



Full wwPDB EM Validation Report ⓘ

Mar 8, 2026 – 02:35 PM UTC

PDB ID : 4V8L / pdb_00004v8l
EMDB ID : EMD-2238
Title : Cryo-EM Structure of the Mycobacterial Fatty Acid Synthase
Authors : Boehringer, D.; Ban, N.; Leibundgut, M.
Deposited on : 2012-12-06
Resolution : 7.50 Å(reported)
Based on initial model : 2UV8

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

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

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

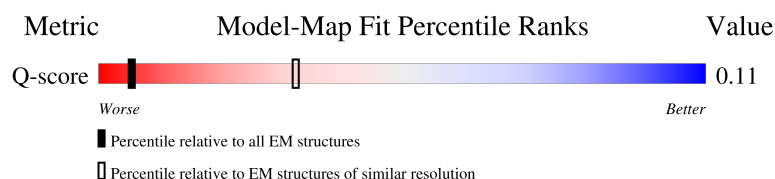
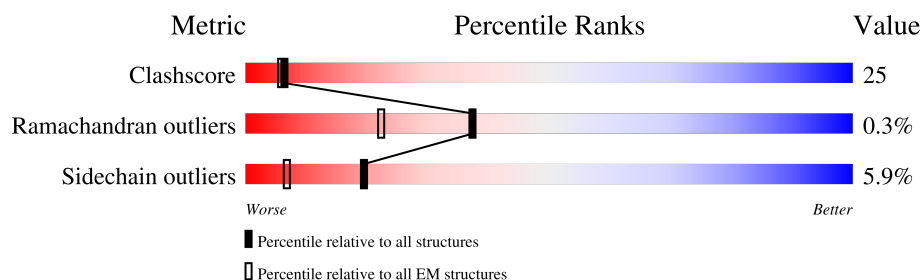
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data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

1 Overall quality at a glance

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

The reported resolution of this entry is 7.50 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Sidechain outliers	223484	23102	-
Q-score	-	25397	436 (7.00 - 8.00)

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	3089	
1	B	3089	
1	C	3089	
1	D	3089	

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Mol	Chain	Length	Quality of chain
1	E	3089	17% 86% 5% 9%
1	F	3089	15% 86% 5% 9%

2 Entry composition

There are 2 unique types of molecules in this entry. The entry contains 126306 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 FATTY ACID SYNTHASE.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	D	2822	Total 21020	C 13294	N 3662	O 3998	S 66	0	0
1	E	2822	Total 21020	C 13294	N 3662	O 3998	S 66	0	0
1	F	2822	Total 21020	C 13294	N 3662	O 3998	S 66	0	0
1	A	2822	Total 21020	C 13294	N 3662	O 3998	S 66	0	0
1	B	2822	Total 21020	C 13294	N 3662	O 3998	S 66	0	0
1	C	2822	Total 21020	C 13294	N 3662	O 3998	S 66	0	0

There are 1086 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
D	929	UNK	GLU	conflict	UNP A0R1H7
D	930	UNK	PRO	conflict	UNP A0R1H7
D	931	UNK	VAL	conflict	UNP A0R1H7
D	932	UNK	GLU	conflict	UNP A0R1H7
D	933	UNK	VAL	conflict	UNP A0R1H7
D	934	UNK	LEU	conflict	UNP A0R1H7
D	935	UNK	SER	conflict	UNP A0R1H7
D	936	UNK	ARG	conflict	UNP A0R1H7
D	937	UNK	ARG	conflict	UNP A0R1H7
D	938	UNK	GLN	conflict	UNP A0R1H7
D	939	UNK	ALA	conflict	UNP A0R1H7
D	940	UNK	ARG	conflict	UNP A0R1H7
D	941	UNK	ARG	conflict	UNP A0R1H7
D	942	UNK	ASP	conflict	UNP A0R1H7
D	943	UNK	ALA	conflict	UNP A0R1H7
D	944	UNK	SER	conflict	UNP A0R1H7
D	974	UNK	THR	conflict	UNP A0R1H7
D	975	UNK	GLU	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
D	976	UNK	TRP	conflict	UNP A0R1H7
D	977	UNK	GLN	conflict	UNP A0R1H7
D	978	UNK	VAL	conflict	UNP A0R1H7
D	979	UNK	ARG	conflict	UNP A0R1H7
D	980	UNK	GLU	conflict	UNP A0R1H7
D	981	UNK	GLY	conflict	UNP A0R1H7
D	982	UNK	SER	conflict	UNP A0R1H7
D	983	UNK	ASP	conflict	UNP A0R1H7
D	984	UNK	ASN	conflict	UNP A0R1H7
D	985	UNK	ARG	conflict	UNP A0R1H7
D	986	UNK	SER	conflict	UNP A0R1H7
D	987	UNK	ALA	conflict	UNP A0R1H7
D	988	UNK	SER	conflict	UNP A0R1H7
D	989	UNK	HIS	conflict	UNP A0R1H7
D	990	UNK	PRO	conflict	UNP A0R1H7
D	991	UNK	SER	conflict	UNP A0R1H7
D	992	UNK	THR	conflict	UNP A0R1H7
D	993	UNK	GLY	conflict	UNP A0R1H7
D	994	UNK	ALA	conflict	UNP A0R1H7
D	995	UNK	ARG	conflict	UNP A0R1H7
D	996	UNK	LEU	conflict	UNP A0R1H7
D	997	UNK	GLU	conflict	UNP A0R1H7
D	998	UNK	VAL	conflict	UNP A0R1H7
D	999	UNK	ALA	conflict	UNP A0R1H7
D	1000	UNK	ASP	conflict	UNP A0R1H7
D	1001	UNK	ASP	conflict	UNP A0R1H7
D	1002	UNK	GLN	conflict	UNP A0R1H7
D	1003	UNK	HIS	conflict	UNP A0R1H7
D	1004	UNK	VAL	conflict	UNP A0R1H7
D	1005	UNK	VAL	conflict	UNP A0R1H7
D	1006	UNK	LEU	conflict	UNP A0R1H7
D	1007	UNK	SER	conflict	UNP A0R1H7
D	1008	UNK	VAL	conflict	UNP A0R1H7
D	1009	UNK	PRO	conflict	UNP A0R1H7
D	1010	UNK	LEU	conflict	UNP A0R1H7
D	1011	UNK	SER	conflict	UNP A0R1H7
D	1012	UNK	GLY	conflict	UNP A0R1H7
D	1013	UNK	THR	conflict	UNP A0R1H7
D	1014	UNK	TRP	conflict	UNP A0R1H7
D	1196	UNK	GLY	conflict	UNP A0R1H7
D	1197	UNK	ARG	conflict	UNP A0R1H7
D	1198	UNK	THR	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
D	1199	UNK	GLY	conflict	UNP A0R1H7
D	1200	UNK	ALA	conflict	UNP A0R1H7
D	1201	UNK	ALA	conflict	UNP A0R1H7
D	1202	UNK	GLU	conflict	UNP A0R1H7
D	1203	UNK	LEU	conflict	UNP A0R1H7
D	1204	UNK	THR	conflict	UNP A0R1H7
D	1205	UNK	ASP	conflict	UNP A0R1H7
D	1206	UNK	PRO	conflict	UNP A0R1H7
D	1207	UNK	VAL	conflict	UNP A0R1H7
D	1208	UNK	ARG	conflict	UNP A0R1H7
D	1209	UNK	ALA	conflict	UNP A0R1H7
D	1210	UNK	GLY	conflict	UNP A0R1H7
D	1211	UNK	GLY	conflict	UNP A0R1H7
D	1212	UNK	ALA	conflict	UNP A0R1H7
D	1213	UNK	ILE	conflict	UNP A0R1H7
D	1214	UNK	SER	conflict	UNP A0R1H7
D	1215	UNK	ASP	conflict	UNP A0R1H7
D	1216	UNK	ASN	conflict	UNP A0R1H7
D	1217	UNK	ALA	conflict	UNP A0R1H7
D	1218	UNK	THR	conflict	UNP A0R1H7
D	1219	UNK	ASP	conflict	UNP A0R1H7
D	1220	UNK	THR	conflict	UNP A0R1H7
D	1221	UNK	PRO	conflict	UNP A0R1H7
D	1222	UNK	ARG	conflict	UNP A0R1H7
D	1223	UNK	ARG	conflict	UNP A0R1H7
D	1224	UNK	ARG	conflict	UNP A0R1H7
D	1225	UNK	ARG	conflict	UNP A0R1H7
D	1226	UNK	ARG	conflict	UNP A0R1H7
D	1227	UNK	ASP	conflict	UNP A0R1H7
D	2076	UNK	GLY	conflict	UNP A0R1H7
D	2077	UNK	ASP	conflict	UNP A0R1H7
D	2078	UNK	ILE	conflict	UNP A0R1H7
D	2079	UNK	ASP	conflict	UNP A0R1H7
D	2080	UNK	ALA	conflict	UNP A0R1H7
D	2081	UNK	GLN	conflict	UNP A0R1H7
D	2082	UNK	TRP	conflict	UNP A0R1H7
D	2083	UNK	GLU	conflict	UNP A0R1H7
D	2084	UNK	GLN	conflict	UNP A0R1H7
D	2085	UNK	LEU	conflict	UNP A0R1H7
D	2086	UNK	SER	conflict	UNP A0R1H7
D	2087	UNK	GLN	conflict	UNP A0R1H7
D	2088	UNK	ARG	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
D	2089	UNK	PHE	conflict	UNP A0R1H7
D	2090	UNK	GLU	conflict	UNP A0R1H7
D	2091	UNK	GLY	conflict	UNP A0R1H7
D	2092	UNK	THR	conflict	UNP A0R1H7
D	2093	UNK	GLY	conflict	UNP A0R1H7
D	2094	UNK	HIS	conflict	UNP A0R1H7
D	2095	UNK	VAL	conflict	UNP A0R1H7
D	2096	UNK	VAL	conflict	UNP A0R1H7
D	2097	UNK	ALA	conflict	UNP A0R1H7
D	2098	UNK	THR	conflict	UNP A0R1H7
D	2099	UNK	GLN	conflict	UNP A0R1H7
D	2100	UNK	ALA	conflict	UNP A0R1H7
D	2101	UNK	ASN	conflict	UNP A0R1H7
D	2102	UNK	TRP	conflict	UNP A0R1H7
D	2103	UNK	TRP	conflict	UNP A0R1H7
D	2104	UNK	GLN	conflict	UNP A0R1H7
D	2105	UNK	GLY	conflict	UNP A0R1H7
D	2106	UNK	LYS	conflict	UNP A0R1H7
D	2107	UNK	ALA	conflict	UNP A0R1H7
D	2108	UNK	LEU	conflict	UNP A0R1H7
D	2109	UNK	ALA	conflict	UNP A0R1H7
D	2110	UNK	ALA	conflict	UNP A0R1H7
D	2111	UNK	GLY	conflict	UNP A0R1H7
D	2112	UNK	ARG	conflict	UNP A0R1H7
D	2113	UNK	ASN	conflict	UNP A0R1H7
D	2114	UNK	VAL	conflict	UNP A0R1H7
D	2115	UNK	HIS	conflict	UNP A0R1H7
D	2116	UNK	ALA	conflict	UNP A0R1H7
D	2117	UNK	SER	conflict	UNP A0R1H7
D	2118	UNK	LEU	conflict	UNP A0R1H7
D	2119	UNK	PHE	conflict	UNP A0R1H7
D	2120	UNK	GLY	conflict	UNP A0R1H7
D	2121	UNK	ARG	conflict	UNP A0R1H7
D	2122	UNK	ILE	conflict	UNP A0R1H7
D	2123	UNK	ALA	conflict	UNP A0R1H7
D	2124	UNK	ALA	conflict	UNP A0R1H7
D	2125	UNK	GLY	conflict	UNP A0R1H7
D	2126	UNK	ALA	conflict	UNP A0R1H7
D	2127	UNK	GLU	conflict	UNP A0R1H7
D	2128	UNK	ASN	conflict	UNP A0R1H7
D	2129	UNK	PRO	conflict	UNP A0R1H7
D	2130	UNK	GLY	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
D	2131	UNK	LYS	conflict	UNP A0R1H7
D	2132	UNK	GLY	conflict	UNP A0R1H7
D	2133	UNK	ARG	conflict	UNP A0R1H7
D	2134	UNK	TYR	conflict	UNP A0R1H7
D	2135	UNK	SER	conflict	UNP A0R1H7
D	2422	UNK	GLU	conflict	UNP A0R1H7
D	2423	UNK	SER	conflict	UNP A0R1H7
D	2424	UNK	ASP	conflict	UNP A0R1H7
D	2425	UNK	ASP	conflict	UNP A0R1H7
D	2426	UNK	GLU	conflict	UNP A0R1H7
D	2427	UNK	ALA	conflict	UNP A0R1H7
D	2428	UNK	PRO	conflict	UNP A0R1H7
D	2429	UNK	ALA	conflict	UNP A0R1H7
D	2430	UNK	GLY	conflict	UNP A0R1H7
D	2431	UNK	THR	conflict	UNP A0R1H7
D	2432	UNK	ILE	conflict	UNP A0R1H7
D	2433	UNK	ARG	conflict	UNP A0R1H7
D	2434	UNK	ALA	conflict	UNP A0R1H7
D	2435	UNK	LEU	conflict	UNP A0R1H7
D	2436	UNK	PRO	conflict	UNP A0R1H7
D	2437	UNK	SER	conflict	UNP A0R1H7
D	2438	UNK	PRO	conflict	UNP A0R1H7
D	2439	UNK	PRO	conflict	UNP A0R1H7
D	2440	UNK	ARG	conflict	UNP A0R1H7
D	2441	UNK	GLY	conflict	UNP A0R1H7
D	2442	UNK	TYR	conflict	UNP A0R1H7
D	2443	UNK	ASN	conflict	UNP A0R1H7
D	2444	UNK	PRO	conflict	UNP A0R1H7
D	2445	UNK	ALA	conflict	UNP A0R1H7
D	2446	UNK	PRO	conflict	UNP A0R1H7
D	2447	UNK	ALA	conflict	UNP A0R1H7
D	2448	UNK	PRO	conflict	UNP A0R1H7
D	2449	UNK	GLU	conflict	UNP A0R1H7
D	2450	UNK	TRP	conflict	UNP A0R1H7
D	2451	UNK	ASP	conflict	UNP A0R1H7
D	2452	UNK	ASP	conflict	UNP A0R1H7
D	2453	UNK	LEU	conflict	UNP A0R1H7
E	929	UNK	GLU	conflict	UNP A0R1H7
E	930	UNK	PRO	conflict	UNP A0R1H7
E	931	UNK	VAL	conflict	UNP A0R1H7
E	932	UNK	GLU	conflict	UNP A0R1H7
E	933	UNK	VAL	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
E	934	UNK	LEU	conflict	UNP A0R1H7
E	935	UNK	SER	conflict	UNP A0R1H7
E	936	UNK	ARG	conflict	UNP A0R1H7
E	937	UNK	ARG	conflict	UNP A0R1H7
E	938	UNK	GLN	conflict	UNP A0R1H7
E	939	UNK	ALA	conflict	UNP A0R1H7
E	940	UNK	ARG	conflict	UNP A0R1H7
E	941	UNK	ARG	conflict	UNP A0R1H7
E	942	UNK	ASP	conflict	UNP A0R1H7
E	943	UNK	ALA	conflict	UNP A0R1H7
E	944	UNK	SER	conflict	UNP A0R1H7
E	974	UNK	THR	conflict	UNP A0R1H7
E	975	UNK	GLU	conflict	UNP A0R1H7
E	976	UNK	TRP	conflict	UNP A0R1H7
E	977	UNK	GLN	conflict	UNP A0R1H7
E	978	UNK	VAL	conflict	UNP A0R1H7
E	979	UNK	ARG	conflict	UNP A0R1H7
E	980	UNK	GLU	conflict	UNP A0R1H7
E	981	UNK	GLY	conflict	UNP A0R1H7
E	982	UNK	SER	conflict	UNP A0R1H7
E	983	UNK	ASP	conflict	UNP A0R1H7
E	984	UNK	ASN	conflict	UNP A0R1H7
E	985	UNK	ARG	conflict	UNP A0R1H7
E	986	UNK	SER	conflict	UNP A0R1H7
E	987	UNK	ALA	conflict	UNP A0R1H7
E	988	UNK	SER	conflict	UNP A0R1H7
E	989	UNK	HIS	conflict	UNP A0R1H7
E	990	UNK	PRO	conflict	UNP A0R1H7
E	991	UNK	SER	conflict	UNP A0R1H7
E	992	UNK	THR	conflict	UNP A0R1H7
E	993	UNK	GLY	conflict	UNP A0R1H7
E	994	UNK	ALA	conflict	UNP A0R1H7
E	995	UNK	ARG	conflict	UNP A0R1H7
E	996	UNK	LEU	conflict	UNP A0R1H7
E	997	UNK	GLU	conflict	UNP A0R1H7
E	998	UNK	VAL	conflict	UNP A0R1H7
E	999	UNK	ALA	conflict	UNP A0R1H7
E	1000	UNK	ASP	conflict	UNP A0R1H7
E	1001	UNK	ASP	conflict	UNP A0R1H7
E	1002	UNK	GLN	conflict	UNP A0R1H7
E	1003	UNK	HIS	conflict	UNP A0R1H7
E	1004	UNK	VAL	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
E	1005	UNK	VAL	conflict	UNP A0R1H7
E	1006	UNK	LEU	conflict	UNP A0R1H7
E	1007	UNK	SER	conflict	UNP A0R1H7
E	1008	UNK	VAL	conflict	UNP A0R1H7
E	1009	UNK	PRO	conflict	UNP A0R1H7
E	1010	UNK	LEU	conflict	UNP A0R1H7
E	1011	UNK	SER	conflict	UNP A0R1H7
E	1012	UNK	GLY	conflict	UNP A0R1H7
E	1013	UNK	THR	conflict	UNP A0R1H7
E	1014	UNK	TRP	conflict	UNP A0R1H7
E	1196	UNK	GLY	conflict	UNP A0R1H7
E	1197	UNK	ARG	conflict	UNP A0R1H7
E	1198	UNK	THR	conflict	UNP A0R1H7
E	1199	UNK	GLY	conflict	UNP A0R1H7
E	1200	UNK	ALA	conflict	UNP A0R1H7
E	1201	UNK	ALA	conflict	UNP A0R1H7
E	1202	UNK	GLU	conflict	UNP A0R1H7
E	1203	UNK	LEU	conflict	UNP A0R1H7
E	1204	UNK	THR	conflict	UNP A0R1H7
E	1205	UNK	ASP	conflict	UNP A0R1H7
E	1206	UNK	PRO	conflict	UNP A0R1H7
E	1207	UNK	VAL	conflict	UNP A0R1H7
E	1208	UNK	ARG	conflict	UNP A0R1H7
E	1209	UNK	ALA	conflict	UNP A0R1H7
E	1210	UNK	GLY	conflict	UNP A0R1H7
E	1211	UNK	GLY	conflict	UNP A0R1H7
E	1212	UNK	ALA	conflict	UNP A0R1H7
E	1213	UNK	ILE	conflict	UNP A0R1H7
E	1214	UNK	SER	conflict	UNP A0R1H7
E	1215	UNK	ASP	conflict	UNP A0R1H7
E	1216	UNK	ASN	conflict	UNP A0R1H7
E	1217	UNK	ALA	conflict	UNP A0R1H7
E	1218	UNK	THR	conflict	UNP A0R1H7
E	1219	UNK	ASP	conflict	UNP A0R1H7
E	1220	UNK	THR	conflict	UNP A0R1H7
E	1221	UNK	PRO	conflict	UNP A0R1H7
E	1222	UNK	ARG	conflict	UNP A0R1H7
E	1223	UNK	ARG	conflict	UNP A0R1H7
E	1224	UNK	ARG	conflict	UNP A0R1H7
E	1225	UNK	ARG	conflict	UNP A0R1H7
E	1226	UNK	ARG	conflict	UNP A0R1H7
E	1227	UNK	ASP	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
E	2076	UNK	GLY	conflict	UNP A0R1H7
E	2077	UNK	ASP	conflict	UNP A0R1H7
E	2078	UNK	ILE	conflict	UNP A0R1H7
E	2079	UNK	ASP	conflict	UNP A0R1H7
E	2080	UNK	ALA	conflict	UNP A0R1H7
E	2081	UNK	GLN	conflict	UNP A0R1H7
E	2082	UNK	TRP	conflict	UNP A0R1H7
E	2083	UNK	GLU	conflict	UNP A0R1H7
E	2084	UNK	GLN	conflict	UNP A0R1H7
E	2085	UNK	LEU	conflict	UNP A0R1H7
E	2086	UNK	SER	conflict	UNP A0R1H7
E	2087	UNK	GLN	conflict	UNP A0R1H7
E	2088	UNK	ARG	conflict	UNP A0R1H7
E	2089	UNK	PHE	conflict	UNP A0R1H7
E	2090	UNK	GLU	conflict	UNP A0R1H7
E	2091	UNK	GLY	conflict	UNP A0R1H7
E	2092	UNK	THR	conflict	UNP A0R1H7
E	2093	UNK	GLY	conflict	UNP A0R1H7
E	2094	UNK	HIS	conflict	UNP A0R1H7
E	2095	UNK	VAL	conflict	UNP A0R1H7
E	2096	UNK	VAL	conflict	UNP A0R1H7
E	2097	UNK	ALA	conflict	UNP A0R1H7
E	2098	UNK	THR	conflict	UNP A0R1H7
E	2099	UNK	GLN	conflict	UNP A0R1H7
E	2100	UNK	ALA	conflict	UNP A0R1H7
E	2101	UNK	ASN	conflict	UNP A0R1H7
E	2102	UNK	TRP	conflict	UNP A0R1H7
E	2103	UNK	TRP	conflict	UNP A0R1H7
E	2104	UNK	GLN	conflict	UNP A0R1H7
E	2105	UNK	GLY	conflict	UNP A0R1H7
E	2106	UNK	LYS	conflict	UNP A0R1H7
E	2107	UNK	ALA	conflict	UNP A0R1H7
E	2108	UNK	LEU	conflict	UNP A0R1H7
E	2109	UNK	ALA	conflict	UNP A0R1H7
E	2110	UNK	ALA	conflict	UNP A0R1H7
E	2111	UNK	GLY	conflict	UNP A0R1H7
E	2112	UNK	ARG	conflict	UNP A0R1H7
E	2113	UNK	ASN	conflict	UNP A0R1H7
E	2114	UNK	VAL	conflict	UNP A0R1H7
E	2115	UNK	HIS	conflict	UNP A0R1H7
E	2116	UNK	ALA	conflict	UNP A0R1H7
E	2117	UNK	SER	conflict	UNP A0R1H7

Continued on next page...

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Chain	Residue	Modelled	Actual	Comment	Reference
E	2118	UNK	LEU	conflict	UNP A0R1H7
E	2119	UNK	PHE	conflict	UNP A0R1H7
E	2120	UNK	GLY	conflict	UNP A0R1H7
E	2121	UNK	ARG	conflict	UNP A0R1H7
E	2122	UNK	ILE	conflict	UNP A0R1H7
E	2123	UNK	ALA	conflict	UNP A0R1H7
E	2124	UNK	ALA	conflict	UNP A0R1H7
E	2125	UNK	GLY	conflict	UNP A0R1H7
E	2126	UNK	ALA	conflict	UNP A0R1H7
E	2127	UNK	GLU	conflict	UNP A0R1H7
E	2128	UNK	ASN	conflict	UNP A0R1H7
E	2129	UNK	PRO	conflict	UNP A0R1H7
E	2130	UNK	GLY	conflict	UNP A0R1H7
E	2131	UNK	LYS	conflict	UNP A0R1H7
E	2132	UNK	GLY	conflict	UNP A0R1H7
E	2133	UNK	ARG	conflict	UNP A0R1H7
E	2134	UNK	TYR	conflict	UNP A0R1H7
E	2135	UNK	SER	conflict	UNP A0R1H7
E	2422	UNK	GLU	conflict	UNP A0R1H7
E	2423	UNK	SER	conflict	UNP A0R1H7
E	2424	UNK	ASP	conflict	UNP A0R1H7
E	2425	UNK	ASP	conflict	UNP A0R1H7
E	2426	UNK	GLU	conflict	UNP A0R1H7
E	2427	UNK	ALA	conflict	UNP A0R1H7
E	2428	UNK	PRO	conflict	UNP A0R1H7
E	2429	UNK	ALA	conflict	UNP A0R1H7
E	2430	UNK	GLY	conflict	UNP A0R1H7
E	2431	UNK	THR	conflict	UNP A0R1H7
E	2432	UNK	ILE	conflict	UNP A0R1H7
E	2433	UNK	ARG	conflict	UNP A0R1H7
E	2434	UNK	ALA	conflict	UNP A0R1H7
E	2435	UNK	LEU	conflict	UNP A0R1H7
E	2436	UNK	PRO	conflict	UNP A0R1H7
E	2437	UNK	SER	conflict	UNP A0R1H7
E	2438	UNK	PRO	conflict	UNP A0R1H7
E	2439	UNK	PRO	conflict	UNP A0R1H7
E	2440	UNK	ARG	conflict	UNP A0R1H7
E	2441	UNK	GLY	conflict	UNP A0R1H7
E	2442	UNK	TYR	conflict	UNP A0R1H7
E	2443	UNK	ASN	conflict	UNP A0R1H7
E	2444	UNK	PRO	conflict	UNP A0R1H7
E	2445	UNK	ALA	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
E	2446	UNK	PRO	conflict	UNP A0R1H7
E	2447	UNK	ALA	conflict	UNP A0R1H7
E	2448	UNK	PRO	conflict	UNP A0R1H7
E	2449	UNK	GLU	conflict	UNP A0R1H7
E	2450	UNK	TRP	conflict	UNP A0R1H7
E	2451	UNK	ASP	conflict	UNP A0R1H7
E	2452	UNK	ASP	conflict	UNP A0R1H7
E	2453	UNK	LEU	conflict	UNP A0R1H7
F	929	UNK	GLU	conflict	UNP A0R1H7
F	930	UNK	PRO	conflict	UNP A0R1H7
F	931	UNK	VAL	conflict	UNP A0R1H7
F	932	UNK	GLU	conflict	UNP A0R1H7
F	933	UNK	VAL	conflict	UNP A0R1H7
F	934	UNK	LEU	conflict	UNP A0R1H7
F	935	UNK	SER	conflict	UNP A0R1H7
F	936	UNK	ARG	conflict	UNP A0R1H7
F	937	UNK	ARG	conflict	UNP A0R1H7
F	938	UNK	GLN	conflict	UNP A0R1H7
F	939	UNK	ALA	conflict	UNP A0R1H7
F	940	UNK	ARG	conflict	UNP A0R1H7
F	941	UNK	ARG	conflict	UNP A0R1H7
F	942	UNK	ASP	conflict	UNP A0R1H7
F	943	UNK	ALA	conflict	UNP A0R1H7
F	944	UNK	SER	conflict	UNP A0R1H7
F	974	UNK	THR	conflict	UNP A0R1H7
F	975	UNK	GLU	conflict	UNP A0R1H7
F	976	UNK	TRP	conflict	UNP A0R1H7
F	977	UNK	GLN	conflict	UNP A0R1H7
F	978	UNK	VAL	conflict	UNP A0R1H7
F	979	UNK	ARG	conflict	UNP A0R1H7
F	980	UNK	GLU	conflict	UNP A0R1H7
F	981	UNK	GLY	conflict	UNP A0R1H7
F	982	UNK	SER	conflict	UNP A0R1H7
F	983	UNK	ASP	conflict	UNP A0R1H7
F	984	UNK	ASN	conflict	UNP A0R1H7
F	985	UNK	ARG	conflict	UNP A0R1H7
F	986	UNK	SER	conflict	UNP A0R1H7
F	987	UNK	ALA	conflict	UNP A0R1H7
F	988	UNK	SER	conflict	UNP A0R1H7
F	989	UNK	HIS	conflict	UNP A0R1H7
F	990	UNK	PRO	conflict	UNP A0R1H7
F	991	UNK	SER	conflict	UNP A0R1H7

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Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
F	992	UNK	THR	conflict	UNP A0R1H7
F	993	UNK	GLY	conflict	UNP A0R1H7
F	994	UNK	ALA	conflict	UNP A0R1H7
F	995	UNK	ARG	conflict	UNP A0R1H7
F	996	UNK	LEU	conflict	UNP A0R1H7
F	997	UNK	GLU	conflict	UNP A0R1H7
F	998	UNK	VAL	conflict	UNP A0R1H7
F	999	UNK	ALA	conflict	UNP A0R1H7
F	1000	UNK	ASP	conflict	UNP A0R1H7
F	1001	UNK	ASP	conflict	UNP A0R1H7
F	1002	UNK	GLN	conflict	UNP A0R1H7
F	1003	UNK	HIS	conflict	UNP A0R1H7
F	1004	UNK	VAL	conflict	UNP A0R1H7
F	1005	UNK	VAL	conflict	UNP A0R1H7
F	1006	UNK	LEU	conflict	UNP A0R1H7
F	1007	UNK	SER	conflict	UNP A0R1H7
F	1008	UNK	VAL	conflict	UNP A0R1H7
F	1009	UNK	PRO	conflict	UNP A0R1H7
F	1010	UNK	LEU	conflict	UNP A0R1H7
F	1011	UNK	SER	conflict	UNP A0R1H7
F	1012	UNK	GLY	conflict	UNP A0R1H7
F	1013	UNK	THR	conflict	UNP A0R1H7
F	1014	UNK	TRP	conflict	UNP A0R1H7
F	1196	UNK	GLY	conflict	UNP A0R1H7
F	1197	UNK	ARG	conflict	UNP A0R1H7
F	1198	UNK	THR	conflict	UNP A0R1H7
F	1199	UNK	GLY	conflict	UNP A0R1H7
F	1200	UNK	ALA	conflict	UNP A0R1H7
F	1201	UNK	ALA	conflict	UNP A0R1H7
F	1202	UNK	GLU	conflict	UNP A0R1H7
F	1203	UNK	LEU	conflict	UNP A0R1H7
F	1204	UNK	THR	conflict	UNP A0R1H7
F	1205	UNK	ASP	conflict	UNP A0R1H7
F	1206	UNK	PRO	conflict	UNP A0R1H7
F	1207	UNK	VAL	conflict	UNP A0R1H7
F	1208	UNK	ARG	conflict	UNP A0R1H7
F	1209	UNK	ALA	conflict	UNP A0R1H7
F	1210	UNK	GLY	conflict	UNP A0R1H7
F	1211	UNK	GLY	conflict	UNP A0R1H7
F	1212	UNK	ALA	conflict	UNP A0R1H7
F	1213	UNK	ILE	conflict	UNP A0R1H7
F	1214	UNK	SER	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
F	1215	UNK	ASP	conflict	UNP A0R1H7
F	1216	UNK	ASN	conflict	UNP A0R1H7
F	1217	UNK	ALA	conflict	UNP A0R1H7
F	1218	UNK	THR	conflict	UNP A0R1H7
F	1219	UNK	ASP	conflict	UNP A0R1H7
F	1220	UNK	THR	conflict	UNP A0R1H7
F	1221	UNK	PRO	conflict	UNP A0R1H7
F	1222	UNK	ARG	conflict	UNP A0R1H7
F	1223	UNK	ARG	conflict	UNP A0R1H7
F	1224	UNK	ARG	conflict	UNP A0R1H7
F	1225	UNK	ARG	conflict	UNP A0R1H7
F	1226	UNK	ARG	conflict	UNP A0R1H7
F	1227	UNK	ASP	conflict	UNP A0R1H7
F	2076	UNK	GLY	conflict	UNP A0R1H7
F	2077	UNK	ASP	conflict	UNP A0R1H7
F	2078	UNK	ILE	conflict	UNP A0R1H7
F	2079	UNK	ASP	conflict	UNP A0R1H7
F	2080	UNK	ALA	conflict	UNP A0R1H7
F	2081	UNK	GLN	conflict	UNP A0R1H7
F	2082	UNK	TRP	conflict	UNP A0R1H7
F	2083	UNK	GLU	conflict	UNP A0R1H7
F	2084	UNK	GLN	conflict	UNP A0R1H7
F	2085	UNK	LEU	conflict	UNP A0R1H7
F	2086	UNK	SER	conflict	UNP A0R1H7
F	2087	UNK	GLN	conflict	UNP A0R1H7
F	2088	UNK	ARG	conflict	UNP A0R1H7
F	2089	UNK	PHE	conflict	UNP A0R1H7
F	2090	UNK	GLU	conflict	UNP A0R1H7
F	2091	UNK	GLY	conflict	UNP A0R1H7
F	2092	UNK	THR	conflict	UNP A0R1H7
F	2093	UNK	GLY	conflict	UNP A0R1H7
F	2094	UNK	HIS	conflict	UNP A0R1H7
F	2095	UNK	VAL	conflict	UNP A0R1H7
F	2096	UNK	VAL	conflict	UNP A0R1H7
F	2097	UNK	ALA	conflict	UNP A0R1H7
F	2098	UNK	THR	conflict	UNP A0R1H7
F	2099	UNK	GLN	conflict	UNP A0R1H7
F	2100	UNK	ALA	conflict	UNP A0R1H7
F	2101	UNK	ASN	conflict	UNP A0R1H7
F	2102	UNK	TRP	conflict	UNP A0R1H7
F	2103	UNK	TRP	conflict	UNP A0R1H7
F	2104	UNK	GLN	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
F	2105	UNK	GLY	conflict	UNP A0R1H7
F	2106	UNK	LYS	conflict	UNP A0R1H7
F	2107	UNK	ALA	conflict	UNP A0R1H7
F	2108	UNK	LEU	conflict	UNP A0R1H7
F	2109	UNK	ALA	conflict	UNP A0R1H7
F	2110	UNK	ALA	conflict	UNP A0R1H7
F	2111	UNK	GLY	conflict	UNP A0R1H7
F	2112	UNK	ARG	conflict	UNP A0R1H7
F	2113	UNK	ASN	conflict	UNP A0R1H7
F	2114	UNK	VAL	conflict	UNP A0R1H7
F	2115	UNK	HIS	conflict	UNP A0R1H7
F	2116	UNK	ALA	conflict	UNP A0R1H7
F	2117	UNK	SER	conflict	UNP A0R1H7
F	2118	UNK	LEU	conflict	UNP A0R1H7
F	2119	UNK	PHE	conflict	UNP A0R1H7
F	2120	UNK	GLY	conflict	UNP A0R1H7
F	2121	UNK	ARG	conflict	UNP A0R1H7
F	2122	UNK	ILE	conflict	UNP A0R1H7
F	2123	UNK	ALA	conflict	UNP A0R1H7
F	2124	UNK	ALA	conflict	UNP A0R1H7
F	2125	UNK	GLY	conflict	UNP A0R1H7
F	2126	UNK	ALA	conflict	UNP A0R1H7
F	2127	UNK	GLU	conflict	UNP A0R1H7
F	2128	UNK	ASN	conflict	UNP A0R1H7
F	2129	UNK	PRO	conflict	UNP A0R1H7
F	2130	UNK	GLY	conflict	UNP A0R1H7
F	2131	UNK	LYS	conflict	UNP A0R1H7
F	2132	UNK	GLY	conflict	UNP A0R1H7
F	2133	UNK	ARG	conflict	UNP A0R1H7
F	2134	UNK	TYR	conflict	UNP A0R1H7
F	2135	UNK	SER	conflict	UNP A0R1H7
F	2422	UNK	GLU	conflict	UNP A0R1H7
F	2423	UNK	SER	conflict	UNP A0R1H7
F	2424	UNK	ASP	conflict	UNP A0R1H7
F	2425	UNK	ASP	conflict	UNP A0R1H7
F	2426	UNK	GLU	conflict	UNP A0R1H7
F	2427	UNK	ALA	conflict	UNP A0R1H7
F	2428	UNK	PRO	conflict	UNP A0R1H7
F	2429	UNK	ALA	conflict	UNP A0R1H7
F	2430	UNK	GLY	conflict	UNP A0R1H7
F	2431	UNK	THR	conflict	UNP A0R1H7
F	2432	UNK	ILE	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
F	2433	UNK	ARG	conflict	UNP A0R1H7
F	2434	UNK	ALA	conflict	UNP A0R1H7
F	2435	UNK	LEU	conflict	UNP A0R1H7
F	2436	UNK	PRO	conflict	UNP A0R1H7
F	2437	UNK	SER	conflict	UNP A0R1H7
F	2438	UNK	PRO	conflict	UNP A0R1H7
F	2439	UNK	PRO	conflict	UNP A0R1H7
F	2440	UNK	ARG	conflict	UNP A0R1H7
F	2441	UNK	GLY	conflict	UNP A0R1H7
F	2442	UNK	TYR	conflict	UNP A0R1H7
F	2443	UNK	ASN	conflict	UNP A0R1H7
F	2444	UNK	PRO	conflict	UNP A0R1H7
F	2445	UNK	ALA	conflict	UNP A0R1H7
F	2446	UNK	PRO	conflict	UNP A0R1H7
F	2447	UNK	ALA	conflict	UNP A0R1H7
F	2448	UNK	PRO	conflict	UNP A0R1H7
F	2449	UNK	GLU	conflict	UNP A0R1H7
F	2450	UNK	TRP	conflict	UNP A0R1H7
F	2451	UNK	ASP	conflict	UNP A0R1H7
F	2452	UNK	ASP	conflict	UNP A0R1H7
F	2453	UNK	LEU	conflict	UNP A0R1H7
A	929	UNK	GLU	conflict	UNP A0R1H7
A	930	UNK	PRO	conflict	UNP A0R1H7
A	931	UNK	VAL	conflict	UNP A0R1H7
A	932	UNK	GLU	conflict	UNP A0R1H7
A	933	UNK	VAL	conflict	UNP A0R1H7
A	934	UNK	LEU	conflict	UNP A0R1H7
A	935	UNK	SER	conflict	UNP A0R1H7
A	936	UNK	ARG	conflict	UNP A0R1H7
A	937	UNK	ARG	conflict	UNP A0R1H7
A	938	UNK	GLN	conflict	UNP A0R1H7
A	939	UNK	ALA	conflict	UNP A0R1H7
A	940	UNK	ARG	conflict	UNP A0R1H7
A	941	UNK	ARG	conflict	UNP A0R1H7
A	942	UNK	ASP	conflict	UNP A0R1H7
A	943	UNK	ALA	conflict	UNP A0R1H7
A	944	UNK	SER	conflict	UNP A0R1H7
A	974	UNK	THR	conflict	UNP A0R1H7
A	975	UNK	GLU	conflict	UNP A0R1H7
A	976	UNK	TRP	conflict	UNP A0R1H7
A	977	UNK	GLN	conflict	UNP A0R1H7
A	978	UNK	VAL	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
A	979	UNK	ARG	conflict	UNP A0R1H7
A	980	UNK	GLU	conflict	UNP A0R1H7
A	981	UNK	GLY	conflict	UNP A0R1H7
A	982	UNK	SER	conflict	UNP A0R1H7
A	983	UNK	ASP	conflict	UNP A0R1H7
A	984	UNK	ASN	conflict	UNP A0R1H7
A	985	UNK	ARG	conflict	UNP A0R1H7
A	986	UNK	SER	conflict	UNP A0R1H7
A	987	UNK	ALA	conflict	UNP A0R1H7
A	988	UNK	SER	conflict	UNP A0R1H7
A	989	UNK	HIS	conflict	UNP A0R1H7
A	990	UNK	PRO	conflict	UNP A0R1H7
A	991	UNK	SER	conflict	UNP A0R1H7
A	992	UNK	THR	conflict	UNP A0R1H7
A	993	UNK	GLY	conflict	UNP A0R1H7
A	994	UNK	ALA	conflict	UNP A0R1H7
A	995	UNK	ARG	conflict	UNP A0R1H7
A	996	UNK	LEU	conflict	UNP A0R1H7
A	997	UNK	GLU	conflict	UNP A0R1H7
A	998	UNK	VAL	conflict	UNP A0R1H7
A	999	UNK	ALA	conflict	UNP A0R1H7
A	1000	UNK	ASP	conflict	UNP A0R1H7
A	1001	UNK	ASP	conflict	UNP A0R1H7
A	1002	UNK	GLN	conflict	UNP A0R1H7
A	1003	UNK	HIS	conflict	UNP A0R1H7
A	1004	UNK	VAL	conflict	UNP A0R1H7
A	1005	UNK	VAL	conflict	UNP A0R1H7
A	1006	UNK	LEU	conflict	UNP A0R1H7
A	1007	UNK	SER	conflict	UNP A0R1H7
A	1008	UNK	VAL	conflict	UNP A0R1H7
A	1009	UNK	PRO	conflict	UNP A0R1H7
A	1010	UNK	LEU	conflict	UNP A0R1H7
A	1011	UNK	SER	conflict	UNP A0R1H7
A	1012	UNK	GLY	conflict	UNP A0R1H7
A	1013	UNK	THR	conflict	UNP A0R1H7
A	1014	UNK	TRP	conflict	UNP A0R1H7
A	1196	UNK	GLY	conflict	UNP A0R1H7
A	1197	UNK	ARG	conflict	UNP A0R1H7
A	1198	UNK	THR	conflict	UNP A0R1H7
A	1199	UNK	GLY	conflict	UNP A0R1H7
A	1200	UNK	ALA	conflict	UNP A0R1H7
A	1201	UNK	ALA	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A	1202	UNK	GLU	conflict	UNP A0R1H7
A	1203	UNK	LEU	conflict	UNP A0R1H7
A	1204	UNK	THR	conflict	UNP A0R1H7
A	1205	UNK	ASP	conflict	UNP A0R1H7
A	1206	UNK	PRO	conflict	UNP A0R1H7
A	1207	UNK	VAL	conflict	UNP A0R1H7
A	1208	UNK	ARG	conflict	UNP A0R1H7
A	1209	UNK	ALA	conflict	UNP A0R1H7
A	1210	UNK	GLY	conflict	UNP A0R1H7
A	1211	UNK	GLY	conflict	UNP A0R1H7
A	1212	UNK	ALA	conflict	UNP A0R1H7
A	1213	UNK	ILE	conflict	UNP A0R1H7
A	1214	UNK	SER	conflict	UNP A0R1H7
A	1215	UNK	ASP	conflict	UNP A0R1H7
A	1216	UNK	ASN	conflict	UNP A0R1H7
A	1217	UNK	ALA	conflict	UNP A0R1H7
A	1218	UNK	THR	conflict	UNP A0R1H7
A	1219	UNK	ASP	conflict	UNP A0R1H7
A	1220	UNK	THR	conflict	UNP A0R1H7
A	1221	UNK	PRO	conflict	UNP A0R1H7
A	1222	UNK	ARG	conflict	UNP A0R1H7
A	1223	UNK	ARG	conflict	UNP A0R1H7
A	1224	UNK	ARG	conflict	UNP A0R1H7
A	1225	UNK	ARG	conflict	UNP A0R1H7
A	1226	UNK	ARG	conflict	UNP A0R1H7
A	1227	UNK	ASP	conflict	UNP A0R1H7
A	2076	UNK	GLY	conflict	UNP A0R1H7
A	2077	UNK	ASP	conflict	UNP A0R1H7
A	2078	UNK	ILE	conflict	UNP A0R1H7
A	2079	UNK	ASP	conflict	UNP A0R1H7
A	2080	UNK	ALA	conflict	UNP A0R1H7
A	2081	UNK	GLN	conflict	UNP A0R1H7
A	2082	UNK	TRP	conflict	UNP A0R1H7
A	2083	UNK	GLU	conflict	UNP A0R1H7
A	2084	UNK	GLN	conflict	UNP A0R1H7
A	2085	UNK	LEU	conflict	UNP A0R1H7
A	2086	UNK	SER	conflict	UNP A0R1H7
A	2087	UNK	GLN	conflict	UNP A0R1H7
A	2088	UNK	ARG	conflict	UNP A0R1H7
A	2089	UNK	PHE	conflict	UNP A0R1H7
A	2090	UNK	GLU	conflict	UNP A0R1H7
A	2091	UNK	GLY	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A	2092	UNK	THR	conflict	UNP A0R1H7
A	2093	UNK	GLY	conflict	UNP A0R1H7
A	2094	UNK	HIS	conflict	UNP A0R1H7
A	2095	UNK	VAL	conflict	UNP A0R1H7
A	2096	UNK	VAL	conflict	UNP A0R1H7
A	2097	UNK	ALA	conflict	UNP A0R1H7
A	2098	UNK	THR	conflict	UNP A0R1H7
A	2099	UNK	GLN	conflict	UNP A0R1H7
A	2100	UNK	ALA	conflict	UNP A0R1H7
A	2101	UNK	ASN	conflict	UNP A0R1H7
A	2102	UNK	TRP	conflict	UNP A0R1H7
A	2103	UNK	TRP	conflict	UNP A0R1H7
A	2104	UNK	GLN	conflict	UNP A0R1H7
A	2105	UNK	GLY	conflict	UNP A0R1H7
A	2106	UNK	LYS	conflict	UNP A0R1H7
A	2107	UNK	ALA	conflict	UNP A0R1H7
A	2108	UNK	LEU	conflict	UNP A0R1H7
A	2109	UNK	ALA	conflict	UNP A0R1H7
A	2110	UNK	ALA	conflict	UNP A0R1H7
A	2111	UNK	GLY	conflict	UNP A0R1H7
A	2112	UNK	ARG	conflict	UNP A0R1H7
A	2113	UNK	ASN	conflict	UNP A0R1H7
A	2114	UNK	VAL	conflict	UNP A0R1H7
A	2115	UNK	HIS	conflict	UNP A0R1H7
A	2116	UNK	ALA	conflict	UNP A0R1H7
A	2117	UNK	SER	conflict	UNP A0R1H7
A	2118	UNK	LEU	conflict	UNP A0R1H7
A	2119	UNK	PHE	conflict	UNP A0R1H7
A	2120	UNK	GLY	conflict	UNP A0R1H7
A	2121	UNK	ARG	conflict	UNP A0R1H7
A	2122	UNK	ILE	conflict	UNP A0R1H7
A	2123	UNK	ALA	conflict	UNP A0R1H7
A	2124	UNK	ALA	conflict	UNP A0R1H7
A	2125	UNK	GLY	conflict	UNP A0R1H7
A	2126	UNK	ALA	conflict	UNP A0R1H7
A	2127	UNK	GLU	conflict	UNP A0R1H7
A	2128	UNK	ASN	conflict	UNP A0R1H7
A	2129	UNK	PRO	conflict	UNP A0R1H7
A	2130	UNK	GLY	conflict	UNP A0R1H7
A	2131	UNK	LYS	conflict	UNP A0R1H7
A	2132	UNK	GLY	conflict	UNP A0R1H7
A	2133	UNK	ARG	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
A	2134	UNK	TYR	conflict	UNP A0R1H7
A	2135	UNK	SER	conflict	UNP A0R1H7
A	2422	UNK	GLU	conflict	UNP A0R1H7
A	2423	UNK	SER	conflict	UNP A0R1H7
A	2424	UNK	ASP	conflict	UNP A0R1H7
A	2425	UNK	ASP	conflict	UNP A0R1H7
A	2426	UNK	GLU	conflict	UNP A0R1H7
A	2427	UNK	ALA	conflict	UNP A0R1H7
A	2428	UNK	PRO	conflict	UNP A0R1H7
A	2429	UNK	ALA	conflict	UNP A0R1H7
A	2430	UNK	GLY	conflict	UNP A0R1H7
A	2431	UNK	THR	conflict	UNP A0R1H7
A	2432	UNK	ILE	conflict	UNP A0R1H7
A	2433	UNK	ARG	conflict	UNP A0R1H7
A	2434	UNK	ALA	conflict	UNP A0R1H7
A	2435	UNK	LEU	conflict	UNP A0R1H7
A	2436	UNK	PRO	conflict	UNP A0R1H7
A	2437	UNK	SER	conflict	UNP A0R1H7
A	2438	UNK	PRO	conflict	UNP A0R1H7
A	2439	UNK	PRO	conflict	UNP A0R1H7
A	2440	UNK	ARG	conflict	UNP A0R1H7
A	2441	UNK	GLY	conflict	UNP A0R1H7
A	2442	UNK	TYR	conflict	UNP A0R1H7
A	2443	UNK	ASN	conflict	UNP A0R1H7
A	2444	UNK	PRO	conflict	UNP A0R1H7
A	2445	UNK	ALA	conflict	UNP A0R1H7
A	2446	UNK	PRO	conflict	UNP A0R1H7
A	2447	UNK	ALA	conflict	UNP A0R1H7
A	2448	UNK	PRO	conflict	UNP A0R1H7
A	2449	UNK	GLU	conflict	UNP A0R1H7
A	2450	UNK	TRP	conflict	UNP A0R1H7
A	2451	UNK	ASP	conflict	UNP A0R1H7
A	2452	UNK	ASP	conflict	UNP A0R1H7
A	2453	UNK	LEU	conflict	UNP A0R1H7
B	929	UNK	GLU	conflict	UNP A0R1H7
B	930	UNK	PRO	conflict	UNP A0R1H7
B	931	UNK	VAL	conflict	UNP A0R1H7
B	932	UNK	GLU	conflict	UNP A0R1H7
B	933	UNK	VAL	conflict	UNP A0R1H7
B	934	UNK	LEU	conflict	UNP A0R1H7
B	935	UNK	SER	conflict	UNP A0R1H7
B	936	UNK	ARG	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	937	UNK	ARG	conflict	UNP A0R1H7
B	938	UNK	GLN	conflict	UNP A0R1H7
B	939	UNK	ALA	conflict	UNP A0R1H7
B	940	UNK	ARG	conflict	UNP A0R1H7
B	941	UNK	ARG	conflict	UNP A0R1H7
B	942	UNK	ASP	conflict	UNP A0R1H7
B	943	UNK	ALA	conflict	UNP A0R1H7
B	944	UNK	SER	conflict	UNP A0R1H7
B	974	UNK	THR	conflict	UNP A0R1H7
B	975	UNK	GLU	conflict	UNP A0R1H7
B	976	UNK	TRP	conflict	UNP A0R1H7
B	977	UNK	GLN	conflict	UNP A0R1H7
B	978	UNK	VAL	conflict	UNP A0R1H7
B	979	UNK	ARG	conflict	UNP A0R1H7
B	980	UNK	GLU	conflict	UNP A0R1H7
B	981	UNK	GLY	conflict	UNP A0R1H7
B	982	UNK	SER	conflict	UNP A0R1H7
B	983	UNK	ASP	conflict	UNP A0R1H7
B	984	UNK	ASN	conflict	UNP A0R1H7
B	985	UNK	ARG	conflict	UNP A0R1H7
B	986	UNK	SER	conflict	UNP A0R1H7
B	987	UNK	ALA	conflict	UNP A0R1H7
B	988	UNK	SER	conflict	UNP A0R1H7
B	989	UNK	HIS	conflict	UNP A0R1H7
B	990	UNK	PRO	conflict	UNP A0R1H7
B	991	UNK	SER	conflict	UNP A0R1H7
B	992	UNK	THR	conflict	UNP A0R1H7
B	993	UNK	GLY	conflict	UNP A0R1H7
B	994	UNK	ALA	conflict	UNP A0R1H7
B	995	UNK	ARG	conflict	UNP A0R1H7
B	996	UNK	LEU	conflict	UNP A0R1H7
B	997	UNK	GLU	conflict	UNP A0R1H7
B	998	UNK	VAL	conflict	UNP A0R1H7
B	999	UNK	ALA	conflict	UNP A0R1H7
B	1000	UNK	ASP	conflict	UNP A0R1H7
B	1001	UNK	ASP	conflict	UNP A0R1H7
B	1002	UNK	GLN	conflict	UNP A0R1H7
B	1003	UNK	HIS	conflict	UNP A0R1H7
B	1004	UNK	VAL	conflict	UNP A0R1H7
B	1005	UNK	VAL	conflict	UNP A0R1H7
B	1006	UNK	LEU	conflict	UNP A0R1H7
B	1007	UNK	SER	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	1008	UNK	VAL	conflict	UNP A0R1H7
B	1009	UNK	PRO	conflict	UNP A0R1H7
B	1010	UNK	LEU	conflict	UNP A0R1H7
B	1011	UNK	SER	conflict	UNP A0R1H7
B	1012	UNK	GLY	conflict	UNP A0R1H7
B	1013	UNK	THR	conflict	UNP A0R1H7
B	1014	UNK	TRP	conflict	UNP A0R1H7
B	1196	UNK	GLY	conflict	UNP A0R1H7
B	1197	UNK	ARG	conflict	UNP A0R1H7
B	1198	UNK	THR	conflict	UNP A0R1H7
B	1199	UNK	GLY	conflict	UNP A0R1H7
B	1200	UNK	ALA	conflict	UNP A0R1H7
B	1201	UNK	ALA	conflict	UNP A0R1H7
B	1202	UNK	GLU	conflict	UNP A0R1H7
B	1203	UNK	LEU	conflict	UNP A0R1H7
B	1204	UNK	THR	conflict	UNP A0R1H7
B	1205	UNK	ASP	conflict	UNP A0R1H7
B	1206	UNK	PRO	conflict	UNP A0R1H7
B	1207	UNK	VAL	conflict	UNP A0R1H7
B	1208	UNK	ARG	conflict	UNP A0R1H7
B	1209	UNK	ALA	conflict	UNP A0R1H7
B	1210	UNK	GLY	conflict	UNP A0R1H7
B	1211	UNK	GLY	conflict	UNP A0R1H7
B	1212	UNK	ALA	conflict	UNP A0R1H7
B	1213	UNK	ILE	conflict	UNP A0R1H7
B	1214	UNK	SER	conflict	UNP A0R1H7
B	1215	UNK	ASP	conflict	UNP A0R1H7
B	1216	UNK	ASN	conflict	UNP A0R1H7
B	1217	UNK	ALA	conflict	UNP A0R1H7
B	1218	UNK	THR	conflict	UNP A0R1H7
B	1219	UNK	ASP	conflict	UNP A0R1H7
B	1220	UNK	THR	conflict	UNP A0R1H7
B	1221	UNK	PRO	conflict	UNP A0R1H7
B	1222	UNK	ARG	conflict	UNP A0R1H7
B	1223	UNK	ARG	conflict	UNP A0R1H7
B	1224	UNK	ARG	conflict	UNP A0R1H7
B	1225	UNK	ARG	conflict	UNP A0R1H7
B	1226	UNK	ARG	conflict	UNP A0R1H7
B	1227	UNK	ASP	conflict	UNP A0R1H7
B	2076	UNK	GLY	conflict	UNP A0R1H7
B	2077	UNK	ASP	conflict	UNP A0R1H7
B	2078	UNK	ILE	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	2079	UNK	ASP	conflict	UNP A0R1H7
B	2080	UNK	ALA	conflict	UNP A0R1H7
B	2081	UNK	GLN	conflict	UNP A0R1H7
B	2082	UNK	TRP	conflict	UNP A0R1H7
B	2083	UNK	GLU	conflict	UNP A0R1H7
B	2084	UNK	GLN	conflict	UNP A0R1H7
B	2085	UNK	LEU	conflict	UNP A0R1H7
B	2086	UNK	SER	conflict	UNP A0R1H7
B	2087	UNK	GLN	conflict	UNP A0R1H7
B	2088	UNK	ARG	conflict	UNP A0R1H7
B	2089	UNK	PHE	conflict	UNP A0R1H7
B	2090	UNK	GLU	conflict	UNP A0R1H7
B	2091	UNK	GLY	conflict	UNP A0R1H7
B	2092	UNK	THR	conflict	UNP A0R1H7
B	2093	UNK	GLY	conflict	UNP A0R1H7
B	2094	UNK	HIS	conflict	UNP A0R1H7
B	2095	UNK	VAL	conflict	UNP A0R1H7
B	2096	UNK	VAL	conflict	UNP A0R1H7
B	2097	UNK	ALA	conflict	UNP A0R1H7
B	2098	UNK	THR	conflict	UNP A0R1H7
B	2099	UNK	GLN	conflict	UNP A0R1H7
B	2100	UNK	ALA	conflict	UNP A0R1H7
B	2101	UNK	ASN	conflict	UNP A0R1H7
B	2102	UNK	TRP	conflict	UNP A0R1H7
B	2103	UNK	TRP	conflict	UNP A0R1H7
B	2104	UNK	GLN	conflict	UNP A0R1H7
B	2105	UNK	GLY	conflict	UNP A0R1H7
B	2106	UNK	LYS	conflict	UNP A0R1H7
B	2107	UNK	ALA	conflict	UNP A0R1H7
B	2108	UNK	LEU	conflict	UNP A0R1H7
B	2109	UNK	ALA	conflict	UNP A0R1H7
B	2110	UNK	ALA	conflict	UNP A0R1H7
B	2111	UNK	GLY	conflict	UNP A0R1H7
B	2112	UNK	ARG	conflict	UNP A0R1H7
B	2113	UNK	ASN	conflict	UNP A0R1H7
B	2114	UNK	VAL	conflict	UNP A0R1H7
B	2115	UNK	HIS	conflict	UNP A0R1H7
B	2116	UNK	ALA	conflict	UNP A0R1H7
B	2117	UNK	SER	conflict	UNP A0R1H7
B	2118	UNK	LEU	conflict	UNP A0R1H7
B	2119	UNK	PHE	conflict	UNP A0R1H7
B	2120	UNK	GLY	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
B	2121	UNK	ARG	conflict	UNP A0R1H7
B	2122	UNK	ILE	conflict	UNP A0R1H7
B	2123	UNK	ALA	conflict	UNP A0R1H7
B	2124	UNK	ALA	conflict	UNP A0R1H7
B	2125	UNK	GLY	conflict	UNP A0R1H7
B	2126	UNK	ALA	conflict	UNP A0R1H7
B	2127	UNK	GLU	conflict	UNP A0R1H7
B	2128	UNK	ASN	conflict	UNP A0R1H7
B	2129	UNK	PRO	conflict	UNP A0R1H7
B	2130	UNK	GLY	conflict	UNP A0R1H7
B	2131	UNK	LYS	conflict	UNP A0R1H7
B	2132	UNK	GLY	conflict	UNP A0R1H7
B	2133	UNK	ARG	conflict	UNP A0R1H7
B	2134	UNK	TYR	conflict	UNP A0R1H7
B	2135	UNK	SER	conflict	UNP A0R1H7
B	2422	UNK	GLU	conflict	UNP A0R1H7
B	2423	UNK	SER	conflict	UNP A0R1H7
B	2424	UNK	ASP	conflict	UNP A0R1H7
B	2425	UNK	ASP	conflict	UNP A0R1H7
B	2426	UNK	GLU	conflict	UNP A0R1H7
B	2427	UNK	ALA	conflict	UNP A0R1H7
B	2428	UNK	PRO	conflict	UNP A0R1H7
B	2429	UNK	ALA	conflict	UNP A0R1H7
B	2430	UNK	GLY	conflict	UNP A0R1H7
B	2431	UNK	THR	conflict	UNP A0R1H7
B	2432	UNK	ILE	conflict	UNP A0R1H7
B	2433	UNK	ARG	conflict	UNP A0R1H7
B	2434	UNK	ALA	conflict	UNP A0R1H7
B	2435	UNK	LEU	conflict	UNP A0R1H7
B	2436	UNK	PRO	conflict	UNP A0R1H7
B	2437	UNK	SER	conflict	UNP A0R1H7
B	2438	UNK	PRO	conflict	UNP A0R1H7
B	2439	UNK	PRO	conflict	UNP A0R1H7
B	2440	UNK	ARG	conflict	UNP A0R1H7
B	2441	UNK	GLY	conflict	UNP A0R1H7
B	2442	UNK	TYR	conflict	UNP A0R1H7
B	2443	UNK	ASN	conflict	UNP A0R1H7
B	2444	UNK	PRO	conflict	UNP A0R1H7
B	2445	UNK	ALA	conflict	UNP A0R1H7
B	2446	UNK	PRO	conflict	UNP A0R1H7
B	2447	UNK	ALA	conflict	UNP A0R1H7
B	2448	UNK	PRO	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
B	2449	UNK	GLU	conflict	UNP A0R1H7
B	2450	UNK	TRP	conflict	UNP A0R1H7
B	2451	UNK	ASP	conflict	UNP A0R1H7
B	2452	UNK	ASP	conflict	UNP A0R1H7
B	2453	UNK	LEU	conflict	UNP A0R1H7
C	929	UNK	GLU	conflict	UNP A0R1H7
C	930	UNK	PRO	conflict	UNP A0R1H7
C	931	UNK	VAL	conflict	UNP A0R1H7
C	932	UNK	GLU	conflict	UNP A0R1H7
C	933	UNK	VAL	conflict	UNP A0R1H7
C	934	UNK	LEU	conflict	UNP A0R1H7
C	935	UNK	SER	conflict	UNP A0R1H7
C	936	UNK	ARG	conflict	UNP A0R1H7
C	937	UNK	ARG	conflict	UNP A0R1H7
C	938	UNK	GLN	conflict	UNP A0R1H7
C	939	UNK	ALA	conflict	UNP A0R1H7
C	940	UNK	ARG	conflict	UNP A0R1H7
C	941	UNK	ARG	conflict	UNP A0R1H7
C	942	UNK	ASP	conflict	UNP A0R1H7
C	943	UNK	ALA	conflict	UNP A0R1H7
C	944	UNK	SER	conflict	UNP A0R1H7
C	974	UNK	THR	conflict	UNP A0R1H7
C	975	UNK	GLU	conflict	UNP A0R1H7
C	976	UNK	TRP	conflict	UNP A0R1H7
C	977	UNK	GLN	conflict	UNP A0R1H7
C	978	UNK	VAL	conflict	UNP A0R1H7
C	979	UNK	ARG	conflict	UNP A0R1H7
C	980	UNK	GLU	conflict	UNP A0R1H7
C	981	UNK	GLY	conflict	UNP A0R1H7
C	982	UNK	SER	conflict	UNP A0R1H7
C	983	UNK	ASP	conflict	UNP A0R1H7
C	984	UNK	ASN	conflict	UNP A0R1H7
C	985	UNK	ARG	conflict	UNP A0R1H7
C	986	UNK	SER	conflict	UNP A0R1H7
C	987	UNK	ALA	conflict	UNP A0R1H7
C	988	UNK	SER	conflict	UNP A0R1H7
C	989	UNK	HIS	conflict	UNP A0R1H7
C	990	UNK	PRO	conflict	UNP A0R1H7
C	991	UNK	SER	conflict	UNP A0R1H7
C	992	UNK	THR	conflict	UNP A0R1H7
C	993	UNK	GLY	conflict	UNP A0R1H7
C	994	UNK	ALA	conflict	UNP A0R1H7

Continued on next page...

