Full wwPDB EM Validation Report ⓘ

Oct 21, 2024 – 12:24 PM JST

PDB ID	:	6M6H
EMDB ID	:	EMD-30124
Title	:	Structure of HSV2 C-capsid portal vertex
Authors	:	Wang, X.X.; Wang, N.
Deposited on	:	2020-03-14
Resolution	:	4.50 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:

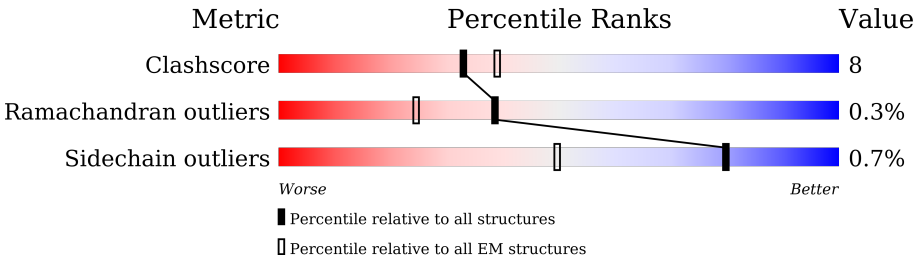
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.39

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 4.50 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
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	1374	15% 72% 23%
1	B	1374	19% 77% 21%
1	C	1374	34% 81% 18%
1	D	1374	20% 80% 19%
1	E	1374	12% 79% 19%
1	F	1374	18% 77% 21%
2	G	702	56% 59% 19% 21%
3	H	585	11% 13% 84%

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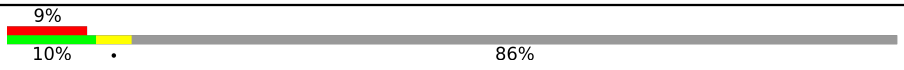
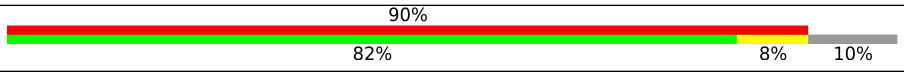
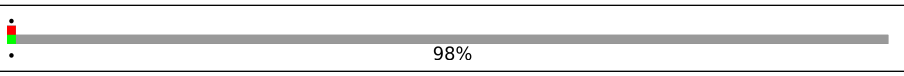
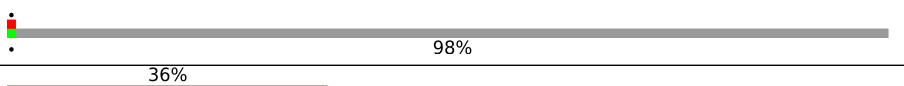
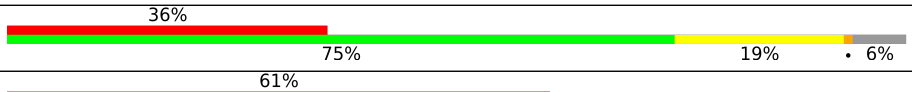
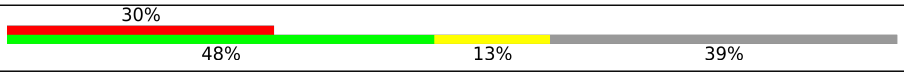
Mol	Chain	Length	Quality of chain
3	I	585	
4	J	112	
4	K	112	
4	L	112	
4	M	112	
4	N	112	
4	O	112	
5	P	3122	
5	Q	3122	
6	R	318	
6	S	318	
7	T	466	

2 Entry composition (i)

There are 7 unique types of molecules in this entry. The entry contains 77884 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 Major capsid protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	1319	Total	C	N	O	S	0	0
			9828	6232	1783	1759	54		
1	B	1362	Total	C	N	O	S	0	0
			10173	6459	1839	1821	54		
1	C	1362	Total	C	N	O	S	0	0
			10209	6479	1843	1833	54		
1	D	1362	Total	C	N	O	S	0	0
			10221	6485	1847	1835	54		
1	E	1351	Total	C	N	O	S	0	0
			10162	6452	1836	1820	54		
1	F	1351	Total	C	N	O	S	0	0
			9978	6343	1803	1781	51		

- Molecule 2 is a protein called Capsid vertex component 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	G	554	Total	C	N	O	S	0	0
			4241	2699	774	749	19		

There are 6 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
G	44	MET	VAL	conflict	UNP P89440
G	89	LEU	ILE	conflict	UNP P89440
G	90	ILE	LEU	conflict	UNP P89440
G	94	VAL	ILE	conflict	UNP P89440
G	198	MET	LEU	conflict	UNP P89440
G	200	LEU	MET	conflict	UNP P89440

- Molecule 3 is a protein called Capsid vertex component 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	H	94	Total	C	N	O	S	0	0
			759	482	138	137	2		
3	I	80	Total	C	N	O		0	0
			644	406	122	116			

There are 10 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	36	TYR	TRP	conflict	UNP P89448
H	38	SER	LEU	conflict	UNP P89448
H	106	THR	ALA	conflict	UNP P89448
H	540	LEU	PRO	conflict	UNP P89448
H	555	ALA	THR	conflict	UNP P89448
I	36	TYR	TRP	conflict	UNP P89448
I	38	SER	LEU	conflict	UNP P89448
I	106	THR	ALA	conflict	UNP P89448
I	540	LEU	PRO	conflict	UNP P89448
I	555	ALA	THR	conflict	UNP P89448

- Molecule 4 is a protein called Small capsomere-interacting protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	J	101	Total	C	N	O	S	0	0
			773	489	143	138	3		
4	K	101	Total	C	N	O	S	0	0
			773	489	143	138	3		
4	L	101	Total	C	N	O	S	0	0
			773	489	143	138	3		
4	M	101	Total	C	N	O	S	0	0
			773	489	143	138	3		
4	N	101	Total	C	N	O	S	0	0
			773	489	143	138	3		
4	O	101	Total	C	N	O	S	0	0
			773	489	143	138	3		

- Molecule 5 is a protein called Large tegument protein deneddylase.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	P	47	Total	C	N	O	S	0	0
			388	237	90	59	2		
5	Q	47	Total	C	N	O	S	0	0
			382	234	87	59	2		

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
P	3076	ARG	SER	conflict	UNP P89459
Q	3076	ARG	SER	conflict	UNP P89459

- Molecule 6 is a protein called Triplex capsid protein 2.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	R	299	Total	C	N	O	S	0	0
			2078	1341	373	357	7		
6	S	307	Total	C	N	O	S	0	0
			2175	1405	392	370	8		

- Molecule 7 is a protein called Triplex capsid protein 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	T	285	Total	C	N	O	S	0	0
			2008	1283	360	348	17		

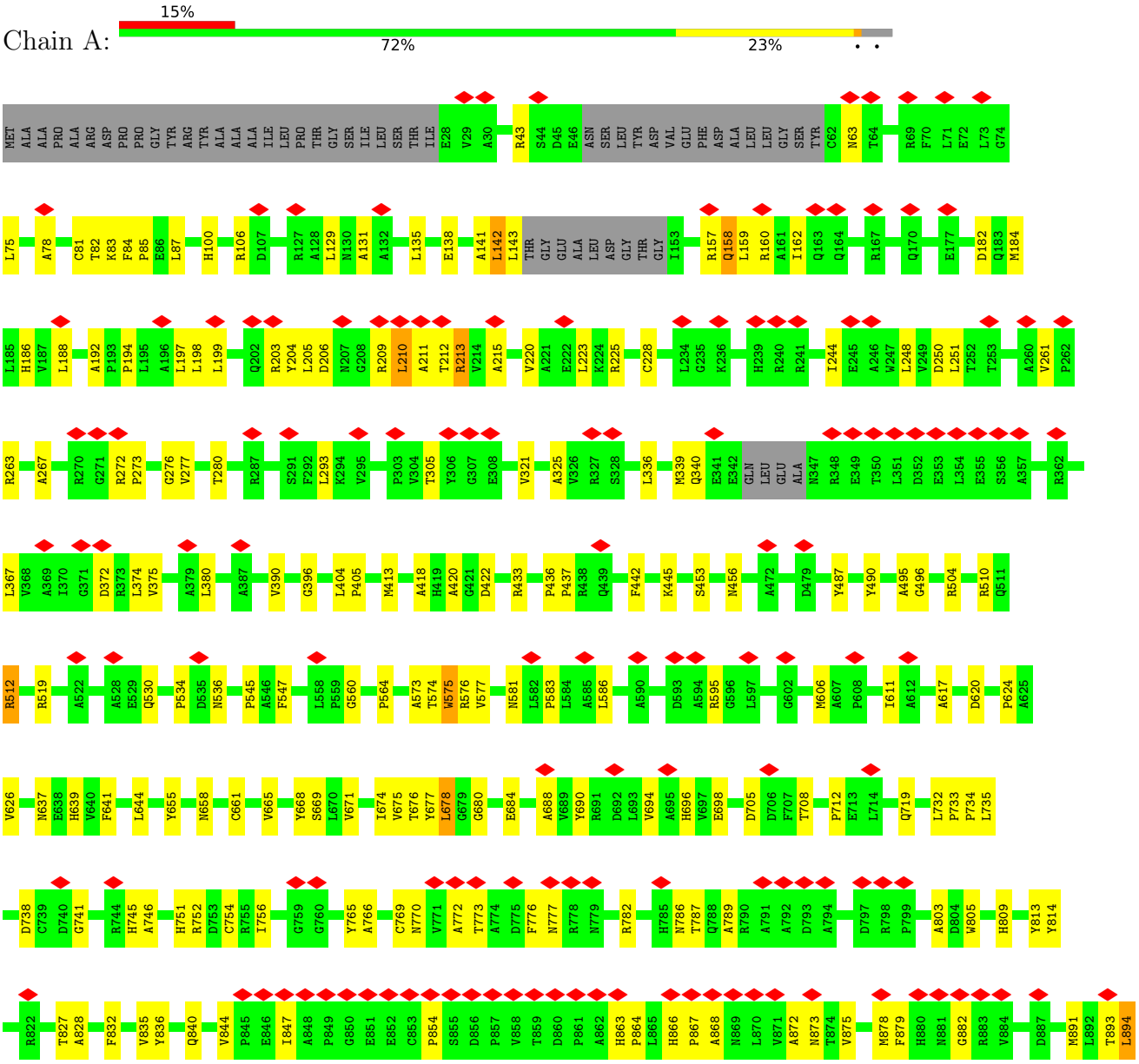
There is a discrepancy between the modelled and reference sequences:

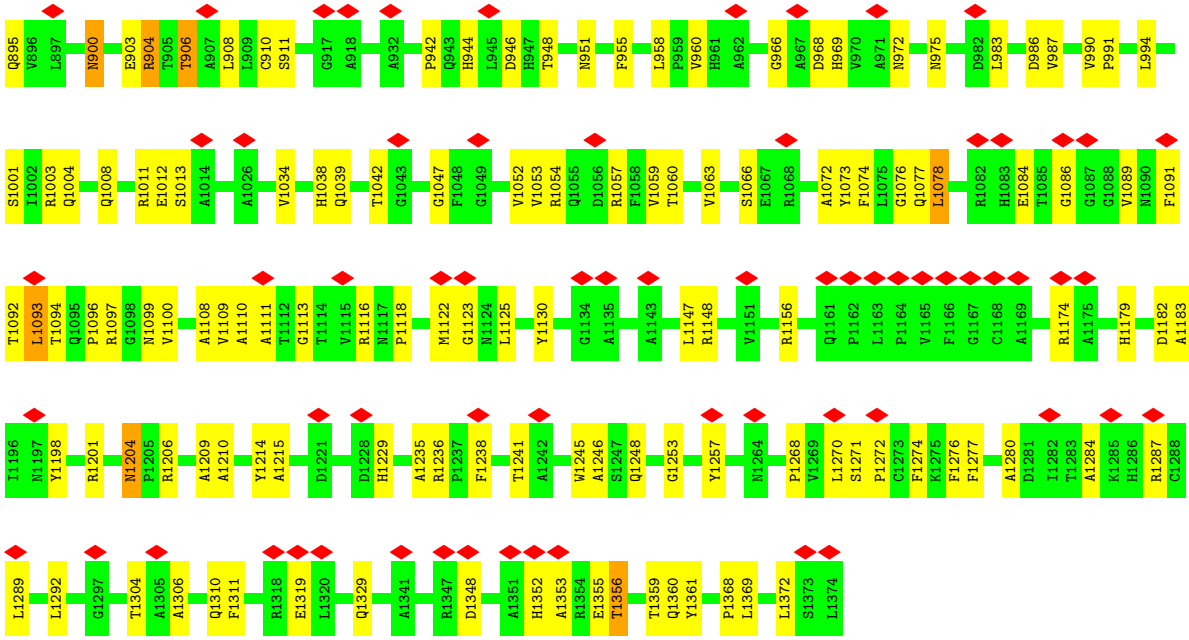
Chain	Residue	Modelled	Actual	Comment	Reference
T	283	CYS	ARG	conflict	UNP G9I260

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.

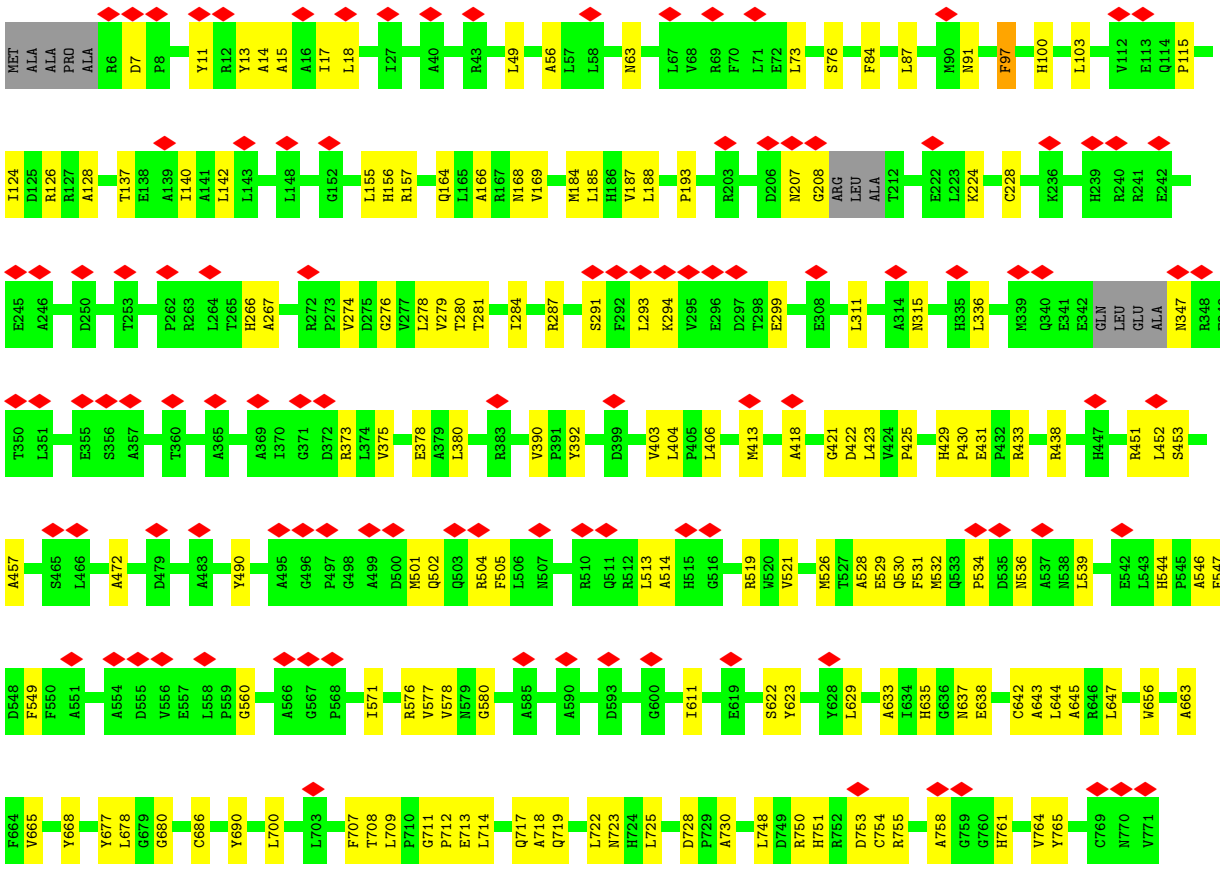
- Molecule 1: Major capsid protein

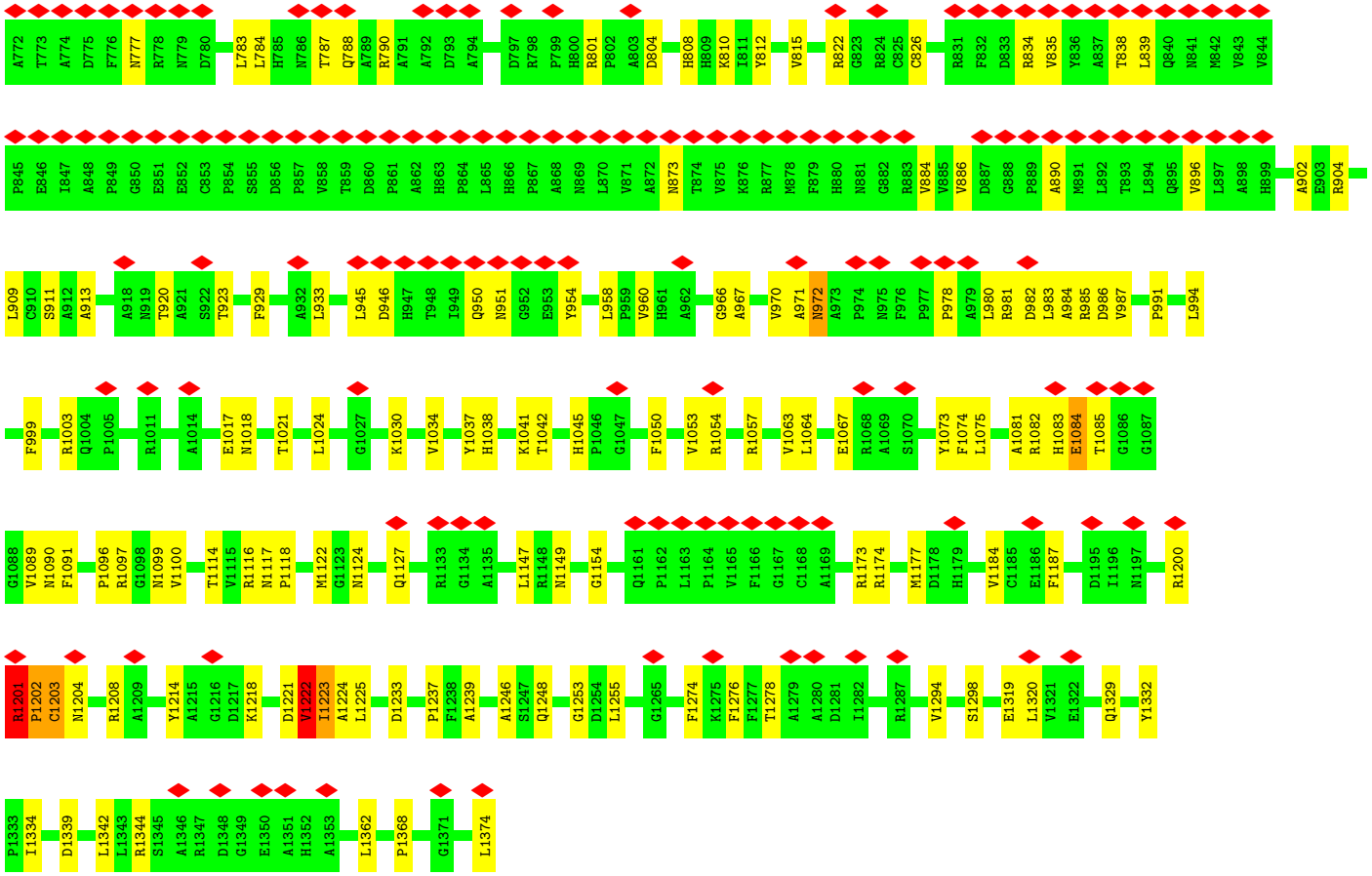




• Molecule 1: Major capsid protein

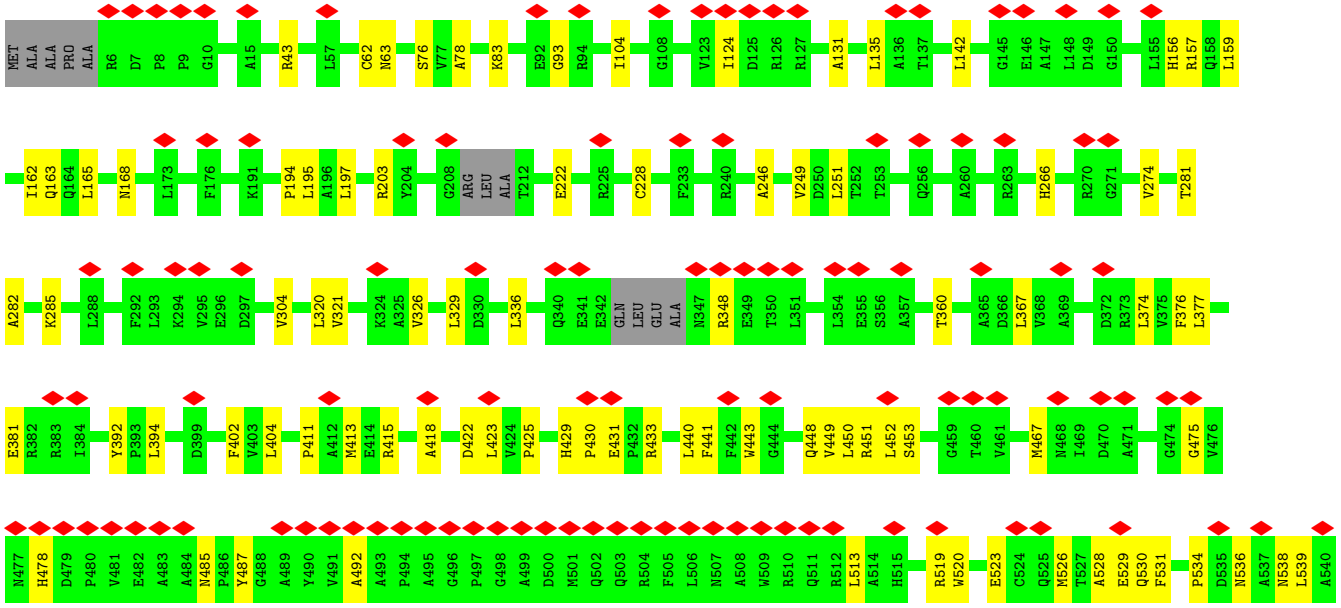
Chain B:

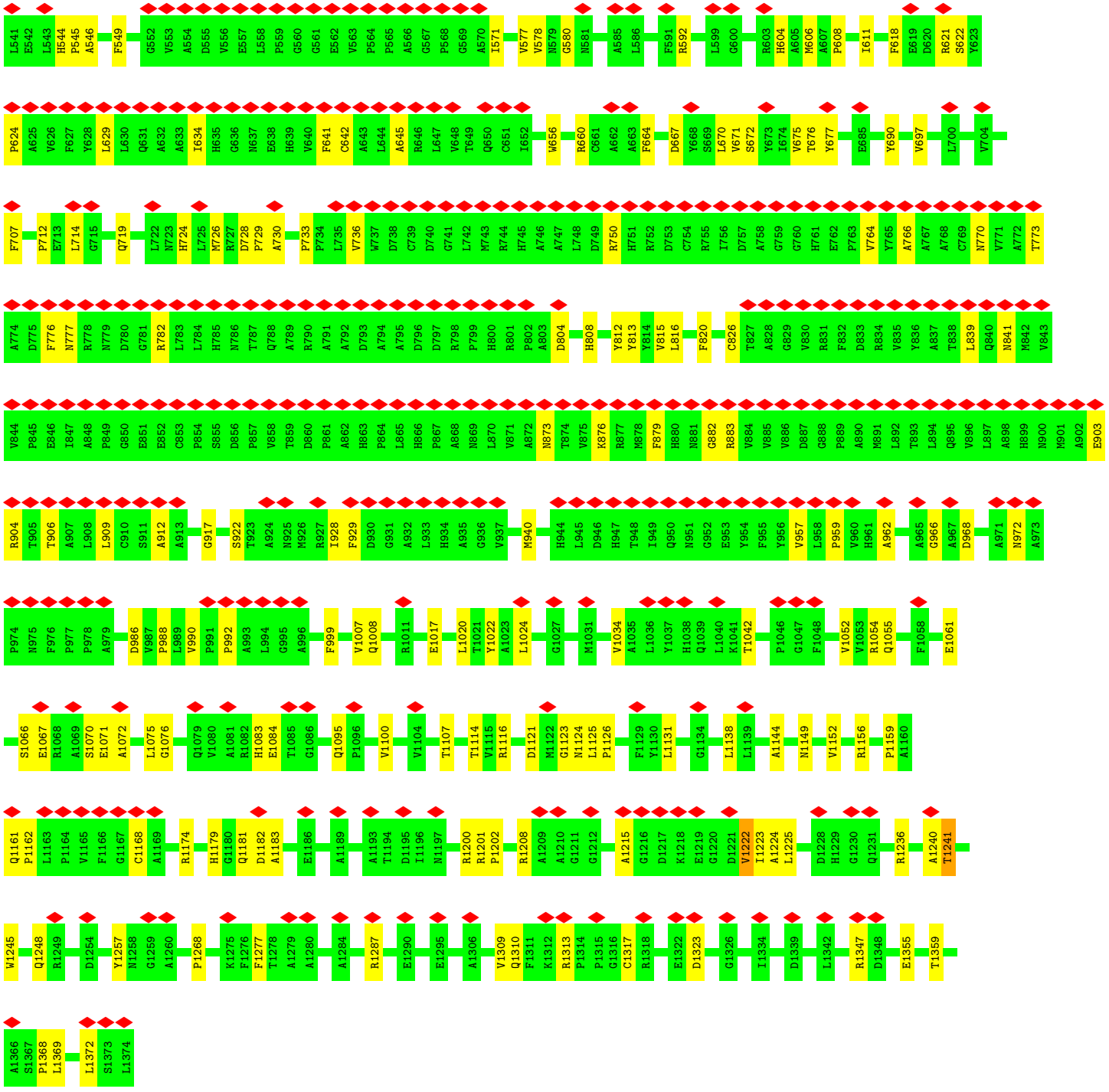




• Molecule 1: Major capsid protein

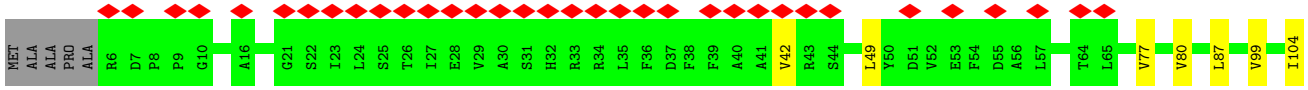
Chain C:

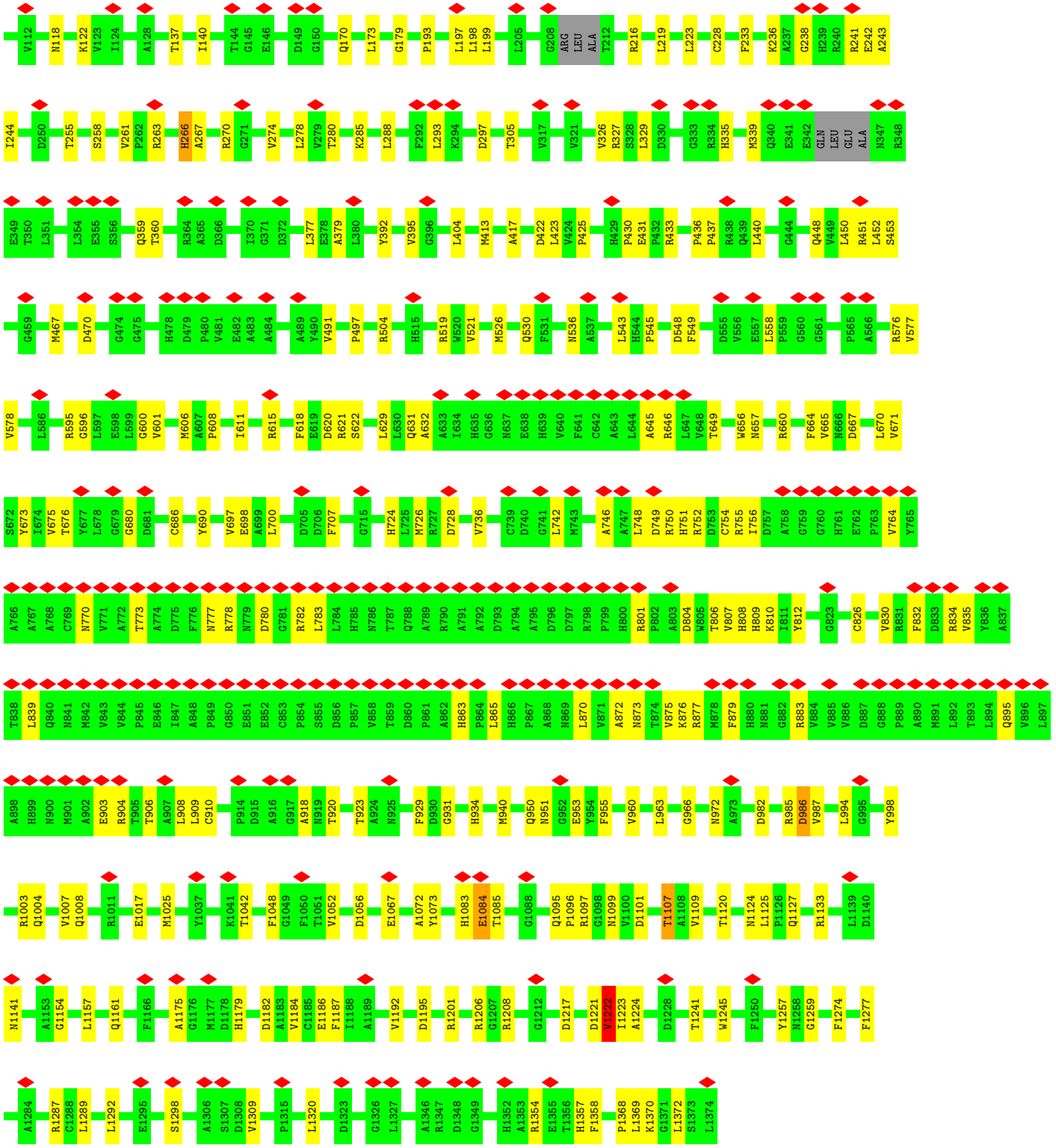




• Molecule 1: Major capsid protein

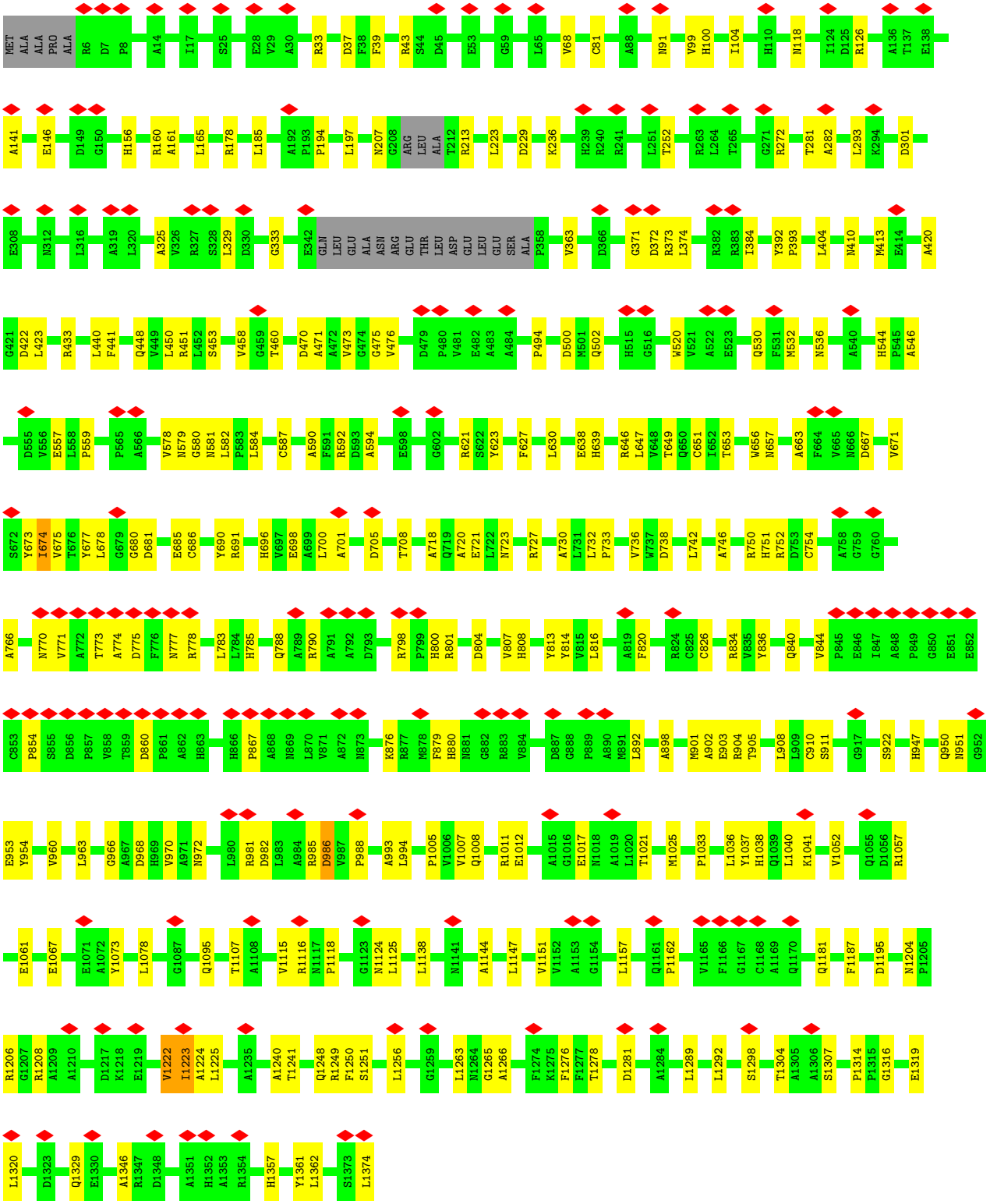
Chain D:





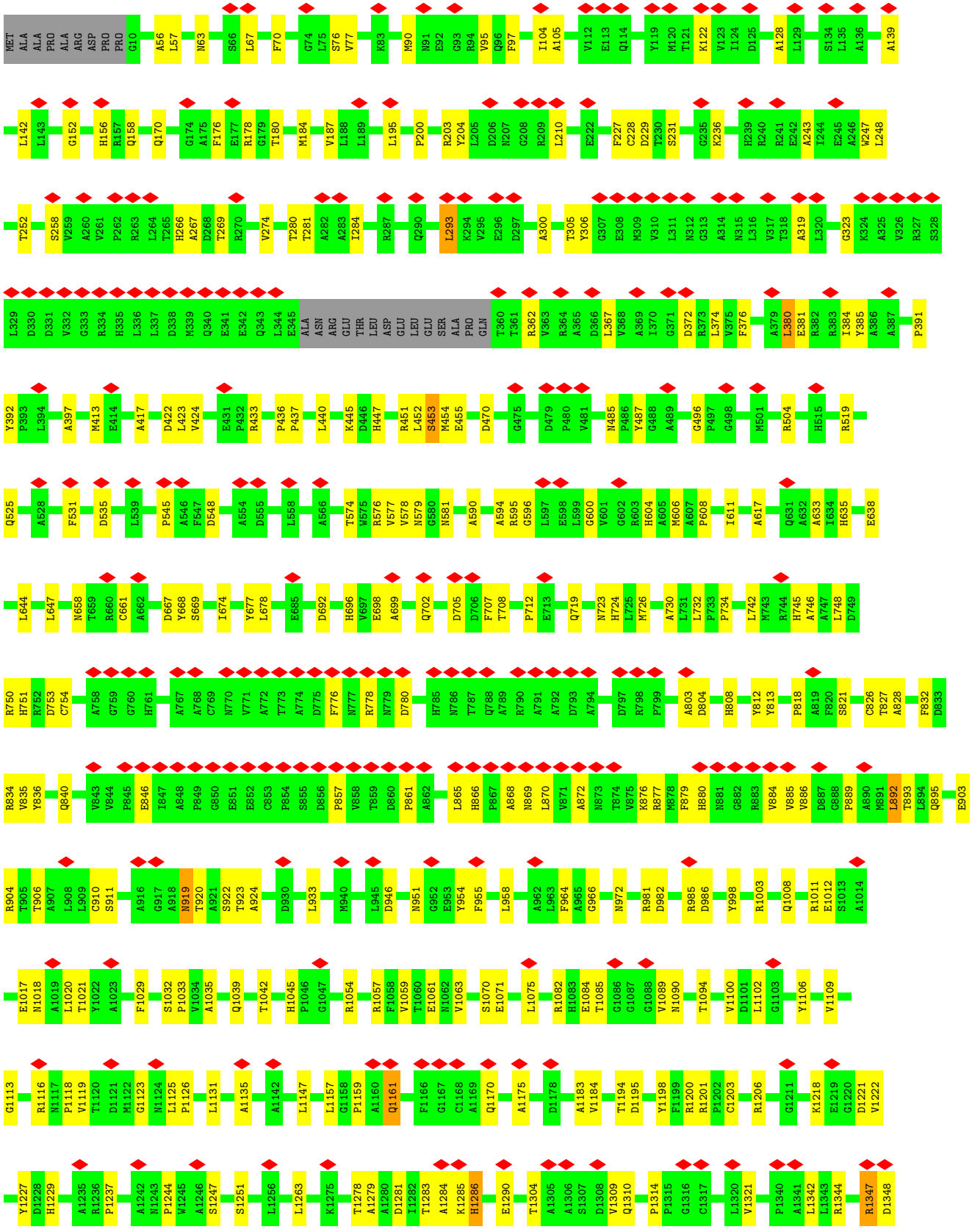
• Molecule 1: Major capsid protein

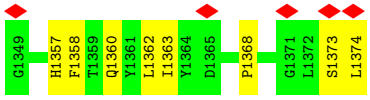
Chain E:



• Molecule 1: Major capsid protein

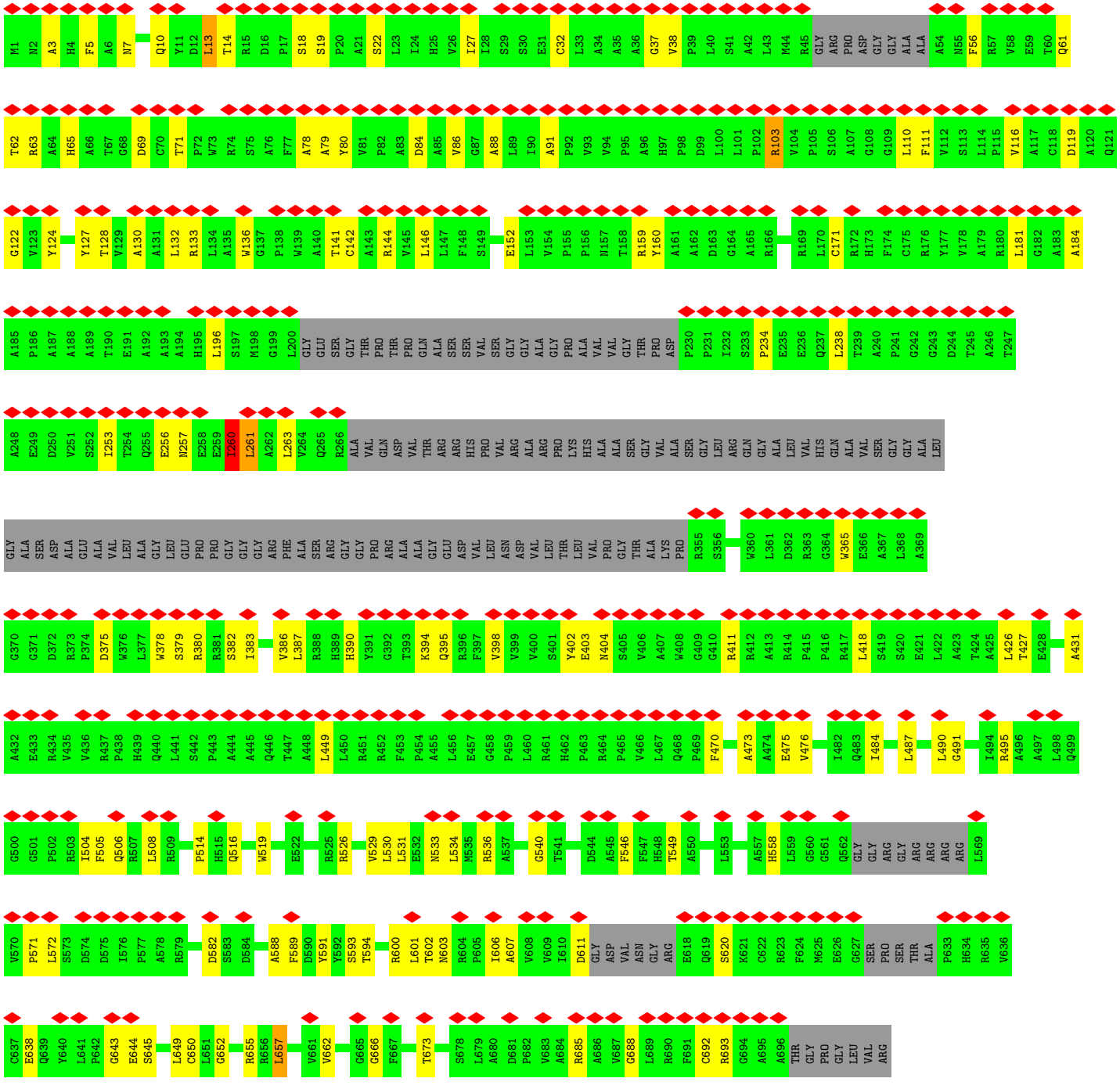
Chain F:


MET ALA ALA PRO ALA ARG ASP PRO PRO G10 A56 L57 N63 S66 L67 F70 G74 L75 S76 V77 K83 M90 N91 E92 G93 R94 V95 Q96 F97 I104 A105 V112 E113 Q114 Y119 M120 T121 K122 V123 I124 D125 A128 L129 S134 L135 A136 A139
L142 L143 G152 H156 R157 Q158 Q170 G174 A175 F176 E177 R178 G179 T180 M184 V187 L188 L189 L195 P200 R203 Y204 L205 D206 N207 G208 R209 L210 E222 F227 C228 D229 T230 S231 G235 K236 H239 R240 R241 E242 A243 I244 E245 A246 W247 L248
T252 S258 V259 A260 V261 P262 R263 L264 T265 H266 A267 D268 T269 R270 V274 T280 T281 A282 A283 I284 R287 Q290 L293 K294 V295 E296 D297 A300 T305 Y306 G307 E308 M309 V310 L311 N312 G313 A314 N315 L316 V317 T318 A319 L320 G323 K324 A325 V326 R327 S328
L329 D330 D331 V332 G333 R334 H335 L336 L337 D338 M339 Q340 E341 E342 Q343 L344 E345 ALA ASN ARG GLU THR LEU ASP GLU LEU GLU SER ALA PRO GLN T360 T361 R362 V363 R364 A365 D366 L367 V368 A369 I370 G371 D372 R373 L374 V375 F376 A379 L380 E381 R382 R383 I384 Y385 A386 A387 P391
Y392 P393 L394 A397 M413 E414 A417 D422 L423 V424 E431 P432 R433 P436 P437 L440 K445 D446 H447 R451 L452 S453 M454 E455 D470 G475 D479 P480 V481 N485 P486 Y487 G488 A489 G496 P497 G498 M501 R504 H515 R519
Q525 A528 F531 D535 L539 P545 A546 F547 D548 A554 D555 L558 A566 T574 W575 R576 V577 V578 N579 G580 N581 A590 A594 R595 G596 L597 E598 L599 G600 V601 G602 R603 H604 A605 M606 A607 P608 I611 A617 Q631 A632 A633 I634 H635 E638
L644 L647 N658 T659 R660 C661 A662 D667 Y668 S669 I674 Y677 L678 E685 D692 H696 V697 E698 A699 Q702 D705 D706 F707 T708 P712 E713 Q719 N723 H724 L725 M726 A730 L731 L732 P733 P734 L742 M743 R744 H745 A746 A747 L748 D749
R750 H751 R752 D753 C754 A758 G759 G760 H761 A767 A768 C769 N770 V771 A772 T773 A774 D775 F776 N777 R778 N779 D780 H785 N786 T787 Q788 A789 R790 A791 A792 D793 A794 D797 R798 P799 A803 D804 H808 Y812 Y813 P818 A819 F820 S821 C826 T827 A828 F832 D833
R834 V835 Y836 Q840 V843 V844 P845 E846 I847 A848 P849 G850 E851 E852 C853 P854 S855 D856 P857 V858 T859 D860 P861 A862 L865 H866 P867 A868 N869 L870 V871 A872 N873 T874 V875 K876 R877 M878 F879 H880 M881 G882 R883 V884 V885 V886 D887 G888 P889 A890 M891 L892 T893 L894 Q895 E903
R904 T905 T906 A907 L908 L909 C910 S911 A916 G917 A918 N919 T920 A921 S922 T923 A924 D930 L933 M940 L945 D946 N951 G952 E953 Y954 F955 L958 A962 L963 F964 A965 G966 N972 R981 D982 R985 D986 Y998 R1003 Q1008 R1011 E1012 S1013 A1014
E1017 N1018 A1019 L1020 T1021 Y1022 A1023 F1029 S1032 P1033 V1034 A1035 Q1039 T1042 H1045 P1046 G1047 R1054 R1057 F1058 V1059 T1060 E1061 N1062 V1063 S1070 E1071 L1075 R1082 H1083 E1084 T1085 G1086 G1087 G1088 V1089 N1090 T1094 V1100 D1101 L1102 G1103 Y1106 V1109
G1113 R1116 N1117 P1118 V1119 T1120 D1121 M1122 G1123 N1124 L1125 P1126 L1131 A1135 A1142 L1147 L1157 C1158 P1159 A1160 Q1161 F1166 G1167 C1168 A1169 Q1170 A1175 D1178 A1183 V1184 T1194 D1195 Y1198 F1199 R1200 R1201 P1202 C1203 R1206 G1211 K1218 E1219 G1220 D1221 V1222
Y1227 D1228 H1229 A1235 R1236 P1237 A1242 N1243 P1244 W1245 A1246 S1247 S1251 L1256 L1263 K1275 T1278 A1279 A1280 D1281 I1282 T1283 A1284 K1285 H1286 E1290 T1304 A1305 A1306 S1307 D1308 V1309 Q1310 P1314 P1315 G1316 C1317 L1320 V1321 P1340 A1341 L1342 L1343 R1344 R1347 D1348



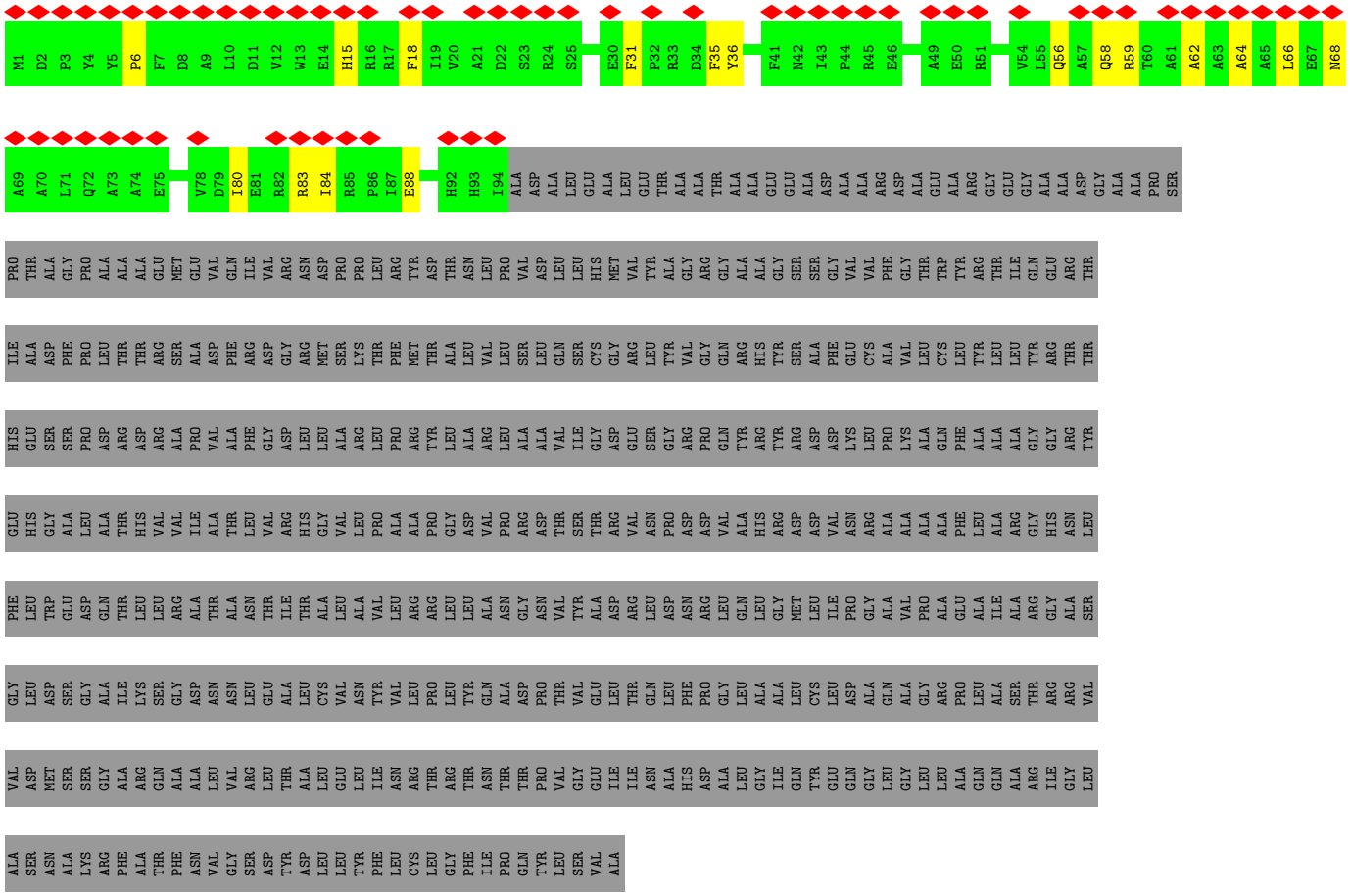
• Molecule 2: Capsid vertex component 1

Chain G:



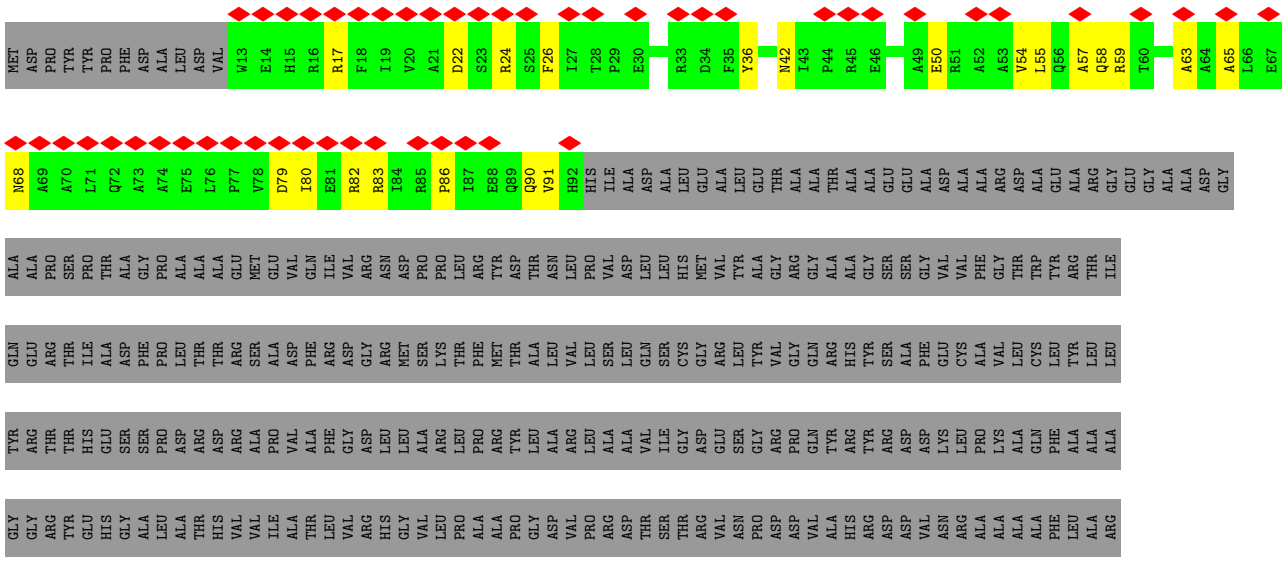
• Molecule 3: Capsid vertex component 2

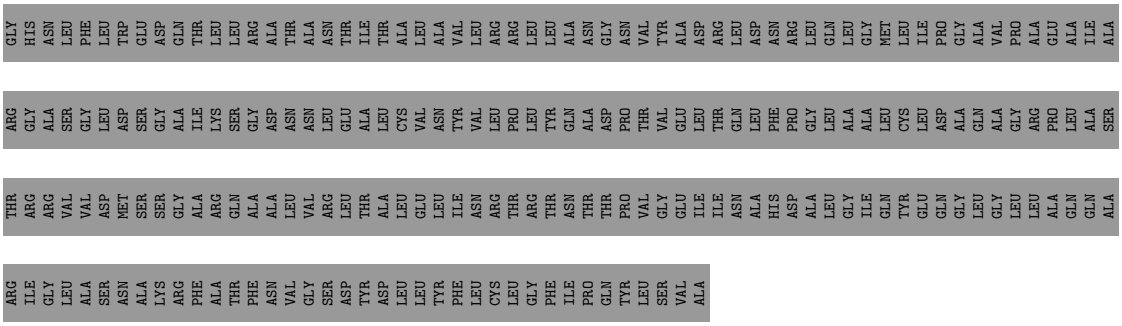
Chain H:



• Molecule 3: Capsid vertex component 2

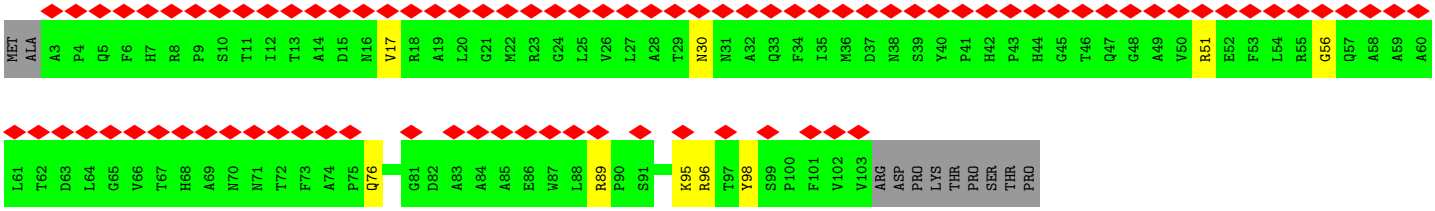
Chain I:





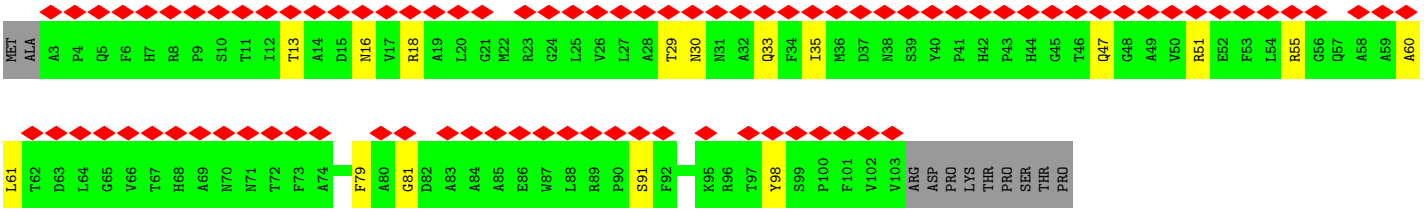
• Molecule 4: Small capsomere-interacting protein

Chain J:



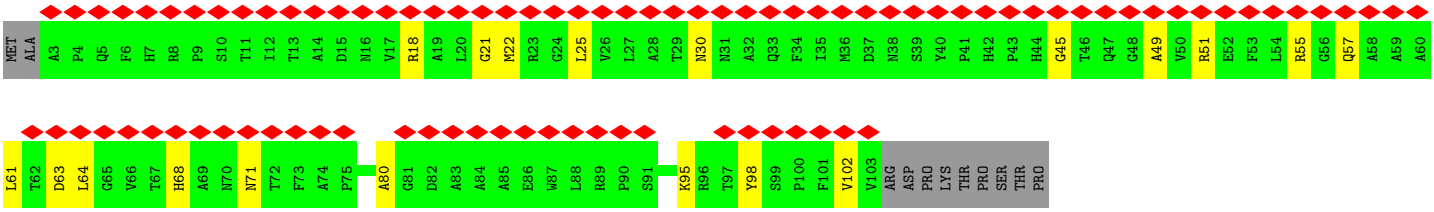
• Molecule 4: Small capsomere-interacting protein

Chain K:



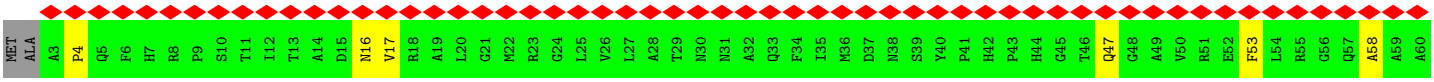
• Molecule 4: Small capsomere-interacting protein

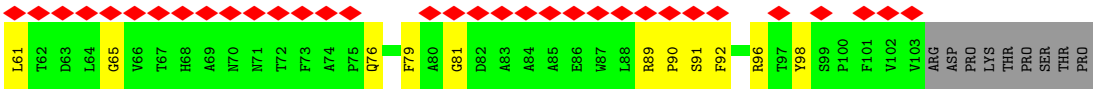
Chain L:



• Molecule 4: Small capsomere-interacting protein

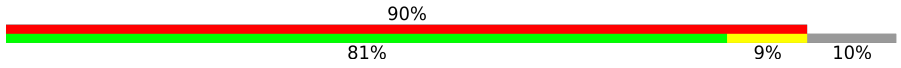
Chain M:

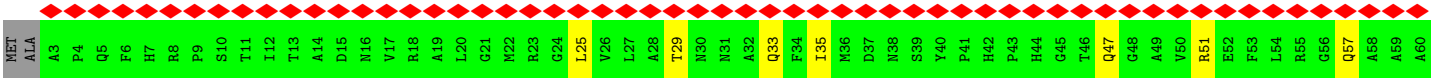


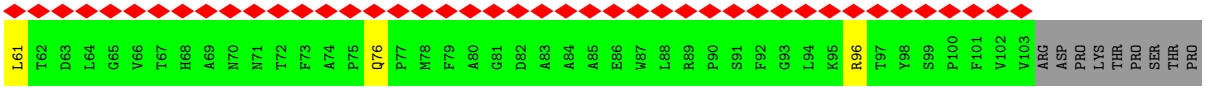


• Molecule 4: Small capsomere-interacting protein

Chain N:

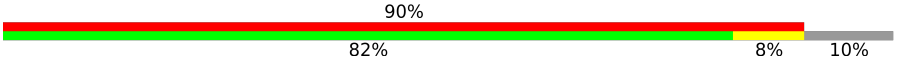


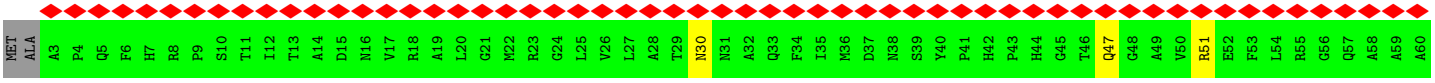


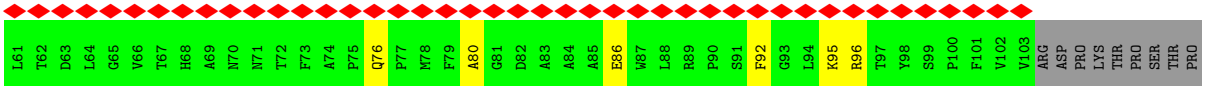


• Molecule 4: Small capsomere-interacting protein

Chain O:

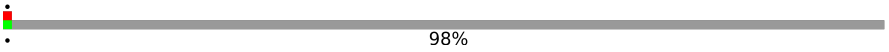






• Molecule 5: Large tegument protein deneddylase

Chain P:



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

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

LEU ARG ALA ALA PRO PRO ALA ASN LEU TYR ALA ARG LEU GLY GLU TRP LEU LEU GLU ARG SER ARG ALA HIS PRO ASN THR LEU PHE ALA PRO ALA THR PRO THR HIS PRO GLU PRO LEU LEU HIS ARG ILE GLN ALA LEU ALA GLN PHE ALA ARG GLY GLU GLU MET ARG VAL GLU ALA

GLU ALA ARG GLU MET ARG GLU ALA LEU ASP ALA LEU ALA ARG GLY VAL ASP SER VAL SER GLN ARG ALA GLY PRO LEU THR VAL MET PRO VAL PRO ALA ALA PRO GLY ALA GLY GLY ARG ALA PRO CYS PRO PRO ALA LEU GLY PRO GLU ALA ILE GLN ALA ARG LEU GLU ASP VAL ARG

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

ARG ASP VAL ALA GLN ARG ALA ALA LEU PRO PRO PRO PRO LEU ALA THR SER PRO GLN ALA ILE LEU LEU ARG ASP LEU LEU GLN ARG GLY GLN PRO LEU ASP ALA PRO GLU ASP LEU ALA ALA TRP LEU SER VAL LEU THR ASP ALA ALA THR GLN GLY LEU ILE GLU ARG LYS PRO

LEU GLU GLU LEU ALA ARG SER ILE HIS GLY ILE ASN ASP GLN GLN ALA ARG ARG SER SER GLY LEU ALA GLU LEU GLN ARG PHE ASP ALA LEU ASP ALA ALA LEU ALA GLN GLN LEU ASP SER ASP ALA ALA PHE VAL PRO ALA THR GLY PRO ALA PRO TYR VAL ASP GLY GLY GLY LEU

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

GLU LYS PHE LEU HIS LYS LEU GLN GLY VAL LEU ARG PRO LEU PRO ASP PHE VAL GLY LEU LYS ALA CYS PRO ALA VAL LEU ALA THR LEU ARG ALA SER LEU PRO ALA GLY TRP THR ASP LEU ALA ASP ALA VAL ARG GLY PRO PRO GLU VAL THR ALA ALA LEU ARG ALA ASP LEU

TRP GLY LEU LEU GLY GLN TYR ARG GLU ALA LEU GLU HIS PRO THR PRO ASP THR ALA THR ALA LEU ALA GLY LEU HIS PRO ALA PHE VAL VAL VAL LEU LYS THR LEU PHE ALA ASP ALA PRO GLU THR PRO VAL LEU VAL GLN PHE PHE SER ASP HIS ALA PRO THR ILE ALA LYS ALA

VAL SER ASN ALA ILE ASN ALA GLY SER ALA ALA VAL ALA THR ALA SER PRO ALA ALA THR VAL ASP ALA ALA VAL ARG ALA HIS GLY ALA LEU ALA ASP ALA VAL SER ALA LEU GLY ALA ALA ALA ARG ASP PRO ALA SER PRO LEU SER PHE LEU ALA VAL LEU ALA ASP SER ALA ALA

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

SER LEU ALA GLY HIS GLU ALA GLY PHE GLY LEU LEU HIS ALA GLU GLY THR ALA GLY ASP HIS SER PRO SER GLY ARG ALA LEU GLN GLU LEU GLY LYS VAL ILE GLY ALA THR ARG ARG ALA ASP GLU LEU GLU ALA ALA VAL ALA ASP LEU THR ALA LYS MET ALA ALA GLN

ARG ALA ARG GLY SER SER GLU ARG TRP ALA ALA GLY VAL GLU ALA ALA LEU ASP ARG VAL GLU ASN ARG ALA GLU PHE ASP VAL VAL GLU LEU ARG ARG LEU GLN ALA LEU ALA GLY THR HIS GLY TYR ASN PRO ARG ASP PHE ARG LYS ARG ALA GLU GLN ALA LEU ALA ALA ASN ALA

GLU ALA VAL THR LEU ALA LEU ASP THR ALA PHE ALA PHE ASN PRO TYR THR PRO GLU ASN GLN ARG HIS PRO MET LEU PRO PRO LEU ALA ALA ILE HIS ARG LEU GLY TRP SER ALA ALA PHE HIS ALA ALA ALA GLU THR TYR ALA ASP MET PHE ARG VAL ASP ALA GLU PRO LEU ALA

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ASP ALA ILE ARG ALA ASP VAL HIS ARG ALA LEU GLY GLY VAL PRO LEU ASP LEU ALA ALA ALA ALA GLU GLN ILE SER ALA ALA ARG ASN ASP PRO GLU ALA THR ALA GLU LEU VAL ARG THR GLY VAL THR LEU PRO CYS PRO SER GLU ASP ALA LEU VAL ALA CYS ALA ALA ALA LEU

GLU ARG VAL ASP GLN SER PRO VAL LYS ASN THR ALA TYR ALA GLU TYR VAL ALA PHE VAL THR ARG GLN ASP THR ALA GLU THR LYS ASP ALA VAL VAL ARG ALA LYS GLN GLN ARG ALA GLU ALA THR GLU ARG VAL MET ALA GLY LEU ARG GLU ALA LEU ALA ALA ARG GLU ARG ARG

ALA GLN ILE GLU ALA GLU GLY LEU ALA ASN LEU LYS THR MET LEU LYS VAL VAL ALA VAL PRO ALA THR VAL ALA LYS THR LEU ASP GLN ALA ARG SER VAL ALA GLU ILE ALA ASP GLN VAL GLU VAL LEU LEU ASP GLN THR GLU LYS THR ARG GLU LEU ASP VAL PRO ALA VAL ILE

TRP LEU GLU HIS ALA GLN ARG THR PHE GLU THR HIS PRO LEU SER ALA ALA ARG GLY ASP GLY PRO GLY PRO LEU ALA ARG HIS ALA GLY ARG LEU GLY ALA LEU PHE ASP THR ARG ARG ARG VAL ASP ALA LEU ARG ARG SER LEU GLU GLU ALA GLU ALA GLU TRP ASP GLU VAL TRP

GLY ARG PHE GLY ARG VAL ARG GLY GLY ALA TRP LYS SER PRO GLU GLY PHE ARG ALA MET HIS GLU GLN LEU ARG ALA LEU GLN ASP THR THR ASN THR VAL SER GLY LEU ARG ALA GLN PRO ALA TYR GLU ARG LEU SER ALA ARG TYR GLN GLY VAL LEU GLY ALA LYS GLY ALA GLU

ARG ALA GLU ALA VAL GLU GLU LEU GLY ALA ARG VAL THR LYS HIS THR ALA LEU CYS ALA ARG LEU ARG ASP GLU VAL VAL ARG ARG VAL PRO TRP GLU MET ASN PHE ASP ALA LEU GLY GLY LEU LEU ALA GLU PHE ASP ALA ALA ALA ALA ASP LEU ALA PRO TRP ALA VAL GLU GLU

PHE ARG GLY ALA ARG GLU LEU ILE GLN TYR ARG MET GLY LEU TYR SER ALA TYR ALA ARG ALA GLY GLY GLN THR GLY ALA GLY ALA GLU SER ALA PRO ALA PRO LEU LEU VAL ASP LEU ARG ALA LEU ASP ALA ARG ALA ARG ALA SER SER SER PRO GLU GLY HIS GLU VAL ASP PRO

GLN LEU LEU ARG ARG ARG GLY GLU ALA TYR LEU ARG ALA GLY GLY ASP PRO GLY PRO LEU VAL LEU ARG GLU ALA VAL SER ALA LEU ASP LEU PRO PHE ALA THR SER PHE LEU ALA PRO ASP GLY THR PRO LEU GLN TYR ALA LEU CYS PHE PRO ALA VAL THR ASP LYS LEU GLY ALA

LEU LEU MET ARG PRO GLU ALA ALA CYS VAL ARG PRO PRO LEU PRO THR ASP VAL LEU GLU SER ALA PRO THR VAL THR ALA MET TYR VAL LEU THR VAL VAL ASN ARG LEU GLN LEU ALA LEU SER ASP ALA GLN ALA ALA ASN PHE GLN LEU PHE GLY ARG PHE VAL ARG HIS ARG GLN

ALA THR TRP GLY ALA SER MET ASP ALA ALA ALA GLU LEU TYR VAL ALA LEU VAL ALA THR THR LEU THR ARG GLU PHE GLY CYS ARG TRP ALA GLN LEU GLY TRP ALA SER GLY ALA ALA ALA PRO ARG PRO PRO PRO GLY PRO ARG GLY SER GLN ARG HIS CYS VAL ALA PHE ASN GLU

ASN ASP VAL LEU VAL ALA LEU VAL ALA GLY VAL PRO GLU HIS ILE TYR ASN PHE TRP ARG LEU ASP LEU VAL ARG GLN HIS GLU TYR MET HIS LEU THR LEU GLU ARG ALA PHE GLU ASP ALA ALA GLU SER MET LEU PHE VAL GLN ARG LEU THR PRO HIS PRO ASP ALA ARG ILE ARG

VAL LEU PRO THR PHE LEU ASP GLY GLY PRO PRO THR ARG GLY LEU LEU PHE GLY THR ARG LEU ALA ASP TRP ARG ARG GLY LYS LEU SER GLU THR ASP PRO LEU ALA PRO TRP ARG SER ALA LEU GLU LEU GLY THR GLN ARG ARG ASP VAL PRO ALA LEU GLY LYS LEU SER PRO ALA

GLN ALA LEU ALA ALA VAL SER VAL LEU GLY ARG MET CYS LEU PRO SER ALA ALA LEU ALA ALA LEU TRP THR CYS MET PHE PRO ASP ASP TYR THR GLU TYR ASP SER PHE ASP ALA LEU LEU ALA ALA ARG LEU GLU SER GLY GLN THR LEU GLY PRO ALA GLY GLY ARG GLU ALA SER

LEU PRO GLU ALA PRO HIS ALA LEU TYR ARG PRO THR GLY GLN HIS VAL ALA VAL LEU ALA ALA ALA THR HIS ARG THR PRO ALA ALA ARG VAL THR ALA MET ASP LEU VAL LEU ALA ALA VAL LEU LEU GLY ALA PRO VAL VAL VAL ALA LEU ARG ASN THR THR ALA PHE SER ARG GLU

SER GLU LEU GLU LEU CYS LEU THR LEU PHE ASP SER ARG PRO GLY GLY PRO ASP ALA ALA LEU ARG ASP VAL VAL SER SER ASP ILE GLU THR TRP ALA VAL GLY LEU LEU HIS THR ASP LEU ASN PRO ILE GLU ASN ALA CYS LEU ALA ALA GLN LEU PRO ARG LEU SER ALA LEU ILE

ALA GLU ARG PRO LEU ALA ASP GLY PRO PRO CYS LEU VAL LEU VAL ASP ILE SER MET THR PRO VAL ALA VAL LEU TRP GLU ALA PRO GLU PRO PRO GLY PRO PRO ASP VAL ARG PHE VAL GLY SER GLU ALA THR GLU GLU LEU PRO PHE VAL ALA THR ALA GLY ASP VAL LEU ALA ALA

SER ALA ALA ASP ALA ASP PRO PHE PHE ALA ARG ALA ILE LEU GLY ARG PRO PHE ASP ALA SER LEU LEU THR GLY GLU LEU PHE PRO GLY HIS PRO VAL TYR GLN ARG PRO LEU ALA ASP GLU ALA GLY PRO SER ALA PRO THR ALA ALA ARG ASP PRO ARG ASP LEU ALA GLY GLY ASP

GLY GLY SER GLY PRO GLU ASP PRO ALA ALA PRO PRO ALA ARG GLN ALA ASP PRO GLY VAL LEU ALA PRO THR LEU LEU THR ASP ALA THR THR GLY GLU PRO VAL PRO PRO ARG MET TRP ALA TRP ILE HIS GLY LEU GLU GLU LEU ALA SER ASP ASP ALA GLY GLY PRO THR PRO ASN

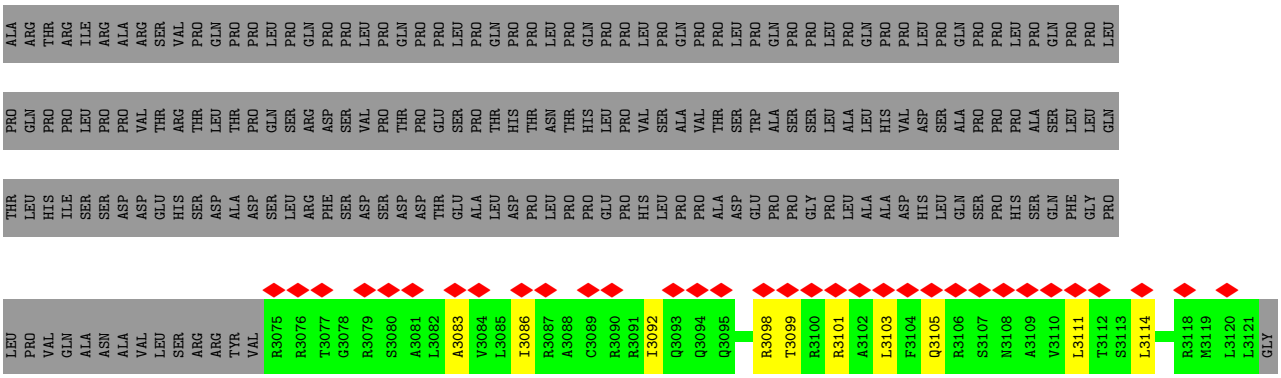
PRO ALA PRO ALA LEU LEU PRO PRO PRO ALA THR ASP GLN SER VAL PRO THR SER GLN TYR ALA PRO ARG PRO ILE GLY PRO ALA ALA THR ALA ARG GLU THR ARG PRO SER VAL PRO PRO GLN GLN ASN THR GLY ARG VAL PRO VAL ALA PRO ARG ASP ASP PRO ARG PRO SER PRO PRO

