
23:B0:211:U:C2'	23:B0:212:U:H5'	2.46	0.45
23:B0:307:C:H2'	23:B0:308:C:C6	2.51	0.45
23:B0:452:G:H2'	23:B0:453:U:O4'	2.16	0.45
23:B0:688:A:O2'	23:B0:2422:C:H4'	2.17	0.45
23:B0:1119:U:N3	23:B0:1120:C:N3	2.64	0.45
23:B0:1119:U:C5	23:B0:1120:C:C5	3.04	0.45
23:B0:1566:G:H4'	23:B0:1733:U:O4	2.16	0.45
23:B0:1678:G:H2'	23:B0:1679:U:C6	2.51	0.45
23:B0:2348:A:H2'	23:B0:2349:G:C8	2.52	0.45
23:B0:2708:U:H2'	23:B0:2709:C:C6	2.51	0.45
1:AA:37:U:H1'	1:AA:547:A:N1	2.31	0.45
1:AA:46:G:C2	1:AA:366:C:C6	3.05	0.45
1:AA:131:C:O2	1:AA:262:A:N1	2.38	0.45
1:AA:252:U:O2	1:AA:275:G:N3	2.50	0.45
1:AA:393:A:C2'	1:AA:394:G:H5'	2.47	0.45
1:AA:542:G:P	6:AD:10:ARG:NH2	2.89	0.45
1:AA:644:G:O2'	1:AA:645:C:H5'	2.17	0.45
1:AA:675:A:O2'	13:AK:116:HIS:NE2	2.25	0.45
1:AA:1110:A:C6	1:AA:1111:A:C6	3.04	0.45
1:AA:1230:C:O2'	15:AM:126:LYS:HA	2.16	0.45
1:AA:1278:U:OP1	1:AA:1279:A:H5'	2.17	0.45
5:AC:23:TYR:CE2	12:AJ:9:ARG:CD	3.00	0.45
6:AD:8:VAL:HG21	6:AD:115:ARG:CZ	2.46	0.45
7:AE:21:ALA:C	7:AE:23:GLY:H	2.19	0.45
9:AG:75:VAL:HG12	9:AG:86:GLN:HE21	1.81	0.45
12:AJ:6:ILE:O	12:AJ:71:LEU:O	2.35	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AM:120:LYS:HE2	15:AM:123:ALA:CB	2.47	0.45
16:AN:39:LEU:CD1	16:AN:47:LEU:HD12	2.46	0.45
21:AS:63:THR:HG22	21:AS:64:GLU:N	2.32	0.45
23:B0:419:G:O2'	23:B0:420:C:H5'	2.17	0.45
23:B0:604:U:H2'	23:B0:605:G:H8	1.82	0.45
23:B0:687:G:O2'	23:B0:688:A:H5'	2.17	0.45
23:B0:700:C:O2'	23:B0:801:A:H5'	2.17	0.45
23:B0:978:U:H2'	23:B0:979:A:C8	2.51	0.45
23:B0:1016:C:H2'	23:B0:1017:C:C6	2.52	0.45
23:B0:1278:A:O2'	23:B0:1279:G:P	2.75	0.45
23:B0:3171:A:O2'	23:B0:3172:U:C6	2.70	0.45
23:B0:2370:G:HO2'	23:B0:2371:A:H2	1.62	0.45
1:AA:65:U:C2	1:AA:200:G:O2'	2.61	0.45
1:AA:105:G:H2'	1:AA:106:C:H6	1.81	0.45
1:AA:439:A:C4	1:AA:497:A:C2	3.04	0.45
1:AA:470:U:H2'	1:AA:471:G:C8	2.51	0.45
1:AA:538:G:C4'	14:AL:114:LYS:CD	2.84	0.45
1:AA:735:C:O2'	1:AA:736:C:H5'	2.17	0.45
1:AA:782:A:H4'	1:AA:1514:C:O2'	2.16	0.45
1:AA:792:A:H1'	1:AA:794:A:N7	2.31	0.45
1:AA:893:C:HO2'	1:AA:894:G:C5'	2.26	0.45
1:AA:1202:G:C2'	1:AA:1203:C:H5'	2.46	0.45
1:AA:1484:C:H2'	1:AA:1485:U:C6	2.50	0.45
1:AA:1515:C:O2'	1:AA:1516:G:H5'	2.16	0.45
4:AB:223:ILE:HG21	4:AB:230:VAL:HG23	1.99	0.45
11:AI:85:LEU:O	11:AI:92:TYR:CD1	2.69	0.45
15:AM:34:LEU:HD13	15:AM:41:PRO:CA	2.45	0.45
17:AO:87:ILE:CG2	17:AO:88:ARG:N	2.79	0.45
18:AP:55:ARG:O	18:AP:58:TYR:HB3	2.17	0.45
20:AR:70:ILE:O	20:AR:74:ARG:HG3	2.17	0.45
23:B0:15:G:O2'	23:B0:16:G:H5'	2.17	0.45
23:B0:316:C:H2'	23:B0:317:U:C6	2.52	0.45
23:B0:611:C:C2'	23:B0:612:G:H5'	2.47	0.45
23:B0:1373:G:H2'	23:B0:1374:G:H5'	1.99	0.45
23:B0:1685:A:H1'	23:B0:1686:A:N7	2.32	0.45
23:B0:1745:C:H2'	23:B0:1746:A:O4'	2.16	0.45
23:B0:3873:G:O2'	23:B0:3874:C:H5'	2.17	0.45
23:B0:1921:A:C2'	23:B0:1922:U:H5''	2.46	0.45
1:AA:37:U:H1'	1:AA:547:A:C2	2.52	0.45
1:AA:119:A:C8	1:AA:287:U:O4	2.70	0.45
1:AA:129:U:C5'	19:AQ:3:LYS:CE	2.95	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:191:G:N9	1:AA:192:U:C6	2.84	0.45
1:AA:242:C:H2'	1:AA:243:A:H5'	1.98	0.45
1:AA:265:G:O4'	19:AQ:64:PRO:CA	2.65	0.45
1:AA:321:A:H2'	1:AA:322:C:C6	2.52	0.45
1:AA:485:G:C2'	1:AA:486:U:OP2	2.65	0.45
1:AA:828:A:H5''	1:AA:859:A:C2	2.51	0.45
1:AA:913:A:O2'	1:AA:914:A:O4'	2.26	0.45
1:AA:920:U:H2'	1:AA:921:U:C6	2.52	0.45
1:AA:1019:C:O2'	1:AA:1020:U:H5'	2.17	0.45
1:AA:1342:C:C3'	11:AI:125:TYR:OH	2.58	0.45
1:AA:1394:A:C6	1:AA:1501:C:H4'	2.51	0.45
4:AB:8:LYS:O	4:AB:9:GLU:CB	2.60	0.45
6:AD:31:CYS:C	6:AD:33:MET:H	2.20	0.45
7:AE:121:LYS:HE3	7:AE:123:LEU:CD2	2.46	0.45
12:AJ:30:SER:HB3	12:AJ:84:GLN:NE2	2.31	0.45
12:AJ:54:PHE:O	12:AJ:55:LYS:HG2	2.17	0.45
12:AJ:60:ARG:O	12:AJ:61:GLU:CB	2.61	0.45
13:AK:51:LYS:O	13:AK:55:LYS:CE	2.65	0.45
14:AL:85:ILE:HG23	14:AL:98:TYR:CB	2.46	0.45
16:AN:25:VAL:O	16:AN:25:VAL:HG13	2.16	0.45
23:B0:109:A:H3'	23:B0:110:U:C5'	2.41	0.45
23:B0:221:A:H62	23:B0:231:G:N2	2.10	0.45
23:B0:852:U:H3	23:B0:950:G:H1	1.64	0.45
23:B0:926:C:C2'	23:B0:927:C:H5'	2.47	0.45
23:B0:959:C:H2'	23:B0:960:U:C6	2.52	0.45
23:B0:1502:G:O2'	23:B0:1503:G:H5'	2.16	0.45
23:B0:2428:U:O2'	23:B0:2429:A:H5'	2.17	0.45
23:B0:2661:G:O2'	23:B0:2662:C:H5'	2.17	0.45
24:B9:66:G:H2'	24:B9:67:C:C6	2.52	0.45
1:AA:185:A:H2'	1:AA:186:C:H6	1.82	0.45
1:AA:547:A:C3'	1:AA:548:G:P	3.05	0.45
1:AA:599:C:H4'	10:AH:130:GLY:O	2.16	0.45
1:AA:814:A:H5'	1:AA:1511:G:H4'	1.98	0.45
1:AA:975:A:O5'	1:AA:976:G:H5'	2.17	0.45
1:AA:1051:C:H2'	1:AA:1052:U:H6	1.80	0.45
1:AA:1206:G:C6	1:AA:1207:G:C5	3.04	0.45
1:AA:1301:U:O2'	1:AA:1302:U:OP1	2.30	0.45
1:AA:1496:C:H2'	1:AA:1497:G:O4'	2.16	0.45
1:AA:1503:A:O2'	1:AA:1504:G:OP1	2.29	0.45
2:AV:16:U:C2'	2:AV:17:U:OP2	2.65	0.45
2:AW:16:U:C2'	2:AW:17:U:OP2	2.65	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:AB:92:TYR:CE1	4:AB:151:GLY:HA3	2.51	0.45
12:AJ:8:LEU:HD23	12:AJ:96:ILE:HG12	1.97	0.45
12:AJ:85:LEU:O	12:AJ:87:THR:N	2.50	0.45
18:AP:39:TYR:CZ	18:AP:41:PRO:HA	2.52	0.45
18:AP:75:ARG:O	18:AP:78:GLY:N	2.50	0.45
22:AT:42:GLN:O	22:AT:45:GLN:HB3	2.16	0.45
23:B0:8:A:H2'	23:B0:9:U:C6	2.52	0.45
23:B0:475:U:H2'	23:B0:476:G:O4'	2.17	0.45
23:B0:709:A:H2'	23:B0:710:C:C6	2.52	0.45
23:B0:874:A:H62	23:B0:928:G:N2	2.12	0.45
23:B0:925:U:H4'	23:B0:926:C:C5	2.52	0.45
23:B0:1199:U:C3'	23:B0:1200:G:H5''	2.32	0.45
23:B0:1793:A:H2'	23:B0:1794:A:C8	2.52	0.45
23:B0:2026:C:H2'	23:B0:2027:C:C6	2.52	0.45
23:B0:2181:A:C2'	23:B0:2182:A:H5'	2.47	0.45
23:B0:2454:C:H42	23:B0:2508:G:H22	1.64	0.45
23:B0:2539:C:H2'	23:B0:2540:A:C8	2.52	0.45
23:B0:2703:C:H2'	23:B0:2704:U:C6	2.51	0.45
23:B0:2830:U:H2'	23:B0:2831:A:C8	2.52	0.45
24:B9:40:C:H2'	24:B9:41:A:O4'	2.16	0.45
24:B9:94:G:O2'	24:B9:95:U:H5'	2.16	0.45
1:AA:15:G:H4'	7:AE:24:ARG:HH22	1.82	0.45
1:AA:102:G:O2'	1:AA:151:A:H2'	2.17	0.45
1:AA:173:U:C5	1:AA:198:G:N3	2.85	0.45
1:AA:227:G:C6	1:AA:228:A:C6	3.05	0.45
1:AA:397:A:H3'	1:AA:397:A:N3	2.32	0.45
1:AA:402:G:O4'	1:AA:621:A:C2	2.71	0.45
1:AA:513:C:H2'	1:AA:514:C:H6	1.81	0.45
1:AA:538:G:H5'	14:AL:114:LYS:CG	2.41	0.45
1:AA:922:G:N2	1:AA:1396:A:N3	2.54	0.45
1:AA:974:A:C4	16:AN:31:ARG:NH2	2.85	0.45
1:AA:1131:G:H2'	1:AA:1132:C:C6	2.51	0.45
1:AA:1261:A:H5'	1:AA:1283:G:O2'	2.17	0.45
1:AA:1300:G:O2'	1:AA:1301:U:C6	2.70	0.45
3:AU:7:U:H2'	3:AU:8:G:C6	2.52	0.45
5:AC:23:TYR:CD1	12:AJ:11:PHE:CD2	3.05	0.45
7:AE:15:ARG:CD	7:AE:26:PHE:CD2	3.00	0.45
7:AE:115:VAL:HG11	7:AE:118:ILE:CD1	2.46	0.45
9:AG:12:LEU:N	9:AG:12:LEU:HD12	2.32	0.45
10:AH:116:LYS:NZ	10:AH:127:LEU:HD12	2.31	0.45
11:AI:111:ARG:HG3	11:AI:111:ARG:HH11	1.80	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AI:114:TYR:HB2	12:AJ:60:ARG:NH1	2.31	0.45
15:AM:9:ILE:N	15:AM:9:ILE:HD12	2.32	0.45
15:AM:110:ARG:HG2	15:AM:110:ARG:HH11	1.82	0.45
22:AT:72:LEU:O	22:AT:73:HIS:O	2.35	0.45
23:B0:116:A:C2	23:B0:155:G:H1'	2.51	0.45
23:B0:241:C:C2'	23:B0:242:A:H5''	2.46	0.45
23:B0:626:A:O2'	23:B0:627:A:H5'	2.17	0.45
23:B0:838:A:H2'	23:B0:839:U:C6	2.52	0.45
23:B0:843:G:O2'	23:B0:844:G:OP1	2.31	0.45
23:B0:871:U:H1'	23:B0:2248:A:H5''	1.99	0.45
23:B0:1089:C:H1'	23:B0:1099:A:H8	1.82	0.45
23:B0:1504:G:O2'	23:B0:1505:U:H5'	2.17	0.45
23:B0:3108:G:H2'	23:B0:3109:U:OP2	2.16	0.45
23:B0:2555:G:H3'	23:B0:2555:G:N3	2.32	0.45
24:B9:36:A:H1'	24:B9:51:G:N2	2.32	0.45
1:AA:39:G:C6	1:AA:404:U:C4	3.05	0.44
1:AA:76:G:O2'	1:AA:77:C:H5'	2.17	0.44
1:AA:118:U:O3'	1:AA:119:A:C5'	2.65	0.44
1:AA:305:G:C3'	1:AA:306:G:P	3.05	0.44
1:AA:319:G:O2'	1:AA:320:C:H5'	2.16	0.44
1:AA:323:U:C4'	22:AT:19:SER:C	2.85	0.44
1:AA:533:A:O2'	1:AA:534:U:P	2.75	0.44
1:AA:781:A:H2'	1:AA:782:A:H5'	1.98	0.44
1:AA:807:A:H2'	1:AA:808:C:C6	2.52	0.44
1:AA:848:G:C2'	1:AA:849:C:C1'	2.86	0.44
1:AA:1301:U:O2'	1:AA:1302:U:P	2.74	0.44
1:AA:1484:C:H5''	23:B0:1943:A:C2'	2.47	0.44
1:AA:1503:A:O2'	1:AA:1504:G:P	2.75	0.44
2:AV:74:C:O3'	23:B0:2581:A:O5'	2.34	0.44
3:AU:9:U:H2'	3:AU:10:U:C6	2.52	0.44
6:AD:142:PRO:HG2	6:AD:187:ARG:NH1	2.32	0.44
11:AI:46:ALA:O	11:AI:49:PRO:HD2	2.17	0.44
11:AI:103:THR:HG22	11:AI:104:ARG:N	2.31	0.44
12:AJ:61:GLU:CD	16:AN:58:LYS:CD	2.86	0.44
12:AJ:75:ILE:HG22	12:AJ:76:ASN:N	2.32	0.44
19:AQ:18:THR:HG23	19:AQ:69:LYS:CE	2.47	0.44
19:AQ:81:ARG:HG3	19:AQ:81:ARG:O	2.17	0.44
20:AR:25:THR:O	20:AR:25:THR:HG22	2.17	0.44
20:AR:74:ARG:HB3	20:AR:81:PHE:CE1	2.51	0.44
23:B0:40:U:H2'	23:B0:41:G:C8	2.52	0.44
23:B0:857:U:C2'	23:B0:858:G:H5'	2.48	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:926:C:H2'	23:B0:927:C:H5'	1.99	0.44
23:B0:1055:A:C2	23:B0:1121:G:H2'	2.52	0.44
23:B0:1273:G:H2'	23:B0:1274:C:C6	2.52	0.44
23:B0:1367:A:H2'	23:B0:1368:G:O4'	2.17	0.44
23:B0:2474:G:O2'	23:B0:2475:C:H5'	2.17	0.44
23:B0:2560:G:H4'	23:B0:2561:G:N7	2.32	0.44
1:AA:130:A:C8	1:AA:264:U:O4'	2.70	0.44
1:AA:254:G:C4'	19:AQ:18:THR:CB	2.73	0.44
1:AA:540:G:H2'	1:AA:541:G:O4'	2.18	0.44
1:AA:586:C:O3'	10:AH:89:PRO:CB	2.65	0.44
1:AA:1112:C:O2	5:AC:179:ARG:CB	2.56	0.44
1:AA:1113:C:N1	5:AC:178:LEU:CD2	2.81	0.44
1:AA:1409:C:HO2'	1:AA:1410:G:H5'	1.78	0.44
2:AV:43:G:H2'	2:AV:44:A:C8	2.53	0.44
4:AB:54:THR:O	4:AB:57:PHE:HB3	2.18	0.44
4:AB:137:ARG:O	4:AB:140:HIS:HB2	2.16	0.44
5:AC:123:GLN:HE22	5:AC:140:ARG:NH2	2.16	0.44
5:AC:179:ARG:HD2	5:AC:179:ARG:C	2.37	0.44
6:AD:24:GLU:CG	6:AD:25:ARG:H	2.31	0.44
6:AD:39:PRO:HG2	6:AD:44:GLY:HA2	1.97	0.44
6:AD:162:LEU:HD13	6:AD:181:MET:CG	2.42	0.44
12:AJ:4:ILE:HG12	12:AJ:100:THR:CB	2.46	0.44
12:AJ:8:LEU:CD1	12:AJ:20:ALA:HB2	2.48	0.44
12:AJ:46:ARG:NH1	12:AJ:64:GLU:CG	2.80	0.44
18:AP:20:VAL:CG1	18:AP:32:TYR:CB	2.95	0.44
18:AP:20:VAL:HG13	18:AP:21:VAL:N	2.32	0.44
23:B0:431:G:H2'	23:B0:432:C:C6	2.53	0.44
23:B0:438:G:H2'	23:B0:439:C:C6	2.51	0.44
23:B0:455:A:H4'	23:B0:1214:C:O2'	2.17	0.44
23:B0:562:G:H2'	23:B0:563:U:O4'	2.17	0.44
23:B0:1436:G:H1'	23:B0:1508:G:N2	2.31	0.44
23:B0:3108:G:C2	23:B0:3109:U:C4	3.05	0.44
23:B0:2591:C:O2'	23:B0:2592:U:H5'	2.17	0.44
23:B0:2854:G:H3'	23:B0:2854:G:N3	2.33	0.44
1:AA:160:A:H61	1:AA:347:G:N2	2.15	0.44
1:AA:265:G:H1'	19:AQ:64:PRO:CB	2.35	0.44
1:AA:389:A:H2'	1:AA:390:C:C5'	2.48	0.44
1:AA:402:G:C4'	1:AA:621:A:C2	3.00	0.44
1:AA:1049:U:H1'	1:AA:1201:A:N7	2.31	0.44
1:AA:1289:A:H2'	1:AA:1290:G:H5'	2.00	0.44
1:AA:1353:G:H2'	1:AA:1354:C:H6	1.82	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:AC:6:HIS:CD2	5:AC:8:ILE:H	2.35	0.44
7:AE:13:ILE:HG22	7:AE:30:ALA:HB2	1.99	0.44
8:AF:40:VAL:CG2	8:AF:41:GLU:N	2.80	0.44
10:AH:73:ASP:OD2	10:AH:75:ARG:HB2	2.18	0.44
20:AR:51:LEU:HA	20:AR:52:PRO:HD3	1.80	0.44
23:B0:457:C:O2'	23:B0:458:G:H5'	2.16	0.44
23:B0:763:A:H2'	23:B0:764:A:H5''	2.00	0.44
23:B0:788:G:H5'	23:B0:790:A:N3	2.32	0.44
23:B0:1098:G:H22	23:B0:1113:C:N3	1.52	0.44
23:B0:1408:A:H1'	23:B0:1410:U:C5	2.52	0.44
23:B0:1436:G:H2'	23:B0:1437:A:C8	2.51	0.44
23:B0:1667:A:H2'	23:B0:1668:G:H8	1.83	0.44
23:B0:1708:C:H2'	23:B0:1709:U:O4'	2.18	0.44
23:B0:1785:A:H2'	23:B0:1786:C:C6	2.52	0.44
23:B0:1938:U:O2'	23:B0:1939:U:OP1	2.28	0.44
23:B0:1956:G:H2'	23:B0:1957:C:O4'	2.17	0.44
1:AA:8:A:H5''	7:AE:121:LYS:CD	2.47	0.44
1:AA:173:U:H5'	1:AA:197:A:C1'	2.45	0.44
1:AA:262:A:H5''	22:AT:76:ALA:N	2.32	0.44
1:AA:267:C:H2'	1:AA:268:C:C6	2.53	0.44
1:AA:384:G:H2'	1:AA:385:C:C6	2.53	0.44
1:AA:401:C:P	6:AD:73:ARG:HH21	2.38	0.44
1:AA:651:C:O2'	1:AA:652:U:P	2.72	0.44
1:AA:819:A:C6	1:AA:1529:G:C2	3.05	0.44
1:AA:933:G:OP2	9:AG:3:ARG:NE	2.48	0.44
1:AA:950:U:H2'	1:AA:951:G:C8	2.52	0.44
1:AA:977:A:H2'	1:AA:978:A:C5'	2.45	0.44
1:AA:1178:G:P	11:AI:97:LYS:NZ	2.89	0.44
2:AV:44:A:C2'	2:AV:45:G:C5'	2.96	0.44
4:AB:134:GLU:C	4:AB:136:VAL:N	2.71	0.44
5:AC:12:LEU:HA	5:AC:12:LEU:HD23	1.76	0.44
5:AC:123:GLN:HE22	5:AC:140:ARG:HH22	1.65	0.44
8:AF:30:LEU:CB	8:AF:35:ALA:HB3	2.41	0.44
15:AM:84:ILE:C	15:AM:86:CYS:N	2.70	0.44
20:AR:26:LEU:HD21	20:AR:39:VAL:HG23	2.00	0.44
23:B0:121:G:H2'	23:B0:122:G:O4'	2.18	0.44
23:B0:1023:U:H1'	23:B0:1154:A:C8	2.52	0.44
23:B0:1118:G:O2'	23:B0:1119:U:H5'	2.17	0.44
23:B0:1331:G:H2'	23:B0:1332:G:C8	2.52	0.44
23:B0:1452:U:H5''	23:B0:1533:G:H5'	2.00	0.44
23:B0:1659:G:H2'	23:B0:1660:G:C8	2.52	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:1679:U:C2'	23:B0:1680:U:H5''	2.47	0.44
23:B0:2204:A:O2'	23:B0:2205:C:OP2	2.35	0.44
23:B0:2204:A:O2'	23:B0:2205:C:P	2.76	0.44
23:B0:2211:U:H2'	23:B0:2212:U:C6	2.52	0.44
23:B0:2312:A:H1'	23:B0:2314:A:C4	2.52	0.44
1:AA:69:G:O2'	1:AA:152:A:O2'	2.36	0.44
1:AA:253:U:C1'	1:AA:275:G:C2'	2.79	0.44
1:AA:253:U:C2	1:AA:275:G:H1'	2.52	0.44
1:AA:253:U:H2'	1:AA:254:G:C8	2.53	0.44
1:AA:675:A:O2'	13:AK:116:HIS:CG	2.71	0.44
1:AA:816:A:P	1:AA:1527:C:C4'	3.05	0.44
1:AA:962:C:H2'	1:AA:963:G:O4'	2.18	0.44
1:AA:1005:A:H2'	1:AA:1006:C:O4'	2.17	0.44
1:AA:1483:A:C8	1:AA:1484:C:N4	2.86	0.44
1:AA:1501:C:OP2	1:AA:1504:G:H2'	2.17	0.44
1:AA:1503:A:C5	1:AA:1531:A:N3	2.86	0.44
3:AU:6:A:H2'	3:AU:7:U:C6	2.53	0.44
2:AW:23:A:H2'	2:AW:24:G:C8	2.52	0.44
4:AB:17:PHE:H	4:AB:44:LEU:HD21	1.83	0.44
4:AB:25:ASN:HD22	4:AB:27:LYS:H	1.65	0.44
4:AB:213:LEU:C	4:AB:213:LEU:HD23	2.37	0.44
6:AD:200:GLU:OE1	6:AD:200:GLU:N	2.46	0.44
7:AE:36:ASP:OD2	7:AE:40:ARG:HD3	2.18	0.44
7:AE:105:VAL:HB	7:AE:106:PRO:CD	2.40	0.44
13:AK:40:ILE:HG23	13:AK:75:TYR:CE2	2.51	0.44
15:AM:84:ILE:HG13	15:AM:86:CYS:HB2	2.00	0.44
16:AN:9:LYS:HG3	16:AN:21:TYR:O	2.17	0.44
16:AN:23:ARG:HD3	16:AN:30:ALA:HB2	2.00	0.44
18:AP:6:LEU:HB3	18:AP:17:TYR:HD2	1.81	0.44
23:B0:172:A:H4'	23:B0:228:A:H4'	2.00	0.44
23:B0:1226:A:C6	23:B0:1250:A:H1'	2.53	0.44
23:B0:1836:C:H2'	23:B0:1837:G:C8	2.53	0.44
24:B9:92:G:H2'	24:B9:93:G:H5'	1.99	0.44
1:AA:38:G:H4'	1:AA:547:A:N7	2.33	0.44