Continued from previous page...

Chain	Residue	Modelled	Actual	Comment	Reference
C	995	UNK	ARG	conflict	UNP A0R1H7
C	996	UNK	LEU	conflict	UNP A0R1H7
C	997	UNK	GLU	conflict	UNP A0R1H7
C	998	UNK	VAL	conflict	UNP A0R1H7
C	999	UNK	ALA	conflict	UNP A0R1H7
C	1000	UNK	ASP	conflict	UNP A0R1H7
C	1001	UNK	ASP	conflict	UNP A0R1H7
C	1002	UNK	GLN	conflict	UNP A0R1H7
C	1003	UNK	HIS	conflict	UNP A0R1H7
C	1004	UNK	VAL	conflict	UNP A0R1H7
C	1005	UNK	VAL	conflict	UNP A0R1H7
C	1006	UNK	LEU	conflict	UNP A0R1H7
C	1007	UNK	SER	conflict	UNP A0R1H7
C	1008	UNK	VAL	conflict	UNP A0R1H7
C	1009	UNK	PRO	conflict	UNP A0R1H7
C	1010	UNK	LEU	conflict	UNP A0R1H7
C	1011	UNK	SER	conflict	UNP A0R1H7
C	1012	UNK	GLY	conflict	UNP A0R1H7
C	1013	UNK	THR	conflict	UNP A0R1H7
C	1014	UNK	TRP	conflict	UNP A0R1H7
C	1196	UNK	GLY	conflict	UNP A0R1H7
C	1197	UNK	ARG	conflict	UNP A0R1H7
C	1198	UNK	THR	conflict	UNP A0R1H7
C	1199	UNK	GLY	conflict	UNP A0R1H7
C	1200	UNK	ALA	conflict	UNP A0R1H7
C	1201	UNK	ALA	conflict	UNP A0R1H7
C	1202	UNK	GLU	conflict	UNP A0R1H7
C	1203	UNK	LEU	conflict	UNP A0R1H7
C	1204	UNK	THR	conflict	UNP A0R1H7
C	1205	UNK	ASP	conflict	UNP A0R1H7
C	1206	UNK	PRO	conflict	UNP A0R1H7
C	1207	UNK	VAL	conflict	UNP A0R1H7
C	1208	UNK	ARG	conflict	UNP A0R1H7
C	1209	UNK	ALA	conflict	UNP A0R1H7
C	1210	UNK	GLY	conflict	UNP A0R1H7
C	1211	UNK	GLY	conflict	UNP A0R1H7
C	1212	UNK	ALA	conflict	UNP A0R1H7
C	1213	UNK	ILE	conflict	UNP A0R1H7
C	1214	UNK	SER	conflict	UNP A0R1H7
C	1215	UNK	ASP	conflict	UNP A0R1H7
C	1216	UNK	ASN	conflict	UNP A0R1H7
C	1217	UNK	ALA	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	1218	UNK	THR	conflict	UNP A0R1H7
C	1219	UNK	ASP	conflict	UNP A0R1H7
C	1220	UNK	THR	conflict	UNP A0R1H7
C	1221	UNK	PRO	conflict	UNP A0R1H7
C	1222	UNK	ARG	conflict	UNP A0R1H7
C	1223	UNK	ARG	conflict	UNP A0R1H7
C	1224	UNK	ARG	conflict	UNP A0R1H7
C	1225	UNK	ARG	conflict	UNP A0R1H7
C	1226	UNK	ARG	conflict	UNP A0R1H7
C	1227	UNK	ASP	conflict	UNP A0R1H7
C	2076	UNK	GLY	conflict	UNP A0R1H7
C	2077	UNK	ASP	conflict	UNP A0R1H7
C	2078	UNK	ILE	conflict	UNP A0R1H7
C	2079	UNK	ASP	conflict	UNP A0R1H7
C	2080	UNK	ALA	conflict	UNP A0R1H7
C	2081	UNK	GLN	conflict	UNP A0R1H7
C	2082	UNK	TRP	conflict	UNP A0R1H7
C	2083	UNK	GLU	conflict	UNP A0R1H7
C	2084	UNK	GLN	conflict	UNP A0R1H7
C	2085	UNK	LEU	conflict	UNP A0R1H7
C	2086	UNK	SER	conflict	UNP A0R1H7
C	2087	UNK	GLN	conflict	UNP A0R1H7
C	2088	UNK	ARG	conflict	UNP A0R1H7
C	2089	UNK	PHE	conflict	UNP A0R1H7
C	2090	UNK	GLU	conflict	UNP A0R1H7
C	2091	UNK	GLY	conflict	UNP A0R1H7
C	2092	UNK	THR	conflict	UNP A0R1H7
C	2093	UNK	GLY	conflict	UNP A0R1H7
C	2094	UNK	HIS	conflict	UNP A0R1H7
C	2095	UNK	VAL	conflict	UNP A0R1H7
C	2096	UNK	VAL	conflict	UNP A0R1H7
C	2097	UNK	ALA	conflict	UNP A0R1H7
C	2098	UNK	THR	conflict	UNP A0R1H7
C	2099	UNK	GLN	conflict	UNP A0R1H7
C	2100	UNK	ALA	conflict	UNP A0R1H7
C	2101	UNK	ASN	conflict	UNP A0R1H7
C	2102	UNK	TRP	conflict	UNP A0R1H7
C	2103	UNK	TRP	conflict	UNP A0R1H7
C	2104	UNK	GLN	conflict	UNP A0R1H7
C	2105	UNK	GLY	conflict	UNP A0R1H7
C	2106	UNK	LYS	conflict	UNP A0R1H7
C	2107	UNK	ALA	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	2108	UNK	LEU	conflict	UNP A0R1H7
C	2109	UNK	ALA	conflict	UNP A0R1H7
C	2110	UNK	ALA	conflict	UNP A0R1H7
C	2111	UNK	GLY	conflict	UNP A0R1H7
C	2112	UNK	ARG	conflict	UNP A0R1H7
C	2113	UNK	ASN	conflict	UNP A0R1H7
C	2114	UNK	VAL	conflict	UNP A0R1H7
C	2115	UNK	HIS	conflict	UNP A0R1H7
C	2116	UNK	ALA	conflict	UNP A0R1H7
C	2117	UNK	SER	conflict	UNP A0R1H7
C	2118	UNK	LEU	conflict	UNP A0R1H7
C	2119	UNK	PHE	conflict	UNP A0R1H7
C	2120	UNK	GLY	conflict	UNP A0R1H7
C	2121	UNK	ARG	conflict	UNP A0R1H7
C	2122	UNK	ILE	conflict	UNP A0R1H7
C	2123	UNK	ALA	conflict	UNP A0R1H7
C	2124	UNK	ALA	conflict	UNP A0R1H7
C	2125	UNK	GLY	conflict	UNP A0R1H7
C	2126	UNK	ALA	conflict	UNP A0R1H7
C	2127	UNK	GLU	conflict	UNP A0R1H7
C	2128	UNK	ASN	conflict	UNP A0R1H7
C	2129	UNK	PRO	conflict	UNP A0R1H7
C	2130	UNK	GLY	conflict	UNP A0R1H7
C	2131	UNK	LYS	conflict	UNP A0R1H7
C	2132	UNK	GLY	conflict	UNP A0R1H7
C	2133	UNK	ARG	conflict	UNP A0R1H7
C	2134	UNK	TYR	conflict	UNP A0R1H7
C	2135	UNK	SER	conflict	UNP A0R1H7
C	2422	UNK	GLU	conflict	UNP A0R1H7
C	2423	UNK	SER	conflict	UNP A0R1H7
C	2424	UNK	ASP	conflict	UNP A0R1H7
C	2425	UNK	ASP	conflict	UNP A0R1H7
C	2426	UNK	GLU	conflict	UNP A0R1H7
C	2427	UNK	ALA	conflict	UNP A0R1H7
C	2428	UNK	PRO	conflict	UNP A0R1H7
C	2429	UNK	ALA	conflict	UNP A0R1H7
C	2430	UNK	GLY	conflict	UNP A0R1H7
C	2431	UNK	THR	conflict	UNP A0R1H7
C	2432	UNK	ILE	conflict	UNP A0R1H7
C	2433	UNK	ARG	conflict	UNP A0R1H7
C	2434	UNK	ALA	conflict	UNP A0R1H7
C	2435	UNK	LEU	conflict	UNP A0R1H7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	2436	UNK	PRO	conflict	UNP A0R1H7
C	2437	UNK	SER	conflict	UNP A0R1H7
C	2438	UNK	PRO	conflict	UNP A0R1H7
C	2439	UNK	PRO	conflict	UNP A0R1H7
C	2440	UNK	ARG	conflict	UNP A0R1H7
C	2441	UNK	GLY	conflict	UNP A0R1H7
C	2442	UNK	TYR	conflict	UNP A0R1H7
C	2443	UNK	ASN	conflict	UNP A0R1H7
C	2444	UNK	PRO	conflict	UNP A0R1H7
C	2445	UNK	ALA	conflict	UNP A0R1H7
C	2446	UNK	PRO	conflict	UNP A0R1H7
C	2447	UNK	ALA	conflict	UNP A0R1H7
C	2448	UNK	PRO	conflict	UNP A0R1H7
C	2449	UNK	GLU	conflict	UNP A0R1H7
C	2450	UNK	TRP	conflict	UNP A0R1H7
C	2451	UNK	ASP	conflict	UNP A0R1H7
C	2452	UNK	ASP	conflict	UNP A0R1H7
C	2453	UNK	LEU	conflict	UNP A0R1H7

-
- The image displays the chemical structure of Flavin Mononucleotide (FMN). It features an isoalloxazine ring system, which is a tricyclic aromatic heterocycle consisting of a benzene ring fused to two pyrimidine rings. The atoms in the ring are labeled: N1, N5, N10 for nitrogen atoms and C2, C4, C6, C7, C8, C9, C10, C12 for carbon atoms. Substituents on the ring include a dimethylaminomethyl group at C2 (labeled C7M, C8M, C9) and a ribityl side chain at N10 (labeled C1, C2, C3, C4, C5). The ribityl chain is a three-carbon chain with hydroxyl groups at C2 and C4. The C4 hydroxyl group is shown with a wedge bond, indicating stereochemistry. The C3 atom is labeled C3(S) and the C2 atom is labeled C2(S). The side chain terminates in a phosphate group (labeled O1P, O2P, O3P, O4P, O5P, O6P, O7P, O8P, O9P, O10P, O11P, O12P, O13P, O14P, O15P, O16P, O17P, O18P, O19P, O20P, O21P, O22P, O23P, O24P, O25P, O26P, O27P, O28P, O29P, O30P, O31P, O32P, O33P, O34P, O35P, O36P, O37P, O38P, O39P, O40P, O41P, O42P, O43P, O44P, O45P, O46P, O47P, O48P, O49P, O50P, O51P, O52P, O53P, O54P, O55P, O56P, O57P, O58P, O59P, O60P, O61P, O62P, O63P, O64P, O65P, O66P, O67P, O68P, O69P, O70P, O71P, O72P, O73P, O74P, O75P, O76P, O77P, O78P, O79P, O80P, O81P, O82P, O83P, O84P, O85P, O86P, O87P, O88P, O89P, O90P, O91P, O92P, O93P, O94P, O95P, O96P, O97P, O98P, O99P, O100P, O101P, O102P, O103P, O104P, O105P, O106P, O107P, O108P, O109P, O110P, O111P, O112P, O113P, O114P, O115P, O116P, O117P, O118P, O119P, O120P, O121P, O122P, O123P, O124P, O125P, O126P, O127P, O128P, O129P, O130P, O131P, O132P, O133P, O134P, O135P, O136P, O137P, O138P, O139P, O140P, O141P, O142P, O143P, O144P, O145P, O146P, O147P, O148P, O149P, O150P, O151P, O152P, O153P, O154P, O155P, O156P, O157P, O158P, O159P, O160P, O161P, O162P, O163P, O164P, O165P, O166P, O167P, O168P, O169P, O170P, O171P, O172P, O173P, O174P, O175P, O176P, O177P, O178P, O179P, O180P, O181P, O182P, O183P, O184P, O185P, O186P, O187P, O188P, O189P, O190P, O191P, O192P, O193P, O194P, O195P, O196P, O197P, O198P, O199P, O200P, O201P, O202P, O203P, O204P, O205P, O206P, O207P, O208P, O209P, O210P, O211P, O212P, O213P, O214P, O215P, O216P, O217P, O218P, O219P, O220P, O221P, O222P, O223P, O224P, O225P, O226P, O227P, O228P, O229P, O230P, O231P, O232P, O233P, O234P, O235P, O236P, O237P, O238P, O239P, O240P, O241P, O242P, O243P, O244P, O245P, O246P, O247P, O248P, O249P, O250P, O251P, O252P, O253P, O254P, O255P, O256P, O257P, O258P, O259P, O260P, O261P, O262P, O263P, O264P, O265P, O266P, O267P, O268P, O269P, O270P, O271P, O272P, O273P, O274P, O275P, O276P, O277P, O278P, O279P, O280P, O281P, O282P, O283P, O284P, O285P, O286P, O287P, O288P, O289P, O290P, O291P, O292P, O293P, O294P, O295P, O296P, O297P, O298P, O299P, O300P, O301P, O302P, O303P, O304P, O305P, O306P, O307P, O308P, O309P, O310P, O311P, O312P, O313P, O314P, O315P, O316P, O317P, O318P, O319P, O320P, O321P, O322P, O323P, O324P, O325P, O326P, O327P, O328P, O329P, O330P, O331P, O332P, O333P, O334P, O335P, O336P, O337P, O338P, O339P, O340P, O341P, O342P, O343P, O344P, O345P, O346P, O347P, O348P, O349P, O350P, O351P, O352P, O353P, O354P, O355P, O356P, O357P, O358P, O359P, O360P, O361P, O362P, O363P, O364P, O365P, O366P, O367P, O368P, O369P, O370P, O371P, O372P, O373P, O374P, O375P, O376P, O377P, O378P, O379P, O380P, O381P, O382P, O383P, O384P, O385P, O386P, O387P, O388P, O389P, O390P, O391P, O392P, O393P, O394P, O395P, O396P, O397P, O398P, O399P, O400P, O401P, O402P, O403P, O404P, O405P, O406P, O407P, O408P, O409P, O410P, O411P, O412P, O413P, O414P, O415P, O416P, O417P, O418P, O419P, O420P, O421P, O422P, O423P, O424P, O425P, O426P, O427P, O428P, O429P, O430P, O431P, O432P, O433P, O434P, O435P, O436P, O437P, O438P, O439P, O440P, O441P, O442P, O443P, O444P, O445P, O446P, O447P, O448P, O449P, O450P, O451P, O452P, O453P, O454P, O455P, O456P, O457P, O458P, O459P, O460P, O461P, O462P, O463P, O464P, O465P, O466P, O467P, O468P, O469P, O470P, O471P, O472P, O473P, O474P, O475P, O476P, O477P, O478P, O479P, O480P, O481P, O482P, O483P, O484P, O485P, O486P, O487P, O488P, O489P, O490P, O491P, O492P, O493P, O494P, O495P, O496P, O497P, O498P, O499P, O500P, O501P, O502P, O503P, O504P, O505P, O506P, O507P, O508P, O509P, O510P, O511P, O512P, O513P, O514P, O515P, O516P, O517P, O518P, O519P, O520P, O521P, O522P, O523P, O524P, O525P, O526P, O527P, O528P, O529P, O530P, O531P, O532P, O533P, O534P, O535P, O536P, O537P, O538P, O539P, O540P, O541P, O542P, O543P, O544P, O545P, O546P, O547P, O548P, O549P, O550P, O551P, O552P, O553P, O554P, O555P, O556P, O557P, O558P, O559P, O560P, O561P, O562P, O563P, O564P, O565P, O566P, O567P, O568P, O569P, O570P, O571P, O572P, O573P, O574P, O575P, O576P, O577P, O578P, O579P, O580P, O581P, O582P, O583P, O584P, O585P, O586P, O587P, O588P, O589P, O590P, O591P, O592P, O593P, O594P, O595P, O596P, O597P, O598P, O599P, O600P, O601P, O602P, O603P, O604P, O605P, O606P, O607P, O608P, O609P, O610P, O611P, O612P, O613P, O614P, O615P, O616P, O617P, O618P, O619P, O620P, O621P, O622P, O623P, O624P, O625P, O626P, O627P, O628P, O629P, O630P, O631P, O632P, O633P, O634P, O635P, O636P, O637P, O638P, O639P, O640P, O641P, O642P, O643P, O644P, O645P, O646P, O647P, O648P, O649P, O650P, O651P, O652P, O653P, O654P, O655P

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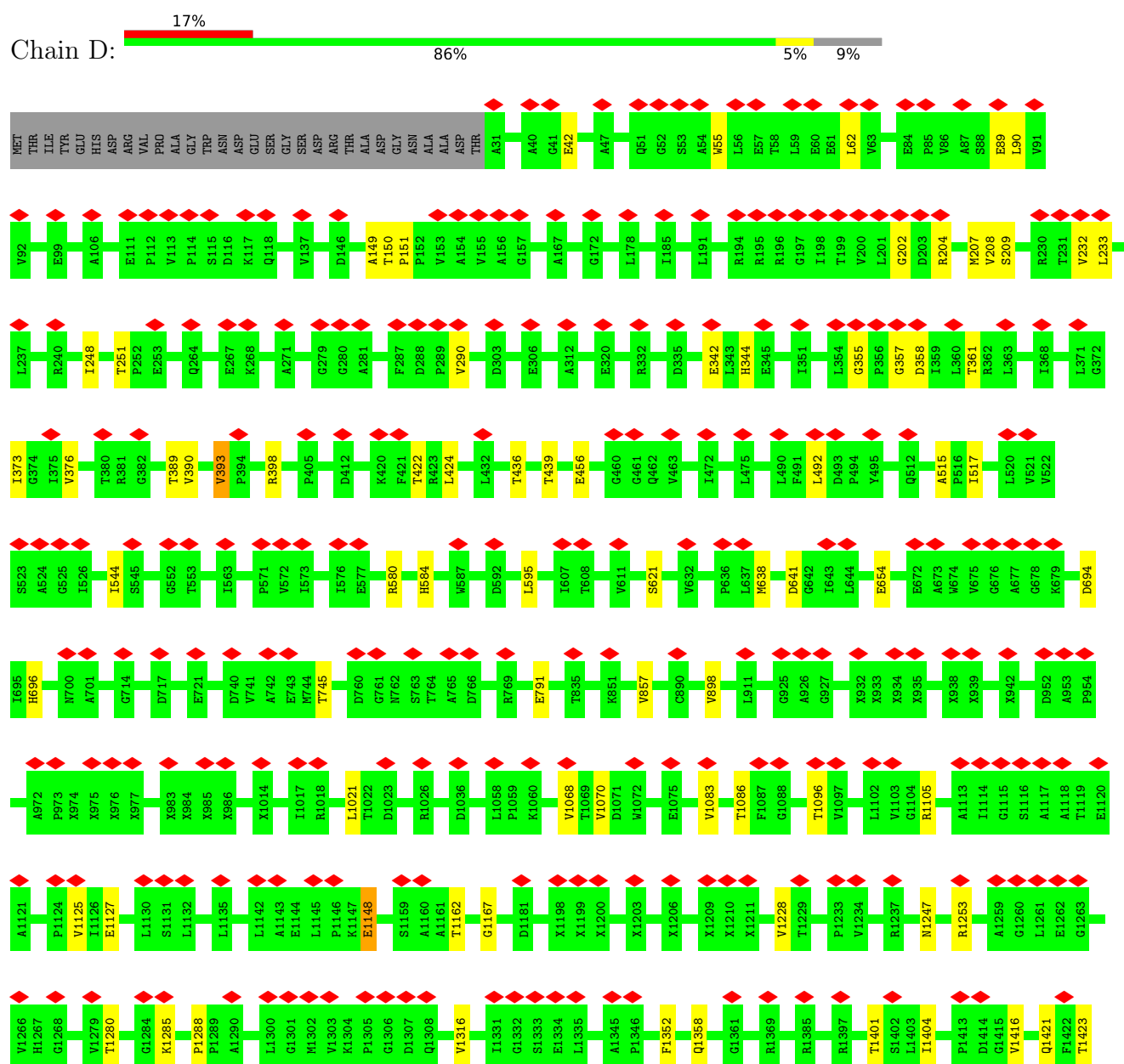
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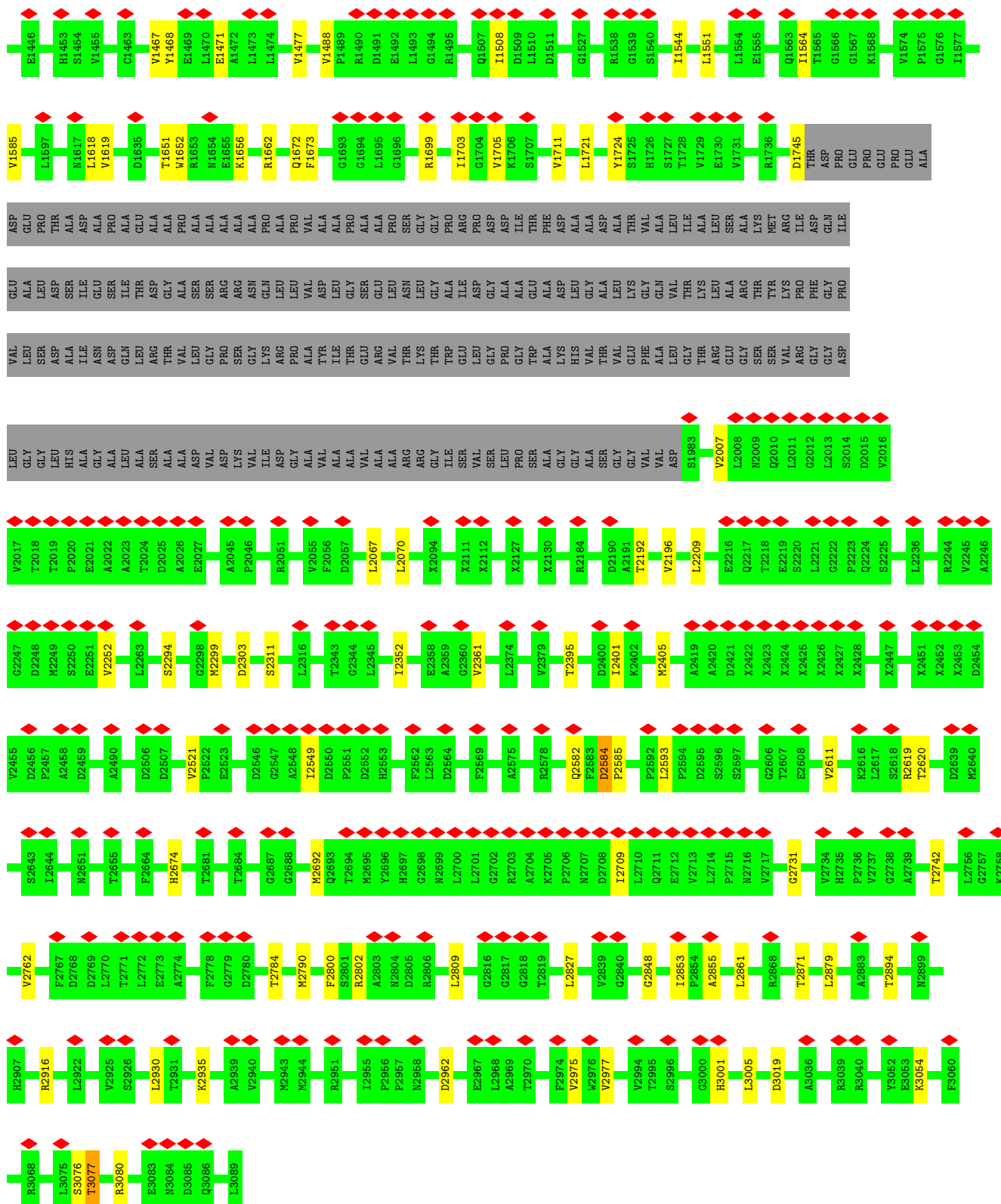
Mol	Chain	Residues	Atoms					AltConf
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2	A	1	Total 31	C 17	N 4	O 9	P 1	0
2	B	1	Total 31	C 17	N 4	O 9	P 1	0
2	C	1	Total 31	C 17	N 4	O 9	P 1	0

3 Residue-property plots

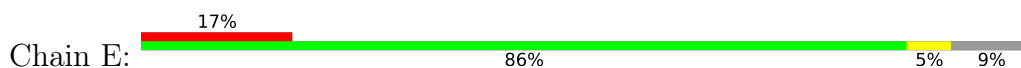
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

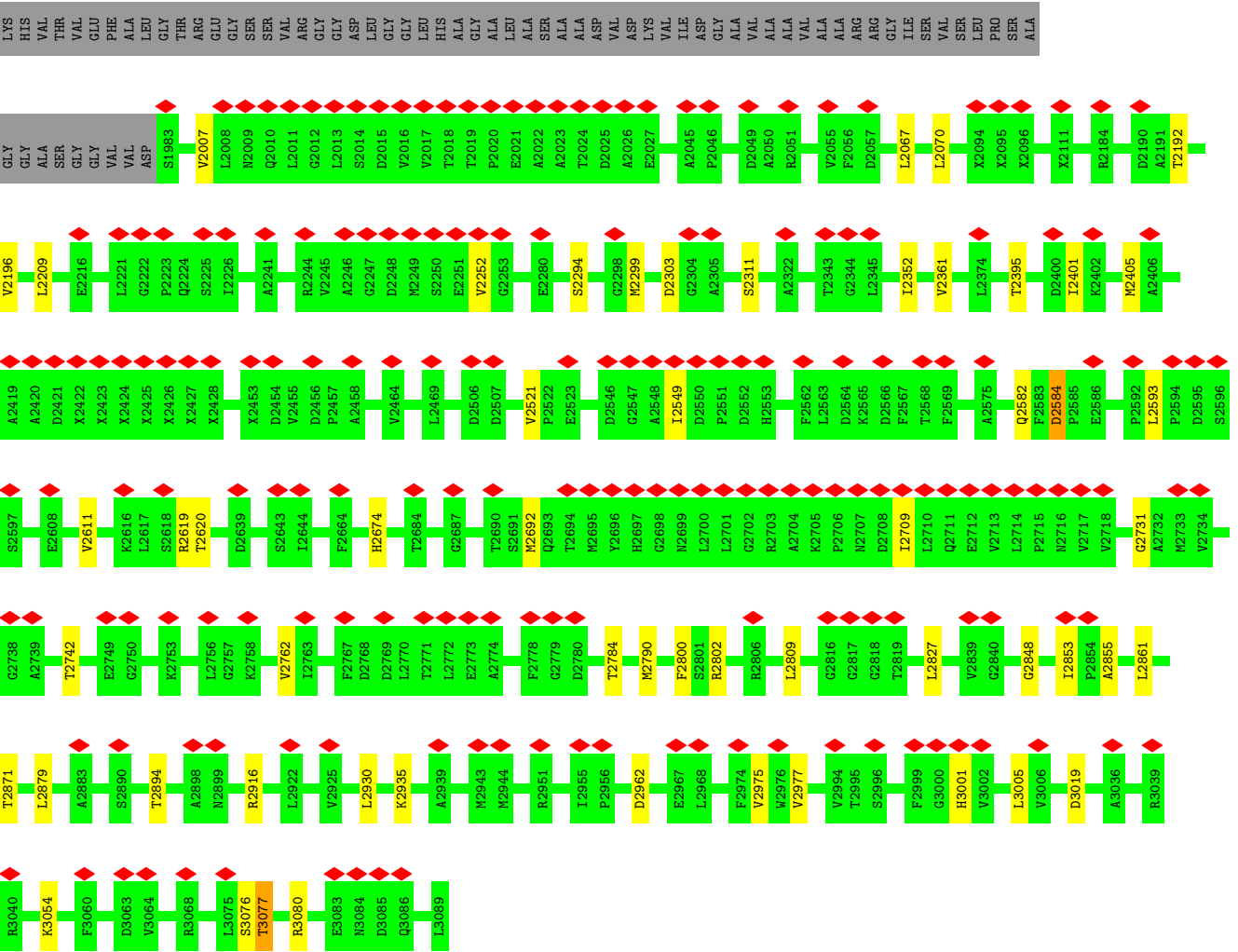




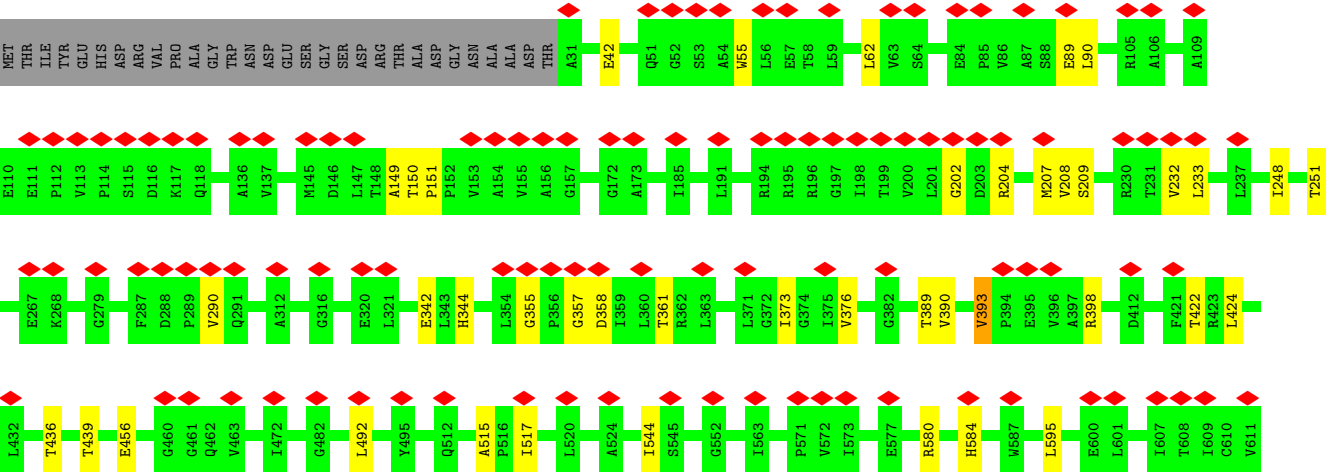
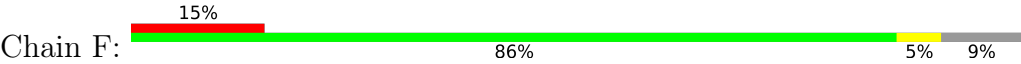
• Molecule 1: FATTY ACID SYNTHASE



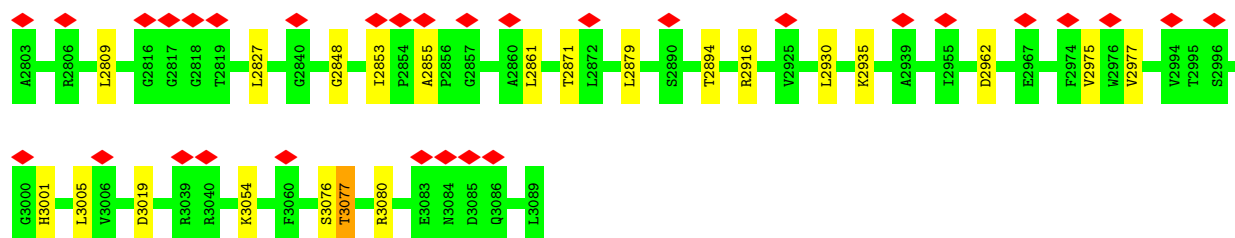




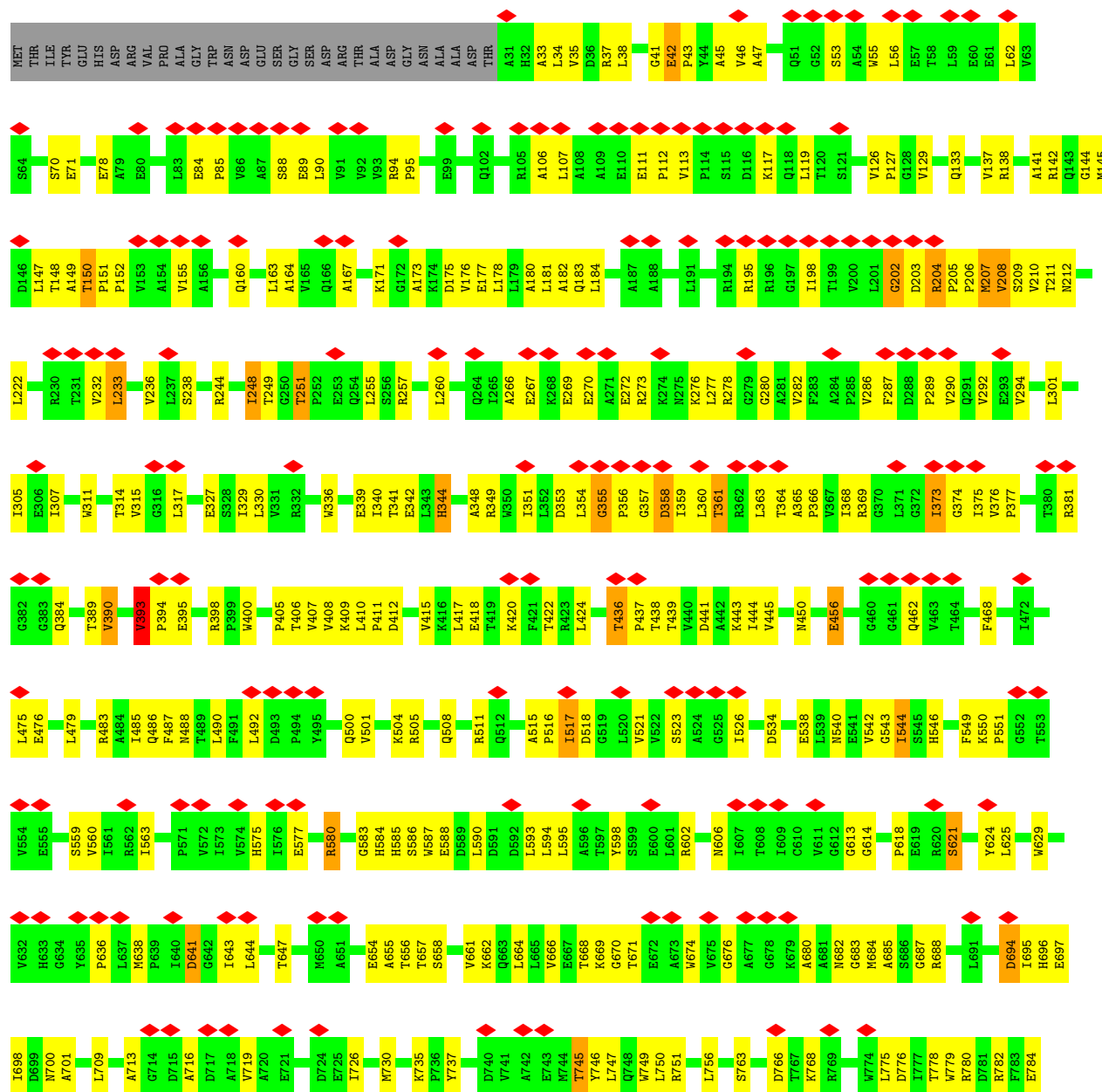
● Molecule 1: FATTY ACID SYNTHASE





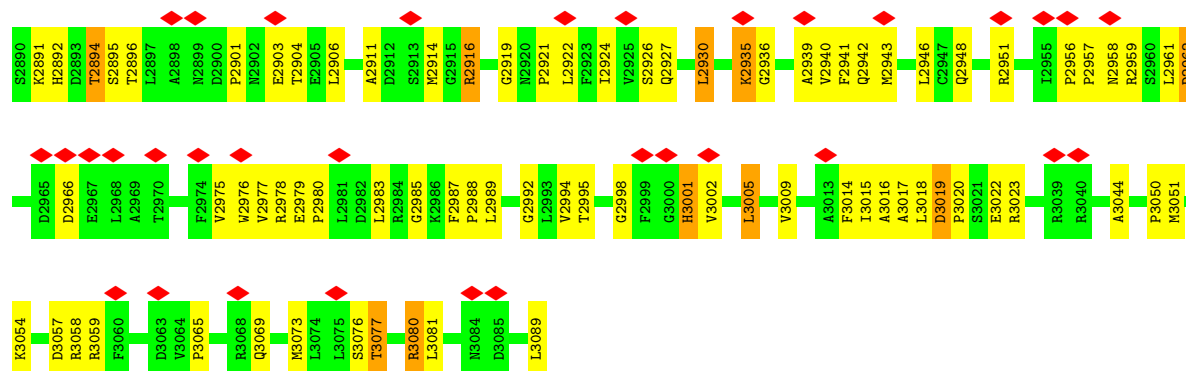


• Molecule 1: FATTY ACID SYNTHASE

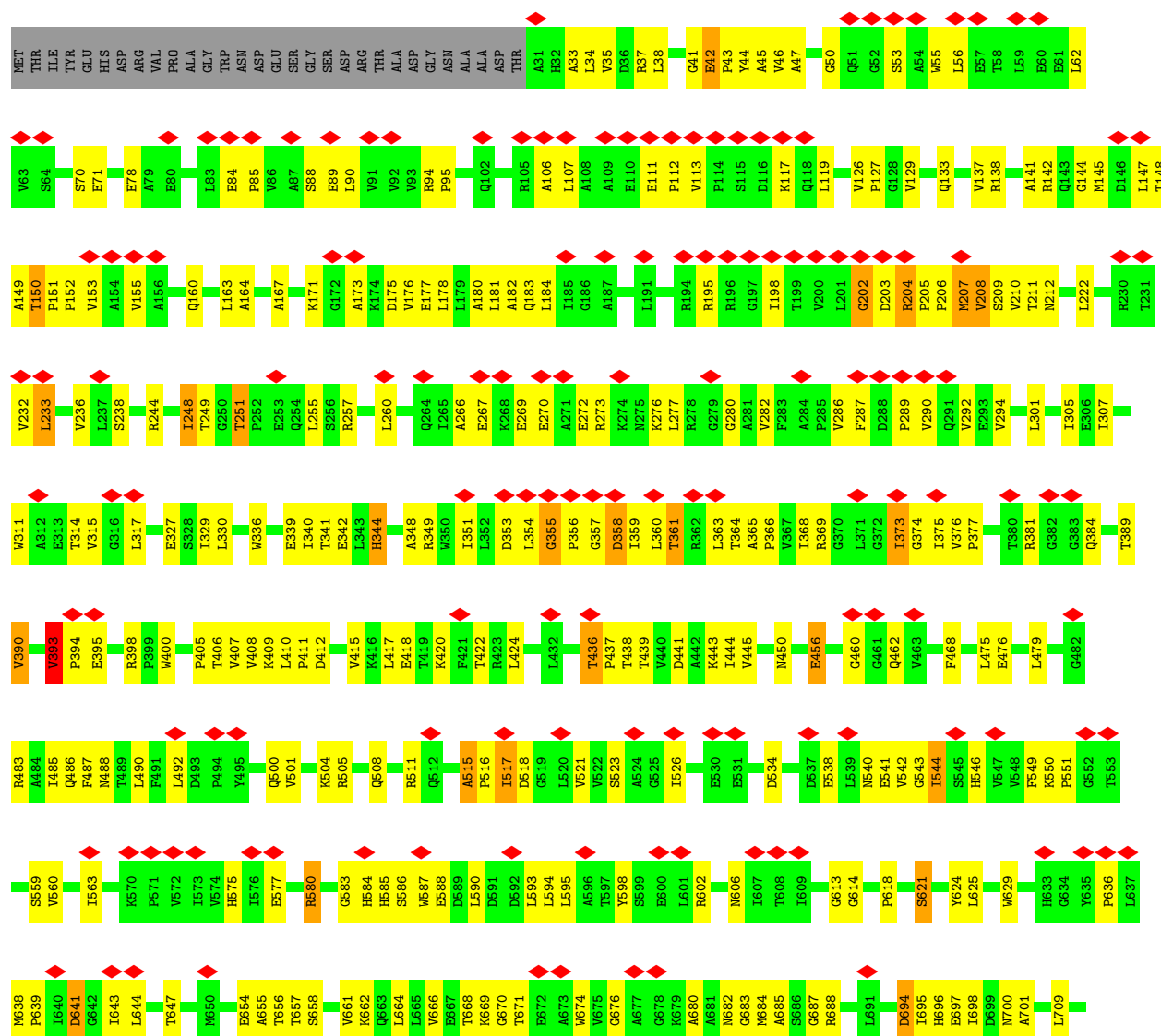


ASP	ASP	G1694	E1598	G1361	W1295	X1211	L1135	V1045	A971	D887	L787
GLU	ALA	L1695	K1605	M1362	R1298	X1212	A1143	L1046	A972	C890	A790
SER	ALA	L1696	I1611	E1365	F1299	X1213	E1144	L1046	P973	V891	E791
THR	ALA		G1456	E1365	L1300	X1215	E1145	V1068	X974	I392	A792
ASP	ALA		G1456	A1368	M1301	X1216	P1146	T1069	X975	T895	R793
GLY	ALA		E1457	R1369	M1302	X1217	E1148	V1070	X976	K1147	R794
ALA	PRO		Y1458	R1369	M1303	X1218	E1148	D1071	X977	A896	H795
ALA	ALA		T1459	V1376	M1304	X1219	P1149	T1072	X978	A897	P796
SER	ALA		A1460	A1380	K1304	X1220	A1150	P1149	X979	V898	H796
ARG	ALA		L1461	D1381	P1305	X1221	E1151	V1077	X980	G900	Q797
ALA	ALA		A1462	D1381	G1306	X1222	F1152		X981	D798	D798
ALA	ALA		C1463	R1385	P1307	X1224			X982	I901	F799
PRO	PRO		V1464	R1385	D1307	X1225			X983	V904	E803
ALA	ALA		V1467	S1391	Q1308	X1226	S1159	V1083	X984		
ALA	ALA		Y1468	S1391	V1309	X1227	A1160	T1086	X985		
VAL	VAL		E1469	H1394	D1310	X1228	A1160	A1085	X986	L911	A808
ALA	ALA		E1470	H1394	F1311	T1229	T1162	T1086	X987	F915	D811
PRO	ALA		L1470	H1394	R1312	V1234	T1163	G1088	X988		
ALA	ALA		E1471	H1394	V1313		T1164	A1089	X989	L924	L816
ALA	ALA		L1474	R1397	V1314		E1165	P1090	X990	G925	E817
ALA	ALA		Y1477	D1398	R1315		E1166	L1091	X991	G927	L826
GLY	GLY		V1477	N1399	V1316		G1167	A1092	X992	A926	L827
GLY	GLY		F1478	P1400	G1317		T1171	T1094	X993	G927	D832
ALA	PRO		H1479	T1401	I1318		V1172	T1096	X994	A928	A833
ALA	ARG		R1480	S1402	V1319		S1173	T1097	X995	X929	A833
ALA	PRO		K1483	L1403	D1320		V1174	V1098	X996	X930	E834
ALA	PRO		M1484	A1405	E1323		R1177	P1099	X997	X931	T835
ALA	ASP		H1485	A1405	L1325		M1178	D1100	X998	X932	V836
ALA	ASP		D1486	V1408	E1326		M1179	C1106	X999	X933	V837
ALA	ALA		V1489	H1411	V1327		A1181	A1101	X1000	X934	X851
ALA	ALA		P1489	H1412	S1328		A1181	L1102	X1001	X935	T852
ALA	ALA		R1490	P1413	A1329		A1181	V1103	X1002	X936	R853
ALA	ALA		D1491	D1414	R1330		L1184	G1104	X1003	X937	G854
ALA	VAL		E1492	G1415	L1331		L1185	C1106	X1006	X938	X855
ALA	ALA		G1494	L1416	G1332		L1188	V1110	X1007	X940	P856
ALA	LEU		R1495	T1420	S1333		R1191	F1111	X1008	X941	V857
ALA	LEU		R1496	Q1421	L1336		F1192		X1009	X942	N858
ALA	ALA		N1497	F1422	M1337		A1193		X1010	X943	F859
ALA	ALA		Y1498	T1423	A1338		I1194		X1011	X944	V860
LYS	LYS		R1499	Q1424	A1339		R1195		X1012		P861
LYS	LYS		R1503	V1425	L1342		X1196		X1013	L947	R862
LYS	LYS		R1504	M1427	L1343		X1197		X1014		R868
LYS	LYS		R1504	M1427	A1344		X1198			D962	R872
LYS	LYS		Q1507	V1430	P1346		X1199			A953	S873
LYS	LYS		I1508	A1431			X1200			P954	D874
LYS	LYS		I1508	A1431			X1201			L957	S875
LYS	LYS		D1509	V1435	Y1360		X1202			R961	L876
LYS	LYS		L1510	V1435	A1351		X1203			M962	W877
LYS	LYS		D1511	Q1441	P1352		X1204			S963	
LYS	LYS		D1514	Q1441	P1353		X1205			V964	
LYS	LYS		D1514	V1445	P1353		X1206			R965	
LYS	LYS		V1519	V1445	G1356		X1207			P966	
LYS	LYS		V1519	A1448	H1357		X1208			V967	
LYS	LYS		R1525	A1450	Q1358		X1209			H968	
LYS	LYS		R1525	A1450	H1359		X1210			R969	
LYS	LYS		R1525	A1450	K1360		X1210			I970	
LYS	LYS		R1525	A1450	K1360		X1210				



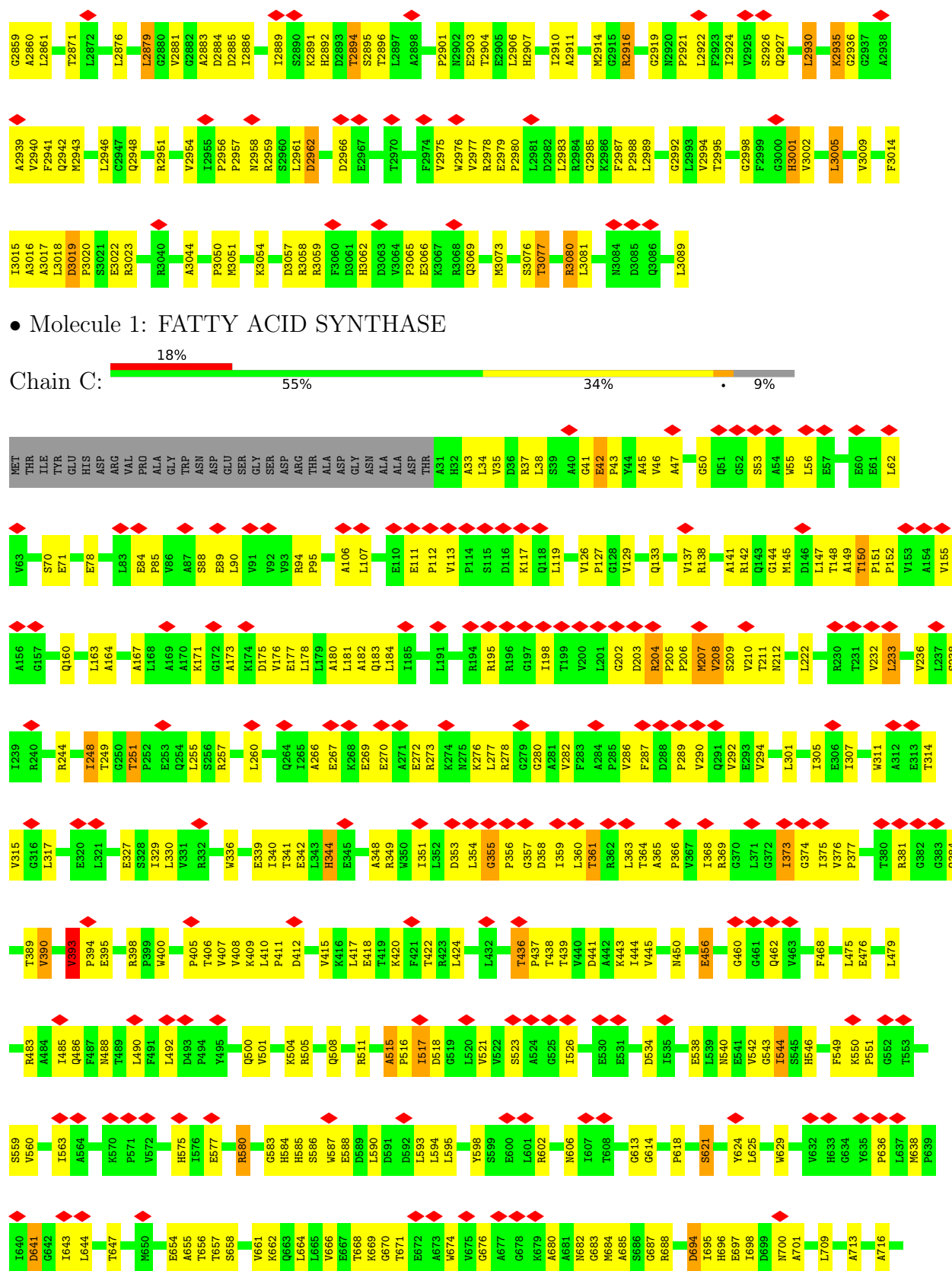


• Molecule 1: FATTY ACID SYNTHASE















4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, D3	Depositor
Number of particles used	106884	Depositor
Resolution determination method	Not provided	
CTF correction method	EACH IMAGE	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	20	Depositor
Minimum defocus (nm)	1500	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	100000	Depositor
Image detector	FEI FALCON I (4k x 4k)	Depositor
Maximum map value	14.936	Depositor
Minimum map value	-7.793	Depositor
Average map value	-0.133	Depositor
Map value standard deviation	1.076	Depositor
Recommended contour level	2.7	Depositor
Map size ($\text{\AA}$)	392.0, 392.0, 392.0	wwPDB
Map dimensions	160, 160, 160	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing ($\text{\AA}$)	2.45, 2.45, 2.45	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: FMN

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	0.35	0/20319	0.87	42/27667 (0.2%)
1	B	0.35	0/20319	0.87	45/27667 (0.2%)
1	C	0.35	0/20319	0.87	42/27667 (0.2%)
1	D	0.35	0/20319	0.87	44/27667 (0.2%)
1	E	0.35	0/20319	0.87	45/27667 (0.2%)
1	F	0.35	0/20319	0.87	41/27667 (0.1%)
All	All	0.35	0/121914	0.87	259/166002 (0.2%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	A	0	5
1	B	0	5
1	C	0	5
1	D	0	5
1	E	0	5
1	F	0	5
All	All	0	30

There are no bond length outliers.

All (259) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	B	151	PRO	N-CA-C	10.68	123.73	110.70
1	D	151	PRO	N-CA-C	10.67	123.71	110.70
1	C	151	PRO	N-CA-C	10.65	123.69	110.70
1	E	151	PRO	N-CA-C	10.63	123.67	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	151	PRO	N-CA-C	10.63	123.67	110.70
1	F	151	PRO	N-CA-C	10.27	123.22	110.70
1	A	204	ARG	CA-C-N	8.67	129.31	120.38
1	A	204	ARG	C-N-CA	8.67	129.31	120.38
1	E	204	ARG	CA-C-N	8.66	129.30	120.38
1	E	204	ARG	C-N-CA	8.66	129.30	120.38
1	F	204	ARG	CA-C-N	8.65	129.29	120.38
1	F	204	ARG	C-N-CA	8.65	129.29	120.38
1	D	204	ARG	CA-C-N	8.64	129.28	120.38
1	D	204	ARG	C-N-CA	8.64	129.28	120.38
1	B	204	ARG	CA-C-N	8.62	129.25	120.38
1	B	204	ARG	C-N-CA	8.62	129.25	120.38
1	C	204	ARG	CA-C-N	8.61	129.25	120.38
1	C	204	ARG	C-N-CA	8.61	129.25	120.38
1	F	1619	VAL	CA-C-N	8.20	127.86	119.82
1	F	1619	VAL	C-N-CA	8.20	127.86	119.82
1	B	1619	VAL	CA-C-N	8.20	127.86	119.82
1	B	1619	VAL	C-N-CA	8.20	127.86	119.82
1	D	1619	VAL	CA-C-N	8.19	127.84	119.82
1	D	1619	VAL	C-N-CA	8.19	127.84	119.82
1	E	1619	VAL	CA-C-N	8.16	127.82	119.82
1	E	1619	VAL	C-N-CA	8.16	127.82	119.82
1	C	1619	VAL	CA-C-N	8.16	127.81	119.82
1	C	1619	VAL	C-N-CA	8.16	127.81	119.82
1	A	1619	VAL	CA-C-N	8.15	127.81	119.82
1	A	1619	VAL	C-N-CA	8.15	127.81	119.82
1	D	42	GLU	CA-C-N	7.84	128.28	120.52
1	D	42	GLU	C-N-CA	7.84	128.28	120.52
1	A	42	GLU	CA-C-N	7.84	128.28	120.52
1	A	42	GLU	C-N-CA	7.84	128.28	120.52
1	F	42	GLU	CA-C-N	7.81	128.25	120.52
1	F	42	GLU	C-N-CA	7.81	128.25	120.52
1	C	42	GLU	CA-C-N	7.79	128.24	120.52
1	C	42	GLU	C-N-CA	7.79	128.24	120.52
1	E	42	GLU	CA-C-N	7.78	128.22	120.52
1	E	42	GLU	C-N-CA	7.78	128.22	120.52
1	B	42	GLU	CA-C-N	7.78	128.22	120.52
1	B	42	GLU	C-N-CA	7.78	128.22	120.52
1	E	1288	PRO	N-CA-C	7.74	120.14	110.70
1	D	1288	PRO	N-CA-C	7.73	120.13	110.70
1	A	1288	PRO	N-CA-C	7.72	120.11	110.70
1	F	1288	PRO	N-CA-C	7.69	120.08	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	1288	PRO	N-CA-C	7.69	120.08	110.70
1	B	1288	PRO	N-CA-C	7.67	120.06	110.70
1	B	355	GLY	CA-C-N	7.28	127.32	119.89
1	B	355	GLY	C-N-CA	7.28	127.32	119.89
1	A	355	GLY	CA-C-N	7.27	127.31	119.89
1	A	355	GLY	C-N-CA	7.27	127.31	119.89
1	C	355	GLY	CA-C-N	7.26	127.30	119.89
1	C	355	GLY	C-N-CA	7.26	127.30	119.89
1	F	355	GLY	CA-C-N	7.24	127.28	119.89
1	F	355	GLY	C-N-CA	7.24	127.28	119.89
1	E	355	GLY	CA-C-N	7.24	127.27	119.89
1	E	355	GLY	C-N-CA	7.24	127.27	119.89
1	D	355	GLY	CA-C-N	7.22	127.26	119.89
1	D	355	GLY	C-N-CA	7.22	127.26	119.89
1	D	398	ARG	CA-C-N	7.05	128.66	119.84
1	D	398	ARG	C-N-CA	7.05	128.66	119.84
1	A	398	ARG	CA-C-N	7.05	128.66	119.84
1	A	398	ARG	C-N-CA	7.05	128.66	119.84
1	E	398	ARG	CA-C-N	7.04	128.64	119.84
1	E	398	ARG	C-N-CA	7.04	128.64	119.84
1	C	398	ARG	CA-C-N	7.01	128.60	119.84
1	C	398	ARG	C-N-CA	7.01	128.60	119.84
1	B	398	ARG	CA-C-N	7.01	128.60	119.84
1	B	398	ARG	C-N-CA	7.01	128.60	119.84
1	F	398	ARG	CA-C-N	6.99	128.58	119.84
1	F	398	ARG	C-N-CA	6.99	128.58	119.84
1	A	2853	ILE	CA-C-N	-6.68	112.81	119.56
1	A	2853	ILE	C-N-CA	-6.68	112.81	119.56
1	B	2853	ILE	CA-C-N	-6.67	112.83	119.56
1	B	2853	ILE	C-N-CA	-6.67	112.83	119.56
1	E	2853	ILE	CA-C-N	-6.66	112.83	119.56
1	E	2853	ILE	C-N-CA	-6.66	112.83	119.56
1	D	2853	ILE	CA-C-N	-6.66	112.84	119.56
1	D	2853	ILE	C-N-CA	-6.66	112.84	119.56
1	F	2853	ILE	CA-C-N	-6.65	112.84	119.56
1	F	2853	ILE	C-N-CA	-6.65	112.84	119.56
1	C	2853	ILE	CA-C-N	-6.65	112.85	119.56
1	C	2853	ILE	C-N-CA	-6.65	112.85	119.56
1	E	1352	PHE	CA-C-N	6.64	127.03	119.92
1	E	1352	PHE	C-N-CA	6.64	127.03	119.92
1	F	1352	PHE	CA-C-N	6.61	126.99	119.92
1	F	1352	PHE	C-N-CA	6.61	126.99	119.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	C	1352	PHE	CA-C-N	6.61	126.99	119.92
1	C	1352	PHE	C-N-CA	6.61	126.99	119.92
1	D	1352	PHE	CA-C-N	6.60	126.98	119.92
1	D	1352	PHE	C-N-CA	6.60	126.98	119.92
1	A	1352	PHE	CA-C-N	6.59	126.97	119.92
1	A	1352	PHE	C-N-CA	6.59	126.97	119.92
1	B	1352	PHE	CA-C-N	6.54	126.92	119.92
1	B	1352	PHE	C-N-CA	6.54	126.92	119.92
1	F	3054	LYS	CA-C-N	6.28	126.40	119.87
1	F	3054	LYS	C-N-CA	6.28	126.40	119.87
1	E	3054	LYS	CA-C-N	6.27	126.39	119.87
1	E	3054	LYS	C-N-CA	6.27	126.39	119.87
1	D	3054	LYS	CA-C-N	6.25	126.37	119.87
1	D	3054	LYS	C-N-CA	6.25	126.37	119.87
1	A	3054	LYS	CA-C-N	6.25	126.37	119.87
1	A	3054	LYS	C-N-CA	6.25	126.37	119.87
1	C	3054	LYS	CA-C-N	6.25	126.36	119.87
1	C	3054	LYS	C-N-CA	6.25	126.36	119.87
1	B	3054	LYS	CA-C-N	6.22	126.34	119.87
1	B	3054	LYS	C-N-CA	6.22	126.34	119.87
1	E	1167	GLY	N-CA-C	6.21	118.33	110.38
1	D	1167	GLY	N-CA-C	6.21	118.33	110.38
1	A	1167	GLY	N-CA-C	6.21	118.33	110.38
1	B	1167	GLY	N-CA-C	6.21	118.32	110.38
1	C	1167	GLY	N-CA-C	6.20	118.31	110.38
1	F	1167	GLY	N-CA-C	6.19	118.30	110.38
1	F	1656	LYS	N-CA-C	6.09	120.50	112.35
1	B	1656	LYS	N-CA-C	6.07	120.49	112.35
1	E	515	ALA	CA-C-N	6.06	125.76	119.82
1	E	515	ALA	C-N-CA	6.06	125.76	119.82
1	C	1656	LYS	N-CA-C	6.06	120.47	112.35
1	D	1656	LYS	N-CA-C	6.04	120.44	112.35
1	C	515	ALA	CA-C-N	6.03	125.73	119.82
1	C	515	ALA	C-N-CA	6.03	125.73	119.82
1	A	1656	LYS	N-CA-C	6.00	120.39	112.35
1	E	1656	LYS	N-CA-C	5.99	120.37	112.35
1	D	515	ALA	CA-C-N	5.97	125.67	119.82
1	D	515	ALA	C-N-CA	5.97	125.67	119.82
1	F	515	ALA	CA-C-N	5.95	125.65	119.82
1	F	515	ALA	C-N-CA	5.95	125.65	119.82
1	B	515	ALA	CA-C-N	5.94	125.64	119.82
1	B	515	ALA	C-N-CA	5.94	125.64	119.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	A	515	ALA	CA-C-N	5.94	125.64	119.82
1	A	515	ALA	C-N-CA	5.94	125.64	119.82
1	E	2855	ALA	CA-C-N	5.80	126.29	120.14
1	E	2855	ALA	C-N-CA	5.80	126.29	120.14
1	A	2855	ALA	CA-C-N	5.78	126.27	120.14
1	A	2855	ALA	C-N-CA	5.78	126.27	120.14
1	C	2855	ALA	CA-C-N	5.78	126.27	120.14
1	C	2855	ALA	C-N-CA	5.78	126.27	120.14
1	B	2855	ALA	CA-C-N	5.77	126.26	120.14
1	B	2855	ALA	C-N-CA	5.77	126.26	120.14
1	E	492	LEU	N-CA-C	5.76	118.05	111.02
1	F	2855	ALA	CA-C-N	5.76	126.24	120.14
1	F	2855	ALA	C-N-CA	5.76	126.24	120.14
1	D	492	LEU	N-CA-C	5.74	118.02	111.02
1	A	42	GLU	N-CA-C	5.74	116.20	109.60
1	A	492	LEU	N-CA-C	5.74	118.02	111.02
1	B	492	LEU	N-CA-C	5.74	118.02	111.02
1	F	42	GLU	N-CA-C	5.73	116.19	109.60
1	D	2855	ALA	CA-C-N	5.73	126.21	120.14
1	D	2855	ALA	C-N-CA	5.73	126.21	120.14
1	F	492	LEU	N-CA-C	5.73	118.01	111.02
1	B	42	GLU	N-CA-C	5.72	116.18	109.60
1	C	492	LEU	N-CA-C	5.71	117.99	111.02
1	D	42	GLU	N-CA-C	5.71	116.16	109.60
1	E	42	GLU	N-CA-C	5.70	116.16	109.60
1	C	42	GLU	N-CA-C	5.70	116.15	109.60
1	E	2674	HIS	CA-C-N	5.64	126.02	119.47
1	E	2674	HIS	C-N-CA	5.64	126.02	119.47
1	B	2674	HIS	CA-C-N	5.64	126.02	119.47
1	B	2674	HIS	C-N-CA	5.64	126.02	119.47
1	A	2674	HIS	CA-C-N	5.64	126.01	119.47
1	A	2674	HIS	C-N-CA	5.64	126.01	119.47
1	C	2674	HIS	CA-C-N	5.61	125.98	119.47
1	C	2674	HIS	C-N-CA	5.61	125.98	119.47
1	D	2674	HIS	CA-C-N	5.61	125.98	119.47
1	D	2674	HIS	C-N-CA	5.61	125.98	119.47
1	F	2674	HIS	CA-C-N	5.58	125.95	119.47
1	F	2674	HIS	C-N-CA	5.58	125.95	119.47
1	C	1316	VAL	CB-CA-C	-5.58	106.97	111.71
1	E	1316	VAL	CB-CA-C	-5.58	106.97	111.71
1	A	1316	VAL	CB-CA-C	-5.57	106.97	111.71
1	F	1316	VAL	CB-CA-C	-5.55	106.99	111.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	D	1316	VAL	CB-CA-C	-5.54	107.00	111.71
1	B	1316	VAL	CB-CA-C	-5.52	107.02	111.71
1	C	2731	GLY	N-CA-C	5.41	119.28	112.79
1	B	2731	GLY	N-CA-C	5.40	119.27	112.79
1	D	3077	THR	N-CA-C	5.40	116.85	111.07
1	A	3077	THR	N-CA-C	5.39	116.84	111.07
1	F	2731	GLY	N-CA-C	5.39	119.26	112.79
1	E	1721	LEU	CA-C-N	-5.38	113.49	119.19
1	E	1721	LEU	C-N-CA	-5.38	113.49	119.19
1	C	3077	THR	N-CA-C	5.38	116.82	111.07
1	C	1721	LEU	CA-C-N	-5.38	113.49	119.19
1	C	1721	LEU	C-N-CA	-5.38	113.49	119.19
1	E	3077	THR	N-CA-C	5.37	116.81	111.07
1	D	1721	LEU	CA-C-N	-5.36	113.50	119.19
1	D	1721	LEU	C-N-CA	-5.36	113.50	119.19
1	A	2731	GLY	N-CA-C	5.36	119.22	112.79
1	B	3077	THR	N-CA-C	5.36	116.80	111.07
1	F	3077	THR	N-CA-C	5.35	116.80	111.07
1	E	2731	GLY	N-CA-C	5.34	119.20	112.79
1	D	2731	GLY	N-CA-C	5.34	119.20	112.79
1	F	1721	LEU	CA-C-N	-5.32	113.55	119.19
1	F	1721	LEU	C-N-CA	-5.32	113.55	119.19
1	B	1721	LEU	CA-C-N	-5.32	113.55	119.19
1	B	1721	LEU	C-N-CA	-5.32	113.55	119.19
1	A	1721	LEU	CA-C-N	-5.28	113.60	119.19
1	A	1721	LEU	C-N-CA	-5.28	113.60	119.19
1	D	2584	ASP	N-CA-C	5.21	121.33	109.81
1	C	2584	ASP	N-CA-C	5.21	121.33	109.81
1	F	2848	GLY	N-CA-C	5.21	118.08	110.63
1	A	2584	ASP	N-CA-C	5.21	121.33	109.81
1	F	2584	ASP	N-CA-C	5.21	121.31	109.81
1	B	2584	ASP	N-CA-C	5.20	121.31	109.81
1	F	55	TRP	N-CA-C	5.19	117.01	111.36
1	C	55	TRP	N-CA-C	5.19	117.01	111.36
1	E	2584	ASP	N-CA-C	5.18	121.27	109.81
1	A	2848	GLY	N-CA-C	5.18	118.04	110.63
1	C	2848	GLY	N-CA-C	5.18	118.04	110.63
1	D	55	TRP	N-CA-C	5.18	117.01	111.36
1	A	55	TRP	N-CA-C	5.18	117.01	111.36
1	B	2848	GLY	N-CA-C	5.17	118.03	110.63
1	D	2848	GLY	N-CA-C	5.17	118.02	110.63
1	B	55	TRP	N-CA-C	5.16	116.99	111.36

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	2848	GLY	N-CA-C	5.15	117.99	110.63
1	E	55	TRP	N-CA-C	5.15	116.97	111.36
1	F	1574	VAL	N-CA-C	5.15	112.96	107.76
1	E	1574	VAL	N-CA-C	5.14	112.95	107.76
1	B	1574	VAL	N-CA-C	5.14	112.95	107.76
1	D	393	VAL	N-CA-C	5.13	119.97	108.88
1	B	2611	VAL	CA-C-N	5.11	125.35	119.83
1	B	2611	VAL	C-N-CA	5.11	125.35	119.83
1	E	393	VAL	N-CA-C	5.11	119.92	108.88
1	A	393	VAL	N-CA-C	5.11	119.92	108.88
1	F	393	VAL	N-CA-C	5.11	119.91	108.88
1	B	393	VAL	N-CA-C	5.11	119.91	108.88
1	E	2611	VAL	CA-C-N	5.10	125.34	119.83
1	E	2611	VAL	C-N-CA	5.10	125.34	119.83
1	C	393	VAL	N-CA-C	5.09	119.88	108.88
1	F	2611	VAL	CA-C-N	5.08	125.32	119.83
1	F	2611	VAL	C-N-CA	5.08	125.32	119.83
1	D	2611	VAL	N-CA-C	5.07	113.42	107.89
1	E	2611	VAL	N-CA-C	5.07	113.41	107.89
1	F	2611	VAL	N-CA-C	5.07	113.41	107.89
1	B	1247	ASN	CA-C-N	5.07	124.73	119.56
1	B	1247	ASN	C-N-CA	5.07	124.73	119.56
1	C	2611	VAL	CA-C-N	5.07	125.30	119.83
1	C	2611	VAL	C-N-CA	5.07	125.30	119.83
1	C	2611	VAL	N-CA-C	5.07	113.41	107.89
1	A	2611	VAL	N-CA-C	5.06	113.40	107.89
1	D	2611	VAL	CA-C-N	5.04	125.28	119.83
1	D	2611	VAL	C-N-CA	5.04	125.28	119.83
1	B	2593	LEU	CA-C-N	5.04	125.06	119.32
1	B	2593	LEU	C-N-CA	5.04	125.06	119.32
1	C	1247	ASN	CA-C-N	5.04	124.70	119.56
1	C	1247	ASN	C-N-CA	5.04	124.70	119.56
1	A	2593	LEU	CA-C-N	5.04	125.06	119.32
1	A	2593	LEU	C-N-CA	5.04	125.06	119.32
1	B	2611	VAL	N-CA-C	5.03	113.37	107.89
1	D	2593	LEU	CA-C-N	5.03	125.05	119.32
1	D	2593	LEU	C-N-CA	5.03	125.05	119.32
1	E	2593	LEU	CA-C-N	5.02	125.04	119.32
1	E	2593	LEU	C-N-CA	5.02	125.04	119.32
1	D	1247	ASN	CA-C-N	5.01	124.67	119.56
1	D	1247	ASN	C-N-CA	5.01	124.67	119.56
1	E	1247	ASN	CA-C-N	5.01	124.67	119.56

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	E	1247	ASN	C-N-CA	5.01	124.67	119.56
1	A	1247	ASN	CA-C-N	5.01	124.67	119.56
1	A	1247	ASN	C-N-CA	5.01	124.67	119.56

There are no chirality outliers.

