Full wwPDB EM Validation Report ⓘ

Nov 19, 2022 – 06:05 pm GMT

PDB ID	:	6G2D
EMDB ID	:	EMD-4342
Title	:	Citrate-induced acetyl-CoA carboxylase (ACC-Cit) filament at 5.4 A resolution
Authors	:	Hunkeler, M.; Hagmann, A.; Stuttfeld, E.; Chami, M.; Stahlberg, H.; Maier, T.
Deposited on	:	2018-03-23
Resolution	:	5.40 Å(reported)

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

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

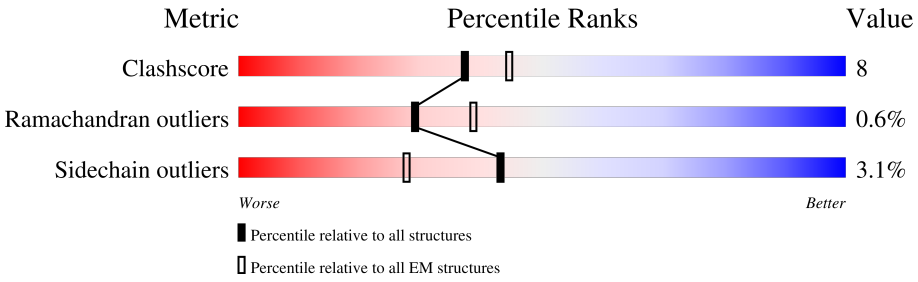
EMDB validation analysis	:	0.0.1.dev43
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 5.40 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

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	B	2407	8% 18% 8% 74%
1	C	2407	7% 70% 16% • 12%
1	D	2407	7% 69% 17% • 12%
1	F	2407	10% 18% 7% • 74%

2 Entry composition (i)

There is only 1 type of molecule in this entry. The entry contains 88169 atoms, of which 43991 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 Acetyl-CoA carboxylase 1.

Mol	Chain	Residues	Atoms						AltConf	Trace
1	B	625	Total	C	H	N	O	S	0	0
			10226	3267	5114	888	922	35		
1	C	2121	Total	C	H	N	O	S	0	0
			33781	10771	16841	2945	3124	100		
1	D	2121	Total	C	H	N	O	S	0	0
			33782	10771	16842	2945	3124	100		
1	F	634	Total	C	H	N	O	S	0	0
			10380	3310	5194	905	936	35		

There are 244 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	-60	MET	-	initiating methionine	UNP Q13085
B	-59	ALA	-	expression tag	UNP Q13085
B	-58	HIS	-	expression tag	UNP Q13085
B	-57	HIS	-	expression tag	UNP Q13085
B	-56	HIS	-	expression tag	UNP Q13085
B	-55	HIS	-	expression tag	UNP Q13085
B	-54	HIS	-	expression tag	UNP Q13085
B	-53	HIS	-	expression tag	UNP Q13085
B	-52	HIS	-	expression tag	UNP Q13085
B	-51	HIS	-	expression tag	UNP Q13085
B	-50	HIS	-	expression tag	UNP Q13085
B	-49	HIS	-	expression tag	UNP Q13085
B	-48	GLY	-	expression tag	UNP Q13085
B	-47	SER	-	expression tag	UNP Q13085
B	-46	THR	-	expression tag	UNP Q13085
B	-45	SER	-	expression tag	UNP Q13085
B	-44	GLY	-	expression tag	UNP Q13085
B	-43	SER	-	expression tag	UNP Q13085
B	-42	GLY	-	expression tag	UNP Q13085
B	-41	GLU	-	expression tag	UNP Q13085
B	-40	GLN	-	expression tag	UNP Q13085
B	-39	LYS	-	expression tag	UNP Q13085

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Chain	Residue	Modelled	Actual	Comment	Reference
B	-38	LEU	-	expression tag	UNP Q13085
B	-37	ILE	-	expression tag	UNP Q13085
B	-36	SER	-	expression tag	UNP Q13085
B	-35	GLU	-	expression tag	UNP Q13085
B	-34	GLU	-	expression tag	UNP Q13085
B	-33	ASP	-	expression tag	UNP Q13085
B	-32	LEU	-	expression tag	UNP Q13085
B	-31	GLY	-	expression tag	UNP Q13085
B	-30	SER	-	expression tag	UNP Q13085
B	-29	THR	-	expression tag	UNP Q13085
B	-28	SER	-	expression tag	UNP Q13085
B	-27	GLY	-	expression tag	UNP Q13085
B	-26	SER	-	expression tag	UNP Q13085
B	-25	GLY	-	expression tag	UNP Q13085
B	-24	ASP	-	expression tag	UNP Q13085
B	-23	TYR	-	expression tag	UNP Q13085
B	-22	LYS	-	expression tag	UNP Q13085
B	-21	ASP	-	expression tag	UNP Q13085
B	-20	ASP	-	expression tag	UNP Q13085
B	-19	ASP	-	expression tag	UNP Q13085
B	-18	ASP	-	expression tag	UNP Q13085
B	-17	LYS	-	expression tag	UNP Q13085
B	-16	LEU	-	expression tag	UNP Q13085
B	-15	THR	-	expression tag	UNP Q13085
B	-14	SER	-	expression tag	UNP Q13085
B	-13	LEU	-	expression tag	UNP Q13085
B	-12	TYR	-	expression tag	UNP Q13085
B	-11	LYS	-	expression tag	UNP Q13085
B	-10	LYS	-	expression tag	UNP Q13085
B	-9	ALA	-	expression tag	UNP Q13085
B	-8	GLY	-	expression tag	UNP Q13085
B	-7	LEU	-	expression tag	UNP Q13085
B	-6	GLU	-	expression tag	UNP Q13085
B	-5	ASN	-	expression tag	UNP Q13085
B	-4	LEU	-	expression tag	UNP Q13085
B	-3	TYR	-	expression tag	UNP Q13085
B	-2	PHE	-	expression tag	UNP Q13085
B	-1	GLN	-	expression tag	UNP Q13085
B	0	GLY	-	expression tag	UNP Q13085
C	-60	MET	-	initiating methionine	UNP Q13085
C	-59	ALA	-	expression tag	UNP Q13085
C	-58	HIS	-	expression tag	UNP Q13085

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Chain	Residue	Modelled	Actual	Comment	Reference
C	-57	HIS	-	expression tag	UNP Q13085
C	-56	HIS	-	expression tag	UNP Q13085
C	-55	HIS	-	expression tag	UNP Q13085
C	-54	HIS	-	expression tag	UNP Q13085
C	-53	HIS	-	expression tag	UNP Q13085
C	-52	HIS	-	expression tag	UNP Q13085
C	-51	HIS	-	expression tag	UNP Q13085
C	-50	HIS	-	expression tag	UNP Q13085
C	-49	HIS	-	expression tag	UNP Q13085
C	-48	GLY	-	expression tag	UNP Q13085
C	-47	SER	-	expression tag	UNP Q13085
C	-46	THR	-	expression tag	UNP Q13085
C	-45	SER	-	expression tag	UNP Q13085
C	-44	GLY	-	expression tag	UNP Q13085
C	-43	SER	-	expression tag	UNP Q13085
C	-42	GLY	-	expression tag	UNP Q13085
C	-41	GLU	-	expression tag	UNP Q13085
C	-40	GLN	-	expression tag	UNP Q13085
C	-39	LYS	-	expression tag	UNP Q13085
C	-38	LEU	-	expression tag	UNP Q13085
C	-37	ILE	-	expression tag	UNP Q13085
C	-36	SER	-	expression tag	UNP Q13085
C	-35	GLU	-	expression tag	UNP Q13085
C	-34	GLU	-	expression tag	UNP Q13085
C	-33	ASP	-	expression tag	UNP Q13085
C	-32	LEU	-	expression tag	UNP Q13085
C	-31	GLY	-	expression tag	UNP Q13085
C	-30	SER	-	expression tag	UNP Q13085
C	-29	THR	-	expression tag	UNP Q13085
C	-28	SER	-	expression tag	UNP Q13085
C	-27	GLY	-	expression tag	UNP Q13085
C	-26	SER	-	expression tag	UNP Q13085
C	-25	GLY	-	expression tag	UNP Q13085
C	-24	ASP	-	expression tag	UNP Q13085
C	-23	TYR	-	expression tag	UNP Q13085
C	-22	LYS	-	expression tag	UNP Q13085
C	-21	ASP	-	expression tag	UNP Q13085
C	-20	ASP	-	expression tag	UNP Q13085
C	-19	ASP	-	expression tag	UNP Q13085
C	-18	ASP	-	expression tag	UNP Q13085
C	-17	LYS	-	expression tag	UNP Q13085
C	-16	LEU	-	expression tag	UNP Q13085

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Chain	Residue	Modelled	Actual	Comment	Reference
C	-15	THR	-	expression tag	UNP Q13085
C	-14	SER	-	expression tag	UNP Q13085
C	-13	LEU	-	expression tag	UNP Q13085
C	-12	TYR	-	expression tag	UNP Q13085
C	-11	LYS	-	expression tag	UNP Q13085
C	-10	LYS	-	expression tag	UNP Q13085
C	-9	ALA	-	expression tag	UNP Q13085
C	-8	GLY	-	expression tag	UNP Q13085
C	-7	LEU	-	expression tag	UNP Q13085
C	-6	GLU	-	expression tag	UNP Q13085
C	-5	ASN	-	expression tag	UNP Q13085
C	-4	LEU	-	expression tag	UNP Q13085
C	-3	TYR	-	expression tag	UNP Q13085
C	-2	PHE	-	expression tag	UNP Q13085
C	-1	GLN	-	expression tag	UNP Q13085
C	0	GLY	-	expression tag	UNP Q13085
D	-60	MET	-	initiating methionine	UNP Q13085
D	-59	ALA	-	expression tag	UNP Q13085
D	-58	HIS	-	expression tag	UNP Q13085
D	-57	HIS	-	expression tag	UNP Q13085
D	-56	HIS	-	expression tag	UNP Q13085
D	-55	HIS	-	expression tag	UNP Q13085
D	-54	HIS	-	expression tag	UNP Q13085
D	-53	HIS	-	expression tag	UNP Q13085
D	-52	HIS	-	expression tag	UNP Q13085
D	-51	HIS	-	expression tag	UNP Q13085
D	-50	HIS	-	expression tag	UNP Q13085
D	-49	HIS	-	expression tag	UNP Q13085
D	-48	GLY	-	expression tag	UNP Q13085
D	-47	SER	-	expression tag	UNP Q13085
D	-46	THR	-	expression tag	UNP Q13085
D	-45	SER	-	expression tag	UNP Q13085
D	-44	GLY	-	expression tag	UNP Q13085
D	-43	SER	-	expression tag	UNP Q13085
D	-42	GLY	-	expression tag	UNP Q13085
D	-41	GLU	-	expression tag	UNP Q13085
D	-40	GLN	-	expression tag	UNP Q13085
D	-39	LYS	-	expression tag	UNP Q13085
D	-38	LEU	-	expression tag	UNP Q13085
D	-37	ILE	-	expression tag	UNP Q13085
D	-36	SER	-	expression tag	UNP Q13085
D	-35	GLU	-	expression tag	UNP Q13085

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Chain	Residue	Modelled	Actual	Comment	Reference
D	-34	GLU	-	expression tag	UNP Q13085
D	-33	ASP	-	expression tag	UNP Q13085
D	-32	LEU	-	expression tag	UNP Q13085
D	-31	GLY	-	expression tag	UNP Q13085
D	-30	SER	-	expression tag	UNP Q13085
D	-29	THR	-	expression tag	UNP Q13085
D	-28	SER	-	expression tag	UNP Q13085
D	-27	GLY	-	expression tag	UNP Q13085
D	-26	SER	-	expression tag	UNP Q13085
D	-25	GLY	-	expression tag	UNP Q13085
D	-24	ASP	-	expression tag	UNP Q13085
D	-23	TYR	-	expression tag	UNP Q13085
D	-22	LYS	-	expression tag	UNP Q13085
D	-21	ASP	-	expression tag	UNP Q13085
D	-20	ASP	-	expression tag	UNP Q13085
D	-19	ASP	-	expression tag	UNP Q13085
D	-18	ASP	-	expression tag	UNP Q13085
D	-17	LYS	-	expression tag	UNP Q13085
D	-16	LEU	-	expression tag	UNP Q13085
D	-15	THR	-	expression tag	UNP Q13085
D	-14	SER	-	expression tag	UNP Q13085
D	-13	LEU	-	expression tag	UNP Q13085
D	-12	TYR	-	expression tag	UNP Q13085
D	-11	LYS	-	expression tag	UNP Q13085
D	-10	LYS	-	expression tag	UNP Q13085
D	-9	ALA	-	expression tag	UNP Q13085
D	-8	GLY	-	expression tag	UNP Q13085
D	-7	LEU	-	expression tag	UNP Q13085
D	-6	GLU	-	expression tag	UNP Q13085
D	-5	ASN	-	expression tag	UNP Q13085
D	-4	LEU	-	expression tag	UNP Q13085
D	-3	TYR	-	expression tag	UNP Q13085
D	-2	PHE	-	expression tag	UNP Q13085
D	-1	GLN	-	expression tag	UNP Q13085
D	0	GLY	-	expression tag	UNP Q13085
F	-60	MET	-	initiating methionine	UNP Q13085
F	-59	ALA	-	expression tag	UNP Q13085
F	-58	HIS	-	expression tag	UNP Q13085
F	-57	HIS	-	expression tag	UNP Q13085
F	-56	HIS	-	expression tag	UNP Q13085
F	-55	HIS	-	expression tag	UNP Q13085
F	-54	HIS	-	expression tag	UNP Q13085

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Chain	Residue	Modelled	Actual	Comment	Reference
F	-53	HIS	-	expression tag	UNP Q13085
F	-52	HIS	-	expression tag	UNP Q13085
F	-51	HIS	-	expression tag	UNP Q13085
F	-50	HIS	-	expression tag	UNP Q13085
F	-49	HIS	-	expression tag	UNP Q13085
F	-48	GLY	-	expression tag	UNP Q13085
F	-47	SER	-	expression tag	UNP Q13085
F	-46	THR	-	expression tag	UNP Q13085
F	-45	SER	-	expression tag	UNP Q13085
F	-44	GLY	-	expression tag	UNP Q13085
F	-43	SER	-	expression tag	UNP Q13085
F	-42	GLY	-	expression tag	UNP Q13085
F	-41	GLU	-	expression tag	UNP Q13085
F	-40	GLN	-	expression tag	UNP Q13085
F	-39	LYS	-	expression tag	UNP Q13085
F	-38	LEU	-	expression tag	UNP Q13085
F	-37	ILE	-	expression tag	UNP Q13085
F	-36	SER	-	expression tag	UNP Q13085
F	-35	GLU	-	expression tag	UNP Q13085
F	-34	GLU	-	expression tag	UNP Q13085
F	-33	ASP	-	expression tag	UNP Q13085
F	-32	LEU	-	expression tag	UNP Q13085
F	-31	GLY	-	expression tag	UNP Q13085
F	-30	SER	-	expression tag	UNP Q13085
F	-29	THR	-	expression tag	UNP Q13085
F	-28	SER	-	expression tag	UNP Q13085
F	-27	GLY	-	expression tag	UNP Q13085
F	-26	SER	-	expression tag	UNP Q13085
F	-25	GLY	-	expression tag	UNP Q13085
F	-24	ASP	-	expression tag	UNP Q13085
F	-23	TYR	-	expression tag	UNP Q13085
F	-22	LYS	-	expression tag	UNP Q13085
F	-21	ASP	-	expression tag	UNP Q13085
F	-20	ASP	-	expression tag	UNP Q13085
F	-19	ASP	-	expression tag	UNP Q13085
F	-18	ASP	-	expression tag	UNP Q13085
F	-17	LYS	-	expression tag	UNP Q13085
F	-16	LEU	-	expression tag	UNP Q13085
F	-15	THR	-	expression tag	UNP Q13085
F	-14	SER	-	expression tag	UNP Q13085
F	-13	LEU	-	expression tag	UNP Q13085
F	-12	TYR	-	expression tag	UNP Q13085

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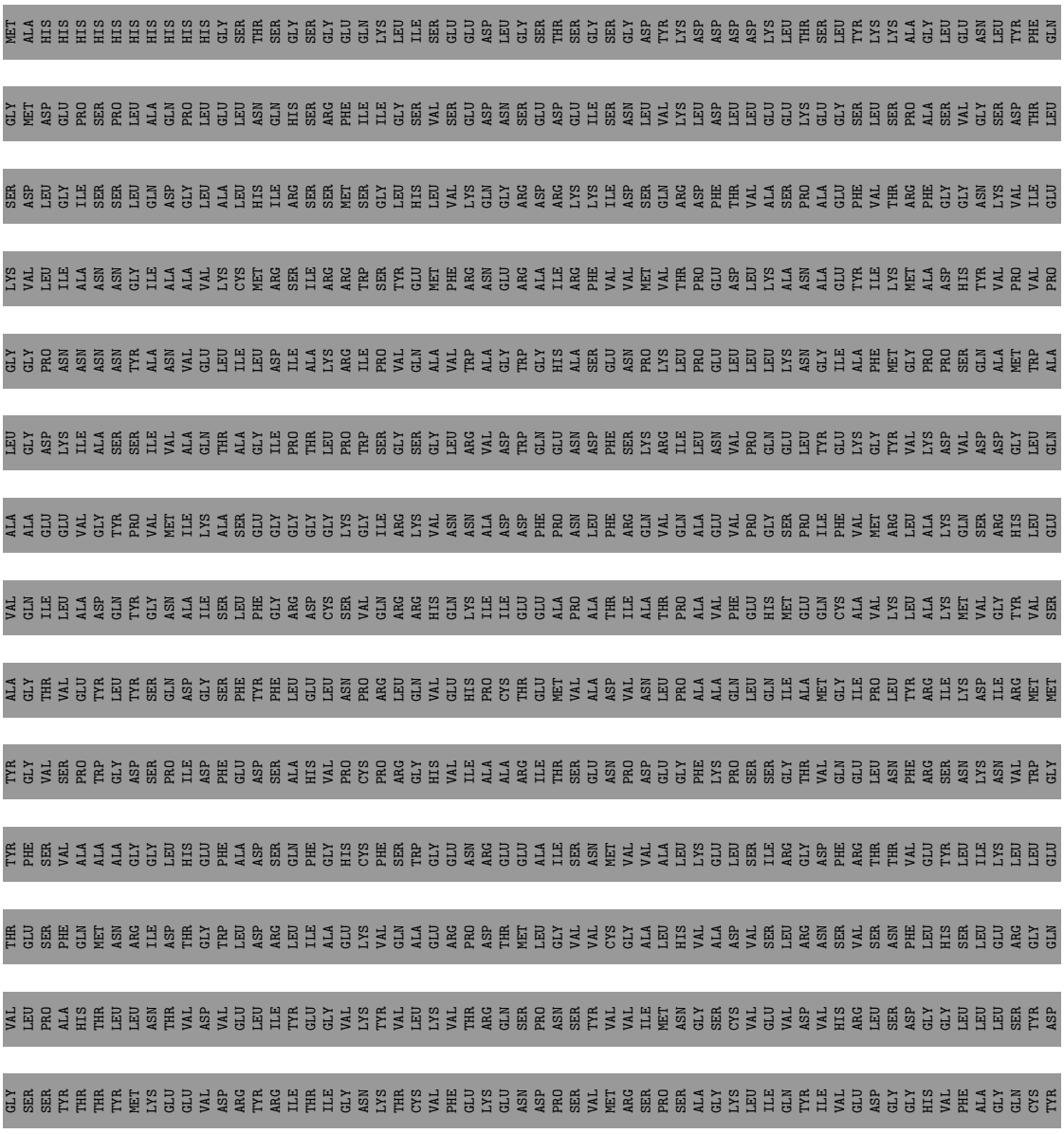
Chain	Residue	Modelled	Actual	Comment	Reference
F	-11	LYS	-	expression tag	UNP Q13085
F	-10	LYS	-	expression tag	UNP Q13085
F	-9	ALA	-	expression tag	UNP Q13085
F	-8	GLY	-	expression tag	UNP Q13085
F	-7	LEU	-	expression tag	UNP Q13085
F	-6	GLU	-	expression tag	UNP Q13085
F	-5	ASN	-	expression tag	UNP Q13085
F	-4	LEU	-	expression tag	UNP Q13085
F	-3	TYR	-	expression tag	UNP Q13085
F	-2	PHE	-	expression tag	UNP Q13085
F	-1	GLN	-	expression tag	UNP Q13085
F	0	GLY	-	expression tag	UNP Q13085

