



Full wwPDB EM Validation Report ⓘ

Mar 8, 2026 – 01:41 PM UTC

PDB ID : 8RRS / pdb_00008rrs
EMDB ID : EMD-19463
Title : Structure of mouse RyR2 solubilised in detergent in open state in complex with Ca²⁺, ATP, caffeine and Nb9657.
Authors : Li, C.; Efremov, R.G.
Deposited on : 2024-01-23
Resolution : 3.40 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:

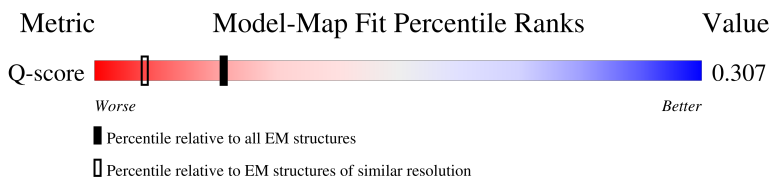
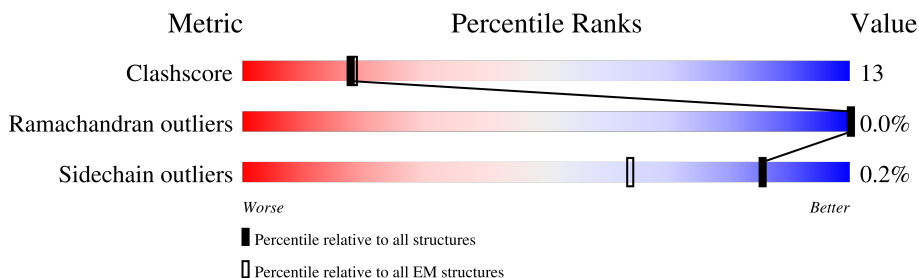
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

1 Overall quality at a glance

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 3.40 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)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	14717 (2.90 - 3.90)

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	4966	 58% 25% 17%
1	C	4966	 59% 25% 17%
1	E	4966	 58% 25% 17%
1	F	4966	 59% 25% 17%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	B	137	37% 64% 28% 8%
2	D	137	36% 65% 27% 8%
2	G	137	36% 64% 28% 8%
2	I	137	36% 64% 28% 8%

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 136400 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.

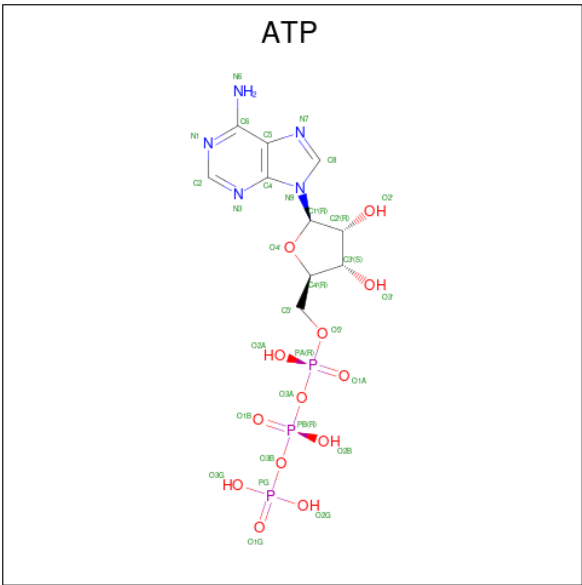
- Molecule 1 is a protein called Ryanodine receptor 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	4142	Total	C	N	O	S	0	0
			33088	21113	5650	6106	219		
1	C	4142	Total	C	N	O	S	0	0
			33088	21113	5650	6106	219		
1	E	4142	Total	C	N	O	S	0	0
			33088	21113	5650	6106	219		
1	F	4142	Total	C	N	O	S	0	0
			33088	21113	5650	6106	219		

- Molecule 2 is a protein called Nanobody 9657.

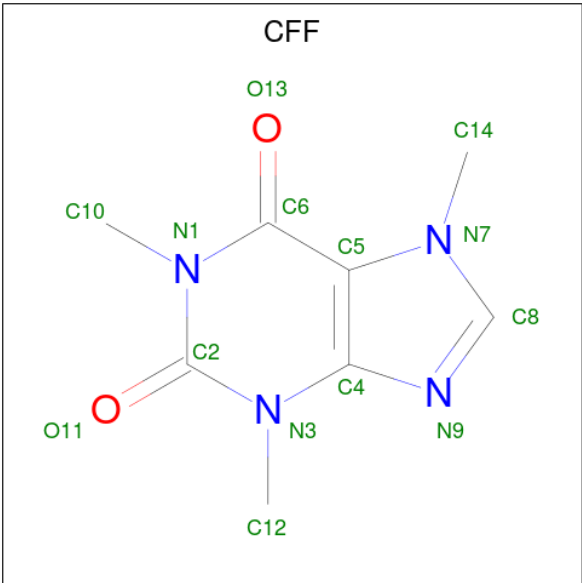
Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	126	Total	C	N	O	S	0	0
			965	595	170	195	5		
2	D	126	Total	C	N	O	S	0	0
			965	595	170	195	5		
2	G	126	Total	C	N	O	S	0	0
			965	595	170	195	5		
2	I	126	Total	C	N	O	S	0	0
			965	595	170	195	5		

- Molecule 3 is ADENOSINE-5'-TRIPHOSPHATE (CCD ID: ATP) (formula: C₁₀H₁₆N₅O₁₃P₃).



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

- Molecule 4 is CAFFEINE (CCD ID: CFF) (formula: C₈H₁₀N₄O₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
4	A	1	Total	C	N	O	0
			14	8	4	2	
4	C	1	Total	C	N	O	0
			14	8	4	2	
4	E	1	Total	C	N	O	0
			14	8	4	2	
4	F	1	Total	C	N	O	0
			14	8	4	2	

- Molecule 5 is ZINC ION (CCD ID: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		AltConf
5	A	1	Total	Zn	0
			1	1	
5	C	1	Total	Zn	0
			1	1	
5	E	1	Total	Zn	0
			1	1	
5	F	1	Total	Zn	0
			1	1	

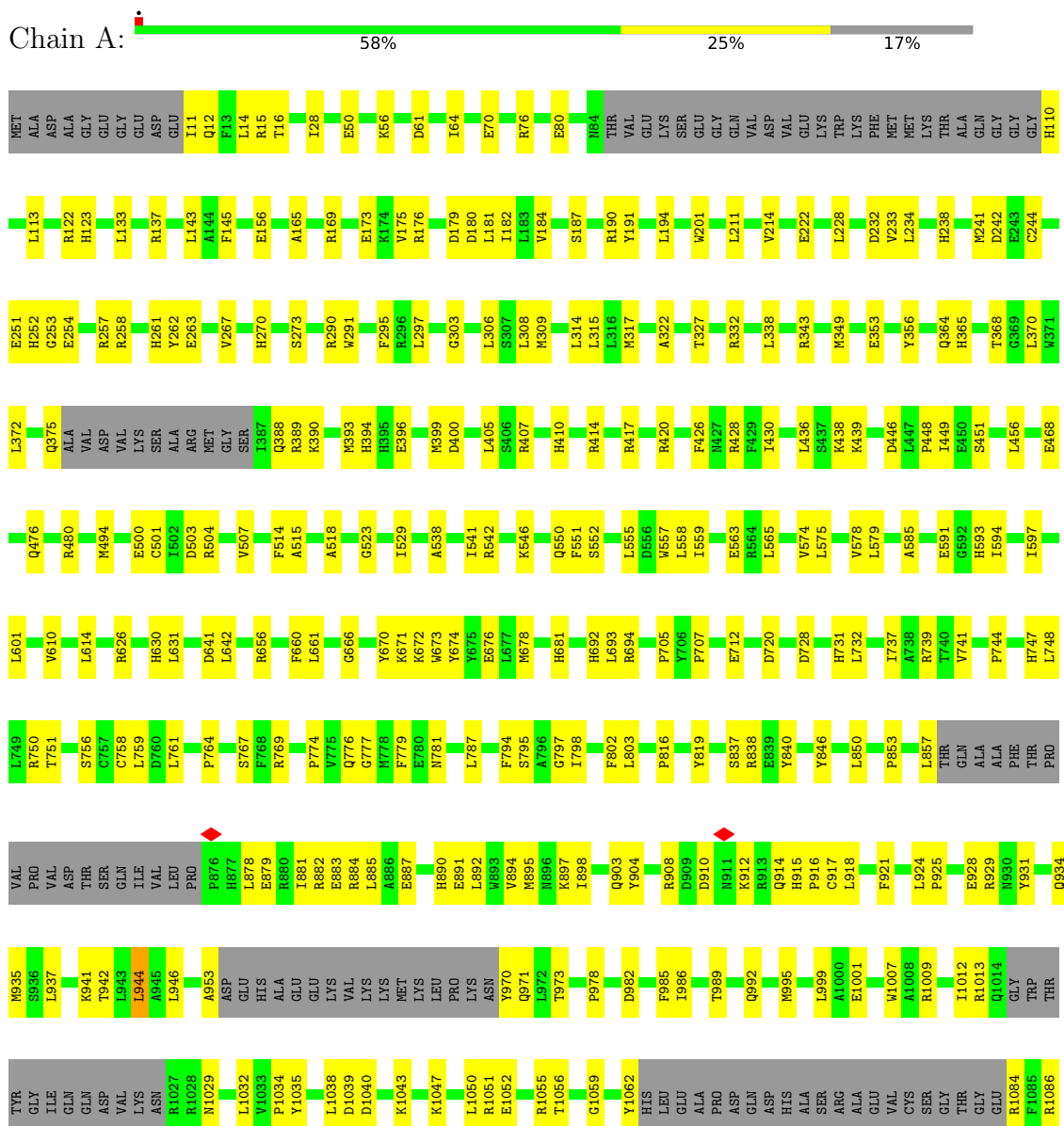
- Molecule 6 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		AltConf
6	A	1	Total	Ca	0
			1	1	
6	C	1	Total	Ca	0
			1	1	
6	E	1	Total	Ca	0
			1	1	
6	F	1	Total	Ca	0
			1	1	

3 Residue-property plots

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry 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: Ryanodine receptor 2



A2522	LYS	THR	H2233	R2089	D1929	F1852	L1754	M1602	I1446	TYR	LYS	M1216	E1091
P2525	ASP	SER	H2237	Q2090	V1932	G1853	L1758	V1609	H1451	ALA	SER	F1217	K1092
L2526	GLY	GLY	T2237	I2094	I1935	ALA	R1759	R1611	D1458	GLN	VAL	G1218	T1093
L2527	LYS	SER	P2238	L2094	L1935	ALA	P1760	S1610	D1459	LYS	ALA	G1219	Y1094
T2528	VAL	SER	L2239	V2098	Q1939	VAL	P1767	G1617	D1460	PRO	GLY	D1220	K1097
R2529	F2452	THR	A2244	R2099	R1942	PRO	SER	G1620	R1461	ARG	PRO	V1221	K1098
C2530	P2453	LEU	D2454	A2100	R1942	GLU	PHE	V1620	R1466	LEU	GLY	Y1236	A1099
A2531	D2454	ASP	L2101	L2101	R1942	GLU	VAL	V1620	V1466	LEU	GLY	Y1236	A1099
F2534	N2455	ILE	P2258	K2102	M1947	GLU	SER	C1622	V1467	LYS	ALA	N1242	R1100
A2535	S2456	GLU	P2259	K2103	M1947	GLY	ILE	C1622	T1468	ARG	PHE	N1242	Y1102
G2536	A2457	GLU	T2259	T2104	S1963	GLY	SER	L1623	L1469	PHE	TYR	R1245	F1103
T2537	G2458	GLU	E2262	Y2105	A1954	THR	ASN	E1636	G1470	LEU	GLY	D1246	E1104
F2459	F2459	LEU	K2263	S2121	A1955	PRO	ASN	E1637	D1471	LEU	PRO	I1247	M1113
C2460	C2460	ASP	V2264	S2121	L1956	GLU	C1776	M1637	E1472	LEU	LYS	T1248	R1114
H2463	H2463	D2379	R2266	I2125	R1959	LYS	D1786	R1638	H1477	ASN	ASP	L1251	R1117
A2541	H2382	H2382	C2276	V2131	K1960	ILE	LYS	D1641	T1480	LYS	LEU	L1251	H1117
L2543	M2383	M2383	Q2277	R2131	T1961	SER	K1789	E1644	K1481	PRO	GLU	R1254	P1120
I2544	G2384	G2384	M2278	M2132	R1962	ILE	A1790	E1644	R1482	ASP	ASP	Q1257	P1120
D2545	N2385	N2385	L2279	T2137	R1965	GLU	K1791	E1649	S1483	TYR	PHE	F1258	P1124
S2546	A2386	A2386	E2137	E2137	S1966	ASP	M1795	E1649	N1484	THR	VAL	P1262	E1127
L2547	I2387	I2387	W2289	L2145	P1967	LYS	K1801	C1666	C1485	GLY	ASP	H1265	L1128
H2549	A2392	A2392	P2291	M2149	P1968	LEU	E1802	L1677	Y1486	SER	SER	H1265	A1136
Y2552	W2405	W2405	R2296	F2154	Q1971	GLY	K1809	L1677	E1507	ALA	PHE	E1266	A1136
R2553	H2406	H2406	R2296	F2154	I1972	ALA	L1805	V1681	E1507	ARG	GLU	H1267	F1137
L2554	L2407	L2407	F2300	P2158	I1972	GLU	L1805	V1681	E1507	LEU	VAL	I1268	D1138
S2555	I2408	I2408	F2300	P2158	I1972	LYS	R1808	L1686	C1510	THR	LEU	E1269	R1144
K2556	K2412	K2412	W2317	W2159	L1975	GLU	D1809	L1686	C1510	GLU	MET	R1144	R1144
T2561	G2413	G2413	L2160	L2160	F1978	ALA	P1809	Y1694	E1535	ASP	LYS	R1272	W1156
Q2564	E2414	E2414	R2320	M2161	K1979	LYS	P1811	Y1694	E1535	VAL	THR	D1274	W1156
R2565	A2415	A2415	R2321	M2161	C1985	GLY	T1814	Y1704	T1538	LEU	ALA	D1274	W1156
D2566	I2418	I2418	R2325	G2165	C1985	LYS	T1815	D1705	V1553	ALA	HIS	GLY	C1164
S2567	R2419	R2419	R2326	N2186	P1988	ARG	E1816	L1706	F1554	ASP	GLY	THR	M1165
I2568	R2496	R2496	R2326	N2186	P1988	PRO	E1816	L1707	F1554	ASP	HIS	ILE	V1166
E2569	A2497	A2497	F2330	V2175	E1969	LYS	F1817	I1708	E1557	LEU	LEU	ASP	D1167
V2570	A2498	A2498	F2330	V2175	E1969	GLU	L1818	D1709	E1557	VAL	VAL	SER	M1168
L2573	S2500	S2500	L2342	P2189	I1991	G1891	P1821	I1710	E1557	PRO	PRO	SER	M1173
Q2578	L2501	L2501	L2343	K2190	R1992	M1895	Y1821	S1713	R1560	ARG	ARG	PRO	M1174
L2579	D2502	D2502	H2346	N2191	L1995	E1899	Y1827	A1718	K1582	ILE	ILE	LEU	L1177
R2580	T2503	T2503	E2347	V2192	F1998	P1900	I1831	A1718	K1582	ASP	ASP	K1284	L1177
P2581	L2506	L2506	E2347	A2193	F1998	V1901	I1831	M1721	H1576	LYS	LYS	V1285	L1182
S2582	L2507	L2507	G2348	R2197	H1999	K1902	I1834	M1722	K1577	LYS	LYS	Q1287	L1182
M2583	S2507	S2507	A2349	R2197	E2000	L1903	I1834	M1722	K1577	GLU	GLU	Q1293	L1190
H2584	A2512	A2512	I2350	F2198	D2001	Q1904	N1837	I1727	C1583	THR	THR	A1191	F1192
Q2585	L2513	L2513	K2351	Y2201	C2006	M1905	E1838	I1727	C1583	PRO	PRO	Q1293	A1191
H2586	A2514	A2514	L2352	F2202	G2007	C1906	D1839	V1728	P1584	LYS	LYS	N1294	F1192
L2587	L2515	L2515	E2353	F2202	I2008	L1907	L1840	P1729	P1585	PRO	PRO	N1295	F1201
L2588	G2516	G2516	D2355	I2205	GLU	L1907	K1841	E1733	H1588	GLU	GLU	R1303	F1201
R2591	R2517	R2517	L2358	Q2210	LEU	L1909	H1842	E1733	V1589	PHE	PHE	L1304	F1201
V2592	Y2518	Y2518	R2358	Q2210	ASP	L1909	H1842	L1739	Q1590	ASN	ASN	S1305	L1207
L2608	L2519	L2519	P2361	M2213	GLU	C1913	L1844	L1739	Q1590	ASN	ASN	G1208	G1208
	C2520	C2520	SER	M2213	ASP	R1920	Q1845	L1749	V1595	HIS	HIS	V1209	V1209
	T2521	ALA	PRO	Y2219	GLY	SER	L1846	P1760	W1597	LYS	LYS	C1310	L1210
												S1315	Q1211

L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L3497	L3498	L3499	L3500	L3508	L3512	G3516	K3517	L3518	N3425	N3426	N3427	S3428	F3429	L3430	C3435	S3436	N3335	N3336	N3337	E3338	A3339	P3339	L3340	L3343	L3344	C3345	D3346	L3347	S3348	E3351	L3352	L3353	L3354	R3457	S3463	L3464	L3465	N3617	L3618	F3619	L3620
L3472	L3473	P3474	L3475	L3479	C3480	A3481	C3482	P3483	C3484	C3485	C3486	L3487	L3488	L3489	C3490	C3491	C3492	C3493	L3494	C3495	L3496	L																																									

- Molecule 1: Ryanodine receptor 2

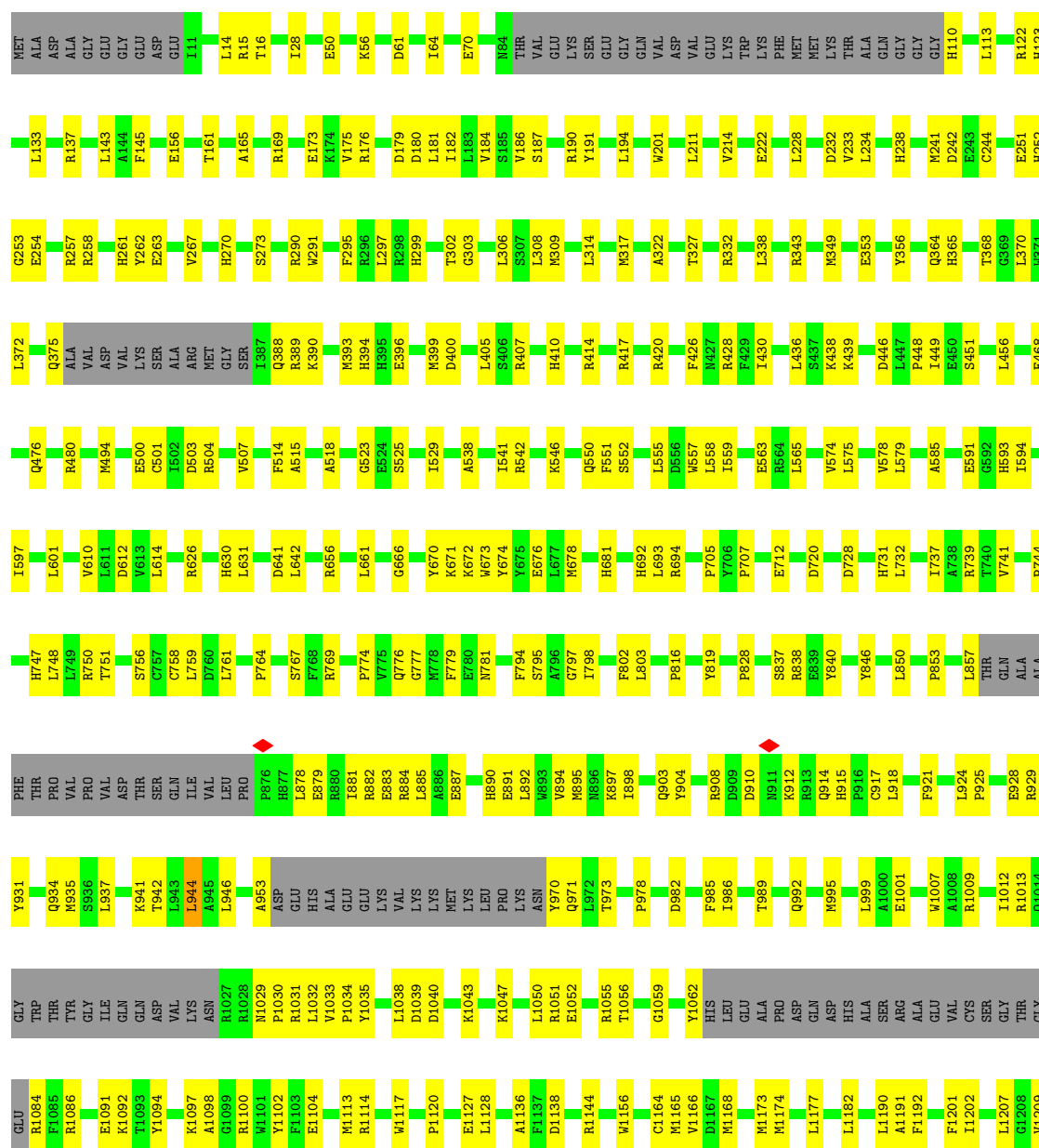
Frequency	Percentage
Daily	59%
Weekly	25%
Monthly	17%











H2586	A2514	E2354	Q2210	M2083	GLU	K1841	E1733	V1589	G1444	LYS	S1315	K1210
L2587	L2515	D2355	M2213	M2083	LEU	H1842	E1733	Q1590	W445	ASP	LYS	Q1211
L2588	M2516	Q2440	M2213	L2086	ASP	I1843	L1739	V1595	I1446	TYR	ALA	N1216
L2591	R2517	R2358	Y2219	R2089	GLU	L1844	L1739	V1595	I1446	GLN	VAL	N1216
V2592	Y2518	P2442	Y2219	Q2090	ASP	Q1845	P1750	M1600	H1451	GLN	ALA	G1218
M2604	L2519	P2361	S2224	Q2090	SER	L1846	L1754	M1602	D1458	LYS	GLY	K1219
L2608	C2520	SER	S2224	T2094	LEU	I1847	L1754	M1602	D1460	PRO	GLY	D1220
L2609	T2521	THR	M2233	T2094	ASP	F1852	L1758	V1609	R1461	ARG	PRO	V1221
L2609	A2522	THR	M2233	T2094	GLY	K1853	L1758	V1609	R1461	GLY	GLY	Y1236
L2611	P2525	THR	T2237	V2098	ASN	GLU	L1758	S1610	T1466	LYS	ALA	Y1236
Y2613	L2526	SER	P2238	R2099	ALA	ALA	P1760	R1611	V1467	GLN	GLY	N1242
E2614	L2527	VAL	L2239	Q1939	VAL	VAL	F1767	G1617	T1468	ARG	PHE	N1242
R2615	T2528	THR	A2244	P2102	THR	PRO	SER	V1620	T1469	PHE	TYR	R1245
L2618	C2530	LEU	P2258	K2103	ILE	GLU	PHE	Q1621	G1470	LEU	GLY	D1246
Y2619	A2531	ASP	M2455	T2104	ARG	GLU	VAL	Q1621	D1471	LEU	PRO	D1246
Y2620	F2534	GLU	P2259	T2105	GLY	GLY	SER	G1622	E1472	ARG	LYS	T1248
C2621	A2535	GLU	D2260	S2121	LEU	GLY	ILE	L1623	E1472	ARG	ASN	T1248
L2622	G2536	GLU	L2261	S2121	LEU	GLY	SER	L1623	H1477	THR	ASP	L1251
L2622	T2537	GLU	E2262	T2125	SER	THR	ASN	E1636	I1480	LYS	ASP	L1251
G2625	F2459	ASP	V2264	T2125	PRO	PRO	ASP	N1637	K1481	GLU	ASP	R1254
F2629	C2480	D2379	V2265	V2131	VAL	LYS	C1776	R1638	R1482	TYR	PHE	Q1257
F2629	H2463	H2382	R2266	R2132	GLU	GLU	D1786	R1638	S1483	SER	ASP	F1258
S2633	K2484	M2383	R2266	M2133	LYS	ILE	D1786	E1644	H1483	THR	VAL	P1262
E2636	M2467	Q2277	C2276	R2143	VAL	SER	K1789	E1644	C1485	GLY	ASP	P1262
L2637	D2472	M2278	Q2277	G2144	THR	ILE	A1790	E1649	Y1486	HIS	SER	H1265
H2638	D2472	A2386	L2279	L2145	TYR	GLU	K1791	E1649	M1487	ALA	PHE	E1266
R2641	R2473	I2387	Y2284	M2149	LEU	ASP	M1795	H1657	E1507	ALA	GLU	H1267
R2642	Y2474	A2392	Y2284	M2149	LYS	ALA	M1795	H1657	E1507	ARG	VAL	H1268
F2644	Q2480	M2405	W2289	F2154	LYS	LYS	K1801	C1666	C1510	LEU	LEU	E1269
G2646	D2481	H2406	N2290	P2158	GLN	GLU	E1802	C1666	C1510	THR	MET	E1269
L2647	F2482	L2407	P2291	P2158	ALA	GLU	L1805	L1677	S1516	ASP	THR	R1272
E2657	L2483	L2408	R2296	L2160	PRO	GLU	L1805	L1677	S1516	LEU	THR	I1273
E2658	H2485	K2412	F2300	M2161	VAL	ALA	R1808	L1686	Q1533	LEU	ALA	D1274
E2659	L2486	G2413	N2317	L2164	ALA	LYS	D1809	L1686	V1534	ALA	VAL	D1274
L2660	V2489	E2414	N2317	G2165	SER	GLY	V1811	Y1694	E1535	ASP	HIS	GLY
F2661	D2494	I2418	V2320	M2166	ARG	ARG	T1814	Y1704	V1553	PRO	GLY	THR
K2662	R2495	R2419	R2321	V2175	LYS	PRO	T1815	D1705	F1554	ASP	ILE	ILE
C2667	R2496	R2325	R2325	P2189	CYS	E1816	E1816	L1706	E1557	ARG	ARG	CYS
S2668	A2497	R2326	R2326	M2191	SER	E1989	L1818	L1707	E1557	ILE	LEU	LEU
A2670	A2498	L2425	F2330	V2192	S2056	I1991	L1818	D1709	R1560	ASP	ASP	ASP
A2671	S2500	L2426	F2330	A2193	L2057	R1992	P1821	I1710	I1561	LYS	LYS	Q1287
A2672	L2501	D2342	L2342	A2193	M2065	L1995	Y1827	S1713	K1562	GLU	GLU	Q1287
A2673	T2502	L2343	L2343	R2197	V2066	F1998	I1831	A1718	V1429	THR	THR	Q1283
A2674	T2503	L2431	F2198	F2198	R2067	H1999	I1831	A1718	R1431	LYS	LYS	N1294
C2680	L2506	G2433	M2346	Y2201	E2071	E2000	I1834	M1721	Q1436	PRO	PRO	N1295
M2680	S2507	V2434	L2350	F2202	E2076	D2001	N1837	M1722	E1437	GLU	GLU	R1303
GLU	A2512	S2436	R2351	F2202	D2076	C2007	E1838	Y1728	F1584	PHE	PHE	L1304
SER	L2513	I2437	A2353	I2205	L2079	I2008	L1840	P1729	P1585	ASN	ASN	S1305
ASN									H1588		HIS	C1310

E3717	R3614	V3550	R3457	A3352	L3287	R3189	V3089	S2996	SER	GLY	L2755	TYR
Q3721	A3615	L3551	R3457	R3363	G3268	P3197	V3089	N2997	I2916	TYR	M2756	VAL
Q3727	V3616	G3552	S3463	D3364	D3289	E3201	I3093	K2998	E2917	SER	L2761	SER
A3728	L3618	I3553	L3464	L3365	D3290	E3202	I3094	E2999	K2918	ARG	L2762	MET
R3729	F3619	V3556	I3465	F3368	G3291	G3203	V3095	K3001	R2919	ARG	L2763	GLU
H3731	L3620	L3557	V3466	Y3369	G3293	V3204	T3096	M3002	I2922	ALA	E2764	LYS
Y3623	Y3623	E3561	K3470	L3372	M3294	P3208	S3105	L3006	S2923	ILE	E2766	GLN
V3627	V3627	S3564	R3471	V3376	L3298	S3209	F3108	F3007	F2924	ASP	K2767	SER
E3636	L3473	D3377	L3472	D3377	L3298	S3210	F3109	L3010	L2925	MET	E2768	GLN
A3644	P3474	N3379	P3474	N3379	F3301	E3211	E3109	L3013	Q2926	ASN	K2769	GLY
A3648	I3475	N3380	I3475	N3380	S3302	K3212	H3110	V3014	Q2927	VAL	E2770	ASN
F3649	I3475	N3380	I3475	N3380	Q3303	M3214	F3116	L3018	L2929	THR	R2771	ASN
LEU	I3479	A3381	K3470	L3372	I3306	I3217	G3117	I3018	R2930	ARG		ASN
PRO	C3480	K3382	R3471	V3376	N3307	I3217	G3117	A3025	V2931			ASN
GLY	A3481	K3383	L3472	D3377	N3307	L3220	L3120	L3028	V2932			PRO
THR	P3482	V3384	L3473	D3377	K3308	L3220	L3121	V3029	E2934			GLN
GLY	G3483	K3385	I3475	N3379	V3309	I3225	L3122	N3030	A2935			PRO
GLY	D3484	K3386		N3379	K3310	R3226	E3123	C3031	A2852			VAL
GLY	Q3485	P3387		N3379	L3313	R3230	D3124	C3032	K2855			ASP
HIS	E3486	P3388		N3379	L3314	M3230	V3125	D3040	K2856			THR
PRO	L3487	P3389		N3379	L3315		Q3126	A3041	L2857			ASN
GLN	I3488	E3390		N3379	T3316			T3042	E2858			THR
ALA	A3489	A3391		N3379	F3317			R3043	L2859			ILE
VAL	L3490	E3392		N3379	G3318			T3038	E2860			ILE
TRP	A3491	E3393		N3379	E3235			L3039	S2861			GLY
LYS	K3492	L3394		N3379	V3236			D3040	K2862			ARG
ALA	R3505	F3395		N3379	V3237			A3041	G2863			ARG
TRP	K3508	K3396		N3379	L3238			T3042	G2864			GLY
LYS	I3512	E3397		N3379	E3233			T3043	G2865			GLY
LEU	G3516	F3402		N3379	M3245			K3046	N2866			ASP
SER	K3517	I3403		N3379	S3246			T3047	H2867			SER
LYS	L3518	N3425		N3379	R3151			G3048	Q2972			MET
ARG	A3522	N3426		N3379	G3155			L3049	Y2973			ALA
LYS	V3525	M3427		N3379	E3156			D3050	F2974			LEU
ALA	V3525	S3428		N3379	A3159			S3051	H2977			TYR
VAL	M3527	L3430		N3379	A3160			K3053	L2979			ASN
VAL	Y3530	L3430		N3379	F3161			R3057	Y2980			ARG
ALA	L3533	K3435		N3379	P3166			E3065	K2881			ARG
PHE	P3534	S3436		N3379	I3167			T3070	Q2889			ILE
ARG	N3535	S3439		N3379	T3172			K3069	D2890			SER
ALA	R3536	K3440		N3379	N3178			M3071	T2891			GLN
PRO	T3537	I3443		N3379	V3179			L3074	F2892			THR
LEU	E3538	I3443		N3379	V3180			Q3078	K2893			VAL
TYR	D3539	E3447		N3379	V3183			R3083	G2905			SER
ASN	P3540	R3448		N3379	R3184			Q3084	PHE			LYS
LEU	P3540	K3449		N3379	T3185			S3084	LYS			THR
P3611	V3547	R3454		N3379	R3186			Q3085	THR			GLY
R3612	E3548	K3454		N3379					ALA			ALA
H3613	R3549			N3379					SER			THR
				N3379					ARG			VAL
				N3379					PRO			SER
				N3379					LEU			GLN
				N3379					CYS			VAL
				N3379					THR			SER
				N3379					GLY			ILE
				N3379					THR			D2748
				N3379					GLY			S2749
				N3379					HIS			S2750
				N3379					ASP			K2751
				N3379					THR			I2752
				N3379					PRO			P2754

V4009	R4113	MET	ILE	MET	ASP	THR	ASP	THR	ARG	V4009
E4010	L4114	PRO	PRO	THR	GLU	THR	GLU	THR	LEU	V3874
M4011	Q4115	ASP	HIS	VAL	LYS	VAL	LYS	VAL	ALA	D3875
I4012	T4116	PRO	ASN	LYS	PRO	LYS	ASN	LYS	ASN	L3878
L4013	L4119	THR	PRO	ASP	THR	ASP	THR	GLY	LYS	R3879
D4017	E4120	GLN	ASN	GLN	GLN	MET	GLN	GLU	GLY	S3883
L4020	L4121	ASP	ALA	VAL	ASP	VAL	VAL	LEU	SER	Q3900
T4030	V4124	VAL	GLY	ALA	VAL	ALA	VAL	GLU	GLY	L3904
E4033	L4132	ARG	ASP	PHE	GLY	PHE	GLY	GLY	GLY	F3905
Y4034	I4135	SER	LEU	SER	ASP	SER	ASP	PRO	ARG	R3904
D4035	T4138	THR	MET	THR	GLU	THR	GLU	GLU	GLY	F3905
G4040	G4139	GLY	ASN	THR	GLY	THR	THR	GLY	GLY	I3909
I4042	S4140	VAL	VAL	VAL	GLY	VAL	VAL	ALA	ALA	F3916
S4043	T4144	PRO	PRO	THR	PRO	THR	PRO	ARG	PRO	T3920
R4044	Y4148	LEU	GLU	LEU	VAL	LEU	VAL	PHE	GLY	E3921
R4045	F4149	GLU	VAL	LEU	PRO	GLY	VAL	GLY	GLY	Q3924
F4046	F4150	SER	GLN	HIS	GLU	GLY	GLY	PHE	PHE	L3934
F4047	E4151	ALA	GLY	GLY	GLY	GLY	GLY	SER	SER	A3935
H4048	I4151	LEU	LYS	VAL	SER	VAL	VAL	LEU	LEU	R3938
K4049	S4152	PRO	PHE	ALA	ALA	ALA	ALA	LEU	LEU	V3944
A4050	S4155	THR	PHE	SER	ALA	SER	ALA	THR	THR	I3964
M4051	R4156	ILE	GLN	VAL	GLY	VAL	GLY	GLY	ILE	L3967
H4054	T4157	CYS	GLN	VAL	GLY	VAL	GLY	ARG	ARG	K3968
E4057	Q4158	ARG	LYS	ARG	LEU	ARG	LEU	TYR	TYR	E3969
T4058	M4159	PHE	LYS	PHE	GLY	PHE	GLY	ASN	ASN	K3971
E4061	E4160	ALA	GLY	ARG	GLY	ARG	GLY	VAL	VAL	M3977
T4062	V4164	LEU	LYS	ILE	GLY	ILE	GLY	LEU	LEU	K3980
L4066	E4166	VAL	GLY	VAL	GLY	VAL	GLY	SER	SER	Q3997
A4069	R4169	SER	LYS	SER	GLY	SER	GLY	LEU	LEU	K3998
E4075	E4181	LEU	THR	LEU	THR	LEU	THR	LEU	LEU	F3999
T4076	K4182	GLY	LYS	GLY	LYS	GLY	LYS	GLY	GLY	M4001
L4077	K4184	VAL	SER	SER	GLY	SER	GLY	ARG	ARG	L4002
D4078	M4185	LEU	ASP	LEU	ASP	LEU	ASP	MET	MET	V4003
Y4079	E4186	MET	ILE	VAL	PHE	ILE	VAL	GLY	GLY	E4004
F4082	T4195	SER	ALA	GLY	GLY	GLY	GLY	LEU	LEU	S4005
V4083	I4196	LYS	GLY	ALA	VAL	ALA	VAL	SER	SER	M4008
E4088	M4199	LEU	GLY	LYS	GLY	LYS	GLY	LEU	LEU	D4111
Q3997	I4205	LYS	ASP	ILE	LYS	LYS	LYS	LYS	LYS	T4112
K3998	V4099	LYS	ARG	LYS	VAL	VAL	VAL	GLN	GLN	
F3999	L4104	GLN	GLY	ALA	GLY	ALA	GLY	ALA	ALA	
M4001	GLU	MET	GLY	GLY	GLY	GLY	GLY	GLY	GLY	
L4002	SER	LYS	GLY	GLY	GLY	GLY	GLY	GLY	GLY	
V4003	ASP	ARG	GLY	GLY	GLY	GLY	GLY	GLY	GLY	
E4004	LEU	MET	TYR	LEU	LEU	LEU	LEU	LEU	LEU	
S4005	ASN	LYS	ALA	ALA	ALA	ALA	ALA	ALA	ALA	
M4008	GLU	LYS	LYS	LYS	LYS	LYS	LYS	LYS	LYS	

• Molecule 1: Ryanodine receptor 2

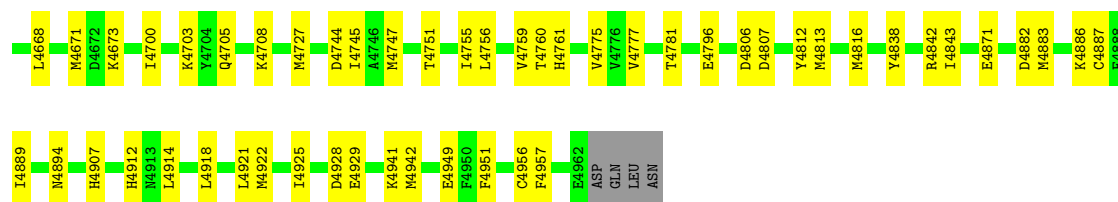
Chain F:  59% 25% 17%

MET	R137	R257	Q375	MET	ASP	THR	ASP	THR	ARG	V4009
ALA	L143	R258	VAL	ALA	LYS	THR	GLU	THR	LEU	V3874
ASP	F145	H261	VAL	GLY	PRO	LYS	ASN	LYS	ASN	D3875
GLY	A144	Y262	VAL	GLY	THR	ASP	THR	GLY	LYS	L3878
GLY	E156	E263	SER	GLY	GLN	GLN	GLN	GLU	GLY	R3879
GLY	T161	Y267	ALA	GLY	VAL	VAL	VAL	LEU	SER	S3883
GLY	A165	H270	ARG	GLY	GLY	GLY	GLY	GLY	GLY	Q3900
GLY	R169	S273	SER	GLY	ASP	ASP	ASP	PRO	ARG	L3904
R15	E173	R290	K388	THR	GLY	GLY	GLY	GLY	GLY	F3905
T16	K174	W291	R389	GLY	VAL	VAL	VAL	GLY	GLY	I3909
I28	V175	F295	K393	GLY	GLY	GLY	GLY	GLY	GLY	F3916
E50	R176	R296	H394	GLY	GLY	GLY	GLY	GLY	GLY	T3920
D61	D179	L297	H395	GLY	GLY	GLY	GLY	GLY	GLY	E3921
I64	D180	H299	E396	GLY	GLY	GLY	GLY	GLY	GLY	Q3924
E70	L181	R302	K399	GLY	GLY	GLY	GLY	GLY	GLY	L3934
R84	I182	G303	D400	GLY	GLY	GLY	GLY	GLY	GLY	A3935
THR	V184	L306	L405	GLY	GLY	GLY	GLY	GLY	GLY	R3938
VAL	S185	S307	S406	GLY	GLY	GLY	GLY	GLY	GLY	V3944
GLY	S187	L308	R407	GLY	GLY	GLY	GLY	GLY	GLY	I3964
LYS	R190	N309	H410	GLY	GLY	GLY	GLY	GLY	GLY	L3967
SER	Y191	L314	R414	GLY	GLY	GLY	GLY	GLY	GLY	K3968
GLY	L194	M317	R417	GLY	GLY	GLY	GLY	GLY	GLY	E3969
GLN	W201	A322	R420	GLY	GLY	GLY	GLY	GLY	GLY	K3971
ASP	L211	T327	F426	GLY	GLY	GLY	GLY	GLY	GLY	M3977
VAL	V214	R332	R427	GLY	GLY	GLY	GLY	GLY	GLY	K3980
LYS	E222	L338	R428	GLY	GLY	GLY	GLY	GLY	GLY	Q3997
PHE	L228	R343	F429	GLY	GLY	GLY	GLY	GLY	GLY	K3998
MET	D232	M349	L436	GLY	GLY	GLY	GLY	GLY	GLY	F3999
MET	V233	K438	S437	GLY	GLY	GLY	GLY	GLY	GLY	M4001
LYS	L234	E353	R438	GLY	GLY	GLY	GLY	GLY	GLY	L4002
ALA	H238	Y356	K439	GLY	GLY	GLY	GLY	GLY	GLY	V4003
GLY	M241	Q364	D446	GLY	GLY	GLY	GLY	GLY	GLY	E4004
GLY	D242	H365	L447	GLY	GLY	GLY	GLY	GLY	GLY	S4005
GLY	E243	T368	P448	GLY	GLY	GLY	GLY	GLY	GLY	M4008
GLY	C244	G369	I449	GLY	GLY	GLY	GLY	GLY	GLY	
H110	E251	L370	F450	GLY	GLY	GLY	GLY	GLY	GLY	
L113	H252	W371	S451	GLY	GLY	GLY	GLY	GLY	GLY	
R122	G253	L372	L456	GLY	GLY	GLY	GLY	GLY	GLY	
H123	E254		E468	GLY	GLY	GLY	GLY	GLY	GLY	
L133			Q476	GLY	GLY	GLY	GLY	GLY	GLY	

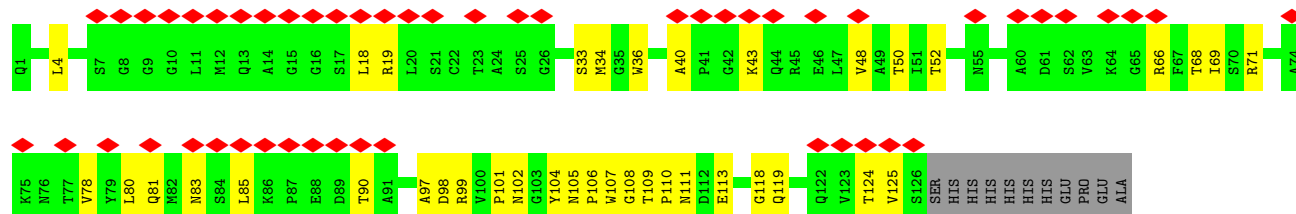
L1935	L1758	V1609	T1466	SER	LEU	K1219	Y1094	GLN	K941	ILE	L759	V610	R430
Q1939	R1759	S1610	V1467	ARG	PRO	D1220	K1097	ASP	T942	VAL	D760	L611	R430
R1942	P1760	R1611	T1468	LEU	GLY	V1221	A1098	VAL	L943	PRO	L761	V612	M494
M1947	P1767	G1617	L1469	GLN	PHE	Y1236	G1099	ASN	L944	PRO	P764	L614	E500
S1963	SER	V1620	D1470	ARG	GLY	N1242	R1100	R1027	L946	PRO	S767	R626	D503
A1964	PHE	Q1621	E1472	PHE	VAL	N1243	W1101	R1028	A953	PRO	R768	L878	R504
A1965	VAL	C1622	H1477	LEU	GLY	R1245	F1103	N1029	ASP	PRO	R769	H630	V507
L1966	THR	L1623	I1480	ARG	ASN	D1246	E1104	L1032	ASP	PRO	R774	L631	A515
R1969	GLY	E1636	K1481	THR	ASP	T1248	M1113	V1033	ALA	PRO	Q776	R656	A518
K1960	ASN	R1637	R1482	LEU	LEU	L1251	R1114	P1034	GLU	PRO	G777	L661	A518
T1961	C1776	A1638	S1483	PRO	GLY	L1252	W1117	L1038	LYS	PRO	F778	G666	E524
R1962	ILE	D1641	N1484	ASP	PHE	R1254	P1120	D1039	VAL	PRO	F779	G666	E524
R1965	THR	E1644	M1487	THR	VAL	Q1257	P1124	D1040	LYS	PRO	N781	Y670	E524
S1966	GLY	E1649	E1507	GLY	ASP	F1258	P1127	K1043	LYS	PRO	N781	Y670	E524
P1967	THR	H1657	C1510	SER	SER	P1262	E1127	K1047	LYS	PRO	F794	K671	S525
P1968	LEU	C1666	A1514	ARG	PHE	H1265	L1128	L1050	PRO	PRO	S795	K672	I529
Q1971	E1801	L1677	A1515	THR	VAL	E1266	F1136	R1051	LYS	PRO	A796	W673	A538
I1972	E1802	L1677	S1516	GLU	MET	H1267	F1137	E1052	ASN	PRO	G797	Y674	A538
L1975	L1805	V1681	Q1533	ASP	LYS	E1269	D1138	R1055	Q971	PRO	I798	E676	I541
F1978	R1808	L1686	E1534	VAL	THR	R1272	R1144	T1056	Q971	PRO	F802	M678	R542
F1979	L1809	L1686	E1535	LEU	ALA	R1273	W1156	G1059	Q971	PRO	L803	H681	K546
C1985	P1810	Y1694	T1538	ASP	GLY	D1274	C1164	Y1062	P978	PRO	P816	H681	K546
P1988	T1814	Y1704	V1553	ARG	LEU	THR	M1165	HIS	D982	PRO	P828	P705	L585
E1989	T1815	D1705	F1554	ASP	VAL	ASP	M1166	LEU	P985	PRO	S837	Y706	D556
I1990	E1816	L1706	F1554	PRO	PRO	ILE	D1167	GLU	P986	PRO	R838	P707	W557
I1991	F1817	L1707	E1557	ARG	ASP	SER	M1168	ALA	T989	PRO	E839	E712	L558
R1992	L1818	I1708	E1557	ILE	ILE	PRO	M1173	ASP	Q992	PRO	Y840	E712	I559
L1995	Y1827	D1709	R1560	ASP	ASP	CYS	M1174	GLN	Q992	PRO	Y846	D720	E563
F1998	I1831	I1710	T1561	ARG	LEU	LEU	L1177	ASP	N995	PRO	Y846	D720	E563
H1999	I1831	S1713	K1562	LYS	LYS	V1285	L1177	HIS	L999	PRO	L850	L732	L565
E2000	I1834	A1718	H1576	THR	GLY	T1286	L1182	SER	L999	PRO	P853	L737	V574
D2001	N1837	M1721	K1577	PRO	PRO	Q1287	L1190	ARG	A1000	PRO	L857	L737	L575
C2006	E1838	M1722	C1583	LYS	LYS	Q1293	A1191	ALA	E1001	PRO	THR	A738	V578
G2007	D1839	M1722	P1584	PRO	PRO	N1294	F1192	GLU	A1007	PRO	GLN	T740	L579
I2008	L1840	I1727	P1585	PHE	GLY	N1295	F1201	CYS	A1008	PRO	ALA	V741	L579
GLY	K1841	Y1728	G1444	ASN	ASN	R1303	I1202	GLY	R1009	PRO	PHE	P744	A585
LEU	H1842	P1729	H1445	ASN	ASN	C1310	L1207	THR	L1012	PRO	ALA	P744	A585
ASP	I1843	E1733	V1589	HIS	HIS	C1310	L1207	GLY	R1013	PRO	THR	H747	E591
GLU	L1844	E1733	Q1590	LYS	LYS	S1315	G1208	GLU	Q1014	PRO	THR	L748	G592
ASP	Q1845	L1739	V1595	ASP	ASP	S1315	V1209	R1084	GLY	PRO	VAL	L749	H593
GLY	L1846	L1739	V1596	THR	THR	LYS	A1210	F1085	TRP	PRO	VAL	R750	I594
SER	I1847	P1750	W1597	ALA	ALA	SER	Q1211	R1086	THR	PRO	VAL	T751	I597
LEU	P1750	L1754	L1459	GLN	GLN	VAL	N1216	E1091	TTR	ASP	ASP	T751	I597
ASP	F1852	L1754	D1460	GLY	GLY	ALA	F1217	K1092	GLY	THR	THR	S756	L601
GLY	K1853	L1754	R1461	LYS	LYS	GLY	G1218	T1093	GLN	GLN	GLN	C758	L601
SER	GLU			PRO	PRO								



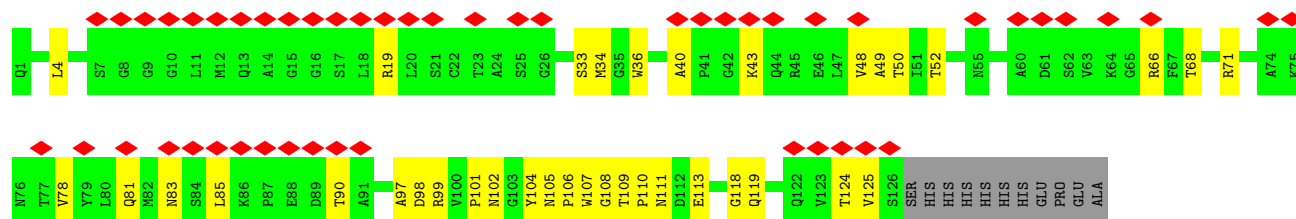




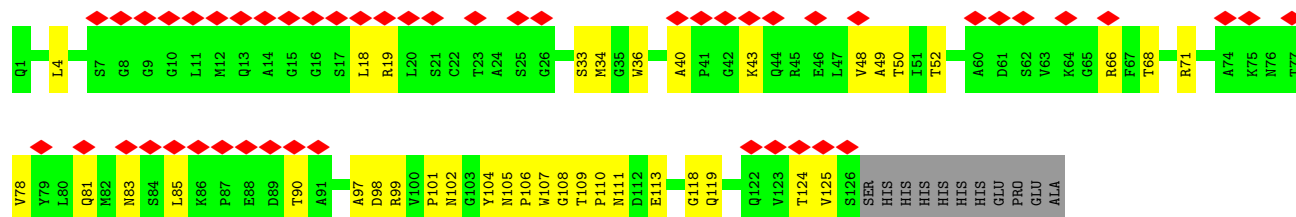
• Molecule 2: Nanobody 9657



• Molecule 2: Nanobody 9657

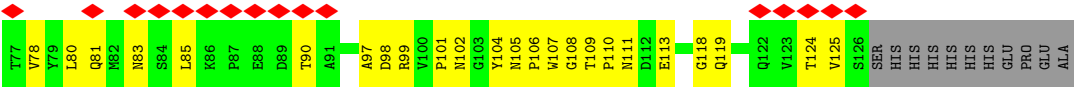


• Molecule 2: Nanobody 9657



• Molecule 2: Nanobody 9657





4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	76852	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	5.181	Depositor
Minimum map value	-0.204	Depositor
Average map value	0.074	Depositor
Map value standard deviation	0.151	Depositor
Recommended contour level	0.35	Depositor
Map size ($\text{\AA}$)	490.56, 490.56, 490.56	wwPDB
Map dimensions	336, 336, 336	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	1.46, 1.46, 1.46	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, CFF, CA, 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	0.13	0/33802	0.33	0/45653
1	C	0.13	0/33802	0.33	0/45653
1	E	0.13	0/33802	0.33	0/45653
1	F	0.13	0/33802	0.33	0/45653
2	B	0.11	0/984	0.28	0/1335
2	D	0.11	0/984	0.28	0/1335
2	G	0.11	0/984	0.28	0/1335
2	I	0.11	0/984	0.28	0/1335
All	All	0.13	0/139144	0.33	0/187952

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	33088	0	32662	892	0
1	C	33088	0	32662	876	0
1	E	33088	0	32662	893	0
1	F	33088	0	32662	890	0
2	B	965	0	910	33	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	D	965	0	910	32	0
2	G	965	0	910	33	0
2	I	965	0	910	31	0
3	A	31	0	12	3	0
3	C	31	0	12	3	0
3	E	31	0	12	3	0
3	F	31	0	12	3	0
4	A	14	0	10	0	0
4	C	14	0	10	0	0
4	E	14	0	10	0	0
4	F	14	0	10	0	0
5	A	1	0	0	0	0
5	C	1	0	0	0	0
5	E	1	0	0	0	0
5	F	1	0	0	0	0
6	A	1	0	0	0	0
6	C	1	0	0	0	0
6	E	1	0	0	0	0
6	F	1	0	0	0	0
All	All	136400	0	134376	3636	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 13.

