



## Full wwPDB EM Validation Report ⓘ

Apr 23, 2024 – 02:12 pm BST

PDB ID : 7AJU  
EMDB ID : EMD-11808  
Title : Cryo-EM structure of the 90S-exosome super-complex (state Post-A1-exosome)  
Authors : Cheng, J.; Lau, B.; Flemming, D.; Venuta, G.L.; Berninghausen, O.; Beckmann, R.; Hurt, E.  
Deposited on : 2020-09-29  
Resolution : 3.80 Å (reported)  
Based on initial model : 6ZQD

This is a Full wwPDB EM 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/EMValidationReportHelp>

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:

EMDB validation analysis : 0.0.1.dev92  
Mogul : 1.8.4, CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.13  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.36.2

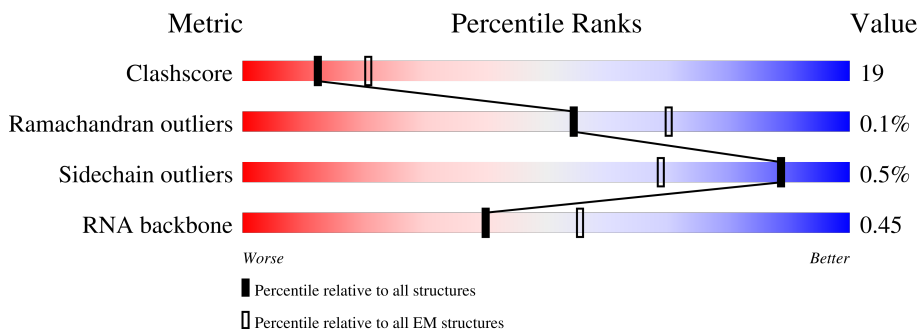
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 3.80 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion  $< 40\%$ ). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	CA	327	42% 32% 26%
1	CB	327	36% 33% 30%
2	DA	255	59% 35% 6%
3	UA	923	53% 32% 14%
4	UB	810	47% 21% 32%
5	UC	610	9% 5% 86%
6	UD	776	44% 41% 15%



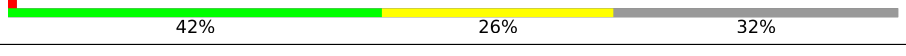

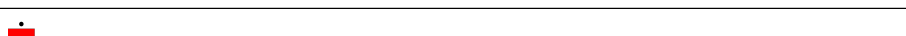


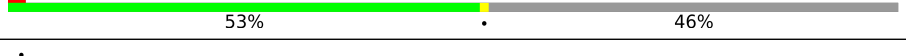
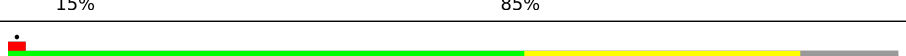
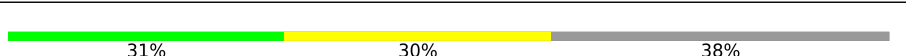
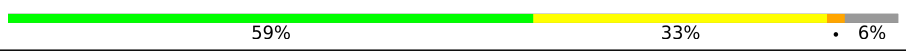
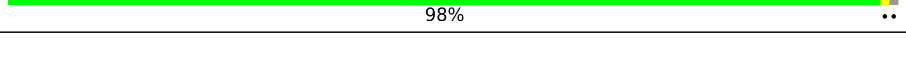
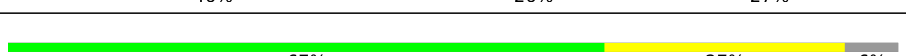



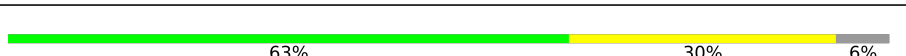

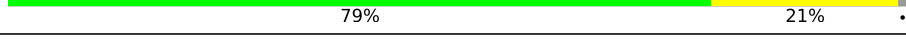




*Continued on next page...*

Continued from previous page...

Mol	Chain	Length	Quality of chain
7	UE	643	40% 33% 26%
8	UF	440	42% 24% 33%
9	UG	554	54% 30% 15%
10	UH	713	52% 14% 34%
11	UI	575	8% 7% 85%
12	UJ	1769	36% 27% 37%
13	UK	250	49% 39% 12%
14	UL	943	43% 39% 17%
15	UM	817	43% 50% 7%
16	UN	899	15% 8% 77%
17	UO	513	40% 56% 4%
18	UP	214	13% 14% 72%
19	UQ	896	49% 43% 8%
20	UR	594	47% 34% 19%
21	US	552	58% 30% 12%
22	UT	2493	51% 41% 7%
23	UU	939	56% 38% 6%
24	UV	1237	45% 42% 12%
25	UX	189	50% 37% 12%
26	CD	504	52% 23% 25%
27	CE	511	49% 36% 15%
28	CF	126	56% 33% 8%
28	CG	126	55% 34% 7%
29	CH	573	55% 26% 18%
30	CI	183	52% 43% 5%

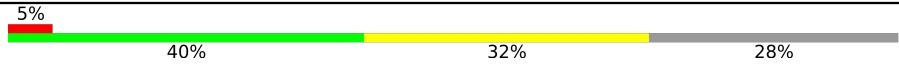

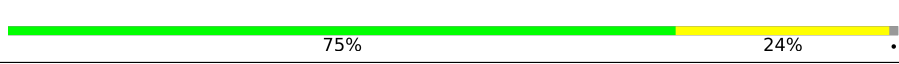
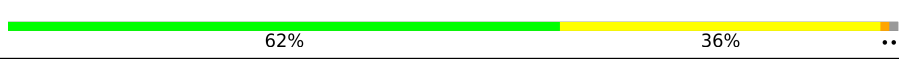

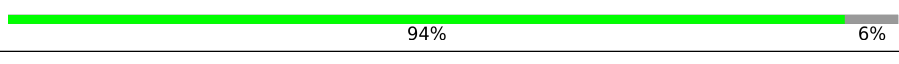
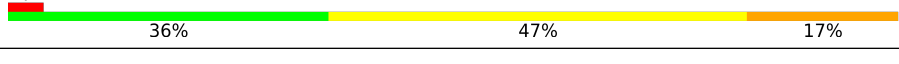
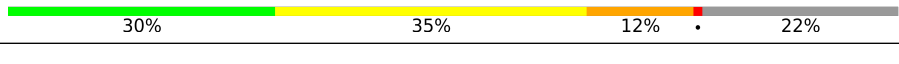
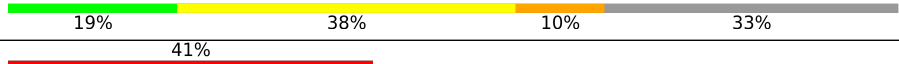


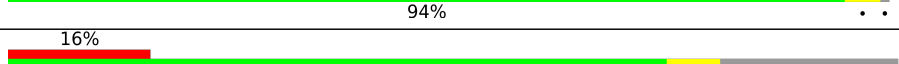

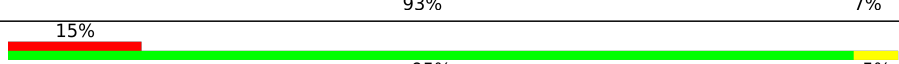
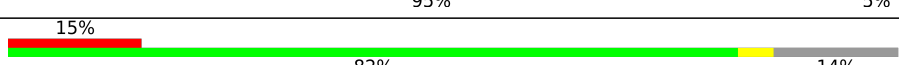
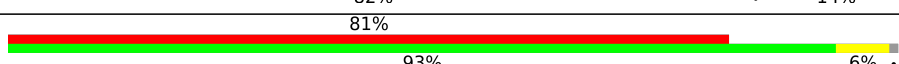
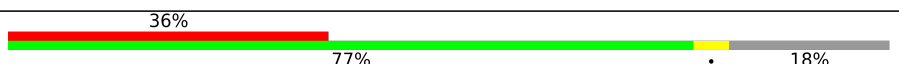

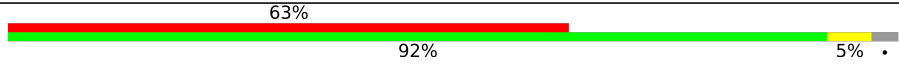


Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
31	CJ	290	
32	CK	593	
33	CL	1183	
34	CM	367	
35	CN	297	
36	JD	1267	
37	JF	252	
37	JG	252	
38	JH	483	
39	JI	1729	
40	JL	318	
41	JM	217	
42	JP	489	
43	Db	82	
44	JJ	274	
45	DE	261	
46	DF	225	
47	DG	236	
48	DH	190	
49	DI	200	
50	DJ	197	
51	DL	156	
52	DN	151	
53	DO	137	
54	DQ	143	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
55	DS	146	
56	DT	144	
57	DW	130	
58	DX	145	
59	DY	135	
60	Dc	67	
61	D2	81	
62	D3	1802	
63	D4	333	
64	EA	22	
65	EB	305	
66	EC	246	
67	ED	394	
68	EE	223	
69	EF	265	
70	EG	250	
71	EH	240	
72	EI	359	
73	EJ	292	
74	EK	1001	
75	EN	1073	

## 2 Entry composition [i](#)

There are 78 unique types of molecules in this entry. The entry contains 242031 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 protein called rRNA 2'-O-methyltransferase fibrillarin.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	CA	242	Total	C	N	O	S	0	0
			1881	1193	338	340	10		
1	CB	228	Total	C	N	O	S	0	0
			1782	1131	320	321	10		

- Molecule 2 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	DA	240	Total	C	N	O	S	0	0
			1912	1209	354	345	4		

- Molecule 3 is a protein called Periodic tryptophan protein 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	UA	792	Total	C	N	O	S	0	0
			6322	4040	1083	1181	18		

- Molecule 4 is a protein called Nucleolar complex protein 14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	UB	553	Total	C	N	O	S	0	0
			4105	2602	736	756	11		

- Molecule 5 is a protein called Something about silencing protein 10.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
5	UC	86	Total	C	N	O	0	0
			694	430	139	125		

- Molecule 6 is a protein called U3 small nucleolar RNA-associated protein 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	UD	663	5269	3339	915	994	21	0	0

- Molecule 7 is a protein called U3 small nucleolar RNA-associated protein 5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	UE	475	3772	2400	649	710	13	0	0

- Molecule 8 is a protein called U3 small nucleolar RNA-associated protein 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	UF	293	2487	1605	435	434	13	0	0

- Molecule 9 is a protein called U3 small nucleolar RNA-associated protein 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	UG	470	3718	2345	664	698	11	0	0

- Molecule 10 is a protein called U3 small nucleolar RNA-associated protein 8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	UH	474	2771	1706	513	549	3	0	0

- Molecule 11 is a protein called U3 small nucleolar RNA-associated protein 9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	UI	88	723	462	131	128	2	0	0

- Molecule 12 is a protein called U3 small nucleolar RNA-associated protein 10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	UJ	1116	8961	5802	1468	1666	25	0	0

- Molecule 13 is a protein called U3 small nucleolar RNA-associated protein 11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	UK	219	1845	1150	356	332	7	0	0

- Molecule 14 is a protein called U3 small nucleolar RNA-associated protein 12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	UL	779	6199	3974	1034	1164	27	0	0

- Molecule 15 is a protein called U3 small nucleolar RNA-associated protein 13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	UM	762	5970	3787	1007	1148	28	0	0

- Molecule 16 is a protein called U3 small nucleolar RNA-associated protein 14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	UN	203	1667	1038	313	314	2	0	0

- Molecule 17 is a protein called U3 small nucleolar RNA-associated protein 15.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	UO	493	3911	2462	702	735	12	0	0

- Molecule 18 is a protein called Bud site selection protein 21.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
18	UP	60	495	310	101	84	0	0

- Molecule 19 is a protein called NET1-associated nuclear protein 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	UQ	820	6557	4171	1107	1260	19	0	0

- Molecule 20 is a protein called U3 small nucleolar RNA-associated protein 18.



Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	UR	481	3791	2399	668	714	10	0	0

- Molecule 21 is a protein called Nucleolar complex protein 4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	US	487	3587	2305	610	660	12	0	0

- Molecule 22 is a protein called U3 small nucleolar RNA-associated protein 20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	UT	2313	18789	12100	3144	3479	66	0	0

- Molecule 23 is a protein called U3 small nucleolar RNA-associated protein 21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
23	UU	878	6922	4386	1198	1316	22	0	0

- Molecule 24 is a protein called U3 small nucleolar RNA-associated protein 22.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
24	UV	1083	8753	5692	1442	1595	24	0	0

- Molecule 25 is a protein called rRNA-processing protein FCF1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
25	UX	167	1330	854	241	225	10	0	0

- Molecule 26 is a protein called Nucleolar protein 56.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
26	CD	380	2994	1898	513	574	9	0	0

- Molecule 27 is a protein called Nucleolar protein 58.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	CE	436	Total	C	N	O	S	0	0
			3326	2093	571	654	8		

- Molecule 28 is a protein called 13 kDa ribonucleoprotein-associated protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
28	CF	121	Total	C	N	O	S	0	0
			916	583	158	171	4		
28	CG	121	Total	C	N	O	S	0	0
			916	583	158	171	4		

- Molecule 29 is a protein called Ribosomal RNA-processing protein 9.

Mol	Chain	Residues	Atoms					AltConf	Trace
29	CH	467	Total	C	N	O	S	0	0
			3736	2371	655	700	10		

- Molecule 30 is a protein called U3 small nucleolar ribonucleoprotein protein IMP3.

Mol	Chain	Residues	Atoms					AltConf	Trace
30	CI	175	Total	C	N	O	S	0	0
			1468	929	276	256	7		

- Molecule 31 is a protein called U3 small nucleolar ribonucleoprotein protein IMP4.

Mol	Chain	Residues	Atoms					AltConf	Trace
31	CJ	256	Total	C	N	O	S	0	0
			2081	1306	394	374	7		

- Molecule 32 is a protein called U3 small nucleolar RNA-associated protein MPP10.

Mol	Chain	Residues	Atoms					AltConf	Trace
32	CK	222	Total	C	N	O	S	0	0
			1789	1111	311	363	4		

- Molecule 33 is a protein called Ribosome biogenesis protein BMS1.

Mol	Chain	Residues	Atoms					AltConf	Trace
33	CL	808	Total	C	N	O	S	0	0
			6551	4187	1171	1165	28		

- Molecule 34 is a protein called RNA 3'-terminal phosphate cyclase-like protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
34	CM	360	2781	1781	473	516	11	0	0

- Molecule 35 is a protein called Ribosomal RNA-processing protein 7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
35	CN	229	1868	1197	317	347	7	0	0

- Molecule 36 is a protein called Probable ATP-dependent RNA helicase DHR1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
36	JD	811	6509	4163	1151	1160	35	0	0

- Molecule 37 is a protein called Ribosomal RNA small subunit methyltransferase NEP1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
37	JF	216	1701	1079	296	315	11	0	0
37	JG	230	1799	1142	313	333	11	0	0

- Molecule 38 is a protein called Essential nuclear protein 1.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
38	JH	261	1295	773	261	261	0	0

- Molecule 39 is a protein called rRNA biogenesis protein RRP5.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
39	JI	265	1314	784	265	265	0	0

- Molecule 40 is a protein called Dimethyladenosine transferase.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
40	JL	283	2262	1439	401	408	14	0	0

- Molecule 41 is a protein called rRNA-processing protein FCF2.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	JM	134	Total	C	N	O	S	0	0
			1131	715	206	207	3		

- Molecule 42 is a protein called Protein SOF1.

Mol	Chain	Residues	Atoms					AltConf	Trace
42	JP	461	Total	C	N	O	S	0	0
			3765	2354	686	709	16		

- Molecule 43 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
43	Db	81	Total	C	N	O	S	0	0
			610	382	110	113	5		

- Molecule 44 is a protein called Pre-rRNA-processing protein PNO1.

Mol	Chain	Residues	Atoms					AltConf	Trace
44	JJ	199	Total	C	N	O	S	0	0
			1573	1001	285	283	4		

- Molecule 45 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
45	DE	246	Total	C	N	O	S	0	0
			1950	1248	361	338	3		

- Molecule 46 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
46	DF	213	Total	C	N	O	S	0	0
			1669	1045	307	314	3		

- Molecule 47 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
47	DG	218	Total	C	N	O	S	0	0
			1755	1102	337	313	3		

- Molecule 48 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms				AltConf	Trace
48	DH	170	Total	C	N	O	0	0
			1361	880	235	246		

- Molecule 49 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
49	DI	177	Total	C	N	O	S	0	0
			1399	869	279	249	2		

- Molecule 50 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
50	DJ	185	Total	C	N	O	S	0	0
			1494	943	289	261	1		

- Molecule 51 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
51	DL	140	Total	C	N	O	S	0	0
			1129	724	215	187	3		

- Molecule 52 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
52	DN	150	Total	C	N	O	S	0	0
			1192	759	224	207	2		

- Molecule 53 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
53	DO	127	Total	C	N	O	S	0	0
			922	567	185	167	3		

- Molecule 54 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms				AltConf	Trace
54	DQ	125	Total	C	N	O	0	0
			969	623	174	172		

- Molecule 55 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
55	DS	105	Total	C	N	O	S	0	0
			861	545	160	154	2		

- Molecule 56 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
56	DT	143	Total	C	N	O	S	0	0
			1112	694	208	208	2		

- Molecule 57 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
57	DW	129	Total	C	N	O	S	0	0
			1021	650	188	180	3		

- Molecule 58 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
58	DX	143	Total	C	N	O	S	0	0
			1115	705	219	189	2		

- Molecule 59 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				AltConf	Trace
59	DY	134	Total	C	N	O	0	0
			1073	676	208	189		

- Molecule 60 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					AltConf	Trace
60	Dc	63	Total	C	N	O	S	0	0
			497	306	99	91	1		

- Molecule 61 is a RNA chain called 5'ETS RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
61	D2	81	Total	C	N	O	P	0	0
			1741	777	319	564	81		

- Molecule 62 is a RNA chain called 18S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
62	D3	1409	30042	13429	5342	9862	1409	0	0

- Molecule 63 is a RNA chain called U3 snoRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
63	D4	223	4720	2113	816	1568	223	0	0

- Molecule 64 is a RNA chain called RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
64	EA	22	366	161	43	140	22	0	0

- Molecule 65 is a protein called Exosome complex component RRP45.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
65	EB	299	1475	877	299	299	0	0

- Molecule 66 is a protein called Exosome complex component SKI6.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
66	EC	243	1199	713	243	243	0	0

- Molecule 67 is a protein called Exosome complex component RRP43.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
67	ED	317	1571	937	317	317	1	0

- Molecule 68 is a protein called Exosome complex component RRP46.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
68	EE	223	1107	661	223	223	1	0

- Molecule 69 is a protein called Exosome complex component RRP42.

Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
69	EF	265	1317	787	265	265	1	0

- Molecule 70 is a protein called Exosome complex component MTR3.

Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
70	EG	215	1058	628	215	215	0	0

- Molecule 71 is a protein called Exosome complex component RRP40.

Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
71	EH	237	1170	696	237	237	0	0

- Molecule 72 is a protein called Exosome complex component RRP4.

Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
72	EI	293	1440	854	293	293	0	0

- Molecule 73 is a protein called Exosome complex component CSL4.

Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
73	EJ	222	1091	647	222	222	0	0

- Molecule 74 is a protein called Exosome complex exonuclease DIS3.

Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
74	EK	970	4818	2878	970	970	1	0

- Molecule 75 is a protein called ATP-dependent RNA helicase DOB1.

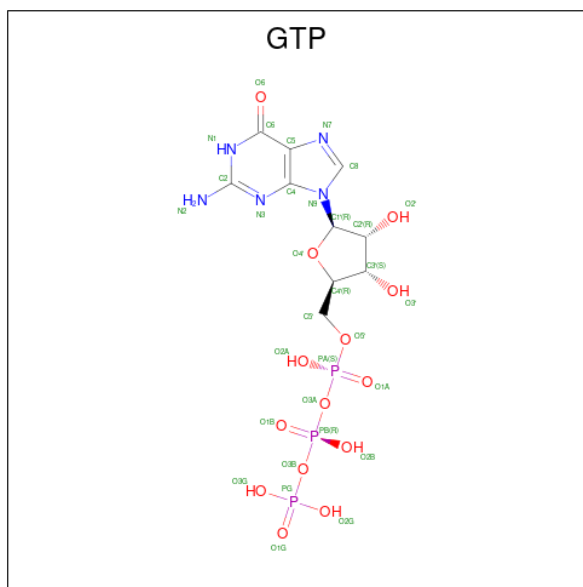
Mol	Chain	Residues	Atoms			AltConf	Trace	
			Total	C	N			O
75	EN	963	4762	2839	963	960	0	0

- Molecule 76 is ZINC ION (three-letter code: ZN) (formula: Zn).



Mol	Chain	Residues	Atoms		AltConf
76	UX	1	Total	Zn	0
			1	1	
76	Db	1	Total	Zn	0
			1	1	
76	EK	1	Total	Zn	0
			1	1	

- Molecule 77 is GUANOSINE-5'-TRIPHOSPHATE (three-letter code: GTP) (formula:  $C_{10}H_{16}N_5O_{14}P_3$ ).



Mol	Chain	Residues	Atoms				AltConf	
77	CL	1	Total	C	N	O	P	0
			32	10	5	14	3	

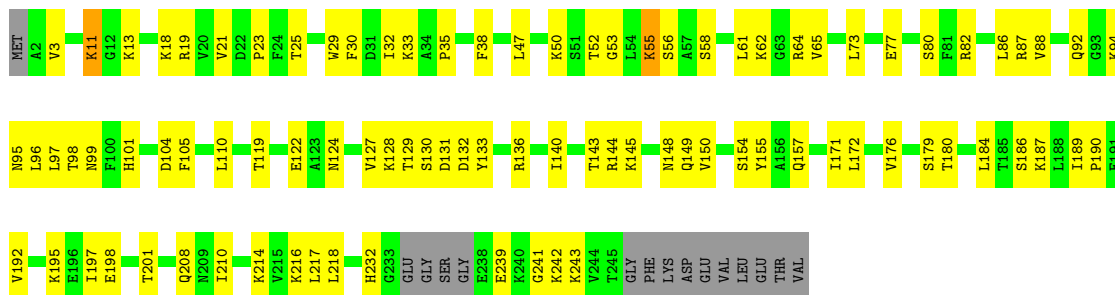
- Molecule 78 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		AltConf
78	CL	1	Total	Mg	0
			1	1	
78	EK	1	Total	Mg	0
			1	1	



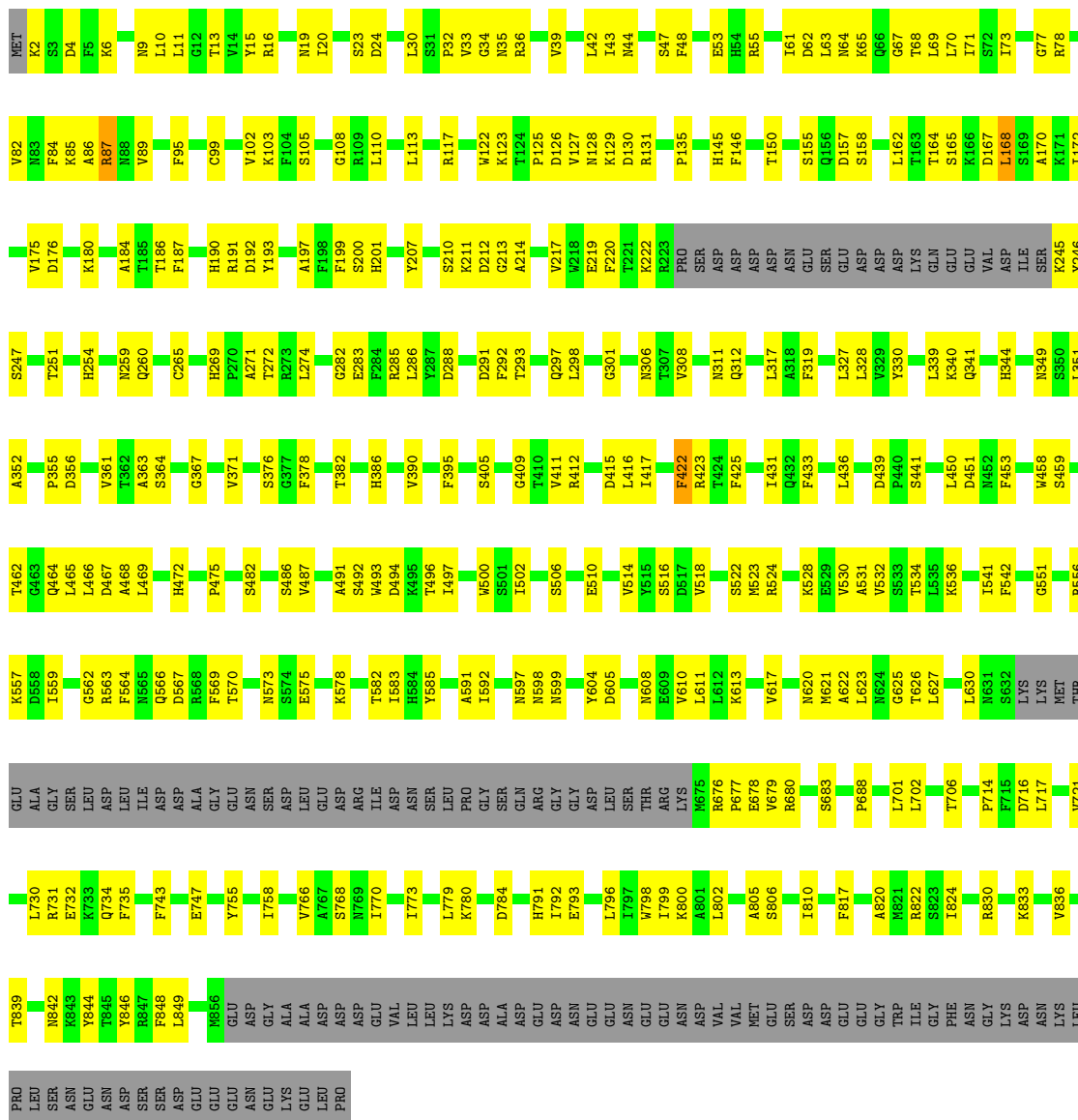
• Molecule 2: 40S ribosomal protein S1-A

Chain DA: 59% 35% 6%



• Molecule 3: Periodic tryptophan protein 2

Chain UA: 53% 32% 14%

















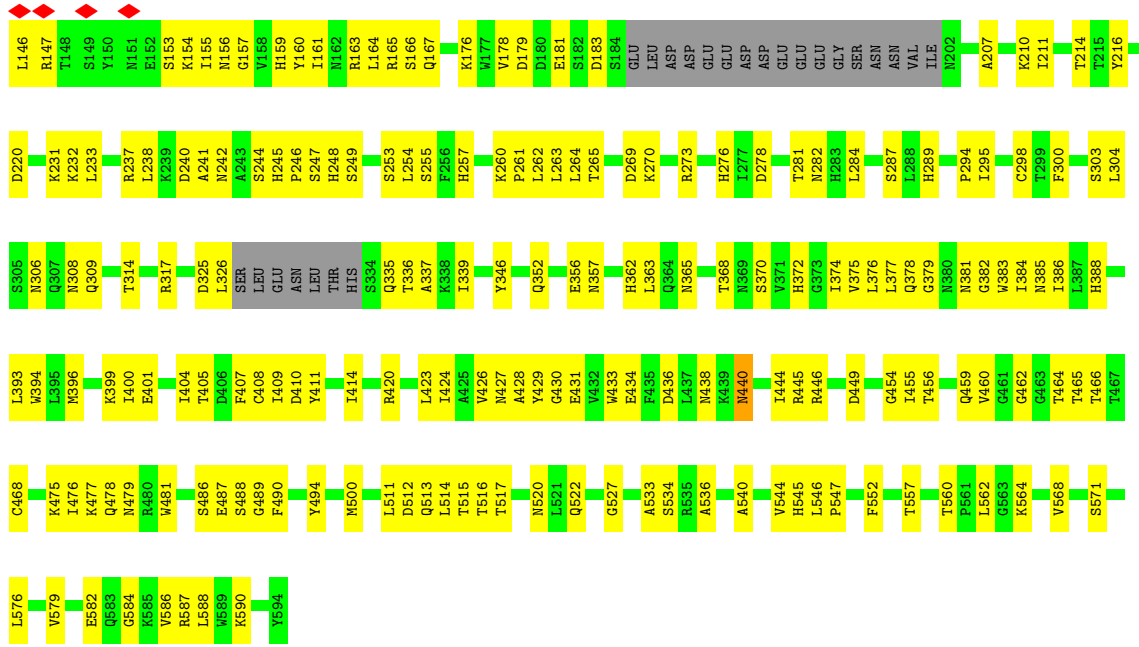




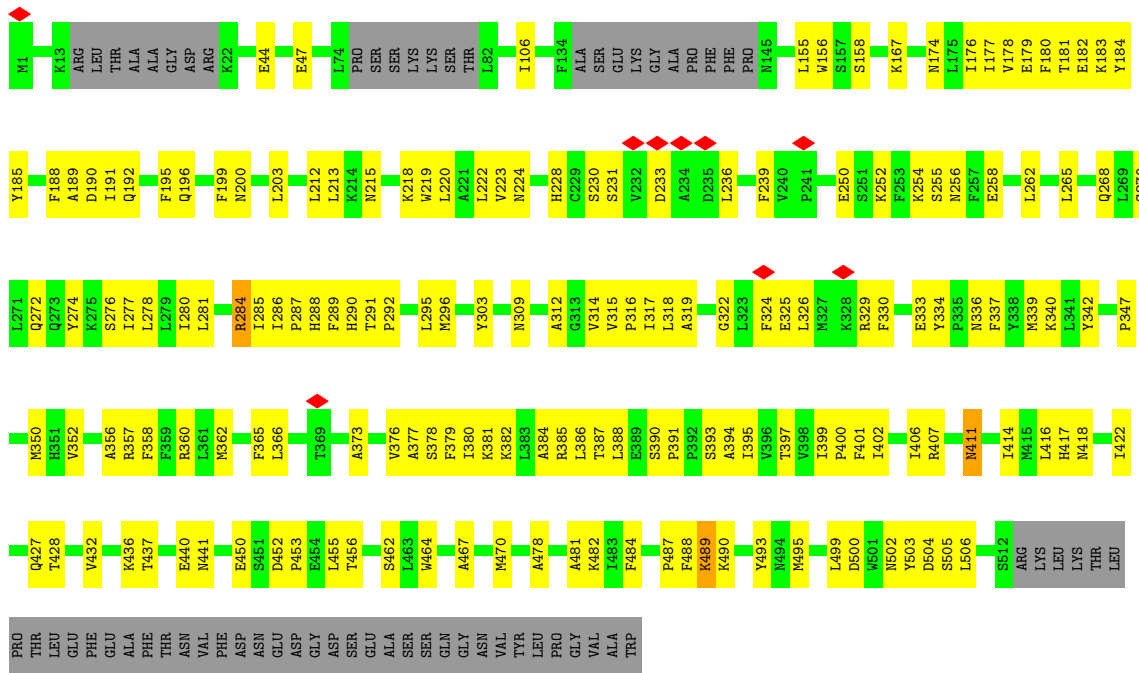




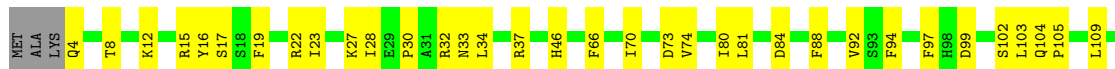




• Molecule 21: Nucleolar complex protein 4



• Molecule 22: U3 small nucleolar RNA-associated protein 20



















ASP VAL SER GLY LYS THR LYS LYS SER SER SER SER SER PRO GLY ASP THR THR THR ASN ILE LYS LEU

● Molecule 33: Ribosome biogenesis protein BMS1

Chain CL:



Table of amino acid residues for Chain CL, including residue number, three-letter code, and one-letter code. Residues are color-coded by validation status (green for good, yellow for ok, grey for missing).

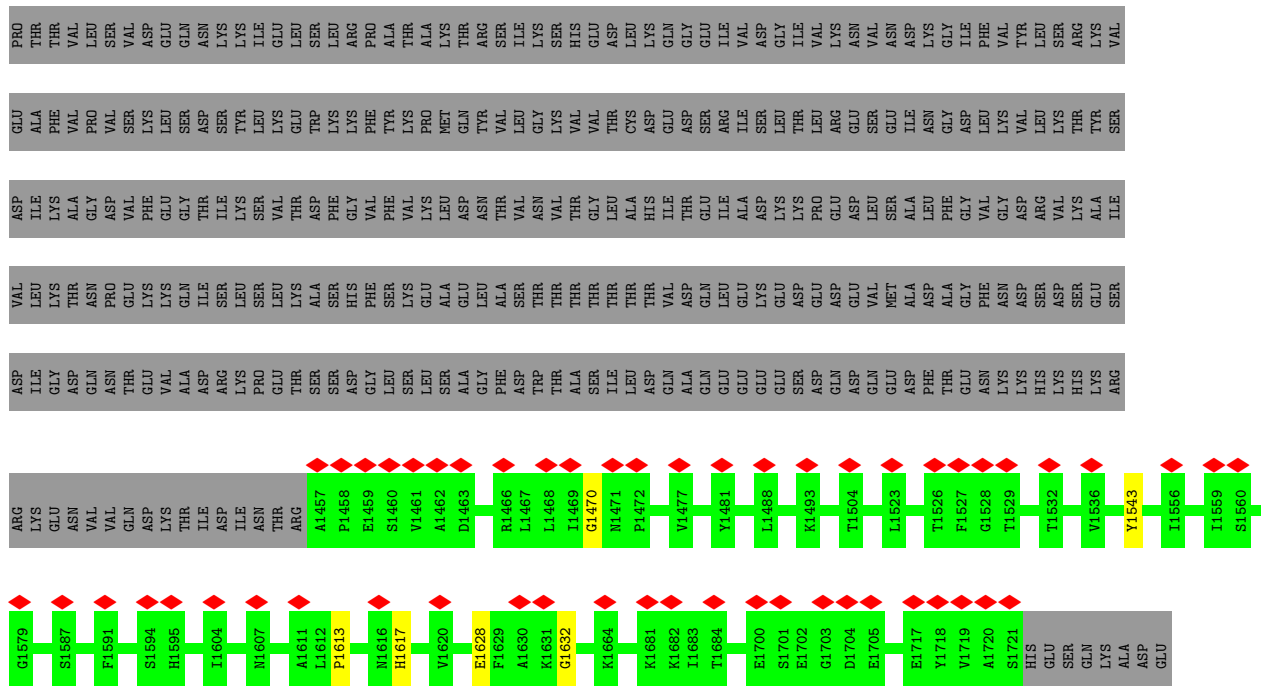




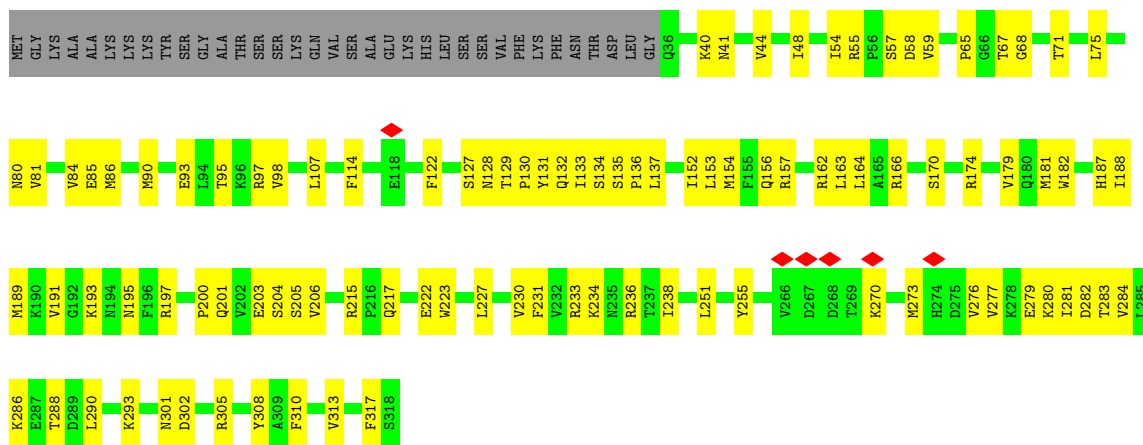




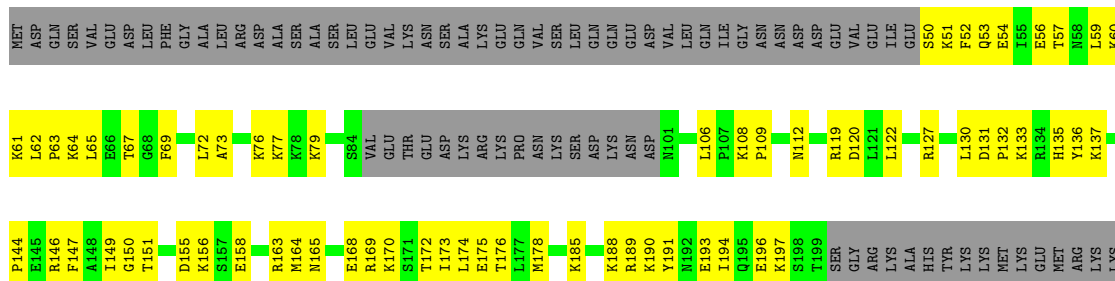
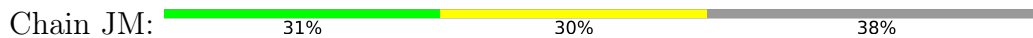




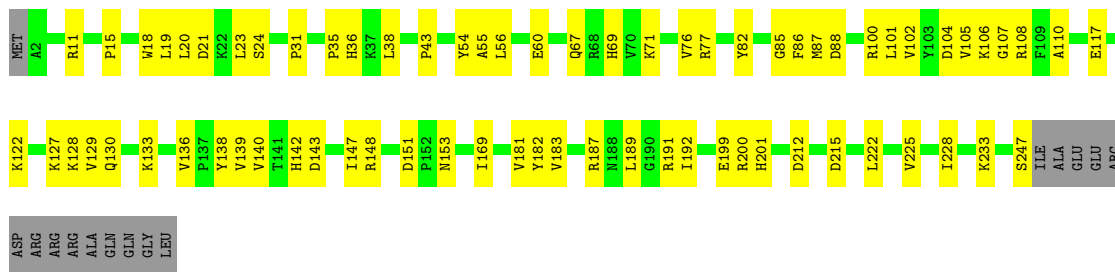
• Molecule 40: Dimethyladenosine transferase



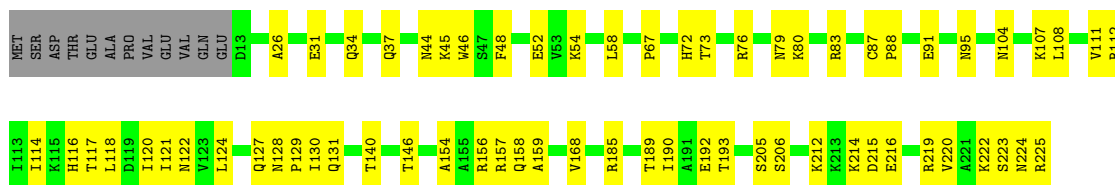
• Molecule 41: rRNA-processing protein FCF2



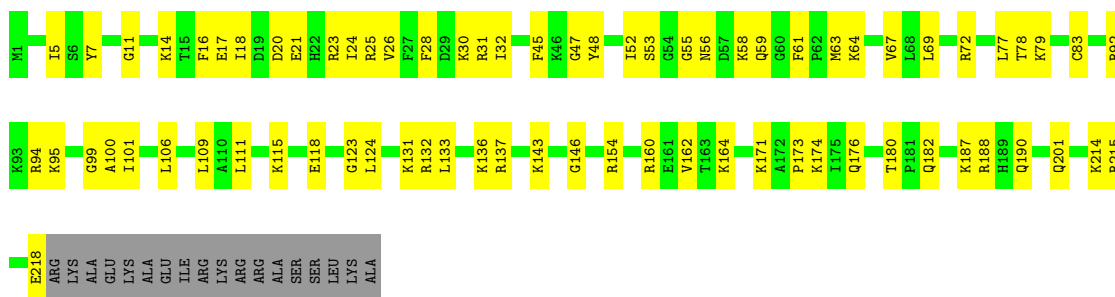




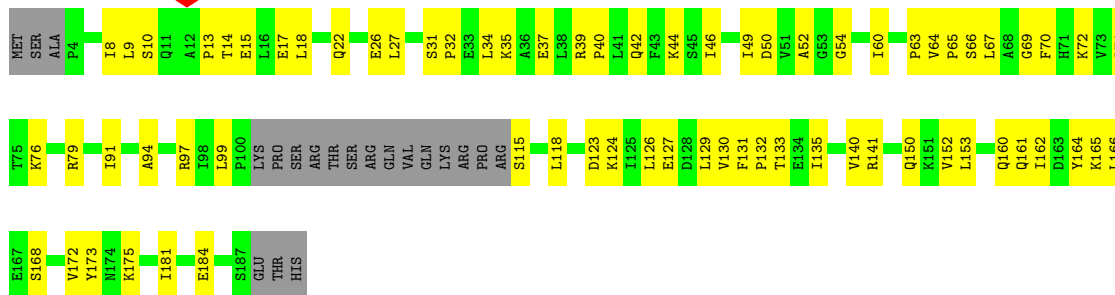
• Molecule 46: 40S ribosomal protein S5



• Molecule 47: 40S ribosomal protein S6-A

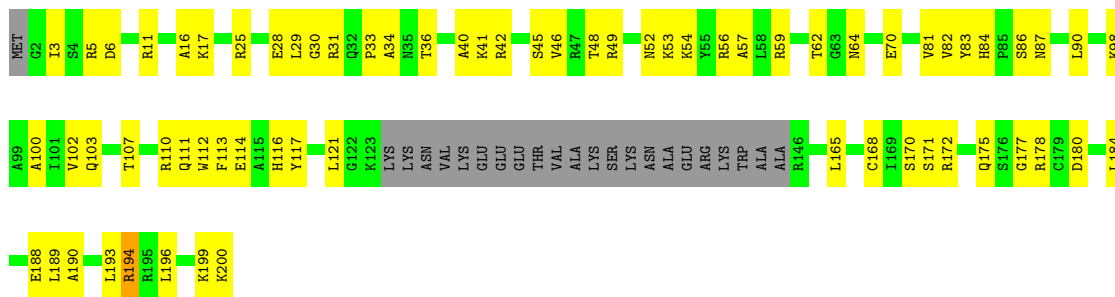


• Molecule 48: 40S ribosomal protein S7-A

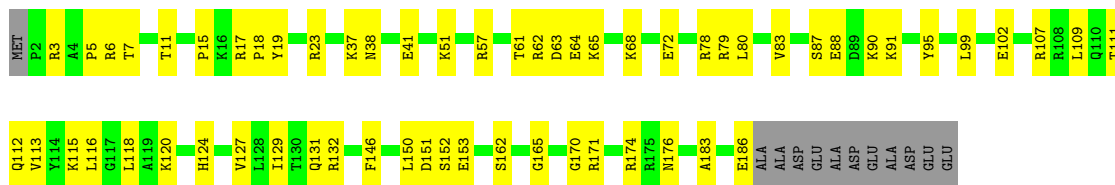


• Molecule 49: 40S ribosomal protein S8-A

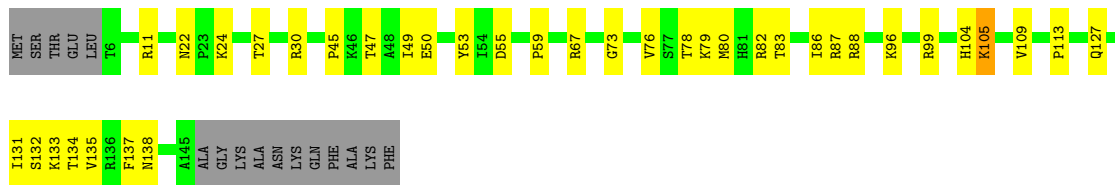




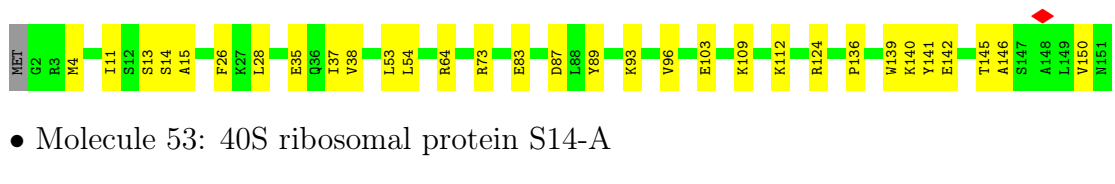
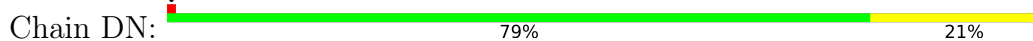
• Molecule 50: 40S ribosomal protein S9-A



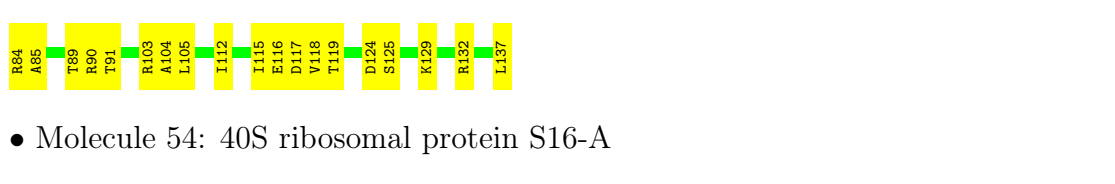
• Molecule 51: 40S ribosomal protein S11-A



• Molecule 52: 40S ribosomal protein S13

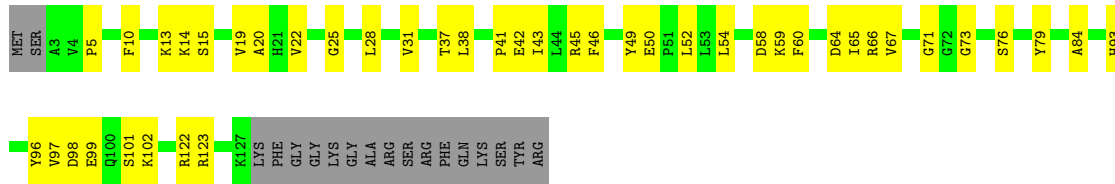


• Molecule 53: 40S ribosomal protein S14-A



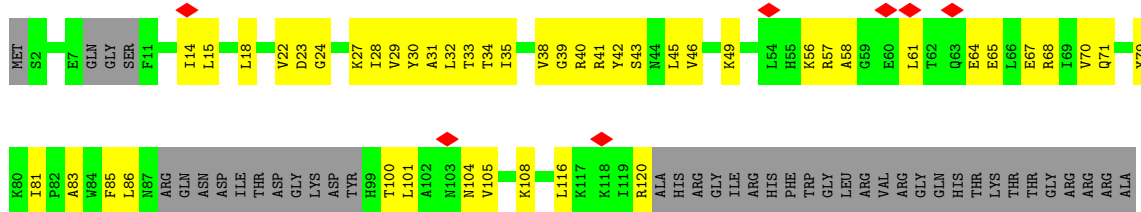
• Molecule 54: 40S ribosomal protein S16-A

Chain DQ:  57% 30% 13%



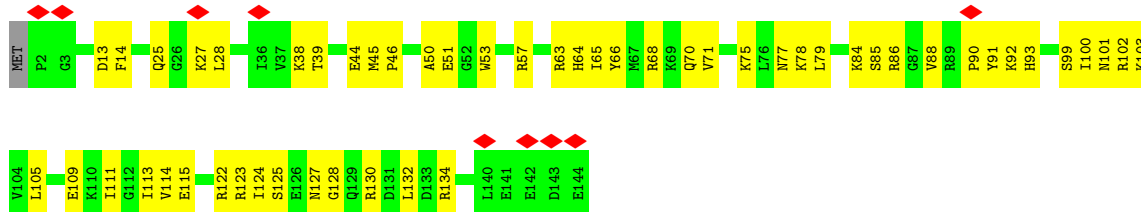
• Molecule 55: 40S ribosomal protein S18-A

Chain DS:  5% 40% 32% 23%




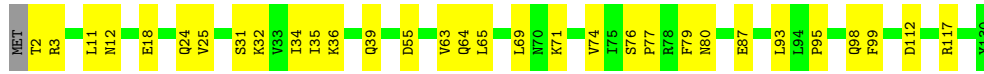
• Molecule 56: 40S ribosomal protein S19-A

Chain DT:  6% 62% 32%



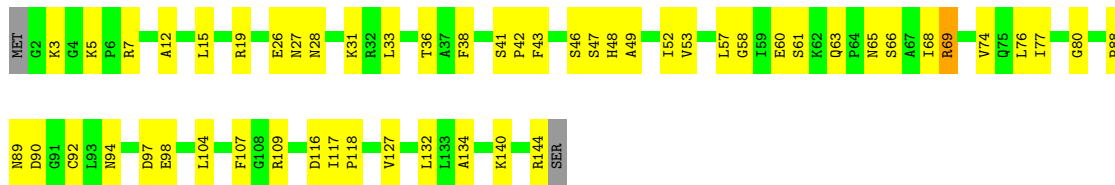
• Molecule 57: 40S ribosomal protein S22-A

Chain DW:  75% 24%



• Molecule 58: 40S ribosomal protein S23-A

Chain DX:  62% 36%



• Molecule 59: 40S ribosomal protein S24-A

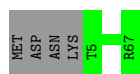


Chain DY: 76% 24%



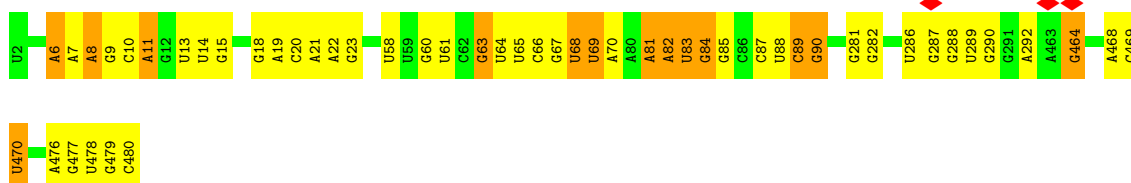
• Molecule 60: 40S ribosomal protein S28-A

Chain Dc: 94% 6%



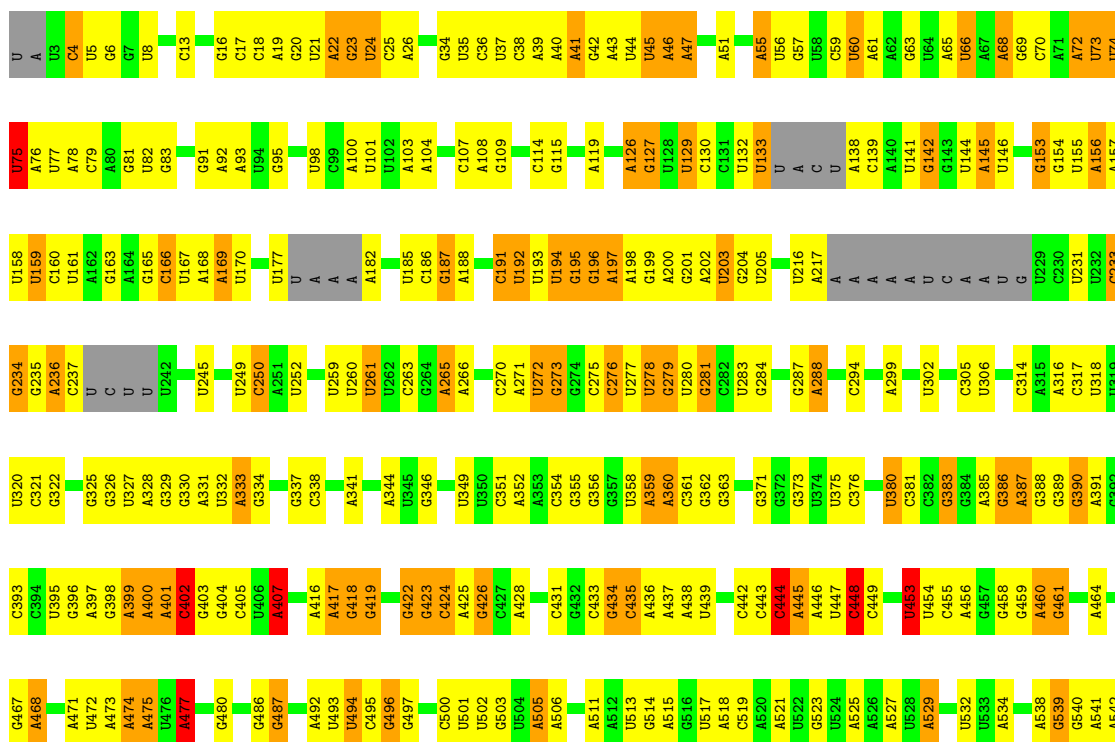
• Molecule 61: 5'ETS RNA

Chain D2: 36% 47% 17%

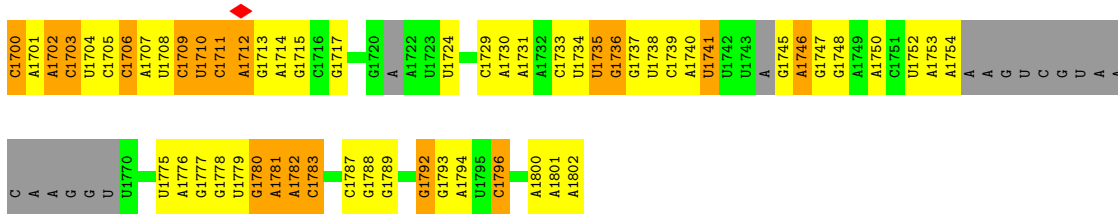


• Molecule 62: 18S rRNA

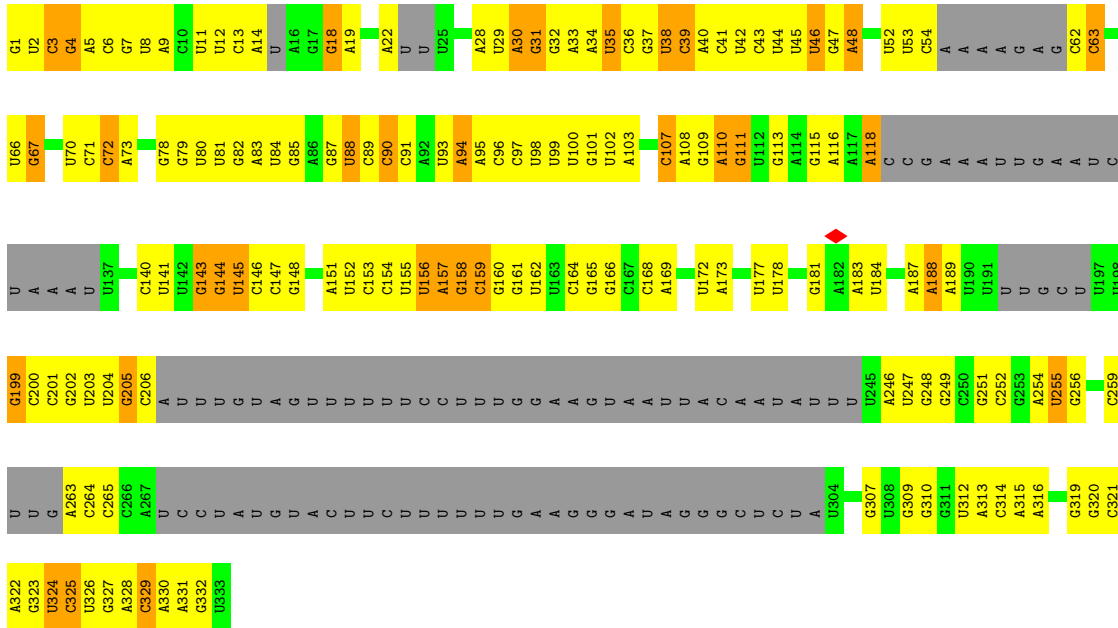
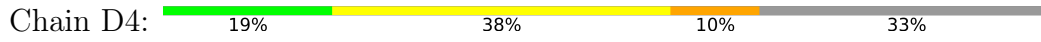
Chain D3: 30% 35% 12% 22%



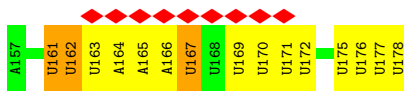




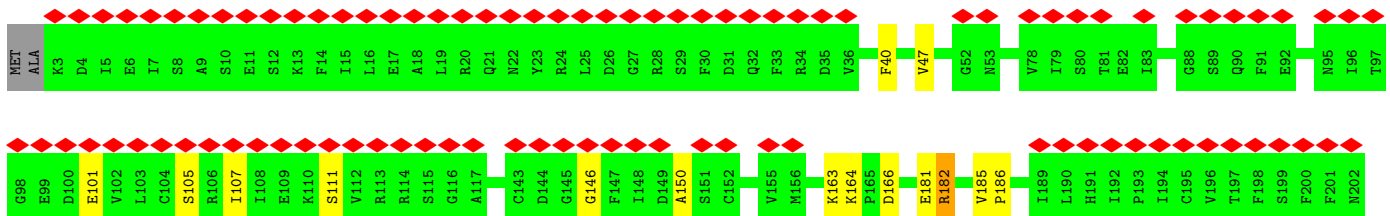
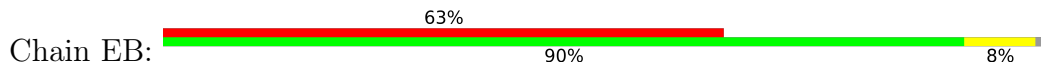
• Molecule 63: U3 snoRNA

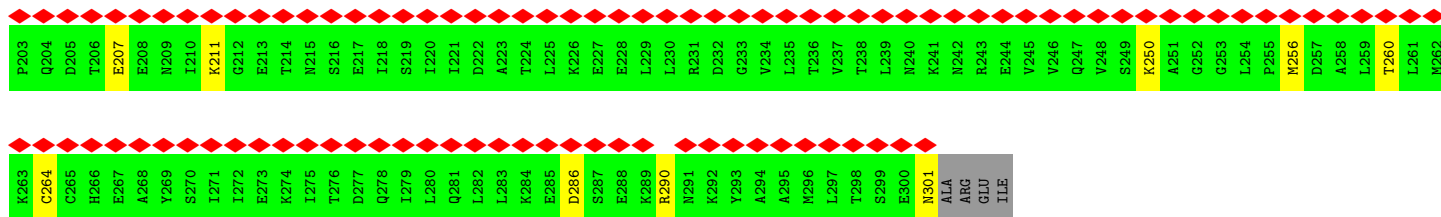


• Molecule 64: RNA



• Molecule 65: Exosome complex component RRP45

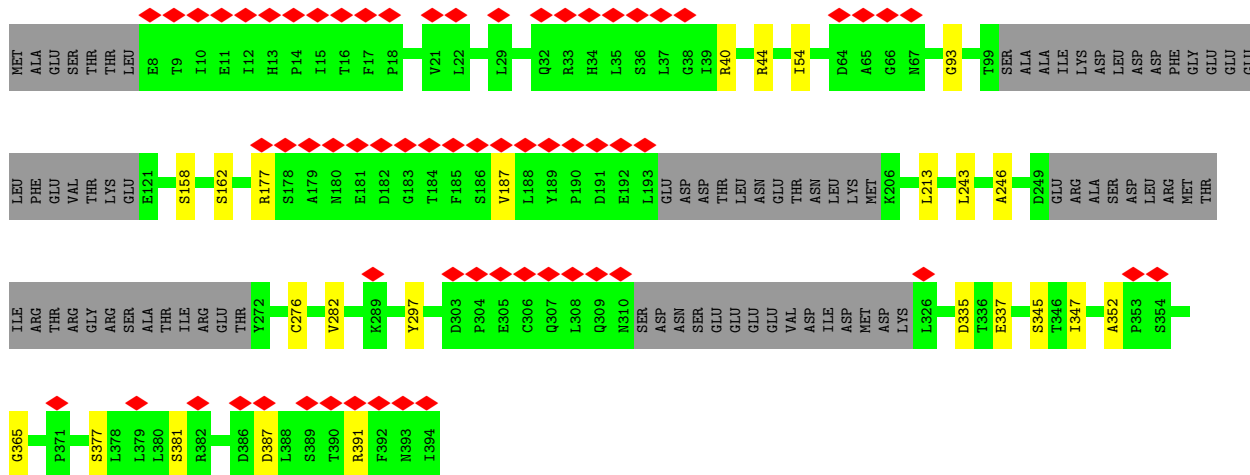
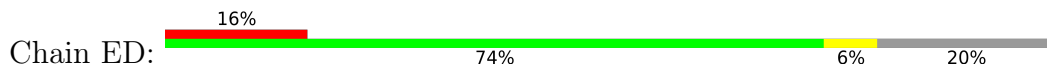




• Molecule 66: Exosome complex component SKI6



• Molecule 67: Exosome complex component RRP43

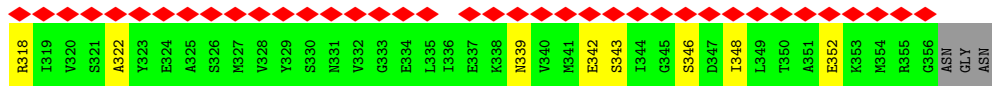
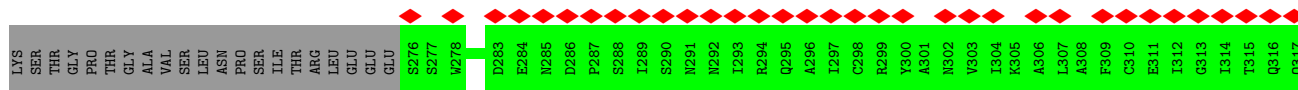


• Molecule 68: Exosome complex component RRP46

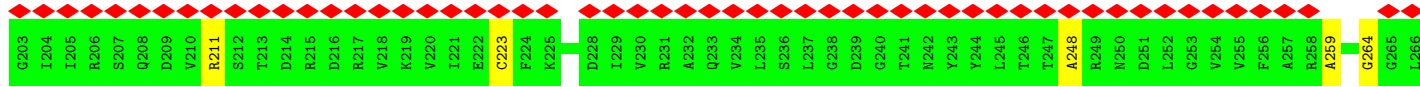
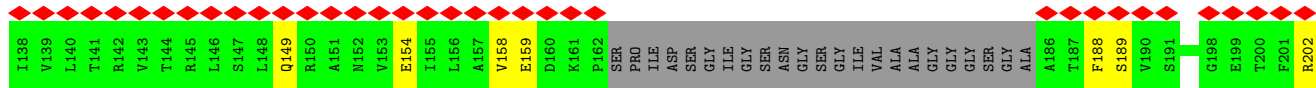
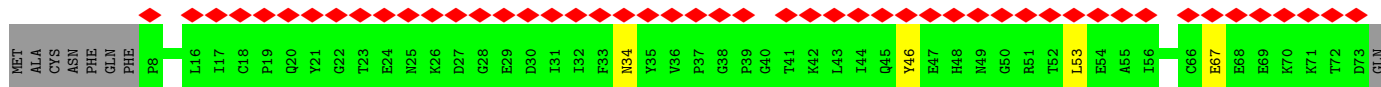


• Molecule 69: Exosome complex component RRP42

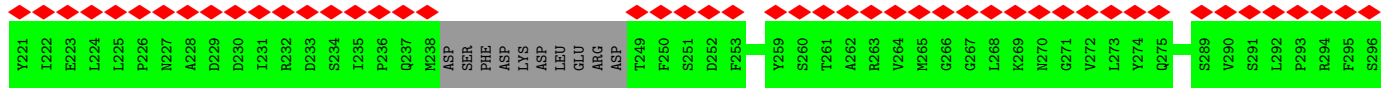
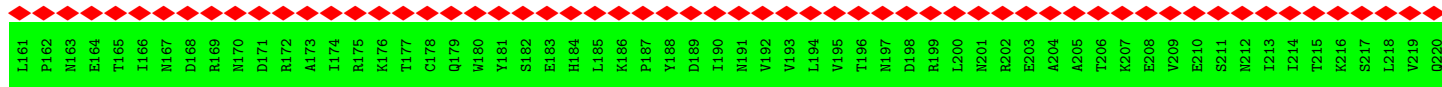
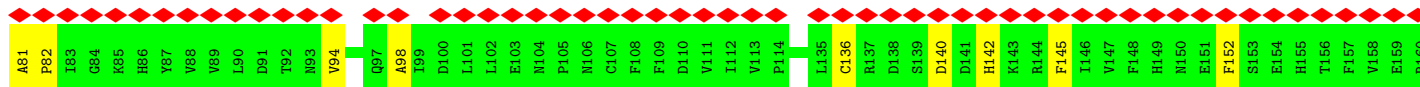
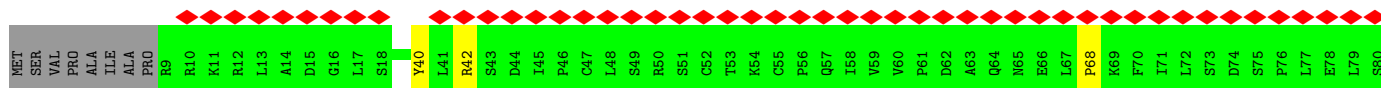
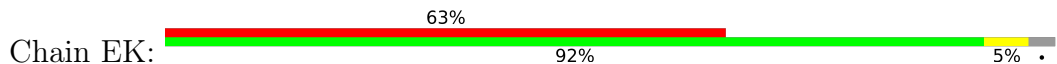




• Molecule 73: Exosome complex component CSL4



• Molecule 74: Exosome complex exonuclease DIS3









## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	35320	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	44	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.473	Depositor
Minimum map value	-0.263	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.008	Depositor
Recommended contour level	0.01	Depositor
Map size (Å)	571.86, 571.86, 571.86	wwPDB
Map dimensions	540, 540, 540	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.059, 1.059, 1.059	Depositor

## 5 Model quality i

### 5.1 Standard geometry i

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

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	CA	0.76	0/1917	0.66	0/2588
1	CB	0.38	0/1815	0.54	1/2448 (0.0%)
2	DA	0.62	0/1937	0.62	0/2593
3	UA	0.65	1/6465 (0.0%)	0.63	2/8752 (0.0%)
4	UB	0.30	0/4158	0.45	0/5607
5	UC	0.69	0/699	0.63	1/919 (0.1%)
6	UD	0.31	0/5369	0.52	1/7272 (0.0%)
7	UE	0.39	0/3840	0.52	0/5208
8	UF	0.52	0/2538	0.56	1/3405 (0.0%)
9	UG	0.64	1/3796 (0.0%)	0.65	1/5126 (0.0%)
10	UH	0.24	0/2773	0.49	0/3798
11	UI	0.24	0/735	0.50	0/987
12	UJ	0.39	0/9111	0.53	1/12323 (0.0%)
13	UK	0.36	0/1869	0.52	0/2472
14	UL	0.43	0/6324	0.57	2/8546 (0.0%)
15	UM	0.43	0/6071	0.59	1/8218 (0.0%)
16	UN	0.58	0/1697	0.58	0/2284
17	UO	0.31	0/3993	0.55	1/5413 (0.0%)
18	UP	0.31	0/499	0.57	0/659
19	UQ	0.30	0/6688	0.50	0/9062
20	UR	0.44	0/3875	0.56	0/5254
21	US	0.26	0/3667	0.45	0/5001
22	UT	0.49	0/19132	0.61	1/25831 (0.0%)
23	UU	0.53	0/7059	0.56	0/9536
24	UV	0.39	0/8962	0.51	0/12120
25	UX	0.78	0/1353	0.72	2/1819 (0.1%)
26	CD	0.55	0/3041	0.57	1/4098 (0.0%)
27	CE	0.38	0/3364	0.55	1/4539 (0.0%)
28	CF	0.63	0/928	0.79	3/1262 (0.2%)
28	CG	0.63	0/928	0.79	3/1262 (0.2%)
29	CH	0.61	1/3809 (0.0%)	0.59	1/5128 (0.0%)
30	CI	0.45	0/1494	0.60	0/2008

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
31	CJ	0.53	0/2118	0.62	0/2855
32	CK	0.48	0/1808	0.62	3/2424 (0.1%)
33	CL	0.58	0/6691	0.61	1/9000 (0.0%)
34	CM	0.50	0/2832	0.58	1/3825 (0.0%)
35	CN	0.38	0/1909	0.51	0/2571
36	JD	0.33	0/6634	0.53	0/8927
37	JF	0.26	0/1727	0.51	1/2329 (0.0%)
37	JG	0.29	0/1828	0.51	1/2470 (0.0%)
38	JH	0.23	0/1293	0.36	0/1801
39	JI	0.23	0/1313	0.36	0/1830
40	JL	0.32	0/2305	0.51	0/3116
41	JM	0.40	0/1151	0.56	0/1535
42	JP	0.87	5/3844 (0.1%)	0.72	6/5174 (0.1%)
43	Db	0.63	0/620	0.62	0/838
44	JJ	0.55	0/1600	0.62	0/2154
45	DE	0.89	0/1991	0.69	0/2683
46	DF	0.49	0/1690	0.56	0/2285
47	DG	0.53	0/1779	0.60	0/2379
48	DH	0.56	0/1383	0.64	0/1863
49	DI	0.67	0/1422	0.63	0/1899
50	DJ	0.82	0/1519	0.70	1/2035 (0.0%)
51	DL	0.83	0/1155	0.63	1/1557 (0.1%)
52	DN	0.65	0/1215	0.61	0/1638
53	DO	0.61	0/933	0.65	0/1256
54	DQ	0.56	0/986	0.58	0/1330
55	DS	0.28	0/871	0.58	0/1171
56	DT	0.35	0/1130	0.57	0/1517
57	DW	0.92	0/1038	0.74	0/1395
58	DX	0.65	0/1133	0.68	1/1510 (0.1%)
59	DY	0.77	0/1087	0.60	0/1449
60	Dc	0.55	0/499	0.62	0/670
61	D2	0.33	0/1946	0.79	0/3024
62	D3	1.26	54/33586 (0.2%)	1.01	49/52290 (0.1%)
63	D4	0.67	0/5263	0.86	2/8171 (0.0%)
64	EA	0.77	0/405	1.53	6/625 (1.0%)
65	EB	0.47	0/1474	0.57	0/2050
66	EC	0.47	0/1198	0.58	0/1666
67	ED	0.43	0/1569	0.62	0/2179
68	EE	0.46	0/1109	0.61	0/1545
69	EF	0.42	0/1319	0.60	0/1839
70	EG	0.45	0/1055	0.59	0/1462
71	EH	0.45	0/1169	0.64	0/1626
72	EI	0.44	0/1437	0.62	0/1992

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
73	EJ	0.40	0/1087	0.62	0/1504
74	EK	0.39	0/4818	0.57	0/6720
75	EN	0.40	0/4760	0.58	0/6629
All	All	0.65	62/249605 (0.0%)	0.67	97/346346 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	DA	0	1
9	UG	0	2
10	UH	0	3
14	UL	0	1
15	UM	0	1
17	UO	0	1
22	UT	0	2
25	UX	0	1
26	CD	0	1
36	JD	0	1
42	JP	0	2
44	JJ	0	1
51	DL	0	1
59	DY	0	1
66	EC	0	1
67	ED	0	3
68	EE	0	1
69	EF	0	1
70	EG	0	2
72	EI	0	1
73	EJ	0	1
75	EN	0	3
All	All	0	32

All (62) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
42	JP	380	TRP	CB-CG	-6.84	1.38	1.50
3	UA	422	PHE	CB-CG	-6.75	1.39	1.51
62	D3	385	A	N9-C4	-6.50	1.33	1.37
62	D3	407	A	N9-C4	-6.26	1.34	1.37

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
62	D3	538	A	N9-C4	-6.21	1.34	1.37
62	D3	103	A	N3-C4	-6.16	1.31	1.34
62	D3	55	A	N9-C4	-6.05	1.34	1.37
62	D3	460	A	N9-C4	-6.05	1.34	1.37
62	D3	461	G	C5-C4	-6.03	1.34	1.38
62	D3	442	C	N1-C6	-6.01	1.33	1.37
62	D3	387	A	N7-C5	-6.00	1.35	1.39
62	D3	461	G	N3-C4	-5.93	1.31	1.35
62	D3	468	A	C5-C4	-5.91	1.34	1.38
62	D3	41	A	N9-C4	-5.79	1.34	1.37
62	D3	477	A	N9-C4	-5.78	1.34	1.37
29	CH	552	TRP	CB-CG	-5.78	1.39	1.50
42	JP	139	CYS	CB-SG	-5.73	1.72	1.81
62	D3	443	C	N1-C6	-5.72	1.33	1.37
62	D3	865	A	N9-C4	-5.71	1.34	1.37
62	D3	109	G	C5-C4	-5.71	1.34	1.38
62	D3	460	A	C5-C4	-5.70	1.34	1.38
62	D3	1097	U	C2-N3	-5.68	1.33	1.37
62	D3	468	A	N3-C4	-5.64	1.31	1.34
62	D3	473	A	N9-C4	-5.64	1.34	1.37
62	D3	471	A	N9-C4	-5.56	1.34	1.37
62	D3	599	A	N9-C4	-5.55	1.34	1.37
62	D3	525	A	N7-C5	-5.51	1.35	1.39
62	D3	956	C	N1-C6	-5.47	1.33	1.37
62	D3	769	A	N7-C5	-5.42	1.35	1.39
62	D3	55	A	N3-C4	-5.39	1.31	1.34
42	JP	59	VAL	CB-CG1	-5.38	1.41	1.52
62	D3	449	C	N1-C6	-5.32	1.33	1.37
62	D3	362	G	C5-C4	-5.32	1.34	1.38
62	D3	383	G	C5-C4	-5.31	1.34	1.38
62	D3	448	C	N1-C6	-5.31	1.33	1.37
62	D3	445	A	N9-C4	-5.28	1.34	1.37
62	D3	461	G	C6-N1	-5.27	1.35	1.39
62	D3	443	C	N3-C4	-5.27	1.30	1.33
62	D3	458	G	C6-N1	-5.26	1.35	1.39
62	D3	770	A	C5-C4	-5.24	1.35	1.38
62	D3	109	G	N9-C8	-5.23	1.34	1.37
62	D3	939	A	N9-C4	-5.22	1.34	1.37
42	JP	35	PHE	CA-CB	-5.21	1.42	1.53
62	D3	386	G	C5-C4	-5.20	1.34	1.38
62	D3	460	A	N3-C4	-5.20	1.31	1.34
62	D3	363	G	C5-C4	-5.19	1.34	1.38

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
62	D3	444	C	N3-C4	-5.17	1.30	1.33
62	D3	169	A	N9-C4	-5.16	1.34	1.37
62	D3	461	G	C2-N3	-5.15	1.28	1.32
62	D3	1068	C	N1-C6	-5.15	1.34	1.37
62	D3	385	A	C6-N1	-5.11	1.31	1.35
62	D3	375	U	N1-C2	-5.10	1.33	1.38
62	D3	59	C	N1-C6	-5.09	1.34	1.37
62	D3	647	G	N9-C4	-5.07	1.33	1.38
62	D3	108	A	N9-C4	-5.06	1.34	1.37
62	D3	37	U	N1-C2	-5.05	1.34	1.38
42	JP	95	TRP	CB-CG	-5.05	1.41	1.50
9	UG	139	TRP	CB-CG	-5.03	1.41	1.50
62	D3	245	U	N1-C2	-5.03	1.34	1.38
62	D3	458	G	N1-C2	-5.02	1.33	1.37
62	D3	966	A	N3-C4	-5.01	1.31	1.34
62	D3	1069	A	N9-C4	-5.00	1.34	1.37

All (97) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
64	EA	167	U	N1-C2-O2	13.97	132.58	122.80
64	EA	167	U	N3-C2-O2	-11.26	114.32	122.20
64	EA	167	U	C2-N1-C1'	11.20	131.14	117.70
62	D3	849	C	OP2-P-O3'	-11.15	80.68	105.20
62	D3	850	A	OP1-P-OP2	9.95	134.53	119.60
62	D3	453	U	C2-N1-C1'	9.83	129.50	117.70
62	D3	849	C	OP1-P-O3'	-9.69	83.88	105.20
62	D3	753	A	O5'-P-OP2	-8.81	97.77	105.70
64	EA	167	U	C6-N1-C1'	-8.23	109.68	121.20
62	D3	474	A	O4'-C1'-N9	8.19	114.75	108.20
25	UX	152	ILE	CG1-CB-CG2	-8.02	93.77	111.40
32	CK	529	ARG	NE-CZ-NH1	-7.70	116.45	120.30
28	CG	31	ARG	CA-CB-CG	-7.57	96.74	113.40
28	CF	31	ARG	CA-CB-CG	-7.56	96.77	113.40
62	D3	647	G	N3-C4-N9	-7.35	121.59	126.00
62	D3	647	G	N3-C4-C5	7.30	132.25	128.60
62	D3	453	U	N3-C2-O2	-7.25	117.12	122.20
62	D3	453	U	N1-C2-O2	7.23	127.86	122.80
62	D3	453	U	C6-N1-C1'	-7.18	111.14	121.20
62	D3	794	U	N1-C2-O2	7.17	127.82	122.80
42	JP	374	LEU	CA-CB-CG	7.12	131.68	115.30
62	D3	1097	U	N1-C2-O2	7.03	127.72	122.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
62	D3	794	U	C2-N1-C1'	6.88	125.96	117.70
42	JP	269	TRP	C-N-CA	-6.83	104.64	121.70
28	CF	31	ARG	CG-CD-NE	-6.67	97.78	111.80
28	CG	31	ARG	CG-CD-NE	-6.65	97.84	111.80
62	D3	36	C	N1-C2-O2	-6.62	114.93	118.90
62	D3	1097	U	N3-C2-O2	-6.61	117.58	122.20
62	D3	618	U	C2-N1-C1'	6.50	125.49	117.70
62	D3	75	U	C2-N1-C1'	6.28	125.23	117.70
62	D3	959	U	N3-C2-O2	-6.28	117.81	122.20
3	UA	168	LEU	CA-CB-CG	-6.24	100.95	115.30
29	CH	268	LEU	C-N-CA	-6.22	106.15	121.70
51	DL	105	LYS	CD-CE-NZ	-6.19	97.47	111.70
42	JP	356	TYR	CB-CG-CD1	-6.13	117.32	121.00
62	D3	618	U	N1-C2-O2	6.05	127.03	122.80
27	CE	39	LEU	CA-CB-CG	-6.04	101.41	115.30
42	JP	83	LEU	CA-CB-CG	6.00	129.09	115.30
62	D3	638	U	N3-C2-O2	-5.96	118.03	122.20
62	D3	351	C	N1-C2-O2	-5.96	115.32	118.90
6	UD	225	LEU	CA-CB-CG	5.86	128.77	115.30
62	D3	1097	U	C2-N1-C1'	5.83	124.70	117.70
37	JG	124	VAL	C-N-CA	5.83	136.27	121.70
62	D3	1064	G	O5'-P-OP2	-5.81	100.47	105.70
32	CK	529	ARG	CG-CD-NE	-5.81	99.60	111.80
62	D3	381	C	C6-N1-C2	-5.77	117.99	120.30
28	CG	31	ARG	CB-CG-CD	5.75	126.56	111.60
28	CF	31	ARG	CB-CG-CD	5.74	126.52	111.60
62	D3	638	U	C2-N1-C1'	5.74	124.59	117.70
63	D4	107	C	C2-N1-C1'	5.73	125.10	118.80
62	D3	422	G	O4'-C1'-N9	5.70	112.76	108.20
22	UT	1011	LEU	CB-CG-CD2	-5.68	101.35	111.00
50	DJ	3	ARG	C-N-CA	-5.63	107.62	121.70
62	D3	1078	C	N1-C2-O2	-5.62	115.53	118.90
62	D3	402	C	C5-C6-N1	-5.58	118.21	121.00
64	EA	161	U	C5-C6-N1	5.57	125.48	122.70
5	UC	544	ILE	CG1-CB-CG2	-5.57	99.16	111.40
26	CD	7	LEU	CA-CB-CG	5.55	128.06	115.30
62	D3	901	G	C4-C5-N7	5.53	113.01	110.80
15	UM	401	LEU	CA-C-N	5.52	129.35	117.20
3	UA	123	LYS	C-N-CA	-5.51	107.94	121.70
64	EA	167	U	C5-C6-N1	5.51	125.45	122.70
62	D3	618	U	C6-N1-C1'	-5.49	113.52	121.20
42	JP	4	LYS	CD-CE-NZ	-5.41	99.25	111.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
62	D3	1096	C	C5-C6-N1	5.39	123.70	121.00
62	D3	638	U	N1-C2-O2	5.39	126.57	122.80
62	D3	901	G	C6-C5-N7	-5.39	127.17	130.40
34	CM	280	LEU	CA-CB-CG	5.38	127.67	115.30
62	D3	75	U	N1-C2-O2	5.37	126.56	122.80
62	D3	402	C	C2-N1-C1'	-5.32	112.95	118.80
33	CL	141	LEU	CA-CB-CG	5.31	127.51	115.30
58	DX	69	ARG	NE-CZ-NH2	-5.30	117.65	120.30
62	D3	655	G	N3-C4-N9	5.28	129.17	126.00
14	UL	146	ILE	CG1-CB-CG2	-5.27	99.81	111.40
62	D3	655	G	C4-N9-C1'	5.27	133.35	126.50
1	CB	236	MET	CB-CG-SD	-5.26	96.63	112.40
62	D3	864	U	N3-C2-O2	-5.24	118.53	122.20
62	D3	545	A	P-O3'-C3'	5.23	125.97	119.70
25	UX	128	LEU	CA-CB-CG	5.22	127.30	115.30
62	D3	794	U	C6-N1-C1'	-5.21	113.91	121.20
62	D3	655	G	C8-N9-C1'	-5.20	120.24	127.00
8	UF	278	MET	CA-CB-CG	5.19	122.12	113.30
42	JP	356	TYR	CB-CG-CD2	5.17	124.10	121.00
62	D3	656	G	C4-N9-C1'	-5.17	119.78	126.50
9	UG	449	ILE	C-N-CA	-5.16	111.46	122.30
62	D3	694	U	N1-C2-O2	5.15	126.40	122.80
62	D3	1063	U	C2-N1-C1'	5.14	123.87	117.70
62	D3	385	A	C2-N3-C4	-5.10	108.05	110.60
37	JF	91	ILE	CG1-CB-CG2	-5.09	100.21	111.40
62	D3	93	A	N1-C6-N6	-5.07	115.56	118.60
62	D3	1097	U	C6-N1-C1'	-5.05	114.13	121.20
63	D4	107	C	C5-C6-N1	5.04	123.52	121.00
14	UL	137	ILE	CG1-CB-CG2	-5.03	100.33	111.40
12	UJ	718	ARG	NE-CZ-NH2	-5.02	117.79	120.30
17	UO	415	LEU	CA-CB-CG	5.01	126.82	115.30
62	D3	753	A	C8-N9-C4	5.01	107.80	105.80
32	CK	529	ARG	NE-CZ-NH2	5.00	122.80	120.30

There are no chirality outliers.

All (32) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
26	CD	240	LEU	Peptide
2	DA	11	LYS	Peptide
51	DL	78	THR	Peptide
59	DY	33	ALA	Peptide

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Group
66	EC	166	TYR	Peptide
67	ED	335	ASP	Peptide
67	ED	352	ALA	Peptide
67	ED	54	ILE	Peptide
68	EE	188	GLU	Peptide
69	EF	136	HIS	Peptide
70	EG	141	LEU	Peptide
70	EG	216	ASP	Peptide
72	EI	92	ASN	Peptide
73	EJ	149	GLN	Peptide
75	EN	541	SER	Peptide
75	EN	573	LYS	Peptide
75	EN	615	VAL	Peptide
36	JD	1018	LYS	Peptide
44	JJ	68	SER	Peptide
42	JP	301	PHE	Peptide
42	JP	302	LYS	Peptide
9	UG	199	LEU	Peptide
9	UG	452	VAL	Peptide
10	UH	266	ILE	Peptide
10	UH	308	PHE	Peptide
10	UH	74	ILE	Peptide
14	UL	386	GLU	Peptide
15	UM	567	VAL	Peptide
17	UO	278	ASP	Peptide
22	UT	1683	ARG	Peptide
22	UT	1926	PHE	Peptide
25	UX	51	LEU	Peptide

## 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	CA	1881	0	1928	105	0
1	CB	1782	0	1826	100	0
2	DA	1912	0	2023	89	0
3	UA	6322	0	6223	242	0
4	UB	4105	0	3846	152	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	UC	694	0	742	31	0
6	UD	5269	0	5281	267	0
7	UE	3772	0	3806	189	0
8	UF	2487	0	2533	99	0
9	UG	3718	0	3721	140	0
10	UH	2771	0	1817	75	0
11	UI	723	0	770	37	0
12	UJ	8961	0	9273	378	0
13	UK	1845	0	1926	100	0
14	UL	6199	0	6221	306	0
15	UM	5970	0	6009	358	0
16	UN	1667	0	1658	67	0
17	UO	3911	0	3906	284	0
18	UP	495	0	561	40	0
19	UQ	6557	0	6489	338	0
20	UR	3791	0	3772	200	0
21	US	3587	0	3200	130	0
22	UT	18789	0	19126	887	0
23	UU	6922	0	6886	301	0
24	UV	8753	0	8867	421	0
25	UX	1330	0	1416	59	0
26	CD	2994	0	3018	101	0
27	CE	3326	0	3406	161	0
28	CF	916	0	964	54	0
28	CG	916	0	964	50	0
29	CH	3736	0	3756	124	0
30	CI	1468	0	1519	73	0
31	CJ	2081	0	2112	107	0
32	CK	1789	0	1801	99	0
33	CL	6551	0	6707	284	0
34	CM	2781	0	2878	109	0
35	CN	1868	0	1845	92	0
36	JD	6509	0	6724	354	0
37	JF	1701	0	1767	78	0
37	JG	1799	0	1872	92	0
38	JH	1295	0	570	3	0
39	JI	1314	0	610	5	0
40	JL	2262	0	2330	88	0
41	JM	1131	0	1161	62	0
42	JP	3765	0	3714	145	0
43	Db	610	0	630	0	0
44	JJ	1573	0	1650	70	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
45	DE	1950	0	2035	57	0
46	DF	1669	0	1724	53	0
47	DG	1755	0	1846	70	0
48	DH	1361	0	1437	52	0
49	DI	1399	0	1431	61	0
50	DJ	1494	0	1573	47	0
51	DL	1129	0	1196	31	0
52	DN	1192	0	1255	32	0
53	DO	922	0	946	44	0
54	DQ	969	0	1025	37	0
55	DS	861	0	896	38	0
56	DT	1112	0	1124	40	0
57	DW	1021	0	1060	29	0
58	DX	1115	0	1191	53	0
59	DY	1073	0	1132	25	0
60	Dc	497	0	535	0	0
61	D2	1741	0	876	50	0
62	D3	30042	0	15140	753	0
63	D4	4720	0	2397	161	0
64	EA	366	0	184	1	0
65	EB	1475	0	658	14	0
66	EC	1199	0	527	9	0
67	ED	1571	0	699	10	0
68	EE	1107	0	499	7	0
69	EF	1317	0	575	6	0
70	EG	1058	0	478	4	0
71	EH	1170	0	528	7	0
72	EI	1440	0	648	7	0
73	EJ	1091	0	500	12	0
74	EK	4818	0	2108	32	0
75	EN	4762	0	2107	57	0
76	Db	1	0	0	0	0
76	EK	1	0	0	0	0
76	UX	1	0	0	0	0
77	CL	32	0	12	3	0
78	CL	1	0	0	0	0
78	EK	1	0	0	0	0
All	All	242031	0	212166	8401	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 19.

All (8401) 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)
14:UL:671:PHE:HA	14:UL:684:TRP:O	1.25	1.32
3:UA:77:GLY:HA3	3:UA:95:PHE:O	1.27	1.28
9:UG:132:GLY:HA3	9:UG:150:LEU:O	1.33	1.24
23:UU:228:GLY:HA3	23:UU:246:ILE:O	1.12	1.22
59:DY:29:HIS:O	59:DY:67:GLY:HA2	1.36	1.21
17:UO:191:GLY:HA3	17:UO:211:HIS:O	1.07	1.19
74:EK:94:VAL:O	74:EK:98:ALA:HB3	1.44	1.15
20:UR:382:GLY:HA3	20:UR:400:ILE:O	1.43	1.15
33:CL:964:ALA:O	33:CL:975:GLU:HA	1.45	1.15
14:UL:673:VAL:HA	14:UL:682:ARG:O	1.45	1.15
10:UH:264:SER:O	10:UH:267:ILE:HA	1.51	1.10
17:UO:191:GLY:CA	17:UO:211:HIS:O	2.03	1.06
9:UG:132:GLY:CA	9:UG:150:LEU:O	2.05	1.04
20:UR:486:SER:OG	28:CF:89:ARG:NH2	1.92	1.02
20:UR:382:GLY:CA	20:UR:400:ILE:O	2.09	1.01
75:EN:616:ILE:O	75:EN:618:VAL:N	1.93	1.00
2:DA:145:LYS:HB2	2:DA:149:GLN:HG3	1.43	1.00
19:UQ:360:MET:HB3	19:UQ:368:ASP:O	1.59	1.00
23:UU:228:GLY:CA	23:UU:246:ILE:O	2.08	0.99
1:CA:122:ARG:NH1	1:CA:140:GLU:OE2	1.95	0.99
36:JD:613:ILE:O	36:JD:617:LEU:HB2	1.63	0.98
7:UE:120:ILE:HG13	7:UE:151:LEU:HD23	1.42	0.98
31:CJ:173:ARG:HA	31:CJ:176:ILE:HD12	1.43	0.98
10:UH:72:THR:O	10:UH:75:ILE:HA	1.62	0.97
3:UA:758:ILE:HD11	3:UA:798:TRP:HZ2	1.26	0.96
37:JF:167:ILE:O	37:JF:171:LEU:HB2	1.65	0.96
14:UL:671:PHE:CA	14:UL:684:TRP:O	2.14	0.96
21:US:495:MET:O	21:US:499:LEU:HB2	1.66	0.95
22:UT:1228:LEU:HD13	22:UT:1271:LEU:HD11	1.46	0.94
35:CN:77:LYS:HE2	35:CN:147:LEU:HD11	1.49	0.94
21:US:386:LEU:O	21:US:390:SER:HB2	1.66	0.94
28:CG:18:GLN:NE2	29:CH:398:CYS:SG	2.41	0.93
30:CI:39:GLN:HE21	30:CI:43:ASP:HB2	1.34	0.92
61:D2:281:G:H2'	61:D2:282:G:H8	1.33	0.92
62:D3:575:C:HO2'	62:D3:576:G:H8	0.97	0.92
3:UA:793:GLU:OE2	23:UU:721:LEU:N	2.03	0.91
15:UM:240:ASN:ND2	24:UV:636:GLU:OE1	2.04	0.91
74:EK:42:ARG:CB	74:EK:152:PHE:O	2.18	0.91
15:UM:787:PRO:HG3	32:CK:495:ILE:HD11	1.52	0.91
7:UE:547:LEU:HD23	17:UO:488:LYS:HD2	1.53	0.90
24:UV:828:ASP:O	24:UV:837:ILE:HB	1.70	0.90
74:EK:94:VAL:O	74:EK:98:ALA:CB	2.19	0.90

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:194:ARG:O	9:UG:208:ALA:O	1.88	0.90
74:EK:617:PRO:HA	74:EK:648:SER:CB	2.02	0.90
10:UH:341:LEU:HA	10:UH:358:VAL:O	1.71	0.90
22:UT:1655:ARG:NH2	22:UT:1744:GLU:OE2	2.05	0.90
55:DS:65:GLU:HA	55:DS:68:ARG:HD3	1.53	0.90
62:D3:976:G:H1	62:D3:1023:A:HO2'	1.17	0.90
36:JD:766:THR:HA	36:JD:812:ARG:HH21	1.37	0.89
12:UJ:715:HIS:CD2	12:UJ:718:ARG:HH22	1.91	0.89
50:DJ:18:PRO:O	50:DJ:23:ARG:NH2	2.05	0.89
12:UJ:25:ARG:NH2	42:JP:11:ASP:OD2	2.06	0.89
27:CE:361:ARG:NH2	63:D4:85:G:N7	2.20	0.89
20:UR:486:SER:HG	28:CF:89:ARG:HH22	1.18	0.89
17:UO:27:TRP:HA	17:UO:30:TYR:HD2	1.38	0.88
37:JG:167:ILE:O	37:JG:171:LEU:HB2	1.73	0.88
9:UG:257:SER:HG	9:UG:259:TRP:HE1	1.16	0.88
23:UU:510:LEU:HD21	23:UU:514:ASN:HA	1.52	0.88
15:UM:286:GLU:HB3	15:UM:288:LEU:HD13	1.56	0.88
19:UQ:323:LEU:O	19:UQ:331:GLN:HA	1.73	0.88
22:UT:1652:ASP:OD1	22:UT:1655:ARG:NH1	2.06	0.88
48:DH:31:SER:O	48:DH:35:LYS:NZ	2.05	0.88
22:UT:1341:GLU:OE1	22:UT:1389:LYS:NZ	2.05	0.87
9:UG:552:ARG:NH2	24:UV:791:LYS:O	2.07	0.87
37:JG:70:CYS:HB2	37:JG:84:ILE:HG23	1.55	0.87
9:UG:238:MET:HG3	9:UG:249:LEU:HD23	1.56	0.87
20:UR:488:SER:HB3	28:CF:89:ARG:HH11	1.38	0.87
48:DH:44:LYS:HG3	48:DH:63:PRO:HD3	1.54	0.87
62:D3:1484:G:N2	62:D3:1606:C:O2	2.08	0.87
7:UE:498:LEU:HA	7:UE:501:TRP:HD1	1.40	0.86
62:D3:657:U:O2	62:D3:677:G:N1	2.08	0.86
35:CN:259:ARG:NH2	52:DN:83:GLU:OE1	2.09	0.86
22:UT:957:LYS:HG3	22:UT:959:PRO:HD2	1.56	0.86
22:UT:1381:LYS:HE2	22:UT:1386:GLU:HG3	1.58	0.86
63:D4:154:C:H42	63:D4:159:C:H42	1.23	0.86
3:UA:510:GLU:OE2	46:DF:83:ARG:NH2	2.08	0.86
22:UT:12:LYS:NZ	62:D3:60:U:OP2	2.08	0.86
62:D3:1119:G:N2	63:D4:6:C:O2	2.07	0.86
19:UQ:118:VAL:HB	19:UQ:130:LYS:HB2	1.56	0.86
12:UJ:1370:TYR:HA	12:UJ:1373:ILE:HG12	1.56	0.86
12:UJ:408:ILE:HA	12:UJ:412:GLU:HB2	1.56	0.85
31:CJ:77:TYR:O	31:CJ:81:SER:HB3	1.76	0.85
37:JF:112:VAL:HB	37:JF:124:VAL:HB	1.55	0.85

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DS:41:ARG:NH2	62:D3:1564:U:O3'	2.08	0.85
61:D2:89:C:H5''	61:D2:90:G:H5'	1.57	0.85
62:D3:6:G:N2	62:D3:18:C:O2	2.08	0.85
62:D3:655:G:N2	62:D3:656:G:O6	2.10	0.85
19:UQ:319:LYS:NZ	19:UQ:478:ASN:O	2.09	0.85
28:CF:111:LYS:NZ	28:CF:115:TYR:OH	2.10	0.85
51:DL:79:LYS:NZ	62:D3:346:G:OP2	2.09	0.85
17:UO:117:LEU:HD21	46:DF:124:LEU:HD21	1.58	0.85
17:UO:125:HIS:HB3	17:UO:145:ASP:HB2	1.59	0.85
62:D3:1666:U:H3	62:D3:1735:U:H3	1.24	0.85
19:UQ:875:MET:O	19:UQ:879:ILE:HB	1.75	0.84
12:UJ:81:LEU:HD12	12:UJ:86:GLN:HE22	1.40	0.84
22:UT:1477:LYS:NZ	22:UT:1479:ASN:OD1	2.10	0.84
65:EB:166:ASP:CB	65:EB:182:ARG:CB	2.56	0.84
15:UM:188:GLU:OE2	24:UV:657:ARG:NH2	2.10	0.84
30:CI:56:ARG:HH22	32:CK:440:LEU:HD11	1.41	0.84
14:UL:540:SER:HA	14:UL:581:ILE:HD11	1.58	0.84
22:UT:898:LYS:NZ	22:UT:944:SER:OG	2.11	0.84
33:CL:215:TYR:HB2	33:CL:220:ILE:HD11	1.60	0.84
49:DI:172:ARG:NH1	62:D3:330:G:OP2	2.11	0.84
22:UT:327:GLY:HA2	22:UT:330:ILE:HB	1.59	0.83
28:CG:111:LYS:NZ	28:CG:115:TYR:OH	2.10	0.83
28:CF:32:GLN:HE21	28:CF:105:ASN:HB3	1.43	0.83
4:UB:115:LYS:NZ	34:CM:67:ILE:O	2.10	0.83
7:UE:84:GLU:OE2	7:UE:86:TRP:NE1	2.09	0.83
14:UL:7:ARG:NH2	14:UL:70:GLY:O	2.11	0.83
12:UJ:1566:ILE:HG22	12:UJ:1568:GLU:H	1.41	0.83
28:CG:32:GLN:HE21	28:CG:105:ASN:HB3	1.43	0.83
8:UF:289:HIS:ND1	27:CE:216:SER:OG	2.10	0.83
36:JD:1092:VAL:HG11	36:JD:1217:PHE:HE2	1.44	0.83
62:D3:775:G:O6	62:D3:785:U:N3	2.12	0.83
15:UM:749:ASN:OD1	15:UM:750:ALA:N	2.12	0.83
12:UJ:1667:VAL:HG23	12:UJ:1710:ALA:HA	1.61	0.83
35:CN:63:ASN:OD1	35:CN:66:HIS:ND1	2.11	0.83
62:D3:1671:A:N6	62:D3:1730:A:O2'	2.12	0.83
12:UJ:712:ASN:HB2	12:UJ:715:HIS:ND1	1.94	0.82
24:UV:1205:LYS:N	24:UV:1213:ILE:O	2.10	0.82
33:CL:72:VAL:HG12	33:CL:137:LEU:HB3	1.60	0.82
8:UF:142:THR:HA	8:UF:175:ASN:HD21	1.43	0.82
22:UT:414:LEU:HB3	22:UT:447:LYS:HD3	1.61	0.82
23:UU:277:ASP:HB2	23:UU:284:ILE:HD11	1.62	0.82

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:77:GLU:OE1	42:JP:1:MET:N	2.10	0.82
17:UO:358:GLN:O	17:UO:362:ARG:HB3	1.80	0.82
36:JD:1050:LYS:HE3	36:JD:1057:ASN:HD22	1.44	0.82
62:D3:444:C:N4	62:D3:459:G:OP2	2.11	0.82
6:UD:475:THR:HA	6:UD:490:SER:HA	1.62	0.82
37:JG:150:ILE:HG13	37:JG:160:LEU:HD12	1.61	0.82
22:UT:1563:ARG:HH12	22:UT:1624:THR:HG22	1.45	0.82
7:UE:342:ASP:HA	7:UE:350:LEU:HD22	1.60	0.81
33:CL:9:ARG:NH2	62:D3:620:A:OP1	2.12	0.81
74:EK:930:VAL:O	74:EK:934:GLY:HA2	1.80	0.81
24:UV:529:VAL:HA	24:UV:695:GLN:O	1.80	0.81
36:JD:928:VAL:HG23	36:JD:1045:LEU:HD11	1.61	0.81
62:D3:895:G:H1	62:D3:917:U:H3	1.28	0.81
12:UJ:1742:GLU:HA	12:UJ:1745:GLU:HG2	1.63	0.81
12:UJ:1763:PRO:O	12:UJ:1766:ARG:NH1	2.14	0.81
22:UT:2113:ASP:OD2	22:UT:2114:ASP:N	2.14	0.81
24:UV:656:ARG:NH1	24:UV:666:CYS:SG	2.53	0.81
34:CM:66:GLU:HB2	34:CM:75:ILE:HB	1.63	0.81
62:D3:1753:A:H2'	62:D3:1754:A:H8	1.43	0.81
65:EB:301:ASN:O	74:EK:505:ALA:O	1.98	0.81
4:UB:52:ARG:HD3	32:CK:370:ARG:HH12	1.45	0.81
19:UQ:559:LYS:HG2	19:UQ:612:SER:HA	1.62	0.81
42:JP:311:VAL:HG12	42:JP:322:THR:HG22	1.63	0.81
47:DG:171:LYS:NZ	62:D3:68:A:OP2	2.13	0.81
6:UD:427:ASN:HD21	18:UP:190:LEU:HD21	1.45	0.81
62:D3:4:C:O2	62:D3:20:G:N2	2.12	0.81
14:UL:643:ASP:HB2	14:UL:650:ILE:HD11	1.62	0.81
56:DT:86:ARG:NE	56:DT:90:PRO:O	2.13	0.81
22:UT:333:TRP:HB2	22:UT:373:THR:HG21	1.63	0.81
51:DL:105:LYS:NZ	62:D3:306:U:OP2	2.14	0.81
36:JD:507:LEU:HD11	36:JD:510:TYR:HB2	1.61	0.81
6:UD:354:LYS:O	6:UD:374:THR:HA	1.80	0.80
22:UT:1151:ILE:HD13	22:UT:1198:PHE:CD1	2.15	0.80
31:CJ:226:ASN:ND2	31:CJ:289:TYR:OH	2.14	0.80
50:DJ:17:ARG:HD2	50:DJ:18:PRO:HD2	1.63	0.80
33:CL:45:ARG:NH2	62:D3:44:U:OP2	2.14	0.80
22:UT:1779:VAL:HG12	22:UT:1780:ARG:H	1.44	0.80
4:UB:751:THR:HA	4:UB:754:GLU:HG2	1.62	0.80
29:CH:234:GLY:O	29:CH:259:LYS:NZ	2.12	0.80
29:CH:241:THR:HG21	29:CH:285:SER:HA	1.63	0.80
62:D3:1695:G:N2	62:D3:1706:C:O2	2.12	0.80

*Continued on next page...*



Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:UK:111:ARG:HE	13:UK:212:LYS:HB2	1.45	0.80
17:UO:237:TRP:HA	17:UO:244:LYS:HA	1.63	0.80
36:JD:362:TYR:O	36:JD:366:ASN:HB2	1.81	0.80
41:JM:108:LYS:HD3	41:JM:109:PRO:HD2	1.64	0.80
62:D3:6:G:N1	62:D3:18:C:N3	2.28	0.80
9:UG:386:PHE:O	42:JP:8:ARG:NH2	2.14	0.80
21:US:191:ILE:O	21:US:195:PHE:HB2	1.82	0.80
22:UT:1592:PRO:O	22:UT:1595:SER:O	1.98	0.80
2:DA:19:ARG:NH2	62:D3:898:A:OP2	2.14	0.80
47:DG:137:ARG:NH1	62:D3:144:U:O4	2.14	0.80
22:UT:2113:ASP:OD2	22:UT:2115:ALA:N	2.15	0.79
3:UA:516:SER:OG	3:UA:536:LYS:NZ	2.13	0.79
15:UM:445:ILE:HD12	15:UM:451:PRO:HA	1.64	0.79
19:UQ:36:ARG:HH11	19:UQ:93:LEU:HG	1.48	0.79
23:UU:879:GLU:HG3	23:UU:880:LEU:HD12	1.63	0.79
24:UV:372:GLN:NE2	24:UV:511:PHE:O	2.15	0.79
20:UR:516:THR:HG22	20:UR:517:THR:H	1.46	0.79
61:D2:281:G:H2'	61:D2:282:G:C8	2.17	0.79
32:CK:510:LYS:NZ	62:D3:1630:U:O4	2.15	0.79
7:UE:485:ALA:HB2	7:UE:526:LEU:HG	1.64	0.79
22:UT:2444:ARG:NH2	62:D3:829:A:OP2	2.15	0.79
24:UV:268:LEU:HB3	24:UV:294:LEU:HB2	1.63	0.79
53:DO:124:ASP:OD2	62:D3:885:G:N2	2.16	0.79
59:DY:10:ARG:NE	59:DY:26:ASP:OD2	2.13	0.79
31:CJ:86:PRO:O	31:CJ:113:ASN:ND2	2.16	0.79
36:JD:478:ARG:HA	36:JD:499:ARG:HH12	1.46	0.79
15:UM:179:LYS:O	44:JJ:69:LYS:NZ	2.16	0.79
15:UM:544:TYR:HB3	15:UM:587:GLN:HG2	1.63	0.79
17:UO:279:GLY:HA3	17:UO:298:PHE:O	1.83	0.79
25:UX:161:LYS:HG2	25:UX:172:LEU:HD21	1.65	0.79
6:UD:265:TRP:HA	6:UD:272:LEU:HA	1.65	0.79
36:JD:738:LEU:O	36:JD:741:LYS:NZ	2.15	0.79
41:JM:163:ARG:NH1	63:D4:312:U:H5''	1.98	0.78
62:D3:615:A:HO2'	62:D3:621:A:H61	1.29	0.78
33:CL:82:LYS:HG2	33:CL:119:GLU:HG3	1.65	0.78
26:CD:302:ASN:ND2	26:CD:397:SER:O	2.15	0.78
9:UG:123:THR:HG23	9:UG:124:HIS:HD2	1.48	0.78
23:UU:802:MET:O	36:JD:1212:TYR:OH	2.01	0.78
32:CK:516:SER:HB2	32:CK:519:GLU:HG3	1.65	0.78
36:JD:761:THR:HG22	36:JD:762:ASN:H	1.48	0.78
49:DI:56:ARG:HH22	62:D3:332:U:P	2.06	0.78

Continued on next page...



