WORLDWIDE PDB PROTEIN DATA BANK

Full wwPDB EM Validation Report (i)

Oct 15, 2024 – 07:41 AM JST

|		
PDB ID	:	3JAC
EMDB ID	:	EMD-6343
Title	:	Cryo-EM study of a channel
Authors	:	Ge, J.; Li, W.; Zhao, Q.; Li, N.; Xiao, B.; Gao, N.; Yang, M.
Deposited on	:	2015-06-05
Resolution	:	4.80 Å(reported)
Based on initial model	:	4RAX

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 4.80 Å.

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

Metric	Percentile Ranks	Value
Clashscore		57
Ramachandran outliers		4.8%
Sidechain outliers		3.5%

■ Percentile relative to all structures
▯ Percentile relative to all EM structures
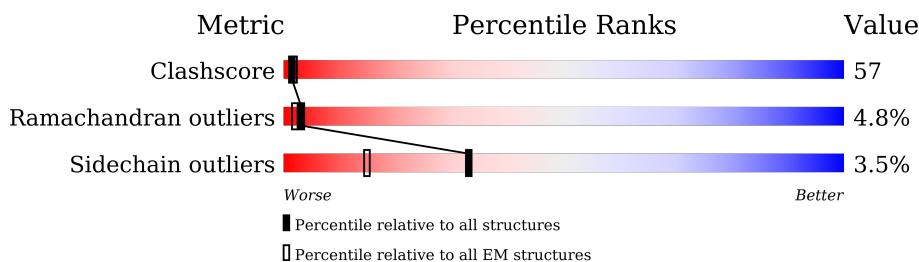
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=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	2553	14% / 23% 9% • 64%
1	B	2553	13% / 22% 10% • 64%
1	C	2553	13% / 23% 9% • 64%
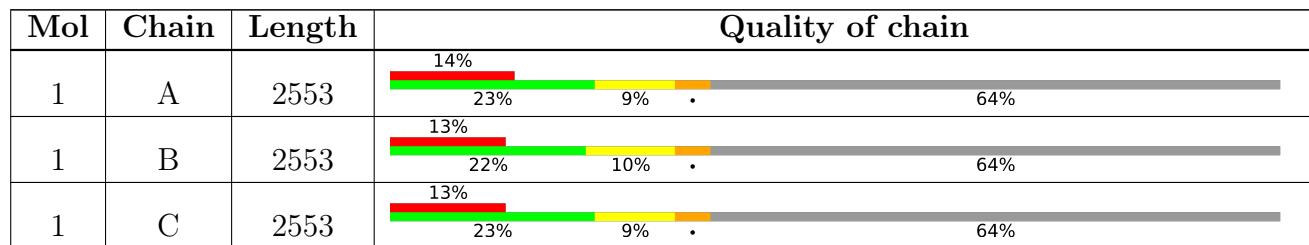
2 Entity composition ⓘ

There is only 1 type of molecule in this entry. The entry contains 15741 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 Piezo-type mechanosensitive ion channel component 1.

| Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	918	Total 5247	C 3208	N 995	O 1038	S 6	0	0
1	B	918	Total 5247	C 3208	N 995	O 1038	S 6	0	0
1	C	918	Total 5247	C 3208	N 995	O 1038	S 6	0	0

There are 18 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	2548	LEU	-	expression tag	UNP E2JF22
A	2549	GLU	-	expression tag	UNP E2JF22
A	2550	VAL	-	expression tag	UNP E2JF22
A	2551	LEU	-	expression tag	UNP E2JF22
A	2552	PHE	-	expression tag	UNP E2JF22
A	2553	GLN	-	expression tag	UNP E2JF22
B	2548	LEU	-	expression tag	UNP E2JF22
B	2549	GLU	-	expression tag	UNP E2JF22
B	2550	VAL	-	expression tag	UNP E2JF22
B	2551	LEU	-	expression tag	UNP E2JF22
B	2552	PHE	-	expression tag	UNP E2JF22
B	2553	GLN	-	expression tag	UNP E2JF22
C	2548	LEU	-	expression tag	UNP E2JF22
C	2549	GLU	-	expression tag	UNP E2JF22
C	2550	VAL	-	expression tag	UNP E2JF22
C	2551	LEU	-	expression tag	UNP E2JF22
C	2552	PHE	-	expression tag	UNP E2JF22
C	2553	GLN	-	expression tag	UNP E2JF22

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.
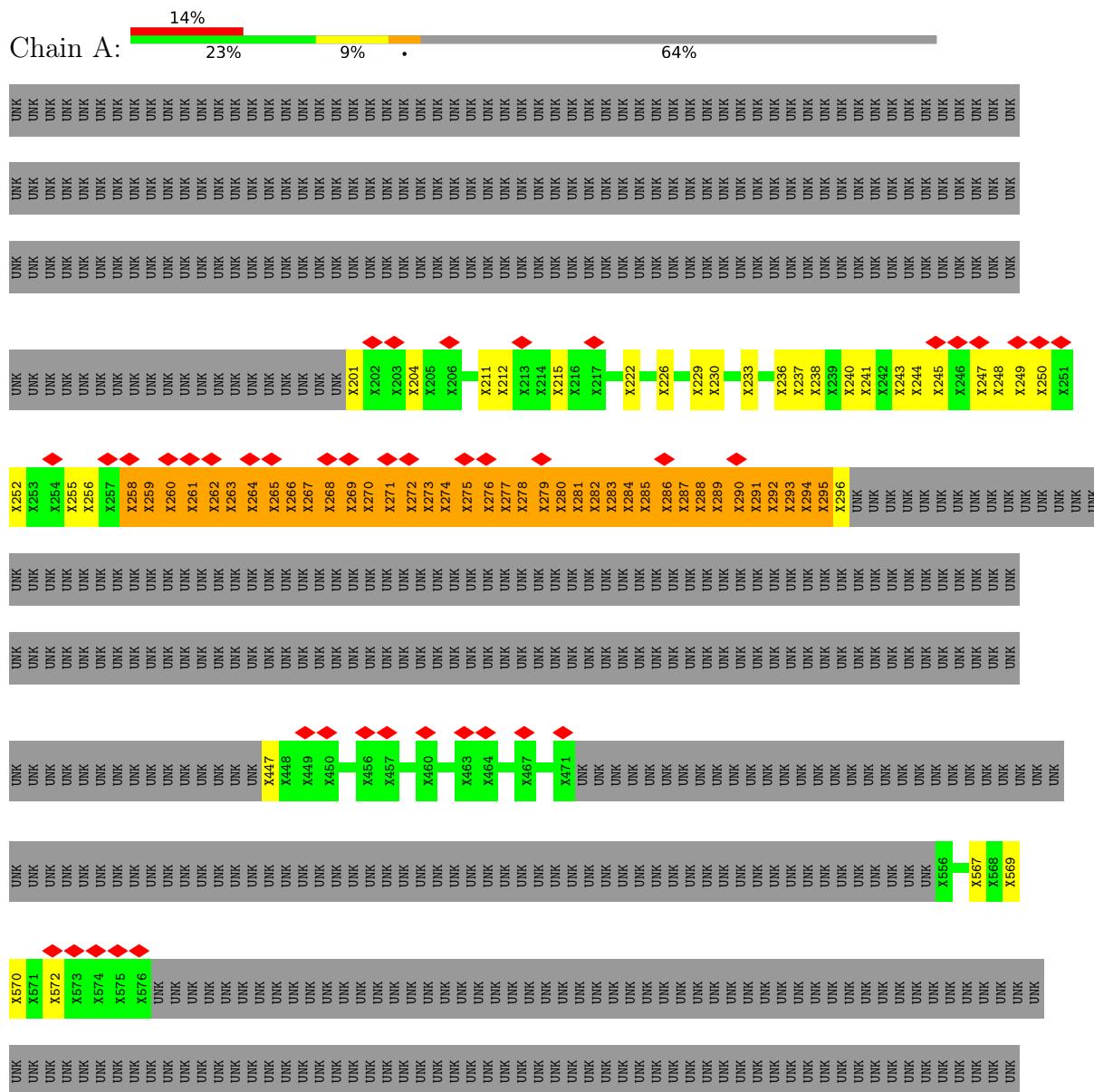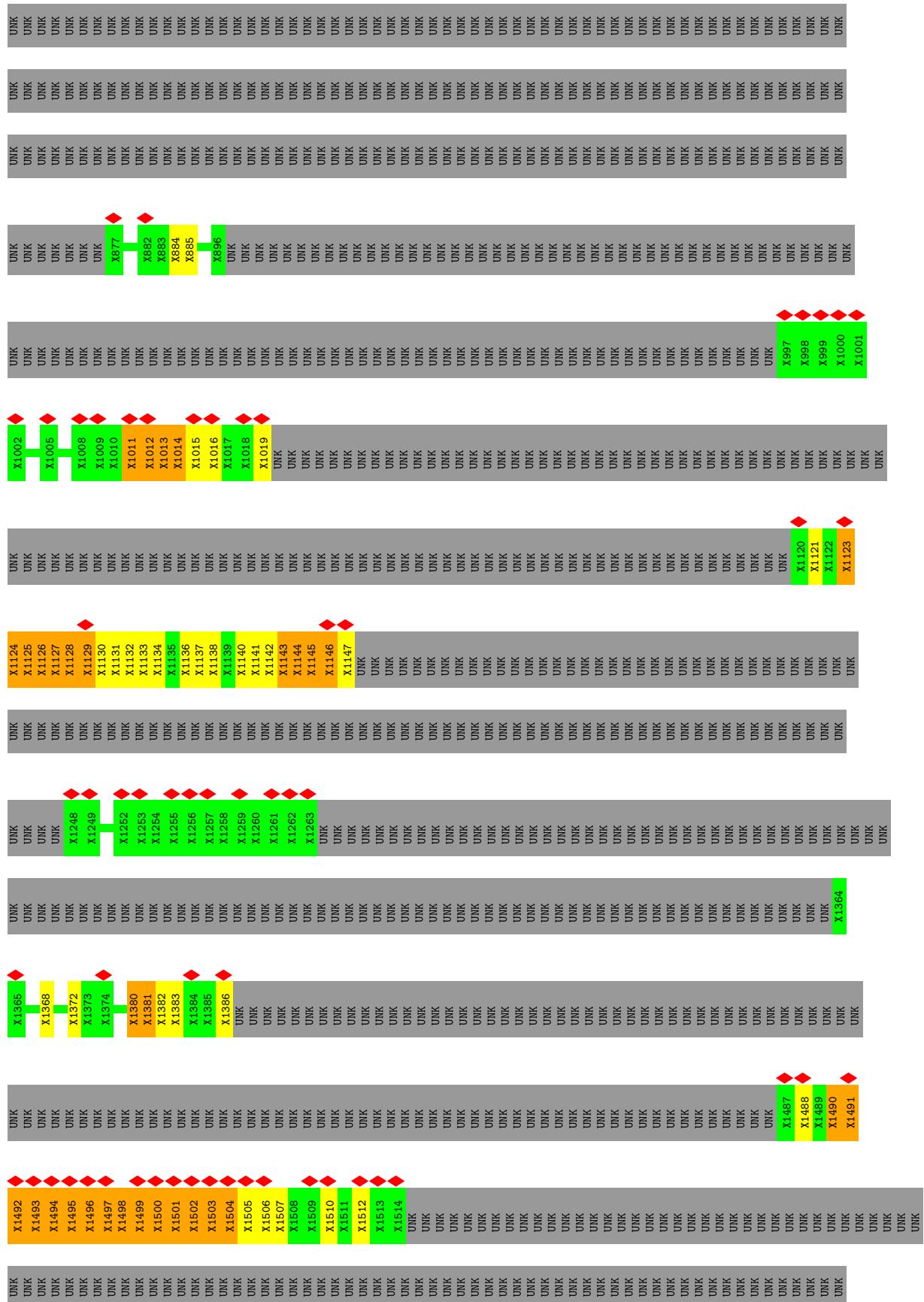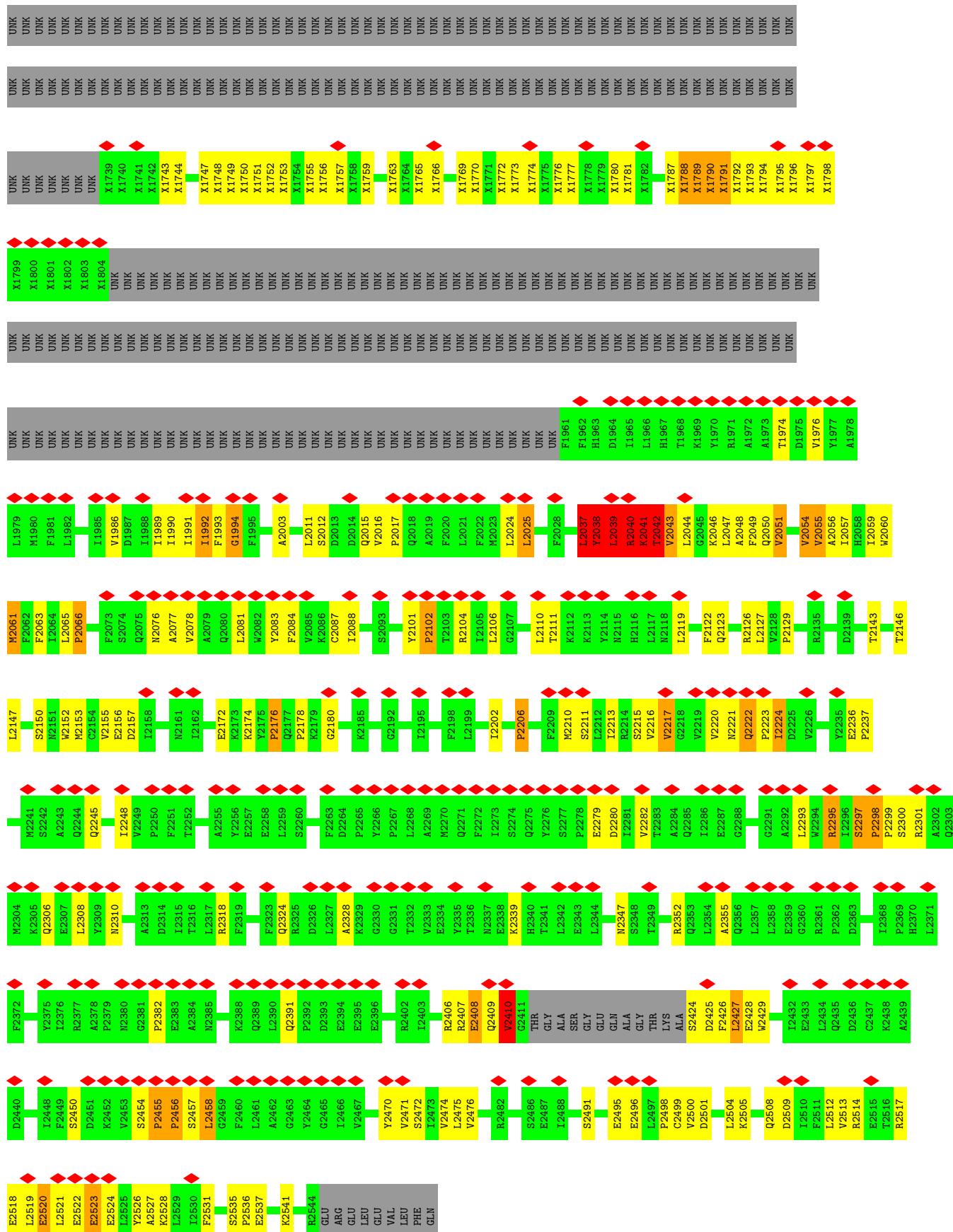
• Molecule 1: Piezo-type mechanosensitive ion channel component 1

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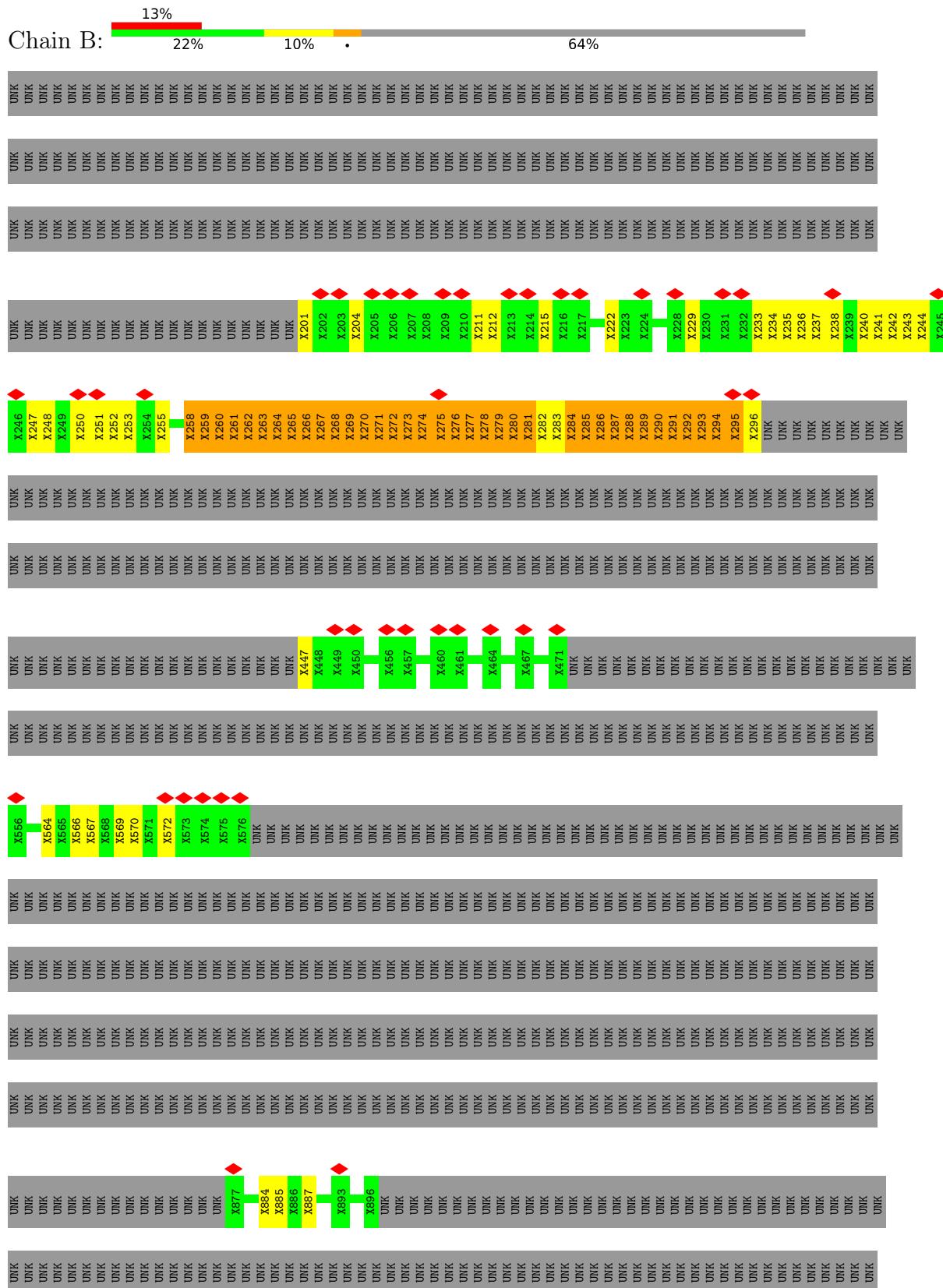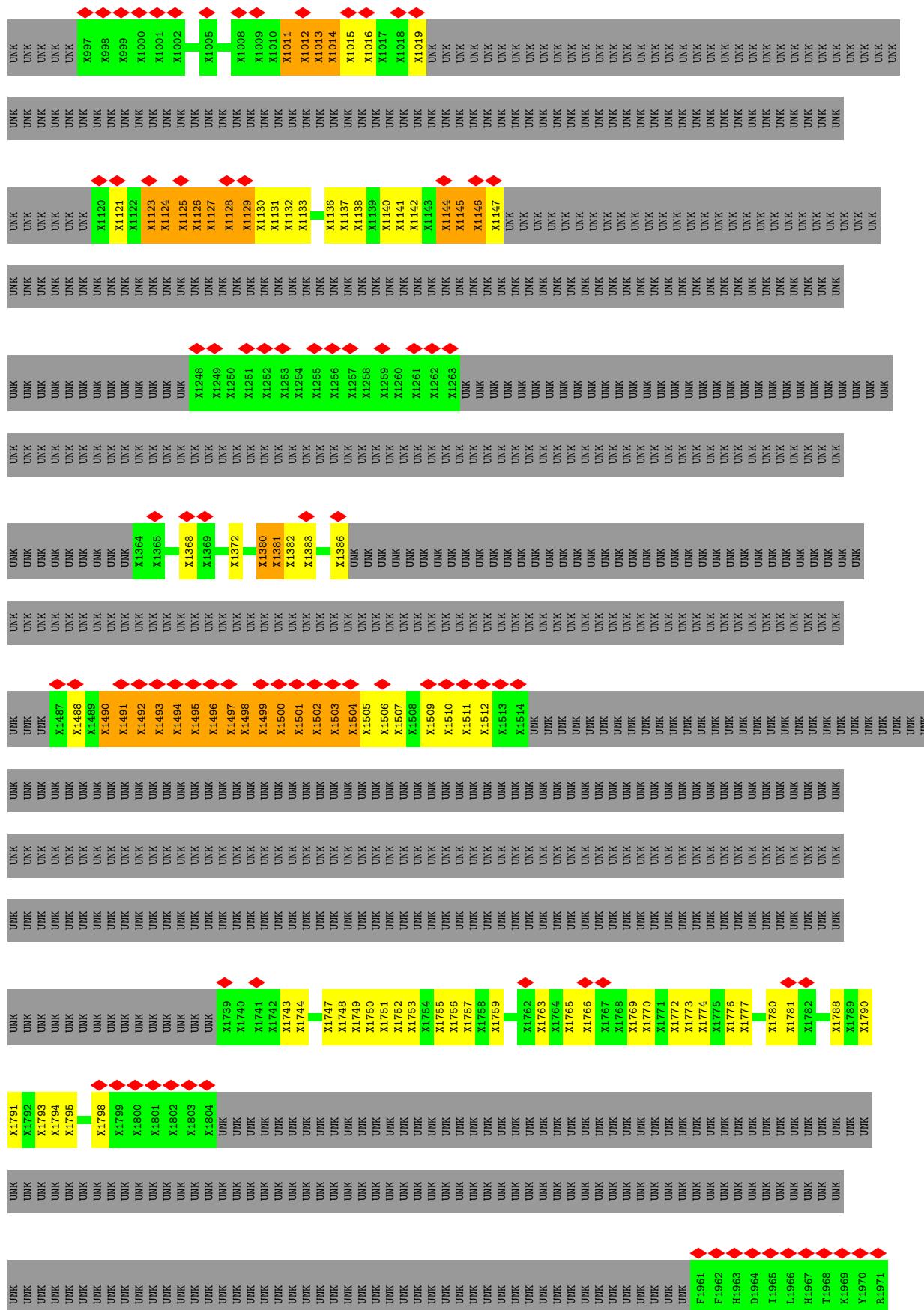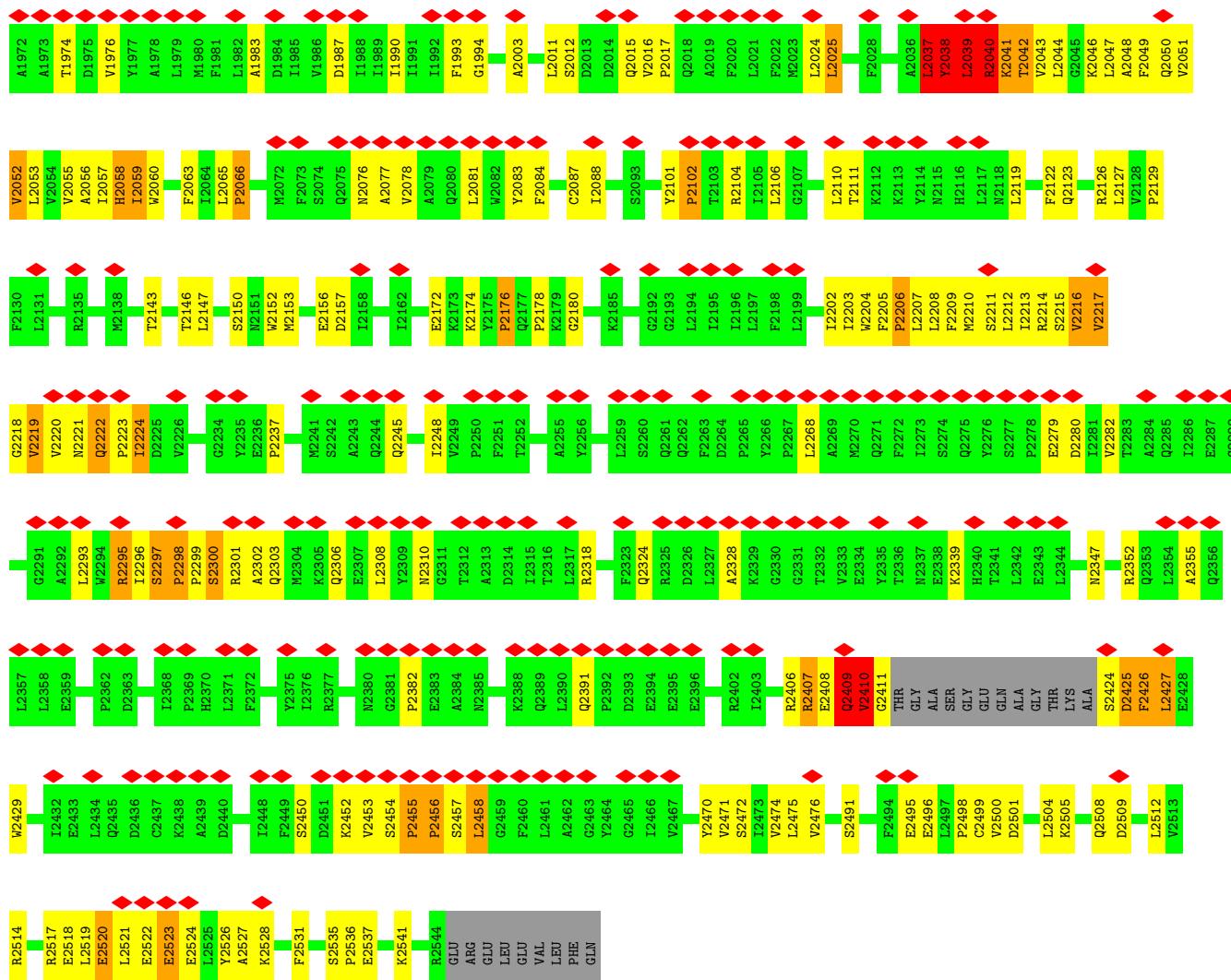
Chain B:

