



Full wwPDB EM Validation Report ⓘ

Jun 16, 2025 – 05:17 PM EDT

PDB ID : 9E1D / pdb_00009e1d
EMDB ID : EMD-47390
Title : Structure of RyR1 in the primed state in the presence of enprofylline
Authors : Miotto, M.C.; Marks, A.R.
Deposited on : 2024-10-21
Resolution : 2.76 Å(reported)
Based on initial model : 7TZC

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.dev118
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0rc1
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.44

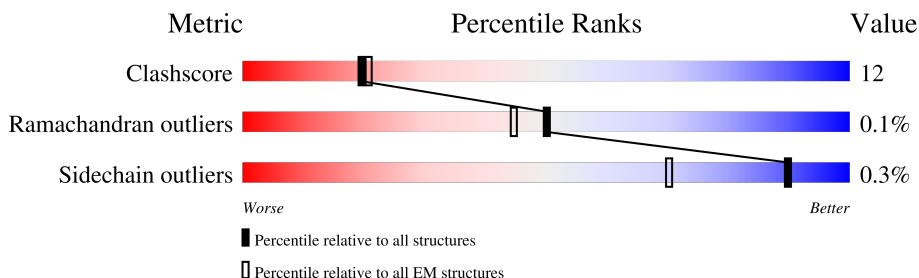
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 2.76 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	A	5037	20% 65% 22% 13%
1	B	5037	20% 66% 21% 13%
1	C	5037	20% 65% 21% 13%
1	D	5037	20% 65% 21% 13%
2	E	108	5% 71% 26% ...
2	F	108	5% 71% 26% ...
2	G	108	... 70% 27% ...
2	H	108	5% 70% 27% ...

2 Entry composition

There are 6 unique types of molecules in this entry. The entry contains 144112 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.

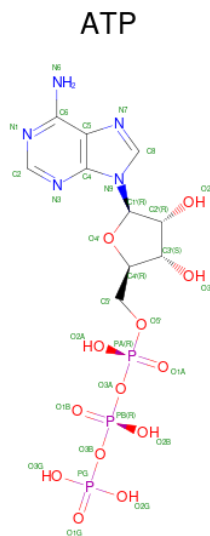
- Molecule 1 is a protein called Ryanodine receptor 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	4404	Total	C	N	O	S	9	0
			35150	22365	6063	6485	237		
1	B	4404	Total	C	N	O	S	9	0
			35150	22365	6063	6485	237		
1	D	4404	Total	C	N	O	S	9	0
			35150	22365	6063	6485	237		
1	C	4404	Total	C	N	O	S	9	0
			35150	22365	6063	6485	237		

- Molecule 2 is a protein called Peptidyl-prolyl cis-trans isomerase FKBP1A.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	E	107	Total	C	N	O	S	0	0
			831	527	146	154	4		
2	H	107	Total	C	N	O	S	0	0
			831	527	146	154	4		
2	G	107	Total	C	N	O	S	0	0
			831	527	146	154	4		
2	F	107	Total	C	N	O	S	0	0
			831	527	146	154	4		

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



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

- Molecule 4 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	AltConf
4	A	1	Total Ca 1 1	0
4	B	1	Total Ca 1 1	0
4	D	1	Total Ca 1 1	0
4	C	1	Total Ca 1 1	0

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

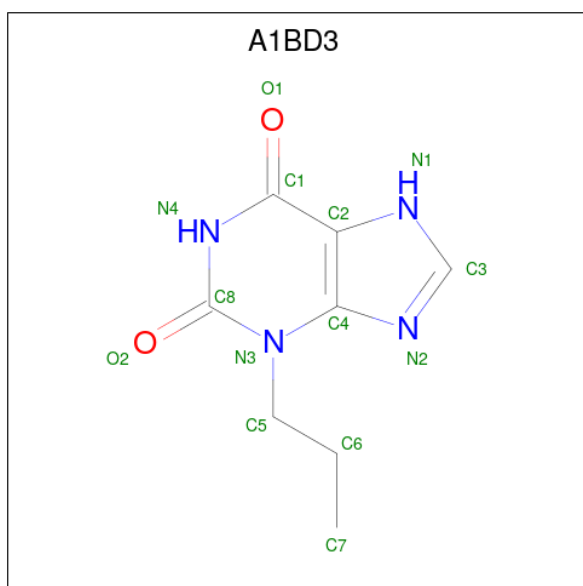
Mol	Chain	Residues	Atoms		AltConf
5	A	1	Total	Zn	0
			1	1	

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms		AltConf
5	B	1	Total	Zn	0
			1	1	
5	D	1	Total	Zn	0
			1	1	
5	C	1	Total	Zn	0
			1	1	

- Molecule 6 is enprofylline (CCD ID: A1BD3) (formula: $C_8H_{10}N_4O_2$) (labeled as "Ligand of Interest" by depositor).

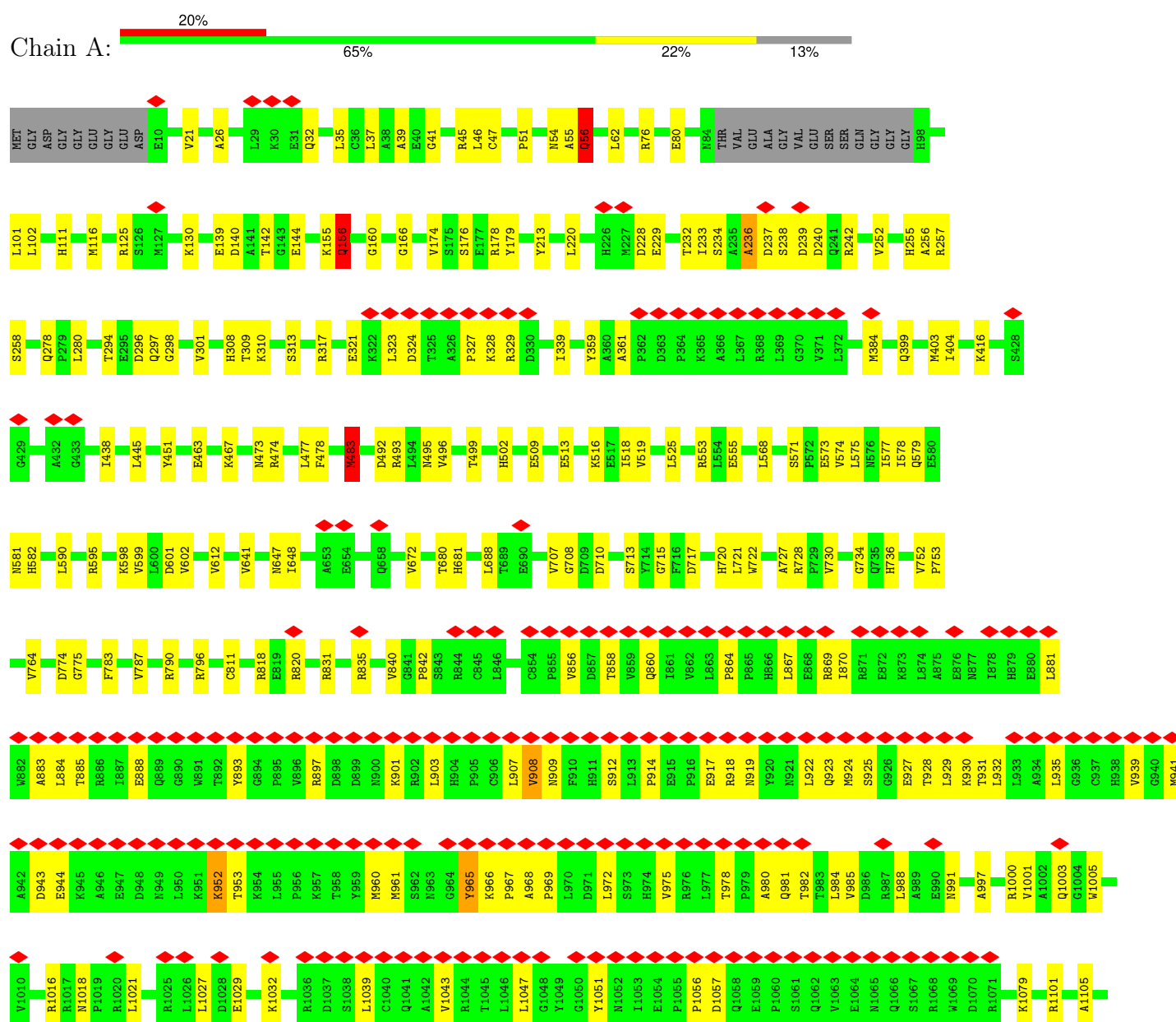


Mol	Chain	Residues	Atoms				AltConf
6	A	1	Total	C	N	O	0
			14	8	4	2	
6	B	1	Total	C	N	O	0
			14	8	4	2	
6	D	1	Total	C	N	O	0
			14	8	4	2	
6	C	1	Total	C	N	O	0
			14	8	4	2	

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.

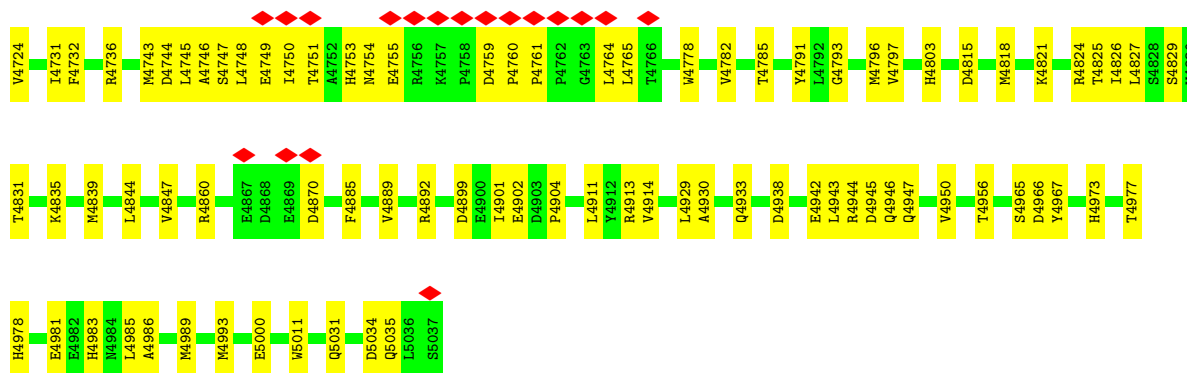
• Molecule 1: Ryanodine receptor 1



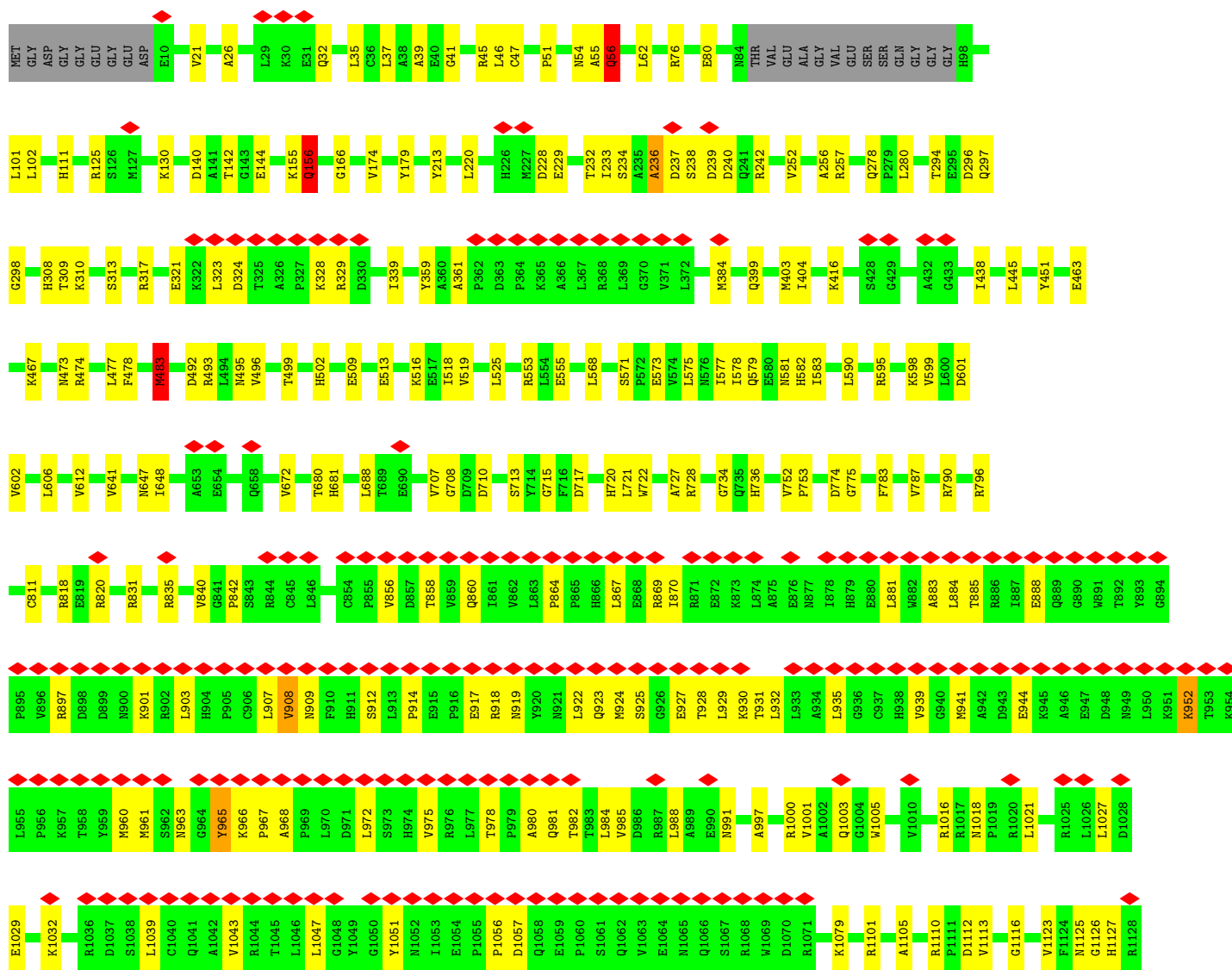








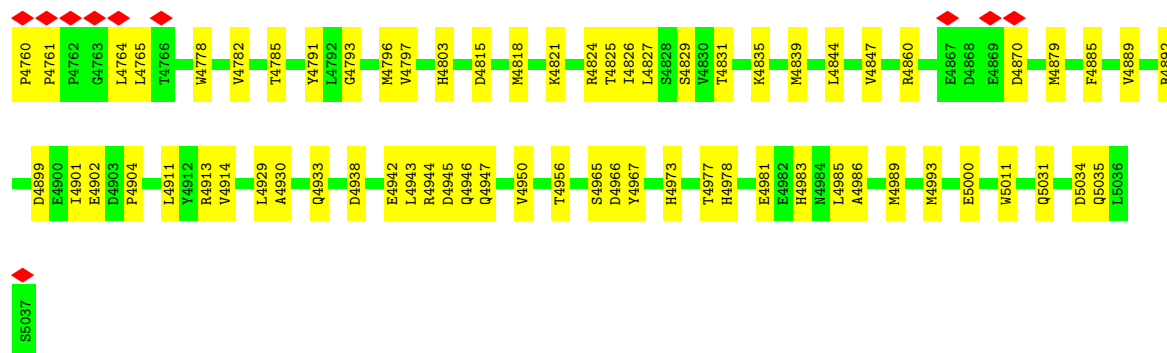
• Molecule 1: Ryanodine receptor 1



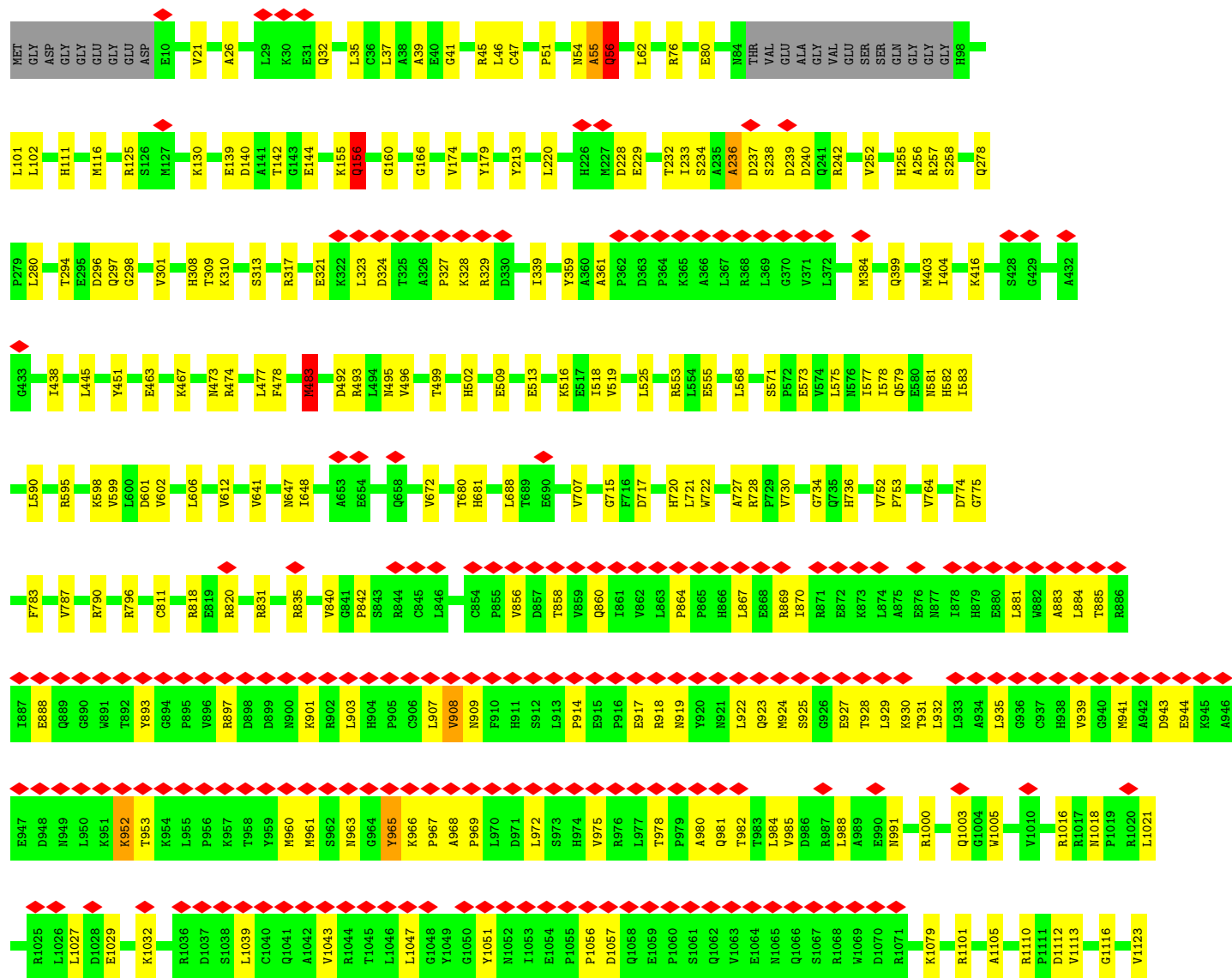




P4667	L4668	R4673	E4676	L4677	A4678	R4679	K4680	G4685	L4686	Y4687	E4690	Q4691	D4695	G4699	D4702	R4703	L4704	V4705	T4708	F4709	S4710	P4711	P4712	S4713	V4720	V4724	I4731	F4732	R4736	M4743	D4744	L4745	A4746	S4747	L4748	E4749	I4750	T4751	F4752	R4753	N4754	E4755	I4756	R4757	D4759	
ASP	MET	GLU	GLY	SER	ALA	GLY	VAL	GLY	GLY	GLY	GLY	GLY	SER	GLY	TRP	GLY	SER	GLY	ALA	ALA	GLY	ASP	GLU	GLY	GLY	GLU	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4655	I4659	V4666	
ALA	ASP	GLU	ASN	GLY	GLU	GLY	VAL	PRO	GLU	ALA	PRO	PRO	PRO	LYS	PRO	LYS	ALA	PRO	PRO	LYS	GLY	GLU	GLY	GLY	GLY	GLY	ALA	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GLY	M4627	Y4628	Y4629	Y4630	F4631	E4633	E4634	L4643	A4644	C4645	L4649	H4650	T4651	L4652	Y4653	A4654	F4657	GLY	ASP
ASP	GLY	PRO	PHE	ARG	PRO	GLY	VAL	GLY	GLY	GLY	GLY	GLY	THR	THR	PRO	LYS	LYS	ALA	PRO	PRO	PRO	GLY	GLY	GLY	GLY	GLY	GL																			



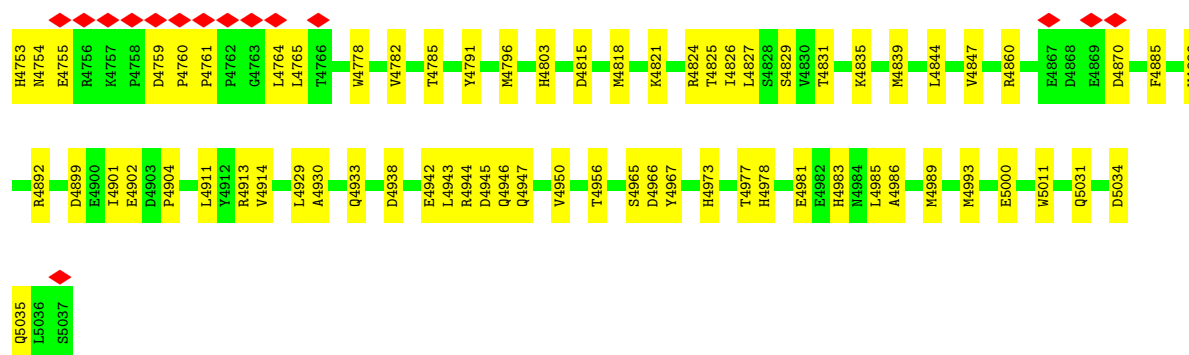
• Molecule 1: Ryanodine receptor 1



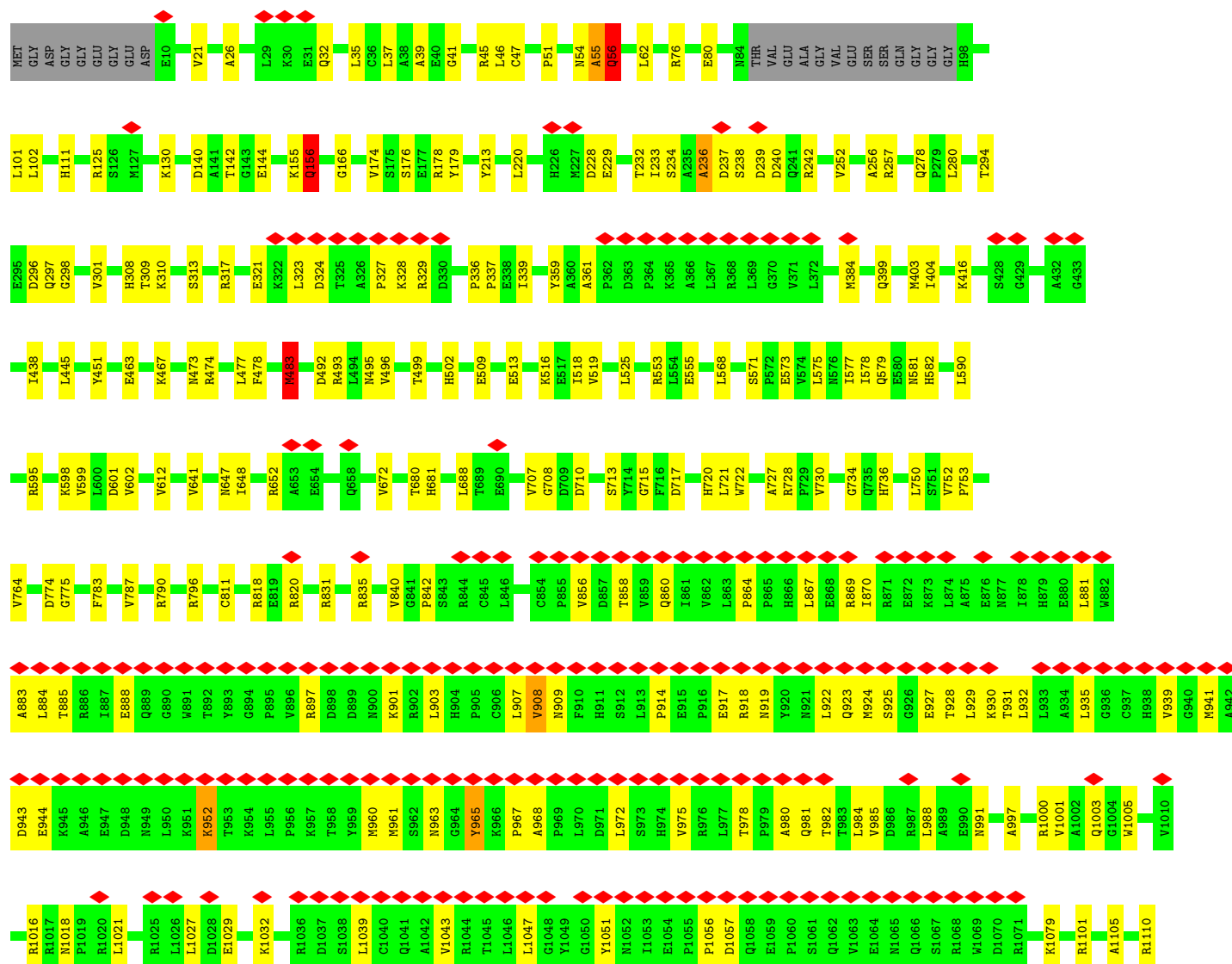




WORLDWIDE
PDB
PROTEIN DATA BANK



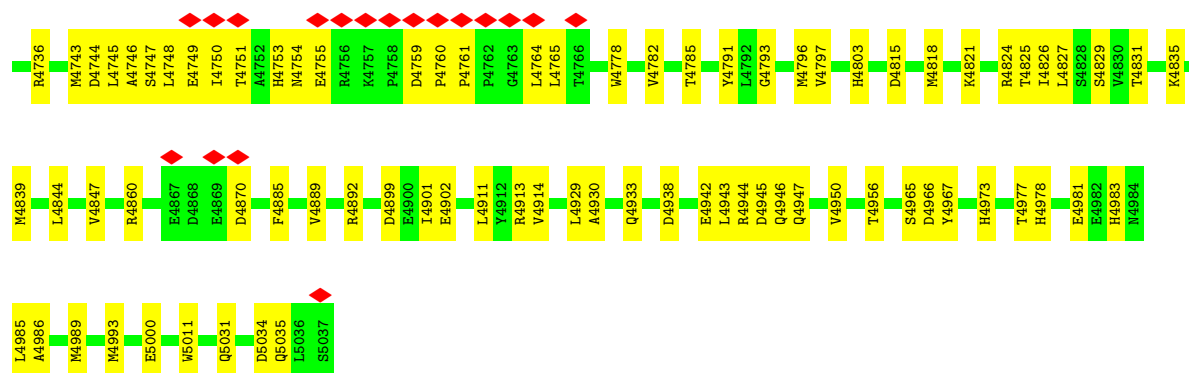
• Molecule 1: Ryanodine receptor 1





V3373	C3303	C3240	T3178	G3113	L3049	A2979	K2914	GLY	Y2794	N2734	T2572
A3374	C3304	P3241	K3179	K3114	V3050	V2980	E2915	Y2855	K2795	F2735	T2577
E3375	T3305	D3242	N3180	V3115	R3051	V2981	E2916	N2856	L2672	H2673	
E3376	A3306	L3243	T3181	S3116	H3052	S2982	A2917	P2857	T2796	D2736	
E3377		P3244	Y3182	GLN	R3053	G2983	R2918	Q2858	S2798	R2737	
Q3378		V3245	Y3183	ALA	V3054	G2984	D2919	P2859	E2799	P2739	
L3379		L3246	V3183	ARG	S3055	R2985	R2920	P2860	K2800	V2740	
R3380		D3247	K3184	THR	L3056	V2986	E2921	D2861	D2801	E2741	
L3381		R3248	K3185	GLN	F3057	V2986	R2921	L2862	D2802	T2742	
E3382		L3249	L3186	VAL	G3058	E2987	K2922	K2803	E2803	L2743	
A3383		K3250	R3187	G3123	T3059	K2988	A2923	G2863	R2804	N2744	
K3384		A3251		G3124	K3059	S2989	Q2924	G2864	I2804	E2745	
R3385		D3252	L3190	V3125	D3060	P2990	E2995	V2865	R2805	V2746	
		L3253	G3191	G3126	A3061	H2991	L2926	T2866	R2806	I2746	
E3386			E3192	Q3127	V3064	E2992	L2927	L2967	V2807	I2747	
A3387		A3257	C3193	K3128	V3065	Y2995	K2928	S2868	P2808	P2748	
E3388		E3258	L3194	L3129	N3066	I2995	P2929	R2869	I2809	E2749	
E3389		S3259	A3195	T3130	C3067		L2930	E2870	K2810	T2750	
G3390		G3260	R3196	T3133		F2998	Q2931	L2871	E2811	L2751	
E3391		A3261	L3197	V3134	H3068	A2999	M2932	Q2872	S2812	D2752	
E3392		Y3263	A3198	A3135	I3070	K3000	N2933	A2873	L2813	S2753	
L3393		T3264	A3200	L3136	L3071	I3001	M2933	K2874	K2814	F2754	
V3394		E3265	M3201	L3137	A3072	L3003	G2934	A2875	A2815	I2755	
R3395		M3266	P3202	P3138	R3073	P3004	Y2935	E2876	M2816	N2756	
		F3267	V3203	V3139	S3074	L3005	V2937	Q2877	I2817	K2757	
L3401		H3268	A3204	V3140	D3076	I3006	T2938	E2880	V2819	A2759	
C3402		V3269	S3205	T3141	A3077	Y3009	R2939	E2882	W2821	M2698	
R3403		I3270	L3206	T3142	R3078	F3010	GLY	N2881	E2820	T2758	
L3405		E3271	E3207	L3143	T3079	L3015	LEU	N2881	E2760	E2700	
L3406		I3272	E3206	F3144	V3080	L3016	LYS	Y2882	A2705	C2702	
		L3274	L3210		M3081	F3017	ASP		T2762	L2626	
V3407		P3275	N3211	Q3149	K3082	L3018	GLU	H2883	T2706	F2628	
L3408		M3276	E3212	H3150	S3083	S3019	L2946	N2884	A2707	I2632	
P3410			Y3213	Q3151	S3083	T3020	D2947	E2885	E2708	L2633	
L3411			N3214	G3152	G3084	T3020	T2948	Y2886	A2709	N2634	
L3412			A3215	Q3153	P3085	P3021	S2949	G2887	L2710	E2635	
L3413			C3216	D3154	E3086	A3022	S2950	R2888	P2636	F2637	
R3414			S3217	V3155	L3087	K3023	I2951	K2889	P2712	A2637	
			V3218	V3156	V3088	V3024	E2952	K2890	D2713	K2639	
			Y3219	I3157	K3089	L3025	K2953	K2891	Y2714	E2640	
L3434			T3220	L3158		G3026	E2954	Q2892	D2716	L2644	
F3435			T3221	D3159	L3092	S3027	R2954	E2893	A2717	R2650	
R3436			K3222	D3160	R3093	G3028	F2955	L2894	Q2773	C2651	
V3437			S3223	V3161	S3094	G3028	A2956	E2895	N2774	Y2719	
V3438			G3224	Q3162	F3095	G3029	F2957	A2896	W2775	S2720	
G3439			P3224	V3163	F3096	H3030	G2958	K2897	S2776	S2721	
			R3225	S3164	E3097	A3031	F2959	T2897	Y2777	Q2722	
			E3226	C3165	S3098	S3032	F2960	G2898	G2778	T2859	
F3442			R3227	Y3166	A3099		L2960	E2899	E2779	G2660	
W3445			A3228	R3167	S3100	F3035	W2966	G2900	N2780	V2866	
S3446			I3229	T3168		K3036	M2967	GLN	S2781	T2667	
K3447			L3230	L3169	L3103		D2968	THR	W2762	L2668	
R3448			L3231	C3170	K3105	I3039	T2969	ALA	D2782	E2669	
H3449			G3231	S3171	M3106		S2970	GLN	E2783	VAL	
			L3232	I3172	V3107	L3042	F2973	THR	E2784	ASP	
			P3233	L3175		F3043	I2974	LYS	L2785	ALA	
K3452			N3234		L3110	L3046	A2975	ILE	R2786	GLU	
E3454			V3235	G3176	R3111	A3047	L2977	GLN	T2787	GLY	
E3455			V3236	T3177	L3112	A3048	E2978	ASP	H2788		
			E3237					THR	P2789		
			E3238					PRG	M2790		
			M3239					ARG	L2791		
								GLU	R2792		

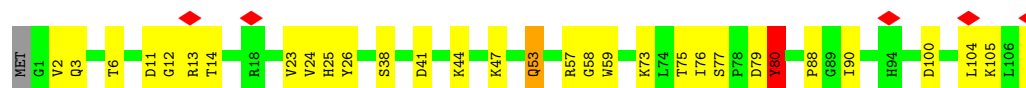




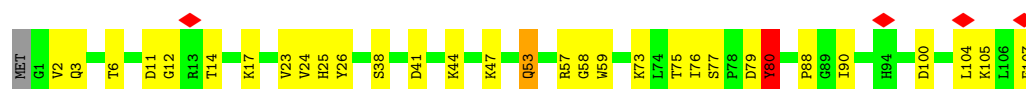
- Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



- Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



- Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



- Molecule 2: Peptidyl-prolyl cis-trans isomerase FKBP1A



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	94090	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	58	Depositor
Minimum defocus (nm)	500	Depositor
Maximum defocus (nm)	1500	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.513	Depositor
Minimum map value	-0.205	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.021	Depositor
Recommended contour level	0.1	Depositor
Map size (Å)	427.52, 427.52, 427.52	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.835, 0.835, 0.835	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: CA, ZN, A1BD3, ATP

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	0.37	29/35977 (0.1%)	0.61	57/48726 (0.1%)
1	B	0.37	29/35977 (0.1%)	0.61	57/48726 (0.1%)
1	C	0.37	29/35977 (0.1%)	0.61	57/48726 (0.1%)
1	D	0.37	29/35977 (0.1%)	0.61	57/48726 (0.1%)
2	E	1.03	9/850 (1.1%)	1.42	11/1146 (1.0%)
2	F	1.03	9/850 (1.1%)	1.42	11/1146 (1.0%)
2	G	1.04	9/850 (1.1%)	1.42	11/1146 (1.0%)
2	H	1.03	9/850 (1.1%)	1.42	11/1146 (1.0%)
All	All	0.39	152/147308 (0.1%)	0.64	272/199488 (0.1%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	1	11
1	B	1	11
1	C	1	11
1	D	1	11
2	E	0	1
2	F	0	1
2	G	0	1
2	H	0	1
All	All	4	48

All (152) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	3949	ARG	NE-CZ	-19.60	1.11	1.33
1	B	3949	ARG	NE-CZ	-19.60	1.11	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	C	3949	ARG	NE-CZ	-19.60	1.11	1.33
1	D	3949	ARG	NE-CZ	-19.59	1.11	1.33
1	D	3321	ARG	CG-CD	-19.16	0.94	1.52
1	A	3321	ARG	CG-CD	-19.14	0.95	1.52
1	C	3321	ARG	CG-CD	-19.14	0.95	1.52
1	B	3321	ARG	CG-CD	-19.12	0.95	1.52
2	G	80	TYR	CG-CD1	-14.40	1.09	1.39
2	E	80	TYR	CG-CD1	-14.38	1.09	1.39
2	H	80	TYR	CG-CD1	-14.37	1.09	1.39
2	F	80	TYR	CG-CD1	-14.34	1.09	1.39
1	A	3321	ARG	NE-CZ	-13.71	1.18	1.33
1	B	3321	ARG	NE-CZ	-13.71	1.18	1.33
1	D	3321	ARG	NE-CZ	-13.71	1.18	1.33
1	C	3321	ARG	NE-CZ	-13.71	1.18	1.33
1	C	3949	ARG	CG-CD	-12.42	1.15	1.52
1	A	3949	ARG	CG-CD	-12.42	1.15	1.52
1	B	3949	ARG	CG-CD	-12.42	1.15	1.52
1	D	3949	ARG	CG-CD	-12.39	1.15	1.52
2	G	80	TYR	CE1-CZ	-12.01	1.09	1.38
2	F	80	TYR	CE1-CZ	-12.01	1.09	1.38
2	H	80	TYR	CE1-CZ	-11.98	1.09	1.38
2	E	80	TYR	CE1-CZ	-11.98	1.09	1.38
1	B	3949	ARG	CB-CG	-11.60	1.17	1.52
1	A	3949	ARG	CB-CG	-11.57	1.17	1.52
1	D	3949	ARG	CB-CG	-11.57	1.17	1.52
1	C	3949	ARG	CB-CG	-11.57	1.17	1.52
2	E	80	TYR	CD2-CE2	10.31	1.69	1.38
2	F	80	TYR	CD2-CE2	10.29	1.69	1.38
2	H	80	TYR	CD2-CE2	10.28	1.69	1.38
2	G	80	TYR	CD2-CE2	10.28	1.69	1.38
1	A	3949	ARG	CD-NE	-10.22	1.31	1.46
1	B	3949	ARG	CD-NE	-10.22	1.31	1.46
1	D	3949	ARG	CD-NE	-10.19	1.31	1.46
1	C	3949	ARG	CD-NE	-10.16	1.32	1.46
1	B	3949	ARG	CZ-NH1	10.16	1.47	1.32
1	A	3949	ARG	CZ-NH1	10.13	1.47	1.32
1	D	3949	ARG	CZ-NH1	10.13	1.47	1.32
1	B	3320	LEU	C-N	10.12	1.48	1.33
1	C	3949	ARG	CZ-NH1	10.10	1.46	1.32
1	A	3320	LEU	C-N	10.08	1.48	1.33
1	D	3320	LEU	C-N	10.06	1.48	1.33
1	C	3320	LEU	C-N	10.06	1.48	1.33

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	E	80	TYR	CG-CD2	-9.79	1.18	1.39
2	F	80	TYR	CG-CD2	-9.78	1.18	1.39
2	H	80	TYR	CG-CD2	-9.76	1.18	1.39
2	G	80	TYR	CG-CD2	-9.76	1.18	1.39
2	E	80	TYR	CE2-CZ	-9.75	1.14	1.38
2	H	80	TYR	CE2-CZ	-9.74	1.14	1.38
2	G	80	TYR	CE2-CZ	-9.74	1.14	1.38
2	F	80	TYR	CE2-CZ	-9.74	1.14	1.38
1	D	2237	CYS	CB-SG	9.14	2.11	1.81
1	A	2237	CYS	CB-SG	9.13	2.11	1.81
1	B	2237	CYS	CB-SG	9.12	2.11	1.81
1	C	2237	CYS	CB-SG	9.12	2.11	1.81
1	A	3321	ARG	CZ-NH1	8.42	1.44	1.32
1	B	3321	ARG	CZ-NH1	8.42	1.44	1.32
1	D	3321	ARG	CZ-NH1	8.42	1.44	1.32
1	C	3321	ARG	CZ-NH1	8.42	1.44	1.32
1	C	1773	PRO	CA-C	-7.96	1.47	1.51
1	B	1773	PRO	CA-C	-7.85	1.47	1.51
1	A	1773	PRO	CA-C	-7.83	1.47	1.51
1	D	1773	PRO	CA-C	-7.83	1.47	1.51
1	B	3949	ARG	CZ-NH2	-7.83	1.23	1.33
1	A	3949	ARG	CZ-NH2	-7.79	1.23	1.33
1	C	3949	ARG	CZ-NH2	-7.79	1.23	1.33
1	A	952	LYS	CD-CE	-7.77	1.29	1.52
1	B	952	LYS	CD-CE	-7.77	1.29	1.52
1	D	952	LYS	CD-CE	-7.77	1.29	1.52
1	C	952	LYS	CD-CE	-7.77	1.29	1.52
1	D	3949	ARG	CZ-NH2	-7.76	1.23	1.33
2	G	53	GLN	CD-NE2	-7.54	1.17	1.33
2	E	53	GLN	CD-NE2	-7.53	1.17	1.33
2	H	53	GLN	CD-NE2	-7.51	1.17	1.33
2	F	53	GLN	CD-NE2	-7.51	1.17	1.33
1	A	2233	CYS	CB-SG	-7.26	1.57	1.81
1	B	2233	CYS	CB-SG	-7.26	1.57	1.81
1	C	2233	CYS	CB-SG	-7.26	1.57	1.81
1	D	2233	CYS	CB-SG	-7.25	1.57	1.81
1	A	3350	ARG	CZ-NH1	-6.34	1.23	1.32
1	D	3350	ARG	CZ-NH1	-6.34	1.23	1.32
1	C	3350	ARG	CZ-NH1	-6.34	1.23	1.32
1	B	3350	ARG	CZ-NH1	-6.32	1.23	1.32
2	G	44	LYS	CG-CD	6.05	1.70	1.52
2	H	44	LYS	CG-CD	6.04	1.70	1.52

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	F	44	LYS	CG-CD	6.03	1.70	1.52
2	E	44	LYS	CG-CD	6.02	1.70	1.52
1	B	56	GLN	CG-CD	-5.99	1.37	1.52
1	D	56	GLN	CG-CD	-5.99	1.37	1.52
1	C	56	GLN	CG-CD	-5.99	1.37	1.52
1	A	56	GLN	CG-CD	-5.98	1.37	1.52
1	A	156	GLN	CD-NE2	-5.97	1.20	1.33
1	B	156	GLN	CD-NE2	-5.97	1.20	1.33
1	C	156	GLN	CD-NE2	-5.97	1.20	1.33
2	F	53	GLN	CG-CD	-5.95	1.37	1.52
2	H	53	GLN	CG-CD	-5.95	1.37	1.52
2	G	53	GLN	CG-CD	-5.95	1.37	1.52
1	D	156	GLN	CD-NE2	-5.95	1.20	1.33
2	E	53	GLN	CG-CD	-5.92	1.37	1.52
1	A	1994	ARG	CZ-NH1	-5.91	1.24	1.32
1	B	1994	ARG	CZ-NH1	-5.91	1.24	1.32
1	D	1994	ARG	CZ-NH1	-5.91	1.24	1.32
1	C	1994	ARG	CZ-NH1	-5.91	1.24	1.32
1	A	3467	MET	CA-C	5.75	1.60	1.52
1	D	3467	MET	CA-C	5.75	1.60	1.52
1	B	3467	MET	CA-C	5.74	1.60	1.52
1	C	3467	MET	CA-C	5.74	1.60	1.52
1	B	3467	MET	CB-CG	-5.64	1.35	1.52
1	A	3467	MET	CB-CG	-5.63	1.35	1.52
1	D	3467	MET	CB-CG	-5.63	1.35	1.52
1	C	3467	MET	CB-CG	-5.63	1.35	1.52
1	A	2173	GLN	CB-CG	-5.61	1.35	1.52
1	D	2173	GLN	CB-CG	-5.61	1.35	1.52
1	C	2173	GLN	CB-CG	-5.61	1.35	1.52
1	B	2173	GLN	CB-CG	-5.60	1.35	1.52
1	B	3350	ARG	CG-CD	-5.60	1.35	1.52
1	C	3350	ARG	CG-CD	-5.60	1.35	1.52
1	A	3350	ARG	CG-CD	-5.59	1.35	1.52
1	D	3350	ARG	CG-CD	-5.59	1.35	1.52
1	A	1421	ARG	NE-CZ	-5.54	1.26	1.33
1	B	1421	ARG	NE-CZ	-5.54	1.26	1.33
1	C	1421	ARG	NE-CZ	-5.54	1.26	1.33
1	D	1421	ARG	NE-CZ	-5.49	1.27	1.33
1	A	3321	ARG	N-CA	-5.49	1.39	1.46
1	B	3321	ARG	N-CA	-5.49	1.39	1.46
1	D	3321	ARG	N-CA	-5.49	1.39	1.46
1	C	3321	ARG	N-CA	-5.48	1.39	1.46

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	B	3467	MET	CA-CB	5.43	1.61	1.53
1	A	3467	MET	CA-CB	5.41	1.61	1.53
1	A	156	GLN	CG-CD	-5.41	1.38	1.52
1	B	156	GLN	CG-CD	-5.41	1.38	1.52
1	D	156	GLN	CG-CD	-5.41	1.38	1.52
1	C	156	GLN	CG-CD	-5.41	1.38	1.52
1	C	3467	MET	CA-CB	5.40	1.61	1.53
1	D	3467	MET	CA-CB	5.38	1.61	1.53
1	B	1421	ARG	CZ-NH2	-5.36	1.26	1.33
1	D	1421	ARG	CZ-NH2	-5.36	1.26	1.33
1	A	1421	ARG	CZ-NH2	-5.31	1.26	1.33
1	C	1421	ARG	CZ-NH2	-5.31	1.26	1.33
1	A	416	LYS	CG-CD	-5.22	1.36	1.52
1	B	416	LYS	CG-CD	-5.22	1.36	1.52
1	D	416	LYS	CG-CD	-5.22	1.36	1.52
1	C	416	LYS	CG-CD	-5.22	1.36	1.52
1	D	3467	MET	SD-CE	-5.14	1.66	1.79
1	C	3467	MET	SD-CE	-5.14	1.66	1.79
1	A	3467	MET	SD-CE	-5.12	1.66	1.79
1	B	3467	MET	SD-CE	-5.11	1.66	1.79
2	E	73	LYS	CE-NZ	-5.07	1.34	1.49
2	G	73	LYS	CE-NZ	-5.07	1.34	1.49
2	F	73	LYS	CE-NZ	-5.06	1.34	1.49
2	H	73	LYS	CE-NZ	-5.06	1.34	1.49

All (272) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	3321	ARG	N-CA-CB	36.30	164.29	110.20
1	D	3321	ARG	N-CA-CB	36.30	164.29	110.20
1	A	3321	ARG	N-CA-CB	36.29	164.28	110.20
1	C	3321	ARG	N-CA-CB	36.29	164.28	110.20
1	D	3949	ARG	NE-CZ-NH1	-34.53	86.97	121.50
1	A	3949	ARG	NE-CZ-NH1	-34.51	86.99	121.50
1	C	3949	ARG	NE-CZ-NH1	-34.51	86.99	121.50
1	B	3949	ARG	NE-CZ-NH1	-34.50	87.00	121.50
2	F	80	TYR	CE1-CZ-CE2	-33.41	53.47	120.30
2	H	80	TYR	CE1-CZ-CE2	-33.39	53.52	120.30
2	E	80	TYR	CE1-CZ-CE2	-33.39	53.52	120.30
2	G	80	TYR	CE1-CZ-CE2	-33.38	53.53	120.30
1	D	3321	ARG	CG-CD-NE	30.89	179.95	112.00
1	C	3321	ARG	CG-CD-NE	30.88	179.94	112.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	3321	ARG	CG-CD-NE	30.87	179.92	112.00
1	B	3321	ARG	CG-CD-NE	30.85	179.88	112.00
1	D	3949	ARG	CG-CD-NE	28.95	175.70	112.00
1	A	3949	ARG	CG-CD-NE	28.93	175.65	112.00
1	B	3949	ARG	CG-CD-NE	28.93	175.65	112.00
1	C	3949	ARG	CG-CD-NE	28.90	175.58	112.00
1	A	3321	ARG	CD-NE-CZ	-23.44	91.58	124.40
1	B	3321	ARG	CD-NE-CZ	-23.44	91.58	124.40
1	D	3321	ARG	CD-NE-CZ	-23.44	91.58	124.40
1	C	3321	ARG	CD-NE-CZ	-23.44	91.58	124.40
1	A	3321	ARG	N-CA-C	-23.39	82.92	111.69
1	C	3321	ARG	N-CA-C	-23.38	82.93	111.69
1	B	3321	ARG	N-CA-C	-23.36	82.95	111.69
1	D	3321	ARG	N-CA-C	-23.36	82.95	111.69
1	B	3321	ARG	CB-CA-C	-15.92	81.57	110.70
1	D	3321	ARG	CB-CA-C	-15.92	81.57	110.70
1	C	3321	ARG	CB-CA-C	-15.92	81.57	110.70
1	A	3321	ARG	CB-CA-C	-15.91	81.59	110.70
1	A	3321	ARG	NH1-CZ-NH2	-15.53	99.12	119.30
1	B	3321	ARG	NH1-CZ-NH2	-15.52	99.12	119.30
1	D	3321	ARG	NH1-CZ-NH2	-15.52	99.12	119.30
1	C	3321	ARG	NH1-CZ-NH2	-15.52	99.12	119.30
2	E	80	TYR	CD1-CG-CD2	-13.74	97.50	118.10
2	H	80	TYR	CD1-CG-CD2	-13.72	97.52	118.10
2	F	80	TYR	CD1-CG-CD2	-13.72	97.53	118.10
2	G	80	TYR	CD1-CG-CD2	-13.71	97.53	118.10
2	F	44	LYS	CD-CE-NZ	-13.30	69.34	111.90
2	E	44	LYS	CD-CE-NZ	-13.29	69.36	111.90
2	H	44	LYS	CD-CE-NZ	-13.29	69.37	111.90
2	G	44	LYS	CD-CE-NZ	-13.29	69.38	111.90
1	B	3320	LEU	CA-C-N	-11.77	100.45	120.58
1	B	3320	LEU	C-N-CA	-11.77	100.45	120.58
1	D	3320	LEU	CA-C-N	-11.77	100.46	120.58
1	D	3320	LEU	C-N-CA	-11.77	100.46	120.58
1	A	3320	LEU	CA-C-N	-11.75	100.49	120.58
1	A	3320	LEU	C-N-CA	-11.75	100.49	120.58
1	C	3320	LEU	CA-C-N	-11.75	100.49	120.58
1	C	3320	LEU	C-N-CA	-11.75	100.49	120.58
1	D	3734	HIS	CB-CG-CD2	-11.59	116.13	131.20
1	C	3734	HIS	CB-CG-CD2	-11.59	116.14	131.20
1	A	3734	HIS	CB-CG-CD2	-11.58	116.15	131.20
1	B	3734	HIS	CB-CG-CD2	-11.56	116.17	131.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	3949	ARG	CB-CG-CD	11.37	137.45	111.30
1	A	3949	ARG	CB-CG-CD	11.35	137.41	111.30
1	D	3949	ARG	CB-CG-CD	11.34	137.39	111.30
1	B	156	GLN	CG-CD-NE2	-11.34	99.39	116.40
1	C	3949	ARG	CB-CG-CD	11.32	137.34	111.30
1	A	156	GLN	CG-CD-NE2	-11.31	99.43	116.40
1	C	156	GLN	CG-CD-NE2	-11.31	99.43	116.40
1	D	156	GLN	CG-CD-NE2	-11.31	99.43	116.40
1	D	3321	ARG	CA-C-N	10.64	134.33	120.60
1	D	3321	ARG	C-N-CA	10.64	134.33	120.60
1	A	3321	ARG	CA-C-N	10.62	134.30	120.60
1	A	3321	ARG	C-N-CA	10.62	134.30	120.60
1	B	3321	ARG	CA-C-N	10.62	134.30	120.60
1	B	3321	ARG	C-N-CA	10.62	134.30	120.60
1	C	3321	ARG	CA-C-N	10.62	134.30	120.60
1	C	3321	ARG	C-N-CA	10.62	134.30	120.60
1	C	4039	MET	CB-CG-SD	10.32	143.67	112.70
1	A	4039	MET	CB-CG-SD	10.32	143.66	112.70
1	D	4039	MET	CB-CG-SD	10.32	143.66	112.70
1	B	4039	MET	CB-CG-SD	10.30	143.61	112.70
2	F	80	TYR	CG-CD1-CE1	-10.08	106.08	121.20
2	H	80	TYR	CG-CD1-CE1	-10.06	106.11	121.20
2	E	80	TYR	CG-CD1-CE1	-10.04	106.14	121.20
2	G	80	TYR	CG-CD1-CE1	-10.03	106.15	121.20
2	G	80	TYR	CD1-CE1-CZ	9.89	137.41	119.60
2	E	80	TYR	CD1-CE1-CZ	9.89	137.40	119.60
2	F	80	TYR	CD1-CE1-CZ	9.87	137.37	119.60
2	H	80	TYR	CD1-CE1-CZ	9.87	137.36	119.60
1	D	2267	MET	CB-CG-SD	9.64	141.63	112.70
1	B	2267	MET	CB-CG-SD	9.64	141.62	112.70
1	A	2267	MET	CB-CG-SD	9.63	141.59	112.70
1	D	1421	ARG	CG-CD-NE	9.63	133.18	112.00
1	C	2267	MET	CB-CG-SD	9.62	141.57	112.70
1	A	1421	ARG	CG-CD-NE	9.61	133.14	112.00
1	B	1421	ARG	CG-CD-NE	9.61	133.14	112.00
1	C	1421	ARG	CG-CD-NE	9.60	133.13	112.00
2	E	80	TYR	CE1-CZ-OH	9.48	148.35	119.90
2	G	80	TYR	CE1-CZ-OH	9.48	148.35	119.90
2	H	80	TYR	CE1-CZ-OH	9.47	148.32	119.90
2	F	80	TYR	CE1-CZ-OH	9.47	148.31	119.90
1	D	3384	LYS	CG-CD-CE	9.41	132.94	111.30
1	C	3384	LYS	CG-CD-CE	9.40	132.93	111.30

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	3384	LYS	CG-CD-CE	9.39	132.90	111.30
1	A	3384	LYS	CG-CD-CE	9.39	132.90	111.30
1	B	3949	ARG	NE-CZ-NH2	9.24	127.52	119.20
1	B	3734	HIS	ND1-CG-CD2	-9.21	96.89	106.10
1	A	3949	ARG	NE-CZ-NH2	9.20	127.48	119.20
1	C	3949	ARG	NE-CZ-NH2	9.20	127.48	119.20
1	D	3734	HIS	ND1-CG-CD2	-9.18	96.92	106.10
1	C	3734	HIS	ND1-CG-CD2	-9.17	96.93	106.10
1	A	3734	HIS	ND1-CG-CD2	-9.17	96.93	106.10
1	D	3949	ARG	NE-CZ-NH2	9.14	127.43	119.20
1	B	3321	ARG	CB-CG-CD	9.04	132.10	111.30
1	C	3321	ARG	CB-CG-CD	9.03	132.07	111.30
1	D	3321	ARG	CB-CG-CD	9.03	132.06	111.30
1	A	3321	ARG	CB-CG-CD	9.02	132.04	111.30
2	E	80	TYR	CB-CG-CD1	8.45	133.48	120.80
2	G	80	TYR	CB-CG-CD1	8.44	133.46	120.80
2	H	80	TYR	CB-CG-CD1	8.43	133.45	120.80
2	F	80	TYR	CB-CG-CD1	8.40	133.40	120.80
1	B	2452	ARG	CG-CD-NE	8.00	129.60	112.00
1	D	2452	ARG	CG-CD-NE	7.99	129.57	112.00
1	A	2452	ARG	CG-CD-NE	7.99	129.57	112.00
1	C	2452	ARG	CG-CD-NE	7.96	129.50	112.00
1	A	952	LYS	CG-CD-CE	7.76	129.14	111.30
1	B	952	LYS	CG-CD-CE	7.75	129.13	111.30
1	D	952	LYS	CG-CD-CE	7.75	129.12	111.30
1	C	952	LYS	CG-CD-CE	7.75	129.12	111.30
1	D	3949	ARG	NH1-CZ-NH2	-7.58	109.45	119.30
2	F	80	TYR	CZ-CE2-CD2	7.56	133.20	119.60
2	G	80	TYR	CZ-CE2-CD2	7.55	133.19	119.60
2	H	80	TYR	CZ-CE2-CD2	7.55	133.18	119.60
1	A	3949	ARG	NH1-CZ-NH2	-7.54	109.49	119.30
1	B	3949	ARG	NH1-CZ-NH2	-7.54	109.50	119.30
2	E	80	TYR	CZ-CE2-CD2	7.54	133.16	119.60
1	C	3949	ARG	NH1-CZ-NH2	-7.51	109.53	119.30
2	F	53	GLN	CG-CD-NE2	-7.29	105.47	116.40
2	E	53	GLN	CG-CD-NE2	-7.27	105.49	116.40
2	H	53	GLN	CG-CD-NE2	-7.27	105.49	116.40
2	G	53	GLN	CG-CD-NE2	-7.26	105.52	116.40
1	D	2725	LYS	CD-CE-NZ	7.22	134.99	111.90
1	A	2725	LYS	CD-CE-NZ	7.21	134.97	111.90
1	C	2725	LYS	CD-CE-NZ	7.21	134.97	111.90
1	B	2725	LYS	CD-CE-NZ	7.20	134.94	111.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	3393	LEU	CD1-CG-CD2	-7.19	94.98	110.80
1	D	3393	LEU	CD1-CG-CD2	-7.19	94.98	110.80
1	C	3393	LEU	CD1-CG-CD2	-7.19	94.98	110.80
1	A	3393	LEU	CD1-CG-CD2	-7.17	95.01	110.80
1	D	1421	ARG	CB-CG-CD	-7.09	95.00	111.30
1	A	1421	ARG	CB-CG-CD	-7.07	95.04	111.30
1	B	1421	ARG	CB-CG-CD	-7.07	95.05	111.30
1	C	1421	ARG	CB-CG-CD	-7.06	95.07	111.30
1	C	3225	ARG	CB-CG-CD	6.87	127.10	111.30
1	A	3225	ARG	CB-CG-CD	6.85	127.06	111.30
1	B	3225	ARG	CB-CG-CD	6.85	127.05	111.30
1	D	3225	ARG	CB-CG-CD	6.84	127.03	111.30
1	B	3321	ARG	NE-CZ-NH2	-6.79	113.09	119.20
1	D	3321	ARG	NE-CZ-NH2	-6.79	113.09	119.20
1	C	3321	ARG	NE-CZ-NH2	-6.79	113.09	119.20
1	A	3321	ARG	NE-CZ-NH2	-6.76	113.11	119.20
1	A	2267	MET	CA-CB-CG	6.68	127.46	114.10
1	C	2267	MET	CA-CB-CG	6.67	127.44	114.10
1	B	2267	MET	CA-CB-CG	6.67	127.43	114.10
1	D	2267	MET	CA-CB-CG	6.67	127.43	114.10
1	A	236	ALA	CA-C-N	6.64	134.15	123.93
1	A	236	ALA	C-N-CA	6.64	134.15	123.93
1	D	236	ALA	CA-C-N	6.63	134.15	123.93
1	D	236	ALA	C-N-CA	6.63	134.15	123.93
1	C	236	ALA	CA-C-N	6.63	134.15	123.93
1	C	236	ALA	C-N-CA	6.63	134.15	123.93
1	B	236	ALA	CA-C-N	6.62	134.12	123.93
1	B	236	ALA	C-N-CA	6.62	134.12	123.93
1	D	1759	ARG	CA-CB-CG	6.39	126.89	114.10
1	A	1759	ARG	CA-CB-CG	6.38	126.85	114.10
1	B	1759	ARG	CA-CB-CG	6.37	126.85	114.10
1	B	3321	ARG	NE-CZ-NH1	6.37	127.87	121.50
1	D	3321	ARG	NE-CZ-NH1	6.37	127.87	121.50
1	C	3321	ARG	NE-CZ-NH1	6.37	127.87	121.50
1	C	1759	ARG	CA-CB-CG	6.37	126.83	114.10
1	A	3321	ARG	NE-CZ-NH1	6.36	127.86	121.50
1	D	1421	ARG	CA-CB-CG	-6.34	101.42	114.10
1	A	1421	ARG	CA-CB-CG	-6.32	101.46	114.10
1	C	1421	ARG	CA-CB-CG	-6.32	101.46	114.10
1	B	1421	ARG	CA-CB-CG	-6.29	101.51	114.10
1	B	3734	HIS	N-CA-C	6.23	117.73	111.07
1	B	965	TYR	CB-CA-C	-6.22	102.31	111.77