All (30) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1148	GLU	Peptide
1	A	150	THR	Peptide
1	A	202	GLY	Peptide
1	A	2584	ASP	Peptide
1	A	357	GLY	Peptide
1	B	1148	GLU	Peptide
1	B	150	THR	Peptide
1	B	202	GLY	Peptide
1	B	2584	ASP	Peptide
1	B	357	GLY	Peptide
1	C	1148	GLU	Peptide
1	C	150	THR	Peptide
1	C	202	GLY	Peptide
1	C	2584	ASP	Peptide
1	C	357	GLY	Peptide
1	D	1148	GLU	Peptide
1	D	150	THR	Peptide
1	D	202	GLY	Peptide
1	D	2584	ASP	Peptide
1	D	357	GLY	Peptide
1	E	1148	GLU	Peptide
1	E	150	THR	Peptide
1	E	202	GLY	Peptide
1	E	2584	ASP	Peptide
1	E	357	GLY	Peptide
1	F	1148	GLU	Peptide
1	F	150	THR	Peptide
1	F	202	GLY	Peptide
1	F	2584	ASP	Peptide
1	F	357	GLY	Peptide

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	21020	0	20990	1082	0
1	B	21020	0	20990	1100	0
1	C	21020	0	20990	1083	0
1	D	21020	0	20990	0	0
1	E	21020	0	20990	0	0
1	F	21020	0	20990	0	0
2	A	31	0	19	4	0
2	B	31	0	19	5	0
2	C	31	0	19	4	0
2	D	31	0	19	0	0
2	E	31	0	19	0	0
2	F	31	0	19	0	0
All	All	126306	0	126054	3210	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 25.

All (3210) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:793:ARG:O	1:A:2435:UNK:HG2	1.31	1.30
1:B:793:ARG:O	1:B:2435:UNK:HG2	1.31	1.28
1:B:2100:UNK:O	1:B:2103:UNK:HG3	1.36	1.26
1:A:2105:UNK:O	1:A:2108:UNK:HG3	1.34	1.25
1:B:2105:UNK:O	1:B:2108:UNK:HG3	1.34	1.25
1:C:2100:UNK:O	1:C:2103:UNK:HG3	1.36	1.23
1:C:793:ARG:O	1:C:2435:UNK:HG2	1.31	1.23
1:A:2093:UNK:HG1	1:A:2129:UNK:O	1.40	1.22
1:A:2100:UNK:O	1:A:2103:UNK:HG3	1.36	1.21
1:C:2093:UNK:HG1	1:C:2129:UNK:O	1.39	1.21
1:C:2105:UNK:O	1:C:2108:UNK:HG3	1.34	1.21
1:B:992:UNK:CG	1:B:996:UNK:HG3	1.72	1.20
1:C:992:UNK:CG	1:C:996:UNK:HG3	1.72	1.18
1:B:2093:UNK:HG1	1:B:2129:UNK:O	1.39	1.18
1:A:992:UNK:CG	1:A:996:UNK:HG3	1.72	1.18

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2451:UNK:HG1	1:B:2454:ASP:OD2	1.44	1.17
1:C:2451:UNK:HG1	1:C:2454:ASP:OD2	1.44	1.16
1:A:2451:UNK:HG1	1:A:2454:ASP:OD2	1.44	1.15
1:C:2094:UNK:HG2	1:C:2096:UNK:HG3	1.32	1.12
1:C:2450:UNK:HG1	1:C:3016:ALA:HB1	1.23	1.11
1:A:2450:UNK:HG1	1:A:3016:ALA:HB1	1.23	1.11
1:B:2097:UNK:O	1:B:2100:UNK:HG3	1.51	1.10
1:B:2450:UNK:HG1	1:B:3016:ALA:HB1	1.23	1.09
1:A:2097:UNK:O	1:A:2100:UNK:HG3	1.51	1.09
1:B:975:UNK:HG3	1:B:993:UNK:CG	1.83	1.09
1:C:2097:UNK:O	1:C:2100:UNK:HG3	1.51	1.09
1:A:975:UNK:HG3	1:A:993:UNK:CG	1.82	1.08
1:A:2094:UNK:HG2	1:A:2096:UNK:HG3	1.32	1.08
1:C:975:UNK:HG3	1:C:993:UNK:CG	1.83	1.07
1:B:2094:UNK:HG2	1:B:2096:UNK:HG3	1.32	1.07
1:A:981:UNK:HG1	1:A:987:UNK:HG2	1.37	1.06
1:C:934:UNK:O	1:C:937:UNK:HG3	1.57	1.04
1:C:981:UNK:HG1	1:C:987:UNK:HG2	1.37	1.04
1:A:934:UNK:O	1:A:937:UNK:HG3	1.58	1.03
1:B:934:UNK:O	1:B:937:UNK:HG3	1.57	1.02
1:B:981:UNK:HG1	1:B:987:UNK:HG2	1.37	1.02
1:B:2094:UNK:CG	1:B:2096:UNK:HG3	1.90	1.02
1:C:975:UNK:CG	1:C:993:UNK:HG1	1.90	1.01
1:C:992:UNK:CG	1:C:996:UNK:CG	2.39	1.01
1:B:975:UNK:CG	1:B:993:UNK:HG1	1.90	1.01
1:A:975:UNK:CG	1:A:993:UNK:HG1	1.89	1.01
1:C:2094:UNK:CG	1:C:2096:UNK:HG3	1.90	1.01
1:A:2094:UNK:CG	1:A:2096:UNK:HG3	1.90	1.00
1:C:932:UNK:O	1:C:936:UNK:HG2	1.61	1.00
1:B:2088:UNK:O	1:B:2091:UNK:HG3	1.61	1.00
1:A:992:UNK:CG	1:A:996:UNK:CG	2.39	1.00
1:A:2113:UNK:O	1:A:2116:UNK:HG3	1.62	1.00
1:C:2113:UNK:O	1:C:2116:UNK:HG3	1.62	1.00
1:B:992:UNK:CG	1:B:996:UNK:CG	2.39	0.99
1:B:1220:UNK:HG3	1:B:1221:UNK:N	1.78	0.99
1:B:2433:UNK:HA	1:B:2524:CYS:HB3	1.44	0.99
1:A:2088:UNK:O	1:A:2091:UNK:HG3	1.61	0.99
1:B:976:UNK:HG3	1:B:993:UNK:HB1	1.43	0.99
1:B:932:UNK:O	1:B:936:UNK:HG2	1.61	0.99
1:C:2088:UNK:O	1:C:2091:UNK:HG3	1.61	0.99
1:A:992:UNK:HG1	1:A:996:UNK:HG3	1.41	0.98

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:792:ALA:O	1:B:2433:UNK:CG	2.12	0.98
1:A:932:UNK:O	1:A:936:UNK:HG2	1.61	0.98
1:A:792:ALA:O	1:A:2433:UNK:CG	2.12	0.98
1:B:2113:UNK:O	1:B:2116:UNK:HG3	1.62	0.98
1:C:1220:UNK:HG3	1:C:1221:UNK:N	1.78	0.98
1:C:792:ALA:O	1:C:2433:UNK:CG	2.12	0.98
1:C:992:UNK:HG1	1:C:996:UNK:HG3	1.41	0.98
1:A:976:UNK:HG3	1:A:993:UNK:HB1	1.43	0.98
1:B:992:UNK:HG1	1:B:996:UNK:HG3	1.41	0.97
1:C:975:UNK:HG3	1:C:993:UNK:HG1	0.99	0.97
1:B:2096:UNK:O	1:B:2099:UNK:HG3	1.65	0.97
1:A:2433:UNK:HA	1:A:2524:CYS:HB3	1.44	0.97
1:C:1003:UNK:HG2	1:C:1004:UNK:N	1.78	0.97
1:B:975:UNK:HG3	1:B:993:UNK:HG1	0.99	0.97
1:C:407:VAL:HB	1:C:933:UNK:HG1	1.47	0.96
1:A:3080:ARG:HH11	1:A:3080:ARG:HG3	1.29	0.96
1:B:1003:UNK:HG2	1:B:1004:UNK:N	1.78	0.96
1:C:2096:UNK:O	1:C:2099:UNK:HG3	1.65	0.96
1:C:2433:UNK:HA	1:C:2524:CYS:HB3	1.44	0.96
1:A:2096:UNK:O	1:A:2099:UNK:HG3	1.65	0.96
1:B:407:VAL:HB	1:B:933:UNK:HG1	1.47	0.96
1:C:3080:ARG:HH11	1:C:3080:ARG:HG3	1.29	0.96
1:A:407:VAL:HB	1:A:933:UNK:HG1	1.47	0.96
1:A:1220:UNK:HG3	1:A:1221:UNK:N	1.78	0.95
1:A:793:ARG:HD3	1:A:2435:UNK:HG1	1.48	0.95
1:C:976:UNK:HG3	1:C:993:UNK:HB1	1.43	0.95
1:A:975:UNK:HG3	1:A:993:UNK:HG1	0.99	0.95
1:B:3080:ARG:HH11	1:B:3080:ARG:HG3	1.29	0.95
1:A:792:ALA:O	1:A:2433:UNK:HG1	1.67	0.94
1:C:792:ALA:O	1:C:2433:UNK:HG1	1.67	0.94
1:A:1003:UNK:HG2	1:A:1004:UNK:N	1.79	0.94
1:B:792:ALA:O	1:B:2433:UNK:HG1	1.67	0.94
1:B:793:ARG:HD3	1:B:2435:UNK:HG1	1.48	0.94
1:B:992:UNK:HG1	1:B:996:UNK:CG	1.97	0.93
1:C:793:ARG:HD3	1:C:2435:UNK:HG1	1.48	0.93
1:A:793:ARG:O	1:A:2435:UNK:CG	2.16	0.93
1:C:793:ARG:O	1:C:2435:UNK:CG	2.17	0.93
1:A:992:UNK:HG1	1:A:996:UNK:CG	1.97	0.93
1:B:793:ARG:O	1:B:2435:UNK:CG	2.17	0.93
1:C:1212:UNK:HG2	1:C:1342:ARG:HH21	1.32	0.93
1:A:929:UNK:O	1:A:930:UNK:HG3	1.69	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2127:UNK:O	1:A:2130:UNK:HG3	1.69	0.93
1:B:2127:UNK:O	1:B:2130:UNK:HG3	1.70	0.92
1:B:929:UNK:O	1:B:930:UNK:HG3	1.69	0.92
1:B:1225:UNK:HG1	1:B:1283:ASP:OD1	1.70	0.92
1:C:992:UNK:HG1	1:C:996:UNK:CG	1.97	0.92
1:C:1225:UNK:HG1	1:C:1283:ASP:OD1	1.70	0.92
1:A:1013:UNK:HG2	1:A:1014:UNK:N	1.84	0.91
1:A:939:UNK:O	1:A:940:UNK:HG3	1.70	0.91
1:C:939:UNK:O	1:C:940:UNK:HG3	1.70	0.91
1:C:1012:UNK:O	1:C:1013:UNK:HG3	1.69	0.91
1:A:1212:UNK:HG2	1:A:1342:ARG:HH21	1.32	0.91
1:B:1212:UNK:HG2	1:B:1342:ARG:HH21	1.32	0.91
1:A:1225:UNK:HG1	1:A:1283:ASP:OD1	1.70	0.91
1:C:2127:UNK:O	1:C:2130:UNK:HG3	1.69	0.91
1:B:1012:UNK:O	1:B:1013:UNK:HG3	1.69	0.91
1:A:2112:UNK:O	1:A:2115:UNK:HG3	1.70	0.91
1:B:2112:UNK:O	1:B:2115:UNK:HG3	1.70	0.91
1:A:943:UNK:O	1:A:944:UNK:HG3	1.71	0.91
1:C:929:UNK:O	1:C:930:UNK:HG3	1.69	0.91
1:C:943:UNK:O	1:C:944:UNK:HG3	1.71	0.90
1:C:1013:UNK:HG2	1:C:1014:UNK:N	1.84	0.90
1:C:2112:UNK:O	1:C:2115:UNK:HG3	1.70	0.90
1:A:1012:UNK:O	1:A:1013:UNK:HG3	1.69	0.90
1:B:939:UNK:O	1:B:940:UNK:HG3	1.70	0.90
1:B:943:UNK:O	1:B:944:UNK:HG3	1.71	0.90
1:B:1013:UNK:HG2	1:B:1014:UNK:N	1.84	0.90
1:C:2093:UNK:HA	1:C:2097:UNK:HG1	1.52	0.90
1:C:981:UNK:CG	1:C:987:UNK:HG2	2.02	0.89
1:B:2093:UNK:HA	1:B:2097:UNK:HG1	1.52	0.89
1:A:2093:UNK:HA	1:A:2097:UNK:HG1	1.52	0.89
1:A:981:UNK:CG	1:A:987:UNK:HG2	2.02	0.89
1:C:1002:UNK:O	1:C:1003:UNK:HG3	1.73	0.89
1:C:2434:UNK:HG3	1:C:2524:CYS:HA	1.54	0.89
1:B:1002:UNK:O	1:B:1003:UNK:HG3	1.73	0.89
1:B:981:UNK:CG	1:B:987:UNK:HG2	2.02	0.88
1:B:2103:UNK:HG2	1:B:2104:UNK:N	1.89	0.88
1:B:2100:UNK:O	1:B:2103:UNK:CG	2.22	0.88
1:C:2100:UNK:O	1:C:2103:UNK:CG	2.22	0.88
1:C:928:ALA:HB1	1:C:931:UNK:HB1	1.55	0.88
1:A:1002:UNK:O	1:A:1003:UNK:HG3	1.73	0.88
1:B:2112:UNK:H	1:B:2115:UNK:CG	1.87	0.88