1:AA:130:A:C5'	1:AA:264:U:C5'	2.94	0.44
1:AA:203:A:H4'	1:AA:468:A:C5'	2.47	0.44
1:AA:600:C:O2'	1:AA:601:C:H5'	2.17	0.44
1:AA:686:U:O4	1:AA:703:G:H1'	2.17	0.44
1:AA:737:A:OP1	8:AF:91:VAL:HA	2.17	0.44
1:AA:884:U:O2'	1:AA:885:G:OP2	2.22	0.44
1:AA:913:A:O2'	1:AA:914:A:OP2	2.36	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1314:C:H2'	1:AA:1315:U:C6	2.52	0.44
1:AA:1346:A:C2'	9:AG:10:ARG:NH2	2.63	0.44
1:AA:1420:C:H5'	23:B0:1933:G:OP1	2.17	0.44
1:AA:1430:C:C5'	23:B0:1721:G:H5'	2.48	0.44
2:AV:23:A:H2'	2:AV:24:G:C8	2.52	0.44
2:AV:50:U:O2'	2:AV:51:G:H5'	2.17	0.44
2:AW:34:G:OP1	2:AW:34:G:C8	2.64	0.44
2:AW:43:G:H2'	2:AW:44:A:C8	2.52	0.44
2:AW:64:A:H4'	23:B0:2461:G:O3'	2.17	0.44
5:AC:99:VAL:HG22	5:AC:100:ALA:O	2.18	0.44
5:AC:113:ALA:N	5:AC:114:PRO:CD	2.80	0.44
6:AD:53:ASP:OD2	7:AE:104:ALA:HB1	2.18	0.44
6:AD:178:VAL:O	6:AD:178:VAL:HG12	2.18	0.44
7:AE:40:ARG:NH1	7:AE:68:GLU:OE2	2.49	0.44
9:AG:24:THR:HA	9:AG:27:ILE:HD12	2.00	0.44
9:AG:78:ARG:HG2	9:AG:80:VAL:HG23	1.99	0.44
10:AH:7:ALA:HB2	10:AH:85:ARG:HD2	1.99	0.44
11:AI:97:LYS:HG3	11:AI:102:LEU:HD12	1.96	0.44
12:AJ:3:LYS:CA	12:AJ:75:ILE:HA	2.48	0.44
12:AJ:22:LYS:HZ3	12:AJ:91:PRO:HD3	1.83	0.44
12:AJ:68:HIS:CD2	12:AJ:68:HIS:N	2.85	0.44
13:AK:60:ALA:O	13:AK:61:ALA:C	2.56	0.44
14:AL:7:ILE:O	14:AL:11:VAL:HG23	2.18	0.44
14:AL:117:ARG:HD2	14:AL:122:THR:OG1	2.17	0.44
16:AN:12:ARG:O	16:AN:14:PRO:CD	2.65	0.44
19:AQ:68:ARG:H	19:AQ:70:ARG:NH1	2.15	0.44
22:AT:30:LYS:O	22:AT:33:ILE:HB	2.18	0.44
22:AT:63:ILE:HD13	22:AT:80:ARG:CB	2.48	0.44
23:B0:354:C:H2'	23:B0:355:G:O4'	2.17	0.44
23:B0:460:U:N3	23:B0:592:G:H1'	2.33	0.44
23:B0:1119:U:C3'	23:B0:1120:C:O4'	2.65	0.44
23:B0:1373:G:H22	23:B0:2192:U:H3	1.65	0.44
23:B0:1856:U:O4	23:B0:3865:A:N1	2.50	0.44
23:B0:1927:U:H3'	23:B0:1928:G:H5'	2.00	0.44
23:B0:1999:U:H5''	23:B0:2041:A:OP1	2.18	0.44
23:B0:2316:G:H2'	23:B0:2317:G:C8	2.50	0.44
1:AA:39:G:C6	1:AA:498:U:O4	2.67	0.44
1:AA:116:A:H2'	1:AA:117:G:O4'	2.17	0.44
1:AA:383:A:H2'	1:AA:384:G:H5'	1.99	0.44
1:AA:433:C:O2'	1:AA:434:U:H5'	2.18	0.44
1:AA:456:A:C5	1:AA:477:G:N3	2.86	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:499:A:C2	1:AA:500:G:H1'	2.46	0.44
1:AA:835:U:OP1	20:AR:60:GLY:CA	2.65	0.44
1:AA:942:G:H21	11:AI:124:GLN:CD	2.20	0.44
1:AA:975:A:H4'	1:AA:976:G:OP2	2.16	0.44
1:AA:1108:G:O3'	5:AC:176:HIS:NE2	2.51	0.44
1:AA:1279:A:O2'	1:AA:1281:U:OP2	2.33	0.44
1:AA:1299:A:C8	1:AA:1301:U:H1'	2.53	0.44
1:AA:1348:U:OP1	11:AI:110:GLU:CB	2.66	0.44
1:AA:1372:U:O2'	1:AA:1373:G:H5'	2.18	0.44
1:AA:1420:C:C5'	23:B0:1933:G:OP1	2.65	0.44
2:AW:50:U:C2'	2:AW:51:G:H5'	2.48	0.44
6:AD:8:VAL:HG11	6:AD:21:LEU:CB	2.47	0.44
15:AM:80:ARG:C	15:AM:82:MET:H	2.20	0.44
20:AR:37:VAL:O	20:AR:41:LYS:HB3	2.18	0.44
23:B0:117:A:O3'	23:B0:118:U:H3'	2.17	0.44
23:B0:242:A:O2'	23:B0:243:G:O4'	2.34	0.44
23:B0:415:A:O2'	23:B0:416:U:H5'	2.17	0.44
23:B0:432:C:H2'	23:B0:433:G:H8	1.83	0.44
23:B0:956:A:H2'	23:B0:956:A:N3	2.32	0.44
23:B0:1279:G:C2'	23:B0:1280:U:OP2	2.66	0.44
23:B0:1292:A:H2'	23:B0:1293:A:C8	2.53	0.44
23:B0:1459:U:H2'	23:B0:1475:U:O2'	2.16	0.44
23:B0:1604:A:H2'	23:B0:1605:A:O4'	2.18	0.44
23:B0:1724:C:H2'	23:B0:1725:C:C6	2.53	0.44
23:B0:1882:G:H21	23:B0:1885:C:N4	2.16	0.44
23:B0:2057:U:H2'	23:B0:2058:U:C6	2.52	0.44
23:B0:2242:C:H42	23:B0:2257:A:N6	2.16	0.44
1:AA:18:C:C2	1:AA:918:A:N1	2.86	0.44
1:AA:45:U:H2'	1:AA:46:G:C8	2.53	0.44
1:AA:119:A:N1	1:AA:240:C:C2	2.86	0.44
1:AA:137:C:O2'	1:AA:138:G:H5'	2.18	0.44
1:AA:176:C:H2'	1:AA:177:C:H6	1.83	0.44
1:AA:223:U:C5'	22:AT:68:LYS:NZ	2.79	0.44
1:AA:427:U:O4'	1:AA:541:G:H5''	2.17	0.44
1:AA:436:C:H2'	1:AA:437:U:C6	2.41	0.44
1:AA:652:U:H2'	1:AA:752:G:N1	2.33	0.44
1:AA:676:A:H4'	13:AK:115:PRO:HA	1.98	0.44
1:AA:815:A:N1	1:AA:1528:U:C2	2.86	0.44
1:AA:1064:G:H22	1:AA:1190:G:HO2'	1.66	0.44
1:AA:1305:G:H22	1:AA:1331:G:C2'	2.31	0.44
1:AA:1457:A:C4	1:AA:1459:C:H1'	2.53	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:56:C:C2'	28:BD:74:ILE:CA	2.96	0.44
4:AB:88:ALA:C	4:AB:90:MET:N	2.71	0.44
6:AD:3:ARG:HA	6:AD:3:ARG:HD3	1.78	0.44
10:AH:86:ILE:HD12	10:AH:133:LEU:HD22	2.00	0.44
14:AL:46:LYS:CG	14:AL:47:LYS:H	2.29	0.44
18:AP:20:VAL:HG13	18:AP:32:TYR:HB2	2.00	0.44
23:B0:114:C:H4'	23:B0:124:A:O2'	2.17	0.44
23:B0:539:A:N6	23:B0:2024:U:H3	2.11	0.44
23:B0:548:G:H2'	23:B0:549:G:C8	2.53	0.44
23:B0:736:G:H2'	23:B0:737:C:O4'	2.17	0.44
23:B0:875:G:H2'	23:B0:876:A:O4'	2.18	0.44
23:B0:1288:A:H2'	23:B0:1289:A:O4'	2.17	0.44
23:B0:1326:U:H1'	23:B0:1626:A:N3	2.33	0.44
23:B0:1703:C:H2'	23:B0:1704:G:O4'	2.17	0.44
23:B0:1915:A:H62	23:B0:1951:G:N2	2.09	0.44
23:B0:2193:C:H2'	23:B0:2194:A:O4'	2.18	0.44
23:B0:2439:U:H2'	23:B0:2440:C:H5'	1.99	0.44
1:AA:46:G:N1	1:AA:366:C:C2	2.85	0.44
1:AA:94:G:C6	1:AA:96:C:N4	2.84	0.44
1:AA:227:G:C5	1:AA:228:A:C5	3.06	0.44
1:AA:248:C:C4'	1:AA:283:C:H1'	2.48	0.44
1:AA:292:G:N3	1:AA:608:A:C6	2.86	0.44
1:AA:598:U:H4'	10:AH:94:TYR:CD1	2.53	0.44
1:AA:865:A:H2'	1:AA:866:C:C6	2.53	0.44
1:AA:905:U:H5	1:AA:906:G:C6	2.36	0.44
1:AA:974:A:P	16:AN:29:ARG:NH2	2.90	0.44
5:AC:47:LEU:H	5:AC:47:LEU:HD13	1.83	0.44
5:AC:134:ILE:HG22	5:AC:168:ALA:CB	2.48	0.44
9:AG:38:LEU:HD12	9:AG:42:ILE:HG13	2.00	0.44
13:AK:95:ILE:HD13	13:AK:108:ILE:HG21	1.99	0.44
17:AO:39:LEU:HD12	17:AO:59:MET:CE	2.48	0.44
18:AP:43:LYS:HA	18:AP:48:TRP:HB3	2.00	0.44
22:AT:100:ILE:O	22:AT:102:GLY:N	2.50	0.44
23:B0:181:A:C4'	23:B0:182:G:H4'	2.44	0.44
23:B0:192:G:O2'	23:B0:193:A:OP2	2.33	0.44
23:B0:529:U:H2'	23:B0:530:G:C8	2.53	0.44
23:B0:839:U:H5'	23:B0:2407:G:H2'	2.00	0.44
23:B0:1033:G:N2	23:B0:1150:C:H2'	2.30	0.44
23:B0:1188:A:H62	23:B0:1189:G:H21	1.66	0.44
23:B0:1313:U:H4'	23:B0:1314:A:O5'	2.18	0.44
23:B0:3872:A:H2'	23:B0:3873:G:H5'	2.00	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2022:C:H2'	23:B0:2023:C:C6	2.53	0.44
23:B0:3116:G:O3'	23:B0:3117:A:O4'	2.36	0.44
23:B0:2343:C:H2'	23:B0:2344:G:O4'	2.18	0.44
1:AA:38:G:C4'	1:AA:547:A:N7	2.81	0.43
1:AA:157:G:O2'	1:AA:158:G:H5'	2.18	0.43
1:AA:266:G:C5'	19:AQ:66:SER:CA	2.82	0.43
1:AA:266:G:C5'	19:AQ:67:LYS:H	2.31	0.43
1:AA:318:G:H22	1:AA:1433:A:H2	1.57	0.43
1:AA:583:A:H2'	1:AA:584:G:O4'	2.17	0.43
1:AA:1004:A:H5''	1:AA:1025:U:C4	2.53	0.43
1:AA:1053:G:O2'	1:AA:1199:U:H5	2.01	0.43
1:AA:1097:C:H2'	1:AA:1098:C:H6	1.82	0.43
1:AA:1269:A:C2	1:AA:1313:U:H1'	2.53	0.43
1:AA:1428:A:O2'	23:B0:1703:C:O2'	2.33	0.43
1:AA:1474:G:P	23:B0:1718:A:N3	2.90	0.43
1:AA:1496:C:H1'	1:AA:1517:G:H22	1.81	0.43
3:AU:12:A:H2'	3:AU:13:A:C6	2.52	0.43
2:AW:64:A:H4'	23:B0:2461:G:O2'	2.18	0.43
4:AB:119:GLU:OE1	4:AB:153:ARG:NH2	2.51	0.43
6:AD:25:ARG:HH21	6:AD:30:LYS:HD3	1.82	0.43
7:AE:40:ARG:NH1	7:AE:68:GLU:OE1	2.51	0.43
10:AH:103:VAL:HG21	10:AH:109:ILE:O	2.18	0.43
12:AJ:46:ARG:HH11	12:AJ:64:GLU:CG	2.31	0.43
14:AL:111:LYS:O	14:AL:112:ASP:HB2	2.18	0.43
15:AM:7:VAL:O	15:AM:7:VAL:HG23	2.18	0.43
15:AM:23:TYR:CE2	15:AM:70:LEU:HD13	2.53	0.43
15:AM:110:ARG:HH11	15:AM:110:ARG:CG	2.31	0.43
17:AO:54:ARG:O	17:AO:58:MET:HG3	2.17	0.43
19:AQ:104:LYS:O	19:AQ:105:ALA:CB	2.65	0.43
22:AT:42:GLN:HA	22:AT:45:GLN:HB2	1.99	0.43
23:B0:10:A:O2'	23:B0:11:G:H5'	2.18	0.43
23:B0:35:G:C1'	23:B0:466:A:H1'	2.48	0.43
23:B0:197:G:N2	23:B0:440:U:H2'	2.33	0.43
23:B0:198:A:H4'	23:B0:199:A:OP2	2.17	0.43
23:B0:207:U:H2'	23:B0:208:C:C6	2.52	0.43
23:B0:758:G:O2'	23:B0:761:G:H1'	2.18	0.43
23:B0:1259:A:H2'	23:B0:1260:A:C8	2.53	0.43
23:B0:1664:G:O5'	23:B0:1665:C:OP1	2.36	0.43
23:B0:3871:A:H2'	23:B0:3872:A:C8	2.53	0.43
23:B0:2033:C:H2'	23:B0:2034:A:O4'	2.17	0.43
23:B0:2065:A:H2'	23:B0:2066:G:O4'	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2265:A:H5''	23:B0:2266:A:O4'	2.18	0.43
1:AA:262:A:C5'	22:AT:75:ASN:N	2.60	0.43
1:AA:370:C:C2'	1:AA:371:G:H5'	2.48	0.43
1:AA:1371:G:OP1	11:AI:11:LYS:O	2.36	0.43
1:AA:1450:U:H2'	1:AA:1452:C:C5	2.52	0.43
2:AW:50:U:O2'	2:AW:51:G:H5'	2.17	0.43
4:AB:92:TYR:CD1	4:AB:151:GLY:HA3	2.53	0.43
5:AC:188:LEU:HD13	5:AC:189:ALA:H	1.83	0.43
8:AF:75:LEU:O	8:AF:75:LEU:HD13	2.18	0.43
9:AG:18:TYR:CD2	9:AG:59:LEU:HB2	2.52	0.43
9:AG:138:LYS:HD3	9:AG:138:LYS:C	2.39	0.43
10:AH:114:THR:C	10:AH:116:LYS:H	2.22	0.43
16:AN:29:ARG:HB3	16:AN:40:CYS:HB3	1.99	0.43
18:AP:67:THR:CG2	18:AP:68:ASP:N	2.81	0.43
23:B0:109:A:H2'	23:B0:110:U:H5''	2.00	0.43
23:B0:167:A:H62	23:B0:183:U:H3	1.66	0.43
23:B0:243:G:H2'	23:B0:244:C:O4'	2.18	0.43
23:B0:583:C:N3	23:B0:2016:A:H4'	2.32	0.43
23:B0:860:U:H2'	23:B0:860:U:O2	2.17	0.43
23:B0:925:U:H5''	23:B0:926:C:OP1	2.18	0.43
23:B0:944:A:H2'	23:B0:945:G:O4'	2.17	0.43
23:B0:1014:G:O2'	23:B0:1015:U:H5'	2.17	0.43
23:B0:1054:C:H2'	23:B0:1055:A:H5'	2.00	0.43
23:B0:1113:C:O3'	23:B0:1114:A:P	2.75	0.43
23:B0:1258:G:H2'	23:B0:1259:A:C8	2.52	0.43
23:B0:1283:C:OP1	23:B0:1284:G:H5'	2.17	0.43
23:B0:1358:C:C2'	23:B0:1359:G:H5''	2.48	0.43
23:B0:1429:A:H1'	23:B0:1603:A:C6	2.53	0.43
23:B0:1633:C:HO2'	23:B0:1634:A:P	2.40	0.43
23:B0:1819:U:H5''	23:B0:1954:A:O3'	2.18	0.43
23:B0:1871:G:H2'	23:B0:1871:G:N3	2.33	0.43
23:B0:2069:U:H2'	23:B0:2070:G:C8	2.53	0.43
23:B0:2469:G:H4'	23:B0:2470:U:C6	2.54	0.43
23:B0:2498:U:H3'	23:B0:2498:U:OP1	2.17	0.43
23:B0:2680:U:H3'	23:B0:2681:A:C5'	2.43	0.43
23:B0:2867:G:H3'	23:B0:2867:G:N3	2.32	0.43
1:AA:189:A:OP2	22:AT:105:SER:HB3	2.13	0.43
1:AA:264:U:HO2'	19:AQ:63:ARG:HD2	1.81	0.43
1:AA:277:C:OP2	19:AQ:41:LYS:NZ	2.42	0.43
1:AA:288:A:HO3'	1:AA:289:G:C5'	2.24	0.43
1:AA:315:A:C5'	1:AA:317:G:OP2	2.64	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:489:C:H2'	1:AA:490:G:C8	2.54	0.43
1:AA:652:U:O4	1:AA:752:G:O2'	2.28	0.43
1:AA:922:G:H21	1:AA:1396:A:C1'	2.29	0.43
1:AA:1229:A:H2'	1:AA:1230:C:H6	1.83	0.43
1:AA:1503:A:C5	1:AA:1531:A:C2	3.06	0.43
1:AA:1533:C:O2	1:AA:1533:C:H2'	2.17	0.43
2:AV:34:G:H3'	2:AV:35:A:H5''	2.00	0.43
2:AV:56:C:O2'	28:BD:74:ILE:CA	2.66	0.43
2:AV:74:C:N4	23:B0:2232:G:N1	2.66	0.43
3:AU:10:U:H2'	3:AU:11:C:C6	2.52	0.43
4:AB:83:MET:HG3	4:AB:238:LEU:HD11	2.00	0.43
4:AB:187:LEU:HD21	4:AB:214:ILE:HG13	2.00	0.43
5:AC:8:ILE:O	5:AC:11:ARG:N	2.47	0.43
5:AC:191:THR:HB	5:AC:194:GLY:O	2.18	0.43
7:AE:24:ARG:NH1	7:AE:24:ARG:HG2	2.33	0.43
8:AF:22:GLU:OE2	8:AF:84:ASN:HB2	2.18	0.43
9:AG:38:LEU:HD11	9:AG:42:ILE:HD11	1.99	0.43
15:AM:22:ILE:HD12	15:AM:25:ILE:CD1	2.41	0.43
17:AO:87:ILE:HG22	17:AO:88:ARG:N	2.34	0.43
21:AS:41:VAL:HG22	21:AS:44:MET:CE	2.49	0.43
23:B0:712:A:H61	23:B0:746:G:H1'	1.83	0.43
23:B0:792:U:H2'	23:B0:793:G:O4'	2.19	0.43
23:B0:1065:A:O2'	23:B0:1066:G:H5'	2.18	0.43
23:B0:1482:U:H2'	23:B0:1483:G:C8	2.53	0.43
23:B0:1881:U:H2'	23:B0:1882:G:H5'	2.00	0.43
23:B0:1923:U:H1'	23:B0:1947:G:H4'	1.99	0.43
23:B0:2011:U:H2'	23:B0:2012:A:H8	1.83	0.43
1:AA:46:G:C8	1:AA:366:C:N4	2.86	0.43
1:AA:161:A:C2	1:AA:348:G:C2'	2.68	0.43
1:AA:197:A:H1'	1:AA:198:G:O4'	2.17	0.43
1:AA:253:U:C4'	1:AA:276:G:O4'	2.66	0.43
1:AA:665:A:C2	1:AA:732:C:H2'	2.53	0.43
1:AA:939:G:H5''	9:AG:102:ARG:NH2	2.34	0.43
1:AA:1263:C:H2'	1:AA:1264:C:H6	1.83	0.43
1:AA:1376:U:H2'	1:AA:1377:A:H8	1.80	0.43
3:AU:13:A:H2'	3:AU:14:A:C6	2.53	0.43
4:AB:8:LYS:HB2	4:AB:9:GLU:H	1.58	0.43
5:AC:11:ARG:O	5:AC:14:ILE:O	2.36	0.43
6:AD:24:GLU:HG2	6:AD:25:ARG:H	1.82	0.43
6:AD:55:ALA:O	6:AD:59:ARG:HG2	2.19	0.43
6:AD:205:GLU:OE2	7:AE:107:ARG:NH2	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AE:119:LEU:HD23	7:AE:119:LEU:HA	1.84	0.43
9:AG:16:LEU:CB	11:AI:41:VAL:HG12	2.49	0.43
10:AH:16:ALA:O	10:AH:21:LYS:HG2	2.18	0.43
11:AI:69:GLY:O	11:AI:73:GLN:HG3	2.18	0.43
12:AJ:27:ALA:CB	12:AJ:81:THR:HG23	2.47	0.43
12:AJ:30:SER:CB	12:AJ:80:LYS:HB3	2.44	0.43
13:AK:23:ALA:HB2	13:AK:91:ARG:HB2	1.99	0.43
13:AK:100:ALA:O	13:AK:102:GLY:N	2.51	0.43
19:AQ:104:LYS:CD	23:B0:729:A:N7	2.80	0.43
20:AR:58:LEU:HD22	20:AR:62:GLU:HB3	1.99	0.43
22:AT:63:ILE:HD13	22:AT:80:ARG:HB3	2.01	0.43
23:B0:437:G:O2'	23:B0:438:G:H5'	2.19	0.43
23:B0:826:U:H2'	23:B0:827:C:C6	2.53	0.43
23:B0:1196:G:C2'	23:B0:1197:U:H5'	2.48	0.43
23:B0:1257:U:H2'	23:B0:1258:G:C8	2.53	0.43
23:B0:1722:G:H2'	23:B0:1723:U:C6	2.54	0.43
1:AA:10:A:O2'	1:AA:507:C:H4'	2.17	0.43
1:AA:19:C:O2'	1:AA:572:A:N1	2.52	0.43
1:AA:141:A:H1'	1:AA:182:U:O2	2.18	0.43
1:AA:376:G:H5''	18:AP:5:ARG:HB2	1.99	0.43
1:AA:430:A:H2'	1:AA:431:A:H5'	1.99	0.43
1:AA:778:G:O2'	13:AK:120:ARG:CA	2.65	0.43
4:AB:71:VAL:HB	4:AB:164:VAL:HG23	1.99	0.43
4:AB:137:ARG:HA	4:AB:140:HIS:HD2	1.84	0.43
5:AC:79:ARG:C	5:AC:81:GLY:H	2.21	0.43
5:AC:191:THR:HG21	5:AC:193:TYR:CE1	2.54	0.43
7:AE:36:ASP:OD1	7:AE:38:GLN:N	2.39	0.43
12:AJ:45:ARG:NH2	16:AN:36:PHE:HE2	2.11	0.43
18:AP:40:ASP:HB3	18:AP:48:TRP:HB2	2.00	0.43
19:AQ:97:SER:O	19:AQ:98:LEU:HD12	2.19	0.43
21:AS:12:ASP:HB2	21:AS:35:SER:OG	2.19	0.43
23:B0:48:A:H4'	23:B0:50:G:O4'	2.18	0.43
23:B0:815:A:P	23:B0:815:A:H8	2.42	0.43
23:B0:1310:C:OP1	23:B0:2689:C:H4'	2.18	0.43
23:B0:1482:U:H2'	23:B0:1483:G:H8	1.83	0.43
23:B0:2035:G:H2'	23:B0:2036:G:C8	2.52	0.43
23:B0:2259:G:H2'	23:B0:2260:C:C6	2.53	0.43
23:B0:2378:G:H2'	23:B0:2379:G:H8	1.83	0.43
23:B0:2559:U:C2'	23:B0:2560:G:H5'	2.49	0.43
23:B0:2636:A:H62	23:B0:2643:G:N2	2.09	0.43
1:AA:205:G:N2	1:AA:207:C:H41	2.15	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:243:A:N6	1:AA:281:G:O2'	2.51	0.43
1:AA:297:G:H5'	1:AA:557:G:O4'	2.19	0.43
1:AA:402:G:H5'	1:AA:621:A:C2	2.54	0.43
1:AA:461:C:O2'	1:AA:462:A:H5'	2.19	0.43
1:AA:819:A:C6	1:AA:1529:G:N1	2.86	0.43
1:AA:961:U:C2'	1:AA:962:C:H5'	2.48	0.43
1:AA:1157:A:O4'	1:AA:1158:C:C2	2.72	0.43
1:AA:1458:G:C4	1:AA:1459:C:O2	2.72	0.43
1:AA:1459:C:H5''	22:AT:28:ALA:HB3	1.60	0.43