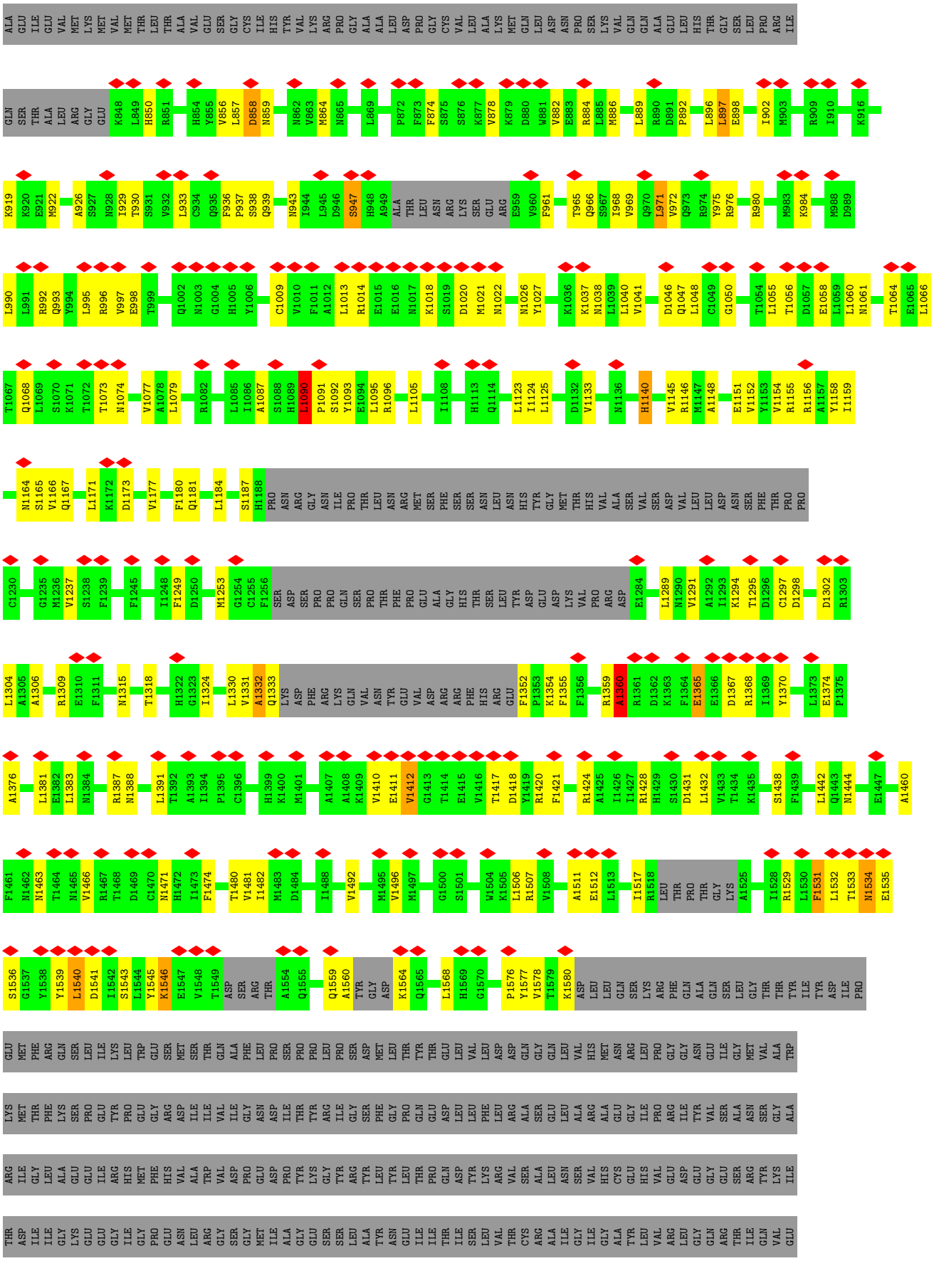
3 Residue-property plots (i)

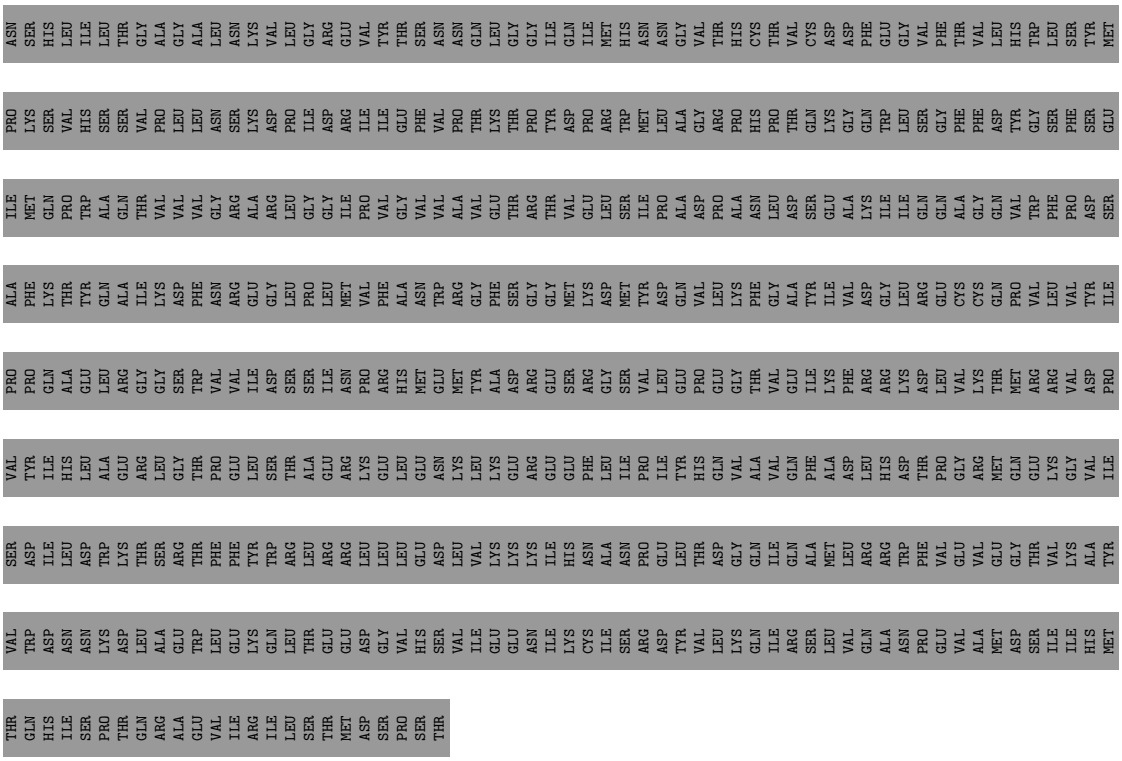
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion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

- Molecule 1: Acetyl-CoA carboxylase 1

Chain B:

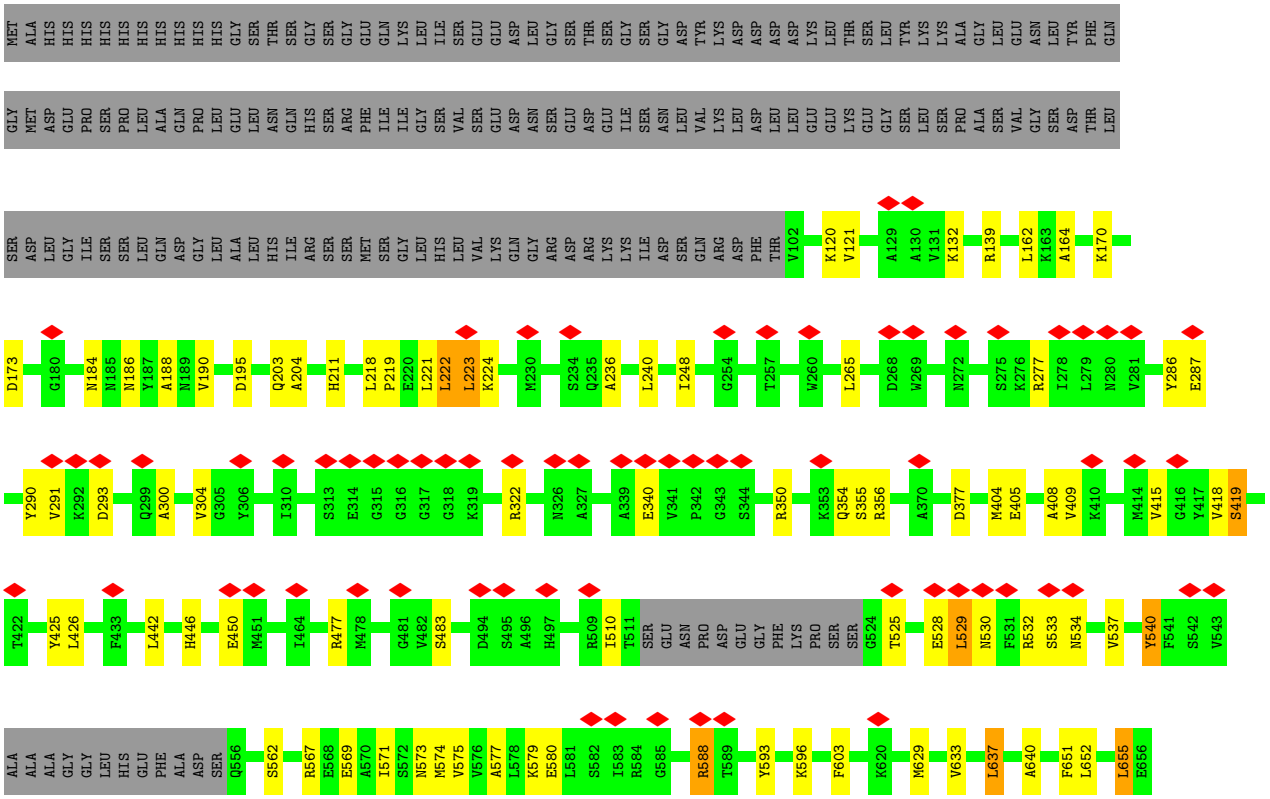


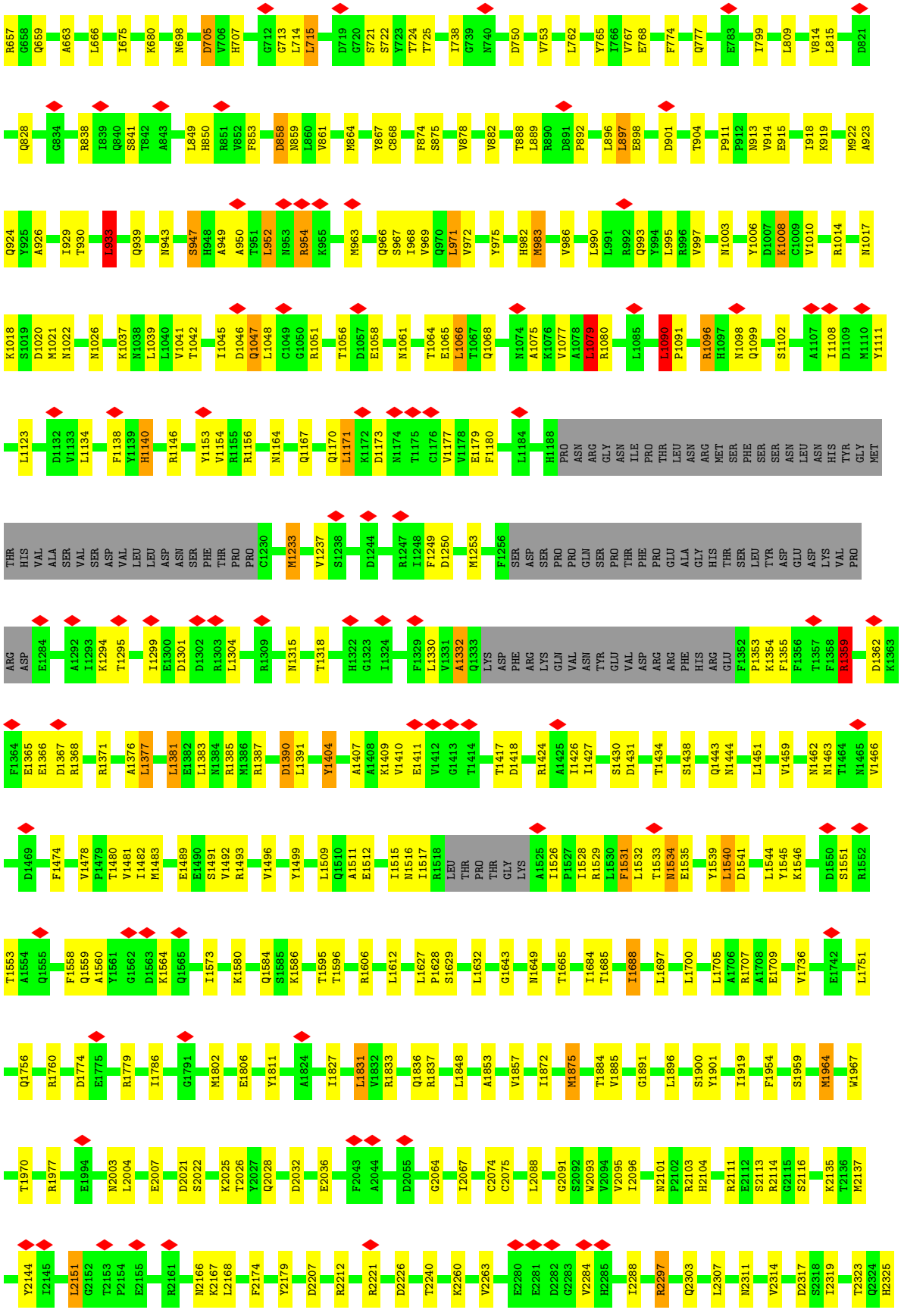


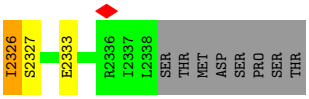


• Molecule 1: Acetyl-CoA carboxylase 1

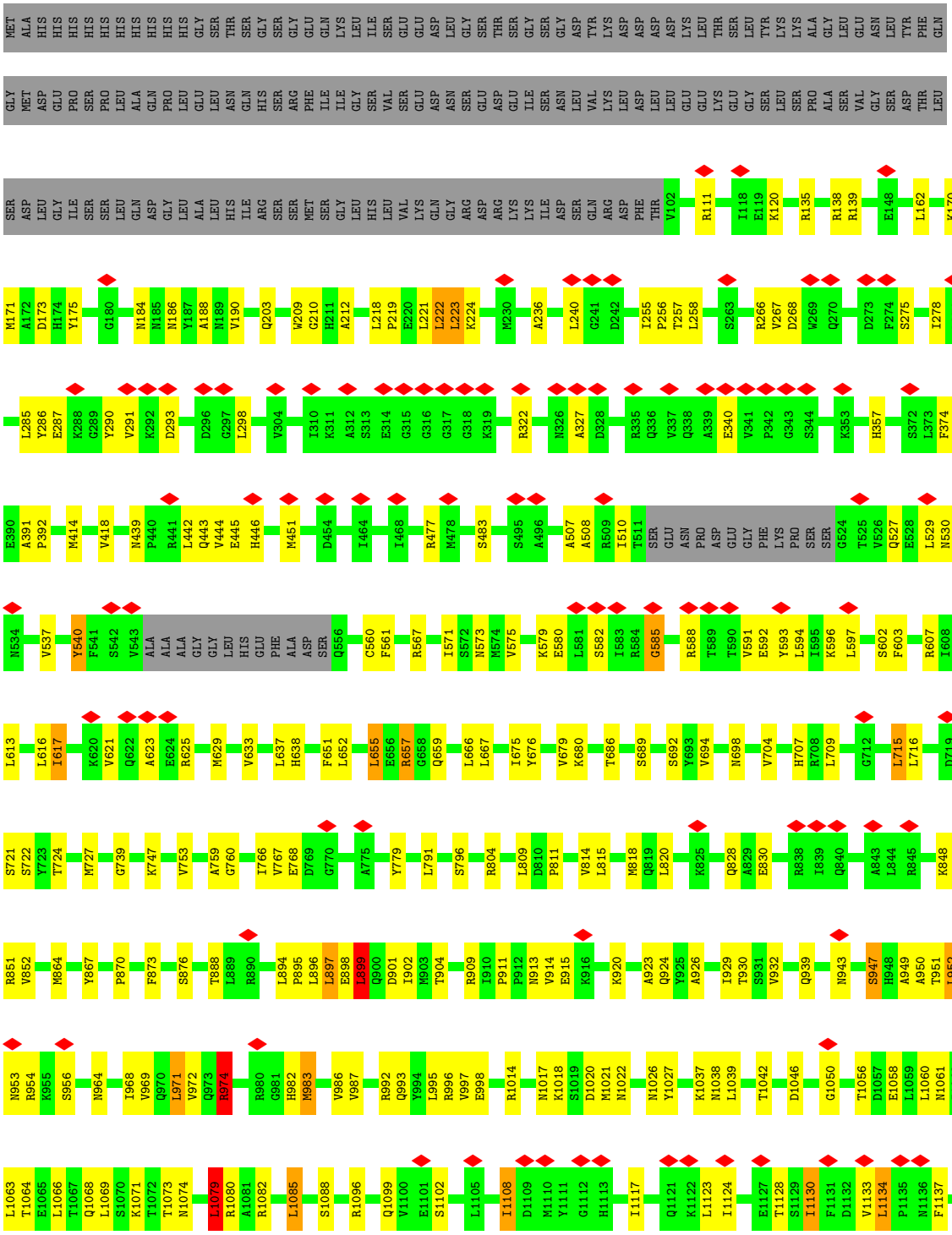
Chain C:

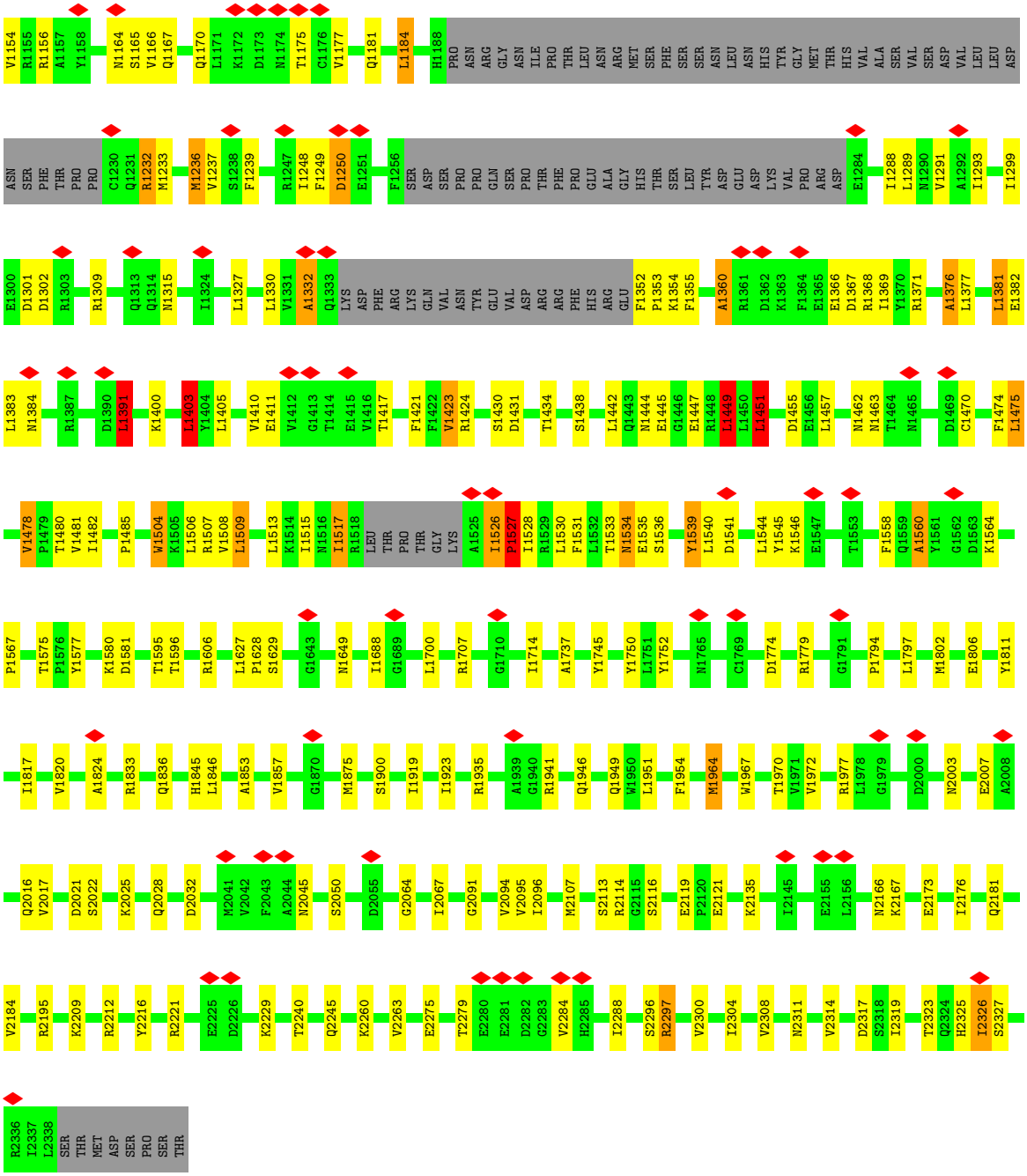



R657 G658 Q659 A663 L666 I675 K680 N698 D705 V706 H707 G712 G713 L714 L715 D719 G720 S721 S722 Y723 T724 T725 I738 G739 N740 D750 V753 L762 Y765 I766 V767 E768 F774 Q777 E783 I799 L809 V814 L815 D821
Q828 G834 R838 I839 Q840 S841 T842 A843 L849 H850 R851 V852 F853 D858 N859 L860 V861 M864 Y867 C868 F874 S875 V878 V882 T888 L889 R890 D891 P892 L896 L897 E898 D901 T904 P911 P912 N913 V914 E915 I918 K919 M922 A923
Q924 Y925 A926 I929 T930 L933 Q939 N943 S947 H948 A949 A950 T951 L952 N953 R954 K955 M963 Q966 S967 I968 V969 Q970 L971 V972 Y975 H982 M983 V986 L990 L991 R992 Q993 Y994 L995 R996 V997 N1003 Y1006 D1007 K1008 C1009 V1010 R1014 N1017
K1018 S1019 D1020 M1021 N1022 N1026 K1037 N1038 L1039 L1040 V1041 T1042 I1045 D1046 Q1047 L1048 C1049 G1050 R1051 T1056 D1057 E1058 N1061 T1064 E1065 L1066 T1067 Q1068 N1074 A1075 K1076 V1077 A1078 L1079 R1080 L1085 L1090 P1091 R1096 H1097 N1098 Q1099 S1102 A1107 I1108 D1109 M1110 Y1111
L1123 D1132 V1133 L1134 F1138 Y1139 H1140 R1146 Y1153 V1154 R1155 R1156 N1164 Q1167 Q1170 L1171 K1172 D1173 N1174 T1175 C1176 V1177 V1178 E1179 F1180 L1184 H1188 PRO ASN ARG GLY ASN ILE PRO THR LEU ASN ARG MET SER PHE SER SER ASN LEU ASN HIS TYR GLY MET
THR HIS VAL ALA SER VAL SER ASP VAL LEU LEU ASP ASN SER PHE THR PRO PRO C1230 M1233 V1237 S1238 D1244 R1247 I1248 F1249 D1250 M1253 F1256 SER ASP SER PRO PRO GLN SER PRO THR PHE PRO PRO GLU ALA GLY HIS THR SER LEU TYR ASP GLU ASP LYS VAL PRO
ARG ASP E1284 A1292 I1293 K1294 T1295 I1299 E1300 D1301 D1302 R1303 L1304 R1309 N1315 T1318 H1322 G1323 I1324 F1329 L1330 V1331 A1332 Q1333 LYS ASP PHE ARG LYS GLN VAL ASN TYR GLU VAL ASP ARG ARG PHE HIS ARG GLU F1352 P1353 K1354 F1355 F1356 T1357 F1358 R1359 D1362 K1363
F1364 E1365 E1366 D1367 R1368 R1371 A1376 L1377 L1381 E1382 L1383 N1384 R1385 M1386 R1387 D1390 L1391 Y1404 A1407 A1408 K1409 V1410 E1411 V1412 G1413 T1414 T1417 D1418 R1424 A1425 I1426 I1427 S1430 D1431 T1434 S1438 Q1443 N1444 L1451 V1459 N1462 N1463 T1464 N1465 V1466
D1469 F1474 V1478 P1479 T1480 V1481 I1482 M1483 E1489 E1490 S1491 V1492 R1493 V1496 Y1499 L1509 Q1510 A1511 E1512 I1515 N1516 I1517 R1518 LEU THR PRO THR GLY LYS A1525 I1526 P1527 I1528 R1529 L1530 F1531 L1532 T1533 N1534 E1535 Y1539 L1540 D1541 L1544 Y1545 K1546 D1550 S1551 R1552
T1553 A1554 Q1555 F1558 Q1559 A1560 Y1561 G1562 D1563 K1564 Q1565 I1573 K1580 Q1584 S1585 K1586 T1595 T1596 R1606 L1612 L1627 P1628 S1629 L1632 G1643 N1649 T1665 I1684 T1685 I1688 L1697 L1700 L1705 A1706 R1707 A1708 E1709 V1736 E1742 L1751
Q1756 R1760 D1774 E1775 R1779 I1786 G1791 M1802 E1806 Y1811 A1824 I1827 L1831 V1832 R1833 Q1836 R1837 L1848 A1853 V1857 I1872 M1875 T1884 V1885 G1891 L1896 S1900 Y1901 I1919 F1954 S1959 M1964 W1967
T1970 R1977 E1994 N2003 L2004 E2007 D2021 S2022 K2025 T2026 Y2027 Q2028 D2032 E2036 F2043 A2044 D2055 G2064 I2067 C2074 C2075 L2088 G2091 S2092 W2093 V2094 V2095 I2096 N2101 P2102 R2103 H2104 R2111 E2112 S2113 R2114 G2115 S2116 K2135 T2136 M2137
Y2144 I2145 L2151 G2152 T2153 P2154 E2155 R2161 N2166 K2167 L2168 F2174 Y2179 D2207 R2212 R2221 D2226 T2240 K2260 V2263 E2280 E2281 D2282 G2283 V2284 H2285 I2288 R2297 Q2303 L2307 N2311 V2314 D2317 S2318 I2319 T2323 Q2324 H2325



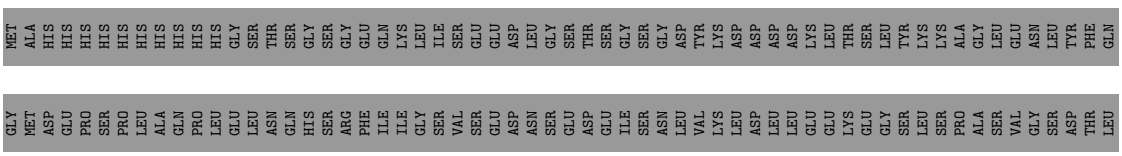
• Molecule 1: Acetyl-CoA carboxylase 1

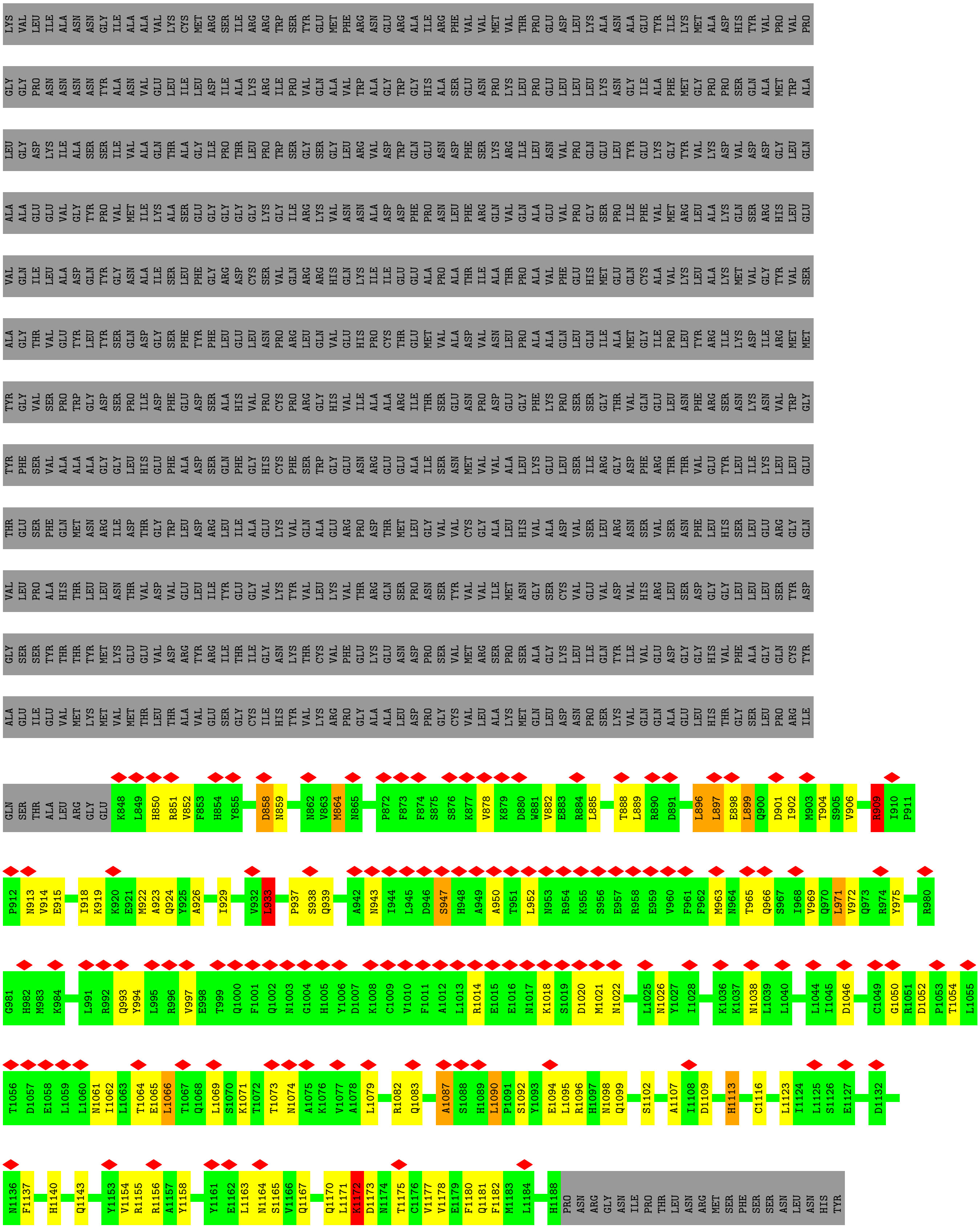




- Molecule 1: Acetyl-CoA carboxylase 1

Chain F:

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GLY GLY PRO ASN ASN ASN ASN TYR ALA ASN VAL GLU LEU ILE LEU ASP ILE ALA LYS ARG ILE PRO VAL GLN ALA VAL TRP ALA GLY TRP GLY HIS ALA SER GLU ASN PRO LYS LEU PRO GLU LEU LEU LEU LYS ASN GLY ILE ALA PHE MET GLY PRO PRO SER GLN ALA MET TRP ALA
LEU GLY ASP LYS ILE ALA SER SER ILE VAL ALA GLN THR ALA GLY ILE PRO THR LEU PRO TRP SER GLY SER GLY LEU ARG VAL ASP TRP GLN GLU ASN ASP PHE SER LYS ARG ILE LEU ASN VAL PRO GLN GLU LEU TYR GLU LYS GLY TYR VAL LYS ASP VAL ASP ASP GLY LEU GLN
ALA ALA GLU GLU VAL GLY TYR PRO VAL MET ILE LYS ALA SER GLU GLY GLY GLY GLY LYS GLY ILE ARG LYS VAL ASN ASN ALA ASP ASP PHE PRO ASN LEU PHE ARG GLN VAL GLN ALA GLU VAL PRO GLY SER PRO ILE PHE VAL MET ARG LEU ALA LYS GLN SER ARG HIS LEU GLU
VAL GLN ILE LEU ALA ASP GLN TYR GLY ASN ALA ILE SER LEU PHE GLY ARG ASP CYS SER VAL GLN ARG ARG HIS GLN LYS ILE ILE GLU GLU ALA PRO ALA THR ILE ALA THR PRO ALA VAL PHE GLU HIS MET GLU GLN CYS ALA VAL LYS LEU ALA LYS MET VAL GLY TYR VAL SER
ALA GLY THR VAL GLU TYR LEU TYR SER GLN ASP GLY SER PHE TYR PHE LEU GLU LEU ASN PRO ARG LEU GLN VAL GLU HIS PRO CYS THR GLU MET VAL ALA ASP VAL ASN LEU PRO ALA ALA GLN LEU GLN ILE ALA MET GLY ILE PRO LEU TYR ARG ILE LYS ASP ILE ARG MET MET
TYR GLY VAL SER PRO TRP GLY ASP SER PRO ILE ASP PHE GLU ASP SER ALA HIS VAL PRO CYS PRO ARG GLY HIS VAL ILE ALA ALA ARG ILE THR SER GLU ASN PRO ASP GLU GLY PHE LYS PRO SER SER GLY THR VAL GLN GLU LEU ASN PHE ARG SER ASN LYS ASN VAL TRP GLY
TYR PHE SER VAL ALA ALA ALA GLY GLY LEU HIS GLU PHE ALA ASP SER GLN PHE GLY HIS CYS PHE SER TRP GLY GLU ASN ARG GLU GLU ALA ILE SER ASN MET VAL VAL ALA LEU LYS GLU LEU SER ILE ARG GLY ASP PHE ARG THR THR VAL GLU TYR LEU ILE LYS LEU LEU GLU
THR GLU SER PHE GLN MET ASN ARG ILE ASP THR GLY TRP LEU ASP ARG LEU ILE ALA GLU LYS VAL GLN ALA GLU ARG PRO ASP THR MET LEU GLY VAL VAL CYS GLY ALA LEU HIS VAL ALA ASP VAL SER LEU ARG ASN SER VAL SER ASN PHE LEU HIS SER LEU GLU ARG GLY GLN
VAL LEU PRO ALA HIS THR LEU LEU ASN THR VAL ASP VAL GLU LEU ILE TYR GLU GLY VAL LYS TYR VAL LEU LYS VAL THR ARG GLN SER PRO ASN SER TYR VAL VAL ILE MET ASN GLY SER CYS VAL GLU VAL ASP VAL HIS ARG LEU SER ASP GLY GLY LEU LEU LEU SER TYR ASP
GLY SER SER TYR THR THR TYR MET LYS GLU GLU VAL ASP ARG TYR ARG ILE THR ILE GLY ASN LYS THR CYS VAL PHE GLU LYS GLU ASN ASP PRO SER VAL MET ARG SER PRO SER ALA GLY LYS LEU ILE GLN TYR ILE VAL GLU ASP GLY GLY HIS VAL PHE ALA GLY GLN CYS TYR
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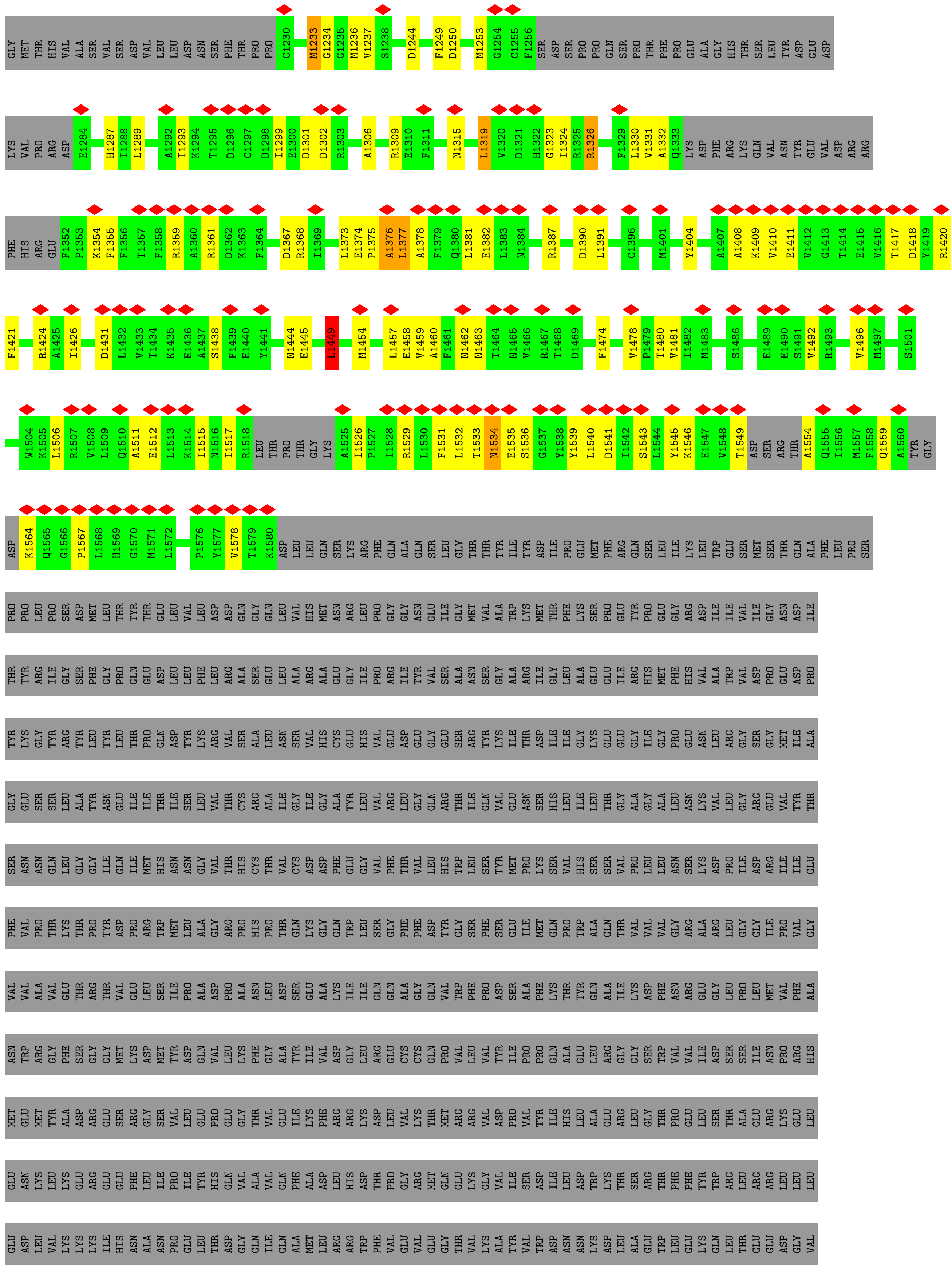
GLN SER THR ALA LEU ARG GLY GLU K848 L849 H850 R851 V852 F853 H854 Y855 D858 N859 N862 V863 M864 N865 P872 F873 F874 S875 S876 K877 V878 K879 D880 W881 V882 E883 R884 L885 T888 L889 R890 D891 L896 L897 E898 L899 Q900 D901 I902 M903 T904 S905 V906 R909 I910 P911
P912 N913 V914 E915 I918 K919 K920 E921 M922 A923 Q924 Y925 A926 I929 V932 L933 P937 S938 Q939 A942 N943 I944 L945 D946 S947 H948 A949 A950 T951 L952 N953 R954 K955 S956 E957 R958 E959 V960 F961 F962 M963 N964 T965 Q966 S967 I968 V969 Q970 L971 V972 Q973 R974 Y975 R980
G981 H982 M983 K984 L991 R992 Q993 Y994 L995 R996 V997 E998 T999 Q1000 F1001 Q1002 N1003 G1004 H1005 Y1006 D1007 K1008 C1009 V1010 F1011 A1012 L1013 R1014 E1015 E1016 N1017 K1018 S1019 D1020 M1021 N1022 L1025 N1026 Y1027 I1028 K1036 K1037 N1038 L1039 L1040 L1044 I1045 D1046 C1049 G1050 R1051 D1052 P1053 T1054 L1055
T1056 D1057 E1058 L1059 L1060 N1061 I1062 L1063 T1064 E1065 L1066 T1067 Q1068 L1069 S1070 K1071 T1072 T1073 N1074 A1075 K1076 V1077 A1078 L1079 R1082 Q1083 A1087 S1088 H1089 L1090 P1091 S1092 Y1093 E1094 L1095 R1096 H1097 N1098 Q1099 S1102 A1107 I1108 D1109 H1113 C1116 L1123 I1124 L1125 S1126 E1127 D1132
N1136 F1137 H1140 Q1143 Y1153 V1154 R1155 R1156 A1157 Y1158 Y1161 E1162 L1163 N1164 S1165 V1166 Q1167 Q1170 L1171 K1172 D1173 N1174 T1175 C1176 V1177 V1178 E1179 F1180 Q1181 F1182 M1183 L1184 H1188 PRO ASN ARG GLY ASN ILE PRO THR LEU ASN ARG MET SER PHE SER SER ASN LEU ASN HIS TYR



HIS SER VAL ILE GLU GLU ASN ILE LYS CYS ILE SER ARG ASP TYR VAL LEU LYS GLN ILE ARG SER LEU VAL GLN ALA ASN PRO GLU VAL ALA MET ASP SER ILE ILE HIS MET THR GLN HIS ILE SER PRO THR GLN ARG ALA GLU VAL ILE ARG ILE LEU SER THR MET ASP SER PRO

SER THR

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	131062	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	40.0	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.081	Depositor
Minimum map value	-0.038	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.002	Depositor
Recommended contour level	0.0172	Depositor
Map size (Å)	476.09998, 476.09998, 476.09998	wwPDB
Map dimensions	450, 450, 450	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.058, 1.058, 1.058	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	B	0.42	0/5209	0.95	13/7030 (0.2%)
1	C	0.40	1/17302 (0.0%)	0.88	34/23432 (0.1%)
1	D	0.42	2/17302 (0.0%)	0.94	59/23432 (0.3%)
1	F	0.42	0/5284	0.96	12/7131 (0.2%)
All	All	0.41	3/45097 (0.0%)	0.92	118/61025 (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	B	0	8
1	C	0	16
1	D	0	16
1	F	0	10
All	All	0	50

All (3) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	D	1526	ILE	C-N	7.03	1.47	1.34
1	D	1527	PRO	CB-CG	-5.58	1.22	1.50
1	C	1138	PHE	CA-C	5.14	1.66	1.52