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	965	TYR	CB-CA-C	-6.22	102.32	111.77
1	A	965	TYR	CB-CA-C	-6.22	102.32	111.77
1	C	965	TYR	CB-CA-C	-6.21	102.32	111.77
1	C	3734	HIS	N-CA-C	6.21	117.72	111.07
1	A	3734	HIS	N-CA-C	6.18	117.69	111.07
1	D	3734	HIS	N-CA-C	6.17	117.67	111.07
1	B	3453	ARG	CB-CG-CD	6.10	125.34	111.30
1	D	3453	ARG	CB-CG-CD	6.10	125.34	111.30
1	A	3453	ARG	CB-CG-CD	6.10	125.32	111.30
1	C	3453	ARG	CB-CG-CD	6.10	125.32	111.30
1	A	1759	ARG	CB-CG-CD	6.09	125.31	111.30
1	C	1759	ARG	CB-CG-CD	6.09	125.31	111.30
1	D	1759	ARG	CB-CG-CD	6.09	125.30	111.30
1	B	1759	ARG	CB-CG-CD	6.08	125.29	111.30
1	C	56	GLN	CG-CD-NE2	-6.04	107.33	116.40
1	A	56	GLN	CG-CD-NE2	-6.03	107.35	116.40
1	B	56	GLN	CG-CD-NE2	-6.03	107.35	116.40
1	D	56	GLN	CG-CD-NE2	-6.03	107.35	116.40
1	A	3949	ARG	N-CA-C	6.02	123.62	110.80
1	B	3949	ARG	N-CA-C	6.02	123.62	110.80
1	D	3949	ARG	N-CA-C	6.02	123.62	110.80
1	C	3949	ARG	N-CA-C	6.02	123.62	110.80
1	B	4039	MET	CG-SD-CE	-5.97	87.76	100.90
1	A	4039	MET	CG-SD-CE	-5.97	87.77	100.90
1	C	4039	MET	CG-SD-CE	-5.96	87.78	100.90
1	D	4039	MET	CG-SD-CE	-5.96	87.78	100.90
1	D	3320	LEU	N-CA-C	-5.91	104.19	111.75
1	A	3320	LEU	N-CA-C	-5.89	104.21	111.75
1	B	3320	LEU	N-CA-C	-5.86	104.25	111.75
1	C	3320	LEU	N-CA-C	-5.86	104.25	111.75
1	B	2874	MET	CB-CG-SD	5.80	130.09	112.70
1	A	2874	MET	CB-CG-SD	5.78	130.04	112.70
1	D	2874	MET	CB-CG-SD	5.77	130.01	112.70
1	C	2874	MET	CB-CG-SD	5.77	130.01	112.70
1	A	965	TYR	N-CA-C	5.76	120.67	107.48
1	B	965	TYR	N-CA-C	5.76	120.67	107.48
1	D	965	TYR	N-CA-C	5.76	120.66	107.48
1	C	965	TYR	N-CA-C	5.76	120.66	107.48
1	A	416	LYS	CB-CA-C	5.72	119.96	110.81
1	C	416	LYS	CB-CA-C	5.71	119.94	110.81
1	B	416	LYS	CB-CA-C	5.71	119.94	110.81
1	D	416	LYS	CB-CA-C	5.70	119.92	110.81

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	2856	ASN	CB-CG-ND2	-5.67	107.89	116.40
1	D	2856	ASN	CB-CG-ND2	-5.67	107.90	116.40
1	C	2856	ASN	CB-CG-ND2	-5.67	107.90	116.40
1	C	1773	PRO	O-C-N	-5.65	118.71	121.31
1	A	1773	PRO	O-C-N	-5.65	118.71	121.31
1	B	1773	PRO	O-C-N	-5.65	118.71	121.31
1	B	2856	ASN	CB-CG-ND2	-5.65	107.93	116.40
1	D	1773	PRO	O-C-N	-5.62	118.72	121.31
1	A	1930	LYS	CB-CG-CD	5.60	124.17	111.30
1	B	1930	LYS	CB-CG-CD	5.59	124.16	111.30
1	D	1930	LYS	CB-CG-CD	5.59	124.16	111.30
1	C	1930	LYS	CB-CG-CD	5.59	124.16	111.30
1	D	3225	ARG	CA-CB-CG	5.55	125.19	114.10
1	B	3225	ARG	CA-CB-CG	5.54	125.17	114.10
1	A	3225	ARG	CA-CB-CG	5.52	125.14	114.10
1	C	3225	ARG	CA-CB-CG	5.51	125.12	114.10
1	B	3933	PHE	CZ-CE2-CD2	5.42	129.76	120.00
1	D	3933	PHE	CZ-CE2-CD2	5.42	129.76	120.00
1	C	3933	PHE	CZ-CE2-CD2	5.41	129.74	120.00
1	A	3933	PHE	CZ-CE2-CD2	5.40	129.72	120.00
1	D	2233	CYS	N-CA-CB	5.37	119.57	110.49
1	C	2233	CYS	N-CA-CB	5.36	119.55	110.49
1	A	2233	CYS	N-CA-CB	5.35	119.54	110.49
1	B	2233	CYS	N-CA-CB	5.32	119.49	110.49
2	G	80	TYR	OH-CZ-CE2	-5.32	103.94	119.90
2	E	80	TYR	OH-CZ-CE2	-5.32	103.94	119.90
2	H	80	TYR	OH-CZ-CE2	-5.32	103.96	119.90
2	F	80	TYR	OH-CZ-CE2	-5.31	103.96	119.90
1	C	3734	HIS	N-CA-CB	5.29	117.68	110.01
1	D	3734	HIS	N-CA-CB	5.28	117.67	110.01
1	A	3734	HIS	N-CA-CB	5.27	117.65	110.01
1	B	3734	HIS	N-CA-CB	5.26	117.64	110.01
1	C	2479	LEU	CD1-CG-CD2	-5.25	99.25	110.80
1	A	2479	LEU	CD1-CG-CD2	-5.24	99.27	110.80
1	B	2479	LEU	CD1-CG-CD2	-5.24	99.28	110.80
1	D	2479	LEU	CD1-CG-CD2	-5.24	99.28	110.80
2	F	53	GLN	CG-CD-OE1	5.21	131.22	120.80
2	H	53	GLN	CG-CD-OE1	5.20	131.20	120.80
2	E	53	GLN	CG-CD-OE1	5.18	131.17	120.80
2	G	53	GLN	CG-CD-OE1	5.18	131.16	120.80
1	C	3383	ALA	N-CA-C	5.13	117.73	107.62
1	A	483	MET	CB-CG-SD	5.11	128.02	112.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	483	MET	CB-CG-SD	5.11	128.02	112.70
1	D	483	MET	CB-CG-SD	5.11	128.02	112.70
1	C	483	MET	CB-CG-SD	5.11	128.02	112.70
1	A	3383	ALA	N-CA-C	5.10	117.67	107.62
1	B	3383	ALA	N-CA-C	5.09	117.65	107.62
1	D	3383	ALA	N-CA-C	5.09	117.65	107.62

All (4) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	A	3321	ARG	CA
1	B	3321	ARG	CA
1	D	3321	ARG	CA
1	C	3321	ARG	CA

All (48) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1421	ARG	Sidechain
1	A	156	GLN	Sidechain
1	A	1758	ARG	Sidechain
1	A	2173	GLN	Sidechain
1	A	3320	LEU	Peptide
1	A	3321	ARG	Sidechain
1	A	3453	ARG	Sidechain
1	A	3734	HIS	Sidechain
1	A	3948	LYS	Peptide
1	A	3949	ARG	Sidechain,Mainchain
1	B	1421	ARG	Sidechain
1	B	156	GLN	Sidechain
1	B	1758	ARG	Sidechain
1	B	2173	GLN	Sidechain
1	B	3320	LEU	Peptide
1	B	3321	ARG	Sidechain
1	B	3453	ARG	Sidechain
1	B	3734	HIS	Sidechain
1	B	3948	LYS	Peptide
1	B	3949	ARG	Sidechain,Mainchain
1	C	1421	ARG	Sidechain
1	C	156	GLN	Sidechain
1	C	1758	ARG	Sidechain
1	C	2173	GLN	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	C	3320	LEU	Peptide
1	C	3321	ARG	Sidechain
1	C	3453	ARG	Sidechain
1	C	3734	HIS	Sidechain
1	C	3948	LYS	Peptide
1	C	3949	ARG	Sidechain,Mainchain
1	D	1421	ARG	Sidechain
1	D	156	GLN	Sidechain
1	D	1758	ARG	Sidechain
1	D	2173	GLN	Sidechain
1	D	3320	LEU	Peptide
1	D	3321	ARG	Sidechain
1	D	3453	ARG	Sidechain
1	D	3734	HIS	Sidechain
1	D	3948	LYS	Peptide
1	D	3949	ARG	Sidechain,Mainchain
2	E	80	TYR	Sidechain
2	F	80	TYR	Sidechain
2	G	80	TYR	Sidechain
2	H	80	TYR	Sidechain

5.2 Too-close contacts

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	35150	0	34794	881	0
1	B	35150	0	34794	863	0
1	C	35150	0	34794	863	0
1	D	35150	0	34794	869	0
2	E	831	0	829	25	0
2	F	831	0	829	25	0
2	G	831	0	829	28	0
2	H	831	0	829	26	0
3	A	31	0	12	1	0
3	B	31	0	12	1	0
3	C	31	0	12	1	0
3	D	31	0	12	1	0
4	A	1	0	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	B	1	0	0	0	0
4	C	1	0	0	0	0
4	D	1	0	0	0	0
5	A	1	0	0	0	0
5	B	1	0	0	0	0
5	C	1	0	0	0	0
5	D	1	0	0	0	0
6	A	14	0	0	0	0
6	B	14	0	0	0	0
6	C	14	0	0	0	0
6	D	14	0	0	0	0
All	All	144112	0	142540	3523	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 12.

All (3523) 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:B:2237:CYS:SG	1:B:2237:CYS:CB	2.11	1.39
1:A:2237:CYS:CB	1:A:2237:CYS:SG	2.11	1.38
1:D:2237:CYS:CB	1:D:2237:CYS:SG	2.11	1.37
1:C:2237:CYS:SG	1:C:2237:CYS:CB	2.11	1.37
1:C:2229:VAL:HG11	1:C:2267:MET:HE1	1.26	1.18
1:B:2229:VAL:HG11	1:B:2267:MET:HE1	1.26	1.13
1:D:2229:VAL:HG11	1:D:2267:MET:HE1	1.26	1.13
1:A:2229:VAL:HG11	1:A:2267:MET:HE1	1.26	1.11
1:B:2452:ARG:NH1	1:C:144:GLU:OE1	1.88	1.06
1:D:144:GLU:OE1	1:C:2452:ARG:NH1	1.89	1.06
1:A:2452:ARG:NH1	1:B:144:GLU:OE1	1.89	1.05
1:B:3521:GLY:HA2	1:B:3524:MET:HE2	1.40	1.03
1:A:3521:GLY:HA2	1:A:3524:MET:HE2	1.40	1.03
1:A:144:GLU:OE1	1:D:2452:ARG:NH1	1.90	1.02
1:A:1999:ARG:O	1:A:3638:MET:HE3	1.60	1.01
1:D:1999:ARG:O	1:D:3638:MET:HE3	1.61	1.00
1:A:3248:ARG:NH1	1:A:3252:ASP:OD1	1.94	1.00
1:D:3248:ARG:NH1	1:D:3252:ASP:OD1	1.94	0.99
1:C:1999:ARG:O	1:C:3638:MET:HE3	1.60	0.99
1:C:3521:GLY:HA2	1:C:3524:MET:HE2	1.40	0.99
1:C:3248:ARG:NH1	1:C:3252:ASP:OD1	1.94	0.99
1:B:1999:ARG:O	1:B:3638:MET:HE3	1.60	0.99

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3248:ARG:NH1	1:B:3252:ASP:OD1	1.94	0.98
1:A:3383:ALA:C	1:A:3384:LYS:HD3	1.88	0.98
1:D:3521:GLY:HA2	1:D:3524:MET:HE2	1.40	0.98
1:D:3383:ALA:C	1:D:3384:LYS:HD3	1.88	0.98
1:A:919:ASN:O	1:A:923:GLN:NE2	1.97	0.97
1:B:3383:ALA:C	1:B:3384:LYS:HD3	1.88	0.97
1:D:919:ASN:O	1:D:923:GLN:NE2	1.97	0.97
1:B:2605:ASP:HA	1:B:2608:MET:HE2	1.47	0.97
1:D:2605:ASP:HA	1:D:2608:MET:HE2	1.47	0.97
1:C:919:ASN:O	1:C:923:GLN:NE2	1.97	0.97
1:B:919:ASN:O	1:B:923:GLN:NE2	1.97	0.97
1:C:3383:ALA:C	1:C:3384:LYS:HD3	1.88	0.96
1:D:2229:VAL:CG1	1:D:2267:MET:HE1	1.96	0.96
1:A:2605:ASP:HA	1:A:2608:MET:HE2	1.47	0.96
1:A:2229:VAL:CG1	1:A:2267:MET:HE1	1.96	0.95
1:C:2605:ASP:HA	1:C:2608:MET:HE2	1.47	0.95
1:A:3321:ARG:O	1:A:3324:VAL:HG22	1.66	0.95
1:C:2229:VAL:CG1	1:C:2267:MET:HE1	1.96	0.95
1:B:3321:ARG:O	1:B:3324:VAL:HG22	1.66	0.95
1:B:2229:VAL:CG1	1:B:2267:MET:HE1	1.96	0.95
1:D:3321:ARG:O	1:D:3324:VAL:HG22	1.66	0.94
1:C:3321:ARG:O	1:C:3324:VAL:HG22	1.66	0.93
1:C:897:ARG:NH2	1:C:917:GLU:OE2	2.02	0.93
1:B:897:ARG:NH2	1:B:917:GLU:OE2	2.02	0.93
1:A:897:ARG:NH2	1:A:917:GLU:OE2	2.02	0.92
1:B:54:ASN:O	1:B:56:GLN:N	2.03	0.92
1:D:54:ASN:O	1:D:56:GLN:N	2.03	0.92
1:C:54:ASN:O	1:C:56:GLN:N	2.03	0.92
1:D:897:ARG:NH2	1:D:917:GLU:OE2	2.02	0.91
1:A:3521:GLY:HA2	1:A:3524:MET:CE	2.00	0.91
1:B:3521:GLY:HA2	1:B:3524:MET:CE	2.00	0.91
1:A:54:ASN:O	1:A:56:GLN:N	2.03	0.91
1:D:3521:GLY:HA2	1:D:3524:MET:CE	2.00	0.91
1:D:978:THR:OG1	1:D:981:GLN:OE1	1.88	0.91
1:C:3521:GLY:HA2	1:C:3524:MET:CE	2.00	0.91
1:B:978:THR:OG1	1:B:981:GLN:OE1	1.88	0.90
1:C:978:THR:OG1	1:C:981:GLN:OE1	1.88	0.90
1:B:3356:SER:HG	1:B:3357:HIS:HD1	1.18	0.89
1:A:978:THR:OG1	1:A:981:GLN:OE1	1.88	0.88
1:D:3356:SER:HG	1:D:3357:HIS:HD1	1.18	0.88
1:A:4899:ASP:OD1	1:D:4892:ARG:NH1	2.07	0.88

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2929:PHE:O	1:C:2933:ASN:ND2	2.07	0.88
1:D:1454:THR:OG1	1:D:1456:ASP:OD1	1.93	0.87
1:D:2929:PHE:O	1:D:2933:ASN:ND2	2.07	0.87
1:D:1999:ARG:O	1:D:3638:MET:CE	2.23	0.87
1:A:1454:THR:OG1	1:A:1456:ASP:OD1	1.93	0.86
1:B:1999:ARG:O	1:B:3638:MET:CE	2.23	0.86
1:C:1999:ARG:O	1:C:3638:MET:CE	2.23	0.86
1:C:2928:LYS:HG3	1:C:2932:MET:SD	2.15	0.86
1:B:2928:LYS:HG3	1:B:2932:MET:SD	2.16	0.86
1:B:2929:PHE:O	1:B:2933:ASN:ND2	2.07	0.86
1:A:2928:LYS:HG3	1:A:2932:MET:SD	2.16	0.86
1:D:2928:LYS:HG3	1:D:2932:MET:SD	2.16	0.86
1:C:3356:SER:HG	1:C:3357:HIS:HD1	1.19	0.86
1:A:1999:ARG:O	1:A:3638:MET:CE	2.23	0.86
1:A:3356:SER:HG	1:A:3357:HIS:HD1	1.17	0.86
1:D:2761:TYR:HB3	1:D:2765:LYS:NZ	1.91	0.86
1:A:2929:PHE:O	1:A:2933:ASN:ND2	2.07	0.86
1:D:3933:PHE:CE2	1:D:3951:PHE:CZ	2.64	0.85
1:B:3933:PHE:CE2	1:B:3951:PHE:CZ	2.64	0.85
1:B:1454:THR:OG1	1:B:1456:ASP:OD1	1.93	0.85
1:A:3933:PHE:CE2	1:A:3951:PHE:CZ	2.64	0.85
1:B:2761:TYR:HB3	1:B:2765:LYS:NZ	1.91	0.85
1:C:2761:TYR:HB3	1:C:2765:LYS:NZ	1.91	0.85
1:C:3933:PHE:CE2	1:C:3951:PHE:CZ	2.64	0.85
1:A:2761:TYR:HB3	1:A:2765:LYS:NZ	1.91	0.85
1:B:1156:THR:OG1	1:B:1157:GLU:OE1	1.95	0.85
1:D:1156:THR:OG1	1:D:1157:GLU:OE1	1.95	0.84
1:C:1454:THR:OG1	1:C:1456:ASP:OD1	1.93	0.84
1:A:3762:ARG:O	1:A:3766:GLN:NE2	2.11	0.84
1:A:3933:PHE:CE2	1:A:3951:PHE:CE2	2.66	0.84
1:A:2927:LEU:O	1:A:2931:GLN:NE2	2.11	0.84
1:D:3933:PHE:CE2	1:D:3951:PHE:CE2	2.66	0.84
1:B:3762:ARG:O	1:B:3766:GLN:NE2	2.11	0.84
1:D:4899:ASP:OD1	1:C:4892:ARG:NH1	2.11	0.84
1:B:2927:LEU:O	1:B:2931:GLN:NE2	2.11	0.83
1:C:1156:THR:OG1	1:C:1157:GLU:OE1	1.95	0.83
1:D:3762:ARG:O	1:D:3766:GLN:NE2	2.11	0.83
1:C:3933:PHE:CE2	1:C:3951:PHE:CE2	2.66	0.83
1:B:3933:PHE:CE2	1:B:3951:PHE:CE2	2.66	0.83
1:C:2927:LEU:O	1:C:2931:GLN:NE2	2.11	0.83
1:D:2927:LEU:O	1:D:2931:GLN:NE2	2.11	0.83

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:495:ASN:OD1	1:A:553:ARG:NH1	2.12	0.83
1:A:1156:THR:OG1	1:A:1157:GLU:OE1	1.95	0.83
1:A:2373:GLY:O	1:B:130:LYS:NZ	2.11	0.83
1:D:3940:LYS:O	1:D:4002:LYS:NZ	2.12	0.83
1:C:3762:ARG:O	1:C:3766:GLN:NE2	2.11	0.83
1:B:3940:LYS:O	1:B:4002:LYS:NZ	2.12	0.83
1:B:4892:ARG:NH1	1:C:4899:ASP:OD1	2.11	0.83
1:B:2233:CYS:HB3	1:B:2237:CYS:HB2	1.61	0.82
1:C:495:ASN:OD1	1:C:553:ARG:NH1	2.12	0.82
1:B:495:ASN:OD1	1:B:553:ARG:NH1	2.12	0.82
1:D:495:ASN:OD1	1:D:553:ARG:NH1	2.12	0.82
1:D:2233:CYS:HB3	1:D:2237:CYS:HB2	1.61	0.82
1:A:3933:PHE:HE2	1:A:3951:PHE:CE2	1.98	0.81
1:B:236:ALA:O	1:B:237:ASP:OD1	1.98	0.81
1:C:236:ALA:O	1:C:237:ASP:OD1	1.98	0.81
1:A:2233:CYS:HB3	1:A:2237:CYS:HB2	1.61	0.81
1:C:4006:ASP:OD2	1:C:4008:SER:OG	1.98	0.81
1:A:236:ALA:O	1:A:237:ASP:OD1	1.98	0.81
1:B:3933:PHE:HE2	1:B:3951:PHE:CE2	1.99	0.81
1:D:236:ALA:O	1:D:237:ASP:OD1	1.98	0.81
1:D:3933:PHE:HE2	1:D:3951:PHE:CE2	1.99	0.81
1:A:2233:CYS:O	1:A:2234:ARG:C	2.24	0.81
1:A:4006:ASP:OD2	1:A:4008:SER:OG	1.98	0.81
1:C:2233:CYS:HB3	1:C:2237:CYS:HB2	1.61	0.81
1:B:4006:ASP:OD2	1:B:4008:SER:OG	1.98	0.81
1:D:2587:TYR:HD2	1:D:2625:ARG:HH12	1.26	0.80
1:C:3940:LYS:O	1:C:4002:LYS:NZ	2.11	0.80
1:A:2587:TYR:HD2	1:A:2625:ARG:HH12	1.26	0.80
1:B:1465:ASP:OD2	1:B:1467:SER:OG	2.00	0.80
1:A:4892:ARG:NH1	1:B:4899:ASP:OD1	2.15	0.80
1:C:3933:PHE:HE2	1:C:3951:PHE:CE2	1.98	0.80
1:A:3300:ALA:HB3	1:A:3301:PRO:HD3	1.65	0.80
1:D:2929:PHE:HA	1:D:2932:MET:HE2	1.65	0.79
1:D:3300:ALA:HB3	1:D:3301:PRO:HD3	1.65	0.79
1:B:2584[B]:HIS:CD2	1:B:2625:ARG:HD2	2.18	0.79
1:C:2587:TYR:HD2	1:C:2625:ARG:HH12	1.26	0.79
1:D:3320:LEU:O	1:D:3321:ARG:C	2.26	0.79
1:D:4006:ASP:OD2	1:D:4008:SER:OG	1.98	0.79
1:A:2584[B]:HIS:CD2	1:A:2625:ARG:HD2	2.18	0.79
1:A:3635:CYS:CA	1:A:3638:MET:HE2	2.13	0.79
1:A:3940:LYS:O	1:A:4002:LYS:NZ	2.12	0.79

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2090:LYS:NZ	1:D:2092:GLN:OE1	2.15	0.79
1:C:3320:LEU:O	1:C:3321:ARG:C	2.26	0.79
1:A:2760:GLU:OE2	1:A:2802:LYS:NZ	2.16	0.79
1:D:1465:ASP:OD2	1:D:1467:SER:OG	2.00	0.79
1:D:980:ALA:O	1:D:984:LEU:HD12	1.83	0.79
1:D:3635:CYS:CA	1:D:3638:MET:HE2	2.13	0.79
1:C:3635:CYS:CA	1:C:3638:MET:HE2	2.13	0.79
1:D:2584[B]:HIS:CD2	1:D:2625:ARG:HD2	2.18	0.78
1:A:2233:CYS:HB3	1:A:2237:CYS:CB	2.13	0.78
1:B:2587:TYR:HD2	1:B:2625:ARG:HH12	1.26	0.78
1:B:2929:PHE:HA	1:B:2932:MET:HE2	1.65	0.78
1:D:2233:CYS:HB3	1:D:2237:CYS:CB	2.13	0.78
1:C:2233:CYS:HB3	1:C:2237:CYS:CB	2.13	0.78
1:A:2929:PHE:HA	1:A:2932:MET:HE2	1.65	0.78
1:C:3300:ALA:HB3	1:C:3301:PRO:HD3	1.65	0.78
1:B:2233:CYS:O	1:B:2234:ARG:C	2.24	0.78
1:B:3300:ALA:HB3	1:B:3301:PRO:HD3	1.65	0.78
1:C:980:ALA:O	1:C:984:LEU:HD12	1.83	0.78
1:C:2584[B]:HIS:CD2	1:C:2625:ARG:HD2	2.18	0.78
1:A:3320:LEU:O	1:A:3321:ARG:C	2.26	0.78
1:D:130:LYS:NZ	1:C:2373:GLY:O	2.16	0.78
1:B:3635:CYS:CA	1:B:3638:MET:HE2	2.13	0.78
1:A:1143:TRP:CZ3	1:A:1149:VAL:HG21	2.19	0.78
1:D:2233:CYS:O	1:D:2234:ARG:C	2.24	0.78
1:C:2929:PHE:HA	1:C:2932:MET:HE2	1.65	0.78
1:A:1465:ASP:OD2	1:A:1467:SER:OG	2.00	0.78
1:D:1143:TRP:CZ3	1:D:1149:VAL:HG21	2.19	0.78
1:A:130:LYS:NZ	1:D:2373:GLY:O	2.17	0.77
1:B:2373:GLY:O	1:C:130:LYS:NZ	2.16	0.77
1:C:2090:LYS:NZ	1:C:2092:GLN:OE1	2.15	0.77
1:A:980:ALA:O	1:A:984:LEU:HD12	1.83	0.77
1:B:3635:CYS:HA	1:B:3638:MET:HE2	1.67	0.77
1:C:1465:ASP:OD2	1:C:1467:SER:OG	2.00	0.77
1:C:2233:CYS:O	1:C:2234:ARG:C	2.24	0.77
1:B:1143:TRP:CZ3	1:B:1149:VAL:HG21	2.19	0.77
1:C:3635:CYS:HA	1:C:3638:MET:HE2	1.67	0.77
1:B:980:ALA:O	1:B:984:LEU:HD12	1.83	0.77
1:B:3320:LEU:O	1:B:3321:ARG:C	2.26	0.77
1:C:1143:TRP:CZ3	1:C:1149:VAL:HG21	2.19	0.77
1:B:2090:LYS:NZ	1:B:2092:GLN:OE1	2.15	0.77
1:B:2233:CYS:HB3	1:B:2237:CYS:CB	2.13	0.77

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3:GLN:CG	2:G:75:THR:HB	2.16	0.76
2:H:3:GLN:CG	2:H:75:THR:HB	2.16	0.76
1:B:1868:PRO:O	1:B:1872:THR:HG23	1.86	0.76
1:A:1868:PRO:O	1:A:1872:THR:HG23	1.86	0.76
2:E:3:GLN:CG	2:E:75:THR:HB	2.16	0.76
1:B:1931:LEU:HD13	1:B:1935:VAL:HG11	1.68	0.76
1:D:3635:CYS:O	1:D:3638:MET:HE2	1.86	0.76
1:D:2212:VAL:HG21	1:D:2256:TYR:OH	1.86	0.76
1:C:3635:CYS:O	1:C:3638:MET:HE2	1.86	0.76
1:A:2212:VAL:HG21	1:A:2256:TYR:OH	1.86	0.76
1:C:1868:PRO:O	1:C:1872:THR:HG23	1.86	0.76
1:A:2090:LYS:NZ	1:A:2092:GLN:OE1	2.14	0.76
1:A:3836:MET:HE1	1:A:3915:ILE:HG23	1.68	0.76
1:B:2760:GLU:OE2	1:B:2802:LYS:NZ	2.16	0.76
1:A:1263:THR:OG1	1:A:1265:ASP:OD1	2.04	0.76
1:B:3836:MET:HE1	1:B:3915:ILE:HG23	1.68	0.76
1:C:2760:GLU:OE2	1:C:2802:LYS:NZ	2.16	0.76
1:B:2212:VAL:HG21	1:B:2256:TYR:OH	1.86	0.76
1:D:1263:THR:OG1	1:D:1265:ASP:OD1	2.04	0.76
1:A:3860:ASN:ND2	1:A:3862:ASP:O	2.19	0.75
2:F:3:GLN:CG	2:F:75:THR:HB	2.16	0.75
1:D:3635:CYS:HA	1:D:3638:MET:HE2	1.67	0.75
1:A:3635:CYS:HA	1:A:3638:MET:HE2	1.67	0.75
1:D:3860:ASN:ND2	1:D:3862:ASP:O	2.19	0.75
1:D:3500:GLY:O	1:D:3504:SER:OG	2.05	0.75
1:A:1931:LEU:HD13	1:A:1935:VAL:HG11	1.68	0.75
1:B:3635:CYS:O	1:B:3638:MET:HE2	1.86	0.75
1:D:3836:MET:HE1	1:D:3915:ILE:HG23	1.68	0.75
1:A:1441:ALA:N	1:A:1513:ASP:OD1	2.20	0.75
1:A:2736:ASP:O	1:A:2738:ARG:NH1	2.20	0.75
1:B:3860:ASN:ND2	1:B:3862:ASP:O	2.19	0.75
2:F:3:GLN:HG2	2:F:75:THR:HB	1.69	0.75
1:D:1441:ALA:N	1:D:1513:ASP:OD1	2.20	0.75
1:D:4902:GLU:O	1:D:4913:ARG:NH1	2.20	0.75
1:A:4063:ASP:OD1	1:A:4064:MET:N	2.20	0.74
1:C:1931:LEU:HD13	1:C:1935:VAL:HG11	1.67	0.74
1:C:2088:GLU:OE1	1:C:2088:GLU:N	2.20	0.74
1:C:3836:MET:HE1	1:C:3915:ILE:HG23	1.68	0.74
1:C:3860:ASN:ND2	1:C:3862:ASP:O	2.19	0.74
2:E:3:GLN:HG2	2:E:75:THR:HB	1.69	0.74
2:H:3:GLN:HG2	2:H:75:THR:HB	1.69	0.74

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:3:GLN:HG2	2:G:75:THR:HB	1.69	0.74
1:C:4063:ASP:OD1	1:C:4064:MET:N	2.20	0.74
1:B:4885:PHE:O	1:B:4889:VAL:HG22	1.87	0.74
1:C:1263:THR:OG1	1:C:1265:ASP:OD1	2.04	0.74
1:A:4885:PHE:O	1:A:4889:VAL:HG22	1.87	0.74
1:C:2212:VAL:HG21	1:C:2256:TYR:OH	1.86	0.74
1:C:4902:GLU:O	1:C:4913:ARG:NH1	2.20	0.74
1:D:1868:PRO:O	1:D:1872:THR:HG23	1.86	0.74
1:D:4063:ASP:OD1	1:D:4064:MET:N	2.20	0.74
1:A:3635:CYS:O	1:A:3638:MET:HE2	1.86	0.74
1:B:4902:GLU:O	1:B:4913:ARG:NH1	2.20	0.74
1:D:3651:ASN:O	1:D:3655:GLU:OE1	2.06	0.74
1:A:2088:GLU:OE1	1:A:2088:GLU:N	2.20	0.74
1:C:3651:ASN:O	1:C:3655:GLU:OE1	2.06	0.74
1:A:4902:GLU:O	1:A:4913:ARG:NH1	2.20	0.74
1:B:2088:GLU:N	1:B:2088:GLU:OE1	2.20	0.73
1:C:4711:PHE:HB3	1:C:4712:PRO:HD3	1.70	0.73
1:C:4885:PHE:O	1:C:4889:VAL:HG22	1.87	0.73
1:B:2736:ASP:O	1:B:2738:ARG:NH1	2.20	0.73
1:B:4063:ASP:OD1	1:B:4064:MET:N	2.20	0.73
1:D:4711:PHE:HB3	1:D:4712:PRO:HD3	1.70	0.73
1:D:4885:PHE:O	1:D:4889:VAL:HG22	1.87	0.73
1:A:3651:ASN:O	1:A:3655:GLU:OE1	2.06	0.73
1:B:1441:ALA:N	1:B:1513:ASP:OD1	2.20	0.73
1:D:2088:GLU:OE1	1:D:2088:GLU:N	2.21	0.73
1:C:981:GLN:HA	1:C:984:LEU:HD13	1.71	0.73
1:C:1441:ALA:N	1:C:1513:ASP:OD1	2.20	0.73
1:A:1018:ASN:HB3	1:A:1021:LEU:HD23	1.71	0.73
1:B:3321:ARG:NH1	1:B:3321:ARG:HB2	2.03	0.73
1:B:3500:GLY:O	1:B:3504:SER:OG	2.05	0.73
1:D:2722:LYS:HG3	1:D:2724:GLU:H	1.54	0.73
1:D:2736:ASP:O	1:D:2738:ARG:NH1	2.20	0.73
1:A:2722:LYS:HG3	1:A:2724:GLU:H	1.54	0.73
1:C:2736:ASP:O	1:C:2738:ARG:NH1	2.20	0.73
1:B:1018:ASN:HB3	1:B:1021:LEU:HD23	1.71	0.73
1:D:1931:LEU:HD13	1:D:1935:VAL:HG11	1.68	0.73
1:B:1263:THR:OG1	1:B:1265:ASP:OD1	2.03	0.73
1:D:981:GLN:HA	1:D:984:LEU:HD13	1.71	0.73
1:D:2760:GLU:OE2	1:D:2802:LYS:NZ	2.16	0.73
1:C:3321:ARG:NH1	1:C:3321:ARG:HB2	2.03	0.73
1:A:981:GLN:HA	1:A:984:LEU:HD13	1.71	0.73

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3500:GLY:O	1:A:3504:SER:OG	2.05	0.73
1:C:3500:GLY:O	1:C:3504:SER:OG	2.05	0.73
1:A:3321:ARG:NH1	1:A:3321:ARG:HB2	2.03	0.73
1:A:4711:PHE:HB3	1:A:4712:PRO:HD3	1.70	0.73
2:H:3:GLN:HE21	2:H:75:THR:CB	2.02	0.72
1:C:2722:LYS:HG3	1:C:2724:GLU:H	1.54	0.72
1:B:3651:ASN:O	1:B:3655:GLU:OE1	2.06	0.72
1:D:2514:ASN:ND2	1:D:2516:ASP:OD1	2.22	0.72
1:C:1303:CYS:O	1:C:1304:THR:OG1	2.07	0.72
1:B:2514:ASN:ND2	1:B:2516:ASP:OD1	2.22	0.72
1:D:3321:ARG:HB2	1:D:3321:ARG:NH1	2.03	0.72
1:B:981:GLN:HA	1:B:984:LEU:HD13	1.71	0.72
1:D:1174:GLY:N	1:C:3467:MET:HE1	2.05	0.72
1:A:3527:PRO:HD2	1:A:3573:MET:HE1	1.72	0.72
1:B:4711:PHE:HB3	1:B:4712:PRO:HD3	1.70	0.72
1:D:3527:PRO:HD2	1:D:3573:MET:HE1	1.72	0.72
1:C:3527:PRO:HD2	1:C:3573:MET:HE1	1.72	0.72
1:C:2355:ARG:NH2	1:C:2449:GLU:OE2	2.23	0.72
1:B:2355:ARG:NH2	1:B:2449:GLU:OE2	2.23	0.72
1:B:3527:PRO:HD2	1:B:3573:MET:HE1	1.72	0.72
1:D:1786:LEU:HD12	1:D:1787:PRO:HD2	1.72	0.72
1:C:2514:ASN:ND2	1:C:2516:ASP:OD1	2.22	0.72
1:B:3467:MET:HE1	1:C:1174:GLY:N	2.05	0.71
1:D:2355:ARG:NH2	1:D:2449:GLU:OE2	2.23	0.71
1:C:1171:SER:HG	1:C:1175:SER:HG	1.28	0.71
1:A:1174:GLY:N	1:D:3467:MET:HE1	2.05	0.71
1:D:1018:ASN:HB3	1:D:1021:LEU:HD23	1.71	0.71
1:A:2514:ASN:ND2	1:A:2516:ASP:OD1	2.22	0.71
1:B:1786:LEU:HD12	1:B:1787:PRO:HD2	1.72	0.71
1:C:1786:LEU:HD12	1:C:1787:PRO:HD2	1.72	0.71
1:A:1786:LEU:HD12	1:A:1787:PRO:HD2	1.72	0.71
2:G:3:GLN:HE21	2:G:75:THR:CB	2.02	0.71
2:F:3:GLN:HE21	2:F:75:THR:CB	2.02	0.71
1:C:1018:ASN:HB3	1:C:1021:LEU:HD23	1.71	0.71
1:C:924:MET:O	1:C:928:THR:HG23	1.91	0.71
1:A:2355:ARG:NH2	1:A:2449:GLU:OE2	2.23	0.71
2:E:3:GLN:HE21	2:E:75:THR:CB	2.02	0.71
1:B:2722:LYS:HG3	1:B:2724:GLU:H	1.54	0.71
1:A:924:MET:O	1:A:928:THR:HG23	1.90	0.70
1:D:3383:ALA:H	1:D:3384:LYS:HZ2	1.39	0.70
1:A:1171:SER:HG	1:A:1175:SER:HG	1.25	0.70

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2437:ALA:O	1:A:2508:ARG:NH2	2.24	0.70
1:A:4710:SER:O	1:A:4713:SER:OG	2.09	0.70
1:B:3899:PHE:CZ	1:B:3903:LEU:HD21	2.27	0.70
1:D:924:MET:O	1:D:928:THR:HG23	1.91	0.70
1:B:3834:ALA:O	1:B:3838:THR:HG23	1.92	0.70
1:D:2285:GLU:OE2	1:D:3853:ALA:HB1	1.92	0.70
1:D:3899:PHE:CZ	1:D:3903:LEU:HD21	2.27	0.70
1:C:3324:VAL:HG11	1:C:3361:THR:HG22	1.72	0.70
1:C:3899:PHE:CZ	1:C:3903:LEU:HD21	2.27	0.70
1:A:3324:VAL:HG11	1:A:3361:THR:HG22	1.72	0.70
1:B:2285:GLU:OE2	1:B:3853:ALA:HB1	1.92	0.70
1:C:321:GLU:OE1	1:C:321:GLU:N	2.25	0.70
1:C:3946:GLN:CD	1:C:3949:ARG:HE	1.99	0.70
1:C:4710:SER:O	1:C:4713:SER:OG	2.09	0.70
1:A:3946:GLN:CD	1:A:3949:ARG:HE	1.99	0.70
1:B:581:ASN:OD1	1:B:582:HIS:N	2.25	0.70
1:C:581:ASN:OD1	1:C:582:HIS:N	2.25	0.70
1:B:3324:VAL:HG11	1:B:3361:THR:HG22	1.72	0.69
1:D:1236:THR:OG1	1:D:1608:MET:SD	2.48	0.69
1:D:2761:TYR:HB3	1:D:2765:LYS:HZ3	1.57	0.69
1:D:3946:GLN:CD	1:D:3949:ARG:HE	1.99	0.69
1:C:2437:ALA:O	1:C:2508:ARG:NH2	2.24	0.69
1:A:228:ASP:OD1	1:A:229:GLU:N	2.25	0.69
1:A:728:ARG:NH2	1:A:1489:CYS:SG	2.65	0.69
1:B:924:MET:O	1:B:928:THR:HG23	1.90	0.69
1:A:581:ASN:OD1	1:A:582:HIS:N	2.25	0.69
1:A:3673:MET:CE	1:A:3725:TYR:CE1	2.76	0.69
1:B:2437:ALA:O	1:B:2508:ARG:NH2	2.24	0.69
1:D:581:ASN:OD1	1:D:582:HIS:N	2.25	0.69
1:D:728:ARG:NH2	1:D:1489:CYS:SG	2.65	0.69
1:D:3324:VAL:HG11	1:D:3361:THR:HG22	1.72	0.69
1:B:728:ARG:NH2	1:B:1489:CYS:SG	2.65	0.69
1:D:228:ASP:OD1	1:D:229:GLU:N	2.25	0.69
1:C:728:ARG:NH2	1:C:1489:CYS:SG	2.65	0.69
1:A:1303:CYS:O	1:A:1304:THR:OG1	2.07	0.69
1:A:3467:MET:HE1	1:B:1174:GLY:N	2.08	0.69
1:A:3834:ALA:O	1:A:3838:THR:HG23	1.92	0.69
1:B:3673:MET:CE	1:B:3725:TYR:CE1	2.76	0.69
1:D:321:GLU:OE1	1:D:321:GLU:N	2.25	0.69
1:D:1422:ASP:OD2	1:D:1568:LYS:NZ	2.20	0.69
1:A:1236:THR:OG1	1:A:1608:MET:SD	2.48	0.69

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2285:GLU:OE2	1:A:3853:ALA:HB1	1.92	0.69
1:A:3899:PHE:CZ	1:A:3903:LEU:HD21	2.27	0.69
1:B:228:ASP:OD1	1:B:229:GLU:N	2.25	0.69
1:D:2437:ALA:O	1:D:2508:ARG:NH2	2.24	0.69
1:C:1561:VAL:HG12	1:C:1562:ILE:HG23	1.75	0.69
1:C:2285:GLU:OE2	1:C:3853:ALA:HB1	1.92	0.69
1:C:3834:ALA:O	1:C:3838:THR:HG23	1.92	0.69
1:D:4710:SER:O	1:D:4713:SER:OG	2.09	0.69
1:A:4966:ASP:OD1	1:A:4967:TYR:N	2.27	0.68
1:B:321:GLU:OE1	1:B:321:GLU:N	2.25	0.68
1:D:2584[B]:HIS:CD2	1:D:2625:ARG:CD	2.76	0.68
1:D:4677:LEU:HD23	1:D:4711:PHE:CZ	2.29	0.68
1:B:2584[B]:HIS:CD2	1:B:2625:ARG:CD	2.76	0.68
1:C:2584[B]:HIS:CD2	1:C:2625:ARG:CD	2.76	0.68
1:A:1177:THR:O	1:A:1180:ARG:NH1	2.26	0.68
1:B:4710:SER:O	1:B:4713:SER:OG	2.09	0.68
1:D:571:SER:OG	1:D:573:GLU:OE1	2.11	0.68
1:C:228:ASP:OD1	1:C:229:GLU:N	2.25	0.68
1:C:4677:LEU:HD23	1:C:4711:PHE:CZ	2.29	0.68
1:A:3943:ILE:O	1:A:3948:LYS:NZ	2.27	0.68
1:B:3435:PHE:CD2	1:B:3524:MET:HE1	2.28	0.68
1:B:3946:GLN:CD	1:B:3949:ARG:HE	1.99	0.68
1:D:3834:ALA:O	1:D:3838:THR:HG23	1.92	0.68
1:A:672:VAL:O	1:A:680:THR:OG1	2.09	0.68
1:B:1177:THR:O	1:B:1180:ARG:NH1	2.26	0.68
1:D:981:GLN:HA	1:D:984:LEU:CD1	2.24	0.68
1:D:2229:VAL:HG11	1:D:2267:MET:CE	2.17	0.68
1:A:321:GLU:OE1	1:A:321:GLU:N	2.25	0.68
1:B:672:VAL:O	1:B:680:THR:OG1	2.09	0.68
1:B:4966:ASP:OD1	1:B:4967:TYR:N	2.26	0.68
1:C:3943:ILE:O	1:C:3948:LYS:NZ	2.27	0.68
1:A:2584[B]:HIS:CD2	1:A:2625:ARG:CD	2.76	0.68
1:A:4677:LEU:HD23	1:A:4711:PHE:CZ	2.29	0.68
1:C:3673:MET:CE	1:C:3725:TYR:CE1	2.76	0.68
1:A:571:SER:OG	1:A:573:GLU:OE1	2.11	0.68
1:A:3502:ARG:NH1	1:A:3502:ARG:O	2.27	0.68
1:B:3103:ILE:HD13	1:B:3168:THR:HG23	1.76	0.68
1:B:4677:LEU:HD23	1:B:4711:PHE:CZ	2.29	0.68
1:D:3435:PHE:CD2	1:D:3524:MET:HE1	2.28	0.68
1:D:3673:MET:CE	1:D:3725:TYR:CE1	2.76	0.68
1:C:3435:PHE:CD2	1:C:3524:MET:HE1	2.28	0.68

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:941:MET:HE2	1:A:944:GLU:HA	1.76	0.68
1:B:3943:ILE:O	1:B:3948:LYS:NZ	2.27	0.68
1:D:4966:ASP:OD1	1:D:4967:TYR:N	2.26	0.68
1:A:1422:ASP:OD2	1:A:1568:LYS:NZ	2.20	0.67
1:C:3502:ARG:NH1	1:C:3502:ARG:O	2.27	0.67
1:A:3435:PHE:CD2	1:A:3524:MET:HE1	2.28	0.67
1:D:1561:VAL:HG12	1:D:1562:ILE:HG23	1.75	0.67
1:C:3103:ILE:HD13	1:C:3168:THR:HG23	1.75	0.67
1:B:981:GLN:HA	1:B:984:LEU:CD1	2.24	0.67
1:C:1177:THR:O	1:C:1180:ARG:NH1	2.26	0.67
1:C:4677:LEU:HD23	1:C:4711:PHE:CE1	2.29	0.67
1:B:1422:ASP:OD2	1:B:1568:LYS:NZ	2.20	0.67
1:D:1303:CYS:O	1:D:1304:THR:OG1	2.07	0.67
1:D:3943:ILE:O	1:D:3948:LYS:NZ	2.27	0.67
1:C:981:GLN:HA	1:C:984:LEU:CD1	2.24	0.67
1:B:1561:VAL:HG12	1:B:1562:ILE:HG23	1.75	0.67
1:D:4677:LEU:HD23	1:D:4711:PHE:CE1	2.29	0.67
1:D:941:MET:HE2	1:D:944:GLU:HA	1.76	0.67
1:C:2196:ASN:OD1	1:C:2199:ARG:NH2	2.28	0.67
1:A:1561:VAL:HG12	1:A:1562:ILE:HG23	1.75	0.67
1:A:2196:ASN:OD1	1:A:2199:ARG:NH2	2.28	0.67
1:B:1303:CYS:O	1:B:1304:THR:OG1	2.07	0.67
1:A:4677:LEU:HD23	1:A:4711:PHE:CE1	2.29	0.67
1:B:4677:LEU:HD23	1:B:4711:PHE:CE1	2.29	0.67
1:B:2790:MET:HE2	1:B:2797:PHE:HE1	1.60	0.67
1:C:140:ASP:OD2	1:C:142:THR:OG1	2.13	0.67
1:A:140:ASP:OD2	1:A:142:THR:OG1	2.13	0.67
1:A:3103:ILE:HD13	1:A:3168:THR:HG23	1.75	0.67
1:D:140:ASP:OD2	1:D:142:THR:OG1	2.13	0.67
1:C:2929:PHE:HA	1:C:2932:MET:CE	2.25	0.67
1:A:981:GLN:HA	1:A:984:LEU:CD1	2.24	0.66
1:B:3502:ARG:NH1	1:B:3502:ARG:O	2.27	0.66
1:D:2604:GLU:C	1:D:2608:MET:CE	2.69	0.66
1:C:1236:THR:OG1	1:C:1608:MET:SD	2.48	0.66
1:C:2605:ASP:CA	1:C:2608:MET:HE2	2.24	0.66
1:A:952:LYS:HD2	1:A:968:ALA:HB1	1.77	0.66
1:C:941:MET:HE2	1:C:944:GLU:HA	1.76	0.66
1:C:2604:GLU:C	1:C:2608:MET:CE	2.69	0.66
1:A:980:ALA:C	1:A:984:LEU:HD12	2.21	0.66
1:D:2929:PHE:HA	1:D:2932:MET:CE	2.25	0.66
1:D:3103:ILE:HD13	1:D:3168:THR:HG23	1.75	0.66

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:473:ASN:O	1:A:477:LEU:HD23	1.96	0.66
1:A:2929:PHE:HA	1:A:2932:MET:CE	2.25	0.66
2:H:79:ASP:OD1	2:H:80:TYR:N	2.29	0.66
1:B:140:ASP:OD2	1:B:142:THR:OG1	2.13	0.66
1:B:2604:GLU:C	1:B:2608:MET:CE	2.69	0.66
1:B:2929:PHE:HA	1:B:2932:MET:CE	2.25	0.66
1:D:2584[A]:HIS:CD2	1:D:2625:ARG:CZ	2.79	0.66
1:C:473:ASN:O	1:C:477:LEU:HD23	1.96	0.66
2:F:79:ASP:OD1	2:F:80:TYR:N	2.29	0.66
1:B:46:LEU:HD13	1:B:125:ARG:HH21	1.60	0.66
1:D:3502:ARG:NH1	1:D:3502:ARG:O	2.27	0.66
1:C:46:LEU:HD13	1:C:125:ARG:HH21	1.60	0.66
1:C:571:SER:OG	1:C:573:GLU:OE1	2.11	0.66
1:C:2584[A]:HIS:CD2	1:C:2625:ARG:CZ	2.79	0.66
1:C:2790:MET:HE2	1:C:2797:PHE:HE1	1.60	0.66
1:A:2929:PHE:HD1	1:A:2932:MET:HE2	1.61	0.66
1:D:473:ASN:O	1:D:477:LEU:HD23	1.96	0.66
1:D:1177:THR:O	1:D:1180:ARG:NH1	2.26	0.66
1:C:2159:LEU:HD13	1:C:2203:MET:HG2	1.78	0.66
1:C:2604:GLU:C	1:C:2608:MET:HE1	2.21	0.66
1:C:4966:ASP:OD1	1:C:4967:TYR:N	2.27	0.66
1:A:2584[A]:HIS:CD2	1:A:2625:ARG:CZ	2.79	0.66
1:B:2196:ASN:OD1	1:B:2199:ARG:NH2	2.28	0.66
1:B:3048:ALA:O	1:B:3053:ARG:NH2	2.28	0.66
1:D:2196:ASN:OD1	1:D:2199:ARG:NH2	2.28	0.66
1:D:2605:ASP:CA	1:D:2608:MET:HE2	2.24	0.66
1:A:3946:GLN:OE1	1:A:3949:ARG:NH2	2.29	0.66
2:G:79:ASP:OD1	2:G:80:TYR:N	2.29	0.66
1:B:2584[A]:HIS:CD2	1:B:2625:ARG:CZ	2.79	0.66
1:D:2929:PHE:HD1	1:D:2932:MET:HE2	1.61	0.66
1:C:952:LYS:HD2	1:C:968:ALA:HB1	1.77	0.66
1:C:980:ALA:C	1:C:984:LEU:HD12	2.21	0.66
1:A:2604:GLU:C	1:A:2608:MET:CE	2.69	0.66
1:D:2790:MET:HE2	1:D:2797:PHE:HE1	1.60	0.66
1:D:3321:ARG:CB	1:D:3321:ARG:HH11	2.10	0.66
1:D:3946:GLN:OE1	1:D:3949:ARG:NH2	2.29	0.66
1:A:3048:ALA:O	1:A:3053:ARG:NH2	2.28	0.65
1:A:3248:ARG:NH1	1:A:3252:ASP:CG	2.54	0.65
1:B:980:ALA:C	1:B:984:LEU:HD12	2.21	0.65
1:B:2159:LEU:HD13	1:B:2203:MET:HG2	1.78	0.65
1:D:2604:GLU:C	1:D:2608:MET:HE1	2.21	0.65

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2929:PHE:HD1	1:C:2932:MET:HE2	1.61	0.65
1:D:952:LYS:HD2	1:D:968:ALA:HB1	1.77	0.65
1:C:3048:ALA:O	1:C:3053:ARG:NH2	2.28	0.65
1:A:2159:LEU:HD13	1:A:2203:MET:HG2	1.78	0.65
1:A:4778:TRP:O	1:A:4782:VAL:HG23	1.96	0.65
1:D:2159:LEU:HD13	1:D:2203:MET:HG2	1.78	0.65
1:C:3946:GLN:OE1	1:C:3949:ARG:NH2	2.29	0.65
1:B:952:LYS:HD2	1:B:968:ALA:HB1	1.77	0.65
1:B:3051:ARG:O	1:B:3053:ARG:NE	2.29	0.65
2:E:79:ASP:OD1	2:E:80:TYR:N	2.29	0.65
1:B:941:MET:HE2	1:B:944:GLU:HA	1.76	0.65
1:D:672:VAL:O	1:D:680:THR:OG1	2.09	0.65
1:D:980:ALA:C	1:D:984:LEU:HD12	2.21	0.65
1:A:46:LEU:HD13	1:A:125:ARG:HH21	1.60	0.65
1:A:1079:LYS:HA	1:A:1189:LEU:HD11	1.79	0.65
1:A:3635:CYS:C	1:A:3638:MET:HE2	2.22	0.65
1:B:571:SER:OG	1:B:573:GLU:OE1	2.11	0.65
1:B:3248:ARG:NH1	1:B:3252:ASP:CG	2.54	0.65
1:B:4778:TRP:O	1:B:4782:VAL:HG23	1.96	0.65
1:D:3248:ARG:NH1	1:D:3252:ASP:CG	2.54	0.65
1:C:672:VAL:O	1:C:680:THR:OG1	2.09	0.65
1:C:2761:TYR:HB3	1:C:2765:LYS:HZ3	1.61	0.65
1:C:3321:ARG:HH11	1:C:3321:ARG:CB	2.10	0.65
1:C:4778:TRP:O	1:C:4782:VAL:HG23	1.97	0.65
1:B:473:ASN:O	1:B:477:LEU:HD23	1.96	0.65
1:B:2605:ASP:CA	1:B:2608:MET:HE2	2.24	0.65
1:B:2929:PHE:HD1	1:B:2932:MET:HE2	1.61	0.65
1:B:3321:ARG:CB	1:B:3321:ARG:HH11	2.10	0.65
1:B:3946:GLN:OE1	1:B:3949:ARG:NH2	2.29	0.65
1:C:2233:CYS:O	1:C:2235:PHE:N	2.30	0.65
1:A:881:LEU:O	1:A:885:THR:HG23	1.96	0.65
1:A:2233:CYS:O	1:A:2235:PHE:N	2.30	0.65
1:A:2790:MET:HE2	1:A:2797:PHE:HE1	1.60	0.65
1:D:46:LEU:HD13	1:D:125:ARG:HH21	1.60	0.65
1:D:4778:TRP:O	1:D:4782:VAL:HG23	1.96	0.65
1:A:3946:GLN:OE1	1:A:3949:ARG:CZ	2.45	0.64
1:A:3395:ARG:HD2	1:A:3454:GLU:OE2	1.98	0.64
1:B:2604:GLU:C	1:B:2608:MET:HE1	2.21	0.64
1:B:3946:GLN:OE1	1:B:3949:ARG:CZ	2.45	0.64
1:C:3878:ASP:OD1	1:C:3879:GLU:N	2.31	0.64
1:D:1079:LYS:HA	1:D:1189:LEU:HD11	1.79	0.64