• Molecule 1: Piezo-type mechanosensitive ion channel component 1

Chain C:
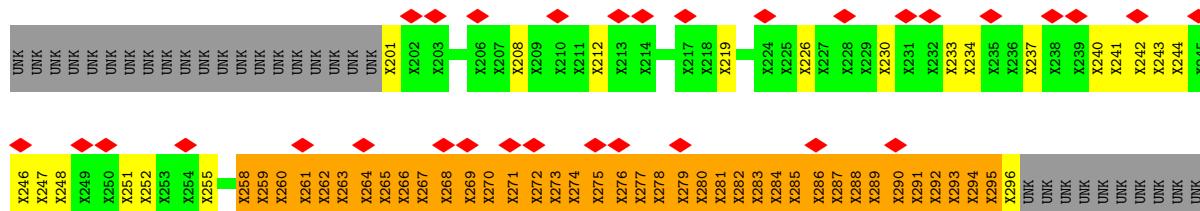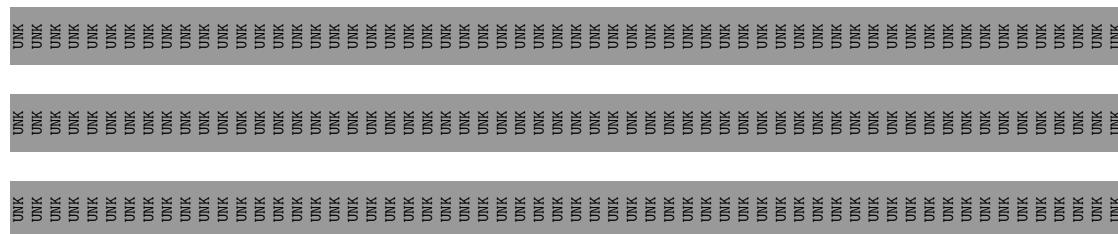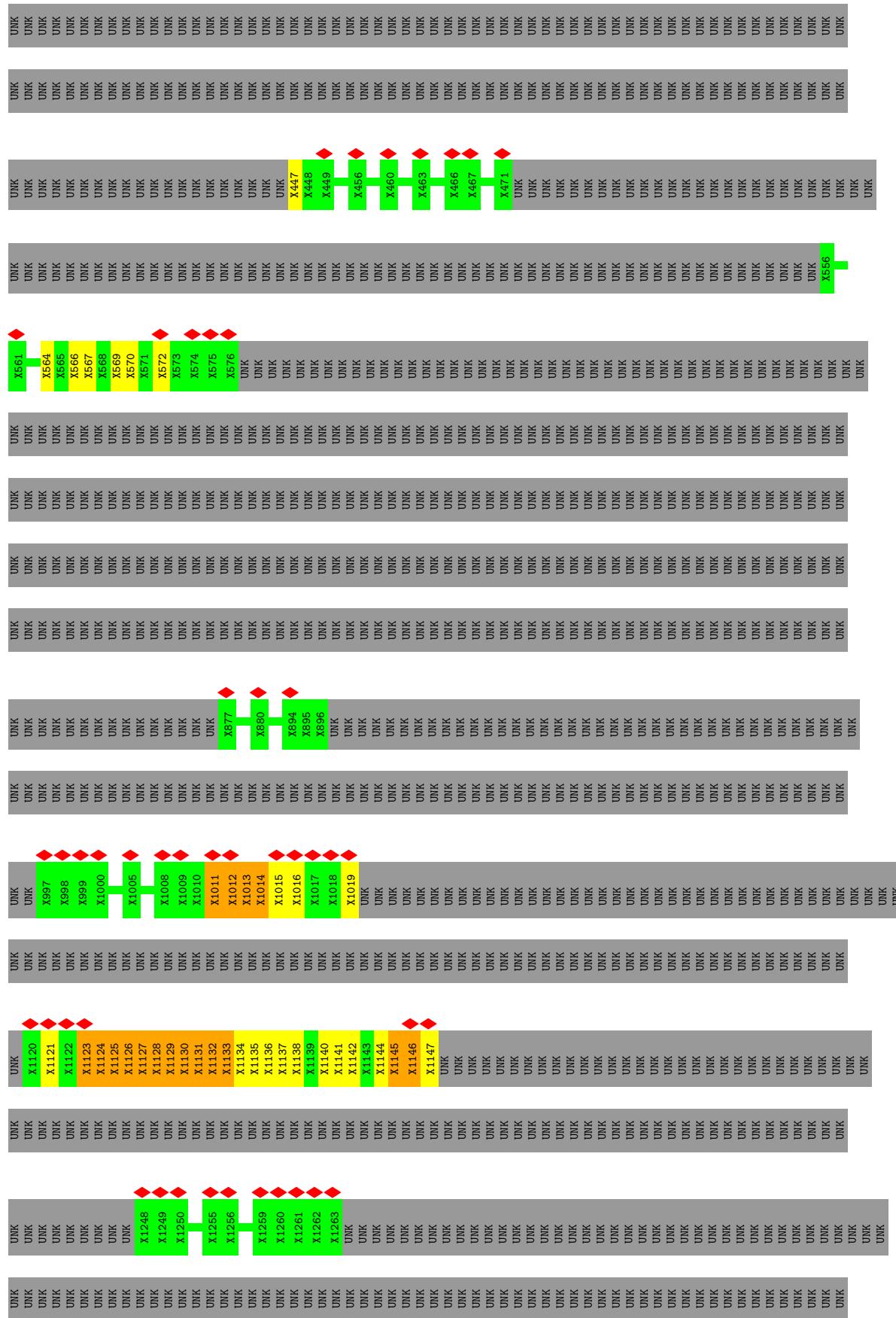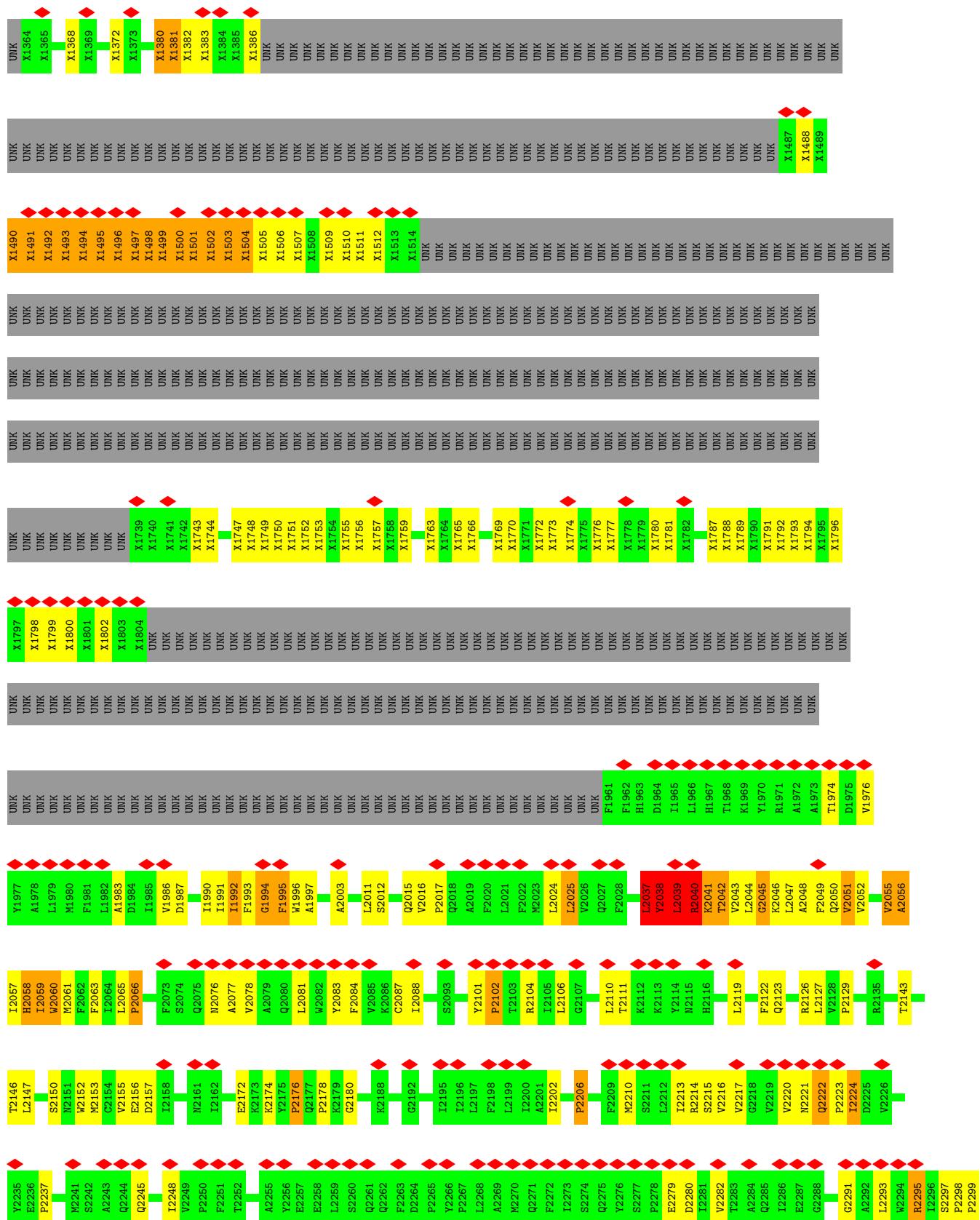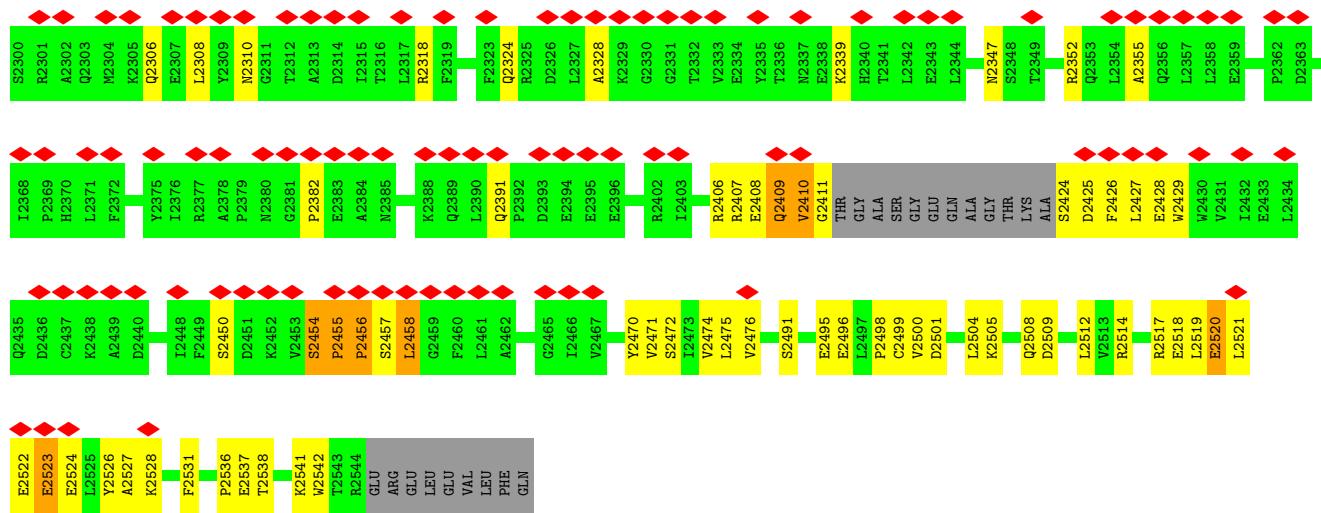
4 Experimental information ⓘ

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	30021	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	CTFFIND	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose $(e^-/\text{Å}^2)$	16	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	22500	Depositor
Image detector	GATAN K2 (4k x 4k)	Depositor
Maximum map value	0.060	Depositor
Minimum map value	-0.026	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.005	Depositor
Recommended contour level	0.0273	Depositor
Map size (Å)	316.80002, 316.80002, 316.80002	wwPDB
Map dimensions	240, 240, 240	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.32, 1.32, 1.32	Depositor

5 Model quality ⓘ

5.1 Standard geometry ⓘ

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	0.42	2/3562 (0.1%)	0.67	19/4908 (0.4%)
1	B	0.43	2/3562 (0.1%)	0.66	19/4908 (0.4%)
1	C	0.40	1/3562 (0.0%)	0.61	16/4908 (0.3%)
All	All	0.41	5/10686 (0.0%)	0.65	54/14724 (0.4%)

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	80
1	B	0	72
1	C	0	76
All	All	0	228

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	2298	PRO	N-CD	5.23	1.55	1.47
1	B	2410	VAL	CA-CB	5.17	1.65	1.54
1	C	2455	PRO	N-CD	5.02	1.54	1.47
1	B	2455	PRO	N-CD	5.02	1.54	1.47
1	A	2455	PRO	N-CD	5.01	1.54	1.47

All (54) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	B	2410	VAL	CB-CA-C	8.86	128.24	111.40
1	B	2410	VAL	CG1-CB-CG2	-8.19	97.79	110.90
1	B	2037	LEU	O-C-N	-8.16	109.65	122.70
1	C	2037	LEU	O-C-N	-8.15	109.65	122.70
1	A	2037	LEU	O-C-N	-8.14	109.67	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	2038	TYR	O-C-N	-8.12	109.71	122.70
1	A	2038	TYR	O-C-N	-8.11	109.73	122.70
1	A	2041	LYS	O-C-N	-8.10	109.73	122.70
1	A	2042	THR	O-C-N	-8.10	109.75	122.70
1	A	2039	LEU	O-C-N	-8.09	109.75	122.70
1	B	2038	TYR	O-C-N	-8.08	109.77	122.70
1	B	2039	LEU	O-C-N	-8.08	109.78	122.70
1	B	2040	ARG	O-C-N	-8.06	109.80	122.70
1	C	2039	LEU	O-C-N	-8.06	109.80	122.70
1	A	2040	ARG	O-C-N	-8.05	109.81	122.70
1	C	2040	ARG	O-C-N	-8.05	109.82	122.70
1	A	2298	PRO	C-N-CD	6.16	141.34	128.40
1	A	2498	PRO	N-CA-CB	6.04	110.55	103.30
1	B	2498	PRO	N-CA-CB	6.03	110.54	103.30
1	C	2498	PRO	N-CA-CB	6.00	110.50	103.30
1	C	2536	PRO	N-CA-CB	5.99	110.49	103.30
1	B	2536	PRO	N-CA-CB	5.97	110.47	103.30
1	A	2536	PRO	N-CA-CB	5.97	110.46	103.30
1	A	2102	PRO	N-CA-CB	5.93	110.41	103.30
1	A	2206	PRO	N-CA-CB	5.91	110.39	103.30
1	C	2178	PRO	N-CA-CB	5.91	110.39	103.30
1	B	2178	PRO	N-CA-CB	5.90	110.38	103.30
1	B	2102	PRO	N-CA-CB	5.90	110.38	103.30
1	B	2222	GLN	C-N-CD	5.90	140.79	128.40
1	A	2178	PRO	N-CA-CB	5.88	110.36	103.30
1	A	2222	GLN	C-N-CD	5.87	140.74	128.40
1	C	2102	PRO	N-CA-CB	5.87	110.34	103.30
1	C	2206	PRO	N-CA-CB	5.86	110.34	103.30
1	C	2222	GLN	C-N-CD	5.86	140.71	128.40
1	B	2129	PRO	N-CA-CB	5.86	110.33	103.30
1	C	2129	PRO	N-CA-CB	5.84	110.31	103.30
1	A	2456	PRO	N-CA-CB	5.83	110.30	103.30
1	A	2066	PRO	N-CA-CB	5.83	110.29	103.30
1	B	2456	PRO	N-CA-CB	5.83	110.29	103.30
1	C	2456	PRO	N-CA-CB	5.82	110.28	103.30
1	A	2129	PRO	N-CA-CB	5.82	110.28	103.30
1	C	2017	PRO	N-CA-CB	5.81	110.27	103.30
1	B	2017	PRO	N-CA-CB	5.79	110.25	103.30
1	A	2017	PRO	N-CA-CB	5.79	110.25	103.30
1	B	2066	PRO	N-CA-CB	5.79	110.25	103.30
1	C	2066	PRO	N-CA-CB	5.79	110.25	103.30
1	C	2454	SER	C-N-CD	5.79	140.56	128.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	2176	PRO	N-CA-CB	5.74	110.19	103.30
1	A	2176	PRO	N-CA-CB	5.72	110.16	103.30
1	B	2176	PRO	N-CA-CB	5.72	110.16	103.30
1	A	2297	SER	C-N-CD	5.65	140.26	128.40
1	B	2410	VAL	CA-CB-CG2	5.42	119.03	110.90
1	B	2409	GLN	N-CA-CB	-5.34	100.98	110.60
1	B	2298	PRO	C-N-CD	5.10	139.12	128.40

There are no chirality outliers.

All (228) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1011	UNK	Mainchain
1	A	1012	UNK	Mainchain
1	A	1013	UNK	Mainchain
1	A	1014	UNK	Mainchain
1	A	1123	UNK	Mainchain
1	A	1124	UNK	Mainchain
1	A	1125	UNK	Mainchain
1	A	1126	UNK	Mainchain
1	A	1127	UNK	Mainchain
1	A	1128	UNK	Mainchain
1	A	1129	UNK	Mainchain
1	A	1143	UNK	Mainchain
1	A	1144	UNK	Mainchain
1	A	1145	UNK	Mainchain
1	A	1146	UNK	Mainchain
1	A	1380	UNK	Mainchain
1	A	1381	UNK	Mainchain
1	A	1490	UNK	Mainchain
1	A	1491	UNK	Mainchain
1	A	1492	UNK	Mainchain
1	A	1493	UNK	Mainchain
1	A	1494	UNK	Mainchain
1	A	1495	UNK	Mainchain
1	A	1496	UNK	Mainchain
1	A	1497	UNK	Mainchain
1	A	1498	UNK	Mainchain
1	A	1499	UNK	Mainchain
1	A	1500	UNK	Mainchain
1	A	1501	UNK	Mainchain
1	A	1502	UNK	Mainchain

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Mol	Chain	Res	Type	Group
1	A	1503	UNK	Mainchain
1	A	1504	UNK	Mainchain
1	A	1788	UNK	Mainchain
1	A	1789	UNK	Mainchain
1	A	1790	UNK	Mainchain
1	A	1791	UNK	Mainchain
1	A	2037	LEU	Mainchain
1	A	2038	TYR	Mainchain
1	A	2039	LEU	Mainchain
1	A	2040	ARG	Mainchain
1	A	2041	LYS	Mainchain
1	A	2042	THR	Mainchain
1	A	258	UNK	Mainchain
1	A	259	UNK	Mainchain
1	A	260	UNK	Mainchain
1	A	261	UNK	Mainchain
1	A	262	UNK	Mainchain
1	A	263	UNK	Mainchain
1	A	264	UNK	Mainchain
1	A	265	UNK	Mainchain
1	A	266	UNK	Mainchain
1	A	267	UNK	Mainchain
1	A	268	UNK	Mainchain
1	A	269	UNK	Mainchain
1	A	270	UNK	Mainchain
1	A	271	UNK	Mainchain
1	A	272	UNK	Mainchain
1	A	273	UNK	Mainchain
1	A	274	UNK	Mainchain
1	A	275	UNK	Mainchain
1	A	276	UNK	Mainchain
1	A	277	UNK	Mainchain
1	A	278	UNK	Mainchain
1	A	279	UNK	Mainchain
1	A	280	UNK	Mainchain
1	A	281	UNK	Mainchain
1	A	282	UNK	Mainchain
1	A	283	UNK	Mainchain
1	A	284	UNK	Mainchain
1	A	285	UNK	Mainchain
1	A	286	UNK	Mainchain
1	A	287	UNK	Mainchain

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Mol	Chain	Res	Type	Group
1	A	288	UNK	Mainchain
1	A	289	UNK	Mainchain
1	A	290	UNK	Mainchain
1	A	291	UNK	Mainchain
1	A	292	UNK	Mainchain
1	A	293	UNK	Mainchain
1	A	294	UNK	Mainchain
1	A	295	UNK	Mainchain
1	B	1011	UNK	Mainchain
1	B	1012	UNK	Mainchain
1	B	1013	UNK	Mainchain
1	B	1014	UNK	Mainchain
1	B	1123	UNK	Mainchain
1	B	1124	UNK	Mainchain
1	B	1125	UNK	Mainchain
1	B	1126	UNK	Mainchain
1	B	1127	UNK	Mainchain
1	B	1128	UNK	Mainchain
1	B	1129	UNK	Mainchain
1	B	1144	UNK	Mainchain
1	B	1145	UNK	Mainchain
1	B	1146	UNK	Mainchain
1	B	1380	UNK	Mainchain
1	B	1381	UNK	Mainchain
1	B	1490	UNK	Mainchain
1	B	1491	UNK	Mainchain
1	B	1492	UNK	Mainchain
1	B	1493	UNK	Mainchain
1	B	1494	UNK	Mainchain
1	B	1495	UNK	Mainchain
1	B	1496	UNK	Mainchain
1	B	1497	UNK	Mainchain
1	B	1498	UNK	Mainchain
1	B	1499	UNK	Mainchain
1	B	1500	UNK	Mainchain
1	B	1501	UNK	Mainchain
1	B	1502	UNK	Mainchain
1	B	1503	UNK	Mainchain
1	B	1504	UNK	Mainchain
1	B	2037	LEU	Mainchain
1	B	2038	TYR	Mainchain
1	B	2039	LEU	Mainchain

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Mol	Chain	Res	Type	Group
1	B	2040	ARG	Mainchain
1	B	2410	VAL	Mainchain
1	B	258	UNK	Mainchain
1	B	259	UNK	Mainchain
1	B	260	UNK	Mainchain
1	B	261	UNK	Mainchain
1	B	262	UNK	Mainchain
1	B	263	UNK	Mainchain
1	B	264	UNK	Mainchain
1	B	265	UNK	Mainchain
1	B	266	UNK	Mainchain
1	B	267	UNK	Mainchain
1	B	268	UNK	Mainchain
1	B	269	UNK	Mainchain
1	B	270	UNK	Mainchain
1	B	271	UNK	Mainchain
1	B	272	UNK	Mainchain
1	B	273	UNK	Mainchain
1	B	274	UNK	Mainchain
1	B	275	UNK	Mainchain
1	B	276	UNK	Mainchain
1	B	277	UNK	Mainchain
1	B	278	UNK	Mainchain
1	B	279	UNK	Mainchain
1	B	280	UNK	Mainchain
1	B	281	UNK	Mainchain
1	B	284	UNK	Mainchain
1	B	285	UNK	Mainchain
1	B	286	UNK	Mainchain
1	B	287	UNK	Mainchain
1	B	288	UNK	Mainchain
1	B	289	UNK	Mainchain
1	B	290	UNK	Mainchain
1	B	291	UNK	Mainchain
1	B	292	UNK	Mainchain
1	B	293	UNK	Mainchain
1	B	294	UNK	Mainchain
1	B	295	UNK	Mainchain
1	C	1011	UNK	Mainchain
1	C	1012	UNK	Mainchain
1	C	1013	UNK	Mainchain
1	C	1014	UNK	Mainchain

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Mol	Chain	Res	Type	Group
1	C	1123	UNK	Mainchain
1	C	1124	UNK	Mainchain
1	C	1125	UNK	Mainchain
1	C	1126	UNK	Mainchain
1	C	1127	UNK	Mainchain
1	C	1128	UNK	Mainchain
1	C	1129	UNK	Mainchain
1	C	1130	UNK	Mainchain
1	C	1131	UNK	Mainchain
1	C	1132	UNK	Mainchain
1	C	1133	UNK	Mainchain
1	C	1145	UNK	Mainchain
1	C	1146	UNK	Mainchain
1	C	1380	UNK	Mainchain
1	C	1381	UNK	Mainchain
1	C	1490	UNK	Mainchain
1	C	1491	UNK	Mainchain
1	C	1492	UNK	Mainchain
1	C	1493	UNK	Mainchain
1	C	1494	UNK	Mainchain
1	C	1495	UNK	Mainchain
1	C	1496	UNK	Mainchain
1	C	1497	UNK	Mainchain
1	C	1498	UNK	Mainchain
1	C	1499	UNK	Mainchain
1	C	1500	UNK	Mainchain
1	C	1501	UNK	Mainchain
1	C	1502	UNK	Mainchain
1	C	1503	UNK	Mainchain
1	C	1504	UNK	Mainchain
1	C	2037	LEU	Mainchain
1	C	2038	TYR	Mainchain
1	C	2039	LEU	Mainchain
1	C	2040	ARG	Mainchain
1	C	258	UNK	Mainchain
1	C	259	UNK	Mainchain
1	C	260	UNK	Mainchain
1	C	261	UNK	Mainchain
1	C	262	UNK	Mainchain
1	C	263	UNK	Mainchain
1	C	264	UNK	Mainchain
1	C	265	UNK	Mainchain

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Mol	Chain	Res	Type	Group
1	C	266	UNK	Mainchain
1	C	267	UNK	Mainchain
1	C	268	UNK	Mainchain
1	C	269	UNK	Mainchain
1	C	270	UNK	Mainchain
1	C	271	UNK	Mainchain
1	C	272	UNK	Mainchain
1	C	273	UNK	Mainchain
1	C	274	UNK	Mainchain
1	C	275	UNK	Mainchain
1	C	276	UNK	Mainchain
1	C	277	UNK	Mainchain
1	C	278	UNK	Mainchain
1	C	279	UNK	Mainchain
1	C	280	UNK	Mainchain
1	C	281	UNK	Mainchain
1	C	282	UNK	Mainchain
1	C	283	UNK	Mainchain
1	C	284	UNK	Mainchain
1	C	285	UNK	Mainchain
1	C	286	UNK	Mainchain
1	C	287	UNK	Mainchain
1	C	288	UNK	Mainchain
1	C	289	UNK	Mainchain
1	C	290	UNK	Mainchain
1	C	291	UNK	Mainchain
1	C	292	UNK	Mainchain
1	C	293	UNK	Mainchain
1	C	294	UNK	Mainchain
1	C	295	UNK	Mainchain

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	5247	0	2895	498	0
1	B	5247	0	2893	538	0
1	C	5247	0	2898	527	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
All	All	15741	0	8686	1389	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 57.