All (3636) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3292:GLY:HA3	1:A:3295:MET:HE3	1.48	0.95
1:C:3292:GLY:HA3	1:C:3295:MET:HE3	1.48	0.93
1:E:3292:GLY:HA3	1:E:3295:MET:HE3	1.48	0.93
1:F:3292:GLY:HA3	1:F:3295:MET:HE3	1.48	0.92
1:E:2998:LYS:HG3	1:E:3002:MET:HE3	1.56	0.87
1:A:2998:LYS:HG3	1:A:3002:MET:HE3	1.56	0.87
1:C:2998:LYS:HG3	1:C:3002:MET:HE3	1.56	0.87
1:F:2998:LYS:HG3	1:F:3002:MET:HE3	1.56	0.87
1:C:3393:GLU:HG3	1:C:3397:MET:HE2	1.58	0.85
1:E:3393:GLU:HG3	1:E:3397:MET:HE2	1.58	0.85
1:F:3393:GLU:HG3	1:F:3397:MET:HE2	1.58	0.84
1:A:4040:GLY:HA3	1:A:4078:ASP:HA	1.60	0.83
1:A:3393:GLU:HG3	1:A:3397:MET:HE2	1.58	0.83
1:C:4040:GLY:HA3	1:C:4078:ASP:HA	1.60	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4040:GLY:HA3	1:E:4078:ASP:HA	1.60	0.82
1:F:4040:GLY:HA3	1:F:4078:ASP:HA	1.60	0.81
1:F:3392:GLU:HG2	1:F:3479:ILE:HG12	1.63	0.81
1:C:3392:GLU:HG2	1:C:3479:ILE:HG12	1.63	0.80
1:A:3376:VAL:O	1:A:3380:ARG:HB2	1.82	0.80
1:C:3376:VAL:O	1:C:3380:ARG:HB2	1.82	0.80
1:E:3376:VAL:O	1:E:3380:ARG:HB2	1.82	0.79
1:A:3392:GLU:HG2	1:A:3479:ILE:HG12	1.63	0.79
1:C:306:LEU:HD11	1:C:314:LEU:HB3	1.65	0.78
1:F:3376:VAL:O	1:F:3380:ARG:HB2	1.82	0.78
1:E:3392:GLU:HG2	1:E:3479:ILE:HG12	1.63	0.78
1:A:306:LEU:HD11	1:A:314:LEU:HB3	1.65	0.77
1:A:2680:MET:HA	1:A:2680:MET:HE3	1.67	0.77
1:E:306:LEU:HD11	1:E:314:LEU:HB3	1.65	0.77
1:F:306:LEU:HD11	1:F:314:LEU:HB3	1.65	0.77
1:C:2680:MET:HA	1:C:2680:MET:HE3	1.67	0.76
1:A:3286:ASN:HB3	1:A:3295:MET:HE2	1.68	0.76
1:C:2916:ILE:O	1:C:2919:ARG:N	2.20	0.75
1:E:2916:ILE:O	1:E:2919:ARG:N	2.20	0.75
1:E:2680:MET:HA	1:E:2680:MET:HE3	1.67	0.75
1:E:3286:ASN:HB3	1:E:3295:MET:HE2	1.68	0.75
1:F:2916:ILE:O	1:F:2919:ARG:N	2.20	0.75
1:F:2680:MET:HA	1:F:2680:MET:HE3	1.67	0.74
1:A:2916:ILE:O	1:A:2919:ARG:N	2.20	0.74
1:C:3286:ASN:HB3	1:C:3295:MET:HE2	1.68	0.74
1:F:3286:ASN:HB3	1:F:3295:MET:HE2	1.68	0.73
1:E:2609:LEU:HD12	1:E:2613:TYR:HE1	1.54	0.73
1:F:891:GLU:HB2	1:F:978:PRO:HB3	1.71	0.72
1:E:891:GLU:HB2	1:E:978:PRO:HB3	1.71	0.72
1:F:2545:ASP:O	1:F:2549:HIS:ND1	2.20	0.72
1:F:794:PHE:HB2	1:F:798:ILE:HG21	1.72	0.72
1:C:2609:LEU:HD12	1:C:2613:TYR:HE1	1.54	0.72
1:E:3049:LEU:HD23	1:E:3052:VAL:HG23	1.72	0.72
1:A:3049:LEU:HD23	1:A:3052:VAL:HG23	1.72	0.71
1:A:2609:LEU:HD12	1:A:2613:TYR:HE1	1.54	0.71
1:C:794:PHE:HB2	1:C:798:ILE:HG21	1.72	0.71
1:C:3238:LEU:HD12	1:C:3241:LEU:HD11	1.73	0.71
1:E:3238:LEU:HD12	1:E:3241:LEU:HD11	1.73	0.71
1:F:2609:LEU:HD12	1:F:2613:TYR:HE1	1.54	0.71
1:F:3238:LEU:HD12	1:F:3241:LEU:HD11	1.73	0.71
1:A:794:PHE:HB2	1:A:798:ILE:HG21	1.72	0.71

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:794:PHE:HB2	1:E:798:ILE:HG21	1.72	0.71
1:A:2545:ASP:O	1:A:2549:HIS:ND1	2.21	0.71
1:E:2545:ASP:O	1:E:2549:HIS:ND1	2.21	0.71
1:E:3843:GLN:HG3	1:E:3921:GLU:HG3	1.72	0.70
1:A:3238:LEU:HD12	1:A:3241:LEU:HD11	1.73	0.70
1:A:891:GLU:HB2	1:A:978:PRO:HB3	1.71	0.70
1:A:3843:GLN:HG3	1:A:3921:GLU:HG3	1.72	0.70
1:E:2501:LEU:HD13	1:E:2512:ALA:HA	1.74	0.70
1:F:3843:GLN:HG3	1:F:3921:GLU:HG3	1.72	0.70
1:A:924:LEU:HD12	1:A:925:PRO:HD2	1.74	0.70
1:C:924:LEU:HD12	1:C:925:PRO:HD2	1.74	0.70
1:C:891:GLU:HB2	1:C:978:PRO:HB3	1.71	0.70
1:C:2545:ASP:O	1:C:2549:HIS:ND1	2.20	0.70
1:E:3399:ALA:HB1	1:E:3556:VAL:HG21	1.74	0.70
1:F:3049:LEU:HD23	1:F:3052:VAL:HG23	1.72	0.70
1:C:3226:ARG:HA	1:C:3234:MET:SD	2.32	0.70
1:C:3399:ALA:HB1	1:C:3556:VAL:HG21	1.74	0.70
1:F:3399:ALA:HB1	1:F:3556:VAL:HG21	1.74	0.70
1:C:3049:LEU:HD23	1:C:3052:VAL:HG23	1.72	0.69
1:A:3399:ALA:HB1	1:A:3556:VAL:HG21	1.74	0.69
1:C:2501:LEU:HD13	1:C:2512:ALA:HA	1.74	0.69
1:F:3226:ARG:HA	1:F:3234:MET:SD	2.32	0.69
1:A:3273:ASN:HD21	1:A:3310:LYS:HB2	1.56	0.69
1:E:924:LEU:HD12	1:E:925:PRO:HD2	1.74	0.69
1:C:3843:GLN:HG3	1:C:3921:GLU:HG3	1.71	0.69
1:E:3226:ARG:HA	1:E:3234:MET:SD	2.32	0.69
1:A:3226:ARG:HA	1:A:3234:MET:SD	2.32	0.69
1:C:3273:ASN:HD21	1:C:3310:LYS:HB2	1.57	0.69
1:E:3273:ASN:HD21	1:E:3310:LYS:HB2	1.57	0.69
1:A:2501:LEU:HD13	1:A:2512:ALA:HA	1.74	0.69
1:A:4013:LEU:HD13	1:A:4121:ALA:HB2	1.75	0.69
1:E:946:LEU:HD13	1:E:995:MET:HG2	1.75	0.69
1:F:764:PRO:HB2	1:F:781:ASN:H	1.58	0.69
1:F:946:LEU:HD13	1:F:995:MET:HG2	1.75	0.69
1:F:2501:LEU:HD13	1:F:2512:ALA:HA	1.74	0.69
1:A:764:PRO:HB2	1:A:781:ASN:H	1.58	0.69
1:E:764:PRO:HB2	1:E:781:ASN:H	1.58	0.69
1:E:3326:LYS:HD3	1:E:3397:MET:HB3	1.75	0.69
1:F:924:LEU:HD12	1:F:925:PRO:HD2	1.74	0.69
1:F:4013:LEU:HD13	1:F:4121:ALA:HB2	1.75	0.69
1:C:764:PRO:HB2	1:C:781:ASN:H	1.58	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2620:TYR:HB2	1:A:2674:ALA:HB1	1.76	0.69
1:A:3326:LYS:HD3	1:A:3397:MET:HB3	1.75	0.69
1:C:2620:TYR:HB2	1:C:2674:ALA:HB1	1.75	0.69
1:F:3727:GLN:O	1:F:3731:HIS:HB3	1.93	0.69
1:F:4942:MET:HE1	1:F:4949:GLU:HG3	1.75	0.69
1:C:234:LEU:HD12	1:C:405:LEU:HB3	1.76	0.68
1:A:3727:GLN:O	1:A:3731:HIS:HB3	1.93	0.68
1:C:4942:MET:HE1	1:C:4949:GLU:HG3	1.75	0.68
1:E:3727:GLN:O	1:E:3731:HIS:HB3	1.93	0.68
1:F:3273:ASN:HD21	1:F:3310:LYS:HB2	1.57	0.68
1:C:4013:LEU:HD13	1:C:4121:ALA:HB2	1.75	0.68
1:F:3326:LYS:HD3	1:F:3397:MET:HB3	1.75	0.68
1:E:4942:MET:HE1	1:E:4949:GLU:HG3	1.75	0.68
1:E:892:LEU:HA	1:E:895:MET:HE3	1.76	0.68
1:F:2620:TYR:HB2	1:F:2674:ALA:HB1	1.75	0.68
1:C:3326:LYS:HD3	1:C:3397:MET:HB3	1.75	0.68
1:E:4013:LEU:HD13	1:E:4121:ALA:HB2	1.75	0.68
1:F:1303:ARG:NH2	1:F:1590:GLN:OE1	2.27	0.68
1:F:3167:ILE:O	1:F:3247:ARG:NH2	2.27	0.68
1:A:2922:TYR:HB2	1:A:3002:MET:HE1	1.76	0.68
1:C:1303:ARG:NH2	1:C:1590:GLN:OE1	2.27	0.68
2:G:36:TRP:HB2	2:G:48:VAL:HB	1.76	0.68
1:E:3000:LYS:HD2	1:E:3043:THR:HG21	1.76	0.68
1:E:3167:ILE:O	1:E:3247:ARG:NH2	2.27	0.68
1:C:3000:LYS:HD2	1:C:3043:THR:HG21	1.76	0.67
1:C:3727:GLN:O	1:C:3731:HIS:HB3	1.93	0.67
1:E:2620:TYR:HB2	1:E:2674:ALA:HB1	1.75	0.67
1:A:1303:ARG:NH2	1:A:1590:GLN:OE1	2.27	0.67
1:A:3993:THR:HA	1:A:3996:LYS:HE2	1.76	0.67
1:E:234:LEU:HD12	1:E:405:LEU:HB3	1.76	0.67
1:F:234:LEU:HD12	1:F:405:LEU:HB3	1.76	0.67
1:C:946:LEU:HD13	1:C:995:MET:HG2	1.75	0.67
1:F:2922:TYR:HB2	1:F:3002:MET:HE1	1.76	0.67
1:F:3000:LYS:HD2	1:F:3043:THR:HG21	1.76	0.67
1:A:982:ASP:HB3	1:A:985:PHE:HB2	1.76	0.67
1:A:3000:LYS:HD2	1:A:3043:THR:HG21	1.77	0.67
1:C:3993:THR:HA	1:C:3996:LYS:HE2	1.77	0.67
1:F:3041:ALA:HB3	1:F:3116:PHE:HB3	1.76	0.67
2:I:36:TRP:HB2	2:I:48:VAL:HB	1.76	0.67
1:C:982:ASP:HB3	1:C:985:PHE:HB2	1.76	0.67
1:A:234:LEU:HD12	1:A:405:LEU:HB3	1.76	0.67