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1599:MET:HG3	1:D:1601:MET:HE2	1.80	0.64
1:D:2233:CYS:O	1:D:2235:PHE:N	2.30	0.64
1:D:3048:ALA:O	1:D:3053:ARG:NH2	2.28	0.64
1:D:3162:GLN:NE2	1:D:3203:VAL:HG11	2.12	0.64
1:D:3395:ARG:HD2	1:D:3454:GLU:OE2	1.98	0.64
1:C:3162:GLN:NE2	1:C:3203:VAL:HG11	2.12	0.64
1:C:1599:MET:HG3	1:C:1601:MET:HE2	1.80	0.64
1:A:3159:ASP:O	1:A:3163:VAL:HG23	1.98	0.64
1:D:881:LEU:O	1:D:885:THR:HG23	1.96	0.64
1:C:3248:ARG:NH1	1:C:3252:ASP:CG	2.54	0.64
1:C:3346:VAL:HG11	1:C:3414:ARG:HB2	1.80	0.64
1:A:2604:GLU:C	1:A:2608:MET:HE1	2.21	0.64
1:A:2761:TYR:HB3	1:A:2765:LYS:HZ3	1.61	0.64
1:B:881:LEU:O	1:B:885:THR:HG23	1.96	0.64
1:B:3159:ASP:O	1:B:3163:VAL:HG23	1.98	0.64
1:D:3878:ASP:OD1	1:D:3879:GLU:N	2.31	0.64
1:C:881:LEU:O	1:C:885:THR:HG23	1.96	0.64
1:C:3395:ARG:HD2	1:C:3454:GLU:OE2	1.98	0.64
1:A:3162:GLN:NE2	1:A:3203:VAL:HG11	2.12	0.64
2:G:11:ASP:OD2	2:G:14:THR:OG1	2.14	0.64
1:B:3115:VAL:O	1:B:3116:SER:OG	2.14	0.64
1:B:3162:GLN:NE2	1:B:3203:VAL:HG11	2.12	0.64
1:B:3395:ARG:HD2	1:B:3454:GLU:OE2	1.98	0.64
1:B:3891:LEU:HD13	1:B:3899:PHE:CZ	2.33	0.64
1:D:3946:GLN:OE1	1:D:3949:ARG:CZ	2.45	0.64
1:C:3635:CYS:C	1:C:3638:MET:HE2	2.22	0.64
1:C:3946:GLN:OE1	1:C:3949:ARG:CZ	2.45	0.64
1:A:2605:ASP:CA	1:A:2608:MET:HE2	2.24	0.64
1:B:1079:LYS:HA	1:B:1189:LEU:HD11	1.79	0.64
1:B:3635:CYS:C	1:B:3638:MET:HE2	2.22	0.64
1:D:3891:LEU:HD13	1:D:3899:PHE:CZ	2.33	0.64
1:C:3051:ARG:O	1:C:3053:ARG:NE	2.29	0.64
1:C:3946:GLN:HA	1:C:3949:ARG:HD2	1.80	0.64
1:C:4078:GLN:HA	1:C:4081:VAL:HG12	1.80	0.64
1:A:3321:ARG:CB	1:A:3321:ARG:HH11	2.09	0.64
1:B:2761:TYR:HB3	1:B:2765:LYS:HZ3	1.60	0.64
1:A:4818:MET:O	1:A:4824:ARG:NH1	2.32	0.63
1:B:2913:ALA:O	1:B:2917:ALA:N	2.31	0.63
1:D:3159:ASP:O	1:D:3163:VAL:HG23	1.98	0.63
1:D:3346:VAL:HG11	1:D:3414:ARG:HB2	1.80	0.63
1:C:1079:LYS:HA	1:C:1189:LEU:HD11	1.79	0.63

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3159:ASP:O	1:C:3163:VAL:HG23	1.98	0.63
1:B:2233:CYS:O	1:B:2235:PHE:N	2.30	0.63
1:B:4078:GLN:HA	1:B:4081:VAL:HG12	1.80	0.63
1:D:3635:CYS:C	1:D:3638:MET:HE2	2.22	0.63
1:D:4655:PHE:CE2	1:D:4659:ILE:HD11	2.34	0.63
1:D:3115:VAL:O	1:D:3116:SER:OG	2.14	0.63
1:D:4078:GLN:HA	1:D:4081:VAL:HG12	1.80	0.63
1:C:3891:LEU:HD13	1:C:3899:PHE:CZ	2.33	0.63
1:B:3946:GLN:HA	1:B:3949:ARG:HD2	1.80	0.63
1:B:4655:PHE:CE2	1:B:4659:ILE:HD11	2.34	0.63
1:D:2516:ASP:OD1	1:D:2517:PHE:N	2.31	0.63
1:A:1599:MET:HG3	1:A:1601:MET:HE2	1.80	0.63
1:A:965:TYR:O	1:A:965:TYR:CD2	2.52	0.63
1:B:1599:MET:HG3	1:B:1601:MET:HE2	1.80	0.63
1:B:2516:ASP:OD1	1:B:2517:PHE:N	2.31	0.63
1:C:4818:MET:O	1:C:4824:ARG:NH1	2.32	0.63
1:A:3321:ARG:HB2	1:A:3321:ARG:HH11	1.63	0.63
1:A:3878:ASP:OD1	1:A:3879:GLU:N	2.31	0.63
2:F:11:ASP:OD2	2:F:14:THR:OG1	2.14	0.63
1:B:3878:ASP:OD1	1:B:3879:GLU:N	2.31	0.63
1:D:3051:ARG:O	1:D:3053:ARG:NE	2.29	0.63
1:C:4655:PHE:CE2	1:C:4659:ILE:HD11	2.34	0.63
1:A:2913:ALA:O	1:A:2917:ALA:N	2.31	0.63
1:A:3891:LEU:HD13	1:A:3899:PHE:CZ	2.33	0.63
1:D:2913:ALA:O	1:D:2917:ALA:N	2.32	0.63
1:C:965:TYR:CD2	1:C:965:TYR:O	2.52	0.63
1:A:3346:VAL:HG11	1:A:3414:ARG:HB2	1.80	0.63
1:A:2516:ASP:OD1	1:A:2517:PHE:N	2.31	0.62
1:A:4071:ILE:O	1:A:4074:SER:OG	2.14	0.62
1:A:4655:PHE:CE2	1:A:4659:ILE:HD11	2.34	0.62
1:B:965:TYR:CD2	1:B:965:TYR:O	2.52	0.62
1:D:3616:LYS:HA	1:D:3619:VAL:HG23	1.82	0.62
1:D:4818:MET:O	1:D:4824:ARG:NH1	2.32	0.62
1:A:3946:GLN:HA	1:A:3949:ARG:HD2	1.80	0.62
1:A:4078:GLN:HA	1:A:4081:VAL:HG12	1.80	0.62
1:B:3321:ARG:HB2	1:B:3321:ARG:HH11	1.63	0.62
1:C:2913:ALA:O	1:C:2917:ALA:N	2.31	0.62
1:D:3383:ALA:N	1:D:3384:LYS:HZ2	1.97	0.62
1:C:4069:LYS:NZ	1:C:4130:ASN:OD1	2.30	0.62
1:A:3051:ARG:O	1:A:3053:ARG:NE	2.28	0.62
1:A:4069:LYS:NZ	1:A:4130:ASN:OD1	2.30	0.62

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3346:VAL:HG11	1:B:3414:ARG:HB2	1.80	0.62
1:B:4818:MET:O	1:B:4824:ARG:NH1	2.32	0.62
1:D:941:MET:CE	1:D:944:GLU:HA	2.30	0.62
1:D:3611:HIS:ND1	1:D:3611:HIS:O	2.33	0.62
1:C:2520:HIS:O	1:C:2524:VAL:HG22	2.00	0.62
1:A:577:ILE:O	1:A:579:GLN:NE2	2.32	0.62
1:D:3946:GLN:HA	1:D:3949:ARG:HD2	1.81	0.62
1:C:3786:CYS:SG	1:C:3831:SER:OG	2.57	0.62
1:A:3616:LYS:HA	1:A:3619:VAL:HG23	1.81	0.62
1:D:3786:CYS:SG	1:D:3831:SER:OG	2.56	0.62
1:C:3321:ARG:HB2	1:C:3321:ARG:HH11	1.63	0.62
1:A:941:MET:CE	1:A:944:GLU:HA	2.30	0.62
1:C:3115:VAL:O	1:C:3116:SER:OG	2.14	0.62
1:B:941:MET:CE	1:B:944:GLU:HA	2.30	0.62
1:D:577:ILE:O	1:D:579:GLN:NE2	2.32	0.62
1:D:2520:HIS:O	1:D:2524:VAL:HG22	2.00	0.62
1:D:2929:PHE:HA	1:D:2932:MET:SD	2.40	0.62
1:C:1422:ASP:OD2	1:C:1568:LYS:NZ	2.20	0.62
1:D:965:TYR:O	1:D:965:TYR:CD2	2.52	0.62
1:C:577:ILE:O	1:C:579:GLN:NE2	2.32	0.62
1:C:941:MET:CE	1:C:944:GLU:HA	2.30	0.62
1:A:961:MET:CE	1:A:965:TYR:C	2.74	0.61
1:B:1427:ILE:HG23	1:B:1428:LEU:HD22	1.82	0.61
1:B:3786:CYS:SG	1:B:3831:SER:OG	2.57	0.61
1:D:3321:ARG:HB2	1:D:3321:ARG:HH11	1.63	0.61
1:C:294:THR:O	1:C:298:GLY:N	2.33	0.61
1:C:1599:MET:CG	1:C:1601:MET:HE2	2.31	0.61
1:C:2516:ASP:OD1	1:C:2517:PHE:N	2.31	0.61
1:A:2499:LYS:O	1:A:2503:VAL:HG23	2.00	0.61
1:D:294:THR:O	1:D:298:GLY:N	2.33	0.61
1:D:961:MET:CE	1:D:965:TYR:C	2.73	0.61
1:D:2499:LYS:O	1:D:2503:VAL:HG23	2.00	0.61
1:D:4069:LYS:NZ	1:D:4130:ASN:OD1	2.30	0.61
1:C:1003:GLN:O	1:C:1016:ARG:NH2	2.34	0.61
1:C:4563:ARG:NH2	1:C:4815:ASP:OD1	2.33	0.61
1:C:483:MET:HA	1:C:483:MET:HE3	1.81	0.61
1:C:2974:ILE:HD13	1:C:3049:LEU:HD12	1.81	0.61
1:C:3616:LYS:HA	1:C:3619:VAL:HG23	1.82	0.61
1:A:1427:ILE:HG23	1:A:1428:LEU:HD22	1.82	0.61
1:A:2522:LEU:HD23	1:A:2582:MET:HE2	1.83	0.61
1:B:1599:MET:CG	1:B:1601:MET:HE2	2.31	0.61

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2520:HIS:O	1:B:2524:VAL:HG22	2.00	0.61
1:B:2522:LEU:HD23	1:B:2582:MET:HE2	1.83	0.61
1:D:1427:ILE:HG23	1:D:1428:LEU:HD22	1.82	0.61
1:D:2974:ILE:HD13	1:D:3049:LEU:HD12	1.81	0.61
1:A:1599:MET:CG	1:A:1601:MET:HE2	2.31	0.61
1:A:3611:HIS:ND1	1:A:3611:HIS:O	2.33	0.61
1:D:483:MET:HA	1:D:483:MET:HE3	1.81	0.61
1:D:1003:GLN:O	1:D:1016:ARG:NH2	2.34	0.61
1:D:2285:GLU:OE1	1:D:3870:ASN:ND2	2.32	0.61
1:C:1427:ILE:HG23	1:C:1428:LEU:HD22	1.82	0.61
1:B:961:MET:CE	1:B:965:TYR:C	2.74	0.61
1:B:1810:LYS:O	1:B:1814:MET:HG3	2.01	0.61
1:B:2974:ILE:HD13	1:B:3049:LEU:HD12	1.81	0.61
1:B:3616:LYS:HA	1:B:3619:VAL:HG23	1.81	0.61
1:D:1599:MET:CG	1:D:1601:MET:HE2	2.31	0.61
1:D:2211:MET:O	1:D:2215:LEU:HD13	2.01	0.61
1:C:961:MET:CE	1:C:965:TYR:C	2.73	0.61
1:C:2499:LYS:O	1:C:2503:VAL:HG23	2.00	0.61
1:A:1003:GLN:O	1:A:1016:ARG:NH2	2.34	0.61
1:A:1810:LYS:O	1:A:1814:MET:HG3	2.01	0.61
1:A:2211:MET:O	1:A:2215:LEU:HD13	2.01	0.61
1:A:2520:HIS:O	1:A:2524:VAL:HG22	2.00	0.61
1:D:1927:LEU:HD22	1:D:2101:MET:SD	2.41	0.61
1:A:2929:PHE:HA	1:A:2932:MET:SD	2.40	0.61
1:B:577:ILE:O	1:B:579:GLN:NE2	2.32	0.61
1:B:1003:GLN:O	1:B:1016:ARG:NH2	2.34	0.61
1:B:2499:LYS:O	1:B:2503:VAL:HG23	2.00	0.61
1:C:2522:LEU:HD23	1:C:2582:MET:HE2	1.82	0.61
2:E:11:ASP:OD2	2:E:14:THR:OG1	2.15	0.61
1:C:2929:PHE:HA	1:C:2932:MET:SD	2.40	0.61
1:C:3611:HIS:ND1	1:C:3611:HIS:O	2.33	0.61
1:A:3786:CYS:SG	1:A:3831:SER:OG	2.57	0.60
1:D:1810:LYS:O	1:D:1814:MET:HG3	2.01	0.60
1:D:3588:ASP:O	1:D:3592:ILE:HD12	2.01	0.60
1:C:2211:MET:O	1:C:2215:LEU:HD13	2.01	0.60
1:A:1927:LEU:HD22	1:A:2101:MET:SD	2.41	0.60
1:A:2587:TYR:HD2	1:A:2625:ARG:NH1	1.99	0.60
2:H:3:GLN:HE21	2:H:75:THR:CG2	2.14	0.60
2:H:3:GLN:HE21	2:H:75:THR:HG21	1.67	0.60
2:F:3:GLN:HE21	2:F:75:THR:CG2	2.14	0.60
1:B:294:THR:O	1:B:298:GLY:N	2.33	0.60

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2929:PHE:HA	1:B:2932:MET:SD	2.40	0.60
1:C:2523:ASP:OD1	1:C:2524:VAL:HG13	2.01	0.60
1:C:4929:LEU:O	1:C:4933:GLN:OE1	2.20	0.60
1:A:294:THR:O	1:A:298:GLY:N	2.33	0.60
1:B:483:MET:HA	1:B:483:MET:HE3	1.81	0.60
1:C:3673:MET:HE2	1:C:3725:TYR:HE1	1.66	0.60
2:G:3:GLN:HE21	2:G:75:THR:CG2	2.14	0.60
1:C:1810:LYS:O	1:C:1814:MET:HG3	2.01	0.60
1:A:483:MET:HA	1:A:483:MET:HE3	1.81	0.60
1:A:2974:ILE:HD13	1:A:3049:LEU:HD12	1.81	0.60
1:B:2211:MET:O	1:B:2215:LEU:HD13	2.01	0.60
1:D:4060:LYS:HG3	1:D:4064:MET:HE2	1.83	0.60
1:A:3946:GLN:OE1	1:A:3949:ARG:NH1	2.35	0.60
1:D:3673:MET:HE2	1:D:3725:TYR:HE1	1.66	0.60
1:C:1927:LEU:HD22	1:C:2101:MET:SD	2.41	0.60
1:C:2434:GLY:O	1:C:2508:ARG:NE	2.34	0.60
1:A:3115:VAL:O	1:A:3116:SER:OG	2.14	0.60
1:B:3611:HIS:ND1	1:B:3611:HIS:O	2.33	0.60
1:A:1758:ARG:NH1	1:A:1759:ARG:O	2.35	0.60
2:E:3:GLN:HE21	2:E:75:THR:CG2	2.14	0.60
2:G:3:GLN:HE21	2:G:75:THR:HG21	1.66	0.60
1:B:4929:LEU:O	1:B:4933:GLN:OE1	2.20	0.60
1:D:2522:LEU:HD23	1:D:2582:MET:HE2	1.82	0.60
1:C:3635:CYS:O	1:C:3638:MET:CE	2.50	0.60
1:A:2523:ASP:OD1	1:A:2524:VAL:HG13	2.01	0.60
1:A:3635:CYS:O	1:A:3638:MET:CE	2.50	0.60
1:A:3673:MET:HE2	1:A:3725:TYR:HE1	1.66	0.60
1:A:4929:LEU:O	1:A:4933:GLN:OE1	2.20	0.60
1:B:1236:THR:OG1	1:B:1608:MET:SD	2.48	0.60
1:B:4069:LYS:NZ	1:B:4130:ASN:OD1	2.30	0.60
1:C:3588:ASP:O	1:C:3592:ILE:HD12	2.01	0.60
1:C:4060:LYS:HG3	1:C:4064:MET:HE2	1.83	0.60
2:E:3:GLN:HE21	2:E:75:THR:HG21	1.66	0.59
1:B:1758:ARG:NH1	1:B:1759:ARG:O	2.35	0.59
1:B:1927:LEU:HD22	1:B:2101:MET:SD	2.41	0.59
1:B:2523:ASP:OD1	1:B:2524:VAL:HG13	2.01	0.59
1:D:4563:ARG:NH2	1:D:4815:ASP:OD1	2.33	0.59
2:H:11:ASP:OD1	2:H:12:GLY:N	2.35	0.59
1:B:2490:MET:HG3	1:B:2545:GLU:OE1	2.02	0.59
1:B:3588:ASP:O	1:B:3592:ILE:HD12	2.01	0.59
1:B:4060:LYS:HG3	1:B:4064:MET:HE2	1.83	0.59

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1758:ARG:NH1	1:D:1759:ARG:O	2.35	0.59
1:D:2741:GLU:HB3	1:D:2743:LEU:HD22	1.84	0.59
1:C:3946:GLN:OE1	1:C:3949:ARG:NH1	2.35	0.59
1:A:4060:LYS:HG3	1:A:4064:MET:HE2	1.83	0.59
2:H:11:ASP:OD2	2:H:14:THR:OG1	2.14	0.59
1:C:1758:ARG:NH1	1:C:1759:ARG:O	2.35	0.59
1:A:2285:GLU:OE1	1:A:3870:ASN:ND2	2.32	0.59
1:A:2490:MET:HG3	1:A:2545:GLU:OE1	2.03	0.59
1:B:3635:CYS:O	1:B:3638:MET:CE	2.50	0.59
1:B:3946:GLN:OE1	1:B:3949:ARG:NH1	2.35	0.59
1:A:3588:ASP:O	1:A:3592:ILE:HD12	2.01	0.59
2:E:11:ASP:OD1	2:E:12:GLY:N	2.35	0.59
1:C:3673:MET:CE	1:C:3725:TYR:HE1	2.15	0.59
2:G:11:ASP:OD1	2:G:12:GLY:N	2.35	0.59
1:D:3514:LEU:HD21	1:D:3602:VAL:HG13	1.84	0.59
1:D:4081:VAL:HG13	1:D:4081:VAL:O	2.02	0.59
1:D:4929:LEU:O	1:D:4933:GLN:OE1	2.20	0.59
1:C:2285:GLU:OE1	1:C:3870:ASN:ND2	2.32	0.59
2:F:11:ASP:OD1	2:F:12:GLY:N	2.35	0.59
1:B:2229:VAL:HG11	1:B:2267:MET:CE	2.17	0.59
1:D:2490:MET:HG3	1:D:2545:GLU:OE1	2.03	0.59
1:D:2523:ASP:OD1	1:D:2524:VAL:HG13	2.01	0.59
1:A:2762:THR:HA	1:A:2765:LYS:HE2	1.85	0.59
1:A:3531:ASP:O	1:A:3535:LEU:HD12	2.02	0.59
1:C:2233:CYS:O	1:C:2236:LEU:N	2.36	0.59
1:A:2741:GLU:HB3	1:A:2743:LEU:HD22	1.84	0.59
1:A:3383:ALA:H	1:A:3384:LYS:HZ2	1.51	0.59
1:B:2587:TYR:HD2	1:B:2625:ARG:NH1	1.99	0.59
1:B:3673:MET:HE2	1:B:3725:TYR:HE1	1.66	0.59
1:D:3531:ASP:O	1:D:3535:LEU:HD12	2.02	0.59
2:H:24:VAL:HG21	2:H:59:TRP:HZ3	1.67	0.59
1:B:3514:LEU:HD21	1:B:3602:VAL:HG13	1.84	0.59
1:D:234:SER:HG	1:D:238:SER:HG	1.49	0.59
1:A:3673:MET:CE	1:A:3725:TYR:HE1	2.15	0.58
1:B:2285:GLU:OE1	1:B:3870:ASN:ND2	2.32	0.58
1:A:2229:VAL:HG11	1:A:2267:MET:CE	2.17	0.58
1:B:3531:ASP:O	1:B:3535:LEU:HD12	2.02	0.58
1:D:2587:TYR:CD2	1:D:2625:ARG:NH1	2.70	0.58
1:C:2208:MET:HE3	1:C:2250:MET:HE1	1.86	0.58
2:E:3:GLN:HE21	2:E:75:THR:HB	1.68	0.58
1:B:928:THR:O	1:B:932:LEU:HD23	2.03	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2762:THR:HA	1:D:2765:LYS:HE2	1.85	0.58
1:D:3673:MET:CE	1:D:3725:TYR:HE1	2.15	0.58
1:C:2587:TYR:HD2	1:C:2625:ARG:NH1	1.99	0.58
1:B:984:LEU:HD21	1:B:1056:PRO:HD2	1.85	0.58
1:D:928:THR:O	1:D:932:LEU:HD23	2.03	0.58
1:D:3946:GLN:OE1	1:D:3949:ARG:NH1	2.35	0.58
1:A:2214:VAL:HG21	1:A:2228:MET:HE2	1.84	0.58
2:H:3:GLN:HE21	2:H:75:THR:HB	1.68	0.58
1:C:2214:VAL:HG21	1:C:2228:MET:HE2	1.84	0.58
1:C:2490:MET:HG3	1:C:2545:GLU:OE1	2.03	0.58
1:C:2741:GLU:HB3	1:C:2743:LEU:HD22	1.84	0.58
1:A:3514:LEU:HD21	1:A:3602:VAL:HG13	1.84	0.58
2:F:24:VAL:HG21	2:F:59:TRP:HZ3	1.67	0.58
1:B:3891:LEU:HB3	1:B:3899:PHE:CE2	2.39	0.58
1:B:4081:VAL:HG13	1:B:4081:VAL:O	2.02	0.58
1:D:2233:CYS:O	1:D:2236:LEU:N	2.36	0.58
1:C:3514:LEU:HD21	1:C:3602:VAL:HG13	1.84	0.58
1:B:2208:MET:HE3	1:B:2250:MET:HE1	1.86	0.58
1:B:2233:CYS:O	1:B:2236:LEU:N	2.36	0.58
1:B:2928:LYS:C	1:B:2932:MET:SD	2.87	0.58
1:C:928:THR:O	1:C:932:LEU:HD23	2.03	0.58
1:C:2208:MET:HE1	1:C:2253:HIS:CG	2.39	0.58
1:A:928:THR:O	1:A:932:LEU:HD23	2.03	0.58
1:A:4081:VAL:HG13	1:A:4081:VAL:O	2.02	0.58
2:G:24:VAL:HG21	2:G:59:TRP:HZ3	1.68	0.58
1:D:2208:MET:HE3	1:D:2250:MET:HE1	1.86	0.58
1:D:2208:MET:HE1	1:D:2253:HIS:CG	2.39	0.58
1:D:3081:MET:HE1	1:D:3093:ARG:NH1	2.19	0.58
1:D:3635:CYS:O	1:D:3638:MET:CE	2.50	0.58
1:D:3891:LEU:HB3	1:D:3899:PHE:CE2	2.39	0.58
1:C:4081:VAL:O	1:C:4081:VAL:HG13	2.02	0.58
1:A:3891:LEU:HB3	1:A:3899:PHE:CE2	2.39	0.58
1:A:4563:ARG:NH2	1:A:4815:ASP:OD1	2.33	0.58
1:B:2762:THR:HA	1:B:2765:LYS:HE2	1.85	0.58
1:B:4563:ARG:NH2	1:B:4815:ASP:OD1	2.33	0.58
1:D:2214:VAL:HG21	1:D:2228:MET:HE2	1.84	0.58
1:C:2762:THR:HA	1:C:2765:LYS:HE2	1.85	0.58
1:A:2233:CYS:O	1:A:2236:LEU:N	2.36	0.58
1:A:2928:LYS:C	1:A:2932:MET:SD	2.87	0.58
1:B:3081:MET:HE1	1:B:3093:ARG:NH1	2.19	0.58
1:D:2587:TYR:HD2	1:D:2625:ARG:NH1	1.99	0.58

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4071:ILE:O	1:D:4074:SER:OG	2.14	0.58
1:C:984:LEU:HD21	1:C:1056:PRO:HD2	1.85	0.58
1:C:2928:LYS:C	1:C:2932:MET:SD	2.87	0.58
1:A:2208:MET:HE3	1:A:2250:MET:HE1	1.86	0.57
1:A:2208:MET:HE1	1:A:2253:HIS:CG	2.39	0.57
1:A:2434:GLY:O	1:A:2508:ARG:NE	2.34	0.57
1:A:3321:ARG:NH1	1:A:3321:ARG:CB	2.66	0.57
2:F:3:GLN:HE21	2:F:75:THR:HG21	1.67	0.57
1:B:2208:MET:HE1	1:B:2253:HIS:CG	2.39	0.57
1:B:2741:GLU:HB3	1:B:2743:LEU:HD22	1.84	0.57
1:B:3097:GLU:O	1:B:3100:SER:OG	2.21	0.57
1:C:156:GLN:OE1	1:C:156:GLN:HA	2.04	0.57
1:C:234:SER:HG	1:C:238:SER:HG	1.52	0.57
1:C:3097:GLU:O	1:C:3100:SER:OG	2.21	0.57
1:C:4691:GLN:OE1	1:C:4703:ARG:NH1	2.35	0.57
1:A:156:GLN:OE1	1:A:156:GLN:HA	2.04	0.57
1:D:4705:VAL:HG22	1:D:4711:PHE:HD1	1.69	0.57
1:C:3531:ASP:O	1:C:3535:LEU:HD12	2.02	0.57
1:B:4944:ARG:NH1	1:C:4942:GLU:OE1	2.36	0.57
1:D:2928:LYS:C	1:D:2932:MET:SD	2.87	0.57
1:D:4691:GLN:OE1	1:D:4703:ARG:NH1	2.35	0.57
1:A:984:LEU:HD21	1:A:1056:PRO:HD2	1.85	0.57
1:A:4705:VAL:HG22	1:A:4711:PHE:HD1	1.69	0.57
1:B:3321:ARG:NH1	1:B:3321:ARG:CB	2.66	0.57
1:D:156:GLN:OE1	1:D:156:GLN:HA	2.05	0.57
1:C:3343:GLN:O	1:C:3346:VAL:HG12	2.05	0.57
1:C:3891:LEU:HB3	1:C:3899:PHE:CE2	2.39	0.57
1:A:2522:LEU:HD23	1:A:2582:MET:CE	2.35	0.57
1:A:2911:LEU:HD12	1:A:2912:THR:O	2.05	0.57
1:A:3081:MET:HE1	1:A:3093:ARG:NH1	2.19	0.57
1:B:4705:VAL:HG22	1:B:4711:PHE:HD1	1.69	0.57
1:A:774:ASP:OD2	1:A:1470:ARG:NH2	2.37	0.57
2:E:24:VAL:HG21	2:E:59:TRP:HZ3	1.67	0.57
1:B:2020:ASP:OD1	1:B:2021:CYS:N	2.38	0.57
1:B:2214:VAL:HG21	1:B:2228:MET:HE2	1.84	0.57
1:B:2522:LEU:HD23	1:B:2582:MET:CE	2.34	0.57
1:B:3531:ASP:OD1	1:B:3532:LEU:N	2.37	0.57
1:B:4745:LEU:HA	1:B:4748:LEU:HD13	1.86	0.57
1:D:493:ARG:O	1:D:496:VAL:HG22	2.04	0.57
1:C:2522:LEU:HD23	1:C:2582:MET:CE	2.34	0.57
1:D:2911:LEU:HD12	1:D:2912:THR:O	2.05	0.57

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2911:LEU:HD12	1:C:2912:THR:O	2.05	0.57
1:A:2020:ASP:OD1	1:A:2021:CYS:N	2.38	0.57
1:B:3613:TYR:O	1:B:3617:LYS:NZ	2.36	0.57
1:D:3343:GLN:O	1:D:3346:VAL:HG12	2.05	0.57
1:A:493:ARG:O	1:A:496:VAL:HG22	2.04	0.57
1:B:4691:GLN:OE1	1:B:4703:ARG:NH1	2.35	0.57
1:D:4224:GLU:OE2	1:D:4224:GLU:N	2.38	0.57
1:C:3384:LYS:HD3	1:C:3384:LYS:N	2.20	0.57
1:C:4745:LEU:HA	1:C:4748:LEU:HD13	1.86	0.57
1:A:3089:LYS:HB3	1:A:3093:ARG:NH1	2.20	0.57
1:B:3628:ARG:HG3	1:B:3628:ARG:O	2.05	0.57
1:B:4224:GLU:N	1:B:4224:GLU:OE2	2.38	0.57
1:D:2538:THR:O	1:D:2542:SER:N	2.37	0.57
1:D:3089:LYS:HB3	1:D:3093:ARG:NH1	2.20	0.57
1:D:3197:LEU:O	1:D:3201:MET:HG3	2.05	0.57
1:D:4651:THR:OG1	1:D:4803:HIS:NE2	2.33	0.57
1:C:2020:ASP:OD1	1:C:2021:CYS:N	2.38	0.57
1:C:3639:THR:HG21	1:C:3644:LEU:HD21	1.87	0.57
1:C:4224:GLU:N	1:C:4224:GLU:OE2	2.38	0.57
1:C:4754:ASN:OD1	1:C:4755:GLU:N	2.38	0.57
1:A:3531:ASP:OD1	1:A:3532:LEU:N	2.37	0.56
2:G:3:GLN:HE21	2:G:75:THR:HB	1.68	0.56
1:B:1926:LEU:HD23	1:B:1929:MET:SD	2.45	0.56
1:D:3946:GLN:OE1	1:D:3949:ARG:NE	2.38	0.56
1:A:3343:GLN:O	1:A:3346:VAL:HG12	2.05	0.56
1:A:4745:LEU:HA	1:A:4748:LEU:HD13	1.86	0.56
2:F:3:GLN:HE21	2:F:75:THR:HB	1.68	0.56
1:B:2587:TYR:CD2	1:B:2625:ARG:NH1	2.70	0.56
1:B:3089:LYS:HB3	1:B:3093:ARG:NH1	2.20	0.56
1:B:3368:ARG:O	1:B:3372:VAL:HG23	2.05	0.56
1:B:4543:GLU:O	1:B:4547:GLN:HG2	2.05	0.56
1:D:3628:ARG:O	1:D:3628:ARG:HG3	2.05	0.56
1:C:3197:LEU:O	1:C:3201:MET:HG3	2.05	0.56
1:C:4543:GLU:O	1:C:4547:GLN:HG2	2.05	0.56
1:A:1448:VAL:HG22	1:A:1554:VAL:HG23	1.88	0.56
1:A:2538:THR:O	1:A:2542:SER:N	2.37	0.56
1:A:3628:ARG:HG3	1:A:3628:ARG:O	2.06	0.56
1:B:493:ARG:O	1:B:496:VAL:HG22	2.04	0.56
1:B:774:ASP:OD2	1:B:1470:ARG:NH2	2.37	0.56
1:B:1171:SER:OG	1:B:1175:SER:OG	2.08	0.56
1:B:3639:THR:HG21	1:B:3644:LEU:HD21	1.87	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:774:ASP:OD2	1:D:1470:ARG:NH2	2.37	0.56
1:D:984:LEU:HD21	1:D:1056:PRO:HD2	1.85	0.56
1:D:2522:LEU:HD23	1:D:2582:MET:CE	2.34	0.56
1:D:2584[B]:HIS:NE2	1:D:2625:ARG:HD2	2.21	0.56
1:D:4745:LEU:HA	1:D:4748:LEU:HD13	1.86	0.56
1:D:4942:GLU:OE1	1:C:4944:ARG:NH1	2.37	0.56
1:C:493:ARG:O	1:C:496:VAL:HG22	2.04	0.56
1:C:1926:LEU:HD23	1:C:1929:MET:SD	2.46	0.56
1:C:2584[B]:HIS:NE2	1:C:2625:ARG:HD2	2.21	0.56
1:C:2587:TYR:CD2	1:C:2625:ARG:NH1	2.70	0.56
1:C:3089:LYS:HB3	1:C:3093:ARG:NH1	2.20	0.56
1:A:4649:LEU:O	1:A:4653:VAL:HG23	2.06	0.56
1:D:3368:ARG:O	1:D:3372:VAL:HG23	2.05	0.56
1:C:35:LEU:HD23	1:C:51:PRO:HA	1.87	0.56
1:C:2292:GLU:OE2	1:C:2352:VAL:HG21	2.06	0.56
1:C:3628:ARG:HG3	1:C:3628:ARG:O	2.06	0.56
1:C:3933:PHE:HE2	1:C:3951:PHE:CD2	2.23	0.56
1:A:445:LEU:HD23	1:A:525:LEU:HD22	1.87	0.56
1:A:4090:LYS:HE3	1:A:4112:LEU:HD22	1.88	0.56
1:B:156:GLN:OE1	1:B:156:GLN:HA	2.04	0.56
1:B:2497:ASP:OD1	1:B:2498:HIS:N	2.39	0.56
1:B:3343:GLN:O	1:B:3346:VAL:HG12	2.05	0.56
1:B:4649:LEU:O	1:B:4653:VAL:HG23	2.06	0.56
1:C:3081:MET:HE1	1:C:3093:ARG:NH1	2.19	0.56
1:C:3368:ARG:O	1:C:3372:VAL:HG23	2.05	0.56
1:C:4705:VAL:HG22	1:C:4711:PHE:HD1	1.69	0.56
1:A:2587:TYR:CD2	1:A:2625:ARG:NH1	2.70	0.56
1:B:3946:GLN:OE1	1:B:3949:ARG:NE	2.38	0.56
1:C:931:THR:O	1:C:935:LEU:HD13	2.06	0.56
1:C:2810:LYS:O	1:C:2814:LYS:HG3	2.06	0.56
1:A:2974:ILE:O	1:A:2978:GLU:OE1	2.24	0.56
1:A:3097:GLU:O	1:A:3100:SER:OG	2.21	0.56
1:B:2911:LEU:HD12	1:B:2912:THR:O	2.05	0.56
1:B:3673:MET:HE1	1:B:3725:TYR:CE1	2.41	0.56
1:D:1926:LEU:HD23	1:D:1929:MET:SD	2.45	0.56
1:D:3673:MET:HE1	1:D:3725:TYR:CE1	2.41	0.56
1:D:4543:GLU:O	1:D:4547:GLN:HG2	2.05	0.56
1:C:984:LEU:O	1:C:988:LEU:HD23	2.06	0.56
1:C:3673:MET:HE1	1:C:3725:TYR:CE1	2.41	0.56
1:C:3946:GLN:OE1	1:C:3949:ARG:NE	2.38	0.56
1:A:931:THR:O	1:A:935:LEU:HD13	2.06	0.56

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2790:MET:HE2	1:A:2797:PHE:CE1	2.41	0.56
1:A:3933:PHE:HE2	1:A:3951:PHE:CD2	2.23	0.56
1:B:2538:THR:O	1:B:2542:SER:N	2.37	0.56
1:D:317:ARG:NH2	1:D:321:GLU:O	2.38	0.56
1:D:3933:PHE:HE2	1:D:3951:PHE:CD2	2.23	0.56
1:C:774:ASP:OD2	1:C:1470:ARG:NH2	2.37	0.56
1:A:2801:ASP:OD1	1:A:2802:LYS:N	2.39	0.56
1:A:3673:MET:HE1	1:A:3725:TYR:CE1	2.40	0.56
1:A:4224:GLU:N	1:A:4224:GLU:OE2	2.38	0.56
1:B:2292:GLU:OE2	1:B:2352:VAL:HG21	2.06	0.56
1:B:3197:LEU:O	1:B:3201:MET:HG3	2.05	0.56
1:B:4090:LYS:HE3	1:B:4112:LEU:HD22	1.88	0.56
1:C:2234:ARG:O	1:C:2238:TYR:CD2	2.59	0.56
1:A:2234:ARG:O	1:A:2238:TYR:CD2	2.59	0.56
1:A:3957:VAL:O	1:A:3961:VAL:HG23	2.06	0.56
1:A:4543:GLU:O	1:A:4547:GLN:HG2	2.05	0.56
1:B:2234:ARG:O	1:B:2238:TYR:CD2	2.59	0.56
1:B:2810:LYS:O	1:B:2814:LYS:HG3	2.06	0.56
1:B:3660:ALA:O	1:B:3664:THR:OG1	2.17	0.56
1:B:3673:MET:CE	1:B:3725:TYR:HE1	2.15	0.56
1:B:4071:ILE:O	1:B:4074:SER:OG	2.14	0.56
1:B:4204:GLN:HB3	1:B:4245:MET:HG2	1.88	0.56
1:D:2020:ASP:OD1	1:D:2021:CYS:N	2.38	0.56
1:D:2810:LYS:O	1:D:2814:LYS:HG3	2.06	0.56
1:D:2974:ILE:O	1:D:2978:GLU:OE1	2.24	0.56
1:C:4204:GLN:HB3	1:C:4245:MET:HG2	1.88	0.56
1:C:4686:LEU:O	1:C:4691:GLN:N	2.36	0.56
1:A:256:ALA:HB2	1:A:477:LEU:HD12	1.89	0.55
1:A:317:ARG:NH2	1:A:321:GLU:O	2.38	0.55
1:A:2584[B]:HIS:NE2	1:A:2625:ARG:HD2	2.21	0.55
1:A:3197:LEU:O	1:A:3201:MET:HG3	2.05	0.55
1:B:931:THR:O	1:B:935:LEU:HD13	2.06	0.55
1:B:2974:ILE:O	1:B:2978:GLU:OE1	2.24	0.55
1:B:3384:LYS:HD3	1:B:3384:LYS:N	2.20	0.55
1:B:3957:VAL:O	1:B:3961:VAL:HG23	2.06	0.55
1:D:2182:ILE:CG2	1:D:2186:MET:HE3	2.36	0.55
1:D:2292:GLU:OE2	1:D:2352:VAL:HG21	2.06	0.55
1:D:3639:THR:HG21	1:D:3644:LEU:HD21	1.87	0.55
1:A:984:LEU:O	1:A:988:LEU:HD23	2.06	0.55
1:A:3368:ARG:O	1:A:3372:VAL:HG23	2.05	0.55
1:A:3383:ALA:H	1:A:3384:LYS:NZ	2.05	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:256:ALA:HB2	1:B:477:LEU:HD12	1.89	0.55
1:B:3933:PHE:HE2	1:B:3951:PHE:CD2	2.23	0.55
1:D:445:LEU:HD23	1:D:525:LEU:HD22	1.87	0.55
1:D:1749:PRO:HB2	1:D:1758:ARG:NH2	2.21	0.55
1:D:1965:TYR:CE2	1:D:1969:LEU:HD11	2.41	0.55
1:D:2761:TYR:C	1:D:2765:LYS:NZ	2.65	0.55
1:C:2801:ASP:OD1	1:C:2802:LYS:N	2.39	0.55
1:C:4090:LYS:HE3	1:C:4112:LEU:HD22	1.88	0.55
1:A:35:LEU:HD23	1:A:51:PRO:HA	1.87	0.55
1:A:1749:PRO:HB2	1:A:1758:ARG:NH2	2.22	0.55
1:A:1926:LEU:HD23	1:A:1929:MET:SD	2.45	0.55
1:A:2292:GLU:OE2	1:A:2352:VAL:HG21	2.06	0.55
1:A:3639:THR:HG21	1:A:3644:LEU:HD21	1.87	0.55
1:A:3946:GLN:OE1	1:A:3949:ARG:NE	2.38	0.55
1:B:35:LEU:HD23	1:B:51:PRO:HA	1.87	0.55
1:B:317:ARG:NH2	1:B:321:GLU:O	2.39	0.55
1:B:2584[B]:HIS:NE2	1:B:2625:ARG:HD2	2.21	0.55
1:D:931:THR:O	1:D:935:LEU:HD13	2.06	0.55
1:D:2497:ASP:OD1	1:D:2498:HIS:N	2.39	0.55
1:D:3384:LYS:HD3	1:D:3384:LYS:N	2.20	0.55
1:D:4743:MET:HE2	1:D:4748:LEU:HD21	1.88	0.55
1:C:1749:PRO:HB2	1:C:1758:ARG:NH2	2.22	0.55
1:C:3947:GLY:O	1:C:3951:PHE:HD2	1.90	0.55
1:A:2182:ILE:CG2	1:A:2186:MET:HE3	2.36	0.55
1:A:2810:LYS:O	1:A:2814:LYS:HG3	2.06	0.55
1:A:3947:GLY:O	1:A:3951:PHE:HD2	1.90	0.55
1:D:399:GLN:HG2	1:D:403:MET:HE3	1.88	0.55
1:C:4071:ILE:O	1:C:4074:SER:OG	2.14	0.55
1:A:2229:VAL:CB	1:A:2267:MET:HE1	2.37	0.55
1:A:3613:TYR:O	1:A:3617:LYS:NZ	2.36	0.55
1:A:4691:GLN:OE1	1:A:4703:ARG:NH1	2.35	0.55
1:B:984:LEU:O	1:B:988:LEU:HD23	2.06	0.55
1:B:1749:PRO:HB2	1:B:1758:ARG:NH2	2.22	0.55
1:B:4743:MET:HE2	1:B:4748:LEU:HD21	1.88	0.55
1:D:965:TYR:O	1:D:965:TYR:CG	2.57	0.55
1:D:2234:ARG:O	1:D:2238:TYR:CD2	2.59	0.55
1:D:3383:ALA:H	1:D:3384:LYS:NZ	2.04	0.55
1:C:1748:PHE:HB3	1:C:1758:ARG:HG2	1.88	0.55
1:C:2182:ILE:CG2	1:C:2186:MET:HE3	2.36	0.55
1:C:2497:ASP:OD1	1:C:2498:HIS:N	2.39	0.55
1:A:3673:MET:HE2	1:A:3725:TYR:CE1	2.40	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4942:GLU:OE1	1:D:4944:ARG:NH1	2.37	0.55
1:B:1448:VAL:HG22	1:B:1554:VAL:HG23	1.88	0.55
1:B:3110:LEU:HD23	1:B:3183:VAL:HG22	1.89	0.55
1:B:3718:GLU:OE2	1:B:3723:MET:CE	2.55	0.55
1:D:722:TRP:CZ2	1:D:727:ALA:HB2	2.42	0.55
1:D:2801:ASP:OD1	1:D:2802:LYS:N	2.39	0.55
1:D:3628:ARG:HG3	1:D:3631:ALA:HB3	1.89	0.55
1:D:4754:ASN:OD1	1:D:4755:GLU:N	2.38	0.55
1:C:1448:VAL:HG22	1:C:1554:VAL:HG23	1.88	0.55
1:C:4649:LEU:O	1:C:4653:VAL:HG23	2.06	0.55
1:A:1965:TYR:CE2	1:A:1969:LEU:HD11	2.41	0.55
1:B:445:LEU:HD23	1:B:525:LEU:HD22	1.87	0.55
1:B:2801:ASP:OD1	1:B:2802:LYS:N	2.39	0.55
1:D:984:LEU:O	1:D:988:LEU:HD23	2.06	0.55
1:D:3718:GLU:OE2	1:D:3723:MET:CE	2.55	0.55
1:D:4090:LYS:HE3	1:D:4112:LEU:HD22	1.88	0.55
1:D:4649:LEU:O	1:D:4653:VAL:HG23	2.06	0.55
1:D:4945:ASP:OD1	1:D:4946:GLN:N	2.40	0.55
1:C:445:LEU:HD23	1:C:525:LEU:HD22	1.87	0.55
1:C:988:LEU:CB	1:C:1039:LEU:HD21	2.37	0.55
1:C:1965:TYR:CE2	1:C:1969:LEU:HD11	2.41	0.55
1:A:2761:TYR:C	1:A:2765:LYS:NZ	2.65	0.55
1:A:3321:ARG:O	1:A:3324:VAL:CG2	2.50	0.55
1:B:722:TRP:CZ2	1:B:727:ALA:HB2	2.42	0.55
1:B:3383:ALA:N	1:B:3384:LYS:NZ	2.54	0.55
1:B:3383:ALA:H	1:B:3384:LYS:NZ	2.04	0.55
1:D:3947:GLY:O	1:D:3951:PHE:HD2	1.90	0.55
1:C:256:ALA:HB2	1:C:477:LEU:HD12	1.89	0.55
1:C:2790:MET:SD	1:C:2791:LEU:HD22	2.47	0.55
1:C:3321:ARG:O	1:C:3324:VAL:CG2	2.50	0.55
1:D:35:LEU:HD23	1:D:51:PRO:HA	1.87	0.55
1:D:2111:VAL:HG12	1:D:2113:SER:H	1.72	0.55
1:D:2790:MET:SD	1:D:2791:LEU:HD22	2.47	0.55
1:C:722:TRP:CZ2	1:C:727:ALA:HB2	2.42	0.55
1:C:3628:ARG:HG3	1:C:3631:ALA:HB3	1.89	0.55
1:A:2497:ASP:OD1	1:A:2498:HIS:N	2.39	0.55
1:A:3628:ARG:HG3	1:A:3631:ALA:HB3	1.89	0.55
1:A:4204:GLN:HB3	1:A:4245:MET:HG2	1.88	0.55
1:B:399:GLN:HG2	1:B:403:MET:HE3	1.88	0.55
1:B:1748:PHE:HB3	1:B:1758:ARG:HG2	1.88	0.55
1:B:2182:ILE:CG2	1:B:2186:MET:HE3	2.36	0.55

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2790:MET:HE2	1:B:2797:PHE:CE1	2.41	0.55
1:D:256:ALA:HB2	1:D:477:LEU:HD12	1.89	0.55
1:D:3531:ASP:OD1	1:D:3532:LEU:N	2.37	0.55
1:D:3933:PHE:HE2	1:D:3951:PHE:CZ	2.18	0.55
1:D:4204:GLN:HB3	1:D:4245:MET:HG2	1.88	0.55
1:C:647:ASN:ND2	1:C:820:ARG:O	2.38	0.55
1:A:4743:MET:HE2	1:A:4748:LEU:HD21	1.88	0.54
1:A:4782:VAL:O	1:A:4785:THR:OG1	2.23	0.54
1:A:4827:LEU:O	1:A:4831:THR:HG23	2.07	0.54
1:B:1965:TYR:CE2	1:B:1969:LEU:HD11	2.41	0.54
1:D:1748:PHE:HB3	1:D:1758:ARG:HG2	1.88	0.54
1:D:2229:VAL:CB	1:D:2267:MET:HE1	2.37	0.54
1:D:2761:TYR:C	1:D:2765:LYS:HZ3	2.15	0.54
1:D:3321:ARG:O	1:D:3324:VAL:CG2	2.50	0.54
1:C:2974:ILE:O	1:C:2978:GLU:OE1	2.24	0.54
1:C:3110:LEU:HD23	1:C:3183:VAL:HG22	1.89	0.54
1:A:399:GLN:HG2	1:A:403:MET:HE3	1.88	0.54
1:A:4945:ASP:OD1	1:A:4946:GLN:N	2.40	0.54
1:B:2229:VAL:CB	1:B:2267:MET:HE1	2.37	0.54
1:B:3673:MET:HE2	1:B:3725:TYR:CE1	2.40	0.54
1:B:3947:GLY:O	1:B:3951:PHE:HD2	1.90	0.54
1:D:988:LEU:CB	1:D:1039:LEU:HD21	2.37	0.54
1:D:3383:ALA:N	1:D:3384:LYS:NZ	2.54	0.54
1:D:3673:MET:HE2	1:D:3725:TYR:CE1	2.40	0.54
1:C:2761:TYR:C	1:C:2765:LYS:NZ	2.65	0.54
1:C:3957:VAL:O	1:C:3961:VAL:HG23	2.06	0.54
1:B:1424:PRO:O	1:B:1428:LEU:HD23	2.08	0.54
1:B:2785:LEU:HD23	1:B:2785:LEU:O	2.08	0.54
1:D:4827:LEU:O	1:D:4831:THR:HG23	2.07	0.54
1:C:4945:ASP:OD1	1:C:4946:GLN:N	2.40	0.54
1:A:647:ASN:ND2	1:A:820:ARG:O	2.38	0.54
1:A:2111:VAL:HG12	1:A:2113:SER:H	1.72	0.54
1:B:2434:GLY:O	1:B:2508:ARG:NE	2.34	0.54
1:B:2761:TYR:C	1:B:2765:LYS:NZ	2.65	0.54
1:D:3957:VAL:O	1:D:3961:VAL:HG23	2.06	0.54
1:C:2229:VAL:CB	1:C:2267:MET:HE1	2.37	0.54
1:C:3383:ALA:N	1:C:3384:LYS:NZ	2.54	0.54
1:C:3383:ALA:H	1:C:3384:LYS:NZ	2.05	0.54
1:C:3531:ASP:OD1	1:C:3532:LEU:N	2.37	0.54
1:A:722:TRP:CZ2	1:A:727:ALA:HB2	2.42	0.54
1:A:988:LEU:CB	1:A:1039:LEU:HD21	2.37	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1280:GLN:O	1:A:1281:ASN:OD1	2.26	0.54
1:A:3384:LYS:HD3	1:A:3384:LYS:N	2.20	0.54
1:B:988:LEU:CB	1:B:1039:LEU:HD21	2.37	0.54
1:B:3628:ARG:HG3	1:B:3631:ALA:HB3	1.89	0.54
1:D:1448:VAL:HG22	1:D:1554:VAL:HG23	1.88	0.54
1:D:2434:GLY:O	1:D:2508:ARG:NE	2.34	0.54
1:C:399:GLN:HG2	1:C:403:MET:HE3	1.88	0.54
1:C:2026:ASP:OD1	1:C:2027:ILE:N	2.40	0.54
1:C:3718:GLU:OE2	1:C:3723:MET:CE	2.55	0.54
1:A:2635:GLU:O	1:A:2638:LYS:NZ	2.40	0.54
1:A:2785:LEU:O	1:A:2785:LEU:HD23	2.08	0.54
1:B:2026:ASP:OD1	1:B:2027:ILE:N	2.40	0.54
1:B:2234:ARG:O	1:B:2238:TYR:HD2	1.91	0.54
1:B:2790:MET:SD	1:B:2791:LEU:HD22	2.47	0.54
1:D:860:GLN:O	1:D:930:LYS:NZ	2.40	0.54
1:C:317:ARG:NH2	1:C:321:GLU:O	2.38	0.54
1:A:1748:PHE:HB3	1:A:1758:ARG:HG2	1.88	0.54
1:A:2234:ARG:O	1:A:2238:TYR:HD2	1.91	0.54
1:A:3383:ALA:N	1:A:3384:LYS:NZ	2.54	0.54
1:A:4821:LYS:O	1:A:4825:THR:HG23	2.08	0.54
1:D:961:MET:HE1	1:D:965:TYR:O	2.08	0.54
1:D:3319:ILE:C	1:D:3321:ARG:N	2.65	0.54
1:C:1018:ASN:CB	1:C:1021:LEU:HD23	2.38	0.54
1:C:1280:GLN:O	1:C:1281:ASN:OD1	2.26	0.54
1:C:2234:ARG:O	1:C:2238:TYR:HD2	1.91	0.54
1:A:2790:MET:SD	1:A:2791:LEU:HD22	2.47	0.54
1:A:3110:LEU:HD23	1:A:3183:VAL:HG22	1.89	0.54
1:A:3504:SER:O	1:A:3507:THR:OG1	2.22	0.54
1:B:4139:ILE:O	1:B:4143:VAL:HG23	2.08	0.54
1:D:2234:ARG:O	1:D:2238:TYR:HD2	1.91	0.54
1:C:1424:PRO:O	1:C:1428:LEU:HD23	2.08	0.54
1:C:2707:ALA:HB1	1:C:3009:TYR:CD1	2.43	0.54
1:C:4584:ASP:OD1	1:C:4585:SER:N	2.41	0.54
1:C:4827:LEU:O	1:C:4831:THR:HG23	2.07	0.54
1:A:3395:ARG:HD2	1:A:3454:GLU:CD	2.33	0.54
1:B:734:GLY:O	1:B:736:HIS:ND1	2.35	0.54
1:B:4545:GLU:OE2	1:B:4548:ARG:NH2	2.41	0.54
1:B:4584:ASP:OD1	1:B:4585:SER:N	2.41	0.54
1:B:4651:THR:OG1	1:B:4803:HIS:NE2	2.33	0.54
1:C:961:MET:HE1	1:C:965:TYR:O	2.08	0.54
1:C:2229:VAL:HG11	1:C:2267:MET:CE	2.17	0.54

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4139:ILE:O	1:C:4143:VAL:HG23	2.08	0.54
1:C:4573:ILE:HG23	1:C:4643:LEU:HD11	1.90	0.54
1:A:1018:ASN:CB	1:A:1021:LEU:HD23	2.38	0.54
1:A:1424:PRO:O	1:A:1428:LEU:HD23	2.08	0.54
1:B:961:MET:HE1	1:B:965:TYR:O	2.08	0.54
1:B:4217:PHE:O	1:B:4221:VAL:HG22	2.08	0.54
1:B:4945:ASP:OD1	1:B:4946:GLN:N	2.40	0.54
1:D:2707:ALA:HB1	1:D:3009:TYR:CD1	2.43	0.54
1:D:2785:LEU:HD23	1:D:2785:LEU:O	2.08	0.54
1:D:4139:ILE:O	1:D:4143:VAL:HG23	2.08	0.54
1:D:4584:ASP:OD1	1:D:4585:SER:N	2.41	0.54
1:D:4821:LYS:O	1:D:4825:THR:HG23	2.08	0.54
1:C:2635:GLU:O	1:C:2638:LYS:NZ	2.40	0.54
1:C:2790:MET:HE2	1:C:2797:PHE:CE1	2.41	0.54
1:C:4821:LYS:O	1:C:4825:THR:HG23	2.08	0.54
1:A:688:LEU:HD11	1:A:775:GLY:CA	2.39	0.53
1:A:4545:GLU:OE2	1:A:4548:ARG:NH2	2.41	0.53
1:B:4759:ASP:O	1:B:4761:PRO:HD3	2.08	0.53
1:B:4821:LYS:O	1:B:4825:THR:HG23	2.08	0.53
1:B:4827:LEU:O	1:B:4831:THR:HG23	2.07	0.53
1:D:1018:ASN:CB	1:D:1021:LEU:HD23	2.38	0.53
1:D:2930:LEU:HD12	1:D:2930:LEU:N	2.23	0.53
1:D:4573:ILE:HG23	1:D:4643:LEU:HD11	1.90	0.53
1:C:2785:LEU:O	1:C:2785:LEU:HD23	2.08	0.53
1:C:4743:MET:HE2	1:C:4748:LEU:HD21	1.88	0.53
1:A:3718:GLU:OE2	1:A:3723:MET:CE	2.55	0.53
1:D:3110:LEU:HD23	1:D:3183:VAL:HG22	1.89	0.53
1:D:4759:ASP:O	1:D:4761:PRO:HD3	2.08	0.53
1:B:3321:ARG:O	1:B:3324:VAL:CG2	2.50	0.53
1:B:4754:ASN:OD1	1:B:4755:GLU:N	2.38	0.53
1:D:2026:ASP:OD1	1:D:2027:ILE:N	2.40	0.53
1:C:864:PRO:HD2	1:C:867:LEU:HD12	1.90	0.53
1:C:2111:VAL:HG12	1:C:2113:SER:H	1.72	0.53
1:C:4217:PHE:O	1:C:4221:VAL:HG22	2.08	0.53
1:A:2707:ALA:HB1	1:A:3009:TYR:CD1	2.43	0.53
1:A:4759:ASP:O	1:A:4761:PRO:HD3	2.08	0.53
1:B:965:TYR:O	1:B:965:TYR:CG	2.57	0.53
1:D:4217:PHE:O	1:D:4221:VAL:HG22	2.08	0.53
1:D:4545:GLU:OE2	1:D:4548:ARG:NH2	2.41	0.53
1:A:2668:SER:O	1:A:2669:GLU:CB	2.57	0.53
1:A:4584:ASP:OD1	1:A:4585:SER:N	2.41	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4754:ASN:OD1	1:A:4755:GLU:N	2.38	0.53
1:B:1110:ARG:NH2	1:B:1112:ASP:OD2	2.42	0.53
1:B:2604:GLU:HB3	1:B:2608:MET:HE1	1.91	0.53
1:D:2790:MET:HE2	1:D:2797:PHE:CE1	2.41	0.53
1:D:3395:ARG:HD2	1:D:3454:GLU:CD	2.33	0.53
1:A:864:PRO:HD2	1:A:867:LEU:HD12	1.90	0.53
1:A:2390:PRO:O	1:A:2391:ALA:HB3	2.09	0.53
1:C:965:TYR:O	1:C:965:TYR:CG	2.57	0.53
1:C:3170:CYS:HA	1:C:3243:ILE:HD11	1.91	0.53
1:B:3170:CYS:HA	1:B:3243:ILE:HD11	1.90	0.53
1:D:2390:PRO:O	1:D:2391:ALA:HB3	2.09	0.53
1:C:3383:ALA:H	1:C:3384:LYS:HZ3	1.56	0.53
1:A:2930:LEU:HD12	1:A:2930:LEU:N	2.23	0.53
1:B:601:ASP:OD1	1:B:1665:HIS:ND1	2.38	0.53
1:B:2111:VAL:HG12	1:B:2113:SER:H	1.72	0.53
1:B:2707:ALA:HB1	1:B:3009:TYR:CD1	2.43	0.53
1:B:4645:CYS:O	1:B:4649:LEU:HD13	2.09	0.53
1:B:4973:HIS:O	1:B:4977:THR:HG23	2.09	0.53
1:D:2635:GLU:O	1:D:2638:LYS:NZ	2.40	0.53
1:C:1039:LEU:O	1:C:1043:VAL:HG23	2.09	0.53
1:C:2668:SER:O	1:C:2669:GLU:CB	2.57	0.53
1:C:3319:ILE:C	1:C:3321:ARG:N	2.65	0.53
1:C:4545:GLU:OE2	1:C:4548:ARG:NH2	2.41	0.53
1:A:174:VAL:HG12	1:D:2452:ARG:HH12	1.74	0.53
2:F:105:LYS:NZ	2:F:107:GLU:OE2	2.42	0.53
1:B:2390:PRO:O	1:B:2391:ALA:HB3	2.09	0.53
1:D:1039:LEU:O	1:D:1043:VAL:HG23	2.09	0.53
1:D:1424:PRO:O	1:D:1428:LEU:HD23	2.08	0.53
1:D:1480:GLN:O	1:D:1480:GLN:HG2	2.09	0.53
1:C:2930:LEU:HD12	1:C:2930:LEU:N	2.23	0.53
1:C:4586:PRO:CD	1:C:4629:TYR:HE2	2.22	0.53
1:A:4645:CYS:O	1:A:4649:LEU:HD13	2.09	0.53
1:D:688:LEU:HD11	1:D:775:GLY:CA	2.39	0.53
1:D:1280:GLN:O	1:D:1281:ASN:OD1	2.26	0.53
1:D:1990:GLU:HG3	1:D:1994:ARG:HE	1.74	0.53
1:D:2584[A]:HIS:HD2	1:D:2625:ARG:CZ	2.22	0.53
1:D:2604:GLU:HB3	1:D:2608:MET:HE1	1.90	0.53
1:D:4686:LEU:O	1:D:4691:GLN:N	2.36	0.53
1:C:296:ASP:OD1	1:C:297:GLN:N	2.42	0.53
1:C:688:LEU:HD11	1:C:775:GLY:CA	2.39	0.53
1:C:3673:MET:HE2	1:C:3725:TYR:CE1	2.40	0.53