All (1389) 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:C:2410:VAL:HG21	1:C:2426:PHE:CD2	1.22	1.67
1:C:2410:VAL:HG21	1:C:2426:PHE:CE2	1.16	1.62
1:C:2409:GLN:CA	1:C:2410:VAL:HG22	1.28	1.60
1:C:230:UNK:HA	1:C:259:UNK:CB	1.19	1.58
1:B:201:UNK:HA	1:B:288:UNK:CB	1.18	1.57
1:C:219:UNK:CB	1:C:270:UNK:CB	1.82	1.57
1:A:201:UNK:HA	1:A:288:UNK:CB	1.16	1.57
1:B:2429:TRP:CH2	1:C:2297:SER:HB2	1.35	1.54
1:C:2410:VAL:CG2	1:C:2426:PHE:CE2	1.89	1.53
1:B:2429:TRP:CZ2	1:C:2297:SER:HB2	1.46	1.51
1:C:2409:GLN:HA	1:C:2410:VAL:CG2	1.40	1.48
1:A:2491:SER:CA	1:C:2512:LEU:CB	1.89	1.47
1:A:215:UNK:CB	1:A:274:UNK:HA	1.46	1.45
1:A:2382:PRO:CG	1:C:2328:ALA:HB2	1.43	1.43
1:C:295:UNK:HA	1:C:447:UNK:N	1.36	1.40
1:A:295:UNK:HA	1:A:447:UNK:N	1.36	1.40
1:B:201:UNK:CA	1:B:288:UNK:CB	1.98	1.40
1:A:237:UNK:CA	1:A:252:UNK:HA	1.41	1.40
1:C:2409:GLN:CB	1:C:2410:VAL:HG22	1.34	1.40
1:A:237:UNK:HA	1:A:252:UNK:CA	1.33	1.39
1:A:2217:VAL:O	1:A:2454:SER:CB	1.70	1.38
1:C:226:UNK:CB	1:C:263:UNK:HA	1.54	1.35
1:B:295:UNK:HA	1:B:447:UNK:N	1.36	1.34
1:A:2491:SER:HA	1:C:2512:LEU:CB	1.47	1.34
1:B:2203:ILE:O	1:B:2207:LEU:CB	1.76	1.33
1:A:2491:SER:CB	1:C:2512:LEU:CB	2.05	1.31
1:A:201:UNK:CA	1:A:288:UNK:CB	2.08	1.31
1:B:2041:LYS:O	1:B:2044:LEU:N	1.64	1.30
1:C:2410:VAL:CG2	1:C:2426:PHE:CD2	2.11	1.29
1:A:233:UNK:CB	1:A:256:UNK:HA	1.62	1.27
1:A:215:UNK:CB	1:A:274:UNK:CA	2.14	1.26
1:A:2328:ALA:HB2	1:B:2382:PRO:CG	1.65	1.26
1:C:2409:GLN:HA	1:C:2410:VAL:CB	1.65	1.26

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:208:UNK:CB	1:C:281:UNK:CB	2.14	1.25
1:C:295:UNK:CA	1:C:447:UNK:N	2.01	1.24
1:C:230:UNK:CA	1:C:259:UNK:CB	2.15	1.23
1:C:2409:GLN:CD	1:C:2410:VAL:O	1.76	1.22
1:B:295:UNK:CA	1:B:447:UNK:N	2.01	1.22
1:B:2429:TRP:CZ3	1:C:2298:PRO:HD2	1.73	1.22
1:A:295:UNK:CA	1:A:447:UNK:N	2.01	1.22
1:B:2429:TRP:CZ2	1:C:2297:SER:CB	2.25	1.20
1:B:2172:GLU:O	1:B:2176:PRO:CB	1.90	1.20
1:C:2409:GLN:HA	1:C:2410:VAL:CG1	1.70	1.20
1:A:2172:GLU:O	1:A:2176:PRO:CB	1.90	1.18
1:C:2408:GLU:O	1:C:2410:VAL:CG1	1.89	1.18
1:C:1994:GLY:O	1:C:1996:TRP:N	1.76	1.18
1:B:2218:GLY:HA2	1:B:2453:VAL:O	1.39	1.18
1:C:2408:GLU:O	1:C:2410:VAL:HG11	1.41	1.17
1:C:2172:GLU:O	1:C:2176:PRO:CB	1.90	1.17
1:B:2429:TRP:CH2	1:C:2299:PRO:HD2	1.79	1.17
1:B:295:UNK:CA	1:B:447:UNK:H2	1.56	1.16
1:B:2409:GLN:HA	1:B:2410:VAL:HG13	1.25	1.15
1:B:2429:TRP:CH2	1:C:2298:PRO:HD2	1.80	1.15
1:A:2407:ARG:HG2	1:A:2426:PHE:HB2	1.26	1.14
1:C:295:UNK:CA	1:C:447:UNK:H2	1.56	1.14
1:B:2429:TRP:CH2	1:C:2297:SER:CB	2.30	1.14
1:A:2293:LEU:HG	1:B:2295:ARG:O	1.45	1.14
1:B:2406:ARG:NH1	1:C:2299:PRO:HG3	1.60	1.13
1:C:240:UNK:CB	1:C:251:UNK:CB	2.26	1.13
1:B:1509:UNK:O	1:B:1511:UNK:N	1.80	1.13
1:A:295:UNK:CA	1:A:447:UNK:H2	1.56	1.12
1:B:2219:VAL:O	1:B:2452:LYS:HE3	1.49	1.12
1:A:2382:PRO:HG3	1:C:2328:ALA:HB2	1.21	1.12
1:C:219:UNK:CA	1:C:270:UNK:CB	2.27	1.12
1:C:2410:VAL:HG21	1:C:2426:PHE:CZ	1.84	1.11
1:C:2409:GLN:CG	1:C:2410:VAL:O	1.98	1.11
1:C:2410:VAL:CG2	1:C:2426:PHE:CZ	2.33	1.11
1:B:295:UNK:C	1:B:447:UNK:H2	1.64	1.11
1:B:2217:VAL:CB	1:B:2455:PRO:HD2	1.80	1.10
1:C:2409:GLN:CD	1:C:2410:VAL:C	1.97	1.10
1:A:2217:VAL:O	1:A:2454:SER:HB2	1.47	1.10
1:A:2410:VAL:HG21	1:A:2426:PHE:HA	1.14	1.10
1:A:2382:PRO:HG2	1:C:2328:ALA:HB2	1.21	1.10
1:C:295:UNK:C	1:C:447:UNK:H2	1.64	1.10

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:295:UNK:C	1:A:447:UNK:H2	1.64	1.10
1:B:212:UNK:HA	1:B:277:UNK:CB	1.82	1.09
1:A:2339:LYS:HE3	1:C:2245:GLN:NE2	1.67	1.09
1:A:2328:ALA:HB2	1:B:2382:PRO:HG2	1.34	1.09
1:C:208:UNK:CB	1:C:281:UNK:HA	1.84	1.08
1:A:2328:ALA:HB2	1:B:2382:PRO:HG3	1.34	1.08
1:B:2203:ILE:O	1:B:2207:LEU:N	1.85	1.08
1:C:2504:LEU:O	1:C:2508:GLN:N	1.88	1.07
1:A:2217:VAL:CB	1:A:2454:SER:HB2	1.84	1.07
1:C:2041:LYS:O	1:C:2044:LEU:N	1.88	1.07
1:B:2429:TRP:CZ3	1:C:2297:SER:HB2	1.89	1.06
1:A:2429:TRP:CZ3	1:B:2298:PRO:HD2	1.90	1.06
1:A:2407:ARG:NH2	1:A:2424:SER:O	1.88	1.06
1:B:2429:TRP:CZ3	1:C:2298:PRO:CD	2.37	1.06
1:A:2217:VAL:O	1:A:2454:SER:HB3	1.53	1.05
1:A:2504:LEU:O	1:A:2508:GLN:N	1.88	1.05
1:B:236:UNK:CB	1:B:255:UNK:CB	2.33	1.05
1:C:2409:GLN:CA	1:C:2410:VAL:HG13	1.84	1.05
1:B:2504:LEU:O	1:B:2508:GLN:N	1.88	1.05
1:A:211:UNK:C	1:A:277:UNK:CB	2.34	1.04
1:B:2406:ARG:CZ	1:C:2299:PRO:HG3	1.88	1.04
1:B:1776:UNK:O	1:B:1781:UNK:N	1.91	1.04
1:B:2203:ILE:O	1:B:2207:LEU:CA	2.04	1.04
1:B:2041:LYS:O	1:B:2043:VAL:N	1.91	1.04
1:A:204:UNK:CB	1:A:284:UNK:C	2.35	1.03
1:A:2406:ARG:NH1	1:A:2408:GLU:OE1	1.91	1.03
1:C:2410:VAL:HG21	1:C:2426:PHE:CG	1.92	1.03
1:B:201:UNK:CB	1:B:288:UNK:CB	2.36	1.03
1:C:1509:UNK:O	1:C:1511:UNK:N	1.92	1.03
1:C:1776:UNK:O	1:C:1781:UNK:N	1.91	1.03
1:A:1776:UNK:O	1:A:1781:UNK:N	1.91	1.03
1:A:2297:SER:OG	1:A:2300:SER:HB2	1.57	1.03
1:B:215:UNK:CB	1:B:273:UNK:C	2.37	1.03
1:B:222:UNK:C	1:B:266:UNK:CB	2.37	1.03
1:C:2052:VAL:HA	1:C:2056:ALA:HA	1.38	1.03
1:C:2122:PHE:CB	1:C:2126:ARG:CB	2.37	1.02
1:A:2407:ARG:HG3	1:A:2428:GLU:HG2	1.40	1.02
1:A:2409:GLN:HA	1:A:2410:VAL:HG23	1.36	1.02
1:B:2122:PHE:CB	1:B:2126:ARG:CB	2.37	1.02
1:A:2122:PHE:CB	1:A:2126:ARG:CB	2.37	1.02
1:C:208:UNK:CB	1:C:281:UNK:CA	2.37	1.02

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2409:GLN:HG3	1:C:2410:VAL:O	1.59	1.02
1:B:1752:UNK:O	1:B:1756:UNK:N	1.93	1.01
1:C:2059:ILE:O	1:C:2063:PHE:CB	2.08	1.01
1:A:1752:UNK:O	1:A:1756:UNK:N	1.94	1.01
1:C:1752:UNK:O	1:C:1756:UNK:N	1.94	1.01
1:C:1983:ALA:O	1:C:1987:ASP:CB	2.09	1.00
1:B:2218:GLY:CA	1:B:2453:VAL:O	2.10	1.00
1:B:2409:GLN:HG3	1:B:2410:VAL:CG2	1.90	1.00
1:B:2219:VAL:O	1:B:2452:LYS:HG2	1.61	0.99
1:A:240:UNK:CB	1:A:248:UNK:HA	1.93	0.99
1:B:237:UNK:HA	1:B:252:UNK:CB	1.92	0.99
1:A:2382:PRO:CG	1:C:2328:ALA:CB	2.40	0.99
1:A:2429:TRP:HZ3	1:B:2298:PRO:HD2	1.28	0.98
1:C:2409:GLN:CA	1:C:2410:VAL:CG2	2.07	0.98
1:A:215:UNK:CB	1:A:274:UNK:N	2.26	0.97
1:B:2429:TRP:CE2	1:C:2297:SER:CB	2.48	0.97
1:C:226:UNK:CB	1:C:263:UNK:CA	2.43	0.97
1:A:1793:UNK:O	1:A:1797:UNK:N	1.96	0.97
1:C:1748:UNK:O	1:C:1752:UNK:N	1.98	0.97
1:A:1748:UNK:O	1:A:1752:UNK:N	1.98	0.97
1:B:2429:TRP:CE2	1:C:2297:SER:HB2	2.00	0.97
1:B:2410:VAL:HG13	1:B:2426:PHE:HB3	1.47	0.96
1:C:2509:ASP:HA	1:C:2514:ARG:CB	1.95	0.96
1:B:2293:LEU:HG	1:C:2295:ARG:O	1.64	0.96
1:A:2509:ASP:HA	1:A:2514:ARG:CB	1.95	0.96
1:A:2011:LEU:O	1:A:2015:GLN:N	1.97	0.96
1:B:1748:UNK:O	1:B:1752:UNK:N	1.98	0.96
1:B:2429:TRP:HH2	1:C:2299:PRO:HD2	1.12	0.95
1:B:2509:ASP:HA	1:B:2514:ARG:CB	1.96	0.95
1:C:2052:VAL:HA	1:C:2056:ALA:CA	1.96	0.95
1:C:219:UNK:HA	1:C:270:UNK:CB	1.94	0.95
1:B:2219:VAL:O	1:B:2452:LYS:CE	2.14	0.95
1:C:2409:GLN:CB	1:C:2410:VAL:CG2	2.26	0.95
1:B:2406:ARG:NH1	1:C:2299:PRO:CG	2.30	0.95
1:A:233:UNK:CB	1:A:256:UNK:CA	2.43	0.94
1:B:2429:TRP:HZ3	1:C:2298:PRO:CD	1.79	0.94
1:B:242:UNK:O	1:B:244:UNK:N	2.01	0.94
1:A:229:UNK:C	1:A:259:UNK:CB	2.46	0.94
1:B:233:UNK:O	1:B:236:UNK:CB	2.16	0.94
1:A:2429:TRP:CD2	1:B:2297:SER:HB3	2.04	0.93
1:A:2406:ARG:HH12	1:B:2299:PRO:HG3	1.30	0.93

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2409:GLN:HG2	1:B:2411:GLY:N	1.83	0.93
1:B:212:UNK:CA	1:B:277:UNK:CB	2.46	0.93
1:C:2202:ILE:O	1:C:2206:PRO:N	2.02	0.93
1:C:2153:MET:HA	1:C:2156:GLU:CB	1.99	0.93
1:A:2153:MET:HA	1:A:2156:GLU:CB	1.99	0.92
1:B:2153:MET:HA	1:B:2156:GLU:CB	1.99	0.92
1:C:2410:VAL:HG23	1:C:2426:PHE:CZ	2.05	0.92
1:B:237:UNK:O	1:B:241:UNK:N	2.03	0.92
1:A:2202:ILE:O	1:A:2206:PRO:N	2.02	0.92
1:A:2299:PRO:HD2	1:C:2429:TRP:HH2	1.31	0.92
1:B:2299:PRO:O	1:B:2303:GLN:N	2.03	0.92
1:B:2202:ILE:O	1:B:2206:PRO:N	2.03	0.92
1:C:2408:GLU:HG2	1:C:2429:TRP:CH2	2.04	0.92
1:A:230:UNK:HA	1:A:259:UNK:CB	1.99	0.91
1:B:1130:UNK:O	1:B:1132:UNK:N	2.04	0.91
1:B:2219:VAL:O	1:B:2452:LYS:CG	2.19	0.91
1:A:2245:GLN:NE2	1:B:2339:LYS:HE3	1.86	0.91
1:A:2491:SER:C	1:C:2512:LEU:CB	2.39	0.91
1:B:2410:VAL:HG12	1:C:2425:ASP:OD2	1.70	0.91
1:B:2409:GLN:CG	1:B:2411:GLY:N	2.35	0.90
1:C:2011:LEU:O	1:C:2015:GLN:N	2.05	0.90
1:C:2410:VAL:HG11	1:C:2426:PHE:CB	2.01	0.90
1:B:211:UNK:C	1:B:277:UNK:CB	2.49	0.90
1:A:1793:UNK:O	1:A:1797:UNK:CB	2.19	0.89
1:B:2219:VAL:O	1:B:2452:LYS:CD	2.20	0.89
1:A:2060:TRP:O	1:A:2063:PHE:N	2.05	0.89
1:C:2409:GLN:CA	1:C:2410:VAL:CG1	2.45	0.89
1:B:2011:LEU:O	1:B:2015:GLN:N	2.05	0.89
1:A:2406:ARG:HG3	1:A:2406:ARG:HH21	1.36	0.89
1:A:244:UNK:O	1:A:248:UNK:N	2.06	0.89
1:A:2410:VAL:HG21	1:A:2426:PHE:CA	2.01	0.89
1:B:2406:ARG:HH12	1:C:2299:PRO:CG	1.84	0.88
1:C:2407:ARG:HG2	1:C:2428:GLU:HG2	1.55	0.88
1:A:2382:PRO:HG2	1:C:2328:ALA:CB	2.02	0.88
1:B:2409:GLN:HG3	1:B:2410:VAL:HG22	1.53	0.88
1:C:201:UNK:HA	1:C:288:UNK:CB	2.02	0.88
1:B:2495:GLU:O	1:B:2499:CYS:CB	2.22	0.88
1:C:2495:GLU:O	1:C:2499:CYS:CB	2.22	0.88
1:C:2409:GLN:HB2	1:C:2410:VAL:HG22	1.54	0.88
1:A:2060:TRP:O	1:A:2063:PHE:CB	2.22	0.87
1:B:241:UNK:N	1:B:248:UNK:HA	1.90	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2410:VAL:CG2	1:A:2426:PHE:HA	2.02	0.87
1:B:2204:TRP:O	1:B:2208:LEU:CB	2.22	0.87
1:B:1983:ALA:O	1:B:1987:ASP:N	2.05	0.87
1:B:282:UNK:O	1:B:283:UNK:C	2.22	0.87
1:C:1144:UNK:O	1:C:1146:UNK:N	2.07	0.87
1:A:2495:GLU:O	1:A:2499:CYS:CB	2.22	0.86
1:B:2406:ARG:HH12	1:C:2299:PRO:HG3	1.36	0.86
1:C:2408:GLU:O	1:C:2410:VAL:HG13	1.73	0.86
1:B:2084:PHE:O	1:B:2088:ILE:N	2.09	0.86
1:B:2409:GLN:CA	1:B:2410:VAL:HG13	2.06	0.86
1:A:294:UNK:C	1:A:447:UNK:H	1.89	0.85
1:C:248:UNK:O	1:C:252:UNK:N	2.08	0.85
1:A:2406:ARG:HH12	1:B:2299:PRO:CG	1.88	0.85
1:C:1776:UNK:CB	1:C:1781:UNK:HA	2.07	0.85
1:B:1776:UNK:CB	1:B:1781:UNK:HA	2.07	0.85
1:A:2084:PHE:O	1:A:2088:ILE:N	2.09	0.85
1:B:212:UNK:N	1:B:277:UNK:CB	2.40	0.85
1:A:2429:TRP:CE3	1:B:2297:SER:HB3	2.10	0.85
1:B:2429:TRP:CH2	1:C:2298:PRO:CD	2.58	0.85
1:B:294:UNK:C	1:B:447:UNK:H	1.89	0.85
1:C:295:UNK:O	1:C:447:UNK:N	2.10	0.84
1:C:1753:UNK:O	1:C:1757:UNK:N	2.10	0.84
1:A:2299:PRO:HD2	1:C:2429:TRP:CH2	2.11	0.84
1:A:295:UNK:O	1:A:447:UNK:N	2.10	0.84
1:A:2152:TRP:O	1:A:2156:GLU:N	2.10	0.84
1:C:2152:TRP:O	1:C:2156:GLU:N	2.10	0.84
1:A:1753:UNK:O	1:A:1757:UNK:N	2.10	0.84
1:C:2084:PHE:O	1:C:2088:ILE:N	2.09	0.84
1:A:2299:PRO:CD	1:C:2408:GLU:HG3	2.08	0.84
1:B:295:UNK:C	1:B:447:UNK:N	2.35	0.84
1:B:295:UNK:O	1:B:447:UNK:N	2.10	0.84
1:C:294:UNK:C	1:C:447:UNK:H	1.89	0.84
1:C:295:UNK:HA	1:C:447:UNK:H	1.42	0.84
1:A:1776:UNK:CB	1:A:1781:UNK:HA	2.07	0.84
1:B:2043:VAL:O	1:B:2047:LEU:N	2.10	0.84
1:C:248:UNK:O	1:C:252:UNK:CB	2.26	0.84
1:A:2217:VAL:O	1:A:2454:SER:CA	2.25	0.84
1:C:2106:LEU:O	1:C:2110:LEU:N	2.10	0.84
1:A:2106:LEU:O	1:A:2110:LEU:N	2.10	0.83
1:B:1753:UNK:O	1:B:1757:UNK:N	2.10	0.83
1:A:215:UNK:CB	1:A:273:UNK:C	2.56	0.83