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2103:UNK:HG2	1:A:2104:UNK:N	1.89	0.87
1:A:2451:UNK:CG	1:A:2454:ASP:OD2	2.22	0.87
1:B:2112:UNK:H	1:B:2115:UNK:HG1	1.40	0.87
1:A:2434:UNK:HG3	1:A:2524:CYS:HA	1.54	0.87
1:B:928:ALA:HB1	1:B:931:UNK:HB1	1.55	0.87
1:B:2434:UNK:HG3	1:B:2524:CYS:HA	1.54	0.87
1:C:2112:UNK:H	1:C:2115:UNK:HG1	1.40	0.87
1:B:2086:UNK:O	1:B:2089:UNK:HG3	1.74	0.87
1:A:928:ALA:HB1	1:A:931:UNK:HB1	1.55	0.87
1:B:2126:UNK:O	1:B:2129:UNK:HG3	1.75	0.87
1:A:2086:UNK:O	1:A:2089:UNK:HG3	1.74	0.86
1:A:2112:UNK:H	1:A:2115:UNK:CG	1.87	0.86
1:C:992:UNK:CG	1:C:994:UNK:HG3	2.05	0.86
1:A:2112:UNK:H	1:A:2115:UNK:HG1	1.40	0.86
1:C:2112:UNK:H	1:C:2115:UNK:CG	1.87	0.86
1:C:2451:UNK:CG	1:C:2454:ASP:OD2	2.22	0.86
1:A:992:UNK:CG	1:A:994:UNK:HG3	2.05	0.86
1:A:2126:UNK:O	1:A:2129:UNK:HG3	1.75	0.86
1:C:2086:UNK:O	1:C:2089:UNK:HG3	1.74	0.86
1:B:992:UNK:CG	1:B:994:UNK:CG	2.53	0.86
1:A:2100:UNK:O	1:A:2103:UNK:CG	2.22	0.86
1:B:2451:UNK:CG	1:B:2454:ASP:OD2	2.22	0.86
1:A:931:UNK:HG1	1:A:933:UNK:CG	2.06	0.86
1:A:992:UNK:CG	1:A:994:UNK:CG	2.53	0.86
1:C:2126:UNK:O	1:C:2129:UNK:HG3	1.75	0.86
1:C:992:UNK:CG	1:C:994:UNK:CG	2.53	0.85
1:A:2085:UNK:O	1:A:2088:UNK:HG3	1.76	0.85
1:B:992:UNK:CG	1:B:994:UNK:HG3	2.05	0.85
1:B:2081:UNK:O	1:B:2084:UNK:HG3	1.76	0.85
1:C:2103:UNK:HG2	1:C:2104:UNK:N	1.89	0.85
1:B:1218:UNK:HG2	1:B:1441:GLN:OE1	1.77	0.85
1:B:2085:UNK:O	1:B:2088:UNK:HG3	1.76	0.85
1:B:935:UNK:O	1:B:939:UNK:HG3	1.77	0.85
1:C:2081:UNK:O	1:C:2084:UNK:HG3	1.76	0.85
1:C:1218:UNK:HG2	1:C:1441:GLN:OE1	1.77	0.85
1:C:2085:UNK:O	1:C:2088:UNK:HG3	1.76	0.85
1:A:935:UNK:O	1:A:939:UNK:HG3	1.77	0.85
1:A:1218:UNK:HG2	1:A:1441:GLN:OE1	1.77	0.85
1:A:2118:UNK:O	1:A:2122:UNK:HG3	1.76	0.85
1:B:2118:UNK:O	1:B:2122:UNK:HG3	1.76	0.84
1:A:2081:UNK:O	1:A:2084:UNK:HG3	1.76	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:992:UNK:HG3	1:A:996:UNK:CG	2.07	0.84
1:B:931:UNK:HG1	1:B:933:UNK:CG	2.06	0.84
1:A:999:UNK:HG2	1:A:1007:UNK:CG	2.07	0.84
1:C:2118:UNK:O	1:C:2122:UNK:HG3	1.76	0.84
1:B:1538:ARG:HH11	1:B:1722:PRO:HB3	1.43	0.84
1:C:935:UNK:O	1:C:939:UNK:HG3	1.77	0.84
1:B:999:UNK:HG2	1:B:1007:UNK:CG	2.07	0.84
1:C:931:UNK:HG1	1:C:933:UNK:CG	2.06	0.83
1:A:43:PRO:HG2	1:A:348:ALA:HA	1.60	0.83
1:C:992:UNK:HG3	1:C:996:UNK:CG	2.07	0.83
1:B:2105:UNK:O	1:B:2108:UNK:CG	2.24	0.83
1:A:992:UNK:HG1	1:A:994:UNK:CG	2.09	0.83
1:C:999:UNK:O	1:C:1007:UNK:HG3	1.80	0.82
1:C:1538:ARG:HH11	1:C:1722:PRO:HB3	1.43	0.82
1:C:2097:UNK:O	1:C:2100:UNK:CG	2.27	0.82
1:B:992:UNK:HG3	1:B:996:UNK:CG	2.07	0.82
1:B:992:UNK:HG1	1:B:994:UNK:CG	2.09	0.82
1:C:999:UNK:HG2	1:C:1007:UNK:CG	2.07	0.82
1:A:2097:UNK:O	1:A:2100:UNK:CG	2.27	0.82
1:C:992:UNK:HG1	1:C:994:UNK:CG	2.09	0.82
1:A:2016:VAL:HG13	1:A:2020:PRO:HG3	1.62	0.82
1:B:2097:UNK:O	1:B:2100:UNK:CG	2.27	0.82
1:C:2016:VAL:HG13	1:C:2020:PRO:HG3	1.62	0.82
1:A:2093:UNK:CG	1:A:2129:UNK:O	2.27	0.81
1:A:2105:UNK:O	1:A:2108:UNK:CG	2.25	0.81
1:B:43:PRO:HG2	1:B:348:ALA:HA	1.60	0.81
1:B:999:UNK:O	1:B:1007:UNK:HG3	1.80	0.81
1:B:2730:TYR:OH	1:B:3059:ARG:NH1	2.14	0.81
1:B:2016:VAL:HG13	1:B:2020:PRO:HG3	1.62	0.81
1:A:967:VAL:HA	1:A:970:ILE:HB	1.63	0.81
1:C:2091:UNK:O	1:C:2132:UNK:HG1	1.80	0.81
1:C:43:PRO:HG2	1:C:348:ALA:HA	1.60	0.81
1:C:138:ARG:NH2	1:C:175:ASP:OD2	2.14	0.81
1:A:2091:UNK:O	1:A:2132:UNK:HG1	1.80	0.81
1:A:2730:TYR:OH	1:A:3059:ARG:NH1	2.14	0.81
1:B:2091:UNK:O	1:B:2132:UNK:HG1	1.80	0.81
1:A:138:ARG:NH2	1:A:175:ASP:OD2	2.14	0.80
1:B:2093:UNK:CG	1:B:2129:UNK:O	2.27	0.80
1:C:46:VAL:HB	1:C:155:VAL:HG13	1.63	0.80
1:A:995:UNK:HB1	1:A:1011:UNK:HG3	1.63	0.80
1:A:1538:ARG:HH11	1:A:1722:PRO:HB3	1.43	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2093:UNK:CG	1:C:2129:UNK:O	2.27	0.80
1:B:995:UNK:HB1	1:B:1011:UNK:HG3	1.63	0.80
1:C:2730:TYR:OH	1:C:3059:ARG:NH1	2.14	0.80
1:A:931:UNK:CG	1:A:933:UNK:CG	2.60	0.80
1:C:2123:UNK:O	1:C:2126:UNK:HG3	1.82	0.80
1:B:138:ARG:NH2	1:B:175:ASP:OD2	2.14	0.80
1:C:967:VAL:HA	1:C:970:ILE:HB	1.63	0.80
1:A:1001:UNK:HG1	1:A:1018:ARG:NH2	1.97	0.80
1:B:46:VAL:HB	1:B:155:VAL:HG13	1.63	0.80
1:A:999:UNK:O	1:A:1007:UNK:HG3	1.80	0.80
1:C:273:ARG:HB2	1:C:282:VAL:H	1.47	0.80
1:C:1001:UNK:HG1	1:C:1018:ARG:NH2	1.97	0.79
1:A:46:VAL:HB	1:A:155:VAL:HG13	1.63	0.79
1:B:931:UNK:CG	1:B:933:UNK:CG	2.60	0.79
1:C:2105:UNK:O	1:C:2108:UNK:CG	2.24	0.79
1:C:1220:UNK:CG	1:C:1221:UNK:N	2.46	0.79
1:A:2098:UNK:O	1:A:2102:UNK:HG3	1.82	0.79
1:B:1001:UNK:HG1	1:B:1018:ARG:NH2	1.97	0.79
1:B:2610:ARG:HH12	1:B:2700:LEU:HD11	1.47	0.79
1:C:931:UNK:CG	1:C:933:UNK:CG	2.60	0.79
1:A:273:ARG:HB2	1:A:282:VAL:H	1.47	0.79
1:B:2084:UNK:O	1:B:2087:UNK:HG3	1.82	0.79
1:B:2098:UNK:O	1:B:2102:UNK:HG3	1.82	0.78
1:C:2077:UNK:HG2	1:C:2079:UNK:HG3	1.65	0.78
1:B:2077:UNK:HG2	1:B:2079:UNK:HG3	1.65	0.78
1:B:2123:UNK:O	1:B:2126:UNK:HG3	1.82	0.78
1:A:931:UNK:HG1	1:A:933:UNK:HG2	1.65	0.78
1:C:995:UNK:HB1	1:C:1011:UNK:HG3	1.63	0.78
1:C:2610:ARG:HH12	1:C:2700:LEU:HD11	1.47	0.78
1:A:2084:UNK:O	1:A:2087:UNK:HG3	1.82	0.78
1:B:930:UNK:O	1:B:930:UNK:HG2	1.83	0.78
1:B:967:VAL:HA	1:B:970:ILE:HB	1.63	0.78
1:B:273:ARG:HB2	1:B:282:VAL:H	1.47	0.78
1:C:2098:UNK:O	1:C:2102:UNK:HG3	1.82	0.78
1:C:930:UNK:HG2	1:C:930:UNK:O	1.83	0.78
1:A:971:ALA:O	1:A:974:UNK:HG3	1.84	0.78
1:A:2077:UNK:HG2	1:A:2079:UNK:HG3	1.65	0.78
1:A:2123:UNK:O	1:A:2126:UNK:HG3	1.82	0.78
1:C:2084:UNK:O	1:C:2087:UNK:HG3	1.82	0.78
1:B:2135:UNK:HG3	1:B:2136:ASP:N	1.99	0.77
1:C:971:ALA:O	1:C:974:UNK:HG3	1.84	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1220:UNK:CG	1:B:1221:UNK:N	2.46	0.77
1:A:930:UNK:O	1:A:930:UNK:HG2	1.83	0.77
1:A:1329:ALA:HB3	1:A:1337:MET:H	1.48	0.77
1:A:2135:UNK:HG3	1:A:2136:ASP:N	1.99	0.77
1:B:1329:ALA:HB3	1:B:1337:MET:H	1.49	0.77
1:C:2135:UNK:HG3	1:C:2136:ASP:N	1.99	0.77
1:C:2100:UNK:HG2	1:C:2101:UNK:N	2.00	0.77
1:C:931:UNK:HG1	1:C:933:UNK:HG2	1.65	0.77
1:C:1329:ALA:HB3	1:C:1337:MET:H	1.49	0.77
1:B:971:ALA:O	1:B:974:UNK:HG3	1.84	0.77
1:C:931:UNK:CG	1:C:933:UNK:HG2	2.15	0.77
1:B:931:UNK:CG	1:B:933:UNK:HG2	2.15	0.77
1:A:257:ARG:HH12	1:C:1695:LEU:HD23	1.51	0.76
1:A:931:UNK:CG	1:A:933:UNK:HG2	2.15	0.76
1:A:2610:ARG:HH12	1:A:2700:LEU:HD11	1.47	0.76
1:B:1695:LEU:HD23	1:C:257:ARG:HH12	1.50	0.76
1:A:1695:LEU:HD23	1:B:257:ARG:HH12	1.51	0.76
1:A:2557:LEU:O	1:A:2613:ARG:N	2.18	0.76
1:A:944:UNK:HG2	1:A:944:UNK:O	1.85	0.76
1:B:931:UNK:HG1	1:B:933:UNK:HG2	1.65	0.76
1:C:934:UNK:O	1:C:937:UNK:CG	2.34	0.76
1:A:1097:VAL:HB	1:A:1146:PRO:HB2	1.68	0.76
1:B:1097:VAL:HB	1:B:1146:PRO:HB2	1.68	0.76
1:A:1220:UNK:CG	1:A:1221:UNK:N	2.46	0.76
1:A:2100:UNK:HG2	1:A:2101:UNK:N	2.00	0.76
1:B:2557:LEU:O	1:B:2613:ARG:N	2.18	0.76
1:A:995:UNK:HB1	1:A:1011:UNK:CG	2.17	0.75
1:B:2124:UNK:O	1:B:2127:UNK:HG3	1.86	0.75
1:C:2452:UNK:HG2	1:C:2453:UNK:N	2.01	0.75
1:A:940:UNK:O	1:A:940:UNK:HG2	1.86	0.75
1:B:2126:UNK:C	1:B:2129:UNK:HG3	2.16	0.75
1:B:2452:UNK:HG2	1:B:2453:UNK:N	2.00	0.75
1:B:944:UNK:O	1:B:944:UNK:HG2	1.85	0.75
1:B:2418:GLY:O	1:B:2422:UNK:HG3	1.87	0.75
1:C:2124:UNK:O	1:C:2127:UNK:HG3	1.87	0.75
1:A:2452:UNK:HG2	1:A:2453:UNK:N	2.00	0.75
1:A:2418:GLY:O	1:A:2422:UNK:HG3	1.87	0.75
1:B:2645:ASP:OD2	1:B:2691:SER:N	2.19	0.75
1:A:1212:UNK:HG2	1:A:1342:ARG:NH2	2.02	0.75
1:B:995:UNK:HB1	1:B:1011:UNK:CG	2.17	0.75
1:B:2088:UNK:O	1:B:2091:UNK:CG	2.35	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2100:UNK:HG2	1:B:2101:UNK:N	2.00	0.75
1:C:2122:UNK:O	1:C:2125:UNK:HG3	1.87	0.75
1:A:2122:UNK:O	1:A:2125:UNK:HG3	1.87	0.74
1:C:445:VAL:HG13	1:C:475:LEU:HD21	1.69	0.74
1:C:944:UNK:HG2	1:C:944:UNK:O	1.85	0.74
1:C:995:UNK:HB1	1:C:1011:UNK:CG	2.17	0.74
1:C:2418:GLY:O	1:C:2422:UNK:HG3	1.87	0.74
1:C:1097:VAL:HB	1:C:1146:PRO:HB2	1.68	0.74
1:C:2088:UNK:O	1:C:2091:UNK:CG	2.35	0.74
1:B:445:VAL:HG13	1:B:475:LEU:HD21	1.69	0.74
1:B:1212:UNK:HG2	1:B:1342:ARG:NH2	2.02	0.74
1:A:2124:UNK:O	1:A:2127:UNK:HG3	1.86	0.74
1:C:33:ALA:HB2	1:C:390:VAL:HA	1.70	0.74
1:A:33:ALA:HB2	1:A:390:VAL:HA	1.70	0.74
1:A:1556:GLU:OE2	1:A:1560:ARG:NH2	2.20	0.74
1:B:940:UNK:O	1:B:940:UNK:HG2	1.86	0.74
1:A:934:UNK:O	1:A:937:UNK:CG	2.34	0.74
1:C:940:UNK:HG2	1:C:940:UNK:O	1.86	0.74
1:A:994:UNK:HG2	1:A:996:UNK:HG3	1.70	0.74
1:A:2087:UNK:HA	1:A:2090:UNK:HG3	1.70	0.74
1:A:2126:UNK:C	1:A:2129:UNK:HG3	2.17	0.74
1:A:2645:ASP:OD2	1:A:2691:SER:N	2.19	0.74
1:B:2122:UNK:O	1:B:2125:UNK:HG3	1.87	0.74
1:C:1212:UNK:CG	1:C:1342:ARG:HE	2.01	0.74
1:C:2557:LEU:O	1:C:2613:ARG:N	2.18	0.74
1:B:33:ALA:HB2	1:B:390:VAL:HA	1.69	0.74
1:B:1212:UNK:CG	1:B:1342:ARG:HE	2.01	0.74
1:C:1212:UNK:HG2	1:C:1342:ARG:NH2	2.02	0.74
1:A:799:PHE:CZ	1:A:2433:UNK:HG3	2.23	0.74
1:A:992:UNK:HG3	1:A:996:UNK:HG3	1.66	0.74
1:B:1001:UNK:O	1:B:1002:UNK:HG3	1.88	0.74
1:B:1556:GLU:OE2	1:B:1560:ARG:NH2	2.20	0.74
1:C:1168:ARG:N	1:C:1194:ILE:O	2.21	0.74
1:C:1556:GLU:OE2	1:C:1560:ARG:NH2	2.20	0.74
1:A:1212:UNK:CG	1:A:1342:ARG:HE	2.01	0.73
1:B:934:UNK:O	1:B:937:UNK:CG	2.34	0.73
1:B:1226:UNK:HG3	1:B:1313:VAL:HG12	1.70	0.73
1:B:2087:UNK:HA	1:B:2090:UNK:HG3	1.70	0.73
1:C:2126:UNK:C	1:C:2129:UNK:HG3	2.17	0.73
1:A:992:UNK:HG2	1:A:994:UNK:CG	2.17	0.73
1:A:1168:ARG:N	1:A:1194:ILE:O	2.21	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:992:UNK:HG2	1:B:994:UNK:CG	2.17	0.73
1:C:994:UNK:HG2	1:C:996:UNK:HG3	1.70	0.73
1:B:3015:ILE:HG12	1:B:3023:ARG:HG3	1.69	0.73
1:C:2096:UNK:O	1:C:2099:UNK:CG	2.37	0.73
1:B:799:PHE:CZ	1:B:2433:UNK:HG3	2.23	0.73
1:C:799:PHE:CZ	1:C:2433:UNK:HG3	2.23	0.73
1:B:994:UNK:HG2	1:B:996:UNK:HG3	1.70	0.73
1:C:3015:ILE:HG12	1:C:3023:ARG:HG3	1.69	0.73
1:A:2883:ALA:O	1:A:2916:ARG:NH1	2.22	0.73
1:B:2053:ALA:O	1:B:2807:ARG:NH2	2.21	0.73
1:B:2096:UNK:O	1:B:2099:UNK:CG	2.36	0.73
1:C:437:PRO:HG3	1:C:876:LEU:HB3	1.70	0.73
1:C:980:UNK:O	1:C:981:UNK:HG3	1.89	0.73
1:C:2053:ALA:O	1:C:2807:ARG:NH2	2.21	0.73
1:B:2093:UNK:HA	1:B:2097:UNK:CG	2.19	0.73
1:C:992:UNK:HG2	1:C:994:UNK:CG	2.17	0.73
1:C:1001:UNK:O	1:C:1002:UNK:HG3	1.88	0.73
1:A:2053:ALA:O	1:A:2807:ARG:NH2	2.21	0.72
1:B:437:PRO:HG3	1:B:876:LEU:HB3	1.70	0.72
1:C:976:UNK:HG3	1:C:993:UNK:CB	2.19	0.72
1:B:1168:ARG:N	1:B:1194:ILE:O	2.21	0.72
1:C:936:UNK:HB1	1:C:941:UNK:HB1	1.71	0.72
1:C:2883:ALA:O	1:C:2916:ARG:NH1	2.22	0.72
1:A:1226:UNK:HG3	1:A:1313:VAL:HG12	1.70	0.72
1:B:1253:ARG:HH11	1:B:1253:ARG:HG3	1.55	0.72
1:C:1226:UNK:HG3	1:C:1313:VAL:HG12	1.70	0.72
1:C:1253:ARG:HH11	1:C:1253:ARG:HG3	1.54	0.72
1:C:1400:PRO:HD2	1:C:1416:VAL:HG22	1.72	0.72
1:A:2093:UNK:HA	1:A:2097:UNK:CG	2.19	0.72
1:B:1400:PRO:HD2	1:B:1416:VAL:HG22	1.72	0.72
1:A:1001:UNK:O	1:A:1002:UNK:HG3	1.88	0.72
1:C:70:SER:OG	1:C:142:ARG:NH2	2.23	0.72
1:C:2645:ASP:OD2	1:C:2691:SER:N	2.19	0.72
1:A:95:PRO:HB2	1:C:1237:ARG:NH1	2.05	0.72
1:A:980:UNK:O	1:A:981:UNK:HG3	1.89	0.72
1:A:2088:UNK:O	1:A:2091:UNK:CG	2.35	0.72
1:B:936:UNK:HB1	1:B:941:UNK:HB1	1.71	0.72
1:B:2121:UNK:O	1:B:2124:UNK:HG3	1.90	0.72
1:A:70:SER:OG	1:A:142:ARG:NH2	2.23	0.72
1:A:445:VAL:HG13	1:A:475:LEU:HD21	1.69	0.72
1:A:2113:UNK:O	1:A:2116:UNK:CG	2.38	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:3015:ILE:HG12	1:A:3023:ARG:HG3	1.69	0.72
1:B:1218:UNK:CG	1:B:1441:GLN:OE1	2.38	0.72
1:C:2093:UNK:HA	1:C:2097:UNK:CG	2.19	0.72
1:A:992:UNK:HG2	1:A:994:UNK:HG3	1.72	0.72
1:B:980:UNK:O	1:B:981:UNK:HG3	1.89	0.72
1:A:1253:ARG:HH11	1:A:1253:ARG:HG3	1.55	0.72
1:A:1400:PRO:HD2	1:A:1416:VAL:HG22	1.72	0.72
1:B:2883:ALA:O	1:B:2916:ARG:NH1	2.22	0.72
1:C:992:UNK:HG2	1:C:994:UNK:HG3	1.72	0.72
1:C:2087:UNK:HA	1:C:2090:UNK:HG3	1.70	0.71
1:C:2268:GLN:OE1	1:C:2319:ARG:NH1	2.23	0.71
1:A:1237:ARG:NH1	1:B:95:PRO:HB2	2.05	0.71
1:A:2121:UNK:O	1:A:2124:UNK:HG3	1.90	0.71
1:B:70:SER:OG	1:B:142:ARG:NH2	2.23	0.71
1:B:1237:ARG:NH1	1:C:95:PRO:HB2	2.05	0.71
1:B:2268:GLN:OE1	1:B:2319:ARG:NH1	2.23	0.71
1:A:981:UNK:HG1	1:A:987:UNK:CG	2.19	0.71
1:C:1218:UNK:CG	1:C:1441:GLN:OE1	2.38	0.71
1:C:2113:UNK:O	1:C:2116:UNK:CG	2.38	0.71
1:A:976:UNK:HG3	1:A:993:UNK:CB	2.19	0.71
1:A:982:UNK:HG2	1:A:983:UNK:N	2.05	0.71
1:B:976:UNK:HG3	1:B:993:UNK:CB	2.19	0.71
1:B:982:UNK:HG2	1:B:983:UNK:N	2.05	0.71
1:B:2998:GLY:N	1:B:3002:VAL:O	2.23	0.71
1:A:981:UNK:HB2	1:A:984:UNK:CG	2.21	0.71
1:A:936:UNK:HB1	1:A:941:UNK:HB1	1.71	0.71
1:C:1634:ARG:HH11	1:C:1639:ALA:H	1.39	0.71
1:C:2121:UNK:O	1:C:2124:UNK:HG3	1.90	0.71
1:A:2096:UNK:O	1:A:2099:UNK:CG	2.37	0.70
1:A:2591:ARG:HH12	1:C:2012:GLY:C	1.99	0.70
1:C:982:UNK:HG2	1:C:983:UNK:N	2.05	0.70
1:C:1507:GLN:O	1:C:1562:ARG:NH1	2.24	0.70
1:A:437:PRO:HG3	1:A:876:LEU:HB3	1.70	0.70
1:B:2012:GLY:C	1:C:2591:ARG:HH12	1.99	0.70
1:C:2112:UNK:O	1:C:2115:UNK:CG	2.38	0.70
1:A:1218:UNK:CG	1:A:1441:GLN:OE1	2.38	0.70
1:A:2268:GLN:OE1	1:A:2319:ARG:NH1	2.23	0.70
1:A:2558:LEU:HG	1:A:2612:PRO:HA	1.73	0.70
1:A:1507:GLN:O	1:A:1562:ARG:NH1	2.24	0.70
1:B:981:UNK:HB2	1:B:984:UNK:CG	2.21	0.70
1:C:981:UNK:HG1	1:C:987:UNK:CG	2.19	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2012:GLY:C	1:B:2591:ARG:HH12	1.99	0.70
1:B:137:VAL:HG22	1:B:354:LEU:HD13	1.74	0.70
1:B:1634:ARG:HH11	1:B:1639:ALA:H	1.39	0.70
1:A:2743:ALA:HB1	1:A:2940:VAL:HG23	1.73	0.70
1:A:2998:GLY:N	1:A:3002:VAL:O	2.23	0.70
1:C:981:UNK:HB2	1:C:984:UNK:CG	2.21	0.70
1:C:2558:LEU:HG	1:C:2612:PRO:HA	1.73	0.70
1:B:580:ARG:HD2	1:B:614:GLY:HA3	1.73	0.70
1:C:974:UNK:HG1	1:C:977:UNK:HB1	1.74	0.70
1:B:992:UNK:HG2	1:B:994:UNK:HG3	1.72	0.70
1:B:2112:UNK:O	1:B:2115:UNK:CG	2.38	0.70
1:B:2743:ALA:HB1	1:B:2940:VAL:HG23	1.73	0.70
1:A:117:LYS:HZ3	1:C:1087:PHE:HB3	1.57	0.69
1:A:1634:ARG:HH11	1:A:1639:ALA:H	1.39	0.69
1:A:2112:UNK:O	1:A:2115:UNK:CG	2.38	0.69
1:C:580:ARG:HD2	1:C:614:GLY:HA3	1.72	0.69
1:C:1035:VAL:HG12	1:C:1037:ASP:H	1.57	0.69
1:A:580:ARG:HD2	1:A:614:GLY:HA3	1.73	0.69
1:A:1035:VAL:HG12	1:A:1037:ASP:H	1.57	0.69
1:A:2860:ALA:HB3	1:A:2906:LEU:HD21	1.73	0.69
1:B:2860:ALA:HB3	1:B:2906:LEU:HD21	1.73	0.69
1:C:2860:ALA:HB3	1:C:2906:LEU:HD21	1.73	0.69
1:B:2215:THR:HB	1:B:2229:LYS:HB2	1.74	0.69
1:C:2085:UNK:O	1:C:2088:UNK:CG	2.41	0.69
1:A:1012:UNK:O	1:A:1013:UNK:CG	2.41	0.69
1:B:1177:ARG:HB2	1:B:1184:LEU:HD23	1.74	0.69
1:A:137:VAL:HG22	1:A:354:LEU:HD13	1.74	0.69
1:B:1164:THR:N	1:B:1167:GLY:O	2.25	0.69
1:B:2558:LEU:HG	1:B:2612:PRO:HA	1.74	0.69
1:C:2122:UNK:HA	1:C:2125:UNK:HG3	1.75	0.69
1:A:2215:THR:HB	1:A:2229:LYS:HB2	1.74	0.69
1:B:2122:UNK:HA	1:B:2125:UNK:HG3	1.75	0.69
1:C:2647:VAL:HG22	1:C:2769:ASP:HB2	1.75	0.69
1:A:1046:LEU:HD13	1:A:1129:LEU:HD22	1.75	0.69
1:B:1046:LEU:HD13	1:B:1129:LEU:HD22	1.75	0.69
1:B:1507:GLN:O	1:B:1562:ARG:NH1	2.24	0.69
1:C:1046:LEU:HD13	1:C:1129:LEU:HD22	1.75	0.69
1:C:2445:UNK:HG2	1:C:2985:GLY:O	1.93	0.69
1:C:2743:ALA:HB1	1:C:2940:VAL:HG23	1.73	0.69
1:C:2998:GLY:N	1:C:3002:VAL:O	2.23	0.69
1:C:2112:UNK:C	1:C:2115:UNK:HG3	2.22	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2085:UNK:O	1:B:2088:UNK:CG	2.40	0.69
1:B:2946:LEU:HD11	1:B:2992:GLY:HA3	1.75	0.69
1:A:2445:UNK:HG2	1:A:2985:GLY:O	1.93	0.68
1:C:992:UNK:HG3	1:C:996:UNK:HG3	1.66	0.68
1:B:2113:UNK:C	1:B:2116:UNK:HG3	2.23	0.68
1:A:511:ARG:HD3	1:A:543:GLY:HA3	1.76	0.68
1:A:1177:ARG:HB2	1:A:1184:LEU:HD23	1.74	0.68
1:B:2112:UNK:C	1:B:2115:UNK:HG3	2.22	0.68
1:B:2113:UNK:O	1:B:2116:UNK:CG	2.37	0.68
1:C:2093:UNK:CG	1:C:2132:UNK:HB1	2.24	0.68
1:B:340:ILE:HD13	1:B:364:THR:HG21	1.75	0.68
1:B:1035:VAL:HG12	1:B:1037:ASP:H	1.57	0.68
1:C:1164:THR:N	1:C:1167:GLY:O	2.25	0.68
1:C:1177:ARG:HB2	1:C:1184:LEU:HD23	1.74	0.68
1:A:340:ILE:HD13	1:A:364:THR:HG21	1.75	0.68
1:A:2112:UNK:C	1:A:2115:UNK:HG3	2.22	0.68
1:C:511:ARG:HD3	1:C:543:GLY:HA3	1.76	0.68
1:C:2113:UNK:C	1:C:2116:UNK:HG3	2.23	0.68
1:A:2093:UNK:CG	1:A:2132:UNK:HB1	2.24	0.68
1:B:2093:UNK:CG	1:B:2132:UNK:HB1	2.24	0.68
1:B:2647:VAL:HG22	1:B:2769:ASP:HB2	1.75	0.68
1:C:137:VAL:HG22	1:C:354:LEU:HD13	1.74	0.68
1:C:2215:THR:HB	1:C:2229:LYS:HB2	1.74	0.68
1:A:2080:UNK:HB2	1:A:2082:UNK:HG3	1.75	0.68
1:A:2946:LEU:HD11	1:A:2992:GLY:HA3	1.75	0.68
1:C:269:GLU:HB3	1:C:282:VAL:HA	1.75	0.68
1:A:2085:UNK:O	1:A:2088:UNK:CG	2.40	0.68
1:B:2445:UNK:HG2	1:B:2985:GLY:O	1.93	0.68
1:C:1488:VAL:HG21	1:C:1580:PRO:HD2	1.76	0.68
1:C:2097:UNK:C	1:C:2100:UNK:HG3	2.24	0.68
1:A:992:UNK:HG3	1:A:996:UNK:HG2	1.76	0.68
1:A:1724:TYR:OH	1:B:267:GLU:OE2	2.08	0.68
1:B:511:ARG:HD3	1:B:543:GLY:HA3	1.76	0.68
1:C:2080:UNK:HB2	1:C:2082:UNK:HG3	1.75	0.68
1:A:974:UNK:HG1	1:A:977:UNK:HB1	1.74	0.67
1:A:2112:UNK:HG2	1:A:2114:UNK:HG3	1.77	0.67
1:A:2122:UNK:HA	1:A:2125:UNK:HG3	1.75	0.67
1:C:2946:LEU:HD11	1:C:2992:GLY:HA3	1.75	0.67
1:C:3080:ARG:HH11	1:C:3080:ARG:CG	2.07	0.67
1:A:2113:UNK:C	1:A:2116:UNK:HG3	2.23	0.67
1:B:974:UNK:HG1	1:B:977:UNK:HB1	1.74	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1163:ASP:HB3	1:B:1199:UNK:HG3	1.76	0.67
1:A:1164:THR:N	1:A:1167:GLY:O	2.25	0.67
1:B:2103:UNK:CG	1:B:2104:UNK:N	2.58	0.67
1:C:2112:UNK:HG2	1:C:2114:UNK:HG3	1.77	0.67
1:B:792:ALA:HA	1:B:799:PHE:HE2	1.60	0.67
1:B:2086:UNK:C	1:B:2089:UNK:HG3	2.25	0.67
1:B:2093:UNK:HG3	1:B:2132:UNK:HB1	1.77	0.67
1:B:3080:ARG:HH11	1:B:3080:ARG:CG	2.07	0.67
1:C:340:ILE:HD13	1:C:364:THR:HG21	1.75	0.67
1:C:2093:UNK:HG3	1:C:2132:UNK:HB1	1.77	0.67
1:C:2103:UNK:CG	1:C:2104:UNK:N	2.58	0.67
1:A:2112:UNK:N	1:A:2115:UNK:CG	2.57	0.67
1:A:2126:UNK:O	1:A:2129:UNK:CG	2.43	0.67
1:B:269:GLU:HB3	1:B:282:VAL:HA	1.75	0.67
1:B:2080:UNK:HB2	1:B:2082:UNK:HG3	1.75	0.67
1:A:2081:UNK:O	1:A:2084:UNK:CG	2.43	0.67
1:A:2097:UNK:C	1:A:2100:UNK:HG3	2.24	0.67
1:B:2080:UNK:O	1:B:2083:UNK:HG3	1.94	0.67
1:B:931:UNK:CG	1:B:933:UNK:HG3	2.25	0.67
1:A:1008:UNK:HG3	1:A:1019:PHE:HB3	1.76	0.67
1:A:2103:UNK:CG	1:A:2104:UNK:N	2.58	0.67
1:B:1488:VAL:HG12	1:B:1490:ARG:NH1	2.10	0.67
1:A:269:GLU:HB3	1:A:282:VAL:HA	1.75	0.66
1:A:1488:VAL:HG21	1:A:1580:PRO:HD2	1.76	0.66
1:A:2084:UNK:C	1:A:2087:UNK:HG3	2.25	0.66
1:A:2647:VAL:HG22	1:A:2769:ASP:HB2	1.75	0.66
1:C:970:ILE:HG12	1:C:996:UNK:HG1	1.76	0.66
1:C:1008:UNK:HG3	1:C:1019:PHE:HB3	1.76	0.66
1:A:511:ARG:HB2	1:A:540:ASN:HB2	1.77	0.66
1:A:792:ALA:HA	1:A:799:PHE:HE2	1.60	0.66
1:A:2080:UNK:O	1:A:2083:UNK:HG3	1.95	0.66
1:A:2093:UNK:HG3	1:A:2132:UNK:HB1	1.77	0.66
1:B:1012:UNK:O	1:B:1013:UNK:CG	2.41	0.66
1:B:1168:ARG:HB2	1:B:1197:UNK:HB2	1.77	0.66
1:B:2084:UNK:C	1:B:2087:UNK:HG3	2.25	0.66
1:C:981:UNK:O	1:C:981:UNK:HG2	1.95	0.66
1:C:992:UNK:HG3	1:C:996:UNK:HG2	1.76	0.66
1:C:1163:ASP:HB3	1:C:1199:UNK:HG3	1.76	0.66
1:B:992:UNK:HG3	1:B:996:UNK:HG2	1.76	0.66
1:B:2097:UNK:C	1:B:2100:UNK:HG3	2.24	0.66
1:C:1358:GLN:HG2	1:C:1423:THR:HG23	1.78	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2081:UNK:O	1:B:2084:UNK:CG	2.43	0.66
1:B:2126:UNK:O	1:B:2129:UNK:CG	2.43	0.66
1:C:511:ARG:HB2	1:C:540:ASN:HB2	1.78	0.66
1:C:2080:UNK:O	1:C:2083:UNK:HG3	1.94	0.66
1:A:1412:HIS:HD2	1:A:1413:PRO:HD2	1.61	0.66
1:B:511:ARG:HB2	1:B:540:ASN:HB2	1.77	0.66
1:B:981:UNK:HG1	1:B:987:UNK:CG	2.19	0.66
1:C:683:GLY:HA2	1:C:700:ASN:HB2	1.78	0.66
1:C:2126:UNK:O	1:C:2129:UNK:CG	2.43	0.66
1:A:1163:ASP:HB3	1:A:1199:UNK:HG3	1.76	0.66
1:B:1167:GLY:HA3	1:B:1195:ARG:HA	1.77	0.66
1:B:1412:HIS:HD2	1:B:1413:PRO:HD2	1.61	0.66
1:C:1168:ARG:HB2	1:C:1197:UNK:HB2	1.77	0.66
1:B:1008:UNK:HG3	1:B:1019:PHE:HB3	1.76	0.66
1:C:792:ALA:HA	1:C:799:PHE:HE2	1.60	0.66
1:A:1084:THR:HG21	1:A:1274:ALA:HA	1.78	0.66
1:A:1358:GLN:HG2	1:A:1423:THR:HG23	1.78	0.66
1:B:35:VAL:HG11	1:B:147:LEU:HB3	1.78	0.66
1:B:2112:UNK:HG2	1:B:2114:UNK:HG3	1.77	0.66
1:C:931:UNK:CG	1:C:933:UNK:HG3	2.24	0.66
1:C:1132:LEU:HD11	1:C:1192:PHE:HB3	1.78	0.66
1:A:931:UNK:CG	1:A:933:UNK:HG3	2.25	0.66
1:C:1084:THR:HG21	1:C:1274:ALA:HA	1.78	0.66
1:C:2081:UNK:O	1:C:2084:UNK:CG	2.43	0.66
1:C:2112:UNK:N	1:C:2115:UNK:CG	2.57	0.66
1:A:2086:UNK:C	1:A:2089:UNK:HG3	2.25	0.66
1:B:666:VAL:HG21	1:B:904:VAL:HB	1.78	0.66
1:B:1358:GLN:HG2	1:B:1423:THR:HG23	1.78	0.66
1:B:2112:UNK:N	1:B:2115:UNK:CG	2.57	0.66
1:C:997:UNK:O	1:C:1009:UNK:N	2.29	0.66
1:A:997:UNK:O	1:A:1009:UNK:N	2.29	0.65
1:A:1167:GLY:HA3	1:A:1195:ARG:HA	1.78	0.65
1:A:2112:UNK:N	1:A:2115:UNK:HG1	2.11	0.65
1:A:2679:ALA:HB3	1:A:2762:VAL:HG12	1.78	0.65
1:B:970:ILE:HG12	1:B:996:UNK:HG1	1.76	0.65
1:B:1488:VAL:HG21	1:B:1580:PRO:HD2	1.77	0.65
1:B:1534:ASN:HB2	1:B:1543:ALA:HB3	1.78	0.65
1:B:2123:UNK:C	1:B:2126:UNK:HG3	2.26	0.65
1:A:970:ILE:HG12	1:A:996:UNK:HG1	1.76	0.65
1:A:1488:VAL:HG12	1:A:1490:ARG:NH1	2.10	0.65
1:B:2706:PRO:HG2	1:B:2709:ILE:HG23	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2123:UNK:C	1:C:2126:UNK:HG3	2.26	0.65
1:A:2123:UNK:C	1:A:2126:UNK:HG3	2.26	0.65
1:B:207:MET:HE2	1:B:292:VAL:HG21	1.78	0.65
1:B:683:GLY:HA2	1:B:700:ASN:HB2	1.78	0.65
1:C:1534:ASN:HB2	1:C:1543:ALA:HB3	1.79	0.65
1:C:2084:UNK:C	1:C:2087:UNK:HG3	2.25	0.65
1:B:1417:LEU:O	1:B:1423:THR:OG1	2.14	0.65
1:C:203:ASP:OD1	1:C:204:ARG:N	2.29	0.65
1:C:924:LEU:O	1:C:929:UNK:N	2.30	0.65
1:C:2876:LEU:HD11	1:C:2886:ILE:HD11	1.79	0.65
1:A:981:UNK:O	1:A:981:UNK:HG2	1.95	0.65
1:B:2112:UNK:N	1:B:2115:UNK:HG1	2.11	0.65
1:B:2679:ALA:HB3	1:B:2762:VAL:HG12	1.78	0.65
1:C:1488:VAL:HG12	1:C:1490:ARG:NH1	2.10	0.65
1:C:2086:UNK:C	1:C:2089:UNK:HG3	2.25	0.65
1:A:35:VAL:HG11	1:A:147:LEU:HB3	1.78	0.65
1:A:450:ASN:HA	1:A:483:ARG:HH11	1.62	0.65
1:B:3080:ARG:HG3	1:B:3080:ARG:NH1	2.09	0.65
1:C:1012:UNK:O	1:C:1013:UNK:CG	2.41	0.65
1:A:2876:LEU:HD11	1:A:2886:ILE:HD11	1.79	0.65
1:B:1132:LEU:HD11	1:B:1192:PHE:HB3	1.78	0.65
1:C:666:VAL:HG21	1:C:904:VAL:HB	1.78	0.65
1:C:1412:HIS:HD2	1:C:1413:PRO:HD2	1.61	0.65
1:C:1417:LEU:O	1:C:1423:THR:OG1	2.14	0.65
1:A:666:VAL:HG21	1:A:904:VAL:HB	1.78	0.65
1:A:1168:ARG:HB2	1:A:1197:UNK:HB2	1.77	0.65
1:B:500:GLN:O	1:B:504:LYS:N	2.24	0.65
1:B:1084:THR:HG21	1:B:1274:ALA:HA	1.78	0.65
1:B:2876:LEU:HD11	1:B:2886:ILE:HD11	1.79	0.65
1:A:943:UNK:O	1:A:944:UNK:CG	2.44	0.65
1:A:999:UNK:CG	1:A:1007:UNK:CG	2.75	0.65
1:A:1536:ASN:HA	1:A:1679:TRP:HB3	1.79	0.65
1:A:3080:ARG:HH11	1:A:3080:ARG:CG	2.07	0.65
1:B:203:ASP:OD1	1:B:204:ARG:N	2.29	0.65
1:B:997:UNK:O	1:B:1009:UNK:N	2.29	0.65
1:C:999:UNK:CG	1:C:1007:UNK:CG	2.75	0.65
1:C:1167:GLY:HA3	1:C:1195:ARG:HA	1.78	0.65
1:A:2652:ILE:HG12	1:A:2722:VAL:HG22	1.79	0.65
1:B:943:UNK:O	1:B:944:UNK:CG	2.44	0.65
1:C:2652:ILE:HG12	1:C:2722:VAL:HG22	1.79	0.65
1:C:2706:PRO:HG2	1:C:2709:ILE:HG23	1.79	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:35:VAL:HG11	1:C:147:LEU:HB3	1.77	0.64
1:C:1536:ASN:HA	1:C:1679:TRP:HB3	1.78	0.64
1:A:56:LEU:HD22	1:A:119:LEU:HD13	1.79	0.64
1:A:408:VAL:HG13	1:A:943:UNK:HG1	1.80	0.64
1:B:981:UNK:HG2	1:B:981:UNK:O	1.95	0.64
1:A:924:LEU:O	1:A:929:UNK:N	2.30	0.64
1:A:2120:UNK:O	1:A:2123:UNK:HG3	1.97	0.64
1:A:2706:PRO:HG2	1:A:2709:ILE:HG23	1.78	0.64
1:A:1534:ASN:HB2	1:A:1543:ALA:HB3	1.78	0.64
1:B:924:LEU:O	1:B:929:UNK:N	2.30	0.64
1:C:450:ASN:HA	1:C:483:ARG:HH11	1.62	0.64
1:C:943:UNK:O	1:C:944:UNK:CG	2.44	0.64
1:A:34:LEU:O	1:A:38:LEU:N	2.25	0.64
1:A:643:ILE:HD12	1:A:915:PHE:HZ	1.62	0.64
1:B:42:GLU:HB3	1:B:349:ARG:HG3	1.79	0.64
1:B:999:UNK:CG	1:B:1007:UNK:CG	2.75	0.64
1:B:2120:UNK:O	1:B:2123:UNK:HG3	1.97	0.64
1:B:2428:UNK:HG2	1:B:2428:UNK:O	1.98	0.64
1:C:2449:UNK:O	1:C:2449:UNK:HG2	1.98	0.64
1:C:2679:ALA:HB3	1:C:2762:VAL:HG12	1.78	0.64
1:C:408:VAL:HG13	1:C:943:UNK:HG1	1.79	0.64
1:A:207:MET:HE2	1:A:292:VAL:HG21	1.78	0.64
1:A:683:GLY:HA2	1:A:700:ASN:HB2	1.78	0.64
1:A:792:ALA:O	1:A:2433:UNK:HG2	1.96	0.64
1:A:1132:LEU:HD11	1:A:1192:PHE:HB3	1.78	0.64
1:A:1214:UNK:HB1	1:A:1320:VAL:HB	1.80	0.64
1:B:2080:UNK:HG2	1:B:2083:UNK:HG3	1.79	0.64
1:C:2120:UNK:O	1:C:2123:UNK:HG3	1.97	0.64
1:B:56:LEU:HD22	1:B:119:LEU:HD13	1.79	0.64
1:A:203:ASP:OD1	1:A:204:ARG:N	2.30	0.64
1:A:2252:VAL:HA	1:A:2255:ARG:HE	1.62	0.64
1:B:1536:ASN:HA	1:B:1679:TRP:HB3	1.78	0.64
1:B:2252:VAL:HA	1:B:2255:ARG:HE	1.62	0.64
1:C:803:GLU:OE1	1:C:2431:UNK:HG3	1.98	0.64
1:B:2449:UNK:HG2	1:B:2449:UNK:O	1.98	0.64
1:C:238:SER:OG	1:C:249:THR:OG1	2.15	0.64
1:A:42:GLU:HB3	1:A:349:ARG:HG3	1.79	0.63
1:C:42:GLU:HB3	1:C:349:ARG:HG3	1.79	0.63
1:C:2080:UNK:HG2	1:C:2083:UNK:HG3	1.79	0.63
1:A:974:UNK:CG	1:A:977:UNK:HB1	2.29	0.63
1:C:207:MET:HE2	1:C:292:VAL:HG21	1.78	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:643:ILE:HD12	1:C:915:PHE:HZ	1.62	0.63
1:A:2428:UNK:O	1:A:2428:UNK:HG2	1.98	0.63
1:B:450:ASN:HA	1:B:483:ARG:HH11	1.62	0.63
1:B:643:ILE:HD12	1:B:915:PHE:HZ	1.62	0.63
1:B:974:UNK:CG	1:B:977:UNK:HB1	2.29	0.63
1:B:2176:LEU:HG	1:B:2180:LYS:HE3	1.80	0.63
1:C:360:LEU:HD12	1:C:363:LEU:HD23	1.80	0.63
1:A:656:THR:HG1	1:A:880:HIS:HD1	1.45	0.63
1:A:2080:UNK:HG2	1:A:2083:UNK:HG3	1.79	0.63
1:A:2422:UNK:HG2	1:A:2422:UNK:O	1.98	0.63
1:C:1214:UNK:HB1	1:C:1320:VAL:HB	1.80	0.63
1:C:2252:VAL:HA	1:C:2255:ARG:HE	1.62	0.63
1:C:2428:UNK:O	1:C:2428:UNK:HG2	1.98	0.63
1:A:1072:TRP:NE1	1:A:1077:VAL:HG22	2.14	0.63
1:A:1087:PHE:HB3	1:B:117:LYS:HZ3	1.64	0.63
1:A:2092:UNK:HA	1:A:2189:PHE:HB2	1.81	0.63
1:B:2297:ARG:HD3	1:B:2297:ARG:H	1.64	0.63
1:C:1072:TRP:NE1	1:C:1077:VAL:HG22	2.14	0.63
1:C:2094:UNK:CG	1:C:2096:UNK:CG	2.75	0.63
1:A:2135:UNK:HG3	1:A:2136:ASP:H	1.64	0.63
1:B:408:VAL:HG13	1:B:943:UNK:HG1	1.79	0.63
1:B:585:HIS:CD2	1:B:586:SER:H	2.17	0.63
1:B:1072:TRP:NE1	1:B:1077:VAL:HG22	2.14	0.63
1:B:1212:UNK:HG2	1:B:1212:UNK:O	1.99	0.63
1:B:2125:UNK:HA	1:B:2128:UNK:HG3	1.81	0.63
1:B:2652:ILE:HG12	1:B:2722:VAL:HG22	1.79	0.63
1:A:2948:GLN:HG2	1:A:2951:ARG:HH21	1.64	0.63
1:B:1215:UNK:HG2	1:B:1216:UNK:N	2.14	0.63
1:C:1212:UNK:HG2	1:C:1212:UNK:O	1.99	0.63
1:C:2092:UNK:O	1:C:2092:UNK:HG2	1.99	0.63
1:A:267:GLU:OE2	1:C:1724:TYR:OH	2.07	0.63
1:A:980:UNK:C	1:A:981:UNK:HG3	2.29	0.63
1:A:1212:UNK:HG2	1:A:1212:UNK:O	1.99	0.63
1:A:2047:THR:OG1	1:A:2205:ASP:OD2	2.17	0.63
1:A:2117:UNK:O	1:A:2121:UNK:HG3	1.98	0.63
1:B:360:LEU:HD12	1:B:363:LEU:HD23	1.80	0.63
1:B:2117:UNK:O	1:B:2121:UNK:HG3	1.98	0.63
1:A:360:LEU:HD12	1:A:363:LEU:HD23	1.80	0.63
1:A:803:GLU:OE1	1:A:2431:UNK:HG3	1.98	0.63
1:A:2297:ARG:H	1:A:2297:ARG:HD3	1.64	0.63
1:B:750:LEU:HD12	1:B:827:LEU:HD11	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:803:GLU:OE1	1:B:2431:UNK:HG3	1.98	0.63
1:B:1212:UNK:HG2	1:B:1342:ARG:HE	1.64	0.63
1:B:2047:THR:OG1	1:B:2205:ASP:OD2	2.17	0.63
1:A:750:LEU:HD12	1:A:827:LEU:HD11	1.81	0.62
1:A:1215:UNK:HG2	1:A:1216:UNK:N	2.14	0.62
1:A:1315:ARG:HH21	1:A:1323:GLU:HG2	1.64	0.62
1:A:1412:HIS:ND1	1:A:1415:GLY:O	2.26	0.62
1:A:2125:UNK:HA	1:A:2128:UNK:HG3	1.81	0.62
1:C:974:UNK:CG	1:C:977:UNK:HB1	2.29	0.62
1:C:1126:ILE:HG22	1:C:1196:UNK:HG1	1.81	0.62
1:C:1412:HIS:ND1	1:C:1415:GLY:O	2.26	0.62
1:C:2173:ASP:OD2	1:C:2799:LYS:NZ	2.32	0.62
1:C:2422:UNK:HG2	1:C:2422:UNK:O	1.98	0.62
1:A:664:LEU:HD13	1:A:701:ALA:HB1	1.81	0.62
1:B:34:LEU:O	1:B:38:LEU:N	2.25	0.62
1:B:980:UNK:C	1:B:981:UNK:HG3	2.29	0.62
1:B:1126:ILE:HG22	1:B:1196:UNK:HG1	1.81	0.62
1:B:2422:UNK:O	1:B:2422:UNK:HG2	1.98	0.62
1:C:1376:VAL:HA	1:C:1470:LEU:HD13	1.81	0.62
1:C:2117:UNK:O	1:C:2121:UNK:HG3	1.98	0.62
1:A:2092:UNK:O	1:A:2092:UNK:HG2	1.99	0.62
1:B:664:LEU:HD13	1:B:701:ALA:HB1	1.81	0.62
1:B:1002:UNK:O	1:B:1003:UNK:CG	2.47	0.62
1:B:1214:UNK:HB1	1:B:1320:VAL:HB	1.80	0.62
1:C:56:LEU:HD22	1:C:119:LEU:HD13	1.79	0.62
1:C:2176:LEU:HG	1:C:2180:LYS:HE3	1.80	0.62
1:A:2449:UNK:O	1:A:2449:UNK:HG2	1.98	0.62
1:B:1376:VAL:HA	1:B:1470:LEU:HD13	1.81	0.62
1:C:585:HIS:CD2	1:C:586:SER:H	2.17	0.62
1:C:1095:LEU:HD12	1:C:1096:THR:H	1.64	0.62
1:C:1212:UNK:HG2	1:C:1342:ARG:HE	1.64	0.62
1:A:500:GLN:O	1:A:504:LYS:N	2.24	0.62
1:A:1376:VAL:HA	1:A:1470:LEU:HD13	1.81	0.62
1:C:992:UNK:CG	1:C:994:UNK:HG2	2.29	0.62
1:A:585:HIS:CD2	1:A:586:SER:H	2.17	0.62
1:A:1622:PRO:HD3	1:A:1685:LEU:HD11	1.81	0.62
1:A:1702:GLU:OE2	1:A:1711:VAL:HG13	1.99	0.62
1:B:1702:GLU:OE2	1:B:1711:VAL:HG13	1.99	0.62
1:B:2173:ASP:OD2	1:B:2799:LYS:NZ	2.32	0.62
1:B:2765:GLY:HA2	1:B:2940:VAL:HG21	1.82	0.62
1:C:792:ALA:O	1:C:2433:UNK:HG2	1.96	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2765:GLY:HA2	1:C:2940:VAL:HG21	1.82	0.62
1:A:992:UNK:CG	1:A:994:UNK:HG2	2.29	0.62
1:B:415:VAL:HG22	1:B:937:UNK:HG1	1.81	0.62
1:B:792:ALA:O	1:B:2433:UNK:HG2	1.96	0.62
1:B:975:UNK:HG3	1:B:993:UNK:CB	2.29	0.62
1:B:1353:PRO:HG3	1:B:1702:GLU:OE2	2.00	0.62
1:B:1725:SER:HB3	1:C:260:LEU:HD13	1.82	0.62
1:B:2237:LEU:HB2	1:B:2287:LEU:HD11	1.82	0.62
1:C:1215:UNK:HG2	1:C:1216:UNK:N	2.14	0.62
1:A:1002:UNK:O	1:A:1003:UNK:CG	2.47	0.62
1:A:1095:LEU:HD12	1:A:1096:THR:H	1.64	0.62
1:B:2092:UNK:HA	1:B:2189:PHE:HB2	1.81	0.62
1:C:164:ALA:HA	1:C:178:LEU:HD13	1.82	0.62
1:C:980:UNK:C	1:C:981:UNK:HG3	2.29	0.62
1:C:2096:UNK:HG2	1:C:2097:UNK:N	2.14	0.62
1:A:238:SER:OG	1:A:249:THR:OG1	2.16	0.62
1:A:1002:UNK:O	1:A:1002:UNK:HG2	1.99	0.62
1:B:992:UNK:HG3	1:B:996:UNK:HG3	1.66	0.62
1:B:2096:UNK:HG2	1:B:2097:UNK:N	2.14	0.62
1:C:415:VAL:HG22	1:C:937:UNK:HG1	1.81	0.62
1:B:2948:GLN:HG2	1:B:2951:ARG:HH21	1.64	0.61
1:C:203:ASP:O	1:C:205:PRO:HD3	2.00	0.61
1:C:664:LEU:HD13	1:C:701:ALA:HB1	1.81	0.61
1:C:975:UNK:HG3	1:C:993:UNK:CB	2.29	0.61
1:C:1431:ALA:HB3	1:C:1459:THR:HG21	1.82	0.61
1:C:1702:GLU:OE2	1:C:1711:VAL:HG13	1.99	0.61
1:C:2047:THR:OG1	1:C:2205:ASP:OD2	2.17	0.61
1:C:2092:UNK:HA	1:C:2189:PHE:HB2	1.81	0.61
1:C:2297:ARG:H	1:C:2297:ARG:HD3	1.64	0.61
1:C:2948:GLN:HG2	1:C:2951:ARG:HH21	1.64	0.61
1:A:511:ARG:HH11	1:A:543:GLY:HA3	1.65	0.61
1:A:793:ARG:HD3	1:A:2435:UNK:CG	2.27	0.61
1:A:2122:UNK:C	1:A:2125:UNK:HG3	2.30	0.61
1:A:3080:ARG:HG3	1:A:3080:ARG:NH1	2.09	0.61
1:B:409:LYS:HD2	1:B:933:UNK:HA	1.82	0.61
1:B:575:HIS:HD2	1:B:644:LEU:HD22	1.66	0.61
1:B:939:UNK:O	1:B:940:UNK:CG	2.47	0.61
1:B:971:ALA:O	1:B:974:UNK:CG	2.48	0.61
1:C:575:HIS:HD2	1:C:644:LEU:HD22	1.66	0.61
1:C:1622:PRO:HD3	1:C:1685:LEU:HD11	1.81	0.61
1:C:2125:UNK:HA	1:C:2128:UNK:HG3	1.81	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:939:UNK:O	1:A:940:UNK:CG	2.47	0.61
1:B:511:ARG:HH11	1:B:543:GLY:HA3	1.66	0.61
1:B:984:UNK:CG	1:B:987:UNK:CG	2.79	0.61
1:B:2092:UNK:HG2	1:B:2092:UNK:O	1.99	0.61
1:C:34:LEU:H	1:C:393:VAL:HG21	1.65	0.61
1:C:970:ILE:CG1	1:C:996:UNK:HG1	2.31	0.61
1:C:2103:UNK:HG1	1:C:2919:GLY:O	2.00	0.61
1:A:415:VAL:CG2	1:A:937:UNK:HG1	2.31	0.61
1:A:976:UNK:O	1:A:976:UNK:HG2	2.01	0.61
1:A:1725:SER:HB3	1:B:260:LEU:HD13	1.82	0.61
1:B:415:VAL:CG2	1:B:937:UNK:HG1	2.31	0.61
1:C:1002:UNK:O	1:C:1003:UNK:CG	2.47	0.61
1:C:2112:UNK:N	1:C:2115:UNK:HG1	2.11	0.61
1:C:2434:UNK:CG	1:C:2523:GLU:O	2.48	0.61
1:A:164:ALA:HA	1:A:178:LEU:HD13	1.82	0.61
1:B:34:LEU:H	1:B:393:VAL:HG21	1.65	0.61
1:B:106:ALA:HB1	1:B:112:PRO:HB2	1.82	0.61
1:B:929:UNK:O	1:B:930:UNK:CG	2.45	0.61
1:B:1622:PRO:HD3	1:B:1685:LEU:HD11	1.81	0.61
1:A:260:LEU:HD13	1:C:1725:SER:HB3	1.82	0.61
1:A:409:LYS:HD2	1:A:933:UNK:HA	1.82	0.61
1:A:415:VAL:HG22	1:A:937:UNK:HG1	1.81	0.61
1:A:575:HIS:HD2	1:A:644:LEU:HD22	1.66	0.61
1:A:984:UNK:HG2	1:A:987:UNK:CG	2.31	0.61
1:A:1431:ALA:HB3	1:A:1459:THR:HG21	1.82	0.61
1:A:2176:LEU:HG	1:A:2180:LYS:HE3	1.80	0.61
1:A:2469:LEU:HD11	1:A:2653:VAL:HB	1.82	0.61
1:B:2469:LEU:HD11	1:B:2653:VAL:HB	1.82	0.61
1:C:409:LYS:HD2	1:C:933:UNK:HA	1.82	0.61
1:C:971:ALA:O	1:C:974:UNK:CG	2.48	0.61
1:C:984:UNK:HG2	1:C:987:UNK:CG	2.31	0.61
1:C:1227:UNK:O	1:C:1227:UNK:HG2	2.00	0.61
1:A:929:UNK:O	1:A:930:UNK:CG	2.45	0.61
1:A:1126:ILE:HG22	1:A:1196:UNK:HG1	1.81	0.61
1:A:1353:PRO:HG3	1:A:1702:GLU:OE2	2.00	0.61
1:B:2122:UNK:C	1:B:2125:UNK:HG3	2.30	0.61
1:B:2135:UNK:HG3	1:B:2136:ASP:H	1.64	0.61
1:C:34:LEU:O	1:C:38:LEU:N	2.25	0.61
1:C:511:ARG:HH11	1:C:543:GLY:HA3	1.66	0.61
1:C:2469:LEU:HD11	1:C:2653:VAL:HB	1.82	0.61
1:C:3058:ARG:HB2	1:C:3089:LEU:HB2	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:106:ALA:HB1	1:A:112:PRO:HB2	1.82	0.61
1:A:580:ARG:HG2	1:A:590:LEU:HD21	1.83	0.61
1:A:1212:UNK:HG2	1:A:1342:ARG:HE	1.64	0.61
1:A:2103:UNK:HG1	1:A:2919:GLY:O	2.00	0.61
1:B:70:SER:HG	1:B:142:ARG:HH22	1.49	0.61
1:B:126:VAL:HG12	1:B:182:ALA:HB1	1.83	0.61
1:B:1007:UNK:HB2	1:B:1018:ARG:HE	1.66	0.61
1:B:1227:UNK:HG2	1:B:1227:UNK:O	2.00	0.61
1:B:1431:ALA:HB3	1:B:1459:THR:HG21	1.82	0.61
1:C:415:VAL:CG2	1:C:937:UNK:HG1	2.31	0.61
1:C:750:LEU:HD12	1:C:827:LEU:HD11	1.81	0.61
1:C:1353:PRO:HG3	1:C:1702:GLU:OE2	2.00	0.61
1:B:979:UNK:O	1:B:979:UNK:HG2	2.01	0.61
1:B:984:UNK:HG2	1:B:987:UNK:CG	2.31	0.61
1:B:2334:HIS:HD2	1:B:2391:LYS:HG3	1.66	0.61
1:B:2434:UNK:CG	1:B:2523:GLU:O	2.48	0.61
1:C:488:ASN:HA	1:C:521:VAL:HB	1.83	0.61
1:C:1007:UNK:HG2	1:C:1007:UNK:O	2.01	0.61
1:A:680:ALA:HA	1:A:685:ALA:HB2	1.83	0.61
1:A:984:UNK:CG	1:A:987:UNK:CG	2.79	0.61
1:A:1007:UNK:O	1:A:1007:UNK:HG2	2.01	0.61
1:A:1227:UNK:O	1:A:1227:UNK:HG2	2.00	0.61
1:B:970:ILE:CG1	1:B:996:UNK:HG1	2.31	0.61
1:B:3058:ARG:HB2	1:B:3089:LEU:HB2	1.82	0.61
1:C:1315:ARG:HH21	1:C:1323:GLU:HG2	1.64	0.61
1:A:34:LEU:H	1:A:393:VAL:HG21	1.65	0.60
1:A:970:ILE:CG1	1:A:996:UNK:HG1	2.31	0.60
1:A:980:UNK:HB2	1:A:989:UNK:HB2	1.83	0.60
1:A:2765:GLY:HA2	1:A:2940:VAL:HG21	1.82	0.60
1:B:438:THR:HA	1:B:880:HIS:HE1	1.66	0.60
1:B:1095:LEU:HD12	1:B:1096:THR:H	1.64	0.60
1:C:984:UNK:CG	1:C:987:UNK:CG	2.79	0.60
1:A:257:ARG:HH12	1:C:1695:LEU:CD2	2.13	0.60
1:A:1007:UNK:HB2	1:A:1018:ARG:HE	1.66	0.60
1:A:2096:UNK:HG2	1:A:2097:UNK:N	2.14	0.60
1:A:2647:VAL:HA	1:A:2650:TRP:HD1	1.66	0.60
1:B:488:ASN:HA	1:B:521:VAL:HB	1.83	0.60
1:B:1315:ARG:HH21	1:B:1323:GLU:HG2	1.64	0.60
1:C:580:ARG:HG2	1:C:590:LEU:HD21	1.83	0.60
1:C:980:UNK:HB2	1:C:989:UNK:HB2	1.83	0.60
1:C:1532:ILE:HA	1:C:1544:ILE:HG12	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2237:LEU:HB2	1:C:2287:LEU:HD11	1.82	0.60
1:A:203:ASP:O	1:A:205:PRO:HD3	2.01	0.60
1:A:2112:UNK:CG	1:A:2114:UNK:HG3	2.31	0.60
1:A:2237:LEU:HB2	1:A:2287:LEU:HD11	1.82	0.60
1:A:2372:MET:HB3	1:A:2394:LEU:HD22	1.83	0.60
1:A:2434:UNK:CG	1:A:2523:GLU:O	2.48	0.60
1:B:1098:VAL:HG12	1:B:1100:ASP:H	1.66	0.60
1:C:2800:PHE:HE1	1:C:2812:LEU:HD22	1.67	0.60
1:A:438:THR:HA	1:A:880:HIS:HE1	1.66	0.60
1:A:971:ALA:O	1:A:974:UNK:CG	2.48	0.60
1:A:979:UNK:HG2	1:A:979:UNK:O	2.01	0.60
1:A:1537:LEU:HB2	1:A:1541:GLN:H	1.67	0.60
1:A:2121:UNK:C	1:A:2124:UNK:HG3	2.31	0.60
1:B:164:ALA:HA	1:B:178:LEU:HD13	1.82	0.60
1:B:203:ASP:O	1:B:205:PRO:HD3	2.01	0.60
1:B:680:ALA:HA	1:B:685:ALA:HB2	1.83	0.60
1:B:1002:UNK:O	1:B:1002:UNK:HG2	2.00	0.60
1:B:2121:UNK:C	1:B:2124:UNK:HG3	2.31	0.60
1:C:1537:LEU:HB2	1:C:1541:GLN:H	1.67	0.60
1:C:2112:UNK:CG	1:C:2114:UNK:HG3	2.31	0.60
1:A:1989:PHE:HD1	1:A:1992:LYS:HZ3	1.49	0.60
1:A:2121:UNK:O	1:A:2124:UNK:CG	2.49	0.60
1:B:1695:LEU:CD2	1:C:257:ARG:HH12	2.13	0.60
1:B:2103:UNK:HG1	1:B:2919:GLY:O	2.00	0.60
1:B:2212:TRP:HA	1:B:2229:LYS:HD3	1.83	0.60
1:C:126:VAL:HG12	1:C:182:ALA:HB1	1.83	0.60
1:C:929:UNK:O	1:C:930:UNK:CG	2.45	0.60
1:C:2212:TRP:HA	1:C:2229:LYS:HD3	1.83	0.60
1:C:2962:ASP:OD1	1:C:2962:ASP:N	2.34	0.60
1:A:488:ASN:HA	1:A:521:VAL:HB	1.83	0.60
1:A:2651:ASN:HD22	1:A:2718:VAL:HG12	1.67	0.60
1:A:3058:ARG:HB2	1:A:3089:LEU:HB2	1.82	0.60
1:B:1012:UNK:C	1:B:1013:UNK:HG3	2.32	0.60
1:B:1087:PHE:HB3	1:C:117:LYS:HZ3	1.67	0.60
1:A:2173:ASP:OD2	1:A:2799:LYS:NZ	2.32	0.60
1:A:1309:VAL:HG22	1:A:1331:ILE:HG12	1.84	0.60
1:A:1695:LEU:CD2	1:B:257:ARG:HH12	2.13	0.60
1:A:2334:HIS:HD2	1:A:2391:LYS:HG3	1.66	0.60
1:B:670:GLY:O	1:B:682:ASN:ND2	2.35	0.60
1:B:687:GLY:O	1:B:695:ILE:N	2.34	0.60
1:B:688:ARG:O	1:B:872:ARG:NE	2.34	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2651:ASN:HD22	1:B:2718:VAL:HG12	1.67	0.60
1:C:976:UNK:HG2	1:C:976:UNK:O	2.01	0.60
1:C:2135:UNK:HG3	1:C:2136:ASP:H	1.64	0.60
1:A:670:GLY:O	1:A:682:ASN:ND2	2.35	0.60
1:A:931:UNK:O	1:A:934:UNK:HG3	2.02	0.60
1:A:975:UNK:HG3	1:A:993:UNK:CB	2.29	0.60
1:B:580:ARG:HG2	1:B:590:LEU:HD21	1.83	0.60
1:B:1435:VAL:HG11	1:B:1463:CYS:HB3	1.84	0.60
1:B:2112:UNK:CG	1:B:2114:UNK:HG3	2.31	0.60
1:B:2647:VAL:HA	1:B:2650:TRP:HD1	1.66	0.60
1:C:1002:UNK:O	1:C:1002:UNK:HG2	1.99	0.60
1:C:1098:VAL:HG12	1:C:1100:ASP:H	1.66	0.60
1:C:2081:UNK:O	1:C:2085:UNK:HG2	2.02	0.60
1:C:2461:VAL:HG11	1:C:2751:VAL:HG22	1.84	0.60
1:C:2651:ASN:HD22	1:C:2718:VAL:HG12	1.67	0.60
1:A:126:VAL:HG12	1:A:182:ALA:HB1	1.83	0.60
1:A:1532:ILE:HA	1:A:1544:ILE:HG12	1.83	0.60
1:A:2081:UNK:O	1:A:2085:UNK:HG2	2.02	0.60
1:B:931:UNK:O	1:B:934:UNK:HG3	2.02	0.60
1:B:1537:LEU:HB2	1:B:1541:GLN:H	1.67	0.60
1:C:670:GLY:O	1:C:682:ASN:ND2	2.35	0.60
1:C:688:ARG:O	1:C:872:ARG:NE	2.34	0.60
1:C:939:UNK:O	1:C:940:UNK:CG	2.47	0.60
1:C:1007:UNK:HB2	1:C:1018:ARG:HE	1.66	0.60
1:C:2121:UNK:O	1:C:2124:UNK:CG	2.49	0.60
1:C:2122:UNK:C	1:C:2125:UNK:HG3	2.30	0.60
1:C:2334:HIS:HD2	1:C:2391:LYS:HG3	1.66	0.60
1:A:1012:UNK:C	1:A:1013:UNK:HG3	2.32	0.59
1:B:1532:ILE:HA	1:B:1544:ILE:HG12	1.83	0.59
1:C:410:LEU:HB3	1:C:1025:VAL:HG21	1.84	0.59
1:C:1435:VAL:HG11	1:C:1463:CYS:HB3	1.84	0.59
1:C:2121:UNK:C	1:C:2124:UNK:HG3	2.31	0.59
1:A:410:LEU:HB3	1:A:1025:VAL:HG21	1.84	0.59
1:B:1656:LYS:HG2	1:B:1660:LEU:HG	1.85	0.59
1:B:2081:UNK:O	1:B:2085:UNK:HG2	2.02	0.59
1:B:2121:UNK:O	1:B:2124:UNK:CG	2.49	0.59
1:B:2372:MET:HB3	1:B:2394:LEU:HD22	1.83	0.59
1:C:680:ALA:HA	1:C:685:ALA:HB2	1.83	0.59
1:C:2056:PHE:HZ	1:C:2180:LYS:HE2	1.67	0.59
1:C:2429:UNK:O	1:C:2429:UNK:HG2	2.02	0.59
1:A:2431:UNK:O	1:A:2431:UNK:HG2	2.01	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:795:HIS:HB3	1:B:799:PHE:CZ	2.37	0.59
1:C:106:ALA:HB1	1:C:112:PRO:HB2	1.82	0.59
1:C:2431:UNK:HG2	1:C:2431:UNK:O	2.01	0.59
1:C:2712:GLU:HA	1:C:2717:VAL:HG11	1.83	0.59
1:A:795:HIS:HB3	1:A:799:PHE:CZ	2.37	0.59
1:A:1098:VAL:HG12	1:A:1100:ASP:H	1.66	0.59
1:A:2800:PHE:HE1	1:A:2812:LEU:HD22	1.67	0.59
1:A:2820:ILE:HD13	1:A:2943:MET:HG2	1.84	0.59
1:B:1002:UNK:C	1:B:1003:UNK:HG3	2.33	0.59
1:A:688:ARG:O	1:A:872:ARG:NE	2.34	0.59
1:A:2056:PHE:HZ	1:A:2180:LYS:HE2	1.67	0.59
1:B:2667:THR:HG21	1:B:3058:ARG:NH1	2.17	0.59
1:C:1336:VAL:HG12	1:C:1337:MET:HG3	1.85	0.59
1:C:2372:MET:HB3	1:C:2394:LEU:HD22	1.83	0.59
1:A:2212:TRP:HA	1:A:2229:LYS:HD3	1.83	0.59
1:B:793:ARG:HD3	1:B:2435:UNK:CG	2.27	0.59
1:B:976:UNK:O	1:B:976:UNK:HG2	2.01	0.59
1:B:980:UNK:HB2	1:B:989:UNK:HB2	1.83	0.59
1:C:931:UNK:O	1:C:934:UNK:HG3	2.02	0.59
1:C:2889:ILE:HG12	1:C:2922:LEU:HB3	1.84	0.59
1:A:1417:LEU:O	1:A:1423:THR:OG1	2.14	0.59
1:B:2431:UNK:O	1:B:2431:UNK:HG2	2.01	0.59
1:A:1656:LYS:HG2	1:A:1660:LEU:HG	1.85	0.59
1:A:2667:THR:HG21	1:A:3058:ARG:NH1	2.17	0.59
1:A:2693:GLN:O	1:A:2697:HIS:ND1	2.33	0.59
1:A:2712:GLU:HA	1:A:2717:VAL:HG11	1.83	0.59
1:B:992:UNK:CG	1:B:994:UNK:HG2	2.30	0.59
1:B:1007:UNK:HG2	1:B:1007:UNK:O	2.01	0.59
1:C:1701:VAL:HG22	1:C:1732:LEU:HB2	1.84	0.59
1:A:2094:UNK:CG	1:A:2096:UNK:CG	2.75	0.59
1:B:1336:VAL:HG12	1:B:1337:MET:HG3	1.85	0.59
1:B:2056:PHE:HZ	1:B:2180:LYS:HE2	1.67	0.59
1:B:2403:ILE:HG23	1:B:2408:LEU:HD12	1.85	0.59
1:B:2461:VAL:HG11	1:B:2751:VAL:HG22	1.84	0.59
1:C:1616:PRO:HG3	1:C:1668:LEU:HD13	1.85	0.59
1:C:2135:UNK:CG	1:C:2136:ASP:N	2.66	0.59
1:C:2647:VAL:HA	1:C:2650:TRP:HD1	1.66	0.59
1:A:150:THR:O	1:A:152:PRO:HD3	2.03	0.59
1:A:943:UNK:C	1:A:944:UNK:HG3	2.32	0.59
1:B:934:UNK:C	1:B:937:UNK:HG3	2.32	0.59
1:B:2800:PHE:HE1	1:B:2812:LEU:HD22	1.67	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1309:VAL:HG22	1:C:1331:ILE:HG12	1.84	0.59
1:A:2246:ALA:C	1:A:2255:ARG:HH12	2.11	0.58
1:B:462:GLN:HG3	1:B:468:PHE:HD1	1.68	0.58
1:C:836:VAL:HG12	1:C:837:VAL:H	1.67	0.58
1:C:979:UNK:HG2	1:C:979:UNK:O	2.01	0.58
1:C:2124:UNK:O	1:C:2127:UNK:CG	2.51	0.58
1:A:1001:UNK:C	1:A:1002:UNK:HG3	2.33	0.58
1:A:1336:VAL:HG12	1:A:1337:MET:HG3	1.85	0.58
1:A:1616:PRO:HG3	1:A:1668:LEU:HD13	1.85	0.58
1:C:438:THR:HA	1:C:880:HIS:HE1	1.66	0.58
1:C:943:UNK:C	1:C:944:UNK:HG3	2.32	0.58
1:C:1012:UNK:C	1:C:1013:UNK:HG3	2.32	0.58
1:A:2429:UNK:O	1:A:2429:UNK:HG2	2.02	0.58
1:A:2591:ARG:NH1	1:C:2012:GLY:C	2.61	0.58
1:A:2889:ILE:HG12	1:A:2922:LEU:HB3	1.84	0.58
1:B:1001:UNK:C	1:B:1002:UNK:HG3	2.33	0.58
1:B:1008:UNK:CG	1:B:1019:PHE:HB3	2.33	0.58
1:B:1327:VAL:HB	1:B:1339:ALA:HB3	1.86	0.58
1:B:1701:VAL:HG22	1:B:1732:LEU:HB2	1.84	0.58
1:C:150:THR:O	1:C:152:PRO:HD3	2.03	0.58
1:C:621:SER:OG	1:C:643:ILE:HD13	2.04	0.58
1:C:1001:UNK:C	1:C:1002:UNK:HG3	2.33	0.58
1:A:735:LYS:HD2	1:A:860:VAL:HG23	1.86	0.58
1:A:1008:UNK:O	1:A:1008:UNK:HG2	2.03	0.58
1:A:2012:GLY:C	1:B:2591:ARG:NH1	2.61	0.58
1:B:1253:ARG:HG3	1:B:1253:ARG:NH1	2.18	0.58
1:B:2712:GLU:HA	1:B:2717:VAL:HG11	1.84	0.58
1:C:795:HIS:HB3	1:C:799:PHE:CZ	2.37	0.58
1:C:990:UNK:CG	1:C:998:UNK:HB2	2.34	0.58
1:A:1008:UNK:CG	1:A:1019:PHE:HB3	2.33	0.58
1:A:1327:VAL:HB	1:A:1339:ALA:HB3	1.86	0.58
1:A:2461:VAL:HG11	1:A:2751:VAL:HG22	1.84	0.58
1:C:1253:ARG:HG3	1:C:1253:ARG:NH1	2.18	0.58
1:C:2667:THR:HG21	1:C:3058:ARG:NH1	2.17	0.58
1:A:1701:VAL:HG22	1:A:1732:LEU:HB2	1.84	0.58
1:A:2124:UNK:C	1:A:2127:UNK:HG3	2.34	0.58
1:B:836:VAL:HG12	1:B:837:VAL:H	1.67	0.58
1:C:2521:VAL:HG13	1:C:2529:ARG:HH11	1.68	0.58
1:A:117:LYS:NZ	1:C:1087:PHE:HB3	2.18	0.58
1:A:836:VAL:HG12	1:A:837:VAL:H	1.67	0.58
1:B:1008:UNK:O	1:B:1008:UNK:HG2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1616:PRO:HG3	1:B:1668:LEU:HD13	1.85	0.58
1:B:2487:LEU:HD11	1:B:2495:LEU:HD12	1.86	0.58
1:B:2686:MET:HE1	1:B:2935:LYS:NZ	2.19	0.58
1:B:2787:THR:HA	1:B:2790:MET:HG3	1.86	0.58
1:B:2876:LEU:HB3	1:B:2881:VAL:HG12	1.86	0.58
1:C:687:GLY:O	1:C:695:ILE:N	2.34	0.58
1:C:1989:PHE:HD1	1:C:1992:LYS:HZ3	1.51	0.58
1:C:2246:ALA:C	1:C:2255:ARG:HH12	2.11	0.58
1:A:441:ASP:OD2	1:A:443:LYS:HB3	2.04	0.58
1:A:511:ARG:HD2	1:A:517:ILE:O	2.04	0.58
1:A:784:GLU:OE2	1:A:787:LEU:HD12	2.04	0.58
1:A:2101:UNK:O	1:A:2105:UNK:HG3	2.04	0.58
1:B:410:LEU:HB3	1:B:1025:VAL:HG21	1.84	0.58
1:B:970:ILE:CD1	1:B:996:UNK:HG1	2.34	0.58
1:C:970:ILE:CD1	1:C:996:UNK:HG1	2.34	0.58
1:C:1656:LYS:HG2	1:C:1660:LEU:HG	1.85	0.58
1:A:2487:LEU:HD11	1:A:2495:LEU:HD12	1.86	0.58
1:B:776:ASP:O	1:B:779:TRP:N	2.31	0.58
1:B:990:UNK:CG	1:B:998:UNK:HB2	2.34	0.58
1:B:2339:TRP:HB2	1:B:2398:LEU:HD11	1.86	0.58
1:B:2820:ILE:HD13	1:B:2943:MET:HG2	1.84	0.58
1:A:2521:VAL:HG13	1:A:2529:ARG:HH11	1.68	0.58
1:A:2554:ALA:HB1	1:A:2614:LYS:NZ	2.19	0.58
1:A:2787:THR:HA	1:A:2790:MET:HG3	1.86	0.58
1:B:784:GLU:OE2	1:B:787:LEU:HD12	2.03	0.58
1:B:943:UNK:C	1:B:944:UNK:HG3	2.32	0.58
1:B:1309:VAL:HG22	1:B:1331:ILE:HG12	1.84	0.58
1:A:462:GLN:HG3	1:A:468:PHE:HD1	1.68	0.57
1:A:1091:LEU:HD13	1:A:1281:ALA:HB3	1.86	0.57
1:A:1435:VAL:HG11	1:A:1463:CYS:HB3	1.84	0.57
1:B:1412:HIS:ND1	1:B:1415:GLY:O	2.26	0.57
1:C:441:ASP:OD2	1:C:443:LYS:HB3	2.04	0.57
1:C:1008:UNK:HG2	1:C:1008:UNK:O	2.03	0.57
1:C:2403:ILE:HG23	1:C:2408:LEU:HD12	1.85	0.57
1:A:476:GLU:HA	1:A:479:LEU:HB2	1.86	0.57
1:A:924:LEU:HA	1:A:928:ALA:HB3	1.87	0.57
1:A:999:UNK:CG	1:A:1007:UNK:HG2	2.34	0.57
1:A:1002:UNK:C	1:A:1003:UNK:HG3	2.33	0.57
1:A:1087:PHE:HB3	1:B:117:LYS:NZ	2.18	0.57
1:B:1009:UNK:O	1:B:1009:UNK:HG2	2.04	0.57
1:B:1095:LEU:HD22	1:B:1289:PRO:HA	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1226:UNK:HG3	1:B:1313:VAL:CG1	2.35	0.57
1:B:2124:UNK:C	1:B:2127:UNK:HG3	2.34	0.57
1:B:2246:ALA:C	1:B:2255:ARG:HH12	2.11	0.57
1:C:1002:UNK:C	1:C:1003:UNK:HG3	2.33	0.57
1:C:2101:UNK:O	1:C:2105:UNK:HG3	2.04	0.57
1:C:2487:LEU:HD11	1:C:2495:LEU:HD12	1.86	0.57
1:A:1095:LEU:HD22	1:A:1289:PRO:HA	1.85	0.57
1:A:2339:TRP:HB2	1:A:2398:LEU:HD11	1.86	0.57
1:B:621:SER:OG	1:B:643:ILE:HD13	2.04	0.57
1:B:2012:GLY:C	1:C:2591:ARG:NH1	2.61	0.57
1:B:2101:UNK:O	1:B:2105:UNK:HG3	2.04	0.57
1:C:934:UNK:C	1:C:937:UNK:HG3	2.32	0.57
1:C:2339:TRP:HB2	1:C:2398:LEU:HD11	1.86	0.57
1:C:2554:ALA:HB1	1:C:2614:LYS:NZ	2.19	0.57
1:A:621:SER:OG	1:A:643:ILE:HD13	2.04	0.57
1:A:939:UNK:C	1:A:940:UNK:HG3	2.33	0.57
1:A:990:UNK:CG	1:A:998:UNK:HB2	2.34	0.57
1:A:1405:ALA:HB3	1:A:1408:VAL:HG23	1.86	0.57
1:A:2686:MET:HE1	1:A:2935:LYS:NZ	2.19	0.57
1:B:341:THR:HG23	1:B:344:HIS:HD1	1.69	0.57
1:B:1087:PHE:HB3	1:C:117:LYS:NZ	2.19	0.57
1:C:129:VAL:HG13	1:C:356:PRO:HG2	1.85	0.57
1:C:511:ARG:HD2	1:C:517:ILE:O	2.04	0.57
1:C:1017:ILE:HG23	1:C:1045:VAL:HG21	1.87	0.57
1:A:970:ILE:CD1	1:A:996:UNK:HG1	2.34	0.57
1:A:2124:UNK:O	1:A:2127:UNK:CG	2.51	0.57
1:B:129:VAL:HG13	1:B:356:PRO:HG2	1.85	0.57
1:B:924:LEU:HA	1:B:928:ALA:HB3	1.86	0.57
1:B:2521:VAL:HG13	1:B:2529:ARG:HH11	1.68	0.57
1:B:2889:ILE:HG12	1:B:2922:LEU:HB3	1.84	0.57
1:B:2983:LEU:HB3	1:B:2987:PHE:O	2.05	0.57
1:C:476:GLU:HA	1:C:479:LEU:HB2	1.86	0.57
1:C:490:LEU:HD23	1:C:523:SER:HB2	1.87	0.57
1:C:924:LEU:HA	1:C:928:ALA:HB3	1.87	0.57
1:C:999:UNK:CG	1:C:1007:UNK:HG2	2.34	0.57
1:C:1445:VAL:HG23	1:C:1448:ALA:HB2	1.87	0.57
1:C:2086:UNK:HA	1:C:2089:UNK:HG3	1.86	0.57
1:C:2124:UNK:C	1:C:2127:UNK:HG3	2.34	0.57
1:C:2820:ILE:HD13	1:C:2943:MET:HG2	1.84	0.57
1:C:2846:ALA:HA	1:C:3001:HIS:O	2.05	0.57
1:A:1009:UNK:O	1:A:1009:UNK:HG2	2.03	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2709:ILE:O	1:A:2713:VAL:HG13	2.05	0.57
1:B:975:UNK:HG2	1:B:976:UNK:N	2.20	0.57
1:B:2429:UNK:HG2	1:B:2429:UNK:O	2.02	0.57
1:C:939:UNK:C	1:C:940:UNK:HG3	2.33	0.57
1:C:1008:UNK:CG	1:C:1019:PHE:HB3	2.33	0.57
1:C:1009:UNK:HG2	1:C:1009:UNK:O	2.04	0.57
1:C:1095:LEU:HD22	1:C:1289:PRO:HA	1.85	0.57
1:C:2622:GLY:HA2	1:C:2812:LEU:HD11	1.87	0.57
1:A:2403:ILE:HG23	1:A:2408:LEU:HD12	1.85	0.57
1:A:2846:ALA:HA	1:A:3001:HIS:O	2.05	0.57
1:B:1445:VAL:HG23	1:B:1448:ALA:HB2	1.87	0.57
1:B:2846:ALA:HA	1:B:3001:HIS:O	2.05	0.57
1:C:784:GLU:OE2	1:C:787:LEU:HD12	2.03	0.57
1:C:2876:LEU:HB3	1:C:2881:VAL:HG12	1.86	0.57
1:A:980:UNK:O	1:A:981:UNK:CG	2.53	0.57
1:A:1537:LEU:HD11	1:A:1714:LEU:HB3	1.87	0.57
1:A:2876:LEU:HB3	1:A:2881:VAL:HG12	1.86	0.57
1:B:441:ASP:OD2	1:B:443:LYS:HB3	2.04	0.57
1:B:735:LYS:HD2	1:B:860:VAL:HG23	1.85	0.57
1:B:978:UNK:HB2	1:B:991:UNK:HG2	1.87	0.57
1:B:2084:UNK:O	1:B:2087:UNK:CG	2.52	0.57
1:C:127:PRO:HG3	1:C:183:GLN:HA	1.86	0.57
1:C:929:UNK:C	1:C:930:UNK:HG3	2.35	0.57
1:C:1091:LEU:HD13	1:C:1281:ALA:HB3	1.86	0.57
1:B:127:PRO:HG3	1:B:183:GLN:HA	1.86	0.57
1:B:511:ARG:NH1	1:B:543:GLY:HA3	2.19	0.57
1:B:2100:UNK:CG	1:B:2101:UNK:N	2.68	0.57
1:C:462:GLN:HG3	1:C:468:PHE:HD1	1.68	0.57
1:C:2686:MET:HE1	1:C:2935:LYS:NZ	2.19	0.57
1:B:868:ARG:HB3	1:B:872:ARG:HH11	1.70	0.57
1:B:2124:UNK:O	1:B:2127:UNK:CG	2.51	0.57
1:C:980:UNK:O	1:C:981:UNK:CG	2.53	0.57
1:C:2521:VAL:HG13	1:C:2529:ARG:NH1	2.20	0.57
1:C:2787:THR:HA	1:C:2790:MET:HG3	1.86	0.57
1:A:127:PRO:HG3	1:A:183:GLN:HA	1.85	0.56
1:A:129:VAL:HG13	1:A:356:PRO:HG2	1.85	0.56
1:A:511:ARG:NH1	1:A:543:GLY:HA3	2.19	0.56
1:A:868:ARG:HB3	1:A:872:ARG:HH11	1.70	0.56
1:B:1126:ILE:O	1:B:1197:UNK:CG	2.53	0.56
1:B:2961:LEU:HD23	1:B:2978:ARG:HB3	1.87	0.56
1:C:868:ARG:HB3	1:C:872:ARG:HH11	1.70	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:490:LEU:HD23	1:A:523:SER:HB2	1.87	0.56