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3993:THR:HA	1:E:3996:LYS:HE2	1.77	0.67
1:E:4158:GLN:HB3	1:E:4199:MET:HB3	1.76	0.67
1:F:3993:THR:HA	1:F:3996:LYS:HE2	1.77	0.67
1:A:946:LEU:HD13	1:A:995:MET:HG2	1.75	0.67
1:E:1303:ARG:NH2	1:E:1590:GLN:OE1	2.27	0.67
1:A:892:LEU:HA	1:A:895:MET:HE3	1.76	0.67
1:A:2918:LYS:HD2	1:A:2919:ARG:N	2.10	0.67
1:A:4942:MET:HE1	1:A:4949:GLU:HG3	1.75	0.67
1:F:3237:VAL:HA	1:F:3240:MET:HG2	1.77	0.67
1:A:3041:ALA:HB3	1:A:3116:PHE:HB3	1.76	0.66
1:A:3167:ILE:O	1:A:3247:ARG:NH2	2.27	0.66
1:C:892:LEU:HA	1:C:895:MET:HE3	1.76	0.66
1:E:3041:ALA:HB3	1:E:3116:PHE:HB3	1.76	0.66
1:A:1560:ARG:NH1	1:A:1561:ILE:O	2.29	0.66
1:C:1560:ARG:NH1	1:C:1561:ILE:O	2.29	0.66
1:C:3466:VAL:HG22	1:C:3470:LYS:HE3	1.78	0.66
1:E:2918:LYS:HD2	1:E:2919:ARG:N	2.10	0.66
1:E:2922:TYR:HB2	1:E:3002:MET:HE1	1.76	0.66
1:A:3237:VAL:HA	1:A:3240:MET:HG2	1.77	0.66
1:C:4158:GLN:HB3	1:C:4199:MET:HB3	1.76	0.66
1:F:1267:HIS:HB3	1:F:1295:ASN:H	1.61	0.66
1:A:3211:GLU:HA	1:A:3214:MET:HG2	1.77	0.66
1:A:3466:VAL:HG22	1:A:3470:LYS:HE3	1.78	0.66
1:A:4158:GLN:HB3	1:A:4199:MET:HB3	1.76	0.66
1:C:2922:TYR:HB2	1:C:3002:MET:HE1	1.76	0.66
2:D:105:ASN:ND2	2:D:108:GLY:O	2.29	0.66
1:E:982:ASP:HB3	1:E:985:PHE:HB2	1.76	0.66
2:I:105:ASN:ND2	2:I:108:GLY:O	2.29	0.66
1:C:3041:ALA:HB3	1:C:3116:PHE:HB3	1.76	0.66
1:E:3211:GLU:HA	1:E:3214:MET:HG2	1.77	0.66
1:F:892:LEU:HA	1:F:895:MET:HE3	1.76	0.66
1:C:1437:GLU:O	1:C:1440:ASN:ND2	2.29	0.66
1:F:1560:ARG:NH1	1:F:1561:ILE:O	2.29	0.66
1:E:3818:MET:N	1:E:3818:MET:SD	2.70	0.66
1:F:982:ASP:HB3	1:F:985:PHE:HB2	1.76	0.66
1:F:3211:GLU:HA	1:F:3214:MET:HG2	1.77	0.66
1:F:3466:VAL:HG22	1:F:3470:LYS:HE3	1.78	0.66
2:B:36:TRP:HB2	2:B:48:VAL:HB	1.76	0.65
2:D:36:TRP:HB2	2:D:48:VAL:HB	1.76	0.65
2:B:105:ASN:ND2	2:B:108:GLY:O	2.29	0.65
1:C:3167:ILE:O	1:C:3247:ARG:NH2	2.27	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1560:ARG:NH1	1:E:1561:ILE:O	2.29	0.65
1:E:3039:LEU:O	1:E:3110:HIS:NE2	2.30	0.65
1:A:1267:HIS:HB3	1:A:1295:ASN:H	1.61	0.65
1:C:3237:VAL:HA	1:C:3240:MET:HG2	1.77	0.65
1:E:3237:VAL:HA	1:E:3240:MET:HG2	1.77	0.65
1:A:3039:LEU:O	1:A:3110:HIS:NE2	2.29	0.65
1:E:2439:PHE:CZ	1:E:2464:LYS:HD2	2.32	0.65
1:F:3818:MET:N	1:F:3818:MET:SD	2.70	0.65
1:A:2439:PHE:CZ	1:A:2464:LYS:HD2	2.32	0.65
1:C:2918:LYS:HD2	1:C:2919:ARG:N	2.10	0.65
1:F:4158:GLN:HB3	1:F:4199:MET:HB3	1.76	0.65
1:A:317:MET:N	1:A:317:MET:SD	2.70	0.65
1:A:2641:ARG:HH22	1:A:2680:MET:HE1	1.60	0.65
1:C:2641:ARG:HH22	1:C:2680:MET:HE1	1.60	0.65
1:E:1267:HIS:HB3	1:E:1295:ASN:H	1.61	0.65
1:E:1913:CYS:SG	1:E:2090:GLN:NE2	2.61	0.65
1:E:2641:ARG:HH22	1:E:2680:MET:HE1	1.60	0.65
2:G:105:ASN:ND2	2:G:108:GLY:O	2.29	0.65
1:C:3039:LEU:O	1:C:3110:HIS:NE2	2.30	0.65
1:E:222:GLU:HB2	1:E:349:MET:HG3	1.79	0.65
1:E:1437:GLU:O	1:E:1440:ASN:ND2	2.29	0.65
1:F:222:GLU:HB2	1:F:349:MET:HG3	1.79	0.65
1:F:1437:GLU:O	1:F:1440:ASN:ND2	2.29	0.65
1:C:317:MET:N	1:C:317:MET:SD	2.70	0.65
1:E:2355:ASP:HB3	1:E:2358:ARG:HB2	1.79	0.65
1:E:2579:LEU:O	1:E:2615:ARG:NH1	2.30	0.65
1:E:3466:VAL:HG22	1:E:3470:LYS:HE3	1.78	0.65
1:F:3039:LEU:O	1:F:3110:HIS:NE2	2.29	0.65
1:A:946:LEU:HD11	1:A:999:LEU:HB2	1.79	0.65
1:C:3211:GLU:HA	1:C:3214:MET:HG2	1.77	0.65
1:E:317:MET:N	1:E:317:MET:SD	2.70	0.65
1:F:2439:PHE:CZ	1:F:2464:LYS:HD2	2.32	0.65
1:F:2579:LEU:O	1:F:2615:ARG:NH1	2.30	0.65
1:F:2641:ARG:HH22	1:F:2680:MET:HE1	1.60	0.65
1:F:2918:LYS:HD2	1:F:2919:ARG:N	2.10	0.65
1:C:2439:PHE:CZ	1:C:2464:LYS:HD2	2.32	0.64
1:C:3614:ARG:HH22	1:C:3618:LEU:HD21	1.62	0.64
1:C:3818:MET:SD	1:C:3818:MET:N	2.70	0.64
1:E:555:LEU:HD21	1:E:578:VAL:HG11	1.79	0.64
1:E:946:LEU:HD11	1:E:999:LEU:HB2	1.79	0.64
1:F:317:MET:SD	1:F:317:MET:N	2.70	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2579:LEU:O	1:A:2615:ARG:NH1	2.30	0.64
1:C:1267:HIS:HB3	1:C:1295:ASN:H	1.61	0.64
1:C:3151:ARG:HD3	1:C:3236:VAL:HG21	1.79	0.64
1:A:3614:ARG:HH22	1:A:3618:LEU:HD21	1.62	0.64
1:C:2579:LEU:O	1:C:2615:ARG:NH1	2.30	0.64
1:F:671:LYS:HB3	1:F:761:LEU:HB3	1.80	0.64
1:A:222:GLU:HB2	1:A:349:MET:HG3	1.79	0.64
1:A:3818:MET:N	1:A:3818:MET:SD	2.70	0.64
1:F:555:LEU:HD21	1:F:578:VAL:HG11	1.79	0.64
1:A:1437:GLU:O	1:A:1440:ASN:ND2	2.29	0.64
1:C:222:GLU:HB2	1:C:349:MET:HG3	1.79	0.64
1:C:2355:ASP:HB3	1:C:2358:ARG:HB2	1.78	0.64
1:F:3614:ARG:HH22	1:F:3618:LEU:HD21	1.62	0.64
1:C:2938:TYR:HB3	1:C:2955:TYR:HB3	1.79	0.64
1:E:2265:VAL:HG12	1:E:2326:ARG:HH21	1.63	0.64
1:E:2938:TYR:HB3	1:E:2955:TYR:HB3	1.79	0.64
1:E:3614:ARG:HH22	1:E:3618:LEU:HD21	1.62	0.64
1:F:946:LEU:HD11	1:F:999:LEU:HB2	1.79	0.64
1:F:2265:VAL:HG12	1:F:2326:ARG:HH21	1.63	0.64
1:F:2355:ASP:HB3	1:F:2358:ARG:HB2	1.79	0.64
1:E:3151:ARG:HD3	1:E:3236:VAL:HG21	1.79	0.64
1:A:3151:ARG:HD3	1:A:3236:VAL:HG21	1.79	0.64
1:F:4617:THR:OG1	1:F:4618:GLU:OE1	2.16	0.64
1:C:555:LEU:HD21	1:C:578:VAL:HG11	1.79	0.63
1:C:946:LEU:HD11	1:C:999:LEU:HB2	1.79	0.63
1:E:3272:MET:HE2	1:E:3308:LYS:HB2	1.80	0.63
1:F:891:GLU:HA	1:F:894:VAL:HG22	1.79	0.63
1:F:2938:TYR:HB3	1:F:2955:TYR:HB3	1.79	0.63
2:B:34:MET:HE2	2:B:78:VAL:HG11	1.81	0.63
1:C:3272:MET:HE2	1:C:3308:LYS:HB2	1.80	0.63
1:A:3688:MET:HE1	1:A:3752:PRO:HB2	1.81	0.63
1:C:2265:VAL:HG12	1:C:2326:ARG:HH21	1.63	0.63
1:C:3688:MET:HE1	1:C:3752:PRO:HB2	1.80	0.63
1:F:3151:ARG:HD3	1:F:3236:VAL:HG21	1.79	0.63
1:F:3688:MET:HE1	1:F:3752:PRO:HB2	1.81	0.63
1:A:671:LYS:HB3	1:A:761:LEU:HB3	1.79	0.63
1:A:2938:TYR:HB3	1:A:2955:TYR:HB3	1.79	0.63
1:E:671:LYS:HB3	1:E:761:LEU:HB3	1.79	0.63
1:A:1913:CYS:SG	1:A:2090:GLN:NE2	2.61	0.63
1:A:3272:MET:HE2	1:A:3308:LYS:HB2	1.80	0.63
1:F:1845:GLN:NE2	1:F:1852:PHE:O	2.32	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:891:GLU:HA	1:A:894:VAL:HG22	1.79	0.63
1:A:2265:VAL:HG12	1:A:2326:ARG:HH21	1.63	0.63
1:A:2355:ASP:HB3	1:A:2358:ARG:HB2	1.79	0.63
1:C:3217:ILE:HA	1:C:3220:LEU:HG	1.81	0.63
1:C:4617:THR:OG1	1:C:4618:GLU:OE1	2.16	0.63
1:E:4617:THR:OG1	1:E:4618:GLU:OE1	2.16	0.63
1:F:3129:CYS:HB3	1:F:3161:PHE:HE1	1.64	0.63
1:E:891:GLU:HA	1:E:894:VAL:HG22	1.79	0.63
1:F:594:ILE:HD12	1:F:631:LEU:HD13	1.81	0.63
1:C:3129:CYS:HB3	1:C:3161:PHE:HE1	1.64	0.63
1:A:555:LEU:HD21	1:A:578:VAL:HG11	1.79	0.62
1:A:3129:CYS:HB3	1:A:3161:PHE:HE1	1.64	0.62
1:A:4051:MET:HA	1:A:4054:HIS:HB2	1.81	0.62
1:C:1845:GLN:NE2	1:C:1852:PHE:O	2.32	0.62
1:E:1845:GLN:NE2	1:E:1852:PHE:O	2.32	0.62
1:E:4051:MET:HA	1:E:4054:HIS:HB2	1.81	0.62
1:F:1913:CYS:SG	1:F:2090:GLN:NE2	2.61	0.62
1:F:3217:ILE:HA	1:F:3220:LEU:HG	1.81	0.62
1:F:3394:LEU:HA	1:F:3397:MET:HE3	1.81	0.62
1:C:891:GLU:HA	1:C:894:VAL:HG22	1.79	0.62
1:E:3394:LEU:HA	1:E:3397:MET:HE3	1.81	0.62
1:C:2587:LEU:O	1:C:2591:LEU:HG	2.00	0.62
1:E:3129:CYS:HB3	1:E:3161:PHE:HE1	1.64	0.62
1:F:2713:PRO:HD2	1:F:2716:LEU:HD12	1.81	0.62
1:A:1935:LEU:HD11	1:A:1975:LEU:HD22	1.82	0.62
1:A:3394:LEU:HA	1:A:3397:MET:HE3	1.81	0.62
1:C:671:LYS:HB3	1:C:761:LEU:HB3	1.79	0.62
1:F:3272:MET:HE2	1:F:3308:LYS:HB2	1.80	0.62
1:A:2713:PRO:HD2	1:A:2716:LEU:HD12	1.81	0.62
1:A:3217:ILE:HA	1:A:3220:LEU:HG	1.81	0.62
1:E:2587:LEU:O	1:E:2591:LEU:HG	2.00	0.62
1:A:594:ILE:HD12	1:A:631:LEU:HD13	1.81	0.62
1:C:1935:LEU:HD11	1:C:1975:LEU:HD22	1.82	0.62
1:C:4051:MET:HA	1:C:4054:HIS:HB2	1.81	0.62
1:F:2981:PHE:HB3	1:F:3000:LYS:HE2	1.82	0.62
1:A:2585:GLN:OE1	1:A:2585:GLN:N	2.33	0.62
1:E:3688:MET:HE1	1:E:3752:PRO:HB2	1.80	0.62
2:G:34:MET:HE2	2:G:78:VAL:HG11	1.81	0.62
1:C:594:ILE:HD12	1:C:631:LEU:HD13	1.81	0.62
1:C:3394:LEU:HA	1:C:3397:MET:HE3	1.81	0.62
1:E:1935:LEU:HD11	1:E:1975:LEU:HD22	1.82	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1789:LYS:HE3	1:F:1834:ILE:HG22	1.82	0.62
1:F:1935:LEU:HD11	1:F:1975:LEU:HD22	1.82	0.62
2:I:34:MET:HE2	2:I:78:VAL:HG11	1.81	0.62
1:A:1953:SER:H	1:A:1956:LEU:HB2	1.65	0.62
1:A:4622:GLU:HA	1:A:4628:GLN:HE21	1.65	0.62
1:C:671:LYS:HG3	1:C:761:LEU:HD22	1.81	0.62
1:C:1953:SER:H	1:C:1956:LEU:HB2	1.65	0.62
1:C:2981:PHE:HB3	1:C:3000:LYS:HE2	1.82	0.62
1:E:671:LYS:HG3	1:E:761:LEU:HD22	1.81	0.62
1:E:3331:MET:O	1:E:3335:GLU:HG2	2.00	0.62
1:A:1845:GLN:NE2	1:A:1852:PHE:O	2.32	0.62
1:A:4617:THR:OG1	1:A:4618:GLU:OE1	2.16	0.62
1:C:2585:GLN:N	1:C:2585:GLN:OE1	2.33	0.62
1:E:2974:PHE:HB3	1:E:3038:THR:HG21	1.82	0.62
1:F:1953:SER:H	1:F:1956:LEU:HB2	1.65	0.62
1:F:2585:GLN:N	1:F:2585:GLN:OE1	2.33	0.62
1:F:2587:LEU:O	1:F:2591:LEU:HG	2.00	0.62
1:C:2086:LEU:HD12	1:C:2089:ARG:HD3	1.82	0.61
1:E:2585:GLN:OE1	1:E:2585:GLN:N	2.33	0.61
1:E:2973:TYR:O	1:E:2977:HIS:ND1	2.33	0.61
1:F:3900:GLN:OE1	1:F:3903:ARG:NH1	2.33	0.61
1:A:2412:LYS:HG3	1:A:2415:ALA:H	1.65	0.61
1:A:2974:PHE:HB3	1:A:3038:THR:HG21	1.82	0.61
1:A:3331:MET:O	1:A:3335:GLU:HG2	2.00	0.61
1:C:176:ARG:HD3	1:C:179:ASP:HB3	1.82	0.61
1:C:2973:TYR:O	1:C:2977:HIS:ND1	2.33	0.61
1:E:165:ALA:HB2	1:E:182:ILE:HG12	1.82	0.61
1:E:594:ILE:HD12	1:E:631:LEU:HD13	1.81	0.61
1:E:747:HIS:ND1	1:E:748:LEU:O	2.31	0.61
1:E:2086:LEU:HD12	1:E:2089:ARG:HD3	1.81	0.61
1:F:2973:TYR:O	1:F:2977:HIS:ND1	2.33	0.61
1:F:4051:MET:HA	1:F:4054:HIS:HB2	1.81	0.61
1:F:4132:LEU:HD11	1:F:4148:TYR:HB3	1.83	0.61
1:A:2587:LEU:O	1:A:2591:LEU:HG	2.00	0.61
1:A:3382:LYS:HA	1:A:3385:LYS:HD2	1.82	0.61
1:E:1953:SER:H	1:E:1956:LEU:HB2	1.65	0.61
1:E:2412:LYS:HG3	1:E:2415:ALA:H	1.65	0.61
1:F:165:ALA:HB2	1:F:182:ILE:HG12	1.83	0.61
1:F:3764:ILE:O	1:F:3769:ASN:ND2	2.31	0.61
1:C:2713:PRO:HD2	1:C:2716:LEU:HD12	1.81	0.61
1:C:3331:MET:O	1:C:3335:GLU:HG2	2.00	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3900:GLN:OE1	1:C:3903:ARG:NH1	2.33	0.61
2:D:34:MET:HE2	2:D:78:VAL:HG11	1.81	0.61
1:E:953:ALA:H	1:E:1062:TYR:HD1	1.49	0.61
1:E:3382:LYS:HA	1:E:3385:LYS:HD2	1.83	0.61
1:F:671:LYS:HG3	1:F:761:LEU:HD22	1.81	0.61
1:A:2086:LEU:HD12	1:A:2089:ARG:HD3	1.82	0.61
1:A:2669:SER:O	1:A:2972:GLN:NE2	2.34	0.61
1:A:3440:LYS:HA	1:A:3443:ILE:HD11	1.82	0.61
1:A:4132:LEU:HD11	1:A:4148:TYR:HB3	1.82	0.61
1:C:2716:LEU:HD13	1:C:2778:LEU:HB3	1.83	0.61
1:C:3382:LYS:HA	1:C:3385:LYS:HD2	1.83	0.61
1:E:2981:PHE:HB3	1:E:3000:LYS:HE2	1.82	0.61
1:E:3217:ILE:HA	1:E:3220:LEU:HG	1.81	0.61
1:E:4132:LEU:HD11	1:E:4148:TYR:HB3	1.82	0.61
1:F:953:ALA:H	1:F:1062:TYR:HD1	1.49	0.61
1:F:2716:LEU:HD13	1:F:2778:LEU:HB3	1.83	0.61
1:F:3331:MET:O	1:F:3335:GLU:HG2	2.00	0.61
1:F:3382:LYS:HA	1:F:3385:LYS:HD2	1.83	0.61
1:A:176:ARG:HD3	1:A:179:ASP:HB3	1.82	0.61
1:A:671:LYS:HG3	1:A:761:LEU:HD22	1.81	0.61
1:A:2973:TYR:O	1:A:2977:HIS:ND1	2.33	0.61
1:C:4132:LEU:HD11	1:C:4148:TYR:HB3	1.82	0.61
1:E:3440:LYS:HA	1:E:3443:ILE:HD11	1.82	0.61
1:E:3900:GLN:OE1	1:E:3903:ARG:NH1	2.33	0.61
1:F:2922:TYR:O	1:F:2926:GLN:HB2	2.01	0.61
2:I:68:THR:HB	2:I:81:GLN:HB2	1.83	0.61
1:A:3233:MET:HA	1:A:3237:VAL:HB	1.83	0.61
1:A:3900:GLN:OE1	1:A:3903:ARG:NH1	2.33	0.61
1:C:953:ALA:H	1:C:1062:TYR:HD1	1.49	0.61
1:C:4079:TYR:O	1:C:4083:VAL:HG12	2.01	0.61
1:E:476:GLN:NE2	1:E:3677:GLU:OE1	2.34	0.61
1:E:1789:LYS:HE3	1:E:1834:ILE:HG22	1.82	0.61
1:E:2922:TYR:O	1:E:2926:GLN:HB2	2.01	0.61
1:E:3233:MET:HA	1:E:3237:VAL:HB	1.83	0.61
1:E:4079:TYR:O	1:E:4083:VAL:HG12	2.01	0.61
1:F:4195:THR:O	1:F:4199:MET:HG3	2.01	0.61
1:A:2343:LEU:HD23	1:A:2430:ASP:HA	1.82	0.61
1:A:2716:LEU:HD13	1:A:2778:LEU:HB3	1.83	0.61
1:C:1086:ARG:HH21	1:C:1251:LEU:HD13	1.66	0.61
1:C:2343:LEU:HD23	1:C:2430:ASP:HA	1.82	0.61
1:E:2713:PRO:HD2	1:E:2716:LEU:HD12	1.81	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3384:LEU:HD21	1:E:3474:PRO:HB2	1.83	0.61
1:F:2086:LEU:HD12	1:F:2089:ARG:HD3	1.82	0.61
1:F:4079:TYR:O	1:F:4083:VAL:HG12	2.01	0.61
1:A:476:GLN:NE2	1:A:3677:GLU:OE1	2.34	0.61
1:A:747:HIS:ND1	1:A:748:LEU:O	2.31	0.61
1:E:1961:THR:HA	1:E:1965:ARG:HB2	1.83	0.61
1:E:2343:LEU:HD23	1:E:2430:ASP:HA	1.82	0.61
1:F:2974:PHE:HB3	1:F:3038:THR:HG21	1.82	0.61
2:B:68:THR:HB	2:B:81:GLN:HB2	1.83	0.60
1:C:777:GLY:HA3	1:C:1469:LEU:HD12	1.83	0.60
1:C:2669:SER:O	1:C:2972:GLN:NE2	2.34	0.60
1:C:4195:THR:O	1:C:4199:MET:HG3	2.01	0.60
1:E:2716:LEU:HD13	1:E:2778:LEU:HB3	1.83	0.60
1:E:4622:GLU:HA	1:E:4628:GLN:HE21	1.65	0.60
1:F:3233:MET:HA	1:F:3237:VAL:HB	1.83	0.60
1:A:165:ALA:HB2	1:A:182:ILE:HG12	1.83	0.60
1:A:953:ALA:H	1:A:1062:TYR:HD1	1.49	0.60
1:A:4195:THR:O	1:A:4199:MET:HG3	2.01	0.60
1:C:2661:PHE:HD2	1:C:2965:VAL:HG21	1.66	0.60
1:E:2519:LEU:HD21	1:E:2554:LEU:HD21	1.83	0.60
1:F:2669:SER:O	1:F:2972:GLN:NE2	2.34	0.60
1:A:2981:PHE:HB3	1:A:3000:LYS:HE2	1.82	0.60
1:C:476:GLN:NE2	1:C:3677:GLU:OE1	2.34	0.60
1:C:2922:TYR:O	1:C:2926:GLN:HB2	2.01	0.60
1:C:3233:MET:HA	1:C:3237:VAL:HB	1.83	0.60
1:E:1827:TYR:CZ	1:E:1831:ILE:HD11	2.37	0.60
1:F:176:ARG:HD3	1:F:179:ASP:HB3	1.82	0.60
1:F:332:ARG:NH1	1:F:364:GLN:OE1	2.34	0.60
1:F:887:GLU:HA	1:F:890:HIS:CD2	2.37	0.60
1:F:2237:THR:HG22	1:F:2239:LEU:H	1.67	0.60
1:F:4622:GLU:HA	1:F:4628:GLN:HE21	1.65	0.60
2:G:68:THR:HB	2:G:81:GLN:HB2	1.83	0.60
1:A:1086:ARG:HH21	1:A:1251:LEU:HD13	1.66	0.60
1:A:1144:ARG:HH11	1:A:1191:ALA:HA	1.66	0.60
1:A:1789:LYS:HE3	1:A:1834:ILE:HG22	1.82	0.60
1:A:2519:LEU:HD21	1:A:2554:LEU:HD21	1.83	0.60
1:C:165:ALA:HB2	1:C:182:ILE:HG12	1.82	0.60
1:C:2412:LYS:HG3	1:C:2415:ALA:H	1.65	0.60
1:C:2974:PHE:HB3	1:C:3038:THR:HG21	1.82	0.60
1:E:1086:ARG:HH21	1:E:1251:LEU:HD13	1.66	0.60
1:E:3089:VAL:O	1:E:3093:ILE:HG12	2.01	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1144:ARG:HH11	1:F:1191:ALA:HA	1.66	0.60
1:C:1827:TYR:CZ	1:C:1831:ILE:HD11	2.37	0.60
1:E:2669:SER:O	1:E:2972:GLN:NE2	2.34	0.60
1:F:476:GLN:NE2	1:F:3677:GLU:OE1	2.34	0.60
1:F:2343:LEU:HD23	1:F:2430:ASP:HA	1.82	0.60
1:F:2455:MET:HE3	1:F:2457:ALA:N	2.17	0.60
1:A:4079:TYR:O	1:A:4083:VAL:HG12	2.01	0.60
1:C:1789:LYS:HE3	1:C:1834:ILE:HG22	1.82	0.60
1:C:2435:ILE:HD12	1:C:2464:LYS:HG2	1.84	0.60
1:C:2455:MET:HE3	1:C:2457:ALA:N	2.16	0.60
1:C:4622:GLU:HA	1:C:4628:GLN:HE21	1.65	0.60
1:E:2661:PHE:HD2	1:E:2965:VAL:HG21	1.66	0.60
1:F:3089:VAL:O	1:F:3093:ILE:HG12	2.01	0.60
1:A:1827:TYR:CZ	1:A:1831:ILE:HD11	2.37	0.60
1:C:3089:VAL:O	1:C:3093:ILE:HG12	2.01	0.60
1:E:332:ARG:NH1	1:E:364:GLN:OE1	2.34	0.60
1:E:887:GLU:HA	1:E:890:HIS:CD2	2.37	0.60
1:E:2237:THR:HG22	1:E:2239:LEU:H	1.67	0.60
1:E:2928:LEU:HD13	1:E:2970:ILE:HG22	1.84	0.60
1:F:3440:LYS:HA	1:F:3443:ILE:HD11	1.82	0.60
1:A:1174:MET:HB3	1:A:1190:LEU:HA	1.84	0.60
1:A:3089:VAL:O	1:A:3093:ILE:HG12	2.01	0.60
1:C:887:GLU:HA	1:C:890:HIS:CD2	2.37	0.60
1:C:2237:THR:HG22	1:C:2239:LEU:H	1.67	0.60
1:E:1174:MET:HB3	1:E:1190:LEU:HA	1.84	0.60
1:A:707:PRO:HG2	1:A:838:ARG:HB2	1.84	0.60
1:A:777:GLY:HA3	1:A:1469:LEU:HD12	1.83	0.60
2:D:68:THR:HB	2:D:81:GLN:HB2	1.83	0.60
1:E:1144:ARG:HH11	1:E:1191:ALA:HA	1.66	0.60
1:E:4761:HIS:NE2	1:E:4871:GLU:OE2	2.35	0.60
1:F:2412:LYS:HG3	1:F:2415:ALA:H	1.65	0.60
1:A:2435:ILE:HD12	1:A:2464:LYS:HG2	1.84	0.60
1:C:3440:LYS:HA	1:C:3443:ILE:HD11	1.82	0.60
1:C:4761:HIS:NE2	1:C:4871:GLU:OE2	2.35	0.60
1:E:176:ARG:HD3	1:E:179:ASP:HB3	1.82	0.60
1:F:332:ARG:NH2	1:F:338:LEU:O	2.35	0.60
1:F:1086:ARG:HH21	1:F:1251:LEU:HD13	1.66	0.60
1:F:4761:HIS:NE2	1:F:4871:GLU:OE2	2.35	0.60
1:A:113:LEU:HD12	1:A:175:VAL:HG21	1.84	0.59
1:A:332:ARG:NH1	1:A:364:GLN:OE1	2.34	0.59
1:E:332:ARG:NH2	1:E:338:LEU:O	2.35	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2661:PHE:HD2	1:F:2965:VAL:HG21	1.66	0.59
1:A:1929:ASP:OD1	1:A:3612:ARG:NH2	2.35	0.59
1:A:1961:THR:HA	1:A:1965:ARG:HB2	1.83	0.59
1:A:4761:HIS:NE2	1:A:4871:GLU:OE2	2.35	0.59
1:C:332:ARG:NH1	1:C:364:GLN:OE1	2.34	0.59
1:C:707:PRO:HG2	1:C:838:ARG:HB2	1.84	0.59
1:E:1929:ASP:OD1	1:E:3612:ARG:NH2	2.35	0.59
1:F:1827:TYR:CZ	1:F:1831:ILE:HD11	2.37	0.59
1:A:2928:LEU:HD13	1:A:2970:ILE:HG22	1.84	0.59
1:C:2519:LEU:HD21	1:C:2554:LEU:HD21	1.83	0.59
1:E:707:PRO:HG2	1:E:838:ARG:HB2	1.84	0.59
1:F:707:PRO:HG2	1:F:838:ARG:HB2	1.84	0.59
1:F:777:GLY:HA3	1:F:1469:LEU:HD12	1.83	0.59
1:F:1009:ARG:HH21	1:F:1013:ARG:HH12	1.50	0.59
1:A:887:GLU:HA	1:A:890:HIS:CD2	2.37	0.59
1:F:3384:LEU:HD21	1:F:3474:PRO:HB2	1.83	0.59
1:A:2455:MET:HE3	1:A:2457:ALA:N	2.17	0.59
1:C:1009:ARG:HH21	1:C:1013:ARG:HH12	1.50	0.59
1:C:1961:THR:HA	1:C:1965:ARG:HB2	1.83	0.59
1:E:777:GLY:HA3	1:E:1469:LEU:HD12	1.83	0.59
1:F:1929:ASP:OD1	1:F:3612:ARG:NH2	2.35	0.59
1:F:1961:THR:HA	1:F:1965:ARG:HB2	1.83	0.59
1:A:3384:LEU:HD21	1:A:3474:PRO:HB2	1.83	0.59
1:C:262:TYR:HB2	1:C:389:ARG:HB2	1.85	0.59
1:F:2519:LEU:HD21	1:F:2554:LEU:HD21	1.83	0.59
1:F:3530:TYR:HA	1:F:3533:LEU:HD12	1.85	0.59
1:A:2463:HIS:O	1:A:2467:MET:HG2	2.03	0.59
1:A:2669:SER:HB3	1:A:2972:GLN:HG3	1.85	0.59
1:C:2145:LEU:O	1:C:2149:MET:HG2	2.03	0.59
1:C:2463:HIS:O	1:C:2467:MET:HG2	2.03	0.59
1:C:3384:LEU:HD21	1:C:3474:PRO:HB2	1.83	0.59
1:E:173:GLU:HA	1:F:3938:ARG:HH12	1.68	0.59
1:E:2455:MET:HE3	1:E:2457:ALA:N	2.17	0.59
1:E:3530:TYR:HA	1:E:3533:LEU:HD12	1.85	0.59
1:E:4195:THR:O	1:E:4199:MET:HG3	2.01	0.59
1:F:113:LEU:HD12	1:F:175:VAL:HG21	1.84	0.59
1:A:1009:ARG:HH21	1:A:1013:ARG:HH12	1.50	0.59
1:A:1285:VAL:O	1:A:1287:GLN:NE2	2.36	0.59
1:C:1038:LEU:HD23	1:C:1043:LYS:HG2	1.85	0.59
1:C:1144:ARG:HH11	1:C:1191:ALA:HA	1.66	0.59
1:C:2928:LEU:HD13	1:C:2970:ILE:HG22	1.84	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2435:ILE:HD12	1:E:2464:LYS:HG2	1.84	0.59
1:E:3487:LEU:HD11	1:E:3512:ILE:HA	1.85	0.59
1:F:747:HIS:ND1	1:F:748:LEU:O	2.31	0.59
1:F:3276:LEU:O	1:F:3280:LEU:HG	2.03	0.59
1:A:2661:PHE:HD2	1:A:2965:VAL:HG21	1.66	0.59
1:A:3530:TYR:HA	1:A:3533:LEU:HD12	1.85	0.59
1:A:4956:CYS:SG	1:A:4957:PHE:N	2.76	0.59
1:C:3210:LEU:HG	1:C:3214:MET:HE2	1.85	0.59
1:C:3487:LEU:HD11	1:C:3512:ILE:HA	1.85	0.59
1:E:1285:VAL:O	1:E:1287:GLN:NE2	2.36	0.59
1:E:3210:LEU:HG	1:E:3214:MET:HE2	1.85	0.59
1:F:262:TYR:HB2	1:F:389:ARG:HB2	1.85	0.59
1:A:332:ARG:NH2	1:A:338:LEU:O	2.35	0.59
1:A:1038:LEU:HD23	1:A:1043:LYS:HG2	1.85	0.59
1:A:2145:LEU:O	1:A:2149:MET:HG2	2.03	0.59
1:C:113:LEU:HD12	1:C:175:VAL:HG21	1.84	0.59
1:C:1174:MET:HB3	1:C:1190:LEU:HA	1.84	0.59
1:C:1704:TYR:O	1:C:1708:ILE:HG12	2.03	0.59
1:C:3530:TYR:HA	1:C:3533:LEU:HD12	1.85	0.59
1:C:4956:CYS:SG	1:C:4957:PHE:N	2.76	0.59
1:F:1100:ARG:HB3	1:F:1236:TYR:HA	1.84	0.59
1:F:1704:TYR:O	1:F:1708:ILE:HG12	2.03	0.59
1:A:1704:TYR:O	1:A:1708:ILE:HG12	2.03	0.58
1:C:1929:ASP:OD1	1:C:3612:ARG:NH2	2.35	0.58
1:E:2480:GLN:NE2	1:E:2537:THR:OG1	2.36	0.58
1:E:2669:SER:HB3	1:E:2972:GLN:HG3	1.85	0.58
1:F:194:LEU:HD11	1:F:201:TRP:HB3	1.85	0.58
1:F:1174:MET:HB3	1:F:1190:LEU:HA	1.84	0.58
1:F:2086:LEU:O	1:F:2090:GLN:HG2	2.03	0.58
1:C:194:LEU:HD11	1:C:201:TRP:HB3	1.85	0.58
1:C:3053:LYS:HG3	1:C:3057:ARG:HH12	1.68	0.58
1:E:1038:LEU:HD23	1:E:1043:LYS:HG2	1.85	0.58
1:F:1165:MET:HA	1:F:1165:MET:HE3	1.85	0.58
1:F:4956:CYS:SG	1:F:4957:PHE:N	2.76	0.58
1:A:3938:ARG:HH12	1:C:173:GLU:HA	1.68	0.58
1:C:332:ARG:NH2	1:C:338:LEU:O	2.35	0.58
1:C:3276:LEU:O	1:C:3280:LEU:HG	2.03	0.58
1:E:3053:LYS:HG3	1:E:3057:ARG:HH12	1.68	0.58
1:F:1038:LEU:HD23	1:F:1043:LYS:HG2	1.85	0.58
1:F:3487:LEU:HD11	1:F:3512:ILE:HA	1.85	0.58
1:A:262:TYR:HB2	1:A:389:ARG:HB2	1.85	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3053:LYS:HG3	1:A:3057:ARG:HH12	1.68	0.58
1:A:3487:LEU:HD11	1:A:3512:ILE:HA	1.85	0.58
1:C:2778:LEU:HD23	1:C:2781:MET:HE3	1.85	0.58
1:E:113:LEU:HD12	1:E:175:VAL:HG21	1.84	0.58
1:E:1100:ARG:HB3	1:E:1236:TYR:HA	1.84	0.58
1:E:3276:LEU:O	1:E:3280:LEU:HG	2.03	0.58
1:A:2922:TYR:O	1:A:2926:GLN:HB2	2.01	0.58
1:C:2086:LEU:O	1:C:2090:GLN:HG2	2.03	0.58
1:E:2145:LEU:O	1:E:2149:MET:HG2	2.03	0.58
1:E:3508:ILE:HG22	1:E:3547:VAL:HG22	1.85	0.58
1:A:194:LEU:HD11	1:A:201:TRP:HB3	1.85	0.58
1:C:1285:VAL:O	1:C:1287:GLN:NE2	2.36	0.58
1:C:3508:ILE:HG22	1:C:3547:VAL:HG22	1.85	0.58
1:E:156:GLU:HB2	1:E:187:SER:HB3	1.84	0.58
1:E:194:LEU:HD11	1:E:201:TRP:HB3	1.85	0.58
1:F:2145:LEU:O	1:F:2149:MET:HG2	2.03	0.58
1:A:156:GLU:HB2	1:A:187:SER:HB3	1.84	0.58
1:A:2086:LEU:O	1:A:2090:GLN:HG2	2.03	0.58
1:A:2237:THR:HG22	1:A:2239:LEU:H	1.67	0.58
1:A:2778:LEU:HD23	1:A:2781:MET:HE3	1.85	0.58
1:A:3508:ILE:HG22	1:A:3547:VAL:HG22	1.85	0.58
1:C:1007:TRP:HH2	2:D:113:GLU:HB2	1.69	0.58
1:F:156:GLU:HB2	1:F:187:SER:HB3	1.84	0.58
1:F:1733:GLU:HB2	1:F:1754:LEU:HD21	1.85	0.58
1:F:2435:ILE:HD12	1:F:2464:LYS:HG2	1.84	0.58
2:I:4:LEU:HB2	2:I:118:GLY:HA3	1.86	0.58
1:A:3276:LEU:O	1:A:3280:LEU:HG	2.03	0.58
1:A:4843:ILE:HD13	1:E:4813:MET:SD	2.44	0.58
1:C:1100:ARG:HB3	1:C:1236:TYR:HA	1.85	0.58
1:C:3938:ARG:HH12	1:F:173:GLU:HA	1.69	0.58
1:E:2585:GLN:HA	1:E:2588:LEU:HD12	1.86	0.58
1:E:4956:CYS:SG	1:E:4957:PHE:N	2.76	0.58
1:F:2463:HIS:O	1:F:2467:MET:HG2	2.03	0.58
2:G:4:LEU:HB2	2:G:118:GLY:HA3	1.86	0.58
1:A:1733:GLU:HB2	1:A:1754:LEU:HD21	1.85	0.58
1:C:2480:GLN:HE22	1:C:2534:PHE:HA	1.69	0.58
1:C:2669:SER:HB3	1:C:2972:GLN:HG3	1.85	0.58
1:E:2086:LEU:O	1:E:2090:GLN:HG2	2.03	0.58
1:F:2778:LEU:HD23	1:F:2781:MET:HE3	1.85	0.58
1:A:1007:TRP:HH2	2:B:113:GLU:HB2	1.69	0.58
2:B:4:LEU:HB2	2:B:118:GLY:HA3	1.86	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:156:GLU:HB2	1:C:187:SER:HB3	1.84	0.58
1:C:2330:PHE:HE2	1:C:2425:LEU:HD21	1.69	0.58
1:C:2585:GLN:HA	1:C:2588:LEU:HD12	1.86	0.58
1:C:3122:LEU:HA	1:C:3126:GLN:HE21	1.69	0.58
1:E:2330:PHE:HE2	1:E:2425:LEU:HD21	1.69	0.58
1:F:2669:SER:HB3	1:F:2972:GLN:HG3	1.85	0.58
1:F:3053:LYS:HG3	1:F:3057:ARG:HH12	1.68	0.58
1:F:3389:PRO:HG3	1:F:3537:THR:HG21	1.86	0.58
1:A:1100:ARG:HB3	1:A:1236:TYR:HA	1.85	0.57
1:A:2480:GLN:NE2	1:A:2537:THR:OG1	2.37	0.57
1:A:3764:ILE:O	1:A:3769:ASN:ND2	2.31	0.57
1:C:552:SER:HA	1:C:555:LEU:HG	1.86	0.57
1:C:3831:ASP:HB2	1:C:3834:PHE:HB3	1.86	0.57
1:E:1009:ARG:HH21	1:E:1013:ARG:HH12	1.50	0.57
1:E:2480:GLN:HE22	1:E:2534:PHE:HA	1.69	0.57
1:F:1310:CYS:SG	1:F:1538:THR:N	2.76	0.57
1:F:2480:GLN:NE2	1:F:2537:THR:OG1	2.36	0.57
1:F:3122:LEU:HA	1:F:3126:GLN:HE21	1.69	0.57
1:A:3389:PRO:HG3	1:A:3537:THR:HG21	1.86	0.57
1:C:1165:MET:HA	1:C:1165:MET:HE3	1.86	0.57
1:C:1733:GLU:HB2	1:C:1754:LEU:HD21	1.86	0.57
1:C:2480:GLN:NE2	1:C:2537:THR:OG1	2.36	0.57
1:C:4199:MET:HE1	1:C:4922:MET:HE1	1.86	0.57
1:E:262:TYR:HB2	1:E:389:ARG:HB2	1.85	0.57
1:F:2928:LEU:HD13	1:F:2970:ILE:HG22	1.84	0.57
1:F:3210:LEU:HG	1:F:3214:MET:HE2	1.85	0.57
1:A:2480:GLN:HE22	1:A:2534:PHE:HA	1.69	0.57
1:C:3339:LEU:HD22	1:C:3354:ILE:HD12	1.87	0.57
1:E:2520:CYS:SG	1:E:2564:GLN:HG2	2.45	0.57
1:F:3339:LEU:HD22	1:F:3354:ILE:HD12	1.87	0.57
1:F:3831:ASP:HB2	1:F:3834:PHE:HB3	1.86	0.57
1:F:4199:MET:HE1	1:F:4922:MET:HE1	1.86	0.57
1:A:2520:CYS:SG	1:A:2564:GLN:HG2	2.45	0.57
1:A:3210:LEU:HG	1:A:3214:MET:HE2	1.85	0.57
1:C:4813:MET:SD	1:F:4843:ILE:HD13	2.44	0.57
1:E:1704:TYR:O	1:E:1708:ILE:HG12	2.03	0.57
1:E:1733:GLU:HB2	1:E:1754:LEU:HD21	1.85	0.57
1:E:3001:GLU:HG2	1:E:3048:GLY:HA2	1.86	0.57
1:E:4843:ILE:HD13	1:F:4813:MET:SD	2.45	0.57
1:F:448:PRO:HB2	1:F:451:SER:HB3	1.87	0.57
1:F:2503:THR:OG1	1:F:2506:LEU:HB2	2.04	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3272:MET:HG3	1:F:3309:VAL:HG12	1.87	0.57
1:C:515:ALA:HB2	1:C:523:GLY:HA3	1.87	0.57
1:C:3001:GLU:HG2	1:C:3048:GLY:HA2	1.86	0.57
1:E:903:GLN:O	1:E:915:HIS:N	2.35	0.57
1:E:1165:MET:HA	1:E:1165:MET:HE3	1.86	0.57
1:E:3122:LEU:HA	1:E:3126:GLN:HE21	1.69	0.57
1:F:2480:GLN:HE22	1:F:2534:PHE:HA	1.69	0.57
1:F:3508:ILE:HG22	1:F:3547:VAL:HG22	1.85	0.57
1:A:173:GLU:HA	1:E:3938:ARG:HH12	1.69	0.57
1:A:515:ALA:HB2	1:A:523:GLY:HA3	1.87	0.57
1:A:1901:VAL:O	1:A:1905:MET:HG3	2.05	0.57
1:A:2585:GLN:HA	1:A:2588:LEU:HD12	1.86	0.57
1:C:448:PRO:HB2	1:C:451:SER:HB3	1.87	0.57
1:C:3389:PRO:HG3	1:C:3537:THR:HG21	1.85	0.57
1:E:1007:TRP:HH2	2:I:113:GLU:HB2	1.69	0.57
1:E:3831:ASP:HB2	1:E:3834:PHE:HB3	1.86	0.57
1:F:2330:PHE:HE2	1:F:2425:LEU:HD21	1.69	0.57
1:A:2350:ILE:O	1:A:2354:GLU:HG2	2.05	0.57
1:A:3122:LEU:HA	1:A:3126:GLN:HE21	1.69	0.57
1:E:2463:HIS:O	1:E:2467:MET:HG2	2.03	0.57
1:F:2350:ILE:O	1:F:2354:GLU:HG2	2.05	0.57
1:A:3001:GLU:HG2	1:A:3048:GLY:HA2	1.86	0.57
1:C:2350:ILE:O	1:C:2354:GLU:HG2	2.05	0.57
1:E:3328:LYS:O	1:E:3332:VAL:HG23	2.05	0.57
1:E:3389:PRO:HG3	1:E:3537:THR:HG21	1.86	0.57
1:F:908:ARG:HE	2:G:104:TYR:HB3	1.70	0.57
1:F:1285:VAL:O	1:F:1287:GLN:NE2	2.36	0.57
1:F:2585:GLN:HA	1:F:2588:LEU:HD12	1.86	0.57
1:F:3328:LYS:O	1:F:3332:VAL:HG23	2.05	0.57
1:C:2520:CYS:SG	1:C:2564:GLN:HG2	2.45	0.57
1:C:2592:VAL:HA	1:C:2643:LEU:HD13	1.87	0.57
1:C:3272:MET:HG3	1:C:3309:VAL:HG12	1.87	0.57
2:D:4:LEU:HB2	2:D:118:GLY:HA3	1.86	0.57
1:F:2520:CYS:SG	1:F:2564:GLN:HG2	2.45	0.57
1:A:538:ALA:O	1:A:542:ARG:HB3	2.05	0.57
1:A:552:SER:HA	1:A:555:LEU:HG	1.86	0.57
1:A:3339:LEU:HD22	1:A:3354:ILE:HD12	1.87	0.57
1:C:1098:ALA:HA	1:C:1168:MET:HB3	1.87	0.57
1:C:1913:CYS:SG	1:C:2090:GLN:NE2	2.61	0.57
1:C:2503:THR:OG1	1:C:2506:LEU:HB2	2.04	0.57
1:E:2350:ILE:O	1:E:2354:GLU:HG2	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3001:GLU:HG2	1:F:3048:GLY:HA2	1.86	0.57
1:F:3322:MET:HE1	1:F:3397:MET:HB2	1.87	0.57
1:A:448:PRO:HB2	1:A:451:SER:HB3	1.87	0.56
1:A:1165:MET:HE3	1:A:1165:MET:HA	1.86	0.56
1:A:2385:ASN:HD21	1:A:2457:ALA:HA	1.70	0.56
1:A:2503:THR:OG1	1:A:2506:LEU:HB2	2.05	0.56
1:A:3831:ASP:HB2	1:A:3834:PHE:HB3	1.86	0.56
1:C:538:ALA:O	1:C:542:ARG:HB3	2.05	0.56
1:E:538:ALA:O	1:E:542:ARG:HB3	2.05	0.56
1:E:1262:PRO:HG2	1:E:1265:HIS:HB2	1.87	0.56
1:E:1310:CYS:SG	1:E:1538:THR:N	2.76	0.56
1:E:2592:VAL:HA	1:E:2643:LEU:HD13	1.87	0.56
1:E:3172:THR:HB	1:E:3201:GLU:HG3	1.87	0.56
1:F:538:ALA:O	1:F:542:ARG:HB3	2.05	0.56
1:F:552:SER:HA	1:F:555:LEU:HG	1.86	0.56
1:F:2385:ASN:HD21	1:F:2457:ALA:HA	1.70	0.56
1:C:1686:LEU:HD11	1:C:1710:ILE:HD11	1.87	0.56
1:C:3322:MET:HE1	1:C:3397:MET:HB2	1.87	0.56
1:E:1246:ASP:OD1	1:E:1694:TYR:OH	2.23	0.56
1:E:2778:LEU:HD23	1:E:2781:MET:HE3	1.85	0.56
1:E:3322:MET:HE1	1:E:3397:MET:HB2	1.87	0.56
1:F:1007:TRP:HH2	2:G:113:GLU:HB2	1.68	0.56
1:F:1901:VAL:O	1:F:1905:MET:HG3	2.05	0.56
1:F:3447:GLU:HA	1:F:3450:LYS:HD2	1.87	0.56
1:A:1262:PRO:HG2	1:A:1265:HIS:HB2	1.87	0.56
1:A:1686:LEU:HD11	1:A:1710:ILE:HD11	1.87	0.56
1:A:2330:PHE:HE2	1:A:2425:LEU:HD21	1.69	0.56
1:A:3272:MET:HG3	1:A:3309:VAL:HG12	1.87	0.56
1:C:137:ARG:HA	1:C:137:ARG:HE	1.71	0.56
1:C:2166:MET:N	1:C:2166:MET:SD	2.78	0.56
1:C:4196:ILE:HA	1:C:4199:MET:HE2	1.88	0.56
1:E:552:SER:HA	1:E:555:LEU:HG	1.86	0.56
1:E:2385:ASN:HD21	1:E:2457:ALA:HA	1.70	0.56
1:E:3272:MET:HG3	1:E:3309:VAL:HG12	1.87	0.56
1:E:4199:MET:HE1	1:E:4922:MET:HE1	1.86	0.56
1:F:137:ARG:HA	1:F:137:ARG:HE	1.71	0.56
1:F:559:ILE:HD13	1:F:593:HIS:HB3	1.87	0.56
1:F:1104:GLU:HB2	1:F:1216:ASN:HB3	1.88	0.56
1:F:1120:PRO:HG3	1:F:1202:ILE:HD11	1.88	0.56
1:F:2342:LEU:O	1:F:2346:MET:HG2	2.05	0.56
1:F:4003:VAL:HG11	1:F:4113:ARG:HD2	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:4494:ALA:HB1	1:F:4592:LEU:HD13	1.88	0.56
1:A:2967:LEU:HD11	1:A:3028:ILE:HA	1.87	0.56
1:C:3447:GLU:HA	1:C:3450:LYS:HD2	1.87	0.56
1:E:1120:PRO:HG3	1:E:1202:ILE:HD11	1.87	0.56
1:F:4181:GLU:HA	1:F:4184:LYS:HB2	1.88	0.56
1:C:1901:VAL:O	1:C:1905:MET:HG3	2.05	0.56
1:C:4494:ALA:HB1	1:C:4592:LEU:HD13	1.88	0.56
1:E:1901:VAL:O	1:E:1905:MET:HG3	2.05	0.56
1:E:3339:LEU:HD22	1:E:3354:ILE:HD12	1.87	0.56
1:F:1098:ALA:HA	1:F:1168:MET:HB3	1.87	0.56
1:F:4196:ILE:HA	1:F:4199:MET:HE2	1.88	0.56
1:A:1310:CYS:SG	1:A:1538:THR:N	2.76	0.56
1:C:2278:MET:N	1:C:2278:MET:SD	2.79	0.56
1:C:3393:GLU:HA	1:C:3396:ARG:HD2	1.88	0.56
1:C:4003:VAL:HG11	1:C:4113:ARG:HD2	1.88	0.56
1:E:448:PRO:HB2	1:E:451:SER:HB3	1.87	0.56
1:E:1811:VAL:HB	1:E:1818:LEU:HD13	1.87	0.56
1:A:3172:THR:HB	1:A:3201:GLU:HG3	1.87	0.56
1:A:3920:THR:O	1:A:3924:GLN:HG2	2.06	0.56
1:A:4196:ILE:HA	1:A:4199:MET:HE2	1.88	0.56
1:C:1104:GLU:HB2	1:C:1216:ASN:HB3	1.88	0.56
1:C:1811:VAL:HB	1:C:1818:LEU:HD13	1.87	0.56
1:C:4628:GLN:OE1	1:C:4631:ARG:NH2	2.39	0.56
1:E:515:ALA:HB2	1:E:523:GLY:HA3	1.87	0.56
1:E:3393:GLU:HA	1:E:3396:ARG:HD2	1.88	0.56
1:E:3396:ARG:O	1:E:3400:GLU:HG3	2.06	0.56
1:E:4494:ALA:HB1	1:E:4592:LEU:HD13	1.88	0.56
1:A:1727:ILE:HD11	1:A:2164:LEU:HD21	1.87	0.56
1:A:3322:MET:HE1	1:A:3397:MET:HB2	1.87	0.56
1:A:4199:MET:HE1	1:A:4922:MET:HE1	1.86	0.56
1:C:908:ARG:HE	2:D:104:TYR:HB3	1.70	0.56
1:C:1262:PRO:HG2	1:C:1265:HIS:HB2	1.87	0.56
1:C:2342:LEU:O	1:C:2346:MET:HG2	2.05	0.56
1:C:3920:THR:O	1:C:3924:GLN:HG2	2.06	0.56
1:E:137:ARG:HA	1:E:137:ARG:HE	1.71	0.56
1:E:769:ARG:HH22	1:E:816:PRO:HD3	1.71	0.56
1:E:4628:GLN:OE1	1:E:4631:ARG:NH2	2.39	0.56
1:F:1262:PRO:HG2	1:F:1265:HIS:HB2	1.87	0.56
1:A:3328:LYS:O	1:A:3332:VAL:HG23	2.05	0.56
1:A:4628:GLN:OE1	1:A:4631:ARG:NH2	2.39	0.56
1:C:4181:GLU:HA	1:C:4184:LYS:HB2	1.88	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:559:ILE:HD13	1:E:593:HIS:HB3	1.87	0.56
1:E:2967:LEU:HD11	1:E:3028:ILE:HA	1.87	0.56
1:E:3731:HIS:CE1	1:E:3775:LYS:HD2	2.41	0.56
1:E:4181:GLU:HA	1:E:4184:LYS:HB2	1.88	0.56
1:F:676:GLU:HG3	1:F:803:LEU:HB2	1.88	0.56
1:F:1641:ASP:HB3	1:F:1644:GLU:HG3	1.88	0.56
1:A:137:ARG:HA	1:A:137:ARG:HE	1.71	0.56
1:A:559:ILE:HD13	1:A:593:HIS:HB3	1.87	0.56
1:A:2099:ARG:O	1:A:2103:LYS:NZ	2.34	0.56
1:A:2592:VAL:HA	1:A:2643:LEU:HD13	1.87	0.56
1:C:2967:LEU:HD11	1:C:3028:ILE:HA	1.87	0.56
1:C:3172:THR:HB	1:C:3201:GLU:HG3	1.87	0.56
1:C:3764:ILE:O	1:C:3769:ASN:ND2	2.31	0.56
1:E:1686:LEU:HD11	1:E:1710:ILE:HD11	1.87	0.56
1:E:3764:ILE:O	1:E:3769:ASN:ND2	2.31	0.56
1:F:515:ALA:HB2	1:F:523:GLY:HA3	1.87	0.56
1:F:1727:ILE:HD11	1:F:2164:LEU:HD21	1.87	0.56
1:F:3172:THR:HB	1:F:3201:GLU:HG3	1.87	0.56
1:A:908:ARG:HE	2:B:104:TYR:HB3	1.70	0.55
1:A:1098:ALA:HA	1:A:1168:MET:HB3	1.87	0.55
1:A:1104:GLU:HB2	1:A:1216:ASN:HB3	1.88	0.55
1:A:1120:PRO:HG3	1:A:1202:ILE:HD11	1.88	0.55
1:C:1641:ASP:HB3	1:C:1644:GLU:HG3	1.88	0.55
1:C:2385:ASN:HD21	1:C:2457:ALA:HA	1.70	0.55
1:E:4003:VAL:HG11	1:E:4113:ARG:HD2	1.88	0.55
1:A:2342:LEU:O	1:A:2346:MET:HG2	2.05	0.55
1:A:4494:ALA:HB1	1:A:4592:LEU:HD13	1.88	0.55
1:C:2981:PHE:CG	1:C:2996:SER:HB3	2.42	0.55
1:C:3348:SER:O	1:C:3352:LEU:HG	2.06	0.55
1:E:676:GLU:HG3	1:E:803:LEU:HB2	1.88	0.55
1:E:2503:THR:OG1	1:E:2506:LEU:HB2	2.04	0.55
1:F:3348:SER:O	1:F:3352:LEU:HG	2.06	0.55
1:F:3731:HIS:CE1	1:F:3775:LYS:HD2	2.41	0.55
1:A:678:MET:HE1	1:A:803:LEU:HD11	1.88	0.55
1:A:3393:GLU:HA	1:A:3396:ARG:HD2	1.88	0.55
1:A:3396:ARG:O	1:A:3400:GLU:HG3	2.06	0.55
1:A:4181:GLU:HA	1:A:4184:LYS:HB2	1.88	0.55
1:C:676:GLU:HG3	1:C:803:LEU:HB2	1.88	0.55
1:C:1120:PRO:HG3	1:C:1202:ILE:HD11	1.87	0.55
1:C:3328:LYS:O	1:C:3332:VAL:HG23	2.05	0.55
1:E:678:MET:HE1	1:E:803:LEU:HD11	1.88	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2932:VAL:HG21	1:E:3006:LEU:HD11	1.89	0.55
1:F:1686:LEU:HD11	1:F:1710:ILE:HD11	1.87	0.55
1:F:3396:ARG:O	1:F:3400:GLU:HG3	2.06	0.55
1:F:3920:THR:O	1:F:3924:GLN:HG2	2.06	0.55
1:A:989:THR:HG23	1:A:992:GLN:H	1.71	0.55
1:A:2542:SER:HB2	1:A:2877:THR:HB	1.89	0.55
1:C:1480:ILE:H	1:C:1480:ILE:HD12	1.72	0.55
1:E:891:GLU:O	1:E:895:MET:HG3	2.07	0.55
1:E:2342:LEU:O	1:E:2346:MET:HG2	2.05	0.55
1:F:1811:VAL:HB	1:F:1818:LEU:HD13	1.87	0.55
1:F:2542:SER:HB2	1:F:2877:THR:HB	1.88	0.55
1:F:3393:GLU:HA	1:F:3396:ARG:HD2	1.88	0.55
1:A:1165:MET:HB2	1:A:1174:MET:SD	2.46	0.55
1:A:4813:MET:SD	1:C:4843:ILE:HD13	2.47	0.55
1:C:559:ILE:HD13	1:C:593:HIS:HB3	1.87	0.55
1:C:891:GLU:O	1:C:895:MET:HG3	2.07	0.55
1:C:1248:THR:HG22	1:C:1602:ASN:HD21	1.72	0.55
1:E:838:ARG:HH21	1:E:1254:ARG:HD2	1.71	0.55
1:E:1098:ALA:HA	1:E:1168:MET:HB3	1.87	0.55
1:E:2278:MET:N	1:E:2278:MET:SD	2.79	0.55
1:E:2580:ARG:HD2	1:E:2581:PRO:HD2	1.89	0.55
1:E:3920:THR:O	1:E:3924:GLN:HG2	2.06	0.55
1:F:4628:GLN:OE1	1:F:4631:ARG:NH2	2.39	0.55
1:A:676:GLU:HG3	1:A:803:LEU:HB2	1.88	0.55
1:A:1641:ASP:HB3	1:A:1644:GLU:HG3	1.88	0.55
1:A:3348:SER:O	1:A:3352:LEU:HG	2.06	0.55
1:A:3731:HIS:CE1	1:A:3775:LYS:HD2	2.41	0.55
1:E:989:THR:HG23	1:E:992:GLN:H	1.71	0.55
1:E:1104:GLU:HB2	1:E:1216:ASN:HB3	1.88	0.55
1:E:1641:ASP:HB3	1:E:1644:GLU:HG3	1.88	0.55
1:E:4196:ILE:HA	1:E:4199:MET:HE2	1.88	0.55
1:F:2580:ARG:HD2	1:F:2581:PRO:HD2	1.89	0.55
1:A:769:ARG:HH22	1:A:816:PRO:HD3	1.71	0.55
1:A:838:ARG:HH21	1:A:1254:ARG:HD2	1.71	0.55
1:A:1480:ILE:H	1:A:1480:ILE:HD12	1.72	0.55
1:C:1165:MET:HB2	1:C:1174:MET:SD	2.47	0.55
1:C:1310:CYS:SG	1:C:1538:THR:N	2.76	0.55
1:E:1248:THR:HG22	1:E:1602:ASN:HD21	1.72	0.55
1:E:1727:ILE:HD11	1:E:2164:LEU:HD21	1.87	0.55
1:E:1843:ILE:HD13	1:E:1846:LEU:HD21	1.89	0.55
1:E:3348:SER:O	1:E:3352:LEU:HG	2.06	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2317:ASN:O	1:F:2321:ARG:HG2	2.07	0.55
1:A:1811:VAL:HB	1:A:1818:LEU:HD13	1.87	0.55
1:A:1843:ILE:HD13	1:A:1846:LEU:HD21	1.89	0.55
1:C:1727:ILE:HD11	1:C:2164:LEU:HD21	1.87	0.55
1:C:3396:ARG:O	1:C:3400:GLU:HG3	2.06	0.55
1:E:1480:ILE:HD12	1:E:1480:ILE:H	1.72	0.55
1:F:769:ARG:HH22	1:F:816:PRO:HD3	1.71	0.55
1:F:1165:MET:HB2	1:F:1174:MET:SD	2.47	0.55
1:F:1480:ILE:H	1:F:1480:ILE:HD12	1.72	0.55
1:F:2278:MET:N	1:F:2278:MET:SD	2.79	0.55
1:F:2932:VAL:HG21	1:F:3006:LEU:HD11	1.89	0.55
1:A:113:LEU:HB2	1:A:175:VAL:HB	1.89	0.55
1:A:3447:GLU:HA	1:A:3450:LYS:HD2	1.87	0.55
1:A:4003:VAL:HG11	1:A:4113:ARG:HD2	1.88	0.55
1:C:3379:ASN:HB2	1:C:3382:LYS:HD3	1.89	0.55
1:C:3731:HIS:CE1	1:C:3775:LYS:HD2	2.41	0.55
1:F:2592:VAL:HA	1:F:2643:LEU:HD13	1.87	0.55
1:A:2981:PHE:CG	1:A:2996:SER:HB3	2.42	0.55
1:E:853:PRO:HD3	1:E:1086:ARG:HG3	1.89	0.55
1:E:3472:LEU:HD23	1:E:3475:ILE:HD12	1.88	0.55
1:A:2580:ARG:HD2	1:A:2581:PRO:HD2	1.89	0.54
1:A:3379:ASN:HB2	1:A:3382:LYS:HD3	1.89	0.54
1:A:3802:LEU:HD22	1:A:3828:VAL:HG22	1.89	0.54
1:C:838:ARG:HH21	1:C:1254:ARG:HD2	1.71	0.54
1:C:853:PRO:HD3	1:C:1086:ARG:HG3	1.89	0.54
1:C:3472:LEU:HD23	1:C:3475:ILE:HD12	1.88	0.54
1:C:3802:LEU:HD22	1:C:3828:VAL:HG22	1.89	0.54
1:C:3840:ARG:HH21	1:C:3844:LEU:HD21	1.72	0.54
1:E:908:ARG:HE	2:I:104:TYR:HB3	1.71	0.54
1:E:1165:MET:HB2	1:E:1174:MET:SD	2.47	0.54
1:E:3802:LEU:HD22	1:E:3828:VAL:HG22	1.89	0.54
1:F:2967:LEU:HD11	1:F:3028:ILE:HA	1.87	0.54
1:F:3684:ASP:O	1:F:3688:MET:HG2	2.07	0.54
1:F:4046:ASP:O	1:F:4049:LYS:HG2	2.08	0.54
1:A:3472:LEU:HD23	1:A:3475:ILE:HD12	1.88	0.54
1:A:4046:ASP:O	1:A:4049:LYS:HG2	2.07	0.54
1:C:143:LEU:O	1:C:190:ARG:NE	2.34	0.54
1:C:1246:ASP:OD1	1:C:1694:TYR:OH	2.22	0.54
1:E:2645:TRP:CD1	1:E:2927:GLN:HE22	2.26	0.54
1:E:2981:PHE:CG	1:E:2996:SER:HB3	2.42	0.54
1:F:891:GLU:O	1:F:895:MET:HG3	2.07	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2981:PHE:CG	1:F:2996:SER:HB3	2.41	0.54
1:A:891:GLU:O	1:A:895:MET:HG3	2.07	0.54
1:A:2278:MET:N	1:A:2278:MET:SD	2.79	0.54
1:A:3208:PRO:HB3	1:A:3212:LYS:HD3	1.89	0.54
1:A:3237:VAL:HA	1:A:3240:MET:CG	2.37	0.54
1:A:3840:ARG:HH21	1:A:3844:LEU:HD21	1.72	0.54
1:A:4099:VAL:HG12	1:A:4132:LEU:HD13	1.90	0.54
1:C:113:LEU:HB2	1:C:175:VAL:HB	1.89	0.54
1:E:3447:GLU:HA	1:E:3450:LYS:HD2	1.87	0.54
1:E:3684:ASP:O	1:E:3688:MET:HG2	2.07	0.54
1:F:2641:ARG:HH12	1:F:2680:MET:HE3	1.72	0.54
1:F:3802:LEU:HD22	1:F:3828:VAL:HG22	1.89	0.54
1:A:1248:THR:HG22	1:A:1602:ASN:HD21	1.72	0.54
1:A:1942:ARG:HH22	1:A:1975:LEU:HD21	1.73	0.54
1:A:2641:ARG:HH12	1:A:2680:MET:HE3	1.72	0.54
1:A:2932:VAL:HG21	1:A:3006:LEU:HD11	1.89	0.54
1:A:3071:MET:HE2	1:A:3138:ALA:HB3	1.89	0.54
1:A:3684:ASP:O	1:A:3688:MET:HG2	2.07	0.54
1:C:769:ARG:HH22	1:C:816:PRO:HD3	1.71	0.54
1:C:2542:SER:HB2	1:C:2877:THR:HB	1.88	0.54
1:C:2580:ARG:HD2	1:C:2581:PRO:HD2	1.89	0.54
1:C:4099:VAL:HG12	1:C:4132:LEU:HD13	1.90	0.54
1:E:113:LEU:HB2	1:E:175:VAL:HB	1.89	0.54
1:E:2166:MET:N	1:E:2166:MET:SD	2.78	0.54
1:A:1791:LYS:O	1:A:1795:MET:HG3	2.08	0.54
1:A:2592:VAL:HG22	1:A:2643:LEU:HB2	1.89	0.54
1:A:2645:TRP:CD1	1:A:2927:GLN:HE22	2.26	0.54
1:A:3388:ASN:ND2	1:A:3390:GLU:OE1	2.41	0.54
1:E:143:LEU:O	1:E:190:ARG:NE	2.34	0.54
1:E:2641:ARG:HH12	1:E:2680:MET:HE3	1.72	0.54
1:E:3237:VAL:HA	1:E:3240:MET:CG	2.37	0.54
1:E:4099:VAL:HG12	1:E:4132:LEU:HD13	1.89	0.54
1:F:1843:ILE:HD13	1:F:1846:LEU:HD21	1.89	0.54
1:F:3379:ASN:HB2	1:F:3382:LYS:HD3	1.89	0.54
1:A:2658:GLN:O	1:A:2662:LYS:HB2	2.08	0.54
1:C:3178:ASN:OD1	1:C:3180:TYR:N	2.40	0.54
1:E:1942:ARG:HH22	1:E:1975:LEU:HD21	1.73	0.54
1:F:678:MET:HE1	1:F:803:LEU:HD11	1.88	0.54
1:C:678:MET:HE1	1:C:803:LEU:HD11	1.88	0.54
1:C:2932:VAL:HG21	1:C:3006:LEU:HD11	1.89	0.54
1:E:4046:ASP:O	1:E:4049:LYS:HG2	2.08	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3472:LEU:HD23	1:F:3475:ILE:HD12	1.88	0.54
1:A:1012:ILE:HG22	1:A:1032:LEU:HG	1.90	0.54
1:A:1246:ASP:OD1	1:A:1694:TYR:OH	2.22	0.54
1:C:747:HIS:ND1	1:C:748:LEU:O	2.31	0.54
1:C:2317:ASN:O	1:C:2321:ARG:HG2	2.07	0.54
1:C:2641:ARG:HH12	1:C:2680:MET:HE3	1.72	0.54
1:C:2658:GLN:O	1:C:2662:LYS:HB2	2.08	0.54
1:C:2672:ALA:O	1:C:2977:HIS:NE2	2.36	0.54
1:E:2317:ASN:O	1:E:2321:ARG:HG2	2.07	0.54
1:F:113:LEU:HB2	1:F:175:VAL:HB	1.89	0.54
1:F:3178:ASN:OD1	1:F:3180:TYR:N	2.40	0.54
1:F:3208:PRO:HB3	1:F:3212:LYS:HD3	1.89	0.54
1:C:1942:ARG:HH22	1:C:1975:LEU:HD21	1.73	0.54
1:C:3071:MET:HE2	1:C:3138:ALA:HB3	1.89	0.54
1:C:3684:ASP:O	1:C:3688:MET:HG2	2.07	0.54
1:C:4727:MET:HE3	1:C:4727:MET:HA	1.90	0.54
1:E:3840:ARG:HH21	1:E:3844:LEU:HD21	1.72	0.54
1:F:853:PRO:HD3	1:F:1086:ARG:HG3	1.89	0.54
1:F:2592:VAL:HG22	1:F:2643:LEU:HB2	1.89	0.54
1:A:853:PRO:HD3	1:A:1086:ARG:HG3	1.89	0.54
1:A:3178:ASN:OD1	1:A:3180:TYR:N	2.40	0.54
1:C:989:THR:HG23	1:C:992:GLN:H	1.71	0.54
1:C:2419:ARG:NE	1:C:2474:VAL:O	2.36	0.54
1:C:2645:TRP:CD1	1:C:2927:GLN:HE22	2.26	0.54
1:C:4046:ASP:O	1:C:4049:LYS:HG2	2.08	0.54
1:E:3071:MET:HE2	1:E:3138:ALA:HB3	1.89	0.54
1:E:3388:ASN:ND2	1:E:3390:GLU:OE1	2.41	0.54
1:F:989:THR:HG23	1:F:992:GLN:H	1.71	0.54
1:F:4099:VAL:HG12	1:F:4132:LEU:HD13	1.90	0.54
1:A:2460:CYS:HB2	1:A:2463:HIS:ND1	2.23	0.53
1:A:2673:GLY:HA2	1:A:2977:HIS:CE1	2.43	0.53
1:C:1012:ILE:HG22	1:C:1032:LEU:HG	1.90	0.53
1:C:1843:ILE:HD13	1:C:1846:LEU:HD21	1.89	0.53
1:E:2542:SER:HB2	1:E:2877:THR:HB	1.88	0.53
1:E:2658:GLN:O	1:E:2662:LYS:HB2	2.08	0.53
1:E:3475:ILE:O	1:E:3479:ILE:HG13	2.08	0.53
1:F:3475:ILE:O	1:F:3479:ILE:HG13	2.08	0.53
1:A:2166:MET:N	1:A:2166:MET:SD	2.78	0.53
1:C:2460:CYS:HB2	1:C:2463:HIS:ND1	2.23	0.53
1:C:2544:ILE:O	1:C:2548:LEU:HG	2.08	0.53
1:E:2460:CYS:HB2	1:E:2463:HIS:ND1	2.23	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2673:GLY:HA2	1:E:2977:HIS:CE1	2.43	0.53
1:F:838:ARG:HH21	1:F:1254:ARG:HD2	1.71	0.53
1:F:942:THR:O	1:F:946:LEU:HG	2.08	0.53
1:F:1248:THR:HG22	1:F:1602:ASN:HD21	1.72	0.53
1:F:1891:GLY:O	1:F:1895:MET:HG3	2.09	0.53
1:F:1942:ARG:HH22	1:F:1975:LEU:HD21	1.73	0.53
1:A:2317:ASN:O	1:A:2321:ARG:HG2	2.07	0.53
1:C:1791:LYS:O	1:C:1795:MET:HG3	2.08	0.53
1:C:3388:ASN:ND2	1:C:3390:GLU:OE1	2.41	0.53
1:E:2592:VAL:HG22	1:E:2643:LEU:HB2	1.89	0.53
1:E:3208:PRO:HB3	1:E:3212:LYS:HD3	1.89	0.53
1:F:1791:LYS:O	1:F:1795:MET:HG3	2.08	0.53
1:F:2544:ILE:O	1:F:2548:LEU:HG	2.08	0.53
1:F:2645:TRP:CD1	1:F:2927:GLN:HE22	2.26	0.53
1:F:2889:GLN:HG2	1:F:2893:LYS:HE3	1.91	0.53
1:F:3237:VAL:HA	1:F:3240:MET:CG	2.37	0.53
1:A:895:MET:HG2	1:A:978:PRO:HG2	1.91	0.53
1:A:2544:ILE:O	1:A:2548:LEU:HG	2.08	0.53
1:C:394:HIS:ND1	1:C:396:GLU:HG3	2.24	0.53
1:C:3208:PRO:HB3	1:C:3212:LYS:HD3	1.89	0.53
1:C:3392:GLU:O	1:C:3396:ARG:HG3	2.08	0.53
1:E:2544:ILE:O	1:E:2548:LEU:HG	2.08	0.53
1:F:1242:ASN:HB3	1:F:1808:ARG:HD2	1.90	0.53
1:F:1902:LYS:HD2	1:F:2079:LEU:HD21	1.90	0.53
1:F:3647:GLY:O	1:F:3658:LYS:NZ	2.37	0.53
1:F:3840:ARG:HH21	1:F:3844:LEU:HD21	1.72	0.53
1:A:2889:GLN:HG2	1:A:2893:LYS:HE3	1.91	0.53
1:C:4806:ASP:OD1	1:C:4807:ASP:N	2.42	0.53
1:E:1012:ILE:HG22	1:E:1032:LEU:HG	1.90	0.53
1:E:1902:LYS:HD2	1:E:2079:LEU:HD21	1.90	0.53
1:F:2658:GLN:O	1:F:2662:LYS:HB2	2.08	0.53
1:F:4806:ASP:OD1	1:F:4807:ASP:N	2.42	0.53
1:A:394:HIS:ND1	1:A:396:GLU:HG3	2.24	0.53
1:A:942:THR:O	1:A:946:LEU:HG	2.08	0.53
1:A:1242:ASN:HB3	1:A:1808:ARG:HD2	1.90	0.53
1:A:1891:GLY:O	1:A:1895:MET:HG3	2.09	0.53
1:A:2931:TYR:HB3	1:A:2962:PHE:HE1	1.74	0.53
1:E:575:LEU:O	1:E:579:LEU:HG	2.09	0.53
1:E:895:MET:HG2	1:E:978:PRO:HG2	1.91	0.53
1:E:1791:LYS:O	1:E:1795:MET:HG3	2.08	0.53
1:E:4806:ASP:OD1	1:E:4807:ASP:N	2.42	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2540:HIS:O	1:F:2543:LEU:N	2.42	0.53
1:F:2931:TYR:HB3	1:F:2962:PHE:HE1	1.74	0.53
1:A:4727:MET:HA	1:A:4727:MET:HE3	1.90	0.53
1:A:4781:THR:HG21	1:A:4812:TYR:HB2	1.91	0.53
1:C:895:MET:HG2	1:C:978:PRO:HG2	1.91	0.53
1:C:942:THR:O	1:C:946:LEU:HG	2.08	0.53
1:C:2931:TYR:HB3	1:C:2962:PHE:CE1	2.44	0.53
1:E:2191:MET:O	1:E:2191:MET:HG3	2.07	0.53
1:E:4727:MET:HA	1:E:4727:MET:HE3	1.91	0.53
1:F:3388:ASN:ND2	1:F:3390:GLU:OE1	2.41	0.53
1:F:3392:GLU:O	1:F:3396:ARG:HG3	2.08	0.53
2:G:19:ARG:HG3	2:G:81:GLN:HE22	1.74	0.53
2:G:33:SER:HB2	2:G:98:ASP:O	2.09	0.53
1:A:2931:TYR:HB3	1:A:2962:PHE:CE1	2.44	0.53
1:A:3392:GLU:O	1:A:3396:ARG:HG3	2.08	0.53
1:C:2673:GLY:HA2	1:C:2977:HIS:CE1	2.43	0.53
1:E:942:THR:O	1:E:946:LEU:HG	2.08	0.53
1:E:2889:GLN:HG2	1:E:2893:LYS:HE3	1.91	0.53
1:E:3379:ASN:HB2	1:E:3382:LYS:HD3	1.89	0.53
1:E:4058:THR:O	1:E:4062:THR:HG23	2.09	0.53
1:F:1012:ILE:HG22	1:F:1032:LEU:HG	1.90	0.53
1:A:2419:ARG:NE	1:A:2474:VAL:O	2.35	0.53
1:C:1891:GLY:O	1:C:1895:MET:HG3	2.09	0.53
1:C:2931:TYR:HB3	1:C:2962:PHE:HE1	1.74	0.53
1:E:1891:GLY:O	1:E:1895:MET:HG3	2.09	0.53
1:E:2925:LEU:HD23	1:E:2928:LEU:HD12	1.91	0.53
1:E:3878:LEU:HD22	1:E:3938:ARG:HG2	1.91	0.53
1:F:2460:CYS:HB2	1:F:2463:HIS:ND1	2.23	0.53
1:F:2931:TYR:HB3	1:F:2962:PHE:CE1	2.44	0.53
1:A:1609:VAL:HG13	1:A:1611:ARG:HG3	1.91	0.53
2:D:19:ARG:HG3	2:D:81:GLN:HE22	1.74	0.53
1:E:2931:TYR:HB3	1:E:2962:PHE:CE1	2.44	0.53
1:F:575:LEU:O	1:F:579:LEU:HG	2.09	0.53
1:F:1649:GLU:OE1	1:F:1649:GLU:N	2.36	0.53
1:F:2673:GLY:HA2	1:F:2977:HIS:CE1	2.43	0.53
1:F:2925:LEU:HD23	1:F:2928:LEU:HD12	1.91	0.53
2:I:19:ARG:HG3	2:I:81:GLN:HE22	1.74	0.53
1:A:3878:LEU:HD22	1:A:3938:ARG:HG2	1.91	0.52
1:C:3237:VAL:HA	1:C:3240:MET:CG	2.37	0.52
1:C:4781:THR:HG21	1:C:4812:TYR:HB2	1.91	0.52
1:C:4889:ILE:HD13	1:C:4912:HIS:HB3	1.91	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:394:HIS:ND1	1:F:396:GLU:HG3	2.24	0.52
1:F:3071:MET:HE2	1:F:3138:ALA:HB3	1.89	0.52
1:F:3878:LEU:HD22	1:F:3938:ARG:HG2	1.91	0.52
2:I:33:SER:HB2	2:I:98:ASP:O	2.09	0.52
1:A:575:LEU:O	1:A:579:LEU:HG	2.09	0.52
1:A:1419:TYR:HE2	1:A:1563:ASN:HB3	1.74	0.52
1:A:2925:LEU:HD23	1:A:2928:LEU:HD12	1.91	0.52
1:A:3475:ILE:O	1:A:3479:ILE:HG13	2.08	0.52
1:A:4058:THR:O	1:A:4062:THR:HG23	2.09	0.52
1:C:2889:GLN:HG2	1:C:2893:LYS:HE3	1.91	0.52
1:C:2922:TYR:O	1:C:2926:GLN:CB	2.57	0.52
1:C:3878:LEU:HD22	1:C:3938:ARG:HG2	1.91	0.52
1:C:4058:THR:O	1:C:4062:THR:HG23	2.09	0.52
2:D:4:LEU:HD21	2:D:97:ALA:HB2	1.91	0.52
1:E:394:HIS:ND1	1:E:396:GLU:HG3	2.24	0.52
1:E:3178:ASN:OD1	1:E:3180:TYR:N	2.41	0.52
1:E:4907:HIS:CE1	1:E:4912:HIS:ND1	2.78	0.52
1:F:261:HIS:CD2	1:F:263:GLU:HG3	2.45	0.52
1:A:2540:HIS:O	1:A:2543:LEU:N	2.42	0.52
2:B:19:ARG:HG3	2:B:81:GLN:HE22	1.74	0.52
1:C:2540:HIS:O	1:C:2543:LEU:N	2.42	0.52
1:C:2592:VAL:HG22	1:C:2643:LEU:HB2	1.89	0.52
1:C:2925:LEU:HD23	1:C:2928:LEU:HD12	1.91	0.52
1:C:3475:ILE:O	1:C:3479:ILE:HG13	2.08	0.52
1:E:931:TYR:CD2	2:I:101:PRO:HG3	2.44	0.52
1:E:2149:MET:HE1	1:E:2198:PHE:HA	1.91	0.52
1:E:2931:TYR:HB3	1:E:2962:PHE:HE1	1.74	0.52
1:E:4889:ILE:HD13	1:E:4912:HIS:HB3	1.91	0.52
1:C:1242:ASN:HB3	1:C:1808:ARG:HD2	1.90	0.52
1:C:1902:LYS:HD2	1:C:2079:LEU:HD21	1.90	0.52
1:E:1221:VAL:HG21	1:F:3525:TRP:CG	2.45	0.52
1:E:1419:TYR:HE2	1:E:1563:ASN:HB3	1.74	0.52
1:E:3392:GLU:O	1:E:3396:ARG:HG3	2.08	0.52
1:F:1609:VAL:HG13	1:F:1611:ARG:HG3	1.92	0.52
1:A:3108:PHE:HB2	1:A:3160:ALA:HB1	1.92	0.52
1:C:1419:TYR:HE2	1:C:1563:ASN:HB3	1.74	0.52
1:C:2189:PRO:HA	1:C:2192:VAL:HG12	1.92	0.52
1:E:1955:ALA:O	1:E:1959:ARG:HG2	2.10	0.52
1:E:3647:GLY:O	1:E:3658:LYS:NZ	2.37	0.52
1:F:895:MET:HG2	1:F:978:PRO:HG2	1.91	0.52
1:F:4727:MET:HA	1:F:4727:MET:HE3	1.90	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4806:ASP:OD1	1:A:4807:ASP:N	2.42	0.52
1:A:4889:ILE:HD13	1:A:4912:HIS:HB3	1.90	0.52
1:E:1609:VAL:HG13	1:E:1611:ARG:HG3	1.91	0.52
1:E:2201:TYR:O	1:E:2205:ILE:HG23	2.10	0.52
1:E:2540:HIS:O	1:E:2543:LEU:N	2.42	0.52
1:E:4781:THR:HG21	1:E:4812:TYR:HB2	1.91	0.52
1:F:928:GLU:OE2	2:G:102:ASN:ND2	2.43	0.52
1:F:1900:PRO:O	1:F:1904:GLN:HG2	2.10	0.52
1:F:2201:TYR:O	1:F:2205:ILE:HG23	2.10	0.52
1:F:2922:TYR:O	1:F:2926:GLN:CB	2.57	0.52
1:F:3916:PHE:O	1:F:3920:THR:HG23	2.10	0.52
1:F:4058:THR:O	1:F:4062:THR:HG23	2.09	0.52
1:A:2191:MET:HG3	1:A:2191:MET:O	2.07	0.52
1:C:238:HIS:HB2	1:C:242:ASP:H	1.75	0.52
1:C:666:GLY:HA3	1:C:1034:PRO:HG3	1.92	0.52
1:C:1609:VAL:HG13	1:C:1611:ARG:HG3	1.92	0.52
1:C:2997:ASN:O	1:C:3001:GLU:HG3	2.10	0.52
1:C:3525:TRP:CG	1:F:1221:VAL:HG21	2.45	0.52
1:E:3108:PHE:HB2	1:E:3160:ALA:HB1	1.92	0.52
1:F:1092:LYS:HE3	1:F:1120:PRO:HB3	1.92	0.52
1:F:1419:TYR:HE2	1:F:1563:ASN:HB3	1.74	0.52
1:F:2149:MET:HE1	1:F:2198:PHE:HA	1.91	0.52
1:C:261:HIS:CD2	1:C:263:GLU:HG3	2.44	0.52
1:C:3916:PHE:O	1:C:3920:THR:HG23	2.10	0.52
1:E:1242:ASN:HB3	1:E:1808:ARG:HD2	1.90	0.52
1:E:2067:ARG:O	1:E:2071:GLU:HG2	2.10	0.52
1:E:2922:TYR:O	1:E:2926:GLN:CB	2.57	0.52
1:E:4796:GLU:OE1	1:E:4796:GLU:N	2.37	0.52
1:F:666:GLY:HA3	1:F:1034:PRO:HG3	1.92	0.52
1:F:1246:ASP:OD1	1:F:1694:TYR:OH	2.23	0.52
1:F:4781:THR:HG21	1:F:4812:TYR:HB2	1.91	0.52
1:A:1902:LYS:HD2	1:A:2079:LEU:HD21	1.90	0.52
1:A:2201:TYR:O	1:A:2205:ILE:HG23	2.10	0.52
1:A:2922:TYR:O	1:A:2926:GLN:CB	2.57	0.52
1:A:4907:HIS:CE1	1:A:4912:HIS:ND1	2.78	0.52
1:C:575:LEU:O	1:C:579:LEU:HG	2.09	0.52
1:C:1900:PRO:O	1:C:1904:GLN:HG2	2.10	0.52
1:C:2075:GLU:OE1	1:C:2075:GLU:N	2.43	0.52
1:C:2657:GLU:HB2	1:C:2660:LEU:HB3	1.92	0.52
1:A:546:LYS:O	1:A:550:GLN:HG2	2.10	0.52
1:A:551:PHE:HE2	1:A:558:LEU:HD11	1.75	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1092:LYS:HE3	1:C:1120:PRO:HB3	1.92	0.52
1:C:1471:ASP:HB2	1:C:1477:HIS:NE2	2.25	0.52
1:E:238:HIS:HB2	1:E:242:ASP:H	1.75	0.52
1:E:2657:GLU:HB2	1:E:2660:LEU:HB3	1.92	0.52
1:E:2997:ASN:O	1:E:3001:GLU:HG3	2.10	0.52
1:F:143:LEU:O	1:F:190:ARG:NE	2.34	0.52
1:F:251:GLU:HG3	1:F:252:HIS:CE1	2.45	0.52
1:F:887:GLU:O	1:F:891:GLU:HG2	2.10	0.52
1:F:1955:ALA:O	1:F:1959:ARG:HG2	2.10	0.52
1:F:4907:HIS:CE1	1:F:4912:HIS:ND1	2.78	0.52
1:A:251:GLU:HG3	1:A:252:HIS:CE1	2.45	0.51
1:A:2552:TYR:CE2	1:A:2556:LYS:HE3	2.45	0.51
2:B:4:LEU:HD21	2:B:97:ALA:HB2	1.91	0.51
2:B:34:MET:HE2	2:B:78:VAL:HG21	1.92	0.51
1:C:2552:TYR:CE2	1:C:2556:LYS:HE3	2.45	0.51
1:E:551:PHE:HE2	1:E:558:LEU:HD11	1.75	0.51
1:E:3729:ARG:O	1:E:3733:ARG:NH1	2.43	0.51
1:F:2067:ARG:O	1:F:2071:GLU:HG2	2.10	0.51
2:G:4:LEU:HD21	2:G:97:ALA:HB2	1.91	0.51
1:A:261:HIS:CD2	1:A:263:GLU:HG3	2.45	0.51
1:A:1221:VAL:HG21	1:E:3525:TRP:CG	2.45	0.51
1:A:1272:ARG:NH2	1:A:1583:CYS:SG	2.83	0.51
1:A:2189:PRO:HA	1:A:2192:VAL:HG12	1.91	0.51
1:A:2997:ASN:O	1:A:3001:GLU:HG3	2.10	0.51
1:A:3273:ASN:ND2	1:A:3310:LYS:HB2	2.23	0.51
2:B:33:SER:HB2	2:B:98:ASP:O	2.09	0.51
1:C:251:GLU:HG3	1:C:252:HIS:CE1	2.45	0.51
1:C:546:LYS:O	1:C:550:GLN:HG2	2.10	0.51
1:E:3916:PHE:O	1:E:3920:THR:HG23	2.10	0.51
1:F:2997:ASN:O	1:F:3001:GLU:HG3	2.10	0.51
1:A:238:HIS:HB2	1:A:242:ASP:H	1.75	0.51
1:E:666:GLY:HA3	1:E:1034:PRO:HG3	1.92	0.51
1:E:1257:GLN:HG2	1:E:1451:HIS:HE1	1.76	0.51
1:E:1900:PRO:O	1:E:1904:GLN:HG2	2.10	0.51
1:E:3230:MET:HE3	1:E:3233:MET:HE3	1.93	0.51
1:F:2657:GLU:HB2	1:F:2660:LEU:HB3	1.92	0.51
1:F:3273:ASN:ND2	1:F:3310:LYS:HB2	2.23	0.51
1:F:3280:LEU:HD12	1:F:3317:HIS:HB2	1.93	0.51
1:A:1959:ARG:HA	1:A:1962:ARG:HB3	1.92	0.51
1:A:2067:ARG:O	1:A:2071:GLU:HG2	2.10	0.51
1:A:2657:GLU:HB2	1:A:2660:LEU:HB3	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:887:GLU:O	1:C:891:GLU:HG2	2.10	0.51
1:C:2527:LEU:HA	1:C:2531:ALA:HB2	1.93	0.51
1:C:3636:GLU:HG2	1:C:3696:LYS:HB2	1.93	0.51
1:E:601:LEU:HB2	1:E:610:VAL:HG11	1.93	0.51
1:E:2189:PRO:HA	1:E:2192:VAL:HG12	1.91	0.51
1:E:4156:ARG:O	1:E:4160:GLU:HG2	2.10	0.51
1:F:238:HIS:HB2	1:F:242:ASP:H	1.75	0.51
1:F:1959:ARG:HA	1:F:1962:ARG:HB3	1.92	0.51
1:A:666:GLY:HA3	1:A:1034:PRO:HG3	1.92	0.51
1:A:1052:GLU:O	1:A:1056:THR:HG23	2.11	0.51
1:A:1092:LYS:HE3	1:A:1120:PRO:HB3	1.92	0.51
1:A:1955:ALA:O	1:A:1959:ARG:HG2	2.10	0.51
1:A:3230:MET:HE3	1:A:3233:MET:HE3	1.93	0.51
1:C:903:GLN:O	1:C:915:HIS:N	2.35	0.51
1:E:244:CYS:SG	1:E:273:SER:HB2	2.51	0.51
1:E:1471:ASP:HB2	1:E:1477:HIS:NE2	2.25	0.51
1:E:1636:GLU:HB2	1:E:1638:ARG:HG2	1.93	0.51
1:E:3031:CYS:HA	1:E:3034:ILE:HG22	1.93	0.51
1:E:3280:LEU:HD12	1:E:3317:HIS:HB2	1.93	0.51
1:F:1636:GLU:HB2	1:F:1638:ARG:HG2	1.93	0.51
1:F:3031:CYS:HA	1:F:3034:ILE:HG22	1.93	0.51
1:F:3729:ARG:O	1:F:3733:ARG:NH1	2.43	0.51
2:G:34:MET:HE2	2:G:78:VAL:HG21	1.92	0.51
1:A:887:GLU:O	1:A:891:GLU:HG2	2.10	0.51
1:A:1900:PRO:O	1:A:1904:GLN:HG2	2.10	0.51
1:A:3293:ALA:HA	1:A:3363:ARG:HD2	1.92	0.51
1:C:1955:ALA:O	1:C:1959:ARG:HG2	2.10	0.51
1:C:3108:PHE:HB2	1:C:3160:ALA:HB1	1.92	0.51
1:C:3280:LEU:HD12	1:C:3317:HIS:HB2	1.93	0.51
2:D:33:SER:HB2	2:D:98:ASP:O	2.09	0.51
1:E:1814:THR:HB	1:E:1817:PHE:HD2	1.76	0.51
1:E:2075:GLU:OE1	1:E:2075:GLU:N	2.43	0.51
1:E:2352:ILE:HA	1:E:2358:ARG:HB3	1.92	0.51
1:F:3293:ALA:HA	1:F:3363:ARG:HD2	1.92	0.51
1:A:2075:GLU:OE1	1:A:2075:GLU:N	2.43	0.51
1:A:2149:MET:HE1	1:A:2198:PHE:HA	1.91	0.51
1:C:928:GLU:OE2	2:D:102:ASN:ND2	2.44	0.51
1:C:1959:ARG:HA	1:C:1962:ARG:HB3	1.92	0.51
1:C:2201:TYR:O	1:C:2205:ILE:HG23	2.10	0.51
1:E:261:HIS:CD2	1:E:263:GLU:HG3	2.45	0.51
1:E:2382:HIS:HB2	1:E:2385:ASN:HB2	1.92	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3273:ASN:ND2	1:E:3310:LYS:HB2	2.24	0.51
1:F:399:MET:HA	1:F:399:MET:HE3	1.92	0.51
1:F:551:PHE:HE2	1:F:558:LEU:HD11	1.75	0.51
1:F:1269:GLU:OE2	1:F:1293:GLN:NE2	2.30	0.51
1:F:1471:ASP:HB2	1:F:1477:HIS:NE2	2.25	0.51
1:F:1814:THR:HB	1:F:1817:PHE:HD2	1.76	0.51
1:F:2952:HIS:HD1	1:F:2957:GLN:HG3	1.76	0.51
1:A:3805:ASN:O	1:A:3809:ARG:HG3	2.11	0.51
1:A:3916:PHE:O	1:A:3920:THR:HG23	2.10	0.51
1:C:4907:HIS:CE1	1:C:4912:HIS:ND1	2.78	0.51
1:E:546:LYS:O	1:E:550:GLN:HG2	2.10	0.51
1:F:238:HIS:CG	1:F:241:MET:HE2	2.46	0.51
1:F:2552:TYR:CE2	1:F:2556:LYS:HE3	2.45	0.51
2:I:4:LEU:HD21	2:I:97:ALA:HB2	1.91	0.51
1:A:3729:ARG:O	1:A:3733:ARG:NH1	2.43	0.51
1:A:4048:HIS:ND1	1:A:4066:LEU:HD11	2.26	0.51
1:A:4156:ARG:O	1:A:4160:GLU:HG2	2.10	0.51
1:C:244:CYS:SG	1:C:273:SER:HB2	2.51	0.51
1:C:2067:ARG:O	1:C:2071:GLU:HG2	2.10	0.51
1:E:251:GLU:HG3	1:E:252:HIS:CE1	2.45	0.51
1:E:1052:GLU:O	1:E:1056:THR:HG23	2.11	0.51
1:E:1092:LYS:HE3	1:E:1120:PRO:HB3	1.92	0.51
1:E:2441:MET:HE1	1:E:2506:LEU:HD11	1.93	0.51
1:F:546:LYS:O	1:F:550:GLN:HG2	2.10	0.51
1:F:601:LEU:HB2	1:F:610:VAL:HG11	1.93	0.51
1:F:2405:MET:HE1	1:F:2407:LEU:HB3	1.93	0.51
1:F:4894:ASN:HD22	1:F:4894:ASN:C	2.19	0.51
1:A:244:CYS:SG	1:A:273:SER:HB2	2.51	0.51
1:A:928:GLU:OE2	2:B:102:ASN:ND2	2.44	0.51
1:A:3636:GLU:HG2	1:A:3696:LYS:HB2	1.93	0.51
1:C:737:ILE:HB	1:C:1482:ARG:HH21	1.76	0.51
1:C:2149:MET:HE1	1:C:2198:PHE:HA	1.91	0.51
1:C:2352:ILE:HA	1:C:2358:ARG:HB3	1.92	0.51
1:C:2405:MET:HE1	1:C:2407:LEU:HB3	1.93	0.51
1:C:3273:ASN:ND2	1:C:3310:LYS:HB2	2.24	0.51
1:C:3729:ARG:O	1:C:3733:ARG:NH1	2.43	0.51
1:C:4796:GLU:OE1	1:C:4796:GLU:N	2.37	0.51
2:D:34:MET:HE2	2:D:78:VAL:HG21	1.92	0.51
1:E:2405:MET:HE1	1:E:2407:LEU:HB3	1.93	0.51
1:E:2527:LEU:HA	1:E:2531:ALA:HB2	1.93	0.51
1:F:244:CYS:SG	1:F:273:SER:HB2	2.51	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1257:GLN:HG2	1:F:1451:HIS:HE1	1.76	0.51
1:F:2189:PRO:HA	1:F:2192:VAL:HG12	1.91	0.51
1:F:2382:HIS:HB2	1:F:2385:ASN:HB2	1.92	0.51
1:F:3108:PHE:HB2	1:F:3160:ALA:HB1	1.92	0.51
1:F:4889:ILE:HD13	1:F:4912:HIS:HB3	1.90	0.51
1:C:494:MET:HA	1:C:494:MET:HE3	1.93	0.50
1:C:551:PHE:HE2	1:C:558:LEU:HD11	1.75	0.50
1:E:399:MET:HA	1:E:399:MET:HE3	1.92	0.50
1:F:2075:GLU:OE1	1:F:2075:GLU:N	2.43	0.50
1:F:4156:ARG:O	1:F:4160:GLU:HG2	2.10	0.50
1:A:1257:GLN:HG2	1:A:1451:HIS:HE1	1.76	0.50
1:A:1269:GLU:OE2	1:A:1293:GLN:NE2	2.30	0.50
1:A:1471:ASP:HB2	1:A:1477:HIS:NE2	2.25	0.50
1:A:1636:GLU:HB2	1:A:1638:ARG:HG2	1.93	0.50
1:A:2527:LEU:HA	1:A:2531:ALA:HB2	1.93	0.50
1:A:3031:CYS:HA	1:A:3034:ILE:HG22	1.93	0.50
1:A:3280:LEU:HD12	1:A:3317:HIS:HB2	1.93	0.50
1:A:3484:ASP:O	1:A:3488:ILE:HG13	2.11	0.50
1:C:238:HIS:CG	1:C:241:MET:HE2	2.46	0.50
1:C:2382:HIS:HB2	1:C:2385:ASN:HB2	1.92	0.50
1:C:3647:GLY:O	1:C:3658:LYS:NZ	2.37	0.50
1:E:737:ILE:HB	1:E:1482:ARG:HH21	1.76	0.50
1:E:1269:GLU:OE2	1:E:1293:GLN:NE2	2.30	0.50
1:F:263:GLU:OE2	1:F:388:GLN:NE2	2.40	0.50
1:F:494:MET:HE3	1:F:494:MET:HA	1.93	0.50
1:F:737:ILE:HB	1:F:1482:ARG:HH21	1.76	0.50
1:F:2441:MET:HE1	1:F:2506:LEU:HD11	1.93	0.50
1:F:3166:PRO:HD2	1:F:3167:ILE:HD12	1.93	0.50
1:F:4045:ARG:HA	1:F:4045:ARG:HE	1.76	0.50
1:A:2441:MET:HE1	1:A:2506:LEU:HD11	1.93	0.50
1:A:4045:ARG:HA	1:A:4045:ARG:HE	1.76	0.50
1:C:1257:GLN:HG2	1:C:1451:HIS:HE1	1.76	0.50
1:C:1636:GLU:HB2	1:C:1638:ARG:HG2	1.93	0.50
1:C:2441:MET:HE1	1:C:2506:LEU:HD11	1.93	0.50
1:C:3031:CYS:HA	1:C:3034:ILE:HG22	1.93	0.50
1:C:3484:ASP:O	1:C:3488:ILE:HG13	2.11	0.50
1:C:4156:ARG:O	1:C:4160:GLU:HG2	2.10	0.50
1:E:238:HIS:CG	1:E:241:MET:HE2	2.46	0.50
1:E:739:ARG:HH12	1:E:1480:ILE:HG21	1.77	0.50
1:E:2672:ALA:HB3	1:E:2972:GLN:HE22	1.77	0.50
1:F:4796:GLU:OE1	1:F:4796:GLU:N	2.37	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2352:ILE:HA	1:A:2358:ARG:HB3	1.92	0.50
1:C:2101:LEU:O	1:C:2104:THR:HG22	2.12	0.50
1:C:2482:PHE:CZ	1:C:2486:LEU:HD11	2.47	0.50
1:C:2672:ALA:HB3	1:C:2972:GLN:HE22	1.77	0.50
1:E:1959:ARG:HA	1:E:1962:ARG:HB3	1.92	0.50
1:F:1128:LEU:HG	1:F:1136:ALA:HB2	1.93	0.50
1:F:2672:ALA:HB3	1:F:2972:GLN:HE22	1.77	0.50
1:F:4111:ASP:O	1:F:4115:GLN:HG2	2.12	0.50
1:A:1446:ILE:HG22	1:A:1485:CYS:HA	1.94	0.50
1:C:1084:ARG:HG3	1:C:1084:ARG:O	2.12	0.50
1:E:887:GLU:O	1:E:891:GLU:HG2	2.10	0.50
1:E:3636:GLU:HG2	1:E:3696:LYS:HB2	1.93	0.50
1:F:1052:GLU:O	1:F:1056:THR:HG23	2.11	0.50
1:F:2482:PHE:CZ	1:F:2486:LEU:HD11	2.47	0.50
1:F:3380:ARG:HH21	1:F:3474:PRO:HG2	1.77	0.50
1:F:4048:HIS:ND1	1:F:4066:LEU:HD11	2.26	0.50
2:I:34:MET:HE2	2:I:78:VAL:HG21	1.92	0.50
