



Full wwPDB EM Validation Report ⓘ

Oct 7, 2024 – 12:25 pm BST

PDB ID : 8RS0
EMDB ID : EMD-19472
Title : Structure of RyR1 in detergent in primed state in complex with nanobody and FKBP
Authors : Li, C.; Efremov, R.G.
Deposited on : 2024-01-24
Resolution : 3.30 Å(reported)

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/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.dev113
Mogul : 1.8.4, CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.39

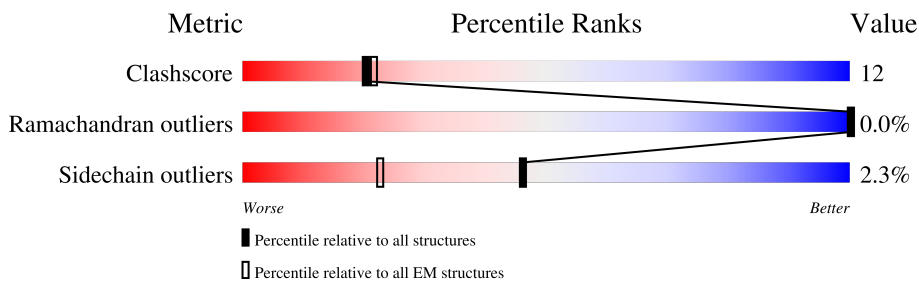
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.30 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.



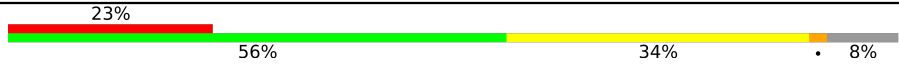

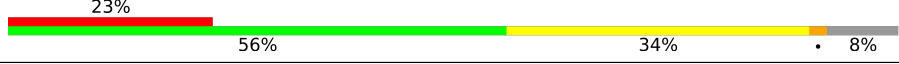
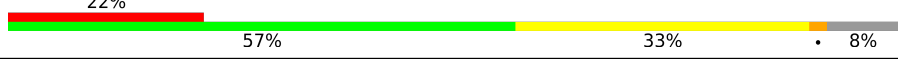
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

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 ≥ 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	A	107	
1	D	107	
1	H	107	
1	I	107	
2	B	5027	
2	E	5027	
2	G	5027	
2	J	5027	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	C	137	
3	F	137	
3	K	137	
3	M	137	

2 Entry composition [i](#)

There are 7 unique types of molecules in this entry. The entry contains 143570 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 Peptidyl-prolyl cis-trans isomerase FKBP1B.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	107	816	514	144	154	4	0	0
1	D	107	816	514	144	154	4	0	0
1	H	107	816	514	144	154	4	0	0
1	I	107	816	514	144	154	4	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	100	ASP	GLY	conflict	UNP Q8HYX6
D	100	ASP	GLY	conflict	UNP Q8HYX6
H	100	ASP	GLY	conflict	UNP Q8HYX6
I	100	ASP	GLY	conflict	UNP Q8HYX6

- Molecule 2 is a protein called Ryanodine receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	4305	34043	21690	5866	6261	226	1	0
2	E	4305	34043	21690	5866	6261	226	1	0
2	G	4319	34149	21751	5887	6284	227	1	0
2	J	4305	34043	21690	5866	6261	226	1	0

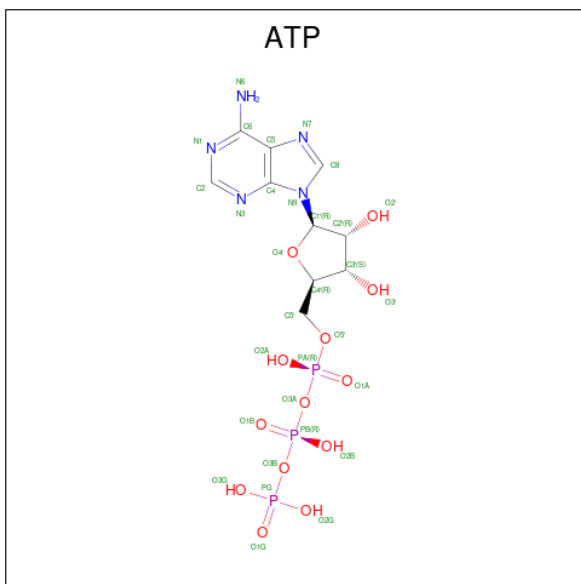
- Molecule 3 is a protein called Nanobody 9657.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	126	Total	C	N	O	S	0	0
			960	591	170	194	5		
3	F	126	Total	C	N	O	S	0	0
			960	591	170	194	5		
3	K	126	Total	C	N	O	S	0	0
			960	591	170	194	5		
3	M	126	Total	C	N	O	S	0	0
			960	591	170	194	5		

- Molecule 4 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
4	B	1	Total	Zn	0
			1	1	
4	E	1	Total	Zn	0
			1	1	
4	G	1	Total	Zn	0
			1	1	
4	J	1	Total	Zn	0
			1	1	

- Molecule 5 is ADENOSINE-5'-TRIPHOSPHATE (three-letter code: ATP) (formula: C₁₀H₁₆N₅O₁₃P₃) (labeled as "Ligand of Interest" by depositor).



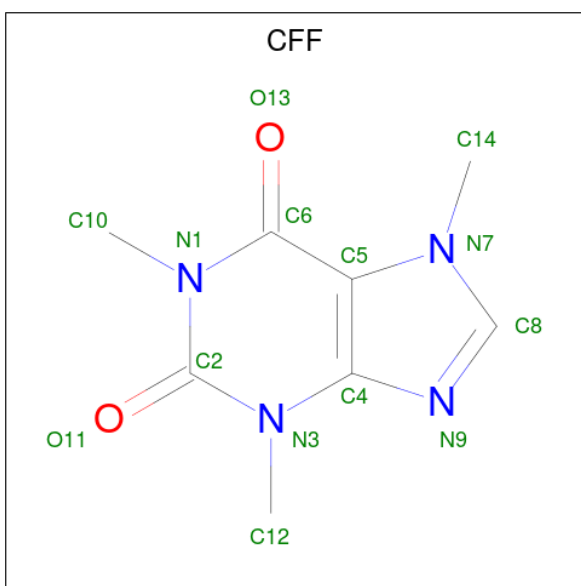
Mol	Chain	Residues	Atoms					AltConf
5	B	1	Total	C	N	O	P	0
			31	10	5	13	3	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms				AltConf	
			Total	C	N	O		P
5	E	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	G	1	Total	C	N	O	P	0
			31	10	5	13	3	
5	J	1	Total	C	N	O	P	0
			31	10	5	13	3	

- Molecule 6 is CAFFEINE (three-letter code: CFF) (formula: $C_8H_{10}N_4O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
			Total	C	N	O	
6	B	1	Total	C	N	O	0
			14	8	4	2	
6	E	1	Total	C	N	O	0
			14	8	4	2	
6	G	1	Total	C	N	O	0
			14	8	4	2	
6	J	1	Total	C	N	O	0
			14	8	4	2	

- Molecule 7 is CALCIUM ION (three-letter code: CA) (formula: Ca) (labeled as "Ligand of Interest" by depositor).

Mol	Chain	Residues	Atoms		AltConf
7	B	1	Total	Ca	0
			1	1	

Continued on next page...

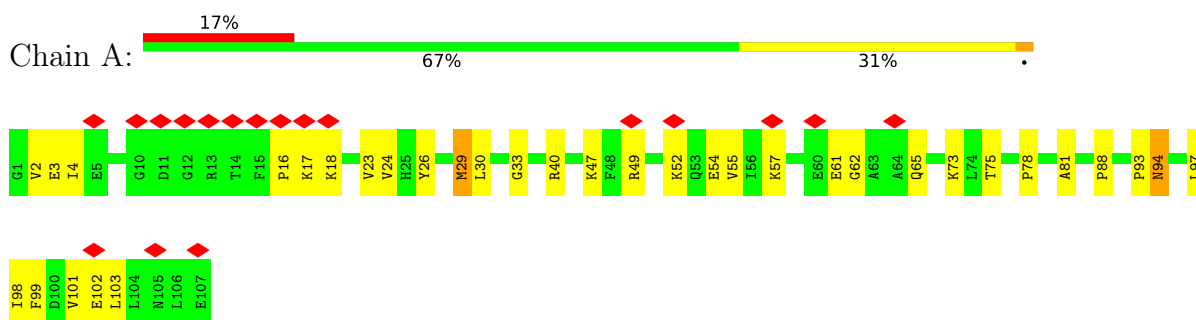
Continued from previous page...

Mol	Chain	Residues	Atoms		AltConf
7	E	1	Total 1	Ca 1	0
7	G	1	Total 1	Ca 1	0
7	J	1	Total 1	Ca 1	0

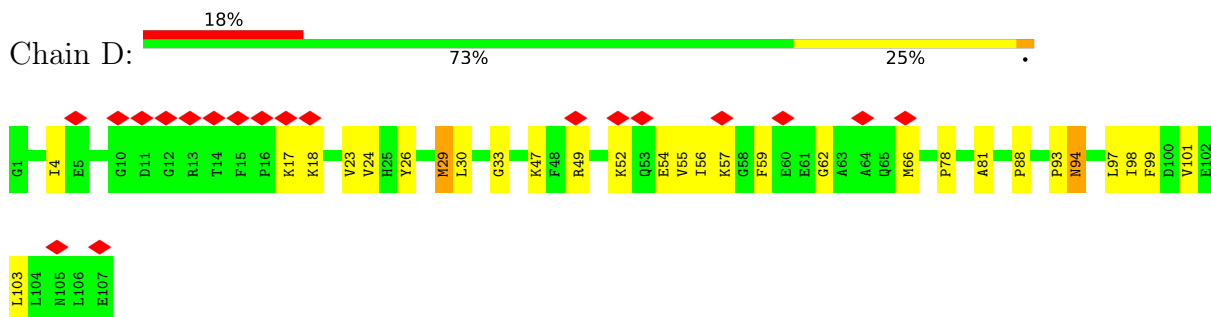
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

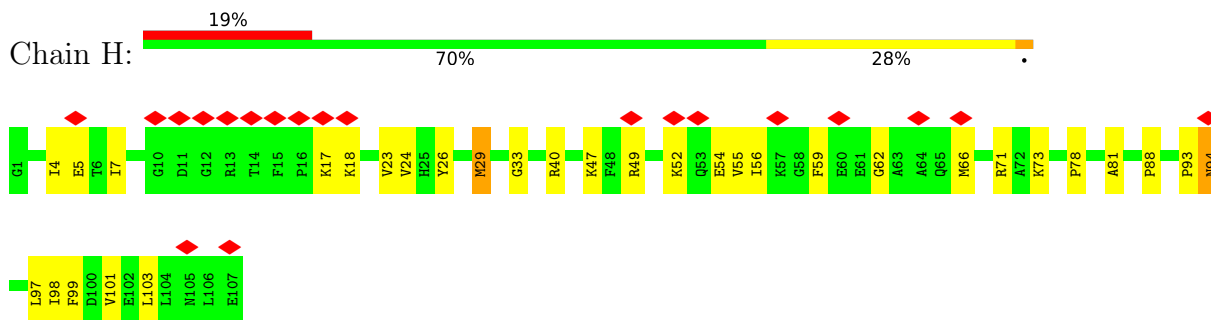
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B

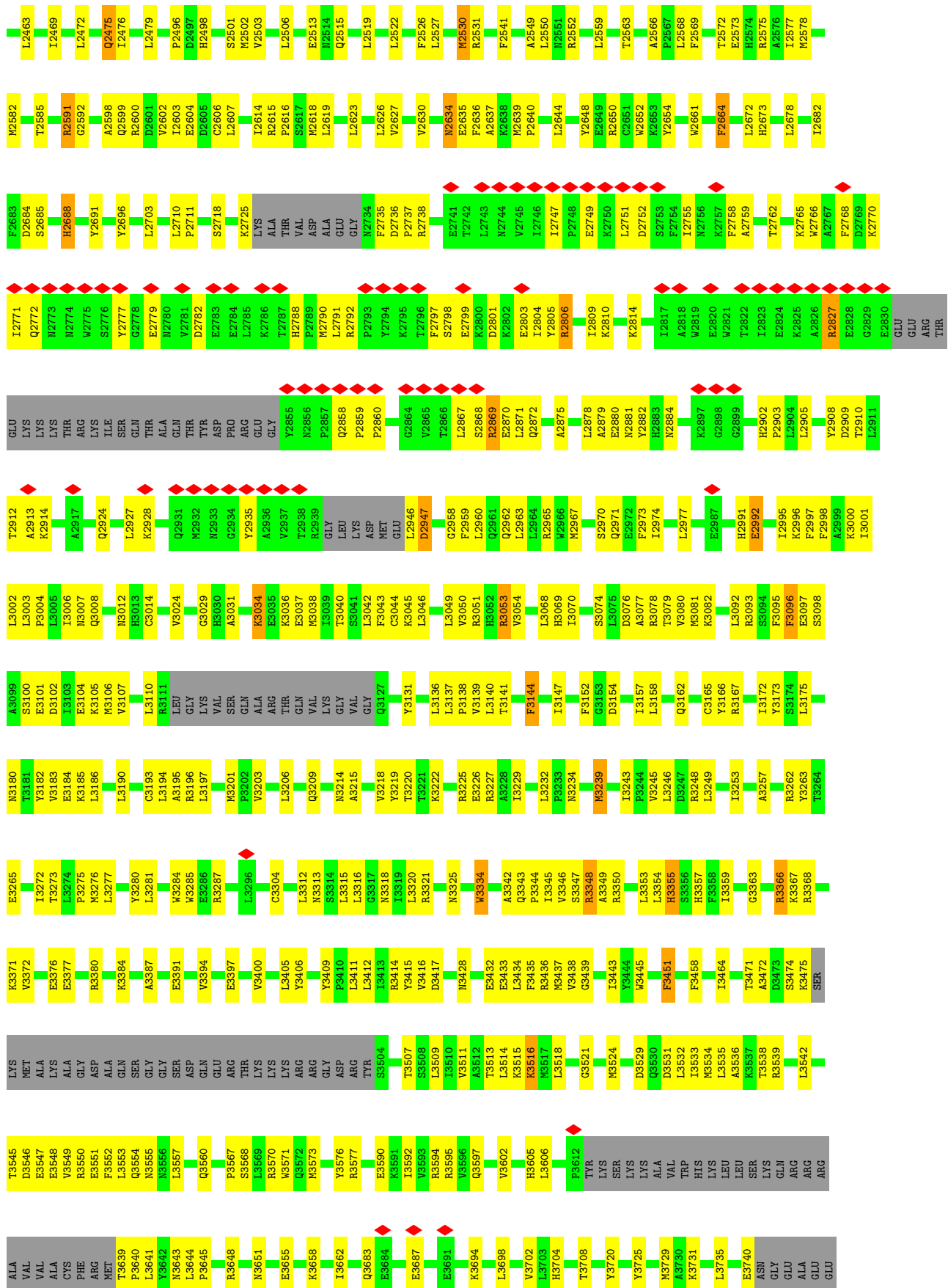


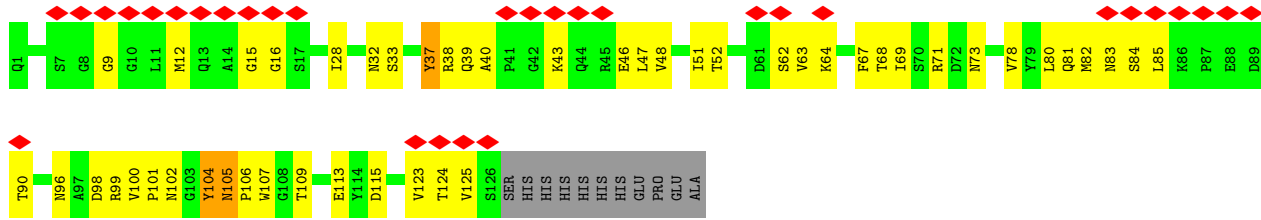
- Molecule 1: Peptidyl-prolyl cis-trans isomerase FKBP1B



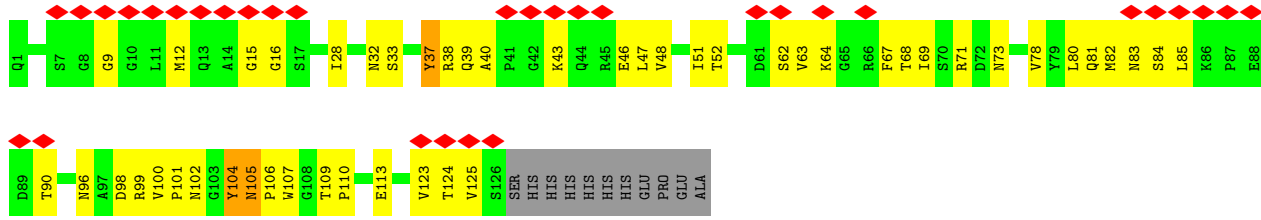
ALA	GLY	THR	I4181	G4043	D3878	L3785	L3583	L3354	L3158	R3078	E2987	H2884
ALA	GLY	THR	R4189	M4044	E3879	E3740	M3534	H3385	Q3162	T3079	E2987	R2897
ALA	GLY	THR	R4202	V4045	F3880	ASN	L3536	S3356	H3166	V3080	H2991	G2898
ALA	GLY	THR	R4203	L4048	F3887	GLY	K3537	F3358	C3165	M3081	E2982	G2899
ALA	GLY	THR	Q4204	V4055	R3891	ALA	T3538	F3358	Y3166	K3082	E2982	G2899
ALA	GLY	THR	M4207	K4060	C3892	GLU	R3472	F3358	R3167	L3092	I2995	H2902
ALA	GLY	THR	P4208	D4063	E3893	GLU	S3474	S3474	I3172	K3093	K2996	F2903
ALA	GLY	THR	K4211	M4064	F3899	ALA	SER	SER	Y3173	S3094	F2997	F2903
ALA	GLY	THR	R4215	K4067	I3915	VAL	LYS	MET	S3174	F3096	F2998	L2904
ALA	GLY	THR	E4232	M4064	L3923	VAL	ALA	ALA	L3175	E3097	A2989	L2905
ALA	GLY	THR	K4069	K4067	M3758	CYS	LYS	LYS	M3180	S3098	K3000	Y2908
ALA	GLY	THR	K4088	K4069	Q3761	PHE	ALA	ALA	T3181	I3001	I3001	D2909
ALA	GLY	THR	K4089	K4069	M3758	ARG	ALA	ALA	Y3182	L3002	L3002	T2910
ALA	GLY	THR	F4077	F4077	Q3761	MET	ASP	ASP	F3183	E3101	P3004	L2911
ALA	GLY	THR	F4240	F4077	S3768	T3639	ALA	ALA	D3102	D3102	P3004	T2912
ALA	GLY	THR	F4241	F4077	M3768	P3640	ALA	ALA	L3103	L3103	I3006	A2913
ALA	GLY	THR	F4242	F4077	H3771	L3641	GLN	GLN	E3104	E3104	N3007	K2914
ALA	GLY	THR	F4243	F4077	L3780	M3643	GLY	GLY	K3105	K3105	Q3008	K2914
ALA	GLY	THR	F4244	F4077	Q3781	L3644	SER	SER	M3106	V3107	N3012	Q2924
ALA	GLY	THR	M4245	K4091	M3782	P3645	ASP	ASP	H3013	L2927	H3013	L2927
ALA	GLY	THR	E4253	M4096	R3648	R3648	GLN	GLN	C3014	C3014	C3014	K2928
PRO	GLY	THR	G4253	Q4100	N3809	N3809	GLU	ARG	V3024	V3024	V3024	Q2931
GLY	GLY	THR	G4253	Q4100	V3812	N3651	ARG	ARG	G3029	G3029	G3029	H2932
GLY	GLY	THR	G4253	Q4100	V3812	E3655	THR	THR	H3030	H3030	H3030	H2933
GLY	GLY	THR	G4253	Q4100	M3816	E3655	LYS	LYS	A3031	A3031	A3031	G2934
GLY	GLY	THR	G4253	Q4100	L3820	K3658	LYS	LYS	P3002	P3002	P3002	G2934
GLY	GLY	THR	G4253	Q4100	L3820	K3658	ARG	ARG	V2303	V2303	V2303	Y2935
GLY	GLY	THR	G4253	Q4100	E3825	T3662	ARG	ARG	K3034	K3034	K3034	A2936
GLY	GLY	THR	G4253	Q4100	L3835	Q3683	GLY	GLY	L3206	L3206	L3206	A2936
GLY	GLY	THR	G4253	Q4100	M3836	E3684	ASP	ASP	P3208	P3208	P3208	V2937
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TYR	TYR	M3209	M3209	M3209	T2938
GLY	GLY	THR	G4253	Q4100	L3844	E3687	S3504	S3504	Q3209	Q3209	Q3209	H2939
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	N3214	N3214	N3214	T3040
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	S3041	S3041	S3041	GLY
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3042	L3042	L3042	LEU
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	F3043	F3043	F3043	LYS
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	C3044	C3044	C3044	ASP
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	MET
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	GLU
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2946
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	D2947
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	G2958
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	F2959
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2960
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2961
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	Q2962
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	R2963
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2964
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2965
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	R2966
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	W2967
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	R2967
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2968
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2969
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	R2970
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	Q2971
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	E2972
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	F2973
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	I2974
GLY	GLY	THR	G4253	Q4100	L3844	E3687	TRP	TRP	L3046	L3046	L3046	L2977

M2661	T2572	E2347	T2230	S2122	L2031	L1759	A1578	ASP	A1121	B999
F2664	E2573	E2347	R2234	L2123	L2045	T1769	L1581	M1420	Y1122	R1000
L2672	R2574	V2352	F2235	R2126	Q2045	P1773	L1581	R1421	V1123	V1001
H2673	A2575	V2353	R2236	Q2127	GLU	P1773	R1584	D1422	G1126	A1002
L2678	L2576	V2354	C2237	L2134	GLU	A1784	C1591	P1424	R1131	Q1003
L2682	M2582	R2355	Y2238	L2134	GLY	A1784	C1591	E1425	S1008	S1008
F2683	L2463	L2357	F2239	L2138	GLU	A1785	C1591	I1426	W1132	D1012
D2684	R2359	R2241	C2240	L2138	GLU	L1786	F1612	I1427	D1012	D1012
S2685	L2469	R2242	R2241	Y2142	LYS	P1787	L1613	L1428	W1143	A1015
H2688	L2472	Q2245	Q2245	P2146	ASP	ALA	Q1614	T1430	M1152	R1016
Y2691	Q2475	R2248	R2248	T2152	ALA	VAL	V1615	T1431	I1153	R1017
Q2599	I2476	S2249	S2249	E1793	ALA	E1793	R1619	T1432	D1154	M1018
R2600	L2479	M2250	M2250	R1813	GLU	R1813	R1623	Y1433	L1021	L1021
D2601	L2479	Y2256	Y2256	M1814	GLU	M1814	R1623	Y1434	L1027	L1027
V2602	P2496	G2262	G2262	L1815	GLU	L1815	W1626	E1444	D1037	D1037
E2603	D2497	I2263	I2263	G1816	PRO	G1816	Q1629	C1447	S1038	S1038
E2604	H2498	G2264	G2264	E1817	GLY	E1817	Q1631	P1455	A1042	A1042
C2605	S2501	L2265	L2265	R1827	GLY	R1827	M1637	C1489	V1043	V1043
L2607	M2502	G2266	G2266	F1836	LYS	F1836	M1637	C1489	I1182	I1182
Y2613	V2503	M2283	M2283	V1845	GLU	V1845	A1638	W1496	D1186	D1186
L2614	L2506	L2286	L2286	V1845	THR	V1845	L1639	G1497	L1046	L1046
R2615	ALA	E2174	E2174	L1849	VAL	L1849	C1647	G1497	I1053	I1053
S2616	ARG	E2175	E2175	L1849	ARG	L1849	C1647	D1498	P1056	P1056
M2617	ARG	M2176	M2176	F1854	LEU	F1854	D1658	F1500	ASP	ASP
M2618	ASP	L2177	L2177	D1854	VAL	D1854	L1669	V1501	PRO	PRO
L2619	ASP	M2178	M2178	V1858	LYS	V1858	L1669	S1502	GLN	GLN
L2623	ARG	I2179	I2179	D1859	LYS	D1859	V1673	G1504	PRO	PRO
L2626	ARG	K2189	K2189	K1860	GLU	K1860	R1680	G1504	SER	SER
V2627	HIS	Y2192	Y2192	K1864	GLU	K1864	L1694	R1508	GLN	GLN
V2630	PHE	T2206	T2206	E1874	PRO	E1874	L1694	R1508	VAL	VAL
M2634	GLY	V2207	V2207	GLU	GLU	GLU	H1696	L1519	H1065	H1065
E2635	GLU	M2208	M2208	GLU	GLU	GLU	H1696	L1519	Q1084	Q1084
F2636	GLU	E2209	E2209	GLU	GLU	GLU	E1699	T1530	R1087	R1087
A2637	PRO	V2210	V2210	GLU	GLU	GLU	R1708	A1453	M1088	M1088
A2640	GLU	M2211	M2211	GLU	GLU	GLU	M1532	E1535	Y1089	Y1089
L2644	GLU	V2212	V2212	ALA	ALA	ALA	M1532	E1535	F1090	F1090
Y2648	N2414	R2213	R2213	GLU	GLU	GLU	F1549	F1549	F1091	F1091
E2649	R2415	G2327	G2327	GLU	GLU	GLU	I1715	P1550	F1092	F1092
R2650	R2416	G2328	G2328	GLU	GLU	GLU	I1718	P1550	V1095	V1095
C2651	H2417	E2329	E2329	GLU	GLU	GLU	R1727	L1555	M1260	M1260
L2654	L2418	R2330	R2330	GLU	GLU	GLU	I1735	P1556	D1261	D1261
Y2658	I2422	Y2331	Y2331	THR	THR	THR	I1735	P1556	G1262	G1262
F2659	L2422	D2332	D2332	LYS	LYS	LYS	L1738	T1557	T1263	T1263
A2660	L2429	F2333	F2333	E2108	E2108	E2108	I1738	T1557	M1100	M1100
S2661	L2430	L2335	L2335	D2109	D2109	D2109	I1745	Q1569	D1112	D1112
W2662	D2431	R2336	R2336	L2116	L2116	L2116	A1757	I1572	L1115	L1115
L2664	R2435	F2340	F2340	M2120	M2120	M2120	R1758	F1575	H1274	H1274
L2668	G2571	G2571	G2571	F2121	F2121	F2121				

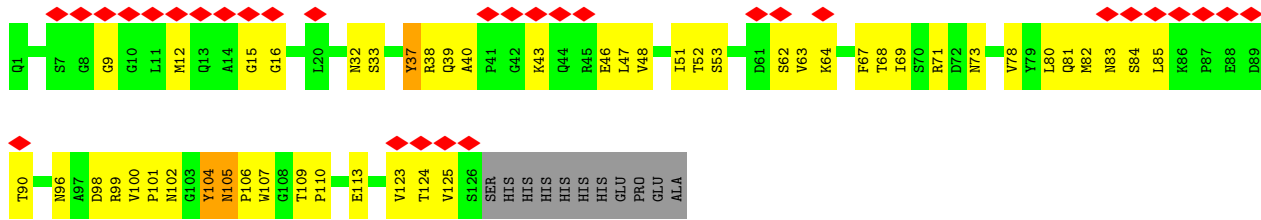




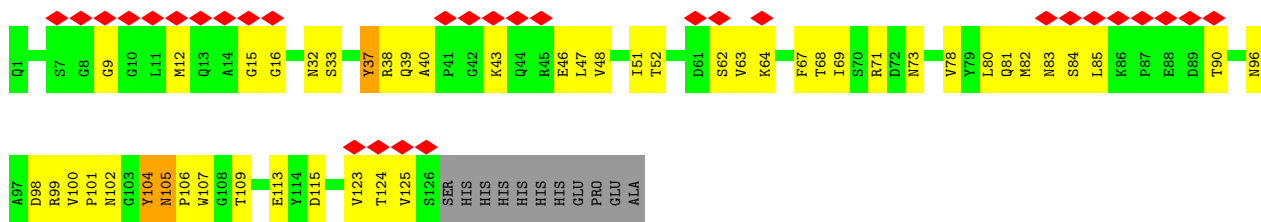
• Molecule 3: Nanobody 9657



• Molecule 3: Nanobody 9657



• Molecule 3: Nanobody 9657



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	145830	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	JEOL CRYO ARM 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	60	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	2500	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	4.519	Depositor
Minimum map value	-0.106	Depositor
Average map value	0.057	Depositor
Map value standard deviation	0.125	Depositor
Recommended contour level	0.3	Depositor
Map size (\AA)	500.64, 500.64, 500.64	wwPDB
Map dimensions	336, 336, 336	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.49, 1.49, 1.49	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: ATP, CA, CFF, 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	A	0.27	0/831	0.55	0/1118
1	D	0.27	0/831	0.56	0/1118
1	H	0.27	0/831	0.56	0/1118
1	I	0.27	0/831	0.56	0/1118
2	B	0.25	0/34814	0.50	1/47183 (0.0%)
2	E	0.25	0/34814	0.50	1/47183 (0.0%)
2	G	0.25	0/34921	0.50	1/47329 (0.0%)
2	J	0.25	0/34814	0.50	1/47183 (0.0%)
3	C	0.28	0/979	0.58	0/1329
3	F	0.28	0/979	0.58	0/1329
3	K	0.28	0/979	0.58	0/1329
3	M	0.28	0/979	0.58	0/1329
All	All	0.25	0/146603	0.50	4/198666 (0.0%)

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	1503	PRO	N-CA-CB	5.74	110.19	103.30
2	J	1503	PRO	N-CA-CB	5.71	110.15	103.30
2	B	1503	PRO	N-CA-CB	5.68	110.11	103.30
2	G	1503	PRO	N-CA-CB	5.66	110.09	103.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	816	0	818	28	0
1	D	816	0	818	23	0
1	H	816	0	818	25	0
1	I	816	0	818	24	0
2	B	34043	0	33446	799	0
2	E	34043	0	33446	803	0
2	G	34149	0	33547	812	0
2	J	34043	0	33446	792	0
3	C	960	0	909	36	0
3	F	960	0	909	41	0
3	K	960	0	909	41	0
3	M	960	0	909	40	0
4	B	1	0	0	0	0
4	E	1	0	0	0	0
4	G	1	0	0	0	0
4	J	1	0	0	0	0
5	B	31	0	12	0	0
5	E	31	0	12	0	0
5	G	31	0	12	0	0
5	J	31	0	12	0	0
6	B	14	0	10	0	0
6	E	14	0	10	0	0
6	G	14	0	10	0	0
6	J	14	0	10	0	0
7	B	1	0	0	0	0
7	E	1	0	0	0	0
7	G	1	0	0	0	0
7	J	1	0	0	0	0
All	All	143570	0	140881	3411	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 12.