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:JD:1133:VAL:HG13	36:JD:1165:THR:HG23	1.64	0.78
14:UL:263:THR:HG1	14:UL:270:SER:N	1.81	0.78
15:UM:559:ILE:HB	15:UM:569:LYS:HB2	1.65	0.78
17:UO:27:TRP:HA	17:UO:30:TYR:CD2	2.19	0.78
17:UO:213:GLN:NE2	17:UO:233:ASN:OD1	2.16	0.78
25:UX:93:LYS:NZ	25:UX:95:ASN:OD1	2.17	0.78
34:CM:199:ARG:NH1	34:CM:232:GLY:O	2.15	0.78
53:DO:25:ASP:OD1	53:DO:26:THR:N	2.16	0.78
8:UF:167:ILE:HD11	16:UN:327:PHE:CD1	2.19	0.78
22:UT:874:LEU:HD21	22:UT:885:ARG:HH11	1.48	0.78
12:UJ:760:PHE:O	12:UJ:768:LYS:NZ	2.16	0.78
13:UK:59:ASN:ND2	30:CI:118:LEU:O	2.17	0.78
17:UO:192:LEU:H	17:UO:211:HIS:H	1.32	0.78
22:UT:4:GLN:N	62:D3:76:A:N7	2.32	0.78
13:UK:186:PRO:HA	13:UK:190:LEU:HD13	1.65	0.78
22:UT:1856:THR:HG22	42:JP:107:LYS:HE3	1.64	0.78
28:CF:5:ASN:OD1	28:CF:7:LYS:N	2.16	0.78
6:UD:205:CYS:SG	6:UD:211:ARG:NH1	2.57	0.77
19:UQ:495:ILE:HD11	19:UQ:509:THR:HB	1.66	0.77
28:CG:5:ASN:OD1	28:CG:7:LYS:N	2.16	0.77
74:EK:136:CYS:HA	74:EK:145:PHE:CB	2.14	0.77
7:UE:148:LEU:HA	7:UE:167:SER:HB3	1.65	0.77
19:UQ:694:LEU:O	19:UQ:698:VAL:C	2.23	0.77
32:CK:511:ASN:ND2	62:D3:1639:C:OP2	2.17	0.77
15:UM:585:ASN:ND2	15:UM:627:ASN:O	2.16	0.77
36:JD:1180:ASN:OD1	36:JD:1183:ARG:NH2	2.17	0.77
37:JF:44:VAL:HG12	37:JF:113:TYR:HB2	1.66	0.77
62:D3:777:C:N4	62:D3:783:G:O6	2.18	0.77
6:UD:640:ILE:HD11	6:UD:749:SER:HA	1.66	0.77
10:UH:308:PHE:O	10:UH:310:MET:N	2.16	0.77
22:UT:1641:GLN:OE1	22:UT:1644:ARG:NH2	2.16	0.77
33:CL:618:PHE:CE1	34:CM:274:LYS:HA	2.20	0.77
3:UA:451:ASP:OD1	30:CI:153:ASN:ND2	2.17	0.77
17:UO:133:HIS:CD2	17:UO:136:ASP:H	2.02	0.77
22:UT:1806:SER:OG	22:UT:1807:GLU:OE2	2.02	0.77
42:JP:196:THR:HG1	42:JP:204:TRP:HE1	1.33	0.77
62:D3:1698:G:N2	62:D3:1703:C:O2	2.15	0.77
4:UB:443:LYS:HB2	4:UB:448:PHE:HB2	1.66	0.77
29:CH:334:GLU:HG3	29:CH:352:PRO:HG2	1.66	0.77
62:D3:1495:C:O2	62:D3:1512:G:N2	2.15	0.77
2:DA:157:GLN:NE2	62:D3:1046:G:OP1	2.18	0.77

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:UO:415:LEU:O	17:UO:419:GLN:NE2	2.16	0.77
20:UR:242:ASN:ND2	20:UR:584:GLY:O	2.18	0.77
27:CE:324:LYS:NZ	63:D4:90:C:O2'	2.18	0.77
33:CL:225:ARG:NH1	62:D3:51:A:N1	2.29	0.77
35:CN:105:SER:OG	35:CN:194:ARG:NH2	2.17	0.77
36:JD:1211:CYS:SG	36:JD:1238:GLN:NE2	2.58	0.77
63:D4:160:G:H2'	63:D4:161:G:H8	1.49	0.77
8:UF:336:ASN:OD1	8:UF:340:GLN:NE2	2.16	0.77
22:UT:2071:PRO:O	22:UT:2076:ARG:NH1	2.18	0.77
37:JG:174:LYS:HG2	37:JG:200:GLU:HG3	1.67	0.77
59:DY:29:HIS:O	59:DY:67:GLY:CA	2.28	0.77
14:UL:795:ILE:O	14:UL:798:ASN:ND2	2.18	0.77
22:UT:2237:THR:HA	22:UT:2240:LEU:HD12	1.68	0.77
30:CI:32:VAL:HA	30:CI:35:THR:HG22	1.67	0.77
33:CL:290:ILE:HG12	33:CL:812:MET:HG2	1.66	0.77
7:UE:301:LEU:HD23	7:UE:317:LEU:HD11	1.66	0.76
7:UE:443:GLN:HE21	17:UO:252:ASN:HD21	1.33	0.76
13:UK:64:TYR:OH	30:CI:119:LYS:NZ	2.18	0.76
32:CK:350:THR:HG21	33:CL:975:GLU:HB3	1.67	0.76
45:DE:129:VAL:HG12	45:DE:139:VAL:HG12	1.67	0.76
6:UD:742:LEU:N	6:UD:755:ILE:O	2.12	0.76
7:UE:277:LYS:HG2	7:UE:324:ASN:HA	1.68	0.76
25:UX:4:ALA:HA	25:UX:8:ARG:HD3	1.67	0.76
33:CL:610:LYS:NZ	33:CL:612:VAL:O	2.17	0.76
33:CL:977:LYS:NZ	62:D3:1598:U:OP2	2.14	0.76
46:DF:26:ALA:HB3	54:DQ:28:LEU:HB3	1.67	0.76
57:DW:18:GLU:OE2	62:D3:1096:C:N4	2.17	0.76
12:UJ:778:SER:O	12:UJ:782:VAL:HB	1.85	0.76
12:UJ:1553:ARG:O	12:UJ:1557:ASP:HB2	1.85	0.76
13:UK:15:GLU:OE2	13:UK:30:LYS:NZ	2.13	0.76
14:UL:140:SER:OG	14:UL:142:ASP:OD1	2.02	0.76
31:CJ:164:GLN:NE2	31:CJ:260:GLU:OE1	2.18	0.76
36:JD:617:LEU:O	36:JD:755:ARG:NH1	2.19	0.76
24:UV:382:SER:O	24:UV:588:GLN:NE2	2.17	0.76
15:UM:689:ASP:OD2	32:CK:503:LYS:NZ	2.18	0.76
22:UT:30:PRO:O	22:UT:33:ASN:O	2.04	0.76
22:UT:2309:LYS:O	22:UT:2312:ARG:NH1	2.19	0.76
62:D3:1554:U:O2	62:D3:1556:A:N6	2.17	0.76
14:UL:365:TYR:OH	14:UL:381:LYS:NZ	2.18	0.76
2:DA:243:LYS:HZ2	24:UV:656:ARG:HE	1.31	0.76
3:UA:716:ASP:OD1	23:UU:576:ARG:NH1	2.18	0.76

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:UB:647:ILE:HA	4:UB:651:TRP:HB2	1.66	0.76
3:UA:482:SER:O	3:UA:486:SER:HA	1.85	0.76
23:UU:329:SER:OG	23:UU:333:GLY:N	2.19	0.76
26:CD:180:LEU:HD21	27:CE:183:ARG:HG2	1.68	0.76
6:UD:301:ASP:O	6:UD:771:GLN:NE2	2.19	0.76
13:UK:65:HIS:HE2	63:D4:54:C:HO2'	1.28	0.76
17:UO:253:LYS:HD2	21:US:333:GLU:HB3	1.66	0.76
22:UT:1206:THR:HA	22:UT:1211:ILE:HD11	1.67	0.76
22:UT:2465:ARG:HH22	62:D3:823:G:H3'	1.48	0.76
31:CJ:173:ARG:HD2	31:CJ:179:ALA:HB3	1.68	0.76
40:JL:162:ARG:NH2	62:D3:1779:U:OP2	2.18	0.76
47:DG:56:ASN:HD21	62:D3:153:G:H21	1.34	0.76
62:D3:823:G:O6	62:D3:849:C:N4	2.19	0.76
3:UA:758:ILE:HD11	3:UA:798:TRP:CZ2	2.16	0.75
20:UR:487:GLU:HA	20:UR:517:THR:HA	1.67	0.75
20:UR:576:LEU:HD23	20:UR:588:LEU:HD21	1.68	0.75
22:UT:2175:GLU:HG2	22:UT:2176:HIS:H	1.49	0.75
26:CD:397:SER:HB3	26:CD:399:VAL:HG12	1.66	0.75
36:JD:451:ARG:HD3	36:JD:763:VAL:HG23	1.68	0.75
42:JP:439:ARG:NH2	62:D3:1042:G:O5'	2.17	0.75
17:UO:80:PHE:O	55:DS:57:ARG:NH2	2.17	0.75
22:UT:2465:ARG:NH1	62:D3:824:G:OP2	2.18	0.75
6:UD:476:LYS:HG3	6:UD:491:CYS:HA	1.67	0.75
16:UN:306:ARG:NH2	42:JP:273:GLU:OE1	2.19	0.75
24:UV:162:PHE:O	24:UV:597:ARG:NH1	2.19	0.75
66:EC:15:ASP:CB	74:EK:40:TYR:CB	2.65	0.75
75:EN:616:ILE:C	75:EN:618:VAL:H	1.88	0.75
8:UF:36:ARG:NE	8:UF:60:GLU:OE2	2.17	0.75
20:UR:143:THR:HA	20:UR:146:LEU:HD12	1.66	0.75
21:US:407:ARG:HD3	21:US:488:PHE:HB3	1.69	0.75
22:UT:2130:LEU:HD21	22:UT:2167:VAL:HG13	1.68	0.75
22:UT:2471:ARG:NH2	62:D3:845:G:OP2	2.19	0.75
3:UA:523:MET:SD	3:UA:530:VAL:HG12	2.27	0.75
6:UD:255:SER:HG	6:UD:265:TRP:HZ3	1.33	0.75
13:UK:65:HIS:NE2	63:D4:54:C:O2'	2.19	0.75
14:UL:675:SER:HA	14:UL:680:SER:O	1.87	0.75
20:UR:444:ILE:HG22	20:UR:445:ARG:HG2	1.67	0.75
17:UO:197:ASP:HB2	17:UO:206:ILE:HD11	1.66	0.75
19:UQ:320:VAL:HA	19:UQ:334:LEU:O	1.87	0.75
20:UR:376:LEU:HD22	20:UR:386:ILE:HD12	1.68	0.75
33:CL:735:GLY:HA3	34:CM:251:GLN:HE22	1.51	0.75

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:UM:492:LYS:HB2	15:UM:512:ASP:HB3	1.68	0.75
19:UQ:101:GLN:OE1	19:UQ:104:ALA:N	2.19	0.75
62:D3:705:U:O4	62:D3:733:A:N6	2.20	0.75
6:UD:213:TRP:HA	6:UD:225:LEU:HA	1.68	0.75
15:UM:32:LEU:HD23	15:UM:43:ILE:HD11	1.68	0.75
46:DF:95:ASN:OD1	46:DF:107:LYS:NZ	2.20	0.75
58:DX:109:ARG:NH1	58:DX:116:ASP:OD2	2.19	0.75
8:UF:278:MET:HG2	8:UF:341:PHE:CE2	2.22	0.75
26:CD:192:ALA:HB1	26:CD:213:ASN:HB2	1.68	0.75
32:CK:401:SER:O	44:JJ:218:ASN:ND2	2.20	0.75
49:DI:56:ARG:NH2	62:D3:332:U:OP1	2.20	0.75
6:UD:303:LYS:NZ	61:D2:84:G:OP2	2.19	0.74
23:UU:135:ASN:HB3	23:UU:159:VAL:HG23	1.69	0.74
28:CF:50:GLU:OE1	28:CF:50:GLU:HA	1.85	0.74
36:JD:613:ILE:O	36:JD:616:LYS:O	2.05	0.74
37:JG:112:VAL:HG13	37:JG:124:VAL:HG13	1.69	0.74
45:DE:122:LYS:NZ	45:DE:143:ASP:OD2	2.15	0.74
63:D4:46:U:H2'	63:D4:47:G:C8	2.21	0.74
14:UL:357:THR:HG1	14:UL:361:THR:HG1	1.33	0.74
42:JP:270:ASN:HD21	42:JP:273:GLU:HG3	1.51	0.74
1:CB:122:ARG:NH2	63:D4:319:G:OP1	2.21	0.74
19:UQ:850:GLU:HA	19:UQ:853:ILE:HD12	1.69	0.74
33:CL:945:THR:OG1	62:D3:1595:U:OP1	2.05	0.74
62:D3:1686:C:N3	62:D3:1715:G:N1	2.32	0.74
74:EK:930:VAL:O	74:EK:934:GLY:CA	2.35	0.74
9:UG:550:LEU:HD21	24:UV:805:ALA:HB1	1.68	0.74
13:UK:140:ARG:NH2	18:UP:166:LEU:O	2.21	0.74
29:CH:207:ARG:NH2	63:D4:246:A:OP2	2.21	0.74
62:D3:1042:G:N2	62:D3:1077:C:O2	2.20	0.74
3:UA:620:ASN:H	3:UA:626:THR:HG21	1.52	0.74
14:UL:553:ASN:HD22	14:UL:573:LYS:H	1.36	0.74
14:UL:771:ARG:HA	14:UL:774:LYS:HD2	1.68	0.74
22:UT:311:ILE:HD11	22:UT:343:ILE:HG23	1.68	0.74
22:UT:2185:ILE:HD11	22:UT:2216:TYR:HE1	1.53	0.74
23:UU:476:PHE:HD1	23:UU:486:ILE:HG12	1.50	0.74
36:JD:516:ASP:HA	36:JD:558:MET:HB2	1.70	0.74
62:D3:1554:U:O2'	62:D3:1556:A:N1	2.20	0.74
15:UM:433:HIS:NE2	15:UM:458:SER:HB2	2.03	0.74
22:UT:519:VAL:HA	22:UT:522:LEU:HD12	1.68	0.74
28:CG:50:GLU:OE1	28:CG:50:GLU:HA	1.85	0.74
1:CB:290:VAL:HG21	13:UK:136:PHE:HE2	1.53	0.74

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:UN:336:THR:HG23	16:UN:339:GLN:H	1.53	0.74
45:DE:104:ASP:HB2	45:DE:110:ALA:HB2	1.68	0.74
45:DE:212:ASP:O	45:DE:215:ASP:N	2.20	0.74
20:UR:414:ILE:HD11	20:UR:420:ARG:HB3	1.70	0.74
21:US:318:LEU:HD22	21:US:357:ARG:HH21	1.53	0.74
34:CM:260:ASP:OD1	34:CM:261:ILE:N	2.19	0.74
63:D4:147:C:O2	63:D4:165:G:N2	2.19	0.74
14:UL:252:SER:OG	14:UL:276:ASN:ND2	2.21	0.73
16:UN:313:PHE:HE2	16:UN:883:ILE:HB	1.52	0.73
20:UR:459:GLN:NE2	20:UR:460:VAL:O	2.20	0.73
24:UV:389:GLY:N	24:UV:392:GLU:OE2	2.20	0.73
40:JL:280:LYS:HE3	40:JL:313:VAL:HG22	1.69	0.73
12:UJ:1768:LEU:HD22	22:UT:32:ARG:HH22	1.53	0.73
15:UM:620:LEU:HA	15:UM:636:ASP:HA	1.69	0.73
21:US:452:ASP:HB2	21:US:455:LEU:HB2	1.69	0.73
22:UT:394:LEU:HD23	22:UT:431:LYS:HG2	1.69	0.73
24:UV:585:MET:HG3	24:UV:613:VAL:HG12	1.68	0.73
33:CL:831:ARG:NH2	33:CL:835:HIS:O	2.21	0.73
33:CL:844:PRO:HB2	33:CL:855:GLN:HE21	1.52	0.73
3:UA:269:HIS:NE2	3:UA:312:GLN:O	2.19	0.73
15:UM:413:ILE:HG13	15:UM:415:TRP:HE1	1.52	0.73
24:UV:1038:GLN:NE2	24:UV:1056:ILE:O	2.20	0.73
36:JD:1058:ILE:HG22	44:JJ:83:SER:HB2	1.70	0.73
74:EK:930:VAL:O	74:EK:934:GLY:N	2.19	0.73
22:UT:2086:ILE:O	22:UT:2090:ALA:HB2	1.88	0.73
62:D3:1495:C:N3	62:D3:1512:G:N1	2.31	0.73
15:UM:291:ILE:HD11	15:UM:307:SER:HA	1.71	0.73
15:UM:353:LEU:HD23	15:UM:365:ILE:HD11	1.70	0.73
22:UT:1012:ARG:HH12	49:DI:116:HIS:CD2	2.06	0.73
36:JD:484:LYS:NZ	36:JD:510:TYR:OH	2.21	0.73
6:UD:481:ILE:HB	6:UD:485:LYS:HG3	1.71	0.73
15:UM:30:LYS:HA	15:UM:45:LEU:O	1.88	0.73
19:UQ:266:ASN:HD22	19:UQ:307:HIS:HA	1.54	0.73
36:JD:595:ASN:OD1	36:JD:601:ASN:ND2	2.17	0.73
63:D4:264:C:O2	63:D4:307:G:N2	2.18	0.73
15:UM:241:GLN:HG3	15:UM:262:GLY:HA3	1.70	0.73
15:UM:460:ASP:OD1	15:UM:462:THR:OG1	2.06	0.73
22:UT:825:GLU:OE1	22:UT:828:ARG:NH2	2.20	0.73
22:UT:1012:ARG:O	22:UT:1068:PHE:HB3	1.89	0.73
22:UT:2213:PHE:HE2	22:UT:2235:ILE:HD11	1.54	0.73
22:UT:2469:ARG:HH21	62:D3:850:A:H61	1.37	0.73

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:260:ASP:HB3	24:UV:378:ASN:HA	1.71	0.73
24:UV:381:HIS:NE2	24:UV:478:THR:O	2.22	0.73
46:DF:189:THR:OG1	62:D3:1473:U:OP2	2.07	0.73
53:DO:70:LYS:O	53:DO:73:GLU:HB2	1.88	0.73
62:D3:706:A:H2	62:D3:732:G:H22	1.37	0.73
3:UA:77:GLY:CA	3:UA:95:PHE:O	2.23	0.73
12:UJ:277:ALA:HB2	20:UR:211:ILE:HD12	1.70	0.73
20:UR:429:TYR:HB2	28:CF:18:GLN:HE21	1.52	0.73
24:UV:125:GLU:OE2	24:UV:129:HIS:NE2	2.21	0.73
32:CK:529:ARG:NH1	62:D3:1754:A:C5	2.56	0.73
48:DH:67:LEU:HD22	48:DH:94:ALA:HB2	1.69	0.73
57:DW:24:GLN:OE1	57:DW:64:GLN:NE2	2.22	0.73
6:UD:743:PHE:HB3	6:UD:755:ILE:HD13	1.70	0.73
7:UE:140:PHE:HE1	7:UE:178:LYS:HE2	1.54	0.73
11:UI:508:ARG:HA	11:UI:511:LYS:HD2	1.70	0.73
21:US:414:ILE:O	21:US:418:ASN:ND2	2.21	0.73
55:DS:49:LYS:NZ	55:DS:79:TYR:O	2.20	0.73
57:DW:80:ASN:ND2	62:D3:747:C:O3'	2.22	0.73
10:UH:567:LEU:HD13	10:UH:602:LEU:HD12	1.71	0.72
22:UT:1205:ILE:HG22	22:UT:1211:ILE:HD13	1.71	0.72
29:CH:158:THR:HG23	29:CH:548:ARG:HB2	1.71	0.72
36:JD:466:LEU:HD22	36:JD:472:LYS:HZ3	1.54	0.72
48:DH:49:ILE:HD11	48:DH:172:VAL:HG22	1.71	0.72
12:UJ:25:ARG:HD2	42:JP:14:VAL:HG12	1.70	0.72
14:UL:137:ILE:HG12	14:UL:147:VAL:HG22	1.69	0.72
14:UL:258:LYS:NZ	14:UL:273:TYR:OH	2.22	0.72
20:UR:253:SER:OG	20:UR:298:CYS:SG	2.47	0.72
22:UT:1877:ARG:HB2	22:UT:1917:ILE:HG22	1.71	0.72
62:D3:676:G:H2'	62:D3:677:G:H8	1.54	0.72
20:UR:181:GLU:OE1	23:UU:242:ARG:NH1	2.22	0.72
32:CK:414:GLU:OE2	44:JJ:176:ARG:NH2	2.23	0.72
6:UD:429:SER:HB3	6:UD:444:ARG:HA	1.70	0.72
9:UG:124:HIS:CD2	9:UG:163:GLU:HG2	2.24	0.72
17:UO:108:TYR:HB3	17:UO:117:LEU:H	1.55	0.72
20:UR:400:ILE:HB	20:UR:433:TRP:CZ3	2.24	0.72
23:UU:62:ASP:OD1	23:UU:64:ASN:N	2.21	0.72
29:CH:156:ASN:HA	29:CH:544:ALA:HB1	1.72	0.72
48:DH:15:GLU:HA	48:DH:18:LEU:HD12	1.71	0.72
17:UO:166:GLY:O	17:UO:194:ARG:NH2	2.23	0.72
19:UQ:630:LEU:HB3	19:UQ:653:PHE:HB2	1.71	0.72
34:CM:306:GLU:HA	34:CM:356:GLY:O	1.90	0.72

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:JL:290:LEU:HD21	40:JL:305:ARG:HH21	1.54	0.72
16:UN:321:HIS:HB2	26:CD:89:ALA:HA	1.71	0.72
31:CJ:75:ASP:OD1	31:CJ:76:GLU:N	2.22	0.72
33:CL:56:VAL:HG22	58:DX:52:ILE:HG12	1.71	0.72
62:D3:1169:G:N1	62:D3:1575:G:OP2	2.22	0.72
1:CB:205:ARG:HG2	27:CE:152:LEU:HD13	1.72	0.72
19:UQ:435:ASP:O	19:UQ:762:TYR:OH	2.08	0.72
19:UQ:574:LEU:HG	19:UQ:584:PHE:HD1	1.54	0.72
22:UT:446:GLN:OE1	22:UT:449:ARG:NH2	2.23	0.72
33:CL:125:LEU:O	33:CL:129:ILE:HG13	1.89	0.72
34:CM:36:ILE:HG21	34:CM:45:LEU:HD23	1.71	0.72
59:DY:34:ASN:ND2	62:D3:521:A:N3	2.37	0.72
3:UA:780:LYS:NZ	3:UA:784:ASP:OD2	2.22	0.72
7:UE:271:LYS:NZ	23:UU:585:SER:O	2.22	0.72
22:UT:981:SER:HB2	22:UT:983:GLN:HE22	1.53	0.72
22:UT:1926:PHE:CE2	22:UT:1929:GLU:HG2	2.24	0.72
24:UV:719:THR:HG23	24:UV:723:ASN:HD22	1.53	0.72
41:JM:193:GLU:HA	41:JM:196:GLU:HG2	1.72	0.72
10:UH:642:LEU:HD22	11:UI:502:ARG:HD3	1.72	0.72
12:UJ:275:ILE:HD11	12:UJ:302:LEU:HB3	1.70	0.72
20:UR:257:HIS:CE1	20:UR:260:LYS:HG2	2.25	0.72
22:UT:318:LEU:HD22	22:UT:361:LEU:HD11	1.69	0.72
36:JD:855:LYS:HE2	36:JD:862:ILE:HD11	1.70	0.72
62:D3:389:G:H2'	62:D3:390:G:H5''	1.71	0.72
7:UE:299:ASP:O	7:UE:318:GLN:NE2	2.18	0.71
22:UT:2056:ARG:HA	22:UT:2059:LYS:HE3	1.72	0.71
31:CJ:144:GLU:OE1	31:CJ:147:GLY:N	2.23	0.71
50:DJ:171:ARG:NH2	62:D3:514:G:O6	2.21	0.71
14:UL:767:GLU:HG3	14:UL:771:ARG:HH21	1.56	0.71
20:UR:456:THR:OG1	20:UR:487:GLU:OE2	2.06	0.71
24:UV:181:PRO:HG2	24:UV:207:LEU:HD22	1.73	0.71
50:DJ:102:GLU:OE1	50:DJ:102:GLU:N	2.23	0.71
4:UB:561:ILE:HB	4:UB:564:VAL:HG12	1.70	0.71
6:UD:127:ASP:HB2	6:UD:134:LEU:HB2	1.73	0.71
22:UT:1766:PHE:HZ	22:UT:1800:LEU:HD21	1.55	0.71
36:JD:113:ILE:HA	36:JD:116:LYS:HG2	1.72	0.71
36:JD:884:GLN:NE2	36:JD:890:ASP:O	2.22	0.71
9:UG:379:GLU:N	9:UG:393:GLY:O	2.23	0.71
15:UM:602:TRP:HB3	15:UM:609:CYS:HA	1.73	0.71
15:UM:750:ALA:N	62:D3:1638:G:O6	2.24	0.71
22:UT:1142:VAL:HG13	22:UT:1147:ILE:HD11	1.72	0.71

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:CG:25:GLN:NE2	29:CH:323:ASP:OD2	2.23	0.71
45:DE:153:ASN:OD1	47:DG:215:ARG:NH1	2.23	0.71
4:UB:701:ALA:HA	21:US:417:HIS:HB2	1.73	0.71
15:UM:224:ASP:HB2	15:UM:230:LYS:HZ3	1.56	0.71
19:UQ:317:TRP:HE1	19:UQ:488:LEU:HD21	1.55	0.71
19:UQ:631:GLN:OE1	19:UQ:640:LYS:NZ	2.18	0.71
7:UE:101:THR:OG1	7:UE:103:ASN:OD1	2.06	0.71
31:CJ:100:LEU:HB2	31:CJ:144:GLU:HG2	1.72	0.71
36:JD:26:ILE:HD11	49:DI:17:LYS:HE2	1.71	0.71
24:UV:1027:LEU:HD21	24:UV:1037:LEU:HD23	1.73	0.71
42:JP:280:ALA:HB2	42:JP:311:VAL:HG13	1.72	0.71
62:D3:615:A:O2'	62:D3:621:A:N6	2.19	0.71
6:UD:272:LEU:HD21	20:UR:399:LYS:HD3	1.72	0.71
12:UJ:1658:ILE:HD11	12:UJ:1663:GLY:HA2	1.72	0.71
15:UM:15:ILE:HG22	15:UM:34:THR:HG21	1.72	0.71
22:UT:2167:VAL:HA	22:UT:2170:LYS:HD2	1.73	0.71
25:UX:152:ILE:HG22	25:UX:171:PRO:HG2	1.72	0.71
27:CE:318:GLN:OE1	63:D4:325:C:N4	2.23	0.71
31:CJ:146:ARG:NE	62:D3:1465:C:O2	2.21	0.71
34:CM:18:ARG:HD3	34:CM:98:TYR:CZ	2.26	0.71
56:DT:109:GLU:OE1	56:DT:122:ARG:NH2	2.23	0.71
22:UT:1278:ARG:HH12	22:UT:1316:MET:HB3	1.54	0.71
23:UU:28:ARG:NH2	23:UU:383:ASP:OD2	2.23	0.71
57:DW:71:LYS:NZ	62:D3:1097:U:OP2	2.23	0.71
62:D3:1063:U:O2'	62:D3:1064:G:OP2	2.08	0.71
15:UM:537:TRP:HD1	15:UM:553:GLY:HA2	1.55	0.71
19:UQ:57:VAL:O	19:UQ:382:LYS:NZ	2.23	0.71
29:CH:419:ASN:ND2	29:CH:421:ASN:OD1	2.22	0.71
50:DJ:79:ARG:NH2	62:D3:762:A:OP1	2.24	0.71
9:UG:108:LEU:HD11	12:UJ:4:LEU:HD12	1.73	0.70
12:UJ:246:LEU:O	12:UJ:285:ASN:ND2	2.23	0.70
37:JG:73:HIS:HB2	37:JG:76:LEU:HB2	1.73	0.70
22:UT:1329:LYS:HA	22:UT:1332:ILE:HG12	1.73	0.70
34:CM:228:ASP:OD1	34:CM:230:TRP:NE1	2.24	0.70
22:UT:362:PHE:HD1	22:UT:381:LEU:HG	1.56	0.70
40:JL:230:VAL:HG13	40:JL:231:PHE:HD1	1.55	0.70
12:UJ:1626:LEU:HD23	12:UJ:1651:LEU:HD21	1.72	0.70
15:UM:490:HIS:ND1	15:UM:510:SER:OG	2.23	0.70
19:UQ:20:PRO:HA	19:UQ:48:PHE:HA	1.72	0.70
22:UT:1091:ILE:HG21	22:UT:1128:ALA:HB1	1.73	0.70
36:JD:1095:ARG:NH1	36:JD:1149:PRO:O	2.21	0.70

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CB:91:HIS:HB3	1:CB:96:VAL:HG23	1.73	0.70
22:UT:1127:PHE:HZ	22:UT:1166:HIS:HB3	1.57	0.70
23:UU:894:ASP:OD1	23:UU:895:VAL:N	2.24	0.70
36:JD:872:ASP:OD2	36:JD:875:ALA:N	2.23	0.70
1:CB:294:ARG:HH21	18:UP:181:LEU:HD12	1.56	0.70
5:UC:603:THR:O	25:UX:43:ASN:ND2	2.25	0.70
12:UJ:1541:ASP:HA	12:UJ:1544:PHE:CE1	2.27	0.70
26:CD:277:ARG:NH1	27:CE:264:GLU:OE1	2.20	0.70
36:JD:732:LEU:HD21	36:JD:746:VAL:HG12	1.73	0.70
1:CA:83:GLY:HA2	41:JM:169:ARG:NH1	2.06	0.70
12:UJ:550:TYR:O	12:UJ:553:SER:C	2.30	0.70
12:UJ:1441:ILE:HA	12:UJ:1444:ILE:HD12	1.74	0.70
14:UL:46:LEU:HD13	14:UL:657:GLN:HE22	1.55	0.70
22:UT:2232:TRP:HA	22:UT:2235:ILE:HD12	1.73	0.70
27:CE:25:SER:HB3	27:CE:116:ILE:HD11	1.73	0.70
33:CL:609:GLU:HA	34:CM:18:ARG:HH12	1.56	0.70
3:UA:494:ASP:HB3	3:UA:496:THR:HG22	1.74	0.70
15:UM:690:HIS:NE2	32:CK:518:GLU:OE2	2.25	0.70
17:UO:86:SER:O	17:UO:98:ALA:HA	1.91	0.70
19:UQ:371:PHE:HB2	19:UQ:385:ILE:HG12	1.73	0.70
22:UT:977:PHE:O	22:UT:980:ASN:O	2.10	0.70
22:UT:1310:SER:OG	22:UT:1323:ARG:O	2.09	0.70
22:UT:1312:SER:OG	22:UT:1315:ARG:NH1	2.25	0.70
23:UU:595:PRO:HD3	23:UU:634:PHE:HD2	1.56	0.70
42:JP:231:GLU:OE2	42:JP:250:ARG:NH1	2.24	0.70
62:D3:63:G:O2'	62:D3:170:U:OP1	2.09	0.70
22:UT:215:VAL:HG21	22:UT:232:LEU:HD11	1.72	0.70
22:UT:2087:ILE:O	22:UT:2132:LYS:NZ	2.25	0.70
36:JD:103:HIS:HA	36:JD:106:LYS:HD2	1.73	0.70
36:JD:847:VAL:HA	36:JD:850:ILE:HG12	1.74	0.70
36:JD:1190:TYR:HB3	36:JD:1213:VAL:HG11	1.74	0.70
3:UA:382:THR:HG21	32:CK:477:GLU:HB3	1.73	0.70
3:UA:557:LYS:HG3	23:UU:423:ARG:HH12	1.54	0.70
6:UD:71:ARG:NH1	6:UD:77:GLU:OE2	2.25	0.70
13:UK:244:TRP:CE3	28:CF:31:ARG:NH1	2.60	0.70
22:UT:429:GLY:HA2	22:UT:432:ILE:HD12	1.73	0.70
33:CL:549:ILE:O	33:CL:553:ILE:HG12	1.92	0.70
35:CN:55:LEU:HB3	35:CN:58:LEU:HD21	1.74	0.70
62:D3:21:U:H2'	62:D3:22:A:H8	1.57	0.70
24:UV:416:PHE:HB3	24:UV:420:GLN:HB2	1.74	0.69
30:CI:39:GLN:NE2	30:CI:43:ASP:HB2	2.07	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CJ:157:PHE:O	31:CJ:159:HIS:N	2.25	0.69
37:JG:99:LEU:HD21	37:JG:238:CYS:HB2	1.72	0.69
37:JG:167:ILE:HG22	37:JG:171:LEU:HD12	1.73	0.69
6:UD:768:ALA:O	18:UP:214:GLY:N	2.24	0.69
10:UH:713:LEU:HD12	10:UH:717:THR:HG21	1.73	0.69
15:UM:406:ALA:HB2	15:UM:440:VAL:HG13	1.74	0.69
22:UT:1707:HIS:O	22:UT:1760:ASN:ND2	2.25	0.69
29:CH:180:LYS:NZ	63:D4:169:A:OP2	2.17	0.69
52:DN:136:PRO:HG2	52:DN:139:TRP:HB2	1.72	0.69
3:UA:482:SER:HB2	3:UA:487:VAL:HG22	1.73	0.69
4:UB:537:LEU:HD11	4:UB:635:VAL:HG11	1.73	0.69
8:UF:299:LYS:HZ3	27:CE:249:GLN:HG2	1.56	0.69
12:UJ:1768:LEU:HD22	22:UT:32:ARG:NH2	2.08	0.69
19:UQ:567:VAL:HG11	19:UQ:615:TRP:HZ2	1.57	0.69
23:UU:242:ARG:HH22	23:UU:281:ARG:HG2	1.57	0.69
29:CH:545:LYS:NZ	63:D4:251:G:N7	2.39	0.69
36:JD:1042:ARG:HH12	36:JD:1064:ASN:HB2	1.57	0.69
42:JP:327:LYS:HG2	42:JP:350:HIS:H	1.57	0.69
44:JJ:129:ARG:HH21	44:JJ:131:ASN:HD21	1.39	0.69
46:DF:118:LEU:HA	46:DF:121:ILE:HD12	1.74	0.69
62:D3:676:G:H2'	62:D3:677:G:C8	2.27	0.69
15:UM:261:ALA:HB1	15:UM:290:ILE:HD13	1.74	0.69
24:UV:214:PHE:HE2	24:UV:299:PRO:HD2	1.57	0.69
24:UV:749:SER:OG	24:UV:787:GLU:OE2	2.09	0.69
6:UD:448:THR:OG1	6:UD:470:LEU:O	2.09	0.69
15:UM:348:PRO:HD2	15:UM:419:GLU:HG3	1.75	0.69
22:UT:220:GLU:OE2	22:UT:268:PRO:HB3	1.93	0.69
30:CI:96:ASP:OD1	30:CI:97:LEU:N	2.25	0.69
31:CJ:278:ARG:HD3	62:D3:1596:C:H41	1.57	0.69
1:CA:144:TRP:HE1	1:CA:183:HIS:CG	2.11	0.69
15:UM:30:LYS:HZ1	15:UM:46:THR:HG23	1.58	0.69
20:UR:455:ILE:HA	20:UR:486:SER:HB3	1.73	0.69
21:US:427:GLN:HE22	21:US:432:VAL:HG22	1.57	0.69
22:UT:1084:ALA:O	22:UT:1088:LYS:HD2	1.92	0.69
24:UV:535:LYS:H	24:UV:538:ASN:HB3	1.58	0.69
27:CE:366:LYS:NZ	63:D4:82:G:OP1	2.21	0.69
33:CL:613:PRO:HB2	34:CM:291:ARG:NH2	2.07	0.69
34:CM:282:GLU:O	34:CM:286:SER:HB3	1.93	0.69
36:JD:624:VAL:HG12	36:JD:777:VAL:HB	1.74	0.69
42:JP:347:ARG:O	42:JP:373:ARG:NH2	2.25	0.69
62:D3:1688:U:H3	62:D3:1713:G:H22	1.40	0.69

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:UH:295:TYR:HA	10:UH:302:LEU:HA	1.74	0.69
18:UP:195:GLU:HB3	18:UP:198:ILE:HG12	1.74	0.69
19:UQ:388:PRO:HG2	19:UQ:781:SER:HB3	1.74	0.69
20:UR:317:ARG:HA	20:UR:356:GLU:HG2	1.74	0.69
34:CM:214:LYS:HG2	34:CM:217:LYS:HZ1	1.57	0.69
41:JM:127:ARG:HA	41:JM:130:LEU:HD13	1.74	0.69
7:UE:317:LEU:HD13	7:UE:322:ILE:HD12	1.75	0.69
15:UM:194:ARG:HG2	15:UM:216:ARG:HB2	1.75	0.69
20:UR:181:GLU:OE2	23:UU:281:ARG:NH2	2.26	0.69
22:UT:1699:LYS:NZ	62:D3:687:G:O3'	2.25	0.69
24:UV:539:LEU:HD13	24:UV:558:LEU:HD11	1.75	0.69
45:DE:106:LYS:HD3	45:DE:108:ARG:HH12	1.57	0.69
50:DJ:120:LYS:H	50:DJ:124:HIS:HD2	1.39	0.69
55:DS:24:GLY:HA2	55:DS:58:ALA:HB3	1.73	0.69
62:D3:1684:U:H3	62:D3:1717:G:H1	1.39	0.69
19:UQ:278:GLY:HA2	19:UQ:300:VAL:HG13	1.75	0.69
22:UT:1351:PHE:O	22:UT:1355:ILE:HD12	1.91	0.69
27:CE:298:ARG:HB3	27:CE:341:LEU:HD11	1.75	0.69
42:JP:388:THR:O	42:JP:392:ASN:ND2	2.26	0.69
48:DH:50:ASP:OD1	48:DH:175:LYS:NZ	2.20	0.69
63:D4:47:G:H2'	63:D4:48:A:C8	2.28	0.69
2:DA:18:LYS:HE2	15:UM:359:SER:HB2	1.75	0.69
19:UQ:502:LYS:HG3	19:UQ:564:PRO:HA	1.75	0.69
22:UT:1390:SER:HA	22:UT:1393:MET:SD	2.33	0.69
36:JD:485:GLU:H	36:JD:488:LYS:HZ2	1.39	0.69
15:UM:739:LEU:HD23	15:UM:763:ILE:HD11	1.75	0.68
17:UO:122:ALA:HB2	17:UO:152:TRP:HH2	1.57	0.68
22:UT:92:VAL:HG13	22:UT:131:THR:HG21	1.75	0.68
22:UT:243:THR:OG1	22:UT:246:THR:O	2.10	0.68
22:UT:269:GLU:OE2	22:UT:313:ARG:NH2	2.25	0.68
28:CF:39:GLU:OE1	63:D4:82:G:N1	2.21	0.68
37:JF:230:TYR:CD2	37:JG:106:LYS:HD3	2.26	0.68
37:JG:150:ILE:HB	37:JG:160:LEU:HB2	1.75	0.68
53:DO:20:TYR:HE1	53:DO:22:SER:HB2	1.58	0.68
4:UB:661:ILE:O	4:UB:665:GLN:N	2.26	0.68
4:UB:712:THR:HB	37:JG:129:ARG:HB2	1.75	0.68
6:UD:273:ASN:HB3	6:UD:319:ARG:NH1	2.07	0.68
9:UG:258:LEU:HB2	9:UG:268:VAL:HG12	1.76	0.68
17:UO:504:ILE:HA	17:UO:507:MET:SD	2.32	0.68
19:UQ:151:TYR:HB2	19:UQ:176:LEU:HB2	1.74	0.68
19:UQ:266:ASN:ND2	19:UQ:307:HIS:HA	2.08	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:440:VAL:HB	19:UQ:765:TRP:CE2	2.28	0.68
22:UT:1101:GLN:HG3	22:UT:1102:PRO:HD2	1.74	0.68
23:UU:86:HIS:HB2	23:UU:123:ILE:HD11	1.76	0.68
31:CJ:278:ARG:NH1	62:D3:563:U:O3'	2.27	0.68
36:JD:734:LEU:HD23	36:JD:758:ILE:HG23	1.74	0.68
37:JG:177:LYS:HB3	37:JG:221:VAL:HA	1.75	0.68
3:UA:563:ARG:HD3	3:UA:630:LEU:HG	1.76	0.68
7:UE:355:ASN:HB3	19:UQ:479:ASN:HD21	1.59	0.68
15:UM:430:TYR:CE2	15:UM:466:TRP:HB3	2.29	0.68
19:UQ:334:LEU:HD21	19:UQ:379:LEU:HD13	1.74	0.68
29:CH:298:SER:OG	29:CH:325:VAL:O	2.11	0.68
4:UB:52:ARG:NH2	32:CK:363:GLU:OE1	2.27	0.68
6:UD:570:ILE:HA	6:UD:586:THR:HG22	1.75	0.68
6:UD:656:ARG:HH22	10:UH:723:ILE:HG12	1.57	0.68
8:UF:167:ILE:HD11	16:UN:327:PHE:HD1	1.57	0.68
14:UL:10:GLN:OE1	14:UL:682:ARG:NH1	2.26	0.68
20:UR:568:VAL:HG12	20:UR:579:VAL:HG22	1.73	0.68
22:UT:30:PRO:O	22:UT:33:ASN:C	2.32	0.68
23:UU:159:VAL:HG21	23:UU:167:ILE:HD11	1.76	0.68
23:UU:176:TYR:HB3	23:UU:179:LYS:HB2	1.75	0.68
31:CJ:282:ARG:NH2	62:D3:560:U:OP2	2.27	0.68
33:CL:193:ARG:NH2	33:CL:197:GLU:OE2	2.27	0.68
33:CL:608:LEU:HB3	34:CM:16:ASN:HB3	1.74	0.68
33:CL:880:TYR:HB2	58:DX:94:ASN:ND2	2.08	0.68
36:JD:885:TYR:HE1	36:JD:1187:LEU:HB2	1.57	0.68
6:UD:199:ASP:HA	6:UD:215:ALA:O	1.94	0.68
15:UM:537:TRP:CD1	15:UM:553:GLY:HA2	2.28	0.68
17:UO:493:HIS:HE1	17:UO:497:LYS:HE3	1.58	0.68
21:US:174:ASN:HD21	21:US:218:LYS:HE3	1.58	0.68
22:UT:1655:ARG:HE	22:UT:1693:THR:HG22	1.57	0.68
22:UT:2146:ALA:HB2	22:UT:2164:THR:HG21	1.75	0.68
24:UV:313:ASN:ND2	24:UV:327:PRO:O	2.24	0.68
24:UV:523:TYR:HD2	24:UV:616:LYS:HG2	1.58	0.68
30:CI:114:ILE:HD12	30:CI:117:ARG:HH11	1.59	0.68
37:JF:48:ALA:HB3	37:JF:116:THR:HA	1.75	0.68
1:CA:171:LEU:HB2	1:CA:237:VAL:HG11	1.74	0.68
3:UA:467:ASP:OD1	3:UA:468:ALA:N	2.26	0.68
1:CB:155:ILE:HD11	1:CB:162:LEU:HD13	1.75	0.68
15:UM:29:GLY:O	15:UM:45:LEU:HB2	1.94	0.68
17:UO:391:ASN:ND2	17:UO:403:ASN:OD1	2.27	0.68
22:UT:1074:ASP:OD1	22:UT:1076:SER:N	2.26	0.68

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1960:LEU:HD21	22:UT:1999:ALA:HA	1.74	0.68
32:CK:335:ARG:NH2	33:CL:957:GLU:OE2	2.27	0.68
33:CL:246:ALA:HB3	33:CL:810:ILE:HG13	1.75	0.68
37:JG:122:ILE:HG12	37:JG:162:VAL:HG22	1.76	0.68
1:CB:251:ARG:HH12	1:CB:255:LEU:HG	1.59	0.68
6:UD:450:VAL:HG13	6:UD:465:LEU:HB2	1.76	0.68
24:UV:928:HIS:NE2	24:UV:1163:LEU:O	2.22	0.68
29:CH:245:SER:OG	29:CH:247:ASP:OD1	2.10	0.68
30:CI:99:ASN:OD1	30:CI:100:LYS:N	2.27	0.68
52:DN:142:GLU:H	52:DN:145:THR:HB	1.58	0.68
1:CB:107:VAL:HG21	1:CB:141:TYR:HB3	1.73	0.68
1:CB:144:TRP:CE2	1:CB:183:HIS:HB3	2.29	0.68
6:UD:31:MET:HE2	6:UD:752:LEU:HG	1.74	0.68
9:UG:289:MET:HB2	9:UG:303:ILE:HD11	1.75	0.68
19:UQ:559:LYS:HB3	19:UQ:576:ALA:HB3	1.74	0.68
33:CL:1052:SER:O	62:D3:575:C:N4	2.26	0.68
40:JL:215:ARG:HH11	40:JL:217:GLN:HA	1.57	0.68
3:UA:210:SER:OG	3:UA:211:LYS:N	2.25	0.68
14:UL:480:ASP:OD1	14:UL:481:LEU:N	2.27	0.68
23:UU:579:ARG:NH1	23:UU:615:PRO:O	2.26	0.68
27:CE:215:ARG:NH1	27:CE:242:SER:OG	2.27	0.68
50:DJ:127:VAL:HG13	50:DJ:131:GLN:HE21	1.59	0.68
3:UA:283:GLU:OE1	3:UA:297:GLN:NE2	2.25	0.68
3:UA:415:ASP:OD1	3:UA:416:LEU:N	2.27	0.68
3:UA:721:VAL:O	23:UU:579:ARG:NH2	2.27	0.68
9:UG:82:LYS:H	9:UG:85:LYS:HD2	1.58	0.68
15:UM:304:LEU:HB2	15:UM:312:GLN:HB2	1.76	0.68
15:UM:586:LYS:NZ	15:UM:646:ASP:OD2	2.26	0.68
30:CI:115:MET:SD	30:CI:131:ILE:HD11	2.34	0.68
36:JD:592:ILE:O	36:JD:597:ARG:NH2	2.27	0.68
6:UD:130:THR:HG23	6:UD:132:LEU:H	1.58	0.67
8:UF:67:ARG:NH1	8:UF:84:SER:OG	2.26	0.67
20:UR:130:ASP:OD1	23:UU:194:ARG:NH2	2.26	0.67
22:UT:915:ALA:O	22:UT:918:GLU:HG2	1.94	0.67
23:UU:641:LEU:HB3	23:UU:654:TRP:HB2	1.76	0.67
35:CN:17:PRO:HB2	35:CN:34:LEU:HD22	1.74	0.67
1:CB:195:TYR:HA	1:CB:218:ILE:HG22	1.76	0.67
19:UQ:694:LEU:O	19:UQ:698:VAL:O	2.11	0.67
20:UR:464:THR:HG21	20:UR:476:ILE:HA	1.75	0.67
20:UR:520:ASN:HB2	20:UR:533:ALA:HB3	1.76	0.67
25:UX:14:LYS:NZ	31:CJ:272:ASP:OD2	2.22	0.67

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:CG:22:ASP:OD1	29:CH:342:ARG:HD2	1.94	0.67
36:JD:808:GLN:O	36:JD:812:ARG:HD3	1.94	0.67
58:DX:3:LYS:HD3	58:DX:7:ARG:HH22	1.59	0.67
62:D3:615:A:HO2'	62:D3:621:A:N6	1.92	0.67
2:DA:104:ASP:OD2	2:DA:105:PHE:N	2.28	0.67
8:UF:12:ILE:HG21	9:UG:62:ALA:HB1	1.77	0.67
17:UO:31:THR:O	17:UO:331:THR:O	2.12	0.67
17:UO:375:HIS:CG	20:UR:339:ILE:HD11	2.29	0.67
24:UV:856:THR:HG22	24:UV:858:ARG:H	1.59	0.67
34:CM:301:MET:HE3	34:CM:311:LEU:HD12	1.75	0.67
62:D3:1477:G:H2'	62:D3:1478:G:H8	1.57	0.67
6:UD:426:GLN:NE2	6:UD:427:ASN:OD1	2.28	0.67
6:UD:573:VAL:HG22	6:UD:584:VAL:HG12	1.75	0.67
15:UM:364:ILE:HB	15:UM:382:GLU:HB2	1.76	0.67
15:UM:494:ILE:HA	15:UM:510:SER:HA	1.76	0.67
16:UN:781:ASP:OD2	16:UN:814:GLY:N	2.28	0.67
22:UT:1645:SER:OG	22:UT:1646:LYS:N	2.27	0.67
23:UU:916:HIS:O	23:UU:919:GLU:HG3	1.94	0.67
24:UV:1103:ARG:HG2	24:UV:1232:ILE:HG13	1.76	0.67
36:JD:1001:SER:OG	36:JD:1170:LEU:O	2.11	0.67
52:DN:64:ARG:NH2	62:D3:861:U:OP2	2.27	0.67
1:CA:82:GLY:O	41:JM:169:ARG:NH2	2.25	0.67
6:UD:443:GLY:HA2	6:UD:448:THR:HG22	1.75	0.67
6:UD:531:ILE:HA	6:UD:545:ARG:HG2	1.77	0.67
12:UJ:1520:THR:HA	12:UJ:1523:ARG:HE	1.59	0.67
15:UM:691:PRO:HD2	32:CK:516:SER:OG	1.94	0.67
16:UN:333:VAL:O	16:UN:335:GLN:NE2	2.28	0.67
20:UR:303:SER:OG	20:UR:309:GLN:OE1	2.10	0.67
22:UT:264:THR:O	22:UT:313:ARG:NH1	2.26	0.67
22:UT:1325:LEU:HD22	22:UT:2435:GLN:HG2	1.76	0.67
23:UU:241:ILE:HG22	23:UU:242:ARG:HG3	1.76	0.67
31:CJ:150:THR:HA	31:CJ:167:LEU:O	1.95	0.67
42:JP:48:THR:HG21	42:JP:410:ILE:HG23	1.77	0.67
6:UD:212:ILE:HB	6:UD:227:HIS:HB2	1.75	0.67
7:UE:366:GLY:O	19:UQ:583:LYS:NZ	2.28	0.67
11:UI:504:GLU:OE1	11:UI:507:ARG:NH1	2.28	0.67
12:UJ:575:SER:HB3	12:UJ:578:VAL:HG22	1.76	0.67
17:UO:150:ARG:HB3	17:UO:152:TRP:NE1	2.10	0.67
17:UO:258:LEU:HD21	17:UO:272:LEU:HD11	1.76	0.67
22:UT:201:ARG:HD3	22:UT:248:HIS:NE2	2.10	0.67
33:CL:1126:LYS:NZ	62:D3:487:G:OP1	2.27	0.67

*Continued on next page...*



Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:777:C:H3'	62:D3:778:G:H21	1.60	0.67
62:D3:1131:A:H2'	62:D3:1132:A:H8	1.59	0.67
62:D3:1537:C:N4	62:D3:1570:A:OP1	2.28	0.67
19:UQ:765:TRP:HB3	19:UQ:777:LEU:HD12	1.77	0.67
22:UT:30:PRO:HA	22:UT:33:ASN:HB3	1.74	0.67
22:UT:977:PHE:O	22:UT:980:ASN:C	2.32	0.67
22:UT:2430:TYR:O	22:UT:2434:LYS:HG2	1.94	0.67
22:UT:2438:LEU:HA	22:UT:2441:ARG:HG2	1.76	0.67
36:JD:408:ASP:HB2	36:JD:551:LYS:HD2	1.76	0.67
48:DH:27:LEU:HD21	48:DH:34:LEU:HD22	1.77	0.67
62:D3:92:A:OP1	62:D3:398:G:N2	2.27	0.67
3:UA:506:SER:OG	62:D3:1616:G:OP2	2.12	0.67
7:UE:453:LEU:HB3	7:UE:487:ARG:HH12	1.59	0.67
22:UT:1158:ILE:HD11	22:UT:1174:ILE:HG21	1.77	0.67
27:CE:323:GLU:OE2	63:D4:324:U:N3	2.18	0.67
33:CL:298:VAL:HG12	33:CL:793:PHE:HE1	1.58	0.67
54:DQ:71:GLY:HA2	62:D3:1483:A:H4'	1.76	0.67
13:UK:230:LYS:HG2	13:UK:244:TRP:CD1	2.29	0.67
17:UO:114:ARG:NH2	62:D3:1534:G:N7	2.43	0.67
22:UT:201:ARG:NH1	22:UT:242:SER:OG	2.27	0.67
24:UV:1103:ARG:HH22	24:UV:1105:PRO:HA	1.59	0.67
27:CE:28:LEU:HD13	27:CE:33:ASP:HB2	1.77	0.67
28:CG:39:GLU:OE1	63:D4:256:G:N1	2.27	0.67
30:CI:38:ILE:HD11	30:CI:44:TYR:HB2	1.77	0.67
30:CI:56:ARG:NH2	32:CK:440:LEU:HD11	2.09	0.67
36:JD:439:PRO:HD2	36:JD:442:PRO:HG2	1.76	0.67
37:JG:178:VAL:HG12	37:JG:223:GLU:HG3	1.77	0.67
52:DN:73:ARG:NH2	62:D3:855:A:O3'	2.28	0.67
1:CA:110:ASN:OD1	1:CA:111:MET:N	2.28	0.67
1:CA:171:LEU:HB3	1:CA:240:VAL:HG12	1.77	0.67
14:UL:492:SER:HG	14:UL:496:THR:HG1	1.42	0.67
33:CL:33:VAL:HG22	33:CL:34:ALA:H	1.60	0.67
50:DJ:162:SER:OG	50:DJ:165:GLY:N	2.26	0.67
58:DX:89:ASN:O	58:DX:92:CYS:N	2.28	0.67
3:UA:168:LEU:HD21	3:UA:192:ASP:O	1.95	0.66
13:UK:161:ARG:NH1	13:UK:164:ASN:O	2.26	0.66
14:UL:386:GLU:HG3	14:UL:391:ARG:HE	1.59	0.66
15:UM:111:ASP:OD2	15:UM:112:SER:N	2.28	0.66
17:UO:217:ASN:HB2	17:UO:229:CYS:HB3	1.76	0.66
19:UQ:363:ASN:HD21	19:UQ:391:VAL:HA	1.60	0.66
22:UT:2448:ARG:HH22	62:D3:826:U:H5'	1.59	0.66

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:379:SER:HB2	23:UU:385:GLN:HB2	1.76	0.66
62:D3:868:G:H1	62:D3:960:U:H3	1.43	0.66
1:CA:116:SER:HB3	1:CA:122:ARG:HD3	1.76	0.66
2:DA:128:LYS:NZ	2:DA:129:THR:O	2.23	0.66
3:UA:608:ASN:HB2	23:UU:513:MET:HE3	1.77	0.66
9:UG:284:ARG:NH2	9:UG:408:GLU:OE1	2.29	0.66
15:UM:506:PHE:O	15:UM:517:ILE:HA	1.95	0.66
17:UO:461:ASP:HB3	19:UQ:519:LEU:HD11	1.77	0.66
19:UQ:640:LYS:HD2	19:UQ:651:SER:HB3	1.76	0.66
22:UT:1325:LEU:HA	22:UT:1328:PHE:CD2	2.30	0.66
50:DJ:176:ASN:ND2	62:D3:511:A:OP2	2.27	0.66
6:UD:62:PRO:HG2	6:UD:65:LEU:HB2	1.77	0.66
7:UE:548:ASP:HA	7:UE:551:ILE:HD12	1.75	0.66
8:UF:46:ARG:NH1	63:D4:39:C:O2	2.27	0.66
12:UJ:364:ASN:OD1	12:UJ:365:ILE:HD12	1.94	0.66
12:UJ:690:GLU:HG3	12:UJ:694:HIS:HE1	1.60	0.66
31:CJ:182:GLN:NE2	31:CJ:235:GLN:OE1	2.27	0.66
1:CA:236:MET:HG3	26:CD:133:LEU:HA	1.78	0.66
3:UA:567:ASP:OD1	30:CI:144:ASN:ND2	2.28	0.66
1:CB:182:SER:O	1:CB:214:ARG:NH1	2.29	0.66
4:UB:713:HIS:ND1	37:JG:154:ASN:OD1	2.28	0.66
12:UJ:407:PHE:O	12:UJ:410:ILE:O	2.13	0.66
22:UT:117:LEU:HD12	22:UT:120:ASP:HB2	1.77	0.66
22:UT:706:LEU:HD21	22:UT:770:TYR:CG	2.30	0.66
22:UT:2030:ASN:HD22	22:UT:2035:ILE:HG21	1.61	0.66
24:UV:932:GLU:OE1	24:UV:932:GLU:N	2.28	0.66
26:CD:267:ASP:OD1	27:CE:275:TYR:OH	2.06	0.66
36:JD:1091:HIS:HB3	36:JD:1154:TYR:CZ	2.29	0.66
1:CA:228:GLN:O	1:CA:231:ARG:NH2	2.29	0.66
4:UB:440:ASN:HD21	4:UB:442:LEU:HG	1.61	0.66
12:UJ:1544:PHE:HA	12:UJ:1547:LEU:HD13	1.78	0.66
19:UQ:677:THR:OG1	19:UQ:692:PHE:O	2.13	0.66
26:CD:226:LYS:NZ	26:CD:260:GLY:O	2.27	0.66
9:UG:283:ASP:OD1	9:UG:284:ARG:N	2.29	0.66
12:UJ:560:ILE:HB	12:UJ:563:LEU:HB2	1.77	0.66
12:UJ:1607:ARG:HE	12:UJ:1612:ASP:HB2	1.60	0.66
13:UK:105:ASN:OD1	13:UK:108:ARG:NH1	2.27	0.66
15:UM:122:THR:HA	15:UM:146:THR:HG23	1.77	0.66
18:UP:195:GLU:OE1	18:UP:198:ILE:N	2.20	0.66
19:UQ:430:LYS:HE2	61:D2:69:U:H4'	1.77	0.66
22:UT:1399:LEU:HA	22:UT:1402:ILE:HD12	1.77	0.66

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:428:GLU:OE2	23:UU:452:ARG:NH2	2.29	0.66
49:DI:87:ASN:OD1	62:D3:341:A:O2'	2.14	0.66
62:D3:196:G:HO2'	62:D3:197:A:H8	1.41	0.66
63:D4:160:G:H2'	63:D4:161:G:C8	2.30	0.66
1:CA:145:ASN:HD21	5:UC:591:TYR:HB2	1.59	0.66
1:CA:189:GLY:O	1:CA:216:ASN:ND2	2.29	0.66
12:UJ:268:LEU:HD12	12:UJ:269:PRO:HD2	1.77	0.66
19:UQ:37:LEU:HD21	19:UQ:41:GLN:HA	1.76	0.66
22:UT:1950:SER:HG	22:UT:1952:SER:HG	1.42	0.66
24:UV:531:LEU:HB3	24:UV:533:LEU:HD23	1.77	0.66
27:CE:416:ALA:HB3	61:D2:289:U:H1'	1.77	0.66
42:JP:256:GLN:HG2	42:JP:257:LYS:H	1.59	0.66
62:D3:887:A:N6	62:D3:924:A:H61	1.93	0.66
1:CB:308:PRO:HG2	13:UK:130:SER:H	1.61	0.66
12:UJ:32:SER:OG	12:UJ:119:GLU:OE2	2.10	0.66
14:UL:339:LYS:HB2	14:UL:356:THR:HG23	1.78	0.66
15:UM:16:TYR:OH	15:UM:21:ALA:O	2.07	0.66
20:UR:434:GLU:O	20:UR:444:ILE:N	2.29	0.66
22:UT:33:ASN:OD1	22:UT:34:LEU:N	2.27	0.66
24:UV:434:LEU:N	24:UV:485:TYR:OH	2.28	0.66
27:CE:195:LEU:HA	27:CE:198:ILE:HG22	1.78	0.66
28:CF:38:ASN:ND2	63:D4:82:G:N7	2.44	0.66
33:CL:1142:LEU:HD21	62:D3:493:U:H4'	1.78	0.66
57:DW:77:PRO:O	57:DW:79:PHE:N	2.29	0.66
3:UA:491:ALA:HB1	3:UA:518:VAL:HG21	1.78	0.66
8:UF:173:ARG:NH2	26:CD:83:ASP:OD1	2.24	0.66
12:UJ:266:THR:HG21	19:UQ:895:LEU:HD21	1.78	0.66
14:UL:42:ILE:HG12	14:UL:51:ILE:HG22	1.78	0.66
15:UM:30:LYS:O	15:UM:44:ASP:HA	1.96	0.66
24:UV:865:ARG:NH2	62:D3:1060:U:OP2	2.28	0.66
26:CD:88:LYS:NZ	26:CD:89:ALA:O	2.23	0.66
1:CB:234:ILE:HG13	1:CB:260:PHE:CE1	2.31	0.66
9:UG:241:ASN:O	9:UG:245:ALA:N	2.29	0.66
11:UI:482:LEU:O	11:UI:486:LEU:HG	1.96	0.66
13:UK:57:GLU:OE1	31:CJ:10:ARG:NH1	2.29	0.66
15:UM:167:ASP:OD1	15:UM:168:THR:N	2.27	0.66
22:UT:674:PHE:CD2	22:UT:676:PRO:HD2	2.31	0.66
22:UT:1296:PRO:O	22:UT:1297:GLU:HG3	1.96	0.66
22:UT:1926:PHE:CD2	22:UT:1929:GLU:HG2	2.31	0.66
23:UU:135:ASN:HD22	23:UU:167:ILE:HG12	1.61	0.66
33:CL:1104:GLY:H	33:CL:1107:LYS:NZ	1.94	0.66

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:JD:621:ALA:HB3	36:JD:773:VAL:HA	1.76	0.66
54:DQ:37:THR:O	54:DQ:45:ARG:NH1	2.29	0.66
62:D3:23:G:H2'	62:D3:24:U:C6	2.31	0.66
6:UD:269:PHE:O	20:UR:446:ARG:NH1	2.29	0.65
17:UO:195:LEU:O	17:UO:206:ILE:N	2.29	0.65
22:UT:114:CYS:O	22:UT:117:LEU:O	2.13	0.65
22:UT:2180:LEU:HD23	22:UT:2183:LEU:HD21	1.78	0.65
23:UU:135:ASN:HD21	23:UU:166:GLU:HA	1.61	0.65
24:UV:755:PRO:HA	24:UV:782:VAL:HG12	1.76	0.65
27:CE:309:LEU:HG	27:CE:371:LEU:HD21	1.75	0.65
31:CJ:88:ILE:HG22	31:CJ:138:ASP:OD1	1.95	0.65
35:CN:188:MET:O	35:CN:192:GLU:HG2	1.96	0.65
36:JD:784:GLU:OE2	36:JD:844:ARG:NH1	2.29	0.65
41:JM:144:PRO:HG2	41:JM:147:PHE:HD2	1.61	0.65
44:JJ:99:ILE:HD11	44:JJ:159:ILE:HB	1.78	0.65
44:JJ:185:PHE:CZ	44:JJ:231:ILE:HD11	2.31	0.65
58:DX:65:ASN:ND2	62:D3:571:G:OP1	2.28	0.65
2:DA:180:THR:O	2:DA:184:LEU:N	2.28	0.65
12:UJ:75:SER:O	12:UJ:78:SER:OG	2.11	0.65
22:UT:981:SER:O	22:UT:982:HIS:ND1	2.29	0.65
27:CE:404:ARG:HD2	63:D4:331:A:H4'	1.78	0.65
28:CF:64:LEU:HD23	28:CF:64:LEU:H	1.61	0.65
31:CJ:241:THR:N	31:CJ:244:GLY:O	2.30	0.65
33:CL:269:VAL:O	33:CL:792:VAL:HA	1.96	0.65
35:CN:261:GLN:O	35:CN:265:ARG:HG3	1.96	0.65
42:JP:109:HIS:HD2	42:JP:113:VAL:HG12	1.60	0.65
44:JJ:117:TYR:CD1	44:JJ:118:PRO:HD3	2.31	0.65
63:D4:46:U:H2'	63:D4:47:G:H8	1.58	0.65
15:UM:123:ASP:OD2	15:UM:125:SER:OG	2.13	0.65
19:UQ:157:PHE:O	19:UQ:169:GLN:NE2	2.29	0.65
47:DG:176:GLN:HG2	62:D3:169:A:H5''	1.77	0.65
1:CA:155:ILE:HD11	1:CA:162:LEU:HD22	1.77	0.65
17:UO:246:TYR:HB3	17:UO:248:ARG:HH12	1.61	0.65
17:UO:357:PHE:HA	17:UO:360:MET:HG2	1.77	0.65
19:UQ:593:ASN:OD1	19:UQ:594:TRP:N	2.30	0.65
20:UR:445:ARG:NH2	20:UR:500:MET:O	2.29	0.65
21:US:180:PHE:O	21:US:184:TYR:HB3	1.96	0.65
21:US:277:ILE:HA	21:US:280:ILE:HG22	1.78	0.65
24:UV:894:ARG:NH2	24:UV:1045:ASN:O	2.29	0.65
26:CD:277:ARG:NH2	26:CD:280:SER:OG	2.29	0.65
35:CN:74:LEU:HD12	35:CN:140:ALA:HB1	1.78	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:UD:183:LEU:HD22	6:UD:223:GLY:HA2	1.77	0.65
12:UJ:1352:LEU:HD11	12:UJ:1396:LEU:HA	1.78	0.65
14:UL:230:LYS:H	14:UL:243:THR:HG22	1.62	0.65
15:UM:675:LYS:NZ	15:UM:677:ASP:OD2	2.29	0.65
22:UT:952:VAL:O	22:UT:955:ASN:ND2	2.29	0.65
29:CH:551:ARG:O	29:CH:553:ILE:N	2.28	0.65
54:DQ:13:LYS:HG3	54:DQ:14:LYS:H	1.62	0.65
1:CA:142:ARG:NH1	1:CA:186:ASP:OD2	2.30	0.65
9:UG:50:ASP:OD1	9:UG:54:LYS:NZ	2.30	0.65
12:UJ:638:SER:HB3	12:UJ:676:LYS:HD3	1.79	0.65
20:UR:129:ASP:HA	20:UR:132:LYS:HG2	1.78	0.65
22:UT:2425:ASP:OD1	22:UT:2426:PHE:N	2.28	0.65
23:UU:303:PHE:HE2	23:UU:310:ILE:HD12	1.61	0.65
24:UV:1206:PRO:HA	24:UV:1212:VAL:HA	1.78	0.65
62:D3:1686:C:N4	62:D3:1715:G:O6	2.20	0.65
1:CA:144:TRP:NE1	1:CA:183:HIS:CG	2.64	0.65
2:DA:127:VAL:HG21	2:DA:176:VAL:HG21	1.79	0.65
6:UD:589:ASN:ND2	6:UD:626:TRP:O	2.29	0.65
6:UD:614:TRP:NE1	6:UD:662:ASP:OD1	2.30	0.65
12:UJ:1355:ILE:HG23	12:UJ:1403:LEU:HD23	1.78	0.65
15:UM:294:LEU:HB2	15:UM:303:PHE:HB2	1.79	0.65
19:UQ:426:ARG:NH1	61:D2:68:U:OP2	2.29	0.65
19:UQ:665:ILE:HG22	19:UQ:669:ASN:HB2	1.78	0.65
36:JD:762:ASN:HA	36:JD:765:GLU:HB3	1.79	0.65
40:JL:75:LEU:HD21	40:JL:107:LEU:HD13	1.77	0.65
47:DG:59:GLN:OE1	47:DG:72:ARG:NH1	2.30	0.65
50:DJ:150:LEU:O	50:DJ:153:GLU:HG3	1.95	0.65
61:D2:286:U:H2'	61:D2:287:G:H8	1.60	0.65
62:D3:1594:G:HO2'	62:D3:1600:A:H61	1.44	0.65
8:UF:145:ASP:OD1	41:JM:67:THR:OG1	2.14	0.65
12:UJ:1705:LEU:HG	12:UJ:1709:ARG:HH12	1.62	0.65
22:UT:408:VAL:O	22:UT:411:PHE:C	2.34	0.65
27:CE:196:ALA:HA	27:CE:205:TYR:HE2	1.60	0.65
33:CL:1106:GLU:OE1	33:CL:1110:ARG:NE	2.30	0.65
41:JM:163:ARG:HH12	63:D4:312:U:H5''	1.62	0.65
41:JM:178:MET:HE2	41:JM:178:MET:HA	1.77	0.65
42:JP:393:LYS:HE2	63:D4:36:C:H5'	1.77	0.65
51:DL:73:GLY:HA3	51:DL:86:ILE:HD12	1.79	0.65
56:DT:92:LYS:HD3	56:DT:93:HIS:H	1.61	0.65
62:D3:1662:G:H2'	62:D3:1663:G:H8	1.62	0.65
6:UD:206:SER:HA	6:UD:240:LEU:HB2	1.79	0.65

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:UL:629:ASN:ND2	14:UL:643:ASP:OD2	2.29	0.65
17:UO:165:THR:HG22	17:UO:166:GLY:H	1.61	0.65
22:UT:636:ARG:NH2	62:D3:165:G:O3'	2.29	0.65
23:UU:600:ILE:HG13	23:UU:614:LEU:HD21	1.79	0.65
24:UV:348:TYR:HA	24:UV:351:LYS:HE2	1.79	0.65
27:CE:286:ASN:OD1	27:CE:387:GLY:N	2.23	0.65
40:JL:230:VAL:HG23	40:JL:238:ILE:HD13	1.79	0.65
48:DH:91:ILE:HG21	48:DH:129:LEU:HD23	1.78	0.65
50:DJ:5:PRO:HB3	62:D3:380:U:C4	2.32	0.65
62:D3:196:G:O2'	62:D3:197:A:H8	1.80	0.65
62:D3:621:A:HO2'	62:D3:1106:U:HO2'	1.45	0.65
3:UA:431:ILE:HD11	3:UA:451:ASP:HB2	1.77	0.65
6:UD:150:ASN:HD21	6:UD:154:ASP:HB2	1.61	0.65
12:UJ:1380:LEU:HD22	12:UJ:1403:LEU:HD11	1.79	0.65
14:UL:261:PHE:HD1	14:UL:272:PHE:HB3	1.62	0.65
15:UM:155:GLN:HB2	15:UM:158:SER:HB3	1.79	0.65
24:UV:801:LYS:NZ	24:UV:836:GLU:OE1	2.29	0.65
3:UA:117:ARG:NH1	3:UA:146:PHE:O	2.30	0.64
4:UB:668:LEU:HD12	4:UB:681:PRO:HB3	1.79	0.64
6:UD:579:ARG:NH2	6:UD:659:PHE:O	2.30	0.64
22:UT:229:TYR:OH	22:UT:277:ASP:OD2	2.14	0.64
22:UT:408:VAL:O	22:UT:411:PHE:O	2.13	0.64
22:UT:718:PRO:HG2	22:UT:755:THR:HG22	1.79	0.64
49:DI:45:SER:OG	49:DI:53:LYS:NZ	2.30	0.64
52:DN:11:ILE:HG13	52:DN:11:ILE:O	1.97	0.64
13:UK:42:HIS:NE2	62:D3:564:G:O6	2.29	0.64
13:UK:109:THR:O	13:UK:113:ILE:HG13	1.97	0.64
15:UM:563:ASP:OD1	15:UM:564:THR:N	2.28	0.64
15:UM:617:ASN:OD1	15:UM:618:ASN:N	2.31	0.64
17:UO:65:ILE:HB	17:UO:75:LYS:HB2	1.80	0.64
22:UT:1489:ILE:HG23	22:UT:1507:THR:HG23	1.79	0.64
22:UT:2175:GLU:N	22:UT:2177:THR:HG1	1.96	0.64
22:UT:2310:GLU:O	22:UT:2312:ARG:NH2	2.30	0.64
23:UU:242:ARG:NH2	23:UU:281:ARG:HG2	2.12	0.64
62:D3:1694:A:H2'	62:D3:1695:G:C8	2.32	0.64
3:UA:844:TYR:CE1	14:UL:899:GLY:HA3	2.33	0.64
11:UI:466:GLU:O	11:UI:470:ILE:HG12	1.98	0.64
12:UJ:1680:VAL:HG23	12:UJ:1683:HIS:HB2	1.79	0.64
14:UL:52:TRP:HE3	14:UL:59:LEU:HD13	1.63	0.64
15:UM:516:LYS:HD2	15:UM:528:THR:HG22	1.78	0.64
17:UO:30:TYR:HA	17:UO:332:LYS:HB2	1.78	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:559:LYS:NZ	19:UQ:560:ILE:O	2.30	0.64
22:UT:523:LEU:HB2	22:UT:557:GLY:HA3	1.78	0.64
23:UU:626:ASP:OD1	23:UU:627:ASN:N	2.30	0.64
23:UU:805:PHE:O	36:JD:1212:TYR:OH	2.15	0.64
24:UV:765:LEU:HD21	24:UV:917:LYS:HB3	1.80	0.64
35:CN:259:ARG:HH12	52:DN:83:GLU:HA	1.62	0.64
41:JM:133:LYS:NZ	62:D3:486:G:O6	2.29	0.64
52:DN:13:SER:OG	52:DN:14:SER:N	2.30	0.64
62:D3:45:U:O2'	62:D3:46:A:OP1	2.15	0.64
3:UA:367:GLY:HA2	3:UA:390:VAL:HG23	1.79	0.64
7:UE:445:LEU:HD11	7:UE:480:LEU:HD12	1.78	0.64
8:UF:165:ARG:O	8:UF:169:GLN:HG2	1.98	0.64
13:UK:244:TRP:HE3	28:CF:31:ARG:NH1	1.96	0.64
15:UM:656:GLN:HE22	15:UM:660:LYS:HE2	1.62	0.64
17:UO:45:ILE:HG12	17:UO:319:VAL:HG11	1.79	0.64
22:UT:1083:TYR:CE1	22:UT:1087:VAL:HG11	2.32	0.64
22:UT:1801:ASN:HD21	22:UT:1882:ARG:HH21	1.44	0.64
24:UV:496:LEU:O	24:UV:500:ASN:ND2	2.29	0.64
25:UX:117:LEU:HD21	25:UX:121:ARG:NH1	2.12	0.64
28:CG:64:LEU:HD23	28:CG:64:LEU:H	1.61	0.64
29:CH:371:ARG:HA	29:CH:374:LYS:HD2	1.80	0.64
33:CL:69:PRO:HB3	33:CL:114:ARG:HG3	1.78	0.64
42:JP:81:ASN:HB2	42:JP:82:LYS:HD3	1.78	0.64
42:JP:389:ARG:NH1	63:D4:36:C:O2	2.29	0.64
62:D3:1711:C:H2'	62:D3:1712:A:H5''	1.78	0.64
15:UM:518:TRP:HB3	15:UM:525:LEU:HA	1.80	0.64
19:UQ:694:LEU:HB3	19:UQ:698:VAL:HB	1.79	0.64
22:UT:1924:LEU:HG	22:UT:1925:ASP:H	1.61	0.64
24:UV:867:ILE:HD13	24:UV:878:LEU:HB3	1.80	0.64
31:CJ:250:VAL:HG22	31:CJ:251:GLY:H	1.60	0.64
56:DT:127:ASN:HA	56:DT:130:ARG:HD3	1.78	0.64
62:D3:779:U:O2'	62:D3:780:A:OP1	2.14	0.64
14:UL:408:THR:HG21	14:UL:447:LEU:HD21	1.80	0.64
17:UO:37:LYS:NZ	17:UO:38:GLU:O	2.23	0.64
22:UT:283:SER:O	22:UT:329:LYS:NZ	2.30	0.64
25:UX:136:TYR:HD2	25:UX:139:ASP:HB2	1.61	0.64
42:JP:109:HIS:CG	42:JP:140:SER:HB2	2.32	0.64
1:CA:159:LEU:HD11	1:CA:315:ILE:HD11	1.79	0.64
17:UO:213:GLN:NE2	17:UO:230:GLY:O	2.31	0.64
20:UR:240:ASP:HB2	20:UR:586:VAL:O	1.98	0.64
22:UT:1479:ASN:HA	22:UT:1483:HIS:HD2	1.62	0.64

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:2076:ARG:O	22:UT:2080:MET:HG2	1.97	0.64
23:UU:24:PHE:HE2	23:UU:611:THR:HG21	1.61	0.64
23:UU:160:THR:N	23:UU:163:GLN:OE1	2.31	0.64
24:UV:494:GLU:OE1	24:UV:497:ARG:NH2	2.28	0.64
31:CJ:189:LEU:HD23	31:CJ:191:PHE:HE2	1.63	0.64
56:DT:14:PHE:HZ	56:DT:132:LEU:HD22	1.61	0.64
3:UA:84:PHE:O	3:UA:87:ARG:HD3	1.98	0.64
13:UK:103:ASP:OD1	13:UK:104:SER:N	2.30	0.64
14:UL:181:SER:OG	14:UL:183:ASP:OD1	2.13	0.64
14:UL:224:SER:HA	14:UL:251:GLN:HE21	1.63	0.64
14:UL:492:SER:OG	14:UL:496:THR:OG1	2.14	0.64
19:UQ:55:TYR:CD1	19:UQ:62:CYS:HA	2.33	0.64
22:UT:1556:ARG:NH1	22:UT:1618:ASN:OD1	2.30	0.64
23:UU:424:ILE:HD11	23:UU:445:MET:HB3	1.80	0.64
34:CM:202:PRO:HG2	62:D3:1132:A:C5	2.33	0.64
36:JD:107:ARG:HG2	36:JD:110:ARG:HH21	1.63	0.64
36:JD:1018:LYS:O	36:JD:1020:GLN:N	2.30	0.64
41:JM:106:LEU:O	41:JM:146:ARG:NH1	2.30	0.64
42:JP:260:GLN:NE2	42:JP:289:TYR:OH	2.31	0.64
46:DF:118:LEU:HD22	46:DF:129:PRO:HB2	1.78	0.64
47:DG:24:ILE:HG22	47:DG:28:PHE:HE1	1.61	0.64
6:UD:233:LYS:NZ	6:UD:239:THR:O	2.31	0.64
12:UJ:772:VAL:HA	12:UJ:775:ILE:HG12	1.80	0.64
15:UM:281:THR:HA	15:UM:327:ILE:HB	1.80	0.64
15:UM:568:MET:N	15:UM:568:MET:SD	2.71	0.64
15:UM:646:ASP:OD1	15:UM:647:CYS:N	2.30	0.64
17:UO:133:HIS:HB2	17:UO:139:ILE:HG22	1.79	0.64
17:UO:151:LEU:HB3	17:UO:162:LEU:HB2	1.80	0.64
36:JD:1154:TYR:HA	36:JD:1169:THR:O	1.98	0.64
62:D3:260:U:H3'	62:D3:261:U:H5'	1.79	0.64
6:UD:136:ASN:HD21	18:UP:191:PRO:HA	1.63	0.64
6:UD:566:LEU:HD22	6:UD:570:ILE:HG12	1.80	0.64
22:UT:1961:LYS:HD2	22:UT:1998:LEU:HD11	1.80	0.64
23:UU:240:ARG:NH2	23:UU:243:THR:OG1	2.31	0.64
27:CE:219:SER:HA	27:CE:236:LYS:HD2	1.80	0.64
33:CL:125:LEU:HB2	33:CL:912:ARG:NH2	2.12	0.64
34:CM:76:TYR:HE1	34:CM:78:PRO:HB3	1.62	0.64
42:JP:109:HIS:CD2	42:JP:140:SER:HB2	2.33	0.64
59:DY:51:GLU:O	59:DY:54:ALA:N	2.26	0.64
3:UA:459:SER:HB2	3:UA:466:LEU:HD11	1.80	0.63
13:UK:248:ARG:HH12	20:UR:512:ASP:HB2	1.63	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:UL:428:PHE:CD1	14:UL:463:SER:HB2	2.33	0.63
14:UL:662:ALA:HB3	14:UL:675:SER:HB3	1.79	0.63
16:UN:872:ARG:O	16:UN:876:GLN:HG2	1.98	0.63
24:UV:721:VAL:HG23	24:UV:722:LEU:HD12	1.80	0.63
24:UV:872:ASN:HD21	39:JI:1543:TYR:HA	1.63	0.63
53:DO:89:THR:HG22	53:DO:125:SER:HB2	1.79	0.63
3:UA:62:ASP:OD1	3:UA:63:LEU:N	2.31	0.63
3:UA:582:THR:HG21	3:UA:683:SER:HA	1.80	0.63
10:UH:558:CYS:O	10:UH:585:ARG:NH1	2.28	0.63
17:UO:90:ARG:NH2	17:UO:137:ASN:O	2.31	0.63
23:UU:258:THR:HG1	23:UU:306:GLY:H	1.44	0.63
23:UU:420:GLU:O	23:UU:429:ASN:ND2	2.28	0.63
40:JL:170:SER:O	40:JL:234:LYS:NZ	2.29	0.63
42:JP:284:HIS:CE1	42:JP:306:SER:HA	2.33	0.63
62:D3:1662:G:H2'	62:D3:1663:G:C8	2.34	0.63
1:CA:307:GLU:O	1:CA:309:TYR:N	2.31	0.63
3:UA:32:PRO:HB3	3:UA:61:ILE:HD11	1.81	0.63
13:UK:244:TRP:HB2	28:CF:31:ARG:NH1	2.13	0.63
15:UM:552:SER:OG	15:UM:554:ASP:OD1	2.11	0.63
23:UU:323:VAL:HG21	27:CE:419:VAL:HG11	1.79	0.63
23:UU:515:ARG:NH1	23:UU:532:ASN:OD1	2.31	0.63
26:CD:4:ILE:HD11	26:CD:99:ALA:HB2	1.81	0.63
26:CD:40:ASP:OD1	26:CD:41:PHE:N	2.31	0.63
27:CE:76:LEU:HA	27:CE:79:ILE:HG12	1.80	0.63
27:CE:167:ILE:HD11	27:CE:298:ARG:HE	1.63	0.63
32:CK:297:LEU:HB2	32:CK:302:LYS:HZ3	1.63	0.63
62:D3:891:A:H2'	62:D3:892:A:H8	1.63	0.63
3:UA:311:ASN:OD1	3:UA:312:GLN:N	2.32	0.63
1:CB:195:TYR:HD2	1:CB:218:ILE:HG21	1.63	0.63
6:UD:637:PHE:HE2	6:UD:746:LEU:HG	1.64	0.63
8:UF:323:PHE:O	8:UF:331:ARG:NH1	2.32	0.63
12:UJ:556:LYS:O	12:UJ:592:ARG:NH2	2.31	0.63
12:UJ:1401:LEU:HD11	12:UJ:1440:VAL:HG11	1.80	0.63
14:UL:123:ALA:HB3	14:UL:141:LYS:HD2	1.80	0.63
15:UM:58:ASN:OD1	15:UM:59:GLU:N	2.31	0.63
15:UM:97:ARG:HE	15:UM:134:GLY:H	1.47	0.63
16:UN:817:ASN:OD1	16:UN:818:LYS:N	2.31	0.63
17:UO:57:VAL:HG21	17:UO:327:LEU:HD21	1.81	0.63
19:UQ:360:MET:CB	19:UQ:368:ASP:O	2.43	0.63
22:UT:438:GLU:OE1	22:UT:442:LYS:NZ	2.27	0.63
22:UT:538:LEU:HD11	22:UT:565:LEU:HG	1.80	0.63

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1098:ASN:HD21	22:UT:1103:SER:HB3	1.64	0.63
24:UV:526:CYS:HB3	24:UV:616:LYS:NZ	2.13	0.63
35:CN:259:ARG:NE	35:CN:259:ARG:HA	2.14	0.63
37:JG:97:LEU:HD22	37:JG:130:ILE:HD12	1.79	0.63
6:UD:214:SER:HB2	6:UD:226:LEU:HD22	1.79	0.63
6:UD:773:LYS:NZ	61:D2:84:G:O6	2.30	0.63
13:UK:167:THR:HG22	13:UK:169:ASP:H	1.64	0.63
14:UL:386:GLU:HG3	14:UL:391:ARG:NE	2.13	0.63
15:UM:175:TRP:CD1	15:UM:182:CYS:HA	2.34	0.63
22:UT:279:TRP:HD1	22:UT:320:THR:HG22	1.63	0.63
22:UT:1903:LEU:HD21	22:UT:1940:LYS:HG2	1.80	0.63
23:UU:62:ASP:OD1	23:UU:63:ALA:N	2.32	0.63
23:UU:324:PHE:HE1	23:UU:340:PRO:HB3	1.63	0.63
24:UV:169:PRO:HA	24:UV:172:THR:HG22	1.79	0.63
26:CD:110:LYS:NZ	42:JP:157:ASN:HD21	1.97	0.63
27:CE:208:ILE:HD11	27:CE:227:LEU:HD11	1.81	0.63
29:CH:242:VAL:HG23	29:CH:253:THR:HG22	1.79	0.63
36:JD:735:TYR:CE2	36:JD:737:LEU:HB2	2.34	0.63
36:JD:1155:TYR:HB2	36:JD:1169:THR:HG22	1.81	0.63
37:JF:31:LEU:HD13	37:JF:40:ARG:HE	1.63	0.63
37:JG:43:VAL:HG13	37:JG:112:VAL:HG23	1.81	0.63
37:JG:151:ARG:NH1	62:D3:1570:A:O3'	2.31	0.63
46:DF:189:THR:HG22	46:DF:192:GLU:HG2	1.81	0.63
62:D3:828:U:H2'	62:D3:829:A:C8	2.34	0.63
2:DA:88:VAL:HG21	2:DA:96:LEU:HD23	1.79	0.63
7:UE:536:LEU:HD11	17:UO:453:VAL:HG13	1.80	0.63
12:UJ:690:GLU:HG3	12:UJ:694:HIS:CE1	2.33	0.63
14:UL:7:ARG:HA	14:UL:651:GLN:HE22	1.62	0.63
17:UO:32:SER:OG	17:UO:331:THR:O	2.17	0.63
20:UR:400:ILE:HD11	20:UR:404:ILE:HG23	1.81	0.63
22:UT:1501:ARG:N	22:UT:1503:ILE:HG12	2.13	0.63
24:UV:96:GLU:O	24:UV:100:SER:HB2	1.99	0.63
24:UV:558:LEU:HD23	24:UV:562:LEU:HD23	1.80	0.63
33:CL:830:ARG:NH2	33:CL:831:ARG:O	2.32	0.63
73:EJ:270:THR:H	73:EJ:275:MET:HA	1.64	0.63
2:DA:21:VAL:HG13	2:DA:23:PRO:HD3	1.81	0.63
1:CB:251:ARG:HH22	1:CB:255:LEU:HD11	1.64	0.63
7:UE:109:ASP:OD1	7:UE:110:ILE:N	2.31	0.63
8:UF:111:ALA:HB1	41:JM:73:ALA:HB2	1.80	0.63
17:UO:370:GLN:OE1	20:UR:245:HIS:NE2	2.28	0.63
22:UT:1239:ASP:HA	22:UT:1242:LYS:HG2	1.81	0.63

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:638:GLY:O	23:UU:656:ASN:ND2	2.25	0.63
35:CN:18:PHE:HB2	35:CN:35:HIS:HB3	1.80	0.63
36:JD:812:ARG:HA	36:JD:815:ARG:HG2	1.81	0.63
56:DT:105:LEU:HD22	56:DT:122:ARG:HD3	1.81	0.63
57:DW:80:ASN:HD21	62:D3:747:C:H4'	1.64	0.63
62:D3:127:G:O2'	62:D3:129:U:OP1	2.17	0.63
6:UD:565:ARG:HG2	12:UJ:635:TYR:H	1.63	0.63
7:UE:200:GLU:O	7:UE:216:ASP:HA	1.99	0.63
8:UF:299:LYS:NZ	27:CE:249:GLN:HG2	2.14	0.63
14:UL:637:ALA:HA	14:UL:660:VAL:HG23	1.81	0.63
17:UO:90:ARG:HH11	17:UO:95:LEU:HD13	1.63	0.63
30:CI:115:MET:HB3	30:CI:120:MET:HB2	1.80	0.63
41:JM:112:ASN:HB2	63:D4:90:C:N3	2.14	0.63
47:DG:187:LYS:NZ	62:D3:139:C:O2'	2.32	0.63
62:D3:922:G:H2'	62:D3:923:A:H8	1.63	0.63
62:D3:1085:G:N2	62:D3:1088:A:OP2	2.32	0.63
63:D4:72:C:H2'	63:D4:73:A:H8	1.64	0.63
12:UJ:1581:LYS:O	12:UJ:1585:ASN:ND2	2.22	0.63
14:UL:345:THR:OG1	14:UL:350:LYS:O	2.13	0.63
19:UQ:312:LEU:HB3	19:UQ:324:TRP:HB2	1.80	0.63
24:UV:298:PHE:HB2	24:UV:340:SER:HA	1.81	0.63
36:JD:536:VAL:O	36:JD:551:LYS:NZ	2.31	0.63
44:JJ:129:ARG:HH21	44:JJ:131:ASN:ND2	1.96	0.63
46:DF:222:LYS:HA	46:DF:225:ARG:HH21	1.63	0.63
56:DT:78:LYS:NZ	62:D3:1523:G:OP1	2.32	0.63
17:UO:219:ILE:HD13	17:UO:258:LEU:HD22	1.81	0.62
19:UQ:459:ILE:HB	19:UQ:469:ASN:HB2	1.81	0.62
24:UV:306:LYS:HA	24:UV:309:LEU:HG	1.80	0.62
28:CG:23:VAL:HG11	28:CG:117:VAL:HG21	1.81	0.62
31:CJ:143:HIS:ND1	62:D3:1604:U:H5''	2.13	0.62
32:CK:408:SER:OG	32:CK:411:GLU:OE1	2.15	0.62
44:JJ:186:GLU:OE1	44:JJ:188:LYS:NZ	2.32	0.62
48:DH:63:PRO:O	48:DH:66:SER:OG	2.16	0.62
17:UO:302:VAL:HA	17:UO:322:LEU:HA	1.80	0.62
22:UT:1000:PHE:O	22:UT:1003:ILE:HG22	1.99	0.62
22:UT:2441:ARG:O	22:UT:2445:ARG:HD3	1.98	0.62
24:UV:671:THR:HA	24:UV:677:ILE:HD11	1.80	0.62
24:UV:1019:GLY:O	24:UV:1023:ASN:ND2	2.31	0.62
30:CI:152:ARG:O	30:CI:155:GLU:HG3	1.99	0.62
33:CL:12:LYS:HD3	33:CL:15:ASN:HB2	1.80	0.62
42:JP:97:MET:O	42:JP:100:ARG:NH1	2.33	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
61:D2:478:U:H2'	61:D2:479:G:H8	1.64	0.62
62:D3:1594:G:HO2'	62:D3:1600:A:N6	1.98	0.62
14:UL:880:ILE:HG22	15:UM:810:LEU:HD12	1.81	0.62
16:UN:336:THR:OG1	16:UN:337:GLU:OE1	2.17	0.62
17:UO:493:HIS:CE1	17:UO:497:LYS:HE3	2.34	0.62
21:US:381:LYS:NZ	21:US:462:SER:O	2.32	0.62
22:UT:874:LEU:HD21	22:UT:885:ARG:HG2	1.81	0.62
22:UT:2204:ASP:OD1	22:UT:2205:LEU:N	2.32	0.62
26:CD:264:SER:OG	26:CD:266:THR:OG1	2.14	0.62
28:CF:32:GLN:NE2	28:CF:105:ASN:HB3	2.14	0.62
1:CB:175:ALA:N	1:CB:198:GLU:OE2	2.32	0.62
7:UE:498:LEU:HA	7:UE:501:TRP:CD1	2.28	0.62
20:UR:295:ILE:HD12	20:UR:314:THR:HG21	1.81	0.62
22:UT:222:ASP:HB3	22:UT:225:GLN:HB3	1.81	0.62
25:UX:182:ILE:HG12	25:UX:185:LEU:HD12	1.80	0.62
37:JF:35:ASP:OD2	37:JF:40:ARG:NH2	2.32	0.62
40:JL:162:ARG:NH1	62:D3:1781:A:H61	1.98	0.62
41:JM:155:ASP:OD1	41:JM:156:LYS:N	2.32	0.62
42:JP:131:LYS:HG2	42:JP:155:TYR:CE2	2.35	0.62
47:DG:92:ARG:O	62:D3:405:C:O2'	2.17	0.62
62:D3:1131:A:H2'	62:D3:1132:A:C8	2.35	0.62
74:EK:300:LEU:O	74:EK:389:THR:HA	1.98	0.62
1:CA:120:GLU:N	1:CA:120:GLU:OE1	2.32	0.62
6:UD:209:ARG:HE	6:UD:230:LYS:HG3	1.64	0.62
6:UD:510:GLU:O	6:UD:558:ARG:NH1	2.32	0.62
7:UE:495:GLN:HE21	17:UO:497:LYS:HD3	1.64	0.62
14:UL:276:ASN:OD1	14:UL:277:ALA:N	2.25	0.62
19:UQ:588:ASP:OD1	19:UQ:597:LYS:NZ	2.32	0.62
22:UT:1335:GLY:H	22:UT:1373:LYS:NZ	1.97	0.62
32:CK:344:GLU:HA	33:CL:960:ARG:HH21	1.64	0.62
35:CN:151:HIS:CE1	35:CN:153:ASN:HB3	2.34	0.62
36:JD:986:LYS:HE2	36:JD:988:TYR:HB2	1.81	0.62
46:DF:48:PHE:CE2	46:DF:67:PRO:HA	2.33	0.62
62:D3:56:U:OP1	62:D3:403:G:N1	2.24	0.62
13:UK:139:SER:OG	13:UK:142:LYS:HG2	1.98	0.62
14:UL:829:VAL:HG22	14:UL:860:ILE:HD11	1.82	0.62
17:UO:264:PHE:HB2	17:UO:316:ARG:HH21	1.65	0.62
22:UT:2241:TYR:O	22:UT:2243:HIS:ND1	2.27	0.62
25:UX:98:ILE:HG23	25:UX:102:VAL:CG1	2.29	0.62
25:UX:155:THR:O	25:UX:174:SER:HA	1.99	0.62
37:JF:150:ILE:HD12	37:JF:160:LEU:HD12	1.80	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DE:117:GLU:OE1	45:DE:117:GLU:N	2.31	0.62
3:UA:155:SER:OG	3:UA:157:ASP:O	2.11	0.62
3:UA:439:ASP:OD1	3:UA:441:SER:N	2.31	0.62
6:UD:144:ILE:HD13	6:UD:160:CYS:HB3	1.80	0.62
7:UE:307:GLN:OE1	7:UE:332:LEU:HD21	1.99	0.62
7:UE:529:THR:O	7:UE:532:ARG:HG2	1.99	0.62
12:UJ:716:PHE:O	12:UJ:719:SER:OG	2.17	0.62
17:UO:487:LEU:HA	17:UO:490:LYS:HZ3	1.64	0.62
19:UQ:680:ALA:HB1	19:UQ:749:ASP:HB2	1.80	0.62
20:UR:352:GLN:HB3	20:UR:379:GLY:HA2	1.80	0.62
22:UT:1151:ILE:HD13	22:UT:1198:PHE:CE1	2.34	0.62
24:UV:339:SER:HA	24:UV:342:HIS:CD2	2.35	0.62
24:UV:936:LEU:HD12	24:UV:977:LEU:HD12	1.81	0.62
24:UV:978:ASP:OD1	24:UV:1011:ARG:HG3	1.99	0.62
33:CL:889:LEU:HD22	33:CL:922:ILE:HG23	1.82	0.62
46:DF:157:ARG:O	46:DF:224:ASN:ND2	2.32	0.62
49:DI:49:ARG:NH1	62:D3:399:A:OP1	2.32	0.62
53:DO:13:VAL:HG23	53:DO:76:ILE:HA	1.80	0.62
56:DT:13:ASP:OD1	56:DT:14:PHE:N	2.32	0.62
62:D3:572:C:H5'	62:D3:573:C:H5	1.64	0.62
62:D3:1666:U:O4	62:D3:1667:A:N6	2.32	0.62
64:EA:162:U:H5'	75:EN:224:GLY:HA3	1.81	0.62
75:EN:436:GLU:O	75:EN:440:LEU:N	2.32	0.62
1:CB:242:ALA:HB2	1:CB:253:ILE:HD11	1.80	0.62
6:UD:585:ILE:HG12	6:UD:591:ILE:HG13	1.82	0.62
9:UG:213:TRP:HE1	9:UG:227:GLU:HG3	1.65	0.62
14:UL:188:LEU:HB3	14:UL:198:GLU:HB3	1.80	0.62
15:UM:437:VAL:HA	15:UM:458:SER:HA	1.80	0.62
17:UO:193:ILE:HD11	17:UO:215:VAL:HG21	1.82	0.62
21:US:179:GLU:HA	21:US:182:GLU:HG2	1.82	0.62
23:UU:324:PHE:CE1	23:UU:340:PRO:HB3	2.35	0.62
24:UV:971:LYS:NZ	24:UV:1033:ASN:HA	2.14	0.62
31:CJ:278:ARG:HA	62:D3:1596:C:H5	1.65	0.62
36:JD:403:ALA:O	36:JD:407:ASN:HB2	2.00	0.62
42:JP:237:SER:HB3	42:JP:247:TYR:HE1	1.65	0.62
47:DG:78:THR:HG22	47:DG:79:LYS:H	1.64	0.62
58:DX:53:VAL:HA	58:DX:74:VAL:HG12	1.82	0.62
62:D3:1594:G:O2'	62:D3:1600:A:N6	2.27	0.62
1:CA:261:LEU:O	26:CD:129:ARG:NH1	2.31	0.62
3:UA:35:ASN:HD21	3:UA:620:ASN:HB2	1.64	0.62
7:UE:167:SER:O	7:UE:168:HIS:ND1	2.33	0.62

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:UM:603:ASP:HB2	15:UM:606:SER:HB3	1.82	0.62
19:UQ:60:ARG:NH1	19:UQ:384:SER:OG	2.33	0.62
22:UT:1625:ASN:O	22:UT:1628:ILE:HG12	2.00	0.62
23:UU:119:GLU:O	23:UU:120:HIS:ND1	2.33	0.62
23:UU:574:THR:OG1	23:UU:576:ARG:NH2	2.33	0.62
24:UV:214:PHE:CE2	24:UV:299:PRO:HD2	2.33	0.62
24:UV:638:MET:HE1	24:UV:646:LYS:HD3	1.82	0.62
37:JG:112:VAL:HG13	37:JG:124:VAL:CG1	2.30	0.62
49:DI:31:ARG:NH1	62:D3:332:U:OP1	2.32	0.62
56:DT:25:GLN:HE22	56:DT:27:LYS:HB3	1.65	0.62
58:DX:46:SER:OG	58:DX:48:HIS:O	2.12	0.62
73:EJ:154:GLU:HA	73:EJ:202:ARG:HA	1.82	0.62
4:UB:97:ARG:NH2	4:UB:101:ALA:HB2	2.14	0.62
4:UB:557:SER:O	4:UB:559:ARG:NH1	2.33	0.62
19:UQ:32:LYS:NZ	19:UQ:343:ASP:OD2	2.28	0.62
22:UT:437:LEU:O	22:UT:764:ARG:NH1	2.33	0.62
22:UT:1503:ILE:O	22:UT:1507:THR:OG1	2.11	0.62
24:UV:151:SER:O	24:UV:155:ASN:ND2	2.33	0.62
31:CJ:223:THR:O	31:CJ:233:VAL:HA	2.00	0.62
38:JH:399:ILE:HA	38:JH:409:ALA:HB1	1.82	0.62
2:DA:61:LEU:HD22	2:DA:96:LEU:HD21	1.80	0.61
8:UF:342:TRP:HZ2	8:UF:358:LEU:HD12	1.65	0.61
13:UK:10:LYS:NZ	62:D3:552:G:O6	2.29	0.61
15:UM:129:VAL:HA	15:UM:136:ILE:HA	1.82	0.61
30:CI:30:THR:HA	30:CI:33:MET:HG2	1.82	0.61
34:CM:29:LYS:NZ	34:CM:332:ILE:O	2.28	0.61
36:JD:919:ASP:HA	36:JD:924:LEU:HD21	1.81	0.61
53:DO:117:ASP:OD1	53:DO:119:THR:OG1	2.18	0.61
9:UG:263:MET:N	9:UG:263:MET:SD	2.73	0.61
9:UG:263:MET:HG3	16:UN:835:VAL:HB	1.83	0.61
24:UV:929:ILE:HG23	24:UV:933:LEU:HD23	1.81	0.61
36:JD:540:ALA:HB1	36:JD:551:LYS:HG3	1.80	0.61
9:UG:299:LYS:NZ	9:UG:308:GLN:OE1	2.33	0.61
10:UH:676:TRP:HB2	11:UI:486:LEU:HB3	1.82	0.61
12:UJ:700:SER:O	12:UJ:703:GLU:HG3	1.99	0.61
14:UL:198:GLU:OE2	14:UL:200:HIS:NE2	2.33	0.61
14:UL:279:LYS:HG2	14:UL:337:LYS:HA	1.81	0.61
19:UQ:111:THR:HG22	19:UQ:115:HIS:HB2	1.82	0.61
19:UQ:510:TYR:OH	19:UQ:527:HIS:ND1	2.32	0.61
24:UV:633:ALA:HA	24:UV:664:THR:HG22	1.82	0.61
34:CM:267:ILE:HB	34:CM:270:GLU:HB2	1.82	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:JD:1076:GLN:O	36:JD:1080:LEU:HG	2.01	0.61
37:JG:178:VAL:HA	37:JG:223:GLU:O	1.99	0.61
49:DI:171:SER:OG	49:DI:172:ARG:N	2.33	0.61
3:UA:67:GLY:O	3:UA:85:LYS:NZ	2.32	0.61
1:CB:160:ASP:OD1	1:CB:161:GLU:N	2.32	0.61
6:UD:143:VAL:HG11	18:UP:198:ILE:HD13	1.83	0.61
6:UD:593:GLU:OE1	6:UD:615:SER:OG	2.18	0.61
7:UE:518:ASN:HB2	7:UE:521:SER:HB2	1.82	0.61
9:UG:45:GLY:HA3	16:UN:856:GLN:NE2	2.16	0.61
9:UG:409:ALA:O	42:JP:8:ARG:NH1	2.33	0.61
19:UQ:366:ASN:HA	19:UQ:399:ILE:HD13	1.82	0.61
21:US:270:SER:O	21:US:274:TYR:HB2	1.99	0.61
22:UT:976:TYR:OH	22:UT:988:LYS:NZ	2.27	0.61
22:UT:1292:GLY:HA3	22:UT:1301:ILE:HD13	1.81	0.61
24:UV:872:ASN:HA	24:UV:875:LYS:HD2	1.83	0.61
29:CH:445:GLU:OE1	29:CH:446:PRO:HD2	2.00	0.61
32:CK:493:GLN:OE1	32:CK:493:GLN:N	2.32	0.61
33:CL:1104:GLY:H	33:CL:1107:LYS:HZ2	1.46	0.61
36:JD:637:LYS:O	36:JD:641:LYS:HG3	2.00	0.61
62:D3:474:A:O2'	62:D3:475:A:OP2	2.13	0.61
1:CB:232:MET:HG2	27:CE:61:ASN:ND2	2.16	0.61
6:UD:323:SER:OG	19:UQ:289:GLN:NE2	2.33	0.61
12:UJ:600:LEU:HD23	12:UJ:603:LYS:HE2	1.82	0.61
15:UM:501:PRO:HG2	15:UM:543:GLN:HG3	1.82	0.61
23:UU:21:SER:OG	23:UU:22:LYS:N	2.33	0.61
28:CG:32:GLN:NE2	28:CG:105:ASN:HB3	2.14	0.61
30:CI:106:ILE:HG23	30:CI:149:LEU:HD21	1.83	0.61
51:DL:132:SER:HB3	51:DL:135:VAL:HG12	1.82	0.61
54:DQ:42:GLU:HA	54:DQ:45:ARG:HG3	1.81	0.61
61:D2:470:U:O4	63:D4:48:A:N6	2.19	0.61
1:CA:114:GLY:N	1:CA:140:GLU:OE1	2.34	0.61
6:UD:401:ILE:HB	6:UD:418:CYS:HB2	1.81	0.61
6:UD:595:ASN:H	6:UD:611:LEU:HA	1.65	0.61
7:UE:445:LEU:HB3	7:UE:479:ILE:HD11	1.81	0.61
7:UE:522:THR:HG23	7:UE:523:LEU:HD12	1.83	0.61
12:UJ:363:LEU:HD23	12:UJ:366:ILE:HD12	1.83	0.61
22:UT:1151:ILE:HG13	22:UT:1152:GLU:N	2.16	0.61
22:UT:1313:SER:OG	22:UT:1323:ARG:NE	2.33	0.61
22:UT:1606:ILE:H	22:UT:1606:ILE:HD12	1.66	0.61
24:UV:173:ASN:HD21	62:D3:1699:G:H5''	1.65	0.61
24:UV:703:LYS:HD2	24:UV:1082:GLN:HB2	1.82	0.61

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:883:LEU:HD11	24:UV:1051:LEU:HD23	1.82	0.61
27:CE:232:GLU:O	27:CE:236:LYS:HG2	2.01	0.61
32:CK:538:LYS:HZ1	62:D3:1628:U:H6	1.47	0.61
62:D3:1569:A:H2'	62:D3:1570:A:H8	1.65	0.61
1:CA:208:ILE:HD11	26:CD:159:SER:HB3	1.83	0.61
2:DA:214:LYS:NZ	62:D3:886:U:OP1	2.33	0.61
4:UB:88:LYS:O	4:UB:92:GLU:HG2	2.01	0.61
7:UE:23:ALA:HB1	20:UR:261:PRO:HG3	1.83	0.61
7:UE:469:ILE:HB	7:UE:508:ILE:HD12	1.83	0.61
12:UJ:1548:PHE:CD2	12:UJ:1593:TYR:HD1	2.19	0.61
15:UM:186:LEU:HD23	15:UM:223:TRP:CE2	2.36	0.61
15:UM:414:VAL:HB	15:UM:428:ALA:HB3	1.81	0.61
22:UT:2095:LEU:O	22:UT:2099:SER:HB3	2.00	0.61
23:UU:102:LYS:HG2	23:UU:103:ARG:HG3	1.83	0.61
28:CF:23:VAL:HG11	28:CF:117:VAL:HG21	1.81	0.61
36:JD:883:LEU:HB3	36:JD:889:LEU:HD13	1.83	0.61
62:D3:1657:U:H4'	62:D3:1658:G:O5'	2.01	0.61
63:D4:102:U:H2'	63:D4:103:A:C8	2.35	0.61
67:ED:177:ARG:HA	67:ED:187:VAL:HA	1.82	0.61
2:DA:243:LYS:NZ	24:UV:656:ARG:HE	1.99	0.61
12:UJ:1369:PHE:HD1	12:UJ:1372:LYS:HZ1	1.47	0.61
17:UO:263:ASN:O	17:UO:310:SER:OG	2.13	0.61
19:UQ:730:ASP:O	19:UQ:734:VAL:N	2.34	0.61
22:UT:326:SER:HG	22:UT:328:ARG:HE	1.46	0.61
22:UT:874:LEU:HD21	22:UT:885:ARG:NH1	2.16	0.61
23:UU:135:ASN:ND2	23:UU:166:GLU:OE2	2.34	0.61
24:UV:145:SER:N	24:UV:148:GLU:OE2	2.32	0.61
27:CE:160:ASP:O	27:CE:164:ILE:HD12	2.01	0.61
36:JD:986:LYS:HB3	36:JD:989:LYS:HB2	1.80	0.61
47:DG:55:GLY:O	47:DG:63:MET:HG3	2.01	0.61
62:D3:74:U:H1'	62:D3:75:U:H5'	1.83	0.61
62:D3:1735:U:H2'	62:D3:1736:G:O4'	1.99	0.61
73:EJ:276:THR:HA	73:EJ:283:THR:HA	1.83	0.61
4:UB:490:PHE:HD1	4:UB:532:ILE:HD12	1.66	0.61
8:UF:340:GLN:O	8:UF:343:LYS:HG2	2.00	0.61
14:UL:350:LYS:HE3	14:UL:366:SER:HB3	1.83	0.61
17:UO:31:THR:C	17:UO:331:THR:O	2.38	0.61
20:UR:488:SER:HB3	28:CF:89:ARG:NH1	2.13	0.61
22:UT:1116:PRO:HA	22:UT:1119:TYR:CZ	2.36	0.61
22:UT:1587:LYS:HA	22:UT:1590:LEU:HB3	1.82	0.61
23:UU:373:ARG:HH11	23:UU:373:ARG:HG2	1.65	0.61

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:456:ASP:OD1	23:UU:457:THR:N	2.34	0.61
23:UU:514:ASN:O	23:UU:532:ASN:ND2	2.32	0.61
24:UV:583:ILE:HD13	24:UV:615:VAL:HG12	1.82	0.61
24:UV:1195:LYS:NZ	24:UV:1210:GLU:OE1	2.32	0.61
25:UX:135:THR:O	25:UX:135:THR:HG22	2.00	0.61
25:UX:189:PHE:CE1	50:DJ:15:PRO:HB3	2.35	0.61
36:JD:1024:PHE:O	36:JD:1028:ASN:ND2	2.29	0.61
37:JF:176:ARG:HD2	37:JF:196:LEU:HD21	1.82	0.61
62:D3:1690:G:H2'	62:D3:1691:A:H8	1.65	0.61
63:D4:188:A:H3'	63:D4:189:A:H8	1.66	0.61
1:CA:86:VAL:HG21	1:CA:123:ILE:HD13	1.82	0.61
7:UE:255:ILE:HD11	7:UE:277:LYS:HD2	1.82	0.61
16:UN:796:GLY:HA3	44:JJ:127:GLN:HG2	1.83	0.61
16:UN:799:SER:OG	16:UN:800:LYS:N	2.31	0.61
17:UO:359:ARG:HA	17:UO:362:ARG:HD3	1.82	0.61
20:UR:382:GLY:HA2	20:UR:400:ILE:O	1.99	0.61
20:UR:400:ILE:HB	20:UR:433:TRP:CE3	2.36	0.61
22:UT:1384:LEU:O	22:UT:1388:SER:N	2.31	0.61
22:UT:1927:SER:OG	22:UT:1928:ASP:N	2.33	0.61
23:UU:432:THR:HG1	23:UU:443:TRP:HE1	1.48	0.61
24:UV:514:ASN:HB3	24:UV:517:ARG:HH12	1.66	0.61
25:UX:52:PHE:HB3	25:UX:55:TYR:HB3	1.83	0.61
47:DG:56:ASN:HD21	62:D3:153:G:N2	1.99	0.61
51:DL:59:PRO:HD3	51:DL:138:ASN:ND2	2.16	0.61
62:D3:1672:G:H2'	62:D3:1673:G:C8	2.36	0.61
9:UG:333:SER:HB2	9:UG:378:VAL:HG21	1.81	0.60
12:UJ:611:ILE:HD12	12:UJ:612:PRO:HD2	1.81	0.60
19:UQ:71:ASN:HB3	19:UQ:74:LEU:HB2	1.82	0.60
33:CL:1054:TYR:O	33:CL:1055:HIS:ND1	2.34	0.60
37:JF:178:VAL:HG12	37:JF:223:GLU:HG3	1.83	0.60
62:D3:656:G:N1	62:D3:678:A:N3	2.49	0.60
12:UJ:302:LEU:O	12:UJ:305:THR:OG1	2.14	0.60
12:UJ:1615:ASN:OD1	12:UJ:1618:LEU:N	2.33	0.60
14:UL:48:ASP:OD1	14:UL:49:VAL:N	2.35	0.60
15:UM:45:LEU:HA	15:UM:50:ARG:HG2	1.82	0.60
15:UM:77:THR:HG21	15:UM:117:LEU:HD13	1.83	0.60
21:US:174:ASN:HB2	21:US:178:VAL:HG13	1.81	0.60
22:UT:418:GLN:NE2	22:UT:452:ASN:H	1.99	0.60
22:UT:1605:THR:O	22:UT:1609:ARG:HG2	2.01	0.60
22:UT:2232:TRP:CD1	22:UT:2257:LEU:HD12	2.36	0.60
27:CE:286:ASN:ND2	27:CE:374:ASP:OD1	2.20	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:CH:405:VAL:HG23	29:CH:415:THR:HG22	1.82	0.60
29:CH:538:ARG:NE	29:CH:565:SER:OG	2.33	0.60
30:CI:146:PRO:O	30:CI:148:TYR:N	2.34	0.60
33:CL:993:ASP:OD1	33:CL:994:LYS:N	2.34	0.60
36:JD:120:TYR:HB3	40:JL:308:TYR:CD1	2.36	0.60
36:JD:854:MET:HB3	36:JD:859:ILE:HB	1.83	0.60
36:JD:1141:LEU:HD13	36:JD:1144:LEU:HD12	1.82	0.60
37:JG:94:GLN:NE2	37:JG:95:CYS:SG	2.74	0.60
40:JL:181:MET:HG2	40:JL:223:TRP:CZ2	2.36	0.60
45:DE:56:LEU:N	45:DE:60:GLU:OE1	2.34	0.60
48:DH:70:PHE:O	48:DH:74:GLN:HB2	2.01	0.60
49:DI:178:ARG:NH1	62:D3:259:U:O4'	2.34	0.60
50:DJ:63:ASP:OD1	50:DJ:64:GLU:N	2.34	0.60
62:D3:472:U:O2'	62:D3:769:A:N3	2.31	0.60
1:CA:321:MET:O	1:CA:323:SER:N	2.35	0.60
6:UD:147:ILE:HD11	6:UD:156:LEU:HD12	1.82	0.60
12:UJ:168:VAL:HG12	12:UJ:169:ARG:HG3	1.82	0.60
12:UJ:363:LEU:HA	12:UJ:366:ILE:HD12	1.82	0.60
12:UJ:1437:ARG:O	12:UJ:1441:ILE:HG12	2.02	0.60
12:UJ:1464:GLU:HG3	12:UJ:1465:ILE:HG12	1.81	0.60
21:US:230:SER:HB3	21:US:288:HIS:CD2	2.36	0.60
23:UU:859:ASP:OD1	23:UU:860:GLU:N	2.34	0.60
27:CE:163:ILE:HD11	27:CE:279:ARG:HG3	1.82	0.60
31:CJ:25:LEU:HG	31:CJ:29:ARG:HH11	1.66	0.60
33:CL:140:LEU:HD11	33:CL:152:THR:HG23	1.83	0.60
36:JD:1060:VAL:HG22	44:JJ:82:THR:HG23	1.82	0.60
58:DX:43:PHE:CD2	58:DX:49:ALA:HB2	2.35	0.60
9:UG:320:THR:O	9:UG:321:ASN:ND2	2.34	0.60
14:UL:15:GLY:O	14:UL:360:ASN:ND2	2.35	0.60
14:UL:677:HIS:NE2	62:D3:1654:G:O2'	2.34	0.60
17:UO:403:ASN:HA	17:UO:406:VAL:HG13	1.83	0.60
20:UR:127:ASP:HB3	20:UR:130:ASP:HB2	1.81	0.60
20:UR:405:THR:HG21	20:UR:455:ILE:O	2.01	0.60
24:UV:158:VAL:HG11	24:UV:237:HIS:HB2	1.83	0.60
24:UV:379:MET:O	24:UV:384:SER:OG	2.19	0.60
24:UV:427:LYS:HA	24:UV:496:LEU:HD21	1.83	0.60
36:JD:116:LYS:HE2	36:JD:120:TYR:HE2	1.66	0.60
36:JD:1050:LYS:HD2	36:JD:1062:ILE:HD11	1.83	0.60
36:JD:1135:ILE:HD11	36:JD:1170:LEU:HD11	1.81	0.60
40:JL:276:VAL:O	40:JL:279:GLU:HG3	2.01	0.60
62:D3:1544:U:H2'	62:D3:1545:A:H8	1.64	0.60

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:1568:C:H4'	62:D3:1569:A:O5'	2.01	0.60
19:UQ:304:SER:HB2	19:UQ:313:LEU:HB2	1.83	0.60
19:UQ:579:ASN:HD21	19:UQ:603:ASN:HA	1.66	0.60
22:UT:1125:ASP:OD1	22:UT:1126:GLU:N	2.35	0.60
24:UV:364:VAL:HA	24:UV:367:ARG:HG2	1.83	0.60
37:JG:39:LYS:HA	37:JG:200:GLU:O	2.00	0.60
40:JL:233:ARG:NH1	62:D3:1777:G:H5'	2.17	0.60
62:D3:1499:G:H1	62:D3:1508:U:H3	1.49	0.60
63:D4:96:C:H2'	63:D4:97:C:C6	2.37	0.60
2:DA:3:VAL:HG23	53:DO:49:LYS:HB3	1.82	0.60
3:UA:844:TYR:CD1	14:UL:899:GLY:HA3	2.36	0.60
6:UD:308:SER:OG	6:UD:310:ASN:OD1	2.20	0.60
9:UG:253:ASN:HB2	9:UG:255:THR:HG23	1.82	0.60
14:UL:261:PHE:O	14:UL:343:TRP:NE1	2.35	0.60
14:UL:285:ARG:HB3	14:UL:327:HIS:HB3	1.82	0.60
15:UM:106:TYR:OH	53:DO:73:GLU:OE1	2.17	0.60
19:UQ:113:ASN:O	19:UQ:115:HIS:ND1	2.33	0.60
20:UR:161:ILE:HD11	23:UU:177:LEU:CD2	2.32	0.60
20:UR:430:GLY:HA2	20:UR:455:ILE:HD12	1.82	0.60
22:UT:1074:ASP:OD1	22:UT:1075:TRP:N	2.34	0.60
22:UT:1668:GLU:OE1	22:UT:1668:GLU:N	2.30	0.60
33:CL:233:ARG:NH2	62:D3:435:C:OP1	2.34	0.60
33:CL:562:GLU:HG3	33:CL:566:ARG:HH12	1.66	0.60
50:DJ:111:THR:O	50:DJ:115:LYS:HG2	2.02	0.60
62:D3:1110:G:H2'	62:D3:1111:G:H8	1.66	0.60
63:D4:181:G:N2	63:D4:184:U:OP2	2.29	0.60
13:UK:235:ASP:O	13:UK:238:GLY:N	2.35	0.60
17:UO:173:THR:HG22	17:UO:218:VAL:HG12	1.82	0.60
19:UQ:371:PHE:HB2	19:UQ:385:ILE:CG1	2.32	0.60
22:UT:1808:SER:OG	22:UT:1809:GLU:N	2.27	0.60
22:UT:2164:THR:O	22:UT:2167:VAL:HB	2.02	0.60
24:UV:439:HIS:HB2	24:UV:466:THR:HB	1.84	0.60
36:JD:2:GLY:N	62:D3:359:A:OP2	2.34	0.60
36:JD:1036:GLU:HB2	36:JD:1040:LYS:NZ	2.16	0.60
49:DI:5:ARG:NH1	49:DI:29:LEU:O	2.34	0.60
63:D4:165:G:H2'	63:D4:166:G:H8	1.66	0.60
6:UD:184:MET:HG3	6:UD:223:GLY:O	2.01	0.60
14:UL:672:VAL:O	14:UL:682:ARG:O	2.20	0.60
16:UN:780:ASP:OD1	16:UN:781:ASP:N	2.35	0.60
22:UT:518:MET:O	22:UT:521:THR:OG1	2.15	0.60
22:UT:1385:ASN:O	22:UT:1388:SER:OG	2.14	0.60