1:A:253:GLY:O	1:A:257:ARG:HG3	2.12	0.50
1:A:494:MET:HA	1:A:494:MET:HE3	1.93	0.50
1:A:2101:LEU:O	1:A:2104:THR:HG22	2.12	0.50
1:C:3178:ASN:O	1:C:3184:ASN:ND2	2.45	0.50
1:C:4045:ARG:HA	1:C:4045:ARG:HE	1.76	0.50
1:C:4048:HIS:ND1	1:C:4066:LEU:HD11	2.26	0.50
1:E:656:ARG:HG2	1:E:837:SER:HA	1.93	0.50
1:E:3380:ARG:HH21	1:E:3474:PRO:HG2	1.77	0.50
1:E:4152:SER:O	1:E:4155:SER:OG	2.30	0.50
1:E:4657:GLY:HA3	1:E:4662:ARG:HG2	1.94	0.50
1:F:656:ARG:HG2	1:F:837:SER:HA	1.94	0.50
1:F:2099:ARG:O	1:F:2103:LYS:NZ	2.34	0.50
1:F:2527:LEU:HA	1:F:2531:ALA:HB2	1.93	0.50
1:F:3522:ALA:HA	1:F:3525:TRP:CD1	2.47	0.50
1:A:238:HIS:CG	1:A:241:MET:HE2	2.46	0.50
1:C:3166:PRO:HD2	1:C:3167:ILE:HD12	1.93	0.50
1:C:3293:ALA:HA	1:C:3363:ARG:HD2	1.93	0.50
1:E:494:MET:HA	1:E:494:MET:HE3	1.93	0.50
1:E:1939:GLN:HA	1:E:1942:ARG:HG2	1.94	0.50
1:E:1988:PRO:HB2	1:E:1991:ILE:HG12	1.93	0.50
1:E:2552:TYR:CE2	1:E:2556:LYS:HE3	2.45	0.50
1:E:3314:LEU:HD12	1:E:3315:LYS:N	2.27	0.50
1:E:3805:ASN:O	1:E:3809:ARG:HG3	2.11	0.50
1:E:4111:ASP:O	1:E:4115:GLN:HG2	2.12	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:739:ARG:HH12	1:F:1480:ILE:HG21	1.77	0.50
1:F:3178:ASN:O	1:F:3184:ASN:ND2	2.45	0.50
1:F:3636:GLU:HG2	1:F:3696:LYS:HB2	1.93	0.50
1:A:601:LEU:HB2	1:A:610:VAL:HG11	1.93	0.50
1:A:737:ILE:HB	1:A:1482:ARG:HH21	1.76	0.50
1:A:1814:THR:HB	1:A:1817:PHE:HD2	1.76	0.50
1:A:3525:TRP:CG	1:C:1221:VAL:HG21	2.46	0.50
1:C:253:GLY:O	1:C:257:ARG:HG3	2.12	0.50
1:C:1052:GLU:O	1:C:1056:THR:HG23	2.11	0.50
1:C:1446:ILE:HG22	1:C:1485:CYS:HA	1.93	0.50
1:C:2480:GLN:HG2	1:C:2537:THR:HG21	1.94	0.50
1:C:3155:GLY:O	1:C:3240:MET:HE1	2.12	0.50
1:C:3380:ARG:HH21	1:C:3474:PRO:HG2	1.77	0.50
1:C:3522:ALA:HA	1:C:3525:TRP:CD1	2.47	0.50
1:C:3805:ASN:O	1:C:3809:ARG:HG3	2.11	0.50
1:C:4647:PHE:HD1	1:C:4650:ARG:HD3	1.76	0.50
1:E:1729:PRO:HD3	1:E:1758:LEU:HD22	1.94	0.50
1:E:3155:GLY:O	1:E:3240:MET:HE1	2.12	0.50
1:E:3484:ASP:O	1:E:3488:ILE:HG13	2.11	0.50
1:E:4635:ASN:OD1	1:E:4703:LYS:NZ	2.38	0.50
1:F:2330:PHE:CE2	1:F:2425:LEU:HD21	2.47	0.50
1:F:2352:ILE:HA	1:F:2358:ARG:HB3	1.92	0.50
1:F:3230:MET:HE3	1:F:3233:MET:HE3	1.93	0.50
1:F:4116:THR:O	1:F:4119:GLU:HG2	2.12	0.50
1:F:4478:PHE:HA	1:F:4481:LYS:HE2	1.94	0.50
1:A:1113:MET:HB2	1:A:1156:TRP:HZ2	1.77	0.50
1:A:1128:LEU:HG	1:A:1136:ALA:HB2	1.93	0.50
1:A:1666:CYS:HB3	1:A:1677:LEU:HD12	1.94	0.50
1:A:3155:GLY:O	1:A:3240:MET:HE1	2.12	0.50
1:C:399:MET:HA	1:C:399:MET:HE3	1.92	0.50
1:C:2330:PHE:CE2	1:C:2425:LEU:HD21	2.47	0.50
1:C:3018:ILE:HG21	1:C:3095:TYR:HB2	1.94	0.50
1:C:3230:MET:HE3	1:C:3233:MET:HE3	1.93	0.50
1:E:449:ILE:HG23	1:E:529:ILE:HD11	1.94	0.50
1:E:3178:ASN:O	1:E:3184:ASN:ND2	2.45	0.50
1:F:3050:ASP:HA	1:F:3053:LYS:HG2	1.94	0.50
1:A:399:MET:HA	1:A:399:MET:HE3	1.92	0.49
1:A:557:TRP:CE3	1:A:558:LEU:HD23	2.47	0.49
1:A:924:LEU:HD23	1:A:929:ARG:HA	1.94	0.49
1:A:1979:LYS:HE2	1:A:3627:TRP:CD1	2.47	0.49
1:C:1814:THR:HB	1:C:1817:PHE:HD2	1.76	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4894:ASN:HD22	1:C:4894:ASN:C	2.19	0.49
1:E:1113:MET:HB2	1:E:1156:TRP:HZ2	1.77	0.49
1:E:3293:ALA:HA	1:E:3363:ARG:HD2	1.92	0.49
1:F:2480:GLN:HG2	1:F:2537:THR:HG21	1.94	0.49
1:F:4657:GLY:HA3	1:F:4662:ARG:HG2	1.94	0.49
1:A:449:ILE:HG23	1:A:529:ILE:HD11	1.94	0.49
1:A:739:ARG:HH12	1:A:1480:ILE:HG21	1.77	0.49
1:A:3050:ASP:HA	1:A:3053:LYS:HG2	1.94	0.49
1:A:3314:LEU:HD12	1:A:3315:LYS:N	2.27	0.49
1:A:3380:ARG:HH21	1:A:3474:PRO:HG2	1.77	0.49
1:A:4478:PHE:HA	1:A:4481:LYS:HE2	1.94	0.49
1:C:449:ILE:HG23	1:C:529:ILE:HD11	1.94	0.49
1:C:601:LEU:HB2	1:C:610:VAL:HG11	1.93	0.49
1:C:1649:GLU:OE1	1:C:1649:GLU:N	2.36	0.49
1:C:2999:GLU:HA	1:C:3002:MET:SD	2.52	0.49
1:C:3050:ASP:HA	1:C:3053:LYS:HG2	1.94	0.49
1:E:303:GLY:HA2	1:E:420:ARG:HH11	1.77	0.49
1:F:1666:CYS:HB3	1:F:1677:LEU:HD12	1.94	0.49
1:F:3314:LEU:HD12	1:F:3315:LYS:N	2.27	0.49
1:F:3805:ASN:O	1:F:3809:ARG:HG3	2.11	0.49
1:A:1553:VAL:HG23	1:A:1554:PHE:H	1.78	0.49
1:A:1988:PRO:HB2	1:A:1991:ILE:HG12	1.93	0.49
1:C:1666:CYS:HB3	1:C:1677:LEU:HD12	1.94	0.49
1:C:3314:LEU:HD12	1:C:3315:LYS:N	2.27	0.49
1:C:4478:PHE:HA	1:C:4481:LYS:HE2	1.94	0.49
1:E:557:TRP:CE3	1:E:558:LEU:HD23	2.47	0.49
1:E:2442:PRO:HA	1:E:2454:ASP:CG	2.37	0.49
1:E:2643:LEU:O	1:E:2647:ILE:HG13	2.12	0.49
1:E:2999:GLU:HA	1:E:3002:MET:SD	2.53	0.49
1:E:3050:ASP:HA	1:E:3053:LYS:HG2	1.94	0.49
1:E:4048:HIS:ND1	1:E:4066:LEU:HD11	2.26	0.49
1:E:4647:PHE:HD1	1:E:4650:ARG:HD3	1.76	0.49
1:E:4894:ASN:C	1:E:4894:ASN:HD22	2.19	0.49
1:F:1988:PRO:HB2	1:F:1991:ILE:HG12	1.93	0.49
1:F:2419:ARG:NE	1:F:2474:VAL:O	2.35	0.49
1:F:2643:LEU:O	1:F:2647:ILE:HG13	2.12	0.49
1:F:3802:LEU:HB2	1:F:3883:SER:HB2	1.95	0.49
1:A:2330:PHE:CE2	1:A:2425:LEU:HD21	2.47	0.49
1:A:2382:HIS:HB2	1:A:2385:ASN:HB2	1.92	0.49
1:A:2405:MET:HE1	1:A:2407:LEU:HB3	1.93	0.49
1:A:2482:PHE:CZ	1:A:2486:LEU:HD11	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3905:PHE:O	1:A:3909:ILE:HG12	2.12	0.49
1:A:4116:THR:O	1:A:4119:GLU:HG2	2.12	0.49
1:A:4647:PHE:HD1	1:A:4650:ARG:HD3	1.76	0.49
1:C:303:GLY:HA2	1:C:420:ARG:HH11	1.77	0.49
1:C:924:LEU:HD23	1:C:929:ARG:HA	1.94	0.49
1:C:1939:GLN:HA	1:C:1942:ARG:HG2	1.94	0.49
1:E:2482:PHE:CZ	1:E:2486:LEU:HD11	2.47	0.49
1:E:2672:ALA:O	1:E:2977:HIS:NE2	2.36	0.49
1:F:557:TRP:CE3	1:F:558:LEU:HD23	2.47	0.49
1:F:924:LEU:HD23	1:F:929:ARG:HA	1.94	0.49
1:F:3484:ASP:O	1:F:3488:ILE:HG13	2.11	0.49
1:A:503:ASP:O	1:A:507:VAL:HG23	2.13	0.49
1:A:2999:GLU:HA	1:A:3002:MET:SD	2.53	0.49
1:A:4057:TYR:HB3	1:A:4061:GLU:HB2	1.95	0.49
1:C:2503:THR:O	1:C:2507:SER:N	2.35	0.49
1:C:3646:PRO:HB2	1:C:3658:LYS:HZ2	1.78	0.49
1:E:253:GLY:O	1:E:257:ARG:HG3	2.12	0.49
1:E:1128:LEU:HG	1:E:1136:ALA:HB2	1.93	0.49
1:E:1553:VAL:HG23	1:E:1554:PHE:H	1.78	0.49
1:E:3392:GLU:OE1	1:E:3537:THR:OG1	2.31	0.49
1:E:3522:ALA:HA	1:E:3525:TRP:CD1	2.47	0.49
1:F:303:GLY:HA2	1:F:420:ARG:HH11	1.77	0.49
1:F:449:ILE:HG23	1:F:529:ILE:HD11	1.94	0.49
1:F:1729:PRO:HD3	1:F:1758:LEU:HD22	1.94	0.49
1:F:4636:THR:OG1	1:F:4637:GLN:N	2.46	0.49
1:A:656:ARG:HG2	1:A:837:SER:HA	1.94	0.49
1:A:894:VAL:HA	1:A:897:LYS:HB2	1.94	0.49
1:A:2643:LEU:O	1:A:2647:ILE:HG13	2.12	0.49
1:A:3324:LYS:HA	1:A:3327:LYS:HD2	1.95	0.49
1:C:557:TRP:CE3	1:C:558:LEU:HD23	2.47	0.49
1:C:4116:THR:O	1:C:4119:GLU:HG2	2.12	0.49
1:E:1609:VAL:HG23	1:E:1620:VAL:HG22	1.95	0.49
1:E:1666:CYS:HB3	1:E:1677:LEU:HD12	1.94	0.49
1:F:563:GLU:OE1	1:F:563:GLU:N	2.39	0.49
1:F:2166:MET:N	1:F:2166:MET:SD	2.78	0.49
1:F:2191:MET:O	1:F:2191:MET:HG3	2.07	0.49
1:F:3018:ILE:HG21	1:F:3095:TYR:HB2	1.94	0.49
1:F:3935:ALA:O	1:F:3940:TRP:NE1	2.44	0.49
1:A:1084:ARG:HG3	1:A:1084:ARG:O	2.11	0.49
1:A:2442:PRO:HA	1:A:2454:ASP:CG	2.37	0.49
1:A:4796:GLU:OE1	1:A:4796:GLU:N	2.37	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:739:ARG:HH12	1:C:1480:ILE:HG21	1.77	0.49
1:C:4111:ASP:O	1:C:4115:GLN:HG2	2.12	0.49
1:C:4112:THR:O	1:C:4116:THR:HG23	2.13	0.49
1:C:4152:SER:O	1:C:4155:SER:OG	2.30	0.49
1:C:4195:THR:HB	1:C:4918:LEU:HD11	1.95	0.49
1:E:2998:LYS:O	1:E:3002:MET:HG3	2.13	0.49
1:F:253:GLY:O	1:F:257:ARG:HG3	2.12	0.49
1:F:894:VAL:HA	1:F:897:LYS:HB2	1.94	0.49
1:F:925:PRO:HG2	1:F:928:GLU:HB2	1.94	0.49
1:F:1084:ARG:HG3	1:F:1084:ARG:O	2.12	0.49
1:F:1979:LYS:HE2	1:F:3627:TRP:CD1	2.47	0.49
1:F:3155:GLY:O	1:F:3240:MET:HE1	2.12	0.49
1:F:4112:THR:O	1:F:4116:THR:HG23	2.13	0.49
1:A:670:TYR:HD2	1:A:672:LYS:HB2	1.78	0.49
1:A:846:TYR:CZ	1:A:1219:LYS:HB2	2.48	0.49
1:A:1939:GLN:HA	1:A:1942:ARG:HG2	1.94	0.49
1:A:2569:GLU:O	1:A:2573:LEU:HG	2.13	0.49
1:A:3041:ALA:HB1	1:A:3120:LEU:HB2	1.94	0.49
1:C:656:ARG:HG2	1:C:837:SER:HA	1.94	0.49
1:C:1553:VAL:HG23	1:C:1554:PHE:H	1.78	0.49
1:C:2569:GLU:O	1:C:2573:LEU:HG	2.13	0.49
1:C:3905:PHE:O	1:C:3909:ILE:HG12	2.12	0.49
1:C:4057:TYR:HB3	1:C:4061:GLU:HB2	1.95	0.49
1:E:180:ASP:HB3	1:E:211:LEU:HD12	1.94	0.49
1:E:503:ASP:O	1:E:507:VAL:HG23	2.13	0.49
1:E:925:PRO:HG2	1:E:928:GLU:HB2	1.94	0.49
1:E:1979:LYS:HE2	1:E:3627:TRP:CD1	2.47	0.49
1:E:3802:LEU:HB2	1:E:3883:SER:HB2	1.95	0.49
1:E:4057:TYR:HB3	1:E:4061:GLU:HB2	1.95	0.49
1:F:816:PRO:HG2	1:F:819:TYR:CG	2.48	0.49
1:F:931:TYR:CD2	2:G:101:PRO:HG3	2.47	0.49
1:F:1446:ILE:HG22	1:F:1485:CYS:HA	1.94	0.49
1:F:1706:LEU:O	1:F:1710:ILE:HG12	2.13	0.49
1:F:3905:PHE:O	1:F:3909:ILE:HG12	2.12	0.49
1:F:4647:PHE:HD1	1:F:4650:ARG:HD3	1.76	0.49
1:A:180:ASP:HB3	1:A:211:LEU:HD12	1.94	0.49
1:A:2480:GLN:HG2	1:A:2537:THR:HG21	1.94	0.49
1:A:2839:MET:HG3	1:A:2892:PHE:HZ	1.78	0.49
1:A:2998:LYS:O	1:A:3002:MET:HG3	2.13	0.49
1:A:3018:ILE:HG21	1:A:3095:TYR:HB2	1.94	0.49
1:A:3802:LEU:HB2	1:A:3883:SER:HB2	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4111:ASP:O	1:A:4115:GLN:HG2	2.12	0.49
1:A:4894:ASN:C	1:A:4894:ASN:HD22	2.19	0.49
1:C:1128:LEU:HG	1:C:1136:ALA:HB2	1.93	0.49
1:C:1190:LEU:HD23	1:C:1190:LEU:H	1.78	0.49
1:C:1979:LYS:HE2	1:C:3627:TRP:CD1	2.47	0.49
1:C:3397:MET:O	1:C:3401:VAL:HG23	2.13	0.49
1:C:3935:ALA:O	1:C:3940:TRP:NE1	2.44	0.49
1:C:4657:GLY:HA3	1:C:4662:ARG:HG2	1.94	0.49
1:E:1681:VAL:HG21	1:E:1706:LEU:HD21	1.95	0.49
1:E:2503:THR:O	1:E:2507:SER:N	2.35	0.49
1:E:4045:ARG:HA	1:E:4045:ARG:HE	1.76	0.49
1:F:1553:VAL:HG23	1:F:1554:PHE:H	1.78	0.49
1:F:2569:GLU:O	1:F:2573:LEU:HG	2.13	0.49
1:F:2999:GLU:HA	1:F:3002:MET:SD	2.53	0.49
1:A:1649:GLU:OE1	1:A:1649:GLU:N	2.36	0.49
1:A:2383:MET:O	1:A:2387:ILE:HG12	2.13	0.49
1:A:3178:ASN:O	1:A:3184:ASN:ND2	2.45	0.49
1:A:4664:ARG:HD2	1:A:4668:LEU:HD23	1.95	0.49
1:C:846:TYR:CZ	1:C:1219:LYS:HB2	2.48	0.49
1:C:1706:LEU:O	1:C:1710:ILE:HG12	2.13	0.49
1:C:4747:MET:HE2	1:C:4747:MET:N	2.28	0.49
1:E:816:PRO:HG2	1:E:819:TYR:CG	2.48	0.49
1:E:846:TYR:CZ	1:E:1219:LYS:HB2	2.48	0.49
1:E:924:LEU:HD23	1:E:929:ARG:HA	1.94	0.49
1:E:1272:ARG:NH2	1:E:1583:CYS:SG	2.83	0.49
1:E:1446:ILE:HG22	1:E:1485:CYS:HA	1.94	0.49
1:E:1722:MET:HE2	1:E:1760:PRO:HD2	1.95	0.49
1:F:1113:MET:SD	1:F:1211:GLN:HB3	2.53	0.49
1:F:1272:ARG:NH2	1:F:1583:CYS:SG	2.83	0.49
1:F:2101:LEU:O	1:F:2104:THR:HG22	2.12	0.49
1:F:3239:PRO:HB3	1:F:3301:PHE:CG	2.48	0.49
1:F:4664:ARG:HD2	1:F:4668:LEU:HD23	1.95	0.49
1:A:4195:THR:HB	1:A:4918:LEU:HD11	1.95	0.48
1:A:4657:GLY:HA3	1:A:4662:ARG:HG2	1.94	0.48
1:C:816:PRO:HG2	1:C:819:TYR:CG	2.48	0.48
1:C:1113:MET:HB2	1:C:1156:TRP:HZ2	1.77	0.48
1:C:1729:PRO:HD3	1:C:1758:LEU:HD22	1.94	0.48
1:C:1988:PRO:HB2	1:C:1991:ILE:HG12	1.93	0.48
1:E:2419:ARG:NE	1:E:2474:VAL:O	2.35	0.48
1:E:4043:SER:HA	1:E:4076:THR:HA	1.95	0.48
1:E:4478:PHE:HA	1:E:4481:LYS:HE2	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:180:ASP:HB3	1:F:211:LEU:HD12	1.94	0.48
1:F:503:ASP:O	1:F:507:VAL:HG23	2.13	0.48
1:F:846:TYR:CZ	1:F:1219:LYS:HB2	2.48	0.48
1:F:1113:MET:HB2	1:F:1156:TRP:HZ2	1.77	0.48
1:F:1681:VAL:HG21	1:F:1706:LEU:HD21	1.95	0.48
1:F:2423:ARG:NH2	1:F:2475:TYR:O	2.44	0.48
1:F:2442:PRO:HA	1:F:2454:ASP:CG	2.37	0.48
1:A:1190:LEU:HD23	1:A:1190:LEU:H	1.78	0.48
1:A:2497:ALA:O	1:A:2500:SER:OG	2.29	0.48
1:A:3397:MET:O	1:A:3401:VAL:HG23	2.13	0.48
1:A:4636:THR:OG1	1:A:4637:GLN:N	2.46	0.48
1:C:3505:ARG:HB2	1:C:3551:LEU:HD22	1.95	0.48
1:E:417:ARG:HG3	1:E:420:ARG:HH21	1.77	0.48
1:E:670:TYR:HD2	1:E:672:LYS:HB2	1.78	0.48
1:E:2330:PHE:CE2	1:E:2425:LEU:HD21	2.47	0.48
1:E:2839:MET:HG3	1:E:2892:PHE:HZ	1.78	0.48
1:E:3239:PRO:HB3	1:E:3301:PHE:CG	2.48	0.48
1:F:4195:THR:HB	1:F:4918:LEU:HD11	1.95	0.48
1:A:1609:VAL:HG23	1:A:1620:VAL:HG22	1.95	0.48
1:A:1729:PRO:HD3	1:A:1758:LEU:HD22	1.94	0.48
1:C:180:ASP:HB3	1:C:211:LEU:HD12	1.94	0.48
1:C:693:LEU:HD22	1:C:798:ILE:HD11	1.96	0.48
1:C:2191:MET:O	1:C:2191:MET:HG3	2.07	0.48
1:E:1113:MET:SD	1:E:1211:GLN:HB3	2.53	0.48
1:F:417:ARG:HG3	1:F:420:ARG:HH21	1.77	0.48
1:F:670:TYR:HD2	1:F:672:LYS:HB2	1.78	0.48
1:F:1174:MET:N	1:F:1174:MET:HE3	2.29	0.48
1:F:1708:ILE:O	1:F:1713:SER:HB3	2.14	0.48
1:F:2878:ALA:HA	1:F:2881:LYS:HE3	1.95	0.48
1:F:4043:SER:HA	1:F:4076:THR:HA	1.95	0.48
1:A:1708:ILE:O	1:A:1713:SER:HB3	2.14	0.48
1:A:2618:LYS:O	1:A:2625:GLY:HA2	2.14	0.48
1:A:3522:ALA:HA	1:A:3525:TRP:CD1	2.47	0.48
1:A:4112:THR:O	1:A:4116:THR:HG23	2.13	0.48
1:A:4700:ILE:HD12	1:A:4705:GLN:HG3	1.96	0.48
1:C:670:TYR:HD2	1:C:672:LYS:HB2	1.78	0.48
1:C:894:VAL:HA	1:C:897:LYS:HB2	1.94	0.48
1:C:904:TYR:HB3	1:C:918:LEU:HD23	1.95	0.48
1:C:2643:LEU:O	1:C:2647:ILE:HG13	2.12	0.48
1:C:2839:MET:HG3	1:C:2892:PHE:HZ	1.78	0.48
1:C:3041:ALA:HB1	1:C:3120:LEU:HB2	1.94	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1174:MET:N	1:E:1174:MET:HE3	2.29	0.48
1:E:1708:ILE:O	1:E:1713:SER:HB3	2.14	0.48
1:E:2101:LEU:O	1:E:2104:THR:HG22	2.12	0.48
1:E:2878:ALA:HA	1:E:2881:LYS:HE3	1.95	0.48
1:E:2925:LEU:O	1:E:2929:ILE:HG13	2.14	0.48
1:E:3041:ALA:HB1	1:E:3120:LEU:HB2	1.94	0.48
1:E:3166:PRO:HD2	1:E:3167:ILE:HD12	1.93	0.48
1:E:3772:VAL:O	1:E:3776:MET:HG3	2.14	0.48
1:E:4747:MET:HE2	1:E:4747:MET:N	2.28	0.48
1:F:903:GLN:O	1:F:915:HIS:N	2.35	0.48
1:F:1939:GLN:HA	1:F:1942:ARG:HG2	1.94	0.48
1:F:4747:MET:HE2	1:F:4747:MET:N	2.28	0.48
1:A:263:GLU:OE2	1:A:388:GLN:NE2	2.40	0.48
1:A:1681:VAL:HG21	1:A:1706:LEU:HD21	1.95	0.48
1:A:3166:PRO:HD2	1:A:3167:ILE:HD12	1.93	0.48
1:C:555:LEU:HD11	1:C:585:ALA:HB1	1.96	0.48
1:C:1681:VAL:HG21	1:C:1706:LEU:HD21	1.95	0.48
1:C:2618:LYS:O	1:C:2625:GLY:HA2	2.14	0.48
1:C:2925:LEU:O	1:C:2929:ILE:HG13	2.14	0.48
1:C:3239:PRO:HB3	1:C:3301:PHE:CG	2.49	0.48
1:E:894:VAL:HA	1:E:897:LYS:HB2	1.94	0.48
1:E:1436:GLN:NE2	1:E:1440:ASN:OD1	2.46	0.48
1:F:1190:LEU:HD23	1:F:1190:LEU:H	1.78	0.48
1:F:1722:MET:HE2	1:F:1760:PRO:HD2	1.95	0.48
1:F:1968:PRO:O	1:F:1972:ILE:HG12	2.13	0.48
1:F:2925:LEU:O	1:F:2929:ILE:HG13	2.14	0.48
1:A:143:LEU:O	1:A:190:ARG:NE	2.34	0.48
1:C:503:ASP:O	1:C:507:VAL:HG23	2.13	0.48
1:C:925:PRO:HG2	1:C:928:GLU:HB2	1.95	0.48
1:C:1722:MET:HE2	1:C:1760:PRO:HD2	1.95	0.48
1:C:2442:PRO:HA	1:C:2454:ASP:CG	2.38	0.48
1:C:3078:GLN:HB3	1:C:3085:GLN:HG3	1.96	0.48
1:C:4636:THR:OG1	1:C:4637:GLN:N	2.46	0.48
1:C:4664:ARG:HD2	1:C:4668:LEU:HD23	1.95	0.48
1:E:2480:GLN:HG2	1:E:2537:THR:HG21	1.94	0.48
1:E:3018:ILE:HG21	1:E:3095:TYR:HB2	1.94	0.48
1:E:3905:PHE:O	1:E:3909:ILE:HG12	2.12	0.48
1:E:4664:ARG:HD2	1:E:4668:LEU:HD23	1.95	0.48
1:F:3505:ARG:HB2	1:F:3551:LEU:HD22	1.95	0.48
1:A:692:HIS:HB3	1:A:795:SER:HB2	1.96	0.48
1:A:925:PRO:HG2	1:A:928:GLU:HB2	1.95	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2672:ALA:HB3	1:A:2972:GLN:HE22	1.77	0.48
1:C:1113:MET:SD	1:C:1211:GLN:HB3	2.53	0.48
1:E:1429:SER:OG	1:E:1557:GLU:HB2	2.14	0.48
1:E:1972:ILE:HG13	1:E:3618:LEU:HB3	1.96	0.48
1:E:2569:GLU:O	1:E:2573:LEU:HG	2.13	0.48
1:F:1609:VAL:HG23	1:F:1620:VAL:HG22	1.95	0.48
1:F:2321:ARG:O	1:F:2325:ARG:HG2	2.14	0.48
1:F:2503:THR:O	1:F:2507:SER:N	2.35	0.48
1:F:2618:LYS:O	1:F:2625:GLY:HA2	2.14	0.48
1:F:4057:TYR:HB3	1:F:4061:GLU:HB2	1.95	0.48
1:A:303:GLY:HA2	1:A:420:ARG:HH11	1.77	0.48
1:A:904:TYR:HB3	1:A:918:LEU:HD23	1.95	0.48
1:A:931:TYR:CD2	2:B:101:PRO:HG3	2.49	0.48
1:A:1051:ARG:HG2	1:A:1055:ARG:HE	1.79	0.48
1:A:1174:MET:N	1:A:1174:MET:HE3	2.29	0.48
1:C:417:ARG:HG3	1:C:420:ARG:HH21	1.77	0.48
1:C:692:HIS:HB3	1:C:795:SER:HB2	1.96	0.48
1:C:712:GLU:HG2	1:C:838:ARG:HG2	1.96	0.48
1:C:1968:PRO:O	1:C:1972:ILE:HG12	2.13	0.48
1:E:1084:ARG:HG3	1:E:1084:ARG:O	2.12	0.48
1:E:2383:MET:O	1:E:2387:ILE:HG12	2.13	0.48
1:E:3324:LYS:HA	1:E:3327:LYS:HD2	1.95	0.48
1:E:4116:THR:O	1:E:4119:GLU:HG2	2.12	0.48
1:E:4671:MET:HE3	1:E:4671:MET:HB3	1.74	0.48
1:F:1429:SER:OG	1:F:1557:GLU:HB2	2.14	0.48
1:F:3772:VAL:O	1:F:3776:MET:HG3	2.14	0.48
1:F:4635:ASN:OD1	1:F:4703:LYS:NZ	2.38	0.48
1:A:712:GLU:HG2	1:A:838:ARG:HG2	1.96	0.48
1:A:816:PRO:HG2	1:A:819:TYR:CG	2.48	0.48
1:A:1047:LYS:HB3	1:A:1051:ARG:HH12	1.79	0.48
1:A:1722:MET:HE2	1:A:1760:PRO:HD2	1.95	0.48
1:A:1968:PRO:O	1:A:1972:ILE:HG12	2.13	0.48
1:A:1972:ILE:HG13	1:A:3618:LEU:HB3	1.96	0.48
1:A:2472:ASP:OD2	1:A:2529:ARG:NE	2.47	0.48
1:A:4747:MET:HE2	1:A:4747:MET:N	2.28	0.48
1:C:1174:MET:N	1:C:1174:MET:HE3	2.29	0.48
1:C:3772:VAL:O	1:C:3776:MET:HG3	2.14	0.48
1:E:1047:LYS:HB3	1:E:1051:ARG:HH12	1.79	0.48
1:E:1144:ARG:HB2	1:E:1192:PHE:CZ	2.49	0.48
1:E:1190:LEU:HD23	1:E:1190:LEU:H	1.78	0.48
1:E:2430:ASP:O	1:E:2434:VAL:HG23	2.14	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3053:LYS:HG3	1:E:3057:ARG:NH1	2.29	0.48
1:E:3505:ARG:HB2	1:E:3551:LEU:HD22	1.95	0.48
1:F:1431:ARG:NH2	1:F:1507:GLU:OE1	2.47	0.48
1:F:2998:LYS:O	1:F:3002:MET:HG3	2.13	0.48
1:A:781:ASN:HB3	1:A:1466:THR:HG22	1.96	0.48
1:A:1144:ARG:HB2	1:A:1192:PHE:CZ	2.49	0.48
1:A:1431:ARG:NH2	1:A:1507:GLU:OE1	2.47	0.48
1:A:1436:GLN:NE2	1:A:1440:ASN:OD1	2.46	0.48
1:C:781:ASN:HB3	1:C:1466:THR:HG22	1.96	0.48
1:C:931:TYR:CD2	2:D:101:PRO:HG3	2.48	0.48
1:C:2175:VAL:HG12	1:C:2219:TYR:CZ	2.49	0.48
1:C:2998:LYS:O	1:C:3002:MET:HG3	2.13	0.48
1:C:3802:LEU:HB2	1:C:3883:SER:HB2	1.95	0.48
1:E:263:GLU:OE2	1:E:388:GLN:NE2	2.40	0.48
1:E:1444:GLY:HA3	1:E:1487:MET:HA	1.96	0.48
1:E:1968:PRO:O	1:E:1972:ILE:HG12	2.13	0.48
1:E:4195:THR:HB	1:E:4918:LEU:HD11	1.95	0.48
1:E:4700:ILE:HD12	1:E:4705:GLN:HG3	1.96	0.48
1:F:693:LEU:HD22	1:F:798:ILE:HD11	1.96	0.48
1:F:802:PHE:O	1:F:1617:GLY:HA3	2.14	0.48
1:F:1990:GLU:H	1:F:1990:GLU:CD	2.22	0.48
1:F:3053:LYS:HG3	1:F:3057:ARG:NH1	2.29	0.48
1:F:4104:LEU:O	1:F:4108:MET:HB2	2.14	0.48
1:A:417:ARG:HG3	1:A:420:ARG:HH21	1.77	0.47
1:A:693:LEU:HD22	1:A:798:ILE:HD11	1.96	0.47
1:A:3122:LEU:H	1:A:3125:VAL:HB	1.79	0.47
1:A:3239:PRO:HB3	1:A:3301:PHE:CG	2.48	0.47
1:A:3772:VAL:O	1:A:3776:MET:HG3	2.14	0.47
1:C:1609:VAL:HG23	1:C:1620:VAL:HG22	1.95	0.47
1:E:802:PHE:O	1:E:1617:GLY:HA3	2.14	0.47
1:E:2774:ILE:HD12	1:E:2891:ILE:HD12	1.96	0.47
1:E:4112:THR:O	1:E:4116:THR:HG23	2.13	0.47
1:F:555:LEU:HD11	1:F:585:ALA:HB1	1.96	0.47
1:F:781:ASN:HB3	1:F:1466:THR:HG22	1.96	0.47
1:F:2472:ASP:OD2	1:F:2529:ARG:NE	2.47	0.47
1:F:2774:ILE:HD12	1:F:2891:ILE:HD12	1.96	0.47
1:F:2839:MET:HG3	1:F:2892:PHE:HZ	1.78	0.47
1:A:1429:SER:OG	1:A:1557:GLU:HB2	2.14	0.47
1:A:1706:LEU:O	1:A:1710:ILE:HG12	2.13	0.47
1:A:2727:SER:OG	1:A:2767:LYS:NZ	2.47	0.47
1:A:3392:GLU:OE1	1:A:3537:THR:OG1	2.31	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3505:ARG:HB2	1:A:3551:LEU:HD22	1.95	0.47
1:A:4887:CYS:HA	3:A:5101:ATP:H2	1.79	0.47
1:C:626:ARG:O	1:C:630:HIS:ND1	2.47	0.47
1:C:1269:GLU:OE2	1:C:1293:GLN:NE2	2.30	0.47
1:C:2472:ASP:OD2	1:C:2529:ARG:NE	2.47	0.47
1:C:3324:LYS:HA	1:C:3327:LYS:HD2	1.95	0.47
1:C:4777:VAL:HG11	1:C:4816:MET:HG2	1.97	0.47
1:E:693:LEU:HD22	1:E:798:ILE:HD11	1.96	0.47
1:E:2618:LYS:O	1:E:2625:GLY:HA2	2.14	0.47
1:E:3397:MET:O	1:E:3401:VAL:HG23	2.13	0.47
1:E:4777:VAL:HG11	1:E:4816:MET:HG2	1.97	0.47
1:F:1436:GLN:NE2	1:F:1440:ASN:OD1	2.46	0.47
1:F:2497:ALA:O	1:F:2500:SER:OG	2.29	0.47
1:F:2727:SER:OG	1:F:2767:LYS:NZ	2.47	0.47
1:F:3041:ALA:HB1	1:F:3120:LEU:HB2	1.94	0.47
1:A:1113:MET:SD	1:A:1211:GLN:HB3	2.53	0.47
1:A:2059:GLN:H	1:A:2059:GLN:CD	2.21	0.47
1:A:2175:VAL:HG12	1:A:2219:TYR:CZ	2.49	0.47
1:C:15:ARG:HB3	1:C:110:HIS:HB3	1.96	0.47
1:C:1436:GLN:NE2	1:C:1440:ASN:OD1	2.46	0.47
1:C:1920:ARG:NH1	1:C:2006:CYS:SG	2.87	0.47
1:C:2383:MET:O	1:C:2387:ILE:HG12	2.13	0.47
1:C:2878:ALA:HA	1:C:2881:LYS:HE3	1.95	0.47
1:E:15:ARG:HB3	1:E:110:HIS:HB3	1.97	0.47
1:E:70:GLU:OE1	1:E:122:ARG:NH2	2.48	0.47
1:E:781:ASN:HB3	1:E:1466:THR:HG22	1.96	0.47
1:E:2472:ASP:OD2	1:E:2529:ARG:NE	2.47	0.47
1:E:4887:CYS:HA	3:E:5101:ATP:H2	1.79	0.47
1:F:626:ARG:O	1:F:630:HIS:ND1	2.47	0.47
1:F:1144:ARG:HB2	1:F:1192:PHE:CZ	2.49	0.47
1:F:1718:ALA:HA	1:F:1721:MET:HE2	1.96	0.47
1:F:3078:GLN:HB3	1:F:3085:GLN:HG3	1.96	0.47
1:A:1920:ARG:NH1	1:A:2006:CYS:SG	2.87	0.47
1:A:3425:ASN:ND2	1:A:3428:SER:HB3	2.30	0.47
1:A:4043:SER:HA	1:A:4076:THR:HA	1.95	0.47
1:A:4635:ASN:OD1	1:A:4703:LYS:NZ	2.38	0.47
1:C:1458:ASP:OD1	1:C:1459:LEU:N	2.48	0.47
1:C:3122:LEU:H	1:C:3125:VAL:HB	1.80	0.47
1:C:3425:ASN:ND2	1:C:3428:SER:HB3	2.30	0.47
1:E:1718:ALA:HA	1:E:1721:MET:HE2	1.96	0.47
1:E:4104:LEU:O	1:E:4108:MET:HB2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:70:GLU:OE1	1:F:122:ARG:NH2	2.48	0.47
1:F:1444:GLY:HA3	1:F:1487:MET:HA	1.96	0.47
1:F:1972:ILE:HG13	1:F:3618:LEU:HB3	1.96	0.47
1:F:2383:MET:O	1:F:2387:ILE:HG12	2.13	0.47
1:A:626:ARG:O	1:A:630:HIS:ND1	2.47	0.47
1:A:2320:VAL:HG11	1:A:2418:ILE:HD12	1.97	0.47
1:A:2503:THR:O	1:A:2507:SER:N	2.35	0.47
1:A:3053:LYS:HG3	1:A:3057:ARG:NH1	2.29	0.47
1:A:4152:SER:O	1:A:4155:SER:OG	2.30	0.47
1:C:802:PHE:O	1:C:1617:GLY:HA3	2.14	0.47
1:C:1429:SER:OG	1:C:1557:GLU:HB2	2.14	0.47
1:C:2430:ASP:O	1:C:2434:VAL:HG23	2.14	0.47
1:C:2566:ASP:O	1:C:2570:VAL:HG23	2.15	0.47
1:C:2774:ILE:HD12	1:C:2891:ILE:HD12	1.96	0.47
1:C:3852:ASP:OD1	1:C:3853:PHE:N	2.48	0.47
1:C:4887:CYS:HA	3:C:5101:ATP:H2	1.79	0.47
1:E:1932:VAL:HG13	1:E:3612:ARG:HH12	1.80	0.47
1:E:2321:ARG:O	1:E:2325:ARG:HG2	2.14	0.47
1:E:2506:LEU:HA	1:E:2506:LEU:HD12	1.62	0.47
1:E:2727:SER:OG	1:E:2767:LYS:NZ	2.47	0.47
1:E:3324:LYS:O	1:E:3328:LYS:HG2	2.15	0.47
1:F:712:GLU:HG2	1:F:838:ARG:HG2	1.96	0.47
1:F:1051:ARG:HG2	1:F:1055:ARG:HE	1.79	0.47
1:F:1920:ARG:NH1	1:F:2006:CYS:SG	2.87	0.47
1:A:802:PHE:O	1:A:1617:GLY:HA3	2.14	0.47
1:A:853:PRO:HG2	1:A:1209:VAL:HA	1.96	0.47
1:A:903:GLN:O	1:A:915:HIS:N	2.35	0.47
1:A:2566:ASP:O	1:A:2570:VAL:HG23	2.15	0.47
1:A:2767:LYS:HG2	1:A:2771:ARG:HH21	1.80	0.47
1:C:1708:ILE:O	1:C:1713:SER:HB3	2.13	0.47
1:C:2973:TYR:CE1	1:C:2979:LEU:HD21	2.50	0.47
1:C:4043:SER:HA	1:C:4076:THR:HA	1.95	0.47
1:C:4700:ILE:HD12	1:C:4705:GLN:HG3	1.96	0.47
1:E:1706:LEU:O	1:E:1710:ILE:HG12	2.13	0.47
1:E:2566:ASP:O	1:E:2570:VAL:HG23	2.15	0.47
1:F:2320:VAL:HG11	1:F:2418:ILE:HD12	1.97	0.47
1:F:2430:ASP:O	1:F:2434:VAL:HG23	2.14	0.47
1:F:2609:LEU:O	1:F:2613:TYR:HD1	1.98	0.47
1:F:3273:ASN:HA	1:F:3313:LEU:HD11	1.96	0.47
1:A:70:GLU:OE1	1:A:122:ARG:NH2	2.48	0.47
1:A:2321:ARG:O	1:A:2325:ARG:HG2	2.14	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2672:ALA:O	1:A:2977:HIS:NE2	2.36	0.47
1:A:2878:ALA:HA	1:A:2881:LYS:HE3	1.96	0.47
1:A:2925:LEU:O	1:A:2929:ILE:HG13	2.14	0.47
1:A:3647:GLY:O	1:A:3658:LYS:NZ	2.37	0.47
2:B:85:LEU:HD13	2:B:125:VAL:HG22	1.97	0.47
1:C:70:GLU:OE1	1:C:122:ARG:NH2	2.48	0.47
1:C:137:ARG:HA	1:C:137:ARG:NE	2.30	0.47
1:C:1051:ARG:HG2	1:C:1055:ARG:HE	1.79	0.47
1:C:2320:VAL:HG11	1:C:2418:ILE:HD12	1.97	0.47
1:C:2767:LYS:HG2	1:C:2771:ARG:HH21	1.80	0.47
1:C:3984:MET:HE2	1:C:3984:MET:HB2	1.84	0.47
1:E:681:HIS:HA	1:E:751:THR:HG22	1.97	0.47
1:E:1051:ARG:HG2	1:E:1055:ARG:HE	1.79	0.47
1:E:1431:ARG:NH2	1:E:1507:GLU:OE1	2.47	0.47
1:E:1990:GLU:CD	1:E:1990:GLU:H	2.22	0.47
1:E:2320:VAL:HG11	1:E:2418:ILE:HD12	1.97	0.47
1:E:2767:LYS:HG2	1:E:2771:ARG:HH21	1.80	0.47
1:E:3852:ASP:OD1	1:E:3853:PHE:N	2.48	0.47
1:F:290:ARG:NH2	1:F:343:ARG:O	2.48	0.47
1:F:934:GLN:OE1	1:F:935:MET:HG2	2.15	0.47
1:F:1458:ASP:OD1	1:F:1459:LEU:N	2.48	0.47
1:F:1932:VAL:HG13	1:F:3612:ARG:HH12	1.80	0.47
1:F:2767:LYS:HG2	1:F:2771:ARG:HH21	1.80	0.47
1:F:2973:TYR:CE1	1:F:2979:LEU:HD21	2.50	0.47
1:F:3309:VAL:H	1:F:3378:TYR:HE2	1.62	0.47
1:F:3324:LYS:HA	1:F:3327:LYS:HD2	1.95	0.47
1:F:3392:GLU:OE1	1:F:3537:THR:OG1	2.31	0.47
1:F:3425:ASN:ND2	1:F:3428:SER:HB3	2.30	0.47
1:F:4777:VAL:HG11	1:F:4816:MET:HG2	1.96	0.47
1:A:1990:GLU:H	1:A:1990:GLU:CD	2.22	0.47
1:A:2973:TYR:CE1	1:A:2979:LEU:HD21	2.50	0.47
1:A:3944:VAL:HG13	1:A:4005:SER:HB3	1.96	0.47
1:C:2727:SER:OG	1:C:2767:LYS:NZ	2.47	0.47
1:C:3241:LEU:HA	1:C:3244:TYR:HB2	1.97	0.47
1:C:3273:ASN:HA	1:C:3313:LEU:HD11	1.96	0.47
1:C:3392:GLU:OE1	1:C:3537:THR:OG1	2.31	0.47
1:C:3944:VAL:HG13	1:C:4005:SER:HB3	1.96	0.47
1:E:626:ARG:O	1:E:630:HIS:ND1	2.47	0.47
1:E:692:HIS:HB3	1:E:795:SER:HB2	1.96	0.47
1:E:3159:ALA:HB2	1:E:3240:MET:CE	2.45	0.47
1:E:3234:MET:O	1:E:3238:LEU:HB3	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3944:VAL:HG13	1:E:4005:SER:HB3	1.96	0.47
1:F:137:ARG:HA	1:F:137:ARG:NE	2.30	0.47
1:F:2455:MET:SD	1:F:2456:SER:N	2.88	0.47
1:F:3241:LEU:HA	1:F:3244:TYR:HB2	1.97	0.47
1:F:3964:ILE:O	1:F:3968:LYS:HG3	2.15	0.47
2:G:85:LEU:HD13	2:G:125:VAL:HG22	1.97	0.47
2:I:85:LEU:HD13	2:I:125:VAL:HG22	1.96	0.47
1:A:915:HIS:CE1	1:A:917:CYS:HB3	2.50	0.47
1:A:2291:PRO:HG3	1:A:2383:MET:HE1	1.97	0.47
1:A:2455:MET:SD	1:A:2456:SER:N	2.88	0.47
1:A:3852:ASP:OD1	1:A:3853:PHE:N	2.48	0.47
1:A:4777:VAL:HG11	1:A:4816:MET:HG2	1.97	0.47
1:C:915:HIS:CE1	1:C:917:CYS:HB3	2.50	0.47
1:C:1047:LYS:HB3	1:C:1051:ARG:HH12	1.79	0.47
1:C:1932:VAL:HG13	1:C:3612:ARG:HH12	1.80	0.47
1:C:3250:GLU:O	1:C:3256:HIS:NE2	2.47	0.47
1:E:1649:GLU:OE1	1:E:1649:GLU:N	2.36	0.47
1:E:1920:ARG:NH1	1:E:2006:CYS:SG	2.87	0.47
1:E:4882:ASP:O	1:E:4886:LYS:HG2	2.15	0.47
1:F:904:TYR:HB3	1:F:918:LEU:HD23	1.95	0.47
1:F:1047:LYS:HB3	1:F:1051:ARG:HH12	1.79	0.47
1:F:3234:MET:O	1:F:3238:LEU:HB3	2.15	0.47
1:A:290:ARG:NH2	1:A:343:ARG:O	2.48	0.47
1:A:2774:ILE:HD12	1:A:2891:ILE:HD12	1.96	0.47
1:A:3273:ASN:HA	1:A:3313:LEU:HD11	1.96	0.47
1:A:3536:ARG:HH22	1:A:3540:PRO:HG3	1.80	0.47
1:A:3646:PRO:HB2	1:A:3658:LYS:HZ2	1.80	0.47
1:C:468:GLU:OE1	1:C:468:GLU:N	2.41	0.47
1:C:853:PRO:HG2	1:C:1209:VAL:HA	1.96	0.47
1:C:1245:ARG:HD2	1:C:1694:TYR:CZ	2.50	0.47
1:C:2526:LEU:HB3	1:C:2534:PHE:CE1	2.50	0.47
1:C:4745:ILE:HD11	1:F:4775:VAL:HG21	1.97	0.47
1:E:290:ARG:NH2	1:E:343:ARG:O	2.48	0.47
1:E:2175:VAL:HG12	1:E:2219:TYR:CZ	2.49	0.47
1:E:3309:VAL:H	1:E:3378:TYR:HE2	1.62	0.47
1:E:3536:ARG:HH22	1:E:3540:PRO:HG3	1.80	0.47
1:E:3964:ILE:O	1:E:3968:LYS:HG3	2.15	0.47
1:F:692:HIS:HB3	1:F:795:SER:HB2	1.96	0.47
1:F:2175:VAL:HG12	1:F:2219:TYR:CZ	2.50	0.47
1:F:3250:GLU:O	1:F:3256:HIS:NE2	2.47	0.47
1:F:3536:ARG:HH22	1:F:3540:PRO:HG3	1.80	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3944:VAL:HG13	1:F:4005:SER:HB3	1.96	0.47
1:A:681:HIS:HA	1:A:751:THR:HG22	1.97	0.46
1:A:2430:ASP:O	1:A:2434:VAL:HG23	2.14	0.46
1:A:2433:GLY:O	1:A:2437:ILE:HG12	2.16	0.46
1:A:3159:ALA:HB2	1:A:3240:MET:CE	2.45	0.46
1:A:4104:LEU:O	1:A:4108:MET:HB2	2.14	0.46
1:C:1444:GLY:HA3	1:C:1487:MET:HA	1.96	0.46
1:C:3309:VAL:H	1:C:3378:TYR:HE2	1.63	0.46
1:C:3964:ILE:O	1:C:3968:LYS:HG3	2.15	0.46
1:E:712:GLU:HG2	1:E:838:ARG:HG2	1.96	0.46
1:E:3078:GLN:HB3	1:E:3085:GLN:HG3	1.96	0.46
1:E:4138:MET:HE2	1:E:4144:ILE:HD11	1.98	0.46
1:F:853:PRO:HG2	1:F:1209:VAL:HA	1.96	0.46
1:F:4700:ILE:HD12	1:F:4705:GLN:HG3	1.96	0.46
1:A:2526:LEU:HB3	1:A:2534:PHE:CE1	2.50	0.46
1:A:2609:LEU:O	1:A:2613:TYR:HD1	1.98	0.46
1:A:3250:GLU:O	1:A:3256:HIS:NE2	2.47	0.46
1:A:3324:LYS:O	1:A:3328:LYS:HG2	2.15	0.46
1:A:3964:ILE:O	1:A:3968:LYS:HG3	2.15	0.46
1:C:308:LEU:HD21	1:C:370:LEU:HD12	1.97	0.46
1:C:1117:TRP:HB3	1:C:1201:PHE:HB3	1.98	0.46
1:C:1431:ARG:NH2	1:C:1507:GLU:OE1	2.47	0.46
1:C:1801:LYS:HE3	1:C:1801:LYS:HB3	1.71	0.46
1:C:1972:ILE:HG13	1:C:3618:LEU:HB3	1.96	0.46
1:C:1990:GLU:H	1:C:1990:GLU:CD	2.22	0.46
1:E:555:LEU:HD11	1:E:585:ALA:HB1	1.96	0.46
1:E:563:GLU:OE1	1:E:563:GLU:N	2.39	0.46
1:E:934:GLN:CD	2:I:99:ARG:HH22	2.22	0.46
1:E:2433:GLY:O	1:E:2437:ILE:HG12	2.16	0.46
1:E:3273:ASN:HA	1:E:3313:LEU:HD11	1.96	0.46
1:F:1086:ARG:NH1	1:F:1254:ARG:HH21	2.13	0.46
1:F:3245:MET:O	1:F:3249:TRP:HB2	2.15	0.46
1:F:4152:SER:O	1:F:4155:SER:OG	2.30	0.46
1:A:15:ARG:HB3	1:A:110:HIS:HB3	1.97	0.46
1:A:563:GLU:OE1	1:A:563:GLU:N	2.39	0.46
1:A:1117:TRP:HB3	1:A:1201:PHE:HB3	1.97	0.46
1:A:1444:GLY:HA3	1:A:1487:MET:HA	1.96	0.46
1:A:3555:ASN:O	1:A:3559:HIS:ND1	2.41	0.46
1:C:290:ARG:NH2	1:C:343:ARG:O	2.48	0.46
1:C:3324:LYS:O	1:C:3328:LYS:HG2	2.15	0.46
2:D:34:MET:O	2:D:50:THR:HG23	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1086:ARG:NH1	1:E:1254:ARG:HH21	2.13	0.46
1:E:2325:ARG:HA	1:E:2325:ARG:HD3	1.73	0.46
1:E:2455:MET:SD	1:E:2456:SER:N	2.88	0.46
1:E:2973:TYR:CE1	1:E:2979:LEU:HD21	2.50	0.46
1:E:3245:MET:O	1:E:3249:TRP:HB2	2.16	0.46
1:F:681:HIS:HA	1:F:751:THR:HG22	1.97	0.46
1:F:1117:TRP:HB3	1:F:1201:PHE:HB3	1.97	0.46
1:F:3319:LEU:HB2	1:F:3320:PRO:HD3	1.97	0.46
1:F:3324:LYS:O	1:F:3328:LYS:HG2	2.15	0.46
1:F:3397:MET:O	1:F:3401:VAL:HG23	2.13	0.46
1:F:3555:ASN:O	1:F:3559:HIS:ND1	2.41	0.46
1:A:1458:ASP:OD1	1:A:1459:LEU:N	2.48	0.46
1:A:3234:MET:O	1:A:3238:LEU:HB3	2.15	0.46
1:A:4138:MET:HE2	1:A:4144:ILE:HD11	1.98	0.46
1:A:4775:VAL:HG21	1:E:4745:ILE:HD11	1.97	0.46
2:B:34:MET:O	2:B:50:THR:HG23	2.16	0.46
1:C:375:GLN:NE2	1:C:390:LYS:HB2	2.31	0.46
1:C:758:CYS:HG	1:C:767:SER:HB3	1.80	0.46
1:C:2455:MET:SD	1:C:2456:SER:N	2.88	0.46
1:C:3289:ILE:HD12	1:C:3291:GLU:H	1.81	0.46
1:C:4882:ASP:O	1:C:4886:LYS:HG2	2.15	0.46
1:E:673:TRP:HD1	1:E:759:LEU:HD12	1.81	0.46
1:E:904:TYR:HB3	1:E:918:LEU:HD23	1.95	0.46
1:E:934:GLN:OE1	1:E:935:MET:HG2	2.15	0.46
1:E:2497:ALA:O	1:E:2500:SER:OG	2.29	0.46
1:E:2526:LEU:HB3	1:E:2534:PHE:HE1	1.80	0.46
1:E:2609:LEU:O	1:E:2613:TYR:HD1	1.98	0.46
1:E:4151:ILE:HD12	1:E:4156:ARG:HH21	1.81	0.46
1:F:2526:LEU:HB3	1:F:2534:PHE:CE1	2.50	0.46
1:F:3159:ALA:HB2	1:F:3240:MET:CE	2.45	0.46
2:G:52:THR:HG21	2:G:102:ASN:HA	1.98	0.46
1:A:308:LEU:HD21	1:A:370:LEU:HD12	1.97	0.46
1:A:1718:ALA:HA	1:A:1721:MET:HE2	1.96	0.46
1:A:3241:LEU:HA	1:A:3244:TYR:HB2	1.97	0.46
1:A:4882:ASP:O	1:A:4886:LYS:HG2	2.15	0.46
1:C:887:GLU:OE1	1:C:890:HIS:NE2	2.49	0.46
1:C:934:GLN:OE1	1:C:935:MET:HG2	2.15	0.46
1:C:1272:ARG:NH2	1:C:1583:CYS:SG	2.83	0.46
1:C:1718:ALA:HA	1:C:1721:MET:HE2	1.96	0.46
1:C:2321:ARG:O	1:C:2325:ARG:HG2	2.14	0.46
1:C:3536:ARG:HH22	1:C:3540:PRO:HG3	1.80	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3717:GLU:O	1:C:3721:GLN:HG2	2.16	0.46
1:C:3920:THR:HG22	1:C:3980:MET:HA	1.98	0.46
1:E:16:THR:HB	1:E:110:HIS:HA	1.98	0.46
1:E:853:PRO:HG2	1:E:1209:VAL:HA	1.96	0.46
1:E:1458:ASP:OD1	1:E:1459:LEU:N	2.48	0.46
1:F:308:LEU:HD21	1:F:370:LEU:HD12	1.97	0.46
1:F:887:GLU:OE1	1:F:890:HIS:NE2	2.49	0.46
1:F:1458:ASP:HB3	1:F:1461:ARG:HE	1.80	0.46
1:F:3852:ASP:OD1	1:F:3853:PHE:N	2.48	0.46
1:F:4887:CYS:HA	3:F:5101:ATP:H2	1.79	0.46
2:I:52:THR:HG21	2:I:102:ASN:HA	1.98	0.46
1:C:681:HIS:HA	1:C:751:THR:HG22	1.97	0.46
1:C:846:TYR:HE2	1:C:1218:GLY:H	1.64	0.46
1:C:2432:VAL:O	1:C:2435:ILE:HG22	2.16	0.46
1:C:2526:LEU:HB3	1:C:2534:PHE:HE1	1.80	0.46
1:C:2609:LEU:O	1:C:2613:TYR:HD1	1.98	0.46
1:C:3159:ALA:HB2	1:C:3240:MET:CE	2.45	0.46
1:C:4104:LEU:O	1:C:4108:MET:HB2	2.15	0.46
2:D:85:LEU:HD13	2:D:125:VAL:HG22	1.97	0.46
1:E:228:LEU:HA	1:E:356:TYR:CD2	2.50	0.46
1:E:375:GLN:NE2	1:E:390:LYS:HB2	2.31	0.46
1:E:2526:LEU:HB3	1:E:2534:PHE:CE1	2.50	0.46
1:E:3108:PHE:N	1:E:3108:PHE:CD1	2.83	0.46
1:E:3220:LEU:HD22	1:E:3225:ILE:HD13	1.98	0.46
1:F:228:LEU:HA	1:F:356:TYR:CD2	2.50	0.46
1:F:846:TYR:HE2	1:F:1218:GLY:H	1.64	0.46
1:F:915:HIS:CE1	1:F:917:CYS:HB3	2.50	0.46
1:F:2291:PRO:HG3	1:F:2383:MET:HE1	1.97	0.46
1:F:3122:LEU:H	1:F:3125:VAL:HB	1.80	0.46
1:A:228:LEU:HA	1:A:356:TYR:CD2	2.50	0.46
1:A:375:GLN:NE2	1:A:390:LYS:HB2	2.31	0.46
1:A:1932:VAL:HG13	1:A:3612:ARG:HH12	1.80	0.46
1:E:137:ARG:HA	1:E:137:ARG:NE	2.30	0.46
1:E:915:HIS:CE1	1:E:917:CYS:HB3	2.50	0.46
1:E:1482:ARG:HG2	1:E:1535:GLU:OE2	2.16	0.46
1:E:1704:TYR:OH	1:E:1795:MET:HE1	2.16	0.46
1:E:4914:LEU:H	3:E:5101:ATP:HN61	1.64	0.46
1:F:15:ARG:HB3	1:F:110:HIS:HB3	1.97	0.46
1:F:1245:ARG:HD2	1:F:1694:TYR:CZ	2.50	0.46
1:F:2731:TRP:O	1:F:2735:LYS:HG2	2.16	0.46
1:F:2996:SER:O	1:F:3000:LYS:HG3	2.16	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:555:LEU:HD11	1:A:585:ALA:HB1	1.96	0.46
1:A:1086:ARG:NH1	1:A:1254:ARG:HH21	2.13	0.46
1:A:1245:ARG:HD2	1:A:1694:TYR:CZ	2.50	0.46
1:A:3220:LEU:HD22	1:A:3225:ILE:HD13	1.98	0.46
1:A:3319:LEU:HB2	1:A:3320:PRO:HD3	1.97	0.46
1:C:322:ALA:HB1	1:C:327:THR:HG21	1.98	0.46
1:C:1458:ASP:HB3	1:C:1461:ARG:HE	1.80	0.46
1:C:2441:MET:CE	1:C:2506:LEU:HD11	2.46	0.46
1:C:2580:ARG:HG2	1:C:2583:MET:HE3	1.98	0.46
1:C:3053:LYS:HG3	1:C:3057:ARG:NH1	2.29	0.46
1:C:3117:GLY:HA2	1:C:3121:ILE:HD13	1.98	0.46
1:E:1117:TRP:HB3	1:E:1201:PHE:HB3	1.98	0.46
1:E:2158:PRO:HA	1:E:2161:MET:HB2	1.98	0.46
1:E:3122:LEU:H	1:E:3125:VAL:HB	1.80	0.46
1:E:3250:GLU:O	1:E:3256:HIS:NE2	2.47	0.46
1:E:4636:THR:OG1	1:E:4637:GLN:N	2.46	0.46
1:F:2566:ASP:O	1:F:2570:VAL:HG23	2.14	0.46
1:F:3220:LEU:HD22	1:F:3225:ILE:HD13	1.98	0.46
1:F:3292:GLY:HA3	1:F:3295:MET:CE	2.34	0.46
1:F:3717:GLU:O	1:F:3721:GLN:HG2	2.16	0.46
2:G:34:MET:O	2:G:50:THR:HG23	2.16	0.46
1:A:137:ARG:HA	1:A:137:ARG:NE	2.30	0.46
1:A:375:GLN:HE21	1:A:390:LYS:HB2	1.80	0.46
1:A:468:GLU:OE1	1:A:468:GLU:N	2.41	0.46
1:A:1704:TYR:OH	1:A:1795:MET:HE1	2.16	0.46
1:A:2441:MET:CE	1:A:2506:LEU:HD11	2.46	0.46
1:A:2731:TRP:O	1:A:2735:LYS:HG2	2.16	0.46
1:A:3078:GLN:HB3	1:A:3085:GLN:HG3	1.96	0.46
1:A:3920:THR:HG22	1:A:3980:MET:HA	1.98	0.46
1:C:16:THR:HB	1:C:110:HIS:HA	1.98	0.46
1:C:1144:ARG:HB2	1:C:1192:PHE:CZ	2.49	0.46
1:C:2291:PRO:HG3	1:C:2383:MET:HE1	1.97	0.46
1:C:2433:GLY:O	1:C:2437:ILE:HG12	2.16	0.46
1:C:2996:SER:O	1:C:3000:LYS:HG3	2.16	0.46
1:C:4151:ILE:HD12	1:C:4156:ARG:HH21	1.81	0.46
1:E:375:GLN:HE21	1:E:390:LYS:HB2	1.80	0.46
1:E:1483:SER:HB3	1:E:1486:TYR:CE2	2.51	0.46
1:E:3241:LEU:HA	1:E:3244:TYR:HB2	1.97	0.46
1:E:4000:ASP:O	1:E:4004:GLU:HG2	2.16	0.46
1:F:2526:LEU:HB3	1:F:2534:PHE:HE1	1.80	0.46
1:F:2621:CYS:SG	1:F:2622:LEU:N	2.89	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:254:GLU:O	1:A:258:ARG:HG3	2.16	0.46
1:A:2158:PRO:HA	1:A:2161:MET:HB2	1.98	0.46
1:A:2484:LEU:HD13	1:A:2540:HIS:ND1	2.32	0.46
1:A:2526:LEU:HB3	1:A:2534:PHE:HE1	1.80	0.46
1:A:2614:GLU:HG3	1:A:2670:ALA:HB2	1.98	0.46
1:A:3122:LEU:HA	1:A:3126:GLN:HG3	1.98	0.46
1:A:3183:TYR:OH	1:A:3197:PRO:O	2.33	0.46
1:A:3249:TRP:CZ3	1:A:3308:LYS:HD3	2.51	0.46
1:A:3717:GLU:O	1:A:3721:GLN:HG2	2.16	0.46
1:A:4671:MET:HE3	1:A:4671:MET:HB3	1.74	0.46
1:C:309:MET:N	1:C:309:MET:SD	2.89	0.46
1:C:1482:ARG:HG2	1:C:1535:GLU:OE2	2.16	0.46
1:C:3234:MET:O	1:C:3238:LEU:HB3	2.15	0.46
1:C:4914:LEU:H	3:C:5101:ATP:HN61	1.64	0.46
1:E:887:GLU:OE1	1:E:890:HIS:NE2	2.49	0.46
1:E:986:ILE:HG21	1:E:1059:GLY:HA2	1.98	0.46
1:E:2405:MET:CE	1:E:2407:LEU:H	2.29	0.46
1:E:3831:ASP:OD1	1:E:3831:ASP:N	2.49	0.46
1:F:1482:ARG:HG2	1:F:1535:GLU:OE2	2.16	0.46
1:F:2405:MET:CE	1:F:2407:LEU:H	2.29	0.46
1:F:3854:GLN:NE2	1:F:3921:GLU:O	2.49	0.46
2:G:105:ASN:ND2	2:G:111:ASN:HB2	2.31	0.46
1:A:1458:ASP:HB3	1:A:1461:ARG:HE	1.80	0.45
1:A:1577:LYS:HE2	1:A:1577:LYS:HA	1.98	0.45
1:A:1903:LEU:O	1:A:1907:LEU:HG	2.16	0.45
1:A:2496:ARG:NH2	1:A:2546:SER:OG	2.49	0.45
1:A:2506:LEU:HD12	1:A:2506:LEU:HA	1.62	0.45
1:A:3117:GLY:HA2	1:A:3121:ILE:HD13	1.98	0.45
1:A:3934:LEU:HD23	1:A:3939:LEU:HD22	1.98	0.45
1:A:4000:ASP:O	1:A:4004:GLU:HG2	2.16	0.45
1:A:4151:ILE:HD12	1:A:4156:ARG:HH21	1.81	0.45
1:C:1483:SER:HB3	1:C:1486:TYR:CE2	2.51	0.45
1:C:1903:LEU:O	1:C:1907:LEU:HG	2.16	0.45
1:C:2614:GLU:HG3	1:C:2670:ALA:HB2	1.98	0.45
1:C:2621:CYS:SG	1:C:2622:LEU:N	2.89	0.45
1:C:2731:TRP:O	1:C:2735:LYS:HG2	2.16	0.45
1:C:2977:HIS:O	1:C:3440:LYS:HD3	2.16	0.45
1:C:3122:LEU:HA	1:C:3126:GLN:HG3	1.98	0.45
1:C:3220:LEU:HD22	1:C:3225:ILE:HD13	1.98	0.45
1:E:1245:ARG:HD2	1:E:1694:TYR:CZ	2.50	0.45
1:E:1272:ARG:HH12	1:E:1585:PRO:HA	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1903:LEU:O	1:E:1907:LEU:HG	2.16	0.45
1:F:1577:LYS:HE2	1:F:1577:LYS:HA	1.98	0.45
1:F:2496:ARG:NH2	1:F:2546:SER:OG	2.49	0.45
1:F:4138:MET:HE2	1:F:4144:ILE:HD11	1.98	0.45
1:F:4151:ILE:HD12	1:F:4156:ARG:HH21	1.81	0.45
1:F:4882:ASP:O	1:F:4886:LYS:HG2	2.15	0.45
1:F:4914:LEU:H	3:F:5101:ATP:HN61	1.64	0.45
2:I:34:MET:O	2:I:50:THR:HG23	2.16	0.45
1:A:887:GLU:OE1	1:A:890:HIS:NE2	2.49	0.45
1:A:934:GLN:OE1	1:A:935:MET:HG2	2.15	0.45
1:A:2580:ARG:HG2	1:A:2583:MET:HE3	1.98	0.45
1:A:3000:LYS:HB2	1:A:3043:THR:HG21	1.99	0.45
1:A:3230:MET:HE2	1:A:3233:MET:HG2	1.98	0.45
1:C:1086:ARG:NH1	1:C:1254:ARG:HH21	2.13	0.45
1:C:2065:MET:HG3	1:C:2083:MET:HG2	1.98	0.45
1:C:3230:MET:HE2	1:C:3233:MET:HG2	1.98	0.45
1:E:309:MET:N	1:E:309:MET:SD	2.89	0.45
1:E:846:TYR:HE2	1:E:1218:GLY:H	1.64	0.45
1:E:1801:LYS:HE3	1:E:1801:LYS:HB3	1.71	0.45
1:E:2291:PRO:HG3	1:E:2383:MET:HE1	1.97	0.45
1:E:3230:MET:HE2	1:E:3233:MET:HG2	1.98	0.45
1:E:3319:LEU:HB2	1:E:3320:PRO:HD3	1.97	0.45
1:E:3425:ASN:ND2	1:E:3428:SER:HB3	2.30	0.45
1:E:4017:ASP:OD1	1:E:4124:VAL:HG13	2.17	0.45
1:F:673:TRP:HD1	1:F:759:LEU:HD12	1.81	0.45
1:F:1903:LEU:O	1:F:1907:LEU:HG	2.16	0.45
1:F:2433:GLY:O	1:F:2437:ILE:HG12	2.16	0.45
1:F:3010:LEU:O	1:F:3014:VAL:HG23	2.17	0.45
1:F:3122:LEU:HA	1:F:3126:GLN:HG3	1.98	0.45
1:A:322:ALA:HB1	1:A:327:THR:HG21	1.98	0.45
1:A:912:LYS:HB2	1:A:914:GLN:HG2	1.99	0.45
1:A:986:ILE:HG21	1:A:1059:GLY:HA2	1.98	0.45
1:A:1272:ARG:HH12	1:A:1585:PRO:HA	1.81	0.45
1:A:3309:VAL:H	1:A:3378:TYR:HE2	1.62	0.45
1:A:4017:ASP:OD1	1:A:4124:VAL:HG13	2.17	0.45
1:C:228:LEU:HA	1:C:356:TYR:CD2	2.50	0.45
1:C:3736:ALA:HB1	1:C:3776:MET:HG2	1.98	0.45
1:C:3854:GLN:NE2	1:C:3921:GLU:O	2.49	0.45
1:E:2441:MET:CE	1:E:2506:LEU:HD11	2.46	0.45
1:E:2614:GLU:HG3	1:E:2670:ALA:HB2	1.98	0.45
1:E:2731:TRP:O	1:E:2735:LYS:HG2	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3000:LYS:HB2	1:E:3043:THR:HG21	1.99	0.45
1:E:3030:ASN:HA	1:E:3033:HIS:HD2	1.81	0.45
1:F:16:THR:HB	1:F:110:HIS:HA	1.98	0.45
1:F:2352:ILE:HD13	1:F:2358:ARG:HB3	1.98	0.45
1:F:2441:MET:CE	1:F:2506:LEU:HD11	2.46	0.45
1:F:3230:MET:HE2	1:F:3233:MET:HG2	1.98	0.45
1:F:3289:ILE:HD12	1:F:3291:GLU:H	1.81	0.45
1:F:3736:ALA:HB1	1:F:3776:MET:HG2	1.98	0.45
1:A:673:TRP:HD1	1:A:759:LEU:HD12	1.81	0.45
1:A:1838:GLU:H	1:A:1838:GLU:CD	2.25	0.45
1:A:2233:MET:O	1:A:2296:ARG:NH2	2.48	0.45
1:A:2621:CYS:SG	1:A:2622:LEU:N	2.89	0.45
1:C:169:ARG:HD2	1:C:176:ARG:HH12	1.82	0.45
1:C:986:ILE:HG21	1:C:1059:GLY:HA2	1.98	0.45
1:C:1576:HIS:CD2	1:C:1577:LYS:HG2	2.51	0.45
2:D:34:MET:HE1	2:D:36:TRP:NE1	2.32	0.45
1:E:308:LEU:HD21	1:E:370:LEU:HD12	1.97	0.45
1:E:912:LYS:HB2	1:E:914:GLN:HG2	1.98	0.45
1:E:2352:ILE:HD13	1:E:2358:ARG:HB3	1.98	0.45
1:F:322:ALA:HB1	1:F:327:THR:HG21	1.98	0.45
1:F:1174:MET:CB	1:F:1190:LEU:HA	2.47	0.45
1:F:3000:LYS:HB2	1:F:3043:THR:HG21	1.99	0.45
1:A:2432:VAL:O	1:A:2435:ILE:HG22	2.16	0.45
1:A:2977:HIS:O	1:A:3440:LYS:HD3	2.16	0.45
1:A:3010:LEU:O	1:A:3014:VAL:HG23	2.16	0.45
1:A:3108:PHE:N	1:A:3108:PHE:CD1	2.83	0.45
1:C:2496:ARG:NH2	1:C:2546:SER:OG	2.49	0.45
1:C:3383:TRP:CH2	1:C:3394:LEU:HD23	2.52	0.45
1:C:4183:GLU:HG2	1:C:4186:GLU:HB3	1.98	0.45
1:E:436:LEU:HD21	1:E:518:ALA:HB2	1.99	0.45
1:E:1576:HIS:CD2	1:E:1577:LYS:HG2	2.51	0.45
1:E:2065:MET:HG3	1:E:2083:MET:HG2	1.98	0.45
1:E:2432:VAL:O	1:E:2435:ILE:HG22	2.16	0.45
1:E:3010:LEU:O	1:E:3014:VAL:HG23	2.17	0.45
1:E:3249:TRP:CZ3	1:E:3308:LYS:HD3	2.51	0.45
1:E:3289:ILE:HD12	1:E:3291:GLU:H	1.81	0.45
1:E:3717:GLU:O	1:E:3721:GLN:HG2	2.16	0.45
1:F:1272:ARG:HH12	1:F:1585:PRO:HA	1.81	0.45
1:F:1483:SER:HB3	1:F:1486:TYR:CE2	2.51	0.45
1:F:2735:LYS:HB3	1:F:2740:TRP:HB2	1.99	0.45
1:F:3327:LYS:O	1:F:3331:MET:HG3	2.16	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3920:THR:HG22	1:F:3980:MET:HA	1.98	0.45
1:A:1482:ARG:HG2	1:A:1535:GLU:OE2	2.16	0.45
1:A:1576:HIS:CD2	1:A:1577:LYS:HG2	2.51	0.45
2:B:119:GLN:OE1	2:B:119:GLN:N	2.50	0.45
1:C:254:GLU:O	1:C:258:ARG:HG3	2.16	0.45
1:C:563:GLU:OE1	1:C:563:GLU:N	2.39	0.45
1:C:912:LYS:HB2	1:C:914:GLN:HG2	1.98	0.45
1:C:1303:ARG:O	1:C:1590:GLN:N	2.38	0.45
1:C:1704:TYR:OH	1:C:1795:MET:HE1	2.16	0.45
1:C:2423:ARG:NH2	1:C:2475:TYR:O	2.44	0.45
1:C:3065:GLU:HG2	1:C:3069:LYS:HE3	1.99	0.45
1:C:3549:ARG:O	1:C:3553:ILE:HG12	2.17	0.45
1:C:3831:ASP:OD1	1:C:3831:ASP:N	2.49	0.45
1:E:1458:ASP:HB3	1:E:1461:ARG:HE	1.80	0.45
1:E:2484:LEU:HD13	1:E:2540:HIS:ND1	2.32	0.45
1:E:2977:HIS:O	1:E:3440:LYS:HD3	2.16	0.45
1:E:4579:THR:HG1	1:E:4732:HIS:CD2	2.34	0.45
1:E:4775:VAL:HG21	1:F:4745:ILE:HD11	1.98	0.45
1:F:375:GLN:HE21	1:F:390:LYS:HB2	1.80	0.45
1:F:1704:TYR:OH	1:F:1795:MET:HE1	2.16	0.45
1:F:1838:GLU:CD	1:F:1838:GLU:H	2.25	0.45
1:F:2432:VAL:O	1:F:2435:ILE:HG22	2.16	0.45
1:F:2540:HIS:HB3	1:F:2543:LEU:HD23	1.99	0.45
1:F:3108:PHE:N	1:F:3108:PHE:CD1	2.83	0.45
1:F:3240:MET:HA	1:F:3240:MET:HE2	1.99	0.45
1:F:3831:ASP:N	1:F:3831:ASP:OD1	2.49	0.45
1:F:3934:LEU:HD23	1:F:3939:LEU:HD22	1.98	0.45
1:F:4000:ASP:O	1:F:4004:GLU:HG2	2.16	0.45
1:A:356:TYR:CD1	1:A:407:ARG:HG2	2.52	0.45
1:A:898:ILE:HG21	1:A:973:THR:HA	1.99	0.45
1:A:1483:SER:HB3	1:A:1486:TYR:CE2	2.51	0.45
1:A:2264:VAL:HG21	1:A:2300:PHE:HE2	1.82	0.45
1:A:2464:LYS:HB3	1:A:2518:TYR:CE1	2.52	0.45
1:A:3030:ASN:HA	1:A:3033:HIS:HD2	1.81	0.45
1:A:3736:ALA:HB1	1:A:3776:MET:HG2	1.98	0.45
1:A:4169:ARG:NH2	3:A:5101:ATP:O1G	2.50	0.45
1:A:4183:GLU:HG2	1:A:4186:GLU:HB3	1.99	0.45
1:C:295:PHE:HE1	1:C:297:LEU:HG	1.82	0.45
1:C:1471:ASP:HB2	1:C:1477:HIS:CE1	2.52	0.45
1:C:2405:MET:CE	1:C:2407:LEU:H	2.29	0.45
1:C:2484:LEU:HD13	1:C:2540:HIS:ND1	2.32	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2735:LYS:HB3	1:C:2740:TRP:HB2	1.99	0.45
1:C:3097:THR:HG21	1:C:3146:TYR:CE2	2.52	0.45
1:C:3108:PHE:N	1:C:3108:PHE:CD1	2.83	0.45
1:C:3934:LEU:HD23	1:C:3939:LEU:HD22	1.97	0.45
1:C:4000:ASP:O	1:C:4004:GLU:HG2	2.16	0.45
1:C:4138:MET:HE2	1:C:4144:ILE:HD11	1.98	0.45
2:D:52:THR:HG21	2:D:102:ASN:HA	1.98	0.45
1:E:898:ILE:HG21	1:E:973:THR:HA	1.99	0.45
1:E:3122:LEU:HA	1:E:3126:GLN:HG3	1.98	0.45
1:E:3327:LYS:O	1:E:3331:MET:HG3	2.16	0.45
1:E:3854:GLN:NE2	1:E:3921:GLU:O	2.49	0.45
1:E:3920:THR:HG22	1:E:3980:MET:HA	1.98	0.45
1:E:4169:ARG:NH2	3:E:5101:ATP:O1G	2.50	0.45
1:E:4941:LYS:HE2	1:E:4941:LYS:HB3	1.82	0.45
1:F:375:GLN:NE2	1:F:390:LYS:HB2	2.31	0.45
1:F:2158:PRO:HA	1:F:2161:MET:HB2	1.98	0.45
1:F:2614:GLU:HG3	1:F:2670:ALA:HB2	1.98	0.45
1:F:3097:THR:HG21	1:F:3146:TYR:CE2	2.52	0.45
2:G:34:MET:HE1	2:G:36:TRP:HE1	1.82	0.45
1:A:593:HIS:O	1:A:597:ILE:HG13	2.17	0.45
1:A:3245:MET:O	1:A:3249:TRP:HB2	2.16	0.45
1:A:3289:ILE:HD12	1:A:3291:GLU:H	1.81	0.45
1:A:3327:LYS:O	1:A:3331:MET:HG3	2.16	0.45
1:C:1838:GLU:CD	1:C:1838:GLU:H	2.25	0.45
1:C:2352:ILE:HD13	1:C:2358:ARG:HB3	1.98	0.45
1:C:3000:LYS:HB2	1:C:3043:THR:HG21	1.99	0.45
1:E:2580:ARG:HG2	1:E:2583:MET:HE3	1.98	0.45
1:E:2621:CYS:SG	1:E:2622:LEU:N	2.89	0.45
1:E:2996:SER:O	1:E:3000:LYS:HG3	2.16	0.45
1:E:3549:ARG:O	1:E:3553:ILE:HG12	2.17	0.45
1:E:3736:ALA:HB1	1:E:3776:MET:HG2	1.98	0.45
1:E:3934:LEU:HD23	1:E:3939:LEU:HD22	1.98	0.45
1:F:169:ARG:HD2	1:F:176:ARG:HH12	1.82	0.45
1:F:309:MET:N	1:F:309:MET:SD	2.89	0.45
1:F:1576:HIS:CD2	1:F:1577:LYS:HG2	2.51	0.45
1:F:2264:VAL:HG21	1:F:2300:PHE:HE2	1.82	0.45
1:F:3850:ASN:ND2	1:F:3853:PHE:HB2	2.32	0.45
2:G:34:MET:HE1	2:G:36:TRP:NE1	2.32	0.45
2:I:105:ASN:ND2	2:I:111:ASN:HB2	2.31	0.45
1:A:16:THR:HB	1:A:110:HIS:HA	1.98	0.45
1:A:436:LEU:HD21	1:A:518:ALA:HB2	1.99	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:846:TYR:HE2	1:A:1218:GLY:H	1.64	0.45
1:A:2405:MET:CE	1:A:2407:LEU:H	2.29	0.45
1:A:2459:PHE:HE1	1:A:2464:LYS:HG3	1.82	0.45
1:A:2996:SER:O	1:A:3000:LYS:HG3	2.16	0.45
1:A:4914:LEU:H	3:A:5101:ATP:HN61	1.64	0.45
2:B:52:THR:HG21	2:B:102:ASN:HA	1.98	0.45
2:B:105:ASN:ND2	2:B:111:ASN:HB2	2.31	0.45
1:C:673:TRP:HD1	1:C:759:LEU:HD12	1.81	0.45
1:C:1786:ASP:OD1	1:C:1786:ASP:N	2.50	0.45
1:C:2464:LYS:HB3	1:C:2518:TYR:CE1	2.52	0.45
1:C:3249:TRP:CZ3	1:C:3308:LYS:HD3	2.51	0.45
1:C:3858:ARG:HG2	1:C:3859:THR:HG23	1.99	0.45
1:E:254:GLU:O	1:E:258:ARG:HG3	2.16	0.45
1:E:1838:GLU:H	1:E:1838:GLU:CD	2.25	0.45
1:E:2496:ARG:NH2	1:E:2546:SER:OG	2.49	0.45
1:E:3025:ALA:O	1:E:3029:VAL:HG23	2.17	0.45
1:E:3850:ASN:ND2	1:E:3853:PHE:HB2	2.32	0.45
1:F:375:GLN:NE2	1:F:390:LYS:O	2.50	0.45
1:F:593:HIS:O	1:F:597:ILE:HG13	2.17	0.45
1:F:917:CYS:HA	1:F:924:LEU:HD11	1.99	0.45
1:F:1786:ASP:OD1	1:F:1786:ASP:N	2.50	0.45
1:F:3025:ALA:O	1:F:3029:VAL:HG23	2.17	0.45
1:F:3858:ARG:HG2	1:F:3859:THR:HG23	1.99	0.45
1:F:4169:ARG:NH2	3:F:5101:ATP:O1G	2.50	0.45
1:A:372:LEU:HD23	1:A:372:LEU:H	1.81	0.45
1:A:1471:ASP:HB2	1:A:1477:HIS:CE1	2.52	0.45
1:A:3065:GLU:HG2	1:A:3069:LYS:HE3	1.99	0.45
1:A:3240:MET:HE2	1:A:3240:MET:HA	1.99	0.45
1:A:3549:ARG:O	1:A:3553:ILE:HG12	2.17	0.45
1:A:3850:ASN:ND2	1:A:3853:PHE:HB2	2.32	0.45
1:C:375:GLN:HE21	1:C:390:LYS:HB2	1.80	0.45
1:C:2276:CYS:SG	1:C:2279:LEU:HG	2.57	0.45
1:C:3025:ALA:O	1:C:3029:VAL:HG23	2.17	0.45
1:C:3240:MET:HA	1:C:3240:MET:HE2	1.99	0.45
1:C:3245:MET:O	1:C:3249:TRP:HB2	2.16	0.45
1:C:3319:LEU:HB2	1:C:3320:PRO:HD3	1.97	0.45
1:C:3327:LYS:O	1:C:3331:MET:HG3	2.16	0.45
1:C:4635:ASN:OD1	1:C:4703:LYS:NZ	2.38	0.45
2:D:105:ASN:ND2	2:D:111:ASN:HB2	2.31	0.45
1:E:2464:LYS:HB3	1:E:2518:TYR:CE1	2.52	0.45
1:E:2934:GLU:HB3	1:E:2938:TYR:CZ	2.52	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:11:ILE:HD12	1:F:11:ILE:HA	1.85	0.45
1:F:898:ILE:HG21	1:F:973:THR:HA	1.99	0.45
1:F:1419:TYR:CE2	1:F:1563:ASN:HB3	2.52	0.45
1:F:2065:MET:HG3	1:F:2083:MET:HG2	1.98	0.45
1:F:3249:TRP:CZ3	1:F:3308:LYS:HD3	2.51	0.45
1:F:4017:ASP:OD1	1:F:4124:VAL:HG13	2.17	0.45
1:A:1091:GLU:HB3	1:A:1094:TYR:HD2	1.82	0.44
1:A:2065:MET:HG3	1:A:2083:MET:HG2	1.98	0.44
1:A:2540:HIS:HB3	1:A:2543:LEU:HD23	1.99	0.44
1:C:356:TYR:CD1	1:C:407:ARG:HG2	2.52	0.44
1:C:1029:ASN:O	1:C:1032:LEU:HB2	2.17	0.44
1:C:1174:MET:CB	1:C:1190:LEU:HA	2.47	0.44
1:C:3030:ASN:HA	1:C:3033:HIS:HD2	1.81	0.44
1:C:3463:SER:HB3	1:C:3466:VAL:HG12	1.99	0.44
1:C:3850:ASN:ND2	1:C:3853:PHE:HB2	2.32	0.44
1:C:4169:ARG:NH2	3:C:5101:ATP:O1G	2.50	0.44
1:C:4928:ASP:OD1	1:C:4929:GLU:N	2.50	0.44
2:D:34:MET:HE1	2:D:36:TRP:HE1	1.82	0.44
1:E:1577:LYS:HE2	1:E:1577:LYS:HA	1.98	0.44
1:E:3117:GLY:HA2	1:E:3121:ILE:HD13	1.98	0.44
1:E:4928:ASP:OD1	1:E:4929:GLU:N	2.50	0.44
1:F:436:LEU:HD21	1:F:518:ALA:HB2	1.99	0.44
1:F:986:ILE:HG21	1:F:1059:GLY:HA2	1.98	0.44
1:F:2484:LEU:HD13	1:F:2540:HIS:ND1	2.32	0.44
1:F:3117:GLY:HA2	1:F:3121:ILE:HD13	1.98	0.44
1:A:1029:ASN:O	1:A:1032:LEU:HB2	2.18	0.44
1:A:3226:ARG:HH12	1:A:3286:ASN:HA	1.82	0.44
1:A:3967:LEU:O	1:A:3971:MET:HG3	2.18	0.44
1:C:908:ARG:NH1	1:C:910:ASP:OD1	2.51	0.44
1:C:1577:LYS:HA	1:C:1577:LYS:HE2	1.98	0.44
1:C:2094:ILE:O	1:C:2098:VAL:HG22	2.18	0.44
1:C:2264:VAL:HG21	1:C:2300:PHE:HE2	1.82	0.44
1:C:2934:GLU:HB3	1:C:2938:TYR:CZ	2.52	0.44
2:D:119:GLN:N	2:D:119:GLN:OE1	2.50	0.44
1:E:295:PHE:HE1	1:E:297:LEU:HG	1.82	0.44
1:E:393:MET:HA	1:E:393:MET:HE2	1.99	0.44
1:E:908:ARG:NH1	1:E:910:ASP:OD1	2.51	0.44
1:E:1029:ASN:O	1:E:1032:LEU:HB2	2.18	0.44
1:E:1786:ASP:N	1:E:1786:ASP:OD1	2.50	0.44
1:E:2459:PHE:HE1	1:E:2464:LYS:HG3	1.82	0.44
1:E:2525:PRO:O	1:E:2526:LEU:C	2.61	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2753:GLN:HG2	1:E:2755:LEU:H	1.83	0.44
1:E:3133:LEU:HB2	1:E:3161:PHE:CE2	2.53	0.44
1:E:3383:TRP:CH2	1:E:3394:LEU:HD23	2.52	0.44
1:E:4183:GLU:HG2	1:E:4186:GLU:HB3	1.99	0.44
1:F:254:GLU:O	1:F:258:ARG:HG3	2.16	0.44
1:F:1471:ASP:HB2	1:F:1477:HIS:CE1	2.52	0.44
1:F:2464:LYS:HB3	1:F:2518:TYR:CE1	2.52	0.44
1:F:2506:LEU:HD12	1:F:2506:LEU:HA	1.62	0.44
1:F:2753:GLN:HG2	1:F:2755:LEU:H	1.83	0.44
1:A:1844:LEU:HA	1:A:1847:ILE:HG22	1.99	0.44
1:A:3097:THR:HG21	1:A:3146:TYR:CE2	2.52	0.44
1:A:4042:ILE:HD11	1:A:4079:TYR:HB3	2.00	0.44
1:C:375:GLN:NE2	1:C:390:LYS:O	2.50	0.44
1:C:941:LYS:HZ3	1:C:944:LEU:HD11	1.82	0.44
1:C:1114:ARG:NH1	1:C:1127:GLU:OE1	2.51	0.44
1:C:2158:PRO:HA	1:C:2161:MET:HB2	1.98	0.44
1:C:2981:PHE:HB3	1:C:3000:LYS:CE	2.47	0.44
1:C:4088:GLU:OE1	1:C:4088:GLU:N	2.51	0.44
1:E:372:LEU:HD23	1:E:372:LEU:H	1.81	0.44
1:E:426:PHE:HZ	1:E:456:LEU:HD21	1.82	0.44
1:E:593:HIS:O	1:E:597:ILE:HG13	2.17	0.44
1:E:1844:LEU:HA	1:E:1847:ILE:HG22	1.99	0.44
1:E:2735:LYS:HB3	1:E:2740:TRP:HB2	1.99	0.44
1:E:3425:ASN:O	1:E:3428:SER:OG	2.32	0.44
1:E:3486:GLU:O	1:E:3490:LEU:HG	2.17	0.44
1:E:3660:VAL:HG13	1:E:3664:HIS:ND1	2.33	0.44
1:E:4608:LYS:O	1:E:4613:GLY:N	2.50	0.44
1:E:4838:TYR:O	1:E:4842:ARG:HB2	2.18	0.44
1:F:1905:MET:O	1:F:1909:LEU:HG	2.17	0.44
1:F:2580:ARG:HG2	1:F:2583:MET:HE3	1.98	0.44
1:F:3133:LEU:HB2	1:F:3161:PHE:CE2	2.53	0.44
2:G:119:GLN:N	2:G:119:GLN:OE1	2.50	0.44
2:I:66:ARG:HA	2:I:66:ARG:NE	2.33	0.44
2:I:119:GLN:OE1	2:I:119:GLN:N	2.50	0.44
1:A:309:MET:N	1:A:309:MET:SD	2.89	0.44
1:A:375:GLN:NE2	1:A:390:LYS:O	2.50	0.44
1:A:1039:ASP:O	1:A:1043:LYS:HG3	2.18	0.44
1:A:1837:ASN:HA	1:A:1840:LEU:HD12	1.99	0.44
1:A:2352:ILE:HD13	1:A:2358:ARG:HB3	1.98	0.44
1:A:2423:ARG:NH2	1:A:2475:TYR:O	2.44	0.44
1:A:2525:PRO:O	1:A:2526:LEU:C	2.61	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3854:GLN:NE2	1:A:3921:GLU:O	2.49	0.44
1:A:4838:TYR:O	1:A:4842:ARG:HB2	2.18	0.44
1:C:2775:LYS:HE3	1:C:2775:LYS:HB3	1.89	0.44
1:C:2851:TRP:HH2	1:C:2869:LEU:HD13	1.82	0.44
1:C:3123:GLU:OE2	1:C:3186:ARG:NH2	2.51	0.44
1:C:3555:ASN:O	1:C:3559:HIS:ND1	2.41	0.44
1:E:375:GLN:NE2	1:E:390:LYS:O	2.50	0.44
1:F:372:LEU:HD23	1:F:372:LEU:H	1.81	0.44
1:F:739:ARG:HE	1:F:1467:VAL:HG11	1.82	0.44
1:F:1114:ARG:NH1	1:F:1127:GLU:OE1	2.50	0.44
1:F:1267:HIS:HB3	1:F:1295:ASN:N	2.31	0.44
1:F:3030:ASN:HA	1:F:3033:HIS:HD2	1.81	0.44
1:F:3065:GLU:HG2	1:F:3069:LYS:HE3	1.99	0.44
1:F:3183:TYR:OH	1:F:3197:PRO:O	2.33	0.44
1:F:3226:ARG:HH12	1:F:3286:ASN:HA	1.82	0.44
1:F:4662:ARG:HE	1:F:4662:ARG:HB3	1.68	0.44
2:G:66:ARG:NE	2:G:66:ARG:HA	2.33	0.44
1:A:12:GLN:H	1:A:12:GLN:HG3	1.61	0.44
1:A:291:TRP:CD1	1:A:353:GLU:HB3	2.53	0.44
1:A:739:ARG:HE	1:A:1467:VAL:HG11	1.82	0.44
1:A:908:ARG:NH1	1:A:910:ASP:OD1	2.51	0.44
1:A:999:LEU:HD21	1:A:1050:LEU:HD12	2.00	0.44
2:B:34:MET:HE1	2:B:36:TRP:HE1	1.82	0.44
2:B:34:MET:HE1	2:B:36:TRP:NE1	2.32	0.44
1:C:732:LEU:HG	1:C:741:VAL:HB	2.00	0.44
1:C:2561:THR:O	1:C:2565:ARG:HG3	2.18	0.44
1:C:3010:LEU:O	1:C:3014:VAL:HG23	2.17	0.44
1:C:3226:ARG:HH12	1:C:3286:ASN:HA	1.82	0.44
1:C:4017:ASP:OD1	1:C:4124:VAL:HG13	2.17	0.44
1:E:322:ALA:HB1	1:E:327:THR:HG21	1.98	0.44
1:E:428:ARG:HH21	1:E:446:ASP:HB2	1.83	0.44
1:E:1516:SER:O	1:E:1533:GLN:NE2	2.38	0.44
1:E:1727:ILE:HG22	1:E:1758:LEU:HD23	2.00	0.44
1:E:1905:MET:O	1:E:1909:LEU:HG	2.17	0.44
1:E:2264:VAL:HG21	1:E:2300:PHE:HE2	1.82	0.44
1:E:2435:ILE:HD12	1:E:2435:ILE:HA	1.86	0.44
1:E:2981:PHE:HB3	1:E:3000:LYS:CE	2.47	0.44
1:E:4042:ILE:HD11	1:E:4079:TYR:HB3	2.00	0.44
1:F:356:TYR:CD1	1:F:407:ARG:HG2	2.52	0.44
1:F:2094:ILE:O	1:F:2098:VAL:HG22	2.18	0.44
1:F:2262:GLU:O	1:F:2266:ARG:HG3	2.18	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2977:HIS:O	1:F:3440:LYS:HD3	2.16	0.44
1:F:2981:PHE:HB3	1:F:3000:LYS:CE	2.47	0.44
2:I:34:MET:HE1	2:I:36:TRP:HE1	1.82	0.44
1:A:169:ARG:HD2	1:A:176:ARG:HH12	1.82	0.44
1:A:1117:TRP:HB2	1:A:1173:MET:HE1	2.00	0.44
1:A:2723:TYR:CE2	1:A:2774:ILE:HG13	2.53	0.44
1:A:2981:PHE:HB3	1:A:3000:LYS:CE	2.47	0.44
1:A:3383:TRP:CH2	1:A:3394:LEU:HD23	2.52	0.44
1:A:3831:ASP:OD1	1:A:3831:ASP:N	2.49	0.44
1:A:4921:LEU:O	1:A:4925:ILE:HG13	2.18	0.44
2:B:66:ARG:NE	2:B:66:ARG:HA	2.33	0.44
1:C:12:GLN:H	1:C:12:GLN:HG3	1.61	0.44
1:C:400:ASP:OD1	1:C:400:ASP:N	2.51	0.44
1:C:797:GLY:HA2	1:C:1623:LEU:HA	2.00	0.44
1:C:898:ILE:HG21	1:C:973:THR:HA	1.99	0.44
1:C:2591:LEU:HD11	1:C:2608:LEU:HD23	2.00	0.44
1:C:2753:GLN:HG2	1:C:2755:LEU:H	1.83	0.44
1:C:3133:LEU:HB2	1:C:3161:PHE:CE2	2.53	0.44
1:E:1117:TRP:HB2	1:E:1173:MET:HE1	2.00	0.44
1:E:2405:MET:SD	1:E:2408:ILE:HG12	2.58	0.44
1:E:4927:LYS:HE2	1:E:4927:LYS:HB3	1.84	0.44
1:F:661:LEU:HD13	1:F:673:TRP:NE1	2.33	0.44
1:F:797:GLY:HA2	1:F:1623:LEU:HA	2.00	0.44
1:F:1029:ASN:O	1:F:1032:LEU:HB2	2.18	0.44
1:F:2276:CYS:SG	1:F:2279:LEU:HG	2.57	0.44
1:F:2459:PHE:HE1	1:F:2464:LYS:HG3	1.82	0.44
1:F:2672:ALA:O	1:F:2977:HIS:NE2	2.36	0.44
1:F:2851:TRP:HH2	1:F:2869:LEU:HD13	1.82	0.44
1:F:2934:GLU:HB3	1:F:2938:TYR:CZ	2.52	0.44
1:F:3395:PHE:HD1	1:F:3472:LEU:HB3	1.82	0.44
1:F:3967:LEU:O	1:F:3971:MET:HG3	2.18	0.44
1:F:3984:MET:HE2	1:F:3984:MET:HB2	1.84	0.44
1:F:4183:GLU:HG2	1:F:4186:GLU:HB3	1.98	0.44
1:A:2276:CYS:SG	1:A:2279:LEU:HG	2.58	0.44
1:A:3262:MET:SD	1:A:3262:MET:N	2.91	0.44
1:A:3361:LEU:O	1:A:3365:LEU:HG	2.18	0.44
1:A:3399:ALA:O	1:A:3403:ILE:HG12	2.18	0.44
1:A:3858:ARG:HG2	1:A:3859:THR:HG23	1.99	0.44
1:A:4596:LEU:HG	1:A:4600:LYS:HE3	2.00	0.44
1:A:4598:ILE:HD13	1:A:4708:LYS:HE3	2.00	0.44
1:C:426:PHE:HZ	1:C:456:LEU:HD21	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1039:ASP:O	1:C:1043:LYS:HG3	2.18	0.44
1:C:2262:GLU:O	1:C:2266:ARG:HG3	2.18	0.44
1:C:2436:SER:HB3	1:C:2489:VAL:HG12	2.00	0.44
1:E:1174:MET:CB	1:E:1190:LEU:HA	2.47	0.44
1:E:2500:SER:O	1:E:2506:LEU:HD23	2.18	0.44
1:F:916:PRO:HG2	2:G:104:TYR:CE2	2.53	0.44
1:F:1102:TYR:HA	1:F:1164:CYS:O	2.18	0.44
1:F:3383:TRP:CH2	1:F:3394:LEU:HD23	2.52	0.44
1:F:3660:VAL:HG13	1:F:3664:HIS:ND1	2.33	0.44
1:F:4608:LYS:O	1:F:4613:GLY:N	2.50	0.44
1:A:232:ASP:OD1	1:A:233:VAL:N	2.51	0.44
1:A:917:CYS:HA	1:A:924:LEU:HD11	1.99	0.44
1:A:2405:MET:SD	1:A:2408:ILE:HG12	2.58	0.44
1:A:2735:LYS:HB3	1:A:2740:TRP:HB2	1.99	0.44
1:A:3463:SER:HB3	1:A:3466:VAL:HG12	1.99	0.44
1:A:3480:CYS:HB2	1:A:3485:GLN:NE2	2.33	0.44
1:A:4008:ASN:O	1:A:4012:ILE:HG13	2.18	0.44
1:A:4608:LYS:O	1:A:4613:GLY:N	2.50	0.44
1:A:4928:ASP:OD1	1:A:4929:GLU:N	2.50	0.44
1:C:372:LEU:H	1:C:372:LEU:HD23	1.81	0.44
1:C:728:ASP:OD1	1:C:731:HIS:N	2.41	0.44
1:C:917:CYS:HA	1:C:924:LEU:HD11	1.99	0.44
1:C:1102:TYR:HA	1:C:1164:CYS:O	2.18	0.44
1:C:1272:ARG:HH12	1:C:1585:PRO:HA	1.81	0.44
1:C:1998:PHE:HA	1:C:2001:ASP:OD2	2.18	0.44
1:C:3399:ALA:O	1:C:3403:ILE:HG12	2.18	0.44
1:C:3967:LEU:O	1:C:3971:MET:HG3	2.18	0.44
1:C:4921:LEU:O	1:C:4925:ILE:HG13	2.18	0.44
2:D:66:ARG:NE	2:D:66:ARG:HA	2.33	0.44
1:E:661:LEU:HD13	1:E:673:TRP:NE1	2.33	0.44
1:E:732:LEU:HG	1:E:741:VAL:HB	2.00	0.44
1:E:1040:ASP:HA	1:E:1043:LYS:HE2	2.00	0.44
1:E:2437:ILE:O	1:E:2464:LYS:HE3	2.18	0.44
1:E:2517:ARG:O	1:E:2521:THR:HG23	2.18	0.44
1:E:2540:HIS:HB3	1:E:2543:LEU:HD23	1.99	0.44
1:E:3097:THR:HG21	1:E:3146:TYR:CE2	2.52	0.44
1:E:3123:GLU:OE2	1:E:3186:ARG:NH2	2.51	0.44
1:E:3262:MET:N	1:E:3262:MET:SD	2.91	0.44
1:E:4922:MET:HE2	1:E:4922:MET:HB2	1.82	0.44
1:F:393:MET:HE2	1:F:393:MET:HA	1.99	0.44