All (3411) 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)
2:B:4961:CYS:SG	2:B:4983:HIS:CE1	2.61	0.94
2:G:4961:CYS:SG	2:G:4983:HIS:CE1	2.60	0.93
2:E:4961:CYS:SG	2:E:4983:HIS:CE1	2.60	0.93
3:K:100:VAL:HG22	3:K:105:ASN:HD22	1.34	0.92
2:J:4961:CYS:SG	2:J:4983:HIS:CE1	2.60	0.92
3:M:100:VAL:HG22	3:M:105:ASN:HD22	1.33	0.92
2:B:3207:GLU:HB2	2:B:3246:LEU:HD22	1.51	0.92
2:B:2515:GLN:HA	2:B:2568:LEU:HD21	1.54	0.89
3:C:100:VAL:HG22	3:C:105:ASN:HD22	1.33	0.89
3:F:100:VAL:HG22	3:F:105:ASN:HD22	1.34	0.89
3:K:38:ARG:HH22	3:K:64:LYS:HG2	1.43	0.84
3:M:38:ARG:HH22	3:M:64:LYS:HG2	1.43	0.83
3:C:38:ARG:HH22	3:C:64:LYS:HG2	1.43	0.82
3:F:38:ARG:HH22	3:F:64:LYS:HG2	1.43	0.81
2:B:248:GLU:HB3	2:B:373:LYS:HD3	1.60	0.80
2:E:248:GLU:HA	2:E:372:LEU:HB3	1.65	0.78
2:G:248:GLU:HA	2:G:372:LEU:HB2	1.64	0.77
2:E:247:TYR:HD2	2:E:374:LYS:HB2	1.50	0.76
2:B:3277:LEU:HD13	2:B:3315:LEU:HD22	1.67	0.76
2:G:2974:ILE:HD12	2:G:3053:ARG:HG2	1.68	0.76
2:G:229:GLU:HA	2:G:249:GLY:HA3	1.68	0.76
2:J:2974:ILE:HD12	2:J:3053:ARG:HG2	1.68	0.76
2:E:1422:ASP:HB2	2:E:1427:ILE:HD11	1.68	0.76
2:B:229:GLU:HA	2:B:249:GLY:HA3	1.68	0.75
2:B:1422:ASP:HB2	2:B:1427:ILE:HD11	1.68	0.75
2:B:2974:ILE:HD12	2:B:3053:ARG:HG2	1.68	0.75
2:J:229:GLU:HA	2:J:249:GLY:HA3	1.68	0.75
2:G:1422:ASP:HB2	2:G:1427:ILE:HD11	1.68	0.75
2:E:2974:ILE:HD12	2:E:3053:ARG:HG2	1.68	0.74
2:B:3366:ARG:NH1	2:B:3437:MET:SD	2.60	0.74
2:B:891:TRP:HA	2:B:902:ARG:HB3	1.69	0.74
2:J:404:ILE:HD13	2:J:481:GLU:HG3	1.70	0.74
2:J:959:TYR:HB2	2:J:964:GLY:HA2	1.69	0.74
2:J:891:TRP:HA	2:J:902:ARG:HB3	1.69	0.74
2:J:248:GLU:HB3	2:J:373:LYS:HD3	1.69	0.74
2:G:3366:ARG:NH1	2:G:3437:MET:SD	2.60	0.74
2:E:229:GLU:HA	2:E:249:GLY:HA3	1.68	0.74
2:E:404:ILE:HD13	2:E:481:GLU:HG3	1.70	0.74
2:J:1422:ASP:HB2	2:J:1427:ILE:HD11	1.68	0.74
2:E:3366:ARG:NH1	2:E:3437:MET:SD	2.60	0.73
2:B:959:TYR:HB2	2:B:964:GLY:HA2	1.69	0.73
2:G:959:TYR:HB2	2:G:964:GLY:HA2	1.69	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:891:TRP:HA	2:G:902:ARG:HB3	1.69	0.73
2:J:3366:ARG:HE	2:J:3367:LYS:HD2	1.54	0.73
2:B:3366:ARG:HE	2:B:3367:LYS:HD2	1.54	0.73
2:G:404:ILE:HD13	2:G:481:GLU:HG3	1.70	0.73
2:E:4852:THR:HG21	2:E:4883:TYR:HA	1.71	0.72
2:G:4715:TYR:HE2	2:G:4717:ASP:HB3	1.53	0.72
2:J:3366:ARG:NH1	2:J:3437:MET:SD	2.60	0.72
2:B:4852:THR:HG21	2:B:4883:TYR:HA	1.71	0.72
2:E:959:TYR:HB2	2:E:964:GLY:HA2	1.69	0.72
2:J:913:LEU:HB3	2:J:917:GLU:HB2	1.72	0.72
2:E:913:LEU:HB3	2:E:917:GLU:HB2	1.72	0.72
2:G:3809:ASN:HB3	2:G:3812:VAL:HG22	1.71	0.72
2:B:247:TYR:HD2	2:B:374:LYS:HB2	1.55	0.72
2:E:891:TRP:HA	2:E:902:ARG:HB3	1.69	0.72
2:B:404:ILE:HD13	2:B:481:GLU:HG3	1.70	0.72
2:G:3320:LEU:HD12	2:G:3357:HIS:CD2	2.25	0.72
2:E:4715:TYR:HE2	2:E:4717:ASP:HB3	1.54	0.72
2:B:3273:THR:HA	2:B:3276:MET:HG2	1.72	0.72
2:J:3277:LEU:HD13	2:J:3315:LEU:HD22	1.71	0.72
2:E:3809:ASN:HB3	2:E:3812:VAL:HG22	1.71	0.71
2:G:4852:THR:HG21	2:G:4883:TYR:HA	1.71	0.71
2:E:3366:ARG:HE	2:E:3367:LYS:HD2	1.54	0.71
2:G:3273:THR:HA	2:G:3276:MET:HG2	1.72	0.71
2:J:3809:ASN:HB3	2:J:3812:VAL:HG22	1.71	0.71
2:J:4715:TYR:HE2	2:J:4717:ASP:HB3	1.55	0.71
2:E:4546:VAL:HG22	2:E:4550:LYS:HE3	1.72	0.70
2:G:2244:ARG:HD3	2:G:3860:ASN:HA	1.73	0.70
2:J:3273:THR:HA	2:J:3276:MET:HG2	1.72	0.70
2:B:913:LEU:HB3	2:B:917:GLU:HB2	1.72	0.70
2:B:3144:PHE:HB2	2:B:3196:ARG:HB3	1.73	0.70
2:B:3809:ASN:HB3	2:B:3812:VAL:HG22	1.71	0.70
2:G:913:LEU:HB3	2:G:917:GLU:HB2	1.72	0.70
2:G:3366:ARG:HE	2:G:3367:LYS:HD2	1.54	0.70
2:E:3144:PHE:HB2	2:E:3196:ARG:HB3	1.73	0.70
2:E:3344:PRO:O	2:E:3348:ARG:NH2	2.25	0.70
2:J:3344:PRO:O	2:J:3348:ARG:NH2	2.25	0.70
2:B:4546:VAL:HG22	2:B:4550:LYS:HE3	1.72	0.70
2:J:4852:THR:HG21	2:J:4883:TYR:HA	1.71	0.70
2:G:3344:PRO:O	2:G:3348:ARG:NH2	2.25	0.70
2:G:4546:VAL:HG22	2:G:4550:LYS:HE3	1.72	0.70
2:E:3273:THR:HA	2:E:3276:MET:HG2	1.72	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3344:PRO:O	2:B:3348:ARG:NH2	2.25	0.70
2:B:4762:PRO:HD2	2:B:4766:THR:HG21	1.73	0.70
2:J:4762:PRO:HD2	2:J:4766:THR:HG21	1.73	0.70
2:G:3144:PHE:HB2	2:G:3196:ARG:HB3	1.73	0.69
2:J:4546:VAL:HG22	2:J:4550:LYS:HE3	1.72	0.69
2:B:399:GLN:O	2:B:403:MET:HG3	1.92	0.69
2:B:640:TYR:HB3	2:B:1613:LEU:HD11	1.75	0.69
2:B:2321:ILE:HD11	2:B:2418:LEU:HB2	1.74	0.69
2:E:3308:THR:H	2:E:3311:HIS:CD2	2.09	0.69
2:E:4762:PRO:HD2	2:E:4766:THR:HG21	1.73	0.69
2:G:399:GLN:O	2:G:403:MET:HG3	1.92	0.69
2:G:640:TYR:HB3	2:G:1613:LEU:HD11	1.75	0.69
2:G:3870:ASN:HD21	2:G:3873:LYS:HB3	1.57	0.69
2:J:2871:LEU:HG	2:J:2927:LEU:HD21	1.74	0.69
2:E:2321:ILE:HD11	2:E:2418:LEU:HB2	1.74	0.69
2:E:2871:LEU:HG	2:E:2927:LEU:HD21	1.74	0.69
2:J:2788:HIS:HB3	2:J:2791:LEU:HB2	1.75	0.69
2:G:4897:ILE:HG13	2:G:4901:ILE:HD11	1.75	0.69
2:E:4897:ILE:HG13	2:E:4901:ILE:HD11	1.75	0.69
2:J:3144:PHE:HB2	2:J:3196:ARG:HB3	1.73	0.69
2:B:3812:VAL:O	2:B:3816:MET:HG3	1.93	0.68
2:B:4176:PRO:O	2:B:4202:ARG:NH2	2.26	0.68
2:E:3812:VAL:O	2:E:3816:MET:HG3	1.93	0.68
2:G:2871:LEU:HG	2:G:2927:LEU:HD21	1.74	0.68
2:J:640:TYR:HB3	2:J:1613:LEU:HD11	1.75	0.68
2:B:2116:LEU:O	2:B:2120:MET:HG2	1.94	0.68
2:B:2871:LEU:HG	2:B:2927:LEU:HD21	1.74	0.68
2:G:4176:PRO:O	2:G:4202:ARG:NH2	2.26	0.68
2:E:399:GLN:O	2:E:403:MET:HG3	1.92	0.68
2:J:399:GLN:O	2:J:403:MET:HG3	1.92	0.68
2:B:4897:ILE:HG13	2:B:4901:ILE:HD11	1.75	0.68
2:E:640:TYR:HB3	2:E:1613:LEU:HD11	1.75	0.68
2:J:897:ARG:HD3	2:J:905:PRO:HD3	1.76	0.68
2:J:4897:ILE:HG13	2:J:4901:ILE:HD11	1.75	0.68
2:B:3077:ALA:O	2:B:3081:MET:HG2	1.94	0.68
3:F:71:ARG:NH1	3:F:73:ASN:OD1	2.26	0.68
2:E:3077:ALA:O	2:E:3081:MET:HG2	1.94	0.68
2:J:2116:LEU:O	2:J:2120:MET:HG2	1.94	0.68
2:B:1089:TYR:HD1	2:B:1152:MET:HG2	1.60	0.68
2:G:2321:ILE:HD11	2:G:2418:LEU:HB2	1.74	0.68
2:B:2788:HIS:HB3	2:B:2791:LEU:HB2	1.75	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:66:MET:HE1	1:H:101:VAL:HG23	1.77	0.67
2:E:2515:GLN:HA	2:E:2568:LEU:HD21	1.75	0.67
2:E:2788:HIS:HB3	2:E:2791:LEU:HB2	1.75	0.67
2:J:2321:ILE:HD11	2:J:2418:LEU:HB2	1.74	0.67
3:K:51:ILE:HG23	3:K:71:ARG:HD2	1.76	0.67
2:G:2116:LEU:O	2:G:2120:MET:HG2	1.94	0.67
2:G:4762:PRO:HD2	2:G:4766:THR:HG21	1.73	0.67
2:J:246:TYR:CG	2:J:373:LYS:HD2	2.30	0.67
2:J:2515:GLN:HA	2:J:2568:LEU:HD21	1.76	0.67
2:J:3262:ARG:HB2	2:J:3265:GLU:HG2	1.76	0.67
2:B:4679:ARG:HE	2:B:5017:ARG:NH2	1.92	0.67
2:E:4176:PRO:O	2:E:4202:ARG:NH2	2.26	0.67
2:G:897:ARG:HD3	2:G:905:PRO:HD3	1.76	0.67
2:G:3812:VAL:O	2:G:3816:MET:HG3	1.93	0.67
2:J:3812:VAL:O	2:J:3816:MET:HG3	1.93	0.67
2:J:4176:PRO:O	2:J:4202:ARG:NH2	2.26	0.67
2:E:897:ARG:HD3	2:E:905:PRO:HD3	1.76	0.67
2:G:3262:ARG:HB2	2:G:3265:GLU:HG2	1.76	0.67
2:E:2116:LEU:O	2:E:2120:MET:HG2	1.94	0.67
3:M:51:ILE:HG23	3:M:71:ARG:HD2	1.76	0.67
2:G:1089:TYR:HD1	2:G:1152:MET:HG2	1.60	0.67
2:G:3077:ALA:O	2:G:3081:MET:HG2	1.94	0.67
3:M:71:ARG:NH1	3:M:73:ASN:OD1	2.26	0.67
2:E:1089:TYR:HD1	2:E:1152:MET:HG2	1.60	0.67
2:E:3253:ILE:HG23	2:E:3318:ASN:HD22	1.60	0.67
2:G:2788:HIS:HB3	2:G:2791:LEU:HB2	1.75	0.67
2:J:2513:GLU:N	2:J:2513:GLU:OE2	2.28	0.67
2:J:3077:ALA:O	2:J:3081:MET:HG2	1.94	0.67
2:G:2513:GLU:N	2:G:2513:GLU:OE2	2.29	0.66
3:K:71:ARG:NH1	3:K:73:ASN:OD1	2.26	0.66
3:C:51:ILE:HG23	3:C:71:ARG:HD2	1.76	0.66
2:E:110:ARG:HD3	2:E:115:ARG:HE	1.60	0.66
2:G:248:GLU:HB3	2:G:373:LYS:HD3	1.77	0.66
2:E:3768:SER:HA	2:E:3771:HIS:CD2	2.31	0.66
2:J:110:ARG:HD3	2:J:115:ARG:HE	1.60	0.66
2:J:3433:GLU:HA	2:J:3436:ARG:HD2	1.78	0.66
2:B:3262:ARG:HB2	2:B:3265:GLU:HG2	1.76	0.66
2:G:3433:GLU:HA	2:G:3436:ARG:HD2	1.78	0.66
2:J:3768:SER:HA	2:J:3771:HIS:CD2	2.31	0.66
2:B:3768:SER:HA	2:B:3771:HIS:CD2	2.31	0.66
2:G:3768:SER:HA	2:G:3771:HIS:CD2	2.31	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2513:GLU:N	2:B:2513:GLU:OE2	2.29	0.66
2:G:1519:LEU:HD11	2:G:1572:ILE:HD13	1.78	0.66
2:B:897:ARG:HD3	2:B:905:PRO:HD3	1.76	0.66
2:J:247:TYR:HD2	2:J:374:LYS:HB2	1.60	0.66
2:E:2513:GLU:N	2:E:2513:GLU:OE2	2.29	0.65
2:E:2566:ALA:HA	2:E:2569:PHE:HD2	1.59	0.65
2:G:246:TYR:CG	2:G:373:LYS:HD2	2.31	0.65
2:J:1519:LEU:HD11	2:J:1572:ILE:HD13	1.78	0.65
2:B:3031:ALA:O	2:B:3036:LYS:NZ	2.30	0.65
2:E:3262:ARG:HB2	2:E:3265:GLU:HG2	1.76	0.65
2:B:1519:LEU:HD11	2:B:1572:ILE:HD13	1.78	0.65
2:B:3194:LEU:HD13	2:B:3276:MET:SD	2.36	0.65
2:J:3194:LEU:HD13	2:J:3276:MET:SD	2.36	0.65
2:J:1089:TYR:HD1	2:J:1152:MET:HG2	1.60	0.65
2:G:110:ARG:HD3	2:G:115:ARG:HE	1.60	0.65
2:G:3194:LEU:HD13	2:G:3276:MET:SD	2.36	0.65
2:B:3435:PHE:HE2	2:B:3518:LEU:HA	1.62	0.65
2:E:3031:ALA:O	2:E:3036:LYS:NZ	2.30	0.65
2:E:3245:VAL:HG23	2:E:3248:ARG:H	1.61	0.65
2:E:3433:GLU:HA	2:E:3436:ARG:HD2	1.78	0.65
2:J:2263:ILE:HA	2:J:2330:ARG:HH22	1.62	0.65
3:F:51:ILE:HG23	3:F:71:ARG:HD2	1.76	0.65
2:E:3194:LEU:HD13	2:E:3276:MET:SD	2.36	0.65
2:E:3435:PHE:HE2	2:E:3518:LEU:HA	1.62	0.65
2:J:622:THR:HA	2:J:626:LEU:HD13	1.79	0.65
3:M:52:THR:HG21	3:M:102:ASN:HA	1.79	0.65
2:B:110:ARG:HD3	2:B:115:ARG:HE	1.60	0.65
2:G:3031:ALA:O	2:G:3036:LYS:NZ	2.30	0.65
2:J:3594:ARG:NH1	2:J:3594:ARG:HA	2.12	0.65
2:B:2347:GLU:OE1	2:B:2347:GLU:N	2.27	0.64
2:E:1519:LEU:HD11	2:E:1572:ILE:HD13	1.78	0.64
2:E:3594:ARG:NH1	2:E:3594:ARG:HA	2.12	0.64
2:B:3281:LEU:HD12	2:B:3312:LEU:HG	1.79	0.64
2:E:622:THR:HA	2:E:626:LEU:HD13	1.79	0.64
2:G:247:TYR:HD2	2:G:374:LYS:HB2	1.62	0.64
2:B:2902:HIS:HB3	2:B:2905:LEU:HG	1.79	0.64
2:B:3433:GLU:HA	2:B:3436:ARG:HD2	1.78	0.64
2:E:246:TYR:CG	2:E:373:LYS:HG3	2.33	0.64
2:E:2902:HIS:HB3	2:E:2905:LEU:HG	1.79	0.64
2:G:2263:ILE:HA	2:G:2330:ARG:HH22	1.62	0.64
2:B:3567:PRO:HB2	2:B:3570:ARG:HH21	1.62	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3281:LEU:HD12	2:G:3312:LEU:HG	1.79	0.64
3:C:71:ARG:NH1	3:C:73:ASN:OD1	2.26	0.64
3:F:52:THR:HG21	3:F:102:ASN:HA	1.79	0.64
3:K:52:THR:HG21	3:K:102:ASN:HA	1.79	0.64
2:E:2347:GLU:OE1	2:E:2347:GLU:N	2.27	0.64
2:J:3263:TYR:HE2	2:J:3334:TRP:HD1	1.46	0.64
2:B:3253:ILE:HG23	2:B:3318:ASN:HD22	1.61	0.64
2:J:3031:ALA:O	2:J:3036:LYS:NZ	2.30	0.64
2:B:2518:LEU:HD23	2:B:2568:LEU:HD22	1.78	0.64
2:E:901:LYS:HD3	2:E:903:LEU:HD11	1.79	0.64
2:G:3435:PHE:HE2	2:G:3518:LEU:HA	1.62	0.64
2:B:3594:ARG:NH1	2:B:3594:ARG:HA	2.12	0.64
2:E:3263:TYR:HE2	2:E:3334:TRP:HD1	1.46	0.64
2:G:622:THR:HA	2:G:626:LEU:HD13	1.79	0.64
2:J:3567:PRO:HB2	2:J:3570:ARG:HH21	1.62	0.64
2:B:901:LYS:HD3	2:B:903:LEU:HD11	1.80	0.64
2:E:2575:ARG:HG3	2:E:2578:MET:HG3	1.80	0.64
2:E:2977:LEU:HD11	2:E:2995:ILE:HD13	1.80	0.64
2:G:2566:ALA:HA	2:G:2569:PHE:HD2	1.63	0.64
2:G:3548:GLU:HG2	2:G:3552:PHE:CZ	2.33	0.64
2:B:2263:ILE:HA	2:B:2330:ARG:HH22	1.62	0.63
2:G:3472:ALA:HA	2:G:3475:LYS:HE2	1.80	0.63
2:B:622:THR:HA	2:B:626:LEU:HD13	1.79	0.63
2:G:23:GLN:HE21	2:G:34:LYS:HB3	1.63	0.63
2:G:1087:ARG:NH1	2:G:1221:GLU:O	2.31	0.63
2:G:3594:ARG:NH1	2:G:3594:ARG:HA	2.12	0.63
2:J:985:VAL:HG22	2:J:1043:VAL:HG21	1.80	0.63
2:J:3245:VAL:HG23	2:J:3248:ARG:H	1.63	0.63
2:E:205:ILE:H	2:E:205:ILE:HD12	1.64	0.63
2:E:3548:GLU:HG2	2:E:3552:PHE:CZ	2.33	0.63
2:G:1229:ASN:HB3	2:G:1827:ARG:HG3	1.81	0.63
2:G:2630:VAL:HG12	2:G:2682:ILE:HD11	1.81	0.63
2:J:573:GLU:OE1	2:J:573:GLU:N	2.21	0.63
2:B:1087:ARG:NH1	2:B:1221:GLU:O	2.31	0.63
2:B:3263:TYR:HE2	2:B:3334:TRP:HD1	1.46	0.63
2:E:2630:VAL:HG12	2:E:2682:ILE:HD11	1.81	0.63
2:J:2630:VAL:HG12	2:J:2682:ILE:HD11	1.81	0.63
2:J:3253:ILE:HG23	2:J:3318:ASN:HD22	1.61	0.63
2:J:3435:PHE:HE2	2:J:3518:LEU:HA	1.62	0.63
2:J:3472:ALA:HA	2:J:3475:LYS:HE2	1.80	0.63
2:J:4087:LEU:HB3	2:J:4122:MET:HB3	1.81	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:23:GLN:HE21	2:B:34:LYS:HB3	1.63	0.63
2:B:1229:ASN:HB3	2:B:1827:ARG:HG3	1.81	0.63
2:B:2977:LEU:HD11	2:B:2995:ILE:HD13	1.80	0.63
2:B:3548:GLU:HG2	2:B:3552:PHE:CZ	2.33	0.63
2:E:985:VAL:HG22	2:E:1043:VAL:HG21	1.80	0.63
2:G:3567:PRO:HB2	2:G:3570:ARG:HH21	1.62	0.63
2:B:985:VAL:HG22	2:B:1043:VAL:HG21	1.80	0.63
2:E:1087:ARG:NH1	2:E:1221:GLU:O	2.32	0.63
2:J:205:ILE:H	2:J:205:ILE:HD12	1.64	0.63
2:J:365:LYS:HE2	2:J:369:LEU:HD21	1.80	0.63
1:D:24:VAL:HG12	1:D:103:LEU:HA	1.81	0.63
2:B:205:ILE:H	2:B:205:ILE:HD12	1.64	0.63
2:B:4087:LEU:HB3	2:B:4122:MET:HB3	1.80	0.63
2:E:981:GLN:O	2:E:985:VAL:HG23	1.99	0.63
2:E:3472:ALA:HA	2:E:3475:LYS:HE2	1.80	0.63
2:E:3567:PRO:HB2	2:E:3570:ARG:HH21	1.62	0.63
2:J:3281:LEU:HD12	2:J:3312:LEU:HG	1.80	0.63
2:G:3590:GLU:O	2:G:3594:ARG:HG2	1.99	0.63
2:B:246:TYR:CG	2:B:373:LYS:HD2	2.34	0.63
2:B:981:GLN:O	2:B:985:VAL:HG23	1.99	0.63
2:B:2630:VAL:HG12	2:B:2682:ILE:HD11	1.81	0.63
2:E:2263:ILE:HA	2:E:2330:ARG:HH22	1.62	0.63
2:J:1087:ARG:NH1	2:J:1221:GLU:O	2.32	0.63
3:C:52:THR:HG21	3:C:102:ASN:HA	1.79	0.63
2:E:23:GLN:HE21	2:E:34:LYS:HB3	1.63	0.62
2:G:901:LYS:HD3	2:G:903:LEU:HD11	1.80	0.62
2:G:3245:VAL:HG23	2:G:3248:ARG:H	1.63	0.62
2:J:1229:ASN:HB3	2:J:1827:ARG:HG3	1.81	0.62
2:J:3590:GLU:O	2:J:3594:ARG:HG2	1.99	0.62
2:E:3590:GLU:O	2:E:3594:ARG:HG2	1.99	0.62
2:G:2902:HIS:HB3	2:G:2905:LEU:HG	1.79	0.62
2:E:4087:LEU:HB3	2:E:4122:MET:HB3	1.81	0.62
2:G:3263:TYR:HE2	2:G:3334:TRP:HD1	1.46	0.62
2:J:2902:HIS:HB3	2:J:2905:LEU:HG	1.79	0.62
2:B:2283:ASN:HB3	2:B:2286:LEU:HB2	1.82	0.62
2:G:2977:LEU:HD11	2:G:2995:ILE:HD13	1.80	0.62
2:J:2977:LEU:HD11	2:J:2995:ILE:HD13	1.80	0.62
2:J:3548:GLU:HG2	2:J:3552:PHE:CZ	2.33	0.62
2:B:573:GLU:OE1	2:B:573:GLU:N	2.21	0.62
2:B:1447:CYS:HB3	2:B:1555:LEU:HB3	1.82	0.62
2:J:3359:ILE:H	2:J:3359:ILE:HD12	1.65	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3590:GLU:O	2:B:3594:ARG:HG2	1.99	0.62
2:E:2283:ASN:HB3	2:E:2286:LEU:HB2	1.82	0.62
2:G:985:VAL:HG22	2:G:1043:VAL:HG21	1.80	0.62
2:J:901:LYS:HD3	2:J:903:LEU:HD11	1.80	0.62
2:B:3472:ALA:HA	2:B:3475:LYS:HE2	1.80	0.62
2:E:1229:ASN:HB3	2:E:1827:ARG:HG3	1.81	0.62
2:E:3568:SER:HA	2:E:3571:TRP:NE1	2.15	0.62
2:E:4090:LYS:HG2	2:E:4123:ILE:HD11	1.82	0.62
2:G:205:ILE:H	2:G:205:ILE:HD12	1.64	0.62
2:G:4091:LYS:HD3	2:G:4091:LYS:N	2.15	0.62
2:J:23:GLN:HE21	2:J:34:LYS:HB3	1.63	0.62
2:G:4087:LEU:HB3	2:G:4122:MET:HB3	1.80	0.62
2:J:4090:LYS:HG2	2:J:4123:ILE:HD11	1.82	0.62
1:H:93:PRO:O	1:H:94:ASN:ND2	2.33	0.62
2:E:3359:ILE:H	2:E:3359:ILE:HD12	1.65	0.62
2:J:952:LYS:H	2:J:969:PRO:HA	1.64	0.62
2:J:3511:VAL:HA	2:J:3515:LYS:HB2	1.81	0.62
1:I:66:MET:HE1	1:I:101:VAL:HG23	1.82	0.61
2:B:3054:VAL:HG11	2:B:3131:TYR:HB2	1.82	0.61
2:B:3511:VAL:HA	2:B:3515:LYS:HB2	1.81	0.61
2:E:3054:VAL:HG11	2:E:3131:TYR:HB2	1.82	0.61
2:B:3350:ARG:HB2	2:B:3353:LEU:HD13	1.81	0.61
2:E:3190:LEU:O	2:E:3194:LEU:HG	2.00	0.61
2:G:3359:ILE:H	2:G:3359:ILE:HD12	1.65	0.61
2:G:3511:VAL:HA	2:G:3515:LYS:HB2	1.81	0.61
2:J:981:GLN:O	2:J:985:VAL:HG23	1.99	0.61
2:J:3568:SER:HA	2:J:3571:TRP:NE1	2.15	0.61
2:B:799:GLU:N	2:B:799:GLU:OE1	2.33	0.61
2:B:4848:VAL:O	2:B:4852:THR:HG23	2.00	0.61
2:G:2515:GLN:HA	2:G:2568:LEU:HD11	1.82	0.61
2:E:1447:CYS:HB3	2:E:1555:LEU:HB3	1.82	0.61
2:E:4091:LYS:HD3	2:E:4091:LYS:N	2.15	0.61
2:G:551:LEU:HD13	2:G:589:LEU:HD11	1.83	0.61
2:G:3190:LEU:O	2:G:3194:LEU:HG	2.01	0.61
2:B:2570:ALA:HB2	2:B:2613:TYR:HB3	1.81	0.61
2:G:2283:ASN:HB3	2:G:2286:LEU:HB2	1.82	0.61
2:G:3384:LYS:HG3	2:G:3387:ALA:H	1.66	0.61
2:G:3568:SER:HA	2:G:3571:TRP:NE1	2.15	0.61
2:J:799:GLU:N	2:J:799:GLU:OE1	2.33	0.61
2:J:3054:VAL:HG11	2:J:3131:TYR:HB2	1.82	0.61
2:E:3384:LYS:HG3	2:E:3387:ALA:H	1.66	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2347:GLU:OE1	2:G:2347:GLU:N	2.27	0.61
2:J:3190:LEU:O	2:J:3194:LEU:HG	2.00	0.61
2:J:3384:LYS:HG3	2:J:3387:ALA:H	1.66	0.61
2:B:551:LEU:HD13	2:B:589:LEU:HD11	1.83	0.61
2:B:2512:ILE:HD13	2:B:2517:PHE:CE2	2.35	0.61
2:B:3359:ILE:H	2:B:3359:ILE:HD12	1.65	0.61
2:B:3568:SER:HA	2:B:3571:TRP:NE1	2.15	0.61
2:E:799:GLU:OE1	2:E:799:GLU:N	2.33	0.61
1:A:17:LYS:HZ2	1:A:18:LYS:HG2	1.66	0.61
2:B:548:VAL:HG21	2:B:582:HIS:HD2	1.66	0.61
2:E:2710:LEU:HD12	2:E:2711:PRO:HD2	1.83	0.61
2:G:799:GLU:N	2:G:799:GLU:OE1	2.33	0.61
2:G:981:GLN:O	2:G:985:VAL:HG23	1.99	0.61
2:G:4090:LYS:HG2	2:G:4123:ILE:HD11	1.82	0.61
2:J:4848:VAL:O	2:J:4852:THR:HG23	2.00	0.61
2:E:2678:LEU:O	2:E:2682:ILE:HG12	2.01	0.61
2:E:3996:PHE:O	2:E:4000:MET:HG2	2.01	0.61
2:G:3350:ARG:HB2	2:G:3353:LEU:HD13	1.81	0.61
1:H:24:VAL:HG12	1:H:103:LEU:HA	1.82	0.60
1:I:24:VAL:HG12	1:I:103:LEU:HA	1.81	0.60
2:E:3350:ARG:HB2	2:E:3353:LEU:HD13	1.82	0.60
2:G:952:LYS:H	2:G:969:PRO:HA	1.64	0.60
2:G:3536:ALA:HB2	2:G:3553:LEU:HD11	1.83	0.60
2:G:4848:VAL:O	2:G:4852:THR:HG23	2.00	0.60
1:A:26:TYR:HB2	1:A:101:VAL:HG12	1.84	0.60
2:B:4849:TYR:O	2:B:4853:VAL:HG23	2.01	0.60
2:E:984:LEU:O	2:E:988:LEU:HD22	2.01	0.60
2:E:3511:VAL:HA	2:E:3515:LYS:HB2	1.81	0.60
2:G:365:LYS:HE2	2:G:369:LEU:HD21	1.83	0.60
2:G:2678:LEU:O	2:G:2682:ILE:HG12	2.01	0.60
2:J:233:ILE:O	2:J:257:ARG:NH1	2.34	0.60
2:J:4867:GLU:OE1	2:J:4867:GLU:N	2.31	0.60
2:B:952:LYS:H	2:B:969:PRO:HA	1.64	0.60
2:B:3190:LEU:O	2:B:3194:LEU:HG	2.00	0.60
2:E:548:VAL:HG21	2:E:582:HIS:HD2	1.66	0.60
2:E:952:LYS:H	2:E:969:PRO:HA	1.64	0.60
2:G:993:HIS:CE1	2:G:1027:LEU:HD11	2.37	0.60
2:J:3350:ARG:HB2	2:J:3353:LEU:HD13	1.81	0.60
1:A:61:GLU:O	1:A:65:GLN:HG3	2.01	0.60
2:B:2710:LEU:HD12	2:B:2711:PRO:HD2	1.83	0.60
2:B:3536:ALA:HB2	2:B:3553:LEU:HD11	1.83	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4090:LYS:HG2	2:B:4123:ILE:HD11	1.82	0.60
2:E:4848:VAL:O	2:E:4852:THR:HG23	2.00	0.60
2:G:3054:VAL:HG11	2:G:3131:TYR:HB2	1.82	0.60
2:J:548:VAL:HG21	2:J:582:HIS:HD2	1.66	0.60
2:J:2283:ASN:HB3	2:J:2286:LEU:HB2	1.82	0.60
2:J:2678:LEU:O	2:J:2682:ILE:HG12	2.01	0.60
2:B:2678:LEU:O	2:B:2682:ILE:HG12	2.01	0.60
2:B:4091:LYS:HD3	2:B:4091:LYS:N	2.15	0.60
2:E:551:LEU:HD13	2:E:589:LEU:HD11	1.83	0.60
2:E:2333:ASP:HA	2:E:2336:ARG:HH11	1.65	0.60
2:G:3368:ARG:O	2:G:3372:VAL:HG23	2.01	0.60
2:J:1447:CYS:HB3	2:J:1555:LEU:HB3	1.82	0.60
2:J:3536:ALA:HB2	2:J:3553:LEU:HD11	1.84	0.60
2:J:4091:LYS:HD3	2:J:4091:LYS:N	2.15	0.60
2:B:993:HIS:CE1	2:B:1027:LEU:HD11	2.36	0.60
2:B:1944:GLU:HG2	2:B:2123:LEU:HD13	1.83	0.60
2:G:984:LEU:O	2:G:988:LEU:HD22	2.01	0.60
2:G:1735:ILE:HD11	2:G:2156:LEU:HD11	1.84	0.60
2:J:2710:LEU:HD12	2:J:2711:PRO:HD2	1.83	0.60
1:A:23:VAL:HG12	1:A:47:LYS:HG2	1.84	0.60
1:H:23:VAL:HG12	1:H:47:LYS:HG2	1.84	0.60
2:B:233:ILE:O	2:B:257:ARG:NH1	2.34	0.60
2:B:2959:PHE:O	2:B:2963:LEU:HG	2.02	0.60
2:G:233:ILE:O	2:G:257:ARG:NH1	2.34	0.60
2:G:3996:PHE:O	2:G:4000:MET:HG2	2.01	0.60
2:J:993:HIS:CE1	2:J:1027:LEU:HD11	2.37	0.60
3:F:38:ARG:NH2	3:F:64:LYS:HG2	2.16	0.60
1:H:17:LYS:HZ2	1:H:18:LYS:HG2	1.66	0.60
1:I:23:VAL:HG12	1:I:47:LYS:HG2	1.84	0.60
2:B:991:ASN:O	2:B:995:VAL:HG23	2.02	0.60
2:E:233:ILE:O	2:E:257:ARG:NH1	2.34	0.60
2:B:3384:LYS:HG3	2:B:3387:ALA:H	1.66	0.60
2:B:4715:TYR:HE2	2:B:4717:ASP:HB3	1.67	0.60
2:E:993:HIS:CE1	2:E:1027:LEU:HD11	2.36	0.60
2:G:2333:ASP:HA	2:G:2336:ARG:HH11	1.65	0.60
2:G:3102:ASP:HA	2:G:3105:LYS:HE2	1.84	0.60
2:J:1115:LEU:HB3	2:J:1123:VAL:HG11	1.84	0.60
2:J:4849:TYR:O	2:J:4853:VAL:HG23	2.01	0.60
2:E:1979:LEU:HD23	2:E:1982:ARG:HH12	1.67	0.60
2:J:551:LEU:HD13	2:J:589:LEU:HD11	1.83	0.60
2:J:1008:SER:HB2	2:J:1017:ARG:HE	1.67	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:3536:ALA:HB2	2:E:3553:LEU:HD11	1.84	0.59
2:G:2575:ARG:HG3	2:G:2578:MET:HG3	1.83	0.59
2:J:248:GLU:HA	2:J:372:LEU:HB2	1.82	0.59
2:J:991:ASN:O	2:J:995:VAL:HG23	2.02	0.59
2:J:2002:PRO:O	2:J:2006:ILE:HG12	2.02	0.59
2:J:2333:ASP:HA	2:J:2336:ARG:HH11	1.65	0.59
2:J:2959:PHE:O	2:J:2963:LEU:HG	2.02	0.59
2:J:3368:ARG:O	2:J:3372:VAL:HG23	2.01	0.59
2:J:3996:PHE:O	2:J:4000:MET:HG2	2.01	0.59
2:B:984:LEU:O	2:B:988:LEU:HD22	2.01	0.59
2:E:3368:ARG:O	2:E:3372:VAL:HG23	2.01	0.59
2:G:1008:SER:HB2	2:G:1017:ARG:HE	1.67	0.59
2:G:2002:PRO:O	2:G:2006:ILE:HG12	2.02	0.59
2:J:984:LEU:O	2:J:988:LEU:HD22	2.02	0.59
1:D:23:VAL:HG12	1:D:47:LYS:HG2	1.84	0.59
2:B:1860:LYS:HG2	2:B:1864:LYS:HE3	1.84	0.59
2:B:3368:ARG:O	2:B:3372:VAL:HG23	2.02	0.59
2:E:246:TYR:CD1	2:E:373:LYS:HG3	2.37	0.59
2:E:2002:PRO:O	2:E:2006:ILE:HG12	2.02	0.59
2:E:2175:GLU:O	2:E:2179:ILE:HG12	2.02	0.59
2:E:3549:VAL:O	2:E:3553:LEU:HD13	2.02	0.59
2:G:4715:TYR:CE2	2:G:4717:ASP:HB3	2.36	0.59
2:J:2212:VAL:HG22	2:J:2256:TYR:HE1	1.68	0.59
1:H:97:LEU:HB3	1:H:99:PHE:HE2	1.67	0.59
2:B:2962:GLN:OE1	2:B:2965:ARG:NH1	2.36	0.59
2:B:3996:PHE:O	2:B:4000:MET:HG2	2.01	0.59
2:B:4681:LEU:HD12	2:B:4724:VAL:HG21	1.84	0.59
2:B:5017:ARG:HH11	2:B:5019:TRP:HZ2	1.49	0.59
2:E:2212:VAL:HG22	2:E:2256:TYR:HE1	1.68	0.59
2:E:3312:LEU:H	2:E:3312:LEU:HD12	1.67	0.59
2:J:2591:ARG:HA	2:J:2591:ARG:CZ	2.32	0.59
2:J:3549:VAL:O	2:J:3553:LEU:HD13	2.02	0.59
2:E:1008:SER:HB2	2:E:1017:ARG:HE	1.67	0.59
2:E:1944:GLU:HG2	2:E:2123:LEU:HD13	1.83	0.59
2:E:2591:ARG:HA	2:E:2591:ARG:CZ	2.33	0.59
2:J:2175:GLU:O	2:J:2179:ILE:HG12	2.02	0.59
2:B:235:ALA:O	2:B:242:ARG:NH2	2.36	0.59
2:B:1115:LEU:HB3	2:B:1123:VAL:HG11	1.84	0.59
2:B:1979:LEU:HD23	2:B:1982:ARG:HH12	1.67	0.59
2:B:2333:ASP:HA	2:B:2336:ARG:HH11	1.65	0.59
2:G:991:ASN:O	2:G:995:VAL:HG23	2.02	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1619:ARG:HA	2:G:1626:TRP:HA	1.85	0.59
2:G:4849:TYR:O	2:G:4853:VAL:HG23	2.01	0.59
2:J:3102:ASP:HA	2:J:3105:LYS:HE2	1.84	0.59
1:D:93:PRO:O	1:D:94:ASN:ND2	2.33	0.59
1:I:17:LYS:HZ2	1:I:18:LYS:HG2	1.66	0.59
2:B:3246:LEU:HG	2:B:3247:ASP:H	1.66	0.59
2:E:3281:LEU:HD12	2:E:3312:LEU:HG	1.84	0.59
2:G:2710:LEU:HD12	2:G:2711:PRO:HD2	1.83	0.59
2:G:2962:GLN:OE1	2:G:2965:ARG:NH1	2.35	0.59
2:J:1735:ILE:HD11	2:J:2156:LEU:HD11	1.84	0.59
2:J:1979:LEU:HD23	2:J:1982:ARG:HH12	1.67	0.59
2:B:783:PHE:HB2	2:B:787:VAL:HG11	1.85	0.59
2:B:2002:PRO:O	2:B:2006:ILE:HG12	2.02	0.59
2:B:2175:GLU:O	2:B:2179:ILE:HG12	2.02	0.59
2:B:2591:ARG:HA	2:B:2591:ARG:CZ	2.32	0.59
2:B:3050:VAL:HG11	2:B:3068:LEU:HD11	1.85	0.59
2:E:783:PHE:HB2	2:E:787:VAL:HG11	1.85	0.59
2:E:991:ASN:O	2:E:995:VAL:HG23	2.02	0.59
2:G:1447:CYS:HB3	2:G:1555:LEU:HB3	1.82	0.59
2:G:2591:ARG:HA	2:G:2591:ARG:CZ	2.32	0.59
3:K:38:ARG:NH2	3:K:64:LYS:HG2	2.16	0.59
2:B:1497:GLY:HA2	2:B:1500:PHE:HD2	1.68	0.59
2:B:2212:VAL:HG22	2:B:2256:TYR:HE1	1.68	0.59
2:B:2518:LEU:CD2	2:B:2568:LEU:HD22	2.33	0.59
2:B:3102:ASP:HA	2:B:3105:LYS:HE2	1.84	0.59
2:G:548:VAL:HG21	2:G:582:HIS:HD2	1.66	0.59
2:J:1860:LYS:HG2	2:J:1864:LYS:HE3	1.84	0.59
2:J:1944:GLU:HG2	2:J:2123:LEU:HD13	1.83	0.59
2:J:2962:GLN:OE1	2:J:2965:ARG:NH1	2.36	0.59
2:B:3549:VAL:O	2:B:3553:LEU:HD13	2.02	0.59
2:E:1860:LYS:HG2	2:E:1864:LYS:HE3	1.84	0.59
2:E:2959:PHE:O	2:E:2963:LEU:HG	2.02	0.59
2:E:4849:TYR:O	2:E:4853:VAL:HG23	2.01	0.59
2:G:573:GLU:OE1	2:G:573:GLU:N	2.21	0.59
2:J:2347:GLU:OE1	2:J:2347:GLU:N	2.27	0.59
2:E:3050:VAL:HG11	2:E:3068:LEU:HD11	1.85	0.58
2:J:235:ALA:O	2:J:242:ARG:NH2	2.36	0.58
2:E:1115:LEU:HB3	2:E:1123:VAL:HG11	1.84	0.58
2:G:1444:GLU:HG2	2:G:1557:THR:HG21	1.86	0.58
2:G:2175:GLU:O	2:G:2179:ILE:HG12	2.02	0.58
2:G:2212:VAL:HG22	2:G:2256:TYR:HE1	1.68	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:1619:ARG:HA	2:J:1626:TRP:HA	1.85	0.58
3:M:109:THR:O	3:M:113:GLU:HG2	2.03	0.58
2:B:2519:LEU:HD21	2:B:2572:THR:HG21	1.85	0.58
2:B:2563:THR:HG22	2:B:2606:CYS:HA	1.85	0.58
2:B:3312:LEU:H	2:B:3312:LEU:HD12	1.68	0.58
2:E:1735:ILE:HD11	2:E:2156:LEU:HD11	1.84	0.58
2:E:2703:LEU:HD12	2:E:3001:ILE:HD11	1.86	0.58
2:E:2962:GLN:OE1	2:E:2965:ARG:NH1	2.36	0.58
2:G:2959:PHE:O	2:G:2963:LEU:HG	2.02	0.58
2:E:1497:GLY:HA2	2:E:1500:PHE:HD2	1.68	0.58
2:E:4681:LEU:HD12	2:E:4724:VAL:HG21	1.84	0.58
2:G:1115:LEU:HB3	2:G:1123:VAL:HG11	1.84	0.58
2:G:3050:VAL:HG11	2:G:3068:LEU:HD11	1.85	0.58
2:J:3312:LEU:H	2:J:3312:LEU:HD12	1.68	0.58
2:B:1619:ARG:HA	2:B:1626:TRP:HA	1.85	0.58
2:E:1424:PRO:O	2:E:1428:LEU:HG	2.04	0.58
2:G:1944:GLU:HG2	2:G:2123:LEU:HD13	1.83	0.58
2:G:1979:LEU:HD23	2:G:1982:ARG:HH12	1.68	0.58
2:G:3253:ILE:HG23	2:G:3318:ASN:HD22	1.68	0.58
2:G:3549:VAL:O	2:G:3553:LEU:HD13	2.02	0.58
2:J:881:LEU:O	2:J:885:THR:HG23	2.04	0.58
2:J:2575:ARG:HG3	2:J:2578:MET:HG3	1.84	0.58
2:J:3050:VAL:HG11	2:J:3068:LEU:HD11	1.85	0.58
3:K:109:THR:O	3:K:113:GLU:HG2	2.03	0.58
2:B:1735:ILE:HD11	2:B:2156:LEU:HD11	1.84	0.58
2:B:2519:LEU:HA	2:B:2522:LEU:HD12	1.84	0.58
2:J:4681:LEU:HD12	2:J:4724:VAL:HG21	1.84	0.58
2:B:341:TYR:CZ	2:B:392:ARG:HB2	2.38	0.58
2:B:653:ALA:HB3	2:B:656:SER:HB3	1.86	0.58
2:B:2703:LEU:HD12	2:B:3001:ILE:HD11	1.86	0.58
2:E:881:LEU:O	2:E:885:THR:HG23	2.04	0.58
2:G:235:ALA:O	2:G:242:ARG:NH2	2.36	0.58
2:J:341:TYR:CZ	2:J:392:ARG:HB2	2.38	0.58
3:C:109:THR:O	3:C:113:GLU:HG2	2.03	0.58
1:D:17:LYS:HZ2	1:D:18:LYS:HG2	1.67	0.58
2:E:653:ALA:HB3	2:E:656:SER:HB3	1.86	0.58
2:G:3349:ALA:HB1	2:G:3353:LEU:HD22	1.86	0.58
2:J:1497:GLY:HA2	2:J:1500:PHE:HD2	1.68	0.58
2:B:881:LEU:O	2:B:885:THR:HG23	2.04	0.58
2:E:1786:LEU:HD12	2:E:1787:PRO:HD2	1.86	0.58
2:G:783:PHE:HB2	2:G:787:VAL:HG11	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:1860:LYS:HG2	2:G:1864:LYS:HE3	1.84	0.58
2:G:3257:ALA:O	2:G:3325:ASN:ND2	2.37	0.58
2:J:2703:LEU:HD12	2:J:3001:ILE:HD11	1.86	0.58
2:J:3257:ALA:O	2:J:3325:ASN:ND2	2.37	0.58
3:F:109:THR:O	3:F:113:GLU:HG2	2.03	0.58
1:H:17:LYS:NZ	1:H:18:LYS:HG2	2.19	0.58
2:B:1008:SER:HB2	2:B:1017:ARG:HE	1.67	0.58
2:B:1444:GLU:HG2	2:B:1557:THR:HG21	1.86	0.58
2:B:1786:LEU:HD12	2:B:1787:PRO:HD2	1.86	0.58
2:E:110:ARG:NH2	2:E:117:TYR:OH	2.37	0.58
2:E:235:ALA:O	2:E:242:ARG:NH2	2.36	0.58
2:J:110:ARG:NH2	2:J:117:TYR:OH	2.37	0.58
2:J:783:PHE:HB2	2:J:787:VAL:HG11	1.85	0.58
2:B:3349:ALA:HB1	2:B:3353:LEU:HD22	1.86	0.57
2:E:1444:GLU:HG2	2:E:1557:THR:HG21	1.86	0.57
2:E:1619:ARG:HA	2:E:1626:TRP:HA	1.85	0.57
2:E:3102:ASP:HA	2:E:3105:LYS:HE2	1.84	0.57
2:G:341:TYR:CZ	2:G:392:ARG:HB2	2.38	0.57
2:J:3347:SER:HB3	2:J:3348:ARG:NH2	2.19	0.57
3:C:38:ARG:NH2	3:C:64:LYS:HG2	2.16	0.57
2:B:13:PHE:HA	2:B:164:ARG:HA	1.86	0.57
2:B:2518:LEU:O	2:B:2522:LEU:HG	2.04	0.57
2:B:2566:ALA:HA	2:B:2569:PHE:HD2	1.69	0.57
2:E:341:TYR:CZ	2:E:392:ARG:HB2	2.38	0.57
2:G:13:PHE:HA	2:G:164:ARG:HA	1.86	0.57
2:G:881:LEU:O	2:G:885:THR:HG23	2.04	0.57
2:G:1424:PRO:O	2:G:1428:LEU:HG	2.04	0.57
2:J:653:ALA:HB3	2:J:656:SER:HB3	1.86	0.57
2:J:1424:PRO:O	2:J:1428:LEU:HG	2.04	0.57
2:E:882:TRP:CD1	3:F:106:PRO:HB3	2.40	0.57
2:E:3443:ILE:HG12	2:E:3605:HIS:HD2	1.70	0.57
2:G:2779:GLU:HG3	2:G:2792:ARG:HG2	1.86	0.57
2:G:3443:ILE:HG12	2:G:3605:HIS:HD2	1.70	0.57
2:J:1444:GLU:HG2	2:J:1557:THR:HG21	1.86	0.57
2:J:3110:LEU:HD13	2:J:3183:VAL:HG12	1.86	0.57
1:A:17:LYS:NZ	1:A:18:LYS:HG2	2.19	0.57
1:I:93:PRO:O	1:I:94:ASN:ND2	2.33	0.57
2:E:878:ILE:HG21	3:F:107:TRP:NE1	2.20	0.57
2:E:3347:SER:HB3	2:E:3348:ARG:NH2	2.19	0.57
2:G:1497:GLY:HA2	2:G:1500:PHE:HD2	1.68	0.57
2:G:1786:LEU:HD12	2:G:1787:PRO:HD2	1.86	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3347:SER:HB3	2:G:3348:ARG:NH2	2.19	0.57
2:G:4681:LEU:HD12	2:G:4724:VAL:HG21	1.84	0.57
2:J:2779:GLU:HG3	2:J:2792:ARG:HG2	1.86	0.57
3:K:39:GLN:NE2	3:K:40:ALA:O	2.38	0.57
3:M:39:GLN:NE2	3:M:40:ALA:O	2.37	0.57
2:B:1424:PRO:O	2:B:1428:LEU:HG	2.04	0.57
2:B:2779:GLU:HG3	2:B:2792:ARG:HG2	1.86	0.57
2:B:3443:ILE:HG12	2:B:3605:HIS:HD2	1.70	0.57
2:E:13:PHE:HA	2:E:164:ARG:HA	1.86	0.57
2:G:224:HIS:HB3	2:G:229:GLU:HG3	1.86	0.57
2:B:248:GLU:HA	2:B:372:LEU:HB2	1.86	0.57
2:B:3257:ALA:O	2:B:3325:ASN:ND2	2.37	0.57
2:G:355:LEU:HD23	2:G:378:LEU:HB3	1.87	0.57
2:G:2703:LEU:HD12	2:G:3001:ILE:HD11	1.86	0.57
2:J:3443:ILE:HG12	2:J:3605:HIS:HD2	1.70	0.57
3:C:39:GLN:NE2	3:C:40:ALA:O	2.38	0.57
2:B:2766:TRP:O	2:B:2770:LYS:HG2	2.05	0.57
2:E:224:HIS:HB3	2:E:229:GLU:HG3	1.86	0.57
2:G:110:ARG:NH2	2:G:117:TYR:OH	2.37	0.57
2:G:653:ALA:HB3	2:G:656:SER:HB3	1.86	0.57
2:J:684:VAL:HG22	2:J:781:VAL:HG12	1.86	0.57
2:J:2572:THR:HG22	2:J:2575:ARG:HB3	1.87	0.57
2:J:3227:ARG:HB3	2:J:3232:LEU:HB2	1.87	0.57
2:J:3349:ALA:HB1	2:J:3353:LEU:HD22	1.86	0.57
2:B:3347:SER:HB3	2:B:3348:ARG:NH2	2.19	0.57
2:B:4999:ASP:HB2	2:B:5002:GLU:HG2	1.87	0.57
2:E:3227:ARG:HB3	2:E:3232:LEU:HB2	1.87	0.57
2:G:2634:ASN:OD1	2:G:2636:PHE:N	2.37	0.57
2:B:210:GLU:HG3	2:B:213:TYR:HB2	1.87	0.57
2:B:244:LEU:HD13	2:B:375:LYS:HZ1	1.69	0.57
2:B:355:LEU:HD23	2:B:378:LEU:HB3	1.87	0.57
2:E:3257:ALA:O	2:E:3325:ASN:ND2	2.37	0.57
2:E:3349:ALA:HB1	2:E:3353:LEU:HD22	1.86	0.57
2:J:2766:TRP:O	2:J:2770:LYS:HG2	2.05	0.57
3:F:39:GLN:NE2	3:F:40:ALA:O	2.38	0.57
2:B:2991:HIS:O	2:B:2995:ILE:HG13	2.06	0.56
2:B:3110:LEU:HD13	2:B:3183:VAL:HG12	1.86	0.56
2:E:2626:LEU:O	2:E:2630:VAL:HG23	2.05	0.56
2:E:4688:ILE:HG22	2:E:4689:THR:HG23	1.87	0.56
2:G:2766:TRP:O	2:G:2770:LYS:HG2	2.05	0.56
2:G:4999:ASP:HB2	2:G:5002:GLU:HG2	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:210:GLU:HG3	2:J:213:TYR:HB2	1.87	0.56
3:M:38:ARG:NH2	3:M:64:LYS:HG2	2.16	0.56
2:G:633:LEU:HB3	2:G:1639:LEU:HD11	1.87	0.56
2:G:1947:CYS:SG	2:G:2127:GLN:NE2	2.77	0.56
2:J:224:HIS:HB3	2:J:229:GLU:HG3	1.86	0.56
1:D:97:LEU:HB3	1:D:99:PHE:HE2	1.70	0.56
1:I:17:LYS:NZ	1:I:18:LYS:HG2	2.19	0.56
2:B:633:LEU:HB3	2:B:1639:LEU:HD11	1.87	0.56
2:E:684:VAL:HG22	2:E:781:VAL:HG12	1.87	0.56
2:E:1225:PRO:HG2	2:E:1228:ILE:HD12	1.88	0.56
2:E:2766:TRP:O	2:E:2770:LYS:HG2	2.05	0.56
2:E:2779:GLU:HG3	2:E:2792:ARG:HG2	1.86	0.56
2:E:2991:HIS:O	2:E:2995:ILE:HG13	2.06	0.56
2:G:2575:ARG:HG3	2:G:2578:MET:CG	2.35	0.56
2:G:2626:LEU:O	2:G:2630:VAL:HG23	2.05	0.56
2:J:355:LEU:HD23	2:J:378:LEU:HB3	1.87	0.56
2:J:758:ARG:HH11	2:J:761:GLY:HA2	1.71	0.56
2:B:929:LEU:HA	2:B:932:LEU:HD12	1.87	0.56
2:B:4688:ILE:HG22	2:B:4689:THR:HG23	1.87	0.56
2:B:4978:HIS:ND1	2:B:4982:GLU:OE1	2.39	0.56
2:E:365:LYS:HE2	2:E:369:LEU:HD21	1.87	0.56
2:E:758:ARG:HH11	2:E:761:GLY:HA2	1.71	0.56
2:E:929:LEU:HA	2:E:932:LEU:HD12	1.87	0.56
2:G:210:GLU:HG3	2:G:213:TYR:HB2	1.87	0.56
2:G:878:ILE:HG21	3:M:107:TRP:NE1	2.21	0.56
2:G:2991:HIS:O	2:G:2995:ILE:HG13	2.06	0.56
2:G:4978:HIS:ND1	2:G:4982:GLU:OE1	2.39	0.56
2:J:13:PHE:HA	2:J:164:ARG:HA	1.86	0.56
2:J:1947:CYS:SG	2:J:2127:GLN:NE2	2.77	0.56
1:A:54:GLU:OE2	1:A:54:GLU:N	2.27	0.56
2:B:1225:PRO:HG2	2:B:1228:ILE:HD12	1.87	0.56
2:E:4999:ASP:HB2	2:E:5002:GLU:HG2	1.87	0.56
2:G:758:ARG:HH11	2:G:761:GLY:HA2	1.71	0.56
2:G:3110:LEU:HD13	2:G:3183:VAL:HG12	1.86	0.56
2:J:1786:LEU:HD12	2:J:1787:PRO:HD2	1.86	0.56
2:J:3439:GLY:O	2:J:3443:ILE:HG13	2.06	0.56
2:B:224:HIS:HB3	2:B:229:GLU:HG3	1.86	0.56
2:B:684:VAL:HG22	2:B:781:VAL:HG12	1.87	0.56
2:B:1947:CYS:SG	2:B:2127:GLN:NE2	2.77	0.56
2:B:2626:LEU:O	2:B:2630:VAL:HG23	2.05	0.56
2:E:210:GLU:HG3	2:E:213:TYR:HB2	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:633:LEU:HB3	2:E:1639:LEU:HD11	1.87	0.56
2:E:4978:HIS:ND1	2:E:4982:GLU:OE1	2.39	0.56
2:J:3547:GLU:O	2:J:3551:GLU:HG2	2.05	0.56
1:A:93:PRO:O	1:A:94:ASN:ND2	2.33	0.56
2:B:2875:ALA:HB2	2:B:2927:LEU:HD22	1.88	0.56
2:B:4715:TYR:CE2	2:B:4717:ASP:HB3	2.39	0.56
2:G:4943:LEU:O	2:G:4947:GLN:HG2	2.06	0.56
2:J:1225:PRO:HG2	2:J:1228:ILE:HD12	1.88	0.56
2:J:4999:ASP:HB2	2:J:5002:GLU:HG2	1.87	0.56
1:D:17:LYS:NZ	1:D:18:LYS:HG2	2.19	0.56
2:B:365:LYS:HE2	2:B:369:LEU:HD21	1.88	0.56
2:E:2575:ARG:HG3	2:E:2578:MET:CG	2.36	0.56
2:G:2498:HIS:O	2:G:2502:MET:HG3	2.06	0.56
2:G:4553:ASN:O	2:G:4557:ARG:HG3	2.06	0.56
2:J:4943:LEU:O	2:J:4947:GLN:HG2	2.06	0.56
2:E:355:LEU:HD23	2:E:378:LEU:HB3	1.87	0.56
2:E:3439:GLY:O	2:E:3443:ILE:HG13	2.06	0.56
2:E:3547:GLU:O	2:E:3551:GLU:HG2	2.05	0.56
2:G:684:VAL:HG22	2:G:781:VAL:HG12	1.87	0.56
2:G:3040:THR:HG21	2:G:3080:VAL:HG11	1.88	0.56
2:G:3547:GLU:O	2:G:3551:GLU:HG2	2.05	0.56
2:J:2575:ARG:HG3	2:J:2578:MET:CG	2.36	0.56
2:B:110:ARG:NH2	2:B:117:TYR:OH	2.37	0.56
2:B:127:MET:SD	2:B:127:MET:N	2.73	0.56
2:B:3040:THR:HG21	2:B:3080:VAL:HG11	1.88	0.56
2:G:2875:ALA:HB2	2:G:2927:LEU:HD22	1.88	0.56
2:G:3227:ARG:HB3	2:G:3232:LEU:HB2	1.87	0.56
2:J:2626:LEU:O	2:J:2630:VAL:HG23	2.05	0.56
2:J:3079:THR:HA	2:J:3082:LYS:HG2	1.88	0.56
2:J:3725:TYR:O	2:J:3729:MET:HG3	2.06	0.56
2:J:4688:ILE:HG22	2:J:4689:THR:HG23	1.87	0.56
2:B:758:ARG:HH11	2:B:761:GLY:HA2	1.71	0.55
2:B:3245:VAL:HG23	2:B:3248:ARG:H	1.71	0.55
2:B:3355:HIS:ND1	2:B:3355:HIS:O	2.40	0.55
2:B:3547:GLU:O	2:B:3551:GLU:HG2	2.05	0.55
2:E:3040:THR:HG21	2:E:3080:VAL:HG11	1.88	0.55
2:E:3110:LEU:HD13	2:E:3183:VAL:HG12	1.86	0.55
2:E:3206:LEU:HB2	2:E:3280:TYR:CE2	2.41	0.55
2:E:5009:TYR:HA	2:E:5012:LYS:HE3	1.87	0.55
2:J:2991:HIS:O	2:J:2995:ILE:HG13	2.06	0.55
2:B:3227:ARG:HB3	2:B:3232:LEU:HB2	1.87	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4553:ASN:O	2:B:4557:ARG:HG3	2.06	0.55
2:E:2572:THR:HA	2:E:2574:HIS:CE1	2.41	0.55
2:G:3206:LEU:HB2	2:G:3280:TYR:HE2	1.72	0.55
2:G:3439:GLY:O	2:G:3443:ILE:HG13	2.06	0.55
2:J:633:LEU:HB3	2:J:1639:LEU:HD11	1.87	0.55
2:J:3040:THR:HG21	2:J:3080:VAL:HG11	1.88	0.55
2:E:920:TYR:HE1	3:F:99:ARG:HE	1.55	0.55
2:E:3592:ILE:HG12	2:E:3595:ARG:HH21	1.72	0.55
2:G:4688:ILE:HG22	2:G:4689:THR:HG23	1.87	0.55
2:J:4749:GLU:HG3	2:J:4753:HIS:CE1	2.42	0.55
2:B:384:MET:N	2:B:384:MET:SD	2.79	0.55
2:B:3206:LEU:HB2	2:B:3280:TYR:CE2	2.41	0.55
2:B:3532:LEU:HD11	2:B:3560:GLN:HB3	1.89	0.55
2:E:2992:GLU:HB2	2:E:2996:LYS:HZ1	1.71	0.55
2:G:2418:LEU:O	2:G:2422:ILE:HG12	2.07	0.55
2:G:3312:LEU:H	2:G:3312:LEU:HD12	1.70	0.55
2:G:3532:LEU:HD11	2:G:3560:GLN:HB3	1.89	0.55
2:G:3725:TYR:O	2:G:3729:MET:HG3	2.06	0.55
2:J:878:ILE:HG21	3:K:107:TRP:NE1	2.20	0.55
2:J:2827:ARG:NH2	2:J:2935:TYR:OH	2.40	0.55
2:J:3355:HIS:ND1	2:J:3355:HIS:O	2.39	0.55
2:J:3532:LEU:HD11	2:J:3560:GLN:HB3	1.89	0.55
2:J:3534:MET:O	2:J:3538:THR:HG23	2.07	0.55
3:K:40:ALA:HB3	3:K:43:LYS:HB2	1.88	0.55
2:B:886:ARG:HH12	2:B:904:HIS:CE1	2.25	0.55
2:B:2498:HIS:O	2:B:2502:MET:HG3	2.06	0.55
2:B:4749:GLU:HG3	2:B:4753:HIS:CE1	2.42	0.55
2:B:5013:MET:HE1	2:B:5021:PHE:HB3	1.88	0.55
2:E:384:MET:N	2:E:384:MET:SD	2.79	0.55
2:E:3532:LEU:HD11	2:E:3560:GLN:HB3	1.89	0.55
2:E:3725:TYR:O	2:E:3729:MET:HG3	2.06	0.55
2:G:1225:PRO:HG2	2:G:1228:ILE:HD12	1.88	0.55
2:G:3507:THR:O	2:G:3511:VAL:HG13	2.07	0.55
2:J:929:LEU:HA	2:J:932:LEU:HD12	1.87	0.55
2:J:2623:LEU:O	2:J:2627:VAL:HG23	2.07	0.55
2:E:2566:ALA:HA	2:E:2569:PHE:CD2	2.39	0.55
2:E:4943:LEU:O	2:E:4947:GLN:HG2	2.06	0.55
2:G:960:MET:SD	2:G:960:MET:N	2.75	0.55
2:G:1084:GLN:NE2	2:G:1186:ASP:O	2.40	0.55
2:J:4553:ASN:O	2:J:4557:ARG:HG3	2.06	0.55
3:M:62:SER:O	3:M:62:SER:OG	2.24	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:127:MET:SD	2:E:127:MET:N	2.73	0.55
2:E:3079:THR:HA	2:E:3082:LYS:HG2	1.88	0.55
2:E:3355:HIS:ND1	2:E:3355:HIS:O	2.39	0.55
2:G:384:MET:N	2:G:384:MET:SD	2.79	0.55
2:G:929:LEU:HA	2:G:932:LEU:HD12	1.87	0.55
2:G:2827:ARG:NH2	2:G:2935:TYR:OH	2.40	0.55
2:G:3206:LEU:HB2	2:G:3280:TYR:CE2	2.41	0.55
2:J:2875:ALA:HB2	2:J:2927:LEU:HD22	1.88	0.55
2:J:4978:HIS:ND1	2:J:4982:GLU:OE1	2.39	0.55
2:B:1087:ARG:HG2	2:B:1154:ASP:OD1	2.07	0.55
2:B:2178:MET:HB2	2:B:2228:MET:HE1	1.89	0.55
2:B:3507:THR:O	2:B:3511:VAL:HG13	2.06	0.55
2:B:4943:LEU:O	2:B:4947:GLN:HG2	2.06	0.55
2:E:1087:ARG:HG2	2:E:1154:ASP:OD1	2.07	0.55
2:G:1087:ARG:HG2	2:G:1154:ASP:OD1	2.07	0.55
2:G:1259:ARG:NH1	2:G:1591:CYS:SG	2.80	0.55
2:G:2623:LEU:O	2:G:2627:VAL:HG23	2.07	0.55
2:J:384:MET:N	2:J:384:MET:SD	2.79	0.55
2:J:2498:HIS:O	2:J:2502:MET:HG3	2.06	0.55
2:J:3592:ILE:HG12	2:J:3595:ARG:HH21	1.72	0.55
1:A:97:LEU:HB3	1:A:99:PHE:HE2	1.72	0.55
2:B:4572:ALA:O	2:B:4576:ILE:HG13	2.07	0.55
2:E:573:GLU:OE1	2:E:573:GLU:N	2.21	0.55
2:E:3207:GLU:HB2	2:E:3246:LEU:CD2	2.37	0.55
2:E:4715:TYR:CE2	2:E:4717:ASP:HB3	2.40	0.55
2:E:4749:GLU:HG3	2:E:4753:HIS:CE1	2.42	0.55
2:G:1940:CYS:O	2:G:1944:GLU:HG3	2.07	0.55
2:G:3079:THR:HA	2:G:3082:LYS:HG2	1.89	0.55
2:G:3355:HIS:ND1	2:G:3355:HIS:O	2.40	0.55
2:G:4867:GLU:OE1	2:G:4867:GLU:N	2.31	0.55
2:J:3206:LEU:HB2	2:J:3280:TYR:CE2	2.42	0.55
2:B:960:MET:HG2	2:B:961:MET:SD	2.47	0.55
2:B:2418:LEU:O	2:B:2422:ILE:HG12	2.07	0.55
2:B:3246:LEU:HG	2:B:3247:ASP:N	2.21	0.55
2:E:248:GLU:OE1	2:E:373:LYS:HE2	2.07	0.55
2:E:886:ARG:HH12	2:E:904:HIS:CE1	2.25	0.55
2:E:1084:GLN:NE2	2:E:1186:ASP:O	2.40	0.55
2:E:2498:HIS:O	2:E:2502:MET:HG3	2.06	0.55
2:E:3534:MET:O	2:E:3538:THR:HG23	2.07	0.55
2:E:3538:THR:O	2:E:3542:LEU:HG	2.07	0.55
2:E:4553:ASN:O	2:E:4557:ARG:HG3	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3534:MET:O	2:G:3538:THR:HG23	2.07	0.55
2:G:3538:THR:O	2:G:3542:LEU:HG	2.07	0.55
2:J:3206:LEU:HB2	2:J:3280:TYR:HE2	1.72	0.55
2:B:1259:ARG:NH1	2:B:1591:CYS:SG	2.80	0.54
2:B:2827:ARG:NH2	2:B:2935:TYR:OH	2.40	0.54
2:B:3592:ILE:HG12	2:B:3595:ARG:HH21	1.72	0.54
2:B:3725:TYR:O	2:B:3729:MET:HG3	2.06	0.54
2:E:504:ALA:HB2	2:E:512:ALA:HB2	1.89	0.54
2:E:2212:VAL:HG22	2:E:2256:TYR:CE1	2.43	0.54
2:E:3594:ARG:NH1	2:E:3597:GLN:OE1	2.34	0.54
2:G:886:ARG:HH12	2:G:904:HIS:CE1	2.25	0.54
2:G:4572:ALA:O	2:G:4576:ILE:HG13	2.07	0.54
2:J:1087:ARG:HG2	2:J:1154:ASP:OD1	2.07	0.54
2:J:2178:MET:HB2	2:J:2228:MET:HE1	1.88	0.54
2:J:2212:VAL:HG22	2:J:2256:TYR:CE1	2.43	0.54
2:J:3507:THR:O	2:J:3511:VAL:HG13	2.07	0.54
1:I:97:LEU:HB3	1:I:99:PHE:HE2	1.72	0.54
2:B:2518:LEU:HD22	2:B:2565:CYS:HB3	1.89	0.54
2:B:3538:THR:O	2:B:3542:LEU:HG	2.07	0.54
2:E:2875:ALA:HB2	2:E:2927:LEU:HD22	1.88	0.54
2:E:3194:LEU:HA	2:E:3197:LEU:HG	1.90	0.54
2:G:893:TYR:HA	2:G:904:HIS:HB3	1.89	0.54
2:J:1259:ARG:NH1	2:J:1591:CYS:SG	2.80	0.54
2:B:1940:CYS:O	2:B:1944:GLU:HG3	2.07	0.54
2:B:2992:GLU:HB2	2:B:2996:LYS:HZ1	1.71	0.54
2:B:3206:LEU:HB2	2:B:3280:TYR:HE2	1.72	0.54
2:B:3439:GLY:O	2:B:3443:ILE:HG13	2.06	0.54
2:E:2418:LEU:O	2:E:2422:ILE:HG12	2.07	0.54
2:E:2452:ARG:NH2	2:J:177:GLU:OE2	2.41	0.54
2:G:876:GLU:O	2:G:880:GLU:HG3	2.07	0.54
2:G:3277:LEU:HD13	2:G:3315:LEU:HD23	1.89	0.54
3:F:40:ALA:HB3	3:F:43:LYS:HB2	1.88	0.54
2:B:504:ALA:HB2	2:B:512:ALA:HB2	1.89	0.54
2:B:2610:LEU:O	2:B:2614:ILE:HG12	2.08	0.54
2:B:2998:PHE:HA	2:B:3002:LEU:HB2	1.90	0.54
2:B:3106:MET:N	2:B:3106:MET:SD	2.80	0.54
2:E:876:GLU:O	2:E:880:GLU:HG3	2.07	0.54
2:E:1699:GLU:HA	2:E:1814:MET:HE1	1.90	0.54
2:E:2827:ARG:NH2	2:E:2935:TYR:OH	2.40	0.54
2:E:2998:PHE:HA	2:E:3002:LEU:HB2	1.90	0.54
2:G:3592:ILE:HG12	2:G:3595:ARG:HH21	1.72	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:4749:GLU:HG3	2:G:4753:HIS:CE1	2.42	0.54
2:J:1084:GLN:NE2	2:J:1186:ASP:O	2.40	0.54
2:J:3965:LEU:HA	2:J:3968:TYR:CD2	2.43	0.54
2:J:4572:ALA:O	2:J:4576:ILE:HG13	2.07	0.54
2:B:234:SER:HB2	2:B:242:ARG:HG2	1.89	0.54
2:B:2212:VAL:HG22	2:B:2256:TYR:CE1	2.43	0.54
2:E:3507:THR:O	2:E:3511:VAL:HG13	2.06	0.54
2:G:1970:GLN:NE2	2:G:3641:LEU:O	2.37	0.54
2:G:2749:GLU:HG3	2:G:2752:ASP:HB2	1.90	0.54
2:J:426:ARG:HG3	2:J:431:PRO:HD3	1.90	0.54
2:J:920:TYR:HE1	3:K:99:ARG:HE	1.56	0.54
2:J:2992:GLU:HB2	2:J:2996:LYS:HZ1	1.73	0.54
2:J:2998:PHE:HA	2:J:3002:LEU:HB2	1.90	0.54
2:J:3538:THR:O	2:J:3542:LEU:HG	2.07	0.54
2:B:2623:LEU:O	2:B:2627:VAL:HG23	2.07	0.54
2:B:4867:GLU:OE1	2:B:4867:GLU:N	2.31	0.54
2:E:960:MET:HG2	2:E:961:MET:SD	2.48	0.54
2:J:960:MET:HG2	2:J:961:MET:SD	2.48	0.54
2:J:1699:GLU:HA	2:J:1814:MET:HE1	1.90	0.54
2:B:3079:THR:HA	2:B:3082:LYS:HG2	1.89	0.54
2:E:1259:ARG:NH1	2:E:1591:CYS:SG	2.80	0.54
2:E:3445:TRP:CD1	2:E:3509:LEU:HG	2.43	0.54
2:G:177:GLU:OE2	2:J:2452:ARG:NH2	2.41	0.54
2:G:426:ARG:HG3	2:G:431:PRO:HD3	1.90	0.54
2:G:2123:LEU:O	2:G:2127:GLN:HG2	2.08	0.54
2:G:2238:TYR:O	2:G:2242:ILE:HG12	2.08	0.54
2:J:886:ARG:HH12	2:J:904:HIS:CE1	2.25	0.54
2:J:3445:TRP:CD1	2:J:3509:LEU:HG	2.43	0.54
2:G:960:MET:HG2	2:G:961:MET:SD	2.47	0.54
2:J:877:ASN:O	2:J:881:LEU:HD22	2.08	0.54
2:J:2123:LEU:O	2:J:2127:GLN:HG2	2.08	0.54
2:J:3194:LEU:HA	2:J:3197:LEU:HG	1.90	0.54
2:B:470:SER:HA	2:B:473:ASN:HD21	1.73	0.54
2:B:2749:GLU:HG3	2:B:2752:ASP:HB2	1.90	0.54
2:E:2178:MET:HB2	2:E:2228:MET:HE1	1.89	0.54
2:E:2238:TYR:O	2:E:2242:ILE:HG12	2.08	0.54
2:E:2312:MET:SD	2:E:2312:MET:N	2.79	0.54
2:E:3938:SER:O	2:E:4002:LYS:NZ	2.41	0.54
2:G:470:SER:HA	2:G:473:ASN:HD21	1.73	0.54
2:G:2312:MET:SD	2:G:2312:MET:N	2.79	0.54
2:G:3938:SER:O	2:G:4002:LYS:NZ	2.41	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2634:ASN:OD1	2:J:2636:PHE:N	2.37	0.54
3:C:40:ALA:HB3	3:C:43:LYS:HB2	1.88	0.54
3:M:40:ALA:HB3	3:M:43:LYS:HB2	1.89	0.54
2:B:1084:GLN:NE2	2:B:1186:ASP:O	2.40	0.54
2:B:2479:LEU:HD23	2:B:2479:LEU:H	1.73	0.54
2:E:877:ASN:O	2:E:881:LEU:HD22	2.08	0.54
2:E:2623:LEU:O	2:E:2627:VAL:HG23	2.07	0.54
2:E:4573:ILE:HG23	2:E:4643:LEU:HD11	1.91	0.54
2:J:3106:MET:N	2:J:3106:MET:SD	2.80	0.54
2:J:4063:ASP:HB2	2:J:4067:LYS:HE3	1.90	0.54
2:B:876:GLU:O	2:B:880:GLU:HG3	2.07	0.53
2:B:877:ASN:O	2:B:881:LEU:HD22	2.08	0.53
2:B:893:TYR:HA	2:B:904:HIS:HB3	1.89	0.53
2:B:1699:GLU:HA	2:B:1814:MET:HE1	1.90	0.53
2:B:2238:TYR:O	2:B:2242:ILE:HG12	2.08	0.53
2:B:3194:LEU:HA	2:B:3197:LEU:HG	1.90	0.53
2:E:2527:LEU:HA	2:E:2530:MET:HG2	1.90	0.53
2:G:2992:GLU:HB2	2:G:2996:LYS:HZ1	1.73	0.53
2:J:2238:TYR:O	2:J:2242:ILE:HG12	2.08	0.53
2:J:3280:TYR:HE1	2:J:3284:TRP:HD1	1.56	0.53
2:B:3280:TYR:CE1	2:B:3284:TRP:HD1	2.27	0.53
2:E:3201:MET:SD	2:E:3203:VAL:HG12	2.48	0.53
2:G:234:SER:HB2	2:G:242:ARG:HG2	1.90	0.53
2:G:877:ASN:O	2:G:881:LEU:HD22	2.08	0.53
2:G:1699:GLU:HA	2:G:1814:MET:HE1	1.90	0.53
2:G:2138:LEU:HD11	2:G:3662:ILE:HD12	1.90	0.53
2:G:3106:MET:N	2:G:3106:MET:SD	2.80	0.53
2:J:2418:LEU:O	2:J:2422:ILE:HG12	2.07	0.53
2:J:2749:GLU:HG3	2:J:2752:ASP:HB2	1.90	0.53
2:B:3201:MET:SD	2:B:3203:VAL:HG12	2.48	0.53
2:E:2123:LEU:O	2:E:2127:GLN:HG2	2.08	0.53
2:E:3093:ARG:O	2:E:3097:GLU:HG2	2.09	0.53
2:E:3106:MET:N	2:E:3106:MET:SD	2.80	0.53
2:E:3376:GLU:OE2	2:E:3380:ARG:NH2	2.39	0.53
2:E:3514:LEU:HD13	2:E:3602:VAL:HG13	1.91	0.53
2:E:4572:ALA:O	2:E:4576:ILE:HG13	2.07	0.53
2:G:2285:GLU:CD	2:G:3860:ASN:HD21	2.12	0.53
2:G:3201:MET:SD	2:G:3203:VAL:HG12	2.48	0.53
2:J:234:SER:HB2	2:J:242:ARG:HG2	1.90	0.53
2:B:206:CYS:HB2	2:B:271:GLY:HA3	1.90	0.53
2:B:426:ARG:HG3	2:B:431:PRO:HD3	1.90	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:999:ASP:O	2:B:1003:GLN:HG2	2.09	0.53
2:B:2518:LEU:HD21	2:B:2569:PHE:CE2	2.43	0.53
2:E:893:TYR:HA	2:E:904:HIS:HB3	1.89	0.53
2:E:999:ASP:O	2:E:1003:GLN:HG2	2.09	0.53
2:E:4063:ASP:HB2	2:E:4067:LYS:HE3	1.90	0.53
2:E:4867:GLU:OE1	2:E:4867:GLU:N	2.31	0.53
2:G:2178:MET:HB2	2:G:2228:MET:HE1	1.90	0.53
2:G:2527:LEU:HA	2:G:2530:MET:HG2	1.90	0.53
2:G:2736:ASP:OD1	2:G:2736:ASP:N	2.42	0.53
2:G:4573:ILE:HG23	2:G:4643:LEU:HD11	1.91	0.53
2:J:876:GLU:O	2:J:880:GLU:HG3	2.07	0.53
2:J:999:ASP:O	2:J:1003:GLN:HG2	2.09	0.53
2:J:3093:ARG:O	2:J:3097:GLU:HG2	2.09	0.53
2:B:2452:ARG:NH2	2:E:177:GLU:OE2	2.41	0.53
2:E:206:CYS:HB2	2:E:271:GLY:HA3	1.91	0.53
2:E:1947:CYS:SG	2:E:2127:GLN:NE2	2.77	0.53
2:E:2531:ARG:NH1	2:E:2585:THR:HB	2.24	0.53
2:E:2749:GLU:HG3	2:E:2752:ASP:HB2	1.90	0.53
2:G:3376:GLU:OE2	2:G:3380:ARG:NH2	2.39	0.53
2:G:3445:TRP:CD1	2:G:3509:LEU:HG	2.43	0.53
2:J:206:CYS:HB2	2:J:271:GLY:HA3	1.91	0.53
2:J:504:ALA:HB2	2:J:512:ALA:HB2	1.89	0.53
2:J:2792:ARG:NH2	2:J:2798:SER:OG	2.41	0.53
2:E:1569:GLN:HB2	2:E:1572:ILE:HD12	1.91	0.53
2:E:3147:ILE:HG23	2:E:3152:PHE:HB2	1.91	0.53
2:G:206:CYS:HB2	2:G:271:GLY:HA3	1.90	0.53
2:G:2531:ARG:NH1	2:G:2585:THR:HB	2.24	0.53
2:G:3194:LEU:HA	2:G:3197:LEU:HG	1.90	0.53
2:J:470:SER:HA	2:J:473:ASN:HD21	1.73	0.53
2:J:1940:CYS:O	2:J:1944:GLU:HG3	2.07	0.53
2:J:2527:LEU:HA	2:J:2530:MET:HG2	1.90	0.53
2:J:3162:GLN:HG2	2:J:3218:VAL:HG13	1.90	0.53
1:I:54:GLU:OE2	1:I:54:GLU:N	2.27	0.53
2:B:960:MET:SD	2:B:960:MET:N	2.75	0.53
2:B:1569:GLN:HB2	2:B:1572:ILE:HD12	1.91	0.53
2:B:3376:GLU:OE2	2:B:3380:ARG:NH2	2.39	0.53
2:E:3206:LEU:HB2	2:E:3280:TYR:HE2	1.72	0.53
2:E:3835:LEU:HD22	2:E:3880:PHE:HZ	1.74	0.53
2:E:3844:LEU:HD21	2:E:3936:TYR:HB2	1.90	0.53
2:E:4677:LEU:HD23	2:E:4711:PHE:HE1	1.72	0.53
2:G:999:ASP:O	2:G:1003:GLN:HG2	2.09	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2998:PHE:HA	2:G:3002:LEU:HB2	1.90	0.53
2:J:3938:SER:O	2:J:4002:LYS:NZ	2.41	0.53
2:B:1623:ARG:HH11	2:B:1623:ARG:HA	1.74	0.53
2:B:2123:LEU:O	2:B:2127:GLN:HG2	2.08	0.53
2:B:3445:TRP:CD1	2:B:3509:LEU:HG	2.43	0.53
2:B:3534:MET:O	2:B:3538:THR:HG23	2.07	0.53
2:E:234:SER:HB2	2:E:242:ARG:HG2	1.89	0.53
2:E:1940:CYS:O	2:E:1944:GLU:HG3	2.07	0.53
2:E:2616:PRO:HA	2:E:2619:LEU:HD12	1.90	0.53
2:G:1569:GLN:HB2	2:G:1572:ILE:HD12	1.91	0.53
2:G:1708:ARG:NH1	2:G:1836:PHE:O	2.42	0.53
2:G:2479:LEU:HD23	2:G:2479:LEU:H	1.73	0.53
2:G:2566:ALA:HA	2:G:2569:PHE:CD2	2.42	0.53
2:G:3280:TYR:CE1	2:G:3284:TRP:HD1	2.27	0.53
2:B:3008:GLN:O	2:B:3012:ASN:ND2	2.42	0.53
2:B:3938:SER:O	2:B:4002:LYS:NZ	2.41	0.53
2:E:426:ARG:HG3	2:E:431:PRO:HD3	1.90	0.53
2:E:470:SER:HA	2:E:473:ASN:HD21	1.73	0.53
2:E:3008:GLN:O	2:E:3012:ASN:ND2	2.42	0.53
2:G:504:ALA:HB2	2:G:512:ALA:HB2	1.89	0.53
2:J:671:VAL:HG22	2:J:787:VAL:HG23	1.91	0.53
2:J:1708:ARG:NH1	2:J:1836:PHE:O	2.42	0.53
2:J:1970:GLN:NE2	2:J:3641:LEU:O	2.37	0.53
2:J:3201:MET:SD	2:J:3203:VAL:HG12	2.48	0.53
2:B:3835:LEU:HD22	2:B:3880:PHE:HZ	1.74	0.53
2:E:2479:LEU:HD23	2:E:2479:LEU:H	1.73	0.53
2:E:3280:TYR:CE1	2:E:3284:TRP:HD1	2.27	0.53
2:G:2212:VAL:HG22	2:G:2256:TYR:CE1	2.43	0.53
2:J:1569:GLN:HB2	2:J:1572:ILE:HD12	1.91	0.53
2:J:2531:ARG:NH1	2:J:2585:THR:HB	2.24	0.53
2:J:3008:GLN:O	2:J:3012:ASN:ND2	2.42	0.53
2:B:2138:LEU:HD11	2:B:3662:ILE:HD12	1.90	0.52
2:B:3162:GLN:HG2	2:B:3218:VAL:HG13	1.90	0.52
2:B:3844:LEU:HD21	2:B:3936:TYR:HB2	1.90	0.52
2:E:3182:TYR:HA	2:E:3185:LYS:HE3	1.91	0.52
2:G:3008:GLN:O	2:G:3012:ASN:ND2	2.42	0.52
2:G:3076:ASP:O	2:G:3080:VAL:HG23	2.08	0.52
2:G:4104:THR:O	2:G:4108:ILE:HG12	2.09	0.52
2:J:3182:TYR:HA	2:J:3185:LYS:HE3	1.91	0.52
2:J:3280:TYR:CE1	2:J:3284:TRP:HD1	2.27	0.52
2:B:2531:ARG:NH1	2:B:2585:THR:HB	2.24	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3147:ILE:HG23	2:B:3152:PHE:HB2	1.91	0.52
2:B:4104:THR:O	2:B:4108:ILE:HG12	2.09	0.52
2:G:1854:PHE:HD1	2:G:1858:ASP:HB3	1.74	0.52
2:G:3093:ARG:O	2:G:3097:GLU:HG2	2.09	0.52
2:G:3891:LEU:HB3	2:G:3899:PHE:CE1	2.45	0.52
3:K:85:LEU:HD13	3:K:125:VAL:HG13	1.91	0.52
2:B:2245:GLN:HG2	2:B:2248:ARG:HH12	1.74	0.52
2:B:3891:LEU:HB3	2:B:3899:PHE:CE1	2.45	0.52
2:E:728:ARG:NH2	2:E:1489:CYS:SG	2.83	0.52
2:E:1623:ARG:HH11	2:E:1623:ARG:HA	1.74	0.52
2:E:3532:LEU:HD12	2:E:3532:LEU:H	1.74	0.52
2:E:4104:THR:O	2:E:4108:ILE:HG12	2.09	0.52
2:G:3835:LEU:HD22	2:G:3880:PHE:HZ	1.74	0.52
2:J:874:LEU:O	2:J:878:ILE:HG12	2.09	0.52
2:J:1727:ARG:NH2	2:J:1773:PRO:O	2.43	0.52
2:J:2265:LEU:HD12	2:J:2265:LEU:H	1.74	0.52
2:J:3076:ASP:O	2:J:3080:VAL:HG23	2.09	0.52
2:B:671:VAL:HG22	2:B:787:VAL:HG23	1.91	0.52
2:B:2312:MET:SD	2:B:2312:MET:N	2.79	0.52
2:B:3076:ASP:O	2:B:3080:VAL:HG23	2.09	0.52
2:B:3215:ALA:HA	2:B:3220:THR:HG21	1.91	0.52
2:E:2245:GLN:HG2	2:E:2248:ARG:HH12	1.73	0.52
2:E:3475:LYS:HD3	2:E:3516:LYS:NZ	2.25	0.52
3:C:85:LEU:HD13	3:C:125:VAL:HG13	1.91	0.52
2:B:40:GLU:O	2:B:114:SER:OG	2.28	0.52
2:B:3093:ARG:O	2:B:3097:GLU:HG2	2.09	0.52
2:E:2619:LEU:O	2:E:2623:LEU:HG	2.09	0.52
2:E:2634:ASN:OD1	2:E:2636:PHE:N	2.37	0.52
2:E:3923:LEU:HB2	2:E:3961:VAL:HG11	1.92	0.52
2:G:2245:GLN:HG2	2:G:2248:ARG:HH12	1.74	0.52
2:J:728:ARG:NH2	2:J:1489:CYS:SG	2.83	0.52
2:J:1854:PHE:HD1	2:J:1858:ASP:HB3	1.74	0.52
2:J:2479:LEU:HD23	2:J:2479:LEU:H	1.74	0.52
2:J:2759:ALA:HB2	2:J:2810:LYS:HZ1	1.74	0.52
2:J:3514:LEU:HD13	2:J:3602:VAL:HG13	1.91	0.52
2:J:4573:ILE:HG23	2:J:4643:LEU:HD11	1.91	0.52
2:B:874:LEU:O	2:B:878:ILE:HG12	2.09	0.52
2:B:2336:ARG:HG2	2:B:2435:ARG:HD3	1.92	0.52
2:B:2960:LEU:HD23	2:B:2963:LEU:HD12	1.92	0.52
2:B:3049:LEU:HA	2:B:3053:ARG:HH21	1.75	0.52
2:B:3280:TYR:HE1	2:B:3284:TRP:HD1	1.56	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4063:ASP:HB2	2:B:4067:LYS:HE3	1.90	0.52
2:B:4069:LYS:NZ	2:B:4130:ASN:OD1	2.37	0.52
2:B:4573:ILE:HG23	2:B:4643:LEU:HD11	1.91	0.52
2:E:3162:GLN:HG2	2:E:3218:VAL:HG13	1.90	0.52
2:E:3891:LEU:HB3	2:E:3899:PHE:CE1	2.45	0.52
2:G:1727:ARG:NH2	2:G:1773:PRO:O	2.43	0.52
2:J:3532:LEU:H	2:J:3532:LEU:HD12	1.74	0.52
2:J:3844:LEU:HD21	2:J:3936:TYR:HB2	1.90	0.52
2:B:1708:ARG:NH1	2:B:1836:PHE:O	2.42	0.52
2:B:2364:PHE:HD1	2:B:2429:LEU:HD21	1.75	0.52
2:B:2527:LEU:HA	2:B:2530:MET:HG2	1.90	0.52
2:B:2634:ASN:OD1	2:B:2636:PHE:N	2.37	0.52
2:E:3207:GLU:HB2	2:E:3246:LEU:HD22	1.91	0.52
2:E:3363:GLY:O	2:E:3367:LYS:HG2	2.10	0.52
2:G:40:GLU:O	2:G:114:SER:OG	2.28	0.52
2:G:2189:LYS:HA	2:G:2192:TYR:CZ	2.45	0.52
2:G:2336:ARG:HG2	2:G:2435:ARG:HD3	1.92	0.52
2:G:3049:LEU:HA	2:G:3053:ARG:HH21	1.75	0.52
2:G:3162:GLN:HG2	2:G:3218:VAL:HG13	1.90	0.52
2:G:4063:ASP:HB2	2:G:4067:LYS:HE3	1.90	0.52
2:J:246:TYR:CB	2:J:373:LYS:HD2	2.40	0.52
2:J:882:TRP:CD1	3:K:106:PRO:HB3	2.45	0.52
2:J:893:TYR:HA	2:J:904:HIS:HB3	1.90	0.52
2:J:2245:GLN:HG2	2:J:2248:ARG:HH12	1.74	0.52
2:J:3475:LYS:HD3	2:J:3516:LYS:NZ	2.25	0.52
2:B:3195:ALA:HB2	2:B:3275:PRO:HB3	1.92	0.52
2:E:2792:ARG:NH2	2:E:2798:SER:OG	2.41	0.52
2:E:3076:ASP:O	2:E:3080:VAL:HG23	2.09	0.52
2:G:671:VAL:HG22	2:G:787:VAL:HG23	1.91	0.52
2:G:3514:LEU:HD13	2:G:3602:VAL:HG13	1.91	0.52
2:G:3844:LEU:HD21	2:G:3936:TYR:HB2	1.90	0.52
2:J:1623:ARG:HA	2:J:1623:ARG:HH11	1.74	0.52
2:J:3835:LEU:HD22	2:J:3880:PHE:HZ	1.74	0.52
2:J:3891:LEU:HB3	2:J:3899:PHE:CE1	2.45	0.52
2:E:571:SER:HB2	2:E:574:VAL:HG22	1.92	0.52
2:G:874:LEU:O	2:G:878:ILE:HG12	2.09	0.52
2:G:3754:GLU:O	2:G:3758:MET:HG3	2.10	0.52
2:J:878:ILE:HG13	3:K:107:TRP:HZ2	1.75	0.52
2:J:3147:ILE:HG23	2:J:3152:PHE:HB2	1.91	0.52
1:I:26:TYR:HB2	1:I:101:VAL:HG12	1.92	0.52
2:B:1727:ARG:NH2	2:B:1773:PRO:O	2.43	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2970:SER:HA	2:B:2973:PHE:CZ	2.45	0.52
2:E:1854:PHE:HD1	2:E:1858:ASP:HB3	1.74	0.52
2:E:2336:ARG:HG2	2:E:2435:ARG:HD3	1.92	0.52
2:E:3962:PHE:O	2:E:3966:THR:HG23	2.09	0.52
2:G:2960:LEU:HD23	2:G:2963:LEU:HD12	1.92	0.52
2:J:4104:THR:O	2:J:4108:ILE:HG12	2.09	0.52
2:J:4715:TYR:CE2	2:J:4717:ASP:HB3	2.40	0.52
2:B:177:GLU:OE2	2:G:2452:ARG:NH2	2.41	0.51
2:B:1970:GLN:NE2	2:B:3641:LEU:O	2.37	0.51
2:B:3363:GLY:O	2:B:3367:LYS:HG2	2.10	0.51
2:E:671:VAL:HG22	2:E:787:VAL:HG23	1.91	0.51
2:E:2138:LEU:HD11	2:E:3662:ILE:HD12	1.90	0.51
2:E:2265:LEU:HD12	2:E:2265:LEU:H	1.74	0.51
2:E:2559:LEU:O	2:E:2563:THR:HG23	2.10	0.51
2:E:2736:ASP:OD1	2:E:2736:ASP:N	2.42	0.51
2:E:3215:ALA:HA	2:E:3220:THR:HG21	1.91	0.51
2:G:728:ARG:NH2	2:G:1489:CYS:SG	2.83	0.51
2:G:2265:LEU:H	2:G:2265:LEU:HD12	1.74	0.51
2:G:2992:GLU:HB2	2:G:2996:LYS:NZ	2.25	0.51
2:G:3147:ILE:HG23	2:G:3152:PHE:HB2	1.91	0.51
2:G:3195:ALA:HB2	2:G:3275:PRO:HB3	1.92	0.51
2:G:3280:TYR:HE1	2:G:3284:TRP:HD1	1.56	0.51
2:J:2138:LEU:HD11	2:J:3662:ILE:HD12	1.90	0.51
2:B:246:TYR:CB	2:B:373:LYS:HD2	2.40	0.51
2:B:3754:GLU:O	2:B:3758:MET:HG3	2.10	0.51
2:E:874:LEU:O	2:E:878:ILE:HG12	2.09	0.51
2:G:1623:ARG:HA	2:G:1623:ARG:HH11	1.74	0.51
2:G:2970:SER:HA	2:G:2973:PHE:CZ	2.45	0.51
2:G:3594:ARG:NH1	2:G:3597:GLN:OE1	2.34	0.51
2:J:210:GLU:HG2	2:J:273:HIS:CE1	2.46	0.51
2:J:4856:PHE:O	2:J:4860:ARG:NH2	2.39	0.51
2:B:728:ARG:NH2	2:B:1489:CYS:SG	2.83	0.51
2:B:3475:LYS:HD3	2:B:3516:LYS:NZ	2.25	0.51
2:B:3532:LEU:H	2:B:3532:LEU:HD12	1.74	0.51
2:E:210:GLU:HG2	2:E:273:HIS:CE1	2.46	0.51
2:E:3535:LEU:HD12	2:E:3539:ARG:HH12	1.76	0.51
2:G:3182:TYR:HA	2:G:3185:LYS:HE3	1.91	0.51
2:J:2336:ARG:HG2	2:J:2435:ARG:HD3	1.92	0.51
2:J:3225:ARG:O	2:J:3229:ILE:HG23	2.11	0.51
3:K:12:MET:HG2	3:K:16:GLY:HA3	1.93	0.51
2:B:231:LEU:O	2:B:260:TRP:NE1	2.40	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2792:ARG:NH2	2:B:2798:SER:OG	2.41	0.51
2:B:4630:TYR:HE1	2:E:4860:ARG:HH22	1.58	0.51
2:E:470:SER:HA	2:E:473:ASN:ND2	2.26	0.51
2:E:1708:ARG:NH1	2:E:1836:PHE:O	2.42	0.51
2:E:1727:ARG:NH2	2:E:1773:PRO:O	2.43	0.51
2:E:2364:PHE:HD1	2:E:2429:LEU:HD21	1.75	0.51
2:G:210:GLU:HG2	2:G:273:HIS:CE1	2.46	0.51
2:G:2619:LEU:O	2:G:2623:LEU:HG	2.09	0.51
2:G:3532:LEU:H	2:G:3532:LEU:HD12	1.75	0.51
2:G:3535:LEU:O	2:G:3539:ARG:HG2	2.11	0.51
2:J:470:SER:HA	2:J:473:ASN:ND2	2.26	0.51
2:J:2559:LEU:O	2:J:2563:THR:HG23	2.11	0.51
2:J:2992:GLU:HB2	2:J:2996:LYS:NZ	2.25	0.51
2:J:3049:LEU:HA	2:J:3053:ARG:HH21	1.75	0.51
2:J:3535:LEU:O	2:J:3539:ARG:HG2	2.11	0.51
3:F:85:LEU:HD13	3:F:125:VAL:HG13	1.91	0.51
2:B:2644:LEU:HD12	2:B:2648:TYR:HE2	1.76	0.51
2:E:3042:LEU:O	2:E:3046:LEU:HG	2.11	0.51
2:E:3049:LEU:HA	2:E:3053:ARG:HH21	1.75	0.51
2:E:3529:ASP:O	2:E:3533:ILE:HG13	2.11	0.51
2:G:2616:PRO:HA	2:G:2619:LEU:HD12	1.91	0.51
2:G:2644:LEU:HD12	2:G:2648:TYR:HE2	1.76	0.51
2:G:3219:TYR:HE1	2:G:3234:ASN:HA	1.76	0.51
2:J:3363:GLY:O	2:J:3367:LYS:HG2	2.10	0.51
2:J:3754:GLU:O	2:J:3758:MET:HG3	2.10	0.51
3:C:12:MET:HG2	3:C:16:GLY:HA3	1.93	0.51
3:F:12:MET:HG2	3:F:16:GLY:HA3	1.93	0.51
2:B:2189:LYS:HA	2:B:2192:TYR:CZ	2.45	0.51
2:B:3225:ARG:O	2:B:3229:ILE:HG23	2.11	0.51
2:E:878:ILE:HG13	3:F:107:TRP:HZ2	1.74	0.51
2:E:2970:SER:HA	2:E:2973:PHE:CZ	2.45	0.51