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2153:MET:O	1:A:2157:ASP:N	2.11	0.83
1:B:2152:TRP:O	1:B:2156:GLU:N	2.10	0.83
1:B:2217:VAL:CB	1:B:2455:PRO:CD	2.55	0.83
1:C:2153:MET:O	1:C:2157:ASP:N	2.11	0.83
1:C:2409:GLN:HB2	1:C:2426:PHE:CE2	2.13	0.83
1:B:1383:UNK:HA	1:B:1386:UNK:CB	2.09	0.83
1:C:1383:UNK:HA	1:C:1386:UNK:CB	2.09	0.83
1:A:241:UNK:HA	1:A:248:UNK:CB	2.09	0.83
1:A:2050:GLN:CB	1:A:2051:VAL:HA	2.09	0.83
1:A:1016:UNK:HA	1:A:1019:UNK:CB	2.09	0.83
1:B:2106:LEU:O	1:B:2110:LEU:N	2.11	0.82
1:A:1142:UNK:O	1:A:1144:UNK:N	2.13	0.82
1:C:295:UNK:C	1:C:447:UNK:N	2.35	0.82
1:C:2471:VAL:O	1:C:2475:LEU:CB	2.27	0.82
1:A:295:UNK:C	1:A:447:UNK:N	2.35	0.82
1:A:2298:PRO:HD2	1:C:2408:GLU:CG	2.10	0.82
1:B:1016:UNK:HA	1:B:1019:UNK:CB	2.09	0.82
1:A:1755:UNK:O	1:A:1759:UNK:N	2.13	0.82
1:A:2409:GLN:HA	1:A:2410:VAL:CG2	2.09	0.82
1:B:2471:VAL:O	1:B:2475:LEU:CB	2.27	0.82
1:C:2050:GLN:CB	1:C:2051:VAL:HA	2.10	0.82
1:A:2471:VAL:O	1:A:2475:LEU:CB	2.27	0.82
1:B:2219:VAL:HG13	1:B:2220:VAL:H	1.45	0.82
1:C:2410:VAL:HG11	1:C:2426:PHE:CG	2.14	0.82
1:B:2153:MET:O	1:B:2157:ASP:N	2.11	0.81
1:C:283:UNK:CB	1:C:1993:PHE:CB	2.58	0.81
1:A:1383:UNK:HA	1:A:1386:UNK:CB	2.09	0.81
1:B:1755:UNK:O	1:B:1759:UNK:N	2.13	0.81
1:B:241:UNK:HA	1:B:248:UNK:CB	2.11	0.81
1:B:295:UNK:CA	1:B:447:UNK:H	1.94	0.81
1:C:1016:UNK:HA	1:C:1019:UNK:CB	2.09	0.81
1:C:1755:UNK:O	1:C:1759:UNK:N	2.13	0.81
1:C:1789:UNK:O	1:C:1793:UNK:N	2.13	0.81
1:A:295:UNK:HA	1:A:447:UNK:H2	1.10	0.81
1:A:295:UNK:HA	1:A:447:UNK:H	1.42	0.80
1:B:295:UNK:HA	1:B:447:UNK:H2	1.10	0.80
1:C:241:UNK:HA	1:C:248:UNK:CB	2.11	0.80
1:C:2410:VAL:HG22	1:C:2426:PHE:CE2	2.16	0.80
1:B:222:UNK:O	1:B:266:UNK:CB	2.29	0.80
1:B:2429:TRP:CZ3	1:C:2297:SER:CB	2.62	0.80
1:A:2044:LEU:O	1:A:2047:LEU:CB	2.30	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:229:UNK:O	1:A:259:UNK:CB	2.30	0.79
1:A:1506:UNK:O	1:A:1507:UNK:CB	2.29	0.79
1:A:2470:TYR:O	1:A:2474:VAL:N	2.15	0.79
1:B:2410:VAL:CA	1:C:2425:ASP:HB2	2.11	0.79
1:A:2382:PRO:HG3	1:C:2328:ALA:CB	2.05	0.79
1:B:233:UNK:O	1:B:255:UNK:CB	2.31	0.79
1:A:265:UNK:CB	1:A:2528:LYS:CB	2.61	0.79
1:A:2429:TRP:CH2	1:B:2299:PRO:HD2	2.17	0.79
1:B:2408:GLU:N	1:B:2408:GLU:OE2	2.15	0.79
1:C:1506:UNK:O	1:C:1507:UNK:CB	2.30	0.79
1:C:295:UNK:CA	1:C:447:UNK:H	1.93	0.78
1:C:1137:UNK:O	1:C:1138:UNK:C	2.30	0.78
1:B:2409:GLN:HG2	1:B:2411:GLY:CA	2.12	0.78
1:B:2426:PHE:O	1:B:2427:LEU:O	2.02	0.78
1:B:265:UNK:CB	1:B:2528:LYS:CB	2.61	0.78
1:B:1129:UNK:O	1:B:1132:UNK:CB	2.32	0.78
1:B:1776:UNK:CA	1:B:1781:UNK:HA	2.14	0.78
1:C:265:UNK:CB	1:C:2528:LYS:CB	2.61	0.78
1:B:2296:ILE:HD11	1:B:2300:SER:O	1.84	0.78
1:C:1765:UNK:O	1:C:1769:UNK:N	2.16	0.78
1:C:2409:GLN:HB2	1:C:2426:PHE:HE2	1.47	0.78
1:C:1776:UNK:CA	1:C:1781:UNK:HA	2.14	0.78
1:A:1765:UNK:O	1:A:1769:UNK:N	2.17	0.78
1:A:2339:LYS:CE	1:C:2245:GLN:NE2	2.44	0.78
1:A:2408:GLU:O	1:A:2410:VAL:HG22	1.83	0.78
1:A:222:UNK:CB	1:A:266:UNK:CB	2.62	0.78
1:B:2293:LEU:H	1:C:2295:ARG:HB2	1.49	0.78
1:B:2219:VAL:HG22	1:B:2220:VAL:N	1.99	0.77
1:C:2407:ARG:CG	1:C:2428:GLU:HG2	2.15	0.77
1:B:1765:UNK:O	1:B:1769:UNK:N	2.16	0.77
1:C:2003:ALA:CB	1:C:2102:PRO:HA	2.14	0.77
1:A:2003:ALA:CB	1:A:2102:PRO:HA	2.14	0.77
1:B:2409:GLN:HA	1:B:2410:VAL:CG1	2.09	0.77
1:B:2470:TYR:O	1:B:2474:VAL:N	2.15	0.77
1:B:1747:UNK:O	1:B:1751:UNK:N	2.19	0.76
1:B:2003:ALA:CB	1:B:2102:PRO:HA	2.14	0.76
1:A:2409:GLN:HG3	1:A:2410:VAL:O	1.86	0.76
1:A:2426:PHE:O	1:A:2428:GLU:HG3	1.86	0.76
1:A:1776:UNK:CA	1:A:1781:UNK:HA	2.14	0.76
1:B:1506:UNK:O	1:B:1507:UNK:CB	2.33	0.76
1:C:1747:UNK:O	1:C:1750:UNK:N	2.19	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:222:UNK:CB	1:B:266:UNK:CB	2.64	0.76
1:B:2406:ARG:NH2	1:C:2299:PRO:HG3	1.99	0.76
1:C:2237:PRO:O	1:C:2295:ARG:NH1	2.20	0.76
1:B:1747:UNK:O	1:B:1750:UNK:N	2.19	0.75
1:A:2407:ARG:HD2	1:A:2428:GLU:OE2	1.85	0.75
1:B:2429:TRP:CE2	1:C:2297:SER:HB3	2.21	0.75
1:A:1992:ILE:O	1:A:1994:GLY:N	2.19	0.75
1:A:2407:ARG:HG3	1:A:2428:GLU:CG	2.16	0.75
1:B:1137:UNK:O	1:B:1141:UNK:N	2.20	0.75
1:A:1747:UNK:O	1:A:1751:UNK:N	2.19	0.75
1:A:2237:PRO:O	1:A:2295:ARG:NH1	2.20	0.75
1:A:2429:TRP:CZ2	1:B:2297:SER:HB2	2.22	0.75
1:A:2512:LEU:N	1:B:2491:SER:CB	2.49	0.75
1:B:2328:ALA:HB2	1:C:2382:PRO:CG	2.17	0.75
1:C:1747:UNK:O	1:C:1751:UNK:N	2.19	0.75
1:B:2298:PRO:O	1:B:2301:ARG:HB3	1.86	0.75
1:C:2470:TYR:O	1:C:2474:VAL:N	2.14	0.75
1:A:2408:GLU:HB2	1:B:2298:PRO:HG2	1.69	0.74
1:C:1509:UNK:O	1:C:1510:UNK:C	2.34	0.74
1:A:1747:UNK:O	1:A:1750:UNK:N	2.19	0.74
1:B:2299:PRO:HA	1:B:2302:ALA:HB3	1.69	0.74
1:C:1144:UNK:O	1:C:1145:UNK:C	2.35	0.74
1:A:2295:ARG:O	1:C:2293:LEU:HG	1.87	0.74
1:A:2299:PRO:HD3	1:C:2408:GLU:HG3	1.67	0.74
1:B:2203:ILE:C	1:B:2207:LEU:CB	2.55	0.74
1:C:1133:UNK:O	1:C:1136:UNK:CB	2.36	0.74
1:B:241:UNK:HA	1:B:248:UNK:CA	2.18	0.74
1:B:2237:PRO:O	1:B:2295:ARG:NH1	2.20	0.74
1:A:245:UNK:O	1:A:249:UNK:N	2.20	0.74
1:C:233:UNK:CB	1:C:255:UNK:O	2.36	0.74
1:A:204:UNK:CB	1:A:284:UNK:CB	2.65	0.74
1:B:2219:VAL:HG22	1:B:2220:VAL:HG23	1.68	0.74
1:C:2410:VAL:CG1	1:C:2426:PHE:HA	2.18	0.74
1:B:2041:LYS:O	1:B:2042:THR:C	2.24	0.73
1:B:2217:VAL:CB	1:B:2454:SER:HB2	2.13	0.73
1:A:211:UNK:O	1:A:277:UNK:CB	2.36	0.73
1:A:2491:SER:CB	1:C:2512:LEU:H	2.02	0.73
1:C:2077:ALA:HA	1:C:2083:TYR:CB	2.18	0.73
1:B:1130:UNK:C	1:B:1132:UNK:N	2.48	0.73
1:B:2058:HIS:C	1:B:2060:TRP:H	1.91	0.73
1:B:2424:SER:OG	1:B:2425:ASP:N	2.20	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1792:UNK:O	1:A:1793:UNK:C	2.37	0.73
1:A:2339:LYS:CE	1:C:2245:GLN:HE22	2.01	0.73
1:A:2408:GLU:HG3	1:A:2429:TRP:CZ3	2.24	0.73
1:A:2077:ALA:HA	1:A:2083:TYR:CB	2.18	0.73
1:C:246:UNK:C	1:C:248:UNK:H	2.00	0.73
1:A:1142:UNK:O	1:A:1143:UNK:C	2.37	0.73
1:B:2077:ALA:HA	1:B:2083:TYR:CB	2.18	0.73
1:C:2406:ARG:NH1	1:C:2408:GLU:OE2	2.22	0.72
1:C:2409:GLN:C	1:C:2410:VAL:HG13	2.05	0.72
1:A:230:UNK:CA	1:A:259:UNK:CB	2.66	0.72
1:B:204:UNK:CB	1:B:284:UNK:CB	2.67	0.72
1:A:1142:UNK:O	1:A:1145:UNK:N	2.22	0.72
1:A:2491:SER:O	1:C:2512:LEU:CB	2.37	0.72
1:A:2297:SER:HB2	1:C:2429:TRP:CZ2	2.25	0.72
1:B:2410:VAL:N	1:C:2425:ASP:HB2	2.03	0.72
1:B:2429:TRP:HZ3	1:C:2298:PRO:HD3	1.55	0.72
1:B:2429:TRP:HH2	1:C:2299:PRO:CD	1.97	0.72
1:B:2429:TRP:HH2	1:C:2298:PRO:HD2	1.49	0.72
1:C:295:UNK:HA	1:C:447:UNK:H2	1.10	0.72
1:C:1772:UNK:O	1:C:1776:UNK:N	2.23	0.72
1:C:1792:UNK:O	1:C:1796:UNK:N	2.21	0.72
1:B:1772:UNK:O	1:B:1776:UNK:N	2.23	0.71
1:C:234:UNK:O	1:C:237:UNK:CB	2.38	0.71
1:A:1772:UNK:O	1:A:1776:UNK:N	2.23	0.71
1:A:2299:PRO:HG3	1:C:2406:ARG:NH1	2.05	0.71
1:C:2084:PHE:HA	1:C:2087:CYS:CB	2.20	0.71
1:B:2298:PRO:O	1:B:2302:ALA:N	2.23	0.71
1:C:1144:UNK:O	1:C:1147:UNK:N	2.22	0.71
1:B:2202:ILE:O	1:B:2206:PRO:CB	2.38	0.71
1:B:2406:ARG:NH1	1:C:2299:PRO:HD3	2.06	0.71
1:C:1753:UNK:HA	1:C:1756:UNK:CB	2.21	0.71
1:C:2408:GLU:HG2	1:C:2429:TRP:CZ3	2.25	0.71
1:A:2084:PHE:HA	1:A:2087:CYS:CB	2.21	0.71
1:A:2051:VAL:O	1:A:2056:ALA:HA	1.90	0.71
1:A:2406:ARG:HH12	1:B:2299:PRO:CD	2.03	0.71
1:A:294:UNK:C	1:A:447:UNK:N	2.54	0.71
1:A:1753:UNK:HA	1:A:1756:UNK:CB	2.21	0.71
1:B:1753:UNK:HA	1:B:1756:UNK:CB	2.21	0.71
1:B:2347:ASN:O	1:B:2352:ARG:NH2	2.24	0.71
1:B:2084:PHE:HA	1:B:2087:CYS:CB	2.21	0.70
1:B:2406:ARG:NH1	1:C:2299:PRO:CD	2.54	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1509:UNK:O	1:B:1510:UNK:C	2.38	0.70
1:C:2052:VAL:O	1:C:2056:ALA:N	2.24	0.70
1:B:2407:ARG:NH2	1:B:2424:SER:O	2.24	0.70
1:A:1773:UNK:O	1:A:1777:UNK:N	2.25	0.70
1:A:2425:ASP:C	1:A:2426:PHE:HD1	1.94	0.70
1:B:1773:UNK:O	1:B:1777:UNK:N	2.25	0.70
1:C:2347:ASN:O	1:C:2352:ARG:NH2	2.24	0.70
1:C:2410:VAL:HG11	1:C:2426:PHE:CD2	2.26	0.70
1:A:2298:PRO:HG2	1:C:2408:GLU:CB	2.22	0.70
1:A:2537:GLU:O	1:A:2541:LYS:N	2.25	0.70
1:A:2339:LYS:NZ	1:C:2245:GLN:HE22	1.88	0.70
1:B:2410:VAL:CG1	1:B:2426:PHE:HB3	2.21	0.70
1:A:2347:ASN:O	1:A:2352:ARG:NH2	2.24	0.70
1:B:294:UNK:C	1:B:447:UNK:N	2.54	0.70
1:C:1773:UNK:O	1:C:1777:UNK:N	2.25	0.70
1:A:2408:GLU:HG3	1:B:2298:PRO:HG2	1.73	0.69
1:B:215:UNK:CB	1:B:274:UNK:N	2.55	0.69
1:B:295:UNK:HA	1:B:447:UNK:H	1.42	0.69
1:B:2409:GLN:HG3	1:B:2411:GLY:N	2.04	0.69
1:C:294:UNK:C	1:C:447:UNK:N	2.54	0.69
1:B:2328:ALA:HB2	1:C:2382:PRO:HG3	1.73	0.69
1:C:1990:ILE:O	1:C:1992:ILE:N	2.25	0.69
1:B:2409:GLN:HG2	1:B:2411:GLY:HA3	1.73	0.69
1:A:2429:TRP:CH2	1:B:2297:SER:HB2	2.28	0.69
1:B:2408:GLU:HB2	1:C:2298:PRO:HG2	1.73	0.69
1:B:2537:GLU:O	1:B:2541:LYS:N	2.25	0.69
1:A:2409:GLN:HE21	1:A:2410:VAL:C	1.97	0.69
1:A:2328:ALA:CB	1:B:2382:PRO:HG3	2.19	0.68
1:C:2202:ILE:O	1:C:2206:PRO:CB	2.41	0.68
1:A:2299:PRO:HD2	1:C:2408:GLU:HG3	1.75	0.68
1:A:2429:TRP:CE2	1:B:2297:SER:HB3	2.29	0.68
1:C:1509:UNK:O	1:C:1512:UNK:N	2.27	0.68
1:A:2202:ILE:O	1:A:2206:PRO:CB	2.41	0.68
1:A:2426:PHE:O	1:A:2427:LEU:C	2.32	0.68
1:B:2409:GLN:CG	1:B:2410:VAL:HG22	2.22	0.68
1:B:2429:TRP:CZ2	1:C:2299:PRO:HD2	2.27	0.68
1:C:2410:VAL:HG23	1:C:2426:PHE:CE2	2.16	0.68
1:A:2406:ARG:HG3	1:A:2406:ARG:NH2	2.08	0.68
1:B:1743:UNK:O	1:B:1747:UNK:N	2.27	0.67
1:B:2410:VAL:HA	1:C:2425:ASP:HB2	1.75	0.67
1:A:2217:VAL:C	1:A:2454:SER:HB2	2.14	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2119:LEU:O	1:B:2126:ARG:CB	2.43	0.67
1:C:1743:UNK:O	1:C:1747:UNK:N	2.27	0.67
1:A:2513:VAL:N	1:B:2491:SER:CB	2.57	0.67
1:C:2119:LEU:O	1:C:2126:ARG:CB	2.43	0.67
1:C:2407:ARG:HD2	1:C:2428:GLU:OE2	1.94	0.67
1:B:2203:ILE:C	1:B:2207:LEU:H	1.96	0.67
1:B:2429:TRP:CZ3	1:C:2298:PRO:HD3	2.29	0.67
1:B:2429:TRP:CD2	1:C:2297:SER:HB3	2.29	0.67
1:C:2408:GLU:O	1:C:2426:PHE:HB3	1.94	0.67
1:C:2501:ASP:O	1:C:2505:LYS:N	2.28	0.67
1:A:1743:UNK:O	1:A:1747:UNK:N	2.27	0.67
1:B:2410:VAL:H	1:C:2425:ASP:HB2	1.59	0.67
1:C:2471:VAL:O	1:C:2475:LEU:N	2.28	0.67
1:A:2236:GLU:OE2	1:C:2291:GLY:CA	2.42	0.66
1:A:2119:LEU:O	1:A:2126:ARG:CB	2.43	0.66
1:A:2339:LYS:HE3	1:C:2245:GLN:HE22	1.55	0.66
1:B:215:UNK:CB	1:B:274:UNK:HA	2.26	0.66
1:B:1133:UNK:O	1:B:1137:UNK:N	2.29	0.66
1:B:236:UNK:C	1:B:252:UNK:HA	2.25	0.66
1:C:2409:GLN:HA	1:C:2426:PHE:CD2	2.31	0.66
1:B:2471:VAL:O	1:B:2475:LEU:N	2.28	0.66
1:B:2057:ILE:O	1:B:2060:TRP:CB	2.43	0.66
1:C:2410:VAL:HG11	1:C:2426:PHE:HB3	1.76	0.66
1:B:1509:UNK:O	1:B:1512:UNK:N	2.29	0.66
1:B:2410:VAL:HG22	1:B:2426:PHE:CD1	2.31	0.66
1:A:1769:UNK:O	1:A:1773:UNK:N	2.30	0.65
1:A:2299:PRO:CD	1:C:2429:TRP:HH2	2.05	0.65
1:B:2293:LEU:HG	1:C:2295:ARG:C	2.17	0.65
1:A:2471:VAL:O	1:A:2475:LEU:N	2.28	0.65
1:C:1509:UNK:C	1:C:1511:UNK:N	2.59	0.65
1:C:1994:GLY:O	1:C:1997:ALA:N	2.29	0.65
1:C:1769:UNK:O	1:C:1773:UNK:N	2.29	0.65
1:B:1769:UNK:O	1:B:1773:UNK:N	2.29	0.65
1:B:2219:VAL:HG13	1:B:2220:VAL:N	2.10	0.65
1:B:2058:HIS:O	1:B:2060:TRP:N	2.30	0.65
1:B:2123:GLN:O	1:B:2127:LEU:N	2.28	0.65
1:B:2409:GLN:NE2	1:B:2426:PHE:CZ	2.65	0.65
1:C:2041:LYS:O	1:C:2042:THR:C	2.36	0.65
1:A:1792:UNK:O	1:A:1796:UNK:N	2.30	0.64
1:B:1776:UNK:HA	1:B:1781:UNK:HA	1.79	0.64
1:B:2293:LEU:CD1	1:C:2295:ARG:HA	2.28	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2501:ASP:O	1:B:2505:LYS:N	2.28	0.64
1:C:2052:VAL:HA	1:C:2056:ALA:CB	2.26	0.64
1:C:2537:GLU:O	1:C:2541:LYS:N	2.25	0.64
1:A:233:UNK:CB	1:A:255:UNK:C	2.74	0.64
1:A:1776:UNK:HA	1:A:1781:UNK:HA	1.79	0.64
1:B:2410:VAL:HA	1:C:2425:ASP:CB	2.27	0.64
1:B:2429:TRP:CD2	1:C:2297:SER:CB	2.80	0.64
1:C:2408:GLU:HG2	1:C:2429:TRP:HH2	1.57	0.64
1:B:2205:PHE:O	1:B:2209:PHE:CB	2.45	0.64
1:C:1994:GLY:O	1:C:1995:PHE:C	2.34	0.64
1:A:567:UNK:O	1:A:570:UNK:CB	2.46	0.64
1:A:2501:ASP:O	1:A:2505:LYS:N	2.28	0.64
1:B:2024:LEU:O	1:B:2025:LEU:O	2.16	0.64
1:B:2426:PHE:O	1:B:2427:LEU:C	2.35	0.64
1:A:2406:ARG:NH1	1:B:2299:PRO:HD3	2.13	0.64
1:C:2408:GLU:C	1:C:2410:VAL:HG13	2.18	0.64
1:B:1509:UNK:C	1:B:1511:UNK:N	2.60	0.64
1:C:567:UNK:O	1:C:570:UNK:CB	2.46	0.64
1:A:2024:LEU:O	1:A:2025:LEU:O	2.16	0.63
1:C:2024:LEU:O	1:C:2025:LEU:O	2.16	0.63
1:C:2495:GLU:O	1:C:2499:CYS:N	2.31	0.63
1:A:2123:GLN:O	1:A:2127:LEU:N	2.27	0.63
1:B:2495:GLU:O	1:B:2499:CYS:N	2.31	0.63
1:A:245:UNK:O	1:A:248:UNK:N	2.32	0.63
1:B:567:UNK:O	1:B:570:UNK:CB	2.46	0.63
1:C:237:UNK:HA	1:C:252:UNK:HA	1.80	0.63
1:C:2123:GLN:O	1:C:2127:LEU:N	2.28	0.63
1:A:2217:VAL:O	1:A:2454:SER:HA	1.99	0.63
1:B:2429:TRP:CH2	1:C:2299:PRO:CD	2.69	0.63
1:A:1131:UNK:HA	1:A:1134:UNK:CB	2.29	0.63
1:A:1749:UNK:O	1:A:1753:UNK:N	2.32	0.63
1:B:2058:HIS:C	1:B:2060:TRP:N	2.53	0.63
1:B:2520:GLU:O	1:B:2523:GLU:CB	2.47	0.63
1:C:1749:UNK:O	1:C:1753:UNK:N	2.32	0.63
1:C:2519:LEU:O	1:C:2522:GLU:N	2.30	0.62
1:A:230:UNK:N	1:A:259:UNK:CB	2.61	0.62
1:C:2520:GLU:O	1:C:2523:GLU:CB	2.47	0.62
1:A:2298:PRO:HD2	1:C:2408:GLU:CB	2.28	0.62
1:B:2519:LEU:O	1:B:2522:GLU:N	2.30	0.62
1:C:219:UNK:CB	1:C:270:UNK:CA	2.75	0.62
1:C:1776:UNK:HA	1:C:1781:UNK:HA	1.79	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2083:TYR:O	1:C:2087:CYS:N	2.31	0.62
1:C:1770:UNK:O	1:C:1774:UNK:N	2.33	0.62
1:A:238:UNK:HA	1:A:241:UNK:CB	2.30	0.62
1:A:1770:UNK:O	1:A:1774:UNK:N	2.33	0.62
1:A:2298:PRO:HG2	1:C:2408:GLU:HB3	1.80	0.62
1:A:2520:GLU:O	1:A:2523:GLU:CB	2.47	0.62
1:B:1749:UNK:O	1:B:1753:UNK:N	2.32	0.62
1:C:2060:TRP:O	1:C:2063:PHE:N	2.32	0.62
1:A:2060:TRP:O	1:A:2061:MET:C	2.38	0.62
1:B:237:UNK:N	1:B:252:UNK:HA	2.15	0.62
1:A:2083:TYR:O	1:A:2087:CYS:N	2.31	0.61
1:A:2407:ARG:HG2	1:A:2426:PHE:CB	2.15	0.61
1:B:1770:UNK:O	1:B:1774:UNK:N	2.33	0.61
1:B:2299:PRO:HG2	1:B:2300:SER:H	1.64	0.61
1:C:201:UNK:CA	1:C:288:UNK:CB	2.78	0.61
1:C:2051:VAL:O	1:C:2056:ALA:HA	2.00	0.61
1:A:2245:GLN:HE22	1:B:2339:LYS:HE3	1.61	0.61
1:B:2517:ARG:O	1:B:2520:GLU:CB	2.48	0.61
1:A:2517:ARG:O	1:A:2520:GLU:CB	2.48	0.61
1:B:2409:GLN:HA	1:B:2426:PHE:HB3	1.83	0.61
1:A:1129:UNK:O	1:A:1132:UNK:CB	2.49	0.61
1:A:2519:LEU:O	1:A:2522:GLU:N	2.30	0.61
1:A:2408:GLU:CB	1:B:2298:PRO:HG2	2.30	0.61
1:A:2217:VAL:CB	1:A:2455:PRO:HD2	2.31	0.60
1:B:241:UNK:CA	1:B:248:UNK:HA	2.31	0.60
1:C:2517:ARG:O	1:C:2520:GLU:CB	2.48	0.60
1:A:2429:TRP:CZ2	1:B:2297:SER:CB	2.84	0.60
1:B:2059:ILE:O	1:B:2063:PHE:CB	2.48	0.60
1:B:2222:GLN:OE1	1:B:2282:VAL:HG13	2.02	0.60
1:A:2297:SER:CB	1:C:2429:TRP:CZ2	2.84	0.60
1:B:2409:GLN:HG3	1:B:2410:VAL:HG23	1.80	0.60
1:C:2153:MET:O	1:C:2156:GLU:N	2.35	0.60
1:C:1794:UNK:O	1:C:1798:UNK:N	2.35	0.60
1:A:2024:LEU:O	1:A:2025:LEU:C	2.40	0.60
1:B:2153:MET:O	1:B:2156:GLU:N	2.35	0.60
1:C:1799:UNK:O	1:C:1800:UNK:C	2.49	0.60
1:B:2024:LEU:O	1:B:2025:LEU:C	2.40	0.60
1:A:1015:UNK:O	1:A:1019:UNK:N	2.35	0.60
1:A:2222:GLN:OE1	1:A:2282:VAL:HG13	2.01	0.60
1:A:2407:ARG:HE	1:A:2426:PHE:H	1.49	0.60
1:A:2429:TRP:CH2	1:B:2299:PRO:CD	2.85	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1382:UNK:O	1:A:1386:UNK:N	2.35	0.59
1:A:2328:ALA:CB	1:B:2382:PRO:CG	2.61	0.59
1:B:1141:UNK:O	1:B:1145:UNK:CB	2.49	0.59
1:A:2328:ALA:CB	1:B:2382:PRO:HG2	2.20	0.59
1:A:2429:TRP:CH2	1:B:2297:SER:CB	2.85	0.59
1:C:2024:LEU:O	1:C:2025:LEU:C	2.40	0.59
1:C:2222:GLN:OE1	1:C:2282:VAL:HG13	2.02	0.59
1:A:2406:ARG:CZ	1:A:2429:TRP:CZ2	2.85	0.59
1:A:2429:TRP:CE2	1:B:2297:SER:CB	2.85	0.59
1:B:1974:THR:O	1:B:1976:VAL:N	2.28	0.59
1:A:2153:MET:O	1:A:2156:GLU:N	2.35	0.59
1:B:204:UNK:CB	1:B:284:UNK:C	2.80	0.59
1:C:1015:UNK:O	1:C:1019:UNK:N	2.35	0.59
1:C:2410:VAL:CG1	1:C:2426:PHE:CG	2.86	0.59
1:B:2299:PRO:C	1:B:2301:ARG:N	2.52	0.59
1:A:294:UNK:O	1:A:447:UNK:N	2.36	0.59
1:A:2495:GLU:O	1:A:2499:CYS:N	2.31	0.59
1:B:1382:UNK:O	1:B:1386:UNK:N	2.35	0.59
1:B:2219:VAL:HG22	1:B:2220:VAL:H	1.66	0.59
1:B:2505:LYS:HA	1:B:2508:GLN:CB	2.33	0.59
1:C:2408:GLU:C	1:C:2426:PHE:HD2	2.06	0.59
1:C:2410:VAL:CG1	1:C:2426:PHE:CD2	2.86	0.59
1:A:250:UNK:C	1:A:252:UNK:N	2.63	0.59
1:C:2410:VAL:CG2	1:C:2426:PHE:CE1	2.86	0.59
1:C:2410:VAL:CB	1:C:2426:PHE:CG	2.85	0.59
1:C:2410:VAL:HG11	1:C:2426:PHE:CA	2.33	0.59
1:A:2512:LEU:H	1:B:2491:SER:CB	2.15	0.59
1:B:1015:UNK:O	1:B:1019:UNK:N	2.35	0.59
1:C:2505:LYS:HA	1:C:2508:GLN:CB	2.33	0.59
1:A:2491:SER:CB	1:C:2512:LEU:N	2.67	0.58
1:A:1131:UNK:O	1:A:1134:UNK:CB	2.51	0.58
1:A:2298:PRO:CD	1:C:2408:GLU:HB2	2.34	0.58
1:B:259:UNK:O	1:B:260:UNK:C	2.51	0.58
1:B:268:UNK:O	1:B:269:UNK:C	2.52	0.58
1:C:1130:UNK:O	1:C:1131:UNK:C	2.51	0.58
1:C:2409:GLN:OE1	1:C:2410:VAL:O	2.18	0.58
1:C:2470:TYR:O	1:C:2474:VAL:CB	2.52	0.58
1:A:1127:UNK:O	1:A:1128:UNK:C	2.51	0.58
1:A:1144:UNK:O	1:A:1145:UNK:C	2.51	0.58
1:A:1381:UNK:O	1:A:1382:UNK:C	2.52	0.58
1:B:294:UNK:O	1:B:447:UNK:N	2.36	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2410:VAL:CA	1:C:2425:ASP:CB	2.81	0.58
1:B:2457:SER:O	1:B:2458:LEU:CB	2.51	0.58
1:B:2470:TYR:O	1:B:2474:VAL:CB	2.51	0.58
1:C:1381:UNK:O	1:C:1382:UNK:C	2.52	0.58
1:C:1501:UNK:O	1:C:1502:UNK:C	2.51	0.58
1:A:201:UNK:CB	1:A:288:UNK:CB	2.82	0.58
1:A:281:UNK:O	1:A:282:UNK:C	2.51	0.58
1:B:2296:ILE:CG1	1:B:2300:SER:HB3	2.34	0.58
1:C:267:UNK:O	1:C:268:UNK:C	2.51	0.58
1:C:277:UNK:O	1:C:278:UNK:C	2.52	0.58
1:C:294:UNK:O	1:C:447:UNK:N	2.36	0.58
1:C:1382:UNK:O	1:C:1386:UNK:N	2.35	0.58
1:C:2408:GLU:CG	1:C:2429:TRP:HH2	2.16	0.58
1:A:290:UNK:O	1:A:291:UNK:C	2.51	0.58
1:A:1990:ILE:N	1:A:1991:ILE:HA	2.18	0.58
1:B:1492:UNK:O	1:B:1493:UNK:C	2.51	0.58
1:B:2424:SER:OG	1:B:2425:ASP:OD1	2.21	0.58
1:C:1132:UNK:O	1:C:1133:UNK:C	2.51	0.58
1:A:280:UNK:O	1:A:281:UNK:C	2.51	0.58
1:A:1502:UNK:O	1:A:1503:UNK:C	2.51	0.58
1:A:1790:UNK:O	1:A:1791:UNK:C	2.51	0.58
1:B:261:UNK:O	1:B:262:UNK:C	2.51	0.58
1:B:285:UNK:O	1:B:286:UNK:C	2.51	0.58
1:B:1124:UNK:O	1:B:1125:UNK:C	2.51	0.58
1:B:1495:UNK:O	1:B:1496:UNK:C	2.51	0.58
1:A:264:UNK:O	1:A:265:UNK:C	2.52	0.58
1:A:1011:UNK:O	1:A:1012:UNK:C	2.51	0.58
1:B:2429:TRP:CE3	1:C:2297:SER:CB	2.86	0.58
1:C:264:UNK:O	1:C:265:UNK:C	2.51	0.58
1:C:2410:VAL:CB	1:C:2426:PHE:CD2	2.86	0.58
1:A:1494:UNK:O	1:A:1495:UNK:C	2.51	0.58
1:A:2298:PRO:HD2	1:C:2408:GLU:HB2	1.86	0.58
1:B:262:UNK:O	1:B:263:UNK:C	2.52	0.58
1:B:263:UNK:O	1:B:264:UNK:C	2.51	0.58
1:B:1491:UNK:O	1:B:1492:UNK:C	2.51	0.58
1:C:2408:GLU:CG	1:C:2429:TRP:CH2	2.85	0.58
1:A:1496:UNK:O	1:A:1497:UNK:C	2.52	0.58
1:A:2505:LYS:HA	1:A:2508:GLN:CB	2.33	0.58
1:B:266:UNK:O	1:B:267:UNK:C	2.51	0.58
1:B:271:UNK:O	1:B:272:UNK:C	2.51	0.58
1:B:288:UNK:O	1:B:289:UNK:C	2.52	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:295:UNK:O	1:B:296:UNK:C	2.52	0.58
1:B:1127:UNK:O	1:B:1128:UNK:C	2.51	0.58
1:B:1144:UNK:O	1:B:1145:UNK:C	2.51	0.58
1:B:2083:TYR:O	1:B:2087:CYS:N	2.31	0.58
1:B:2299:PRO:HG2	1:B:2300:SER:N	2.17	0.58
1:C:1011:UNK:O	1:C:1012:UNK:C	2.52	0.58
1:A:285:UNK:O	1:A:286:UNK:C	2.51	0.58
1:A:2293:LEU:HG	1:B:2295:ARG:C	2.22	0.58
1:A:2299:PRO:CD	1:C:2429:TRP:CH2	2.85	0.58
1:B:1494:UNK:O	1:B:1495:UNK:C	2.51	0.58
1:B:2406:ARG:NH1	1:B:2408:GLU:OE1	2.37	0.58
1:C:294:UNK:O	1:C:295:UNK:C	2.51	0.58
1:C:1012:UNK:O	1:C:1013:UNK:C	2.51	0.58
1:C:1503:UNK:O	1:C:1504:UNK:C	2.51	0.58
1:C:1759:UNK:HA	1:C:1763:UNK:CB	2.34	0.58
1:A:1503:UNK:O	1:A:1504:UNK:C	2.51	0.57
1:A:1791:UNK:O	1:A:1792:UNK:C	2.52	0.57
1:A:2298:PRO:HG2	1:C:2408:GLU:HB2	1.85	0.57
1:B:294:UNK:O	1:B:295:UNK:C	2.52	0.57
1:B:1493:UNK:O	1:B:1494:UNK:C	2.51	0.57
1:C:271:UNK:O	1:C:272:UNK:C	2.51	0.57
1:C:289:UNK:O	1:C:290:UNK:C	2.51	0.57
1:C:1013:UNK:O	1:C:1014:UNK:C	2.52	0.57
1:C:2409:GLN:CB	1:C:2426:PHE:CE2	2.85	0.57
1:A:265:UNK:O	1:A:266:UNK:C	2.51	0.57
1:A:2299:PRO:CG	1:C:2429:TRP:CZ2	2.87	0.57
1:B:275:UNK:O	1:B:276:UNK:C	2.52	0.57
1:B:1501:UNK:O	1:B:1502:UNK:C	2.51	0.57
1:B:1794:UNK:O	1:B:1798:UNK:N	2.36	0.57
1:C:1504:UNK:O	1:C:1505:UNK:C	2.51	0.57
1:A:226:UNK:C	1:A:263:UNK:CB	2.77	0.57
1:A:259:UNK:O	1:A:260:UNK:C	2.51	0.57
1:A:1759:UNK:HA	1:A:1763:UNK:CB	2.34	0.57
1:B:272:UNK:O	1:B:273:UNK:C	2.51	0.57
1:B:1123:UNK:O	1:B:1124:UNK:C	2.51	0.57
1:C:272:UNK:O	1:C:273:UNK:C	2.51	0.57
1:C:274:UNK:O	1:C:275:UNK:C	2.51	0.57
1:C:281:UNK:O	1:C:282:UNK:C	2.52	0.57
1:C:1145:UNK:O	1:C:1146:UNK:C	2.51	0.57
1:C:1498:UNK:O	1:C:1499:UNK:C	2.52	0.57
1:C:1502:UNK:O	1:C:1503:UNK:C	2.51	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2457:SER:O	1:C:2458:LEU:CB	2.51	0.57
1:A:222:UNK:CB	1:A:266:UNK:C	2.82	0.57
1:A:287:UNK:O	1:A:288:UNK:C	2.51	0.57
1:A:288:UNK:O	1:A:289:UNK:C	2.52	0.57
1:A:2470:TYR:O	1:A:2474:VAL:CB	2.52	0.57
1:C:1125:UNK:O	1:C:1126:UNK:C	2.51	0.57
1:A:1124:UNK:O	1:A:1125:UNK:C	2.51	0.57
1:A:1126:UNK:O	1:A:1127:UNK:C	2.51	0.57
1:A:1145:UNK:O	1:A:1146:UNK:C	2.51	0.57
1:B:1126:UNK:O	1:B:1127:UNK:C	2.51	0.57
1:B:1759:UNK:HA	1:B:1763:UNK:CB	2.34	0.57
1:C:258:UNK:O	1:C:259:UNK:C	2.52	0.57
1:C:1380:UNK:O	1:C:1381:UNK:C	2.51	0.57
1:A:263:UNK:O	1:A:264:UNK:C	2.51	0.57
1:A:1123:UNK:O	1:A:1124:UNK:C	2.51	0.57
1:A:2408:GLU:CG	1:A:2429:TRP:CZ3	2.87	0.57
1:A:2457:SER:O	1:A:2458:LEU:CB	2.51	0.57
1:B:1013:UNK:O	1:B:1014:UNK:C	2.52	0.57
1:B:1145:UNK:O	1:B:1146:UNK:C	2.51	0.57
1:C:268:UNK:O	1:C:269:UNK:C	2.51	0.57
1:A:272:UNK:O	1:A:273:UNK:C	2.52	0.57
1:A:295:UNK:O	1:A:296:UNK:C	2.52	0.57
1:A:1014:UNK:O	1:A:1015:UNK:C	2.51	0.57
1:A:1499:UNK:O	1:A:1500:UNK:C	2.51	0.57
1:A:1788:UNK:O	1:A:1789:UNK:C	2.52	0.57
1:B:1129:UNK:O	1:B:1130:UNK:C	2.52	0.57
1:C:262:UNK:O	1:C:263:UNK:C	2.51	0.57
1:C:295:UNK:O	1:C:296:UNK:C	2.51	0.57
1:C:1497:UNK:O	1:C:1498:UNK:C	2.52	0.57
1:A:275:UNK:O	1:A:276:UNK:C	2.52	0.57
1:A:278:UNK:O	1:A:279:UNK:C	2.51	0.57
1:A:291:UNK:O	1:A:292:UNK:C	2.51	0.57
1:A:1504:UNK:O	1:A:1505:UNK:C	2.51	0.57
1:A:2406:ARG:NH1	1:A:2429:TRP:CZ2	2.73	0.57
1:A:2408:GLU:CG	1:B:2298:PRO:HG2	2.35	0.57
1:B:273:UNK:O	1:B:274:UNK:C	2.51	0.57
1:B:280:UNK:O	1:B:281:UNK:C	2.51	0.57
1:B:2424:SER:N	1:B:2426:PHE:CZ	2.73	0.57
1:C:1134:UNK:C	1:C:1136:UNK:N	2.65	0.57
1:A:266:UNK:O	1:A:267:UNK:C	2.51	0.57
1:A:1143:UNK:O	1:A:1144:UNK:C	2.52	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1974:THR:O	1:A:1976:VAL:N	2.28	0.57
1:A:2406:ARG:NH1	1:B:2299:PRO:HG3	2.09	0.57
1:B:265:UNK:O	1:B:266:UNK:C	2.51	0.57
1:B:276:UNK:O	1:B:277:UNK:C	2.51	0.57
1:B:278:UNK:O	1:B:279:UNK:C	2.52	0.57
1:B:1125:UNK:O	1:B:1126:UNK:C	2.51	0.57
1:B:1146:UNK:O	1:B:1147:UNK:C	2.51	0.57
1:C:279:UNK:O	1:C:280:UNK:C	2.51	0.57
1:C:1799:UNK:O	1:C:1802:UNK:N	2.37	0.57
1:C:2410:VAL:HG21	1:C:2426:PHE:CE1	2.35	0.57
1:A:273:UNK:O	1:A:274:UNK:C	2.52	0.57
1:A:1493:UNK:O	1:A:1494:UNK:C	2.51	0.57
1:A:2297:SER:HB2	1:C:2429:TRP:CH2	2.39	0.57
1:A:2429:TRP:CZ3	1:B:2297:SER:HB3	2.38	0.57
1:B:292:UNK:O	1:B:293:UNK:C	2.52	0.57
1:C:1144:UNK:C	1:C:1146:UNK:N	2.68	0.57
1:C:1146:UNK:O	1:C:1147:UNK:C	2.51	0.57
1:C:1491:UNK:O	1:C:1492:UNK:C	2.51	0.57
1:C:1495:UNK:O	1:C:1496:UNK:C	2.51	0.57
1:B:284:UNK:O	1:B:285:UNK:C	2.51	0.56
1:B:2209:PHE:C	1:B:2211:SER:H	2.08	0.56
1:A:258:UNK:O	1:A:259:UNK:C	2.51	0.56
1:A:261:UNK:O	1:A:262:UNK:C	2.51	0.56
1:A:267:UNK:O	1:A:268:UNK:C	2.51	0.56
1:A:289:UNK:O	1:A:290:UNK:C	2.51	0.56
1:A:2297:SER:HB2	1:A:2299:PRO:HG2	1.86	0.56
1:B:215:UNK:CB	1:B:274:UNK:CA	2.83	0.56
1:C:212:UNK:HA	1:C:277:UNK:CB	2.35	0.56
1:C:288:UNK:O	1:C:289:UNK:C	2.52	0.56
1:C:1492:UNK:O	1:C:1493:UNK:C	2.51	0.56
1:A:282:UNK:O	1:A:283:UNK:C	2.51	0.56
1:A:292:UNK:O	1:A:293:UNK:C	2.52	0.56
1:A:1491:UNK:O	1:A:1492:UNK:C	2.51	0.56
1:B:1014:UNK:O	1:B:1015:UNK:C	2.51	0.56
1:B:1380:UNK:O	1:B:1381:UNK:C	2.51	0.56
1:B:1381:UNK:O	1:B:1382:UNK:C	2.52	0.56
1:C:266:UNK:O	1:C:267:UNK:C	2.51	0.56
1:C:290:UNK:O	1:C:291:UNK:C	2.51	0.56
1:C:1744:UNK:O	1:C:1748:UNK:N	2.38	0.56
1:A:233:UNK:CB	1:A:255:UNK:O	2.54	0.56
1:A:293:UNK:O	1:A:294:UNK:C	2.51	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1793:UNK:O	1:A:1797:UNK:CA	2.52	0.56
1:B:260:UNK:O	1:B:261:UNK:C	2.51	0.56
1:B:269:UNK:O	1:B:270:UNK:C	2.51	0.56
1:B:1128:UNK:O	1:B:1129:UNK:C	2.51	0.56
1:B:1744:UNK:O	1:B:1748:UNK:N	2.38	0.56
1:C:292:UNK:O	1:C:293:UNK:C	2.52	0.56
1:C:1500:UNK:O	1:C:1501:UNK:C	2.52	0.56
1:C:2410:VAL:HG21	1:C:2426:PHE:CD1	2.37	0.56
1:A:238:UNK:O	1:A:241:UNK:N	2.39	0.56
1:A:260:UNK:O	1:A:261:UNK:C	2.52	0.56
1:A:1744:UNK:O	1:A:1748:UNK:N	2.39	0.56
1:A:1766:UNK:O	1:A:1770:UNK:N	2.39	0.56
1:B:279:UNK:O	1:B:280:UNK:C	2.52	0.56
1:B:1490:UNK:O	1:B:1491:UNK:C	2.51	0.56
1:B:1503:UNK:O	1:B:1504:UNK:C	2.51	0.56
1:B:1766:UNK:O	1:B:1770:UNK:N	2.39	0.56
1:C:269:UNK:O	1:C:270:UNK:C	2.51	0.56
1:C:276:UNK:O	1:C:277:UNK:C	2.52	0.56
1:C:285:UNK:O	1:C:286:UNK:C	2.51	0.56
1:C:1133:UNK:O	1:C:1134:UNK:C	2.51	0.56
1:A:279:UNK:O	1:A:280:UNK:C	2.51	0.56
1:A:1013:UNK:O	1:A:1014:UNK:C	2.52	0.56
1:A:2407:ARG:NH2	1:A:2426:PHE:CD1	2.73	0.56
1:B:1504:UNK:O	1:B:1505:UNK:C	2.51	0.56
1:B:2293:LEU:HG	1:C:2295:ARG:CA	2.35	0.56
1:B:2293:LEU:CG	1:C:2295:ARG:O	2.47	0.56
1:C:273:UNK:O	1:C:274:UNK:C	2.51	0.56
1:C:1134:UNK:O	1:C:1136:UNK:N	2.38	0.56
1:A:262:UNK:O	1:A:263:UNK:C	2.51	0.56
1:C:260:UNK:O	1:C:261:UNK:C	2.52	0.56
1:C:261:UNK:O	1:C:262:UNK:C	2.51	0.56
1:C:1127:UNK:O	1:C:1128:UNK:C	2.51	0.56
1:A:268:UNK:O	1:A:269:UNK:C	2.52	0.56
1:A:1789:UNK:O	1:A:1790:UNK:C	2.52	0.56
1:B:229:UNK:O	1:B:259:UNK:CB	2.50	0.56
1:B:270:UNK:O	1:B:271:UNK:C	2.52	0.56
1:C:2410:VAL:HG12	1:C:2426:PHE:HA	1.88	0.56
1:A:294:UNK:O	1:A:295:UNK:C	2.51	0.56
1:A:1490:UNK:O	1:A:1491:UNK:C	2.51	0.56
1:B:258:UNK:O	1:B:259:UNK:C	2.51	0.56
1:B:277:UNK:O	1:B:278:UNK:C	2.52	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1123:UNK:O	1:C:1124:UNK:C	2.51	0.56
1:C:1494:UNK:O	1:C:1495:UNK:C	2.51	0.56
1:A:237:UNK:HA	1:A:252:UNK:CB	2.28	0.56
1:A:276:UNK:O	1:A:277:UNK:C	2.51	0.56
1:A:286:UNK:O	1:A:287:UNK:C	2.51	0.56
1:A:1495:UNK:O	1:A:1496:UNK:C	2.51	0.56