All (118) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	971	LEU	CA-CB-CG	13.49	146.33	115.30
1	D	1526	ILE	C-N-CD	-13.29	91.36	120.60
1	D	585	GLY	N-CA-C	12.22	143.64	113.10
1	D	222	LEU	CA-CB-CG	10.98	140.56	115.30
1	D	1527	PRO	C-N-CA	10.94	149.04	121.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	C	222	LEU	CA-CB-CG	9.88	138.01	115.30
1	D	1381	LEU	CA-CB-CG	9.12	136.27	115.30
1	F	933	LEU	CA-CB-CG	9.12	136.26	115.30
1	D	1382	GLU	C-N-CA	8.96	144.11	121.70
1	D	1527	PRO	CA-N-CD	-8.85	99.11	111.50
1	D	1079	LEU	CA-CB-CG	8.80	135.54	115.30
1	D	1085	LEU	CB-CG-CD2	8.72	125.83	111.00
1	D	1384	ASN	C-N-CA	8.24	142.31	121.70
1	D	971	LEU	CA-CB-CG	7.96	133.61	115.30
1	D	1478	VAL	CG1-CB-CG2	7.77	123.33	110.90
1	D	1250	ASP	CB-CG-OD1	7.71	125.24	118.30
1	F	1090	LEU	CA-CB-CG	7.71	133.03	115.30
1	D	1423	VAL	CG1-CB-CG2	7.55	122.99	110.90
1	C	2179	TYR	CB-CG-CD2	-7.54	116.47	121.00
1	F	933	LEU	CB-CG-CD1	7.47	123.70	111.00
1	C	2151	LEU	CB-CG-CD2	-7.42	98.39	111.00
1	D	974	ARG	CA-CB-CG	7.41	129.70	113.40
1	C	1079	LEU	CA-CB-CG	7.34	132.18	115.30
1	C	286	TYR	CA-CB-CG	7.17	127.02	113.40
1	C	1367	ASP	CB-CG-OD1	7.14	124.73	118.30
1	C	1359	ARG	CA-CB-CG	7.13	129.08	113.40
1	C	983	MET	CA-CB-CG	7.01	125.22	113.30
1	D	1134	LEU	CB-CA-C	7.00	123.51	110.20
1	B	971	LEU	CA-CB-CG	6.96	131.30	115.30
1	C	1831	LEU	CA-CB-CG	6.88	131.13	115.30
1	D	1391	LEU	CB-CG-CD2	6.87	122.67	111.00
1	C	2179	TYR	CB-CG-CD1	6.85	125.11	121.00
1	D	1288	ILE	CG1-CB-CG2	6.84	126.44	111.40
1	D	983	MET	CA-CB-CG	6.83	124.91	113.30
1	D	1451	LEU	CA-CB-CG	6.80	130.95	115.30
1	D	286	TYR	CA-CB-CG	6.77	126.26	113.40
1	D	1130	ILE	CG1-CB-CG2	6.71	126.16	111.40
1	C	223	LEU	CA-CB-CG	6.67	130.64	115.30
1	D	1449	LEU	CB-CG-CD1	6.61	122.24	111.00
1	D	1124	ILE	CG1-CB-CG2	6.49	125.69	111.40
1	D	223	LEU	CA-CB-CG	6.48	130.20	115.30
1	D	1368	ARG	NE-CZ-NH2	-6.40	117.10	120.30
1	B	1158	TYR	CA-CB-CG	6.36	125.49	113.40
1	D	1539	TYR	CB-CG-CD2	-6.33	117.20	121.00
1	C	540	TYR	CB-CG-CD1	-6.24	117.26	121.00
1	F	858	ASP	CB-CG-OD1	6.21	123.89	118.30
1	C	1964	MET	CA-CB-CG	6.16	123.77	113.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	952	LEU	CA-CB-CG	6.16	129.47	115.30
1	C	2151	LEU	CB-CG-CD1	6.14	121.44	111.00
1	D	1964	MET	CA-CB-CG	6.13	123.73	113.30
1	D	897	LEU	CA-CB-CG	6.12	129.37	115.30
1	D	1517	ILE	C-N-CA	6.09	136.94	121.70
1	F	896	LEU	CA-CB-CG	6.08	129.28	115.30
1	F	1449	LEU	CB-CG-CD1	6.03	121.25	111.00
1	C	858	ASP	CB-CG-OD1	6.02	123.72	118.30
1	D	1367	ASP	CB-CG-OD1	5.99	123.69	118.30
1	C	1964	MET	CB-CG-SD	5.98	130.33	112.40
1	D	374	PHE	CB-CG-CD1	-5.97	116.62	120.80
1	D	1504	TRP	CB-CA-C	5.91	122.21	110.40
1	C	889	LEU	CA-CB-CG	5.86	128.77	115.30
1	C	1140	HIS	CB-CA-C	5.78	121.97	110.40
1	C	933	LEU	CA-CB-CG	5.78	128.60	115.30
1	C	588	ARG	NE-CZ-NH1	5.74	123.17	120.30
1	F	1233	MET	CA-CB-CG	5.73	123.04	113.30
1	C	1368	ARG	NE-CZ-NH2	-5.73	117.44	120.30
1	D	899	LEU	CA-CB-CG	5.72	128.47	115.30
1	D	637	LEU	CB-CG-CD2	-5.69	101.33	111.00
1	D	111	ARG	CA-CB-CG	5.67	125.87	113.40
1	D	540	TYR	CB-CG-CD1	-5.66	117.61	121.00
1	B	1140	HIS	CB-CA-C	5.62	121.64	110.40
1	C	540	TYR	CB-CG-CD2	5.62	124.37	121.00
1	D	1403	LEU	CA-CB-CG	5.59	128.16	115.30
1	D	1508	VAL	CG1-CB-CG2	-5.57	101.99	110.90
1	D	666	LEU	CB-CG-CD1	5.56	120.45	111.00
1	C	1404	TYR	CA-CB-CG	5.55	123.95	113.40
1	D	1130	ILE	C-N-CA	5.54	135.56	121.70
1	D	1509	LEU	CA-CB-CG	5.53	128.01	115.30
1	B	858	ASP	CB-CG-OD1	5.50	123.25	118.30
1	B	1090	LEU	CA-CB-CG	5.48	127.89	115.30
1	D	374	PHE	CB-CG-CD2	5.47	124.63	120.80
1	B	1318	THR	OG1-CB-CG2	5.46	122.56	110.00
1	D	657	ARG	CA-CB-CG	5.46	125.41	113.40
1	C	1531	PHE	CB-CG-CD2	5.45	124.62	120.80
1	C	815	LEU	CA-CB-CG	5.43	127.80	115.30
1	C	715	LEU	CA-CB-CG	5.42	127.78	115.30
1	D	666	LEU	CB-CG-CD2	-5.41	101.81	111.00
1	B	1442	LEU	CA-CB-CG	5.37	127.65	115.30
1	D	1403	LEU	CB-CG-CD1	5.36	120.12	111.00
1	C	867	TYR	CA-CB-CG	-5.36	103.21	113.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	D	1232	ARG	CG-CD-NE	5.36	123.05	111.80
1	D	1368	ARG	NE-CZ-NH1	5.36	122.98	120.30
1	B	990	LEU	CA-CB-CG	5.35	127.60	115.30
1	C	896	LEU	CA-CB-CG	5.33	127.56	115.30
1	D	974	ARG	N-CA-CB	5.31	120.15	110.60
1	D	1451	LEU	CB-CG-CD1	5.29	119.99	111.00
1	D	1485	PRO	N-CA-C	5.28	125.83	112.10
1	D	952	LEU	CA-CB-CG	5.26	127.39	115.30
1	B	1079	LEU	CA-CB-CG	5.24	127.36	115.30
1	C	1390	ASP	N-CA-C	-5.24	96.85	111.00
1	D	540	TYR	CB-CG-CD2	5.23	124.14	121.00
1	C	1090	LEU	CA-CB-CG	5.22	127.32	115.30
1	B	1568	LEU	CB-CG-CD2	5.21	119.86	111.00
1	D	1128	THR	OG1-CB-CG2	5.20	121.97	110.00
1	B	1428	ARG	N-CA-CB	-5.19	101.25	110.60
1	D	1250	ASP	CB-CG-OD2	-5.18	113.64	118.30
1	F	1368	ARG	NE-CZ-NH2	-5.17	117.71	120.30
1	F	1137	PHE	C-N-CA	-5.16	108.81	121.70
1	D	382	ARG	NE-CZ-NH1	5.13	122.87	120.30
1	C	1233	MET	CA-CB-CG	5.10	121.97	113.30
1	C	1531	PHE	CB-CG-CD1	-5.05	117.26	120.80
1	F	971	LEU	CA-CB-CG	5.05	126.91	115.30
1	B	896	LEU	CA-CB-CG	5.04	126.89	115.30
1	D	561	PHE	CB-CG-CD2	-5.03	117.28	120.80
1	F	909	ARG	NE-CZ-NH1	5.03	122.81	120.30
1	D	561	PHE	CB-CG-CD1	5.02	124.31	120.80
1	C	990	LEU	CA-CB-CG	5.01	126.83	115.30
1	B	1367	ASP	CB-CG-OD1	5.01	122.81	118.30
1	D	896	LEU	CA-CB-CG	5.00	126.81	115.30

There are no chirality outliers.

All (50) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	B	1171	LEU	Peptide
1	B	1173	ASP	Peptide
1	B	1249	PHE	Peptide
1	B	1315	ASN	Peptide
1	B	1332	ALA	Peptide
1	B	1360	ALA	Peptide
1	B	1466	VAL	Peptide
1	B	1564	LYS	Peptide

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Mol	Chain	Res	Type	Group
1	C	1047	GLN	Peptide
1	C	1171	LEU	Peptide
1	C	1173	ASP	Peptide
1	C	1249	PHE	Peptide
1	C	1315	ASN	Peptide
1	C	1332	ALA	Peptide
1	C	1362	ASP	Peptide
1	C	1377	LEU	Peptide
1	C	1466	VAL	Peptide
1	C	1564	LYS	Peptide
1	C	277	ARG	Peptide
1	C	588	ARG	Peptide
1	C	750	ASP	Peptide
1	C	924	GLN	Peptide
1	C	952	LEU	Peptide
1	C	954	ARG	Peptide
1	D	1108	ILE	Peptide
1	D	1130	ILE	Peptide
1	D	1184	LEU	Peptide
1	D	1249	PHE	Peptide
1	D	1315	ASN	Peptide
1	D	1332	ALA	Peptide
1	D	1360	ALA	Peptide
1	D	1376	ALA	Peptide
1	D	1526	ILE	Peptide
1	D	1527	PRO	Peptide
1	D	210	GLY	Peptide
1	D	617	ILE	Peptide
1	D	924	GLN	Peptide
1	D	951	THR	Peptide
1	D	953	ASN	Peptide
1	D	956	SER	Peptide
1	F	1140	HIS	Peptide
1	F	1171	LEU	Peptide
1	F	1172	LYS	Peptide
1	F	1249	PHE	Peptide
1	F	1315	ASN	Peptide
1	F	1332	ALA	Peptide
1	F	1376	ALA	Peptide
1	F	1377	LEU	Peptide
1	F	1564	LYS	Peptide
1	F	924	GLN	Peptide

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	B	5112	5114	5134	108	0
1	C	16940	16841	16897	255	0
1	D	16940	16842	16897	282	0
1	F	5186	5194	5214	113	0
All	All	44178	43991	44142	728	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 8.