4:AB:59:GLU:O	4:AB:60:ASP:C	2.57	0.43
4:AB:124:SER:CB	4:AB:125:PRO:CD	2.90	0.43
6:AD:10:ARG:HH11	6:AD:10:ARG:HG3	1.83	0.43
11:AI:78:LYS:HE2	11:AI:78:LYS:HB3	1.87	0.43
23:B0:45:C:H2'	23:B0:46:C:C6	2.53	0.43
23:B0:69:G:O2'	23:B0:70:A:H4'	2.17	0.43
23:B0:491:A:H2'	23:B0:491:A:N3	2.34	0.43
23:B0:931:G:N2	23:B0:2247:A:H5''	2.34	0.43
23:B0:969:U:O2'	23:B0:970:A:H5''	2.18	0.43
23:B0:1391:A:H2'	23:B0:1392:U:C5	2.54	0.43
23:B0:1424:U:H2'	23:B0:1425:G:C8	2.53	0.43
23:B0:1938:U:H3'	23:B0:2530:C:O2'	2.19	0.43
23:B0:2241:U:H4'	23:B0:2307:A:C2	2.54	0.43
23:B0:2436:U:H2'	23:B0:2437:G:O4'	2.18	0.43
23:B0:2586:G:H2'	23:B0:2587:G:O4'	2.19	0.43
1:AA:27:G:C4	1:AA:557:G:N3	2.81	0.43
1:AA:50:A:N6	1:AA:361:G:H4'	2.33	0.43
1:AA:118:U:O3'	1:AA:119:A:O5'	2.37	0.43
1:AA:265:G:O4'	19:AQ:64:PRO:O	2.35	0.43
1:AA:618:C:N3	1:AA:622:A:N6	2.67	0.43
1:AA:818:G:H3'	1:AA:819:A:H5'	2.01	0.43
1:AA:1060:C:O2'	1:AA:1061:G:H5'	2.18	0.43
1:AA:1131:G:H2'	1:AA:1132:C:H6	1.83	0.43
1:AA:1297:C:OP2	15:AM:44:ARG:NH2	2.51	0.43
4:AB:17:PHE:CA	4:AB:44:LEU:HD21	2.49	0.43
6:AD:8:VAL:CG1	6:AD:21:LEU:HD13	2.48	0.43
7:AE:80:ILE:HD12	7:AE:80:ILE:H	1.84	0.43
16:AN:29:ARG:HH11	16:AN:29:ARG:CG	2.32	0.43
18:AP:52:ASP:CG	18:AP:52:ASP:O	2.57	0.43
22:AT:50:GLU:HG2	22:AT:100:ILE:CG1	2.48	0.43
23:B0:211:U:O2'	23:B0:212:U:H5'	2.19	0.43
23:B0:217:U:H5'	23:B0:633:G:O2'	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:540:G:N7	23:B0:2018:G:H4'	2.33	0.43
23:B0:941:U:H2'	23:B0:942:U:C6	2.54	0.43
23:B0:1329:U:H2'	23:B0:1330:G:C8	2.54	0.43
23:B0:1401:G:H2'	23:B0:1402:G:H8	1.83	0.43
23:B0:2055:G:H2'	23:B0:2056:C:C6	2.54	0.43
24:B9:35:C:H2'	24:B9:36:A:O4'	2.19	0.43
1:AA:130:A:O3'	1:AA:263:A:O2'	2.36	0.43
1:AA:130:A:C6	1:AA:264:U:O2	2.71	0.43
1:AA:255:G:N3	19:AQ:16:GLN:NE2	2.62	0.43
1:AA:363:A:O2'	1:AA:364:A:H5'	2.18	0.43
1:AA:409:G:OP1	6:AD:24:GLU:O	2.36	0.43
1:AA:451:A:N6	1:AA:480:U:H2'	2.33	0.43
1:AA:762:C:H4'	23:B0:729:A:N6	2.28	0.43
1:AA:960:U:O2	1:AA:960:U:H2'	2.19	0.43
1:AA:991:U:O2	1:AA:993:G:H8	2.02	0.43
1:AA:1250:A:H4'	11:AI:68:GLY:CA	2.49	0.43
1:AA:1262:C:H2'	1:AA:1263:C:C6	2.54	0.43
1:AA:1317:C:C6	16:AN:16:PHE:CG	3.06	0.43
1:AA:1327:C:O2'	1:AA:1328:C:H5'	2.19	0.43
2:AV:50:U:C2'	2:AV:51:G:H5'	2.48	0.43
4:AB:74:LYS:HD2	4:AB:166:ASP:HB2	2.00	0.43
4:AB:204:ASN:HD22	4:AB:206:ASP:H	1.66	0.43
5:AC:26:LYS:N	5:AC:26:LYS:CD	2.78	0.43
6:AD:120:LEU:HD23	6:AD:125:HIS:CD2	2.54	0.43
6:AD:127:THR:HG23	6:AD:128:VAL:N	2.34	0.43
7:AE:118:ILE:HD13	7:AE:118:ILE:HG21	1.74	0.43
9:AG:108:ALA:O	9:AG:119:ARG:HD2	2.18	0.43
11:AI:78:LYS:HD3	11:AI:101:PHE:CD2	2.54	0.43
11:AI:106:ALA:O	11:AI:108:VAL:HG23	2.19	0.43
14:AL:41:ARG:HB3	14:AL:41:ARG:HH11	1.84	0.43
15:AM:33:ALA:HB2	15:AM:64:TRP:CH2	2.54	0.43
23:B0:70:A:OP2	23:B0:111:G:H4'	2.19	0.43
23:B0:798:G:C2'	23:B0:799:C:H5'	2.48	0.43
23:B0:1429:A:O2'	23:B0:1430:G:H4'	2.19	0.43
23:B0:1634:A:O2'	23:B0:1635:G:OP1	2.29	0.43
23:B0:2426:G:C5'	23:B0:2480:C:H41	2.28	0.43
23:B0:2468:G:H2'	23:B0:2469:G:O4'	2.19	0.43
23:B0:2728:A:H2'	23:B0:2729:A:O4'	2.18	0.43
1:AA:70:A:C2'	1:AA:71:U:H5'	2.48	0.43
1:AA:191:G:N2	1:AA:192:U:H1'	2.23	0.43
1:AA:255:G:H4'	19:AQ:17:LYS:CB	2.48	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:564:C:H5'	14:AL:10:LEU:HD13	2.01	0.43
1:AA:640:A:C2'	1:AA:641:U:H5'	2.48	0.43
1:AA:676:A:O2'	13:AK:115:PRO:HG3	2.19	0.43
1:AA:779:C:C5'	13:AK:120:ARG:C	2.75	0.43
1:AA:782:A:H2'	1:AA:783:C:O4'	2.19	0.43
1:AA:858:G:O2'	1:AA:859:A:H5'	2.18	0.43
1:AA:977:A:H2	1:AA:1224:G:C6	2.37	0.43
1:AA:1010:G:O2'	1:AA:1011:G:H5'	2.18	0.43
1:AA:1125:U:H5''	1:AA:1126:U:H5	1.83	0.43
1:AA:1181:G:O2'	1:AA:1182:G:H5'	2.19	0.43
1:AA:1416:G:N7	1:AA:1417:G:N9	2.67	0.43
1:AA:1500:A:OP1	1:AA:1508:G:OP1	2.37	0.43
2:AV:76:A:O3'	23:B0:2046:C:O2'	2.27	0.43
5:AC:112:SER:HB2	5:AC:115:LEU:HB2	2.01	0.43
14:AL:41:ARG:CB	14:AL:41:ARG:NH1	2.82	0.43
14:AL:58:VAL:N	14:AL:66:VAL:O	2.47	0.43
17:AO:48:LYS:O	17:AO:50:HIS:N	2.50	0.43
22:AT:42:GLN:O	22:AT:46:GLU:HG3	2.19	0.43
23:B0:873:U:O2	23:B0:2246:A:H5''	2.18	0.43
23:B0:1393:G:O2'	23:B0:1394:G:H5'	2.19	0.43
23:B0:1561:A:H2'	23:B0:1562:G:O4'	2.19	0.43
23:B0:3877:A:HO2'	55:B5:198:THR:CA	2.26	0.43
23:B0:2424:G:H2'	23:B0:2425:G:O4'	2.19	0.43
1:AA:15:G:HO2'	7:AE:24:ARG:NH1	2.14	0.43
1:AA:119:A:N3	1:AA:240:C:C4	2.87	0.43
1:AA:130:A:C5'	19:AQ:63:ARG:CZ	2.89	0.43
1:AA:409:G:H2'	1:AA:410:G:O4'	2.18	0.43
1:AA:737:A:H1'	8:AF:73:ASN:OD1	2.19	0.43
1:AA:1051:C:H2'	1:AA:1052:U:C6	2.53	0.43
1:AA:1075:C:H5''	4:AB:179:LYS:HZ1	1.82	0.43
1:AA:1126:U:H2'	1:AA:1127:G:O4'	2.19	0.43
1:AA:1181:G:H4'	1:AA:1184:G:C4'	2.49	0.43
1:AA:1230:C:H1'	15:AM:125:ARG:O	2.19	0.43
1:AA:1287:A:C2	1:AA:1353:G:H1'	2.54	0.43
1:AA:1353:G:H2'	1:AA:1354:C:C6	2.54	0.43
2:AW:76:A:C1'	23:B0:2486:C:C5'	2.97	0.43
4:AB:28:PHE:CD2	4:AB:190:THR:HA	2.54	0.43
5:AC:116:VAL:HG11	5:AC:141:VAL:HG21	2.01	0.43
6:AD:60:GLU:OE1	6:AD:60:GLU:HA	2.19	0.43
6:AD:198:VAL:HG12	6:AD:199:ASN:N	2.34	0.43
7:AE:43:LEU:HB2	7:AE:136:MET:HE2	2.00	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AF:100:ASN:ND2	20:AR:23:LYS:O	2.52	0.43
14:AL:70:ILE:CD1	14:AL:77:LEU:HD12	2.42	0.43
17:AO:78:TYR:CE2	17:AO:82:ILE:HD11	2.53	0.43
19:AQ:101:ARG:CD	23:B0:731:A:C2	3.00	0.43
22:AT:11:SER:C	22:AT:13:LEU:H	2.22	0.43
23:B0:114:C:H2'	23:B0:115:G:O4'	2.19	0.43
23:B0:170:U:H2'	23:B0:171:G:H8	1.84	0.43
23:B0:572:G:H2'	23:B0:573:C:C6	2.54	0.43
23:B0:635:C:H2'	23:B0:636:G:H5''	2.00	0.43
23:B0:738:G:H2'	23:B0:739:G:O4'	2.18	0.43
23:B0:765:C:O2'	23:B0:766:A:O4'	2.36	0.43
23:B0:1039:A:H2'	23:B0:1040:A:C8	2.54	0.43
23:B0:1411:C:O5'	23:B0:1411:C:H6	2.02	0.43
23:B0:1466:C:H2'	23:B0:1467:U:O4'	2.19	0.43
23:B0:2204:A:H1'	23:B0:2205:C:C5	2.53	0.43
23:B0:2475:C:C2'	23:B0:2476:A:H5'	2.49	0.43
23:B0:2572:U:H2'	23:B0:2573:C:C6	2.54	0.43
24:B9:108:G:O2'	24:B9:109:G:H5'	2.19	0.43
1:AA:150:C:H2'	1:AA:151:A:P	2.58	0.42
1:AA:160:A:H2'	1:AA:161:A:O4'	2.18	0.42
1:AA:169:C:O2'	1:AA:170:U:H5'	2.19	0.42
1:AA:246:A:H2	1:AA:278:G:N3	2.13	0.42
1:AA:452:A:O2'	1:AA:453:A:O4'	2.34	0.42
1:AA:628:G:H2'	1:AA:629:G:H8	1.84	0.42
1:AA:677:U:O2	1:AA:777:A:O2'	2.36	0.42
1:AA:685:G:P	13:AK:12:ARG:HH22	2.42	0.42
1:AA:1441:G:H4'	1:AA:1442:G:C8	2.54	0.42
5:AC:46:GLU:C	5:AC:48:TYR:H	2.22	0.42
6:AD:196:LEU:C	6:AD:198:VAL:H	2.21	0.42
12:AJ:17:ASP:O	12:AJ:21:GLN:HB2	2.19	0.42
14:AL:60:LEU:CD2	14:AL:66:VAL:HG22	2.49	0.42
15:AM:6:GLY:O	15:AM:7:VAL:CG2	2.65	0.42
17:AO:29:VAL:HG11	17:AO:67:LEU:HD21	2.00	0.42
19:AQ:45:HIS:CD2	19:AQ:47:PRO:HG3	2.54	0.42
19:AQ:60:ILE:HD13	19:AQ:61:GLU:N	2.34	0.42
23:B0:689:A:C2'	23:B0:690:A:H5'	2.48	0.42
23:B0:744:C:H2'	23:B0:745:C:C6	2.54	0.42
23:B0:842:A:H5'	23:B0:844:G:C5	2.54	0.42
23:B0:1307:U:H2'	23:B0:1308:C:O4'	2.19	0.42
23:B0:1429:A:N6	23:B0:1602:G:H5'	2.34	0.42
23:B0:3877:A:O5'	23:B0:1861:G:OP2	2.37	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:3185:U:H2'	23:B0:3186:C:O4'	2.19	0.42
23:B0:2455:A:C2'	23:B0:2456:U:H5'	2.49	0.42
23:B0:2625:U:H2'	23:B0:2626:U:O4'	2.18	0.42
1:AA:107:G:O2'	1:AA:108:G:H5'	2.19	0.42
1:AA:117:G:O6	1:AA:289:G:H1'	2.18	0.42
1:AA:418:C:H2'	1:AA:419:C:C6	2.54	0.42
1:AA:448:A:C4	1:AA:487:A:C2	3.07	0.42
1:AA:1269:A:H2	1:AA:1312:G:N3	2.17	0.42
1:AA:1308:U:P	15:AM:99:ARG:HG3	2.59	0.42
1:AA:1434:A:O3'	1:AA:1435:G:H4'	2.19	0.42
4:AB:116:GLU:CG	4:AB:153:ARG:NH1	2.80	0.42
5:AC:50:ALA:O	5:AC:70:VAL:CG1	2.67	0.42
5:AC:70:VAL:O	5:AC:106:VAL:N	2.51	0.42
6:AD:157:LEU:CD2	6:AD:161:ASN:ND2	2.74	0.42
12:AJ:61:GLU:OE2	16:AN:58:LYS:CE	2.66	0.42
12:AJ:72:VAL:O	12:AJ:73:ASP:HB2	2.18	0.42
19:AQ:59:ILE:CG2	19:AQ:71:PHE:CD1	3.02	0.42
20:AR:46:GLU:CD	20:AR:46:GLU:N	2.72	0.42
23:B0:220:U:H2'	23:B0:221:A:O4'	2.19	0.42
23:B0:796:A:C2	23:B0:798:G:H1'	2.54	0.42
23:B0:1292:A:H2'	23:B0:1293:A:H8	1.84	0.42
23:B0:1626:A:H5''	23:B0:1627:C:OP2	2.19	0.42
23:B0:1788:C:H2'	23:B0:1789:U:C6	2.54	0.42
23:B0:1975:G:H4'	23:B0:1976:U:C5	2.53	0.42
23:B0:1982:C:H2'	23:B0:1983:G:C8	2.52	0.42
23:B0:2204:A:H4'	23:B0:2205:C:O4'	2.19	0.42
23:B0:2404:A:OP1	23:B0:2406:C:H5'	2.18	0.42
23:B0:2426:G:O2'	23:B0:2427:A:OP2	2.32	0.42
23:B0:2504:G:H2'	23:B0:2505:G:H8	1.83	0.42
23:B0:2639:A:H2'	23:B0:2640:G:O4'	2.20	0.42
1:AA:487:A:H2'	1:AA:488:C:O4'	2.19	0.42
1:AA:538:G:H5'	14:AL:114:LYS:CD	2.46	0.42
1:AA:778:G:O2'	1:AA:779:C:H5'	2.19	0.42
1:AA:796:C:OP2	13:AK:123:LYS:NZ	2.45	0.42
1:AA:926:G:H1	3:AU:6:A:P	2.43	0.42
1:AA:942:G:H2'	1:AA:943:U:H6	1.84	0.42
1:AA:1126:U:H2'	1:AA:1127:G:H8	1.84	0.42
1:AA:1397:C:O2'	1:AA:1398:A:P	2.77	0.42
4:AB:125:PRO:C	4:AB:127:ILE:H	2.22	0.42
4:AB:146:GLN:O	4:AB:150:SER:HB3	2.18	0.42
7:AE:64:ARG:O	7:AE:65:ASN:CB	2.60	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:AE:115:VAL:CG1	7:AE:116:THR:N	2.82	0.42
9:AG:95:ARG:NH1	9:AG:95:ARG:CG	2.80	0.42
9:AG:112:PRO:O	9:AG:113:GLU:C	2.57	0.42
12:AJ:15:THR:HG23	12:AJ:94:VAL:CG2	2.49	0.42
12:AJ:56:HIS:O	12:AJ:58:ASP:N	2.52	0.42
13:AK:33:THR:OG1	13:AK:37:GLY:C	2.58	0.42
14:AL:26:ALA:C	14:AL:27:LEU:O	2.57	0.42
21:AS:3:ARG:O	21:AS:4:SER:HB3	2.19	0.42
22:AT:57:ARG:HE	22:AT:100:ILE:HG21	1.85	0.42
23:B0:338:G:O2'	23:B0:339:U:H5'	2.19	0.42
23:B0:569:C:H2'	23:B0:570:G:C8	2.53	0.42
23:B0:872:G:H2'	23:B0:928:G:N1	2.35	0.42
23:B0:1764:A:H2'	23:B0:1765:C:O4'	2.19	0.42
23:B0:1811:A:H1'	23:B0:1813:A:C5	2.53	0.42
23:B0:3877:A:P	23:B0:1861:G:P	3.16	0.42
23:B0:1981:A:H4'	23:B0:2704:U:O2'	2.19	0.42
1:AA:70:A:O2'	1:AA:71:U:H5'	2.19	0.42
1:AA:128:G:O4'	19:AQ:61:GLU:OE2	2.36	0.42
1:AA:244:U:C5	1:AA:894:G:C2	3.08	0.42
1:AA:418:C:H2'	1:AA:419:C:H6	1.84	0.42
1:AA:825:G:H2'	1:AA:826:C:C6	2.53	0.42
1:AA:875:C:O2'	10:AH:14:ARG:HD2	2.18	0.42
1:AA:974:A:OP1	1:AA:974:A:H8	2.03	0.42
1:AA:1014:A:N6	21:AS:34:TRP:CZ2	2.87	0.42
1:AA:1074:G:O3'	4:AB:103:THR:HG21	2.19	0.42
1:AA:1107:C:OP1	5:AC:174:PRO:N	2.53	0.42
1:AA:1135:U:O5'	1:AA:1135:U:H6	2.01	0.42
1:AA:1137:C:H4'	1:AA:1138:G:N1	2.33	0.42
1:AA:1244:C:O2'	1:AA:1245:A:H5'	2.19	0.42
1:AA:1266:G:N2	1:AA:1269:A:OP2	2.49	0.42
1:AA:1407:C:H2'	1:AA:1408:A:H8	1.85	0.42
1:AA:1446:A:C4	1:AA:1456:A:N1	2.87	0.42
1:AA:1458:G:N9	1:AA:1459:C:O2	2.52	0.42
1:AA:1505:G:H3'	1:AA:1505:G:H8	1.85	0.42
4:AB:16:HIS:CE1	4:AB:210:SER:HG	2.37	0.42
4:AB:33:TYR:O	4:AB:34:ALA:CB	2.67	0.42
4:AB:41:ILE:O	4:AB:41:ILE:HG22	2.18	0.42
6:AD:25:ARG:HA	6:AD:28:SER:OG	2.19	0.42
6:AD:163:GLU:C	6:AD:165:MET:N	2.72	0.42
7:AE:16:THR:HG23	7:AE:27:ARG:O	2.19	0.42
8:AF:40:VAL:HG22	8:AF:41:GLU:N	2.34	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AG:15:ASP:OD2	9:AG:23:VAL:HG11	2.19	0.42
9:AG:31:MET:SD	9:AG:34:GLY:HA2	2.59	0.42
17:AO:41:GLU:O	17:AO:42:HIS:C	2.57	0.42
18:AP:4:ILE:CG1	18:AP:64:ALA:HB1	2.49	0.42
18:AP:51:VAL:O	18:AP:52:ASP:C	2.58	0.42
21:AS:17:GLU:HA	21:AS:20:LEU:CD1	2.49	0.42
21:AS:40:ILE:HG23	21:AS:44:MET:SD	2.59	0.42
23:B0:477:A:H2'	23:B0:478:G:O4'	2.20	0.42
23:B0:697:G:O2'	23:B0:698:A:H5'	2.20	0.42
23:B0:883:A:H2'	23:B0:884:C:O4'	2.19	0.42
23:B0:1017:C:H2'	23:B0:1018:C:O4'	2.19	0.42
23:B0:1223:G:H4'	23:B0:1224:A:C5'	2.49	0.42
23:B0:2492:G:H2'	23:B0:2493:U:C6	2.54	0.42
23:B0:2561:G:N3	23:B0:2561:G:H2'	2.35	0.42
23:B0:2771:C:H5	23:B0:2867:G:H22	1.66	0.42
1:AA:16:A:O2'	1:AA:17:U:H5'	2.18	0.42
1:AA:499:A:H1'	1:AA:500:G:C1'	2.40	0.42
1:AA:825:G:O2'	1:AA:826:C:H5'	2.20	0.42
1:AA:848:G:HO3'	1:AA:849:C:P	2.40	0.42
1:AA:878:G:C5'	10:AH:89:PRO:HG2	2.48	0.42
1:AA:994:A:C4	16:AN:5:ALA:O	2.72	0.42
1:AA:1319:A:OP1	21:AS:5:LEU:CD2	2.68	0.42
1:AA:1399:C:C2	1:AA:1502:A:N6	2.86	0.42
1:AA:1438:G:H2'	1:AA:1439:C:C6	2.54	0.42
1:AA:1476:G:P	23:B0:1706:A:O3'	2.77	0.42
4:AB:187:LEU:HA	4:AB:201:ILE:HB	2.02	0.42
5:AC:193:TYR:HE1	5:AC:196:LEU:HD11	1.83	0.42
6:AD:8:VAL:CG1	6:AD:21:LEU:CD1	2.98	0.42
7:AE:131:ILE:HD13	7:AE:131:ILE:HA	1.93	0.42
8:AF:77:ARG:O	8:AF:81:ILE:HG13	2.18	0.42
18:AP:4:ILE:HG23	18:AP:36:ILE:HD11	2.01	0.42
21:AS:41:VAL:HB	21:AS:43:GLU:OE2	2.20	0.42
23:B0:19:C:H2'	23:B0:20:C:C6	2.54	0.42
23:B0:669:G:H2'	23:B0:670:U:O4'	2.20	0.42
23:B0:1313:U:O2'	23:B0:1314:A:P	2.78	0.42
23:B0:1480:G:C2'	23:B0:1481:U:H5'	2.49	0.42
23:B0:1775:A:H4'	23:B0:1776:A:C8	2.54	0.42
23:B0:1900:U:H3'	23:B0:1901:A:H8	1.85	0.42
23:B0:1957:C:O2'	23:B0:1958:G:H5'	2.20	0.42
23:B0:2437:G:H4'	23:B0:2438:A:N7	2.35	0.42
23:B0:2523:G:O2'	23:B0:2524:G:H5'	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:2559:U:H2'	23:B0:2560:G:H5'	2.01	0.42
23:B0:2564:U:H5''	23:B0:2565:C:H5'	2.01	0.42
24:B9:73:C:H3'	24:B9:74:A:OP2	2.20	0.42
1:AA:38:G:H4'	1:AA:547:A:C5	2.54	0.42
1:AA:127:G:O3'	19:AQ:2:PRO:HD2	2.20	0.42
1:AA:322:C:HO2'	22:AT:23:ARG:HB2	1.84	0.42
1:AA:359:U:O2'	1:AA:360:A:H5'	2.18	0.42
1:AA:376:G:P	18:AP:67:THR:CG2	3.01	0.42
1:AA:1195:C:H3'	1:AA:1196:U:H5''	2.02	0.42
5:AC:23:TYR:CZ	12:AJ:9:ARG:HD3	2.55	0.42
12:AJ:3:LYS:HG3	12:AJ:75:ILE:HG23	2.02	0.42
14:AL:60:LEU:HD21	14:AL:66:VAL:CG2	2.50	0.42
15:AM:80:ARG:C	15:AM:82:MET:N	2.72	0.42
23:B0:833:A:H2'	23:B0:834:A:C8	2.55	0.42
23:B0:1672:A:H2'	23:B0:1673:C:O4'	2.20	0.42
23:B0:1679:U:H2'	23:B0:1680:U:H5''	2.02	0.42
23:B0:1855:G:H4'	23:B0:2390:A:H4'	2.00	0.42
24:B9:50:U:H2'	24:B9:51:G:H8	1.83	0.42
1:AA:69:G:H1'	1:AA:101:A:N1	2.34	0.42
1:AA:427:U:H4'	1:AA:541:G:H5''	2.01	0.42
1:AA:532:A:H2'	1:AA:533:A:C5'	2.48	0.42
1:AA:570:G:O2'	1:AA:819:A:C2'	2.63	0.42
1:AA:584:G:H2'	1:AA:585:G:C8	2.54	0.42
1:AA:647:C:H2'	1:AA:648:A:C8	2.54	0.42
1:AA:762:C:H5'	23:B0:729:A:N6	2.27	0.42
1:AA:811:C:H4'	1:AA:900:A:N6	2.34	0.42
1:AA:835:U:C5'	20:AR:64:ARG:CZ	2.71	0.42