1:F:1727:ILE:HG22	1:F:1758:LEU:HD23	2.00	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2983:SER:HA	1:F:3439:SER:HB3	2.00	0.44
1:F:3197:PRO:HD2	1:F:3203:VAL:HG22	2.00	0.44
1:F:3399:ALA:O	1:F:3403:ILE:HG12	2.18	0.44
1:F:3549:ARG:O	1:F:3553:ILE:HG12	2.17	0.44
1:F:4928:ASP:OD1	1:F:4929:GLU:N	2.50	0.44
2:I:34:MET:HE1	2:I:36:TRP:NE1	2.32	0.44
1:A:1905:MET:O	1:A:1909:LEU:HG	2.17	0.44
1:A:3074:LEU:HD22	1:A:3147:VAL:HG23	2.00	0.44
1:A:3486:GLU:O	1:A:3490:LEU:HG	2.17	0.44
1:A:4069:ALA:HA	1:A:4082:PHE:CE1	2.53	0.44
1:A:4745:ILE:HD11	1:C:4775:VAL:HG21	1.99	0.44
1:C:739:ARG:HE	1:C:1467:VAL:HG11	1.82	0.44
1:C:1040:ASP:HA	1:C:1043:LYS:HE2	2.00	0.44
1:C:2517:ARG:O	1:C:2521:THR:HG23	2.18	0.44
1:C:2723:TYR:CE2	1:C:2774:ILE:HG13	2.53	0.44
1:C:3480:CYS:HB2	1:C:3485:GLN:NE2	2.33	0.44
1:C:4008:ASN:O	1:C:4012:ILE:HG13	2.18	0.44
1:C:4598:ILE:HD13	1:C:4708:LYS:HE3	2.00	0.44
1:C:4608:LYS:O	1:C:4613:GLY:N	2.50	0.44
1:E:356:TYR:CD1	1:E:407:ARG:HG2	2.52	0.44
1:E:739:ARG:HE	1:E:1467:VAL:HG11	1.82	0.44
1:E:917:CYS:HA	1:E:924:LEU:HD11	1.99	0.44
1:E:1039:ASP:O	1:E:1043:LYS:HG3	2.18	0.44
1:E:1419:TYR:CE2	1:E:1563:ASN:HB3	2.52	0.44
1:E:2276:CYS:SG	1:E:2279:LEU:HG	2.57	0.44
1:E:2859:LEU:HD11	1:E:2867:HIS:CD2	2.53	0.44
1:E:3226:ARG:HH12	1:E:3286:ASN:HA	1.82	0.44
1:E:3240:MET:HE2	1:E:3240:MET:HA	1.99	0.44
1:E:3399:ALA:O	1:E:3403:ILE:HG12	2.18	0.44
1:E:4088:GLU:N	1:E:4088:GLU:OE1	2.51	0.44
1:F:426:PHE:HZ	1:F:456:LEU:HD21	1.82	0.44
1:F:732:LEU:HG	1:F:741:VAL:HB	2.00	0.44
1:F:1091:GLU:HB3	1:F:1094:TYR:HD2	1.82	0.44
1:F:1750:PRO:HG3	1:F:2057:LEU:HD22	2.00	0.44
1:F:2561:THR:O	1:F:2565:ARG:HG3	2.18	0.44
1:F:3123:GLU:OE2	1:F:3186:ARG:NH2	2.51	0.44
1:F:4008:ASN:O	1:F:4012:ILE:HG13	2.18	0.44
1:F:4009:VAL:O	1:F:4013:LEU:HG	2.18	0.44
1:A:267:VAL:HA	1:A:270:HIS:ND1	2.33	0.43
1:A:884:ARG:HG3	1:A:885:LEU:N	2.33	0.43
1:A:916:PRO:HG2	2:B:104:TYR:CE2	2.53	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1303:ARG:O	1:A:1590:GLN:N	2.38	0.43
1:A:2851:TRP:HH2	1:A:2869:LEU:HD13	1.82	0.43
1:A:3133:LEU:HB2	1:A:3161:PHE:CE2	2.53	0.43
1:A:3395:PHE:HD1	1:A:3472:LEU:HB3	1.82	0.43
1:A:4088:GLU:OE1	1:A:4088:GLU:N	2.51	0.43
2:B:40:ALA:HB3	2:B:43:LYS:HB2	2.00	0.43
1:C:291:TRP:CD1	1:C:353:GLU:HB3	2.53	0.43
1:C:436:LEU:HD21	1:C:518:ALA:HB2	1.99	0.43
1:C:1837:ASN:HA	1:C:1840:LEU:HD12	2.00	0.43
1:C:3361:LEU:O	1:C:3365:LEU:HG	2.18	0.43
1:C:3425:ASN:OD1	1:C:3427:MET:HE3	2.18	0.43
1:C:4671:MET:HE3	1:C:4671:MET:HB3	1.74	0.43
1:C:4838:TYR:O	1:C:4842:ARG:HB2	2.18	0.43
1:E:3553:ILE:O	1:E:3557:LEU:HG	2.18	0.43
1:E:3858:ARG:HG2	1:E:3859:THR:HG23	2.00	0.43
1:E:4030:THR:HA	1:E:4033:GLU:HG3	2.00	0.43
1:E:4596:LEU:HG	1:E:4600:LYS:HE3	2.00	0.43
1:F:468:GLU:OE1	1:F:468:GLU:N	2.41	0.43
1:F:884:ARG:HG3	1:F:885:LEU:N	2.33	0.43
1:F:2500:SER:O	1:F:2506:LEU:HD23	2.18	0.43
1:F:3463:SER:HB3	1:F:3466:VAL:HG12	1.99	0.43
1:F:3488:ILE:HG12	1:F:3550:VAL:HA	2.00	0.43
1:F:4069:ALA:HA	1:F:4082:PHE:CE1	2.53	0.43
1:A:393:MET:HE2	1:A:393:MET:HA	1.99	0.43
1:A:400:ASP:OD1	1:A:400:ASP:N	2.51	0.43
1:A:428:ARG:HH21	1:A:446:ASP:HB2	1.83	0.43
1:A:1114:ARG:NH1	1:A:1127:GLU:OE1	2.51	0.43
1:A:2500:SER:O	1:A:2506:LEU:HD23	2.18	0.43
1:A:2936:HIS:CE1	1:A:3013:LEU:HD13	2.53	0.43
1:A:3403:ILE:HD11	1:A:3556:VAL:HA	2.00	0.43
1:A:3553:ILE:O	1:A:3557:LEU:HG	2.18	0.43
1:C:393:MET:HE2	1:C:393:MET:HA	1.99	0.43
1:C:593:HIS:O	1:C:597:ILE:HG13	2.17	0.43
1:C:1113:MET:HB2	1:C:1156:TRP:CZ2	2.54	0.43
1:C:1419:TYR:CE2	1:C:1563:ASN:HB3	2.52	0.43
1:C:2086:LEU:O	1:C:2089:ARG:HG2	2.18	0.43
1:C:2498:ALA:HB2	1:C:2515:LEU:HD21	2.00	0.43
1:C:4009:VAL:O	1:C:4013:LEU:HG	2.19	0.43
1:C:4579:THR:HG1	1:C:4732:HIS:CD2	2.34	0.43
1:E:169:ARG:HD2	1:E:176:ARG:HH12	1.82	0.43
1:E:610:VAL:O	1:E:614:LEU:HG	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1809:ASP:N	1:E:1809:ASP:OD1	2.51	0.43
1:E:2414:GLU:O	1:E:2418:ILE:HG12	2.18	0.43
1:E:2936:HIS:CE1	1:E:3013:LEU:HD13	2.53	0.43
1:F:133:LEU:O	1:F:145:PHE:HB3	2.19	0.43
1:F:291:TRP:CD1	1:F:353:GLU:HB3	2.53	0.43
1:F:295:PHE:HE1	1:F:297:LEU:HG	1.82	0.43
1:F:912:LYS:HB2	1:F:914:GLN:HG2	1.99	0.43
1:F:1001:GLU:HG2	1:F:1035:TYR:CD1	2.53	0.43
1:F:1040:ASP:HA	1:F:1043:LYS:HE2	2.00	0.43
1:F:2591:LEU:HD11	1:F:2608:LEU:HD23	2.00	0.43
1:F:3262:MET:SD	1:F:3262:MET:N	2.91	0.43
1:F:3361:LEU:O	1:F:3365:LEU:HG	2.18	0.43
1:A:295:PHE:HE1	1:A:297:LEU:HG	1.82	0.43
1:A:2094:ILE:O	1:A:2098:VAL:HG22	2.18	0.43
1:A:2561:THR:O	1:A:2565:ARG:HG3	2.18	0.43
1:A:2859:LEU:HD11	1:A:2867:HIS:CD2	2.53	0.43
1:A:3197:PRO:HD2	1:A:3203:VAL:HG22	2.00	0.43
1:A:3488:ILE:HG12	1:A:3550:VAL:HA	2.00	0.43
1:A:4595:PRO:HA	1:A:4598:ILE:HG12	2.01	0.43
1:A:4922:MET:HE2	1:A:4922:MET:HB2	1.82	0.43
1:C:1905:MET:O	1:C:1909:LEU:HG	2.17	0.43
1:C:2540:HIS:HB3	1:C:2543:LEU:HD23	1.99	0.43
1:C:2980:TYR:O	1:C:3000:LYS:HE2	2.18	0.43
1:C:3395:PHE:HD1	1:C:3472:LEU:HB3	1.82	0.43
1:C:4500:MET:HE3	1:C:4500:MET:HB2	1.84	0.43
1:E:232:ASP:OD1	1:E:233:VAL:N	2.51	0.43
1:E:267:VAL:HA	1:E:270:HIS:ND1	2.33	0.43
1:E:291:TRP:CD1	1:E:353:GLU:HB3	2.53	0.43
1:E:365:HIS:HD2	1:E:368:THR:HG22	1.83	0.43
1:E:400:ASP:OD1	1:E:400:ASP:N	2.51	0.43
1:E:879:GLU:O	1:E:883:GLU:HG2	2.19	0.43
1:E:2094:ILE:O	1:E:2098:VAL:HG22	2.18	0.43
1:E:2561:THR:O	1:E:2565:ARG:HG3	2.18	0.43
1:E:3183:TYR:OH	1:E:3197:PRO:O	2.33	0.43
1:E:3967:LEU:O	1:E:3971:MET:HG3	2.18	0.43
1:E:4069:ALA:HA	1:E:4082:PHE:CE1	2.53	0.43
1:E:4595:PRO:HA	1:E:4598:ILE:HG12	2.01	0.43
1:F:610:VAL:O	1:F:614:LEU:HG	2.18	0.43
1:F:881:ILE:HA	1:F:884:ARG:HG2	2.00	0.43
1:F:1113:MET:HB2	1:F:1156:TRP:CZ2	2.54	0.43
1:F:2086:LEU:O	1:F:2089:ARG:HG2	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2723:TYR:CE2	1:F:2774:ILE:HG13	2.53	0.43
1:F:4042:ILE:HD11	1:F:4079:TYR:HB3	2.00	0.43
1:A:610:VAL:O	1:A:614:LEU:HG	2.18	0.43
1:A:732:LEU:HG	1:A:741:VAL:HB	2.00	0.43
1:A:797:GLY:HA2	1:A:1623:LEU:HA	2.00	0.43
1:A:2262:GLU:O	1:A:2266:ARG:HG3	2.18	0.43
1:A:2924:PHE:O	1:A:2928:LEU:HG	2.19	0.43
1:A:3025:ALA:O	1:A:3029:VAL:HG23	2.17	0.43
1:C:1437:GLU:OE2	1:C:1439:ALA:HB3	2.19	0.43
1:C:2459:PHE:HE1	1:C:2464:LYS:HG3	1.82	0.43
1:C:2500:SER:O	1:C:2506:LEU:HD23	2.18	0.43
1:C:3014:VAL:HG12	1:C:3095:TYR:HE1	1.83	0.43
1:C:4941:LYS:HE2	1:C:4941:LYS:HB3	1.82	0.43
1:E:1001:GLU:HG2	1:E:1035:TYR:CD1	2.53	0.43
1:E:1471:ASP:HB2	1:E:1477:HIS:CE1	2.52	0.43
1:E:1998:PHE:HA	1:E:2001:ASP:OD2	2.18	0.43
1:E:3065:GLU:HG2	1:E:3069:LYS:HE3	1.99	0.43
1:E:3395:PHE:HD1	1:E:3472:LEU:HB3	1.82	0.43
1:E:4009:VAL:O	1:E:4013:LEU:HG	2.18	0.43
1:F:232:ASP:OD1	1:F:233:VAL:N	2.51	0.43
1:F:879:GLU:O	1:F:883:GLU:HG2	2.19	0.43
1:F:1809:ASP:OD1	1:F:1809:ASP:N	2.51	0.43
1:F:1837:ASN:HA	1:F:1840:LEU:HD12	1.99	0.43
1:F:1998:PHE:HA	1:F:2001:ASP:OD2	2.18	0.43
1:F:2325:ARG:HA	1:F:2325:ARG:HD3	1.73	0.43
1:F:2498:ALA:HB2	1:F:2515:LEU:HD21	2.00	0.43
1:F:2517:ARG:O	1:F:2521:THR:HG23	2.18	0.43
1:F:3480:CYS:HB2	1:F:3485:GLN:NE2	2.33	0.43
1:F:4030:THR:HA	1:F:4033:GLU:HG3	2.00	0.43
1:F:4088:GLU:OE1	1:F:4088:GLU:N	2.51	0.43
1:A:2161:MET:HA	1:A:2161:MET:HE3	2.00	0.43
1:A:3123:GLU:OE2	1:A:3186:ARG:NH2	2.51	0.43
1:C:50:GLU:OE2	1:C:61:ASP:N	2.52	0.43
1:C:916:PRO:HG2	2:D:104:TYR:CE2	2.54	0.43
1:C:999:LEU:HD21	1:C:1050:LEU:HD12	2.00	0.43
1:C:1091:GLU:HB3	1:C:1094:TYR:HD2	1.82	0.43
1:C:2859:LEU:HD11	1:C:2867:HIS:CD2	2.53	0.43
1:C:3074:LEU:HD22	1:C:3147:VAL:HG23	2.00	0.43
1:C:3660:VAL:HG13	1:C:3664:HIS:ND1	2.33	0.43
1:C:3731:HIS:NE2	1:C:3775:LYS:HD2	2.34	0.43
1:C:4042:ILE:HD11	1:C:4079:TYR:HB3	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:797:GLY:HA2	1:E:1623:LEU:HA	2.00	0.43
1:E:881:ILE:HA	1:E:884:ARG:HG2	2.00	0.43
1:E:928:GLU:OE2	2:I:102:ASN:ND2	2.49	0.43
1:E:1102:TYR:HA	1:E:1164:CYS:O	2.18	0.43
1:E:1750:PRO:HG3	1:E:2057:LEU:HD22	2.00	0.43
1:E:2262:GLU:O	1:E:2266:ARG:HG3	2.18	0.43
1:E:3463:SER:HB3	1:E:3466:VAL:HG12	1.99	0.43
1:E:3488:ILE:HG12	1:E:3550:VAL:HA	2.00	0.43
1:E:4598:ILE:HD13	1:E:4708:LYS:HE3	2.00	0.43
1:F:890:HIS:O	1:F:894:VAL:HG13	2.19	0.43
1:F:2980:TYR:O	1:F:3000:LYS:HE2	2.18	0.43
1:F:3365:LEU:O	1:F:3369:TYR:HB2	2.19	0.43
1:A:426:PHE:HZ	1:A:456:LEU:HD21	1.82	0.43
1:A:591:GLU:HA	1:A:631:LEU:HD11	2.01	0.43
1:A:728:ASP:OD1	1:A:731:HIS:N	2.41	0.43
1:A:1040:ASP:HA	1:A:1043:LYS:HE2	2.00	0.43
1:A:1102:TYR:HA	1:A:1164:CYS:O	2.18	0.43
1:A:1113:MET:HB2	1:A:1156:TRP:CZ2	2.54	0.43
1:A:2437:ILE:O	1:A:2464:LYS:HE3	2.18	0.43
1:A:2464:LYS:HZ3	1:A:2494:ASP:CG	2.26	0.43
1:A:2765:LYS:O	1:A:2768:GLU:HG3	2.19	0.43
1:A:2980:TYR:O	1:A:3000:LYS:HE2	2.18	0.43
1:A:3998:MET:HE2	1:A:3998:MET:HB2	1.96	0.43
1:A:4662:ARG:HH21	1:A:4673:LYS:HD2	1.84	0.43
1:C:267:VAL:HA	1:C:270:HIS:ND1	2.33	0.43
1:C:591:GLU:HA	1:C:631:LEU:HD11	2.01	0.43
1:C:661:LEU:HD13	1:C:673:TRP:NE1	2.33	0.43
1:C:1001:GLU:HG2	1:C:1035:TYR:CD1	2.53	0.43
1:C:2405:MET:SD	1:C:2408:ILE:HG12	2.58	0.43
1:C:3486:GLU:O	1:C:3490:LEU:HG	2.17	0.43
1:C:3488:ILE:HG12	1:C:3550:VAL:HA	2.00	0.43
1:C:4030:THR:HA	1:C:4033:GLU:HG3	2.00	0.43
1:C:4508:ALA:HB2	1:C:4578:HIS:HE1	1.83	0.43
1:C:4662:ARG:HH21	1:C:4673:LYS:HD2	1.84	0.43
1:E:884:ARG:HG3	1:E:885:LEU:N	2.33	0.43
1:E:894:VAL:O	1:E:898:ILE:HG12	2.18	0.43
1:E:1091:GLU:HB3	1:E:1094:TYR:HD2	1.82	0.43
1:E:2161:MET:HA	1:E:2161:MET:HE3	2.00	0.43
1:E:2723:TYR:CE2	1:E:2774:ILE:HG13	2.53	0.43
1:E:2983:SER:HA	1:E:3439:SER:HB3	2.00	0.43
1:E:3361:LEU:O	1:E:3365:LEU:HG	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3646:PRO:HB2	1:E:3658:LYS:HZ2	1.83	0.43
1:E:4559:VAL:HG22	1:E:4561:GLU:H	1.84	0.43
1:F:267:VAL:HA	1:F:270:HIS:ND1	2.33	0.43
1:F:365:HIS:HD2	1:F:368:THR:HG22	1.83	0.43
1:F:2405:MET:SD	1:F:2408:ILE:HG12	2.58	0.43
1:F:2414:GLU:O	1:F:2418:ILE:HG12	2.18	0.43
1:F:2435:ILE:HD12	1:F:2435:ILE:HA	1.87	0.43
1:F:3014:VAL:HG12	1:F:3095:TYR:HE1	1.83	0.43
1:F:3486:GLU:O	1:F:3490:LEU:HG	2.18	0.43
1:F:4595:PRO:HA	1:F:4598:ILE:HG12	2.00	0.43
1:F:4838:TYR:O	1:F:4842:ARG:HB2	2.18	0.43
1:A:2591:LEU:HD11	1:A:2608:LEU:HD23	2.00	0.43
1:A:2753:GLN:HG2	1:A:2755:LEU:H	1.83	0.43
1:A:3425:ASN:OD1	1:A:3427:MET:HE3	2.18	0.43
1:A:4671:MET:HG2	1:A:4671:MET:O	2.19	0.43
1:C:894:VAL:O	1:C:898:ILE:HG12	2.18	0.43
1:C:2936:HIS:CE1	1:C:3013:LEU:HD13	2.53	0.43
1:C:3071:MET:HE3	1:C:3135:SER:HA	2.00	0.43
1:C:3262:MET:N	1:C:3262:MET:SD	2.91	0.43
1:C:3303:GLN:O	1:C:3306:ILE:HG22	2.19	0.43
1:C:4035:ASP:OD1	1:C:4042:ILE:HG23	2.19	0.43
1:C:4069:ALA:HA	1:C:4082:PHE:CE1	2.53	0.43
1:C:4559:VAL:HG22	1:C:4561:GLU:H	1.83	0.43
1:E:999:LEU:HD21	1:E:1050:LEU:HD12	2.00	0.43
1:E:2143:ARG:HE	1:E:2143:ARG:HB3	1.67	0.43
1:E:2851:TRP:HH2	1:E:2869:LEU:HD13	1.82	0.43
1:E:3425:ASN:OD1	1:E:3427:MET:HE3	2.18	0.43
1:F:400:ASP:OD1	1:F:400:ASP:N	2.51	0.43
1:F:428:ARG:HH21	1:F:446:ASP:HB2	1.83	0.43
1:F:999:LEU:HD21	1:F:1050:LEU:HD12	2.00	0.43
1:F:1039:ASP:O	1:F:1043:LYS:HG3	2.18	0.43
1:F:1039:ASP:OD1	1:F:1039:ASP:N	2.52	0.43
1:F:2437:ILE:O	1:F:2464:LYS:HE3	2.18	0.43
1:F:2765:LYS:O	1:F:2768:GLU:HG3	2.19	0.43
1:F:2859:LEU:HD11	1:F:2867:HIS:CD2	2.53	0.43
1:F:4042:ILE:HB	1:F:4047:PHE:HB2	2.00	0.43
1:F:4508:ALA:HB2	1:F:4578:HIS:HE1	1.83	0.43
1:F:4671:MET:HG2	1:F:4671:MET:O	2.19	0.43
1:A:11:ILE:HD12	1:A:11:ILE:HA	1.85	0.43
1:A:390:LYS:HA	1:A:390:LYS:HD3	1.89	0.43
1:A:797:GLY:N	1:A:1622:CYS:O	2.52	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:941:LYS:NZ	1:A:944:LEU:HD11	2.34	0.43
1:A:1001:GLU:HG2	1:A:1035:TYR:CD1	2.53	0.43
1:A:1727:ILE:HG22	1:A:1758:LEU:HD23	2.00	0.43
1:A:1801:LYS:HB3	1:A:1801:LYS:HE3	1.71	0.43
1:A:2086:LEU:O	1:A:2089:ARG:HG2	2.18	0.43
1:A:2414:GLU:O	1:A:2418:ILE:HG12	2.19	0.43
1:A:3303:GLN:O	1:A:3306:ILE:HG22	2.19	0.43
1:A:3660:VAL:HG13	1:A:3664:HIS:ND1	2.33	0.43
1:A:4166:GLU:O	1:A:4169:ARG:HG2	2.19	0.43
1:A:4508:ALA:HB2	1:A:4578:HIS:HE1	1.83	0.43
1:C:232:ASP:OD1	1:C:233:VAL:N	2.51	0.43
1:C:2289:TRP:CZ2	1:C:2387:ILE:HD12	2.54	0.43
1:C:2414:GLU:O	1:C:2418:ILE:HG12	2.19	0.43
1:C:3553:ILE:O	1:C:3557:LEU:HG	2.18	0.43
1:E:758:CYS:SG	1:E:767:SER:HB3	2.59	0.43
1:E:1837:ASN:HA	1:E:1840:LEU:HD12	1.99	0.43
1:E:2210:GLN:NE2	1:E:2244:ALA:O	2.45	0.43
1:E:3731:HIS:NE2	1:E:3775:LYS:HD2	2.34	0.43
1:F:908:ARG:NH1	1:F:910:ASP:OD1	2.51	0.43
1:F:970:TYR:HB2	1:F:971:GLN:H	1.70	0.43
1:F:2936:HIS:CE1	1:F:3013:LEU:HD13	2.53	0.43
1:F:3425:ASN:OD1	1:F:3427:MET:HE3	2.18	0.43
1:F:4166:GLU:O	1:F:4169:ARG:HG2	2.19	0.43
1:A:890:HIS:O	1:A:894:VAL:HG13	2.18	0.43
1:A:1174:MET:CB	1:A:1190:LEU:HA	2.47	0.43
1:A:1998:PHE:HA	1:A:2001:ASP:OD2	2.18	0.43
1:A:4135:ILE:HG12	1:A:4149:PHE:HE1	1.84	0.43
2:B:90:THR:HG23	2:B:124:THR:HA	2.01	0.43
1:C:133:LEU:O	1:C:145:PHE:HB3	2.19	0.43
1:C:430:ILE:HD13	1:C:500:GLU:HG3	2.01	0.43
1:C:565:LEU:HD23	1:C:565:LEU:O	2.19	0.43
1:C:934:GLN:CD	2:D:99:ARG:HH22	2.27	0.43
1:C:1117:TRP:HB2	1:C:1173:MET:HE1	2.00	0.43
1:C:1727:ILE:HG22	1:C:1758:LEU:HD23	2.00	0.43
1:C:2514:ALA:HA	1:C:2517:ARG:HD2	2.01	0.43
1:C:2765:LYS:O	1:C:2768:GLU:HG3	2.19	0.43
1:C:2852:ALA:O	1:C:2855:LYS:HG3	2.19	0.43
1:C:4596:LEU:HG	1:C:4600:LYS:HE3	2.00	0.43
1:E:890:HIS:O	1:E:894:VAL:HG13	2.19	0.43
1:E:1113:MET:HB2	1:E:1156:TRP:CZ2	2.54	0.43
1:E:1114:ARG:NH1	1:E:1127:GLU:OE1	2.51	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:1258:PHE:HB2	1:E:1303:ARG:HH21	1.84	0.43
1:E:3365:LEU:O	1:E:3369:TYR:HB2	2.19	0.43
1:E:4008:ASN:O	1:E:4012:ILE:HG13	2.18	0.43
1:F:3731:HIS:NE2	1:F:3775:LYS:HD2	2.34	0.43
1:F:4559:VAL:HG22	1:F:4561:GLU:H	1.84	0.43
2:I:40:ALA:HB3	2:I:43:LYS:HB2	2.00	0.43
1:A:438:LYS:HG3	1:A:439:LYS:HG2	2.00	0.43
1:A:882:ARG:HH11	1:A:937:LEU:HA	1.84	0.43
1:A:2076:ASP:HB3	1:A:2079:LEU:HB3	2.01	0.43
1:A:2517:ARG:O	1:A:2521:THR:HG23	2.18	0.43
1:A:2929:ILE:HG12	1:A:3006:LEU:HD13	2.01	0.43
1:C:428:ARG:HH21	1:C:446:ASP:HB2	1.83	0.43
1:C:610:VAL:O	1:C:614:LEU:HG	2.18	0.43
1:C:1809:ASP:N	1:C:1809:ASP:OD1	2.51	0.43
1:C:1844:LEU:HA	1:C:1847:ILE:HG22	1.99	0.43
1:C:2924:PHE:O	1:C:2928:LEU:HG	2.19	0.43
1:C:2983:SER:HA	1:C:3439:SER:HB3	2.00	0.43
2:D:40:ALA:HB3	2:D:43:LYS:HB2	2.01	0.43
1:E:591:GLU:HA	1:E:631:LEU:HD11	2.01	0.43
1:E:732:LEU:HB3	1:E:779:PHE:CZ	2.54	0.43
1:E:878:LEU:HD23	1:E:878:LEU:H	1.84	0.43
1:E:1437:GLU:OE2	1:E:1439:ALA:HB3	2.19	0.43
1:E:2498:ALA:HB2	1:E:2515:LEU:HD21	2.00	0.43
1:E:2929:ILE:HG12	1:E:3006:LEU:HD13	2.01	0.43
1:E:4035:ASP:OD1	1:E:4042:ILE:HG23	2.18	0.43
1:E:4135:ILE:HG12	1:E:4149:PHE:HE1	1.84	0.43
1:E:4166:GLU:O	1:E:4169:ARG:HG2	2.19	0.43
1:E:4648:VAL:O	1:E:4652:VAL:HG12	2.19	0.43
1:F:430:ILE:HD13	1:F:500:GLU:HG3	2.01	0.43
1:F:2193:ALA:O	1:F:2197:ARG:HG3	2.19	0.43
1:F:2436:SER:HB3	1:F:2489:VAL:HG12	2.00	0.43
1:F:2525:PRO:O	1:F:2526:LEU:C	2.61	0.43
1:F:3007:PHE:HD1	1:F:3007:PHE:O	2.02	0.43
1:F:4035:ASP:OD1	1:F:4042:ILE:HG23	2.19	0.43
1:A:14:LEU:HD11	1:A:214:VAL:HG21	2.01	0.42
1:A:365:HIS:HD2	1:A:368:THR:HG22	1.83	0.42
1:A:410:HIS:O	1:A:414:ARG:HG2	2.19	0.42
1:A:565:LEU:O	1:A:565:LEU:HD23	2.19	0.42
1:A:1786:ASP:OD1	1:A:1786:ASP:N	2.50	0.42
1:A:2289:TRP:CZ2	1:A:2387:ILE:HD12	2.54	0.42
1:A:2436:SER:HB3	1:A:2489:VAL:HG12	2.00	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2514:ALA:HA	1:A:2517:ARG:HD2	2.01	0.42
1:A:2852:ALA:O	1:A:2855:LYS:HG3	2.19	0.42
1:A:3071:MET:HE3	1:A:3135:SER:HA	2.00	0.42
1:C:557:TRP:HE3	1:C:558:LEU:HD23	1.84	0.42
1:C:878:LEU:HD23	1:C:878:LEU:H	1.84	0.42
1:C:941:LYS:NZ	1:C:944:LEU:HD11	2.34	0.42
1:C:2497:ALA:O	1:C:2500:SER:OG	2.29	0.42
1:C:4671:MET:O	1:C:4671:MET:HG2	2.19	0.42
2:D:90:THR:HG23	2:D:124:THR:HA	2.01	0.42
1:E:133:LEU:O	1:E:145:PHE:HB3	2.19	0.42
1:E:430:ILE:HD13	1:E:500:GLU:HG3	2.01	0.42
1:E:797:GLY:N	1:E:1622:CYS:O	2.52	0.42
1:E:1600:MET:HE2	1:E:1600:MET:HB3	1.90	0.42
1:E:2591:LEU:HD11	1:E:2608:LEU:HD23	2.00	0.42
1:E:2852:ALA:O	1:E:2855:LYS:HG3	2.19	0.42
1:E:3197:PRO:HD2	1:E:3203:VAL:HG22	2.00	0.42
1:E:4662:ARG:HH21	1:E:4673:LYS:HD2	1.84	0.42
1:F:184:VAL:HG22	1:F:191:TYR:CD1	2.54	0.42
1:F:797:GLY:N	1:F:1622:CYS:O	2.52	0.42
1:F:1437:GLU:OE2	1:F:1439:ALA:HB3	2.19	0.42
1:F:1844:LEU:HA	1:F:1847:ILE:HG22	1.99	0.42
1:F:4598:ILE:HD13	1:F:4708:LYS:HE3	2.00	0.42
1:A:661:LEU:HD13	1:A:673:TRP:NE1	2.33	0.42
1:A:776:GLN:CD	1:A:1472:GLU:HA	2.44	0.42
1:A:1437:GLU:OE2	1:A:1439:ALA:HB3	2.19	0.42
1:A:1739:LEU:HD23	1:A:1739:LEU:H	1.84	0.42
1:A:1750:PRO:HG3	1:A:2057:LEU:HD22	2.00	0.42
1:A:1809:ASP:OD1	1:A:1809:ASP:N	2.51	0.42
1:A:3454:LYS:HA	1:A:3457:ARG:HG3	2.01	0.42
1:A:4009:VAL:O	1:A:4013:LEU:HG	2.18	0.42
1:A:4648:VAL:O	1:A:4652:VAL:HG12	2.19	0.42
1:C:881:ILE:HA	1:C:884:ARG:HG2	2.00	0.42
1:C:2213:MET:HE2	1:C:2213:MET:HA	2.01	0.42
1:C:3117:GLY:C	1:C:3166:PRO:HG3	2.44	0.42
1:C:3294:TRP:O	1:C:3298:LEU:HG	2.20	0.42
1:C:3538:GLU:H	1:C:3538:GLU:CD	2.27	0.42
1:C:4595:PRO:HA	1:C:4598:ILE:HG12	2.01	0.42
1:E:1039:ASP:OD1	1:E:1039:ASP:N	2.52	0.42
1:E:1947:MET:HE2	1:E:1947:MET:HA	2.00	0.42
1:E:2436:SER:HB3	1:E:2489:VAL:HG12	2.00	0.42
1:F:438:LYS:HG3	1:F:439:LYS:HG2	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:3071:MET:HE3	1:F:3135:SER:HA	2.00	0.42
1:F:3303:GLN:O	1:F:3306:ILE:HG22	2.19	0.42
1:F:3403:ILE:HD11	1:F:3556:VAL:HA	2.00	0.42
1:A:2498:ALA:HB2	1:A:2515:LEU:HD21	2.00	0.42
1:A:2934:GLU:HB3	1:A:2938:TYR:CZ	2.52	0.42
1:A:4042:ILE:HB	1:A:4047:PHE:HB2	2.00	0.42
2:B:18:LEU:HD23	2:B:18:LEU:HA	1.87	0.42
1:C:365:HIS:HD2	1:C:368:THR:HG22	1.83	0.42
1:C:758:CYS:SG	1:C:767:SER:HB3	2.59	0.42
1:C:884:ARG:HG3	1:C:885:LEU:N	2.33	0.42
1:C:890:HIS:O	1:C:894:VAL:HG13	2.18	0.42
1:C:1039:ASP:OD1	1:C:1039:ASP:N	2.52	0.42
1:C:2161:MET:HA	1:C:2161:MET:HE3	2.00	0.42
1:C:2233:MET:O	1:C:2296:ARG:NH2	2.48	0.42
1:C:2943:ASP:OD2	1:C:3017:ARG:NE	2.48	0.42
1:C:4010:GLU:HG2	1:C:4120:LEU:HD13	2.02	0.42
1:E:480:ARG:NH2	1:E:3677:GLU:OE2	2.52	0.42
1:E:2980:TYR:O	1:E:3000:LYS:HE2	2.18	0.42
1:E:3074:LEU:HD22	1:E:3147:VAL:HG23	2.00	0.42
1:E:3085:GLN:HE21	1:E:3089:VAL:HG12	1.84	0.42
1:E:3117:GLY:C	1:E:3166:PRO:HG3	2.44	0.42
1:E:3480:CYS:HB2	1:E:3485:GLN:NE2	2.33	0.42
1:E:4500:MET:HG2	1:E:4585:CYS:SG	2.60	0.42
1:E:4921:LEU:O	1:E:4925:ILE:HG13	2.18	0.42
1:F:769:ARG:HA	1:F:774:PRO:HA	2.01	0.42
1:F:894:VAL:O	1:F:898:ILE:HG12	2.18	0.42
1:F:1428:TYR:CE1	1:F:1510:CYS:HB2	2.54	0.42
1:F:1947:MET:HA	1:F:1947:MET:HE2	2.00	0.42
1:F:2852:ALA:O	1:F:2855:LYS:HG3	2.19	0.42
1:F:3553:ILE:O	1:F:3557:LEU:HG	2.18	0.42
1:F:3909:ILE:HG21	1:F:3969:GLU:HB3	2.01	0.42
1:F:4921:LEU:O	1:F:4925:ILE:HG13	2.18	0.42
2:G:107:TRP:HD1	2:G:110:PRO:HB2	1.84	0.42
1:A:732:LEU:HB3	1:A:779:PHE:CZ	2.54	0.42
1:A:894:VAL:O	1:A:898:ILE:HG12	2.18	0.42
1:A:1791:LYS:HG3	1:A:1795:MET:SD	2.59	0.42
1:A:1995:LEU:HD11	1:A:3623:TYR:CE1	2.54	0.42
1:A:3085:GLN:HE21	1:A:3089:VAL:HG12	1.84	0.42
1:A:4030:THR:HA	1:A:4033:GLU:HG3	2.00	0.42
1:C:480:ARG:NH2	1:C:3677:GLU:OE2	2.53	0.42
1:C:2325:ARG:HD3	1:C:2325:ARG:HA	1.73	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3197:PRO:HD2	1:C:3203:VAL:HG22	2.00	0.42
1:C:3217:ILE:HD11	1:C:3241:LEU:HD22	2.02	0.42
1:C:3403:ILE:HD11	1:C:3556:VAL:HA	2.00	0.42
1:C:3454:LYS:HA	1:C:3457:ARG:HG3	2.02	0.42
1:C:4042:ILE:HB	1:C:4047:PHE:HB2	2.00	0.42
1:E:14:LEU:HD11	1:E:214:VAL:HG21	2.01	0.42
1:E:430:ILE:HG23	1:E:504:ARG:HE	1.84	0.42
1:E:850:LEU:O	1:E:1207:LEU:HD12	2.20	0.42
1:E:1428:TYR:CE1	1:E:1510:CYS:HB2	2.54	0.42
1:E:2086:LEU:O	1:E:2089:ARG:HG2	2.18	0.42
1:E:2121:SER:O	1:E:2125:ILE:HG12	2.19	0.42
1:E:2175:VAL:HG12	1:E:2219:TYR:CE2	2.55	0.42
1:E:2514:ALA:HA	1:E:2517:ARG:HD2	2.01	0.42
1:E:3071:MET:HE3	1:E:3135:SER:HA	2.00	0.42
1:E:3303:GLN:O	1:E:3306:ILE:HG22	2.19	0.42
1:E:4508:ALA:HB2	1:E:4578:HIS:HE1	1.83	0.42
1:E:4671:MET:O	1:E:4671:MET:HG2	2.19	0.42
1:F:557:TRP:HE3	1:F:558:LEU:HD23	1.84	0.42
1:F:1117:TRP:HB2	1:F:1173:MET:HE1	2.00	0.42
1:F:2121:SER:O	1:F:2125:ILE:HG12	2.19	0.42
1:F:2289:TRP:CZ2	1:F:2387:ILE:HD12	2.54	0.42
1:F:2778:LEU:HA	1:F:2781:MET:HE3	2.02	0.42
1:F:2929:ILE:HG12	1:F:3006:LEU:HD13	2.01	0.42
1:F:3294:TRP:O	1:F:3298:LEU:HG	2.20	0.42
2:I:107:TRP:HD1	2:I:110:PRO:HB2	1.84	0.42
1:A:878:LEU:H	1:A:878:LEU:HD23	1.84	0.42
1:A:881:ILE:HA	1:A:884:ARG:HG2	2.00	0.42
1:A:2175:VAL:HG12	1:A:2219:TYR:CE2	2.55	0.42
1:A:2213:MET:HE2	1:A:2213:MET:HA	2.01	0.42
1:A:4010:GLU:HG2	1:A:4120:LEU:HD13	2.02	0.42
1:C:430:ILE:HG23	1:C:504:ARG:HE	1.85	0.42
1:C:769:ARG:HA	1:C:774:PRO:HA	2.01	0.42
1:C:776:GLN:CD	1:C:1472:GLU:HA	2.44	0.42
1:C:797:GLY:N	1:C:1622:CYS:O	2.52	0.42
1:C:850:LEU:O	1:C:1207:LEU:HD12	2.20	0.42
1:C:1750:PRO:HG3	1:C:2057:LEU:HD22	2.00	0.42
1:C:2193:ALA:O	1:C:2197:ARG:HG3	2.19	0.42
1:C:2441:MET:HE3	1:C:2442:PRO:C	2.45	0.42
1:C:3636:GLU:HG3	1:C:3693:ILE:HG23	2.01	0.42
1:E:184:VAL:HG22	1:E:191:TYR:CD1	2.54	0.42
1:E:776:GLN:CD	1:E:1472:GLU:HA	2.44	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:882:ARG:HH11	1:E:937:LEU:HA	1.84	0.42
1:E:1995:LEU:HD11	1:E:3623:TYR:CE1	2.54	0.42
1:E:2076:ASP:HB3	1:E:2079:LEU:HB3	2.01	0.42
1:E:3014:VAL:HG12	1:E:3095:TYR:HE1	1.83	0.42
1:E:3275:LEU:O	1:E:3279:ILE:HG13	2.19	0.42
1:E:3403:ILE:HD11	1:E:3556:VAL:HA	2.00	0.42
1:E:4500:MET:HE3	1:E:4500:MET:HB2	1.84	0.42
1:F:758:CYS:SG	1:F:767:SER:HB3	2.59	0.42
1:F:1595:VAL:HG23	1:F:1595:VAL:O	2.20	0.42
1:F:2175:VAL:HG12	1:F:2219:TYR:CE2	2.55	0.42
1:F:2514:ALA:HA	1:F:2517:ARG:HD2	2.01	0.42
1:F:3074:LEU:HD22	1:F:3147:VAL:HG23	2.00	0.42
1:F:3245:MET:C	1:F:3245:MET:SD	3.03	0.42
1:F:3454:LYS:HA	1:F:3457:ARG:HG3	2.02	0.42
1:F:3538:GLU:CD	1:F:3538:GLU:H	2.27	0.42
1:F:4596:LEU:HG	1:F:4600:LYS:HE3	2.00	0.42
1:A:430:ILE:HD13	1:A:500:GLU:HG3	2.01	0.42
1:A:480:ARG:NH2	1:A:3677:GLU:OE2	2.52	0.42
1:A:758:CYS:SG	1:A:767:SER:HB3	2.59	0.42
1:A:1113:MET:SD	1:A:1207:LEU:HD22	2.60	0.42
1:A:1419:TYR:CE2	1:A:1563:ASN:HB3	2.52	0.42
1:A:2121:SER:O	1:A:2125:ILE:HG12	2.19	0.42
1:A:3007:PHE:HD1	1:A:3007:PHE:O	2.02	0.42
1:A:3014:VAL:HG12	1:A:3095:TYR:HE1	1.83	0.42
1:A:3275:LEU:O	1:A:3279:ILE:HG13	2.19	0.42
1:A:3769:ASN:OD1	1:A:3769:ASN:N	2.53	0.42
1:A:4035:ASP:OD1	1:A:4042:ILE:HG23	2.18	0.42
1:A:4483:ILE:O	1:A:4486:GLN:HG3	2.19	0.42
1:A:4559:VAL:HG22	1:A:4561:GLU:H	1.84	0.42
1:C:176:ARG:HE	1:C:181:LEU:HB3	1.85	0.42
1:C:879:GLU:O	1:C:883:GLU:HG2	2.19	0.42
1:C:1739:LEU:HD23	1:C:1739:LEU:H	1.84	0.42
1:C:2480:GLN:HE21	1:C:2484:LEU:HD11	1.84	0.42
1:C:3245:MET:SD	1:C:3245:MET:C	3.03	0.42
1:E:3492:LYS:HD2	1:E:3561:GLU:CD	2.45	0.42
1:E:4616:ILE:HD13	1:E:4616:ILE:HA	1.88	0.42
1:F:50:GLU:OE2	1:F:61:ASP:N	2.52	0.42
1:F:565:LEU:HD23	1:F:565:LEU:O	2.19	0.42
1:F:591:GLU:HA	1:F:631:LEU:HD11	2.01	0.42
1:F:1739:LEU:HD23	1:F:1739:LEU:H	1.84	0.42
1:F:2076:ASP:HB3	1:F:2079:LEU:HB3	2.01	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2924:PHE:O	1:F:2928:LEU:HG	2.19	0.42
1:F:3217:ILE:HD11	1:F:3241:LEU:HD22	2.02	0.42
1:F:3322:MET:C	1:F:3322:MET:SD	3.03	0.42
1:F:3998:MET:HE2	1:F:3998:MET:HB2	1.96	0.42
1:F:4662:ARG:HH21	1:F:4673:LYS:HD2	1.84	0.42
1:A:28:ILE:HD12	1:A:201:TRP:HE1	1.85	0.42
1:A:1177:LEU:HB2	1:A:1182:LEU:HD21	2.02	0.42
1:A:2983:SER:HA	1:A:3439:SER:HB3	2.00	0.42
1:A:3117:GLY:C	1:A:3166:PRO:HG3	2.44	0.42
1:A:3217:ILE:HD11	1:A:3241:LEU:HD22	2.02	0.42
1:C:184:VAL:HG22	1:C:191:TYR:CD1	2.54	0.42
1:C:840:TYR:HE2	1:C:1086:ARG:HH12	1.68	0.42
1:C:1258:PHE:HB2	1:C:1303:ARG:HH21	1.84	0.42
1:C:2105:TYR:CZ	1:C:2160:LEU:HB2	2.55	0.42
1:C:2175:VAL:HG12	1:C:2219:TYR:CE2	2.55	0.42
1:C:3769:ASN:OD1	1:C:3769:ASN:N	2.53	0.42
1:C:4166:GLU:O	1:C:4169:ARG:HG2	2.19	0.42
1:E:941:LYS:NZ	1:E:944:LEU:HD11	2.34	0.42
1:E:1267:HIS:HB3	1:E:1295:ASN:N	2.31	0.42
1:E:1595:VAL:HG23	1:E:1595:VAL:O	2.20	0.42
1:E:1841:LYS:O	1:E:1845:GLN:HG2	2.20	0.42
1:E:2765:LYS:O	1:E:2768:GLU:HG3	2.19	0.42
1:E:3292:GLY:HA3	1:E:3295:MET:CE	2.34	0.42
1:E:3698:CYS:SG	1:E:3730:LEU:HD21	2.60	0.42
1:E:3935:ALA:O	1:E:3940:TRP:NE1	2.44	0.42
1:E:4042:ILE:HB	1:E:4047:PHE:HB2	2.00	0.42
1:E:4483:ILE:O	1:E:4486:GLN:HG3	2.19	0.42
1:F:430:ILE:HG23	1:F:504:ARG:HE	1.85	0.42
1:F:941:LYS:NZ	1:F:944:LEU:HD11	2.34	0.42
1:A:879:GLU:O	1:A:883:GLU:HG2	2.19	0.42
1:A:3245:MET:C	1:A:3245:MET:SD	3.03	0.42
1:A:3731:HIS:NE2	1:A:3775:LYS:HD2	2.34	0.42
2:B:107:TRP:HD1	2:B:110:PRO:HB2	1.84	0.42
1:C:1553:VAL:HG23	1:C:1554:PHE:N	2.35	0.42
1:C:1595:VAL:HG23	1:C:1595:VAL:O	2.20	0.42
1:C:2437:ILE:O	1:C:2464:LYS:HE3	2.18	0.42
1:C:2525:PRO:O	1:C:2526:LEU:C	2.61	0.42
1:C:3275:LEU:O	1:C:3279:ILE:HG13	2.19	0.42
1:C:3322:MET:C	1:C:3322:MET:SD	3.03	0.42
1:C:4519:LYS:HE2	1:C:4519:LYS:HB3	1.88	0.42
2:D:83:ASN:OD1	2:D:83:ASN:C	2.62	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:438:LYS:HG3	1:E:439:LYS:HG2	2.01	0.42
1:E:565:LEU:O	1:E:565:LEU:HD23	2.19	0.42
1:E:2193:ALA:O	1:E:2197:ARG:HG3	2.19	0.42
1:E:2233:MET:O	1:E:2296:ARG:NH2	2.48	0.42
1:E:2579:LEU:N	1:E:2615:ARG:HH12	2.18	0.42
1:E:2924:PHE:O	1:E:2928:LEU:HG	2.19	0.42
1:F:694:ARG:NH1	1:F:720:ASP:OD1	2.53	0.42
1:F:840:TYR:HE2	1:F:1086:ARG:HH12	1.68	0.42
1:F:1553:VAL:HG23	1:F:1554:PHE:N	2.35	0.42
1:F:1995:LEU:HD11	1:F:3623:TYR:CE1	2.54	0.42
1:F:4034:TYR:OH	1:F:4046:ASP:OD1	2.33	0.42
1:F:4135:ILE:HG12	1:F:4149:PHE:HE1	1.84	0.42
1:F:4500:MET:HG2	1:F:4585:CYS:SG	2.60	0.42
1:F:4941:LYS:HB3	1:F:4941:LYS:HE2	1.82	0.42
2:G:40:ALA:HB3	2:G:43:LYS:HB2	2.00	0.42
1:A:840:TYR:HE2	1:A:1086:ARG:HH12	1.68	0.42
1:A:1267:HIS:HB3	1:A:1295:ASN:N	2.31	0.42
1:A:3018:ILE:HD12	1:A:3095:TYR:HD1	1.85	0.42
1:A:3294:TRP:O	1:A:3298:LEU:HG	2.20	0.42
1:A:3698:CYS:SG	1:A:3730:LEU:HD21	2.60	0.42
2:B:83:ASN:OD1	2:B:83:ASN:C	2.62	0.42
1:C:694:ARG:NH1	1:C:720:ASP:OD1	2.53	0.42
1:C:1791:LYS:HG3	1:C:1795:MET:SD	2.59	0.42
1:C:2121:SER:O	1:C:2125:ILE:HG12	2.19	0.42
1:C:3085:GLN:HE21	1:C:3089:VAL:HG12	1.84	0.42
1:C:3365:LEU:O	1:C:3369:TYR:HB2	2.19	0.42
1:C:3909:ILE:HG21	1:C:3969:GLU:HB3	2.01	0.42
1:C:3993:THR:O	1:C:3997:GLN:HG3	2.20	0.42
1:C:3998:MET:HE2	1:C:3998:MET:HB2	1.96	0.42
1:E:176:ARG:HE	1:E:181:LEU:HB3	1.85	0.42
1:E:468:GLU:OE1	1:E:468:GLU:N	2.41	0.42
1:E:1739:LEU:HD23	1:E:1739:LEU:H	1.84	0.42
1:E:2099:ARG:O	1:E:2103:LYS:NZ	2.34	0.42
1:E:2480:GLN:HE21	1:E:2484:LEU:HD11	1.84	0.42
1:E:3007:PHE:O	1:E:3007:PHE:HD1	2.02	0.42
1:E:3482:PRO:HD2	1:E:3527:MET:SD	2.60	0.42
1:E:4010:GLU:HG2	1:E:4120:LEU:HD13	2.02	0.42
1:E:4508:ALA:O	1:E:4511:ILE:HG22	2.20	0.42
1:E:4633:VAL:O	1:E:4636:THR:HG22	2.20	0.42
1:F:238:HIS:HB2	1:F:242:ASP:N	2.35	0.42
1:F:626:ARG:HH21	1:F:2131:VAL:HG11	1.84	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:2213:MET:HE2	1:F:2213:MET:HA	2.01	0.42
1:F:3698:CYS:SG	1:F:3730:LEU:HD21	2.60	0.42
1:F:4648:VAL:O	1:F:4652:VAL:HG12	2.19	0.42
2:I:83:ASN:C	2:I:83:ASN:OD1	2.62	0.42
1:A:674:TYR:HE1	1:A:756:SER:HB2	1.85	0.42
1:A:850:LEU:O	1:A:1207:LEU:HD12	2.20	0.42
1:A:1841:LYS:O	1:A:1845:GLN:HG2	2.20	0.42
1:A:2193:ALA:O	1:A:2197:ARG:HG3	2.19	0.42
1:A:3482:PRO:HD2	1:A:3527:MET:SD	2.60	0.42
1:A:3492:LYS:HD2	1:A:3561:GLU:CD	2.45	0.42
1:A:3727:GLN:O	1:A:3731:HIS:CB	2.66	0.42
1:A:3909:ILE:HG21	1:A:3969:GLU:HB3	2.01	0.42
1:A:4500:MET:HG2	1:A:4585:CYS:SG	2.60	0.42
1:A:4883:MET:HA	1:A:4883:MET:HE3	2.02	0.42
1:C:1113:MET:SD	1:C:1207:LEU:HD22	2.60	0.42
1:C:1802:GLU:HA	1:C:1805:LEU:HG	2.02	0.42
1:C:3226:ARG:NH1	1:C:3286:ASN:HA	2.35	0.42
1:C:3322:MET:HB3	1:C:3368:PHE:CE2	2.55	0.42
1:C:3482:PRO:HD2	1:C:3527:MET:SD	2.60	0.42
2:D:109:THR:OG1	2:D:110:PRO:HD3	2.20	0.42
1:E:50:GLU:OE2	1:E:61:ASP:N	2.52	0.42
1:E:238:HIS:HB2	1:E:242:ASP:N	2.35	0.42
1:E:410:HIS:O	1:E:414:ARG:HG2	2.20	0.42
1:E:747:HIS:CE1	1:E:750:ARG:HG2	2.55	0.42
1:E:769:ARG:HA	1:E:774:PRO:HA	2.01	0.42
1:E:840:TYR:HE2	1:E:1086:ARG:HH12	1.68	0.42
1:E:1553:VAL:HG23	1:E:1554:PHE:N	2.35	0.42
1:E:1791:LYS:HG3	1:E:1795:MET:SD	2.59	0.42
1:E:2258:GLU:N	1:E:2259:PRO:HD2	2.35	0.42
1:E:2289:TRP:CZ2	1:E:2387:ILE:HD12	2.54	0.42
1:E:2778:LEU:HA	1:E:2781:MET:HE3	2.02	0.42
1:E:3018:ILE:HD12	1:E:3095:TYR:HD1	1.85	0.42
1:E:3322:MET:HB3	1:E:3368:PHE:CE2	2.55	0.42
1:F:410:HIS:O	1:F:414:ARG:HG2	2.20	0.42
1:F:480:ARG:NH2	1:F:3677:GLU:OE2	2.52	0.42
1:F:850:LEU:O	1:F:1207:LEU:HD12	2.20	0.42
1:F:1166:VAL:HG22	1:F:1173:MET:HB2	2.02	0.42
1:F:3283:ILE:O	1:F:3287:LEU:HG	2.20	0.42
1:F:3492:LYS:HD2	1:F:3561:GLU:CD	2.45	0.42
1:F:3636:GLU:HG3	1:F:3693:ILE:HG23	2.01	0.42
1:F:4168:LYS:HE2	1:F:4168:LYS:HB3	1.86	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:83:ASN:OD1	2:G:83:ASN:C	2.62	0.42
1:A:184:VAL:HG22	1:A:191:TYR:CD1	2.54	0.41
1:A:2132:ARG:HG2	1:A:2133:MET:H	1.85	0.41
1:A:2258:GLU:N	1:A:2259:PRO:HD2	2.35	0.41
1:A:3538:GLU:CD	1:A:3538:GLU:H	2.27	0.41
1:A:4508:ALA:O	1:A:4511:ILE:HG22	2.20	0.41
1:C:238:HIS:HB2	1:C:242:ASP:N	2.35	0.41
1:C:410:HIS:O	1:C:414:ARG:HG2	2.20	0.41
1:C:882:ARG:HH11	1:C:937:LEU:HA	1.84	0.41
1:C:2426:ILE:O	1:C:2475:TYR:OH	2.37	0.41
1:C:3183:TYR:OH	1:C:3197:PRO:O	2.33	0.41
1:C:4500:MET:HG2	1:C:4585:CYS:SG	2.60	0.41
2:D:107:TRP:HD1	2:D:110:PRO:HB2	1.84	0.41
1:E:64:ILE:HA	1:E:123:HIS:CE1	2.55	0.41
1:E:626:ARG:HH21	1:E:2131:VAL:HG11	1.84	0.41
1:E:1113:MET:SD	1:E:1207:LEU:HD22	2.60	0.41
1:E:1814:THR:HG22	1:E:1816:GLU:H	1.85	0.41
1:E:2581:PRO:HD2	1:E:2629:PHE:HD2	1.85	0.41
1:E:3226:ARG:NH1	1:E:3286:ASN:HA	2.35	0.41
1:E:3245:MET:SD	1:E:3245:MET:C	3.03	0.41
1:E:3322:MET:SD	1:E:3322:MET:C	3.03	0.41
1:E:3454:LYS:HA	1:E:3457:ARG:HG3	2.02	0.41
1:E:3636:GLU:HG3	1:E:3693:ILE:HG23	2.02	0.41
1:E:3993:THR:O	1:E:3997:GLN:HG3	2.20	0.41
1:E:3998:MET:HE2	1:E:3998:MET:HB2	1.96	0.41
1:F:390:LYS:HA	1:F:390:LYS:HD3	1.89	0.41
1:F:934:GLN:CD	2:G:99:ARG:HH22	2.27	0.41
1:F:1114:ARG:HG2	1:F:1138:ASP:HB2	2.01	0.41
1:F:1791:LYS:HG3	1:F:1795:MET:SD	2.59	0.41
1:F:1841:LYS:O	1:F:1845:GLN:HG2	2.20	0.41
1:F:4505:LEU:HD13	1:F:4744:ASP:HB3	2.02	0.41
1:F:4633:VAL:O	1:F:4636:THR:HG22	2.20	0.41
1:F:4671:MET:HE3	1:F:4671:MET:HB3	1.74	0.41
1:F:4922:MET:HE2	1:F:4922:MET:HB2	1.82	0.41
1:A:133:LEU:O	1:A:145:PHE:HB3	2.19	0.41
1:A:626:ARG:HH21	1:A:2131:VAL:HG11	1.84	0.41
1:A:1947:MET:HA	1:A:1947:MET:HE2	2.00	0.41
1:A:2753:GLN:NE2	1:A:2762:LEU:O	2.49	0.41
1:A:2974:PHE:HD1	1:A:2979:LEU:HD12	1.86	0.41
1:A:3322:MET:SD	1:A:3322:MET:C	3.03	0.41
1:A:3638:LYS:HE2	1:A:3638:LYS:HB3	1.89	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3935:ALA:O	1:A:3940:TRP:NE1	2.44	0.41
2:B:104:TYR:HD1	2:B:106:PRO:HD3	1.84	0.41
1:C:64:ILE:HA	1:C:123:HIS:CE1	2.55	0.41
1:C:1114:ARG:HG2	1:C:1138:ASP:HB2	2.01	0.41
1:C:1166:VAL:HG22	1:C:1173:MET:HB2	2.02	0.41
1:C:3292:GLY:HA3	1:C:3295:MET:CE	2.34	0.41
1:C:4135:ILE:HG12	1:C:4149:PHE:HE1	1.84	0.41
1:C:4648:VAL:O	1:C:4652:VAL:HG12	2.19	0.41
1:E:28:ILE:HD12	1:E:201:TRP:HE1	1.85	0.41
1:E:728:ASP:OD1	1:E:731:HIS:N	2.41	0.41
1:E:1114:ARG:HG2	1:E:1138:ASP:HB2	2.01	0.41
1:E:1144:ARG:H	1:E:1144:ARG:HG2	1.73	0.41
1:E:2132:ARG:HG2	1:E:2133:MET:H	1.85	0.41
1:E:3909:ILE:HG21	1:E:3969:GLU:HB3	2.01	0.41
1:F:674:TYR:HE1	1:F:756:SER:HB2	1.85	0.41
1:F:828:PRO:HG2	1:F:1033:VAL:HG21	2.02	0.41
1:F:1113:MET:SD	1:F:1207:LEU:HD22	2.60	0.41
1:F:1985:CYS:SG	1:F:1992:ARG:NH1	2.94	0.41
1:F:3117:GLY:C	1:F:3166:PRO:HG3	2.44	0.41
1:F:3482:PRO:HD2	1:F:3527:MET:SD	2.60	0.41
1:F:3769:ASN:OD1	1:F:3769:ASN:N	2.53	0.41
2:G:18:LEU:HD23	2:G:18:LEU:HA	1.87	0.41
2:I:90:THR:HG23	2:I:124:THR:HA	2.01	0.41
2:I:109:THR:OG1	2:I:110:PRO:HD3	2.20	0.41
1:A:557:TRP:HE3	1:A:558:LEU:HD23	1.84	0.41
1:A:694:ARG:NH1	1:A:720:ASP:OD1	2.53	0.41
1:A:769:ARG:HA	1:A:774:PRO:HA	2.01	0.41
1:A:934:GLN:CD	2:B:99:ARG:HH22	2.29	0.41
1:A:1039:ASP:OD1	1:A:1039:ASP:N	2.52	0.41
1:A:1595:VAL:O	1:A:1595:VAL:HG23	2.20	0.41
1:A:1985:CYS:SG	1:A:1992:ARG:NH1	2.94	0.41
1:A:2459:PHE:CE1	1:A:2464:LYS:HG3	2.56	0.41
1:A:3365:LEU:O	1:A:3369:TYR:HB2	2.19	0.41
1:A:3993:THR:O	1:A:3997:GLN:HG3	2.20	0.41
1:C:14:LEU:HD11	1:C:214:VAL:HG21	2.01	0.41
1:C:1177:LEU:HB2	1:C:1182:LEU:HD21	2.02	0.41
1:C:1428:TYR:CE1	1:C:1510:CYS:HB2	2.54	0.41
1:C:3369:TYR:HE2	1:C:3465:ILE:HA	1.85	0.41
1:C:4751:THR:O	1:C:4755:ILE:HG13	2.21	0.41
1:E:674:TYR:HE1	1:E:756:SER:HB2	1.85	0.41
1:E:1999:HIS:CG	1:E:3627:TRP:HD1	2.39	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3217:ILE:HD11	1:E:3241:LEU:HD22	2.02	0.41
1:E:3426:ASN:O	1:E:3430:LEU:HG	2.21	0.41
1:E:3832:ASP:N	1:E:3832:ASP:OD1	2.53	0.41
1:F:776:GLN:CD	1:F:1472:GLU:HA	2.44	0.41
1:F:882:ARG:HH11	1:F:937:LEU:HA	1.84	0.41
1:F:2161:MET:HE3	1:F:2161:MET:HA	2.00	0.41
1:F:2233:MET:O	1:F:2296:ARG:NH2	2.48	0.41
1:F:3085:GLN:HE21	1:F:3089:VAL:HG12	1.84	0.41
1:F:3275:LEU:O	1:F:3279:ILE:HG13	2.19	0.41
1:F:3322:MET:HB3	1:F:3368:PHE:CE2	2.55	0.41
1:F:3369:TYR:HE2	1:F:3465:ILE:HA	1.85	0.41
2:G:90:THR:HG23	2:G:124:THR:HA	2.01	0.41
1:A:64:ILE:HA	1:A:123:HIS:CE1	2.55	0.41
1:A:1303:ARG:HD3	1:A:1446:ILE:HD11	2.03	0.41
1:A:1553:VAL:HG23	1:A:1554:PHE:N	2.35	0.41
1:A:1899:GLU:HA	1:A:1902:LYS:HG2	2.03	0.41
1:A:2441:MET:HE3	1:A:2442:PRO:C	2.45	0.41
1:A:2579:LEU:N	1:A:2615:ARG:HH12	2.18	0.41
1:A:3283:ILE:O	1:A:3287:LEU:HG	2.20	0.41
1:A:3482:PRO:O	1:A:3486:GLU:HG3	2.20	0.41
1:A:4030:THR:HG23	1:A:4054:HIS:HE1	1.86	0.41
1:C:747:HIS:CE1	1:C:750:ARG:HG2	2.55	0.41
1:C:1947:MET:HE2	1:C:1947:MET:HA	2.00	0.41
1:C:2929:ILE:HG12	1:C:3006:LEU:HD13	2.01	0.41
1:C:3007:PHE:O	1:C:3007:PHE:HD1	2.02	0.41
1:C:3018:ILE:HD12	1:C:3095:TYR:HD1	1.85	0.41
1:C:3254:GLU:OE1	1:C:3254:GLU:N	2.47	0.41
1:C:3426:ASN:O	1:C:3430:LEU:HG	2.21	0.41
1:C:3875:ASP:O	1:C:3879:ARG:HG3	2.21	0.41
1:C:4483:ILE:O	1:C:4486:GLN:HG3	2.19	0.41
1:C:4505:LEU:HD13	1:C:4744:ASP:HB3	2.02	0.41
1:E:1303:ARG:O	1:E:1590:GLN:N	2.38	0.41
1:E:1899:GLU:HA	1:E:1902:LYS:HG2	2.03	0.41
1:E:2459:PHE:CE1	1:E:2464:LYS:HG3	2.56	0.41
1:E:2918:LYS:HA	1:E:2999:GLU:OE2	2.21	0.41
1:E:4751:THR:O	1:E:4755:ILE:HG13	2.21	0.41
1:F:176:ARG:HE	1:F:181:LEU:HB3	1.85	0.41
1:F:732:LEU:HB3	1:F:779:PHE:CZ	2.54	0.41
1:F:878:LEU:HD23	1:F:878:LEU:H	1.84	0.41
1:F:1258:PHE:HB2	1:F:1303:ARG:HH21	1.84	0.41
1:F:1516:SER:O	1:F:1533:GLN:NE2	2.38	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1801:LYS:HB3	1:F:1801:LYS:HE3	1.71	0.41
1:F:2105:TYR:CZ	1:F:2160:LEU:HB2	2.55	0.41
1:F:2202:PHE:O	1:F:2205:ILE:HG12	2.21	0.41
1:F:2581:PRO:HD2	1:F:2629:PHE:HD2	1.85	0.41
1:F:3226:ARG:NH1	1:F:3286:ASN:HA	2.35	0.41
1:F:3875:ASP:O	1:F:3879:ARG:HG3	2.21	0.41
1:A:1814:THR:HG22	1:A:1816:GLU:H	1.85	0.41
1:A:2480:GLN:HE21	1:A:2484:LEU:HD11	1.84	0.41
1:A:2581:PRO:HD2	1:A:2629:PHE:HD2	1.85	0.41
1:A:3129:CYS:HB3	1:A:3161:PHE:CE1	2.51	0.41
1:A:3226:ARG:NH1	1:A:3286:ASN:HA	2.35	0.41
1:A:3254:GLU:OE1	1:A:3254:GLU:N	2.47	0.41
1:A:4633:VAL:O	1:A:4636:THR:HG22	2.20	0.41
2:B:109:THR:OG1	2:B:110:PRO:HD3	2.20	0.41
1:C:744:PRO:HD3	1:C:776:GLN:HE21	1.85	0.41
1:C:3492:LYS:HD2	1:C:3561:GLU:CD	2.45	0.41
2:D:52:THR:HA	2:D:71:ARG:HH11	1.86	0.41
1:E:2105:TYR:CZ	1:E:2160:LEU:HB2	2.55	0.41
1:E:2441:MET:HE3	1:E:2442:PRO:C	2.45	0.41
1:E:3769:ASN:OD1	1:E:3769:ASN:N	2.53	0.41
1:F:251:GLU:HG3	1:F:252:HIS:ND1	2.36	0.41
1:F:299:HIS:HB3	1:F:302:THR:HG22	2.02	0.41
1:F:908:ARG:NE	2:G:104:TYR:HB3	2.36	0.41
1:F:3046:LYS:HD2	1:F:3046:LYS:O	2.21	0.41
1:F:3488:ILE:HA	1:F:3550:VAL:HG13	2.03	0.41
1:F:4010:GLU:HG2	1:F:4120:LEU:HD13	2.02	0.41
1:F:4483:ILE:O	1:F:4486:GLN:HG3	2.19	0.41
1:F:4508:ALA:O	1:F:4511:ILE:HG22	2.20	0.41
2:G:104:TYR:HD1	2:G:106:PRO:HD3	1.84	0.41
1:A:176:ARG:HE	1:A:181:LEU:HB3	1.85	0.41
1:A:921:PHE:HA	1:A:924:LEU:HB2	2.02	0.41
1:A:970:TYR:HB2	1:A:971:GLN:H	1.70	0.41
1:A:2996:SER:O	1:A:2999:GLU:HB2	2.21	0.41
1:A:3426:ASN:O	1:A:3430:LEU:HG	2.21	0.41
1:A:3636:GLU:HG3	1:A:3693:ILE:HG23	2.01	0.41
1:A:4140:SER:O	1:A:4140:SER:OG	2.39	0.41
1:C:28:ILE:HD12	1:C:201:TRP:HE1	1.85	0.41
1:C:732:LEU:HB3	1:C:779:PHE:CZ	2.54	0.41
1:C:1841:LYS:O	1:C:1845:GLN:HG2	2.20	0.41
1:C:3383:TRP:HH2	1:C:3394:LEU:HD23	1.85	0.41
1:C:3832:ASP:N	1:C:3832:ASP:OD1	2.54	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3870:ILE:O	1:C:3874:VAL:HG23	2.20	0.41
1:C:4164:VAL:HG21	1:C:4199:MET:HG2	2.03	0.41
1:E:3369:TYR:HE2	1:E:3465:ILE:HA	1.85	0.41
1:E:3538:GLU:H	1:E:3538:GLU:CD	2.27	0.41
1:E:3875:ASP:O	1:E:3879:ARG:HG3	2.21	0.41
1:E:4048:HIS:HD1	1:E:4066:LEU:HD11	1.86	0.41
1:F:161:THR:HG23	1:F:186:VAL:HG22	2.03	0.41
1:F:747:HIS:CE1	1:F:750:ARG:HG2	2.55	0.41
1:F:1588:HIS:CE1	1:F:1590:GLN:HE21	2.39	0.41
1:F:1814:THR:HG22	1:F:1816:GLU:H	1.85	0.41
1:F:1899:GLU:HA	1:F:1902:LYS:HG2	2.03	0.41
1:F:2441:MET:HE3	1:F:2442:PRO:C	2.45	0.41
1:F:2464:LYS:HZ3	1:F:2494:ASP:CG	2.29	0.41
1:F:2480:GLN:HE21	1:F:2484:LEU:HD11	1.84	0.41
1:F:2859:LEU:HD13	1:F:2866:ASN:HA	2.02	0.41
1:F:2973:TYR:CD1	1:F:2973:TYR:C	2.99	0.41
1:F:4164:VAL:HG21	1:F:4199:MET:HG2	2.03	0.41
1:A:56:LYS:HE2	1:A:56:LYS:HB2	1.88	0.41
1:A:251:GLU:HG3	1:A:252:HIS:ND1	2.36	0.41
1:A:430:ILE:HG23	1:A:504:ARG:HE	1.84	0.41
1:A:1258:PHE:HB2	1:A:1303:ARG:HH21	1.84	0.41
1:A:3369:TYR:HE2	1:A:3465:ILE:HA	1.85	0.41
1:A:4164:VAL:HG21	1:A:4199:MET:HG2	2.03	0.41
1:A:4505:LEU:HD13	1:A:4744:ASP:HB3	2.02	0.41
1:C:263:GLU:OE2	1:C:388:GLN:NE2	2.40	0.41
1:C:299:HIS:HB3	1:C:302:THR:HG22	2.02	0.41
1:C:1420:LEU:O	1:C:1423:THR:HG22	2.21	0.41
1:C:1686:LEU:HD13	1:C:1707:LEU:HD13	2.02	0.41
1:C:1995:LEU:HD11	1:C:3623:TYR:CE1	2.54	0.41
1:C:2996:SER:O	1:C:2999:GLU:HB2	2.21	0.41
1:C:3283:ILE:O	1:C:3287:LEU:HG	2.20	0.41
1:C:3943:VAL:HG23	1:C:3977:MET:SD	2.61	0.41
1:C:3998:MET:O	1:C:4002:LEU:HG	2.21	0.41
1:C:4188:PHE:CE1	1:C:4914:LEU:HD22	2.56	0.41
1:C:4508:ALA:O	1:C:4511:ILE:HG22	2.20	0.41
1:E:557:TRP:HE3	1:E:558:LEU:HD23	1.84	0.41
1:E:1097:LYS:HD2	1:E:1097:LYS:N	2.36	0.41
1:E:2213:MET:HE2	1:E:2213:MET:HA	2.01	0.41
1:E:2423:ARG:NH2	1:E:2475:TYR:O	2.44	0.41
1:E:4140:SER:O	1:E:4140:SER:OG	2.39	0.41
1:E:4164:VAL:HG21	1:E:4199:MET:HG2	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:28:ILE:HD12	1:F:201:TRP:HE1	1.85	0.41
1:F:2258:GLU:N	1:F:2259:PRO:HD2	2.35	0.41
1:F:2276:CYS:HB2	1:F:2290:ASN:ND2	2.36	0.41
1:F:2621:CYS:HA	1:F:2676:PRO:HG3	2.02	0.41
1:F:3383:TRP:HH2	1:F:3394:LEU:HD23	1.85	0.41
1:F:4501:ARG:HA	1:F:4501:ARG:HD2	1.93	0.41
1:A:50:GLU:OE2	1:A:61:ASP:N	2.52	0.41
1:A:744:PRO:HD3	1:A:776:GLN:HE21	1.85	0.41
1:A:928:GLU:OE1	1:A:928:GLU:N	2.49	0.41
1:A:1097:LYS:HD2	1:A:1097:LYS:N	2.36	0.41
1:A:1114:ARG:HG2	1:A:1138:ASP:HB2	2.01	0.41
1:A:1305:SER:N	1:A:1588:HIS:O	2.54	0.41
1:A:2383:MET:O	1:A:2383:MET:HE3	2.21	0.41
1:A:2778:LEU:HA	1:A:2781:MET:HE3	2.01	0.41
1:A:3943:VAL:HG23	1:A:3977:MET:SD	2.61	0.41
1:A:4044:LYS:HB2	1:A:4075:GLU:OE2	2.21	0.41
1:C:674:TYR:HE1	1:C:756:SER:HB2	1.85	0.41
1:C:1267:HIS:HB3	1:C:1295:ASN:N	2.31	0.41
1:C:1814:THR:HG22	1:C:1816:GLU:H	1.85	0.41
1:C:1899:GLU:HA	1:C:1902:LYS:HG2	2.03	0.41
1:C:1967:PRO:O	1:C:1971:GLN:HG3	2.21	0.41
1:C:2076:ASP:HB3	1:C:2079:LEU:HB3	2.01	0.41
1:C:2258:GLU:N	1:C:2259:PRO:HD2	2.35	0.41
1:C:3029:VAL:HG12	1:C:3033:HIS:NE2	2.36	0.41
1:C:3482:PRO:O	1:C:3486:GLU:HG3	2.20	0.41
1:C:3811:ASN:O	1:C:3814:GLU:HG2	2.21	0.41
1:C:4020:LEU:HD12	1:C:4124:VAL:HG12	2.03	0.41
1:C:4633:VAL:O	1:C:4636:THR:HG22	2.20	0.41
1:E:299:HIS:HB3	1:E:302:THR:HG22	2.02	0.41
1:E:705:PRO:HG3	1:E:857:LEU:HD12	2.03	0.41
1:E:828:PRO:HG2	1:E:1033:VAL:HG21	2.02	0.41
1:E:921:PHE:HB2	1:E:929:ARG:NH1	2.36	0.41
1:E:1166:VAL:HG22	1:E:1173:MET:HB2	2.02	0.41
1:E:1802:GLU:HA	1:E:1805:LEU:HG	2.02	0.41
1:E:1985:CYS:SG	1:E:1992:ARG:NH1	2.94	0.41
1:E:2279:LEU:HB3	1:E:2284:TYR:HB2	2.03	0.41
1:E:3283:ILE:O	1:E:3287:LEU:HG	2.20	0.41
1:E:3294:TRP:O	1:E:3298:LEU:HG	2.19	0.41
1:E:4044:LYS:HB2	1:E:4075:GLU:OE2	2.21	0.41
1:E:4521:SER:O	1:E:4556:VAL:N	2.54	0.41
1:F:261:HIS:HD2	1:F:263:GLU:HG3	1.86	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1097:LYS:HD2	1:F:1097:LYS:N	2.36	0.41
1:F:2348:GLU:O	1:F:2352:ILE:HG12	2.21	0.41
1:F:2918:LYS:HD2	1:F:2918:LYS:C	2.46	0.41
1:F:3029:VAL:HG12	1:F:3033:HIS:NE2	2.36	0.41
1:F:3832:ASP:N	1:F:3832:ASP:OD1	2.54	0.41
1:F:3998:MET:O	1:F:4002:LEU:HG	2.21	0.41
1:A:641:ASP:O	1:A:642:LEU:HB3	2.21	0.41
1:A:1428:TYR:CE1	1:A:1510:CYS:HB2	2.54	0.41
1:A:2105:TYR:CZ	1:A:2160:LEU:HB2	2.55	0.41
1:A:2210:GLN:NE2	1:A:2244:ALA:O	2.45	0.41
1:A:3292:GLY:HA3	1:A:3295:MET:CE	2.34	0.41
1:A:3322:MET:HB3	1:A:3368:PHE:CE2	2.55	0.41
1:A:4645:ASP:OD1	1:A:4645:ASP:N	2.44	0.41
1:A:4751:THR:O	1:A:4755:ILE:HG13	2.21	0.41
1:A:4756:LEU:O	1:A:4759:VAL:HG12	2.21	0.41
2:B:52:THR:HA	2:B:71:ARG:HH11	1.85	0.41
1:C:251:GLU:HG3	1:C:252:HIS:ND1	2.36	0.41
1:C:438:LYS:HG3	1:C:439:LYS:HG2	2.01	0.41
1:C:556:ASP:OD1	1:C:556:ASP:N	2.54	0.41
1:C:601:LEU:HD13	1:C:610:VAL:HB	2.03	0.41
1:C:1097:LYS:N	1:C:1097:LYS:HD2	2.36	0.41
1:C:1985:CYS:SG	1:C:1992:ARG:NH1	2.94	0.41
1:C:2154:PHE:CE1	1:C:2205:ILE:HD13	2.56	0.41
1:C:2202:PHE:O	1:C:2205:ILE:HG12	2.21	0.41
1:C:2276:CYS:HB2	1:C:2290:ASN:ND2	2.36	0.41
1:C:2348:GLU:O	1:C:2352:ILE:HG12	2.21	0.41
1:C:2579:LEU:N	1:C:2615:ARG:HH12	2.18	0.41
1:C:2974:PHE:HD1	1:C:2979:LEU:HD12	1.86	0.41
1:C:3124:ASP:N	1:C:3124:ASP:OD1	2.54	0.41
1:C:3698:CYS:SG	1:C:3730:LEU:HD21	2.60	0.41
1:C:4662:ARG:HE	1:C:4662:ARG:HB3	1.68	0.41
1:C:4756:LEU:O	1:C:4759:VAL:HG12	2.21	0.41
2:D:104:TYR:HD1	2:D:106:PRO:HD3	1.84	0.41
1:E:56:LYS:HE2	1:E:56:LYS:HB2	1.88	0.41
1:E:161:THR:HG23	1:E:186:VAL:HG22	2.03	0.41
1:E:173:GLU:HA	1:F:3938:ARG:NH1	2.35	0.41
1:E:241:MET:HE2	1:E:241:MET:HB2	1.92	0.41
1:E:430:ILE:HD11	1:E:501:CYS:HB3	2.02	0.41
1:E:612:ASP:OD1	1:E:1657:HIS:ND1	2.50	0.41
1:E:694:ARG:NH1	1:E:720:ASP:OD1	2.53	0.41
1:E:1177:LEU:HB2	1:E:1182:LEU:HD21	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2154:PHE:CE1	1:E:2205:ILE:HD13	2.56	0.41
1:E:3129:CYS:HB3	1:E:3161:PHE:CE1	2.51	0.41
1:E:3214:MET:SD	1:E:3271:HIS:NE2	2.94	0.41
1:E:3286:ASN:CB	1:E:3295:MET:HE2	2.47	0.41
1:E:3369:TYR:HA	1:E:3372:LEU:HB3	2.03	0.41
1:E:3386:GLU:HB3	1:E:3535:ASN:ND2	2.36	0.41
1:E:3482:PRO:O	1:E:3486:GLU:HG3	2.21	0.41
1:E:3998:MET:O	1:E:4002:LEU:HG	2.21	0.41
1:E:4030:THR:HG23	1:E:4054:HIS:HE1	1.86	0.41
1:E:4756:LEU:O	1:E:4759:VAL:HG12	2.21	0.41
1:F:744:PRO:HD3	1:F:776:GLN:HE21	1.85	0.41
1:F:921:PHE:HB2	1:F:929:ARG:NH1	2.36	0.41
1:F:928:GLU:OE1	1:F:928:GLU:N	2.49	0.41
1:F:1273:ILE:HB	1:F:1287:GLN:OE1	2.21	0.41
1:F:1303:ARG:HD3	1:F:1446:ILE:HD11	2.03	0.41
1:F:1802:GLU:HA	1:F:1805:LEU:HG	2.02	0.41
1:F:2143:ARG:HE	1:F:2143:ARG:HB3	1.67	0.41
1:F:2392:ALA:HB2	1:F:2463:HIS:CD2	2.56	0.41
1:F:2459:PHE:CE1	1:F:2464:LYS:HG3	2.56	0.41
1:F:2974:PHE:HD1	1:F:2979:LEU:HD12	1.86	0.41
1:F:3018:ILE:HD12	1:F:3095:TYR:HD1	1.85	0.41
1:F:3482:PRO:O	1:F:3486:GLU:HG3	2.21	0.41
1:F:3638:LYS:HE2	1:F:3638:LYS:HB3	1.89	0.41
1:F:3870:ILE:O	1:F:3874:VAL:HG23	2.21	0.41
1:F:3993:THR:O	1:F:3997:GLN:HG3	2.20	0.41
1:F:4030:THR:HG23	1:F:4054:HIS:HE1	1.86	0.41
1:F:4048:HIS:HD1	1:F:4066:LEU:HD11	1.86	0.41
1:F:4188:PHE:CE1	1:F:4914:LEU:HD22	2.56	0.41
1:F:4883:MET:HA	1:F:4883:MET:HE3	2.02	0.41
2:G:109:THR:OG1	2:G:110:PRO:HD3	2.20	0.41
1:A:747:HIS:CE1	1:A:750:ARG:HG2	2.55	0.41
1:A:2065:MET:HE2	1:A:2065:MET:HB2	1.89	0.41
1:A:2392:ALA:HB2	1:A:2463:HIS:CD2	2.56	0.41
1:A:2426:ILE:O	1:A:2475:TYR:OH	2.37	0.41
1:A:2554:LEU:HG	1:A:2568:ILE:HD13	2.03	0.41
1:A:2918:LYS:HA	1:A:2999:GLU:OE2	2.21	0.41
1:A:3046:LYS:HD2	1:A:3046:LYS:O	2.21	0.41
1:A:3214:MET:SD	1:A:3271:HIS:NE2	2.94	0.41
1:A:3616:VAL:O	1:A:3620:LEU:HG	2.21	0.41
1:C:641:ASP:O	1:C:642:LEU:HB3	2.21	0.41
1:C:828:PRO:HG2	1:C:1033:VAL:HG21	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1305:SER:N	1:C:1588:HIS:O	2.54	0.41
1:C:2132:ARG:HG2	1:C:2133:MET:H	1.85	0.41
1:C:2224:SER:HB2	1:C:2239:LEU:HB2	2.03	0.41
1:C:2392:ALA:HB2	1:C:2463:HIS:CD2	2.56	0.41
1:C:2522:ALA:C	1:C:2525:PRO:HD2	2.46	0.41
1:C:2549:HIS:H	1:C:2549:HIS:HD1	1.68	0.41
1:C:2918:LYS:HA	1:C:2999:GLU:OE2	2.21	0.41
1:C:2973:TYR:C	1:C:2973:TYR:CD1	2.99	0.41
1:C:4185:MET:HE2	1:C:4951:PHE:CG	2.56	0.41
1:C:4883:MET:HE3	1:C:4883:MET:HA	2.02	0.41
1:E:251:GLU:HG3	1:E:252:HIS:ND1	2.36	0.41
1:E:1686:LEU:HD13	1:E:1707:LEU:HD13	2.02	0.41
1:E:2775:LYS:HE3	1:E:2775:LYS:HB3	1.89	0.41
1:E:2973:TYR:C	1:E:2973:TYR:CD1	2.98	0.41
1:E:2974:PHE:HD1	1:E:2979:LEU:HD12	1.86	0.41
1:F:14:LEU:HD11	1:F:214:VAL:HG21	2.01	0.41
1:F:2132:ARG:HG2	1:F:2133:MET:H	1.85	0.41
1:F:2918:LYS:HA	1:F:2999:GLU:OE2	2.21	0.41
1:F:3124:ASP:OD1	1:F:3124:ASP:N	2.54	0.41
1:F:3369:TYR:HA	1:F:3372:LEU:HB3	2.03	0.41
2:I:48:VAL:HG12	2:I:49:ALA:H	1.86	0.41
2:I:104:TYR:HD1	2:I:106:PRO:HD3	1.84	0.41
1:A:173:GLU:HA	1:E:3938:ARG:NH1	2.36	0.40
1:A:541:ILE:HD11	1:A:574:VAL:HG13	2.04	0.40
1:A:601:LEU:HD13	1:A:610:VAL:HB	2.03	0.40
1:A:1420:LEU:O	1:A:1423:THR:HG22	2.21	0.40
1:A:1749:LEU:HD23	1:A:1844:LEU:HD12	2.03	0.40
1:A:2621:CYS:HA	1:A:2676:PRO:HG3	2.02	0.40
1:A:3029:VAL:HG12	1:A:3033:HIS:NE2	2.36	0.40
1:A:3386:GLU:HB3	1:A:3535:ASN:ND2	2.36	0.40
1:C:626:ARG:HH21	1:C:2131:VAL:HG11	1.84	0.40
1:C:908:ARG:NE	2:D:104:TYR:HB3	2.35	0.40
1:C:2778:LEU:HA	1:C:2781:MET:HE3	2.02	0.40
1:C:3046:LYS:HD2	1:C:3046:LYS:O	2.21	0.40
1:E:514:PHE:HD2	1:E:523:GLY:HA2	1.86	0.40
1:E:921:PHE:HA	1:E:924:LEU:HB2	2.02	0.40
1:E:1978:PHE:CZ	1:E:1995:LEU:HD23	2.56	0.40
1:E:2383:MET:O	1:E:2383:MET:HE3	2.21	0.40
1:E:2481:ASP:OD1	1:E:2482:PHE:N	2.54	0.40
1:E:3105:SER:HB3	1:E:3156:GLU:HG2	2.04	0.40
1:E:3273:ASN:ND2	1:E:3313:LEU:HG	2.37	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:4020:LEU:HD12	1:E:4124:VAL:HG12	2.03	0.40
1:E:4883:MET:HA	1:E:4883:MET:HE3	2.02	0.40
1:F:612:ASP:OD1	1:F:1657:HIS:ND1	2.50	0.40
1:F:921:PHE:HA	1:F:924:LEU:HB2	2.02	0.40
1:F:1177:LEU:HB2	1:F:1182:LEU:HD21	2.02	0.40
1:F:1967:PRO:O	1:F:1971:GLN:HG3	2.21	0.40
1:F:1999:HIS:CG	1:F:3627:TRP:HD1	2.39	0.40
1:F:2554:LEU:HG	1:F:2568:ILE:HD13	2.03	0.40
1:F:2577:GLY:O	1:F:2615:ARG:HD2	2.21	0.40
1:F:3007:PHE:HA	1:F:3035:LEU:HD13	2.03	0.40
1:F:3276:LEU:HD22	1:F:3309:VAL:HG11	2.04	0.40
1:F:3348:SER:HA	1:F:3351:GLU:HB2	2.04	0.40
1:F:4756:LEU:O	1:F:4759:VAL:HG12	2.21	0.40
2:G:52:THR:HA	2:G:71:ARG:HH11	1.85	0.40
2:I:64:LYS:HE2	2:I:64:LYS:HB3	1.94	0.40
1:A:314:LEU:O	1:A:315:LEU:HD23	2.22	0.40
1:A:514:PHE:HD2	1:A:523:GLY:HA2	1.86	0.40
1:A:555:LEU:HD23	1:A:555:LEU:HA	1.93	0.40
1:A:1257:GLN:HB2	1:A:1596:LEU:HD21	2.03	0.40
1:A:1967:PRO:O	1:A:1971:GLN:HG3	2.21	0.40
1:A:1999:HIS:CG	1:A:3627:TRP:HD1	2.39	0.40
1:A:2202:PHE:O	1:A:2205:ILE:HG12	2.21	0.40
1:A:2481:ASP:OD1	1:A:2482:PHE:N	2.54	0.40
1:A:3348:SER:HA	1:A:3351:GLU:HB2	2.04	0.40
1:A:3369:TYR:HA	1:A:3372:LEU:HB3	2.03	0.40
1:A:3488:ILE:HA	1:A:3550:VAL:HG13	2.03	0.40
1:A:3998:MET:O	1:A:4002:LEU:HG	2.21	0.40
1:A:4479:TRP:O	1:A:4483:ILE:HG12	2.22	0.40
1:C:314:LEU:O	1:C:315:LEU:HD23	2.21	0.40
1:C:430:ILE:HD11	1:C:501:CYS:HB3	2.02	0.40
1:C:513:HIS:O	1:C:517:VAL:HG23	2.22	0.40
1:C:1257:GLN:HG2	1:C:1451:HIS:CE1	2.56	0.40
1:C:2581:PRO:HD2	1:C:2629:PHE:HD2	1.85	0.40
1:C:2621:CYS:HA	1:C:2676:PRO:HG3	2.02	0.40
1:C:2918:LYS:HD2	1:C:2918:LYS:C	2.46	0.40
1:C:3502:GLU:OE1	1:C:3502:GLU:N	2.40	0.40
1:C:3980:MET:HE3	1:C:3980:MET:HB3	1.99	0.40
1:E:525:SER:O	1:E:529:ILE:HG13	2.21	0.40
1:E:1273:ILE:HB	1:E:1287:GLN:OE1	2.21	0.40
1:E:1704:TYR:CG	1:E:1821:PRO:HB2	2.57	0.40
1:E:2426:ILE:O	1:E:2475:TYR:OH	2.37	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2464:LYS:HZ3	1:E:2494:ASP:CG	2.29	0.40
1:E:2859:LEU:HD13	1:E:2866:ASN:HA	2.02	0.40
1:E:3007:PHE:HA	1:E:3035:LEU:HD13	2.03	0.40
1:E:3029:VAL:HG12	1:E:3033:HIS:NE2	2.36	0.40
1:E:3046:LYS:O	1:E:3046:LYS:HD2	2.21	0.40
1:E:3616:VAL:O	1:E:3620:LEU:HG	2.21	0.40
1:E:4185:MET:HE2	1:E:4951:PHE:CG	2.57	0.40
1:E:4505:LEU:HD13	1:E:4744:ASP:HB3	2.02	0.40
1:F:1310:CYS:HA	1:F:1514:ALA:HB1	2.03	0.40
1:F:1978:PHE:CZ	1:F:1995:LEU:HD23	2.56	0.40
1:F:2481:ASP:OD1	1:F:2482:PHE:N	2.54	0.40
1:F:2579:LEU:N	1:F:2615:ARG:HH12	2.18	0.40
1:F:2667:CYS:O	1:F:2671:VAL:HG23	2.21	0.40
1:F:3214:MET:SD	1:F:3271:HIS:NE2	2.94	0.40
1:F:3943:VAL:HG23	1:F:3977:MET:SD	2.61	0.40
1:A:430:ILE:HD11	1:A:501:CYS:HB3	2.02	0.40
1:A:705:PRO:HG3	1:A:857:LEU:HD12	2.03	0.40
1:A:921:PHE:HB2	1:A:929:ARG:NH1	2.36	0.40
1:A:1166:VAL:HG22	1:A:1173:MET:HB2	2.02	0.40
1:A:1273:ILE:HB	1:A:1287:GLN:OE1	2.21	0.40
1:A:1978:PHE:CZ	1:A:1995:LEU:HD23	2.56	0.40
1:A:2348:GLU:O	1:A:2352:ILE:HG12	2.21	0.40
1:A:2549:HIS:HD1	1:A:2549:HIS:H	1.68	0.40
1:A:2999:GLU:O	1:A:3003:VAL:HG23	2.22	0.40
1:A:3273:ASN:ND2	1:A:3313:LEU:HG	2.37	0.40
1:A:3276:LEU:HD22	1:A:3309:VAL:HG11	2.04	0.40
1:A:3383:TRP:HH2	1:A:3394:LEU:HD23	1.85	0.40
1:A:4188:PHE:CE1	1:A:4914:LEU:HD22	2.56	0.40
1:A:4521:SER:O	1:A:4556:VAL:N	2.54	0.40
1:C:541:ILE:HD11	1:C:574:VAL:HG13	2.04	0.40
1:C:2459:PHE:CE1	1:C:2464:LYS:HG3	2.56	0.40
1:C:2481:ASP:OD1	1:C:2482:PHE:N	2.54	0.40
1:C:2535:ALA:HB1	1:C:2578:GLN:O	2.21	0.40
1:C:2554:LEU:HG	1:C:2568:ILE:HD13	2.03	0.40
1:C:3007:PHE:HA	1:C:3035:LEU:HD13	2.04	0.40
1:E:541:ILE:HD11	1:E:574:VAL:HG13	2.03	0.40
1:E:744:PRO:HD3	1:E:776:GLN:HE21	1.86	0.40
1:E:1305:SER:N	1:E:1588:HIS:O	2.54	0.40
1:E:2202:PHE:O	1:E:2205:ILE:HG12	2.21	0.40
1:E:2224:SER:HB2	1:E:2239:LEU:HB2	2.03	0.40
1:E:2261:LEU:HD12	1:E:2261:LEU:HA	1.94	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:2392:ALA:HB2	1:E:2463:HIS:CD2	2.56	0.40
1:E:2535:ALA:HB1	1:E:2578:GLN:O	2.22	0.40
1:E:2667:CYS:O	1:E:2671:VAL:HG23	2.21	0.40
1:E:3014:VAL:HG12	1:E:3095:TYR:CE1	2.57	0.40
1:E:3030:ASN:HA	1:E:3033:HIS:CD2	2.56	0.40
1:F:64:ILE:HA	1:F:123:HIS:CE1	2.55	0.40
1:F:541:ILE:HD11	1:F:574:VAL:HG13	2.04	0.40
1:F:900:LEU:HB2	1:F:902:TRP:HD1	1.86	0.40
1:F:2224:SER:HB2	1:F:2239:LEU:HB2	2.03	0.40
1:F:2996:SER:O	1:F:2999:GLU:HB2	2.21	0.40
1:F:2999:GLU:O	1:F:3003:VAL:HG23	2.22	0.40
1:F:3426:ASN:O	1:F:3430:LEU:HG	2.21	0.40
1:F:3612:ARG:HH11	1:F:3612:ARG:HA	1.87	0.40
1:F:4113:ARG:H	1:F:4113:ARG:HG2	1.60	0.40
1:F:4185:MET:HE2	1:F:4951:PHE:CG	2.57	0.40
1:F:4500:MET:HE3	1:F:4500:MET:HB2	1.84	0.40
2:I:69:ILE:HB	2:I:80:LEU:HD13	2.04	0.40
1:A:76:ARG:O	1:A:80:GLU:HG2	2.22	0.40
1:A:1704:TYR:CG	1:A:1821:PRO:HB2	2.57	0.40
1:A:2133:MET:HE3	1:A:2137:GLU:HB2	2.04	0.40
1:A:2154:PHE:CE1	1:A:2205:ILE:HD13	2.56	0.40
1:A:2522:ALA:C	1:A:2525:PRO:HD2	2.46	0.40
1:A:2633:SER:OG	1:A:2636:GLU:HG3	2.22	0.40
1:A:3014:VAL:HG12	1:A:3095:TYR:CE1	2.57	0.40
1:A:3105:SER:HB3	1:A:3156:GLU:HG2	2.04	0.40
1:A:3612:ARG:O	1:A:3616:VAL:HG12	2.22	0.40
1:A:4048:HIS:HD1	1:A:4066:LEU:HD11	1.86	0.40
1:A:4185:MET:HE2	1:A:4951:PHE:CG	2.56	0.40
1:A:4618:GLU:OE1	1:A:4618:GLU:N	2.54	0.40
1:C:1303:ARG:HD3	1:C:1446:ILE:HD11	2.03	0.40
1:C:1588:HIS:CE1	1:C:1590:GLN:HE21	2.39	0.40
1:C:2428:LEU:O	1:C:2432:VAL:HG23	2.22	0.40
1:C:3754:VAL:HA	1:C:3757:THR:HG22	2.04	0.40
1:E:641:ASP:O	1:E:642:LEU:HB3	2.21	0.40
1:E:970:TYR:HB2	1:E:971:GLN:H	1.70	0.40
1:E:1030:PRO:HB2	1:E:1031:ARG:NH1	2.36	0.40
1:E:2633:SER:OG	1:E:2636:GLU:HG3	2.22	0.40
1:E:2765:LYS:O	1:E:2769:ILE:HG22	2.22	0.40
1:E:2918:LYS:HD2	1:E:2918:LYS:C	2.46	0.40
1:E:3870:ILE:O	1:E:3874:VAL:HG23	2.20	0.40
1:E:3900:GLN:HA	1:E:3903:ARG:HH11	1.87	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:3943:VAL:HG23	1:E:3977:MET:SD	2.61	0.40
1:E:4618:GLU:OE1	1:E:4618:GLU:N	2.54	0.40
1:F:1257:GLN:HB2	1:F:1596:LEU:HD21	2.03	0.40
1:F:1843:ILE:HD13	1:F:1843:ILE:HA	1.92	0.40
1:F:4030:THR:HG23	1:F:4054:HIS:CE1	2.57	0.40
1:F:4751:THR:O	1:F:4755:ILE:HG13	2.21	0.40
2:G:48:VAL:HG12	2:G:49:ALA:H	1.86	0.40
1:A:660:PHE:HB3	1:A:787:LEU:HD22	2.04	0.40
1:A:897:LYS:HE2	1:A:915:HIS:NE2	2.36	0.40
1:A:908:ARG:NE	2:B:104:TYR:HB3	2.35	0.40
1:A:1124:PRO:HG3	1:A:1597:TRP:CE2	2.57	0.40
1:A:1588:HIS:CE1	1:A:1590:GLN:HE21	2.39	0.40
1:A:1686:LEU:HD13	1:A:1707:LEU:HD13	2.02	0.40
1:A:1802:GLU:HA	1:A:1805:LEU:HG	2.02	0.40
1:A:2535:ALA:HB1	1:A:2578:GLN:O	2.21	0.40
1:A:2676:PRO:HA	1:A:2677:PRO:HD3	1.99	0.40
1:A:3612:ARG:HA	1:A:3612:ARG:HH11	1.87	0.40
1:A:3754:VAL:HA	1:A:3757:THR:HG22	2.04	0.40
1:A:3811:ASN:O	1:A:3814:GLU:HG2	2.21	0.40
2:B:69:ILE:HB	2:B:80:LEU:HD13	2.04	0.40
1:C:143:LEU:HB3	1:C:190:ARG:HH21	1.87	0.40
1:C:227:TYR:HA	1:C:355:LYS:HA	2.03	0.40
1:C:921:PHE:HA	1:C:924:LEU:HB2	2.02	0.40
1:C:1978:PHE:CZ	1:C:1995:LEU:HD23	2.56	0.40
1:C:1999:HIS:CG	1:C:3627:TRP:HD1	2.39	0.40
1:C:2133:MET:HE3	1:C:2137:GLU:HB2	2.04	0.40
1:C:2588:LEU:HD21	1:C:2612:HIS:NE2	2.37	0.40
1:C:3214:MET:SD	1:C:3271:HIS:NE2	2.94	0.40
1:C:3386:GLU:HB3	1:C:3535:ASN:ND2	2.36	0.40
1:C:4044:LYS:HB2	1:C:4075:GLU:OE2	2.21	0.40
1:C:4168:LYS:HB3	1:C:4168:LYS:HE2	1.86	0.40
2:D:48:VAL:HG12	2:D:49:ALA:H	1.86	0.40
1:E:897:LYS:HE2	1:E:915:HIS:NE2	2.36	0.40
1:E:1420:LEU:O	1:E:1423:THR:HG22	2.21	0.40
1:E:1967:PRO:O	1:E:1971:GLN:HG3	2.21	0.40
1:E:2276:CYS:HB2	1:E:2290:ASN:ND2	2.36	0.40
1:E:2522:ALA:C	1:E:2525:PRO:HD2	2.46	0.40
1:E:2549:HIS:HD1	1:E:2549:HIS:H	1.68	0.40
1:E:2554:LEU:HG	1:E:2568:ILE:HD13	2.03	0.40
1:E:3644:ALA:HB2	1:E:3663:LEU:HD13	2.04	0.40
1:E:3811:ASN:O	1:E:3814:GLU:HG2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:525:SER:O	1:F:529:ILE:HG13	2.21	0.40
1:F:705:PRO:HG3	1:F:857:LEU:HD12	2.03	0.40
1:F:1124:PRO:HG3	1:F:1597:TRP:CE2	2.57	0.40
1:F:2154:PHE:CE1	1:F:2205:ILE:HD13	2.56	0.40
1:F:2221:LEU:HD12	1:F:2260:ASP:HB2	2.03	0.40
1:F:2564:GLN:O	1:F:2568:ILE:HG13	2.22	0.40
1:F:2850:ILE:HD12	1:F:2850:ILE:HA	1.96	0.40
1:F:3169:PHE:HE1	1:F:3244:TYR:OH	2.05	0.40
1:F:3369:TYR:CE2	1:F:3465:ILE:HA	2.57	0.40
1:F:3374:ARG:NH2	1:F:3431:ILE:O	2.55	0.40
1:F:3616:VAL:O	1:F:3620:LEU:HG	2.21	0.40
1:F:3754:VAL:HA	1:F:3757:THR:HG22	2.04	0.40
1:F:3902:GLN:HE21	1:F:3963:GLN:HG2	1.87	0.40
1:F:4020:LEU:HD12	1:F:4124:VAL:HG12	2.03	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	4094/4966 (82%)	3987 (97%)	106 (3%)	1 (0%)	100	100
1	C	4094/4966 (82%)	3986 (97%)	107 (3%)	1 (0%)	100	100
1	E	4094/4966 (82%)	3986 (97%)	107 (3%)	1 (0%)	100	100
1	F	4094/4966 (82%)	3983 (97%)	110 (3%)	1 (0%)	100	100
2	B	124/137 (90%)	118 (95%)	6 (5%)	0	100	100
2	D	124/137 (90%)	118 (95%)	6 (5%)	0	100	100
2	G	124/137 (90%)	118 (95%)	6 (5%)	0	100	100
2	I	124/137 (90%)	118 (95%)	6 (5%)	0	100	100
All	All	16872/20412 (83%)	16414 (97%)	454 (3%)	4 (0%)	100	100