All (728) 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:1511:ALA:HB3	1:C:1532:LEU:HD12	1.36	1.07
1:C:721:SER:OG	1:D:173:ASP:O	1.92	0.86
1:C:1533:THR:OG1	1:C:1541:ASP:O	1.94	0.84
1:D:357:HIS:ND1	1:D:378:CYS:SG	2.50	0.83
1:C:1387:ARG:O	1:C:1409:LYS:NZ	2.12	0.81
1:C:173:ASP:O	1:D:721:SER:OG	1.98	0.81
1:F:1123:LEU:O	1:F:1156:ARG:NH1	2.15	0.80
1:D:477:ARG:NE	1:D:483:SER:O	2.14	0.77
1:B:1512:GLU:OE1	1:B:1529:ARG:NH2	2.18	0.77
1:C:1003:ASN:O	1:C:1008:LYS:NZ	2.17	0.77
1:B:864:MET:O	1:B:1037:LYS:NZ	2.16	0.77
1:B:1123:LEU:O	1:B:1156:ARG:NH1	2.18	0.77
1:D:1900:SER:OG	1:D:1977:ARG:NH2	2.18	0.76
1:D:1533:THR:OG1	1:D:1541:ASP:O	2.02	0.76
1:C:2317:ASP:OD2	1:D:2297:ARG:NH2	2.19	0.76
1:B:898:GLU:OE1	1:B:975:TYR:OH	2.01	0.75
1:C:864:MET:O	1:C:1037:LYS:NZ	2.19	0.75
1:F:1082:ARG:NH2	1:F:1458:GLU:OE1	2.19	0.75
1:B:1038:ASN:HD22	1:B:1073:THR:HG22	1.52	0.75
1:D:1424:ARG:NH2	1:D:1577:TYR:OH	2.20	0.74
1:D:1833:ARG:NH1	1:D:1836:GLN:OE1	2.21	0.74
1:D:1447:GLU:O	1:D:1451:LEU:HD13	1.87	0.74
1:D:1954:PHE:O	1:D:2212:ARG:NH1	2.20	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1512:GLU:OE1	1:F:1529:ARG:NH2	2.20	0.74
1:D:1022:ASN:O	1:D:1026:ASN:ND2	2.20	0.74
1:F:1022:ASN:O	1:F:1026:ASN:ND2	2.20	0.74
1:B:1140:HIS:O	1:B:1146:ARG:NH2	2.20	0.74
1:C:1900:SER:OG	1:C:1977:ARG:NH2	2.20	0.74
1:F:1038:ASN:ND2	1:F:1073:THR:O	2.20	0.73
1:D:1099:GLN:O	1:D:1102:SER:OG	2.02	0.73
1:F:901:ASP:O	1:F:904:THR:OG1	2.06	0.73
1:D:588:ARG:NH2	1:D:739:GLY:O	2.21	0.73
1:C:1837:ARG:NH2	1:C:2036:GLU:OE2	2.22	0.73
1:D:943:ASN:O	1:D:947:SER:OG	2.06	0.73
1:D:873:PHE:O	1:D:876:SER:OG	2.06	0.72
1:F:1531:PHE:O	1:F:1543:SER:OG	2.07	0.72
1:C:1811:TYR:OH	1:C:2032:ASP:OD1	2.08	0.72
1:C:1041:VAL:HG11	1:C:1077:VAL:HG22	1.70	0.72
1:D:1707:ARG:NE	1:D:1806:GLU:OE2	2.23	0.71
1:D:1534:ASN:ND2	1:D:1539:TYR:O	2.24	0.71
1:C:322:ARG:NH2	1:C:340:GLU:OE2	2.23	0.71
1:C:477:ARG:NE	1:C:483:SER:O	2.17	0.71
1:F:1387:ARG:O	1:F:1409:LYS:NZ	2.23	0.71
1:D:828:GLN:OE1	1:D:830:GLU:N	2.22	0.71
1:C:139:ARG:NH2	1:D:533:SER:O	2.24	0.71
1:D:1046:ASP:O	1:D:1050:GLY:HA3	1.91	0.71
1:B:1091:PRO:O	1:B:1096:ARG:NH1	2.24	0.70
1:D:255:ILE:HG23	1:D:258:LEU:HD12	1.71	0.70
1:D:2300:VAL:O	1:D:2304:ILE:HD12	1.91	0.70
1:C:2091:GLY:O	1:C:2095:VAL:HG22	1.91	0.70
1:D:2229:LYS:NZ	1:D:2245:GLN:OE1	2.22	0.70
1:D:596:LYS:NZ	1:D:621:VAL:O	2.25	0.70
1:D:1123:LEU:O	1:D:1156:ARG:NH1	2.25	0.70
1:D:357:HIS:HD1	1:D:378:CYS:HG	1.38	0.69
1:D:532:ARG:NH2	1:D:580:GLU:OE2	2.24	0.69
1:D:623:ALA:O	1:D:625:ARG:NH1	2.25	0.69
1:D:376:ARG:NH2	1:D:443:GLN:OE1	2.26	0.69
1:B:1014:ARG:O	1:B:1018:LYS:HA	1.93	0.69
1:C:121:VAL:HG22	1:C:204:ALA:HB3	1.74	0.69
1:C:1833:ARG:NH1	1:C:1836:GLN:OE1	2.25	0.69
1:D:901:ASP:O	1:D:904:THR:OG1	2.09	0.69
1:D:1038:ASN:ND2	1:D:1073:THR:O	2.25	0.69
1:D:530:ASN:ND2	1:D:537:VAL:O	2.26	0.69
1:D:1811:TYR:OH	1:D:2032:ASP:OD1	2.09	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1022:ASN:O	1:B:1026:ASN:ND2	2.26	0.68
1:C:567:ARG:NH2	1:C:603:PHE:O	2.26	0.68
1:C:530:ASN:O	1:C:532:ARG:NH2	2.27	0.68
1:C:1079:LEU:HB3	1:C:1462:ASN:HD22	1.58	0.68
1:B:892:PRO:HG2	1:B:929:ILE:HD11	1.76	0.68
1:B:939:GLN:O	1:B:943:ASN:ND2	2.27	0.68
1:D:322:ARG:NH2	1:D:340:GLU:OE2	2.27	0.68
1:C:580:GLU:OE1	1:D:135:ARG:NH2	2.27	0.67
1:C:1022:ASN:O	1:C:1026:ASN:ND2	2.27	0.67
1:D:138:ARG:NH2	1:D:171:MET:O	2.27	0.67
1:C:1123:LEU:O	1:C:1156:ARG:NH1	2.29	0.66
1:D:287:GLU:O	1:D:290:TYR:O	2.12	0.66
1:C:655:LEU:O	1:C:1014:ARG:NH1	2.29	0.66
1:C:1427:ILE:O	1:C:1478:VAL:HG22	1.94	0.66
1:D:1082:ARG:NH1	1:D:1455:ASP:OD1	2.29	0.66
1:D:804:ARG:NH2	1:D:1745:TYR:OH	2.28	0.66
1:C:248:ILE:HG13	1:C:265:LEU:HD13	1.78	0.65
1:D:1020:ASP:OD1	1:D:1021:MET:N	2.29	0.65
1:F:1020:ASP:OD1	1:F:1021:MET:N	2.29	0.65
1:C:190:VAL:HG13	1:C:218:LEU:HD23	1.79	0.65
1:D:1177:VAL:HG13	1:D:1237:VAL:HG22	1.77	0.65
1:C:892:PRO:HB2	1:C:929:ILE:HD11	1.78	0.65
1:C:1020:ASP:OD1	1:C:1021:MET:N	2.30	0.65
1:C:1836:GLN:OE1	1:C:2028:GLN:NE2	2.29	0.65
1:B:1534:ASN:ND2	1:B:1539:TYR:O	2.29	0.65
1:C:1140:HIS:O	1:C:1146:ARG:NH2	2.30	0.64
1:D:1445:GLU:O	1:D:1449:LEU:HD13	1.97	0.64
1:F:1014:ARG:O	1:F:1018:LYS:HA	1.97	0.64
1:F:1533:THR:OG1	1:F:1541:ASP:O	2.16	0.64
1:C:1434:THR:OG1	1:C:1482:ILE:O	2.11	0.64
1:F:1382:GLU:OE2	1:F:1529:ARG:NH2	2.31	0.64
1:B:930:THR:OG1	1:D:1166:VAL:O	2.16	0.63
1:D:939:GLN:O	1:D:943:ASN:ND2	2.31	0.63
1:C:901:ASP:O	1:C:904:THR:OG1	2.17	0.63
1:D:926:ALA:O	1:D:929:ILE:HG22	1.98	0.63
1:C:2021:ASP:OD1	1:C:2022:SER:N	2.31	0.63
1:D:1700:LEU:HD22	1:D:1802:MET:CE	2.28	0.63
1:D:1457:LEU:O	1:D:1457:LEU:HD23	1.98	0.63
1:D:2021:ASP:OD1	1:D:2022:SER:N	2.31	0.63
1:B:1496:VAL:HG11	1:B:1540:LEU:HD11	1.79	0.63
1:F:1083:GLN:O	1:F:1087:ALA:HB2	1.97	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:838:ARG:O	1:C:841:SER:OG	2.10	0.62
1:D:2166:ASN:OD1	1:D:2167:LYS:N	2.32	0.62
1:C:571:ILE:O	1:C:575:VAL:HG23	1.99	0.62
1:B:996:ARG:NH1	1:B:1027:TYR:OH	2.33	0.62
1:D:186:ASN:N	1:D:186:ASN:OD1	2.33	0.62
1:D:760:GLY:O	1:D:809:LEU:N	2.32	0.62
1:C:355:SER:OG	1:C:426:LEU:HD11	1.99	0.62
1:D:1530:LEU:HD12	1:D:1544:LEU:HD12	1.82	0.62
1:F:1534:ASN:ND2	1:F:1539:TYR:O	2.33	0.62
1:C:705:ASP:OD1	1:C:705:ASP:N	2.30	0.62
1:F:898:GLU:OE1	1:F:975:TYR:OH	2.15	0.62
1:F:1172:LYS:O	1:F:1175:THR:OG1	2.12	0.62
1:C:1014:ARG:O	1:C:1018:LYS:HA	1.98	0.62
1:C:1366:GLU:OE1	1:C:1371:ARG:NH2	2.32	0.62
1:F:1046:ASP:O	1:F:1050:GLY:HA3	2.00	0.62
1:D:190:VAL:HG22	1:D:218:LEU:HD21	1.82	0.62
1:F:858:ASP:OD1	1:F:859:ASN:N	2.33	0.61
1:F:918:ILE:O	1:F:922:MET:HG2	1.99	0.61
1:F:1158:TYR:OH	1:F:1326:ARG:NH1	2.33	0.61
1:D:184:ASN:HA	1:D:188:ALA:HB3	1.82	0.61
1:B:1020:ASP:OD1	1:B:1021:MET:N	2.32	0.61
1:C:120:LYS:N	1:C:203:GLN:OE1	2.32	0.61
1:C:1434:THR:HG23	1:C:1481:VAL:HB	1.83	0.61
1:D:1606:ARG:NH1	1:D:1628:PRO:O	2.32	0.61
1:D:982:HIS:O	1:D:986:VAL:HG12	2.00	0.61
1:C:858:ASP:OD1	1:C:859:ASN:N	2.33	0.61
1:C:1047:GLN:O	1:C:1048:LEU:HD22	1.99	0.61
1:D:1039:LEU:O	1:D:1042:THR:OG1	2.16	0.61
1:F:850:HIS:HB2	1:F:897:LEU:HD23	1.82	0.61
1:F:1014:ARG:NH1	1:F:1018:LYS:O	2.33	0.61
1:F:1079:LEU:HG	1:F:1459:VAL:HG22	1.83	0.61
1:B:1492:VAL:O	1:B:1496:VAL:HG12	2.00	0.61
1:B:902:ILE:HD13	1:B:971:LEU:HD22	1.82	0.61
1:D:1946:GLN:NE2	1:D:1949:GLN:OE1	2.34	0.61
1:D:1237:VAL:HB	1:D:1291:VAL:HG12	1.83	0.60
1:F:1545:TYR:OH	1:F:1567:PRO:O	2.19	0.60
1:C:404:MET:O	1:C:425:TYR:OH	2.19	0.60
1:D:212:ALA:HB1	1:D:218:LEU:HD11	1.82	0.60
1:D:1820:VAL:HG11	1:D:1846:LEU:HD21	1.82	0.60
1:B:1511:ALA:HB3	1:B:1532:LEU:HD12	1.83	0.60
1:D:1403:LEU:HB3	1:D:1423:VAL:HG23	1.83	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:850:HIS:HB2	1:C:897:LEU:HD23	1.83	0.60
1:F:1092:SER:HB3	1:F:1095:LEU:HD23	1.84	0.60
1:B:961:PHE:O	1:B:965:THR:HG22	2.01	0.60
1:B:1046:ASP:O	1:B:1050:GLY:HA3	2.02	0.60
1:F:1163:LEU:HD13	1:F:1182:PHE:HB3	1.83	0.60
1:C:1492:VAL:O	1:C:1496:VAL:HG12	2.01	0.60
1:C:2166:ASN:OD1	1:C:2167:LYS:N	2.34	0.60
1:D:1085:LEU:O	1:D:1088:SER:OG	2.19	0.60
1:B:1370:TYR:HE1	1:B:1383:LEU:HD23	1.67	0.59
1:D:1967:TRP:O	1:D:2025:LYS:NZ	2.32	0.59
1:B:1177:VAL:HG13	1:B:1237:VAL:HG22	1.83	0.59
1:B:858:ASP:OD1	1:B:859:ASN:N	2.35	0.59
1:C:1534:ASN:ND2	1:C:1539:TYR:O	2.36	0.59
1:C:2074:CYS:O	1:C:2101:ASN:ND2	2.35	0.59
1:B:1374:GLU:O	1:B:1376:ALA:N	2.35	0.59
1:C:1385:ARG:NE	1:C:1573:ILE:O	2.36	0.59
1:C:1606:ARG:NH1	1:C:1628:PRO:O	2.36	0.59
1:D:389:GLU:HB2	1:D:507:ALA:HB3	1.85	0.59
1:D:508:ALA:HB3	1:D:560:CYS:SG	2.43	0.59
1:D:275:SER:OG	1:D:414:MET:O	2.14	0.59
1:D:1836:GLN:OE1	1:D:2028:GLN:NE2	2.36	0.59
1:C:707:HIS:CG	1:D:162:LEU:HD21	2.36	0.59
1:C:1330:LEU:HD12	1:C:1355:PHE:CE1	2.38	0.59
1:C:1700:LEU:HD22	1:C:1802:MET:CE	2.32	0.59
1:C:1967:TRP:O	1:C:2025:LYS:NZ	2.34	0.59
1:B:1481:VAL:O	1:B:1517:ILE:HG22	2.02	0.58
1:C:926:ALA:O	1:C:929:ILE:HG22	2.02	0.58
1:D:567:ARG:NH2	1:D:603:PHE:O	2.34	0.58
1:C:1632:LEU:HD12	1:C:1665:THR:O	2.02	0.58
1:F:1445:GLU:O	1:F:1449:LEU:HD13	2.03	0.58
1:C:1377:LEU:HD12	1:C:1426:ILE:HD11	1.84	0.58
1:C:1684:ILE:O	1:C:1688:ILE:HA	2.03	0.58
1:F:1099:GLN:O	1:F:1102:SER:OG	2.16	0.58
1:F:1373:LEU:HD13	1:F:1374:GLU:N	2.18	0.58
1:D:721:SER:HG	1:D:722:SER:H	1.51	0.58
1:D:2107:MET:SD	1:D:2107:MET:N	2.76	0.58
1:B:1167:GLN:N	1:B:1167:GLN:OE1	2.37	0.58
1:C:1167:GLN:OE1	1:C:1167:GLN:N	2.37	0.58
1:F:1094:GLU:O	1:F:1095:LEU:HD22	2.04	0.58
1:C:849:LEU:HD22	1:C:888:THR:CG2	2.34	0.57
1:D:686:THR:O	1:D:694:VAL:HG12	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1166:VAL:HG22	1:B:1180:PHE:CD1	2.39	0.57
1:D:1457:LEU:HD22	1:D:1506:LEU:CD1	2.33	0.57
1:F:1492:VAL:O	1:F:1496:VAL:HG12	2.04	0.57
1:B:1047:GLN:O	1:B:1048:LEU:HD22	2.04	0.57
1:C:240:LEU:HD21	1:C:415:VAL:HG11	1.85	0.57
1:C:725:THR:HG22	1:C:738:ILE:HG23	1.86	0.57
1:D:2091:GLY:O	1:D:2095:VAL:HG22	2.03	0.57
1:B:1154:VAL:HG11	1:B:1180:PHE:CZ	2.39	0.57
1:C:715:LEU:HD13	1:D:175:TYR:OH	2.05	0.57
1:C:949:ALA:O	1:C:952:LEU:HD22	2.05	0.57
1:D:947:SER:O	1:D:950:ALA:HB3	2.05	0.57
1:D:1700:LEU:HD22	1:D:1802:MET:HE1	1.87	0.57
1:C:993:GLN:O	1:C:997:VAL:HG22	2.04	0.57
1:B:1253:MET:SD	1:B:1253:MET:N	2.78	0.57
1:B:1421:PHE:CE2	1:B:1460:ALA:HB1	2.40	0.57
1:C:1045:ILE:O	1:C:1048:LEU:C	2.43	0.57
1:D:993:GLN:O	1:D:997:VAL:HG22	2.05	0.57
1:F:864:MET:SD	1:F:993:GLN:NE2	2.78	0.57
1:C:569:GLU:OE2	1:C:573:ASN:ND2	2.29	0.56
1:C:418:VAL:O	1:C:419:SER:OG	2.17	0.56
1:C:2174:PHE:O	1:D:804:ARG:NH2	2.38	0.56
1:D:1239:PHE:CE1	1:D:1248:ILE:HD11	2.40	0.56
1:B:966:GLN:O	1:B:969:VAL:HG12	2.05	0.56
1:D:1504:TRP:O	1:D:1507:ARG:NH1	2.33	0.56
1:C:248:ILE:CG1	1:C:265:LEU:HD13	2.36	0.56
1:D:391:ALA:HB3	1:D:392:PRO:HD3	1.88	0.56
1:D:1737:ALA:HB3	1:D:1750:TYR:O	2.05	0.56
1:F:1113:HIS:O	1:F:1116:CYS:N	2.39	0.56
1:D:287:GLU:O	1:D:290:TYR:C	2.43	0.56
1:C:939:GLN:O	1:C:943:ASN:ND2	2.39	0.56
1:D:721:SER:OG	1:D:722:SER:N	2.39	0.56
1:F:1052:ASP:OD2	1:F:1054:THR:OG1	2.23	0.56
1:F:1391:LEU:HD13	1:F:1404:TYR:OH	2.06	0.56
1:C:2297:ARG:NH2	1:D:2317:ASP:OD2	2.39	0.56
1:D:1383:LEU:HD13	1:D:1383:LEU:O	2.06	0.56
1:D:2016:GLN:HE21	1:D:2045:ASN:HD21	1.53	0.56
1:F:898:GLU:O	1:F:902:ILE:HD12	2.06	0.56
1:B:1184:LEU:HD22	1:B:1187:SER:HB3	1.88	0.55
1:C:1736:VAL:HG22	1:C:1751:LEU:CD2	2.36	0.55
1:D:709:LEU:HD11	1:D:715:LEU:HG	1.86	0.55
1:B:1531:PHE:O	1:B:1543:SER:OG	2.21	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:874:PHE:O	1:B:878:VAL:HG22	2.06	0.55
1:C:184:ASN:HA	1:C:188:ALA:HB3	1.89	0.55
1:D:418:VAL:HG12	1:D:418:VAL:O	2.06	0.55
1:D:629:MET:O	1:D:633:VAL:HG23	2.07	0.55
1:C:721:SER:OG	1:C:722:SER:N	2.39	0.55
1:C:753:VAL:HG13	1:C:814:VAL:HG13	1.88	0.55
1:C:1253:MET:HE1	1:C:1318:THR:HG22	1.87	0.55
1:D:1481:VAL:O	1:D:1517:ILE:HG22	2.06	0.55
1:C:2297:ARG:HG2	1:D:2314:VAL:HG12	1.88	0.55
1:F:1167:GLN:N	1:F:1167:GLN:OE1	2.40	0.55
1:C:132:LYS:NZ	1:C:450:GLU:OE1	2.40	0.55
1:C:1381:LEU:HD13	1:C:1383:LEU:HD22	1.89	0.55
1:C:2174:PHE:O	1:D:1745:TYR:OH	2.24	0.55
1:C:1901:TYR:OH	1:C:1959:SER:O	2.19	0.55
1:D:704:VAL:HB	1:D:716:LEU:HD11	1.89	0.55
1:D:759:ALA:HB2	1:D:811:PRO:HD3	1.89	0.55
1:F:1233:MET:HB3	1:F:1287:HIS:HD1	1.72	0.55
1:D:767:VAL:HG12	1:D:768:GLU:H	1.71	0.54
1:C:162:LEU:HD21	1:D:707:HIS:HB3	1.88	0.54
1:D:442:LEU:HD11	1:D:446:HIS:CG	2.43	0.54
1:F:1420:ARG:NH2	1:F:1578:VAL:O	2.41	0.54
1:C:1885:VAL:HG11	1:C:1891:GLY:HA2	1.88	0.54
1:D:1430:SER:OG	1:D:1431:ASP:N	2.40	0.54
1:D:1527:PRO:CB	1:D:1528:ILE:HG12	2.38	0.54
1:C:911:PRO:O	1:C:914:VAL:HG12	2.07	0.54
1:D:612:TRP:O	1:D:616:LEU:HD23	2.08	0.54
1:F:1079:LEU:HD11	1:F:1462:ASN:HD22	1.72	0.54
1:C:408:ALA:HB2	1:C:425:TYR:OH	2.07	0.54
1:D:724:THR:O	1:D:739:GLY:N	2.40	0.54
1:F:1546:LYS:N	1:F:1559:GLN:O	2.40	0.54
1:C:528:GLU:HG3	1:D:532:ARG:HB3	1.90	0.53
1:B:992:ARG:HA	1:B:995:LEU:HB3	1.89	0.53
1:C:762:LEU:HD11	1:C:809:LEU:HD12	1.89	0.53
1:C:767:VAL:HG12	1:C:768:GLU:H	1.73	0.53
1:C:1134:LEU:HD21	1:C:1153:TYR:HB2	1.90	0.53
1:C:1707:ARG:NE	1:C:1806:GLU:OE2	2.38	0.53
1:D:1737:ALA:HB2	1:D:1752:TYR:CD1	2.43	0.53
1:D:659:GLN:NE2	1:D:2007:GLU:OE2	2.42	0.53
1:F:939:GLN:OE1	1:F:943:ASN:ND2	2.26	0.53
1:B:1496:VAL:HG21	1:B:1540:LEU:HD13	1.90	0.53
1:D:911:PRO:O	1:D:914:VAL:HG12	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1580:LYS:O	1:C:1584:GLN:NE2	2.41	0.53
1:D:809:LEU:HD22	1:D:815:LEU:HD21	1.91	0.53
1:D:1366:GLU:OE1	1:D:1371:ARG:NH1	2.40	0.53
1:C:1430:SER:OG	1:C:1431:ASP:N	2.41	0.53
1:C:2088:LEU:HD12	1:C:2093:TRP:HE3	1.74	0.53
1:C:2103:ARG:NH1	1:C:2226:ASP:OD1	2.41	0.53
1:D:686:THR:HG21	1:D:870:PRO:HD3	1.91	0.53
1:B:1546:LYS:N	1:B:1559:GLN:O	2.42	0.53
1:C:354:GLN:NE2	1:C:355:SER:O	2.41	0.53
1:D:1184:LEU:HD11	1:D:1232:ARG:NH2	2.23	0.53
1:D:1421:PHE:CE2	1:D:1457:LEU:HD21	2.44	0.53
1:D:219:PRO:HA	1:D:222:LEU:HD23	1.91	0.52
1:D:715:LEU:HD12	1:D:715:LEU:O	2.09	0.52
1:F:926:ALA:O	1:F:929:ILE:HG22	2.09	0.52
1:F:993:GLN:O	1:F:997:VAL:HG22	2.10	0.52
1:C:982:HIS:O	1:C:986:VAL:HG12	2.08	0.52
1:C:1099:GLN:O	1:C:1102:SER:OG	2.19	0.52
1:C:1359:ARG:N	1:C:1365:GLU:O	2.42	0.52
1:B:1370:TYR:CE1	1:B:1383:LEU:HD23	2.45	0.52
1:C:1091:PRO:O	1:C:1096:ARG:NH1	2.42	0.52
1:C:170:LYS:HG2	1:D:724:THR:HG21	1.91	0.52
1:F:1107:ALA:HB1	1:F:1116:CYS:HB2	1.91	0.52
1:B:850:HIS:HB2	1:B:897:LEU:HD23	1.92	0.52
1:C:1041:VAL:CG1	1:C:1077:VAL:HG22	2.40	0.52
1:C:1509:LEU:HD12	1:C:1534:ASN:O	2.10	0.52
1:B:898:GLU:O	1:B:902:ILE:HD12	2.10	0.52
1:B:1124:ILE:C	1:B:1125:LEU:HD22	2.30	0.52
1:C:1108:ILE:O	1:C:1111:TYR:N	2.43	0.52
1:D:1480:THR:O	1:D:1480:THR:OG1	2.28	0.52
1:C:724:THR:HG21	1:D:170:LYS:HG3	1.91	0.52
1:D:1014:ARG:O	1:D:1018:LYS:HA	2.09	0.52
1:D:1167:GLN:N	1:D:1167:GLN:OE1	2.42	0.52
1:F:1079:LEU:CD1	1:F:1462:ASN:HD22	2.23	0.52
1:C:1064:THR:O	1:C:1068:GLN:NE2	2.40	0.52
1:C:2022:SER:O	1:C:2026:THR:OG1	2.20	0.52
1:F:1178:VAL:HG12	1:F:1236:MET:HB3	1.92	0.52
1:F:1421:PHE:CZ	1:F:1460:ALA:HB1	2.45	0.52
1:B:1056:THR:O	1:B:1058:GLU:N	2.40	0.52
1:C:1586:LYS:NZ	1:C:1685:THR:OG1	2.20	0.52
1:D:510:ILE:HD11	1:D:540:TYR:O	2.10	0.52
1:B:1014:ARG:NH1	1:B:1021:MET:SD	2.83	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1295:THR:OG1	1:B:1332:ALA:O	2.28	0.51
1:C:724:THR:HG21	1:D:170:LYS:CG	2.40	0.51
1:D:923:ALA:O	1:D:926:ALA:HB3	2.10	0.51
1:D:1627:LEU:HD22	1:D:1628:PRO:HD2	1.92	0.51
1:C:849:LEU:HD22	1:C:888:THR:HG22	1.91	0.51
1:C:971:LEU:HD22	1:C:975:TYR:CZ	2.45	0.51
1:F:947:SER:O	1:F:950:ALA:HB3	2.10	0.51
1:C:918:ILE:O	1:C:922:MET:HG2	2.10	0.51
1:C:947:SER:O	1:C:950:ALA:HB3	2.10	0.51
1:F:1431:ASP:OD1	1:F:1480:THR:N	2.40	0.51
1:D:1535:GLU:HG3	1:D:1536:SER:H	1.76	0.51
1:F:1457:LEU:HB3	1:F:1506:LEU:HD23	1.92	0.51
1:C:293:ASP:N	1:C:293:ASP:OD1	2.43	0.51
1:C:304:VAL:O	1:C:350:ARG:NH2	2.42	0.51
1:C:966:GLN:O	1:C:969:VAL:HG12	2.10	0.51
1:C:1299:ILE:O	1:C:1301:ASP:N	2.44	0.51
1:C:1756:GLN:O	1:C:1760:ARG:NH1	2.44	0.51
1:D:120:LYS:N	1:D:203:GLN:OE1	2.44	0.51
1:D:293:ASP:OD1	1:D:293:ASP:N	2.44	0.51
1:D:676:TYR:N	1:D:679:VAL:O	2.42	0.51
1:D:1470:CYS:HA	1:D:1509:LEU:HD23	1.92	0.51
1:C:186:ASN:OD1	1:C:186:ASN:N	2.42	0.51
1:D:209:TRP:CZ2	1:D:444:VAL:HG23	2.46	0.51
1:C:1551:SER:OG	1:C:1553:THR:O	2.28	0.51
1:C:1853:ALA:O	1:C:1857:VAL:HG23	2.09	0.51
1:D:592:GLU:OE1	1:D:625:ARG:NH1	2.43	0.51
1:B:968:ILE:O	1:B:972:VAL:HG12	2.12	0.50
1:C:878:VAL:O	1:C:882:VAL:HG23	2.11	0.50
1:C:1786:ILE:O	1:D:2195:ARG:NE	2.44	0.50
1:B:1151:GLU:OE2	1:D:932:VAL:HG12	2.12	0.50
1:D:949:ALA:O	1:D:952:LEU:HD22	2.11	0.50
1:C:356:ARG:NH2	1:C:377:ASP:OD2	2.43	0.50
1:F:1323:GLY:C	1:F:1324:ILE:HD12	2.32	0.50
1:C:1046:ASP:OD1	1:C:1080:ARG:NH2	2.44	0.50
1:C:1517:ILE:HG13	1:C:1526:ILE:HD11	1.93	0.50
1:C:1443:GLN:NE2	1:C:1491:SER:OG	2.44	0.50
1:F:902:ILE:HD13	1:F:971:LEU:HD22	1.93	0.50
1:C:1294:LYS:O	1:C:1295:THR:OG1	2.27	0.50
1:C:300:ALA:O	1:C:304:VAL:HG22	2.12	0.50
1:C:874:PHE:O	1:C:878:VAL:HG22	2.12	0.50
1:B:1578:VAL:HG12	1:B:1580:LYS:H	1.77	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1391:LEU:HD22	1:C:1404:TYR:OH	2.11	0.49
1:C:2096:ILE:HG22	1:C:2096:ILE:O	2.12	0.49
1:B:1295:THR:HG21	1:B:1331:VAL:HB	1.95	0.49
1:B:1330:LEU:HD12	1:B:1355:PHE:HE1	1.77	0.49
1:D:675:ILE:HA	1:D:680:LYS:HA	1.94	0.49
1:D:1108:ILE:HD13	1:D:1145:VAL:HB	1.94	0.49
1:D:1941:ARG:O	1:D:1951:LEU:N	2.39	0.49
1:F:1480:THR:O	1:F:1480:THR:OG1	2.29	0.49
1:B:1148:ALA:O	1:B:1152:VAL:HG23	2.13	0.49
1:C:898:GLU:OE1	1:C:975:TYR:OH	2.29	0.49
1:C:2303:GLN:O	1:C:2307:LEU:HD23	2.12	0.49
1:C:1330:LEU:HD21	1:C:1353:PRO:HB3	1.95	0.49
1:C:1627:LEU:HD22	1:C:1628:PRO:HD2	1.93	0.49
1:D:898:GLU:O	1:D:902:ILE:HD12	2.13	0.49
1:F:933:LEU:HD13	1:F:933:LEU:O	2.12	0.49
1:C:913:ASN:OD1	1:C:914:VAL:N	2.45	0.49
1:C:971:LEU:HD22	1:C:975:TYR:CE2	2.48	0.49
1:D:2311:ASN:O	1:D:2314:VAL:HG22	2.13	0.49