2:G:365:LYS:O	2:G:369:LEU:HG	2.10	0.51
2:G:920:TYR:O	2:G:923:GLN:HG2	2.11	0.51
2:G:920:TYR:HE1	3:M:99:ARG:HE	1.59	0.51
2:G:2559:LEU:O	2:G:2563:THR:HG23	2.11	0.51
2:G:4860:ARG:HH22	2:J:4630:TYR:HE1	1.58	0.51
2:J:3529:ASP:O	2:J:3533:ILE:HG13	2.11	0.51
2:J:4569:LEU:HD21	2:J:4649:LEU:HD23	1.93	0.51
2:E:3093:ARG:HA	2:E:3096:PHE:CD1	2.46	0.51
2:G:470:SER:HA	2:G:473:ASN:ND2	2.26	0.51
2:G:2364:PHE:HD1	2:G:2429:LEU:HD21	1.75	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:15:GLY:H	3:F:85:LEU:HB2	1.74	0.51
2:B:1000:ARG:HH12	3:C:115:ASP:H	1.59	0.51
2:B:1854:PHE:HD1	2:B:1858:ASP:HB3	1.74	0.51
2:B:3042:LEU:O	2:B:3046:LEU:HG	2.11	0.51
2:B:3182:TYR:HA	2:B:3185:LYS:HE3	1.91	0.51
2:E:3535:LEU:O	2:E:3539:ARG:HG2	2.11	0.51
2:G:878:ILE:HG13	3:M:107:TRP:HZ2	1.75	0.51
2:G:2682:ILE:HB	2:G:2703:LEU:HD21	1.93	0.51
2:G:3215:ALA:HA	2:G:3220:THR:HG21	1.91	0.51
2:G:3475:LYS:HD3	2:G:3516:LYS:NZ	2.25	0.51
2:J:243:ARG:HA	2:J:301:VAL:HG22	1.93	0.51
2:J:920:TYR:O	2:J:923:GLN:HG2	2.11	0.51
2:J:2189:LYS:HA	2:J:2192:TYR:CZ	2.45	0.51
2:J:2960:LEU:HD23	2:J:2963:LEU:HD12	1.92	0.51
2:J:3215:ALA:HA	2:J:3220:THR:HG21	1.91	0.51
2:J:3535:LEU:HD12	2:J:3539:ARG:HH12	1.76	0.51
3:C:90:THR:HG23	3:C:124:THR:HA	1.93	0.51
3:M:90:THR:HG23	3:M:124:THR:HA	1.93	0.51
1:D:97:LEU:HB3	1:D:99:PHE:CE2	2.46	0.51
1:H:54:GLU:OE2	1:H:54:GLU:N	2.27	0.51
1:I:26:TYR:CB	1:I:101:VAL:HG12	2.41	0.51
2:B:3644:LEU:HD11	2:B:3648:ARG:HD2	1.93	0.51
2:B:4856:PHE:O	2:B:4860:ARG:NH2	2.39	0.51
2:E:2572:THR:HG22	2:E:2575:ARG:HB3	1.93	0.51
2:E:3280:TYR:HE1	2:E:3284:TRP:HD1	1.56	0.51
2:G:3042:LEU:O	2:G:3046:LEU:HG	2.11	0.51
2:J:246:TYR:HE1	2:J:375:LYS:HG2	1.76	0.51
3:M:12:MET:HG2	3:M:16:GLY:HA3	1.93	0.51
3:M:15:GLY:H	3:M:85:LEU:HB2	1.74	0.51
2:B:243:ARG:HA	2:B:301:VAL:HG22	1.93	0.51
2:B:2265:LEU:HD12	2:B:2265:LEU:H	1.74	0.51
2:B:3514:LEU:HD13	2:B:3602:VAL:HG13	1.91	0.51
2:B:3535:LEU:O	2:B:3539:ARG:HG2	2.11	0.51
2:E:3225:ARG:O	2:E:3229:ILE:HG23	2.11	0.51
2:G:233:ILE:HG12	2:G:234:SER:H	1.76	0.51
2:G:571:SER:HB2	2:G:574:VAL:HG22	1.92	0.51
2:G:882:TRP:CD1	3:M:106:PRO:HB3	2.46	0.51
2:G:3698:LEU:O	2:G:3702:VAL:HG12	2.11	0.51
2:J:40:GLU:O	2:J:114:SER:OG	2.28	0.51
2:J:4671:PHE:HD1	2:J:4714:ASN:O	1.94	0.51
3:K:90:THR:HG23	3:K:124:THR:HA	1.93	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:571:SER:HB2	2:B:574:VAL:HG22	1.92	0.50
2:B:3535:LEU:HD12	2:B:3539:ARG:HH12	1.76	0.50
2:B:3594:ARG:NH1	2:B:3597:GLN:OE1	2.34	0.50
2:E:40:GLU:O	2:E:114:SER:OG	2.28	0.50
2:E:243:ARG:HA	2:E:301:VAL:HG22	1.93	0.50
2:E:246:TYR:HE1	2:E:375:LYS:HG2	1.76	0.50
2:E:479:GLN:HE21	2:E:539:LEU:HD11	1.77	0.50
2:E:4189:ARG:HB3	2:E:5031:GLN:HE22	1.76	0.50
2:G:2614:ILE:O	2:G:2650:ARG:NH1	2.41	0.50
2:G:3225:ARG:O	2:G:3229:ILE:HG23	2.11	0.50
2:G:3363:GLY:O	2:G:3367:LYS:HG2	2.10	0.50
2:G:3644:LEU:HD11	2:G:3648:ARG:HD2	1.93	0.50
2:J:2582:MET:HA	2:J:2585:THR:HG22	1.93	0.50
2:J:3195:ALA:HB2	2:J:3275:PRO:HB3	1.92	0.50
2:B:210:GLU:HG2	2:B:273:HIS:CE1	2.46	0.50
2:B:2736:ASP:OD1	2:B:2736:ASP:N	2.42	0.50
2:B:3246:LEU:CG	2:B:3247:ASP:H	2.24	0.50
2:B:3698:LEU:O	2:B:3702:VAL:HG12	2.11	0.50
2:E:2208:MET:O	2:E:2212:VAL:HG23	2.12	0.50
2:E:2582:MET:HA	2:E:2585:THR:HG22	1.93	0.50
2:E:2960:LEU:HD23	2:E:2963:LEU:HD12	1.92	0.50
2:E:4720:VAL:HG13	2:E:4721:LYS:H	1.76	0.50
2:G:3002:LEU:O	2:G:3006:ILE:HG22	2.12	0.50
2:J:233:ILE:HG12	2:J:234:SER:H	1.76	0.50
2:J:365:LYS:O	2:J:369:LEU:HG	2.10	0.50
2:J:2566:ALA:HA	2:J:2569:PHE:HD2	1.76	0.50
3:K:15:GLY:H	3:K:85:LEU:HB2	1.74	0.50
3:M:85:LEU:HD13	3:M:125:VAL:HG13	1.91	0.50
2:B:920:TYR:O	2:B:923:GLN:HG2	2.11	0.50
2:B:2759:ALA:HB2	2:B:2810:LYS:HZ1	1.75	0.50
2:B:4860:ARG:HH22	2:G:4630:TYR:HE1	1.58	0.50
2:E:2644:LEU:HD12	2:E:2648:TYR:HE2	1.76	0.50
2:E:2759:ALA:HB2	2:E:2810:LYS:HZ1	1.75	0.50
2:E:3002:LEU:O	2:E:3006:ILE:HG22	2.12	0.50
2:E:3195:ALA:HB2	2:E:3275:PRO:HB3	1.92	0.50
2:E:3698:LEU:O	2:E:3702:VAL:HG12	2.11	0.50
2:G:243:ARG:HA	2:G:301:VAL:HG22	1.93	0.50
2:G:3535:LEU:HD12	2:G:3539:ARG:HH12	1.76	0.50
2:G:3923:LEU:HB2	2:G:3961:VAL:HG11	1.92	0.50
2:G:4569:LEU:HD21	2:G:4649:LEU:HD23	1.93	0.50
2:J:3042:LEU:O	2:J:3046:LEU:HG	2.11	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:4189:ARG:HB3	2:J:5031:GLN:HE22	1.77	0.50
3:K:62:SER:O	3:K:62:SER:OG	2.24	0.50
2:B:2992:GLU:HB2	2:B:2996:LYS:NZ	2.25	0.50
2:B:3034:LYS:O	2:B:3037:GLU:HG3	2.12	0.50
2:B:3219:TYR:HE1	2:B:3234:ASN:HA	1.76	0.50
2:B:3923:LEU:HB2	2:B:3961:VAL:HG11	1.93	0.50
2:B:4189:ARG:HB3	2:B:5031:GLN:HE22	1.76	0.50
2:E:878:ILE:HG13	3:F:107:TRP:CZ2	2.45	0.50
2:E:2189:LYS:HA	2:E:2192:TYR:CZ	2.45	0.50
2:E:2992:GLU:HB2	2:E:2996:LYS:NZ	2.25	0.50
2:E:3141:THR:HA	2:E:3144:PHE:CD2	2.47	0.50
2:E:3219:TYR:HE1	2:E:3234:ASN:HA	1.76	0.50
2:G:479:GLN:HE21	2:G:539:LEU:HD11	1.76	0.50
2:G:1423:ASP:O	2:G:1427:ILE:HG12	2.12	0.50
2:G:2759:ALA:HB2	2:G:2810:LYS:HZ1	1.76	0.50
2:G:3529:ASP:O	2:G:3533:ILE:HG13	2.11	0.50
2:G:3965:LEU:HA	2:G:3968:TYR:CD2	2.46	0.50
2:G:4545:GLU:O	2:G:4549:VAL:HG13	2.11	0.50
2:J:1423:ASP:O	2:J:1427:ILE:HG12	2.12	0.50
2:J:2109:ASP:HA	2:J:3694:LYS:HD2	1.93	0.50
2:J:2970:SER:HA	2:J:2973:PHE:CZ	2.45	0.50
2:J:3227:ARG:HG2	2:J:3232:LEU:HD12	1.93	0.50
2:J:4545:GLU:O	2:J:4549:VAL:HG13	2.12	0.50
3:F:90:THR:HG23	3:F:124:THR:HA	1.93	0.50
1:D:54:GLU:OE2	1:D:54:GLU:N	2.27	0.50
2:B:470:SER:HA	2:B:473:ASN:ND2	2.26	0.50
2:B:479:GLN:HE21	2:B:539:LEU:HD11	1.76	0.50
2:B:1423:ASP:O	2:B:1427:ILE:HG12	2.12	0.50
2:B:3093:ARG:HA	2:B:3096:PHE:CD1	2.46	0.50
2:E:233:ILE:HG12	2:E:234:SER:H	1.76	0.50
2:E:3644:LEU:HD11	2:E:3648:ARG:HD2	1.93	0.50
2:E:4545:GLU:O	2:E:4549:VAL:HG13	2.12	0.50
2:G:2109:ASP:HA	2:G:3694:LYS:HD2	1.93	0.50
2:G:3227:ARG:HG2	2:G:3232:LEU:HD12	1.93	0.50
2:J:479:GLN:HE21	2:J:539:LEU:HD11	1.76	0.50
2:J:571:SER:HB2	2:J:574:VAL:HG22	1.92	0.50
2:J:2165:LEU:HD13	2:J:2178:MET:HG2	1.94	0.50
2:J:3698:LEU:O	2:J:3702:VAL:HG12	2.11	0.50
2:B:2208:MET:O	2:B:2212:VAL:HG23	2.12	0.50
2:B:2635:GLU:HG3	2:B:2636:PHE:CD2	2.47	0.50
2:B:2682:ILE:HB	2:B:2703:LEU:HD21	1.93	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3966:THR:HG23	2:B:4026:MET:HA	1.92	0.50
2:E:920:TYR:O	2:E:923:GLN:HG2	2.11	0.50
2:E:1970:GLN:NE2	2:E:3641:LEU:O	2.37	0.50
2:G:866:HIS:HE1	2:G:870:ILE:HD12	1.77	0.50
2:G:2635:GLU:HG3	2:G:2636:PHE:CD2	2.47	0.50
2:G:3093:ARG:HA	2:G:3096:PHE:CD1	2.46	0.50
2:G:3141:THR:HA	2:G:3144:PHE:CD2	2.47	0.50
2:J:2380:ILE:O	2:J:2384:ILE:HG13	2.12	0.50
2:J:2457:LEU:HA	2:J:2460:LEU:HD12	1.94	0.50
2:J:3376:GLU:OE2	2:J:3380:ARG:NH2	2.39	0.50
2:B:2576:ALA:HA	2:B:2579:VAL:HB	1.93	0.50
2:B:2879:ALA:HA	2:B:2882:TYR:CD2	2.47	0.50
2:B:3180:ASN:O	2:B:3184:GLU:HG2	2.12	0.50
2:B:4096:ALA:O	2:B:4100:GLN:HG2	2.12	0.50
2:E:1087:ARG:HB3	2:E:1223:PHE:HA	1.94	0.50
2:E:3180:ASN:O	2:E:3184:GLU:HG2	2.12	0.50
2:E:3754:GLU:O	2:E:3758:MET:HG3	2.10	0.50
2:G:246:TYR:HE1	2:G:375:LYS:HG2	1.76	0.50
2:G:2165:LEU:HD13	2:G:2178:MET:HG2	1.93	0.50
2:G:4189:ARG:HB3	2:G:5031:GLN:HE22	1.77	0.50
2:J:127:MET:SD	2:J:127:MET:N	2.73	0.50
2:J:2208:MET:O	2:J:2212:VAL:HG23	2.12	0.50
2:J:2572:THR:HA	2:J:2574:HIS:CE1	2.46	0.50
2:J:2644:LEU:HD12	2:J:2648:TYR:HE2	1.76	0.50
2:J:4105:GLY:O	2:J:4109:GLN:HG2	2.12	0.50
1:D:26:TYR:CB	1:D:101:VAL:HG12	2.42	0.50
2:B:526:LEU:HD11	2:B:540:PHE:HZ	1.77	0.50
2:B:866:HIS:HE1	2:B:870:ILE:HD12	1.76	0.50
2:B:3651:ASN:O	2:B:3655:GLU:HG2	2.12	0.50
2:E:121:LEU:N	2:E:134:ASP:O	2.45	0.50
2:E:365:LYS:O	2:E:369:LEU:HG	2.12	0.50
2:E:501:ALA:O	2:E:505:GLU:HG2	2.12	0.50
2:E:823:LEU:HD11	2:E:1626:TRP:HB3	1.94	0.50
2:E:2635:GLU:HG3	2:E:2636:PHE:CD2	2.47	0.50
2:E:3246:LEU:HD23	2:E:3247:ASP:H	1.77	0.50
2:G:2211:MET:HA	2:G:2214:VAL:HG12	1.94	0.50
2:G:2573:GLU:HB2	2:G:2615:ARG:NH2	2.27	0.50
2:G:2788:HIS:NE2	2:G:2805:TYR:OH	2.38	0.50
2:G:5013:MET:CE	2:G:5020:ASP:HB2	2.42	0.50
2:G:5013:MET:HE3	2:G:5020:ASP:HB2	1.93	0.50
2:J:526:LEU:HD11	2:J:540:PHE:HZ	1.76	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2635:GLU:HG3	2:J:2636:PHE:CD2	2.47	0.50
2:J:3093:ARG:HA	2:J:3096:PHE:CD1	2.46	0.50
2:J:3093:ARG:HA	2:J:3096:PHE:HD1	1.77	0.50
2:B:3093:ARG:HA	2:B:3096:PHE:HD1	1.77	0.50
2:B:3529:ASP:O	2:B:3533:ILE:HG13	2.11	0.50
2:G:2582:MET:HA	2:G:2585:THR:HG22	1.94	0.50
2:G:3180:ASN:O	2:G:3184:GLU:HG2	2.12	0.50
2:J:231:LEU:O	2:J:260:TRP:NE1	2.40	0.50
2:J:1619:ARG:HB3	2:J:1626:TRP:CD2	2.47	0.50
2:J:2364:PHE:HD1	2:J:2429:LEU:HD21	1.75	0.50
2:J:3002:LEU:O	2:J:3006:ILE:HG22	2.12	0.50
2:B:233:ILE:HG12	2:B:234:SER:H	1.76	0.49
2:B:2165:LEU:HD13	2:B:2178:MET:HG2	1.94	0.49
2:B:2211:MET:HA	2:B:2214:VAL:HG12	1.94	0.49
2:B:2415:ARG:HA	2:B:2415:ARG:HH11	1.77	0.49
2:B:2457:LEU:HA	2:B:2460:LEU:HD12	1.94	0.49
2:B:3002:LEU:O	2:B:3006:ILE:HG22	2.12	0.49
2:E:2165:LEU:HD13	2:E:2178:MET:HG2	1.94	0.49
2:E:2879:ALA:HA	2:E:2882:TYR:CD2	2.47	0.49
2:E:3034:LYS:O	2:E:3037:GLU:HG3	2.12	0.49
2:E:3227:ARG:HG2	2:E:3232:LEU:HD12	1.93	0.49
2:E:3406:TYR:HD2	2:E:3464:ILE:HG21	1.77	0.49
2:G:2380:ILE:O	2:G:2384:ILE:HG13	2.12	0.49
2:G:4105:GLY:O	2:G:4109:GLN:HG2	2.12	0.49
2:J:3277:LEU:HB3	2:J:3315:LEU:HD13	1.94	0.49
1:H:97:LEU:HB3	1:H:99:PHE:CE2	2.46	0.49
2:B:3970:GLN:HE21	2:B:5004:THR:HA	1.77	0.49
2:G:501:ALA:O	2:G:505:GLU:HG2	2.12	0.49
2:G:1619:ARG:HB3	2:G:1626:TRP:CD2	2.47	0.49
2:G:2572:THR:HG22	2:G:2575:ARG:HB3	1.94	0.49
2:G:3034:LYS:O	2:G:3037:GLU:HG3	2.12	0.49
2:G:3780:LEU:HD22	2:G:3820:LEU:HD21	1.95	0.49
2:J:2230:THR:O	2:J:2234:ARG:HG3	2.12	0.49
2:J:3034:LYS:O	2:J:3037:GLU:HG3	2.12	0.49
2:J:3219:TYR:HE1	2:J:3234:ASN:HA	1.76	0.49
3:M:37:TYR:HE1	3:M:96:ASN:HB3	1.78	0.49
2:B:3227:ARG:HG2	2:B:3232:LEU:HD12	1.93	0.49
2:B:4569:LEU:HD21	2:B:4649:LEU:HD23	1.93	0.49
2:E:3438:VAL:HB	2:E:3513:THR:HG22	1.94	0.49
2:E:3651:ASN:O	2:E:3655:GLU:HG2	2.12	0.49
2:E:4843:LEU:O	2:E:4847:VAL:HG22	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:526:LEU:HD11	2:G:540:PHE:HZ	1.76	0.49
2:G:1215:ALA:HA	2:G:1219:LEU:HB3	1.94	0.49
2:G:1260:MET:O	2:G:1263:THR:OG1	2.31	0.49
2:G:2415:ARG:HA	2:G:2415:ARG:HH11	1.77	0.49
2:G:2751:LEU:O	2:G:2755:ILE:HG12	2.13	0.49
2:G:3093:ARG:HA	2:G:3096:PHE:HD1	1.77	0.49
2:G:3531:ASP:O	2:G:3535:LEU:HD23	2.12	0.49
2:J:148:TRP:CZ3	2:J:180:LEU:HG	2.48	0.49
2:J:501:ALA:O	2:J:505:GLU:HG2	2.11	0.49
2:J:823:LEU:HD11	2:J:1626:TRP:HB3	1.94	0.49
2:J:2415:ARG:HA	2:J:2415:ARG:HH11	1.77	0.49
2:J:3438:VAL:HB	2:J:3513:THR:HG22	1.94	0.49
3:C:15:GLY:H	3:C:85:LEU:HB2	1.74	0.49
3:M:63:VAL:O	3:M:63:VAL:HG12	2.13	0.49
2:B:223:PHE:HA	2:B:230:CYS:HA	1.95	0.49
2:B:823:LEU:HD11	2:B:1626:TRP:HB3	1.94	0.49
2:B:1087:ARG:HB3	2:B:1223:PHE:HA	1.94	0.49
2:B:2751:LEU:O	2:B:2755:ILE:HG12	2.13	0.49
2:E:1423:ASP:O	2:E:1427:ILE:HG12	2.12	0.49
2:E:2211:MET:HA	2:E:2214:VAL:HG12	1.94	0.49
2:E:2614:ILE:O	2:E:2650:ARG:NH1	2.41	0.49
2:E:3093:ARG:HA	2:E:3096:PHE:HD1	1.77	0.49
2:E:3531:ASP:O	2:E:3535:LEU:HD23	2.12	0.49
2:E:4569:LEU:HD21	2:E:4649:LEU:HD23	1.93	0.49
2:E:4630:TYR:HE1	2:J:4860:ARG:HH22	1.59	0.49
2:G:2691:TYR:HA	2:G:2696:TYR:CE1	2.47	0.49
2:G:4843:LEU:O	2:G:4847:VAL:HG22	2.13	0.49
2:J:866:HIS:HE1	2:J:870:ILE:HD12	1.77	0.49
2:J:2879:ALA:HA	2:J:2882:TYR:CD2	2.47	0.49
3:F:63:VAL:HG12	3:F:63:VAL:O	2.13	0.49
2:B:501:ALA:O	2:B:505:GLU:HG2	2.12	0.49
2:B:1215:ALA:HA	2:B:1219:LEU:HB3	1.94	0.49
2:B:2567:PRO:HA	2:B:2613:TYR:CD1	2.48	0.49
2:B:3141:THR:HA	2:B:3144:PHE:CD2	2.47	0.49
2:B:4545:GLU:O	2:B:4549:VAL:HG13	2.12	0.49
2:E:1619:ARG:HB3	2:E:1626:TRP:CD2	2.47	0.49
2:E:2380:ILE:O	2:E:2384:ILE:HG13	2.12	0.49
2:E:2475:GLN:NE2	2:E:2476:ILE:O	2.46	0.49
2:E:2682:ILE:HB	2:E:2703:LEU:HD21	1.93	0.49
2:E:2751:LEU:O	2:E:2755:ILE:HG12	2.13	0.49
2:E:3970:GLN:HE21	2:E:5004:THR:HA	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:4096:ALA:O	2:E:4100:GLN:HG2	2.12	0.49
2:G:2208:MET:O	2:G:2212:VAL:HG23	2.12	0.49
2:G:2496:PRO:HG3	2:G:2550:LEU:HD23	1.94	0.49
2:G:3651:ASN:O	2:G:3655:GLU:HG2	2.12	0.49
2:J:2211:MET:HA	2:J:2214:VAL:HG12	1.94	0.49
2:J:2431:ASP:HB2	2:J:2501:SER:HB2	1.95	0.49
2:J:3180:ASN:O	2:J:3184:GLU:HG2	2.12	0.49
2:J:3780:LEU:HD22	2:J:3820:LEU:HD21	1.95	0.49
2:B:2496:PRO:HG3	2:B:2550:LEU:HD23	1.94	0.49
2:B:2725:LYS:HZ1	2:B:2737:PRO:HA	1.76	0.49
2:E:2109:ASP:HA	2:E:3694:LYS:HD2	1.93	0.49
2:E:2415:ARG:HA	2:E:2415:ARG:HH11	1.77	0.49
2:E:2869:ARG:HH22	2:E:2946:LEU:HA	1.78	0.49
2:E:2881:ASN:HA	2:E:2884:ASN:ND2	2.28	0.49
2:G:2869:ARG:HH22	2:G:2946:LEU:HA	1.78	0.49
2:G:2881:ASN:HA	2:G:2884:ASN:ND2	2.28	0.49
2:G:3406:TYR:HD2	2:G:3464:ILE:HG21	1.77	0.49
2:G:3438:VAL:HB	2:G:3513:THR:HG22	1.95	0.49
2:J:1087:ARG:HB3	2:J:1223:PHE:HA	1.94	0.49
2:J:3141:THR:HA	2:J:3144:PHE:CD2	2.47	0.49
2:J:3644:LEU:HD11	2:J:3648:ARG:HD2	1.93	0.49
2:J:3970:GLN:NE2	2:J:5004:THR:HA	2.28	0.49
3:K:82:MET:HG3	3:K:84:SER:O	2.13	0.49
1:A:24:VAL:HG12	1:A:103:LEU:HA	1.93	0.49
2:B:349:GLN:HE21	2:B:354:GLY:HA2	1.78	0.49
2:B:3438:VAL:HB	2:B:3513:THR:HG22	1.95	0.49
2:B:3531:ASP:O	2:B:3535:LEU:HD23	2.12	0.49
2:E:148:TRP:CZ3	2:E:180:LEU:HG	2.48	0.49
2:E:866:HIS:HE1	2:E:870:ILE:HD12	1.76	0.49
2:E:4105:GLY:O	2:E:4109:GLN:HG2	2.12	0.49
2:G:148:TRP:CZ3	2:G:180:LEU:HG	2.48	0.49
2:G:2376:LEU:O	2:G:2380:ILE:HG12	2.13	0.49
2:G:2475:GLN:NE2	2:G:2476:ILE:O	2.46	0.49
2:G:2792:ARG:NH2	2:G:2798:SER:OG	2.41	0.49
2:G:3970:GLN:HE21	2:G:5004:THR:HA	1.78	0.49
2:G:4118:ASP:OD1	2:G:4119:GLU:N	2.46	0.49
2:G:4802:GLY:HA2	2:G:4808:PHE:HB2	1.95	0.49
2:J:1260:MET:O	2:J:1263:THR:OG1	2.31	0.49
2:J:2376:LEU:O	2:J:2380:ILE:HG12	2.13	0.49
2:J:2881:ASN:HA	2:J:2884:ASN:ND2	2.28	0.49
2:J:2970:SER:O	2:J:2974:ILE:HG23	2.13	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:3406:TYR:HD2	2:J:3464:ILE:HG21	1.77	0.49
2:J:3573:MET:HE2	2:J:3576:TYR:HB3	1.95	0.49
2:J:3651:ASN:O	2:J:3655:GLU:HG2	2.12	0.49
2:J:4096:ALA:O	2:J:4100:GLN:HG2	2.12	0.49
2:J:4677:LEU:HD23	2:J:4711:PHE:HE1	1.77	0.49
1:H:26:TYR:CB	1:H:101:VAL:HG12	2.43	0.49
2:B:2109:ASP:HA	2:B:3694:LYS:HD2	1.93	0.49
2:B:2747:ILE:HG21	2:B:2814:LYS:HE3	1.95	0.49
2:B:3406:TYR:HD2	2:B:3464:ILE:HG21	1.77	0.49
2:B:3573:MET:HE2	2:B:3576:TYR:HB3	1.94	0.49
2:E:2747:ILE:HG21	2:E:2814:LYS:HE3	1.95	0.49
2:E:3051:ARG:NH2	2:E:3098:SER:O	2.46	0.49
2:E:3573:MET:HE2	2:E:3576:TYR:HB3	1.94	0.49
2:G:2431:ASP:HB2	2:G:2501:SER:HB2	1.95	0.49
2:G:2457:LEU:HA	2:G:2460:LEU:HD12	1.94	0.49
2:G:2747:ILE:HG21	2:G:2814:LYS:HE3	1.95	0.49
2:G:2879:ALA:HA	2:G:2882:TYR:CD2	2.47	0.49
2:J:878:ILE:HG13	3:K:107:TRP:CZ2	2.47	0.49
2:J:1215:ALA:HA	2:J:1219:LEU:HB3	1.94	0.49
2:J:2619:LEU:O	2:J:2623:LEU:HG	2.13	0.49
2:J:2751:LEU:O	2:J:2755:ILE:HG12	2.13	0.49
2:J:3531:ASP:O	2:J:3535:LEU:HD23	2.12	0.49
2:J:4843:LEU:O	2:J:4847:VAL:HG22	2.13	0.49
2:J:5009:TYR:HA	2:J:5012:LYS:HE3	1.94	0.49
3:K:37:TYR:HE1	3:K:96:ASN:HB3	1.77	0.49
1:A:78:PRO:HA	1:A:81:ALA:HB3	1.94	0.49
2:B:121:LEU:N	2:B:134:ASP:O	2.45	0.49
2:B:2475:GLN:NE2	2:B:2476:ILE:O	2.46	0.49
2:B:2691:TYR:HA	2:B:2696:TYR:CE1	2.47	0.49
2:B:2881:ASN:HA	2:B:2884:ASN:ND2	2.28	0.49
2:B:3051:ARG:NH2	2:B:3098:SER:O	2.46	0.49
2:E:208:CYS:H	2:E:269:TRP:HH2	1.61	0.49
2:E:882:TRP:CD2	3:F:106:PRO:HG3	2.47	0.49
2:G:371:VAL:CG1	2:G:373:LYS:HG2	2.43	0.49
2:G:863:LEU:HD22	2:G:867:LEU:HD21	1.95	0.49
2:G:1530:THR:HG23	2:G:1535:GLU:H	1.78	0.49
2:G:2230:THR:O	2:G:2234:ARG:HG3	2.12	0.49
2:G:2637:ALA:C	2:G:2640:PRO:HD2	2.33	0.49
2:G:2973:PHE:CD1	2:G:2995:ILE:HG12	2.48	0.49
2:J:1095:VAL:HB	2:J:1199:VAL:HG23	1.95	0.49
2:J:2475:GLN:NE2	2:J:2476:ILE:O	2.46	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:H:78:PRO:HA	1:H:81:ALA:HB3	1.94	0.49
2:B:148:TRP:CZ3	2:B:180:LEU:HG	2.48	0.49
2:B:1154:ASP:HB3	2:B:1157:GLU:HB2	1.95	0.49
2:B:1619:ARG:HB3	2:B:1626:TRP:CD2	2.47	0.49
2:B:2230:THR:O	2:B:2234:ARG:HG3	2.12	0.49
2:E:526:LEU:HD11	2:E:540:PHE:HZ	1.77	0.49
2:E:1260:MET:O	2:E:1263:THR:OG1	2.31	0.49
2:E:3078:ARG:O	2:E:3082:LYS:HG2	2.13	0.49
2:E:3307:VAL:HA	2:E:3311:HIS:CE1	2.47	0.49
2:E:3316:LEU:HD21	2:E:3345:ILE:HG13	1.95	0.49
2:G:3246:LEU:HD12	2:G:3249:LEU:HD12	1.95	0.49
2:G:3573:MET:SD	2:G:3577:ARG:NH2	2.86	0.49
2:J:349:GLN:HE21	2:J:354:GLY:HA2	1.78	0.49
2:J:2970:SER:HA	2:J:2973:PHE:CE2	2.48	0.49
2:B:208:CYS:H	2:B:269:TRP:HH2	1.61	0.48
2:B:863:LEU:HD22	2:B:867:LEU:HD21	1.95	0.48
2:B:1530:THR:HG23	2:B:1535:GLU:H	1.78	0.48
2:B:2376:LEU:O	2:B:2380:ILE:HG12	2.13	0.48
2:B:2558:VAL:O	2:B:2562:ILE:HG12	2.14	0.48
2:B:2970:SER:HA	2:B:2973:PHE:CE2	2.48	0.48
2:E:349:GLN:HE21	2:E:354:GLY:HA2	1.78	0.48
2:E:2230:THR:O	2:E:2234:ARG:HG3	2.12	0.48
2:E:2431:ASP:HB2	2:E:2501:SER:HB2	1.95	0.48
2:E:2457:LEU:HA	2:E:2460:LEU:HD12	1.94	0.48
2:E:3206:LEU:HD13	2:E:3246:LEU:N	2.28	0.48
2:E:4651:THR:HG21	2:E:4803:HIS:CD2	2.48	0.48
2:J:1530:THR:HG23	2:J:1535:GLU:H	1.78	0.48
2:J:2637:ALA:C	2:J:2640:PRO:HD2	2.33	0.48
2:J:2747:ILE:HG21	2:J:2814:LYS:HE3	1.95	0.48
2:J:3078:ARG:O	2:J:3082:LYS:HG2	2.13	0.48
2:J:4802:GLY:HA2	2:J:4808:PHE:HB2	1.95	0.48
1:D:78:PRO:HA	1:D:81:ALA:HB3	1.94	0.48
2:B:4105:GLY:O	2:B:4109:GLN:HG2	2.12	0.48
2:B:4651:THR:HG21	2:B:4803:HIS:CD2	2.48	0.48
2:E:3573:MET:SD	2:E:3577:ARG:NH2	2.86	0.48
2:E:3780:LEU:HD22	2:E:3820:LEU:HD21	1.95	0.48
2:G:823:LEU:HD11	2:G:1626:TRP:HB3	1.94	0.48
2:G:870:ILE:O	2:G:874:LEU:HG	2.13	0.48
2:G:1095:VAL:HB	2:G:1199:VAL:HG23	1.95	0.48
2:J:2616:PRO:HA	2:J:2619:LEU:HD12	1.94	0.48
2:J:2691:TYR:HA	2:J:2696:TYR:CE1	2.47	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2973:PHE:CD1	2:J:2995:ILE:HG12	2.48	0.48
2:B:2869:ARG:HH22	2:B:2946:LEU:HA	1.78	0.48
2:B:3315:LEU:O	2:B:3319:ILE:HG13	2.14	0.48
2:E:223:PHE:HA	2:E:230:CYS:HA	1.95	0.48
2:E:2867:LEU:HB2	2:E:2928:LYS:NZ	2.29	0.48
2:E:4118:ASP:OD1	2:E:4119:GLU:N	2.46	0.48
2:J:870:ILE:O	2:J:874:LEU:HG	2.13	0.48
2:J:2682:ILE:HB	2:J:2703:LEU:HD21	1.93	0.48
2:J:2869:ARG:HH22	2:J:2946:LEU:HA	1.78	0.48
2:J:3051:ARG:NH2	2:J:3098:SER:O	2.46	0.48
2:J:3262:ARG:N	2:J:3262:ARG:HD2	2.28	0.48
3:C:63:VAL:O	3:C:63:VAL:HG12	2.13	0.48
3:K:63:VAL:O	3:K:63:VAL:HG12	2.13	0.48
3:M:82:MET:HG3	3:M:84:SER:O	2.13	0.48
1:A:4:ILE:HD11	1:A:62:GLY:HA2	1.96	0.48
1:I:78:PRO:HA	1:I:81:ALA:HB3	1.94	0.48
2:B:733:PRO:HG2	2:B:762:CYS:HB3	1.96	0.48
2:B:1095:VAL:HB	2:B:1199:VAL:HG23	1.95	0.48
2:B:2973:PHE:CD1	2:B:2995:ILE:HG12	2.48	0.48
2:B:3573:MET:SD	2:B:3577:ARG:NH2	2.86	0.48
2:G:1087:ARG:HB3	2:G:1223:PHE:HA	1.94	0.48
2:G:2158:CYS:O	2:G:2162:ILE:HG13	2.14	0.48
2:G:2867:LEU:HB2	2:G:2928:LYS:NZ	2.29	0.48
2:J:2788:HIS:NE2	2:J:2805:TYR:OH	2.38	0.48
2:J:4651:THR:HG21	2:J:4803:HIS:CD2	2.48	0.48
2:J:5013:MET:HE1	2:J:5021:PHE:HB3	1.95	0.48
3:C:37:TYR:HE1	3:C:96:ASN:HB3	1.78	0.48
1:A:4:ILE:HG13	1:A:65:GLN:NE2	2.28	0.48
1:D:4:ILE:HD11	1:D:62:GLY:HA2	1.96	0.48
1:I:4:ILE:HD11	1:I:62:GLY:HA2	1.96	0.48
2:B:28:VAL:HG12	2:B:33:LEU:HD23	1.96	0.48
2:B:1735:ILE:HG22	2:B:2142:TYR:HB3	1.95	0.48
2:B:2637:ALA:C	2:B:2640:PRO:HD2	2.33	0.48
2:B:3078:ARG:O	2:B:3082:LYS:HG2	2.13	0.48
2:E:299:LEU:HD21	2:E:377:ILE:HA	1.96	0.48
2:E:1154:ASP:HB3	2:E:1157:GLU:HB2	1.95	0.48
2:E:1623:ARG:HA	2:E:1623:ARG:NH1	2.28	0.48
2:E:2970:SER:HA	2:E:2973:PHE:CE2	2.48	0.48
2:E:3262:ARG:N	2:E:3262:ARG:HD2	2.28	0.48
2:G:121:LEU:N	2:G:134:ASP:O	2.45	0.48
2:G:299:LEU:HD21	2:G:377:ILE:HA	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3573:MET:HE2	2:G:3576:TYR:HB3	1.95	0.48
2:J:863:LEU:HD22	2:J:867:LEU:HD21	1.95	0.48
2:J:2158:CYS:O	2:J:2162:ILE:HG13	2.14	0.48
2:J:2496:PRO:HG3	2:J:2550:LEU:HD23	1.93	0.48
3:C:82:MET:HG3	3:C:84:SER:O	2.13	0.48
3:F:37:TYR:HE1	3:F:96:ASN:HB3	1.77	0.48
1:H:4:ILE:HD11	1:H:62:GLY:HA2	1.96	0.48
2:B:2799:GLU:O	2:B:2803:GLU:HG2	2.14	0.48
2:B:3475:LYS:HD3	2:B:3516:LYS:HZ1	1.79	0.48
2:B:3780:LEU:HD22	2:B:3820:LEU:HD21	1.95	0.48
2:E:1426:ILE:HA	2:E:1429:ASN:OD1	2.13	0.48
2:E:2158:CYS:O	2:E:2162:ILE:HG13	2.14	0.48
2:E:2496:PRO:HG3	2:E:2550:LEU:HD23	1.94	0.48
2:E:2637:ALA:C	2:E:2640:PRO:HD2	2.33	0.48
2:E:2691:TYR:HA	2:E:2696:TYR:CE1	2.47	0.48
2:E:2799:GLU:O	2:E:2803:GLU:HG2	2.14	0.48
2:E:2970:SER:O	2:E:2974:ILE:HG23	2.13	0.48
2:E:2973:PHE:CD1	2:E:2995:ILE:HG12	2.48	0.48
2:E:4802:GLY:HA2	2:E:4808:PHE:HB2	1.95	0.48
2:G:1154:ASP:HB3	2:G:1157:GLU:HB2	1.95	0.48
2:G:1623:ARG:HA	2:G:1623:ARG:NH1	2.28	0.48
2:G:2970:SER:HA	2:G:2973:PHE:CE2	2.48	0.48
2:G:3051:ARG:NH2	2:G:3098:SER:O	2.46	0.48
2:G:4096:ALA:O	2:G:4100:GLN:HG2	2.12	0.48
2:J:4118:ASP:OD1	2:J:4119:GLU:N	2.46	0.48
2:B:870:ILE:O	2:B:874:LEU:HG	2.14	0.48
2:B:1260:MET:O	2:B:1263:THR:OG1	2.31	0.48
2:B:2626:LEU:HD22	2:B:2640:PRO:HB3	1.95	0.48
2:B:3704:HIS:O	2:B:3708:THR:HG23	2.14	0.48
2:B:4118:ASP:OD1	2:B:4119:GLU:N	2.46	0.48
2:E:369:LEU:HB3	2:E:371:VAL:HG23	1.96	0.48
2:E:3704:HIS:O	2:E:3708:THR:HG23	2.14	0.48
2:E:3836:MET:CE	2:E:3915:ILE:HG23	2.44	0.48
2:G:28:VAL:HG12	2:G:33:LEU:HD23	1.96	0.48
2:G:1735:ILE:HG22	2:G:2142:TYR:HB3	1.95	0.48
2:G:3262:ARG:N	2:G:3262:ARG:HD2	2.28	0.48
2:J:208:CYS:H	2:J:269:TRP:HH2	1.61	0.48
2:B:2431:ASP:HB2	2:B:2501:SER:HB2	1.94	0.48
2:B:2562:ILE:HG23	2:B:2569:PHE:CE2	2.48	0.48
2:B:2970:SER:O	2:B:2974:ILE:HG23	2.13	0.48
2:B:3836:MET:CE	2:B:3915:ILE:HG23	2.44	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3991:GLY:O	2:B:3995:VAL:HG23	2.13	0.48
2:B:4780:PHE:HA	2:B:4783:ILE:HG22	1.94	0.48
2:B:4843:LEU:O	2:B:4847:VAL:HG22	2.13	0.48
2:E:3354:LEU:HG	2:E:3359:ILE:HD11	1.96	0.48
2:E:3366:ARG:NE	2:E:3367:LYS:HD2	2.26	0.48
2:G:223:PHE:HA	2:G:230:CYS:HA	1.95	0.48
2:G:2626:LEU:HD22	2:G:2640:PRO:HB3	1.96	0.48
2:G:3078:ARG:O	2:G:3082:LYS:HG2	2.13	0.48
2:G:3836:MET:CE	2:G:3915:ILE:HG23	2.44	0.48
2:G:4780:PHE:HA	2:G:4783:ILE:HG22	1.94	0.48
2:J:2376:LEU:HD12	2:J:2376:LEU:H	1.79	0.48
2:J:2566:ALA:HA	2:J:2569:PHE:CD2	2.49	0.48
2:J:3320:LEU:HD23	2:J:3320:LEU:HA	1.74	0.48
3:F:82:MET:HG3	3:F:84:SER:O	2.13	0.48
2:B:2380:ILE:O	2:B:2384:ILE:HG13	2.12	0.48
2:B:3166:TYR:CE1	2:B:3239:MET:HG3	2.49	0.48
2:E:215:THR:HG22	2:E:273:HIS:HA	1.96	0.48
2:E:1215:ALA:HA	2:E:1219:LEU:HB3	1.94	0.48
2:E:3281:LEU:O	2:E:3285:TRP:HB2	2.14	0.48
2:G:1426:ILE:HA	2:G:1429:ASN:OD1	2.13	0.48
2:G:2531:ARG:HH12	2:G:2585:THR:HB	1.79	0.48
2:G:2970:SER:O	2:G:2974:ILE:HG23	2.13	0.48
2:G:3704:HIS:O	2:G:3708:THR:HG23	2.14	0.48
2:G:4064:MET:HE1	2:G:4110:PHE:HD2	1.79	0.48
2:J:1426:ILE:HA	2:J:1429:ASN:OD1	2.13	0.48
2:J:2736:ASP:OD1	2:J:2736:ASP:N	2.42	0.48
2:J:3353:LEU:HG	2:J:3357:HIS:CE1	2.49	0.48
2:J:3573:MET:SD	2:J:3577:ARG:NH2	2.86	0.48
2:J:3991:GLY:O	2:J:3995:VAL:HG23	2.13	0.48
2:B:299:LEU:HD21	2:B:377:ILE:HA	1.96	0.48
2:B:582:HIS:O	2:B:586:ILE:HG13	2.14	0.48
2:B:1089:TYR:CD1	2:B:1152:MET:HG2	2.45	0.48
2:B:1420:ASN:OD1	2:B:1421:ARG:N	2.47	0.48
2:B:2158:CYS:O	2:B:2162:ILE:HG13	2.14	0.48
2:B:3353:LEU:HG	2:B:3357:HIS:CE1	2.49	0.48
2:E:2376:LEU:O	2:E:2380:ILE:HG12	2.13	0.48
2:G:2134:LEU:O	2:G:2138:LEU:HG	2.14	0.48
2:G:2725:LYS:HZ1	2:G:2737:PRO:HA	1.77	0.48
2:G:4651:THR:HG21	2:G:4803:HIS:CD2	2.48	0.48
2:G:4679:ARG:HH21	2:G:5017:ARG:CZ	2.26	0.48
2:J:215:THR:HG22	2:J:273:HIS:HA	1.96	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:1623:ARG:HA	2:J:1623:ARG:NH1	2.28	0.48
2:J:2867:LEU:HB2	2:J:2928:LYS:NZ	2.29	0.48
2:J:3281:LEU:O	2:J:3285:TRP:HB2	2.14	0.48
2:B:215:THR:HG22	2:B:273:HIS:HA	1.96	0.47
2:B:1426:ILE:HA	2:B:1429:ASN:OD1	2.13	0.47
2:B:3044:CYS:SG	2:B:3092:LEU:HB2	2.54	0.47
2:B:3514:LEU:HD12	2:B:3606:LEU:HB2	1.96	0.47
2:B:4679:ARG:NH1	2:B:4715:TYR:OH	2.46	0.47
2:E:630:GLU:HG3	2:E:631:LEU:HD23	1.96	0.47
2:E:3166:TYR:CE1	2:E:3239:MET:HG3	2.49	0.47
2:E:3313:ASN:OD1	2:E:3353:LEU:HD11	2.14	0.47
2:E:4069:LYS:NZ	2:E:4130:ASN:OD1	2.37	0.47
2:G:208:CYS:H	2:G:269:TRP:HH2	1.61	0.47
2:G:582:HIS:O	2:G:586:ILE:HG13	2.14	0.47
2:G:659:TYR:HB2	2:G:1017:ARG:HH22	1.79	0.47
2:G:2869:ARG:NH2	2:G:2947:ASP:H	2.12	0.47
2:J:121:LEU:N	2:J:134:ASP:O	2.45	0.47
2:J:1089:TYR:CD1	2:J:1152:MET:HG2	2.45	0.47
2:J:1154:ASP:HB3	2:J:1157:GLU:HB2	1.95	0.47
2:J:3166:TYR:CE1	2:J:3239:MET:HG3	2.49	0.47
1:I:17:LYS:HG3	1:I:18:LYS:H	1.79	0.47
2:B:630:GLU:HG3	2:B:631:LEU:HD23	1.96	0.47
2:B:2867:LEU:HB2	2:B:2928:LYS:NZ	2.28	0.47
2:B:3051:ARG:NH2	2:B:3102:ASP:HB2	2.30	0.47
2:B:3443:ILE:HG12	2:B:3605:HIS:CD2	2.49	0.47
2:E:404:ILE:HG23	2:E:483:MET:SD	2.54	0.47
2:E:659:TYR:HB2	2:E:1017:ARG:HH22	1.80	0.47
2:E:3044:CYS:SG	2:E:3092:LEU:HB2	2.54	0.47
2:E:3514:LEU:HD12	2:E:3606:LEU:HB2	1.96	0.47
2:E:4749:GLU:HG3	2:E:4753:HIS:NE2	2.29	0.47
2:E:4780:PHE:HA	2:E:4783:ILE:HG22	1.94	0.47
2:G:349:GLN:HE21	2:G:354:GLY:HA2	1.78	0.47
2:G:3044:CYS:SG	2:G:3092:LEU:HB2	2.54	0.47
2:G:4069:LYS:NZ	2:G:4130:ASN:OD1	2.37	0.47
2:J:111:HIS:CE1	2:J:113:HIS:HB3	2.49	0.47
2:J:4780:PHE:HA	2:J:4783:ILE:HG22	1.94	0.47
1:A:17:LYS:HG3	1:A:18:LYS:H	1.79	0.47
2:B:3354:LEU:HG	2:B:3359:ILE:HD11	1.96	0.47
2:B:3970:GLN:NE2	2:B:5004:THR:HA	2.30	0.47
2:E:283:ARG:HE	2:E:288:GLY:HA2	1.80	0.47
2:E:2376:LEU:HD12	2:E:2376:LEU:H	1.79	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:3970:GLN:NE2	2:E:5004:THR:HA	2.29	0.47
2:G:1274:HIS:HB3	2:G:1277:TRP:HB2	1.97	0.47
2:G:3166:TYR:CE1	2:G:3239:MET:HG3	2.49	0.47
2:G:3991:GLY:O	2:G:3995:VAL:HG23	2.13	0.47
2:J:299:LEU:HD21	2:J:377:ILE:HA	1.96	0.47
2:J:747:CYS:SG	2:J:756:SER:HB2	2.55	0.47
1:D:17:LYS:HG3	1:D:18:LYS:H	1.79	0.47
1:H:17:LYS:HG3	1:H:18:LYS:H	1.79	0.47
2:B:2134:LEU:O	2:B:2138:LEU:HG	2.14	0.47
2:B:2673:HIS:CE1	2:B:2910:THR:HA	2.50	0.47
2:B:2869:ARG:NH2	2:B:2947:ASP:H	2.12	0.47
2:B:3262:ARG:N	2:B:3262:ARG:HD2	2.28	0.47
2:B:3313:ASN:OD1	2:B:3353:LEU:HD11	2.15	0.47
2:E:2788:HIS:NE2	2:E:2805:TYR:OH	2.38	0.47
2:E:3640:PRO:HG2	2:E:3643:ASN:HB2	1.96	0.47
2:G:747:CYS:SG	2:G:756:SER:HB2	2.55	0.47
2:G:818:ARG:NH1	2:G:1027:LEU:O	2.44	0.47
2:G:3970:GLN:NE2	2:G:5004:THR:HA	2.29	0.47
2:J:1735:ILE:HG22	2:J:2142:TYR:HB3	1.95	0.47
2:J:2134:LEU:O	2:J:2138:LEU:HG	2.14	0.47
2:J:3044:CYS:SG	2:J:3092:LEU:HB2	2.54	0.47
2:J:3825:GLU:H	2:J:3825:GLU:CD	2.17	0.47
3:K:71:ARG:HB3	3:K:78:VAL:HG22	1.97	0.47
1:D:26:TYR:HB2	1:D:101:VAL:HG12	1.96	0.47
2:B:4749:GLU:HG3	2:B:4753:HIS:NE2	2.29	0.47
2:B:4802:GLY:HA2	2:B:4808:PHE:HB2	1.95	0.47
2:E:582:HIS:O	2:E:586:ILE:HG13	2.14	0.47
2:E:863:LEU:HD22	2:E:867:LEU:HD21	1.95	0.47
2:E:1530:THR:HG23	2:E:1535:GLU:H	1.78	0.47
2:E:2806:ARG:O	2:E:2810:LYS:HG2	2.14	0.47
2:G:111:HIS:CE1	2:G:113:HIS:HB3	2.50	0.47
2:G:1089:TYR:CD1	2:G:1152:MET:HG2	2.45	0.47
2:G:3353:LEU:HG	2:G:3357:HIS:CE1	2.49	0.47
2:G:3475:LYS:HZ1	2:G:3511:VAL:HG21	1.79	0.47
2:J:223:PHE:HA	2:J:230:CYS:HA	1.95	0.47
2:J:2614:ILE:O	2:J:2650:ARG:NH1	2.41	0.47
2:J:2626:LEU:HD22	2:J:2640:PRO:HB3	1.95	0.47
2:E:747:CYS:SG	2:E:756:SER:HB2	2.55	0.47
2:E:870:ILE:O	2:E:874:LEU:HG	2.13	0.47
2:E:1095:VAL:HB	2:E:1199:VAL:HG23	1.95	0.47
2:E:1274:HIS:HB3	2:E:1277:TRP:HB2	1.97	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1813:ARG:O	2:E:1817:GLU:HG2	2.15	0.47
2:E:2134:LEU:O	2:E:2138:LEU:HG	2.14	0.47
2:E:2515:GLN:CA	2:E:2568:LEU:HD21	2.44	0.47
2:E:2531:ARG:HH12	2:E:2585:THR:HB	1.79	0.47
2:E:3209:GLN:CD	2:E:3209:GLN:H	2.18	0.47
2:G:2673:HIS:CE1	2:G:2910:THR:HA	2.50	0.47
2:G:2799:GLU:O	2:G:2803:GLU:HG2	2.14	0.47
2:G:2806:ARG:O	2:G:2810:LYS:HG2	2.14	0.47
2:J:404:ILE:HG23	2:J:483:MET:SD	2.54	0.47
2:J:487:VAL:O	2:J:491:ILE:HG13	2.15	0.47
2:J:582:HIS:O	2:J:586:ILE:HG13	2.14	0.47
2:J:863:LEU:HD13	2:J:867:LEU:HD21	1.97	0.47
2:J:3051:ARG:NH2	2:J:3102:ASP:HB2	2.30	0.47
2:J:3704:HIS:O	2:J:3708:THR:HG23	2.14	0.47
2:J:4181:ILE:HG22	2:J:4987:ASN:HB3	1.97	0.47
3:F:71:ARG:HB3	3:F:78:VAL:HG22	1.96	0.47
2:B:365:LYS:O	2:B:369:LEU:HG	2.14	0.47
2:B:404:ILE:HG23	2:B:483:MET:SD	2.54	0.47
2:B:1274:HIS:HB3	2:B:1277:TRP:HB2	1.97	0.47
2:B:1623:ARG:HA	2:B:1623:ARG:NH1	2.28	0.47
2:B:2353:VAL:O	2:B:2357:LEU:HG	2.15	0.47
2:B:2782:ASP:N	2:B:2782:ASP:OD1	2.47	0.47
2:B:3209:GLN:CD	2:B:3209:GLN:H	2.18	0.47
2:B:3280:TYR:HE1	2:B:3284:TRP:CD1	2.33	0.47
2:E:111:HIS:CE1	2:E:113:HIS:HB3	2.50	0.47
2:E:2673:HIS:CE1	2:E:2910:THR:HA	2.50	0.47
2:E:2869:ARG:NH2	2:E:2947:ASP:H	2.12	0.47
2:E:3316:LEU:HD11	2:E:3345:ILE:HG23	1.95	0.47
2:E:3353:LEU:HG	2:E:3357:HIS:CE1	2.49	0.47
2:E:3991:GLY:O	2:E:3995:VAL:HG23	2.14	0.47
2:G:283:ARG:HE	2:G:288:GLY:HA2	1.79	0.47
2:G:733:PRO:HG2	2:G:762:CYS:HB3	1.96	0.47
2:G:3354:LEU:HG	2:G:3359:ILE:HD11	1.96	0.47
2:G:3640:PRO:HG2	2:G:3643:ASN:HB2	1.96	0.47
2:G:4211:LYS:O	2:G:4215:ARG:HG3	2.15	0.47
2:J:28:VAL:HG12	2:J:33:LEU:HD23	1.96	0.47
2:J:246:TYR:CD1	2:J:373:LYS:HB3	2.50	0.47
2:J:799:GLU:OE1	2:J:1623:ARG:NH1	2.48	0.47
2:J:1420:ASN:OD1	2:J:1421:ARG:N	2.47	0.47
2:J:2806:ARG:O	2:J:2810:LYS:HG2	2.14	0.47
2:J:2869:ARG:NH2	2:J:2947:ASP:H	2.12	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:3280:TYR:HE1	2:J:3284:TRP:CD1	2.33	0.47
2:J:4211:LYS:O	2:J:4215:ARG:HG3	2.15	0.47
2:B:283:ARG:HE	2:B:288:GLY:HA2	1.79	0.47
2:B:2518:LEU:HD21	2:B:2569:PHE:CZ	2.49	0.47
2:B:3965:LEU:HA	2:B:3968:TYR:CD2	2.50	0.47
2:E:20:VAL:HG12	2:E:22:LEU:H	1.80	0.47
2:E:733:PRO:HG2	2:E:762:CYS:HB3	1.96	0.47
2:E:1420:ASN:OD1	2:E:1421:ARG:N	2.47	0.47
2:E:1735:ILE:HG22	2:E:2142:TYR:HB3	1.95	0.47
2:E:2626:LEU:HD22	2:E:2640:PRO:HB3	1.95	0.47
2:E:2718:SER:OG	2:E:2909:ASP:O	2.25	0.47
2:E:3412:LEU:O	2:E:3416:VAL:HG12	2.15	0.47
2:G:20:VAL:HG12	2:G:22:LEU:H	1.80	0.47
2:G:1420:ASN:OD1	2:G:1421:ARG:N	2.47	0.47
2:G:2225:PHE:O	2:G:2229:VAL:HG23	2.15	0.47
2:G:2592:GLY:O	2:G:2600:ARG:NH1	2.48	0.47
2:G:3209:GLN:CD	2:G:3209:GLN:H	2.18	0.47
2:J:733:PRO:HG2	2:J:762:CYS:HB3	1.96	0.47
2:J:3313:ASN:OD1	2:J:3353:LEU:HD11	2.14	0.47
2:J:4749:GLU:HG3	2:J:4753:HIS:NE2	2.29	0.47
2:B:878:ILE:HG21	3:C:107:TRP:NE1	2.30	0.47
2:B:3197:LEU:O	2:B:3201:MET:HB3	2.15	0.47
2:B:3281:LEU:O	2:B:3285:TRP:HB2	2.14	0.47
2:B:3825:GLU:H	2:B:3825:GLU:CD	2.17	0.47
2:E:3825:GLU:H	2:E:3825:GLU:CD	2.17	0.47
2:G:3281:LEU:O	2:G:3285:TRP:HB2	2.14	0.47
2:J:2469:ILE:HA	2:J:2472:LEU:HG	1.97	0.47
2:J:2531:ARG:HH12	2:J:2585:THR:HB	1.79	0.47
2:J:3412:LEU:O	2:J:3416:VAL:HG12	2.15	0.47
2:B:487:VAL:O	2:B:491:ILE:HG13	2.15	0.47
2:B:747:CYS:SG	2:B:756:SER:HB2	2.55	0.47
2:B:2806:ARG:O	2:B:2810:LYS:HG2	2.14	0.47
2:B:3003:LEU:HB2	2:B:3004:PRO:HD3	1.97	0.47
2:B:3366:ARG:NE	2:B:3367:LYS:HD2	2.26	0.47
2:B:4181:ILE:HG22	2:B:4987:ASN:HB3	1.97	0.47
2:E:317:ARG:NH2	2:E:321:GLU:O	2.48	0.47
2:E:863:LEU:HD13	2:E:867:LEU:HD21	1.97	0.47
2:E:3443:ILE:HG12	2:E:3605:HIS:CD2	2.50	0.47
2:G:215:THR:HG22	2:G:273:HIS:HA	1.96	0.47
2:G:1745:ILE:HD11	2:G:1769:THR:HG23	1.97	0.47
2:G:2809:ILE:H	2:G:2809:ILE:HD12	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:2958:GLY:O	2:G:2962:GLN:HG2	2.15	0.47
2:G:3051:ARG:NH2	2:G:3102:ASP:HB2	2.30	0.47
2:G:3316:LEU:HD21	2:G:3345:ILE:HG13	1.97	0.47
2:G:3475:LYS:HD3	2:G:3516:LYS:HZ1	1.80	0.47
2:J:4064:MET:HE1	2:J:4110:PHE:HD2	1.80	0.47
2:B:2225:PHE:O	2:B:2229:VAL:HG23	2.15	0.46
2:E:2576:ALA:HA	2:E:2579:VAL:HB	1.96	0.46
2:G:317:ARG:NH2	2:G:321:GLU:O	2.48	0.46
2:G:487:VAL:O	2:G:491:ILE:HG13	2.15	0.46
2:G:2152:THR:O	2:G:2156:LEU:HG	2.16	0.46
2:G:3825:GLU:H	2:G:3825:GLU:CD	2.17	0.46
2:J:2152:THR:O	2:J:2156:LEU:HG	2.16	0.46
2:J:3246:LEU:HD13	2:J:3280:TYR:CD2	2.49	0.46
2:J:3246:LEU:HD12	2:J:3249:LEU:HD12	1.97	0.46
2:J:3346:VAL:HG21	2:J:3411:LEU:HB3	1.96	0.46
2:B:111:HIS:CE1	2:B:113:HIS:HB3	2.50	0.46
2:B:659:TYR:HB2	2:B:1017:ARG:HH22	1.79	0.46
2:B:2592:GLY:O	2:B:2600:ARG:NH1	2.48	0.46
2:E:28:VAL:HG12	2:E:33:LEU:HD23	1.96	0.46
2:E:642:THR:HG21	2:E:1615:VAL:HG21	1.98	0.46
2:E:799:GLU:OE1	2:E:1623:ARG:NH1	2.48	0.46
2:E:2867:LEU:HB2	2:E:2928:LYS:HZ3	1.80	0.46
2:G:2469:ILE:HA	2:G:2472:LEU:HG	1.97	0.46
2:G:3197:LEU:O	2:G:3201:MET:HB3	2.15	0.46
2:G:3412:LEU:O	2:G:3416:VAL:HG12	2.15	0.46
2:J:1813:ARG:O	2:J:1817:GLU:HG2	2.15	0.46
2:J:3443:ILE:HG12	2:J:3605:HIS:CD2	2.49	0.46
2:J:4675:LYS:HG3	2:J:4715:TYR:HE1	1.80	0.46
1:I:97:LEU:HB3	1:I:99:PHE:CE2	2.51	0.46
2:B:213:TYR:HA	2:B:340:LYS:HA	1.98	0.46
2:B:642:THR:HG21	2:B:1615:VAL:HG21	1.98	0.46
2:E:487:VAL:O	2:E:491:ILE:HG13	2.15	0.46
2:E:2782:ASP:N	2:E:2782:ASP:OD1	2.47	0.46
2:E:4675:LYS:HG3	2:E:4715:TYR:HE1	1.80	0.46
2:G:213:TYR:HA	2:G:340:LYS:HA	1.97	0.46
2:G:799:GLU:OE1	2:G:1623:ARG:NH1	2.48	0.46
2:G:2294:ASP:O	2:G:2298:VAL:HG12	2.16	0.46
2:G:2376:LEU:H	2:G:2376:LEU:HD12	1.79	0.46
2:G:4181:ILE:HG22	2:G:4987:ASN:HB3	1.97	0.46
2:J:1042:ALA:O	2:J:1046:LEU:HG	2.16	0.46
2:J:2294:ASP:O	2:J:2298:VAL:HG12	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2353:VAL:O	2:J:2357:LEU:HG	2.15	0.46
2:J:3003:LEU:HB2	2:J:3004:PRO:HD3	1.97	0.46
2:J:3354:LEU:HG	2:J:3359:ILE:HD11	1.96	0.46
2:B:4240:ASP:O	2:B:4244:GLU:HG3	2.16	0.46
2:E:2102:VAL:HG13	2:E:2120:MET:HB2	1.97	0.46
2:E:2104:ARG:O	2:E:2108:GLU:HG2	2.16	0.46
2:E:2152:THR:O	2:E:2156:LEU:HG	2.16	0.46
2:E:2765:LYS:HD3	2:E:2765:LYS:HA	1.67	0.46
2:E:3002:LEU:HD23	2:E:3002:LEU:HA	1.81	0.46
2:E:3346:VAL:HG21	2:E:3411:LEU:HB3	1.96	0.46
2:G:19:GLU:HB3	2:G:205:ILE:HD13	1.98	0.46
2:G:863:LEU:HD13	2:G:867:LEU:HD21	1.97	0.46
2:G:1042:ALA:O	2:G:1046:LEU:HG	2.16	0.46
2:G:1669:LEU:O	2:G:1673:VAL:HG22	2.16	0.46
2:G:1813:ARG:O	2:G:1817:GLU:HG2	2.15	0.46
2:G:1964:ARG:HB3	2:G:1968:LYS:NZ	2.30	0.46
2:G:2782:ASP:N	2:G:2782:ASP:OD1	2.47	0.46
2:G:4749:GLU:HG3	2:G:4753:HIS:NE2	2.29	0.46
2:J:283:ARG:HE	2:J:288:GLY:HA2	1.79	0.46
2:J:1153:ILE:HG13	2:J:1160:ILE:HG12	1.97	0.46
2:J:1669:LEU:O	2:J:1673:VAL:HG22	2.16	0.46
2:J:2225:PHE:O	2:J:2229:VAL:HG23	2.15	0.46
2:J:2328:GLY:HA2	2:J:2331:TYR:HD2	1.81	0.46
2:J:2673:HIS:CE1	2:J:2910:THR:HA	2.50	0.46
2:B:882:TRP:O	2:B:885:THR:OG1	2.28	0.46
2:B:1153:ILE:HG13	2:B:1160:ILE:HG12	1.97	0.46
2:B:2328:GLY:HA2	2:B:2331:TYR:HD2	1.81	0.46
2:B:3412:LEU:O	2:B:3416:VAL:HG12	2.15	0.46
2:B:3640:PRO:HG2	2:B:3643:ASN:HB2	1.96	0.46
2:B:4160:LEU:O	2:B:4164:LEU:HG	2.16	0.46
2:B:4211:LYS:O	2:B:4215:ARG:HG3	2.15	0.46
2:E:1669:LEU:O	2:E:1673:VAL:HG22	2.16	0.46
2:E:1745:ILE:HD11	2:E:1769:THR:HG23	1.97	0.46
2:E:2294:ASP:O	2:E:2298:VAL:HG12	2.16	0.46
2:E:2515:GLN:O	2:E:2519:LEU:HG	2.14	0.46
2:E:3051:ARG:NH2	2:E:3102:ASP:HB2	2.30	0.46
2:E:4160:LEU:O	2:E:4164:LEU:HG	2.16	0.46
2:E:4204:GLN:O	2:E:4207:MET:HB2	2.16	0.46
2:G:630:GLU:HG3	2:G:631:LEU:HD23	1.96	0.46
2:G:3514:LEU:HD12	2:G:3606:LEU:HB2	1.96	0.46
2:G:4160:LEU:O	2:G:4164:LEU:HG	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:4679:ARG:NH1	2:G:4715:TYR:OH	2.49	0.46
2:J:630:GLU:HG3	2:J:631:LEU:HD23	1.96	0.46
2:J:2312:MET:SD	2:J:2312:MET:N	2.79	0.46
2:J:2592:GLY:O	2:J:2600:ARG:NH1	2.48	0.46
2:J:3428:ASN:O	2:J:3432:GLU:HG2	2.16	0.46
1:A:55:VAL:HA	2:B:1784:ALA:HA	1.97	0.46
2:B:247:TYR:CD2	2:B:374:LYS:HB2	2.44	0.46
2:B:317:ARG:NH2	2:B:321:GLU:O	2.48	0.46
2:B:2958:GLY:O	2:B:2962:GLN:HG2	2.15	0.46
2:E:1153:ILE:HG13	2:E:1160:ILE:HG12	1.97	0.46
2:E:1964:ARG:HB3	2:E:1968:LYS:NZ	2.30	0.46
2:E:3548:GLU:HG2	2:E:3552:PHE:CE2	2.51	0.46
2:G:246:TYR:CB	2:G:373:LYS:HD2	2.45	0.46
2:G:478:PHE:HD2	2:G:483:MET:HG3	1.81	0.46
2:G:2328:GLY:HA2	2:G:2331:TYR:HD2	1.81	0.46
2:G:2353:VAL:O	2:G:2357:LEU:HG	2.15	0.46
2:G:2599:GLN:O	2:G:2603:ILE:HG13	2.16	0.46
2:G:4240:ASP:O	2:G:4244:GLU:HG3	2.16	0.46
2:J:642:THR:HG21	2:J:1615:VAL:HG21	1.98	0.46
2:J:1274:HIS:HB3	2:J:1277:TRP:HB2	1.97	0.46
2:J:3197:LEU:O	2:J:3201:MET:HB3	2.15	0.46
2:J:3514:LEU:HD12	2:J:3606:LEU:HB2	1.96	0.46
2:J:4160:LEU:O	2:J:4164:LEU:HG	2.16	0.46
2:B:248:GLU:HA	2:B:372:LEU:CB	2.46	0.46
2:B:799:GLU:OE1	2:B:1623:ARG:NH1	2.48	0.46
2:B:996:TRP:HE1	2:B:1000:ARG:HD2	1.81	0.46
2:B:1745:ILE:HD11	2:B:1769:THR:HG23	1.97	0.46
2:B:1813:ARG:O	2:B:1817:GLU:HG2	2.15	0.46
2:B:1964:ARG:HB3	2:B:1968:LYS:NZ	2.30	0.46
2:B:2376:LEU:HD12	2:B:2376:LEU:H	1.79	0.46
2:B:2531:ARG:HH12	2:B:2585:THR:HB	1.79	0.46
2:B:2696:TYR:HE2	2:B:2997:PHE:HA	1.81	0.46
2:E:996:TRP:HE1	2:E:1000:ARG:HD2	1.81	0.46
2:E:2469:ILE:HA	2:E:2472:LEU:HG	1.97	0.46
2:G:863:LEU:HD13	2:G:867:LEU:HD11	1.98	0.46
2:G:3428:ASN:O	2:G:3432:GLU:HG2	2.16	0.46
2:G:3969:ILE:O	2:G:3970:GLN:C	2.54	0.46
2:J:20:VAL:HG12	2:J:22:LEU:H	1.80	0.46
2:J:659:TYR:HB2	2:J:1017:ARG:HH22	1.79	0.46
2:J:2799:GLU:O	2:J:2803:GLU:HG2	2.14	0.46
2:J:2881:ASN:HA	2:J:2884:ASN:HD21	1.81	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2958:GLY:O	2:J:2962:GLN:HG2	2.15	0.46
2:J:3366:ARG:NE	2:J:3367:LYS:HD2	2.26	0.46
2:J:3405:LEU:HD13	2:J:3451:PHE:HZ	1.81	0.46
3:K:38:ARG:HD3	3:K:48:VAL:HG22	1.98	0.46
2:B:19:GLU:HB3	2:B:205:ILE:HD13	1.98	0.46
2:B:20:VAL:HG12	2:B:22:LEU:H	1.80	0.46
2:B:316:PHE:HE2	2:B:348:VAL:HG22	1.81	0.46
2:B:478:PHE:HD2	2:B:483:MET:HG3	1.81	0.46
2:B:696:PRO:HG2	2:B:1612:PHE:HE2	1.81	0.46
2:B:820:ARG:HG2	2:B:820:ARG:HH11	1.81	0.46
2:B:1042:ALA:O	2:B:1046:LEU:HG	2.16	0.46
2:B:2152:THR:O	2:B:2156:LEU:HG	2.16	0.46
2:B:3346:VAL:HG21	2:B:3411:LEU:HB3	1.96	0.46
2:E:1260:MET:HB2	2:E:1269:CYS:SG	2.56	0.46
2:E:2599:GLN:O	2:E:2603:ILE:HG13	2.16	0.46
2:E:3277:LEU:HD13	2:E:3315:LEU:HD13	1.96	0.46
2:G:404:ILE:HG23	2:G:483:MET:SD	2.54	0.46
2:G:642:THR:HG21	2:G:1615:VAL:HG21	1.98	0.46
2:G:2104:ARG:O	2:G:2108:GLU:HG2	2.16	0.46
2:G:3757:GLU:O	2:G:3761:GLN:HG2	2.16	0.46
2:J:317:ARG:NH2	2:J:321:GLU:O	2.48	0.46
2:J:478:PHE:HD2	2:J:483:MET:HG3	1.81	0.46
2:J:1964:ARG:HB3	2:J:1968:LYS:NZ	2.30	0.46
2:J:3342:ALA:HA	2:J:3345:ILE:HG22	1.98	0.46
2:J:3548:GLU:HG2	2:J:3552:PHE:CE2	2.51	0.46
2:J:3757:GLU:O	2:J:3761:GLN:HG2	2.16	0.46
3:C:71:ARG:HB3	3:C:78:VAL:HG22	1.97	0.46
1:H:55:VAL:HA	2:G:1784:ALA:HA	1.97	0.46
1:H:88:PRO:HB2	2:G:1680:ARG:HH12	1.81	0.46
2:B:863:LEU:HD13	2:B:867:LEU:HD11	1.98	0.46
2:B:1260:MET:HB2	2:B:1269:CYS:SG	2.56	0.46
2:E:2225:PHE:O	2:E:2229:VAL:HG23	2.15	0.46
2:E:2353:VAL:O	2:E:2357:LEU:HG	2.15	0.46
2:E:2696:TYR:HE2	2:E:2997:PHE:HA	1.81	0.46
2:E:2809:ILE:H	2:E:2809:ILE:HD12	1.80	0.46
2:E:2881:ASN:HA	2:E:2884:ASN:HD21	1.81	0.46
2:E:2958:GLY:O	2:E:2962:GLN:HG2	2.15	0.46
2:E:3405:LEU:HD13	2:E:3451:PHE:HZ	1.81	0.46
2:G:231:LEU:O	2:G:260:TRP:NE1	2.40	0.46
2:G:316:PHE:HE2	2:G:348:VAL:HG22	1.81	0.46
2:G:1498:GLY:HA2	2:G:1501:VAL:HG12	1.98	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3003:LEU:HB2	2:G:3004:PRO:HD3	1.97	0.46
2:G:3346:VAL:HG21	2:G:3411:LEU:HB3	1.96	0.46
2:J:960:MET:SD	2:J:960:MET:N	2.75	0.46
2:J:1745:ILE:HD11	2:J:1769:THR:HG23	1.97	0.46
2:J:1927:LEU:HD23	2:J:1939:MET:HE1	1.98	0.46
2:J:2809:ILE:H	2:J:2809:ILE:HD12	1.80	0.46
2:J:3173:TYR:CG	2:J:3243:ILE:HG12	2.51	0.46
2:J:3475:LYS:HZ1	2:J:3511:VAL:HG21	1.80	0.46
2:J:3639:THR:N	2:J:3640:PRO:HD2	2.31	0.46
2:B:3969:ILE:O	2:B:3970:GLN:C	2.55	0.46
2:B:4238:CYS:O	2:B:4242:ILE:HG13	2.16	0.46
2:E:231:LEU:O	2:E:260:TRP:NE1	2.40	0.46
2:E:3197:LEU:O	2:E:3201:MET:HB3	2.15	0.46
2:E:3342:ALA:HA	2:E:3345:ILE:HG22	1.98	0.46
2:E:4112:LEU:HD12	2:E:4112:LEU:HA	1.84	0.46
2:E:4181:ILE:HG22	2:E:4987:ASN:HB3	1.97	0.46
2:E:4856:PHE:O	2:E:4860:ARG:NH2	2.39	0.46
2:G:797:HIS:HA	2:G:1619:ARG:HH22	1.81	0.46
2:G:2607:LEU:HD23	2:G:2607:LEU:HA	1.83	0.46
2:G:3137:LEU:HB3	2:G:3138:PRO:HD3	1.98	0.46
2:G:3313:ASN:OD1	2:G:3353:LEU:HD11	2.14	0.46
2:G:3443:ILE:HG12	2:G:3605:HIS:CD2	2.49	0.46
2:J:2688:HIS:ND1	2:J:2688:HIS:N	2.63	0.46
2:J:3640:PRO:HG2	2:J:3643:ASN:HB2	1.96	0.46
2:J:4240:ASP:O	2:J:4244:GLU:HG3	2.16	0.46
3:M:71:ARG:HB3	3:M:78:VAL:HG22	1.96	0.46
2:B:1669:LEU:O	2:B:1673:VAL:HG22	2.16	0.45
2:B:2104:ARG:O	2:B:2108:GLU:HG2	2.16	0.45
2:B:3034:LYS:O	2:B:3038:MET:HG2	2.16	0.45
2:B:3342:ALA:HA	2:B:3345:ILE:HG22	1.98	0.45
2:B:3475:LYS:HZ1	2:B:3511:VAL:HG21	1.81	0.45
2:E:210:GLU:H	2:E:273:HIS:CE1	2.34	0.45
2:E:818:ARG:NH1	2:E:1027:LEU:O	2.44	0.45
2:E:863:LEU:HD13	2:E:867:LEU:HD11	1.98	0.45
2:E:1042:ALA:O	2:E:1046:LEU:HG	2.16	0.45
2:E:2592:GLY:O	2:E:2600:ARG:NH1	2.48	0.45
2:E:3003:LEU:HB2	2:E:3004:PRO:HD3	1.97	0.45
2:E:3969:ILE:O	2:E:3970:GLN:C	2.55	0.45
2:E:4240:ASP:O	2:E:4244:GLU:HG3	2.16	0.45
2:E:4735:GLU:O	2:E:4739:GLU:HG2	2.17	0.45
2:G:820:ARG:HG2	2:G:820:ARG:HH11	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:873:LYS:NZ	2:G:947:GLU:OE1	2.48	0.45
2:G:3276:MET:O	2:G:3280:TYR:HB2	2.16	0.45
2:G:3280:TYR:HE1	2:G:3284:TRP:CD1	2.33	0.45
2:G:3554:GLN:O	2:G:3557:LEU:HD23	2.16	0.45
2:G:3639:THR:N	2:G:3640:PRO:HD2	2.31	0.45
2:J:210:GLU:H	2:J:273:HIS:CE1	2.34	0.45
2:J:818:ARG:NH1	2:J:1027:LEU:O	2.44	0.45
2:J:1260:MET:HB2	2:J:1269:CYS:SG	2.56	0.45
2:J:3209:GLN:CD	2:J:3209:GLN:H	2.18	0.45
2:B:210:GLU:H	2:B:273:HIS:CE1	2.35	0.45
2:B:2240:CYS:SG	2:B:2250:MET:HG3	2.57	0.45
2:B:2294:ASP:O	2:B:2298:VAL:HG12	2.16	0.45
2:B:2463:LEU:HD11	2:B:2506:LEU:HD13	1.98	0.45
2:B:2469:ILE:HA	2:B:2472:LEU:HG	1.97	0.45
2:B:2502:MET:HB2	2:B:2502:MET:HE3	1.66	0.45
2:B:2809:ILE:H	2:B:2809:ILE:HD12	1.80	0.45
2:B:2881:ASN:HA	2:B:2884:ASN:HD21	1.81	0.45
2:B:4207:MET:CE	2:B:4208:PRO:HD2	2.46	0.45
2:B:4651:THR:HG21	2:B:4803:HIS:NE2	2.31	0.45
2:E:3157:ILE:HG22	2:E:3162:GLN:OE1	2.16	0.45
2:G:996:TRP:HE1	2:G:1000:ARG:HD2	1.81	0.45
2:G:1153:ILE:HG13	2:G:1160:ILE:HG12	1.97	0.45
2:G:2463:LEU:HD11	2:G:2506:LEU:HD13	1.98	0.45
2:G:2765:LYS:HA	2:G:2765:LYS:HD3	1.67	0.45
2:G:4064:MET:HE1	2:G:4110:PHE:CD2	2.51	0.45
2:G:4856:PHE:O	2:G:4860:ARG:NH2	2.39	0.45
2:J:863:LEU:HD13	2:J:867:LEU:HD11	1.98	0.45
2:J:2104:ARG:O	2:J:2108:GLU:HG2	2.16	0.45
2:J:2463:LEU:HD11	2:J:2506:LEU:HD13	1.98	0.45
2:J:3034:LYS:O	2:J:3038:MET:HG2	2.16	0.45
2:J:3157:ILE:HG22	2:J:3162:GLN:OE1	2.16	0.45
2:J:3244:PRO:HB2	2:J:3248:ARG:HB3	1.98	0.45
2:J:4090:LYS:HG3	2:J:4121:GLU:HB3	1.98	0.45
2:J:4204:GLN:O	2:J:4207:MET:HB2	2.16	0.45
1:H:29:MET:SD	1:H:33:GLY:HA2	2.57	0.45
2:B:292:ALA:HB2	2:B:312:THR:HG22	1.98	0.45
2:B:818:ARG:NH1	2:B:1027:LEU:O	2.44	0.45
2:B:4204:GLN:O	2:B:4207:MET:HB2	2.16	0.45
2:E:372:LEU:HG	2:E:374:LYS:NZ	2.32	0.45
2:E:1089:TYR:CD1	2:E:1152:MET:HG2	2.45	0.45
2:E:3475:LYS:HZ1	2:E:3511:VAL:HG21	1.81	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:3757:GLU:O	2:E:3761:GLN:HG2	2.16	0.45
2:G:878:ILE:HG13	3:M:107:TRP:CZ2	2.50	0.45
2:G:3405:LEU:HD13	2:G:3451:PHE:HZ	1.81	0.45
2:G:3887:PHE:O	2:G:3891:LEU:HG	2.17	0.45
2:G:4238:CYS:O	2:G:4242:ILE:HG13	2.16	0.45
2:J:213:TYR:HA	2:J:340:LYS:HA	1.97	0.45
2:J:3107:VAL:HG12	2:J:3175:LEU:HD11	1.98	0.45
2:J:3140:LEU:HD12	2:J:3140:LEU:O	2.16	0.45
2:J:3887:PHE:O	2:J:3891:LEU:HG	2.17	0.45
3:C:9:GLY:HA3	3:C:123:VAL:HG22	1.99	0.45
1:D:57:LYS:HE2	1:D:57:LYS:HB2	1.75	0.45
2:B:2566:ALA:HA	2:B:2569:PHE:CD2	2.49	0.45
2:B:2599:GLN:O	2:B:2603:ILE:HG13	2.16	0.45
2:B:3137:LEU:HB3	2:B:3138:PRO:HD3	1.98	0.45
2:B:3548:GLU:HG2	2:B:3552:PHE:CE2	2.51	0.45
2:B:3554:GLN:O	2:B:3557:LEU:HD23	2.16	0.45
2:B:4696:ASP:O	2:B:4700:GLN:HG2	2.17	0.45
2:E:213:TYR:HA	2:E:340:LYS:HA	1.97	0.45
2:E:820:ARG:HH11	2:E:820:ARG:HG2	1.81	0.45
2:E:2463:LEU:HD11	2:E:2506:LEU:HD13	1.99	0.45
2:E:3034:LYS:O	2:E:3038:MET:HG2	2.16	0.45
2:E:3140:LEU:HD12	2:E:3140:LEU:O	2.16	0.45
2:E:3475:LYS:HD3	2:E:3516:LYS:HZ1	1.80	0.45
2:E:4064:MET:HE1	2:E:4110:PHE:HD2	1.81	0.45
2:E:4211:LYS:O	2:E:4215:ARG:HG3	2.15	0.45
2:G:3342:ALA:HA	2:G:3345:ILE:HG22	1.98	0.45
2:G:4204:GLN:O	2:G:4207:MET:HB2	2.16	0.45
2:G:4675:LYS:HG3	2:G:4715:TYR:HE1	1.81	0.45
2:J:2240:CYS:SG	2:J:2250:MET:HG3	2.57	0.45
2:J:2696:TYR:HE2	2:J:2997:PHE:HA	1.81	0.45
2:J:2782:ASP:N	2:J:2782:ASP:OD1	2.47	0.45
2:J:3276:MET:O	2:J:3280:TYR:HB2	2.16	0.45
2:J:3927:GLN:HB2	2:J:3992:PHE:CE2	2.52	0.45
1:D:29:MET:SD	1:D:33:GLY:HA2	2.57	0.45
1:I:29:MET:SD	1:I:33:GLY:HA2	2.57	0.45
2:B:863:LEU:HD13	2:B:867:LEU:HD21	1.97	0.45
2:B:1455:PRO:HG3	2:B:1549:PHE:HE1	1.82	0.45
2:B:2568:LEU:C	2:B:2568:LEU:HD23	2.37	0.45
2:B:3140:LEU:HD12	2:B:3140:LEU:O	2.16	0.45
2:B:3276:MET:O	2:B:3280:TYR:HB2	2.16	0.45
2:B:3757:GLU:O	2:B:3761:GLN:HG2	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4048:LEU:HD22	2:B:4055:VAL:HG21	1.99	0.45
2:B:4064:MET:HE1	2:B:4110:PHE:CD2	2.52	0.45
2:B:4090:LYS:HG3	2:B:4121:GLU:HB3	1.98	0.45
2:B:4735:GLU:O	2:B:4739:GLU:HG2	2.17	0.45
2:B:4744:ASP:HB3	2:B:4747:SER:HB3	1.99	0.45
2:E:3194:LEU:HD21	2:E:3272:ILE:HG23	1.98	0.45
2:E:3887:PHE:O	2:E:3891:LEU:HG	2.17	0.45
2:E:3927:GLN:HB2	2:E:3992:PHE:CE2	2.52	0.45
2:G:226:HIS:CD2	2:G:226:HIS:N	2.85	0.45
2:G:1260:MET:HB2	2:G:1269:CYS:SG	2.56	0.45
2:G:2515:GLN:CA	2:G:2568:LEU:HD11	2.46	0.45
2:J:292:ALA:HB2	2:J:312:THR:HG22	1.98	0.45
2:J:3104:GLU:HA	2:J:3107:VAL:HG22	1.98	0.45
2:J:4207:MET:CE	2:J:4208:PRO:HD2	2.46	0.45
2:J:4651:THR:HG21	2:J:4803:HIS:NE2	2.31	0.45
3:C:38:ARG:HD3	3:C:48:VAL:HG22	1.98	0.45
2:B:1179:PHE:HB2	2:B:1182:ILE:HD11	1.98	0.45
2:B:2102:VAL:HG13	2:B:2120:MET:HB2	1.97	0.45
2:B:3405:LEU:HG	2:B:3409:TYR:CE1	2.51	0.45
2:B:4232:GLU:HG2	2:B:5019:TRP:NE1	2.32	0.45
2:E:226:HIS:CD2	2:E:226:HIS:N	2.85	0.45
2:E:573:GLU:O	2:E:577:ILE:HG22	2.17	0.45
2:E:2240:CYS:SG	2:E:2250:MET:HG3	2.57	0.45
2:E:2688:HIS:ND1	2:E:2688:HIS:N	2.63	0.45
2:E:4207:MET:CE	2:E:4208:PRO:HD2	2.46	0.45
2:E:4720:VAL:O	2:E:4723:LYS:N	2.50	0.45
2:G:2102:VAL:HG13	2:G:2120:MET:HB2	1.97	0.45
2:G:2236:LEU:HD22	2:G:2250:MET:SD	2.57	0.45
2:G:2240:CYS:SG	2:G:2250:MET:HG3	2.57	0.45
2:G:2299:VAL:HG12	2:G:2360:LYS:HD2	1.99	0.45
2:G:2881:ASN:HA	2:G:2884:ASN:HD21	1.81	0.45
2:G:4207:MET:CE	2:G:4208:PRO:HD2	2.46	0.45
2:J:696:PRO:HG2	2:J:1612:PHE:HE2	1.81	0.45
2:J:2262:GLY:O	2:J:2266:GLY:N	2.47	0.45
2:J:4115:SER:HB2	2:J:4123:ILE:HG21	1.98	0.45
2:J:4238:CYS:O	2:J:4242:ILE:HG13	2.16	0.45
1:D:55:VAL:HA	2:E:1784:ALA:HA	1.99	0.45
2:B:873:LYS:NZ	2:B:947:GLU:OE1	2.49	0.45
2:B:1694:LEU:HD11	2:B:1718:ILE:HD11	1.99	0.45
2:B:3428:ASN:O	2:B:3432:GLU:HG2	2.16	0.45
2:B:3639:THR:N	2:B:3640:PRO:HD2	2.31	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4064:MET:HE1	2:B:4110:PHE:HD2	1.81	0.45
2:E:276:TRP:CE2	2:E:339:ILE:HG12	2.52	0.45
2:E:1455:PRO:HG3	2:E:1549:PHE:HE1	1.82	0.45
2:E:4048:LEU:HD22	2:E:4055:VAL:HG21	1.99	0.45
2:E:4064:MET:HE1	2:E:4110:PHE:CD2	2.52	0.45
2:E:4232:GLU:HG2	2:E:5019:TRP:NE1	2.32	0.45
2:E:4238:CYS:O	2:E:4242:ILE:HG13	2.16	0.45
2:G:993:HIS:HE1	2:G:1027:LEU:HD11	1.78	0.45
2:G:1455:PRO:HG3	2:G:1549:PHE:HE1	1.82	0.45
2:G:2503:VAL:HG21	2:G:2526:PHE:HZ	1.82	0.45
2:G:2867:LEU:HB2	2:G:2928:LYS:HZ3	1.82	0.45
2:G:3034:LYS:O	2:G:3038:MET:HG2	2.16	0.45
2:G:3107:VAL:HG12	2:G:3175:LEU:HD11	1.98	0.45
2:G:3316:LEU:HD11	2:G:3345:ILE:HG23	1.99	0.45
2:J:276:TRP:CE2	2:J:339:ILE:HG12	2.52	0.45
2:J:316:PHE:HE2	2:J:348:VAL:HG22	1.81	0.45
2:J:797:HIS:HA	2:J:1619:ARG:HH22	1.81	0.45
2:J:3405:LEU:HG	2:J:3409:TYR:CE1	2.51	0.45
2:J:4064:MET:HE1	2:J:4110:PHE:CD2	2.52	0.45
3:C:68:THR:OG1	3:C:81:GLN:HB3	2.17	0.45
2:B:1214:PHE:CZ	2:B:1225:PRO:HD3	2.52	0.45
2:B:1498:GLY:HA2	2:B:1501:VAL:HG12	1.98	0.45
2:B:2619:LEU:O	2:B:2623:LEU:HG	2.17	0.45
2:B:2725:LYS:NZ	2:B:2736:ASP:O	2.50	0.45
2:E:2012:PHE:CZ	2:E:2031:LEU:HD23	2.52	0.45
2:E:2691:TYR:CD2	2:E:2996:LYS:HD2	2.52	0.45
2:E:3104:GLU:HA	2:E:3107:VAL:HG22	1.98	0.45
2:E:3137:LEU:HB3	2:E:3138:PRO:HD3	1.98	0.45
2:E:3280:TYR:HE1	2:E:3284:TRP:CD1	2.33	0.45
2:E:3639:THR:N	2:E:3640:PRO:HD2	2.31	0.45
2:E:4696:ASP:O	2:E:4700:GLN:HG2	2.17	0.45
2:G:210:GLU:H	2:G:273:HIS:CE1	2.35	0.45
2:G:246:TYR:CD1	2:G:373:LYS:HB3	2.51	0.45
2:G:484:LEU:HD11	2:G:540:PHE:HE1	1.82	0.45
2:G:551:LEU:HD23	2:G:560:ILE:HG13	1.99	0.45
2:G:1179:PHE:HB2	2:G:1182:ILE:HD11	1.99	0.45
2:G:2575:ARG:HH11	2:G:2577:ILE:HG23	1.82	0.45
2:G:4696:ASP:O	2:G:4700:GLN:HG2	2.17	0.45
2:J:484:LEU:HD11	2:J:540:PHE:HE1	1.82	0.45
2:J:551:LEU:HD23	2:J:560:ILE:HG13	1.99	0.45
2:J:1435:TYR:CZ	2:J:1550:PRO:HB3	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:1575:LEU:HD23	2:J:1575:LEU:HA	1.82	0.45
2:J:2157:GLU:O	2:J:2161:GLN:HG3	2.17	0.45
2:J:2299:VAL:HG12	2:J:2360:LYS:HD2	1.98	0.45
2:J:2599:GLN:O	2:J:2603:ILE:HG13	2.16	0.45
2:J:3377:GLU:HA	2:J:3380:ARG:HG2	1.99	0.45
3:K:68:THR:OG1	3:K:81:GLN:HB3	2.17	0.45
1:A:29:MET:SD	1:A:33:GLY:HA2	2.57	0.45
2:B:35:LEU:HG	2:B:51:PRO:HA	1.98	0.45
2:B:1930:LYS:HD2	2:B:1931:LEU:N	2.32	0.45
2:B:2654:TYR:HB2	2:B:2661:TRP:HE3	1.82	0.45
2:B:2691:TYR:CD2	2:B:2996:LYS:HD2	2.52	0.45
2:E:478:PHE:HD2	2:E:483:MET:HG3	1.81	0.45
2:E:2236:LEU:HD22	2:E:2250:MET:SD	2.57	0.45
2:E:3276:MET:O	2:E:3280:TYR:HB2	2.16	0.45
2:E:3428:ASN:O	2:E:3432:GLU:HG2	2.16	0.45
2:E:4090:LYS:HG3	2:E:4121:GLU:HB3	1.98	0.45
2:E:4115:SER:HB2	2:E:4123:ILE:HG21	1.98	0.45
2:E:4651:THR:HG21	2:E:4803:HIS:NE2	2.31	0.45
2:E:4671:PHE:HD1	2:E:4714:ASN:O	2.00	0.45
2:E:4744:ASP:HB3	2:E:4747:SER:HB3	1.99	0.45
2:E:4959:PHE:CD1	2:E:4985:LEU:HD11	2.52	0.45
2:G:374:LYS:O	2:G:375:LYS:C	2.53	0.45
2:G:489:ASN:OD1	2:G:493:ARG:NH1	2.50	0.45
2:G:2157:GLU:O	2:G:2161:GLN:HG3	2.17	0.45
2:G:3024:VAL:HG13	2:G:3029:GLY:HA2	1.99	0.45
2:G:3377:GLU:HA	2:G:3380:ARG:HG2	1.99	0.45
2:G:3405:LEU:HG	2:G:3409:TYR:CE1	2.52	0.45
2:G:3754:GLU:HG3	2:G:4719:PHE:CZ	2.52	0.45
2:J:35:LEU:HG	2:J:51:PRO:HA	1.98	0.45
2:J:993:HIS:HE1	2:J:1027:LEU:HD11	1.79	0.45
2:J:996:TRP:HE1	2:J:1000:ARG:HD2	1.81	0.45
2:J:1455:PRO:HG3	2:J:1549:PHE:HE1	1.82	0.45
2:J:2102:VAL:HG13	2:J:2120:MET:HB2	1.97	0.45
2:J:3137:LEU:HB3	2:J:3138:PRO:HD3	1.98	0.45
2:J:3194:LEU:HD21	2:J:3272:ILE:HG23	1.98	0.45
3:M:38:ARG:HD3	3:M:48:VAL:HG22	1.98	0.45
2:B:184:THR:HG22	2:B:189:LEU:HD13	1.99	0.45
2:B:797:HIS:HA	2:B:1619:ARG:HH22	1.82	0.45
2:B:876:GLU:HA	2:B:876:GLU:OE1	2.17	0.45
2:B:2688:HIS:ND1	2:B:2688:HIS:N	2.63	0.45
2:B:2960:LEU:HD13	2:B:3038:MET:HG3	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:19:GLU:HB3	2:E:205:ILE:HD13	1.98	0.45
2:E:1694:LEU:HD11	2:E:1718:ILE:HD11	1.99	0.45
2:E:2328:GLY:HA2	2:E:2331:TYR:HD2	1.81	0.45
2:E:3965:LEU:HA	2:E:3968:TYR:CD2	2.52	0.45
2:G:276:TRP:CE2	2:G:339:ILE:HG12	2.51	0.45
2:G:2691:TYR:CD2	2:G:2996:LYS:HD2	2.52	0.45
2:G:2696:TYR:HE2	2:G:2997:PHE:HA	1.81	0.45
2:G:4090:LYS:HG3	2:G:4121:GLU:HB3	1.98	0.45
2:G:4651:THR:HG21	2:G:4803:HIS:NE2	2.31	0.45
2:J:573:GLU:O	2:J:577:ILE:HG22	2.17	0.45
2:J:820:ARG:HG2	2:J:820:ARG:HH11	1.81	0.45
2:J:1214:PHE:CZ	2:J:1225:PRO:HD3	2.52	0.45
2:J:2549:ALA:HA	2:J:2552:ARG:NH1	2.32	0.45
2:J:2672:LEU:HD12	2:J:2672:LEU:HA	1.81	0.45
2:J:2725:LYS:NZ	2:J:2736:ASP:O	2.50	0.45
2:J:2924:GLN:O	2:J:2928:LYS:HG2	2.17	0.45
2:J:3024:VAL:HG13	2:J:3029:GLY:HA2	1.99	0.45
2:J:3316:LEU:HD11	2:J:3345:ILE:HG23	1.99	0.45
2:J:3554:GLN:O	2:J:3557:LEU:HD23	2.16	0.45
3:C:69:ILE:HB	3:C:80:LEU:HD13	1.99	0.45
3:F:38:ARG:HD3	3:F:48:VAL:HG22	1.98	0.45
1:H:5:GLU:HB2	1:H:73:LYS:HE2	1.99	0.44
2:B:1815:LEU:HD22	2:B:1845:VAL:HG21	1.99	0.44
2:E:489:ASN:OD1	2:E:493:ARG:NH1	2.50	0.44
2:E:797:HIS:HA	2:E:1619:ARG:HH22	1.81	0.44
2:E:876:GLU:OE1	2:E:876:GLU:HA	2.17	0.44
2:E:2570:ALA:HA	2:E:2613:TYR:O	2.17	0.44
2:E:2725:LYS:NZ	2:E:2736:ASP:O	2.50	0.44
2:E:3377:GLU:HA	2:E:3380:ARG:HG2	1.99	0.44
2:E:4021:LYS:O	2:E:4025:VAL:HG23	2.17	0.44
2:E:4679:ARG:NH1	2:E:4715:TYR:OH	2.50	0.44
2:G:127:MET:SD	2:G:127:MET:N	2.73	0.44
2:G:292:ALA:HB2	2:G:312:THR:HG22	1.98	0.44
2:G:1214:PHE:CZ	2:G:1225:PRO:HD3	2.52	0.44
2:G:3104:GLU:HA	2:G:3107:VAL:HG22	1.98	0.44
2:G:3140:LEU:HD12	2:G:3140:LEU:O	2.16	0.44
2:G:3865:VAL:HG22	2:G:3867:ASN:H	1.81	0.44
2:G:4048:LEU:HD22	2:G:4055:VAL:HG21	1.99	0.44
2:J:1498:GLY:HA2	2:J:1501:VAL:HG12	1.98	0.44
2:J:2880:GLU:HB2	2:J:2908:TYR:CD2	2.52	0.44
3:F:68:THR:OG1	3:F:81:GLN:HB3	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:M:9:GLY:HA3	3:M:123:VAL:HG22	1.99	0.44
1:A:24:VAL:HG12	1:A:102:GLU:O	2.17	0.44
2:B:489:ASN:OD1	2:B:493:ARG:NH1	2.50	0.44
2:B:2012:PHE:CZ	2:B:2031:LEU:HD23	2.52	0.44
2:B:2604:GLU:HG2	2:B:2639:MET:HG3	2.00	0.44
2:B:3107:VAL:HG12	2:B:3175:LEU:HD11	1.98	0.44
2:B:3194:LEU:HD21	2:B:3272:ILE:HG23	1.98	0.44
2:E:525:LEU:O	2:E:529:LEU:HG	2.17	0.44
2:E:1018:ASN:OD1	2:E:1021:LEU:N	2.51	0.44
2:E:1435:TYR:CZ	2:E:1550:PRO:HB3	2.52	0.44
2:E:1930:LYS:HD2	2:E:1931:LEU:N	2.32	0.44
2:E:2549:ALA:HA	2:E:2552:ARG:NH1	2.32	0.44
2:E:2654:TYR:HB2	2:E:2661:TRP:HE3	1.82	0.44
2:E:2924:GLN:O	2:E:2928:LYS:HG2	2.17	0.44
2:E:3397:GLU:O	2:E:3400:VAL:HG12	2.18	0.44
2:E:3405:LEU:HG	2:E:3409:TYR:CE1	2.51	0.44
2:G:35:LEU:HG	2:G:51:PRO:HA	1.98	0.44
2:G:2262:GLY:O	2:G:2266:GLY:N	2.47	0.44
2:G:2858:GLN:HB2	2:G:2859:PRO:HD3	2.00	0.44
2:G:3157:ILE:HG22	2:G:3162:GLN:OE1	2.17	0.44
2:G:3548:GLU:HG2	2:G:3552:PHE:CE2	2.51	0.44
2:G:5017:ARG:NH1	2:G:5019:TRP:HZ2	2.15	0.44
2:J:1694:LEU:HD11	2:J:1718:ILE:HD11	1.99	0.44
2:J:4232:GLU:HG2	2:J:5019:TRP:NE1	2.32	0.44
3:K:69:ILE:HB	3:K:80:LEU:HD13	1.99	0.44
2:B:276:TRP:CE2	2:B:339:ILE:HG12	2.52	0.44
2:B:551:LEU:HD23	2:B:560:ILE:HG13	1.99	0.44