All (4) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	2530	CYS
1	C	2530	CYS
1	E	2530	CYS
1	F	2530	CYS

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	3589/4355 (82%)	3581 (100%)	8 (0%)	87	85
1	C	3589/4355 (82%)	3582 (100%)	7 (0%)	87	85
1	E	3589/4355 (82%)	3580 (100%)	9 (0%)	86	84
1	F	3589/4355 (82%)	3581 (100%)	8 (0%)	87	85
2	B	103/114 (90%)	103 (100%)	0	100	100
2	D	103/114 (90%)	103 (100%)	0	100	100
2	G	103/114 (90%)	103 (100%)	0	100	100
2	I	103/114 (90%)	103 (100%)	0	100	100
All	All	14768/17876 (83%)	14736 (100%)	32 (0%)	85	85

All (32) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	944	LEU
1	A	2441	MET
1	A	2506	LEU
1	A	2519	LEU
1	A	2638	HIS
1	A	3167	ILE
1	A	3372	LEU
1	A	4760	THR
1	C	944	LEU
1	C	2506	LEU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	2519	LEU
1	C	2638	HIS
1	C	3167	ILE
1	C	3372	LEU
1	C	4760	THR
1	E	944	LEU
1	E	2441	MET
1	E	2506	LEU
1	E	2519	LEU
1	E	2604	MET
1	E	2638	HIS
1	E	3167	ILE
1	E	3372	LEU
1	E	4760	THR
1	F	944	LEU
1	F	2441	MET
1	F	2506	LEU
1	F	2519	LEU
1	F	2638	HIS
1	F	3167	ILE
1	F	3372	LEU
1	F	4760	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (118) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	150	GLN
1	A	238	HIS
1	A	375	GLN
1	A	476	GLN
1	A	608	HIS
1	A	888	ASN
1	A	1143	GLN
1	A	1171	HIS
1	A	1211	GLN
1	A	1294	ASN
1	A	1498	GLN
1	A	1588	HIS
1	A	1936	GLN
1	A	2058	GLN
1	A	2151	ASN
1	A	2194	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2480	GLN
1	A	2972	GLN
1	A	3033	HIS
1	A	3177	HIS
1	A	3409	HIS
1	A	3721	GLN
1	A	3849	HIS
1	A	3881	GLN
1	A	3902	GLN
1	A	4008	ASN
1	A	4793	ASN
2	B	76	ASN
2	B	81	GLN
2	B	105	ASN
1	C	150	GLN
1	C	238	HIS
1	C	375	GLN
1	C	476	GLN
1	C	608	HIS
1	C	888	ASN
1	C	927	GLN
1	C	1143	GLN
1	C	1171	HIS
1	C	1211	GLN
1	C	1294	ASN
1	C	1588	HIS
1	C	1936	GLN
1	C	2058	GLN
1	C	2151	ASN
1	C	2194	ASN
1	C	2480	GLN
1	C	2972	GLN
1	C	3177	HIS
1	C	3562	GLN
1	C	3721	GLN
1	C	3849	HIS
1	C	3881	GLN
1	C	3902	GLN
1	C	4008	ASN
1	C	4793	ASN
2	D	76	ASN
2	D	81	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
2	D	105	ASN
1	E	150	GLN
1	E	238	HIS
1	E	375	GLN
1	E	476	GLN
1	E	608	HIS
1	E	888	ASN
1	E	1143	GLN
1	E	1171	HIS
1	E	1211	GLN
1	E	1294	ASN
1	E	1588	HIS
1	E	1936	GLN
1	E	2058	GLN
1	E	2151	ASN
1	E	2194	ASN
1	E	2480	GLN
1	E	2972	GLN
1	E	3033	HIS
1	E	3126	GLN
1	E	3177	HIS
1	E	3485	GLN
1	E	3562	GLN
1	E	3721	GLN
1	E	3849	HIS
1	E	3881	GLN
1	E	3902	GLN
1	E	4008	ASN
1	E	4793	ASN
1	F	150	GLN
1	F	375	GLN
1	F	476	GLN
1	F	608	HIS
1	F	888	ASN
1	F	1143	GLN
1	F	1171	HIS
1	F	1211	GLN
1	F	1294	ASN
1	F	1498	GLN
1	F	1588	HIS
1	F	1936	GLN
1	F	2058	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	F	2151	ASN
1	F	2194	ASN
1	F	2480	GLN
1	F	2628	ASN
1	F	2972	GLN
1	F	3177	HIS
1	F	3485	GLN
1	F	3721	GLN
1	F	3849	HIS
1	F	3881	GLN
1	F	3902	GLN
1	F	4793	ASN
2	G	76	ASN
2	G	81	GLN
2	G	105	ASN
2	I	76	ASN
2	I	81	GLN
2	I	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	$\# Z > 2$
4	CFF	C	5102	-	15,15,15	0.59	0	23,23,23	0.72	1 (4%)
3	ATP	A	5101	-	32,33,33	0.35	0	48,52,52	0.33	0
3	ATP	C	5101	-	32,33,33	0.35	0	48,52,52	0.33	0
4	CFF	A	5102	-	15,15,15	0.59	0	23,23,23	0.71	1 (4%)
4	CFF	F	5102	-	15,15,15	0.59	0	23,23,23	0.72	1 (4%)
3	ATP	E	5101	-	32,33,33	0.35	0	48,52,52	0.33	0
3	ATP	F	5101	-	32,33,33	0.35	0	48,52,52	0.33	0
4	CFF	E	5102	-	15,15,15	0.59	0	23,23,23	0.71	1 (4%)