THR PRO SER PRO PRO ALA ASP ALA ALA LEU PRO PRO PRO ALA PHE SER GLY SER ALA ALA ALA PHE SER ALA ALA VAL PRO ARG VAL ARG ARG SER ARG ARG THR ARG ALA LYS SER ARG ALA PRO ARG ALA SER ALA PRO PRO GLU GLY TRP ARG PRO PRO ALA LEU PRO ALA PRO VAL

ALA PRO VAL ALA ALA SER ALA ARG PRO PRO ASP GLN PRO PRO THR PRO GLU SER ALA PRO PRO ALA TRP VAL SER ALA LEU PRO LEU PRO PRO GLY PRO ALA SER ALA ARG GLY ALA PHE PRO ALA PRO THR LEU ALA PRO ILE PRO PRO PRO PRO ALA GLU GLY ALA VAL VAL PRO GLY

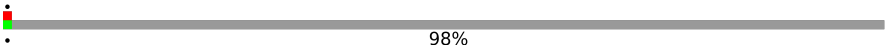
GLY ASP ARG ARG ARG GLY ARG ARG GLN THR THR ALA GLY PRO SER PRO THR PRO PRO ARG GLY PRO ALA ALA GLY PRO PRO ARG ARG LEU THR ARG PRO ALA VAL ALA SER LEU SER ALA SER LEU ASN SER LEU PRO SER PRO ARG ASP PRO ALA ASP HIS ALA ALA ALA VAL SER ALA

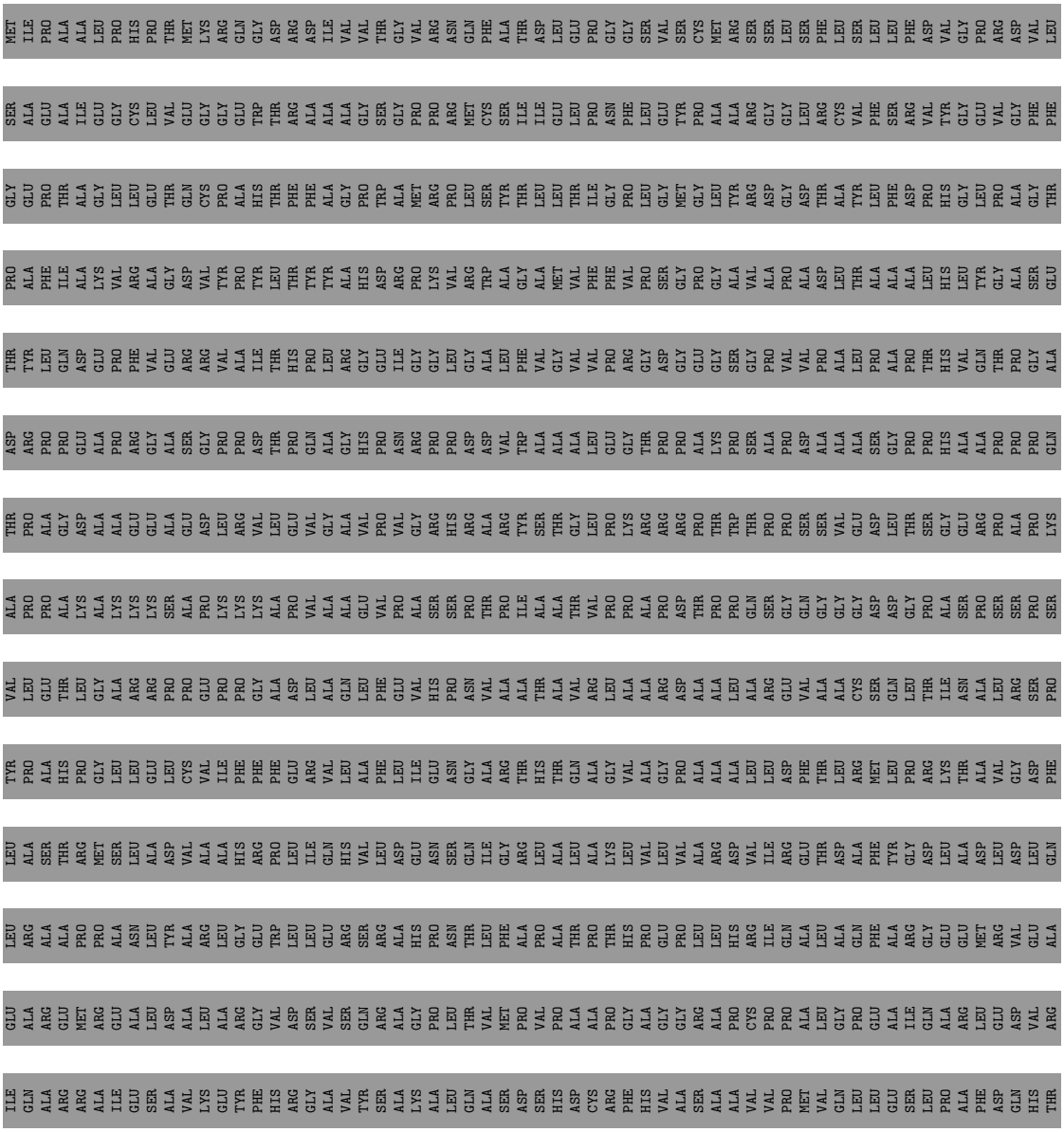
ALA ALA ALA ALA VAL PRO PRO SER PRO GLY LEU ALA PRO PRO THR SER ALA VAL GLN THR SER PRO PRO PRO LEU ALA PRO GLY PRO VAL ALA PRO SER GLU PRO LEU CYS GLY TRP VAL VAL PRO GLY GLY PRO VAL ALA ARG ARG PRO PRO PRO GLN SER PRO ALA THR LYS PRO ALA



• Molecule 5: Large tegument protein deneddylase

Chain Q:





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LEU GLU GLU LEU ALA ARG SER ILE HIS GLY ILE ASN ASP GLN GLN ALA ARG ARG SER SER GLY LEU ALA GLU LEU GLN ARG PHE ASP ALA LEU ASP ALA ALA LEU ALA GLN GLN LEU ASP SER ASP ALA ALA PHE VAL PRO ALA THR GLY PRO ALA PRO TYR VAL ASP GLY GLY GLY LEU

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

GLU LYS PHE LEU HIS LYS LEU GLN GLY VAL LEU ARG PRO LEU PRO ASP PHE VAL GLY LEU LYS ALA CYS PRO ALA VAL LEU ALA THR LEU ARG ALA SER LEU PRO ALA GLY TRP THR ASP LEU ALA ASP ALA VAL ARG GLY PRO PRO PRO GLU VAL THR ALA ALA LEU ARG ALA ASP LEU

TRP GLY LEU LEU GLY GLN TYR ARG GLU ALA LEU GLU HIS PRO THR PRO ASP THR ALA THR ALA LEU ALA GLY LEU HIS PRO ALA PHE VAL VAL VAL LEU LYS THR LEU PHE ALA ASP ALA PRO GLU THR PRO VAL LEU VAL GLN PHE PHE SER ASP HIS ALA PRO THR ILE ALA LYS ALA

VAL SER ASN ALA ILE ASN ALA GLY SER ALA ALA VAL ALA THR ALA SER PRO ALA ALA THR VAL ASP ALA ALA VAL ARG ALA HIS GLY ALA LEU ALA ASP ALA VAL SER ALA LEU GLY ALA ALA ALA ARG ASP PRO ALA SER PRO LEU SER PHE LEU ALA VAL LEU ALA ASP SER ALA ALA

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

SER LEU ALA GLY HIS GLU ALA GLY PHE GLY GLY LEU LEU HIS ALA GLU GLY THR ALA GLY ASP HIS SER PRO SER GLY ARG ALA LEU GLN GLU LEU GLY LYS VAL ILE GLY ALA THR ARG ARG ARG ALA ASP GLU LEU GLU ALA ALA VAL ALA ASP LEU THR ALA LYS MET ALA ALA GLN

ARG ALA ARG GLY SER SER GLU ARG TRP ALA ALA GLY VAL GLU ALA ALA LEU ASP ARG VAL GLU ASN ARG ALA GLU PHE ASP VAL VAL GLU LEU ARG ARG LEU GLN ALA LEU ALA GLY THR HIS GLY TYR ASN PRO ARG ASP PHE ARG LYS ARG ALA GLU GLN ALA LEU ALA ALA ASN ALA

GLU ALA VAL THR LEU ALA LEU ASP THR ALA PHE ALA PHE ASN PRO TYR THR PRO GLU ASN GLN ARG HIS PRO MET LEU PRO PRO LEU ALA ALA ILE HIS ARG LEU GLY TRP SER ALA ALA PHE HIS ALA ALA ALA GLU THR TYR ALA ASP MET PHE ARG VAL ASP ALA GLU PRO LEU ALA

ARG LEU LEU ARG ILE ALA GLU GLY LEU LEU GLU MET ALA GLN ALA GLY ASP GLY PHE ILE ASP TYR HIS GLU ALA VAL GLY ARG LEU ALA ASP ASP MET THR SER VAL PRO GLY LEU ARG ARG TYR VAL PRO PHE PHE GLN HIS GLY TYR ALA ASP TYR VAL GLU LEU ARG ASP ARG LEU

ASP ALA ILE ARG ALA ASP VAL HIS ARG ALA LEU GLY GLY VAL PRO LEU ASP LEU ALA ALA ALA ALA GLU GLN ILE SER ALA ALA ARG ASN ASP PRO GLU ALA THR ALA GLU LEU VAL ARG THR GLY VAL THR LEU PRO CYS PRO SER GLU ASP ALA LEU VAL ALA CYS ALA ALA ALA LEU

GLU ARG VAL ASP GLN SER PRO VAL LYS ASN THR ALA TYR ALA GLU TYR VAL ALA PHE VAL THR ARG GLN ASP THR ALA GLU THR LYS ASP ALA VAL VAL ARG ALA LYS GLN GLN ARG ALA GLU ALA THR GLU ARG VAL MET ALA GLY LEU ARG GLU ALA LEU ALA ALA ARG GLU ARG ARG

ALA GLN ILE GLU ALA GLU GLY LEU ALA ASN LEU LYS THR MET LEU LYS VAL VAL ALA VAL PRO ALA THR VAL ALA LYS THR LEU ASP GLN ALA ARG SER VAL ALA GLU ILE ALA ASP GLN VAL GLU VAL LEU LEU ASP GLN THR GLU LYS THR ARG GLU LEU ASP VAL PRO ALA VAL ILE

TRP LEU GLU HIS ALA GLN ARG THR PHE GLU THR HIS PRO LEU SER ALA ALA ARG GLY ASP GLY PRO GLY PRO LEU ALA ARG HIS ALA GLY ARG LEU GLY ALA LEU PHE ASP THR ARG ARG ARG VAL ASP ALA LEU ARG ARG SER LEU GLU GLU ALA GLU ALA GLU TRP ASP GLU VAL TRP

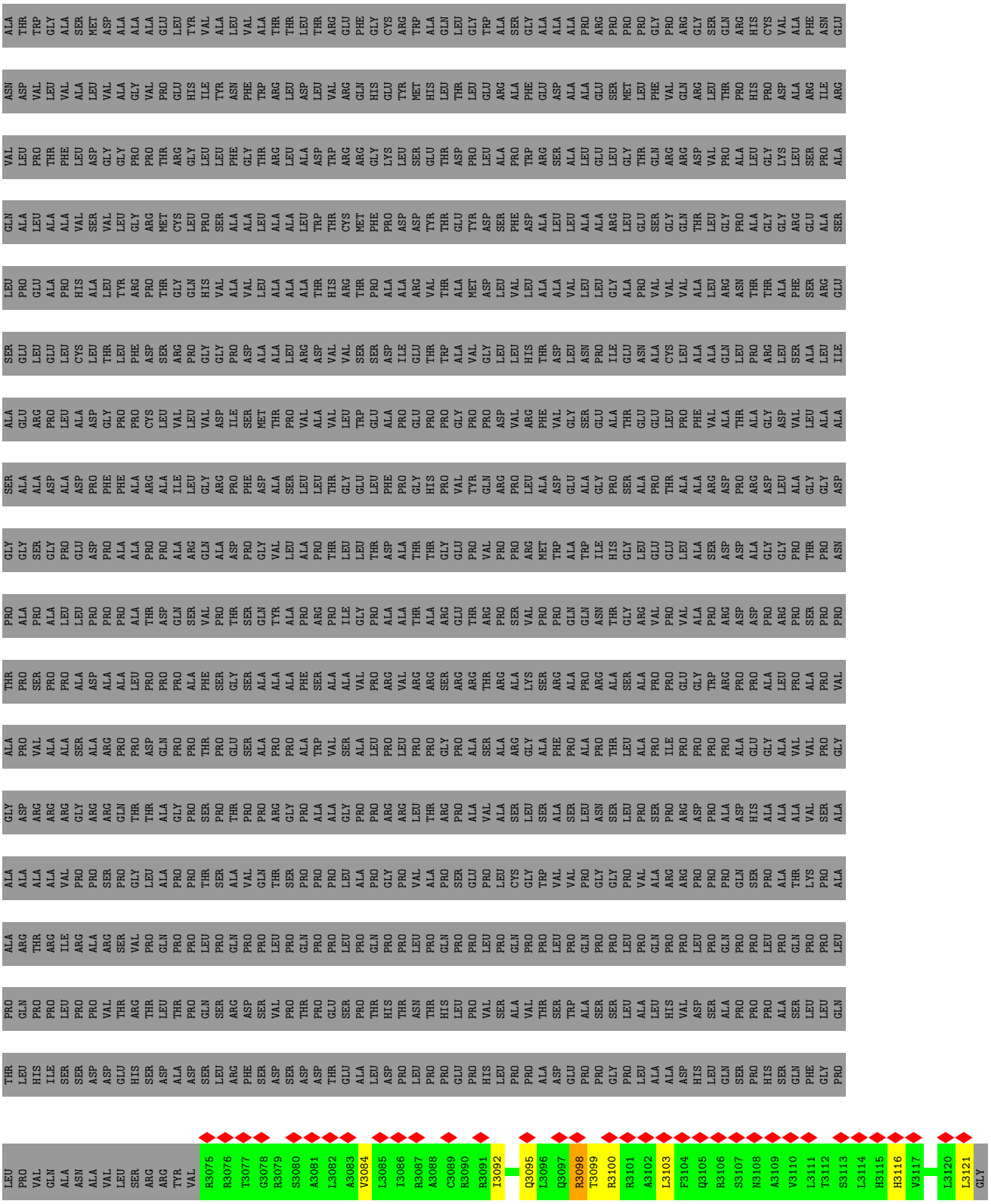
GLY ARG PHE GLY ARG VAL ARG GLY GLY ALA TRP LYS SER PRO GLU GLY PHE ARG ALA MET HIS GLU GLN LEU ARG ALA LEU GLN ASP THR THR ASN THR VAL SER GLY LEU ARG ALA GLN PRO ALA TYR GLU ARG LEU SER ALA ARG TYR GLN GLY VAL LEU GLY ALA LYS GLY ALA GLU

ARG ALA GLU ALA VAL GLU GLU LEU GLY ALA ARG VAL THR LYS HIS THR ALA LEU CYS ALA ARG LEU ARG ASP GLU VAL VAL ARG ARG VAL PRO TRP GLU MET ASN PHE ASP ALA LEU GLY GLY LEU LEU ALA GLU PHE ASP ALA ALA ALA ALA ASP LEU ALA PRO TRP ALA VAL GLU GLU

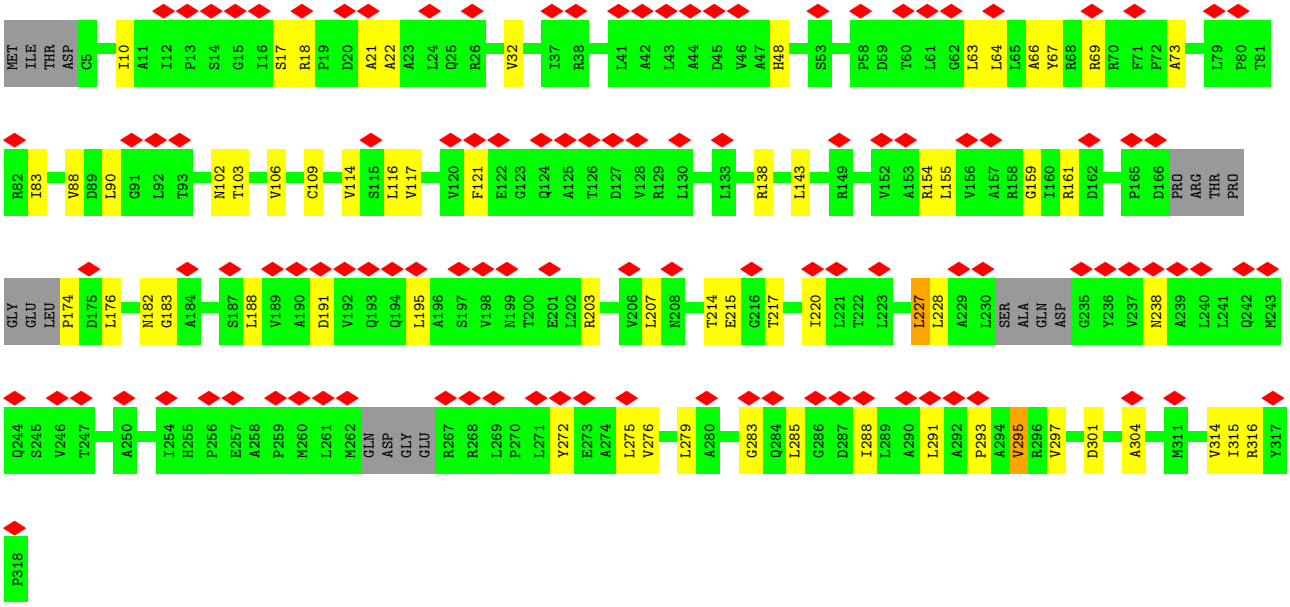
PHE ARG GLY ALA ARG GLU LEU ILE GLN TYR ARG MET GLY LEU TYR SER ALA TYR ALA ARG ALA GLY GLY GLN THR GLY ALA GLY ALA GLU SER ALA PRO ALA PRO LEU LEU VAL ASP LEU ARG ALA LEU ASP ALA ARG ALA ARG ALA SER SER PRO GLU GLY HIS GLU VAL ASP PRO

GLN LEU LEU ARG ARG ARG GLY GLU ALA TYR LEU ARG ALA GLY GLY ASP PRO GLY PRO LEU VAL LEU ARG GLU ALA VAL SER ALA LEU ASP LEU PRO PHE ALA THR SER PHE LEU ALA PRO ASP GLY THR PRO LEU GLN TYR ALA LEU CYS PHE PRO ALA VAL THR ASP LYS LEU GLY ALA

LEU LEU MET ARG PRO GLU ALA ALA CYS VAL ARG PRO PRO LEU PRO THR ASP VAL LEU GLU SER ALA PRO THR VAL THR ALA MET TYR VAL LEU THR VAL VAL ASN ARG LEU GLN LEU ALA LEU SER ASP ALA GLN ALA ALA ASN PHE GLN LEU PHE GLY ARG PHE VAL ARG HIS ARG GLN

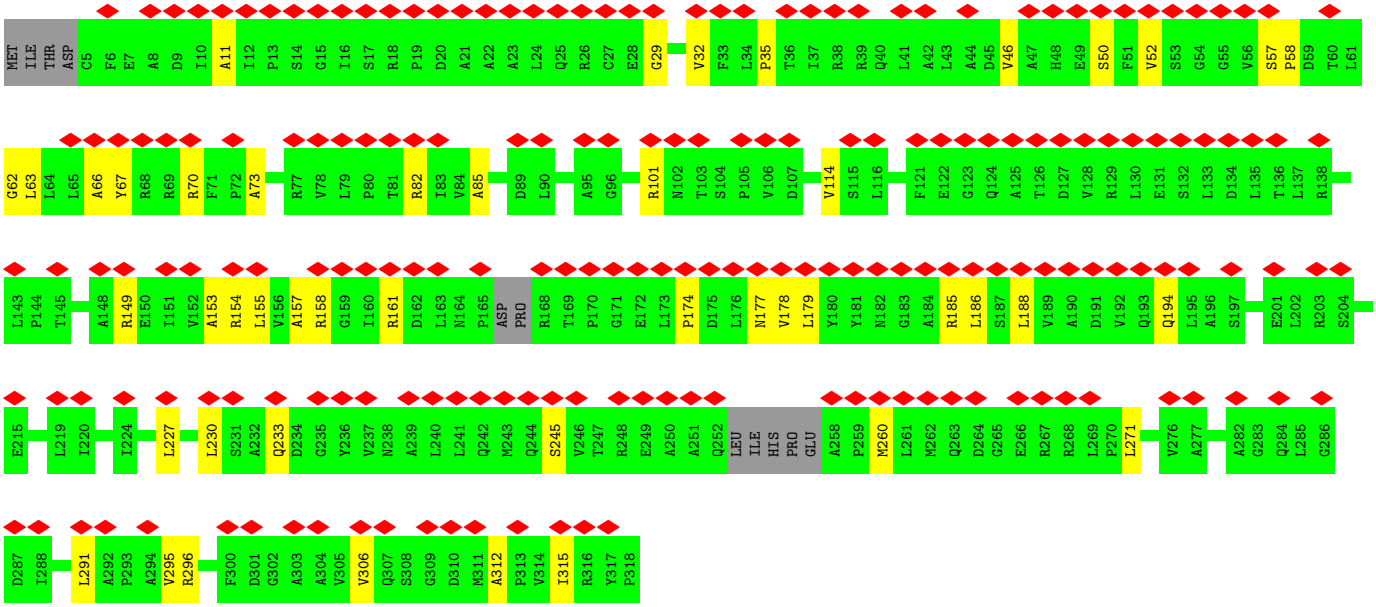


• Molecule 6: Triplex capsid protein 2



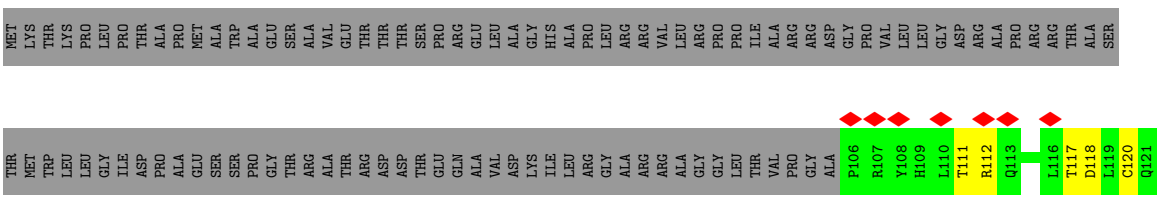
• Molecule 6: Triplex capsid protein 2

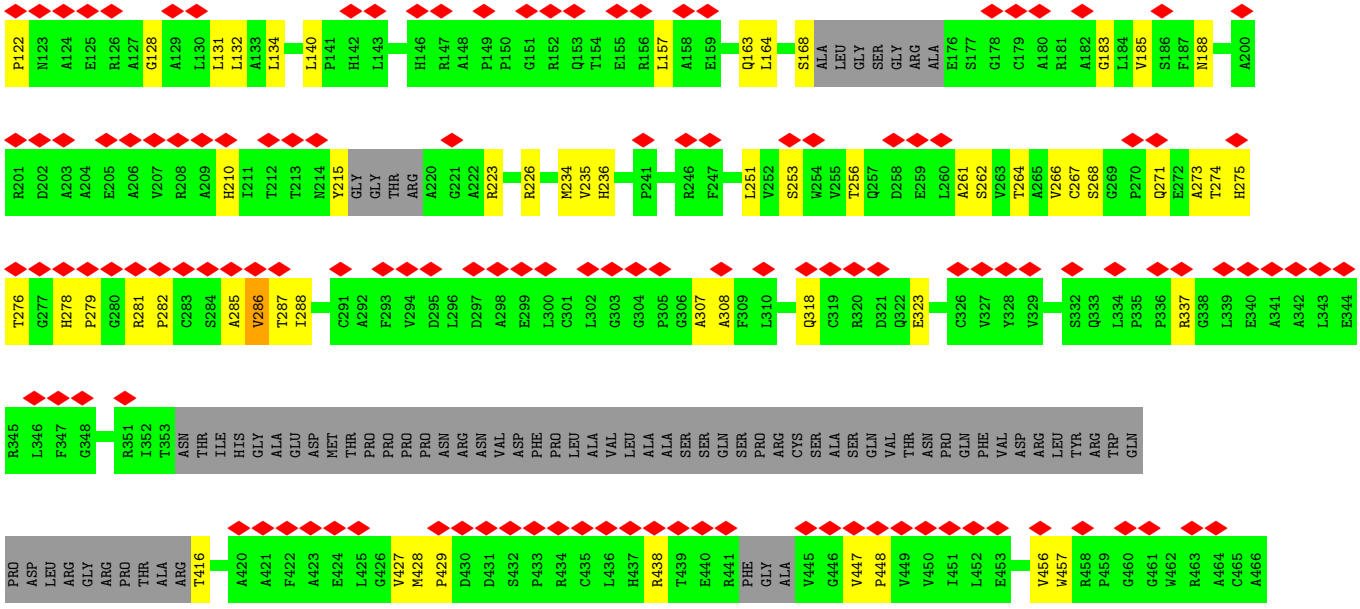
Chain S:



• Molecule 7: Triplex capsid protein 1

Chain T:




P122 N123 A124 E125 R126 A127 G128 A129 L130 L131 L132 A133 L134 L140 P141 H142 L143 H146 R147 A148 P149 P150 G151 R152 Q153 T154 E155 R156 L157 A158 E159 Q163 L164 S168 ALA LEU GLY SER GLY ARG ALA E176 S177 G178 C179 A180 R181 A182 G183 L184 V185 S186 F187 N188 A200
R201 D202 A203 A204 E205 A206 V207 R208 A209 H210 T211 T212 T213 N214 Y215 GLY GLY THR ARG A220 G221 A222 R223 R226 M234 V235 H236 P241 R246 F247 L251 V252 S253 W254 V255 T256 Q257 D258 E259 L260 A261 S262 V263 T264 A265 V266 C267 S268 G269 P270 Q271 E272 A273 T274 H275
T276 G277 H278 P279 G280 R281 P282 C283 S284 A285 V286 T287 I288 C291 A292 F293 V294 D295 L296 D297 A298 E299 L300 C301 L302 G303 G304 P305 G306 A307 A308 F309 L310 Q318 C319 R320 D321 Q322 E323 C326 V327 Y328 V329 S332 Q333 L334 P335 P336 R337 G338 L339 E340 A341 A342 L343 E344
R345 L346 F347 G348 R351 I352 T353 ASN THR ILE HIS GLY ALA GLU ASP MET THR PRO PRO PRO PRO ASN ARG ASN VAL ASP PHE PRO LEU ALA VAL LEU ALA ALA SER SER GLN SER PRO ARG CYS SER ALA SER GLN VAL THR ASN PRO GLN PHE VAL ASP ARG LEU TYR ARG TRP GLN
PRO ASP LEU ARG GLY ARG PRO THR ALA ARG T416 A420 A421 F422 A423 E424 L425 G426 V427 M428 P429 D430 D431 S432 P433 R434 C435 L436 H437 R438 T439 E440 R441 PHE GLY ALA V445 G446 V447 P448 V449 V450 I451 L452 E453 V456 W457 R458 P459 G460 G461 W462 R463 A464 C465 A466

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	35698	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 ($e^-/Å^2$)	30.0, 30	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	FEI FALCON II (4k x 4k), FEI FALCON II (4k x 4k)	Depositor
Maximum map value	0.109	Depositor
Minimum map value	-0.078	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.012	Depositor
Recommended contour level	0.02	Depositor
Map size (Å)	414.0, 414.0, 414.0	wwPDB
Map dimensions	300, 300, 300	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.38, 1.38, 1.38	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	0.41	0/10068	0.66	4/13767 (0.0%)
1	B	0.39	0/10427	0.63	2/14259 (0.0%)
1	C	0.36	0/10464	0.59	1/14307 (0.0%)
1	D	0.37	0/10475	0.62	4/14319 (0.0%)
1	E	0.39	0/10416	0.62	3/14235 (0.0%)
1	F	0.40	0/10227	0.66	9/13997 (0.1%)
2	G	0.34	1/4350 (0.0%)	0.55	1/5933 (0.0%)
3	H	0.30	0/779	0.54	0/1062
3	I	0.31	0/659	0.55	0/897
4	J	0.30	0/795	0.53	0/1084
4	K	0.32	0/795	0.56	0/1084
4	L	0.30	0/795	0.55	0/1084
4	M	0.29	0/795	0.51	0/1084
4	N	0.26	0/795	0.46	0/1084
4	O	0.26	0/795	0.48	0/1084
5	P	0.23	0/390	0.50	0/520
5	Q	0.29	0/384	0.49	0/513
6	R	0.32	0/2114	0.64	0/2909
6	S	0.30	0/2215	0.62	0/3047
7	T	0.33	0/2055	0.67	0/2818
All	All	0.37	1/79793 (0.0%)	0.62	24/109087 (0.0%)

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	7
1	B	0	5
1	C	0	8
1	D	0	6
1	E	0	6

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Mol	Chain	#Chirality outliers	#Planarity outliers
1	F	0	7
2	G	0	2
6	R	0	2
6	S	0	1
7	T	0	1
All	All	0	45

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	G	19	SER	C-N	8.43	1.50	1.34

All (24) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	F	293	LEU	CA-CB-CG	8.59	135.06	115.30
1	F	892	LEU	CA-CB-CG	6.92	131.23	115.30
1	A	678	LEU	CA-CB-CG	6.63	130.56	115.30
1	F	1348	ASP	CB-CG-OD1	6.49	124.14	118.30
2	G	657	LEU	CA-CB-CG	6.47	130.19	115.30
1	A	135	LEU	CA-CB-CG	6.31	129.82	115.30
1	F	1285	LYS	C-N-CA	6.26	137.35	121.70
1	B	513	LEU	CA-CB-CG	5.92	128.90	115.30
1	D	1084	GLU	C-N-CA	5.90	136.46	121.70
1	E	1266	ALA	C-N-CA	5.73	136.02	121.70
1	E	293	LEU	CA-CB-CG	5.71	128.44	115.30
1	D	199	LEU	CA-CB-CG	5.63	128.25	115.30
1	F	293	LEU	C-N-CA	5.53	135.53	121.70
1	F	892	LEU	CB-CG-CD1	-5.50	101.66	111.00
1	D	1083	HIS	C-N-CA	5.23	134.76	121.70
1	D	986	ASP	CB-CG-OD2	5.22	123.00	118.30
1	E	986	ASP	CB-CG-OD2	5.22	123.00	118.30
1	A	986	ASP	CB-CG-OD2	5.20	122.98	118.30
1	F	986	ASP	CB-CG-OD2	5.20	122.98	118.30
1	B	986	ASP	CB-CG-OD2	5.20	122.97	118.30
1	C	986	ASP	CB-CG-OD2	5.17	122.96	118.30
1	F	1347	ARG	C-N-CA	5.13	134.52	121.70
1	A	1078	LEU	CA-CB-CG	5.03	126.88	115.30
1	F	380	LEU	C-N-CA	5.00	134.21	121.70

There are no chirality outliers.

All (45) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1012	GLU	Peptide
1	A	1113	GLY	Peptide
1	A	305	THR	Peptide
1	A	573	ALA	Peptide
1	A	665	VAL	Peptide
1	A	81	CYS	Peptide
1	A	975	ASN	Peptide
1	B	1201	ARG	Peptide
1	B	1222	VAL	Peptide
1	B	534	PRO	Peptide
1	B	764	VAL	Peptide
1	B	972	ASN	Peptide
1	C	1083	HIS	Peptide
1	C	1161	GLN	Peptide
1	C	1162	PRO	Peptide
1	C	1222	VAL	Peptide
1	C	1241	THR	Peptide
1	C	131	ALA	Peptide
1	C	411	PRO	Peptide
1	C	43	ARG	Peptide
1	D	1084	GLU	Peptide
1	D	1161	GLN	Peptide
1	D	1222	VAL	Peptide
1	D	258	SER	Peptide
1	D	266	HIS	Peptide
1	D	755	ARG	Peptide
1	E	1162	PRO	Peptide
1	E	1222	VAL	Peptide
1	E	1265	GLY	Peptide
1	E	1316	GLY	Peptide
1	E	371	GLY	Peptide
1	E	43	ARG	Peptide
1	F	105	ALA	Peptide
1	F	1113	GLY	Peptide
1	F	1161	GLN	Peptide
1	F	1222	VAL	Peptide
1	F	293	LEU	Peptide
1	F	447	HIS	Peptide
1	F	453	SER	Peptide
2	G	260	ILE	Peptide
2	G	504	ILE	Peptide
6	R	103	THR	Peptide
6	R	315	ILE	Peptide

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Mol	Chain	Res	Type	Group
6	S	260	MET	Peptide
7	T	140	LEU	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	A	9828	0	9537	215	0
1	B	10173	0	9890	200	0
1	C	10209	0	9935	152	0
1	D	10221	0	9958	164	0
1	E	10162	0	9934	165	0
1	F	9978	0	9625	188	0
2	G	4241	0	4187	96	0
3	H	759	0	737	15	0
3	I	644	0	629	22	0
4	J	773	0	748	9	0
4	K	773	0	748	16	0
4	L	773	0	748	15	0
4	M	773	0	748	15	0
4	N	773	0	748	7	0
4	O	773	0	748	8	0
5	P	388	0	426	7	0
5	Q	382	0	415	13	0
6	R	2078	0	2053	41	0
6	S	2175	0	2213	31	0
7	T	2008	0	1886	35	0
All	All	77884	0	75913	1256	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 (1256) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:321:VAL:HG22	1:B:18:LEU:CD1	1.80	1.11