2:B:3887:PHE:O	2:B:3891:LEU:HG	2.17	0.44
2:E:2880:GLU:HB2	2:E:2908:TYR:CD2	2.53	0.44
2:G:696:PRO:HG2	2:G:1612:PHE:HE2	1.81	0.44
2:G:1694:LEU:HD11	2:G:1718:ILE:HD11	1.99	0.44
2:G:1930:LYS:HD2	2:G:1931:LEU:N	2.32	0.44
2:G:2138:LEU:HD12	2:G:3658:LYS:HG3	1.99	0.44
2:G:3567:PRO:O	2:G:3570:ARG:HB3	2.17	0.44
2:G:3731:LYS:NZ	2:G:3735:LEU:HD21	2.32	0.44
2:G:4115:SER:HB2	2:G:4123:ILE:HG21	1.98	0.44
2:J:3051:ARG:HH22	2:J:3102:ASP:HB2	1.83	0.44
3:M:68:THR:OG1	3:M:81:GLN:HB3	2.17	0.44
2:B:3024:VAL:HG13	2:B:3029:GLY:HA2	1.99	0.44
2:B:3377:GLU:HA	2:B:3380:ARG:HG2	1.99	0.44
2:B:3405:LEU:HD13	2:B:3451:PHE:HZ	1.81	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:3836:MET:HE1	2:B:3915:ILE:HG23	1.99	0.44
2:B:3927:GLN:HB2	2:B:3992:PHE:CE2	2.52	0.44
2:B:4115:SER:HB2	2:B:4123:ILE:HG21	1.98	0.44
2:B:4652:LEU:O	2:B:4656:LEU:HG	2.18	0.44
2:E:696:PRO:HG2	2:E:1612:PHE:HE2	1.81	0.44
2:E:2157:GLU:O	2:E:2161:GLN:HG3	2.17	0.44
2:E:2960:LEU:HD13	2:E:3038:MET:HG3	2.00	0.44
2:G:184:THR:HG22	2:G:189:LEU:HD13	1.99	0.44
2:G:3194:LEU:HD21	2:G:3272:ILE:HG23	1.98	0.44
2:G:3366:ARG:NE	2:G:3367:LYS:HD2	2.26	0.44
2:G:3927:GLN:HB2	2:G:3992:PHE:CE2	2.52	0.44
2:G:5012:LYS:HE2	2:G:5016:GLU:OE2	2.16	0.44
2:J:525:LEU:O	2:J:529:LEU:HG	2.17	0.44
2:J:3971:GLY:O	2:J:3972:PRO:C	2.56	0.44
2:J:4696:ASP:O	2:J:4700:GLN:HG2	2.16	0.44
1:H:98:ILE:HD12	1:H:98:ILE:N	2.33	0.44
2:B:573:GLU:O	2:B:577:ILE:HG22	2.17	0.44
2:B:2503:VAL:HG21	2:B:2526:PHE:HZ	1.82	0.44
2:B:2718:SER:OG	2:B:2909:ASP:O	2.25	0.44
2:B:3157:ILE:HG22	2:B:3162:GLN:OE1	2.17	0.44
2:B:4021:LYS:O	2:B:4025:VAL:HG23	2.18	0.44
2:B:4959:PHE:CD1	2:B:4985:LEU:HD11	2.52	0.44
2:E:292:ALA:HB2	2:E:312:THR:HG22	1.98	0.44
2:E:316:PHE:HE2	2:E:348:VAL:HG22	1.81	0.44
2:E:2672:LEU:HD12	2:E:2672:LEU:HA	1.81	0.44
2:E:3107:VAL:HG12	2:E:3175:LEU:HD11	1.98	0.44
2:E:3874:VAL:HG21	2:E:3950:ASN:ND2	2.33	0.44
2:E:4021:LYS:HD3	2:E:4138:ASP:HB3	2.00	0.44
2:E:4911:LEU:HD23	2:E:4911:LEU:HA	1.85	0.44
2:G:573:GLU:O	2:G:577:ILE:HG22	2.17	0.44
2:G:876:GLU:OE1	2:G:876:GLU:HA	2.17	0.44
2:G:972:LEU:HB2	2:G:1044:ARG:HE	1.83	0.44
2:G:2012:PHE:CZ	2:G:2031:LEU:HD23	2.52	0.44
2:G:4021:LYS:O	2:G:4025:VAL:HG23	2.18	0.44
2:J:2330:ARG:HE	2:J:2330:ARG:HB2	1.68	0.44
2:J:2503:VAL:HG21	2:J:2526:PHE:HZ	1.82	0.44
2:J:3014:CYS:SG	2:J:3074:SER:HB3	2.58	0.44
2:J:3537:LYS:HE2	2:J:3537:LYS:HB3	1.85	0.44
2:J:3731:LYS:NZ	2:J:3735:LEU:HD21	2.32	0.44
2:J:3754:GLU:HG3	2:J:4719:PHE:CZ	2.53	0.44
2:J:4735:GLU:O	2:J:4739:GLU:HG2	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:4959:PHE:CD1	2:J:4985:LEU:HD11	2.52	0.44
1:A:26:TYR:CB	1:A:101:VAL:HG12	2.46	0.44
1:I:98:ILE:N	1:I:98:ILE:HD12	2.32	0.44
2:B:2236:LEU:HD22	2:B:2250:MET:SD	2.57	0.44
2:B:2768:PHE:O	2:B:2772:GLN:HG2	2.18	0.44
2:B:3397:GLU:O	2:B:3400:VAL:HG12	2.18	0.44
2:E:1214:PHE:CZ	2:E:1225:PRO:HD3	2.52	0.44
2:E:2138:LEU:HD12	2:E:3658:LYS:HG3	1.99	0.44
2:E:2449:GLU:O	2:E:2453:ILE:HG12	2.17	0.44
2:G:525:LEU:O	2:G:529:LEU:HG	2.17	0.44
2:G:887:ILE:HD13	2:G:959:TYR:HB3	2.00	0.44
2:G:2359:ARG:HD3	2:G:2359:ARG:HA	1.82	0.44
2:G:2967:MET:CE	2:G:3045:LYS:HB3	2.48	0.44
2:G:3051:ARG:HH22	2:G:3102:ASP:HB2	1.83	0.44
2:J:135:VAL:HG21	2:J:191:VAL:HG22	2.00	0.44
2:J:371:VAL:HG12	2:J:373:LYS:HG2	1.98	0.44
2:J:371:VAL:CG1	2:J:373:LYS:HG2	2.47	0.44
2:J:882:TRP:CD2	3:K:106:PRO:HG3	2.52	0.44
2:J:2012:PHE:CZ	2:J:2031:LEU:HD23	2.52	0.44
2:J:2236:LEU:HD22	2:J:2250:MET:SD	2.57	0.44
2:J:2967:MET:CE	2:J:3045:LYS:HB3	2.48	0.44
2:J:3244:PRO:HG2	2:J:3249:LEU:HD23	1.98	0.44
2:J:3644:LEU:HD12	2:J:3645:PRO:HD2	1.99	0.44
2:J:4048:LEU:HD22	2:J:4055:VAL:HG21	1.99	0.44
2:J:4698:LYS:HE3	2:J:4698:LYS:HB2	1.84	0.44
2:J:4744:ASP:HB3	2:J:4747:SER:HB3	1.99	0.44
1:D:66:MET:HE2	1:D:66:MET:HB3	1.71	0.44
2:B:474:ARG:O	2:B:478:PHE:HD1	2.01	0.44
2:B:920:TYR:HE1	3:C:99:ARG:HE	1.65	0.44
2:B:2575:ARG:O	2:B:2579:VAL:HG23	2.17	0.44
2:B:2880:GLU:HB2	2:B:2908:TYR:CD2	2.53	0.44
2:B:3092:LEU:O	2:B:3095:PHE:HB3	2.18	0.44
2:B:3731:LYS:NZ	2:B:3735:LEU:HD21	2.32	0.44
2:E:35:LEU:HG	2:E:51:PRO:HA	1.98	0.44
2:E:2563:THR:HG22	2:E:2606:CYS:HA	2.00	0.44
2:E:3014:CYS:SG	2:E:3074:SER:HB3	2.58	0.44
2:G:2880:GLU:HB2	2:G:2908:TYR:CD2	2.53	0.44
2:G:3014:CYS:SG	2:G:3074:SER:HB3	2.58	0.44
2:G:3246:LEU:HD13	2:G:3280:TYR:CD2	2.53	0.44
2:J:882:TRP:CZ2	3:K:104:TYR:HB2	2.53	0.44
2:J:3284:TRP:CZ3	2:J:3287:ARG:HD3	2.53	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:3874:VAL:HG21	2:J:3950:ASN:ND2	2.33	0.44
3:F:9:GLY:HA3	3:F:123:VAL:HG22	1.99	0.44
2:B:1018:ASN:OD1	2:B:1021:LEU:N	2.51	0.44
2:B:2157:GLU:O	2:B:2161:GLN:HG3	2.17	0.44
2:B:2788:HIS:NE2	2:B:2805:TYR:OH	2.38	0.44
2:E:1815:LEU:HD22	2:E:1845:VAL:HG21	1.99	0.44
2:E:2503:VAL:HG21	2:E:2526:PHE:HZ	1.82	0.44
2:E:2518:LEU:HD21	2:E:2569:PHE:CZ	2.52	0.44
2:E:2967:MET:CE	2:E:3045:LYS:HB3	2.48	0.44
2:G:2688:HIS:ND1	2:G:2688:HIS:N	2.63	0.44
2:G:2768:PHE:O	2:G:2772:GLN:HG2	2.18	0.44
2:G:2960:LEU:HD13	2:G:3038:MET:HG3	2.00	0.44
2:G:3284:TRP:CZ3	2:G:3287:ARG:HD3	2.53	0.44
2:G:4652:LEU:O	2:G:4656:LEU:HG	2.18	0.44
2:G:4735:GLU:O	2:G:4739:GLU:HG2	2.17	0.44
2:G:4817:ALA:HA	2:G:4823:LEU:HB3	2.00	0.44
2:J:19:GLU:HB3	2:J:205:ILE:HD13	1.98	0.44
2:J:489:ASN:OD1	2:J:493:ARG:NH1	2.50	0.44
2:J:873:LYS:NZ	2:J:947:GLU:OE1	2.48	0.44
2:J:2691:TYR:CD2	2:J:2996:LYS:HD2	2.52	0.44
2:J:3475:LYS:HD3	2:J:3516:LYS:HZ1	1.81	0.44
2:J:4652:LEU:O	2:J:4656:LEU:HG	2.18	0.44
1:H:56:ILE:HG13	1:H:59:PHE:HB2	2.00	0.44
1:I:56:ILE:HG13	1:I:59:PHE:HB2	2.00	0.44
2:B:226:HIS:CD2	2:B:226:HIS:N	2.85	0.44
2:B:2777:TYR:HB2	2:B:2791:LEU:O	2.18	0.44
2:B:2924:GLN:O	2:B:2928:LYS:HG2	2.17	0.44
2:B:3874:VAL:HG21	2:B:3950:ASN:ND2	2.33	0.44
2:B:3996:PHE:HZ	2:B:4019:LEU:HG	1.83	0.44
2:E:2607:LEU:HD23	2:E:2607:LEU:HA	1.83	0.44
2:E:2768:PHE:O	2:E:2772:GLN:HG2	2.18	0.44
2:E:3098:SER:O	2:E:3101:GLU:HG3	2.18	0.44
2:G:135:VAL:HG21	2:G:191:VAL:HG22	2.00	0.44
2:G:1435:TYR:CZ	2:G:1550:PRO:HB3	2.52	0.44
2:G:4671:PHE:HD1	2:G:4714:ASN:O	2.01	0.44
2:J:1433:TYR:CE1	2:J:1578:ALA:HB2	2.53	0.44
2:J:2960:LEU:HD13	2:J:3038:MET:HG3	1.99	0.44
2:J:4021:LYS:O	2:J:4025:VAL:HG23	2.18	0.44
2:J:4069:LYS:NZ	2:J:4130:ASN:OD1	2.37	0.44
2:B:2858:GLN:HB2	2:B:2859:PRO:HD3	2.00	0.43
2:B:3567:PRO:O	2:B:3570:ARG:HB3	2.17	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:551:LEU:HD23	2:E:560:ILE:HG13	1.99	0.43
2:E:1179:PHE:HB2	2:E:1182:ILE:HD11	1.99	0.43
2:E:1433:TYR:CE1	2:E:1578:ALA:HB2	2.53	0.43
2:E:1498:GLY:HA2	2:E:1501:VAL:HG12	1.98	0.43
2:G:1121:ALA:HB1	2:G:1123:VAL:HG13	2.01	0.43
2:G:3996:PHE:HZ	2:G:4019:LEU:HG	1.83	0.43
2:G:4744:ASP:HB3	2:G:4747:SER:HB3	1.98	0.43
2:G:4959:PHE:CD1	2:G:4985:LEU:HD11	2.52	0.43
2:J:1815:LEU:HD22	2:J:1845:VAL:HG21	1.99	0.43
2:J:1930:LYS:HD2	2:J:1931:LEU:N	2.32	0.43
2:J:2684:ASP:OD1	2:J:2685:SER:N	2.51	0.43
2:J:2858:GLN:HB2	2:J:2859:PRO:HD3	2.00	0.43
2:J:3567:PRO:O	2:J:3570:ARG:HB3	2.17	0.43
3:K:32:ASN:ND2	3:K:101:PRO:HB3	2.33	0.43
3:M:69:ILE:HB	3:M:80:LEU:HD13	1.99	0.43
1:D:56:ILE:HG13	1:D:59:PHE:HB2	2.00	0.43
2:B:887:ILE:HD13	2:B:959:TYR:HB3	2.00	0.43
2:B:2262:GLY:O	2:B:2266:GLY:N	2.47	0.43
2:B:2967:MET:CE	2:B:3045:LYS:HB3	2.48	0.43
2:B:3014:CYS:SG	2:B:3074:SER:HB3	2.58	0.43
2:B:3414:ARG:NH2	2:B:3474:SER:O	2.51	0.43
2:E:3458:PHE:CE2	2:E:3464:ILE:HG13	2.54	0.43
2:E:3554:GLN:O	2:E:3557:LEU:HD23	2.16	0.43
2:E:4642:ALA:O	2:E:4646:LEU:HD23	2.18	0.43
2:G:663:TYR:CE1	2:G:745:SER:HB3	2.53	0.43
2:G:1000:ARG:NH2	2:G:1003:GLN:HG3	2.34	0.43
2:G:2563:THR:HG22	2:G:2606:CYS:HA	2.00	0.43
2:G:2725:LYS:NZ	2:G:2736:ASP:O	2.50	0.43
2:G:2870[B]:GLU:CD	2:G:2870[B]:GLU:H	2.22	0.43
2:G:3092:LEU:O	2:G:3095:PHE:HB3	2.18	0.43
2:G:4698:LYS:HE3	2:G:4698:LYS:HB2	1.84	0.43
2:J:201:ASN:ND2	2:J:203:ASN:HD21	2.17	0.43
2:J:3594:ARG:NH1	2:J:3597:GLN:OE1	2.34	0.43
2:B:1426:ILE:O	2:B:1430:THR:HB	2.18	0.43
2:B:2138:LEU:HD12	2:B:3658:LYS:HG3	1.99	0.43
2:B:3458:PHE:CE2	2:B:3464:ILE:HG13	2.54	0.43
2:E:201:ASN:ND2	2:E:203:ASN:HD21	2.17	0.43
2:E:972:LEU:HB2	2:E:1044:ARG:HE	1.83	0.43
2:E:1738:LEU:HB2	2:E:2146:PRO:HD3	2.00	0.43
2:E:2604:GLU:HG2	2:E:2639:MET:HG3	2.00	0.43
2:E:2777:TYR:HB2	2:E:2791:LEU:O	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:3024:VAL:HG13	2:E:3029:GLY:HA2	1.99	0.43
2:E:3284:TRP:CZ3	2:E:3287:ARG:HD3	2.53	0.43
2:E:3644:LEU:HD12	2:E:3645:PRO:HD2	1.99	0.43
2:E:3731:LYS:NZ	2:E:3735:LEU:HD21	2.32	0.43
2:G:882:TRP:CD2	3:M:106:PRO:HG3	2.53	0.43
2:G:882:TRP:O	2:G:885:THR:OG1	2.28	0.43
2:G:2654:TYR:HB2	2:G:2661:TRP:HE3	1.82	0.43
2:G:2768:PHE:HA	2:G:2771:ILE:HG22	2.00	0.43
2:G:3414:ARG:NH2	2:G:3474:SER:O	2.51	0.43
2:G:3874:VAL:HG21	2:G:3950:ASN:ND2	2.33	0.43
2:J:876:GLU:HA	2:J:876:GLU:OE1	2.17	0.43
2:J:1581:LEU:HD12	2:J:1584:ARG:HE	1.84	0.43
2:J:2449:GLU:O	2:J:2453:ILE:HG12	2.17	0.43
2:J:3996:PHE:HZ	2:J:4019:LEU:HG	1.83	0.43
3:C:32:ASN:OD1	3:C:33:SER:N	2.51	0.43
3:M:32:ASN:ND2	3:M:101:PRO:HB3	2.33	0.43
1:I:5:GLU:HB2	1:I:73:LYS:HE2	2.01	0.43
2:B:1000:ARG:NH2	2:B:1003:GLN:HG3	2.33	0.43
2:B:2449:GLU:O	2:B:2453:ILE:HG12	2.17	0.43
2:B:2878:LEU:HG	2:B:2882:TYR:CZ	2.53	0.43
2:B:3098:SER:O	2:B:3101:GLU:HG3	2.18	0.43
2:B:3284:TRP:CZ3	2:B:3287:ARG:HD3	2.53	0.43
2:B:3644:LEU:HD12	2:B:3645:PRO:HD2	1.99	0.43
2:B:4677:LEU:HD23	2:B:4711:PHE:HE1	1.84	0.43
2:E:2684:ASP:OD1	2:E:2685:SER:N	2.51	0.43
2:E:3567:PRO:O	2:E:3570:ARG:HB3	2.17	0.43
2:G:144:GLU:HG3	2:G:175:SER:HB2	2.01	0.43
2:G:1426:ILE:O	2:G:1430:THR:HB	2.18	0.43
2:G:2449:GLU:O	2:G:2453:ILE:HG12	2.17	0.43
2:G:2573:GLU:HB2	2:G:2615:ARG:HH21	1.82	0.43
2:G:2777:TYR:HB2	2:G:2791:LEU:O	2.18	0.43
2:G:2924:GLN:O	2:G:2928:LYS:HG2	2.17	0.43
2:G:2971:GLN:HA	2:G:2974:ILE:HG12	2.00	0.43
2:G:3644:LEU:HD12	2:G:3645:PRO:HD2	1.99	0.43
2:J:663:TYR:CE1	2:J:745:SER:HB3	2.53	0.43
2:J:1000:ARG:NH2	2:J:1003:GLN:HG3	2.33	0.43
2:J:3397:GLU:O	2:J:3400:VAL:HG12	2.18	0.43
2:J:3414:ARG:NH2	2:J:3474:SER:O	2.51	0.43
2:J:4021:LYS:HD3	2:J:4138:ASP:HB3	2.00	0.43
3:F:62:SER:O	3:F:62:SER:OG	2.24	0.43
3:F:69:ILE:HB	3:F:80:LEU:HD13	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:K:85:LEU:HD23	3:K:85:LEU:HA	1.92	0.43
2:B:135:VAL:HG21	2:B:191:VAL:HG22	2.00	0.43
2:B:484:LEU:HD11	2:B:540:PHE:HE1	1.82	0.43
2:B:1097:THR:HG23	2:B:1143:TRP:CD1	2.54	0.43
2:B:1435:TYR:CZ	2:B:1550:PRO:HB3	2.52	0.43
2:B:2299:VAL:HG12	2:B:2360:LYS:HD2	1.98	0.43
2:B:2318:TYR:HA	2:B:2395:PRO:HA	2.01	0.43
2:B:2549:ALA:HA	2:B:2552:ARG:NH1	2.33	0.43
2:B:2575:ARG:HG3	2:B:2578:MET:HG3	2.00	0.43
2:B:2870[B]:GLU:H	2:B:2870[B]:GLU:CD	2.22	0.43
2:B:3222:LYS:HB3	2:B:3226:GLU:HB3	2.00	0.43
2:B:4911:LEU:HD23	2:B:4911:LEU:HA	1.85	0.43
2:E:184:THR:HG22	2:E:189:LEU:HD13	1.99	0.43
2:E:663:TYR:CE1	2:E:745:SER:HB3	2.53	0.43
2:E:1012:ASP:HB3	2:E:1015:ALA:HB3	2.00	0.43
2:E:1575:LEU:HD23	2:E:1575:LEU:HA	1.82	0.43
2:E:2299:VAL:HG12	2:E:2360:LYS:HD2	1.99	0.43
2:E:3051:ARG:HH22	2:E:3102:ASP:HB2	1.83	0.43
2:G:232:THR:HG21	2:G:252:VAL:HG11	2.01	0.43
2:G:1433:TYR:CE1	2:G:1578:ALA:HB2	2.53	0.43
2:G:2604:GLU:HG2	2:G:2639:MET:HG3	2.00	0.43
2:G:2635:GLU:HG3	2:G:2636:PHE:HD2	1.83	0.43
2:G:4642:ALA:O	2:G:4646:LEU:HD23	2.18	0.43
2:J:232:THR:HG21	2:J:252:VAL:HG11	2.01	0.43
2:J:1012:ASP:HB3	2:J:1015:ALA:HB3	2.00	0.43
2:J:1179:PHE:HB2	2:J:1182:ILE:HD11	1.98	0.43
2:J:2318:TYR:HA	2:J:2395:PRO:HA	2.01	0.43
2:J:2768:PHE:O	2:J:2772:GLN:HG2	2.18	0.43
2:J:4112:LEU:HD12	2:J:4112:LEU:HA	1.84	0.43
3:C:64:LYS:N	3:C:64:LYS:HD2	2.33	0.43
3:K:9:GLY:HA3	3:K:123:VAL:HG22	1.99	0.43
3:M:46:GLU:HG3	3:M:62:SER:HB2	2.00	0.43
3:M:64:LYS:HD2	3:M:64:LYS:N	2.33	0.43
2:B:144:GLU:HG3	2:B:175:SER:HB2	2.00	0.43
2:B:972:LEU:HB2	2:B:1044:ARG:HE	1.83	0.43
2:B:1012:ASP:HB3	2:B:1015:ALA:HB3	2.00	0.43
2:B:1121:ALA:HB1	2:B:1123:VAL:HG13	2.00	0.43
2:B:1433:TYR:CE1	2:B:1578:ALA:HB2	2.53	0.43
2:B:1738:LEU:HB2	2:B:2146:PRO:HD3	2.00	0.43
2:B:2515:GLN:O	2:B:2519:LEU:HG	2.19	0.43
2:B:3104:GLU:HA	2:B:3107:VAL:HG22	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:4720:VAL:O	2:B:4724:VAL:HG23	2.19	0.43
2:E:484:LEU:HD11	2:E:540:PHE:HE1	1.82	0.43
2:E:978:THR:O	2:E:982:THR:HG23	2.19	0.43
2:E:993:HIS:HE1	2:E:1027:LEU:HD11	1.78	0.43
2:E:2318:TYR:HA	2:E:2395:PRO:HA	2.01	0.43
2:E:2573:GLU:HA	2:E:2576:ALA:HB2	1.99	0.43
2:E:2870[B]:GLU:H	2:E:2870[B]:GLU:CD	2.22	0.43
2:E:3996:PHE:HZ	2:E:4019:LEU:HG	1.83	0.43
2:G:201:ASN:ND2	2:G:203:ASN:HD21	2.17	0.43
2:G:1496:TRP:CE2	2:G:1498:GLY:HA3	2.54	0.43
2:G:1815:LEU:HD22	2:G:1845:VAL:HG21	1.99	0.43
2:G:2223:ILE:HG21	2:G:2229:VAL:HG21	2.00	0.43
2:G:2867:LEU:HD23	2:G:2868:SER:O	2.18	0.43
2:J:245:VAL:HG13	2:J:376:ALA:HB3	2.01	0.43
2:J:2138:LEU:HD12	2:J:3658:LYS:HG3	1.99	0.43
2:J:2223:ILE:HG21	2:J:2229:VAL:HG21	2.01	0.43
3:F:64:LYS:N	3:F:64:LYS:HD2	2.33	0.43
2:B:119:SER:HA	2:B:146:CYS:HA	2.00	0.43
2:B:2684:ASP:OD1	2:B:2685:SER:N	2.51	0.43
2:B:2768:PHE:HA	2:B:2771:ILE:HG22	2.00	0.43
2:B:3417:ASP:OD1	2:B:3516:LYS:HG2	2.19	0.43
2:E:144:GLU:HG3	2:E:175:SER:HB2	2.01	0.43
2:E:2502:MET:HE3	2:E:2502:MET:HB2	1.66	0.43
2:E:2878:LEU:HG	2:E:2882:TYR:CZ	2.53	0.43
2:E:3836:MET:HE1	2:E:3915:ILE:HG23	2.00	0.43
2:E:4652:LEU:O	2:E:4656:LEU:HG	2.18	0.43
2:G:878:ILE:HG21	3:M:107:TRP:HE1	1.83	0.43
2:G:1097:THR:HG23	2:G:1143:TRP:CD1	2.54	0.43
2:G:2318:TYR:HA	2:G:2395:PRO:HA	2.01	0.43
2:G:2878:LEU:HG	2:G:2882:TYR:CZ	2.53	0.43
2:G:4021:LYS:HD3	2:G:4138:ASP:HB3	2.00	0.43
2:J:184:THR:HG22	2:J:189:LEU:HD13	1.99	0.43
2:J:1115:LEU:HD23	2:J:1123:VAL:HG11	2.01	0.43
2:J:2589:LEU:HD23	2:J:2589:LEU:HA	1.87	0.43
2:J:2635:GLU:HG3	2:J:2636:PHE:HD2	1.83	0.43
2:J:2654:TYR:HB2	2:J:2661:TRP:HE3	1.82	0.43
2:J:2768:PHE:HA	2:J:2771:ILE:HG22	2.00	0.43
2:J:2878:LEU:HG	2:J:2882:TYR:CZ	2.53	0.43
2:J:3206:LEU:HD13	2:J:3246:LEU:N	2.34	0.43
2:J:3458:PHE:CE2	2:J:3464:ILE:HG13	2.54	0.43
2:J:4888:TYR:O	2:J:4892:ARG:HD3	2.19	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:47:LEU:O	3:C:62:SER:HB3	2.19	0.43
1:I:55:VAL:HA	2:J:1784:ALA:HA	2.00	0.43
2:B:525:LEU:O	2:B:529:LEU:HG	2.17	0.43
2:B:663:TYR:CE1	2:B:745:SER:HB3	2.53	0.43
2:B:867:LEU:O	2:B:871:ARG:HB3	2.19	0.43
2:B:2672:LEU:HD12	2:B:2672:LEU:HA	1.81	0.43
2:B:4642:ALA:O	2:B:4646:LEU:HD23	2.19	0.43
2:E:245:VAL:HG13	2:E:376:ALA:HB3	2.01	0.43
2:E:2858:GLN:HB2	2:E:2859:PRO:HD3	1.99	0.43
2:E:3354:LEU:HD11	2:E:3434:LEU:HD22	2.01	0.43
2:E:3414:ARG:NH2	2:E:3474:SER:O	2.51	0.43
2:G:882:TRP:CZ2	3:M:104:TYR:HB2	2.54	0.43
2:G:2003:GLN:NE2	2:G:3863:GLY:HA3	2.34	0.43
2:G:2549:ALA:HA	2:G:2552:ARG:NH1	2.32	0.43
2:G:2575:ARG:NH1	2:G:2577:ILE:HG23	2.34	0.43
2:G:3354:LEU:HD11	2:G:3434:LEU:HD22	2.01	0.43
2:G:3458:PHE:CE2	2:G:3464:ILE:HG13	2.54	0.43
2:J:867:LEU:O	2:J:871:ARG:HB3	2.19	0.43
2:J:1496:TRP:CE2	2:J:1498:GLY:HA3	2.54	0.43
2:J:2867:LEU:HD23	2:J:2868:SER:O	2.18	0.43
2:J:2971:GLN:HA	2:J:2974:ILE:HG12	2.00	0.43
2:J:3098:SER:O	2:J:3101:GLU:HG3	2.18	0.43
2:J:3222:LYS:HD2	2:J:3226:GLU:CD	2.39	0.43
2:J:3222:LYS:HB3	2:J:3226:GLU:HB3	2.00	0.43
2:J:4817:ALA:HA	2:J:4823:LEU:HB3	2.00	0.43
1:D:98:ILE:N	1:D:98:ILE:HD12	2.34	0.43
1:H:7:ILE:HD12	1:H:71:ARG:HG2	2.01	0.43
2:B:131:LEU:HD13	2:B:195:PHE:HD2	1.84	0.43
2:B:1092:PHE:HE2	2:B:1100:MET:HE3	1.84	0.43
2:B:1694:LEU:HD13	2:B:1715:LEU:HD12	2.01	0.43
2:B:1931:LEU:HD22	2:B:1935:VAL:HG11	2.00	0.43
2:B:2206:THR:O	2:B:2210:VAL:HG23	2.19	0.43
2:B:2765:LYS:NZ	2:B:2860:PRO:HA	2.34	0.43
2:B:2996:LYS:O	2:B:3000:LYS:HG2	2.19	0.43
2:B:4021:LYS:HD3	2:B:4138:ASP:HB3	2.00	0.43
2:B:4846:VAL:O	2:B:4850:LEU:HG	2.19	0.43
2:E:135:VAL:HG21	2:E:191:VAL:HG22	2.00	0.43
2:E:474:ARG:O	2:E:478:PHE:HD1	2.01	0.43
2:E:1121:ALA:HB1	2:E:1123:VAL:HG13	2.00	0.43
2:E:1426:ILE:O	2:E:1430:THR:HB	2.18	0.43
2:E:1581:LEU:HD12	2:E:1584:ARG:HE	1.84	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:3367:LYS:O	2:E:3371:LYS:HG2	2.19	0.43
2:E:3754:GLU:HG3	2:E:4719:PHE:CZ	2.54	0.43
2:E:3989:VAL:HG13	2:E:4023:MET:HE2	2.01	0.43
2:G:796:ARG:HD3	2:G:1619:ARG:HH12	1.84	0.43
2:G:1012:ASP:HB3	2:G:1015:ALA:HB3	2.00	0.43
2:G:1115:LEU:HD23	2:G:1123:VAL:HG11	2.01	0.43
2:G:2765:LYS:NZ	2:G:2860:PRO:HA	2.34	0.43
2:G:3222:LYS:HD2	2:G:3226:GLU:CD	2.39	0.43
2:G:3346:VAL:HB	2:G:3411:LEU:HD22	2.01	0.43
2:G:3397:GLU:O	2:G:3400:VAL:HG12	2.18	0.43
2:J:2563:THR:HG22	2:J:2606:CYS:HA	2.00	0.43
2:J:2870[B]:GLU:H	2:J:2870[B]:GLU:CD	2.22	0.43
2:J:3511:VAL:HG12	2:J:3515:LYS:HD2	2.01	0.43
2:J:4679:ARG:NH1	2:J:4715:TYR:OH	2.51	0.43
3:C:32:ASN:ND2	3:C:101:PRO:HB3	2.33	0.43
3:M:32:ASN:OD1	3:M:33:SER:N	2.51	0.43
1:A:88:PRO:HB2	2:B:1680:ARG:HH12	1.84	0.43
2:B:294:THR:N	2:B:298:GLY:O	2.39	0.43
2:B:878:ILE:HG13	3:C:107:TRP:HZ2	1.84	0.43
2:B:3511:VAL:HG12	2:B:3515:LYS:HD2	2.01	0.43
2:E:232:THR:HG21	2:E:252:VAL:HG11	2.01	0.43
2:E:786:GLY:H	2:E:1631:GLN:HA	1.84	0.43
2:E:873:LYS:NZ	2:E:947:GLU:OE1	2.48	0.43
2:E:3222:LYS:HB3	2:E:3226:GLU:HB3	2.00	0.43
2:E:3878:ASP:OD1	2:E:3878:ASP:N	2.52	0.43
2:E:4817:ALA:HA	2:E:4823:LEU:HB3	2.00	0.43
2:G:474:ARG:O	2:G:478:PHE:HD1	2.01	0.43
2:G:1152:MET:HE2	2:G:1161:ILE:HB	2.01	0.43
2:G:2159:LEU:O	2:G:2163:ARG:HG3	2.19	0.43
2:G:2515:GLN:O	2:G:2519:LEU:HG	2.19	0.43
2:G:2684:ASP:OD1	2:G:2685:SER:N	2.51	0.43
2:G:3511:VAL:HG12	2:G:3515:LYS:HD2	2.01	0.43
2:G:4677:LEU:HD23	2:G:4711:PHE:HE1	1.84	0.43
2:G:4888:TYR:O	2:G:4892:ARG:HD3	2.18	0.43
2:J:707:VAL:HG23	2:J:782:SER:OG	2.19	0.43
2:J:887:ILE:HD13	2:J:959:TYR:HB3	2.00	0.43
2:J:979:PRO:O	2:J:983:THR:HG23	2.19	0.43
2:J:1018:ASN:OD1	2:J:1021:LEU:N	2.51	0.43
2:J:1738:LEU:HB2	2:J:2146:PRO:HD3	2.00	0.43
2:J:2604:GLU:HG2	2:J:2639:MET:HG3	2.00	0.43
2:J:3354:LEU:HD11	2:J:3434:LEU:HD22	2.01	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:32:ASN:OD1	3:F:33:SER:N	2.51	0.43
3:F:46:GLU:HG3	3:F:62:SER:HB2	2.00	0.43
3:F:47:LEU:O	3:F:62:SER:HB3	2.19	0.43
3:K:64:LYS:N	3:K:64:LYS:HD2	2.33	0.43
2:B:232:THR:HG21	2:B:252:VAL:HG11	2.01	0.42
2:B:993:HIS:HE1	2:B:1027:LEU:HD11	1.78	0.42
2:B:2618:MET:SD	2:B:2618:MET:N	2.91	0.42
2:B:3051:ARG:HH22	2:B:3102:ASP:HB2	1.83	0.42
2:B:3222:LYS:HD2	2:B:3226:GLU:CD	2.39	0.42
2:B:3346:VAL:HB	2:B:3411:LEU:HD22	2.01	0.42
2:B:3354:LEU:HD11	2:B:3434:LEU:HD22	2.01	0.42
2:E:887:ILE:HD13	2:E:959:TYR:HB3	2.00	0.42
2:E:1432:THR:HG23	2:E:1572:ILE:HG23	2.01	0.42
2:E:2867:LEU:HD23	2:E:2868:SER:O	2.18	0.42
2:E:4846:VAL:O	2:E:4850:LEU:HG	2.19	0.42
2:G:786:GLY:H	2:G:1631:GLN:HA	1.84	0.42
2:G:1018:ASN:OD1	2:G:1021:LEU:N	2.51	0.42
2:G:2206:THR:O	2:G:2210:VAL:HG23	2.19	0.42
2:G:2230:THR:HG22	2:G:2234:ARG:HH11	1.83	0.42
2:G:3367:LYS:O	2:G:3371:LYS:HG2	2.19	0.42
2:G:4232:GLU:HG2	2:G:5019:TRP:NE1	2.34	0.42
2:G:4818:MET:N	2:G:4818:MET:SD	2.92	0.42
2:J:978:THR:O	2:J:982:THR:HG23	2.19	0.42
2:J:1097:THR:HG23	2:J:1143:TRP:CD1	2.54	0.42
2:J:2515:GLN:O	2:J:2519:LEU:HG	2.19	0.42
2:J:2777:TYR:HB2	2:J:2791:LEU:O	2.18	0.42
2:J:3521:GLY:HA2	2:J:3524:MET:SD	2.59	0.42
2:J:4642:ALA:O	2:J:4646:LEU:HD23	2.19	0.42
3:K:47:LEU:O	3:K:62:SER:HB3	2.19	0.42
2:B:1432:THR:HG23	2:B:1572:ILE:HG23	2.01	0.42
2:B:4014:LYS:HG2	2:B:4135:PRO:HB3	2.01	0.42
2:B:4805:ASN:HB3	2:B:4808:PHE:CD2	2.54	0.42
2:E:248:GLU:O	2:E:372:LEU:HD23	2.19	0.42
2:E:424:LYS:HE2	2:E:424:LYS:HB2	1.92	0.42
2:E:468:LEU:O	2:E:472:ARG:HG2	2.19	0.42
2:E:979:PRO:O	2:E:983:THR:HG23	2.19	0.42
2:E:2768:PHE:HA	2:E:2771:ILE:HG22	2.00	0.42
2:E:3511:VAL:HG12	2:E:3515:LYS:HD2	2.01	0.42
2:G:1694:LEU:HD13	2:G:1715:LEU:HD12	2.01	0.42
2:G:3098:SER:O	2:G:3101:GLU:HG3	2.18	0.42
2:G:3157:ILE:HG23	2:G:3165:CYS:SG	2.59	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:144:GLU:HG3	2:J:175:SER:HB2	2.01	0.42
2:J:275:ARG:HB3	2:J:278:GLN:HB2	2.01	0.42
2:J:3367:LYS:O	2:J:3371:LYS:HG2	2.19	0.42
2:J:4818:MET:N	2:J:4818:MET:SD	2.92	0.42
2:B:978:THR:O	2:B:982:THR:HG23	2.19	0.42
2:B:979:PRO:O	2:B:983:THR:HG23	2.19	0.42
2:B:2654:TYR:HB2	2:B:2661:TRP:CE3	2.55	0.42
2:B:2867:LEU:HD23	2:B:2868:SER:O	2.18	0.42
2:E:349:GLN:HB2	2:E:356:TRP:CZ3	2.54	0.42
2:E:2765:LYS:NZ	2:E:2860:PRO:HA	2.34	0.42
2:E:2971:GLN:HA	2:E:2974:ILE:HG12	2.00	0.42
2:E:3092:LEU:O	2:E:3095:PHE:HB3	2.18	0.42
2:E:4818:MET:N	2:E:4818:MET:SD	2.92	0.42
2:G:131:LEU:HD13	2:G:195:PHE:HD2	1.84	0.42
2:G:978:THR:O	2:G:982:THR:HG23	2.19	0.42
2:G:2312:MET:CE	2:G:2312:MET:H	2.32	0.42
2:G:2359:ARG:O	2:G:2361:PRO:HD3	2.19	0.42
2:G:2575:ARG:O	2:G:2578:MET:HG3	2.19	0.42
2:G:3521:GLY:HA2	2:G:3524:MET:SD	2.60	0.42
2:J:2159:LEU:O	2:J:2163:ARG:HG3	2.19	0.42
2:J:2765:LYS:NZ	2:J:2860:PRO:HA	2.34	0.42
3:K:53:SER:H	3:K:53:SER:HG	1.62	0.42
1:D:88:PRO:HB2	2:E:1680:ARG:HH12	1.84	0.42
2:B:182:LEU:HD13	2:B:198:THR:HG21	2.02	0.42
2:B:535:ALA:O	2:B:539:LEU:HG	2.19	0.42
2:B:707:VAL:HG23	2:B:782:SER:OG	2.19	0.42
2:B:1581:LEU:HD12	2:B:1584:ARG:HE	1.84	0.42
2:B:2312:MET:H	2:B:2312:MET:CE	2.32	0.42
2:B:2359:ARG:O	2:B:2361:PRO:HD3	2.19	0.42
2:E:371:VAL:HG12	2:E:373:LYS:H	1.85	0.42
2:E:372:LEU:HD12	2:E:372:LEU:HA	1.81	0.42
2:E:548:VAL:HA	2:E:551:LEU:HG	2.02	0.42
2:E:707:VAL:HG23	2:E:782:SER:OG	2.19	0.42
2:E:2654:TYR:HB2	2:E:2661:TRP:CE3	2.55	0.42
2:E:2790:MET:O	2:E:2792:ARG:NE	2.52	0.42
2:E:4888:TYR:O	2:E:4892:ARG:HD3	2.18	0.42
2:G:275:ARG:HB3	2:G:278:GLN:HB2	2.01	0.42
2:G:548:VAL:HA	2:G:551:LEU:HG	2.02	0.42
2:G:3222:LYS:HB3	2:G:3226:GLU:HB3	2.00	0.42
2:G:4232:GLU:HG2	2:G:5019:TRP:HE1	1.84	0.42
2:J:226:HIS:CD2	2:J:226:HIS:N	2.85	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:535:ALA:O	2:J:539:LEU:HG	2.19	0.42
2:J:1931:LEU:HD22	2:J:1935:VAL:HG11	2.00	0.42
2:J:2206:THR:O	2:J:2210:VAL:HG23	2.19	0.42
2:J:2351:ASN:O	2:J:2355:ARG:HG3	2.19	0.42
3:K:46:GLU:HG3	3:K:62:SER:HB2	2.00	0.42
3:M:63:VAL:HA	3:M:67:PHE:HE2	1.85	0.42
2:B:468:LEU:O	2:B:472:ARG:HG2	2.19	0.42
2:B:2159:LEU:O	2:B:2163:ARG:HG3	2.19	0.42
2:B:2971:GLN:HA	2:B:2974:ILE:HG12	2.00	0.42
2:B:3316:LEU:HD11	2:B:3345:ILE:HG23	2.01	0.42
2:B:3367:LYS:O	2:B:3371:LYS:HG2	2.19	0.42
2:B:4818:MET:N	2:B:4818:MET:SD	2.92	0.42
2:B:4888:TYR:O	2:B:4892:ARG:HD3	2.18	0.42
2:E:14:LEU:HD13	2:E:202:MET:HG2	2.02	0.42
2:E:943:ASP:HB2	2:E:946:ALA:HB3	2.02	0.42
2:E:1000:ARG:NH2	2:E:1003:GLN:HG3	2.33	0.42
2:E:1261:ASP:N	2:E:1261:ASP:OD1	2.53	0.42
2:E:1931:LEU:HD22	2:E:1935:VAL:HG11	2.00	0.42
2:E:2351:ASN:O	2:E:2355:ARG:HG3	2.20	0.42
2:G:707:VAL:HG23	2:G:782:SER:OG	2.19	0.42
2:G:867:LEU:O	2:G:871:ARG:HB3	2.19	0.42
2:G:1738:LEU:HB2	2:G:2146:PRO:HD3	2.00	0.42
2:G:1757:ALA:O	2:G:1759:ARG:HD2	2.20	0.42
2:G:2541:PHE:N	2:G:2541:PHE:CD1	2.87	0.42
2:G:2801:ASP:HA	2:G:2804:ILE:HG12	2.01	0.42
2:J:548:VAL:HG21	2:J:582:HIS:CD2	2.52	0.42
2:J:972:LEU:HB2	2:J:1044:ARG:HE	1.83	0.42
2:J:1757:ALA:O	2:J:1759:ARG:HD2	2.20	0.42
2:J:3007:ASN:OD1	2:J:3070:ILE:HG13	2.19	0.42
2:J:3092:LEU:O	2:J:3095:PHE:HB3	2.18	0.42
3:F:32:ASN:ND2	3:F:101:PRO:HB3	2.33	0.42
1:H:17:LYS:HG3	1:H:18:LYS:N	2.35	0.42
2:B:201:ASN:ND2	2:B:203:ASN:HD21	2.17	0.42
2:B:943:ASP:HB2	2:B:946:ALA:HB3	2.02	0.42
2:B:1496:TRP:CE2	2:B:1498:GLY:HA3	2.54	0.42
2:B:2725:LYS:HE3	2:B:2735:PHE:CE1	2.55	0.42
2:B:2902:HIS:CG	2:B:2903:PRO:HD2	2.55	0.42
2:B:3157:ILE:HG23	2:B:3165:CYS:SG	2.59	0.42
2:B:3343:GLN:HB3	2:B:3344:PRO:HD3	2.02	0.42
2:B:4817:ALA:HA	2:B:4823:LEU:HB3	2.00	0.42
2:E:131:LEU:HD13	2:E:195:PHE:HD2	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:182:LEU:HD13	2:E:198:THR:HG21	2.02	0.42
2:E:535:ALA:O	2:E:539:LEU:HG	2.19	0.42
2:E:657:THR:HB	2:E:1021:LEU:HG	2.02	0.42
2:E:1115:LEU:HD23	2:E:1123:VAL:HG11	2.01	0.42
2:E:2165:LEU:HD11	2:E:2177:LEU:HB3	2.02	0.42
2:E:2173:GLN:O	2:E:2177:LEU:HD23	2.20	0.42
2:E:2223:ILE:HG21	2:E:2229:VAL:HG21	2.00	0.42
2:E:2359:ARG:O	2:E:2361:PRO:HD3	2.19	0.42
2:E:2640:PRO:O	2:E:2644:LEU:HD23	2.20	0.42
2:E:3417:ASP:OD1	2:E:3516:LYS:HG2	2.19	0.42
2:E:4852:THR:HG22	2:E:4886:HIS:CG	2.55	0.42
2:G:1432:THR:HG23	2:G:1572:ILE:HG23	2.02	0.42
2:J:131:LEU:HD13	2:J:195:PHE:HD2	1.84	0.42
2:J:468:LEU:O	2:J:472:ARG:HG2	2.19	0.42
2:J:474:ARG:O	2:J:478:PHE:HD1	2.01	0.42
2:J:943:ASP:HB2	2:J:946:ALA:HB3	2.02	0.42
2:J:1426:ILE:O	2:J:1430:THR:HB	2.19	0.42
2:J:1432:THR:HG23	2:J:1572:ILE:HG23	2.01	0.42
2:J:2996:LYS:O	2:J:3000:LYS:HG2	2.19	0.42
2:J:4060:LYS:HA	2:J:4063:ASP:OD2	2.20	0.42
2:J:4805:ASN:HB3	2:J:4808:PHE:CD2	2.54	0.42
2:J:4852:THR:HG22	2:J:4886:HIS:CG	2.55	0.42
3:F:83:ASN:OD1	3:F:83:ASN:N	2.53	0.42
3:K:32:ASN:OD1	3:K:33:SER:N	2.51	0.42
1:I:17:LYS:HG3	1:I:18:LYS:N	2.35	0.42
2:B:14:LEU:HD13	2:B:202:MET:HG2	2.02	0.42
2:B:786:GLY:H	2:B:1631:GLN:HA	1.84	0.42
2:B:796:ARG:HD3	2:B:1619:ARG:HH12	1.84	0.42
2:B:2173:GLN:O	2:B:2177:LEU:HD23	2.20	0.42
2:B:2598:ALA:O	2:B:2602:VAL:HG23	2.20	0.42
2:B:2640:PRO:O	2:B:2644:LEU:HD23	2.20	0.42
2:B:3154:ASP:N	2:B:3154:ASP:OD1	2.53	0.42
2:E:867:LEU:O	2:E:871:ARG:HB3	2.19	0.42
2:E:1496:TRP:CE2	2:E:1498:GLY:HA3	2.54	0.42
2:E:2725:LYS:HE3	2:E:2735:PHE:CE1	2.55	0.42
2:E:2765:LYS:HZ2	2:E:2860:PRO:HA	1.85	0.42
2:E:3154:ASP:OD1	2:E:3154:ASP:N	2.53	0.42
2:G:245:VAL:HG13	2:G:376:ALA:HB3	2.01	0.42
2:G:2640:PRO:O	2:G:2644:LEU:HD23	2.20	0.42
2:G:2996:LYS:O	2:G:3000:LYS:HG2	2.19	0.42
2:J:119:SER:HA	2:J:146:CYS:HA	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:461:HIS:HA	2:J:464:LYS:HE3	2.02	0.42
2:J:551:LEU:HD11	2:J:564:LEU:HD22	2.02	0.42
2:J:2312:MET:H	2:J:2312:MET:CE	2.31	0.42
2:J:2541:PHE:N	2:J:2541:PHE:CD1	2.87	0.42
2:J:3538:THR:OG1	2:J:3539:ARG:NH1	2.53	0.42
1:A:98:ILE:N	1:A:98:ILE:HD12	2.34	0.42
2:B:144:GLU:OE2	2:G:2452:ARG:HD2	2.20	0.42
2:B:245:VAL:HG13	2:B:376:ALA:HB3	2.01	0.42
2:B:883:ALA:O	2:B:887:ILE:HG13	2.20	0.42
2:B:2292:GLU:H	2:B:2292:GLU:CD	2.21	0.42
2:B:2664:PHE:CD1	2:B:2664:PHE:N	2.88	0.42
2:B:3002:LEU:HD23	2:B:3002:LEU:HA	1.81	0.42
2:B:3567:PRO:CB	2:B:3570:ARG:HH21	2.32	0.42
2:B:3735:LEU:O	2:B:3740:GLU:N	2.53	0.42
2:B:4677:LEU:HD12	2:B:4677:LEU:HA	1.91	0.42
2:E:1097:THR:HG23	2:E:1143:TRP:CD1	2.54	0.42
2:E:1694:LEU:HD13	2:E:1715:LEU:HD12	2.01	0.42
2:E:2122:SER:O	2:E:2126:ARG:HG3	2.20	0.42
2:E:2159:LEU:O	2:E:2163:ARG:HG3	2.19	0.42
2:E:2206:THR:O	2:E:2210:VAL:HG23	2.19	0.42
2:E:2312:MET:H	2:E:2312:MET:CE	2.32	0.42
2:E:2996:LYS:O	2:E:3000:LYS:HG2	2.19	0.42
2:E:3343:GLN:HB3	2:E:3344:PRO:HD3	2.02	0.42
2:E:3346:VAL:HB	2:E:3411:LEU:HD22	2.01	0.42
2:E:4655:PHE:O	2:E:4659:ILE:HG12	2.20	0.42
2:G:266:ARG:NE	2:G:268:SER:O	2.53	0.42
2:G:1931:LEU:HD22	2:G:1935:VAL:HG11	2.00	0.42
2:G:2330:ARG:HE	2:G:2330:ARG:HB2	1.68	0.42
2:G:2351:ASN:O	2:G:2355:ARG:HG3	2.19	0.42
2:G:3078:ARG:HG2	2:G:3152:PHE:CE1	2.55	0.42
2:J:349:GLN:HB2	2:J:356:TRP:CZ3	2.54	0.42
2:J:464:LYS:HE3	2:J:464:LYS:HB3	1.93	0.42
2:J:657:THR:HB	2:J:1021:LEU:HG	2.02	0.42
2:J:786:GLY:H	2:J:1631:GLN:HA	1.84	0.42
2:J:2359:ARG:O	2:J:2361:PRO:HD3	2.19	0.42
2:J:3250:MET:CE	2:J:3315:LEU:HD21	2.50	0.42
2:J:3771:HIS:CG	2:J:3812:VAL:HG12	2.55	0.42
2:J:3878:ASP:N	2:J:3878:ASP:OD1	2.52	0.42
3:C:46:GLU:HG3	3:C:62:SER:HB2	2.00	0.42
3:F:85:LEU:HD23	3:F:85:LEU:HA	1.92	0.42
2:B:266:ARG:NE	2:B:268:SER:O	2.53	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:349:GLN:HB2	2:B:356:TRP:CZ3	2.54	0.42
2:B:464:LYS:O	2:B:468:LEU:HG	2.20	0.42
2:B:911:HIS:HE1	2:B:918:ARG:NE	2.18	0.42
2:B:1115:LEU:HD23	2:B:1123:VAL:HG11	2.01	0.42
2:B:3136:LEU:O	2:B:3140:LEU:HB3	2.20	0.42
2:B:3521:GLY:HA2	2:B:3524:MET:SD	2.59	0.42
2:B:3771:HIS:CG	2:B:3812:VAL:HG12	2.55	0.42
2:B:3893:GLU:HA	2:B:3967:GLU:OE2	2.19	0.42
2:B:4852:THR:HG22	2:B:4886:HIS:CG	2.55	0.42
2:E:119:SER:HA	2:E:146:CYS:HA	2.00	0.42
2:E:551:LEU:HD11	2:E:564:LEU:HD22	2.02	0.42
2:E:1037:ASP:OD1	2:E:1038:SER:N	2.52	0.42
2:E:2230:THR:HG22	2:E:2234:ARG:HH11	1.83	0.42
2:E:2311:PRO:O	2:E:2314:LEU:HG	2.20	0.42
2:E:3007:ASN:OD1	2:E:3070:ILE:HG13	2.19	0.42
2:E:3157:ILE:HG23	2:E:3165:CYS:SG	2.59	0.42
2:E:3222:LYS:HD2	2:E:3226:GLU:CD	2.39	0.42
2:E:3320:LEU:HD23	2:E:3320:LEU:HA	1.74	0.42
2:E:4805:ASN:HB3	2:E:4808:PHE:CD2	2.54	0.42
2:E:4852:THR:HG21	2:E:4883:TYR:HD1	1.85	0.42
2:G:119:SER:HA	2:G:146:CYS:HA	2.00	0.42
2:G:883:ALA:O	2:G:887:ILE:HG13	2.20	0.42
2:G:3069:HIS:CD2	2:G:3139:VAL:HA	2.55	0.42
2:G:3546:ASP:O	2:G:3550:ARG:HG3	2.19	0.42
2:G:3878:ASP:N	2:G:3878:ASP:OD1	2.52	0.42
2:G:4928:LEU:HD23	2:G:4928:LEU:HA	1.89	0.42
2:J:411:TYR:HB2	2:J:486:LEU:HD21	2.02	0.42
2:J:2230:THR:HG22	2:J:2234:ARG:HH11	1.83	0.42
2:J:2725:LYS:HE3	2:J:2735:PHE:CE1	2.55	0.42
2:J:3257:ALA:HB1	2:J:3321:ARG:HB3	2.02	0.42
2:J:3316:LEU:HD21	2:J:3345:ILE:HG13	2.02	0.42
2:J:3546:ASP:O	2:J:3550:ARG:HG3	2.19	0.42
2:J:4846:VAL:O	2:J:4850:LEU:HG	2.19	0.42
3:K:83:ASN:OD1	3:K:83:ASN:N	2.53	0.42
3:K:104:TYR:HD1	3:K:106:PRO:HD3	1.85	0.42
3:M:47:LEU:O	3:M:62:SER:HB3	2.19	0.42
1:A:40:ARG:H	1:A:40:ARG:HG2	1.72	0.42
2:B:167:ASP:OD1	2:B:168:ASP:N	2.53	0.42
2:B:548:VAL:HA	2:B:551:LEU:HG	2.02	0.42
2:B:984:LEU:HA	2:B:987:ARG:NH1	2.35	0.42
2:B:2223:ILE:HG21	2:B:2229:VAL:HG21	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2351:ASN:O	2:B:2355:ARG:HG3	2.20	0.42
2:B:2559:LEU:O	2:B:2563:THR:HG23	2.20	0.42
2:B:2635:GLU:HG3	2:B:2636:PHE:HD2	1.84	0.42
2:B:2737:PRO:HB2	2:B:2884:ASN:HB2	2.02	0.42
2:B:3172:ILE:HD11	2:B:3190:LEU:HB3	2.02	0.42
2:B:3535:LEU:CD1	2:B:3539:ARG:HH12	2.33	0.42
2:B:4687:TYR:HE1	2:B:4692:PRO:HG3	1.85	0.42
2:E:167:ASP:OD1	2:E:168:ASP:N	2.53	0.42
2:E:266:ARG:NE	2:E:268:SER:O	2.53	0.42
2:E:788:LYS:HG2	2:E:1629:GLN:HB2	2.02	0.42
2:E:984:LEU:HA	2:E:987:ARG:NH1	2.35	0.42
2:E:1757:ALA:O	2:E:1759:ARG:HD2	2.20	0.42
2:E:2801:ASP:HA	2:E:2804:ILE:HG12	2.01	0.42
2:E:2905:LEU:HD23	2:E:2905:LEU:HA	1.93	0.42
2:E:3043:PHE:CD1	2:E:3043:PHE:C	2.93	0.42
2:E:3246:LEU:HA	2:E:3249:LEU:HG	2.02	0.42
2:E:3735:LEU:O	2:E:3740:GLU:N	2.53	0.42
2:E:4687:TYR:HE1	2:E:4692:PRO:HG3	1.85	0.42
2:G:461:HIS:HA	2:G:464:LYS:HE3	2.02	0.42
2:G:468:LEU:O	2:G:472:ARG:HG2	2.19	0.42
2:G:535:ALA:O	2:G:539:LEU:HG	2.20	0.42
2:G:3007:ASN:OD1	2:G:3070:ILE:HG13	2.19	0.42
2:G:3049:LEU:HA	2:G:3053:ARG:NH2	2.35	0.42
2:G:3206:LEU:HD13	2:G:3246:LEU:N	2.35	0.42
2:G:4014:LYS:HG2	2:G:4135:PRO:HB3	2.01	0.42
2:G:4852:THR:HG22	2:G:4886:HIS:CG	2.55	0.42
2:J:548:VAL:HA	2:J:551:LEU:HG	2.02	0.42
2:J:883:ALA:O	2:J:887:ILE:HG13	2.20	0.42
2:J:2598:ALA:O	2:J:2602:VAL:HG23	2.20	0.42
2:J:3069:HIS:CD2	2:J:3139:VAL:HA	2.55	0.42
2:J:4687:TYR:HE1	2:J:4692:PRO:HG3	1.85	0.42
2:J:4773:VAL:O	2:J:4777:ILE:HG13	2.20	0.42
1:I:73:LYS:HE2	1:I:73:LYS:HB3	1.92	0.41
2:B:214:VAL:HG13	2:B:274:LEU:HB2	2.02	0.41
2:B:664:PHE:CE1	2:B:746:CYS:HB2	2.55	0.41
2:B:1088:TRP:HB2	2:B:1153:ILE:HG22	2.02	0.41
2:B:2122:SER:O	2:B:2126:ARG:HG3	2.20	0.41
2:B:2652:TRP:CD1	2:B:2652:TRP:C	2.93	0.41
2:B:3186:LEU:HG	2:B:3190:LEU:HD21	2.02	0.41
2:B:3878:ASP:OD1	2:B:3878:ASP:N	2.52	0.41
2:B:4968:PHE:O	2:B:4974:GLY:HA3	2.20	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:461:HIS:HA	2:E:464:LYS:HE3	2.02	0.41
2:E:796:ARG:HD3	2:E:1619:ARG:HH12	1.84	0.41
2:E:2452:ARG:HD2	2:J:144:GLU:OE2	2.19	0.41
2:E:2652:TRP:CD1	2:E:2652:TRP:C	2.93	0.41
2:E:2902:HIS:CG	2:E:2903:PRO:HD2	2.55	0.41
2:E:3078:ARG:HG2	2:E:3152:PHE:CE1	2.55	0.41
2:E:3257:ALA:HB1	2:E:3321:ARG:HB3	2.02	0.41
2:E:3538:THR:OG1	2:E:3539:ARG:NH1	2.53	0.41
2:E:3546:ASP:O	2:E:3550:ARG:HG3	2.19	0.41
2:E:3771:HIS:CG	2:E:3812:VAL:HG12	2.55	0.41
2:E:4038:GLY:O	2:E:4042:ARG:NE	2.46	0.41
2:G:943:ASP:HB2	2:G:946:ALA:HB3	2.02	0.41
2:G:997:ALA:O	2:G:1001:VAL:HG23	2.20	0.41
2:G:1261:ASP:N	2:G:1261:ASP:OD1	2.53	0.41
2:G:2122:SER:O	2:G:2126:ARG:HG3	2.20	0.41
2:G:2654:TYR:HB2	2:G:2661:TRP:CE3	2.55	0.41
2:G:2725:LYS:HE3	2:G:2735:PHE:CE1	2.55	0.41
2:G:3172:ILE:HD11	2:G:3190:LEU:HB3	2.02	0.41
2:G:4041:ALA:O	2:G:4045:VAL:HG23	2.20	0.41
2:G:4060:LYS:HA	2:G:4063:ASP:OD2	2.20	0.41
2:J:464:LYS:O	2:J:468:LEU:HG	2.20	0.41
2:J:1090:PHE:HB2	2:J:1204:LEU:HA	2.02	0.41
2:J:3049:LEU:HA	2:J:3053:ARG:NH2	2.35	0.41
2:J:3078:ARG:HG2	2:J:3152:PHE:CE1	2.55	0.41
2:J:3157:ILE:HG23	2:J:3165:CYS:SG	2.59	0.41
2:J:3316:LEU:HD13	2:J:3316:LEU:HA	1.95	0.41
2:J:3346:VAL:HB	2:J:3411:LEU:HD22	2.01	0.41
2:J:4655:PHE:O	2:J:4659:ILE:HG12	2.20	0.41
1:A:2:VAL:HA	1:A:75:THR:O	2.20	0.41
2:B:1037:ASP:OD1	2:B:1038:SER:N	2.52	0.41
2:B:2230:THR:HG22	2:B:2234:ARG:HH11	1.83	0.41
2:B:3007:ASN:OD1	2:B:3070:ILE:HG13	2.19	0.41
2:B:3043:PHE:CD1	2:B:3043:PHE:C	2.93	0.41
2:B:3257:ALA:HB1	2:B:3321:ARG:HB3	2.02	0.41
2:E:688:LEU:HD12	2:E:688:LEU:HA	1.87	0.41
2:E:911:HIS:HB2	2:E:913:LEU:HG	2.02	0.41
2:E:2598:ALA:O	2:E:2602:VAL:HG23	2.20	0.41
2:G:979:PRO:O	2:G:983:THR:HG23	2.19	0.41
2:G:1581:LEU:HD12	2:G:1584:ARG:HE	1.83	0.41
2:G:3735:LEU:O	2:G:3740:GLU:N	2.53	0.41
2:G:4546:VAL:HA	2:G:4549:VAL:HG22	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:4805:ASN:HB3	2:G:4808:PHE:CD2	2.54	0.41
2:J:266:ARG:NE	2:J:268:SER:O	2.53	0.41
2:J:796:ARG:HD3	2:J:1619:ARG:HH12	1.84	0.41
2:J:2522:LEU:HD11	2:J:2569:PHE:CE1	2.54	0.41
2:J:2652:TRP:CD1	2:J:2652:TRP:C	2.93	0.41
2:J:2801:ASP:HA	2:J:2804:ILE:HG12	2.01	0.41
3:C:104:TYR:HD1	3:C:106:PRO:HD3	1.85	0.41
3:K:63:VAL:HA	3:K:67:PHE:HE2	1.85	0.41
2:B:461:HIS:HA	2:B:464:LYS:HE3	2.02	0.41
2:B:911:HIS:HB2	2:B:913:LEU:HG	2.02	0.41
2:B:3069:HIS:CD2	2:B:3139:VAL:HA	2.55	0.41
2:B:4245:MET:HE3	2:B:4245:MET:HB3	1.91	0.41
2:E:214:VAL:HG13	2:E:274:LEU:HB2	2.02	0.41
2:E:575:LEU:HD13	2:E:606:LEU:HA	2.02	0.41
2:E:2123:LEU:HD12	2:E:2123:LEU:HA	1.91	0.41
2:E:3069:HIS:CD2	2:E:3139:VAL:HA	2.55	0.41
2:E:3683:GLN:O	2:E:3687:GLU:HB2	2.21	0.41
2:E:4014:LYS:HG2	2:E:4135:PRO:HB3	2.01	0.41
2:E:4041:ALA:O	2:E:4045:VAL:HG23	2.20	0.41
2:G:144:GLU:OE2	2:J:2452:ARG:HD2	2.19	0.41
2:G:182:LEU:HD13	2:G:198:THR:HG21	2.02	0.41
2:G:1037:ASP:OD1	2:G:1038:SER:N	2.52	0.41
2:G:2664:PHE:CD1	2:G:2664:PHE:N	2.88	0.41
2:G:2737:PRO:HB2	2:G:2884:ASN:HB2	2.02	0.41
2:G:3257:ALA:HB1	2:G:3321:ARG:HB3	2.02	0.41
2:G:3417:ASP:OD1	2:G:3516:LYS:HG2	2.19	0.41
2:G:4687:TYR:HE1	2:G:4692:PRO:HG3	1.85	0.41
2:J:167:ASP:OD1	2:J:168:ASP:N	2.53	0.41
2:J:182:LEU:HD13	2:J:198:THR:HG21	2.02	0.41
2:J:788:LYS:HG2	2:J:1629:GLN:HB2	2.02	0.41
2:J:1121:ALA:HB1	2:J:1123:VAL:HG13	2.00	0.41
2:J:1694:LEU:HD13	2:J:1715:LEU:HD12	2.01	0.41
2:J:2640:PRO:O	2:J:2644:LEU:HD23	2.20	0.41
2:J:2758:PHE:O	2:J:2762:THR:HG23	2.21	0.41
2:J:2902:HIS:CG	2:J:2903:PRO:HD2	2.55	0.41
2:J:3417:ASP:OD1	2:J:3516:LYS:HG2	2.19	0.41
2:J:3592:ILE:HG12	2:J:3595:ARG:NH2	2.35	0.41
2:J:4014:LYS:HG2	2:J:4135:PRO:HB3	2.01	0.41
2:J:4017:LEU:HD22	2:J:4139:ILE:HG21	2.03	0.41
2:J:4031:LEU:HD13	2:J:4044:MET:HE3	2.03	0.41
3:C:28:ILE:HD12	3:C:28:ILE:HA	1.93	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:F:63:VAL:HA	3:F:67:PHE:HE2	1.85	0.41
1:I:88:PRO:HB2	2:J:1680:ARG:HH12	1.85	0.41
2:B:3078:ARG:HG2	2:B:3152:PHE:CE1	2.55	0.41
2:B:3546:ASP:O	2:B:3550:ARG:HG3	2.19	0.41
2:B:4060:LYS:HA	2:B:4063:ASP:OD2	2.20	0.41
2:B:4655:PHE:O	2:B:4659:ILE:HG12	2.20	0.41
2:B:4773:VAL:O	2:B:4777:ILE:HG13	2.20	0.41
2:B:4928:LEU:HD23	2:B:4928:LEU:HA	1.89	0.41
2:E:882:TRP:CZ2	3:F:104:TYR:HB2	2.55	0.41
2:E:911:HIS:HE1	2:E:918:ARG:NE	2.18	0.41
2:E:936:GLY:HA3	2:E:1056:PRO:HB3	2.01	0.41
2:E:937:CYS:HB3	2:E:1053:ILE:HB	2.02	0.41
2:E:1927:LEU:HD23	2:E:1939:MET:HE1	2.03	0.41
2:E:3521:GLY:HA2	2:E:3524:MET:SD	2.60	0.41
2:E:4060:LYS:HA	2:E:4063:ASP:OD2	2.20	0.41
2:E:4698:LYS:HE3	2:E:4698:LYS:HB2	1.84	0.41
2:G:14:LEU:HD13	2:G:202:MET:HG2	2.02	0.41
2:G:904:HIS:CD2	2:G:907:LEU:H	2.39	0.41
2:G:984:LEU:HA	2:G:987:ARG:NH1	2.35	0.41
2:G:2173:GLN:O	2:G:2177:LEU:HD23	2.20	0.41
2:G:2598:ALA:O	2:G:2602:VAL:HG23	2.20	0.41
2:G:2902:HIS:CG	2:G:2903:PRO:HD2	2.55	0.41
2:G:3836:MET:HE3	2:G:3915:ILE:HG23	2.02	0.41
2:G:4232:GLU:HG2	2:G:5019:TRP:CD1	2.56	0.41
2:G:4773:VAL:O	2:G:4777:ILE:HG13	2.20	0.41
2:G:4851:TYR:HD1	2:G:4916:PHE:CE1	2.39	0.41
2:G:4968:PHE:O	2:G:4974:GLY:HA3	2.20	0.41
2:J:984:LEU:HA	2:J:987:ARG:NH1	2.35	0.41
2:J:997:ALA:O	2:J:1001:VAL:HG23	2.20	0.41
2:J:2173:GLN:O	2:J:2177:LEU:HD23	2.20	0.41
2:J:2737:PRO:HB2	2:J:2884:ASN:HB2	2.02	0.41
2:J:4852:THR:HG21	2:J:4883:TYR:HD1	1.85	0.41
3:M:104:TYR:HD1	3:M:106:PRO:HD3	1.85	0.41
2:B:657:THR:HB	2:B:1021:LEU:HG	2.02	0.41
2:B:904:HIS:CD2	2:B:907:LEU:H	2.39	0.41
2:B:2452:ARG:HD2	2:E:144:GLU:OE2	2.19	0.41
2:B:2589:LEU:HD23	2:B:2589:LEU:HA	1.87	0.41
2:B:2615:ARG:HD2	2:B:2664:PHE:HA	2.01	0.41
2:B:3193:CYS:O	2:B:3197:LEU:HG	2.21	0.41
2:B:3683:GLN:O	2:B:3687:GLU:HB2	2.21	0.41
2:E:866:HIS:ND1	2:E:870:ILE:HB	2.36	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:1088:TRP:HB2	2:E:1153:ILE:HG22	2.02	0.41
2:E:1092:PHE:HE2	2:E:1100:MET:HE3	1.86	0.41
2:E:1849:LEU:HG	2:E:1945:TYR:CE2	2.56	0.41
2:E:2737:PRO:HB2	2:E:2884:ASN:HB2	2.02	0.41
2:E:4968:PHE:O	2:E:4974:GLY:HA3	2.20	0.41
2:G:162:LYS:NZ	2:J:3987:ASP:OD2	2.49	0.41
2:G:167:ASP:OD1	2:G:168:ASP:N	2.53	0.41
2:G:349:GLN:HB2	2:G:356:TRP:CZ3	2.54	0.41
2:G:371:VAL:HG11	2:G:373:LYS:HG2	2.02	0.41
2:G:464:LYS:O	2:G:468:LEU:HG	2.20	0.41
2:G:657:THR:HB	2:G:1021:LEU:HG	2.02	0.41
2:G:911:HIS:HE1	2:G:918:ARG:NE	2.18	0.41
2:G:1088:TRP:HB2	2:G:1153:ILE:HG22	2.02	0.41
2:G:1090:PHE:HB2	2:G:1204:LEU:HA	2.02	0.41
2:G:2292:GLU:H	2:G:2292:GLU:CD	2.21	0.41
2:G:2340:PHE:HB2	2:G:2435:ARG:HE	1.86	0.41
2:G:2382:GLU:HA	2:G:2385:ARG:NE	2.36	0.41
2:G:2718:SER:OG	2:G:2909:ASP:O	2.25	0.41
2:G:2790:MET:O	2:G:2792:ARG:NE	2.52	0.41
2:G:2947:ASP:OD1	2:G:2947:ASP:N	2.54	0.41
2:G:3173:TYR:CG	2:G:3243:ILE:HG12	2.56	0.41
2:G:3193:CYS:O	2:G:3197:LEU:HG	2.21	0.41
2:G:3343:GLN:HB3	2:G:3344:PRO:HD3	2.02	0.41
2:G:3535:LEU:CD1	2:G:3539:ARG:HH12	2.33	0.41
2:G:3567:PRO:CB	2:G:3570:ARG:HH21	2.32	0.41
2:G:3771:HIS:CG	2:G:3812:VAL:HG12	2.55	0.41
2:J:102:LEU:HD21	2:J:105:HIS:CE1	2.56	0.41
2:J:214:VAL:HG13	2:J:274:LEU:HB2	2.02	0.41
2:J:3172:ILE:HD11	2:J:3190:LEU:HB3	2.02	0.41
2:J:3179:LYS:HE3	2:J:3179:LYS:HB3	1.95	0.41
2:J:3391:GLU:HA	2:J:3394:VAL:HG22	2.03	0.41
3:F:104:TYR:HD1	3:F:106:PRO:HD3	1.85	0.41
1:A:73:LYS:HB3	1:A:73:LYS:HE2	1.86	0.41
2:B:575:LEU:HD13	2:B:606:LEU:HA	2.02	0.41
2:B:997:ALA:O	2:B:1001:VAL:HG23	2.20	0.41
2:B:1637:MET:HG3	2:B:1696:HIS:ND1	2.36	0.41
2:B:2519:LEU:HD11	2:B:2572:THR:HG23	2.03	0.41
2:B:3049:LEU:HA	2:B:3053:ARG:NH2	2.35	0.41
2:E:705:ASN:N	2:E:705:ASN:HD22	2.19	0.41
2:E:997:ALA:O	2:E:1001:VAL:HG23	2.20	0.41
2:E:2479:LEU:HD22	2:E:2541:PHE:HZ	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:222:LEU:HB3	2:G:388:LEU:HD12	2.02	0.41
2:G:575:LEU:HD13	2:G:606:LEU:HA	2.02	0.41
2:G:1000:ARG:HH12	3:M:115:ASP:H	1.69	0.41
2:G:2311:PRO:O	2:G:2314:LEU:HG	2.20	0.41
2:G:3354:LEU:HD13	2:G:3415:TYR:HE2	1.86	0.41
2:J:473:ASN:O	2:J:477:LEU:HG	2.21	0.41
2:J:575:LEU:HD13	2:J:606:LEU:HA	2.02	0.41
2:J:904:HIS:CD2	2:J:907:LEU:H	2.39	0.41
2:J:2311:PRO:O	2:J:2314:LEU:HG	2.20	0.41
2:J:2368:LEU:HD23	2:J:2368:LEU:HA	1.88	0.41
2:J:4851:TYR:HD1	2:J:4916:PHE:CE1	2.39	0.41
2:B:222:LEU:HB3	2:B:388:LEU:HD12	2.02	0.41
2:B:473:ASN:O	2:B:477:LEU:HG	2.21	0.41
2:B:1757:ALA:O	2:B:1759:ARG:HD2	2.20	0.41
2:B:1849:LEU:HG	2:B:1945:TYR:CE2	2.56	0.41
2:B:2382:GLU:HA	2:B:2385:ARG:NE	2.35	0.41
2:B:4041:ALA:O	2:B:4045:VAL:HG23	2.20	0.41
2:E:102:LEU:HD21	2:E:105:HIS:CE1	2.56	0.41
2:E:275:ARG:HB3	2:E:278:GLN:HB2	2.01	0.41
2:E:898:ASP:O	2:E:902:ARG:N	2.54	0.41
2:E:1090:PHE:HB2	2:E:1204:LEU:HA	2.02	0.41
2:E:1658:ASP:N	2:E:1658:ASP:OD1	2.54	0.41
2:E:2262:GLY:O	2:E:2266:GLY:N	2.47	0.41
2:E:3186:LEU:HG	2:E:3190:LEU:HD21	2.02	0.41
2:E:3567:PRO:CB	2:E:3570:ARG:HH21	2.32	0.41
2:G:162:LYS:HG3	2:J:3984:ARG:HH22	1.86	0.41
2:G:788:LYS:HG2	2:G:1629:GLN:HB2	2.02	0.41
2:G:2165:LEU:HD11	2:G:2177:LEU:HB3	2.02	0.41
2:G:2575:ARG:NH1	2:G:2578:MET:HB3	2.36	0.41
2:G:3100:SER:HB3	2:G:3167:ARG:HE	1.85	0.41
2:G:3186:LEU:HG	2:G:3190:LEU:HD21	2.02	0.41
2:G:3316:LEU:O	2:G:3320:LEU:HG	2.20	0.41
2:G:4017:LEU:HD22	2:G:4139:ILE:HG21	2.03	0.41
2:G:4846:VAL:O	2:G:4850:LEU:HG	2.19	0.41
2:J:14:LEU:HD13	2:J:202:MET:HG2	2.02	0.41
2:J:222:LEU:HB3	2:J:388:LEU:HD12	2.02	0.41
2:J:878:ILE:HG21	3:K:107:TRP:HE1	1.85	0.41
2:J:936:GLY:HA3	2:J:1056:PRO:HB3	2.02	0.41
2:J:1126:GLY:HA3	2:J:1143:TRP:CE3	2.56	0.41
2:J:1658:ASP:N	2:J:1658:ASP:OD1	2.54	0.41
2:J:2292:GLU:H	2:J:2292:GLU:CD	2.22	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2414:ASN:HB2	2:J:2417:HIS:CE1	2.56	0.41
2:J:2672:LEU:HD11	2:J:2711:PRO:HD2	2.03	0.41
2:J:4546:VAL:HA	2:J:4549:VAL:HG22	2.03	0.41
3:C:83:ASN:OD1	3:C:83:ASN:N	2.53	0.41
1:H:88:PRO:HB2	2:G:1680:ARG:NH1	2.36	0.41
2:B:232:THR:OG1	2:B:248:GLU:HG2	2.21	0.41
2:B:2311:PRO:O	2:B:2314:LEU:HG	2.20	0.41
2:B:2758:PHE:O	2:B:2762:THR:HG23	2.21	0.41
2:B:2765:LYS:HD3	2:B:2765:LYS:HA	1.67	0.41
2:B:2871:LEU:HD11	2:B:2927:LEU:HD11	2.03	0.41
2:B:3552:PHE:HA	2:B:3555:ASN:OD1	2.21	0.41
2:E:411:TYR:HB2	2:E:486:LEU:HD21	2.02	0.41
2:E:664:PHE:CE1	2:E:746:CYS:HB2	2.56	0.41
2:E:883:ALA:O	2:E:887:ILE:HG13	2.20	0.41
2:E:2414:ASN:HB2	2:E:2417:HIS:CE1	2.56	0.41
2:E:2758:PHE:O	2:E:2762:THR:HG23	2.20	0.41
2:E:2871:LEU:HD11	2:E:2927:LEU:HD11	2.03	0.41
2:E:3347:SER:HB2	2:E:3414:ARG:HG3	2.03	0.41
2:G:473:ASN:O	2:G:477:LEU:HG	2.21	0.41
2:G:866:HIS:CD2	2:G:869:ARG:HH21	2.39	0.41
2:G:1126:GLY:HA3	2:G:1143:TRP:CE3	2.56	0.41
2:G:2285:GLU:H	2:G:2285:GLU:HG2	1.69	0.41
2:G:2522:LEU:HD11	2:G:2569:PHE:CE1	2.55	0.41
2:G:2672:LEU:HD12	2:G:2672:LEU:HA	1.81	0.41
2:G:3347:SER:HB2	2:G:3414:ARG:HG3	2.03	0.41
2:G:3545:THR:O	2:G:3549:VAL:HG13	2.21	0.41
2:G:3592:ILE:HG12	2:G:3595:ARG:NH2	2.35	0.41
2:G:3592:ILE:HA	2:G:3595:ARG:HE	1.86	0.41
2:G:3809:ASN:HB3	2:G:3812:VAL:CG2	2.48	0.41
2:J:1849:LEU:HG	2:J:1945:TYR:CE2	2.56	0.41
2:J:2359:ARG:HD3	2:J:2359:ARG:HA	1.82	0.41
2:J:2479:LEU:HD22	2:J:2541:PHE:HZ	1.86	0.41
2:J:2654:TYR:HB2	2:J:2661:TRP:CE3	2.55	0.41
1:A:17:LYS:HG3	1:A:18:LYS:N	2.35	0.41
2:B:275:ARG:HB3	2:B:278:GLN:HB2	2.02	0.41
2:B:551:LEU:HD11	2:B:564:LEU:HD22	2.02	0.41
2:B:866:HIS:CD2	2:B:869:ARG:HH21	2.39	0.41
2:B:1090:PHE:HB2	2:B:1204:LEU:HA	2.02	0.41
2:B:2165:LEU:HD11	2:B:2177:LEU:HB3	2.02	0.41
2:B:2419:GLY:O	2:B:2423:MET:HG2	2.21	0.41
2:B:2617:SER:OG	2:B:2618:MET:SD	2.76	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2790:MET:O	2:B:2792:ARG:NE	2.52	0.41
2:B:3354:LEU:HD13	2:B:3415:TYR:HE2	1.86	0.41
2:B:3835:LEU:HD22	2:B:3880:PHE:CZ	2.56	0.41
2:B:4852:THR:HG21	2:B:4883:TYR:HD1	1.85	0.41
2:E:1126:GLY:HA3	2:E:1143:TRP:CE3	2.56	0.41
2:E:1637:MET:HG3	2:E:1696:HIS:ND1	2.36	0.41
2:E:2382:GLU:HA	2:E:2385:ARG:NE	2.36	0.41
2:E:2664:PHE:N	2:E:2664:PHE:CD1	2.88	0.41
2:E:3214:ASN:HB2	2:E:3304:CYS:HB3	2.02	0.41
2:E:3391:GLU:HA	2:E:3394:VAL:HG22	2.03	0.41
2:E:4773:VAL:O	2:E:4777:ILE:HG13	2.20	0.41
2:E:4851:TYR:HD1	2:E:4916:PHE:CE1	2.39	0.41
2:E:4992:LEU:HD13	2:E:5014:TYR:CZ	2.56	0.41
2:G:214:VAL:HG13	2:G:274:LEU:HB2	2.02	0.41
2:G:548:VAL:HG21	2:G:582:HIS:CD2	2.52	0.41
2:G:551:LEU:HD11	2:G:564:LEU:HD22	2.02	0.41
2:G:1637:MET:HG3	2:G:1696:HIS:ND1	2.36	0.41
2:G:1849:LEU:HG	2:G:1945:TYR:CE2	2.56	0.41
2:G:1931:LEU:HD13	2:G:1935:VAL:HG12	2.03	0.41
2:G:2331:TYR:O	2:G:2335:LEU:HG	2.21	0.41
2:G:2414:ASN:HB2	2:G:2417:HIS:CE1	2.56	0.41
2:G:2652:TRP:CD1	2:G:2652:TRP:C	2.93	0.41
2:G:2672:LEU:HD11	2:G:2711:PRO:HD2	2.03	0.41
2:G:2912:THR:OG1	2:G:2913:ALA:N	2.54	0.41
2:G:3214:ASN:HB2	2:G:3304:CYS:HB3	2.02	0.41
2:G:3316:LEU:HD13	2:G:3316:LEU:HA	1.92	0.41
2:G:3391:GLU:HA	2:G:3394:VAL:HG22	2.03	0.41
2:G:3683:GLN:O	2:G:3687:GLU:HB2	2.21	0.41
2:G:4852:THR:HG21	2:G:4883:TYR:HD1	1.85	0.41
2:J:911:HIS:HE1	2:J:918:ARG:NE	2.18	0.41
2:J:911:HIS:HB2	2:J:913:LEU:HG	2.02	0.41
2:J:1252:HIS:CE1	2:J:1254:HIS:HB2	2.56	0.41
2:J:2122:SER:O	2:J:2126:ARG:HG3	2.20	0.41
2:J:2165:LEU:HD11	2:J:2177:LEU:HB3	2.02	0.41
2:J:2515:GLN:CA	2:J:2568:LEU:HD21	2.48	0.41
2:J:2566:ALA:O	2:J:2569:PHE:HB2	2.21	0.41
2:J:2664:PHE:CD1	2:J:2664:PHE:N	2.88	0.41
2:J:2947:ASP:OD1	2:J:2947:ASP:N	2.54	0.41
2:J:3343:GLN:HB3	2:J:3344:PRO:HD3	2.02	0.41
2:J:3354:LEU:HD13	2:J:3415:TYR:HE2	1.86	0.41
2:J:3552:PHE:HA	2:J:3555:ASN:OD1	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:3683:GLN:O	2:J:3687:GLU:HB2	2.21	0.41
2:J:4041:ALA:O	2:J:4045:VAL:HG23	2.20	0.41
2:J:4968:PHE:O	2:J:4974:GLY:HA3	2.20	0.41
3:C:63:VAL:HA	3:C:67:PHE:HE2	1.85	0.41
3:C:85:LEU:HD23	3:C:85:LEU:HA	1.92	0.41
3:C:101:PRO:O	3:C:104:TYR:N	2.48	0.41
3:F:109:THR:OG1	3:F:110:PRO:HD3	2.21	0.41
3:M:101:PRO:O	3:M:104:TYR:N	2.48	0.41
1:D:17:LYS:HG3	1:D:18:LYS:N	2.35	0.41
1:D:49:ARG:HB2	1:D:52:LYS:HG2	2.03	0.41
1:I:88:PRO:HB2	2:J:1680:ARG:NH1	2.36	0.41
2:B:214:VAL:HA	2:B:341:TYR:CD2	2.56	0.41
2:B:411:TYR:HB2	2:B:486:LEU:HD21	2.02	0.41
2:B:866:HIS:ND1	2:B:870:ILE:HB	2.36	0.41
2:B:1126:GLY:HA3	2:B:1143:TRP:CE3	2.56	0.41
2:B:2562:ILE:HG23	2:B:2569:PHE:CZ	2.56	0.41
2:E:222:LEU:HB3	2:E:388:LEU:HD12	2.02	0.41
2:E:464:LYS:O	2:E:468:LEU:HG	2.20	0.41
2:E:691:GLY:HA3	2:E:712:TYR:CD1	2.56	0.41
2:E:866:HIS:CD2	2:E:869:ARG:HH21	2.39	0.41
2:E:878:ILE:HG21	3:F:107:TRP:CE2	2.55	0.41
2:E:1131:ARG:HB2	2:E:1179:PHE:CZ	2.56	0.41
2:E:3100:SER:HB3	2:E:3167:ARG:HE	1.85	0.41
2:E:3193:CYS:O	2:E:3197:LEU:HG	2.21	0.41
2:E:3893:GLU:HA	2:E:3967:GLU:OE2	2.21	0.41
2:E:4017:LEU:HD22	2:E:4139:ILE:HG21	2.03	0.41
2:G:102:LEU:HD21	2:G:105:HIS:CE1	2.56	0.41
2:G:424:LYS:HE2	2:G:424:LYS:HB2	1.92	0.41
2:G:911:HIS:HB2	2:G:913:LEU:HG	2.02	0.41
2:G:3552:PHE:HA	2:G:3555:ASN:OD1	2.21	0.41
2:J:575:LEU:HA	2:J:578:ILE:HG12	2.03	0.41
2:J:937:CYS:HB3	2:J:1053:ILE:HB	2.02	0.41
2:J:2340:PHE:HB2	2:J:2435:ARG:HE	1.86	0.41
2:J:3137:LEU:HD12	2:J:3137:LEU:HA	1.91	0.41
2:J:3535:LEU:CD1	2:J:3539:ARG:HH12	2.33	0.41
2:J:4666:VAL:O	2:J:4670:ILE:HG12	2.21	0.41
1:H:49:ARG:HB2	1:H:52:LYS:HG2	2.03	0.40
1:I:29:MET:HG3	1:I:30:LEU:O	2.21	0.40
2:B:533:ASN:HB3	2:B:536:ASN:HB2	2.04	0.40
2:B:691:GLY:HA3	2:B:712:TYR:CD1	2.56	0.40
2:B:788:LYS:HG2	2:B:1629:GLN:HB2	2.02	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:B:2479:LEU:HD22	2:B:2541:PHE:HZ	1.86	0.40
2:B:2801:ASP:HA	2:B:2804:ILE:HG12	2.01	0.40
2:B:2947:ASP:OD1	2:B:2947:ASP:N	2.54	0.40
2:B:3173:TYR:CG	2:B:3243:ILE:HG12	2.56	0.40
2:B:3277:LEU:HB3	2:B:3315:LEU:HD13	2.03	0.40
2:B:3354:LEU:HD13	2:B:3415:TYR:CE2	2.57	0.40
2:B:3592:ILE:HA	2:B:3595:ARG:HE	1.86	0.40
2:B:4851:TYR:HD1	2:B:4916:PHE:CE1	2.39	0.40
2:E:105:HIS:O	2:E:150:MET:HG2	2.22	0.40
2:E:232:THR:OG1	2:E:248:GLU:HG2	2.21	0.40
2:E:294:THR:N	2:E:298:GLY:O	2.39	0.40
2:E:473:ASN:O	2:E:477:LEU:HG	2.21	0.40
2:E:2575:ARG:NH1	2:E:2577:ILE:HG23	2.36	0.40
2:E:2947:ASP:OD1	2:E:2947:ASP:N	2.54	0.40
2:E:3535:LEU:CD1	2:E:3539:ARG:HH12	2.33	0.40
2:G:2419:GLY:O	2:G:2423:MET:HG2	2.21	0.40
2:G:2566:ALA:O	2:G:2569:PHE:HB2	2.21	0.40
2:G:3136:LEU:O	2:G:3140:LEU:HB3	2.20	0.40
2:G:3471:THR:O	2:G:3475:LYS:HG3	2.21	0.40
2:J:866:HIS:ND1	2:J:870:ILE:HB	2.36	0.40
2:J:1131:ARG:HB2	2:J:1179:PHE:CZ	2.56	0.40
2:J:1261:ASP:N	2:J:1261:ASP:OD1	2.53	0.40
2:J:2382:GLU:HA	2:J:2385:ARG:NE	2.35	0.40
2:J:2871:LEU:HD11	2:J:2927:LEU:HD11	2.03	0.40
2:J:3193:CYS:O	2:J:3197:LEU:HG	2.21	0.40
2:J:3592:ILE:HA	2:J:3595:ARG:HE	1.86	0.40
3:F:28:ILE:HD12	3:F:28:ILE:HA	1.93	0.40
1:A:49:ARG:HB2	1:A:52:LYS:HG2	2.03	0.40
1:A:57:LYS:HB2	1:A:57:LYS:HE2	1.75	0.40
1:H:26:TYR:HB2	1:H:101:VAL:HG12	2.03	0.40
2:B:936:GLY:HA3	2:B:1056:PRO:HB3	2.01	0.40
2:B:1252:HIS:CE1	2:B:1254:HIS:HB2	2.56	0.40
2:B:1733:GLU:HG2	2:B:2201:LEU:HD23	2.03	0.40
2:B:2359:ARG:HD3	2:B:2359:ARG:HA	1.82	0.40
2:B:3100:SER:HB3	2:B:3167:ARG:HE	1.85	0.40
2:B:3137:LEU:HD12	2:B:3137:LEU:HA	1.91	0.40
2:B:4546:VAL:HA	2:B:4549:VAL:HG22	2.03	0.40
2:B:4898:GLY:HA2	2:B:4901:ILE:HD12	2.03	0.40
2:E:664:PHE:HB3	2:E:811:CYS:SG	2.62	0.40
2:E:3173:TYR:CG	2:E:3243:ILE:HG12	2.56	0.40
2:E:3354:LEU:HD13	2:E:3415:TYR:HE2	1.86	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:E:4666:VAL:O	2:E:4670:ILE:HG12	2.21	0.40
2:E:4928:LEU:HA	2:E:4928:LEU:HD23	1.89	0.40
2:G:16:THR:HA	2:G:69:LEU:HD22	2.04	0.40
2:G:664:PHE:CE1	2:G:746:CYS:HB2	2.55	0.40
2:G:4655:PHE:O	2:G:4659:ILE:HG12	2.20	0.40
2:G:4847:VAL:O	2:G:4851:TYR:HD2	2.04	0.40
2:G:4898:GLY:HA2	2:G:4901:ILE:HD12	2.03	0.40
2:J:1637:MET:HG3	2:J:1696:HIS:ND1	2.36	0.40
2:J:2912:THR:OG1	2:J:2913:ALA:N	2.54	0.40
2:J:3985:LEU:O	2:J:3989:VAL:HG23	2.21	0.40
3:K:109:THR:OG1	3:K:110:PRO:HD3	2.21	0.40
1:A:16:PRO:HG3	1:A:103:LEU:HD21	2.03	0.40
1:H:40:ARG:H	1:H:40:ARG:HG2	1.72	0.40
2:B:105:HIS:O	2:B:150:MET:HG2	2.22	0.40
2:B:617:ASN:O	2:B:621:ILE:HG13	2.22	0.40
2:B:2352:VAL:O	2:B:2356:LEU:HG	2.22	0.40
2:B:2414:ASN:HB2	2:B:2417:HIS:CE1	2.56	0.40
2:B:3214:ASN:HB2	2:B:3304:CYS:HB3	2.03	0.40
2:B:3347:SER:HB2	2:B:3414:ARG:HG3	2.03	0.40
2:B:3989:VAL:HG13	2:B:4023:MET:HE2	2.03	0.40
2:E:548:VAL:HG21	2:E:582:HIS:CD2	2.52	0.40
2:E:904:HIS:CD2	2:E:907:LEU:H	2.39	0.40
2:E:960:MET:SD	2:E:960:MET:N	2.75	0.40
2:E:2331:TYR:O	2:E:2335:LEU:HG	2.21	0.40
2:E:2575:ARG:O	2:E:2578:MET:HG3	2.21	0.40
2:E:3136:LEU:O	2:E:3140:LEU:HB3	2.20	0.40
2:E:3552:PHE:HA	2:E:3555:ASN:OD1	2.21	0.40
2:G:411:TYR:HB2	2:G:486:LEU:HD21	2.02	0.40
2:G:898:ASP:O	2:G:902:ARG:N	2.54	0.40
2:G:936:GLY:HA3	2:G:1056:PRO:HB3	2.01	0.40
2:G:937:CYS:HB3	2:G:1053:ILE:HB	2.02	0.40
2:G:1092:PHE:HE2	2:G:1100:MET:HE3	1.86	0.40
2:G:2310:CYS:SG	2:G:2313:LEU:HB2	2.62	0.40
2:G:2758:PHE:O	2:G:2762:THR:HG23	2.20	0.40
2:G:3246:LEU:HD22	2:G:3280:TYR:CE2	2.56	0.40
2:G:4020:GLN:O	2:G:4024:VAL:HG23	2.21	0.40
2:J:866:HIS:CD2	2:J:869:ARG:HH21	2.39	0.40
2:J:2575:ARG:NH1	2:J:2577:ILE:HG23	2.37	0.40
2:J:3186:LEU:HG	2:J:3190:LEU:HD21	2.02	0.40
2:J:3347:SER:HB2	2:J:3414:ARG:HG3	2.03	0.40
2:J:3545:THR:O	2:J:3549:VAL:HG13	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:3731:LYS:HZ2	2:J:3735:LEU:HD21	1.86	0.40
1:A:29:MET:HG3	1:A:30:LEU:O	2.21	0.40
2:B:1509:ILE:HG22	2:B:1511:HIS:H	1.86	0.40
2:B:2340:PHE:HB2	2:B:2435:ARG:HE	1.86	0.40
2:B:2867:LEU:HB2	2:B:2928:LYS:HZ3	1.84	0.40
2:B:2912:THR:OG1	2:B:2913:ALA:N	2.54	0.40
2:B:3462:ASN:HB2	2:B:3464:ILE:HG12	2.04	0.40
2:B:4020:GLN:O	2:B:4024:VAL:HG23	2.21	0.40
2:B:4666:VAL:O	2:B:4670:ILE:HG12	2.22	0.40
2:E:1252:HIS:CE1	2:E:1254:HIS:HB2	2.56	0.40
2:E:1981:MET:CE	2:E:1981:MET:HA	2.52	0.40
2:E:3285:TRP:CD1	2:E:3312:LEU:HD11	2.56	0.40
2:G:2479:LEU:HD22	2:G:2541:PHE:HZ	1.86	0.40
2:G:2578:MET:HE2	2:G:2578:MET:HB2	2.01	0.40
2:G:4048:LEU:HD23	2:G:4048:LEU:HA	1.88	0.40
2:J:2331:TYR:O	2:J:2335:LEU:HG	2.21	0.40
2:J:3462:ASN:HB2	2:J:3464:ILE:HG12	2.04	0.40
2:J:3471:THR:O	2:J:3475:LYS:HG3	2.21	0.40
2:J:3892:CYS:SG	2:J:3903:LEU:HD12	2.62	0.40
3:M:83:ASN:OD1	3:M:83:ASN:N	2.53	0.40
1:A:3:GLU:HB2	1:A:75:THR:HB	2.02	0.40
1:D:29:MET:HG3	1:D:30:LEU:O	2.21	0.40
2:B:16:THR:HA	2:B:69:LEU:HD22	2.04	0.40
2:B:1131:ARG:HB2	2:B:1179:PHE:CZ	2.56	0.40
2:B:1931:LEU:HD13	2:B:1935:VAL:HG12	2.03	0.40
2:B:2541:PHE:N	2:B:2541:PHE:CD1	2.87	0.40
2:E:2626:LEU:CD2	2:E:2640:PRO:HB3	2.51	0.40
2:E:2912:THR:OG1	2:E:2913:ALA:N	2.54	0.40
2:E:3835:LEU:HD22	2:E:3880:PHE:CZ	2.56	0.40
2:E:3892:CYS:SG	2:E:3903:LEU:HD12	2.62	0.40
2:E:4631:PHE:CE2	2:E:4633:GLU:HB2	2.57	0.40
2:G:866:HIS:ND1	2:G:870:ILE:HB	2.36	0.40
2:G:1436:SER:OG	2:G:1565:GLU:HB2	2.22	0.40
2:G:1815:LEU:O	2:G:1819:VAL:HG23	2.22	0.40
2:G:2871:LEU:HD11	2:G:2927:LEU:HD11	2.03	0.40
2:G:3154:ASP:OD1	2:G:3154:ASP:N	2.53	0.40
2:J:105:HIS:O	2:J:150:MET:HG2	2.22	0.40
2:J:424:LYS:HE2	2:J:424:LYS:HB2	1.92	0.40
2:J:1088:TRP:HB2	2:J:1153:ILE:HG22	2.03	0.40
2:J:1733:GLU:HG2	2:J:2201:LEU:HD23	2.03	0.40
2:J:2310:CYS:SG	2:J:2313:LEU:HB2	2.62	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:J:2419:GLY:O	2:J:2423:MET:HG2	2.21	0.40
2:J:2575:ARG:NH1	2:J:2578:MET:HB3	2.37	0.40
2:J:2575:ARG:O	2:J:2578:MET:HG3	2.21	0.40
2:J:3214:ASN:HB2	2:J:3304:CYS:HB3	2.02	0.40
2:J:3893:GLU:HA	2:J:3967:GLU:OE2	2.21	0.40
2:J:4631:PHE:CE2	2:J:4633:GLU:HB2	2.57	0.40
2:J:4847:VAL:O	2:J:4851:TYR:HD2	2.04	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	A	105/107 (98%)	100 (95%)	5 (5%)	0	100	100
1	D	105/107 (98%)	103 (98%)	2 (2%)	0	100	100
1	H	105/107 (98%)	101 (96%)	4 (4%)	0	100	100
1	I	105/107 (98%)	103 (98%)	2 (2%)	0	100	100
2	B	4264/5027 (85%)	4160 (98%)	103 (2%)	1 (0%)	100	100
2	E	4264/5027 (85%)	4162 (98%)	102 (2%)	0	100	100
2	G	4280/5027 (85%)	4175 (98%)	105 (2%)	0	100	100
2	J	4264/5027 (85%)	4161 (98%)	103 (2%)	0	100	100
3	C	124/137 (90%)	116 (94%)	8 (6%)	0	100	100
3	F	124/137 (90%)	116 (94%)	8 (6%)	0	100	100
3	K	124/137 (90%)	116 (94%)	8 (6%)	0	100	100
3	M	124/137 (90%)	116 (94%)	8 (6%)	0	100	100
All	All	17988/21084 (85%)	17529 (97%)	458 (2%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	375	LYS