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
4	CFF	C	5102	-	-	-	0/2/2/2
3	ATP	A	5101	-	-	5/22/38/38	0/3/3/3
3	ATP	C	5101	-	-	5/22/38/38	0/3/3/3
4	CFF	A	5102	-	-	-	0/2/2/2
4	CFF	F	5102	-	-	-	0/2/2/2
3	ATP	E	5101	-	-	5/22/38/38	0/3/3/3
3	ATP	F	5101	-	-	5/22/38/38	0/3/3/3
4	CFF	E	5102	-	-	-	0/2/2/2

There are no bond length outliers.

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	F	5102	CFF	C12-N3-C2	2.36	121.45	117.33
4	C	5102	CFF	C12-N3-C2	2.34	121.41	117.33
4	E	5102	CFF	C12-N3-C2	2.34	121.41	117.33
4	A	5102	CFF	C12-N3-C2	2.32	121.37	117.33

There are no chirality outliers.

All (20) torsion outliers are listed below:

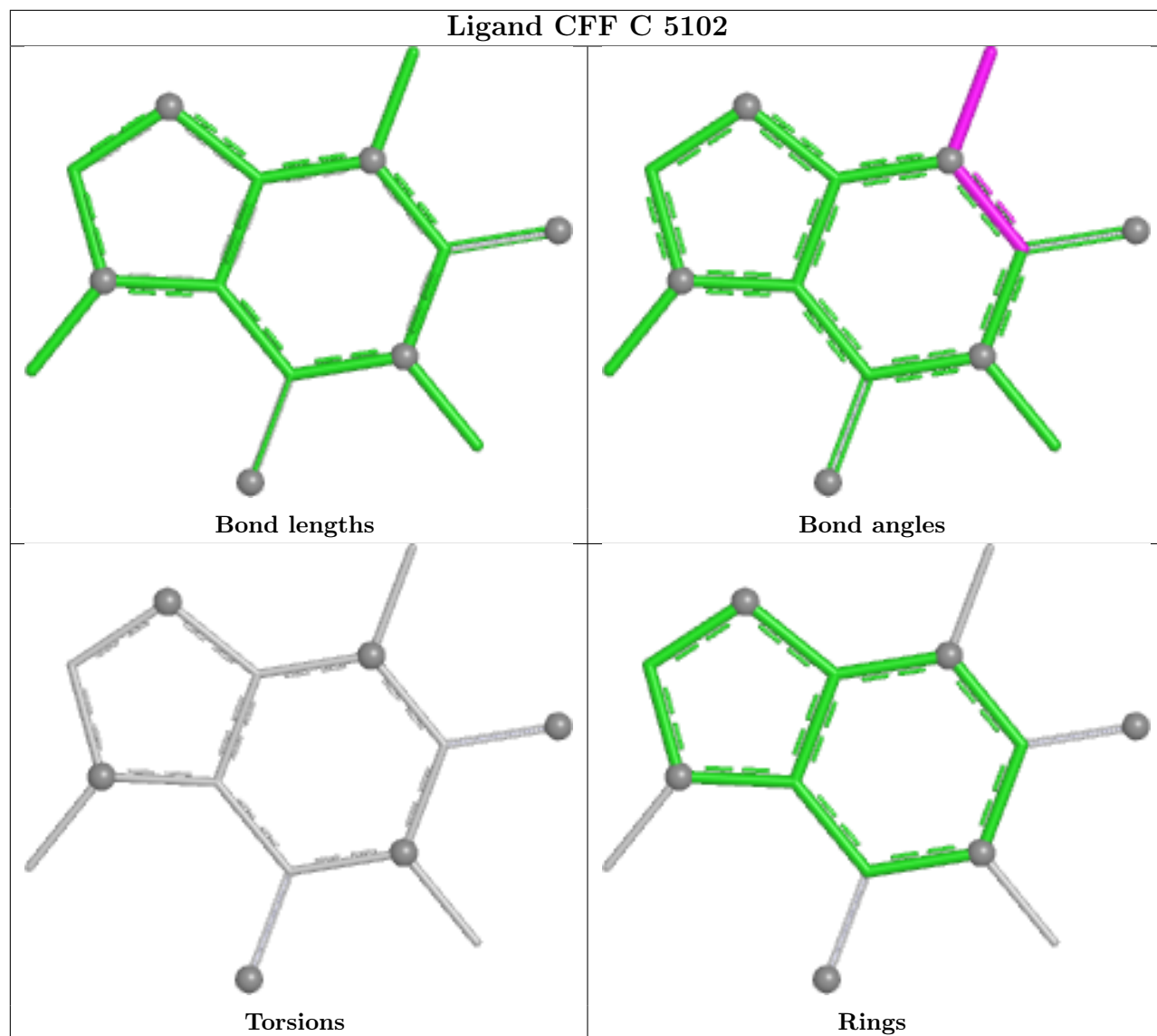
Mol	Chain	Res	Type	Atoms
3	A	5101	ATP	C5'-O5'-PA-O1A
3	A	5101	ATP	C5'-O5'-PA-O3A
3	C	5101	ATP	C5'-O5'-PA-O1A
3	C	5101	ATP	C5'-O5'-PA-O3A
3	E	5101	ATP	C5'-O5'-PA-O1A
3	E	5101	ATP	C5'-O5'-PA-O3A
3	F	5101	ATP	C5'-O5'-PA-O1A
3	F	5101	ATP	C5'-O5'-PA-O3A
3	A	5101	ATP	C4'-C5'-O5'-PA
3	C	5101	ATP	C4'-C5'-O5'-PA
3	E	5101	ATP	C4'-C5'-O5'-PA
3	F	5101	ATP	C4'-C5'-O5'-PA
3	A	5101	ATP	C5'-O5'-PA-O2A
3	C	5101	ATP	C5'-O5'-PA-O2A
3	E	5101	ATP	C5'-O5'-PA-O2A
3	F	5101	ATP	C5'-O5'-PA-O2A
3	A	5101	ATP	PG-O3B-PB-O2B
3	C	5101	ATP	PG-O3B-PB-O2B
3	E	5101	ATP	PG-O3B-PB-O2B
3	F	5101	ATP	PG-O3B-PB-O2B

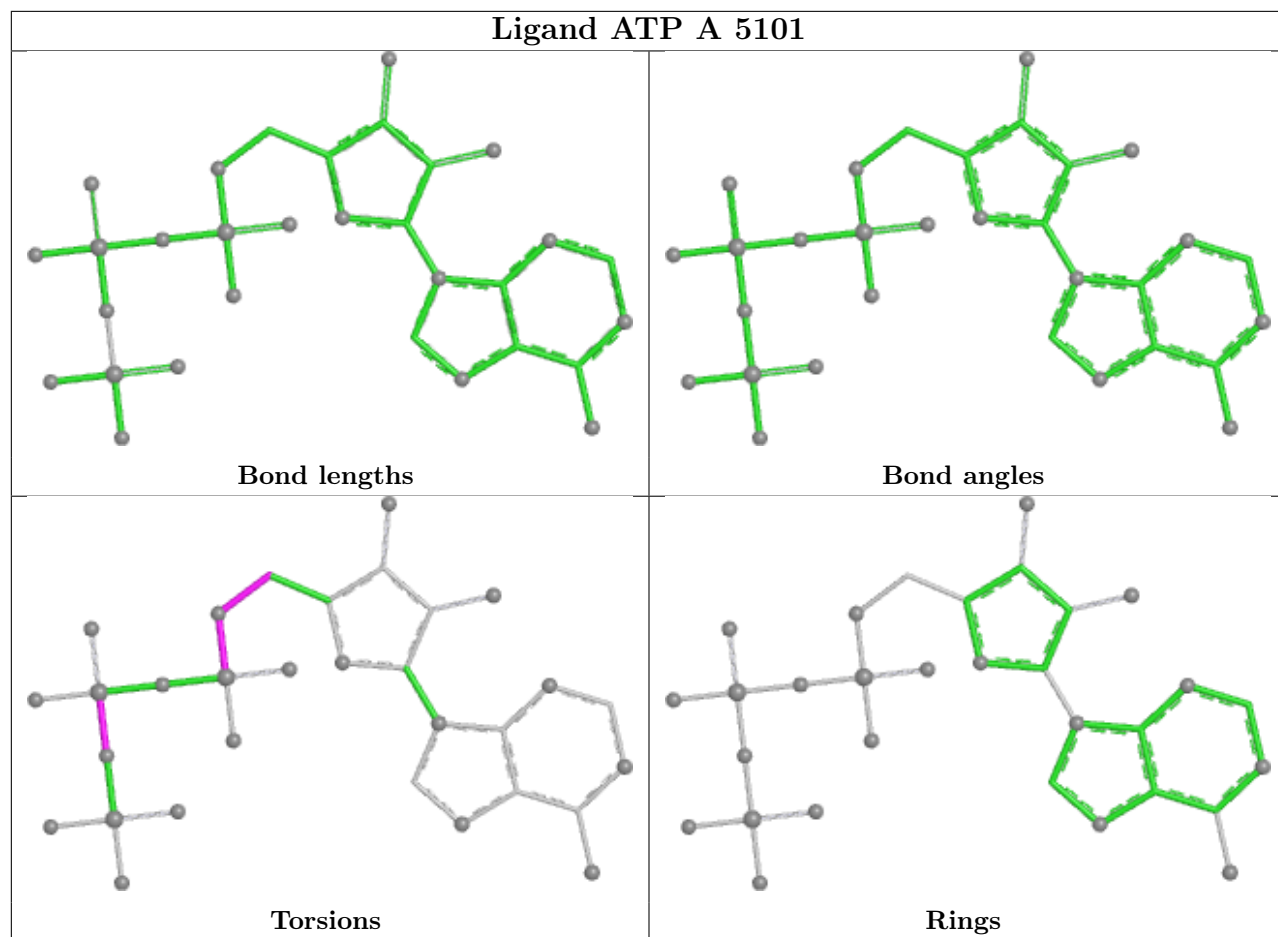
There are no ring outliers.