1:AA:942:G:C2	1:AA:943:U:C6	3.07	0.42
1:AA:1228:C:H4'	15:AM:116:THR:HA	2.02	0.42
1:AA:1264:C:H2'	1:AA:1265:G:C8	2.55	0.42
1:AA:1288:A:H1'	1:AA:1353:G:O4'	2.20	0.42
1:AA:1434:A:P	1:AA:1435:G:C8	3.09	0.42
2:AV:76:A:O5'	23:B0:2564:U:C6	2.66	0.42
5:AC:57:ILE:O	5:AC:57:ILE:HG22	2.20	0.42
5:AC:64:VAL:HG12	5:AC:65:ALA:H	1.84	0.42
5:AC:70:VAL:HG12	5:AC:71:ALA:H	1.84	0.42
5:AC:79:ARG:NE	5:AC:82:GLU:HG2	2.34	0.42
5:AC:172:ARG:HH12	5:AC:174:PRO:CG	2.22	0.42
6:AD:63:LYS:O	6:AD:64:LEU:C	2.58	0.42
7:AE:79:GLU:OE2	10:AH:105:ARG:NE	2.51	0.42
8:AF:45:LEU:O	8:AF:46:ARG:HG2	2.20	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AK:85:ARG:NH1	13:AK:85:ARG:HG3	2.34	0.42
13:AK:86:GLY:H	13:AK:112:THR:CG2	2.32	0.42
13:AK:93:GLN:NE2	13:AK:96:ARG:NH2	2.67	0.42
19:AQ:104:LYS:HD2	23:B0:729:A:N7	2.35	0.42
21:AS:51:VAL:HG12	21:AS:52:TYR:H	1.85	0.42
23:B0:69:G:O2'	23:B0:70:A:P	2.78	0.42
23:B0:589:C:H2'	23:B0:590:C:C6	2.55	0.42
23:B0:738:G:C2'	23:B0:739:G:H5'	2.50	0.42
23:B0:841:G:N1	23:B0:2226:A:H4'	2.35	0.42
23:B0:1181:C:H3'	23:B0:1182:U:H5''	2.01	0.42
23:B0:1961:A:H2'	23:B0:1962:C:O4'	2.19	0.42
23:B0:2031:A:H2'	23:B0:2032:G:C8	2.54	0.42
23:B0:3110:G:P	23:B0:3149:G:C5'	3.08	0.42
23:B0:3110:G:C4'	23:B0:3111:C:OP2	2.67	0.42
23:B0:2864:C:H2'	23:B0:2865:G:O4'	2.20	0.42
1:AA:232:G:C2	1:AA:263:A:H2	2.28	0.42
1:AA:292:G:C1'	1:AA:608:A:H61	2.28	0.42
1:AA:406:G:N7	1:AA:496:A:C5	2.88	0.42
1:AA:438:G:O2'	1:AA:495:U:O4	2.24	0.42
1:AA:537:G:H5''	14:AL:113:ARG:NE	2.33	0.42
1:AA:767:A:H2'	1:AA:768:A:O4'	2.20	0.42
1:AA:893:C:C6	1:AA:894:G:C8	3.08	0.42
1:AA:965:A:O2'	1:AA:966:G:C5'	2.67	0.42
1:AA:1217:C:O2'	1:AA:1218:C:H5'	2.19	0.42
1:AA:1320:C:N4	21:AS:37:ARG:CD	2.77	0.42
2:AV:74:C:C3'	23:B0:2581:A:P	2.67	0.42
5:AC:77:ILE:CG2	5:AC:81:GLY:HA2	2.50	0.42
7:AE:120:THR:HG23	7:AE:121:LYS:H	1.84	0.42
9:AG:69:VAL:O	9:AG:69:VAL:CG1	2.68	0.42
10:AH:68:ARG:HG2	10:AH:68:ARG:HH11	1.84	0.42
19:AQ:95:TYR:N	19:AQ:95:TYR:CD1	2.88	0.42
20:AR:26:LEU:CD1	20:AR:27:GLY:H	2.29	0.42
23:B0:509:U:H2'	23:B0:510:G:H5'	2.00	0.42
23:B0:583:C:H4'	23:B0:584:A:OP2	2.20	0.42
23:B0:903:G:C6	23:B0:904:U:C4	3.08	0.42
23:B0:1112:U:H2'	23:B0:1112:U:O2	2.20	0.42
23:B0:3109:U:O3'	23:B0:3149:G:H4'	2.20	0.42
23:B0:2467:A:H2'	23:B0:2468:G:C8	2.55	0.42
23:B0:2633:A:H4'	23:B0:2634:G:C4'	2.39	0.42
24:B9:9:G:H2'	24:B9:10:U:O4'	2.20	0.42
1:AA:26:A:C5'	1:AA:27:G:OP2	2.67	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:113:G:H4'	1:AA:354:G:O3'	2.18	0.42
1:AA:203:A:C4'	1:AA:468:A:H4'	2.46	0.42
1:AA:293:G:OP1	1:AA:609:A:N6	2.52	0.42
1:AA:456:A:C2	1:AA:477:G:C1'	2.87	0.42
1:AA:501:C:O4'	1:AA:548:G:N2	2.53	0.42
1:AA:628:G:O2'	1:AA:629:G:H5'	2.20	0.42
1:AA:841:C:N3	1:AA:845:A:N6	2.67	0.42
1:AA:1288:A:O4'	1:AA:1353:G:H4'	2.19	0.42
1:AA:1340:A:C4'	2:AV:32:C:H4'	2.50	0.42
1:AA:1398:A:C5'	1:AA:1399:C:OP1	2.55	0.42
6:AD:53:ASP:OD2	7:AE:104:ALA:CB	2.68	0.42
6:AD:70:ILE:HD11	6:AD:100:ARG:CD	2.49	0.42
18:AP:39:TYR:CD2	18:AP:73:LEU:HD11	2.54	0.42
21:AS:20:LEU:HD12	21:AS:21:GLU:N	2.34	0.42
23:B0:332:C:H2'	23:B0:333:A:H5'	2.02	0.42
23:B0:391:C:H2'	23:B0:392:G:C8	2.54	0.42
23:B0:571:U:H2'	23:B0:581:A:H1'	2.02	0.42
23:B0:594:G:H21	23:B0:1267:A:H62	1.68	0.42
23:B0:814:G:H3'	23:B0:815:A:C5'	2.46	0.42
23:B0:877:G:N2	23:B0:926:C:H41	2.17	0.42
23:B0:1667:A:H2'	23:B0:1668:G:C8	2.55	0.42
23:B0:1912:G:OP1	23:B0:1913:G:H4'	2.19	0.42
23:B0:1938:U:O2'	23:B0:1939:U:H5'	2.20	0.42
23:B0:2393:G:H2'	23:B0:2394:G:H8	1.85	0.42
23:B0:2404:A:O2'	23:B0:2405:A:OP2	2.29	0.42
23:B0:2815:C:H2'	23:B0:2816:C:C6	2.55	0.42
1:AA:18:C:O2	1:AA:918:A:N1	2.52	0.42
1:AA:246:A:C3'	1:AA:247:G:H4'	2.50	0.42
1:AA:538:G:H5'	14:AL:114:LYS:CB	2.06	0.42
1:AA:602:A:C2	1:AA:637:G:C2	3.08	0.42
1:AA:640:A:O2'	1:AA:641:U:H5'	2.20	0.42
1:AA:692:U:O2	1:AA:695:A:C8	2.73	0.42
1:AA:730:G:C5	1:AA:731:G:H1'	2.54	0.42
1:AA:762:C:O2'	23:B0:729:A:H2	1.99	0.42
1:AA:851:G:H2'	1:AA:852:G:H8	1.84	0.42
1:AA:1129:C:O2'	1:AA:1130:A:P	2.78	0.42
1:AA:1402:C:H2'	1:AA:1403:C:H6	1.85	0.42
1:AA:1473:A:O3'	23:B0:1718:A:N3	2.53	0.42
6:AD:24:GLU:H	6:AD:112:VAL:HG11	1.85	0.42
6:AD:148:VAL:HG13	6:AD:158:ILE:HD13	2.01	0.42
9:AG:65:ALA:O	9:AG:66:VAL:C	2.58	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:AI:104:ARG:O	11:AI:105:ASP:C	2.59	0.42
12:AJ:55:LYS:O	12:AJ:56:HIS:HB2	2.19	0.42
14:AL:7:ILE:HD13	14:AL:7:ILE:HA	1.93	0.42
14:AL:43:VAL:CG1	14:AL:44:THR:N	2.81	0.42
15:AM:32:GLU:O	15:AM:35:GLU:N	2.53	0.42
15:AM:96:LEU:HB3	15:AM:97:PRO:HD2	2.00	0.42
19:AQ:40:LYS:HD3	19:AQ:42:TYR:OH	2.20	0.42
19:AQ:95:TYR:N	19:AQ:95:TYR:HD1	2.18	0.42
22:AT:44:ALA:HB2	22:AT:88:VAL:HG13	2.02	0.42
22:AT:80:ARG:O	22:AT:84:LEU:HB2	2.20	0.42
23:B0:334:G:N3	23:B0:344:G:H1'	2.35	0.42
23:B0:869:C:O2'	23:B0:870:C:H5'	2.19	0.42
23:B0:1040:A:C2'	23:B0:1041:G:H5'	2.49	0.42
23:B0:1080:A:H4'	23:B0:1081:A:C8	2.54	0.42
23:B0:1671:A:H2'	23:B0:1672:A:H8	1.85	0.42
23:B0:1747:G:H1'	23:B0:1749:G:C2	2.55	0.42
24:B9:25:G:C2'	24:B9:26:G:H5'	2.50	0.42
24:B9:106:U:O2'	24:B9:107:C:H5'	2.19	0.42
1:AA:39:G:C8	1:AA:498:U:N3	2.88	0.41
1:AA:413:G:N2	1:AA:428:G:H1'	2.34	0.41
1:AA:439:A:N6	1:AA:497:A:H1'	2.35	0.41
1:AA:877:C:O2	10:AH:3:THR:HG21	2.20	0.41
1:AA:951:G:C6	1:AA:1231:G:C6	3.08	0.41
1:AA:977:A:C2	1:AA:1224:G:C5	3.08	0.41
1:AA:1095:U:H2'	1:AA:1096:C:H6	1.83	0.41
1:AA:1489:G:H2'	1:AA:1490:C:C5'	2.27	0.41
4:AB:130:ARG:HB3	4:AB:134:GLU:OE1	2.20	0.41
5:AC:73:PRO:HD3	5:AC:105:GLU:HG3	2.03	0.41
7:AE:31:LEU:HA	7:AE:31:LEU:HD23	1.74	0.41
8:AF:19:LEU:HD21	8:AF:23:LYS:HD2	2.01	0.41
10:AH:111:ILE:O	10:AH:134:ILE:HB	2.20	0.41
23:B0:425:A:H2'	23:B0:426:C:O4'	2.20	0.41
23:B0:1188:A:H62	23:B0:1189:G:N2	2.17	0.41
23:B0:1762:C:H2'	23:B0:1763:G:C8	2.55	0.41
23:B0:2195:C:H2'	23:B0:2196:U:O4'	2.20	0.41
23:B0:2809:A:H2'	23:B0:2810:A:H5'	2.01	0.41
1:AA:145:G:O2'	1:AA:146:G:H5'	2.20	0.41
1:AA:255:G:H4'	19:AQ:17:LYS:N	2.17	0.41
1:AA:320:C:C1'	1:AA:1434:A:C2	2.93	0.41
1:AA:546:G:H4'	1:AA:548:G:H4'	2.01	0.41
1:AA:586:C:H5'	10:AH:90:GLY:CA	2.51	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:833:U:H2'	1:AA:834:C:C6	2.55	0.41
1:AA:1016:A:C5'	16:AN:15:LYS:CE	2.87	0.41
1:AA:1233:G:OP1	11:AI:123:PRO:CB	2.69	0.41
1:AA:1264:C:H2'	1:AA:1265:G:H8	1.85	0.41
1:AA:1311:G:H2'	1:AA:1312:G:O4'	2.20	0.41
1:AA:1531:A:O5'	1:AA:1531:A:H8	2.03	0.41
2:AV:52:U:O2'	2:AV:53:G:H5'	2.20	0.41
2:AV:74:C:C4	23:B0:2231:G:N2	2.88	0.41
4:AB:62:ALA:C	4:AB:64:ARG:H	2.24	0.41
5:AC:134:ILE:HG22	5:AC:168:ALA:HB3	2.01	0.41
7:AE:144:THR:O	7:AE:145:LYS:C	2.59	0.41
8:AF:48:LEU:HD13	8:AF:52:ILE:CG1	2.50	0.41
8:AF:98:LEU:HD23	8:AF:98:LEU:HA	1.94	0.41
9:AG:23:VAL:HG13	9:AG:43:PHE:CE2	2.55	0.41
9:AG:93:PRO:HG2	9:AG:94:ARG:H	1.86	0.41
11:AI:56:LEU:O	11:AI:58:ARG:N	2.49	0.41
13:AK:100:ALA:O	13:AK:101:SER:C	2.57	0.41
22:AT:53:LEU:HD13	22:AT:101:GLY:N	2.35	0.41
22:AT:100:ILE:C	22:AT:102:GLY:N	2.74	0.41
23:B0:167:A:H2'	23:B0:168:A:C8	2.55	0.41
23:B0:860:U:O2'	23:B0:861:G:H5'	2.20	0.41
23:B0:1082:G:H1'	23:B0:1100:G:H2'	2.03	0.41
23:B0:1196:G:H2'	23:B0:1197:U:H5'	2.00	0.41
23:B0:1448:A:H2'	23:B0:1449:C:C6	2.55	0.41
23:B0:2242:C:N4	23:B0:2257:A:H61	2.18	0.41
23:B0:2604:G:H2'	23:B0:2605:C:C6	2.55	0.41
23:B0:2694:G:H2'	23:B0:2695:C:C6	2.55	0.41
23:B0:2721:A:H62	23:B0:2743:G:H21	1.68	0.41
1:AA:143:A:H2	1:AA:220:G:H22	1.66	0.41
1:AA:255:G:H4'	19:AQ:17:LYS:HG3	2.02	0.41
1:AA:625:G:O2'	1:AA:626:U:H5'	2.20	0.41
1:AA:636:U:H2'	1:AA:637:G:C8	2.55	0.41
1:AA:757:U:OP1	1:AA:823:G:C4'	2.68	0.41
1:AA:812:C:OP1	1:AA:903:G:H1'	2.20	0.41
1:AA:865:A:N3	1:AA:918:A:O4'	2.53	0.41
1:AA:866:C:H2'	1:AA:867:G:O4'	2.20	0.41
1:AA:1067:A:C1'	1:AA:1068:G:OP2	2.69	0.41
1:AA:1262:C:N4	1:AA:1273:G:H1	2.18	0.41
1:AA:1405:G:H1'	1:AA:1519:A:C4'	2.50	0.41
2:AW:52:U:O2'	2:AW:53:G:H5'	2.21	0.41
5:AC:38:ARG:CB	5:AC:94:LEU:HD21	2.50	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AD:205:GLU:O	6:AD:208:SER:HB2	2.20	0.41
11:AI:97:LYS:HB2	11:AI:98:PRO:HD3	2.01	0.41
12:AJ:32:ALA:HB2	12:AJ:75:ILE:O	2.19	0.41
12:AJ:63:PHE:CD2	16:AN:58:LYS:HA	2.55	0.41
12:AJ:63:PHE:CE1	16:AN:48:ALA:HB3	2.54	0.41
13:AK:57:THR:OG1	13:AK:58:PRO:HD2	2.20	0.41
14:AL:33:ARG:HD2	14:AL:62:SER:HB3	2.01	0.41
14:AL:55:VAL:CG1	14:AL:56:ALA:N	2.83	0.41
14:AL:104:VAL:HG12	14:AL:105:TYR:CD1	2.56	0.41
17:AO:26:GLU:HG3	17:AO:81:LEU:HG	2.02	0.41
17:AO:70:LEU:HD12	17:AO:78:TYR:HB2	2.01	0.41
17:AO:83:GLU:OE1	17:AO:83:GLU:C	2.58	0.41
18:AP:43:LYS:HA	18:AP:48:TRP:CB	2.50	0.41
20:AR:17:SER:HB2	20:AR:54:ARG:HH21	1.85	0.41
22:AT:23:ARG:NH1	22:AT:23:ARG:HG2	2.35	0.41
23:B0:328:A:O2'	23:B0:329:C:H5'	2.20	0.41
23:B0:895:G:H2'	23:B0:896:C:O4'	2.20	0.41
23:B0:1073:G:H2'	23:B0:1073:G:N3	2.35	0.41
23:B0:1447:U:H1'	23:B0:1577:G:H22	1.86	0.41
23:B0:1528:C:H3'	23:B0:1529:C:H5''	2.02	0.41
23:B0:1683:G:H2'	23:B0:1684:G:H5'	2.02	0.41
23:B0:3877:A:C1'	55:B5:196:VAL:CA	2.98	0.41
23:B0:1889:G:H2'	23:B0:1890:G:C8	2.55	0.41
23:B0:2459:C:C2'	23:B0:2460:G:H5'	2.51	0.41
23:B0:2676:G:H2'	23:B0:2677:U:C6	2.56	0.41
1:AA:19:C:O2'	1:AA:20:U:H5'	2.20	0.41
1:AA:21:G:C4'	1:AA:914:A:N6	2.81	0.41
1:AA:115:G:H1'	1:AA:116:A:C8	2.55	0.41
1:AA:162:A:H2'	1:AA:163:C:O4'	2.20	0.41
1:AA:522:C:O2'	1:AA:523:A:H5'	2.19	0.41
1:AA:550:G:O2'	1:AA:551:U:H5'	2.20	0.41
1:AA:588:G:C4	1:AA:753:A:N1	2.88	0.41
1:AA:944:G:C3'	1:AA:945:G:H5'	2.50	0.41
1:AA:1061:G:C2'	1:AA:1062:U:H5'	2.50	0.41
1:AA:1112:C:C2	5:AC:178:LEU:CA	3.04	0.41
1:AA:1138:G:N1	1:AA:1140:C:C2	2.89	0.41
2:AV:34:G:OP1	2:AV:34:G:C8	2.64	0.41
9:AG:45:ASP:O	9:AG:49:ILE:HG13	2.20	0.41
10:AH:51:VAL:CG1	10:AH:52:ASP:N	2.83	0.41
11:AI:110:GLU:OE2	11:AI:113:LYS:NZ	2.53	0.41
13:AK:21:ILE:HD12	13:AK:95:ILE:HG12	2.01	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AK:54:ARG:H	13:AK:54:ARG:HG2	1.47	0.41
13:AK:99:GLN:HG2	13:AK:105:VAL:HG21	2.02	0.41
13:AK:127:LYS:HA	13:AK:127:LYS:HD3	1.78	0.41
14:AL:48:PRO:CG	14:AL:49:ASN:H	2.25	0.41
23:B0:31:C:H5''	23:B0:1252:C:OP1	2.20	0.41
23:B0:601:A:H3'	23:B0:602:C:H5'	2.03	0.41
23:B0:773:G:H2'	23:B0:774:A:O4'	2.21	0.41
23:B0:1679:U:H3'	23:B0:1680:U:C5'	2.45	0.41
23:B0:3865:A:C4	23:B0:3875:A:N1	2.89	0.41
23:B0:1880:G:H2'	23:B0:1881:U:C6	2.55	0.41
23:B0:1912:G:O4'	23:B0:1913:G:C8	2.72	0.41
23:B0:2448:A:C2'	23:B0:2449:G:H5'	2.50	0.41
1:AA:252:U:O2	1:AA:275:G:C4	2.74	0.41
1:AA:262:A:H5''	22:AT:76:ALA:H	1.85	0.41
1:AA:285:G:O2'	1:AA:286:G:H5'	2.21	0.41
1:AA:382:A:C2	1:AA:383:A:C4	3.09	0.41
1:AA:449:C:O2	18:AP:42:ARG:HD2	2.20	0.41
1:AA:653:A:N9	10:AH:56:LYS:CG	2.73	0.41
1:AA:692:U:OP1	13:AK:124:LYS:CE	2.63	0.41
1:AA:844:A:H2'	1:AA:845:A:H8	1.86	0.41
1:AA:848:G:C3'	1:AA:849:C:O4'	2.68	0.41
1:AA:923:A:H1'	1:AA:1398:A:C2'	2.51	0.41
1:AA:1239:A:H2'	1:AA:1298:C:H42	1.83	0.41
1:AA:1453:G:H2'	1:AA:1454:G:O4'	2.21	0.41
4:AB:10:LEU:C	4:AB:12:GLU:N	2.72	0.41
4:AB:228:GLY:O	4:AB:229:VAL:C	2.58	0.41
10:AH:126:LYS:O	10:AH:128:GLY:N	2.54	0.41
13:AK:65:ALA:O	13:AK:68:ALA:HB3	2.20	0.41
16:AN:39:LEU:HD11	16:AN:47:LEU:HD12	2.02	0.41
18:AP:82:GLN:O	18:AP:83:GLU:C	2.59	0.41
23:B0:59:G:O6	23:B0:62:U:H2'	2.19	0.41
23:B0:567:G:H2'	23:B0:568:G:C8	2.56	0.41
23:B0:1055:A:H2	23:B0:1121:G:H2'	1.83	0.41
23:B0:1204:G:H2'	23:B0:1205:G:C8	2.55	0.41
23:B0:1579:G:H2'	23:B0:1580:C:C6	2.56	0.41
23:B0:1912:G:H3'	23:B0:1912:G:N3	2.35	0.41
23:B0:2440:C:H1'	23:B0:2471:U:N3	2.32	0.41
23:B0:2710:C:O2'	23:B0:2711:G:H5'	2.20	0.41
23:B0:2756:A:H1'	23:B0:2758:A:N7	2.36	0.41
23:B0:2796:A:H2'	23:B0:2797:G:O4'	2.20	0.41
1:AA:7:G:H5'	1:AA:298:A:O4'	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:165:C:H2'	1:AA:166:G:H8	1.86	0.41
1:AA:322:C:O2'	22:AT:23:ARG:HB2	2.21	0.41
1:AA:419:C:H5''	1:AA:513:C:C4'	2.49	0.41
1:AA:456:A:C6	1:AA:477:G:N9	2.88	0.41
1:AA:676:A:H4'	13:AK:114:VAL:C	2.41	0.41
1:AA:944:G:C3'	1:AA:945:G:C5'	2.98	0.41
1:AA:1070:U:H2'	1:AA:1071:C:H6	1.86	0.41
1:AA:1430:C:H5'	23:B0:1721:G:C5'	2.49	0.41
1:AA:1431:C:H2'	1:AA:1432:G:O4'	2.21	0.41
1:AA:1497:G:H21	1:AA:1519:A:C1'	2.26	0.41
2:AV:64:A:OP1	45:BU:7:VAL:CA	2.68	0.41
4:AB:60:ASP:O	4:AB:64:ARG:HB2	2.20	0.41
5:AC:134:ILE:HD13	5:AC:166:GLU:HB3	2.01	0.41
5:AC:187:ALA:O	5:AC:198:VAL:N	2.52	0.41
6:AD:62:GLN:HE22	6:AD:65:ARG:NH1	2.18	0.41
6:AD:130:GLY:O	6:AD:131:ARG:C	2.58	0.41
7:AE:80:ILE:HD12	7:AE:91:LEU:HB2	2.00	0.41
9:AG:16:LEU:HG	11:AI:41:VAL:HG12	2.01	0.41
10:AH:125:ARG:HE	10:AH:125:ARG:HB2	1.68	0.41
10:AH:126:LYS:C	10:AH:128:GLY:N	2.73	0.41
11:AI:110:GLU:HG2	11:AI:113:LYS:NZ	2.35	0.41
11:AI:120:ARG:O	11:AI:122:ALA:N	2.53	0.41
13:AK:95:ILE:O	13:AK:95:ILE:HG22	2.20	0.41
13:AK:104:GLN:OE1	13:AK:106:LYS:HE2	2.19	0.41
16:AN:3:ARG:NH1	16:AN:6:LEU:CD1	2.84	0.41
19:AQ:95:TYR:HA	19:AQ:98:LEU:HD11	2.02	0.41
19:AQ:104:LYS:HB2	23:B0:726:G:C5	2.55	0.41
22:AT:54:LYS:HA	22:AT:57:ARG:HD3	2.02	0.41
23:B0:365:U:H2'	23:B0:366:U:C6	2.56	0.41
23:B0:643:A:H2'	23:B0:644:A:C8	2.56	0.41
23:B0:870:C:H2'	23:B0:871:U:C6	2.56	0.41
23:B0:974:U:H2'	23:B0:975:C:C6	2.55	0.41
23:B0:1007:A:H2'	23:B0:1008:G:H8	1.84	0.41
23:B0:1962:C:H2'	23:B0:1963:G:H8	1.84	0.41
1:AA:115:G:H1'	1:AA:116:A:N7	2.35	0.41
1:AA:259:G:H5''	22:AT:87:LYS:NZ	2.35	0.41
1:AA:689:C:OP1	13:AK:27:ASN:ND2	2.48	0.41
1:AA:867:G:O2'	1:AA:868:C:H5'	2.20	0.41
1:AA:1057:G:H2'	1:AA:1058:G:O4'	2.20	0.41
1:AA:1108:G:H5'	1:AA:1191:A:H4'	2.03	0.41
1:AA:1355:G:O2'	1:AA:1356:G:H5'	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:AV:75:C:N3	23:B0:2230:G:C2	2.86	0.41
5:AC:7:PRO:HG2	5:AC:184:TYR:CB	2.45	0.41