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	A	87/88 (99%)	85 (98%)	2 (2%)	45	68
1	D	87/88 (99%)	85 (98%)	2 (2%)	45	68
1	H	87/88 (99%)	85 (98%)	2 (2%)	45	68
1	I	87/88 (99%)	85 (98%)	2 (2%)	45	68
2	B	3662/4270 (86%)	3580 (98%)	82 (2%)	47	69
2	E	3662/4270 (86%)	3581 (98%)	81 (2%)	47	69
2	G	3674/4270 (86%)	3594 (98%)	80 (2%)	47	69
2	J	3662/4270 (86%)	3580 (98%)	82 (2%)	47	69
3	C	103/114 (90%)	99 (96%)	4 (4%)	27	55
3	F	103/114 (90%)	99 (96%)	4 (4%)	27	55
3	K	103/114 (90%)	99 (96%)	4 (4%)	27	55
3	M	103/114 (90%)	99 (96%)	4 (4%)	27	55
All	All	15420/17888 (86%)	15071 (98%)	349 (2%)	46	68

All (349) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	29	MET
1	A	94	ASN
1	D	29	MET
1	D	94	ASN
1	H	29	MET
1	H	94	ASN
1	I	29	MET
1	I	94	ASN
2	B	116	MET
2	B	125	ARG