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:2239:LEU:HD11	22:UT:2254:VAL:HG11	1.84	0.60
23:UU:254:LEU:HD12	23:UU:264:LEU:HD11	1.81	0.60
27:CE:28:LEU:HA	27:CE:33:ASP:HB2	1.82	0.60
33:CL:301:ILE:HD12	33:CL:791:ILE:HG22	1.84	0.60
59:DY:99:LYS:NZ	59:DY:100:VAL:O	2.34	0.60
3:UA:344:HIS:ND1	3:UA:364:SER:OG	2.35	0.60
12:UJ:797:LEU:HD12	12:UJ:801:ILE:HG21	1.83	0.60
13:UK:35:VAL:O	13:UK:39:GLN:HG2	2.02	0.60
14:UL:49:VAL:O	14:UL:62:LYS:HA	2.02	0.60
17:UO:492:ARG:HA	17:UO:495:ILE:HD12	1.82	0.60
19:UQ:174:TYR:CD1	19:UQ:189:HIS:HA	2.37	0.60
20:UR:534:SER:HB3	20:UR:540:ALA:HB1	1.82	0.60
25:UX:115:ILE:HD11	57:DW:99:PHE:CE2	2.37	0.60
29:CH:313:SER:HG	59:DY:2:SER:N	1.98	0.60
29:CH:477:SER:OG	29:CH:521:VAL:O	2.20	0.60
31:CJ:138:ASP:OD2	31:CJ:209:LEU:HD23	2.01	0.60
40:JL:131:TYR:HA	40:JL:134:SER:HB3	1.84	0.60
54:DQ:38:LEU:HA	54:DQ:45:ARG:HH22	1.66	0.60
56:DT:127:ASN:OD1	56:DT:128:GLY:N	2.35	0.60
74:EK:81:ALA:HB1	74:EK:82:PRO:HA	1.83	0.60
1:CB:164:ILE:HG23	1:CB:170:VAL:HG21	1.84	0.60
7:UE:229:GLU:OE2	23:UU:503:ARG:NH1	2.34	0.60
7:UE:484:LEU:HD22	7:UE:498:LEU:HD11	1.83	0.60
13:UK:230:LYS:HG2	13:UK:244:TRP:NE1	2.16	0.60
15:UM:194:ARG:HD3	15:UM:216:ARG:HH11	1.66	0.60
20:UR:433:TRP:CD1	20:UR:446:ARG:HD2	2.37	0.60
22:UT:581:LEU:O	22:UT:584:SER:OG	2.19	0.60
22:UT:1301:ILE:HG13	22:UT:1302:SER:N	2.17	0.60
24:UV:627:LEU:HD13	24:UV:671:THR:HG23	1.83	0.60
28:CF:57:ASP:OD2	28:CF:84:ARG:NH1	2.35	0.60
33:CL:87:ARG:NH1	33:CL:98:LEU:O	2.35	0.60
35:CN:59:PRO:O	35:CN:62:SER:OG	2.17	0.60
36:JD:1105:LYS:HD3	36:JD:1114:ASN:HD21	1.65	0.60
37:JF:41:MET:HB3	37:JF:110:LEU:HB3	1.83	0.60
37:JF:144:LEU:HB2	37:JF:150:ILE:HD11	1.83	0.60
1:CA:97:TYR:HB2	1:CA:107:VAL:HG23	1.82	0.59
3:UA:265:CYS:SG	3:UA:308:VAL:HG23	2.42	0.59
9:UG:546:ILE:HD11	24:UV:808:LEU:HD22	1.82	0.59
15:UM:30:LYS:HB2	15:UM:31:ILE:HD12	1.82	0.59
22:UT:2011:ILE:N	22:UT:2050:TYR:OH	2.28	0.59
24:UV:416:PHE:HB3	24:UV:420:GLN:CB	2.32	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:858:ARG:HH21	62:D3:1058:U:H3	1.50	0.59
27:CE:158:LYS:HA	27:CE:283:ILE:HG12	1.83	0.59
33:CL:1110:ARG:O	33:CL:1114:GLN:HG2	2.02	0.59
36:JD:539:ARG:HH12	36:JD:552:LYS:HB2	1.67	0.59
44:JJ:270:LEU:HG	44:JJ:273:ARG:HE	1.67	0.59
47:DG:24:ILE:HG22	47:DG:28:PHE:CE1	2.37	0.59
56:DT:99:SER:HB2	56:DT:103:LYS:NZ	2.17	0.59
1:CA:124:SER:OG	41:JM:151:THR:OG1	2.20	0.59
2:DA:32:ILE:HG22	2:DA:96:LEU:HB2	1.84	0.59
2:DA:128:LYS:NZ	24:UV:1010:GLU:OE2	2.34	0.59
4:UB:48:ILE:O	4:UB:52:ARG:HG2	2.02	0.59
10:UH:553:GLN:OE1	10:UH:557:THR:OG1	2.19	0.59
19:UQ:168:LEU:HD13	19:UQ:195:ASN:HB2	1.83	0.59
21:US:281:LEU:HA	21:US:285:ILE:HB	1.84	0.59
28:CG:19:GLN:OE1	28:CG:120:LYS:HE3	2.02	0.59
36:JD:415:GLU:OE2	36:JD:812:ARG:NH1	2.35	0.59
40:JL:59:VAL:HG13	40:JL:122:PHE:HA	1.82	0.59
46:DF:154:ALA:HB1	46:DF:156:ARG:HH22	1.66	0.59
4:UB:705:HIS:CD2	21:US:487:PRO:HD3	2.37	0.59
5:UC:540:ILE:HB	5:UC:544:ILE:HD11	1.85	0.59
14:UL:473:ASP:N	14:UL:494:ASP:OD2	2.31	0.59
15:UM:17:ALA:HB3	15:UM:36:VAL:HG23	1.83	0.59
17:UO:60:SER:HA	17:UO:83:VAL:HG23	1.85	0.59
19:UQ:197:ILE:HB	19:UQ:211:MET:HG3	1.84	0.59
19:UQ:342:ILE:HD11	19:UQ:359:GLN:HB2	1.85	0.59
19:UQ:583:LYS:HE2	19:UQ:599:ILE:HD12	1.83	0.59
22:UT:1214:ASP:OD1	22:UT:1215:HIS:N	2.34	0.59
24:UV:1159:ASN:HD22	24:UV:1201:ASP:HB3	1.67	0.59
35:CN:168:PHE:HA	35:CN:171:PHE:CD2	2.37	0.59
37:JG:164:LYS:HB3	62:D3:1575:G:H5''	1.84	0.59
47:DG:56:ASN:HD22	62:D3:154:G:H1'	1.66	0.59
47:DG:214:LYS:O	47:DG:218:GLU:HG2	2.03	0.59
50:DJ:127:VAL:O	50:DJ:131:GLN:HG2	2.02	0.59
6:UD:44:ALA:HB3	6:UD:71:ARG:HB3	1.85	0.59
12:UJ:1699:CYS:SG	12:UJ:1700:SER:N	2.74	0.59
17:UO:259:ASP:HB2	17:UO:273:ILE:HD11	1.84	0.59
21:US:220:LEU:O	21:US:224:ASN:ND2	2.35	0.59
22:UT:268:PRO:O	22:UT:271:SER:OG	2.12	0.59
22:UT:1408:ASP:OD1	22:UT:1409:SER:N	2.32	0.59
23:UU:476:PHE:CD1	23:UU:486:ILE:HG12	2.35	0.59
24:UV:577:ARG:NH2	24:UV:626:LYS:O	2.33	0.59

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:CI:93:LYS:HE3	30:CI:95:SER:HB3	1.84	0.59
35:CN:221:LYS:HE3	62:D3:1058:U:H1'	1.84	0.59
37:JG:88:ARG:HH22	37:JG:210:ALA:H	1.50	0.59
45:DE:60:GLU:OE2	59:DY:20:ARG:NH2	2.26	0.59
46:DF:146:THR:HA	46:DF:158:GLN:O	2.02	0.59
62:D3:434:G:H21	62:D3:435:C:H41	1.50	0.59
62:D3:922:G:H2'	62:D3:923:A:C8	2.37	0.59
2:DA:186:SER:OG	24:UV:738:TYR:OH	2.19	0.59
6:UD:306:GLN:HG2	6:UD:364:PHE:CD2	2.37	0.59
7:UE:364:THR:HA	17:UO:15:LEU:HD22	1.85	0.59
12:UJ:407:PHE:O	12:UJ:410:ILE:C	2.40	0.59
12:UJ:1380:LEU:HD21	12:UJ:1400:ILE:HG23	1.84	0.59
12:UJ:1658:ILE:HD12	12:UJ:1666:LEU:HD22	1.85	0.59
14:UL:335:LEU:HD23	14:UL:335:LEU:H	1.67	0.59
14:UL:417:TRP:CD1	14:UL:424:CYS:HA	2.38	0.59
14:UL:913:ASN:O	14:UL:917:ASN:HB3	2.01	0.59
15:UM:12:LEU:HB3	15:UM:641:PHE:HB2	1.84	0.59
19:UQ:318:GLU:HG3	19:UQ:320:VAL:HG12	1.85	0.59
26:CD:247:ILE:HD13	26:CD:250:ARG:HD2	1.83	0.59
33:CL:935:VAL:HG12	33:CL:1002:ILE:HG22	1.85	0.59
37:JG:91:ILE:O	37:JG:94:GLN:NE2	2.35	0.59
40:JL:233:ARG:NH1	62:D3:1776:A:O2'	2.24	0.59
53:DO:18:ARG:HE	53:DO:31:THR:HG21	1.67	0.59
62:D3:1677:C:H42	62:D3:1724:U:H3	1.50	0.59
3:UA:376:SER:O	3:UA:378:PHE:N	2.36	0.59
7:UE:197:ILE:HG22	7:UE:198:THR:HG23	1.84	0.59
7:UE:255:ILE:HG12	7:UE:277:LYS:HB2	1.83	0.59
10:UH:574:ARG:HB2	10:UH:578:LEU:HD21	1.83	0.59
19:UQ:265:ASP:OD2	19:UQ:268:GLY:N	2.23	0.59
21:US:329:ARG:HH11	21:US:330:PHE:HD2	1.51	0.59
22:UT:2237:THR:O	22:UT:2240:LEU:HB2	2.03	0.59
24:UV:1169:ILE:HG12	24:UV:1180:ASN:HD21	1.67	0.59
33:CL:1074:GLN:HA	33:CL:1077:LEU:HD13	1.84	0.59
36:JD:1188:LEU:HD22	36:JD:1215:PRO:HB2	1.84	0.59
37:JF:247:ASP:OD2	37:JG:240:LYS:NZ	2.36	0.59
42:JP:398:GLU:O	42:JP:402:GLU:HG3	2.02	0.59
46:DF:48:PHE:CD2	46:DF:67:PRO:HA	2.38	0.59
58:DX:3:LYS:NZ	62:D3:614:C:OP1	2.25	0.59
1:CA:325:LEU:HG	25:UX:131:SER:HB3	1.84	0.59
4:UB:552:GLN:HA	4:UB:555:ARG:HG2	1.85	0.59
7:UE:209:ASP:OD1	7:UE:210:ARG:N	2.36	0.59

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:133:LYS:H	19:UQ:183:LYS:HZ3	1.50	0.59
19:UQ:768:TRP:HA	19:UQ:774:PHE:HA	1.84	0.59
20:UR:400:ILE:HB	20:UR:433:TRP:HZ3	1.66	0.59
22:UT:524:LYS:HD3	22:UT:557:GLY:HA2	1.84	0.59
22:UT:1602:ASP:OD1	22:UT:1603:ASP:N	2.29	0.59
29:CH:366:GLN:NE2	29:CH:367:LYS:HG2	2.16	0.59
36:JD:595:ASN:HB2	36:JD:825:TYR:C	2.23	0.59
42:JP:327:LYS:HD2	42:JP:349:GLN:HG2	1.85	0.59
5:UC:559:ARG:NH2	62:D3:545:A:H5'	2.18	0.59
10:UH:592:ARG:NH1	17:UO:509:GLN:HB3	2.18	0.59
10:UH:592:ARG:NH1	10:UH:643:ASP:OD2	2.35	0.59
13:UK:61:ASP:OD2	30:CI:160:TRP:NE1	2.35	0.59
14:UL:180:THR:OG1	14:UL:207:CYS:SG	2.61	0.59
15:UM:532:HIS:CD2	15:UM:533:LYS:H	2.20	0.59
17:UO:375:HIS:CD2	20:UR:339:ILE:HD11	2.37	0.59
22:UT:678:TRP:HH2	47:DG:146:GLY:HA3	1.68	0.59
22:UT:1665:LEU:HD22	22:UT:1669:TYR:CD2	2.38	0.59
23:UU:715:GLN:NE2	23:UU:717:ASP:O	2.30	0.59
24:UV:971:LYS:NZ	24:UV:1032:PRO:O	2.28	0.59
36:JD:929:ALA:HB1	36:JD:1010:VAL:HG11	1.85	0.59
38:JH:260:TYR:HA	38:JH:306:ALA:HB2	1.84	0.59
47:DG:5:ILE:HG23	47:DG:124:LEU:HD21	1.84	0.59
62:D3:827:C:H2'	62:D3:828:U:C6	2.37	0.59
3:UA:84:PHE:O	3:UA:86:ALA:N	2.36	0.59
3:UA:842:ASN:OD1	23:UU:886:SER:HB2	2.03	0.59
12:UJ:745:TYR:CE2	12:UJ:747:GLN:HB3	2.38	0.59
14:UL:680:SER:HG	14:UL:682:ARG:HE	1.50	0.59
21:US:155:LEU:HD22	21:US:176:ILE:HD12	1.84	0.59
22:UT:1271:LEU:HA	22:UT:1274:THR:HG22	1.83	0.59
22:UT:1428:THR:O	22:UT:1429:LYS:HG3	2.02	0.59
22:UT:1439:ILE:HG21	22:UT:1474:HIS:ND1	2.18	0.59
22:UT:2440:ARG:HB3	22:UT:2444:ARG:HH12	1.67	0.59
23:UU:704:ASP:OD1	23:UU:705:ILE:N	2.35	0.59
24:UV:1152:TYR:HA	24:UV:1155:LEU:HD12	1.85	0.59
29:CH:123:GLU:O	29:CH:126:ALA:N	2.36	0.59
33:CL:74:VAL:HG12	33:CL:82:LYS:HG3	1.85	0.59
33:CL:244:MET:HB3	33:CL:275:LEU:HD23	1.84	0.59
34:CM:142:GLU:HA	34:CM:146:VAL:O	2.02	0.59
40:JL:189:MET:O	40:JL:205:SER:OG	2.17	0.59
62:D3:575:C:O2'	62:D3:576:G:H8	1.77	0.59
62:D3:1112:G:H1	63:D4:12:U:H3	1.51	0.59

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CB:171:LEU:N	1:CB:237:VAL:HG21	2.17	0.59
6:UD:271:THR:HG23	20:UR:446:ARG:HH11	1.67	0.59
7:UE:145:CYS:HB3	7:UE:148:LEU:HD21	1.84	0.59
9:UG:112:GLY:HA3	9:UG:130:ARG:HB3	1.85	0.59
12:UJ:70:SER:HA	12:UJ:74:PHE:HB2	1.85	0.59
15:UM:300:SER:OG	15:UM:316:VAL:O	2.21	0.59
15:UM:446:VAL:HG13	15:UM:448:LYS:HG2	1.85	0.59
15:UM:446:VAL:N	15:UM:452:GLU:OE2	2.35	0.59
17:UO:366:TYR:CE2	17:UO:368:GLY:HA2	2.37	0.59
22:UT:483:ALA:O	22:UT:525:ILE:HD11	2.02	0.59
22:UT:1801:ASN:ND2	22:UT:1882:ARG:HH21	2.00	0.59
23:UU:125:GLY:HA2	27:CE:430:ASP:HA	1.84	0.59
24:UV:558:LEU:HD22	24:UV:608:PHE:HE2	1.68	0.59
28:CF:19:GLN:OE1	28:CF:120:LYS:HE3	2.02	0.59
36:JD:116:LYS:HE2	36:JD:120:TYR:CE2	2.38	0.59
37:JF:45:LEU:HD11	37:JF:208:ALA:HB2	1.85	0.59
49:DI:113:PHE:CE2	49:DI:117:TYR:HD2	2.21	0.59
50:DJ:109:LEU:HB2	50:DJ:146:PHE:HB3	1.84	0.59
62:D3:575:C:O2'	62:D3:576:G:O5'	2.21	0.59
62:D3:700:C:H42	62:D3:737:A:H61	1.51	0.59
4:UB:523:ILE:HD13	21:US:506:LEU:HD22	1.85	0.58
14:UL:7:ARG:HH22	14:UL:71:ALA:HA	1.68	0.58
17:UO:279:GLY:H	17:UO:302:VAL:H	1.50	0.58
22:UT:262:ALA:O	22:UT:313:ARG:NH1	2.36	0.58
22:UT:490:LYS:HA	22:UT:527:ARG:HH12	1.68	0.58
22:UT:524:LYS:NZ	22:UT:556:ARG:HB3	2.17	0.58
22:UT:969:SER:O	22:UT:972:LEU:C	2.41	0.58
22:UT:1301:ILE:HG13	22:UT:1302:SER:H	1.68	0.58
31:CJ:278:ARG:HH11	62:D3:564:G:P	2.25	0.58
48:DH:99:LEU:HD23	48:DH:99:LEU:H	1.68	0.58
54:DQ:41:PRO:O	54:DQ:43:ILE:HD12	2.02	0.58
3:UA:30:LEU:HD11	3:UA:63:LEU:HD22	1.85	0.58
1:CB:114:GLY:N	1:CB:140:GLU:OE2	2.30	0.58
15:UM:365:ILE:HG22	15:UM:381:VAL:HG12	1.85	0.58
22:UT:287:SER:O	22:UT:290:SER:OG	2.19	0.58
22:UT:655:ASP:OD1	22:UT:656:LYS:N	2.36	0.58
22:UT:1325:LEU:HG	22:UT:1328:PHE:HD2	1.68	0.58
22:UT:1791:GLU:OE2	22:UT:1794:ARG:NH2	2.36	0.58
22:UT:2455:ALA:HA	22:UT:2458:ILE:HD12	1.85	0.58
24:UV:1204:VAL:HA	24:UV:1214:LEU:HA	1.84	0.58
27:CE:84:LYS:HE3	27:CE:106:ASN:HB2	1.85	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:CG:57:ASP:OD2	28:CG:84:ARG:NH1	2.35	0.58
29:CH:438:ILE:H	29:CH:438:ILE:HD12	1.68	0.58
30:CI:4:LYS:NZ	61:D2:476:A:OP1	2.32	0.58
30:CI:156:ASP:OD2	31:CJ:3:ARG:HG2	2.02	0.58
31:CJ:139:LEU:HB2	31:CJ:157:PHE:CE2	2.37	0.58
33:CL:280:LEU:HD12	33:CL:281:PRO:HD2	1.83	0.58
42:JP:263:ARG:NH2	42:JP:282:GLU:OE1	2.35	0.58
75:EN:642:ASN:O	75:EN:646:TYR:N	2.33	0.58
3:UA:212:ASP:OD2	3:UA:213:GLY:N	2.37	0.58
1:CB:171:LEU:HB2	1:CB:237:VAL:HG21	1.86	0.58
6:UD:395:SER:OG	6:UD:398:THR:OG1	2.18	0.58
6:UD:637:PHE:CE2	6:UD:746:LEU:HG	2.38	0.58
10:UH:571:PHE:HA	10:UH:610:PHE:CZ	2.39	0.58
12:UJ:75:SER:N	12:UJ:78:SER:OG	2.37	0.58
12:UJ:747:GLN:HA	12:UJ:750:ASN:HD21	1.68	0.58
14:UL:285:ARG:N	14:UL:327:HIS:O	2.27	0.58
15:UM:593:CYS:SG	15:UM:594:GLY:N	2.76	0.58
23:UU:67:HIS:NE2	61:D2:292:A:OP1	2.36	0.58
23:UU:311:VAL:HG22	23:UU:321:GLU:HG2	1.83	0.58
24:UV:369:TRP:HE3	24:UV:370:LEU:HD12	1.67	0.58
26:CD:302:ASN:HD21	26:CD:397:SER:C	2.05	0.58
36:JD:890:ASP:OD1	36:JD:894:MET:N	2.32	0.58
40:JL:114:PHE:HE2	40:JL:137:LEU:HD11	1.68	0.58
62:D3:163:G:OP2	62:D3:163:G:N2	2.32	0.58
6:UD:635:GLY:HA3	6:UD:649:TRP:CE2	2.39	0.58
12:UJ:167:PHE:CE2	12:UJ:178:THR:HG21	2.37	0.58
12:UJ:671:LEU:HD23	12:UJ:675:ASN:HD21	1.67	0.58
14:UL:281:ILE:HD11	14:UL:355:LEU:HD12	1.84	0.58
17:UO:414:THR:O	17:UO:418:LEU:HD23	2.02	0.58
20:UR:146:LEU:C	20:UR:163:ARG:HH12	2.07	0.58
22:UT:976:TYR:HD1	22:UT:985:ASN:HD22	1.51	0.58
22:UT:1289:ILE:HD13	22:UT:1305:VAL:HG11	1.85	0.58
24:UV:179:LYS:HD3	24:UV:213:LEU:HD21	1.85	0.58
28:CF:65:LEU:HD23	28:CF:65:LEU:O	2.03	0.58
32:CK:326:LEU:O	33:CL:930:LYS:NZ	2.36	0.58
36:JD:863:ILE:O	36:JD:873:ARG:NH1	2.37	0.58
36:JD:1208:GLU:OE2	36:JD:1237:HIS:NE2	2.34	0.58
54:DQ:5:PRO:HB3	54:DQ:96:TYR:CE2	2.39	0.58
1:CA:263:ASP:OD2	1:CA:264:GLN:HG2	2.04	0.58
3:UA:110:LEU:HB2	3:UA:122:TRP:O	2.04	0.58
1:CB:232:MET:SD	27:CE:7:GLU:HB3	2.43	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CB:234:ILE:HG13	1:CB:260:PHE:HE1	1.65	0.58
1:CB:236:MET:HE1	27:CE:122:GLU:N	2.19	0.58
6:UD:95:LYS:O	18:UP:193:LYS:NZ	2.23	0.58
6:UD:427:ASN:O	6:UD:444:ARG:NH1	2.36	0.58
10:UH:556:VAL:HG23	10:UH:557:THR:HG23	1.85	0.58
15:UM:89:HIS:HD2	15:UM:92:THR:H	1.49	0.58
15:UM:673:MET:CE	15:UM:693:ARG:HG2	2.33	0.58
22:UT:1592:PRO:O	22:UT:1596:LYS:HB3	2.04	0.58
23:UU:545:PRO:HB2	23:UU:563:ASP:OD2	2.04	0.58
28:CF:118:LYS:O	28:CF:122:GLU:HG3	2.04	0.58
29:CH:256:ARG:NH2	29:CH:282:GLU:OE1	2.37	0.58
31:CJ:191:PHE:HD1	31:CJ:203:VAL:HG22	1.68	0.58
3:UA:82:VAL:HG12	3:UA:89:VAL:HA	1.86	0.58
12:UJ:558:VAL:HG23	12:UJ:599:PHE:HB2	1.84	0.58
14:UL:552:ASP:OD1	14:UL:552:ASP:N	2.37	0.58
15:UM:389:ASP:HB3	15:UM:408:LYS:HB3	1.85	0.58
19:UQ:174:TYR:HB3	19:UQ:187:VAL:HG13	1.86	0.58
21:US:400:PRO:HB2	21:US:495:MET:SD	2.44	0.58
23:UU:178:ASN:HD22	23:UU:194:ARG:HG2	1.68	0.58
24:UV:927:GLY:O	24:UV:1151:LYS:NZ	2.37	0.58
28:CG:42:LYS:O	28:CG:46:ARG:HD2	2.04	0.58
34:CM:246:VAL:HG12	34:CM:257:PHE:HB3	1.85	0.58
36:JD:1116:PRO:HD2	36:JD:1134:TYR:CE1	2.38	0.58
40:JL:282:ASP:O	40:JL:286:LYS:HG2	2.04	0.58
42:JP:73:ILE:HG12	42:JP:85:THR:HG22	1.85	0.58
59:DY:37:LYS:NZ	62:D3:523:G:OP2	2.27	0.58
61:D2:286:U:H2'	61:D2:287:G:C8	2.39	0.58
75:EN:870:ILE:O	75:EN:873:SER:CB	2.51	0.58
1:CA:182:SER:HB3	1:CA:210:MET:SD	2.43	0.58
2:DA:216:LYS:NZ	62:D3:885:G:OP1	2.36	0.58
1:CB:244:VAL:HG22	1:CB:246:GLN:H	1.68	0.58
7:UE:299:ASP:OD2	7:UE:320:ARG:NH2	2.36	0.58
7:UE:469:ILE:HG21	7:UE:505:CYS:HA	1.84	0.58
12:UJ:1370:TYR:O	12:UJ:1374:VAL:HG22	2.04	0.58
14:UL:52:TRP:HZ2	14:UL:362:ILE:HG13	1.69	0.58
14:UL:386:GLU:O	14:UL:389:GLY:N	2.33	0.58
15:UM:176:ASP:OD1	15:UM:177:LEU:N	2.37	0.58
17:UO:123:SER:H	17:UO:150:ARG:HH12	1.51	0.58
20:UR:129:ASP:HB2	23:UU:194:ARG:HH12	1.69	0.58
22:UT:27:LYS:HG2	22:UT:28:ILE:H	1.68	0.58
24:UV:1081:ASN:O	24:UV:1084:THR:OG1	2.18	0.58

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CJ:116:ARG:HH22	62:D3:1581:C:P	2.26	0.58
36:JD:918:SER:HA	36:JD:1083:MET:HE1	1.85	0.58
37:JF:180:LEU:HD22	37:JF:227:LEU:HD11	1.86	0.58
37:JG:85:SER:O	37:JG:88:ARG:NH1	2.37	0.58
59:DY:41:ARG:NH2	59:DY:52:LYS:O	2.37	0.58
62:D3:1699:G:H21	62:D3:1702:A:H62	1.51	0.58
67:ED:246:ALA:HA	67:ED:276:CYS:HA	1.84	0.58
4:UB:49:ALA:O	4:UB:52:ARG:HB2	2.04	0.58
6:UD:531:ILE:HG13	6:UD:545:ARG:HE	1.68	0.58
15:UM:259:TYR:HE1	15:UM:293:VAL:HG11	1.69	0.58
15:UM:593:CYS:SG	15:UM:620:LEU:HD23	2.44	0.58
22:UT:1098:ASN:ND2	22:UT:1103:SER:HB3	2.18	0.58
22:UT:1966:PHE:O	22:UT:1970:THR:OG1	2.15	0.58
22:UT:2027:MET:SD	22:UT:2040:ARG:HG3	2.44	0.58
23:UU:822:ARG:O	23:UU:825:SER:OG	2.17	0.58
33:CL:93:MET:HE1	33:CL:115:LEU:HD12	1.85	0.58
34:CM:131:GLU:HG2	34:CM:194:VAL:HG11	1.85	0.58
36:JD:1137:PRO:HD3	36:JD:1166:ARG:HD3	1.85	0.58
37:JG:193:ILE:HD13	37:JG:245:ALA:HA	1.86	0.58
48:DH:52:ALA:C	48:DH:54:GLY:H	2.06	0.58
7:UE:99:PHE:HB3	7:UE:129:PHE:CE1	2.39	0.58
12:UJ:235:VAL:HG22	12:UJ:264:PHE:CE1	2.39	0.58
14:UL:103:ILE:HD12	14:UL:148:TRP:CZ3	2.39	0.58
15:UM:500:SER:OG	15:UM:502:ASN:OD1	2.13	0.58
15:UM:692:MET:HG2	32:CK:515:MET:HE1	1.86	0.58
20:UR:365:ASN:HB3	20:UR:368:THR:O	2.04	0.58
22:UT:323:PHE:HB2	22:UT:364:LEU:HD13	1.86	0.58
22:UT:2095:LEU:O	22:UT:2099:SER:CB	2.52	0.58
23:UU:370:SER:OG	23:UU:371:LYS:N	2.37	0.58
24:UV:215:GLU:N	24:UV:218:ASP:OD2	2.37	0.58
33:CL:931:LYS:HB2	33:CL:1006:TRP:HZ3	1.67	0.58
36:JD:723:GLN:HA	36:JD:726:ASN:HB3	1.85	0.58
37:JF:128:VAL:HG22	37:JF:159:LEU:HD12	1.86	0.58
48:DH:34:LEU:HA	48:DH:37:GLU:HB2	1.86	0.58
61:D2:20:C:H2'	61:D2:21:A:C8	2.39	0.58
3:UA:514:VAL:HG21	3:UA:518:VAL:HG13	1.86	0.58
6:UD:347:LEU:HB3	6:UD:361:LEU:HD21	1.85	0.58
14:UL:330:GLN:HG2	14:UL:331:THR:H	1.68	0.58
14:UL:658:SER:HB3	14:UL:677:HIS:HB3	1.85	0.58
17:UO:32:SER:OG	17:UO:331:THR:OG1	2.12	0.58
20:UR:165:ARG:CZ	23:UU:236:ARG:HH12	2.17	0.58

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:UR:427:ASN:OD1	20:UR:428:ALA:N	2.36	0.58
22:UT:1311:TYR:HD1	22:UT:1324:ILE:HD13	1.68	0.58
22:UT:1499:ARG:HH22	22:UT:1542:LYS:HB2	1.69	0.58
23:UU:837:LEU:HA	23:UU:840:PHE:HD2	1.68	0.58
27:CE:125:PRO:HA	27:CE:128:LEU:HG	1.86	0.58
30:CI:137:ARG:HA	30:CI:142:LEU:HA	1.86	0.58
35:CN:46:ASN:ND2	35:CN:49:GLU:OE1	2.37	0.58
54:DQ:22:VAL:HG22	54:DQ:65:ILE:HG12	1.86	0.58
54:DQ:58:ASP:OD2	54:DQ:59:LYS:N	2.37	0.58
3:UA:415:ASP:OD1	3:UA:417:ILE:N	2.30	0.57
6:UD:309:GLN:NE2	6:UD:318:ASN:HA	2.19	0.57
6:UD:548:GLY:O	6:UD:566:LEU:N	2.37	0.57
7:UE:108:LYS:HE3	7:UE:122:SER:HB2	1.86	0.57
8:UF:278:MET:HG2	8:UF:341:PHE:CZ	2.39	0.57
12:UJ:772:VAL:HG11	12:UJ:801:ILE:HG12	1.85	0.57
15:UM:413:ILE:CG1	15:UM:415:TRP:HE1	2.17	0.57
15:UM:496:ALA:HB3	15:UM:509:ALA:HB3	1.86	0.57
17:UO:101:ALA:HA	17:UO:126:PRO:HB3	1.86	0.57
17:UO:253:LYS:HE2	17:UO:278:ASP:OD1	2.03	0.57
21:US:366:LEU:HD12	21:US:401:PHE:HZ	1.67	0.57
22:UT:133:ILE:HG22	22:UT:180:LEU:HD11	1.86	0.57
22:UT:790:GLU:OE1	22:UT:839:LYS:N	2.33	0.57
22:UT:918:GLU:O	22:UT:922:MET:HG2	2.04	0.57
23:UU:307:GLN:HG2	27:CE:421:MET:HG2	1.85	0.57
24:UV:592:PHE:HB3	24:UV:599:VAL:HG22	1.86	0.57
28:CF:42:LYS:O	28:CF:46:ARG:HD2	2.04	0.57
28:CG:65:LEU:O	28:CG:65:LEU:HD23	2.03	0.57
35:CN:16:VAL:N	35:CN:37:MET:O	2.34	0.57
36:JD:539:ARG:HE	36:JD:553:LEU:HD22	1.69	0.57
44:JJ:120:LEU:HD11	44:JJ:159:ILE:HD11	1.86	0.57
51:DL:79:LYS:NZ	62:D3:346:G:P	2.77	0.57
2:DA:3:VAL:H	53:DO:49:LYS:HA	1.68	0.57
2:DA:243:LYS:HZ2	24:UV:656:ARG:NE	2.01	0.57
4:UB:660:ILE:HA	21:US:388:LEU:HD21	1.86	0.57
5:UC:560:ASN:HB2	62:D3:477:A:OP1	2.04	0.57
8:UF:190:LEU:HA	8:UF:193:ILE:HD12	1.85	0.57
15:UM:581:CYS:SG	15:UM:590:LEU:HD21	2.43	0.57
19:UQ:283:VAL:HA	19:UQ:289:GLN:O	2.04	0.57
22:UT:483:ALA:O	22:UT:486:PHE:N	2.37	0.57
31:CJ:191:PHE:CD1	31:CJ:203:VAL:HG22	2.40	0.57
36:JD:613:ILE:O	36:JD:616:LYS:C	2.41	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DE:233:LYS:O	45:DE:233:LYS:HG3	2.05	0.57
62:D3:572:C:H5''	62:D3:573:C:C5	2.39	0.57
7:UE:355:ASN:O	19:UQ:471:GLN:NE2	2.36	0.57
7:UE:551:ILE:HG12	17:UO:484:MET:SD	2.43	0.57
9:UG:215:LYS:HB3	9:UG:224:LEU:HD11	1.86	0.57
14:UL:623:PHE:HD1	14:UL:630:PHE:HB3	1.68	0.57
16:UN:337:GLU:OE1	16:UN:337:GLU:N	2.36	0.57
22:UT:1012:ARG:HB2	22:UT:1068:PHE:CD1	2.39	0.57
22:UT:2021:ASP:OD1	22:UT:2024:ARG:NH1	2.37	0.57
22:UT:2139:GLU:HA	22:UT:2142:GLU:OE2	2.04	0.57
22:UT:2162:LEU:HD12	22:UT:2208:SER:HB2	1.86	0.57
25:UX:142:VAL:HG21	25:UX:163:ARG:HE	1.69	0.57
28:CG:118:LYS:O	28:CG:122:GLU:HG3	2.04	0.57
40:JL:128:ASN:HA	40:JL:154:MET:CG	2.33	0.57
44:JJ:102:PRO:HD2	44:JJ:163:THR:HG23	1.87	0.57
51:DL:79:LYS:HD3	62:D3:346:G:H5'	1.86	0.57
62:D3:1663:G:H1	62:D3:1738:U:H3	1.52	0.57
75:EN:794:LEU:O	75:EN:798:ASN:N	2.35	0.57
1:CA:263:ASP:OD2	1:CA:264:GLN:N	2.37	0.57
3:UA:130:ASP:OD2	3:UA:131:ARG:N	2.36	0.57
3:UA:563:ARG:NH2	3:UA:569:PHE:O	2.37	0.57
4:UB:520:PRO:O	4:UB:524:LEU:HG	2.04	0.57
8:UF:299:LYS:HD2	8:UF:300:MET:HG2	1.87	0.57
13:UK:167:THR:HB	13:UK:170:GLN:HG3	1.86	0.57
15:UM:626:MET:O	15:UM:630:ASP:HA	2.04	0.57
17:UO:132:PHE:HA	17:UO:140:LEU:HD13	1.86	0.57
21:US:411:ASN:O	21:US:411:ASN:ND2	2.38	0.57
22:UT:1776:LEU:O	22:UT:1779:VAL:O	2.22	0.57
23:UU:858:PHE:CD2	23:UU:905:ILE:HD11	2.39	0.57
24:UV:439:HIS:ND1	24:UV:460:GLU:O	2.33	0.57
28:CF:61:ILE:HD12	28:CF:64:LEU:HD21	1.86	0.57
31:CJ:116:ARG:NH2	62:D3:1581:C:OP1	2.36	0.57
36:JD:1079:LEU:O	36:JD:1083:MET:HG3	2.03	0.57
40:JL:67:THR:O	40:JL:97:ARG:NH1	2.37	0.57
55:DS:101:LEU:HA	55:DS:104:ASN:HD21	1.68	0.57
7:UE:126:PHE:HB2	7:UE:140:PHE:HD2	1.70	0.57
12:UJ:1507:LEU:HD12	12:UJ:1528:VAL:HG21	1.86	0.57
14:UL:224:SER:HB2	14:UL:251:GLN:HG2	1.86	0.57
14:UL:912:TRP:CD2	15:UM:779:VAL:HG21	2.39	0.57
15:UM:576:ASN:OD1	15:UM:577:ALA:N	2.38	0.57
15:UM:588:LYS:O	15:UM:604:CYS:N	2.38	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:UO:215:VAL:HA	17:UO:230:GLY:HA3	1.86	0.57
22:UT:1181:ILE:HD11	22:UT:1185:LEU:HD21	1.86	0.57
22:UT:1766:PHE:CZ	22:UT:1800:LEU:HD21	2.36	0.57
22:UT:2228:PHE:HB3	22:UT:2232:TRP:HZ3	1.69	0.57
33:CL:734:GLU:HB3	33:CL:737:ASN:HD21	1.68	0.57
34:CM:146:VAL:HG13	34:CM:172:SER:HB2	1.86	0.57
36:JD:1077:ILE:HG22	36:JD:1081:LYS:HE3	1.84	0.57
63:D4:202:G:H2'	63:D4:203:U:C6	2.39	0.57
66:EC:15:ASP:O	74:EK:40:TYR:CB	2.52	0.57
4:UB:475:ARG:HH12	4:UB:517:VAL:HG22	1.69	0.57
9:UG:197:ASP:OD1	9:UG:198:PHE:N	2.37	0.57
12:UJ:559:ASN:ND2	12:UJ:594:SER:OG	2.37	0.57
12:UJ:1453:VAL:O	12:UJ:1457:LEU:HG	2.04	0.57
14:UL:414:LEU:HD12	14:UL:447:LEU:HD11	1.87	0.57
14:UL:451:ASN:O	14:UL:453:GLU:N	2.37	0.57
17:UO:148:VAL:HG12	17:UO:165:THR:HG23	1.86	0.57
17:UO:500:GLU:O	17:UO:504:ILE:HG12	2.03	0.57
19:UQ:670:LEU:HB2	19:UQ:683:LEU:HD21	1.86	0.57
22:UT:1264:LEU:HD12	22:UT:1268:ILE:HD11	1.87	0.57
22:UT:1341:GLU:HA	22:UT:1344:TRP:HB2	1.87	0.57
22:UT:1477:LYS:HD3	22:UT:1479:ASN:H	1.70	0.57
22:UT:1795:ARG:NH2	62:D3:686:C:O3'	2.38	0.57
24:UV:201:SER:OG	24:UV:202:SER:N	2.38	0.57
31:CJ:278:ARG:HA	62:D3:1596:C:C5	2.39	0.57
35:CN:131:ALA:O	35:CN:135:ASN:ND2	2.37	0.57
36:JD:369:SER:HA	36:JD:372:LYS:HG2	1.87	0.57
36:JD:1020:GLN:HA	36:JD:1023:ILE:HG12	1.87	0.57
40:JL:174:ARG:HG3	40:JL:227:LEU:HB3	1.87	0.57
62:D3:514:G:H1	62:D3:543:C:H5	1.52	0.57
75:EN:205:SER:O	75:EN:209:TYR:N	2.33	0.57
3:UA:4:ASP:OD1	3:UA:6:LYS:NZ	2.35	0.57
3:UA:833:LYS:HA	3:UA:836:VAL:HG12	1.87	0.57
7:UE:110:ILE:HD11	7:UE:117:LEU:HD21	1.87	0.57
8:UF:190:LEU:HD11	8:UF:323:PHE:HE1	1.70	0.57
10:UH:341:LEU:CA	10:UH:358:VAL:O	2.49	0.57
14:UL:809:LEU:O	14:UL:812:ILE:HG22	2.03	0.57
15:UM:580:ARG:HB2	15:UM:593:CYS:HB3	1.86	0.57
15:UM:791:ARG:HH22	32:CK:493:GLN:NE2	2.03	0.57
16:UN:780:ASP:OD2	16:UN:818:LYS:HB2	2.05	0.57
22:UT:1095:SER:HA	22:UT:1136:THR:HG22	1.86	0.57
22:UT:2424:SER:O	22:UT:2427:THR:OG1	2.18	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:417:LEU:HD12	23:UU:432:THR:HG22	1.86	0.57
24:UV:623:GLU:HB3	24:UV:626:LYS:HZ1	1.70	0.57
26:CD:257:ILE:O	27:CE:138:LYS:NZ	2.27	0.57
36:JD:801:VAL:HG11	36:JD:809:ARG:HH12	1.69	0.57
36:JD:1136:HIS:HA	36:JD:1166:ARG:HD3	1.86	0.57
42:JP:220:ASP:OD1	48:DH:141:ARG:NH1	2.37	0.57
48:DH:97:ARG:NH2	48:DH:99:LEU:O	2.37	0.57
62:D3:901:G:C6	62:D3:902:G:N1	2.72	0.57
62:D3:991:G:N1	62:D3:1012:U:OP2	2.35	0.57
9:UG:133:HIS:NE2	9:UG:147:GLU:OE2	2.38	0.57
15:UM:104:PRO:HG3	53:DO:72:LYS:HE3	1.85	0.57
16:UN:787:THR:HG22	16:UN:808:PHE:HB2	1.85	0.57
18:UP:169:ASP:HB3	18:UP:180:LEU:HD23	1.85	0.57
19:UQ:406:MET:HE1	19:UQ:485:ARG:HB2	1.87	0.57
20:UR:433:TRP:HD1	20:UR:446:ARG:HD2	1.68	0.57
22:UT:1328:PHE:CE1	22:UT:1363:LEU:HG	2.40	0.57
22:UT:1921:LEU:O	22:UT:1924:LEU:C	2.43	0.57
23:UU:209:ILE:HG21	23:UU:223:LEU:HD23	1.85	0.57
23:UU:798:ALA:O	23:UU:802:MET:HB2	2.05	0.57
26:CD:215:THR:HA	26:CD:218:LYS:HG2	1.86	0.57
32:CK:345:LEU:HD23	32:CK:345:LEU:H	1.69	0.57
48:DH:130:VAL:HG21	48:DH:135:ILE:HG13	1.87	0.57
51:DL:22:ASN:OD1	51:DL:24:LYS:N	2.38	0.57
56:DT:77:ASN:OD1	56:DT:101:ASN:ND2	2.38	0.57
59:DY:109:LYS:NZ	62:D3:459:G:OP1	2.37	0.57
75:EN:810:PRO:O	75:EN:816:ILE:N	2.38	0.57
75:EN:863:MET:O	75:EN:867:LYS:N	2.37	0.57
2:DA:124:ASN:HD21	62:D3:884:A:H4'	1.69	0.57
4:UB:56:ASN:ND2	32:CK:366:GLU:OE1	2.37	0.57
6:UD:476:LYS:N	6:UD:489:CYS:O	2.31	0.57
8:UF:4:THR:O	8:UF:8:LEU:HG	2.04	0.57
12:UJ:669:VAL:O	12:UJ:673:ASN:ND2	2.38	0.57
14:UL:392:THR:HG23	14:UL:409:ALA:HB1	1.87	0.57
16:UN:849:PHE:O	16:UN:851:PHE:N	2.38	0.57
19:UQ:204:ASN:HD21	19:UQ:266:ASN:HB3	1.68	0.57
22:UT:1412:GLU:N	22:UT:1412:GLU:OE2	2.35	0.57
23:UU:591:PHE:HA	23:UU:601:VAL:O	2.04	0.57
29:CH:334:GLU:HG3	29:CH:352:PRO:CG	2.34	0.57
29:CH:454:GLU:O	29:CH:460:ARG:NE	2.37	0.57
53:DO:20:TYR:CE1	53:DO:22:SER:HB2	2.37	0.57
62:D3:416:A:H5''	62:D3:417:A:N7	2.19	0.57

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
63:D4:102:U:H2'	63:D4:103:A:H8	1.70	0.57
1:CA:198:GLU:OE1	1:CA:200:SER:N	2.38	0.57
8:UF:46:ARG:HH12	63:D4:39:C:H1'	1.68	0.57
19:UQ:579:ASN:ND2	19:UQ:602:PRO:O	2.38	0.57
20:UR:163:ARG:O	20:UR:166:SER:OG	2.20	0.57
22:UT:436:PHE:HA	22:UT:439:VAL:HG22	1.85	0.57
22:UT:1278:ARG:NH1	22:UT:1316:MET:HB3	2.20	0.57
23:UU:178:ASN:ND2	23:UU:194:ARG:HG2	2.19	0.57
23:UU:717:ASP:HB3	23:UU:720:LEU:HD23	1.86	0.57
29:CH:546:GLU:OE1	29:CH:551:ARG:NE	2.38	0.57
40:JL:302:ASP:OD1	40:JL:305:ARG:NH2	2.34	0.57
50:DJ:64:GLU:OE1	50:DJ:65:LYS:N	2.38	0.57
62:D3:505:A:N6	62:D3:586:G:O2'	2.31	0.57
6:UD:477:LEU:HB2	6:UD:489:CYS:HB3	1.87	0.56
14:UL:449:THR:OG1	14:UL:451:ASN:O	2.22	0.56
15:UM:517:ILE:HD11	15:UM:527:ALA:HB3	1.86	0.56
19:UQ:11:LYS:NZ	19:UQ:788:THR:O	2.38	0.56
19:UQ:359:GLN:O	19:UQ:368:ASP:O	2.22	0.56
20:UR:562:LEU:HD11	20:UR:579:VAL:HG11	1.87	0.56
24:UV:396:LEU:HD11	24:UV:429:LEU:HD21	1.87	0.56
24:UV:580:TYR:HB2	24:UV:618:ILE:HB	1.86	0.56
36:JD:416:THR:O	36:JD:815:ARG:NH1	2.38	0.56
36:JD:623:LEU:HD13	36:JD:758:ILE:HB	1.86	0.56
36:JD:1048:ILE:O	36:JD:1051:SER:OG	2.18	0.56
37:JF:49:SER:HB3	37:JF:87:ALA:HA	1.85	0.56
42:JP:119:THR:OG1	42:JP:120:GLN:N	2.36	0.56
44:JJ:213:LYS:NZ	62:D3:1796:C:O2	2.37	0.56
63:D4:6:C:H2'	63:D4:7:G:C8	2.40	0.56
3:UA:48:PHE:HZ	3:UA:87:ARG:HG2	1.69	0.56
4:UB:16:ARG:NH2	4:UB:50:GLU:OE2	2.37	0.56
7:UE:147:GLN:O	7:UE:167:SER:OG	2.20	0.56
9:UG:73:TYR:CE1	42:JP:4:LYS:NZ	2.73	0.56
12:UJ:546:ASN:O	12:UJ:549:LYS:HG3	2.05	0.56
12:UJ:1555:ALA:O	12:UJ:1571:ARG:NH1	2.38	0.56
14:UL:680:SER:OG	14:UL:682:ARG:NE	2.34	0.56
17:UO:36:VAL:HG12	17:UO:327:LEU:HB2	1.87	0.56
19:UQ:408:THR:HG21	19:UQ:488:LEU:HB2	1.87	0.56
22:UT:15:ARG:NH1	62:D3:61:A:H5'	2.19	0.56
22:UT:793:PHE:HD1	22:UT:796:ILE:HB	1.70	0.56
22:UT:1197:THR:O	22:UT:1201:LEU:HD13	2.04	0.56
24:UV:813:GLU:OE1	24:UV:817:ASN:ND2	2.39	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:826:SER:OG	24:UV:839:THR:OG1	2.23	0.56
24:UV:1098:PHE:CZ	24:UV:1184:GLY:HA3	2.40	0.56
25:UX:56:ASN:ND2	25:UX:169:GLY:O	2.26	0.56
33:CL:322:ARG:HH12	62:D3:416:A:H5'	1.70	0.56
33:CL:625:TRP:CZ3	34:CM:281:GLU:HA	2.40	0.56
34:CM:59:VAL:HG23	34:CM:83:GLY:HA2	1.88	0.56
37:JF:88:ARG:O	37:JF:91:ILE:HG22	2.05	0.56
37:JG:100:LEU:HD23	37:JG:130:ILE:HG12	1.87	0.56
44:JJ:148:ASP:OD2	44:JJ:150:GLY:N	2.36	0.56
45:DE:136:VAL:HG21	45:DE:148:ARG:NH2	2.20	0.56
48:DH:133:THR:HG21	48:DH:162:ILE:HG21	1.87	0.56
61:D2:6:A:O2'	61:D2:7:A:N7	2.38	0.56
2:DA:47:LEU:O	2:DA:64:ARG:NH2	2.37	0.56
2:DA:148:ASN:OD1	62:D3:1066:C:O2'	2.14	0.56
3:UA:222:LYS:HA	3:UA:246:TYR:HB2	1.86	0.56
1:CB:91:HIS:NE2	13:UK:163:GLU:O	2.27	0.56
4:UB:627:HIS:CE1	4:UB:632:CYS:HB2	2.41	0.56
6:UD:741:LEU:HA	6:UD:756:GLU:HA	1.85	0.56
9:UG:76:PRO:O	9:UG:77:GLU:HB2	2.04	0.56
10:UH:340:TYR:O	10:UH:358:VAL:O	2.24	0.56
10:UH:570:LEU:HD12	10:UH:582:ILE:HG22	1.88	0.56
12:UJ:176:ALA:O	12:UJ:180:ILE:HG12	2.04	0.56
12:UJ:286:LEU:HD21	12:UJ:292:LYS:HA	1.87	0.56
12:UJ:598:TYR:O	12:UJ:601:SER:OG	2.21	0.56
12:UJ:1528:VAL:HA	12:UJ:1531:ILE:HG12	1.87	0.56
12:UJ:1652:VAL:HG12	12:UJ:1694:HIS:CD2	2.40	0.56
14:UL:398:ASP:OD2	14:UL:438:PHE:N	2.38	0.56
15:UM:461:LEU:HD21	15:UM:489:ALA:N	2.20	0.56
15:UM:461:LEU:CD1	15:UM:490:HIS:H	2.18	0.56
17:UO:427:VAL:O	17:UO:431:LEU:HB2	2.05	0.56
19:UQ:332:GLN:NE2	61:D2:87:C:O2	2.38	0.56
19:UQ:510:TYR:HE1	19:UQ:527:HIS:HB3	1.70	0.56
20:UR:306:ASN:HD22	20:UR:309:GLN:CD	2.09	0.56
22:UT:362:PHE:CD1	22:UT:381:LEU:HG	2.37	0.56
22:UT:592:PRO:O	22:UT:597:ARG:NH2	2.38	0.56
22:UT:1471:GLU:OE1	22:UT:1517:HIS:ND1	2.38	0.56
22:UT:2448:ARG:NH2	62:D3:827:C:OP2	2.38	0.56
23:UU:318:SER:OG	23:UU:320:LYS:NZ	2.33	0.56
24:UV:103:PHE:O	24:UV:107:ILE:HG13	2.05	0.56
24:UV:439:HIS:CE1	24:UV:458:ILE:HB	2.40	0.56
24:UV:976:ILE:HD13	24:UV:1017:TYR:HD1	1.70	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:CI:5:LEU:HD13	30:CI:9:GLU:HG3	1.87	0.56
36:JD:885:TYR:HB2	36:JD:1124:ARG:HD2	1.87	0.56
42:JP:139:CYS:SG	42:JP:182:PHE:HB3	2.44	0.56
44:JJ:177:LEU:HD12	44:JJ:180:LEU:HG	1.85	0.56
44:JJ:204:ARG:NH1	44:JJ:250:LEU:O	2.39	0.56
45:DE:182:TYR:HB2	45:DE:228:ILE:HD11	1.86	0.56
53:DO:132:ARG:NH2	62:D3:1789:G:N7	2.54	0.56
55:DS:40:ARG:HH12	62:D3:1539:G:C1'	2.18	0.56
63:D4:202:G:N2	63:D4:247:U:O2	2.29	0.56
66:EC:162:SER:HA	66:EC:186:THR:HA	1.88	0.56
6:UD:37:ARG:NH1	6:UD:758:ASN:OD1	2.35	0.56
13:UK:134:THR:HG22	18:UP:177:ARG:HB3	1.86	0.56
17:UO:152:TRP:HE1	17:UO:160:PRO:HB3	1.71	0.56
22:UT:2234:GLY:O	22:UT:2237:THR:OG1	2.18	0.56
23:UU:764:GLY:HA2	23:UU:769:ASP:HB3	1.87	0.56
23:UU:793:GLN:NE2	23:UU:797:ASP:OD1	2.38	0.56
25:UX:50:ALA:O	25:UX:57:GLN:HG2	2.05	0.56
27:CE:80:LYS:HG2	27:CE:103:LEU:HD21	1.88	0.56
28:CG:65:LEU:O	28:CG:68:PRO:HD2	2.06	0.56
45:DE:11:ARG:NH1	45:DE:21:ASP:O	2.36	0.56
6:UD:107:VAL:HG13	6:UD:110:GLU:HB2	1.87	0.56
11:UI:459:LEU:HD23	11:UI:467:LEU:HD11	1.86	0.56
12:UJ:180:ILE:HD11	19:UQ:876:PHE:CE2	2.41	0.56
14:UL:216:LEU:HD23	14:UL:216:LEU:H	1.71	0.56
15:UM:219:ILE:HD13	24:UV:657:ARG:HH11	1.71	0.56
15:UM:303:PHE:HD1	15:UM:311:LEU:HD23	1.69	0.56
15:UM:546:LYS:HG3	15:UM:562:LEU:HD12	1.87	0.56
15:UM:787:PRO:HB2	32:CK:492:PRO:HG3	1.86	0.56
17:UO:44:HIS:HD2	17:UO:86:SER:HA	1.71	0.56
17:UO:426:LYS:HE2	17:UO:428:ARG:HB2	1.88	0.56
20:UR:440:ASN:C	20:UR:440:ASN:HD22	2.08	0.56
21:US:167:LYS:O	21:US:272:GLN:NE2	2.38	0.56
22:UT:316:LYS:O	22:UT:319:THR:OG1	2.23	0.56
23:UU:354:SER:O	23:UU:631:ASN:ND2	2.39	0.56
24:UV:669:TRP:CZ2	24:UV:681:ILE:HG12	2.41	0.56
32:CK:315:GLU:OE2	33:CL:1033:ARG:NH2	2.39	0.56
33:CL:879:THR:OG1	62:D3:572:C:N4	2.37	0.56
36:JD:462:VAL:HG13	36:JD:473:VAL:HG11	1.86	0.56
36:JD:885:TYR:CE2	36:JD:1090:ASP:HB3	2.41	0.56
36:JD:926:TYR:HD1	36:JD:1007:LEU:HD21	1.69	0.56
36:JD:1001:SER:HB3	36:JD:1004:PHE:HD2	1.71	0.56

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:JG:43:VAL:HG23	37:JG:204:VAL:HG13	1.87	0.56
58:DX:3:LYS:HD3	58:DX:7:ARG:NH2	2.20	0.56
67:ED:243:LEU:N	67:ED:282:VAL:O	2.37	0.56
75:EN:419:CYS:O	75:EN:423:ALA:N	2.37	0.56
3:UA:386:HIS:CE1	3:UA:412:ARG:HD2	2.41	0.56
7:UE:453:LEU:HA	7:UE:456:VAL:HG12	1.88	0.56
7:UE:495:GLN:HA	7:UE:498:LEU:HB3	1.86	0.56
15:UM:571:LEU:HG	15:UM:602:TRP:CE2	2.41	0.56
16:UN:844:SER:OG	16:UN:845:SER:N	2.37	0.56
20:UR:571:SER:HB2	20:UR:576:LEU:HB2	1.86	0.56
21:US:378:SER:OG	21:US:453:PRO:O	2.23	0.56
22:UT:1325:LEU:HD23	22:UT:2431:THR:HB	1.87	0.56
22:UT:1551:LEU:O	22:UT:1554:PRO:HD2	2.06	0.56
22:UT:1706:LYS:O	22:UT:1760:ASN:ND2	2.39	0.56
23:UU:634:PHE:HE1	23:UU:641:LEU:HD13	1.70	0.56
24:UV:976:ILE:HG21	24:UV:1017:TYR:HE1	1.71	0.56
33:CL:74:VAL:CG1	33:CL:82:LYS:HG3	2.36	0.56
33:CL:254:HIS:CD2	33:CL:256:GLU:HB3	2.40	0.56
36:JD:506:LYS:HE2	36:JD:538:LEU:HD11	1.87	0.56
40:JL:55:ARG:HG2	40:JL:57:SER:H	1.71	0.56
42:JP:439:ARG:HH22	62:D3:1042:G:P	2.28	0.56
45:DE:182:TYR:HB2	45:DE:228:ILE:CD1	2.35	0.56
47:DG:17:GLU:OE1	47:DG:17:GLU:N	2.39	0.56
49:DI:87:ASN:HB2	49:DI:90:LEU:HG	1.86	0.56
56:DT:88:VAL:HG13	62:D3:1172:G:N2	2.20	0.56
62:D3:1698:G:N1	62:D3:1703:C:N3	2.52	0.56
4:UB:504:ILE:HD12	4:UB:508:PHE:HE2	1.70	0.56
10:UH:314:LEU:HA	10:UH:321:ILE:HA	1.86	0.56
15:UM:409:ASP:OD1	15:UM:410:ASN:N	2.37	0.56
22:UT:470:ILE:HD13	22:UT:503:ARG:HB3	1.87	0.56
22:UT:1749:LYS:NZ	62:D3:688:G:OP1	2.37	0.56
22:UT:1889:VAL:HG12	22:UT:1926:PHE:CD1	2.41	0.56
23:UU:53:CYS:SG	23:UU:80:ILE:HB	2.46	0.56
24:UV:765:LEU:HD12	24:UV:1168:TYR:CD1	2.41	0.56
34:CM:40:ASP:OD1	34:CM:41:LEU:N	2.39	0.56
34:CM:155:LYS:O	34:CM:165:GLU:N	2.30	0.56
44:JJ:97:ARG:HH21	44:JJ:152:LEU:HD23	1.70	0.56
62:D3:17:C:H2'	62:D3:18:C:H6	1.71	0.56
12:UJ:368:SER:HA	12:UJ:371:LYS:HZ3	1.71	0.56
14:UL:262:ILE:CG2	14:UL:271:PHE:HB2	2.35	0.56
15:UM:574:HIS:CE1	15:UM:594:GLY:HA3	2.41	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:UO:248:ARG:NH2	17:UO:289:ASN:O	2.39	0.56
19:UQ:73:LEU:HD22	19:UQ:129:PRO:HG2	1.86	0.56
19:UQ:80:GLN:HG2	19:UQ:83:GLU:H	1.71	0.56
19:UQ:265:ASP:OD1	19:UQ:270:GLN:N	2.34	0.56
19:UQ:284:SER:O	19:UQ:288:LEU:HA	2.06	0.56
23:UU:332:SER:OG	23:UU:335:VAL:HB	2.06	0.56
24:UV:704:PHE:HB3	24:UV:954:LEU:HD22	1.87	0.56
34:CM:202:PRO:HG2	62:D3:1132:A:C6	2.41	0.56
36:JD:522:ASN:HB3	36:JD:525:THR:HG23	1.88	0.56
47:DG:164:LYS:HA	47:DG:164:LYS:HE2	1.86	0.56
51:DL:105:LYS:NZ	62:D3:306:U:P	2.79	0.56
62:D3:1544:U:H2'	62:D3:1545:A:C8	2.40	0.56
3:UA:190:HIS:NE2	3:UA:210:SER:HB2	2.20	0.56
10:UH:580:LEU:HD21	10:UH:631:SER:HA	1.87	0.56
12:UJ:715:HIS:HD2	12:UJ:718:ARG:HH22	1.49	0.56
15:UM:271:ASP:OD2	15:UM:274:SER:N	2.36	0.56
15:UM:591:ILE:HD11	15:UM:623:LEU:HD21	1.87	0.56
17:UO:62:ARG:NH1	17:UO:63:VAL:O	2.39	0.56
19:UQ:204:ASN:ND2	19:UQ:266:ASN:HB3	2.21	0.56
19:UQ:311:TYR:OH	20:UR:394:TRP:O	2.21	0.56
21:US:292:PRO:HB2	21:US:329:ARG:CZ	2.35	0.56
24:UV:828:ASP:OD1	24:UV:829:GLU:N	2.39	0.56
36:JD:1175:SER:HA	36:JD:1231:LEU:HD23	1.87	0.56
54:DQ:99:GLU:OE1	54:DQ:99:GLU:N	2.33	0.56
57:DW:2:THR:OG1	57:DW:3:ARG:N	2.35	0.56
62:D3:47:A:N7	62:D3:98:U:O2'	2.34	0.56
62:D3:193:U:H2'	62:D3:194:U:H2'	1.88	0.56
3:UA:458:TRP:HA	3:UA:465:LEU:HA	1.86	0.56
1:CB:173:LEU:HD11	1:CB:256:ASN:ND2	2.21	0.56
12:UJ:44:ASP:OD2	12:UJ:45:TYR:N	2.39	0.56
14:UL:46:LEU:HD13	14:UL:657:GLN:NE2	2.20	0.56
15:UM:406:ALA:HB1	15:UM:437:VAL:HG13	1.88	0.56
19:UQ:139:GLU:OE2	19:UQ:174:TYR:OH	2.22	0.56
19:UQ:519:LEU:HB3	19:UQ:522:SER:HB3	1.88	0.56
20:UR:276:HIS:O	20:UR:282:ASN:HA	2.05	0.56
22:UT:1360:GLU:O	22:UT:1362:ALA:N	2.39	0.56
22:UT:2423:VAL:HA	22:UT:2426:PHE:HD2	1.71	0.56
24:UV:392:GLU:H	24:UV:392:GLU:CD	2.09	0.56
30:CI:127:ALA:O	30:CI:131:ILE:HG12	2.06	0.56
31:CJ:170:VAL:HA	31:CJ:254:PHE:HB3	1.87	0.56
36:JD:774:ARG:NH1	36:JD:818:PRO:O	2.26	0.56

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:786:C:H2'	62:D3:787:G:C8	2.39	0.56
67:ED:158:SER:O	67:ED:162:SER:N	2.39	0.56
3:UA:222:LYS:HG2	3:UA:246:TYR:CD2	2.41	0.55
3:UA:351:LEU:HD23	3:UA:352:ALA:N	2.21	0.55
3:UA:361:VAL:HG12	3:UA:371:VAL:HG22	1.87	0.55
6:UD:274:GLN:OE1	6:UD:319:ARG:NE	2.38	0.55
6:UD:333:ILE:HA	6:UD:351:GLY:HA2	1.87	0.55
8:UF:2:SER:OG	8:UF:3:LYS:N	2.39	0.55
13:UK:146:PHE:O	18:UP:173:ARG:NH1	2.38	0.55
14:UL:7:ARG:NH2	14:UL:9:GLU:OE2	2.39	0.55
14:UL:149:ASP:HB3	14:UL:156:LEU:HD11	1.87	0.55
15:UM:600:LYS:HG3	15:UM:602:TRP:HZ3	1.72	0.55
15:UM:618:ASN:OD1	15:UM:619:ARG:N	2.36	0.55
19:UQ:473:LEU:O	19:UQ:530:LYS:NZ	2.40	0.55
19:UQ:586:SER:O	19:UQ:597:LYS:NZ	2.27	0.55
22:UT:1328:PHE:HE1	22:UT:1363:LEU:HG	1.70	0.55
22:UT:1689:VAL:HG22	22:UT:1744:GLU:OE1	2.06	0.55
23:UU:225:THR:OG1	23:UU:227:THR:O	2.24	0.55
36:JD:526:ASP:O	36:JD:529:ILE:HG12	2.06	0.55
36:JD:765:GLU:O	36:JD:812:ARG:NE	2.39	0.55
48:DH:133:THR:HG21	48:DH:162:ILE:HD13	1.88	0.55
54:DQ:25:GLY:HA3	54:DQ:64:ASP:HB2	1.89	0.55
2:DA:198:GLU:HB2	2:DA:210:ILE:HD12	1.88	0.55
11:UI:477:LYS:HG2	11:UI:481:HIS:CE1	2.41	0.55
12:UJ:533:PRO:HG2	12:UJ:710:LYS:HE3	1.87	0.55
17:UO:26:TYR:HE2	17:UO:30:TYR:HH	1.53	0.55
20:UR:557:THR:N	20:UR:560:THR:OG1	2.39	0.55
22:UT:1279:ASN:HA	22:UT:1282:VAL:HG22	1.86	0.55
24:UV:182:ASP:HB3	24:UV:208:THR:HB	1.87	0.55
33:CL:879:THR:OG1	62:D3:572:C:C4	2.57	0.55
34:CM:291:ARG:HG2	34:CM:317:GLN:HG3	1.87	0.55
36:JD:732:LEU:HD12	36:JD:733:PRO:HD2	1.89	0.55
42:JP:79:SER:OG	42:JP:82:LYS:HE2	2.05	0.55
45:DE:199:GLU:OE2	45:DE:201:HIS:NE2	2.39	0.55
49:DI:110:ARG:O	49:DI:114:GLU:HG3	2.05	0.55
50:DJ:162:SER:HG	50:DJ:165:GLY:H	1.53	0.55
62:D3:272:U:HO2'	62:D3:273:G:H8	1.54	0.55
62:D3:717:C:H42	62:D3:720:G:H22	1.53	0.55
62:D3:1524:A:H2'	62:D3:1525:A:C8	2.41	0.55
62:D3:1671:A:H3'	62:D3:1672:G:C8	2.40	0.55
63:D4:154:C:H42	63:D4:159:C:N4	1.99	0.55

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:UA:530:VAL:HG22	3:UA:542:PHE:HB2	1.87	0.55
4:UB:475:ARG:NH1	4:UB:516:LEU:O	2.40	0.55
6:UD:331:ASN:HD22	6:UD:766:GLN:HB3	1.71	0.55
12:UJ:1536:VAL:HG21	12:UJ:1578:PHE:HZ	1.71	0.55
17:UO:182:HIS:ND1	17:UO:197:ASP:OD1	2.37	0.55
19:UQ:766:ILE:HD13	19:UQ:776:PHE:HB3	1.87	0.55
20:UR:430:GLY:HA2	20:UR:455:ILE:CD1	2.36	0.55
22:UT:379:GLN:NE2	22:UT:383:ASN:OD1	2.40	0.55
22:UT:1586:ILE:HG13	22:UT:1587:LYS:N	2.21	0.55
23:UU:634:PHE:CE1	23:UU:641:LEU:HD13	2.41	0.55
24:UV:186:ILE:HG12	24:UV:346:LEU:HG	1.87	0.55
24:UV:236:THR:HG21	24:UV:256:TYR:HE1	1.70	0.55
24:UV:406:ILE:HG13	24:UV:457:TYR:HB3	1.87	0.55
26:CD:148:GLU:OE1	26:CD:148:GLU:N	2.39	0.55
26:CD:331:SER:OG	63:D4:111:G:OP1	2.24	0.55
33:CL:734:GLU:HB3	33:CL:737:ASN:ND2	2.21	0.55
34:CM:244:THR:HG23	34:CM:259:GLU:HB3	1.89	0.55
36:JD:803:LYS:NZ	36:JD:834:PHE:O	2.38	0.55
41:JM:163:ARG:NH2	63:D4:312:U:OP1	2.26	0.55
44:JJ:270:LEU:O	44:JJ:273:ARG:HG3	2.06	0.55
62:D3:1564:U:H2'	62:D3:1565:C:H6	1.70	0.55
62:D3:1747:G:H2'	62:D3:1748:G:H8	1.70	0.55
1:CB:153:ALA:HB3	1:CB:306:LEU:HD23	1.89	0.55
9:UG:427:GLU:OE2	9:UG:431:ARG:NH2	2.39	0.55
12:UJ:287:ASP:OD1	12:UJ:288:ALA:N	2.39	0.55
12:UJ:754:GLU:HA	12:UJ:757:ILE:HD12	1.88	0.55
14:UL:624:LEU:HD12	14:UL:629:ASN:HB2	1.89	0.55
15:UM:808:TYR:HB2	23:UU:932:VAL:HG22	1.87	0.55
17:UO:149:THR:OG1	17:UO:164:LEU:HB3	2.06	0.55
20:UR:378:GLN:NE2	20:UR:407:PHE:HE1	2.03	0.55
22:UT:877:LYS:HD2	22:UT:882:ASN:HD21	1.72	0.55
22:UT:1374:PHE:O	22:UT:1378:ILE:HG12	2.07	0.55
23:UU:25:SER:OG	23:UU:655:THR:OG1	2.25	0.55
23:UU:321:GLU:O	23:UU:343:LEU:HB3	2.07	0.55
24:UV:427:LYS:HB3	24:UV:496:LEU:HD11	1.87	0.55
28:CG:5:ASN:CB	29:CH:463:GLN:HA	2.36	0.55
28:CG:61:ILE:HD12	28:CG:64:LEU:HD21	1.86	0.55
34:CM:131:GLU:OE2	34:CM:156:ARG:NH1	2.39	0.55
36:JD:730:TYR:N	36:JD:755:ARG:O	2.37	0.55
47:DG:67:VAL:HG13	47:DG:99:GLY:HA2	1.88	0.55
49:DI:83:TYR:OH	49:DI:199:LYS:NZ	2.32	0.55

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:DJ:62:ARG:HD2	50:DJ:68:LYS:HZ1	1.71	0.55
53:DO:45:GLY:O	53:DO:48:VAL:O	2.25	0.55
62:D3:502:U:H2'	62:D3:503:G:H8	1.71	0.55
62:D3:1753:A:H2'	62:D3:1754:A:C8	2.34	0.55
73:EJ:158:VAL:O	73:EJ:189:SER:N	2.37	0.55
1:CB:264:GLN:N	1:CB:320:TYR:O	2.39	0.55
12:UJ:135:LEU:HD21	12:UJ:151:ILE:HD13	1.89	0.55
12:UJ:550:TYR:O	12:UJ:553:SER:O	2.25	0.55
12:UJ:1623:ILE:O	12:UJ:1627:THR:HG23	2.06	0.55
14:UL:552:ASP:O	14:UL:554:THR:N	2.39	0.55
15:UM:551:SER:HB3	15:UM:581:CYS:HB2	1.87	0.55
19:UQ:396:ILE:HD13	19:UQ:779:ILE:HB	1.89	0.55
22:UT:226:THR:O	22:UT:229:TYR:HB3	2.07	0.55
22:UT:402:ARG:HE	22:UT:746:ILE:HD11	1.71	0.55
22:UT:1439:ILE:O	22:UT:1441:LEU:N	2.39	0.55
22:UT:2065:VAL:HG12	22:UT:2069:GLN:HE22	1.71	0.55
22:UT:2183:LEU:O	22:UT:2186:LYS:HG2	2.05	0.55
23:UU:845:VAL:HG11	23:UU:884:PHE:CE1	2.42	0.55
24:UV:176:PHE:HB3	24:UV:230:VAL:HG21	1.88	0.55
32:CK:453:SER:OG	32:CK:454:VAL:N	2.39	0.55
35:CN:259:ARG:HH22	52:DN:83:GLU:CB	2.18	0.55
36:JD:855:LYS:HG3	36:JD:889:LEU:HD21	1.88	0.55
36:JD:1059:ALA:HA	44:JJ:68:SER:O	2.07	0.55
37:JF:232:LEU:HD21	37:JG:103:PRO:HG3	1.89	0.55
48:DH:69:GLY:HA2	48:DH:72:LYS:HE2	1.88	0.55
51:DL:134:THR:OG1	62:D3:325:G:OP1	2.24	0.55
62:D3:1688:U:H2'	62:D3:1689:A:H8	1.72	0.55
62:D3:1752:U:O4	62:D3:1753:A:N6	2.39	0.55
71:EH:5:ILE:N	71:EH:40:GLY:O	2.38	0.55
3:UA:425:PHE:HB3	3:UA:458:TRP:CD1	2.42	0.55
15:UM:584:ILE:HG23	15:UM:586:LYS:H	1.72	0.55
19:UQ:71:ASN:O	19:UQ:75:SER:OG	2.16	0.55
21:US:314:VAL:HG21	21:US:352:VAL:HG21	1.89	0.55
22:UT:996:ARG:HH12	62:D3:133:U:H5''	1.70	0.55
22:UT:1151:ILE:HD12	22:UT:1201:LEU:HD22	1.88	0.55
22:UT:1326:SER:HA	22:UT:1329:LYS:HE3	1.89	0.55
23:UU:730:LYS:HE3	23:UU:880:LEU:HD21	1.89	0.55
23:UU:885:MET:HG2	23:UU:912:TRP:CZ2	2.42	0.55
24:UV:686:LEU:HB2	24:UV:696:ILE:HD11	1.89	0.55
28:CF:65:LEU:O	28:CF:68:PRO:HD2	2.06	0.55
30:CI:32:VAL:HG21	30:CI:44:TYR:CD1	2.41	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:JF:196:LEU:HD11	37:JF:202:ILE:HD13	1.89	0.55
37:JG:36:LYS:HB3	37:JG:172:PRO:HA	1.88	0.55
47:DG:176:GLN:HG2	62:D3:169:A:C5'	2.36	0.55
50:DJ:120:LYS:H	50:DJ:124:HIS:CD2	2.22	0.55
62:D3:679:U:H2'	62:D3:680:U:C6	2.42	0.55
62:D3:887:A:H61	62:D3:924:A:H61	1.54	0.55
62:D3:976:G:N1	62:D3:1023:A:O2'	2.27	0.55
63:D4:157:A:H4'	63:D4:158:G:O5'	2.05	0.55
1:CA:85:LYS:HA	1:CA:85:LYS:HE3	1.89	0.55
3:UA:604:TYR:HA	3:UA:611:LEU:HA	1.89	0.55
1:CB:148:ARG:HH11	1:CB:148:ARG:HG3	1.71	0.55
6:UD:293:ASN:HB3	6:UD:310:ASN:HB3	1.89	0.55
7:UE:60:VAL:HA	7:UE:80:MET:HG2	1.88	0.55
12:UJ:791:VAL:O	12:UJ:795:LEU:HB2	2.06	0.55
12:UJ:795:LEU:HD12	12:UJ:796:PRO:HD2	1.89	0.55
14:UL:249:GLU:CD	14:UL:250:LYS:H	2.08	0.55
15:UM:516:LYS:HB2	15:UM:518:TRP:HZ3	1.71	0.55
16:UN:879:ILE:O	16:UN:879:ILE:HG13	2.05	0.55
17:UO:167:ALA:HA	17:UO:194:ARG:NH2	2.21	0.55
21:US:316:PRO:HA	21:US:319:ALA:HB3	1.88	0.55
22:UT:1089:PRO:HG2	22:UT:1090:ARG:HE	1.72	0.55
22:UT:1915:LEU:O	22:UT:1919:ILE:HG23	2.06	0.55
26:CD:37:GLN:OE1	42:JP:385:VAL:HG12	2.07	0.55
36:JD:523:ILE:H	36:JD:523:ILE:HD12	1.70	0.55
36:JD:1116:PRO:HD2	36:JD:1134:TYR:CD1	2.41	0.55
40:JL:201:GLN:NE2	62:D3:1783:C:O5'	2.39	0.55
40:JL:233:ARG:HH22	62:D3:1776:A:H4'	1.71	0.55
44:JJ:74:ASP:O	44:JJ:77:GLY:N	2.39	0.55
52:DN:96:VAL:HG21	52:DN:150:VAL:HG11	1.89	0.55
62:D3:358:U:H2'	62:D3:360:A:H5'	1.89	0.55
62:D3:1787:C:N4	62:D3:1788:G:O6	2.40	0.55
3:UA:162:LEU:HD13	3:UA:197:ALA:HB1	1.88	0.55
6:UD:331:ASN:ND2	6:UD:766:GLN:HB3	2.22	0.55
8:UF:144:VAL:HG21	8:UF:178:VAL:HG11	1.88	0.55
9:UG:160:LEU:HD12	9:UG:161:GLN:N	2.21	0.55
12:UJ:721:VAL:HG11	12:UJ:751:ILE:HG22	1.88	0.55
13:UK:64:TYR:CE2	33:CL:1080:LYS:HB2	2.41	0.55
14:UL:536:CYS:SG	14:UL:537:VAL:N	2.80	0.55
19:UQ:694:LEU:O	19:UQ:698:VAL:N	2.40	0.55
21:US:215:ASN:HB3	21:US:218:LYS:HD3	1.89	0.55
22:UT:1178:CYS:O	22:UT:1181:ILE:HG22	2.07	0.55

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1247:LEU:HA	22:UT:1250:ILE:HG22	1.89	0.55
22:UT:1533:MET:HG3	22:UT:1537:LYS:HG3	1.88	0.55
22:UT:1683:ARG:O	22:UT:1686:GLN:N	2.40	0.55
23:UU:530:ASP:HB2	23:UU:537:LEU:HD21	1.88	0.55
23:UU:738:ASP:N	23:UU:738:ASP:OD1	2.39	0.55
30:CI:39:GLN:NE2	30:CI:40:ASN:HB3	2.22	0.55
36:JD:25:ARG:HG3	36:JD:26:ILE:HG23	1.89	0.55
40:JL:84:VAL:HG21	40:JL:114:PHE:HB3	1.87	0.55
62:D3:1714:A:H2'	62:D3:1715:G:H8	1.72	0.55
63:D4:264:C:N3	63:D4:307:G:N1	2.50	0.55
3:UA:422:PHE:CZ	62:D3:1633:A:C4	2.95	0.55
3:UA:570:THR:HG23	3:UA:573:ASN:H	1.71	0.55
13:UK:112:GLN:HE22	63:D4:324:U:H5'	1.72	0.55
14:UL:414:LEU:HD13	14:UL:457:PHE:CD2	2.42	0.55
15:UM:579:GLN:O	15:UM:580:ARG:HG2	2.07	0.55
17:UO:63:VAL:HB	17:UO:77:PHE:HB2	1.88	0.55
17:UO:280:HIS:HB2	17:UO:297:LYS:NZ	2.22	0.55
19:UQ:302:SER:HB2	19:UQ:343:ASP:HA	1.89	0.55
20:UR:270:LYS:HA	20:UR:295:ILE:HG12	1.89	0.55
21:US:309:ASN:HB3	21:US:312:ALA:HB3	1.88	0.55
22:UT:367:ARG:HD2	22:UT:403:LEU:HD23	1.88	0.55
24:UV:761:ARG:HB2	24:UV:899:LEU:HD23	1.88	0.55
34:CM:113:LYS:HD3	34:CM:171:ASP:OD1	2.06	0.55
36:JD:639:LEU:HB3	36:JD:731:VAL:HG11	1.88	0.55
37:JG:111:GLN:HG3	37:JG:113:TYR:HE1	1.71	0.55
62:D3:1534:G:OP2	62:D3:1534:G:H8	1.90	0.55
62:D3:1693:A:H2'	62:D3:1694:A:C8	2.42	0.55
63:D4:100:U:H2'	63:D4:101:G:H8	1.71	0.55
75:EN:398:VAL:O	75:EN:402:TRP:N	2.34	0.55
2:DA:101:HIS:O	2:DA:217:LEU:HD23	2.07	0.55
12:UJ:78:SER:HA	12:UJ:81:LEU:CD2	2.37	0.55
14:UL:234:GLU:HB3	14:UL:240:GLY:HA3	1.89	0.55
15:UM:579:GLN:OE1	15:UM:595:ALA:HB2	2.07	0.55
17:UO:45:ILE:HD12	17:UO:56:ALA:O	2.06	0.55
21:US:399:ILE:HG12	21:US:484:PHE:HE2	1.71	0.55
22:UT:434:LEU:HD12	22:UT:757:ILE:HG13	1.89	0.55
22:UT:1271:LEU:HB3	22:UT:1275:PHE:CE1	2.42	0.55
23:UU:880:LEU:HA	23:UU:883:THR:HG22	1.89	0.55
31:CJ:83:ILE:H	31:CJ:83:ILE:HD12	1.72	0.55
32:CK:344:GLU:HA	33:CL:960:ARG:NH2	2.20	0.55
36:JD:1126:PRO:HA	36:JD:1129:GLU:HB2	1.89	0.55

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:JG:227:LEU:HB3	37:JG:232:LEU:HD21	1.89	0.55
62:D3:1501:C:H2'	62:D3:1502:G:H8	1.72	0.55
75:EN:465:LEU:O	75:EN:469:ARG:N	2.39	0.55
6:UD:45:THR:OG1	6:UD:352:VAL:HA	2.07	0.54
6:UD:306:GLN:HE21	6:UD:324:SER:HB3	1.72	0.54
6:UD:420:LEU:HD11	6:UD:462:VAL:HG11	1.88	0.54
10:UH:647:LEU:O	11:UI:509:GLN:NE2	2.37	0.54
12:UJ:1451:LYS:HB3	12:UJ:1455:LYS:NZ	2.23	0.54
13:UK:106:TYR:CE2	13:UK:110:LEU:HD11	2.41	0.54
13:UK:232:LYS:HE2	13:UK:240:ILE:HD12	1.88	0.54
14:UL:394:VAL:HB	14:UL:675:SER:OG	2.07	0.54
14:UL:805:ILE:O	14:UL:808:THR:HG22	2.06	0.54
17:UO:233:ASN:ND2	17:UO:247:GLU:OE2	2.40	0.54
19:UQ:71:ASN:OD1	19:UQ:72:SER:N	2.40	0.54
20:UR:264:LEU:HD23	20:UR:265:THR:N	2.22	0.54
20:UR:449:ASP:OD1	20:UR:494:TYR:OH	2.17	0.54
20:UR:486:SER:O	20:UR:489:GLY:N	2.38	0.54
21:US:437:THR:O	21:US:441:ASN:ND2	2.40	0.54
22:UT:1602:ASP:O	22:UT:1606:ILE:HD11	2.06	0.54
22:UT:1668:GLU:O	22:UT:1671:VAL:HG12	2.07	0.54
23:UU:810:ARG:NH1	36:JD:1232:ASN:OD1	2.40	0.54
24:UV:737:LEU:HD11	24:UV:842:ILE:HG21	1.89	0.54
24:UV:858:ARG:NH2	62:D3:1058:U:H3	2.05	0.54
27:CE:103:LEU:HD22	27:CE:105:PHE:CD1	2.42	0.54
29:CH:116:ILE:HD12	29:CH:116:ILE:H	1.73	0.54
33:CL:874:TYR:OH	62:D3:578:U:OP2	2.20	0.54
37:JG:73:HIS:ND1	37:JG:73:HIS:O	2.40	0.54
40:JL:157:ARG:HG3	40:JL:203:GLU:HB2	1.89	0.54
42:JP:93:LYS:HD3	42:JP:102:GLU:OE1	2.07	0.54
62:D3:992:A:H2	62:D3:1012:U:O4	1.90	0.54
75:EN:684:VAL:HA	75:EN:766:SER:HA	1.89	0.54
2:DA:172:LEU:O	2:DA:176:VAL:HG22	2.07	0.54
6:UD:250:THR:HG22	6:UD:251:ASP:H	1.71	0.54
9:UG:230:THR:HG22	9:UG:232:ALA:H	1.72	0.54
12:UJ:1461:TRP:HB2	12:UJ:1477:PHE:CZ	2.42	0.54
15:UM:578:VAL:HG23	15:UM:579:GLN:H	1.73	0.54
15:UM:791:ARG:HH22	32:CK:493:GLN:CD	2.10	0.54
15:UM:791:ARG:NH2	32:CK:493:GLN:OE1	2.39	0.54
17:UO:40:ASN:HB2	17:UO:60:SER:HB3	1.90	0.54
19:UQ:605:ASN:OD1	19:UQ:606:HIS:N	2.40	0.54
22:UT:1742:VAL:HB	22:UT:1745:ILE:HD12	1.88	0.54

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:2136:LYS:O	22:UT:2139:GLU:HG2	2.07	0.54
23:UU:846:ASP:OD1	23:UU:850:ARG:NH2	2.40	0.54
24:UV:372:GLN:O	24:UV:514:ASN:ND2	2.40	0.54
24:UV:622:SER:OG	24:UV:623:GLU:OE2	2.24	0.54
24:UV:883:LEU:HD21	24:UV:1050:ILE:HG22	1.89	0.54
62:D3:40:A:H2'	62:D3:41:A:O4'	2.07	0.54
62:D3:1690:G:H2'	62:D3:1691:A:C8	2.42	0.54
63:D4:181:G:H22	63:D4:183:A:H3'	1.72	0.54
63:D4:201:C:N4	63:D4:249:G:O6	2.41	0.54
2:DA:61:LEU:HD23	2:DA:64:ARG:HG3	1.90	0.54
1:CB:307:GLU:CD	1:CB:308:PRO:HD3	2.28	0.54
6:UD:121:THR:HG23	6:UD:142:GLY:O	2.06	0.54
12:UJ:137:LEU:HD23	12:UJ:195:TYR:HB2	1.89	0.54
12:UJ:200:ILE:HG22	12:UJ:201:LYS:HE2	1.89	0.54
14:UL:814:MET:SD	14:UL:815:SER:N	2.81	0.54
15:UM:115:THR:HG21	44:JJ:79:PRO:HD2	1.88	0.54
17:UO:31:THR:O	17:UO:331:THR:N	2.40	0.54
19:UQ:314:SER:HB2	19:UQ:322:SER:OG	2.07	0.54
21:US:386:LEU:O	21:US:390:SER:CB	2.48	0.54
22:UT:1173:LEU:O	22:UT:1176:THR:OG1	2.16	0.54
22:UT:1176:THR:O	22:UT:1179:LEU:HG	2.07	0.54
22:UT:1310:SER:HG	22:UT:1326:SER:HG	1.54	0.54
24:UV:975:LEU:HD23	24:UV:1041:VAL:HG12	1.89	0.54
24:UV:1109:LYS:NZ	24:UV:1170:GLY:O	2.27	0.54
31:CJ:77:TYR:O	31:CJ:81:SER:CB	2.51	0.54
33:CL:84:THR:HG23	77:CL:2001:GTP:O1A	2.07	0.54
35:CN:259:ARG:HH22	52:DN:83:GLU:HB2	1.71	0.54
37:JF:39:LYS:NZ	37:JF:200:GLU:O	2.40	0.54
37:JG:53:HIS:CG	37:JG:68:LEU:HD21	2.42	0.54
40:JL:280:LYS:O	40:JL:283:THR:OG1	2.23	0.54
62:D3:1483:A:H2	62:D3:1607:G:H1'	1.72	0.54
71:EH:204:THR:O	71:EH:208:TYR:N	2.41	0.54
73:EJ:159:GLU:HA	73:EJ:188:PHE:HA	1.89	0.54
75:EN:86:GLU:HA	75:EN:120:ARG:HA	1.89	0.54
75:EN:351:GLU:O	75:EN:355:LYS:N	2.34	0.54
1:CB:165:ALA:H	1:CB:168:LYS:HD2	1.71	0.54
6:UD:509:GLN:HB3	6:UD:558:ARG:HH22	1.72	0.54
7:UE:311:MET:HE3	7:UE:312:PRO:HD2	1.89	0.54
9:UG:161:GLN:NE2	9:UG:429:GLU:OE2	2.41	0.54
9:UG:203:TYR:HD2	9:UG:220:SER:HB3	1.73	0.54
12:UJ:206:TYR:CZ	12:UJ:209:GLN:HB2	2.41	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:UL:657:GLN:NE2	14:UL:678:ASP:OD2	2.40	0.54
15:UM:490:HIS:NE2	15:UM:516:LYS:HG2	2.21	0.54
17:UO:278:ASP:O	17:UO:298:PHE:O	2.25	0.54
17:UO:481:GLN:O	17:UO:485:ILE:HG12	2.07	0.54
19:UQ:498:LEU:HD13	19:UQ:509:THR:HG22	1.90	0.54
22:UT:355:GLN:HG3	22:UT:389:ILE:HG22	1.90	0.54
22:UT:1311:TYR:CD1	22:UT:1324:ILE:HD13	2.42	0.54
22:UT:1949:PRO:HB2	42:JP:252:ASN:ND2	2.23	0.54
22:UT:2052:GLN:HE21	22:UT:2056:ARG:HG2	1.72	0.54
23:UU:453:TRP:CD2	23:UU:492:GLY:HA3	2.43	0.54
23:UU:885:MET:HE3	23:UU:888:LEU:HD23	1.90	0.54
26:CD:198:TRP:HE1	27:CE:165:GLN:HB3	1.72	0.54
26:CD:205:GLU:HG3	26:CD:254:ASN:HB3	1.89	0.54
27:CE:160:ASP:OD1	27:CE:160:ASP:N	2.41	0.54
31:CJ:206:LEU:HD13	31:CJ:209:LEU:HD12	1.89	0.54
33:CL:613:PRO:HG2	33:CL:615:PHE:CZ	2.42	0.54
33:CL:629:ASP:N	33:CL:629:ASP:OD1	2.38	0.54
33:CL:1080:LYS:O	33:CL:1082:GLN:N	2.39	0.54
35:CN:254:LYS:HE2	52:DN:89:TYR:HE2	1.72	0.54
40:JL:48:ILE:HG23	40:JL:152:ILE:HG21	1.88	0.54
42:JP:228:ASN:ND2	42:JP:230:ASN:O	2.41	0.54
65:EB:164:LYS:O	65:EB:185:VAL:N	2.35	0.54
4:UB:613:ILE:HG13	4:UB:614:ILE:H	1.71	0.54
4:UB:701:ALA:HB1	4:UB:704:ASN:HD22	1.72	0.54
7:UE:444:ALA:HB1	7:UE:453:LEU:HG	1.89	0.54
14:UL:578:SER:HB3	14:UL:591:SER:HB3	1.90	0.54
17:UO:212:ASP:N	17:UO:212:ASP:OD1	2.40	0.54
19:UQ:768:TRP:CZ3	19:UQ:770:TYR:HA	2.43	0.54
21:US:223:VAL:O	21:US:228:HIS:NE2	2.38	0.54
22:UT:1082:ILE:O	22:UT:1086:VAL:HG23	2.07	0.54
24:UV:392:GLU:HA	24:UV:395:ILE:HD12	1.89	0.54
24:UV:579:LYS:NZ	24:UV:619:VAL:O	2.41	0.54
26:CD:395:GLU:OE1	29:CH:455:THR:OG1	2.24	0.54
33:CL:561:GLU:O	33:CL:565:ARG:HG2	2.07	0.54
36:JD:541:LYS:HB3	36:JD:549:GLU:HB2	1.89	0.54
40:JL:41:ASN:HB2	40:JL:44:VAL:HG22	1.89	0.54
51:DL:55:ASP:OD1	51:DL:82:ARG:NH1	2.40	0.54
55:DS:64:GLU:O	55:DS:67:GLU:HG3	2.06	0.54
1:CA:306:LEU:O	1:CA:306:LEU:HD12	2.08	0.54
2:DA:239:GLU:HG3	24:UV:659:LYS:NZ	2.23	0.54
1:CB:144:TRP:CZ2	1:CB:183:HIS:HB3	2.43	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:UD:219:ASP:O	6:UD:222:MET:HG2	2.08	0.54
6:UD:232:ASP:N	6:UD:232:ASP:OD1	2.39	0.54
6:UD:534:LEU:CD2	6:UD:543:ILE:HG22	2.37	0.54
10:UH:665:GLN:HB3	11:UI:496:LEU:HD21	1.90	0.54
12:UJ:404:PHE:O	12:UJ:408:ILE:HG13	2.08	0.54
15:UM:418:ASN:HD21	15:UM:420:ASN:HD21	1.54	0.54
15:UM:465:LYS:NZ	15:UM:521:GLU:O	2.33	0.54
19:UQ:432:ARG:H	19:UQ:432:ARG:HD3	1.73	0.54
19:UQ:499:LYS:HG2	19:UQ:500:PHE:H	1.72	0.54
19:UQ:506:TRP:HZ3	19:UQ:571:GLN:HB2	1.72	0.54
21:US:203:LEU:HD21	21:US:212:LEU:HD22	1.89	0.54
22:UT:84:ASP:OD2	22:UT:84:ASP:N	2.39	0.54
22:UT:549:LYS:NZ	22:UT:587:ASP:HB3	2.22	0.54
22:UT:1041:SER:OG	22:UT:1043:GLU:OE1	2.21	0.54
22:UT:2159:ASN:O	22:UT:2162:LEU:HB3	2.07	0.54
23:UU:605:LEU:HD23	23:UU:628:VAL:HG21	1.90	0.54
24:UV:215:GLU:OE2	62:D3:1700:C:O2'	2.18	0.54
24:UV:495:THR:HA	24:UV:498:MET:HG2	1.90	0.54
33:CL:755:LYS:NZ	62:D3:434:G:O6	2.40	0.54
40:JL:181:MET:SD	40:JL:182:TRP:CD1	3.00	0.54
42:JP:83:LEU:HD21	42:JP:364:ILE:HG21	1.88	0.54
47:DG:162:VAL:HG21	62:D3:68:A:H5'	1.89	0.54
63:D4:202:G:H1	63:D4:247:U:H3	1.54	0.54
2:DA:150:VAL:HG12	9:UG:512:ARG:HE	1.73	0.54
3:UA:68:THR:HG21	3:UA:127:VAL:HG21	1.90	0.54
1:CB:120:GLU:OE1	1:CB:120:GLU:N	2.35	0.54
4:UB:52:ARG:CD	32:CK:370:ARG:HH12	2.17	0.54
6:UD:155:LYS:HD3	6:UD:167:LEU:HD21	1.90	0.54
12:UJ:675:ASN:HA	12:UJ:680:TYR:CD2	2.42	0.54
12:UJ:1369:PHE:O	12:UJ:1373:ILE:HG23	2.08	0.54
12:UJ:1666:LEU:O	12:UJ:1670:ILE:HD12	2.08	0.54
14:UL:760:ILE:HG13	14:UL:831:LYS:HB3	1.89	0.54
16:UN:779:GLU:OE1	16:UN:815:VAL:HG21	2.08	0.54
17:UO:51:HIS:HB3	17:UO:53:HIS:CE1	2.43	0.54
18:UP:208:ARG:HG2	18:UP:211:LEU:CD2	2.38	0.54
19:UQ:875:MET:SD	19:UQ:875:MET:N	2.80	0.54
22:UT:500:LEU:HD22	22:UT:503:ARG:HH11	1.71	0.54
22:UT:522:LEU:O	22:UT:525:ILE:HB	2.08	0.54
22:UT:718:PRO:HD3	22:UT:758:ILE:HG13	1.89	0.54
26:CD:411:ARG:HB3	26:CD:411:ARG:NH1	2.22	0.54
27:CE:343:TYR:HE2	63:D4:88:U:C4	2.25	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:CI:125:GLN:HA	30:CI:128:VAL:HG12	1.88	0.54
37:JG:36:LYS:HD2	37:JG:172:PRO:HA	1.89	0.54
40:JL:236:ARG:HD3	62:D3:981:U:OP1	2.08	0.54
55:DS:27:LYS:HE2	62:D3:1533:C:H5'	1.90	0.54
56:DT:28:LEU:HA	56:DT:111:ILE:HD11	1.90	0.54
62:D3:273:G:N2	62:D3:284:G:H1'	2.23	0.54
62:D3:279:G:C2	62:D3:281:G:C4	2.96	0.54
62:D3:330:G:C6	62:D3:331:A:C5	2.96	0.54
62:D3:513:U:H2'	62:D3:514:G:C8	2.43	0.54
62:D3:1115:U:H2'	62:D3:1116:A:C8	2.43	0.54
1:CA:110:ASN:OD1	1:CA:112:ALA:N	2.40	0.54
3:UA:341:GLN:N	3:UA:341:GLN:OE1	2.40	0.54
3:UA:482:SER:O	3:UA:486:SER:CA	2.55	0.54
6:UD:374:THR:HG22	6:UD:375:VAL:HG23	1.89	0.54
7:UE:445:LEU:HD22	7:UE:479:ILE:HG13	1.90	0.54
12:UJ:1374:VAL:HG23	12:UJ:1375:PRO:HD3	1.88	0.54
17:UO:52:PRO:HB3	17:UO:309:PRO:HD2	1.90	0.54
22:UT:366:ILE:O	22:UT:407:ARG:NH2	2.41	0.54
22:UT:972:LEU:HG	22:UT:973:ASP:H	1.71	0.54
22:UT:1011:LEU:O	22:UT:1013:THR:N	2.40	0.54
24:UV:558:LEU:HD22	24:UV:608:PHE:CE2	2.42	0.54
24:UV:940:LYS:C	24:UV:940:LYS:HD3	2.28	0.54
30:CI:93:LYS:HZ2	30:CI:94:ILE:H	1.55	0.54
33:CL:870:ARG:NH1	62:D3:574:G:OP1	2.41	0.54
36:JD:739:PRO:O	36:JD:742:GLU:HG2	2.07	0.54
42:JP:131:LYS:HG2	42:JP:155:TYR:HE2	1.73	0.54
52:DN:124:ARG:NH2	62:D3:628:G:OP2	2.41	0.54
75:EN:325:PRO:O	75:EN:553:GLY:N	2.35	0.54
1:CA:145:ASN:HD21	5:UC:591:TYR:CB	2.20	0.54
1:CB:110:ASN:HD21	1:CB:142:ARG:HD3	1.73	0.54
1:CB:307:GLU:OE1	1:CB:308:PRO:HD3	2.08	0.54
12:UJ:670:LEU:HA	12:UJ:673:ASN:HD21	1.72	0.54
12:UJ:1550:ILE:HG22	12:UJ:1553:ARG:HH11	1.73	0.54
14:UL:676:SER:OG	14:UL:678:ASP:OD1	2.22	0.54
15:UM:557:VAL:HG12	15:UM:571:LEU:HB2	1.90	0.54
19:UQ:17:GLY:H	19:UQ:465:ASN:ND2	2.06	0.54
19:UQ:207:LEU:HD23	19:UQ:229:SER:HA	1.90	0.54
22:UT:673:ARG:NH1	22:UT:777:GLN:HE21	2.06	0.54
22:UT:1199:LEU:HD23	22:UT:1242:LYS:NZ	2.23	0.54
23:UU:360:ASP:HA	23:UU:421:ASN:ND2	2.23	0.54
27:CE:159:VAL:HG23	27:CE:162:MET:HB3	1.89	0.54

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CJ:290:LEU:HD22	62:D3:563:U:OP2	2.07	0.54
49:DI:98:LYS:HB3	62:D3:329:G:H5''	1.89	0.54
56:DT:114:VAL:HB	56:DT:123:ARG:O	2.08	0.54
2:DA:119:THR:HG23	2:DA:155:TYR:HD1	1.73	0.54
5:UC:572:ALA:HB1	25:UX:53:PHE:HE2	1.73	0.54
11:UI:495:VAL:O	11:UI:499:ILE:HG13	2.08	0.54
15:UM:354:ALA:HA	15:UM:364:ILE:HD13	1.90	0.54
15:UM:551:SER:HA	15:UM:557:VAL:HG23	1.89	0.54
16:UN:821:ARG:NH2	16:UN:823:ASP:OD2	2.24	0.54
21:US:495:MET:HG3	21:US:499:LEU:HD12	1.90	0.54
22:UT:860:SER:O	22:UT:866:GLN:NE2	2.41	0.54
22:UT:1120:GLN:O	22:UT:1124:TYR:HB2	2.08	0.54
22:UT:1481:ILE:O	22:UT:1485:LEU:HB2	2.08	0.54
22:UT:1617:VAL:O	22:UT:1621:LEU:HD23	2.07	0.54
23:UU:251:ILE:H	23:UU:251:ILE:HD12	1.73	0.54
23:UU:276:TYR:CE1	23:UU:283:ARG:HG3	2.43	0.54
24:UV:102:ILE:O	24:UV:105:LEU:HG	2.07	0.54
24:UV:214:PHE:CZ	24:UV:298:PHE:HD1	2.26	0.54
24:UV:536:TYR:OH	24:UV:552:ARG:NH1	2.37	0.54
33:CL:761:GLN:NE2	34:CM:307:ASP:OD1	2.37	0.54
34:CM:134:LYS:HA	34:CM:138:MET:HG2	1.89	0.54
50:DJ:107:ARG:HH22	50:DJ:153:GLU:HG2	1.72	0.54
52:DN:37:ILE:HG12	52:DN:54:LEU:HD11	1.90	0.54
71:EH:84:TYR:N	71:EH:97:LEU:O	2.36	0.54
74:EK:568:VAL:O	74:EK:625:SER:HA	2.08	0.54
3:UA:735:PHE:CD1	3:UA:758:ILE:HG22	2.43	0.53
8:UF:269:ILE:O	8:UF:273:ILE:HG12	2.08	0.53
12:UJ:32:SER:O	12:UJ:150:ARG:NH1	2.41	0.53
12:UJ:408:ILE:HG12	12:UJ:412:GLU:OE1	2.07	0.53
17:UO:23:GLU:O	17:UO:27:TRP:HE3	1.90	0.53
19:UQ:441:GLU:HG2	19:UQ:499:LYS:HA	1.90	0.53
19:UQ:499:LYS:NZ	19:UQ:562:PRO:HG3	2.21	0.53
19:UQ:647:THR:O	19:UQ:648:LYS:HG3	2.07	0.53
20:UR:545:HIS:HB2	20:UR:552:PHE:CZ	2.42	0.53
24:UV:184:SER:OG	24:UV:343:GLU:OE2	2.18	0.53
24:UV:413:LEU:HG	24:UV:415:GLY:H	1.72	0.53
28:CG:38:ASN:ND2	63:D4:256:G:N7	2.56	0.53
36:JD:111:LYS:HD3	36:JD:114:ILE:HD12	1.90	0.53
36:JD:1117:TYR:HA	36:JD:1132:PHE:HE1	1.73	0.53
36:JD:1234:ILE:HG21	36:JD:1250:PHE:CD2	2.43	0.53
37:JG:148:LEU:HD11	62:D3:1575:G:C5	2.43	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DF:48:PHE:HE1	46:DF:130:ILE:HD13	1.73	0.53
49:DI:33:PRO:HB3	62:D3:330:G:O2'	2.08	0.53
62:D3:13:C:O2	63:D4:18:G:N2	2.19	0.53
62:D3:272:U:O2'	62:D3:273:G:O4'	2.25	0.53
62:D3:690:G:N2	62:D3:691:C:O2	2.41	0.53
62:D3:1479:A:H2'	62:D3:1480:G:H8	1.73	0.53
62:D3:1564:U:H2'	62:D3:1565:C:C6	2.42	0.53
74:EK:136:CYS:CA	74:EK:145:PHE:CB	2.85	0.53
7:UE:221:MET:HG3	7:UE:222:THR:H	1.74	0.53
8:UF:134:ASN:HD21	16:UN:325:SER:HB2	1.73	0.53
17:UO:75:LYS:HE3	17:UO:111:TYR:HA	1.90	0.53
17:UO:194:ARG:HG3	17:UO:208:SER:HB2	1.89	0.53
19:UQ:363:ASN:HB2	19:UQ:453:HIS:CE1	2.43	0.53
22:UT:306:LEU:HD23	22:UT:306:LEU:H	1.71	0.53
22:UT:389:ILE:O	22:UT:389:ILE:HG13	2.07	0.53
22:UT:632:LEU:HD11	47:DG:131:LYS:HB2	1.89	0.53
24:UV:683:ASN:HA	24:UV:696:ILE:HD12	1.90	0.53
24:UV:1081:ASN:HD21	24:UV:1083:GLN:HB2	1.71	0.53
26:CD:146:ASP:OD1	26:CD:149:ARG:HG2	2.07	0.53
34:CM:183:ILE:O	34:CM:312:ARG:NH1	2.36	0.53
36:JD:30:GLN:HG2	62:D3:317:C:H5''	1.89	0.53
37:JF:180:LEU:HD12	37:JF:206:VAL:HG22	1.90	0.53
37:JG:228:SER:HB3	37:JG:232:LEU:HD11	1.90	0.53
62:D3:418:G:O2'	62:D3:419:G:OP1	2.25	0.53
1:CA:279:THR:OG1	1:CA:280:VAL:N	2.40	0.53
3:UA:254:HIS:HB3	3:UA:292:PHE:CE2	2.43	0.53
6:UD:199:ASP:CA	6:UD:215:ALA:O	2.57	0.53
6:UD:302:ARG:HD2	6:UD:329:HIS:O	2.08	0.53
14:UL:443:LEU:O	14:UL:459:LEU:HD22	2.08	0.53
17:UO:85:TYR:CE1	17:UO:101:ALA:HB2	2.43	0.53
17:UO:264:PHE:HB3	17:UO:310:SER:HA	1.89	0.53
19:UQ:484:VAL:O	19:UQ:488:LEU:HG	2.09	0.53
22:UT:498:ILE:HD11	22:UT:537:LEU:HB2	1.90	0.53
23:UU:353:PRO:HA	23:UU:370:SER:HB2	1.91	0.53
24:UV:217:LYS:O	24:UV:223:ARG:NE	2.41	0.53
26:CD:8:LEU:HD12	26:CD:82:LEU:HD21	1.90	0.53
33:CL:182:THR:HG22	62:D3:517:U:OP1	2.08	0.53
33:CL:310:THR:HG23	33:CL:313:TYR:H	1.73	0.53
36:JD:885:TYR:CE1	36:JD:1187:LEU:HB2	2.41	0.53
40:JL:132:GLN:HB2	62:D3:1780:G:O2'	2.09	0.53
41:JM:158:GLU:OE1	41:JM:158:GLU:N	2.42	0.53

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DH:31:SER:CB	48:DH:34:LEU:HB2	2.38	0.53
52:DN:4:MET:HE1	52:DN:124:ARG:NH1	2.23	0.53
62:D3:545:A:O2'	62:D3:546:U:O4'	2.23	0.53
62:D3:992:A:H2'	62:D3:993:A:H5'	1.90	0.53
62:D3:1590:G:C2	62:D3:1607:G:C2	2.97	0.53
1:CB:107:VAL:CG2	1:CB:141:TYR:HB3	2.39	0.53
6:UD:36:CYS:HB3	6:UD:755:ILE:HG13	1.89	0.53
6:UD:490:SER:O	6:UD:493:ASP:N	2.41	0.53
7:UE:111:ASP:OD2	7:UE:153:ILE:HG12	2.09	0.53
7:UE:522:THR:HG23	7:UE:523:LEU:CD1	2.39	0.53
17:UO:104:LEU:HD21	17:UO:119:SER:HB2	1.89	0.53
19:UQ:253:SER:OG	61:D2:81:A:OP1	2.24	0.53
20:UR:394:TRP:CZ3	20:UR:396:MET:HA	2.43	0.53
22:UT:1143:LYS:O	22:UT:1147:ILE:HD12	2.08	0.53
24:UV:185:LEU:HG	24:UV:190:ALA:HB2	1.90	0.53
24:UV:527:TYR:HB2	24:UV:615:VAL:CG2	2.38	0.53
33:CL:772:MET:O	33:CL:776:GLN:HB2	2.09	0.53
33:CL:1077:LEU:HD23	33:CL:1081:SER:O	2.08	0.53
37:JF:73:HIS:O	37:JF:77:LEU:HD23	2.09	0.53
50:DJ:170:GLY:O	50:DJ:174:ARG:HG2	2.09	0.53
62:D3:1661:U:H2'	62:D3:1662:G:H8	1.72	0.53
62:D3:1689:A:H2'	62:D3:1690:G:C8	2.43	0.53
63:D4:100:U:H2'	63:D4:101:G:C8	2.43	0.53
68:EE:139:ILE:HA	68:EE:157:SER:HA	1.90	0.53
69:EF:242:HIS:O	69:EF:246:GLN:N	2.41	0.53
1:CA:144:TRP:NE1	1:CA:183:HIS:HB3	2.24	0.53
1:CB:105:LEU:HD22	1:CB:143:VAL:HG21	1.90	0.53
1:CB:116:SER:OG	1:CB:120:GLU:OE1	2.25	0.53
7:UE:110:ILE:HD12	7:UE:119:CYS:HB3	1.89	0.53
19:UQ:680:ALA:HB3	19:UQ:690:ASN:HB2	1.91	0.53
20:UR:304:LEU:HB2	20:UR:362:HIS:NE2	2.23	0.53
22:UT:512:ASP:OD1	22:UT:513:ASN:N	2.42	0.53
22:UT:2212:THR:O	22:UT:2215:SER:OG	2.22	0.53
26:CD:52:SER:HB2	26:CD:85:ASN:HD21	1.74	0.53
27:CE:369:VAL:HG22	28:CF:63:ILE:HD12	1.88	0.53
27:CE:407:ARG:NH1	27:CE:408:THR:H	2.07	0.53
33:CL:140:LEU:O	33:CL:169:GLY:HA2	2.08	0.53
33:CL:826:LYS:HD2	33:CL:926:ILE:HG21	1.89	0.53
33:CL:844:PRO:HA	33:CL:856:THR:O	2.09	0.53
34:CM:45:LEU:HD12	34:CM:67:ILE:HD11	1.91	0.53
36:JD:840:PRO:HD2	36:JD:843:LEU:HD12	1.90	0.53

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:JD:846:PRO:HB2	36:JD:849:SER:OG	2.09	0.53
36:JD:1000:PHE:HE2	36:JD:1148:PRO:HD2	1.74	0.53
45:DE:36:HIS:CG	45:DE:85:GLY:HA3	2.43	0.53
47:DG:160:ARG:NH2	62:D3:68:A:OP1	2.27	0.53
49:DI:34:ALA:HB2	49:DI:56:ARG:HD3	1.90	0.53
62:D3:126:A:N1	62:D3:263:C:O2'	2.41	0.53
63:D4:313:A:H2'	63:D4:314:C:C6	2.43	0.53
1:CB:182:SER:HB3	1:CB:210:MET:SD	2.48	0.53
6:UD:454:GLN:HB3	6:UD:461:LYS:HG3	1.90	0.53
11:UI:463:LYS:HB3	11:UI:466:GLU:HG2	1.91	0.53
12:UJ:33:LEU:HB2	12:UJ:119:GLU:HG2	1.90	0.53
12:UJ:752:ALA:O	12:UJ:756:LEU:HG	2.08	0.53
14:UL:88:HIS:HB2	14:UL:129:PHE:CZ	2.43	0.53
15:UM:30:LYS:HZ2	15:UM:46:THR:HA	1.74	0.53
17:UO:134:THR:OG1	17:UO:135:GLN:OE1	2.27	0.53
17:UO:141:ALA:HB1	17:UO:174:LEU:HD11	1.90	0.53
17:UO:301:PRO:HG2	17:UO:323:SER:OG	2.08	0.53
17:UO:371:GLU:HG3	20:UR:289:HIS:HB2	1.90	0.53
18:UP:195:GLU:OE2	18:UP:197:SER:OG	2.25	0.53
19:UQ:279:VAL:HG21	61:D2:82:A:N7	2.24	0.53
19:UQ:426:ARG:NH2	61:D2:67:G:OP2	2.42	0.53
23:UU:255:SER:OG	23:UU:301:ALA:O	2.26	0.53
25:UX:68:ASP:OD1	25:UX:69:THR:N	2.41	0.53
25:UX:90:LEU:HD12	25:UX:94:CYS:SG	2.49	0.53
25:UX:122:ASP:HB3	25:UX:125:ILE:HG12	1.91	0.53
29:CH:293:ASP:OD2	29:CH:310:ASN:HB2	2.09	0.53
33:CL:870:ARG:HH22	62:D3:573:C:HO2'	1.51	0.53
36:JD:917:VAL:HA	36:JD:920:GLU:OE1	2.08	0.53
36:JD:993:GLN:O	36:JD:993:GLN:NE2	2.41	0.53
37:JF:175:CYS:SG	37:JF:201:SER:OG	2.59	0.53
44:JJ:132:LEU:HD23	44:JJ:132:LEU:H	1.73	0.53
49:DI:42:ARG:HH11	49:DI:59:ARG:HH21	1.56	0.53
51:DL:105:LYS:HZ1	62:D3:306:U:P	2.31	0.53
62:D3:893:U:H2'	62:D3:894:U:H6	1.72	0.53
62:D3:1655:A:N6	62:D3:1745:G:H21	2.07	0.53
62:D3:1657:U:H4'	62:D3:1658:G:C5'	2.39	0.53
73:EJ:46:TYR:N	73:EJ:53:LEU:O	2.42	0.53
3:UA:363:ALA:HB1	3:UA:390:VAL:HB	1.90	0.53
4:UB:754:GLU:HG3	4:UB:755:ILE:N	2.24	0.53
5:UC:434:PHE:CZ	37:JF:91:ILE:HD11	2.43	0.53
7:UE:532:ARG:HG3	17:UO:453:VAL:HG11	1.89	0.53

Continued on next page...