6:AD:108:LEU:HA	6:AD:108:LEU:HD23	1.86	0.41
13:AK:86:GLY:N	13:AK:112:THR:HG23	2.35	0.41
15:AM:46:LYS:HE3	15:AM:46:LYS:HB2	1.86	0.41
17:AO:34:LEU:HD23	17:AO:34:LEU:C	2.40	0.41
17:AO:57:LEU:HA	17:AO:57:LEU:HD12	1.86	0.41
18:AP:19:ILE:HG22	18:AP:36:ILE:CG1	2.51	0.41
23:B0:128:C:C3'	23:B0:129:A:H5''	2.50	0.41
23:B0:178:C:H4'	23:B0:399:G:C2	2.56	0.41
23:B0:909:C:H2'	23:B0:910:U:H6	1.85	0.41
23:B0:1018:C:H2'	23:B0:1019:U:H5	1.86	0.41
23:B0:1332:G:H2'	23:B0:1333:G:O4'	2.21	0.41
23:B0:1354:A:O2'	23:B0:1355:A:OP1	2.29	0.41
23:B0:1915:A:H2'	23:B0:1916:G:O4'	2.21	0.41
23:B0:1948:C:H2'	23:B0:1949:A:N7	2.36	0.41
1:AA:182:U:OP2	1:AA:183:G:C8	2.74	0.41
1:AA:355:C:C5'	1:AA:389:A:OP2	2.69	0.41
1:AA:502:G:H2'	1:AA:503:C:C6	2.56	0.41
1:AA:948:C:O2'	1:AA:949:A:H5'	2.21	0.41
1:AA:2003:G:H2'	1:AA:1004:A:H4'	2.02	0.41
1:AA:1113:C:C1'	5:AC:178:LEU:HD21	2.46	0.41
1:AA:1263:C:H2'	1:AA:1264:C:C6	2.56	0.41
2:AV:11:C:H4'	23:B0:1892:C:C4'	2.50	0.41
4:AB:165:VAL:O	4:AB:187:LEU:O	2.38	0.41
7:AE:9:LYS:HG3	7:AE:112:LEU:HD11	2.03	0.41
10:AH:6:ILE:O	10:AH:10:LEU:HG	2.20	0.41
12:AJ:80:LYS:HA	12:AJ:83:GLU:HB2	2.03	0.41
14:AL:27:LEU:HB3	14:AL:62:SER:HB2	2.03	0.41
15:AM:36:LYS:C	15:AM:38:GLY:H	2.24	0.41
17:AO:74:ASP:OD1	17:AO:76:GLU:HB3	2.21	0.41
17:AO:81:LEU:HD22	17:AO:85:LEU:HD12	2.03	0.41
23:B0:139:A:H2'	23:B0:140:G:C8	2.56	0.41
23:B0:675:C:H5''	34:BJ:26:THR:CA	2.51	0.41
23:B0:753:U:C2'	23:B0:754:G:H5'	2.51	0.41
23:B0:1566:G:H2'	23:B0:1567:A:C8	2.56	0.41
23:B0:2395:C:H2'	23:B0:2396:C:C5'	2.51	0.41
1:AA:37:U:H4'	1:AA:500:G:O3'	2.20	0.41
1:AA:47:C:C6	1:AA:365:U:H2'	2.56	0.41
1:AA:330:C:H6	1:AA:330:C:H5''	1.86	0.41
1:AA:367:U:C3'	1:AA:368:U:P	3.05	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:371:G:C2'	1:AA:372:C:H5'	2.51	0.41
1:AA:406:G:C8	1:AA:496:A:C2	3.09	0.41
1:AA:757:U:OP1	1:AA:823:G:H4'	2.21	0.41
1:AA:824:C:H2'	1:AA:825:G:C8	2.56	0.41
1:AA:835:U:H5''	20:AR:64:ARG:NH1	2.30	0.41
1:AA:836:G:C6	1:AA:851:G:C6	3.09	0.41
1:AA:920:U:O4'	1:AA:1080:A:N1	2.54	0.41
1:AA:939:G:C6	1:AA:940:C:N4	2.89	0.41
1:AA:992:U:H2'	1:AA:1043:C:C5	2.54	0.41
1:AA:1059:C:O2'	12:AJ:53:PRO:CD	2.69	0.41
1:AA:1126:U:P	1:AA:1126:U:H6	2.43	0.41
1:AA:1152:A:H2'	1:AA:1153:C:H6	1.83	0.41
1:AA:1184:G:H2'	1:AA:1185:G:C8	2.56	0.41
1:AA:1278:U:H5''	1:AA:1279:A:O5'	2.17	0.41
1:AA:1390:U:H2'	1:AA:1391:U:H6	1.85	0.41
1:AA:1430:C:C4'	23:B0:1721:G:C5'	2.93	0.41
1:AA:1440:C:H2'	1:AA:1441:G:C5'	2.48	0.41
1:AA:1457:A:C8	1:AA:1459:C:C4	3.06	0.41
4:AB:15:VAL:HG11	4:AB:210:SER:N	2.36	0.41
4:AB:95:GLN:C	4:AB:96:ARG:HD2	2.40	0.41
4:AB:134:GLU:O	4:AB:138:LEU:HG	2.21	0.41
5:AC:77:ILE:O	5:AC:83:ARG:HB3	2.21	0.41
5:AC:79:ARG:CG	5:AC:82:GLU:HG2	2.51	0.41
6:AD:7:PRO:CB	6:AD:10:ARG:HD2	2.51	0.41
10:AH:82:HIS:O	10:AH:83:ILE:HB	2.21	0.41
12:AJ:29:ARG:C	12:AJ:84:GLN:HE22	2.24	0.41
15:AM:37:THR:HG23	15:AM:55:ARG:HB2	2.03	0.41
18:AP:6:LEU:HD12	18:AP:6:LEU:N	2.36	0.41
21:AS:25:LYS:HD2	21:AS:25:LYS:N	2.34	0.41
23:B0:147:G:C2	23:B0:148:C:H1'	2.56	0.41
23:B0:187:U:H2'	23:B0:188:G:C8	2.56	0.41
23:B0:239:A:H2'	23:B0:240:U:O4'	2.20	0.41
23:B0:477:A:C2'	23:B0:478:G:H5'	2.51	0.41
23:B0:478:G:O2'	23:B0:479:G:H5'	2.20	0.41
23:B0:514:G:N3	23:B0:514:G:C2'	2.82	0.41
23:B0:644:A:C2'	23:B0:645:G:H5'	2.50	0.41
23:B0:658:G:H4'	23:B0:2331:A:C5'	2.50	0.41
23:B0:776:G:H3'	23:B0:776:G:N3	2.36	0.41
23:B0:810:U:H2'	23:B0:811:G:H8	1.85	0.41
23:B0:811:G:O2'	23:B0:812:G:H5'	2.21	0.41
23:B0:831:G:H21	23:B0:1203:A:N6	2.04	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:967:G:H1'	23:B0:970:A:H62	1.86	0.41
23:B0:1004:A:C2'	23:B0:1005:U:H5''	2.46	0.41
23:B0:1119:U:N3	23:B0:1120:C:N4	2.60	0.41
23:B0:1196:G:H2'	23:B0:1197:U:C5'	2.51	0.41
23:B0:1542:G:H21	23:B0:1561:A:H62	1.69	0.41
23:B0:1760:G:H2'	23:B0:1761:G:C8	2.56	0.41
23:B0:2018:G:H3'	23:B0:2019:C:H5'	2.03	0.41
23:B0:2028:C:O2'	23:B0:2029:G:H5'	2.21	0.41
23:B0:3177:C:O2'	23:B0:3178:C:H5'	2.19	0.41
23:B0:2212:U:H2'	23:B0:2213:G:C8	2.55	0.41
23:B0:2239:C:O2'	23:B0:2240:C:H5'	2.21	0.41
23:B0:2491:C:H2'	23:B0:2492:G:C5'	2.45	0.41
23:B0:2526:U:H2'	23:B0:2527:G:C8	2.55	0.41
23:B0:2562:G:H2'	23:B0:2563:U:O4'	2.20	0.41
23:B0:2620:G:H2'	23:B0:2621:G:H8	1.86	0.41
23:B0:2811:G:H2'	23:B0:2812:A:C8	2.55	0.41
1:AA:13:U:C2	1:AA:914:A:H3'	2.53	0.41
1:AA:38:G:H3'	1:AA:39:G:P	2.61	0.41
1:AA:562:C:O2'	14:AL:17:LYS:HE3	2.20	0.41
1:AA:930:C:O2'	1:AA:931:C:H5'	2.20	0.41
1:AA:952:U:H2'	1:AA:953:G:H8	1.85	0.41
1:AA:1053:G:C3'	1:AA:1054:C:C5'	2.99	0.41
1:AA:1060:C:C5'	12:AJ:52:GLY:N	2.84	0.41
1:AA:1213:A:N1	1:AA:1215:G:H1'	2.35	0.41
1:AA:1250:A:C5'	11:AI:68:GLY:O	2.67	0.41
1:AA:1314:C:H5	21:AS:6:LYS:HG3	1.85	0.41
1:AA:1350:A:P	11:AI:121:ARG:HG3	2.61	0.41
2:AW:25:C:C4	2:AW:26:G:C5	3.09	0.41
4:AB:14:GLY:O	4:AB:15:VAL:CG2	2.69	0.41
4:AB:53:ARG:NH1	4:AB:199:TYR:HD2	2.19	0.41
4:AB:125:PRO:HG2	4:AB:126:GLU:H	1.86	0.41
5:AC:174:PRO:HB2	5:AC:177:THR:CG2	2.50	0.41
5:AC:191:THR:HG22	5:AC:193:TYR:N	2.23	0.41
8:AF:33:TYR:HA	8:AF:71:ARG:NH2	2.36	0.41
12:AJ:96:ILE:CG2	12:AJ:97:GLU:H	2.25	0.41
13:AK:50:TYR:N	13:AK:50:TYR:CD2	2.84	0.41
14:AL:28:LYS:CG	14:AL:33:ARG:HH12	2.34	0.41
15:AM:63:THR:HG23	15:AM:64:TRP:CD2	2.56	0.41
15:AM:69:GLU:O	15:AM:72:ALA:HB3	2.21	0.41
17:AO:26:GLU:HA	17:AO:81:LEU:HD11	2.03	0.41
17:AO:38:ARG:O	17:AO:41:GLU:HB3	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:AO:39:LEU:HD12	17:AO:59:MET:HE2	2.02	0.41
19:AQ:105:ALA:HA	23:B0:727:U:H4'	2.00	0.41
20:AR:39:VAL:CG1	20:AR:40:LEU:N	2.84	0.41
21:AS:67:VAL:HG12	21:AS:68:GLY:N	2.35	0.41
23:B0:108:G:H2'	23:B0:109:A:C8	2.56	0.41
23:B0:769:C:H2'	23:B0:770:U:O4'	2.21	0.41
23:B0:819:C:H2'	23:B0:820:U:C6	2.56	0.41
23:B0:856:A:H2'	23:B0:857:U:O4'	2.21	0.41
23:B0:878:C:N4	23:B0:921:A:H62	2.07	0.41
23:B0:1194:U:O2'	23:B0:1195:U:P	2.79	0.41
23:B0:1682:A:H2'	23:B0:1683:G:C8	2.56	0.41
23:B0:1906:U:H2'	23:B0:1907:C:C6	2.56	0.41
23:B0:2447:G:H2'	23:B0:2448:A:H5'	2.02	0.41
1:AA:216:C:C5'	1:AA:466:A:N6	2.77	0.40
1:AA:246:A:C4'	1:AA:247:G:C4'	2.91	0.40
1:AA:373:A:H2'	1:AA:374:A:H8	1.85	0.40
1:AA:427:U:C1'	1:AA:541:G:OP1	2.65	0.40
1:AA:502:G:H2'	1:AA:503:C:H6	1.84	0.40
1:AA:547:A:OP1	1:AA:548:G:OP1	2.39	0.40
1:AA:567:G:H2'	1:AA:568:G:O4'	2.21	0.40
1:AA:702:A:N7	23:B0:1839:A:O3'	2.51	0.40
1:AA:750:G:N3	17:AO:23:GLY:HA3	2.37	0.40
1:AA:864:A:H2'	1:AA:865:A:C8	2.56	0.40
1:AA:1091:U:OP1	1:AA:1172:C:H5'	2.20	0.40
1:AA:1124:G:C8	1:AA:1145:C:C5	3.09	0.40
1:AA:1285:A:O2'	1:AA:1286:A:OP2	2.36	0.40
1:AA:1315:U:H5	21:AS:6:LYS:NZ	2.19	0.40
1:AA:1350:A:C6	1:AA:1351:U:N3	2.89	0.40
1:AA:1372:U:OP1	11:AI:71:SER:HB3	2.21	0.40
1:AA:1426:C:H2'	1:AA:1427:U:H6	1.84	0.40
1:AA:1474:G:C1'	23:B0:1705:U:H4'	2.51	0.40
1:AA:1475:G:C3'	23:B0:1706:A:H4'	2.51	0.40
5:AC:65:ALA:O	5:AC:66:VAL:HB	2.21	0.40
5:AC:67:THR:O	5:AC:67:THR:HG22	2.21	0.40
5:AC:95:THR:C	5:AC:97:LYS:N	2.73	0.40
5:AC:108:ASN:C	5:AC:110:ASN:N	2.73	0.40
5:AC:191:THR:HG21	5:AC:193:TYR:CE2	2.56	0.40
7:AE:24:ARG:O	7:AE:25:ARG:HG2	2.20	0.40
8:AF:48:LEU:HD13	8:AF:52:ILE:CD1	2.51	0.40
8:AF:79:LEU:O	8:AF:85:VAL:HG11	2.22	0.40
9:AG:114:ARG:HH11	9:AG:114:ARG:CG	2.32	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AK:98:LEU:HD23	13:AK:98:LEU:HA	1.82	0.40
14:AL:53:ARG:CB	14:AL:93:LEU:HD11	2.50	0.40
15:AM:96:LEU:O	15:AM:110:ARG:NH1	2.54	0.40
20:AR:44:LEU:HD22	20:AR:48:GLY:O	2.21	0.40
23:B0:820:U:H5'	23:B0:2424:G:H4'	2.04	0.40
23:B0:930:A:H5'	23:B0:931:G:C8	2.57	0.40
23:B0:1223:G:N2	23:B0:1225:G:H21	2.13	0.40
23:B0:1234:C:H2'	23:B0:1235:C:C6	2.57	0.40
23:B0:1686:A:C2'	23:B0:1687:C:H5'	2.52	0.40
23:B0:2023:C:H2'	23:B0:2024:U:C6	2.56	0.40
23:B0:2027:C:H2'	23:B0:2028:C:C6	2.55	0.40
23:B0:3127:G:N3	23:B0:3173:A:N3	2.69	0.40
23:B0:2240:C:H2'	23:B0:2241:U:C5'	2.50	0.40
23:B0:2522:G:O2'	23:B0:2523:G:H5'	2.21	0.40
23:B0:2524:G:H2'	23:B0:2525:U:O4'	2.21	0.40
1:AA:94:G:O6	1:AA:96:C:N4	2.55	0.40
1:AA:359:U:H2'	1:AA:360:A:C8	2.57	0.40
1:AA:467:U:O2	1:AA:467:U:H2'	2.21	0.40
1:AA:476:U:C6	1:AA:477:G:O5'	2.73	0.40
1:AA:519:C:H2'	1:AA:520:A:C8	2.56	0.40
1:AA:883:C:O2'	1:AA:884:U:H5'	2.21	0.40
1:AA:893:C:C2	1:AA:894:G:N7	2.88	0.40
1:AA:913:A:H1'	1:AA:914:A:O4'	2.21	0.40
1:AA:1014:A:C6	21:AS:34:TRP:NE1	2.87	0.40
1:AA:1020:U:H2'	1:AA:1021:G:C8	2.50	0.40
1:AA:1056:U:H5'	5:AC:163:ALA:HB2	2.02	0.40
1:AA:1241:G:OP1	9:AG:35:LYS:NZ	2.53	0.40
1:AA:1346:A:C2	9:AG:10:ARG:CZ	3.03	0.40
1:AA:1415:G:O2'	1:AA:1416:G:H5'	2.21	0.40
1:AA:1459:C:OP2	22:AT:28:ALA:O	2.40	0.40
1:AA:1473:A:H1'	23:B0:1719:G:H1'	2.03	0.40
4:AB:107:THR:C	4:AB:109:SER:N	2.75	0.40
5:AC:110:ASN:ND2	5:AC:140:ARG:HB3	2.21	0.40
6:AD:194:LEU:N	6:AD:194:LEU:HD22	2.37	0.40
7:AE:118:ILE:HG22	7:AE:119:LEU:O	2.21	0.40
12:AJ:75:ILE:O	12:AJ:76:ASN:HB2	2.21	0.40
13:AK:48:ILE:O	13:AK:49:GLY:C	2.59	0.40
14:AL:46:LYS:NZ	14:AL:47:LYS:HE3	2.36	0.40
18:AP:17:TYR:N	18:AP:17:TYR:CD1	2.89	0.40
22:AT:92:LEU:O	22:AT:96:GLY:HA3	2.21	0.40
23:B0:174:A:H2'	23:B0:175:C:O4'	2.21	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:B0:420:C:H2'	23:B0:421:G:C8	2.57	0.40
23:B0:552:C:C2'	23:B0:553:C:H4'	2.46	0.40
23:B0:699:G:H3'	23:B0:699:G:N3	2.35	0.40
23:B0:1474:A:C2'	23:B0:1475:U:H5'	2.47	0.40
23:B0:1770:U:H2'	23:B0:1774:A:H62	1.86	0.40
23:B0:2048:C:H2'	23:B0:2049:C:C6	2.56	0.40
23:B0:3119:A:O2'	23:B0:3121:G:OP2	2.35	0.40
23:B0:2236:U:H2'	23:B0:2237:C:C5'	2.47	0.40
24:B9:56:G:H2'	24:B9:57:U:O4'	2.22	0.40
24:B9:63:A:H2'	24:B9:64:C:C6	2.55	0.40
1:AA:43:C:H2'	1:AA:44:G:O4'	2.21	0.40
1:AA:131:C:H4'	1:AA:262:A:C2'	2.51	0.40
1:AA:155:C:H2'	1:AA:156:G:C8	2.57	0.40
1:AA:475:C:H2'	1:AA:476:U:H6	1.84	0.40
1:AA:958:A:N9	21:AS:55:LYS:HD2	2.33	0.40
1:AA:961:U:O2'	1:AA:962:C:H5'	2.20	0.40
1:AA:1077:G:N2	1:AA:1080:A:OP2	2.50	0.40
1:AA:1129:C:OP1	11:AI:62:TYR:CE2	2.75	0.40
1:AA:1257:U:H4'	1:AA:1258:G:C5'	2.50	0.40
1:AA:1261:A:C1'	1:AA:1283:G:C5'	2.98	0.40
1:AA:1286:A:H2'	1:AA:1287:A:O5'	2.21	0.40
1:AA:1392:G:H2'	1:AA:1393:U:H6	1.86	0.40
4:AB:14:GLY:O	4:AB:15:VAL:HG22	2.21	0.40
4:AB:90:MET:HA	4:AB:91:PRO:HD3	1.70	0.40
6:AD:163:GLU:O	6:AD:166:LYS:HG3	2.22	0.40
10:AH:18:ARG:N	10:AH:18:ARG:HD2	2.36	0.40
11:AI:117:HIS:C	11:AI:118:LYS:HG3	2.42	0.40
17:AO:71:GLN:O	17:AO:72:ARG:C	2.59	0.40
23:B0:521:U:C2'	23:B0:522:G:H5'	2.51	0.40
23:B0:1337:G:H1'	23:B0:1632:A:C6	2.56	0.40
23:B0:1354:A:C2	23:B0:1411:C:H4'	2.56	0.40
23:B0:2048:C:H2'	23:B0:2049:C:H6	1.87	0.40
23:B0:2370:G:H2'	23:B0:2371:A:H2	1.87	0.40
23:B0:2437:G:H2'	23:B0:2469:G:N1	2.37	0.40
23:B0:2532:G:H1'	23:B0:2561:G:N3	2.36	0.40
1:AA:322:C:O2	22:AT:19:SER:CB	2.70	0.40
1:AA:599:C:O2'	1:AA:600:C:H5'	2.22	0.40
1:AA:965:A:O2'	1:AA:966:G:P	2.80	0.40
1:AA:1061:G:C5'	12:AJ:56:HIS:CB	2.47	0.40
1:AA:1094:G:OP2	1:AA:1095:U:C5	2.74	0.40
1:AA:1104:G:OP1	4:AB:111:ARG:HD2	2.22	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:AA:1112:C:C4	5:AC:178:LEU:HB3	2.55	0.40
1:AA:1300:G:C2'	1:AA:1301:U:OP2	2.69	0.40
1:AA:1346:A:N6	1:AA:1375:A:OP2	2.48	0.40
1:AA:1499:A:C4'	1:AA:1520:G:C4'	2.99	0.40
2:AW:75:C:C4	23:B0:2533:U:C2	3.05	0.40
5:AC:91:LEU:HD11	5:AC:99:VAL:HG22	2.03	0.40
5:AC:126:ARG:O	5:AC:127:ARG:HB2	2.21	0.40
6:AD:100:ARG:HB3	6:AD:102:ASP:OD1	2.22	0.40
9:AG:104:LEU:HD23	9:AG:134:ALA:HB1	2.04	0.40
12:AJ:23:ILE:N	12:AJ:23:ILE:CD1	2.85	0.40
13:AK:67:ASP:OD2	13:AK:71:LYS:HE3	2.21	0.40
15:AM:40:ASN:ND2	15:AM:41:PRO:N	2.64	0.40
17:AO:17:ARG:NH1	17:AO:17:ARG:CG	2.84	0.40
19:AQ:93:GLN:O	19:AQ:96:GLN:HB3	2.22	0.40
23:B0:35:G:H1'	23:B0:466:A:H1'	2.04	0.40
23:B0:69:G:HO2'	23:B0:70:A:P	2.45	0.40
23:B0:79:G:H1'	23:B0:356:A:C2	2.57	0.40
23:B0:211:U:H2'	23:B0:212:U:O4'	2.22	0.40
23:B0:340:G:O4'	23:B0:488:A:H1'	2.22	0.40
23:B0:718:A:N6	23:B0:739:G:H4'	2.37	0.40
23:B0:738:G:H2'	23:B0:739:G:H5'	2.02	0.40
23:B0:878:C:O2'	23:B0:879:A:P	2.80	0.40
23:B0:1026:U:H2'	23:B0:1027:C:C6	2.56	0.40
23:B0:1686:A:O2'	23:B0:2528:G:H5'	2.22	0.40
23:B0:3172:U:O2'	23:B0:3173:A:H5'	2.21	0.40
23:B0:3196:G:O3'	23:B0:3197:U:P	2.80	0.40
23:B0:2372:A:H2'	23:B0:2373:C:C6	2.56	0.40
23:B0:2519:C:H2'	23:B0:2520:A:O4'	2.21	0.40
24:B9:110:U:O2'	24:B9:111:C:H5'	2.21	0.40
1:AA:202:G:C4'	1:AA:469:C:P	3.01	0.40
1:AA:264:U:H1'	19:AQ:64:PRO:N	2.33	0.40
1:AA:473:C:C2'	1:AA:474:U:H5'	2.52	0.40
1:AA:748:C:H6	1:AA:748:C:OP2	2.05	0.40
1:AA:1021:G:H2'	1:AA:1022:G:H5'	2.04	0.40
1:AA:1380:U:O2'	1:AA:1381:U:OP2	2.36	0.40
1:AA:1437:C:H2'	1:AA:1438:G:H8	1.86	0.40
2:AW:16:U:O2	2:AW:16:U:O4'	2.40	0.40
4:AB:9:GLU:O	4:AB:48:MET:SD	2.80	0.40
4:AB:47:THR:HG23	4:AB:202:PRO:O	2.21	0.40
7:AE:76:ILE:HG23	7:AE:77:PRO:HD2	2.04	0.40
8:AF:48:LEU:HD13	8:AF:52:ILE:HD12	2.03	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:AF:78:GLU:HA	8:AF:81:ILE:CD1	2.51	0.40
9:AG:32:ARG:O	9:AG:33:ASP:HB2	2.22	0.40
11:AI:10:ARG:O	11:AI:11:LYS:C	2.60	0.40
11:AI:121:ARG:C	11:AI:121:ARG:HD3	2.42	0.40
12:AJ:3:LYS:CG	12:AJ:75:ILE:HG23	2.50	0.40
12:AJ:44:VAL:HG11	12:AJ:46:ARG:NH1	2.37	0.40
12:AJ:59:SER:O	12:AJ:60:ARG:HB2	2.20	0.40
18:AP:34:GLU:HG2	18:AP:35:LYS:N	2.36	0.40
19:AQ:84:LEU:HD23	19:AQ:84:LEU:HA	1.89	0.40
19:AQ:97:SER:O	19:AQ:99:SER:N	2.53	0.40
23:B0:57:G:C2'	23:B0:58:C:H5''	2.47	0.40
23:B0:70:A:H4'	23:B0:72:A:OP1	2.22	0.40
23:B0:1197:U:H2'	23:B0:1198:C:O4'	2.21	0.40
23:B0:1452:U:H5'	23:B0:1532:A:O2'	2.21	0.40
23:B0:3877:A:C8	23:B0:3877:A:C4'	3.04	0.40
23:B0:3877:A:O5'	23:B0:1861:G:P	2.80	0.40
23:B0:3184:C:H2'	23:B0:3185:U:H5''	1.98	0.40
23:B0:2809:A:N6	23:B0:2854:G:H2'	2.36	0.40
23:B0:2862:G:O2'	23:B0:2863:U:H5'	2.22	0.40