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	127	MET
2	B	269	TRP
2	B	280	LEU
2	B	283	ARG
2	B	299	LEU
2	B	306	LYS
2	B	341	TYR
2	B	379	HIS
2	B	631	LEU
2	B	702	TRP
2	B	866	HIS
2	B	877	ASN
2	B	902	ARG
2	B	955	LEU
2	B	959	TYR
2	B	960	MET
2	B	1112	ASP
2	B	1133	HIS
2	B	1143	TRP
2	B	1229	ASN
2	B	1270	LEU
2	B	1286	MET
2	B	1421	ARG
2	B	1435	TYR
2	B	1532	ASN
2	B	1647	CYS
2	B	1981	MET
2	B	2178	MET
2	B	2256	TYR
2	B	2305	CYS
2	B	2312	MET
2	B	2326	CYS
2	B	2340	PHE
2	B	2392	ARG
2	B	2475	GLN
2	B	2530	MET
2	B	2574	HIS
2	B	2591	ARG
2	B	2618	MET
2	B	2634	ASN
2	B	2664	PHE
2	B	2688	HIS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	B	2738	ARG
2	B	2797	PHE
2	B	2806	ARG
2	B	2827	ARG
2	B	2869	ARG
2	B	2872	GLN
2	B	2914	LYS
2	B	2947	ASP
2	B	2992	GLU
2	B	3034	LYS
2	B	3043	PHE
2	B	3053	ARG
2	B	3096	PHE
2	B	3144	PHE
2	B	3158	LEU
2	B	3239	MET
2	B	3334	TRP
2	B	3348	ARG
2	B	3355	HIS
2	B	3366	ARG
2	B	3451	PHE
2	B	3516	LYS
2	B	3720	TYR
2	B	3782	MET
2	B	3933	PHE
2	B	3966	THR
2	B	4000	MET
2	B	4042	ARG
2	B	4044	MET
2	B	4077	PHE
2	B	4080	TYR
2	B	4159	ARG
2	B	4161	ARG
2	B	4207	MET
2	B	4655	PHE
2	B	4767	TRP
2	B	4844	LEU
2	B	4933	GLN
2	E	116	MET
2	E	125	ARG
2	E	127	MET
2	E	269	TRP