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:312:VAL:HG21	9:UG:353:PRO:HG2	1.89	0.53
9:UG:321:ASN:OD1	9:UG:380:ASN:HA	2.09	0.53
14:UL:186:ILE:HG21	14:UL:229:TRP:HZ3	1.72	0.53
14:UL:614:HIS:HB2	14:UL:618:ILE:HG13	1.89	0.53
14:UL:816:GLN:NE2	62:D3:1154:G:OP1	2.41	0.53
22:UT:244:GLN:OE1	22:UT:245:GLU:HB2	2.09	0.53
22:UT:1238:ASN:O	22:UT:1241:GLN:NE2	2.42	0.53
22:UT:1935:LYS:O	22:UT:1939:ARG:HG2	2.09	0.53
22:UT:2006:LEU:O	22:UT:2009:LYS:C	2.47	0.53
23:UU:227:THR:O	23:UU:229:GLU:N	2.41	0.53
24:UV:256:TYR:CD2	24:UV:594:ILE:HA	2.44	0.53
33:CL:130:ASP:OD1	33:CL:131:ILE:N	2.42	0.53
33:CL:949:LYS:HG3	33:CL:950:ASP:HB2	1.90	0.53
34:CM:76:TYR:CE1	34:CM:78:PRO:HB3	2.44	0.53
36:JD:800:TRP:HB3	36:JD:834:PHE:CE1	2.44	0.53
37:JF:75:GLY:O	37:JF:79:LYS:HG2	2.07	0.53
42:JP:341:GLU:OE2	63:D4:30:A:N6	2.35	0.53
47:DG:188:ARG:HD3	62:D3:283:U:H5''	1.89	0.53
52:DN:140:LYS:NZ	52:DN:142:GLU:OE2	2.42	0.53
62:D3:1630:U:H1'	62:D3:1631:A:H5''	1.91	0.53
69:EF:259:VAL:O	69:EF:263:GLU:N	2.32	0.53
6:UD:774:LEU:HD23	61:D2:84:G:C2	2.44	0.53
12:UJ:311:ASN:HD21	12:UJ:346:LYS:HE2	1.74	0.53
12:UJ:1396:LEU:O	12:UJ:1400:ILE:HD12	2.09	0.53
12:UJ:1423:LEU:HA	12:UJ:1426:ILE:HD12	1.91	0.53
19:UQ:497:ASP:HB2	19:UQ:510:TYR:HB3	1.91	0.53
20:UR:161:ILE:HD11	23:UU:177:LEU:HD21	1.91	0.53
22:UT:1472:HIS:CG	22:UT:1473:ALA:H	2.26	0.53
22:UT:2276:ILE:O	22:UT:2280:ILE:HG13	2.09	0.53
23:UU:853:ASN:N	23:UU:860:GLU:OE1	2.41	0.53
24:UV:1137:ASN:O	24:UV:1140:SER:OG	2.21	0.53
24:UV:1203:ASN:ND2	24:UV:1222:GLU:OE2	2.41	0.53
25:UX:115:ILE:HD11	57:DW:99:PHE:CZ	2.44	0.53
28:CG:5:ASN:HB2	29:CH:463:GLN:HA	1.90	0.53
29:CH:177:ASN:OD1	29:CH:178:GLY:N	2.37	0.53
30:CI:29:ASP:O	30:CI:33:MET:HG2	2.09	0.53
30:CI:55:ARG:NH1	30:CI:98:GLU:O	2.40	0.53
36:JD:600:PHE:HB3	36:JD:605:GLU:HB3	1.90	0.53
37:JG:77:LEU:HD23	37:JG:84:ILE:HG13	1.91	0.53
42:JP:287:TYR:CD1	42:JP:300:VAL:HG12	2.44	0.53
55:DS:83:ALA:HA	55:DS:86:LEU:HD23	1.91	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:1484:G:H21	62:D3:1606:C:H1'	1.73	0.53
69:EF:202:ALA:O	69:EF:206:SER:N	2.35	0.53
4:UB:474:CYS:O	4:UB:478:ILE:HG12	2.09	0.53
6:UD:225:LEU:HD11	28:CF:13:ASP:OD2	2.09	0.53
12:UJ:1477:PHE:O	12:UJ:1480:THR:OG1	2.26	0.53
19:UQ:627:ASP:OD1	19:UQ:627:ASP:N	2.42	0.53
21:US:366:LEU:HD12	21:US:401:PHE:CZ	2.43	0.53
22:UT:656:LYS:HG3	22:UT:657:LEU:N	2.24	0.53
22:UT:711:GLN:HE21	22:UT:768:THR:HG23	1.73	0.53
22:UT:1779:VAL:HG12	22:UT:1780:ARG:N	2.20	0.53
22:UT:2228:PHE:HB3	22:UT:2232:TRP:CZ3	2.44	0.53
31:CJ:275:TRP:HZ2	31:CJ:290:LEU:HA	1.72	0.53
33:CL:549:ILE:HD13	33:CL:567:TRP:CD1	2.44	0.53
35:CN:66:HIS:HB3	35:CN:158:TRP:CH2	2.43	0.53
37:JF:167:ILE:HG13	37:JF:171:LEU:HD13	1.91	0.53
40:JL:133:ILE:O	40:JL:137:LEU:HD23	2.09	0.53
42:JP:393:LYS:CE	63:D4:36:C:H5'	2.39	0.53
46:DF:158:GLN:OE1	46:DF:159:ALA:N	2.41	0.53
55:DS:29:VAL:O	55:DS:33:THR:HG23	2.09	0.53
57:DW:76:SER:OG	57:DW:77:PRO:HD3	2.08	0.53
62:D3:1569:A:H2'	62:D3:1570:A:C8	2.43	0.53
75:EN:399:LYS:O	75:EN:403:LYS:N	2.38	0.53
4:UB:429:LEU:HD11	4:UB:455:LEU:HD22	1.91	0.53
10:UH:571:PHE:CD2	10:UH:606:ASP:HB3	2.44	0.53
12:UJ:1548:PHE:O	12:UJ:1552:VAL:HG23	2.08	0.53
12:UJ:1556:PHE:CE1	12:UJ:1600:PRO:HB2	2.44	0.53
14:UL:414:LEU:HD13	14:UL:457:PHE:HD2	1.74	0.53
15:UM:573:GLY:O	15:UM:600:LYS:NZ	2.42	0.53
17:UO:108:TYR:HA	17:UO:117:LEU:HB3	1.91	0.53
17:UO:224:THR:HG23	17:UO:225:GLN:HG3	1.91	0.53
22:UT:730:ASP:OD1	22:UT:730:ASP:N	2.42	0.53
22:UT:1316:MET:HG3	22:UT:1317:HIS:CD2	2.44	0.53
22:UT:1317:HIS:HB2	22:UT:1320:ASP:HB2	1.91	0.53
22:UT:2450:ILE:O	22:UT:2457:GLN:NE2	2.42	0.53
22:UT:2472:GLU:O	22:UT:2476:HIS:ND1	2.39	0.53
23:UU:27:PHE:CD2	23:UU:28:ARG:HG2	2.44	0.53
23:UU:373:ARG:HG2	23:UU:373:ARG:NH1	2.24	0.53
24:UV:648:PHE:O	24:UV:689:HIS:NE2	2.37	0.53
24:UV:1151:LYS:O	24:UV:1155:LEU:HG	2.09	0.53
25:UX:117:LEU:HD21	25:UX:121:ARG:HH11	1.71	0.53
32:CK:413:TYR:HD2	44:JJ:177:LEU:HD11	1.74	0.53

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CL:775:GLU:HG3	33:CL:776:GLN:H	1.73	0.53
34:CM:51:SER:HG	34:CM:99:PHE:HZ	1.55	0.53
36:JD:1063:ARG:NH2	36:JD:1064:ASN:OD1	2.41	0.53
37:JG:97:LEU:HD11	37:JG:132:ARG:HG3	1.91	0.53
50:DJ:38:ASN:HB2	50:DJ:41:GLU:HG3	1.91	0.53
62:D3:1483:A:C2	62:D3:1607:G:H1'	2.44	0.53
12:UJ:186:MET:HE1	12:UJ:233:GLN:HG3	1.90	0.52
12:UJ:766:ALA:O	12:UJ:769:LEU:HG	2.09	0.52
13:UK:3:LYS:NZ	62:D3:549:G:OP1	2.40	0.52
13:UK:112:GLN:OE1	63:D4:323:G:O2'	2.21	0.52
14:UL:330:GLN:NE2	14:UL:376:SER:O	2.41	0.52
14:UL:418:ASN:OD1	14:UL:421:THR:OG1	2.24	0.52
14:UL:555:VAL:HB	14:UL:569:LEU:HB2	1.91	0.52
14:UL:764:GLU:OE2	14:UL:834:LYS:NZ	2.40	0.52
15:UM:154:GLY:HA3	15:UM:161:TRP:CE3	2.43	0.52
15:UM:296:ILE:C	15:UM:298:SER:H	2.11	0.52
15:UM:451:PRO:HD2	15:UM:468:ILE:HD12	1.90	0.52
19:UQ:762:TYR:HB3	19:UQ:779:ILE:HG23	1.90	0.52
22:UT:1075:TRP:O	22:UT:1079:MET:HG3	2.09	0.52
22:UT:1133:LEU:O	22:UT:1136:THR:OG1	2.24	0.52
22:UT:1232:LEU:HD21	22:UT:1274:THR:HG21	1.91	0.52
22:UT:1381:LYS:CE	22:UT:1386:GLU:HG3	2.36	0.52
22:UT:2240:LEU:HG	22:UT:2280:ILE:HD13	1.90	0.52
23:UU:141:LYS:HD3	23:UU:154:TYR:HD1	1.73	0.52
23:UU:813:PHE:CD1	36:JD:1191:SER:HB3	2.43	0.52
24:UV:492:ALA:O	24:UV:496:LEU:HD23	2.09	0.52
37:JF:121:LEU:HD21	37:JF:167:ILE:HD13	1.91	0.52
46:DF:76:ARG:NH2	46:DF:79:ASN:OD1	2.43	0.52
72:EI:318:ARG:O	72:EI:322:ALA:N	2.38	0.52
3:UA:285:ARG:HE	3:UA:297:GLN:NE2	2.07	0.52
3:UA:355:PRO:HD3	3:UA:395:PHE:CD2	2.44	0.52
6:UD:326:ARG:HH11	6:UD:365:SER:HA	1.74	0.52
9:UG:244:ASN:O	9:UG:244:ASN:ND2	2.42	0.52
15:UM:105:SER:HA	15:UM:121:GLY:HA2	1.90	0.52
15:UM:172:VAL:HG23	15:UM:186:LEU:HB2	1.90	0.52
21:US:188:PHE:HB2	21:US:191:ILE:HB	1.90	0.52
22:UT:326:SER:OG	22:UT:328:ARG:NE	2.33	0.52
22:UT:441:ASP:OD1	22:UT:442:LYS:N	2.43	0.52
22:UT:581:LEU:O	22:UT:585:LEU:HG	2.09	0.52
22:UT:905:LEU:HD12	22:UT:956:PHE:HE1	1.75	0.52
22:UT:1186:TYR:CE2	22:UT:1227:ILE:HA	2.44	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1199:LEU:HD23	22:UT:1242:LYS:HZ2	1.73	0.52
22:UT:1310:SER:OG	22:UT:1326:SER:OG	2.26	0.52
22:UT:1360:GLU:C	22:UT:1362:ALA:H	2.12	0.52
22:UT:1367:ALA:O	22:UT:1371:ILE:HG12	2.09	0.52
23:UU:125:GLY:HA3	27:CE:433:THR:HB	1.90	0.52
23:UU:488:ASN:ND2	54:DQ:98:ASP:OD2	2.42	0.52
23:UU:913:GLU:HG3	23:UU:917:LYS:NZ	2.25	0.52
24:UV:373:ARG:O	24:UV:516:SER:OG	2.28	0.52
24:UV:416:PHE:HD2	24:UV:421:LEU:HD23	1.73	0.52
24:UV:1016:GLN:HE22	24:UV:1044:LYS:HE2	1.73	0.52
25:UX:69:THR:HG23	25:UX:106:LEU:HD12	1.90	0.52
27:CE:385:ASP:OD1	27:CE:386:ILE:N	2.42	0.52
29:CH:456:ASP:HB3	29:CH:459:LEU:HB2	1.91	0.52
36:JD:1240:LYS:HE2	36:JD:1245:TRP:CE2	2.44	0.52
44:JJ:132:LEU:O	44:JJ:135:LYS:NZ	2.29	0.52
62:D3:23:G:H2'	62:D3:24:U:H6	1.72	0.52
62:D3:1143:A:O2'	62:D3:1145:U:OP2	2.26	0.52
62:D3:1146:G:H2'	62:D3:1147:A:H8	1.74	0.52
62:D3:1592:A:N3	62:D3:1605:G:N2	2.58	0.52
65:EB:40:PHE:HA	65:EB:47:VAL:HA	1.92	0.52
74:EK:910:ASN:O	74:EK:911:GLU:CB	2.58	0.52
75:EN:921:GLU:O	75:EN:925:ASN:N	2.40	0.52
7:UE:111:ASP:OD1	7:UE:112:LEU:N	2.40	0.52
9:UG:132:GLY:HA2	9:UG:150:LEU:O	2.04	0.52
10:UH:711:ARG:NH1	10:UH:712:ALA:O	2.42	0.52
12:UJ:122:VAL:HA	12:UJ:127:ILE:HG12	1.89	0.52
12:UJ:709:ASN:O	12:UJ:710:LYS:HG3	2.09	0.52
14:UL:666:ALA:HB3	14:UL:670:GLY:H	1.74	0.52
19:UQ:510:TYR:CE1	19:UQ:527:HIS:HB3	2.45	0.52
20:UR:381:ASN:OD1	20:UR:382:GLY:N	2.38	0.52
20:UR:436:ASP:HB3	20:UR:444:ILE:HD11	1.90	0.52
22:UT:356:ASP:OD1	22:UT:357:LYS:N	2.41	0.52
22:UT:590:MET:HE1	22:UT:667:PHE:HB3	1.92	0.52
24:UV:146:LEU:HD22	24:UV:169:PRO:HG3	1.90	0.52
24:UV:167:PRO:HB3	24:UV:226:HIS:CD2	2.44	0.52
26:CD:113:PHE:O	26:CD:116:VAL:HG12	2.09	0.52
33:CL:3:GLN:NE2	62:D3:1793:G:N3	2.40	0.52
33:CL:982:LYS:HB3	33:CL:983:PRO:HD3	1.90	0.52
34:CM:29:LYS:HZ1	34:CM:332:ILE:HG23	1.74	0.52
36:JD:926:TYR:CD1	36:JD:1007:LEU:HD21	2.44	0.52
46:DF:73:THR:N	46:DF:91:GLU:OE1	2.42	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DH:39:ARG:HG3	48:DH:40:PRO:HD3	1.91	0.52
4:UB:659:GLU:HA	4:UB:662:LEU:HG	1.91	0.52
6:UD:593:GLU:HB3	6:UD:615:SER:OG	2.09	0.52
6:UD:622:LEU:O	6:UD:627:LYS:NZ	2.31	0.52
9:UG:335:GLY:O	9:UG:377:LYS:HA	2.09	0.52
9:UG:354:CYS:SG	9:UG:364:ARG:NH1	2.83	0.52
12:UJ:1454:LEU:HD13	12:UJ:1457:LEU:HD12	1.90	0.52
13:UK:59:ASN:O	13:UK:61:ASP:N	2.36	0.52
13:UK:61:ASP:OD2	30:CI:160:TRP:CD1	2.62	0.52
15:UM:43:ILE:HD12	15:UM:378:PRO:HG3	1.91	0.52
15:UM:88:PHE:HE2	15:UM:90:LEU:HD23	1.73	0.52
17:UO:62:ARG:NH1	17:UO:76:THR:HA	2.25	0.52
17:UO:146:ASP:HB3	17:UO:148:VAL:HG22	1.90	0.52
17:UO:421:LEU:HD22	17:UO:462:TRP:CH2	2.45	0.52
20:UR:325:ASP:OD1	20:UR:326:LEU:N	2.43	0.52
22:UT:992:LYS:HE2	22:UT:996:ARG:HH11	1.74	0.52
22:UT:1189:LEU:HD22	22:UT:1194:SER:OG	2.09	0.52
22:UT:1587:LYS:HD2	22:UT:1623:LEU:HD13	1.91	0.52
23:UU:434:HIS:NE2	23:UU:441:ARG:HG3	2.23	0.52
36:JD:30:GLN:HE21	62:D3:317:C:C5'	2.22	0.52
36:JD:473:VAL:HA	36:JD:489:VAL:O	2.09	0.52
37:JF:115:GLN:NE2	37:JF:116:THR:O	2.36	0.52
37:JG:70:CYS:HB3	37:JG:87:ALA:O	2.10	0.52
49:DI:57:ALA:HB2	49:DI:177:GLY:HA2	1.91	0.52
55:DS:100:THR:O	55:DS:104:ASN:ND2	2.42	0.52
61:D2:476:A:H2'	61:D2:477:G:C8	2.44	0.52
3:UA:472:HIS:ND1	3:UA:492:SER:OG	2.36	0.52
3:UA:747:GLU:OE2	23:UU:598:ARG:NH2	2.43	0.52
1:CB:88:ILE:HD11	1:CB:97:TYR:HB3	1.91	0.52
6:UD:536:VAL:HA	6:UD:541:ALA:HA	1.91	0.52
8:UF:125:SER:HB3	8:UF:128:LYS:H	1.75	0.52
9:UG:123:THR:HG23	9:UG:124:HIS:CD2	2.37	0.52
9:UG:123:THR:OG1	9:UG:140:ARG:NH1	2.42	0.52
12:UJ:52:ALA:HB2	12:UJ:120:TRP:HB2	1.90	0.52
12:UJ:1520:THR:O	12:UJ:1524:ILE:HD12	2.10	0.52
13:UK:68:HIS:NE2	30:CI:169:THR:HG21	2.25	0.52
14:UL:284:PHE:CD1	14:UL:328:PRO:HA	2.44	0.52
15:UM:696:ASN:O	15:UM:700:ARG:HG2	2.10	0.52
19:UQ:154:LEU:HD12	19:UQ:171:TYR:HD2	1.73	0.52
22:UT:46:HIS:HB2	22:UT:116:ASP:OD1	2.09	0.52
22:UT:1475:GLN:HG3	22:UT:1517:HIS:HB3	1.91	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1667:ALA:O	22:UT:1670:LEU:HB3	2.09	0.52
22:UT:1689:VAL:O	22:UT:1693:THR:HG23	2.09	0.52
22:UT:2438:LEU:HB3	22:UT:2442:LYS:NZ	2.25	0.52
23:UU:354:SER:H	23:UU:370:SER:HA	1.74	0.52
23:UU:594:SER:HA	23:UU:634:PHE:CD2	2.44	0.52
31:CJ:236:HIS:CD2	31:CJ:247:ILE:HD12	2.44	0.52
36:JD:91:ARG:O	36:JD:95:LYS:HG2	2.08	0.52
40:JL:40:LYS:HE3	40:JL:197:ARG:HG3	1.91	0.52
41:JM:165:ASN:HB2	41:JM:168:GLU:HB2	1.92	0.52
62:D3:1477:G:H2'	62:D3:1478:G:C8	2.42	0.52
62:D3:1671:A:H3'	62:D3:1672:G:H8	1.74	0.52
62:D3:1753:A:C4	62:D3:1754:A:N7	2.77	0.52
67:ED:40:ARG:N	67:ED:44:ARG:O	2.40	0.52
75:EN:489:ILE:O	75:EN:493:GLU:N	2.40	0.52
2:DA:179:SER:OG	2:DA:180:THR:N	2.39	0.52
3:UA:23:SER:HA	3:UA:63:LEU:HD23	1.91	0.52
3:UA:99:CYS:SG	3:UA:113:LEU:HD11	2.49	0.52
3:UA:497:ILE:HD11	3:UA:532:VAL:HG21	1.92	0.52
6:UD:532:ASN:N	6:UD:544:SER:O	2.41	0.52
6:UD:769:PHE:HA	18:UP:213:LYS:HA	1.91	0.52
7:UE:349:ASP:O	7:UE:352:SER:OG	2.23	0.52
8:UF:125:SER:OG	8:UF:127:LYS:HB2	2.09	0.52
9:UG:83:THR:OG1	9:UG:368:TYR:O	2.18	0.52
12:UJ:376:GLU:HG2	12:UJ:379:GLU:OE1	2.10	0.52
12:UJ:696:LEU:HD13	12:UJ:740:ALA:HB2	1.91	0.52
14:UL:446:ILE:HG13	14:UL:455:GLN:O	2.10	0.52
15:UM:409:ASP:HB3	15:UM:411:THR:HG22	1.91	0.52
15:UM:743:CYS:SG	15:UM:759:THR:OG1	2.45	0.52
17:UO:44:HIS:CD2	17:UO:86:SER:HA	2.43	0.52
17:UO:262:GLU:HG3	17:UO:270:SER:OG	2.10	0.52
18:UP:208:ARG:HG2	18:UP:211:LEU:HD23	1.91	0.52
19:UQ:68:PHE:O	19:UQ:75:SER:OG	2.27	0.52
19:UQ:113:ASN:O	19:UQ:133:LYS:NZ	2.39	0.52
19:UQ:174:TYR:HD1	19:UQ:189:HIS:HA	1.75	0.52
19:UQ:356:LEU:HD21	19:UQ:372:LEU:HB3	1.91	0.52
21:US:436:LYS:O	21:US:440:GLU:HG2	2.10	0.52
22:UT:250:LYS:O	22:UT:254:ILE:HG13	2.09	0.52
22:UT:715:TYR:HE2	22:UT:758:ILE:HG23	1.75	0.52
22:UT:1191:ASP:HB3	22:UT:1194:SER:HB3	1.91	0.52
22:UT:1386:GLU:OE1	22:UT:1386:GLU:N	2.39	0.52
22:UT:1536:THR:HG23	22:UT:1537:LYS:HG2	1.92	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1782:ASN:OD1	22:UT:1783:LEU:N	2.42	0.52
22:UT:1990:LEU:HA	22:UT:1996:GLN:HG3	1.92	0.52
22:UT:2284:LEU:HD21	22:UT:2293:LEU:HD11	1.90	0.52
24:UV:385:LEU:HG	24:UV:582:GLN:HE21	1.74	0.52
24:UV:526:CYS:HB3	24:UV:616:LYS:HZ2	1.75	0.52
27:CE:69:SER:H	27:CE:72:LEU:HD12	1.74	0.52
28:CG:39:GLU:OE1	63:D4:256:G:N2	2.39	0.52
31:CJ:225:ALA:O	31:CJ:231:ILE:HA	2.08	0.52
33:CL:754:GLN:O	33:CL:758:ILE:HG12	2.10	0.52
33:CL:893:ASN:ND2	58:DX:98:GLU:HB2	2.24	0.52
36:JD:440:ASP:OD1	36:JD:441:TYR:N	2.43	0.52
36:JD:461:ARG:HA	36:JD:464:ASN:HD21	1.75	0.52
37:JF:41:MET:SD	37:JF:202:ILE:HG23	2.49	0.52
40:JL:135:SER:HB3	40:JL:136:PRO:HD3	1.92	0.52
46:DF:205:SER:O	46:DF:206:SER:OG	2.26	0.52
54:DQ:20:ALA:HB2	54:DQ:84:ALA:HB1	1.91	0.52
62:D3:1600:A:H4'	62:D3:1601:G:H5'	1.90	0.52
62:D3:1667:A:H2'	62:D3:1668:G:C8	2.45	0.52
63:D4:147:C:H2'	63:D4:148:G:H8	1.74	0.52
71:EH:232:LYS:O	71:EH:236:THR:N	2.43	0.52
1:CA:202:ARG:HD2	28:CG:69:LEU:HD12	1.92	0.52
2:DA:195:LYS:NZ	24:UV:787:GLU:OE2	2.41	0.52
3:UA:422:PHE:HB3	3:UA:423:ARG:HG3	1.91	0.52
3:UA:556:ARG:HB3	3:UA:556:ARG:NH1	2.25	0.52
1:CB:117:VAL:HG23	1:CB:118:TYR:HD1	1.73	0.52
10:UH:661:TYR:O	10:UH:664:LYS:HG3	2.09	0.52
14:UL:179:SER:O	14:UL:186:ILE:HD12	2.10	0.52
15:UM:512:ASP:OD1	15:UM:514:THR:HG22	2.10	0.52
15:UM:620:LEU:HD11	15:UM:634:SER:HB3	1.92	0.52
19:UQ:302:SER:HB2	19:UQ:342:ILE:O	2.10	0.52
19:UQ:509:THR:OG1	19:UQ:530:LYS:HB2	2.10	0.52
19:UQ:531:PHE:HB2	19:UQ:545:THR:OG1	2.10	0.52
20:UR:133:ILE:O	20:UR:157:GLY:N	2.42	0.52
21:US:188:PHE:CD2	21:US:191:ILE:HD12	2.44	0.52
22:UT:1336:TYR:C	22:UT:1337:LYS:HD3	2.29	0.52
22:UT:2227:GLY:O	22:UT:2231:ILE:HG12	2.10	0.52
23:UU:392:ARG:CZ	23:UU:449:ARG:HH12	2.22	0.52
24:UV:213:LEU:O	24:UV:227:LYS:NZ	2.38	0.52
33:CL:966:ILE:HG22	33:CL:975:GLU:N	2.25	0.52
36:JD:451:ARG:HG3	36:JD:454:ALA:H	1.75	0.52
36:JD:823:ARG:HB3	36:JD:825:TYR:CZ	2.45	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:JF:243:HIS:HB3	37:JG:240:LYS:NZ	2.25	0.52
44:JJ:186:GLU:O	44:JJ:189:ASP:HB2	2.10	0.52
45:DE:181:VAL:HG13	45:DE:225:VAL:HG13	1.92	0.52
46:DF:220:VAL:O	46:DF:223:SER:OG	2.25	0.52
48:DH:14:THR:HB	48:DH:17:GLU:OE1	2.10	0.52
56:DT:63:ARG:NH1	62:D3:1481:C:OP1	2.42	0.52
2:DA:82:ARG:NH2	2:DA:189:ILE:O	2.42	0.52
3:UA:220:PHE:CE1	3:UA:247:SER:HA	2.44	0.52
9:UG:440:ASP:OD1	9:UG:440:ASP:N	2.43	0.52
12:UJ:720:LEU:HA	12:UJ:723:LEU:HD23	1.92	0.52
12:UJ:1461:TRP:HB2	12:UJ:1477:PHE:CE1	2.44	0.52
14:UL:344:THR:O	14:UL:352:GLU:HB2	2.10	0.52
14:UL:468:ILE:HD11	14:UL:522:LEU:HB2	1.91	0.52
20:UR:284:LEU:HD21	20:UR:287:SER:HB3	1.91	0.52
20:UR:346:TYR:CE2	20:UR:393:LEU:HA	2.45	0.52
22:UT:759:SER:O	22:UT:763:GLU:HG3	2.10	0.52
22:UT:1431:PHE:O	22:UT:1435:GLU:HG2	2.10	0.52
22:UT:1776:LEU:HD21	22:UT:1781:ILE:HD12	1.90	0.52
22:UT:2006:LEU:O	22:UT:2009:LYS:O	2.28	0.52
23:UU:78:SER:OG	23:UU:79:SER:N	2.43	0.52
24:UV:905:SER:HB2	24:UV:981:LYS:HD2	1.91	0.52
31:CJ:173:ARG:HA	31:CJ:176:ILE:CD1	2.30	0.52
37:JG:109:LYS:HB3	37:JG:249:TRP:HZ3	1.74	0.52
42:JP:205:ASP:OD1	42:JP:206:VAL:N	2.43	0.52
45:DE:71:LYS:HG2	45:DE:76:VAL:HG22	1.90	0.52
52:DN:124:ARG:HD3	62:D3:966:A:OP2	2.10	0.52
56:DT:65:ILE:O	56:DT:68:ARG:O	2.28	0.52
57:DW:87:GLU:OE1	57:DW:117:ARG:NH2	2.43	0.52
62:D3:828:U:O4	62:D3:829:A:N6	2.43	0.52
2:DA:35:PRO:HD2	2:DA:38:PHE:HE2	1.74	0.52
2:DA:241:GLY:HA3	24:UV:656:ARG:HG2	1.91	0.52
2:DA:242:LYS:HB2	24:UV:657:ARG:HE	1.75	0.52
6:UD:263:LYS:NZ	6:UD:275:SER:OG	2.43	0.52
8:UF:142:THR:CA	8:UF:175:ASN:HD21	2.20	0.52
14:UL:262:ILE:O	14:UL:270:SER:N	2.43	0.52
14:UL:558:PHE:CD1	14:UL:565:PHE:HA	2.45	0.52
15:UM:665:GLN:HB2	15:UM:684:LEU:HD12	1.92	0.52
18:UP:158:LYS:O	18:UP:161:LYS:HG3	2.10	0.52
19:UQ:56:SER:HB3	19:UQ:59:THR:HG22	1.92	0.52
20:UR:424:ILE:HD12	20:UR:434:GLU:HG2	1.92	0.52
22:UT:299:TYR:O	22:UT:303:ASN:ND2	2.43	0.52

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1779:VAL:CG1	22:UT:1780:ARG:H	2.20	0.52
22:UT:2096:SER:O	22:UT:2099:SER:OG	2.22	0.52
26:CD:266:THR:O	26:CD:269:GLU:HG3	2.10	0.52
31:CJ:191:PHE:O	32:CK:372:ARG:NH2	2.43	0.52
33:CL:125:LEU:HB2	33:CL:912:ARG:HH21	1.74	0.52
33:CL:302:GLU:OE2	33:CL:303:LYS:N	2.43	0.52
33:CL:880:TYR:CB	58:DX:94:ASN:HD21	2.22	0.52
33:CL:1138:ARG:NH2	62:D3:494:U:OP1	2.43	0.52
36:JD:381:SER:HB2	36:JD:384:ILE:HD11	1.90	0.52
49:DI:172:ARG:HE	49:DI:175:GLN:HG3	1.73	0.52
54:DQ:31:VAL:HG22	54:DQ:67:VAL:HB	1.91	0.52
62:D3:17:C:H2'	62:D3:18:C:C6	2.45	0.52
62:D3:287:G:O2'	62:D3:288:A:P	2.68	0.52
75:EN:433:SER:O	75:EN:437:LYS:N	2.40	0.52
75:EN:771:GLY:HA2	75:EN:807:VAL:HA	1.91	0.52
1:CB:253:ILE:HG13	1:CB:269:ILE:HD12	1.91	0.52
6:UD:77:GLU:HB3	6:UD:79:TRP:HE1	1.74	0.52
6:UD:302:ARG:HD3	6:UD:330:GLY:C	2.30	0.52
7:UE:253:LEU:HD23	7:UE:301:LEU:HD21	1.92	0.52
9:UG:63:THR:HG21	42:JP:28:LEU:HG	1.90	0.52
9:UG:417:ASN:HB3	9:UG:419:PHE:O	2.10	0.52
12:UJ:271:LYS:HA	20:UR:220:ASP:HB2	1.91	0.52
12:UJ:560:ILE:HG22	12:UJ:599:PHE:HB3	1.92	0.52
12:UJ:642:THR:HB	12:UJ:676:LYS:HE3	1.92	0.52
12:UJ:1445:ILE:HD13	12:UJ:1483:SER:HB2	1.90	0.52
12:UJ:1749:ARG:HH12	22:UT:37:ARG:CZ	2.23	0.52
14:UL:129:PHE:HB3	14:UL:136:LEU:CD1	2.40	0.52
15:UM:496:ALA:HB2	15:UM:538:ASP:HA	1.92	0.52
16:UN:779:GLU:HG3	16:UN:821:ARG:HH12	1.75	0.52
17:UO:39:HIS:CE1	55:DS:56:LYS:HZ1	2.27	0.52
19:UQ:19:LYS:HD3	19:UQ:781:SER:H	1.75	0.52
19:UQ:241:LEU:HD12	19:UQ:244:ILE:HB	1.91	0.52
22:UT:209:ARG:HB3	22:UT:213:ARG:HH22	1.74	0.52
22:UT:897:PHE:CZ	22:UT:901:ILE:HD11	2.44	0.52
22:UT:1320:ASP:CG	22:UT:1323:ARG:HD3	2.30	0.52
22:UT:1328:PHE:O	22:UT:1332:ILE:HG23	2.10	0.52
22:UT:1882:ARG:HH22	62:D3:650:U:H5'	1.74	0.52
22:UT:1927:SER:O	22:UT:1930:SER:OG	2.19	0.52
23:UU:802:MET:SD	36:JD:1210:TYR:HB3	2.49	0.52
24:UV:309:LEU:HD21	24:UV:473:LYS:HB3	1.92	0.52
24:UV:577:ARG:NH1	24:UV:624:CYS:O	2.43	0.52

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CE:34:SER:HB2	27:CE:122:GLU:OE1	2.09	0.52
27:CE:248:THR:HG23	27:CE:251:ASP:H	1.74	0.52
28:CG:25:GLN:OE1	29:CH:342:ARG:HG2	2.09	0.52
33:CL:746:GLU:HB3	33:CL:752:GLU:OE1	2.10	0.52
36:JD:393:VAL:HG12	36:JD:583:VAL:HG21	1.91	0.52
36:JD:469:HIS:HB3	36:JD:472:LYS:HD2	1.92	0.52
36:JD:766:THR:HA	36:JD:812:ARG:NH2	2.17	0.52
44:JJ:164:LEU:HD13	44:JJ:232:HIS:ND1	2.25	0.52
63:D4:62:C:H2'	63:D4:63:C:C6	2.45	0.52
2:DA:149:GLN:OE1	62:D3:1066:C:H4'	2.10	0.51
3:UA:308:VAL:HG22	3:UA:319:PHE:CE1	2.45	0.51
5:UC:594:GLU:HA	5:UC:594:GLU:OE2	2.10	0.51
11:UI:477:LYS:O	11:UI:480:LYS:HG3	2.09	0.51
15:UM:301:GLN:OE1	15:UM:314:ILE:N	2.43	0.51
15:UM:536:LEU:HD23	15:UM:552:SER:HA	1.92	0.51
17:UO:123:SER:OG	17:UO:150:ARG:NH1	2.44	0.51
20:UR:462:GLY:HA2	20:UR:527:GLY:HA3	1.92	0.51
22:UT:1017:LEU:HD21	22:UT:1023:LEU:HB2	1.93	0.51
22:UT:1098:ASN:HD21	22:UT:1106:LEU:HB2	1.75	0.51
22:UT:1155:ASP:OD2	22:UT:1201:LEU:HG	2.10	0.51
22:UT:1470:GLY:HA2	22:UT:1472:HIS:CE1	2.45	0.51
22:UT:2213:PHE:CE2	22:UT:2235:ILE:HD11	2.40	0.51
23:UU:382:LYS:O	23:UU:384:ALA:N	2.43	0.51
24:UV:367:ARG:NH1	24:UV:390:THR:HG21	2.25	0.51
24:UV:400:LEU:HB3	24:UV:412:LEU:HD23	1.91	0.51
24:UV:441:GLN:HG3	24:UV:468:PHE:HD2	1.75	0.51
24:UV:1228:ASN:OD1	24:UV:1229:ASP:N	2.43	0.51
27:CE:230:GLU:O	27:CE:233:GLU:HG3	2.10	0.51
28:CF:32:GLN:HE21	28:CF:105:ASN:CB	2.19	0.51
32:CK:408:SER:OG	44:JJ:169:ASP:OD2	2.28	0.51
33:CL:735:GLY:HA3	34:CM:251:GLN:NE2	2.23	0.51
33:CL:931:LYS:HB2	33:CL:1006:TRP:CZ3	2.43	0.51
40:JL:162:ARG:HH22	62:D3:1778:G:H3'	1.75	0.51
40:JL:201:GLN:HE22	62:D3:1783:C:P	2.33	0.51
42:JP:126:LYS:NZ	42:JP:128:PRO:HA	2.26	0.51
42:JP:314:SER:HA	42:JP:356:TYR:CD2	2.45	0.51
47:DG:61:PHE:HD2	47:DG:72:ARG:NE	2.08	0.51
62:D3:1686:C:O2	62:D3:1715:G:N2	2.39	0.51
63:D4:94:A:H61	63:D4:322:A:H61	1.58	0.51
63:D4:201:C:N3	63:D4:249:G:N1	2.58	0.51
3:UA:259:ASN:CG	3:UA:260:GLN:H	2.14	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CB:171:LEU:HB2	1:CB:237:VAL:HG11	1.91	0.51
1:CB:204:GLY:O	1:CB:208:ILE:HG12	2.10	0.51
5:UC:604:ARG:HH12	25:UX:44:ILE:HG22	1.75	0.51
12:UJ:526:LEU:O	12:UJ:530:THR:HG23	2.10	0.51
12:UJ:1492:SER:OG	12:UJ:1493:ALA:N	2.43	0.51
13:UK:230:LYS:HB3	13:UK:242:PHE:HD2	1.75	0.51
14:UL:88:HIS:HB2	14:UL:129:PHE:CE2	2.45	0.51
14:UL:568:SER:HB3	14:UL:570:TYR:HE1	1.74	0.51
14:UL:912:TRP:CG	15:UM:779:VAL:HG21	2.45	0.51
15:UM:153:TYR:HE2	15:UM:160:ILE:HD12	1.76	0.51
15:UM:461:LEU:HD11	15:UM:489:ALA:H	1.76	0.51
19:UQ:54:VAL:HB	19:UQ:64:LYS:HB3	1.91	0.51
19:UQ:397:LYS:HG2	19:UQ:398:HIS:CD2	2.46	0.51
22:UT:333:TRP:CZ2	22:UT:369:SER:HA	2.45	0.51
22:UT:1332:ILE:HG22	22:UT:1366:ASN:ND2	2.25	0.51
22:UT:2003:LEU:HD22	22:UT:2019:ILE:HG21	1.91	0.51
24:UV:210:PRO:HD2	24:UV:213:LEU:HD12	1.93	0.51
24:UV:712:ASN:N	24:UV:1113:GLY:O	2.36	0.51
24:UV:858:ARG:NH2	62:D3:1058:U:O2	2.43	0.51
24:UV:1102:LEU:HD11	24:UV:1180:ASN:HB2	1.92	0.51
26:CD:301:PRO:HG2	26:CD:396:PRO:HB2	1.92	0.51
37:JF:91:ILE:O	37:JF:94:GLN:NE2	2.43	0.51
56:DT:50:ALA:HA	56:DT:53:TRP:HD1	1.75	0.51
62:D3:119:A:H1'	62:D3:397:A:C5	2.45	0.51
63:D4:62:C:H2'	63:D4:63:C:H6	1.75	0.51
63:D4:164:C:H2'	63:D4:165:G:H8	1.75	0.51
6:UD:124:THR:HG21	18:UP:191:PRO:HB3	1.91	0.51
6:UD:225:LEU:O	6:UD:225:LEU:HD12	2.10	0.51
7:UE:7:GLN:HB2	7:UE:20:VAL:HG22	1.92	0.51
7:UE:439:VAL:HG23	7:UE:440:ILE:HD12	1.91	0.51
8:UF:297:ASP:N	8:UF:297:ASP:OD1	2.43	0.51
15:UM:263:GLY:O	15:UM:289:PHE:HA	2.11	0.51
17:UO:183:LEU:HD11	17:UO:195:LEU:HD21	1.92	0.51
17:UO:315:ASN:HB3	17:UO:333:LYS:HZ2	1.75	0.51
19:UQ:878:ASN:HB2	19:UQ:890:ARG:HH12	1.75	0.51
20:UR:401:GLU:OE2	20:UR:401:GLU:N	2.34	0.51
22:UT:2166:LYS:HD3	22:UT:2169:LEU:HD21	1.92	0.51
22:UT:2467:HIS:O	22:UT:2471:ARG:HG3	2.10	0.51
24:UV:764:SER:O	24:UV:914:ARG:NH1	2.43	0.51
27:CE:345:ALA:HB3	27:CE:348:VAL:HG22	1.91	0.51
27:CE:380:ARG:NH1	27:CE:382:ASP:OD1	2.42	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CL:560:PRO:HB2	34:CM:320:GLU:OE1	2.10	0.51
33:CL:619:GLU:OE1	33:CL:619:GLU:N	2.24	0.51
36:JD:800:TRP:HB3	36:JD:834:PHE:HE1	1.74	0.51
36:JD:1002:ASP:N	36:JD:1002:ASP:OD1	2.42	0.51
37:JF:174:LYS:HG2	37:JF:200:GLU:HA	1.92	0.51
40:JL:65:PRO:HD2	40:JL:85:GLU:OE2	2.10	0.51
71:EH:203:ASN:O	71:EH:207:CYS:N	2.40	0.51
1:CA:81:ARG:HH11	41:JM:164:MET:HG3	1.74	0.51
4:UB:477:TYR:O	4:UB:480:GLU:HG3	2.09	0.51
4:UB:657:PHE:HD2	4:UB:691:LEU:HD22	1.75	0.51
4:UB:790:THR:HG23	4:UB:791:GLU:HG2	1.92	0.51
7:UE:119:CYS:SG	7:UE:127:TYR:HB2	2.51	0.51
7:UE:250:ASP:O	7:UE:288:LYS:NZ	2.40	0.51
14:UL:400:SER:HB3	14:UL:438:PHE:CZ	2.45	0.51
15:UM:257:ILE:HG21	15:UM:269:LEU:HD23	1.92	0.51
15:UM:455:LEU:HD22	15:UM:506:PHE:CE1	2.45	0.51
17:UO:27:TRP:HH2	17:UO:268:MET:HB3	1.75	0.51
17:UO:147:ARG:HG2	17:UO:170:TYR:H	1.75	0.51
19:UQ:669:ASN:HB3	19:UQ:749:ASP:HB3	1.92	0.51
22:UT:66:PHE:HB2	22:UT:94:PHE:CE2	2.46	0.51
22:UT:1127:PHE:CZ	22:UT:1166:HIS:HB3	2.42	0.51
22:UT:1643:LEU:HD21	22:UT:1693:THR:HG21	1.91	0.51
22:UT:2471:ARG:NH1	62:D3:845:G:H3'	2.25	0.51
24:UV:444:SER:OG	24:UV:471:SER:OG	2.12	0.51
30:CI:174:ARG:HB3	30:CI:176:GLN:HG3	1.92	0.51
31:CJ:116:ARG:HD2	31:CJ:117:LEU:N	2.26	0.51
33:CL:942:PHE:HB3	62:D3:1594:G:H5''	1.92	0.51
35:CN:38:PHE:HB2	35:CN:56:VAL:HB	1.91	0.51
36:JD:915:LEU:HD12	36:JD:1049:ILE:HG21	1.91	0.51
37:JG:177:LYS:HG2	37:JG:221:VAL:HG12	1.92	0.51
42:JP:94:TYR:HD2	42:JP:103:PHE:HD2	1.58	0.51
42:JP:244:ILE:HD11	42:JP:264:THR:HG21	1.91	0.51
47:DG:95:LYS:NZ	62:D3:160:C:O3'	2.43	0.51
49:DI:70:GLU:OE1	49:DI:70:GLU:N	2.41	0.51
53:DO:12:GLN:HB3	53:DO:77:THR:OG1	2.10	0.51
56:DT:57:ARG:NE	62:D3:1479:A:OP1	2.42	0.51
56:DT:66:TYR:HB2	56:DT:124:ILE:HD12	1.91	0.51
62:D3:191:C:O2'	62:D3:192:U:O4'	2.23	0.51
62:D3:1545:A:H2'	62:D3:1546:G:H8	1.76	0.51
62:D3:1582:U:C4	62:D3:1614:A:C8	2.98	0.51
1:CA:202:ARG:HB2	1:CA:203:PRO:HD3	1.92	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:UA:562:GLY:HA3	3:UA:625:GLY:O	2.10	0.51
4:UB:427:ALA:HA	4:UB:473:GLU:OE1	2.10	0.51
4:UB:734:ARG:HH22	62:D3:1544:U:H1'	1.76	0.51
6:UD:769:PHE:HD1	18:UP:213:LYS:HG2	1.75	0.51
8:UF:57:ILE:HD13	8:UF:96:TYR:CZ	2.46	0.51
12:UJ:1738:GLU:OE2	22:UT:201:ARG:NH2	2.33	0.51
12:UJ:1742:GLU:HA	12:UJ:1745:GLU:CG	2.36	0.51
15:UM:279:LYS:HD3	15:UM:325:ASP:O	2.10	0.51
17:UO:43:THR:O	17:UO:304:SER:OG	2.28	0.51
19:UQ:575:THR:O	19:UQ:582:LEU:HA	2.11	0.51
21:US:317:ILE:HG23	21:US:358:PHE:HD1	1.74	0.51
22:UT:668:GLY:O	22:UT:671:THR:OG1	2.18	0.51
22:UT:1088:LYS:HB2	22:UT:1089:PRO:HD3	1.92	0.51
23:UU:86:HIS:CG	23:UU:87:PHE:H	2.29	0.51
23:UU:523:ASP:N	23:UU:523:ASP:OD1	2.43	0.51
24:UV:873:GLU:HG2	24:UV:874:LEU:HD22	1.90	0.51
25:UX:123:PRO:HD3	42:JP:67:ARG:HD2	1.92	0.51
25:UX:189:PHE:HE1	50:DJ:15:PRO:HB3	1.76	0.51
33:CL:90:VAL:O	33:CL:94:THR:HG22	2.10	0.51
33:CL:222:ASN:HA	33:CL:225:ARG:HD3	1.93	0.51
40:JL:164:LEU:HD21	40:JL:187:HIS:HB2	1.93	0.51
42:JP:109:HIS:NE2	42:JP:138:SER:OG	2.34	0.51
44:JJ:113:TRP:HA	44:JJ:116:ILE:HD12	1.91	0.51
62:D3:1688:U:H2'	62:D3:1689:A:C8	2.46	0.51
3:UA:308:VAL:HG22	3:UA:319:PHE:CD1	2.46	0.51
7:UE:480:LEU:O	7:UE:484:LEU:HG	2.11	0.51
12:UJ:689:GLU:HA	12:UJ:692:ILE:HD12	1.93	0.51
15:UM:30:LYS:HE3	15:UM:45:LEU:O	2.11	0.51
15:UM:175:TRP:HD1	15:UM:181:LYS:O	1.94	0.51
15:UM:264:ASP:HB3	15:UM:266:ILE:HG12	1.92	0.51
16:UN:289:GLU:OE1	42:JP:468:TYR:OH	2.13	0.51
17:UO:455:SER:O	17:UO:459:VAL:HG23	2.10	0.51
19:UQ:252:LEU:HD11	61:D2:81:A:H2'	1.91	0.51
20:UR:129:ASP:OD1	20:UR:129:ASP:N	2.42	0.51
20:UR:454:GLY:O	20:UR:486:SER:HB2	2.10	0.51
22:UT:214:SER:O	22:UT:217:GLU:HG3	2.11	0.51
22:UT:992:LYS:NZ	22:UT:996:ARG:HE	2.09	0.51
22:UT:1504:GLY:O	22:UT:1508:GLN:HG2	2.10	0.51
22:UT:2175:GLU:HG2	22:UT:2176:HIS:N	2.22	0.51
22:UT:2425:ASP:O	22:UT:2429:ILE:HG12	2.11	0.51
24:UV:1205:LYS:HA	35:CN:36:PHE:HD2	1.76	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:CG:85:VAL:CG2	29:CH:552:TRP:HB3	2.40	0.51
31:CJ:126:ASN:HB3	54:DQ:123:ARG:HH11	1.75	0.51
31:CJ:139:LEU:HD23	31:CJ:266:LEU:HD21	1.92	0.51
33:CL:195:TRP:HB3	33:CL:200:GLN:HG2	1.93	0.51
35:CN:170:ASN:O	35:CN:173:LYS:HB2	2.10	0.51
36:JD:600:PHE:HB2	36:JD:609:LYS:HE2	1.92	0.51
37:JF:236:VAL:HG21	37:JG:103:PRO:HD3	1.92	0.51
40:JL:251:LEU:HD21	40:JL:317:PHE:CD1	2.46	0.51
56:DT:64:HIS:NE2	62:D3:1480:G:OP1	2.44	0.51
61:D2:288:G:H2'	61:D2:289:U:C6	2.46	0.51
3:UA:806:SER:O	3:UA:806:SER:OG	2.27	0.51
6:UD:566:LEU:HD23	6:UD:586:THR:HG21	1.93	0.51
7:UE:299:ASP:H	7:UE:319:TRP:HZ2	1.57	0.51
14:UL:201:ILE:HG22	15:UM:660:LYS:HD3	1.93	0.51
14:UL:332:ILE:HD11	14:UL:367:ILE:HD11	1.93	0.51
17:UO:33:ALA:HB2	17:UO:330:ARG:HG2	1.93	0.51
19:UQ:175:ALA:HB3	19:UQ:188:ALA:HB3	1.92	0.51
22:UT:12:LYS:HZ3	62:D3:60:U:C5'	2.24	0.51
22:UT:125:TYR:CZ	22:UT:166:LEU:HD11	2.46	0.51
22:UT:280:MET:HG2	22:UT:733:VAL:HG21	1.93	0.51
24:UV:1202:CYS:SG	24:UV:1203:ASN:N	2.84	0.51
27:CE:194:GLU:OE2	27:CE:242:SER:HA	2.10	0.51
30:CI:36:TYR:HD2	30:CI:107:CYS:SG	2.33	0.51
33:CL:82:LYS:HB3	77:CL:2001:GTP:O1B	2.11	0.51
36:JD:734:LEU:HD13	36:JD:741:LYS:HG2	1.93	0.51
36:JD:1116:PRO:HG2	36:JD:1135:ILE:HG22	1.93	0.51
41:JM:172:THR:HB	41:JM:175:GLU:OE1	2.10	0.51
44:JJ:129:ARG:NH2	44:JJ:131:ASN:HD21	2.07	0.51
49:DI:189:LEU:O	49:DI:193:LEU:HG	2.11	0.51
61:D2:476:A:H2'	61:D2:477:G:H8	1.76	0.51
2:DA:241:GLY:H	24:UV:656:ARG:HD3	1.75	0.51
3:UA:585:TYR:HE1	3:UA:592:ILE:HD11	1.75	0.51
6:UD:31:MET:CE	6:UD:752:LEU:HG	2.40	0.51
7:UE:248:THR:O	7:UE:251:GLY:N	2.37	0.51
12:UJ:313:ASP:O	12:UJ:350:SER:OG	2.24	0.51
14:UL:175:ASP:HB3	14:UL:176:TRP:CE3	2.46	0.51
17:UO:329:ILE:HG13	17:UO:329:ILE:O	2.11	0.51
19:UQ:158:LYS:NZ	19:UQ:168:LEU:O	2.38	0.51
19:UQ:401:GLN:HB2	19:UQ:412:ASN:ND2	2.25	0.51
19:UQ:599:ILE:HD11	19:UQ:601:LEU:HD12	1.92	0.51
20:UR:216:TYR:OH	23:UU:274:ILE:HG12	2.10	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:94:PHE:O	22:UT:97:PHE:HB2	2.10	0.51
22:UT:2310:GLU:HA	22:UT:2312:ARG:HH12	1.76	0.51
23:UU:120:HIS:NE2	23:UU:168:VAL:O	2.43	0.51
23:UU:517:MET:HE3	23:UU:529:TYR:CD2	2.45	0.51
24:UV:141:TRP:NE1	24:UV:144:LYS:HG3	2.25	0.51
28:CG:54:MET:HB3	28:CG:64:LEU:HD12	1.93	0.51
29:CH:292:SER:OG	29:CH:293:ASP:N	2.42	0.51
29:CH:449:ASN:HA	29:CH:460:ARG:HD3	1.92	0.51
31:CJ:245:VAL:HG21	32:CK:373:ILE:HD11	1.93	0.51
36:JD:840:PRO:HG2	36:JD:843:LEU:HG	1.92	0.51
36:JD:867:PHE:HD1	36:JD:870:PRO:HB3	1.75	0.51
40:JL:131:TYR:O	40:JL:134:SER:N	2.44	0.51
47:DG:14:LYS:HD2	47:DG:123:GLY:HA3	1.92	0.51
62:D3:1578:U:H2'	62:D3:1579:U:C6	2.46	0.51
75:EN:93:VAL:N	75:EN:113:VAL:O	2.42	0.51
75:EN:646:TYR:O	75:EN:650:GLU:N	2.40	0.51
2:DA:127:VAL:HG21	2:DA:176:VAL:CG2	2.40	0.51
3:UA:524:ARG:HA	3:UA:585:TYR:HD2	1.75	0.51
3:UA:766:VAL:O	3:UA:770:ILE:HG13	2.10	0.51
1:CB:248:ASP:HB2	1:CB:251:ARG:HB2	1.91	0.51
4:UB:550:VAL:HA	4:UB:553:TYR:HB2	1.92	0.51
4:UB:648:SER:HA	4:UB:652:LYS:HE3	1.93	0.51
7:UE:444:ALA:O	7:UE:448:ASN:HA	2.11	0.51
12:UJ:193:THR:OG1	12:UJ:241:ILE:HD11	2.11	0.51
12:UJ:357:ARG:O	12:UJ:360:ARG:NH2	2.43	0.51
14:UL:897:ASP:OD1	15:UM:761:ARG:NH2	2.35	0.51
17:UO:231:GLY:O	17:UO:255:VAL:HG22	2.11	0.51
19:UQ:97:THR:HG22	19:UQ:178:PHE:HE2	1.76	0.51
20:UR:144:LYS:HE2	20:UR:147:ARG:HH21	1.75	0.51
21:US:334:TYR:HB3	21:US:337:PHE:HD1	1.76	0.51
21:US:350:MET:SD	21:US:394:ALA:HB1	2.51	0.51
22:UT:1428:THR:HG23	22:UT:1429:LYS:H	1.75	0.51
22:UT:1604:GLU:OE1	22:UT:1604:GLU:N	2.44	0.51
22:UT:2065:VAL:HG12	22:UT:2069:GLN:NE2	2.26	0.51
22:UT:2475:LYS:HA	22:UT:2478:LYS:HD2	1.92	0.51
23:UU:346:ARG:NH1	23:UU:384:ALA:O	2.43	0.51
24:UV:100:SER:OG	24:UV:104:LYS:HE2	2.11	0.51
24:UV:236:THR:HG21	24:UV:256:TYR:CE1	2.46	0.51
24:UV:392:GLU:OE1	24:UV:392:GLU:N	2.34	0.51
24:UV:433:ASP:O	24:UV:457:TYR:OH	2.10	0.51
24:UV:1158:LYS:O	24:UV:1187:LYS:HE3	2.11	0.51

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CE:407:ARG:HA	27:CE:407:ARG:HH11	1.76	0.51
28:CF:54:MET:HB3	28:CF:64:LEU:HD12	1.93	0.51
33:CL:618:PHE:CD1	34:CM:274:LYS:HG3	2.46	0.51
33:CL:831:ARG:HD3	33:CL:838:ILE:HG22	1.92	0.51
36:JD:408:ASP:OD1	36:JD:408:ASP:N	2.42	0.51
36:JD:862:ILE:H	36:JD:862:ILE:HD12	1.76	0.51
48:DH:76:LYS:O	48:DH:79:ARG:N	2.44	0.51
49:DI:42:ARG:NH1	49:DI:59:ARG:HE	2.08	0.51
55:DS:42:TYR:HA	55:DS:85:PHE:HZ	1.76	0.51
62:D3:734:A:H2'	62:D3:735:C:H5'	1.92	0.51
63:D4:6:C:H2'	63:D4:7:G:H8	1.76	0.51
75:EN:699:ALA:O	75:EN:718:ILE:N	2.43	0.51
1:CA:127:GLU:O	1:CA:137:THR:N	2.41	0.51
2:DA:35:PRO:HG3	2:DA:99:ASN:HA	1.92	0.51
3:UA:70:LEU:HB2	3:UA:84:PHE:CE2	2.46	0.51
1:CB:272:LYS:HE2	1:CB:275:CYS:SG	2.51	0.51
4:UB:426:THR:HG22	4:UB:462:LEU:HD22	1.93	0.51
6:UD:226:LEU:HD23	6:UD:226:LEU:H	1.76	0.51
7:UE:126:PHE:HZ	7:UE:165:VAL:HG11	1.76	0.51
7:UE:230:SER:OG	7:UE:231:ASP:N	2.44	0.51
9:UG:222:GLY:HA3	30:CI:18:PHE:CD1	2.45	0.51
12:UJ:670:LEU:O	12:UJ:674:LEU:HG	2.11	0.51
12:UJ:1420:LEU:HG	12:UJ:1456:VAL:HG22	1.93	0.51
13:UK:16:ARG:HD3	62:D3:575:C:N4	2.25	0.51
14:UL:21:ALA:HB3	14:UL:44:SER:HB3	1.93	0.51
14:UL:137:ILE:HG21	14:UL:169:PHE:HZ	1.76	0.51
15:UM:388:GLU:N	15:UM:388:GLU:OE1	2.44	0.51
15:UM:421:SER:O	15:UM:423:LYS:N	2.43	0.51
21:US:452:ASP:O	21:US:456:THR:HG23	2.10	0.51
22:UT:88:PHE:HZ	22:UT:128:ALA:HB2	1.75	0.51
22:UT:178:ILE:HG22	22:UT:179:PRO:HD3	1.93	0.51
22:UT:792:HIS:C	22:UT:794:VAL:H	2.14	0.51
23:UU:900:ASN:OD1	23:UU:901:LYS:N	2.44	0.51
27:CE:233:GLU:O	27:CE:236:LYS:HB2	2.11	0.51
29:CH:459:LEU:O	29:CH:463:GLN:HG2	2.10	0.51
29:CH:535:GLU:H	29:CH:570:GLN:HE21	1.59	0.51
33:CL:8:HIS:HB3	62:D3:1792:G:N7	2.26	0.51
35:CN:94:GLY:HA2	35:CN:97:GLU:OE1	2.11	0.51
36:JD:1064:ASN:OD1	36:JD:1065:GLU:N	2.43	0.51
37:JF:30:VAL:HG22	37:JF:127:THR:HG21	1.93	0.51
40:JL:273:MET:HA	40:JL:276:VAL:HG12	1.93	0.51

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:JP:281:ASN:OD1	42:JP:282:GLU:N	2.44	0.51
44:JJ:98:LYS:HG2	44:JJ:138:GLU:CG	2.41	0.51
62:D3:418:G:H3'	62:D3:418:G:N3	2.25	0.51
62:D3:869:A:H61	62:D3:958:U:H3	1.58	0.51
74:EK:618:TYR:N	74:EK:648:SER:O	2.41	0.51
3:UA:4:ASP:O	3:UA:706:THR:HG22	2.11	0.50
3:UA:43:ILE:HG23	3:UA:44:ASN:OD1	2.12	0.50
4:UB:678:PHE:HB3	4:UB:681:PRO:HG2	1.93	0.50
7:UE:284:LYS:HG2	7:UE:331:SER:HA	1.93	0.50
7:UE:350:LEU:HD11	19:UQ:60:ARG:NE	2.26	0.50
8:UF:299:LYS:HZ3	8:UF:300:MET:CE	2.24	0.50
10:UH:587:LEU:HB2	19:UQ:605:ASN:HD22	1.76	0.50
13:UK:48:LEU:HB3	13:UK:52:ARG:HH21	1.76	0.50
14:UL:217:LEU:HD21	14:UL:229:TRP:HB2	1.92	0.50
14:UL:580:ASP:OD1	14:UL:581:ILE:N	2.44	0.50
15:UM:458:SER:OG	15:UM:459:ASN:N	2.44	0.50
15:UM:698:LEU:HD13	15:UM:759:THR:HG21	1.93	0.50
17:UO:127:THR:HA	17:UO:144:SER:HA	1.92	0.50
19:UQ:116:VAL:HB	19:UQ:132:PHE:HB2	1.93	0.50
20:UR:363:LEU:HD13	20:UR:374:ILE:HG21	1.93	0.50
21:US:504:ASP:OD1	21:US:505:SER:N	2.44	0.50
22:UT:606:THR:O	22:UT:610:LEU:HD23	2.11	0.50
22:UT:980:ASN:HB3	22:UT:983:GLN:OE1	2.11	0.50
22:UT:1050:MET:HE2	62:D3:130:C:H4'	1.92	0.50
33:CL:769:TYR:HB3	33:CL:777:ARG:NH2	2.26	0.50
36:JD:366:ASN:ND2	36:JD:440:ASP:OD1	2.45	0.50
37:JF:178:VAL:HA	37:JF:223:GLU:O	2.11	0.50
45:DE:100:ARG:HG3	45:DE:102:VAL:HG13	1.92	0.50
45:DE:182:TYR:CD1	45:DE:192:ILE:HG12	2.46	0.50
47:DG:118:GLU:N	47:DG:118:GLU:OE2	2.43	0.50
55:DS:105:VAL:HG22	55:DS:108:LYS:NZ	2.26	0.50
62:D3:398:G:H8	62:D3:398:G:O5'	1.93	0.50
62:D3:1002:G:N7	62:D3:1003:A:C6	2.79	0.50
62:D3:1096:C:H6	62:D3:1096:C:H5'	1.74	0.50
62:D3:1131:A:N1	62:D3:1132:A:N6	2.60	0.50
62:D3:1615:C:H5''	62:D3:1616:G:O4'	2.10	0.50
62:D3:1730:A:O3'	62:D3:1731:A:H8	1.95	0.50
74:EK:368:LYS:O	74:EK:372:LEU:N	2.37	0.50
1:CA:116:SER:HB2	1:CA:120:GLU:CD	2.31	0.50
1:CA:170:VAL:HG22	1:CA:239:CYS:SG	2.50	0.50
2:DA:86:LEU:HB3	2:DA:98:THR:CG2	2.42	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:UA:493:TRP:CH2	30:CI:140:PRO:HD3	2.47	0.50
3:UA:599:ASN:OD1	3:UA:617:VAL:HG12	2.11	0.50
6:UD:113:ARG:NH1	6:UD:173:GLY:O	2.44	0.50
9:UG:160:LEU:HD12	9:UG:161:GLN:H	1.76	0.50
12:UJ:1652:VAL:HG11	12:UJ:1690:LEU:HB3	1.92	0.50
15:UM:287:GLU:OE1	15:UM:287:GLU:N	2.40	0.50
15:UM:402:TRP:HZ3	15:UM:416:ARG:HB2	1.76	0.50
15:UM:452:GLU:OE1	15:UM:452:GLU:N	2.35	0.50
15:UM:702:LEU:HD21	15:UM:758:ARG:HG3	1.93	0.50
16:UN:890:VAL:HG13	42:JP:358:MET:HB3	1.92	0.50
19:UQ:695:TYR:O	19:UQ:699:ASN:HB2	2.11	0.50
20:UR:248:HIS:HB2	20:UR:269:ASP:OD1	2.11	0.50
20:UR:420:ARG:HB2	20:UR:438:ASN:HB2	1.93	0.50
20:UR:490:PHE:CD2	28:CF:89:ARG:HD3	2.46	0.50
22:UT:535:ASN:O	22:UT:538:LEU:HB2	2.11	0.50
22:UT:1905:SER:OG	22:UT:1906:GLU:N	2.45	0.50
22:UT:1907:ASN:HB3	22:UT:1910:VAL:HG12	1.93	0.50
24:UV:523:TYR:CD2	24:UV:616:LYS:HG2	2.44	0.50
24:UV:976:ILE:HD13	24:UV:1017:TYR:CD1	2.45	0.50
34:CM:301:MET:HE1	34:CM:311:LEU:HB2	1.94	0.50
35:CN:263:ARG:O	35:CN:267:LYS:HG2	2.11	0.50
36:JD:771:PRO:O	36:JD:816:THR:OG1	2.26	0.50
37:JG:112:VAL:CG1	37:JG:124:VAL:HG13	2.39	0.50
42:JP:262:MET:SD	42:JP:283:ASP:HB3	2.51	0.50
46:DF:76:ARG:HG2	54:DQ:122:ARG:NH2	2.26	0.50
62:D3:923:A:H2'	62:D3:924:A:C8	2.46	0.50
3:UA:15:TYR:CD1	3:UA:20:ILE:HD11	2.46	0.50
3:UA:288:ASP:HB3	3:UA:293:THR:HG22	1.91	0.50
3:UA:356:ASP:OD2	3:UA:830:ARG:NH2	2.42	0.50
4:UB:510:THR:HB	4:UB:556:ILE:HG21	1.94	0.50
6:UD:565:ARG:HE	12:UJ:635:TYR:N	2.09	0.50
7:UE:145:CYS:HB3	7:UE:148:LEU:HD11	1.92	0.50
7:UE:547:LEU:O	7:UE:551:ILE:HG13	2.10	0.50
7:UE:551:ILE:O	7:UE:555:LYS:HG2	2.11	0.50
8:UF:364:MET:HA	8:UF:367:ILE:HG22	1.94	0.50
12:UJ:241:ILE:HA	12:UJ:244:LYS:NZ	2.26	0.50
14:UL:183:ASP:O	14:UL:185:MET:N	2.43	0.50
15:UM:96:VAL:HG12	15:UM:97:ARG:HG3	1.92	0.50
15:UM:461:LEU:HD11	15:UM:490:HIS:H	1.76	0.50
17:UO:122:ALA:HB2	17:UO:152:TRP:CH2	2.42	0.50
17:UO:151:LEU:HD23	17:UO:162:LEU:HD13	1.93	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:US:250:GLU:O	21:US:254:LYS:HG2	2.10	0.50
22:UT:593:ASP:OD2	22:UT:595:LYS:HB2	2.11	0.50
22:UT:793:PHE:O	22:UT:793:PHE:CD1	2.64	0.50
22:UT:2345:ARG:HH22	22:UT:2385:LEU:HG	1.76	0.50
23:UU:355:TYR:HA	23:UU:631:ASN:ND2	2.26	0.50
24:UV:915:LEU:HD13	24:UV:954:LEU:HD21	1.93	0.50
24:UV:1169:ILE:H	24:UV:1169:ILE:HD12	1.77	0.50
32:CK:297:LEU:HB2	32:CK:302:LYS:NZ	2.25	0.50
34:CM:18:ARG:HD3	34:CM:98:TYR:CE1	2.46	0.50
36:JD:1033:LYS:HG2	36:JD:1037:GLU:OE2	2.11	0.50
36:JD:1154:TYR:CG	36:JD:1167:MET:HG2	2.46	0.50
40:JL:54:ILE:HD11	40:JL:58:ASP:HB2	1.94	0.50
44:JJ:236:GLY:O	44:JJ:240:ILE:HG23	2.11	0.50
46:DF:46:TRP:HH2	46:DF:122:ASN:HD22	1.59	0.50
62:D3:898:A:N1	62:D3:911:U:O2'	2.43	0.50
62:D3:1649:G:H2'	62:D3:1650:U:H6	1.75	0.50
62:D3:1661:U:H2'	62:D3:1662:G:C8	2.46	0.50
63:D4:143:G:O2'	63:D4:144:G:OP1	2.27	0.50
63:D4:168:C:H2'	63:D4:169:A:H8	1.76	0.50
2:DA:154:SER:OG	2:DA:154:SER:O	2.27	0.50
3:UA:269:HIS:HE1	3:UA:271:ALA:HB3	1.75	0.50
4:UB:55:PHE:O	4:UB:57:PRO:HD3	2.12	0.50
6:UD:117:ILE:HD11	6:UD:147:ILE:HD12	1.93	0.50
7:UE:203:ILE:CD1	7:UE:214:VAL:HG22	2.41	0.50
8:UF:73:ARG:O	8:UF:76:GLN:NE2	2.44	0.50
8:UF:107:LEU:HD11	8:UF:146:ILE:HD11	1.93	0.50
10:UH:561:LEU:HD22	10:UH:566:LEU:HD11	1.92	0.50
10:UH:571:PHE:HD2	10:UH:606:ASP:HB3	1.77	0.50
12:UJ:316:PRO:HD2	12:UJ:319:ILE:HD12	1.93	0.50
12:UJ:561:PHE:CE2	12:UJ:619:SER:HB2	2.47	0.50
15:UM:420:ASN:OD1	15:UM:423:LYS:HE3	2.12	0.50
17:UO:61:THR:H	17:UO:83:VAL:HA	1.76	0.50
17:UO:177:ILE:HG21	17:UO:183:LEU:HB3	1.94	0.50
21:US:181:THR:HA	21:US:185:TYR:HB3	1.92	0.50
22:UT:2166:LYS:O	22:UT:2169:LEU:HG	2.10	0.50
24:UV:299:PRO:HD2	24:UV:302:VAL:HG11	1.93	0.50
24:UV:828:ASP:OD1	24:UV:830:SER:N	2.30	0.50
25:UX:152:ILE:CG2	25:UX:171:PRO:HG2	2.39	0.50
28:CG:9:PHE:C	28:CG:9:PHE:CD2	2.85	0.50
29:CH:366:GLN:HE22	29:CH:367:LYS:HE3	1.76	0.50
29:CH:452:SER:HB3	29:CH:460:ARG:HG2	1.94	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:CK:362:THR:O	32:CK:366:GLU:HG3	2.12	0.50
33:CL:204:LEU:HD23	33:CL:204:LEU:H	1.76	0.50
33:CL:293:VAL:HA	33:CL:1022:LEU:HD13	1.93	0.50
33:CL:1117:LEU:HD21	41:JM:122:LEU:HD21	1.93	0.50
37:JG:189:VAL:HG21	37:JG:241:PHE:HA	1.92	0.50
40:JL:310:PHE:HA	40:JL:313:VAL:HG12	1.94	0.50
62:D3:1690:G:N2	62:D3:1711:C:O2	2.44	0.50
63:D4:52:U:H2'	63:D4:53:U:C6	2.46	0.50
63:D4:329:C:H2'	63:D4:330:A:C8	2.47	0.50
67:ED:377:SER:O	67:ED:381:SER:N	2.45	0.50
3:UA:200:SER:OG	3:UA:201:HIS:N	2.45	0.50
1:CB:271:ILE:HB	1:CB:314:CYS:SG	2.51	0.50
12:UJ:19:ALA:CB	12:UJ:25:ARG:HG3	2.42	0.50
12:UJ:33:LEU:O	12:UJ:150:ARG:NE	2.43	0.50
12:UJ:367:LEU:HD13	12:UJ:403:LEU:HD23	1.93	0.50
13:UK:186:PRO:HG2	13:UK:187:LYS:HE2	1.94	0.50
15:UM:259:TYR:CD1	15:UM:267:PHE:HE1	2.30	0.50
15:UM:584:ILE:HG23	15:UM:586:LYS:N	2.26	0.50
19:UQ:502:LYS:HB3	19:UQ:565:ARG:HH11	1.77	0.50
19:UQ:632:ILE:N	19:UQ:651:SER:OG	2.34	0.50
20:UR:231:LYS:O	20:UR:232:LYS:HD3	2.12	0.50
22:UT:1008:LEU:HD22	22:UT:1015:PHE:CZ	2.46	0.50
22:UT:1228:LEU:HD22	22:UT:1271:LEU:HD21	1.93	0.50
22:UT:1986:VAL:O	22:UT:1990:LEU:N	2.40	0.50
23:UU:28:ARG:HH22	23:UU:383:ASP:CG	2.14	0.50
24:UV:197:GLN:HB3	24:UV:199:ASN:OD1	2.11	0.50
24:UV:1135:ASN:ND2	24:UV:1137:ASN:HB2	2.27	0.50
24:UV:1154:ASN:HB3	24:UV:1158:LYS:NZ	2.26	0.50
27:CE:286:ASN:HB3	27:CE:370:SER:OG	2.11	0.50
28:CF:9:PHE:CD2	28:CF:9:PHE:C	2.85	0.50
28:CF:46:ARG:NH1	63:D4:326:U:OP1	2.40	0.50
29:CH:62:LYS:HG2	29:CH:65:ARG:NH2	2.26	0.50
29:CH:425:TRP:CH2	29:CH:432:PRO:HG3	2.46	0.50
31:CJ:146:ARG:NH1	62:D3:1175:U:H1'	2.27	0.50
33:CL:787:SER:O	33:CL:789:VAL:HG13	2.11	0.50
33:CL:861:THR:O	33:CL:882:ASN:HB2	2.11	0.50
33:CL:1104:GLY:N	33:CL:1107:LYS:HZ2	2.10	0.50
35:CN:131:ALA:HA	35:CN:134:ILE:HG22	1.93	0.50
36:JD:538:LEU:HD12	36:JD:539:ARG:N	2.26	0.50
36:JD:623:LEU:HD23	36:JD:773:VAL:HG23	1.94	0.50
36:JD:623:LEU:HB2	36:JD:776:VAL:HG12	1.93	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:JF:96:LEU:HA	37:JF:99:LEU:HD12	1.94	0.50
44:JJ:250:LEU:HG	44:JJ:259:VAL:HG21	1.94	0.50
59:DY:41:ARG:HD2	59:DY:94:TYR:CE1	2.46	0.50
62:D3:997:G:O2'	62:D3:998:A:OP1	2.25	0.50
62:D3:1673:G:H2'	62:D3:1674:C:H6	1.77	0.50
6:UD:128:LEU:HB2	6:UD:526:PRO:HG2	1.94	0.50
7:UE:461:ASP:O	7:UE:465:ILE:HG12	2.12	0.50
8:UF:120:ARG:NH2	8:UF:124:THR:HG22	2.27	0.50
9:UG:104:LEU:HD11	9:UG:139:TRP:CD1	2.47	0.50
9:UG:271:LEU:HB3	16:UN:828:ASN:HB3	1.93	0.50
12:UJ:1655:LEU:HD21	12:UJ:1707:ALA:HB2	1.94	0.50
14:UL:152:GLY:O	14:UL:154:VAL:HG23	2.12	0.50
14:UL:386:GLU:O	14:UL:388:GLN:N	2.45	0.50
15:UM:148:SER:OG	15:UM:193:VAL:O	2.21	0.50
19:UQ:133:LYS:H	19:UQ:183:LYS:NZ	2.09	0.50
19:UQ:554:SER:O	19:UQ:554:SER:OG	2.30	0.50
20:UR:357:ASN:HB2	20:UR:378:GLN:OE1	2.11	0.50
22:UT:247:LEU:HD11	22:UT:294:VAL:HG21	1.94	0.50
22:UT:480:TYR:CE1	22:UT:521:THR:HG21	2.46	0.50
22:UT:864:ASP:OD1	22:UT:865:VAL:N	2.45	0.50
22:UT:1941:VAL:HA	22:UT:1944:ILE:HG12	1.93	0.50
22:UT:1964:SER:HB2	22:UT:2002:PHE:HD1	1.76	0.50
24:UV:105:LEU:HA	24:UV:108:ASP:OD2	2.11	0.50
24:UV:135:LEU:O	24:UV:180:LYS:NZ	2.37	0.50
24:UV:1165:SER:OG	24:UV:1166:ARG:N	2.44	0.50
27:CE:98:ILE:HA	27:CE:101:LEU:HD23	1.93	0.50
27:CE:339:TYR:HB3	27:CE:343:TYR:HB2	1.94	0.50
35:CN:78:TYR:CG	35:CN:143:LYS:HE3	2.47	0.50
36:JD:381:SER:OG	36:JD:385:GLN:OE1	2.28	0.50
36:JD:1207:THR:HA	36:JD:1240:LYS:HB3	1.93	0.50
37:JF:174:LYS:HE3	37:JF:200:GLU:HB2	1.94	0.50
40:JL:59:VAL:HA	40:JL:80:ASN:O	2.12	0.50
42:JP:59:VAL:HG13	42:JP:374:LEU:HD12	1.93	0.50
47:DG:45:PHE:HA	47:DG:48:TYR:HD2	1.76	0.50
55:DS:14:ILE:HA	55:DS:23:ASP:HA	1.93	0.50
62:D3:1733:C:H2'	62:D3:1734:U:C6	2.47	0.50
62:D3:1775:U:H2'	62:D3:1776:A:H8	1.76	0.50
63:D4:5:A:C5	63:D4:6:C:C4	2.99	0.50
63:D4:181:G:N2	63:D4:183:A:H3'	2.27	0.50
66:EC:164:GLY:HA2	66:EC:184:THR:HA	1.93	0.50
68:EE:138:ILE:O	68:EE:158:LEU:N	2.36	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
73:EJ:270:THR:N	73:EJ:274:MET:O	2.45	0.50
75:EN:647:HIS:O	75:EN:651:GLN:N	2.31	0.50
75:EN:960:ALA:O	75:EN:964:LYS:N	2.38	0.50
2:DA:77:GLU:O	2:DA:80:SER:OG	2.26	0.50
3:UA:105:SER:O	3:UA:108:GLY:N	2.39	0.50
7:UE:174:ASP:HB3	7:UE:177:GLU:HB3	1.92	0.50
8:UF:183:TYR:CZ	8:UF:322:LEU:HD12	2.47	0.50
9:UG:502:ARG:NH2	62:D3:1079:U:OP1	2.43	0.50
12:UJ:158:PRO:HG2	12:UJ:161:PHE:CD1	2.46	0.50
12:UJ:230:LYS:HD3	12:UJ:233:GLN:HE21	1.76	0.50
12:UJ:561:PHE:HA	12:UJ:564:VAL:HG22	1.93	0.50
15:UM:50:ARG:NH2	15:UM:378:PRO:O	2.45	0.50
15:UM:129:VAL:HB	15:UM:136:ILE:HG22	1.94	0.50
19:UQ:375:ASN:OD1	19:UQ:382:LYS:HD2	2.12	0.50
20:UR:165:ARG:HD2	23:UU:236:ARG:HH22	1.76	0.50
22:UT:425:TRP:CE3	22:UT:457:PHE:HD1	2.30	0.50
22:UT:996:ARG:NH2	62:D3:132:U:O3'	2.44	0.50
22:UT:2233:ASP:O	22:UT:2237:THR:HG23	2.12	0.50
24:UV:801:LYS:HD2	35:CN:187:HIS:CG	2.47	0.50
24:UV:1159:ASN:OD1	24:UV:1160:SER:N	2.44	0.50
26:CD:5:GLU:HG3	26:CD:96:ILE:HD12	1.94	0.50
29:CH:481:ILE:O	29:CH:484:SER:OG	2.19	0.50
31:CJ:146:ARG:HH12	62:D3:1175:U:H1'	1.76	0.50
33:CL:293:VAL:HG13	33:CL:1022:LEU:HD11	1.93	0.50
35:CN:40:LYS:HD2	35:CN:138:TRP:HH2	1.76	0.50
35:CN:138:TRP:CD1	35:CN:142:LYS:HD2	2.47	0.50
37:JG:51:GLU:C	37:JG:68:LEU:HD23	2.32	0.50
45:DE:19:LEU:HD11	45:DE:108:ARG:HD3	1.94	0.50
45:DE:183:VAL:HG13	45:DE:189:LEU:HA	1.93	0.50
51:DL:27:THR:O	51:DL:30:ARG:NH2	2.22	0.50
63:D4:98:U:H2'	63:D4:99:U:H6	1.77	0.50
73:EJ:67:GLU:O	73:EJ:107:LEU:N	2.45	0.50
1:CA:291:GLN:HE21	25:UX:129:SER:H	1.59	0.50
2:DA:136:ARG:NH1	62:D3:884:A:H5''	2.26	0.50
12:UJ:527:LEU:O	12:UJ:530:THR:OG1	2.23	0.50
12:UJ:1600:PRO:HA	12:UJ:1603:MET:HG2	1.91	0.50
12:UJ:1659:GLU:OE2	12:UJ:1660:ASN:N	2.45	0.50
14:UL:548:ILE:O	14:UL:555:VAL:HA	2.12	0.50
15:UM:342:ASP:OD2	15:UM:343:MET:N	2.45	0.50
15:UM:557:VAL:CG1	15:UM:571:LEU:HB2	2.42	0.50
15:UM:673:MET:HE2	15:UM:693:ARG:HG2	1.94	0.50

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:UO:41:SER:HB2	17:UO:303:LEU:HD12	1.92	0.50
19:UQ:443:ASN:HD21	19:UQ:541:TRP:HZ2	1.59	0.50
19:UQ:574:LEU:HD21	19:UQ:615:TRP:HZ3	1.76	0.50
20:UR:410:ASP:OD1	20:UR:411:TYR:N	2.44	0.50
22:UT:448:VAL:O	22:UT:451:VAL:HG12	2.12	0.50
22:UT:566:HIS:CG	22:UT:567:PRO:HD2	2.46	0.50
22:UT:2427:THR:HA	22:UT:2430:TYR:CD1	2.47	0.50
24:UV:331:LEU:HD11	24:UV:556:ILE:HG12	1.93	0.50
24:UV:709:PRO:HB3	24:UV:1114:ILE:HD12	1.93	0.50
33:CL:613:PRO:HG2	33:CL:615:PHE:CE1	2.46	0.50
33:CL:858:PRO:HA	33:CL:885:PHE:HB3	1.94	0.50
36:JD:736:SER:HA	36:JD:741:LYS:HE3	1.94	0.50
49:DI:81:VAL:HA	49:DI:102:VAL:HG12	1.93	0.50
50:DJ:11:THR:OG1	62:D3:472:U:H5"	2.12	0.50
58:DX:74:VAL:HG21	58:DX:104:LEU:HD11	1.93	0.50
62:D3:234:G:N1	62:D3:235:G:N7	2.59	0.50
68:EE:168:VAL:O	68:EE:172:LYS:N	2.45	0.50
69:EF:37:PHE:O	69:EF:49:ARG:N	2.45	0.50
4:UB:433:ILE:HD13	4:UB:459:LEU:HD11	1.94	0.50
7:UE:126:PHE:CZ	7:UE:165:VAL:HG11	2.47	0.50
7:UE:229:GLU:N	7:UE:254:GLU:OE1	2.45	0.50
7:UE:241:ALA:O	7:UE:259:PRO:HD2	2.11	0.50
12:UJ:48:ILE:HG22	12:UJ:120:TRP:HE3	1.77	0.50
12:UJ:377:ARG:HB3	12:UJ:377:ARG:NH1	2.27	0.50
12:UJ:600:LEU:HB3	12:UJ:604:LEU:HB2	1.94	0.50
14:UL:230:LYS:HB3	14:UL:245:MET:CE	2.41	0.50
19:UQ:745:ILE:O	19:UQ:754:LEU:N	2.45	0.50
20:UR:245:HIS:CD2	20:UR:246:PRO:HD2	2.47	0.50
22:UT:209:ARG:HB3	22:UT:213:ARG:NH2	2.27	0.50
22:UT:212:VAL:HA	22:UT:215:VAL:HG12	1.94	0.50
22:UT:1200:ASN:HA	22:UT:1242:LYS:HZ3	1.77	0.50
22:UT:1501:ARG:N	22:UT:1501:ARG:HD2	2.27	0.50
22:UT:2427:THR:O	22:UT:2431:THR:HG23	2.12	0.50
23:UU:64:ASN:HA	27:CE:421:MET:CE	2.42	0.50
23:UU:580:GLN:HG2	23:UU:582:TRP:NE1	2.27	0.50
23:UU:632:VAL:HG23	23:UU:643:THR:HG22	1.93	0.50
23:UU:816:HIS:NE2	23:UU:820:GLN:OE1	2.45	0.50
24:UV:146:LEU:HB2	24:UV:172:THR:HG21	1.93	0.50
24:UV:202:SER:HB2	24:UV:291:SER:HB3	1.93	0.50
24:UV:761:ARG:HD2	24:UV:899:LEU:HD23	1.93	0.50
24:UV:801:LYS:HB3	35:CN:184:ILE:HD12	1.94	0.50

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CE:86:THR:HA	27:CE:106:ASN:O	2.12	0.50
28:CG:5:ASN:OD1	28:CG:5:ASN:C	2.50	0.50
33:CL:554:TYR:CE1	34:CM:330:LYS:HD2	2.47	0.50
33:CL:929:VAL:CG1	33:CL:1006:TRP:HB3	2.42	0.50
41:JM:172:THR:HG22	41:JM:174:LEU:H	1.76	0.50
50:DJ:79:ARG:O	50:DJ:83:VAL:HG23	2.12	0.50
52:DN:35:GLU:HA	52:DN:38:VAL:HG22	1.94	0.50
53:DO:71:CYS:SG	53:DO:76:ILE:HB	2.52	0.50
56:DT:65:ILE:O	56:DT:68:ARG:C	2.50	0.50
72:EI:176:LEU:HA	72:EI:182:ALA:HA	1.94	0.50
75:EN:123:VAL:HA	75:EN:315:HIS:HA	1.93	0.50
3:UA:9:ASN:OD1	3:UA:10:LEU:N	2.45	0.49
3:UA:48:PHE:CZ	3:UA:87:ARG:HG2	2.47	0.49
1:CB:301:LEU:CD1	1:CB:319:ARG:HG3	2.42	0.49
4:UB:52:ARG:NH1	32:CK:370:ARG:HH22	2.09	0.49
6:UD:532:ASN:O	6:UD:533:HIS:ND1	2.44	0.49
9:UG:546:ILE:HG21	24:UV:809:LYS:HD3	1.94	0.49
15:UM:558:LYS:NZ	15:UM:570:THR:OG1	2.45	0.49
16:UN:875:HIS:O	16:UN:879:ILE:HG12	2.11	0.49
17:UO:259:ASP:O	17:UO:272:LEU:HD12	2.13	0.49
22:UT:12:LYS:HZ3	62:D3:60:U:H5''	1.76	0.49
22:UT:637:ASP:OD1	22:UT:641:ARG:HD2	2.11	0.49
22:UT:950:ILE:HD11	22:UT:1003:ILE:HD11	1.93	0.49
22:UT:955:ASN:HB3	49:DI:111:GLN:HE22	1.77	0.49
31:CJ:182:GLN:HB3	62:D3:1159:C:H42	1.77	0.49
33:CL:107:VAL:HG12	33:CL:354:ILE:HG22	1.93	0.49
33:CL:769:TYR:HB3	33:CL:777:ARG:NH1	2.27	0.49
36:JD:409:VAL:HA	36:JD:555:LEU:O	2.12	0.49
37:JF:249:TRP:HE3	37:JF:251:ILE:HD11	1.77	0.49
37:JG:227:LEU:HD21	37:JG:240:LYS:HB3	1.93	0.49
42:JP:75:LYS:HE3	42:JP:358:MET:HE3	1.93	0.49
42:JP:326:ASP:OD1	42:JP:327:LYS:N	2.45	0.49
48:DH:31:SER:HB2	48:DH:34:LEU:HB2	1.94	0.49
53:DO:118:VAL:O	53:DO:118:VAL:HG13	2.12	0.49
55:DS:39:GLY:N	62:D3:1566:U:H5''	2.27	0.49
55:DS:101:LEU:HA	55:DS:104:ASN:ND2	2.28	0.49
56:DT:70:GLN:HA	56:DT:122:ARG:O	2.11	0.49
62:D3:1041:G:N2	62:D3:1078:C:O2	2.45	0.49
62:D3:1087:A:H2'	62:D3:1088:A:C8	2.46	0.49
6:UD:81:PRO:HA	6:UD:85:TRP:HA	1.93	0.49
12:UJ:747:GLN:HA	12:UJ:750:ASN:ND2	2.27	0.49

*Continued on next page...*



Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:1586:LEU:HB2	12:UJ:1590:ILE:HD11	1.93	0.49
14:UL:284:PHE:HA	14:UL:329:PHE:H	1.77	0.49
14:UL:453:GLU:OE1	14:UL:469:GLU:HA	2.12	0.49
14:UL:484:ASP:OD1	14:UL:485:GLY:N	2.46	0.49
14:UL:659:GLU:OE1	14:UL:659:GLU:N	2.43	0.49
15:UM:531:ASN:HD21	15:UM:560:TRP:HH2	1.59	0.49
19:UQ:140:LYS:O	19:UQ:155:THR:OG1	2.20	0.49
20:UR:142:LYS:O	20:UR:145:LYS:HG2	2.12	0.49
22:UT:1299:GLU:OE1	22:UT:1299:GLU:N	2.46	0.49
22:UT:1663:ILE:HD11	22:UT:1701:MET:HA	1.93	0.49
22:UT:1916:ARG:O	22:UT:1919:ILE:HG12	2.11	0.49
24:UV:870:ALA:HB2	35:CN:103:LEU:HD21	1.94	0.49
24:UV:1154:ASN:O	24:UV:1158:LYS:HB2	2.13	0.49
25:UX:4:ALA:N	30:CI:108:ARG:HE	2.09	0.49
26:CD:277:ARG:NH1	27:CE:264:GLU:HB3	2.26	0.49
27:CE:87:LEU:HB3	27:CE:107:VAL:HG12	1.93	0.49
29:CH:252:VAL:HG11	29:CH:295:LEU:HD22	1.94	0.49
31:CJ:172:MET:O	31:CJ:175:ASP:HB3	2.11	0.49
31:CJ:262:ARG:HG2	31:CJ:273:VAL:HG12	1.94	0.49
32:CK:428:GLU:O	32:CK:432:LYS:HG2	2.12	0.49
33:CL:866:ARG:NH2	58:DX:69:ARG:HH22	2.10	0.49
33:CL:929:VAL:HG13	33:CL:1006:TRP:HB3	1.94	0.49
36:JD:763:VAL:HG13	36:JD:764:ALA:H	1.76	0.49
36:JD:795:SER:OG	36:JD:797:GLU:OE1	2.29	0.49
36:JD:863:ILE:HG13	36:JD:876:LEU:HD11	1.94	0.49
36:JD:898:ASP:O	36:JD:902:MET:HG2	2.12	0.49
36:JD:1035:MET:HA	36:JD:1038:ILE:HD12	1.94	0.49
36:JD:1179:ALA:HA	36:JD:1188:LEU:HD11	1.94	0.49
41:JM:191:TYR:HA	41:JM:194:ILE:HG12	1.93	0.49
42:JP:51:GLU:HG2	42:JP:380:TRP:NE1	2.27	0.49
47:DG:77:LEU:HD12	47:DG:95:LYS:HB2	1.94	0.49
62:D3:21:U:N3	62:D3:603:U:O4	2.36	0.49
62:D3:978:A:H2'	62:D3:979:A:O4'	2.13	0.49
62:D3:1176:G:C6	62:D3:1177:C:C4	3.00	0.49
62:D3:1526:A:H2'	62:D3:1527:C:H5'	1.94	0.49
63:D4:38:U:H4'	63:D4:39:C:OP1	2.11	0.49
3:UA:210:SER:HB3	3:UA:214:ALA:H	1.78	0.49
4:UB:604:VAL:HG21	4:UB:633:VAL:HG21	1.94	0.49
6:UD:112:LEU:HD22	6:UD:524:LYS:HE2	1.94	0.49
6:UD:481:ILE:HG12	6:UD:536:VAL:HG21	1.93	0.49
7:UE:486:GLU:OE1	17:UO:18:GLN:NE2	2.44	0.49

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:UH:561:LEU:HB3	10:UH:566:LEU:HD11	1.95	0.49
12:UJ:1656:SER:HA	12:UJ:1703:GLU:CD	2.33	0.49
15:UM:719:ILE:HG23	15:UM:758:ARG:HH21	1.77	0.49
19:UQ:629:LYS:HG3	19:UQ:631:GLN:HE21	1.77	0.49
22:UT:1321:PHE:O	22:UT:1324:ILE:HG22	2.12	0.49
22:UT:2155:ALA:HA	22:UT:2158:LEU:HD12	1.94	0.49
23:UU:774:ARG:NH2	53:DO:52:ARG:HH11	2.09	0.49
32:CK:409:LEU:HA	32:CK:412:ILE:HG12	1.93	0.49
40:JL:95:THR:HA	40:JL:98:VAL:HG12	1.94	0.49
40:JL:114:PHE:CE2	40:JL:137:LEU:HD11	2.48	0.49
40:JL:277:VAL:O	40:JL:281:ILE:HG12	2.12	0.49
42:JP:1:MET:O	42:JP:3:ILE:HG23	2.12	0.49
42:JP:228:ASN:HB3	42:JP:269:TRP:CD2	2.47	0.49
42:JP:290:ASP:OD1	42:JP:291:MET:N	2.45	0.49
42:JP:304:HIS:CE1	42:JP:330:ARG:HG3	2.48	0.49
49:DI:84:HIS:HD2	49:DI:87:ASN:H	1.58	0.49
51:DL:132:SER:OG	51:DL:133:LYS:N	2.45	0.49
52:DN:15:ALA:O	62:D3:959:U:H5'	2.12	0.49
62:D3:231:U:N3	62:D3:233:C:C2	2.81	0.49
62:D3:794:U:O2	62:D3:794:U:H2'	2.12	0.49
74:EK:778:ILE:HA	74:EK:789:SER:CB	2.42	0.49
75:EN:87:GLN:N	75:EN:119:VAL:O	2.38	0.49
75:EN:1050:LEU:O	75:EN:1054:MET:N	2.45	0.49
3:UA:524:ARG:HA	3:UA:585:TYR:CD2	2.46	0.49
3:UA:810:ILE:HG23	3:UA:817:PHE:CD2	2.47	0.49
1:CB:227:PRO:O	1:CB:231:ARG:HB3	2.11	0.49
4:UB:651:TRP:HA	4:UB:654:LEU:HD23	1.93	0.49
6:UD:585:ILE:HD12	6:UD:636:ILE:HD11	1.94	0.49
7:UE:437:VAL:O	7:UE:437:VAL:HG12	2.11	0.49
8:UF:190:LEU:HD11	8:UF:323:PHE:CE1	2.48	0.49
12:UJ:490:ARG:HA	12:UJ:493:LYS:HG2	1.94	0.49
12:UJ:558:VAL:HG12	12:UJ:595:THR:HG21	1.95	0.49
15:UM:678:TRP:NE1	15:UM:704:GLU:OE2	2.45	0.49
17:UO:109:ASP:OD1	17:UO:112:ASN:HB3	2.12	0.49
17:UO:195:LEU:HB3	17:UO:207:TYR:O	2.12	0.49
22:UT:515:THR:O	22:UT:518:MET:HG3	2.13	0.49
22:UT:1284:LEU:HD21	22:UT:1288:PHE:HE2	1.77	0.49
22:UT:1482:SER:OG	22:UT:1483:HIS:N	2.45	0.49
23:UU:160:THR:HG23	23:UU:162:ILE:HG22	1.93	0.49
23:UU:285:HIS:ND1	23:UU:286:VAL:N	2.61	0.49
24:UV:517:ARG:HG2	24:UV:518:PHE:CZ	2.47	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:UX:96:PRO:HG2	25:UX:125:ILE:HD13	1.93	0.49
33:CL:158:ILE:HG13	33:CL:913:ILE:HD11	1.93	0.49
35:CN:50:SER:O	35:CN:127:LYS:NZ	2.34	0.49
36:JD:787:TYR:CD2	36:JD:845:MET:HG2	2.47	0.49
37:JG:105:ASN:HA	37:JG:110:LEU:HD21	1.95	0.49
45:DE:148:ARG:NH1	47:DG:201:GLN:OE1	2.45	0.49
59:DY:12:VAL:HG22	59:DY:23:PHE:HB3	1.94	0.49
62:D3:1694:A:H2'	62:D3:1695:G:H8	1.77	0.49
68:EE:217:ILE:O	68:EE:221:LEU:N	2.45	0.49
75:EN:971:ALA:O	75:EN:975:LYS:N	2.39	0.49
2:DA:187:LYS:O	2:DA:190:PRO:HD2	2.12	0.49
3:UA:64:ASN:OD1	3:UA:65:LYS:N	2.45	0.49
4:UB:561:ILE:O	4:UB:564:VAL:HG12	2.13	0.49
6:UD:226:LEU:O	6:UD:227:HIS:ND1	2.45	0.49
7:UE:462:GLU:HG3	7:UE:504:TRP:HE1	1.78	0.49
9:UG:126:LEU:HB2	9:UG:159:TYR:CZ	2.47	0.49
9:UG:139:TRP:CE3	9:UG:140:ARG:HG3	2.48	0.49
14:UL:145:ILE:HD11	14:UL:166:ILE:HG21	1.94	0.49
15:UM:194:ARG:HD3	15:UM:216:ARG:HE	1.78	0.49
17:UO:144:SER:OG	17:UO:145:ASP:N	2.46	0.49
17:UO:463:VAL:HA	17:UO:466:VAL:HG12	1.95	0.49
19:UQ:404:SER:HB3	19:UQ:411:SER:HB2	1.94	0.49
22:UT:2232:TRP:CD1	22:UT:2235:ILE:HD12	2.47	0.49
27:CE:109:SER:O	27:CE:111:ALA:N	2.45	0.49
27:CE:192:PHE:CE2	27:CE:195:LEU:HB2	2.48	0.49
29:CH:181:ASN:O	29:CH:184:ARG:HG3	2.13	0.49
31:CJ:265:THR:HG23	31:CJ:267:GLU:HG2	1.94	0.49
32:CK:481:PRO:HG3	32:CK:484:MET:HE3	1.95	0.49
32:CK:538:LYS:HZ3	62:D3:1628:U:H5'	1.78	0.49
36:JD:1090:ASP:O	36:JD:1092:VAL:N	2.45	0.49
36:JD:1176:THR:HG23	36:JD:1177:PRO:HD3	1.94	0.49
42:JP:203:LEU:HB3	42:JP:213:SER:HB3	1.94	0.49
53:DO:61:MET:HG2	53:DO:104:ALA:HB2	1.92	0.49
58:DX:26:GLU:CD	58:DX:27:ASN:H	2.16	0.49
58:DX:41:SER:OG	58:DX:42:PRO:HD2	2.11	0.49
58:DX:134:ALA:HB1	58:DX:140:LYS:HG3	1.94	0.49
62:D3:327:U:H2'	62:D3:328:A:H8	1.76	0.49
62:D3:656:G:O2'	62:D3:657:U:O5'	2.31	0.49
63:D4:172:U:H2'	63:D4:173:A:H8	1.76	0.49
1:CA:165:ALA:HB1	1:CA:166:PRO:HD2	1.95	0.49
1:CA:269:ILE:O	1:CA:315:ILE:HA	2.13	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:DA:50:LYS:HD2	2:DA:52:THR:HB	1.94	0.49
2:DA:150:VAL:CG1	9:UG:512:ARG:HE	2.26	0.49
4:UB:511:SER:OG	4:UB:556:ILE:O	2.28	0.49
5:UC:557:ASP:O	5:UC:564:LYS:HB2	2.11	0.49
6:UD:400:LYS:HE2	6:UD:419:LYS:HG3	1.95	0.49
6:UD:403:THR:O	6:UD:414:TYR:HA	2.13	0.49
7:UE:318:GLN:O	7:UE:321:GLU:HG2	2.13	0.49
7:UE:529:THR:HA	7:UE:532:ARG:NE	2.28	0.49
9:UG:447:ASN:O	42:JP:37:ARG:NH1	2.46	0.49
10:UH:647:LEU:HB2	11:UI:509:GLN:OE1	2.12	0.49
17:UO:122:ALA:HB1	17:UO:150:ARG:NH1	2.27	0.49
19:UQ:60:ARG:NH2	19:UQ:382:LYS:O	2.45	0.49
19:UQ:429:ILE:HG23	19:UQ:734:VAL:HG23	1.94	0.49
20:UR:408:CYS:SG	20:UR:409:ILE:N	2.85	0.49
21:US:181:THR:HG23	21:US:222:LEU:HD12	1.94	0.49
21:US:213:LEU:HG	21:US:268:GLN:HB2	1.95	0.49
22:UT:8:THR:HG21	62:D3:81:G:H21	1.76	0.49
22:UT:288:ILE:O	22:UT:292:LEU:HG	2.13	0.49
22:UT:480:TYR:HE1	22:UT:521:THR:HG21	1.78	0.49
22:UT:1258:TRP:O	22:UT:1262:GLU:HG3	2.13	0.49
22:UT:1283:SER:O	22:UT:1287:LEU:HD23	2.12	0.49
23:UU:510:LEU:HD11	23:UU:531:PHE:CD2	2.46	0.49
24:UV:364:VAL:O	24:UV:368:LEU:HD23	2.12	0.49
24:UV:1205:LYS:HE2	24:UV:1215:ASN:OD1	2.13	0.49
25:UX:98:ILE:HG23	25:UX:102:VAL:HG12	1.94	0.49
26:CD:395:GLU:OE2	29:CH:456:ASP:N	2.46	0.49
31:CJ:245:VAL:HG21	32:CK:373:ILE:CD1	2.42	0.49
33:CL:901:ILE:HG21	33:CL:906:ASP:O	2.12	0.49
33:CL:923:ASP:CG	33:CL:924:VAL:H	2.16	0.49
35:CN:138:TRP:O	35:CN:141:LEU:HG	2.12	0.49
35:CN:259:ARG:HH22	52:DN:83:GLU:CA	2.26	0.49
36:JD:540:ALA:CB	36:JD:551:LYS:HG3	2.43	0.49
37:JF:104:ILE:HD12	37:JF:104:ILE:H	1.78	0.49
40:JL:128:ASN:HA	40:JL:154:MET:HG2	1.95	0.49
42:JP:188:HIS:HB2	42:JP:227:PHE:CZ	2.47	0.49
42:JP:196:THR:OG1	42:JP:204:TRP:NE1	2.32	0.49
44:JJ:189:ASP:OD2	53:DO:91:THR:HA	2.13	0.49
47:DG:69:LEU:O	47:DG:99:GLY:HA3	2.13	0.49
48:DH:64:VAL:CG2	48:DH:65:PRO:HD3	2.42	0.49
49:DI:64:ASN:O	49:DI:180:ASP:HA	2.12	0.49
51:DL:79:LYS:HZ3	62:D3:346:G:P	2.31	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:1060:U:H2'	62:D3:1061:A:O4'	2.12	0.49
63:D4:165:G:H2'	63:D4:166:G:C8	2.46	0.49
1:CA:83:GLY:HA2	41:JM:169:ARG:HH12	1.76	0.49
3:UA:168:LEU:HD12	9:UG:236:MET:CE	2.43	0.49
3:UA:524:ARG:NH2	3:UA:528:LYS:HB2	2.28	0.49
4:UB:445:VAL:HG23	4:UB:449:LYS:HD3	1.94	0.49
4:UB:533:LYS:O	4:UB:539:ARG:NH1	2.45	0.49
6:UD:184:MET:SD	6:UD:224:ARG:HA	2.53	0.49
7:UE:554:PHE:HB2	17:UO:475:GLU:HB2	1.95	0.49
9:UG:125:LEU:HD21	9:UG:127:ILE:HG23	1.94	0.49
12:UJ:323:PHE:CE2	12:UJ:347:PHE:HZ	2.30	0.49
12:UJ:1536:VAL:HA	12:UJ:1539:MET:HG2	1.95	0.49
12:UJ:1608:PHE:HE2	12:UJ:1613:MET:HB3	1.77	0.49
12:UJ:1627:THR:HG22	12:UJ:1669:ALA:HA	1.95	0.49
13:UK:33:ASP:OD2	33:CL:1059:ARG:NH1	2.46	0.49
13:UK:98:LEU:HD22	13:UK:214:VAL:HG11	1.94	0.49
14:UL:87:ALA:HB2	14:UL:94:LEU:HD13	1.95	0.49
15:UM:518:TRP:HB2	15:UM:524:GLU:O	2.11	0.49
15:UM:559:ILE:HG22	15:UM:568:MET:SD	2.52	0.49
17:UO:96:LEU:HD23	17:UO:108:TYR:O	2.13	0.49
20:UR:368:THR:O	20:UR:370:SER:N	2.41	0.49
23:UU:156:LYS:NZ	23:UU:158:THR:OG1	2.44	0.49
23:UU:565:LEU:HD22	23:UU:586:ASN:O	2.11	0.49
24:UV:983:GLU:OE1	24:UV:983:GLU:N	2.45	0.49
28:CF:5:ASN:OD1	28:CF:5:ASN:C	2.50	0.49
29:CH:164:GLN:HG3	29:CH:185:LEU:HD11	1.94	0.49
31:CJ:139:LEU:HB2	31:CJ:157:PHE:CZ	2.47	0.49
32:CK:529:ARG:NH1	62:D3:1754:A:N7	2.54	0.49
35:CN:150:LYS:HD2	35:CN:151:HIS:HB2	1.93	0.49
36:JD:439:PRO:HB2	36:JD:442:PRO:HD2	1.95	0.49
36:JD:739:PRO:HB3	36:JD:742:GLU:OE2	2.13	0.49
36:JD:1134:TYR:CG	36:JD:1164:LYS:HD3	2.47	0.49
37:JG:129:ARG:HH21	37:JG:129:ARG:HA	1.78	0.49
40:JL:68:GLY:O	40:JL:71:THR:OG1	2.25	0.49
49:DI:11:ARG:NH1	62:D3:318:U:O3'	2.46	0.49
62:D3:287:G:O2'	62:D3:288:A:OP2	2.30	0.49
62:D3:1174:C:O2'	62:D3:1601:G:O2'	2.24	0.49
3:UA:47:SER:OG	3:UA:48:PHE:N	2.46	0.49
3:UA:731:ARG:HA	3:UA:731:ARG:NE	2.28	0.49
4:UB:548:ARG:HE	4:UB:642:SER:HB3	1.77	0.49
6:UD:279:HIS:NE2	6:UD:299:GLY:HA3	2.28	0.49

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:UE:101:THR:HG22	7:UE:129:PHE:HZ	1.77	0.49
7:UE:154:VAL:HG21	7:UE:162:GLN:HG2	1.94	0.49
8:UF:46:ARG:NH1	63:D4:39:C:H1'	2.27	0.49
11:UI:452:LEU:HB3	11:UI:453:PRO:HD3	1.94	0.49
15:UM:418:ASN:HD22	15:UM:423:LYS:HD2	1.78	0.49
21:US:255:SER:HA	21:US:258:GLU:HG2	1.95	0.49
22:UT:289:GLU:HG2	22:UT:290:SER:N	2.27	0.49
22:UT:362:PHE:HB2	22:UT:396:PHE:CE1	2.47	0.49
22:UT:898:LYS:HD2	62:D3:259:U:OP2	2.13	0.49
22:UT:2440:ARG:O	22:UT:2443:GLU:HG3	2.13	0.49
23:UU:124:PHE:HB2	27:CE:429:ALA:HB1	1.95	0.49
23:UU:817:PHE:HE1	23:UU:833:LEU:HD11	1.77	0.49
24:UV:566:ILE:HD11	24:UV:686:LEU:HD22	1.94	0.49
26:CD:203:PHE:CE2	26:CD:206:LEU:HB2	2.48	0.49
27:CE:91:GLU:HB2	27:CE:94:LEU:HB3	1.94	0.49
28:CF:7:LYS:HD2	28:CF:65:LEU:HD11	1.95	0.49
28:CG:85:VAL:HG23	29:CH:552:TRP:HB3	1.94	0.49
32:CK:516:SER:HB2	32:CK:519:GLU:CG	2.38	0.49
32:CK:529:ARG:NH1	62:D3:1754:A:C8	2.80	0.49
33:CL:53:LYS:HB2	62:D3:433:C:C5	2.48	0.49
33:CL:826:LYS:HE2	33:CL:921:GLU:HG3	1.95	0.49
33:CL:948:ILE:HB	33:CL:987:TYR:CZ	2.47	0.49
33:CL:1126:LYS:HZ3	62:D3:487:G:P	2.35	0.49
35:CN:105:SER:OG	35:CN:105:SER:O	2.27	0.49
36:JD:25:ARG:HG3	36:JD:26:ILE:N	2.27	0.49
36:JD:1134:TYR:CD2	36:JD:1164:LYS:HD3	2.47	0.49
37:JF:121:LEU:HB3	37:JF:163:ILE:HG13	1.94	0.49
41:JM:155:ASP:HB3	41:JM:158:GLU:OE1	2.12	0.49
42:JP:330:ARG:HD2	42:JP:339:SER:OG	2.12	0.49
57:DW:12:ASN:HD21	62:D3:1036:A:H2	1.61	0.49
62:D3:21:U:H2'	62:D3:22:A:C8	2.42	0.49
1:CB:285:VAL:HA	1:CB:288:ARG:NH1	2.28	0.49
6:UD:97:ARG:HE	18:UP:193:LYS:HD2	1.77	0.49
6:UD:538:GLN:HE22	6:UD:577:THR:HG22	1.77	0.49
10:UH:634:LEU:O	10:UH:638:LEU:HG	2.13	0.49
12:UJ:362:LYS:CG	12:UJ:365:ILE:HD13	2.43	0.49
12:UJ:1692:VAL:HA	12:UJ:1695:MET:HG2	1.95	0.49
13:UK:64:TYR:HE2	33:CL:1080:LYS:HB2	1.77	0.49
14:UL:544:ARG:NH2	14:UL:545:TYR:OH	2.45	0.49
17:UO:6:PRO:HD2	19:UQ:480:SER:HA	1.95	0.49
17:UO:192:LEU:HA	17:UO:210:ASN:HA	1.94	0.49

*Continued on next page...*



Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:UR:183:ASP:OD1	23:UU:281:ARG:NH2	2.40	0.49
20:UR:522:GLN:NE2	20:UR:568:VAL:O	2.37	0.49
21:US:303:TYR:CE2	21:US:340:LYS:HG2	2.48	0.49
22:UT:590:MET:CE	22:UT:703:PHE:HZ	2.26	0.49
22:UT:1232:LEU:O	22:UT:1235:LEU:HB3	2.12	0.49
22:UT:1424:MET:O	22:UT:1428:THR:HB	2.13	0.49
33:CL:132:ALA:HB2	33:CL:155:PHE:CE1	2.48	0.49
36:JD:1115:ILE:H	36:JD:1115:ILE:HD12	1.77	0.49
37:JF:192:TYR:OH	37:JF:223:GLU:OE2	2.25	0.49
40:JL:200:PRO:HG3	62:D3:1782:A:N3	2.28	0.49
46:DF:185:ARG:NH2	62:D3:1573:A:OP2	2.46	0.49
47:DG:64:LYS:HD2	47:DG:83:CYS:SG	2.53	0.49
49:DI:196:LEU:O	49:DI:200:LYS:HG2	2.13	0.49
59:DY:3:ASP:OD1	59:DY:3:ASP:N	2.44	0.49
62:D3:371:G:O5'	62:D3:371:G:H8	1.95	0.49
62:D3:853:G:C6	62:D3:854:U:C4	3.01	0.49
75:EN:352:ASN:O	75:EN:356:ALA:N	2.44	0.49
1:CA:263:ASP:OD1	1:CA:322:ARG:HB3	2.12	0.49
3:UA:259:ASN:OD1	3:UA:260:GLN:N	2.45	0.49
9:UG:376:ASN:HB3	9:UG:394:HIS:HB2	1.94	0.49
10:UH:552:LYS:HA	10:UH:555:ILE:HG12	1.95	0.49
12:UJ:1461:TRP:HE1	12:UJ:1506:SER:HB2	1.78	0.49
13:UK:43:ARG:O	13:UK:46:SER:OG	2.23	0.49
14:UL:390:GLN:HG2	14:UL:394:VAL:HG22	1.95	0.49
14:UL:447:LEU:O	14:UL:454:LEU:HD12	2.13	0.49
14:UL:582:SER:OG	14:UL:583:PHE:N	2.44	0.49
15:UM:174:VAL:CG1	15:UM:184:HIS:HB2	2.43	0.49
15:UM:279:LYS:HG3	15:UM:327:ILE:HG13	1.95	0.49
15:UM:465:LYS:NZ	15:UM:520:LEU:O	2.31	0.49
15:UM:699:LYS:HB2	15:UM:755:ILE:HD11	1.95	0.49
15:UM:719:ILE:HD11	15:UM:765:MET:SD	2.53	0.49
17:UO:142:THR:HG21	17:UO:152:TRP:CH2	2.48	0.49
19:UQ:319:LYS:HD2	19:UQ:339:GLY:H	1.77	0.49
21:US:489:LYS:HD2	21:US:490:LYS:HB3	1.95	0.49
22:UT:238:GLU:HA	22:UT:241:THR:HG22	1.95	0.49
22:UT:499:PRO:C	22:UT:503:ARG:HE	2.15	0.49
22:UT:673:ARG:HH11	22:UT:777:GLN:HE21	1.61	0.49
22:UT:1098:ASN:ND2	22:UT:1106:LEU:HB2	2.28	0.49
22:UT:1132:ALA:O	22:UT:1136:THR:HG23	2.13	0.49
22:UT:1430:TYR:N	22:UT:1435:GLU:OE1	2.45	0.49
23:UU:292:ARG:HG2	23:UU:316:ASP:OD2	2.13	0.49