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4645:CYS:O	1:C:4649:LEU:HD13	2.09	0.53
1:A:2026:ASP:OD1	1:A:2027:ILE:N	2.40	0.52
1:A:4217:PHE:O	1:A:4221:VAL:HG22	2.08	0.52
1:B:4782:VAL:O	1:B:4785:THR:OG1	2.23	0.52
1:D:647:ASN:ND2	1:D:820:ARG:O	2.38	0.52
1:C:2165:LEU:HD21	1:C:2177:LEU:HD23	1.92	0.52
1:C:2390:PRO:O	1:C:2391:ALA:HB3	2.09	0.52
1:A:1497:GLY:O	1:A:1501:VAL:HG23	2.10	0.52
1:A:1990:GLU:HG3	1:A:1994:ARG:HE	1.74	0.52
1:A:3946:GLN:NE2	1:A:3949:ARG:HE	2.08	0.52
1:A:4835:LYS:O	1:A:4839:MET:HG2	2.10	0.52
1:A:4973:HIS:O	1:A:4977:THR:HG23	2.09	0.52
2:G:105:LYS:NZ	2:G:107:GLU:OE2	2.42	0.52
1:B:688:LEU:HD11	1:B:775:GLY:CA	2.39	0.52
1:B:864:PRO:HD2	1:B:867:LEU:HD12	1.90	0.52
1:B:1480:GLN:O	1:B:1480:GLN:HG2	2.09	0.52
1:B:1497:GLY:O	1:B:1501:VAL:HG23	2.10	0.52
1:B:2584[A]:HIS:HD2	1:B:2625:ARG:CZ	2.22	0.52
1:D:3321:ARG:NH1	1:D:3321:ARG:CB	2.66	0.52
1:C:4759:ASP:O	1:C:4761:PRO:HD3	2.08	0.52
1:A:296:ASP:OD1	1:A:297:GLN:N	2.42	0.52
1:A:1771:LEU:HD22	1:A:2153:MET:HE2	1.92	0.52
1:A:2165:LEU:HD21	1:A:2177:LEU:HD23	1.92	0.52
1:A:2584[A]:HIS:HD2	1:A:2625:ARG:CZ	2.22	0.52
1:A:4139:ILE:O	1:A:4143:VAL:HG23	2.08	0.52
2:F:6:THR:HG23	2:F:6:THR:O	2.10	0.52
1:B:1280:GLN:O	1:B:1281:ASN:OD1	2.26	0.52
1:D:1771:LEU:HD22	1:D:2153:MET:HE2	1.92	0.52
1:D:2822:THR:OG1	1:D:2938:THR:OG1	2.28	0.52
1:D:3825:GLU:OE1	1:D:3825:GLU:N	2.43	0.52
1:C:2584[A]:HIS:HD2	1:C:2625:ARG:CZ	2.22	0.52
1:C:5034:ASP:OD1	1:C:5035:GLN:N	2.43	0.52
1:A:2822:THR:OG1	1:A:2938:THR:OG1	2.28	0.52
2:H:105:LYS:NZ	2:H:107:GLU:OE2	2.42	0.52
2:G:6:THR:HG23	2:G:6:THR:O	2.10	0.52
1:B:2930:LEU:N	1:B:2930:LEU:HD12	2.23	0.52
1:B:3395:ARG:HD2	1:B:3454:GLU:CD	2.33	0.52
1:D:831:ARG:HE	1:D:840:VAL:HG21	1.75	0.52
1:D:864:PRO:HD2	1:D:867:LEU:HD12	1.90	0.52
1:D:2165:LEU:HD21	1:D:2177:LEU:HD23	1.92	0.52
1:C:1480:GLN:HG2	1:C:1480:GLN:O	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2518:LEU:O	1:C:2522:LEU:HD13	2.10	0.52
1:C:3284:TRP:O	1:C:3305:THR:HG21	2.10	0.52
1:C:3994:HIS:CE1	1:C:3998:HIS:CE1	2.98	0.52
1:A:818:ARG:NH1	1:A:1029:GLU:OE2	2.40	0.52
2:E:105:LYS:NZ	2:E:107:GLU:OE2	2.42	0.52
1:D:3994:HIS:CE1	1:D:3998:HIS:CE1	2.98	0.52
1:D:4586:PRO:CD	1:D:4629:TYR:HE2	2.22	0.52
1:D:4782:VAL:O	1:D:4785:THR:OG1	2.23	0.52
1:C:867:LEU:HA	1:C:870:ILE:HG22	1.92	0.52
1:C:1110:ARG:NH2	1:C:1112:ASP:OD2	2.42	0.52
1:C:1676:LEU:HB3	1:C:2167:ILE:HD12	1.92	0.52
1:C:3395:ARG:HD2	1:C:3454:GLU:CD	2.33	0.52
1:C:4973:HIS:O	1:C:4977:THR:HG23	2.09	0.52
1:A:867:LEU:HA	1:A:870:ILE:HG22	1.92	0.52
1:A:961:MET:HE1	1:A:965:TYR:O	2.08	0.52
1:A:1480:GLN:O	1:A:1480:GLN:HG2	2.09	0.52
1:A:2518:LEU:O	1:A:2522:LEU:HD13	2.10	0.52
1:B:2452:ARG:HH12	1:C:174:VAL:HG12	1.75	0.52
1:B:2668:SER:O	1:B:2669:GLU:CB	2.57	0.52
1:B:3445:TRP:O	1:B:3452:LYS:NZ	2.34	0.52
1:B:4573:ILE:HG23	1:B:4643:LEU:HD11	1.90	0.52
1:B:4586:PRO:CD	1:B:4629:TYR:HE2	2.22	0.52
1:D:590:LEU:HD21	1:D:599:VAL:HB	1.92	0.52
1:D:1497:GLY:O	1:D:1501:VAL:HG23	2.10	0.52
1:C:5000:GLU:OE2	1:C:5011:TRP:NE1	2.43	0.52
1:A:3825:GLU:OE1	1:A:3825:GLU:N	2.43	0.52
1:A:4573:ILE:HG23	1:A:4643:LEU:HD11	1.90	0.52
1:B:1018:ASN:CB	1:B:1021:LEU:HD23	2.38	0.52
1:B:2165:LEU:HD21	1:B:2177:LEU:HD23	1.92	0.52
1:D:296:ASP:OD1	1:D:297:GLN:N	2.42	0.52
1:D:1110:ARG:NH2	1:D:1112:ASP:OD2	2.42	0.52
1:D:2518:LEU:O	1:D:2522:LEU:HD13	2.10	0.52
1:D:3170:CYS:HA	1:D:3243:ILE:HD11	1.91	0.52
1:D:3284:TRP:O	1:D:3305:THR:HG21	2.10	0.52
1:C:37:LEU:HD11	1:C:47:CYS:HB3	1.92	0.52
1:A:3170:CYS:HA	1:A:3243:ILE:HD11	1.90	0.52
1:B:37:LEU:HD11	1:B:47:CYS:HB3	1.92	0.52
1:B:3946:GLN:NE2	1:B:3949:ARG:HE	2.08	0.52
1:B:5034:ASP:OD1	1:B:5035:GLN:N	2.43	0.52
1:D:867:LEU:HA	1:D:870:ILE:HG22	1.92	0.52
1:D:4645:CYS:O	1:D:4649:LEU:HD13	2.09	0.52

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4835:LYS:O	1:D:4839:MET:HG2	2.10	0.52
1:C:1497:GLY:O	1:C:1501:VAL:HG23	2.10	0.52
1:C:3478:MET:O	1:C:3478:MET:HG2	2.10	0.52
1:A:37:LEU:HD11	1:A:47:CYS:HB3	1.92	0.52
1:A:3284:TRP:O	1:A:3305:THR:HG21	2.10	0.52
1:B:1676:LEU:HB3	1:B:2167:ILE:HD12	1.92	0.52
1:D:3097:GLU:O	1:D:3100:SER:OG	2.21	0.52
1:D:5034:ASP:OD1	1:D:5035:GLN:N	2.43	0.52
1:A:831:ARG:HE	1:A:840:VAL:HG21	1.75	0.52
1:A:1110:ARG:NH2	1:A:1112:ASP:OD2	2.42	0.52
1:A:2967:MET:HE1	1:A:3049:LEU:HD22	1.92	0.52
1:A:3994:HIS:CE1	1:A:3998:HIS:CE1	2.98	0.52
1:B:1771:LEU:HD22	1:B:2153:MET:HE2	1.92	0.52
1:B:3825:GLU:OE1	1:B:3825:GLU:N	2.43	0.52
1:D:239:ASP:OD1	1:D:240:ASP:N	2.43	0.52
1:D:3613:TYR:O	1:D:3617:LYS:NZ	2.36	0.52
1:D:3933:PHE:CD2	1:D:3951:PHE:CZ	2.98	0.52
1:D:5000:GLU:OE2	1:D:5011:TRP:NE1	2.43	0.52
1:C:1771:LEU:HD22	1:C:2153:MET:HE2	1.92	0.52
1:A:1676:LEU:HB3	1:A:2167:ILE:HD12	1.92	0.51
1:A:3319:ILE:C	1:A:3321:ARG:N	2.65	0.51
1:A:4944:ARG:NH1	1:B:4942:GLU:OE1	2.41	0.51
1:A:4956:THR:O	1:A:4965:SER:N	2.43	0.51
1:B:860:GLN:O	1:B:930:LYS:NZ	2.40	0.51
1:B:867:LEU:HA	1:B:870:ILE:HG22	1.92	0.51
1:B:2635:GLU:O	1:B:2638:LYS:NZ	2.40	0.51
1:B:3284:TRP:O	1:B:3305:THR:HG21	2.10	0.51
1:B:3319:ILE:C	1:B:3321:ARG:N	2.65	0.51
1:D:37:LEU:HD11	1:D:47:CYS:HB3	1.92	0.51
1:D:2668:SER:O	1:D:2669:GLU:CB	2.57	0.51
1:D:3478:MET:O	1:D:3478:MET:HG2	2.10	0.51
1:C:4680:LYS:O	1:C:4685:GLY:N	2.42	0.51
1:A:965:TYR:O	1:A:965:TYR:CG	2.57	0.51
1:A:1995:THR:HG22	1:A:1999:ARG:HG2	1.93	0.51
1:A:3187:ARG:HG3	1:A:3272:ILE:HD11	1.92	0.51
2:E:6:THR:HG23	2:E:6:THR:O	2.10	0.51
2:H:6:THR:HG23	2:H:6:THR:O	2.10	0.51
1:B:239:ASP:OD1	1:B:240:ASP:N	2.43	0.51
1:B:717:ASP:OD1	1:B:720:HIS:N	2.41	0.51
1:B:3994:HIS:CE1	1:B:3998:HIS:CE1	2.98	0.51
1:B:5000:GLU:OE2	1:B:5011:TRP:NE1	2.43	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:818:ARG:NH1	1:D:1029:GLU:OE2	2.40	0.51
1:D:3946:GLN:NE2	1:D:3949:ARG:HE	2.08	0.51
1:D:4680:LYS:O	1:D:4685:GLY:N	2.42	0.51
1:C:717:ASP:OD1	1:C:720:HIS:N	2.41	0.51
1:C:3616:LYS:HA	1:C:3619:VAL:CG2	2.41	0.51
1:C:3825:GLU:N	1:C:3825:GLU:OE1	2.43	0.51
1:C:4978:HIS:CE1	1:C:4983:HIS:ND1	2.78	0.51
1:A:3354:LEU:HD11	1:A:3434:LEU:HD22	1.93	0.51
2:E:38:SER:HB3	2:E:41:ASP:OD1	2.11	0.51
1:B:647:ASN:ND2	1:B:820:ARG:O	2.38	0.51
1:B:3354:LEU:HD11	1:B:3434:LEU:HD22	1.93	0.51
1:B:3435:PHE:CD2	1:B:3524:MET:CE	2.94	0.51
1:D:174:VAL:HG12	1:C:2452:ARG:HH12	1.74	0.51
1:D:975:VAL:HG13	1:D:1047:LEU:HD23	1.92	0.51
1:D:2490:MET:SD	1:D:2545:GLU:OE2	2.69	0.51
1:D:2967:MET:HE1	1:D:3049:LEU:HD22	1.92	0.51
1:D:3354:LEU:HD11	1:D:3434:LEU:HD22	1.93	0.51
1:C:721:LEU:HD12	1:C:1476:MET:HE1	1.93	0.51
1:C:831:ARG:HE	1:C:840:VAL:HG21	1.75	0.51
1:C:3187:ARG:HG3	1:C:3272:ILE:HD11	1.92	0.51
1:C:3699:HIS:CE1	1:C:3703:LEU:HD11	2.46	0.51
1:C:4870:ASP:OD1	1:C:4870:ASP:N	2.44	0.51
1:A:3282:PRO:HG3	1:A:3345:ILE:HG22	1.92	0.51
1:A:3616:LYS:HA	1:A:3619:VAL:CG2	2.40	0.51
1:A:3933:PHE:CD2	1:A:3951:PHE:CZ	2.98	0.51
1:A:4651:THR:OG1	1:A:4803:HIS:NE2	2.33	0.51
2:G:38:SER:HB3	2:G:41:ASP:OD1	2.11	0.51
1:B:3282:PRO:HG3	1:B:3345:ILE:HG22	1.92	0.51
1:B:3699:HIS:CE1	1:B:3703:LEU:HD11	2.46	0.51
1:B:4835:LYS:O	1:B:4839:MET:HG2	2.10	0.51
1:D:869:ARG:NH2	1:D:1051:TYR:OH	2.44	0.51
1:D:3616:LYS:HA	1:D:3619:VAL:CG2	2.40	0.51
1:D:4978:HIS:CE1	1:D:4983:HIS:ND1	2.78	0.51
1:C:239:ASP:OD1	1:C:240:ASP:N	2.43	0.51
1:C:2822:THR:OG1	1:C:2938:THR:OG1	2.28	0.51
1:A:239:ASP:OD1	1:A:240:ASP:N	2.43	0.51
1:A:5034:ASP:OD1	1:A:5035:GLN:N	2.43	0.51
1:B:2518:LEU:O	1:B:2522:LEU:HD13	2.10	0.51
1:B:3616:LYS:HA	1:B:3619:VAL:CG2	2.40	0.51
1:C:2604:GLU:HB3	1:C:2608:MET:HE1	1.91	0.51
1:A:734:GLY:O	1:A:736:HIS:ND1	2.35	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2604:GLU:HB3	1:A:2608:MET:HE1	1.90	0.51
1:A:4586:PRO:CD	1:A:4629:TYR:HE2	2.22	0.51
1:B:3733:CYS:SG	1:B:3770:LEU:HD12	2.51	0.51
1:D:3733:CYS:SG	1:D:3770:LEU:HD12	2.51	0.51
1:D:4205:TRP:CE3	1:D:4989:MET:HE2	2.46	0.51
1:D:4956:THR:O	1:D:4965:SER:N	2.43	0.51
1:D:4989:MET:SD	1:D:4993:MET:SD	3.08	0.51
1:C:359:TYR:HD2	1:C:361:ALA:H	1.58	0.51
1:C:3282:PRO:HG3	1:C:3345:ILE:HG22	1.92	0.51
1:C:3946:GLN:NE2	1:C:3949:ARG:HE	2.08	0.51
1:A:1039:LEU:O	1:A:1043:VAL:HG23	2.09	0.51
1:A:3478:MET:O	1:A:3478:MET:HG2	2.10	0.51
1:A:3699:HIS:CE1	1:A:3703:LEU:HD11	2.46	0.51
1:B:296:ASP:OD1	1:B:297:GLN:N	2.42	0.51
1:B:590:LEU:HD21	1:B:599:VAL:HB	1.92	0.51
1:B:721:LEU:HD12	1:B:1476:MET:HE1	1.93	0.51
1:B:1990:GLU:HG3	1:B:1994:ARG:HE	1.74	0.51
1:B:2822:THR:OG1	1:B:2938:THR:OG1	2.28	0.51
1:B:3257:ALA:O	1:B:3321:ARG:NH2	2.44	0.51
1:B:3258:GLU:HA	1:B:3321:ARG:NH2	2.26	0.51
1:D:721:LEU:HD12	1:D:1476:MET:HE1	1.93	0.51
1:D:4627:MET:SD	1:D:4628:VAL:O	2.69	0.51
1:D:4870:ASP:OD1	1:D:4870:ASP:N	2.44	0.51
1:D:4973:HIS:O	1:D:4977:THR:HG23	2.09	0.51
1:C:590:LEU:HD21	1:C:599:VAL:HB	1.92	0.51
1:C:869:ARG:NH2	1:C:1051:TYR:OH	2.44	0.51
1:C:2481:LYS:HD2	1:C:2481:LYS:O	2.11	0.51
1:C:4989:MET:SD	1:C:4993:MET:SD	3.08	0.51
1:A:927:GLU:O	1:A:931:THR:HG23	2.11	0.51
1:A:3733:CYS:SG	1:A:3770:LEU:HD12	2.51	0.51
1:A:3933:PHE:HE2	1:A:3951:PHE:CZ	2.18	0.51
1:A:4627:MET:SD	1:A:4628:VAL:O	2.69	0.51
2:H:77:SER:OG	2:H:79:ASP:OD1	2.28	0.51
1:B:869:ARG:NH2	1:B:1051:TYR:OH	2.44	0.51
1:B:1039:LEU:O	1:B:1043:VAL:HG23	2.09	0.51
1:B:3413:ILE:HG23	1:B:3516:LYS:HD3	1.93	0.51
1:D:3699:HIS:CE1	1:D:3703:LEU:HD11	2.45	0.51
1:C:3354:LEU:HD11	1:C:3434:LEU:HD22	1.93	0.51
1:C:4182:GLU:OE1	1:C:4983:HIS:NE2	2.44	0.51
1:C:4835:LYS:O	1:C:4839:MET:HG2	2.10	0.51
1:A:2452:ARG:HH12	1:B:174:VAL:HG12	1.76	0.51

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3258:GLU:HA	1:A:3321:ARG:NH2	2.26	0.51
1:A:4686:LEU:O	1:A:4691:GLN:N	2.36	0.51
1:A:5000:GLU:OE2	1:A:5011:TRP:NE1	2.43	0.51
2:H:38:SER:HB3	2:H:41:ASP:OD1	2.11	0.51
1:B:3933:PHE:CD2	1:B:3951:PHE:CZ	2.98	0.51
1:B:4205:TRP:CE3	1:B:4989:MET:HE2	2.46	0.51
1:B:4978:HIS:CE1	1:B:4983:HIS:ND1	2.78	0.51
1:D:883:ALA:HB1	1:D:907:LEU:HD13	1.93	0.51
1:D:1995:THR:HG22	1:D:1999:ARG:HG2	1.93	0.51
1:C:2490:MET:SD	1:C:2545:GLU:OE2	2.69	0.51
1:C:3435:PHE:CD2	1:C:3524:MET:CE	2.94	0.51
1:C:4956:THR:O	1:C:4965:SER:N	2.43	0.51
1:A:590:LEU:HD21	1:A:599:VAL:HB	1.92	0.51
1:A:975:VAL:HG13	1:A:1047:LEU:HD23	1.92	0.51
1:A:4205:TRP:CE3	1:A:4989:MET:HE2	2.46	0.51
1:A:4989:MET:SD	1:A:4993:MET:SD	3.08	0.51
1:B:2198:MET:SD	1:B:2203:MET:SD	3.09	0.51
1:B:2977:LEU:CD2	1:B:3056:LEU:HD22	2.42	0.51
1:B:3478:MET:HG2	1:B:3478:MET:O	2.10	0.51
1:B:4956:THR:O	1:B:4965:SER:N	2.43	0.51
1:D:2198:MET:SD	1:D:2203:MET:SD	3.09	0.51
1:C:648:ILE:HD13	1:C:811:CYS:HB3	1.93	0.51
1:A:869:ARG:NH2	1:A:1051:TYR:OH	2.44	0.50
1:D:3187:ARG:HG3	1:D:3272:ILE:HD11	1.92	0.50
1:C:975:VAL:HG13	1:C:1047:LEU:HD23	1.92	0.50
1:C:2198:MET:SD	1:C:2203:MET:SD	3.09	0.50
1:C:3257:ALA:O	1:C:3321:ARG:NH2	2.44	0.50
1:A:359:TYR:HD2	1:A:361:ALA:H	1.58	0.50
1:A:2309:SER:OG	1:A:2314:LEU:HD21	2.11	0.50
1:A:2490:MET:SD	1:A:2545:GLU:OE2	2.69	0.50
1:B:927:GLU:O	1:B:931:THR:HG23	2.11	0.50
1:B:4989:MET:SD	1:B:4993:MET:SD	3.08	0.50
1:D:988:LEU:HB3	1:D:1039:LEU:HD21	1.93	0.50
1:D:2309:SER:OG	1:D:2314:LEU:HD21	2.11	0.50
1:D:2974:ILE:CD1	1:D:3049:LEU:HD12	2.42	0.50
1:D:3258:GLU:HA	1:D:3321:ARG:NH2	2.26	0.50
1:C:927:GLU:O	1:C:931:THR:HG23	2.11	0.50
1:C:1990:GLU:HG3	1:C:1994:ARG:HE	1.74	0.50
1:C:2967:MET:HE1	1:C:3049:LEU:HD22	1.92	0.50
1:C:3733:CYS:SG	1:C:3770:LEU:HD12	2.51	0.50
1:A:3257:ALA:O	1:A:3321:ARG:NH2	2.44	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:4978:HIS:CE1	1:A:4983:HIS:ND1	2.78	0.50
1:B:831:ARG:HE	1:B:840:VAL:HG21	1.75	0.50
1:B:883:ALA:HB1	1:B:907:LEU:HD13	1.93	0.50
1:B:941:MET:SD	1:B:1051:TYR:HE1	2.35	0.50
1:B:1995:THR:HG22	1:B:1999:ARG:HG2	1.93	0.50
1:B:2967:MET:HE1	1:B:3049:LEU:HD22	1.92	0.50
1:B:2974:ILE:HG13	1:B:2975:ALA:N	2.27	0.50
1:B:4182:GLU:OE1	1:B:4983:HIS:NE2	2.44	0.50
1:D:3321:ARG:HH11	1:D:3321:ARG:CG	2.13	0.50
1:C:883:ALA:HB1	1:C:907:LEU:HD13	1.93	0.50
1:A:3413:ILE:HG23	1:A:3516:LYS:HD3	1.93	0.50
2:F:38:SER:HB3	2:F:41:ASP:OD1	2.11	0.50
1:B:3299:GLY:O	1:B:3300:ALA:HB2	2.11	0.50
1:D:648:ILE:HD13	1:D:811:CYS:HB3	1.93	0.50
1:D:3762:ARG:C	1:D:3766:GLN:NE2	2.69	0.50
1:C:734:GLY:O	1:C:736:HIS:ND1	2.35	0.50
1:C:3258:GLU:HA	1:C:3321:ARG:NH2	2.26	0.50
1:C:3732:SER:O	1:C:3735:LEU:HG	2.11	0.50
1:C:4205:TRP:CE3	1:C:4989:MET:HE2	2.46	0.50
1:A:721:LEU:HD12	1:A:1476:MET:HE1	1.93	0.50
1:B:1143:TRP:CE3	1:B:1149:VAL:HG21	2.47	0.50
1:B:2309:SER:OG	1:B:2314:LEU:HD21	2.11	0.50
1:B:2481:LYS:O	1:B:2481:LYS:HD2	2.11	0.50
1:B:3382:GLU:CA	1:B:3384:LYS:HZ3	2.24	0.50
1:D:359:TYR:HD2	1:D:361:ALA:H	1.58	0.50
1:D:1676:LEU:HB3	1:D:2167:ILE:HD12	1.92	0.50
1:D:2685:SER:O	1:D:2689:LYS:HG2	2.12	0.50
1:C:2604:GLU:CB	1:C:2608:MET:HE1	2.42	0.50
1:C:3324:VAL:CG1	1:C:3361:THR:HG22	2.41	0.50
1:A:985:VAL:HG22	1:A:1043:VAL:HG21	1.94	0.50
1:A:988:LEU:HB3	1:A:1039:LEU:HD21	1.93	0.50
1:B:2490:MET:SD	1:B:2545:GLU:OE2	2.69	0.50
1:B:3187:ARG:HG3	1:B:3272:ILE:HD11	1.92	0.50
1:B:3762:ARG:C	1:B:3766:GLN:NE2	2.69	0.50
1:D:985:VAL:HG22	1:D:1043:VAL:HG21	1.94	0.50
1:C:941:MET:SD	1:C:1051:TYR:HE1	2.35	0.50
1:B:961:MET:HE1	1:B:967:PRO:HD3	1.94	0.50
1:D:2481:LYS:HD2	1:D:2481:LYS:O	2.11	0.50
1:D:3299:GLY:O	1:D:3300:ALA:HB2	2.11	0.50
1:D:4634:GLU:OE1	1:D:4634:GLU:N	2.45	0.50
1:C:1143:TRP:HZ3	1:C:1149:VAL:HG21	1.74	0.50

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2309:SER:OG	1:C:2314:LEU:HD21	2.11	0.50
1:C:2974:ILE:CD1	1:C:3049:LEU:HD12	2.42	0.50
1:C:3762:ARG:C	1:C:3766:GLN:NE2	2.69	0.50
1:A:568:LEU:HD12	1:A:602:VAL:HG13	1.94	0.50
1:A:2604:GLU:CB	1:A:2608:MET:HE1	2.42	0.50
1:A:2974:ILE:CD1	1:A:3049:LEU:HD12	2.42	0.50
1:A:2977:LEU:CD2	1:A:3056:LEU:HD22	2.42	0.50
1:B:463:GLU:O	1:B:467:LYS:HG2	2.12	0.50
1:B:3732:SER:O	1:B:3735:LEU:HG	2.12	0.50
1:B:4627:MET:SD	1:B:4628:VAL:O	2.69	0.50
1:B:4634:GLU:OE1	1:B:4634:GLU:N	2.45	0.50
1:D:884:LEU:O	1:D:888:GLU:OE1	2.29	0.50
1:D:927:GLU:O	1:D:931:THR:HG23	2.11	0.50
1:D:3282:PRO:HG3	1:D:3345:ILE:HG22	1.92	0.50
1:C:568:LEU:HD12	1:C:602:VAL:HG13	1.94	0.50
1:C:918:ARG:O	1:C:922:LEU:HD23	2.12	0.50
1:C:3299:GLY:O	1:C:3300:ALA:HB2	2.11	0.50
1:A:884:LEU:O	1:A:888:GLU:OE1	2.29	0.50
1:A:3225:ARG:NH2	1:A:3226:GLU:OE2	2.45	0.50
2:E:24:VAL:HG21	2:E:59:TRP:CZ3	2.47	0.50
1:B:2685:SER:O	1:B:2689:LYS:HG2	2.12	0.50
1:B:3504:SER:O	1:B:3507:THR:OG1	2.22	0.50
1:B:3944:GLU:OE2	1:B:3946:GLN:HB2	2.12	0.50
1:D:3257:ALA:O	1:D:3321:ARG:NH2	2.44	0.50
1:D:3435:PHE:CD2	1:D:3524:MET:CE	2.94	0.50
1:D:3732:SER:O	1:D:3735:LEU:HG	2.11	0.50
1:C:404:ILE:HG23	1:C:483:MET:SD	2.52	0.50
1:C:884:LEU:O	1:C:888:GLU:OE1	2.29	0.50
1:C:2142:TYR:HA	1:C:3651:ASN:HD21	1.77	0.50
1:C:3225:ARG:NH2	1:C:3226:GLU:OE2	2.45	0.50
1:C:3521:GLY:HA2	1:C:3524:MET:HE3	1.89	0.50
1:A:463:GLU:O	1:A:467:LYS:HG2	2.12	0.49
1:A:883:ALA:HB1	1:A:907:LEU:HD13	1.93	0.49
1:A:2198:MET:SD	1:A:2203:MET:SD	3.09	0.49
1:A:2685:SER:O	1:A:2689:LYS:HG2	2.12	0.49
1:A:3732:SER:O	1:A:3735:LEU:HG	2.12	0.49
1:A:4182:GLU:OE1	1:A:4983:HIS:NE2	2.44	0.49
1:B:359:TYR:HD2	1:B:361:ALA:H	1.58	0.49
1:B:918:ARG:O	1:B:922:LEU:HD23	2.12	0.49
1:B:975:VAL:HG13	1:B:1047:LEU:HD23	1.92	0.49
1:B:2142:TYR:HA	1:B:3651:ASN:HD21	1.77	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:463:GLU:O	1:D:467:LYS:HG2	2.12	0.49
1:D:918:ARG:O	1:D:922:LEU:HD23	2.12	0.49
1:D:3413:ILE:HG23	1:D:3516:LYS:HD3	1.93	0.49
1:D:4791:TYR:CZ	1:D:4818:MET:CE	2.95	0.49
1:C:2538:THR:O	1:C:2542:SER:N	2.37	0.49
1:C:2685:SER:O	1:C:2689:LYS:HG2	2.12	0.49
1:A:2481:LYS:HD2	1:A:2481:LYS:O	2.11	0.49
1:A:3762:ARG:C	1:A:3766:GLN:NE2	2.69	0.49
1:A:4860:ARG:NH1	1:D:4630:TYR:OH	2.45	0.49
1:B:2604:GLU:CB	1:B:2608:MET:HE1	2.42	0.49
1:B:3114:LYS:HD2	1:B:3125:VAL:HG21	1.94	0.49
1:D:404:ILE:HG23	1:D:483:MET:SD	2.52	0.49
1:D:1931:LEU:HD13	1:D:1935:VAL:CG1	2.41	0.49
1:C:601:ASP:OD1	1:C:1665:HIS:ND1	2.38	0.49
1:C:3933:PHE:CD2	1:C:3951:PHE:CZ	2.98	0.49
1:C:4791:TYR:CZ	1:C:4818:MET:CE	2.96	0.49
1:A:860:GLN:O	1:A:930:LYS:NZ	2.39	0.49
1:A:961:MET:HE1	1:A:967:PRO:HD3	1.94	0.49
1:A:3944:GLU:OE2	1:A:3946:GLN:HB2	2.12	0.49
1:A:4634:GLU:OE1	1:A:4634:GLU:N	2.45	0.49
1:A:4902:GLU:O	1:A:4913:ARG:CZ	2.61	0.49
1:B:26:ALA:N	1:B:32:GLN:OE1	2.46	0.49
1:D:568:LEU:HD12	1:D:602:VAL:HG13	1.94	0.49
1:D:2604:GLU:CB	1:D:2608:MET:HE1	2.42	0.49
1:D:2977:LEU:CD2	1:D:3056:LEU:HD22	2.42	0.49
1:D:3391:GLU:OE2	1:D:3450:ASN:ND2	2.34	0.49
1:C:438:ILE:HG23	1:C:518:ILE:HD11	1.94	0.49
1:C:914:PRO:HB2	1:C:917:GLU:OE1	2.13	0.49
1:C:1143:TRP:CE3	1:C:1149:VAL:HG21	2.47	0.49
1:C:2166:LEU:HD11	1:C:2206:THR:HG23	1.94	0.49
1:C:2974:ILE:HG13	1:C:2975:ALA:N	2.27	0.49
1:C:3660:ALA:O	1:C:3664:THR:OG1	2.17	0.49
1:C:4782:VAL:O	1:C:4785:THR:OG1	2.23	0.49
1:A:648:ILE:HD13	1:A:811:CYS:HB3	1.93	0.49
1:A:918:ARG:O	1:A:922:LEU:HD23	2.12	0.49
1:A:3382:GLU:CA	1:A:3384:LYS:HZ3	2.26	0.49
1:B:568:LEU:HD12	1:B:602:VAL:HG13	1.94	0.49
1:B:3225:ARG:NH2	1:B:3226:GLU:OE2	2.45	0.49
1:B:4680:LYS:O	1:B:4685:GLY:N	2.42	0.49
1:B:4826:ILE:O	1:B:4829:SER:OG	2.24	0.49
1:D:21:VAL:HG11	1:D:62:LEU:HD11	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:717:ASP:OD1	1:D:720:HIS:N	2.41	0.49
1:D:2974:ILE:HG13	1:D:2975:ALA:N	2.27	0.49
1:D:3944:GLU:OE2	1:D:3946:GLN:HB2	2.12	0.49
1:C:1995:THR:HG22	1:C:1999:ARG:HG2	1.93	0.49
1:C:4627:MET:SD	1:C:4628:VAL:O	2.69	0.49
1:A:404:ILE:HG23	1:A:483:MET:SD	2.52	0.49
1:A:914:PRO:HB2	1:A:917:GLU:OE1	2.13	0.49
2:G:3:GLN:NE2	2:G:75:THR:HG21	2.28	0.49
2:F:3:GLN:NE2	2:F:75:THR:HG21	2.28	0.49
1:B:884:LEU:O	1:B:888:GLU:OE1	2.29	0.49
1:B:985:VAL:HG22	1:B:1043:VAL:HG21	1.94	0.49
1:B:2974:ILE:CD1	1:B:3049:LEU:HD12	2.42	0.49
1:C:2977:LEU:CD2	1:C:3056:LEU:HD22	2.42	0.49
1:C:4634:GLU:N	1:C:4634:GLU:OE1	2.45	0.49
1:A:26:ALA:N	1:A:32:GLN:OE1	2.46	0.49
1:A:3114:LYS:HD2	1:A:3125:VAL:HG21	1.94	0.49
1:A:3299:GLY:O	1:A:3300:ALA:HB2	2.11	0.49
1:A:3382:GLU:HA	1:A:3384:LYS:HZ3	1.77	0.49
1:A:3395:ARG:CD	1:A:3454:GLU:CD	2.86	0.49
1:A:4870:ASP:OD1	1:A:4870:ASP:N	2.44	0.49
1:B:156:GLN:OE1	1:B:156:GLN:CA	2.61	0.49
1:B:404:ILE:HG23	1:B:483:MET:SD	2.52	0.49
1:B:4930:ALA:HA	1:B:4933:GLN:OE1	2.13	0.49
1:D:941:MET:SD	1:D:1051:TYR:HE1	2.35	0.49
1:D:2142:TYR:HA	1:D:3651:ASN:HD21	1.77	0.49
1:D:2482:ASP:C	1:D:2482:ASP:OD1	2.56	0.49
1:D:3246:LEU:HD11	1:D:3250:MET:HE3	1.94	0.49
1:D:3445:TRP:O	1:D:3452:LYS:NZ	2.34	0.49
1:D:4543:GLU:O	1:D:4546:VAL:HG22	2.13	0.49
1:D:4764:LEU:HD12	1:D:4765:LEU:N	2.28	0.49
1:C:156:GLN:OE1	1:C:156:GLN:CA	2.61	0.49
1:C:463:GLU:O	1:C:467:LYS:HG2	2.12	0.49
1:C:2926:LEU:O	1:C:2930:LEU:HD13	2.12	0.49
1:C:3319:ILE:O	1:C:3320:LEU:C	2.55	0.49
1:C:3395:ARG:CD	1:C:3454:GLU:CD	2.86	0.49
1:C:3413:ILE:HG23	1:C:3516:LYS:HD3	1.93	0.49
1:A:1143:TRP:CE3	1:A:1149:VAL:HG21	2.47	0.49
1:A:4791:TYR:CZ	1:A:4818:MET:CE	2.96	0.49
1:A:4930:ALA:HA	1:A:4933:GLN:OE1	2.13	0.49
2:E:25:HIS:ND1	2:E:104:LEU:HD21	2.28	0.49
2:F:24:VAL:HG21	2:F:59:TRP:CZ3	2.47	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:648:ILE:HD13	1:B:811:CYS:HB3	1.93	0.49
1:D:509:GLU:O	1:D:513:GLU:OE1	2.31	0.49
1:D:2926:LEU:O	1:D:2930:LEU:HD13	2.12	0.49
1:D:3107:VAL:O	1:D:3111:ARG:HG2	2.13	0.49
1:D:4902:GLU:O	1:D:4913:ARG:CZ	2.61	0.49
1:C:26:ALA:N	1:C:32:GLN:OE1	2.46	0.49
2:G:24:VAL:HG21	2:G:59:TRP:CZ3	2.47	0.49
1:B:988:LEU:HB3	1:B:1039:LEU:HD21	1.93	0.49
1:B:3081:MET:HE1	1:B:3093:ARG:HH12	1.78	0.49
1:B:4686:LEU:O	1:B:4691:GLN:N	2.36	0.49
1:D:438:ILE:HG23	1:D:518:ILE:HD11	1.94	0.49
1:D:914:PRO:HB2	1:D:917:GLU:OE1	2.13	0.49
1:D:961:MET:HE1	1:D:967:PRO:HD3	1.94	0.49
1:C:278:GLN:HA	1:C:328:LYS:NZ	2.28	0.49
1:C:2644:LEU:HD13	1:C:2678:LEU:HD21	1.95	0.49
1:C:3246:LEU:HD11	1:C:3250:MET:HE3	1.94	0.49
1:A:601:ASP:OD1	1:A:1665:HIS:ND1	2.38	0.49
1:A:1143:TRP:HZ3	1:A:1149:VAL:HG21	1.74	0.49
1:A:2166:LEU:HD11	1:A:2206:THR:HG23	1.94	0.49
1:A:2644:LEU:HD13	1:A:2678:LEU:HD21	1.95	0.49
1:A:2974:ILE:HG13	1:A:2975:ALA:N	2.27	0.49
1:A:4161:ARG:HA	1:A:4164:LEU:HD12	1.95	0.49
2:H:2:VAL:HG23	2:H:80:TYR:HD2	1.78	0.49
2:G:2:VAL:HG23	2:G:80:TYR:HD2	1.78	0.49
1:B:3318:ASN:C	1:B:3321:ARG:H	2.20	0.49
1:D:2614:ILE:HG23	1:D:2618:MET:SD	2.53	0.49
1:D:3225:ARG:NH2	1:D:3226:GLU:OE2	2.45	0.49
1:D:3395:ARG:CD	1:D:3454:GLU:CD	2.86	0.49
1:C:3944:GLU:OE2	1:C:3946:GLN:HB2	2.12	0.49
1:C:4651:THR:OG1	1:C:4803:HIS:NE2	2.33	0.49
1:A:156:GLN:OE1	1:A:156:GLN:CA	2.61	0.49
1:A:278:GLN:HA	1:A:328:LYS:NZ	2.28	0.49
1:A:2142:TYR:HA	1:A:3651:ASN:HD21	1.77	0.49
1:A:2977:LEU:O	1:A:2981:VAL:HG23	2.13	0.49
1:A:3107:VAL:O	1:A:3111:ARG:HG2	2.13	0.49
1:A:3383:ALA:N	1:A:3384:LYS:HZ2	2.11	0.49
2:G:25:HIS:ND1	2:G:104:LEU:HD21	2.28	0.49
1:B:234:SER:HG	1:B:238:SER:HG	1.49	0.49
1:B:278:GLN:HA	1:B:328:LYS:NZ	2.28	0.49
1:B:818:ARG:NH1	1:B:1029:GLU:OE2	2.40	0.49
1:B:2644:LEU:HD13	1:B:2678:LEU:HD21	1.95	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3107:VAL:O	1:B:3111:ARG:HG2	2.13	0.49
1:B:4736:ARG:HB2	1:B:4736:ARG:NH1	2.28	0.49
1:D:278:GLN:HA	1:D:328:LYS:NZ	2.28	0.49
1:D:3319:ILE:O	1:D:3320:LEU:C	2.55	0.49
1:D:3324:VAL:CG1	1:D:3361:THR:HG22	2.41	0.49
1:D:4161:ARG:HA	1:D:4164:LEU:HD12	1.95	0.49
1:C:860:GLN:O	1:C:930:LYS:NZ	2.39	0.49
1:C:4902:GLU:O	1:C:4913:ARG:CZ	2.60	0.49
1:A:941:MET:SD	1:A:1051:TYR:HE1	2.35	0.48
1:A:1436:SER:OG	1:A:1565:GLU:HB2	2.13	0.48
1:A:3318:ASN:C	1:A:3321:ARG:H	2.20	0.48
1:A:4764:LEU:HD12	1:A:4765:LEU:N	2.28	0.48
2:E:2:VAL:HG23	2:E:80:TYR:HD2	1.78	0.48
1:B:21:VAL:HG11	1:B:62:LEU:HD11	1.95	0.48
1:B:509:GLU:O	1:B:513:GLU:OE1	2.31	0.48
1:B:914:PRO:HB2	1:B:917:GLU:OE1	2.13	0.48
1:B:3383:ALA:N	1:B:3384:LYS:HZ3	2.10	0.48
1:B:4870:ASP:N	1:B:4870:ASP:OD1	2.44	0.48
1:D:156:GLN:OE1	1:D:156:GLN:CA	2.61	0.48
1:D:3383:ALA:O	1:D:3384:LYS:HD3	2.13	0.48
1:D:3521:GLY:HA2	1:D:3524:MET:HE3	1.89	0.48
1:D:4016:LEU:O	1:D:4020:GLN:HG3	2.13	0.48
1:D:4736:ARG:NH1	1:D:4736:ARG:HB2	2.28	0.48
1:C:3382:GLU:CA	1:C:3384:LYS:HZ1	2.25	0.48
1:A:717:ASP:OD1	1:A:720:HIS:N	2.41	0.48
1:A:3319:ILE:O	1:A:3320:LEU:C	2.55	0.48
1:A:3435:PHE:CD2	1:A:3524:MET:CE	2.94	0.48
2:H:24:VAL:HG21	2:H:59:TRP:CZ3	2.47	0.48
1:B:4764:LEU:HD12	1:B:4765:LEU:N	2.28	0.48
1:B:4791:TYR:CZ	1:B:4818:MET:CE	2.96	0.48
1:D:1143:TRP:HZ3	1:D:1149:VAL:HG21	1.74	0.48
1:D:4826:ILE:O	1:D:4829:SER:OG	2.24	0.48
1:C:818:ARG:NH1	1:C:1029:GLU:OE2	2.40	0.48
1:C:4016:LEU:O	1:C:4020:GLN:HG3	2.13	0.48
1:C:4930:ALA:HA	1:C:4933:GLN:OE1	2.13	0.48
1:A:21:VAL:HG11	1:A:62:LEU:HD11	1.95	0.48
1:A:492:ASP:O	1:A:496:VAL:HG13	2.14	0.48
1:A:2237:CYS:SG	1:A:2275:VAL:HG22	2.54	0.48
1:A:2482:ASP:C	1:A:2482:ASP:OD1	2.56	0.48
1:A:4736:ARG:NH1	1:A:4736:ARG:HB2	2.28	0.48
2:F:25:HIS:ND1	2:F:104:LEU:HD21	2.28	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2482:ASP:OD1	1:B:2482:ASP:C	2.56	0.48
1:B:2675:THR:CG2	1:B:2706:ILE:HG23	2.43	0.48
1:B:2977:LEU:O	1:B:2981:VAL:HG23	2.13	0.48
1:B:3324:VAL:CG1	1:B:3361:THR:HG22	2.41	0.48
1:B:3383:ALA:O	1:B:3384:LYS:HD3	2.13	0.48
1:B:3946:GLN:HE22	1:B:3949:ARG:HH21	1.62	0.48
1:B:4543:GLU:O	1:B:4546:VAL:HG22	2.13	0.48
1:D:2166:LEU:HD11	1:D:2206:THR:HG23	1.94	0.48
1:D:2977:LEU:O	1:D:2981:VAL:HG23	2.13	0.48
1:C:3321:ARG:HH11	1:C:3321:ARG:CG	2.13	0.48
1:A:2755:ILE:HD13	1:A:2810:LYS:HD3	1.96	0.48
2:H:3:GLN:NE2	2:H:75:THR:HG21	2.28	0.48
1:B:1436:SER:OG	1:B:1565:GLU:HB2	2.13	0.48
1:B:2781:VAL:HG22	1:B:2789:PRO:HB2	1.96	0.48
1:B:3395:ARG:CD	1:B:3454:GLU:CD	2.86	0.48
1:D:601:ASP:OD1	1:D:1665:HIS:ND1	2.38	0.48
1:D:1143:TRP:CE3	1:D:1149:VAL:HG21	2.47	0.48
1:D:4930:ALA:HA	1:D:4933:GLN:OE1	2.13	0.48
1:C:988:LEU:HB3	1:C:1039:LEU:HD21	1.93	0.48
1:C:2237:CYS:SG	1:C:2275:VAL:HG22	2.54	0.48
1:C:2619:LEU:O	1:C:2623:LEU:HD13	2.14	0.48
1:C:3382:GLU:HA	1:C:3384:LYS:HZ1	1.78	0.48
1:C:3946:GLN:HE22	1:C:3949:ARG:HH21	1.62	0.48
1:C:4746:ALA:O	1:C:4750:ILE:HD12	2.14	0.48
1:A:2290:LEU:HD23	1:A:2291:GLN:N	2.29	0.48
1:A:2675:THR:CG2	1:A:2706:ILE:HG23	2.43	0.48
1:A:2926:LEU:O	1:A:2930:LEU:HD13	2.12	0.48
2:E:3:GLN:NE2	2:E:75:THR:HG21	2.28	0.48
1:B:308:HIS:O	1:B:310:LYS:N	2.46	0.48
1:B:2166:LEU:HD11	1:B:2206:THR:HG23	1.94	0.48
1:B:2926:LEU:O	1:B:2930:LEU:HD13	2.12	0.48
1:B:3945:GLU:OE1	1:B:3946:GLN:NE2	2.47	0.48
1:D:2237:CYS:SG	1:D:2275:VAL:HG22	2.54	0.48
1:D:2755:ILE:HD13	1:D:2810:LYS:HD3	1.96	0.48
1:D:4746:ALA:O	1:D:4750:ILE:HD12	2.14	0.48
1:C:961:MET:HE1	1:C:967:PRO:HD3	1.94	0.48
1:C:985:VAL:HG22	1:C:1043:VAL:HG21	1.94	0.48
1:C:2614:ILE:HG23	1:C:2618:MET:SD	2.53	0.48
1:C:2675:THR:CG2	1:C:2706:ILE:HG23	2.43	0.48
1:C:2755:ILE:HD13	1:C:2810:LYS:HD3	1.96	0.48
1:C:3107:VAL:O	1:C:3111:ARG:HG2	2.13	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4764:LEU:HD12	1:C:4765:LEU:N	2.28	0.48
1:A:438:ILE:HG23	1:A:518:ILE:HD11	1.94	0.48
1:A:1577:ALA:O	1:A:1584:ARG:NH1	2.43	0.48
1:A:1866:ILE:HG12	1:A:1939:MET:HE1	1.95	0.48
1:A:2310:CYS:O	1:A:2314:LEU:HD23	2.14	0.48
1:A:2894:LEU:O	1:A:2897:LYS:N	2.47	0.48
1:A:3246:LEU:HD11	1:A:3250:MET:HE3	1.94	0.48
1:A:4016:LEU:O	1:A:4020:GLN:HG3	2.13	0.48
1:A:4929:LEU:C	1:A:4933:GLN:OE1	2.57	0.48
1:B:2755:ILE:HD13	1:B:2810:LYS:HD3	1.96	0.48
1:B:2894:LEU:O	1:B:2897:LYS:N	2.47	0.48
1:B:4746:ALA:O	1:B:4750:ILE:HD12	2.14	0.48
1:D:26:ALA:N	1:D:32:GLN:OE1	2.46	0.48
1:D:2781:VAL:HG22	1:D:2789:PRO:HB2	1.96	0.48
1:C:308:HIS:O	1:C:310:LYS:N	2.46	0.48
1:C:509:GLU:O	1:C:513:GLU:OE1	2.31	0.48
1:C:3114:LYS:HD2	1:C:3125:VAL:HG21	1.94	0.48
1:A:553:ARG:NE	1:A:555:GLU:OE2	2.46	0.48
1:A:2614:ILE:HG23	1:A:2618:MET:SD	2.53	0.48
1:A:3916:ILE:H	1:A:3916:ILE:HD12	1.79	0.48
1:A:4543:GLU:O	1:A:4546:VAL:HG22	2.13	0.48
1:A:4746:ALA:O	1:A:4750:ILE:HD12	2.14	0.48
2:F:2:VAL:HG23	2:F:80:TYR:HD2	1.78	0.48
1:B:3246:LEU:HD11	1:B:3250:MET:HE3	1.94	0.48
1:B:4902:GLU:O	1:B:4913:ARG:CZ	2.61	0.48
1:D:975:VAL:CG1	1:D:1047:LEU:HD23	2.44	0.48
1:D:1749:PRO:O	1:D:1758:ARG:NH2	2.47	0.48
1:D:2675:THR:CG2	1:D:2706:ILE:HG23	2.43	0.48
1:D:3114:LYS:HD2	1:D:3125:VAL:HG21	1.94	0.48
1:D:3945:GLU:OE1	1:D:3946:GLN:NE2	2.47	0.48
1:D:4929:LEU:C	1:D:4933:GLN:OE1	2.57	0.48
1:C:1436:SER:OG	1:C:1565:GLU:HB2	2.13	0.48
1:C:2393:ASP:OD1	1:C:2418:LEU:N	2.47	0.48
1:C:3111:ARG:O	1:C:3112:LEU:HB2	2.13	0.48
1:C:3383:ALA:O	1:C:3384:LYS:HD3	2.13	0.48
1:C:3613:TYR:O	1:C:3617:LYS:NZ	2.36	0.48
1:A:975:VAL:CG1	1:A:1047:LEU:HD23	2.44	0.48
1:B:438:ILE:HG23	1:B:518:ILE:HD11	1.94	0.48
1:B:1143:TRP:HZ3	1:B:1149:VAL:HG21	1.74	0.48
1:B:1749:PRO:O	1:B:1758:ARG:NH2	2.47	0.48
1:B:2614:ILE:HG23	1:B:2618:MET:SD	2.53	0.48

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3111:ARG:O	1:B:3112:LEU:HB2	2.13	0.48
1:D:492:ASP:O	1:D:496:VAL:HG13	2.14	0.48
1:D:3111:ARG:O	1:D:3112:LEU:HB2	2.13	0.48
1:C:3240:CYS:SG	1:C:3243:ILE:HD13	2.54	0.48
1:C:3945:GLU:OE1	1:C:3946:GLN:NE2	2.47	0.48
1:B:4929:LEU:C	1:B:4933:GLN:OE1	2.57	0.48
1:D:2644:LEU:HD13	1:D:2678:LEU:HD21	1.95	0.48
1:D:3240:CYS:SG	1:D:3243:ILE:HD13	2.54	0.48
1:D:3552:PHE:O	1:D:3555:ASN:OD1	2.32	0.48
1:D:3946:GLN:HE22	1:D:3949:ARG:HH21	1.62	0.48
1:C:961:MET:HE2	1:C:965:TYR:C	2.39	0.48
1:C:4161:ARG:HA	1:C:4164:LEU:HD12	1.95	0.48
1:A:509:GLU:O	1:A:513:GLU:OE1	2.31	0.48
1:A:2581:SER:O	1:A:2585:THR:HG23	2.14	0.48
1:A:3414:ARG:CZ	1:A:3472:ALA:HB3	2.44	0.48
1:A:3445:TRP:O	1:A:3452:LYS:NZ	2.34	0.48
2:E:77:SER:OG	2:E:79:ASP:OD1	2.28	0.48
1:B:1943:LEU:CD1	1:B:2101:MET:HE1	2.44	0.48
1:B:2290:LEU:HD23	1:B:2291:GLN:N	2.29	0.48
1:B:3414:ARG:CZ	1:B:3472:ALA:HB3	2.44	0.48
1:B:3933:PHE:HE2	1:B:3951:PHE:CZ	2.18	0.48
1:D:734:GLY:O	1:D:736:HIS:ND1	2.35	0.48
1:D:2310:CYS:O	1:D:2314:LEU:HD23	2.14	0.48
1:D:3081:MET:HE1	1:D:3093:ARG:HH12	1.78	0.48
1:D:3365:LEU:HD13	1:D:3405:LEU:HD23	1.95	0.48
1:C:2290:LEU:HD23	1:C:2291:GLN:N	2.29	0.48
1:C:3357:HIS:O	1:C:3361:THR:HG23	2.14	0.48
1:C:4736:ARG:NH1	1:C:4736:ARG:HB2	2.28	0.48
1:C:4929:LEU:C	1:C:4933:GLN:OE1	2.57	0.48
1:A:961:MET:CE	1:A:967:PRO:HD3	2.44	0.47
1:A:961:MET:HE2	1:A:965:TYR:C	2.39	0.47
1:A:1943:LEU:CD1	1:A:2101:MET:HE1	2.44	0.47
1:A:3585:ASP:OD1	1:A:3586:ALA:N	2.47	0.47
1:B:961:MET:CE	1:B:967:PRO:HD3	2.44	0.47
1:B:975:VAL:CG1	1:B:1047:LEU:HD23	2.44	0.47
1:B:2440:MET:O	1:B:2443:ILE:N	2.47	0.47
1:B:3003:LEU:HB2	1:B:3004:PRO:HD3	1.96	0.47
1:D:1436:SER:OG	1:D:1565:GLU:HB2	2.13	0.47
1:D:2290:LEU:HD23	1:D:2291:GLN:N	2.29	0.47
1:D:2330:ARG:HA	1:D:2333:ASP:OD2	2.14	0.47
1:D:3585:ASP:OD1	1:D:3586:ALA:N	2.47	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:4182:GLU:OE1	1:D:4983:HIS:NE2	2.44	0.47
1:C:961:MET:CE	1:C:967:PRO:HD3	2.44	0.47
1:C:2310:CYS:O	1:C:2314:LEU:HD23	2.14	0.47
1:C:3552:PHE:O	1:C:3555:ASN:OD1	2.32	0.47
1:C:4543:GLU:O	1:C:4546:VAL:HG22	2.13	0.47
1:A:856:VAL:HG12	1:A:991:ASN:ND2	2.29	0.47
1:A:1749:PRO:O	1:A:1758:ARG:NH2	2.47	0.47
1:A:3946:GLN:HE22	1:A:3949:ARG:HH21	1.62	0.47
1:A:4586:PRO:HD3	1:A:4629:TYR:HE2	1.78	0.47
2:E:57:ARG:O	2:E:58:GLY:C	2.56	0.47
2:H:25:HIS:ND1	2:H:104:LEU:HD21	2.28	0.47
1:B:492:ASP:O	1:B:496:VAL:HG13	2.14	0.47
1:B:1866:ILE:HG12	1:B:1939:MET:HE1	1.95	0.47
1:B:2619:LEU:O	1:B:2623:LEU:HD13	2.14	0.47
1:B:4161:ARG:HA	1:B:4164:LEU:HD12	1.95	0.47
1:D:1492:CYS:SG	1:D:1494:MET:HG3	2.54	0.47
1:D:2440:MET:O	1:D:2443:ILE:N	2.47	0.47
1:D:2894:LEU:O	1:D:2897:LYS:N	2.47	0.47
1:D:3799:LYS:NZ	1:D:3883:ASP:OD2	2.48	0.47
1:D:4586:PRO:HD3	1:D:4629:TYR:HE2	1.78	0.47
1:C:856:VAL:HG12	1:C:991:ASN:ND2	2.29	0.47
1:C:2482:ASP:C	1:C:2482:ASP:OD1	2.56	0.47
1:C:2939:ARG:HE	1:C:2939:ARG:HA	1.79	0.47
1:A:2393:ASP:OD1	1:A:2418:LEU:N	2.47	0.47
1:A:3003:LEU:HB2	1:A:3004:PRO:HD3	1.96	0.47
1:A:4680:LYS:O	1:A:4685:GLY:N	2.42	0.47
1:B:2330:ARG:HA	1:B:2333:ASP:OD2	2.14	0.47
1:B:3585:ASP:OD1	1:B:3586:ALA:N	2.47	0.47
1:B:3916:ILE:H	1:B:3916:ILE:HD12	1.79	0.47
1:B:3946:GLN:CD	1:B:3949:ARG:NE	2.72	0.47
1:C:612:VAL:HG13	1:C:2167:ILE:O	2.14	0.47
1:C:1492:CYS:SG	1:C:1494:MET:HG3	2.54	0.47
1:C:1866:ILE:HG12	1:C:1939:MET:HE1	1.96	0.47
1:C:2186:MET:HE2	1:C:2235:PHE:HA	1.96	0.47
1:C:2330:ARG:HA	1:C:2333:ASP:OD2	2.14	0.47
1:C:2744:ASN:OD1	1:C:2745:VAL:N	2.48	0.47
1:C:2894:LEU:O	1:C:2897:LYS:N	2.47	0.47
1:C:3246:LEU:CD1	1:C:3250:MET:HE3	2.45	0.47
1:C:3318:ASN:C	1:C:3321:ARG:H	2.20	0.47
1:A:595:ARG:NH1	1:A:1643:GLU:OE2	2.44	0.47
1:A:1931:LEU:HD13	1:A:1935:VAL:CG1	2.41	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:856:VAL:HG12	1:B:991:ASN:ND2	2.29	0.47
1:B:1492:CYS:SG	1:B:1494:MET:HG3	2.54	0.47
1:B:3448:SER:O	1:B:3452:LYS:NZ	2.48	0.47
1:D:612:VAL:HG13	1:D:2167:ILE:O	2.14	0.47
1:D:856:VAL:HG12	1:D:991:ASN:ND2	2.29	0.47
1:D:2186:MET:HE2	1:D:2235:PHE:HA	1.96	0.47
1:D:2393:ASP:OD1	1:D:2418:LEU:N	2.47	0.47
1:D:2619:LEU:O	1:D:2623:LEU:HD13	2.14	0.47
1:D:2939:ARG:HA	1:D:2939:ARG:HE	1.79	0.47
1:D:3036:LYS:O	1:D:3039:ILE:HG22	2.14	0.47
1:C:1131:ARG:NH1	1:C:1178:ALA:O	2.47	0.47
1:C:2581:SER:O	1:C:2585:THR:HG23	2.14	0.47
1:C:2781:VAL:HG22	1:C:2789:PRO:HB2	1.96	0.47
1:A:2330:ARG:HA	1:A:2333:ASP:OD2	2.14	0.47
1:A:2495:VAL:HG23	1:A:2497:ASP:OD1	2.15	0.47
1:A:2781:VAL:HG22	1:A:2789:PRO:HB2	1.96	0.47
1:A:3061:ALA:O	1:A:3065:VAL:HG23	2.15	0.47
1:A:3552:PHE:O	1:A:3555:ASN:OD1	2.32	0.47
1:B:612:VAL:HG13	1:B:2167:ILE:O	2.14	0.47
1:B:1461:ASP:OD2	1:B:1468:LYS:NZ	2.47	0.47
1:B:2237:CYS:SG	1:B:2275:VAL:HG22	2.54	0.47
1:B:2310:CYS:O	1:B:2314:LEU:HD23	2.14	0.47
1:B:3169:LEU:HD11	1:B:3205:PHE:CZ	2.50	0.47
1:B:3382:GLU:HA	1:B:3384:LYS:HZ3	1.79	0.47
1:D:595:ARG:NH1	1:D:1643:GLU:OE2	2.44	0.47
1:D:961:MET:CE	1:D:967:PRO:HD3	2.44	0.47
1:D:2581:SER:O	1:D:2585:THR:HG23	2.14	0.47
1:C:975:VAL:CG1	1:C:1047:LEU:HD23	2.44	0.47
1:C:1749:PRO:O	1:C:1758:ARG:NH2	2.47	0.47
1:C:1943:LEU:CD1	1:C:2101:MET:HE1	2.44	0.47
1:C:2440:MET:O	1:C:2443:ILE:N	2.47	0.47
1:C:2977:LEU:O	1:C:2981:VAL:HG23	2.13	0.47
1:C:3633:VAL:O	1:C:3637:ARG:HG2	2.15	0.47
1:A:612:VAL:HG13	1:A:2167:ILE:O	2.14	0.47
1:B:1828:ASP:OD1	1:B:1828:ASP:N	2.48	0.47
1:B:3357:HIS:O	1:B:3361:THR:HG23	2.14	0.47
1:B:3765:TYR:CZ	1:B:4753:HIS:ND1	2.75	0.47
1:D:2744:ASN:OD1	1:D:2745:VAL:N	2.48	0.47
1:D:3061:ALA:O	1:D:3065:VAL:HG23	2.15	0.47
1:D:3246:LEU:CD1	1:D:3250:MET:HE3	2.45	0.47
1:D:3633:VAL:O	1:D:3637:ARG:HG2	2.15	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:21:VAL:HG11	1:C:62:LEU:HD11	1.95	0.47
1:C:3036:LYS:O	1:C:3039:ILE:HG22	2.14	0.47
1:A:308:HIS:O	1:A:310:LYS:N	2.46	0.47
1:A:1000:ARG:HG3	1:A:1005:TRP:HB2	1.97	0.47
1:A:2440:MET:O	1:A:2443:ILE:N	2.47	0.47
1:A:2619:LEU:O	1:A:2623:LEU:HD13	2.14	0.47
1:A:2684:ASP:O	1:A:2688:HIS:ND1	2.39	0.47
1:A:2874:MET:SD	1:A:2939:ARG:C	2.98	0.47
1:A:3036:LYS:O	1:A:3039:ILE:HG22	2.14	0.47
1:A:3169:LEU:HD11	1:A:3205:PHE:CZ	2.50	0.47
1:A:3324:VAL:CG1	1:A:3361:THR:HG22	2.41	0.47
1:A:3365:LEU:HD13	1:A:3405:LEU:HD23	1.95	0.47
1:A:3660:ALA:O	1:A:3664:THR:OG1	2.17	0.47
1:A:3945:GLU:OE1	1:A:3946:GLN:NE2	2.47	0.47
1:B:553:ARG:NE	1:B:555:GLU:OE2	2.46	0.47
1:B:961:MET:HE2	1:B:965:TYR:C	2.39	0.47
1:B:1101:ARG:HG2	1:B:1125:ASN:HB2	1.97	0.47
1:B:1157:GLU:OE1	1:B:1157:GLU:N	2.48	0.47
1:B:1791:VAL:O	1:B:1792:ALA:HB3	2.15	0.47
1:B:2581:SER:O	1:B:2585:THR:HG23	2.14	0.47
1:B:2744:ASN:OD1	1:B:2745:VAL:N	2.48	0.47
1:B:2986:VAL:O	1:B:2986:VAL:HG13	2.14	0.47
1:B:3240:CYS:SG	1:B:3243:ILE:HD13	2.54	0.47
1:B:3246:LEU:CD1	1:B:3250:MET:HE3	2.45	0.47
1:B:3359:ILE:HB	1:B:3360:PRO:HD3	1.97	0.47
1:B:3414:ARG:NH2	1:B:3469:PHE:O	2.48	0.47
1:B:3552:PHE:O	1:B:3555:ASN:OD1	2.32	0.47
1:B:3799:LYS:NZ	1:B:3883:ASP:OD2	2.48	0.47
1:B:4016:LEU:O	1:B:4020:GLN:HG3	2.13	0.47
1:B:4047:MET:HE3	1:B:4047:MET:HB3	1.88	0.47
1:B:4071:ILE:HG21	1:B:4097:MET:HE1	1.97	0.47
1:B:4586:PRO:HD3	1:B:4629:TYR:HE2	1.78	0.47
1:D:961:MET:HE2	1:D:965:TYR:C	2.39	0.47
1:D:1101:ARG:HG2	1:D:1125:ASN:HB2	1.97	0.47
1:D:1699:GLU:OE2	1:D:1813:ARG:NH2	2.48	0.47
1:D:1866:ILE:HG12	1:D:1939:MET:HE1	1.95	0.47
1:D:1943:LEU:CD1	1:D:2101:MET:HE1	2.44	0.47
1:D:3414:ARG:NH2	1:D:3469:PHE:O	2.48	0.47
1:C:492:ASP:O	1:C:496:VAL:HG13	2.14	0.47
1:C:2986:VAL:O	1:C:2986:VAL:HG13	2.14	0.47
1:A:1492:CYS:SG	1:A:1494:MET:HG3	2.54	0.47