1:B:1011:UNK:O	1:B:1012:UNK:C	2.51	0.56
1:C:259:UNK:O	1:C:260:UNK:C	2.51	0.56
1:C:1766:UNK:O	1:C:1770:UNK:N	2.39	0.56
1:A:1501:UNK:O	1:A:1502:UNK:C	2.51	0.55
1:A:2409:GLN:CA	1:A:2410:VAL:CG2	2.84	0.55
1:B:1012:UNK:O	1:B:1013:UNK:C	2.51	0.55
1:B:2429:TRP:CZ3	1:C:2297:SER:CA	2.89	0.55
1:A:1128:UNK:O	1:A:1129:UNK:C	2.51	0.55
1:B:1499:UNK:O	1:B:1500:UNK:C	2.52	0.55
1:C:275:UNK:O	1:C:276:UNK:C	2.52	0.55
1:C:1490:UNK:O	1:C:1491:UNK:C	2.51	0.55
1:A:212:UNK:N	1:A:277:UNK:CB	2.68	0.55
1:B:1500:UNK:O	1:B:1501:UNK:C	2.51	0.55
1:B:293:UNK:O	1:B:294:UNK:C	2.52	0.55
1:B:2041:LYS:C	1:B:2043:VAL:N	2.59	0.55
1:C:282:UNK:O	1:C:283:UNK:C	2.52	0.55
1:C:291:UNK:O	1:C:292:UNK:C	2.51	0.55
1:C:1131:UNK:O	1:C:1132:UNK:C	2.52	0.55
1:A:1380:UNK:O	1:A:1381:UNK:C	2.52	0.55
1:B:2429:TRP:CE3	1:C:2297:SER:HB2	2.39	0.55
1:C:263:UNK:O	1:C:264:UNK:C	2.51	0.55
1:C:1493:UNK:O	1:C:1494:UNK:C	2.51	0.55
1:C:1499:UNK:O	1:C:1500:UNK:C	2.51	0.55
1:A:1012:UNK:O	1:A:1013:UNK:C	2.51	0.55
1:A:1129:UNK:O	1:A:1130:UNK:C	2.52	0.55
1:A:2049:PHE:H	1:A:2051:VAL:CB	2.19	0.55
1:B:274:UNK:O	1:B:275:UNK:C	2.51	0.55
1:B:569:UNK:O	1:B:570:UNK:C	2.55	0.55
1:C:278:UNK:O	1:C:279:UNK:C	2.51	0.55
1:C:283:UNK:O	1:C:284:UNK:C	2.51	0.55
1:C:1129:UNK:O	1:C:1130:UNK:C	2.51	0.55
1:A:2299:PRO:HG3	1:C:2429:TRP:HZ2	1.71	0.55
1:B:291:UNK:O	1:B:292:UNK:C	2.51	0.55
1:C:1974:THR:O	1:C:1976:VAL:N	2.28	0.55
1:A:283:UNK:O	1:A:284:UNK:C	2.51	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2522:GLU:O	1:A:2524:GLU:N	2.40	0.55
1:B:286:UNK:O	1:B:287:UNK:C	2.51	0.55
1:B:289:UNK:O	1:B:290:UNK:C	2.52	0.55
1:B:1498:UNK:O	1:B:1499:UNK:C	2.52	0.55
1:C:201:UNK:CB	1:C:288:UNK:CB	2.84	0.55
1:C:284:UNK:O	1:C:285:UNK:C	2.51	0.55
1:A:1146:UNK:O	1:A:1147:UNK:C	2.51	0.55
1:C:569:UNK:O	1:C:570:UNK:C	2.55	0.55
1:A:1125:UNK:O	1:A:1126:UNK:C	2.51	0.55
1:B:1502:UNK:O	1:B:1503:UNK:C	2.51	0.55
1:C:265:UNK:O	1:C:266:UNK:C	2.52	0.55
1:C:280:UNK:O	1:C:281:UNK:C	2.51	0.55
1:C:1124:UNK:O	1:C:1125:UNK:C	2.51	0.55
1:B:241:UNK:CA	1:B:248:UNK:CA	2.86	0.54
1:C:240:UNK:C	1:C:248:UNK:CB	2.86	0.54
1:C:270:UNK:O	1:C:271:UNK:C	2.52	0.54
1:C:1126:UNK:O	1:C:1127:UNK:C	2.51	0.54
1:C:1496:UNK:O	1:C:1497:UNK:C	2.51	0.54
1:A:1492:UNK:O	1:A:1493:UNK:C	2.51	0.54
1:A:2217:VAL:CA	1:A:2454:SER:HB2	2.37	0.54
1:B:2296:ILE:HG13	1:B:2300:SER:HB3	1.88	0.54
1:B:2410:VAL:HB	1:C:2425:ASP:HB3	1.89	0.54
1:A:270:UNK:O	1:A:271:UNK:C	2.52	0.54
1:A:274:UNK:O	1:A:275:UNK:C	2.52	0.54
1:A:1498:UNK:O	1:A:1499:UNK:C	2.52	0.54
1:B:264:UNK:O	1:B:265:UNK:C	2.51	0.54
1:B:267:UNK:O	1:B:268:UNK:C	2.51	0.54
1:B:1497:UNK:O	1:B:1498:UNK:C	2.52	0.54
1:C:1014:UNK:O	1:C:1015:UNK:C	2.51	0.54
1:C:2522:GLU:O	1:C:2524:GLU:N	2.40	0.54
1:A:240:UNK:C	1:A:248:UNK:CB	2.86	0.54
1:A:284:UNK:O	1:A:285:UNK:C	2.51	0.54
1:A:569:UNK:O	1:A:570:UNK:C	2.55	0.54
1:A:2426:PHE:O	1:A:2428:GLU:CG	2.55	0.54
1:B:2293:LEU:HD12	1:C:2295:ARG:HA	1.88	0.54
1:B:2522:GLU:O	1:B:2524:GLU:N	2.40	0.54
1:C:2410:VAL:CG2	1:C:2426:PHE:CG	2.70	0.54
1:C:2424:SER:OG	1:C:2425:ASP:N	2.40	0.54
1:A:2060:TRP:O	1:A:2063:PHE:CA	2.56	0.54
1:B:1130:UNK:O	1:B:1131:UNK:C	2.56	0.54
1:A:2236:GLU:OE2	1:C:2291:GLY:HA2	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2491:SER:CB	1:C:2512:LEU:CA	2.83	0.54
1:B:2077:ALA:CA	1:B:2083:TYR:CB	2.86	0.54
1:A:243:UNK:CB	1:A:247:UNK:CB	2.86	0.54
1:A:1142:UNK:C	1:A:1144:UNK:N	2.70	0.54
1:A:2077:ALA:CA	1:A:2083:TYR:CB	2.86	0.54
1:A:2408:GLU:C	1:A:2426:PHE:HB3	2.28	0.54
1:B:281:UNK:O	1:B:282:UNK:C	2.51	0.54
1:C:286:UNK:O	1:C:287:UNK:C	2.51	0.54
1:C:1787:UNK:O	1:C:1788:UNK:C	2.56	0.54
1:A:269:UNK:O	1:A:270:UNK:C	2.51	0.54
1:A:277:UNK:O	1:A:278:UNK:C	2.51	0.54
1:A:1500:UNK:O	1:A:1501:UNK:C	2.52	0.54
1:A:2408:GLU:HG3	1:A:2429:TRP:CH2	2.43	0.54
1:B:290:UNK:O	1:B:291:UNK:C	2.51	0.54
1:B:1496:UNK:O	1:B:1497:UNK:C	2.52	0.54
1:B:2012:SER:O	1:B:2016:VAL:N	2.39	0.54
1:A:2298:PRO:CG	1:C:2408:GLU:CB	2.85	0.54
1:A:1974:THR:C	1:A:1976:VAL:H	2.11	0.54
1:A:2050:GLN:CB	1:A:2055:VAL:CB	2.86	0.54
1:C:1128:UNK:O	1:C:1129:UNK:C	2.51	0.54
1:A:1497:UNK:O	1:A:1498:UNK:C	2.52	0.53
1:B:240:UNK:CB	1:B:252:UNK:CB	2.86	0.53
1:B:2046:LYS:CB	1:B:2050:GLN:CB	2.86	0.53
1:B:2328:ALA:HB2	1:C:2382:PRO:HG2	1.89	0.53
1:C:233:UNK:CB	1:C:255:UNK:C	2.85	0.53
1:A:271:UNK:O	1:A:272:UNK:C	2.51	0.53
1:A:2143:THR:O	1:A:2147:LEU:N	2.41	0.53
1:B:295:UNK:N	1:B:447:UNK:N	2.56	0.53
1:C:243:UNK:CB	1:C:247:UNK:CB	2.85	0.53
1:C:1137:UNK:O	1:C:1141:UNK:N	2.42	0.53
1:C:1986:VAL:O	1:C:1990:ILE:N	2.33	0.53
1:A:295:UNK:CA	1:A:447:UNK:H	1.93	0.53
1:B:243:UNK:CB	1:B:247:UNK:CB	2.86	0.53
1:B:283:UNK:CB	1:B:1993:PHE:CB	2.86	0.53
1:B:287:UNK:O	1:B:288:UNK:C	2.52	0.53
1:C:2056:ALA:O	1:C:2060:TRP:CB	2.56	0.53
1:A:295:UNK:O	1:A:447:UNK:CB	2.56	0.53
1:A:2101:TYR:HA	1:A:2104:ARG:CB	2.39	0.53
1:A:2245:GLN:HE22	1:B:2339:LYS:CE	2.20	0.53
1:B:2472:SER:O	1:B:2476:VAL:CB	2.56	0.53
1:C:2409:GLN:N	1:C:2410:VAL:HG13	2.21	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:233:UNK:CB	1:A:256:UNK:N	2.70	0.53
1:B:2046:LYS:HA	1:B:2050:GLN:CB	2.38	0.53
1:B:2101:TYR:HA	1:B:2104:ARG:CB	2.39	0.53
1:C:295:UNK:O	1:C:447:UNK:CB	2.56	0.53
1:C:2408:GLU:OE1	1:C:2408:GLU:HA	2.09	0.53
1:A:2298:PRO:HD2	1:C:2408:GLU:HG2	1.90	0.53
1:B:2051:VAL:C	1:B:2053:LEU:H	2.11	0.53
1:B:2218:GLY:HA3	1:B:2453:VAL:O	2.06	0.53
1:B:2409:GLN:CG	1:B:2410:VAL:C	2.76	0.53
1:C:2410:VAL:CG1	1:C:2426:PHE:CA	2.85	0.53
1:A:2224:ILE:HG12	1:A:2324:GLN:O	2.09	0.53
1:B:2046:LYS:CA	1:B:2050:GLN:CB	2.87	0.53
1:C:293:UNK:O	1:C:294:UNK:C	2.52	0.53
1:B:211:UNK:O	1:B:277:UNK:CB	2.56	0.53
1:A:2429:TRP:CZ3	1:B:2297:SER:CB	2.92	0.53
1:B:295:UNK:O	1:B:447:UNK:CB	2.56	0.53
1:C:1787:UNK:O	1:C:1791:UNK:N	2.42	0.53
1:A:240:UNK:C	1:A:248:UNK:HA	2.39	0.53
1:A:2424:SER:OG	1:C:2411:GLY:O	2.15	0.53
1:A:2472:SER:O	1:A:2476:VAL:CB	2.57	0.53
1:B:2429:TRP:CZ3	1:C:2297:SER:HA	2.43	0.53
1:B:2429:TRP:CD2	1:C:2297:SER:HB2	2.43	0.53
1:C:287:UNK:O	1:C:288:UNK:C	2.52	0.53
1:C:2224:ILE:HG12	1:C:2324:GLN:O	2.09	0.53
1:C:2472:SER:O	1:C:2476:VAL:CB	2.57	0.53
1:C:2052:VAL:O	1:C:2056:ALA:HB2	2.09	0.52
1:C:2077:ALA:CA	1:C:2083:TYR:CB	2.86	0.52
1:B:2518:GLU:O	1:B:2521:LEU:CB	2.57	0.52
1:C:2050:GLN:CB	1:C:2051:VAL:CA	2.86	0.52
1:C:2101:TYR:HA	1:C:2104:ARG:CB	2.39	0.52
1:C:2408:GLU:C	1:C:2410:VAL:CG1	2.72	0.52
1:A:569:UNK:O	1:A:572:UNK:N	2.43	0.52
1:A:1792:UNK:O	1:A:1793:UNK:O	2.27	0.52
1:A:2299:PRO:CG	1:C:2429:TRP:HZ2	2.23	0.52
1:B:2410:VAL:CG2	1:B:2426:PHE:CD1	2.93	0.52
1:B:2050:GLN:N	1:B:2051:VAL:CA	2.73	0.52
1:B:2143:THR:O	1:B:2147:LEU:N	2.41	0.52
1:B:569:UNK:O	1:B:572:UNK:N	2.43	0.52
1:B:2224:ILE:HG12	1:B:2324:GLN:O	2.09	0.52
1:C:2518:GLU:O	1:C:2521:LEU:CB	2.57	0.52
1:B:240:UNK:O	1:B:242:UNK:N	2.43	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2409:GLN:HA	1:B:2410:VAL:HG22	1.91	0.52
1:C:1974:THR:C	1:C:1976:VAL:H	2.11	0.52
1:A:2518:GLU:O	1:A:2521:LEU:CB	2.57	0.52
1:B:2299:PRO:O	1:B:2302:ALA:N	2.42	0.52
1:C:2050:GLN:N	1:C:2051:VAL:CB	2.73	0.52
1:C:2052:VAL:CA	1:C:2056:ALA:HB2	2.39	0.52
1:A:265:UNK:HA	1:A:2528:LYS:CB	2.40	0.52
1:C:240:UNK:C	1:C:242:UNK:N	2.73	0.52
1:C:2049:PHE:N	1:C:2051:VAL:CB	2.73	0.52
1:A:2050:GLN:N	1:A:2051:VAL:CB	2.73	0.51
1:B:240:UNK:C	1:B:242:UNK:N	2.73	0.51
1:C:569:UNK:O	1:C:572:UNK:N	2.43	0.51
1:B:238:UNK:C	1:B:240:UNK:N	2.73	0.51
1:B:240:UNK:CB	1:B:252:UNK:N	2.73	0.51
1:B:248:UNK:C	1:B:250:UNK:N	2.73	0.51
1:B:2408:GLU:C	1:B:2426:PHE:HB2	2.31	0.51
1:C:1140:UNK:C	1:C:1142:UNK:N	2.72	0.51
1:A:2299:PRO:CG	1:C:2406:ARG:NH1	2.73	0.51
1:C:1137:UNK:O	1:C:1138:UNK:O	2.28	0.51
1:A:1131:UNK:O	1:A:1132:UNK:C	2.57	0.51
1:B:1776:UNK:O	1:B:1780:UNK:N	2.44	0.51
1:B:233:UNK:HA	1:B:255:UNK:CB	2.40	0.51
1:C:2409:GLN:OE1	1:C:2411:GLY:HA3	2.11	0.51
1:A:2410:VAL:CG2	1:A:2426:PHE:CG	2.93	0.51
1:B:1136:UNK:C	1:B:1138:UNK:N	2.72	0.51
1:B:2429:TRP:HZ2	1:C:2299:PRO:CG	2.23	0.51
1:A:1776:UNK:O	1:A:1780:UNK:N	2.43	0.51
1:A:2299:PRO:HB3	1:C:2406:ARG:HH12	1.75	0.51
1:B:1747:UNK:O	1:B:1748:UNK:C	2.58	0.51
1:B:1791:UNK:C	1:B:1793:UNK:N	2.73	0.51
1:C:1747:UNK:O	1:C:1748:UNK:C	2.58	0.51
1:A:1747:UNK:O	1:A:1748:UNK:C	2.58	0.51
1:B:2050:GLN:N	1:B:2051:VAL:CB	2.73	0.51
1:A:1510:UNK:C	1:A:1512:UNK:N	2.73	0.51
1:B:265:UNK:HA	1:B:2528:LYS:CB	2.40	0.51
1:B:1751:UNK:O	1:B:1755:UNK:N	2.44	0.51
1:B:2046:LYS:HA	1:B:2050:GLN:N	2.26	0.51
1:C:265:UNK:HA	1:C:2528:LYS:CB	2.40	0.51
1:A:1140:UNK:C	1:A:1142:UNK:N	2.73	0.51
1:B:242:UNK:C	1:B:244:UNK:N	2.73	0.51
1:C:244:UNK:N	1:C:247:UNK:CB	2.73	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1136:UNK:C	1:A:1138:UNK:N	2.72	0.50
1:A:1751:UNK:O	1:A:1755:UNK:N	2.44	0.50
1:A:2409:GLN:CA	1:A:2410:VAL:HG23	2.26	0.50
1:A:2299:PRO:HG3	1:C:2429:TRP:CZ2	2.46	0.50
1:A:245:UNK:C	1:A:247:UNK:N	2.73	0.50
1:A:1130:UNK:C	1:A:1132:UNK:N	2.74	0.50
1:B:222:UNK:CA	1:B:266:UNK:CB	2.88	0.50
1:C:2052:VAL:HA	1:C:2056:ALA:HB2	1.93	0.50
1:C:2220:VAL:HG13	1:C:2280:ASP:OD1	2.11	0.50
1:C:2409:GLN:OE1	1:C:2410:VAL:C	2.46	0.50
1:A:2429:TRP:HH2	1:B:2299:PRO:CD	2.24	0.50
1:B:2220:VAL:HG13	1:B:2280:ASP:OD1	2.11	0.50
1:C:1142:UNK:C	1:C:1144:UNK:N	2.73	0.50
1:C:2406:ARG:HH11	1:C:2408:GLU:CD	2.13	0.50
1:A:2050:GLN:CB	1:A:2051:VAL:CA	2.86	0.50
1:A:2220:VAL:HG13	1:A:2280:ASP:OD1	2.12	0.50
1:A:2513:VAL:H	1:B:2491:SER:CB	2.24	0.50
1:C:1776:UNK:O	1:C:1780:UNK:N	2.44	0.50
1:B:235:UNK:C	1:B:237:UNK:N	2.73	0.50
1:B:1140:UNK:C	1:B:1142:UNK:N	2.73	0.50
1:B:2011:LEU:O	1:B:2015:GLN:CB	2.60	0.50
1:C:2143:THR:O	1:C:2147:LEU:N	2.41	0.50
1:B:2424:SER:N	1:B:2426:PHE:CE1	2.80	0.50
1:C:1751:UNK:O	1:C:1755:UNK:N	2.44	0.50
1:C:2425:ASP:C	1:C:2426:PHE:HD1	2.15	0.50
1:B:1974:THR:C	1:B:1976:VAL:H	2.11	0.49
1:B:2219:VAL:CG1	1:B:2220:VAL:H	2.13	0.49
1:A:295:UNK:N	1:A:447:UNK:N	2.56	0.49
1:B:222:UNK:CB	1:B:266:UNK:CA	2.90	0.49
1:B:2425:ASP:C	1:B:2426:PHE:CD1	2.86	0.49
1:C:234:UNK:O	1:C:237:UNK:N	2.45	0.49
1:B:2003:ALA:CB	1:B:2102:PRO:CA	2.90	0.49
1:C:1134:UNK:O	1:C:1135:UNK:C	2.60	0.49
1:A:1130:UNK:O	1:A:1132:UNK:N	2.46	0.49
1:A:2408:GLU:CD	1:A:2429:TRP:CH2	2.86	0.49
1:B:2429:TRP:HZ2	1:C:2299:PRO:HG2	1.78	0.49
1:C:2011:LEU:O	1:C:2015:GLN:CB	2.60	0.49
1:C:2409:GLN:HB2	1:C:2410:VAL:CG2	2.23	0.49
1:A:2298:PRO:CG	1:C:2408:GLU:HB2	2.42	0.49
1:B:2519:LEU:C	1:B:2521:LEU:N	2.66	0.49
1:C:241:UNK:CA	1:C:248:UNK:CB	2.85	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:234:UNK:O	1:B:237:UNK:N	2.45	0.49
1:B:2039:LEU:O	1:B:2040:ARG:C	2.51	0.49
1:C:2012:SER:O	1:C:2016:VAL:N	2.39	0.49
1:C:2409:GLN:CA	1:C:2426:PHE:CD2	2.96	0.49
1:A:1130:UNK:O	1:A:1131:UNK:C	2.60	0.49
1:A:1990:ILE:N	1:A:1991:ILE:CA	2.75	0.49
1:A:2040:ARG:O	1:A:2041:LYS:C	2.52	0.49
1:A:2042:THR:O	1:A:2043:VAL:C	2.52	0.49
1:B:2297:SER:O	1:B:2301:ARG:N	2.44	0.49
1:A:2408:GLU:HG3	1:A:2429:TRP:HZ3	1.74	0.49
1:C:2039:LEU:O	1:C:2040:ARG:C	2.51	0.49
1:B:233:UNK:C	1:B:255:UNK:CB	2.91	0.48
1:C:2040:ARG:O	1:C:2041:LYS:C	2.52	0.48
1:C:2041:LYS:O	1:C:2043:VAL:N	2.47	0.48
1:A:2512:LEU:C	1:B:2491:SER:CB	2.81	0.48
1:A:1792:UNK:O	1:A:1796:UNK:CB	2.61	0.48
1:A:2039:LEU:O	1:A:2040:ARG:C	2.51	0.48
1:A:2297:SER:OG	1:A:2300:SER:CB	2.45	0.48
1:A:2519:LEU:C	1:A:2521:LEU:N	2.66	0.48
1:B:2409:GLN:HG3	1:B:2411:GLY:H	1.78	0.48
1:C:2037:LEU:O	1:C:2038:TYR:C	2.51	0.48
1:A:2146:THR:O	1:A:2150:SER:N	2.47	0.48
1:A:2299:PRO:HD2	1:C:2408:GLU:CG	2.42	0.48
1:B:2407:ARG:HG3	1:B:2407:ARG:O	2.12	0.48
1:C:1776:UNK:CB	1:C:1781:UNK:CA	2.85	0.48
1:B:2038:TYR:O	1:B:2039:LEU:C	2.52	0.48
1:B:2429:TRP:CZ2	1:C:2297:SER:OG	2.66	0.48
1:A:2012:SER:O	1:A:2016:VAL:N	2.39	0.48
1:B:884:UNK:O	1:B:887:UNK:N	2.47	0.48
1:B:2051:VAL:O	1:B:2053:LEU:N	2.37	0.48
1:C:2500:VAL:O	1:C:2504:LEU:N	2.36	0.48
1:A:2298:PRO:CD	1:C:2408:GLU:CB	2.91	0.48
1:C:2041:LYS:O	1:C:2044:LEU:CB	2.61	0.48
1:A:2038:TYR:O	1:A:2039:LEU:C	2.51	0.48
1:A:2101:TYR:O	1:A:2104:ARG:CB	2.61	0.48
1:B:2003:ALA:HB1	1:B:2102:PRO:HA	1.96	0.48
1:B:2101:TYR:O	1:B:2104:ARG:CB	2.61	0.48
1:C:1983:ALA:O	1:C:1987:ASP:N	2.47	0.48
1:C:2519:LEU:C	1:C:2521:LEU:N	2.66	0.48
1:B:233:UNK:CA	1:B:255:UNK:CB	2.92	0.48
1:B:2146:THR:O	1:B:2150:SER:N	2.47	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2298:PRO:O	1:B:2301:ARG:CB	2.59	0.48
1:C:2038:TYR:O	1:C:2039:LEU:C	2.51	0.48
1:C:2101:TYR:O	1:C:2104:ARG:CB	2.61	0.48
1:B:241:UNK:CA	1:B:248:UNK:CB	2.87	0.47
1:B:1368:UNK:O	1:B:1372:UNK:N	2.47	0.47
1:B:2037:LEU:O	1:B:2038:TYR:C	2.51	0.47
1:B:2046:LYS:HA	1:B:2050:GLN:CA	2.44	0.47
1:B:2050:GLN:CB	1:B:2051:VAL:HA	2.43	0.47
1:A:211:UNK:CB	1:A:277:UNK:CB	2.92	0.47
1:A:1368:UNK:O	1:A:1372:UNK:N	2.47	0.47
1:A:2041:LYS:O	1:A:2042:THR:C	2.52	0.47
1:A:2106:LEU:O	1:A:2110:LEU:CB	2.62	0.47
1:A:2522:GLU:O	1:A:2523:GLU:C	2.53	0.47
1:B:234:UNK:C	1:B:236:UNK:N	2.74	0.47
1:B:2052:VAL:O	1:B:2056:ALA:HA	2.14	0.47
1:B:2106:LEU:O	1:B:2110:LEU:CB	2.62	0.47
1:C:2046:LYS:HA	1:C:2049:PHE:CB	2.44	0.47
1:C:2222:GLN:OE1	1:C:2282:VAL:CG1	2.62	0.47
1:A:2153:MET:CA	1:A:2156:GLU:CB	2.85	0.47
1:A:2222:GLN:OE1	1:A:2282:VAL:CG1	2.62	0.47
1:B:2040:ARG:O	1:B:2041:LYS:C	2.52	0.47
1:B:2041:LYS:O	1:B:2043:VAL:CA	2.62	0.47
1:B:2041:LYS:HA	1:B:2044:LEU:CB	2.44	0.47
1:C:2146:THR:O	1:C:2150:SER:N	2.47	0.47
1:A:237:UNK:CA	1:A:252:UNK:CA	2.28	0.47
1:A:2406:ARG:NH2	1:A:2429:TRP:CZ2	2.82	0.47
1:A:201:UNK:N	1:A:288:UNK:CB	2.75	0.47
1:A:241:UNK:CA	1:A:248:UNK:CB	2.85	0.47
1:C:2003:ALA:CB	1:C:2102:PRO:CA	2.89	0.47
1:C:2106:LEU:O	1:C:2110:LEU:CB	2.62	0.47
1:A:2406:ARG:NH2	1:A:2429:TRP:HZ2	2.13	0.47
1:B:1776:UNK:CB	1:B:1781:UNK:CA	2.85	0.47
1:B:2222:GLN:OE1	1:B:2282:VAL:CG1	2.62	0.47
1:C:2044:LEU:O	1:C:2047:LEU:CB	2.63	0.47
1:C:2176:PRO:O	1:C:2180:GLY:N	2.45	0.47
1:A:1793:UNK:C	1:A:1797:UNK:CB	2.93	0.47
1:A:2049:PHE:N	1:A:2051:VAL:CB	2.78	0.47
1:A:2077:ALA:N	1:A:2083:TYR:CB	2.78	0.47
1:A:2297:SER:CB	1:C:2429:TRP:CH2	2.98	0.47
1:B:2077:ALA:N	1:B:2083:TYR:CB	2.78	0.47
1:C:1368:UNK:O	1:C:1372:UNK:N	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2223:PRO:O	1:C:2248:ILE:HD13	2.15	0.47
1:A:204:UNK:CB	1:A:284:UNK:CA	2.90	0.47
1:A:2297:SER:HB3	1:C:2429:TRP:CE2	2.50	0.47
1:A:2406:ARG:NH2	1:A:2406:ARG:CG	2.73	0.47
1:B:251:UNK:C	1:B:253:UNK:N	2.77	0.46
1:C:2077:ALA:N	1:C:2083:TYR:CB	2.78	0.46
1:C:2522:GLU:O	1:C:2523:GLU:C	2.53	0.46
1:A:1990:ILE:CB	1:A:1991:ILE:HA	2.45	0.46
1:A:2519:LEU:O	1:A:2520:GLU:C	2.53	0.46
1:B:2429:TRP:CZ2	1:C:2299:PRO:CD	2.97	0.46
1:C:2060:TRP:O	1:C:2061:MET:C	2.54	0.46
1:A:1776:UNK:CB	1:A:1781:UNK:CA	2.85	0.46
1:B:2245:GLN:NE2	1:C:2339:LYS:HE3	2.30	0.46
1:B:2409:GLN:HG2	1:B:2410:VAL:C	2.36	0.46
1:B:2522:GLU:O	1:B:2523:GLU:C	2.53	0.46
1:C:2003:ALA:HB1	1:C:2102:PRO:HA	1.96	0.46
1:C:2003:ALA:HB2	1:C:2102:PRO:HA	1.96	0.46
1:C:2519:LEU:O	1:C:2520:GLU:C	2.53	0.46
1:A:2003:ALA:CB	1:A:2102:PRO:CA	2.90	0.46
1:A:2410:VAL:HG23	1:A:2426:PHE:CG	2.51	0.46
1:B:2299:PRO:CG	1:B:2300:SER:N	2.78	0.46
1:A:1137:UNK:O	1:A:1141:UNK:N	2.48	0.46
1:A:2500:VAL:O	1:A:2504:LEU:N	2.36	0.46
1:B:251:UNK:O	1:B:255:UNK:CB	2.64	0.46
1:B:2409:GLN:HG3	1:B:2410:VAL:CA	2.46	0.46
1:C:2058:HIS:O	1:C:2060:TRP:N	2.49	0.46
1:C:2496:GLU:O	1:C:2499:CYS:O	2.34	0.46
1:B:2223:PRO:O	1:B:2248:ILE:HD13	2.15	0.46
1:C:2425:ASP:C	1:C:2426:PHE:CD1	2.89	0.46
1:A:2037:LEU:O	1:A:2038:TYR:C	2.52	0.46
1:A:2407:ARG:CG	1:A:2426:PHE:HB2	2.19	0.46
1:B:2221:ASN:O	1:B:2450:SER:HB2	2.16	0.46
1:A:2003:ALA:HB1	1:A:2102:PRO:HA	1.96	0.46
1:A:2293:LEU:H	1:B:2295:ARG:HB2	1.81	0.46
1:A:2299:PRO:CD	1:C:2408:GLU:CG	2.87	0.46
1:A:236:UNK:C	1:A:238:UNK:N	2.73	0.46
1:A:2425:ASP:O	1:A:2426:PHE:HD1	1.99	0.46
1:B:240:UNK:C	1:B:248:UNK:HA	2.45	0.46
1:B:283:UNK:O	1:B:284:UNK:C	2.64	0.46
1:B:2041:LYS:O	1:B:2043:VAL:C	2.45	0.46
1:B:2409:GLN:C	1:B:2410:VAL:HG13	2.36	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2043:VAL:O	1:A:2044:LEU:C	2.54	0.46
1:B:2519:LEU:O	1:B:2520:GLU:C	2.53	0.46
1:A:2245:GLN:HE22	1:B:2339:LYS:NZ	2.14	0.45
1:A:2382:PRO:CD	1:C:2328:ALA:HB2	2.31	0.45
1:B:2057:ILE:HA	1:B:2060:TRP:CB	2.45	0.45
1:C:248:UNK:O	1:C:252:UNK:CA	2.64	0.45
1:A:2057:ILE:O	1:A:2061:MET:N	2.46	0.45
1:A:2221:ASN:O	1:A:2450:SER:HB2	2.16	0.45
1:A:2223:PRO:O	1:A:2248:ILE:HD13	2.15	0.45
1:B:2299:PRO:CG	1:B:2300:SER:H	2.29	0.45
1:B:2496:GLU:O	1:B:2499:CYS:O	2.34	0.45
1:C:2012:SER:O	1:C:2016:VAL:CB	2.64	0.45
1:B:2012:SER:O	1:B:2016:VAL:CB	2.64	0.45
1:B:2297:SER:HB2	1:B:2299:PRO:HD2	1.99	0.45
1:B:2500:VAL:O	1:B:2504:LEU:N	2.36	0.45
1:A:2012:SER:O	1:A:2016:VAL:CB	2.64	0.45
1:A:2220:VAL:HG11	1:A:2279:GLU:O	2.17	0.45
1:A:2298:PRO:HD2	1:C:2408:GLU:HG3	1.94	0.45
1:B:1790:UNK:O	1:B:1793:UNK:N	2.50	0.45
1:B:2406:ARG:HH12	1:C:2299:PRO:CD	2.21	0.45
1:C:2221:ASN:O	1:C:2450:SER:HB2	2.16	0.45
1:A:204:UNK:CA	1:A:284:UNK:CB	2.94	0.45
1:A:1787:UNK:O	1:A:1788:UNK:C	2.64	0.45
1:B:2408:GLU:O	1:B:2426:PHE:HB2	2.17	0.45
1:B:2425:ASP:N	1:B:2425:ASP:OD1	2.49	0.45
1:A:1748:UNK:HA	1:A:1751:UNK:CB	2.47	0.45
1:A:2299:PRO:CG	1:C:2406:ARG:HH12	2.28	0.45
1:A:2003:ALA:HB2	1:A:2102:PRO:HA	1.96	0.45
1:A:2408:GLU:CG	1:A:2429:TRP:CH2	2.99	0.45
1:A:2496:GLU:O	1:A:2499:CYS:O	2.34	0.45
1:B:237:UNK:HA	1:B:252:UNK:CA	2.45	0.45
1:C:2076:ASN:C	1:C:2083:TYR:CB	2.86	0.45
1:C:2220:VAL:HG11	1:C:2279:GLU:O	2.17	0.45
1:B:2221:ASN:O	1:B:2450:SER:CB	2.65	0.45
1:A:2076:ASN:C	1:A:2083:TYR:CB	2.86	0.45
1:B:1141:UNK:O	1:B:1145:UNK:N	2.50	0.44
1:C:2153:MET:CA	1:C:2156:GLU:CB	2.85	0.44
1:A:1121:UNK:O	1:A:1125:UNK:CB	2.66	0.44
1:A:2044:LEU:HA	1:A:2047:LEU:CB	2.47	0.44
1:A:2176:PRO:O	1:A:2180:GLY:N	2.45	0.44
1:A:2408:GLU:OE1	1:A:2429:TRP:CH2	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:2527:ALA:O	1:B:2531:PHE:N	2.50	0.44
1:B:1748:UNK:HA	1:B:1751:UNK:CB	2.47	0.44
1:B:2220:VAL:HG11	1:B:2279:GLU:O	2.17	0.44
1:C:2408:GLU:O	1:C:2426:PHE:CD2	2.70	0.44
1:A:265:UNK:CA	1:A:2528:LYS:CB	2.96	0.44
1:A:1488:UNK:O	1:A:1492:UNK:CB	2.66	0.44
1:A:2221:ASN:O	1:A:2450:SER:CB	2.65	0.44
1:B:1121:UNK:O	1:B:1125:UNK:CB	2.66	0.44
1:B:2512:LEU:CB	1:C:2491:SER:O	2.55	0.44
1:C:2206:PRO:O	1:C:2210:MET:N	2.47	0.44
1:A:1137:UNK:O	1:A:1141:UNK:CB	2.66	0.44
1:B:1488:UNK:O	1:B:1492:UNK:CB	2.66	0.44
1:A:1136:UNK:O	1:A:1138:UNK:N	2.50	0.44
1:A:1747:UNK:O	1:A:1750:UNK:CA	2.65	0.44
1:B:251:UNK:O	1:B:255:UNK:N	2.50	0.44
1:B:265:UNK:CA	1:B:2528:LYS:CB	2.96	0.44
1:B:2299:PRO:C	1:B:2301:ARG:H	2.19	0.44
1:C:1748:UNK:HA	1:C:1751:UNK:CB	2.47	0.44
1:A:2424:SER:O	1:A:2426:PHE:CE1	2.71	0.44
1:A:2429:TRP:CZ2	1:B:2299:PRO:HD2	2.53	0.44
1:B:1795:UNK:O	1:B:1798:UNK:N	2.51	0.44
1:B:2048:ALA:C	1:B:2051:VAL:CB	2.86	0.44
1:B:2076:ASN:C	1:B:2083:TYR:CB	2.85	0.44
1:B:2297:SER:OG	1:B:2300:SER:HB2	2.17	0.44
1:B:2408:GLU:OE1	1:B:2429:TRP:CH2	2.70	0.44
1:C:2048:ALA:C	1:C:2051:VAL:CB	2.86	0.44
1:C:2221:ASN:O	1:C:2450:SER:CB	2.65	0.44
1:A:1773:UNK:HA	1:A:1776:UNK:CB	2.48	0.44
1:B:1773:UNK:HA	1:B:1776:UNK:CB	2.48	0.44
1:C:1747:UNK:O	1:C:1750:UNK:CA	2.65	0.44
1:A:2409:GLN:OE1	1:A:2426:PHE:CZ	2.70	0.44
1:A:2528:LYS:HA	1:A:2531:PHE:CB	2.48	0.44
1:C:1121:UNK:O	1:C:1125:UNK:CB	2.66	0.44
1:A:1132:UNK:C	1:A:1134:UNK:N	2.79	0.43
1:A:2217:VAL:CB	1:A:2455:PRO:CD	2.96	0.43
1:A:2527:ALA:O	1:A:2531:PHE:N	2.50	0.43
1:B:2049:PHE:C	1:B:2051:VAL:CB	2.86	0.43
1:C:1773:UNK:HA	1:C:1776:UNK:CB	2.48	0.43
1:B:2224:ILE:HG12	1:B:2224:ILE:H	1.56	0.43
1:B:2406:ARG:HH22	1:C:2299:PRO:HG3	1.81	0.43
1:C:1488:UNK:O	1:C:1492:UNK:CB	2.66	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2424:SER:O	1:C:2426:PHE:HD1	2.01	0.43
1:C:2425:ASP:O	1:C:2426:PHE:CD1	2.70	0.43
1:A:2410:VAL:N	1:B:2425:ASP:OD2	2.51	0.43
1:A:2522:GLU:C	1:A:2524:GLU:N	2.72	0.43
1:B:1747:UNK:O	1:B:1750:UNK:CA	2.65	0.43
1:B:2050:GLN:N	1:B:2051:VAL:HA	2.33	0.43
1:B:2211:SER:C	1:B:2213:ILE:H	2.21	0.43
1:B:2406:ARG:HH12	1:C:2299:PRO:CB	2.28	0.43
1:A:884:UNK:O	1:A:885:UNK:C	2.64	0.43
1:A:2299:PRO:HD3	1:C:2408:GLU:CG	2.43	0.43
1:B:2153:MET:CA	1:B:2156:GLU:CB	2.85	0.43
1:C:2146:THR:O	1:C:2150:SER:HA	2.19	0.43
1:C:2306:GLN:NE2	1:C:2310:ASN:OD1	2.51	0.43
1:C:2424:SER:O	1:C:2426:PHE:CD1	2.70	0.43
1:A:1794:UNK:O	1:A:1798:UNK:N	2.51	0.43
1:A:2407:ARG:HE	1:A:2426:PHE:N	2.14	0.43
1:A:2531:PHE:O	1:A:2535:SER:N	2.50	0.43
1:B:2215:SER:O	1:B:2216:VAL:CB	2.67	0.43
1:B:2409:GLN:CA	1:B:2426:PHE:HB3	2.47	0.43
1:A:2406:ARG:NH1	1:A:2429:TRP:HZ2	2.15	0.43
1:B:2146:THR:O	1:B:2150:SER:HA	2.19	0.43
1:B:2429:TRP:CZ2	1:C:2299:PRO:CG	3.01	0.43
1:C:2058:HIS:C	1:C:2060:TRP:N	2.71	0.43
1:A:2406:ARG:CZ	1:A:2429:TRP:HZ2	2.28	0.43
1:B:884:UNK:O	1:B:885:UNK:C	2.65	0.43
1:B:2219:VAL:CG2	1:B:2220:VAL:H	2.28	0.43
1:B:1136:UNK:O	1:B:1138:UNK:N	2.52	0.43
1:B:2519:LEU:O	1:B:2521:LEU:N	2.52	0.43
1:C:1749:UNK:HA	1:C:1752:UNK:CB	2.49	0.43
1:A:2046:LYS:C	1:A:2048:ALA:H	2.22	0.43
1:A:2146:THR:O	1:A:2150:SER:HA	2.19	0.43
1:B:1749:UNK:HA	1:B:1752:UNK:CB	2.49	0.43
1:B:2003:ALA:HB2	1:B:2102:PRO:HA	1.96	0.43
1:B:2528:LYS:HA	1:B:2531:PHE:CB	2.48	0.43
1:C:1974:THR:C	1:C:1976:VAL:N	2.71	0.43
1:C:2052:VAL:C	1:C:2056:ALA:HB2	2.39	0.43
1:C:2409:GLN:CD	1:C:2426:PHE:CZ	2.85	0.43
1:A:2406:ARG:NH1	1:B:2299:PRO:CD	2.70	0.43
1:B:2176:PRO:O	1:B:2180:GLY:N	2.45	0.43
1:C:265:UNK:CA	1:C:2528:LYS:CB	2.96	0.43
1:C:2527:ALA:O	1:C:2531:PHE:N	2.50	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2528:LYS:HA	1:C:2531:PHE:CB	2.48	0.42
1:B:2297:SER:O	1:B:2298:PRO:C	2.58	0.42
1:A:1791:UNK:O	1:A:1795:UNK:N	2.52	0.42
1:B:1140:UNK:O	1:B:1142:UNK:N	2.52	0.42
1:B:2407:ARG:HD3	1:B:2426:PHE:CD2	2.55	0.42
1:A:1749:UNK:HA	1:A:1752:UNK:CB	2.49	0.42
1:B:2219:VAL:C	1:B:2452:LYS:HE3	2.33	0.42
1:C:2318:ARG:HD2	1:C:2339:LYS:HD2	2.01	0.42
1:A:2308:LEU:HB3	1:A:2355:ALA:HB2	2.01	0.42
1:B:1133:UNK:O	1:B:1137:UNK:CB	2.68	0.42
1:B:2051:VAL:C	1:B:2053:LEU:N	2.73	0.42
1:B:2211:SER:C	1:B:2213:ILE:N	2.73	0.42
1:B:2306:GLN:NE2	1:B:2310:ASN:OD1	2.51	0.42
1:C:1994:GLY:C	1:C:1996:TRP:H	2.16	0.42
1:C:2045:GLY:C	1:C:2047:LEU:N	2.73	0.42
1:A:2318:ARG:HD2	1:A:2339:LYS:HD2	2.01	0.42
1:B:2522:GLU:C	1:B:2524:GLU:N	2.72	0.42
1:C:2055:VAL:O	1:C:2057:ILE:N	2.52	0.42
1:C:2213:ILE:C	1:C:2215:SER:N	2.73	0.42
1:A:2426:PHE:O	1:A:2427:LEU:O	2.38	0.42
1:B:1136:UNK:O	1:B:1137:UNK:C	2.68	0.42
1:B:2296:ILE:HD11	1:B:2300:SER:C	2.38	0.42
1:C:226:UNK:CB	1:C:263:UNK:CB	2.97	0.42
1:C:2519:LEU:O	1:C:2521:LEU:N	2.52	0.42
1:A:1133:UNK:O	1:A:1137:UNK:CB	2.68	0.42
1:B:2209:PHE:C	1:B:2211:SER:N	2.73	0.42
1:B:2429:TRP:CH2	1:C:2297:SER:CA	3.01	0.42
1:C:1137:UNK:O	1:C:1141:UNK:CB	2.67	0.42
1:A:2003:ALA:HB1	1:A:2102:PRO:CA	2.50	0.42
1:B:2224:ILE:HD11	1:B:2324:GLN:HG2	2.02	0.42
1:C:2003:ALA:HB1	1:C:2102:PRO:CA	2.50	0.42
1:C:2538:THR:O	1:C:2542:TRP:N	2.47	0.42
1:A:2211:SER:C	1:A:2213:ILE:N	2.73	0.41
1:A:2426:PHE:CD1	1:A:2426:PHE:N	2.87	0.41
1:B:1788:UNK:C	1:B:1790:UNK:N	2.83	0.41
1:B:2318:ARG:HD2	1:B:2339:LYS:HD2	2.01	0.41
1:A:1974:THR:C	1:A:1976:VAL:N	2.71	0.41
1:A:2050:GLN:C	1:A:2055:VAL:H	2.23	0.41
1:A:2054:VAL:O	1:A:2056:ALA:N	2.45	0.41
1:A:2224:ILE:HD11	1:A:2324:GLN:HG2	2.02	0.41
1:A:2299:PRO:HG3	1:C:2406:ARG:CZ	2.49	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:2306:GLN:NE2	1:A:2310:ASN:OD1	2.51	0.41
1:A:2519:LEU:O	1:A:2521:LEU:N	2.52	0.41
1:B:2003:ALA:HB1	1:B:2102:PRO:CA	2.50	0.41
1:C:2308:LEU:HB3	1:C:2355:ALA:HB2	2.02	0.41
1:C:2408:GLU:C	1:C:2426:PHE:CD2	2.90	0.41
1:C:2522:GLU:C	1:C:2524:GLU:N	2.72	0.41
1:B:2293:LEU:HD11	1:B:2427:LEU:HD13	2.02	0.41
1:B:2408:GLU:C	1:B:2426:PHE:CB	2.89	0.41
1:C:2224:ILE:HD11	1:C:2324:GLN:HG2	2.02	0.41
1:A:2426:PHE:HD1	1:A:2426:PHE:N	2.18	0.41
1:B:564:UNK:C	1:B:566:UNK:N	2.83	0.41
1:C:2410:VAL:CG2	1:C:2426:PHE:CD1	3.01	0.41
1:A:2054:VAL:C	1:A:2056:ALA:H	2.24	0.41
1:C:2213:ILE:O	1:C:2215:SER:N	2.53	0.41
1:B:2268:LEU:HD23	1:B:2268:LEU:HA	1.88	0.41
1:C:240:UNK:CB	1:C:248:UNK:HA	2.50	0.41
1:C:2055:VAL:C	1:C:2057:ILE:N	2.74	0.41
1:C:2425:ASP:OD1	1:C:2426:PHE:N	2.54	0.41
1:A:1136:UNK:O	1:A:1137:UNK:C	2.69	0.41
1:C:564:UNK:C	1:C:566:UNK:N	2.83	0.41
1:C:2003:ALA:CB	1:C:2102:PRO:CB	2.99	0.41
1:B:2308:LEU:HB3	1:B:2355:ALA:HB2	2.02	0.41
1:A:250:UNK:O	1:A:252:UNK:N	2.53	0.41
1:A:2046:LYS:C	1:A:2048:ALA:N	2.73	0.41
1:A:2206:PRO:O	1:A:2210:MET:N	2.47	0.41
1:B:240:UNK:C	1:B:247:UNK:C	2.99	0.41
1:C:2293:LEU:HD11	1:C:2427:LEU:HD13	2.02	0.41
1:B:2212:LEU:C	1:B:2214:ARG:N	2.73	0.41
1:B:2221:ASN:C	1:B:2222:GLN:HE21	2.24	0.41
1:A:2152:TRP:O	1:A:2155:VAL:N	2.54	0.40
1:B:241:UNK:O	1:B:242:UNK:C	2.69	0.40
1:B:2212:LEU:O	1:B:2214:ARG:N	2.54	0.40
1:B:2219:VAL:CG2	1:B:2220:VAL:HG23	2.44	0.40
1:B:2429:TRP:HZ3	1:C:2298:PRO:HD2	1.34	0.40
1:B:2531:PHE:O	1:B:2535:SER:N	2.50	0.40
1:C:2152:TRP:O	1:C:2155:VAL:N	2.55	0.40
1:A:2003:ALA:CB	1:A:2102:PRO:CB	2.99	0.40
1:A:2003:ALA:HB1	1:A:2102:PRO:CB	2.52	0.40
1:A:2382:PRO:HG3	1:C:2328:ALA:CA	2.51	0.40
1:B:2003:ALA:CB	1:B:2102:PRO:CB	2.99	0.40
1:C:2217:VAL:CB	1:C:2455:PRO:CD	2.99	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1986:VAL:O	1:A:1989:ILE:N	2.55	0.40
1:A:2297:SER:O	1:A:2301:ARG:N	2.42	0.40
1:B:2409:GLN:HG3	1:B:2410:VAL:C	2.41	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	568/2553 (22%)	512 (90%)	31 (6%)	25 (4%)	2	17
1	B	568/2553 (22%)	513 (90%)	27 (5%)	28 (5%)	2	16
1	C	568/2553 (22%)	513 (90%)	27 (5%)	28 (5%)	2	16
All	All	1704/7659 (22%)	1538 (90%)	85 (5%)	81 (5%)	3	16