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	E	280	LEU
2	E	283	ARG
2	E	299	LEU
2	E	306	LYS
2	E	341	TYR
2	E	379	HIS
2	E	631	LEU
2	E	702	TRP
2	E	866	HIS
2	E	877	ASN
2	E	902	ARG
2	E	955	LEU
2	E	959	TYR
2	E	960	MET
2	E	1112	ASP
2	E	1133	HIS
2	E	1143	TRP
2	E	1170	MET
2	E	1229	ASN
2	E	1270	LEU
2	E	1286	MET
2	E	1421	ARG
2	E	1435	TYR
2	E	1532	ASN
2	E	1647	CYS
2	E	1981	MET
2	E	2178	MET
2	E	2256	TYR
2	E	2305	CYS
2	E	2312	MET
2	E	2326	CYS
2	E	2340	PHE
2	E	2392	ARG
2	E	2475	GLN
2	E	2530	MET
2	E	2591	ARG
2	E	2618	MET
2	E	2634	ASN
2	E	2664	PHE
2	E	2688	HIS
2	E	2738	ARG
2	E	2797	PHE

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	E	2806	ARG
2	E	2827	ARG
2	E	2869	ARG
2	E	2872	GLN
2	E	2914	LYS
2	E	2947	ASP
2	E	2992	GLU
2	E	3034	LYS
2	E	3043	PHE
2	E	3053	ARG
2	E	3096	PHE
2	E	3144	PHE
2	E	3158	LEU
2	E	3239	MET
2	E	3334	TRP
2	E	3348	ARG
2	E	3355	HIS
2	E	3366	ARG
2	E	3451	PHE
2	E	3516	LYS
2	E	3720	TYR
2	E	3782	MET
2	E	3933	PHE
2	E	4000	MET
2	E	4042	ARG
2	E	4044	MET
2	E	4077	PHE
2	E	4080	TYR
2	E	4159	ARG
2	E	4161	ARG
2	E	4207	MET
2	E	4655	PHE
2	E	4767	TRP
2	E	4844	LEU
2	E	4933	GLN
2	G	116	MET
2	G	125	ARG
2	G	127	MET
2	G	269	TRP
2	G	280	LEU
2	G	283	ARG
2	G	299	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	G	306	LYS
2	G	341	TYR
2	G	379	HIS
2	G	631	LEU
2	G	702	TRP
2	G	866	HIS
2	G	877	ASN
2	G	902	ARG
2	G	955	LEU
2	G	959	TYR
2	G	960	MET
2	G	1112	ASP
2	G	1133	HIS
2	G	1143	TRP
2	G	1229	ASN
2	G	1270	LEU
2	G	1286	MET
2	G	1421	ARG
2	G	1435	TYR
2	G	1532	ASN
2	G	1647	CYS
2	G	1981	MET
2	G	2178	MET
2	G	2256	TYR
2	G	2305	CYS
2	G	2312	MET
2	G	2326	CYS
2	G	2340	PHE
2	G	2392	ARG
2	G	2475	GLN
2	G	2530	MET
2	G	2591	ARG
2	G	2618	MET
2	G	2634	ASN
2	G	2664	PHE
2	G	2688	HIS
2	G	2738	ARG
2	G	2797	PHE
2	G	2806	ARG
2	G	2827	ARG
2	G	2869	ARG
2	G	2872	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	G	2914	LYS
2	G	2947	ASP
2	G	2992	GLU
2	G	3034	LYS
2	G	3043	PHE
2	G	3053	ARG
2	G	3096	PHE
2	G	3144	PHE
2	G	3158	LEU
2	G	3239	MET
2	G	3334	TRP
2	G	3348	ARG
2	G	3355	HIS
2	G	3366	ARG
2	G	3451	PHE
2	G	3516	LYS
2	G	3720	TYR
2	G	3782	MET
2	G	3933	PHE
2	G	4000	MET
2	G	4042	ARG
2	G	4044	MET
2	G	4077	PHE
2	G	4080	TYR
2	G	4159	ARG
2	G	4161	ARG
2	G	4207	MET
2	G	4655	PHE
2	G	4767	TRP
2	G	4844	LEU
2	G	4933	GLN
2	J	116	MET
2	J	125	ARG
2	J	127	MET
2	J	269	TRP
2	J	280	LEU
2	J	283	ARG
2	J	299	LEU
2	J	306	LYS
2	J	341	TYR
2	J	379	HIS
2	J	631	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	J	702	TRP
2	J	866	HIS
2	J	877	ASN
2	J	902	ARG
2	J	955	LEU
2	J	959	TYR
2	J	960	MET
2	J	1112	ASP
2	J	1133	HIS
2	J	1143	TRP
2	J	1229	ASN
2	J	1270	LEU
2	J	1286	MET
2	J	1421	ARG
2	J	1435	TYR
2	J	1532	ASN
2	J	1647	CYS
2	J	1981	MET
2	J	2178	MET
2	J	2256	TYR
2	J	2305	CYS
2	J	2312	MET
2	J	2326	CYS
2	J	2340	PHE
2	J	2392	ARG
2	J	2475	GLN
2	J	2530	MET
2	J	2591	ARG
2	J	2618	MET
2	J	2634	ASN
2	J	2664	PHE
2	J	2688	HIS
2	J	2738	ARG
2	J	2797	PHE
2	J	2806	ARG
2	J	2827	ARG
2	J	2869	ARG
2	J	2872	GLN
2	J	2914	LYS
2	J	2947	ASP
2	J	2992	GLU
2	J	3034	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	J	3043	PHE
2	J	3053	ARG
2	J	3096	PHE
2	J	3144	PHE
2	J	3158	LEU
2	J	3239	MET
2	J	3250	MET
2	J	3334	TRP
2	J	3348	ARG
2	J	3355	HIS
2	J	3366	ARG
2	J	3451	PHE
2	J	3516	LYS
2	J	3720	TYR
2	J	3782	MET
2	J	3933	PHE
2	J	4000	MET
2	J	4042	ARG
2	J	4044	MET
2	J	4077	PHE
2	J	4080	TYR
2	J	4159	ARG
2	J	4161	ARG
2	J	4207	MET
2	J	4655	PHE
2	J	4767	TRP
2	J	4844	LEU
2	J	4933	GLN
2	J	5014	TYR
3	C	37	TYR
3	C	98	ASP
3	C	104	TYR
3	C	105	ASN
3	F	37	TYR
3	F	98	ASP
3	F	104	TYR
3	F	105	ASN
3	K	37	TYR
3	K	98	ASP
3	K	104	TYR
3	K	105	ASN
3	M	37	TYR

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
3	M	98	ASP
3	M	104	TYR
3	M	105	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (53) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	25	HIS
1	A	65	GLN
1	H	25	HIS
1	I	25	HIS
2	B	23	GLN
2	B	203	ASN
2	B	273	HIS
2	B	879	HIS
2	B	904	HIS
2	B	1220	GLN
2	B	1300	HIS
2	B	3318	ASN
2	B	3605	HIS
2	B	3960	GLN
2	B	3970	GLN
2	E	23	GLN
2	E	203	ASN
2	E	273	HIS
2	E	879	HIS
2	E	904	HIS
2	E	1300	HIS
2	E	2574	HIS
2	E	3311	HIS
2	E	3318	ASN
2	E	3605	HIS
2	E	3960	GLN
2	E	3970	GLN
2	E	4714	ASN
2	G	23	GLN
2	G	203	ASN
2	G	273	HIS
2	G	879	HIS
2	G	1300	HIS
2	G	2574	HIS
2	G	3318	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	G	3605	HIS
2	G	3860	ASN
2	G	3870	ASN
2	G	3960	GLN
2	G	3970	GLN
2	J	23	GLN
2	J	203	ASN
2	J	273	HIS
2	J	879	HIS
2	J	904	HIS
2	J	1220	GLN
2	J	1300	HIS
2	J	3318	ASN
2	J	3605	HIS
3	C	105	ASN
3	F	105	ASN
3	K	105	ASN
3	M	105	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 16 ligands modelled in this entry, 8 are monoatomic - leaving 8 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
5	ATP	G	5102	-	26,33,33	0.59	0	31,52,52	0.82	2 (6%)
6	CFF	J	5103	-	8,15,15	2.40	3 (37%)	8,23,23	1.18	1 (12%)
5	ATP	E	5102	-	26,33,33	0.59	0	31,52,52	0.81	2 (6%)
5	ATP	B	5102	-	26,33,33	0.59	0	31,52,52	0.81	2 (6%)
5	ATP	J	5102	-	26,33,33	0.60	0	31,52,52	0.81	2 (6%)
6	CFF	E	5103	-	8,15,15	2.39	3 (37%)	8,23,23	1.18	1 (12%)
6	CFF	B	5103	-	8,15,15	2.39	3 (37%)	8,23,23	1.16	1 (12%)
6	CFF	G	5103	-	8,15,15	2.40	3 (37%)	8,23,23	1.16	1 (12%)

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
5	ATP	G	5102	-	-	7/18/38/38	0/3/3/3
6	CFF	J	5103	-	-	-	0/2/2/2
5	ATP	E	5102	-	-	7/18/38/38	0/3/3/3
5	ATP	B	5102	-	-	7/18/38/38	0/3/3/3
5	ATP	J	5102	-	-	7/18/38/38	0/3/3/3
6	CFF	E	5103	-	-	-	0/2/2/2
6	CFF	B	5103	-	-	-	0/2/2/2
6	CFF	G	5103	-	-	-	0/2/2/2

All (12) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	B	5103	CFF	C5-C4	4.57	1.45	1.39
6	J	5103	CFF	C5-C4	4.49	1.45	1.39
6	G	5103	CFF	C5-C4	4.47	1.45	1.39
6	E	5103	CFF	C5-C4	4.46	1.45	1.39
6	G	5103	CFF	C5-C6	4.35	1.48	1.41
6	J	5103	CFF	C5-C6	4.34	1.48	1.41
6	E	5103	CFF	C5-C6	4.34	1.48	1.41
6	B	5103	CFF	C5-C6	4.30	1.48	1.41
6	E	5103	CFF	C6-N1	2.29	1.41	1.38
6	J	5103	CFF	C6-N1	2.28	1.41	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	G	5103	CFF	C6-N1	2.27	1.41	1.38
6	B	5103	CFF	C6-N1	2.12	1.41	1.38

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	G	5102	ATP	C5-C6-N6	2.29	123.84	120.35
6	J	5103	CFF	C5-C6-N1	-2.28	115.77	118.20
5	B	5102	ATP	C5-C6-N6	2.27	123.80	120.35
5	E	5102	ATP	C5-C6-N6	2.27	123.80	120.35
5	J	5102	ATP	C5-C6-N6	2.27	123.80	120.35
6	B	5103	CFF	C5-C6-N1	-2.25	115.80	118.20
6	G	5103	CFF	C5-C6-N1	-2.24	115.81	118.20
6	E	5103	CFF	C5-C6-N1	-2.24	115.81	118.20
5	J	5102	ATP	PB-O3B-PG	2.03	139.80	132.83
5	E	5102	ATP	PB-O3B-PG	2.02	139.77	132.83
5	B	5102	ATP	PB-O3B-PG	2.01	139.74	132.83
5	G	5102	ATP	PB-O3B-PG	2.01	139.74	132.83

There are no chirality outliers.

All (28) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
5	B	5102	ATP	PB-O3B-PG-O2G
5	B	5102	ATP	C5'-O5'-PA-O3A
5	E	5102	ATP	PB-O3B-PG-O2G
5	E	5102	ATP	C5'-O5'-PA-O3A
5	G	5102	ATP	PB-O3B-PG-O2G
5	G	5102	ATP	C5'-O5'-PA-O3A
5	J	5102	ATP	PB-O3B-PG-O2G
5	J	5102	ATP	C5'-O5'-PA-O3A
5	B	5102	ATP	O4'-C4'-C5'-O5'
5	E	5102	ATP	O4'-C4'-C5'-O5'
5	G	5102	ATP	O4'-C4'-C5'-O5'
5	J	5102	ATP	O4'-C4'-C5'-O5'
5	B	5102	ATP	C3'-C4'-C5'-O5'
5	E	5102	ATP	C3'-C4'-C5'-O5'
5	G	5102	ATP	C3'-C4'-C5'-O5'
5	J	5102	ATP	C3'-C4'-C5'-O5'
5	B	5102	ATP	C5'-O5'-PA-O1A
5	E	5102	ATP	C5'-O5'-PA-O1A
5	G	5102	ATP	C5'-O5'-PA-O1A

Continued on next page...

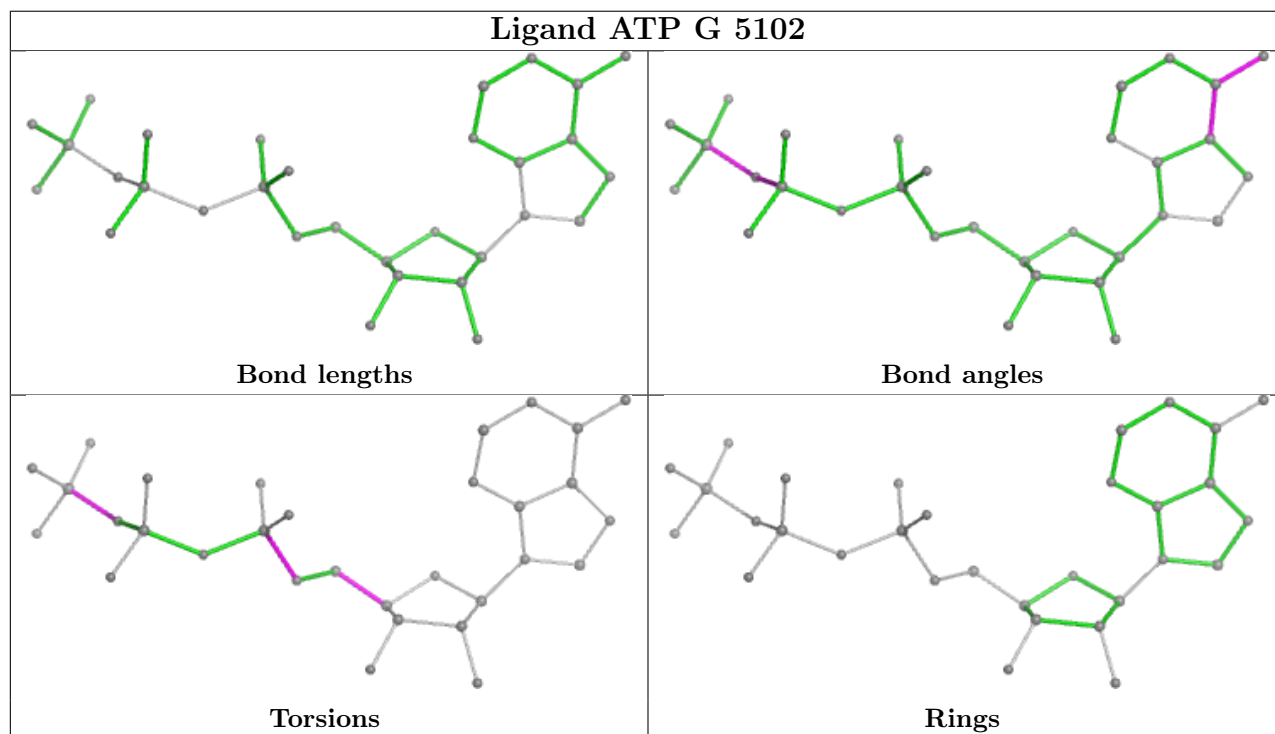
Continued from previous page...

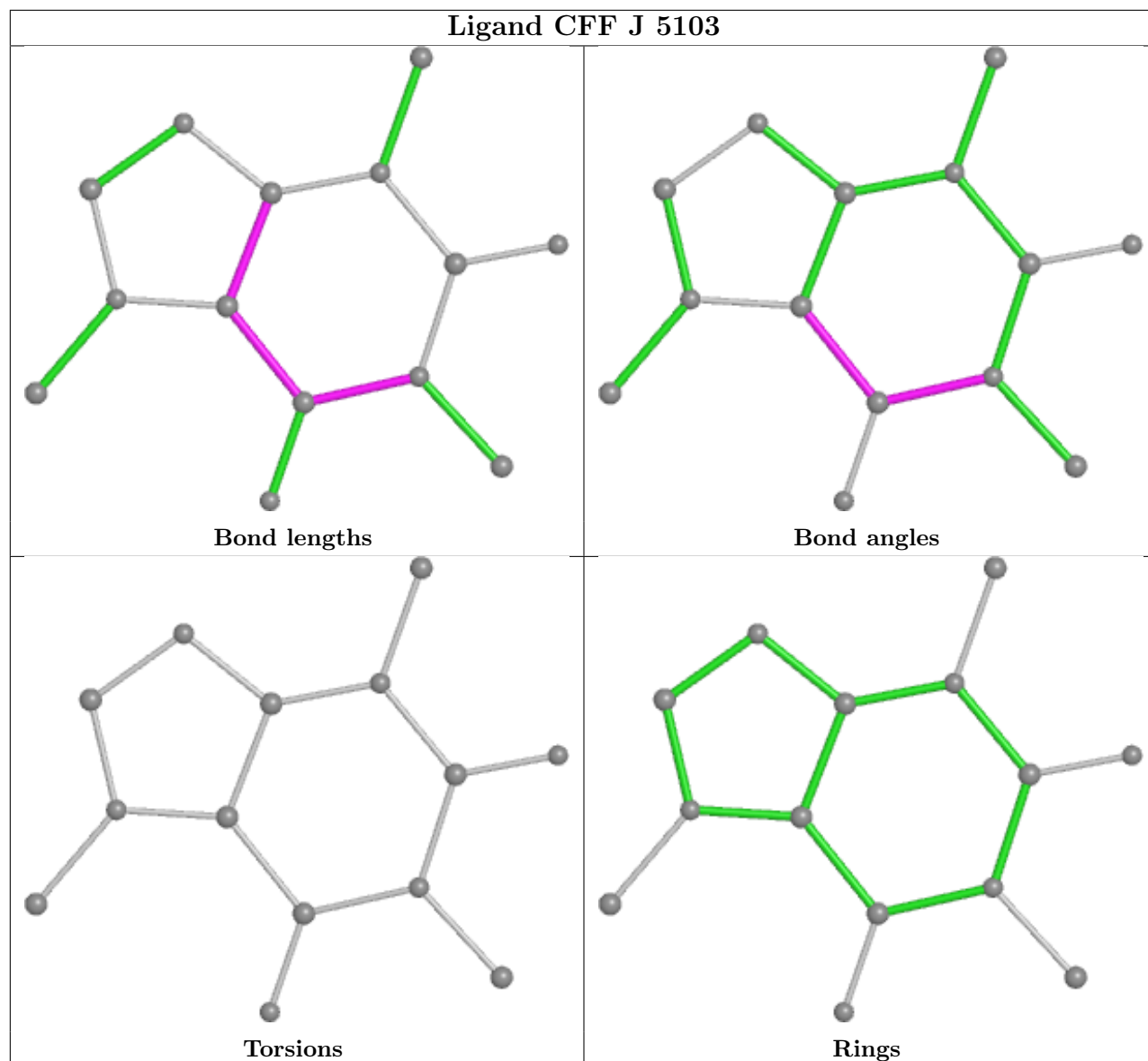
Mol	Chain	Res	Type	Atoms
5	J	5102	ATP	C5'-O5'-PA-O1A
5	B	5102	ATP	PB-O3B-PG-O1G
5	E	5102	ATP	PB-O3B-PG-O1G
5	G	5102	ATP	PB-O3B-PG-O1G
5	J	5102	ATP	PB-O3B-PG-O1G
5	B	5102	ATP	PB-O3B-PG-O3G
5	E	5102	ATP	PB-O3B-PG-O3G
5	G	5102	ATP	PB-O3B-PG-O3G
5	J	5102	ATP	PB-O3B-PG-O3G

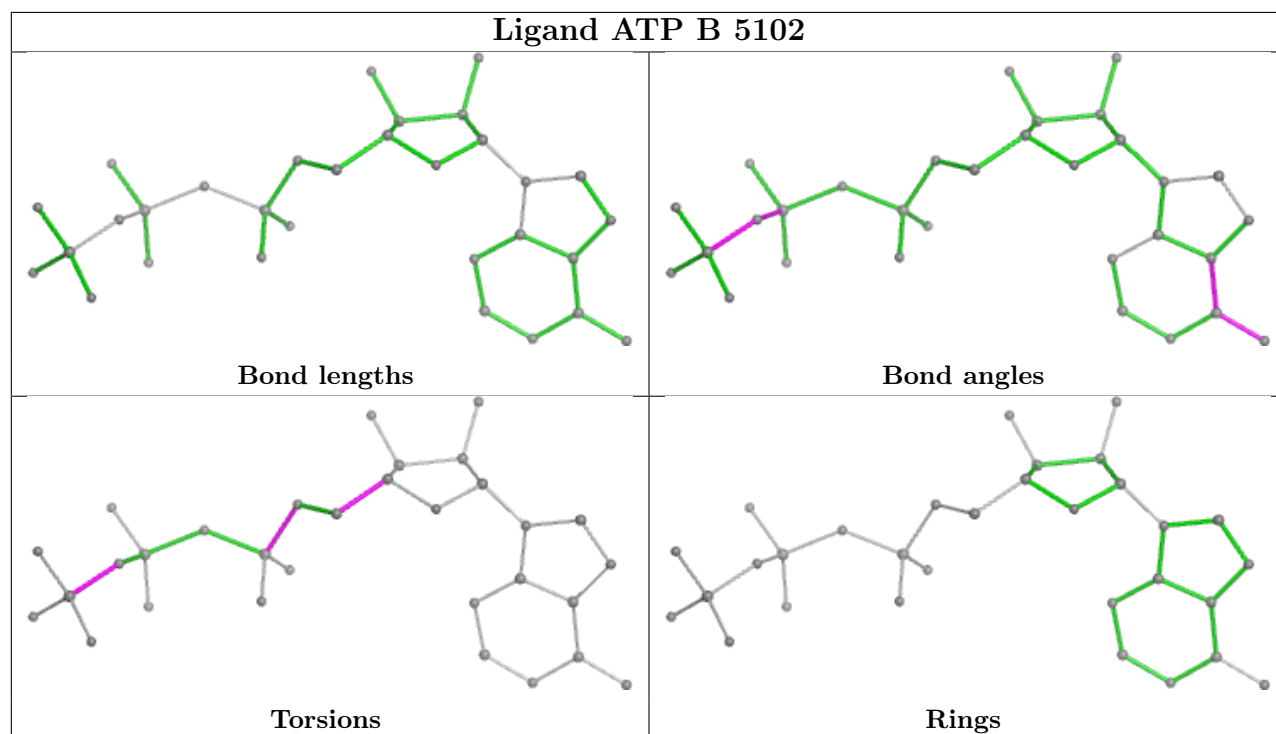
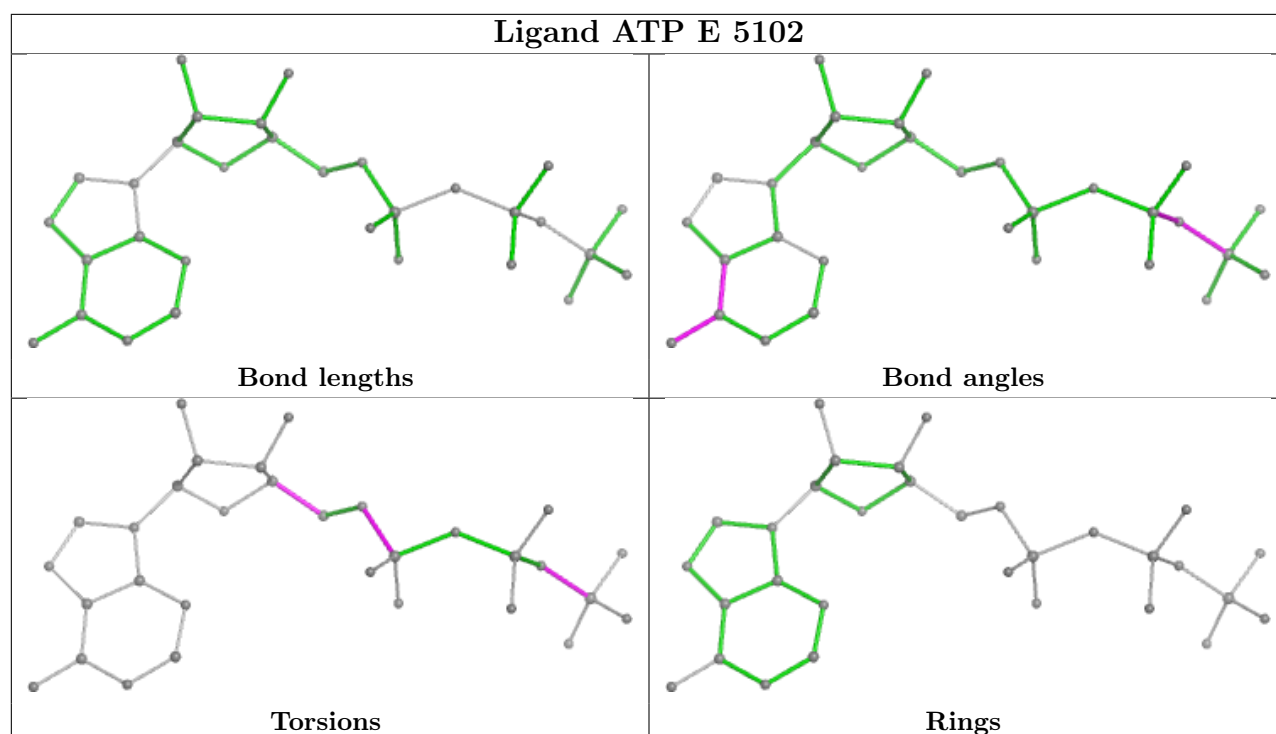
There are no ring outliers.