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2744:ASN:OD1	1:A:2745:VAL:N	2.48	0.47
1:A:2986:VAL:HG13	1:A:2986:VAL:O	2.14	0.47
1:B:2874:MET:SD	1:B:2939:ARG:C	2.98	0.47
1:B:3036:LYS:O	1:B:3039:ILE:HG22	2.14	0.47
1:B:3365:LEU:HD13	1:B:3405:LEU:HD23	1.95	0.47
1:D:2874:MET:SD	1:D:2939:ARG:C	2.98	0.47
1:D:2986:VAL:HG13	1:D:2986:VAL:O	2.14	0.47
1:D:3169:LEU:HD11	1:D:3205:PHE:CZ	2.50	0.47
1:D:3916:ILE:H	1:D:3916:ILE:HD12	1.79	0.47
1:C:553:ARG:NH2	1:C:555:GLU:OE2	2.47	0.47
1:C:1101:ARG:HG2	1:C:1125:ASN:HB2	1.97	0.47
1:C:4586:PRO:HD3	1:C:4629:TYR:HE2	1.78	0.47
1:A:1791:VAL:O	1:A:1792:ALA:HB3	2.15	0.47
1:A:3111:ARG:O	1:A:3112:LEU:HB2	2.14	0.47
1:A:3246:LEU:CD1	1:A:3250:MET:HE3	2.45	0.47
1:A:3357:HIS:O	1:A:3361:THR:HG23	2.14	0.47
1:B:2021:CYS:O	1:B:2028:ARG:NH2	2.48	0.47
1:B:2907:PRO:HB2	1:B:2909:ASP:OD1	2.15	0.47
1:B:3521:GLY:HA2	1:B:3524:MET:HE3	1.89	0.47
1:D:1000:ARG:HG3	1:D:1005:TRP:HB2	1.97	0.47
1:D:3382:GLU:HA	1:D:3384:LYS:HZ3	1.80	0.47
1:C:1000:ARG:HG3	1:C:1005:TRP:HB2	1.97	0.47
1:C:1699:GLU:OE2	1:C:1813:ARG:NH2	2.48	0.47
1:C:3081:MET:HE1	1:C:3093:ARG:HH12	1.78	0.47
1:C:3365:LEU:HD13	1:C:3405:LEU:HD23	1.95	0.47
1:C:3946:GLN:HA	1:C:3949:ARG:CD	2.45	0.47
1:A:1101:ARG:HG2	1:A:1125:ASN:HB2	1.97	0.47
1:A:1157:GLU:OE1	1:A:1157:GLU:N	2.48	0.47
1:A:1792:ALA:O	1:A:2176:ASN:ND2	2.48	0.47
1:A:3240:CYS:SG	1:A:3243:ILE:HD13	2.54	0.47
1:A:3359:ILE:HB	1:A:3360:PRO:HD3	1.97	0.47
1:A:3379:LEU:O	1:A:3382:GLU:O	2.33	0.47
1:B:3061:ALA:O	1:B:3065:VAL:HG23	2.15	0.47
1:D:1461:ASP:OD2	1:D:1468:LYS:NZ	2.47	0.47
1:D:1792:ALA:O	1:D:2176:ASN:ND2	2.48	0.47
1:C:2021:CYS:O	1:C:2028:ARG:NH2	2.48	0.47
1:C:3635:CYS:HA	1:C:3638:MET:CE	2.43	0.47
1:A:939:VAL:HG13	1:A:1051:TYR:HB3	1.97	0.46
1:A:3225:ARG:HD2	1:A:3226:GLU:N	2.30	0.46
1:A:3391:GLU:OE2	1:A:3450:ASN:ND2	2.34	0.46
1:A:4071:ILE:HG21	1:A:4097:MET:HE1	1.97	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1000:ARG:HG3	1:B:1005:TRP:HB2	1.97	0.46
1:B:2650:ARG:HG3	1:B:2651:CYS:SG	2.55	0.46
1:B:3633:VAL:O	1:B:3637:ARG:HG2	2.15	0.46
1:D:1157:GLU:OE1	1:D:1157:GLU:N	2.48	0.46
1:D:2294:ASP:O	1:D:2298:VAL:HG23	2.15	0.46
1:D:3357:HIS:O	1:D:3361:THR:HG23	2.14	0.46
1:C:3585:ASP:OD1	1:C:3586:ALA:N	2.47	0.46
1:A:1828:ASP:OD1	1:A:1828:ASP:N	2.48	0.46
1:A:2348:GLU:OE1	1:A:3852:LYS:NZ	2.49	0.46
1:A:3946:GLN:HA	1:A:3949:ARG:CD	2.45	0.46
2:H:57:ARG:O	2:H:58:GLY:C	2.56	0.46
2:F:57:ARG:O	2:F:58:GLY:C	2.56	0.46
1:B:4911:LEU:HA	1:B:4914:VAL:HG22	1.97	0.46
1:D:1819:VAL:HA	1:D:1929:MET:HE1	1.97	0.46
1:D:3003:LEU:HB2	1:D:3004:PRO:HD3	1.96	0.46
1:D:3225:ARG:HD2	1:D:3226:GLU:N	2.30	0.46
1:D:3379:LEU:O	1:D:3382:GLU:O	2.33	0.46
1:D:3946:GLN:CD	1:D:3949:ARG:NE	2.72	0.46
1:C:1157:GLU:OE1	1:C:1157:GLU:N	2.48	0.46
1:C:1819:VAL:HA	1:C:1929:MET:HE1	1.97	0.46
1:C:2118:ARG:NH2	1:C:3719:ASP:OD1	2.44	0.46
1:C:2650:ARG:HG3	1:C:2651:CYS:SG	2.55	0.46
1:C:3448:SER:O	1:C:3452:LYS:NZ	2.48	0.46
1:C:3916:ILE:HD12	1:C:3916:ILE:H	1.79	0.46
1:C:4942:GLU:O	1:C:4945:ASP:OD1	2.33	0.46
1:A:2021:CYS:O	1:A:2028:ARG:NH2	2.48	0.46
1:A:2673:HIS:ND1	1:A:2716:ASP:OD2	2.46	0.46
1:A:2939:ARG:HA	1:A:2939:ARG:HE	1.79	0.46
1:A:3383:ALA:O	1:A:3384:LYS:HD3	2.13	0.46
1:A:3521:GLY:HA2	1:A:3524:MET:HE3	1.89	0.46
1:A:3633:VAL:O	1:A:3637:ARG:HG2	2.15	0.46
1:A:3799:LYS:NZ	1:A:3883:ASP:OD2	2.48	0.46
1:B:961:MET:CE	1:B:965:TYR:O	2.64	0.46
1:B:2294:ASP:O	1:B:2298:VAL:HG23	2.15	0.46
1:B:2393:ASP:OD1	1:B:2418:LEU:N	2.47	0.46
1:B:2495:VAL:HG23	1:B:2497:ASP:OD1	2.15	0.46
1:B:3225:ARG:HD2	1:B:3226:GLU:N	2.30	0.46
1:D:553:ARG:NH2	1:D:555:GLU:OE2	2.47	0.46
1:D:2495:VAL:HG23	1:D:2497:ASP:OD1	2.15	0.46
1:D:3250:MET:HE1	1:D:3311:HIS:HB3	1.97	0.46
1:C:553:ARG:NE	1:C:555:GLU:OE2	2.46	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2495:VAL:HG23	1:C:2497:ASP:OD1	2.15	0.46
1:C:3225:ARG:HD2	1:C:3226:GLU:N	2.30	0.46
1:C:3250:MET:HE1	1:C:3311:HIS:HB3	1.97	0.46
1:C:3414:ARG:NH2	1:C:3469:PHE:O	2.48	0.46
1:A:1131:ARG:NH1	1:A:1178:ALA:O	2.47	0.46
1:A:3448:SER:O	1:A:3452:LYS:NZ	2.48	0.46
1:A:4911:LEU:HA	1:A:4914:VAL:HG22	1.97	0.46
1:B:553:ARG:NH2	1:B:555:GLU:OE2	2.47	0.46
1:B:1759:ARG:O	1:B:1759:ARG:HD2	2.16	0.46
1:B:3316:LEU:HD21	1:B:3346:VAL:HG23	1.97	0.46
1:B:3969:ILE:HG21	1:B:3980:LEU:HD12	1.98	0.46
1:D:961:MET:CE	1:D:965:TYR:O	2.63	0.46
1:D:2021:CYS:O	1:D:2028:ARG:NH2	2.48	0.46
1:D:2410:PRO:HG3	1:D:2415:ARG:HD2	1.98	0.46
1:D:3369:ALA:HB2	1:D:3401:LEU:HD21	1.98	0.46
1:C:2410:PRO:HG3	1:C:2415:ARG:HD2	1.98	0.46
1:C:3003:LEU:HB2	1:C:3004:PRO:HD3	1.96	0.46
1:C:3169:LEU:HD11	1:C:3205:PHE:CZ	2.50	0.46
1:C:3414:ARG:CZ	1:C:3472:ALA:HB3	2.44	0.46
1:A:3316:LEU:HD21	1:A:3346:VAL:HG23	1.97	0.46
1:A:3465:ASN:C	1:A:3467:MET:H	2.23	0.46
1:A:4944:ARG:NE	1:B:4938:ASP:OD1	2.47	0.46
2:G:3:GLN:NE2	2:G:75:THR:HB	2.31	0.46
2:G:57:ARG:O	2:G:58:GLY:C	2.56	0.46
1:B:931:THR:HG21	1:B:991:ASN:ND2	2.31	0.46
1:B:3466:ASN:O	1:B:3470:LEU:HG	2.16	0.46
1:B:4942:GLU:O	1:B:4945:ASP:OD1	2.33	0.46
1:D:3414:ARG:CZ	1:D:3472:ALA:HB3	2.44	0.46
1:C:1792:ALA:O	1:C:2176:ASN:ND2	2.48	0.46
1:C:2023:LEU:O	1:C:2028:ARG:NH2	2.49	0.46
1:C:2182:ILE:HG22	1:C:2186:MET:HE3	1.98	0.46
1:C:2874:MET:SD	1:C:2939:ARG:C	2.98	0.46
1:C:3061:ALA:O	1:C:3065:VAL:HG23	2.15	0.46
1:C:4083:ASP:OD1	1:C:4085:ARG:NH1	2.49	0.46
1:A:1699:GLU:OE2	1:A:1813:ARG:NH2	2.48	0.46
1:A:2186:MET:HE2	1:A:2235:PHE:HA	1.96	0.46
1:A:2650:ARG:HG3	1:A:2651:CYS:SG	2.55	0.46
1:A:3414:ARG:NH2	1:A:3469:PHE:O	2.48	0.46
1:B:1434:TYR:HB2	1:B:1572:ILE:HG21	1.98	0.46
1:B:1931:LEU:HD13	1:B:1935:VAL:CG1	2.41	0.46
1:B:2233:CYS:SG	1:B:2270:SER:HB2	2.56	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3225:ARG:HD2	1:B:3225:ARG:C	2.41	0.46
1:D:553:ARG:NE	1:D:555:GLU:OE2	2.46	0.46
1:D:3166:TYR:OH	1:D:3203:VAL:HG21	2.16	0.46
1:D:3465:ASN:C	1:D:3467:MET:H	2.23	0.46
1:D:3969:ILE:HG21	1:D:3980:LEU:HD12	1.98	0.46
1:D:4083:ASP:OD1	1:D:4085:ARG:NH1	2.49	0.46
1:C:1791:VAL:O	1:C:1792:ALA:HB3	2.15	0.46
1:C:2929:PHE:CD1	1:C:2932:MET:HE2	2.48	0.46
1:C:3369:ALA:HB2	1:C:3401:LEU:HD21	1.98	0.46
1:C:3799:LYS:NZ	1:C:3883:ASP:OD2	2.48	0.46
1:A:961:MET:CE	1:A:965:TYR:O	2.64	0.46
1:A:2294:ASP:O	1:A:2298:VAL:HG23	2.16	0.46
1:A:2907:PRO:HB2	1:A:2909:ASP:OD1	2.15	0.46
1:A:3081:MET:HE1	1:A:3093:ARG:HH12	1.78	0.46
1:A:3369:ALA:HB2	1:A:3401:LEU:HD21	1.98	0.46
1:A:3901:ASN:OD1	1:A:3904:ARG:NH1	2.45	0.46
1:A:3969:ILE:HG21	1:A:3980:LEU:HD12	1.98	0.46
1:A:4942:GLU:O	1:A:4945:ASP:OD1	2.33	0.46
1:B:2182:ILE:HG22	1:B:2186:MET:HE3	1.98	0.46
1:B:2684:ASP:O	1:B:2688:HIS:ND1	2.39	0.46
1:B:3635:CYS:HA	1:B:3638:MET:CE	2.43	0.46
1:D:1434:TYR:HB2	1:D:1572:ILE:HG21	1.98	0.46
1:D:4705:VAL:O	1:D:4708:THR:OG1	2.27	0.46
1:C:1931:LEU:HD13	1:C:1935:VAL:CG1	2.41	0.46
1:C:2907:PRO:HB2	1:C:2909:ASP:OD1	2.15	0.46
1:C:3892:CYS:HG	1:C:3899:PHE:HD2	1.60	0.46
1:C:3933:PHE:HE2	1:C:3951:PHE:CZ	2.18	0.46
1:A:3162:GLN:HE21	1:A:3203:VAL:HG11	1.80	0.46
1:A:3832:ILE:HG22	1:A:3836:MET:HE3	1.98	0.46
1:A:4083:ASP:OD1	1:A:4085:ARG:NH1	2.49	0.46
1:B:2186:MET:HE2	1:B:2235:PHE:HA	1.96	0.46
1:B:3166:TYR:OH	1:B:3203:VAL:HG21	2.16	0.46
1:D:2023:LEU:O	1:D:2028:ARG:NH2	2.49	0.46
1:D:3832:ILE:HG22	1:D:3836:MET:HE3	1.98	0.46
1:D:4911:LEU:HA	1:D:4914:VAL:HG22	1.97	0.46
1:C:796:ARG:O	1:C:1622:GLU:HA	2.16	0.46
1:C:3822:ASP:OD1	1:C:3823:LYS:N	2.49	0.46
1:C:3969:ILE:HG21	1:C:3980:LEU:HD12	1.98	0.46
1:A:2701:PRO:C	1:A:2702:CYS:SG	2.99	0.46
1:A:3755:GLU:O	1:A:3759:GLU:OE1	2.34	0.46
1:B:309:THR:O	1:B:313:SER:N	2.49	0.46

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:796:ARG:O	1:B:1622:GLU:HA	2.16	0.46
1:B:1699:GLU:OE2	1:B:1813:ARG:NH2	2.48	0.46
1:B:3559:LEU:O	1:B:3559:LEU:HD23	2.16	0.46
1:B:3997:ALA:HB1	1:B:4057:MET:SD	2.56	0.46
1:B:4791:TYR:CZ	1:B:4818:MET:HE3	2.51	0.46
1:D:2233:CYS:SG	1:D:2270:SER:HB2	2.56	0.46
1:D:3225:ARG:HD2	1:D:3225:ARG:C	2.41	0.46
1:D:3318:ASN:C	1:D:3321:ARG:H	2.20	0.46
1:D:3337:ARG:O	1:D:3340:VAL:HG22	2.16	0.46
1:C:323:LEU:O	1:C:324:ASP:OD1	2.34	0.46
1:C:931:THR:HG21	1:C:991:ASN:ND2	2.31	0.46
1:C:1759:ARG:O	1:C:1759:ARG:HD2	2.16	0.46
1:C:2684:ASP:O	1:C:2688:HIS:ND1	2.39	0.46
1:C:3166:TYR:OH	1:C:3203:VAL:HG21	2.16	0.46
1:C:3337:ARG:O	1:C:3340:VAL:HG22	2.16	0.46
1:C:3997:ALA:HB1	1:C:4057:MET:SD	2.56	0.46
1:C:4720:VAL:O	1:C:4724:VAL:HG23	2.16	0.46
1:A:323:LEU:O	1:A:324:ASP:OD1	2.34	0.46
1:A:3762:ARG:C	1:A:3766:GLN:HE22	2.24	0.46
1:D:327:PRO:O	1:D:329:ARG:NH1	2.45	0.46
1:D:858:THR:HG21	1:D:927:GLU:OE2	2.16	0.46
1:D:2974:ILE:HD13	1:D:3049:LEU:CD1	2.46	0.46
1:D:4942:GLU:O	1:D:4945:ASP:OD1	2.33	0.46
1:C:710:ASP:OD1	1:C:713:SER:OG	2.28	0.46
1:C:1828:ASP:OD1	1:C:1828:ASP:N	2.48	0.46
1:C:3162:GLN:HE21	1:C:3203:VAL:HG11	1.80	0.46
1:C:3225:ARG:HD2	1:C:3225:ARG:C	2.41	0.46
1:C:3359:ILE:HB	1:C:3360:PRO:HD3	1.97	0.46
1:A:858:THR:HG21	1:A:927:GLU:OE2	2.16	0.45
1:A:2023:LEU:O	1:A:2028:ARG:NH2	2.49	0.45
1:A:2310:CYS:SG	1:A:2313:LEU:HD23	2.56	0.45
1:A:2992:GLU:HA	1:A:2995:ILE:HD12	1.98	0.45
1:A:3106:MET:O	1:A:3110:LEU:HD13	2.16	0.45
1:A:3250:MET:HE1	1:A:3311:HIS:HB3	1.97	0.45
1:A:3466:ASN:O	1:A:3470:LEU:HG	2.16	0.45
1:B:2310:CYS:SG	1:B:2313:LEU:HD23	2.56	0.45
1:B:2939:ARG:HA	1:B:2939:ARG:HE	1.79	0.45
1:B:3162:GLN:HE21	1:B:3203:VAL:HG11	1.80	0.45
1:B:3268:HIS:ND1	1:B:3272:ILE:HD12	2.31	0.45
1:D:309:THR:O	1:D:313:SER:N	2.49	0.45
1:D:2348:GLU:OE1	1:D:3852:LYS:NZ	2.49	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3201:MET:O	1:D:3283:ARG:NH1	2.49	0.45
1:D:3268:HIS:ND1	1:D:3272:ILE:HD12	2.31	0.45
1:D:3448:SER:O	1:D:3452:LYS:NZ	2.48	0.45
1:D:3997:ALA:HB1	1:D:4057:MET:SD	2.56	0.45
1:D:4071:ILE:HG21	1:D:4097:MET:HE1	1.97	0.45
1:D:4720:VAL:O	1:D:4724:VAL:HG23	2.16	0.45
1:C:309:THR:O	1:C:313:SER:N	2.49	0.45
1:C:901:LYS:HG3	1:C:903:LEU:HG	1.99	0.45
1:C:972:LEU:HD22	1:C:975:VAL:HG21	1.98	0.45
1:C:2294:ASP:O	1:C:2298:VAL:HG23	2.16	0.45
1:C:2801:ASP:HA	1:C:2804:ILE:HG12	1.98	0.45
1:C:3268:HIS:ND1	1:C:3272:ILE:HD12	2.31	0.45
1:C:3379:LEU:O	1:C:3382:GLU:O	2.33	0.45
1:C:3465:ASN:C	1:C:3467:MET:H	2.23	0.45
1:C:3466:ASN:O	1:C:3470:LEU:HG	2.16	0.45
1:C:3559:LEU:O	1:C:3559:LEU:HD23	2.16	0.45
1:C:4673:ARG:NH2	1:C:4702:ASP:OD1	2.49	0.45
1:A:988:LEU:HB2	1:A:1039:LEU:HD21	1.99	0.45
1:A:1819:VAL:HA	1:A:1929:MET:HE1	1.97	0.45
1:A:3137:LEU:HB2	1:A:3138:PRO:HD3	1.99	0.45
1:A:3248:ARG:HH12	1:A:3252:ASP:CG	2.18	0.45
1:A:3997:ALA:HB1	1:A:4057:MET:SD	2.56	0.45
1:A:4655:PHE:HE2	1:A:4659:ILE:HD11	1.81	0.45
1:B:1027:LEU:O	1:B:1032:LYS:NZ	2.49	0.45
1:B:2801:ASP:HA	1:B:2804:ILE:HG12	1.98	0.45
1:B:3369:ALA:HB2	1:B:3401:LEU:HD21	1.98	0.45
1:B:3379:LEU:O	1:B:3382:GLU:O	2.33	0.45
1:B:4083:ASP:OD1	1:B:4085:ARG:NH1	2.49	0.45
1:B:4747:SER:O	1:B:4751:THR:HG23	2.17	0.45
1:D:688:LEU:HD11	1:D:775:GLY:C	2.41	0.45
1:D:835:ARG:NH2	1:D:1210:SER:O	2.50	0.45
1:D:2650:ARG:HG3	1:D:2651:CYS:SG	2.55	0.45
1:D:2907:PRO:HB2	1:D:2909:ASP:OD1	2.15	0.45
1:D:3359:ILE:HB	1:D:3360:PRO:HD3	1.97	0.45
1:D:3755:GLU:O	1:D:3759:GLU:OE1	2.34	0.45
1:D:3822:ASP:OD1	1:D:3823:LYS:N	2.49	0.45
1:D:3892:CYS:HG	1:D:3899:PHE:HD2	1.62	0.45
1:D:4747:SER:O	1:D:4751:THR:HG23	2.17	0.45
1:C:213:TYR:HA	1:C:339:ILE:O	2.17	0.45
1:C:688:LEU:HD11	1:C:775:GLY:C	2.41	0.45
1:C:1434:TYR:HB2	1:C:1572:ILE:HG21	1.98	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1461:ASP:OD2	1:C:1468:LYS:NZ	2.47	0.45
1:C:2475:GLN:CD	1:C:2488:PRO:HB3	2.42	0.45
1:C:3106:MET:O	1:C:3110:LEU:HD13	2.16	0.45
1:C:4747:SER:O	1:C:4751:THR:HG23	2.17	0.45
1:A:1434:TYR:HB2	1:A:1572:ILE:HG21	1.98	0.45
1:A:1925:GLY:O	1:A:1929:MET:HG3	2.16	0.45
1:A:2608:MET:O	1:A:2612[B]:ARG:HG3	2.17	0.45
1:A:2801:ASP:HA	1:A:2804:ILE:HG12	1.98	0.45
1:A:3337:ARG:O	1:A:3340:VAL:HG22	2.16	0.45
1:A:3559:LEU:HD23	1:A:3559:LEU:O	2.16	0.45
1:A:4651:THR:HG22	1:A:4796:MET:HE1	1.98	0.45
1:A:4747:SER:O	1:A:4751:THR:HG23	2.17	0.45
2:F:3:GLN:NE2	2:F:75:THR:HB	2.31	0.45
1:B:688:LEU:HD11	1:B:775:GLY:C	2.41	0.45
1:B:858:THR:HG21	1:B:927:GLU:OE2	2.16	0.45
1:B:1925:GLY:O	1:B:1929:MET:HG3	2.16	0.45
1:B:2348:GLU:OE1	1:B:3852:LYS:NZ	2.49	0.45
1:B:4673:ARG:NH2	1:B:4702:ASP:OD1	2.49	0.45
1:D:972:LEU:HD22	1:D:975:VAL:HG21	1.98	0.45
1:D:1791:VAL:O	1:D:1792:ALA:HB3	2.15	0.45
1:D:3197:LEU:CD2	1:D:3201:MET:SD	3.05	0.45
1:D:3559:LEU:HD23	1:D:3559:LEU:O	2.16	0.45
1:D:4651:THR:HG22	1:D:4796:MET:HE1	1.98	0.45
1:C:939:VAL:HG13	1:C:1051:TYR:HB3	1.97	0.45
1:C:961:MET:CE	1:C:965:TYR:O	2.64	0.45
1:C:1811:ALA:HA	1:C:1814:MET:HE2	1.98	0.45
1:C:2233:CYS:SG	1:C:2270:SER:HB2	2.56	0.45
1:C:2883:HIS:HB2	1:C:2908:TYR:CZ	2.52	0.45
1:C:4791:TYR:CZ	1:C:4818:MET:HE3	2.51	0.45
1:A:309:THR:O	1:A:313:SER:N	2.49	0.45
1:A:688:LEU:HD11	1:A:775:GLY:C	2.41	0.45
1:A:972:LEU:HD22	1:A:975:VAL:HG21	1.98	0.45
1:A:2182:ILE:HG22	1:A:2186:MET:HE3	1.98	0.45
1:A:3225:ARG:HD2	1:A:3225:ARG:C	2.41	0.45
1:A:3822:ASP:OD1	1:A:3823:LYS:N	2.49	0.45
2:H:3:GLN:NE2	2:H:75:THR:HB	2.31	0.45
1:B:2023:LEU:O	1:B:2028:ARG:NH2	2.49	0.45
1:B:2118:ARG:NH2	1:B:3719:ASP:OD1	2.44	0.45
1:B:2475:GLN:CD	1:B:2488:PRO:HB3	2.42	0.45
1:B:3375:GLU:O	1:B:3379:LEU:HD13	2.17	0.45
1:B:4060:LYS:O	1:B:4063:ASP:OD1	2.35	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:4096:ALA:O	1:B:4100:GLN:HG2	2.17	0.45
1:D:939:VAL:HG13	1:D:1051:TYR:HB3	1.97	0.45
1:D:2182:ILE:HG22	1:D:2186:MET:HE3	1.98	0.45
1:D:2992:GLU:HA	1:D:2995:ILE:HD12	1.98	0.45
1:D:4673:ARG:NH2	1:D:4702:ASP:OD1	2.49	0.45
1:D:4791:TYR:CZ	1:D:4818:MET:HE3	2.51	0.45
1:C:2208:MET:HE1	1:C:2253:HIS:CB	2.46	0.45
1:C:3197:LEU:CD2	1:C:3201:MET:SD	3.05	0.45
1:A:234:SER:OG	1:A:238:SER:OG	2.27	0.45
1:A:234:SER:HG	1:A:238:SER:HG	1.60	0.45
1:A:931:THR:HG21	1:A:991:ASN:ND2	2.31	0.45
1:A:1759:ARG:O	1:A:1759:ARG:HD2	2.16	0.45
1:A:3201:MET:O	1:A:3283:ARG:NH1	2.49	0.45
1:A:3435:PHE:CE2	1:A:3524:MET:HE1	2.51	0.45
1:B:1792:ALA:O	1:B:2176:ASN:ND2	2.48	0.45
1:B:1819:VAL:HA	1:B:1929:MET:HE1	1.97	0.45
1:B:3755:GLU:O	1:B:3759:GLU:OE1	2.34	0.45
1:B:4720:VAL:O	1:B:4724:VAL:HG23	2.16	0.45
1:D:931:THR:HG21	1:D:991:ASN:ND2	2.31	0.45
1:D:2208:MET:HE1	1:D:2253:HIS:CB	2.46	0.45
1:D:2310:CYS:SG	1:D:2313:LEU:HD23	2.56	0.45
1:D:3106:MET:O	1:D:3110:LEU:HD13	2.16	0.45
1:D:3137:LEU:HB2	1:D:3138:PRO:HD3	1.99	0.45
1:D:3435:PHE:CE2	1:D:3524:MET:HE1	2.51	0.45
1:C:233:ILE:O	1:C:257:ARG:NH1	2.49	0.45
1:C:835:ARG:NH2	1:C:1210:SER:O	2.50	0.45
1:C:4071:ILE:HG21	1:C:4097:MET:HE1	1.97	0.45
1:C:4651:THR:HG22	1:C:4796:MET:HE1	1.98	0.45
1:A:710:ASP:OD1	1:A:713:SER:OG	2.28	0.45
1:A:796:ARG:O	1:A:1622:GLU:HA	2.16	0.45
1:A:2233:CYS:SG	1:A:2270:SER:HB2	2.56	0.45
1:A:2410:PRO:HG3	1:A:2415:ARG:HD2	1.98	0.45
1:A:2475:GLN:CD	1:A:2488:PRO:HB3	2.42	0.45
1:A:2719:TYR:HB2	1:A:2953:LYS:NZ	2.32	0.45
1:A:4630:TYR:OH	1:B:4860:ARG:NH1	2.49	0.45
1:A:4678:ALA:HB1	1:A:4720:VAL:HG21	1.99	0.45
1:B:2608:MET:O	1:B:2612[B]:ARG:HG3	2.17	0.45
1:B:2911:LEU:HD13	1:B:2915:GLU:HB2	1.99	0.45
1:B:2992:GLU:HA	1:B:2995:ILE:HD12	1.98	0.45
1:B:3250:MET:HE1	1:B:3311:HIS:HB3	1.97	0.45
1:B:3762:ARG:C	1:B:3766:GLN:HE22	2.24	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3822:ASP:OD1	1:B:3823:LYS:N	2.49	0.45
1:D:901:LYS:HG3	1:D:903:LEU:HG	1.99	0.45
1:D:3018:LEU:HD21	1:D:3075:LEU:O	2.17	0.45
1:D:3982:HIS:NE2	1:D:4039:MET:HE1	2.32	0.45
1:D:4096:ALA:O	1:D:4100:GLN:HG2	2.17	0.45
1:D:4690:GLU:O	1:D:4691:GLN:HB3	2.17	0.45
1:C:516:LYS:O	1:C:519:VAL:HG22	2.17	0.45
1:C:595:ARG:NH1	1:C:1643:GLU:OE2	2.44	0.45
1:C:860:GLN:O	1:C:860:GLN:HG2	2.17	0.45
1:C:917:GLU:OE1	1:C:917:GLU:N	2.48	0.45
1:C:1925:GLY:O	1:C:1929:MET:HG3	2.16	0.45
1:C:3762:ARG:C	1:C:3766:GLN:HE22	2.24	0.45
1:C:3866:ILE:O	1:C:3867:ASN:OD1	2.35	0.45
1:C:4678:ALA:HB1	1:C:4720:VAL:HG21	1.99	0.45
1:A:3166:TYR:OH	1:A:3203:VAL:HG21	2.16	0.45
1:A:3268:HIS:ND1	1:A:3272:ILE:HD12	2.31	0.45
1:A:3866:ILE:O	1:A:3867:ASN:OD1	2.35	0.45
1:A:4096:ALA:O	1:A:4100:GLN:HG2	2.17	0.45
1:A:4631:PHE:HE2	1:A:4633:GLU:HG2	1.82	0.45
1:A:4673:ARG:NH2	1:A:4702:ASP:OD1	2.49	0.45
1:B:835:ARG:NH2	1:B:1210:SER:O	2.50	0.45
1:B:860:GLN:O	1:B:860:GLN:HG2	2.17	0.45
1:B:901:LYS:HG3	1:B:903:LEU:HG	1.98	0.45
1:B:2410:PRO:HG3	1:B:2415:ARG:HD2	1.97	0.45
1:B:3337:ARG:O	1:B:3340:VAL:HG22	2.16	0.45
1:B:4651:THR:HG22	1:B:4796:MET:HE1	1.98	0.45
1:B:4678:ALA:HB1	1:B:4720:VAL:HG21	1.99	0.45
1:D:1759:ARG:O	1:D:1759:ARG:HD2	2.16	0.45
1:D:2883:HIS:HB2	1:D:2908:TYR:CZ	2.52	0.45
1:D:4047:MET:HE3	1:D:4047:MET:HB3	1.88	0.45
1:D:4207:MET:HE2	1:D:4207:MET:HA	1.98	0.45
1:D:4985:LEU:HD12	1:D:4986:ALA:N	2.32	0.45
1:C:1577:ALA:O	1:C:1584:ARG:NH1	2.43	0.45
1:C:2310:CYS:SG	1:C:2313:LEU:HD23	2.56	0.45
1:C:2911:LEU:HD13	1:C:2915:GLU:HB2	1.99	0.45
1:C:3018:LEU:HD21	1:C:3075:LEU:O	2.17	0.45
1:C:4096:ALA:O	1:C:4100:GLN:HG2	2.17	0.45
1:A:553:ARG:NH2	1:A:555:GLU:OE2	2.47	0.45
1:A:1811:ALA:HA	1:A:1814:MET:HE2	1.98	0.45
1:A:2883:HIS:HB2	1:A:2908:TYR:CZ	2.52	0.45
1:A:2911:LEU:HD13	1:A:2915:GLU: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:4047:MET:HE3	1:A:4047:MET:HB3	1.88	0.45
1:A:4983:HIS:O	3:A:5301:ATP:N6	2.50	0.45
1:A:4985:LEU:HD12	1:A:4986:ALA:N	2.32	0.45
2:E:3:GLN:NE2	2:E:75:THR:HB	2.31	0.45
2:H:23:VAL:HG22	2:H:47:LYS:HG2	1.99	0.45
1:B:972:LEU:HD22	1:B:975:VAL:HG21	1.98	0.45
1:B:3106:MET:O	1:B:3110:LEU:HD13	2.16	0.45
1:B:3435:PHE:CE2	1:B:3524:MET:HE1	2.51	0.45
1:B:3946:GLN:HA	1:B:3949:ARG:CD	2.45	0.45
1:D:233:ILE:O	1:D:257:ARG:NH1	2.49	0.45
1:D:796:ARG:O	1:D:1622:GLU:HA	2.16	0.45
1:D:1925:GLY:O	1:D:1929:MET:HG3	2.16	0.45
1:D:2719:TYR:HB2	1:D:2953:LYS:NZ	2.32	0.45
1:D:2801:ASP:HA	1:D:2804:ILE:HG12	1.98	0.45
1:D:3316:LEU:HD21	1:D:3346:VAL:HG23	1.97	0.45
1:D:3762:ARG:C	1:D:3766:GLN:HE22	2.24	0.45
1:D:3866:ILE:O	1:D:3867:ASN:OD1	2.35	0.45
1:D:4631:PHE:HE2	1:D:4633:GLU:HG2	1.82	0.45
1:C:2336:ARG:HG2	1:C:2435:ARG:HD2	1.99	0.45
1:C:2608:MET:O	1:C:2612[B]:ARG:HG3	2.17	0.45
1:C:2701:PRO:C	1:C:2702:CYS:SG	2.99	0.45
1:C:3316:LEU:HD21	1:C:3346:VAL:HG23	1.97	0.45
1:C:3504:SER:O	1:C:3507:THR:OG1	2.22	0.45
1:C:4911:LEU:HA	1:C:4914:VAL:HG22	1.97	0.45
1:A:213:TYR:HA	1:A:339:ILE:O	2.17	0.45
1:A:327:PRO:O	1:A:329:ARG:NH1	2.45	0.45
1:A:860:GLN:O	1:A:860:GLN:HG2	2.17	0.45
1:A:3197:LEU:CD2	1:A:3201:MET:SD	3.05	0.45
1:A:4720:VAL:O	1:A:4724:VAL:HG23	2.16	0.45
1:B:988:LEU:HB2	1:B:1039:LEU:HD21	1.99	0.45
1:B:2208:MET:HE1	1:B:2253:HIS:CB	2.46	0.45
1:B:3319:ILE:O	1:B:3320:LEU:C	2.55	0.45
1:B:3498:ARG:CZ	1:B:3501:ASP:HB2	2.47	0.45
1:B:4690:GLU:O	1:B:4691:GLN:HB3	2.17	0.45
1:D:1733:GLU:HG2	1:D:2201:LEU:HD23	1.99	0.45
1:D:3162:GLN:HE21	1:D:3203:VAL:HG11	1.80	0.45
1:D:3946:GLN:HA	1:D:3949:ARG:CD	2.45	0.45
1:D:4180:ARG:HD2	1:D:4981:GLU:HB3	1.99	0.45
1:D:4678:ALA:HB1	1:D:4720:VAL:HG21	1.99	0.45
1:D:4860:ARG:NH1	1:C:4630:TYR:OH	2.50	0.45
1:C:641:VAL:HG21	1:C:681:HIS:HD1	1.82	0.45

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1733:GLU:HG2	1:C:2201:LEU:HD23	1.99	0.45
1:C:2719:TYR:HB2	1:C:2953:LYS:NZ	2.32	0.45
1:C:2724:GLU:HG3	1:C:2725:LYS:H	1.82	0.45
1:C:3201:MET:O	1:C:3283:ARG:NH1	2.49	0.45
1:C:4047:MET:HE3	1:C:4047:MET:HB3	1.88	0.45
1:C:4207:MET:HE2	1:C:4207:MET:HA	1.98	0.45
1:A:179:TYR:OH	1:D:2359:ARG:NE	2.50	0.45
1:A:2208:MET:HE1	1:A:2253:HIS:CB	2.46	0.45
1:A:3765:TYR:CZ	1:A:4753:HIS:ND1	2.75	0.45
1:A:4791:TYR:CZ	1:A:4818:MET:HE3	2.51	0.45
1:B:323:LEU:O	1:B:324:ASP:OD1	2.34	0.45
1:B:917:GLU:OE1	1:B:917:GLU:N	2.48	0.45
1:B:939:VAL:HG13	1:B:1051:TYR:HB3	1.97	0.45
1:B:1733:GLU:HG2	1:B:2201:LEU:HD23	1.99	0.45
1:B:2724:GLU:HG3	1:B:2725:LYS:H	1.82	0.45
1:B:3197:LEU:CD2	1:B:3201:MET:SD	3.05	0.45
1:B:3465:ASN:C	1:B:3467:MET:H	2.23	0.45
1:D:1105:ALA:O	1:D:1189:LEU:N	2.50	0.45
1:D:1577:ALA:O	1:D:1584:ARG:NH1	2.43	0.45
1:D:2701:PRO:C	1:D:2702:CYS:SG	2.99	0.45
1:D:3466:ASN:O	1:D:3470:LEU:HG	2.16	0.45
1:D:3577:ARG:NE	1:D:3584:GLU:OE2	2.44	0.45
1:C:2992:GLU:HA	1:C:2995:ILE:HD12	1.98	0.45
1:C:3137:LEU:HB2	1:C:3138:PRO:HD3	1.99	0.45
1:C:3230:LEU:HD23	1:C:3230:LEU:H	1.82	0.45
1:C:3732:SER:HA	1:C:3735:LEU:HD21	1.99	0.45
1:C:3734:HIS:HB2	1:C:3736:GLU:HG2	1.98	0.45
1:C:3832:ILE:HG22	1:C:3836:MET:HE3	1.98	0.45
1:C:4901:ILE:HG13	1:C:4913:ARG:NH2	2.32	0.45
1:A:233:ILE:O	1:A:257:ARG:NH1	2.49	0.44
1:A:835:ARG:NH2	1:A:1210:SER:O	2.50	0.44
1:A:1027:LEU:O	1:A:1032:LYS:NZ	2.49	0.44
1:A:1461:ASP:OD2	1:A:1468:LYS:NZ	2.47	0.44
1:A:2973:PHE:CD1	1:A:2973:PHE:C	2.95	0.44
1:A:3982:HIS:NE2	1:A:4039:MET:HE1	2.32	0.44
1:A:4041:ALA:O	1:A:4045:VAL:HG23	2.17	0.44
1:A:4060:LYS:O	1:A:4063:ASP:OD1	2.35	0.44
1:A:4586:PRO:CD	1:A:4629:TYR:CE2	3.00	0.44
1:A:4844:LEU:O	1:A:4847:VAL:HG22	2.17	0.44
1:A:4901:ILE:HG13	1:A:4913:ARG:NH2	2.32	0.44
2:G:23:VAL:HG22	2:G:47:LYS:HG2	1.99	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:233:ILE:HD12	1:B:242:ARG:HB3	1.99	0.44
1:B:2719:TYR:HB2	1:B:2953:LYS:NZ	2.32	0.44
1:B:2883:HIS:HB2	1:B:2908:TYR:CZ	2.52	0.44
1:B:3201:MET:O	1:B:3283:ARG:NH1	2.49	0.44
1:B:3383:ALA:H	1:B:3384:LYS:HZ2	1.64	0.44
1:D:213:TYR:HA	1:D:339:ILE:O	2.17	0.44
1:D:2761:TYR:O	1:D:2765:LYS:CE	2.65	0.44
1:D:2872:GLN:O	1:D:2873:ALA:C	2.60	0.44
1:D:4844:LEU:O	1:D:4847:VAL:HG22	2.17	0.44
1:D:4901:ILE:HG13	1:D:4913:ARG:NH2	2.32	0.44
1:C:3498:ARG:NH2	1:C:3501:ASP:HB2	2.32	0.44
1:C:3498:ARG:CZ	1:C:3501:ASP:HB2	2.47	0.44
1:A:2626:LEU:HD22	1:A:2640:PRO:HB3	2.00	0.44
1:A:3498:ARG:NH2	1:A:3501:ASP:HB2	2.32	0.44
1:B:384:MET:SD	1:C:166:GLY:C	3.00	0.44
1:B:1421:ARG:O	1:B:1570:LYS:NZ	2.49	0.44
1:B:2336:ARG:HG2	1:B:2435:ARG:HD2	1.99	0.44
1:B:3832:ILE:HG22	1:B:3836:MET:HE3	1.98	0.44
1:B:3866:ILE:O	1:B:3867:ASN:OD1	2.35	0.44
1:B:4207:MET:HE2	1:B:4207:MET:HA	1.98	0.44
1:D:155:LYS:HE3	1:D:156:GLN:HE22	1.82	0.44
1:D:917:GLU:OE1	1:D:917:GLU:N	2.48	0.44
1:D:988:LEU:HB2	1:D:1039:LEU:HD21	1.99	0.44
1:D:2608:MET:O	1:D:2612[B]:ARG:HG3	2.17	0.44
1:D:3375:GLU:O	1:D:3379:LEU:HD13	2.17	0.44
1:D:4219:PHE:CD1	1:D:4950:VAL:HG21	2.53	0.44
1:C:3445:TRP:O	1:C:3452:LYS:NZ	2.34	0.44
1:C:3755:GLU:O	1:C:3759:GLU:OE1	2.34	0.44
1:C:4586:PRO:CD	1:C:4629:TYR:CE2	3.00	0.44
1:A:1552:VAL:HG11	1:A:1562:ILE:HD13	2.00	0.44
1:A:2336:ARG:HG2	1:A:2435:ARG:HD2	1.99	0.44
1:A:3018:LEU:HD21	1:A:3075:LEU:O	2.17	0.44
2:F:23:VAL:HG22	2:F:47:LYS:HG2	1.99	0.44
1:B:451:TYR:CE2	1:B:474:ARG:HD2	2.53	0.44
1:B:710:ASP:OD1	1:B:713:SER:OG	2.28	0.44
1:B:1126:GLY:O	1:B:1127:HIS:C	2.60	0.44
1:B:2701:PRO:C	1:B:2702:CYS:SG	2.99	0.44
1:B:2950:SER:O	1:B:2954:ARG:HG3	2.18	0.44
1:B:3982:HIS:NE2	1:B:4039:MET:HE1	2.32	0.44
1:B:4586:PRO:HG3	1:B:4629:TYR:CE2	2.53	0.44
1:B:4844:LEU:O	1:B:4847:VAL:HG22	2.17	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:4901:ILE:HG13	1:B:4913:ARG:NH2	2.32	0.44
1:D:179:TYR:OH	1:C:2359:ARG:NE	2.51	0.44
1:D:641:VAL:HG21	1:D:681:HIS:HD1	1.82	0.44
1:D:2290:LEU:HD21	1:D:2295:LEU:HG	1.99	0.44
1:D:2354:VAL:O	1:D:2358:ILE:HG23	2.18	0.44
1:D:2475:GLN:CD	1:D:2488:PRO:HB3	2.42	0.44
1:D:3498:ARG:CZ	1:D:3501:ASP:HB2	2.47	0.44
1:C:858:THR:HG21	1:C:927:GLU:OE2	2.16	0.44
1:C:1805:GLU:HG2	1:C:1806:ALA:N	2.33	0.44
1:C:2974:ILE:HD13	1:C:3049:LEU:CD1	2.46	0.44
1:C:3435:PHE:CE2	1:C:3524:MET:HE1	2.51	0.44
1:C:3455:GLU:O	1:C:3459:VAL:HG23	2.18	0.44
1:C:4060:LYS:O	1:C:4063:ASP:OD1	2.35	0.44
1:A:516:LYS:O	1:A:519:VAL:HG22	2.17	0.44
1:A:707:VAL:HG12	1:A:715:GLY:HA3	1.99	0.44
1:A:1733:GLU:HG2	1:A:2201:LEU:HD23	1.99	0.44
1:A:1805:GLU:HG2	1:A:1806:ALA:N	2.33	0.44
1:A:2872:GLN:O	1:A:2873:ALA:C	2.60	0.44
1:A:3230:LEU:HD23	1:A:3230:LEU:H	1.82	0.44
1:A:3621:HIS:HB3	1:A:3623:LEU:HD12	2.00	0.44
1:A:4705:VAL:O	1:A:4708:THR:OG1	2.27	0.44
2:E:23:VAL:HG22	2:E:47:LYS:HG2	1.99	0.44
1:B:1131:ARG:NH1	1:B:1178:ALA:O	2.47	0.44
1:B:2233:CYS:C	1:B:2235:PHE:N	2.75	0.44
1:B:2973:PHE:CD1	1:B:2973:PHE:C	2.95	0.44
1:D:516:LYS:O	1:D:519:VAL:HG22	2.17	0.44
1:D:2336:ARG:HG2	1:D:2435:ARG:HD2	1.99	0.44
1:D:2684:ASP:O	1:D:2688:HIS:ND1	2.39	0.44
1:D:3230:LEU:HD23	1:D:3230:LEU:H	1.82	0.44
1:D:3635:CYS:HA	1:D:3638:MET:CE	2.43	0.44
1:D:3732:SER:HA	1:D:3735:LEU:HD21	1.99	0.44
1:D:3734:HIS:HB2	1:D:3736:GLU:HG2	1.98	0.44
1:D:4041:ALA:O	1:D:4045:VAL:HG23	2.17	0.44
1:D:4060:LYS:O	1:D:4063:ASP:OD1	2.35	0.44
1:D:4586:PRO:HG3	1:D:4629:TYR:CE2	2.53	0.44
1:C:2761:TYR:O	1:C:2765:LYS:CE	2.65	0.44
1:C:4586:PRO:HG3	1:C:4629:TYR:CE2	2.53	0.44
1:A:2513:GLU:OE1	1:A:2513:GLU:N	2.51	0.44
1:A:2660:GLY:HA3	1:A:2666:VAL:HG12	2.00	0.44
1:A:3375:GLU:O	1:A:3379:LEU:HD13	2.17	0.44
1:A:3498:ARG:CZ	1:A:3501:ASP:HB2	2.47	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3734:HIS:HB2	1:A:3736:GLU:HG2	1.98	0.44
1:A:4586:PRO:HG3	1:A:4629:TYR:CE2	2.53	0.44
1:A:4690:GLU:O	1:A:4691:GLN:HB3	2.17	0.44
1:A:4826:ILE:O	1:A:4829:SER:OG	2.24	0.44
1:B:213:TYR:HA	1:B:339:ILE:O	2.17	0.44
1:B:3592:ILE:HD12	1:B:3592:ILE:H	1.82	0.44
1:B:4180:ARG:HD2	1:B:4981:GLU:HB3	1.99	0.44
1:D:451:TYR:CE2	1:D:474:ARG:HD2	2.53	0.44
1:D:1811:ALA:HA	1:D:1814:MET:HE2	1.98	0.44
1:D:3589:PRO:O	1:D:3593:VAL:HG13	2.18	0.44
1:D:3621:HIS:HB3	1:D:3623:LEU:HD12	2.00	0.44
1:C:155:LYS:HE3	1:C:156:GLN:HE22	1.83	0.44
1:C:707:VAL:HG12	1:C:715:GLY:HA3	1.99	0.44
1:C:988:LEU:HB2	1:C:1039:LEU:HD21	1.99	0.44
1:C:2290:LEU:HD21	1:C:2295:LEU:HG	2.00	0.44
1:C:2626:LEU:HD22	1:C:2640:PRO:HB3	2.00	0.44
1:C:2973:PHE:CD1	1:C:2973:PHE:C	2.95	0.44
1:C:3375:GLU:O	1:C:3379:LEU:HD13	2.17	0.44
1:C:3589:PRO:O	1:C:3593:VAL:HG13	2.18	0.44
1:C:3592:ILE:HD12	1:C:3592:ILE:H	1.82	0.44
1:C:4985:LEU:HD12	1:C:4986:ALA:N	2.32	0.44
1:A:2724:GLU:HG3	1:A:2725:LYS:H	1.82	0.44
1:A:4180:ARG:HD2	1:A:4981:GLU:HB3	1.99	0.44
2:F:88:PRO:O	2:F:90:ILE:HD12	2.18	0.44
1:B:2359:ARG:NE	1:C:179:TYR:OH	2.51	0.44
1:B:3589:PRO:O	1:B:3593:VAL:HG13	2.18	0.44
1:B:3621:HIS:HB3	1:B:3623:LEU:HD12	2.00	0.44
1:B:4219:PHE:CD1	1:B:4950:VAL:HG21	2.53	0.44
1:D:166:GLY:C	1:C:384:MET:SD	3.01	0.44
1:D:234:SER:OG	1:D:238:SER:OG	2.27	0.44
1:D:1805:GLU:HG2	1:D:1806:ALA:N	2.33	0.44
1:D:3455:GLU:O	1:D:3459:VAL:HG23	2.18	0.44
1:C:233:ILE:HD12	1:C:242:ARG:HB3	1.99	0.44
1:C:1105:ALA:O	1:C:1189:LEU:N	2.50	0.44
1:C:2283:ASN:OD1	1:C:2285:GLU:HB2	2.18	0.44
1:C:2872:GLN:O	1:C:2873:ALA:C	2.60	0.44
1:C:4760:PRO:O	1:C:4761:PRO:C	2.61	0.44
1:A:101:LEU:C	1:A:102:LEU:HD12	2.43	0.44
1:A:384:MET:SD	1:B:166:GLY:C	3.01	0.44
1:A:2354:VAL:O	1:A:2358:ILE:HG23	2.18	0.44
1:A:3603:LEU:O	1:A:3607:GLU:OE1	2.36	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1552:VAL:HG11	1:B:1562:ILE:HD13	2.00	0.44
1:B:1805:GLU:HG2	1:B:1806:ALA:N	2.33	0.44
1:B:3734:HIS:HB2	1:B:3736:GLU:HG2	1.98	0.44
1:B:4586:PRO:CD	1:B:4629:TYR:CE2	3.00	0.44
1:B:4630:TYR:OH	1:C:4860:ARG:NH1	2.50	0.44
1:B:4985:LEU:HD12	1:B:4986:ALA:N	2.32	0.44
1:D:1027:LEU:O	1:D:1032:LYS:NZ	2.49	0.44
1:D:2911:LEU:HD13	1:D:2915:GLU:HB2	1.99	0.44
1:D:2973:PHE:C	1:D:2973:PHE:CD1	2.95	0.44
1:D:3901:ASN:OD1	1:D:3904:ARG:NH1	2.44	0.44
1:D:4760:PRO:O	1:D:4761:PRO:C	2.61	0.44
1:C:1552:VAL:HG11	1:C:1562:ILE:HD13	2.00	0.44
1:C:2348:GLU:OE1	1:C:3852:LYS:NZ	2.49	0.44
1:A:451:TYR:CE2	1:A:474:ARG:HD2	2.53	0.44
1:A:901:LYS:HG3	1:A:903:LEU:HG	1.99	0.44
1:A:908:VAL:O	1:A:909:ASN:HB2	2.18	0.44
1:A:2440:MET:O	1:A:2444:GLN:OE1	2.36	0.44
1:A:2761:TYR:O	1:A:2765:LYS:CE	2.65	0.44
1:A:3934:TYR:HD1	1:A:3999:MET:HE3	1.83	0.44
1:A:4207:MET:HA	1:A:4207:MET:HE2	1.98	0.44
1:A:4219:PHE:CD1	1:A:4950:VAL:HG21	2.53	0.44
2:E:2:VAL:HG22	2:E:58:GLY:HA2	2.00	0.44
2:E:88:PRO:O	2:E:90:ILE:HD12	2.18	0.44
2:H:2:VAL:HG22	2:H:58:GLY:HA2	2.00	0.44
2:H:88:PRO:O	2:H:90:ILE:HD12	2.18	0.44
2:G:77:SER:OG	2:G:79:ASP:OD1	2.28	0.44
1:B:384:MET:SD	1:C:166:GLY:HA3	2.58	0.44
1:B:1577:ALA:O	1:B:1584:ARG:NH1	2.43	0.44
1:B:1811:ALA:HA	1:B:1814:MET:HE2	1.98	0.44
1:B:2513:GLU:OE1	1:B:2513:GLU:N	2.51	0.44
1:B:3137:LEU:HB2	1:B:3138:PRO:HD3	1.99	0.44
1:B:3467:MET:HE1	1:C:1173:SER:C	2.42	0.44
1:B:3732:SER:HA	1:B:3735:LEU:HD21	1.99	0.44
1:B:4190:ILE:HB	1:B:5031:GLN:OE1	2.18	0.44
1:B:4631:PHE:HE2	1:B:4633:GLU:HG2	1.82	0.44
1:D:101:LEU:C	1:D:102:LEU:HD12	2.43	0.44
1:D:323:LEU:O	1:D:324:ASP:OD1	2.34	0.44
1:D:1173:SER:C	1:C:3467:MET:HE1	2.42	0.44
1:D:2283:ASN:OD1	1:D:2285:GLU:HB2	2.18	0.44
1:D:2440:MET:O	1:D:2444:GLN:OE1	2.36	0.44
1:D:2724:GLU:HG3	1:D:2725:LYS:H	1.82	0.44