All (81) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	1992	ILE
1	A	1993	PHE
1	A	2025	LEU
1	A	2043	VAL
1	A	2051	VAL
1	A	2054	VAL
1	A	2059	ILE
1	A	2061	MET
1	A	2065	LEU
1	A	2066	PRO
1	A	2174	LYS
1	A	2216	VAL
1	A	2217	VAL
1	A	2410	VAL

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Mol	Chain	Res	Type
1	A	2456	PRO
1	A	2523	GLU
1	B	1990	ILE
1	B	2025	LEU
1	B	2041	LYS
1	B	2042	THR
1	B	2052	VAL
1	B	2058	HIS
1	B	2065	LEU
1	B	2066	PRO
1	B	2174	LYS
1	B	2216	VAL
1	B	2217	VAL
1	B	2410	VAL
1	B	2427	LEU
1	B	2456	PRO
1	B	2523	GLU
1	C	1991	ILE
1	C	1992	ILE
1	C	1995	PHE
1	C	2025	LEU
1	C	2041	LYS
1	C	2055	VAL
1	C	2058	HIS
1	C	2060	TRP
1	C	2065	LEU
1	C	2066	PRO
1	C	2174	LYS
1	C	2410	VAL
1	C	2456	PRO
1	C	2523	GLU
1	A	2055	VAL
1	A	2215	SER
1	A	2458	LEU
1	B	2059	ILE
1	B	2219	VAL
1	B	2409	GLN
1	B	2458	LEU
1	C	2042	THR
1	C	2051	VAL
1	C	2216	VAL
1	C	2458	LEU