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:341:THR:O	24:UV:341:THR:HG22	2.13	0.49
25:UX:61:PRO:HB3	25:UX:92:ALA:HB1	1.94	0.49
26:CD:110:LYS:CE	42:JP:157:ASN:HD21	2.26	0.49
30:CI:64:LEU:HD13	30:CI:65:PRO:HD2	1.95	0.49
36:JD:120:TYR:HB3	40:JL:308:TYR:CE1	2.47	0.49
42:JP:149:SER:O	42:JP:150:ILE:HD13	2.13	0.49
50:DJ:151:ASP:OD1	50:DJ:152:SER:N	2.46	0.49
52:DN:141:TYR:CE1	52:DN:146:ALA:HB2	2.48	0.49
56:DT:92:LYS:CD	56:DT:93:HIS:H	2.25	0.49
61:D2:8:A:C2	61:D2:9:G:H1'	2.48	0.49
62:D3:827:C:H2'	62:D3:828:U:H6	1.77	0.49
63:D4:178:U:H1'	63:D4:188:A:N6	2.28	0.49
63:D4:199:G:C6	63:D4:200:C:C4	3.01	0.49
63:D4:265:C:N4	63:D4:307:G:O6	2.46	0.49
65:EB:286:ASP:O	65:EB:290:ARG:N	2.43	0.49
1:CB:208:ILE:HD11	1:CB:221:ILE:HD11	1.95	0.48
4:UB:620:SER:O	4:UB:624:THR:HB	2.13	0.48
6:UD:264:PHE:HB2	6:UD:274:GLN:HB2	1.95	0.48
6:UD:307:PHE:CD1	6:UD:322:ASN:HA	2.47	0.48
8:UF:320:ILE:HD12	8:UF:335:ILE:HG23	1.94	0.48
12:UJ:713:PHE:O	12:UJ:716:PHE:HB3	2.13	0.48
15:UM:128:VAL:HG13	15:UM:137:THR:OG1	2.13	0.48
15:UM:281:THR:O	15:UM:326:THR:OG1	2.24	0.48
15:UM:416:ARG:HB2	15:UM:427:TYR:HE1	1.77	0.48
15:UM:560:TRP:CZ3	15:UM:567:VAL:HG13	2.48	0.48
17:UO:300:GLY:HA3	17:UO:322:LEU:HD13	1.95	0.48
22:UT:2390:TYR:HD1	22:UT:2413:CYS:SG	2.36	0.48
24:UV:730:LEU:HD22	24:UV:768:PRO:HG3	1.94	0.48
25:UX:155:THR:OG1	25:UX:156:ASN:N	2.45	0.48
29:CH:69:GLN:NE2	29:CH:73:ASN:OD1	2.47	0.48
31:CJ:189:LEU:HD23	31:CJ:191:PHE:CE2	2.46	0.48
33:CL:222:ASN:O	33:CL:225:ARG:HG2	2.13	0.48
33:CL:254:HIS:NE2	33:CL:256:GLU:HB3	2.28	0.48
33:CL:625:TRP:HZ3	34:CM:281:GLU:HA	1.78	0.48
33:CL:769:TYR:HB3	33:CL:777:ARG:CZ	2.43	0.48
33:CL:862:THR:HB	33:CL:872:LEU:HD11	1.94	0.48
33:CL:1119:ILE:HD13	41:JM:194:ILE:HD13	1.95	0.48
35:CN:167:THR:HG22	35:CN:171:PHE:CZ	2.48	0.48
36:JD:417:GLY:O	36:JD:815:ARG:NH2	2.46	0.48
36:JD:1018:LYS:O	36:JD:1021:LYS:N	2.37	0.48
42:JP:287:TYR:HD1	42:JP:300:VAL:HG12	1.75	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
44:JJ:131:ASN:ND2	44:JJ:138:GLU:OE2	2.46	0.48
47:DG:131:LYS:HE2	62:D3:166:C:OP1	2.13	0.48
48:DH:64:VAL:HG23	48:DH:65:PRO:HD3	1.95	0.48
50:DJ:87:SER:OG	50:DJ:90:LYS:HG3	2.13	0.48
54:DQ:10:PHE:CE1	54:DQ:19:VAL:HG22	2.48	0.48
75:EN:92:GLU:HA	75:EN:114:ARG:HA	1.95	0.48
1:CA:244:VAL:HG23	1:CA:249:GLN:HG3	1.94	0.48
1:CA:319:ARG:HG3	1:CA:319:ARG:HH11	1.78	0.48
1:CB:165:ALA:HB3	1:CB:168:LYS:HG3	1.94	0.48
1:CB:168:LYS:O	1:CB:192:GLY:HA3	2.13	0.48
4:UB:443:LYS:HB3	4:UB:447:SER:OG	2.12	0.48
7:UE:443:GLN:HE21	17:UO:252:ASN:ND2	2.05	0.48
8:UF:128:LYS:O	8:UF:132:ILE:HG12	2.13	0.48
8:UF:183:TYR:CE2	8:UF:187:LYS:HD2	2.49	0.48
8:UF:358:LEU:O	8:UF:362:THR:HG23	2.12	0.48
9:UG:190:HIS:HE2	9:UG:217:HIS:HB2	1.77	0.48
12:UJ:1452:GLU:OE1	12:UJ:1452:GLU:N	2.43	0.48
15:UM:576:ASN:HD21	15:UM:596:ASP:N	2.11	0.48
15:UM:616:HIS:CE1	15:UM:640:VAL:HG13	2.48	0.48
19:UQ:254:TYR:HD1	19:UQ:257:ARG:HE	1.61	0.48
19:UQ:740:LYS:HE2	19:UQ:742:ARG:HH22	1.78	0.48
20:UR:165:ARG:NH2	23:UU:236:ARG:HH12	2.11	0.48
22:UT:99:ASP:O	22:UT:103:LEU:HG	2.13	0.48
22:UT:339:LEU:O	22:UT:343:ILE:HG12	2.13	0.48
22:UT:2340:ILE:O	22:UT:2343:ILE:HG22	2.12	0.48
22:UT:2423:VAL:O	22:UT:2427:THR:HG23	2.13	0.48
24:UV:525:LEU:HB2	24:UV:617:LEU:HB2	1.95	0.48
24:UV:586:VAL:O	24:UV:611:ASP:N	2.28	0.48
24:UV:936:LEU:O	24:UV:939:ILE:HG22	2.13	0.48
24:UV:1228:ASN:ND2	35:CN:162:THR:HB	2.29	0.48
27:CE:407:ARG:NH1	27:CE:407:ARG:HA	2.28	0.48
28:CF:9:PHE:C	28:CF:9:PHE:HD2	2.16	0.48
29:CH:551:ARG:C	29:CH:553:ILE:H	2.15	0.48
31:CJ:96:PRO:HB3	31:CJ:100:LEU:HD23	1.95	0.48
33:CL:847:LEU:HA	33:CL:898:GLY:HA2	1.94	0.48
37:JF:233:SER:HB3	37:JF:236:VAL:HG12	1.95	0.48
46:DF:111:VAL:O	46:DF:114:ILE:HG22	2.13	0.48
47:DG:20:ASP:O	47:DG:24:ILE:HG12	2.13	0.48
61:D2:13:U:H1'	61:D2:70:A:N7	2.28	0.48
62:D3:388:G:OP2	62:D3:423:G:O2'	2.31	0.48
62:D3:647:G:H22	62:D3:687:G:N2	2.11	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
75:EN:622:GLU:O	75:EN:626:ALA:N	2.40	0.48
1:CA:144:TRP:HE1	1:CA:183:HIS:HB3	1.78	0.48
1:CB:91:HIS:CE1	1:CB:92:ARG:HG2	2.48	0.48
6:UD:84:ASN:HA	6:UD:85:TRP:HE3	1.78	0.48
6:UD:288:THR:OG1	6:UD:289:ASP:N	2.45	0.48
6:UD:633:CYS:SG	6:UD:648:PHE:HB3	2.54	0.48
11:UI:437:ILE:HG12	11:UI:452:LEU:HD11	1.96	0.48
12:UJ:115:LEU:HD12	12:UJ:115:LEU:HA	1.62	0.48
12:UJ:1642:SER:O	12:UJ:1645:GLU:HG3	2.13	0.48
14:UL:213:LYS:HB2	14:UL:261:PHE:CE2	2.48	0.48
14:UL:854:CYS:SG	14:UL:887:LEU:HD11	2.53	0.48
15:UM:84:LEU:HD11	15:UM:86:LYS:HE2	1.95	0.48
16:UN:815:VAL:HG23	16:UN:816:VAL:HG22	1.96	0.48
17:UO:434:ARG:NH2	17:UO:466:VAL:HG23	2.28	0.48
19:UQ:690:ASN:ND2	19:UQ:749:ASP:O	2.44	0.48
21:US:467:ALA:O	21:US:470:MET:HB2	2.13	0.48
22:UT:1312:SER:HA	22:UT:1315:ARG:HE	1.78	0.48
22:UT:1655:ARG:NE	22:UT:1693:THR:HG22	2.27	0.48
22:UT:2205:LEU:O	22:UT:2208:SER:OG	2.23	0.48
23:UU:503:ARG:HB2	23:UU:523:ASP:HB3	1.96	0.48
24:UV:426:ILE:HG22	24:UV:496:LEU:CD2	2.43	0.48
24:UV:1178:ASP:N	24:UV:1178:ASP:OD1	2.44	0.48
25:UX:97:LEU:HB3	25:UX:128:LEU:HD22	1.95	0.48
29:CH:304:ILE:CD1	29:CH:338:THR:HG21	2.43	0.48
31:CJ:86:PRO:HA	31:CJ:137:THR:OG1	2.13	0.48
36:JD:95:LYS:O	36:JD:99:LYS:HG2	2.13	0.48
36:JD:874:VAL:HG12	36:JD:878:LYS:HZ3	1.78	0.48
36:JD:1149:PRO:CG	36:JD:1172:ASP:HB2	2.43	0.48
45:DE:11:ARG:NH1	45:DE:20:LEU:HB3	2.28	0.48
45:DE:183:VAL:HG12	45:DE:191:ARG:O	2.13	0.48
46:DF:108:LEU:O	46:DF:112:ARG:HG2	2.13	0.48
55:DS:41:ARG:HH21	62:D3:1565:C:P	2.36	0.48
62:D3:1592:A:C2	62:D3:1605:G:C2	3.01	0.48
69:EF:9:SER:O	69:EF:13:ASP:N	2.45	0.48
1:CA:195:TYR:HD1	1:CA:218:ILE:HD11	1.79	0.48
3:UA:282:GLY:HA3	3:UA:301:GLY:O	2.13	0.48
3:UA:793:GLU:OE1	23:UU:721:LEU:HB2	2.13	0.48
1:CB:116:SER:H	1:CB:122:ARG:HH21	1.62	0.48
1:CB:197:VAL:HG22	1:CB:220:ILE:HB	1.94	0.48
4:UB:696:GLU:HG2	4:UB:697:HIS:N	2.28	0.48
4:UB:781:MET:SD	58:DX:61:SER:OG	2.70	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:UD:574:HIS:NE2	6:UD:638:SER:OG	2.41	0.48
7:UE:251:GLY:O	7:UE:288:LYS:NZ	2.39	0.48
8:UF:3:LYS:HG2	8:UF:7:TYR:CE2	2.48	0.48
10:UH:670:GLU:O	10:UH:674:GLU:HG2	2.13	0.48
12:UJ:87:THR:HG22	12:UJ:90:GLU:OE1	2.13	0.48
12:UJ:771:ILE:O	12:UJ:775:ILE:HG23	2.12	0.48
12:UJ:1664:LYS:HA	12:UJ:1667:VAL:HG12	1.94	0.48
14:UL:163:LYS:O	62:D3:1752:U:H5'	2.14	0.48
14:UL:568:SER:HB3	14:UL:570:TYR:CE1	2.48	0.48
14:UL:619:MET:H	14:UL:634:SER:HA	1.79	0.48
15:UM:32:LEU:HD12	15:UM:33:ALA:N	2.28	0.48
19:UQ:138:ASP:OD1	19:UQ:138:ASP:N	2.41	0.48
19:UQ:279:VAL:HG21	61:D2:82:A:H62	1.77	0.48
20:UR:144:LYS:O	20:UR:147:ARG:HG3	2.13	0.48
22:UT:1238:ASN:OD1	22:UT:1239:ASP:N	2.45	0.48
22:UT:1472:HIS:CG	22:UT:1473:ALA:N	2.82	0.48
22:UT:2438:LEU:O	22:UT:2441:ARG:HB2	2.14	0.48
23:UU:717:ASP:OD1	23:UU:718:LYS:N	2.45	0.48
24:UV:391:PHE:O	24:UV:394:THR:OG1	2.24	0.48
24:UV:872:ASN:OD1	24:UV:873:GLU:N	2.46	0.48
26:CD:26:ASP:OD1	26:CD:123:LEU:HD11	2.13	0.48
30:CI:93:LYS:HB3	30:CI:96:ASP:CG	2.34	0.48
36:JD:1212:TYR:CE1	36:JD:1235:ALA:HB2	2.49	0.48
37:JF:76:LEU:O	37:JF:80:MET:HG3	2.13	0.48
45:DE:88:ASP:O	45:DE:100:ARG:HA	2.13	0.48
46:DF:112:ARG:NH1	62:D3:1529:C:OP2	2.47	0.48
46:DF:216:GLU:OE2	46:DF:219:ARG:NH1	2.39	0.48
51:DL:76:VAL:HG21	51:DL:87:ARG:HB2	1.96	0.48
62:D3:388:G:OP1	62:D3:402:C:H5	1.96	0.48
62:D3:1683:C:O2'	62:D3:1684:U:O5'	2.29	0.48
65:EB:207:GLU:O	65:EB:211:LYS:N	2.39	0.48
72:EI:348:ILE:O	72:EI:352:GLU:N	2.46	0.48
1:CA:253:ILE:HG21	1:CA:269:ILE:HD11	1.95	0.48
2:DA:143:THR:O	2:DA:154:SER:OG	2.31	0.48
6:UD:213:TRP:CD1	6:UD:225:LEU:HB3	2.48	0.48
6:UD:242:TRP:HH2	18:UP:202:LYS:HE2	1.78	0.48
7:UE:22:VAL:HG13	20:UR:278:ASP:CG	2.33	0.48
9:UG:213:TRP:HE1	9:UG:227:GLU:CG	2.26	0.48
11:UI:464:SER:HA	11:UI:467:LEU:HD12	1.96	0.48
12:UJ:560:ILE:O	12:UJ:564:VAL:HG13	2.13	0.48
12:UJ:576:ILE:HG12	12:UJ:579:ARG:HH21	1.78	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:1590:ILE:O	12:UJ:1593:TYR:HB2	2.13	0.48
14:UL:672:VAL:O	14:UL:684:TRP:HD1	1.95	0.48
17:UO:372:HIS:N	20:UR:287:SER:OG	2.42	0.48
17:UO:431:LEU:O	17:UO:434:ARG:NH1	2.46	0.48
19:UQ:258:TYR:CE1	19:UQ:414:ILE:HG12	2.48	0.48
19:UQ:450:TYR:CD2	19:UQ:500:PHE:HZ	2.32	0.48
21:US:156:TRP:HH2	21:US:219:TRP:HB2	1.79	0.48
22:UT:470:ILE:HD12	22:UT:504:ILE:HD13	1.94	0.48
22:UT:673:ARG:HA	22:UT:678:TRP:HZ2	1.78	0.48
22:UT:1208:MET:HE3	22:UT:1210:PHE:H	1.79	0.48
22:UT:1268:ILE:HA	22:UT:1271:LEU:HD12	1.95	0.48
22:UT:2080:MET:HE3	22:UT:2125:LEU:HD12	1.95	0.48
22:UT:2301:LEU:HA	22:UT:2304:ILE:HG22	1.95	0.48
22:UT:2428:LYS:O	22:UT:2431:THR:OG1	2.26	0.48
24:UV:238:HIS:O	24:UV:241:ILE:HG12	2.13	0.48
24:UV:378:ASN:O	24:UV:387:GLY:N	2.46	0.48
29:CH:162:CYS:SG	29:CH:540:LEU:HD12	2.53	0.48
33:CL:625:TRP:HH2	34:CM:284:SER:HB3	1.78	0.48
33:CL:1018:VAL:HG12	33:CL:1029:TRP:CH2	2.48	0.48
37:JF:243:HIS:HD2	37:JG:243:HIS:HD2	1.60	0.48
41:JM:190:LYS:HA	41:JM:193:GLU:OE2	2.13	0.48
53:DO:40:ALA:HB2	53:DO:70:LYS:HG2	1.96	0.48
62:D3:514:G:O2'	62:D3:515:A:H5''	2.12	0.48
62:D3:926:A:OP1	62:D3:1016:C:O2'	2.24	0.48
70:EG:193:ALA:HA	70:EG:202:SER:HA	1.94	0.48
75:EN:1022:GLY:O	75:EN:1026:ARG:N	2.42	0.48
1:CA:228:GLN:NE2	1:CA:259:MET:SD	2.87	0.48
4:UB:438:ASN:ND2	4:UB:494:SER:HB3	2.28	0.48
4:UB:504:ILE:HG23	4:UB:508:PHE:CD2	2.48	0.48
6:UD:249:ARG:NH1	6:UD:249:ARG:O	2.46	0.48
7:UE:161:ALA:HA	7:UE:175:ILE:HG12	1.93	0.48
8:UF:46:ARG:HE	61:D2:480:C:H1'	1.78	0.48
8:UF:331:ARG:O	8:UF:335:ILE:HG12	2.14	0.48
10:UH:563:LEU:HD21	10:UH:590:PHE:CG	2.48	0.48
11:UI:437:ILE:HG23	11:UI:452:LEU:HG	1.95	0.48
12:UJ:769:LEU:HA	12:UJ:772:VAL:HG12	1.96	0.48
12:UJ:800:ASP:OD1	12:UJ:800:ASP:N	2.46	0.48
14:UL:52:TRP:CE3	14:UL:59:LEU:HD13	2.45	0.48
14:UL:260:GLU:HB3	14:UL:273:TYR:CE2	2.49	0.48
15:UM:800:VAL:O	15:UM:803:SER:OG	2.18	0.48
16:UN:288:TYR:HA	42:JP:255:THR:HG23	1.95	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:UO:508:LEU:HD12	17:UO:509:GLN:HG3	1.95	0.48
19:UQ:412:ASN:HD22	19:UQ:417:LEU:HD12	1.79	0.48
22:UT:502:GLU:OE2	22:UT:503:ARG:HD3	2.12	0.48
22:UT:1702:HIS:HA	22:UT:1705:LEU:HD12	1.96	0.48
22:UT:1987:LEU:HB3	22:UT:1988:PRO:HD3	1.94	0.48
23:UU:414:ILE:HG12	23:UU:434:HIS:CE1	2.48	0.48
23:UU:510:LEU:HD23	23:UU:511:ASP:O	2.13	0.48
26:CD:209:LEU:HD13	26:CD:250:ARG:HG3	1.96	0.48
27:CE:17:ALA:HA	27:CE:42:PHE:CE1	2.48	0.48
35:CN:16:VAL:HG13	35:CN:144:TYR:CD2	2.49	0.48
36:JD:385:GLN:HA	36:JD:388:ARG:HD3	1.95	0.48
36:JD:1023:ILE:O	36:JD:1026:LYS:HG3	2.14	0.48
36:JD:1117:TYR:HA	36:JD:1132:PHE:CE1	2.49	0.48
45:DE:36:HIS:CD2	45:DE:85:GLY:HA3	2.48	0.48
49:DI:70:GLU:HG3	49:DI:112:TRP:CH2	2.48	0.48
49:DI:84:HIS:CD2	49:DI:90:LEU:HD12	2.48	0.48
56:DT:88:VAL:HG13	62:D3:1172:G:H21	1.78	0.48
59:DY:6:THR:HG21	59:DY:8:ARG:NH2	2.28	0.48
62:D3:735:C:H2'	62:D3:736:C:O4'	2.13	0.48
62:D3:959:U:O2	62:D3:959:U:H2'	2.13	0.48
62:D3:1542:G:N2	62:D3:1569:A:OP2	2.47	0.48
63:D4:44:U:H2'	63:D4:45:U:C6	2.49	0.48
63:D4:80:U:OP1	63:D4:81:U:O2'	2.20	0.48
12:UJ:22:ARG:NH2	42:JP:18:SER:O	2.46	0.48
12:UJ:368:SER:HA	12:UJ:371:LYS:NZ	2.29	0.48
12:UJ:798:ASP:OD1	12:UJ:799:SER:N	2.47	0.48
12:UJ:1607:ARG:HE	12:UJ:1612:ASP:CB	2.26	0.48
14:UL:19:SER:HB2	14:UL:44:SER:OG	2.13	0.48
15:UM:661:LEU:O	15:UM:665:GLN:HG2	2.14	0.48
17:UO:62:ARG:NH1	17:UO:64:GLN:HG2	2.29	0.48
17:UO:315:ASN:HB3	17:UO:333:LYS:NZ	2.27	0.48
19:UQ:139:GLU:HB2	19:UQ:156:THR:O	2.14	0.48
19:UQ:404:SER:OG	19:UQ:405:ALA:N	2.46	0.48
20:UR:335:GLN:HG2	20:UR:336:THR:HG23	1.94	0.48
21:US:196:GLN:HE21	21:US:219:TRP:HH2	1.60	0.48
22:UT:1239:ASP:O	22:UT:1243:ILE:HG13	2.14	0.48
22:UT:1556:ARG:HD3	22:UT:1618:ASN:OD1	2.14	0.48
24:UV:376:SER:O	24:UV:387:GLY:N	2.46	0.48
26:CD:188:ILE:HD11	26:CD:281:LEU:HB3	1.96	0.48
28:CG:7:LYS:HD2	28:CG:65:LEU:HD11	1.95	0.48
31:CJ:111:PHE:CZ	31:CJ:209:LEU:HD13	2.49	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CL:625:TRP:CE3	34:CM:280:LEU:HD23	2.49	0.48
33:CL:751:TYR:HB2	58:DX:77:ILE:HG22	1.95	0.48
35:CN:18:PHE:CD1	35:CN:158:TRP:HB2	2.49	0.48
41:JM:108:LYS:CD	41:JM:109:PRO:HD2	2.41	0.48
41:JM:135:HIS:CE1	62:D3:487:G:C4	3.01	0.48
45:DE:147:ILE:HG21	45:DE:169:ILE:HG13	1.94	0.48
45:DE:181:VAL:CG1	45:DE:225:VAL:HG13	2.43	0.48
51:DL:133:LYS:HG2	51:DL:134:THR:HG23	1.94	0.48
54:DQ:98:ASP:OD1	54:DQ:101:SER:OG	2.25	0.48
55:DS:18:LEU:HD11	55:DS:70:VAL:HG13	1.95	0.48
55:DS:81:ILE:HG22	55:DS:86:LEU:HD22	1.96	0.48
62:D3:763:G:H1	62:D3:773:C:H42	1.61	0.48
62:D3:985:G:H2'	62:D3:986:G:C8	2.49	0.48
62:D3:1706:C:H2'	62:D3:1707:A:C8	2.49	0.48
68:EE:15:GLY:O	68:EE:30:VAL:N	2.41	0.48
1:CA:107:VAL:HA	1:CA:142:ARG:O	2.14	0.48
6:UD:331:ASN:OD1	6:UD:768:ALA:HA	2.14	0.48
6:UD:616:LYS:NZ	12:UJ:627:LEU:O	2.42	0.48
6:UD:625:GLU:HA	6:UD:628:THR:HG22	1.95	0.48
7:UE:53:LEU:HD13	7:UE:58:LEU:HD12	1.96	0.48
7:UE:453:LEU:HB3	7:UE:487:ARG:NH1	2.25	0.48
8:UF:152:LYS:HG3	41:JM:65:LEU:HB2	1.96	0.48
8:UF:163:SER:O	8:UF:167:ILE:HG12	2.14	0.48
9:UG:430:VAL:HG21	30:CI:3:ARG:HE	1.79	0.48
13:UK:29:GLU:OE2	33:CL:1062:ARG:NH1	2.47	0.48
14:UL:159:LEU:HB3	14:UL:189:TRP:CZ3	2.48	0.48
15:UM:189:HIS:CD2	15:UM:215:GLY:HA3	2.48	0.48
15:UM:249:LEU:HB2	15:UM:257:ILE:HB	1.95	0.48
17:UO:177:ILE:HD12	17:UO:178:PRO:HD2	1.95	0.48
17:UO:234:PHE:CZ	17:UO:248:ARG:HB2	2.48	0.48
19:UQ:559:LYS:HG3	19:UQ:613:LEU:HD23	1.95	0.48
22:UT:593:ASP:O	22:UT:596:ILE:HG22	2.14	0.48
22:UT:608:MET:SD	22:UT:615:VAL:HA	2.54	0.48
22:UT:1148:GLY:O	22:UT:1151:ILE:HG12	2.14	0.48
22:UT:1272:PHE:HD1	22:UT:1284:LEU:HD21	1.79	0.48
22:UT:1516:GLN:HA	22:UT:1554:PRO:HB3	1.96	0.48
22:UT:1906:GLU:N	22:UT:1906:GLU:OE1	2.45	0.48
23:UU:131:SER:HB2	23:UU:170:LEU:HD11	1.95	0.48
23:UU:546:ILE:HA	23:UU:562:LEU:HD23	1.95	0.48
24:UV:872:ASN:ND2	39:JI:1543:TYR:HA	2.27	0.48
30:CI:51:CYS:O	30:CI:55:ARG:HG3	2.14	0.48

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:CI:57:LEU:HD21	32:CK:440:LEU:HD22	1.96	0.48
31:CJ:187:PRO:HB3	31:CJ:220:ARG:HG3	1.96	0.48
36:JD:384:ILE:HD12	36:JD:465:GLU:O	2.14	0.48
37:JG:94:GLN:OE1	37:JG:235:SER:HB3	2.13	0.48
40:JL:41:ASN:OD1	40:JL:195:ASN:ND2	2.47	0.48
48:DH:161:GLN:HA	48:DH:164:TYR:HE2	1.78	0.48
53:DO:52:ARG:HG3	62:D3:906:A:OP1	2.14	0.48
62:D3:16:G:H2'	62:D3:17:C:C6	2.49	0.48
63:D4:45:U:H2'	63:D4:46:U:C6	2.49	0.48
3:UA:621:MET:SD	3:UA:627:LEU:HD21	2.54	0.48
4:UB:422:LEU:HD22	4:UB:466:TYR:CD2	2.48	0.48
5:UC:562:ARG:HB3	50:DJ:37:LYS:HB3	1.96	0.48
9:UG:118:TYR:CE2	9:UG:125:LEU:HD12	2.49	0.48
13:UK:140:ARG:HA	13:UK:143:MET:CE	2.44	0.48
15:UM:694:LEU:HD22	15:UM:746:TRP:HH2	1.78	0.48
16:UN:295:VAL:HG13	42:JP:275:PHE:HB3	1.96	0.48
16:UN:321:HIS:NE2	26:CD:90:SER:OG	2.47	0.48
19:UQ:356:LEU:CD2	19:UQ:372:LEU:HB3	2.44	0.48
19:UQ:500:PHE:CD1	19:UQ:507:MET:HB3	2.49	0.48
22:UT:2138:LEU:O	22:UT:2141:VAL:HG22	2.14	0.48
23:UU:303:PHE:CE2	23:UU:310:ILE:HD12	2.46	0.48
23:UU:336:VAL:O	23:UU:336:VAL:HG12	2.14	0.48
26:CD:196:LYS:HA	26:CD:216:PHE:CE2	2.49	0.48
27:CE:24:LYS:O	27:CE:28:LEU:HD23	2.14	0.48
33:CL:296:PHE:CE1	33:CL:796:VAL:HG22	2.48	0.48
33:CL:624:LYS:HG2	33:CL:625:TRP:CD1	2.49	0.48
35:CN:168:PHE:CD2	35:CN:171:PHE:HD2	2.31	0.48
36:JD:493:THR:HG22	36:JD:496:VAL:HG23	1.96	0.48
46:DF:154:ALA:O	46:DF:156:ARG:NH1	2.47	0.48
48:DH:9:LEU:HD23	48:DH:10:SER:N	2.29	0.48
49:DI:107:THR:O	49:DI:111:GLN:HG3	2.13	0.48
49:DI:190:ALA:O	49:DI:194:ARG:HD3	2.14	0.48
56:DT:71:VAL:HG12	56:DT:75:LYS:HD3	1.95	0.48
62:D3:107:C:H5''	62:D3:383:G:O2'	2.14	0.48
62:D3:728:U:H2'	62:D3:729:G:C8	2.49	0.48
63:D4:181:G:H21	63:D4:184:U:H5	1.62	0.48
3:UA:415:ASP:O	3:UA:416:LEU:HD23	2.14	0.48
1:CB:178:GLY:HA2	1:CB:181:VAL:HG12	1.96	0.48
4:UB:459:LEU:HA	4:UB:462:LEU:HG	1.95	0.48
4:UB:704:ASN:HD21	21:US:422:ILE:HG21	1.78	0.48
6:UD:422:LEU:HD13	6:UD:444:ARG:NH2	2.28	0.48

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:UF:297:ASP:OD1	8:UF:299:LYS:HE3	2.14	0.48
10:UH:293:TYR:HA	10:UH:304:GLN:HA	1.96	0.48
10:UH:665:GLN:HA	10:UH:668:ILE:HG22	1.96	0.48
12:UJ:180:ILE:HD11	19:UQ:876:PHE:HE2	1.78	0.48
15:UM:186:LEU:HD23	15:UM:223:TRP:CD2	2.49	0.48
16:UN:773:LYS:HA	16:UN:773:LYS:HD3	1.54	0.48
17:UO:465:VAL:O	17:UO:468:GLU:HG2	2.14	0.48
19:UQ:852:ASP:OD2	20:UR:475:LYS:NZ	2.47	0.48
20:UR:564:LYS:HD2	20:UR:582:GLU:HG3	1.95	0.48
22:UT:219:LEU:HD21	22:UT:270:ARG:HG2	1.96	0.48
22:UT:833:LYS:O	22:UT:836:SER:OG	2.28	0.48
22:UT:1155:ASP:HB2	22:UT:1201:LEU:HG	1.95	0.48
22:UT:1169:ASP:O	22:UT:1172:THR:OG1	2.28	0.48
22:UT:2185:ILE:HD11	22:UT:2216:TYR:CE1	2.40	0.48
29:CH:222:PRO:O	29:CH:225:LYS:HG3	2.13	0.48
33:CL:1018:VAL:HG12	33:CL:1029:TRP:CZ2	2.49	0.48
34:CM:214:LYS:HG2	34:CM:217:LYS:NZ	2.25	0.48
35:CN:82:SER:OG	35:CN:133:SER:O	2.23	0.48
42:JP:96:ASN:HB2	42:JP:103:PHE:CE1	2.49	0.48
62:D3:144:U:H2'	62:D3:145:A:O4'	2.14	0.48
62:D3:1623:C:H2'	62:D3:1624:C:H6	1.79	0.48
63:D4:263:A:H2'	63:D4:264:C:C6	2.49	0.48
65:EB:107:ILE:O	65:EB:111:SER:N	2.37	0.48
2:DA:88:VAL:HG21	2:DA:96:LEU:HB3	1.95	0.47
5:UC:433:ARG:HD3	37:JF:231:PRO:HG2	1.95	0.47
6:UD:57:ILE:HG22	6:UD:340:GLN:HB2	1.96	0.47
7:UE:458:ASN:ND2	7:UE:494:ARG:HH22	2.12	0.47
12:UJ:272:LYS:O	12:UJ:275:ILE:HG22	2.14	0.47
12:UJ:351:TYR:O	12:UJ:354:SER:OG	2.28	0.47
13:UK:250:ARG:HH21	20:UR:515:THR:HG22	1.79	0.47
14:UL:369:TYR:HB2	14:UL:373:ASP:O	2.14	0.47
15:UM:731:LEU:HD23	15:UM:736:LEU:HD23	1.97	0.47
19:UQ:444:PRO:HB3	19:UQ:770:TYR:CE1	2.49	0.47
20:UR:465:THR:OG1	20:UR:466:THR:N	2.47	0.47
21:US:324:PHE:CG	21:US:365:PHE:HE2	2.32	0.47
22:UT:1083:TYR:OH	22:UT:1125:ASP:OD2	2.32	0.47
22:UT:1155:ASP:CB	22:UT:1201:LEU:HG	2.44	0.47
24:UV:167:PRO:HD3	24:UV:226:HIS:CE1	2.49	0.47
26:CD:33:GLU:OE1	42:JP:382:ARG:HB3	2.14	0.47
26:CD:395:GLU:OE2	29:CH:455:THR:N	2.47	0.47
27:CE:126:GLU:O	27:CE:129:PRO:HD2	2.14	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CE:167:ILE:HD11	27:CE:298:ARG:NE	2.28	0.47
28:CG:9:PHE:C	28:CG:9:PHE:HD2	2.16	0.47
36:JD:469:HIS:HD2	36:JD:472:LYS:HE3	1.79	0.47
36:JD:918:SER:CA	36:JD:1083:MET:HE1	2.43	0.47
36:JD:928:VAL:HA	36:JD:931:VAL:HG12	1.96	0.47
36:JD:1039:VAL:HG23	36:JD:1040:LYS:HD3	1.95	0.47
51:DL:45:PRO:HB2	51:DL:47:THR:HG22	1.96	0.47
51:DL:99:ARG:HD2	58:DX:15:LEU:HD12	1.96	0.47
63:D4:188:A:H3'	63:D4:189:A:C8	2.48	0.47
3:UA:170:ALA:O	3:UA:187:PHE:HB2	2.14	0.47
3:UA:585:TYR:HD1	3:UA:592:ILE:HG12	1.78	0.47
3:UA:678:GLU:HG2	3:UA:679:VAL:N	2.29	0.47
3:UA:839:THR:HG23	23:UU:916:HIS:NE2	2.29	0.47
4:UB:613:ILE:HG13	4:UB:614:ILE:N	2.29	0.47
4:UB:703:GLN:HE22	21:US:488:PHE:H	1.61	0.47
12:UJ:764:ASN:O	12:UJ:768:LYS:HG3	2.13	0.47
12:UJ:1540:ASN:O	12:UJ:1543:VAL:HG22	2.14	0.47
13:UK:120:LYS:NZ	63:D4:321:C:OP2	2.47	0.47
13:UK:125:LEU:HD11	13:UK:198:PHE:CE1	2.50	0.47
14:UL:182:LYS:HE2	14:UL:208:TRP:CH2	2.50	0.47
15:UM:508:THR:O	15:UM:515:CYS:HA	2.13	0.47
17:UO:133:HIS:HD2	17:UO:135:GLN:N	2.12	0.47
18:UP:170:SER:HA	18:UP:177:ARG:HH12	1.79	0.47
18:UP:177:ARG:NH1	18:UP:178:VAL:O	2.47	0.47
19:UQ:249:THR:HB	61:D2:82:A:C2	2.48	0.47
19:UQ:426:ARG:HH12	61:D2:67:G:H3'	1.79	0.47
19:UQ:529:LEU:HD23	19:UQ:550:PRO:HG2	1.96	0.47
19:UQ:769:ASN:HB3	19:UQ:773:ASP:OD1	2.14	0.47
22:UT:214:SER:O	22:UT:218:LYS:HG2	2.13	0.47
22:UT:473:SER:HA	22:UT:476:LEU:HD12	1.95	0.47
22:UT:1545:VAL:O	22:UT:1549:VAL:HG23	2.14	0.47
22:UT:1780:ARG:HA	22:UT:1860:ASN:ND2	2.29	0.47
22:UT:2448:ARG:HH21	62:D3:827:C:H5	1.61	0.47
23:UU:284:ILE:H	23:UU:284:ILE:HD12	1.79	0.47
23:UU:364:HIS:HD2	23:UU:381:ARG:HE	1.62	0.47
23:UU:530:ASP:OD1	23:UU:531:PHE:N	2.47	0.47
23:UU:820:GLN:HA	23:UU:823:GLU:OE2	2.14	0.47
24:UV:270:ILE:HB	24:UV:292:ILE:HB	1.96	0.47
27:CE:315:SER:HB3	63:D4:325:C:C6	2.49	0.47
27:CE:319:ILE:HD12	27:CE:326:LEU:HD22	1.96	0.47
28:CF:39:GLU:O	28:CF:43:THR:HG22	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:CG:5:ASN:HA	29:CH:462:ARG:HG2	1.95	0.47
29:CH:138:ASP:OD1	29:CH:138:ASP:N	2.43	0.47
31:CJ:269:LYS:HB3	31:CJ:269:LYS:HE2	1.73	0.47
34:CM:287:ALA:HB2	34:CM:314:ASN:HB2	1.96	0.47
35:CN:132:ALA:HA	35:CN:135:ASN:HD21	1.78	0.47
37:JF:113:TYR:HA	37:JF:122:ILE:O	2.13	0.47
47:DG:32:ILE:HG22	47:DG:100:ALA:HB1	1.96	0.47
48:DH:131:PHE:CG	48:DH:132:PRO:HA	2.49	0.47
49:DI:40:ALA:HB3	49:DI:59:ARG:HH12	1.79	0.47
54:DQ:52:LEU:HG	54:DQ:60:PHE:CE2	2.49	0.47
62:D3:416:A:H3'	62:D3:417:A:C8	2.49	0.47
62:D3:1110:G:H2'	62:D3:1111:G:C8	2.49	0.47
66:EC:105:VAL:O	66:EC:109:GLU:N	2.47	0.47
3:UA:564:PHE:HZ	3:UA:678:GLU:OE1	1.97	0.47
1:CB:162:LEU:HD23	1:CB:164:ILE:H	1.79	0.47
4:UB:788:ILE:HD11	58:DX:57:LEU:HD12	1.96	0.47
9:UG:157:ALA:HB2	9:UG:168:VAL:HG12	1.96	0.47
9:UG:288:TYR:CB	9:UG:345:LEU:HD12	2.44	0.47
11:UI:481:HIS:O	11:UI:484:SER:OG	2.27	0.47
12:UJ:375:LEU:HD23	12:UJ:375:LEU:HA	1.71	0.47
12:UJ:1503:LEU:O	12:UJ:1507:LEU:HG	2.15	0.47
12:UJ:1709:ARG:NH1	12:UJ:1709:ARG:HB2	2.29	0.47
15:UM:587:GLN:O	15:UM:588:LYS:HE2	2.14	0.47
17:UO:5:ARG:HD3	19:UQ:336:ARG:HH21	1.79	0.47
17:UO:177:ILE:HG13	17:UO:179:ALA:H	1.78	0.47
19:UQ:632:ILE:H	19:UQ:651:SER:HG	1.57	0.47
19:UQ:714:ASP:HB2	19:UQ:774:PHE:CZ	2.50	0.47
20:UR:160:TYR:O	20:UR:163:ARG:HG2	2.14	0.47
22:UT:583:LEU:HD21	22:UT:656:LYS:NZ	2.28	0.47
22:UT:1479:ASN:HA	22:UT:1483:HIS:CD2	2.47	0.47
23:UU:719:GLU:OE2	23:UU:719:GLU:N	2.47	0.47
23:UU:934:ALA:O	23:UU:938:THR:HG22	2.14	0.47
24:UV:173:ASN:ND2	62:D3:1699:G:H5''	2.28	0.47
24:UV:248:LEU:HB3	24:UV:252:LEU:HD23	1.95	0.47
24:UV:307:LYS:HA	24:UV:312:ARG:NH1	2.29	0.47
24:UV:971:LYS:HZ2	24:UV:1033:ASN:HA	1.79	0.47
26:CD:41:PHE:O	26:CD:45:THR:HG23	2.14	0.47
27:CE:214:ILE:HG22	27:CE:215:ARG:H	1.78	0.47
32:CK:407:LYS:HB2	32:CK:411:GLU:HB2	1.97	0.47
33:CL:156:LEU:O	33:CL:160:GLN:HG3	2.15	0.47
34:CM:60:THR:OG1	34:CM:80:ILE:O	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:JL:201:GLN:OE1	40:JL:201:GLN:N	2.46	0.47
41:JM:173:ILE:HA	41:JM:176:THR:HG22	1.96	0.47
41:JM:178:MET:HE2	41:JM:178:MET:CA	2.45	0.47
42:JP:93:LYS:HE2	42:JP:105:SER:OG	2.14	0.47
42:JP:188:HIS:HB2	42:JP:227:PHE:CE1	2.49	0.47
44:JJ:193:LEU:HD22	44:JJ:197:HIS:HB3	1.97	0.47
48:DH:140:VAL:HG22	48:DH:150:GLN:HG3	1.96	0.47
54:DQ:50:GLU:O	54:DQ:54:LEU:HG	2.14	0.47
55:DS:64:GLU:HG2	55:DS:65:GLU:N	2.28	0.47
62:D3:234:G:C6	62:D3:235:G:C5	3.03	0.47
62:D3:892:A:H2'	62:D3:893:U:C6	2.49	0.47
63:D4:96:C:H2'	63:D4:97:C:H6	1.77	0.47
75:EN:504:THR:O	75:EN:508:GLY:N	2.35	0.47
3:UA:285:ARG:HG2	3:UA:297:GLN:HG3	1.95	0.47
6:UD:49:LEU:HD13	6:UD:348:VAL:HG23	1.96	0.47
8:UF:200:ARG:HA	8:UF:203:MET:HE2	1.95	0.47
12:UJ:250:SER:HB3	12:UJ:253:CYS:SG	2.55	0.47
12:UJ:303:PHE:HA	12:UJ:306:LEU:CD2	2.44	0.47
12:UJ:1744:ILE:O	12:UJ:1748:VAL:HG23	2.13	0.47
13:UK:116:LYS:O	13:UK:119:GLU:HG3	2.13	0.47
14:UL:129:PHE:HB3	14:UL:136:LEU:HD13	1.94	0.47
15:UM:235:LYS:NZ	15:UM:273:GLU:O	2.47	0.47
15:UM:791:ARG:HH22	32:CK:493:GLN:HE22	1.62	0.47
17:UO:209:LEU:HD22	17:UO:237:TRP:CZ3	2.49	0.47
19:UQ:177:THR:OG1	19:UQ:186:GLU:HB3	2.13	0.47
19:UQ:473:LEU:HB3	19:UQ:530:LYS:NZ	2.28	0.47
22:UT:311:ILE:O	22:UT:315:LEU:HD23	2.15	0.47
22:UT:614:GLN:OE1	22:UT:614:GLN:N	2.37	0.47
22:UT:680:GLY:O	22:UT:684:THR:HG23	2.15	0.47
22:UT:1324:ILE:HG23	22:UT:1325:LEU:HD12	1.97	0.47
22:UT:1421:LEU:O	22:UT:1425:VAL:HG23	2.14	0.47
22:UT:1685:SER:O	22:UT:1689:VAL:HG23	2.13	0.47
24:UV:228:ARG:HH21	24:UV:296:ILE:H	1.62	0.47
24:UV:1100:VAL:HG22	24:UV:1234:PHE:HD1	1.79	0.47
31:CJ:91:THR:HA	31:CJ:117:LEU:O	2.15	0.47
33:CL:125:LEU:HD21	33:CL:899:VAL:HG11	1.97	0.47
33:CL:168:LEU:HD11	33:CL:226:PHE:CD2	2.49	0.47
37:JF:175:CYS:HG	37:JF:201:SER:HG	1.55	0.47
42:JP:44:ALA:O	42:JP:48:THR:HG23	2.14	0.47
47:DG:52:ILE:HG23	47:DG:109:LEU:HD11	1.95	0.47
49:DI:170:SER:O	49:DI:170:SER:OG	2.29	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:DL:11:ARG:HG2	51:DL:11:ARG:HH11	1.78	0.47
51:DL:96:LYS:HG3	62:D3:373:G:H5'	1.97	0.47
55:DS:43:SER:HA	55:DS:46:VAL:HG22	1.97	0.47
62:D3:1752:U:H2'	62:D3:1753:A:H8	1.79	0.47
2:DA:187:LYS:O	2:DA:192:VAL:HG12	2.15	0.47
3:UA:19:ASN:OD1	3:UA:20:ILE:N	2.47	0.47
4:UB:600:LEU:O	4:UB:675:TYR:OH	2.33	0.47
4:UB:656:ALA:HB2	21:US:464:TRP:O	2.14	0.47
4:UB:678:PHE:HB3	4:UB:681:PRO:HD2	1.96	0.47
5:UC:596:THR:O	41:JM:137:LYS:HG3	2.15	0.47
6:UD:375:VAL:HG11	6:UD:742:LEU:HD11	1.95	0.47
7:UE:175:ILE:HG13	7:UE:176:GLU:H	1.80	0.47
7:UE:437:VAL:HG12	7:UE:440:ILE:HB	1.97	0.47
9:UG:196:LEU:HD23	9:UG:196:LEU:H	1.80	0.47
10:UH:664:LYS:O	10:UH:667:GLU:HG3	2.14	0.47
12:UJ:1361:VAL:HG13	12:UJ:1362:LEU:HD22	1.95	0.47
12:UJ:1548:PHE:CZ	12:UJ:1579:PHE:HE1	2.32	0.47
12:UJ:1664:LYS:HE2	63:D4:145:U:H5'	1.96	0.47
13:UK:49:LYS:HA	13:UK:52:ARG:NH1	2.29	0.47
14:UL:26:ILE:HD11	14:UL:42:ILE:HD11	1.96	0.47
14:UL:261:PHE:CD1	14:UL:272:PHE:HB3	2.46	0.47
14:UL:450:ARG:NH1	62:D3:1657:U:H5'	2.30	0.47
14:UL:888:ARG:HH22	15:UM:807:ASP:HB2	1.79	0.47
20:UR:306:ASN:HD21	20:UR:308:ASN:HB2	1.79	0.47
22:UT:499:PRO:O	22:UT:503:ARG:NE	2.42	0.47
22:UT:524:LYS:CE	22:UT:556:ARG:HB3	2.44	0.47
22:UT:571:LEU:HA	22:UT:574:LEU:CD2	2.44	0.47
22:UT:1221:ILE:O	22:UT:1225:ILE:HG23	2.14	0.47
23:UU:217:VAL:CG2	23:UU:220:ILE:HD12	2.45	0.47
23:UU:274:ILE:HG13	23:UU:286:VAL:HG23	1.94	0.47
23:UU:774:ARG:HH21	53:DO:52:ARG:HH11	1.61	0.47
24:UV:104:LYS:HA	24:UV:107:ILE:HD12	1.96	0.47
24:UV:400:LEU:O	24:UV:412:LEU:HB2	2.14	0.47
27:CE:277:SER:HA	27:CE:293:GLU:HG3	1.97	0.47
29:CH:401:SER:O	29:CH:417:SER:OG	2.26	0.47
31:CJ:188:HIS:NE2	31:CJ:218:SER:HB2	2.29	0.47
32:CK:538:LYS:NZ	62:D3:1628:U:H5''	2.29	0.47
33:CL:27:ASN:OD1	33:CL:29:LYS:HB2	2.14	0.47
34:CM:289:VAL:HG21	34:CM:311:LEU:HD11	1.97	0.47
34:CM:365:LYS:HG2	34:CM:366:ILE:N	2.29	0.47
36:JD:539:ARG:NH1	36:JD:540:ALA:HA	2.30	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:JD:763:VAL:HG13	36:JD:764:ALA:N	2.29	0.47
36:JD:1050:LYS:HE3	36:JD:1057:ASN:ND2	2.21	0.47
37:JF:36:LYS:HB3	37:JF:173:THR:HG23	1.97	0.47
37:JF:96:LEU:HD11	37:JF:137:PHE:CE2	2.49	0.47
47:DG:173:PRO:HA	62:D3:66:U:H5'	1.96	0.47
48:DH:124:LYS:HD3	48:DH:124:LYS:HA	1.66	0.47
62:D3:1112:G:C6	62:D3:1113:A:C5	3.02	0.47
74:EK:723:THR:O	74:EK:726:LEU:CB	2.63	0.47
75:EN:793:SER:O	75:EN:797:VAL:N	2.43	0.47
3:UA:168:LEU:HD22	3:UA:191:ARG:O	2.15	0.47
3:UA:585:TYR:CD1	3:UA:592:ILE:HG12	2.49	0.47
1:CB:195:TYR:HD2	1:CB:218:ILE:CG2	2.27	0.47
6:UD:347:LEU:HD23	6:UD:347:LEU:H	1.79	0.47
7:UE:259:PRO:O	7:UE:273:LYS:NZ	2.45	0.47
7:UE:469:ILE:HG22	7:UE:508:ILE:HB	1.95	0.47
10:UH:305:VAL:HA	10:UH:311:VAL:HA	1.96	0.47
10:UH:679:ILE:HG13	11:UI:483:LYS:HE3	1.95	0.47
12:UJ:377:ARG:NH1	12:UJ:414:LEU:HD11	2.30	0.47
12:UJ:490:ARG:NH1	12:UJ:491:TYR:OH	2.48	0.47
14:UL:17:ILE:HG23	14:UL:52:TRP:CH2	2.49	0.47
14:UL:187:LYS:HD3	14:UL:196:CYS:SG	2.54	0.47
14:UL:857:LEU:O	14:UL:860:ILE:HG22	2.13	0.47
15:UM:767:HIS:HB3	15:UM:772:LEU:HD11	1.96	0.47
17:UO:390:ARG:HG3	17:UO:394:GLN:HE22	1.80	0.47
19:UQ:335:PRO:HD3	61:D2:87:C:C5	2.50	0.47
19:UQ:637:THR:HG23	19:UQ:639:LYS:HB2	1.96	0.47
19:UQ:768:TRP:HB3	19:UQ:774:PHE:CE2	2.50	0.47
20:UR:254:LEU:O	20:UR:255:SER:OG	2.28	0.47
20:UR:264:LEU:HD12	20:UR:300:PHE:CE1	2.49	0.47
22:UT:472:ASP:OD1	22:UT:473:SER:N	2.48	0.47
22:UT:1272:PHE:HE2	22:UT:1350:THR:HG1	1.58	0.47
22:UT:2273:ILE:HD12	22:UT:2273:ILE:H	1.79	0.47
23:UU:228:GLY:HA2	23:UU:251:ILE:HD11	1.95	0.47
24:UV:134:ILE:HA	24:UV:137:GLU:OE1	2.14	0.47
24:UV:951:PRO:HG3	24:UV:960:LYS:HD2	1.97	0.47
27:CE:176:GLU:HA	27:CE:179:THR:HG22	1.96	0.47
28:CF:95:ARG:HD3	63:D4:79:G:N7	2.28	0.47
29:CH:72:GLU:HA	29:CH:75:LYS:NZ	2.30	0.47
33:CL:961:PHE:O	33:CL:976:ILE:HD11	2.14	0.47
35:CN:88:LEU:HB2	35:CN:125:LEU:HB2	1.96	0.47
37:JF:100:LEU:HD13	37:JF:130:ILE:HB	1.97	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:JM:54:GLU:HA	41:JM:57:THR:HG22	1.95	0.47
58:DX:31:LYS:HG2	58:DX:36:THR:OG1	2.15	0.47
61:D2:22:A:H2'	61:D2:23:G:C8	2.49	0.47
75:EN:242:LEU:O	75:EN:246:LEU:N	2.47	0.47
2:DA:122:GLU:HG2	2:DA:140:ILE:HG22	1.97	0.47
2:DA:129:THR:OG1	2:DA:130:SER:N	2.48	0.47
3:UA:349:ASN:ND2	3:UA:390:VAL:O	2.48	0.47
1:CB:86:VAL:HG12	1:CB:101:GLY:HA3	1.95	0.47
4:UB:58:PHE:HE2	31:CJ:176:ILE:CD1	2.28	0.47
6:UD:451:PHE:CE2	6:UD:464:LYS:HB3	2.49	0.47
7:UE:140:PHE:CE1	7:UE:178:LYS:HE2	2.43	0.47
8:UF:372:ARG:NH1	8:UF:372:ARG:HB2	2.29	0.47
10:UH:120:LEU:O	10:UH:133:THR:N	2.44	0.47
10:UH:599:MET:HE1	10:UH:640:LEU:HB3	1.96	0.47
12:UJ:47:PHE:O	12:UJ:50:GLU:HG2	2.15	0.47
12:UJ:81:LEU:HD12	12:UJ:86:GLN:NE2	2.20	0.47
12:UJ:1380:LEU:CD2	12:UJ:1403:LEU:HD11	2.42	0.47
12:UJ:1525:GLU:OE2	12:UJ:1529:HIS:NE2	2.48	0.47
13:UK:116:LYS:NZ	63:D4:324:U:OP1	2.47	0.47
13:UK:190:LEU:O	13:UK:194:LYS:HG2	2.15	0.47
14:UL:145:ILE:HG13	14:UL:166:ILE:HG12	1.96	0.47
14:UL:182:LYS:O	14:UL:206:GLU:HG3	2.13	0.47
14:UL:232:ASP:OD2	14:UL:234:GLU:HB2	2.15	0.47
15:UM:224:ASP:HB2	15:UM:230:LYS:NZ	2.27	0.47
15:UM:265:ALA:HA	15:UM:290:ILE:HB	1.96	0.47
17:UO:86:SER:HB2	17:UO:129:VAL:HA	1.96	0.47
17:UO:156:ASN:HD21	17:UO:159:GLU:HB3	1.80	0.47
19:UQ:554:SER:OG	61:D2:7:A:N3	2.48	0.47
20:UR:426:VAL:HG21	20:UR:455:ILE:HG21	1.97	0.47
22:UT:874:LEU:CD2	22:UT:885:ARG:HG2	2.44	0.47
22:UT:904:PHE:HB2	22:UT:911:GLN:O	2.15	0.47
22:UT:1399:LEU:O	22:UT:1403:ARG:HD3	2.15	0.47
22:UT:2184:ALA:O	22:UT:2188:ILE:HG13	2.15	0.47
23:UU:837:LEU:HA	23:UU:840:PHE:CD2	2.47	0.47
24:UV:534:GLY:N	24:UV:605:GLY:O	2.47	0.47
24:UV:744:MET:HG3	24:UV:813:GLU:HG2	1.97	0.47
24:UV:974:PRO:HB3	24:UV:1024:PHE:CD1	2.50	0.47
26:CD:174:ILE:HD11	26:CD:295:LYS:HG2	1.96	0.47
26:CD:229:LEU:HD23	26:CD:229:LEU:HA	1.79	0.47
27:CE:4:VAL:HG23	27:CE:88:ILE:HB	1.97	0.47
29:CH:399:GLU:HA	29:CH:419:ASN:OD1	2.14	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:CI:93:LYS:NZ	30:CI:95:SER:H	2.12	0.47
30:CI:110:ARG:O	30:CI:114:ILE:HG12	2.14	0.47
31:CJ:138:ASP:OD1	31:CJ:138:ASP:N	2.46	0.47
31:CJ:141:VAL:HG12	31:CJ:153:THR:HB	1.96	0.47
33:CL:51:GLU:OE2	33:CL:54:LEU:HD12	2.14	0.47
33:CL:107:VAL:O	33:CL:114:ARG:HB2	2.14	0.47
33:CL:819:GLU:HA	33:CL:889:LEU:O	2.14	0.47
33:CL:899:VAL:HG12	33:CL:913:ILE:HA	1.97	0.47
34:CM:46:LYS:N	34:CM:49:GLU:OE1	2.47	0.47
35:CN:207:VAL:HG22	35:CN:213:THR:HG22	1.97	0.47
35:CN:259:ARG:HH21	35:CN:262:VAL:HG21	1.79	0.47
36:JD:444:MET:HE3	36:JD:488:LYS:HB2	1.96	0.47
36:JD:740:THR:HA	36:JD:743:GLN:CD	2.34	0.47
36:JD:1045:LEU:HA	36:JD:1048:ILE:HD12	1.97	0.47
37:JF:93:HIS:ND1	37:JF:137:PHE:HD2	2.11	0.47
41:JM:131:ASP:OD1	41:JM:132:PRO:HD2	2.14	0.47
41:JM:197:LYS:HB2	41:JM:197:LYS:HE3	1.66	0.47
45:DE:222:LEU:HD12	45:DE:222:LEU:HA	1.70	0.47
47:DG:31:ARG:HB3	47:DG:31:ARG:HH11	1.80	0.47
47:DG:47:GLY:HA3	47:DG:118:GLU:OE2	2.15	0.47
47:DG:94:ARG:HD2	62:D3:407:A:OP1	2.15	0.47
47:DG:136:LYS:HD3	62:D3:168:A:H4'	1.97	0.47
48:DH:129:LEU:HD21	48:DH:172:VAL:HG11	1.97	0.47
62:D3:82:U:H2'	62:D3:83:G:C8	2.49	0.47
62:D3:235:G:O6	62:D3:236:A:N6	2.48	0.47
62:D3:502:U:H2'	62:D3:503:G:C8	2.49	0.47
62:D3:1752:U:H2'	62:D3:1753:A:C8	2.50	0.47
63:D4:113:G:N2	63:D4:256:G:N3	2.62	0.47
3:UA:13:THR:HG21	3:UA:16:ARG:HH12	1.80	0.47
3:UA:714:PRO:HB2	3:UA:717:LEU:HG	1.96	0.47
1:CB:162:LEU:HD21	1:CB:164:ILE:HB	1.96	0.47
4:UB:572:LEU:HD23	4:UB:667:LEU:HB3	1.96	0.47
6:UD:231:VAL:HG11	6:UD:257:ASP:OD2	2.15	0.47
6:UD:595:ASN:N	6:UD:610:VAL:O	2.48	0.47
10:UH:594:SER:O	10:UH:597:GLN:HG3	2.15	0.47
12:UJ:378:TYR:CD1	19:UQ:857:PHE:HA	2.50	0.47
12:UJ:1566:ILE:HG21	12:UJ:1571:ARG:HG3	1.97	0.47
14:UL:200:HIS:CD2	14:UL:242:LEU:HD13	2.49	0.47
17:UO:51:HIS:CE1	17:UO:313:GLN:NE2	2.83	0.47
17:UO:90:ARG:NH2	17:UO:137:ASN:HB3	2.30	0.47
19:UQ:26:SER:O	19:UQ:28:VAL:HG23	2.14	0.47

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:196:VAL:HA	19:UQ:211:MET:O	2.15	0.47
20:UR:242:ASN:HB2	20:UR:586:VAL:H	1.79	0.47
20:UR:408:CYS:SG	20:UR:460:VAL:HG12	2.55	0.47
21:US:393:SER:O	21:US:397:THR:HG23	2.14	0.47
22:UT:234:ILE:HA	22:UT:237:THR:HG22	1.97	0.47
22:UT:286:ALA:HB3	22:UT:291:LEU:HD21	1.96	0.47
22:UT:733:VAL:HG23	22:UT:736:LEU:HB3	1.97	0.47
22:UT:980:ASN:ND2	22:UT:985:ASN:OD1	2.47	0.47
22:UT:1083:TYR:CE2	22:UT:1087:VAL:HG21	2.49	0.47
22:UT:1724:ASN:HA	22:UT:1729:ALA:HB3	1.96	0.47
22:UT:2149:LEU:HD13	22:UT:2160:LEU:HB3	1.97	0.47
24:UV:519:ASP:OD2	24:UV:614:ARG:NH1	2.48	0.47
24:UV:907:GLN:CD	24:UV:907:GLN:H	2.18	0.47
28:CG:39:GLU:O	28:CG:43:THR:HG22	2.14	0.47
29:CH:158:THR:HG21	29:CH:240:LEU:HA	1.97	0.47
30:CI:5:LEU:HD12	30:CI:10:GLN:HG3	1.96	0.47
33:CL:298:VAL:HG12	33:CL:793:PHE:CE1	2.46	0.47
33:CL:893:ASN:HD21	58:DX:98:GLU:HB2	1.79	0.47
34:CM:51:SER:OG	34:CM:99:PHE:HZ	1.98	0.47
36:JD:477:ILE:HA	36:JD:496:VAL:HG21	1.97	0.47
36:JD:1042:ARG:HH22	36:JD:1064:ASN:HB3	1.79	0.47
36:JD:1092:VAL:HG11	36:JD:1217:PHE:CE2	2.36	0.47
40:JL:75:LEU:HD22	40:JL:81:VAL:HG21	1.95	0.47
42:JP:59:VAL:CG1	42:JP:374:LEU:HD12	2.45	0.47
53:DO:29:HIS:CE1	53:DO:38:THR:HB	2.49	0.47
62:D3:1602:C:O2'	62:D3:1603:U:O5'	2.29	0.47
66:EC:166:TYR:O	66:EC:169:THR:N	2.39	0.47
1:CA:110:ASN:ND2	1:CA:142:ARG:HD2	2.29	0.47
3:UA:55:ARG:HH11	3:UA:55:ARG:HG3	1.80	0.47
4:UB:745:LYS:O	4:UB:749:LYS:HG2	2.15	0.47
7:UE:281:ILE:HG12	7:UE:328:VAL:HB	1.97	0.47
10:UH:668:ILE:O	10:UH:671:ARG:HD3	2.14	0.47
11:UI:446:TRP:HZ2	11:UI:492:ILE:HD12	1.80	0.47
13:UK:4:LEU:HD23	58:DX:88:PRO:HB2	1.96	0.47
13:UK:191:ASP:OD1	13:UK:192:LYS:N	2.47	0.47
14:UL:494:ASP:HB2	14:UL:496:THR:OG1	2.14	0.47
19:UQ:437:THR:HG1	19:UQ:706:HIS:HD1	1.58	0.47
19:UQ:645:GLU:HG3	19:UQ:647:THR:HG23	1.97	0.47
19:UQ:656:ASP:N	19:UQ:656:ASP:OD1	2.48	0.47
22:UT:194:GLU:O	22:UT:197:SER:HB3	2.14	0.47
22:UT:227:ASN:HA	22:UT:230:GLU:OE2	2.14	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:418:GLN:O	22:UT:422:LYS:HE2	2.15	0.47
22:UT:1427:ASN:O	22:UT:1427:ASN:ND2	2.38	0.47
22:UT:1505:ASN:O	22:UT:1509:ILE:HD12	2.15	0.47
22:UT:1559:LEU:HD11	22:UT:1587:LYS:NZ	2.30	0.47
22:UT:1592:PRO:O	22:UT:1595:SER:C	2.54	0.47
23:UU:518:VAL:HG21	23:UU:558:PHE:CZ	2.50	0.47
23:UU:561:ALA:HB1	23:UU:588:ILE:HG21	1.96	0.47
25:UX:70:ASN:OD1	25:UX:157:ASP:HB2	2.15	0.47
26:CD:102:ASP:OD2	26:CD:105:LEU:N	2.48	0.47
28:CG:32:GLN:HE21	28:CG:105:ASN:CB	2.19	0.47
29:CH:474:TRP:HB2	29:CH:492:TRP:CZ3	2.50	0.47
33:CL:625:TRP:HH2	34:CM:284:SER:CB	2.28	0.47
34:CM:161:LEU:HB2	34:CM:237:LYS:HB2	1.97	0.47
34:CM:197:SER:OG	34:CM:240:GLY:O	2.21	0.47
44:JJ:97:ARG:NH1	53:DO:115:ILE:HD11	2.30	0.47
48:DH:123:ASP:OD1	48:DH:124:LYS:N	2.47	0.47
55:DS:49:LYS:HD3	55:DS:79:TYR:HB3	1.96	0.47
62:D3:647:G:C2	62:D3:688:G:C2	3.03	0.47
62:D3:692:C:H2'	62:D3:693:U:C6	2.49	0.47
62:D3:1113:A:H61	63:D4:11:U:H3	1.63	0.47
1:CA:144:TRP:CE3	1:CA:152:ALA:HA	2.50	0.47
1:CA:182:SER:HB2	1:CA:214:ARG:HH12	1.80	0.47
1:CA:293:LEU:HD22	1:CA:298:ILE:HD12	1.97	0.47
2:DA:25:THR:HG23	15:UM:216:ARG:CZ	2.45	0.47
3:UA:84:PHE:O	3:UA:87:ARG:N	2.47	0.47
3:UA:219:GLU:HB3	3:UA:251:THR:OG1	2.15	0.47
3:UA:286:LEU:HD21	3:UA:317:LEU:HD11	1.97	0.47
1:CB:233:LEU:HD13	27:CE:144:ALA:HB2	1.97	0.47
4:UB:700:LEU:HD23	4:UB:700:LEU:H	1.79	0.47
8:UF:125:SER:HB3	8:UF:128:LYS:HB2	1.97	0.47
10:UH:558:CYS:H	10:UH:585:ARG:HH22	1.63	0.47
12:UJ:1742:GLU:OE2	29:CH:59:PRO:HD2	2.14	0.47
15:UM:107:ILE:HG21	15:UM:149:SER:HA	1.97	0.47
15:UM:178:VAL:HG23	44:JJ:71:VAL:HG23	1.97	0.47
17:UO:99:GLY:HA2	17:UO:105:VAL:HG12	1.97	0.47
17:UO:411:LYS:HB3	17:UO:448:LYS:NZ	2.30	0.47
22:UT:549:LYS:HZ1	22:UT:587:ASP:HB3	1.80	0.47
22:UT:1043:GLU:HG3	22:UT:1044:GLU:OE2	2.14	0.47
22:UT:1344:TRP:CE3	22:UT:1347:LEU:HD11	2.50	0.47
24:UV:523:TYR:HD2	24:UV:616:LYS:CG	2.27	0.47
24:UV:539:LEU:O	24:UV:543:LEU:N	2.43	0.47

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:1217:GLU:HA	24:UV:1220:PHE:CD2	2.49	0.47
25:UX:100:ASP:HB2	25:UX:130:CYS:SG	2.55	0.47
27:CE:361:ARG:NH1	63:D4:84:U:OP2	2.48	0.47
29:CH:149:PHE:CE1	29:CH:562:GLY:HA3	2.50	0.47
31:CJ:172:MET:O	31:CJ:176:ILE:HG13	2.14	0.47
33:CL:249:PHE:HZ	33:CL:801:VAL:HG22	1.80	0.47
36:JD:505:PHE:C	36:JD:506:LYS:HD2	2.36	0.47
36:JD:874:VAL:HG12	36:JD:878:LYS:NZ	2.30	0.47
36:JD:1017:PRO:O	36:JD:1021:LYS:HB2	2.15	0.47
37:JF:214:ASP:OD2	37:JF:224:LYS:HE2	2.14	0.47
47:DG:21:GLU:HA	47:DG:24:ILE:HB	1.97	0.47
47:DG:59:GLN:NE2	62:D3:418:G:H1'	2.30	0.47
48:DH:123:ASP:O	48:DH:127:GLU:HG3	2.14	0.47
54:DQ:73:GLY:N	54:DQ:76:SER:OG	2.47	0.47
55:DS:31:ALA:O	55:DS:34:THR:HG22	2.15	0.47
61:D2:464:G:N2	63:D4:53:U:H3	2.12	0.47
62:D3:1146:G:H2'	62:D3:1147:A:C8	2.50	0.47
62:D3:1500:C:H2'	62:D3:1501:C:C6	2.49	0.47
73:EJ:259:ALA:O	73:EJ:264:GLY:N	2.44	0.47
75:EN:93:VAL:O	75:EN:113:VAL:N	2.43	0.47
3:UA:55:ARG:HD3	3:UA:621:MET:CE	2.46	0.46
3:UA:791:HIS:CD2	23:UU:716:ILE:HG13	2.50	0.46
1:CB:103:GLU:HA	13:UK:194:LYS:NZ	2.30	0.46
4:UB:500:PHE:O	4:UB:504:ILE:HG12	2.14	0.46
4:UB:650:VAL:HG13	4:UB:651:TRP:CD1	2.50	0.46
6:UD:202:ILE:HG22	6:UD:244:VAL:HG11	1.97	0.46
9:UG:213:TRP:NE1	9:UG:215:LYS:HE2	2.30	0.46
9:UG:301:TRP:CE2	9:UG:308:GLN:HB3	2.50	0.46
11:UI:454:LEU:HD13	11:UI:458:TRP:CZ2	2.50	0.46
13:UK:64:TYR:CE2	33:CL:1080:LYS:HE2	2.49	0.46
14:UL:156:LEU:H	14:UL:156:LEU:HD12	1.80	0.46
14:UL:212:VAL:HG22	14:UL:217:LEU:HB2	1.97	0.46
15:UM:464:LYS:HB2	15:UM:486:THR:HG22	1.96	0.46
17:UO:149:THR:C	17:UO:150:ARG:HD3	2.36	0.46
20:UR:429:TYR:HB3	20:UR:431:GLU:OE1	2.15	0.46
20:UR:486:SER:HG	28:CF:89:ARG:NH2	1.91	0.46
22:UT:1122:LEU:O	22:UT:1127:PHE:HD1	1.98	0.46
22:UT:1276:ASP:OD2	22:UT:1276:ASP:N	2.47	0.46
24:UV:141:TRP:HE1	24:UV:144:LYS:HG3	1.80	0.46
28:CF:40:ALA:O	28:CF:43:THR:HG23	2.15	0.46
31:CJ:250:VAL:HG22	31:CJ:251:GLY:N	2.29	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:CK:427:SER:O	32:CK:430:LEU:N	2.48	0.46
34:CM:97:GLY:HA3	34:CM:128:ALA:O	2.15	0.46
34:CM:119:LYS:HG2	34:CM:165:GLU:HG2	1.98	0.46
36:JD:1149:PRO:HG3	36:JD:1172:ASP:HB2	1.97	0.46
44:JJ:93:LYS:N	44:JJ:143:PRO:HB3	2.30	0.46
54:DQ:58:ASP:OD2	54:DQ:59:LYS:HG3	2.14	0.46
54:DQ:71:GLY:N	62:D3:1483:A:OP1	2.38	0.46
62:D3:681:U:O4	62:D3:682:C:N4	2.47	0.46
4:UB:656:ALA:HB2	21:US:464:TRP:C	2.36	0.46
8:UF:311:TYR:O	8:UF:314:SER:OG	2.22	0.46
9:UG:254:GLY:HA2	9:UG:277:VAL:HG23	1.98	0.46
9:UG:288:TYR:HB3	9:UG:345:LEU:HD12	1.97	0.46
10:UH:670:GLU:O	10:UH:673:THR:OG1	2.28	0.46
12:UJ:1650:SER:O	12:UJ:1654:GLN:HG2	2.15	0.46
14:UL:436:CYS:SG	14:UL:437:LYS:N	2.88	0.46
15:UM:36:VAL:HG22	15:UM:37:LEU:H	1.80	0.46
15:UM:265:ALA:HB2	15:UM:288:LEU:O	2.16	0.46
15:UM:679:THR:HG21	15:UM:723:GLU:HB2	1.97	0.46
17:UO:129:VAL:HB	17:UO:131:LYS:NZ	2.31	0.46
17:UO:255:VAL:HA	17:UO:276:SER:HA	1.96	0.46
18:UP:208:ARG:CD	18:UP:210:ALA:HB3	2.45	0.46
19:UQ:872:PHE:HD1	19:UQ:875:MET:HE3	1.80	0.46
20:UR:261:PRO:O	20:UR:262:LEU:HD12	2.14	0.46
22:UT:104:GLN:HB3	22:UT:105:PRO:HD3	1.96	0.46
22:UT:793:PHE:CD2	22:UT:844:VAL:HB	2.50	0.46
22:UT:866:GLN:HE22	22:UT:931:GLY:HA3	1.80	0.46
22:UT:1122:LEU:HD23	22:UT:1129:THR:OG1	2.15	0.46
22:UT:1237:GLU:HG2	22:UT:1238:ASN:N	2.31	0.46
22:UT:2353:SER:O	22:UT:2356:SER:OG	2.24	0.46
24:UV:557:THR:OG1	24:UV:560:ASN:HB2	2.15	0.46
26:CD:20:VAL:HG22	26:CD:48:ILE:HD11	1.96	0.46
27:CE:348:VAL:HG12	27:CE:359:ILE:HG23	1.96	0.46
27:CE:359:ILE:HA	27:CE:362:VAL:HG12	1.97	0.46
33:CL:181:SER:HB3	62:D3:529:A:OP1	2.15	0.46
33:CL:242:PRO:HB3	33:CL:278:THR:O	2.15	0.46
34:CM:47:ASP:OD1	34:CM:48:TYR:N	2.47	0.46
34:CM:47:ASP:OD2	34:CM:93:SER:OG	2.25	0.46
35:CN:209:GLU:HG2	35:CN:210:ASP:N	2.30	0.46
36:JD:410:VAL:HG22	36:JD:579:PRO:HG2	1.97	0.46
37:JG:116:THR:HG22	37:JG:118:ARG:H	1.80	0.46
41:JM:50:SER:O	41:JM:53:GLN:HG3	2.15	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:JM:51:LYS:O	41:JM:54:GLU:HG3	2.14	0.46
44:JJ:71:VAL:HG22	44:JJ:81:PHE:CE1	2.51	0.46
48:DH:126:LEU:HD13	48:DH:173:TYR:CE1	2.50	0.46
49:DI:121:LEU:HD23	49:DI:121:LEU:HA	1.79	0.46
51:DL:11:ARG:HG2	51:DL:11:ARG:NH1	2.31	0.46
54:DQ:93:HIS:HA	54:DQ:97:VAL:HG22	1.97	0.46
62:D3:647:G:N2	62:D3:687:G:N2	2.63	0.46
62:D3:1663:G:C6	62:D3:1664:C:C4	3.03	0.46
63:D4:72:C:H2'	63:D4:73:A:C8	2.45	0.46
65:EB:256:MET:O	66:EC:196:LEU:N	2.45	0.46
1:CA:123:ILE:HB	1:CA:141:TYR:HB2	1.98	0.46
2:DA:55:LYS:HD2	2:DA:56:SER:N	2.31	0.46
2:DA:129:THR:CG2	2:DA:133:TYR:HB2	2.45	0.46
3:UA:11:LEU:HB2	3:UA:701:LEU:HB3	1.97	0.46
3:UA:162:LEU:HD21	3:UA:172:ILE:HG12	1.97	0.46
3:UA:800:LYS:HG3	23:UU:928:PHE:CE2	2.50	0.46
6:UD:285:CYS:SG	6:UD:336:ILE:N	2.88	0.46
6:UD:434:SER:OG	6:UD:439:VAL:HB	2.16	0.46
6:UD:489:CYS:HB2	6:UD:534:LEU:CD1	2.46	0.46
6:UD:586:THR:O	6:UD:589:ASN:N	2.48	0.46
6:UD:742:LEU:HD21	6:UD:757:ARG:HE	1.80	0.46
7:UE:281:ILE:HB	7:UE:291:ILE:HD11	1.97	0.46
9:UG:74:LEU:HD22	9:UG:404:PRO:HG2	1.98	0.46
14:UL:8:PHE:HB3	14:UL:686:GLU:HB3	1.98	0.46
14:UL:98:TYR:CE1	14:UL:104:LYS:HE2	2.50	0.46
14:UL:200:HIS:CD2	14:UL:242:LEU:HD22	2.51	0.46
15:UM:249:LEU:HG	15:UM:259:TYR:HD2	1.81	0.46
15:UM:384:TYR:OH	15:UM:422:CYS:SG	2.74	0.46
15:UM:414:VAL:O	15:UM:428:ALA:HB3	2.15	0.46
15:UM:580:ARG:HB2	15:UM:593:CYS:CB	2.45	0.46
17:UO:105:VAL:HG12	17:UO:127:THR:HG21	1.97	0.46
21:US:428:THR:O	21:US:432:VAL:HG23	2.15	0.46
22:UT:22:ARG:NH2	22:UT:145:SER:OG	2.49	0.46
22:UT:884:TYR:HE2	22:UT:917:ASP:HB3	1.80	0.46
22:UT:1609:ARG:HG3	22:UT:1609:ARG:NH1	2.30	0.46
31:CJ:287:LYS:HD2	31:CJ:287:LYS:HA	1.66	0.46
33:CL:879:THR:HG22	33:CL:880:TYR:H	1.79	0.46
34:CM:22:VAL:HG13	34:CM:106:LEU:HD11	1.98	0.46
35:CN:66:HIS:HB3	35:CN:158:TRP:CZ2	2.50	0.46
37:JG:179:THR:HB	37:JG:224:LYS:HG2	1.98	0.46
41:JM:119:ARG:HG2	41:JM:119:ARG:HH21	1.80	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:DH:165:LYS:O	48:DH:168:SER:OG	2.19	0.46
50:DJ:51:LYS:HB2	50:DJ:51:LYS:HE2	1.70	0.46
51:DL:88:ARG:O	51:DL:104:HIS:HA	2.16	0.46
53:DO:34:SER:O	53:DO:36:LYS:N	2.49	0.46
58:DX:26:GLU:OE1	58:DX:27:ASN:N	2.48	0.46
62:D3:23:G:O2'	62:D3:24:U:H5'	2.16	0.46
62:D3:982:U:H2'	62:D3:983:A:C8	2.50	0.46
62:D3:1100:G:H2'	62:D3:1100:G:N3	2.30	0.46
1:CA:184:VAL:HA	1:CA:187:VAL:HG12	1.97	0.46
3:UA:582:THR:O	3:UA:583:ILE:HD13	2.14	0.46
4:UB:652:LYS:HA	4:UB:691:LEU:HD11	1.97	0.46
5:UC:577:LYS:HB2	5:UC:577:LYS:HE3	1.65	0.46
6:UD:298:ALA:HB2	6:UD:336:ILE:HD11	1.96	0.46
6:UD:422:LEU:HD11	6:UD:449:LYS:HD2	1.97	0.46
6:UD:565:ARG:CG	12:UJ:635:TYR:H	2.28	0.46
8:UF:286:ILE:HD11	8:UF:308:THR:HG21	1.97	0.46
9:UG:373:PHE:CZ	9:UG:392:VAL:HG21	2.49	0.46
12:UJ:1553:ARG:O	12:UJ:1557:ASP:CB	2.61	0.46
13:UK:143:MET:HE1	18:UP:180:LEU:CD2	2.45	0.46
14:UL:8:PHE:HB3	14:UL:686:GLU:HA	1.96	0.46
15:UM:194:ARG:HD3	15:UM:216:ARG:NH1	2.31	0.46
16:UN:765:VAL:O	16:UN:769:GLN:HG2	2.16	0.46
19:UQ:22:LEU:HD22	19:UQ:369:TYR:CE2	2.51	0.46
22:UT:114:CYS:O	22:UT:117:LEU:C	2.54	0.46
22:UT:1335:GLY:H	22:UT:1373:LYS:HZ2	1.62	0.46
22:UT:1766:PHE:O	22:UT:1769:LEU:N	2.41	0.46
22:UT:1843:GLU:O	22:UT:1847:LEU:HG	2.14	0.46
22:UT:2032:SER:OG	22:UT:2035:ILE:HB	2.16	0.46
22:UT:2061:PHE:CD2	22:UT:2098:LEU:HD11	2.50	0.46
22:UT:2162:LEU:HD22	22:UT:2163:ARG:HD2	1.98	0.46
22:UT:2167:VAL:O	22:UT:2170:LYS:HB2	2.15	0.46
24:UV:870:ALA:O	24:UV:875:LYS:NZ	2.49	0.46
24:UV:1187:LYS:HD3	39:JI:1470:GLY:O	2.16	0.46
26:CD:96:ILE:HG23	26:CD:116:VAL:HG23	1.97	0.46
27:CE:313:PRO:HG2	27:CE:316:THR:HG23	1.98	0.46
28:CG:62:GLU:HA	28:CG:65:LEU:CB	2.45	0.46
31:CJ:83:ILE:CD1	32:CK:384:ARG:HH21	2.28	0.46
32:CK:408:SER:HA	44:JJ:223:ARG:NH2	2.29	0.46
33:CL:159:ALA:HB1	33:CL:165:PRO:HD2	1.97	0.46
34:CM:215:VAL:HG12	34:CM:216:LEU:HD23	1.96	0.46
37:JG:53:HIS:ND1	37:JG:68:LEU:HD11	2.30	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:DF:44:ASN:HB2	54:DQ:46:PHE:CE2	2.50	0.46
47:DG:180:THR:HG22	47:DG:182:GLN:H	1.80	0.46
50:DJ:88:GLU:O	50:DJ:91:LYS:HG3	2.16	0.46
54:DQ:99:GLU:HA	54:DQ:102:LYS:HB3	1.96	0.46
56:DT:50:ALA:HA	56:DT:53:TRP:CD1	2.50	0.46
63:D4:202:G:C5	63:D4:248:G:C6	3.03	0.46
67:ED:93:GLY:HA2	67:ED:213:LEU:HA	1.98	0.46
1:CA:249:GLN:O	1:CA:253:ILE:HG12	2.15	0.46
6:UD:185:ARG:NH2	28:CF:124:LEU:O	2.47	0.46
7:UE:362:ARG:HB3	19:UQ:593:ASN:HD22	1.81	0.46
7:UE:490:ARG:HD3	17:UO:16:LEU:HD23	1.97	0.46
8:UF:186:VAL:HG21	8:UF:319:TYR:HE1	1.81	0.46
12:UJ:1418:ASN:O	12:UJ:1422:VAL:HG23	2.16	0.46
14:UL:143:SER:C	14:UL:166:ILE:HD11	2.36	0.46
15:UM:7:TYR:HE1	15:UM:611:LYS:HZ2	1.62	0.46
15:UM:26:SER:OG	15:UM:28:ASN:OD1	2.28	0.46
15:UM:70:THR:HG21	15:UM:114:SER:HB2	1.96	0.46
16:UN:767:GLU:OE1	16:UN:767:GLU:N	2.42	0.46
17:UO:16:LEU:O	17:UO:19:GLN:NE2	2.48	0.46
17:UO:123:SER:H	17:UO:150:ARG:NH1	2.13	0.46
19:UQ:252:LEU:HD21	61:D2:81:A:H3'	1.97	0.46
20:UR:400:ILE:HD11	20:UR:404:ILE:HG12	1.96	0.46
20:UR:516:THR:HG21	20:UR:536:ALA:HB3	1.97	0.46
21:US:258:GLU:OE1	21:US:291:THR:OG1	2.23	0.46
22:UT:81:LEU:HD23	22:UT:117:LEU:HD21	1.98	0.46
22:UT:524:LYS:HD3	22:UT:557:GLY:CA	2.46	0.46
22:UT:1326:SER:HA	22:UT:1329:LYS:CE	2.44	0.46
22:UT:1368:SER:OG	22:UT:1416:GLU:OE2	2.27	0.46
22:UT:1482:SER:HA	22:UT:1486:ILE:HD12	1.98	0.46
22:UT:2192:LEU:O	22:UT:2195:THR:OG1	2.27	0.46
23:UU:217:VAL:HG21	23:UU:220:ILE:HD12	1.97	0.46
23:UU:594:SER:OG	23:UU:596:GLU:HG2	2.16	0.46
24:UV:856:THR:O	24:UV:859:ASP:HB2	2.15	0.46
24:UV:1103:ARG:NH2	24:UV:1104:THR:O	2.48	0.46
25:UX:121:ARG:HD3	42:JP:66:HIS:O	2.15	0.46
26:CD:209:LEU:HD22	26:CD:250:ARG:HD3	1.98	0.46
27:CE:285:PRO:HG3	27:CE:382:ASP:HA	1.96	0.46
27:CE:315:SER:HB3	63:D4:325:C:C5	2.50	0.46
32:CK:485:SER:O	32:CK:488:SER:N	2.45	0.46
37:JF:104:ILE:HD13	37:JF:242:CYS:HB2	1.98	0.46
37:JG:42:ILE:O	37:JG:203:CYS:HA	2.16	0.46

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DE:15:PRO:HG2	45:DE:18:TRP:CE2	2.50	0.46
55:DS:45:LEU:HD11	55:DS:85:PHE:HE2	1.80	0.46
62:D3:38:C:H2'	62:D3:39:A:O4'	2.16	0.46
62:D3:1501:C:H2'	62:D3:1502:G:C8	2.50	0.46
74:EK:771:ASN:O	74:EK:775:ASN:HA	2.16	0.46
1:CA:87:VAL:HG22	41:JM:149:ILE:HG22	1.97	0.46
2:DA:87:ARG:C	2:DA:98:THR:HG23	2.35	0.46
3:UA:70:LEU:HB2	3:UA:84:PHE:CZ	2.50	0.46
3:UA:450:LEU:HG	3:UA:475:PRO:HB3	1.96	0.46
3:UA:469:LEU:HD21	3:UA:502:ILE:HG21	1.98	0.46
4:UB:766:ARG:NH1	32:CK:348:ASP:HA	2.30	0.46
6:UD:156:LEU:H	6:UD:156:LEU:HD23	1.81	0.46
6:UD:432:SER:HG	6:UD:480:PHE:HD1	1.60	0.46
7:UE:364:THR:HG23	19:UQ:547:VAL:HG22	1.96	0.46
8:UF:269:ILE:HG13	8:UF:270:ALA:N	2.31	0.46
9:UG:238:MET:HG3	9:UG:249:LEU:CD2	2.36	0.46
9:UG:381:LEU:HD12	9:UG:390:LEU:HD12	1.97	0.46
17:UO:2:SER:HB2	19:UQ:334:LEU:HD12	1.98	0.46
17:UO:62:ARG:HH12	17:UO:76:THR:HA	1.80	0.46
17:UO:280:HIS:HB2	17:UO:297:LYS:HZ3	1.80	0.46
19:UQ:200:ASN:ND2	19:UQ:262:MET:O	2.49	0.46
19:UQ:499:LYS:HG2	19:UQ:500:PHE:N	2.30	0.46
19:UQ:557:ILE:HA	19:UQ:577:ASP:OD1	2.15	0.46
20:UR:490:PHE:CE1	20:UR:512:ASP:HB3	2.51	0.46
22:UT:333:TRP:CH2	22:UT:369:SER:HA	2.50	0.46
22:UT:416:PHE:HA	22:UT:419:LEU:HG	1.98	0.46
22:UT:862:ASN:HB3	22:UT:864:ASP:OD1	2.15	0.46
22:UT:1284:LEU:HD23	22:UT:1284:LEU:C	2.36	0.46
22:UT:1334:ASP:HA	22:UT:1335:GLY:HA3	1.63	0.46
22:UT:1921:LEU:O	22:UT:1924:LEU:O	2.34	0.46
23:UU:117:ASN:HB2	23:UU:119:GLU:OE2	2.15	0.46
23:UU:373:ARG:HB3	23:UU:411:PHE:O	2.14	0.46
24:UV:193:ALA:HB2	24:UV:360:VAL:HG12	1.98	0.46
24:UV:298:PHE:HB3	24:UV:302:VAL:HG21	1.96	0.46
24:UV:396:LEU:HD22	24:UV:425:VAL:HG23	1.98	0.46
24:UV:517:ARG:NH1	24:UV:517:ARG:HB2	2.30	0.46
24:UV:741:ILE:HA	24:UV:744:MET:HE3	1.97	0.46
25:UX:152:ILE:HD13	25:UX:152:ILE:HG21	1.67	0.46
29:CH:290:LYS:HZ3	29:CH:290:LYS:HB2	1.81	0.46
29:CH:467:LYS:HA	29:CH:470:LEU:HD23	1.98	0.46
31:CJ:119:ARG:NH1	31:CJ:122:TYR:O	2.45	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CL:722:LYS:O	33:CL:725:LYS:HG3	2.16	0.46
34:CM:233:GLU:HG2	34:CM:234:ASN:N	2.31	0.46
36:JD:113:ILE:HG21	40:JL:301:ASN:OD1	2.16	0.46
36:JD:750:PRO:HG3	36:JD:756:LEU:HD22	1.97	0.46
36:JD:761:THR:HG22	36:JD:762:ASN:N	2.25	0.46
36:JD:851:VAL:HA	36:JD:854:MET:HE2	1.98	0.46
36:JD:1036:GLU:O	36:JD:1039:VAL:HG22	2.15	0.46
37:JG:67:LEU:HD23	37:JG:138:SER:HB2	1.98	0.46
37:JG:96:LEU:HD21	37:JG:137:PHE:CE1	2.50	0.46
40:JL:71:THR:O	40:JL:75:LEU:HD23	2.16	0.46
40:JL:270:LYS:H	40:JL:270:LYS:HD2	1.79	0.46
41:JM:168:GLU:HA	41:JM:170:LYS:NZ	2.30	0.46
46:DF:58:LEU:HD11	46:DF:168:VAL:HG23	1.98	0.46
49:DI:16:ALA:HB2	62:D3:354:C:OP1	2.15	0.46
51:DL:104:HIS:HE1	62:D3:349:U:OP1	1.98	0.46
54:DQ:46:PHE:HA	54:DQ:49:TYR:HB2	1.97	0.46
55:DS:30:TYR:HE2	62:D3:1539:G:N1	2.13	0.46
55:DS:68:ARG:HA	55:DS:71:GLN:HG2	1.98	0.46
62:D3:196:G:C4	62:D3:197:A:C8	3.04	0.46
62:D3:1075:C:H2'	62:D3:1076:A:O4'	2.16	0.46
6:UD:588:ASP:OD1	6:UD:588:ASP:N	2.45	0.46
12:UJ:417:LYS:HA	12:UJ:420:LYS:HG2	1.97	0.46
12:UJ:715:HIS:HA	12:UJ:718:ARG:NH2	2.31	0.46
12:UJ:745:TYR:HD2	12:UJ:748:LEU:HB2	1.80	0.46
13:UK:37:ARG:HH12	33:CL:996:LEU:HD22	1.81	0.46
14:UL:396:SER:HB3	14:UL:408:THR:OG1	2.16	0.46
14:UL:481:LEU:HD23	14:UL:481:LEU:H	1.81	0.46
15:UM:16:TYR:CD1	15:UM:309:GLN:HB3	2.50	0.46
15:UM:53:LEU:HB3	15:UM:54:HIS:ND1	2.30	0.46
15:UM:719:ILE:HG23	15:UM:758:ARG:HE	1.81	0.46
16:UN:324:ALA:H	26:CD:87:PRO:HA	1.80	0.46
17:UO:436:GLU:HA	17:UO:439:LEU:HB2	1.97	0.46
17:UO:475:GLU:O	17:UO:481:GLN:NE2	2.48	0.46
19:UQ:90:LYS:NZ	19:UQ:91:ILE:O	2.43	0.46
19:UQ:259:VAL:HA	19:UQ:275:PHE:HA	1.98	0.46
19:UQ:284:SER:O	19:UQ:288:LEU:CA	2.64	0.46
19:UQ:434:GLN:HB2	19:UQ:436:PHE:CE2	2.51	0.46
19:UQ:631:GLN:HA	19:UQ:651:SER:O	2.15	0.46
20:UR:564:LYS:HB3	20:UR:582:GLU:HG2	1.97	0.46
21:US:176:ILE:HG13	21:US:177:ILE:N	2.30	0.46
22:UT:394:LEU:HD11	22:UT:435:PHE:CD1	2.51	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:749:LYS:HG3	22:UT:756:SER:HB2	1.98	0.46
22:UT:1153:ALA:O	22:UT:1157:ILE:HG12	2.16	0.46
22:UT:2132:LYS:HG2	22:UT:2133:LEU:H	1.80	0.46
23:UU:138:PHE:CE2	23:UU:156:LYS:HG3	2.51	0.46
23:UU:202:SER:OG	23:UU:203:ASN:N	2.49	0.46
24:UV:125:GLU:O	24:UV:128:LEU:HG	2.16	0.46
24:UV:274:LYS:HG2	24:UV:286:TYR:CE2	2.51	0.46
24:UV:777:ASP:O	24:UV:780:GLN:NE2	2.49	0.46
27:CE:212:MET:SD	27:CE:218:ALA:HB2	2.56	0.46
29:CH:304:ILE:HD13	29:CH:338:THR:HG21	1.97	0.46
30:CI:16:VAL:HG23	30:CI:16:VAL:O	2.16	0.46
33:CL:118:LEU:HD11	33:CL:245:LEU:CD2	2.45	0.46
35:CN:97:GLU:N	35:CN:97:GLU:OE2	2.49	0.46
36:JD:30:GLN:HE21	62:D3:317:C:H5''	1.78	0.46
36:JD:537:ARG:O	36:JD:542:LEU:HB2	2.16	0.46
36:JD:553:LEU:HD23	36:JD:553:LEU:H	1.81	0.46
36:JD:572:THR:HG22	36:JD:575:PRO:HG2	1.97	0.46
36:JD:928:VAL:HG22	36:JD:1042:ARG:HB2	1.97	0.46
36:JD:1036:GLU:HB2	36:JD:1040:LYS:HZ1	1.80	0.46
37:JF:69:ASN:OD1	37:JF:72:ASP:N	2.47	0.46
37:JF:182:PHE:CE2	37:JF:232:LEU:HB2	2.50	0.46
40:JL:188:ILE:HB	40:JL:206:VAL:HG13	1.96	0.46
40:JL:233:ARG:NH2	62:D3:1776:A:O3'	2.49	0.46
42:JP:388:THR:HG22	42:JP:392:ASN:HD21	1.81	0.46
44:JJ:157:ASP:OD2	53:DO:103:ARG:NH2	2.33	0.46
45:DE:23:LEU:HD11	50:DJ:6:ARG:HD3	1.97	0.46
47:DG:31:ARG:HG2	47:DG:101:ILE:HG12	1.97	0.46
51:DL:67:ARG:O	51:DL:127:GLN:HB3	2.15	0.46
62:D3:199:G:C2	62:D3:200:A:C5	3.04	0.46
62:D3:973:A:H2'	62:D3:974:A:H8	1.79	0.46
65:EB:163:LYS:HA	65:EB:186:PRO:HA	1.98	0.46
75:EN:153:PHE:O	75:EN:157:ALA:N	2.49	0.46
2:DA:243:LYS:HZ2	24:UV:656:ARG:HH21	1.63	0.46
3:UA:62:ASP:OD2	3:UA:103:LYS:HA	2.16	0.46
3:UA:469:LEU:HD23	3:UA:500:TRP:CD2	2.50	0.46
4:UB:47:ALA:O	4:UB:50:GLU:HG3	2.15	0.46
4:UB:651:TRP:HB3	4:UB:657:PHE:CD1	2.51	0.46
4:UB:731:ASP:HB3	4:UB:734:ARG:HB2	1.98	0.46
6:UD:269:PHE:HD1	20:UR:446:ARG:HG2	1.81	0.46
7:UE:212:LEU:HD11	7:UE:246:VAL:HG11	1.98	0.46
10:UH:56:ILE:N	10:UH:71:SER:O	2.44	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:279:MET:HE2	12:UJ:299:ILE:HG23	1.97	0.46
12:UJ:712:ASN:O	12:UJ:715:HIS:HB2	2.16	0.46
14:UL:452:GLY:HA3	14:UL:472:HIS:O	2.16	0.46
14:UL:609:LYS:HD3	14:UL:647:PHE:CD1	2.50	0.46
15:UM:53:LEU:HB3	15:UM:54:HIS:CE1	2.51	0.46
15:UM:726:GLN:O	15:UM:730:ILE:HG12	2.16	0.46
17:UO:45:ILE:HD11	17:UO:55:PHE:HD2	1.80	0.46
18:UP:188:LYS:HG3	18:UP:189:THR:HG23	1.97	0.46
19:UQ:337:LEU:HD22	19:UQ:341:ILE:HG21	1.97	0.46
22:UT:793:PHE:HD2	22:UT:844:VAL:HB	1.80	0.46
22:UT:1273:LYS:HB2	22:UT:1349:PHE:HB3	1.96	0.46
24:UV:734:PHE:CE2	24:UV:755:PRO:HG3	2.51	0.46
24:UV:765:LEU:O	24:UV:914:ARG:NH1	2.49	0.46
27:CE:5:LEU:HA	27:CE:14:LEU:HD23	1.97	0.46
27:CE:11:GLY:HA2	27:CE:50:PHE:CD1	2.51	0.46
27:CE:53:ALA:O	27:CE:57:LEU:HG	2.16	0.46
27:CE:353:GLY:O	27:CE:356:LYS:HB2	2.15	0.46
28:CF:62:GLU:HA	28:CF:65:LEU:CB	2.45	0.46
31:CJ:141:VAL:CG1	31:CJ:153:THR:HB	2.46	0.46
33:CL:124:ASP:HB3	33:CL:126:ASN:OD1	2.16	0.46
33:CL:768:GLU:OE1	33:CL:768:GLU:HA	2.16	0.46
33:CL:1067:LEU:HD23	33:CL:1067:LEU:H	1.80	0.46
34:CM:339:LEU:HD23	34:CM:352:ALA:HA	1.97	0.46
36:JD:867:PHE:CD1	36:JD:870:PRO:HB3	2.50	0.46
36:JD:1093:ALA:HB1	36:JD:1118:ILE:HG12	1.97	0.46
37:JF:93:HIS:O	37:JF:97:LEU:HD23	2.16	0.46
37:JG:84:ILE:H	37:JG:84:ILE:HD12	1.80	0.46
44:JJ:158:PHE:HB2	44:JJ:175:LEU:HG	1.97	0.46
45:DE:247:SER:O	45:DE:247:SER:OG	2.33	0.46
52:DN:109:LYS:HD2	62:D3:975:C:H5''	1.98	0.46
53:DO:105:LEU:CD2	53:DO:112:ILE:HD11	2.45	0.46
61:D2:88:U:N3	61:D2:89:C:N3	2.64	0.46
62:D3:142:G:C2	62:D3:266:A:C4	3.04	0.46
62:D3:629:U:OP2	62:D3:969:C:N4	2.46	0.46
62:D3:970:A:H5'	62:D3:971:A:OP2	2.16	0.46
62:D3:1022:C:H41	62:D3:1023:A:N6	2.13	0.46
62:D3:1673:G:H2'	62:D3:1674:C:C6	2.50	0.46
62:D3:1682:U:O2'	62:D3:1683:C:H5'	2.15	0.46
67:ED:387:ASP:O	67:ED:391:ARG:N	2.49	0.46
68:EE:190:GLN:O	68:EE:194:LEU:N	2.46	0.46
1:CA:323:SER:O	1:CA:323:SER:OG	2.30	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:UA:422:PHE:CE1	62:D3:1633:A:C4	3.04	0.46
6:UD:310:ASN:OD1	6:UD:310:ASN:N	2.47	0.46
6:UD:658:ASP:HB3	6:UD:661:VAL:HG12	1.98	0.46
7:UE:481:LEU:HD23	7:UE:484:LEU:HD12	1.98	0.46
8:UF:281:LEU:HD23	8:UF:281:LEU:HA	1.79	0.46
13:UK:147:THR:H	13:UK:150:LYS:HE3	1.80	0.46
14:UL:629:ASN:HD22	14:UL:643:ASP:HA	1.81	0.46
14:UL:656:HIS:HB3	14:UL:682:ARG:NH2	2.31	0.46
19:UQ:46:ILE:O	19:UQ:46:ILE:HG13	2.16	0.46
19:UQ:153:ILE:HB	19:UQ:176:LEU:HD11	1.98	0.46
19:UQ:271:LEU:HB2	19:UQ:285:LEU:HD21	1.98	0.46
19:UQ:574:LEU:HG	19:UQ:584:PHE:CD1	2.43	0.46
21:US:373:ALA:HA	21:US:376:VAL:HG12	1.97	0.46
22:UT:70:ILE:O	22:UT:73:ASP:N	2.49	0.46
22:UT:376:LEU:H	22:UT:376:LEU:HD23	1.80	0.46
22:UT:434:LEU:HD22	22:UT:750:TYR:CE1	2.51	0.46
22:UT:519:VAL:O	22:UT:523:LEU:HG	2.16	0.46
22:UT:1529:ARG:O	22:UT:1532:SER:OG	2.29	0.46
22:UT:1593:THR:O	22:UT:1595:SER:O	2.33	0.46
22:UT:2081:GLU:OE1	22:UT:2081:GLU:HA	2.16	0.46
22:UT:2341:GLY:O	22:UT:2345:ARG:HG2	2.16	0.46
23:UU:307:GLN:NE2	27:CE:422:THR:O	2.49	0.46
24:UV:316:ARG:HE	62:D3:1697:G:H4'	1.80	0.46
27:CE:299:LEU:HD22	27:CE:320:LEU:HD23	1.96	0.46
28:CG:40:ALA:O	28:CG:43:THR:HG23	2.15	0.46
29:CH:448:PHE:O	29:CH:451:ILE:HG22	2.15	0.46
33:CL:855:GLN:NE2	33:CL:1032:LEU:HB3	2.31	0.46
35:CN:12:GLY:O	35:CN:40:LYS:HD3	2.16	0.46
36:JD:114:ILE:O	36:JD:117:LEU:HG	2.16	0.46
36:JD:531:MET:SD	36:JD:532:LEU:N	2.89	0.46
36:JD:1174:ALA:O	36:JD:1177:PRO:HD2	2.16	0.46
45:DE:43:PRO:HA	45:DE:82:TYR:O	2.16	0.46
48:DH:97:ARG:HG3	62:D3:694:U:H5''	1.97	0.46
62:D3:287:G:N3	62:D3:288:A:C8	2.84	0.46
62:D3:575:C:O2'	62:D3:576:G:P	2.74	0.46
62:D3:1575:G:C2	62:D3:1576:A:C4	3.04	0.46
3:UA:688:PRO:O	3:UA:822:ARG:HD2	2.16	0.46
1:CB:227:PRO:HG3	1:CB:256:ASN:OD1	2.16	0.46
6:UD:155:LYS:CD	6:UD:167:LEU:HD21	2.44	0.46
6:UD:338:ALA:HA	6:UD:347:LEU:HA	1.98	0.46
6:UD:402:TRP:NE1	6:UD:416:LEU:HD12	2.30	0.46