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3982:HIS:NE2	1:C:4039:MET:HE1	2.32	0.44
1:C:4041:ALA:O	1:C:4045:VAL:HG23	2.17	0.44
1:C:4631:PHE:HE2	1:C:4633:GLU:HG2	1.82	0.44
1:A:641:VAL:HG21	1:A:681:HIS:HD1	1.82	0.44
1:A:2290:LEU:HD21	1:A:2295:LEU:HG	1.99	0.44
1:A:2309:SER:HB2	1:A:2321:ILE:O	2.18	0.44
1:B:595:ARG:NH1	1:B:1643:GLU:OE2	2.44	0.44
1:B:641:VAL:HG21	1:B:681:HIS:HD1	1.82	0.44
1:B:1742:THR:O	1:B:1960:ALA:HB2	2.17	0.44
1:B:2788:HIS:HB3	1:B:2791:LEU:HD23	2.00	0.44
1:D:155:LYS:HE2	1:C:228:ASP:OD2	2.18	0.44
1:D:323:LEU:O	1:D:324:ASP:C	2.61	0.44
1:D:4586:PRO:CD	1:D:4629:TYR:CE2	3.00	0.44
1:D:4655:PHE:HE2	1:D:4659:ILE:HD11	1.81	0.44
1:C:908:VAL:O	1:C:909:ASN:HB2	2.18	0.44
1:C:1742:THR:O	1:C:1960:ALA:HB2	2.17	0.44
1:C:2001:PRO:O	1:C:2005:GLN:HG3	2.18	0.44
1:C:2309:SER:HB2	1:C:2321:ILE:O	2.18	0.44
1:C:2950:SER:O	1:C:2954:ARG:HG3	2.18	0.44
1:C:3386:GLU:O	1:C:3389:GLU:O	2.36	0.44
1:C:3934:TYR:HD1	1:C:3999:MET:HE3	1.83	0.44
1:C:4695:ASP:O	1:C:4695:ASP:OD2	2.36	0.44
1:A:1126:GLY:O	1:A:1127:HIS:C	2.60	0.43
1:A:2950:SER:O	1:A:2954:ARG:HG3	2.18	0.43
1:A:3946:GLN:NE2	1:A:3949:ARG:HH21	2.15	0.43
1:B:516:LYS:O	1:B:519:VAL:HG22	2.17	0.43
1:B:2660:GLY:HA3	1:B:2666:VAL:HG12	2.00	0.43
1:B:2761:TYR:O	1:B:2765:LYS:CE	2.65	0.43
1:D:707:VAL:HG12	1:D:715:GLY:HA3	1.99	0.43
1:D:783:PHE:HB2	1:D:787:VAL:HG21	2.00	0.43
1:D:1742:THR:O	1:D:1960:ALA:HB2	2.17	0.43
1:D:3946:GLN:NE2	1:D:3949:ARG:HH21	2.15	0.43
1:D:4170:ILE:H	1:D:4170:ILE:HD12	1.83	0.43
1:D:4744:ASP:O	1:D:4748:LEU:CD1	2.66	0.43
1:C:451:TYR:CE2	1:C:474:ARG:HD2	2.53	0.43
1:C:4180:ARG:HD2	1:C:4981:GLU:HB3	1.99	0.43
1:A:228:ASP:OD2	1:B:155:LYS:HE2	2.18	0.43
1:A:3104:GLU:O	1:A:3107:VAL:HG22	2.19	0.43
1:A:3589:PRO:O	1:A:3593:VAL:HG13	2.18	0.43
1:A:3832:ILE:CG2	1:A:3836:MET:HE3	2.48	0.43
1:A:4190:ILE:HB	1:A:5031:GLN:OE1	2.18	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:101:LEU:C	1:B:102:LEU:HD12	2.43	0.43
1:B:228:ASP:OD2	1:C:155:LYS:HE2	2.18	0.43
1:B:2440:MET:O	1:B:2444:GLN:OE1	2.36	0.43
1:B:3603:LEU:O	1:B:3607:GLU:OE1	2.36	0.43
1:B:3901:ASN:OD1	1:B:3904:ARG:NH1	2.44	0.43
1:B:4744:ASP:O	1:B:4748:LEU:CD1	2.66	0.43
1:D:860:GLN:O	1:D:860:GLN:HG2	2.17	0.43
1:D:1131:ARG:NH1	1:D:1178:ALA:O	2.47	0.43
1:D:1552:VAL:HG11	1:D:1562:ILE:HD13	2.00	0.43
1:D:2668:SER:O	1:D:2669:GLU:HB2	2.19	0.43
1:D:2928:LYS:O	1:D:2932:MET:HG2	2.18	0.43
1:D:3104:GLU:O	1:D:3107:VAL:HG22	2.19	0.43
1:D:3248:ARG:HH12	1:D:3252:ASP:CG	2.17	0.43
1:D:3498:ARG:NH2	1:D:3501:ASP:HB2	2.32	0.43
1:D:3592:ILE:HD12	1:D:3592:ILE:H	1.82	0.43
1:D:4222:VAL:HG11	1:D:4950:VAL:HA	2.00	0.43
1:C:1805:GLU:O	1:C:1808:ARG:HG2	2.18	0.43
1:C:2788:HIS:HB3	1:C:2791:LEU:HD23	2.00	0.43
1:C:4844:LEU:O	1:C:4847:VAL:HG22	2.17	0.43
1:A:2283:ASN:OD1	1:A:2285:GLU:HB2	2.18	0.43
1:A:3197:LEU:HD23	1:A:3201:MET:SD	2.59	0.43
1:A:4744:ASP:O	1:A:4748:LEU:CD1	2.66	0.43
2:H:26:TYR:HA	2:H:100:ASP:O	2.19	0.43
2:G:88:PRO:O	2:G:90:ILE:HD12	2.18	0.43
1:B:2894:LEU:O	1:B:2898:GLY:N	2.48	0.43
1:B:3455:GLU:O	1:B:3459:VAL:HG23	2.18	0.43
1:B:3498:ARG:NH2	1:B:3501:ASP:HB2	2.32	0.43
1:D:233:ILE:HD12	1:D:242:ARG:HB3	1.99	0.43
1:D:2001:PRO:O	1:D:2005:GLN:HG3	2.18	0.43
1:D:2309:SER:HB2	1:D:2321:ILE:O	2.18	0.43
1:D:2626:LEU:HD22	1:D:2640:PRO:HB3	2.00	0.43
1:D:4943:LEU:O	1:D:4947:GLN:HG2	2.19	0.43
1:C:752:VAL:HB	1:C:753:PRO:C	2.44	0.43
1:C:2673:HIS:ND1	1:C:2716:ASP:OD2	2.46	0.43
1:C:3329:ILE:HD11	1:C:3332:ALA:HB2	2.00	0.43
1:A:323:LEU:O	1:A:324:ASP:C	2.61	0.43
1:A:2233:CYS:C	1:A:2235:PHE:N	2.75	0.43
1:A:3732:SER:HA	1:A:3735:LEU:HD21	1.99	0.43
1:A:4170:ILE:HD12	1:A:4170:ILE:H	1.83	0.43
1:B:2858:GLN:O	1:B:2860:PRO:HD3	2.18	0.43
1:B:2906:VAL:HG23	1:B:2911:LEU:HD23	2.00	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3230:LEU:HD23	1:B:3230:LEU:H	1.82	0.43
1:B:3750:GLU:OE1	1:B:3750:GLU:N	2.52	0.43
1:D:2014:ASP:O	1:D:2015:GLU:HB3	2.19	0.43
1:D:3832:ILE:CG2	1:D:3836:MET:HE3	2.48	0.43
1:D:4983:HIS:O	3:D:5301:ATP:N6	2.50	0.43
1:C:323:LEU:O	1:C:324:ASP:C	2.61	0.43
1:C:2440:MET:O	1:C:2444:GLN:OE1	2.36	0.43
1:C:2490:MET:CG	1:C:2545:GLU:OE1	2.67	0.43
1:C:2523:ASP:OD1	1:C:2524:VAL:N	2.52	0.43
1:C:3621:HIS:HB3	1:C:3623:LEU:HD12	2.00	0.43
1:C:3750:GLU:OE1	1:C:3750:GLU:N	2.52	0.43
1:C:4095:LYS:HA	1:C:4098:ASP:OD2	2.19	0.43
1:C:4219:PHE:CD1	1:C:4950:VAL:HG21	2.53	0.43
1:C:4744:ASP:O	1:C:4748:LEU:CD1	2.66	0.43
1:A:1805:GLU:O	1:A:1808:ARG:HG2	2.18	0.43
1:A:2668:SER:O	1:A:2669:GLU:HB2	2.19	0.43
1:A:2677:LYS:HE2	1:A:2910:THR:HG22	2.00	0.43
1:A:2889:LYS:O	1:A:2893:GLU:OE1	2.37	0.43
1:A:3455:GLU:O	1:A:3459:VAL:HG23	2.18	0.43
1:A:3592:ILE:HD12	1:A:3592:ILE:H	1.82	0.43
1:A:3634:ALA:O	1:A:3638:MET:HG3	2.19	0.43
1:B:155:LYS:HE3	1:B:156:GLN:HE22	1.82	0.43
1:B:707:VAL:HG12	1:B:715:GLY:HA3	1.99	0.43
1:B:2290:LEU:HD21	1:B:2295:LEU:HG	1.99	0.43
1:B:2354:VAL:O	1:B:2358:ILE:HG23	2.18	0.43
1:B:3435:PHE:HD2	1:B:3524:MET:HE1	1.80	0.43
1:B:3832:ILE:CG2	1:B:3836:MET:HE3	2.48	0.43
1:B:3946:GLN:NE2	1:B:3949:ARG:HH21	2.15	0.43
1:B:4041:ALA:O	1:B:4045:VAL:HG23	2.17	0.43
1:D:308:HIS:O	1:D:310:LYS:N	2.46	0.43
1:D:1805:GLU:O	1:D:1808:ARG:HG2	2.18	0.43
1:D:2490:MET:CG	1:D:2545:GLU:OE1	2.67	0.43
1:D:2788:HIS:HB3	1:D:2791:LEU:HD23	2.00	0.43
1:D:2950:SER:O	1:D:2954:ARG:HG3	2.18	0.43
1:C:1057:ASP:OD1	1:C:1057:ASP:N	2.52	0.43
1:C:2858:GLN:O	1:C:2860:PRO:HD3	2.18	0.43
1:C:2889:LYS:O	1:C:2893:GLU:OE1	2.37	0.43
1:C:3946:GLN:NE2	1:C:3949:ARG:HH21	2.15	0.43
1:C:4945:ASP:OD1	1:C:4945:ASP:C	2.62	0.43
1:A:155:LYS:HE3	1:A:156:GLN:HE22	1.82	0.43
1:A:233:ILE:HD12	1:A:242:ARG:HB3	1.99	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:783:PHE:HB2	1:A:787:VAL:HG21	2.00	0.43
1:A:1742:THR:O	1:A:1960:ALA:HB2	2.17	0.43
1:A:2118:ARG:NH2	1:A:3719:ASP:OD1	2.44	0.43
1:A:3386:GLU:O	1:A:3389:GLU:O	2.36	0.43
2:F:26:TYR:HA	2:F:100:ASP:O	2.19	0.43
1:B:2150:GLU:HG2	1:B:2151:ASP:N	2.34	0.43
1:B:2523:ASP:OD1	1:B:2524:VAL:N	2.52	0.43
1:B:2626:LEU:HD22	1:B:2640:PRO:HB3	2.00	0.43
1:B:2872:GLN:O	1:B:2873:ALA:C	2.60	0.43
1:B:3386:GLU:O	1:B:3389:GLU:O	2.36	0.43
1:B:4944:ARG:NE	1:C:4938:ASP:OD1	2.52	0.43
1:D:166:GLY:HA3	1:C:384:MET:SD	2.59	0.43
1:D:1057:ASP:N	1:D:1057:ASP:OD1	2.52	0.43
1:D:2513:GLU:OE1	1:D:2513:GLU:N	2.51	0.43
1:D:2660:GLY:HA3	1:D:2666:VAL:HG12	2.00	0.43
1:D:3197:LEU:HD23	1:D:3201:MET:SD	2.59	0.43
1:D:3750:GLU:N	1:D:3750:GLU:OE1	2.52	0.43
1:D:3971:GLY:N	1:D:3972:PRO:HA	2.34	0.43
1:D:4095:LYS:HA	1:D:4098:ASP:OD2	2.19	0.43
1:D:4190:ILE:HB	1:D:5031:GLN:OE1	2.18	0.43
1:C:41:GLY:O	1:C:45:ARG:NH1	2.52	0.43
1:C:1823:GLY:O	1:C:1825:HIS:ND1	2.51	0.43
1:C:2354:VAL:O	1:C:2358:ILE:HG23	2.18	0.43
1:C:2668:SER:O	1:C:2669:GLU:HB2	2.19	0.43
1:C:4170:ILE:H	1:C:4170:ILE:HD12	1.83	0.43
1:A:752:VAL:HB	1:A:753:PRO:C	2.43	0.43
1:A:1669:LEU:O	1:A:1673:VAL:HG22	2.19	0.43
1:A:1823:GLY:O	1:A:1825:HIS:ND1	2.51	0.43
1:A:2858:GLN:O	1:A:2860:PRO:HD3	2.18	0.43
1:A:3152:PHE:O	1:A:3156:VAL:HG23	2.19	0.43
1:A:3750:GLU:OE1	1:A:3750:GLU:N	2.52	0.43
1:A:4222:VAL:HG11	1:A:4950:VAL:HA	2.00	0.43
2:E:26:TYR:HA	2:E:100:ASP:O	2.19	0.43
2:G:2:VAL:HG22	2:G:58:GLY:HA2	2.00	0.43
1:B:752:VAL:HB	1:B:753:PRO:C	2.43	0.43
1:B:1057:ASP:OD1	1:B:1057:ASP:N	2.52	0.43
1:B:2014:ASP:O	1:B:2015:GLU:HB3	2.19	0.43
1:B:2577:ILE:H	1:B:2577:ILE:HD12	1.84	0.43
1:B:2677:LYS:HE2	1:B:2910:THR:HG22	2.00	0.43
1:B:2699:ALA:O	1:B:2702:CYS:HB3	2.19	0.43
1:B:3197:LEU:HD23	1:B:3201:MET:SD	2.59	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3321:ARG:HH11	1:B:3321:ARG:CG	2.13	0.43
1:D:752:VAL:HB	1:D:753:PRO:C	2.43	0.43
1:D:2225:PHE:N	1:D:2226:PRO:CD	2.82	0.43
1:D:2577:ILE:HD12	1:D:2577:ILE:H	1.84	0.43
1:D:3111:ARG:HH12	1:D:3175:LEU:HD12	1.84	0.43
1:D:3603:LEU:O	1:D:3607:GLU:OE1	2.36	0.43
1:D:4695:ASP:O	1:D:4695:ASP:OD2	2.36	0.43
1:C:1126:GLY:O	1:C:1127:HIS:C	2.60	0.43
1:C:4983:HIS:O	3:C:5301:ATP:N6	2.50	0.43
1:A:1173:SER:C	1:D:3467:MET:HE1	2.43	0.43
1:A:2001:PRO:O	1:A:2005:GLN:HG3	2.18	0.43
1:A:3087:ILE:H	1:A:3087:ILE:HD12	1.84	0.43
1:A:4666:VAL:N	1:A:4667:PRO:CD	2.82	0.43
2:F:2:VAL:HG22	2:F:58:GLY:HA2	2.00	0.43
1:B:598:LYS:O	1:B:602:VAL:HG23	2.19	0.43
1:B:908:VAL:O	1:B:909:ASN:HB2	2.18	0.43
1:B:3892:CYS:HG	1:B:3899:PHE:HD2	1.66	0.43
1:B:4095:LYS:HA	1:B:4098:ASP:OD2	2.19	0.43
1:B:4666:VAL:N	1:B:4667:PRO:CD	2.82	0.43
1:B:4760:PRO:O	1:B:4761:PRO:C	2.61	0.43
1:B:4946:GLN:O	1:B:4950:VAL:HG23	2.19	0.43
1:D:1000:ARG:HB3	1:D:1021:LEU:HD11	2.01	0.43
1:D:2677:LYS:HE2	1:D:2910:THR:HG22	2.00	0.43
1:D:2889:LYS:O	1:D:2893:GLU:OE1	2.37	0.43
1:D:2929:PHE:CD1	1:D:2932:MET:HE2	2.48	0.43
1:C:2906:VAL:HG23	1:C:2911:LEU:HD23	2.00	0.43
1:C:3832:ILE:CG2	1:C:3836:MET:HE3	2.48	0.43
1:C:3996:PHE:HD1	1:C:4016:LEU:HD11	1.83	0.43
1:A:1057:ASP:N	1:A:1057:ASP:OD1	2.52	0.43
1:A:2199:ARG:NH1	1:A:2245:GLN:HB3	2.34	0.43
1:A:2523:ASP:OD1	1:A:2524:VAL:N	2.52	0.43
1:A:2788:HIS:HB3	1:A:2791:LEU:HD23	2.00	0.43
1:A:3111:ARG:HH12	1:A:3175:LEU:HD12	1.84	0.43
1:A:4695:ASP:O	1:A:4695:ASP:OD2	2.36	0.43
2:G:26:TYR:HA	2:G:100:ASP:O	2.19	0.43
1:B:41:GLY:O	1:B:45:ARG:NH1	2.52	0.43
1:B:1256:GLU:HB2	1:B:1275:ARG:HE	1.84	0.43
1:B:1669:LEU:O	1:B:1673:VAL:HG22	2.19	0.43
1:B:2490:MET:CG	1:B:2545:GLU:OE1	2.67	0.43
1:B:2668:SER:O	1:B:2669:GLU:HB2	2.19	0.43
1:B:2974:ILE:HD13	1:B:3049:LEU:CD1	2.46	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:3104:GLU:O	1:B:3107:VAL:HG22	2.19	0.43
1:B:3111:ARG:HH12	1:B:3175:LEU:HD12	1.84	0.43
1:B:3991:GLY:O	1:B:3995:VAL:HG23	2.19	0.43
1:B:4170:ILE:H	1:B:4170:ILE:HD12	1.83	0.43
1:B:4945:ASP:OD1	1:B:4945:ASP:C	2.62	0.43
1:D:953:THR:OG1	1:D:969:PRO:O	2.24	0.43
1:D:1759:ARG:HD2	1:D:1759:ARG:C	2.44	0.43
1:D:1987:SER:O	1:D:1991:THR:HG23	2.19	0.43
1:D:3386:GLU:O	1:D:3389:GLU:O	2.36	0.43
1:D:4001:MET:HE2	1:D:4057:MET:HG2	2.01	0.43
1:C:101:LEU:C	1:C:102:LEU:HD12	2.43	0.43
1:C:336:PRO:HA	1:C:337:PRO:HD3	1.92	0.43
1:C:783:PHE:HB2	1:C:787:VAL:HG21	2.00	0.43
1:C:1027:LEU:O	1:C:1032:LYS:NZ	2.49	0.43
1:C:1123:VAL:HG23	1:C:1132:TRP:HB2	2.01	0.43
1:C:2097:LEU:HD12	1:C:2100[B]:HIS:CE1	2.54	0.43
1:C:2677:LYS:HE2	1:C:2910:THR:HG22	2.00	0.43
1:C:2736:ASP:O	1:C:2738:ARG:HD3	2.19	0.43
1:C:2894:LEU:O	1:C:2898:GLY:N	2.48	0.43
1:C:2928:LYS:O	1:C:2932:MET:HG2	2.18	0.43
1:C:3111:ARG:HH12	1:C:3175:LEU:HD12	1.84	0.43
1:C:3603:LEU:O	1:C:3607:GLU:OE1	2.36	0.43
1:C:4222:VAL:HG11	1:C:4950:VAL:HA	2.00	0.43
1:C:4666:VAL:N	1:C:4667:PRO:CD	2.82	0.43
1:C:4690:GLU:O	1:C:4691:GLN:HB3	2.17	0.43
1:C:4943:LEU:O	1:C:4947:GLN:HG2	2.19	0.43
1:C:4946:GLN:O	1:C:4950:VAL:HG23	2.19	0.43
1:A:41:GLY:O	1:A:45:ARG:NH1	2.52	0.43
1:A:867:LEU:HD13	1:A:929:LEU:HD12	2.01	0.43
1:A:3392:LEU:O	1:A:3395:ARG:HB3	2.19	0.43
1:A:3635:CYS:HA	1:A:3638:MET:CE	2.43	0.43
1:A:4000:MET:HG2	1:A:4013:LEU:HD11	2.01	0.43
1:B:1105:ALA:O	1:B:1189:LEU:N	2.50	0.43
1:B:2097:LEU:HD12	1:B:2100[B]:HIS:CE1	2.54	0.43
1:B:2225:PHE:N	1:B:2226:PRO:CD	2.82	0.43
1:B:2889:LYS:O	1:B:2893:GLU:OE1	2.37	0.43
1:B:3018:LEU:HD21	1:B:3075:LEU:O	2.17	0.43
1:B:4695:ASP:O	1:B:4695:ASP:OD2	2.36	0.43
1:D:451:TYR:CZ	1:D:474:ARG:HD2	2.54	0.43
1:D:1446:SER:O	1:D:1496:TRP:NE1	2.41	0.43
1:D:2118:ARG:NH2	1:D:3719:ASP:OD1	2.44	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2799:GLU:O	1:D:2803:GLU:OE1	2.37	0.43
1:D:4666:VAL:N	1:D:4667:PRO:CD	2.82	0.43
1:C:1759:ARG:HD2	1:C:1759:ARG:C	2.44	0.43
1:C:1987:SER:O	1:C:1991:THR:HG23	2.19	0.43
1:C:2199:ARG:NH1	1:C:2245:GLN:HB3	2.34	0.43
1:C:3104:GLU:O	1:C:3107:VAL:HG22	2.19	0.43
1:C:3152:PHE:O	1:C:3156:VAL:HG23	2.19	0.43
1:C:3971:GLY:N	1:C:3972:PRO:HA	2.34	0.43
1:C:4190:ILE:HB	1:C:5031:GLN:OE1	2.18	0.43
1:A:790:ARG:HA	1:A:1626:TRP:O	2.19	0.42
1:A:1759:ARG:HD2	1:A:1759:ARG:C	2.44	0.42
1:A:2150:GLU:HG2	1:A:2151:ASP:N	2.34	0.42
1:A:2799:GLU:O	1:A:2803:GLU:OE1	2.37	0.42
1:A:2928:LYS:O	1:A:2932:MET:HG2	2.18	0.42
1:A:3409:TYR:N	1:A:3410:PRO:HD2	2.34	0.42
1:A:3991:GLY:O	1:A:3995:VAL:HG23	2.19	0.42
1:A:4943:LEU:O	1:A:4947:GLN:HG2	2.19	0.42
1:B:323:LEU:O	1:B:324:ASP:C	2.61	0.42
1:B:783:PHE:HB2	1:B:787:VAL:HG21	2.00	0.42
1:B:867:LEU:HD13	1:B:929:LEU:HD12	2.01	0.42
1:B:1823:GLY:O	1:B:1825:HIS:ND1	2.51	0.42
1:B:1987:SER:O	1:B:1991:THR:HG23	2.19	0.42
1:B:2185:ILE:HD13	1:B:2203:MET:CE	2.49	0.42
1:B:2736:ASP:O	1:B:2738:ARG:HD3	2.19	0.42
1:B:3392:LEU:O	1:B:3395:ARG:HB3	2.19	0.42
1:B:3634:ALA:O	1:B:3638:MET:HG3	2.19	0.42
1:B:4001:MET:HE2	1:B:4057:MET:HG2	2.01	0.42
1:D:908:VAL:O	1:D:909:ASN:HB2	2.18	0.42
1:D:2858:GLN:O	1:D:2860:PRO:HD3	2.18	0.42
1:D:3152:PHE:O	1:D:3156:VAL:HG23	2.19	0.42
1:D:4731:ILE:HG13	1:D:4732:PHE:N	2.34	0.42
1:C:327:PRO:O	1:C:329:ARG:NH1	2.45	0.42
1:C:1769:THR:N	1:C:1956:GLU:OE2	2.52	0.42
1:C:2014:ASP:O	1:C:2015:GLU:HB3	2.19	0.42
1:C:2699:ALA:O	1:C:2702:CYS:HB3	2.19	0.42
1:C:2799:GLU:O	1:C:2803:GLU:OE1	2.37	0.42
1:C:3210:LEU:HD13	1:C:3304:CYS:O	2.19	0.42
1:A:953:THR:OG1	1:A:969:PRO:O	2.24	0.42
1:A:2097:LEU:HD12	1:A:2100[B]:HIS:CE1	2.54	0.42
1:A:2225:PHE:N	1:A:2226:PRO:CD	2.82	0.42
1:A:2902:HIS:CE1	1:A:2904:LEU:HB3	2.54	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2906:VAL:HG23	1:A:2911:LEU:HD23	2.00	0.42
1:A:4760:PRO:O	1:A:4761:PRO:C	2.61	0.42
2:G:90:ILE:HD11	1:C:1684:ALA:HA	2.01	0.42
1:B:451:TYR:CZ	1:B:474:ARG:HD2	2.54	0.42
1:B:575:LEU:HA	1:B:578:ILE:HG12	2.01	0.42
1:B:2001:PRO:O	1:B:2005:GLN:HG3	2.18	0.42
1:B:2283:ASN:OD1	1:B:2285:GLU:HB2	2.18	0.42
1:B:3087:ILE:HD12	1:B:3087:ILE:H	1.84	0.42
1:B:3934:TYR:HD1	1:B:3999:MET:HE3	1.83	0.42
1:B:3971:GLY:N	1:B:3972:PRO:HA	2.34	0.42
1:B:4000:MET:HG2	1:B:4013:LEU:HD11	2.01	0.42
1:D:76:ARG:O	1:D:80:GLU:HG2	2.19	0.42
1:D:1123:VAL:HG23	1:D:1132:TRP:HB2	2.01	0.42
1:D:2097:LEU:HD12	1:D:2100[B]:HIS:CE1	2.54	0.42
1:D:2523:ASP:OD1	1:D:2524:VAL:N	2.52	0.42
1:D:2906:VAL:HG23	1:D:2911:LEU:HD23	2.00	0.42
1:D:3087:ILE:H	1:D:3087:ILE:HD12	1.84	0.42
1:D:3392:LEU:O	1:D:3395:ARG:HB3	2.19	0.42
1:D:4585:SER:O	1:D:4629:TYR:HD2	2.02	0.42
1:D:4938:ASP:OD1	1:C:4944:ARG:NE	2.51	0.42
1:D:4946:GLN:O	1:D:4950:VAL:HG23	2.19	0.42
1:C:598:LYS:O	1:C:602:VAL:HG23	2.19	0.42
1:C:842:PRO:O	1:C:1196:PRO:HA	2.19	0.42
1:C:1112:ASP:OD1	1:C:1113:VAL:N	2.52	0.42
1:C:4001:MET:HE2	1:C:4057:MET:HG2	2.01	0.42
1:A:278:GLN:HA	1:A:328:LYS:HZ3	1.84	0.42
1:A:2035:HIS:ND1	1:A:3657:TYR:OH	2.36	0.42
1:A:2874:MET:SD	1:A:2939:ARG:O	2.78	0.42
1:A:2929:PHE:CD1	1:A:2932:MET:HE2	2.48	0.42
1:A:3971:GLY:N	1:A:3972:PRO:HA	2.34	0.42
1:B:2199:ARG:NH1	1:B:2245:GLN:HB3	2.34	0.42
1:B:2874:MET:SD	1:B:2939:ARG:O	2.78	0.42
1:B:3329:ILE:HD11	1:B:3332:ALA:HB2	2.00	0.42
1:B:3534:MET:O	1:B:3538:THR:HG23	2.20	0.42
1:B:4943:LEU:O	1:B:4947:GLN:HG2	2.19	0.42
1:D:41:GLY:O	1:D:45:ARG:NH1	2.52	0.42
1:D:1126:GLY:O	1:D:1127:HIS:C	2.60	0.42
1:D:2199:ARG:NH1	1:D:2245:GLN:HB3	2.34	0.42
1:D:2699:ALA:O	1:D:2702:CYS:HB3	2.19	0.42
1:D:3634:ALA:O	1:D:3638:MET:HG3	2.19	0.42
1:D:3637:ARG:O	1:D:3638:MET:C	2.63	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:451:TYR:CZ	1:C:474:ARG:HD2	2.54	0.42
1:C:3392:LEU:O	1:C:3395:ARG:HB3	2.19	0.42
1:A:1000:ARG:HB3	1:A:1021:LEU:HD11	2.01	0.42
1:A:1171:SER:OG	1:A:1175:SER:OG	2.08	0.42
1:A:1705:GLY:HA3	1:A:1836:PHE:CD2	2.55	0.42
1:A:2185:ILE:HD13	1:A:2203:MET:CE	2.49	0.42
1:A:3329:ILE:HD11	1:A:3332:ALA:HB2	2.00	0.42
1:A:3414:ARG:NH2	1:A:3472:ALA:HB3	2.35	0.42
1:A:4001:MET:HE2	1:A:4057:MET:HG2	2.01	0.42
1:A:4095:LYS:HA	1:A:4098:ASP:OD2	2.19	0.42
1:A:4585:SER:O	1:A:4629:TYR:HD2	2.02	0.42
1:B:790:ARG:HA	1:B:1626:TRP:O	2.19	0.42
1:B:2309:SER:HB2	1:B:2321:ILE:O	2.18	0.42
1:B:2799:GLU:O	1:B:2803:GLU:OE1	2.37	0.42
1:B:2902:HIS:CE1	1:B:2904:LEU:HB3	2.54	0.42
1:B:3210:LEU:HD13	1:B:3304:CYS:O	2.19	0.42
1:B:3547:GLU:OE1	1:B:3550:ARG:NH1	2.53	0.42
1:B:4731:ILE:HG13	1:B:4732:PHE:N	2.34	0.42
1:D:1749:PRO:C	1:D:1758:ARG:HH21	2.28	0.42
1:D:2894:LEU:O	1:D:2898:GLY:N	2.48	0.42
1:D:3382:GLU:CA	1:D:3384:LYS:HZ3	2.31	0.42
1:D:3435:PHE:HD2	1:D:3524:MET:HE1	1.81	0.42
1:C:790:ARG:HA	1:C:1626:TRP:O	2.19	0.42
1:C:2233:CYS:C	1:C:2235:PHE:N	2.75	0.42
1:C:2369[B]:ARG:HA	1:C:2369[B]:ARG:HD3	1.90	0.42
1:C:2577:ILE:H	1:C:2577:ILE:HD12	1.84	0.42
1:C:4902:GLU:O	1:C:4913:ARG:NH2	2.52	0.42
1:A:451:TYR:CZ	1:A:474:ARG:HD2	2.54	0.42
1:A:598:LYS:O	1:A:602:VAL:HG23	2.19	0.42
1:A:1256:GLU:HB2	1:A:1275:ARG:HE	1.84	0.42
1:A:3166:TYR:O	1:A:3170:CYS:SG	2.77	0.42
1:A:3592:ILE:O	1:A:3596:VAL:HG23	2.19	0.42
1:B:39:ALA:O	1:B:111:HIS:NE2	2.53	0.42
1:B:1705:GLY:HA3	1:B:1836:PHE:CD2	2.55	0.42
1:B:1805:GLU:O	1:B:1808:ARG:HG2	2.19	0.42
1:B:2928:LYS:O	1:B:2932:MET:HG2	2.18	0.42
1:B:3152:PHE:O	1:B:3156:VAL:HG23	2.19	0.42
1:B:3592:ILE:O	1:B:3596:VAL:HG23	2.19	0.42
1:B:4705:VAL:O	1:B:4708:THR:OG1	2.27	0.42
1:D:39:ALA:O	1:D:111:HIS:NE2	2.53	0.42
1:D:46:LEU:HD13	1:D:125:ARG:NH2	2.33	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2150:GLU:HG2	1:D:2151:ASP:N	2.34	0.42
1:D:2185:ILE:HD13	1:D:2203:MET:CE	2.49	0.42
1:D:2736:ASP:O	1:D:2738:ARG:HD3	2.19	0.42
1:D:3409:TYR:N	1:D:3410:PRO:HD2	2.34	0.42
1:D:3531:ASP:O	1:D:3535:LEU:CD1	2.68	0.42
1:D:3996:PHE:HD1	1:D:4016:LEU:HD11	1.83	0.42
1:C:2513:GLU:OE1	1:C:2513:GLU:N	2.51	0.42
1:C:2660:GLY:HA3	1:C:2666:VAL:HG12	2.00	0.42
1:C:3409:TYR:N	1:C:3410:PRO:HD2	2.34	0.42
1:C:3916:ILE:O	1:C:3920:VAL:HG23	2.20	0.42
1:C:4645:CYS:O	1:C:4649:LEU:CD1	2.68	0.42
1:A:155:LYS:HE2	1:D:228:ASP:OD2	2.20	0.42
1:A:2577:ILE:H	1:A:2577:ILE:HD12	1.84	0.42
1:A:3229:ILE:HG13	1:A:3230:LEU:N	2.35	0.42
1:A:3534:MET:O	1:A:3538:THR:HG23	2.20	0.42
1:A:4946:GLN:O	1:A:4950:VAL:HG23	2.19	0.42
2:F:77:SER:OG	2:F:79:ASP:OD1	2.28	0.42
1:B:907:LEU:O	1:B:908:VAL:HB	2.20	0.42
1:B:1000:ARG:HB3	1:B:1021:LEU:HD11	2.01	0.42
1:B:1112:ASP:OD1	1:B:1113:VAL:N	2.52	0.42
1:B:1123:VAL:HG23	1:B:1132:TRP:HB2	2.01	0.42
1:B:1759:ARG:HD2	1:B:1759:ARG:C	2.44	0.42
1:B:3166:TYR:O	1:B:3170:CYS:SG	2.77	0.42
1:B:3229:ILE:HG13	1:B:3230:LEU:N	2.35	0.42
1:B:3637:ARG:O	1:B:3638:MET:C	2.63	0.42
1:B:3996:PHE:HD1	1:B:4016:LEU:HD11	1.84	0.42
1:B:4673:ARG:O	1:B:4676:GLU:HG3	2.19	0.42
1:D:3934:TYR:HD1	1:D:3999:MET:HE3	1.83	0.42
1:D:3986:TRP:O	1:D:3990:VAL:HG23	2.20	0.42
1:C:232:THR:HG21	1:C:252:VAL:HG21	2.02	0.42
1:C:2874:MET:SD	1:C:2939:ARG:O	2.78	0.42
1:C:3087:ILE:H	1:C:3087:ILE:HD12	1.84	0.42
1:C:4000:MET:HG2	1:C:4013:LEU:HD11	2.01	0.42
1:A:232:THR:HG21	1:A:252:VAL:HG21	2.02	0.42
1:A:384:MET:SD	1:B:166:GLY:HA3	2.59	0.42
1:A:478:PHE:CD2	1:A:483:MET:HG3	2.55	0.42
1:A:925:SER:O	1:A:929:LEU:HD23	2.20	0.42
1:A:2326:CYS:SG	1:A:2327:GLY:N	2.93	0.42
1:A:2914:LYS:HG3	1:A:2915:GLU:N	2.35	0.42
1:A:4673:ARG:O	1:A:4676:GLU:HG3	2.19	0.42
2:G:17:LYS:HA	2:G:17:LYS:HD3	1.88	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:842:PRO:O	1:B:1196:PRO:HA	2.19	0.42
1:B:2929:PHE:CD1	1:B:2932:MET:HE2	2.48	0.42
1:B:3409:TYR:N	1:B:3410:PRO:HD2	2.34	0.42
1:D:867:LEU:HD13	1:D:929:LEU:HD12	2.01	0.42
1:D:1116:GLY:HA3	1:D:1132:TRP:HB3	2.02	0.42
1:D:1669:LEU:O	1:D:1673:VAL:HG22	2.19	0.42
1:D:1748:PHE:CB	1:D:1758:ARG:HG2	2.50	0.42
1:D:1769:THR:N	1:D:1956:GLU:OE2	2.52	0.42
1:D:1828:ASP:OD1	1:D:1828:ASP:N	2.48	0.42
1:D:2031:LEU:HD11	1:D:3657:TYR:CE1	2.55	0.42
1:D:2874:MET:SD	1:D:2939:ARG:O	2.78	0.42
1:D:2908:TYR:HA	1:D:2911:LEU:HG	2.02	0.42
1:D:3210:LEU:HD13	1:D:3304:CYS:O	2.19	0.42
1:D:3225:ARG:NH1	1:D:3226:GLU:HG3	2.35	0.42
1:D:3329:ILE:HD11	1:D:3332:ALA:HB2	2.00	0.42
1:D:4000:MET:SD	1:D:4017:LEU:HD21	2.60	0.42
1:C:2150:GLU:HG2	1:C:2151:ASP:N	2.34	0.42
1:C:2225:PHE:N	1:C:2226:PRO:CD	2.82	0.42
1:C:3166:TYR:O	1:C:3170:CYS:SG	2.77	0.42
1:C:4585:SER:O	1:C:4629:TYR:HD2	2.02	0.42
1:C:4731:ILE:HG13	1:C:4732:PHE:N	2.34	0.42
1:A:39:ALA:O	1:A:111:HIS:NE2	2.53	0.42
1:A:2699:ALA:O	1:A:2702:CYS:HB3	2.19	0.42
1:A:2974:ILE:HD13	1:A:3049:LEU:CD1	2.46	0.42
1:A:3637:ARG:O	1:A:3638:MET:C	2.63	0.42
1:A:3986:TRP:O	1:A:3990:VAL:HG23	2.20	0.42
1:A:4731:ILE:HG13	1:A:4732:PHE:N	2.34	0.42
1:A:4945:ASP:OD1	1:A:4945:ASP:C	2.62	0.42
1:B:328:LYS:HE2	1:B:328:LYS:HB3	1.82	0.42
1:B:2031:LEU:HD11	1:B:3657:TYR:CE1	2.55	0.42
1:B:4222:VAL:HG11	1:B:4950:VAL:HA	2.00	0.42
1:D:598:LYS:O	1:D:602:VAL:HG23	2.19	0.42
1:D:1421:ARG:O	1:D:1570:LYS:NZ	2.49	0.42
1:D:3991:GLY:O	1:D:3995:VAL:HG23	2.19	0.42
1:D:4000:MET:HG2	1:D:4013:LEU:HD11	2.01	0.42
1:D:4902:GLU:O	1:D:4913:ARG:NH2	2.52	0.42
1:C:1749:PRO:O	1:C:1758:ARG:NE	2.52	0.42
1:C:2326:CYS:SG	1:C:2327:GLY:N	2.93	0.42
1:C:2702:CYS:C	1:C:2704:CYS:H	2.28	0.42
1:C:3197:LEU:HD23	1:C:3201:MET:SD	2.59	0.42
1:C:3534:MET:O	1:C:3538:THR:HG23	2.20	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:3765:TYR:CZ	1:C:4753:HIS:ND1	2.75	0.42
1:C:3991:GLY:O	1:C:3995:VAL:HG23	2.19	0.42
1:A:166:GLY:C	1:D:384:MET:SD	3.02	0.42
1:A:1116:GLY:HA3	1:A:1132:TRP:HB3	2.02	0.42
1:A:1123:VAL:HG23	1:A:1132:TRP:HB2	2.01	0.42
1:A:2970:SER:HA	1:A:2973:PHE:CE2	2.55	0.42
1:A:3547:GLU:CD	1:A:3550:ARG:HH11	2.28	0.42
1:A:4631:PHE:HE2	1:A:4633:GLU:CG	2.33	0.42
1:A:4744:ASP:O	1:A:4748:LEU:HD12	2.20	0.42
1:B:1705:GLY:N	1:B:1706:PRO:CD	2.83	0.42
1:B:3225:ARG:NH1	1:B:3226:GLU:HG3	2.35	0.42
1:B:3281:LEU:HB2	1:B:3282:PRO:HD3	2.02	0.42
1:B:3916:ILE:O	1:B:3920:VAL:HG23	2.20	0.42
1:B:4879:MET:HE3	1:B:4879:MET:HB3	1.95	0.42
1:D:301:VAL:O	1:D:301:VAL:HG23	2.20	0.42
1:D:478:PHE:CD2	1:D:483:MET:HG3	2.55	0.42
1:D:790:ARG:HA	1:D:1626:TRP:O	2.19	0.42
1:D:907:LEU:O	1:D:908:VAL:HB	2.20	0.42
1:D:1423:ASP:HB3	1:D:1426:ILE:HD12	2.02	0.42
1:D:1705:GLY:HA3	1:D:1836:PHE:CD2	2.55	0.42
1:D:2951:ILE:H	1:D:2951:ILE:HD12	1.85	0.42
1:D:3129:LEU:O	1:D:3133:THR:HG22	2.20	0.42
1:D:3229:ILE:HG13	1:D:3230:LEU:N	2.35	0.42
1:D:3414:ARG:NH2	1:D:3472:ALA:HB3	2.35	0.42
1:D:4839:MET:HE2	1:D:4839:MET:HA	2.01	0.42
1:D:4945:ASP:OD1	1:D:4945:ASP:C	2.62	0.42
1:C:907:LEU:O	1:C:908:VAL:HB	2.20	0.42
1:C:978:THR:O	1:C:982:THR:HG23	2.20	0.42
1:C:2461:VAL:O	1:C:2510:TYR:OH	2.31	0.42
1:C:2902:HIS:CE1	1:C:2904:LEU:HB3	2.54	0.42
1:C:3229:ILE:HG13	1:C:3230:LEU:N	2.35	0.42
1:C:3262:ARG:HH21	1:C:3329:ILE:CG2	2.33	0.42
1:C:3346:VAL:HG11	1:C:3414:ARG:CB	2.48	0.42
1:C:3634:ALA:O	1:C:3638:MET:HG3	2.19	0.42
1:C:4244:GLU:OE2	1:C:4668:LEU:HD22	2.20	0.42
1:C:4673:ARG:O	1:C:4676:GLU:HG3	2.19	0.42
1:A:76:ARG:O	1:A:80:GLU:HG2	2.19	0.42
1:A:965:TYR:O	1:A:966:LYS:C	2.63	0.42
1:A:1749:PRO:C	1:A:1758:ARG:HH21	2.28	0.42
1:A:2031:LEU:HD11	1:A:3657:TYR:CE1	2.55	0.42
1:A:2481:LYS:O	1:A:2482:ASP:CG	2.63	0.42

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2584[B]:HIS:HD2	1:A:2625:ARG:HD2	1.80	0.42
1:A:2725:LYS:HB2	1:A:2725:LYS:HE2	1.88	0.42
1:A:3359:ILE:HG23	1:A:3437:MET:HE1	2.02	0.42
1:A:3527:PRO:HD2	1:A:3573:MET:CE	2.46	0.42
1:A:3559:LEU:O	1:A:3560:GLN:C	2.63	0.42
1:A:3768:SER:HA	1:A:3771:HIS:NE2	2.35	0.42
1:A:3768:SER:O	1:A:3772:THR:OG1	2.31	0.42
1:B:478:PHE:CD2	1:B:483:MET:HG3	2.55	0.42
1:B:981:GLN:HA	1:B:984:LEU:HD12	2.01	0.42
1:B:1995:THR:HG22	1:B:1999:ARG:CG	2.50	0.42
1:B:2951:ILE:H	1:B:2951:ILE:HD12	1.85	0.42
1:B:3382:GLU:C	1:B:3384:LYS:HZ3	2.28	0.42
1:D:1112:ASP:OD1	1:D:1113:VAL:N	2.52	0.42
1:D:2914:LYS:HG3	1:D:2915:GLU:N	2.35	0.42
1:D:3262:ARG:HH21	1:D:3329:ILE:CG2	2.33	0.42
1:D:3281:LEU:HB2	1:D:3282:PRO:HD3	2.02	0.42
1:D:4744:ASP:O	1:D:4748:LEU:HD12	2.20	0.42
1:C:301:VAL:O	1:C:301:VAL:HG23	2.20	0.42
1:C:575:LEU:HA	1:C:578:ILE:HG12	2.01	0.42
1:C:3225:ARG:NH1	1:C:3226:GLU:HG3	2.35	0.42
1:C:3592:ILE:O	1:C:3596:VAL:HG23	2.19	0.42
1:C:3768:SER:HA	1:C:3771:HIS:NE2	2.35	0.42
1:C:3866:ILE:O	1:C:3867:ASN:C	2.63	0.42
1:C:3901:ASN:OD1	1:C:3904:ARG:NH1	2.44	0.42
1:C:4631:PHE:HE2	1:C:4633:GLU:CG	2.33	0.42
1:C:4655:PHE:HE2	1:C:4659:ILE:HD11	1.81	0.42
1:A:2638:LYS:O	1:A:2698:MET:HE3	2.20	0.41
1:A:2736:ASP:O	1:A:2738:ARG:HD3	2.19	0.41
1:A:2951:ILE:HD12	1:A:2951:ILE:H	1.85	0.41
1:A:3210:LEU:HD13	1:A:3304:CYS:O	2.19	0.41
1:A:3866:ILE:O	1:A:3867:ASN:C	2.63	0.41
1:B:220:LEU:C	1:B:220:LEU:HD12	2.46	0.41
1:B:965:TYR:O	1:B:966:LYS:C	2.63	0.41
1:B:978:THR:O	1:B:982:THR:HG23	2.20	0.41
1:B:3768:SER:HA	1:B:3771:HIS:NE2	2.35	0.41
1:B:4902:GLU:O	1:B:4913:ARG:NH2	2.53	0.41
1:D:842:PRO:O	1:D:1196:PRO:HA	2.19	0.41
1:D:978:THR:O	1:D:982:THR:HG23	2.20	0.41
1:D:2313:LEU:HD12	1:D:2318:TYR:CD1	2.55	0.41
1:D:2326:CYS:SG	1:D:2327:GLY:N	2.93	0.41
1:D:3166:TYR:O	1:D:3170:CYS:SG	2.77	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3534:MET:O	1:D:3538:THR:HG23	2.20	0.41
1:D:3547:GLU:OE1	1:D:3550:ARG:NH1	2.53	0.41
1:D:3592:ILE:O	1:D:3596:VAL:HG23	2.19	0.41
1:D:3765:TYR:CZ	1:D:4753:HIS:ND1	2.75	0.41
1:C:478:PHE:CD2	1:C:483:MET:HG3	2.55	0.41
1:C:1000:ARG:HB3	1:C:1021:LEU:HD11	2.01	0.41
1:C:1705:GLY:N	1:C:1706:PRO:CD	2.83	0.41
1:C:1705:GLY:HA3	1:C:1836:PHE:CD2	2.55	0.41
1:C:1749:PRO:C	1:C:1758:ARG:HH21	2.28	0.41
1:C:2951:ILE:HD12	1:C:2951:ILE:H	1.85	0.41
1:C:3281:LEU:HB2	1:C:3282:PRO:HD3	2.02	0.41
1:A:2014:ASP:O	1:A:2015:GLU:HB3	2.19	0.41
1:A:2638:LYS:O	1:A:2698:MET:CE	2.69	0.41
2:G:58:GLY:HA3	2:G:76:ILE:HG12	2.02	0.41
1:B:280:LEU:HD12	1:B:280:LEU:C	2.46	0.41
1:B:328:LYS:C	1:B:329:ARG:HD3	2.45	0.41
1:B:1749:PRO:C	1:B:1758:ARG:HH21	2.28	0.41
1:B:2702:CYS:C	1:B:2704:CYS:H	2.28	0.41
1:B:4645:CYS:O	1:B:4649:LEU:CD1	2.68	0.41
1:D:328:LYS:HB3	1:D:328:LYS:HE2	1.82	0.41
1:D:499:THR:HG23	1:D:502:HIS:H	1.86	0.41
1:D:2280:VAL:O	1:D:2280:VAL:HG22	2.21	0.41
1:D:2673:HIS:ND1	1:D:2716:ASP:OD2	2.46	0.41
1:D:2902:HIS:CE1	1:D:2904:LEU:HB3	2.54	0.41
1:D:3866:ILE:O	1:D:3867:ASN:C	2.63	0.41
1:D:4244:GLU:OE2	1:D:4668:LEU:HD22	2.20	0.41
1:D:4631:PHE:HE2	1:D:4633:GLU:CG	2.33	0.41
1:D:4687:TYR:OH	1:D:4699:GLY:O	2.33	0.41
1:C:1726:SER:O	1:C:1729:SER:OG	2.38	0.41
1:C:1995:THR:HG22	1:C:1999:ARG:CG	2.50	0.41
1:C:2280:VAL:O	1:C:2280:VAL:HG22	2.21	0.41
1:C:3414:ARG:NH2	1:C:3472:ALA:HB3	2.35	0.41
1:A:280:LEU:HD12	1:A:280:LEU:C	2.46	0.41
1:A:1112:ASP:OD1	1:A:1113:VAL:N	2.52	0.41
1:A:1421:ARG:O	1:A:1570:LYS:NZ	2.49	0.41
1:A:1995:THR:HG22	1:A:1999:ARG:CG	2.50	0.41
1:A:3129:LEU:O	1:A:3133:THR:HG22	2.20	0.41
1:A:3547:GLU:OE1	1:A:3550:ARG:NH1	2.53	0.41
1:A:3996:PHE:HD1	1:A:4016:LEU:HD11	1.83	0.41
1:A:4645:CYS:O	1:A:4649:LEU:CD1	2.68	0.41
2:F:58:GLY:HA3	2:F:76:ILE:HG12	2.02	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:925:SER:O	1:B:929:LEU:HD23	2.20	0.41
1:B:2313:LEU:HD12	1:B:2318:TYR:CD1	2.55	0.41
1:B:2326:CYS:SG	1:B:2327:GLY:N	2.93	0.41
1:B:2417:HIS:ND1	1:B:2492:ALA:HB2	2.35	0.41
1:B:2638:LYS:O	1:B:2698:MET:HE3	2.20	0.41
1:B:2914:LYS:HG3	1:B:2915:GLU:N	2.35	0.41
1:D:1808:ARG:HD3	1:D:1853:ILE:HG22	2.02	0.41
1:D:1815:LEU:O	1:D:1819:VAL:HG23	2.20	0.41
1:D:1823:GLY:O	1:D:1825:HIS:ND1	2.51	0.41
1:D:2481:LYS:O	1:D:2482:ASP:CG	2.63	0.41
1:D:3359:ILE:HG23	1:D:3437:MET:HE1	2.02	0.41
1:D:4645:CYS:O	1:D:4649:LEU:CD1	2.68	0.41
1:C:280:LEU:C	1:C:280:LEU:HD12	2.46	0.41
1:C:1168:VAL:HG11	1:C:1176:GLU:HG3	2.03	0.41
1:C:2031:LEU:HD11	1:C:3657:TYR:CE1	2.55	0.41
1:C:2185:ILE:HD13	1:C:2203:MET:CE	2.49	0.41
1:C:2313:LEU:HD12	1:C:2318:TYR:CD1	2.55	0.41
1:C:2638:LYS:O	1:C:2698:MET:HE3	2.20	0.41
1:C:3637:ARG:O	1:C:3638:MET:C	2.63	0.41
1:C:3986:TRP:O	1:C:3990:VAL:HG23	2.20	0.41
1:A:328:LYS:C	1:A:329:ARG:HD3	2.45	0.41
1:A:1820:ARG:O	1:A:1824:GLN:HG2	2.21	0.41
1:A:2490:MET:CG	1:A:2545:GLU:OE1	2.67	0.41
1:A:4000:MET:SD	1:A:4017:LEU:HD21	2.60	0.41
1:B:1116:GLY:HA3	1:B:1132:TRP:HB3	2.02	0.41
1:B:1286:MET:HE1	1:B:1553:PHE:HB3	2.03	0.41
1:B:1808:ARG:HD3	1:B:1853:ILE:HG22	2.02	0.41
1:B:2481:LYS:O	1:B:2482:ASP:CG	2.63	0.41
1:B:2583:LEU:O	1:B:2586:VAL:HG12	2.21	0.41
1:B:2908:TYR:HA	1:B:2911:LEU:HG	2.02	0.41
1:B:3866:ILE:O	1:B:3867:ASN:C	2.63	0.41
1:B:3946:GLN:HA	1:B:3949:ARG:NE	2.35	0.41
1:D:4673:ARG:O	1:D:4676:GLU:HG3	2.19	0.41
1:C:39:ALA:O	1:C:111:HIS:NE2	2.53	0.41
1:C:76:ARG:O	1:C:80:GLU:HG2	2.19	0.41
1:C:1256:GLU:HB2	1:C:1275:ARG:HE	1.84	0.41
1:C:1423:ASP:HB3	1:C:1426:ILE:HD12	2.02	0.41
1:C:1446:SER:O	1:C:1496:TRP:NE1	2.41	0.41
1:C:2908:TYR:HA	1:C:2911:LEU:HG	2.02	0.41
1:C:4839:MET:HE2	1:C:4839:MET:HA	2.01	0.41
1:A:46:LEU:HD13	1:A:125:ARG:NH2	2.33	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:842:PRO:O	1:A:1196:PRO:HA	2.19	0.41
1:A:978:THR:O	1:A:982:THR:HG23	2.20	0.41
1:A:1987:SER:O	1:A:1991:THR:HG23	2.19	0.41
1:A:2417:HIS:ND1	1:A:2492:ALA:HB2	2.36	0.41
1:A:3874:VAL:HG12	1:A:3875:MET:HG2	2.03	0.41
1:A:3891:LEU:HD13	1:A:3899:PHE:HZ	1.84	0.41
1:A:4902:GLU:O	1:A:4913:ARG:NH2	2.52	0.41
1:B:76:ARG:O	1:B:80:GLU:HG2	2.19	0.41
1:B:1748:PHE:CB	1:B:1758:ARG:HG2	2.50	0.41
1:B:3129:LEU:O	1:B:3133:THR:HG22	2.20	0.41
1:B:3414:ARG:NH2	1:B:3472:ALA:HB3	2.35	0.41
1:B:3754:GLU:O	1:B:3758:MET:HG2	2.21	0.41
1:B:4655:PHE:HE2	1:B:4659:ILE:HD11	1.81	0.41
1:D:1256:GLU:HB2	1:D:1275:ARG:HE	1.84	0.41
1:D:1286:MET:HE1	1:D:1553:PHE:HB3	2.03	0.41
1:D:1726:SER:O	1:D:1729:SER:OG	2.38	0.41
1:D:3547:GLU:CD	1:D:3550:ARG:HH11	2.28	0.41
1:D:3891:LEU:CB	1:D:3899:PHE:CE2	3.03	0.41
1:D:3916:ILE:O	1:D:3920:VAL:HG23	2.20	0.41
1:D:4644:TRP:O	1:D:4648:LEU:HD13	2.21	0.41
1:C:220:LEU:C	1:C:220:LEU:HD12	2.46	0.41
1:C:708:GLY:HA3	1:C:722:TRP:HB3	2.02	0.41
1:C:2583:LEU:O	1:C:2586:VAL:HG12	2.21	0.41
1:C:3891:LEU:CB	1:C:3899:PHE:CE2	3.03	0.41
1:C:3946:GLN:HA	1:C:3949:ARG:NE	2.35	0.41
1:C:4000:MET:SD	1:C:4017:LEU:HD21	2.60	0.41
1:A:166:GLY:HA3	1:D:384:MET:SD	2.60	0.41
1:A:1423:ASP:HB3	1:A:1426:ILE:HD12	2.02	0.41
1:A:2761:TYR:C	1:A:2765:LYS:HZ1	2.27	0.41
1:A:3384:LYS:H	1:A:3387:ALA:HB3	1.86	0.41
1:A:3590:GLU:HG2	1:A:3591:LYS:N	2.36	0.41
1:A:3891:LEU:CB	1:A:3899:PHE:CE2	3.03	0.41
1:A:4644:TRP:O	1:A:4648:LEU:HD13	2.21	0.41
2:H:58:GLY:HA3	2:H:76:ILE:HG12	2.02	0.41
1:B:908:VAL:O	1:B:963:ASN:CG	2.64	0.41
1:B:2490:MET:HE1	1:B:2546:MET:SD	2.61	0.41
1:B:2638:LYS:O	1:B:2698:MET:CE	2.69	0.41
1:B:3262:ARG:HH21	1:B:3329:ILE:CG2	2.33	0.41
1:B:3749:VAL:HG23	1:B:3749:VAL:O	2.21	0.41
1:B:3769:ARG:O	1:B:3773:ARG:HD2	2.21	0.41
1:B:4000:MET:SD	1:B:4017:LEU:HD21	2.60	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:4244:GLU:OE2	1:B:4668:LEU:HD22	2.20	0.41
1:B:4585:SER:O	1:B:4629:TYR:HD2	2.02	0.41
1:B:4904:PRO:HB3	1:B:4913:ARG:HD3	2.03	0.41
1:D:908:VAL:O	1:D:963:ASN:CG	2.64	0.41
1:D:1705:GLY:N	1:D:1706:PRO:CD	2.83	0.41
1:D:1995:THR:HG22	1:D:1999:ARG:CG	2.50	0.41
1:D:2461:VAL:O	1:D:2510:TYR:OH	2.31	0.41
1:D:2742:THR:O	1:D:2742:THR:HG22	2.21	0.41
1:D:3590:GLU:HG2	1:D:3591:LYS:N	2.36	0.41
1:D:3946:GLN:HA	1:D:3949:ARG:NE	2.35	0.41
1:C:328:LYS:C	1:C:329:ARG:HD3	2.45	0.41
1:C:1116:GLY:HA3	1:C:1132:TRP:HB3	2.02	0.41
1:C:1669:LEU:O	1:C:1673:VAL:HG22	2.19	0.41
1:C:1808:ARG:HD3	1:C:1853:ILE:HG22	2.02	0.41
1:C:2430:ILE:HG22	1:C:2505:PHE:HB2	2.03	0.41
1:C:2970:SER:HA	1:C:2973:PHE:CE2	2.55	0.41
1:C:3129:LEU:O	1:C:3133:THR:HG22	2.20	0.41
1:C:3660:ALA:HB3	1:C:3661:TRP:HD1	1.86	0.41
1:C:3686:GLU:O	1:C:3687:GLU:HB2	2.21	0.41
1:C:4687:TYR:OH	1:C:4699:GLY:O	2.33	0.41
1:A:116:MET:HG2	1:A:139:GLU:HA	2.03	0.41
1:A:220:LEU:C	1:A:220:LEU:HD12	2.46	0.41
1:A:917:GLU:OE1	1:A:917:GLU:N	2.48	0.41
1:A:1769:THR:N	1:A:1956:GLU:OE2	2.52	0.41
1:A:2369[B]:ARG:HD3	1:A:2369[B]:ARG:HA	1.90	0.41
1:A:3686:GLU:O	1:A:3687:GLU:HB2	2.21	0.41
1:A:3892:CYS:HG	1:A:3899:PHE:HD2	1.65	0.41
1:B:2280:VAL:HG22	1:B:2280:VAL:O	2.21	0.41
1:B:2970:SER:HA	1:B:2973:PHE:CE2	2.55	0.41
1:B:3547:GLU:CD	1:B:3550:ARG:HH11	2.28	0.41
1:B:3786:CYS:HG	1:B:3831:SER:HG	1.55	0.41
1:B:3891:LEU:CB	1:B:3899:PHE:CE2	3.03	0.41
1:B:4983:HIS:O	3:B:5301:ATP:N6	2.50	0.41
1:D:1168:VAL:HG11	1:D:1176:GLU:HG3	2.03	0.41
1:D:2970:SER:HA	1:D:2973:PHE:CE2	2.55	0.41
1:D:3588:ASP:O	1:D:3591:LYS:N	2.54	0.41
1:D:3874:VAL:HG12	1:D:3875:MET:HG2	2.03	0.41
1:D:4749:GLU:O	1:D:4753:HIS:CD2	2.74	0.41
1:C:176:SER:HG	1:C:178:ARG:HH11	1.67	0.41
1:C:867:LEU:HD13	1:C:929:LEU:HD12	2.01	0.41
1:C:2094:LEU:O	1:C:2098:VAL:HG23	2.21	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:176:SER:HG	1:A:178:ARG:HH11	1.65	0.41
1:A:301:VAL:O	1:A:301:VAL:HG23	2.20	0.41
1:A:1748:PHE:CB	1:A:1758:ARG:HG2	2.50	0.41
1:A:1815:LEU:O	1:A:1819:VAL:HG23	2.20	0.41
1:A:2116:LEU:O	1:A:2120:MET:HG2	2.21	0.41
1:A:2280:VAL:O	1:A:2280:VAL:HG22	2.21	0.41
1:A:2461:VAL:O	1:A:2510:TYR:OH	2.31	0.41
1:A:2490:MET:HE1	1:A:2546:MET:SD	2.61	0.41
1:A:3225:ARG:NH1	1:A:3226:GLU:HG3	2.35	0.41
1:A:3281:LEU:HB2	1:A:3282:PRO:HD3	2.02	0.41
1:A:3628:ARG:O	1:A:3629:ARG:C	2.64	0.41
1:A:3660:ALA:HB3	1:A:3661:TRP:HD1	1.86	0.41
1:A:3769:ARG:O	1:A:3773:ARG:HD2	2.21	0.41
1:B:2369[B]:ARG:HD3	1:B:2369[B]:ARG:HA	1.90	0.41
1:B:3628:ARG:O	1:B:3629:ARG:C	2.64	0.41
1:B:3686:GLU:O	1:B:3687:GLU:HB2	2.21	0.41
1:B:4631:PHE:HE2	1:B:4633:GLU:CG	2.33	0.41
1:B:4839:MET:HE2	1:B:4839:MET:HA	2.01	0.41
1:D:116:MET:HG2	1:D:139:GLU:HA	2.03	0.41
1:D:2094:LEU:O	1:D:2098:VAL:HG23	2.21	0.41
1:D:3406:TYR:OH	1:D:3455:GLU:OE2	2.35	0.41
1:D:3660:ALA:HB3	1:D:3661:TRP:HD1	1.86	0.41
1:C:463:GLU:OE1	1:C:463:GLU:N	2.49	0.41
1:C:925:SER:O	1:C:929:LEU:HD23	2.20	0.41
1:C:1286:MET:HE1	1:C:1553:PHE:HB3	2.03	0.41
1:C:2350:ALA:O	1:C:2354:VAL:HG23	2.21	0.41
1:C:2490:MET:HE1	1:C:2546:MET:SD	2.61	0.41
1:C:3590:GLU:HG2	1:C:3591:LYS:N	2.36	0.41
1:C:3749:VAL:HG23	1:C:3749:VAL:O	2.21	0.41
1:C:4644:TRP:O	1:C:4648:LEU:HD13	2.21	0.41
1:A:1105:ALA:O	1:A:1189:LEU:N	2.50	0.41
1:A:1225:PRO:HG2	1:A:1228:ILE:HD13	2.03	0.41
1:A:1286:MET:HE1	1:A:1553:PHE:HB3	2.03	0.41
1:A:1808:ARG:HD3	1:A:1853:ILE:HG22	2.02	0.41
1:A:2742:THR:HG22	1:A:2742:THR:O	2.21	0.41
1:A:3459:VAL:HG11	1:A:3503:TYR:CD1	2.56	0.41
1:A:3749:VAL:HG23	1:A:3749:VAL:O	2.21	0.41
1:A:3946:GLN:HA	1:A:3949:ARG:NE	2.35	0.41
1:A:4063:ASP:OD1	1:A:4063:ASP:C	2.63	0.41
1:A:4904:PRO:HB3	1:A:4913:ARG:HD3	2.03	0.41
2:H:13:ARG:HG3	2:H:14:THR:HG23	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:232:THR:HG21	1:B:252:VAL:HG21	2.02	0.41
1:B:499:THR:HG23	1:B:502:HIS:H	1.86	0.41
1:B:1658:ASP:OD1	1:B:1658:ASP:N	2.54	0.41
1:B:2094:LEU:O	1:B:2098:VAL:HG23	2.21	0.41
1:B:2542:SER:OG	1:B:2593:ARG:HG3	2.21	0.41
1:B:2725:LYS:HE2	1:B:2725:LYS:HB2	1.88	0.41
1:B:2788:HIS:CE1	1:B:2790:MET:HG2	2.56	0.41
1:B:2904:LEU:O	1:B:2906:VAL:N	2.54	0.41
1:B:3359:ILE:HG23	1:B:3437:MET:HE1	2.02	0.41
1:B:3459:VAL:HG11	1:B:3503:TYR:CD1	2.56	0.41
1:B:3542:LEU:O	1:B:3543:LYS:HB2	2.21	0.41
1:B:3660:ALA:HB3	1:B:3661:TRP:HD1	1.86	0.41
1:B:3696:ASP:OD1	1:B:3699:HIS:HB2	2.21	0.41
1:D:575:LEU:HA	1:D:578:ILE:HG12	2.01	0.41
1:D:583:ILE:CD1	1:D:606:LEU:HD13	2.51	0.41
1:D:730:VAL:HG21	1:D:764:VAL:HG12	2.03	0.41
1:D:1225:PRO:HG2	1:D:1228:ILE:HD13	2.03	0.41
1:D:2417:HIS:ND1	1:D:2492:ALA:HB2	2.36	0.41
1:D:2583:LEU:O	1:D:2586:VAL:HG12	2.21	0.41
1:D:2638:LYS:O	1:D:2698:MET:CE	2.69	0.41
1:D:2638:LYS:O	1:D:2698:MET:HE3	2.20	0.41
1:D:2702:CYS:C	1:D:2704:CYS:H	2.28	0.41
1:D:2755:ILE:HG23	1:D:2809:ILE:HG21	2.03	0.41
1:D:2782:ASP:OD1	1:D:2782:ASP:N	2.54	0.41
1:D:2904:LEU:O	1:D:2906:VAL:N	2.54	0.41
1:D:2926:LEU:O	1:D:2930:LEU:CD1	2.69	0.41
1:D:3106:MET:HE1	1:D:3190:LEU:HD21	2.03	0.41
1:D:3542:LEU:O	1:D:3543:LYS:HB2	2.21	0.41
1:D:3696:ASP:OD1	1:D:3699:HIS:HB2	2.21	0.41
1:D:3749:VAL:HG23	1:D:3749:VAL:O	2.21	0.41
1:D:3768:SER:HA	1:D:3771:HIS:NE2	2.35	0.41
1:D:3933:PHE:CD2	1:D:3951:PHE:CE1	3.09	0.41
1:C:328:LYS:HE2	1:C:328:LYS:HB3	1.83	0.41
1:C:730:VAL:HG21	1:C:764:VAL:HG12	2.03	0.41
1:C:2470:ILE:HG22	1:C:2525:GLY:HA3	2.03	0.41
1:C:2481:LYS:O	1:C:2482:ASP:CG	2.63	0.41
1:C:2914:LYS:HG3	1:C:2915:GLU:N	2.35	0.41
1:C:3531:ASP:O	1:C:3535:LEU:CD1	2.68	0.41
1:C:3547:GLU:CD	1:C:3550:ARG:HH11	2.28	0.41
1:C:3615:SER:O	1:C:3616:LYS:HG2	2.21	0.41
1:C:3725:TYR:HA	1:C:3728:ILE:HD12	2.03	0.41