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Mol	Chain	Res	Type
1	A	1994	GLY
1	A	2111	THR
1	A	2520	GLU
1	A	2526	TYR
1	B	2111	THR
1	B	2210	MET
1	B	2520	GLU
1	B	2526	TYR
1	C	2056	ALA
1	C	2111	THR
1	C	2520	GLU
1	C	2526	TYR
1	A	2078	VAL
1	B	2055	VAL
1	B	2078	VAL
1	C	2045	GLY
1	C	2078	VAL
1	A	2081	LEU
1	B	2081	LEU
1	B	2206	PRO
1	C	2081	LEU
1	C	2214	ARG
1	C	1994	GLY
1	C	2059	ILE
1	B	1994	GLY

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	200/522 (38%)	194 (97%)	6 (3%)	36	56
1	B	200/522 (38%)	190 (95%)	10 (5%)	20	42
1	C	200/522 (38%)	195 (98%)	5 (2%)	42	62
All	All	600/1566 (38%)	579 (96%)	21 (4%)	33	52

All (21) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	2224	ILE
1	A	2295	ARG
1	A	2391	GLN
1	A	2408	GLU
1	A	2410	VAL
1	A	2427	LEU
1	B	2224	ILE
1	B	2295	ARG
1	B	2297	SER
1	B	2300	SER
1	B	2391	GLN
1	B	2407	ARG
1	B	2409	GLN
1	B	2410	VAL
1	B	2425	ASP
1	B	2426	PHE
1	C	2224	ILE
1	C	2295	ARG
1	C	2391	GLN
1	C	2409	GLN
1	C	2454	SER

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (5) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	2245	GLN
1	A	2409	GLN
1	B	2245	GLN
1	B	2409	GLN
1	C	2245	GLN

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains ⓘ

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

5.5　Carbohydrates ⓘ

There are no oligosaccharides in this entry.

5.6　Ligand geometry ⓘ

There are no ligands in this entry.

5.7　Other polymers ⓘ

There are no such residues in this entry.

5.8　Polymer linkage issues ⓘ

There are no chain breaks in this entry.