1:C:1493:ARG:NH1	1:C:1540:LEU:HD21	2.28	0.49
1:C:1595:THR:OG1	1:C:1596:THR:N	2.45	0.49
1:D:255:ILE:O	1:D:257:THR:N	2.44	0.49
1:D:591:VAL:HA	1:D:594:LEU:HD12	1.94	0.49
1:D:1714:ILE:HD12	1:D:1817:ILE:HB	1.95	0.49
1:D:2260:LYS:O	1:D:2263:VAL:HG12	2.13	0.48
1:F:922:MET:HG3	1:F:923:ALA:N	2.27	0.48
1:D:266:ARG:H	1:D:285:LEU:HD21	1.78	0.48
1:D:1853:ALA:O	1:D:1857:VAL:HG23	2.13	0.48
1:F:1375:PRO:O	1:F:1378:ALA:HB2	2.13	0.48
1:C:1061:ASN:O	1:C:1064:THR:HG22	2.14	0.48
1:F:1164:ASN:C	1:F:1165:SER:HG	2.15	0.48
1:F:1319:LEU:HD21	1:F:1361:ARG:HB2	1.96	0.48
1:D:1527:PRO:HB3	1:D:1528:ILE:HG12	1.94	0.48
1:D:2096:ILE:O	1:D:2096:ILE:HG22	2.13	0.48
1:F:1071:LYS:O	1:F:1074:ASN:C	2.51	0.48
1:F:1517:ILE:HG13	1:F:1526:ILE:HD11	1.95	0.48
1:C:1180:PHE:O	1:C:1233:MET:HB2	2.13	0.48
1:B:1471:ASN:ND2	1:B:1507:ARG:O	2.46	0.48
1:C:721:SER:HG	1:C:722:SER:H	1.61	0.48
1:C:765:TYR:OH	1:C:799:ILE:HG21	2.14	0.48
1:D:968:ILE:O	1:D:972:VAL:HG12	2.14	0.48
1:F:1061:ASN:O	1:F:1064:THR:HG22	2.14	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1165:SER:HB2	1:F:1181:GLN:HB2	1.96	0.48
1:D:753:VAL:HG13	1:D:814:VAL:HG13	1.95	0.48
1:F:1143:GLN:HE21	1:F:1170:GLN:NE2	2.10	0.48
1:C:1827:ILE:HD13	1:D:2094:VAL:HG11	1.96	0.47
1:D:913:ASN:OD1	1:D:914:VAL:N	2.47	0.47
1:D:1079:LEU:HD11	1:D:1462:ASN:HB3	1.96	0.47
1:C:1098:ASN:OD1	1:F:1098:ASN:ND2	2.46	0.47
1:C:1418:ASP:OD2	1:C:1584:GLN:NE2	2.47	0.47
1:F:878:VAL:O	1:F:882:VAL:HG23	2.14	0.47
1:F:1391:LEU:HB2	1:F:1404:TYR:HE2	1.79	0.47
1:C:1045:ILE:O	1:C:1048:LEU:O	2.31	0.47
1:D:2325:HIS:O	1:D:2326:ILE:HG23	2.14	0.47
1:C:510:ILE:HD11	1:C:540:TYR:O	2.15	0.47
1:C:2284:VAL:HG12	1:C:2284:VAL:O	2.14	0.47
1:F:852:VAL:CG1	1:F:888:THR:HG21	2.45	0.47
1:F:906:VAL:HG13	1:F:909:ARG:HE	1.80	0.47
1:B:1092:SER:HB3	1:B:1095:LEU:HB3	1.96	0.47
1:B:1093:TYR:CE1	1:B:1133:VAL:HG22	2.50	0.47
1:C:236:ALA:O	1:C:240:LEU:HB2	2.15	0.47
1:C:1045:ILE:HG21	1:C:1080:ARG:HB3	1.95	0.47
1:C:1090:LEU:O	1:C:1090:LEU:HD22	2.14	0.47
1:C:1534:ASN:HD22	1:C:1535:GLU:N	2.13	0.47
1:D:1239:PHE:CZ	1:D:1248:ILE:HD11	2.49	0.47
1:B:926:ALA:O	1:B:929:ILE:HG22	2.14	0.47
1:B:1105:LEU:HD21	1:B:1145:VAL:HG11	1.97	0.47
1:D:255:ILE:HG23	1:D:258:LEU:HB2	1.97	0.47
1:D:1534:ASN:HD22	1:D:1535:GLU:H	1.63	0.47
1:B:1333:GLN:OE1	1:B:1352:PHE:N	2.48	0.47
1:B:1535:GLU:HG3	1:B:1536:SER:H	1.80	0.47
1:D:1774:ASP:O	1:D:1779:ARG:NH1	2.48	0.47
1:D:1824:ALA:HB3	1:D:1846:LEU:HD13	1.97	0.47
1:F:1253:MET:SD	1:F:1253:MET:N	2.87	0.47
1:F:1359:ARG:NH2	1:F:1367:ASP:OD2	2.47	0.47
1:F:1408:ALA:HB2	1:F:1418:ASP:HB2	1.95	0.47
1:B:993:GLN:O	1:B:997:VAL:HG22	2.15	0.47
1:B:1061:ASN:O	1:B:1064:THR:HG22	2.15	0.47
1:B:1064:THR:O	1:B:1068:GLN:NE2	2.43	0.47
1:B:1154:VAL:HG11	1:B:1180:PHE:CE2	2.50	0.47
1:C:2260:LYS:O	1:C:2263:VAL:HG12	2.14	0.47
1:D:1061:ASN:O	1:D:1064:THR:HG22	2.15	0.47
1:D:1442:LEU:HD13	1:D:1442:LEU:HA	1.72	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:1066:LEU:O	1:F:1069:LEU:HD13	2.14	0.47
1:B:1391:LEU:O	1:B:1391:LEU:HD12	2.16	0.46
1:C:1039:LEU:O	1:C:1042:THR:OG1	2.14	0.46
1:C:2064:GLY:O	1:C:2067:ILE:HG13	2.16	0.46
1:C:2093:TRP:CD1	1:D:1797:LEU:HD13	2.49	0.46
1:D:996:ARG:NH1	1:D:1027:TYR:OH	2.47	0.46
1:C:287:GLU:O	1:C:290:TYR:O	2.32	0.46
1:C:1512:GLU:OE1	1:C:1529:ARG:NH2	2.48	0.46
1:D:1534:ASN:HD22	1:D:1535:GLU:N	2.13	0.46
1:D:2113:SER:O	1:D:2114:ARG:NH1	2.41	0.46
1:C:919:LYS:HA	1:C:922:MET:HG2	1.97	0.46
1:D:255:ILE:HD11	1:D:266:ARG:HE	1.80	0.46
1:D:1164:ASN:O	1:D:1165:SER:OG	2.32	0.46
1:F:1391:LEU:HB2	1:F:1404:TYR:CE2	2.50	0.46
1:B:1090:LEU:O	1:B:1090:LEU:HD22	2.15	0.46
1:B:1302:ASP:O	1:B:1306:ALA:HB2	2.16	0.46
1:D:389:GLU:HG3	1:D:445:GLU:HG2	1.97	0.46
1:D:593:TYR:O	1:D:597:LEU:HD23	2.16	0.46
1:D:2284:VAL:HG12	1:D:2284:VAL:O	2.15	0.46
1:F:1418:ASP:OD2	1:F:1420:ARG:NH1	2.49	0.46
1:F:1511:ALA:HB3	1:F:1532:LEU:HD12	1.98	0.46
1:B:1289:LEU:HB3	1:B:1324:ILE:HD11	1.98	0.46
1:C:219:PRO:HA	1:C:222:LEU:HD23	1.98	0.46
1:D:1330:LEU:HD22	1:D:1355:PHE:CE1	2.51	0.46
1:C:762:LEU:CD1	1:C:809:LEU:HD12	2.45	0.46
1:C:1006:TYR:O	1:C:1010:VAL:HG23	2.15	0.46
1:C:2095:VAL:HG23	1:C:2096:ILE:HG12	1.97	0.46
1:D:638:HIS:ND1	1:D:727:MET:HB2	2.31	0.46
1:F:1301:ASP:OD1	1:F:1302:ASP:N	2.48	0.46
1:B:1496:VAL:HG21	1:B:1540:LEU:CD1	2.44	0.46
1:C:2111:ARG:NH1	1:C:2207:ASP:OD1	2.49	0.46
1:C:2319:ILE:O	1:C:2323:THR:N	2.47	0.46
1:D:849:LEU:HD22	1:D:888:THR:HG22	1.97	0.46
1:F:1154:VAL:HG13	1:F:1180:PHE:CE1	2.50	0.46
1:B:1424:ARG:HA	1:B:1474:PHE:HB3	1.98	0.46
1:B:1431:ASP:C	1:B:1432:LEU:HD12	2.36	0.46
1:C:969:VAL:HA	1:C:972:VAL:HG12	1.98	0.46
1:D:1434:THR:HG22	1:D:1482:ILE:HG23	1.97	0.46
1:B:943:ASN:O	1:B:947:SER:OG	2.28	0.45
1:C:1051:ARG:NH2	1:F:1109:ASP:O	2.50	0.45
1:D:920:LYS:O	1:D:923:ALA:HB3	2.14	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1352:PHE:HB3	1:D:1353:PRO:HD3	1.98	0.45
1:D:1421:PHE:CD2	1:D:1457:LEU:HD21	2.51	0.45
1:D:1424:ARG:HG2	1:D:1474:PHE:HB3	1.99	0.45
1:B:1411:GLU:OE2	1:B:1412:VAL:HG22	2.16	0.45
1:D:256:PRO:O	1:D:257:THR:OG1	2.35	0.45
1:F:923:ALA:O	1:F:926:ALA:HB3	2.17	0.45
1:C:248:ILE:HG12	1:C:265:LEU:HD22	1.99	0.45
1:C:1056:THR:O	1:C:1058:GLU:N	2.42	0.45
1:C:1480:THR:O	1:C:1480:THR:OG1	2.31	0.45
1:C:1612:LEU:HD22	1:C:1896:LEU:HB3	1.99	0.45
1:D:2319:ILE:O	1:D:2323:THR:N	2.47	0.45
1:B:936:PHE:O	1:B:938:SER:N	2.42	0.45
1:D:221:LEU:HA	1:D:224:LYS:HG2	1.97	0.45
1:D:2296:SER:O	1:D:2300:VAL:HG23	2.16	0.45
1:C:637:LEU:HA	1:C:640:ALA:HB3	1.98	0.45
1:D:1299:ILE:HG22	1:D:1299:ILE:O	2.16	0.45
1:C:1451:LEU:HD21	1:C:1499:TYR:CE2	2.51	0.45
1:D:2017:VAL:HG11	1:D:2050:SER:HB3	1.98	0.45
1:F:1154:VAL:HG13	1:F:1180:PHE:CZ	2.51	0.45
1:D:1064:THR:O	1:D:1068:GLN:NE2	2.44	0.45
1:D:1071:LYS:O	1:D:1074:ASN:C	2.55	0.45
1:F:913:ASN:OD1	1:F:914:VAL:N	2.49	0.45
1:F:939:GLN:O	1:F:943:ASN:ND2	2.50	0.45
1:D:1330:LEU:HD11	1:D:1353:PRO:CB	2.46	0.45
1:F:919:LYS:HA	1:F:922:MET:HG2	1.98	0.45
1:F:1330:LEU:HD13	1:F:1355:PHE:CD1	2.52	0.45
1:C:2113:SER:O	1:C:2114:ARG:NH1	2.44	0.45
1:D:818:MET:SD	1:D:818:MET:N	2.90	0.45
1:D:1134:LEU:HD23	1:D:1137:PHE:CE1	2.51	0.45
1:F:1481:VAL:O	1:F:1517:ILE:HG22	2.17	0.45
1:C:774:PHE:N	1:C:777:GLN:OE1	2.47	0.44
1:C:1515:ILE:CG2	1:C:1528:ILE:HD11	2.47	0.44
1:D:1309:ARG:NH1	1:D:1366:GLU:OE2	2.49	0.44
1:D:1545:TYR:HA	1:D:1560:ALA:HA	1.98	0.44
1:B:1166:VAL:HG22	1:B:1180:PHE:HD1	1.81	0.44
1:C:715:LEU:HD13	1:D:175:TYR:CZ	2.52	0.44
1:C:1177:VAL:HG13	1:C:1237:VAL:HG22	2.00	0.44
1:B:1055:LEU:HD13	1:B:1056:THR:N	2.33	0.44
1:C:190:VAL:HG13	1:C:218:LEU:CD2	2.47	0.44
1:C:575:VAL:HG12	1:C:579:LYS:NZ	2.33	0.44
1:D:298:LEU:HD22	1:D:327:ALA:HB1	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:909:ARG:HH11	1:D:964:ASN:HB3	1.82	0.44
1:F:1177:VAL:HG13	1:F:1237:VAL:HG22	1.98	0.44
1:C:922:MET:HG3	1:C:923:ALA:N	2.32	0.44
1:C:995:LEU:HD12	1:C:1066:LEU:HD22	1.98	0.44
1:D:767:VAL:HG12	1:D:768:GLU:N	2.32	0.44
1:D:1517:ILE:HG12	1:D:1527:PRO:CD	2.48	0.44
1:C:767:VAL:HG12	1:C:768:GLU:N	2.32	0.44
1:C:1705:LEU:HD11	1:C:1709:GLU:OE2	2.17	0.44
1:D:848:LYS:O	1:D:852:VAL:HG23	2.17	0.44
1:D:1919:ILE:HG21	1:D:2216:TYR:CD2	2.53	0.44
1:C:858:ASP:HA	1:C:861:VAL:HG12	1.99	0.44
1:D:1060:LEU:HA	1:D:1063:LEU:HB2	1.99	0.44
1:D:1545:TYR:OH	1:D:1567:PRO:O	2.24	0.44
1:B:933:LEU:HB3	1:D:1117:ILE:HG12	1.99	0.44
1:F:852:VAL:HG11	1:F:888:THR:HG21	2.00	0.44
1:B:1360:ALA:HB2	1:B:1365:GLU:HA	2.00	0.44
1:B:1545:TYR:HA	1:B:1560:ALA:HA	2.00	0.44
1:C:1167:GLN:NE2	1:C:1179:GLU:OE1	2.51	0.44
1:C:1919:ILE:HD12	1:C:1919:ILE:H	1.82	0.44
1:D:638:HIS:CE1	1:D:727:MET:HB2	2.53	0.44
1:D:1301:ASP:OD1	1:D:1302:ASP:N	2.51	0.44
1:F:1481:VAL:HG22	1:F:1515:ILE:HD11	1.99	0.44
1:B:886:MET:SD	1:B:1048:LEU:HD21	2.58	0.44
1:B:961:PHE:CE2	1:B:965:THR:HG21	2.52	0.44
1:C:849:LEU:HD22	1:C:888:THR:HG21	2.00	0.44
1:C:1390:ASP:N	1:C:1407:ALA:O	2.33	0.44
1:C:1872:ILE:HB	1:C:1884:THR:HG21	1.99	0.44
1:D:1369:ILE:CD1	1:D:1391:LEU:HD21	2.47	0.44
1:F:1424:ARG:HG2	1:F:1474:PHE:HB3	2.00	0.44
1:B:1482:ILE:O	1:B:1482:ILE:HG22	2.18	0.43
1:D:1700:LEU:HD22	1:D:1802:MET:HE3	1.96	0.43
1:D:2288:ILE:HD12	1:D:2288:ILE:H	1.83	0.43
1:C:442:LEU:HD11	1:C:446:HIS:CG	2.53	0.43
1:C:1643:GLY:HA3	1:C:1697:LEU:HD21	2.00	0.43
1:D:1421:PHE:CD2	1:D:1457:LEU:HD11	2.53	0.43
1:B:939:GLN:OE1	1:B:976:ARG:NH1	2.50	0.43
1:C:963:MET:HA	1:C:966:GLN:HG2	2.01	0.43
1:D:2173:GLU:HA	1:D:2176:ILE:HD12	1.99	0.43
1:F:969:VAL:HA	1:F:972:VAL:HG12	1.99	0.43
1:C:529:LEU:H	1:C:540:TYR:HA	1.84	0.43
1:C:1170:GLN:C	1:C:1171:LEU:HD12	2.39	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:2288:ILE:HD12	1:C:2288:ILE:H	1.83	0.43
1:D:571:ILE:O	1:D:575:VAL:HG23	2.18	0.43
1:D:1164:ASN:OD1	1:D:1164:ASN:N	2.52	0.43
1:D:1457:LEU:HD13	1:D:1506:LEU:HD11	2.01	0.43
1:B:1038:ASN:ND2	1:B:1074:ASN:OD1	2.51	0.43
1:C:629:MET:O	1:C:633:VAL:HG23	2.18	0.43
1:C:707:HIS:CD2	1:C:715:LEU:HD11	2.52	0.43
1:B:980:ARG:O	1:B:984:LYS:HG3	2.19	0.43
1:C:574:MET:O	1:C:577:ALA:HB3	2.19	0.43
1:C:1079:LEU:HB2	1:C:1459:VAL:HG22	2.00	0.43
1:C:1294:LYS:HA	1:C:1332:ALA:HB3	2.01	0.43
1:B:856:VAL:HG21	1:B:884:ARG:HB3	1.99	0.43
1:C:1410:VAL:HG12	1:C:1411:GLU:N	2.34	0.43
1:D:1177:VAL:HG13	1:D:1237:VAL:CG2	2.45	0.43
1:D:1935:ARG:NH2	1:D:1972:VAL:HG11	2.33	0.43
1:C:923:ALA:O	1:C:926:ALA:HB3	2.19	0.43
1:D:1528:ILE:HA	1:D:1545:TYR:O	2.18	0.43
1:B:919:LYS:HA	1:B:922:MET:HG2	2.00	0.43
1:B:1480:THR:O	1:B:1480:THR:OG1	2.28	0.43
1:C:442:LEU:HD11	1:C:446:HIS:CB	2.49	0.43
1:C:659:GLN:NE2	1:C:2007:GLU:OE2	2.52	0.43
1:C:933:LEU:HD21	1:F:1155:ARG:HD2	2.01	0.43
1:C:968:ILE:O	1:C:972:VAL:HG12	2.19	0.43
1:C:1546:LYS:N	1:C:1559:GLN:O	2.52	0.43
1:D:1528:ILE:CA	1:D:1545:TYR:O	2.67	0.43
1:B:1418:ASP:OD2	1:B:1420:ARG:NH1	2.52	0.43
1:C:1164:ASN:OD1	1:C:1164:ASN:N	2.49	0.43
1:C:2311:ASN:O	1:C:2314:VAL:HG22	2.19	0.43
1:D:895:PRO:O	1:D:899:LEU:HD23	2.19	0.43
1:D:969:VAL:HA	1:D:972:VAL:HG12	2.00	0.43
1:D:1434:THR:CG2	1:D:1482:ILE:HG23	2.49	0.43
1:B:878:VAL:O	1:B:882:VAL:HG23	2.19	0.42
1:B:1155:ARG:O	1:B:1159:ILE:HB	2.19	0.42
1:D:2119:GLU:OE1	1:D:2121:GLU:N	2.51	0.42
1:B:1237:VAL:HB	1:B:1291:VAL:HG12	2.01	0.42
1:C:713:GLY:C	1:C:714:LEU:HD12	2.39	0.42
1:C:1875:MET:N	1:C:1875:MET:SD	2.92	0.42
1:D:1046:ASP:OD2	1:D:1080:ARG:NH1	2.52	0.42
1:D:2181:GLN:O	1:D:2184:VAL:HG22	2.19	0.42
1:C:528:GLU:HG2	1:C:540:TYR:HB3	2.00	0.42
1:D:1330:LEU:HD13	1:D:1355:PHE:CD1	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:1037:LYS:O	1:B:1041:VAL:HG23	2.19	0.42
1:C:528:GLU:CG	1:D:532:ARG:HB3	2.50	0.42
1:C:659:GLN:NE2	1:C:2004:LEU:O	2.51	0.42
1:C:663:ALA:O	1:C:666:LEU:HD23	2.18	0.42
1:C:930:THR:HG22	1:C:930:THR:O	2.19	0.42
1:F:963:MET:HA	1:F:966:GLN:HG2	2.01	0.42
1:B:1165:SER:HB2	1:B:1181:GLN:HB2	2.00	0.42
1:C:1154:VAL:HG13	1:C:1180:PHE:CE1	2.55	0.42
1:C:1627:LEU:HD12	1:C:1629:SER:OG	2.19	0.42
1:D:609:ASP:OD1	1:D:612:TRP:N	2.52	0.42
1:D:766:ILE:HG22	1:D:779:TYR:C	2.39	0.42
1:D:1134:LEU:HD23	1:D:1137:PHE:HE1	1.84	0.42
1:D:1165:SER:HB2	1:D:1181:GLN:HB3	2.01	0.42
1:D:1481:VAL:HG22	1:D:1515:ILE:HD11	2.02	0.42
1:D:2064:GLY:O	1:D:2067:ILE:HG13	2.19	0.42
1:C:1545:TYR:HA	1:C:1560:ALA:HA	2.02	0.42
1:D:613:LEU:O	1:D:617:ILE:HD12	2.20	0.42
1:D:1239:PHE:HB3	1:D:1293:ILE:HG22	2.02	0.42
1:B:1066:LEU:HD11	1:B:1077:VAL:CG1	2.50	0.42
1:C:287:GLU:O	1:C:290:TYR:C	2.58	0.42
1:C:537:VAL:HG13	1:C:562:SER:HB2	2.01	0.42
1:C:675:ILE:HA	1:C:680:LYS:HA	2.01	0.42
1:F:885:LEU:HD11	1:F:889:LEU:HD12	2.01	0.42
1:F:896:LEU:HA	1:F:899:LEU:HD23	2.01	0.42
1:F:1062:ILE:HD12	1:F:1062:ILE:H	1.85	0.42
1:C:534:ASN:HB3	1:C:537:VAL:HG23	2.01	0.42
1:D:864:MET:O	1:D:1037:LYS:NZ	2.51	0.42
1:D:1845:HIS:C	1:D:1846:LEU:HD22	2.40	0.42
1:F:1180:PHE:HB2	1:F:1234:GLY:HA3	2.02	0.42
1:F:1377:LEU:CD1	1:F:1426:ILE:HD11	2.49	0.42
1:F:1390:ASP:HB2	1:F:1409:LYS:HB3	2.01	0.42
1:D:527:GLN:CD	1:D:529:LEU:HD21	2.40	0.42
1:D:1410:VAL:HG12	1:D:1411:GLU:N	2.34	0.42
1:D:1919:ILE:HD12	1:D:1919:ILE:H	1.85	0.42
1:F:1164:ASN:OD1	1:F:1164:ASN:N	2.51	0.42
1:F:1299:ILE:HG22	1:F:1299:ILE:O	2.19	0.42
1:F:1454:MET:HB2	1:F:1506:LEU:HD21	2.00	0.42
1:F:1549:THR:HG22	1:F:1554:ALA:HA	2.00	0.42
1:D:894:LEU:HB3	1:D:895:PRO:HD3	2.00	0.42
1:D:930:THR:HG22	1:D:930:THR:O	2.20	0.42
1:D:1923:ILE:O	1:D:2209:LYS:NZ	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:2095:VAL:HG23	1:D:2096:ILE:HG12	2.02	0.42
1:F:965:THR:HG23	1:F:965:THR:O	2.20	0.42
1:F:1306:ALA:HA	1:F:1309:ARG:HE	1.84	0.42
1:D:1066:LEU:O	1:D:1069:LEU:HD13	2.20	0.41
1:D:1071:LYS:O	1:D:1074:ASN:N	2.53	0.41
1:D:1627:LEU:HD12	1:D:1629:SER:OG	2.19	0.41
1:D:2275:GLU:O	1:D:2279:THR:HG23	2.20	0.41
1:F:939:GLN:CD	1:F:943:ASN:HD21	2.19	0.41
1:B:1294:LYS:O	1:B:1295:THR:OG1	2.33	0.41
1:C:164:ALA:HB1	1:C:525:THR:HG21	2.02	0.41
1:C:221:LEU:HA	1:C:224:LYS:HG2	2.02	0.41
1:C:1954:PHE:O	1:C:2212:ARG:NH1	2.52	0.41
1:D:278:ILE:CG2	1:D:280:ASN:HD22	2.33	0.41
1:D:1474:PHE:C	1:D:1475:LEU:HD12	2.41	0.41
1:D:1515:ILE:O	1:D:1527:PRO:HG2	2.20	0.41
1:D:1517:ILE:H	1:D:1527:PRO:HD2	1.84	0.41
1:B:1164:ASN:OD1	1:B:1164:ASN:N	2.48	0.41
1:D:1133:VAL:HG11	1:D:1332:ALA:HB2	2.01	0.41
1:C:1424:ARG:HG2	1:C:1474:PHE:HB3	2.03	0.41
1:C:1489:GLU:HA	1:C:1492:VAL:HG12	2.02	0.41
1:C:1534:ASN:HD22	1:C:1535:GLU:H	1.66	0.41
1:C:2075:CYS:O	1:C:2104:HIS:NE2	2.53	0.41
1:D:1056:THR:O	1:D:1058:GLU:N	2.51	0.41
1:D:1527:PRO:HB2	1:D:1528:ILE:HG12	2.02	0.41
1:F:1424:ARG:HA	1:F:1474:PHE:HB3	2.02	0.41
1:F:1535:GLU:HG3	1:F:1536:SER:H	1.85	0.41
1:B:878:VAL:HB	1:B:1040:LEU:HD11	2.03	0.41
1:B:1534:ASN:HD22	1:B:1535:GLU:N	2.18	0.41
1:D:255:ILE:CD1	1:D:266:ARG:HE	2.34	0.41
1:D:1457:LEU:HD22	1:D:1506:LEU:HD11	2.01	0.41
1:B:1410:VAL:HG12	1:B:1411:GLU:N	2.36	0.41
1:C:657:ARG:HE	1:C:2007:GLU:CG	2.34	0.41
1:C:1827:ILE:O	1:C:1831:LEU:HD13	2.21	0.41
1:D:579:LYS:O	1:D:582:SER:OG	2.34	0.41
1:D:1405:LEU:HD12	1:D:1421:PHE:HE1	1.86	0.41
1:D:2323:THR:HG22	1:D:2323:THR:O	2.21	0.41
1:B:1388:ASN:HD22	1:B:1576:PRO:HB2	1.86	0.41
1:B:1506:LEU:HD12	1:B:1506:LEU:N	2.36	0.41
1:C:195:ASP:OD2	1:D:851:ARG:NH2	2.54	0.41
1:C:1075:ALA:O	1:C:1079:LEU:HD12	2.20	0.41
1:C:1528:ILE:HB	1:C:1544:LEU:HD21	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:585:GLY:HA2	1:D:588:ARG:HD2	2.01	0.41
1:D:651:PHE:O	1:D:655:LEU:HB2	2.21	0.41
1:D:1595:THR:OG1	1:D:1596:THR:N	2.54	0.41
1:B:1009:CYS:O	1:B:1013:LEU:HD23	2.21	0.41
1:C:651:PHE:O	1:C:655:LEU:HB2	2.21	0.41
1:C:1480:THR:HA	1:C:1516:ASN:O	2.21	0.41
1:C:2323:THR:HG22	1:C:2323:THR:O	2.20	0.41
1:C:2325:HIS:O	1:C:2326:ILE:HG23	2.20	0.41
1:D:537:VAL:HG21	1:D:573:ASN:HB3	2.01	0.41
1:D:1154:VAL:HG22	1:D:1236:MET:SD	2.61	0.41
1:F:1293:ILE:HD11	1:F:1331:VAL:HG12	2.03	0.41
1:C:967:SER:O	1:C:971:LEU:HB2	2.21	0.41
1:C:2144:TYR:CD1	1:C:2168:LEU:HD11	2.55	0.41
1:D:529:LEU:H	1:D:540:TYR:HA	1.86	0.41
1:D:602:SER:OG	1:D:607:ARG:NH2	2.53	0.41
1:D:1133:VAL:HG23	1:D:1353:PRO:CG	2.51	0.41
1:D:1184:LEU:HD11	1:D:1232:ARG:CZ	2.51	0.41
1:D:2304:ILE:O	1:D:2308:VAL:HG23	2.21	0.41
1:F:1410:VAL:HG12	1:F:1411:GLU:N	2.36	0.41
1:B:997:VAL:HG23	1:B:998:GLU:N	2.36	0.41
1:B:1533:THR:OG1	1:B:1541:ASP:O	2.31	0.41
1:C:405:GLU:O	1:C:409:VAL:HG23	2.21	0.41
1:C:593:TYR:HA	1:C:596:LYS:HZ2	1.86	0.41
1:C:1545:TYR:CG	1:C:1558:PHE:HB3	2.56	0.41
1:B:1055:LEU:HD12	1:B:1060:LEU:HG	2.02	0.40
1:C:173:ASP:O	1:D:722:SER:N	2.42	0.40
1:D:236:ALA:O	1:D:240:LEU:HB2	2.21	0.40
1:D:992:ARG:HA	1:D:995:LEU:HB3	2.03	0.40
1:D:1794:PRO:HB3	1:D:1797:LEU:HD12	2.03	0.40
1:F:1324:ILE:HD12	1:F:1324:ILE:N	2.36	0.40
1:C:1774:ASP:O	1:C:1779:ARG:NH1	2.54	0.40
1:D:612:TRP:C	1:D:616:LEU:HD23	2.42	0.40
1:B:1387:ARG:HE	1:B:1576:PRO:HG3	1.86	0.40
1:D:267:VAL:HG12	1:D:268:ASP:N	2.36	0.40
1:D:971:LEU:HA	1:D:974:ARG:HD3	2.03	0.40
1:D:1289:LEU:O	1:D:1327:LEU:HA	2.21	0.40
1:D:2323:THR:HG23	1:D:2326:ILE:HD11	2.02	0.40
1:B:1297:CYS:SG	1:B:1298:ASP:N	2.94	0.40
1:C:533:SER:O	1:D:139:ARG:NE	2.52	0.40
1:D:796:SER:O	1:D:820:LEU:HD22	2.22	0.40
1:D:997:VAL:HG23	1:D:998:GLU:N	2.36	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:922:MET:HG3	1:F:923:ALA:H	1.86	0.40
1:F:1382:GLU:O	1:F:1424:ARG:NH2	2.53	0.40
1:B:1302:ASP:O	1:B:1306:ALA:CB	2.70	0.40
1:C:1299:ILE:HD12	1:C:1299:ILE:H	1.86	0.40
1:C:1434:THR:HG21	1:C:1483:MET:HB2	2.02	0.40
1:D:689:SER:HB3	1:D:692:SER:HB2	2.04	0.40
1:D:983:MET:O	1:D:987:VAL:HG12	2.22	0.40
1:D:1546:LYS:O	1:D:1558:PHE:HA	2.22	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	B	609/2407 (25%)	522 (86%)	81 (13%)	6 (1%)	15	54
1	C	2107/2407 (88%)	1908 (91%)	191 (9%)	8 (0%)	34	72
1	D	2107/2407 (88%)	1901 (90%)	193 (9%)	13 (1%)	25	65
1	F	620/2407 (26%)	521 (84%)	91 (15%)	8 (1%)	12	48
All	All	5443/9628 (56%)	4852 (89%)	556 (10%)	35 (1%)	29	65