All (12) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AD:172:PRO:O	8:AF:15:ASP:CB[3_555]	1.18	1.02
1:AA:416:G:C4'	23:B0:3153:G:O2'[3_555]	1.79	0.41
1:AA:416:G:O2'	23:B0:3153:G:O2'[3_555]	1.87	0.33
6:AD:172:PRO:O	8:AF:15:ASP:CA[3_555]	1.87	0.33
6:AD:186:LEU:CD1	8:AF:15:ASP:OD2[3_555]	1.91	0.29
23:B0:2769:C:C5	23:B0:2877:A:C6[16_555]	2.07	0.13
23:B0:2769:C:N4	23:B0:2877:A:N3[16_555]	2.08	0.12
1:AA:415:A:O2'	23:B0:3152:G:O2'[3_555]	2.13	0.07
23:B0:1:G:N3	23:B0:2770:A:N6[16_555]	2.14	0.06
1:AA:416:G:C3'	23:B0:3153:G:O2'[3_555]	2.17	0.03
6:AD:186:LEU:CD1	8:AF:15:ASP:CG[3_555]	2.17	0.03
1:AA:416:G:C4'	23:B0:3153:G:C1'[3_555]	2.19	0.01

## 5.3 Torsion angles [i](#)

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

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	AB	232/234 (99%)	174 (75%)	34 (15%)	24 (10%)	0	8
5	AC	204/206 (99%)	135 (66%)	40 (20%)	29 (14%)	0	4
6	AD	206/208 (99%)	166 (81%)	31 (15%)	9 (4%)	2	22
7	AE	148/150 (99%)	130 (88%)	13 (9%)	5 (3%)	3	26
8	AF	99/101 (98%)	79 (80%)	19 (19%)	1 (1%)	15	55
9	AG	153/155 (99%)	127 (83%)	16 (10%)	10 (6%)	1	16
10	AH	136/138 (99%)	125 (92%)	7 (5%)	4 (3%)	4	29
11	AI	125/127 (98%)	89 (71%)	26 (21%)	10 (8%)	1	12
12	AJ	96/98 (98%)	59 (62%)	20 (21%)	17 (18%)	0	3
13	AK	117/119 (98%)	88 (75%)	20 (17%)	9 (8%)	1	13
14	AL	122/124 (98%)	98 (80%)	15 (12%)	9 (7%)	1	14
15	AM	123/125 (98%)	88 (72%)	27 (22%)	8 (6%)	1	16
16	AN	58/60 (97%)	40 (69%)	11 (19%)	7 (12%)	0	6
17	AO	86/88 (98%)	70 (81%)	11 (13%)	5 (6%)	1	18
18	AP	81/83 (98%)	65 (80%)	15 (18%)	1 (1%)	13	50
19	AQ	102/104 (98%)	84 (82%)	10 (10%)	8 (8%)	1	13
20	AR	71/73 (97%)	62 (87%)	7 (10%)	2 (3%)	5	30
21	AS	78/80 (98%)	48 (62%)	19 (24%)	11 (14%)	0	4
22	AT	97/99 (98%)	65 (67%)	20 (21%)	12 (12%)	0	5
All	All	2334/2372 (98%)	1792 (77%)	361 (16%)	181 (8%)	1	13