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:43:ARG:CB	1:A:1091:PHE:CZ	2.36	1.08
1:A:43:ARG:CB	1:A:1091:PHE:CE2	2.49	0.95
2:G:257:ASN:HA	2:G:260:ILE:HD11	1.45	0.94
1:A:321:VAL:HG22	1:B:18:LEU:HD11	1.50	0.90
1:B:1082:ARG:HH11	1:B:1089:VAL:HG12	1.44	0.82
2:G:257:ASN:CA	2:G:260:ILE:HD11	2.15	0.76
1:B:826:CYS:HB2	1:B:966:GLY:H	1.52	0.74
1:F:895:GLN:HA	4:L:61:LEU:HB3	1.70	0.74
1:A:512:ARG:HH12	1:A:564:PRO:HD2	1.52	0.74
1:A:496:GLY:HA3	1:A:504:ARG:HH22	1.54	0.73
1:B:267:ALA:HB1	1:B:274:VAL:HB	1.71	0.72
1:B:1089:VAL:O	1:B:1091:PHE:HD1	1.71	0.72
1:B:1085:THR:HB	1:B:1090:ASN:OD1	1.89	0.71
1:A:100:HIS:H	1:B:63:ASN:HD21	1.40	0.69
1:F:139:ALA:HA	1:F:142:LEU:HB2	1.75	0.69
1:B:1089:VAL:O	1:B:1091:PHE:CD1	2.45	0.69
1:A:1073:TYR:OH	1:A:1097:ARG:NH1	2.26	0.68
2:G:382:SER:HB2	2:G:403:GLU:HB2	1.76	0.68
1:B:1127:GLN:CD	1:B:1184:VAL:HG13	2.14	0.67
7:T:267:CYS:O	7:T:271:GLN:NE2	2.27	0.67
1:A:836:TYR:O	1:A:840:GLN:NE2	2.26	0.67
1:E:530:GLN:O	1:E:536:ASN:ND2	2.26	0.66
6:S:70:ARG:O	7:T:337:ARG:NH2	2.28	0.66
1:D:267:ALA:HB1	1:D:274:VAL:H	1.59	0.66
1:B:281:THR:H	1:B:284:ILE:HD12	1.60	0.66
1:D:425:PRO:HG3	1:D:431:GLU:HB2	1.78	0.66
1:F:1342:LEU:HB3	1:F:1362:LEU:HD12	1.77	0.65
1:D:450:LEU:HB3	1:D:1124:ASN:HD21	1.60	0.65
1:F:1304:THR:HG21	1:F:1314:PRO:HD2	1.79	0.65
2:G:79:ALA:HB3	2:G:111:PHE:HB2	1.78	0.65
1:A:261:VAL:HG22	1:A:263:ARG:H	1.63	0.64
1:F:730:ALA:HB2	1:F:750:ARG:HH12	1.62	0.64
7:T:253:SER:HG	7:T:264:THR:HG1	1.43	0.64
1:A:204:TYR:OH	1:B:1117:ASN:ND2	2.29	0.64
1:C:285:LYS:HE2	1:C:377:LEU:HB3	1.80	0.64
1:C:228:CYS:HA	1:C:1368:PRO:HG3	1.80	0.64
3:H:15:HIS:HB3	3:H:18:PHE:HB2	1.80	0.64
1:A:1304:THR:HG22	1:A:1306:ALA:H	1.63	0.64
1:D:417:ALA:O	1:D:1354:ARG:NH2	2.31	0.64
2:G:159:ARG:HG2	2:G:386:VAL:HG22	1.80	0.64
1:B:960:VAL:HA	1:B:994:LEU:HD13	1.80	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:T:118:ASP:O	7:T:223:ARG:NH1	2.31	0.63
1:C:912:ALA:HB3	1:C:928:ILE:HB	1.81	0.63
1:B:838:THR:HG1	1:B:954:TYR:HH	1.46	0.63
1:D:193:PRO:HG2	1:D:198:LEU:HD12	1.81	0.63
1:E:252:THR:HG22	1:E:373:ARG:HD3	1.79	0.63
1:E:673:TYR:OH	1:E:801:ARG:NH2	2.32	0.62
1:E:947:HIS:HB3	4:L:80:ALA:H	1.64	0.62
1:C:523:GLU:HB3	1:C:1008:GLN:HG2	1.82	0.62
1:B:336:LEU:HD22	1:C:156:HIS:HE1	1.64	0.62
1:B:576:ARG:HA	1:B:1003:ARG:HH12	1.64	0.62
1:C:485:ASN:HD21	1:C:513:LEU:HA	1.64	0.62
1:D:707:PHE:HA	1:D:1042:THR:HG21	1.82	0.62
2:G:61:GLN:HE21	2:G:63:ARG:HH21	1.48	0.62
1:C:618:PHE:HA	1:C:940:MET:HB3	1.82	0.62
1:F:920:THR:H	1:F:923:THR:HG1	1.48	0.62
1:D:754:CYS:HA	1:D:910:CYS:HA	1.82	0.62
1:A:321:VAL:HG22	1:B:18:LEU:HD13	1.79	0.61
1:D:873:ASN:HA	4:M:92:PHE:HB2	1.82	0.61
1:D:620:ASP:OD1	1:E:691:ARG:NH1	2.33	0.61
1:E:1276:PHE:HA	1:E:1329:GLN:HE22	1.65	0.61
1:B:707:PHE:HA	1:B:1042:THR:HG21	1.83	0.61
1:C:656:TRP:O	1:C:660:ARG:NH1	2.33	0.61
1:A:182:ASP:O	1:A:186:HIS:ND1	2.33	0.61
1:D:236:LYS:NZ	1:D:1370:LYS:O	2.33	0.61
1:D:982:ASP:OD1	1:D:985:ARG:NH1	2.33	0.61
2:G:238:LEU:HD22	2:G:387:LEU:HB2	1.81	0.61
1:C:957:VAL:HG22	1:C:959:PRO:HD3	1.82	0.61
1:D:530:GLN:O	1:D:536:ASN:ND2	2.33	0.61
1:E:557:GLU:HG3	1:E:559:PRO:HD2	1.80	0.61
1:B:530:GLN:O	1:B:536:ASN:ND2	2.33	0.61
1:D:629:LEU:HB3	1:D:839:LEU:HD21	1.82	0.61
1:D:1182:ASP:HB2	1:D:1309:VAL:HA	1.83	0.61
1:E:982:ASP:OD1	1:E:985:ARG:NH1	2.33	0.61
1:F:1085:THR:OG1	1:F:1090:ASN:ND2	2.34	0.61
1:A:272:ARG:HE	1:A:374:LEU:HB2	1.64	0.60
1:A:1130:TYR:HB3	1:A:1148:ARG:HH21	1.65	0.60
1:B:1084:GLU:HA	1:B:1084:GLU:OE2	1.99	0.60
1:C:1201:ARG:HH12	1:D:1179:HIS:HE1	1.48	0.60
1:D:326:VAL:HB	1:D:329:LEU:HD12	1.84	0.60
1:B:76:SER:OG	1:B:266:HIS:NE2	2.32	0.60
3:I:83:ARG:HG3	5:Q:3103:LEU:HD11	1.84	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:301:ASP:H	7:T:112:ARG:HB3	1.67	0.60
1:B:909:LEU:HD11	1:B:929:PHE:HB3	1.83	0.60
1:D:1257:TYR:HB2	1:D:1277:PHE:HD2	1.67	0.60
1:D:749:ASP:O	1:D:752:ARG:NH2	2.32	0.60
7:T:438:ARG:HA	7:T:448:PRO:HA	1.84	0.60
1:B:490:TYR:OH	1:B:560:GLY:O	2.19	0.60
2:G:132:LEU:HB2	2:G:146:LEU:HB2	1.83	0.60
1:B:712:PRO:O	1:B:719:GLN:NE2	2.35	0.60
1:A:891:MET:O	1:A:895:GLN:NE2	2.34	0.60
1:D:834:ARG:HD3	4:M:90:PRO:HB3	1.83	0.60
1:A:142:LEU:HG	1:A:158:GLN:HG3	1.84	0.60
1:E:404:LEU:HB2	1:E:1052:VAL:HB	1.84	0.60
1:D:664:PHE:HB3	1:D:670:LEU:HD13	1.83	0.59
3:I:80:ILE:HD13	5:P:3103:LEU:HB3	1.84	0.59
1:A:674:ILE:HG23	1:A:678:LEU:HD12	1.83	0.59
1:E:785:HIS:NE2	1:E:798:ARG:O	2.35	0.59
1:A:828:ALA:HB1	1:A:955:PHE:HB3	1.84	0.59
1:B:84:PHE:O	1:B:1097:ARG:NH2	2.34	0.59
2:G:10:GLN:HA	2:G:13:LEU:HD23	1.84	0.59
1:B:728:ASP:O	1:B:810:LYS:NZ	2.35	0.59
1:E:674:ILE:HG13	1:E:678:LEU:HD12	1.85	0.59
1:F:826:CYS:SG	1:F:827:THR:N	2.76	0.59
2:G:650:CYS:HB2	2:G:662:VAL:HB	1.84	0.59
1:A:87:LEU:H	1:A:1076:GLY:HA2	1.67	0.59
7:T:157:LEU:HD11	7:T:234:MET:HA	1.84	0.59
1:A:769:CYS:O	1:A:900:ASN:ND2	2.35	0.59
1:C:815:VAL:HA	1:C:1024:LEU:HD22	1.85	0.59
1:D:1206:ARG:HB3	1:D:1277:PHE:HE1	1.68	0.59
1:F:748:LEU:HD13	1:F:750:ARG:HB2	1.85	0.59
1:A:367:LEU:HD13	1:A:374:LEU:HD21	1.85	0.58
1:A:404:LEU:HB2	1:A:1052:VAL:HB	1.83	0.58
1:F:707:PHE:HA	1:F:1042:THR:HG21	1.85	0.58
1:C:1236:ARG:NH2	1:C:1241:THR:O	2.36	0.58
1:F:696:HIS:HE1	1:F:1021:THR:HG21	1.67	0.58
6:R:161:ARG:NH1	6:R:174:PRO:O	2.36	0.58
1:B:406:LEU:HB2	1:B:1050:PHE:HB2	1.85	0.58
1:B:629:LEU:HB3	1:B:839:LEU:HD21	1.85	0.58
1:D:645:ALA:O	1:D:649:THR:N	2.33	0.58
1:F:872:ALA:O	4:L:30:ASN:ND2	2.36	0.58
1:F:1082:ARG:NH2	1:F:1084:GLU:OE2	2.36	0.58
1:B:276:GLY:HA3	1:B:375:VAL:HG22	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:777:ASN:O	4:O:51:ARG:NH2	2.37	0.58
1:B:278:LEU:HD13	1:B:375:VAL:HG11	1.86	0.58
1:B:1237:PRO:HB2	1:C:1156:ARG:HE	1.69	0.58
4:L:22:MET:HG2	4:L:64:LEU:HD22	1.86	0.58
1:A:129:LEU:O	1:A:1094:THR:OG1	2.21	0.58
1:A:1004:GLN:O	1:A:1008:GLN:NE2	2.36	0.58
1:B:1089:VAL:O	1:B:1089:VAL:HG23	2.04	0.58
1:B:1118:PRO:HG3	1:B:1374:LEU:HD13	1.85	0.58
1:D:99:VAL:O	1:D:118:ASN:ND2	2.36	0.58
4:M:76:GLN:O	4:M:96:ARG:NH2	2.30	0.58
7:T:285:ALA:O	7:T:287:THR:N	2.36	0.58
1:A:276:GLY:HA3	1:A:375:VAL:HG13	1.84	0.58
1:B:1118:PRO:HD3	1:B:1374:LEU:HD22	1.85	0.58
1:B:1233:ASP:O	1:C:1174:ARG:NH2	2.37	0.58
1:D:909:LEU:HA	1:D:931:GLY:HA2	1.85	0.58
1:E:460:THR:HG21	1:E:1187:PHE:HB2	1.85	0.58
1:D:497:PRO:HD2	1:D:504:ARG:HH12	1.68	0.58
1:D:1052:VAL:HG22	1:D:1187:PHE:HE1	1.68	0.58
1:B:717:GLN:HE21	1:B:748:LEU:HD22	1.69	0.58
1:F:381:GLU:HA	1:F:385:TYR:HB2	1.84	0.58
1:C:826:CYS:HB2	1:C:966:GLY:H	1.68	0.57
1:D:870:LEU:HD22	1:D:877:ARG:HA	1.86	0.57
1:E:413:MET:O	1:F:433:ARG:NH1	2.32	0.57
1:E:638:GLU:OE1	1:E:801:ARG:NH2	2.36	0.57
1:A:433:ARG:NH1	1:F:413:MET:O	2.35	0.57
1:C:730:ALA:HB2	1:C:750:ARG:HH12	1.69	0.57
1:F:1008:GLN:HE22	1:F:1011:ARG:HH11	1.52	0.57
1:A:960:VAL:HA	1:A:994:LEU:HD13	1.86	0.57
1:B:677:TYR:HD1	4:J:95:LYS:HG2	1.69	0.57
1:F:595:ARG:NH1	1:F:1045:HIS:O	2.38	0.57
1:E:544:HIS:CD2	1:E:546:ALA:H	2.22	0.57
2:G:253:ILE:O	2:G:257:ASN:ND2	2.38	0.57
1:B:425:PRO:HG3	1:B:431:GLU:HB2	1.85	0.57
1:B:502:GLN:HA	1:B:505:PHE:HB3	1.86	0.57
1:D:137:THR:HA	1:D:140:ILE:HD12	1.86	0.57
1:E:646:ARG:HA	1:E:649:THR:HG22	1.86	0.57
1:D:413:MET:O	1:E:433:ARG:NH1	2.38	0.57
1:F:1161:GLN:NE2	1:F:1170:GLN:OE1	2.37	0.57
1:F:204:TYR:OH	1:F:210:LEU:O	2.22	0.57
2:G:91:ALA:O	2:G:103:ARG:NH1	2.38	0.57
2:G:124:TYR:HB3	2:G:418:LEU:HD22	1.86	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:373:ARG:NH2	1:B:1067:GLU:OE1	2.38	0.57
1:E:1208:ARG:NH2	1:E:1240:ALA:O	2.38	0.57
6:R:275:LEU:HD22	6:S:157:ALA:HB2	1.86	0.57
1:E:708:THR:HA	1:E:1038:HIS:HB3	1.86	0.56
1:E:730:ALA:HB2	1:E:750:ARG:HH12	1.70	0.56
1:C:1076:GLY:H	1:C:1095:GLN:HE21	1.53	0.56
1:F:67:LEU:HD21	1:F:170:GLN:HB3	1.87	0.56
6:S:57:SER:O	6:S:194:GLN:NE2	2.37	0.56
1:B:1246:ALA:HA	1:B:1253:GLY:HA3	1.86	0.56
1:F:982:ASP:OD1	1:F:985:ARG:NH1	2.38	0.56
2:G:256:GLU:OE1	5:Q:3098:ARG:NH2	2.39	0.56
7:T:281:ARG:N	7:T:282:PRO:HD2	2.19	0.56
1:A:904:ARG:NH1	1:A:906:THR:OG1	2.36	0.56
1:B:528:ALA:HA	1:B:531:PHE:HB2	1.87	0.56
1:D:42:VAL:HG21	1:D:49:LEU:HD21	1.88	0.56
2:G:600:ARG:NH1	2:G:602:THR:O	2.39	0.56
1:A:272:ARG:NH2	1:A:372:ASP:O	2.38	0.56
1:A:676:THR:HG21	1:F:946:ASP:HB3	1.88	0.56
1:C:159:LEU:O	1:C:163:GLN:NE2	2.38	0.56
1:D:697:VAL:HG12	1:D:808:HIS:HD2	1.71	0.56
1:E:742:LEU:HD21	1:E:908:LEU:HD21	1.87	0.56
6:R:10:ILE:HB	6:R:83:ILE:HB	1.88	0.56
2:G:260:ILE:HG13	3:I:90:GLN:CD	2.25	0.56
1:A:63:ASN:HB3	1:F:95:VAL:HG13	1.87	0.56
1:A:1276:PHE:HA	1:A:1329:GLN:HE22	1.70	0.56
1:C:804:ASP:O	1:C:808:HIS:ND1	2.37	0.56
1:D:875:VAL:O	1:D:879:PHE:N	2.39	0.56
6:R:161:ARG:HE	6:S:271:LEU:HD12	1.71	0.56
1:B:1074:PHE:HB3	1:B:1097:ARG:HH11	1.71	0.56
1:D:99:VAL:HG13	1:D:118:ASN:HD22	1.70	0.56
1:D:359:GLN:NE2	1:D:360:THR:O	2.39	0.56
1:A:1215:ALA:O	1:A:1287:ARG:NH1	2.39	0.56
1:B:665:VAL:O	1:B:812:TYR:OH	2.22	0.56
1:D:618:PHE:HA	1:D:940:MET:HB3	1.88	0.56
1:C:544:HIS:CD2	1:C:546:ALA:H	2.24	0.55
2:G:487:LEU:HD23	2:G:490:LEU:HD12	1.88	0.55
6:S:179:LEU:HB2	6:S:186:LEU:HB2	1.87	0.55
1:A:617:ALA:HB2	1:A:661:CYS:HB3	1.86	0.55
1:A:803:ALA:H	1:F:981:ARG:HH22	1.53	0.55
1:C:104:ILE:HG23	1:D:179:GLY:HA2	1.88	0.55
1:D:228:CYS:HA	1:D:1368:PRO:HG3	1.88	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:742:LEU:HD12	1:D:908:LEU:HD21	1.87	0.55
1:B:1298:SER:HB2	1:B:1320:LEU:HD22	1.89	0.55
1:C:667:ASP:OD1	1:C:813:TYR:OH	2.25	0.55
1:E:450:LEU:HD22	1:E:1124:ASN:HD22	1.71	0.55
1:E:590:ALA:O	1:E:594:ALA:N	2.39	0.55
1:E:1298:SER:HB2	1:E:1320:LEU:HD22	1.88	0.55
1:F:754:CYS:HA	1:F:910:CYS:HA	1.89	0.55
3:H:56:GLN:HG3	3:I:55:LEU:HD21	1.88	0.55
1:A:951:ASN:ND2	1:A:972:ASN:O	2.37	0.55
1:B:711:GLY:H	1:B:719:GLN:HG3	1.70	0.55
1:D:255:THR:OG1	1:D:1067:GLU:OE2	2.25	0.55
1:E:738:ASP:OD1	1:E:738:ASP:N	2.37	0.55
1:E:951:ASN:ND2	1:E:972:ASN:O	2.39	0.55
1:F:229:ASP:O	1:F:236:LYS:NZ	2.39	0.55
1:F:445:LYS:NZ	1:F:1118:PRO:O	2.39	0.55
1:F:708:THR:OG1	1:F:723:ASN:ND2	2.40	0.55
1:C:968:ASP:O	1:C:972:ASN:ND2	2.36	0.55
1:D:1289:LEU:HD13	1:D:1292:LEU:HB2	1.89	0.55
4:L:51:ARG:HB3	4:L:55:ARG:HH12	1.72	0.55
6:R:276:VAL:HG21	6:S:154:ARG:HD3	1.88	0.55
1:A:445:LYS:HE2	1:A:1118:PRO:HG2	1.89	0.55
6:S:230:LEU:HA	6:S:233:GLN:HE21	1.71	0.55
1:C:1061:GLU:OE1	1:C:1114:THR:OG1	2.25	0.55
1:D:451:ARG:NH2	1:D:453:SER:OG	2.40	0.55
1:E:1181:GLN:NE2	1:E:1307:SER:O	2.40	0.55
1:F:284:ILE:HD11	1:F:1061:GLU:HB3	1.88	0.55
1:F:638:GLU:OE2	1:F:677:TYR:OH	2.25	0.55
4:M:17:VAL:HG21	4:M:53:PHE:HA	1.89	0.55
6:S:306:VAL:HG11	6:S:312:ALA:HB2	1.89	0.55
1:A:495:ALA:O	1:A:504:ARG:NH1	2.37	0.54
1:A:777:ASN:O	4:K:51:ARG:NH2	2.40	0.54
1:C:712:PRO:O	1:C:719:GLN:NE2	2.34	0.54
1:F:248:LEU:O	1:F:252:THR:N	2.39	0.54
5:P:3101:ARG:O	5:P:3105:GLN:N	2.40	0.54
1:D:951:ASN:ND2	1:D:972:ASN:O	2.33	0.54
1:B:1218:LYS:N	1:B:1221:ASP:OD2	2.40	0.54
1:C:281:THR:OG1	1:C:381:GLU:OE2	2.26	0.54
1:B:1200:ARG:NH2	1:B:1362:LEU:O	2.41	0.54
1:A:197:LEU:HA	1:A:223:LEU:HD11	1.89	0.54
1:A:1359:THR:OG1	1:A:1360:GLN:NE2	2.40	0.54
1:C:62:CYS:SG	1:C:63:ASN:N	2.81	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:777:ASN:ND2	4:N:47:GLN:OE1	2.40	0.54
4:K:18:ARG:HA	4:K:60:ALA:HB2	1.89	0.54
1:A:194:PRO:HD2	1:A:197:LEU:HD12	1.90	0.54
1:C:76:SER:OG	1:C:266:HIS:NE2	2.40	0.54
1:D:261:VAL:HG12	1:D:263:ARG:H	1.73	0.54
6:R:283:GLY:O	6:S:149:ARG:NH1	2.40	0.54
7:T:256:THR:HG22	7:T:262:SER:H	1.73	0.54
1:D:631:GLN:HG3	1:D:670:LEU:HD11	1.90	0.54
1:E:104:ILE:HG12	1:F:178:ARG:HB3	1.88	0.54
1:F:604:HIS:NE2	1:F:692:ASP:OD1	2.37	0.54
2:G:260:ILE:HG13	3:I:90:GLN:CG	2.37	0.54
1:D:673:TYR:OH	1:D:801:ARG:NH2	2.40	0.54
1:D:1298:SER:HB2	1:D:1320:LEU:HD22	1.90	0.54
2:G:38:VAL:HG13	2:G:136:TRP:HZ2	1.73	0.54
2:G:558:HIS:ND1	2:G:655:ARG:O	2.38	0.54
1:B:451:ARG:NH2	1:B:453:SER:OG	2.40	0.54
1:E:81:CYS:HA	1:E:1073:TYR:HB3	1.89	0.54
1:E:229:ASP:O	1:E:236:LYS:NZ	2.37	0.54
1:E:700:LEU:HD22	1:E:1025:MET:HG2	1.90	0.54
1:F:545:PRO:O	1:F:576:ARG:NH1	2.41	0.54
1:A:142:LEU:HD13	1:A:142:LEU:O	2.08	0.54
1:B:100:HIS:O	1:C:63:ASN:ND2	2.41	0.54
2:G:65:HIS:H	2:G:128:THR:HG22	1.72	0.54
1:A:777:ASN:ND2	4:K:47:GLN:OE1	2.39	0.53
1:C:1208:ARG:NH2	1:C:1240:ALA:O	2.42	0.53
1:D:392:TYR:HD2	1:D:395:VAL:HG12	1.73	0.53
3:I:79:ASP:HB3	5:Q:3103:LEU:HD22	1.90	0.53
1:C:1124:ASN:O	1:C:1156:ARG:NH1	2.40	0.53
1:D:906:THR:HB	1:D:934:HIS:HB3	1.90	0.53
1:A:944:HIS:HE1	1:A:968:ASP:HB3	1.73	0.53
1:B:1276:PHE:HA	1:B:1329:GLN:HE22	1.74	0.53
7:T:122:PRO:HB3	7:T:251:LEU:HD11	1.90	0.53
1:A:1236:ARG:NH2	1:A:1241:THR:O	2.41	0.53
1:B:193:PRO:HD3	1:B:1294:VAL:HG12	1.91	0.53
1:B:403:VAL:HG22	1:B:1053:VAL:HG22	1.90	0.53
1:C:418:ALA:HA	1:D:423:LEU:HD23	1.90	0.53
1:C:621:ARG:NH2	1:D:698:GLU:OE2	2.42	0.53
1:F:440:LEU:HD23	1:F:452:LEU:HD12	1.90	0.53
1:F:861:PRO:O	1:F:869:ASN:ND2	2.42	0.53
1:A:1054:ARG:HH22	1:A:1122:MET:HA	1.74	0.53
1:B:713:GLU:HG2	1:B:718:ALA:HA	1.91	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:777:ASN:O	4:J:51:ARG:NH2	2.37	0.53
1:F:548:ASP:OD1	1:F:576:ARG:NE	2.37	0.53
1:F:577:VAL:HG12	1:F:578:VAL:HG13	1.91	0.53
1:C:1123:GLY:H	1:C:1183:ALA:HB3	1.74	0.53
1:C:1200:ARG:NH2	1:C:1355:GLU:OE2	2.41	0.53
1:A:1059:VAL:HG12	1:A:1116:ARG:HD3	1.90	0.53
1:B:663:ALA:N	1:B:690:TYR:OH	2.36	0.53
1:D:80:VAL:HB	1:D:1072:ALA:HA	1.91	0.53
2:G:473:ALA:HB1	2:G:476:VAL:HB	1.89	0.53
3:H:59:ARG:HG3	5:Q:3121:LEU:HD13	1.91	0.53
7:T:128:GLY:HA2	7:T:286:VAL:HG13	1.91	0.53
7:T:163:GLN:HB3	7:T:226:ARG:HD2	1.90	0.53
1:A:225:ARG:HH12	1:A:1201:ARG:HH12	1.57	0.53
1:A:1348:ASP:OD2	1:A:1352:HIS:NE2	2.42	0.53
1:B:623:TYR:OH	1:B:663:ALA:O	2.23	0.53
1:B:709:LEU:H	1:B:1038:HIS:HD2	1.55	0.53
1:B:982:ASP:OD1	1:B:985:ARG:NH2	2.38	0.53
1:D:122:LYS:NZ	1:D:1101:ASP:O	2.34	0.53
1:E:708:THR:OG1	1:E:723:ASN:ND2	2.39	0.53
1:F:712:PRO:O	1:F:719:GLN:NE2	2.35	0.53
2:G:171:CYS:HB3	2:G:196:LEU:HB3	1.90	0.53
1:A:712:PRO:O	1:A:719:GLN:NE2	2.40	0.53
1:B:11:TYR:O	1:B:15:ALA:N	2.40	0.53
1:C:530:GLN:HG3	1:C:536:ASN:HD22	1.74	0.53
1:D:198:LEU:HD13	1:D:1109:VAL:HG23	1.91	0.53
1:D:241:ARG:NH1	1:D:242:GLU:OE2	2.41	0.53
1:E:1222:VAL:O	1:E:1224:ALA:N	2.42	0.53
1:F:778:ARG:O	1:F:904:ARG:NE	2.42	0.53
1:B:978:PRO:HA	1:B:981:ARG:HG2	1.90	0.53
6:S:11:ALA:HA	6:S:82:ARG:HA	1.91	0.53
7:T:308:ALA:HB3	7:T:428:MET:HB3	1.91	0.53
1:A:658:ASN:ND2	1:B:680:GLY:O	2.41	0.52
1:C:203:ARG:NH2	1:C:222:GLU:OE2	2.42	0.52
1:E:1037:TYR:O	1:E:1041:LYS:N	2.37	0.52
1:F:267:ALA:HB3	1:F:300:ALA:HB3	1.90	0.52
1:F:574:THR:OG1	1:F:1003:ARG:NH2	2.41	0.52
6:R:161:ARG:HH22	6:R:174:PRO:HD2	1.73	0.52
1:B:532:MET:HA	1:B:1239:ALA:HA	1.91	0.52
1:B:873:ASN:ND2	4:J:30:ASN:OD1	2.38	0.52
1:F:832:PHE:HA	1:F:835:VAL:HB	1.90	0.52
2:G:256:GLU:HB2	5:Q:3095:GLN:HE21	1.74	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:677:TYR:HD1	4:O:95:LYS:HG2	1.73	0.52
1:D:960:VAL:HG12	1:D:994:LEU:HD22	1.91	0.52
1:F:152:GLY:O	1:F:156:HIS:N	2.38	0.52
1:A:445:LYS:HD3	1:A:1179:HIS:HB3	1.92	0.52
1:B:544:HIS:HD2	1:B:546:ALA:H	1.58	0.52
1:C:487:TYR:OH	1:C:990:VAL:N	2.42	0.52
1:D:288:LEU:HB3	1:D:293:LEU:HD13	1.91	0.52
2:G:508:LEU:HB2	2:G:666:GLY:HA2	1.89	0.52
2:G:606:ILE:HD11	2:G:638:GLU:HG2	1.91	0.52
7:T:427:VAL:O	7:T:456:VAL:N	2.43	0.52
1:A:1369:LEU:HA	1:A:1372:LEU:HD12	1.91	0.52
1:B:187:VAL:HG11	1:B:1099:ASN:HD21	1.73	0.52
1:F:865:LEU:HD21	1:F:879:PHE:HB3	1.91	0.52
5:P:3083:ALA:HA	5:P:3086:ILE:HB	1.91	0.52
6:R:215:GLU:OE1	6:S:245:SER:OG	2.27	0.52
1:D:826:CYS:HB2	1:D:966:GLY:H	1.75	0.52
1:E:470:ASP:HB3	1:E:922:SER:HB3	1.92	0.52
1:A:641:PHE:HE2	1:A:677:TYR:HB2	1.75	0.52
1:C:1071:GLU:OE2	1:C:1100:VAL:N	2.41	0.52
1:C:1313:ARG:NH1	1:C:1317:CYS:O	2.42	0.52
1:B:951:ASN:ND2	1:B:972:ASN:O	2.40	0.52
1:E:621:ARG:NH2	1:F:698:GLU:OE2	2.43	0.52
1:E:1061:GLU:OE2	1:E:1116:ARG:NH2	2.42	0.52
6:R:114:VAL:HG11	6:R:291:LEU:HB3	1.92	0.52