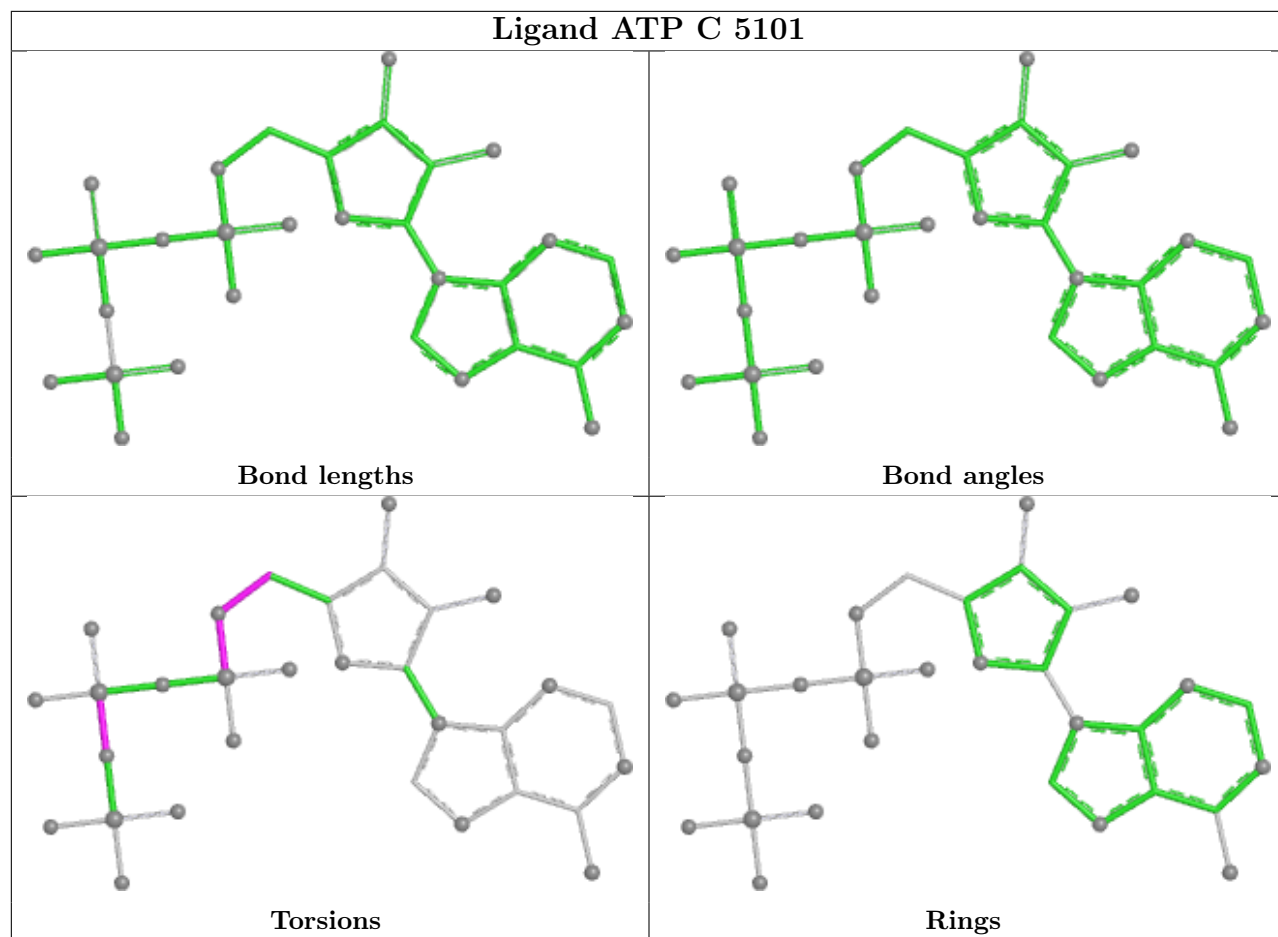
4 monomers are involved in 12 short contacts:

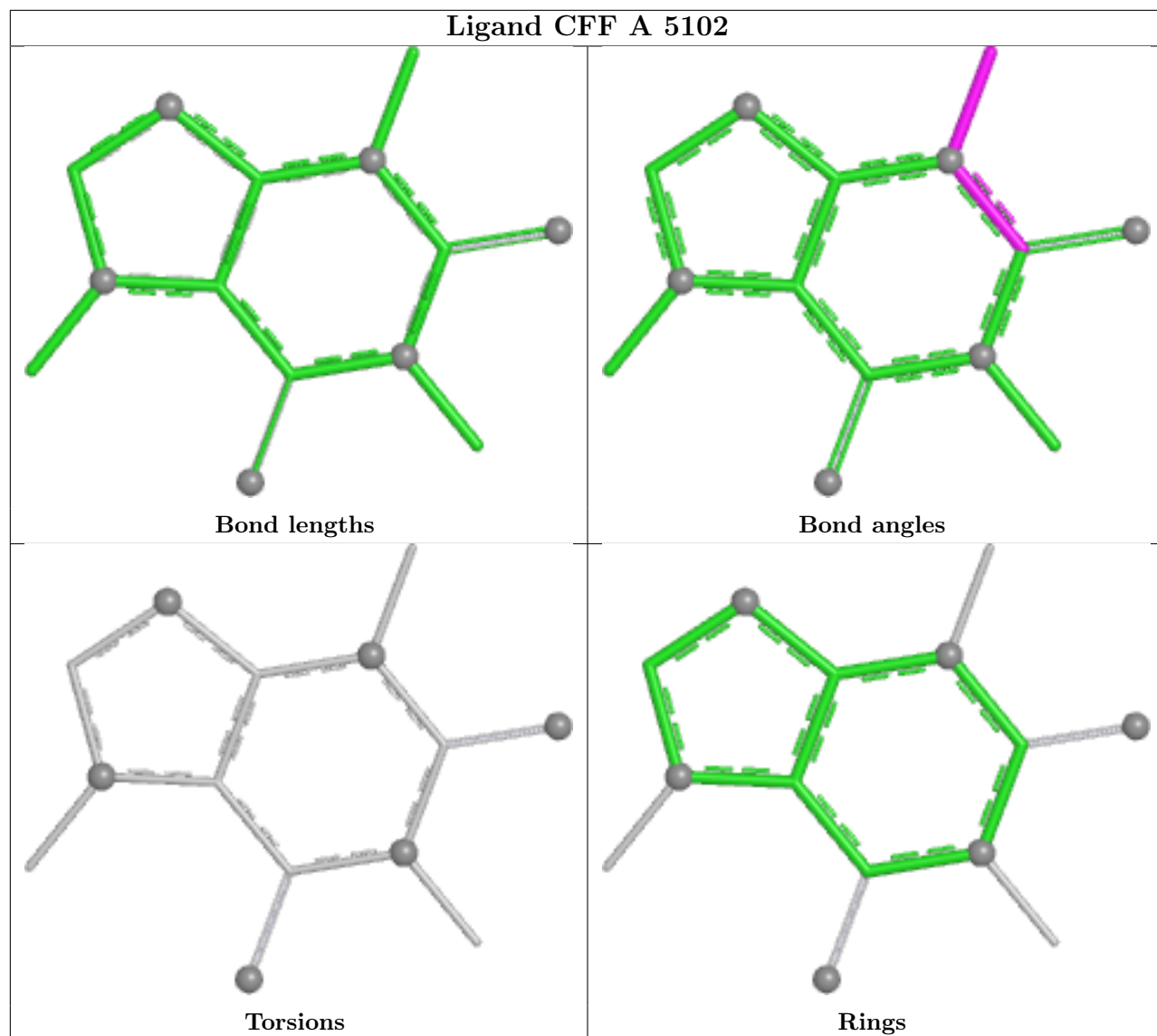
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	A	5101	ATP	3	0
3	C	5101	ATP	3	0
3	E	5101	ATP	3	0
3	F	5101	ATP	3	0

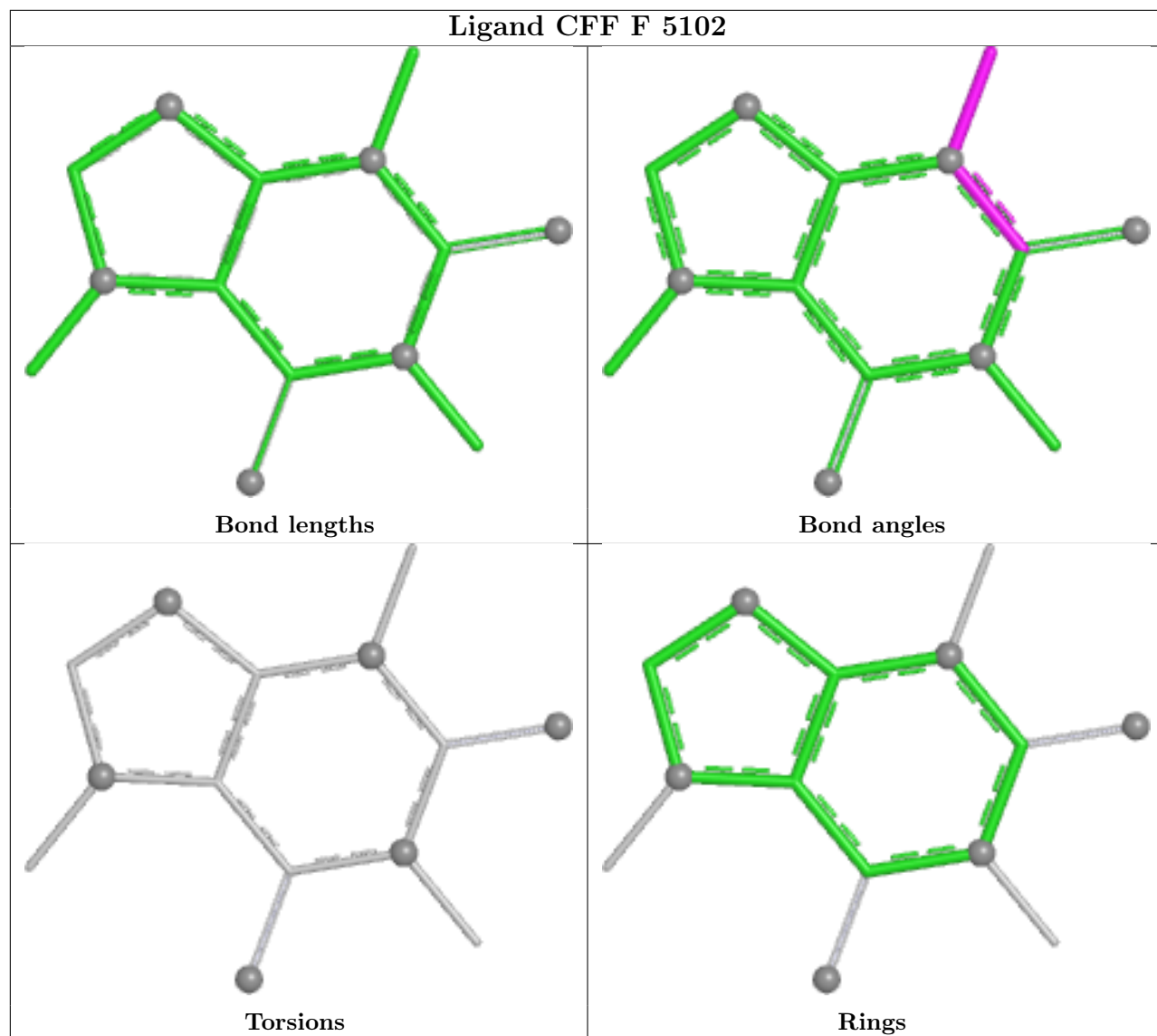
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

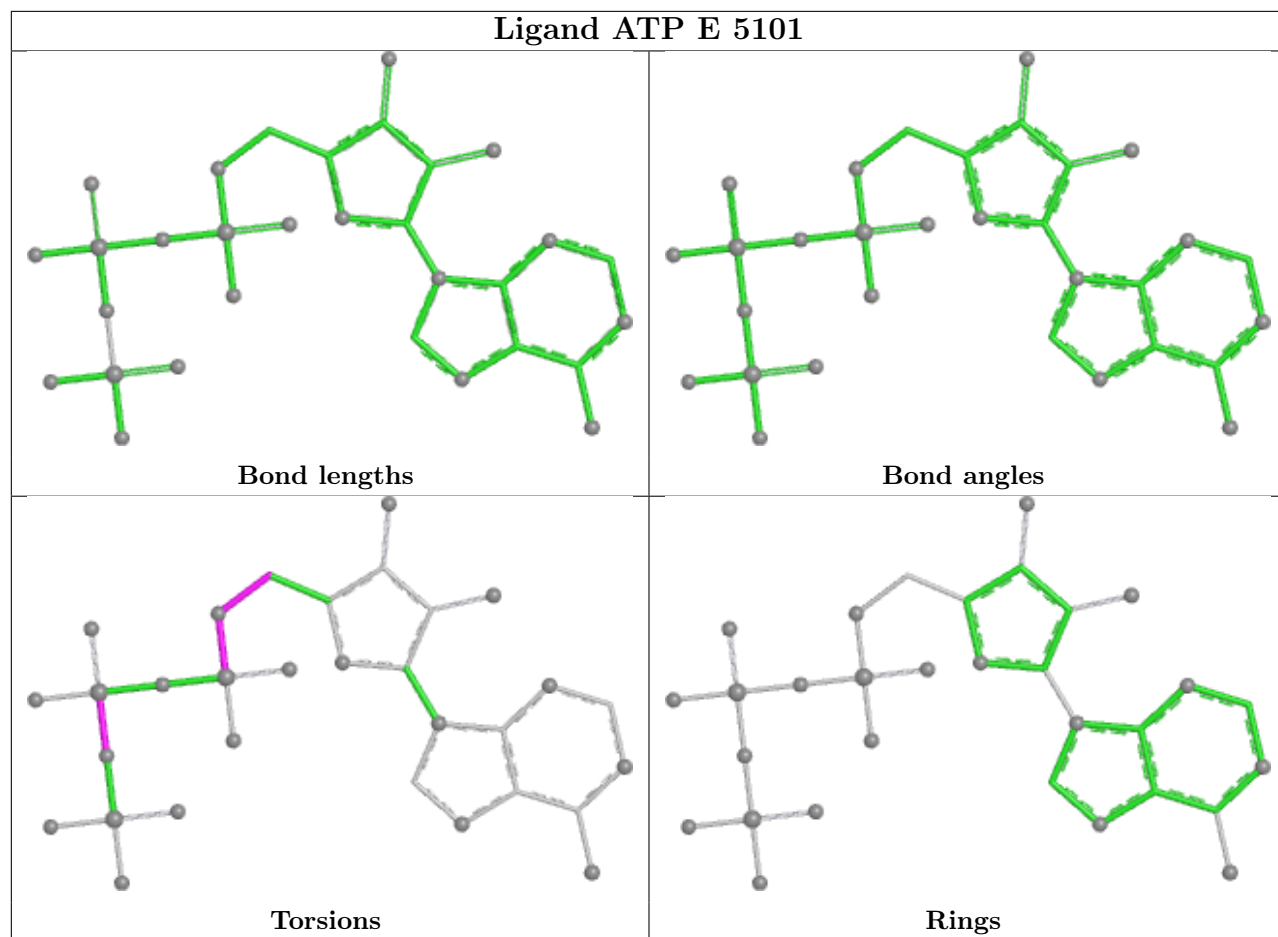


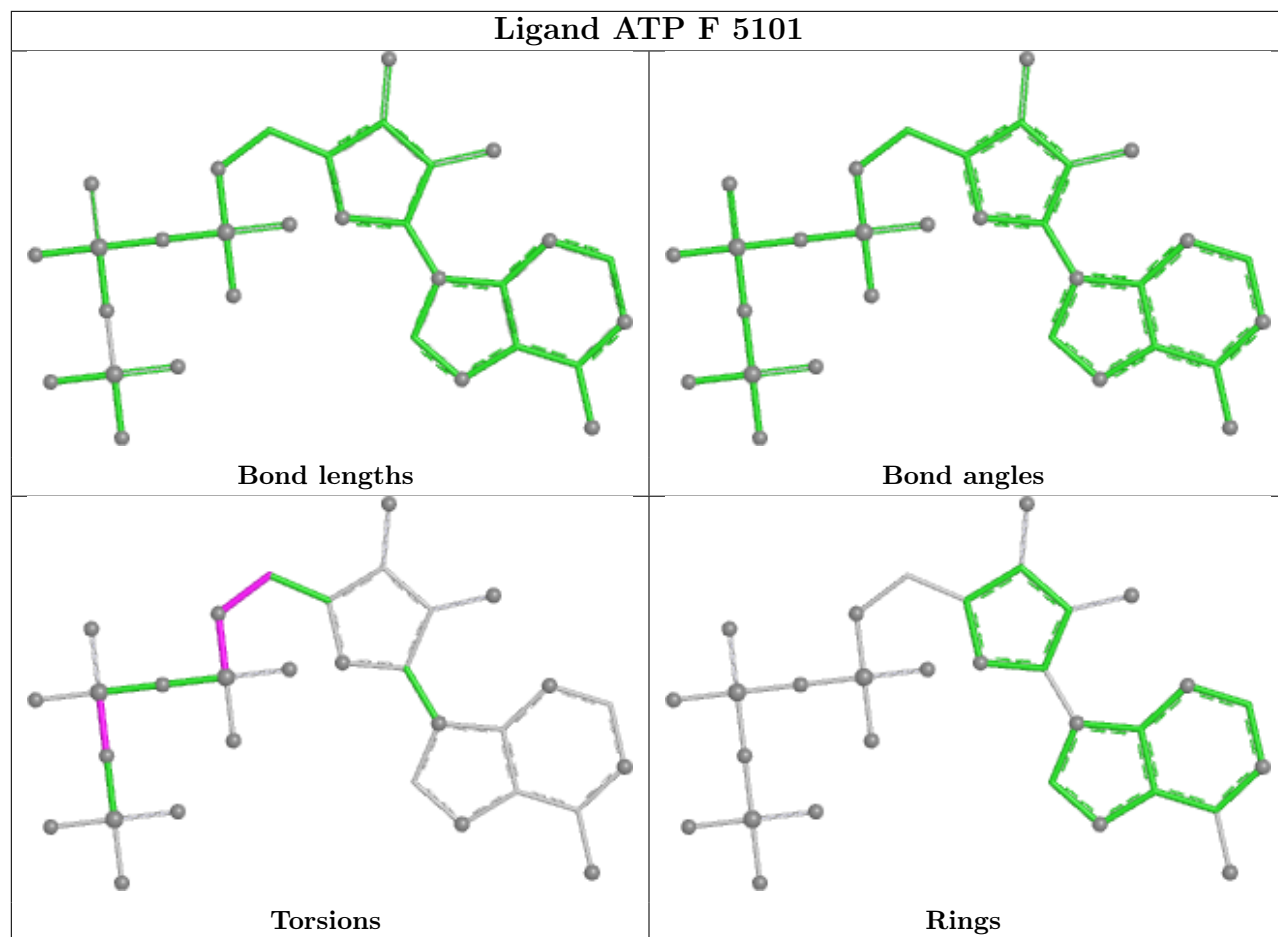


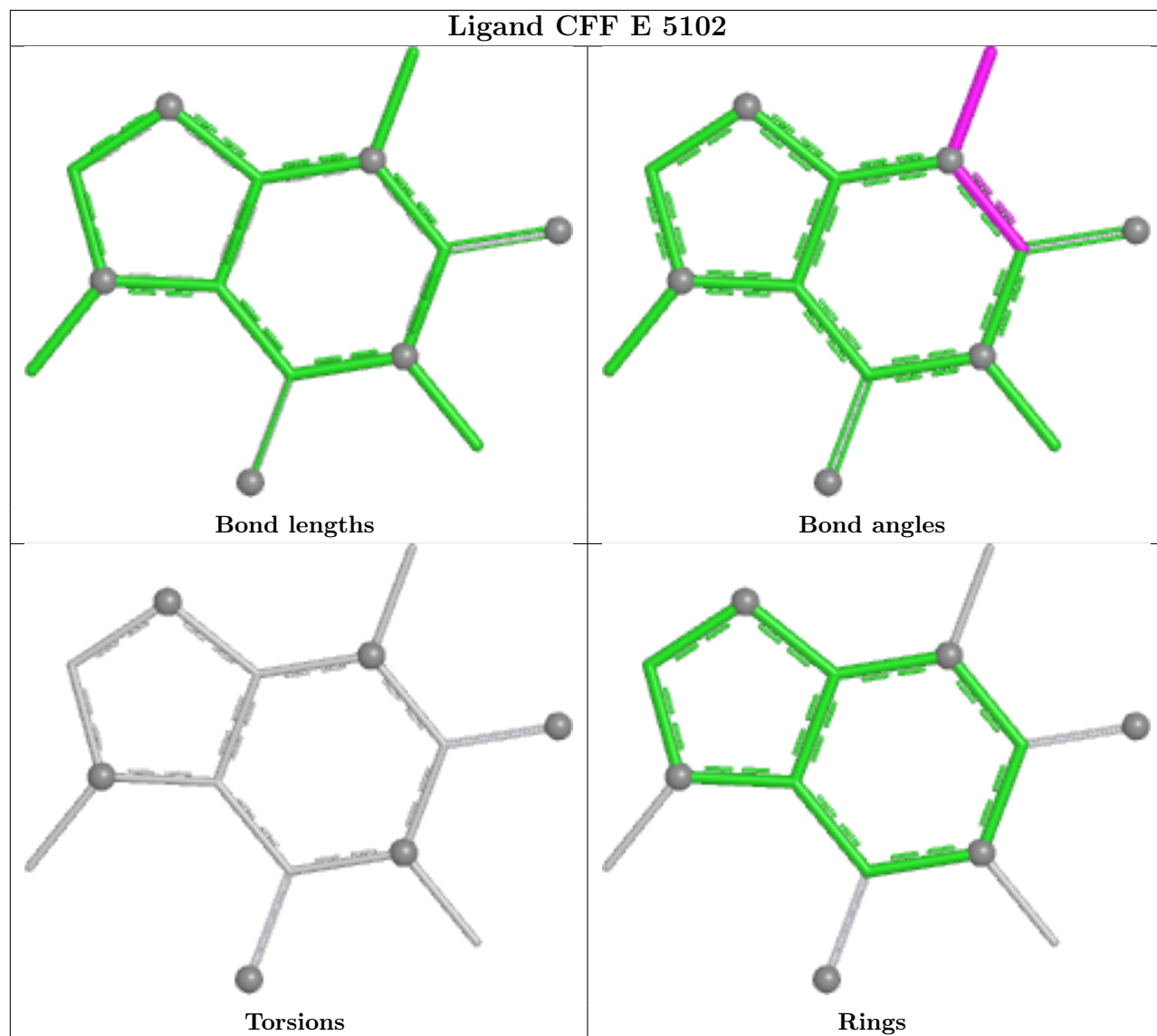












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

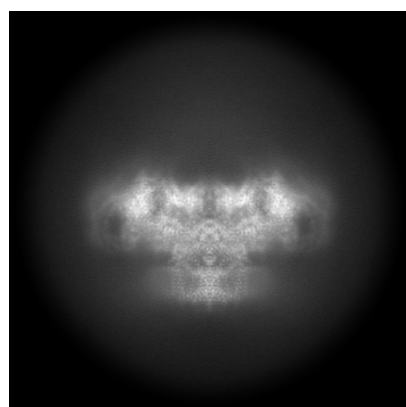
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-19463. These allow visual inspection of the internal detail of the map and identification of artifacts.

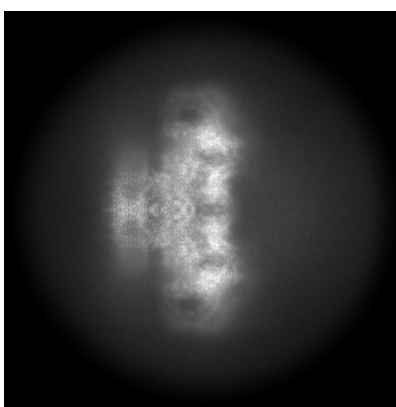
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

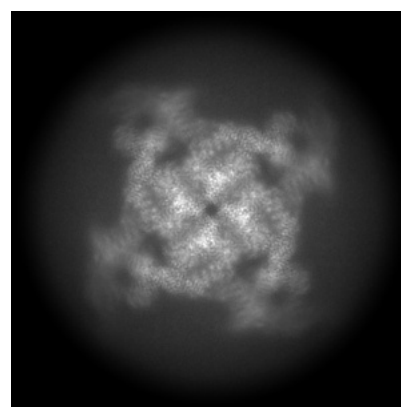
6.1.1 Primary map



X



Y

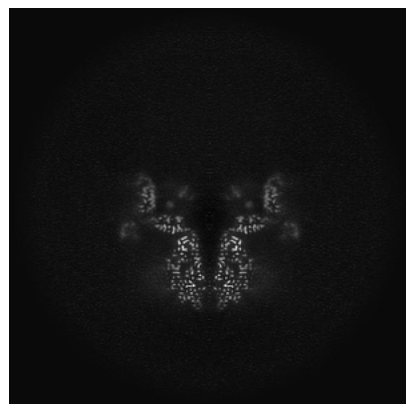


Z

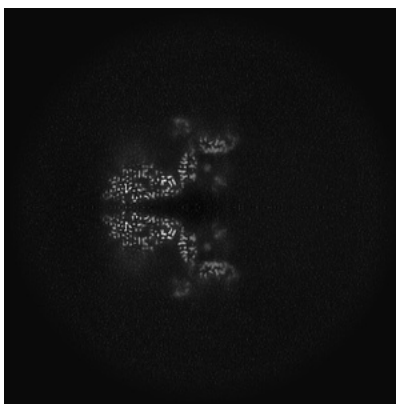
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

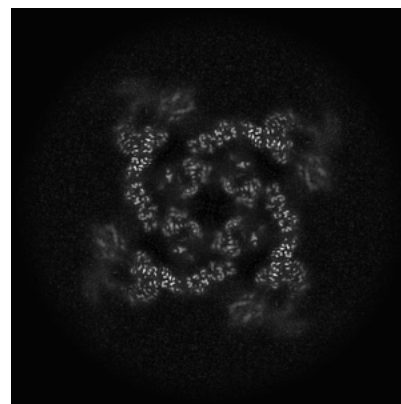
6.2.1 Primary map



X Index: 168



Y Index: 168

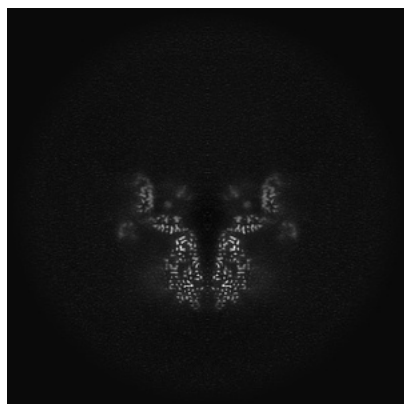


Z Index: 168

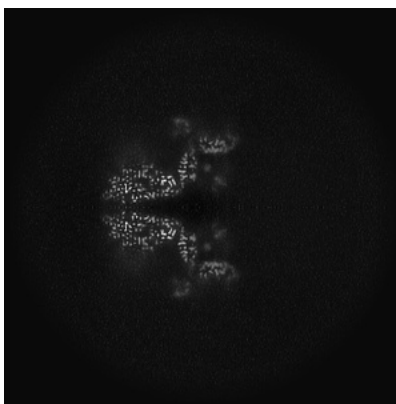
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

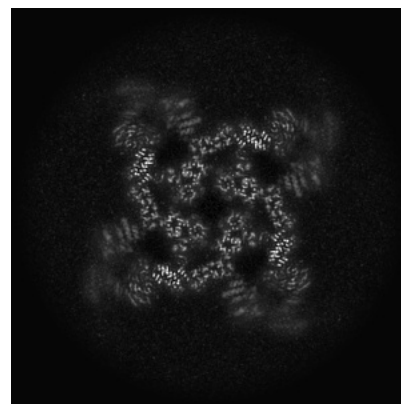
6.3.1 Primary map



X Index: 168



Y Index: 168

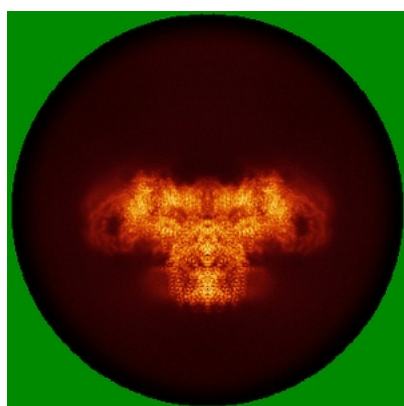


Z Index: 173

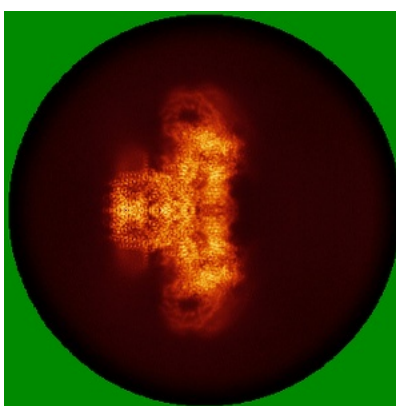
The images above show the largest variance slices of the map in three orthogonal directions.

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

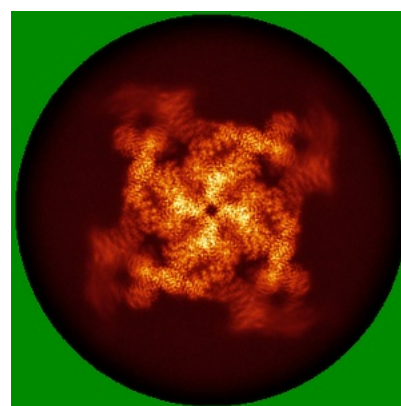
6.4.1 Primary map



X



Y

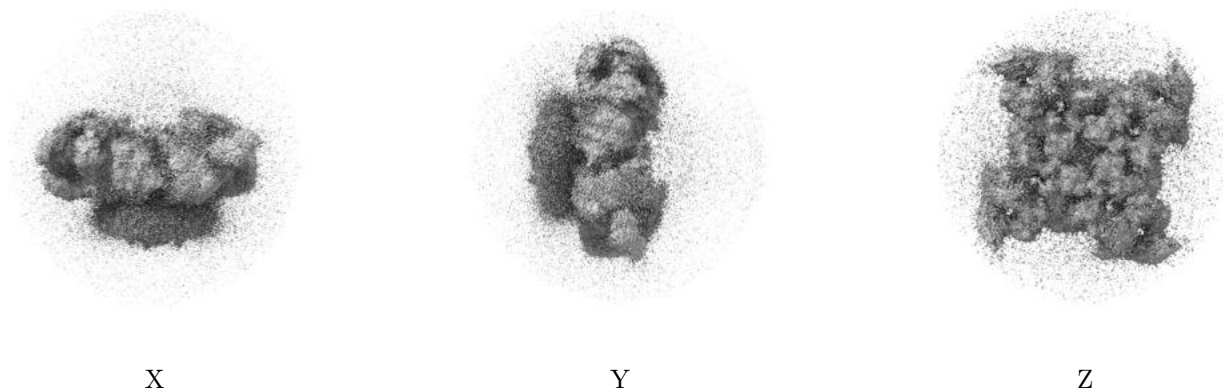


Z

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

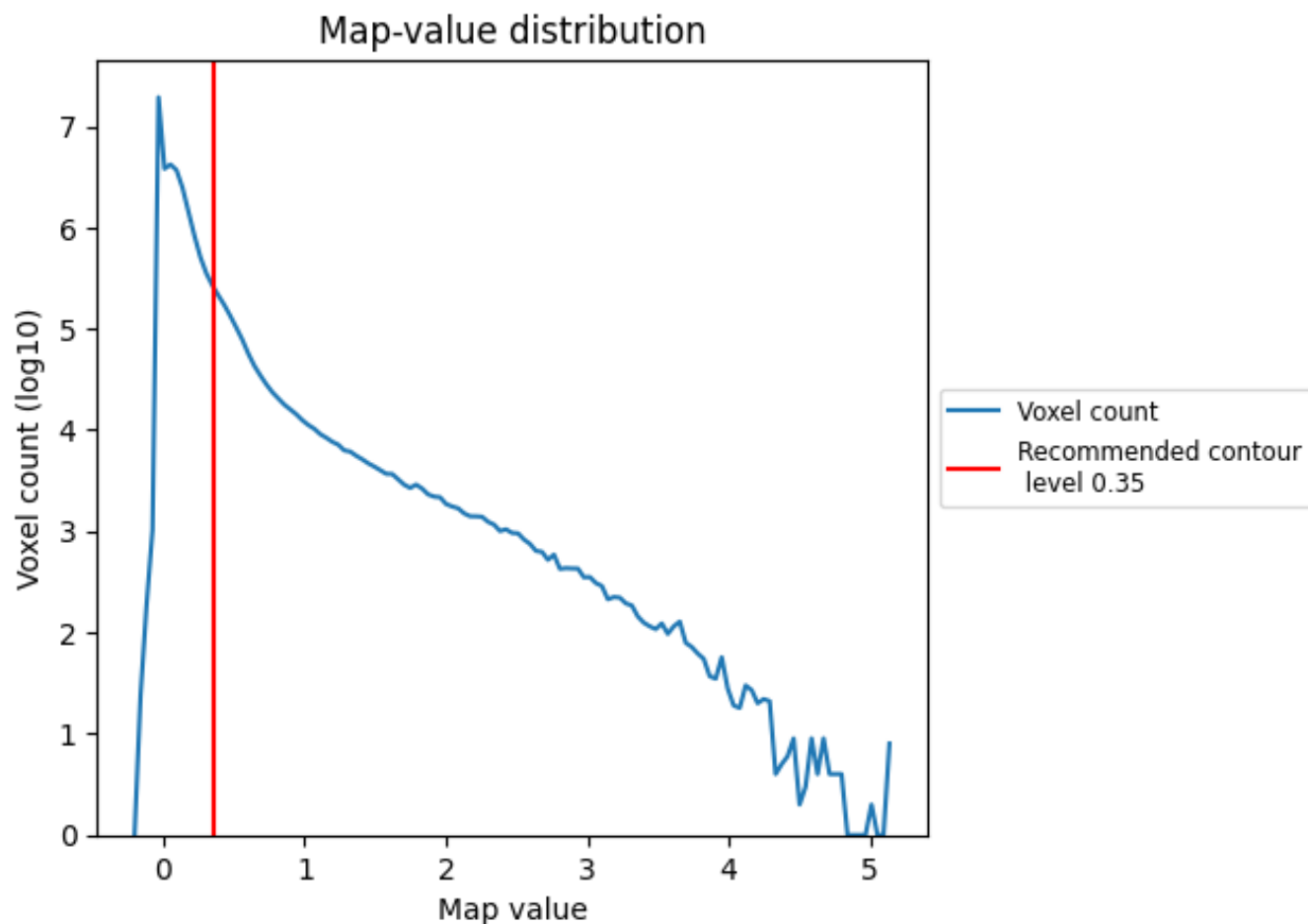
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

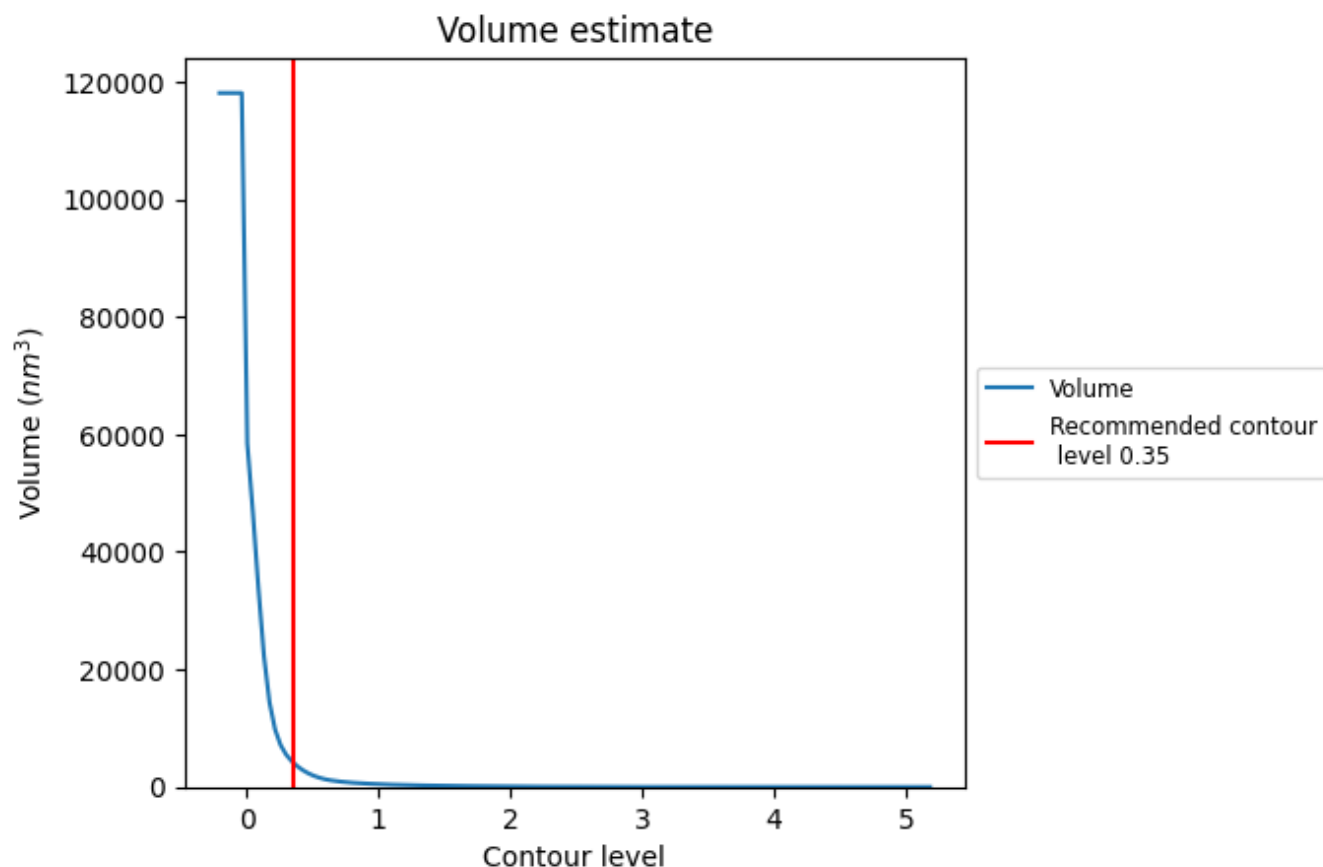
This section contains the results of statistical analysis of the map.

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.

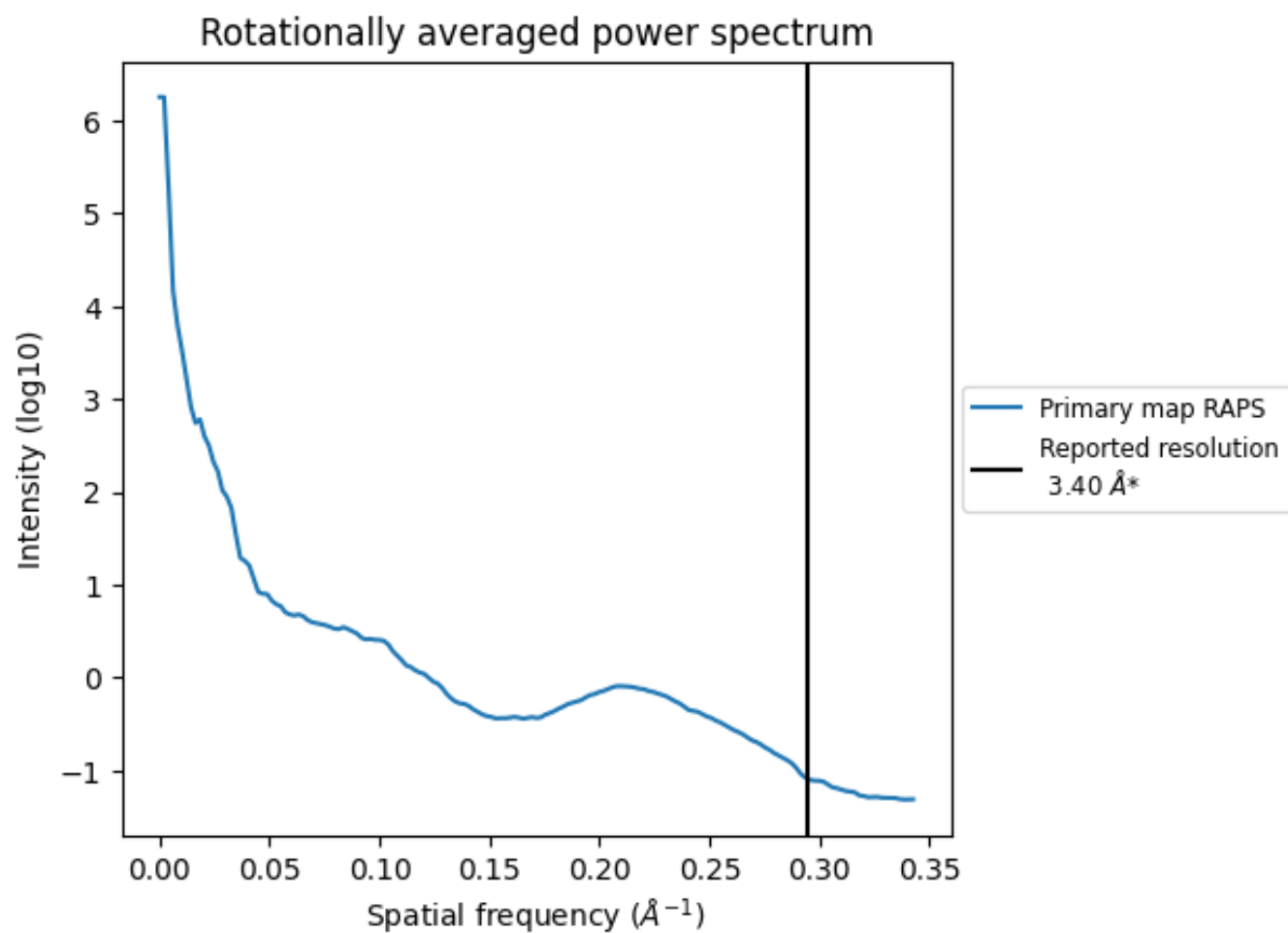
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 4230 nm^3 ; this corresponds to an approximate mass of 3821 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 ⓘ

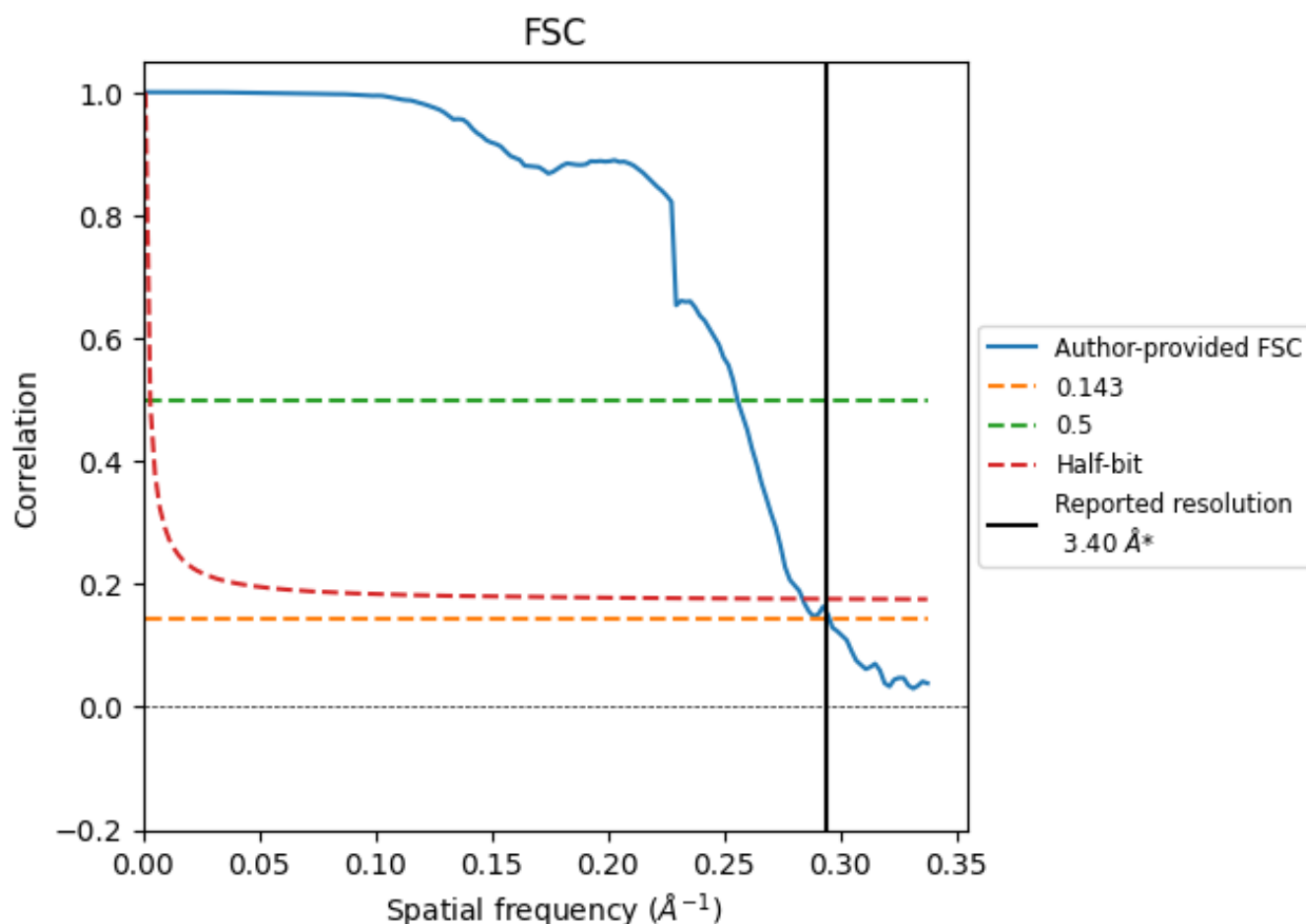


*Reported resolution corresponds to spatial frequency of 0.294 Å⁻¹

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 0.294 Å⁻¹

8.2 Resolution estimates [i](#)

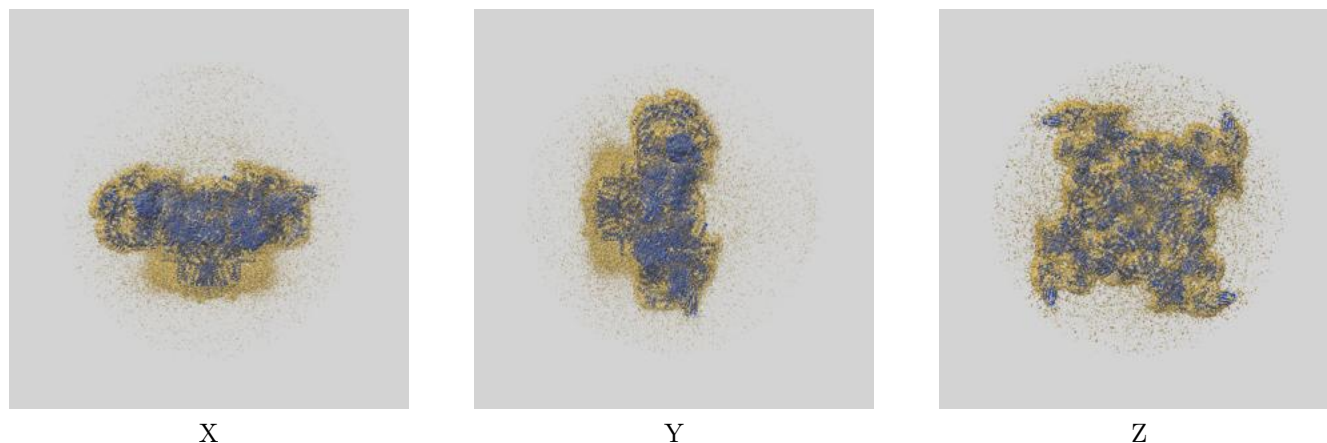
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.40	-	-
Author-provided FSC curve	3.39	3.91	3.52
Unmasked-calculated*	-	-	-

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

9 Map-model fit [i](#)

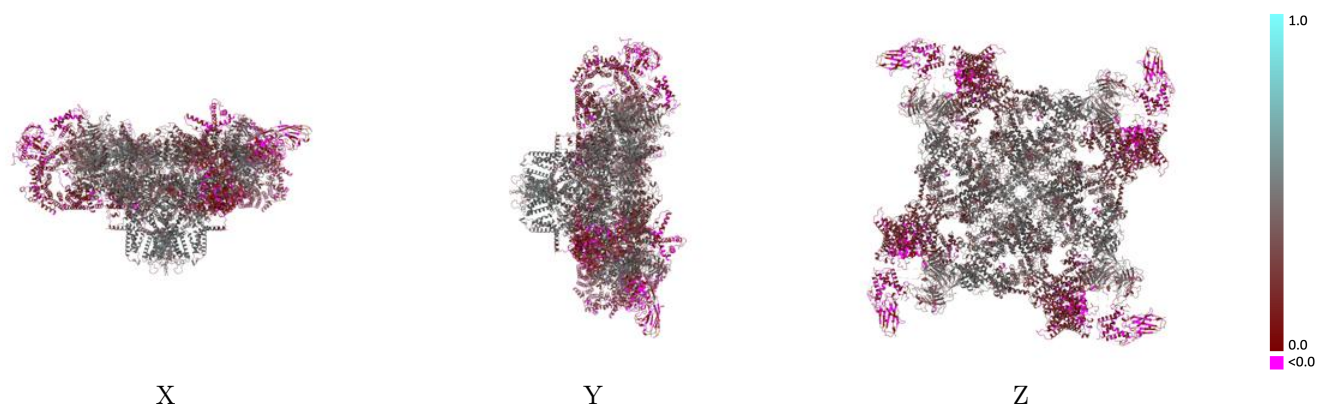
This section contains information regarding the fit between EMDB map EMD-19463 and PDB model 8RRS. Per-residue inclusion information can be found in [section 3](#) on [page 7](#).

9.1 Map-model overlay [i](#)



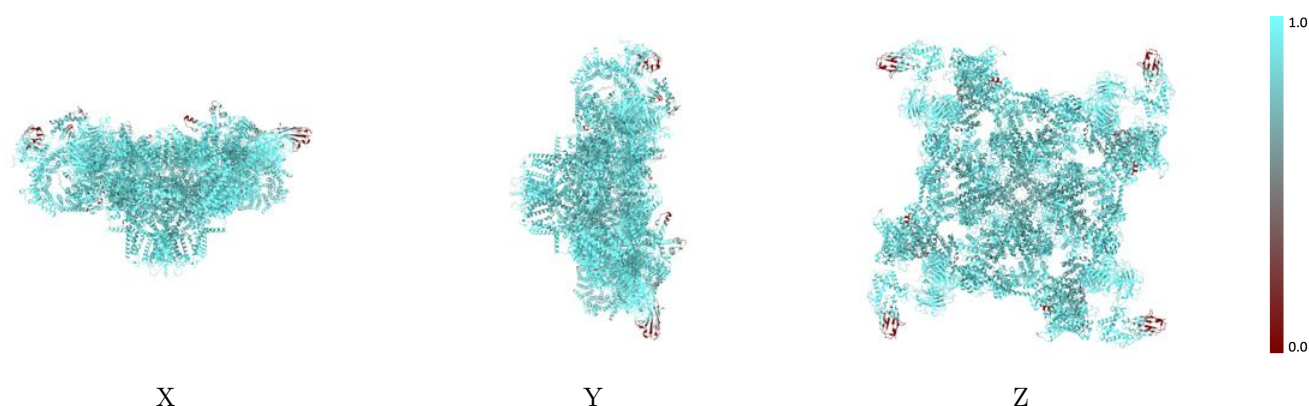
The images above show the 3D surface view of the map at the recommended contour level 0.35 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



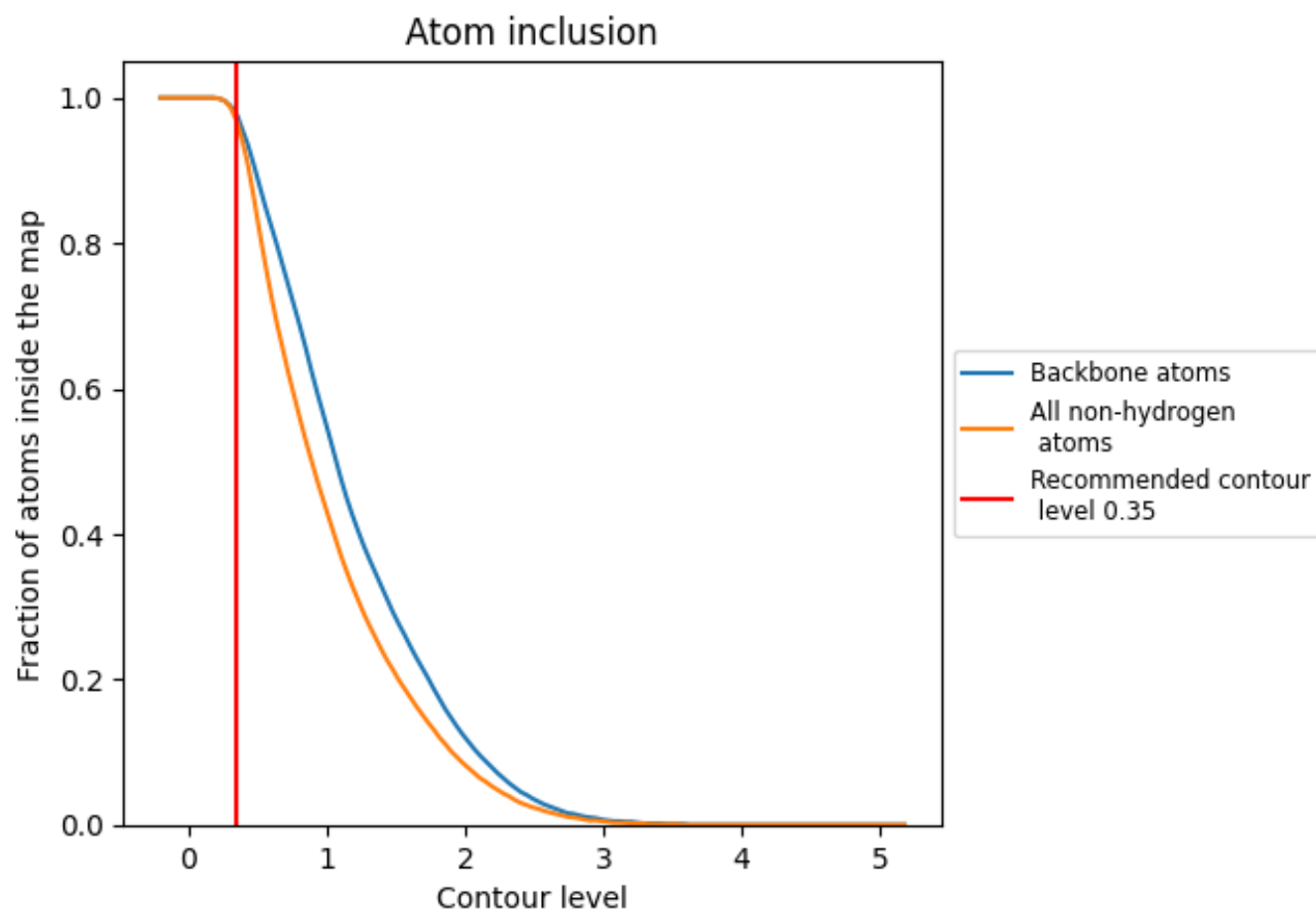
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.35).

9.4 Atom inclusion [i](#)



At the recommended contour level, 98% of all backbone atoms, 97% 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 (0.35) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9670	0.3070
A	0.9780	0.3140
B	0.5750	0.0800
C	0.9780	0.3140
D	0.5720	0.0810
E	0.9780	0.3130
F	0.9780	0.3130
G	0.5750	0.0790
I	0.5750	0.0790

1.0

0.0

<0.0