All (181) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	AB	9	GLU
4	AB	15	VAL

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
4	AB	16	HIS
4	AB	17	PHE
4	AB	21	ARG
4	AB	24	TRP
5	AC	4	LYS
5	AC	15	THR
5	AC	16	ARG
5	AC	26	LYS
5	AC	47	LEU
5	AC	61	ALA
5	AC	62	ASP
5	AC	97	LYS
5	AC	101	LEU
5	AC	146	ALA
5	AC	154	SER
5	AC	179	ARG
5	AC	189	ALA
6	AD	29	PRO
6	AD	36	ARG
7	AE	16	THR
7	AE	153	LYS
9	AG	7	ALA
9	AG	155	ARG
10	AH	24	THR
10	AH	83	ILE
10	AH	91	ARG
11	AI	88	TYR
12	AJ	32	ALA
12	AJ	39	PRO
12	AJ	54	PHE
12	AJ	57	LYS
12	AJ	79	ARG
12	AJ	86	MET
13	AK	57	THR
13	AK	127	LYS
14	AL	27	LEU
14	AL	28	LYS
14	AL	47	LYS
15	AM	63	THR
15	AM	67	GLU
15	AM	121	LYS
15	AM	122	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
15	AM	124	PRO
16	AN	22	THR
16	AN	29	ARG
17	AO	88	ARG
19	AQ	69	LYS
19	AQ	80	GLY
19	AQ	81	ARG
19	AQ	96	GLN
19	AQ	98	LEU
19	AQ	104	LYS
20	AR	87	ARG
21	AS	6	LYS
21	AS	71	LEU
22	AT	11	SER
22	AT	73	HIS
4	AB	8	LYS
4	AB	18	GLY
4	AB	20	GLU
4	AB	97	TRP
4	AB	123	ALA
4	AB	232	PRO
5	AC	29	TYR
5	AC	156	ARG
5	AC	168	ALA
5	AC	181	ASN
5	AC	206	GLU
6	AD	4	TYR
6	AD	26	CYS
6	AD	88	VAL
6	AD	125	HIS
7	AE	22	GLY
7	AE	104	ALA
8	AF	37	VAL
9	AG	52	GLU
11	AI	41	VAL
11	AI	58	ARG
12	AJ	30	SER
12	AJ	34	VAL
12	AJ	40	LEU
12	AJ	72	VAL
13	AK	15	ALA
13	AK	49	GLY

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
13	AK	50	TYR
13	AK	89	ALA
14	AL	41	ARG
14	AL	48	PRO
14	AL	51	ALA
14	AL	116	SER
14	AL	121	GLY
15	AM	6	GLY
15	AM	85	GLY
18	AP	10	GLY
20	AR	20	ALA
21	AS	9	VAL
21	AS	45	VAL
21	AS	67	VAL
21	AS	68	GLY
22	AT	9	ASN
22	AT	49	ALA
22	AT	95	ALA
22	AT	99	LEU
22	AT	102	GLY
4	AB	26	PRO
4	AB	60	ASP
4	AB	83	MET
4	AB	89	GLY
4	AB	204	ASN
6	AD	175	SER
7	AE	65	ASN
9	AG	5	ARG
10	AH	127	LEU
11	AI	56	LEU
12	AJ	19	SER
12	AJ	60	ARG
12	AJ	61	GLU
12	AJ	90	LEU
13	AK	35	PRO
13	AK	101	SER
14	AL	49	ASN
16	AN	13	THR
16	AN	23	ARG
19	AQ	97	SER
21	AS	28	LYS
21	AS	30	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
21	AS	32	LYS
22	AT	74	LYS
4	AB	126	GLU
4	AB	165	VAL
5	AC	39	ILE
5	AC	100	ALA
5	AC	188	LEU
9	AG	4	ARG
9	AG	81	GLY
9	AG	112	PRO
11	AI	7	THR
11	AI	12	GLU
11	AI	119	ALA
15	AM	123	ALA
16	AN	12	ARG
16	AN	60	SER
17	AO	16	ALA
19	AQ	33	GLY
22	AT	50	GLU
4	AB	155	LEU
5	AC	24	ALA
5	AC	66	VAL
5	AC	127	ARG
6	AD	123	HIS
9	AG	53	LYS
11	AI	121	ARG
16	AN	36	PHE
17	AO	84	LYS
21	AS	31	ILE
4	AB	127	ILE
4	AB	214	ILE
5	AC	108	ASN
5	AC	174	PRO
6	AD	5	ILE
11	AI	43	ALA
12	AJ	26	ALA
4	AB	124	SER
9	AG	14	PRO
12	AJ	82	ILE
22	AT	98	PRO
4	AB	125	PRO
5	AC	76	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	AC	77	ILE
9	AG	17	VAL
12	AJ	36	GLY
17	AO	82	ILE
21	AS	8	GLY
11	AI	44	VAL
17	AO	19	PRO
22	AT	96	GLY
22	AT	101	GLY
5	AC	75	VAL
13	AK	90	GLY

### 5.3.2 Protein sidechains [i](#)

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
4	AB	202/202 (100%)	180 (89%)	22 (11%)	6 23
5	AC	160/160 (100%)	142 (89%)	18 (11%)	6 21
6	AD	180/180 (100%)	172 (96%)	8 (4%)	28 53
7	AE	115/115 (100%)	100 (87%)	15 (13%)	4 18
8	AF	90/90 (100%)	88 (98%)	2 (2%)	52 71
9	AG	126/126 (100%)	122 (97%)	4 (3%)	39 61
10	AH	119/119 (100%)	109 (92%)	10 (8%)	11 33
11	AI	98/98 (100%)	90 (92%)	8 (8%)	11 34
12	AJ	88/88 (100%)	79 (90%)	9 (10%)	7 25
13	AK	90/90 (100%)	84 (93%)	6 (7%)	16 41
14	AL	104/104 (100%)	96 (92%)	8 (8%)	13 37
15	AM	100/100 (100%)	90 (90%)	10 (10%)	7 26
16	AN	49/49 (100%)	47 (96%)	2 (4%)	30 55
17	AO	79/79 (100%)	72 (91%)	7 (9%)	9 30
18	AP	72/72 (100%)	67 (93%)	5 (7%)	15 40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
19	AQ	96/96 (100%)	90 (94%)	6 (6%)	18	43
20	AR	64/64 (100%)	61 (95%)	3 (5%)	26	51
21	AS	71/71 (100%)	68 (96%)	3 (4%)	30	54
22	AT	76/76 (100%)	69 (91%)	7 (9%)	9	29
All	All	1979/1979 (100%)	1826 (92%)	153 (8%)	13	37

All (153) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	AB	8	LYS
4	AB	12	GLU
4	AB	17	PHE
4	AB	23	ARG
4	AB	24	TRP
4	AB	25	ASN
4	AB	87	ARG
4	AB	114	ARG
4	AB	139	LYS
4	AB	144	ARG
4	AB	146	GLN
4	AB	155	LEU
4	AB	157	ARG
4	AB	164	VAL
4	AB	170	GLU
4	AB	178	ARG
4	AB	204	ASN
4	AB	213	LEU
4	AB	221	LEU
4	AB	231	GLU
4	AB	232	PRO
4	AB	236	TYR
5	AC	3	ASN
5	AC	5	ILE
5	AC	34	LEU
5	AC	47	LEU
5	AC	56	ASP
5	AC	75	VAL
5	AC	82	GLU
5	AC	90	GLU
5	AC	91	LEU
5	AC	99	VAL

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
5	AC	107	GLN
5	AC	139	GLN
5	AC	164	ARG
5	AC	167	TRP
5	AC	175	LEU
5	AC	179	ARG
5	AC	188	LEU
5	AC	204	LEU
6	AD	15	GLU
6	AD	29	PRO
6	AD	53	ASP
6	AD	122	ARG
6	AD	127	THR
6	AD	157	LEU
6	AD	192	GLU
6	AD	199	ASN
7	AE	12	LEU
7	AE	26	PHE
7	AE	31	LEU
7	AE	38	GLN
7	AE	41	VAL
7	AE	43	LEU
7	AE	56	GLN
7	AE	65	ASN
7	AE	68	GLU
7	AE	73	ASN
7	AE	79	GLU
7	AE	80	ILE
7	AE	89	ILE
7	AE	120	THR
7	AE	150	ARG
8	AF	10	LEU
8	AF	69	GLU
9	AG	8	GLU
9	AG	11	GLN
9	AG	37	ASN
9	AG	38	LEU
10	AH	2	LEU
10	AH	21	LYS
10	AH	52	ASP
10	AH	63	LEU
10	AH	85	ARG

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
10	AH	91	ARG
10	AH	92	ARG
10	AH	104	ARG
10	AH	105	ARG
10	AH	119	LEU
11	AI	2	GLU
11	AI	23	ASN
11	AI	38	GLN
11	AI	53	VAL
11	AI	58	ARG
11	AI	79	LEU
11	AI	111	ARG
11	AI	121	ARG
12	AJ	6	ILE
12	AJ	15	THR
12	AJ	45	ARG
12	AJ	60	ARG
12	AJ	64	GLU
12	AJ	71	LEU
12	AJ	73	ASP
12	AJ	83	GLU
12	AJ	95	GLU
13	AK	24	SER
13	AK	29	ILE
13	AK	35	PRO
13	AK	54	ARG
13	AK	84	VAL
13	AK	92	GLU
14	AL	17	LYS
14	AL	33	ARG
14	AL	53	ARG
14	AL	60	LEU
14	AL	81	SER
14	AL	98	TYR
14	AL	113	ARG
14	AL	126	LYS
15	AM	9	ILE
15	AM	16	ASP
15	AM	40	ASN
15	AM	44	ARG
15	AM	70	LEU
15	AM	81	LEU

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
15	AM	102	ARG
15	AM	110	ARG
15	AM	124	PRO
15	AM	125	ARG
16	AN	41	ARG
16	AN	44	LEU
17	AO	6	GLU
17	AO	7	GLU
17	AO	39	LEU
17	AO	57	LEU
17	AO	70	LEU
17	AO	81	LEU
17	AO	83	GLU
18	AP	2	VAL
18	AP	8	ARG
18	AP	28	ARG
18	AP	53	VAL
18	AP	62	VAL
19	AQ	34	LYS
19	AQ	38	ARG
19	AQ	60	ILE
19	AQ	68	ARG
19	AQ	74	LEU
19	AQ	98	LEU
20	AR	36	ASN
20	AR	38	GLU
20	AR	55	ARG
21	AS	10	PHE
21	AS	15	LEU
21	AS	20	LEU
22	AT	42	GLN
22	AT	45	GLN
22	AT	57	ARG
22	AT	73	HIS
22	AT	75	ASN
22	AT	84	LEU
22	AT	86	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (62) such sidechains are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
4	AB	19	HIS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
4	AB	25	ASN
4	AB	40	HIS
4	AB	140	HIS
4	AB	146	GLN
4	AB	204	ASN
5	AC	3	ASN
5	AC	6	HIS
5	AC	31	HIS
5	AC	69	HIS
5	AC	110	ASN
5	AC	118	GLN
5	AC	123	GLN
5	AC	139	GLN
5	AC	181	ASN
6	AD	45	GLN
6	AD	62	GLN
6	AD	123	HIS
6	AD	125	HIS
6	AD	161	ASN
6	AD	199	ASN
6	AD	201	GLN
7	AE	73	ASN
8	AF	18	GLN
8	AF	27	GLN
8	AF	32	ASN
8	AF	57	GLN
8	AF	64	GLN
8	AF	73	ASN
8	AF	94	GLN
8	AF	100	ASN
9	AG	37	ASN
9	AG	86	GLN
10	AH	15	ASN
11	AI	23	ASN
11	AI	124	GLN
12	AJ	62	HIS
12	AJ	76	ASN
12	AJ	78	ASN
12	AJ	84	GLN
13	AK	22	HIS
13	AK	26	ASN
13	AK	38	ASN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
13	AK	62	GLN
13	AK	93	GLN
14	AL	49	ASN
14	AL	75	HIS
15	AM	12	ASN
15	AM	40	ASN
15	AM	62	ASN
16	AN	49	HIS
17	AO	13	GLN
17	AO	37	ASN
19	AQ	16	GLN
19	AQ	26	GLN
19	AQ	93	GLN
20	AR	36	ASN
21	AS	14	HIS
21	AS	53	ASN
21	AS	56	GLN
21	AS	65	ASN
22	AT	42	GLN

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	1479/1527 (96%)	217 (14%)	92 (6%)
2	AV	75/76 (98%)	13 (17%)	3 (4%)
2	AW	74/76 (97%)	13 (17%)	3 (4%)
23	B0	2802/2887 (97%)	430 (15%)	56 (1%)
24	B9	116/118 (98%)	10 (8%)	0
3	AU	8/18 (44%)	1 (12%)	0
All	All	4554/4702 (96%)	684 (15%)	154 (3%)

All (684) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	6	G
1	AA	8	A
1	AA	9	G
1	AA	27	G
1	AA	31	G
1	AA	32	A
1	AA	47	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	48	C
1	AA	49	U
1	AA	51	A
1	AA	52	G
1	AA	60	A
1	AA	61	G
1	AA	75	C
1	AA	80	C
1	AA	84	U
1	AA	85	U
1	AA	86	G
1	AA	96	C
1	AA	116	A
1	AA	120	A
1	AA	121	C
1	AA	129(A)	G
1	AA	130	A
1	AA	131	C
1	AA	144	G
1	AA	182	U
1	AA	186	C
1	AA	195	A
1	AA	198	G
1	AA	205	G
1	AA	209	U
1	AA	213	G
1	AA	215	C
1	AA	244	U
1	AA	247	G
1	AA	251	G
1	AA	252	U
1	AA	266	G
1	AA	267	C
1	AA	275	G
1	AA	280	C
1	AA	282	A
1	AA	289	G
1	AA	316	G
1	AA	321	A
1	AA	328	C
1	AA	329	A
1	AA	330	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	332	G
1	AA	344	A
1	AA	345	C
1	AA	353	A
1	AA	354	G
1	AA	367	U
1	AA	373	A
1	AA	412	A
1	AA	413	G
1	AA	421	U
1	AA	428	G
1	AA	429	U
1	AA	430	A
1	AA	439	A
1	AA	467	U
1	AA	481	G
1	AA	484	G
1	AA	485	G
1	AA	497	A
1	AA	509	A
1	AA	510	A
1	AA	511	C
1	AA	518	C
1	AA	519	C
1	AA	527	G
1	AA	532	A
1	AA	533	A
1	AA	534	U
1	AA	547	A
1	AA	557	G
1	AA	559	A
1	AA	560	U
1	AA	561	U
1	AA	562	C
1	AA	572	A
1	AA	573	A
1	AA	575	G
1	AA	576	G
1	AA	588	G
1	AA	652	U
1	AA	653	A
1	AA	665	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	686	U
1	AA	687	A
1	AA	688	G
1	AA	702	A
1	AA	703	G
1	AA	723	U
1	AA	731	G
1	AA	734	G
1	AA	749	C
1	AA	755	G
1	AA	777	A
1	AA	781	A
1	AA	782	A
1	AA	793	U
1	AA	794	A
1	AA	813	U
1	AA	817	C
1	AA	819	A
1	AA	828	A
1	AA	858	G
1	AA	885	G
1	AA	902	G
1	AA	913	A
1	AA	914	A
1	AA	926	G
1	AA	927	G
1	AA	934	C
1	AA	935	A
1	AA	945	G
1	AA	960	U
1	AA	966	G
1	AA	969	A
1	AA	971	G
1	AA	974	A
1	AA	975	A
1	AA	976	G
1	AA	977	A
1	AA	991	U
1	AA	992	U
1	AA	993	G
1	AA	1004	A
1	AA	1005	A

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	1023	G
1	AA	1026	G
1	AA	1030	U
1	AA	1034	G
1	AA	1050	G
1	AA	1053	G
1	AA	1065	U
1	AA	1066	C
1	AA	1068	G
1	AA	1085	U
1	AA	1086	U
1	AA	1094	G
1	AA	1095	U
1	AA	1101	A
1	AA	1102	A
1	AA	1117	G
1	AA	1124	G
1	AA	1125	U
1	AA	1126	U
1	AA	1129	C
1	AA	1130	A
1	AA	1131	G
1	AA	1137	C
1	AA	1138	G
1	AA	1139	G
1	AA	1140	C
1	AA	1145	C
1	AA	1146	A
1	AA	1152	A
1	AA	1157	A
1	AA	1159	U
1	AA	1183	A
1	AA	1184	G
1	AA	1191	A
1	AA	1196	U
1	AA	1197	G
1	AA	1201	A
1	AA	1202	G
1	AA	1211	U
1	AA	1212	U
1	AA	1215	G
1	AA	1226	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	1227	A
1	AA	1238	A
1	AA	1258	G
1	AA	1280	A
1	AA	1281	U
1	AA	1282	C
1	AA	1285	A
1	AA	1286	A
1	AA	1287	A
1	AA	1299	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1303	C
1	AA	1305	G
1	AA	1320	C
1	AA	1332	A
1	AA	1336	C
1	AA	1338	G
1	AA	1347	G
1	AA	1348	U
1	AA	1363	A
1	AA	1364	U
1	AA	1365	G
1	AA	1381	U
1	AA	1394	A
1	AA	1398	A
1	AA	1399	C
1	AA	1442	G
1	AA	1443	G
1	AA	1452	C
1	AA	1490	C
1	AA	1491	G
1	AA	1499	A
1	AA	1502	A
1	AA	1504	G
1	AA	1505	G
1	AA	1506	U
1	AA	1517	G
1	AA	1520	G
1	AA	1529	G
1	AA	1530	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	AV	2	C
2	AV	3	G
2	AV	17	U
2	AV	18	G
2	AV	19	G
2	AV	21	A
2	AV	34	G
2	AV	35	A
2	AV	36	A
2	AV	37	G
2	AV	41	U
2	AV	75	C
2	AV	76	A
3	AU	9	U
2	AW	2	C
2	AW	3	G
2	AW	17	U
2	AW	18	G
2	AW	19	G
2	AW	21	A
2	AW	26	G
2	AW	35	A
2	AW	36	A
2	AW	37	G
2	AW	41	U
2	AW	74	C
2	AW	76	A
23	B0	14	A
23	B0	15	G
23	B0	45	C
23	B0	48	A
23	B0	49	U
23	B0	50	G
23	B0	58	C
23	B0	59	G
23	B0	63	A
23	B0	67	G
23	B0	70	A
23	B0	72	A
23	B0	87	G
23	B0	89	A
23	B0	90	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	91	A
23	B0	99	U
23	B0	105	G
23	B0	110	U
23	B0	116	A
23	B0	118	U
23	B0	123	A
23	B0	129	A
23	B0	135	U
23	B0	155	G
23	B0	158	A
23	B0	173	A
23	B0	174	A
23	B0	176	A
23	B0	177	U
23	B0	181	A
23	B0	182	G
23	B0	193	A
23	B0	199	A
23	B0	200	A
23	B0	205	A
23	B0	206	U
23	B0	210	A
23	B0	218	A
23	B0	219	G
23	B0	225	G
23	B0	226	C
23	B0	227	G
23	B0	229	G
23	B0	242	A
23	B0	243	G
23	B0	245	C
23	B0	305	A
23	B0	318	G
23	B0	333	A
23	B0	334	G
23	B0	335	A
23	B0	340	G
23	B0	342	G
23	B0	343	A
23	B0	344	G
23	B0	358	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	363	G
23	B0	368	A
23	B0	373	A
23	B0	399	G
23	B0	401	G
23	B0	408	U
23	B0	414	A
23	B0	418	C
23	B0	419	G
23	B0	424	G
23	B0	443	A
23	B0	455	A
23	B0	456	C
23	B0	460	U
23	B0	463	C
23	B0	467	U
23	B0	469	G
23	B0	491	A
23	B0	492	G
23	B0	515	A
23	B0	518	A
23	B0	519	C
23	B0	537	C
23	B0	541	C
23	B0	542	A
23	B0	554	U
23	B0	556	A
23	B0	558	G
23	B0	559	C
23	B0	572	G
23	B0	584	A
23	B0	602	C
23	B0	613	A
23	B0	617	U
23	B0	624	A
23	B0	632	A
23	B0	636	G
23	B0	638	A
23	B0	648	A
23	B0	652	C
23	B0	654	A
23	B0	657	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	665	A
23	B0	666	U
23	B0	667	U
23	B0	684	C
23	B0	697	G
23	B0	699	G
23	B0	700	C
23	B0	728	G
23	B0	742	G
23	B0	743	A
23	B0	753	U
23	B0	760	U
23	B0	761	G
23	B0	766	A
23	B0	776	G
23	B0	778	G
23	B0	789	G
23	B0	794	A
23	B0	796	A
23	B0	797	A
23	B0	798	G
23	B0	801	A
23	B0	802	A
23	B0	803	C
23	B0	806	A
23	B0	813	A
23	B0	818	G
23	B0	825	C
23	B0	832	A
23	B0	840	U
23	B0	841	G
23	B0	844	G
23	B0	873	U
23	B0	879	A
23	B0	895	G
23	B0	919	U
23	B0	922	A
23	B0	926	C
23	B0	930	A
23	B0	941	U
23	B0	944	A
23	B0	952	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	957	G
23	B0	969	U
23	B0	970	A
23	B0	972	C
23	B0	984	A
23	B0	994	A
23	B0	996	C
23	B0	1005	U
23	B0	1006	C
23	B0	1023	U
23	B0	1024	G
23	B0	1030	U
23	B0	1032	A
23	B0	1033	G
23	B0	1036	G
23	B0	1037	U
23	B0	1044	U
23	B0	1055	A
23	B0	1056	U
23	B0	1057	A
23	B0	1068	A
23	B0	1069	G
23	B0	1071	U
23	B0	1072	U
23	B0	1073	G
23	B0	1078	A
23	B0	1081	A
23	B0	1082	G
23	B0	1084	A
23	B0	1092	U
23	B0	1099	A
23	B0	1100	G
23	B0	1113	C
23	B0	1122	A
23	B0	1137	A
23	B0	1138	A
23	B0	1142	G
23	B0	1145	C
23	B0	1146	G
23	B0	1153	A
23	B0	1167	A
23	B0	1182	U