1:A:583:PRO:HG2	1:A:586:LEU:HD13	1.91	0.52
1:B:1075:LEU:O	1:B:1097:ARG:NH1	2.42	0.52
1:D:430:PRO:HB3	1:D:601:VAL:HG11	1.92	0.52
1:D:777:ASN:O	4:N:51:ARG:NH2	2.42	0.52
1:D:804:ASP:HA	1:D:807:VAL:HB	1.91	0.52
1:D:903:GLU:HG2	1:D:904:ARG:HG2	1.92	0.52
1:D:1222:VAL:O	1:D:1224:ALA:N	2.43	0.52
1:F:1084:GLU:HG3	1:F:1089:VAL:HG12	1.92	0.52
1:F:1118:PRO:HD3	1:F:1374:LEU:HD13	1.92	0.52
1:A:575:TRP:O	1:A:1003:ARG:NH2	2.29	0.52
1:A:752:ARG:O	1:A:911:SER:OG	2.28	0.52
1:E:1225:LEU:HD23	1:F:1175:ALA:HB3	1.92	0.52
1:F:804:ASP:O	1:F:808:HIS:ND1	2.38	0.52
3:H:80:ILE:HG22	5:Q:3100:ARG:HG2	1.92	0.52
3:H:83:ARG:HE	5:P:3099:THR:HG22	1.75	0.52
6:S:230:LEU:HD23	6:S:233:GLN:HE21	1.75	0.52
1:B:1037:TYR:OH	1:B:1041:LYS:NZ	2.41	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1217:ASP:N	1:D:1221:ASP:OD2	2.44	0.51
1:F:1017:GLU:HA	1:F:1020:LEU:HB3	1.92	0.51
2:G:495:ARG:NH2	3:I:42:ASN:OD1	2.38	0.51
1:A:754:CYS:HA	1:A:910:CYS:HA	1.92	0.51
1:C:124:ILE:HG12	1:C:1100:VAL:HG22	1.92	0.51
1:C:443:TRP:HH2	1:C:1347:ARG:HB3	1.75	0.51
1:D:491:VAL:HB	1:D:558:LEU:HB3	1.92	0.51
1:D:1195:ASP:OD1	1:D:1195:ASP:N	2.42	0.51
1:E:1256:LEU:HA	1:E:1263:LEU:HD12	1.91	0.51
1:F:1221:ASP:N	1:F:1221:ASP:OD1	2.41	0.51
1:A:204:TYR:C	1:A:206:ASP:H	2.14	0.51
1:A:390:VAL:HB	1:F:104:ILE:HD12	1.93	0.51
1:E:1037:TYR:OH	1:E:1147:LEU:O	2.28	0.51
1:F:300:ALA:HA	1:F:362:ARG:HG2	1.92	0.51
1:A:948:THR:HG21	4:J:95:LYS:HE3	1.93	0.51
1:B:933:LEU:HD11	1:B:958:LEU:HD23	1.92	0.51
1:A:405:PRO:O	1:A:1361:TYR:OH	2.28	0.51
1:B:1204:ASN:ND2	1:B:1208:ARG:O	2.44	0.51
1:D:216:ARG:NH2	1:D:1287:ARG:O	2.41	0.51
1:B:103:LEU:HD11	1:B:115:PRO:HA	1.92	0.51
1:B:164:GLN:O	1:B:168:ASN:N	2.43	0.51
1:B:980:LEU:HD22	1:B:983:LEU:HD22	1.93	0.51
1:C:1125:LEU:HD13	1:C:1156:ARG:HD2	1.93	0.51
1:E:141:ALA:HB1	1:E:146:GLU:HB3	1.93	0.51
1:E:372:ASP:OD1	1:E:372:ASP:N	2.42	0.51
1:F:451:ARG:NH2	1:F:453:SER:OG	2.44	0.51
1:F:1227:TYR:O	1:F:1229:HIS:ND1	2.44	0.51
2:G:152:GLU:OE2	2:G:390:HIS:ND1	2.33	0.51
7:T:210:HIS:HB2	7:T:447:VAL:HG21	1.93	0.51
1:B:635:HIS:HB2	1:B:902:ALA:HB2	1.92	0.51
1:C:672:SER:O	1:C:676:THR:OG1	2.22	0.51
1:C:1225:LEU:HD23	1:D:1175:ALA:HB3	1.92	0.51
1:D:656:TRP:CE2	1:D:686:CYS:HB3	2.46	0.51
1:E:458:VAL:HG22	1:E:1151:VAL:HG22	1.92	0.51
2:G:379:SER:HA	2:G:383:ILE:HD11	1.91	0.51
2:G:473:ALA:HB3	3:I:54:VAL:HG13	1.93	0.51
3:H:31:PHE:HB2	3:H:35:PHE:HD2	1.75	0.51
1:A:390:VAL:HG21	1:F:104:ILE:HB	1.92	0.51
1:B:422:ASP:OD1	1:B:422:ASP:N	2.42	0.51
1:B:1201:ARG:HH12	1:C:1179:HIS:HE1	1.58	0.51
1:B:1208:ARG:NE	1:B:1225:LEU:O	2.34	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:1149:ASN:HA	1:C:1152:VAL:HB	1.91	0.51
1:E:410:ASN:HD21	1:E:1361:TYR:HB3	1.75	0.51
2:G:506:GLN:NE2	3:I:22:ASP:O	2.44	0.51
2:G:571:PRO:HA	2:G:692:CYS:HA	1.93	0.51
1:B:755:ARG:HG3	1:B:761:HIS:HA	1.93	0.51
1:C:451:ARG:NH2	1:C:453:SER:OG	2.44	0.51
1:C:804:ASP:HB3	1:C:808:HIS:CE1	2.46	0.51
1:C:1066:SER:OG	1:C:1067:GLU:N	2.43	0.51
1:D:596:GLY:O	1:D:600:GLY:N	2.44	0.51
2:G:37:GLY:O	2:G:144:ARG:NE	2.44	0.51
6:S:35:PRO:HB3	6:S:70:ARG:HG2	1.92	0.51
1:A:244:ILE:O	1:A:248:LEU:N	2.42	0.51
1:B:188:LEU:HD23	1:B:1064:LEU:HD21	1.93	0.51
1:B:753:ASP:OD1	1:B:911:SER:OG	2.28	0.51
1:D:872:ALA:HB2	4:M:76:GLN:HB3	1.92	0.51
2:G:657:LEU:O	2:G:673:THR:OG1	2.29	0.51
7:T:278:HIS:N	7:T:279:PRO:HD2	2.25	0.51
1:D:895:GLN:HA	4:N:61:LEU:HD13	1.93	0.50
1:E:1346:ALA:HB2	1:E:1362:LEU:HD11	1.94	0.50
1:F:496:GLY:HA3	1:F:504:ARG:HH22	1.76	0.50
2:G:91:ALA:HB3	2:G:103:ARG:HH11	1.76	0.50
2:G:530:LEU:HD21	2:G:594:THR:HG23	1.93	0.50
6:R:121:PHE:HE2	6:R:143:LEU:HD11	1.75	0.50
2:G:403:GLU:HG3	2:G:411:ARG:HB2	1.93	0.50
6:R:102:ASN:ND2	6:R:106:VAL:O	2.44	0.50
1:C:195:LEU:HD22	1:C:251:LEU:HD12	1.94	0.50
1:C:608:PRO:HA	1:C:611:ILE:HD12	1.93	0.50
1:D:728:ASP:O	1:D:810:LYS:NZ	2.45	0.50
3:I:86:PRO:O	3:I:90:GLN:NE2	2.45	0.50
6:S:62:GLY:O	6:S:66:ALA:N	2.44	0.50
1:B:17:ILE:HD11	1:B:49:LEU:HD22	1.94	0.50
1:B:228:CYS:HA	1:B:1368:PRO:HG3	1.92	0.50
1:D:521:VAL:HG21	1:D:987:VAL:HG22	1.94	0.50
6:R:114:VAL:HG22	6:R:293:PRO:HA	1.94	0.50
1:A:138:GLU:HA	1:A:141:ALA:HB3	1.94	0.50
1:A:1174:ARG:NH1	1:A:1182:ASP:OD2	2.41	0.50
1:C:611:ILE:HG23	1:C:820:PHE:HE1	1.75	0.50
1:D:42:VAL:HG11	1:D:49:LEU:HD11	1.92	0.50
4:N:76:GLN:O	4:N:96:ARG:NH2	2.41	0.50
6:R:279:LEU:HD22	6:S:153:ALA:HB2	1.94	0.50
7:T:132:LEU:O	7:T:185:VAL:N	2.44	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:643:ALA:HB1	1:B:896:VAL:HG21	1.93	0.50
1:B:758:ALA:HB2	1:B:904:ARG:HH12	1.76	0.50
1:E:281:THR:OG1	1:E:282:ALA:N	2.43	0.50
1:E:963:LEU:HD23	1:E:1007:VAL:HG22	1.94	0.50
1:A:413:MET:O	1:B:433:ARG:NH1	2.41	0.50
1:B:980:LEU:O	1:B:984:ALA:N	2.40	0.50
1:C:93:GLY:HA3	1:C:124:ILE:HD12	1.93	0.50
1:C:733:PRO:HG2	1:C:736:VAL:HG22	1.93	0.50
1:C:1257:TYR:HB2	1:C:1277:PHE:HD2	1.76	0.50
1:D:467:MET:HG3	1:D:918:ALA:HA	1.93	0.50
1:D:736:VAL:O	1:D:934:HIS:ND1	2.45	0.50
1:F:258:SER:OG	1:F:1102:LEU:O	2.29	0.50
1:F:876:LYS:HA	1:F:879:PHE:HB2	1.94	0.50
1:F:1195:ASP:OD1	1:F:1195:ASP:N	2.45	0.50
2:G:495:ARG:NH2	3:I:36:TYR:O	2.44	0.50
3:H:59:ARG:NH2	3:I:58:GLN:OE1	2.41	0.50
1:A:453:SER:OG	1:A:456:ASN:N	2.41	0.50
1:A:867:PRO:HG3	4:J:98:TYR:HB2	1.93	0.50
1:A:873:ASN:HB2	4:K:30:ASN:HD21	1.75	0.50
1:C:909:LEU:HD11	1:C:929:PHE:HB3	1.93	0.50
1:C:959:PRO:HB2	1:C:990:VAL:HG22	1.92	0.50
1:D:631:GLN:HE21	1:D:667:ASP:HB2	1.77	0.50
1:D:1201:ARG:NH1	1:E:448:GLN:OE1	2.45	0.50
1:A:1280:ALA:O	1:A:1284:ALA:N	2.44	0.49
1:B:224:LYS:NZ	1:B:1214:TYR:OH	2.41	0.49
1:B:730:ALA:HB2	1:B:750:ARG:HH12	1.77	0.49
1:C:804:ASP:HB3	1:C:808:HIS:HE1	1.77	0.49
1:D:883:ARG:HB2	1:E:680:GLY:HA3	1.94	0.49
1:F:422:ASP:N	1:F:422:ASP:OD1	2.45	0.49
4:M:89:ARG:NH2	4:N:29:THR:O	2.45	0.49
4:O:76:GLN:O	4:O:96:ARG:NH2	2.42	0.49
1:A:844:VAL:HG22	1:A:864:PRO:HB3	1.93	0.49
1:A:1057:ARG:NH2	1:A:1319:GLU:OE2	2.45	0.49
1:C:664:PHE:HB3	1:C:670:LEU:HD13	1.93	0.49
1:C:1222:VAL:O	1:C:1224:ALA:N	2.44	0.49
1:E:161:ALA:O	1:E:165:LEU:N	2.41	0.49
1:D:876:LYS:HA	1:D:879:PHE:HD2	1.76	0.49
1:F:453:SER:O	1:F:455:GLU:N	2.45	0.49
1:D:621:ARG:NH2	1:E:698:GLU:OE2	2.45	0.49
1:E:207:ASN:HB2	1:F:391:PRO:HA	1.94	0.49
1:F:834:ARG:HD2	1:F:954:TYR:HA	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:C:766:ALA:HB2	1:C:782:ARG:HD2	1.94	0.49
1:D:440:LEU:HB3	1:D:452:LEU:HB2	1.95	0.49
1:C:404:LEU:HB2	1:C:1052:VAL:HB	1.94	0.49
1:C:1125:LEU:HD12	1:C:1126:PRO:HD2	1.93	0.49
1:C:1182:ASP:HB2	1:C:1309:VAL:HA	1.94	0.49
1:D:285:LYS:HE2	1:D:377:LEU:HB3	1.93	0.49
1:D:436:PRO:HG2	1:D:595:ARG:HB3	1.95	0.49
1:F:1206:ARG:NH1	1:F:1247:SER:O	2.46	0.49
1:F:1278:THR:HG22	1:F:1281:ASP:H	1.78	0.49
2:G:588:ALA:HA	2:G:607:ALA:HA	1.94	0.49
1:A:159:LEU:HD12	1:A:162:ILE:HB	1.94	0.49
1:A:209:ARG:O	1:A:209:ARG:HG2	2.13	0.49
1:B:404:LEU:HD21	1:B:1334:ILE:HD11	1.95	0.49
1:E:325:ALA:H	1:F:56:ALA:HA	1.77	0.49
1:E:867:PRO:HG3	4:L:98:TYR:HB2	1.93	0.49
1:E:1195:ASP:N	1:E:1195:ASP:OD1	2.46	0.49
1:E:1248:GLN:HB2	1:E:1251:SER:HB3	1.94	0.49
1:E:1278:THR:HG22	1:E:1281:ASP:H	1.76	0.49
1:F:1284:ALA:O	1:F:1286:HIS:N	2.43	0.49
1:A:827:THR:OG1	1:A:958:LEU:O	2.30	0.49
1:C:1017:GLU:HA	1:C:1020:LEU:HB3	1.95	0.49
1:E:836:TYR:CZ	1:E:901:MET:HB2	2.48	0.49
6:R:64:LEU:HA	6:R:67:TYR:HB2	1.94	0.49
6:R:182:ASN:OD1	6:R:183:GLY:N	2.45	0.49
1:C:671:VAL:HG13	1:C:690:TYR:HD1	1.78	0.49
2:G:526:ARG:NH2	3:H:36:TYR:O	2.44	0.49
1:A:396:GLY:N	1:A:1060:THR:O	2.42	0.49
1:A:840:GLN:HB2	4:K:61:LEU:HD21	1.94	0.49
1:B:838:THR:OG1	1:B:954:TYR:OH	2.25	0.49
1:D:77:VAL:HG23	1:D:266:HIS:HB3	1.95	0.49
1:D:724:HIS:CD2	1:D:726:MET:H	2.30	0.49
1:E:100:HIS:H	1:F:63:ASN:HD21	1.61	0.49
1:F:97:PHE:HE1	1:F:122:LYS:HG2	1.78	0.49
6:S:67:TYR:HB3	6:S:291:LEU:HD21	1.94	0.49
1:A:84:PHE:HB2	1:A:1074:PHE:HB3	1.93	0.48
1:A:991:PRO:HG2	1:A:994:LEU:HD12	1.95	0.48
1:D:270:ARG:NH1	1:D:297:ASP:OD1	2.44	0.48
1:E:790:ARG:HH11	4:M:79:PHE:HB2	1.77	0.48
1:F:470:ASP:N	1:F:470:ASP:OD1	2.46	0.48
1:F:734:PRO:HD2	1:F:813:TYR:HD2	1.78	0.48
1:A:624:PRO:HB3	1:A:882:GLY:HA3	1.93	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:73:LEU:HD21	1:B:380:LEU:HD21	1.94	0.48
1:C:841:ASN:ND2	1:C:873:ASN:O	2.46	0.48
1:D:622:SER:OG	1:E:675:VAL:O	2.25	0.48
6:R:116:LEU:HD21	6:R:143:LEU:HB2	1.95	0.48
1:A:1063:VAL:HB	1:A:1111:ALA:HB3	1.94	0.48
1:A:1238:PHE:HB3	1:B:1124:ASN:HD21	1.77	0.48
1:B:629:LEU:O	1:B:633:ALA:N	2.46	0.48
1:F:1070:SER:OG	1:F:1071:GLU:N	2.46	0.48
6:R:154:ARG:HD2	6:R:176:LEU:HB3	1.94	0.48
1:A:680:GLY:O	1:F:658:ASN:ND2	2.47	0.48
1:A:708:THR:HG22	1:A:1038:HIS:HE1	1.79	0.48
1:A:1348:ASP:OD1	1:A:1348:ASP:N	2.45	0.48
1:B:611:ILE:HD11	1:B:1018:ASN:HD21	1.79	0.48
1:D:1095:GLN:OE1	1:D:1097:ARG:NH2	2.47	0.48
2:G:62:THR:OG1	2:G:71:THR:OG1	2.27	0.48
3:H:64:ALA:O	3:H:68:ASN:N	2.42	0.48
6:S:114:VAL:N	6:S:295:VAL:O	2.41	0.48
1:A:228:CYS:HA	1:A:1368:PRO:HG3	1.96	0.48
1:A:772:ALA:HA	4:K:55:ARG:HH21	1.78	0.48
1:B:184:MET:O	1:B:1073:TYR:OH	2.31	0.48
1:B:521:VAL:HG11	1:B:987:VAL:HG13	1.95	0.48
1:B:1222:VAL:O	1:B:1224:ALA:N	2.46	0.48
1:C:135:LEU:HD21	1:C:165:LEU:HD13	1.96	0.48
1:C:549:PHE:HB3	1:C:571:ILE:HD11	1.95	0.48
1:C:776:PHE:HA	1:C:903:GLU:HB2	1.96	0.48
1:D:285:LYS:HD3	1:D:379:ALA:HB2	1.95	0.48
3:I:91:VAL:HG11	5:P:3092:ILE:HB	1.96	0.48
1:A:832:PHE:HA	1:A:835:VAL:HB	1.95	0.48
1:B:142:LEU:HD21	1:B:157:ARG:HB3	1.96	0.48
1:B:622:SER:OG	1:C:675:VAL:O	2.21	0.48
1:F:753:ASP:OD1	1:F:911:SER:OG	2.25	0.48
1:F:1218:LYS:HB3	1:F:1221:ASP:HB3	1.96	0.48
1:C:724:HIS:CD2	1:C:726:MET:H	2.32	0.48
1:C:812:TYR:HA	1:C:816:LEU:HD13	1.95	0.48
1:F:857:PRO:HG3	1:F:885:VAL:HG22	1.96	0.48
1:A:766:ALA:HB2	1:A:782:ARG:HD3	1.96	0.48
1:B:438:ARG:HD3	1:B:1045:HIS:HB2	1.94	0.48
1:B:544:HIS:CD2	1:B:546:ALA:H	2.31	0.48
1:C:326:VAL:HB	1:C:329:LEU:HB2	1.95	0.48
1:E:981:ARG:HH22	1:F:803:ALA:H	1.61	0.48
1:F:846:GLU:HA	4:L:68:HIS:CE1	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L:71:ASN:HA	4:L:102:VAL:HB	1.96	0.48
6:R:297:VAL:HG22	6:R:314:VAL:HG22	1.96	0.48
1:B:128:ALA:HA	1:B:1096:PRO:HA	1.95	0.48
1:B:539:LEU:O	1:B:1248:GLN:NE2	2.43	0.48
1:C:78:ALA:O	1:C:1070:SER:OG	2.28	0.48
1:D:963:LEU:HG	1:D:1007:VAL:HG22	1.95	0.48
1:A:106:ARG:HH21	1:B:390:VAL:HG22	1.79	0.48
1:A:420:ALA:HB2	1:B:421:GLY:HA3	1.95	0.48
1:A:1099:ASN:OD1	1:A:1099:ASN:N	2.47	0.48
1:D:1099:ASN:OD1	1:D:1099:ASN:N	2.47	0.48
1:E:667:ASP:OD1	1:E:813:TYR:OH	2.32	0.48
1:E:854:PRO:HB3	1:E:860:ASP:HB3	1.95	0.48
1:F:281:THR:HG22	1:F:392:TYR:HE2	1.79	0.48
1:A:192:ALA:HB1	1:A:1110:ALA:HB2	1.96	0.47
1:B:87:LEU:HD22	1:B:1097:ARG:HA	1.96	0.47
1:B:87:LEU:HD22	1:B:1097:ARG:HE	1.79	0.47
1:E:301:ASP:N	1:E:363:VAL:O	2.42	0.47
1:E:754:CYS:HA	1:E:910:CYS:HA	1.95	0.47
1:F:1106:TYR:OH	1:F:1290:GLU:O	2.32	0.47
2:G:27:ILE:HB	2:G:398:VAL:HB	1.96	0.47
2:G:65:HIS:HE1	2:G:470:PHE:H	1.62	0.47
1:C:873:ASN:ND2	4:O:30:ASN:OD1	2.43	0.47
1:E:1008:GLN:HE21	1:E:1012:GLU:HB2	1.79	0.47
2:G:365:TRP:CD1	2:G:380:ARG:HD3	2.49	0.47
1:A:225:ARG:NH1	1:A:1201:ARG:HH12	2.13	0.47
1:A:442:PHE:HE2	1:A:1122:MET:HB3	1.79	0.47
1:A:746:ALA:HA	1:A:751:HIS:CG	2.49	0.47
1:A:894:LEU:HB2	4:K:61:LEU:HB3	1.96	0.47
1:A:966:GLY:HA3	1:A:969:HIS:HB2	1.96	0.47
1:A:1078:LEU:HD12	1:A:1093:LEU:HD13	1.95	0.47
1:D:632:ALA:HB1	1:D:832:PHE:HE1	1.79	0.47
1:D:646:ARG:HA	1:D:649:THR:HG22	1.97	0.47
1:E:840:GLN:HE22	4:M:58:ALA:HB2	1.79	0.47
1:E:1057:ARG:NH2	1:E:1319:GLU:OE2	2.47	0.47
1:F:919:ASN:HD21	1:F:924:ALA:HA	1.79	0.47
1:C:1138:LEU:HB2	1:C:1144:ALA:HB2	1.94	0.47
2:G:591:TYR:HB2	2:G:602:THR:HG23	1.96	0.47
1:A:577:VAL:HG21	1:A:1001:SER:HA	1.95	0.47
1:C:526:MET:N	1:C:529:GLU:OE1	2.48	0.47
1:D:548:ASP:OD1	1:D:576:ARG:NE	2.39	0.47
1:E:329:LEU:O	1:E:333:GLY:N	2.44	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:L:18:ARG:NH2	4:L:63:ASP:OD2	2.37	0.47
6:S:296:ARG:HB3	6:S:315:ILE:HG13	1.96	0.47
1:A:277:VAL:HB	1:A:1066:SER:HB3	1.96	0.47
1:B:311:LEU:HD12	1:B:315:ASN:HB3	1.96	0.47
1:C:304:VAL:HG12	1:C:360:THR:HG22	1.95	0.47
1:C:622:SER:OG	1:D:675:VAL:O	2.25	0.47
1:C:777:ASN:ND2	4:O:47:GLN:OE1	2.47	0.47
1:E:156:HIS:CE1	1:E:160:ARG:HE	2.33	0.47
1:E:1017:GLU:O	1:E:1021:THR:OG1	2.24	0.47
1:F:699:ALA:HA	1:F:702:GLN:HE21	1.79	0.47
1:F:836:TYR:O	1:F:840:GLN:NE2	2.46	0.47
2:G:257:ASN:C	2:G:260:ILE:HD11	2.34	0.47
1:A:671:VAL:HG13	1:A:690:TYR:HD1	1.79	0.47
1:A:854:PRO:HB3	1:A:863:HIS:HA	1.97	0.47
1:A:1077:GLN:H	1:A:1096:PRO:HD2	1.80	0.47
1:A:1289:LEU:HA	1:A:1292:LEU:HD12	1.95	0.47
1:A:1353:ALA:O	1:B:1344:ARG:NH2	2.43	0.47
1:B:642:CYS:HA	1:B:645:ALA:HB2	1.96	0.47
1:B:1274:PHE:O	1:B:1278:THR:OG1	2.32	0.47
1:D:526:MET:O	1:D:530:GLN:N	2.45	0.47
1:D:909:LEU:HD11	1:D:929:PHE:HB3	1.97	0.47
1:E:579:ASN:N	1:E:579:ASN:OD1	2.47	0.47
1:E:653:THR:O	1:E:657:ASN:ND2	2.48	0.47
1:E:1033:PRO:HA	1:E:1036:LEU:HB2	1.96	0.47
1:F:184:MET:HA	1:F:187:VAL:HG22	1.96	0.47
1:F:280:THR:HG23	1:F:1063:VAL:HG22	1.96	0.47
1:F:305:THR:OG1	1:F:306:TYR:N	2.48	0.47
1:F:372:ASP:N	1:F:372:ASP:OD1	2.44	0.47
1:F:674:ILE:HG23	1:F:678:LEU:HD12	1.97	0.47
1:F:828:ALA:HB1	1:F:955:PHE:HB3	1.95	0.47
1:F:889:PRO:HA	1:F:892:LEU:HB3	1.97	0.47
6:R:214:THR:HG21	6:S:227:LEU:HD11	1.96	0.47
1:A:770:ASN:H	1:A:773:THR:HB	1.79	0.47
1:E:450:LEU:HD13	1:E:1124:ASN:HB2	1.97	0.47
1:F:826:CYS:HA	1:F:964:PHE:HB3	1.97	0.47
1:F:1344:ARG:HG2	1:F:1347:ARG:HH12	1.79	0.47
1:A:83:LYS:HE3	1:A:85:PRO:HD3	1.97	0.47
1:A:267:ALA:HA	1:A:273:PRO:HA	1.96	0.47
1:A:639:HIS:HA	4:K:79:PHE:HE2	1.79	0.47
1:F:525:GLN:NE2	1:F:535:ASP:O	2.48	0.47
4:K:13:THR:OG1	4:K:16:ASN:ND2	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:T:131:LEU:HD21	7:T:251:LEU:HD12	1.96	0.47
7:T:134:LEU:HB3	7:T:183:GLY:HA2	1.97	0.47
7:T:281:ARG:N	7:T:282:PRO:CD	2.77	0.47
1:A:248:LEU:HA	1:A:251:LEU:HD13	1.97	0.47
1:E:778:ARG:O	1:E:904:ARG:NE	2.48	0.47
1:F:1279:ALA:O	1:F:1283:THR:OG1	2.25	0.47
1:A:248:LEU:HD12	1:A:251:LEU:HD13	1.97	0.46
1:A:1257:TYR:HB2	1:A:1277:PHE:HD2	1.80	0.46
1:B:452:LEU:HD21	1:B:1124:ASN:HA	1.97	0.46
1:C:1055:GLN:HB3	1:C:1310:GLN:HE22	1.80	0.46
1:D:606:MET:HE3	1:D:611:ILE:HG12	1.97	0.46
2:G:5:PHE:HE2	2:G:375:ASP:HA	1.80	0.46
4:M:81:GLY:N	4:M:91:SER:OG	2.42	0.46
1:A:1270:LEU:HB3	1:A:1310:GLN:HB3	1.97	0.46
1:B:577:VAL:HG12	1:B:578:VAL:HG13	1.97	0.46
2:G:534:LEU:HD21	2:G:649:LEU:HD13	1.97	0.46
7:T:273:ALA:HB2	7:T:457:TRP:HE1	1.79	0.46
1:A:75:LEU:HD12	1:A:78:ALA:HB3	1.96	0.46
1:A:1125:LEU:HD11	1:A:1156:ARG:HB3	1.96	0.46
1:B:884:VAL:HG12	1:B:886:VAL:HG23	1.98	0.46
1:C:929:PHE:N	1:C:999:PHE:O	2.48	0.46
1:F:70:PHE:O	1:F:76:SER:OG	2.33	0.46
3:I:83:ARG:HD2	5:Q:3099:THR:HG22	1.97	0.46
5:P:3111:LEU:HD23	5:P:3114:LEU:HD12	1.97	0.46
1:A:1066:SER:HA	1:A:1108:ALA:HA	1.97	0.46
1:E:578:VAL:N	1:E:581:ASN:OD1	2.38	0.46
1:F:677:TYR:HD1	4:L:95:LYS:HG2	1.79	0.46
1:F:742:LEU:HA	1:F:745:HIS:HB3	1.98	0.46
2:G:22:SER:HB2	2:G:116:VAL:HB	1.97	0.46
4:M:4:PRO:HB3	4:M:16:ASN:HB3	1.97	0.46
1:A:675:VAL:HG21	1:A:694:VAL:HG21	1.96	0.46
1:B:578:VAL:HG23	1:B:580:GLY:H	1.81	0.46
1:C:425:PRO:HG3	1:C:431:GLU:HB2	1.98	0.46
1:E:520:TRP:HH2	1:E:988:PRO:HD2	1.80	0.46
1:F:668:TYR:HB2	1:F:812:TYR:CG	2.51	0.46
6:R:48:HIS:CD2	6:R:138:ARG:HD3	2.51	0.46
6:R:155:LEU:O	6:R:159:GLY:N	2.48	0.46
1:A:873:ASN:ND2	4:K:30:ASN:OD1	2.38	0.46
1:C:467:MET:O	1:C:922:SER:OG	2.33	0.46
1:E:451:ARG:NH2	1:E:453:SER:OG	2.49	0.46
2:G:69:ASP:OD1	2:G:685:ARG:NH1	2.47	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:626:VAL:HG13	1:A:878:MET:HG3	1.97	0.46
1:E:766:ALA:N	1:E:783:LEU:O	2.39	0.46
1:F:606:MET:HB2	1:F:1018:ASN:HD21	1.80	0.46
1:A:248:LEU:HD23	1:A:293:LEU:HD21	1.97	0.46
1:A:418:ALA:HA	1:B:423:LEU:H	1.81	0.46
1:A:1156:ARG:HH12	1:F:1237:PRO:HB3	1.81	0.46
1:B:717:GLN:HE22	1:B:750:ARG:HD3	1.81	0.46