All (35) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	1087	ALA
1	B	1304	LEU
1	B	1365	GLU
1	C	1304	LEU
1	D	1527	PRO
1	F	1087	ALA
1	C	211	HIS

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Mol	Chain	Res	Type
1	D	291	VAL
1	D	667	LEU
1	D	867	TYR
1	F	1172	LYS
1	B	937	PRO
1	C	291	VAL
1	C	868	CYS
1	C	1376	ALA
1	D	1564	LYS
1	D	1580	LYS
1	D	1376	ALA
1	D	1400	LYS
1	D	1560	ALA
1	D	1581	ASP
1	F	937	PRO
1	F	994	TYR
1	F	1113	HIS
1	F	1173	ASP
1	C	419	SER
1	F	938	SER
1	F	1376	ALA
1	B	1360	ALA
1	C	853	PHE
1	D	1146	ARG
1	D	1360	ALA
1	C	1688	ILE
1	D	1688	ILE
1	B	1412	VAL

5.3.2 Protein sidechains (i)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	571/2108 (27%)	552 (97%)	19 (3%)	38	61
1	C	1855/2108 (88%)	1806 (97%)	49 (3%)	46	67
1	D	1855/2108 (88%)	1800 (97%)	55 (3%)	41	63

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	F	579/2108 (28%)	552 (95%)	27 (5%)	26 52
All	All	4860/8432 (58%)	4710 (97%)	150 (3%)	43 62

All (150) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	B	857	LEU
1	B	889	LEU
1	B	897	LEU
1	B	947	SER
1	B	1090	LEU
1	B	1309	ARG
1	B	1354	LYS
1	B	1359	ARG
1	B	1368	ARG
1	B	1381	LEU
1	B	1417	THR
1	B	1438	SER
1	B	1444	ASN
1	B	1463	ASN
1	B	1531	PHE
1	B	1534	ASN
1	B	1540	LEU
1	B	1546	LYS
1	B	1577	TYR
1	C	223	LEU
1	C	529	LEU
1	C	637	LEU
1	C	652	LEU
1	C	655	LEU
1	C	698	ASN
1	C	705	ASP
1	C	828	GLN
1	C	875	SER
1	C	897	LEU
1	C	915	GLU
1	C	933	LEU
1	C	947	SER
1	C	954	ARG
1	C	983	MET
1	C	1008	LYS
1	C	1017	ASN

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Mol	Chain	Res	Type
1	C	1065	GLU
1	C	1066	LEU
1	C	1079	LEU
1	C	1090	LEU
1	C	1096	ARG
1	C	1250	ASP
1	C	1354	LYS
1	C	1359	ARG
1	C	1381	LEU
1	C	1417	THR
1	C	1438	SER
1	C	1444	ASN
1	C	1463	ASN
1	C	1531	PHE
1	C	1534	ASN
1	C	1540	LEU
1	C	1649	ASN
1	C	1848	LEU
1	C	1875	MET
1	C	1964	MET
1	C	1970	THR
1	C	2003	ASN
1	C	2116	SER
1	C	2135	LYS
1	C	2137	MET
1	C	2151	LEU
1	C	2221	ARG
1	C	2240	THR
1	C	2297	ARG
1	C	2326	ILE
1	C	2327	SER
1	C	2333	GLU
1	D	223	LEU
1	D	439	ASN
1	D	451	MET
1	D	532	ARG
1	D	652	LEU
1	D	655	LEU
1	D	657	ARG
1	D	698	ASN
1	D	715	LEU
1	D	747	LYS

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Mol	Chain	Res	Type
1	D	791	LEU
1	D	897	LEU
1	D	899	LEU
1	D	915	GLU
1	D	947	SER
1	D	954	ARG
1	D	974	ARG
1	D	1017	ASN
1	D	1079	LEU
1	D	1096	ARG
1	D	1170	GLN
1	D	1175	THR
1	D	1233	MET
1	D	1236	MET
1	D	1250	ASP
1	D	1354	LYS
1	D	1377	LEU
1	D	1381	LEU
1	D	1391	LEU
1	D	1403	LEU
1	D	1417	THR
1	D	1438	SER
1	D	1444	ASN
1	D	1449	LEU
1	D	1451	LEU
1	D	1463	ASN
1	D	1475	LEU
1	D	1478	VAL
1	D	1513	LEU
1	D	1531	PHE
1	D	1534	ASN
1	D	1540	LEU
1	D	1575	THR
1	D	1649	ASN
1	D	1875	MET
1	D	1964	MET
1	D	1970	THR
1	D	2003	ASN
1	D	2116	SER
1	D	2135	LYS
1	D	2221	ARG
1	D	2240	THR

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Mol	Chain	Res	Type
1	D	2297	ARG
1	D	2326	ILE
1	D	2327	SER
1	F	851	ARG
1	F	864	MET
1	F	897	LEU
1	F	899	LEU
1	F	909	ARG
1	F	915	GLU
1	F	933	LEU
1	F	947	SER
1	F	1065	GLU
1	F	1066	LEU
1	F	1090	LEU
1	F	1096	ARG
1	F	1244	ASP
1	F	1250	ASP
1	F	1289	LEU
1	F	1319	LEU
1	F	1326	ARG
1	F	1354	LYS
1	F	1381	LEU
1	F	1417	THR
1	F	1438	SER
1	F	1444	ASN
1	F	1449	LEU
1	F	1463	ASN
1	F	1478	VAL
1	F	1534	ASN
1	F	1540	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (72) such sidechains are listed below:

Mol	Chain	Res	Type
1	B	862	ASN
1	B	865	ASN
1	B	943	ASN
1	B	964	ASN
1	B	966	GLN
1	B	1033	GLN
1	B	1038	ASN
1	B	1114	GLN

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Mol	Chain	Res	Type
1	B	1287	HIS
1	B	1313	GLN
1	B	1315	ASN
1	B	1333	GLN
1	B	1388	ASN
1	B	1443	GLN
1	B	1444	ASN
1	B	1463	ASN
1	B	1476	ASN
1	B	1534	ASN
1	B	1565	GLN
1	B	1569	HIS
1	C	165	ASN
1	C	225	ASN
1	C	280	ASN
1	C	354	GLN
1	C	698	ASN
1	C	859	ASN
1	C	862	ASN
1	C	943	ASN
1	C	966	GLN
1	C	1017	ASN
1	C	1026	ASN
1	C	1119	ASN
1	C	1429	HIS
1	C	1443	GLN
1	C	1444	ASN
1	C	1462	ASN
1	C	1463	ASN
1	C	1476	ASN
1	C	1534	ASN
1	C	2003	ASN
1	C	2028	GLN
1	C	2045	ASN
1	D	225	ASN
1	D	280	ASN
1	D	354	GLN
1	D	698	ASN
1	D	707	HIS
1	D	862	ASN
1	D	943	ASN
1	D	964	ASN

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Mol	Chain	Res	Type
1	D	966	GLN
1	D	1017	ASN
1	D	1026	ASN
1	D	1114	GLN
1	D	1443	GLN
1	D	1444	ASN
1	D	1463	ASN
1	D	1534	ASN
1	D	1946	GLN
1	D	2003	ASN
1	D	2028	GLN
1	D	2045	ASN
1	F	859	ASN
1	F	862	ASN
1	F	865	ASN
1	F	1170	GLN
1	F	1181	GLN
1	F	1402	HIS
1	F	1444	ASN
1	F	1462	ASN
1	F	1463	ASN
1	F	1534	ASN

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 monosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

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.

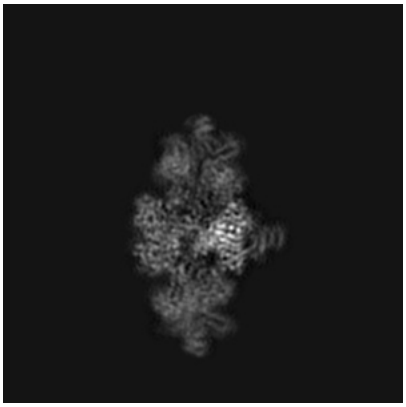
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-4342. These allow visual inspection of the internal detail of the map and identification of artifacts.