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	1183	C
23	B0	1185	C
23	B0	1188	A
23	B0	1194	U
23	B0	1195	U
23	B0	1199	U
23	B0	1200	G
23	B0	1224	A
23	B0	1253	C
23	B0	1262	U
23	B0	1264	C
23	B0	1266	G
23	B0	1269	G
23	B0	1278	A
23	B0	1279	G
23	B0	1280	U
23	B0	1284	G
23	B0	1285	A
23	B0	1288	A
23	B0	1314	A
23	B0	1327	C
23	B0	1334	A
23	B0	1338	G
23	B0	1342	U
23	B0	1343	C
23	B0	1355	A
23	B0	1356	G
23	B0	1359	G
23	B0	1391	A
23	B0	1392	U
23	B0	1397	A
23	B0	1398	G
23	B0	1433	A
23	B0	1441	A
23	B0	1442	C
23	B0	1443	G
23	B0	1459	U
23	B0	1465	G
23	B0	1468	A
23	B0	1469	U
23	B0	1470	G
23	B0	1475	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	1482	U
23	B0	1490	U
23	B0	1496	G
23	B0	1505	U
23	B0	1508	G
23	B0	1509	A
23	B0	1513	U
23	B0	1519	G
23	B0	1520	G
23	B0	1524	C
23	B0	1529	C
23	B0	1552	C
23	B0	1571	G
23	B0	1573	G
23	B0	1574	A
23	B0	1576	G
23	B0	1582	A
23	B0	1583	A
23	B0	1585	A
23	B0	1601	U
23	B0	1618	U
23	B0	1623	C
23	B0	1624	A
23	B0	1625	A
23	B0	1632	A
23	B0	1633	C
23	B0	1634	A
23	B0	1635	G
23	B0	1648	C
23	B0	1651	U
23	B0	1657	A
23	B0	1664	G
23	B0	1665	C
23	B0	1670	G
23	B0	1671	A
23	B0	1680	U
23	B0	1685	A
23	B0	1691	G
23	B0	1692	C
23	B0	1710	U
23	B0	1712	G
23	B0	1715	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	1717	A
23	B0	1724	C
23	B0	1733	U
23	B0	1748	U
23	B0	1749	G
23	B0	1750	A
23	B0	1754	G
23	B0	1755	G
23	B0	1764	A
23	B0	1771	A
23	B0	1773	C
23	B0	1778	U
23	B0	1792	C
23	B0	1800	A
23	B0	1801	C
23	B0	1802	A
23	B0	1807	A
23	B0	1808	C
23	B0	1821	A
23	B0	1831	G
23	B0	3865	A
23	B0	1884	A
23	B0	1920	A
23	B0	1922	U
23	B0	1926	U
23	B0	1927	U
23	B0	1928	G
23	B0	1938	U
23	B0	1939	U
23	B0	1949	A
23	B0	1950	C
23	B0	1954	A
23	B0	1955	G
23	B0	1956	G
23	B0	1979	C
23	B0	1980	A
23	B0	2004	U
23	B0	2006	G
23	B0	2014	A
23	B0	2015	G
23	B0	2016	A
23	B0	2019	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	2034	A
23	B0	2038	C
23	B0	2043	A
23	B0	2045	A
23	B0	2051	U
23	B0	2052	G
23	B0	2060	A
23	B0	3107	G
23	B0	3111	C
23	B0	3112	G
23	B0	3116	G
23	B0	3117	A
23	B0	3118	U
23	B0	3119	A
23	B0	3146	A
23	B0	3147	C
23	B0	3150	C
23	B0	3172	U
23	B0	3173	A
23	B0	3185	U
23	B0	3191	A
23	B0	2191	A
23	B0	2195	C
23	B0	2199	C
23	B0	2205	C
23	B0	2218	G
23	B0	2229	G
23	B0	2237	C
23	B0	2241	U
23	B0	2245	A
23	B0	2246	A
23	B0	2247	A
23	B0	2255	G
23	B0	2262	C
23	B0	2268	G
23	B0	2285	U
23	B0	2286	G
23	B0	2287	G
23	B0	2288	A
23	B0	2298	U
23	B0	2299	A
23	B0	2300	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	2301	A
23	B0	2313	G
23	B0	2315	A
23	B0	2316	G
23	B0	2326	C
23	B0	2362	G
23	B0	2364	C
23	B0	2378	G
23	B0	2382	C
23	B0	2385	U
23	B0	2396	C
23	B0	2403	C
23	B0	2405	A
23	B0	2408	G
23	B0	2409	A
23	B0	2414	A
23	B0	2420	C
23	B0	2427	A
23	B0	2428	U
23	B0	2438	A
23	B0	2448	A
23	B0	2455	A
23	B0	2470	U
23	B0	2481	G
23	B0	2482	A
23	B0	2483	U
23	B0	2484	G
23	B0	2485	U
23	B0	2492	G
23	B0	2498	U
23	B0	2499	C
23	B0	2504	G
23	B0	2522	G
23	B0	2546	G
23	B0	2549	G
23	B0	2565	C
23	B0	2578	G
23	B0	2581	A
23	B0	2582	G
23	B0	2588	U
23	B0	2589	C
23	B0	2591	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	2593	A
23	B0	2594	U
23	B0	2608	A
23	B0	2609	G
23	B0	2625	U
23	B0	2633	A
23	B0	2634	G
23	B0	2661	G
23	B0	2669	C
23	B0	2670	C
23	B0	2681	A
23	B0	2691	C
23	B0	2692	A
23	B0	2712	G
23	B0	2728	A
23	B0	2730	A
23	B0	2732	C
23	B0	2737	A
23	B0	2745	A
23	B0	2756	A
23	B0	2760	G
23	B0	2761	A
23	B0	2771	C
23	B0	2784	A
23	B0	2785	A
23	B0	2795	A
23	B0	2807	U
23	B0	2808	U
23	B0	2809	A
23	B0	2811	G
23	B0	2825	A
23	B0	2841	U
23	B0	2842	C
23	B0	2847	G
23	B0	2854	G
23	B0	2855	C
23	B0	2859	U
24	B9	18	G
24	B9	26	G
24	B9	27	A
24	B9	28	A
24	B9	29	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
24	B9	31	A
24	B9	47	A
24	B9	77	G
24	B9	112	A
24	B9	115	G

All (154) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	5	U
1	AA	7	G
1	AA	30	U
1	AA	48	C
1	AA	51	A
1	AA	60	A
1	AA	74	G
1	AA	94	G
1	AA	115	G
1	AA	119	A
1	AA	129(A)	G
1	AA	135	C
1	AA	181	G
1	AA	185	A
1	AA	197	A
1	AA	204	A
1	AA	212	G
1	AA	243	A
1	AA	250	A
1	AA	251	G
1	AA	266	G
1	AA	274	A
1	AA	279	A
1	AA	281	G
1	AA	328	C
1	AA	329	A
1	AA	344	A
1	AA	353	A
1	AA	366	C
1	AA	372	C
1	AA	403	C
1	AA	428	G
1	AA	429	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	438	G
1	AA	484	G
1	AA	496	A
1	AA	509	A
1	AA	518	C
1	AA	533	A
1	AA	546	G
1	AA	556	C
1	AA	559	A
1	AA	560	U
1	AA	575	G
1	AA	587	G
1	AA	651	C
1	AA	687	A
1	AA	701	C
1	AA	733	A
1	AA	748	C
1	AA	792	A
1	AA	812	C
1	AA	905	U
1	AA	913	A
1	AA	965	A
1	AA	975	A
1	AA	976	G
1	AA	992	U
1	AA	1049	U
1	AA	1065	U
1	AA	1067	A
1	AA	1085	U
1	AA	1101	A
1	AA	1129	C
1	AA	1145	C
1	AA	1182	G
1	AA	1183	A
1	AA	1190	G
1	AA	1196	U
1	AA	1201	A
1	AA	1214	C
1	AA	1226	C
1	AA	1237	C
1	AA	1257	U
1	AA	1281	U

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
1	AA	1285	A
1	AA	1300	G
1	AA	1301	U
1	AA	1302	U
1	AA	1319	A
1	AA	1346	A
1	AA	1347	G
1	AA	1364	U
1	AA	1380	U
1	AA	1397	C
1	AA	1409	C
1	AA	1451	A
1	AA	1498	U
1	AA	1503	A
1	AA	1504	G
1	AA	1505	G
1	AA	1528	U
2	AV	16	U
2	AV	18	G
2	AV	35	A
2	AW	16	U
2	AW	18	G
2	AW	35	A
23	B0	69	G
23	B0	173	A
23	B0	181	A
23	B0	192	G
23	B0	198	A
23	B0	242	A
23	B0	342	G
23	B0	583	C
23	B0	765	C
23	B0	801	A
23	B0	805	G
23	B0	824	U
23	B0	843	G
23	B0	878	C
23	B0	1071	U
23	B0	1141	U
23	B0	1187	A
23	B0	1193	G
23	B0	1194	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
23	B0	1223	G
23	B0	1263	G
23	B0	1278	A
23	B0	1279	G
23	B0	1313	U
23	B0	1354	A
23	B0	1495	G
23	B0	1518	C
23	B0	1519	G
23	B0	1575	C
23	B0	1633	C
23	B0	1634	A
23	B0	1664	G
23	B0	1807	A
23	B0	1820	G
23	B0	1856	U
23	B0	1938	U
23	B0	2015	G
23	B0	3098	U
23	B0	3107	G
23	B0	3110	G
23	B0	3111	C
23	B0	3116	G
23	B0	3118	U
23	B0	3146	A
23	B0	3149	G
23	B0	3171	A
23	B0	3172	U
23	B0	2204	A
23	B0	2245	A
23	B0	2261	G
23	B0	2377	U
23	B0	2404	A
23	B0	2426	G
23	B0	2668	U
23	B0	2759	U
23	B0	2824	C

#### 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 [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
1	AA	108
23	B0	31
2	AW	4
2	AV	4
24	B9	2
3	AU	1
14	AL	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	1443:G	O3'	1445:U	P	10.46
1	AA	1459:C	O3'	1460:A	P	10.16
1	AA	1458:G	O3'	1459:C	P	8.01
1	B0	1888:C	O3'	1889:G	P	6.63
1	B0	3180:U	O3'	3181:C	P	5.39
1	AA	455:C	O3'	456:A	P	5.28
1	B0	891:A	O3'	892:A	P	4.99
1	B0	3197:U	O3'	2181:A	P	4.97
1	AA	993:G	O3'	994:A	P	4.72
1	B0	3161:C	O3'	3162:G	P	4.56
1	AA	68:G	O3'	69:G	P	4.50
1	B0	910:U	O3'	911:A	P	4.44
1	AA	476:U	O3'	477:G	P	4.41
1	AA	1434:A	O3'	1435:G	P	4.39

*Continued on next page...*

*Continued from previous page...*

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	1044:A	O3'	1045:C	P	4.27
1	B0	3108:G	O3'	3109:U	P	4.23
1	B0	3126:A	O3'	3127:G	P	4.03
1	AA	1466:C	O3'	1467:G	P	3.96
1	AA	99:C	O3'	101:A	P	3.92
1	AA	1278:U	O3'	1279:A	P	3.65
1	AA	200:G	O3'	201:G	P	3.50
1	B0	2075:U	O3'	3093:C	P	3.50
1	AA	820:U	O3'	821:G	P	3.45
1	B0	1912:G	O3'	1913:G	P	3.36
1	AA	196:A	O3'	197:A	P	3.29
1	AA	397:A	O3'	398:C	P	3.28
1	AA	1256:A	O3'	1257:U	P	3.23
1	AA	337:C	O3'	338:A	P	3.13
1	B0	1116:U	O3'	1117:G	P	3.10
1	AA	919:A	O3'	920:U	P	3.05
1	AA	547:A	O3'	548:G	P	3.02
1	AA	396:G	O3'	397:A	P	3.00
1	AA	216:C	O3'	217:C	P	2.94
1	AA	717:C	O3'	718:G	P	2.91
1	AA	179:A	O3'	180:U	P	2.86
1	AA	38:G	O3'	39:G	P	2.81
1	B0	3877:A	O3'	1861:G	P	2.80
1	B0	3196:G	O3'	3197:U	P	2.80
1	B0	1113:C	O3'	1114:A	P	2.75
1	B0	3181:C	O3'	3182:U	P	2.73
1	AA	170:U	O3'	171:A	P	2.72
1	AA	672:U	O3'	673:G	P	2.72
1	AA	684:A	O3'	685:G	P	2.72
1	AA	848:G	O3'	849:C	P	2.72
1	AA	150:C	O3'	151:A	P	2.71
1	B0	897:A	O3'	898:C	P	2.70
1	AA	497:A	O3'	498:U	P	2.69
1	AA	1416:G	O3'	1417:G	P	2.69
1	AA	1027:C	O3'	1028:C	P	2.68
1	AA	814:A	O3'	815:A	P	2.67
1	AA	1117:G	O3'	1118:C	P	2.66
1	AA	1026:G	O3'	1027:C	P	2.65
1	AA	405:U	O3'	406:G	P	2.62
1	AA	705:U	O3'	706:A	P	2.60
1	AA	960:U	O3'	961:U	P	2.53
1	AA	351:G	O3'	352:C	P	2.51

*Continued on next page...*

*Continued from previous page...*

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	765:G	O3'	766:A	P	2.50
1	AW	44:A	O3'	45:G	P	2.48
1	AA	249:U	O3'	250:A	P	2.46
1	AA	914:A	O3'	915:A	P	2.42
1	B0	1119:U	O3'	1120:C	P	2.42
1	AA	305:G	O3'	306:G	P	2.40
1	AA	1483:A	O3'	1484:C	P	2.39
1	B0	1062:G	O3'	1063:C	P	2.38
1	B0	3187:U	O3'	3188:U	P	2.35
1	AA	191:G	O3'	192:U	P	2.33
1	AA	1447:A	O3'	1448:C	P	2.29
1	AA	291:C	O3'	292:G	P	2.28
1	AA	1224:G	O3'	1225:A	P	2.27
1	AA	1238:A	O3'	1239:A	P	2.25
1	AA	837:G	O3'	838:C	P	2.24
1	B9	107:C	O3'	108:G	P	2.21
1	AA	733:A	O3'	734:G	P	2.18
1	AA	115:G	O3'	116:A	P	2.17
1	AA	1331:G	O3'	1332:A	P	2.17
1	AA	367:U	O3'	368:U	P	2.14
1	B0	3107:G	O3'	3108:G	P	2.14
1	AA	1034:G	O3'	1035:A	P	2.13
1	AA	212:G	O3'	213:G	P	2.12
1	AV	25:C	O3'	26:G	P	2.12
1	B0	3098:U	O3'	3099:U	P	2.12
1	AA	288:A	O3'	289:G	P	2.08
1	AA	827:U	O3'	828:A	P	2.07
1	AA	1211:U	O3'	1212:U	P	2.07
1	AA	118:U	O3'	119:A	P	2.06
1	AU	11:C	O3'	12:A	P	2.05
1	B0	3183:A	O3'	3184:C	P	2.02
1	AA	375:U	O3'	376:G	P	2.01
1	AA	1155:G	O3'	1156:G	P	2.01
1	B9	73:C	O3'	74:A	P	2.01
1	AA	89:G	O3'	90:C	P	1.98
1	B0	3149:G	O3'	3150:C	P	1.98
1	AA	1398:A	O3'	1399:C	P	1.97
1	AA	546:G	O3'	547:A	P	1.96
1	AA	606:G	O3'	607:A	P	1.95
1	AA	1297:C	O3'	1298:C	P	1.95
1	AA	387:U	O3'	388:G	P	1.93
1	AA	1335:C	O3'	1336:C	P	1.93

*Continued on next page...*

*Continued from previous page...*

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	B0	1856:U	O3'	3865:A	P	1.93
1	AA	206:C	O3'	207:C	P	1.91
1	B0	3188:U	O3'	3189:U	P	1.90
1	B0	3141:G	O3'	3142:C	P	1.87
1	AA	278:G	O3'	279:A	P	1.86
1	AA	631:G	O3'	632:A	P	1.86
1	AA	1182:G	O3'	1183:A	P	1.86
1	B0	3101:G	O3'	3102:G	P	1.86
1	AA	1237:C	O3'	1238:A	P	1.85
1	AA	1374:A	O3'	1375:A	P	1.85
1	AW	34:G	O3'	35:A	P	1.84
1	AA	587:G	O3'	588:G	P	1.83
1	B0	3190:G	O3'	3191:A	P	1.83
1	B0	3874:C	O3'	3875:A	P	1.81
1	AA	754:C	O3'	755:G	P	1.78
1	AA	499:A	O3'	500:G	P	1.76
1	AA	1067:A	O3'	1068:G	P	1.38
1	AA	274:A	O3'	275:G	P	1.37
1	AA	1345:U	O3'	1346:A	P	1.36
1	AA	1455:G	O3'	1456:A	P	1.34
1	AA	1457:A	O3'	1458:G	P	1.34
1	AA	227:G	O3'	228:A	P	1.33
1	AW	33:U	O3'	34:G	P	1.32
1	AA	461:C	O3'	462:A	P	1.31
1	AA	1383:C	O3'	1384:C	P	1.31
1	AA	26:A	O3'	27:G	P	1.30
1	AA	394:G	O3'	395:C	P	1.30
1	AA	1110:A	O3'	1111:A	P	1.30
1	AV	75:C	O3'	76:A	P	1.30
1	AW	75:C	O3'	76:A	P	1.29
1	AV	74:C	O3'	75:C	P	1.28
1	AA	776:G	O3'	777:A	P	1.27
1	AA	59:A	O3'	60:A	P	1.26
1	B0	3102:G	O3'	3103:A	P	1.26
1	AA	804:U	O3'	805:C	P	1.25
1	AA	651:C	O3'	652:U	P	1.24
1	AA	1490:C	O3'	1491:G	P	1.23
1	AA	74:G	O3'	75:C	P	1.20
1	AA	576:G	O3'	577:G	P	1.20
1	AA	1409:C	O3'	1410:G	P	1.19
1	AA	403:C	O3'	404:U	P	1.18
1	AV	36:A	O3'	37:G	P	1.18

*Continued on next page...*

*Continued from previous page...*

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	AA	239:U	O3'	240:C	P	1.17
1	AA	94:G	O3'	96:C	P	1.12
1	B0	3106:U	O3'	3107:G	P	1.12
1	AA	1393:U	O3'	1394:A	P	1.05
1	AA	556:C	O3'	557:G	P	1.02
1	AA	905:U	O3'	906:G	P	0.96
1	AL	19:ARG	C	20:LYS	N	0.94
1	AA	436:C	O3'	437:U	P	0.88
1	AA	893:C	O3'	894:G	P	0.87
1	AA	214:U	O3'	215:C	P	0.73
1	AA	135:C	O3'	136:C	P	0.60

## 6 Fit of model and data

### 6.1 Protein, DNA and RNA chains

Unable to reproduce the depositors R factor - this section is therefore empty.

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

Unable to reproduce the depositors R factor - this section is therefore empty.

### 6.3 Carbohydrates

Unable to reproduce the depositors R factor - this section is therefore empty.

### 6.4 Ligands

Unable to reproduce the depositors R factor - this section is therefore empty.

### 6.5 Other polymers

Unable to reproduce the depositors R factor - this section is therefore empty.