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:4705:VAL:O	1:C:4708:THR:OG1	2.27	0.41
1:A:574:VAL:HA	1:A:577:ILE:HG12	2.03	0.41
1:A:730:VAL:HG21	1:A:764:VAL:HG12	2.03	0.41
1:A:2044:ILE:H	1:A:2044:ILE:HD12	1.86	0.41
1:A:2782:ASP:OD1	1:A:2782:ASP:N	2.54	0.41
1:A:3262:ARG:HH21	1:A:3329:ILE:CG2	2.33	0.41
1:A:4224:GLU:O	1:A:4224:GLU:HG2	2.21	0.41
1:B:233:ILE:O	1:B:257:ARG:NH1	2.49	0.41
1:B:583:ILE:CD1	1:B:606:LEU:HD13	2.51	0.41
1:B:1447:CYS:HB3	1:B:1555:LEU:HB3	2.03	0.41
1:B:3874:VAL:HG12	1:B:3875:MET:HG2	2.03	0.41
1:D:893:TYR:HE1	1:D:908:VAL:HB	1.86	0.41
1:D:925:SER:O	1:D:929:LEU:HD23	2.20	0.41
1:D:2285:GLU:CD	1:D:3870:ASN:HD21	2.27	0.41
1:D:3527:PRO:HD2	1:D:3573:MET:CE	2.46	0.41
1:D:3621:HIS:O	1:D:3621:HIS:ND1	2.47	0.41
1:D:4904:PRO:HB3	1:D:4913:ARG:HD3	2.03	0.41
1:D:4911:LEU:O	1:D:4914:VAL:HG22	2.21	0.41
1:C:1658:ASP:N	1:C:1658:ASP:OD1	2.54	0.41
1:C:2431:ASP:O	1:C:2435:ARG:HG3	2.21	0.41
1:C:2788:HIS:CE1	1:C:2790:MET:HG2	2.56	0.41
1:C:2926:LEU:O	1:C:2930:LEU:CD1	2.69	0.41
1:C:4744:ASP:O	1:C:4748:LEU:HD12	2.20	0.41
1:A:575:LEU:HA	1:A:578:ILE:HG12	2.01	0.40
1:A:708:GLY:HA3	1:A:722:TRP:HB3	2.02	0.40
1:A:893:TYR:HE1	1:A:908:VAL:HB	1.86	0.40
1:A:941:MET:HE3	1:A:943:ASP:C	2.46	0.40
1:A:997:ALA:O	1:A:1001:VAL:HG23	2.21	0.40
1:A:1690:ASP:OD2	1:A:1693:GLN:NE2	2.49	0.40
1:A:2313:LEU:HD12	1:A:2318:TYR:CD1	2.55	0.40
1:A:2542:SER:OG	1:A:2593:ARG:HG3	2.21	0.40
1:A:2894:LEU:O	1:A:2898:GLY:N	2.48	0.40
1:A:3106:MET:HE1	1:A:3190:LEU:HD21	2.03	0.40
1:A:3169:LEU:HG	1:A:3194:LEU:HD11	2.04	0.40
1:A:4180:ARG:HG3	1:A:4981:GLU:O	2.21	0.40
1:A:4839:MET:HE2	1:A:4839:MET:HA	2.01	0.40
1:A:4911:LEU:O	1:A:4914:VAL:HG22	2.21	0.40
1:A:4938:ASP:OD1	1:D:4944:ARG:NE	2.53	0.40
1:B:1554:VAL:HG21	1:B:1561:VAL:CG1	2.51	0.40
1:B:1705:GLY:HA3	1:B:1836:PHE:CG	2.56	0.40
1:B:1726:SER:O	1:B:1729:SER:OG	2.38	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2350:ALA:O	1:B:2354:VAL:HG23	2.21	0.40
1:B:2782:ASP:OD1	1:B:2782:ASP:N	2.54	0.40
1:B:3054:VAL:HG13	1:B:3055:SER:N	2.36	0.40
1:B:3588:ASP:O	1:B:3591:LYS:N	2.54	0.40
1:B:3615:SER:O	1:B:3616:LYS:HG2	2.21	0.40
1:B:4075:GLU:OE1	1:C:4736:ARG:CZ	2.69	0.40
1:B:4744:ASP:O	1:B:4748:LEU:HD12	2.20	0.40
1:D:54:ASN:O	1:D:55:ALA:C	2.64	0.40
1:D:160:GLY:O	1:C:3984:ARG:NH2	2.48	0.40
1:D:220:LEU:HD12	1:D:220:LEU:C	2.46	0.40
1:D:232:THR:HG21	1:D:252:VAL:HG21	2.02	0.40
1:D:280:LEU:HD12	1:D:280:LEU:C	2.46	0.40
1:D:1554:VAL:HG21	1:D:1561:VAL:CG1	2.51	0.40
1:D:2788:HIS:CE1	1:D:2790:MET:HG2	2.56	0.40
1:D:3559:LEU:O	1:D:3560:GLN:C	2.63	0.40
1:D:4180:ARG:HG3	1:D:4981:GLU:O	2.21	0.40
1:C:3054:VAL:HG13	1:C:3055:SER:N	2.36	0.40
1:C:3106:MET:HE1	1:C:3190:LEU:HD21	2.03	0.40
1:C:4180:ARG:HG3	1:C:4981:GLU:O	2.21	0.40
1:C:4749:GLU:O	1:C:4753:HIS:CD2	2.74	0.40
1:C:4826:ILE:O	1:C:4829:SER:OG	2.24	0.40
1:A:499:THR:HG23	1:A:502:HIS:H	1.86	0.40
1:A:907:LEU:O	1:A:908:VAL:HB	2.20	0.40
1:A:909:ASN:HB3	1:A:912:SER:HB3	2.03	0.40
1:A:1168:VAL:HG11	1:A:1176:GLU:HG3	2.03	0.40
1:A:2094:LEU:O	1:A:2098:VAL:HG23	2.21	0.40
1:A:3382:GLU:O	1:A:3382:GLU:CD	2.65	0.40
1:A:3933:PHE:CD2	1:A:3951:PHE:CE1	3.09	0.40
1:A:4244:GLU:OE2	1:A:4668:LEU:HD22	2.20	0.40
2:G:2:VAL:HG23	2:G:80:TYR:CD2	2.56	0.40
1:B:909:ASN:HB3	1:B:912:SER:HB3	2.03	0.40
1:B:1423:ASP:HB3	1:B:1426:ILE:HD12	2.02	0.40
1:B:2044:ILE:HD12	1:B:2044:ILE:H	1.86	0.40
1:B:3106:MET:HE1	1:B:3190:LEU:HD21	2.03	0.40
1:B:3621:HIS:HB3	1:B:3623:LEU:CD1	2.52	0.40
1:B:3986:TRP:O	1:B:3990:VAL:HG23	2.20	0.40
1:B:4180:ARG:HG3	1:B:4981:GLU:O	2.21	0.40
1:B:4687:TYR:OH	1:B:4699:GLY:O	2.33	0.40
1:D:2117:VAL:O	1:D:2120:MET:HG2	2.21	0.40
1:D:2470:ILE:HG22	1:D:2525:GLY:HA3	2.03	0.40
1:D:2490:MET:HE1	1:D:2546:MET:SD	2.61	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:3346:VAL:HG11	1:D:3414:ARG:CB	2.48	0.40
1:D:3628:ARG:O	1:D:3629:ARG:C	2.64	0.40
1:C:941:MET:HE3	1:C:943:ASP:C	2.46	0.40
1:C:1705:GLY:HA3	1:C:1836:PHE:CG	2.56	0.40
1:C:2904:LEU:O	1:C:2906:VAL:N	2.54	0.40
1:C:3628:ARG:O	1:C:3629:ARG:C	2.64	0.40
1:C:4063:ASP:OD1	1:C:4063:ASP:C	2.63	0.40
1:A:1658:ASP:N	1:A:1658:ASP:OD1	2.54	0.40
1:A:2431:ASP:O	1:A:2435:ARG:HG3	2.21	0.40
1:A:2463:LEU:HD21	1:A:2517:PHE:CZ	2.56	0.40
1:A:3588:ASP:O	1:A:3591:LYS:N	2.54	0.40
1:A:3916:ILE:O	1:A:3920:VAL:HG23	2.20	0.40
1:A:4736:ARG:CZ	1:D:4075:GLU:OE1	2.69	0.40
1:A:4749:GLU:O	1:A:4753:HIS:CD2	2.74	0.40
1:B:708:GLY:HA3	1:B:722:TRP:HB3	2.02	0.40
1:B:997:ALA:O	1:B:1001:VAL:HG23	2.21	0.40
1:B:1815:LEU:O	1:B:1819:VAL:HG23	2.20	0.40
1:B:2430:ILE:HG22	1:B:2505:PHE:HB2	2.03	0.40
1:B:2517:PHE:O	1:B:2521:VAL:HG23	2.21	0.40
1:B:2926:LEU:O	1:B:2930:LEU:CD1	2.69	0.40
1:B:3225:ARG:CZ	1:B:3226:GLU:HG3	2.51	0.40
1:B:3384:LYS:H	1:B:3387:ALA:HB3	1.86	0.40
1:B:3559:LEU:O	1:B:3560:GLN:C	2.63	0.40
1:D:255:HIS:O	1:D:258:SER:OG	2.39	0.40
1:D:965:TYR:O	1:D:966:LYS:C	2.63	0.40
1:D:1820:ARG:O	1:D:1824:GLN:HG2	2.21	0.40
1:C:652:ARG:NE	1:C:750:LEU:O	2.55	0.40
1:C:981:GLN:HA	1:C:984:LEU:HD12	2.01	0.40
1:C:1515:VAL:O	1:C:1531:ALA:O	2.40	0.40
1:C:1815:LEU:O	1:C:1819:VAL:HG23	2.20	0.40
1:C:1926:LEU:HA	1:C:1929:MET:SD	2.62	0.40
1:C:2044:ILE:HD12	1:C:2044:ILE:H	1.86	0.40
1:C:2116:LEU:O	1:C:2120:MET:HG2	2.21	0.40
1:C:2542:SER:OG	1:C:2593:ARG:HG3	2.21	0.40
1:C:2638:LYS:O	1:C:2698:MET:CE	2.69	0.40
1:C:3933:PHE:CD2	1:C:3951:PHE:CE1	3.09	0.40
1:C:4793:GLY:O	1:C:4797:VAL:HG23	2.22	0.40
1:A:1447:CYS:HB3	1:A:1555:LEU:HB3	2.03	0.40
1:A:1705:GLY:N	1:A:1706:PRO:CD	2.83	0.40
1:A:3225:ARG:CZ	1:A:3226:GLU:HG3	2.51	0.40
1:A:3615:SER:O	1:A:3616:LYS:HG2	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3621:HIS:O	1:A:3621:HIS:ND1	2.47	0.40
1:A:3696:ASP:OD1	1:A:3699:HIS:HB2	2.21	0.40
1:A:3754:GLU:O	1:A:3758:MET:HG2	2.21	0.40
1:A:3955:MET:HE3	1:A:4015:GLU:HG2	2.04	0.40
1:A:4793:GLY:O	1:A:4797:VAL:HG23	2.22	0.40
2:E:58:GLY:HA3	2:E:76:ILE:HG12	2.02	0.40
1:B:1515:VAL:O	1:B:1531:ALA:O	2.40	0.40
1:B:2524:VAL:HG23	1:B:2525:GLY:N	2.37	0.40
1:B:3933:PHE:CD2	1:B:3951:PHE:CE1	3.09	0.40
1:B:4793:GLY:O	1:B:4797:VAL:HG23	2.22	0.40
1:D:2515:GLN:O	1:D:2519:LEU:HG	2.22	0.40
1:D:2542:SER:OG	1:D:2593:ARG:HG3	2.21	0.40
1:D:3769:ARG:O	1:D:3773:ARG:HD2	2.21	0.40
1:D:4049:VAL:HG21	1:D:4159:ARG:HD2	2.03	0.40
1:D:4736:ARG:CZ	1:C:4075:GLU:OE1	2.69	0.40
1:C:54:ASN:O	1:C:55:ALA:C	2.64	0.40
1:C:1820:ARG:O	1:C:1824:GLN:HG2	2.21	0.40
1:C:2117:VAL:O	1:C:2120:MET:HG2	2.21	0.40
1:C:2417:HIS:ND1	1:C:2492:ALA:HB2	2.36	0.40
1:C:2761:TYR:HB3	1:C:2765:LYS:HZ1	1.79	0.40
1:C:2768:PHE:O	1:C:2772:GLN:HG2	2.22	0.40
1:C:2862:LEU:HB2	1:C:2865:VAL:HG23	2.04	0.40
1:C:3225:ARG:CZ	1:C:3226:GLU:HG3	2.51	0.40
1:C:3359:ILE:HG23	1:C:3437:MET:HE1	2.02	0.40
1:A:160:GLY:O	1:D:3984:ARG:NH2	2.48	0.40
1:A:255:HIS:O	1:A:258:SER:OG	2.39	0.40
1:A:1926:LEU:HA	1:A:1929:MET:SD	2.62	0.40
1:A:2123:LEU:O	1:A:2127:GLN:HG2	2.22	0.40
1:A:2359:ARG:NE	1:B:179:TYR:OH	2.54	0.40
1:A:2430:ILE:HG22	1:A:2505:PHE:HB2	2.03	0.40
1:A:2583:LEU:O	1:A:2586:VAL:HG12	2.21	0.40
1:A:2605:ASP:HA	1:A:2608:MET:CE	2.35	0.40
1:A:2609:ALA:HA	1:A:2612[A]:ARG:NH2	2.37	0.40
1:A:2702:CYS:C	1:A:2704:CYS:H	2.28	0.40
1:A:2707:ALA:HB1	1:A:3009:TYR:CE1	2.57	0.40
1:A:3465:ASN:O	1:A:3466:ASN:HB2	2.22	0.40
1:A:3542:LEU:O	1:A:3543:LYS:HB2	2.21	0.40
1:B:1225:PRO:HG2	1:B:1228:ILE:HD13	2.03	0.40
1:B:1820:ARG:O	1:B:1824:GLN:HG2	2.21	0.40
1:B:1926:LEU:HA	1:B:1929:MET:SD	2.62	0.40
1:B:2123:LEU:O	1:B:2127:GLN:HG2	2.22	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2463:LEU:HD21	1:B:2517:PHE:CZ	2.56	0.40
1:B:2742:THR:O	1:B:2742:THR:HG22	2.21	0.40
1:B:4049:VAL:HG21	1:B:4159:ARG:HD2	2.03	0.40
1:B:4224:GLU:O	1:B:4224:GLU:HG2	2.22	0.40
1:D:328:LYS:C	1:D:329:ARG:HD3	2.45	0.40
1:D:931:THR:O	1:D:935:LEU:CD1	2.69	0.40
1:D:941:MET:HE3	1:D:943:ASP:C	2.46	0.40
1:D:2369[B]:ARG:HA	1:D:2369[B]:ARG:HD3	1.90	0.40
1:D:3621:HIS:HB3	1:D:3623:LEU:CD1	2.51	0.40
1:D:3835:LEU:HD22	1:D:3880:PHE:CZ	2.57	0.40
1:C:499:THR:HG23	1:C:502:HIS:H	1.86	0.40
1:C:908:VAL:O	1:C:963:ASN:CG	2.64	0.40
1:C:997:ALA:O	1:C:1001:VAL:HG23	2.21	0.40
1:C:2382:GLU:OE2	1:C:2392:ARG:NH1	2.54	0.40
1:C:2426:TYR:O	1:C:2430:ILE:HG12	2.22	0.40
1:C:3588:ASP:O	1:C:3591:LYS:N	2.54	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	4385/5037 (87%)	4256 (97%)	123 (3%)	6 (0%)	48	70
1	B	4385/5037 (87%)	4256 (97%)	123 (3%)	6 (0%)	48	70
1	C	4385/5037 (87%)	4256 (97%)	123 (3%)	6 (0%)	48	70
1	D	4385/5037 (87%)	4256 (97%)	123 (3%)	6 (0%)	48	70
2	E	105/108 (97%)	102 (97%)	3 (3%)	0	100	100
2	F	105/108 (97%)	102 (97%)	3 (3%)	0	100	100
2	G	105/108 (97%)	102 (97%)	3 (3%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	H	105/108 (97%)	102 (97%)	3 (3%)	0	100	100
All	All	17960/20580 (87%)	17432 (97%)	504 (3%)	24 (0%)	50	70

All (24) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	55	ALA
1	A	908	VAL
1	A	3300	ALA
1	A	3949	ARG
1	B	55	ALA
1	B	908	VAL
1	B	3300	ALA
1	B	3949	ARG
1	D	55	ALA
1	D	908	VAL
1	D	3300	ALA
1	D	3949	ARG
1	C	55	ALA
1	C	908	VAL
1	C	3300	ALA
1	C	3949	ARG
1	A	2669	GLU
1	B	2669	GLU
1	D	2669	GLU
1	C	2669	GLU
1	A	4691	GLN
1	B	4691	GLN
1	D	4691	GLN
1	C	4691	GLN

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	3836/4276 (90%)	3826 (100%)	10 (0%)	91	95
1	B	3836/4276 (90%)	3826 (100%)	10 (0%)	91	95
1	C	3836/4276 (90%)	3826 (100%)	10 (0%)	91	95
1	D	3836/4276 (90%)	3826 (100%)	10 (0%)	91	95
2	E	89/90 (99%)	88 (99%)	1 (1%)	70	83
2	F	89/90 (99%)	88 (99%)	1 (1%)	70	83
2	G	89/90 (99%)	88 (99%)	1 (1%)	70	83
2	H	89/90 (99%)	88 (99%)	1 (1%)	70	83
All	All	15700/17464 (90%)	15656 (100%)	44 (0%)	90	95

All (44) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	56	GLN
1	A	156	GLN
1	A	483	MET
1	A	960	MET
1	A	1759	ARG
1	A	2268[A]	GLN
1	A	2268[B]	GLN
1	A	3225	ARG
1	A	3321	ARG
1	A	3949	ARG
2	E	53	GLN
2	H	53	GLN
2	G	53	GLN
2	F	53	GLN
1	B	56	GLN
1	B	156	GLN
1	B	483	MET
1	B	960	MET
1	B	1759	ARG
1	B	2268[A]	GLN
1	B	2268[B]	GLN
1	B	3225	ARG
1	B	3321	ARG
1	B	3949	ARG
1	D	56	GLN
1	D	156	GLN
1	D	483	MET

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	960	MET
1	D	1759	ARG
1	D	2268[A]	GLN
1	D	2268[B]	GLN
1	D	3225	ARG
1	D	3321	ARG
1	D	3949	ARG
1	C	56	GLN
1	C	156	GLN
1	C	483	MET
1	C	960	MET
1	C	1759	ARG
1	C	2268[A]	GLN
1	C	2268[B]	GLN
1	C	3225	ARG
1	C	3321	ARG
1	C	3949	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (159) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	151	HIS
1	A	218	HIS
1	A	241	GLN
1	A	460	GLN
1	A	533	ASN
1	A	582	HIS
1	A	720	HIS
1	A	725	HIS
1	A	838	HIS
1	A	1125	ASN
1	A	1127	HIS
1	A	1130	GLN
1	A	1298	HIS
1	A	1299	GLN
1	A	1300	HIS
1	A	1719	HIS
1	A	1824	GLN
1	A	2161	GLN
1	A	2260	ASN
1	A	2441	HIS
1	A	2773	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2856	ASN
1	A	2883	HIS
1	A	3313	ASN
1	A	3343	GLN
1	A	3651	ASN
1	A	3734	HIS
1	A	3766	GLN
1	A	3850	GLN
1	A	3897	ASN
1	A	4005	GLN
1	A	4034	ASN
1	A	4054	ASN
1	A	4250	GLN
1	A	4700	GLN
1	A	4776	GLN
1	A	4946	GLN
1	A	4949	GLN
2	E	3	GLN
2	H	3	GLN
2	G	3	GLN
2	F	3	GLN
1	B	113	HIS
1	B	151	HIS
1	B	218	HIS
1	B	241	GLN
1	B	413	GLN
1	B	460	GLN
1	B	533	ASN
1	B	582	HIS
1	B	720	HIS
1	B	725	HIS
1	B	797	HIS
1	B	1125	ASN
1	B	1127	HIS
1	B	1130	GLN
1	B	1298	HIS
1	B	1299	GLN
1	B	1300	HIS
1	B	1719	HIS
1	B	1824	GLN
1	B	1938	GLN
1	B	2161	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	B	2260	ASN
1	B	2342	ASN
1	B	2773	ASN
1	B	2774	ASN
1	B	2856	ASN
1	B	2883	HIS
1	B	3313	ASN
1	B	3343	GLN
1	B	3651	ASN
1	B	3734	HIS
1	B	3766	GLN
1	B	3897	ASN
1	B	4005	GLN
1	B	4034	ASN
1	B	4054	ASN
1	B	4250	GLN
1	B	4547	GLN
1	B	4776	GLN
1	B	4946	GLN
1	B	4949	GLN
1	D	113	HIS
1	D	151	HIS
1	D	218	HIS
1	D	241	GLN
1	D	460	GLN
1	D	533	ASN
1	D	582	HIS
1	D	720	HIS
1	D	725	HIS
1	D	838	HIS
1	D	1125	ASN
1	D	1127	HIS
1	D	1130	GLN
1	D	1298	HIS
1	D	1299	GLN
1	D	1300	HIS
1	D	1824	GLN
1	D	2161	GLN
1	D	2260	ASN
1	D	2342	ASN
1	D	2441	HIS
1	D	2773	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	D	2856	ASN
1	D	2883	HIS
1	D	3313	ASN
1	D	3343	GLN
1	D	3651	ASN
1	D	3683	GLN
1	D	3734	HIS
1	D	3766	GLN
1	D	3850	GLN
1	D	4005	GLN
1	D	4034	ASN
1	D	4054	ASN
1	D	4250	GLN
1	D	4776	GLN
1	D	4946	GLN
1	D	4949	GLN
1	C	71	GLN
1	C	151	HIS
1	C	218	HIS
1	C	241	GLN
1	C	413	GLN
1	C	460	GLN
1	C	533	ASN
1	C	582	HIS
1	C	720	HIS
1	C	725	HIS
1	C	838	HIS
1	C	1127	HIS
1	C	1298	HIS
1	C	1299	GLN
1	C	1300	HIS
1	C	1719	HIS
1	C	1824	GLN
1	C	2161	GLN
1	C	2260	ASN
1	C	2342	ASN
1	C	2441	HIS
1	C	2773	ASN
1	C	2856	ASN
1	C	2883	HIS
1	C	3313	ASN
1	C	3343	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	C	3651	ASN
1	C	3734	HIS
1	C	3766	GLN
1	C	3850	GLN
1	C	3897	ASN
1	C	4005	GLN
1	C	4034	ASN
1	C	4054	ASN
1	C	4250	GLN
1	C	4547	GLN
1	C	4776	GLN
1	C	4949	GLN

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	$\# Z > 2$
3	ATP	A	5301	-	28,33,33	0.65	0	34,52,52	0.95	1 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
3	ATP	D	5301	-	28,33,33	0.64	0	34,52,52	0.95	1 (2%)
3	ATP	C	5301	-	28,33,33	0.65	0	34,52,52	0.95	1 (2%)
6	A1BD3	D	5304	-	11,15,15	5.56	6 (54%)	13,21,21	3.55	8 (61%)
3	ATP	B	5301	-	28,33,33	0.65	0	34,52,52	0.95	1 (2%)
6	A1BD3	A	5304	-	11,15,15	5.56	6 (54%)	13,21,21	3.55	8 (61%)
6	A1BD3	C	5304	-	11,15,15	5.56	6 (54%)	13,21,21	3.55	8 (61%)
6	A1BD3	B	5304	-	11,15,15	5.56	6 (54%)	13,21,21	3.54	8 (61%)

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
3	ATP	A	5301	-	-	10/18/38/38	0/3/3/3
3	ATP	D	5301	-	-	10/18/38/38	0/3/3/3
3	ATP	C	5301	-	-	10/18/38/38	0/3/3/3
6	A1BD3	D	5304	-	-	1/3/3/3	0/2/2/2
3	ATP	B	5301	-	-	10/18/38/38	0/3/3/3
6	A1BD3	A	5304	-	-	1/3/3/3	0/2/2/2
6	A1BD3	C	5304	-	-	1/3/3/3	0/2/2/2
6	A1BD3	B	5304	-	-	1/3/3/3	0/2/2/2

All (24) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	D	5304	A1BD3	C8-N3	10.26	1.49	1.37
6	A	5304	A1BD3	C8-N3	10.19	1.49	1.37
6	B	5304	A1BD3	C8-N3	10.17	1.49	1.37
6	C	5304	A1BD3	C8-N3	10.17	1.49	1.37
6	A	5304	A1BD3	O2-C8	9.75	1.40	1.23
6	B	5304	A1BD3	O2-C8	9.75	1.40	1.23
6	C	5304	A1BD3	O2-C8	9.75	1.40	1.23
6	D	5304	A1BD3	O2-C8	9.74	1.40	1.23
6	A	5304	A1BD3	O1-C1	7.31	1.40	1.23
6	D	5304	A1BD3	O1-C1	7.31	1.40	1.23
6	C	5304	A1BD3	O1-C1	7.30	1.40	1.23
6	B	5304	A1BD3	O1-C1	7.28	1.40	1.23
6	B	5304	A1BD3	C8-N4	6.32	1.49	1.38
6	C	5304	A1BD3	C8-N4	6.32	1.49	1.38

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
6	A	5304	A1BD3	C8-N4	6.28	1.48	1.38
6	D	5304	A1BD3	C8-N4	6.24	1.48	1.38
6	A	5304	A1BD3	C4-N3	4.86	1.46	1.39
6	B	5304	A1BD3	C4-N3	4.84	1.46	1.39
6	D	5304	A1BD3	C4-N3	4.84	1.46	1.39
6	C	5304	A1BD3	C4-N3	4.84	1.46	1.39
6	B	5304	A1BD3	C1-N4	4.80	1.45	1.37
6	A	5304	A1BD3	C1-N4	4.76	1.45	1.37
6	C	5304	A1BD3	C1-N4	4.76	1.45	1.37
6	D	5304	A1BD3	C1-N4	4.75	1.45	1.37

All (36) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	C	5304	A1BD3	C1-N4-C8	-8.20	119.67	127.38
6	A	5304	A1BD3	C1-N4-C8	-8.17	119.69	127.38
6	B	5304	A1BD3	C1-N4-C8	-8.17	119.69	127.38
6	D	5304	A1BD3	C1-N4-C8	-8.15	119.72	127.38
6	C	5304	A1BD3	C3-N2-C4	6.83	114.09	101.92
6	B	5304	A1BD3	C3-N2-C4	6.82	114.09	101.92
6	D	5304	A1BD3	C3-N2-C4	6.82	114.08	101.92
6	A	5304	A1BD3	C3-N2-C4	6.81	114.07	101.92
6	D	5304	A1BD3	C4-N3-C8	-4.06	118.93	121.53
6	B	5304	A1BD3	C4-N3-C8	-4.00	118.97	121.53
6	C	5304	A1BD3	C4-N3-C8	-4.00	118.97	121.53
6	A	5304	A1BD3	C4-N3-C8	-4.00	118.97	121.53
6	C	5304	A1BD3	C2-C1-N4	2.88	119.57	114.07
6	A	5304	A1BD3	C2-C1-N4	2.87	119.54	114.07
6	D	5304	A1BD3	C2-C1-N4	2.87	119.54	114.07
6	B	5304	A1BD3	C2-C1-N4	2.85	119.51	114.07
6	D	5304	A1BD3	C5-N3-C8	2.81	120.48	117.32
6	A	5304	A1BD3	C5-N3-C8	2.79	120.46	117.32
6	C	5304	A1BD3	C5-N3-C8	2.79	120.46	117.32
6	B	5304	A1BD3	C5-N3-C8	2.77	120.43	117.32
6	D	5304	A1BD3	O2-C8-N3	-2.67	120.06	122.03
6	A	5304	A1BD3	O2-C8-N3	-2.61	120.10	122.03
6	B	5304	A1BD3	O2-C8-N3	-2.57	120.13	122.03
6	C	5304	A1BD3	O2-C8-N3	-2.57	120.13	122.03
6	D	5304	A1BD3	N4-C8-N3	2.39	119.87	115.53
6	A	5304	A1BD3	N4-C8-N3	2.38	119.85	115.53
6	B	5304	A1BD3	N4-C8-N3	2.38	119.84	115.53
6	C	5304	A1BD3	N4-C8-N3	2.38	119.84	115.53

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	B	5301	ATP	C5-C6-N6	2.30	123.82	120.31
3	A	5301	ATP	C5-C6-N6	2.26	123.75	120.31
3	D	5301	ATP	C5-C6-N6	2.24	123.72	120.31
3	C	5301	ATP	C5-C6-N6	2.24	123.72	120.31
6	D	5304	A1BD3	O1-C1-C2	-2.10	120.16	124.32
6	A	5304	A1BD3	O1-C1-C2	-2.09	120.18	124.32
6	C	5304	A1BD3	O1-C1-C2	-2.09	120.19	124.32
6	B	5304	A1BD3	O1-C1-C2	-2.08	120.20	124.32

There are no chirality outliers.

All (44) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	5301	ATP	C5'-O5'-PA-O1A
3	A	5301	ATP	C5'-O5'-PA-O3A
3	B	5301	ATP	C5'-O5'-PA-O1A
3	B	5301	ATP	C5'-O5'-PA-O3A
3	D	5301	ATP	C5'-O5'-PA-O1A
3	D	5301	ATP	C5'-O5'-PA-O3A
3	C	5301	ATP	C5'-O5'-PA-O1A
3	C	5301	ATP	C5'-O5'-PA-O3A
6	A	5304	A1BD3	N3-C5-C6-C7
6	B	5304	A1BD3	N3-C5-C6-C7
6	D	5304	A1BD3	N3-C5-C6-C7
6	C	5304	A1BD3	N3-C5-C6-C7
3	A	5301	ATP	O4'-C4'-C5'-O5'
3	B	5301	ATP	O4'-C4'-C5'-O5'
3	D	5301	ATP	O4'-C4'-C5'-O5'
3	C	5301	ATP	O4'-C4'-C5'-O5'
3	A	5301	ATP	C3'-C4'-C5'-O5'
3	B	5301	ATP	C3'-C4'-C5'-O5'
3	D	5301	ATP	C3'-C4'-C5'-O5'
3	C	5301	ATP	C3'-C4'-C5'-O5'
3	A	5301	ATP	PG-O3B-PB-O3A
3	B	5301	ATP	PG-O3B-PB-O3A
3	D	5301	ATP	PG-O3B-PB-O3A
3	C	5301	ATP	PG-O3B-PB-O3A
3	A	5301	ATP	PB-O3A-PA-O5'
3	B	5301	ATP	PB-O3A-PA-O5'
3	D	5301	ATP	PB-O3A-PA-O5'
3	C	5301	ATP	PB-O3A-PA-O5'
3	D	5301	ATP	C4'-C5'-O5'-PA

Continued on next page...

Continued from previous page...

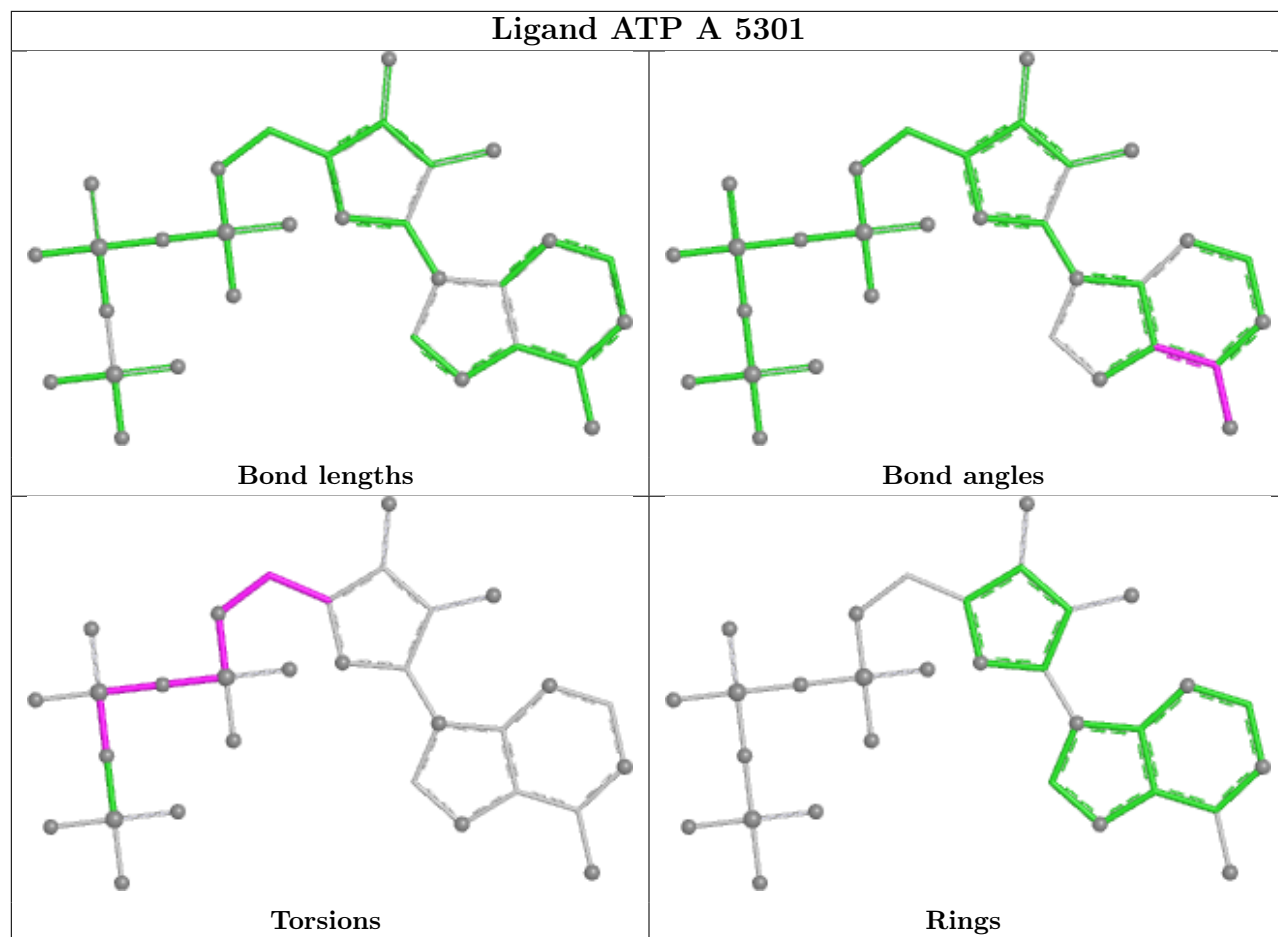
Mol	Chain	Res	Type	Atoms
3	A	5301	ATP	C4'-C5'-O5'-PA
3	B	5301	ATP	C4'-C5'-O5'-PA
3	C	5301	ATP	C4'-C5'-O5'-PA
3	A	5301	ATP	C5'-O5'-PA-O2A
3	B	5301	ATP	C5'-O5'-PA-O2A
3	D	5301	ATP	C5'-O5'-PA-O2A
3	C	5301	ATP	C5'-O5'-PA-O2A
3	A	5301	ATP	PA-O3A-PB-O2B
3	B	5301	ATP	PA-O3A-PB-O2B
3	D	5301	ATP	PA-O3A-PB-O2B
3	C	5301	ATP	PA-O3A-PB-O2B
3	A	5301	ATP	PG-O3B-PB-O2B
3	B	5301	ATP	PG-O3B-PB-O2B
3	D	5301	ATP	PG-O3B-PB-O2B
3	C	5301	ATP	PG-O3B-PB-O2B

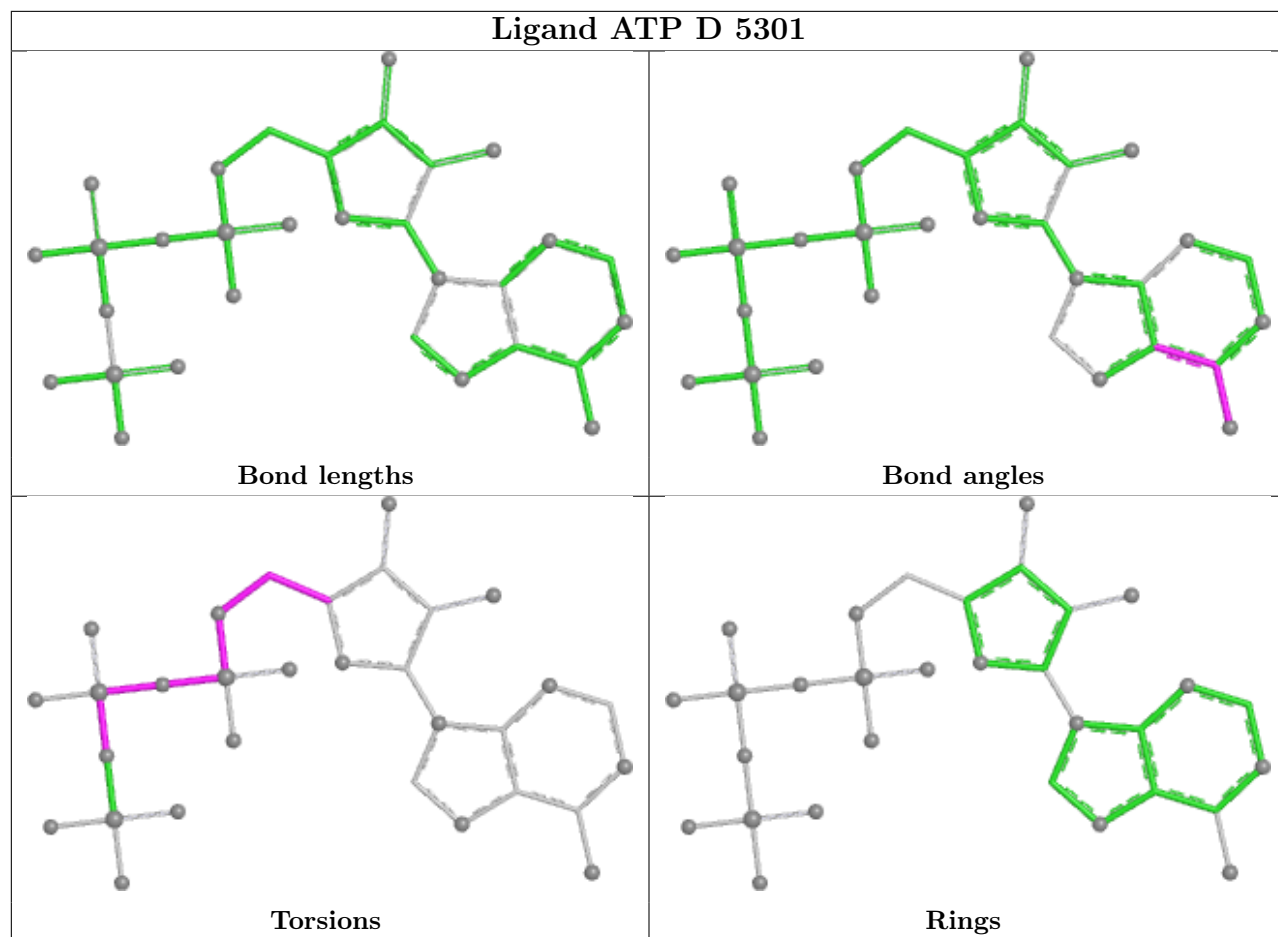
There are no ring outliers.

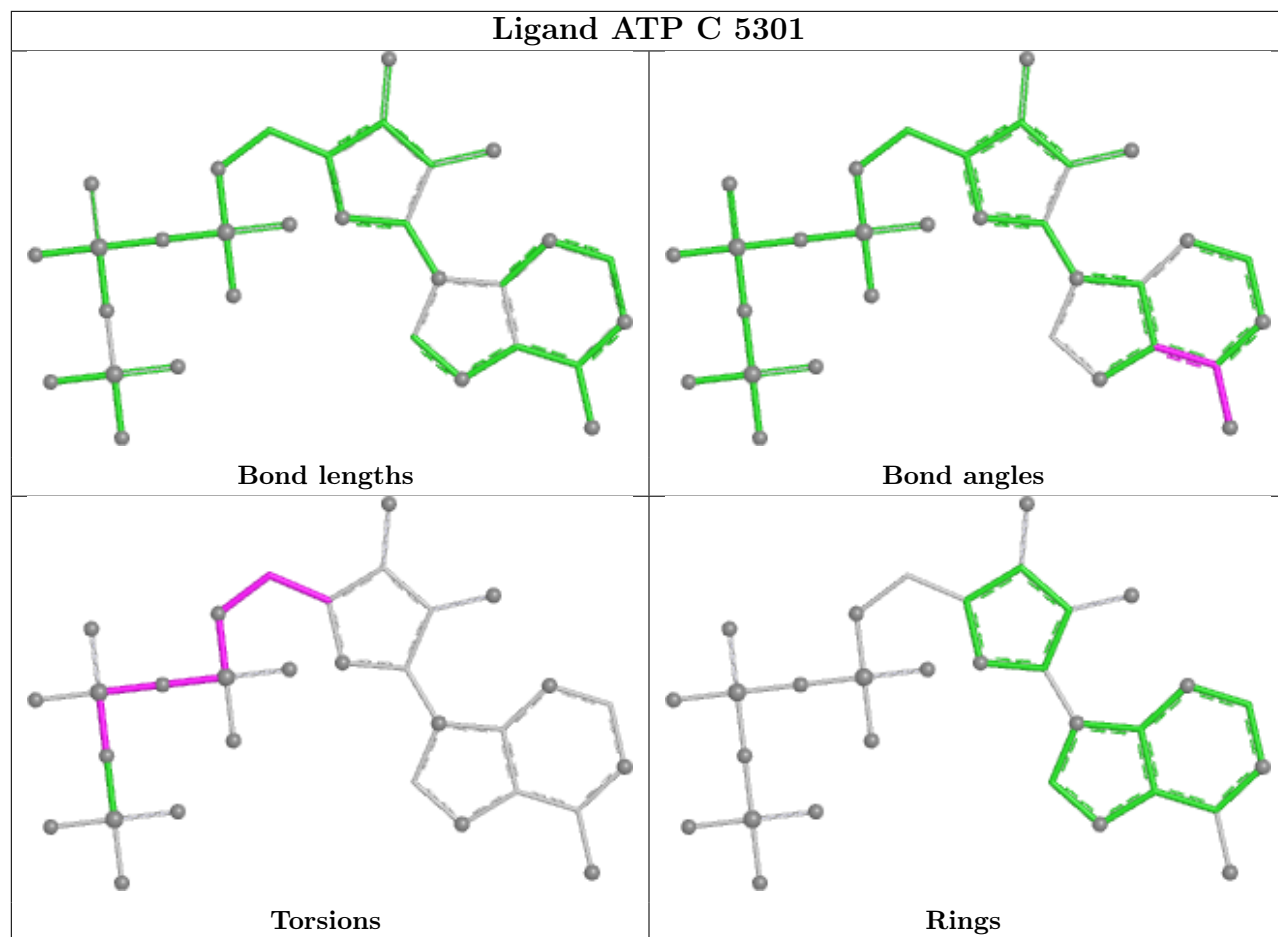
4 monomers are involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	A	5301	ATP	1	0
3	D	5301	ATP	1	0
3	C	5301	ATP	1	0
3	B	5301	ATP	1	0

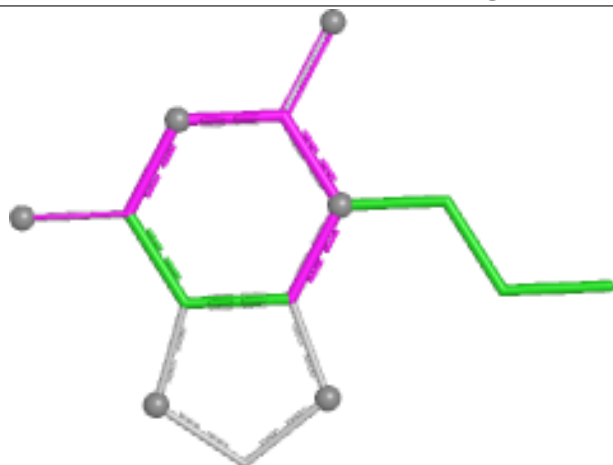
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. 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.