1:C:735:LYS:HD2	1:C:860:VAL:HG23	1.85	0.56
1:C:793:ARG:HD3	1:C:2435:UNK:CG	2.27	0.56
1:A:37:ARG:O	1:A:41:GLY:N	2.38	0.56
1:A:745:THR:OG1	1:A:834:GLU:O	2.19	0.56
1:A:976:UNK:CG	1:A:993:UNK:HB1	2.29	0.56
1:A:2086:UNK:HA	1:A:2089:UNK:HG3	1.86	0.56
1:B:150:THR:O	1:B:152:PRO:HD3	2.03	0.56
1:B:476:GLU:HA	1:B:479:LEU:HB2	1.86	0.56
1:B:511:ARG:HD2	1:B:517:ILE:O	2.04	0.56
1:B:939:UNK:C	1:B:940:UNK:HG3	2.33	0.56
1:B:999:UNK:CG	1:B:1007:UNK:HG2	2.34	0.56
1:B:1001:UNK:O	1:B:1002:UNK:CG	2.53	0.56
1:B:1637:VAL:HG21	1:B:1671:TRP:CG	2.40	0.56
1:B:1989:PHE:HD1	1:B:1992:LYS:HZ3	1.53	0.56
1:B:2481:MET:O	1:B:2959:ARG:NH2	2.39	0.56
1:B:2521:VAL:HG13	1:B:2529:ARG:NH1	2.20	0.56
1:B:2554:ALA:HB1	1:B:2614:LYS:NZ	2.19	0.56
1:B:2709:ILE:O	1:B:2713:VAL:HG13	2.05	0.56
1:C:177:GLU:HB3	1:C:317:LEU:HD13	1.87	0.56
1:C:341:THR:HG23	1:C:344:HIS:HD1	1.69	0.56
1:C:1420:THR:OG1	1:C:1485:HIS:NE2	2.38	0.56
1:C:1537:LEU:HD11	1:C:1714:LEU:HB3	1.86	0.56
1:A:776:ASP:O	1:A:779:TRP:N	2.31	0.56
1:A:978:UNK:HB2	1:A:991:UNK:HG2	1.87	0.56
1:A:1017:ILE:HG23	1:A:1045:VAL:HG21	1.87	0.56
1:A:1253:ARG:HG3	1:A:1253:ARG:NH1	2.18	0.56
1:A:2521:VAL:HG13	1:A:2529:ARG:NH1	2.20	0.56
1:A:2881:VAL:HG13	1:A:2885:ASP:HB2	1.88	0.56
1:B:177:GLU:HB3	1:B:317:LEU:HD13	1.87	0.56
1:B:1091:LEU:HD13	1:B:1281:ALA:HB3	1.86	0.56
1:C:511:ARG:NH1	1:C:543:GLY:HA3	2.19	0.56
1:C:1126:ILE:O	1:C:1197:UNK:CG	2.53	0.56
1:C:2957:PRO:HD3	1:C:2980:PRO:HB3	1.88	0.56
1:A:975:UNK:HG2	1:A:976:UNK:N	2.20	0.56
1:A:990:UNK:HG2	1:A:990:UNK:O	2.05	0.56
1:B:892:ILE:HG22	2:B:4000:FMN:HM82	1.88	0.56
1:B:2622:GLY:HA2	1:B:2812:LEU:HD11	1.87	0.56
1:C:2693:GLN:O	1:C:2697:HIS:ND1	2.33	0.56
1:A:2983:LEU:HB3	1:A:2987:PHE:O	2.05	0.56
1:B:1511:ASP:H	1:B:1514:ASP:HB2	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2962:ASP:OD1	1:B:2962:ASP:N	2.34	0.56
1:C:475:LEU:O	1:C:479:LEU:N	2.37	0.56
1:C:1327:VAL:HB	1:C:1339:ALA:HB3	1.86	0.56
1:C:1511:ASP:H	1:C:1514:ASP:HB2	1.71	0.56
1:A:1637:VAL:HG21	1:A:1671:TRP:CG	2.40	0.56
1:B:2478:ARG:NH1	1:B:2482:GLU:OE1	2.39	0.56
1:C:1226:UNK:HG3	1:C:1313:VAL:CG1	2.35	0.56
1:C:1637:VAL:HG21	1:C:1671:TRP:CG	2.40	0.56
1:C:2478:ARG:NH1	1:C:2482:GLU:OE1	2.39	0.56
1:A:892:ILE:HG22	2:A:4000:FMN:HM82	1.88	0.56
1:A:1126:ILE:O	1:A:1197:UNK:CG	2.53	0.56
1:A:1226:UNK:HG3	1:A:1313:VAL:CG1	2.35	0.56
1:A:1511:ASP:H	1:A:1514:ASP:HB2	1.71	0.56
1:A:2478:ARG:NH1	1:A:2482:GLU:OE1	2.39	0.56
1:A:2961:LEU:HD23	1:A:2978:ARG:HB3	1.87	0.56
1:B:1537:LEU:HD11	1:B:1714:LEU:HB3	1.87	0.56
1:B:2086:UNK:HA	1:B:2089:UNK:HG3	1.86	0.56
1:B:2094:UNK:CG	1:B:2096:UNK:CG	2.75	0.56
1:C:978:UNK:HB2	1:C:991:UNK:HG2	1.87	0.56
1:C:992:UNK:CG	1:C:996:UNK:HG2	2.32	0.56
1:C:2084:UNK:O	1:C:2087:UNK:CG	2.52	0.56
1:C:2709:ILE:O	1:C:2713:VAL:HG13	2.05	0.56
1:C:2961:LEU:HD23	1:C:2978:ARG:HB3	1.87	0.56
1:C:2983:LEU:HB3	1:C:2987:PHE:O	2.05	0.56
1:A:687:GLY:O	1:A:695:ILE:N	2.34	0.56
1:A:2102:UNK:C	1:A:2105:UNK:HG3	2.36	0.56
1:B:490:LEU:HD23	1:B:523:SER:HB2	1.87	0.56
1:B:1017:ILE:HG23	1:B:1045:VAL:HG21	1.87	0.56
1:B:1618:LEU:HG	1:B:1619:VAL:HG23	1.88	0.56
1:C:1618:LEU:HG	1:C:1619:VAL:HG23	1.88	0.56
1:C:2102:UNK:C	1:C:2105:UNK:HG3	2.36	0.56
1:A:1445:VAL:HG23	1:A:1448:ALA:HB2	1.87	0.56
1:A:2084:UNK:O	1:A:2087:UNK:CG	2.52	0.56
1:B:990:UNK:O	1:B:990:UNK:HG2	2.05	0.56
1:B:1420:THR:OG1	1:B:1485:HIS:NE2	2.38	0.56
1:B:2303:ASP:N	1:B:2303:ASP:OD1	2.39	0.56
1:B:3073:MET:HE2	1:B:3089:LEU:HD11	1.88	0.56
1:C:37:ARG:O	1:C:41:GLY:N	2.39	0.56
1:C:975:UNK:HG2	1:C:976:UNK:N	2.20	0.56
1:C:990:UNK:O	1:C:990:UNK:HG2	2.05	0.56
1:C:1405:ALA:HB3	1:C:1408:VAL:HG23	1.86	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:934:UNK:C	1:A:937:UNK:HG3	2.32	0.55
1:B:540:ASN:HD21	1:B:544:ILE:HG13	1.71	0.55
1:B:929:UNK:C	1:B:930:UNK:HG3	2.35	0.55
1:B:2743:ALA:HB3	1:B:2939:ALA:HB3	1.88	0.55
1:A:42:GLU:H	1:A:42:GLU:CD	2.14	0.55
1:A:2481:MET:O	1:A:2959:ARG:NH2	2.39	0.55
1:A:2743:ALA:HB3	1:A:2939:ALA:HB3	1.88	0.55
1:B:1405:ALA:HB3	1:B:1408:VAL:HG23	1.87	0.55
1:A:929:UNK:C	1:A:930:UNK:HG3	2.35	0.55
1:A:1618:LEU:HG	1:A:1619:VAL:HG23	1.88	0.55
1:B:475:LEU:O	1:B:479:LEU:N	2.37	0.55
1:B:737:TYR:HE1	1:B:862:VAL:HA	1.72	0.55
1:B:931:UNK:HG2	1:B:934:UNK:N	2.21	0.55
1:B:2102:UNK:C	1:B:2105:UNK:HG3	2.36	0.55
1:C:892:ILE:HG22	2:C:4000:FMN:HM82	1.88	0.55
1:A:2135:UNK:CG	1:A:2136:ASP:N	2.66	0.55
1:A:2622:GLY:HA2	1:A:2812:LEU:HD11	1.87	0.55
1:B:42:GLU:CD	1:B:42:GLU:H	2.14	0.55
1:B:975:UNK:CG	1:B:976:UNK:N	2.70	0.55
1:B:980:UNK:O	1:B:981:UNK:CG	2.53	0.55
1:C:1496:SER:HB3	1:C:1578:ASP:HB3	1.89	0.55
1:C:2442:UNK:HG2	1:C:2442:UNK:O	2.07	0.55
1:C:2481:MET:O	1:C:2959:ARG:NH2	2.39	0.55
1:C:3073:MET:HE2	1:C:3089:LEU:HD11	1.88	0.55
1:A:540:ASN:HD21	1:A:544:ILE:HG13	1.71	0.55
1:B:551:PRO:HG3	1:B:560:VAL:HG21	1.89	0.55
1:B:1010:UNK:O	1:B:1017:ILE:N	2.29	0.55
1:C:42:GLU:H	1:C:42:GLU:CD	2.14	0.55
1:C:1010:UNK:O	1:C:1017:ILE:N	2.29	0.55
1:C:2881:VAL:HG13	1:C:2885:ASP:HB2	1.88	0.55
1:A:177:GLU:HB3	1:A:317:LEU:HD13	1.87	0.55
1:B:2704:ALA:O	1:B:2705:LYS:HD3	2.07	0.55
1:A:931:UNK:HG2	1:A:933:UNK:CG	2.37	0.55
1:A:1690:GLU:O	1:A:1694:GLY:N	2.40	0.55
1:A:1734:SER:HA	1:A:1741:LEU:HD11	1.89	0.55
1:B:2458:ALA:HA	1:B:2824:ARG:HD2	1.89	0.55
1:C:2810:GLY:HA2	1:C:2896:THR:HA	1.89	0.55
1:A:737:TYR:HE1	1:A:862:VAL:HA	1.72	0.55
1:A:931:UNK:HG2	1:A:934:UNK:N	2.21	0.55
1:B:1496:SER:HB3	1:B:1578:ASP:HB3	1.88	0.55
1:B:2135:UNK:CG	1:B:2136:ASP:N	2.66	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2957:PRO:HD3	1:B:2980:PRO:HB3	1.88	0.55
1:C:737:TYR:HE1	1:C:862:VAL:HA	1.72	0.55
1:C:1690:GLU:O	1:C:1694:GLY:N	2.40	0.55
1:A:2087:UNK:CA	1:A:2090:UNK:HG3	2.37	0.55
1:A:2458:ALA:HA	1:A:2824:ARG:HD2	1.89	0.55
1:A:2704:ALA:O	1:A:2705:LYS:HD3	2.07	0.55
1:B:1724:TYR:OH	1:C:267:GLU:OE2	2.07	0.55
1:B:2418:GLY:O	1:B:2422:UNK:N	2.40	0.55
1:C:144:GLY:O	1:C:148:THR:N	2.34	0.55
1:C:994:UNK:CG	1:C:996:UNK:HG3	2.37	0.55
1:C:1001:UNK:O	1:C:1002:UNK:CG	2.53	0.55
1:A:1001:UNK:O	1:A:1002:UNK:CG	2.53	0.55
1:A:2337:ILE:HG23	1:A:2369:MET:HE2	1.90	0.55
1:A:2418:GLY:O	1:A:2422:UNK:N	2.40	0.54
1:B:763:SER:O	1:B:766:ASP:N	2.41	0.54
1:B:1163:ASP:CB	1:B:1199:UNK:HG3	2.37	0.54
1:B:1690:GLU:O	1:B:1694:GLY:N	2.40	0.54
1:B:2442:UNK:O	1:B:2442:UNK:HG2	2.07	0.54
1:A:33:ALA:O	1:A:37:ARG:N	2.35	0.54
1:A:975:UNK:CG	1:A:976:UNK:N	2.70	0.54
1:A:2303:ASP:OD1	1:A:2303:ASP:N	2.39	0.54
1:A:2810:GLY:HA2	1:A:2896:THR:HA	1.89	0.54
1:B:238:SER:OG	1:B:249:THR:OG1	2.15	0.54
1:B:2810:GLY:HA2	1:B:2896:THR:HA	1.89	0.54
1:C:540:ASN:HD21	1:C:544:ILE:HG13	1.71	0.54
1:C:975:UNK:CG	1:C:976:UNK:N	2.70	0.54
1:C:978:UNK:HB2	1:C:991:UNK:CG	2.37	0.54
1:C:2337:ILE:HG23	1:C:2369:MET:HE2	1.90	0.54
1:A:2957:PRO:HD3	1:A:2980:PRO:HB3	1.88	0.54
1:C:931:UNK:HG2	1:C:934:UNK:N	2.21	0.54
1:C:2704:ALA:O	1:C:2705:LYS:HD3	2.07	0.54
1:A:1010:UNK:O	1:A:1017:ILE:N	2.29	0.54
1:A:2417:SER:O	1:A:2421:ASP:N	2.40	0.54
1:B:2115:UNK:HA	1:B:2118:UNK:HG3	1.90	0.54
1:B:2881:VAL:HG13	1:B:2885:ASP:HB2	1.88	0.54
1:C:763:SER:O	1:C:766:ASP:N	2.41	0.54
1:C:931:UNK:HG2	1:C:933:UNK:CG	2.37	0.54
1:C:2743:ALA:HB3	1:C:2939:ALA:HB3	1.88	0.54
1:A:668:THR:OG1	1:A:698:ILE:HD11	2.08	0.54
1:A:3018:LEU:O	1:A:3022:GLU:HB2	2.08	0.54
1:B:2693:GLN:O	1:B:2697:HIS:ND1	2.33	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2103:UNK:O	1:C:2106:UNK:HG3	2.08	0.54
1:C:2458:ALA:HA	1:C:2824:ARG:HD2	1.89	0.54
1:C:2860:ALA:HB1	1:C:3005:LEU:HD13	1.90	0.54
1:A:1496:SER:HB3	1:A:1578:ASP:HB3	1.89	0.54
1:B:580:ARG:HH11	1:B:614:GLY:HA3	1.72	0.54
1:C:273:ARG:HD2	1:C:282:VAL:HG12	1.90	0.54
1:C:580:ARG:HH11	1:C:614:GLY:HA3	1.73	0.54
1:C:716:ALA:HA	1:C:719:VAL:HG23	1.90	0.54
1:A:456:GLU:HG2	1:A:486:GLN:HE21	1.73	0.54
1:A:763:SER:O	1:A:766:ASP:N	2.41	0.54
1:A:2122:UNK:CA	1:A:2125:UNK:HG3	2.38	0.54
1:B:37:ARG:O	1:B:41:GLY:N	2.39	0.54
1:B:2768:ASP:OD2	1:B:2936:GLY:N	2.41	0.54
1:C:1003:UNK:CG	1:C:1004:UNK:N	2.53	0.54
1:C:1163:ASP:CB	1:C:1199:UNK:HG3	2.38	0.54
1:C:1357:ILE:HG13	1:C:1710:THR:HG21	1.89	0.54
1:C:2100:UNK:CG	1:C:2101:UNK:N	2.68	0.54
1:C:2115:UNK:HA	1:C:2118:UNK:HG3	1.90	0.54
1:C:2127:UNK:O	1:C:2130:UNK:CG	2.52	0.54
1:C:2418:GLY:O	1:C:2422:UNK:N	2.40	0.54
1:A:978:UNK:HB2	1:A:991:UNK:CG	2.37	0.54
1:A:1357:ILE:HG13	1:A:1710:THR:HG21	1.89	0.54
1:A:2112:UNK:N	1:A:2115:UNK:HG3	2.23	0.54
1:A:2492:VAL:HG21	1:A:2527:VAL:HG22	1.90	0.54
1:B:273:ARG:HD2	1:B:282:VAL:HG12	1.90	0.54
1:B:668:THR:OG1	1:B:698:ILE:HD11	2.08	0.54
1:B:978:UNK:HB2	1:B:991:UNK:CG	2.37	0.54
1:C:456:GLU:HG2	1:C:486:GLN:HE21	1.73	0.54
1:C:2554:ALA:HB1	1:C:2614:LYS:HZ2	1.73	0.54
1:A:88:SER:HG	1:A:311:TRP:CD1	2.26	0.54
1:B:2104:UNK:HA	1:B:2107:UNK:HG3	1.90	0.54
1:C:33:ALA:O	1:C:37:ARG:N	2.35	0.54
1:C:3018:LEU:O	1:C:3022:GLU:HB2	2.08	0.54
1:A:980:UNK:N	1:A:989:UNK:O	2.41	0.54
1:A:994:UNK:CG	1:A:996:UNK:HG3	2.37	0.54
1:B:624:TYR:HA	1:B:629:TRP:CD1	2.43	0.54
1:B:1734:SER:HA	1:B:1741:LEU:HD11	1.89	0.54
1:B:2100:UNK:C	1:B:2103:UNK:HG3	2.31	0.54
1:B:2860:ALA:HB1	1:B:3005:LEU:HD13	1.90	0.54
1:C:624:TYR:HA	1:C:629:TRP:CD1	2.43	0.54
1:C:2087:UNK:CA	1:C:2090:UNK:HG3	2.37	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:368:ILE:HG21	1:A:373:ILE:HG13	1.90	0.53
1:A:475:LEU:O	1:A:479:LEU:N	2.37	0.53
1:A:2100:UNK:CG	1:A:2101:UNK:N	2.68	0.53
1:A:2442:UNK:O	1:A:2442:UNK:HG2	2.07	0.53
1:A:3073:MET:HE2	1:A:3089:LEU:HD11	1.88	0.53
1:B:456:GLU:HG2	1:B:486:GLN:HE21	1.73	0.53
1:B:1089:ALA:O	1:B:1091:LEU:N	2.41	0.53
1:B:1225:UNK:HG1	1:B:1283:ASP:CG	2.34	0.53
1:B:2417:SER:O	1:B:2421:ASP:N	2.40	0.53
1:C:1323:GLU:N	1:C:1343:LEU:O	2.41	0.53
1:C:2551:PRO:O	1:C:2617:LEU:HB2	2.08	0.53
1:A:624:TYR:HA	1:A:629:TRP:CD1	2.43	0.53
1:A:1089:ALA:O	1:A:1091:LEU:N	2.42	0.53
1:B:88:SER:HG	1:B:311:TRP:CD1	2.26	0.53
1:B:2103:UNK:O	1:B:2106:UNK:HG3	2.08	0.53
1:B:2425:UNK:O	1:B:2425:UNK:HG2	2.09	0.53
1:B:2492:VAL:HG21	1:B:2527:VAL:HG22	1.90	0.53
1:B:2554:ALA:HB1	1:B:2614:LYS:HZ2	1.71	0.53
1:C:33:ALA:O	1:C:37:ARG:HG2	2.08	0.53
1:C:551:PRO:HG3	1:C:560:VAL:HG21	1.89	0.53
1:C:992:UNK:HG2	1:C:994:UNK:HG2	1.87	0.53
1:C:999:UNK:HG3	1:C:1007:UNK:HG2	1.90	0.53
1:C:1734:SER:HA	1:C:1741:LEU:HD11	1.89	0.53
1:C:2104:UNK:HA	1:C:2107:UNK:HG3	1.90	0.53
1:C:2303:ASP:OD1	1:C:2303:ASP:N	2.39	0.53
1:A:580:ARG:HH11	1:A:614:GLY:HA3	1.72	0.53
1:A:1163:ASP:CB	1:A:1199:UNK:HG3	2.38	0.53
1:B:992:UNK:HG2	1:B:994:UNK:HG2	1.87	0.53
1:B:994:UNK:CG	1:B:996:UNK:HG3	2.37	0.53
1:B:2088:UNK:HG2	1:B:2188:ARG:HH12	1.73	0.53
1:B:2911:ALA:HA	1:B:2914:MET:HE2	1.91	0.53
1:C:2768:ASP:OD2	1:C:2936:GLY:N	2.41	0.53
1:A:526:ILE:HD12	1:A:549:PHE:HB3	1.90	0.53
1:A:1225:UNK:HG1	1:A:1283:ASP:CG	2.34	0.53
1:A:1323:GLU:N	1:A:1343:LEU:O	2.41	0.53
1:A:2088:UNK:HG2	1:A:2188:ARG:HH12	1.74	0.53
1:A:2425:UNK:HG2	1:A:2425:UNK:O	2.09	0.53
1:A:2768:ASP:OD2	1:A:2936:GLY:N	2.41	0.53
1:C:668:THR:OG1	1:C:698:ILE:HD11	2.08	0.53
1:C:836:VAL:HG21	1:C:2437:UNK:HB2	1.90	0.53
1:C:970:ILE:HD13	1:C:996:UNK:HG1	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2122:UNK:CA	1:C:2125:UNK:HG3	2.38	0.53
1:A:792:ALA:HA	1:A:799:PHE:CE2	2.43	0.53
1:A:992:UNK:CG	1:A:996:UNK:HG2	2.32	0.53
1:A:1425:VAL:HG13	1:A:1474:LEU:HD13	1.91	0.53
1:A:2085:UNK:C	1:A:2088:UNK:HG3	2.38	0.53
1:A:2104:UNK:HA	1:A:2107:UNK:HG3	1.90	0.53
1:A:2911:ALA:HA	1:A:2914:MET:HE2	1.91	0.53
1:B:2551:PRO:O	1:B:2617:LEU:HB2	2.08	0.53
1:B:3018:LEU:O	1:B:3022:GLU:HB2	2.08	0.53
1:C:500:GLN:O	1:C:504:LYS:N	2.24	0.53
1:C:980:UNK:N	1:C:989:UNK:O	2.41	0.53
1:C:1089:ALA:O	1:C:1091:LEU:N	2.42	0.53
1:C:2492:VAL:HG21	1:C:2527:VAL:HG22	1.90	0.53
1:A:551:PRO:HG3	1:A:560:VAL:HG21	1.89	0.53
1:A:716:ALA:HA	1:A:719:VAL:HG23	1.90	0.53
1:A:2081:UNK:C	1:A:2084:UNK:HG3	2.39	0.53
1:B:411:PRO:HD2	1:B:1025:VAL:HG11	1.91	0.53
1:B:980:UNK:N	1:B:989:UNK:O	2.41	0.53
1:B:1148:GLU:O	1:B:1150:ALA:N	2.42	0.53
1:B:1538:ARG:NH1	1:B:1722:PRO:HB3	2.18	0.53
1:B:2086:UNK:O	1:B:2089:UNK:CG	2.52	0.53
1:C:745:THR:HG23	1:C:834:GLU:HA	1.90	0.53
1:C:1425:VAL:HG13	1:C:1474:LEU:HD13	1.91	0.53
1:C:2123:UNK:O	1:C:2126:UNK:CG	2.55	0.53
1:C:2631:PRO:HG3	1:C:2649:LEU:HD13	1.90	0.53
1:A:836:VAL:HG21	1:A:2437:UNK:HB2	1.90	0.53
1:A:970:ILE:HD13	1:A:996:UNK:HG1	1.91	0.53
1:A:999:UNK:HG3	1:A:1007:UNK:HG2	1.90	0.53
1:B:33:ALA:O	1:B:37:ARG:HG2	2.08	0.53
1:B:526:ILE:HD12	1:B:549:PHE:HB3	1.90	0.53
1:B:992:UNK:HG1	1:B:994:UNK:HG3	1.81	0.53
1:C:1226:UNK:HB1	1:C:1282:THR:HG21	1.90	0.53
1:C:2082:UNK:O	1:C:2086:UNK:HG3	2.09	0.53
1:A:588:GLU:HB3	1:A:593:LEU:HD11	1.91	0.53
1:A:961:ARG:NH2	1:A:1196:UNK:O	2.42	0.53
1:A:1420:THR:OG1	1:A:1485:HIS:NE2	2.38	0.53
1:A:2088:UNK:C	1:A:2188:ARG:NH1	2.72	0.53
1:A:2135:UNK:CG	1:A:2136:ASP:H	2.22	0.53
1:B:836:VAL:HG21	1:B:2437:UNK:HB2	1.90	0.53
1:B:931:UNK:HG2	1:B:933:UNK:CG	2.37	0.53
1:B:1151:GLU:HB2	1:B:1179:ALA:HB3	1.90	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1488:VAL:HG12	1:B:1490:ARG:HH11	1.73	0.53
1:B:2135:UNK:CG	1:B:2136:ASP:H	2.22	0.53
1:C:1174:VAL:HB	1:C:1188:LEU:HB3	1.91	0.53
1:C:1634:ARG:HD2	1:C:1638:PRO:HA	1.91	0.53
1:A:1148:GLU:O	1:A:1150:ALA:N	2.42	0.53
1:A:1151:GLU:HB2	1:A:1179:ALA:HB3	1.90	0.53
1:B:970:ILE:HD13	1:B:996:UNK:HG1	1.91	0.53
1:B:2631:PRO:HG3	1:B:2649:LEU:HD13	1.90	0.53
1:B:2740:CYS:HB2	1:B:2998:GLY:HA2	1.91	0.53
1:C:2425:UNK:O	1:C:2425:UNK:HG2	2.09	0.53
1:A:33:ALA:O	1:A:37:ARG:HG2	2.08	0.53
1:A:992:UNK:HG2	1:A:994:UNK:HG2	1.87	0.53
1:A:1163:ASP:CG	1:A:1199:UNK:HG3	2.34	0.53
1:A:2860:ALA:HB1	1:A:3005:LEU:HD13	1.90	0.53
1:B:33:ALA:O	1:B:37:ARG:N	2.35	0.53
1:B:1323:GLU:N	1:B:1343:LEU:O	2.42	0.53
1:B:2087:UNK:CA	1:B:2090:UNK:HG3	2.37	0.53
1:C:2088:UNK:C	1:C:2188:ARG:NH1	2.72	0.53
1:C:2094:UNK:H	1:C:2097:UNK:HG3	1.74	0.53
1:C:2112:UNK:N	1:C:2115:UNK:HG3	2.23	0.53
1:A:1634:ARG:HD2	1:A:1638:PRO:HA	1.91	0.52
1:A:2103:UNK:O	1:A:2106:UNK:HG3	2.08	0.52
1:A:2115:UNK:HA	1:A:2118:UNK:HG3	1.90	0.52
1:A:2551:PRO:O	1:A:2617:LEU:HB2	2.08	0.52
1:B:961:ARG:NH2	1:B:1196:UNK:O	2.42	0.52
1:B:2081:UNK:C	1:B:2084:UNK:HG3	2.39	0.52
1:C:368:ILE:HG21	1:C:373:ILE:HG13	1.90	0.52
1:C:1163:ASP:CG	1:C:1199:UNK:HG3	2.34	0.52
1:C:1530:LEU:HD21	1:C:1554:LEU:HD22	1.91	0.52
1:C:2215:THR:HG22	1:C:2216:GLU:HG3	1.91	0.52
1:C:2740:CYS:HB2	1:C:2998:GLY:HA2	1.92	0.52
1:A:208:VAL:HG12	1:A:248:ILE:HG12	1.92	0.52
1:B:2085:UNK:C	1:B:2088:UNK:HG3	2.38	0.52
1:B:2112:UNK:N	1:B:2115:UNK:HG3	2.23	0.52
1:B:2337:ILE:HG23	1:B:2369:MET:HE2	1.90	0.52
1:C:411:PRO:HD2	1:C:1025:VAL:HG11	1.91	0.52
1:C:2085:UNK:C	1:C:2088:UNK:HG3	2.38	0.52
1:A:1174:VAL:HB	1:A:1188:LEU:HB3	1.91	0.52
1:B:716:ALA:HA	1:B:719:VAL:HG23	1.90	0.52
1:B:1001:UNK:HG1	1:B:1018:ARG:HH22	1.74	0.52
1:C:71:GLU:HG2	1:C:142:ARG:NH2	2.24	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2911:ALA:HA	1:C:2914:MET:HE2	1.90	0.52
1:C:2927:GLN:HE22	1:C:2941:PHE:C	2.17	0.52
1:A:71:GLU:HG2	1:A:142:ARG:NH2	2.24	0.52
1:A:745:THR:HG23	1:A:834:GLU:HA	1.90	0.52
1:A:931:UNK:HG2	1:A:933:UNK:HG2	1.91	0.52
1:A:1530:LEU:HD21	1:A:1554:LEU:HD22	1.91	0.52
1:A:1733:ASN:HD22	1:A:1736:ARG:HD2	1.74	0.52
1:A:2089:UNK:HA	1:A:2188:ARG:HH11	1.74	0.52
1:A:2686:MET:HE1	1:A:2935:LYS:HZ2	1.74	0.52
1:A:2808:ARG:HB2	1:A:2895:SER:O	2.10	0.52
1:B:71:GLU:HG2	1:B:142:ARG:NH2	2.24	0.52
1:B:2094:UNK:HG2	1:B:2096:UNK:CG	2.23	0.52
1:C:1151:GLU:HB2	1:C:1179:ALA:HB3	1.90	0.52
1:C:1538:ARG:NH1	1:C:1722:PRO:HB3	2.18	0.52
1:A:400:TRP:CZ3	1:A:636:PRO:HB2	2.45	0.52
1:B:368:ILE:HG21	1:B:373:ILE:HG13	1.90	0.52
1:B:1287:VAL:O	1:B:1291:LYS:HG3	2.10	0.52
1:B:1357:ILE:HG13	1:B:1710:THR:HG21	1.89	0.52
1:B:2089:UNK:HA	1:B:2188:ARG:HH11	1.74	0.52
1:B:2094:UNK:H	1:B:2097:UNK:HG3	1.75	0.52
1:B:2236:LEU:HD23	1:B:2288:HIS:HB2	1.92	0.52
1:B:2927:GLN:HE22	1:B:2941:PHE:C	2.17	0.52
1:C:1148:GLU:O	1:C:1150:ALA:N	2.42	0.52
1:C:1225:UNK:HG1	1:C:1283:ASP:CG	2.34	0.52
1:C:2135:UNK:CG	1:C:2136:ASP:H	2.22	0.52
1:A:411:PRO:HD2	1:A:1025:VAL:HG11	1.91	0.52
1:A:1110:VAL:HG13	1:A:1172:VAL:HG11	1.92	0.52
1:A:1287:VAL:O	1:A:1291:LYS:HG3	2.10	0.52
1:A:2631:PRO:HG3	1:A:2649:LEU:HD13	1.90	0.52
1:A:2927:GLN:HE22	1:A:2941:PHE:C	2.17	0.52
1:B:745:THR:HG23	1:B:834:GLU:HA	1.90	0.52
1:B:999:UNK:HG3	1:B:1007:UNK:HG2	1.90	0.52
1:B:1093:PRO:HB3	1:B:1277:HIS:HE1	1.75	0.52
1:B:2087:UNK:HA	1:B:2090:UNK:CG	2.39	0.52
1:B:2808:ARG:HB2	1:B:2895:SER:O	2.10	0.52
1:C:526:ILE:HD12	1:C:549:PHE:HB3	1.90	0.52
1:C:2081:UNK:C	1:C:2084:UNK:HG3	2.39	0.52
1:A:273:ARG:HD2	1:A:282:VAL:HG12	1.90	0.52
1:A:1093:PRO:HB3	1:A:1277:HIS:HE1	1.75	0.52
1:A:1164:THR:HA	1:A:1204:UNK:O	2.10	0.52
1:A:2094:UNK:H	1:A:2097:UNK:HG3	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1110:VAL:HG13	1:B:1172:VAL:HG11	1.92	0.52
1:B:1226:UNK:HB1	1:B:1282:THR:HG21	1.90	0.52
1:C:208:VAL:HB	1:C:255:LEU:HD13	1.92	0.52
1:C:961:ARG:NH2	1:C:1196:UNK:O	2.42	0.52
1:C:1110:VAL:HG13	1:C:1172:VAL:HG11	1.92	0.52
1:C:1287:VAL:O	1:C:1291:LYS:HG3	2.10	0.52
1:C:2122:UNK:HA	1:C:2125:UNK:CG	2.40	0.52
1:B:2122:UNK:CA	1:B:2125:UNK:HG3	2.38	0.52
1:C:577:GLU:OE2	2:C:4000:FMN:O3'	2.28	0.52
1:C:1723:GLU:C	1:C:1725:SER:H	2.18	0.52
1:A:577:GLU:OE2	2:A:4000:FMN:O3'	2.28	0.52
1:A:1723:GLU:C	1:A:1725:SER:H	2.18	0.52
1:A:2215:THR:HG22	1:A:2216:GLU:HG3	1.92	0.52
1:A:2740:CYS:HB2	1:A:2998:GLY:HA2	1.92	0.52
1:B:1163:ASP:CG	1:B:1199:UNK:HG3	2.34	0.52
1:B:1425:VAL:HG13	1:B:1474:LEU:HD13	1.91	0.52
1:B:1622:PRO:HD3	1:B:1685:LEU:HD21	1.92	0.52
1:C:208:VAL:HG12	1:C:248:ILE:HG12	1.92	0.52
1:C:400:TRP:CZ3	1:C:636:PRO:HB2	2.45	0.52
1:C:2087:UNK:C	1:C:2090:UNK:HG3	2.40	0.52
1:C:2088:UNK:HG2	1:C:2188:ARG:HH12	1.73	0.52
1:A:542:VAL:HG11	1:A:964:VAL:HB	1.92	0.52
1:B:106:ALA:O	1:B:112:PRO:HD2	2.10	0.52
1:B:144:GLY:O	1:B:148:THR:N	2.34	0.52
1:B:588:GLU:HB3	1:B:593:LEU:HD11	1.91	0.52
1:B:1174:VAL:HB	1:B:1188:LEU:HB3	1.91	0.52
1:B:2087:UNK:C	1:B:2090:UNK:HG3	2.40	0.52
1:B:2122:UNK:HA	1:B:2125:UNK:CG	2.40	0.52
1:B:2698:GLY:HA3	1:B:2705:LYS:HG3	1.92	0.52
1:C:106:ALA:O	1:C:112:PRO:HD2	2.10	0.52
1:C:1119:THR:O	1:C:1123:PHE:HB2	2.10	0.52
1:C:2094:UNK:HG2	1:C:2096:UNK:CG	2.23	0.52
1:C:2236:LEU:HD23	1:C:2288:HIS:HB2	1.92	0.52
1:A:336:TRP:CE2	1:A:360:LEU:HD11	2.45	0.51
1:A:2094:UNK:HG2	1:A:2096:UNK:CG	2.23	0.51
1:A:2552:ASP:OD1	1:A:2552:ASP:N	2.43	0.51
1:B:176:VAL:O	1:B:180:ALA:N	2.36	0.51
1:B:336:TRP:CE2	1:B:360:LEU:HD11	2.45	0.51
1:B:405:PRO:HG3	1:B:625:LEU:HG	1.92	0.51
1:B:1530:LEU:HD21	1:B:1554:LEU:HD22	1.91	0.51
1:B:2088:UNK:C	1:B:2188:ARG:NH1	2.72	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:420:LYS:HB3	1:C:641:ASP:OD2	2.10	0.51
1:C:932:UNK:O	1:C:936:UNK:CG	2.48	0.51
1:C:984:UNK:HG2	1:C:987:UNK:HG2	1.92	0.51
1:A:1226:UNK:HB1	1:A:1282:THR:HG21	1.90	0.51
1:A:1488:VAL:HG12	1:A:1490:ARG:HH11	1.73	0.51
1:B:1598:GLU:HG2	1:B:1666:ILE:HD13	1.93	0.51
1:B:2082:UNK:O	1:B:2086:UNK:HG3	2.09	0.51
1:C:1164:THR:HA	1:C:1204:UNK:O	2.10	0.51
1:A:2082:UNK:O	1:A:2086:UNK:HG3	2.09	0.51
1:A:2087:UNK:HA	1:A:2090:UNK:CG	2.39	0.51
1:B:1723:GLU:C	1:B:1725:SER:H	2.18	0.51
1:B:2215:THR:HG22	1:B:2216:GLU:HG3	1.91	0.51
1:C:588:GLU:HB3	1:C:593:LEU:HD11	1.91	0.51
1:C:2790:MET:HG2	1:C:2809:LEU:HD11	1.93	0.51
1:A:1119:THR:O	1:A:1123:PHE:HB2	2.10	0.51
1:A:2086:UNK:O	1:A:2089:UNK:CG	2.52	0.51
1:A:2087:UNK:C	1:A:2090:UNK:HG3	2.40	0.51
1:A:2401:ILE:HG23	1:A:2403:ILE:H	1.75	0.51
1:A:2690:THR:O	1:A:2693:GLN:HG2	2.11	0.51
1:B:400:TRP:CZ3	1:B:636:PRO:HB2	2.45	0.51
1:B:420:LYS:HB3	1:B:641:ASP:OD2	2.10	0.51
1:B:542:VAL:HG11	1:B:964:VAL:HB	1.92	0.51
1:B:1733:ASN:HD22	1:B:1736:ARG:HD2	1.74	0.51
1:B:2123:UNK:O	1:B:2126:UNK:CG	2.56	0.51
1:B:2434:UNK:O	1:B:2434:UNK:HG2	2.11	0.51
1:C:508:GLN:HA	1:C:540:ASN:HB3	1.92	0.51
1:A:206:PRO:HG2	1:A:294:VAL:HA	1.92	0.51
1:A:1622:PRO:HD3	1:A:1685:LEU:HD21	1.92	0.51
1:B:745:THR:OG1	1:B:834:GLU:O	2.19	0.51
1:B:1634:ARG:HD2	1:B:1638:PRO:HA	1.91	0.51
1:C:2417:SER:O	1:C:2421:ASP:N	2.40	0.51
1:A:2122:UNK:HA	1:A:2125:UNK:CG	2.40	0.51
1:A:2200:MET:HE1	1:A:2270:LEU:HD22	1.93	0.51
1:B:984:UNK:HG2	1:B:987:UNK:HG2	1.93	0.51
1:B:2690:THR:O	1:B:2693:GLN:HG2	2.11	0.51
1:A:420:LYS:HB3	1:A:641:ASP:OD2	2.10	0.51
1:A:937:UNK:HG2	1:A:938:UNK:N	2.26	0.51
1:A:2790:MET:HG2	1:A:2809:LEU:HD11	1.93	0.51
1:B:206:PRO:HG2	1:B:294:VAL:HA	1.92	0.51
1:C:746:TYR:HA	1:C:749:TRP:HD1	1.76	0.51
1:C:2089:UNK:HA	1:C:2188:ARG:HH11	1.74	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2401:ILE:HG23	1:C:2403:ILE:H	1.76	0.51
1:A:2434:UNK:HG2	1:A:2434:UNK:O	2.11	0.51
1:B:208:VAL:HB	1:B:255:LEU:HD13	1.92	0.51
1:B:1164:THR:HA	1:B:1204:UNK:O	2.10	0.51
1:B:2401:ILE:HG23	1:B:2403:ILE:H	1.76	0.51
1:C:792:ALA:HA	1:C:799:PHE:CE2	2.43	0.51
1:C:1488:VAL:HG12	1:C:1490:ARG:HH11	1.73	0.51
1:C:1598:GLU:HG2	1:C:1666:ILE:HD13	1.92	0.51
1:C:1733:ASN:HD22	1:C:1736:ARG:HD2	1.74	0.51
1:A:106:ALA:O	1:A:112:PRO:HD2	2.10	0.51
1:A:2105:UNK:HG2	1:A:2106:UNK:N	2.26	0.51
1:A:2123:UNK:O	1:A:2126:UNK:CG	2.56	0.51
1:A:2667:THR:HG21	1:A:3058:ARG:HH11	1.76	0.51
1:B:937:UNK:HG2	1:B:938:UNK:N	2.25	0.51
1:B:981:UNK:HG1	1:B:987:UNK:C	2.41	0.51
1:B:1119:THR:O	1:B:1123:PHE:HB2	2.10	0.51
1:B:2200:MET:HE1	1:B:2270:LEU:HD22	1.93	0.51
1:C:2754:ILE:HA	1:C:2759:ALA:O	2.11	0.51
1:A:2957:PRO:HB3	1:A:2979:GLU:C	2.36	0.51
1:B:2501:MET:HE1	1:B:2516:GLU:OE2	2.11	0.51
1:C:936:UNK:O	1:C:941:UNK:N	2.44	0.51
1:C:937:UNK:HG2	1:C:938:UNK:N	2.25	0.51
1:C:1001:UNK:HG1	1:C:1018:ARG:HH22	1.74	0.51
1:C:2086:UNK:O	1:C:2089:UNK:CG	2.52	0.51
1:C:2698:GLY:HA3	1:C:2705:LYS:HG3	1.92	0.51
1:C:2957:PRO:HB3	1:C:2979:GLU:C	2.36	0.51
1:A:272:GLU:HB3	1:A:280:GLY:O	2.11	0.50
1:A:2236:LEU:HD23	1:A:2288:HIS:HB2	1.92	0.50
1:A:2554:ALA:HB1	1:A:2614:LYS:HZ2	1.74	0.50
1:B:1317:GLY:H	1:B:1324:VAL:HG12	1.76	0.50
1:C:1986:LEU:HA	1:C:1989:PHE:HD2	1.76	0.50
1:C:2056:PHE:CZ	1:C:2180:LYS:HE2	2.47	0.50
1:C:2452:UNK:CG	1:C:2453:UNK:N	2.73	0.50
1:A:1331:ILE:HG13	1:A:1336:VAL:HG21	1.94	0.50
1:A:1634:ARG:HH11	1:A:1639:ALA:N	2.08	0.50
1:B:746:TYR:HA	1:B:749:TRP:HD1	1.76	0.50
1:C:336:TRP:CE2	1:C:360:LEU:HD11	2.45	0.50
1:C:1622:PRO:HD3	1:C:1685:LEU:HD21	1.92	0.50
1:C:2104:UNK:C	1:C:2107:UNK:HG3	2.42	0.50
1:C:2361:VAL:HG11	1:C:2398:LEU:HD23	1.93	0.50
1:C:2434:UNK:O	1:C:2434:UNK:HG2	2.11	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:780:ARG:HD2	1:A:816:LEU:HB3	1.93	0.50
1:A:1598:GLU:HG2	1:A:1666:ILE:HD13	1.93	0.50
1:A:2180:LYS:HZ1	1:A:2962:ASP:HB3	1.75	0.50
1:A:2245:VAL:HG13	1:A:2255:ARG:CZ	2.42	0.50
1:A:2662:SER:HB2	1:A:2833:LEU:HD22	1.93	0.50
1:B:1590:VAL:HG11	1:B:1671:TRP:CD2	2.47	0.50
1:B:2104:UNK:C	1:B:2107:UNK:HG3	2.42	0.50
1:C:1093:PRO:HB3	1:C:1277:HIS:HE1	1.75	0.50
1:C:1212:UNK:HG1	1:C:1342:ARG:HE	1.76	0.50
1:C:2245:VAL:HG13	1:C:2255:ARG:CZ	2.41	0.50
1:C:2808:ARG:HB2	1:C:2895:SER:O	2.10	0.50
1:A:257:ARG:NH1	1:C:1695:LEU:HD23	2.23	0.50
1:A:1317:GLY:H	1:A:1324:VAL:HG12	1.76	0.50
1:A:1380:ALA:HB1	1:A:1474:LEU:HD12	1.93	0.50
1:A:2261:LYS:HA	1:A:2265:TRP:HB2	1.94	0.50
1:C:272:GLU:HB3	1:C:280:GLY:O	2.11	0.50
1:C:780:ARG:HD2	1:C:816:LEU:HB3	1.93	0.50
1:C:1590:VAL:HG11	1:C:1671:TRP:CD2	2.47	0.50
1:A:1538:ARG:NH1	1:A:1722:PRO:HB3	2.18	0.50
1:A:2698:GLY:HA3	1:A:2705:LYS:HG3	1.92	0.50
1:B:2127:UNK:O	1:B:2130:UNK:CG	2.52	0.50
1:C:2140:VAL:HG22	1:C:2165:ILE:HD12	1.93	0.50
1:A:1590:VAL:HG11	1:A:1671:TRP:CD2	2.47	0.50
1:B:1331:ILE:HG13	1:B:1336:VAL:HG21	1.94	0.50
1:C:1010:UNK:CG	1:C:1017:ILE:HB	2.42	0.50
1:C:2501:MET:HE1	1:C:2516:GLU:OE2	2.11	0.50
1:A:208:VAL:HB	1:A:255:LEU:HD13	1.92	0.50
1:A:932:UNK:O	1:A:936:UNK:CG	2.48	0.50
1:A:936:UNK:O	1:A:941:UNK:N	2.45	0.50
1:A:2501:MET:HE1	1:A:2516:GLU:OE2	2.11	0.50
1:A:2754:ILE:HA	1:A:2759:ALA:O	2.11	0.50
1:B:133:GLN:HG2	1:B:355:GLY:HA2	1.94	0.50
1:B:207:MET:HA	1:B:249:THR:HG22	1.94	0.50
1:B:208:VAL:HG12	1:B:248:ILE:HG12	1.92	0.50
1:B:272:GLU:HB3	1:B:280:GLY:O	2.11	0.50
1:B:936:UNK:O	1:B:941:UNK:N	2.44	0.50
1:B:1711:VAL:HA	1:B:1714:LEU:HG	1.93	0.50
1:C:405:PRO:HG3	1:C:625:LEU:HG	1.93	0.50
1:C:1207:UNK:O	1:C:1207:UNK:HG2	2.12	0.50
1:C:2552:ASP:OD1	1:C:2552:ASP:N	2.43	0.50
1:A:405:PRO:HG3	1:A:625:LEU:HG	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:505:ARG:HA	1:A:508:GLN:HB2	1.94	0.50
1:A:981:UNK:HG1	1:A:987:UNK:C	2.41	0.50
1:A:1212:UNK:O	1:A:1342:ARG:NH2	2.45	0.50
1:A:1212:UNK:HG1	1:A:1342:ARG:HE	1.75	0.50
1:A:1986:LEU:HA	1:A:1989:PHE:HD2	1.76	0.50
1:A:2623:ALA:HB2	1:A:2812:LEU:HD21	1.94	0.50
1:A:2811:PHE:HB3	1:A:2894:THR:HG22	1.94	0.50
1:C:206:PRO:HG2	1:C:294:VAL:HA	1.92	0.50
1:C:542:VAL:HG11	1:C:964:VAL:HB	1.92	0.50
1:C:981:UNK:HG1	1:C:987:UNK:C	2.41	0.50
1:C:2274:LEU:HD23	1:C:2277:ILE:HD12	1.94	0.50
1:C:2690:THR:O	1:C:2693:GLN:HG2	2.11	0.50
1:A:133:GLN:HG2	1:A:355:GLY:HA2	1.94	0.50
1:A:1212:UNK:HG2	1:A:1342:ARG:NE	2.26	0.50
1:B:2334:HIS:HB3	1:B:2391:LYS:HA	1.94	0.50
1:C:981:UNK:HG1	1:C:987:UNK:O	2.12	0.50
1:C:981:UNK:CG	1:C:987:UNK:O	2.60	0.50
1:A:990:UNK:HG3	1:A:998:UNK:HB2	1.94	0.49
1:A:2334:HIS:HB3	1:A:2391:LYS:HA	1.94	0.49
1:B:990:UNK:HG3	1:B:998:UNK:HB2	1.94	0.49
1:B:2557:LEU:HD22	1:B:2613:ARG:HB2	1.94	0.49
1:B:2667:THR:HG21	1:B:3058:ARG:HH11	1.76	0.49
1:B:2829:LEU:HD21	1:B:3014:PHE:HE2	1.76	0.49
1:C:1331:ILE:HG13	1:C:1336:VAL:HG21	1.94	0.49
1:C:1711:VAL:HA	1:C:1714:LEU:HG	1.94	0.49
1:C:2261:LYS:HA	1:C:2265:TRP:HB2	1.94	0.49
1:C:2557:LEU:HD22	1:C:2613:ARG:HB2	1.94	0.49
1:A:984:UNK:HG2	1:A:987:UNK:HG2	1.93	0.49
1:A:1001:UNK:HG1	1:A:1018:ARG:HH22	1.74	0.49
1:A:2104:UNK:C	1:A:2107:UNK:HG3	2.42	0.49
1:A:2127:UNK:O	1:A:2130:UNK:CG	2.52	0.49
1:B:1986:LEU:HA	1:B:1989:PHE:HD2	1.76	0.49
1:B:2056:PHE:CZ	1:B:2180:LYS:HE2	2.47	0.49
1:B:2140:VAL:HG22	1:B:2165:ILE:HD12	1.93	0.49
1:B:2361:VAL:HG11	1:B:2398:LEU:HD23	1.93	0.49
1:B:2754:ILE:HA	1:B:2759:ALA:O	2.11	0.49
1:C:1317:GLY:H	1:C:1324:VAL:HG12	1.76	0.49
1:C:2811:PHE:HB3	1:C:2894:THR:HG22	1.94	0.49
1:A:508:GLN:HA	1:A:540:ASN:HB3	1.92	0.49
1:A:981:UNK:CG	1:A:987:UNK:O	2.60	0.49
1:A:1207:UNK:O	1:A:1207:UNK:HG2	2.12	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2056:PHE:CZ	1:A:2180:LYS:HE2	2.47	0.49
1:A:2140:VAL:HG22	1:A:2165:ILE:HD12	1.93	0.49
1:B:656:THR:HG1	1:B:880:HIS:CE1	2.29	0.49
1:B:1212:UNK:O	1:B:1342:ARG:NH2	2.45	0.49
1:B:1212:UNK:HG1	1:B:1342:ARG:HE	1.75	0.49
1:B:2957:PRO:HB3	1:B:2979:GLU:C	2.36	0.49
1:C:1178:ASN:HB2	1:C:1185:LEU:HD11	1.94	0.49
1:C:1212:UNK:O	1:C:1342:ARG:NH2	2.45	0.49
1:A:2361:VAL:HG11	1:A:2398:LEU:HD23	1.93	0.49
1:B:577:GLU:OE2	2:B:4000:FMN:O3'	2.28	0.49
1:B:1119:THR:HA	1:B:1123:PHE:CD1	2.47	0.49
1:C:776:ASP:O	1:C:779:TRP:N	2.31	0.49
1:C:1119:THR:HA	1:C:1123:PHE:CD1	2.48	0.49
1:C:1637:VAL:HG21	1:C:1671:TRP:CD2	2.48	0.49
1:C:2662:SER:HB2	1:C:2833:LEU:HD22	1.93	0.49
1:A:656:THR:HG1	1:A:880:HIS:CE1	2.30	0.49
1:A:2274:LEU:HD23	1:A:2277:ILE:HD12	1.94	0.49
1:A:2557:LEU:HD22	1:A:2613:ARG:HB2	1.94	0.49
1:A:3080:ARG:CG	1:A:3080:ARG:NH1	2.72	0.49
1:B:981:UNK:HG1	1:B:987:UNK:O	2.12	0.49
1:B:1637:VAL:HG21	1:B:1671:TRP:CD2	2.48	0.49
1:B:2105:UNK:HG2	1:B:2106:UNK:N	2.26	0.49
1:B:2245:VAL:HG13	1:B:2255:ARG:CZ	2.41	0.49
1:C:184:LEU:HB3	1:C:311:TRP:HE3	1.78	0.49
1:C:1380:ALA:HB1	1:C:1474:LEU:HD12	1.94	0.49
1:C:2200:MET:HE1	1:C:2270:LEU:HD22	1.93	0.49
1:A:981:UNK:HG1	1:A:987:UNK:O	2.12	0.49
1:B:505:ARG:HA	1:B:508:GLN:HB2	1.94	0.49
1:B:508:GLN:HA	1:B:540:ASN:HB3	1.92	0.49
1:B:976:UNK:CG	1:B:993:UNK:HB1	2.29	0.49
1:B:1212:UNK:HG2	1:B:1342:ARG:NE	2.26	0.49
1:B:2662:SER:HB2	1:B:2833:LEU:HD22	1.94	0.49
1:C:207:MET:HA	1:C:249:THR:HG22	1.94	0.49
1:C:671:THR:HB	1:C:682:ASN:CG	2.38	0.49
1:A:184:LEU:HB3	1:A:311:TRP:HE3	1.78	0.49
1:A:1119:THR:HA	1:A:1123:PHE:CD1	2.47	0.49
1:A:2503:LYS:HE3	1:A:2505:GLU:OE2	2.13	0.49
1:B:932:UNK:HA	1:B:935:UNK:HG3	1.94	0.49
1:B:1457:GLU:OE2	1:B:1614:TYR:OH	2.30	0.49
1:B:1580:PRO:O	1:B:1583:SER:OG	2.22	0.49
1:B:2790:MET:HG2	1:B:2809:LEU:HD11	1.93	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2087:UNK:HA	1:C:2090:UNK:CG	2.39	0.49
1:C:2105:UNK:HG2	1:C:2106:UNK:N	2.26	0.49
1:C:3080:ARG:HG3	1:C:3080:ARG:NH1	2.09	0.49
1:A:207:MET:HA	1:A:249:THR:HG22	1.94	0.49
1:A:1010:UNK:CG	1:A:1017:ILE:HB	2.42	0.49
1:A:2829:LEU:HD21	1:A:3014:PHE:HE2	1.77	0.49
1:B:981:UNK:CG	1:B:987:UNK:O	2.60	0.49
1:B:1010:UNK:CG	1:B:1017:ILE:HB	2.42	0.49
1:B:1291:LYS:HA	1:B:1344:ALA:HB3	1.95	0.49
1:B:2261:LYS:HA	1:B:2265:TRP:HB2	1.93	0.49
1:C:305:ILE:HD13	1:C:327:GLU:HG2	1.95	0.49
1:C:1362:MET:HG3	1:C:1430:VAL:HG21	1.95	0.49
1:A:444:ILE:HD12	1:A:655:ALA:HA	1.95	0.49
1:A:671:THR:HB	1:A:682:ASN:CG	2.38	0.49
1:A:790:ALA:HB3	1:A:826:LEU:HD21	1.95	0.49
1:A:1291:LYS:HZ2	1:A:1346:PRO:N	2.11	0.49
1:A:1695:LEU:HD23	1:B:257:ARG:NH1	2.23	0.49
1:A:2291:LEU:HD21	1:A:2332:LEU:HD22	1.95	0.49
1:A:2962:ASP:OD1	1:A:2962:ASP:N	2.34	0.49
1:B:184:LEU:HB3	1:B:311:TRP:HE3	1.78	0.49
1:B:780:ARG:HD2	1:B:816:LEU:HB3	1.93	0.49
1:B:792:ALA:HA	1:B:799:PHE:CE2	2.43	0.49
1:B:1380:ALA:HB1	1:B:1474:LEU:HD12	1.93	0.49
1:B:2087:UNK:O	1:B:2090:UNK:HG3	2.13	0.49
1:B:2274:LEU:HD23	1:B:2277:ILE:HD12	1.94	0.49
1:C:932:UNK:HA	1:C:935:UNK:HG3	1.94	0.49
1:C:992:UNK:HG1	1:C:994:UNK:HG3	1.81	0.49
1:C:999:UNK:O	1:C:1007:UNK:N	2.46	0.49
1:C:2094:UNK:O	1:C:2098:UNK:HG3	2.13	0.49
1:A:746:TYR:HA	1:A:749:TRP:HD1	1.76	0.49
1:B:999:UNK:O	1:B:1007:UNK:N	2.46	0.49
1:C:997:UNK:HB1	1:C:1009:UNK:HG2	1.95	0.49
1:C:2334:HIS:HB3	1:C:2391:LYS:HA	1.94	0.49
1:A:868:ARG:HB3	1:A:872:ARG:NH1	2.28	0.48
1:A:1012:UNK:O	1:A:1012:UNK:HG2	2.13	0.48
1:A:1111:PHE:HE1	1:A:1129:LEU:HD11	1.78	0.48
1:A:1637:VAL:HG21	1:A:1671:TRP:CD2	2.48	0.48
1:A:2087:UNK:O	1:A:2090:UNK:HG3	2.13	0.48
1:B:361:THR:HG21	1:B:377:PRO:HG3	1.95	0.48
1:B:444:ILE:HD12	1:B:655:ALA:HA	1.95	0.48
1:B:671:THR:HB	1:B:682:ASN:CG	2.38	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1207:UNK:HG2	1:B:1207:UNK:O	2.12	0.48
1:B:2094:UNK:O	1:B:2098:UNK:HG3	2.13	0.48
1:B:2120:UNK:HG2	1:B:2121:UNK:N	2.28	0.48
1:C:2100:UNK:C	1:C:2103:UNK:HG3	2.31	0.48
1:C:2118:UNK:HG2	1:C:2119:UNK:N	2.28	0.48
1:C:2667:THR:HG21	1:C:3058:ARG:HH11	1.76	0.48
1:C:2829:LEU:HD21	1:C:3014:PHE:HE2	1.76	0.48
1:A:999:UNK:O	1:A:1007:UNK:N	2.46	0.48
1:A:1651:THR:HB	1:A:1656:LYS:HD2	1.95	0.48
1:A:2926:SER:HB3	1:A:2976:TRP:HH2	1.79	0.48
1:B:2086:UNK:CA	1:B:2089:UNK:HG3	2.43	0.48
1:C:1533:VAL:HG13	1:C:1582:HIS:HB2	1.95	0.48
1:A:726:ILE:HG22	1:A:730:MET:HE3	1.95	0.48
1:A:932:UNK:HA	1:A:935:UNK:HG3	1.94	0.48
1:A:2086:UNK:CA	1:A:2089:UNK:HG3	2.43	0.48
1:B:501:VAL:HA	1:B:504:LYS:HE2	1.96	0.48
1:B:790:ALA:HB3	1:B:826:LEU:HD21	1.95	0.48
1:B:1003:UNK:CG	1:B:1004:UNK:N	2.53	0.48
1:B:1533:VAL:HG13	1:B:1582:HIS:HB2	1.95	0.48
1:B:2115:UNK:O	1:B:2119:UNK:HG3	2.13	0.48
1:B:2291:LEU:HD21	1:B:2332:LEU:HD22	1.95	0.48
1:B:2820:ILE:HD12	1:B:2822:LEU:HD21	1.95	0.48
1:C:133:GLN:HG2	1:C:355:GLY:HA2	1.94	0.48
1:C:361:THR:HG21	1:C:377:PRO:HG3	1.95	0.48
1:C:726:ILE:HG22	1:C:730:MET:HE3	1.95	0.48
1:C:996:UNK:HG2	1:C:996:UNK:O	2.13	0.48
1:C:2503:LYS:HE3	1:C:2505:GLU:OE2	2.13	0.48
1:C:2623:ALA:HB2	1:C:2812:LEU:HD21	1.94	0.48
1:A:1435:VAL:HG22	1:A:1703:ILE:HD12	1.95	0.48
1:A:2103:UNK:CG	1:A:2919:GLY:O	2.62	0.48
1:A:2167:THR:HB	1:A:2198:ALA:HB3	1.96	0.48
1:B:2623:ALA:HB2	1:B:2812:LEU:HD21	1.94	0.48
1:C:2667:THR:HB	1:C:3081:LEU:HD11	1.95	0.48
1:C:2848:GLY:H	1:C:3001:HIS:CD2	2.31	0.48
1:A:1711:VAL:HA	1:A:1714:LEU:HG	1.93	0.48
1:A:1996:PRO:O	1:A:2000:LEU:N	2.41	0.48
1:A:2060:TRP:HZ2	1:A:2966:ASP:HA	1.79	0.48
1:A:2170:ARG:HB2	1:A:2175:ARG:HG3	1.95	0.48
1:B:726:ILE:HG22	1:B:730:MET:HE3	1.95	0.48
1:B:1103:VAL:HG21	1:B:1269:MET:SD	2.54	0.48
1:B:1435:VAL:HG22	1:B:1703:ILE:HD12	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2167:THR:HB	1:B:2198:ALA:HB3	1.96	0.48
1:B:2667:THR:HB	1:B:3081:LEU:HD11	1.96	0.48
1:C:505:ARG:HA	1:C:508:GLN:HB2	1.94	0.48
1:C:976:UNK:CG	1:C:993:UNK:HB1	2.29	0.48
1:C:1381:ASP:OD1	1:C:1391:SER:OG	2.22	0.48
1:C:2736:PRO:HG2	1:C:2746:SER:HA	1.96	0.48
1:A:184:LEU:HD13	1:A:311:TRP:HB3	1.96	0.48
1:A:2848:GLY:H	1:A:3001:HIS:CD2	2.31	0.48
1:B:982:UNK:CG	1:B:983:UNK:N	2.76	0.48
1:B:1133:VAL:O	1:B:1193:ALA:N	2.42	0.48
1:B:1695:LEU:HD23	1:C:257:ARG:NH1	2.23	0.48
1:B:2060:TRP:HZ2	1:B:2966:ASP:HA	1.79	0.48
1:B:2645:ASP:OD1	1:B:2647:VAL:HG23	2.14	0.48
1:B:2811:PHE:HB3	1:B:2894:THR:HG22	1.94	0.48
1:C:444:ILE:HD12	1:C:655:ALA:HA	1.95	0.48
1:C:1012:UNK:O	1:C:1012:UNK:HG2	2.13	0.48
1:C:1103:VAL:HG21	1:C:1269:MET:SD	2.54	0.48
1:C:1291:LYS:HA	1:C:1344:ALA:HB3	1.95	0.48
1:C:2087:UNK:O	1:C:2090:UNK:HG3	2.13	0.48
1:C:2088:UNK:O	1:C:2188:ARG:NH1	2.47	0.48
1:C:2645:ASP:OD1	1:C:2647:VAL:HG23	2.13	0.48
1:C:2648:ALA:HA	1:C:2718:VAL:HG13	1.96	0.48
1:C:2820:ILE:HD12	1:C:2822:LEU:HD21	1.95	0.48
1:A:1178:ASN:HB2	1:A:1185:LEU:HD11	1.94	0.48
1:A:2115:UNK:O	1:A:2119:UNK:HG3	2.13	0.48
1:B:803:GLU:OE1	1:B:2431:UNK:CG	2.62	0.48
1:B:931:UNK:CG	1:B:934:UNK:HG3	2.44	0.48
1:B:1362:MET:HG3	1:B:1430:VAL:HG21	1.95	0.48
1:B:1508:ILE:HB	1:B:1562:ARG:HD3	1.96	0.48
1:B:2103:UNK:CG	1:B:2919:GLY:O	2.62	0.48
1:C:1634:ARG:HH11	1:C:1639:ALA:N	2.08	0.48
1:C:2060:TRP:HZ2	1:C:2966:ASP:HA	1.79	0.48
1:A:144:GLY:O	1:A:148:THR:N	2.34	0.48
1:A:931:UNK:CG	1:A:934:UNK:HG3	2.44	0.48
1:A:985:UNK:HG2	1:A:986:UNK:N	2.29	0.48
1:A:1103:VAL:HG21	1:A:1269:MET:SD	2.54	0.48
1:A:1291:LYS:HA	1:A:1344:ALA:HB3	1.95	0.48
1:A:1362:MET:HG3	1:A:1430:VAL:HG21	1.95	0.48
1:A:2088:UNK:O	1:A:2188:ARG:NH1	2.47	0.48
1:A:2180:LYS:NZ	1:A:2962:ASP:HB3	2.29	0.48
1:A:2592:PRO:HA	1:A:2599:TRP:CD1	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2666:PRO:CB	1:A:2727:VAL:HA	2.44	0.48
1:B:305:ILE:HD13	1:B:327:GLU:HG2	1.95	0.48
1:C:868:ARG:HB3	1:C:872:ARG:NH1	2.28	0.48
1:C:990:UNK:HG3	1:C:998:UNK:HB2	1.94	0.48
1:C:1212:UNK:HG2	1:C:1342:ARG:NE	2.26	0.48
1:C:2094:UNK:HG1	1:C:2096:UNK:HG3	1.90	0.48
1:C:2115:UNK:O	1:C:2119:UNK:HG3	2.13	0.48
1:C:2167:THR:HB	1:C:2198:ALA:HB3	1.96	0.48
1:C:2666:PRO:CB	1:C:2727:VAL:HA	2.44	0.48
1:A:305:ILE:HD13	1:A:327:GLU:HG2	1.95	0.48
1:A:315:VAL:C	1:A:317:LEU:H	2.22	0.48
1:A:997:UNK:N	1:A:1009:UNK:O	2.47	0.48
1:A:2094:UNK:O	1:A:2098:UNK:HG3	2.13	0.48
1:A:2120:UNK:HG2	1:A:2121:UNK:N	2.28	0.48
1:A:2645:ASP:OD1	1:A:2647:VAL:HG23	2.14	0.48
1:A:2667:THR:HB	1:A:3081:LEU:HD11	1.96	0.48
1:A:2692:MET:HE3	1:A:2713:VAL:HB	1.96	0.48
1:B:171:LYS:HE3	1:B:173:ALA:HB3	1.96	0.48
1:B:647:THR:HG22	1:B:901:ILE:HD11	1.96	0.48
1:B:2088:UNK:O	1:B:2188:ARG:NH1	2.47	0.48
1:C:997:UNK:N	1:C:1009:UNK:O	2.47	0.48
1:C:1467:VAL:HA	1:C:1605:LYS:HD2	1.96	0.48
1:C:2592:PRO:HA	1:C:2599:TRP:CD1	2.49	0.48
1:C:2926:SER:HB3	1:C:2976:TRP:HH2	1.78	0.48
1:A:2670:MET:HE2	1:A:2675:PRO:HB3	1.96	0.48
1:A:2762:VAL:HG22	1:A:2822:LEU:HB2	1.96	0.48
1:A:2820:ILE:HD12	1:A:2822:LEU:HD21	1.95	0.48
1:B:575:HIS:CD2	1:B:644:LEU:HD22	2.49	0.48
1:B:808:ALA:HB3	1:B:811:ASP:HB2	1.96	0.48
1:B:997:UNK:N	1:B:1009:UNK:O	2.47	0.48
1:B:2352:ILE:HG12	1:B:2412:ALA:HB1	1.96	0.48
1:B:2692:MET:HE3	1:B:2713:VAL:HB	1.96	0.48
1:C:171:LYS:HE3	1:C:173:ALA:HB3	1.96	0.48
1:C:301:LEU:HD13	1:C:330:LEU:HD22	1.96	0.48
1:C:575:HIS:CD2	1:C:644:LEU:HD22	2.48	0.48
1:C:1651:THR:HB	1:C:1656:LYS:HD2	1.95	0.48
1:C:2448:UNK:O	1:C:2448:UNK:HG2	2.13	0.48
1:A:176:VAL:O	1:A:180:ALA:N	2.36	0.47
1:A:996:UNK:HG2	1:A:996:UNK:O	2.13	0.47
1:A:2736:PRO:HG2	1:A:2746:SER:HA	1.96	0.47
1:B:315:VAL:C	1:B:317:LEU:H	2.22	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:670:GLY:HA3	1:B:899:ALA:HB2	1.96	0.47
1:B:674:TRP:CD1	1:B:895:THR:HG21	2.49	0.47
1:B:2180:LYS:NZ	1:B:2962:ASP:HB3	2.29	0.47
1:B:2448:UNK:HG2	1:B:2448:UNK:O	2.13	0.47
1:B:2666:PRO:CB	1:B:2727:VAL:HA	2.44	0.47
1:B:2686:MET:HE1	1:B:2935:LYS:HZ2	1.78	0.47
1:C:1013:UNK:CG	1:C:1014:UNK:N	2.58	0.47
1:C:1435:VAL:HG22	1:C:1703:ILE:HD12	1.95	0.47
1:C:2843:GLN:HG2	1:C:2845:PHE:CZ	2.49	0.47
1:A:2348:GLN:O	1:A:2416:MET:HG3	2.15	0.47
1:A:2554:ALA:HB1	1:A:2614:LYS:HD2	1.95	0.47
1:B:1012:UNK:O	1:B:1012:UNK:HG2	2.14	0.47
1:B:1111:PHE:HE1	1:B:1129:LEU:HD11	1.78	0.47
1:B:1651:THR:HB	1:B:1656:LYS:HD2	1.95	0.47
1:B:2101:UNK:HG2	1:B:2102:UNK:N	2.29	0.47
1:B:2434:UNK:HG3	1:B:2523:GLU:O	2.14	0.47
1:B:2503:LYS:HE3	1:B:2505:GLU:OE2	2.13	0.47
1:B:2592:PRO:HA	1:B:2599:TRP:CD1	2.49	0.47
1:B:2848:GLY:H	1:B:3001:HIS:CD2	2.31	0.47
1:B:2884:ASP:HA	1:B:2916:ARG:NH1	2.30	0.47
1:C:184:LEU:HD13	1:C:311:TRP:HB3	1.96	0.47
1:C:606:ASN:HD22	1:C:606:ASN:H	1.62	0.47
1:C:647:THR:HG22	1:C:901:ILE:HD11	1.96	0.47
1:C:1010:UNK:HG2	1:C:1017:ILE:HB	1.96	0.47
1:C:1580:PRO:O	1:C:1583:SER:OG	2.23	0.47
1:C:2180:LYS:NZ	1:C:2962:ASP:HB3	2.29	0.47
1:C:2554:ALA:HB1	1:C:2614:LYS:HD2	1.95	0.47
1:C:2686:MET:HE1	1:C:2935:LYS:HZ2	1.78	0.47
1:A:1457:GLU:OE2	1:A:1614:TYR:OH	2.30	0.47
1:A:1533:VAL:HG13	1:A:1582:HIS:HB2	1.95	0.47
1:A:2434:UNK:HG3	1:A:2523:GLU:O	2.14	0.47
1:B:365:ALA:O	1:B:369:ARG:N	2.42	0.47
1:B:1072:TRP:HE1	1:B:1077:VAL:HG22	1.80	0.47
1:B:1178:ASN:HB2	1:B:1185:LEU:HD11	1.94	0.47
1:B:1625:LEU:HD11	1:B:1660:LEU:HB3	1.95	0.47
1:C:176:VAL:O	1:C:180:ALA:N	2.36	0.47
1:C:790:ALA:HB3	1:C:826:LEU:HD21	1.95	0.47
1:C:1450:ALA:N	1:C:1613:ARG:O	2.48	0.47
1:C:2692:MET:HE3	1:C:2713:VAL:HB	1.96	0.47
1:A:365:ALA:HB3	1:A:366:PRO:HD3	1.96	0.47
1:A:674:TRP:CD1	1:A:895:THR:HG21	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2093:UNK:HG1	1:B:2132:UNK:HB1	1.95	0.47
1:B:2123:UNK:HA	1:B:2126:UNK:HG3	1.97	0.47
1:B:2252:VAL:HG22	1:B:2255:ARG:NH2	2.30	0.47
1:B:2461:VAL:HG21	1:B:2751:VAL:HG13	1.96	0.47
1:B:2648:ALA:HA	1:B:2718:VAL:HG13	1.96	0.47
1:C:365:ALA:HB3	1:C:366:PRO:HD3	1.96	0.47
1:C:674:TRP:CD1	1:C:895:THR:HG21	2.49	0.47
1:C:808:ALA:HB3	1:C:811:ASP:HB2	1.96	0.47
1:C:985:UNK:HG2	1:C:986:UNK:N	2.29	0.47
1:C:2170:ARG:HB2	1:C:2175:ARG:HG3	1.95	0.47
1:A:997:UNK:HB1	1:A:1009:UNK:CG	2.44	0.47
1:A:1508:ILE:HB	1:A:1562:ARG:HD3	1.97	0.47
1:A:2118:UNK:HG2	1:A:2119:UNK:N	2.28	0.47
1:A:2648:ALA:HA	1:A:2718:VAL:HG13	1.96	0.47
1:A:2843:GLN:HG2	1:A:2845:PHE:CZ	2.49	0.47
1:B:832:ASP:O	1:B:836:VAL:HG23	2.14	0.47
1:B:985:UNK:HG2	1:B:986:UNK:N	2.29	0.47
1:B:997:UNK:HB1	1:B:1009:UNK:HG2	1.95	0.47
1:B:2170:ARG:HB2	1:B:2175:ARG:HG3	1.96	0.47
1:C:88:SER:HG	1:C:311:TRP:CD1	2.32	0.47
1:C:1455:VAL:HB	1:C:1480:ARG:HH12	1.80	0.47
1:C:2103:UNK:CG	1:C:2919:GLY:O	2.62	0.47
1:C:2123:UNK:HA	1:C:2126:UNK:HG3	1.97	0.47
1:C:2461:VAL:HG21	1:C:2751:VAL:HG13	1.96	0.47
1:A:606:ASN:H	1:A:606:ASN:HD22	1.63	0.47
1:A:997:UNK:HB1	1:A:1009:UNK:HG2	1.95	0.47
1:A:2093:UNK:HG1	1:A:2132:UNK:HB1	1.95	0.47
1:A:2448:UNK:HG2	1:A:2448:UNK:O	2.13	0.47
1:B:641:ASP:OD1	1:B:641:ASP:N	2.47	0.47
1:B:683:GLY:CA	1:B:700:ASN:HB2	2.44	0.47
1:B:932:UNK:O	1:B:936:UNK:CG	2.47	0.47
1:B:996:UNK:HG2	1:B:996:UNK:O	2.13	0.47
1:B:1590:VAL:HG11	1:B:1671:TRP:CE2	2.50	0.47
1:B:2376:LEU:HD22	1:B:2392:VAL:HG21	1.97	0.47
1:B:2681:THR:O	1:B:2764:ALA:HA	2.15	0.47
1:C:966:PRO:O	1:C:970:ILE:N	2.48	0.47
1:C:997:UNK:HB1	1:C:1009:UNK:CG	2.45	0.47
1:A:713:ALA:O	1:A:868:ARG:NH2	2.48	0.47
1:A:782:ARG:HD3	1:A:853:LEU:HD22	1.97	0.47
1:A:1381:ASP:OD1	1:A:1391:SER:OG	2.22	0.47
1:A:1625:LEU:HD11	1:A:1660:LEU:HB3	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1672:GLN:HE21	1:A:1672:GLN:HB3	1.58	0.47
1:A:2101:UNK:HG2	1:A:2102:UNK:N	2.29	0.47
1:A:2800:PHE:CE1	1:A:2812:LEU:HD22	2.50	0.47
1:A:2884:ASP:HA	1:A:2916:ARG:NH1	2.29	0.47
1:B:184:LEU:HD13	1:B:311:TRP:HB3	1.96	0.47
1:B:365:ALA:HB3	1:B:366:PRO:HD3	1.96	0.47
1:B:745:THR:HG22	1:B:747:LEU:H	1.80	0.47
1:B:1455:VAL:HB	1:B:1480:ARG:HH12	1.80	0.47
1:B:1672:GLN:HE21	1:B:1672:GLN:HB3	1.58	0.47
1:B:2630:ASP:HB3	1:B:2633:VAL:HG23	1.97	0.47
1:B:2926:SER:HB3	1:B:2976:TRP:HH2	1.79	0.47
1:C:210:VAL:HG22	1:C:287:PHE:CD1	2.50	0.47
1:C:670:GLY:HA3	1:C:899:ALA:HB2	1.96	0.47
1:C:832:ASP:O	1:C:836:VAL:HG23	2.14	0.47
1:C:941:UNK:HG3	1:C:942:UNK:N	2.30	0.47
1:C:1625:LEU:HD11	1:C:1660:LEU:HB3	1.96	0.47
1:C:2120:UNK:HG2	1:C:2121:UNK:N	2.28	0.47
1:C:2670:MET:HE2	1:C:2675:PRO:HB3	1.96	0.47
1:C:2762:VAL:HG22	1:C:2822:LEU:HB2	1.96	0.47
1:C:2773:GLU:HA	1:C:2776:ILE:HG22	1.97	0.47
1:A:301:LEU:HD13	1:A:330:LEU:HD22	1.96	0.47
1:A:966:PRO:O	1:A:970:ILE:N	2.48	0.47
1:A:1010:UNK:HG2	1:A:1017:ILE:HB	1.96	0.47
1:A:1467:VAL:HA	1:A:1605:LYS:HD2	1.96	0.47
1:A:2210:VAL:HB	1:A:2277:ILE:HD11	1.96	0.47
1:B:778:THR:HG21	1:B:854:GLY:HA3	1.97	0.47
1:B:868:ARG:HB3	1:B:872:ARG:NH1	2.28	0.47
1:B:931:UNK:HG2	1:B:933:UNK:HG2	1.92	0.47
1:B:2125:UNK:HA	1:B:2128:UNK:CG	2.45	0.47
1:B:2450:UNK:HG1	1:B:3016:ALA:CB	2.17	0.47
1:B:2762:VAL:HG22	1:B:2822:LEU:HB2	1.96	0.47
1:C:803:GLU:OE1	1:C:2431:UNK:CG	2.62	0.47
1:C:931:UNK:CG	1:C:934:UNK:HG3	2.44	0.47
1:C:1276:GLN:HE21	1:C:1292:LEU:HD13	1.79	0.47
1:C:2086:UNK:CA	1:C:2089:UNK:HG3	2.43	0.47
1:C:2376:LEU:HD22	1:C:2392:VAL:HG21	1.97	0.47
1:C:2681:THR:O	1:C:2764:ALA:HA	2.15	0.47
1:A:198:ILE:HG12	1:C:1087:PHE:CE1	2.50	0.47
1:A:803:GLU:OE1	1:A:2431:UNK:CG	2.62	0.47
1:A:808:ALA:HB3	1:A:811:ASP:HB2	1.96	0.47
1:A:832:ASP:O	1:A:836:VAL:HG23	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2785:ALA:HB1	1:A:2809:LEU:HG	1.97	0.47
1:B:210:VAL:HG22	1:B:287:PHE:CD1	2.50	0.47
1:B:585:HIS:HD2	1:B:586:SER:H	1.62	0.47
1:B:713:ALA:O	1:B:868:ARG:NH2	2.48	0.47
1:B:782:ARG:HD3	1:B:853:LEU:HD22	1.97	0.47
1:B:941:UNK:HG3	1:B:942:UNK:N	2.30	0.47
1:B:1010:UNK:HG2	1:B:1017:ILE:HB	1.96	0.47
1:B:2554:ALA:HB1	1:B:2614:LYS:HD2	1.96	0.47
1:C:2291:LEU:HD21	1:C:2332:LEU:HD22	1.95	0.47
1:C:2891:LYS:HZ1	1:C:2904:THR:N	2.13	0.47
1:A:141:ALA:O	1:A:145:MET:HB2	2.15	0.47
1:A:2482:GLU:HG2	1:A:2956:PRO:HB3	1.97	0.47
1:B:301:LEU:HD13	1:B:330:LEU:HD22	1.96	0.47
1:B:992:UNK:CG	1:B:996:UNK:HG2	2.32	0.47
1:B:2843:GLN:HG2	1:B:2845:PHE:CZ	2.49	0.47
1:C:836:VAL:HG12	1:C:837:VAL:N	2.29	0.47
1:C:1111:PHE:HE1	1:C:1129:LEU:HD11	1.78	0.47
1:C:2101:UNK:HG2	1:C:2102:UNK:N	2.29	0.47
1:C:2125:UNK:HA	1:C:2128:UNK:CG	2.44	0.47
1:C:2427:UNK:O	1:C:2427:UNK:HG2	2.15	0.47
1:C:3080:ARG:CG	1:C:3080:ARG:NH1	2.72	0.47
1:A:836:VAL:HG12	1:A:837:VAL:N	2.29	0.46
1:A:1237:ARG:CZ	1:B:95:PRO:HB2	2.46	0.46
1:A:2058:ASP:OD1	1:A:2058:ASP:N	2.46	0.46
1:B:94:ARG:HG3	1:B:95:PRO:HD3	1.98	0.46
1:B:836:VAL:HG12	1:B:837:VAL:N	2.29	0.46
1:B:966:PRO:O	1:B:970:ILE:N	2.48	0.46
1:B:997:UNK:HB1	1:B:1009:UNK:CG	2.44	0.46
1:B:1467:VAL:HA	1:B:1605:LYS:HD2	1.96	0.46
1:C:222:LEU:HD21	1:C:236:VAL:HA	1.97	0.46
1:C:1590:VAL:HG11	1:C:1671:TRP:CE2	2.50	0.46
1:C:2104:UNK:HA	1:C:2107:UNK:CG	2.46	0.46
1:C:2210:VAL:HB	1:C:2277:ILE:HD11	1.97	0.46
1:C:2252:VAL:HG13	1:C:2255:ARG:HH21	1.81	0.46
1:A:670:GLY:HA3	1:A:899:ALA:HB2	1.96	0.46
1:A:778:THR:HG21	1:A:854:GLY:HA3	1.97	0.46
1:A:941:UNK:HG3	1:A:942:UNK:N	2.30	0.46
1:A:2077:UNK:CG	1:A:2079:UNK:HG3	2.41	0.46
1:A:2096:UNK:C	1:A:2099:UNK:HG3	2.43	0.46
1:B:518:ASP:HA	1:B:543:GLY:O	2.15	0.46
1:B:2961:LEU:HD22	1:B:2976:TRP:CD1	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:84:GLU:HB2	1:C:85:PRO:HD3	1.97	0.46
1:C:501:VAL:HA	1:C:504:LYS:HE2	1.96	0.46
1:C:656:THR:HG1	1:C:880:HIS:CE1	2.30	0.46
1:C:713:ALA:O	1:C:868:ARG:NH2	2.48	0.46
1:C:931:UNK:HG2	1:C:933:UNK:HG2	1.92	0.46
1:C:1508:ILE:HB	1:C:1562:ARG:HD3	1.97	0.46
1:C:2096:UNK:C	1:C:2099:UNK:HG3	2.43	0.46
1:C:2352:ILE:HG12	1:C:2412:ALA:HB1	1.96	0.46
1:A:171:LYS:HE3	1:A:173:ALA:HB3	1.96	0.46
1:A:210:VAL:HG22	1:A:287:PHE:CD1	2.50	0.46
1:A:361:THR:HG21	1:A:377:PRO:HG3	1.95	0.46
1:A:365:ALA:O	1:A:369:ARG:N	2.42	0.46
1:A:2252:VAL:HG13	1:A:2255:ARG:HH21	1.80	0.46
1:A:2352:ILE:HG12	1:A:2412:ALA:HB1	1.96	0.46
1:A:2681:THR:O	1:A:2764:ALA:HA	2.15	0.46
1:A:2978:ARG:NH1	1:A:2979:GLU:OE2	2.49	0.46
1:B:205:PRO:CD	1:B:289:PRO:HB3	2.46	0.46
1:B:996:UNK:HA	1:B:1010:UNK:HA	1.97	0.46
1:B:1001:UNK:O	1:B:1005:UNK:HB2	2.16	0.46
1:B:1319:ASP:HB2	1:B:1342:ARG:NH1	2.31	0.46
1:B:2118:UNK:HG2	1:B:2119:UNK:N	2.28	0.46
1:C:982:UNK:CG	1:C:983:UNK:N	2.76	0.46
1:C:2434:UNK:HG3	1:C:2523:GLU:O	2.14	0.46
1:C:2884:ASP:HA	1:C:2916:ARG:NH1	2.29	0.46
1:A:84:GLU:HB2	1:A:85:PRO:HD3	1.98	0.46
1:A:518:ASP:HA	1:A:543:GLY:O	2.15	0.46
1:A:683:GLY:CA	1:A:700:ASN:HB2	2.44	0.46
1:A:1612:GLY:N	1:A:1623:PHE:O	2.48	0.46
1:A:1699:ARG:HG3	1:A:1730:GLU:HB3	1.97	0.46
1:A:2461:VAL:HG21	1:A:2751:VAL:HG13	1.96	0.46
1:B:598:TYR:OH	1:B:639:PRO:O	2.30	0.46
1:B:1291:LYS:HZ2	1:B:1346:PRO:N	2.14	0.46
1:B:1634:ARG:HH11	1:B:1639:ALA:N	2.08	0.46
1:B:2252:VAL:HG13	1:B:2255:ARG:HH21	1.81	0.46
1:B:2736:PRO:HG2	1:B:2746:SER:HA	1.95	0.46
1:C:315:VAL:C	1:C:317:LEU:H	2.22	0.46
1:C:518:ASP:HA	1:C:543:GLY:O	2.15	0.46
1:C:2348:GLN:O	1:C:2416:MET:HG3	2.15	0.46
1:A:1325:LEU:HD11	1:A:1343:LEU:HD22	1.98	0.46
1:A:1346:PRO:HG2	1:A:1699:ARG:HD3	1.98	0.46
1:A:2961:LEU:HD22	1:A:2976:TRP:CD1	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:656:THR:OG1	1:B:880:HIS:ND1	2.35	0.46
1:B:768:LYS:HA	1:B:775:LEU:HD11	1.97	0.46
1:B:1237:ARG:CZ	1:C:95:PRO:HB2	2.46	0.46
1:B:1276:GLN:HE21	1:B:1292:LEU:HD13	1.79	0.46
1:B:1699:ARG:HG3	1:B:1730:GLU:HB3	1.97	0.46
1:B:2543:PHE:HA	1:B:2624:GLN:HE22	1.81	0.46
1:C:745:THR:HG22	1:C:747:LEU:H	1.80	0.46
1:C:782:ARG:HD3	1:C:853:LEU:HD22	1.97	0.46
1:C:2252:VAL:HG22	1:C:2255:ARG:NH2	2.30	0.46
1:B:2104:UNK:HA	1:B:2107:UNK:CG	2.46	0.46
1:C:141:ALA:O	1:C:145:MET:HB2	2.15	0.46
1:C:406:THR:OG1	1:C:418:GLU:OE1	2.34	0.46
1:C:534:ASP:O	1:C:538:GLU:HG3	2.16	0.46
1:C:778:THR:HG21	1:C:854:GLY:HA3	1.97	0.46
1:C:1325:LEU:HD11	1:C:1343:LEU:HD22	1.98	0.46
1:C:1699:ARG:HG3	1:C:1730:GLU:HB3	1.97	0.46
1:C:2361:VAL:HG21	1:C:2401:ILE:HD11	1.98	0.46
1:A:575:HIS:CD2	1:A:644:LEU:HD22	2.49	0.46
1:A:1072:TRP:CD1	1:A:1097:VAL:HG22	2.51	0.46
1:A:1590:VAL:HG11	1:A:1671:TRP:CE2	2.50	0.46
1:A:3065:PRO:O	1:A:3069:GLN:N	2.42	0.46
1:B:84:GLU:HB2	1:B:85:PRO:HD3	1.97	0.46
1:B:141:ALA:O	1:B:145:MET:HB2	2.15	0.46
1:B:406:THR:OG1	1:B:418:GLU:OE1	2.34	0.46
1:B:540:ASN:ND2	1:B:544:ILE:HG13	2.30	0.46
1:B:606:ASN:HD22	1:B:606:ASN:H	1.62	0.46
1:B:1072:TRP:CD1	1:B:1097:VAL:HG22	2.51	0.46
1:B:2210:VAL:HB	1:B:2277:ILE:HD11	1.96	0.46
1:B:2348:GLN:O	1:B:2416:MET:HG3	2.15	0.46
1:C:374:GLY:C	1:C:375:ILE:HG13	2.41	0.46
1:C:1001:UNK:O	1:C:1005:UNK:HB2	2.16	0.46
1:C:1094:THR:O	1:C:1288:PRO:HG2	2.15	0.46
1:C:1319:ASP:HB2	1:C:1342:ARG:NH1	2.31	0.46
1:C:1346:PRO:HG2	1:C:1699:ARG:HD3	1.98	0.46
1:C:2482:GLU:HG2	1:C:2956:PRO:HB3	1.97	0.46
1:A:167:ALA:HB3	1:A:178:LEU:HD21	1.98	0.46
1:A:277:LEU:HD22	1:A:676:GLY:O	2.16	0.46
1:A:501:VAL:HA	1:A:504:LYS:HE2	1.96	0.46
1:A:1205:UNK:HG2	1:A:1206:UNK:N	2.30	0.46
1:A:1212:UNK:CG	1:A:1342:ARG:HH21	2.17	0.46