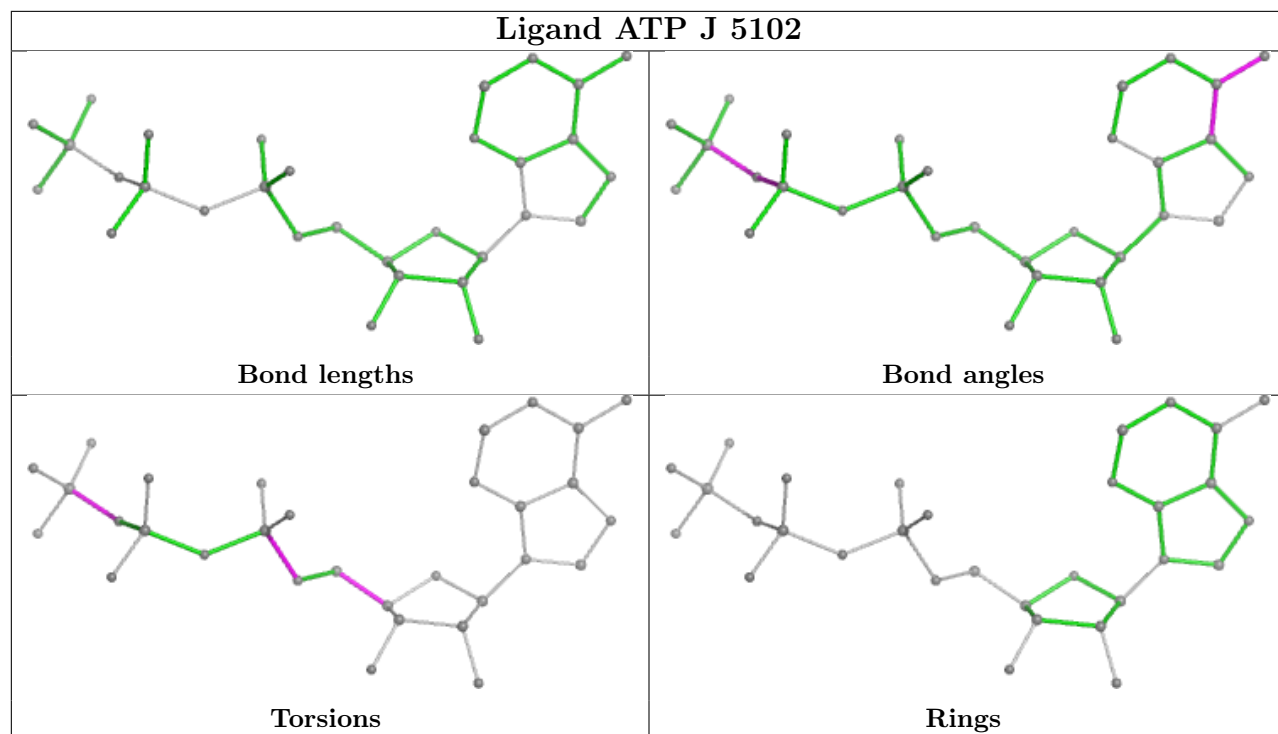
No monomer is involved in short contacts.

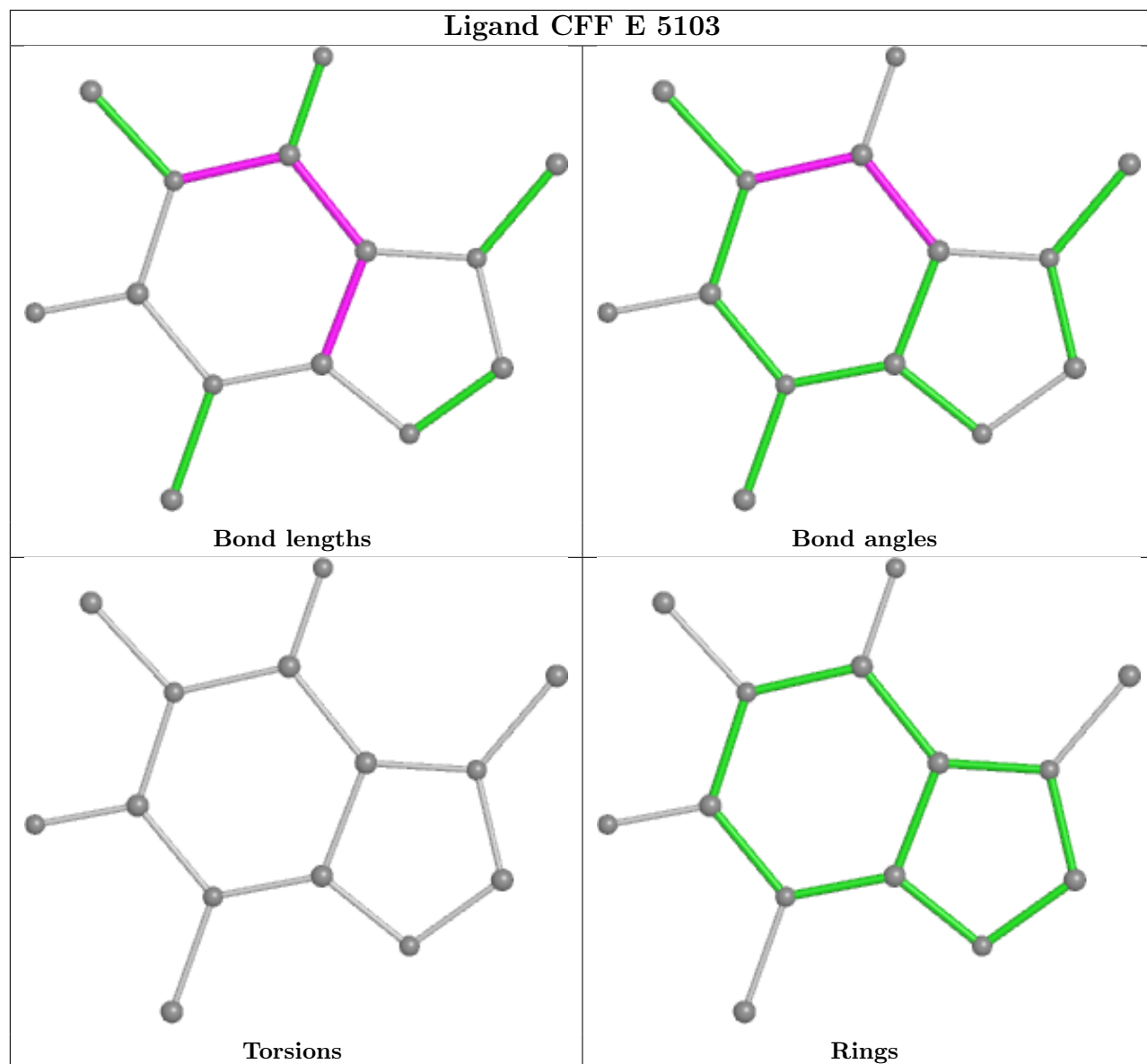
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

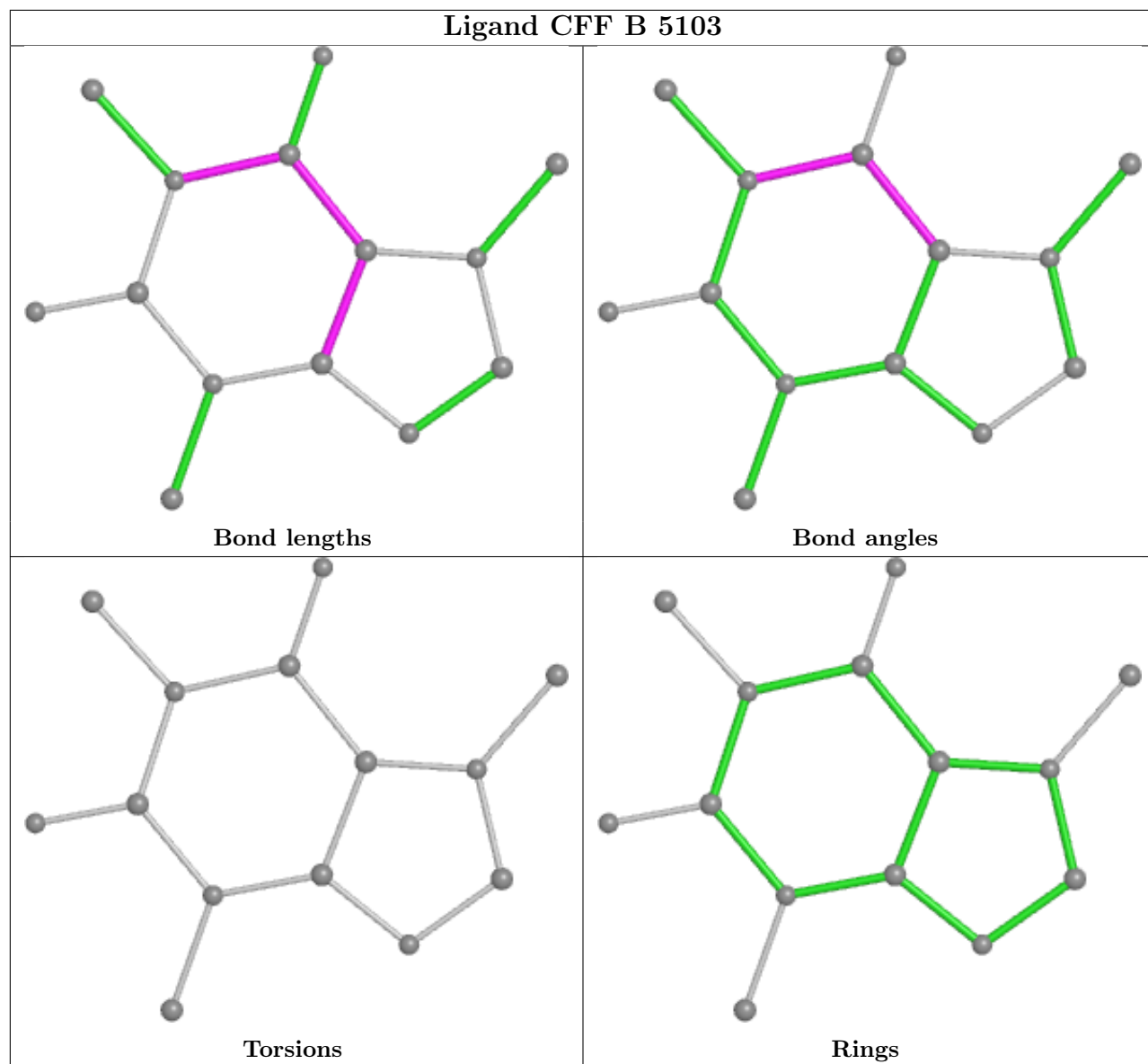


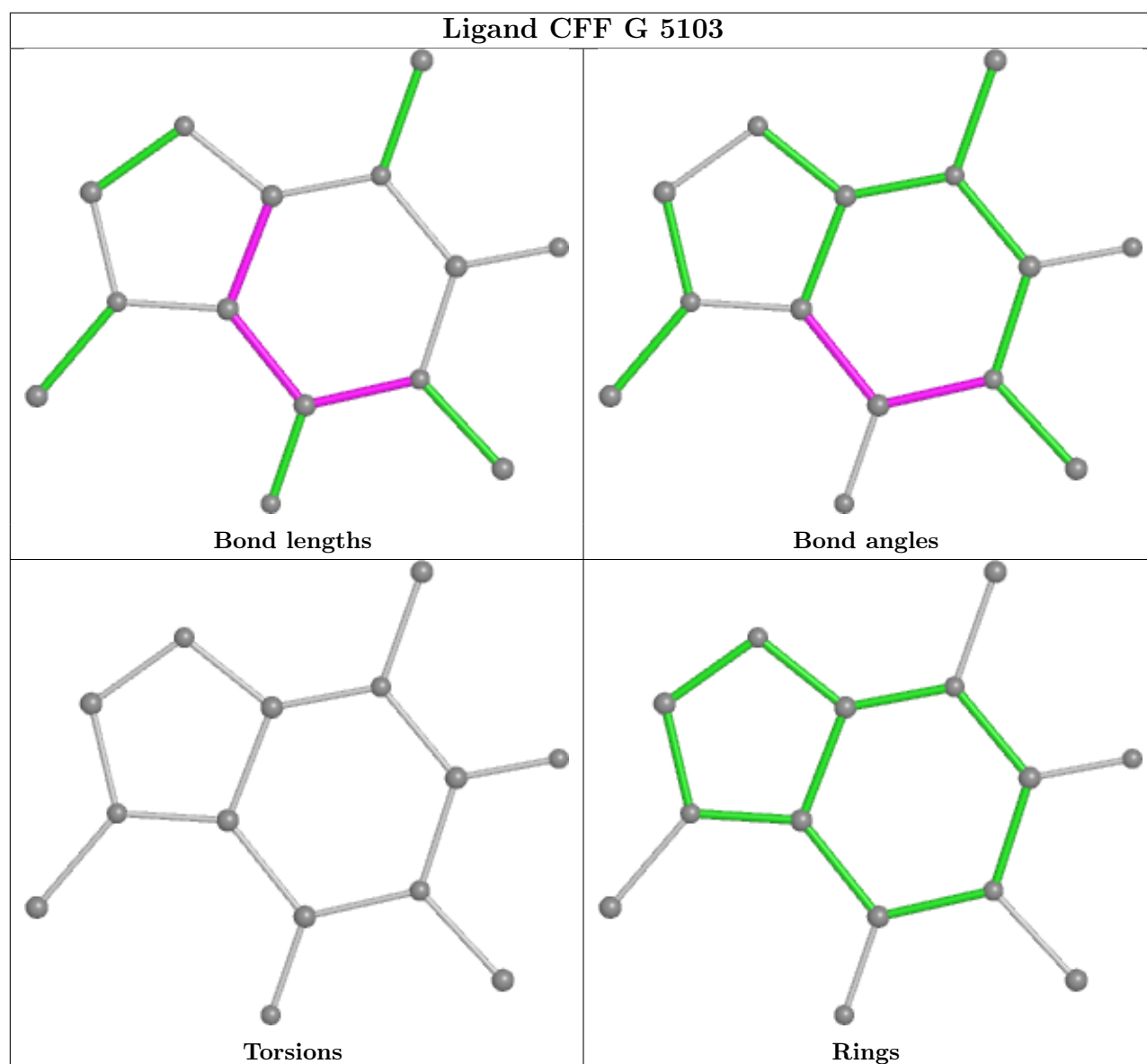












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

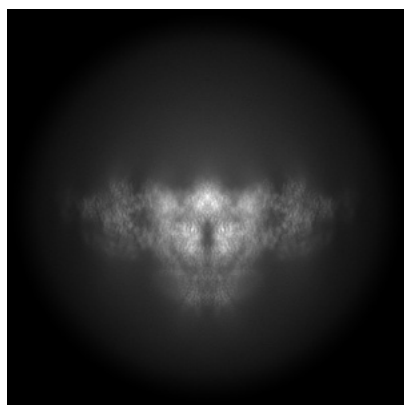
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-19472. These allow visual inspection of the internal detail of the map and identification of artifacts.

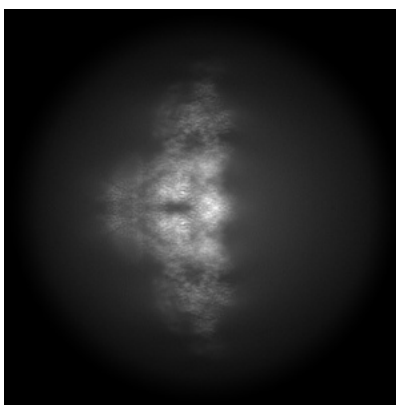
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

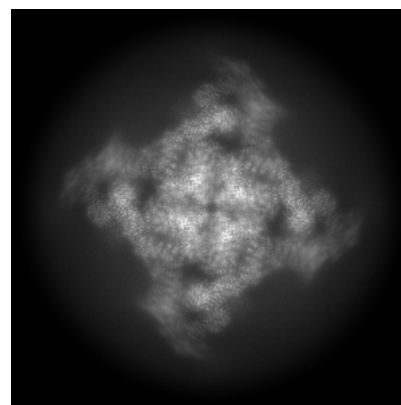
6.1.1 Primary map



X



Y

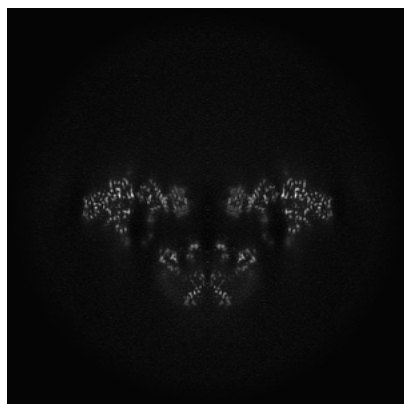


Z

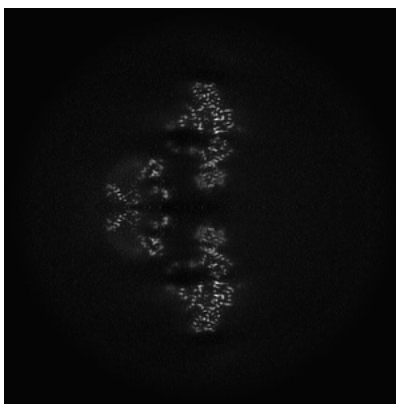
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

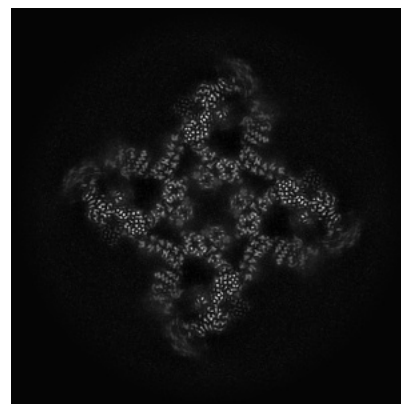
6.2.1 Primary map



X Index: 168



Y Index: 168

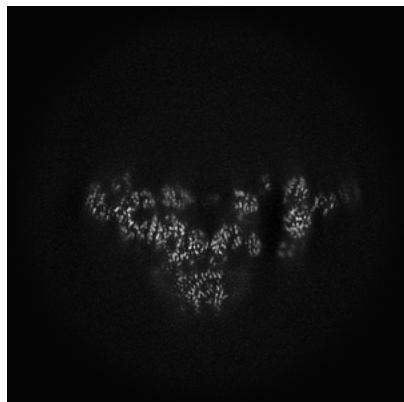


Z Index: 168

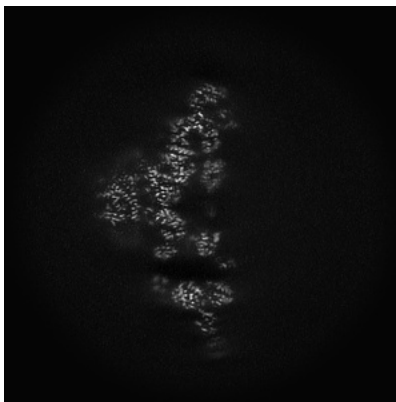
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

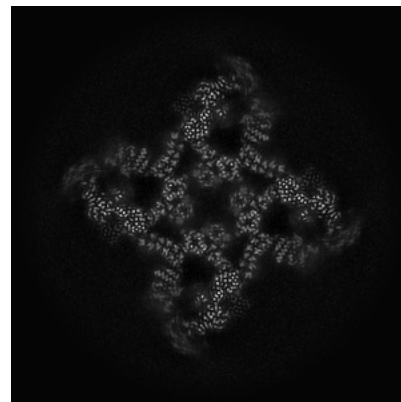
6.3.1 Primary map



X Index: 178



Y Index: 178

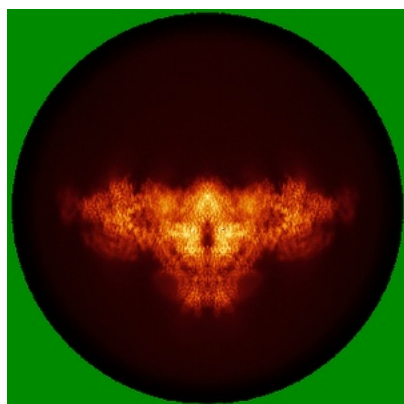


Z Index: 168

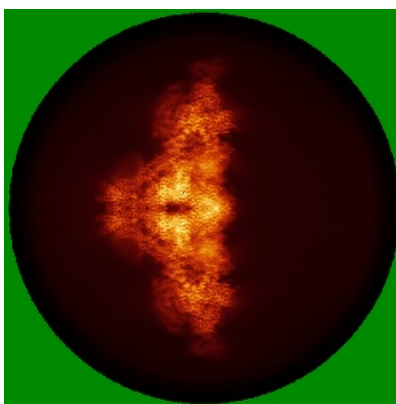
The images above show the largest variance slices of the map in three orthogonal directions.

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

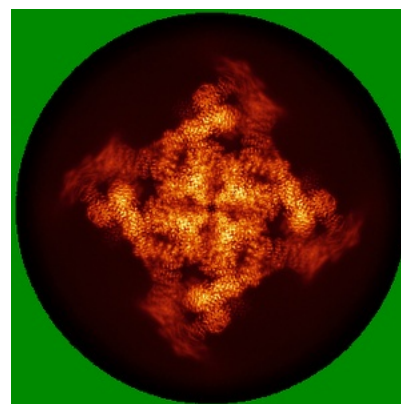
6.4.1 Primary map



X



Y

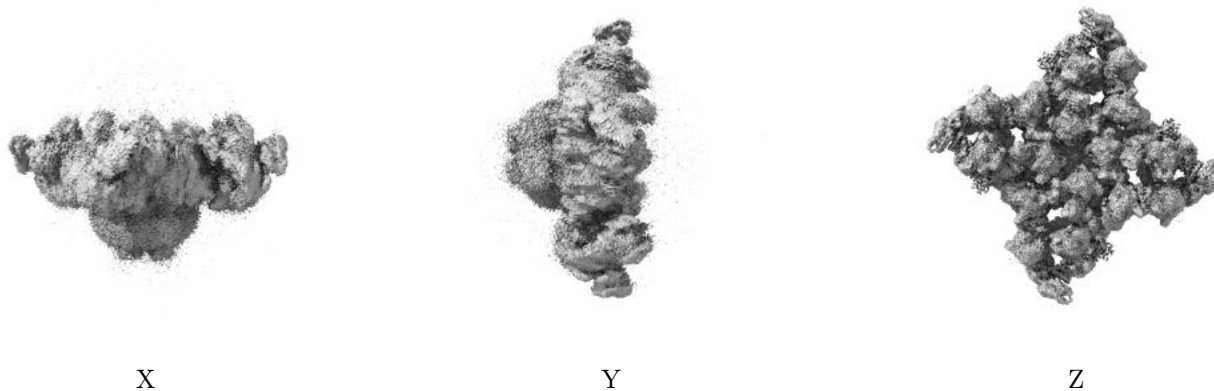


Z

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 0.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

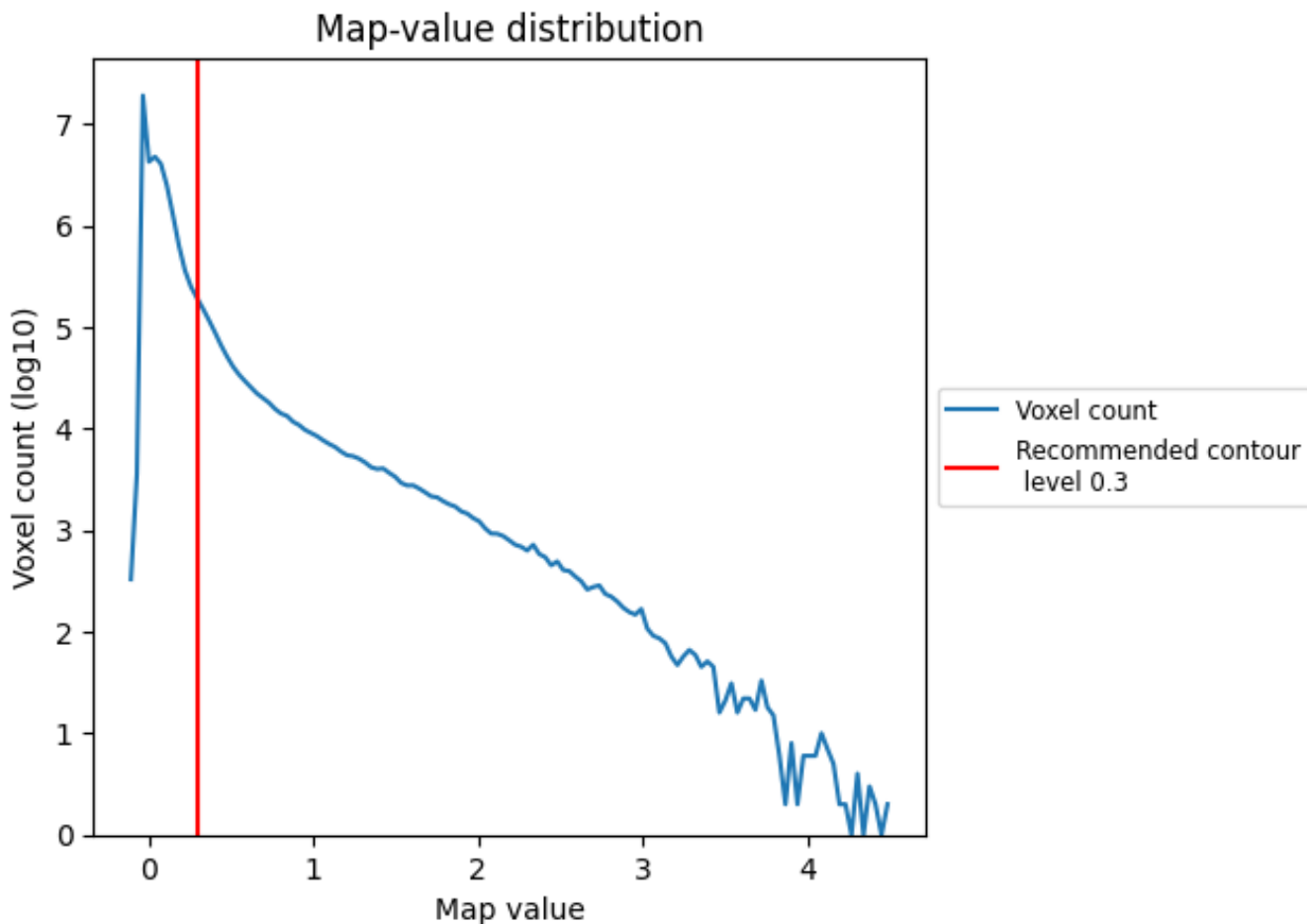
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

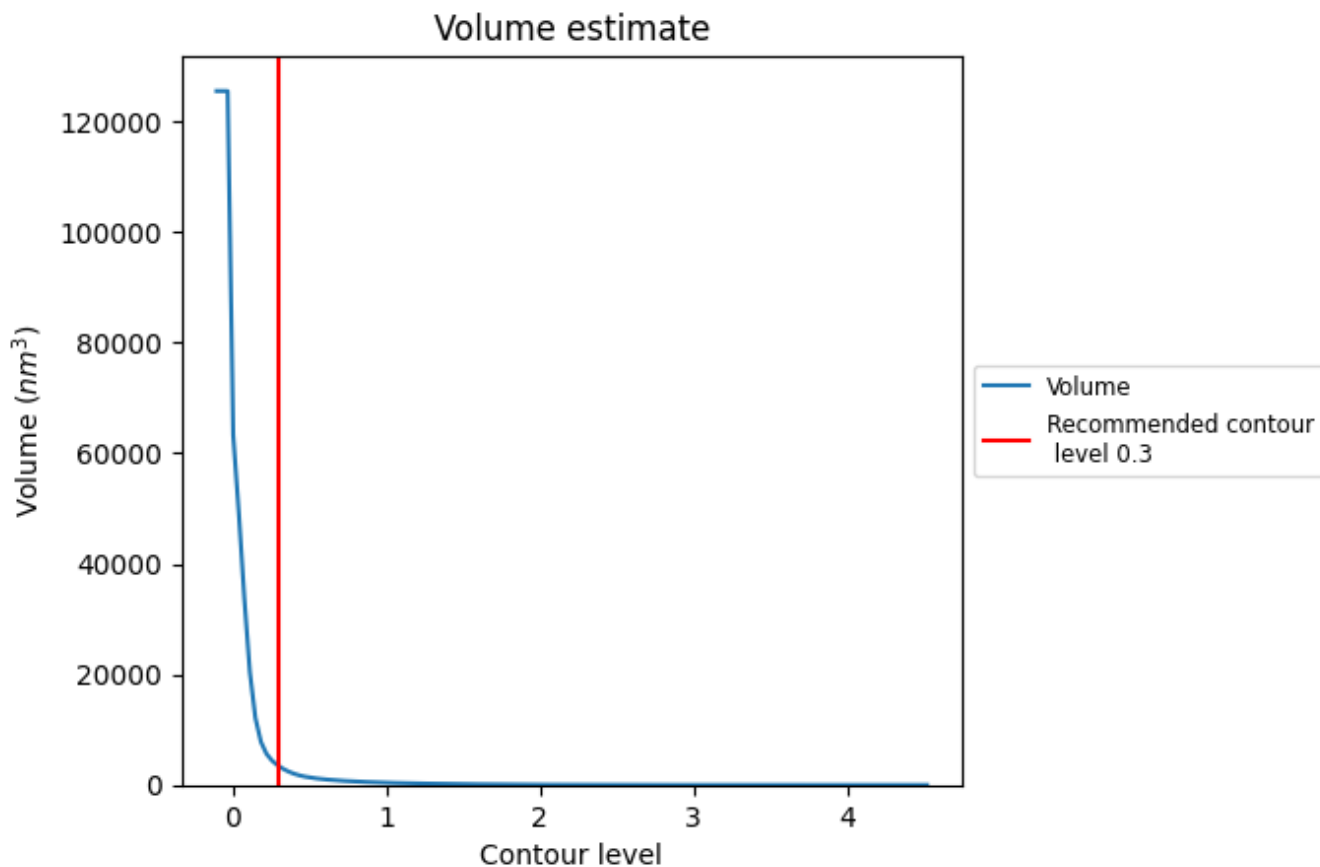
This section contains the results of statistical analysis of the map.

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.

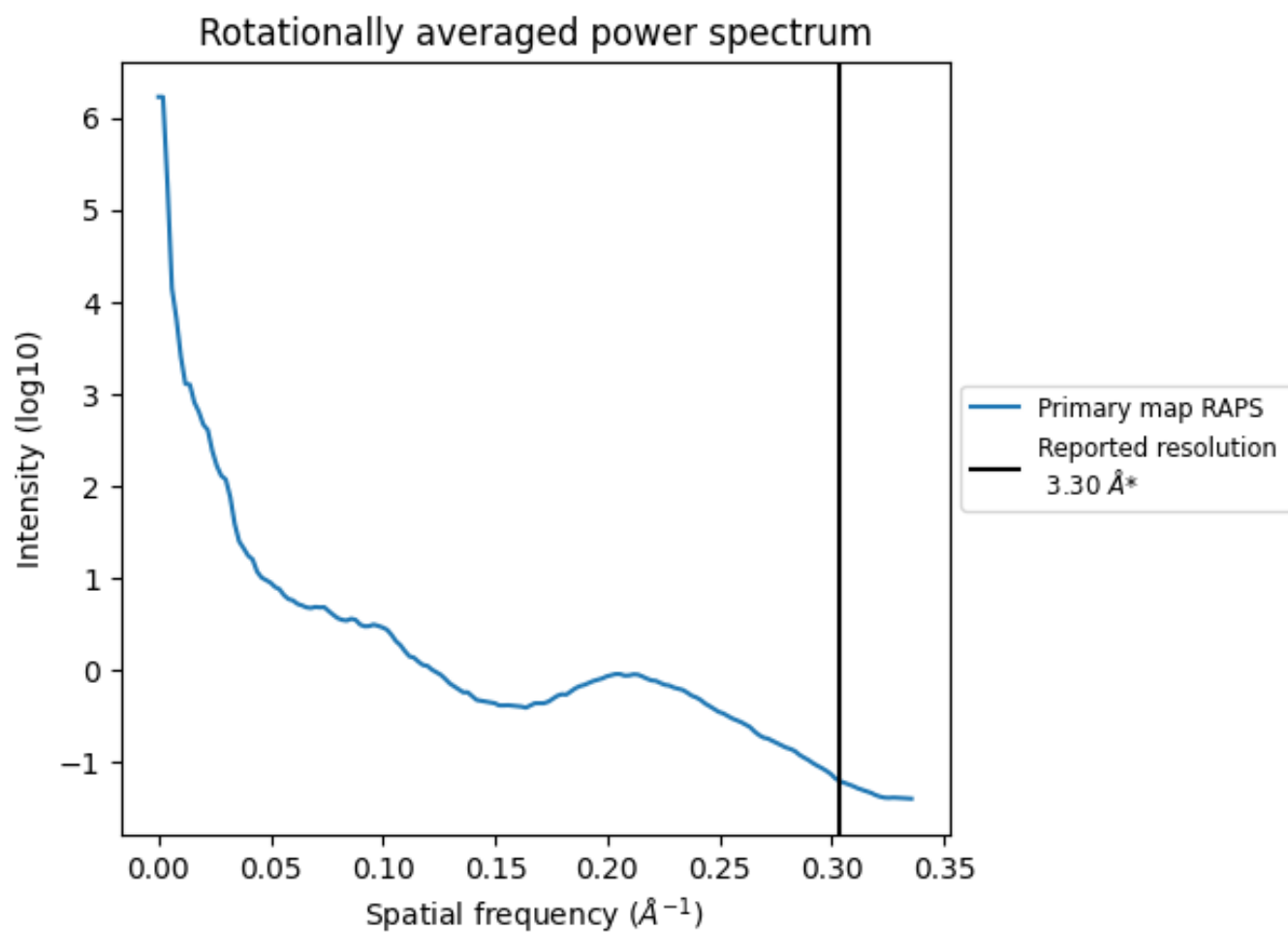
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 3395 nm^3 ; this corresponds to an approximate mass of 3067 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](#)

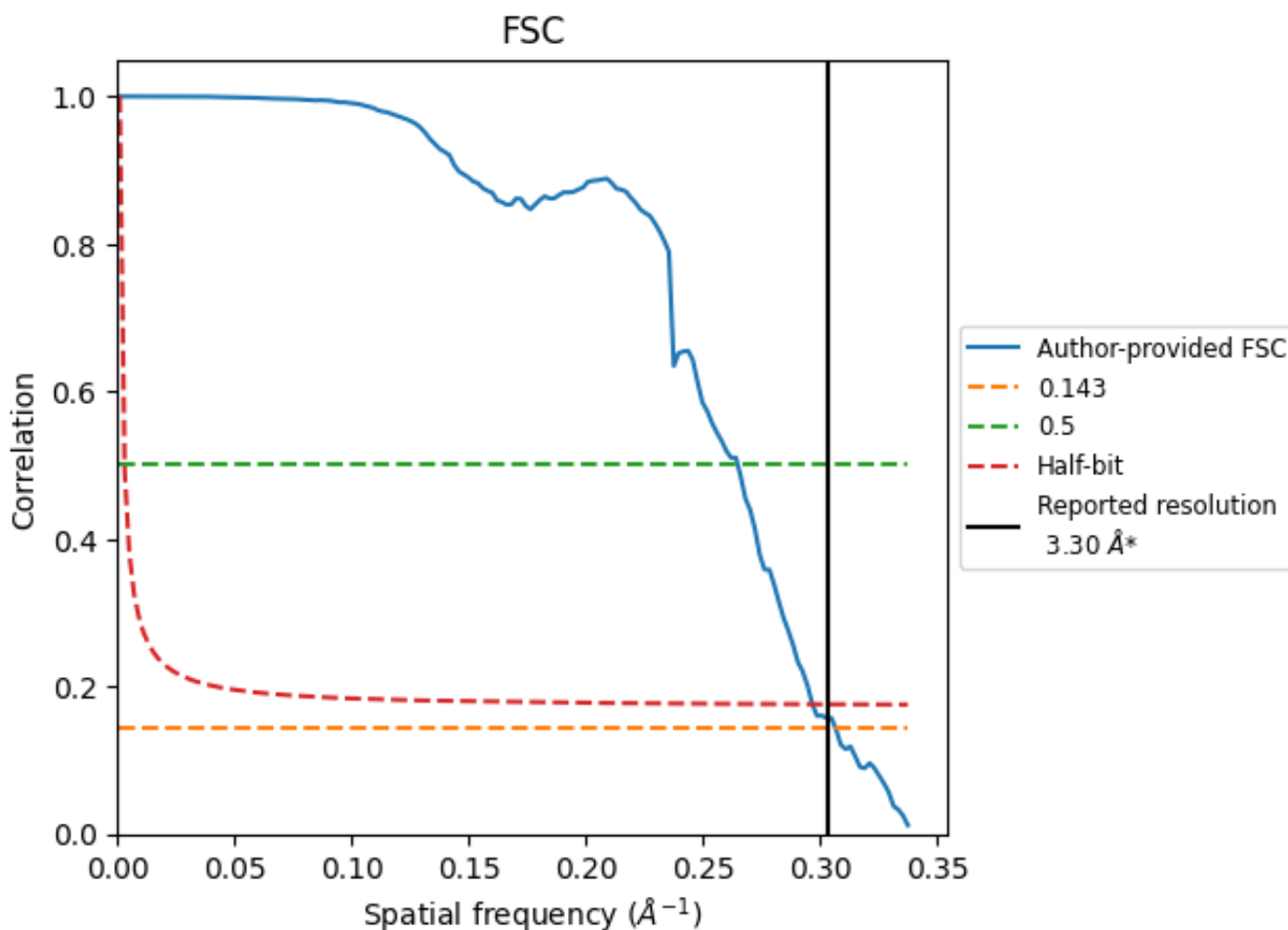


*Reported resolution corresponds to spatial frequency of 0.303 Å⁻¹

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 0.303 Å⁻¹

8.2 Resolution estimates [i](#)

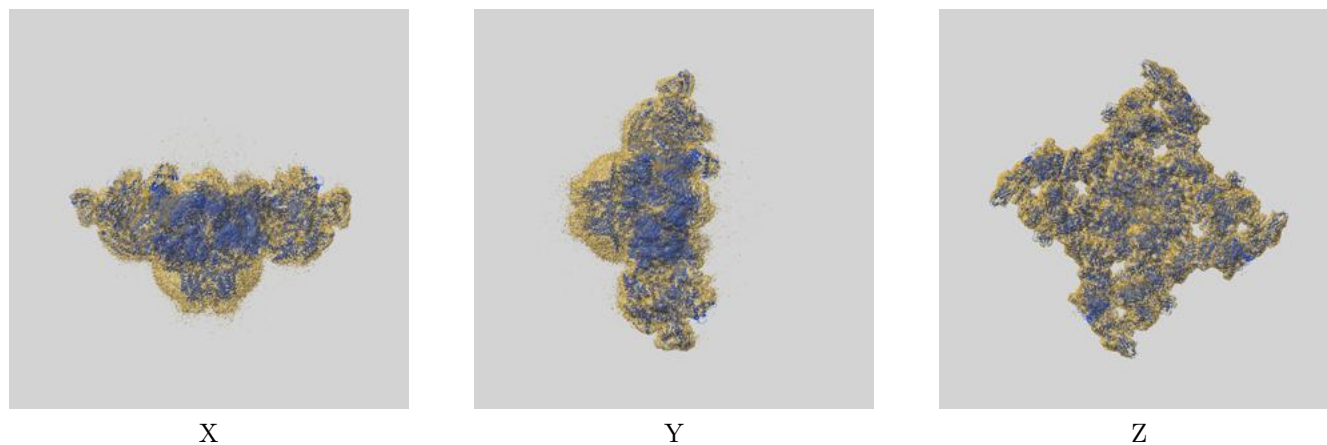
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.30	-	-
Author-provided FSC curve	3.26	3.78	3.37
Unmasked-calculated*	-	-	-

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

9 Map-model fit [i](#)

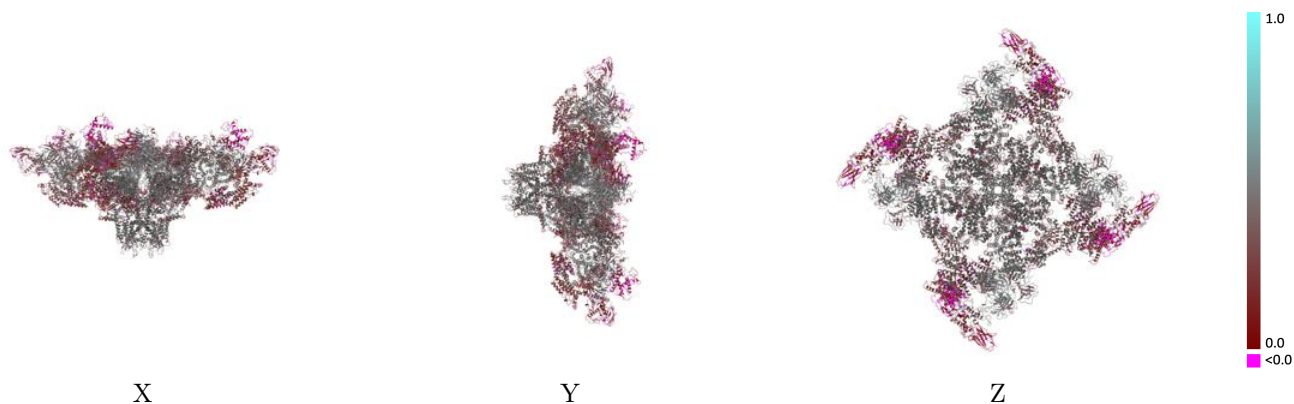
This section contains information regarding the fit between EMDB map EMD-19472 and PDB model 8RS0. Per-residue inclusion information can be found in section 3 on page 8.

9.1 Map-model overlay [i](#)



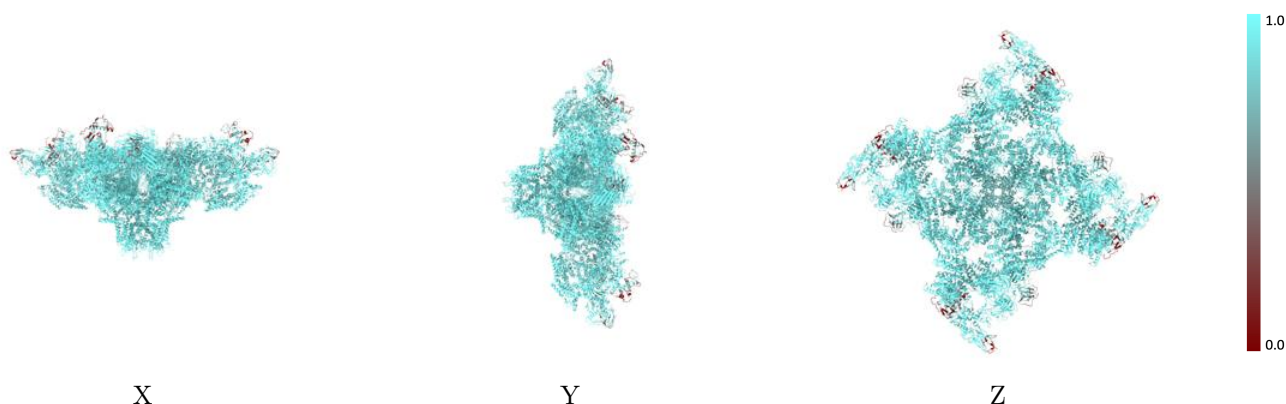
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



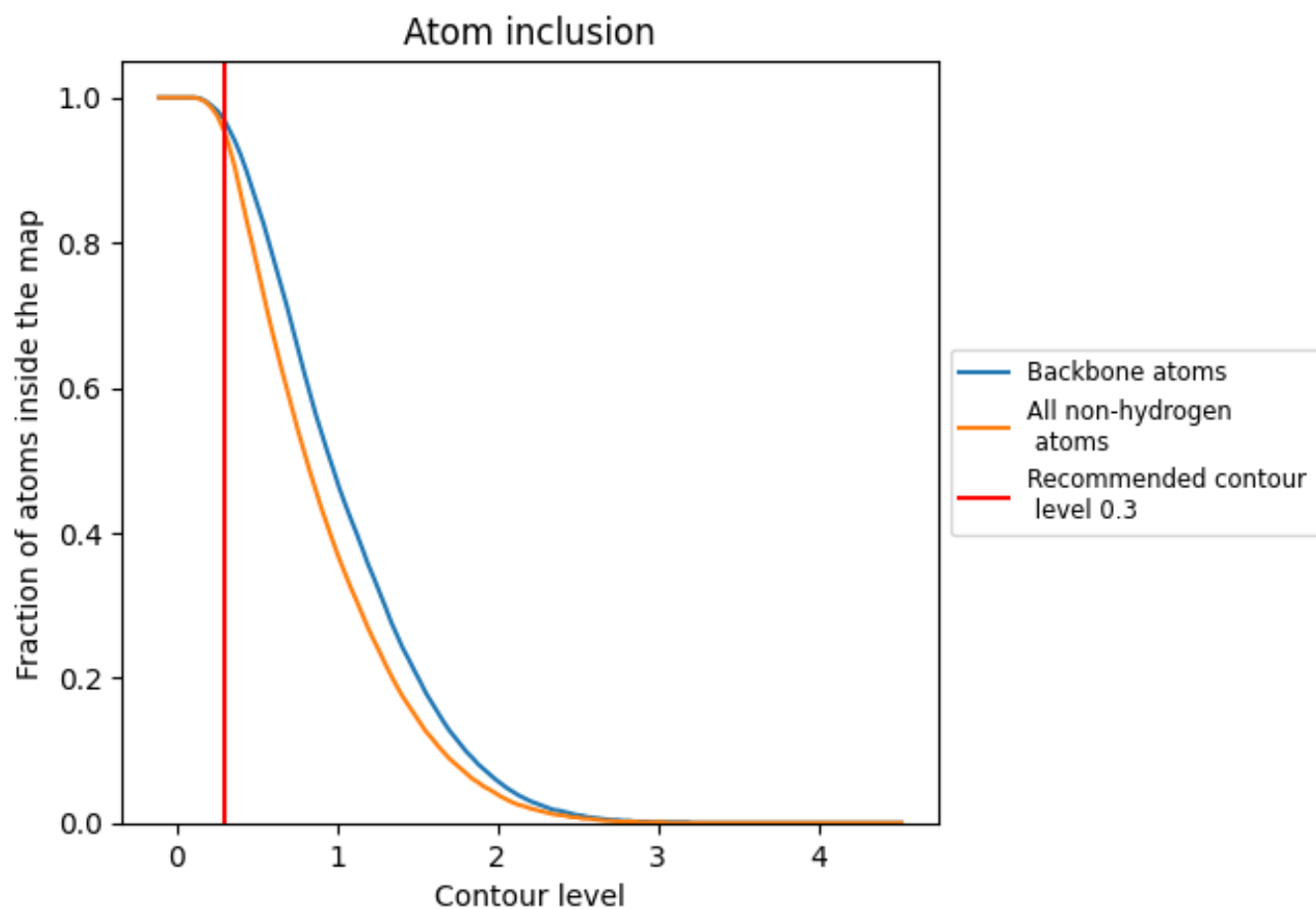
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.3).



























9.4 Atom inclusion [i](#)



At the recommended contour level, 97% of all backbone atoms, 95% 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 (0.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9530	 0.3560
A	 0.6870	 0.3860
B	 0.9670	 0.3620
C	 0.6930	 0.1320
D	 0.6890	 0.3950
E	 0.9670	 0.3620
F	 0.6880	 0.1320
G	 0.9670	 0.3610
H	 0.6880	 0.3920
I	 0.6850	 0.3940
J	 0.9670	 0.3620
K	 0.6880	 0.1340
M	 0.6910	 0.1310