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:8:LEU:HA	12:UJ:11:VAL:HG12	1.97	0.46
12:UJ:527:LEU:HD12	12:UJ:566:CYS:SG	2.56	0.46
12:UJ:1425:VAL:O	12:UJ:1429:SER:HB3	2.15	0.46
13:UK:93:MET:N	13:UK:93:MET:SD	2.88	0.46
19:UQ:111:THR:HG23	19:UQ:113:ASN:H	1.81	0.46
19:UQ:396:ILE:HG21	19:UQ:779:ILE:HB	1.98	0.46
19:UQ:714:ASP:HB3	19:UQ:717:THR:HG22	1.98	0.46
19:UQ:773:ASP:OD1	19:UQ:773:ASP:N	2.49	0.46
20:UR:207:ALA:HA	20:UR:210:LYS:HE3	1.98	0.46
20:UR:382:GLY:C	20:UR:404:ILE:HD11	2.36	0.46
22:UT:1114:HIS:CE1	22:UT:1156:SER:HG	2.33	0.46
23:UU:177:LEU:O	23:UU:179:LYS:HD3	2.15	0.46
24:UV:121:VAL:HG13	24:UV:189:PHE:HE1	1.81	0.46
24:UV:391:PHE:CE2	24:UV:395:ILE:HD11	2.51	0.46
24:UV:741:ILE:HG21	24:UV:753:ILE:HD11	1.98	0.46
24:UV:773:TYR:HA	24:UV:778:PHE:CG	2.51	0.46
24:UV:807:LEU:HD23	24:UV:807:LEU:HA	1.74	0.46
24:UV:1229:ASP:N	24:UV:1229:ASP:OD1	2.48	0.46
25:UX:124:ARG:HH22	57:DW:98:GLN:HE22	1.65	0.46
29:CH:218:ALA:HB2	63:D4:118:A:C5	2.51	0.46
31:CJ:109:LEU:HD22	62:D3:1159:C:N4	2.31	0.46
33:CL:105:ILE:HG13	33:CL:356:ALA:HB2	1.97	0.46
36:JD:727:ASP:HB3	36:JD:728:PRO:HD3	1.98	0.46
36:JD:841:GLU:HA	36:JD:844:ARG:HB2	1.98	0.46
36:JD:1109:ARG:O	36:JD:1110:THR:HG22	2.15	0.46
37:JG:53:HIS:CD2	37:JG:68:LEU:HD21	2.50	0.46
41:JM:144:PRO:HG2	41:JM:147:PHE:CD2	2.48	0.46
44:JJ:208:LYS:HB2	44:JJ:208:LYS:HE2	1.76	0.46
50:DJ:113:VAL:HG13	50:DJ:118:LEU:HB2	1.97	0.46
51:DL:131:ILE:HB	51:DL:135:VAL:HG13	1.97	0.46
61:D2:20:C:H2'	61:D2:21:A:H8	1.80	0.46
63:D4:82:G:N2	63:D4:327:G:N3	2.64	0.46
1:CA:128:PRO:HB3	63:D4:90:C:H5'	1.98	0.45
1:CA:169:LYS:N	1:CA:238:ASP:OD2	2.36	0.45
3:UA:30:LEU:HD22	3:UA:39:VAL:HG22	1.97	0.45
4:UB:482:GLN:HE22	4:UB:524:LEU:HD13	1.80	0.45
4:UB:495:ASN:HD22	4:UB:618:THR:HG22	1.80	0.45
8:UF:126:TYR:CE1	8:UF:130:HIS:NE2	2.84	0.45
8:UF:172:LEU:HD22	8:UF:182:TRP:CE2	2.50	0.45
9:UG:170:GLN:HG3	9:UG:175:PHE:CE1	2.51	0.45
10:UH:650:LEU:HD11	11:UI:506:LEU:HD22	1.98	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:UI:454:LEU:HA	11:UI:457:LYS:HG3	1.98	0.45
12:UJ:377:ARG:HH12	12:UJ:414:LEU:HD11	1.82	0.45
14:UL:7:ARG:HE	14:UL:651:GLN:NE2	2.15	0.45
14:UL:836:ILE:HG23	14:UL:853:ILE:HD11	1.97	0.45
15:UM:72:ASP:O	15:UM:74:GLN:N	2.47	0.45
15:UM:430:TYR:HE2	15:UM:466:TRP:HB3	1.78	0.45
15:UM:734:GLU:O	15:UM:737:ILE:HG22	2.15	0.45
17:UO:65:ILE:O	17:UO:74:ILE:N	2.35	0.45
22:UT:1325:LEU:HD22	22:UT:2435:GLN:CG	2.43	0.45
22:UT:1379:ASN:HB2	22:UT:1429:LYS:HE3	1.97	0.45
22:UT:1714:SER:O	22:UT:1717:ILE:N	2.48	0.45
22:UT:2162:LEU:HD13	22:UT:2163:ARG:NH1	2.30	0.45
23:UU:765:GLU:OE2	44:JJ:273:ARG:NH1	2.49	0.45
23:UU:817:PHE:CE1	23:UU:833:LEU:HD11	2.52	0.45
24:UV:686:LEU:HD12	24:UV:696:ILE:HD13	1.98	0.45
24:UV:844:THR:O	24:UV:847:GLY:N	2.49	0.45
27:CE:316:THR:HG22	63:D4:324:U:O2'	2.16	0.45
30:CI:77:LEU:HD21	32:CK:441:TYR:OH	2.17	0.45
36:JD:1001:SER:HB3	36:JD:1004:PHE:CD2	2.50	0.45
36:JD:1137:PRO:HA	36:JD:1142:ASN:CG	2.37	0.45
37:JF:179:THR:OG1	37:JF:221:VAL:HG11	2.15	0.45
37:JG:96:LEU:HD13	37:JG:130:ILE:HG21	1.97	0.45
40:JL:90:MET:HA	40:JL:93:GLU:HG3	1.98	0.45
54:DQ:15:SER:HB3	62:D3:1608:U:OP1	2.16	0.45
62:D3:73:U:C4'	62:D3:74:U:H5'	2.46	0.45
62:D3:158:U:O2'	62:D3:159:U:H3'	2.16	0.45
62:D3:477:A:N6	62:D3:539:G:N7	2.64	0.45
1:CA:222:GLU:OE2	1:CA:229:LYS:HE2	2.15	0.45
3:UA:2:LYS:HB2	3:UA:2:LYS:HE2	1.77	0.45
3:UA:462:THR:HG22	3:UA:464:GLN:HG2	1.98	0.45
3:UA:730:LEU:HD23	3:UA:730:LEU:HA	1.83	0.45
3:UA:846:TYR:HD1	23:UU:909:LEU:HD12	1.81	0.45
4:UB:707:PRO:HA	37:JG:25:PRO:HB3	1.98	0.45
4:UB:743:GLN:O	4:UB:747:GLU:OE1	2.34	0.45
6:UD:209:ARG:HB2	6:UD:211:ARG:HH12	1.81	0.45
7:UE:366:GLY:HA3	19:UQ:550:PRO:HA	1.99	0.45
9:UG:74:LEU:HB2	9:UG:404:PRO:HG2	1.98	0.45
9:UG:529:ARG:O	9:UG:532:GLN:HG3	2.16	0.45
12:UJ:63:GLU:HA	12:UJ:64:PRO:HD3	1.80	0.45
12:UJ:78:SER:HA	12:UJ:81:LEU:HD22	1.97	0.45
12:UJ:381:ARG:HH21	12:UJ:414:LEU:CD1	2.29	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:1567:THR:OG1	12:UJ:1570:GLU:OE1	2.32	0.45
14:UL:389:GLY:O	14:UL:415:LYS:HE3	2.16	0.45
14:UL:476:ILE:HA	14:UL:492:SER:HA	1.97	0.45
14:UL:502:PHE:CD2	14:UL:522:LEU:HD11	2.51	0.45
15:UM:105:SER:HA	15:UM:121:GLY:CA	2.45	0.45
17:UO:480:LEU:HA	17:UO:483:LEU:HD12	1.98	0.45
19:UQ:88:ILE:HA	19:UQ:111:THR:HA	1.98	0.45
19:UQ:92:LEU:HB2	19:UQ:108:THR:HB	1.97	0.45
19:UQ:655:LEU:HD13	19:UQ:659:ILE:HD11	1.99	0.45
19:UQ:664:LEU:HD23	19:UQ:664:LEU:H	1.82	0.45
20:UR:137:ILE:HD11	20:UR:155:ILE:HG22	1.97	0.45
20:UR:164:LEU:CD2	23:UU:175:THR:HG22	2.46	0.45
20:UR:490:PHE:HE1	20:UR:512:ASP:HB3	1.82	0.45
21:US:281:LEU:O	21:US:286:ILE:HG12	2.17	0.45
21:US:502:ASN:OD1	21:US:503:TYR:N	2.48	0.45
22:UT:301:ASP:HA	22:UT:304:ASP:OD2	2.17	0.45
22:UT:316:LYS:HG3	22:UT:729:TRP:CE3	2.51	0.45
22:UT:500:LEU:O	22:UT:504:ILE:HG12	2.16	0.45
22:UT:655:ASP:HB3	22:UT:658:VAL:HG22	1.98	0.45
22:UT:1222:SER:O	22:UT:1225:ILE:HG12	2.16	0.45
23:UU:445:MET:O	23:UU:448:LYS:HG3	2.15	0.45
26:CD:245:SER:OG	26:CD:247:ILE:HG12	2.16	0.45
30:CI:108:ARG:HA	30:CI:113:VAL:HG11	1.97	0.45
30:CI:114:ILE:HD13	30:CI:117:ARG:HE	1.82	0.45
33:CL:87:ARG:HH12	33:CL:99:ASN:HA	1.81	0.45
36:JD:806:ALA:HB1	36:JD:823:ARG:CZ	2.46	0.45
37:JG:70:CYS:SG	37:JG:88:ARG:HG3	2.56	0.45
47:DG:24:ILE:O	47:DG:28:PHE:HD1	1.98	0.45
48:DH:160:GLN:O	48:DH:164:TYR:HD2	2.00	0.45
50:DJ:112:GLN:O	50:DJ:116:LEU:HG	2.17	0.45
62:D3:901:G:C6	62:D3:902:G:C2	3.04	0.45
62:D3:1154:G:N2	62:D3:1155:G:C4	2.84	0.45
73:EJ:34:ASN:N	73:EJ:104:LYS:O	2.48	0.45
1:CA:104:ASP:HB2	5:UC:598:ILE:HG12	1.98	0.45
2:DA:241:GLY:HA3	24:UV:656:ARG:CG	2.47	0.45
3:UA:126:ASP:OD1	3:UA:128:ASN:N	2.49	0.45
3:UA:453:PHE:HB3	3:UA:475:PRO:HA	1.98	0.45
3:UA:575:GLU:HA	3:UA:578:LYS:HG2	1.98	0.45
3:UA:623:LEU:HD23	3:UA:677:PRO:HB2	1.98	0.45
7:UE:168:HIS:H	7:UE:191:VAL:HG23	1.81	0.45
7:UE:217:ILE:O	7:UE:220:GLY:N	2.47	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:88:GLN:HB3	9:UG:92:LYS:NZ	2.32	0.45
10:UH:602:LEU:HD23	10:UH:603:SER:O	2.16	0.45
12:UJ:384:ILE:O	12:UJ:388:ILE:HG12	2.15	0.45
13:UK:102:GLN:HG3	13:UK:103:ASP:H	1.80	0.45
15:UM:455:LEU:HD22	15:UM:506:PHE:CZ	2.51	0.45
16:UN:295:VAL:HG21	42:JP:291:MET:SD	2.56	0.45
17:UO:256:THR:HG21	17:UO:302:VAL:O	2.17	0.45
17:UO:434:ARG:HH21	17:UO:466:VAL:HG23	1.81	0.45
18:UP:194:LYS:HE3	18:UP:199:ILE:HG13	1.98	0.45
19:UQ:252:LEU:HD23	19:UQ:256:THR:HG21	1.98	0.45
20:UR:477:LYS:HD3	20:UR:477:LYS:HA	1.82	0.45
22:UT:74:VAL:HG21	22:UT:80:ILE:HD11	1.99	0.45
22:UT:1251:VAL:HG21	22:UT:1291:LEU:HD22	1.98	0.45
29:CH:258:ARG:HD2	29:CH:278:ASP:O	2.16	0.45
31:CJ:102:GLN:HB3	31:CJ:174:HIS:ND1	2.31	0.45
31:CJ:190:ILE:HB	31:CJ:223:THR:HA	1.98	0.45
32:CK:448:LEU:HD23	32:CK:448:LEU:HA	1.76	0.45
33:CL:36:PRO:HB3	58:DX:33:LEU:HD23	1.97	0.45
33:CL:300:GLN:HB3	33:CL:792:VAL:HG22	1.98	0.45
34:CM:251:GLN:OE1	34:CM:251:GLN:HA	2.16	0.45
36:JD:495:GLY:O	36:JD:499:ARG:HG3	2.16	0.45
37:JF:179:THR:HG21	37:JF:214:ASP:OD1	2.15	0.45
42:JP:237:SER:HB3	42:JP:247:TYR:CE1	2.48	0.45
42:JP:288:TYR:O	42:JP:298:LEU:N	2.49	0.45
42:JP:330:ARG:CZ	42:JP:342:ILE:HD12	2.46	0.45
47:DG:32:ILE:HD11	47:DG:53:SER:O	2.17	0.45
56:DT:39:THR:HA	56:DT:100:ILE:HD12	1.98	0.45
56:DT:102:ARG:NH2	62:D3:1500:C:OP1	2.47	0.45
62:D3:496:G:H2'	62:D3:497:G:H8	1.82	0.45
62:D3:985:G:C2	62:D3:986:G:C4	3.04	0.45
1:CA:280:VAL:HG22	1:CA:281:ASP:H	1.82	0.45
3:UA:340:LYS:N	3:UA:341:GLN:OE1	2.49	0.45
4:UB:519:THR:OG1	4:UB:520:PRO:HD3	2.16	0.45
4:UB:712:THR:HA	37:JG:127:THR:O	2.17	0.45
7:UE:86:TRP:CD1	7:UE:98:LYS:HG2	2.50	0.45
7:UE:187:HIS:CG	7:UE:206:ALA:HB2	2.52	0.45
7:UE:199:ASN:N	7:UE:199:ASN:OD1	2.47	0.45
7:UE:242:ASP:OD1	7:UE:242:ASP:N	2.48	0.45
7:UE:436:THR:OG1	7:UE:438:THR:HG23	2.16	0.45
8:UF:64:ASN:HB2	8:UF:88:ILE:HG21	1.98	0.45
8:UF:275:ASP:O	8:UF:278:MET:HB3	2.16	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:138:ASP:O	9:UG:140:ARG:N	2.49	0.45
14:UL:26:ILE:HG22	14:UL:27:PRO:O	2.17	0.45
14:UL:464:LEU:HD22	14:UL:467:THR:OG1	2.17	0.45
15:UM:126:ILE:HD11	15:UM:175:TRP:HZ3	1.81	0.45
17:UO:133:HIS:HD2	17:UO:136:ASP:H	1.57	0.45
17:UO:434:ARG:HD3	17:UO:434:ARG:N	2.31	0.45
18:UP:205:TRP:CE2	18:UP:208:ARG:NH1	2.84	0.45
19:UQ:424:GLN:OE1	19:UQ:428:LEU:HD23	2.17	0.45
21:US:342:TYR:O	21:US:382:LYS:NZ	2.43	0.45
21:US:450:GLU:HB3	21:US:456:THR:HG22	1.97	0.45
22:UT:109:LEU:HD23	22:UT:109:LEU:HA	1.81	0.45
22:UT:551:SER:O	22:UT:555:LEU:HD12	2.17	0.45
22:UT:1166:HIS:O	22:UT:1170:LEU:HD12	2.16	0.45
22:UT:1542:LYS:HB3	22:UT:1608:GLU:HG3	1.99	0.45
22:UT:1806:SER:HB2	22:UT:1811:ILE:HG21	1.98	0.45
23:UU:118:VAL:HA	23:UU:132:THR:HG22	1.97	0.45
23:UU:463:VAL:HG23	23:UU:463:VAL:O	2.16	0.45
23:UU:595:PRO:HD3	23:UU:634:PHE:CD2	2.44	0.45
24:UV:310:PRO:O	24:UV:328:ALA:HB1	2.17	0.45
27:CE:59:GLU:O	27:CE:63:ILE:HG12	2.17	0.45
27:CE:173:LEU:HD23	27:CE:173:LEU:HA	1.79	0.45
29:CH:228:TYR:CG	29:CH:229:GLU:N	2.84	0.45
32:CK:346:GLU:OE1	32:CK:346:GLU:N	2.50	0.45
33:CL:253:THR:HG23	33:CL:267:ARG:HB3	1.99	0.45
33:CL:775:GLU:HG3	33:CL:776:GLN:N	2.31	0.45
33:CL:1105:ASP:HA	33:CL:1108:LYS:HE3	1.97	0.45
36:JD:377:GLU:HB3	36:JD:385:GLN:HE22	1.81	0.45
36:JD:1001:SER:OG	36:JD:1003:VAL:HG22	2.16	0.45
37:JG:99:LEU:O	37:JG:105:ASN:ND2	2.46	0.45
40:JL:156:GLN:OE1	62:D3:1781:A:O2'	2.23	0.45
40:JL:222:GLU:OE1	40:JL:317:PHE:N	2.50	0.45
42:JP:114:THR:OG1	42:JP:139:CYS:O	2.33	0.45
46:DF:146:THR:HB	46:DF:157:ARG:HB3	1.98	0.45
49:DI:25:ARG:HD3	49:DI:25:ARG:HA	1.73	0.45
50:DJ:90:LYS:HB3	50:DJ:95:TYR:CG	2.52	0.45
52:DN:87:ASP:N	52:DN:87:ASP:OD1	2.49	0.45
62:D3:146:U:C4	62:D3:167:U:C4	3.04	0.45
62:D3:327:U:H2'	62:D3:328:A:C8	2.51	0.45
62:D3:1115:U:O2'	62:D3:1116:A:OP1	2.34	0.45
62:D3:1150:G:H2'	62:D3:1151:A:H8	1.81	0.45
63:D4:143:G:HO2'	63:D4:144:G:P	2.38	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
67:ED:297:TYR:N	67:ED:347:ILE:O	2.49	0.45
74:EK:328:ALA:N	74:EK:386:ILE:HA	2.31	0.45
75:EN:445:ASN:O	75:EN:449:ALA:N	2.50	0.45
2:DA:150:VAL:HG12	9:UG:512:ARG:NE	2.30	0.45
3:UA:158:SER:O	3:UA:158:SER:OG	2.30	0.45
3:UA:222:LYS:HA	3:UA:246:TYR:CB	2.46	0.45
3:UA:597:ASN:HA	3:UA:680:ARG:HB2	1.99	0.45
3:UA:622:ALA:O	3:UA:676:ARG:NH1	2.48	0.45
4:UB:443:LYS:HD2	4:UB:448:PHE:HD2	1.80	0.45
4:UB:617:HIS:CD2	4:UB:618:THR:HG23	2.51	0.45
4:UB:704:ASN:ND2	21:US:422:ILE:HG21	2.32	0.45
6:UD:32:ILE:HG22	6:UD:750:ASN:O	2.16	0.45
6:UD:231:VAL:HG22	6:UD:265:TRP:HH2	1.82	0.45
8:UF:84:SER:O	8:UF:87:SER:N	2.49	0.45
12:UJ:690:GLU:O	12:UJ:693:SER:OG	2.25	0.45
15:UM:355:LEU:HD23	15:UM:355:LEU:HA	1.69	0.45
16:UN:789:PRO:HG2	44:JJ:117:TYR:CZ	2.52	0.45
17:UO:263:ASN:HA	17:UO:269:GLN:OE1	2.16	0.45
17:UO:479:VAL:O	17:UO:483:LEU:HG	2.16	0.45
18:UP:181:LEU:H	18:UP:181:LEU:HD23	1.82	0.45
20:UR:511:LEU:HD21	20:UR:544:VAL:HG11	1.98	0.45
20:UR:514:LEU:HD23	20:UR:514:LEU:HA	1.82	0.45
21:US:326:LEU:HG	21:US:329:ARG:NH2	2.30	0.45
22:UT:246:THR:HG23	22:UT:290:SER:HB2	1.98	0.45
22:UT:595:LYS:O	22:UT:599:GLU:HG2	2.17	0.45
22:UT:647:ALA:HB1	22:UT:651:LYS:HZ1	1.80	0.45
22:UT:1882:ARG:HH22	62:D3:650:U:C5'	2.29	0.45
23:UU:393:LEU:H	23:UU:393:LEU:HD12	1.81	0.45
24:UV:938:ALA:O	24:UV:941:PRO:HD2	2.17	0.45
26:CD:20:VAL:HA	26:CD:48:ILE:HD13	1.97	0.45
26:CD:247:ILE:HA	26:CD:250:ARG:HG2	1.98	0.45
29:CH:181:ASN:HA	29:CH:184:ARG:HD3	1.97	0.45
33:CL:635:PHE:CE2	34:CM:219:LEU:HD13	2.51	0.45
33:CL:810:ILE:HG13	33:CL:810:ILE:O	2.16	0.45
40:JL:251:LEU:HD21	40:JL:317:PHE:HD1	1.82	0.45
41:JM:63:PRO:C	41:JM:64:LYS:HD2	2.37	0.45
45:DE:151:ASP:OD2	47:DG:215:ARG:NH1	2.49	0.45
48:DH:46:ILE:HD12	48:DH:60:ILE:HG12	1.99	0.45
50:DJ:78:ARG:NH2	62:D3:763:G:OP1	2.50	0.45
54:DQ:98:ASP:OD1	54:DQ:98:ASP:N	2.47	0.45
62:D3:129:U:O5'	62:D3:129:U:H6	1.99	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:652:G:C2	62:D3:683:C:N3	2.85	0.45
62:D3:907:A:O2'	62:D3:998:A:OP1	2.35	0.45
62:D3:910:C:O2'	62:D3:911:U:O5'	2.34	0.45
2:DA:239:GLU:HG3	24:UV:659:LYS:HZ3	1.82	0.45
3:UA:207:TYR:CD1	3:UA:217:VAL:HG22	2.52	0.45
5:UC:559:ARG:HH21	62:D3:545:A:H5'	1.82	0.45
7:UE:173:ILE:HG22	7:UE:180:VAL:HA	1.99	0.45
7:UE:221:MET:HG3	7:UE:222:THR:N	2.30	0.45
8:UF:313:PHE:HB3	8:UF:342:TRP:CZ2	2.52	0.45
9:UG:237:ALA:HB2	9:UG:278:ASN:O	2.17	0.45
11:UI:462:LEU:HB3	11:UI:463:LYS:HE2	1.98	0.45
12:UJ:670:LEU:HA	12:UJ:673:ASN:ND2	2.31	0.45
12:UJ:1398:VAL:O	12:UJ:1402:LEU:HG	2.16	0.45
14:UL:209:GLY:HA3	14:UL:220:THR:HG22	1.99	0.45
15:UM:89:HIS:CD2	15:UM:91:LYS:HB3	2.52	0.45
15:UM:633:VAL:HG12	15:UM:643:PHE:CD1	2.52	0.45
15:UM:695:PHE:CZ	15:UM:755:ILE:HD12	2.52	0.45
16:UN:299:ASN:HA	16:UN:302:VAL:HG12	1.99	0.45
16:UN:763:ASP:O	16:UN:766:ALA:N	2.50	0.45
16:UN:879:ILE:HD13	42:JP:396:TYR:HB2	1.99	0.45
17:UO:54:ASP:OD1	17:UO:54:ASP:N	2.50	0.45
17:UO:421:LEU:HD21	17:UO:430:ALA:HB2	1.98	0.45
17:UO:463:VAL:O	17:UO:466:VAL:HG12	2.17	0.45
21:US:391:PRO:O	21:US:395:ILE:HG12	2.16	0.45
22:UT:589:PHE:HE1	22:UT:661:PHE:CE1	2.35	0.45
22:UT:620:SER:HA	22:UT:623:MET:CE	2.45	0.45
22:UT:1240:THR:HA	22:UT:1243:ILE:HD12	1.98	0.45
22:UT:1261:ILE:HG21	22:UT:1295:VAL:HG11	1.99	0.45
22:UT:2000:PHE:HA	22:UT:2003:LEU:HD12	1.99	0.45
23:UU:100:ILE:HD13	23:UU:149:TYR:HB2	1.97	0.45
23:UU:630:THR:N	23:UU:644:THR:O	2.46	0.45
24:UV:99:LYS:NZ	24:UV:501:ASN:O	2.37	0.45
24:UV:423:LYS:O	24:UV:427:LYS:HG2	2.17	0.45
24:UV:1156:LYS:HG2	24:UV:1157:TYR:CE1	2.51	0.45
27:CE:43:LYS:NZ	27:CE:130:GLY:HA3	2.32	0.45
29:CH:343:ASP:N	29:CH:343:ASP:OD1	2.50	0.45
32:CK:371:ARG:HB3	32:CK:371:ARG:CZ	2.45	0.45
32:CK:411:GLU:HA	32:CK:414:GLU:OE1	2.17	0.45
33:CL:251:ASP:OD1	33:CL:251:ASP:N	2.49	0.45
35:CN:70:PHE:O	35:CN:74:LEU:HD23	2.17	0.45
36:JD:445:VAL:HB	36:JD:489:VAL:HA	1.99	0.45

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:JL:127:SER:HB2	40:JL:153:LEU:HD22	1.99	0.45
42:JP:299:ASN:OD1	42:JP:300:VAL:N	2.49	0.45
42:JP:362:TYR:HH	42:JP:383:SER:HG	1.63	0.45
46:DF:212:LYS:O	46:DF:216:GLU:HG2	2.17	0.45
49:DI:29:LEU:HD23	49:DI:29:LEU:H	1.81	0.45
55:DS:28:ILE:HG12	55:DS:56:LYS:O	2.16	0.45
58:DX:43:PHE:CE2	58:DX:49:ALA:HB2	2.52	0.45
58:DX:69:ARG:HE	58:DX:69:ARG:HB3	1.63	0.45
62:D3:629:U:C2	62:D3:970:A:N6	2.85	0.45
62:D3:901:G:N1	62:D3:902:G:C6	2.85	0.45
75:EN:864:LYS:O	75:EN:868:ARG:N	2.38	0.45
3:UA:15:TYR:HB2	3:UA:327:LEU:HD12	1.98	0.45
3:UA:36:ARG:NH2	3:UA:53:GLU:OE1	2.49	0.45
3:UA:55:ARG:HH21	3:UA:78:ARG:NH1	2.15	0.45
3:UA:168:LEU:CD2	3:UA:193:TYR:HA	2.47	0.45
4:UB:484:ARG:HB3	4:UB:492:ALA:HB1	1.98	0.45
6:UD:242:TRP:CH2	18:UP:202:LYS:HE2	2.51	0.45
8:UF:35:LYS:HA	8:UF:35:LYS:HD2	1.60	0.45
10:UH:678:LEU:O	10:UH:681:THR:OG1	2.20	0.45
12:UJ:680:TYR:CG	12:UJ:681:ALA:N	2.85	0.45
12:UJ:800:ASP:OD1	12:UJ:801:ILE:HD12	2.17	0.45
12:UJ:1504:LEU:HD21	12:UJ:1532:SER:HB3	1.99	0.45
12:UJ:1572:LEU:HD12	12:UJ:1576:PHE:HE1	1.81	0.45
14:UL:149:ASP:O	14:UL:153:GLU:N	2.50	0.45
14:UL:230:LYS:HB3	14:UL:245:MET:HE1	1.98	0.45
14:UL:386:GLU:HB3	14:UL:391:ARG:HH21	1.82	0.45
15:UM:137:THR:HG1	15:UM:138:HIS:N	2.14	0.45
15:UM:172:VAL:HG13	15:UM:193:VAL:HG21	1.99	0.45
17:UO:464:ALA:O	17:UO:467:LEU:HG	2.17	0.45
19:UQ:57:VAL:HB	19:UQ:382:LYS:HZ1	1.81	0.45
19:UQ:716:ARG:HH21	19:UQ:772:THR:N	2.14	0.45
21:US:384:ALA:HA	21:US:387:THR:HG22	1.98	0.45
22:UT:1018:HIS:HB3	22:UT:1021:SER:OG	2.17	0.45
22:UT:1314:SER:CB	22:UT:1324:ILE:HB	2.46	0.45
22:UT:1415:SER:HA	22:UT:1418:VAL:HG12	1.99	0.45
22:UT:1431:PHE:C	22:UT:1435:GLU:HG2	2.35	0.45
22:UT:1624:THR:O	22:UT:1628:ILE:HG23	2.16	0.45
22:UT:1899:LEU:HD21	22:UT:1917:ILE:HD11	1.97	0.45
23:UU:237:LYS:HB3	23:UU:239:LYS:HD3	1.99	0.45
23:UU:841:SER:O	23:UU:845:VAL:HG23	2.17	0.45
24:UV:130:LYS:HD2	24:UV:283:TYR:CE2	2.51	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:229:SER:O	24:UV:232:LEU:HG	2.17	0.45
24:UV:1097:ASP:OD2	24:UV:1186:ILE:HG22	2.16	0.45
24:UV:1205:LYS:HA	35:CN:36:PHE:CD2	2.51	0.45
27:CE:43:LYS:HG3	27:CE:44:ILE:HG12	1.97	0.45
27:CE:132:SER:O	27:CE:132:SER:OG	2.35	0.45
27:CE:241:VAL:O	27:CE:241:VAL:HG13	2.16	0.45
27:CE:398:LEU:O	27:CE:402:GLU:HG2	2.16	0.45
28:CF:62:GLU:HA	28:CF:65:LEU:HB3	1.98	0.45
29:CH:464:LEU:HA	29:CH:464:LEU:HD23	1.64	0.45
29:CH:535:GLU:OE2	29:CH:570:GLN:NE2	2.50	0.45
31:CJ:144:GLU:HA	31:CJ:149:PRO:HA	1.98	0.45
33:CL:799:GLU:OE2	33:CL:799:GLU:N	2.31	0.45
35:CN:92:GLU:OE1	35:CN:92:GLU:N	2.47	0.45
36:JD:1034:LEU:O	36:JD:1038:ILE:HG13	2.17	0.45
37:JF:44:VAL:HA	37:JF:113:TYR:O	2.17	0.45
39:JI:1613:PRO:O	39:JI:1617:HIS:N	2.42	0.45
47:DG:58:LYS:HZ2	47:DG:106:LEU:C	2.20	0.45
48:DH:8:ILE:O	48:DH:42:GLN:HB3	2.16	0.45
48:DH:166:LEU:HD23	48:DH:166:LEU:HA	1.75	0.45
49:DI:41:LYS:HE3	49:DI:41:LYS:HB2	1.54	0.45
58:DX:46:SER:OG	58:DX:47:SER:N	2.49	0.45
73:EJ:223:CYS:HA	73:EJ:286:ARG:HA	1.99	0.45
75:EN:353:PHE:O	75:EN:357:MET:N	2.42	0.45
75:EN:401:ILE:O	75:EN:405:LYS:N	2.50	0.45
75:EN:699:ALA:N	75:EN:718:ILE:O	2.48	0.45
1:CB:91:HIS:HA	13:UK:164:ASN:ND2	2.32	0.45
4:UB:689:GLU:HG2	4:UB:693:LYS:NZ	2.32	0.45
6:UD:245:ILE:HG22	6:UD:286:LEU:HD23	1.98	0.45
6:UD:649:TRP:CH2	6:UD:743:PHE:HA	2.51	0.45
8:UF:67:ARG:HH12	8:UF:85:ASP:HB3	1.81	0.45
12:UJ:488:GLY:HA2	12:UJ:491:TYR:HD2	1.80	0.45
12:UJ:1548:PHE:HE1	12:UJ:1575:PHE:CE1	2.34	0.45
12:UJ:1617:ASN:O	12:UJ:1621:LEU:HD23	2.17	0.45
13:UK:152:PHE:CD2	13:UK:165:ARG:HD3	2.52	0.45
14:UL:403:ASN:O	14:UL:404:LYS:HE2	2.16	0.45
15:UM:397:THR:CG2	15:UM:402:TRP:HB2	2.47	0.45
17:UO:447:LEU:HA	17:UO:490:LYS:HE3	1.98	0.45
17:UO:508:LEU:HD12	17:UO:509:GLN:N	2.32	0.45
19:UQ:214:ASP:HB3	19:UQ:218:LYS:NZ	2.32	0.45
20:UR:247:SER:OG	20:UR:273:ARG:NH1	2.50	0.45
21:US:406:ILE:HG21	21:US:416:LEU:HD11	1.99	0.45

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:132:LEU:HD23	22:UT:132:LEU:HA	1.66	0.45
22:UT:430:LYS:HA	22:UT:481:TRP:NE1	2.32	0.45
22:UT:626:GLU:HG2	22:UT:665:TYR:OH	2.16	0.45
22:UT:1463:GLN:HE22	22:UT:1503:ILE:N	2.14	0.45
23:UU:822:ARG:O	23:UU:826:GLN:HG2	2.17	0.45
24:UV:490:GLU:OE1	24:UV:580:TYR:OH	2.17	0.45
26:CD:168:GLN:OE1	26:CD:298:THR:HG22	2.17	0.45
27:CE:328:ARG:O	27:CE:332:THR:HG22	2.16	0.45
28:CG:62:GLU:HA	28:CG:65:LEU:HB3	1.98	0.45
31:CJ:110:LEU:O	31:CJ:220:ARG:NH2	2.49	0.45
31:CJ:196:THR:HG23	31:CJ:198:LEU:H	1.82	0.45
33:CL:52:ARG:HD3	62:D3:436:A:OP2	2.17	0.45
33:CL:548:ASN:HB3	33:CL:551:LYS:NZ	2.32	0.45
33:CL:880:TYR:CB	58:DX:94:ASN:ND2	2.76	0.45
34:CM:314:ASN:HB3	34:CM:317:GLN:NE2	2.32	0.45
35:CN:254:LYS:NZ	52:DN:93:LYS:NZ	2.65	0.45
48:DH:152:VAL:HG23	48:DH:181:ILE:HD11	1.98	0.45
49:DI:36:THR:OG1	49:DI:57:ALA:O	2.30	0.45
49:DI:82:VAL:HG21	49:DI:103:GLN:HG3	1.98	0.45
53:DO:90:ARG:NH1	62:D3:902:G:OP1	2.43	0.45
58:DX:38:PHE:HE1	62:D3:601:A:H4'	1.81	0.45
59:DY:27:VAL:HG21	59:DY:40:LEU:HD21	1.97	0.45
62:D3:1646:C:H2'	62:D3:1647:U:H6	1.82	0.45
63:D4:152:U:H2'	63:D4:153:C:C6	2.52	0.45
63:D4:164:C:H2'	63:D4:165:G:C8	2.51	0.45
4:UB:482:GLN:NE2	4:UB:524:LEU:HD13	2.32	0.45
4:UB:561:ILE:HG22	4:UB:564:VAL:H	1.81	0.45
6:UD:426:GLN:NE2	18:UP:190:LEU:HG	2.32	0.45
9:UG:546:ILE:CD1	24:UV:808:LEU:HD22	2.47	0.45
10:UH:642:LEU:HD23	17:UO:510:LEU:HD13	1.99	0.45
12:UJ:361:SER:OG	12:UJ:362:LYS:HD3	2.16	0.45
13:UK:188:GLU:O	13:UK:192:LYS:HB2	2.17	0.45
14:UL:164:ASP:HB3	14:UL:182:LYS:HB3	1.98	0.45
14:UL:417:TRP:HD1	14:UL:424:CYS:HA	1.79	0.45
14:UL:429:GLU:N	14:UL:429:GLU:OE1	2.50	0.45
15:UM:333:ILE:HG22	15:UM:380:ASP:OD1	2.16	0.45
15:UM:415:TRP:CD1	15:UM:415:TRP:N	2.85	0.45
15:UM:542:CYS:SG	15:UM:583:PHE:HB3	2.57	0.45
17:UO:211:HIS:HA	17:UO:235:LYS:NZ	2.32	0.45
21:US:329:ARG:HD2	21:US:330:PHE:N	2.32	0.45
21:US:400:PRO:HB3	21:US:493:TYR:HD2	1.82	0.45

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:118:GLY:O	22:UT:120:ASP:N	2.49	0.45
22:UT:1374:PHE:CZ	22:UT:1378:ILE:HD11	2.52	0.45
23:UU:246:ILE:HD11	23:UU:276:TYR:HE2	1.82	0.45
25:UX:156:ASN:O	25:UX:156:ASN:ND2	2.44	0.45
26:CD:332:THR:HA	26:CD:335:ILE:HG12	1.99	0.45
28:CG:110:ILE:O	28:CG:114:ILE:HG13	2.16	0.45
29:CH:284:LEU:HD11	29:CH:300:ALA:HB2	1.98	0.45
33:CL:615:PHE:CD2	34:CM:278:GLN:CD	2.90	0.45
33:CL:810:ILE:HG22	33:CL:1021:LEU:HD21	1.98	0.45
33:CL:1143:ALA:O	33:CL:1147:GLU:HG2	2.16	0.45
35:CN:19:LYS:HA	35:CN:33:SER:O	2.17	0.45
36:JD:494:ASP:O	36:JD:498:LEU:HG	2.17	0.45
36:JD:523:ILE:O	36:JD:527:ILE:HG12	2.16	0.45
36:JD:626:LEU:HD13	36:JD:779:SER:HB3	1.99	0.45
36:JD:1080:LEU:O	36:JD:1084:ILE:HG12	2.17	0.45
36:JD:1091:HIS:O	36:JD:1153:LEU:HD12	2.16	0.45
37:JG:137:PHE:O	37:JG:141:MET:HG2	2.17	0.45
40:JL:41:ASN:O	40:JL:44:VAL:HG22	2.16	0.45
47:DG:23:ARG:O	47:DG:26:VAL:HB	2.17	0.45
50:DJ:120:LYS:N	50:DJ:124:HIS:HD2	2.10	0.45
62:D3:272:U:O2'	62:D3:273:G:O5'	2.30	0.45
62:D3:333:A:H5''	62:D3:334:G:OP2	2.16	0.45
62:D3:697:C:H2'	62:D3:698:U:C6	2.52	0.45
63:D4:157:A:OP2	63:D4:157:A:H8	1.99	0.45
1:CA:138:LYS:HE3	1:CA:138:LYS:HB3	1.74	0.45
3:UA:450:LEU:O	3:UA:450:LEU:HD23	2.16	0.45
1:CB:243:ASP:HA	1:CB:270:SER:OG	2.16	0.45
5:UC:567:LYS:HE2	5:UC:567:LYS:HB3	1.75	0.45
6:UD:431:CYS:SG	6:UD:442:VAL:HG12	2.57	0.45
6:UD:453:LEU:HD12	6:UD:460:LEU:HB3	1.99	0.45
7:UE:167:SER:O	7:UE:167:SER:OG	2.34	0.45
7:UE:468:THR:O	7:UE:472:LEU:HG	2.16	0.45
8:UF:272:THR:O	8:UF:276:VAL:HG22	2.17	0.45
9:UG:178:ASP:OD1	9:UG:179:HIS:N	2.42	0.45
10:UH:552:LYS:O	10:UH:556:VAL:HG22	2.17	0.45
11:UI:479:CYS:O	11:UI:482:LEU:HG	2.16	0.45
12:UJ:535:ALA:HA	12:UJ:539:LEU:HD23	1.99	0.45
14:UL:574:LEU:HD13	14:UL:593:ALA:HB3	1.99	0.45
14:UL:576:VAL:HG11	14:UL:579:ILE:HD11	1.98	0.45
15:UM:385:GLU:N	15:UM:385:GLU:OE2	2.50	0.45
15:UM:589:GLN:HG2	15:UM:603:ASP:OD1	2.17	0.45

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:UN:865:ILE:HD11	42:JP:403:ARG:NH1	2.32	0.45
18:UP:184:THR:C	18:UP:188:LYS:HZ2	2.20	0.45
19:UQ:92:LEU:HD23	19:UQ:92:LEU:HA	1.82	0.45
19:UQ:208:LEU:HD23	19:UQ:228:VAL:O	2.17	0.45
19:UQ:259:VAL:HG22	61:D2:63:G:O6	2.16	0.45
19:UQ:506:TRP:CZ3	19:UQ:571:GLN:HB2	2.50	0.45
19:UQ:681:ILE:HG13	19:UQ:688:VAL:HA	1.98	0.45
19:UQ:760:HIS:CD2	19:UQ:761:GLU:HG3	2.52	0.45
22:UT:489:SER:O	22:UT:490:LYS:HG3	2.17	0.45
22:UT:562:VAL:HG11	22:UT:607:LEU:HD23	1.98	0.45
23:UU:268:THR:CG2	23:UU:272:ASP:HB2	2.47	0.45
23:UU:362:GLN:HB3	23:UU:364:HIS:ND1	2.32	0.45
23:UU:633:LYS:O	23:UU:641:LEU:HD12	2.17	0.45
23:UU:772:SER:O	23:UU:776:GLY:HA2	2.17	0.45
25:UX:83:VAL:HG21	25:UX:124:ARG:HE	1.82	0.45
26:CD:400:PHE:HA	26:CD:403:VAL:HG12	1.99	0.45
27:CE:28:LEU:HD13	27:CE:33:ASP:CB	2.46	0.45
29:CH:449:ASN:OD1	29:CH:450:ASP:N	2.50	0.45
31:CJ:192:ASP:OD1	32:CK:372:ARG:NH2	2.51	0.45
33:CL:14:LYS:HB2	33:CL:14:LYS:HE2	1.73	0.45
33:CL:1025:GLU:C	33:CL:1027:THR:H	2.20	0.45
35:CN:24:LYS:HE2	35:CN:24:LYS:HB2	1.80	0.45
36:JD:532:LEU:HA	36:JD:535:CYS:SG	2.57	0.45
36:JD:823:ARG:HB3	36:JD:825:TYR:CE2	2.52	0.45
36:JD:1187:LEU:HD23	36:JD:1217:PHE:CD1	2.52	0.45
37:JF:209:MET:HG3	37:JF:212:GLY:HA3	1.98	0.45
37:JG:40:ARG:O	37:JG:201:SER:HA	2.17	0.45
42:JP:71:TYR:CE2	42:JP:88:ALA:HB2	2.52	0.45
42:JP:321:VAL:HG22	42:JP:354:VAL:HG11	1.98	0.45
44:JJ:158:PHE:CD1	44:JJ:171:SER:HB2	2.52	0.45
46:DF:117:THR:HG22	46:DF:121:ILE:HD11	1.99	0.45
50:DJ:57:ARG:O	50:DJ:61:THR:HG23	2.17	0.45
50:DJ:183:ALA:HA	50:DJ:186:GLU:HG3	1.99	0.45
53:DO:38:THR:HG21	62:D3:895:G:H21	1.82	0.45
57:DW:36:LYS:HD3	57:DW:36:LYS:HA	1.85	0.45
59:DY:29:HIS:CE1	59:DY:34:ASN:H	2.34	0.45
62:D3:325:G:H2'	62:D3:326:G:H8	1.82	0.45
62:D3:686:C:H2'	62:D3:687:G:H8	1.82	0.45
72:EI:117:ALA:H	72:EI:126:VAL:HA	1.82	0.45
3:UA:162:LEU:HG	3:UA:199:PHE:CE2	2.52	0.44
3:UA:409:GLY:HA2	3:UA:431:ILE:O	2.17	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:UA:422:PHE:CZ	62:D3:1633:A:C2	3.06	0.44
5:UC:610:ASN:HB3	25:UX:133:LYS:HG2	2.00	0.44
7:UE:127:TYR:HB3	7:UE:129:PHE:HE2	1.82	0.44
7:UE:350:LEU:HD21	19:UQ:60:ARG:CZ	2.48	0.44
12:UJ:717:GLU:HG2	12:UJ:748:LEU:HD13	1.97	0.44
14:UL:448:GLY:HA2	14:UL:476:ILE:HD11	1.99	0.44
15:UM:141:LYS:HD2	15:UM:142:GLY:N	2.32	0.44
15:UM:267:PHE:O	15:UM:281:THR:HG23	2.17	0.44
15:UM:418:ASN:ND2	15:UM:420:ASN:HD21	2.15	0.44
15:UM:513:LYS:HG3	15:UM:535:GLY:H	1.83	0.44
16:UN:313:PHE:O	16:UN:315:LEU:N	2.47	0.44
19:UQ:589:SER:OG	19:UQ:590:HIS:N	2.50	0.44
20:UR:261:PRO:C	20:UR:262:LEU:HD12	2.38	0.44
22:UT:405:TYR:O	22:UT:408:VAL:HG12	2.17	0.44
22:UT:418:GLN:O	22:UT:422:LYS:HG2	2.17	0.44
24:UV:153:PHE:HA	24:UV:156:LYS:HB2	1.99	0.44
28:CG:125:LEU:HD23	28:CG:125:LEU:HA	1.83	0.44
30:CI:109:ARG:HD2	30:CI:150:VAL:O	2.17	0.44
35:CN:20:LEU:HA	35:CN:157:GLU:OE2	2.17	0.44
35:CN:91:ASP:OD2	35:CN:96:HIS:N	2.50	0.44
36:JD:878:LYS:O	36:JD:882:LEU:HD23	2.16	0.44
36:JD:907:LEU:HD23	36:JD:908:SER:N	2.32	0.44
37:JG:46:ALA:HA	37:JG:115:GLN:HB3	1.99	0.44
37:JG:219:GLU:H	37:JG:219:GLU:CD	2.19	0.44
40:JL:281:ILE:HA	40:JL:284:VAL:HG22	1.99	0.44
42:JP:113:VAL:HG23	42:JP:113:VAL:O	2.17	0.44
42:JP:172:LEU:HD23	42:JP:172:LEU:O	2.17	0.44
42:JP:231:GLU:HG3	42:JP:231:GLU:O	2.17	0.44
62:D3:138:A:H61	62:D3:266:A:H61	1.64	0.44
62:D3:187:G:C6	62:D3:197:A:C6	3.05	0.44
62:D3:195:G:O2'	62:D3:196:G:H5'	2.17	0.44
62:D3:610:G:O2'	62:D3:613:G:O2'	2.12	0.44
62:D3:1010:C:H2'	62:D3:1011:G:O4'	2.17	0.44
62:D3:1057:U:O2'	62:D3:1058:U:O5'	2.29	0.44
63:D4:42:U:H2'	63:D4:43:C:C6	2.52	0.44
75:EN:220:GLY:N	75:EN:234:CYS:O	2.37	0.44
2:DA:145:LYS:HB2	2:DA:149:GLN:CG	2.29	0.44
2:DA:218:LEU:HD23	2:DA:218:LEU:HA	1.75	0.44
3:UA:55:ARG:HD3	3:UA:621:MET:HE1	1.99	0.44
1:CB:195:TYR:HA	1:CB:218:ILE:CG2	2.45	0.44
6:UD:229:MET:SD	6:UD:270:ALA:HB1	2.57	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:UD:564:ALA:HA	12:UJ:636:ASP:OD2	2.17	0.44
7:UE:343:ARG:HD3	7:UE:344:ASP:N	2.32	0.44
7:UE:470:PHE:HD2	7:UE:471:ARG:HD2	1.81	0.44
9:UG:298:MET:CE	9:UG:330:LEU:HD21	2.47	0.44
10:UH:636:GLN:O	10:UH:640:LEU:HG	2.17	0.44
12:UJ:1404:PHE:HD1	12:UJ:1407:LEU:HD21	1.82	0.44
14:UL:499:PHE:CD1	14:UL:526:THR:HG23	2.52	0.44
14:UL:540:SER:CA	14:UL:581:ILE:HD11	2.38	0.44
14:UL:588:ILE:HG23	14:UL:600:TRP:HB2	1.99	0.44
15:UM:627:ASN:OD1	15:UM:627:ASN:N	2.50	0.44
16:UN:298:TRP:O	16:UN:301:ILE:HG22	2.17	0.44
17:UO:173:THR:HG21	17:UO:218:VAL:H	1.81	0.44
19:UQ:213:LYS:O	19:UQ:217:THR:HG23	2.18	0.44
21:US:478:ALA:O	21:US:482:LYS:HG2	2.16	0.44
22:UT:902:THR:HG21	49:DI:62:THR:HG21	1.99	0.44
22:UT:1516:GLN:HG3	22:UT:1517:HIS:CD2	2.51	0.44
23:UU:439:PHE:HE1	23:UU:441:ARG:NH1	2.15	0.44
24:UV:286:TYR:O	24:UV:289:ARG:NH1	2.48	0.44
24:UV:468:PHE:CZ	24:UV:473:LYS:HA	2.52	0.44
24:UV:529:VAL:HG22	24:UV:696:ILE:HG12	1.98	0.44
24:UV:1063:ARG:O	24:UV:1067:LEU:HD23	2.18	0.44
27:CE:101:LEU:HD12	27:CE:103:LEU:H	1.81	0.44
31:CJ:201:ARG:HA	31:CJ:201:ARG:HD2	1.78	0.44
33:CL:968:THR:HG22	33:CL:972:ILE:HG12	1.99	0.44
33:CL:975:GLU:OE2	33:CL:977:LYS:HE2	2.17	0.44
34:CM:202:PRO:HG3	34:CM:229:VAL:HG11	1.99	0.44
36:JD:396:GLU:HB3	36:JD:399:LYS:HE3	2.00	0.44
36:JD:461:ARG:HA	36:JD:464:ASN:ND2	2.32	0.44
36:JD:1002:ASP:CG	36:JD:1169:THR:HG1	2.20	0.44
36:JD:1106:ILE:HA	36:JD:1107:THR:HA	1.66	0.44
37:JG:40:ARG:HH22	37:JG:111:GLN:HB3	1.83	0.44
41:JM:59:LEU:HD12	41:JM:62:LEU:HD12	1.98	0.44
42:JP:400:LEU:HA	42:JP:400:LEU:HD23	1.68	0.44
51:DL:80:MET:HG3	51:DL:83:THR:OG1	2.18	0.44
54:DQ:123:ARG:HA	54:DQ:123:ARG:NE	2.32	0.44
55:DS:42:TYR:O	55:DS:46:VAL:HG13	2.17	0.44
62:D3:400:A:H4'	62:D3:401:A:H5''	2.00	0.44
62:D3:505:A:H62	62:D3:585:A:H5'	1.83	0.44
62:D3:1540:G:C6	62:D3:1541:G:C4	3.06	0.44
62:D3:1701:A:H2'	62:D3:1702:A:N3	2.32	0.44
65:EB:250:LYS:N	66:EC:199:LEU:O	2.43	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
74:EK:845:PRO:HA	74:EK:851:ASP:CB	2.47	0.44
1:CB:281:ASP:O	1:CB:285:VAL:HG23	2.17	0.44
6:UD:34:HIS:HB3	6:UD:414:TYR:OH	2.18	0.44
7:UE:255:ILE:O	7:UE:276:SER:OG	2.30	0.44
8:UF:121:GLY:HA2	8:UF:124:THR:OG1	2.18	0.44
10:UH:593:ASP:OD2	10:UH:594:SER:N	2.50	0.44
12:UJ:563:LEU:HD11	12:UJ:600:LEU:HB2	1.99	0.44
12:UJ:1355:ILE:O	12:UJ:1359:VAL:HG23	2.17	0.44
12:UJ:1358:CYS:HA	12:UJ:1361:VAL:HG12	1.98	0.44
12:UJ:1664:LYS:HD3	63:D4:145:U:C6	2.52	0.44
12:UJ:1750:THR:O	12:UJ:1754:LYS:HG3	2.16	0.44
14:UL:406:LEU:HD11	14:UL:416:ILE:HG13	2.00	0.44
15:UM:344:ARG:O	15:UM:353:LEU:HD12	2.17	0.44
15:UM:348:PRO:HD2	15:UM:419:GLU:CG	2.46	0.44
15:UM:493:ASP:O	15:UM:511:TYR:N	2.37	0.44
17:UO:209:LEU:HD13	17:UO:237:TRP:CE3	2.52	0.44
19:UQ:310:SER:C	19:UQ:326:LEU:HD13	2.38	0.44
22:UT:280:MET:SD	22:UT:735:ARG:NH2	2.90	0.44
22:UT:490:LYS:HA	22:UT:527:ARG:NH1	2.32	0.44
22:UT:846:SER:HB2	22:UT:849:GLU:OE2	2.17	0.44
22:UT:881:LEU:O	22:UT:885:ARG:HG3	2.17	0.44
22:UT:945:ARG:HE	22:UT:945:ARG:HB2	1.55	0.44
22:UT:1168:VAL:O	22:UT:1172:THR:HG23	2.18	0.44
22:UT:2345:ARG:CD	62:D3:830:U:H5'	2.47	0.44
23:UU:138:PHE:HB3	23:UU:140:TYR:HE1	1.82	0.44
23:UU:495:ARG:HD3	23:UU:495:ARG:HA	1.65	0.44
24:UV:219:PHE:HB3	24:UV:303:PHE:CD2	2.53	0.44
24:UV:551:GLU:HA	24:UV:554:LYS:HZ2	1.83	0.44
24:UV:623:GLU:HB3	24:UV:626:LYS:NZ	2.31	0.44
24:UV:808:LEU:HA	24:UV:825:PHE:HZ	1.82	0.44
25:UX:61:PRO:HG3	25:UX:63:TYR:CZ	2.52	0.44
25:UX:171:PRO:HA	25:UX:184:LYS:HB2	1.99	0.44
26:CD:240:LEU:O	26:CD:242:ASN:N	2.50	0.44
27:CE:98:ILE:HG13	27:CE:107:VAL:HG21	1.98	0.44
27:CE:124:LEU:HD12	27:CE:127:LEU:HB3	1.98	0.44
28:CF:110:ILE:O	28:CF:114:ILE:HG13	2.16	0.44
31:CJ:93:SER:OG	31:CJ:94:ARG:N	2.48	0.44
32:CK:499:GLY:O	32:CK:508:ARG:NH2	2.41	0.44
33:CL:128:MET:SD	33:CL:155:PHE:HB2	2.57	0.44
36:JD:106:LYS:O	36:JD:109:GLU:HG2	2.16	0.44
36:JD:375:TYR:O	36:JD:379:SER:OG	2.22	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:JL:193:LYS:HB2	40:JL:200:PRO:O	2.16	0.44
44:JJ:72:VAL:HB	44:JJ:80:ARG:HG3	1.98	0.44
48:DH:9:LEU:HD11	48:DH:13:PRO:HA	1.99	0.44
53:DO:48:VAL:O	53:DO:48:VAL:HG13	2.18	0.44
61:D2:18:G:H2'	61:D2:19:A:C8	2.52	0.44
62:D3:233:C:H4'	62:D3:234:G:O4'	2.17	0.44
74:EK:81:ALA:CB	74:EK:82:PRO:HA	2.45	0.44
1:CA:128:PRO:HA	1:CA:136:PRO:HB3	2.00	0.44
4:UB:495:ASN:ND2	4:UB:618:THR:HG22	2.33	0.44
4:UB:662:LEU:O	4:UB:666:GLN:HG2	2.16	0.44
6:UD:71:ARG:HB2	6:UD:75:ASN:HB3	2.00	0.44
6:UD:298:ALA:HB2	6:UD:304:ILE:HG22	1.98	0.44
7:UE:552:ASN:O	7:UE:556:THR:HG22	2.17	0.44
8:UF:120:ARG:HH12	8:UF:123:GLN:HB2	1.82	0.44
11:UI:476:LYS:HA	11:UI:476:LYS:HD3	1.83	0.44
12:UJ:332:ILE:O	12:UJ:336:LEU:HG	2.17	0.44
14:UL:398:ASP:OD1	14:UL:399:ILE:N	2.49	0.44
14:UL:625:PRO:HG3	14:UL:667:THR:O	2.16	0.44
15:UM:194:ARG:HA	15:UM:194:ARG:HD2	1.70	0.44
15:UM:259:TYR:HB2	15:UM:267:PHE:CE1	2.52	0.44
15:UM:544:TYR:HB3	15:UM:587:GLN:CG	2.40	0.44
17:UO:53:HIS:HB2	17:UO:69:ARG:HH12	1.83	0.44
17:UO:285:ASP:OD1	17:UO:285:ASP:N	2.48	0.44
17:UO:420:GLU:O	17:UO:424:ARG:HG2	2.18	0.44
19:UQ:534:LYS:HG2	19:UQ:541:TRP:CH2	2.53	0.44
21:US:326:LEU:O	21:US:329:ARG:HG3	2.17	0.44
22:UT:358:VAL:O	22:UT:362:PHE:HD2	2.00	0.44
22:UT:424:ASN:ND2	22:UT:427:SER:OG	2.42	0.44
22:UT:524:LYS:HE2	22:UT:556:ARG:HB3	2.00	0.44
22:UT:2270:ASN:HA	22:UT:2273:ILE:HD13	1.99	0.44
24:UV:566:ILE:HA	24:UV:569:VAL:HG12	1.98	0.44
24:UV:710:LEU:O	24:UV:1114:ILE:HG13	2.17	0.44
25:UX:67:ILE:HG21	25:UX:72:ILE:HD11	2.00	0.44
27:CE:61:ASN:HD22	27:CE:147:ILE:HD11	1.82	0.44
28:CG:7:LYS:NZ	28:CG:62:GLU:OE2	2.50	0.44
29:CH:326:GLU:OE1	29:CH:403:ASP:HA	2.16	0.44
31:CJ:152:LEU:HB2	31:CJ:167:LEU:HD22	1.99	0.44
31:CJ:177:ILE:HG13	31:CJ:178:ASN:OD1	2.17	0.44
31:CJ:223:THR:HG22	31:CJ:234:ARG:O	2.17	0.44
32:CK:301:GLU:O	32:CK:305:ILE:HG12	2.18	0.44
32:CK:329:GLU:HA	33:CL:933:LYS:HG3	1.99	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:CL:1027:THR:O	33:CL:1028:GLU:HG2	2.18	0.44
36:JD:23:LEU:HG	36:JD:27:ARG:HH11	1.82	0.44
36:JD:750:PRO:HG3	36:JD:756:LEU:HB3	2.00	0.44
36:JD:788:ASN:O	36:JD:792:GLY:N	2.47	0.44
36:JD:1077:ILE:HD12	36:JD:1077:ILE:H	1.82	0.44
37:JG:32:THR:OG1	37:JG:34:LYS:HG2	2.17	0.44
42:JP:187:SER:HA	42:JP:194:PHE:HA	1.99	0.44
42:JP:415:ARG:NH2	42:JP:415:ARG:HB3	2.32	0.44
45:DE:54:TYR:O	59:DY:15:ASN:ND2	2.51	0.44
47:DG:133:LEU:HD12	62:D3:166:C:O2	2.17	0.44
47:DG:154:ARG:O	62:D3:78:A:H5'	2.17	0.44
48:DH:115:SER:HB2	48:DH:118:LEU:HD23	1.99	0.44
54:DQ:99:GLU:HB2	54:DQ:102:LYS:HE2	2.00	0.44
57:DW:55:ASP:N	57:DW:55:ASP:OD1	2.50	0.44
62:D3:554:C:N4	62:D3:571:G:C6	2.85	0.44
62:D3:619:A:O2'	62:D3:1110:G:O4'	2.34	0.44
62:D3:909:U:O4	62:D3:910:C:N4	2.49	0.44
62:D3:1469:A:H2	62:D3:1571:C:HO2'	1.66	0.44
62:D3:1512:G:H2'	62:D3:1513:G:C8	2.51	0.44
63:D4:201:C:N3	63:D4:249:G:C6	2.85	0.44
74:EK:634:ALA:HB2	74:EK:680:LEU:HA	1.99	0.44
75:EN:567:VAL:O	75:EN:571:MET:N	2.41	0.44
75:EN:683:SER:HA	75:EN:689:ASN:HA	2.00	0.44
2:DA:29:TRP:CE2	2:DA:47:LEU:HD21	2.53	0.44
6:UD:630:LYS:HD3	6:UD:630:LYS:HA	1.76	0.44
8:UF:323:PHE:HB2	8:UF:335:ILE:HD11	2.00	0.44
12:UJ:248:SER:OG	12:UJ:249:LYS:N	2.51	0.44
13:UK:93:MET:HA	13:UK:96:VAL:HG12	1.99	0.44
14:UL:877:LYS:HZ1	15:UM:817:PHE:HB3	1.83	0.44
15:UM:181:LYS:O	15:UM:183:LEU:N	2.50	0.44
15:UM:290:ILE:HA	15:UM:306:LEU:HD13	2.00	0.44
17:UO:424:ARG:HG3	17:UO:425:GLY:N	2.33	0.44
19:UQ:461:ASP:OD2	19:UQ:464:LYS:NZ	2.50	0.44
19:UQ:500:PHE:HD1	19:UQ:507:MET:HB3	1.82	0.44
20:UR:249:SER:N	20:UR:269:ASP:OD2	2.40	0.44
21:US:381:LYS:O	21:US:385:ARG:HG3	2.17	0.44
22:UT:201:ARG:HD3	22:UT:248:HIS:CE1	2.53	0.44
22:UT:362:PHE:O	22:UT:366:ILE:HG12	2.17	0.44
22:UT:1376:ASP:O	22:UT:1380:GLU:HG3	2.18	0.44
22:UT:2381:GLU:HB2	22:UT:2382:LYS:H	1.55	0.44
23:UU:221:ILE:HG23	23:UU:223:LEU:HD11	1.98	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:392:ARG:NH2	23:UU:449:ARG:HH12	2.15	0.44
23:UU:807:VAL:HG12	23:UU:809:GLY:H	1.83	0.44
23:UU:859:ASP:HB2	23:UU:863:TRP:CZ2	2.52	0.44
24:UV:527:TYR:CD1	24:UV:698:ASN:HB2	2.52	0.44
24:UV:1041:VAL:O	24:UV:1049:GLY:HA2	2.18	0.44
25:UX:119:LEU:HA	25:UX:119:LEU:HD23	1.67	0.44
28:CF:106:ASP:OD1	28:CF:107:ALA:N	2.50	0.44
28:CG:106:ASP:OD1	28:CG:107:ALA:N	2.50	0.44
29:CH:166:VAL:H	29:CH:175:SER:CB	2.31	0.44
33:CL:138:VAL:HG11	33:CL:155:PHE:CE2	2.53	0.44
33:CL:303:LYS:C	33:CL:304:LEU:HD12	2.38	0.44
33:CL:928:ILE:HG23	33:CL:1009:VAL:HG23	1.98	0.44
34:CM:180:MET:HG3	34:CM:181:HIS:N	2.32	0.44
35:CN:70:PHE:CZ	35:CN:74:LEU:HD21	2.52	0.44
35:CN:259:ARG:HA	35:CN:259:ARG:HE	1.82	0.44
36:JD:919:ASP:OD2	36:JD:1055:LYS:HB3	2.17	0.44
36:JD:1154:TYR:CD1	36:JD:1167:MET:HG2	2.53	0.44
37:JF:99:LEU:HD23	37:JF:238:CYS:SG	2.58	0.44
40:JL:166:ARG:NH2	62:D3:1123:C:O3'	2.50	0.44
42:JP:8:ARG:HD2	42:JP:13:TYR:HE1	1.83	0.44
42:JP:228:ASN:HB3	42:JP:269:TRP:CE2	2.52	0.44
47:DG:18:ILE:HG23	47:DG:23:ARG:HD2	2.00	0.44
47:DG:190:GLN:NE2	62:D3:265:A:C8	2.86	0.44
48:DH:153:LEU:HD23	48:DH:184:GLU:HB2	2.00	0.44
53:DO:45:GLY:O	53:DO:48:VAL:C	2.56	0.44
56:DT:38:LYS:HZ1	56:DT:44:GLU:N	2.15	0.44
61:D2:21:A:H2'	61:D2:22:A:C8	2.53	0.44
62:D3:16:G:C6	62:D3:17:C:N4	2.85	0.44
62:D3:588:U:H2'	62:D3:589:C:C6	2.53	0.44
62:D3:904:G:C4	62:D3:905:A:C8	3.06	0.44
62:D3:1008:G:C6	62:D3:1009:U:C4	3.05	0.44
62:D3:1142:A:C4	62:D3:1143:A:C8	3.05	0.44
62:D3:1146:G:C2	62:D3:1147:A:C5	3.06	0.44
62:D3:1623:C:H2'	62:D3:1624:C:C6	2.52	0.44
62:D3:1648:A:C2	62:D3:1649:G:C4	3.06	0.44
63:D4:18:G:H2'	63:D4:19:A:C8	2.53	0.44
63:D4:263:A:H2'	63:D4:264:C:H6	1.81	0.44
74:EK:663:ASP:O	74:EK:664:LYS:CB	2.66	0.44
1:CA:232:MET:HB2	1:CA:233:LEU:HD12	2.00	0.44
3:UA:146:PHE:HB2	3:UA:167:ASP:OD1	2.17	0.44
3:UA:269:HIS:CE1	3:UA:271:ALA:HB3	2.53	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:UB:703:GLN:HA	4:UB:705:HIS:CE1	2.53	0.44
4:UB:734:ARG:NH2	62:D3:1544:U:H1'	2.33	0.44
6:UD:160:CYS:SG	6:UD:164:THR:HB	2.58	0.44
6:UD:309:GLN:HG3	6:UD:319:ARG:O	2.17	0.44
6:UD:433:LEU:HD12	6:UD:439:VAL:O	2.18	0.44
6:UD:770:ILE:HG22	6:UD:772:PRO:HD3	1.99	0.44
9:UG:48:LYS:O	9:UG:51:GLU:HG3	2.17	0.44
9:UG:80:LEU:HD12	9:UG:80:LEU:HA	1.86	0.44
9:UG:423:LYS:NZ	63:D4:39:C:H5''	2.33	0.44
10:UH:601:LYS:HB3	10:UH:601:LYS:HE3	1.79	0.44
14:UL:561:ASP:OD1	14:UL:562:SER:N	2.50	0.44
14:UL:612:PHE:CE2	62:D3:1140:G:H1'	2.52	0.44
15:UM:426:ILE:HG22	15:UM:426:ILE:O	2.17	0.44
15:UM:490:HIS:CE1	15:UM:510:SER:HG	2.35	0.44
17:UO:123:SER:N	17:UO:150:ARG:HH22	2.15	0.44
17:UO:173:THR:HG21	17:UO:217:ASN:HA	1.99	0.44
18:UP:198:ILE:HG13	18:UP:199:ILE:N	2.32	0.44
20:UR:516:THR:HG22	20:UR:517:THR:N	2.23	0.44
21:US:174:ASN:ND2	21:US:218:LYS:HE3	2.31	0.44
21:US:470:MET:HA	21:US:481:ALA:HB1	2.00	0.44
22:UT:140:ILE:HD11	22:UT:188:LEU:HD21	1.98	0.44
22:UT:715:TYR:CE2	22:UT:758:ILE:HG23	2.53	0.44
22:UT:1281:ARG:O	22:UT:1285:THR:HG23	2.18	0.44
22:UT:1741:LYS:HB2	22:UT:1741:LYS:HE3	1.52	0.44
23:UU:774:ARG:HD2	53:DO:53:ASP:OD2	2.18	0.44
24:UV:103:PHE:CE2	24:UV:107:ILE:HD11	2.52	0.44
28:CF:7:LYS:NZ	28:CF:62:GLU:OE2	2.50	0.44
29:CH:151:ARG:NH2	63:D4:247:U:O4	2.50	0.44
29:CH:417:SER:OG	29:CH:418:ASP:N	2.50	0.44
30:CI:66:PRO:HA	30:CI:71:ARG:NH1	2.32	0.44
32:CK:335:ARG:NH2	33:CL:952:PHE:HA	2.32	0.44
33:CL:611:PHE:HZ	34:CM:257:PHE:HZ	1.66	0.44
33:CL:976:ILE:O	33:CL:976:ILE:HG13	2.18	0.44
33:CL:1138:ARG:CZ	62:D3:492:A:C5	3.01	0.44
35:CN:9:MET:N	35:CN:13:PHE:O	2.40	0.44
35:CN:54:PHE:HA	35:CN:125:LEU:HD13	2.00	0.44
36:JD:783:LYS:HD3	36:JD:796:PHE:HB3	1.99	0.44
36:JD:1000:PHE:CE2	36:JD:1148:PRO:HD2	2.53	0.44
42:JP:329:ILE:HB	42:JP:343:TYR:HB2	2.00	0.44
46:DF:34:GLN:O	46:DF:37:GLN:HB3	2.18	0.44
46:DF:80:LYS:HB3	46:DF:80:LYS:HE2	1.74	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:DQ:13:LYS:HD2	54:DQ:13:LYS:HA	1.76	0.44
56:DT:102:ARG:NH2	62:D3:1500:C:P	2.91	0.44
62:D3:647:G:N2	62:D3:687:G:H22	2.15	0.44
62:D3:717:C:N4	62:D3:720:G:H22	2.15	0.44
62:D3:1002:G:H1'	62:D3:1004:U:O4	2.18	0.44
62:D3:1091:A:H4'	62:D3:1092:A:O4'	2.17	0.44
62:D3:1536:G:C6	62:D3:1538:U:C2	3.05	0.44
62:D3:1734:U:H2'	62:D3:1735:U:C6	2.53	0.44
63:D4:88:U:C4	63:D4:89:C:C2	3.06	0.44
75:EN:790:VAL:O	75:EN:794:LEU:N	2.43	0.44
3:UA:559:ILE:CG2	3:UA:598:ASN:HD22	2.30	0.44
1:CB:234:ILE:O	1:CB:260:PHE:HE1	2.00	0.44
5:UC:541:ASN:OD1	5:UC:542:TYR:N	2.51	0.44
5:UC:574:LYS:HD2	62:D3:502:U:H5''	1.98	0.44
6:UD:565:ARG:C	6:UD:566:LEU:HD12	2.38	0.44
7:UE:438:THR:HG22	7:UE:468:THR:HA	1.99	0.44
9:UG:512:ARG:NH1	62:D3:1043:A:O3'	2.50	0.44
10:UH:272:PHE:HA	10:UH:279:TYR:HA	1.99	0.44
12:UJ:638:SER:OG	12:UJ:673:ASN:O	2.31	0.44
12:UJ:1396:LEU:O	12:UJ:1399:ALA:N	2.51	0.44
12:UJ:1442:SER:HA	12:UJ:1445:ILE:HG12	2.00	0.44
12:UJ:1752:LEU:HA	12:UJ:1752:LEU:HD23	1.76	0.44
15:UM:33:ALA:HB2	15:UM:69:LEU:HD12	1.99	0.44
15:UM:169:ASN:O	15:UM:171:MET:N	2.47	0.44
15:UM:212:LEU:HD21	15:UM:246:CYS:HB2	1.99	0.44
15:UM:402:TRP:CD1	15:UM:445:ILE:HG13	2.53	0.44
15:UM:532:HIS:CG	15:UM:533:LYS:H	2.36	0.44
16:UN:840:LEU:HA	16:UN:840:LEU:HD23	1.66	0.44
17:UO:444:ASN:O	17:UO:447:LEU:HG	2.17	0.44
18:UP:171:VAL:HG13	18:UP:178:VAL:HB	2.00	0.44
20:UR:429:TYR:CB	28:CF:18:GLN:HE21	2.25	0.44
21:US:322:GLY:HA2	21:US:325:GLU:OE2	2.17	0.44
22:UT:102:SER:O	22:UT:105:PRO:HD2	2.17	0.44
22:UT:259:LEU:HA	22:UT:275:LEU:HD11	1.99	0.44
22:UT:260:HIS:O	22:UT:264:THR:HG23	2.18	0.44
22:UT:494:THR:HA	22:UT:497:ILE:HG12	1.98	0.44
22:UT:992:LYS:CE	22:UT:996:ARG:HE	2.31	0.44
22:UT:1558:THR:O	22:UT:1562:VAL:HG23	2.18	0.44
22:UT:1793:LEU:HD23	22:UT:1793:LEU:HA	1.73	0.44
22:UT:2048:MET:N	22:UT:2048:MET:SD	2.91	0.44
22:UT:2175:GLU:N	22:UT:2175:GLU:OE1	2.50	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:234:ASN:HB2	23:UU:241:ILE:CD1	2.47	0.44
24:UV:189:PHE:HB3	24:UV:203:ILE:HG21	2.00	0.44
24:UV:413:LEU:HB3	24:UV:416:PHE:CZ	2.53	0.44
24:UV:853:ARG:HD3	24:UV:889:TYR:CZ	2.52	0.44
24:UV:962:LEU:HA	24:UV:965:ILE:HG22	1.99	0.44
27:CE:76:LEU:HA	27:CE:79:ILE:CG1	2.46	0.44
27:CE:359:ILE:HD11	27:CE:394:VAL:HG22	2.00	0.44
28:CG:5:ASN:HA	29:CH:462:ARG:CG	2.48	0.44
30:CI:128:VAL:HG23	30:CI:146:PRO:CG	2.48	0.44
31:CJ:25:LEU:HG	31:CJ:29:ARG:NH1	2.32	0.44
31:CJ:207:LYS:NZ	32:CK:380:ASP:O	2.41	0.44
33:CL:738:PHE:O	36:JD:89:VAL:HG11	2.18	0.44
36:JD:485:GLU:HB2	36:JD:488:LYS:NZ	2.32	0.44
36:JD:828:ALA:HB1	36:JD:832:HIS:CE1	2.53	0.44
36:JD:897:GLU:HB2	36:JD:901:LYS:NZ	2.32	0.44
37:JG:53:HIS:HE1	37:JG:80:MET:HG3	1.82	0.44
40:JL:40:LYS:HD3	40:JL:40:LYS:HA	1.78	0.44
44:JJ:245:GLU:OE2	53:DO:137:LEU:HD11	2.18	0.44
45:DE:60:GLU:CD	59:DY:20:ARG:HH22	2.18	0.44
51:DL:99:ARG:HG3	58:DX:12:ALA:HB2	1.98	0.44
59:DY:14:SER:O	59:DY:14:SER:OG	2.33	0.44
62:D3:545:A:O2'	62:D3:546:U:C6	2.71	0.44
62:D3:948:G:H2'	62:D3:949:C:C6	2.53	0.44
62:D3:1503:A:H2'	62:D3:1504:G:O4'	2.18	0.44
63:D4:94:A:H61	63:D4:322:A:N6	2.16	0.44
1:CA:218:ILE:HG22	26:CD:152:LEU:HG	2.00	0.44
3:UA:779:LEU:HA	3:UA:779:LEU:HD23	1.69	0.44
1:CB:110:ASN:OD1	1:CB:142:ARG:HB2	2.18	0.44
4:UB:611:SER:OG	4:UB:634:SER:HB3	2.17	0.44
6:UD:581:SER:OG	6:UD:593:GLU:HG2	2.18	0.44
10:UH:584:PHE:O	19:UQ:605:ASN:ND2	2.36	0.44
12:UJ:789:VAL:HA	12:UJ:792:LEU:HG	2.00	0.44
12:UJ:1378:ILE:HA	12:UJ:1381:PHE:CD2	2.53	0.44
14:UL:754:GLU:OE1	14:UL:754:GLU:HA	2.18	0.44
14:UL:849:HIS:O	14:UL:853:ILE:HG22	2.17	0.44
15:UM:161:TRP:HB2	15:UM:177:LEU:HB2	2.00	0.44
15:UM:536:LEU:HA	15:UM:552:SER:HA	1.99	0.44
19:UQ:714:ASP:HB2	19:UQ:774:PHE:HZ	1.82	0.44
20:UR:137:ILE:HA	20:UR:143:THR:HG21	2.00	0.44
20:UR:335:GLN:OE1	20:UR:335:GLN:N	2.50	0.44
21:US:292:PRO:HB2	21:US:329:ARG:NH2	2.33	0.44

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:US:356:ALA:O	21:US:360:ARG:HG3	2.16	0.44
22:UT:70:ILE:HG22	22:UT:74:VAL:HG12	2.00	0.44
22:UT:457:PHE:HE2	22:UT:485:ILE:HG21	1.82	0.44
22:UT:1011:LEU:CB	22:UT:1015:PHE:HB3	2.48	0.44
22:UT:1863:LEU:HA	22:UT:1863:LEU:HD12	1.79	0.44
23:UU:37:VAL:CG2	23:UU:53:CYS:HB3	2.48	0.44
23:UU:511:ASP:OD2	23:UU:513:MET:N	2.51	0.44
27:CE:39:LEU:HD23	27:CE:39:LEU:HA	1.66	0.44
27:CE:303:SER:HB2	27:CE:309:LEU:HD13	2.00	0.44
33:CL:91:ARG:HD3	33:CL:214:ARG:NE	2.32	0.44
34:CM:319:ASP:O	34:CM:323:ILE:HG12	2.18	0.44
35:CN:3:ILE:HA	35:CN:6:ILE:HD12	1.99	0.44
35:CN:55:LEU:O	35:CN:123:THR:OG1	2.19	0.44
35:CN:259:ARG:NH1	52:DN:83:GLU:HA	2.29	0.44
36:JD:1039:VAL:HA	36:JD:1042:ARG:HG2	2.00	0.44
36:JD:1100:PHE:HB3	36:JD:1101:PRO:HD3	1.99	0.44
37:JF:115:GLN:HE22	37:JF:120:ILE:N	2.16	0.44
53:DO:51:ASP:OD2	62:D3:906:A:P	2.75	0.44
58:DX:5:LYS:NZ	62:D3:612:U:OP2	2.48	0.44
62:D3:779:U:HO2'	62:D3:780:A:P	2.38	0.44
62:D3:923:A:H2'	62:D3:924:A:H8	1.82	0.44
62:D3:1630:U:O2'	62:D3:1631:A:OP2	2.34	0.44
63:D4:8:U:C2	63:D4:9:A:C8	3.05	0.44
75:EN:719:VAL:N	75:EN:762:ILE:O	2.39	0.44
1:CA:102:LYS:O	41:JM:136:TYR:OH	2.24	0.44
1:CA:104:ASP:OD2	5:UC:597:GLY:HA2	2.18	0.44
1:CA:198:GLU:OE1	1:CA:199:PHE:N	2.51	0.44
2:DA:73:LEU:HD12	2:DA:73:LEU:HA	1.74	0.44
3:UA:732:GLU:CD	3:UA:734:GLN:HE22	2.21	0.44
3:UA:799:ILE:HD13	3:UA:824:ILE:HG23	1.99	0.44
1:CB:103:GLU:HA	13:UK:194:LYS:HZ1	1.82	0.44
1:CB:281:ASP:O	1:CB:284:THR:OG1	2.21	0.44
4:UB:85:GLY:O	4:UB:89:GLN:HG2	2.18	0.44
6:UD:196:LYS:HG3	6:UD:246:TYR:CE2	2.53	0.44
6:UD:231:VAL:HG22	6:UD:265:TRP:CH2	2.53	0.44
6:UD:298:ALA:CB	6:UD:336:ILE:HD11	2.48	0.44
6:UD:363:SER:O	6:UD:367:GLY:N	2.39	0.44
6:UD:396:GLU:HA	6:UD:428:ILE:HG21	1.99	0.44
9:UG:357:SER:HA	9:UG:364:ARG:HE	1.83	0.44
11:UI:440:SER:OG	11:UI:452:LEU:HD21	2.18	0.44
12:UJ:494:VAL:HG21	12:UJ:525:PHE:CE1	2.52	0.44

Continued on next page...



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:581:GLY:O	12:UJ:585:ILE:HG12	2.18	0.44
14:UL:104:LYS:HB3	14:UL:113:VAL:HG21	1.99	0.44
14:UL:237:LYS:HZ1	15:UM:671:ASN:HB2	1.83	0.44
14:UL:453:GLU:OE1	14:UL:469:GLU:HG3	2.18	0.44
15:UM:32:LEU:HD12	15:UM:33:ALA:H	1.83	0.44
16:UN:763:ASP:O	16:UN:767:GLU:OE1	2.36	0.44
17:UO:37:LYS:HD2	17:UO:325:GLY:O	2.18	0.44
19:UQ:132:PHE:HB3	19:UQ:185:PHE:CE2	2.53	0.44
19:UQ:397:LYS:HA	19:UQ:737:ILE:HD11	1.99	0.44
19:UQ:447:LYS:NZ	19:UQ:770:TYR:HB2	2.32	0.44
19:UQ:551:HIS:HE2	19:UQ:583:LYS:HB2	1.83	0.44
19:UQ:864:ASP:N	19:UQ:864:ASP:OD1	2.51	0.44
20:UR:237:ARG:HH21	20:UR:587:ARG:HG3	1.83	0.44
21:US:228:HIS:O	21:US:231:SER:OG	2.26	0.44
22:UT:706:LEU:HD23	22:UT:774:ILE:HG21	2.00	0.44
22:UT:1032:MET:O	22:UT:1036:VAL:HG12	2.18	0.44
22:UT:1233:LYS:HA	22:UT:1233:LYS:HD2	1.61	0.44
23:UU:141:LYS:HD3	23:UU:154:TYR:CD1	2.53	0.44
23:UU:167:ILE:HD13	23:UU:184:THR:HG22	1.99	0.44
23:UU:774:ARG:HH21	53:DO:52:ARG:NH1	2.16	0.44
23:UU:791:GLU:O	23:UU:795:LYS:HG2	2.18	0.44
23:UU:797:ASP:O	23:UU:801:GLN:OE1	2.36	0.44
26:CD:34:VAL:O	26:CD:37:GLN:HG2	2.18	0.44
27:CE:237:THR:HA	27:CE:240:GLU:OE2	2.18	0.44
29:CH:61:ASP:OD1	29:CH:64:ARG:NH2	2.45	0.44
30:CI:88:LEU:HD23	30:CI:88:LEU:H	1.82	0.44
32:CK:409:LEU:CD1	44:JJ:223:ARG:HG2	2.47	0.44
34:CM:157:GLY:H	34:CM:164:GLY:HA3	1.83	0.44
35:CN:59:PRO:HG2	35:CN:158:TRP:CE2	2.53	0.44
36:JD:115:GLY:O	36:JD:118:GLN:HG2	2.18	0.44
36:JD:411:ILE:HG23	36:JD:580:VAL:HG13	2.00	0.44
36:JD:533:SER:HB2	36:JD:537:ARG:NH2	2.33	0.44
36:JD:1217:PHE:HB2	36:JD:1231:LEU:HD11	2.00	0.44
42:JP:121:PRO:HB3	42:JP:206:VAL:HG11	1.99	0.44
44:JJ:196:ASP:OD2	44:JJ:200:ARG:NH1	2.51	0.44
46:DF:45:LYS:HB3	46:DF:46:TRP:CD1	2.52	0.44
55:DS:31:ALA:O	55:DS:35:ILE:HG12	2.17	0.44
56:DT:85:SER:HA	56:DT:91:TYR:CD1	2.52	0.44
62:D3:700:C:H2'	62:D3:701:U:C6	2.52	0.44
63:D4:205:G:C2	63:D4:206:C:C2	3.06	0.44
71:EH:119:VAL:HA	71:EH:149:ILE:HA	2.00	0.44

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CB:99:ALA:O	1:CB:104:ASP:HA	2.18	0.43
6:UD:279:HIS:CE1	6:UD:283:VAL:HG22	2.53	0.43
6:UD:414:TYR:HE2	10:UH:716:TYR:CG	2.36	0.43
6:UD:424:ASP:HB2	6:UD:449:LYS:NZ	2.33	0.43
6:UD:545:ARG:HB2	6:UD:549:VAL:HG23	2.00	0.43
7:UE:284:LYS:NZ	7:UE:329:GLU:OE1	2.27	0.43
7:UE:305:TRP:HE1	7:UE:307:GLN:NE2	2.16	0.43
7:UE:364:THR:O	19:UQ:547:VAL:HA	2.18	0.43
9:UG:389:LEU:HD23	9:UG:402:ILE:HA	1.99	0.43
11:UI:483:LYS:HB3	11:UI:487:ARG:NH1	2.33	0.43
13:UK:140:ARG:HA	13:UK:143:MET:HE3	2.00	0.43
14:UL:413:SER:HA	14:UL:428:PHE:O	2.18	0.43
14:UL:592:SER:HB2	14:UL:594:ASP:OD1	2.18	0.43
14:UL:750:GLU:HA	14:UL:753:MET:HE3	2.00	0.43
14:UL:751:ARG:HE	14:UL:751:ARG:HB2	1.54	0.43
14:UL:892:LYS:HA	14:UL:892:LYS:HD2	1.88	0.43
15:UM:253:ASP:OD1	15:UM:253:ASP:N	2.51	0.43
15:UM:582:SER:O	15:UM:590:LEU:HG	2.18	0.43
16:UN:321:HIS:CB	26:CD:89:ALA:HA	2.45	0.43
16:UN:329:ARG:NH1	16:UN:339:GLN:HG2	2.33	0.43
17:UO:404:ALA:O	17:UO:409:MET:HE1	2.18	0.43
17:UO:422:ARG:NH2	17:UO:423:LYS:HB2	2.33	0.43
19:UQ:172:ARG:HG2	19:UQ:192:GLU:HG3	2.00	0.43
19:UQ:319:LYS:CD	19:UQ:339:GLY:H	2.31	0.43
21:US:399:ILE:HG23	21:US:484:PHE:CE2	2.53	0.43
22:UT:132:LEU:HD13	22:UT:155:LEU:HG	2.00	0.43
22:UT:643:LYS:NZ	22:UT:683:ASP:OD2	2.47	0.43
22:UT:1601:ARG:HD2	45:DE:200:ARG:HD3	2.00	0.43
22:UT:2068:LEU:HD23	22:UT:2105:ALA:HB1	1.99	0.43
23:UU:433:ALA:HB1	23:UU:463:VAL:HG23	2.00	0.43
23:UU:639:ASP:OD1	23:UU:639:ASP:N	2.42	0.43
23:UU:820:GLN:HE21	23:UU:832:SER:HB2	1.82	0.43
24:UV:129:HIS:HA	24:UV:132:TYR:HD2	1.82	0.43
24:UV:139:PRO:HG2	24:UV:238:HIS:CE1	2.53	0.43
24:UV:140:ASP:HA	24:UV:178:TYR:CD2	2.53	0.43
27:CE:33:ASP:OD1	27:CE:37:LYS:NZ	2.51	0.43
27:CE:98:ILE:O	27:CE:101:LEU:HG	2.18	0.43
28:CF:20:ILE:O	28:CF:24:VAL:HG23	2.17	0.43
29:CH:158:THR:O	29:CH:522:THR:HB	2.18	0.43
33:CL:568:ARG:NH1	34:CM:315:LYS:O	2.51	0.43
33:CL:777:ARG:HD3	33:CL:777:ARG:HA	1.73	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:CM:144:PHE:O	34:CM:178:ILE:HG12	2.18	0.43
34:CM:263:ASP:OD2	34:CM:264:ALA:N	2.48	0.43
36:JD:87:SER:O	36:JD:91:ARG:HG2	2.18	0.43
36:JD:529:ILE:HA	36:JD:532:LEU:HG	2.00	0.43
36:JD:925:PRO:HA	36:JD:928:VAL:HG12	2.00	0.43
36:JD:1086:ALA:HA	36:JD:1181:ILE:HG21	2.00	0.43
40:JL:133:ILE:HG23	40:JL:137:LEU:HD23	2.00	0.43
42:JP:355:LYS:HD3	42:JP:355:LYS:HA	1.60	0.43
58:DX:76:LEU:HD21	58:DX:104:LEU:HD12	2.00	0.43
62:D3:199:G:H2'	62:D3:200:A:H8	1.82	0.43
62:D3:689:G:C6	62:D3:690:G:C5	3.05	0.43
62:D3:1646:C:H42	62:D3:1754:A:H61	1.64	0.43
63:D4:204:U:H2'	63:D4:205:G:C8	2.52	0.43
65:EB:146:GLY:O	65:EB:150:ALA:N	2.49	0.43
73:EJ:211:ARG:HA	73:EJ:248:ALA:HA	2.00	0.43
1:CA:144:TRP:HE1	1:CA:183:HIS:CB	2.31	0.43
1:CA:280:VAL:HG21	1:CA:284:THR:HG21	2.00	0.43
2:DA:58:SER:O	2:DA:62:LYS:HG3	2.18	0.43
2:DA:239:GLU:OE1	2:DA:239:GLU:N	2.50	0.43
3:UA:207:TYR:HD1	3:UA:217:VAL:HG22	1.83	0.43
1:CB:111:MET:HE1	1:CB:185:SER:O	2.17	0.43
4:UB:660:ILE:HG13	21:US:388:LEU:HD11	2.00	0.43
6:UD:488:ILE:O	6:UD:495:VAL:HA	2.18	0.43
8:UF:114:LEU:HA	8:UF:114:LEU:HD23	1.74	0.43
8:UF:372:ARG:HB2	8:UF:372:ARG:CZ	2.48	0.43
9:UG:388:ASP:HB2	9:UG:403:VAL:O	2.18	0.43
10:UH:182:THR:HA	10:UH:206:LEU:HA	2.00	0.43
12:UJ:498:PHE:CE2	12:UJ:539:LEU:HD13	2.53	0.43
14:UL:102:VAL:HG12	14:UL:118:ASN:HB3	1.99	0.43
14:UL:137:ILE:CG2	14:UL:169:PHE:HZ	2.31	0.43
14:UL:386:GLU:CB	14:UL:391:ARG:HH21	2.31	0.43
15:UM:387:HIS:HD2	15:UM:413:ILE:CD1	2.31	0.43
17:UO:26:TYR:HA	17:UO:29:GLN:OE1	2.17	0.43
17:UO:82:ASP:OD1	17:UO:82:ASP:N	2.48	0.43
17:UO:439:LEU:HD11	17:UO:470:TYR:CD2	2.52	0.43
17:UO:505:GLU:O	17:UO:508:LEU:HG	2.18	0.43
19:UQ:863:LYS:HB3	20:UR:547:PRO:HB2	1.99	0.43
22:UT:519:VAL:HG11	22:UT:548:TYR:CD1	2.53	0.43
22:UT:2213:PHE:CE1	22:UT:2217:MET:SD	3.12	0.43
22:UT:2440:ARG:NH2	62:D3:829:A:H3'	2.34	0.43
23:UU:666:ARG:O	23:UU:668:ILE:HG23	2.17	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:219:PHE:HA	24:UV:224:CYS:SG	2.58	0.43
24:UV:287:LYS:H	24:UV:287:LYS:HD2	1.83	0.43
24:UV:550:MET:O	24:UV:553:VAL:HG12	2.17	0.43
24:UV:1144:ASP:OD2	24:UV:1146:THR:HG22	2.17	0.43
24:UV:1159:ASN:ND2	24:UV:1201:ASP:HB3	2.30	0.43
27:CE:318:GLN:HG2	27:CE:319:ILE:HG23	1.99	0.43
28:CG:20:ILE:O	28:CG:24:VAL:HG23	2.17	0.43
29:CH:72:GLU:HA	29:CH:75:LYS:HZ3	1.83	0.43
33:CL:287:ARG:NH1	33:CL:296:PHE:O	2.51	0.43
33:CL:895:PRO:HB3	58:DX:144:ARG:HH11	1.82	0.43
33:CL:1128:LYS:HE2	33:CL:1128:LYS:HB2	1.69	0.43
34:CM:344:GLU:OE1	34:CM:345:ALA:N	2.51	0.43
35:CN:85:GLU:OE2	35:CN:127:LYS:HB3	2.18	0.43
36:JD:373:ALA:HA	36:JD:376:VAL:HG12	2.00	0.43
36:JD:749:LYS:NZ	36:JD:752:GLN:HE22	2.16	0.43
36:JD:1081:LYS:HB3	36:JD:1081:LYS:HE2	1.71	0.43
36:JD:1176:THR:CG2	36:JD:1177:PRO:HD3	2.48	0.43
37:JG:175:CYS:HA	37:JG:201:SER:O	2.17	0.43
41:JM:189:ARG:O	41:JM:193:GLU:OE1	2.35	0.43
45:DE:55:ALA:O	45:DE:56:LEU:HD23	2.17	0.43
49:DI:200:LYS:HA	49:DI:200:LYS:HD3	1.79	0.43
52:DN:103:GLU:OE1	52:DN:103:GLU:HA	2.17	0.43
62:D3:1620:C:HO2'	62:D3:1621:U:P	2.41	0.43
62:D3:1689:A:H2'	62:D3:1690:G:H8	1.82	0.43
63:D4:5:A:H2'	63:D4:6:C:C6	2.52	0.43
65:EB:101:GLU:O	65:EB:105:SER:N	2.51	0.43
66:EC:164:GLY:O	66:EC:171:LEU:N	2.43	0.43
2:DA:13:LYS:HE2	62:D3:898:A:O2'	2.18	0.43
2:DA:128:LYS:HE2	2:DA:132:ASP:HA	2.00	0.43
3:UA:802:LEU:HD23	3:UA:802:LEU:HA	1.78	0.43
4:UB:658:ASN:O	4:UB:662:LEU:HG	2.18	0.43
5:UC:535:ASP:OD1	5:UC:536:GLY:N	2.47	0.43
10:UH:569:GLU:OE1	10:UH:574:ARG:NH1	2.45	0.43
11:UI:511:LYS:O	11:UI:514:GLU:HG3	2.19	0.43
13:UK:195:LEU:C	13:UK:199:LYS:HZ2	2.21	0.43
14:UL:200:HIS:CG	14:UL:242:LEU:HD22	2.53	0.43
16:UN:789:PRO:HG2	44:JJ:117:TYR:OH	2.18	0.43
16:UN:791:TRP:HE3	44:JJ:132:LEU:HD13	1.83	0.43
19:UQ:49:ASN:N	19:UQ:49:ASN:OD1	2.51	0.43
19:UQ:560:ILE:HD12	19:UQ:575:THR:HG22	2.00	0.43
19:UQ:720:ILE:HG12	19:UQ:745:ILE:HA	1.99	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:US:402:ILE:O	21:US:406:ILE:HG13	2.17	0.43
22:UT:2441:ARG:HH22	62:D3:828:U:H5''	1.82	0.43
23:UU:192:ASN:O	23:UU:196:GLY:N	2.51	0.43
24:UV:192:LYS:HA	24:UV:192:LYS:HD3	1.94	0.43
24:UV:903:SER:O	24:UV:906:TYR:C	2.57	0.43
24:UV:1037:LEU:HD22	24:UV:1050:ILE:CD1	2.48	0.43
26:CD:198:TRP:HE3	26:CD:271:VAL:HG22	1.83	0.43
27:CE:22:ILE:O	27:CE:25:SER:OG	2.29	0.43
27:CE:33:ASP:HA	27:CE:37:LYS:NZ	2.33	0.43
28:CG:51:PHE:HE1	28:CG:114:ILE:HG22	1.84	0.43
29:CH:443:LEU:HD12	29:CH:444:PRO:HD2	1.99	0.43
30:CI:159:THR:OG1	30:CI:160:TRP:N	2.51	0.43
34:CM:109:PHE:HE1	34:CM:174:ILE:HD11	1.82	0.43
35:CN:228:LYS:HA	35:CN:228:LYS:HD3	1.73	0.43
36:JD:564:VAL:O	36:JD:568:SER:HB2	2.17	0.43
36:JD:750:PRO:HD3	36:JD:756:LEU:HD13	2.00	0.43
36:JD:1085:CYS:HA	36:JD:1153:LEU:CD2	2.48	0.43
37:JF:64:LYS:HA	37:JF:64:LYS:HD2	1.83	0.43
37:JF:177:LYS:HB2	37:JF:221:VAL:HA	1.99	0.43
40:JL:279:GLU:O	40:JL:283:THR:HG23	2.18	0.43
42:JP:95:TRP:CZ3	42:JP:102:GLU:HB3	2.53	0.43
42:JP:367:SER:OG	42:JP:369:ASP:OD1	2.37	0.43
48:DH:118:LEU:HD13	48:DH:118:LEU:HA	1.88	0.43
49:DI:103:GLN:HA	49:DI:165:LEU:O	2.18	0.43
50:DJ:18:PRO:HB2	50:DJ:19:TYR:CD1	2.53	0.43
58:DX:63:GLN:HG2	58:DX:63:GLN:O	2.19	0.43
62:D3:191:C:C2	62:D3:192:U:H1'	2.53	0.43
62:D3:1546:G:H2'	62:D3:1547:A:H8	1.83	0.43
62:D3:1650:U:C2	62:D3:1651:A:C8	3.07	0.43
62:D3:1682:U:O2'	62:D3:1683:C:H6	2.01	0.43
63:D4:1:G:C6	63:D4:3:C:C4	3.06	0.43
1:CA:116:SER:HB2	1:CA:120:GLU:OE1	2.18	0.43
2:DA:65:VAL:O	2:DA:65:VAL:HG13	2.18	0.43
3:UA:168:LEU:HD12	9:UG:236:MET:HE1	2.00	0.43
6:UD:100:GLU:N	6:UD:117:ILE:O	2.51	0.43
7:UE:10:TYR:HE2	7:UE:293:ASN:O	2.00	0.43
7:UE:94:GLU:OE2	7:UE:96:THR:OG1	2.34	0.43
8:UF:167:ILE:HD11	16:UN:327:PHE:HA	2.01	0.43
12:UJ:401:VAL:HA	12:UJ:404:PHE:HD2	1.83	0.43
12:UJ:773:GLN:O	12:UJ:776:VAL:HG12	2.19	0.43
12:UJ:1505:LEU:HD11	12:UJ:1554:TRP:CD1	2.53	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:1590:ILE:HA	12:UJ:1593:TYR:CD2	2.53	0.43
13:UK:138:ASP:HA	18:UP:181:LEU:HD22	2.00	0.43
15:UM:137:THR:HG1	15:UM:138:HIS:CE1	2.36	0.43
15:UM:170:GLY:HA3	15:UM:189:HIS:O	2.18	0.43
17:UO:68:SER:O	17:UO:317:HIS:NE2	2.47	0.43
19:UQ:330:SER:OG	19:UQ:331:GLN:N	2.52	0.43
20:UR:278:ASP:HB2	20:UR:281:THR:O	2.18	0.43
20:UR:513:GLN:OE1	20:UR:513:GLN:N	2.51	0.43
22:UT:1352:LEU:HD23	22:UT:1401:ASN:ND2	2.33	0.43
22:UT:1428:THR:HG23	22:UT:1429:LYS:N	2.32	0.43
22:UT:1518:MET:HE3	22:UT:1523:TYR:HA	2.00	0.43
22:UT:2357:LYS:HA	22:UT:2360:CYS:SG	2.58	0.43
23:UU:60:ILE:HD11	23:UU:90:VAL:HG21	2.00	0.43
23:UU:490:GLN:NE2	54:DQ:99:GLU:OE1	2.51	0.43
24:UV:505:ASP:OD1	24:UV:505:ASP:N	2.52	0.43
24:UV:692:LYS:H	24:UV:692:LYS:HD2	1.83	0.43
26:CD:7:LEU:HB3	26:CD:99:ALA:HB3	2.01	0.43
27:CE:96:ASN:HB2	27:CE:100:LYS:HZ3	1.84	0.43
27:CE:309:LEU:HG	27:CE:371:LEU:CD2	2.46	0.43
29:CH:180:LYS:H	29:CH:180:LYS:HD3	1.83	0.43
29:CH:492:TRP:HA	29:CH:519:GLY:O	2.19	0.43
31:CJ:225:ALA:HB2	32:CK:365:LEU:HD11	2.01	0.43
33:CL:129:ILE:HG12	33:CL:158:ILE:HD13	2.00	0.43
33:CL:267:ARG:HH12	33:CL:798:MET:HB2	1.84	0.43
33:CL:840:LYS:HG2	33:CL:841:THR:O	2.18	0.43
34:CM:7:LYS:N	34:CM:30:PRO:HB2	2.34	0.43
36:JD:730:TYR:HB2	36:JD:754:SER:HB3	1.99	0.43
36:JD:756:LEU:HD23	36:JD:756:LEU:H	1.83	0.43
36:JD:840:PRO:HB2	36:JD:842:ILE:HG12	2.00	0.43
36:JD:1164:LYS:HB3	36:JD:1166:ARG:NH1	2.33	0.43
37:JF:41:MET:HB3	37:JF:110:LEU:CB	2.48	0.43
37:JG:55:ILE:O	37:JG:63:ASP:N	2.51	0.43
40:JL:129:THR:OG1	40:JL:130:PRO:HD2	2.18	0.43
44:JJ:180:LEU:HD23	44:JJ:180:LEU:HA	1.76	0.43
46:DF:157:ARG:HB2	46:DF:224:ASN:HD21	1.84	0.43
52:DN:112:LYS:NZ	62:D3:975:C:OP1	2.49	0.43
53:DO:84:ARG:HG2	53:DO:85:ALA:O	2.18	0.43
56:DT:113:ILE:O	56:DT:125:SER:HB3	2.18	0.43
58:DX:66:SER:O	58:DX:69:ARG:HB2	2.19	0.43
62:D3:69:G:H2'	62:D3:70:C:H6	1.83	0.43
62:D3:72:A:H1'	62:D3:73:U:H5'	2.00	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:416:A:OP2	62:D3:417:A:N6	2.35	0.43
62:D3:1465:C:C2	62:D3:1466:G:C8	3.05	0.43
62:D3:1667:A:H2'	62:D3:1668:G:H8	1.84	0.43
62:D3:1707:A:H2'	62:D3:1708:U:C6	2.54	0.43
62:D3:1800:A:C4	62:D3:1801:A:C8	3.07	0.43
1:CA:90:PRO:HA	1:CA:97:TYR:HD1	1.83	0.43
2:DA:30:PHE:CE2	2:DA:94:LYS:HA	2.53	0.43
2:DA:129:THR:HG23	2:DA:131:ASP:H	1.84	0.43
3:UA:125:PRO:HB3	3:UA:135:PRO:HB2	2.01	0.43
3:UA:846:TYR:HE1	23:UU:909:LEU:HB3	1.81	0.43
1:CB:114:GLY:H	1:CB:140:GLU:CD	2.17	0.43
1:CB:269:ILE:HB	1:CB:316:VAL:HG22	1.99	0.43
1:CB:289:GLU:HA	1:CB:292:LYS:NZ	2.34	0.43
4:UB:478:ILE:O	4:UB:481:MET:N	2.51	0.43
4:UB:731:ASP:HB3	4:UB:734:ARG:HG3	2.00	0.43
4:UB:769:GLU:HG3	4:UB:770:LYS:N	2.33	0.43
6:UD:180:ASP:OD1	6:UD:181:THR:OG1	2.33	0.43
6:UD:400:LYS:HA	6:UD:400:LYS:HD2	1.82	0.43
6:UD:563:LEU:O	12:UJ:639:ARG:NH1	2.43	0.43
9:UG:216:TYR:CD2	9:UG:261:PRO:HB3	2.53	0.43
10:UH:665:GLN:O	10:UH:668:ILE:HG22	2.19	0.43
12:UJ:351:TYR:CZ	12:UJ:355:ILE:HD11	2.54	0.43
12:UJ:564:VAL:O	12:UJ:568:ILE:HG12	2.19	0.43
12:UJ:801:ILE:O	12:UJ:805:ILE:HG12	2.19	0.43
12:UJ:1533:ASN:HB2	12:UJ:1581:LYS:HD2	2.00	0.43
13:UK:230:LYS:HB2	13:UK:230:LYS:NZ	2.34	0.43
14:UL:17:ILE:HG23	14:UL:52:TRP:HH2	1.84	0.43
14:UL:217:LEU:HD22	14:UL:231:LEU:CD2	2.48	0.43
14:UL:433:ALA:HA	14:UL:449:THR:HA	2.00	0.43
14:UL:619:MET:N	14:UL:633:CYS:O	2.52	0.43
15:UM:736:LEU:HD11	15:UM:767:HIS:CE1	2.53	0.43
16:UN:793:GLU:HA	44:JJ:129:ARG:HD2	1.99	0.43
17:UO:107:VAL:HG13	17:UO:118:LEU:HB3	1.99	0.43
19:UQ:47:PRO:HB2	19:UQ:88:ILE:HD13	2.01	0.43
19:UQ:220:HIS:ND1	61:D2:21:A:H5''	2.33	0.43
19:UQ:334:LEU:HB3	19:UQ:337:LEU:HD11	2.00	0.43
19:UQ:370:GLN:HG3	19:UQ:386:ASN:HB2	2.00	0.43
19:UQ:395:THR:OG1	19:UQ:424:GLN:NE2	2.50	0.43
22:UT:461:ILE:HG23	22:UT:482:ARG:HB3	2.00	0.43
22:UT:637:ASP:O	22:UT:641:ARG:HG3	2.19	0.43
22:UT:653:LYS:HD3	22:UT:654:THR:N	2.34	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:822:SER:OG	22:UT:823:TRP:N	2.51	0.43
22:UT:1211:ILE:HB	22:UT:1216:VAL:HG11	2.00	0.43
22:UT:1888:THR:HG22	22:UT:1891:HIS:ND1	2.34	0.43
22:UT:2423:VAL:HA	22:UT:2426:PHE:CD2	2.51	0.43
24:UV:134:ILE:O	24:UV:138:ILE:HG13	2.19	0.43
24:UV:259:PHE:CD1	24:UV:295:LEU:HD11	2.53	0.43
24:UV:383:GLY:HA2	24:UV:583:ILE:HG23	2.01	0.43
26:CD:69:ILE:HD13	26:CD:69:ILE:HA	1.87	0.43
26:CD:181:LEU:HA	26:CD:181:LEU:HD23	1.68	0.43
29:CH:256:ARG:NH1	29:CH:549:LEU:O	2.50	0.43
31:CJ:188:HIS:CE1	31:CJ:218:SER:HB2	2.53	0.43
31:CJ:279:ARG:HG3	62:D3:1597:A:H5'	2.00	0.43
34:CM:7:LYS:HG3	34:CM:8:TYR:HD2	1.82	0.43
35:CN:33:SER:OG	35:CN:34:LEU:N	2.52	0.43
35:CN:260:PHE:O	35:CN:264:GLU:HG2	2.19	0.43
36:JD:27:ARG:HD3	62:D3:356:G:OP1	2.19	0.43
36:JD:111:LYS:HD3	36:JD:111:LYS:HA	1.73	0.43
38:JH:222:LYS:HA	38:JH:254:TRP:HA	2.00	0.43
44:JJ:74:ASP:O	44:JJ:77:GLY:CA	2.66	0.43
55:DS:61:LEU:HA	55:DS:65:GLU:OE2	2.18	0.43
57:DW:65:LEU:HD12	57:DW:65:LEU:O	2.19	0.43
57:DW:112:ASP:OD1	57:DW:112:ASP:N	2.38	0.43
61:D2:10:C:H2'	61:D2:11:A:C8	2.53	0.43
62:D3:6:G:O6	62:D3:18:C:N4	2.35	0.43
62:D3:453:U:H2'	62:D3:454:U:H5''	2.00	0.43
62:D3:617:U:N3	62:D3:618:U:H5	2.17	0.43
62:D3:689:G:C4	62:D3:690:G:C8	3.07	0.43
62:D3:1087:A:C2	62:D3:1088:A:C5	3.06	0.43
62:D3:1481:C:H4'	62:D3:1482:C:OP1	2.19	0.43
62:D3:1563:C:H2'	62:D3:1564:U:H6	1.84	0.43
63:D4:168:C:H2'	63:D4:169:A:C8	2.52	0.43
74:EK:928:VAL:O	74:EK:936:GLU:HA	2.19	0.43
2:DA:33:LYS:HD2	2:DA:95:ASN:HD21	1.84	0.43
3:UA:245:LYS:HG3	3:UA:246:TYR:HD1	1.84	0.43
1:CB:89:GLU:OE2	13:UK:164:ASN:ND2	2.51	0.43
4:UB:96:LYS:NZ	4:UB:765:GLN:OE1	2.49	0.43
6:UD:273:ASN:HB3	6:UD:319:ARG:HH12	1.83	0.43
6:UD:417:VAL:O	6:UD:459:LYS:NZ	2.45	0.43
7:UE:163:LEU:HD23	7:UE:163:LEU:H	1.83	0.43
7:UE:284:LYS:HA	7:UE:284:LYS:HE2	1.99	0.43
8:UF:113:TYR:CE2	8:UF:132:ILE:HD12	2.54	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:155:HIS:CE1	9:UG:194:ARG:NE	2.86	0.43
9:UG:415:GLU:O	9:UG:416:LEU:HD23	2.17	0.43
12:UJ:230:LYS:HD3	12:UJ:233:GLN:NE2	2.34	0.43
12:UJ:579:ARG:HH12	12:UJ:635:TYR:HE1	1.65	0.43
12:UJ:715:HIS:CG	12:UJ:718:ARG:HH22	2.33	0.43
12:UJ:1688:ASN:O	12:UJ:1692:VAL:HG22	2.18	0.43
14:UL:612:PHE:HB2	62:D3:1140:G:C2	2.53	0.43
14:UL:799:LYS:HE3	14:UL:803:GLN:HG3	2.01	0.43
15:UM:30:LYS:NZ	15:UM:46:THR:HA	2.34	0.43
17:UO:153:ASP:OD1	17:UO:154:ILE:N	2.52	0.43
18:UP:195:GLU:OE1	18:UP:198:ILE:HG23	2.18	0.43
19:UQ:379:LEU:HD23	19:UQ:379:LEU:HA	1.84	0.43
19:UQ:557:ILE:CG2	19:UQ:575:THR:HB	2.49	0.43
20:UR:133:ILE:HD11	27:CE:436:ALA:HA	1.99	0.43
20:UR:164:LEU:O	20:UR:167:GLN:HB3	2.19	0.43
21:US:185:TYR:CE1	21:US:192:GLN:HG2	2.53	0.43
21:US:189:ALA:HB2	21:US:236:LEU:HB2	2.00	0.43
21:US:200:ASN:HD21	21:US:256:ASN:HA	1.83	0.43
23:UU:718:LYS:O	23:UU:875:ASN:ND2	2.51	0.43
24:UV:108:ASP:HA	24:UV:111:LEU:HG	2.00	0.43
24:UV:110:LEU:HD13	24:UV:113:GLN:OE1	2.18	0.43
24:UV:426:ILE:HG22	24:UV:496:LEU:HD22	2.00	0.43
24:UV:917:LYS:NZ	24:UV:935:GLU:OE2	2.49	0.43
27:CE:180:TYR:HB3	27:CE:262:ILE:HD11	1.99	0.43
27:CE:418:LYS:HB3	27:CE:418:LYS:HE3	1.78	0.43
28:CF:57:ASP:OD1	28:CF:83:SER:HA	2.18	0.43
28:CG:57:ASP:OD1	28:CG:83:SER:HA	2.18	0.43
29:CH:333:MET:HE3	29:CH:410:ASP:CG	2.39	0.43
31:CJ:222:ILE:CD1	31:CJ:235:GLN:HG2	2.48	0.43
32:CK:504:ASP:OD1	32:CK:504:ASP:N	2.52	0.43
33:CL:174:LEU:CD1	33:CL:206:TYR:HB3	2.48	0.43
33:CL:879:THR:HG22	33:CL:880:TYR:N	2.34	0.43
37:JF:128:VAL:HG22	37:JF:159:LEU:HB3	2.00	0.43
41:JM:52:PHE:O	41:JM:56:GLU:HG2	2.19	0.43
44:JJ:126:LEU:HD12	44:JJ:126:LEU:HA	1.88	0.43
49:DI:40:ALA:O	49:DI:59:ARG:NH1	2.51	0.43
62:D3:447:U:H2'	62:D3:448:C:O4'	2.18	0.43
62:D3:580:A:C6	62:D3:581:U:N3	2.86	0.43
62:D3:647:G:N2	62:D3:688:G:N3	2.65	0.43
62:D3:655:G:H1'	62:D3:656:G:C8	2.53	0.43
62:D3:875:G:O2'	62:D3:877:G:OP2	2.33	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
72:EI:238:GLN:O	72:EI:242:ALA:N	2.49	0.43
3:UA:220:PHE:HE1	3:UA:247:SER:HA	1.84	0.43
3:UA:518:VAL:HG12	3:UA:534:THR:HG22	2.00	0.43
1:CB:172:TYR:CE1	1:CB:241:PHE:HD2	2.37	0.43
4:UB:525:MET:HE1	4:UB:549:ILE:HB	2.00	0.43
5:UC:602:LEU:HD12	5:UC:602:LEU:HA	1.79	0.43
6:UD:534:LEU:HD23	6:UD:543:ILE:HA	2.01	0.43
7:UE:54:GLU:HG2	7:UE:55:ASP:N	2.33	0.43
9:UG:448:SER:O	9:UG:448:SER:OG	2.36	0.43
10:UH:170:LYS:HA	10:UH:177:SER:HA	2.01	0.43
10:UH:668:ILE:HG13	10:UH:671:ARG:CZ	2.49	0.43
11:UI:428:ASP:OD1	11:UI:428:ASP:N	2.52	0.43
12:UJ:170:SER:OG	12:UJ:171:GLU:N	2.49	0.43
12:UJ:194:SER:HB2	23:UU:335:VAL:HG11	2.00	0.43
12:UJ:231:LEU:HD23	12:UJ:231:LEU:HA	1.69	0.43
12:UJ:400:LEU:HG	12:UJ:404:PHE:HE2	1.84	0.43
12:UJ:1479:SER:O	12:UJ:1482:GLU:HG3	2.18	0.43
13:UK:22:ARG:NH1	33:CL:937:PHE:CG	2.84	0.43
13:UK:163:GLU:HG2	13:UK:164:ASN:N	2.34	0.43
15:UM:291:ILE:HB	15:UM:305:VAL:HG13	2.00	0.43
15:UM:431:ILE:HG13	15:UM:432:GLY:H	1.84	0.43
17:UO:5:ARG:HD3	19:UQ:336:ARG:NH2	2.34	0.43
17:UO:192:LEU:O	17:UO:194:ARG:HD2	2.17	0.43
17:UO:226:ILE:HD11	17:UO:239:LEU:HD23	2.01	0.43
17:UO:303:LEU:HG	17:UO:323:SER:HB3	2.00	0.43
17:UO:389:GLU:O	17:UO:392:ILE:HG22	2.19	0.43
19:UQ:152:ARG:NH2	19:UQ:231:PHE:HA	2.33	0.43
20:UR:238:LEU:HD13	20:UR:588:LEU:HD23	2.01	0.43
22:UT:324:SER:OG	22:UT:325:GLU:N	2.52	0.43
22:UT:358:VAL:HG13	22:UT:362:PHE:HE2	1.84	0.43
22:UT:1780:ARG:HA	22:UT:1860:ASN:HD21	1.83	0.43
22:UT:1910:VAL:O	22:UT:1914:THR:HG23	2.19	0.43
24:UV:417:SER:O	24:UV:421:LEU:HG	2.18	0.43
24:UV:765:LEU:HD23	24:UV:765:LEU:HA	1.63	0.43
26:CD:206:LEU:HD13	26:CD:251:VAL:HG21	2.01	0.43
27:CE:391:ARG:HA	27:CE:394:VAL:HG12	2.00	0.43
30:CI:163:ASN:HA	30:CI:183:SER:O	2.17	0.43
34:CM:233:GLU:OE2	34:CM:233:GLU:N	2.37	0.43
36:JD:28:ASN:O	36:JD:32:THR:HG22	2.19	0.43
36:JD:514:ILE:HG13	36:JD:556:ILE:HB	1.99	0.43
37:JF:42:ILE:HB	37:JF:203:CYS:SG	2.59	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:JL:128:ASN:HA	40:JL:154:MET:HG3	2.00	0.43
42:JP:226:LYS:HD2	42:JP:267:ILE:O	2.18	0.43
45:DE:31:PRO:HD2	45:DE:38:LEU:HD11	2.01	0.43
45:DE:86:PHE:CZ	45:DE:87:MET:HE2	2.54	0.43
46:DF:146:THR:HG21	46:DF:220:VAL:HG12	1.99	0.43
53:DO:52:ARG:HG2	62:D3:905:A:H5''	2.00	0.43
56:DT:84:LYS:HB2	56:DT:84:LYS:HE3	1.78	0.43
62:D3:1011:G:HO2'	62:D3:1012:U:H6	1.66	0.43
62:D3:1656:U:OP1	62:D3:1657:U:H5''	2.18	0.43
75:EN:660:VAL:O	75:EN:664:VAL:N	2.43	0.43
2:DA:119:THR:HG23	2:DA:155:TYR:HA	2.01	0.43
2:DA:144:ARG:HB3	2:DA:208:GLN:CG	2.48	0.43
3:UA:192:ASP:OD2	3:UA:211:LYS:HD3	2.19	0.43
3:UA:541:ILE:HB	3:UA:551:GLY:O	2.19	0.43
3:UA:605:ASP:OD2	23:UU:513:MET:HE1	2.18	0.43
1:CB:301:LEU:HD11	1:CB:319:ARG:HG3	2.00	0.43
4:UB:6:LEU:HD22	31:CJ:219:GLU:HG2	2.01	0.43
4:UB:536:SER:OG	4:UB:538:LYS:HG2	2.19	0.43
5:UC:556:LYS:HA	5:UC:559:ARG:HG3	1.99	0.43
6:UD:188:ALA:HB2	6:UD:207:ASP:OD1	2.17	0.43
6:UD:459:LYS:HA	6:UD:459:LYS:HD2	1.85	0.43
7:UE:504:TRP:O	7:UE:508:ILE:HG13	2.18	0.43
9:UG:69:GLU:OE2	42:JP:13:TYR:OH	2.26	0.43
12:UJ:145:THR:CG2	12:UJ:147:VAL:HG12	2.49	0.43
12:UJ:648:LYS:HD2	12:UJ:648:LYS:HA	1.85	0.43
12:UJ:1355:ILE:HG21	12:UJ:1399:ALA:HB1	2.00	0.43
13:UK:3:LYS:HG3	13:UK:4:LEU:N	2.33	0.43
13:UK:106:TYR:CZ	13:UK:110:LEU:HD21	2.54	0.43
14:UL:88:HIS:N	14:UL:129:PHE:HZ	2.17	0.43
17:UO:33:ALA:HA	17:UO:329:ILE:O	2.19	0.43
17:UO:66:PHE:CZ	17:UO:73:VAL:HG22	2.53	0.43
19:UQ:237:LEU:HD12	19:UQ:238:SER:N	2.34	0.43
19:UQ:264:ILE:HG22	19:UQ:271:LEU:HG	2.00	0.43
19:UQ:473:LEU:HB3	19:UQ:530:LYS:HZ2	1.84	0.43
20:UR:176:LYS:HA	20:UR:179:ASP:HB3	1.99	0.43
21:US:188:PHE:CD1	21:US:239:PHE:HB2	2.54	0.43
22:UT:336:ILE:O	22:UT:340:ILE:HG12	2.18	0.43
22:UT:1477:LYS:O	22:UT:1480:SER:OG	2.31	0.43
22:UT:2375:GLU:OE1	22:UT:2375:GLU:N	2.43	0.43
23:UU:775:GLU:O	23:UU:777:ILE:HG23	2.18	0.43
23:UU:791:GLU:OE1	23:UU:791:GLU:HA	2.18	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:119:LYS:O	24:UV:122:LEU:HG	2.19	0.43
24:UV:248:LEU:O	24:UV:252:LEU:HD23	2.18	0.43
24:UV:379:MET:SD	24:UV:381:HIS:N	2.91	0.43
24:UV:529:VAL:O	24:UV:612:PHE:HB2	2.19	0.43
26:CD:14:GLY:HA2	26:CD:56:PHE:CE1	2.54	0.43
26:CD:222:PHE:HD2	26:CD:223:ILE:HG13	1.84	0.43
27:CE:128:LEU:HD13	27:CE:134:ASN:O	2.19	0.43
27:CE:326:LEU:HA	27:CE:337:PRO:HD2	2.00	0.43
32:CK:481:PRO:HB2	32:CK:483:TYR:CE2	2.54	0.43
33:CL:613:PRO:HA	34:CM:321:ARG:HH12	1.84	0.43
36:JD:534:ARG:HH12	36:JD:865:PHE:HA	1.83	0.43
36:JD:542:LEU:HD22	36:JD:547:PRO:HB3	2.01	0.43
36:JD:572:THR:HG22	36:JD:576:ILE:HG23	2.00	0.43
36:JD:723:GLN:NE2	36:JD:726:ASN:HD22	2.17	0.43
36:JD:886:LEU:O	36:JD:913:LYS:NZ	2.51	0.43
36:JD:1035:MET:O	36:JD:1039:VAL:HG13	2.18	0.43
36:JD:1085:CYS:HB2	36:JD:1173:ILE:HD12	2.01	0.43
42:JP:120:GLN:N	42:JP:120:GLN:OE1	2.52	0.43
45:DE:107:GLY:HA2	45:DE:189:LEU:HD11	2.01	0.43
45:DE:189:LEU:C	45:DE:189:LEU:HD12	2.39	0.43
45:DE:228:ILE:HD13	45:DE:228:ILE:HG21	1.78	0.43
46:DF:48:PHE:CE1	46:DF:130:ILE:HD13	2.52	0.43
51:DL:53:TYR:CD2	51:DL:113:PRO:HG2	2.54	0.43
52:DN:53:LEU:HD23	52:DN:53:LEU:HA	1.82	0.43
55:DS:32:LEU:HA	55:DS:35:ILE:HG12	2.00	0.43
62:D3:982:U:H2'	62:D3:983:A:H8	1.84	0.43
63:D4:156:U:H4'	63:D4:157:A:OP2	2.18	0.43
3:UA:145:HIS:CE1	3:UA:165:SER:HG	2.34	0.43
1:CB:251:ARG:HH12	1:CB:255:LEU:CG	2.28	0.43
4:UB:568:PHE:CD2	4:UB:643:LEU:HD12	2.53	0.43
6:UD:197:LYS:C	6:UD:199:ASP:H	2.21	0.43
6:UD:624:LYS:HA	6:UD:627:LYS:HD2	2.01	0.43
7:UE:307:GLN:HG2	7:UE:313:TYR:CE2	2.53	0.43
8:UF:120:ARG:HG2	8:UF:120:ARG:HH11	1.83	0.43
11:UI:446:TRP:CZ2	11:UI:492:ILE:HD12	2.53	0.43
12:UJ:683:SER:O	12:UJ:687:LEU:HG	2.19	0.43
12:UJ:755:ARG:HA	12:UJ:755:ARG:HD2	1.75	0.43
12:UJ:1351:SER:O	12:UJ:1355:ILE:HG12	2.18	0.43
14:UL:213:LYS:N	14:UL:216:LEU:O	2.44	0.43
14:UL:661:TRP:HE1	14:UL:677:HIS:HB2	1.84	0.43
14:UL:891:LEU:HD23	14:UL:891:LEU:HA	1.76	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:UM:364:ILE:HD13	15:UM:364:ILE:HA	1.84	0.43
15:UM:414:VAL:HB	15:UM:428:ALA:CB	2.49	0.43
17:UO:192:LEU:H	17:UO:211:HIS:N	2.10	0.43
17:UO:217:ASN:HB3	17:UO:219:ILE:HD11	2.00	0.43
17:UO:364:SER:O	20:UR:270:LYS:NZ	2.51	0.43
19:UQ:624:HIS:HB3	19:UQ:631:GLN:HB2	2.01	0.43
19:UQ:724:ILE:HD13	19:UQ:762:TYR:CZ	2.54	0.43
21:US:284:ARG:O	21:US:287:PRO:HD2	2.18	0.43
21:US:432:VAL:HG12	21:US:436:LYS:NZ	2.34	0.43
22:UT:316:LYS:HG3	22:UT:729:TRP:CZ3	2.54	0.43
22:UT:371:VAL:O	22:UT:375:THR:HG23	2.19	0.43
22:UT:1479:ASN:HD22	22:UT:1483:HIS:CD2	2.37	0.43
23:UU:93:ALA:HB1	23:UU:118:VAL:HG11	2.01	0.43
23:UU:192:ASN:HB3	23:UU:195:THR:OG1	2.19	0.43
24:UV:352:THR:HG21	24:UV:398:ALA:HB1	2.01	0.43
24:UV:921:ASP:OD1	24:UV:1167:LYS:N	2.52	0.43
27:CE:68:VAL:HA	27:CE:72:LEU:HD12	2.00	0.43
27:CE:337:PRO:HA	63:D4:88:U:OP2	2.19	0.43
29:CH:459:LEU:HA	29:CH:459:LEU:HD23	1.74	0.43
33:CL:1105:ASP:OD1	33:CL:1108:LYS:HE3	2.18	0.43
36:JD:522:ASN:O	36:JD:525:THR:OG1	2.25	0.43
37:JG:103:PRO:O	37:JG:106:LYS:HG3	2.18	0.43
40:JL:281:ILE:HD12	40:JL:310:PHE:HE1	1.82	0.43
42:JP:48:THR:HG22	42:JP:401:LYS:HE3	2.01	0.43
42:JP:52:ARG:NE	42:JP:52:ARG:HA	2.33	0.43
45:DE:187:ARG:HG3	62:D3:753:A:P	2.58	0.43
50:DJ:68:LYS:HE3	50:DJ:72:GLU:OE2	2.19	0.43
58:DX:117:ILE:HG22	58:DX:118:PRO:O	2.18	0.43
62:D3:676:G:C2	62:D3:677:G:C5	3.06	0.43
62:D3:1545:A:H2'	62:D3:1546:G:C8	2.53	0.43
62:D3:1787:C:H2'	62:D3:1788:G:C8	2.54	0.43
70:EG:49:HIS:O	70:EG:61:LEU:N	2.50	0.43
75:EN:513:ALA:O	75:EN:545:GLY:N	2.39	0.43
2:DA:32:ILE:HG22	2:DA:96:LEU:HD22	2.01	0.43
2:DA:87:ARG:HH12	2:DA:99:ASN:HD21	1.67	0.43
3:UA:78:ARG:HA	3:UA:78:ARG:HD2	1.90	0.43
3:UA:168:LEU:HA	3:UA:168:LEU:HD23	1.46	0.43
3:UA:431:ILE:HD11	3:UA:451:ASP:CB	2.44	0.43
3:UA:611:LEU:H	3:UA:611:LEU:HD23	1.84	0.43
3:UA:743:PHE:HD1	3:UA:743:PHE:HA	1.70	0.43
3:UA:849:LEU:HD22	23:UU:897:HIS:HB2	2.01	0.43