6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-6343. 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 |
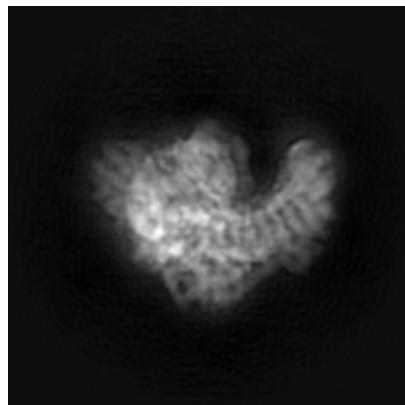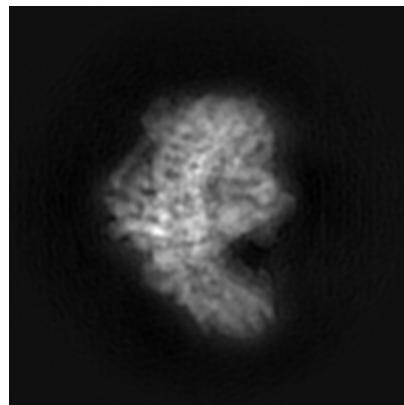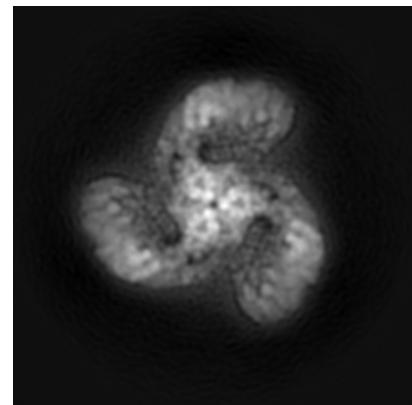
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

6.2.1 Primary map
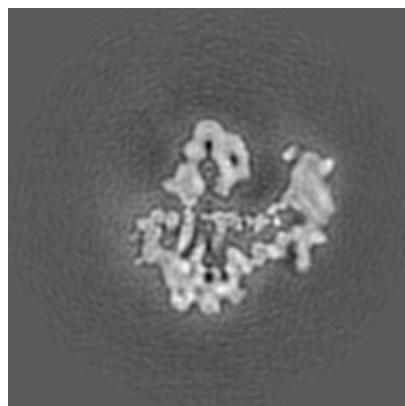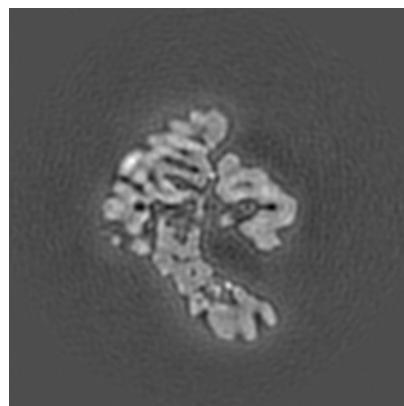
| X Index: 120 | Y Index: 120 | Z Index: 120 |
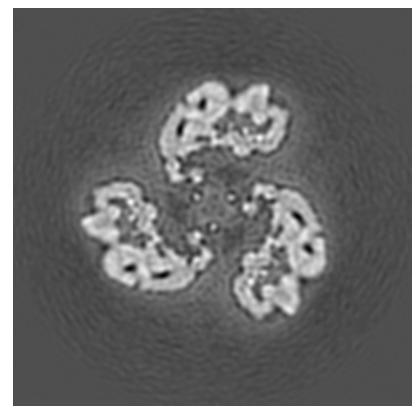
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices ⓘ
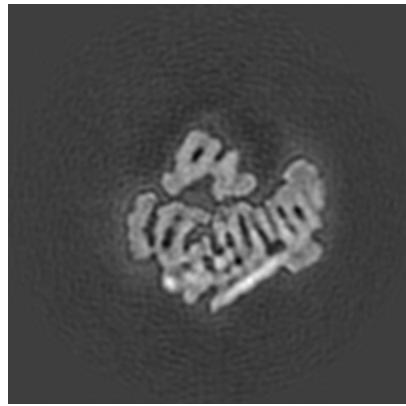
6.3.1 Primary map
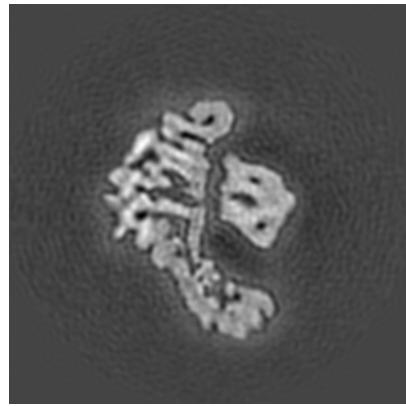
| X Index: 107 | Y Index: 115 | Z Index: 112 |
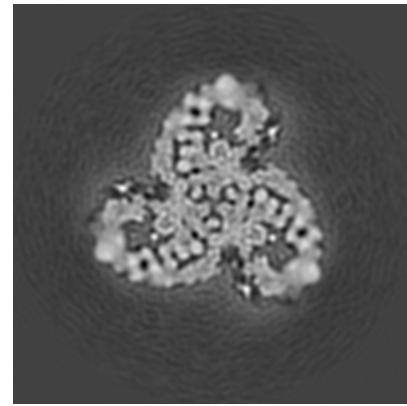
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) ⓘ

6.4.1 Primary map

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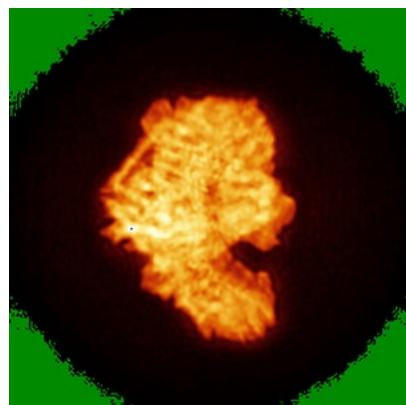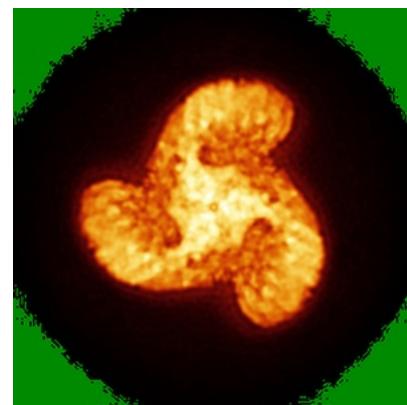
The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5   Orthogonal surface views (i)

6.5.1   Primary map

X   Y   Z

The images above show the 3D surface view of the map at the recommended contour level 0.0273. 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 ⓘ

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

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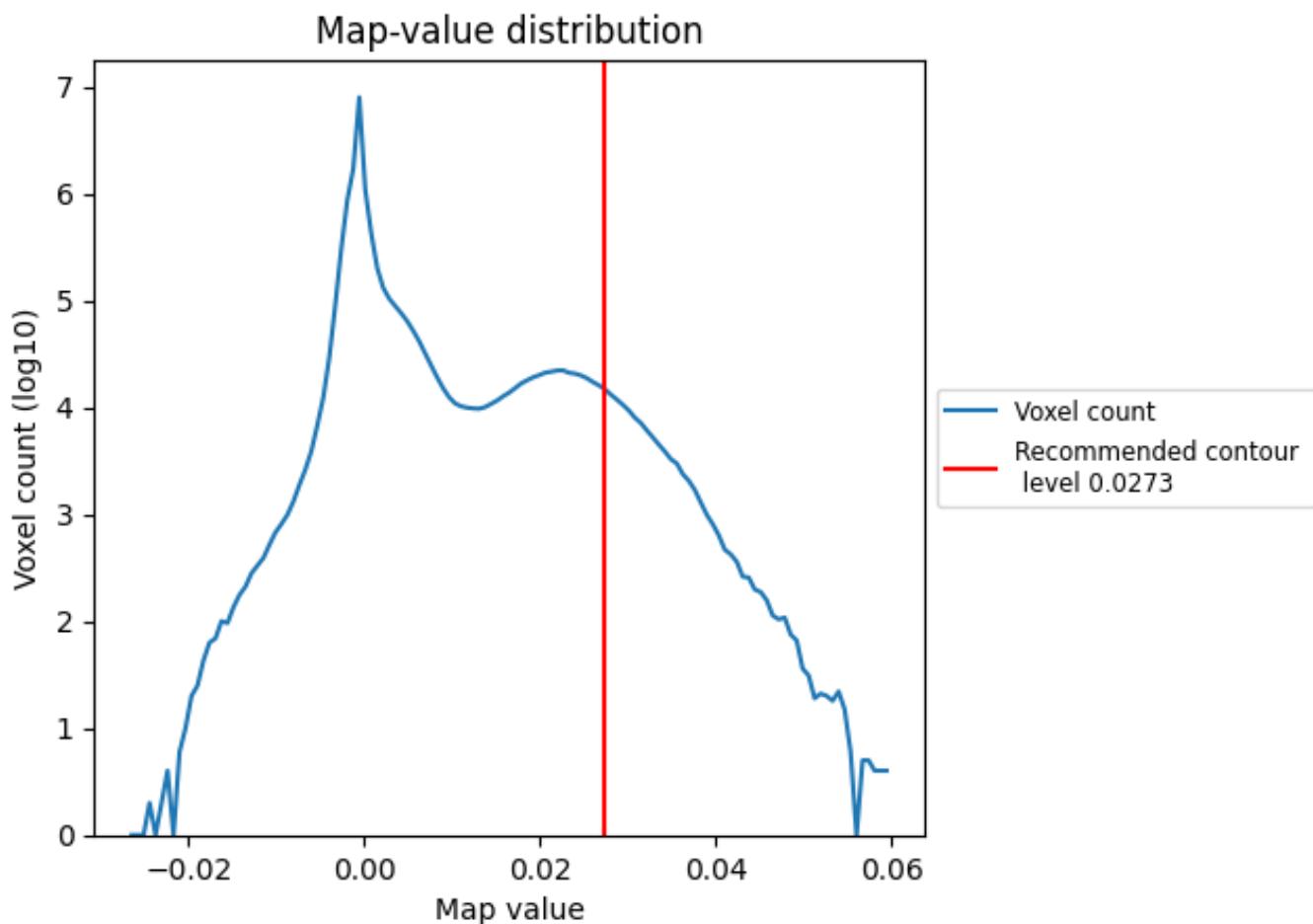
The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

7.2 Volume estimate (i)
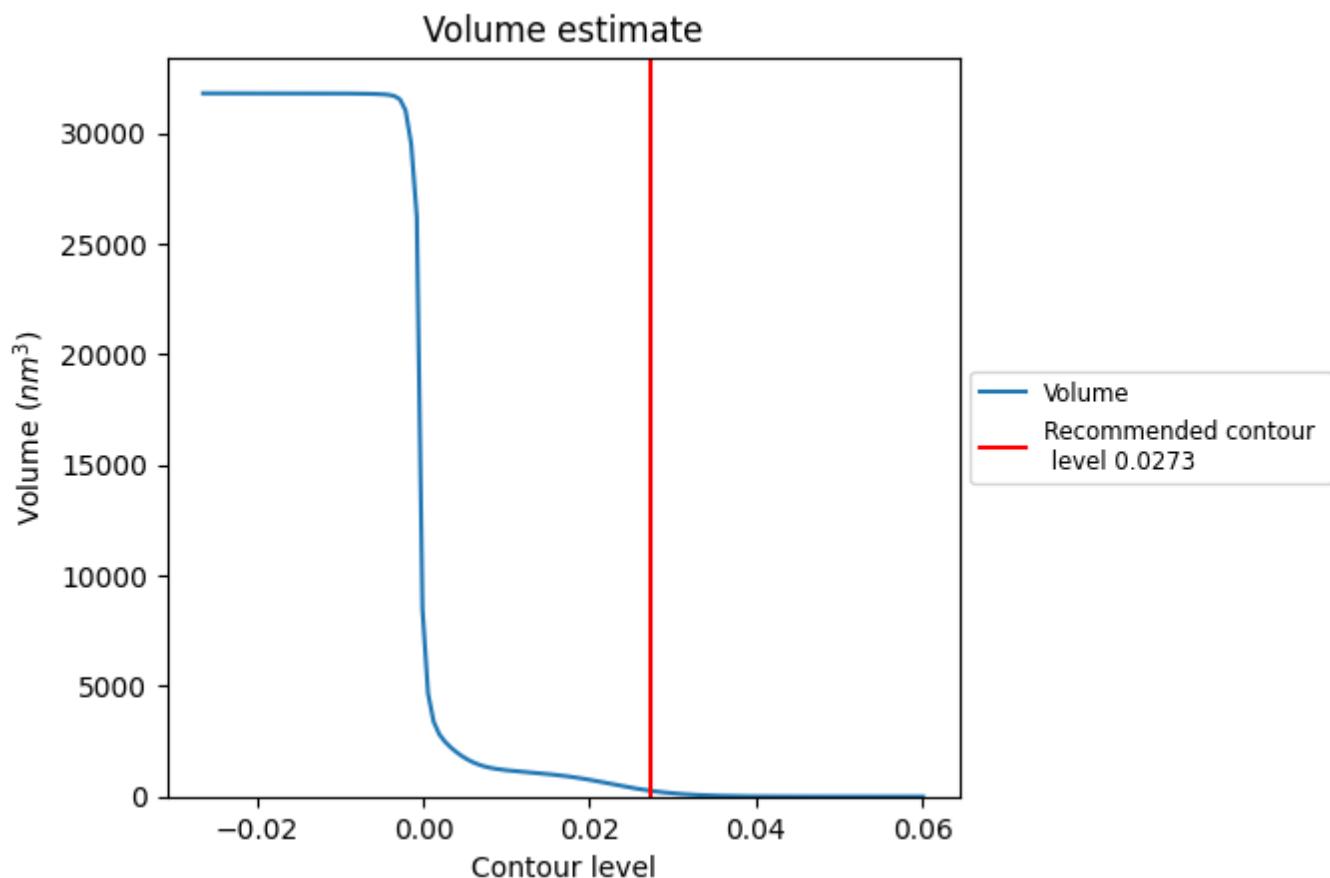
The volume at the recommended contour level is 265 nm^3; this corresponds to an approximate mass of 240 kDa.

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 ⓘ
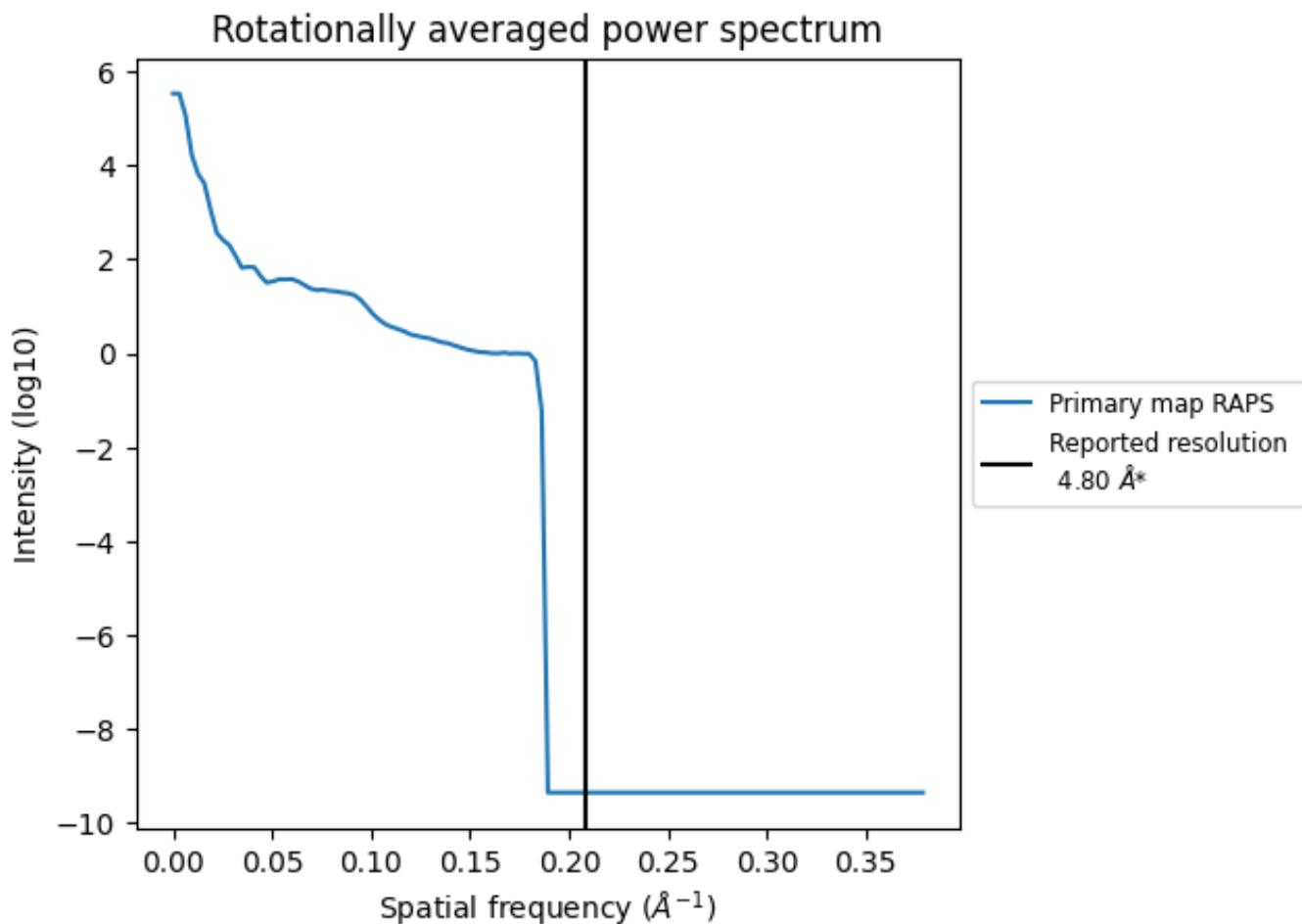
*Reported resolution corresponds to spatial frequency of 0.208 Å^{-1}

8 Fourier-Shell correlation ⓘ

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

9 Map-model fit ⓘ

This section contains information regarding the fit between EMDB map EMD-6343 and PDB model 3JAC. Per-residue inclusion information can be found in section 3 on page 4.

9.1 Map-model overlay ⓘ
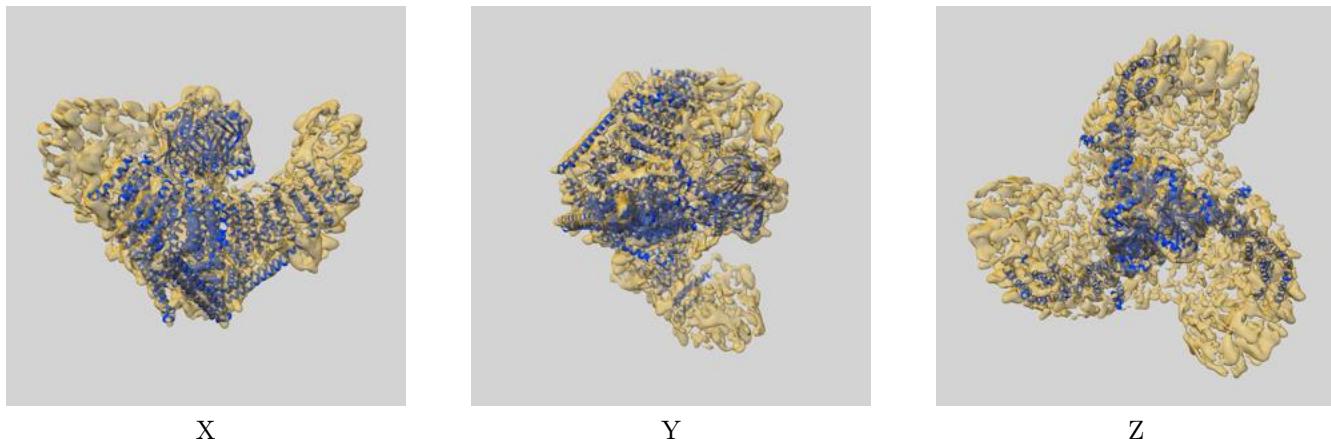
| X | Y | Z |

The images above show the 3D surface view of the map at the recommended contour level 0.0273 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2   Q-score mapped to coordinate model (i)

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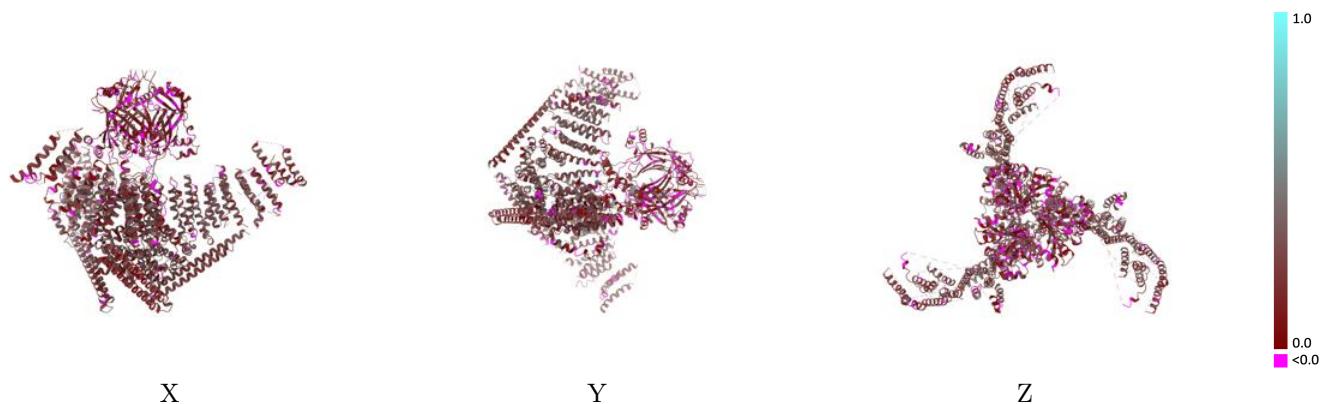
The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

X   Y   Z
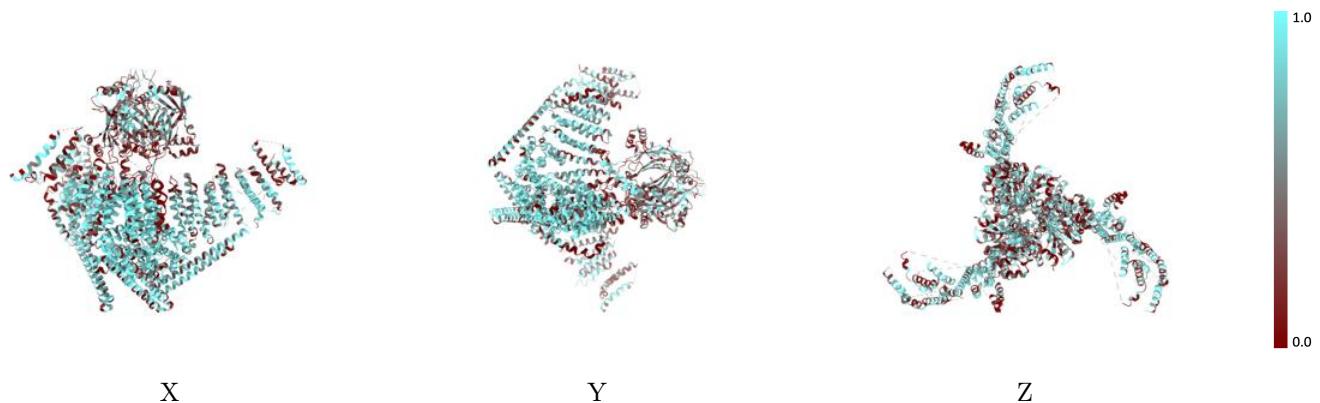
The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.0273).

9.4 Atom inclusion ⓘ
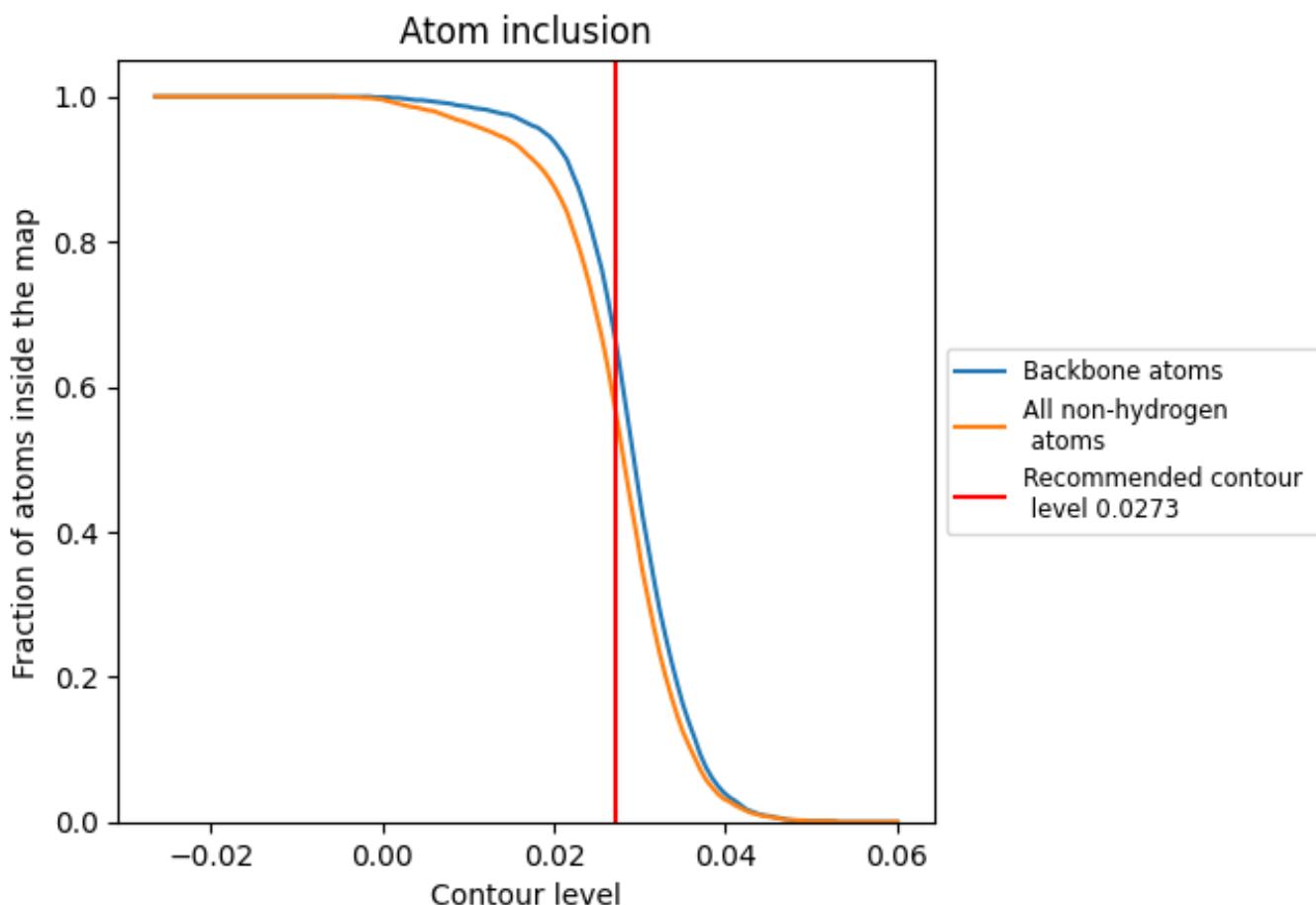
At the recommended contour level, 66% of all backbone atoms, 56% of all non-hydrogen atoms, are inside the map.

9.5   Map-model fit summary ⓘ

The table lists the average atom inclusion at the recommended contour level (0.0273) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5610	0.1900
A	0.5610	0.1890
B	0.5620	0.1880
C	0.5600	0.1920

1.0

0.0

<0.0