1:A:1276:GLN:HE21	1:A:1292:LEU:HD13	1.79	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2104:UNK:HA	1:A:2107:UNK:CG	2.46	0.46
1:A:2376:LEU:HD22	1:A:2392:VAL:HG21	1.97	0.46
1:A:2630:ASP:HB3	1:A:2633:VAL:HG23	1.97	0.46
1:B:374:GLY:C	1:B:375:ILE:HG13	2.41	0.46
1:B:2180:LYS:HZ1	1:B:2962:ASP:HB3	1.79	0.46
1:B:2978:ARG:NH1	1:B:2979:GLU:OE2	2.49	0.46
1:C:94:ARG:HG3	1:C:95:PRO:HD3	1.98	0.46
1:C:996:UNK:HA	1:C:1010:UNK:HA	1.97	0.46
1:A:95:PRO:HB2	1:C:1237:ARG:CZ	2.45	0.46
1:A:647:THR:HG22	1:A:901:ILE:HD11	1.96	0.46
1:A:1455:VAL:HB	1:A:1480:ARG:HH12	1.80	0.46
1:A:2212:TRP:HA	1:A:2229:LYS:HB3	1.98	0.46
1:A:2252:VAL:HG22	1:A:2255:ARG:NH2	2.30	0.46
1:A:2610:ARG:NH1	1:A:2700:LEU:HD21	2.31	0.46
1:A:2773:GLU:HA	1:A:2776:ILE:HG22	1.97	0.46
1:A:2790:MET:SD	1:A:2800:PHE:HB2	2.56	0.46
1:B:111:GLU:HB2	1:B:112:PRO:HD3	1.98	0.46
1:B:984:UNK:HG1	1:B:987:UNK:CG	2.46	0.46
1:B:1205:UNK:HG2	1:B:1206:UNK:N	2.31	0.46
1:B:1304:LYS:O	1:B:1307:ASP:HB2	2.16	0.46
1:B:2619:ARG:NH1	1:B:2779:GLY:HA2	2.31	0.46
1:B:2670:MET:HE2	1:B:2675:PRO:HB3	1.96	0.46
1:C:111:GLU:HB2	1:C:112:PRO:HD3	1.98	0.46
1:C:1205:UNK:HG2	1:C:1206:UNK:N	2.30	0.46
1:C:2619:ARG:NH1	1:C:2779:GLY:HA2	2.31	0.46
1:C:2946:LEU:HD22	1:C:2994:VAL:HG23	1.98	0.46
1:A:205:PRO:CD	1:A:289:PRO:HB3	2.46	0.46
1:A:745:THR:HG22	1:A:747:LEU:H	1.80	0.46
1:A:868:ARG:HD3	1:A:872:ARG:HH12	1.81	0.46
1:A:1087:PHE:CE1	1:B:198:ILE:HG12	2.51	0.46
1:A:2123:UNK:HA	1:A:2126:UNK:HG3	1.97	0.46
1:A:2125:UNK:HA	1:A:2128:UNK:CG	2.45	0.46
1:A:2879:LEU:HD13	1:A:3009:VAL:HG11	1.98	0.46
1:B:1087:PHE:CE1	1:C:198:ILE:HG12	2.51	0.46
1:B:2770:LEU:HB3	1:B:2815:GLN:HB3	1.97	0.46
1:B:2891:LYS:HZ2	1:B:2903:GLU:CG	2.29	0.46
1:C:408:VAL:CG1	1:C:943:UNK:HG1	2.46	0.46
1:C:1072:TRP:CD1	1:C:1097:VAL:HG22	2.51	0.46
1:C:1304:LYS:O	1:C:1307:ASP:HB2	2.16	0.46
1:C:2234:PRO:HB2	1:C:2287:LEU:HD13	1.98	0.46
1:C:2879:LEU:HD13	1:C:3009:VAL:HG11	1.98	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:111:GLU:HB2	1:A:112:PRO:HD3	1.98	0.45
1:A:2100:UNK:C	1:A:2103:UNK:HG3	2.31	0.45
1:A:2137:GLU:O	1:A:2163:THR:N	2.30	0.45
1:A:2891:LYS:HG3	1:A:2924:ILE:HD13	1.98	0.45
1:B:793:ARG:HA	1:B:2435:UNK:HG1	1.97	0.45
1:B:1094:THR:O	1:B:1288:PRO:HG2	2.15	0.45
1:B:1325:LEU:HD11	1:B:1343:LEU:HD22	1.98	0.45
1:B:2094:UNK:HG1	1:B:2096:UNK:HG3	1.90	0.45
1:B:2672:TRP:CD1	1:B:2831:MET:HG2	2.52	0.45
1:B:2773:GLU:HA	1:B:2776:ILE:HG22	1.97	0.45
1:B:2889:ILE:HD11	1:B:2922:LEU:HD22	1.98	0.45
1:A:793:ARG:HA	1:A:2435:UNK:HG1	1.98	0.45
1:A:996:UNK:HA	1:A:1010:UNK:HA	1.97	0.45
1:A:1003:UNK:CG	1:A:1004:UNK:N	2.53	0.45
1:A:1094:THR:O	1:A:1288:PRO:HG2	2.15	0.45
1:A:1319:ASP:HB2	1:A:1342:ARG:NH1	2.31	0.45
1:A:1450:ALA:N	1:A:1613:ARG:O	2.48	0.45
1:A:2173:ASP:CG	1:A:2799:LYS:HZ3	2.20	0.45
1:A:2543:PHE:HA	1:A:2624:GLN:HE22	1.81	0.45
1:B:1702:GLU:OE1	1:B:1712:ALA:N	2.49	0.45
1:B:2234:PRO:HB2	1:B:2287:LEU:HD13	1.98	0.45
1:B:2482:GLU:HG2	1:B:2956:PRO:HB3	1.97	0.45
1:B:2946:LEU:HD22	1:B:2994:VAL:HG23	1.98	0.45
1:C:47:ALA:O	1:C:353:ASP:HA	2.17	0.45
1:C:277:LEU:HD22	1:C:676:GLY:O	2.16	0.45
1:C:540:ASN:ND2	1:C:544:ILE:HG13	2.30	0.45
1:C:683:GLY:CA	1:C:700:ASN:HB2	2.44	0.45
1:C:1462:ALA:HB2	1:C:1468:TYR:HE1	1.81	0.45
1:C:2212:TRP:HA	1:C:2229:LYS:HB3	1.98	0.45
1:C:2961:LEU:HD22	1:C:2976:TRP:CD1	2.51	0.45
1:A:94:ARG:HG3	1:A:95:PRO:HD3	1.98	0.45
1:A:793:ARG:HH12	1:A:2523:GLU:CD	2.24	0.45
1:A:944:UNK:O	1:A:944:UNK:CG	2.59	0.45
1:A:1133:VAL:O	1:A:1193:ALA:N	2.42	0.45
1:A:1462:ALA:HB2	1:A:1468:TYR:HE1	1.81	0.45
1:A:1483:LYS:O	1:A:1487:ILE:HG23	2.17	0.45
1:A:2619:ARG:NH1	1:A:2779:GLY:HA2	2.31	0.45
1:B:351:ILE:HB	1:B:375:ILE:HG12	1.99	0.45
1:B:1352:PHE:HA	1:B:1353:PRO:HD3	1.72	0.45
1:B:1462:ALA:HB2	1:B:1468:TYR:HE1	1.81	0.45
1:B:2891:LYS:HZ1	1:B:2904:THR:N	2.13	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2891:LYS:HG3	1:B:2924:ILE:HD13	1.99	0.45
1:C:205:PRO:CD	1:C:289:PRO:HB3	2.46	0.45
1:C:381:ARG:O	1:C:384:GLN:HG2	2.17	0.45
1:C:746:TYR:HB2	1:C:833:ALA:HB1	1.99	0.45
1:C:984:UNK:HG1	1:C:987:UNK:CG	2.46	0.45
1:C:2070:LEU:O	1:C:2074:GLU:HG3	2.16	0.45
1:C:2472:TYR:CZ	1:C:2930:LEU:HD22	2.52	0.45
1:A:222:LEU:HD21	1:A:236:VAL:HA	1.97	0.45
1:A:747:LEU:HD22	1:A:751:ARG:CZ	2.47	0.45
1:A:784:GLU:OE2	1:A:816:LEU:HD21	2.16	0.45
1:A:2246:ALA:N	1:A:2255:ARG:NH1	2.64	0.45
1:A:2672:TRP:CD1	1:A:2831:MET:HG2	2.52	0.45
1:A:2845:PHE:HD2	1:A:2860:ALA:HA	1.82	0.45
1:A:2889:ILE:HD11	1:A:2922:LEU:HD22	1.98	0.45
1:B:47:ALA:O	1:B:353:ASP:HA	2.17	0.45
1:B:1001:UNK:HG1	1:B:1018:ARG:HH21	1.80	0.45
1:B:1346:PRO:HG2	1:B:1699:ARG:HD3	1.98	0.45
1:B:2096:UNK:C	1:B:2099:UNK:HG3	2.43	0.45
1:B:2769:ASP:OD1	1:B:2770:LEU:N	2.49	0.45
1:B:2785:ALA:HB1	1:B:2809:LEU:HG	1.97	0.45
1:B:2879:LEU:HD13	1:B:3009:VAL:HG11	1.98	0.45
1:C:585:HIS:CB	1:C:694:ASP:HB2	2.47	0.45
1:C:684:MET:HG3	1:C:895:THR:HA	1.98	0.45
1:C:1212:UNK:HG2	1:C:1342:ARG:CZ	2.47	0.45
1:C:1483:LYS:O	1:C:1487:ILE:HG23	2.17	0.45
1:C:2891:LYS:HZ2	1:C:2903:GLU:CG	2.30	0.45
1:A:222:LEU:HD13	1:A:248:ILE:HD12	1.99	0.45
1:A:381:ARG:O	1:A:384:GLN:HG2	2.17	0.45
1:A:544:ILE:O	1:A:546:HIS:N	2.41	0.45
1:A:684:MET:HG3	1:A:895:THR:HA	1.98	0.45
1:A:2427:UNK:O	1:A:2427:UNK:HG2	2.15	0.45
1:A:2770:LEU:HB3	1:A:2815:GLN:HB3	1.97	0.45
1:B:207:MET:HG3	1:B:292:VAL:HB	1.98	0.45
1:B:746:TYR:HB2	1:B:833:ALA:HB1	1.99	0.45
1:B:793:ARG:HH12	1:B:2523:GLU:CD	2.24	0.45
1:B:868:ARG:HD3	1:B:872:ARG:HH12	1.81	0.45
1:B:2246:ALA:N	1:B:2255:ARG:NH1	2.64	0.45
1:C:351:ILE:HB	1:C:375:ILE:HG12	1.99	0.45
1:C:511:ARG:CB	1:C:540:ASN:HB2	2.46	0.45
1:C:544:ILE:C	1:C:546:HIS:H	2.22	0.45
1:C:768:LYS:HA	1:C:775:LEU:HD11	1.97	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2785:ALA:HB1	1:C:2809:LEU:HG	1.97	0.45
1:C:2790:MET:SD	1:C:2800:PHE:HB2	2.56	0.45
1:A:408:VAL:CG1	1:A:943:UNK:HG1	2.46	0.45
1:A:534:ASP:O	1:A:538:GLU:HG3	2.16	0.45
1:A:540:ASN:ND2	1:A:544:ILE:HG13	2.30	0.45
1:A:1001:UNK:O	1:A:1005:UNK:HB2	2.15	0.45
1:A:1702:GLU:OE1	1:A:1712:ALA:N	2.49	0.45
1:A:2070:LEU:O	1:A:2074:GLU:HG3	2.16	0.45
1:B:195:ARG:NH1	1:B:198:ILE:HD12	2.31	0.45
1:B:585:HIS:CB	1:B:694:ASP:HB2	2.47	0.45
1:B:1450:ALA:N	1:B:1613:ARG:O	2.48	0.45
1:B:1519:VAL:HG13	1:B:1530:LEU:HD23	1.98	0.45
1:C:167:ALA:HB3	1:C:178:LEU:HD21	1.98	0.45
1:C:1457:GLU:OE2	1:C:1614:TYR:OH	2.30	0.45
1:C:1488:VAL:HB	1:C:1579:VAL:HG22	1.99	0.45
1:C:1553:ALA:O	1:C:1557:GLU:HG2	2.17	0.45
1:C:2630:ASP:HB3	1:C:2633:VAL:HG23	1.97	0.45
1:A:406:THR:OG1	1:A:418:GLU:OE1	2.34	0.45
1:A:768:LYS:HA	1:A:775:LEU:HD11	1.98	0.45
1:A:1072:TRP:HE1	1:A:1077:VAL:HG22	1.80	0.45
1:A:2080:UNK:HG2	1:A:2083:UNK:CG	2.45	0.45
1:A:2361:VAL:HG21	1:A:2401:ILE:HD11	1.98	0.45
1:B:534:ASP:O	1:B:538:GLU:HG3	2.16	0.45
1:B:544:ILE:C	1:B:546:HIS:H	2.22	0.45
1:B:1488:VAL:HB	1:B:1579:VAL:HG22	1.99	0.45
1:B:1605:LYS:H	1:B:1658:LYS:HE2	1.82	0.45
1:B:1996:PRO:O	1:B:2000:LEU:N	2.41	0.45
1:B:2137:GLU:O	1:B:2163:THR:N	2.30	0.45
1:B:2212:TRP:HA	1:B:2229:LYS:HB3	1.98	0.45
1:B:2452:UNK:CG	1:B:2453:UNK:N	2.73	0.45
1:B:2452:UNK:HA	1:B:3017:ALA:HA	1.99	0.45
1:B:2790:MET:SD	1:B:2800:PHE:HB2	2.56	0.45
1:B:3080:ARG:CG	1:B:3080:ARG:NH1	2.72	0.45
1:C:747:LEU:HD22	1:C:751:ARG:CZ	2.47	0.45
1:C:763:SER:HB3	1:C:766:ASP:HB2	1.99	0.45
1:C:1684:ASP:HA	1:C:1687:PHE:HD2	1.82	0.45
1:A:195:ARG:NH1	1:A:198:ILE:HD12	2.31	0.45
1:A:544:ILE:C	1:A:546:HIS:H	2.22	0.45
1:B:763:SER:HB3	1:B:766:ASP:HB2	1.99	0.45
1:B:1212:UNK:HG2	1:B:1342:ARG:CZ	2.47	0.45
1:B:2361:VAL:HG21	1:B:2401:ILE:HD11	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2845:PHE:HD2	1:B:2860:ALA:HA	1.81	0.45
1:B:2891:LYS:HZ2	1:B:2903:GLU:HB3	1.82	0.45
1:C:195:ARG:NH1	1:C:198:ILE:HD12	2.31	0.45
1:C:222:LEU:HD13	1:C:248:ILE:HD12	1.99	0.45
1:C:641:ASP:N	1:C:641:ASP:OD1	2.47	0.45
1:C:784:GLU:OE2	1:C:816:LEU:HD21	2.16	0.45
1:C:1996:PRO:O	1:C:2000:LEU:N	2.41	0.45
1:C:2093:UNK:HG1	1:C:2132:UNK:HB1	1.95	0.45
1:C:2114:UNK:HA	1:C:2117:UNK:HG3	1.99	0.45
1:C:2297:ARG:HH22	1:C:2391:LYS:HZ3	1.65	0.45
1:C:2610:ARG:NH1	1:C:2700:LEU:HD21	2.31	0.45
1:C:2769:ASP:OD1	1:C:2770:LEU:N	2.49	0.45
1:C:2770:LEU:HB3	1:C:2815:GLN:HB3	1.97	0.45
1:C:2845:PHE:HD2	1:C:2860:ALA:HA	1.81	0.45
1:A:351:ILE:HB	1:A:375:ILE:HG12	1.99	0.45
1:A:1605:LYS:H	1:A:1658:LYS:HE2	1.82	0.45
1:A:2297:ARG:HH22	1:A:2391:LYS:HZ3	1.65	0.45
1:A:2591:ARG:HH12	1:C:2014:SER:H	1.65	0.45
1:B:167:ALA:HB3	1:B:178:LEU:HD21	1.98	0.45
1:B:222:LEU:HD21	1:B:236:VAL:HA	1.97	0.45
1:B:336:TRP:CH2	1:B:360:LEU:HD21	2.52	0.45
1:B:784:GLU:OE2	1:B:816:LEU:HD21	2.16	0.45
1:B:997:UNK:O	1:B:1009:UNK:HG3	2.17	0.45
1:B:1171:PRO:HA	1:B:1191:ARG:HG2	1.99	0.45
1:B:1284:GLY:HA2	1:B:1343:LEU:HD11	1.99	0.45
1:B:2610:ARG:NH1	1:B:2700:LEU:HD21	2.31	0.45
1:C:544:ILE:O	1:C:546:HIS:N	2.40	0.45
1:C:1072:TRP:HE1	1:C:1077:VAL:HG22	1.80	0.45
1:C:1634:ARG:NH1	1:C:1639:ALA:N	2.65	0.45
1:C:2296:ASN:HB3	1:C:2299:MET:SD	2.57	0.45
1:C:2672:TRP:CD1	1:C:2831:MET:HG2	2.52	0.45
1:C:2845:PHE:CD2	1:C:2860:ALA:HA	2.52	0.45
1:A:746:TYR:HB2	1:A:833:ALA:HB1	1.99	0.45
1:A:799:PHE:CZ	1:A:2433:UNK:CG	2.99	0.45
1:A:997:UNK:O	1:A:1009:UNK:HG3	2.17	0.45
1:A:1488:VAL:HB	1:A:1579:VAL:HG22	1.99	0.45
1:A:2014:SER:H	1:B:2591:ARG:HH12	1.65	0.45
1:A:2946:LEU:HD22	1:A:2994:VAL:HG23	1.98	0.45
1:B:381:ARG:O	1:B:384:GLN:HG2	2.17	0.45
1:B:544:ILE:O	1:B:546:HIS:N	2.41	0.45
1:B:2619:ARG:HH12	1:B:2779:GLY:HA2	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:793:ARG:HH12	1:C:2523:GLU:CD	2.24	0.45
1:C:868:ARG:HD3	1:C:872:ARG:HH12	1.81	0.45
1:C:1001:UNK:HG1	1:C:1018:ARG:HH21	1.80	0.45
1:C:1581:PHE:HB2	1:C:1586:LEU:HD22	1.99	0.45
1:C:2246:ALA:N	1:C:2255:ARG:NH1	2.64	0.45
1:C:2246:ALA:N	1:C:2255:ARG:HH12	2.15	0.45
1:C:2800:PHE:CE1	1:C:2812:LEU:HD22	2.50	0.45
1:C:2978:ARG:NH1	1:C:2979:GLU:OE2	2.49	0.45
1:A:210:VAL:HG22	1:A:287:PHE:HD1	1.83	0.44
1:A:984:UNK:HG1	1:A:987:UNK:CG	2.46	0.44
1:A:999:UNK:C	1:A:1007:UNK:HG3	2.46	0.44
1:A:1212:UNK:HG2	1:A:1342:ARG:CZ	2.47	0.44
1:A:2845:PHE:CD2	1:A:2860:ALA:HA	2.52	0.44
1:B:664:LEU:HB3	1:B:701:ALA:HB1	1.99	0.44
1:B:799:PHE:CZ	1:B:2433:UNK:CG	2.99	0.44
1:B:1285:LYS:HB3	1:B:1286:PRO:HD2	1.99	0.44
1:B:2300:PHE:CZ	1:B:2398:LEU:HB3	2.52	0.44
1:B:2427:UNK:O	1:B:2427:UNK:HG2	2.15	0.44
1:B:2891:LYS:HZ2	1:B:2903:GLU:CB	2.30	0.44
1:C:365:ALA:O	1:C:369:ARG:N	2.42	0.44
1:C:664:LEU:HB3	1:C:701:ALA:HB1	1.99	0.44
1:C:997:UNK:O	1:C:1009:UNK:HG3	2.18	0.44
1:C:1702:GLU:OE1	1:C:1712:ALA:N	2.49	0.44
1:C:2891:LYS:HG3	1:C:2924:ILE:HD13	1.98	0.44
1:A:207:MET:HG3	1:A:292:VAL:HB	1.98	0.44
1:A:1304:LYS:O	1:A:1307:ASP:HB2	2.16	0.44
1:A:1634:ARG:NH1	1:A:1639:ALA:N	2.65	0.44
1:B:210:VAL:HG22	1:B:287:PHE:HD1	1.82	0.44
1:B:277:LEU:HD22	1:B:676:GLY:O	2.16	0.44
1:B:550:LYS:HD3	1:B:577:GLU:OE2	2.17	0.44
1:B:999:UNK:HG2	1:B:1007:UNK:HG1	1.96	0.44
1:B:1381:ASP:OD1	1:B:1391:SER:OG	2.22	0.44
1:B:1612:GLY:N	1:B:1623:PHE:O	2.48	0.44
1:B:2299:MET:H	1:B:2299:MET:HG2	1.68	0.44
1:C:207:MET:HG3	1:C:292:VAL:HB	1.98	0.44
1:C:210:VAL:HG22	1:C:287:PHE:HD1	1.83	0.44
1:C:2300:PHE:CZ	1:C:2398:LEU:HB3	2.52	0.44
1:C:2452:UNK:HA	1:C:3017:ALA:HA	1.98	0.44
1:C:2543:PHE:HA	1:C:2624:GLN:HE22	1.81	0.44
1:C:2619:ARG:HH12	1:C:2779:GLY:HA2	1.81	0.44
1:A:47:ALA:O	1:A:353:ASP:HA	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:511:ARG:CB	1:A:540:ASN:HB2	2.46	0.44
1:A:664:LEU:HB3	1:A:701:ALA:HB1	1.99	0.44
1:A:2120:UNK:O	1:A:2123:UNK:CG	2.66	0.44
1:A:2246:ALA:N	1:A:2255:ARG:HH12	2.15	0.44
1:A:2300:PHE:CZ	1:A:2398:LEU:HB3	2.52	0.44
1:A:2452:UNK:CG	1:A:2453:UNK:N	2.73	0.44
1:A:2555:SER:HA	1:A:2556:PRO:HD2	1.84	0.44
1:A:2847:ASP:CG	1:A:2857:GLY:HA2	2.43	0.44
1:B:684:MET:HG3	1:B:895:THR:HA	1.98	0.44
1:B:747:LEU:HD22	1:B:751:ARG:CZ	2.47	0.44
1:B:1350:TYR:CD1	1:B:1703:ILE:HD11	2.53	0.44
1:B:2080:UNK:HG2	1:B:2083:UNK:CG	2.45	0.44
1:B:2134:UNK:HG1	1:B:2190:ASP:CG	2.43	0.44
1:B:2472:TYR:CZ	1:B:2930:LEU:HD22	2.52	0.44
1:B:2847:ASP:CG	1:B:2857:GLY:HA2	2.43	0.44
1:C:336:TRP:CH2	1:C:360:LEU:HD21	2.52	0.44
1:C:1171:PRO:HA	1:C:1191:ARG:HG2	1.99	0.44
1:C:2209:LEU:O	1:C:2213:VAL:HG23	2.18	0.44
1:A:583:GLY:HA2	1:A:892:ILE:HD13	2.00	0.44
1:A:1519:VAL:HG13	1:A:1530:LEU:HD23	1.99	0.44
1:B:44:TYR:O	1:B:153:VAL:N	2.44	0.44
1:B:222:LEU:HD13	1:B:248:ILE:HD12	1.99	0.44
1:B:999:UNK:C	1:B:1007:UNK:HG3	2.47	0.44
1:B:1553:ALA:O	1:B:1557:GLU:HG2	2.17	0.44
1:B:2083:UNK:HA	1:B:2086:UNK:HG3	2.00	0.44
1:C:583:GLY:HA2	1:C:892:ILE:HD13	2.00	0.44
1:C:1605:LYS:H	1:C:1658:LYS:HE2	1.82	0.44
1:C:2080:UNK:HG2	1:C:2083:UNK:CG	2.45	0.44
1:C:2889:ILE:HD11	1:C:2922:LEU:HD22	1.98	0.44
1:A:475:LEU:HD23	1:A:475:LEU:HA	1.79	0.44
1:A:1284:GLY:HA2	1:A:1343:LEU:HD11	1.99	0.44
1:A:1350:TYR:CD1	1:A:1703:ILE:HD11	2.53	0.44
1:A:2014:SER:N	1:B:2591:ARG:NH1	2.66	0.44
1:A:2452:UNK:HA	1:A:3017:ALA:HA	1.98	0.44
1:A:2472:TYR:CZ	1:A:2930:LEU:HD22	2.52	0.44
1:A:2591:ARG:NH1	1:C:2014:SER:N	2.66	0.44
1:A:2619:ARG:HH12	1:A:2779:GLY:HA2	1.81	0.44
1:B:515:ALA:HA	1:B:516:PRO:HD3	1.84	0.44
1:B:1503:ILE:HB	1:B:1542:TYR:HB2	2.00	0.44
1:B:2296:ASN:HB3	1:B:2299:MET:SD	2.57	0.44
1:B:2334:HIS:CD2	1:B:2391:LYS:HG3	2.50	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:970:ILE:HG23	1:C:992:UNK:HG1	2.00	0.44
1:C:1093:PRO:HB3	1:C:1277:HIS:CE1	2.52	0.44
1:A:374:GLY:C	1:A:375:ILE:HG13	2.41	0.44
1:A:2234:PRO:HB2	1:A:2287:LEU:HD13	1.98	0.44
1:A:2769:ASP:OD1	1:A:2770:LEU:N	2.49	0.44
1:B:1634:ARG:NH1	1:B:1639:ALA:N	2.65	0.44
1:B:1650:ASP:C	1:B:1652:TRP:H	2.26	0.44
1:B:1684:ASP:HA	1:B:1687:PHE:HD2	1.82	0.44
1:B:1723:GLU:O	1:B:1725:SER:N	2.51	0.44
1:B:2114:UNK:HA	1:B:2117:UNK:HG3	1.99	0.44
1:B:2246:ALA:N	1:B:2255:ARG:HH12	2.15	0.44
1:C:793:ARG:HA	1:C:2435:UNK:HG1	1.97	0.44
1:C:1350:TYR:CD1	1:C:1703:ILE:HD11	2.53	0.44
1:C:1723:GLU:O	1:C:1725:SER:N	2.51	0.44
1:C:2119:UNK:HG2	1:C:2120:UNK:N	2.33	0.44
1:C:2471:PRO:HA	1:C:2625:ILE:HA	2.00	0.44
1:C:2580:PHE:HE1	1:C:2603:ARG:HH21	1.66	0.44
1:A:88:SER:HB3	1:A:314:THR:OG1	2.18	0.44
1:A:412:ASP:H	1:A:1025:VAL:CG2	2.31	0.44
1:A:550:LYS:HD3	1:A:577:GLU:OE2	2.17	0.44
1:A:585:HIS:CB	1:A:694:ASP:HB2	2.47	0.44
1:A:657:THR:HB	1:A:662:LYS:HE3	2.00	0.44
1:A:1705:VAL:O	1:A:1735:GLU:HB2	2.18	0.44
1:A:2296:ASN:HB3	1:A:2299:MET:SD	2.57	0.44
1:B:782:ARG:NH1	1:B:857:VAL:HG22	2.33	0.44
1:B:944:UNK:O	1:B:944:UNK:CG	2.59	0.44
1:B:1537:LEU:HD13	1:B:1541:GLN:HB2	2.00	0.44
1:B:2014:SER:H	1:C:2591:ARG:HH12	1.65	0.44
1:B:2209:LEU:O	1:B:2213:VAL:HG23	2.18	0.44
1:B:2297:ARG:HH22	1:B:2391:LYS:HZ3	1.65	0.44
1:C:745:THR:OG1	1:C:834:GLU:O	2.19	0.44
1:C:782:ARG:NH1	1:C:857:VAL:HG22	2.33	0.44
1:C:1284:GLY:HA2	1:C:1343:LEU:HD11	1.99	0.44
1:C:1537:LEU:HD13	1:C:1541:GLN:HB2	2.00	0.44
1:C:1582:HIS:HA	1:C:1674:ALA:O	2.18	0.44
1:A:163:LEU:HD13	1:A:181:LEU:HD23	2.00	0.44
1:A:763:SER:HB3	1:A:766:ASP:HB2	1.99	0.44
1:A:1171:PRO:HA	1:A:1191:ARG:HG2	1.99	0.44
1:A:1581:PHE:HB2	1:A:1586:LEU:HD22	1.99	0.44
1:A:2013:LEU:HD23	1:A:2013:LEU:HA	1.87	0.44
1:A:2252:VAL:HG22	1:A:2255:ARG:HH21	1.82	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2891:LYS:HZ2	1:A:2903:GLU:HG2	1.82	0.44
1:B:408:VAL:CG1	1:B:943:UNK:HG1	2.46	0.44
1:B:2845:PHE:CD2	1:B:2860:ALA:HA	2.52	0.44
1:C:393:VAL:HG12	1:C:394:PRO:N	2.32	0.44
1:C:2122:UNK:O	1:C:2125:UNK:CG	2.63	0.44
1:C:2334:HIS:CD2	1:C:2391:LYS:HG3	2.50	0.44
1:C:2958:ASN:HD22	1:C:2976:TRP:HE1	1.65	0.44
1:A:1553:ALA:O	1:A:1557:GLU:HG2	2.17	0.44
1:A:1684:ASP:HA	1:A:1687:PHE:HD2	1.82	0.44
1:A:2094:UNK:HG1	1:A:2096:UNK:HG3	1.90	0.44
1:A:2134:UNK:HG1	1:A:2190:ASP:CG	2.43	0.44
1:B:647:THR:OG1	2:B:4000:FMN:O3P	2.27	0.44
1:B:995:UNK:HB1	1:B:1011:UNK:HG2	1.99	0.44
1:B:1483:LYS:O	1:B:1487:ILE:HG23	2.17	0.44
1:B:2119:UNK:HG2	1:B:2120:UNK:N	2.33	0.44
1:B:2462:VAL:HG13	1:B:2835:VAL:HG13	2.00	0.44
1:B:2753:LYS:HA	1:B:2753:LYS:HD3	1.83	0.44
1:B:2958:ASN:HD22	1:B:2976:TRP:HE1	1.65	0.44
1:C:550:LYS:HD3	1:C:577:GLU:OE2	2.17	0.44
1:C:857:VAL:HG13	1:C:859:PHE:H	1.83	0.44
1:C:1285:LYS:HB3	1:C:1286:PRO:HD2	1.99	0.44
1:C:1733:ASN:H	1:C:1737:ASP:HB2	1.83	0.44
1:A:782:ARG:NH1	1:A:857:VAL:HG22	2.33	0.43
1:A:981:UNK:CG	1:A:987:UNK:C	2.96	0.43
1:A:1093:PRO:HB3	1:A:1277:HIS:CE1	2.52	0.43
1:A:1133:VAL:N	1:A:1193:ALA:O	2.48	0.43
1:A:1268:GLY:HA2	1:A:1271:LEU:HD12	1.99	0.43
1:A:1285:LYS:HB3	1:A:1286:PRO:HD2	1.99	0.43
1:A:1733:ASN:H	1:A:1737:ASP:HB2	1.83	0.43
1:A:2083:UNK:HA	1:A:2086:UNK:HG3	2.00	0.43
1:A:2989:LEU:HD12	1:A:2989:LEU:HA	1.77	0.43
1:B:344:HIS:CD2	1:B:373:ILE:HG13	2.53	0.43
1:B:583:GLY:HA2	1:B:892:ILE:HD13	2.00	0.43
1:B:602:ARG:NH2	1:B:641:ASP:OD1	2.27	0.43
1:B:657:THR:HB	1:B:662:LYS:HE3	2.00	0.43
1:B:1093:PRO:HB3	1:B:1277:HIS:CE1	2.52	0.43
1:B:2903:GLU:OE2	1:B:2995:THR:OG1	2.36	0.43
1:C:931:UNK:HG3	1:C:934:UNK:HG3	2.00	0.43
1:C:2120:UNK:O	1:C:2123:UNK:CG	2.65	0.43
1:C:2686:MET:HE3	1:C:2686:MET:HB2	1.94	0.43
1:C:2710:LEU:O	1:C:2713:VAL:HG22	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:336:TRP:CH2	1:A:360:LEU:HD21	2.52	0.43
1:A:602:ARG:NH2	1:A:641:ASP:OD1	2.27	0.43
1:A:695:ILE:HG22	1:A:697:GLU:HG3	2.01	0.43
1:A:982:UNK:CG	1:A:983:UNK:N	2.76	0.43
1:A:999:UNK:HG2	1:A:1007:UNK:HG1	1.96	0.43
1:A:3044:ALA:HB1	1:A:3050:PRO:HB3	2.00	0.43
1:B:340:ILE:HD11	1:B:351:ILE:HD13	2.01	0.43
1:B:2070:LEU:O	1:B:2074:GLU:HG3	2.16	0.43
1:B:2120:UNK:O	1:B:2123:UNK:CG	2.66	0.43
1:C:34:LEU:O	1:C:38:LEU:HG	2.18	0.43
1:C:874:ASP:OD2	1:C:877:TRP:CD1	2.72	0.43
1:C:1133:VAL:O	1:C:1193:ALA:N	2.42	0.43
1:C:1163:ASP:HA	1:C:1168:ARG:HA	2.01	0.43
1:A:393:VAL:HG12	1:A:394:PRO:N	2.32	0.43
1:A:641:ASP:OD1	1:A:641:ASP:N	2.48	0.43
1:A:2114:UNK:HA	1:A:2117:UNK:HG3	1.99	0.43
1:B:970:ILE:HG23	1:B:992:UNK:HG1	2.00	0.43
1:B:1705:VAL:O	1:B:1735:GLU:HB2	2.18	0.43
1:C:981:UNK:HG2	1:C:988:UNK:HA	2.01	0.43
1:C:1268:GLY:HA2	1:C:1271:LEU:HD12	2.00	0.43
1:C:1612:GLY:N	1:C:1623:PHE:O	2.48	0.43
1:C:2134:UNK:HG1	1:C:2190:ASP:CG	2.43	0.43
1:C:2180:LYS:HZ1	1:C:2962:ASP:HB3	1.82	0.43
1:C:2462:VAL:HG13	1:C:2835:VAL:HG13	2.00	0.43
1:C:3019:ASP:CG	1:C:3020:PRO:HD2	2.43	0.43
1:A:341:THR:HG23	1:A:344:HIS:ND1	2.34	0.43
1:A:580:ARG:HD3	1:A:896:ALA:HB3	2.01	0.43
1:A:1582:HIS:HA	1:A:1674:ALA:O	2.18	0.43
1:A:2541:ARG:O	1:A:2621:VAL:HG13	2.18	0.43
1:B:393:VAL:HG12	1:B:394:PRO:N	2.32	0.43
1:B:857:VAL:HG13	1:B:859:PHE:H	1.83	0.43
1:B:981:UNK:CG	1:B:987:UNK:C	2.96	0.43
1:B:2541:ARG:O	1:B:2621:VAL:HG13	2.18	0.43
1:B:2580:PHE:HE1	1:B:2603:ARG:HH21	1.66	0.43
1:B:2710:LEU:O	1:B:2713:VAL:HG22	2.18	0.43
1:C:657:THR:HB	1:C:662:LYS:HE3	2.00	0.43
1:C:2115:UNK:HA	1:C:2118:UNK:CG	2.49	0.43
1:A:344:HIS:CD2	1:A:373:ILE:HG13	2.53	0.43
1:A:1163:ASP:HA	1:A:1168:ARG:HA	2.01	0.43
1:A:1723:GLU:O	1:A:1725:SER:N	2.51	0.43
1:A:2209:LEU:O	1:A:2213:VAL:HG23	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:516:PRO:HA	1:B:962:MET:SD	2.58	0.43
1:B:1268:GLY:HA2	1:B:1271:LEU:HD12	1.99	0.43
1:B:2092:UNK:O	1:B:2092:UNK:CG	2.64	0.43
1:B:2471:PRO:HA	1:B:2625:ILE:HA	2.00	0.43
1:B:2512:TRP:O	1:B:2520:LEU:HD12	2.19	0.43
1:C:276:LYS:HB3	1:C:587:TRP:CH2	2.53	0.43
1:C:647:THR:N	2:C:4000:FMN:O3P	2.51	0.43
1:C:1519:VAL:HG13	1:C:1530:LEU:HD23	1.99	0.43
1:C:2095:UNK:C	1:C:2098:UNK:HG3	2.49	0.43
1:C:2706:PRO:O	1:C:2709:ILE:HG12	2.19	0.43
1:C:3044:ALA:HB1	1:C:3050:PRO:HB3	2.00	0.43
1:A:874:ASP:OD2	1:A:877:TRP:CD1	2.71	0.43
1:A:2297:ARG:HH12	1:A:2391:LYS:NZ	2.17	0.43
1:A:2462:VAL:HG13	1:A:2835:VAL:HG13	2.00	0.43
1:A:2591:ARG:HH12	1:C:2014:SER:N	2.16	0.43
1:B:276:LYS:HB3	1:B:587:TRP:CH2	2.53	0.43
1:B:412:ASP:H	1:B:1025:VAL:CG2	2.31	0.43
1:B:1581:PHE:HB2	1:B:1586:LEU:HD22	1.99	0.43
1:B:2426:UNK:O	1:B:2426:UNK:HG2	2.18	0.43
1:B:2610:ARG:NH1	1:B:2700:LEU:HD11	2.25	0.43
1:C:163:LEU:HD13	1:C:181:LEU:HD23	2.00	0.43
1:C:212:ASN:C	1:C:244:ARG:HB3	2.44	0.43
1:C:340:ILE:HD11	1:C:351:ILE:HD13	2.01	0.43
1:C:344:HIS:CD2	1:C:373:ILE:HG13	2.53	0.43
1:C:580:ARG:HD3	1:C:896:ALA:HB3	2.01	0.43
1:C:695:ILE:HG22	1:C:697:GLU:HG3	2.00	0.43
1:C:782:ARG:HH11	1:C:857:VAL:HG22	1.83	0.43
1:C:999:UNK:C	1:C:1007:UNK:HG3	2.47	0.43
1:C:1650:ASP:C	1:C:1652:TRP:H	2.26	0.43
1:C:2083:UNK:HA	1:C:2086:UNK:HG3	2.00	0.43
1:C:2847:ASP:CG	1:C:2857:GLY:HA2	2.43	0.43
1:A:857:VAL:HG13	1:A:859:PHE:H	1.83	0.43
1:A:931:UNK:HG3	1:A:934:UNK:HG3	2.01	0.43
1:A:2471:PRO:HA	1:A:2625:ILE:HA	2.00	0.43
1:B:658:SER:HB2	1:B:661:VAL:HG23	2.01	0.43
1:B:784:GLU:CD	1:B:816:LEU:HD21	2.44	0.43
1:B:940:UNK:O	1:B:940:UNK:CG	2.60	0.43
1:B:1582:HIS:HA	1:B:1674:ALA:O	2.18	0.43
1:B:2786:ASP:OD2	1:B:2789:MET:HG2	2.19	0.43
1:B:3019:ASP:CG	1:B:3020:PRO:HD2	2.43	0.43
1:C:88:SER:HB3	1:C:314:THR:OG1	2.18	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1705:VAL:O	1:C:1735:GLU:HB2	2.18	0.43
1:C:2903:GLU:OE2	1:C:2995:THR:OG1	2.36	0.43
1:A:276:LYS:HB3	1:A:587:TRP:CH2	2.53	0.43
1:A:408:VAL:HG13	1:A:943:UNK:CG	2.48	0.43
1:A:1070:VAL:N	1:A:1152:PHE:O	2.52	0.43
1:A:2669:LEU:HD23	1:A:2831:MET:HE1	2.01	0.43
1:A:2710:LEU:O	1:A:2713:VAL:HG22	2.18	0.43
1:A:2903:GLU:OE2	1:A:2995:THR:OG1	2.36	0.43
1:A:2958:ASN:HD22	1:A:2976:TRP:HE1	1.65	0.43
1:B:34:LEU:O	1:B:38:LEU:HG	2.18	0.43
1:B:88:SER:HB3	1:B:314:THR:OG1	2.18	0.43
1:B:488:ASN:OD1	1:B:523:SER:OG	2.34	0.43
1:B:647:THR:N	2:B:4000:FMN:O3P	2.51	0.43
1:B:856:PRO:HG2	1:B:874:ASP:HB2	2.00	0.43
1:B:931:UNK:HG3	1:B:934:UNK:HG3	2.01	0.43
1:B:981:UNK:HG2	1:B:988:UNK:HA	2.00	0.43
1:B:1021:LEU:HB3	1:B:1034:GLU:HG2	2.01	0.43
1:B:1619:VAL:HA	1:B:1620:PRO:HD2	1.80	0.43
1:B:2014:SER:N	1:C:2591:ARG:NH1	2.66	0.43
1:C:613:GLY:HA2	2:C:4000:FMN:O5'	2.19	0.43
1:C:2064:ARG:HG2	1:C:2100:UNK:HG1	2.01	0.43
1:C:2810:GLY:HA2	1:C:2896:THR:HG22	2.01	0.43
1:A:34:LEU:O	1:A:38:LEU:HG	2.19	0.43
1:A:340:ILE:HD11	1:A:351:ILE:HD13	2.01	0.43
1:A:709:LEU:HD21	1:A:872:ARG:NE	2.34	0.43
1:A:981:UNK:HG2	1:A:988:UNK:HA	2.01	0.43
1:A:1352:PHE:HA	1:A:1353:PRO:HD3	1.72	0.43
1:A:1503:ILE:HB	1:A:1542:TYR:HB2	2.00	0.43
1:A:2119:UNK:HG2	1:A:2120:UNK:N	2.34	0.43
1:A:2122:UNK:O	1:A:2125:UNK:CG	2.63	0.43
1:A:2299:MET:H	1:A:2299:MET:HG2	1.68	0.43
1:A:2530:TYR:O	1:A:2533:ALA:N	2.52	0.43
1:A:2652:ILE:HG22	1:A:3051:MET:HE1	2.01	0.43
1:A:2706:PRO:O	1:A:2709:ILE:HG12	2.19	0.43
1:A:2786:ASP:OD2	1:A:2789:MET:HG2	2.19	0.43
1:B:163:LEU:HD13	1:B:181:LEU:HD23	2.00	0.43
1:B:307:ILE:HG22	1:B:311:TRP:CE2	2.54	0.43
1:B:511:ARG:CB	1:B:540:ASN:HB2	2.46	0.43
1:B:780:ARG:NH1	1:B:817:GLU:OE2	2.52	0.43
1:B:782:ARG:HH11	1:B:857:VAL:HG22	1.83	0.43
1:B:1133:VAL:N	1:B:1193:ALA:O	2.48	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1317:GLY:O	1:B:1324:VAL:HG12	2.19	0.43
1:B:2665:THR:HA	1:B:2666:PRO:HD3	1.86	0.43
1:B:3044:ALA:HB1	1:B:3050:PRO:HB3	2.00	0.43
1:C:475:LEU:HD23	1:C:475:LEU:HA	1.79	0.43
1:C:856:PRO:HG2	1:C:874:ASP:HB2	2.00	0.43
1:C:2530:TYR:O	1:C:2533:ALA:N	2.52	0.43
1:C:2891:LYS:HZ2	1:C:2903:GLU:CB	2.32	0.43
1:A:780:ARG:NH1	1:A:817:GLU:OE2	2.52	0.43
1:A:885:GLU:HG2	1:A:887:ASP:H	1.84	0.43
1:A:999:UNK:HG2	1:A:1007:UNK:HG3	1.96	0.43
1:A:1084:THR:CG2	1:A:1274:ALA:HA	2.48	0.43
1:A:2092:UNK:O	1:A:2092:UNK:CG	2.64	0.43
1:A:2244:ARG:HG2	1:A:2245:VAL:N	2.34	0.43
1:A:2580:PHE:HE1	1:A:2603:ARG:HH21	1.66	0.43
1:A:2695:MET:HG3	1:A:2696:TYR:N	2.34	0.43
1:B:50:GLY:O	1:B:53:SER:OG	2.36	0.43
1:B:393:VAL:O	1:B:395:GLU:N	2.52	0.43
1:B:695:ILE:HG22	1:B:697:GLU:HG3	2.00	0.43
1:B:2669:LEU:HD23	1:B:2831:MET:HE1	2.01	0.43
1:B:2810:GLY:HA2	1:B:2896:THR:HG22	2.01	0.43
1:C:1117:ALA:HA	1:C:1120:GLU:HB2	2.01	0.43
1:C:2058:ASP:OD1	1:C:2058:ASP:N	2.46	0.43
1:C:2096:UNK:CG	1:C:2097:UNK:N	2.82	0.43
1:C:2137:GLU:O	1:C:2163:THR:N	2.30	0.43
1:C:2557:LEU:HB3	1:C:2613:ARG:HB2	2.01	0.43
1:A:212:ASN:C	1:A:244:ARG:HB3	2.44	0.42
1:A:782:ARG:HH11	1:A:857:VAL:HG22	1.83	0.42
1:A:2426:UNK:O	1:A:2426:UNK:HG2	2.18	0.42
1:B:874:ASP:OD2	1:B:877:TRP:CD1	2.72	0.42
1:B:1087:PHE:CZ	1:C:203:ASP:OD2	2.72	0.42
1:B:1733:ASN:H	1:B:1737:ASP:HB2	1.83	0.42
1:B:2014:SER:N	1:C:2591:ARG:HH12	2.16	0.42
1:B:2244:ARG:HG2	1:B:2245:VAL:N	2.34	0.42
1:B:2957:PRO:HB3	1:B:2980:PRO:N	2.34	0.42
1:C:78:GLU:HB2	1:C:176:VAL:HG21	2.01	0.42
1:C:1084:THR:CG2	1:C:1274:ALA:HA	2.49	0.42
1:C:1317:GLY:O	1:C:1324:VAL:HG12	2.19	0.42
1:C:1660:LEU:HD23	1:C:1660:LEU:HA	1.86	0.42
1:C:2426:UNK:O	1:C:2426:UNK:HG2	2.18	0.42
1:C:2541:ARG:O	1:C:2621:VAL:HG13	2.18	0.42
1:C:2889:ILE:HB	1:C:2924:ILE:HG12	2.01	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1662:ARG:HG3	1:A:1663:LYS:N	2.34	0.42
1:A:2810:GLY:HA2	1:A:2896:THR:HG22	2.01	0.42
1:A:2891:LYS:HZ1	1:A:2904:THR:N	2.17	0.42
1:A:3019:ASP:CG	1:A:3020:PRO:HD2	2.43	0.42
1:B:355:GLY:HA2	1:B:356:PRO:HD3	1.86	0.42
1:B:1117:ALA:HA	1:B:1120:GLU:HB2	2.01	0.42
1:B:1551:LEU:HD13	1:B:1551:LEU:HA	1.80	0.42
1:B:2115:UNK:HA	1:B:2118:UNK:CG	2.48	0.42
1:B:2296:ASN:ND2	1:B:2395:THR:HG21	2.34	0.42
1:B:2405:MET:HE2	1:B:2409:ALA:HB2	2.01	0.42
1:B:2706:PRO:O	1:B:2709:ILE:HG12	2.19	0.42
1:B:2800:PHE:CE1	1:B:2812:LEU:HD22	2.50	0.42
1:C:341:THR:HG23	1:C:344:HIS:ND1	2.34	0.42
1:C:516:PRO:HA	1:C:962:MET:SD	2.58	0.42
1:C:709:LEU:HD21	1:C:872:ARG:NE	2.34	0.42
1:C:1533:VAL:N	1:C:1543:ALA:O	2.52	0.42
1:C:1662:ARG:HG3	1:C:1663:LYS:N	2.34	0.42
1:C:2077:UNK:CG	1:C:2079:UNK:HG3	2.41	0.42
1:C:2141:VAL:HG22	1:C:2238:PHE:HD2	1.85	0.42
1:A:211:THR:HB	1:A:286:VAL:HB	2.02	0.42
1:A:613:GLY:HA2	2:A:4000:FMN:O5'	2.19	0.42
1:A:1504:ARG:HA	1:A:1540:SER:O	2.19	0.42
1:A:2095:UNK:C	1:A:2098:UNK:HG3	2.49	0.42
1:A:2141:VAL:HG22	1:A:2238:PHE:HD2	1.85	0.42
1:A:2405:MET:HE2	1:A:2409:ALA:HB2	2.01	0.42
1:A:2808:ARG:HH21	1:A:2901:PRO:HD3	1.85	0.42
1:A:2957:PRO:HB3	1:A:2980:PRO:N	2.34	0.42
1:B:45:ALA:O	1:B:351:ILE:HA	2.20	0.42
1:B:1702:GLU:CD	1:B:1711:VAL:HG22	2.45	0.42
1:B:2122:UNK:O	1:B:2125:UNK:CG	2.63	0.42
1:B:2252:VAL:HG22	1:B:2255:ARG:HH21	1.82	0.42
1:B:2652:ILE:HG22	1:B:3051:MET:HE1	2.01	0.42
1:B:2911:ALA:O	1:B:2916:ARG:HB2	2.19	0.42
1:C:307:ILE:HG22	1:C:311:TRP:CE2	2.54	0.42
1:C:438:THR:HA	1:C:880:HIS:CE1	2.51	0.42
1:C:999:UNK:HG2	1:C:1007:UNK:HG1	1.96	0.42
1:C:1275:ALA:HB2	1:C:1311:PHE:CE2	2.55	0.42
1:A:516:PRO:HA	1:A:962:MET:SD	2.58	0.42
1:A:970:ILE:HG23	1:A:992:UNK:HG1	2.00	0.42
1:A:1106:CYS:SG	1:A:1174:VAL:HG11	2.60	0.42
1:A:1317:GLY:O	1:A:1324:VAL:HG12	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2105:UNK:C	1:A:2108:UNK:HG3	2.34	0.42
1:A:2145:SER:O	1:A:2148:SER:OG	2.34	0.42
1:B:53:SER:HA	1:B:359:ILE:HG13	2.01	0.42
1:B:212:ASN:C	1:B:244:ARG:HB3	2.44	0.42
1:B:1163:ASP:HA	1:B:1168:ARG:HA	2.01	0.42
1:B:2095:UNK:C	1:B:2098:UNK:HG3	2.49	0.42
1:C:2252:VAL:HG22	1:C:2255:ARG:HH21	1.82	0.42
1:C:2584:ASP:O	1:C:2586:GLU:N	2.53	0.42
1:A:107:LEU:HD13	1:A:113:VAL:HB	2.02	0.42
1:A:784:GLU:CD	1:A:816:LEU:HD21	2.44	0.42
1:A:1021:LEU:HB3	1:A:1034:GLU:HG2	2.01	0.42
1:A:1087:PHE:CZ	1:B:203:ASP:OD2	2.72	0.42
1:A:1280:THR:O	1:A:1288:PRO:HB3	2.20	0.42
1:A:1399:ASN:HA	1:A:1400:PRO:HD3	1.86	0.42
1:A:1537:LEU:HD13	1:A:1541:GLN:HB2	2.00	0.42
1:A:2512:TRP:O	1:A:2520:LEU:HD12	2.19	0.42
1:B:211:THR:HB	1:B:286:VAL:HB	2.01	0.42
1:B:1280:THR:O	1:B:1288:PRO:HB3	2.20	0.42
1:B:1660:LEU:HD23	1:B:1660:LEU:HA	1.85	0.42
1:B:2444:UNK:HB2	1:B:2988:PRO:HB3	2.01	0.42
1:B:2836:LEU:HD23	1:B:2836:LEU:HA	1.87	0.42
1:C:981:UNK:CG	1:C:987:UNK:C	2.96	0.42
1:C:999:UNK:HG2	1:C:1007:UNK:HG3	1.96	0.42
1:C:1106:CYS:SG	1:C:1174:VAL:HG11	2.60	0.42
1:C:2244:ARG:HG2	1:C:2245:VAL:N	2.34	0.42
1:C:2444:UNK:HB2	1:C:2988:PRO:HB3	2.01	0.42
1:C:2512:TRP:O	1:C:2520:LEU:HD12	2.19	0.42
1:C:2620:THR:OG1	1:C:2791:ARG:NH2	2.53	0.42
1:C:2911:ALA:O	1:C:2916:ARG:HB2	2.19	0.42
1:C:2961:LEU:HD22	1:C:2976:TRP:HD1	1.85	0.42
1:A:1650:ASP:C	1:A:1652:TRP:H	2.26	0.42
1:A:2610:ARG:NH1	1:A:2700:LEU:HD11	2.25	0.42
1:A:2805:ASP:OD2	1:A:2807:ARG:HB2	2.20	0.42
1:B:42:GLU:HA	1:B:43:PRO:HD3	1.91	0.42
1:B:107:LEU:HD13	1:B:113:VAL:HB	2.01	0.42
1:B:613:GLY:HA2	2:B:4000:FMN:O5'	2.19	0.42
1:B:2294:SER:HB3	1:B:2310:LYS:HB2	2.02	0.42
1:B:2297:ARG:HH12	1:B:2391:LYS:NZ	2.17	0.42
1:B:2695:MET:HG3	1:B:2696:TYR:N	2.34	0.42
1:B:2889:ILE:HB	1:B:2924:ILE:HG12	2.01	0.42
1:C:45:ALA:O	1:C:351:ILE:HA	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:970:ILE:O	1:C:974:UNK:HG3	2.20	0.42
1:C:1504:ARG:HA	1:C:1540:SER:O	2.19	0.42
1:C:1637:VAL:HA	1:C:1638:PRO:HD2	1.91	0.42
1:C:2297:ARG:HH12	1:C:2391:LYS:NZ	2.17	0.42
1:C:2846:ALA:O	1:C:2859:GLY:HA3	2.19	0.42
1:C:3065:PRO:O	1:C:3069:GLN:N	2.42	0.42
1:A:307:ILE:HG22	1:A:311:TRP:CE2	2.54	0.42
1:A:647:THR:N	2:A:4000:FMN:O3P	2.51	0.42
1:A:856:PRO:HG2	1:A:874:ASP:HB2	2.00	0.42
1:A:1275:ALA:O	1:A:1279:VAL:HG23	2.20	0.42
1:A:2115:UNK:HA	1:A:2118:UNK:CG	2.49	0.42
1:A:2889:ILE:HG13	1:A:2922:LEU:HD13	2.02	0.42
1:A:2911:ALA:O	1:A:2916:ARG:HB2	2.19	0.42
1:B:479:LEU:HD21	1:B:485:ILE:HD11	2.02	0.42
1:B:668:THR:HG23	1:B:683:GLY:HA3	2.02	0.42
1:B:885:GLU:HG2	1:B:887:ASP:H	1.84	0.42
1:B:1275:ALA:HB2	1:B:1311:PHE:CE2	2.55	0.42
1:B:1504:ARG:HA	1:B:1540:SER:O	2.19	0.42
1:B:1656:LYS:N	1:B:1657:PRO:HD2	2.35	0.42
1:B:1703:ILE:HG22	1:B:1704:GLY:H	1.85	0.42
1:B:2958:ASN:HD22	1:B:2976:TRP:NE1	2.18	0.42
1:C:50:GLY:O	1:C:53:SER:OG	2.36	0.42
1:C:658:SER:HB2	1:C:661:VAL:HG23	2.01	0.42
1:C:780:ARG:NH1	1:C:817:GLU:OE2	2.52	0.42
1:C:795:HIS:NE2	1:C:797:GLN:HB2	2.35	0.42
1:C:1120:GLU:HA	1:C:1125:VAL:CG2	2.50	0.42
1:C:2120:UNK:C	1:C:2123:UNK:HG3	2.50	0.42
1:C:2125:UNK:CA	1:C:2128:UNK:HG3	2.49	0.42
1:C:2891:LYS:HZ2	1:C:2903:GLU:HB3	1.85	0.42
1:C:2891:LYS:NZ	1:C:2903:GLU:HB3	2.35	0.42
1:A:336:TRP:HE3	1:A:339:GLU:OE2	2.03	0.42
1:A:488:ASN:OD1	1:A:523:SER:OG	2.34	0.42
1:A:1687:PHE:CE1	1:A:1723:GLU:HG2	2.55	0.42
1:A:2296:ASN:ND2	1:A:2395:THR:HG21	2.34	0.42
1:B:436:THR:OG1	1:B:437:PRO:HD3	2.19	0.42
1:B:999:UNK:O	1:B:1007:UNK:CG	2.61	0.42
1:B:1705:VAL:C	1:B:1735:GLU:HB2	2.45	0.42
1:B:2300:PHE:HZ	1:B:2398:LEU:HB3	1.85	0.42
1:B:2620:THR:OG1	1:B:2791:ARG:NH2	2.53	0.42
1:B:2846:ALA:O	1:B:2859:GLY:HA3	2.19	0.42
1:B:2961:LEU:HD22	1:B:2976:TRP:HD1	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:336:TRP:HE3	1:C:339:GLU:OE2	2.03	0.42
1:C:412:ASP:H	1:C:1025:VAL:CG2	2.31	0.42
1:C:479:LEU:HD21	1:C:485:ILE:HD11	2.02	0.42
1:C:784:GLU:CD	1:C:816:LEU:HD21	2.44	0.42
1:C:957:LEU:O	1:C:1034:GLU:HB2	2.20	0.42
1:C:1021:LEU:HB3	1:C:1034:GLU:HG2	2.01	0.42
1:C:1503:ILE:HB	1:C:1542:TYR:HB2	2.00	0.42
1:C:1656:LYS:N	1:C:1657:PRO:HD2	2.35	0.42
1:C:2113:UNK:HG2	1:C:2114:UNK:N	2.35	0.42
1:A:78:GLU:HB2	1:A:176:VAL:HG21	2.01	0.42
1:A:658:SER:HB2	1:A:661:VAL:HG23	2.01	0.42
1:A:1228:VAL:HB	1:A:1311:PHE:HB2	2.02	0.42
1:A:1380:ALA:HB1	1:A:1474:LEU:CD1	2.50	0.42
1:A:2055:VAL:HG22	1:A:2194:TRP:CD1	2.55	0.42
1:A:2064:ARG:HG2	1:A:2100:UNK:HG1	2.01	0.42
1:A:2584:ASP:O	1:A:2586:GLU:N	2.53	0.42
1:A:2620:THR:OG1	1:A:2791:ARG:NH2	2.53	0.42
1:A:2753:LYS:HD3	1:A:2753:LYS:HA	1.83	0.42
1:A:2846:ALA:O	1:A:2859:GLY:HA3	2.20	0.42
1:B:408:VAL:HG13	1:B:943:UNK:CG	2.48	0.42
1:B:2530:TYR:O	1:B:2533:ALA:N	2.52	0.42
1:B:2557:LEU:HB3	1:B:2613:ARG:HB2	2.01	0.42
1:B:2800:PHE:CZ	1:B:2812:LEU:HD13	2.55	0.42
1:C:53:SER:HA	1:C:359:ILE:HG13	2.01	0.42
1:C:436:THR:OG1	1:C:437:PRO:HD3	2.19	0.42
1:C:1275:ALA:O	1:C:1279:VAL:HG23	2.20	0.42
1:C:1280:THR:O	1:C:1288:PRO:HB3	2.20	0.42
1:C:1702:GLU:CD	1:C:1711:VAL:HG22	2.45	0.42
1:C:2294:SER:HB3	1:C:2310:LYS:HB2	2.02	0.42
1:C:2405:MET:HE2	1:C:2409:ALA:HB2	2.01	0.42
1:C:2652:ILE:HG22	1:C:3051:MET:HE1	2.01	0.42
1:A:436:THR:OG1	1:A:437:PRO:HD3	2.19	0.42
1:A:668:THR:HG23	1:A:683:GLY:HA3	2.02	0.42
1:A:1008:UNK:O	1:A:1008:UNK:CG	2.67	0.42
1:A:1275:ALA:HB2	1:A:1311:PHE:CE2	2.55	0.42
1:A:1460:ALA:O	1:A:1464:VAL:HG22	2.20	0.42
1:A:2123:UNK:CA	1:A:2126:UNK:HG3	2.50	0.42
1:A:2125:UNK:CA	1:A:2128:UNK:HG3	2.49	0.42
1:A:2800:PHE:CZ	1:A:2812:LEU:HD13	2.55	0.42
1:B:970:ILE:O	1:B:974:UNK:HG3	2.20	0.42
1:B:2055:VAL:HG22	1:B:2194:TRP:CD1	2.55	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2584:ASP:O	1:B:2586:GLU:N	2.53	0.42
1:B:2892:HIS:HA	1:B:2942:GLN:HE22	1.85	0.42
1:C:668:THR:HG23	1:C:683:GLY:HA3	2.02	0.42
1:C:1228:VAL:HB	1:C:1311:PHE:HB2	2.02	0.42
1:C:2354:SER:O	1:C:2358:GLU:HG3	2.20	0.42
1:C:2957:PRO:HB3	1:C:2980:PRO:N	2.34	0.42
1:A:53:SER:HA	1:A:359:ILE:HG13	2.01	0.41
1:A:203:ASP:OD2	1:C:1087:PHE:CZ	2.72	0.41
1:A:976:UNK:O	1:A:976:UNK:CG	2.68	0.41
1:A:1117:ALA:HA	1:A:1120:GLU:HB2	2.01	0.41
1:A:1656:LYS:N	1:A:1657:PRO:HD2	2.35	0.41
1:A:1705:VAL:C	1:A:1735:GLU:HB2	2.45	0.41
1:A:2014:SER:N	1:B:2591:ARG:HH12	2.16	0.41
1:A:2096:UNK:CG	1:A:2097:UNK:N	2.82	0.41
1:A:2300:PHE:HZ	1:A:2398:LEU:HB3	1.85	0.41
1:A:2891:LYS:NZ	1:A:2903:GLU:HB3	2.35	0.41
1:B:709:LEU:HD21	1:B:872:ARG:NE	2.34	0.41
1:B:1120:GLU:HA	1:B:1125:VAL:CG2	2.50	0.41
1:B:1611:ILE:HG23	1:B:1624:THR:HA	2.02	0.41
1:B:2077:UNK:CG	1:B:2079:UNK:HG3	2.41	0.41
1:B:2125:UNK:CA	1:B:2128:UNK:HG3	2.49	0.41
1:B:2141:VAL:HG22	1:B:2238:PHE:HD2	1.85	0.41
1:B:2354:SER:O	1:B:2358:GLU:HG3	2.20	0.41
1:B:2808:ARG:HH21	1:B:2901:PRO:HD3	1.85	0.41
1:B:2889:ILE:HG13	1:B:2922:LEU:HD13	2.02	0.41
1:C:160:GLN:HA	1:C:329:ILE:HD13	2.02	0.41
1:C:1352:PHE:HA	1:C:1353:PRO:HD3	1.72	0.41
1:C:1703:ILE:HG22	1:C:1704:GLY:H	1.85	0.41
1:C:2299:MET:H	1:C:2299:MET:HG2	1.68	0.41
1:C:2450:UNK:HG1	1:C:3016:ALA:CB	2.17	0.41
1:A:266:ALA:O	1:A:270:GLU:HG3	2.20	0.41
1:A:438:THR:HA	1:A:880:HIS:CE1	2.51	0.41
1:A:669:LYS:O	1:A:682:ASN:HB3	2.20	0.41
1:A:970:ILE:O	1:A:974:UNK:HG3	2.20	0.41
1:A:984:UNK:HG2	1:A:984:UNK:O	2.20	0.41
1:A:1702:GLU:CD	1:A:1711:VAL:HG22	2.45	0.41
1:A:2294:SER:HB3	1:A:2310:LYS:HB2	2.02	0.41
1:A:2591:ARG:NH1	1:C:2014:SER:H	2.19	0.41
1:A:2958:ASN:HD22	1:A:2976:TRP:NE1	2.18	0.41
1:B:78:GLU:HB2	1:B:176:VAL:HG21	2.01	0.41
1:B:266:ALA:O	1:B:270:GLU:HG3	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:360:LEU:HA	1:C:363:LEU:HB3	2.02	0.41
1:C:559:SER:O	1:C:563:ILE:HG12	2.20	0.41
1:C:618:PRO:HB3	1:C:915:PHE:HA	2.02	0.41
1:C:756:LEU:HD13	1:C:859:PHE:CD2	2.55	0.41
1:C:1611:ILE:HG23	1:C:1624:THR:HA	2.02	0.41
1:C:2503:LYS:HG3	1:C:2513:TYR:HB2	2.02	0.41
1:C:2786:ASP:OD2	1:C:2789:MET:HG2	2.19	0.41
1:C:2800:PHE:CZ	1:C:2812:LEU:HD13	2.55	0.41
1:C:2808:ARG:HH21	1:C:2901:PRO:HD3	1.85	0.41
1:A:70:SER:HG	1:A:142:ARG:HH22	1.65	0.41
1:A:360:LEU:HA	1:A:363:LEU:HB3	2.02	0.41
1:A:559:SER:O	1:A:563:ILE:HG12	2.20	0.41
1:A:795:HIS:NE2	1:A:797:GLN:HB2	2.35	0.41
1:A:1611:ILE:HG23	1:A:1624:THR:HA	2.02	0.41
1:A:2444:UNK:HB2	1:A:2988:PRO:HB3	2.01	0.41
1:A:2563:LEU:HD21	1:A:2567:PHE:HB2	2.02	0.41
1:A:2919:GLY:O	1:A:2921:PRO:HD3	2.21	0.41
1:B:336:TRP:HE3	1:B:339:GLU:OE2	2.03	0.41
1:B:487:PHE:O	1:B:521:VAL:N	2.51	0.41
1:B:1228:VAL:HB	1:B:1311:PHE:HB2	2.02	0.41
1:B:1706:LYS:HA	1:B:1735:GLU:HG3	2.02	0.41
1:B:2064:ARG:HG2	1:B:2100:UNK:HG1	2.01	0.41
1:B:2805:ASP:OD2	1:B:2807:ARG:HB2	2.20	0.41
1:C:211:THR:HB	1:C:286:VAL:HB	2.01	0.41
1:C:369:ARG:HA	1:C:369:ARG:HD2	1.85	0.41
1:C:1095:LEU:HD23	1:C:1098:VAL:HA	2.03	0.41
1:C:2123:UNK:CA	1:C:2126:UNK:HG3	2.50	0.41
1:C:2669:LEU:HD23	1:C:2831:MET:HE1	2.01	0.41
1:C:2695:MET:HG3	1:C:2696:TYR:N	2.34	0.41
1:C:2958:ASN:HD22	1:C:2976:TRP:NE1	2.18	0.41
1:A:2557:LEU:HB3	1:A:2613:ARG:HB2	2.01	0.41
1:A:2892:HIS:HA	1:A:2942:GLN:HE22	1.85	0.41
1:B:436:THR:HG22	1:B:460:GLY:HA3	2.03	0.41
1:B:580:ARG:HD3	1:B:896:ALA:HB3	2.01	0.41
1:B:980:UNK:C	1:B:981:UNK:CG	2.96	0.41
1:B:1095:LEU:HD23	1:B:1098:VAL:HA	2.02	0.41
1:B:1106:CYS:SG	1:B:1174:VAL:HG11	2.60	0.41
1:B:1224:UNK:O	1:B:1224:UNK:HG2	2.20	0.41
1:B:1662:ARG:HG3	1:B:1663:LYS:N	2.34	0.41
1:B:2891:LYS:HZ2	1:B:2903:GLU:HG2	1.85	0.41
1:B:2891:LYS:NZ	1:B:2903:GLU:HB3	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:266:ALA:O	1:C:270:GLU:HG3	2.20	0.41
1:C:669:LYS:O	1:C:682:ASN:HB3	2.20	0.41
1:C:2055:VAL:HG22	1:C:2194:TRP:CD1	2.55	0.41
1:C:2296:ASN:ND2	1:C:2395:THR:HG21	2.34	0.41
1:A:233:LEU:HB3	1:A:251:THR:OG1	2.21	0.41
1:A:1703:ILE:HG22	1:A:1704:GLY:H	1.85	0.41
1:A:2134:UNK:HB1	1:A:2189:PHE:HD2	1.85	0.41
1:A:2354:SER:O	1:A:2358:GLU:HG3	2.20	0.41
1:A:2492:VAL:HG12	1:A:2526:ILE:HG22	2.02	0.41
1:A:2889:ILE:HB	1:A:2924:ILE:HG12	2.01	0.41
1:B:669:LYS:O	1:B:682:ASN:HB3	2.20	0.41
1:B:1460:ALA:O	1:B:1464:VAL:HG22	2.20	0.41
1:B:2096:UNK:CG	1:B:2097:UNK:N	2.82	0.41
1:B:2123:UNK:CA	1:B:2126:UNK:HG3	2.50	0.41
1:B:2205:ASP:O	1:B:2209:LEU:HB2	2.21	0.41
1:B:2503:LYS:HG3	1:B:2513:TYR:HB2	2.02	0.41
1:B:2563:LEU:HD21	1:B:2567:PHE:HB2	2.02	0.41
1:C:417:LEU:HD21	1:C:625:LEU:HD21	2.02	0.41
1:C:885:GLU:HG2	1:C:887:ASP:H	1.84	0.41
1:C:1399:ASN:HA	1:C:1400:PRO:HD3	1.86	0.41
1:C:1672:GLN:HE21	1:C:1672:GLN:HB3	1.58	0.41
1:C:1687:PHE:CE1	1:C:1723:GLU:HG2	2.55	0.41
1:C:1724:TYR:C	1:C:1726:HIS:H	2.29	0.41
1:C:2092:UNK:O	1:C:2092:UNK:CG	2.64	0.41
1:C:2104:UNK:CA	1:C:2107:UNK:HG3	2.50	0.41
1:C:2818:GLY:C	1:C:2940:VAL:HG11	2.46	0.41
1:C:2889:ILE:HG13	1:C:2922:LEU:HD13	2.02	0.41
1:A:202:GLY:O	1:A:289:PRO:HD2	2.21	0.41
1:A:587:TRP:CZ2	1:A:694:ASP:OD2	2.74	0.41
1:A:756:LEU:HD13	1:A:859:PHE:CD2	2.55	0.41
1:A:1491:ASP:HB2	1:A:1495:ARG:HB2	2.02	0.41
1:A:2014:SER:H	1:B:2591:ARG:NH1	2.18	0.41
1:A:2113:UNK:HA	1:A:2116:UNK:HG3	2.03	0.41
1:A:2113:UNK:HG2	1:A:2114:UNK:N	2.35	0.41
1:B:936:UNK:HA	1:B:939:UNK:CG	2.51	0.41
1:B:2058:ASP:OD1	1:B:2058:ASP:N	2.46	0.41
1:B:2246:ALA:C	1:B:2255:ARG:NH1	2.78	0.41
1:B:2483:VAL:HG13	1:B:2954:VAL:HG11	2.03	0.41
1:B:2818:GLY:C	1:B:2940:VAL:HG11	2.46	0.41
1:C:585:HIS:HB3	1:C:694:ASP:HB2	2.03	0.41
1:C:1634:ARG:NH1	1:C:1639:ALA:H	2.11	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1706:LYS:HA	1:C:1735:GLU:HG3	2.03	0.41
1:C:2113:UNK:HA	1:C:2116:UNK:HG3	2.03	0.41
1:C:2468:GLU:OE2	1:C:2478:ARG:NH2	2.48	0.41
1:A:160:GLN:HA	1:A:329:ILE:HD13	2.02	0.41
1:A:393:VAL:O	1:A:395:GLU:N	2.52	0.41
1:A:957:LEU:O	1:A:1034:GLU:HB2	2.20	0.41
1:A:1400:PRO:O	1:A:1415:GLY:HA2	2.21	0.41
1:A:1535:PHE:O	1:A:1679:TRP:N	2.48	0.41
1:A:2141:VAL:HG22	1:A:2238:PHE:CD2	2.56	0.41
1:A:2770:LEU:CB	1:A:2815:GLN:HB3	2.51	0.41
1:B:202:GLY:O	1:B:289:PRO:HD2	2.21	0.41
1:B:233:LEU:HB3	1:B:251:THR:OG1	2.21	0.41
1:B:709:LEU:HD11	1:B:872:ARG:CZ	2.51	0.41
1:B:1275:ALA:O	1:B:1279:VAL:HG23	2.20	0.41
1:B:1400:PRO:O	1:B:1415:GLY:HA2	2.21	0.41
1:B:1491:ASP:HB2	1:B:1495:ARG:HB2	2.02	0.41
1:B:2120:UNK:C	1:B:2123:UNK:HG3	2.50	0.41
1:B:2286:ARG:HD3	1:B:2331:SER:OG	2.20	0.41
1:B:2770:LEU:CB	1:B:2815:GLN:HB3	2.51	0.41
1:C:515:ALA:HA	1:C:516:PRO:HD3	1.84	0.41
1:C:1460:ALA:O	1:C:1464:VAL:HG22	2.20	0.41
1:C:1705:VAL:C	1:C:1735:GLU:HB2	2.45	0.41
1:C:2286:ARG:HD3	1:C:2331:SER:OG	2.20	0.41
1:C:2710:LEU:HD12	1:C:2713:VAL:HG21	2.03	0.41
1:C:2805:ASP:OD2	1:C:2807:ARG:HB2	2.20	0.41
1:C:2919:GLY:O	1:C:2921:PRO:HD3	2.21	0.41
1:A:479:LEU:HD21	1:A:485:ILE:HD11	2.02	0.41
1:A:1099:PRO:HB2	1:A:1295:TRP:HE1	1.86	0.41
1:B:160:GLN:HA	1:B:329:ILE:HD13	2.02	0.41
1:B:559:SER:O	1:B:563:ILE:HG12	2.20	0.41
1:B:957:LEU:O	1:B:1034:GLU:HB2	2.20	0.41
1:B:1164:THR:HG22	1:B:1204:UNK:HB2	2.03	0.41
1:B:1695:LEU:HD12	1:B:1695:LEU:HA	1.71	0.41
1:B:2113:UNK:HA	1:B:2116:UNK:HG3	2.03	0.41
1:B:2686:MET:HE1	1:B:2935:LYS:HG3	2.03	0.41
1:B:3065:PRO:O	1:B:3069:GLN:N	2.42	0.41
1:C:107:LEU:HD13	1:C:113:VAL:HB	2.01	0.41
1:C:2114:UNK:O	1:C:2118:UNK:HG3	2.21	0.41
1:C:2428:UNK:O	1:C:2428:UNK:CG	2.67	0.41
1:C:3062:HIS:H	1:C:3066:GLU:HG3	1.86	0.41
1:A:45:ALA:O	1:A:351:ILE:HA	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:133:GLN:O	1:A:137:VAL:HG23	2.21	0.41
1:A:278:ARG:HD2	1:A:674:TRP:CE3	2.56	0.41
1:A:585:HIS:HB3	1:A:694:ASP:HB2	2.03	0.41
1:A:594:LEU:O	1:A:598:TYR:HB2	2.21	0.41
1:A:795:HIS:HE2	1:A:797:GLN:HB2	1.86	0.41
1:A:936:UNK:HA	1:A:939:UNK:CG	2.51	0.41
1:A:985:UNK:O	1:A:988:UNK:HG3	2.21	0.41
1:A:1224:UNK:O	1:A:1224:UNK:HG2	2.20	0.41
1:A:1634:ARG:NH1	1:A:1639:ALA:H	2.11	0.41
1:A:2104:UNK:CA	1:A:2107:UNK:HG3	2.50	0.41
1:A:2114:UNK:O	1:A:2118:UNK:HG3	2.21	0.41
1:A:2686:MET:HE1	1:A:2935:LYS:HG3	2.03	0.41
1:A:2891:LYS:HZ2	1:A:2903:GLU:CG	2.34	0.41
1:A:2961:LEU:HD22	1:A:2976:TRP:HD1	1.85	0.41
1:A:3057:ASP:OD1	1:A:3057:ASP:N	2.54	0.41
1:B:360:LEU:HA	1:B:363:LEU:HB3	2.03	0.41
1:B:369:ARG:HA	1:B:369:ARG:HD2	1.85	0.41
1:B:618:PRO:HB3	1:B:915:PHE:HA	2.02	0.41
1:B:795:HIS:NE2	1:B:797:GLN:HB2	2.35	0.41
1:B:1017:ILE:HG12	1:B:1045:VAL:HG11	2.03	0.41
1:B:1637:VAL:HA	1:B:1638:PRO:HD2	1.90	0.41
1:B:1687:PHE:CE1	1:B:1723:GLU:HG2	2.55	0.41
1:B:2104:UNK:CA	1:B:2107:UNK:HG3	2.50	0.41
1:B:2212:TRP:O	1:B:2229:LYS:HB3	2.21	0.41
1:B:2405:MET:O	1:B:2409:ALA:HB3	2.21	0.41
1:B:2989:LEU:HD12	1:B:2989:LEU:HA	1.77	0.41
1:B:3062:HIS:H	1:B:3066:GLU:HG3	1.86	0.41
1:C:233:LEU:HB3	1:C:251:THR:OG1	2.21	0.41
1:C:436:THR:HG22	1:C:460:GLY:HA3	2.03	0.41
1:C:936:UNK:HA	1:C:939:UNK:CG	2.51	0.41
1:C:1002:UNK:CG	1:C:1005:UNK:HB2	2.51	0.41
1:C:1099:PRO:HB2	1:C:1295:TRP:HE1	1.86	0.41
1:C:1491:ASP:HB2	1:C:1495:ARG:HB2	2.02	0.41
1:C:1986:LEU:HA	1:C:1989:PHE:CD2	2.56	0.41
1:C:2010:GLN:OE1	1:C:2013:LEU:HD11	2.21	0.41
1:C:2492:VAL:HG12	1:C:2526:ILE:HG22	2.02	0.41
1:C:2889:ILE:HD12	1:C:2993:LEU:HD23	2.03	0.41
1:C:2891:LYS:HZ2	1:C:2903:GLU:HG2	1.84	0.41
1:C:2891:LYS:NZ	1:C:2903:GLU:C	2.79	0.41
1:C:2978:ARG:HG3	1:C:2979:GLU:HG3	2.03	0.41
1:C:3057:ASP:OD1	1:C:3057:ASP:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2098:UNK:HG2	1:A:2099:UNK:N	2.36	0.41
1:A:2212:TRP:O	1:A:2229:LYS:HB3	2.21	0.41
1:A:2334:HIS:CD2	1:A:2391:LYS:HG3	2.50	0.41
1:B:341:THR:HG23	1:B:344:HIS:ND1	2.34	0.41
1:B:594:LEU:O	1:B:598:TYR:HB2	2.21	0.41
1:B:1462:ALA:HB2	1:B:1468:TYR:CE1	2.56	0.41
1:B:2919:GLY:O	1:B:2921:PRO:HD3	2.21	0.41
1:B:2927:GLN:HE21	1:B:2927:GLN:HB3	1.70	0.41
1:C:278:ARG:HD2	1:C:674:TRP:CE3	2.56	0.41
1:C:594:LEU:O	1:C:598:TYR:HB2	2.21	0.41
1:C:709:LEU:HD11	1:C:872:ARG:CZ	2.51	0.41
1:C:2483:VAL:HG13	1:C:2954:VAL:HG11	2.03	0.41
1:C:2989:LEU:HD12	1:C:2989:LEU:HA	1.77	0.41
1:A:1087:PHE:CD1	1:B:198:ILE:HG23	2.56	0.40
1:A:1095:LEU:HD13	1:A:1289:PRO:CB	2.52	0.40
1:A:1120:GLU:HA	1:A:1125:VAL:CG2	2.50	0.40
1:A:2086:UNK:HA	1:A:2089:UNK:CG	2.51	0.40
1:A:2093:UNK:HB2	1:A:2129:UNK:HB2	2.03	0.40
1:B:358:ASP:OD2	1:B:361:THR:HB	2.21	0.40
1:B:3057:ASP:OD1	1:B:3057:ASP:N	2.54	0.40
1:C:180:ALA:O	1:C:184:LEU:HG	2.21	0.40
1:C:273:ARG:HD2	1:C:282:VAL:CG1	2.51	0.40
1:C:602:ARG:NH2	1:C:641:ASP:OD1	2.27	0.40
1:C:984:UNK:HG2	1:C:984:UNK:O	2.20	0.40
1:C:1133:VAL:N	1:C:1193:ALA:O	2.48	0.40
1:C:1224:UNK:O	1:C:1224:UNK:HG2	2.20	0.40
1:C:2145:SER:O	1:C:2148:SER:OG	2.34	0.40
1:C:2300:PHE:HZ	1:C:2398:LEU:HB3	1.85	0.40
1:A:278:ARG:HD2	1:A:674:TRP:HE3	1.87	0.40
1:A:709:LEU:HD11	1:A:872:ARG:CZ	2.51	0.40
1:A:1462:ALA:HB2	1:A:1468:TYR:CE1	2.56	0.40
1:A:1695:LEU:HD12	1:A:1695:LEU:HA	1.71	0.40
1:A:1702:GLU:OE1	1:A:1711:VAL:HG22	2.22	0.40
1:A:2010:GLN:OE1	1:A:2013:LEU:HD11	2.21	0.40
1:A:2120:UNK:C	1:A:2123:UNK:HG3	2.50	0.40
1:A:2710:LEU:HD12	1:A:2713:VAL:HG21	2.03	0.40
1:B:133:GLN:O	1:B:137:VAL:HG23	2.21	0.40
1:B:417:LEU:HD21	1:B:625:LEU:HD21	2.02	0.40
1:B:756:LEU:HD13	1:B:859:PHE:CD2	2.55	0.40
1:B:999:UNK:HG2	1:B:1007:UNK:HG3	1.96	0.40
1:B:1087:PHE:CD1	1:C:198:ILE:HG23	2.56	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1237:ARG:HH11	1:B:1237:ARG:HG2	1.86	0.40
1:B:1533:VAL:N	1:B:1543:ALA:O	2.52	0.40
1:B:1604:ASP:OD1	1:B:1604:ASP:N	2.55	0.40
1:B:2400:ASP:OD1	1:B:2400:ASP:N	2.45	0.40
1:B:2891:LYS:NZ	1:B:2903:GLU:C	2.79	0.40
1:B:2978:ARG:HG3	1:B:2979:GLU:HG3	2.03	0.40
1:C:133:GLN:O	1:C:137:VAL:HG23	2.21	0.40
1:C:393:VAL:O	1:C:395:GLU:N	2.52	0.40
1:C:1215:UNK:CG	1:C:1216:UNK:N	2.84	0.40
1:C:1400:PRO:O	1:C:1415:GLY:HA2	2.21	0.40
1:C:2114:UNK:O	1:C:2117:UNK:HG3	2.21	0.40
1:C:2449:UNK:O	1:C:2449:UNK:CG	2.68	0.40
1:C:2892:HIS:HA	1:C:2942:GLN:HE22	1.85	0.40
1:A:198:ILE:HG23	1:C:1087:PHE:CD1	2.56	0.40
1:A:487:PHE:O	1:A:521:VAL:N	2.51	0.40
1:A:618:PRO:HB3	1:A:915:PHE:HA	2.02	0.40
1:A:2286:ARG:HD3	1:A:2331:SER:OG	2.20	0.40
1:A:2346:MET:O	1:A:2349:ASN:N	2.55	0.40
1:B:984:UNK:HG2	1:B:984:UNK:O	2.20	0.40
1:B:1095:LEU:HD13	1:B:1289:PRO:CB	2.52	0.40
1:B:1616:PRO:HG2	1:B:1619:VAL:HB	2.04	0.40
1:B:2014:SER:H	1:C:2591:ARG:NH1	2.19	0.40
1:B:2093:UNK:HB2	1:B:2129:UNK:HB2	2.03	0.40
1:B:2114:UNK:O	1:B:2117:UNK:HG3	2.21	0.40
1:B:2672:TRP:CZ3	1:B:2830:LYS:HG2	2.56	0.40
1:C:745:THR:HG22	1:C:747:LEU:N	2.37	0.40
1:C:794:LEU:HD12	1:C:830:TYR:HB3	2.04	0.40
1:C:799:PHE:CZ	1:C:2433:UNK:CG	2.99	0.40
1:C:976:UNK:O	1:C:976:UNK:CG	2.68	0.40
1:C:995:UNK:HB1	1:C:1011:UNK:HG2	1.99	0.40
1:C:1237:ARG:HG2	1:C:1237:ARG:HH11	1.86	0.40
1:C:2141:VAL:HG22	1:C:2238:PHE:CD2	2.56	0.40
1:C:2405:MET:O	1:C:2409:ALA:HB3	2.21	0.40
1:C:2574:GLU:HG3	1:C:2599:TRP:CE2	2.57	0.40
1:C:2672:TRP:CZ3	1:C:2830:LYS:HG2	2.56	0.40
1:C:2770:LEU:CB	1:C:2815:GLN:HB3	2.51	0.40
1:A:180:ALA:O	1:A:184:LEU:HG	2.21	0.40
1:A:417:LEU:HD21	1:A:625:LEU:HD21	2.02	0.40
1:A:745:THR:HG22	1:A:747:LEU:N	2.37	0.40
1:A:1706:LYS:HA	1:A:1735:GLU:HG3	2.03	0.40
1:A:2611:VAL:HA	1:A:2612:PRO:HD3	1.86	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2618:SER:HB3	1:A:2786:ASP:OD1	2.21	0.40
1:A:2672:TRP:CZ3	1:A:2830:LYS:HG2	2.56	0.40
1:B:142:ARG:HD3	1:B:142:ARG:HA	1.91	0.40
1:B:336:TRP:HE1	1:B:364:THR:HG22	1.86	0.40
1:B:587:TRP:CZ2	1:B:694:ASP:OD2	2.74	0.40
1:B:1002:UNK:CG	1:B:1005:UNK:HB2	2.51	0.40
1:B:1087:PHE:HZ	1:C:203:ASP:OD2	2.05	0.40
1:B:1353:PRO:HB2	1:B:1707:SER:HB2	2.04	0.40
1:B:1380:ALA:HB1	1:B:1474:LEU:CD1	2.50	0.40
1:B:1724:TYR:C	1:B:1726:HIS:H	2.29	0.40
1:B:2260:MET:HE2	1:B:2260:MET:HB3	1.99	0.40
1:B:2907:HIS:HA	1:B:2910:ILE:HG12	2.04	0.40
1:C:1095:LEU:HD12	1:C:1096:THR:N	2.35	0.40
1:C:1535:PHE:O	1:C:1679:TRP:N	2.48	0.40
1:C:1616:PRO:HG2	1:C:1619:VAL:HB	2.04	0.40
1:C:1619:VAL:HA	1:C:1620:PRO:HD2	1.80	0.40
1:C:2093:UNK:HB2	1:C:2129:UNK:HB2	2.03	0.40
1:C:2645:ASP:CG	1:C:2690:THR:HB	2.47	0.40
1:A:358:ASP:OD2	1:A:361:THR:HB	2.21	0.40
1:A:1013:UNK:CG	1:A:1014:UNK:N	2.58	0.40
1:A:1629:PHE:O	1:A:1633:ILE:HG13	2.22	0.40
1:A:2114:UNK:O	1:A:2117:UNK:HG3	2.22	0.40
1:A:2205:ASP:O	1:A:2209:LEU:HB2	2.21	0.40
1:A:2405:MET:O	1:A:2409:ALA:HB3	2.21	0.40
1:A:2503:LYS:HG3	1:A:2513:TYR:HB2	2.02	0.40
1:A:2692:MET:HE2	1:A:2692:MET:HB3	1.93	0.40
1:A:2836:LEU:HD23	1:A:2836:LEU:HA	1.87	0.40
1:B:273:ARG:HD2	1:B:282:VAL:CG1	2.51	0.40
1:B:541:GLU:HG3	1:B:542:VAL:N	2.37	0.40
1:B:585:HIS:HB3	1:B:694:ASP:HB2	2.03	0.40
1:B:985:UNK:O	1:B:988:UNK:HG3	2.21	0.40
1:B:1099:PRO:HB2	1:B:1295:TRP:HE1	1.86	0.40
1:B:2346:MET:O	1:B:2349:ASN:N	2.55	0.40
1:B:2492:VAL:HG12	1:B:2526:ILE:HG22	2.02	0.40
1:B:2557:LEU:HD23	1:B:2558:LEU:N	2.37	0.40
1:B:2611:VAL:HA	1:B:2612:PRO:HD3	1.86	0.40
1:C:408:VAL:HG23	1:C:418:GLU:HB2	2.04	0.40
1:C:2930:LEU:HD23	1:C:2930:LEU:HA	1.93	0.40