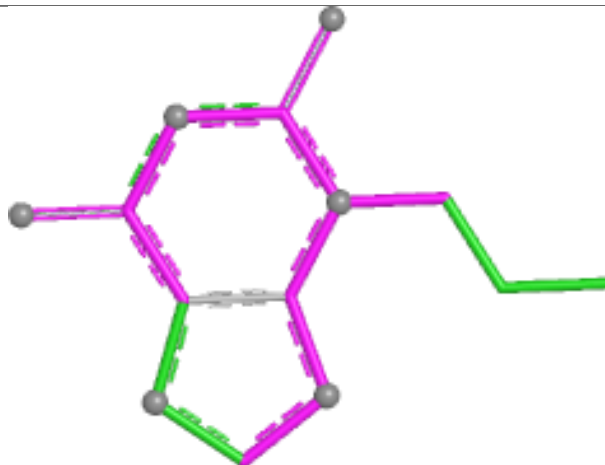




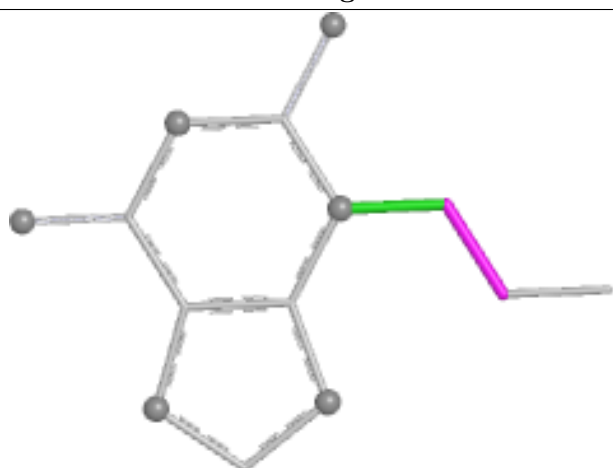
Ligand A1BD3 D 5304



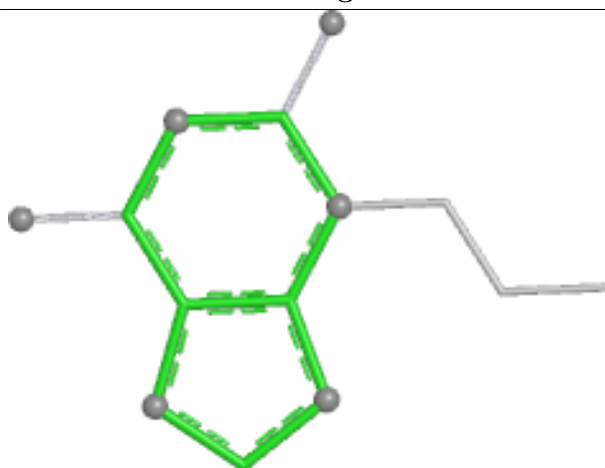
Bond lengths



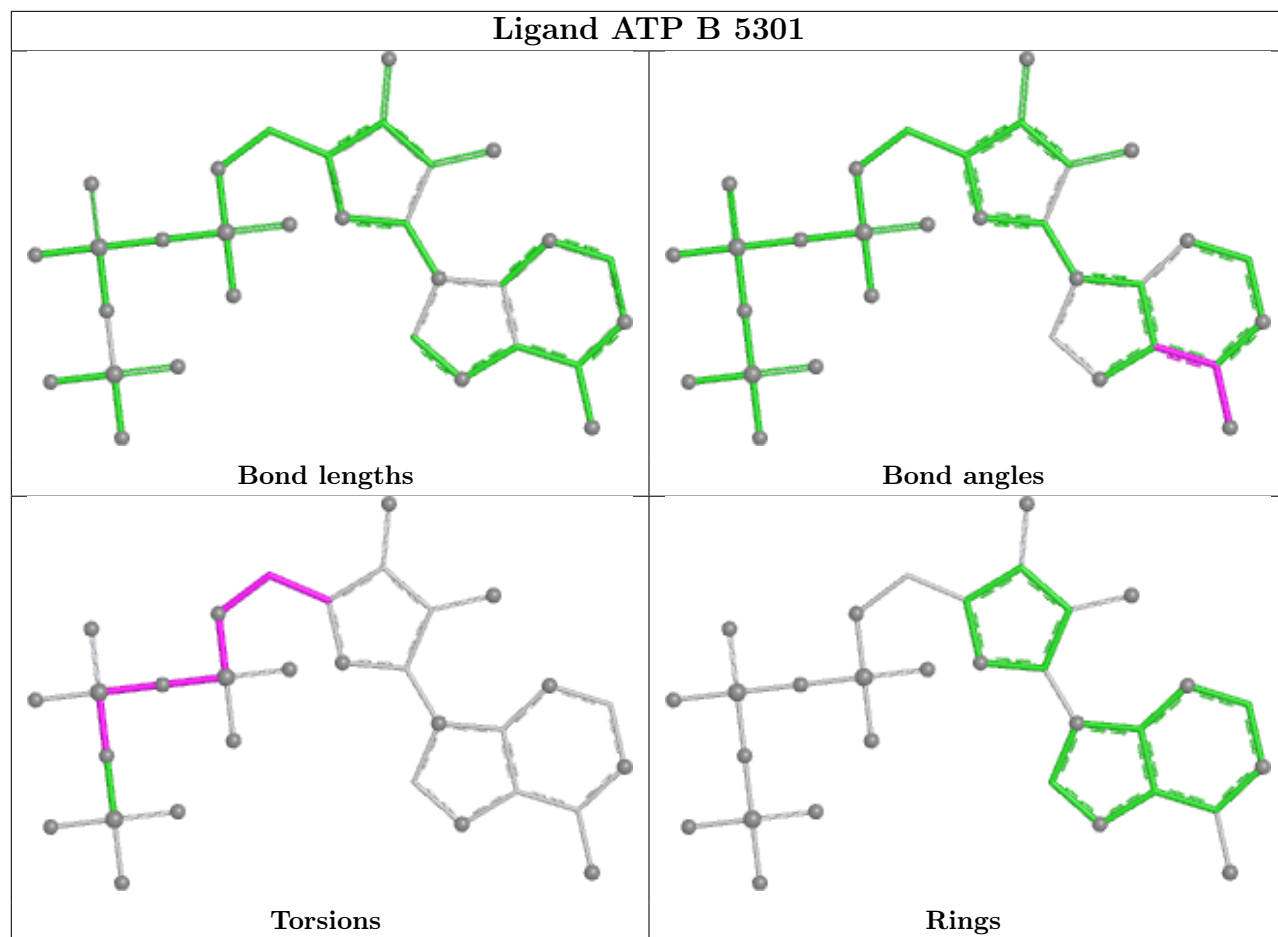
Bond angles



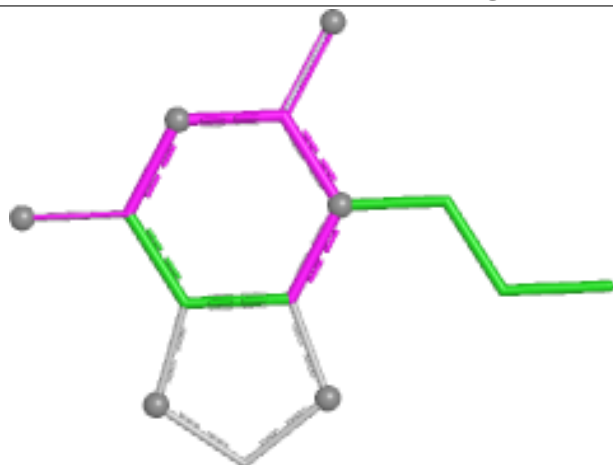
Torsions



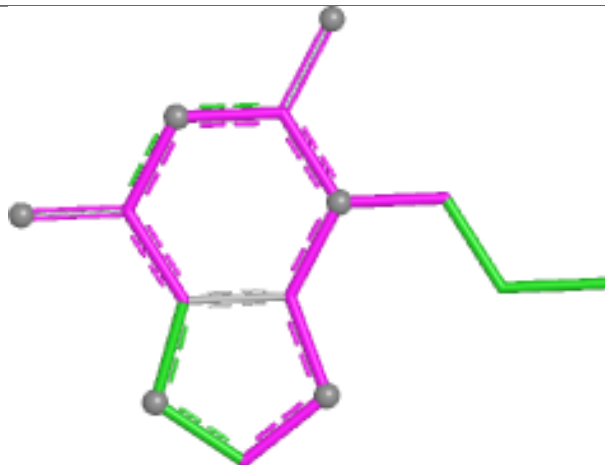
Rings



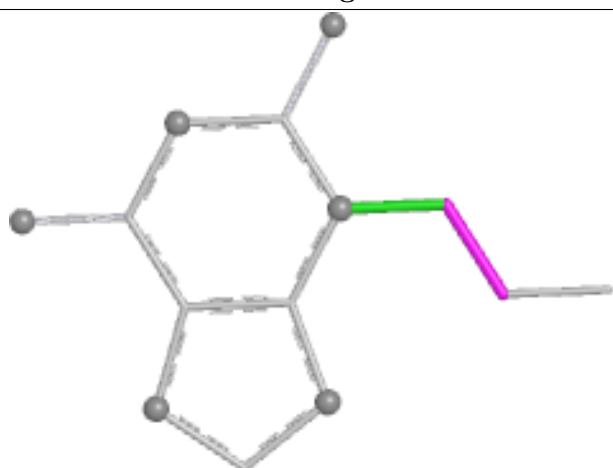
Ligand A1BD3 A 5304



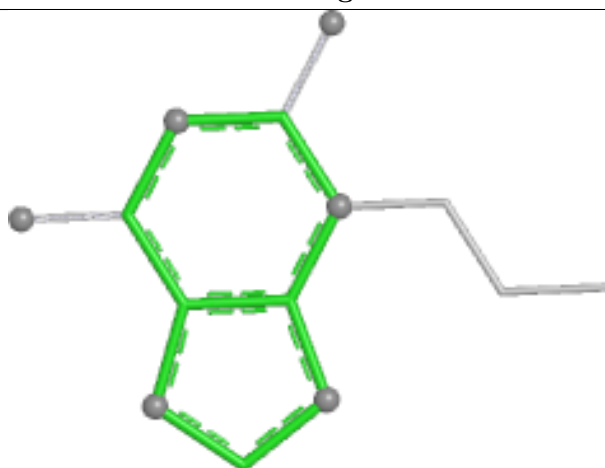
Bond lengths



Bond angles

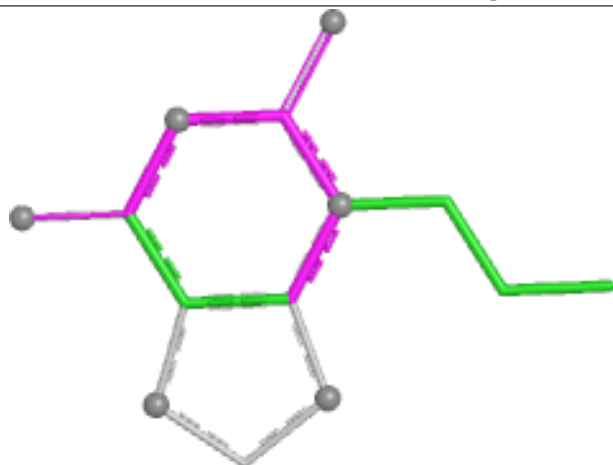


Torsions

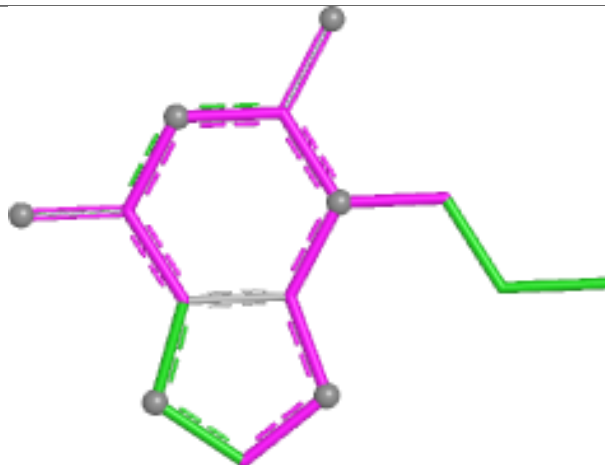


Rings

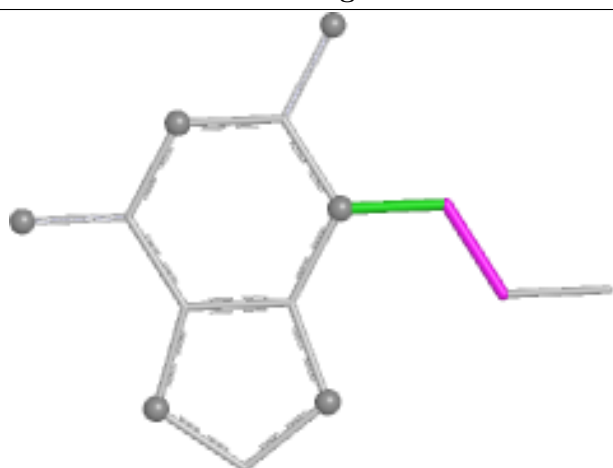
Ligand A1BD3 C 5304



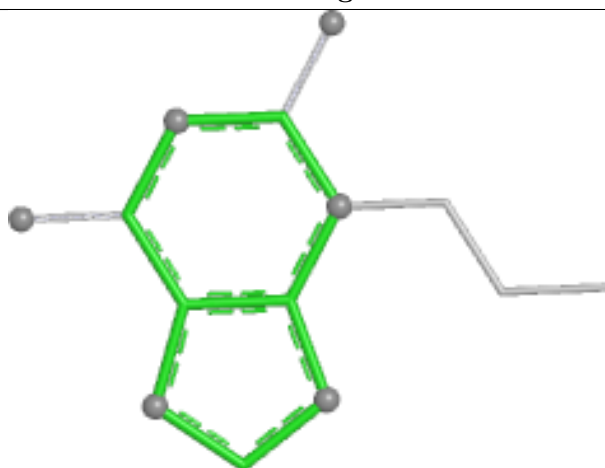
Bond lengths



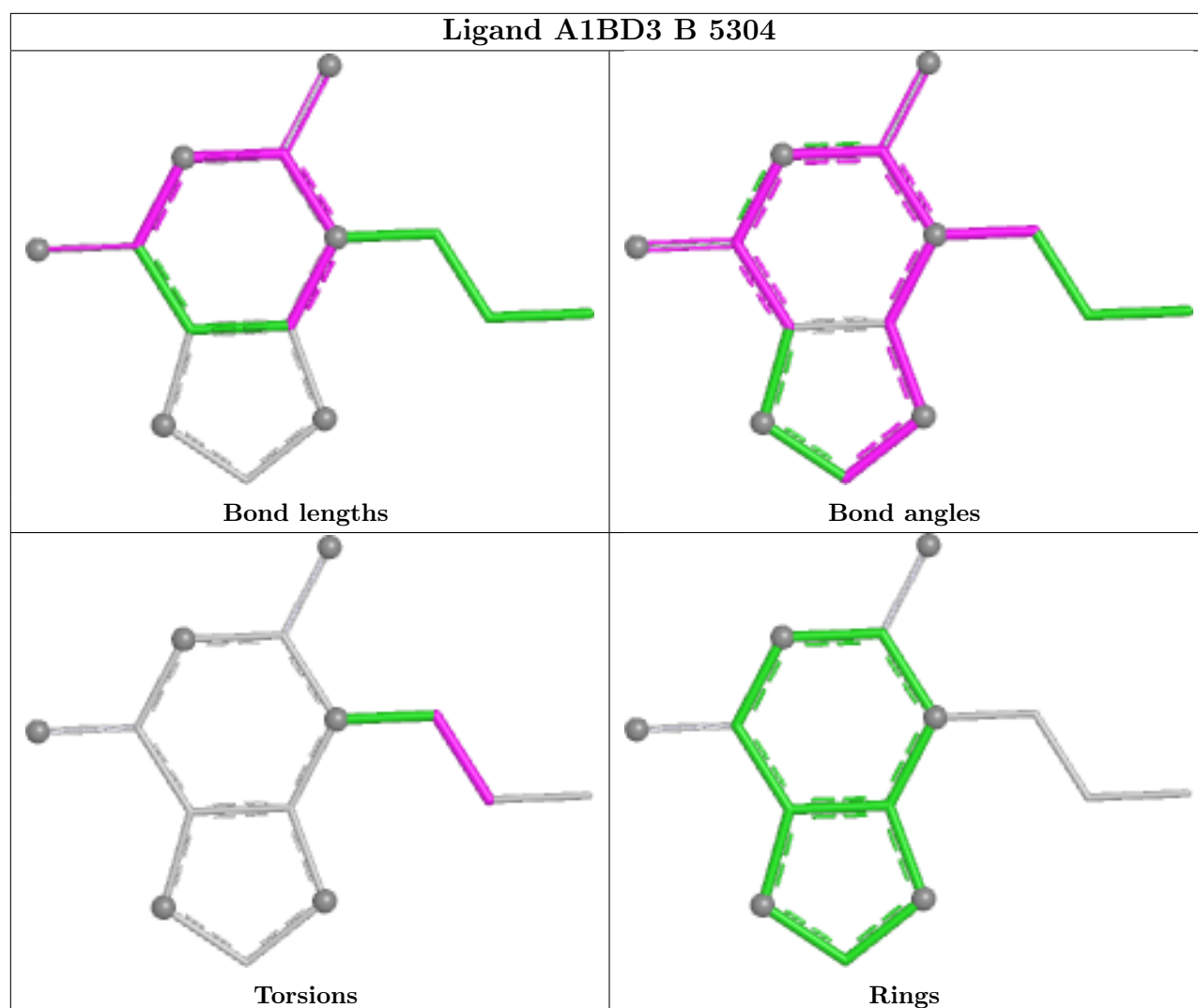
Bond angles



Torsions



Rings



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.

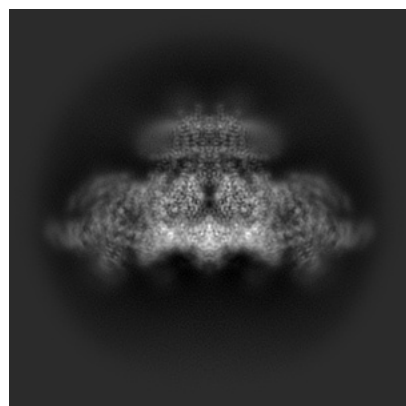
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-47390. These allow visual inspection of the internal detail of the map and identification of artifacts.

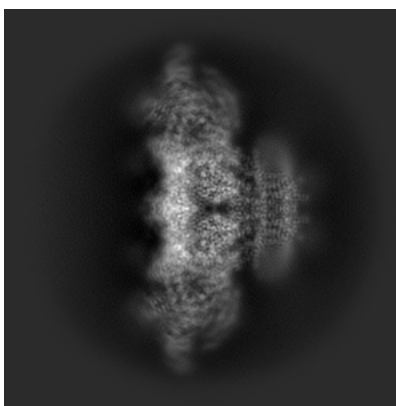
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

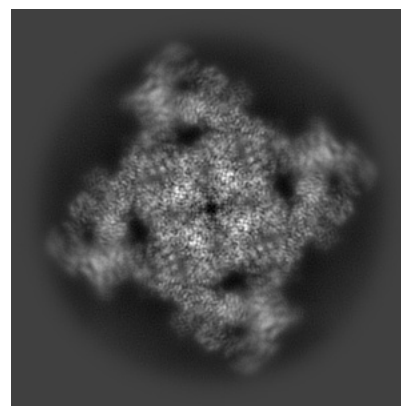
6.1.1 Primary map



X

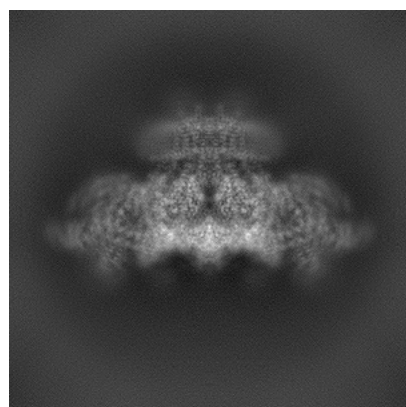


Y

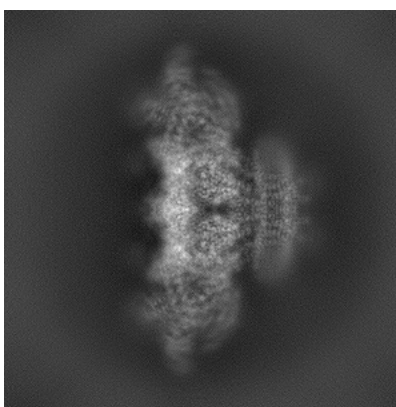


Z

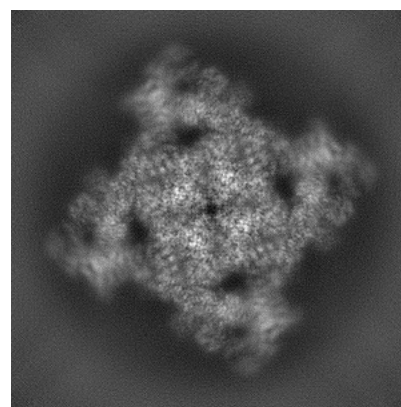
6.1.2 Raw map



X



Y

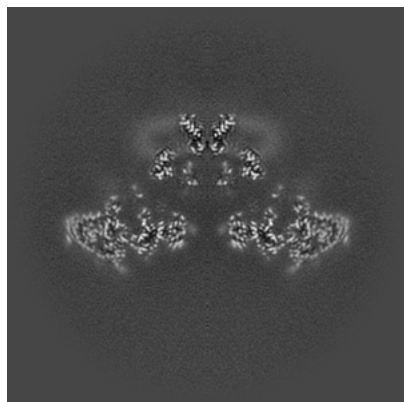


Z

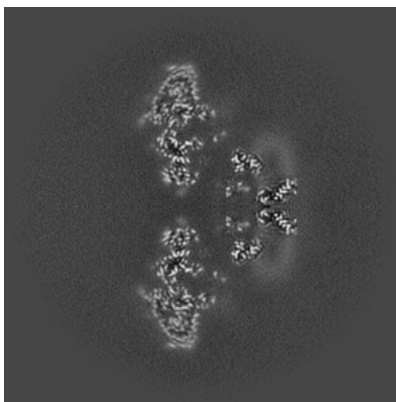
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

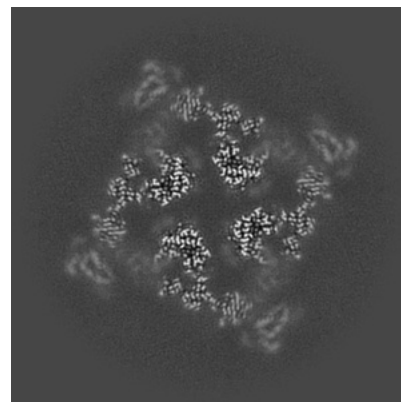
6.2.1 Primary map



X Index: 256

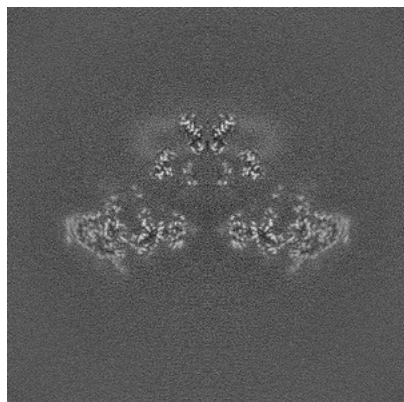


Y Index: 256

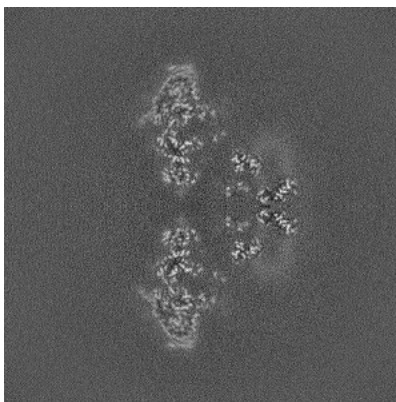


Z Index: 256

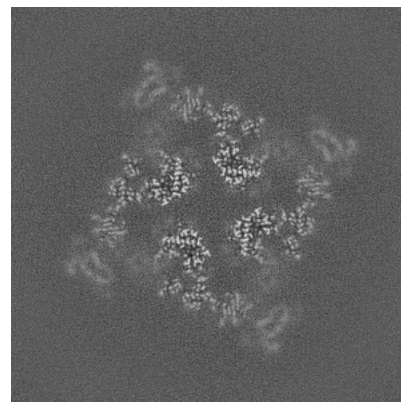
6.2.2 Raw map



X Index: 256



Y Index: 256

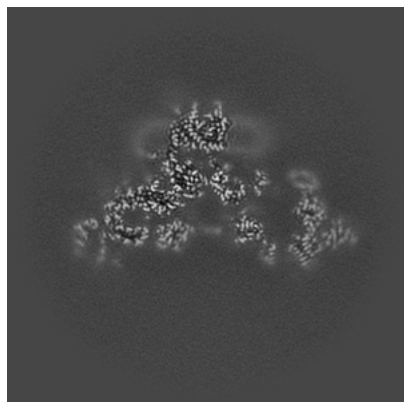


Z Index: 256

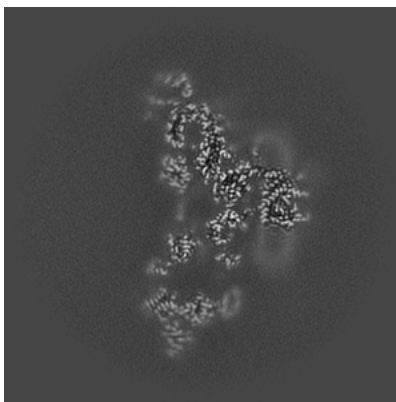
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

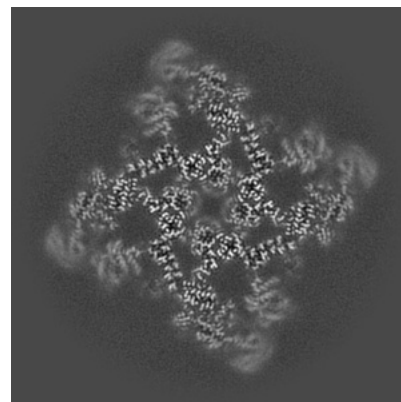
6.3.1 Primary map



X Index: 239

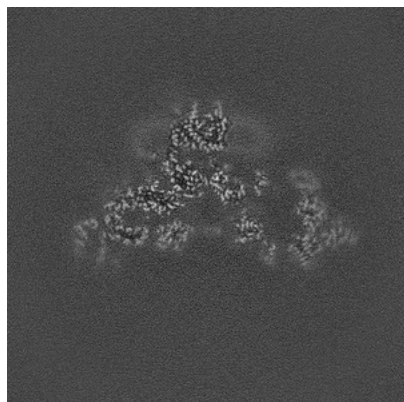


Y Index: 239

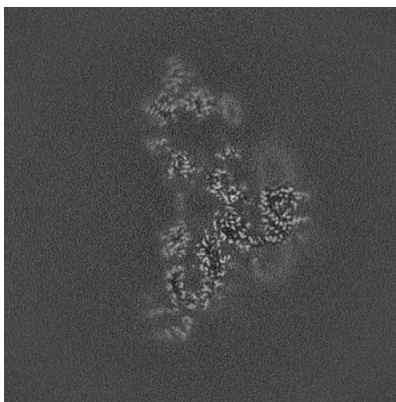


Z Index: 229

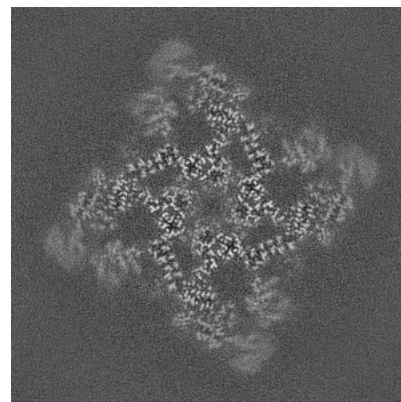
6.3.2 Raw map



X Index: 239



Y Index: 273

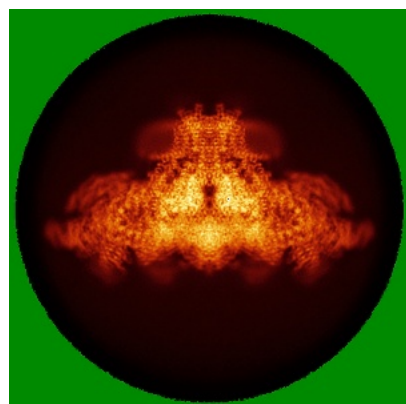


Z Index: 229

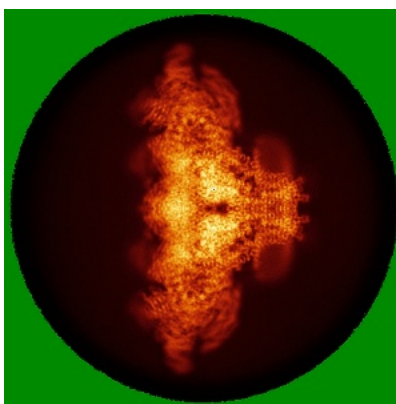
The images above show the largest variance slices of the map in three orthogonal directions.

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

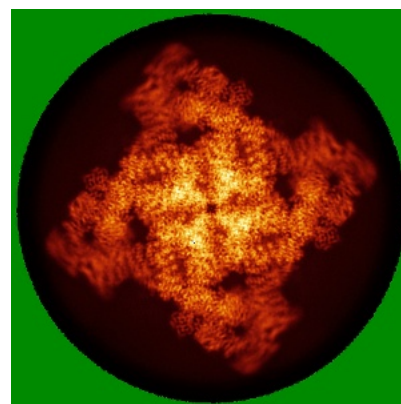
6.4.1 Primary map



X

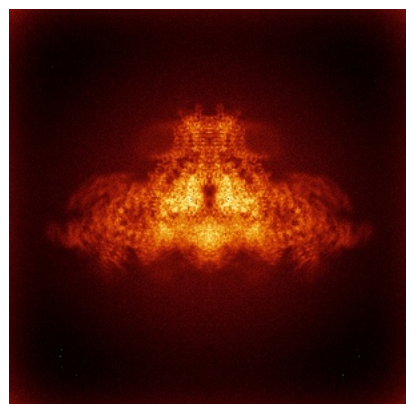


Y

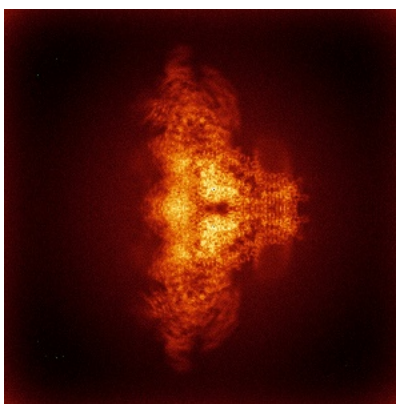


Z

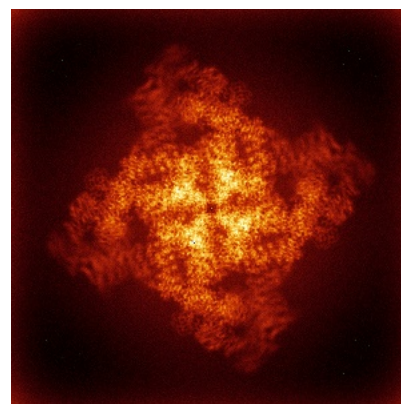
6.4.2 Raw map



X



Y

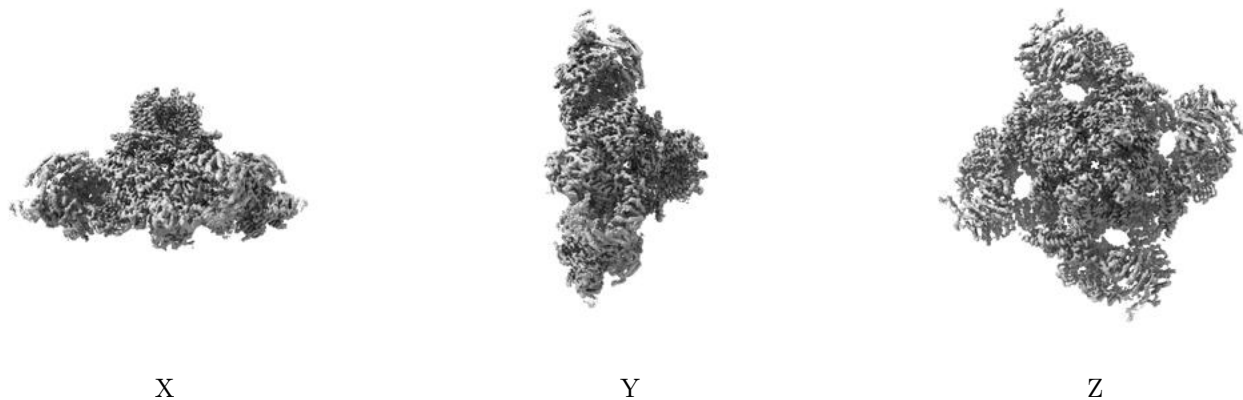


Z

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.

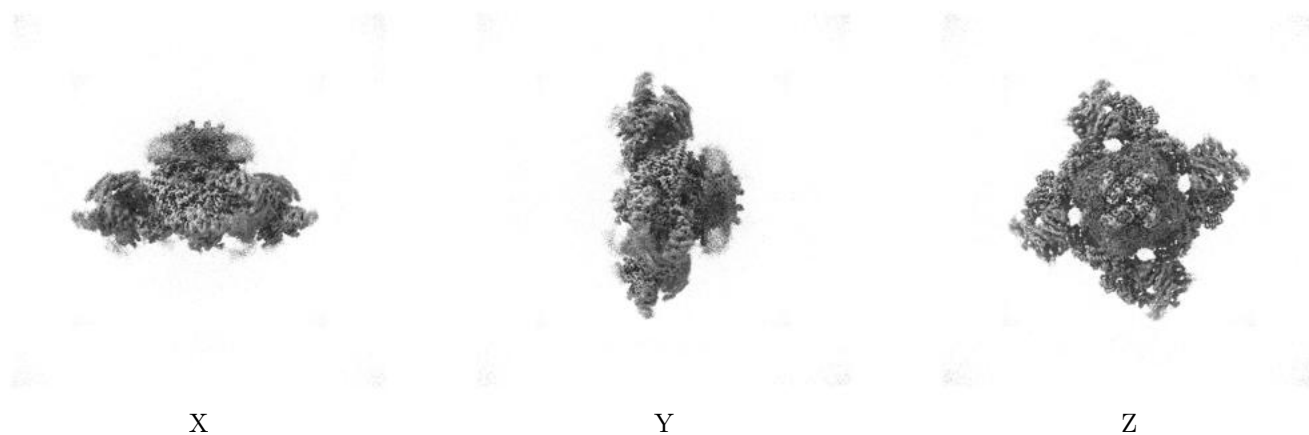
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.1. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

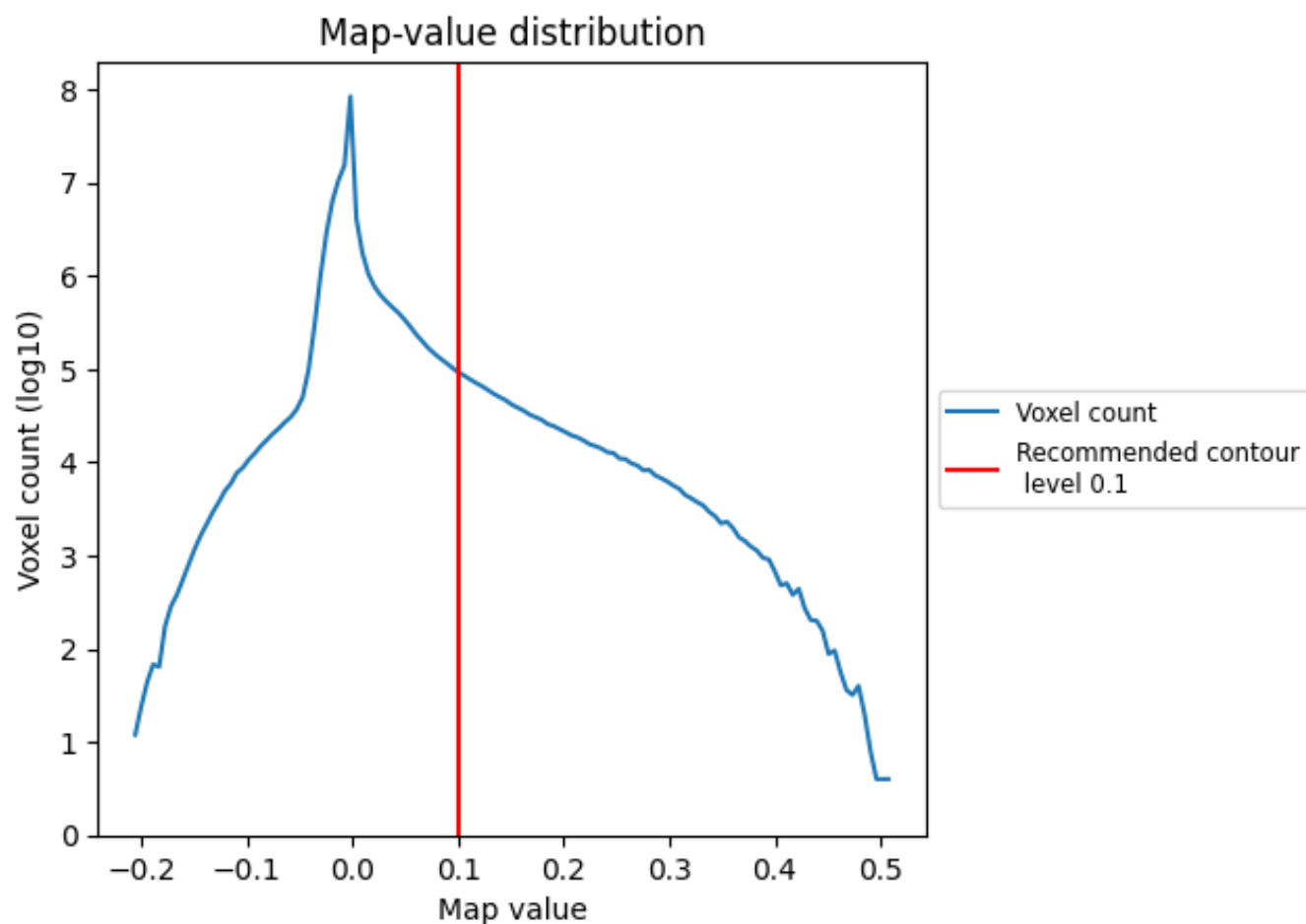
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

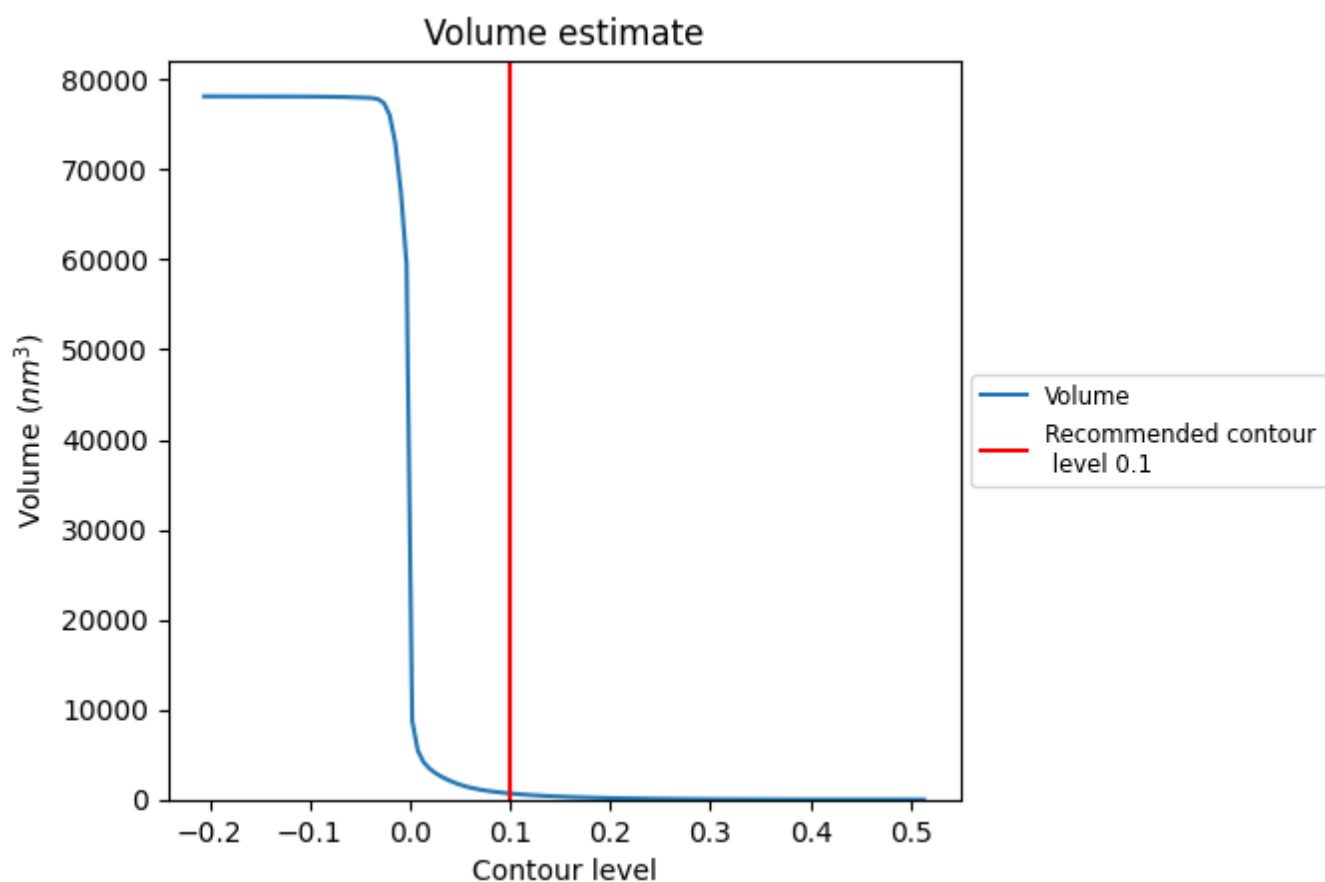
This section contains the results of statistical analysis of the map.

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.

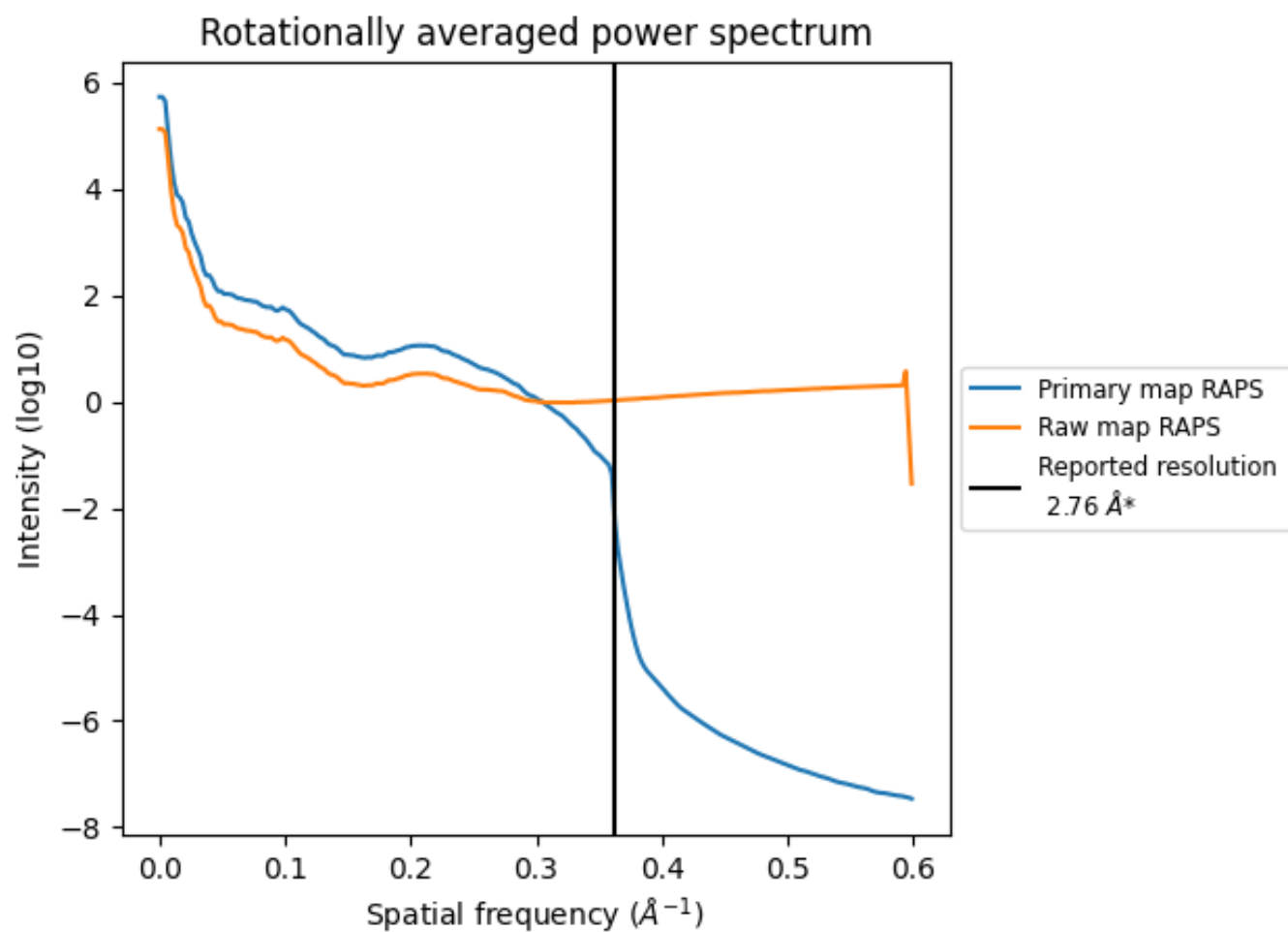
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 676 nm³; this corresponds to an approximate mass of 611 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 ⓘ

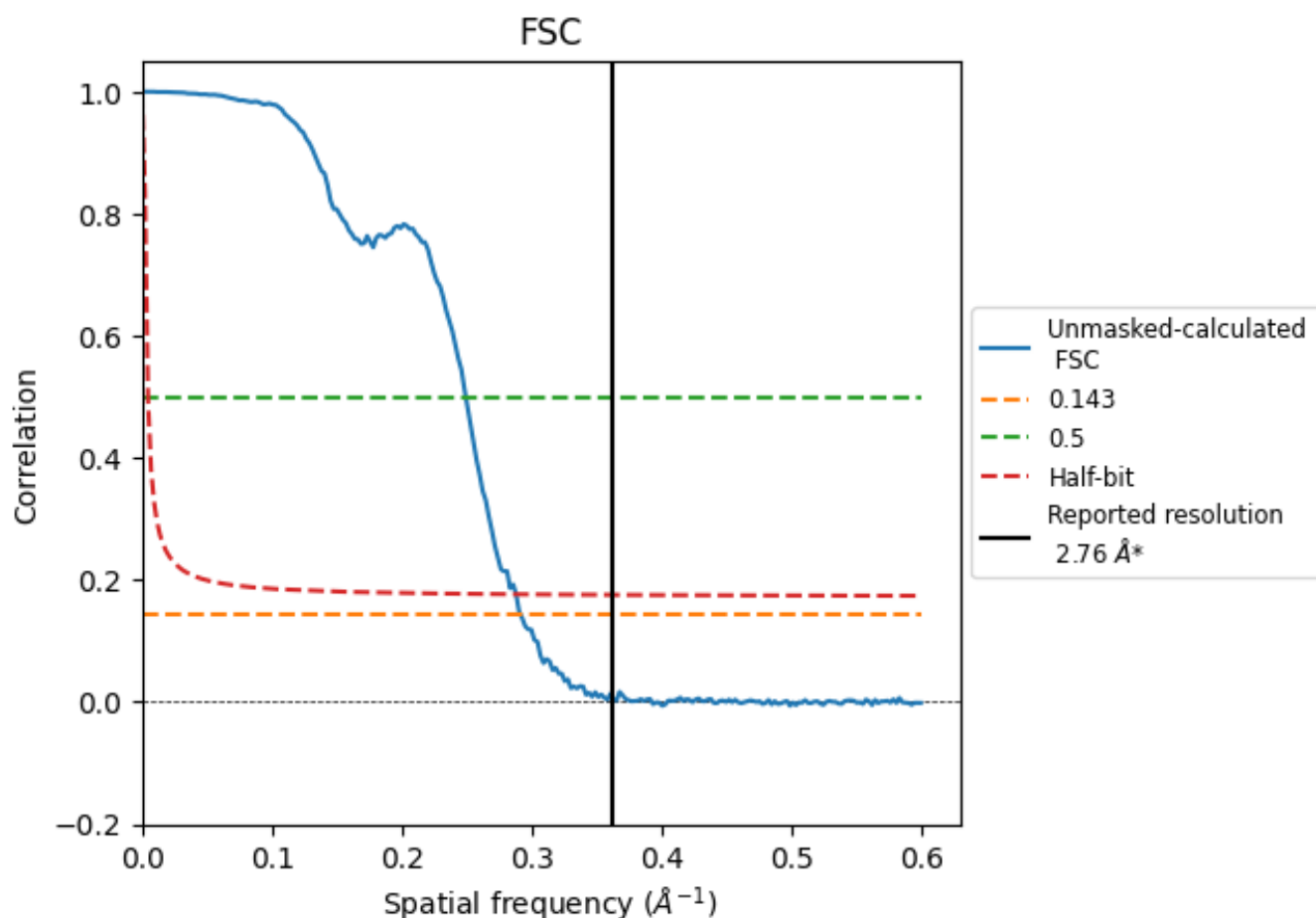


*Reported resolution corresponds to spatial frequency of 0.362 Å⁻¹

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 $0.362 \text{ \AA}^{-1}$

8.2 Resolution estimates [i](#)

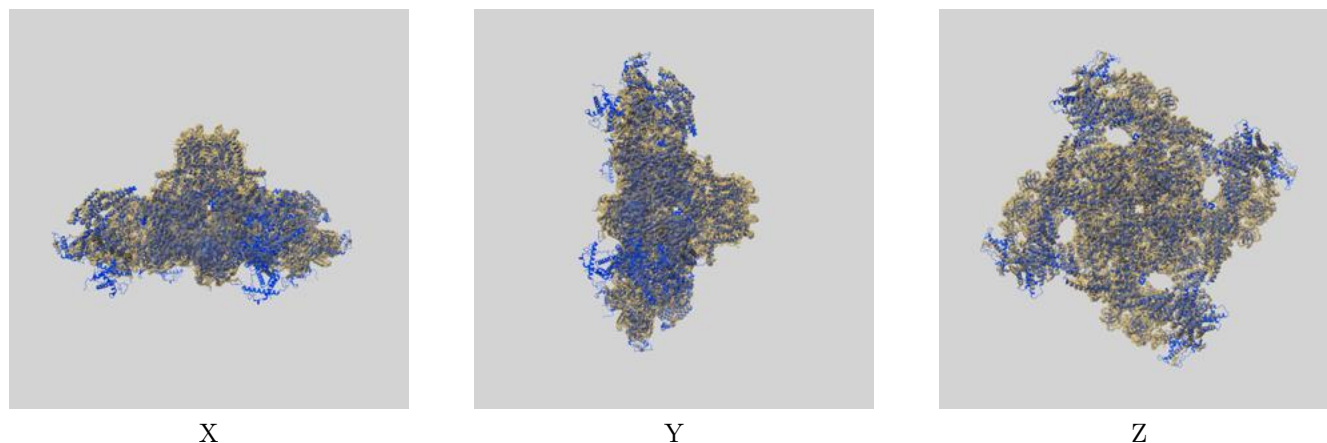
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.76	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.44	4.02	3.48

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.44 differs from the reported value 2.76 by more than 10 %

9 Map-model fit [i](#)

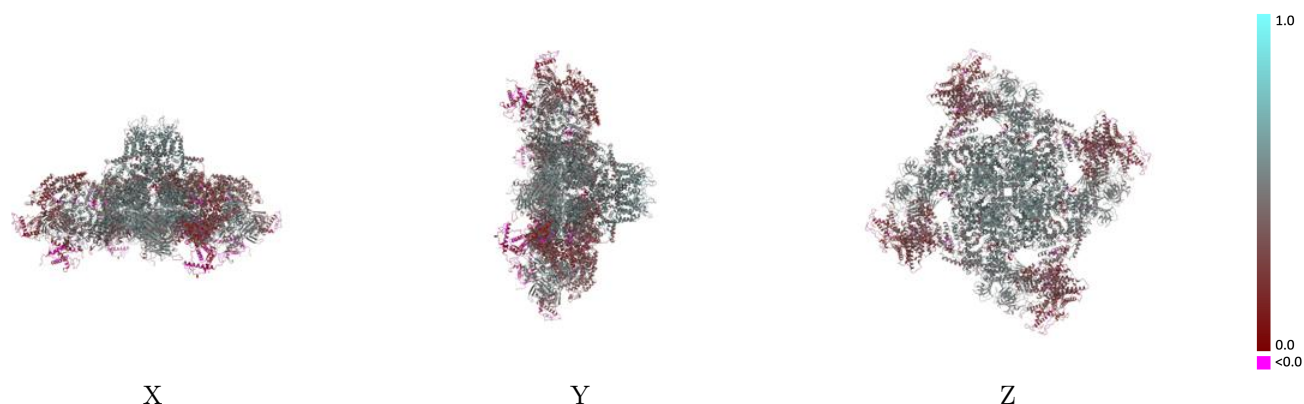
This section contains information regarding the fit between EMDB map EMD-47390 and PDB model 9E1D. Per-residue inclusion information can be found in section [3](#) on page [6](#).

9.1 Map-model overlay [i](#)



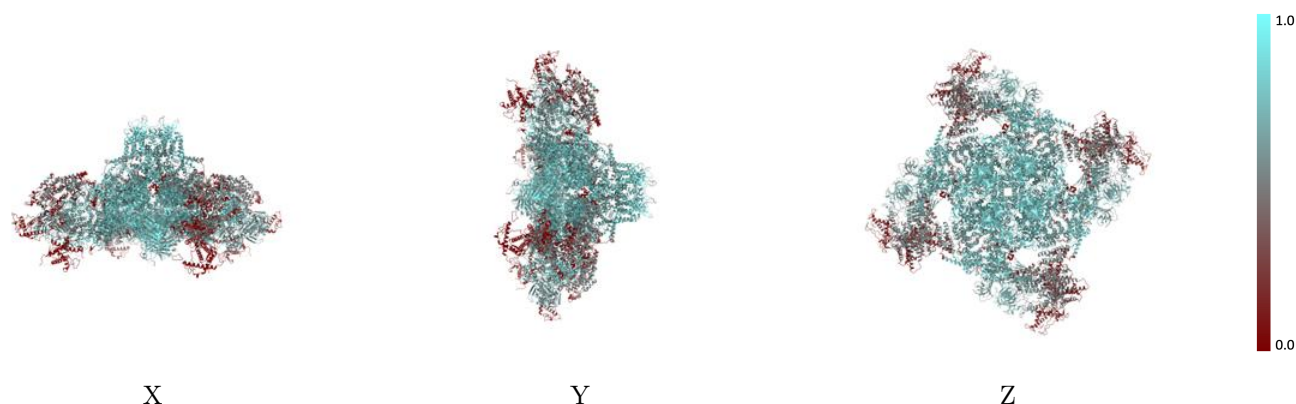
The images above show the 3D surface view of the map at the recommended contour level 0.1 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



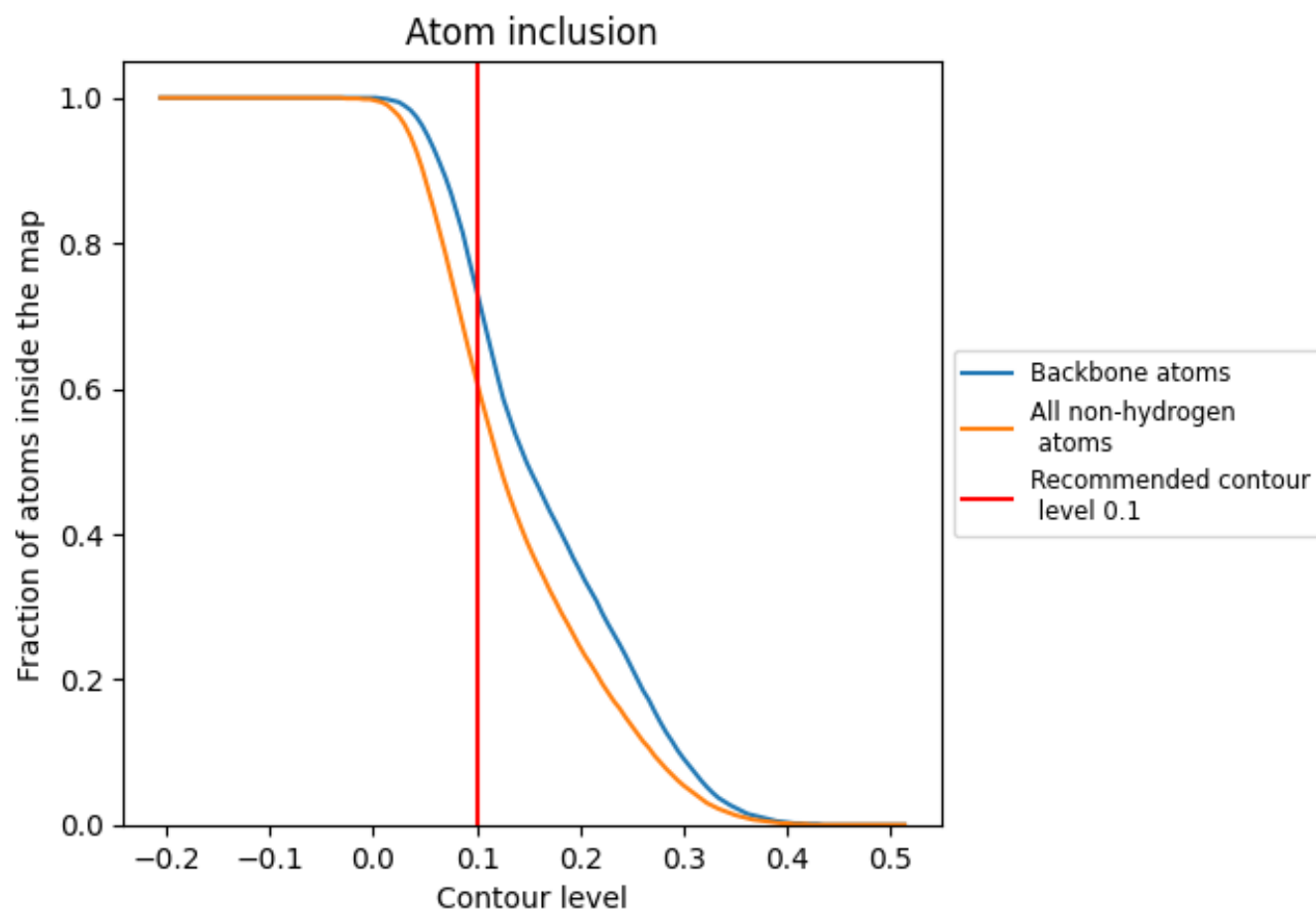
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.1).

9.4 Atom inclusion [i](#)



At the recommended contour level, 73% of all backbone atoms, 61% 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 (0.1) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6090	0.4220
A	0.6100	0.4200
B	0.6090	0.4200
C	0.6090	0.4200
D	0.6090	0.4200
E	0.6110	0.4940
F	0.6140	0.4920
G	0.6100	0.4900
H	0.6090	0.4920

1.0

0.0

<0.0