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:CB:170:VAL:O	1:CB:194:VAL:HA	2.19	0.43
6:UD:445:PRO:O	6:UD:474:SER:HB2	2.18	0.43
6:UD:612:THR:HG22	6:UD:614:TRP:H	1.84	0.43
7:UE:133:GLN:OE1	7:UE:133:GLN:N	2.52	0.43
7:UE:443:GLN:NE2	17:UO:252:ASN:HD21	2.09	0.43
7:UE:481:LEU:HD21	7:UE:502:VAL:HA	2.01	0.43
7:UE:541:LEU:HD12	10:UH:674:GLU:OE1	2.19	0.43
8:UF:268:ASP:HA	8:UF:271:LEU:HD13	2.00	0.43
8:UF:271:LEU:HD11	8:UF:334:LEU:HD22	2.00	0.43
9:UG:139:TRP:O	9:UG:139:TRP:CG	2.72	0.43
9:UG:378:VAL:HG23	9:UG:378:VAL:O	2.19	0.43
10:UH:564:ASN:O	10:UH:567:LEU:HG	2.19	0.43
10:UH:586:ILE:HG13	10:UH:587:LEU:N	2.34	0.43
10:UH:592:ARG:HG3	10:UH:640:LEU:CD2	2.49	0.43
11:UI:435:LEU:HB3	11:UI:439:LYS:NZ	2.34	0.43
13:UK:64:TYR:O	13:UK:67:MET:HG2	2.18	0.43
13:UK:106:TYR:CD1	27:CE:331:LYS:HA	2.54	0.43
14:UL:178:ILE:HD11	14:UL:231:LEU:HD11	2.01	0.43
14:UL:184:GLY:O	14:UL:201:ILE:HD12	2.19	0.43
14:UL:416:ILE:O	14:UL:425:ILE:N	2.38	0.43
14:UL:614:HIS:HB3	14:UL:634:SER:HB3	2.01	0.43
15:UM:228:LYS:HD3	15:UM:228:LYS:HA	1.77	0.43
15:UM:346:VAL:HG21	15:UM:354:ALA:HB2	2.00	0.43
15:UM:463:ILE:HD12	15:UM:487:ARG:NE	2.33	0.43
16:UN:764:VAL:HA	16:UN:767:GLU:OE1	2.19	0.43
19:UQ:413:SER:O	19:UQ:417:LEU:N	2.51	0.43
20:UR:298:CYS:HB3	20:UR:314:THR:HG23	2.00	0.43
20:UR:478:GLN:HG2	20:UR:479:ASN:O	2.18	0.43
20:UR:522:GLN:OE1	20:UR:568:VAL:HG23	2.19	0.43
21:US:252:LYS:NZ	21:US:256:ASN:HD21	2.16	0.43
21:US:278:LEU:HD22	21:US:315:VAL:HG13	2.00	0.43
21:US:358:PHE:O	21:US:362:MET:HG2	2.19	0.43
22:UT:491:LEU:O	22:UT:493:ASN:ND2	2.51	0.43
22:UT:923:PRO:O	22:UT:927:ARG:HG2	2.19	0.43
22:UT:1194:SER:O	22:UT:1198:PHE:HD2	2.02	0.43
22:UT:2180:LEU:O	22:UT:2183:LEU:HG	2.19	0.43
23:UU:656:ASN:O	23:UU:659:GLN:HB3	2.18	0.43
23:UU:915:VAL:O	23:UU:918:LYS:HB3	2.19	0.43
24:UV:205:THR:HG23	24:UV:294:LEU:HD13	2.01	0.43
24:UV:304:GLU:HB3	24:UV:307:LYS:HB2	2.01	0.43
24:UV:307:LYS:HD2	24:UV:312:ARG:HH12	1.84	0.43

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:CD:30:ARG:NH2	26:CD:122:GLU:OE2	2.52	0.43
27:CE:43:LYS:HZ3	27:CE:127:LEU:HG	1.84	0.43
27:CE:258:LEU:O	27:CE:262:ILE:HG12	2.19	0.43
29:CH:452:SER:CB	29:CH:460:ARG:HG2	2.49	0.43
30:CI:156:ASP:OD1	31:CJ:4:ARG:HG2	2.19	0.43
33:CL:758:ILE:O	33:CL:762:LEU:HD23	2.19	0.43
33:CL:1080:LYS:HA	33:CL:1080:LYS:HD3	1.86	0.43
34:CM:201:SER:O	34:CM:204:LEU:N	2.52	0.43
36:JD:110:ARG:O	36:JD:114:ILE:HG13	2.18	0.43
36:JD:485:GLU:HB2	36:JD:488:LYS:HZ1	1.84	0.43
36:JD:632:ILE:O	36:JD:636:VAL:HG23	2.19	0.43
41:JM:185:LYS:HA	41:JM:188:LYS:HG2	2.01	0.43
46:DF:128:ASN:HB3	46:DF:131:GLN:HB3	2.00	0.43
56:DT:99:SER:HB2	56:DT:103:LYS:HZ1	1.82	0.43
57:DW:35:ILE:O	57:DW:39:GLN:HG3	2.19	0.43
62:D3:493:U:H2'	62:D3:494:U:C5	2.54	0.43
62:D3:1470:C:H2'	62:D3:1573:A:N7	2.34	0.43
63:D4:79:G:O2'	63:D4:328:A:N1	2.44	0.43
63:D4:161:G:H2'	63:D4:162:U:C6	2.53	0.43
65:EB:260:THR:O	65:EB:264:CYS:N	2.48	0.43
75:EN:400:MET:O	75:EN:404:LYS:N	2.44	0.43
4:UB:89:GLN:HE22	32:CK:358:THR:HA	1.84	0.42
6:UD:39:VAL:HG11	6:UD:755:ILE:HG23	2.00	0.42
6:UD:139:CYS:SG	6:UD:158:VAL:HG21	2.59	0.42
6:UD:219:ASP:OD1	6:UD:220:GLU:N	2.51	0.42
6:UD:487:VAL:HA	6:UD:496:PHE:O	2.18	0.42
6:UD:519:THR:HG23	6:UD:522:SER:H	1.84	0.42
8:UF:28:GLU:HB3	20:UR:27:PHE:CZ	2.54	0.42
8:UF:130:HIS:CE1	16:UN:327:PHE:CD2	3.06	0.42
8:UF:183:TYR:CE1	8:UF:322:LEU:HD12	2.54	0.42
9:UG:146:ALA:HB2	9:UG:179:HIS:O	2.19	0.42
9:UG:222:GLY:HA3	30:CI:18:PHE:CE1	2.54	0.42
10:UH:657:ASN:O	10:UH:660:LEU:HG	2.19	0.42
12:UJ:121:LEU:HD12	12:UJ:121:LEU:HA	1.71	0.42
12:UJ:604:LEU:HD22	12:UJ:605:TYR:CZ	2.54	0.42
13:UK:125:LEU:HD21	13:UK:198:PHE:CE2	2.54	0.42
13:UK:250:ARG:HA	28:CF:94:SER:OG	2.18	0.42
14:UL:437:LYS:HD3	14:UL:437:LYS:HA	1.85	0.42
14:UL:895:GLU:OE2	15:UM:793:PHE:HE1	2.01	0.42
15:UM:22:VAL:HG12	15:UM:291:ILE:HG22	2.00	0.42
15:UM:149:SER:C	15:UM:150:LEU:HD12	2.39	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:UO:45:ILE:HG22	17:UO:304:SER:HB3	2.01	0.42
20:UR:134:LYS:H	27:CE:437:ALA:HB2	1.84	0.42
21:US:254:LYS:HB3	21:US:290:HIS:HB2	2.01	0.42
21:US:317:ILE:HG22	21:US:318:LEU:HD23	2.00	0.42
22:UT:792:HIS:C	22:UT:794:VAL:N	2.72	0.42
22:UT:833:LYS:HE2	22:UT:833:LYS:HB3	1.87	0.42
22:UT:926:LEU:HD23	22:UT:926:LEU:HA	1.74	0.42
22:UT:1896:ILE:HD13	22:UT:1896:ILE:HA	1.86	0.42
22:UT:2353:SER:OG	22:UT:2354:PHE:N	2.51	0.42
23:UU:192:ASN:HB2	23:UU:199:VAL:HG11	2.01	0.42
24:UV:285:PHE:O	24:UV:288:THR:OG1	2.32	0.42
24:UV:905:SER:CB	24:UV:981:LYS:HD2	2.49	0.42
24:UV:1080:LEU:HD11	24:UV:1085:ILE:HD11	2.00	0.42
24:UV:1141:GLU:HG2	35:CN:165:PHE:CZ	2.54	0.42
24:UV:1228:ASN:HD21	35:CN:164:SER:HB2	1.85	0.42
26:CD:173:HIS:CD2	27:CE:187:TRP:HE1	2.36	0.42
26:CD:229:LEU:HD11	26:CD:255:ALA:HB3	2.01	0.42
29:CH:141:LEU:HD11	29:CH:571:THR:OG1	2.18	0.42
29:CH:437:ARG:HD3	29:CH:437:ARG:HA	1.69	0.42
31:CJ:139:LEU:HD22	31:CJ:157:PHE:HZ	1.84	0.42
31:CJ:211:ASN:OD1	31:CJ:212:ALA:N	2.52	0.42
32:CK:348:ASP:OD1	32:CK:348:ASP:N	2.46	0.42
32:CK:433:ALA:O	32:CK:437:ILE:HG23	2.18	0.42
33:CL:1004:ARG:NH1	62:D3:558:U:OP1	2.50	0.42
35:CN:225:SER:O	35:CN:229:LYS:HG2	2.18	0.42
35:CN:259:ARG:HH22	52:DN:83:GLU:HA	1.83	0.42
36:JD:498:LEU:O	36:JD:502:MET:HG2	2.19	0.42
37:JG:167:ILE:H	37:JG:167:ILE:HD12	1.84	0.42
47:DG:137:ARG:HH22	62:D3:144:U:H5	1.67	0.42
56:DT:115:GLU:HG3	56:DT:123:ARG:HE	1.83	0.42
57:DW:32:LYS:O	57:DW:36:LYS:HG2	2.19	0.42
59:DY:90:ARG:HG2	59:DY:94:TYR:CE2	2.54	0.42
62:D3:1479:A:H2'	62:D3:1480:G:C8	2.54	0.42
1:CA:117:VAL:HG23	1:CA:118:TYR:HD1	1.84	0.42
3:UA:288:ASP:O	3:UA:292:PHE:HA	2.19	0.42
3:UA:605:ASP:OD1	3:UA:605:ASP:N	2.51	0.42
1:CB:214:ARG:HA	1:CB:215:PRO:HD3	1.90	0.42
6:UD:319:ARG:NE	6:UD:319:ARG:HA	2.34	0.42
6:UD:497:ILE:HD11	6:UD:555:LEU:HD22	2.00	0.42
8:UF:8:LEU:HD13	8:UF:37:THR:HG22	2.01	0.42
9:UG:115:HIS:CE1	9:UG:380:ASN:HD22	2.37	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:UG:171:LYS:HB2	9:UG:171:LYS:HE3	1.80	0.42
10:UH:230:VAL:O	10:UH:239:ASP:N	2.49	0.42
12:UJ:235:VAL:HG22	12:UJ:264:PHE:HE1	1.82	0.42
12:UJ:364:ASN:OD1	12:UJ:365:ILE:N	2.52	0.42
12:UJ:1472:VAL:O	12:UJ:1476:LEU:HD23	2.19	0.42
13:UK:206:GLN:O	13:UK:209:THR:HG22	2.19	0.42
14:UL:237:LYS:NZ	15:UM:671:ASN:HB2	2.34	0.42
14:UL:410:SER:HG	14:UL:432:TYR:HD1	1.66	0.42
14:UL:601:GLY:HA3	14:UL:608:HIS:CE1	2.54	0.42
15:UM:296:ILE:O	15:UM:298:SER:N	2.51	0.42
15:UM:353:LEU:HB3	15:UM:365:ILE:HG13	2.01	0.42
15:UM:568:MET:HG2	15:UM:569:LYS:HG2	2.00	0.42
15:UM:595:ALA:O	15:UM:619:ARG:HA	2.19	0.42
15:UM:736:LEU:HD23	15:UM:736:LEU:HA	1.80	0.42
17:UO:45:ILE:HD11	17:UO:55:PHE:CD2	2.54	0.42
17:UO:284:PHE:HE1	17:UO:292:VAL:HG22	1.85	0.42
19:UQ:193:TRP:CZ2	19:UQ:228:VAL:HG21	2.54	0.42
19:UQ:258:TYR:HD2	19:UQ:276:ALA:HB2	1.84	0.42
20:UR:211:ILE:O	20:UR:214:THR:HG22	2.19	0.42
21:US:156:TRP:CH2	21:US:219:TRP:HB2	2.54	0.42
21:US:286:ILE:HB	21:US:287:PRO:HD3	2.01	0.42
22:UT:129:ILE:O	22:UT:133:ILE:HG23	2.19	0.42
22:UT:2125:LEU:HD23	22:UT:2125:LEU:HA	1.76	0.42
22:UT:2137:ASP:O	22:UT:2141:VAL:HG13	2.20	0.42
23:UU:562:LEU:HD23	23:UU:562:LEU:HA	1.78	0.42
24:UV:497:ARG:HH22	24:UV:945:PRO:HG2	1.85	0.42
24:UV:793:PRO:HG2	24:UV:799:LEU:HA	2.02	0.42
24:UV:795:GLU:OE1	24:UV:798:SER:N	2.26	0.42
26:CD:233:SER:O	26:CD:237:LEU:HG	2.19	0.42
33:CL:300:GLN:HB3	33:CL:792:VAL:CG2	2.49	0.42
33:CL:841:THR:HG22	33:CL:860:TYR:H	1.84	0.42
40:JL:133:ILE:HD12	40:JL:133:ILE:HA	1.91	0.42
40:JL:174:ARG:HH12	62:D3:1779:U:H3	1.67	0.42
42:JP:131:LYS:HB3	42:JP:155:TYR:HD2	1.85	0.42
42:JP:189:ARG:O	42:JP:190:GLU:HG2	2.19	0.42
44:JJ:107:THR:HB	44:JJ:108:PRO:HD3	2.01	0.42
44:JJ:185:PHE:CE1	44:JJ:244:ARG:HG3	2.54	0.42
45:DE:21:ASP:OD2	45:DE:24:SER:HB2	2.19	0.42
47:DG:7:TYR:O	47:DG:11:GLY:N	2.52	0.42
57:DW:12:ASN:ND2	62:D3:1036:A:H2	2.16	0.42
62:D3:198:A:H2'	62:D3:199:G:O4'	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:486:G:H4'	62:D3:487:G:H5'	2.01	0.42
62:D3:984:G:C2	62:D3:985:G:C8	3.07	0.42
62:D3:1691:A:N6	62:D3:1710:U:O2	2.46	0.42
63:D4:95:A:H61	63:D4:321:C:H42	1.67	0.42
3:UA:13:THR:HG21	3:UA:16:ARG:NH1	2.35	0.42
3:UA:186:THR:OG1	3:UA:187:PHE:N	2.52	0.42
3:UA:755:TYR:CE1	3:UA:798:TRP:CD1	3.08	0.42
4:UB:422:LEU:O	4:UB:426:THR:HG23	2.20	0.42
4:UB:613:ILE:HG22	4:UB:638:ASN:HA	2.01	0.42
6:UD:309:GLN:HE21	6:UD:318:ASN:HA	1.84	0.42
8:UF:130:HIS:CE1	16:UN:327:PHE:HD2	2.36	0.42
8:UF:178:VAL:HG12	8:UF:181:LEU:H	1.84	0.42
8:UF:356:PRO:HB2	8:UF:357:GLU:OE1	2.19	0.42
11:UI:477:LYS:HB3	11:UI:477:LYS:HE2	1.66	0.42
12:UJ:1427:TYR:OH	12:UJ:1477:PHE:HA	2.19	0.42
12:UJ:1584:GLU:O	12:UJ:1587:ARG:NH2	2.52	0.42
13:UK:64:TYR:OH	33:CL:1080:LYS:HB2	2.18	0.42
14:UL:321:TYR:CZ	14:UL:325:ILE:HD11	2.54	0.42
14:UL:546:LEU:HD21	14:UL:548:ILE:HD11	2.02	0.42
14:UL:596:ASN:HD22	62:D3:1140:G:H22	1.67	0.42
15:UM:737:ILE:HD12	15:UM:737:ILE:HA	1.88	0.42
17:UO:133:HIS:CG	17:UO:136:ASP:HB3	2.54	0.42
17:UO:167:ALA:HA	17:UO:194:ARG:HH22	1.82	0.42
17:UO:395:PHE:HB3	61:D2:85:G:C6	2.54	0.42
17:UO:470:TYR:HB3	17:UO:473:THR:OG1	2.19	0.42
19:UQ:436:PHE:O	19:UQ:764:SER:OG	2.20	0.42
19:UQ:559:LYS:O	19:UQ:560:ILE:HD13	2.18	0.42
19:UQ:658:GLU:O	19:UQ:660:GLN:NE2	2.48	0.42
19:UQ:718:GLY:HA3	19:UQ:747:ASP:HA	2.00	0.42
20:UR:377:LEU:O	20:UR:384:ILE:HA	2.19	0.42
21:US:176:ILE:O	21:US:179:GLU:HG3	2.18	0.42
22:UT:1185:LEU:HA	22:UT:1189:LEU:HD12	2.01	0.42
22:UT:2466:LYS:HD3	22:UT:2466:LYS:HA	1.89	0.42
23:UU:420:GLU:HB2	23:UU:468:MET:HE3	2.01	0.42
24:UV:127:PHE:CD1	24:UV:283:TYR:HB3	2.54	0.42
24:UV:140:ASP:HA	24:UV:178:TYR:CE2	2.54	0.42
24:UV:519:ASP:OD1	24:UV:520:ASN:N	2.52	0.42
24:UV:900:GLU:OE1	24:UV:901:ASN:N	2.52	0.42
25:UX:65:VAL:HG11	25:UX:173:MET:HE1	2.01	0.42
25:UX:79:LYS:HD3	57:DW:95:PRO:HA	2.02	0.42
25:UX:106:LEU:HA	25:UX:109:LEU:HD12	2.01	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:CD:213:ASN:OD1	26:CD:214:TYR:N	2.53	0.42
29:CH:149:PHE:HE1	29:CH:562:GLY:HA3	1.84	0.42
30:CI:57:LEU:HD23	30:CI:57:LEU:HA	1.84	0.42
30:CI:96:ASP:HA	30:CI:100:LYS:HZ2	1.84	0.42
30:CI:151:THR:HG22	30:CI:152:ARG:N	2.35	0.42
32:CK:410:ALA:O	32:CK:414:GLU:HG3	2.19	0.42
34:CM:26:LEU:HD23	34:CM:26:LEU:HA	1.65	0.42
34:CM:282:GLU:OE1	34:CM:291:ARG:N	2.41	0.42
34:CM:301:MET:CE	34:CM:311:LEU:HB2	2.49	0.42
36:JD:1191:SER:OG	36:JD:1213:VAL:HG13	2.19	0.42
40:JL:293:LYS:HA	40:JL:293:LYS:HD2	1.79	0.42
42:JP:345:THR:HG21	63:D4:31:G:N7	2.35	0.42
46:DF:127:GLN:CG	46:DF:128:ASN:H	2.32	0.42
50:DJ:80:LEU:HD13	50:DJ:99:LEU:HD11	2.01	0.42
58:DX:97:ASP:OD1	58:DX:98:GLU:N	2.49	0.42
62:D3:4:C:OP2	62:D3:4:C:H6	2.01	0.42
62:D3:891:A:C4	62:D3:892:A:C8	3.08	0.42
62:D3:909:U:C4	62:D3:910:C:N4	2.88	0.42
62:D3:1157:A:C6	62:D3:1160:A:C4	3.07	0.42
62:D3:1546:G:H2'	62:D3:1547:A:C8	2.55	0.42
62:D3:1668:G:H2'	62:D3:1669:U:C6	2.54	0.42
62:D3:1745:G:O3'	62:D3:1746:A:H8	2.02	0.42
75:EN:846:LEU:O	75:EN:850:TYR:N	2.51	0.42
3:UA:24:ASP:HA	3:UA:312:GLN:OE1	2.19	0.42
3:UA:531:ALA:HB2	3:UA:585:TYR:OH	2.19	0.42
3:UA:591:ALA:HA	3:UA:605:ASP:HA	2.01	0.42
6:UD:71:ARG:HD2	6:UD:77:GLU:OE2	2.20	0.42
6:UD:224:ARG:NH2	28:CF:11:LEU:O	2.45	0.42
6:UD:258:SER:HA	6:UD:282:ASP:CB	2.50	0.42
7:UE:75:ALA:O	7:UE:76:ILE:HD13	2.20	0.42
7:UE:344:ASP:OD2	7:UE:348:LYS:NZ	2.48	0.42
12:UJ:33:LEU:HA	12:UJ:33:LEU:HD23	1.81	0.42
12:UJ:210:LEU:HD12	12:UJ:210:LEU:HA	1.73	0.42
12:UJ:349:THR:HG21	12:UJ:379:GLU:HG2	2.02	0.42
12:UJ:670:LEU:HD12	12:UJ:671:LEU:N	2.35	0.42
12:UJ:1550:ILE:HG13	12:UJ:1551:LEU:N	2.34	0.42
12:UJ:1664:LYS:HD3	63:D4:145:U:H6	1.85	0.42
15:UM:554:ASP:OD1	15:UM:556:THR:OG1	2.37	0.42
21:US:233:ASP:OD1	21:US:233:ASP:N	2.50	0.42
22:UT:1632:LEU:HA	22:UT:1632:LEU:HD23	1.77	0.42
22:UT:1637:THR:O	22:UT:1641:GLN:HG2	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1862:LEU:H	22:UT:1862:LEU:HG	1.67	0.42
22:UT:2165:TYR:OH	22:UT:2180:LEU:O	2.37	0.42
22:UT:2438:LEU:HB3	22:UT:2442:LYS:HZ3	1.85	0.42
23:UU:257:ARG:HD2	23:UU:303:PHE:HE1	1.84	0.42
23:UU:323:VAL:HB	23:UU:343:LEU:HD22	2.01	0.42
24:UV:237:HIS:O	24:UV:241:ILE:HG23	2.19	0.42
24:UV:939:ILE:O	24:UV:943:VAL:HG22	2.19	0.42
24:UV:976:ILE:HG21	24:UV:1017:TYR:CE1	2.53	0.42
26:CD:195:VAL:HG12	26:CD:216:PHE:HE2	1.83	0.42
28:CG:59:GLU:HB3	29:CH:450:ASP:OD1	2.20	0.42
31:CJ:4:ARG:HD2	31:CJ:7:ARG:HH21	1.83	0.42
32:CK:409:LEU:HD11	44:JJ:223:ARG:HG2	2.01	0.42
35:CN:37:MET:HG2	35:CN:56:VAL:O	2.19	0.42
36:JD:631:GLU:O	36:JD:635:MET:HG2	2.19	0.42
36:JD:802:SER:O	36:JD:805:SER:OG	2.22	0.42
36:JD:1061:VAL:HG22	36:JD:1062:ILE:H	1.84	0.42
40:JL:193:LYS:N	40:JL:203:GLU:OE2	2.46	0.42
40:JL:288:THR:HB	40:JL:290:LEU:HD23	2.01	0.42
41:JM:57:THR:HG23	41:JM:61:LYS:NZ	2.35	0.42
42:JP:104:VAL:HG21	42:JP:150:ILE:HD12	2.02	0.42
47:DG:14:LYS:HE2	47:DG:16:PHE:HE1	1.85	0.42
49:DI:86:SER:OG	62:D3:328:A:N3	2.45	0.42
57:DW:31:SER:OG	57:DW:34:ILE:HG13	2.18	0.42
62:D3:138:A:N6	62:D3:266:A:H61	2.18	0.42
62:D3:693:U:OP1	62:D3:694:U:O2'	2.29	0.42
62:D3:1709:C:H2'	62:D3:1710:U:C6	2.54	0.42
62:D3:1740:A:H2'	62:D3:1741:U:C6	2.55	0.42
71:EH:76:ILE:O	71:EH:116:GLY:N	2.50	0.42
1:CA:81:ARG:HD3	41:JM:164:MET:HG3	2.01	0.42
1:CA:125:VAL:HG12	41:JM:150:GLY:HA3	2.00	0.42
2:DA:92:GLN:O	2:DA:92:GLN:HG3	2.18	0.42
3:UA:570:THR:CG2	3:UA:573:ASN:H	2.31	0.42
1:CB:170:VAL:HB	1:CB:194:VAL:HG22	2.00	0.42
1:CB:206:GLU:O	1:CB:209:SER:OG	2.22	0.42
4:UB:433:ILE:HG13	4:UB:434:ILE:N	2.34	0.42
4:UB:593:LEU:HD11	4:UB:596:TYR:CE1	2.55	0.42
6:UD:208:GLY:HA3	6:UD:233:LYS:HZ2	1.84	0.42
6:UD:265:TRP:CD1	6:UD:272:LEU:HB3	2.55	0.42
8:UF:299:LYS:HZ3	8:UF:300:MET:HE2	1.83	0.42
12:UJ:225:SER:O	12:UJ:225:SER:OG	2.36	0.42
12:UJ:328:ASP:O	12:UJ:331:SER:OG	2.30	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:UK:63:TYR:OH	13:UK:68:HIS:HE1	2.01	0.42
13:UK:98:LEU:HD21	13:UK:107:VAL:HG22	2.01	0.42
14:UL:41:LEU:HB2	14:UL:54:ILE:HD11	2.01	0.42
14:UL:147:VAL:HG12	14:UL:156:LEU:HD13	2.01	0.42
14:UL:402:ASP:OD1	14:UL:404:LYS:HE3	2.20	0.42
14:UL:671:PHE:CB	14:UL:684:TRP:O	2.66	0.42
17:UO:314:GLY:HA2	17:UO:334:LYS:HD2	2.01	0.42
17:UO:392:ILE:HG13	17:UO:424:ARG:CZ	2.49	0.42
19:UQ:37:LEU:HD23	19:UQ:38:SER:O	2.19	0.42
19:UQ:154:LEU:HD12	19:UQ:171:TYR:CD2	2.54	0.42
19:UQ:317:TRP:NE1	19:UQ:488:LEU:HD21	2.30	0.42
19:UQ:535:ASN:HB2	19:UQ:538:GLU:OE1	2.20	0.42
19:UQ:716:ARG:NH2	19:UQ:770:TYR:O	2.52	0.42
19:UQ:768:TRP:HB3	19:UQ:774:PHE:CD2	2.54	0.42
21:US:188:PHE:CG	21:US:239:PHE:HB2	2.54	0.42
21:US:387:THR:OG1	21:US:395:ILE:HD12	2.19	0.42
22:UT:1225:ILE:HB	22:UT:1267:THR:HG21	2.00	0.42
22:UT:1273:LYS:HB2	22:UT:1349:PHE:CD1	2.55	0.42
22:UT:1300:SER:HA	22:UT:1303:LYS:HD2	2.01	0.42
22:UT:1647:SER:O	22:UT:1651:ARG:HG3	2.19	0.42
22:UT:2106:LEU:HA	22:UT:2109:VAL:HG12	2.02	0.42
22:UT:2137:ASP:O	22:UT:2140:ILE:HG12	2.20	0.42
22:UT:2379:GLU:OE2	22:UT:2382:LYS:NZ	2.30	0.42
23:UU:285:HIS:HD2	23:UU:339:PRO:HB3	1.85	0.42
23:UU:607:SER:HB3	23:UU:625:VAL:O	2.19	0.42
24:UV:758:SER:HB3	24:UV:763:THR:HG23	2.02	0.42
24:UV:814:LEU:HD21	24:UV:821:TYR:HB2	2.01	0.42
32:CK:335:ARG:NH1	32:CK:340:LEU:HD13	2.35	0.42
32:CK:350:THR:CG2	33:CL:975:GLU:HB3	2.42	0.42
33:CL:14:LYS:NZ	33:CL:19:LYS:HD3	2.34	0.42
33:CL:82:LYS:HE2	77:CL:2001:GTP:O1B	2.20	0.42
33:CL:764:ILE:HG21	34:CM:181:HIS:HE1	1.85	0.42
33:CL:1113:ILE:O	33:CL:1117:LEU:HD23	2.19	0.42
34:CM:68:SER:HB3	34:CM:73:THR:HG22	2.02	0.42
34:CM:241:TRP:NE1	34:CM:262:GLY:HA3	2.35	0.42
36:JD:454:ALA:HB2	36:JD:767:SER:HB2	2.02	0.42
36:JD:476:GLN:HG3	36:JD:480:ASP:O	2.20	0.42
36:JD:1187:LEU:HD23	36:JD:1217:PHE:CE1	2.55	0.42
37:JF:236:VAL:HG21	37:JG:102:SER:HA	2.00	0.42
47:DG:52:ILE:HD12	47:DG:109:LEU:HD21	2.02	0.42
49:DI:113:PHE:CD1	49:DI:121:LEU:HG	2.55	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:DS:38:VAL:HB	55:DS:42:TYR:CD2	2.55	0.42
58:DX:60:GLU:N	58:DX:60:GLU:OE2	2.50	0.42
61:D2:288:G:N2	63:D4:66:U:O2	2.50	0.42
62:D3:276:C:C4	62:D3:278:U:N3	2.85	0.42
62:D3:455:C:H3'	62:D3:456:A:C8	2.54	0.42
62:D3:717:C:H42	62:D3:720:G:N2	2.17	0.42
62:D3:1739:C:H2'	62:D3:1740:A:H8	1.83	0.42
63:D4:255:U:H4'	63:D4:256:G:OP2	2.19	0.42
63:D4:314:C:H2'	63:D4:315:A:H8	1.84	0.42
1:CA:301:LEU:HD23	1:CA:301:LEU:HA	1.83	0.42
2:DA:197:ILE:O	2:DA:201:THR:HG23	2.20	0.42
3:UA:328:LEU:CD2	3:UA:330:TYR:HB2	2.50	0.42
3:UA:792:ILE:HD13	3:UA:792:ILE:HG21	1.84	0.42
6:UD:257:ASP:OD1	6:UD:261:SER:HB2	2.19	0.42
6:UD:622:LEU:HB2	6:UD:627:LYS:HE3	2.01	0.42
7:UE:66:VAL:HG22	7:UE:112:LEU:HD22	2.01	0.42
7:UE:437:VAL:HG11	7:UE:456:VAL:HG23	2.01	0.42
8:UF:299:LYS:HD2	8:UF:300:MET:N	2.34	0.42
9:UG:74:LEU:HB3	9:UG:368:TYR:OH	2.19	0.42
9:UG:138:ASP:OD2	9:UG:141:LYS:NZ	2.36	0.42
9:UG:195:HIS:NE2	9:UG:236:MET:O	2.53	0.42
12:UJ:94:LEU:HD23	12:UJ:94:LEU:HA	1.91	0.42
12:UJ:667:LYS:HZ1	12:UJ:702:TRP:HH2	1.68	0.42
12:UJ:716:PHE:O	12:UJ:720:LEU:HD23	2.18	0.42
13:UK:196:LYS:HA	13:UK:199:LYS:HG2	2.01	0.42
14:UL:170:TRP:CE2	14:UL:212:VAL:HB	2.55	0.42
14:UL:623:PHE:CD1	14:UL:630:PHE:HB3	2.52	0.42
14:UL:656:HIS:CE1	14:UL:660:VAL:HG22	2.55	0.42
15:UM:154:GLY:HA3	15:UM:161:TRP:CZ3	2.55	0.42
15:UM:199:ILE:HD12	15:UM:199:ILE:HA	1.90	0.42
15:UM:295:PRO:HA	15:UM:302:MET:SD	2.60	0.42
15:UM:356:ALA:HB2	15:UM:394:LEU:HB2	2.02	0.42
17:UO:40:ASN:CB	17:UO:60:SER:HB3	2.49	0.42
17:UO:104:LEU:HG	17:UO:121:ASN:HA	2.02	0.42
17:UO:401:LEU:HG	17:UO:405:PHE:CE2	2.55	0.42
19:UQ:660:GLN:HB3	19:UQ:707:MET:HB2	2.02	0.42
19:UQ:779:ILE:HG13	19:UQ:780:GLU:N	2.35	0.42
20:UR:385:ASN:O	20:UR:386:ILE:HD13	2.20	0.42
21:US:262:LEU:HA	21:US:265:LEU:HG	2.01	0.42
22:UT:497:ILE:O	22:UT:501:LEU:HD23	2.20	0.42
22:UT:792:HIS:O	22:UT:794:VAL:N	2.52	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:886:ASP:OD1	22:UT:886:ASP:N	2.52	0.42
22:UT:1289:ILE:O	22:UT:1293:ARG:NH1	2.53	0.42
22:UT:1302:SER:HA	22:UT:1305:VAL:HG22	2.01	0.42
22:UT:1545:VAL:HG21	22:UT:1608:GLU:O	2.19	0.42
22:UT:1667:ALA:O	22:UT:1670:LEU:N	2.53	0.42
22:UT:1983:LEU:HD12	22:UT:1983:LEU:HA	1.71	0.42
22:UT:2387:LEU:HD21	22:UT:2416:ILE:HG21	2.02	0.42
23:UU:97:LYS:HG2	23:UU:111:GLU:HA	2.01	0.42
23:UU:470:GLN:HB2	23:UU:553:ARG:NH1	2.34	0.42
25:UX:143:HIS:O	25:UX:147:GLN:HG3	2.20	0.42
26:CD:124:ALA:O	26:CD:128:ILE:HG12	2.19	0.42
27:CE:127:LEU:O	27:CE:127:LEU:HD23	2.20	0.42
27:CE:299:LEU:HD23	27:CE:299:LEU:HA	1.90	0.42
29:CH:470:LEU:O	29:CH:471:GLN:NE2	2.49	0.42
29:CH:474:TRP:O	29:CH:491:SER:OG	2.12	0.42
33:CL:980:LEU:HD12	33:CL:980:LEU:HA	1.87	0.42
36:JD:1155:TYR:HB3	36:JD:1168:ASN:HB3	2.01	0.42
40:JL:163:LEU:HD22	40:JL:179:VAL:HG11	2.02	0.42
42:JP:331:ILE:O	42:JP:340:ARG:N	2.52	0.42
46:DF:87:CYS:SG	46:DF:88:PRO:HD2	2.59	0.42
47:DG:174:LYS:HB2	62:D3:79:C:H1'	2.01	0.42
52:DN:14:SER:HB2	62:D3:959:U:H5''	2.01	0.42
62:D3:575:C:H6	62:D3:575:C:H2'	1.66	0.42
62:D3:683:C:H2'	62:D3:684:A:H8	1.85	0.42
62:D3:1119:G:C5	63:D4:7:G:C2	3.08	0.42
62:D3:1666:U:C4	62:D3:1736:G:C6	3.08	0.42
62:D3:1801:A:H2'	62:D3:1802:A:H8	1.85	0.42
74:EK:567:GLY:HA2	74:EK:627:ILE:HA	2.02	0.42
2:DA:129:THR:HG22	2:DA:133:TYR:HB2	2.02	0.42
1:CB:306:LEU:HD11	1:CB:315:ILE:HG22	2.01	0.42
4:UB:487:LYS:HA	4:UB:487:LYS:HD2	1.80	0.42
4:UB:689:GLU:HG2	4:UB:693:LYS:HZ3	1.84	0.42
7:UE:46:TRP:HB2	7:UE:48:GLU:OE2	2.20	0.42
7:UE:64:LYS:NZ	7:UE:111:ASP:OD1	2.52	0.42
7:UE:184:PHE:CE1	7:UE:220:GLY:HA2	2.54	0.42
9:UG:202:HIS:CD2	9:UG:437:LEU:HB2	2.54	0.42
10:UH:291:LYS:N	10:UH:305:VAL:O	2.52	0.42
12:UJ:1420:LEU:HA	12:UJ:1456:VAL:HG13	2.02	0.42
12:UJ:1626:LEU:O	12:UJ:1630:LEU:HD23	2.19	0.42
13:UK:202:LYS:HD3	13:UK:205:LEU:HD23	2.01	0.42
14:UL:802:GLU:OE1	14:UL:838:THR:HG22	2.19	0.42

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:UM:306:LEU:O	15:UM:309:GLN:N	2.52	0.42
17:UO:123:SER:H	17:UO:150:ARG:HH22	1.66	0.42
17:UO:371:GLU:H	17:UO:371:GLU:CD	2.19	0.42
17:UO:403:ASN:O	17:UO:406:VAL:HG22	2.20	0.42
19:UQ:359:GLN:CG	19:UQ:361:THR:HB	2.49	0.42
19:UQ:720:ILE:HD12	19:UQ:774:PHE:CD2	2.54	0.42
20:UR:241:ALA:O	20:UR:244:SER:HB3	2.19	0.42
20:UR:440:ASN:C	20:UR:440:ASN:ND2	2.72	0.42
21:US:195:PHE:CE2	21:US:222:LEU:HD21	2.54	0.42
21:US:336:ASN:HB3	21:US:339:MET:HB3	2.00	0.42
22:UT:181:LEU:HD12	22:UT:181:LEU:HA	1.81	0.42
22:UT:365:PHE:O	22:UT:369:SER:OG	2.33	0.42
22:UT:574:LEU:O	22:UT:577:HIS:HB3	2.19	0.42
22:UT:1075:TRP:C	22:UT:1079:MET:HG3	2.40	0.42
22:UT:1123:TYR:CE2	22:UT:1166:HIS:HB2	2.55	0.42
22:UT:1325:LEU:HG	22:UT:1328:PHE:CD2	2.53	0.42
22:UT:1397:ILE:HG22	22:UT:1398:LEU:HD23	2.02	0.42
22:UT:1468:ARG:O	22:UT:1468:ARG:HD3	2.19	0.42
23:UU:30:ILE:HG22	23:UU:31:GLY:N	2.35	0.42
23:UU:190:LEU:HD12	23:UU:190:LEU:HA	1.91	0.42
23:UU:253:SER:C	23:UU:254:LEU:HD22	2.40	0.42
23:UU:580:GLN:HG2	23:UU:582:TRP:HE1	1.85	0.42
23:UU:612:TRP:CZ3	23:UU:619:CYS:HB2	2.55	0.42
23:UU:819:LYS:O	23:UU:823:GLU:OE1	2.38	0.42
24:UV:179:LYS:HB2	24:UV:210:PRO:HG2	2.02	0.42
24:UV:490:GLU:HG2	24:UV:949:PHE:HE2	1.83	0.42
26:CD:19:LYS:HB2	26:CD:51:VAL:HG21	2.02	0.42
26:CD:200:GLY:HA2	26:CD:204:PRO:HA	2.02	0.42
26:CD:229:LEU:HD13	26:CD:252:ILE:HA	2.00	0.42
28:CG:61:ILE:O	28:CG:65:LEU:HB2	2.19	0.42
29:CH:448:PHE:CD1	29:CH:461:LYS:HE2	2.55	0.42
29:CH:522:THR:HG1	29:CH:542:SER:HG	1.64	0.42
30:CI:81:LYS:HE3	32:CK:445:VAL:HG23	2.00	0.42
33:CL:863:THR:O	33:CL:865:SER:N	2.53	0.42
33:CL:966:ILE:HG23	33:CL:991:PHE:HE1	1.85	0.42
33:CL:1142:LEU:CD2	62:D3:493:U:H4'	2.47	0.42
36:JD:550:HIS:CE1	36:JD:552:LYS:HA	2.54	0.42
36:JD:996:LYS:O	36:JD:999:LYS:NZ	2.31	0.42
37:JF:147:LYS:O	37:JF:148:LEU:HG	2.20	0.42
37:JG:175:CYS:SG	37:JG:176:ARG:N	2.93	0.42
41:JM:158:GLU:HG2	41:JM:158:GLU:O	2.20	0.42

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:JM:174:LEU:O	41:JM:178:MET:HG2	2.20	0.42
42:JP:214:ASP:O	42:JP:215:LEU:HD23	2.19	0.42
42:JP:226:LYS:HG2	42:JP:227:PHE:O	2.19	0.42
44:JJ:129:ARG:HH21	44:JJ:131:ASN:CG	2.22	0.42
49:DI:86:SER:O	62:D3:341:A:O2'	2.37	0.42
54:DQ:13:LYS:CG	54:DQ:14:LYS:H	2.30	0.42
62:D3:100:A:H2'	62:D3:101:U:O4'	2.20	0.42
62:D3:305:C:O5'	62:D3:305:C:H6	2.03	0.42
62:D3:373:G:H8	62:D3:373:G:OP2	2.03	0.42
62:D3:396:G:N2	62:D3:399:A:OP2	2.53	0.42
62:D3:886:U:H2'	62:D3:887:A:O4'	2.19	0.42
62:D3:977:A:C6	62:D3:1025:A:C4	3.07	0.42
62:D3:1120:U:H3	63:D4:5:A:H61	1.66	0.42
62:D3:1747:G:H2'	62:D3:1748:G:C8	2.52	0.42
72:EI:339:ASN:O	72:EI:343:SER:N	2.50	0.42
1:CA:257:SER:O	1:CA:261:LEU:HB3	2.20	0.42
2:DA:171:ILE:HD13	2:DA:171:ILE:HA	1.88	0.42
3:UA:846:TYR:CD1	23:UU:909:LEU:HD12	2.55	0.42
7:UE:62:CYS:SG	7:UE:110:ILE:HB	2.60	0.42
7:UE:305:TRP:HE1	7:UE:307:GLN:HE22	1.67	0.42
9:UG:51:GLU:O	9:UG:55:LYS:HG2	2.20	0.42
9:UG:220:SER:OG	9:UG:221:THR:N	2.53	0.42
12:UJ:262:VAL:HG11	19:UQ:892:MET:SD	2.59	0.42
12:UJ:643:PRO:HG3	12:UJ:650:PHE:CD2	2.54	0.42
12:UJ:701:SER:HA	12:UJ:704:LYS:HG2	2.01	0.42
12:UJ:1539:MET:HG3	12:UJ:1544:PHE:CE1	2.55	0.42
12:UJ:1640:SER:OG	12:UJ:1643:ARG:HG2	2.20	0.42
12:UJ:1753:VAL:O	12:UJ:1757:GLU:HG3	2.20	0.42
14:UL:653:LEU:HD13	14:UL:684:TRP:CZ3	2.54	0.42
14:UL:762:GLU:HG3	14:UL:794:LEU:HD12	2.01	0.42
14:UL:814:MET:O	14:UL:817:LEU:N	2.52	0.42
15:UM:64:ILE:H	15:UM:64:ILE:HD12	1.84	0.42
16:UN:314:PRO:HG2	16:UN:886:LYS:HG3	2.02	0.42
16:UN:321:HIS:CE1	26:CD:90:SER:HG	2.37	0.42
17:UO:213:GLN:CD	17:UO:231:GLY:HA3	2.39	0.42
17:UO:262:GLU:HG2	17:UO:263:ASN:CG	2.40	0.42
19:UQ:68:PHE:CD1	19:UQ:74:LEU:HD13	2.55	0.42
19:UQ:313:LEU:HD11	19:UQ:346:VAL:HG13	2.01	0.42
20:UR:490:PHE:CD2	28:CF:89:ARG:NE	2.88	0.42
21:US:223:VAL:HA	21:US:228:HIS:HE1	1.85	0.42
21:US:336:ASN:HB3	21:US:339:MET:CB	2.49	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:103:LEU:HA	22:UT:103:LEU:HD23	1.79	0.42
22:UT:484:ILE:HD12	22:UT:484:ILE:HA	1.90	0.42
22:UT:505:PHE:CE2	22:UT:540:THR:HG22	2.54	0.42
22:UT:542:LEU:HB3	22:UT:578:TYR:CD2	2.53	0.42
22:UT:874:LEU:HD12	22:UT:874:LEU:O	2.19	0.42
22:UT:996:ARG:HH22	62:D3:133:U:C5'	2.32	0.42
22:UT:1089:PRO:HG2	22:UT:1090:ARG:HG2	2.02	0.42
22:UT:1811:ILE:HG13	22:UT:1812:LEU:N	2.35	0.42
22:UT:2255:HIS:ND1	22:UT:2300:THR:HG22	2.35	0.42
23:UU:53:CYS:SG	23:UU:54:VAL:N	2.93	0.42
23:UU:106:GLU:OE1	23:UU:108:HIS:N	2.52	0.42
23:UU:316:ASP:OD1	23:UU:318:SER:HB3	2.20	0.42
23:UU:925:LEU:HD23	23:UU:925:LEU:HA	1.75	0.42
24:UV:402:ASN:C	24:UV:410:LYS:HE3	2.40	0.42
24:UV:858:ARG:O	24:UV:862:LEU:HG	2.20	0.42
25:UX:115:ILE:HD12	25:UX:115:ILE:HA	1.89	0.42
26:CD:4:ILE:HG13	26:CD:4:ILE:O	2.19	0.42
27:CE:78:GLU:HG3	27:CE:78:GLU:O	2.20	0.42
27:CE:219:SER:HA	27:CE:236:LYS:CD	2.48	0.42
29:CH:161:SER:HB2	29:CH:242:VAL:HG13	2.00	0.42
30:CI:122:GLU:HG2	30:CI:123:THR:HG23	2.02	0.42
32:CK:427:SER:O	32:CK:430:LEU:HB3	2.19	0.42
33:CL:118:LEU:HD11	33:CL:245:LEU:HD22	2.02	0.42
33:CL:246:ALA:HB3	33:CL:810:ILE:CG1	2.46	0.42
37:JF:29:PRO:HB2	37:JF:30:VAL:H	1.61	0.42
42:JP:89:ASP:HB3	42:JP:91:VAL:HG12	2.02	0.42
42:JP:433:GLU:O	42:JP:437:ILE:HG12	2.20	0.42
47:DG:83:CYS:HA	62:D3:161:U:O3'	2.19	0.42
48:DH:22:GLN:O	48:DH:26:GLU:HG3	2.19	0.42
49:DI:46:VAL:HG23	49:DI:54:LYS:HB3	2.00	0.42
49:DI:184:LEU:HD22	49:DI:188:GLU:HB3	2.02	0.42
50:DJ:109:LEU:HD22	50:DJ:129:ILE:CD1	2.50	0.42
53:DO:25:ASP:N	53:DO:55:SER:HB3	2.35	0.42
53:DO:129:LYS:NZ	62:D3:1009:U:OP2	2.35	0.42
57:DW:74:VAL:O	62:D3:1100:G:O2'	2.28	0.42
57:DW:77:PRO:HG2	57:DW:79:PHE:CE2	2.54	0.42
62:D3:1657:U:H4'	62:D3:1658:G:H5''	2.01	0.42
67:ED:345:SER:HA	67:ED:365:GLY:H	1.84	0.42
1:CA:321:MET:C	1:CA:323:SER:H	2.23	0.42
3:UA:73:ILE:HG21	3:UA:99:CYS:SG	2.60	0.42
3:UA:150:THR:HG22	3:UA:164:THR:O	2.19	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:UA:566:GLN:NE2	30:CI:144:ASN:HD22	2.18	0.42
3:UA:820:ALA:O	3:UA:824:ILE:HG12	2.20	0.42
4:UB:314:MET:O	4:UB:513:GLN:NE2	2.53	0.42
4:UB:604:VAL:HG13	4:UB:606:PHE:HD2	1.84	0.42
4:UB:678:PHE:HB3	4:UB:681:PRO:CG	2.50	0.42
6:UD:372:MET:HA	6:UD:373:PRO:HD3	1.87	0.42
6:UD:654:ILE:O	6:UD:734:PHE:HA	2.19	0.42
7:UE:11:ASP:HB3	7:UE:65:TRP:CE2	2.55	0.42
9:UG:529:ARG:O	9:UG:533:ILE:HG23	2.19	0.42
10:UH:231:PHE:HA	10:UH:238:ASP:HA	2.01	0.42
12:UJ:1439:SER:O	12:UJ:1442:SER:OG	2.25	0.42
12:UJ:1598:LEU:HD11	12:UJ:1643:ARG:HB2	2.02	0.42
12:UJ:1724:VAL:HG13	12:UJ:1725:LEU:HG	2.02	0.42
14:UL:105:VAL:O	14:UL:113:VAL:HG23	2.19	0.42
14:UL:615:GLN:N	14:UL:636:ASP:OD1	2.53	0.42
15:UM:313:LEU:O	15:UM:330:THR:OG1	2.25	0.42
15:UM:615:GLY:C	15:UM:642:GLN:HE22	2.23	0.42
17:UO:62:ARG:CZ	17:UO:64:GLN:HG2	2.49	0.42
17:UO:284:PHE:CE1	17:UO:292:VAL:HG22	2.55	0.42
19:UQ:43:ASN:HA	19:UQ:55:TYR:O	2.19	0.42
19:UQ:178:PHE:CG	19:UQ:179:ASP:N	2.87	0.42
19:UQ:340:ILE:HG13	19:UQ:359:GLN:HB3	2.02	0.42
20:UR:255:SER:O	20:UR:263:LEU:HD12	2.20	0.42
21:US:377:ALA:HA	21:US:380:ILE:HG22	2.00	0.42
22:UT:226:THR:O	22:UT:230:GLU:OE1	2.38	0.42
22:UT:505:PHE:HE2	22:UT:540:THR:HG22	1.85	0.42
22:UT:519:VAL:HG11	22:UT:548:TYR:CE1	2.55	0.42
22:UT:1168:VAL:O	22:UT:1171:VAL:HG22	2.19	0.42
22:UT:1244:LEU:HD23	22:UT:1244:LEU:HA	1.78	0.42
22:UT:1277:GLU:O	22:UT:1281:ARG:HG2	2.19	0.42
22:UT:1289:ILE:HG23	22:UT:1293:ARG:HH12	1.84	0.42
22:UT:1391:ILE:O	22:UT:1395:LYS:HG3	2.20	0.42
22:UT:1395:LYS:HA	22:UT:1399:LEU:HG	2.01	0.42
22:UT:2472:GLU:HA	22:UT:2475:LYS:HE2	2.02	0.42
23:UU:174:ALA:O	23:UU:175:THR:OG1	2.25	0.42
23:UU:395:LYS:HD3	23:UU:395:LYS:HA	1.87	0.42
23:UU:606:ASP:N	23:UU:606:ASP:OD1	2.50	0.42
24:UV:1156:LYS:HG2	24:UV:1157:TYR:CD1	2.54	0.42
25:UX:130:CYS:HB3	25:UX:144:ARG:NH2	2.35	0.42
26:CD:244:ASP:OD1	26:CD:244:ASP:N	2.53	0.42
27:CE:215:ARG:HB3	27:CE:239:ALA:HB1	2.02	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:CE:427:TYR:CG	27:CE:428:ASN:N	2.88	0.42
30:CI:29:ASP:O	30:CI:32:VAL:HG22	2.19	0.42
33:CL:174:LEU:HD23	33:CL:174:LEU:HA	1.86	0.42
33:CL:719:ASN:O	33:CL:723:LYS:HG2	2.19	0.42
34:CM:7:LYS:HD2	34:CM:77:ARG:HH11	1.84	0.42
35:CN:85:GLU:HG3	35:CN:127:LYS:O	2.20	0.42
36:JD:588:PHE:HB2	36:JD:814:GLY:O	2.20	0.42
36:JD:1077:ILE:O	36:JD:1081:LYS:HG2	2.19	0.42
42:JP:356:TYR:CD1	42:JP:363:ILE:HG12	2.54	0.42
44:JJ:164:LEU:HD22	44:JJ:232:HIS:CE1	2.54	0.42
48:DH:32:PRO:C	48:DH:35:LYS:HZ1	2.22	0.42
58:DX:69:ARG:HH11	58:DX:90:ASP:HB3	1.85	0.42
61:D2:60:G:H2'	61:D2:61:U:C6	2.54	0.42
62:D3:129:U:C2	62:D3:182:A:C6	3.08	0.42
62:D3:424:C:O2'	62:D3:426:G:OP1	2.35	0.42
62:D3:843:U:H2'	62:D3:844:A:O4'	2.19	0.42
63:D4:107:C:H6	63:D4:108:A:C6	2.38	0.42
63:D4:202:G:C6	63:D4:203:U:C4	3.07	0.42
69:EF:65:LYS:O	69:EF:123:LYS:N	2.52	0.42
1:CA:127:GLU:HA	1:CA:127:GLU:OE2	2.20	0.42
1:CA:144:TRP:CE2	1:CA:183:HIS:HB3	2.55	0.42
1:CA:306:LEU:CD1	1:CA:310:GLU:HB2	2.50	0.42
3:UA:269:HIS:ND1	3:UA:272:THR:HG22	2.35	0.42
3:UA:559:ILE:HG23	3:UA:598:ASN:HD22	1.84	0.42
3:UA:773:ILE:HD12	3:UA:773:ILE:H	1.84	0.42
4:UB:92:GLU:O	4:UB:96:LYS:HG2	2.20	0.42
6:UD:79:TRP:CE2	6:UD:87:GLN:HB2	2.55	0.42
6:UD:399:VAL:HB	6:UD:420:LEU:HB2	2.02	0.42
6:UD:545:ARG:HB2	6:UD:549:VAL:CG2	2.50	0.42
7:UE:5:VAL:HG23	7:UE:306:LEU:HD11	2.02	0.42
7:UE:510:GLY:O	7:UE:514:VAL:HG23	2.20	0.42
7:UE:532:ARG:O	7:UE:536:LEU:HG	2.20	0.42
8:UF:50:ILE:HA	8:UF:50:ILE:HD13	1.78	0.42
8:UF:359:TYR:O	8:UF:362:THR:OG1	2.31	0.42
9:UG:124:HIS:CG	9:UG:163:GLU:HG2	2.55	0.42
12:UJ:365:ILE:O	12:UJ:369:LEU:HG	2.20	0.42
12:UJ:746:GLU:O	12:UJ:750:ASN:ND2	2.53	0.42
12:UJ:1459:ARG:O	12:UJ:1462:SER:OG	2.32	0.42
12:UJ:1471:THR:HG22	12:UJ:1516:PHE:CE1	2.55	0.42
12:UJ:1549:VAL:HG12	12:UJ:1553:ARG:NE	2.35	0.42
13:UK:230:LYS:HE2	13:UK:242:PHE:CE2	2.55	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:UL:114:LEU:HG	14:UL:115:LEU:HD22	2.01	0.42
14:UL:392:THR:OG1	14:UL:393:ASP:N	2.53	0.42
15:UM:518:TRP:HD1	15:UM:519:ASN:O	2.03	0.42
19:UQ:198:LEU:HD12	19:UQ:198:LEU:HA	1.85	0.42
19:UQ:215:VAL:HG11	19:UQ:224:SER:HB3	2.02	0.42
19:UQ:409:LYS:HE2	19:UQ:409:LYS:HB3	1.87	0.42
19:UQ:413:SER:N	19:UQ:416:SER:HB3	2.35	0.42
20:UR:137:ILE:N	20:UR:153:SER:O	2.51	0.42
20:UR:178:VAL:HG21	23:UU:220:ILE:HD11	2.02	0.42
20:UR:356:GLU:H	20:UR:356:GLU:HG3	1.71	0.42
20:UR:408:CYS:O	20:UR:423:LEU:HD12	2.20	0.42
22:UT:162:LEU:HB3	22:UT:166:LEU:HD23	2.02	0.42
22:UT:355:GLN:O	22:UT:358:VAL:HB	2.20	0.42
22:UT:1221:ILE:HG13	22:UT:1222:SER:N	2.35	0.42
22:UT:1381:LYS:HA	22:UT:1382:PRO:HD3	1.95	0.42
22:UT:2130:LEU:HG	22:UT:2131:PRO:HD3	2.02	0.42
22:UT:2130:LEU:O	22:UT:2134:GLU:HG2	2.20	0.42
22:UT:2236:ILE:HG23	22:UT:2280:ILE:HD12	2.02	0.42
23:UU:132:THR:OG1	23:UU:136:SER:HB2	2.20	0.42
24:UV:183:ILE:HD11	24:UV:205:THR:OG1	2.20	0.42
24:UV:190:ALA:O	24:UV:192:LYS:HE2	2.20	0.42
24:UV:209:MET:HG3	24:UV:231:TYR:CE1	2.54	0.42
24:UV:932:GLU:O	24:UV:936:LEU:HD23	2.20	0.42
24:UV:1083:GLN:O	24:UV:1087:LEU:HG	2.20	0.42
26:CD:184:LEU:CD2	26:CD:285:ARG:HB2	2.49	0.42
28:CF:51:PHE:HE1	28:CF:114:ILE:HG22	1.83	0.42
28:CF:61:ILE:O	28:CF:65:LEU:HB2	2.19	0.42
29:CH:190:VAL:HG11	29:CH:242:VAL:HB	2.02	0.42
30:CI:46:LYS:O	30:CI:50:ILE:HG13	2.20	0.42
32:CK:478:ASP:OD1	32:CK:478:ASP:N	2.53	0.42
34:CM:241:TRP:CE2	34:CM:262:GLY:HA3	2.55	0.42
34:CM:311:LEU:HD22	34:CM:313:ILE:HG22	2.01	0.42
35:CN:144:TYR:O	35:CN:147:LEU:HB2	2.20	0.42
36:JD:109:GLU:O	36:JD:113:ILE:HG12	2.20	0.42
36:JD:114:ILE:HG22	36:JD:118:GLN:OE1	2.19	0.42
36:JD:624:VAL:HG23	36:JD:759:VAL:HA	2.01	0.42
37:JG:64:LYS:HG3	37:JG:65:TYR:N	2.35	0.42
41:JM:137:LYS:HE2	62:D3:500:C:OP2	2.20	0.42
44:JJ:222:THR:HB	44:JJ:234:LEU:O	2.20	0.42
56:DT:45:MET:HG2	56:DT:46:PRO:HD2	2.00	0.42
62:D3:23:G:N1	62:D3:602:U:C2	2.88	0.42

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:320:U:O2'	62:D3:321:C:H6	2.03	0.42
62:D3:494:U:H2'	62:D3:495:C:C6	2.55	0.42
62:D3:1176:G:C2	62:D3:1177:C:C2	3.08	0.42
63:D4:202:G:H2'	63:D4:203:U:H6	1.82	0.42
63:D4:315:A:H2'	63:D4:316:A:H8	1.85	0.42
65:EB:164:LYS:N	65:EB:185:VAL:O	2.35	0.42
74:EK:368:LYS:O	74:EK:372:LEU:CB	2.67	0.42
3:UA:71:ILE:HG21	3:UA:102:VAL:HG11	2.01	0.41
3:UA:129:LYS:HE3	3:UA:129:LYS:HB2	1.87	0.41
3:UA:297:GLN:C	3:UA:298:LEU:HD12	2.40	0.41
3:UA:467:ASP:CG	3:UA:468:ALA:H	2.19	0.41
3:UA:848:PHE:CE2	14:UL:904:GLY:HA2	2.55	0.41
1:CB:155:ILE:HD13	1:CB:155:ILE:HA	1.91	0.41
4:UB:52:ARG:CD	32:CK:370:ARG:NH1	2.83	0.41
4:UB:424:LYS:O	4:UB:428:VAL:HG23	2.19	0.41
4:UB:602:LEU:HD11	4:UB:674:LYS:HE3	2.02	0.41
6:UD:519:THR:N	6:UD:522:SER:OG	2.53	0.41
6:UD:612:THR:HB	6:UD:615:SER:OG	2.20	0.41
7:UE:245:ALA:HB1	7:UE:253:LEU:HD11	2.00	0.41
7:UE:295:PHE:O	7:UE:301:LEU:HD12	2.19	0.41
7:UE:369:PHE:HB3	7:UE:372:VAL:HG11	2.01	0.41
8:UF:108:LYS:HE2	8:UF:112:MET:HE3	2.02	0.41
9:UG:309:LEU:HD23	9:UG:309:LEU:HA	1.75	0.41
9:UG:495:SER:OG	9:UG:496:GLY:N	2.54	0.41
10:UH:562:PRO:O	10:UH:566:LEU:HD13	2.20	0.41
12:UJ:68:ILE:O	12:UJ:72:THR:HG22	2.20	0.41
12:UJ:1477:PHE:O	12:UJ:1481:LEU:HD23	2.20	0.41
12:UJ:1546:PRO:O	12:UJ:1550:ILE:HG23	2.20	0.41
12:UJ:1625:SER:O	12:UJ:1628:SER:OG	2.30	0.41
14:UL:279:LYS:HA	14:UL:338:ILE:HG23	2.02	0.41
14:UL:357:THR:OG1	14:UL:361:THR:OG1	2.09	0.41
14:UL:572:HIS:CG	14:UL:598:LYS:HZ3	2.38	0.41
14:UL:843:LYS:O	14:UL:846:LEU:HB3	2.20	0.41
15:UM:78:TYR:CZ	15:UM:86:LYS:HB2	2.55	0.41
15:UM:343:MET:HB3	15:UM:353:LEU:HD11	2.01	0.41
16:UN:779:GLU:HG3	16:UN:821:ARG:NH1	2.35	0.41
16:UN:853:ASN:OD1	16:UN:854:ARG:N	2.53	0.41
16:UN:878:LEU:HD23	16:UN:878:LEU:HA	1.79	0.41
17:UO:75:LYS:HD3	17:UO:75:LYS:HA	1.95	0.41
17:UO:485:ILE:O	17:UO:489:THR:HG23	2.20	0.41
19:UQ:450:TYR:CG	19:UQ:500:PHE:HZ	2.37	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:511:GLU:OE1	19:UQ:530:LYS:HE2	2.19	0.41
20:UR:130:ASP:O	20:UR:133:ILE:HG22	2.21	0.41
20:UR:257:HIS:HB3	20:UR:260:LYS:O	2.19	0.41
20:UR:490:PHE:CD2	28:CF:89:ARG:CD	3.03	0.41
22:UT:4:GLN:N	62:D3:76:A:H62	2.18	0.41
22:UT:225:GLN:OE1	22:UT:226:THR:N	2.52	0.41
22:UT:558:TRP:CZ3	22:UT:603:LEU:HD21	2.55	0.41
22:UT:1710:LEU:HD12	22:UT:1760:ASN:HB3	2.01	0.41
22:UT:2138:LEU:HA	22:UT:2141:VAL:HG22	2.01	0.41
22:UT:2471:ARG:NH1	62:D3:846:G:OP2	2.39	0.41
23:UU:452:ARG:H	23:UU:452:ARG:HG2	1.76	0.41
23:UU:764:GLY:CA	23:UU:769:ASP:HB3	2.50	0.41
24:UV:106:GLN:O	24:UV:110:LEU:HD23	2.19	0.41
24:UV:514:ASN:HB3	24:UV:517:ARG:HH22	1.85	0.41
24:UV:587:GLY:HA3	24:UV:610:PHE:HA	2.02	0.41
24:UV:831:ILE:HD11	24:UV:885:PHE:N	2.35	0.41
25:UX:7:THR:HG22	31:CJ:14:TYR:CG	2.55	0.41
25:UX:77:GLN:O	62:D3:1098:U:O2'	2.18	0.41
29:CH:481:ILE:HB	29:CH:484:SER:OG	2.20	0.41
30:CI:122:GLU:H	30:CI:122:GLU:CD	2.23	0.41
33:CL:968:THR:HG23	33:CL:970:SER:H	1.85	0.41
33:CL:968:THR:HG23	33:CL:970:SER:N	2.35	0.41
34:CM:311:LEU:HD23	34:CM:312:ARG:N	2.35	0.41
36:JD:424:VAL:HB	36:JD:425:PRO:HD3	2.01	0.41
36:JD:629:GLN:HB2	36:JD:735:TYR:CE2	2.55	0.41
37:JF:80:MET:HE3	37:JF:82:ARG:HB2	2.02	0.41
42:JP:267:ILE:HD13	42:JP:267:ILE:HG21	1.84	0.41
44:JJ:164:LEU:HD23	44:JJ:164:LEU:HA	1.78	0.41
46:DF:54:LYS:HE3	46:DF:131:GLN:HE21	1.85	0.41
58:DX:132:LEU:HD23	58:DX:132:LEU:HA	1.90	0.41
62:D3:55:A:C2	62:D3:426:G:C5	3.08	0.41
62:D3:91:G:H2'	62:D3:92:A:O4'	2.20	0.41
62:D3:1053:G:H2'	62:D3:1054:U:C6	2.55	0.41
62:D3:1692:G:H2'	62:D3:1693:A:O4'	2.20	0.41
63:D4:41:C:H2'	63:D4:42:U:C6	2.55	0.41
2:DA:189:ILE:HD13	2:DA:189:ILE:HA	1.87	0.41
3:UA:411:VAL:HG23	3:UA:433:PHE:CD2	2.55	0.41
3:UA:613:LYS:HE3	3:UA:613:LYS:HB2	1.82	0.41
1:CB:144:TRP:NE1	1:CB:183:HIS:HB3	2.34	0.41
6:UD:125:GLU:OE2	6:UD:134:LEU:HD23	2.20	0.41
6:UD:394:TRP:HB2	6:UD:428:ILE:HD11	2.02	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:UD:535:GLU:O	6:UD:542:VAL:HG12	2.20	0.41
6:UD:561:LYS:HD2	6:UD:561:LYS:HA	1.88	0.41
7:UE:238:SER:OG	7:UE:239:GLY:N	2.53	0.41
8:UF:172:LEU:HD13	8:UF:182:TRP:CZ3	2.55	0.41
9:UG:196:LEU:HA	9:UG:206:VAL:O	2.19	0.41
9:UG:321:ASN:HB2	9:UG:333:SER:OG	2.20	0.41
12:UJ:19:ALA:HB1	12:UJ:25:ARG:HG3	2.01	0.41
14:UL:49:VAL:CG2	14:UL:63:LEU:HB2	2.49	0.41
14:UL:171:CYS:SG	14:UL:172:GLN:N	2.93	0.41
14:UL:285:ARG:O	14:UL:327:HIS:N	2.53	0.41
15:UM:151:LYS:HG2	15:UM:197:ASP:HA	2.03	0.41
15:UM:491:GLU:H	15:UM:491:GLU:CD	2.22	0.41
16:UN:330:THR:OG1	16:UN:331:GLN:N	2.53	0.41
17:UO:177:ILE:HD11	17:UO:223:PRO:HA	2.02	0.41
17:UO:221:VAL:HG23	17:UO:260:TYR:CG	2.54	0.41
17:UO:315:ASN:N	17:UO:315:ASN:OD1	2.53	0.41
18:UP:208:ARG:HD2	18:UP:210:ALA:HB3	2.02	0.41
19:UQ:198:LEU:H	19:UQ:211:MET:HG2	1.84	0.41
19:UQ:359:GLN:HE22	19:UQ:367:SER:CB	2.33	0.41
22:UT:19:PHE:CZ	22:UT:23:ILE:HD11	2.55	0.41
22:UT:1011:LEU:HB3	22:UT:1015:PHE:HB3	2.02	0.41
22:UT:1313:SER:HA	22:UT:1316:MET:HG2	2.01	0.41
22:UT:1498:GLU:HG3	22:UT:1508:GLN:HE21	1.84	0.41
22:UT:1503:ILE:HG13	22:UT:1504:GLY:N	2.34	0.41
22:UT:1868:LEU:HD23	22:UT:1868:LEU:HA	1.79	0.41
24:UV:119:LYS:HB2	24:UV:119:LYS:HE3	1.89	0.41
24:UV:238:HIS:HA	24:UV:241:ILE:HG12	2.02	0.41
24:UV:245:LYS:HE3	24:UV:245:LYS:HB3	1.76	0.41
24:UV:284:ASN:OD1	24:UV:287:LYS:NZ	2.36	0.41
24:UV:1013:THR:HG22	24:UV:1016:GLN:OE1	2.20	0.41
26:CD:102:ASP:HB3	26:CD:105:LEU:HB2	2.02	0.41
26:CD:257:ILE:O	26:CD:257:ILE:HG22	2.20	0.41
29:CH:166:VAL:H	29:CH:175:SER:HB3	1.85	0.41
29:CH:192:LYS:C	29:CH:194:LEU:H	2.22	0.41
30:CI:70:PHE:CE2	32:CK:437:ILE:HD11	2.55	0.41
32:CK:437:ILE:HG13	32:CK:438:SER:N	2.35	0.41
33:CL:1106:GLU:OE1	41:JM:119:ARG:NH1	2.53	0.41
34:CM:56:ILE:O	34:CM:60:THR:HG22	2.20	0.41
35:CN:173:LYS:HD2	35:CN:173:LYS:HA	1.83	0.41
36:JD:827:SER:O	36:JD:831:GLU:HG2	2.19	0.41
41:JM:77:LYS:HZ1	41:JM:79:LYS:HB2	1.85	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:JP:250:ARG:HB2	42:JP:250:ARG:NH2	2.35	0.41
46:DF:31:GLU:OE2	46:DF:31:GLU:HA	2.19	0.41
46:DF:157:ARG:CB	46:DF:224:ASN:HD21	2.33	0.41
47:DG:52:ILE:HD13	47:DG:111:LEU:CD2	2.50	0.41
50:DJ:62:ARG:NH2	50:DJ:68:LYS:HZ3	2.18	0.41
53:DO:58:TYR:CZ	53:DO:62:LEU:HD11	2.54	0.41
57:DW:25:VAL:HG22	57:DW:63:VAL:HB	2.01	0.41
59:DY:44:LEU:HD23	59:DY:44:LEU:HA	1.89	0.41
62:D3:686:C:H2'	62:D3:687:G:C8	2.55	0.41
62:D3:1621:U:H2'	62:D3:1622:G:O4'	2.20	0.41
63:D4:144:G:C2	63:D4:146:C:N3	2.88	0.41
70:EG:70:GLN:O	70:EG:145:LYS:N	2.41	0.41
1:CA:226:HIS:O	1:CA:229:LYS:N	2.50	0.41
4:UB:435:PHE:O	4:UB:439:GLN:HG2	2.19	0.41
6:UD:34:HIS:CD2	6:UD:747:ILE:HD12	2.56	0.41
6:UD:737:LYS:HB2	6:UD:738:TYR:CE2	2.55	0.41
7:UE:177:GLU:O	7:UE:179:LYS:NZ	2.39	0.41
7:UE:234:GLU:CD	7:UE:235:LEU:H	2.23	0.41
7:UE:495:GLN:HE22	7:UE:533:ARG:CZ	2.33	0.41
8:UF:137:LEU:HD22	8:UF:147:TRP:CE2	2.55	0.41
8:UF:285:TYR:O	8:UF:288:LYS:HG3	2.20	0.41
9:UG:240:GLN:HG3	9:UG:240:GLN:O	2.19	0.41
12:UJ:544:LEU:HD11	12:UJ:581:GLY:HA3	2.02	0.41
12:UJ:558:VAL:O	12:UJ:592:ARG:NH2	2.54	0.41
12:UJ:667:LYS:HA	12:UJ:670:LEU:HG	2.02	0.41
12:UJ:1749:ARG:NH2	22:UT:34:LEU:HA	2.36	0.41
13:UK:12:GLN:HG3	13:UK:13:HIS:N	2.35	0.41
13:UK:110:LEU:HA	13:UK:113:ILE:HD12	2.02	0.41
14:UL:148:TRP:HD1	14:UL:155:GLY:HA2	1.86	0.41
14:UL:406:LEU:HD13	14:UL:406:LEU:HA	1.94	0.41
14:UL:533:ASP:OD1	14:UL:534:ILE:N	2.53	0.41
14:UL:614:HIS:HB3	14:UL:634:SER:CB	2.50	0.41
15:UM:80:SER:OG	15:UM:81:GLN:N	2.53	0.41
15:UM:619:ARG:O	15:UM:636:ASP:HB2	2.19	0.41
16:UN:810:LYS:HB2	16:UN:810:LYS:HE3	1.78	0.41
17:UO:268:MET:HE3	17:UO:287:LEU:HD12	2.02	0.41
20:UR:375:VAL:C	20:UR:376:LEU:HD23	2.41	0.41
21:US:190:ASP:OD1	21:US:190:ASP:N	2.51	0.41
21:US:296:MET:SD	21:US:326:LEU:HD21	2.60	0.41
21:US:417:HIS:CE1	37:JG:23:LEU:HD12	2.55	0.41
22:UT:246:THR:HG23	22:UT:290:SER:CB	2.51	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:721:GLU:HB2	22:UT:752:THR:HG23	2.01	0.41
22:UT:1243:ILE:HA	22:UT:1246:ILE:HD12	2.02	0.41
22:UT:1281:ARG:HD2	22:UT:1281:ARG:HA	1.75	0.41
22:UT:1334:ASP:HB3	22:UT:1336:TYR:CE2	2.55	0.41
22:UT:1651:ARG:NH1	22:UT:1744:GLU:OE1	2.54	0.41
22:UT:1743:LYS:O	22:UT:1747:SER:HB2	2.19	0.41
22:UT:1776:LEU:O	22:UT:1779:VAL:C	2.58	0.41
22:UT:2334:ASP:OD1	22:UT:2335:TYR:N	2.52	0.41
22:UT:2358:LYS:HG2	22:UT:2362:GLN:OE1	2.20	0.41
23:UU:304:LEU:HD23	23:UU:304:LEU:HA	1.82	0.41
23:UU:584:HIS:NE2	23:UU:602:SER:OG	2.37	0.41
23:UU:644:THR:HG22	23:UU:651:ILE:HG23	2.02	0.41
24:UV:337:LEU:CD2	24:UV:474:VAL:HG22	2.50	0.41
24:UV:373:ARG:O	24:UV:522:LYS:NZ	2.53	0.41
24:UV:476:ILE:HD12	24:UV:476:ILE:H	1.85	0.41
24:UV:529:VAL:HB	24:UV:613:VAL:CG2	2.50	0.41
24:UV:918:ARG:O	24:UV:922:THR:HG23	2.20	0.41
27:CE:252:LEU:HA	27:CE:255:ILE:HG22	2.03	0.41
33:CL:617:THR:HB	33:CL:619:GLU:OE1	2.21	0.41
33:CL:828:ARG:NH2	33:CL:918:ILE:HD11	2.35	0.41
36:JD:116:LYS:HG3	36:JD:117:LEU:N	2.34	0.41
36:JD:551:LYS:O	36:JD:554:LYS:NZ	2.32	0.41
36:JD:855:LYS:HD3	36:JD:855:LYS:HA	1.88	0.41
36:JD:1037:GLU:O	36:JD:1041:LEU:HD23	2.20	0.41
45:DE:143:ASP:N	45:DE:143:ASP:OD1	2.50	0.41
47:DG:143:LYS:HB3	47:DG:143:LYS:HE3	1.78	0.41
51:DL:49:ILE:HG22	51:DL:50:GLU:HG3	2.03	0.41
57:DW:69:LEU:HA	57:DW:69:LEU:HD12	1.63	0.41
58:DX:107:PHE:CD1	58:DX:109:ARG:HB2	2.55	0.41
62:D3:19:A:C6	62:D3:20:G:C5	3.09	0.41
62:D3:495:C:H5'	62:D3:496:G:OP2	2.21	0.41
62:D3:780:A:H4'	62:D3:781:U:H3'	2.03	0.41
62:D3:993:A:H2'	62:D3:994:G:O4'	2.20	0.41
63:D4:47:G:H2'	63:D4:48:A:H8	1.77	0.41
63:D4:83:A:C8	63:D4:328:A:C6	3.08	0.41
63:D4:159:C:N3	63:D4:160:G:C6	2.88	0.41
1:CA:315:ILE:HD13	1:CA:315:ILE:HG21	1.81	0.41
3:UA:610:VAL:HG22	3:UA:611:LEU:H	1.84	0.41
4:UB:590:ASN:HB3	21:US:347:PRO:HG2	2.01	0.41
4:UB:661:ILE:HG23	4:UB:665:GLN:HG3	2.02	0.41
4:UB:688:VAL:O	4:UB:692:THR:HG23	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:UD:184:MET:HB3	6:UD:184:MET:HE2	1.84	0.41
7:UE:12:PRO:HG2	7:UE:67:ASN:OD1	2.20	0.41
7:UE:339:LYS:HE2	7:UE:339:LYS:HB2	1.81	0.41
8:UF:85:ASP:OD1	8:UF:85:ASP:N	2.53	0.41
12:UJ:130:LYS:HA	12:UJ:130:LYS:HD2	1.76	0.41
12:UJ:159:PRO:O	27:CE:412:VAL:HG23	2.20	0.41
12:UJ:489:GLU:HA	12:UJ:492:LYS:HD2	2.01	0.41
12:UJ:564:VAL:O	12:UJ:567:LEU:HG	2.21	0.41
13:UK:98:LEU:HA	33:CL:1099:ALA:HB3	2.02	0.41
14:UL:65:ASP:OD1	14:UL:66:GLY:N	2.52	0.41
15:UM:24:THR:HG21	15:UM:69:LEU:H	1.85	0.41
15:UM:355:LEU:HD21	15:UM:641:PHE:HZ	1.85	0.41
15:UM:618:ASN:ND2	15:UM:637:ALA:HB3	2.35	0.41
15:UM:802:GLN:O	15:UM:805:ILE:HB	2.21	0.41
19:UQ:339:GLY:HA3	19:UQ:358:LEU:HD21	2.02	0.41
19:UQ:868:ASN:OD1	19:UQ:871:SER:HB3	2.20	0.41
21:US:195:PHE:CD2	21:US:199:PHE:HE2	2.38	0.41
22:UT:364:LEU:HD23	22:UT:364:LEU:HA	1.87	0.41
22:UT:1005:ASN:OD1	22:UT:1061:CYS:HB2	2.20	0.41
22:UT:1273:LYS:HE3	22:UT:1401:ASN:HD21	1.84	0.41
22:UT:1357:ASN:OD1	22:UT:1358:LYS:N	2.54	0.41
22:UT:1609:ARG:HG3	22:UT:1609:ARG:HH11	1.85	0.41
22:UT:1616:LEU:HB3	22:UT:1635:ILE:HD13	2.02	0.41
23:UU:485:THR:HG1	23:UU:487:TYR:HE1	1.67	0.41
24:UV:272:CYS:SG	24:UV:273:SER:N	2.94	0.41
24:UV:1192:GLY:O	24:UV:1213:ILE:HG13	2.20	0.41
26:CD:263:ILE:HD12	26:CD:267:ASP:HB3	2.01	0.41
27:CE:116:ILE:HD12	27:CE:116:ILE:H	1.85	0.41
29:CH:157:LEU:HD23	29:CH:191:SER:HB3	2.01	0.41
29:CH:228:TYR:N	29:CH:228:TYR:CD2	2.88	0.41
30:CI:107:CYS:O	30:CI:110:ARG:HB2	2.19	0.41
31:CJ:162:THR:HG23	31:CJ:264:GLY:O	2.20	0.41
32:CK:401:SER:O	32:CK:401:SER:OG	2.38	0.41
32:CK:413:TYR:CD2	44:JJ:177:LEU:HD11	2.55	0.41
33:CL:20:LYS:O	33:CL:23:THR:HG22	2.20	0.41
33:CL:92:ARG:HH21	33:CL:221:LEU:HD13	1.84	0.41
36:JD:497:LEU:O	36:JD:500:GLU:HG3	2.20	0.41
41:JM:69:PHE:O	41:JM:72:LEU:HB3	2.21	0.41
42:JP:284:HIS:HE1	42:JP:306:SER:HA	1.83	0.41
42:JP:397:ASP:O	42:JP:401:LYS:HG2	2.20	0.41
45:DE:67:GLN:OE1	45:DE:69:HIS:NE2	2.50	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:DE:77:ARG:HA	45:DE:77:ARG:HD3	1.91	0.41
58:DX:19:ARG:HH11	62:D3:611:U:P	2.38	0.41
62:D3:202:A:H2'	62:D3:203:U:O4'	2.20	0.41
62:D3:592:A:O2'	62:D3:596:C:OP1	2.30	0.41
62:D3:616:G:H1'	62:D3:621:A:C5	2.55	0.41
62:D3:679:U:C4	62:D3:680:U:C4	3.08	0.41
62:D3:1001:A:H2'	62:D3:1002:G:C5	2.55	0.41
75:EN:329:TYR:N	75:EN:555:VAL:O	2.51	0.41
3:UA:69:LEU:HA	3:UA:69:LEU:HD23	1.68	0.41
3:UA:175:VAL:HG23	3:UA:176:ASP:OD1	2.21	0.41
1:CB:310:GLU:HG2	1:CB:313:HIS:ND1	2.35	0.41
4:UB:58:PHE:CE2	31:CJ:176:ILE:CD1	3.02	0.41
6:UD:548:GLY:HA3	6:UD:566:LEU:O	2.21	0.41
7:UE:25:ASP:OD2	20:UR:590:LYS:HD2	2.21	0.41
7:UE:176:GLU:HG2	7:UE:177:GLU:N	2.35	0.41
7:UE:209:ASP:O	7:UE:231:ASP:HA	2.20	0.41
7:UE:311:MET:CE	7:UE:312:PRO:HD2	2.51	0.41
7:UE:338:ASN:ND2	20:UR:337:ALA:HB3	2.36	0.41
8:UF:114:LEU:HD12	41:JM:69:PHE:HE2	1.85	0.41
8:UF:137:LEU:HA	8:UF:137:LEU:HD23	1.79	0.41
9:UG:268:VAL:HG22	9:UG:269:LYS:N	2.36	0.41
9:UG:356:GLY:O	9:UG:364:ARG:NH2	2.43	0.41
12:UJ:275:ILE:CD1	12:UJ:302:LEU:HB3	2.46	0.41
12:UJ:1499:ILE:HA	12:UJ:1502:LYS:HD2	2.01	0.41
14:UL:7:ARG:HA	14:UL:651:GLN:NE2	2.32	0.41
14:UL:209:GLY:O	14:UL:219:THR:HA	2.21	0.41
14:UL:262:ILE:HD12	14:UL:343:TRP:CG	2.56	0.41
14:UL:406:LEU:CD1	14:UL:416:ILE:HG13	2.51	0.41
14:UL:837:ASP:O	14:UL:841:GLN:HG2	2.20	0.41
15:UM:97:ARG:NE	15:UM:134:GLY:H	2.16	0.41
15:UM:148:SER:N	15:UM:166:GLY:O	2.39	0.41
15:UM:799:LEU:HD23	15:UM:799:LEU:HA	1.73	0.41
17:UO:361:MET:HG2	17:UO:361:MET:O	2.21	0.41
18:UP:169:ASP:CB	18:UP:180:LEU:HD23	2.50	0.41
19:UQ:11:LYS:O	19:UQ:786:VAL:HA	2.20	0.41
19:UQ:407:ASN:HA	19:UQ:412:ASN:HA	2.01	0.41
20:UR:16:ASP:O	20:UR:20:GLN:HG3	2.20	0.41
22:UT:232:LEU:HD13	22:UT:232:LEU:HA	1.91	0.41
22:UT:248:HIS:O	22:UT:251:ALA:HB3	2.21	0.41
22:UT:1205:ILE:HG22	22:UT:1211:ILE:CD1	2.47	0.41
22:UT:1278:ARG:HH22	22:UT:1316:MET:CA	2.32	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1899:LEU:HD23	22:UT:1899:LEU:HA	1.64	0.41
22:UT:2066:ASP:HA	22:UT:2069:GLN:OE1	2.20	0.41
22:UT:2214:SER:HB3	22:UT:2253:LEU:HD13	2.02	0.41
23:UU:280:ARG:HH22	23:UU:334:ASP:C	2.23	0.41
23:UU:707:PHE:O	23:UU:709:THR:HG23	2.21	0.41
24:UV:203:ILE:HD11	24:UV:290:PHE:HE2	1.86	0.41
27:CE:329:ALA:HA	27:CE:332:THR:HG22	2.03	0.41
31:CJ:8:GLU:O	31:CJ:11:GLU:HG3	2.20	0.41
32:CK:507:ILE:O	32:CK:515:MET:HB2	2.20	0.41
33:CL:89:LEU:HA	33:CL:89:LEU:HD12	1.80	0.41
33:CL:1140:LYS:HE3	33:CL:1140:LYS:HB3	1.92	0.41
36:JD:524:ASN:OD1	36:JD:525:THR:N	2.53	0.41
36:JD:1154:TYR:HB2	36:JD:1167:MET:HB3	2.02	0.41
37:JF:107:ALA:HB1	37:JF:109:LYS:HE2	2.03	0.41
37:JG:41:MET:O	37:JG:110:LEU:HA	2.20	0.41
39:JI:1628:GLU:HA	39:JI:1632:GLY:HA3	2.02	0.41
40:JL:236:ARG:NE	62:D3:982:U:OP2	2.53	0.41
45:DE:35:PRO:HB2	45:DE:36:HIS:CD2	2.55	0.41
45:DE:133:LYS:HE2	62:D3:252:U:OP1	2.20	0.41
53:DO:83:ILE:HG22	53:DO:116:GLU:O	2.20	0.41
58:DX:26:GLU:OE1	58:DX:28:ASN:N	2.53	0.41
62:D3:156:A:N6	62:D3:157:A:C2	2.88	0.41
63:D4:4:G:C6	63:D4:5:A:C5	3.09	0.41
63:D4:199:G:C5	63:D4:200:C:C4	3.08	0.41
1:CA:185:SER:HB2	1:CA:217:ILE:HD11	2.01	0.41
1:CA:320:TYR:OH	1:CA:322:ARG:HD3	2.21	0.41
2:DA:110:LEU:HD23	2:DA:110:LEU:HA	1.75	0.41
3:UA:792:ILE:HG22	3:UA:796:LEU:HD12	2.02	0.41
1:CB:85:LYS:HD2	1:CB:85:LYS:HA	1.86	0.41
1:CB:264:GLN:CA	1:CB:320:TYR:O	2.68	0.41
6:UD:150:ASN:CG	6:UD:155:LYS:H	2.23	0.41
6:UD:235:LYS:HD3	6:UD:235:LYS:C	2.41	0.41
6:UD:389:ARG:HB3	6:UD:404:MET:HB3	2.03	0.41
6:UD:587:ALA:C	6:UD:589:ASN:H	2.24	0.41
7:UE:473:LYS:HE3	7:UE:473:LYS:HB3	1.72	0.41
9:UG:214:LEU:HD21	9:UG:216:TYR:CE2	2.56	0.41
12:UJ:132:THR:HB	12:UJ:155:ILE:HD11	2.02	0.41
12:UJ:1599:GLU:N	12:UJ:1600:PRO:HD2	2.36	0.41
14:UL:344:THR:N	14:UL:352:GLU:O	2.47	0.41
14:UL:871:GLN:HG2	14:UL:872:LYS:N	2.35	0.41
15:UM:176:ASP:OD2	15:UM:179:LYS:HB2	2.20	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:UM:197:ASP:OD1	15:UM:198:ILE:N	2.54	0.41
15:UM:616:HIS:HE1	15:UM:640:VAL:O	2.04	0.41
16:UN:865:ILE:HD11	42:JP:403:ARG:CZ	2.51	0.41
19:UQ:213:LYS:NZ	19:UQ:222:HIS:HB2	2.36	0.41
19:UQ:359:GLN:HG3	19:UQ:361:THR:HB	2.02	0.41
19:UQ:435:ASP:HB2	19:UQ:437:THR:HG23	2.01	0.41
20:UR:374:ILE:HD12	20:UR:376:LEU:HD21	2.03	0.41
22:UT:412:ASN:O	22:UT:416:PHE:HD2	2.04	0.41
22:UT:982:HIS:HE1	22:UT:1081:ASP:OD1	2.03	0.41
22:UT:982:HIS:H	22:UT:983:GLN:CD	2.24	0.41
22:UT:1321:PHE:HA	22:UT:1324:ILE:HG22	2.03	0.41
22:UT:1518:MET:CE	22:UT:1523:TYR:HA	2.49	0.41
23:UU:361:SER:HA	23:UU:636:PRO:HG2	2.01	0.41
23:UU:392:ARG:O	23:UU:449:ARG:NH2	2.54	0.41
24:UV:161:PRO:HA	24:UV:597:ARG:HA	2.03	0.41
24:UV:924:LEU:HD21	24:UV:1181:VAL:HG13	2.01	0.41
24:UV:926:LEU:HA	24:UV:926:LEU:HD23	1.77	0.41
24:UV:971:LYS:HZ1	24:UV:1033:ASN:HA	1.82	0.41
26:CD:178:ILE:HA	26:CD:178:ILE:HD13	1.78	0.41
33:CL:195:TRP:NE1	33:CL:202:ALA:O	2.54	0.41
34:CM:66:GLU:HA	34:CM:66:GLU:OE2	2.20	0.41
36:JD:897:GLU:HA	36:JD:900:LYS:NZ	2.35	0.41
37:JF:75:GLY:HA2	37:JF:78:LYS:HE2	2.02	0.41
42:JP:283:ASP:N	42:JP:283:ASP:OD1	2.53	0.41
44:JJ:98:LYS:HG2	44:JJ:138:GLU:HG2	2.01	0.41
46:DF:72:HIS:O	54:DQ:79:TYR:OH	2.39	0.41
46:DF:140:THR:O	46:DF:214:LYS:HD3	2.21	0.41
47:DG:115:LYS:HE3	47:DG:115:LYS:HB3	1.87	0.41
48:DH:161:GLN:HA	48:DH:164:TYR:CE2	2.55	0.41
49:DI:3:ILE:O	49:DI:30:GLY:N	2.51	0.41
50:DJ:7:THR:O	62:D3:771:A:H4'	2.19	0.41
50:DJ:132:ARG:HH11	50:DJ:132:ARG:HD2	1.72	0.41
55:DS:29:VAL:O	55:DS:43:SER:OG	2.27	0.41
61:D2:478:U:C2	61:D2:479:G:C8	3.09	0.41
62:D3:1141:G:N1	62:D3:1142:A:C5	2.88	0.41
62:D3:1528:U:C4	62:D3:1529:C:N4	2.88	0.41
62:D3:1673:G:N2	62:D3:1729:C:O2	2.53	0.41
62:D3:1700:C:H2'	62:D3:1701:A:O4'	2.20	0.41
2:DA:50:LYS:HZ2	2:DA:53:GLY:N	2.18	0.41
7:UE:149:ASN:N	7:UE:149:ASN:OD1	2.51	0.41
9:UG:194:ARG:C	9:UG:208:ALA:O	2.55	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:UJ:276:LEU:HD23	12:UJ:276:LEU:HA	1.86	0.41
12:UJ:551:ILE:O	12:UJ:554:ILE:HB	2.20	0.41
12:UJ:1482:GLU:HA	12:UJ:1485:VAL:HG22	2.02	0.41
14:UL:412:GLY:HA3	14:UL:430:CYS:H	1.85	0.41
14:UL:747:LYS:O	14:UL:750:GLU:HB3	2.21	0.41
14:UL:824:MET:HA	14:UL:825:PRO:HD3	1.80	0.41
17:UO:79:ARG:HD3	17:UO:114:ARG:NH2	2.36	0.41
19:UQ:46:ILE:HD12	19:UQ:48:PHE:CE1	2.55	0.41
19:UQ:97:THR:OG1	19:UQ:98:VAL:N	2.54	0.41
19:UQ:255:ASN:O	19:UQ:276:ALA:HB3	2.20	0.41
19:UQ:341:ILE:O	19:UQ:341:ILE:HG13	2.20	0.41
19:UQ:720:ILE:HD12	19:UQ:774:PHE:CG	2.55	0.41
20:UR:134:LYS:HE2	20:UR:134:LYS:HB2	1.85	0.41
20:UR:211:ILE:HA	20:UR:214:THR:HG22	2.01	0.41
20:UR:475:LYS:HD3	20:UR:475:LYS:HA	1.78	0.41
22:UT:392:CYS:O	22:UT:395:GLU:HB2	2.20	0.41
22:UT:431:LYS:NZ	22:UT:750:TYR:HB3	2.36	0.41
22:UT:470:ILE:CD1	22:UT:503:ARG:HB3	2.50	0.41
22:UT:776:ASN:ND2	22:UT:827:ASP:OD1	2.45	0.41
22:UT:1019:THR:HA	22:UT:1023:LEU:HB3	2.01	0.41
22:UT:1101:GLN:HG3	22:UT:1102:PRO:CD	2.48	0.41
22:UT:1310:SER:OG	22:UT:1327:THR:OG1	2.26	0.41
22:UT:1384:LEU:HA	22:UT:1430:TYR:OH	2.21	0.41
22:UT:2111:PHE:HE1	22:UT:2159:ASN:HB2	1.86	0.41
23:UU:57:THR:OG1	23:UU:72:SER:OG	2.06	0.41
23:UU:594:SER:HA	23:UU:634:PHE:HD2	1.85	0.41
23:UU:819:LYS:O	23:UU:822:ARG:N	2.52	0.41
23:UU:828:LYS:HE2	23:UU:828:LYS:HB3	1.67	0.41
24:UV:153:PHE:HD1	24:UV:158:VAL:HG13	1.86	0.41
24:UV:254:LEU:HD12	24:UV:268:LEU:HD11	2.03	0.41
24:UV:1067:LEU:HA	24:UV:1070:VAL:HG12	2.02	0.41
24:UV:1105:PRO:HD3	24:UV:1230:MET:CE	2.50	0.41
24:UV:1137:ASN:HD22	35:CN:174:PRO:HD2	1.86	0.41
26:CD:163:VAL:O	26:CD:164:LYS:HB2	2.20	0.41
27:CE:152:LEU:HD23	27:CE:152:LEU:HA	1.92	0.41
28:CG:50:GLU:O	28:CG:51:PHE:HB3	2.21	0.41
32:CK:496:TYR:CE2	32:CK:498:VAL:HG12	2.55	0.41
33:CL:126:ASN:OD1	33:CL:126:ASN:N	2.53	0.41
33:CL:301:ILE:CD1	33:CL:791:ILE:HG22	2.50	0.41
33:CL:960:ARG:HH12	33:CL:961:PHE:HE1	1.67	0.41
34:CM:111:LYS:HB2	34:CM:111:LYS:HE3	1.85	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:CN:35:HIS:CD2	35:CN:59:PRO:HG3	2.56	0.41
35:CN:210:ASP:N	35:CN:210:ASP:OD1	2.42	0.41
36:JD:541:LYS:HD3	36:JD:549:GLU:CB	2.50	0.41
36:JD:889:LEU:HD23	36:JD:893:GLU:O	2.21	0.41
40:JL:191:VAL:HB	40:JL:204:SER:OG	2.20	0.41
40:JL:273:MET:O	40:JL:276:VAL:HG12	2.21	0.41
42:JP:394:LEU:HA	42:JP:394:LEU:HD23	1.82	0.41
45:DE:101:LEU:HD23	45:DE:101:LEU:HA	1.81	0.41
45:DE:127:LYS:HE2	45:DE:142:HIS:HA	2.02	0.41
49:DI:25:ARG:HA	62:D3:400:A:H5''	2.03	0.41
62:D3:997:G:HO2'	62:D3:998:A:P	2.44	0.41
62:D3:1163:A:N6	62:D3:1164:G:C6	2.89	0.41
62:D3:1611:A:C6	62:D3:1612:U:C4	3.09	0.41
63:D4:315:A:H2'	63:D4:316:A:C8	2.55	0.41
1:CA:144:TRP:NE1	1:CA:183:HIS:ND1	2.67	0.41
1:CA:144:TRP:CZ2	1:CA:183:HIS:HB3	2.55	0.41
2:DA:11:LYS:HE3	15:UM:493:ASP:HB2	2.03	0.41
4:UB:429:LEU:HD23	4:UB:462:LEU:HD21	2.01	0.41
5:UC:596:THR:HG22	41:JM:137:LYS:CG	2.50	0.41
6:UD:49:LEU:HD21	6:UD:69:ILE:HG12	2.03	0.41
6:UD:113:ARG:NE	6:UD:174:PRO:HA	2.36	0.41
6:UD:592:TYR:CE2	6:UD:619:THR:HG21	2.55	0.41
12:UJ:760:PHE:CD2	12:UJ:795:LEU:HD11	2.56	0.41
14:UL:212:VAL:HG22	14:UL:217:LEU:CB	2.50	0.41
14:UL:533:ASP:HB3	14:UL:551:LEU:HB2	2.03	0.41
15:UM:584:ILE:HB	15:UM:589:GLN:O	2.21	0.41
17:UO:90:ARG:HD2	17:UO:95:LEU:HD13	2.02	0.41
17:UO:366:TYR:OH	17:UO:371:GLU:OE1	2.18	0.41
19:UQ:433:ARG:HH11	19:UQ:703:LYS:HG3	1.85	0.41
20:UR:16:ASP:OD1	20:UR:17:GLU:N	2.50	0.41
22:UT:12:LYS:HE2	22:UT:12:LYS:HB3	1.86	0.41
22:UT:571:LEU:O	22:UT:575:MET:HG2	2.20	0.41
22:UT:899:ASP:OD1	49:DI:41:LYS:NZ	2.38	0.41
22:UT:1017:LEU:HD22	22:UT:1073:PHE:CZ	2.56	0.41
22:UT:1668:GLU:HG2	22:UT:1669:TYR:N	2.36	0.41
23:UU:86:HIS:HB2	23:UU:123:ILE:CD1	2.49	0.41
23:UU:763:SER:O	23:UU:767:VAL:HG22	2.21	0.41
23:UU:854:SER:HB2	23:UU:895:VAL:HG21	2.02	0.41
24:UV:635:SER:OG	24:UV:636:GLU:N	2.54	0.41
26:CD:110:LYS:HE3	42:JP:157:ASN:HD21	1.85	0.41
30:CI:101:VAL:HG23	30:CI:101:VAL:O	2.21	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CJ:230:PHE:CE2	32:CK:355:PRO:HD3	2.55	0.41
32:CK:326:LEU:HD13	32:CK:326:LEU:HA	1.91	0.41
33:CL:737:ASN:OD1	33:CL:738:PHE:N	2.51	0.41
35:CN:167:THR:O	35:CN:170:ASN:HB3	2.21	0.41
36:JD:466:LEU:HD13	36:JD:472:LYS:HE2	2.03	0.41
36:JD:848:GLU:HG2	36:JD:849:SER:N	2.35	0.41
36:JD:1137:PRO:HA	36:JD:1142:ASN:OD1	2.21	0.41
37:JG:150:ILE:HD13	37:JG:150:ILE:HA	1.91	0.41
44:JJ:160:LYS:HD2	44:JJ:160:LYS:O	2.20	0.41
45:DE:128:LYS:HB3	45:DE:140:VAL:HB	2.03	0.41
46:DF:116:HIS:O	46:DF:120:ILE:HG12	2.21	0.41
46:DF:222:LYS:HA	46:DF:225:ARG:HE	1.85	0.41
47:DG:25:ARG:HA	47:DG:28:PHE:CD1	2.55	0.41
47:DG:78:THR:HG22	47:DG:79:LYS:N	2.34	0.41
49:DI:25:ARG:HD3	62:D3:400:A:H5''	2.02	0.41
59:DY:91:LEU:HA	59:DY:91:LEU:HD23	1.79	0.41
62:D3:354:C:C2	62:D3:355:G:C8	3.09	0.41
62:D3:683:C:H2'	62:D3:684:A:C8	2.56	0.41
62:D3:689:G:C5	62:D3:690:G:N7	2.89	0.41
62:D3:975:C:H2'	62:D3:976:G:O4'	2.20	0.41
62:D3:1087:A:H2'	62:D3:1088:A:H8	1.86	0.41
62:D3:1693:A:H2'	62:D3:1694:A:H8	1.84	0.41
1:CA:218:ILE:HD13	1:CA:218:ILE:HG21	1.78	0.41
1:CA:311:ARG:HB2	5:UC:583:TYR:CD2	2.56	0.41
2:DA:86:LEU:HB3	2:DA:98:THR:HG21	2.02	0.41
3:UA:10:LEU:HD13	3:UA:702:LEU:HD23	2.02	0.41
3:UA:192:ASP:O	3:UA:193:TYR:CD1	2.73	0.41
3:UA:274:LEU:HD23	3:UA:274:LEU:HA	1.87	0.41
3:UA:291:ASP:N	3:UA:291:ASP:OD1	2.53	0.41
1:CB:240:VAL:HG23	1:CB:261:LEU:HD13	2.02	0.41
1:CB:259:MET:HG3	1:CB:260:PHE:CD2	2.55	0.41
4:UB:99:PHE:CZ	4:UB:765:GLN:HB3	2.55	0.41
4:UB:422:LEU:HD22	4:UB:466:TYR:CE2	2.56	0.41
4:UB:513:GLN:HG2	4:UB:559:ARG:HH21	1.86	0.41
4:UB:751:THR:CA	4:UB:754:GLU:HG2	2.42	0.41
5:UC:588:SER:O	63:D4:110:A:N6	2.53	0.41
6:UD:198:ASP:O	6:UD:215:ALA:O	2.38	0.41
6:UD:202:ILE:HG12	6:UD:212:ILE:HG12	2.02	0.41
6:UD:279:HIS:HB3	6:UD:305:PHE:CZ	2.55	0.41
6:UD:438:GLN:HB2	6:UD:452:HIS:NE2	2.36	0.41
6:UD:773:LYS:HE2	61:D2:83:U:C4	2.56	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:UE:175:ILE:HG13	7:UE:176:GLU:N	2.35	0.41
7:UE:231:ASP:HB2	7:UE:249:GLU:OE1	2.21	0.41
7:UE:453:LEU:CB	7:UE:487:ARG:HH22	2.33	0.41
7:UE:470:PHE:HA	7:UE:508:ILE:HG21	2.02	0.41
7:UE:513:LEU:O	7:UE:516:ILE:HG22	2.21	0.41
9:UG:189:GLN:OE1	9:UG:224:LEU:HD22	2.21	0.41
9:UG:546:ILE:HA	9:UG:546:ILE:HD13	1.78	0.41
11:UI:490:GLU:O	11:UI:494:PRO:HD3	2.20	0.41
11:UI:497:LEU:HB2	17:UO:502:GLN:HG2	2.02	0.41
12:UJ:214:THR:O	12:UJ:218:ILE:HG13	2.20	0.41
12:UJ:248:SER:O	12:UJ:285:ASN:ND2	2.51	0.41
12:UJ:263:VAL:O	12:UJ:266:THR:HG22	2.21	0.41
12:UJ:301:LYS:O	12:UJ:305:THR:HG23	2.20	0.41
12:UJ:419:LEU:HD12	12:UJ:420:LYS:N	2.36	0.41
12:UJ:561:PHE:HB2	12:UJ:598:TYR:CD1	2.55	0.41
12:UJ:733:MET:SD	12:UJ:733:MET:N	2.93	0.41
12:UJ:1382:ASP:O	12:UJ:1385:LEU:HG	2.21	0.41
12:UJ:1651:LEU:O	12:UJ:1654:GLN:HB2	2.20	0.41
12:UJ:1683:HIS:HA	12:UJ:1686:ILE:HG22	2.03	0.41
13:UK:155:THR:HG22	13:UK:158:MET:HB2	2.03	0.41
14:UL:538:ARG:HD3	14:UL:580:ASP:HA	2.03	0.41
15:UM:87:ILE:CG2	15:UM:97:ARG:HB2	2.51	0.41
15:UM:88:PHE:CE2	15:UM:90:LEU:HD23	2.54	0.41
15:UM:286:GLU:OE1	15:UM:360:PRO:HG2	2.20	0.41
15:UM:561:SER:HB3	15:UM:568:MET:CE	2.51	0.41
15:UM:602:TRP:HA	15:UM:610:LEU:HD23	2.02	0.41
16:UN:344:GLN:O	16:UN:348:GLU:HG2	2.21	0.41
17:UO:51:HIS:O	17:UO:53:HIS:ND1	2.41	0.41
17:UO:156:ASN:ND2	17:UO:159:GLU:HB3	2.36	0.41
17:UO:177:ILE:CG2	17:UO:183:LEU:HB3	2.51	0.41
17:UO:195:LEU:HD13	17:UO:207:TYR:CZ	2.55	0.41
17:UO:243:LYS:HD3	17:UO:243:LYS:HA	1.78	0.41
17:UO:428:ARG:O	17:UO:431:LEU:N	2.44	0.41
17:UO:435:ASP:O	17:UO:439:LEU:HG	2.21	0.41
19:UQ:47:PRO:HG3	19:UQ:91:ILE:HD11	2.03	0.41
19:UQ:57:VAL:HB	19:UQ:382:LYS:NZ	2.36	0.41
19:UQ:152:ARG:NH1	19:UQ:190:GLN:OE1	2.46	0.41
19:UQ:289:GLN:OE1	19:UQ:291:ARG:HG3	2.21	0.41
19:UQ:306:SER:HB3	19:UQ:311:TYR:HB2	2.03	0.41
19:UQ:397:LYS:O	19:UQ:398:HIS:ND1	2.54	0.41
19:UQ:559:LYS:HG3	19:UQ:613:LEU:CD2	2.51	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:559:LYS:HA	19:UQ:559:LYS:HD2	1.86	0.41
20:UR:242:ASN:CG	20:UR:586:VAL:HG12	2.41	0.41
20:UR:481:TRP:CD2	20:UR:546:LEU:HD23	2.56	0.41
22:UT:142:PHE:O	22:UT:142:PHE:CD2	2.74	0.41
22:UT:294:VAL:O	22:UT:298:MET:HG3	2.21	0.41
22:UT:326:SER:HA	22:UT:368:ASN:HD21	1.86	0.41
22:UT:332:ASP:N	22:UT:332:ASP:OD1	2.52	0.41
22:UT:537:LEU:O	22:UT:541:ILE:HG12	2.20	0.41
22:UT:753:GLN:O	22:UT:757:ILE:HG13	2.21	0.41
22:UT:827:ASP:HA	22:UT:830:VAL:HG22	2.01	0.41
22:UT:957:LYS:HB3	22:UT:960:TYR:CD2	2.56	0.41
22:UT:1116:PRO:HA	22:UT:1119:TYR:CE2	2.56	0.41
22:UT:1265:TYR:OH	22:UT:1298:LEU:HD21	2.20	0.41
22:UT:1282:VAL:O	22:UT:1286:GLU:HG2	2.21	0.41
22:UT:1290:GLU:HA	22:UT:1293:ARG:CZ	2.51	0.41
22:UT:1326:SER:HG	22:UT:1327:THR:N	2.19	0.41
22:UT:1343:GLU:O	22:UT:1346:PRO:HD2	2.21	0.41
22:UT:1347:LEU:O	22:UT:1351:PHE:CD1	2.73	0.41
22:UT:1884:ARG:O	22:UT:1887:LEU:HB3	2.21	0.41
22:UT:2052:GLN:NE2	22:UT:2056:ARG:HG2	2.36	0.41
22:UT:2187:ARG:O	22:UT:2190:TYR:HB3	2.21	0.41
23:UU:371:LYS:HG2	23:UU:413:GLU:OE1	2.21	0.41
23:UU:728:ARG:HD3	23:UU:728:ARG:HA	1.71	0.41
24:UV:116:LEU:HD23	24:UV:194:GLY:O	2.21	0.41
24:UV:117:LYS:HE3	24:UV:117:LYS:HB3	1.90	0.41
24:UV:364:VAL:HA	24:UV:367:ARG:CG	2.51	0.41
24:UV:379:MET:HB2	24:UV:479:LYS:NZ	2.36	0.41
24:UV:389:GLY:H	24:UV:392:GLU:CD	2.17	0.41
24:UV:543:LEU:HG	24:UV:545:ALA:N	2.36	0.41
24:UV:956:ASN:HD21	24:UV:960:LYS:HE3	1.85	0.41
26:CD:263:ILE:HA	27:CE:156:ALA:HB1	2.02	0.41
27:CE:174:ASP:CG	27:CE:269:ARG:HH21	2.23	0.41
27:CE:290:LEU:HA	27:CE:290:LEU:HD12	1.80	0.41
28:CG:58:CYS:O	29:CH:451:ILE:HD12	2.21	0.41
29:CH:134:ARG:HD2	29:CH:484:SER:HB3	2.03	0.41
29:CH:167:LEU:O	29:CH:169:LYS:HE2	2.21	0.41
29:CH:290:LYS:HB2	29:CH:290:LYS:NZ	2.35	0.41
29:CH:419:ASN:ND2	29:CH:419:ASN:O	2.54	0.41
29:CH:456:ASP:O	29:CH:460:ARG:HG3	2.21	0.41
31:CJ:78:ALA:O	32:CK:384:ARG:NH2	2.44	0.41
31:CJ:117:LEU:HA	31:CJ:117:LEU:HD12	1.70	0.41