There are no symmetry-related clashes.

5.3 Torsion angles ⓘ

5.3.1 Protein backbone ⓘ

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	2637/3089 (85%)	2489 (94%)	140 (5%)	8 (0%)	36	72
1	B	2637/3089 (85%)	2489 (94%)	140 (5%)	8 (0%)	36	72
1	C	2637/3089 (85%)	2489 (94%)	139 (5%)	9 (0%)	36	72
1	D	2637/3089 (85%)	2488 (94%)	140 (5%)	9 (0%)	36	72
1	E	2637/3089 (85%)	2488 (94%)	141 (5%)	8 (0%)	36	72
1	F	2637/3089 (85%)	2488 (94%)	140 (5%)	9 (0%)	36	72
All	All	15822/18534 (85%)	14931 (94%)	840 (5%)	51 (0%)	37	72

All (51) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	D	1148	GLU
1	E	1148	GLU
1	F	1148	GLU
1	A	1148	GLU
1	B	1148	GLU
1	C	1148	GLU
1	D	1724	TYR
1	E	1724	TYR
1	F	1724	TYR
1	A	1724	TYR
1	B	1724	TYR
1	C	1724	TYR
1	D	149	ALA
1	D	1652	TRP
1	D	1705	VAL
1	E	149	ALA
1	E	1652	TRP
1	E	1705	VAL
1	F	149	ALA
1	F	1652	TRP

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Mol	Chain	Res	Type
1	F	1705	VAL
1	A	149	ALA
1	A	1652	TRP
1	A	1705	VAL
1	B	149	ALA
1	B	1652	TRP
1	B	1705	VAL
1	C	149	ALA
1	C	1652	TRP
1	C	1705	VAL
1	D	89	GLU
1	E	89	GLU
1	F	89	GLU
1	A	89	GLU
1	B	89	GLU
1	C	89	GLU
1	D	1068	VAL
1	D	1285	LYS
1	E	1068	VAL
1	E	1285	LYS
1	F	1068	VAL
1	F	1285	LYS
1	A	1068	VAL
1	A	1285	LYS
1	B	1068	VAL
1	B	1285	LYS
1	C	1068	VAL
1	C	1285	LYS
1	D	2585	PRO
1	F	2585	PRO
1	C	2585	PRO

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.

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	2076/2264 (92%)	1953 (94%)	123 (6%)	18	39
1	B	2076/2264 (92%)	1953 (94%)	123 (6%)	18	39
1	C	2076/2264 (92%)	1953 (94%)	123 (6%)	18	39
1	D	2076/2264 (92%)	1953 (94%)	123 (6%)	18	39
1	E	2076/2264 (92%)	1953 (94%)	123 (6%)	18	39
1	F	2076/2264 (92%)	1953 (94%)	123 (6%)	18	39
All	All	12456/13584 (92%)	11718 (94%)	738 (6%)	19	39

All (738) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	D	62	LEU
1	D	90	LEU
1	D	207	MET
1	D	208	VAL
1	D	209	SER
1	D	232	VAL
1	D	233	LEU
1	D	248	ILE
1	D	251	THR
1	D	290	VAL
1	D	342	GLU
1	D	344	HIS
1	D	358	ASP
1	D	361	THR
1	D	373	ILE
1	D	376	VAL
1	D	389	THR
1	D	390	VAL
1	D	393	VAL
1	D	422	THR
1	D	424	LEU
1	D	436	THR
1	D	439	THR
1	D	456	GLU
1	D	517	ILE
1	D	544	ILE
1	D	580	ARG

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Mol	Chain	Res	Type
1	D	584	HIS
1	D	595	LEU
1	D	621	SER
1	D	638	MET
1	D	641	ASP
1	D	654	GLU
1	D	694	ASP
1	D	696	HIS
1	D	745	THR
1	D	791	GLU
1	D	857	VAL
1	D	898	VAL
1	D	1021	LEU
1	D	1070	VAL
1	D	1083	VAL
1	D	1086	THR
1	D	1096	THR
1	D	1105	ARG
1	D	1125	VAL
1	D	1127	GLU
1	D	1162	THR
1	D	1228	VAL
1	D	1253	ARG
1	D	1280	THR
1	D	1358	GLN
1	D	1401	THR
1	D	1404	ILE
1	D	1416	VAL
1	D	1421	GLN
1	D	1423	THR
1	D	1467	VAL
1	D	1468	TYR
1	D	1471	GLU
1	D	1477	VAL
1	D	1488	VAL
1	D	1508	ILE
1	D	1544	ILE
1	D	1551	LEU
1	D	1564	ILE
1	D	1585	VAL
1	D	1618	LEU
1	D	1651	THR

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Mol	Chain	Res	Type
1	D	1662	ARG
1	D	1672	GLN
1	D	1673	PHE
1	D	1699	ARG
1	D	1703	ILE
1	D	1711	VAL
1	D	1745	ASP
1	D	2007	VAL
1	D	2067	LEU
1	D	2070	LEU
1	D	2192	THR
1	D	2196	VAL
1	D	2209	LEU
1	D	2252	VAL
1	D	2294	SER
1	D	2299	MET
1	D	2303	ASP
1	D	2311	SER
1	D	2352	ILE
1	D	2361	VAL
1	D	2395	THR
1	D	2401	ILE
1	D	2405	MET
1	D	2521	VAL
1	D	2549	ILE
1	D	2582	GLN
1	D	2619	ARG
1	D	2620	THR
1	D	2692	MET
1	D	2709	ILE
1	D	2742	THR
1	D	2762	VAL
1	D	2784	THR
1	D	2790	MET
1	D	2800	PHE
1	D	2802	ARG
1	D	2809	LEU
1	D	2827	LEU
1	D	2861	LEU
1	D	2871	THR
1	D	2879	LEU
1	D	2894	THR

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Mol	Chain	Res	Type
1	D	2916	ARG
1	D	2930	LEU
1	D	2935	LYS
1	D	2962	ASP
1	D	2975	VAL
1	D	2977	VAL
1	D	3001	HIS
1	D	3005	LEU
1	D	3019	ASP
1	D	3076	SER
1	D	3077	THR
1	D	3080	ARG
1	E	62	LEU
1	E	90	LEU
1	E	207	MET
1	E	208	VAL
1	E	209	SER
1	E	232	VAL
1	E	233	LEU
1	E	248	ILE
1	E	251	THR
1	E	290	VAL
1	E	342	GLU
1	E	344	HIS
1	E	358	ASP
1	E	361	THR
1	E	373	ILE
1	E	376	VAL
1	E	389	THR
1	E	390	VAL
1	E	393	VAL
1	E	422	THR
1	E	424	LEU
1	E	436	THR
1	E	439	THR
1	E	456	GLU
1	E	517	ILE
1	E	544	ILE
1	E	580	ARG
1	E	584	HIS
1	E	595	LEU
1	E	621	SER

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Mol	Chain	Res	Type
1	E	638	MET
1	E	641	ASP
1	E	654	GLU
1	E	694	ASP
1	E	696	HIS
1	E	745	THR
1	E	791	GLU
1	E	857	VAL
1	E	898	VAL
1	E	1021	LEU
1	E	1070	VAL
1	E	1083	VAL
1	E	1086	THR
1	E	1096	THR
1	E	1105	ARG
1	E	1125	VAL
1	E	1127	GLU
1	E	1162	THR
1	E	1228	VAL
1	E	1253	ARG
1	E	1280	THR
1	E	1358	GLN
1	E	1401	THR
1	E	1404	ILE
1	E	1416	VAL
1	E	1421	GLN
1	E	1423	THR
1	E	1467	VAL
1	E	1468	TYR
1	E	1471	GLU
1	E	1477	VAL
1	E	1488	VAL
1	E	1508	ILE
1	E	1544	ILE
1	E	1551	LEU
1	E	1564	ILE
1	E	1585	VAL
1	E	1618	LEU
1	E	1651	THR
1	E	1662	ARG
1	E	1672	GLN
1	E	1673	PHE

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Mol	Chain	Res	Type
1	E	1699	ARG
1	E	1703	ILE
1	E	1711	VAL
1	E	1745	ASP
1	E	2007	VAL
1	E	2067	LEU
1	E	2070	LEU
1	E	2192	THR
1	E	2196	VAL
1	E	2209	LEU
1	E	2252	VAL
1	E	2294	SER
1	E	2299	MET
1	E	2303	ASP
1	E	2311	SER
1	E	2352	ILE
1	E	2361	VAL
1	E	2395	THR
1	E	2401	ILE
1	E	2405	MET
1	E	2521	VAL
1	E	2549	ILE
1	E	2582	GLN
1	E	2619	ARG
1	E	2620	THR
1	E	2692	MET
1	E	2709	ILE
1	E	2742	THR
1	E	2762	VAL
1	E	2784	THR
1	E	2790	MET
1	E	2800	PHE
1	E	2802	ARG
1	E	2809	LEU
1	E	2827	LEU
1	E	2861	LEU
1	E	2871	THR
1	E	2879	LEU
1	E	2894	THR
1	E	2916	ARG
1	E	2930	LEU
1	E	2935	LYS

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Mol	Chain	Res	Type
1	E	2962	ASP
1	E	2975	VAL
1	E	2977	VAL
1	E	3001	HIS
1	E	3005	LEU
1	E	3019	ASP
1	E	3076	SER
1	E	3077	THR
1	E	3080	ARG
1	F	62	LEU
1	F	90	LEU
1	F	207	MET
1	F	208	VAL
1	F	209	SER
1	F	232	VAL
1	F	233	LEU
1	F	248	ILE
1	F	251	THR
1	F	290	VAL
1	F	342	GLU
1	F	344	HIS
1	F	358	ASP
1	F	361	THR
1	F	373	ILE
1	F	376	VAL
1	F	389	THR
1	F	390	VAL
1	F	393	VAL
1	F	422	THR
1	F	424	LEU
1	F	436	THR
1	F	439	THR
1	F	456	GLU
1	F	517	ILE
1	F	544	ILE
1	F	580	ARG
1	F	584	HIS
1	F	595	LEU
1	F	621	SER
1	F	638	MET
1	F	641	ASP
1	F	654	GLU

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Mol	Chain	Res	Type
1	F	694	ASP
1	F	696	HIS
1	F	745	THR
1	F	791	GLU
1	F	857	VAL
1	F	898	VAL
1	F	1021	LEU
1	F	1070	VAL
1	F	1083	VAL
1	F	1086	THR
1	F	1096	THR
1	F	1105	ARG
1	F	1125	VAL
1	F	1127	GLU
1	F	1162	THR
1	F	1228	VAL
1	F	1253	ARG
1	F	1280	THR
1	F	1358	GLN
1	F	1401	THR
1	F	1404	ILE
1	F	1416	VAL
1	F	1421	GLN
1	F	1423	THR
1	F	1467	VAL
1	F	1468	TYR
1	F	1471	GLU
1	F	1477	VAL
1	F	1488	VAL
1	F	1508	ILE
1	F	1544	ILE
1	F	1551	LEU
1	F	1564	ILE
1	F	1585	VAL
1	F	1618	LEU
1	F	1651	THR
1	F	1662	ARG
1	F	1672	GLN
1	F	1673	PHE
1	F	1699	ARG
1	F	1703	ILE
1	F	1711	VAL

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Mol	Chain	Res	Type
1	F	1745	ASP
1	F	2007	VAL
1	F	2067	LEU
1	F	2070	LEU
1	F	2192	THR
1	F	2196	VAL
1	F	2209	LEU
1	F	2252	VAL
1	F	2294	SER
1	F	2299	MET
1	F	2303	ASP
1	F	2311	SER
1	F	2352	ILE
1	F	2361	VAL
1	F	2395	THR
1	F	2401	ILE
1	F	2405	MET
1	F	2521	VAL
1	F	2549	ILE
1	F	2582	GLN
1	F	2619	ARG
1	F	2620	THR
1	F	2692	MET
1	F	2709	ILE
1	F	2742	THR
1	F	2762	VAL
1	F	2784	THR
1	F	2790	MET
1	F	2800	PHE
1	F	2802	ARG
1	F	2809	LEU
1	F	2827	LEU
1	F	2861	LEU
1	F	2871	THR
1	F	2879	LEU
1	F	2894	THR
1	F	2916	ARG
1	F	2930	LEU
1	F	2935	LYS
1	F	2962	ASP
1	F	2975	VAL
1	F	2977	VAL

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Mol	Chain	Res	Type
1	F	3001	HIS
1	F	3005	LEU
1	F	3019	ASP
1	F	3076	SER
1	F	3077	THR
1	F	3080	ARG
1	A	62	LEU
1	A	90	LEU
1	A	207	MET
1	A	208	VAL
1	A	209	SER
1	A	232	VAL
1	A	233	LEU
1	A	248	ILE
1	A	251	THR
1	A	290	VAL
1	A	342	GLU
1	A	344	HIS
1	A	358	ASP
1	A	361	THR
1	A	373	ILE
1	A	376	VAL
1	A	389	THR
1	A	390	VAL
1	A	393	VAL
1	A	422	THR
1	A	424	LEU
1	A	436	THR
1	A	439	THR
1	A	456	GLU
1	A	517	ILE
1	A	544	ILE
1	A	580	ARG
1	A	584	HIS
1	A	595	LEU
1	A	621	SER
1	A	638	MET
1	A	641	ASP
1	A	654	GLU
1	A	694	ASP
1	A	696	HIS
1	A	745	THR

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Mol	Chain	Res	Type
1	A	791	GLU
1	A	857	VAL
1	A	898	VAL
1	A	1021	LEU
1	A	1070	VAL
1	A	1083	VAL
1	A	1086	THR
1	A	1096	THR
1	A	1105	ARG
1	A	1125	VAL
1	A	1127	GLU
1	A	1162	THR
1	A	1228	VAL
1	A	1253	ARG
1	A	1280	THR
1	A	1358	GLN
1	A	1401	THR
1	A	1404	ILE
1	A	1416	VAL
1	A	1421	GLN
1	A	1423	THR
1	A	1467	VAL
1	A	1468	TYR
1	A	1471	GLU
1	A	1477	VAL
1	A	1488	VAL
1	A	1508	ILE
1	A	1544	ILE
1	A	1551	LEU
1	A	1564	ILE
1	A	1585	VAL
1	A	1618	LEU
1	A	1651	THR
1	A	1662	ARG
1	A	1672	GLN
1	A	1673	PHE
1	A	1699	ARG
1	A	1703	ILE
1	A	1711	VAL
1	A	1745	ASP
1	A	2007	VAL
1	A	2067	LEU

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Mol	Chain	Res	Type
1	A	2070	LEU
1	A	2192	THR
1	A	2196	VAL
1	A	2209	LEU
1	A	2252	VAL
1	A	2294	SER
1	A	2299	MET
1	A	2303	ASP
1	A	2311	SER
1	A	2352	ILE
1	A	2361	VAL
1	A	2395	THR
1	A	2401	ILE
1	A	2405	MET
1	A	2521	VAL
1	A	2549	ILE
1	A	2582	GLN
1	A	2619	ARG
1	A	2620	THR
1	A	2692	MET
1	A	2709	ILE
1	A	2742	THR
1	A	2762	VAL
1	A	2784	THR
1	A	2790	MET
1	A	2800	PHE
1	A	2802	ARG
1	A	2809	LEU
1	A	2827	LEU
1	A	2861	LEU
1	A	2871	THR
1	A	2879	LEU
1	A	2894	THR
1	A	2916	ARG
1	A	2930	LEU
1	A	2935	LYS
1	A	2962	ASP
1	A	2975	VAL
1	A	2977	VAL
1	A	3001	HIS
1	A	3005	LEU
1	A	3019	ASP

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Mol	Chain	Res	Type
1	A	3076	SER
1	A	3077	THR
1	A	3080	ARG
1	B	62	LEU
1	B	90	LEU
1	B	207	MET
1	B	208	VAL
1	B	209	SER
1	B	232	VAL
1	B	233	LEU
1	B	248	ILE
1	B	251	THR
1	B	290	VAL
1	B	342	GLU
1	B	344	HIS
1	B	358	ASP
1	B	361	THR
1	B	373	ILE
1	B	376	VAL
1	B	389	THR
1	B	390	VAL
1	B	393	VAL
1	B	422	THR
1	B	424	LEU
1	B	436	THR
1	B	439	THR
1	B	456	GLU
1	B	517	ILE
1	B	544	ILE
1	B	580	ARG
1	B	584	HIS
1	B	595	LEU
1	B	621	SER
1	B	638	MET
1	B	641	ASP
1	B	654	GLU
1	B	694	ASP
1	B	696	HIS
1	B	745	THR
1	B	791	GLU
1	B	857	VAL
1	B	898	VAL

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Mol	Chain	Res	Type
1	B	1021	LEU
1	B	1070	VAL
1	B	1083	VAL
1	B	1086	THR
1	B	1096	THR
1	B	1105	ARG
1	B	1125	VAL
1	B	1127	GLU
1	B	1162	THR
1	B	1228	VAL
1	B	1253	ARG
1	B	1280	THR
1	B	1358	GLN
1	B	1401	THR
1	B	1404	ILE
1	B	1416	VAL
1	B	1421	GLN
1	B	1423	THR
1	B	1467	VAL
1	B	1468	TYR
1	B	1471	GLU
1	B	1477	VAL
1	B	1488	VAL
1	B	1508	ILE
1	B	1544	ILE
1	B	1551	LEU
1	B	1564	ILE
1	B	1585	VAL
1	B	1618	LEU
1	B	1651	THR
1	B	1662	ARG
1	B	1672	GLN
1	B	1673	PHE
1	B	1699	ARG
1	B	1703	ILE
1	B	1711	VAL
1	B	1745	ASP
1	B	2007	VAL
1	B	2067	LEU
1	B	2070	LEU
1	B	2192	THR
1	B	2196	VAL

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Mol	Chain	Res	Type
1	B	2209	LEU
1	B	2252	VAL
1	B	2294	SER
1	B	2299	MET
1	B	2303	ASP
1	B	2311	SER
1	B	2352	ILE
1	B	2361	VAL
1	B	2395	THR
1	B	2401	ILE
1	B	2405	MET
1	B	2521	VAL
1	B	2549	ILE
1	B	2582	GLN
1	B	2619	ARG
1	B	2620	THR
1	B	2692	MET
1	B	2709	ILE
1	B	2742	THR
1	B	2762	VAL
1	B	2784	THR
1	B	2790	MET
1	B	2800	PHE
1	B	2802	ARG
1	B	2809	LEU
1	B	2827	LEU
1	B	2861	LEU
1	B	2871	THR
1	B	2879	LEU
1	B	2894	THR
1	B	2916	ARG
1	B	2930	LEU
1	B	2935	LYS
1	B	2962	ASP
1	B	2975	VAL
1	B	2977	VAL
1	B	3001	HIS
1	B	3005	LEU
1	B	3019	ASP
1	B	3076	SER
1	B	3077	THR
1	B	3080	ARG

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Mol	Chain	Res	Type
1	C	62	LEU
1	C	90	LEU
1	C	207	MET
1	C	208	VAL
1	C	209	SER
1	C	232	VAL
1	C	233	LEU
1	C	248	ILE
1	C	251	THR
1	C	290	VAL
1	C	342	GLU
1	C	344	HIS
1	C	358	ASP
1	C	361	THR
1	C	373	ILE
1	C	376	VAL
1	C	389	THR
1	C	390	VAL
1	C	393	VAL
1	C	422	THR
1	C	424	LEU
1	C	436	THR
1	C	439	THR
1	C	456	GLU
1	C	517	ILE
1	C	544	ILE
1	C	580	ARG
1	C	584	HIS
1	C	595	LEU
1	C	621	SER
1	C	638	MET
1	C	641	ASP
1	C	654	GLU
1	C	694	ASP
1	C	696	HIS
1	C	745	THR
1	C	791	GLU
1	C	857	VAL
1	C	898	VAL
1	C	1021	LEU
1	C	1070	VAL
1	C	1083	VAL

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Mol	Chain	Res	Type
1	C	1086	THR
1	C	1096	THR
1	C	1105	ARG
1	C	1125	VAL
1	C	1127	GLU
1	C	1162	THR
1	C	1228	VAL
1	C	1253	ARG
1	C	1280	THR
1	C	1358	GLN
1	C	1401	THR
1	C	1404	ILE
1	C	1416	VAL
1	C	1421	GLN
1	C	1423	THR
1	C	1467	VAL
1	C	1468	TYR
1	C	1471	GLU
1	C	1477	VAL
1	C	1488	VAL
1	C	1508	ILE
1	C	1544	ILE
1	C	1551	LEU
1	C	1564	ILE
1	C	1585	VAL
1	C	1618	LEU
1	C	1651	THR
1	C	1662	ARG
1	C	1672	GLN
1	C	1673	PHE
1	C	1699	ARG
1	C	1703	ILE
1	C	1711	VAL
1	C	1745	ASP
1	C	2007	VAL
1	C	2067	LEU
1	C	2070	LEU
1	C	2192	THR
1	C	2196	VAL
1	C	2209	LEU
1	C	2252	VAL
1	C	2294	SER

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Mol	Chain	Res	Type
1	C	2299	MET
1	C	2303	ASP
1	C	2311	SER
1	C	2352	ILE
1	C	2361	VAL
1	C	2395	THR
1	C	2401	ILE
1	C	2405	MET
1	C	2521	VAL
1	C	2549	ILE
1	C	2582	GLN
1	C	2619	ARG
1	C	2620	THR
1	C	2692	MET
1	C	2709	ILE
1	C	2742	THR
1	C	2762	VAL
1	C	2784	THR
1	C	2790	MET
1	C	2800	PHE
1	C	2802	ARG
1	C	2809	LEU
1	C	2827	LEU
1	C	2861	LEU
1	C	2871	THR
1	C	2879	LEU
1	C	2894	THR
1	C	2916	ARG
1	C	2930	LEU
1	C	2935	LYS
1	C	2962	ASP
1	C	2975	VAL
1	C	2977	VAL
1	C	3001	HIS
1	C	3005	LEU
1	C	3019	ASP
1	C	3076	SER
1	C	3077	THR
1	C	3080	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (78) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	486	GLN
1	A	540	ASN
1	A	585	HIS
1	A	606	ASN
1	A	633	HIS
1	A	1057	ASN
1	A	1134	HIS
1	A	1276	GLN
1	A	1277	HIS
1	A	1355	GLN
1	A	1421	GLN
1	A	1534	ASN
1	A	1617	ASN
1	A	1672	GLN
1	A	2288	HIS
1	A	2296	ASN
1	A	2334	HIS
1	A	2587	HIS
1	A	2651	ASN
1	A	2699	ASN
1	A	2815	GLN
1	A	2850	HIS
1	A	2927	GLN
1	A	2942	GLN
1	A	2973	HIS
1	B	386	ASN
1	B	486	GLN
1	B	540	ASN
1	B	585	HIS
1	B	606	ASN
1	B	633	HIS
1	B	1057	ASN
1	B	1134	HIS
1	B	1276	GLN
1	B	1277	HIS
1	B	1355	GLN
1	B	1421	GLN
1	B	1534	ASN
1	B	1617	ASN
1	B	1672	GLN
1	B	2288	HIS
1	B	2296	ASN
1	B	2334	HIS

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Mol	Chain	Res	Type
1	B	2587	HIS
1	B	2651	ASN
1	B	2699	ASN
1	B	2815	GLN
1	B	2850	HIS
1	B	2927	GLN
1	B	2942	GLN
1	B	2973	HIS
1	C	386	ASN
1	C	486	GLN
1	C	540	ASN
1	C	575	HIS
1	C	585	HIS
1	C	606	ASN
1	C	633	HIS
1	C	1057	ASN
1	C	1134	HIS
1	C	1276	GLN
1	C	1277	HIS
1	C	1355	GLN
1	C	1421	GLN
1	C	1534	ASN
1	C	1617	ASN
1	C	1672	GLN
1	C	2288	HIS
1	C	2296	ASN
1	C	2334	HIS
1	C	2587	HIS
1	C	2651	ASN
1	C	2699	ASN
1	C	2815	GLN
1	C	2850	HIS
1	C	2927	GLN
1	C	2942	GLN
1	C	2973	HIS

5.3.3 RNA ⓘ

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](#)

6 ligands are modelled in this entry.