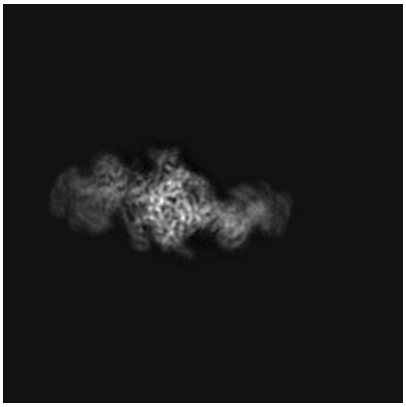
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

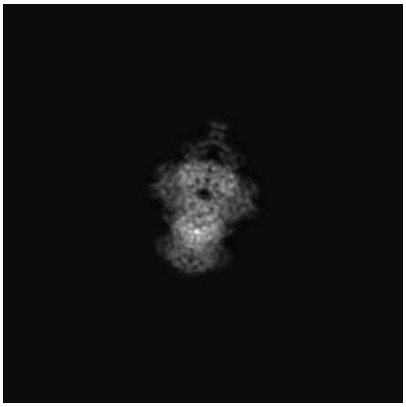
6.1.1 Primary map



X



Y



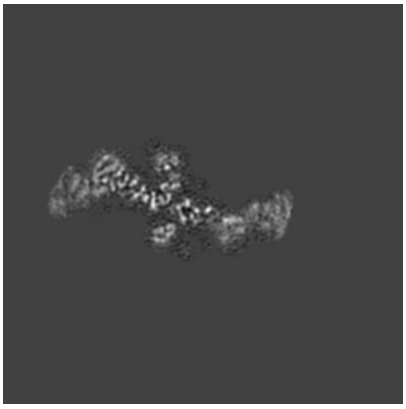
Z

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

6.2 Central slices

6.2.1 Primary map

X Index: 225



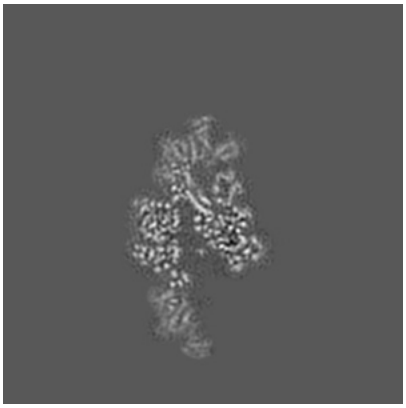
Y Index: 225

Z Index: 225

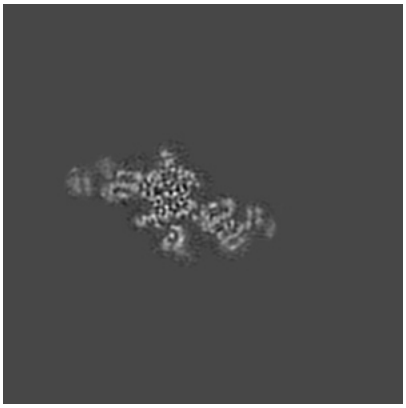
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

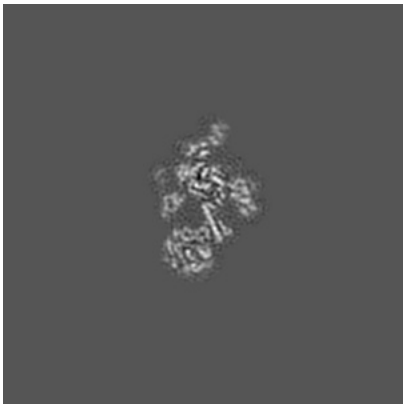
6.3.1 Primary map



X Index: 217



Y Index: 247

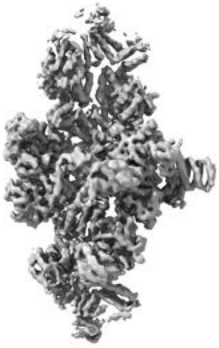


Z Index: 177

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

6.4 Orthogonal surface views (i)

6.4.1 Primary map



X

Y

Z

The images above show the 3D surface view of the map at the recommended contour level 0.0172. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

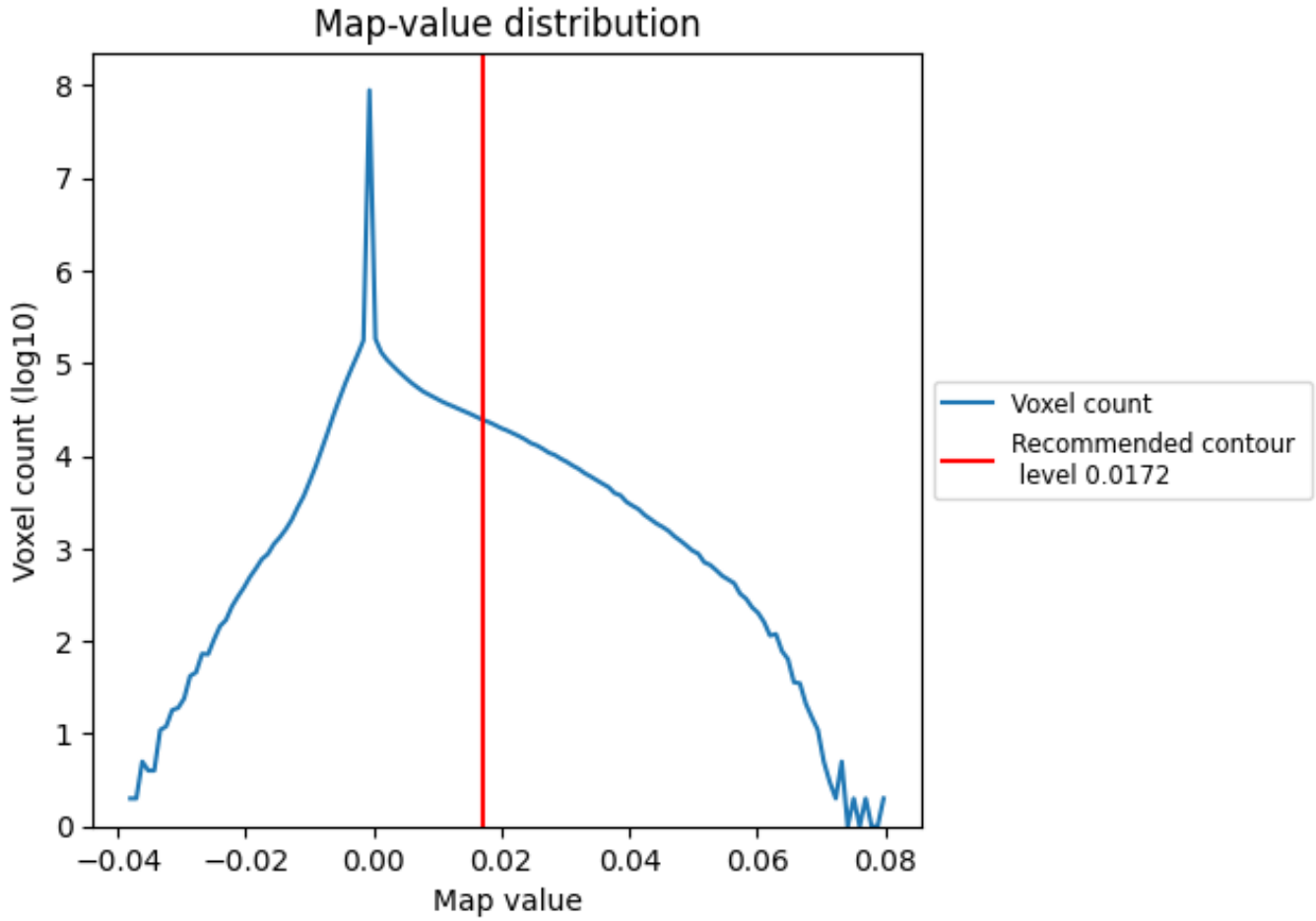
6.5 Mask visualisation (i)

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

7 Map analysis

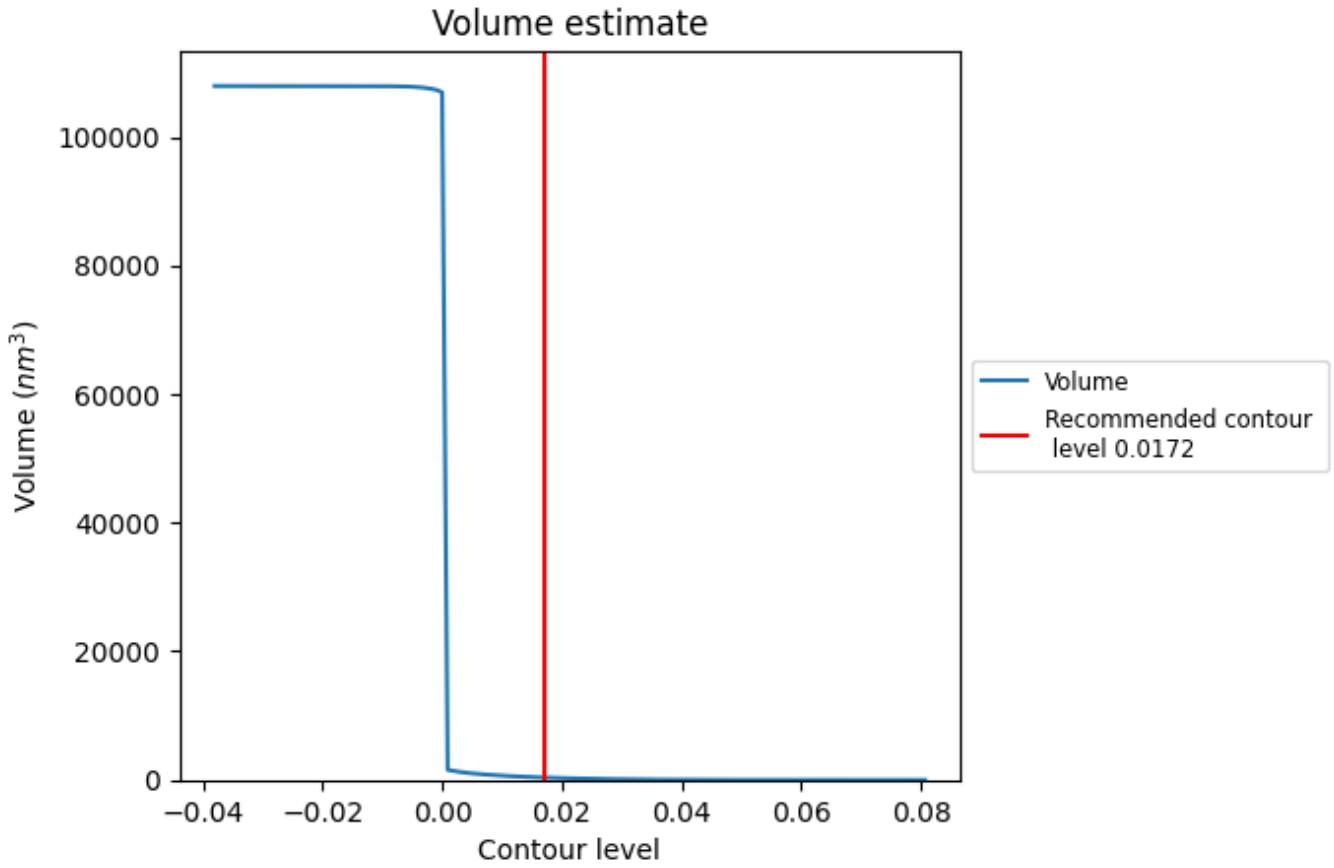
This section contains the results of statistical analysis of the map.

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.

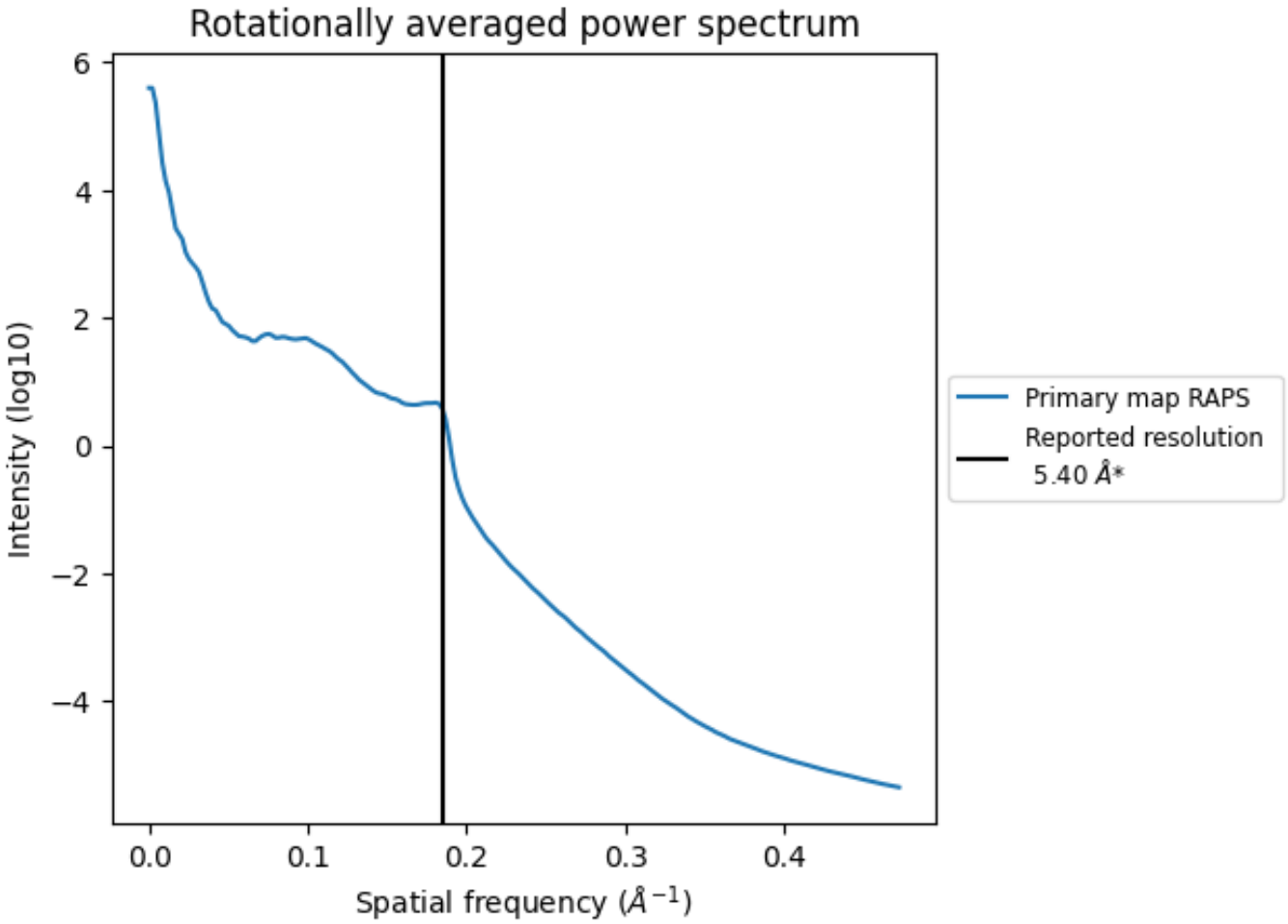
7.2 Volume estimate



The volume at the recommended contour level is 370 nm^3; this corresponds to an approximate mass of 334 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.185 Å^{-1}

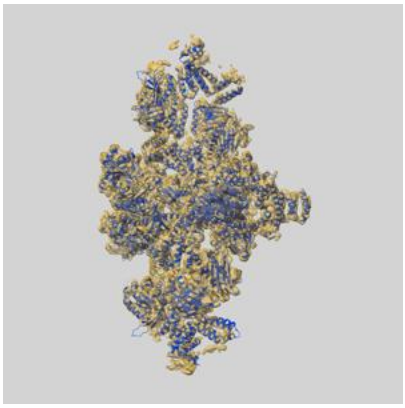
8 Fourier-Shell correlation (i)

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

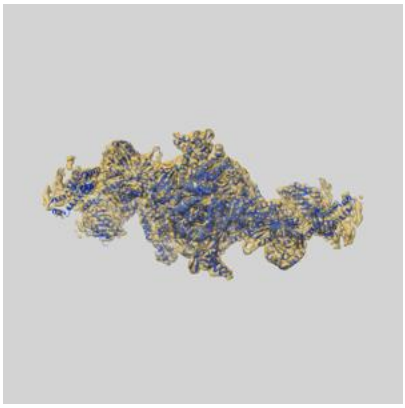
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-4342 and PDB model 6G2D. Per-residue inclusion information can be found in section 3 on page 10.

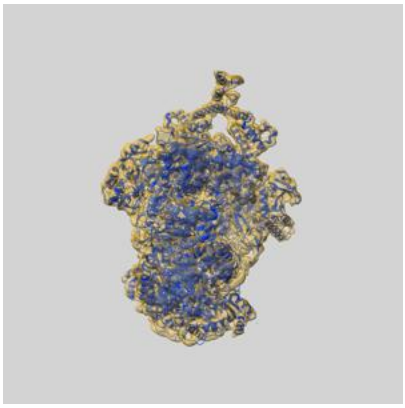
9.1 Map-model overlay



X



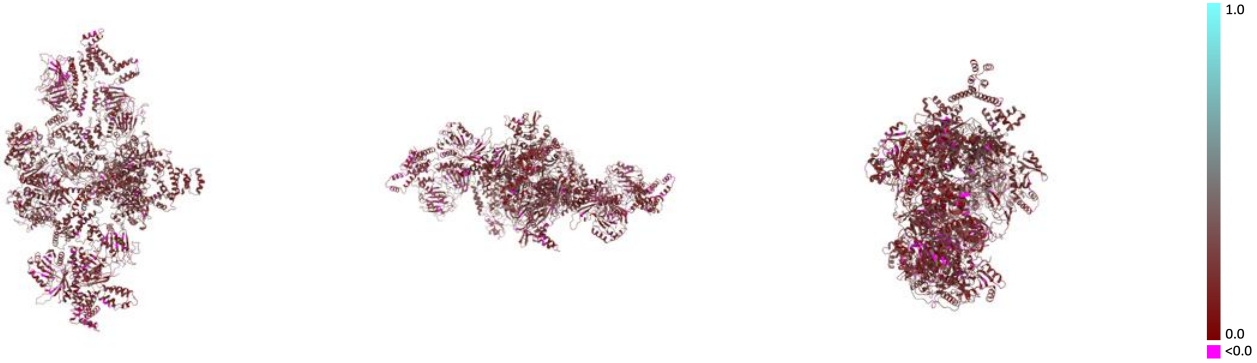
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0172 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.

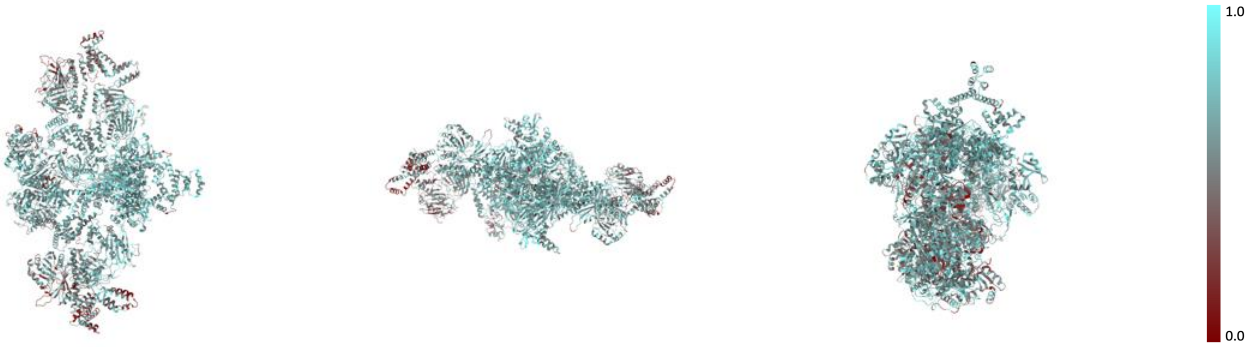
9.2 Q-score mapped to coordinate model



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.

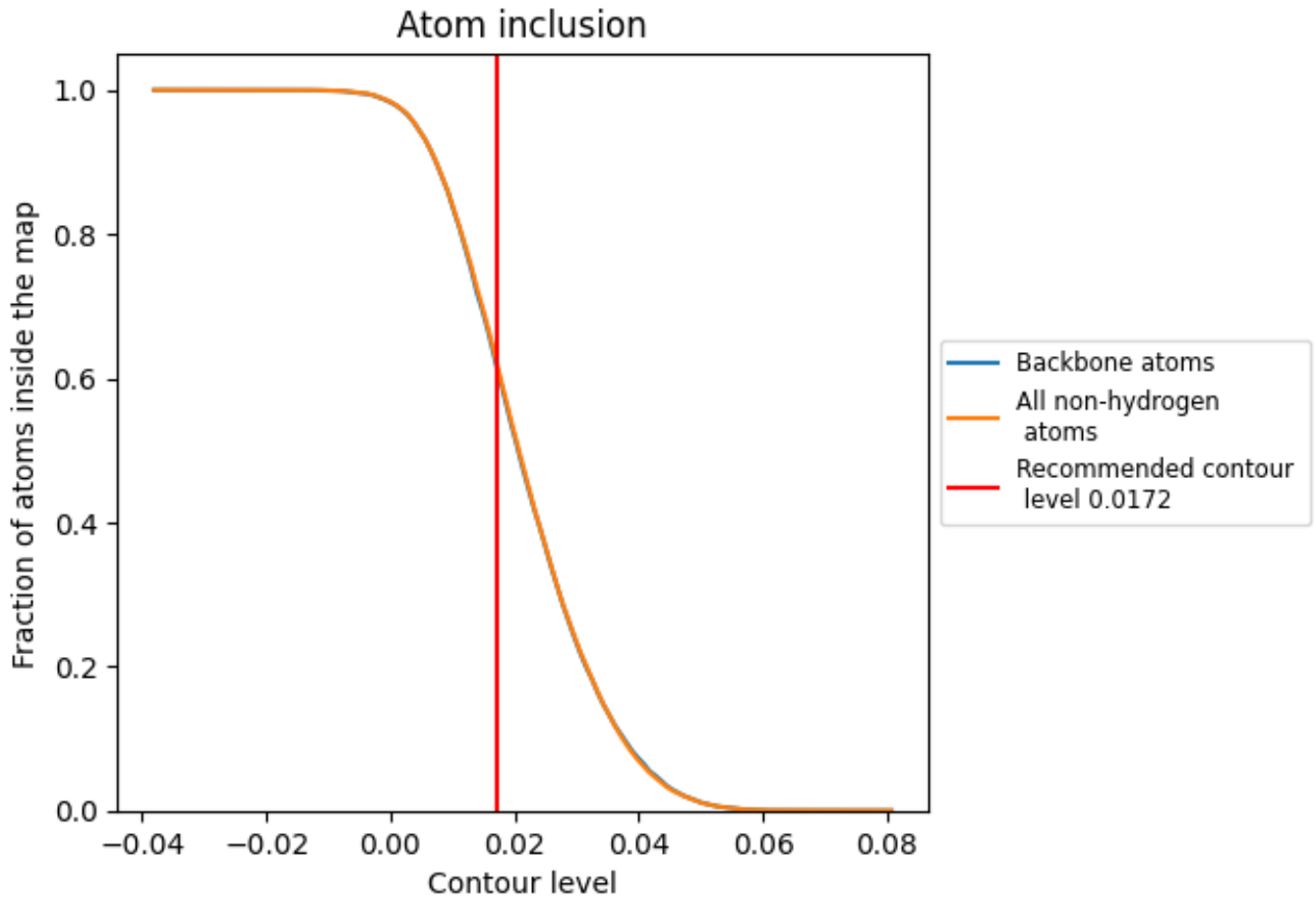
9.3 Atom inclusion mapped to coordinate model



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 (0.0172).

9.4 Atom inclusion (i)



At the recommended contour level, 61% of all backbone atoms, 62% 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 (0.0172) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6199	0.2160
B	0.5194	0.1810
C	0.6712	0.2260
D	0.6747	0.2280
F	0.4604	0.1760