*Continued on next page...*



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:CJ:263:LEU:HA	31:CJ:263:LEU:HD23	1.80	0.41
32:CK:407:LYS:HB3	32:CK:407:LYS:HE3	1.82	0.41
32:CK:529:ARG:NH1	62:D3:1754:A:C4	2.88	0.41
33:CL:727:ARG:CZ	33:CL:730:PHE:HD2	2.34	0.41
33:CL:750:TRP:CD1	58:DX:80:GLY:HA3	2.56	0.41
33:CL:750:TRP:O	33:CL:754:GLN:HG2	2.20	0.41
33:CL:797:PRO:HG2	33:CL:1022:LEU:HD21	2.03	0.41
33:CL:1115:LYS:O	33:CL:1119:ILE:HG12	2.21	0.41
33:CL:1144:LYS:HE3	33:CL:1144:LYS:HB3	1.88	0.41
34:CM:338:PHE:HB3	34:CM:353:THR:OG1	2.20	0.41
35:CN:87:LEU:HD23	35:CN:87:LEU:H	1.86	0.41
35:CN:259:ARG:NE	35:CN:259:ARG:CA	2.83	0.41
36:JD:530:GLY:O	36:JD:533:SER:OG	2.29	0.41
36:JD:554:LYS:C	36:JD:555:LEU:HD12	2.41	0.41
37:JF:164:LYS:HE2	37:JF:164:LYS:HB2	1.96	0.41
40:JL:90:MET:O	40:JL:93:GLU:HG3	2.20	0.41
42:JP:361:LYS:NZ	42:JP:381:GLU:OE1	2.53	0.41
42:JP:444:GLU:HG2	42:JP:448:ARG:HD3	2.01	0.41
45:DE:67:GLN:CD	45:DE:69:HIS:HE2	2.23	0.41
46:DF:104:ASN:HD22	62:D3:1587:A:H1'	1.86	0.41
47:DG:173:PRO:HA	62:D3:66:U:C5'	2.51	0.41
48:DH:35:LYS:O	48:DH:39:ARG:HG2	2.21	0.41
48:DH:76:LYS:HB2	48:DH:76:LYS:HE2	1.85	0.41
49:DI:100:ALA:O	49:DI:168:CYS:HA	2.21	0.41
51:DL:109:VAL:HG22	51:DL:137:PHE:HB2	2.03	0.41
53:DO:18:ARG:HE	53:DO:31:THR:CG2	2.33	0.41
54:DQ:66:ARG:HB2	54:DQ:66:ARG:CZ	2.51	0.41
56:DT:105:LEU:HD22	56:DT:122:ARG:CD	2.50	0.41
57:DW:77:PRO:HG3	58:DX:7:ARG:HG2	2.01	0.41
57:DW:93:LEU:HD23	57:DW:93:LEU:HA	1.86	0.41
58:DX:127:VAL:HG13	58:DX:127:VAL:O	2.21	0.41
59:DY:55:VAL:HG22	59:DY:75:VAL:HG22	2.03	0.41
62:D3:188:A:N7	62:D3:197:A:H2	2.19	0.41
62:D3:331:A:C6	62:D3:332:U:N3	2.88	0.41
62:D3:401:A:O2'	62:D3:402:C:H4'	2.20	0.41
62:D3:567:A:H2'	62:D3:568:G:O4'	2.20	0.41
62:D3:629:U:C2	62:D3:970:A:C6	3.09	0.41
62:D3:844:A:N6	62:D3:845:G:O6	2.54	0.41
62:D3:896:U:H2'	62:D3:897:C:C6	2.55	0.41
62:D3:900:A:C6	62:D3:901:G:C5	3.09	0.41
62:D3:1697:G:N2	62:D3:1704:U:O2	2.51	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:1706:C:H2'	62:D3:1707:A:N9	2.35	0.41
62:D3:1714:A:H2'	62:D3:1715:G:C8	2.53	0.41
62:D3:1736:G:H2'	62:D3:1737:G:H8	1.86	0.41
63:D4:44:U:H2'	63:D4:45:U:H6	1.85	0.41
70:EG:94:SER:O	70:EG:137:ILE:N	2.54	0.41
72:EI:342:GLU:O	72:EI:346:SER:N	2.48	0.41
74:EK:319:GLU:O	74:EK:390:ALA:HB1	2.21	0.41
74:EK:626:VAL:HA	74:EK:640:ASN:O	2.21	0.41
75:EN:957:PRO:HA	75:EN:960:ALA:HB3	2.02	0.41
2:DA:86:LEU:HB3	2:DA:98:THR:HG22	2.02	0.41
2:DA:97:LEU:HB3	2:DA:232:HIS:CD2	2.55	0.41
3:UA:33:VAL:HG12	3:UA:34:GLY:N	2.36	0.41
1:CB:143:VAL:HG22	1:CB:144:TRP:O	2.20	0.41
6:UD:122:VAL:HG23	6:UD:137:TYR:C	2.42	0.41
7:UE:453:LEU:HB2	7:UE:487:ARG:HH22	1.84	0.41
7:UE:526:LEU:O	7:UE:530:LEU:HG	2.21	0.41
8:UF:276:VAL:O	8:UF:280:THR:HG22	2.21	0.41
9:UG:61:ALA:O	9:UG:64:ASP:HB2	2.21	0.41
10:UH:562:PRO:HB2	10:UH:565:GLU:OE1	2.21	0.41
11:UI:486:LEU:O	11:UI:489:SER:OG	2.38	0.41
12:UJ:683:SER:O	12:UJ:686:SER:OG	2.32	0.41
12:UJ:1544:PHE:HB2	12:UJ:1547:LEU:HB2	2.02	0.41
12:UJ:1725:LEU:HD23	12:UJ:1725:LEU:HA	1.81	0.41
13:UK:16:ARG:NH2	62:D3:556:A:C4	2.87	0.41
14:UL:128:GLN:O	14:UL:136:LEU:HD12	2.20	0.41
14:UL:614:HIS:CB	14:UL:618:ILE:HG13	2.51	0.41
14:UL:839:VAL:O	14:UL:842:ASN:N	2.54	0.41
14:UL:887:LEU:HD12	14:UL:887:LEU:HA	1.85	0.41
15:UM:163:LEU:HB2	15:UM:177:LEU:HD21	2.03	0.41
15:UM:183:LEU:HD12	15:UM:183:LEU:HA	1.81	0.41
15:UM:492:LYS:HA	15:UM:492:LYS:HD2	1.91	0.41
15:UM:563:ASP:OD1	15:UM:564:THR:HG23	2.21	0.41
15:UM:804:TYR:CD2	23:UU:927:LYS:HB3	2.56	0.41
17:UO:192:LEU:N	17:UO:211:HIS:H	2.07	0.41
17:UO:415:LEU:HD23	17:UO:419:GLN:NE2	2.35	0.41
19:UQ:519:LEU:HG	19:UQ:521:SER:H	1.86	0.41
20:UR:161:ILE:HD11	23:UU:177:LEU:HD23	2.03	0.41
20:UR:465:THR:HG23	20:UR:468:CYS:H	1.84	0.41
21:US:106:ILE:HA	21:US:158:SER:OG	2.21	0.41
21:US:195:PHE:CE2	21:US:222:LEU:HD11	2.56	0.41
22:UT:1062:LEU:HA	22:UT:1065:VAL:HG12	2.03	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:UT:1118:LEU:C	22:UT:1120:GLN:H	2.25	0.41
22:UT:1331:LEU:HD22	22:UT:1366:ASN:HB3	2.03	0.41
22:UT:1532:SER:O	22:UT:1536:THR:HG22	2.20	0.41
22:UT:1665:LEU:HD23	22:UT:1665:LEU:HA	1.89	0.41
22:UT:2085:LEU:O	22:UT:2088:THR:HG22	2.21	0.41
22:UT:2465:ARG:NH2	62:D3:823:G:H3'	2.26	0.41
23:UU:72:SER:HA	23:UU:104:GLY:O	2.21	0.41
23:UU:346:ARG:NE	23:UU:384:ALA:HA	2.36	0.41
23:UU:704:ASP:OD1	23:UU:705:ILE:HG13	2.21	0.41
24:UV:467:LEU:O	24:UV:475:ASN:HA	2.21	0.41
24:UV:591:ASP:OD1	24:UV:591:ASP:N	2.54	0.41
24:UV:831:ILE:HD12	24:UV:831:ILE:HA	1.88	0.41
26:CD:327:LYS:HE2	26:CD:327:LYS:HB3	1.84	0.41
27:CE:5:LEU:HD23	27:CE:6:THR:N	2.36	0.41
27:CE:201:ASP:HB3	27:CE:204:ALA:HB3	2.02	0.41
29:CH:343:ASP:O	29:CH:345:THR:OG1	2.36	0.41
29:CH:522:THR:OG1	29:CH:542:SER:OG	2.29	0.41
31:CJ:157:PHE:C	31:CJ:159:HIS:N	2.75	0.41
32:CK:314:LEU:HD23	32:CK:314:LEU:HA	1.83	0.41
33:CL:78:PRO:HA	33:CL:122:ALA:CB	2.51	0.41
33:CL:818:THR:HG21	34:CM:362:THR:OG1	2.21	0.41
33:CL:824:ILE:HD11	33:CL:926:ILE:HG23	2.03	0.41
33:CL:1142:LEU:HD12	33:CL:1142:LEU:HA	1.96	0.41
34:CM:314:ASN:OD1	34:CM:315:LYS:N	2.52	0.41
34:CM:315:LYS:HD2	34:CM:348:GLU:HB2	2.03	0.41
34:CM:337:VAL:HG22	34:CM:354:ILE:HG12	2.03	0.41
36:JD:396:GLU:O	36:JD:400:ILE:HG12	2.21	0.41
36:JD:1019:GLU:O	36:JD:1023:ILE:HG23	2.21	0.41
36:JD:1173:ILE:HG12	36:JD:1174:ALA:N	2.36	0.41
37:JF:130:ILE:HD12	37:JF:137:PHE:CZ	2.56	0.41
37:JG:177:LYS:O	37:JG:221:VAL:HB	2.21	0.41
42:JP:200:LYS:O	42:JP:200:LYS:HG3	2.21	0.41
46:DF:215:ASP:O	46:DF:219:ARG:HG3	2.21	0.41
52:DN:26:PHE:CE2	52:DN:28:LEU:HB2	2.56	0.41
56:DT:51:GLU:OE1	56:DT:51:GLU:N	2.44	0.41
62:D3:474:A:HO2'	62:D3:475:A:P	2.38	0.41
62:D3:681:U:C4	62:D3:682:C:C4	3.09	0.41
62:D3:804:A:H2'	62:D3:805:U:C6	2.56	0.41
62:D3:926:A:H2'	62:D3:927:C:O4'	2.21	0.41
62:D3:1553:G:H2'	62:D3:1554:U:O4'	2.21	0.41
63:D4:66:U:C2'	63:D4:67:G:H5'	2.51	0.41

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
68:EE:164:ALA:HB3	68:EE:179:LEU:H	1.86	0.41
1:CA:204:GLY:O	1:CA:208:ILE:HG12	2.21	0.40
3:UA:168:LEU:HD21	3:UA:193:TYR:HA	2.02	0.40
3:UA:701:LEU:HA	3:UA:701:LEU:HD12	1.77	0.40
4:UB:115:LYS:O	34:CM:69:TYR:HA	2.20	0.40
4:UB:604:VAL:HG22	4:UB:606:PHE:H	1.86	0.40
4:UB:763:ALA:HB2	32:CK:349:ARG:NE	2.36	0.40
5:UC:562:ARG:HB3	50:DJ:37:LYS:CB	2.51	0.40
5:UC:587:GLN:O	63:D4:110:A:N6	2.52	0.40
6:UD:35:ARG:NE	6:UD:756:GLU:OE1	2.43	0.40
6:UD:347:LEU:HD22	6:UD:361:LEU:HD23	2.03	0.40
6:UD:742:LEU:CD2	6:UD:757:ARG:HG3	2.51	0.40
7:UE:32:GLN:OE1	7:UE:33:PRO:HD2	2.21	0.40
9:UG:197:ASP:HB3	9:UG:238:MET:HE1	2.03	0.40
9:UG:329:LEU:CD2	9:UG:340:LEU:HD12	2.51	0.40
9:UG:509:ILE:HD13	9:UG:509:ILE:HA	1.91	0.40
12:UJ:648:LYS:O	12:UJ:648:LYS:NZ	2.52	0.40
14:UL:194:HIS:O	14:UL:194:HIS:ND1	2.53	0.40
14:UL:243:THR:OG1	14:UL:244:GLU:N	2.53	0.40
14:UL:420:LYS:HD2	14:UL:420:LYS:HA	1.74	0.40
14:UL:645:GLU:N	14:UL:645:GLU:OE1	2.53	0.40
15:UM:241:GLN:NE2	15:UM:268:GLN:OE1	2.55	0.40
15:UM:457:ALA:HB1	15:UM:494:ILE:CD1	2.51	0.40
15:UM:560:TRP:CH2	15:UM:567:VAL:HG13	2.55	0.40
17:UO:88:SER:OG	17:UO:130:THR:O	2.21	0.40
17:UO:487:LEU:HA	17:UO:490:LYS:NZ	2.35	0.40
18:UP:164:LYS:HD2	18:UP:164:LYS:HA	1.78	0.40
19:UQ:579:ASN:ND2	19:UQ:579:ASN:O	2.54	0.40
20:UR:136:PRO:HA	20:UR:154:LYS:HG2	2.02	0.40
20:UR:383:TRP:CE3	20:UR:383:TRP:HA	2.56	0.40
21:US:357:ARG:HA	21:US:360:ARG:HG3	2.02	0.40
21:US:417:HIS:O	21:US:417:HIS:CG	2.74	0.40
22:UT:457:PHE:CE2	22:UT:485:ILE:HG21	2.56	0.40
22:UT:905:LEU:HA	22:UT:905:LEU:HD13	1.86	0.40
22:UT:992:LYS:HE2	22:UT:996:ARG:NH1	2.36	0.40
22:UT:996:ARG:HH22	62:D3:133:U:H5''	1.85	0.40
22:UT:1065:VAL:O	22:UT:1069:VAL:HG22	2.21	0.40
22:UT:1591:TYR:CZ	22:UT:1631:PHE:HD2	2.39	0.40
22:UT:1593:THR:C	22:UT:1595:SER:O	2.59	0.40
22:UT:1610:MET:N	22:UT:1611:PRO:HD2	2.36	0.40
22:UT:2178:ILE:HA	22:UT:2181:ASP:OD2	2.20	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:UU:382:LYS:C	23:UU:384:ALA:H	2.23	0.40
23:UU:724:SER:OG	23:UU:879:GLU:OE2	2.39	0.40
24:UV:160:VAL:HG13	24:UV:233:ALA:HB2	2.03	0.40
24:UV:571:ARG:HA	24:UV:571:ARG:HD2	1.84	0.40
24:UV:801:LYS:HD2	35:CN:187:HIS:ND1	2.36	0.40
24:UV:1013:THR:HG23	24:UV:1016:GLN:H	1.86	0.40
27:CE:35:SER:HB3	27:CE:37:LYS:HG2	2.03	0.40
27:CE:279:ARG:NE	27:CE:279:ARG:HA	2.36	0.40
29:CH:265:THR:O	29:CH:268:LEU:HD22	2.20	0.40
33:CL:225:ARG:NH1	62:D3:51:A:C6	2.88	0.40
33:CL:231:LYS:HE3	33:CL:231:LYS:HB2	1.91	0.40
33:CL:784:LYS:HB2	33:CL:784:LYS:HE3	1.75	0.40
33:CL:1033:ARG:NH1	33:CL:1038:ILE:HG22	2.36	0.40
36:JD:602:TYR:H	36:JD:605:GLU:HB2	1.85	0.40
36:JD:848:GLU:HG2	36:JD:849:SER:H	1.86	0.40
37:JF:91:ILE:HG13	37:JF:94:GLN:HE21	1.87	0.40
42:JP:95:TRP:CE3	42:JP:102:GLU:HB3	2.57	0.40
42:JP:210:LYS:HE2	42:JP:210:LYS:HB3	1.89	0.40
45:DE:104:ASP:OD1	45:DE:105:VAL:N	2.51	0.40
49:DI:84:HIS:NE2	49:DI:90:LEU:HD12	2.36	0.40
62:D3:72:A:O2'	62:D3:73:U:H2'	2.21	0.40
62:D3:416:A:H3'	62:D3:417:A:H8	1.86	0.40
62:D3:1111:G:H2'	62:D3:1112:G:C8	2.57	0.40
63:D4:329:C:H2'	63:D4:330:A:H8	1.86	0.40
1:CA:142:ARG:NH1	1:CA:214:ARG:HH22	2.19	0.40
1:CA:147:PHE:CD2	5:UC:587:GLN:HB3	2.56	0.40
1:CA:178:GLY:HA3	1:CA:210:MET:SD	2.61	0.40
3:UA:42:LEU:HD21	3:UA:339:LEU:HD23	2.04	0.40
1:CB:233:LEU:HD23	1:CB:233:LEU:HA	1.90	0.40
1:CB:253:ILE:HA	1:CB:253:ILE:HD13	1.81	0.40
4:UB:478:ILE:O	4:UB:482:GLN:OE1	2.39	0.40
4:UB:514:TYR:HA	4:UB:519:THR:HG21	2.03	0.40
4:UB:561:ILE:O	4:UB:565:VAL:HG23	2.21	0.40
6:UD:38:PHE:HE2	6:UD:402:TRP:CD2	2.39	0.40
6:UD:156:LEU:HD23	6:UD:168:ILE:O	2.21	0.40
6:UD:340:GLN:N	6:UD:340:GLN:OE1	2.54	0.40
7:UE:322:ILE:HG23	7:UE:323:PRO:HD2	2.02	0.40
7:UE:453:LEU:HA	7:UE:453:LEU:HD23	1.84	0.40
7:UE:481:LEU:HD23	7:UE:481:LEU:HA	1.83	0.40
9:UG:115:HIS:CE1	9:UG:380:ASN:ND2	2.90	0.40
12:UJ:366:ILE:O	12:UJ:370:LEU:HG	2.21	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:UL:17:ILE:HB	14:UL:360:ASN:HB3	2.03	0.40
14:UL:118:ASN:OD1	14:UL:118:ASN:O	2.39	0.40
14:UL:576:VAL:HG22	14:UL:592:SER:OG	2.22	0.40
15:UM:24:THR:HG21	15:UM:68:LYS:HD2	2.03	0.40
15:UM:243:VAL:HG13	15:UM:243:VAL:O	2.21	0.40
15:UM:307:SER:C	15:UM:309:GLN:H	2.24	0.40
15:UM:387:HIS:CE1	15:UM:407:SER:HB2	2.56	0.40
15:UM:569:LYS:HE3	15:UM:604:CYS:O	2.21	0.40
17:UO:136:ASP:OD1	17:UO:138:LYS:N	2.48	0.40
17:UO:278:ASP:HB2	17:UO:280:HIS:HB2	2.02	0.40
17:UO:500:GLU:HA	17:UO:503:ARG:HD2	2.02	0.40
19:UQ:276:ALA:HA	19:UQ:299:SER:OG	2.21	0.40
20:UR:156:ASN:OD1	20:UR:159:HIS:ND1	2.53	0.40
20:UR:270:LYS:HG2	20:UR:294:PRO:HA	2.04	0.40
20:UR:407:PHE:HD2	20:UR:423:LEU:HD11	1.86	0.40
21:US:44:GLU:HA	21:US:47:GLU:O	2.21	0.40
21:US:220:LEU:HD23	21:US:276:SER:OG	2.21	0.40
21:US:366:LEU:HD21	21:US:379:PHE:CE2	2.56	0.40
22:UT:16:TYR:O	22:UT:17:SER:OG	2.39	0.40
22:UT:169:LYS:HE3	22:UT:169:LYS:HB2	1.97	0.40
22:UT:190:ARG:NH1	22:UT:191:PHE:HE1	2.19	0.40
22:UT:235:LEU:HD23	22:UT:236:PHE:N	2.36	0.40
22:UT:261:GLU:O	22:UT:267:SER:OG	2.25	0.40
22:UT:272:VAL:HG21	22:UT:313:ARG:HG3	2.04	0.40
22:UT:397:PHE:O	22:UT:401:LEU:HG	2.21	0.40
22:UT:425:TRP:CZ3	22:UT:426:GLN:HB3	2.57	0.40
22:UT:594:GLY:N	22:UT:597:ARG:HH21	2.18	0.40
22:UT:774:ILE:HD12	22:UT:774:ILE:HA	1.82	0.40
22:UT:1559:LEU:HD11	22:UT:1587:LYS:HZ1	1.86	0.40
22:UT:1942:LEU:HD23	22:UT:1942:LEU:HA	1.84	0.40
22:UT:2179:GLU:O	22:UT:2182:GLU:HG3	2.20	0.40
23:UU:116:ALA:HB1	23:UU:133:ASP:OD1	2.21	0.40
23:UU:126:ASP:O	23:UU:141:LYS:HA	2.22	0.40
23:UU:364:HIS:HD2	23:UU:381:ARG:NE	2.19	0.40
23:UU:661:LYS:HG3	23:UU:662:THR:O	2.22	0.40
24:UV:123:LYS:NZ	24:UV:284:ASN:O	2.54	0.40
24:UV:912:VAL:HG11	24:UV:942:PHE:CE2	2.56	0.40
27:CE:163:ILE:HD13	27:CE:163:ILE:HA	1.86	0.40
28:CG:87:LEU:HD12	28:CG:87:LEU:HA	1.88	0.40
29:CH:224:SER:O	29:CH:226:HIS:HD2	2.04	0.40
29:CH:478:LEU:HA	29:CH:478:LEU:HD12	1.86	0.40

Continued on next page...



*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:CI:70:PHE:HE2	32:CK:437:ILE:HD11	1.86	0.40
33:CL:271:ILE:HD13	33:CL:271:ILE:HA	1.92	0.40
33:CL:906:ASP:OD1	33:CL:906:ASP:N	2.52	0.40
33:CL:986:HIS:CD2	33:CL:986:HIS:N	2.88	0.40
35:CN:139:ASN:O	35:CN:143:LYS:HE2	2.20	0.40
36:JD:437:ASP:HA	36:JD:438:SER:HA	1.85	0.40
36:JD:468:ASP:OD1	36:JD:468:ASP:N	2.55	0.40
37:JG:164:LYS:HA	62:D3:1575:G:O3'	2.20	0.40
37:JG:192:TYR:O	37:JG:196:LEU:HD23	2.21	0.40
41:JM:56:GLU:HB3	41:JM:60:LYS:NZ	2.36	0.40
55:DS:105:VAL:HG22	55:DS:108:LYS:HZ1	1.86	0.40
58:DX:69:ARG:HH21	58:DX:69:ARG:HD3	1.66	0.40
62:D3:193:U:N3	62:D3:195:G:C8	2.90	0.40
62:D3:1012:U:C4	62:D3:1013:A:N7	2.90	0.40
63:D4:320:G:C6	63:D4:321:C:C4	3.09	0.40
1:CA:144:TRP:NE1	1:CA:183:HIS:CB	2.84	0.40
4:UB:547:VAL:HA	4:UB:550:VAL:HG22	2.03	0.40
4:UB:696:GLU:O	4:UB:698:ILE:HG12	2.21	0.40
4:UB:703:GLN:HA	4:UB:705:HIS:HE1	1.85	0.40
6:UD:75:ASN:HA	6:UD:91:ILE:O	2.20	0.40
6:UD:497:ILE:N	6:UD:509:GLN:O	2.43	0.40
7:UE:89:SER:OG	7:UE:92:ALA:HB3	2.21	0.40
7:UE:530:LEU:HD13	17:UO:508:LEU:HD21	2.04	0.40
9:UG:118:TYR:CZ	9:UG:125:LEU:HD12	2.56	0.40
10:UH:208:SER:N	10:UH:222:PHE:O	2.53	0.40
12:UJ:210:LEU:HD21	12:UJ:253:CYS:HA	2.04	0.40
12:UJ:277:ALA:O	12:UJ:281:THR:HG23	2.21	0.40
12:UJ:1622:VAL:O	12:UJ:1625:SER:OG	2.36	0.40
13:UK:248:ARG:NH1	20:UR:512:ASP:O	2.54	0.40
14:UL:123:ALA:HB3	14:UL:141:LYS:CD	2.51	0.40
14:UL:550:LEU:HD23	14:UL:550:LEU:HA	1.92	0.40
14:UL:596:ASN:ND2	62:D3:1140:G:H22	2.19	0.40
14:UL:636:ASP:OD2	14:UL:638:VAL:HG22	2.21	0.40
15:UM:16:TYR:O	15:UM:336:ASN:HB2	2.20	0.40
15:UM:217:ASP:OD1	15:UM:218:ASP:N	2.50	0.40
15:UM:538:ASP:OD1	15:UM:539:VAL:N	2.53	0.40
15:UM:540:SER:O	15:UM:548:LEU:HD12	2.20	0.40
16:UN:813:LYS:HE3	16:UN:813:LYS:HB3	1.88	0.40
17:UO:86:SER:HB2	17:UO:128:HIS:O	2.22	0.40
17:UO:211:HIS:CE1	17:UO:235:LYS:HG3	2.56	0.40
18:UP:185:GLN:HG2	18:UP:186:ASP:N	2.36	0.40

*Continued on next page...*



Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:UQ:167:SER:O	19:UQ:167:SER:OG	2.34	0.40
19:UQ:547:VAL:HG12	19:UQ:550:PRO:HG3	2.02	0.40
20:UR:304:LEU:HB2	20:UR:362:HIS:CD2	2.55	0.40
21:US:500:ASP:OD1	21:US:500:ASP:N	2.53	0.40
22:UT:190:ARG:O	22:UT:194:GLU:HG3	2.21	0.40
22:UT:279:TRP:HE1	22:UT:321:ILE:HA	1.87	0.40
22:UT:647:ALA:HB1	22:UT:651:LYS:NZ	2.35	0.40
22:UT:986:SER:O	22:UT:988:LYS:N	2.52	0.40
22:UT:1272:PHE:HD1	22:UT:1284:LEU:CD2	2.33	0.40
22:UT:1439:ILE:HG12	22:UT:1474:HIS:ND1	2.37	0.40
22:UT:1698:LEU:HA	22:UT:1698:LEU:HD23	1.83	0.40
22:UT:2019:ILE:HA	22:UT:2022:THR:HG22	2.02	0.40
22:UT:2030:ASN:HD22	22:UT:2035:ILE:CG2	2.31	0.40
24:UV:120:HIS:HB3	24:UV:288:THR:HB	2.04	0.40
24:UV:153:PHE:CD1	24:UV:158:VAL:HG13	2.57	0.40
24:UV:394:THR:HA	24:UV:397:MET:HE2	2.03	0.40
25:UX:185:LEU:O	25:UX:188:VAL:HG13	2.21	0.40
26:CD:215:THR:HA	26:CD:218:LYS:NZ	2.37	0.40
26:CD:301:PRO:CG	26:CD:396:PRO:HB2	2.51	0.40
27:CE:2:ALA:HB2	27:CE:19:ASP:HA	2.03	0.40
27:CE:232:GLU:HA	27:CE:235:VAL:HG22	2.03	0.40
30:CI:64:LEU:CD1	30:CI:65:PRO:HD2	2.51	0.40
32:CK:339:ALA:O	32:CK:343:GLU:HG2	2.20	0.40
33:CL:823:GLY:N	33:CL:889:LEU:HD21	2.36	0.40
33:CL:1051:ASP:N	33:CL:1051:ASP:OD1	2.52	0.40
34:CM:14:SER:O	34:CM:14:SER:OG	2.31	0.40
34:CM:196:TYR:HA	34:CM:228:ASP:O	2.20	0.40
34:CM:305:LYS:O	34:CM:307:ASP:N	2.53	0.40
36:JD:490:LYS:HG3	36:JD:492:MET:SD	2.62	0.40
36:JD:525:THR:O	36:JD:529:ILE:HG23	2.20	0.40
36:JD:863:ILE:H	36:JD:863:ILE:HD12	1.87	0.40
36:JD:1188:LEU:HD23	36:JD:1188:LEU:HA	1.90	0.40
37:JG:39:LYS:HE2	37:JG:249:TRP:CZ2	2.56	0.40
37:JG:91:ILE:HG13	37:JG:92:THR:N	2.36	0.40
40:JL:255:TYR:CZ	40:JL:280:LYS:HE2	2.57	0.40
41:JM:120:ASP:OD1	41:JM:173:ILE:HG22	2.21	0.40
42:JP:54:PHE:O	42:JP:382:ARG:NH2	2.53	0.40
42:JP:319:GLU:OE1	42:JP:340:ARG:NH2	2.48	0.40
61:D2:70:A:N3	61:D2:70:A:H2'	2.36	0.40
62:D3:249:U:H3'	62:D3:250:C:H5'	2.02	0.40
62:D3:651:G:C2	62:D3:684:A:C2	3.09	0.40

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
62:D3:732:G:O2'	62:D3:851:U:OP1	2.20	0.40
62:D3:827:C:O2'	62:D3:828:U:H5'	2.21	0.40
62:D3:1524:A:O2'	62:D3:1525:A:O4'	2.23	0.40
62:D3:1685:G:C4	62:D3:1717:G:C2	3.10	0.40
63:D4:309:G:H2'	63:D4:310:G:C8	2.56	0.40
74:EK:140:ASP:C	74:EK:142:HIS:H	2.23	0.40
1:CA:182:SER:HB2	1:CA:214:ARG:NH1	2.36	0.40
1:CA:280:VAL:HG22	1:CA:281:ASP:N	2.36	0.40
2:DA:61:LEU:HD23	2:DA:61:LEU:HA	1.83	0.40
3:UA:180:LYS:HG2	3:UA:184:ALA:HB2	2.01	0.40
3:UA:405:SER:HB2	3:UA:436:LEU:HD12	2.03	0.40
3:UA:768:SER:HA	3:UA:805:ALA:HB1	2.03	0.40
1:CB:274:ASN:O	1:CB:278:SER:HB2	2.21	0.40
4:UB:741:LYS:HA	4:UB:741:LYS:HD2	1.80	0.40
6:UD:747:ILE:HG13	6:UD:753:ALA:HB2	2.03	0.40
9:UG:77:GLU:OE2	42:JP:2:LYS:HG2	2.21	0.40
12:UJ:567:LEU:HB2	12:UJ:582:VAL:HG13	2.03	0.40
12:UJ:611:ILE:HB	12:UJ:660:LEU:HD23	2.03	0.40
12:UJ:1711:MET:SD	12:UJ:1715:TYR:HE1	2.44	0.40
13:UK:29:GLU:HB2	33:CL:999:ASP:OD2	2.20	0.40
13:UK:231:LYS:NZ	13:UK:233:ILE:HB	2.36	0.40
14:UL:203:HIS:HB2	14:UL:206:GLU:O	2.21	0.40
15:UM:333:ILE:HD13	15:UM:333:ILE:HG21	1.87	0.40
15:UM:758:ARG:HA	15:UM:758:ARG:HD2	1.46	0.40
17:UO:7:ARG:HD2	17:UO:7:ARG:HA	1.88	0.40
17:UO:308:SER:HA	17:UO:309:PRO:HD3	1.96	0.40
17:UO:333:LYS:HA	17:UO:333:LYS:HD2	1.93	0.40
17:UO:458:ILE:H	17:UO:458:ILE:HD12	1.87	0.40
19:UQ:152:ARG:NH1	19:UQ:175:ALA:HB2	2.37	0.40
19:UQ:302:SER:O	19:UQ:303:LEU:HD23	2.21	0.40
19:UQ:581:GLY:HA2	19:UQ:602:PRO:HD2	2.03	0.40
20:UR:155:ILE:HD12	20:UR:155:ILE:HA	1.93	0.40
20:UR:428:ALA:O	20:UR:454:GLY:HA2	2.22	0.40
21:US:289:PHE:CE2	21:US:295:LEU:HG	2.57	0.40
22:UT:136:LEU:HD23	22:UT:136:LEU:HA	1.82	0.40
22:UT:653:LYS:HD3	22:UT:653:LYS:C	2.41	0.40
22:UT:1090:ARG:NH1	22:UT:1097:GLU:OE2	2.54	0.40
22:UT:1147:ILE:HG22	22:UT:1198:PHE:CE1	2.56	0.40
22:UT:1642:VAL:O	22:UT:1645:SER:HB3	2.21	0.40
23:UU:66:LEU:HD23	23:UU:66:LEU:HA	1.80	0.40
23:UU:269:SER:C	23:UU:271:GLY:H	2.24	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:UV:109:GLU:O	24:UV:112:GLU:HG3	2.22	0.40
24:UV:156:LYS:HD3	24:UV:156:LYS:HA	1.83	0.40
24:UV:243:LEU:HD12	24:UV:246:ASP:OD1	2.22	0.40
24:UV:300:TYR:HD1	24:UV:341:THR:HG23	1.86	0.40
24:UV:744:MET:HE2	24:UV:744:MET:HB2	1.90	0.40
26:CD:127:LEU:HD23	26:CD:127:LEU:HA	1.85	0.40
26:CD:180:LEU:HD13	26:CD:180:LEU:HA	1.85	0.40
26:CD:374:ARG:NH1	63:D4:259:C:OP2	2.55	0.40
27:CE:6:THR:CG2	27:CE:13:ALA:HB3	2.51	0.40
27:CE:287:LEU:HA	27:CE:287:LEU:HD12	1.84	0.40
28:CF:50:GLU:O	28:CF:51:PHE:HB3	2.21	0.40
29:CH:337:VAL:HG11	29:CH:407:MET:HG2	2.02	0.40
33:CL:92:ARG:HH21	33:CL:221:LEU:CD1	2.34	0.40
33:CL:743:GLU:HG3	33:CL:748:ASP:OD1	2.21	0.40
37:JF:179:THR:HB	37:JF:224:LYS:HG2	2.04	0.40
37:JG:45:LEU:HD11	37:JG:208:ALA:HB2	2.03	0.40
37:JG:111:GLN:HG3	37:JG:113:TYR:CE1	2.55	0.40
42:JP:50:LEU:HD13	63:D4:35:U:O2	2.22	0.40
42:JP:321:VAL:HG21	42:JP:363:ILE:HD13	2.04	0.40
44:JJ:102:PRO:HG2	44:JJ:105:ARG:HB2	2.03	0.40
48:DH:130:VAL:O	48:DH:133:THR:N	2.54	0.40
49:DI:6:ASP:HB3	49:DI:28:GLU:OE1	2.22	0.40
49:DI:48:THR:OG1	49:DI:52:ASN:HB2	2.22	0.40
52:DN:140:LYS:O	52:DN:145:THR:HG21	2.21	0.40
56:DT:64:HIS:CE1	56:DT:79:LEU:HD21	2.57	0.40
58:DX:58:GLY:HA3	58:DX:68:ILE:O	2.22	0.40
59:DY:105:ARG:O	59:DY:109:LYS:HG3	2.21	0.40
61:D2:18:G:H2'	61:D2:19:A:H8	1.86	0.40
62:D3:142:G:N2	62:D3:266:A:C4	2.90	0.40
62:D3:278:U:H4'	62:D3:279:G:O5'	2.21	0.40
62:D3:386:G:H2'	62:D3:387:A:C8	2.57	0.40
62:D3:649:U:O2'	62:D3:650:U:H5''	2.21	0.40
62:D3:1112:G:H2'	62:D3:1113:A:O4'	2.22	0.40
62:D3:1495:C:N4	62:D3:1512:G:O6	2.35	0.40
63:D4:40:A:C5	63:D4:41:C:C4	3.09	0.40
63:D4:78:G:C6	63:D4:330:A:C6	3.09	0.40
75:EN:355:LYS:O	75:EN:359:SER:N	2.53	0.40
1:CA:81:ARG:HH11	1:CA:81:ARG:HD3	1.77	0.40
1:CA:319:ARG:HG3	1:CA:319:ARG:NH1	2.36	0.40
3:UA:522:SER:OG	3:UA:523:MET:N	2.55	0.40
4:UB:388:LEU:CB	4:UB:428:VAL:HG11	2.52	0.40

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:UB:490:PHE:CE2	4:UB:538:LYS:HE2	2.56	0.40
4:UB:662:LEU:HB2	4:UB:663:PRO:HD3	2.04	0.40
4:UB:737:ILE:HD12	4:UB:737:ILE:HA	1.95	0.40
6:UD:272:LEU:HD21	20:UR:399:LYS:CD	2.46	0.40
6:UD:326:ARG:HG2	6:UD:327:LEU:N	2.37	0.40
7:UE:143:ASN:OD1	7:UE:144:ASN:N	2.54	0.40
7:UE:493:HIS:O	7:UE:493:HIS:ND1	2.53	0.40
8:UF:153:TYR:CE1	8:UF:157:VAL:HG21	2.56	0.40
9:UG:340:LEU:O	9:UG:368:TYR:N	2.54	0.40
9:UG:388:ASP:N	9:UG:388:ASP:OD1	2.54	0.40
12:UJ:69:PHE:HE2	12:UJ:104:LEU:HD12	1.87	0.40
12:UJ:261:LEU:HD23	12:UJ:261:LEU:HA	1.70	0.40
12:UJ:283:LEU:HB3	12:UJ:322:LEU:HG	2.02	0.40
12:UJ:413:ASP:HB2	12:UJ:417:LYS:HZ3	1.87	0.40
12:UJ:567:LEU:HB2	12:UJ:582:VAL:CG1	2.52	0.40
12:UJ:644:LYS:HA	12:UJ:644:LYS:HD3	1.90	0.40
12:UJ:1548:PHE:HE1	12:UJ:1575:PHE:HE1	1.67	0.40
12:UJ:1592:SER:O	12:UJ:1595:THR:HB	2.20	0.40
14:UL:175:ASP:HB3	14:UL:176:TRP:CZ3	2.56	0.40
14:UL:264:ASN:HB3	14:UL:348:SER:OG	2.21	0.40
17:UO:36:VAL:CG1	17:UO:327:LEU:HB2	2.52	0.40
17:UO:85:TYR:HE1	17:UO:101:ALA:HB2	1.87	0.40
17:UO:150:ARG:HB3	17:UO:152:TRP:CE2	2.56	0.40
17:UO:439:LEU:HD23	17:UO:439:LEU:HA	1.91	0.40
19:UQ:215:VAL:O	19:UQ:219:ASP:HB2	2.22	0.40
20:UR:165:ARG:CZ	23:UU:236:ARG:HH22	2.34	0.40
20:UR:233:LEU:HD12	20:UR:233:LEU:HA	1.89	0.40
20:UR:372:HIS:CE1	20:UR:388:HIS:CD2	3.09	0.40
22:UT:202:LYS:HA	22:UT:202:LYS:HD3	1.69	0.40
22:UT:415:LYS:HE3	22:UT:415:LYS:HB3	1.91	0.40
22:UT:418:GLN:HE22	22:UT:452:ASN:HB2	1.86	0.40
22:UT:891:LEU:HD21	22:UT:929:PHE:HE1	1.87	0.40
22:UT:1059:LEU:HD13	22:UT:1059:LEU:HA	1.90	0.40
22:UT:1193:ASN:O	22:UT:1196:SER:OG	2.37	0.40
22:UT:1307:ASP:HB2	22:UT:1308:LEU:HD12	2.04	0.40
22:UT:1360:GLU:C	22:UT:1362:ALA:N	2.75	0.40
22:UT:1761:ILE:HD11	22:UT:1765:GLU:OE1	2.21	0.40
24:UV:345:TYR:O	24:UV:349:LEU:HG	2.22	0.40
24:UV:434:LEU:HD13	24:UV:439:HIS:HA	2.04	0.40
24:UV:469:ASP:O	24:UV:473:LYS:N	2.54	0.40
24:UV:576:ASP:OD2	24:UV:576:ASP:N	2.55	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:UX:106:LEU:O	25:UX:109:LEU:HB2	2.21	0.40
26:CD:92:LYS:HD2	26:CD:93:LYS:NZ	2.36	0.40
26:CD:322:LEU:HD12	26:CD:322:LEU:HA	1.74	0.40
27:CE:96:ASN:OD1	27:CE:97:ALA:N	2.55	0.40
27:CE:162:MET:HE1	27:CE:279:ARG:HH21	1.87	0.40
27:CE:237:THR:HA	27:CE:240:GLU:CD	2.41	0.40
29:CH:289:ARG:O	29:CH:292:SER:HB3	2.22	0.40
29:CH:331:LEU:HA	29:CH:331:LEU:HD23	1.75	0.40
31:CJ:215:LYS:N	31:CJ:218:SER:OG	2.55	0.40
33:CL:141:LEU:HA	33:CL:170:VAL:O	2.21	0.40
33:CL:623:LYS:HA	33:CL:623:LYS:HE2	2.03	0.40
33:CL:870:ARG:NH2	62:D3:573:C:O2'	2.32	0.40
33:CL:977:LYS:NZ	62:D3:1597:A:OP1	2.27	0.40
33:CL:1073:VAL:O	33:CL:1076:GLU:N	2.53	0.40
34:CM:299:VAL:O	34:CM:302:VAL:HG12	2.21	0.40
35:CN:18:PHE:HZ	35:CN:70:PHE:CD1	2.39	0.40
35:CN:175:LEU:HD13	35:CN:175:LEU:HA	1.93	0.40
36:JD:437:ASP:OD1	36:JD:439:PRO:HD3	2.21	0.40
37:JG:176:ARG:O	37:JG:202:ILE:HD12	2.21	0.40
45:DE:130:GLN:HB2	45:DE:138:TYR:CZ	2.57	0.40
46:DF:52:GLU:OE2	46:DF:54:LYS:HG2	2.21	0.40
46:DF:190:ILE:O	46:DF:193:THR:HG22	2.21	0.40
47:DG:26:VAL:O	47:DG:30:LYS:NZ	2.40	0.40
47:DG:132:ARG:NH1	62:D3:68:A:C6	2.89	0.40
55:DS:15:LEU:HD23	55:DS:22:VAL:O	2.21	0.40
55:DS:116:LEU:HD11	55:DS:120:ARG:HE	1.86	0.40
57:DW:11:LEU:HA	57:DW:11:LEU:HD23	1.91	0.40
58:DX:19:ARG:NH1	62:D3:611:U:OP1	2.32	0.40
58:DX:33:LEU:HD23	58:DX:33:LEU:HA	1.89	0.40
62:D3:496:G:C4	62:D3:497:G:C8	3.09	0.40
62:D3:912:U:H4'	62:D3:913:G:O5'	2.20	0.40
62:D3:976:G:C6	62:D3:1023:A:C4	3.09	0.40
62:D3:1041:G:N2	62:D3:1078:C:C2	2.90	0.40
62:D3:1670:G:H1'	62:D3:1731:A:N6	2.36	0.40
62:D3:1697:G:C6	62:D3:1705:C:N3	2.90	0.40
62:D3:1707:A:H2'	62:D3:1708:U:H6	1.87	0.40

There are no symmetry-related clashes.

## 5.3 Torsion angles

### 5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	
1	CA	238/327 (73%)	211 (89%)	27 (11%)	0	100	100
1	CB	224/327 (68%)	209 (93%)	15 (7%)	0	100	100
2	DA	236/255 (92%)	210 (89%)	26 (11%)	0	100	100
3	UA	786/923 (85%)	699 (89%)	87 (11%)	0	100	100
4	UB	535/810 (66%)	513 (96%)	22 (4%)	0	100	100
5	UC	82/610 (13%)	72 (88%)	10 (12%)	0	100	100
6	UD	653/776 (84%)	589 (90%)	64 (10%)	0	100	100
7	UE	465/643 (72%)	425 (91%)	40 (9%)	0	100	100
8	UF	283/440 (64%)	278 (98%)	5 (2%)	0	100	100
9	UG	464/554 (84%)	410 (88%)	54 (12%)	0	100	100
10	UH	446/713 (63%)	406 (91%)	39 (9%)	1 (0%)	47	79
11	UI	86/575 (15%)	84 (98%)	2 (2%)	0	100	100
12	UJ	1092/1769 (62%)	1030 (94%)	62 (6%)	0	100	100
13	UK	213/250 (85%)	197 (92%)	15 (7%)	1 (0%)	29	66
14	UL	765/943 (81%)	677 (88%)	88 (12%)	0	100	100
15	UM	750/817 (92%)	663 (88%)	87 (12%)	0	100	100
16	UN	197/899 (22%)	180 (91%)	17 (9%)	0	100	100
17	UO	489/513 (95%)	453 (93%)	36 (7%)	0	100	100
18	UP	58/214 (27%)	55 (95%)	3 (5%)	0	100	100
19	UQ	810/896 (90%)	739 (91%)	71 (9%)	0	100	100
20	UR	473/594 (80%)	435 (92%)	38 (8%)	0	100	100
21	US	479/552 (87%)	456 (95%)	23 (5%)	0	100	100
22	UT	2265/2493 (91%)	2078 (92%)	185 (8%)	2 (0%)	51	83
23	UU	870/939 (93%)	792 (91%)	78 (9%)	0	100	100
24	UV	1071/1237 (87%)	1025 (96%)	46 (4%)	0	100	100

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
25	UX	163/189 (86%)	148 (91%)	15 (9%)	0	100	100
26	CD	376/504 (75%)	354 (94%)	21 (6%)	1 (0%)	41	74
27	CE	434/511 (85%)	404 (93%)	30 (7%)	0	100	100
28	CF	119/126 (94%)	112 (94%)	7 (6%)	0	100	100
28	CG	119/126 (94%)	112 (94%)	7 (6%)	0	100	100
29	CH	461/573 (80%)	416 (90%)	44 (10%)	1 (0%)	47	79
30	CI	171/183 (93%)	159 (93%)	12 (7%)	0	100	100
31	CJ	252/290 (87%)	220 (87%)	32 (13%)	0	100	100
32	CK	214/593 (36%)	198 (92%)	16 (8%)	0	100	100
33	CL	796/1183 (67%)	723 (91%)	73 (9%)	0	100	100
34	CM	358/367 (98%)	332 (93%)	26 (7%)	0	100	100
35	CN	221/297 (74%)	212 (96%)	9 (4%)	0	100	100
36	JD	793/1267 (63%)	714 (90%)	77 (10%)	2 (0%)	41	74
37	JF	212/252 (84%)	207 (98%)	5 (2%)	0	100	100
37	JG	226/252 (90%)	218 (96%)	8 (4%)	0	100	100
38	JH	257/483 (53%)	250 (97%)	7 (3%)	0	100	100
39	JI	263/1729 (15%)	251 (95%)	12 (5%)	0	100	100
40	JL	281/318 (88%)	269 (96%)	12 (4%)	0	100	100
41	JM	130/217 (60%)	119 (92%)	11 (8%)	0	100	100
42	JP	457/489 (94%)	410 (90%)	47 (10%)	0	100	100
43	Db	79/82 (96%)	72 (91%)	7 (9%)	0	100	100
44	JJ	195/274 (71%)	180 (92%)	15 (8%)	0	100	100
45	DE	244/261 (94%)	231 (95%)	13 (5%)	0	100	100
46	DF	211/225 (94%)	190 (90%)	21 (10%)	0	100	100
47	DG	216/236 (92%)	201 (93%)	15 (7%)	0	100	100
48	DH	166/190 (87%)	150 (90%)	16 (10%)	0	100	100
49	DI	173/200 (86%)	162 (94%)	11 (6%)	0	100	100
50	DJ	183/197 (93%)	168 (92%)	15 (8%)	0	100	100
51	DL	138/156 (88%)	131 (95%)	7 (5%)	0	100	100
52	DN	148/151 (98%)	141 (95%)	7 (5%)	0	100	100
53	DO	125/137 (91%)	110 (88%)	15 (12%)	0	100	100

*Continued on next page...*



Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
54	DQ	123/143 (86%)	113 (92%)	10 (8%)	0	100	100
55	DS	99/146 (68%)	91 (92%)	8 (8%)	0	100	100
56	DT	141/144 (98%)	129 (92%)	12 (8%)	0	100	100
57	DW	127/130 (98%)	109 (86%)	18 (14%)	0	100	100
58	DX	141/145 (97%)	125 (89%)	16 (11%)	0	100	100
59	DY	132/135 (98%)	126 (96%)	6 (4%)	0	100	100
60	Dc	61/67 (91%)	56 (92%)	5 (8%)	0	100	100
65	EB	297/305 (97%)	274 (92%)	21 (7%)	2 (1%)	22	60
66	EC	241/246 (98%)	224 (93%)	17 (7%)	0	100	100
67	ED	308/394 (78%)	283 (92%)	24 (8%)	1 (0%)	41	74
68	EE	222/223 (100%)	209 (94%)	13 (6%)	0	100	100
69	EF	264/265 (100%)	250 (95%)	14 (5%)	0	100	100
70	EG	209/250 (84%)	192 (92%)	17 (8%)	0	100	100
71	EH	235/240 (98%)	217 (92%)	18 (8%)	0	100	100
72	EI	287/359 (80%)	262 (91%)	25 (9%)	0	100	100
73	EJ	214/292 (73%)	198 (92%)	16 (8%)	0	100	100
74	EK	965/1001 (96%)	939 (97%)	25 (3%)	1 (0%)	51	83
75	EN	959/1073 (89%)	891 (93%)	64 (7%)	4 (0%)	34	70
All	All	27236/36685 (74%)	25138 (92%)	2082 (8%)	16 (0%)	54	83

All (16) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
36	JD	1019	GLU
75	EN	615	VAL
75	EN	617	SER
10	UH	309	PRO
29	CH	552	TRP
36	JD	1018	LYS
13	UK	11	LYS
65	EB	181	GLU
65	EB	182	ARG
75	EN	873	SER
22	UT	1596	LYS
67	ED	337	GLU
26	CD	241	LEU

Continued on next page...

*Continued from previous page...*

Mol	Chain	Res	Type
74	EK	68	PRO
22	UT	1382	PRO
75	EN	616	ILE

### 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 PDB entries followed by that with respect to all EM entries.

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	
1	CA	202/240 (84%)	202 (100%)	0	100	100
1	CB	192/240 (80%)	192 (100%)	0	100	100
2	DA	212/224 (95%)	211 (100%)	1 (0%)	88	94
3	UA	695/812 (86%)	693 (100%)	2 (0%)	92	96
4	UB	382/732 (52%)	381 (100%)	1 (0%)	92	96
5	UC	74/538 (14%)	74 (100%)	0	100	100
6	UD	604/713 (85%)	603 (100%)	1 (0%)	93	97
7	UE	428/574 (75%)	426 (100%)	2 (0%)	88	94
8	UF	277/414 (67%)	273 (99%)	4 (1%)	67	81
9	UG	405/480 (84%)	402 (99%)	3 (1%)	84	91
10	UH	125/657 (19%)	122 (98%)	3 (2%)	49	71
11	UI	83/533 (16%)	81 (98%)	2 (2%)	49	71
12	UJ	1031/1633 (63%)	1027 (100%)	4 (0%)	91	95
13	UK	207/234 (88%)	207 (100%)	0	100	100
14	UL	690/832 (83%)	689 (100%)	1 (0%)	93	97
15	UM	668/719 (93%)	666 (100%)	2 (0%)	92	96
16	UN	183/808 (23%)	183 (100%)	0	100	100
17	UO	437/454 (96%)	435 (100%)	2 (0%)	88	94
18	UP	57/196 (29%)	55 (96%)	2 (4%)	36	64
19	UQ	756/826 (92%)	753 (100%)	3 (0%)	91	95
20	UR	424/529 (80%)	423 (100%)	1 (0%)	93	97

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
21	US	332/506 (66%)	328 (99%)	4 (1%)	71	84
22	UT	2134/2307 (92%)	2125 (100%)	9 (0%)	91	95
23	UU	768/819 (94%)	766 (100%)	2 (0%)	92	96
24	UV	988/1125 (88%)	984 (100%)	4 (0%)	91	95
25	UX	148/169 (88%)	146 (99%)	2 (1%)	67	81
26	CD	326/435 (75%)	325 (100%)	1 (0%)	92	96
27	CE	352/433 (81%)	350 (99%)	2 (1%)	86	92
28	CF	100/104 (96%)	85 (85%)	15 (15%)	3	18
28	CG	100/104 (96%)	85 (85%)	15 (15%)	3	18
29	CH	407/503 (81%)	407 (100%)	0	100	100
30	CI	165/172 (96%)	165 (100%)	0	100	100
31	CJ	227/258 (88%)	227 (100%)	0	100	100
32	CK	201/535 (38%)	201 (100%)	0	100	100
33	CL	710/1039 (68%)	707 (100%)	3 (0%)	91	95
34	CM	307/312 (98%)	307 (100%)	0	100	100
35	CN	209/274 (76%)	207 (99%)	2 (1%)	76	86
36	JD	724/1140 (64%)	718 (99%)	6 (1%)	81	89
37	JF	195/222 (88%)	195 (100%)	0	100	100
37	JG	206/222 (93%)	204 (99%)	2 (1%)	76	86
40	JL	255/283 (90%)	254 (100%)	1 (0%)	91	95
41	JM	125/200 (62%)	124 (99%)	1 (1%)	81	89
42	JP	416/443 (94%)	416 (100%)	0	100	100
43	Db	70/71 (99%)	69 (99%)	1 (1%)	67	81
44	JJ	174/238 (73%)	174 (100%)	0	100	100
45	DE	210/222 (95%)	210 (100%)	0	100	100
46	DF	180/191 (94%)	180 (100%)	0	100	100
47	DG	187/201 (93%)	187 (100%)	0	100	100
48	DH	151/170 (89%)	151 (100%)	0	100	100
49	DI	142/161 (88%)	141 (99%)	1 (1%)	84	91
50	DJ	158/166 (95%)	158 (100%)	0	100	100
51	DL	125/137 (91%)	125 (100%)	0	100	100

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
52	DN	127/128 (99%)	127 (100%)	0	100	100
53	DO	90/105 (86%)	90 (100%)	0	100	100
54	DQ	104/119 (87%)	104 (100%)	0	100	100
55	DS	96/129 (74%)	96 (100%)	0	100	100
56	DT	115/116 (99%)	114 (99%)	1 (1%)	78	88
57	DW	110/111 (99%)	110 (100%)	0	100	100
58	DX	118/120 (98%)	118 (100%)	0	100	100
59	DY	112/113 (99%)	112 (100%)	0	100	100
60	Dc	56/60 (93%)	56 (100%)	0	100	100
All	All	19852/26551 (75%)	19746 (100%)	106 (0%)	89	94

All (106) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	DA	55	LYS
3	UA	87	ARG
3	UA	306	ASN
4	UB	97	ARG
6	UD	461	LYS
7	UE	293	ASN
7	UE	368	ASN
8	UF	44	ASN
8	UF	266	ARG
8	UF	288	LYS
8	UF	299	LYS
9	UG	244	ASN
9	UG	274	ARG
9	UG	455	ARG
10	UH	664	LYS
10	UH	671	ARG
10	UH	711	ARG
11	UI	457	LYS
11	UI	480	LYS
12	UJ	549	LYS
12	UJ	617	LYS
12	UJ	645	ARG
12	UJ	710	LYS
14	UL	811	ARG
15	UM	141	LYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
15	UM	487	ARG
17	UO	150	ARG
17	UO	434	ARG
18	UP	161	LYS
18	UP	177	ARG
19	UQ	366	ASN
19	UQ	432	ARG
19	UQ	648	LYS
20	UR	440	ASN
21	US	183	LYS
21	US	284	ARG
21	US	411	ASN
21	US	489	LYS
22	UT	372	LYS
22	UT	449	ARG
22	UT	490	LYS
22	UT	503	ARG
22	UT	735	ARG
22	UT	1427	ASN
22	UT	1429	LYS
22	UT	1468	ARG
22	UT	1743	LYS
23	UU	19	LYS
23	UU	903	GLN
24	UV	712	ASN
24	UV	1094	LYS
24	UV	1197	ARG
24	UV	1199	ASN
25	UX	132	HIS
25	UX	156	ASN
26	CD	388	ARG
27	CE	80	LYS
27	CE	215	ARG
28	CF	5	ASN
28	CF	9	PHE
28	CF	19	GLN
28	CF	26	GLN
28	CF	43	THR
28	CF	44	LEU
28	CF	49	SER
28	CF	50	GLU
28	CF	58	CYS

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
28	CF	63	ILE
28	CF	72	GLU
28	CF	102	ILE
28	CF	111	LYS
28	CF	114	ILE
28	CF	117	VAL
28	CG	5	ASN
28	CG	9	PHE
28	CG	19	GLN
28	CG	26	GLN
28	CG	43	THR
28	CG	44	LEU
28	CG	49	SER
28	CG	50	GLU
28	CG	58	CYS
28	CG	63	ILE
28	CG	72	GLU
28	CG	102	ILE
28	CG	111	LYS
28	CG	114	ILE
28	CG	117	VAL
33	CL	92	ARG
33	CL	725	LYS
33	CL	973	ARG
35	CN	41	ARG
35	CN	150	LYS
36	JD	121	LYS
36	JD	571	LYS
36	JD	641	LYS
36	JD	749	LYS
36	JD	1026	LYS
36	JD	1109	ARG
37	JG	88	ARG
37	JG	106	LYS
40	JL	86	MET
41	JM	76	LYS
43	Db	29	ARG
49	DI	194	ARG
56	DT	134	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (106) such sidechains are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
2	DA	124	ASN
3	UA	297	GLN
4	UB	438	ASN
4	UB	704	ASN
6	UD	136	ASN
6	UD	306	GLN
7	UE	293	ASN
7	UE	368	ASN
7	UE	443	GLN
7	UE	458	ASN
7	UE	495	GLN
8	UF	175	ASN
9	UG	115	HIS
9	UG	124	HIS
9	UG	321	ASN
12	UJ	86	GLN
12	UJ	233	GLN
12	UJ	311	ASN
12	UJ	399	GLN
12	UJ	559	ASN
12	UJ	673	ASN
12	UJ	715	HIS
12	UJ	750	ASN
12	UJ	1694	HIS
13	UK	68	HIS
14	UL	411	ASN
14	UL	553	ASN
14	UL	596	ASN
14	UL	651	GLN
14	UL	657	GLN
14	UL	798	ASN
14	UL	871	GLN
14	UL	873	ASN
15	UM	240	ASN
15	UM	387	HIS
15	UM	418	ASN
15	UM	585	ASN
15	UM	656	GLN
17	UO	133	HIS
17	UO	213	GLN
17	UO	252	ASN
17	UO	493	HIS
19	UQ	169	GLN

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
19	UQ	204	ASN
19	UQ	332	GLN
19	UQ	412	ASN
19	UQ	465	ASN
20	UR	306	ASN
21	US	174	ASN
21	US	256	ASN
22	UT	39	HIS
22	UT	112	GLN
22	UT	115	HIS
22	UT	418	GLN
22	UT	866	GLN
22	UT	955	ASN
22	UT	1098	ASN
22	UT	1366	ASN
22	UT	1463	GLN
22	UT	2030	ASN
22	UT	2052	GLN
23	UU	35	ASN
23	UU	135	ASN
23	UU	178	ASN
23	UU	364	HIS
23	UU	490	GLN
23	UU	631	ASN
24	UV	226	HIS
24	UV	607	HIS
24	UV	1023	ASN
24	UV	1137	ASN
24	UV	1199	ASN
25	UX	148	HIS
26	CD	302	ASN
27	CE	61	ASN
28	CF	18	GLN
28	CF	32	GLN
28	CG	18	GLN
28	CG	32	GLN
29	CH	69	GLN
29	CH	463	GLN
29	CH	570	GLN
30	CI	39	GLN
30	CI	144	ASN
31	CJ	164	GLN

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
31	CJ	226	ASN
36	JD	30	GLN
36	JD	366	ASN
36	JD	469	HIS
36	JD	726	ASN
36	JD	752	GLN
36	JD	1057	ASN
37	JG	53	HIS
37	JG	94	GLN
42	JP	134	ASN
42	JP	157	ASN
42	JP	260	GLN
44	JJ	218	ASN
45	DE	36	HIS
46	DF	224	ASN
47	DG	56	ASN
49	DI	84	HIS
49	DI	111	GLN
55	DS	104	ASN
57	DW	24	GLN
57	DW	64	GLN

### 5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
61	D2	76/81 (93%)	23 (30%)	0
62	D3	1387/1802 (76%)	387 (27%)	25 (1%)
63	D4	214/333 (64%)	58 (27%)	4 (1%)
64	EA	21/22 (95%)	15 (71%)	0
All	All	1698/2238 (75%)	483 (28%)	29 (1%)

All (483) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
61	D2	6	A
61	D2	8	A
61	D2	11	A
61	D2	14	U
61	D2	15	G
61	D2	58	U
61	D2	63	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
61	D2	64	U
61	D2	65	U
61	D2	66	C
61	D2	68	U
61	D2	69	U
61	D2	81	A
61	D2	82	A
61	D2	83	U
61	D2	84	G
61	D2	89	C
61	D2	90	G
61	D2	290	G
61	D2	464	G
61	D2	468	A
61	D2	469	C
61	D2	470	U
62	D3	4	C
62	D3	5	U
62	D3	8	U
62	D3	22	A
62	D3	23	G
62	D3	24	U
62	D3	25	C
62	D3	26	A
62	D3	34	G
62	D3	35	U
62	D3	42	G
62	D3	43	A
62	D3	45	U
62	D3	46	A
62	D3	47	A
62	D3	57	G
62	D3	60	U
62	D3	65	A
62	D3	66	U
62	D3	68	A
62	D3	72	A
62	D3	73	U
62	D3	74	U
62	D3	75	U
62	D3	77	U
62	D3	95	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	104	A
62	D3	114	C
62	D3	115	G
62	D3	126	A
62	D3	127	G
62	D3	129	U
62	D3	133	U
62	D3	141	U
62	D3	142	G
62	D3	145	A
62	D3	153	G
62	D3	155	U
62	D3	156	A
62	D3	159	U
62	D3	166	C
62	D3	177	U
62	D3	185	U
62	D3	186	C
62	D3	187	G
62	D3	191	C
62	D3	192	U
62	D3	194	U
62	D3	195	G
62	D3	196	G
62	D3	197	A
62	D3	201	G
62	D3	203	U
62	D3	204	G
62	D3	205	U
62	D3	216	U
62	D3	217	A
62	D3	233	C
62	D3	234	G
62	D3	236	A
62	D3	237	C
62	D3	250	C
62	D3	261	U
62	D3	265	A
62	D3	270	C
62	D3	271	A
62	D3	273	G
62	D3	275	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	276	C
62	D3	277	U
62	D3	278	U
62	D3	279	G
62	D3	280	U
62	D3	281	G
62	D3	288	A
62	D3	294	C
62	D3	299	A
62	D3	302	U
62	D3	314	C
62	D3	316	A
62	D3	322	G
62	D3	333	A
62	D3	337	G
62	D3	338	C
62	D3	344	A
62	D3	352	A
62	D3	359	A
62	D3	360	A
62	D3	361	C
62	D3	376	C
62	D3	380	U
62	D3	390	G
62	D3	391	A
62	D3	393	C
62	D3	395	U
62	D3	399	A
62	D3	400	A
62	D3	401	A
62	D3	402	C
62	D3	404	G
62	D3	407	A
62	D3	417	A
62	D3	419	G
62	D3	422	G
62	D3	423	G
62	D3	424	C
62	D3	425	A
62	D3	426	G
62	D3	428	A
62	D3	431	C

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	434	G
62	D3	435	C
62	D3	437	A
62	D3	438	A
62	D3	439	U
62	D3	444	C
62	D3	445	A
62	D3	446	A
62	D3	448	C
62	D3	453	U
62	D3	460	A
62	D3	461	G
62	D3	464	A
62	D3	467	G
62	D3	468	A
62	D3	475	A
62	D3	477	A
62	D3	480	G
62	D3	487	G
62	D3	494	U
62	D3	496	G
62	D3	501	U
62	D3	505	A
62	D3	506	A
62	D3	518	A
62	D3	519	C
62	D3	527	A
62	D3	529	A
62	D3	532	U
62	D3	534	A
62	D3	539	G
62	D3	540	G
62	D3	541	A
62	D3	542	A
62	D3	545	A
62	D3	548	G
62	D3	557	G
62	D3	562	G
62	D3	563	U
62	D3	564	G
62	D3	565	C
62	D3	570	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	572	C
62	D3	573	C
62	D3	576	G
62	D3	579	A
62	D3	580	A
62	D3	582	U
62	D3	583	C
62	D3	584	C
62	D3	585	A
62	D3	587	C
62	D3	594	A
62	D3	595	G
62	D3	603	U
62	D3	608	U
62	D3	611	U
62	D3	616	G
62	D3	619	A
62	D3	622	A
62	D3	623	A
62	D3	643	G
62	D3	655	G
62	D3	656	G
62	D3	657	U
62	D3	658	C
62	D3	677	G
62	D3	678	A
62	D3	685	A
62	D3	691	C
62	D3	694	U
62	D3	700	C
62	D3	702	G
62	D3	707	A
62	D3	708	C
62	D3	709	C
62	D3	712	G
62	D3	714	G
62	D3	716	C
62	D3	717	C
62	D3	718	U
62	D3	719	U
62	D3	720	G
62	D3	721	U

*Continued on next page...*



*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	722	G
62	D3	723	G
62	D3	726	C
62	D3	732	G
62	D3	738	G
62	D3	754	A
62	D3	766	U
62	D3	771	A
62	D3	774	A
62	D3	775	G
62	D3	780	A
62	D3	781	U
62	D3	782	U
62	D3	783	G
62	D3	786	C
62	D3	787	G
62	D3	793	A
62	D3	795	U
62	D3	803	A
62	D3	826	U
62	D3	827	C
62	D3	828	U
62	D3	829	A
62	D3	831	U
62	D3	848	C
62	D3	849	C
62	D3	850	A
62	D3	851	U
62	D3	852	C
62	D3	854	U
62	D3	855	A
62	D3	863	A
62	D3	864	U
62	D3	865	A
62	D3	873	U
62	D3	875	G
62	D3	881	A
62	D3	886	U
62	D3	898	A
62	D3	899	G
62	D3	900	A
62	D3	906	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	908	U
62	D3	910	C
62	D3	911	U
62	D3	912	U
62	D3	913	G
62	D3	914	G
62	D3	915	A
62	D3	921	U
62	D3	926	A
62	D3	930	A
62	D3	932	U
62	D3	933	A
62	D3	934	C
62	D3	935	U
62	D3	940	A
62	D3	942	G
62	D3	951	A
62	D3	960	U
62	D3	966	A
62	D3	970	A
62	D3	990	C
62	D3	992	A
62	D3	993	A
62	D3	998	A
62	D3	1000	C
62	D3	1001	A
62	D3	1003	A
62	D3	1006	C
62	D3	1007	C
62	D3	1020	A
62	D3	1024	U
62	D3	1026	A
62	D3	1028	C
62	D3	1031	U
62	D3	1032	G
62	D3	1037	C
62	D3	1039	A
62	D3	1042	G
62	D3	1043	A
62	D3	1058	U
62	D3	1059	U
62	D3	1061	A

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	1062	A
62	D3	1063	U
62	D3	1064	G
62	D3	1072	C
62	D3	1073	G
62	D3	1076	A
62	D3	1080	U
62	D3	1081	A
62	D3	1082	C
62	D3	1092	A
62	D3	1093	A
62	D3	1096	C
62	D3	1097	U
62	D3	1099	U
62	D3	1100	G
62	D3	1113	A
62	D3	1114	G
62	D3	1116	A
62	D3	1119	G
62	D3	1122	G
62	D3	1128	C
62	D3	1131	A
62	D3	1139	A
62	D3	1140	G
62	D3	1141	G
62	D3	1144	U
62	D3	1145	U
62	D3	1158	C
62	D3	1160	A
62	D3	1177	C
62	D3	1471	A
62	D3	1473	U
62	D3	1478	G
62	D3	1481	C
62	D3	1482	C
62	D3	1485	C
62	D3	1487	A
62	D3	1488	G
62	D3	1494	C
62	D3	1496	U
62	D3	1500	C
62	D3	1506	G

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	1524	A
62	D3	1527	C
62	D3	1529	C
62	D3	1534	G
62	D3	1536	G
62	D3	1537	C
62	D3	1538	U
62	D3	1539	G
62	D3	1540	G
62	D3	1542	G
62	D3	1556	A
62	D3	1557	U
62	D3	1558	U
62	D3	1569	A
62	D3	1574	G
62	D3	1577	A
62	D3	1584	G
62	D3	1590	G
62	D3	1595	U
62	D3	1600	A
62	D3	1601	G
62	D3	1602	C
62	D3	1618	C
62	D3	1619	C
62	D3	1621	U
62	D3	1622	G
62	D3	1628	U
62	D3	1629	G
62	D3	1630	U
62	D3	1631	A
62	D3	1633	A
62	D3	1638	G
62	D3	1639	C
62	D3	1645	G
62	D3	1651	A
62	D3	1655	A
62	D3	1657	U
62	D3	1658	G
62	D3	1666	U
62	D3	1671	A
62	D3	1680	G
62	D3	1682	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	1683	C
62	D3	1684	U
62	D3	1693	A
62	D3	1695	G
62	D3	1697	G
62	D3	1700	C
62	D3	1702	A
62	D3	1703	C
62	D3	1706	C
62	D3	1709	C
62	D3	1710	U
62	D3	1711	C
62	D3	1712	A
62	D3	1735	U
62	D3	1736	G
62	D3	1741	U
62	D3	1746	A
62	D3	1750	A
62	D3	1780	G
62	D3	1781	A
62	D3	1782	A
62	D3	1783	C
62	D3	1792	G
62	D3	1794	A
62	D3	1796	C
63	D4	2	U
63	D4	3	C
63	D4	4	G
63	D4	13	C
63	D4	14	A
63	D4	18	G
63	D4	22	A
63	D4	28	A
63	D4	29	U
63	D4	30	A
63	D4	31	G
63	D4	32	G
63	D4	33	A
63	D4	34	A
63	D4	35	U
63	D4	37	G
63	D4	38	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
63	D4	39	C
63	D4	46	U
63	D4	48	A
63	D4	63	C
63	D4	67	G
63	D4	70	U
63	D4	71	C
63	D4	72	C
63	D4	87	G
63	D4	88	U
63	D4	90	C
63	D4	91	C
63	D4	93	U
63	D4	94	A
63	D4	109	G
63	D4	110	A
63	D4	111	G
63	D4	115	G
63	D4	116	A
63	D4	118	A
63	D4	140	C
63	D4	141	U
63	D4	144	G
63	D4	145	U
63	D4	151	A
63	D4	155	U
63	D4	157	A
63	D4	158	G
63	D4	159	C
63	D4	177	U
63	D4	187	A
63	D4	188	A
63	D4	199	G
63	D4	205	G
63	D4	252	C
63	D4	254	A
63	D4	255	U
63	D4	324	U
63	D4	325	C
63	D4	329	C
63	D4	332	G
64	EA	161	U

*Continued on next page...*

*Continued from previous page...*

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
64	EA	162	U
64	EA	163	U
64	EA	164	A
64	EA	165	A
64	EA	166	A
64	EA	167	U
64	EA	169	U
64	EA	170	U
64	EA	171	U
64	EA	172	U
64	EA	175	U
64	EA	176	U
64	EA	177	U
64	EA	178	U

All (29) RNA pucker outliers are listed below:

<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
62	D3	34	G
62	D3	114	C
62	D3	155	U
62	D3	272	U
62	D3	278	U
62	D3	418	G
62	D3	540	G
62	D3	545	A
62	D3	583	C
62	D3	765	G
62	D3	782	U
62	D3	912	U
62	D3	997	G
62	D3	1057	U
62	D3	1058	U
62	D3	1063	U
62	D3	1096	C
62	D3	1115	U
62	D3	1481	C
62	D3	1568	C
62	D3	1573	A
62	D3	1600	A
62	D3	1620	C
62	D3	1657	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
62	D3	1670	G
63	D4	38	U
63	D4	143	G
63	D4	156	U
63	D4	157	A

## 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

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

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

Of 6 ligands modelled in this entry, 5 are monoatomic - leaving 1 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
77	GTP	CL	2001	78	26,34,34	1.43	3 (11%)	32,54,54	1.97	7 (21%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
77	GTP	CL	2001	78	-	7/18/38/38	0/3/3/3

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
77	CL	2001	GTP	C5-C6	-4.96	1.37	1.47
77	CL	2001	GTP	C5-C4	-2.21	1.37	1.43
77	CL	2001	GTP	O4'-C4'	-2.09	1.40	1.45

All (7) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
77	CL	2001	GTP	PA-O3A-PB	-5.41	114.25	132.83
77	CL	2001	GTP	PB-O3B-PG	-4.86	116.17	132.83
77	CL	2001	GTP	C5-C6-N1	3.47	120.08	113.95
77	CL	2001	GTP	C2-N1-C6	-3.38	118.87	125.10
77	CL	2001	GTP	C3'-C2'-C1'	3.25	105.87	100.98
77	CL	2001	GTP	C8-N7-C5	2.83	108.38	102.99
77	CL	2001	GTP	O6-C6-C5	-2.43	119.63	124.37

There are no chirality outliers.

All (7) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
77	CL	2001	GTP	C5'-O5'-PA-O1A
77	CL	2001	GTP	C5'-O5'-PA-O2A
77	CL	2001	GTP	C3'-C4'-C5'-O5'
77	CL	2001	GTP	O4'-C4'-C5'-O5'
77	CL	2001	GTP	PB-O3A-PA-O1A
77	CL	2001	GTP	PB-O3A-PA-O2A
77	CL	2001	GTP	C5'-O5'-PA-O3A

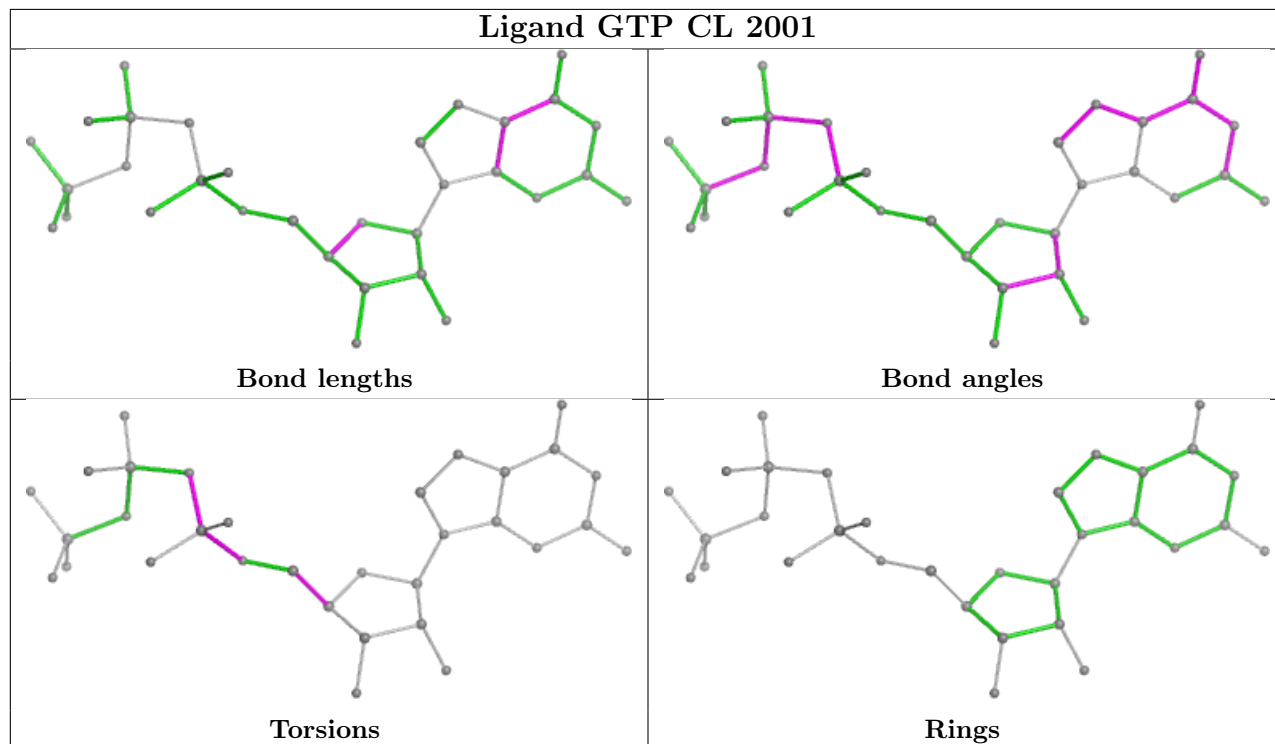
There are no ring outliers.

1 monomer is involved in 3 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
77	CL	2001	GTP	3	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and

any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

The following chains have linkage breaks:

Mol	Chain	Number of breaks
61	D2	4

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	D2	92:C	O3'	281:G	P	62.30
1	D2	292:A	O3'	463:A	P	45.10
1	D2	70:A	O3'	80:A	P	19.53
1	D2	24:U	O3'	56:G	P	14.66

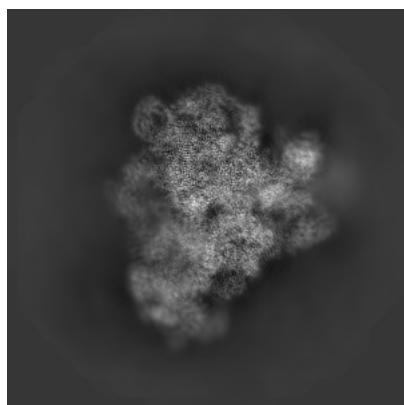
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-11808. These allow visual inspection of the internal detail of the map and identification of artifacts.

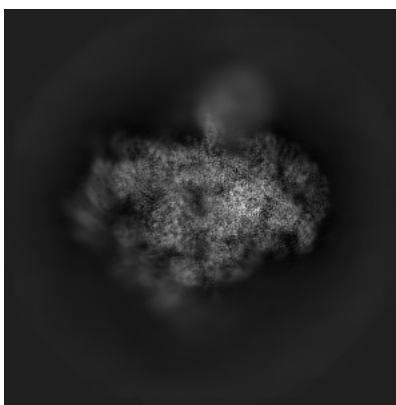
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 6.1 Orthogonal projections [i](#)

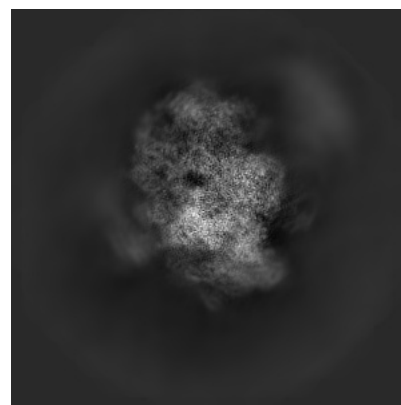
#### 6.1.1 Primary map



X



Y

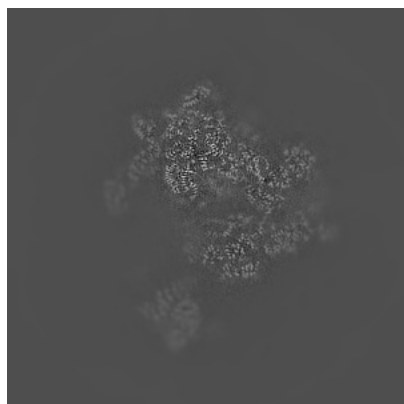


Z

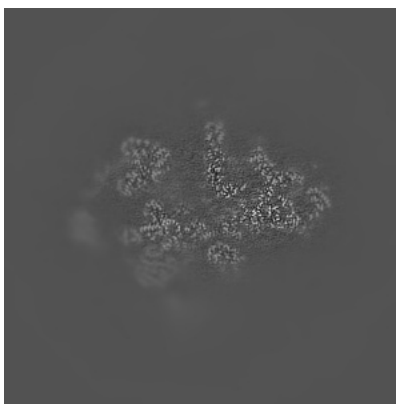
The images above show the map projected in three orthogonal directions.

### 6.2 Central slices [i](#)

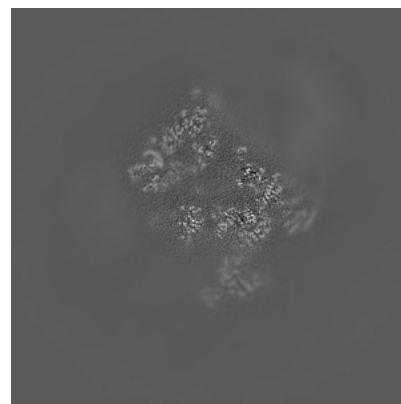
#### 6.2.1 Primary map



X Index: 270



Y Index: 270

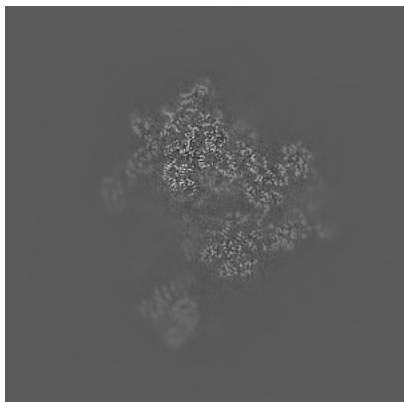


Z Index: 270

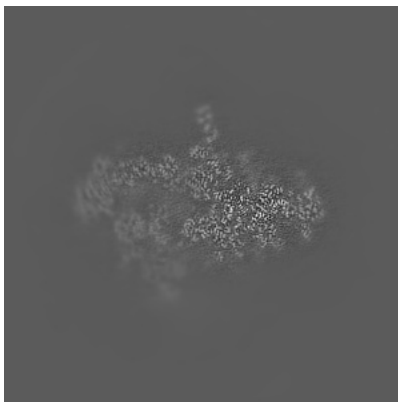
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

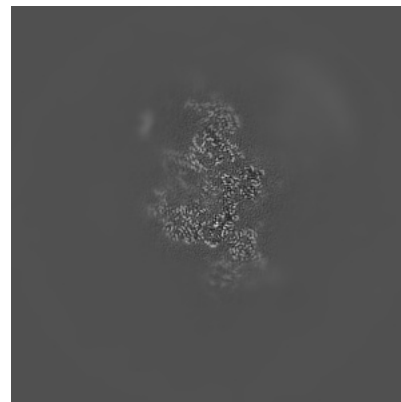
### 6.3.1 Primary map



X Index: 271



Y Index: 249

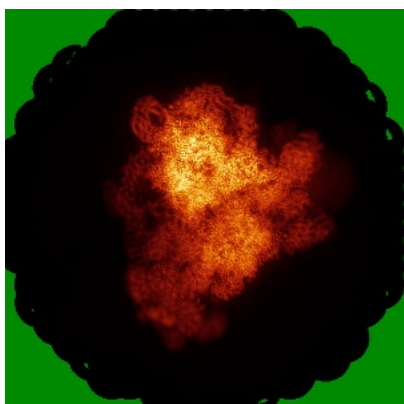


Z Index: 314

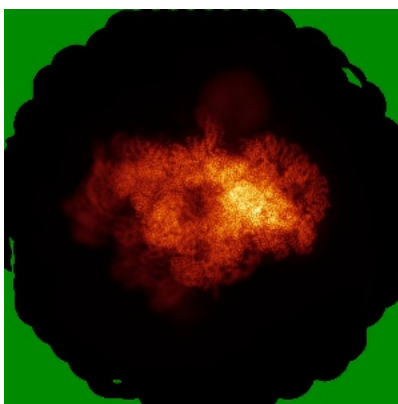
The images above show the largest variance slices of the map in three orthogonal directions.

## 6.4 Orthogonal standard-deviation projections (False-color) [i](#)

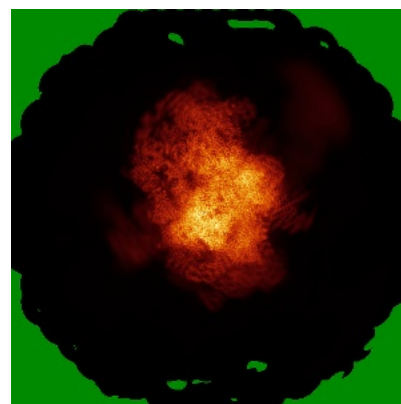
### 6.4.1 Primary map



X



Y

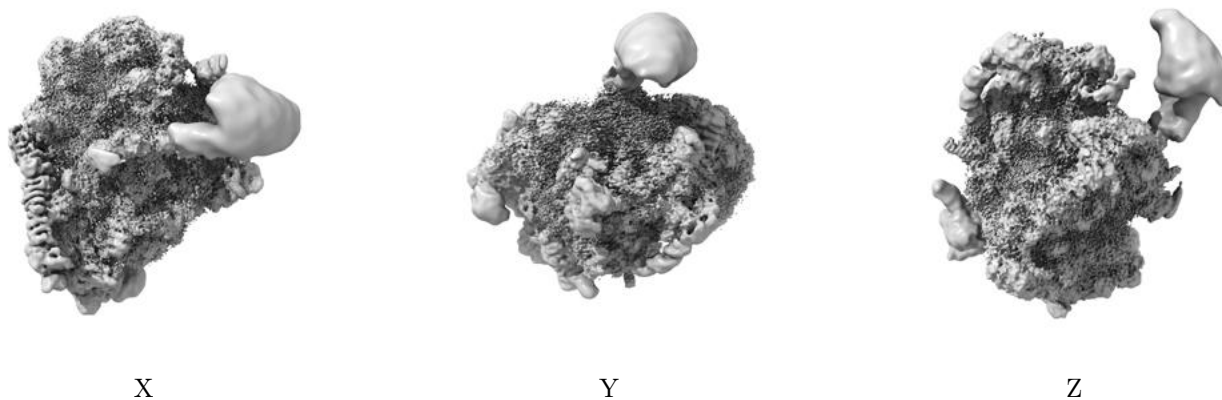


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

## 6.5 Orthogonal surface views [i](#)

### 6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.01. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

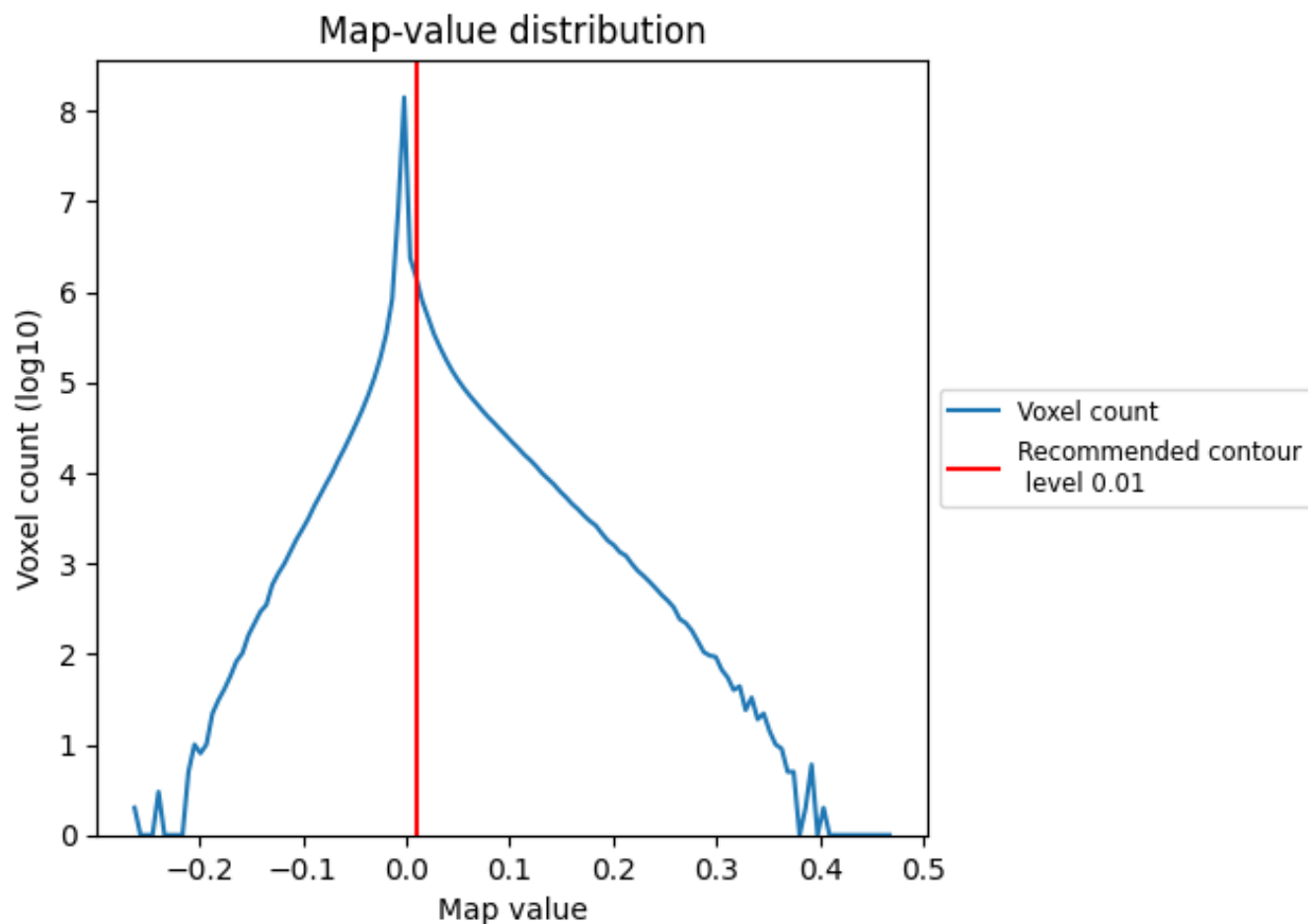
## 6.6 Mask visualisation [i](#)

This section was not generated. No masks/segmentation were deposited.

## 7 Map analysis [i](#)

This section contains the results of statistical analysis of the map.

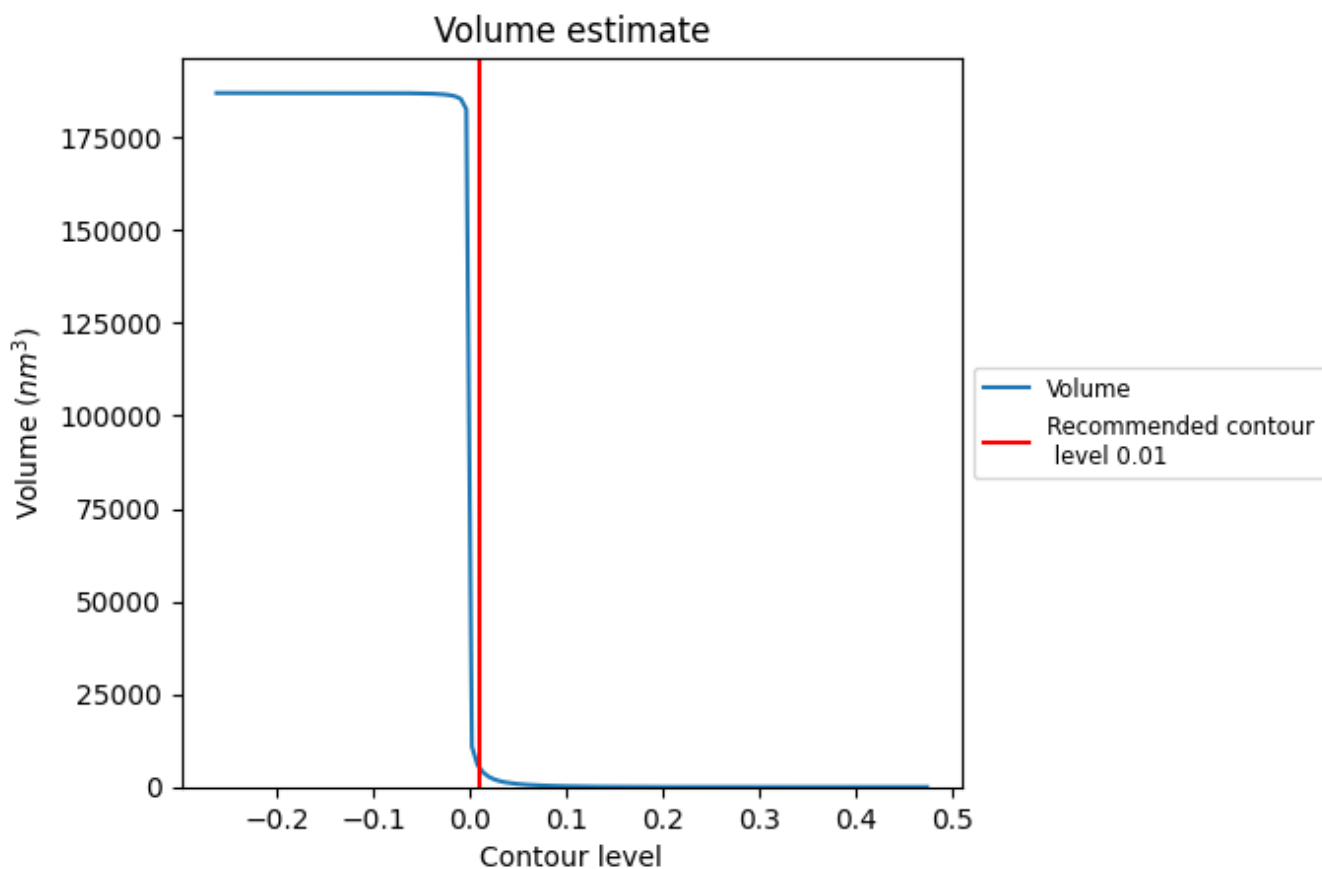
### 7.1 Map-value distribution [i](#)



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.



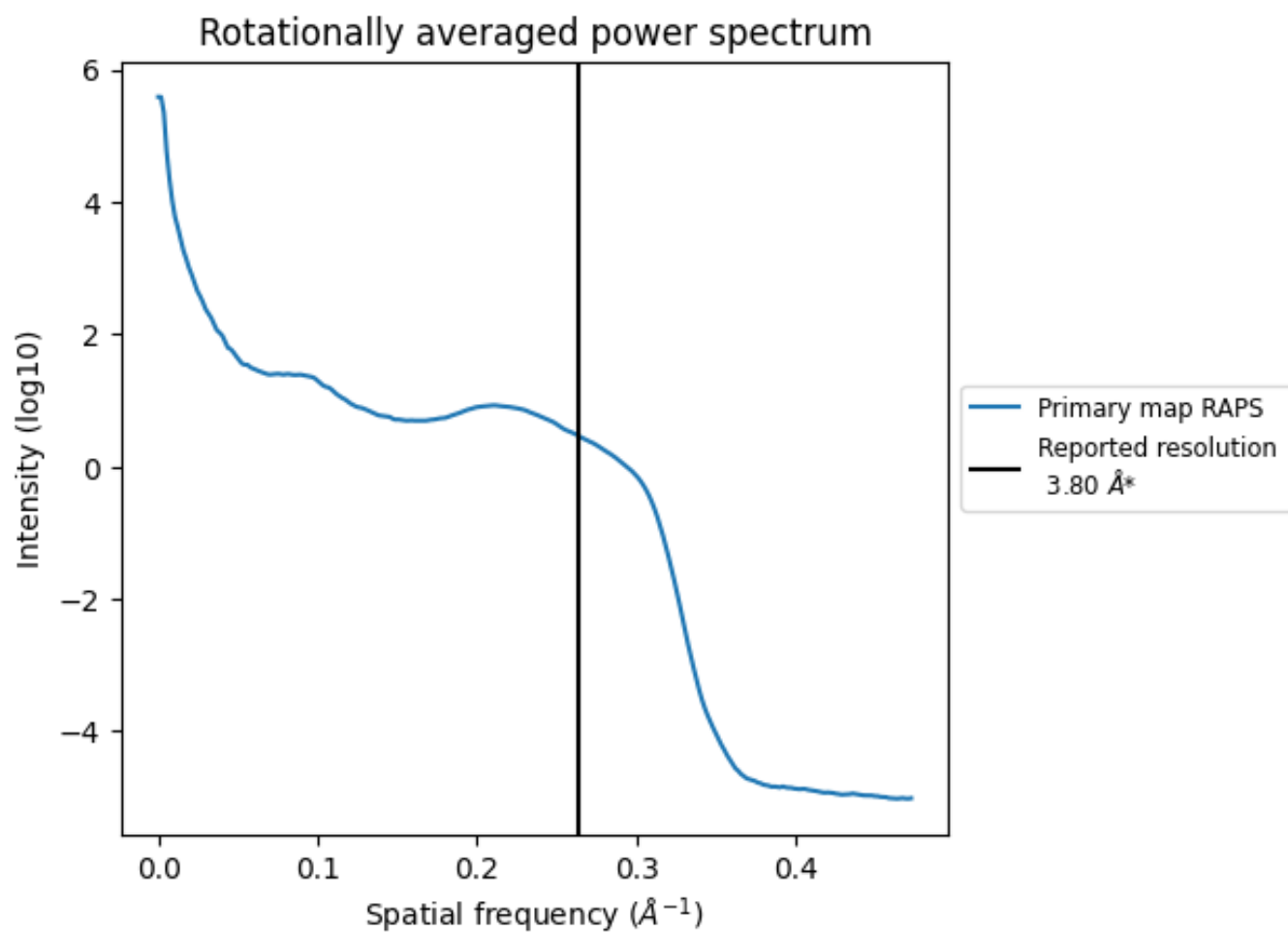
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is 5032  $\text{nm}^3$ ; this corresponds to an approximate mass of 4545 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

### 7.3 Rotationally averaged power spectrum [i](#)

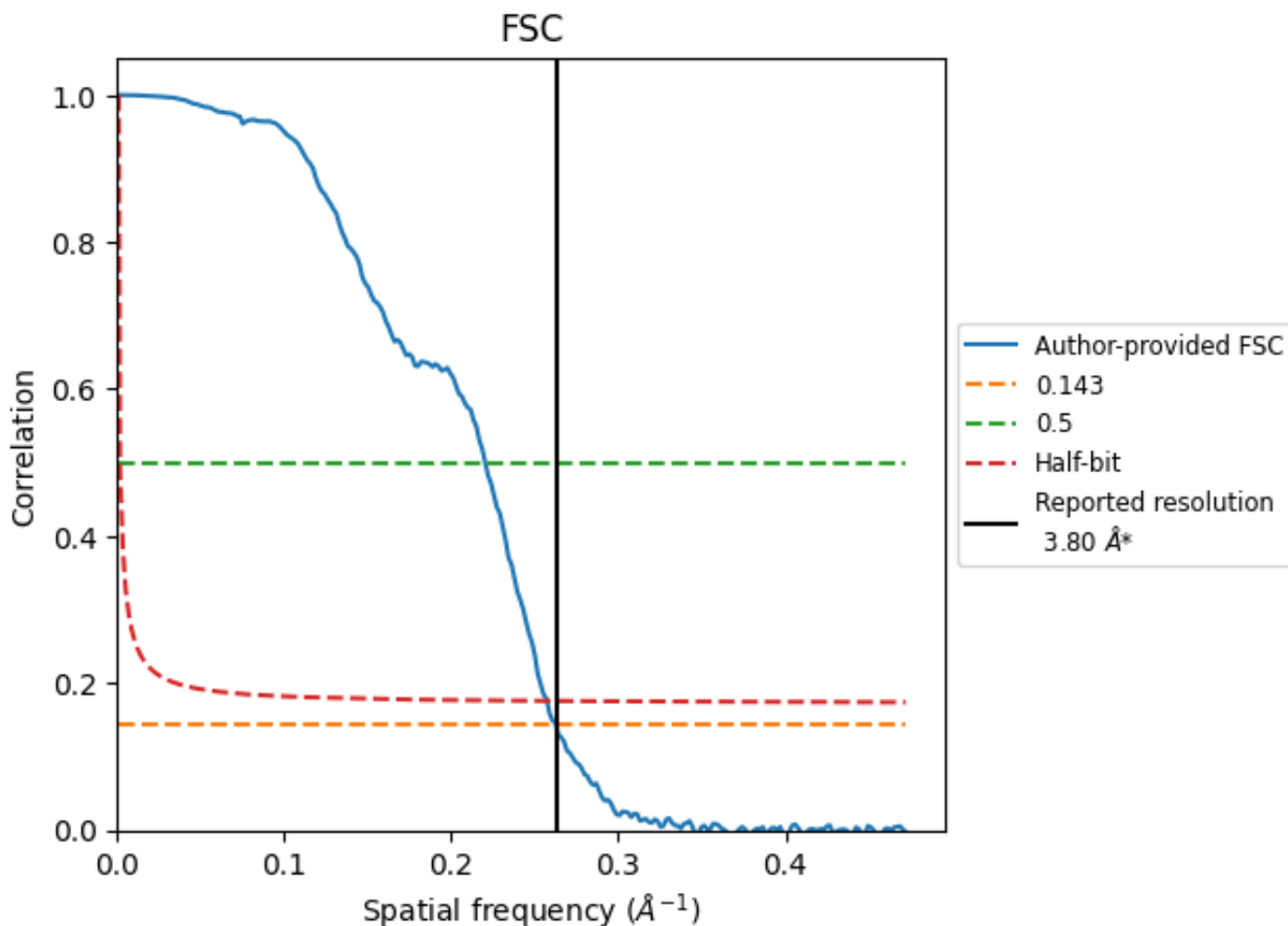


\*Reported resolution corresponds to spatial frequency of 0.263 Å<sup>-1</sup>

## 8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

### 8.1 FSC [i](#)



\*Reported resolution corresponds to spatial frequency of 0.263 Å<sup>-1</sup>

## 8.2 Resolution estimates [i](#)

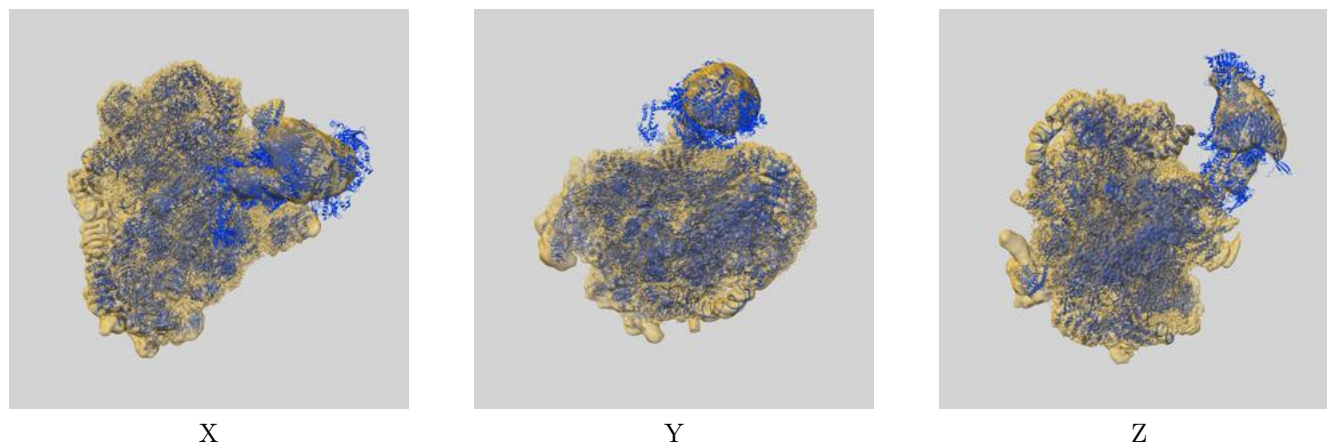
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.80	-	-
Author-provided FSC curve	3.81	4.54	3.89
Unmasked-calculated*	-	-	-

\*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

## 9 Map-model fit [i](#)

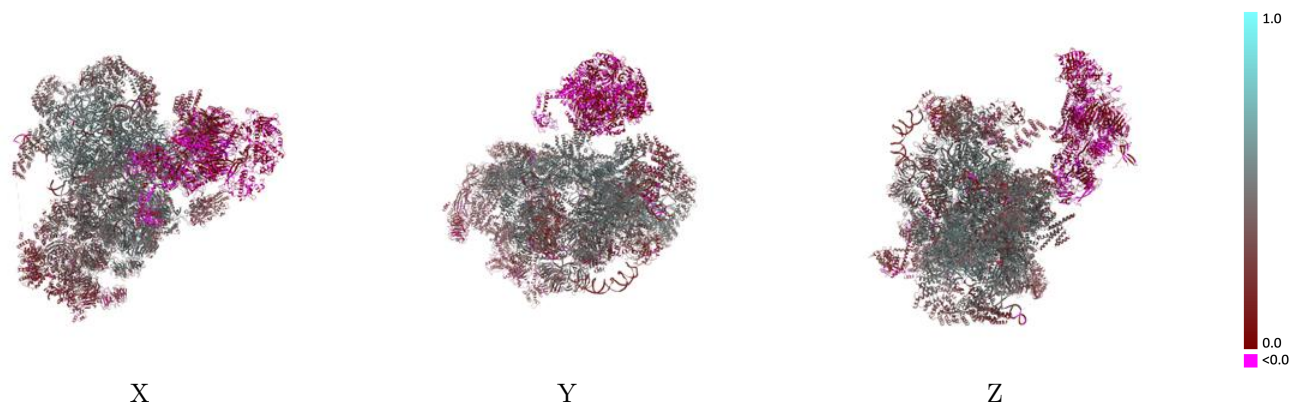
This section contains information regarding the fit between EMDB map EMD-11808 and PDB model 7AJU. Per-residue inclusion information can be found in section 3 on page 18.

### 9.1 Map-model overlay [i](#)



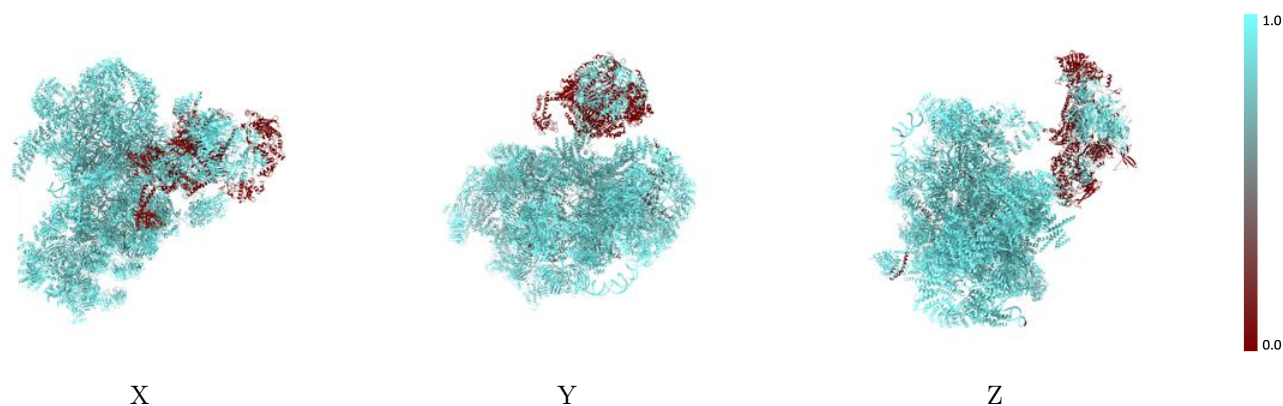
The images above show the 3D surface view of the map at the recommended contour level 0.01 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model [\(i\)](#)



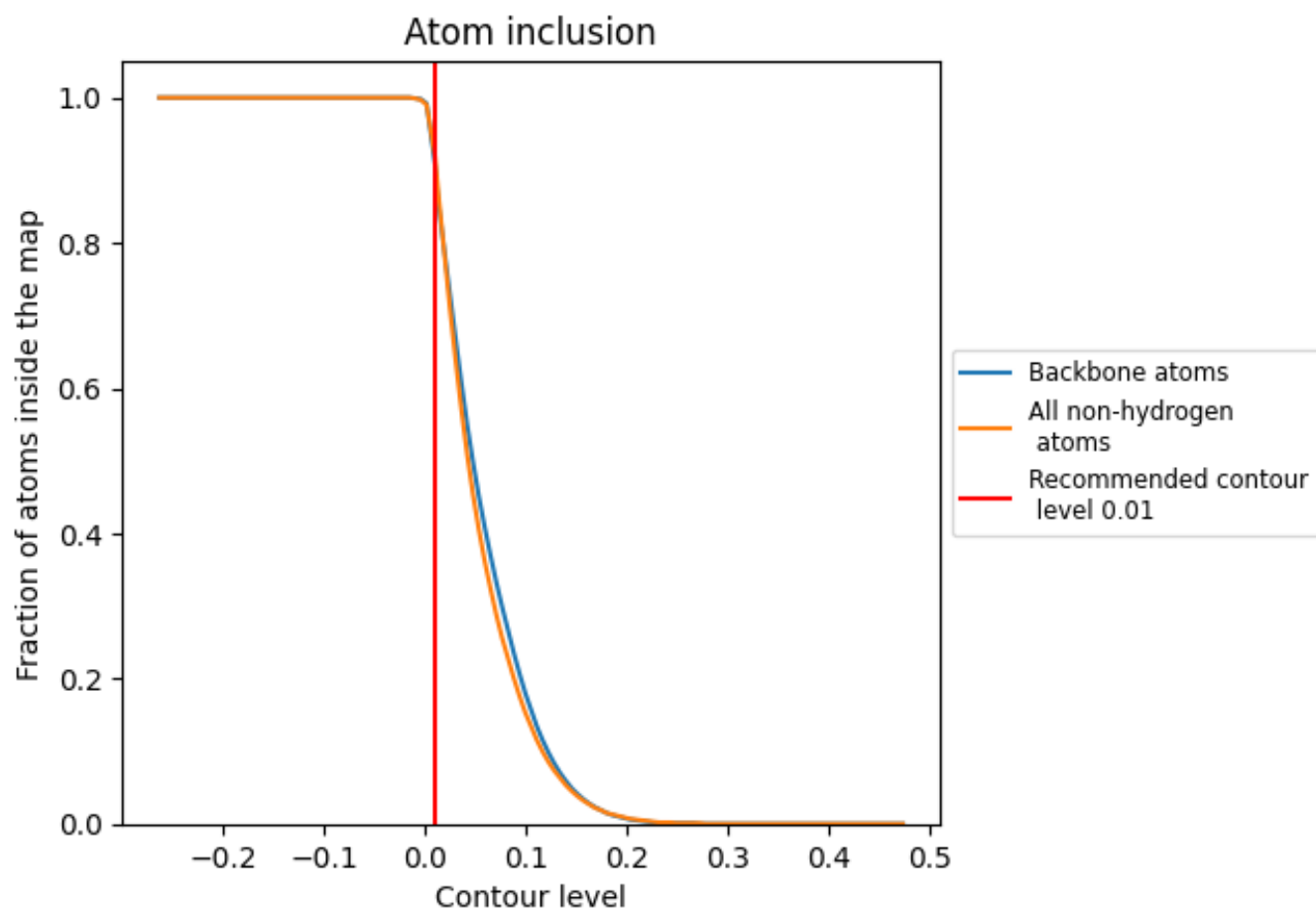
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

## 9.3 Atom inclusion mapped to coordinate model [\(i\)](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.01).

## 9.4 Atom inclusion [i](#)









































































At the recommended contour level, 91% of all backbone atoms, 92% of all non-hydrogen atoms, are inside the map.



## 9.5 Map-model fit summary





















































































The table lists the average atom inclusion at the recommended contour level (0.01) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9180	 0.3660
CA	 0.9820	 0.5320
CB	 0.9630	 0.3860
CD	 0.9740	 0.4510
CE	 0.9670	 0.3810
CF	 0.9510	 0.4100
CG	 0.9710	 0.5040
CH	 0.9900	 0.5070
CI	 0.9530	 0.4040
CJ	 0.9470	 0.4640
CK	 0.9780	 0.4530
CL	 0.9620	 0.4670
CM	 0.9870	 0.4770
CN	 0.9760	 0.3130
D2	 0.9290	 0.2450
D3	 0.9780	 0.4550
D4	 0.9470	 0.3430
DA	 0.9760	 0.5000
DE	 0.9900	 0.5770
DF	 0.9820	 0.4750
DG	 0.9930	 0.4920
DH	 0.9720	 0.4760
DI	 0.9870	 0.5300
DJ	 0.9830	 0.5540
DL	 0.9920	 0.5440
DN	 0.9760	 0.5150
DO	 0.9870	 0.5100
DQ	 0.9800	 0.4990
DS	 0.7790	 0.2510
DT	 0.7880	 0.3220
DW	 0.9780	 0.5690
DX	 0.9720	 0.5200
DY	 0.9820	 0.5460
Db	 0.9820	 0.5430
Dc	 0.9940	 0.4990







*Continued on next page...*

*Continued from previous page...*

Chain	Atom inclusion	Q-score
EA	 0.5550	 -0.0160
EB	 0.3590	 0.0030
EC	 0.5350	 0.0130
ED	 0.7980	 0.0450
EE	 0.8410	 0.0480
EF	 0.8530	 0.0380
EG	 0.8260	 0.0300
EH	 0.1750	 0.0420
EI	 0.5400	 0.0270
EJ	 0.1710	 0.0100
EK	 0.3440	 0.0230
EN	 0.2480	 0.0260
JD	 0.9160	 0.2530
JF	 0.9440	 0.1520
JG	 0.9410	 0.2340
JH	 0.9590	 0.1490
JI	 0.7860	 0.1720
JJ	 0.9760	 0.4860
JL	 0.9250	 0.3520
JM	 0.9550	 0.4290
JP	 0.9860	 0.5510
UA	 0.9790	 0.5040
UB	 0.9330	 0.1870
UC	 0.9690	 0.4960
UD	 0.9730	 0.3120
UE	 0.9530	 0.3570
UF	 0.9840	 0.4230
UG	 0.9810	 0.5010
UH	 0.9720	 0.1410
UI	 0.9690	 0.1760
UJ	 0.9340	 0.3300
UK	 0.9130	 0.3730
UL	 0.9840	 0.4080
UM	 0.9720	 0.4070
UN	 0.9770	 0.4800
UO	 0.9410	 0.2560
UP	 0.9330	 0.3080
UQ	 0.9640	 0.2520
UR	 0.9620	 0.4270
US	 0.9320	 0.1770
UT	 0.9780	 0.4140
UU	 0.9820	 0.4700

*Continued on next page...*

*Continued from previous page...*

Chain	Atom inclusion	Q-score
UV	 0.9740	 0.3420
UX	 0.9580	 0.5330