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$
2	FMN	D	4000	-	33,33,33	1.04	2 (6%)	48,50,50	1.28	8 (16%)
2	FMN	E	4000	-	33,33,33	1.04	2 (6%)	48,50,50	1.29	7 (14%)
2	FMN	A	4000	-	33,33,33	1.03	2 (6%)	48,50,50	1.28	8 (16%)
2	FMN	C	4000	-	33,33,33	1.04	2 (6%)	48,50,50	1.28	8 (16%)
2	FMN	F	4000	-	33,33,33	1.03	2 (6%)	48,50,50	1.28	8 (16%)
2	FMN	B	4000	-	33,33,33	1.04	2 (6%)	48,50,50	1.29	9 (18%)

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
2	FMN	D	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	E	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	A	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	C	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	F	4000	-	-	5/18/18/18	0/3/3/3
2	FMN	B	4000	-	-	5/18/18/18	0/3/3/3

All (12) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	B	4000	FMN	C4A-N5	3.72	1.38	1.30
2	E	4000	FMN	C4A-N5	3.70	1.38	1.30
2	F	4000	FMN	C4A-N5	3.67	1.38	1.30
2	C	4000	FMN	C4A-N5	3.67	1.38	1.30
2	D	4000	FMN	C4A-N5	3.67	1.38	1.30
2	A	4000	FMN	C4A-N5	3.67	1.38	1.30
2	C	4000	FMN	C10-N1	2.30	1.37	1.33
2	E	4000	FMN	C10-N1	2.28	1.37	1.33
2	D	4000	FMN	C10-N1	2.27	1.37	1.33
2	B	4000	FMN	C10-N1	2.26	1.37	1.33
2	F	4000	FMN	C10-N1	2.25	1.37	1.33
2	A	4000	FMN	C10-N1	2.25	1.37	1.33

All (48) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	C	4000	FMN	C4-N3-C2	-3.13	120.08	125.64
2	F	4000	FMN	C4-N3-C2	-3.12	120.09	125.64
2	E	4000	FMN	C4-N3-C2	-3.11	120.11	125.64
2	B	4000	FMN	C4-N3-C2	-3.10	120.13	125.64
2	D	4000	FMN	C4-N3-C2	-3.09	120.15	125.64
2	A	4000	FMN	C4-N3-C2	-3.09	120.15	125.64
2	E	4000	FMN	C4A-C10-N10	3.01	120.79	116.48
2	C	4000	FMN	C4A-C10-N10	3.00	120.78	116.48
2	B	4000	FMN	C4A-C10-N10	2.99	120.76	116.48
2	D	4000	FMN	C4A-C10-N10	2.98	120.74	116.48
2	A	4000	FMN	C4A-C10-N10	2.98	120.74	116.48
2	F	4000	FMN	C4A-C10-N10	2.98	120.74	116.48
2	E	4000	FMN	C10-C4A-N5	-2.67	119.36	124.81
2	B	4000	FMN	C10-C4A-N5	-2.64	119.42	124.81
2	D	4000	FMN	C10-C4A-N5	-2.64	119.43	124.81
2	A	4000	FMN	C10-C4A-N5	-2.64	119.43	124.81
2	C	4000	FMN	C10-C4A-N5	-2.62	119.46	124.81
2	F	4000	FMN	C10-C4A-N5	-2.61	119.48	124.81
2	B	4000	FMN	C4A-C4-N3	2.59	119.84	113.25
2	E	4000	FMN	C4A-C4-N3	2.58	119.82	113.25
2	C	4000	FMN	C4A-C4-N3	2.58	119.81	113.25
2	F	4000	FMN	C4A-C4-N3	2.58	119.81	113.25
2	D	4000	FMN	C4A-C4-N3	2.57	119.80	113.25
2	A	4000	FMN	C4A-C4-N3	2.57	119.80	113.25
2	D	4000	FMN	O4-C4-C4A	-2.42	120.14	126.53
2	F	4000	FMN	O4-C4-C4A	-2.41	120.17	126.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	E	4000	FMN	O4-C4-C4A	-2.41	120.18	126.53
2	B	4000	FMN	O4-C4-C4A	-2.41	120.18	126.53
2	A	4000	FMN	O4-C4-C4A	-2.40	120.21	126.53
2	C	4000	FMN	O4-C4-C4A	-2.39	120.22	126.53
2	E	4000	FMN	C4-C4A-N5	2.36	121.47	118.21
2	B	4000	FMN	C4-C4A-N5	2.35	121.45	118.21
2	D	4000	FMN	C4-C4A-N5	2.34	121.45	118.21
2	A	4000	FMN	C4-C4A-N5	2.34	121.45	118.21
2	F	4000	FMN	C4-C4A-N5	2.31	121.39	118.21
2	C	4000	FMN	C4-C4A-N5	2.30	121.39	118.21
2	D	4000	FMN	C9A-C5A-N5	-2.28	120.04	122.45
2	C	4000	FMN	C9A-C5A-N5	-2.27	120.04	122.45
2	F	4000	FMN	C9A-C5A-N5	-2.27	120.05	122.45
2	A	4000	FMN	C9A-C5A-N5	-2.26	120.06	122.45
2	B	4000	FMN	C9A-C5A-N5	-2.23	120.08	122.45
2	E	4000	FMN	C9A-C5A-N5	-2.22	120.10	122.45
2	B	4000	FMN	C5A-C9A-N10	2.04	119.81	117.97
2	C	4000	FMN	C5A-C9A-N10	2.02	119.80	117.97
2	D	4000	FMN	C5A-C9A-N10	2.02	119.80	117.97
2	A	4000	FMN	C5A-C9A-N10	2.02	119.79	117.97
2	B	4000	FMN	O2-C2-N1	-2.01	118.46	121.80
2	F	4000	FMN	C5A-C9A-N10	2.01	119.78	117.97

There are no chirality outliers.

All (30) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
2	D	4000	FMN	O3'-C3'-C4'-C5'
2	E	4000	FMN	O3'-C3'-C4'-C5'
2	F	4000	FMN	O3'-C3'-C4'-C5'
2	A	4000	FMN	O3'-C3'-C4'-C5'
2	B	4000	FMN	O3'-C3'-C4'-C5'
2	C	4000	FMN	O3'-C3'-C4'-C5'
2	D	4000	FMN	C2'-C3'-C4'-C5'
2	E	4000	FMN	C2'-C3'-C4'-C5'
2	F	4000	FMN	C2'-C3'-C4'-C5'
2	A	4000	FMN	C2'-C3'-C4'-C5'
2	B	4000	FMN	C2'-C3'-C4'-C5'
2	C	4000	FMN	C2'-C3'-C4'-C5'
2	D	4000	FMN	C2'-C3'-C4'-O4'
2	E	4000	FMN	C2'-C3'-C4'-O4'
2	F	4000	FMN	C2'-C3'-C4'-O4'

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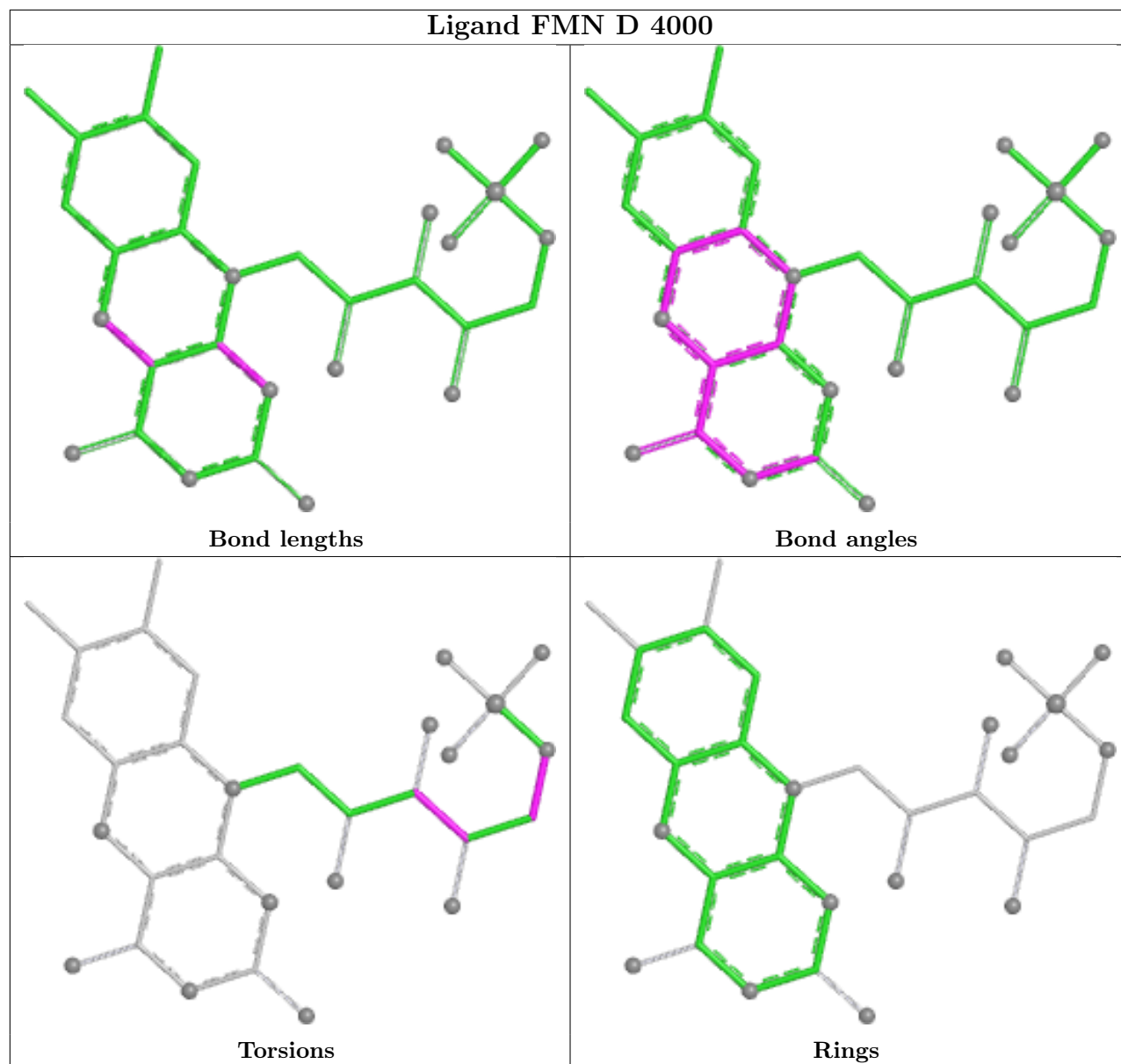
Mol	Chain	Res	Type	Atoms
2	A	4000	FMN	C2'-C3'-C4'-O4'
2	B	4000	FMN	C2'-C3'-C4'-O4'
2	C	4000	FMN	C2'-C3'-C4'-O4'
2	D	4000	FMN	O3'-C3'-C4'-O4'
2	E	4000	FMN	O3'-C3'-C4'-O4'
2	F	4000	FMN	O3'-C3'-C4'-O4'
2	A	4000	FMN	O3'-C3'-C4'-O4'
2	B	4000	FMN	O3'-C3'-C4'-O4'
2	C	4000	FMN	O3'-C3'-C4'-O4'
2	D	4000	FMN	C4'-C5'-O5'-P
2	E	4000	FMN	C4'-C5'-O5'-P
2	F	4000	FMN	C4'-C5'-O5'-P
2	A	4000	FMN	C4'-C5'-O5'-P
2	B	4000	FMN	C4'-C5'-O5'-P
2	C	4000	FMN	C4'-C5'-O5'-P

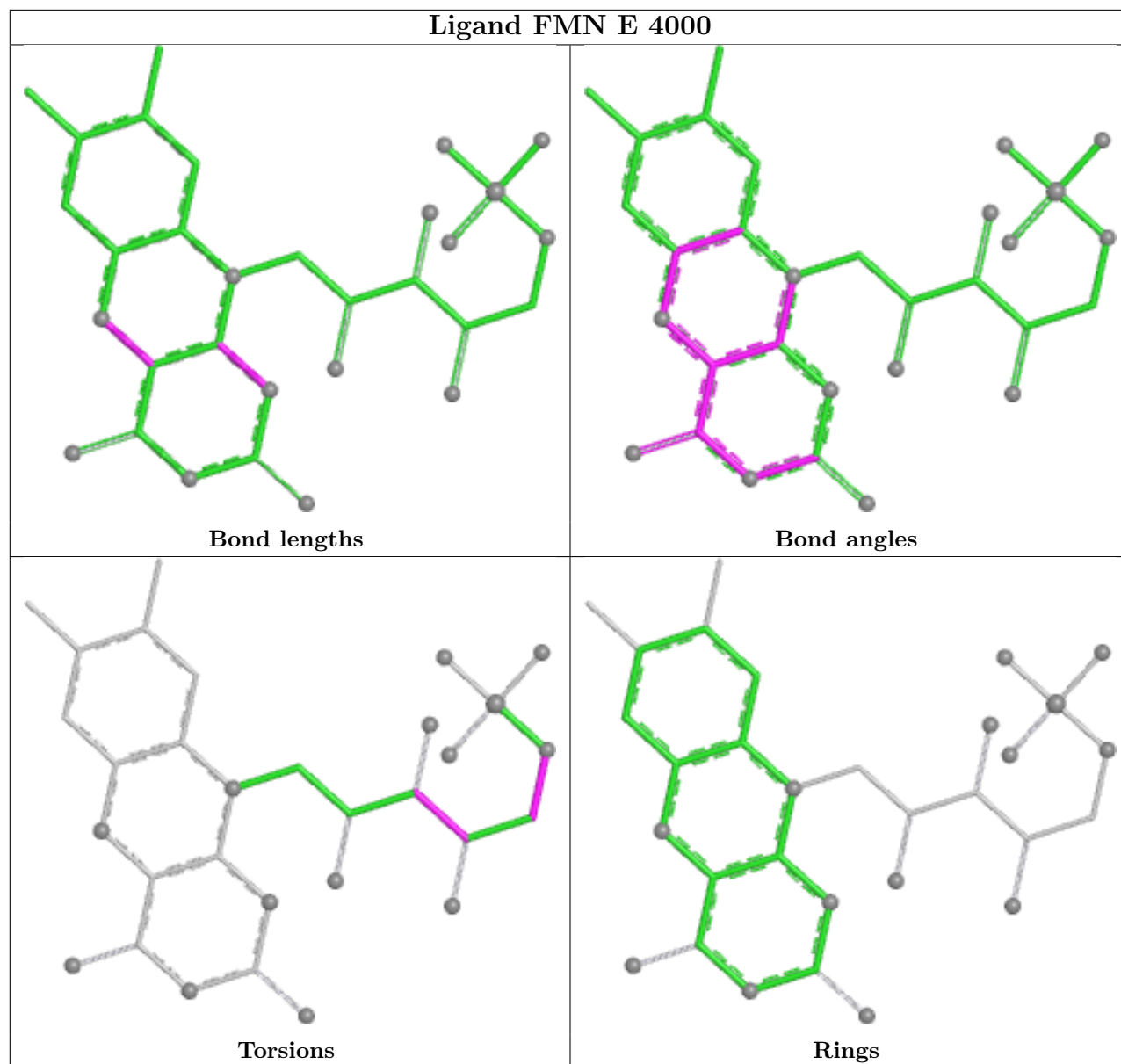
There are no ring outliers.

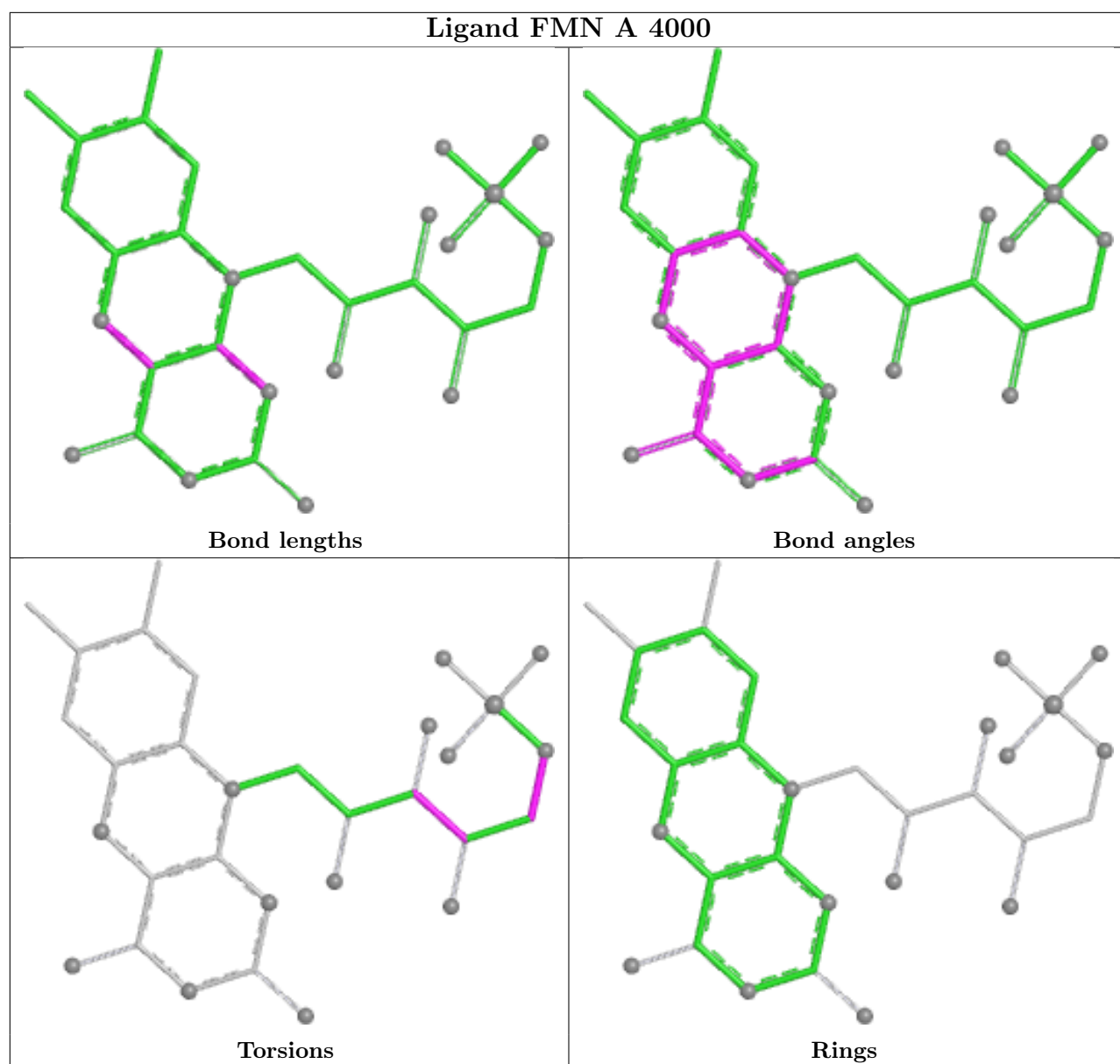
3 monomers are involved in 13 short contacts:

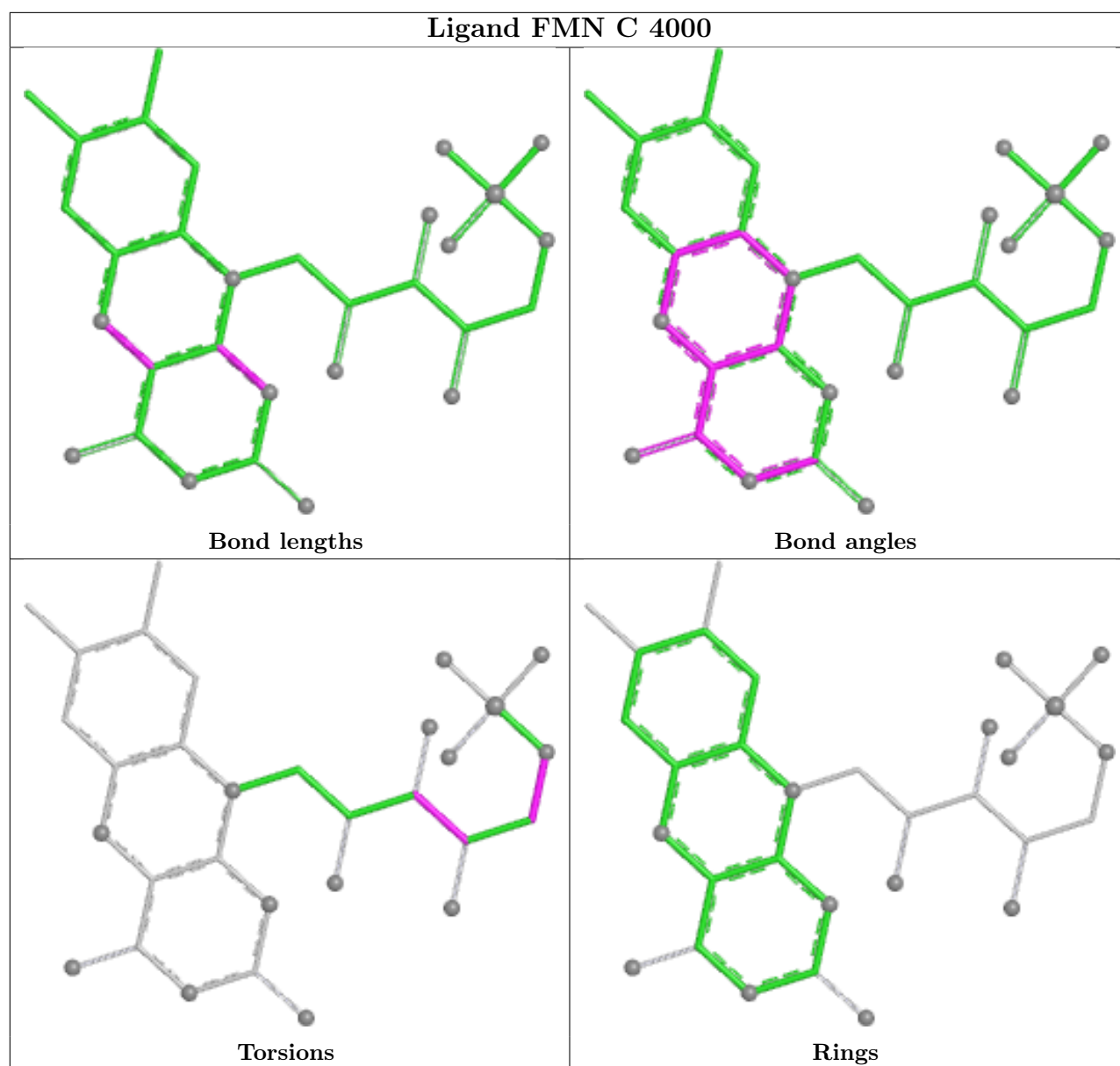
Mol	Chain	Res	Type	Clashes	Symm-Clashes
2	A	4000	FMN	4	0
2	C	4000	FMN	4	0
2	B	4000	FMN	5	0

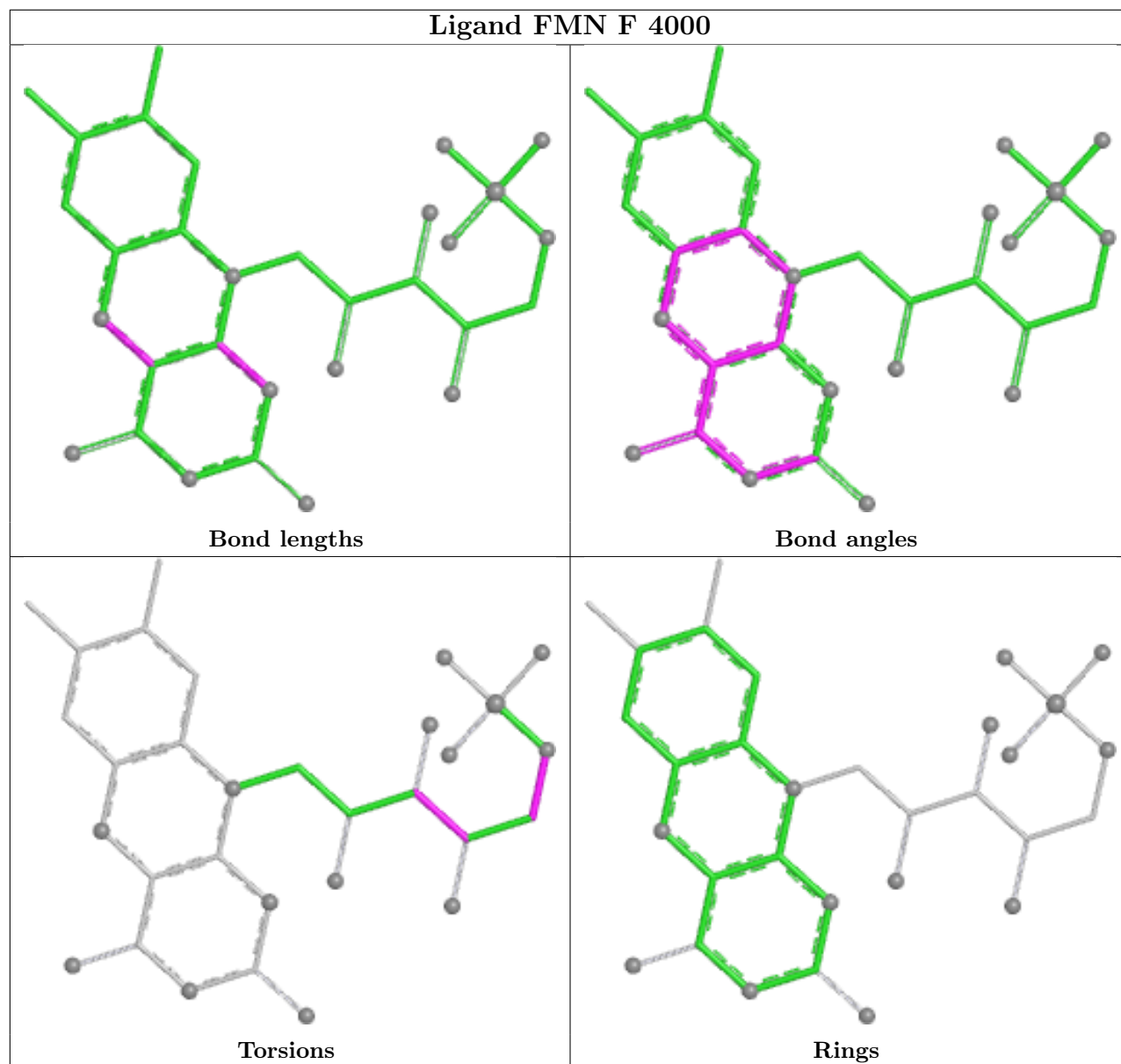
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

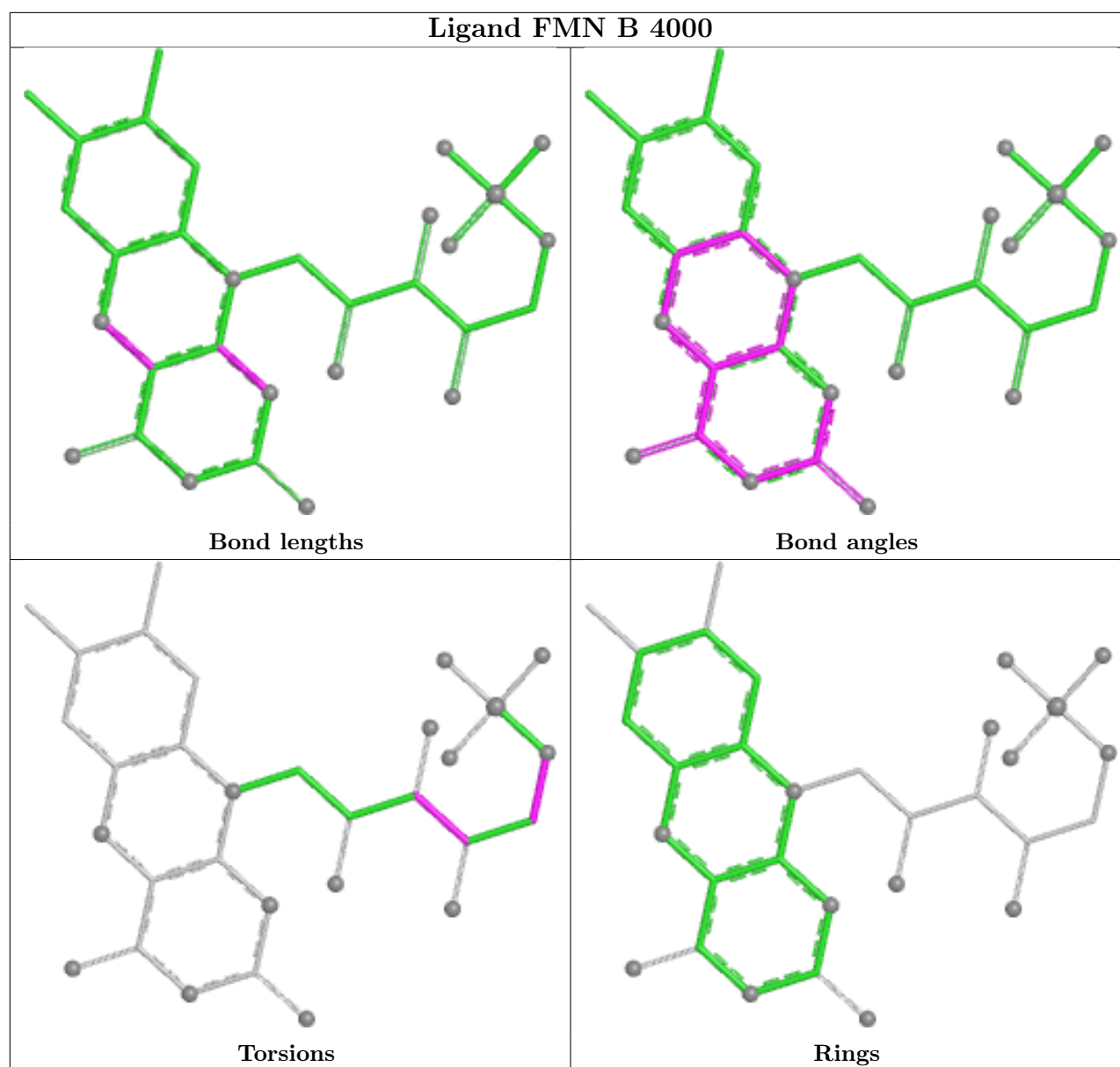












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

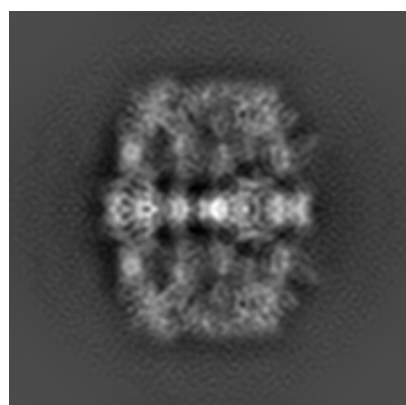
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-2238. These allow visual inspection of the internal detail of the map and identification of artifacts.

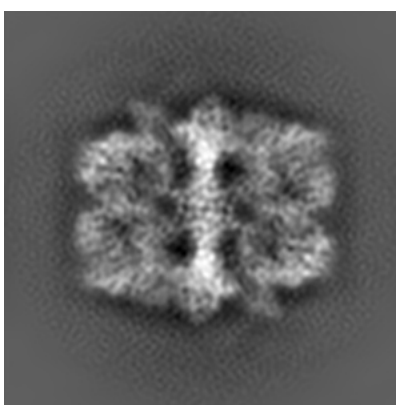
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

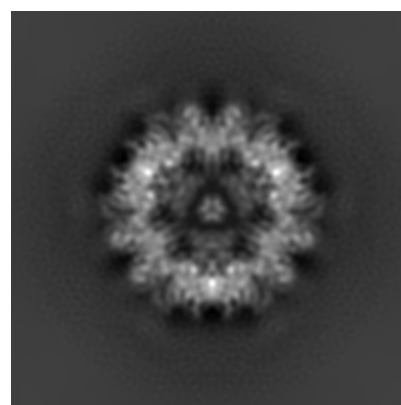
6.1.1 Primary map



X



Y

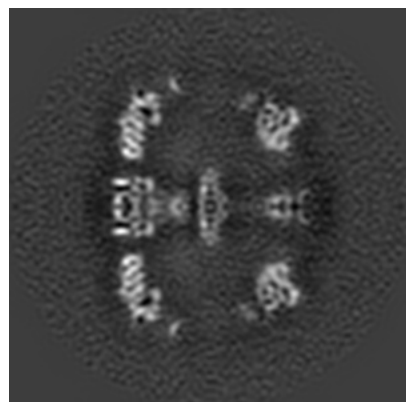


Z

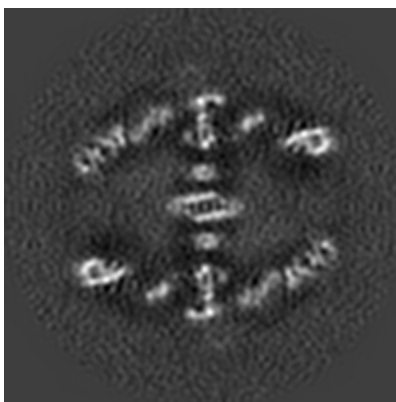
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

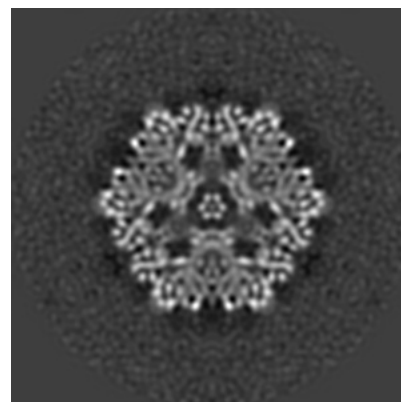
6.2.1 Primary map



X Index: 80



Y Index: 80

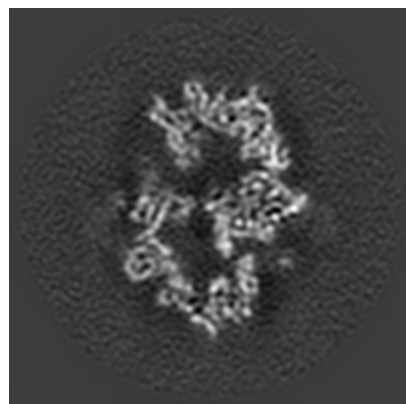


Z Index: 80

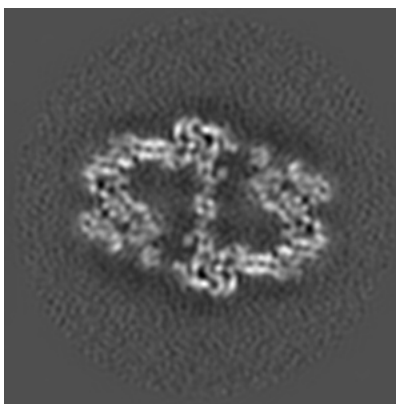
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

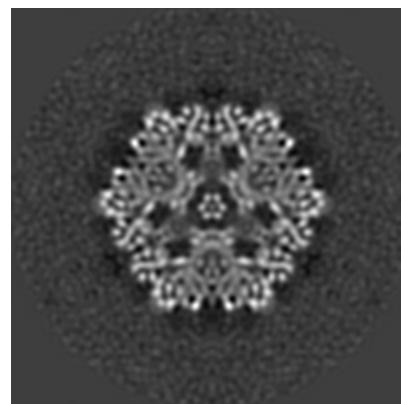
6.3.1 Primary map



X Index: 55



Y Index: 105

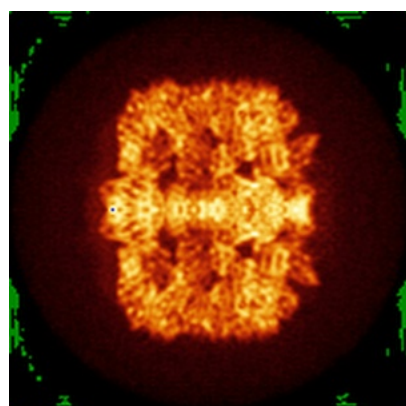


Z Index: 80

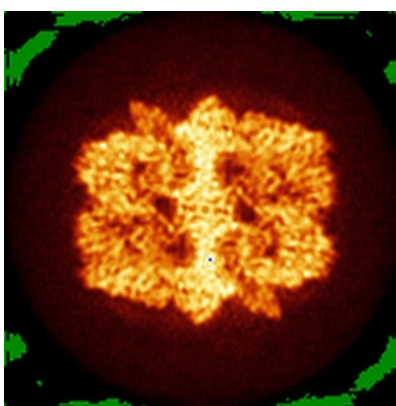
The images above show the largest variance slices of the map in three orthogonal directions.

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

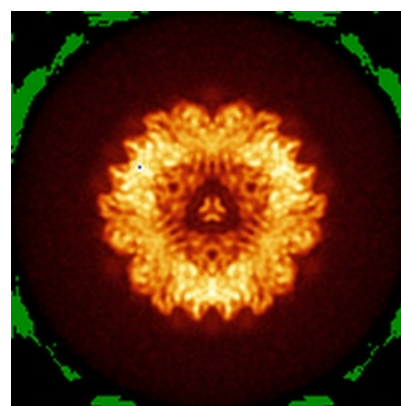
6.4.1 Primary map



X



Y

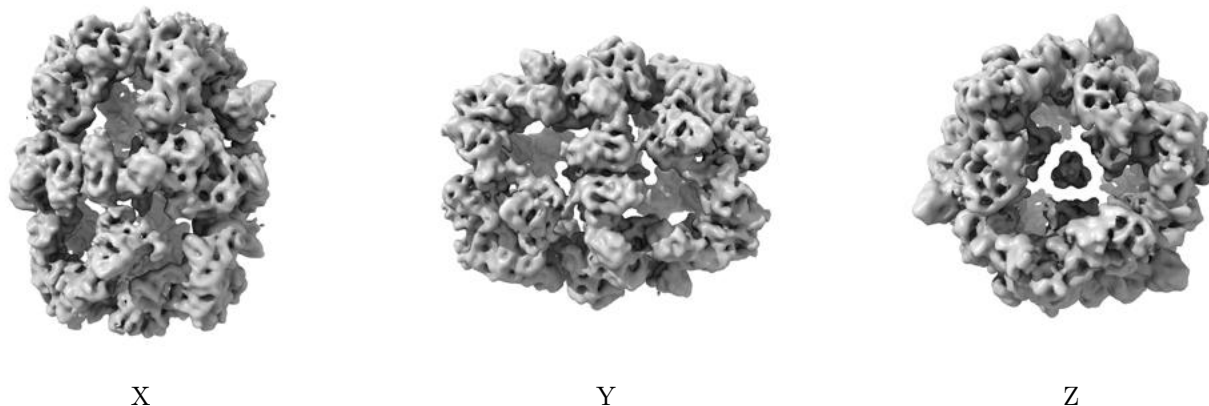


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 2.7. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

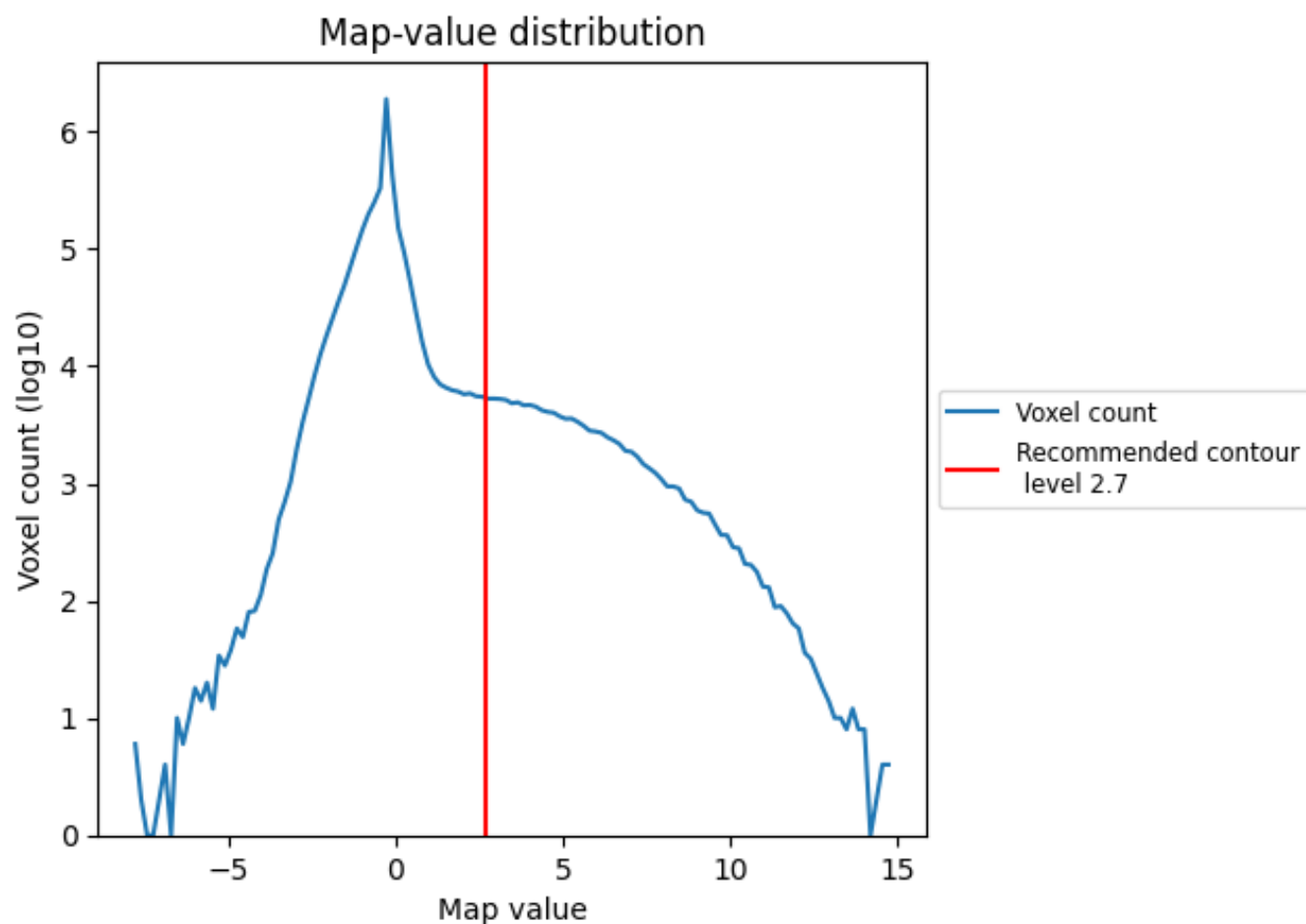
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

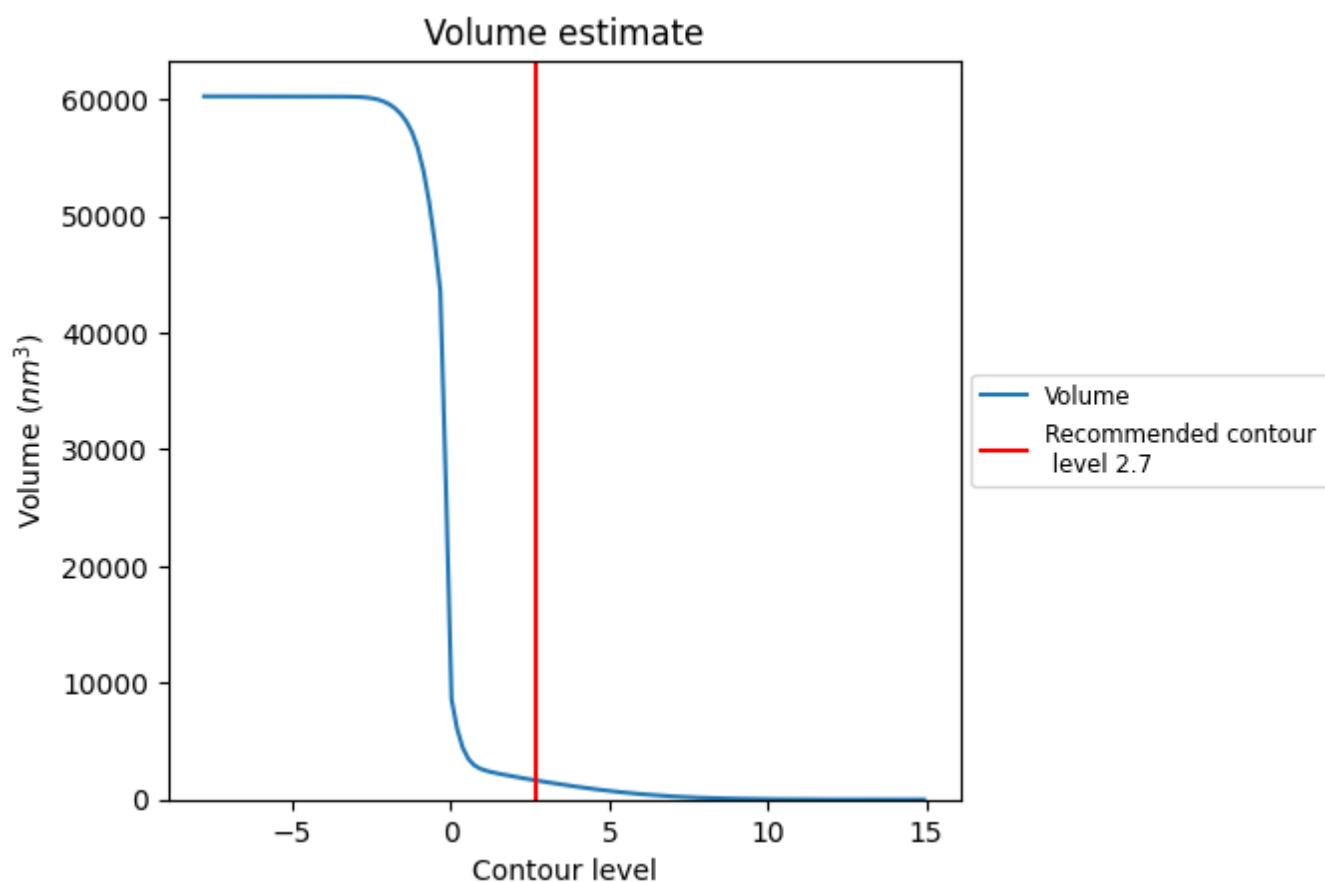
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

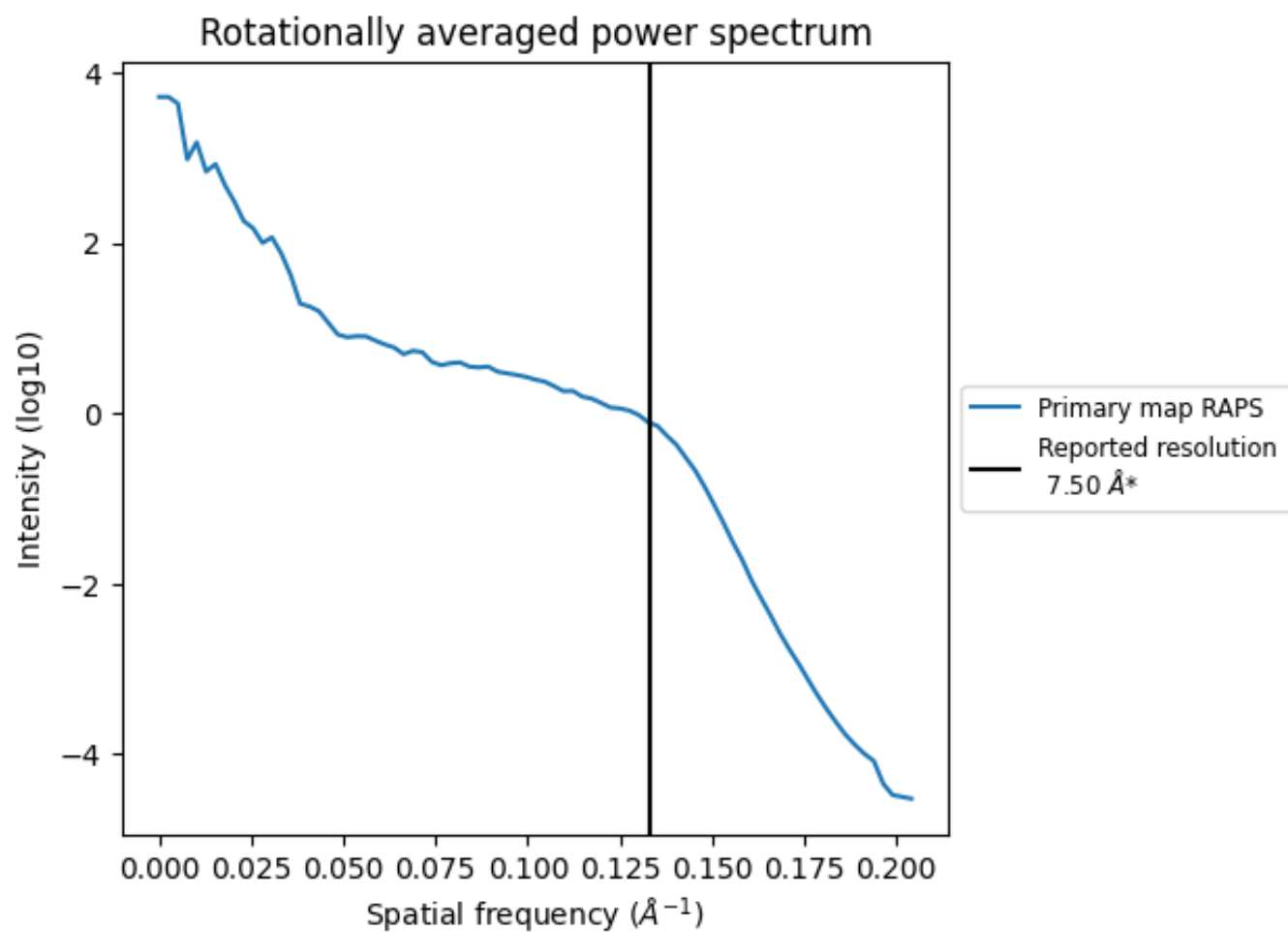
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 1634 nm³; this corresponds to an approximate mass of 1476 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 0.133 Å⁻¹

8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

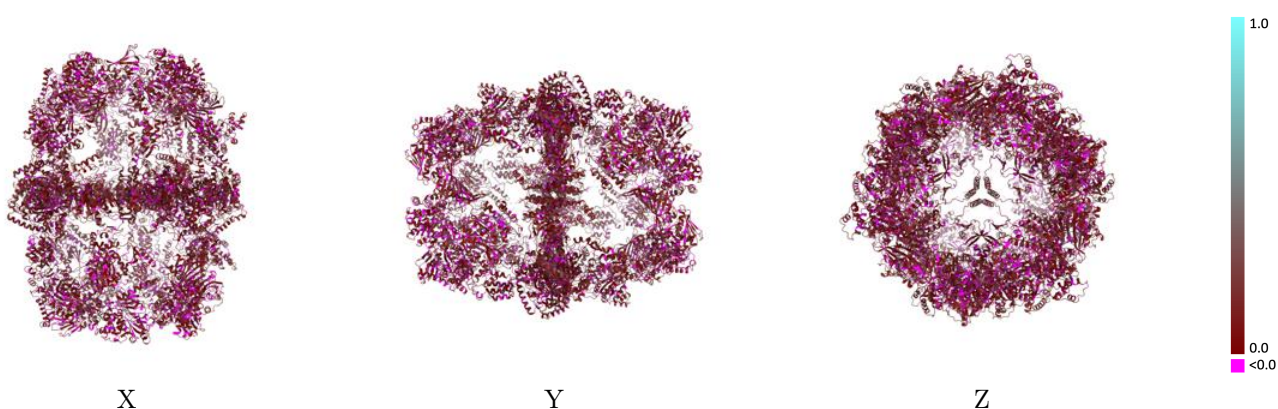
9 Map-model fit [i](#)

This section contains information regarding the fit between EMDB map EMD-2238 and PDB model 4V8L. Per-residue inclusion information can be found in section 3 on page 32.

9.1 Map-model overlay [i](#)

This section was not generated.

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

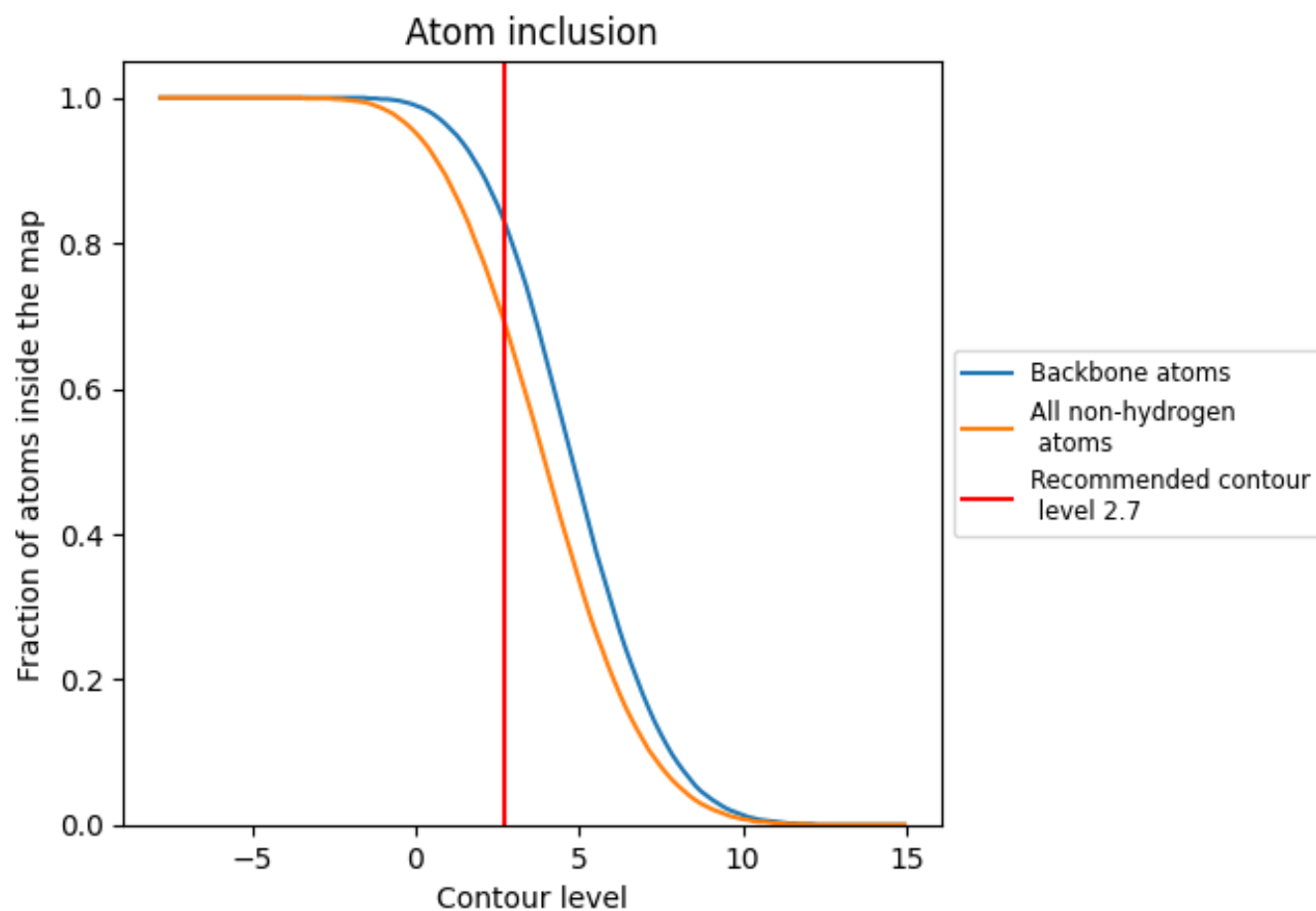


The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

This section was not generated.

9.4 Atom inclusion [i](#)



At the recommended contour level, 83% of all backbone atoms, 69% 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 (2.7) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6930	0.1100
A	0.6750	0.1000
B	0.6950	0.1130
C	0.6890	0.1090
D	0.6980	0.1120
E	0.6910	0.1080
F	0.7120	0.1200

1.0

0.0

<0.0