1:C:764:VAL:HG13	1:C:782:ARG:HE	1.81	0.46
1:D:335:HIS:O	1:D:339:MET:N	2.48	0.46
1:D:697:VAL:HG12	1:D:808:HIS:CD2	2.51	0.46
1:F:870:LEU:HD22	1:F:877:ARG:HA	1.98	0.46
2:G:593:SER:HB3	2:G:601:LEU:HD21	1.98	0.46
2:G:611:ASP:HB2	2:G:620:SER:HB2	1.98	0.46
6:R:272:TYR:HD2	6:S:161:ARG:HE	1.64	0.46
1:A:220:VAL:HG11	1:A:1214:TYR:HE1	1.79	0.46
1:A:1206:ARG:HD3	1:A:1210:ALA:HB2	1.97	0.46
1:B:644:LEU:HD23	1:B:647:LEU:HD23	1.98	0.46
1:B:822:ARG:NH2	1:B:1017:GLU:OE2	2.47	0.46
1:E:422:ASP:OD1	1:E:422:ASP:N	2.48	0.46
1:E:494:PRO:HG3	1:E:993:ALA:HB1	1.98	0.46
1:E:844:VAL:HG11	1:E:892:LEU:HD12	1.96	0.46
1:E:950:GLN:HB3	1:E:953:GLU:HB2	1.97	0.46
1:F:247:TRP:HE3	1:F:248:LEU:HD12	1.80	0.46
1:F:274:VAL:HG11	1:F:376:PHE:CD2	2.51	0.46
1:F:866:HIS:CD2	1:F:868:ALA:H	2.34	0.46
6:R:285:LEU:HD23	6:R:288:ILE:HD12	1.97	0.46
1:A:487:TYR:OH	1:A:990:VAL:N	2.49	0.46
1:B:7:ASP:O	1:B:11:TYR:N	2.37	0.46
1:D:417:ALA:HB2	1:D:1358:PHE:HE1	1.81	0.46
1:E:584:LEU:HG	1:E:1005:PRO:HB3	1.98	0.46
4:L:21:GLY:O	4:L:25:LEU:N	2.49	0.46
6:S:155:LEU:HD22	6:S:158:ARG:HH11	1.80	0.46
7:T:307:ALA:HB1	7:T:429:PRO:HA	1.96	0.46
1:B:1174:ARG:HD2	1:B:1177:MET:HB3	1.98	0.45
1:D:87:LEU:HD22	1:D:1096:PRO:HB2	1.98	0.45
1:D:422:ASP:N	1:D:422:ASP:OD1	2.48	0.45
1:D:986:ASP:OD2	1:E:705:ASP:HB3	2.16	0.45
1:E:775:ASP:HB3	1:E:778:ARG:HD2	1.98	0.45
1:E:788:GLN:HB3	1:E:800:HIS:CG	2.51	0.45
1:F:724:HIS:CD2	1:F:726:MET:H	2.33	0.45
1:F:1054:ARG:HH11	1:F:1123:GLY:HA3	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:R:109:CYS:HB2	6:R:304:ALA:HB1	1.98	0.45
6:R:155:LEU:HD11	6:R:188:LEU:HD11	1.97	0.45
1:A:199:LEU:HD21	1:A:250:ASP:HB3	1.97	0.45
1:A:340:GLN:HE22	1:B:155:LEU:HB2	1.81	0.45
1:A:1054:ARG:HH12	1:A:1123:GLY:H	1.64	0.45
1:A:1182:ASP:O	1:A:1310:GLN:NE2	2.49	0.45
1:B:637:ASN:HA	1:B:787:THR:HA	1.98	0.45
1:D:1073:TYR:HD1	1:D:1099:ASN:HB3	1.82	0.45
1:E:968:ASP:O	1:E:972:ASN:ND2	2.38	0.45
1:F:892:LEU:HD11	4:L:68:HIS:CG	2.51	0.45
1:F:1008:GLN:NE2	1:F:1012:GLU:OE1	2.41	0.45
2:G:426:LEU:HD23	2:G:449:LEU:HD13	1.97	0.45
2:G:427:THR:O	2:G:431:ALA:N	2.49	0.45
1:C:1369:LEU:HA	1:C:1372:LEU:HD12	1.97	0.45
1:A:620:ASP:OD2	1:A:655:TYR:OH	2.32	0.45
1:E:532:MET:HA	1:E:1240:ALA:H	1.81	0.45
1:E:638:GLU:OE2	1:E:677:TYR:OH	2.23	0.45
2:G:238:LEU:HD13	2:G:387:LEU:HD13	1.97	0.45
7:T:188:ASN:ND2	7:T:215:TYR:OH	2.38	0.45
1:A:203:ARG:HD3	1:B:1116:ARG:HH21	1.80	0.45
1:B:1127:GLN:NE2	1:B:1184:VAL:HG13	2.32	0.45
1:C:539:LEU:O	1:C:1248:GLN:NE2	2.48	0.45
1:C:1215:ALA:O	1:C:1287:ARG:NH1	2.35	0.45
1:D:665:VAL:O	1:D:812:TYR:OH	2.28	0.45
1:E:213:ARG:NH1	1:F:1175:ALA:O	2.49	0.45
1:E:656:TRP:CD2	1:E:686:CYS:HB3	2.51	0.45
2:G:133:ARG:HH12	2:G:572:LEU:HB3	1.82	0.45
2:G:260:ILE:HG21	5:Q:3092:ILE:HG13	1.98	0.45
1:A:280:THR:HG22	1:A:1063:VAL:HG13	1.98	0.45
1:A:576:ARG:NH1	1:A:581:ASN:O	2.49	0.45
1:A:741:GLY:O	1:A:745:HIS:N	2.39	0.45
1:A:1086:GLY:C	7:T:278:HIS:HE1	2.20	0.45
1:B:804:ASP:O	1:B:808:HIS:ND1	2.43	0.45
1:D:832:PHE:HA	1:D:835:VAL:HB	1.98	0.45
1:D:1127:GLN:HB2	1:D:1186:GLU:HG2	1.99	0.45
1:E:834:ARG:HD2	1:E:954:TYR:HA	1.98	0.45
2:G:80:TYR:HA	2:G:110:LEU:HA	1.98	0.45
1:A:184:MET:O	1:A:188:LEU:N	2.45	0.45
1:B:166:ALA:HA	1:B:169:VAL:HG12	1.99	0.45
1:E:647:LEU:O	1:E:651:CYS:N	2.47	0.45
1:E:777:ASN:ND2	4:M:47:GLN:OE1	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:176:PHE:O	1:F:180:THR:N	2.49	0.45
1:F:195:LEU:HB2	1:F:1109:VAL:HB	1.99	0.45
2:G:136:TRP:HB2	2:G:142:CYS:HB3	1.99	0.45
3:H:58:GLN:HB3	3:I:59:ARG:HE	1.82	0.45
4:M:61:LEU:O	4:M:65:GLY:N	2.50	0.45
1:A:805:TRP:CE2	1:A:809:HIS:HE1	2.35	0.45
1:A:1355:GLU:HB3	1:A:1356:THR:HG22	1.99	0.45
1:C:392:TYR:CZ	1:C:394:LEU:HB2	2.51	0.45
1:C:580:GLY:HA2	1:C:592:ARG:HH12	1.81	0.45
1:E:1304:THR:HG21	1:E:1314:PRO:HD2	1.98	0.45
1:F:633:ALA:O	1:F:635:HIS:ND1	2.39	0.45
1:F:998:TYR:O	1:F:1003:ARG:NH2	2.48	0.45
2:G:644:GLU:OE1	2:G:645:SER:OG	2.34	0.45
6:S:52:VAL:HA	6:S:58:PRO:HD3	1.98	0.45
1:B:834:ARG:NH1	4:O:86:GLU:O	2.47	0.45
1:F:590:ALA:O	1:F:594:ALA:N	2.49	0.45
1:F:753:ASP:OD1	1:F:753:ASP:N	2.50	0.45
1:F:1184:VAL:HG23	1:F:1310:GLN:HE21	1.82	0.45
1:F:1200:ARG:HG2	1:F:1363:ILE:HG23	1.98	0.45
2:G:86:VAL:HG12	2:G:234:PRO:HB2	1.99	0.45
2:G:533:ASN:HA	2:G:536:ARG:HB2	1.98	0.45
2:G:572:LEU:HD23	2:G:693:ARG:HB2	1.99	0.45
6:R:88:VAL:HG11	6:R:295:VAL:HG22	1.98	0.45
7:T:271:GLN:H	7:T:271:GLN:HG3	1.58	0.45
1:C:142:LEU:HD21	1:C:157:ARG:HG3	1.98	0.45
1:D:764:VAL:HG13	1:D:782:ARG:HE	1.81	0.45
1:D:778:ARG:NH2	1:D:780:ASP:OD2	2.42	0.45
1:E:502:GLN:HE22	1:E:970:VAL:HG22	1.82	0.45
1:F:243:ALA:O	1:F:247:TRP:N	2.50	0.45
1:A:422:ASP:OD1	1:A:422:ASP:N	2.50	0.44
1:B:647:LEU:HA	1:B:890:ALA:HB1	1.98	0.44
1:D:404:LEU:HB2	1:D:1052:VAL:HB	1.99	0.44
1:E:804:ASP:HA	1:E:807:VAL:HB	1.99	0.44
1:F:200:PRO:HA	1:F:203:ARG:HG2	1.99	0.44
1:F:644:LEU:HD23	1:F:647:LEU:HD23	1.98	0.44
1:F:751:HIS:NE2	1:F:754:CYS:HB2	2.32	0.44
1:F:1157:LEU:HD21	1:F:1309:VAL:HG11	1.99	0.44
4:L:25:LEU:HD21	4:L:57:GLN:HG2	1.98	0.44
6:S:161:ARG:HH12	6:S:174:PRO:HG2	1.81	0.44
1:A:336:LEU:HA	1:A:339:MET:HG3	1.99	0.44
1:C:642:CYS:HA	1:C:645:ALA:HB2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:873:ASN:OD1	4:M:92:PHE:N	2.48	0.44
1:D:1004:GLN:HE21	1:D:1008:GLN:HB2	1.82	0.44
1:E:156:HIS:HE1	1:E:160:ARG:HE	1.65	0.44
1:F:667:ASP:OD2	1:F:669:SER:OG	2.31	0.44
2:G:84:ASP:O	2:G:88:ALA:N	2.50	0.44
6:R:66:ALA:HA	6:R:69:ARG:HB3	2.00	0.44
7:T:164:LEU:O	7:T:168:SER:N	2.43	0.44
1:A:131:ALA:HB3	1:A:1092:THR:HG23	1.97	0.44
1:A:1183:ALA:HA	1:A:1310:GLN:HE22	1.82	0.44
1:B:287:ARG:HH12	1:B:1114:THR:HG21	1.82	0.44
1:B:501:MET:HA	1:B:504:ARG:HG2	1.99	0.44
1:C:281:THR:OG1	1:C:282:ALA:N	2.51	0.44
1:D:783:LEU:HD21	1:D:908:LEU:HD13	2.00	0.44
1:E:904:ARG:NH1	1:E:905:THR:O	2.50	0.44
1:E:1078:LEU:HD23	1:E:1095:GLN:HB2	2.00	0.44
1:F:228:CYS:HA	1:F:1368:PRO:HG3	1.99	0.44
6:S:29:GLY:O	6:S:101:ARG:N	2.40	0.44
7:T:274:THR:C	7:T:276:THR:H	2.20	0.44
1:B:14:ALA:HA	1:B:17:ILE:HD12	1.99	0.44
1:C:697:VAL:HG12	1:C:808:HIS:HD2	1.82	0.44
1:C:904:ARG:NH1	1:C:906:THR:OG1	2.49	0.44
1:D:238:GLY:HA2	1:D:244:ILE:HD11	2.00	0.44
1:D:280:THR:O	1:D:392:TYR:OH	2.25	0.44
1:D:748:LEU:HD13	1:D:750:ARG:HB2	1.99	0.44
1:D:770:ASN:H	1:D:773:THR:HB	1.83	0.44
1:F:269:THR:HG22	1:F:362:ARG:HH12	1.83	0.44
1:F:893:THR:HA	1:F:895:GLN:HG2	2.00	0.44
2:G:141:THR:HG21	2:G:603:ASN:HB3	1.99	0.44
3:I:65:ALA:HA	3:I:68:ASN:HB2	2.00	0.44
1:A:210:LEU:HD22	1:A:210:LEU:HA	1.85	0.44
1:A:545:PRO:HG3	1:A:1245:TRP:CD2	2.52	0.44
1:B:549:PHE:HB3	1:B:571:ILE:HD11	1.99	0.44
1:B:1034:VAL:HG22	1:B:1147:LEU:HD13	1.99	0.44
1:D:1125:LEU:HD11	1:D:1157:LEU:HG	1.99	0.44
1:E:99:VAL:HG23	1:E:118:ASN:HD22	1.83	0.44
1:F:1059:VAL:HG11	1:F:1116:ARG:HD2	2.00	0.44
1:A:891:MET:HA	1:A:894:LEU:HD21	1.98	0.44
1:B:280:THR:HG22	1:B:1063:VAL:HG12	1.99	0.44
1:B:472:ALA:HB2	1:B:1255:LEU:HD11	2.00	0.44
1:B:750:ARG:HA	1:B:913:ALA:HB3	1.99	0.44
1:C:634:ILE:HD13	1:C:641:PHE:HD1	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:577:VAL:HG12	1:D:578:VAL:HG13	1.99	0.44
1:D:1208:ARG:HB2	1:D:1241:THR:HG22	1.98	0.44
2:G:32:CYS:HA	2:G:395:GLN:HG3	2.00	0.44
2:G:65:HIS:CD2	2:G:127:TYR:HB3	2.53	0.44
2:G:589:PHE:HA	2:G:652:GLY:HA2	2.00	0.44
1:A:321:VAL:CG2	1:B:18:LEU:CD1	2.73	0.44
1:A:576:ARG:HA	1:A:1003:ARG:HH12	1.82	0.44
1:A:1054:ARG:NH2	1:A:1122:MET:HA	2.33	0.44
1:A:1116:ARG:HH12	1:F:203:ARG:HB2	1.83	0.44
1:C:320:LEU:HD12	1:C:321:VAL:HG23	2.00	0.44
1:C:429:HIS:HA	1:C:430:PRO:HD3	1.73	0.44
1:D:1259:GLY:HA3	1:D:1274:PHE:HE1	1.83	0.44
1:F:128:ALA:O	1:F:1094:THR:OG1	2.35	0.44
1:F:319:ALA:O	1:F:323:GLY:N	2.50	0.44
1:F:436:PRO:HA	1:F:437:PRO:HD3	1.77	0.44
2:G:378:TRP:CE2	2:G:404:ASN:HB3	2.52	0.44
2:G:484:ILE:HD11	3:I:50:GLU:HB2	1.99	0.44
1:A:738:ASP:OD1	1:A:738:ASP:N	2.47	0.44
1:A:751:HIS:NE2	1:A:754:CYS:HB2	2.33	0.44
1:A:875:VAL:O	1:A:879:PHE:N	2.48	0.44
1:A:946:ASP:N	1:A:946:ASP:OD1	2.50	0.44
1:E:701:ALA:O	1:E:727:ARG:NH2	2.50	0.44
1:E:804:ASP:HB3	1:E:808:HIS:CE1	2.52	0.44
1:F:397:ALA:HB3	1:F:1321:VAL:HG13	1.99	0.44
2:G:643:GLY:N	2:G:650:CYS:SG	2.83	0.44
7:T:111:THR:HG23	7:T:266:VAL:HG23	1.99	0.44
1:A:1034:VAL:HG22	1:A:1147:LEU:HD22	2.00	0.44
1:B:418:ALA:HA	1:C:423:LEU:H	1.82	0.44
1:C:440:LEU:HB3	1:C:452:LEU:HB2	2.00	0.44
1:D:1206:ARG:NH2	1:D:1208:ARG:O	2.50	0.44
1:E:718:ALA:H	1:E:721:GLU:HB2	1.82	0.44
1:F:724:HIS:HD2	1:F:726:MET:H	1.65	0.44
1:F:1029:PHE:HB3	1:F:1039:GLN:NE2	2.33	0.44
1:F:1033:PRO:HB2	1:F:1147:LEU:HD21	1.99	0.44
3:H:84:ILE:HB	5:Q:3100:ARG:HD2	2.00	0.44
1:A:82:THR:OG1	1:A:83:LYS:N	2.51	0.43
1:E:392:TYR:HA	1:E:393:PRO:HD3	1.88	0.43
1:E:582:LEU:HD11	1:E:587:CYS:HB2	2.00	0.43
1:E:1208:ARG:HB2	1:E:1241:THR:HG22	2.00	0.43
1:F:608:PRO:HA	1:F:611:ILE:HD12	2.00	0.43
7:T:117:THR:HG23	7:T:261:ALA:HB2	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:1004:GLN:NE2	1:A:1008:GLN:OE1	2.51	0.43
1:B:645:ALA:HB1	1:B:678:LEU:HD21	1.99	0.43
1:C:883:ARG:HG3	1:D:680:GLY:HA3	2.01	0.43
1:C:1168:CYS:HB2	1:C:1268:PRO:HD3	2.00	0.43
1:D:197:LEU:HA	1:D:223:LEU:HD11	2.01	0.43
1:D:1369:LEU:HA	1:D:1372:LEU:HD12	2.00	0.43
1:F:1198:TYR:CZ	1:F:1203:CYS:HB2	2.53	0.43
3:H:84:ILE:O	3:H:88:GLU:N	2.47	0.43
1:A:1054:ARG:HH22	1:A:1123:GLY:H	1.66	0.43
1:A:1198:TYR:OH	1:A:1204:ASN:O	2.31	0.43
1:A:1355:GLU:HB2	1:B:1344:ARG:CZ	2.48	0.43
1:C:492:ALA:H	1:C:992:PRO:HB2	1.82	0.43
1:D:233:PHE:HZ	1:D:243:ALA:HB1	1.84	0.43
1:D:629:LEU:HG	1:D:835:VAL:HG13	2.00	0.43
1:D:806:THR:HA	1:D:809:HIS:HB2	2.00	0.43
1:E:752:ARG:O	1:E:911:SER:OG	2.30	0.43
1:F:904:ARG:NH1	1:F:906:THR:OG1	2.51	0.43
1:F:1131:LEU:HD23	1:F:1159:PRO:HG3	2.00	0.43
1:A:325:ALA:HB3	1:B:56:ALA:HA	2.01	0.43
1:A:733:PRO:HA	1:A:814:TYR:HE2	1.84	0.43
1:A:1209:ALA:HB2	1:A:1235:ALA:HB2	2.01	0.43
1:B:668:TYR:HB2	1:B:812:TYR:CG	2.54	0.43
1:B:765:TYR:HE1	1:B:783:LEU:HD13	1.83	0.43
1:B:967:ALA:O	1:B:971:ALA:N	2.48	0.43
1:C:876:LYS:HA	1:C:879:PHE:HD2	1.82	0.43
1:C:1131:LEU:HD23	1:C:1159:PRO:HG3	2.00	0.43
1:C:1323:ASP:OD1	1:C:1323:ASP:N	2.51	0.43
1:D:615:ARG:NH1	1:D:1017:GLU:OE2	2.51	0.43
1:D:950:GLN:HB3	1:D:953:GLU:HG3	2.01	0.43
1:D:1048:PHE:HA	1:D:1192:VAL:HG13	1.99	0.43
1:F:857:PRO:HD3	1:F:885:VAL:HG13	2.00	0.43
1:F:1135:ALA:HA	1:F:1263:LEU:HD22	1.98	0.43
2:G:160:TYR:OH	2:G:402:TYR:O	2.35	0.43
2:G:531:LEU:HD23	2:G:534:LEU:HD12	2.00	0.43
4:K:33:GLN:HE21	4:K:35:ILE:HD13	1.83	0.43
1:A:436:PRO:HA	1:A:437:PRO:HD3	1.80	0.43
1:A:1195:ASP:OD1	1:A:1195:ASP:N	2.46	0.43
1:D:219:LEU:O	1:D:223:LEU:N	2.50	0.43
1:D:305:THR:OG1	1:D:359:GLN:OE1	2.34	0.43
1:D:423:LEU:HD12	1:D:1357:HIS:NE2	2.34	0.43
1:E:272:ARG:HH11	1:E:374:LEU:HD12	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:696:HIS:HE1	1:E:1021:THR:HG21	1.84	0.43
1:E:751:HIS:CE1	1:E:754:CYS:HB2	2.53	0.43
1:F:440:LEU:HA	1:F:440:LEU:HD12	1.86	0.43
1:F:1125:LEU:HD12	1:F:1126:PRO:HD2	1.99	0.43
2:G:3:ALA:O	2:G:7:ASN:ND2	2.51	0.43
6:R:228:LEU:HG	6:R:238:ASN:HA	2.00	0.43
6:S:50:SER:O	6:S:70:ARG:NH2	2.50	0.43
1:A:639:HIS:HA	4:K:79:PHE:CE2	2.53	0.43
1:B:886:VAL:HG13	1:B:890:ALA:HB3	2.00	0.43
1:C:629:LEU:HB3	1:C:839:LEU:HD21	2.00	0.43
1:D:830:VAL:HG22	1:D:955:PHE:HD1	1.84	0.43
1:F:1032:SER:OG	1:F:1035:ALA:N	2.43	0.43
2:G:56:PHE:HB3	2:G:78:ALA:HB3	2.00	0.43
1:B:457:ALA:HA	1:B:1187:PHE:CE2	2.54	0.43
1:D:1369:LEU:HD13	1:D:1372:LEU:HD12	2.00	0.43
1:E:420:ALA:HB2	1:F:424:VAL:HG21	1.99	0.43
1:F:933:LEU:HD11	1:F:958:LEU:HD23	2.00	0.43
2:G:516:GLN:HA	2:G:519:TRP:HD1	1.84	0.43
6:R:217:THR:HA	6:R:220:ILE:HG22	2.01	0.43
1:A:1246:ALA:HA	1:A:1253:GLY:HA3	2.00	0.43
1:B:97:PHE:HD1	1:B:97:PHE:HA	1.72	0.43
1:B:1339:ASP:HB2	1:B:1342:LEU:HG	2.01	0.43
1:C:83:LYS:HE2	1:C:1075:LEU:HD22	1.99	0.43
1:C:402:PHE:HB2	1:C:1054:ARG:HG2	2.01	0.43
1:E:99:VAL:O	1:E:118:ASN:ND2	2.46	0.43
1:E:774:ALA:HA	1:E:903:GLU:HB3	2.01	0.43
4:M:76:GLN:OE1	4:M:98:TYR:OH	2.25	0.43
1:A:157:ARG:HA	1:A:160:ARG:HE	1.84	0.43
1:A:534:PRO:HB3	1:B:1154:GLY:H	1.83	0.43
1:B:929:PHE:N	1:B:999:PHE:O	2.48	0.43
1:D:804:ASP:O	1:D:808:HIS:ND1	2.42	0.43
1:E:816:LEU:HD23	1:E:820:PHE:HE2	1.83	0.43
1:F:920:THR:N	1:F:923:THR:OG1	2.39	0.43
1:F:1373:SER:OG	1:F:1374:LEU:N	2.52	0.43
2:G:427:THR:HG22	5:Q:3116:HIS:CE1	2.53	0.43
7:T:318:GLN:OE1	7:T:416:THR:N	2.51	0.43
1:A:611:ILE:H	1:A:611:ILE:HG13	1.65	0.43
1:A:637:ASN:HA	1:A:787:THR:HA	2.00	0.43
1:B:629:LEU:HG	1:B:835:VAL:HG13	2.01	0.43
1:C:157:ARG:HD2	1:C:157:ARG:HA	1.84	0.43
1:C:450:LEU:HD13	1:C:1124:ASN:HB2	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:579:ASN:OD1	1:F:579:ASN:N	2.52	0.43
4:J:17:VAL:HB	4:J:56:GLY:HA3	2.01	0.43
7:T:267:CYS:SG	7:T:268:SER:N	2.92	0.43
1:B:629:LEU:HD23	1:B:839:LEU:HG	2.01	0.42
1:B:725:LEU:HA	1:B:1030:LYS:HE3	2.01	0.42
1:E:37:ASP:OD1	1:E:37:ASP:N	2.51	0.42
1:E:771:VAL:HG13	1:E:898:ALA:HA	2.00	0.42
1:E:876:LYS:HA	1:E:879:PHE:HB2	2.01	0.42
1:F:1357:HIS:O	1:F:1360:GLN:N	2.52	0.42
2:G:253:ILE:O	5:Q:3095:GLN:NE2	2.51	0.42
6:R:63:LEU:O	6:R:67:TYR:N	2.44	0.42
6:R:203:ARG:HH22	6:R:207:LEU:HD11	1.84	0.42
1:A:756:ILE:HB	1:A:908:LEU:HD12	2.00	0.42
1:C:433:ARG:O	1:C:1359:THR:OG1	2.34	0.42
1:C:448:GLN:NE2	1:C:449:VAL:O	2.48	0.42
1:C:1072:ALA:HB3	1:C:1100:VAL:HB	2.01	0.42
1:D:543:LEU:HB2	1:D:549:PHE:CE2	2.55	0.42
1:D:863:HIS:CE1	1:D:865:LEU:HB2	2.54	0.42
1:F:380:LEU:HD13	1:F:384:ILE:HD11	2.01	0.42
1:F:485:ASN:O	1:F:487:TYR:N	2.48	0.42
1:F:578:VAL:N	1:F:581:ASN:OD1	2.42	0.42
3:H:83:ARG:HB3	5:P:3099:THR:HG22	2.00	0.42
6:R:272:TYR:HB2	6:S:161:ARG:HH21	1.83	0.42
1:A:789:ALA:HB1	4:K:79:PHE:CG	2.54	0.42
1:B:137:THR:HA	1:B:140:ILE:HD12	2.01	0.42
1:E:441:PHE:HE1	1:E:451:ARG:HG3	1.84	0.42
1:E:471:ALA:O	1:E:475:GLY:N	2.53	0.42
1:E:500:ASP:OD1	1:E:500:ASP:N	2.51	0.42
1:F:77:VAL:HG22	1:F:266:HIS:CD2	2.54	0.42
1:F:142:LEU:HD23	1:F:158:GLN:HA	2.01	0.42
1:F:1100:VAL:HG13	1:F:1102:LEU:HB2	2.01	0.42
4:L:45:GLY:O	4:L:49:ALA:N	2.52	0.42
4:N:33:GLN:HG2	4:N:35:ILE:H	1.84	0.42
1:A:983:LEU:HD12	1:A:987:VAL:HG11	2.01	0.42
1:B:708:THR:OG1	1:B:723:ASN:ND2	2.50	0.42
1:B:815:VAL:HA	1:B:1024:LEU:HD22	2.01	0.42
1:B:946:ASP:HB3	1:C:676:THR:HG22	2.01	0.42
1:E:627:PHE:HD1	1:E:630:LEU:HD12	1.84	0.42
1:E:1115:VAL:HG11	1:E:1374:LEU:HD11	2.01	0.42
1:E:1138:LEU:HD12	1:E:1144:ALA:HA	2.00	0.42
2:G:487:LEU:O	2:G:491:GLY:N	2.43	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:688:GLY:O	2:G:692:CYS:N	2.52	0.42
1:A:198:LEU:HD22	1:A:1109:VAL:HG21	2.01	0.42
1:E:623:TYR:OH	1:E:663:ALA:O	2.25	0.42
1:E:656:TRP:HZ2	1:E:685:GLU:HG2	1.85	0.42
1:E:880:HIS:NE2	4:L:98:TYR:HB3	2.33	0.42
1:F:1123:GLY:HA2	1:F:1183:ALA:HB3	2.02	0.42
2:G:119:ASP:H	2:G:122:GLY:HA2	1.83	0.42
6:R:67:TYR:HE2	6:R:117:VAL:HA	1.83	0.42
1:A:668:TYR:HB3	1:A:809:HIS:CD2	2.54	0.42
1:B:124:ILE:HB	1:B:1100:VAL:HG22	2.01	0.42
1:B:185:LEU:HD21	1:B:279:VAL:HG11	2.01	0.42
1:B:1127:GLN:OE1	1:B:1184:VAL:HG13	2.20	0.42
1:C:367:LEU:HD23	1:C:376:PHE:HA	2.00	0.42
1:C:413:MET:O	1:D:433:ARG:NH1	2.48	0.42
1:C:714:LEU:HD13	1:C:719:GLN:HE22	1.85	0.42
1:D:804:ASP:HB3	1:D:808:HIS:CE1	2.54	0.42
1:E:68:VAL:HG21	1:E:384:ILE:HG22	2.02	0.42
1:E:1040:LEU:HD23	1:E:1040:LEU:HA	1.84	0.42
1:F:470:ASP:HB3	1:F:922:SER:HB3	2.00	0.42
1:F:880:HIS:HE1	4:K:98:TYR:HB3	1.84	0.42
5:Q:3095:GLN:HA	5:Q:3098:ARG:HE	1.85	0.42
6:R:17:SER:O	6:R:21:ALA:N	2.49	0.42
1:A:530:GLN:HG3	1:A:536:ASN:ND2	2.35	0.42
1:A:547:PHE:O	1:A:576:ARG:NE	2.53	0.42
1:A:595:ARG:HH22	1:A:1047:GLY:HA2	1.84	0.42
1:A:669:SER:OG	1:A:809:HIS:NE2	2.36	0.42
1:A:769:CYS:HB3	1:A:786:ASN:HD22	1.85	0.42
1:A:893:THR:OG1	1:A:894:LEU:N	2.52	0.42
1:B:17:ILE:O	1:B:17:ILE:HG22	2.18	0.42
1:B:544:HIS:CD2	1:B:547:PHE:HD2	2.38	0.42
1:B:751:HIS:CE1	1:B:754:CYS:HB2	2.54	0.42
1:B:1054:ARG:HH11	1:B:1122:MET:HB3	1.83	0.42
1:C:622:SER:OG	1:D:676:THR:O	2.38	0.42
1:E:732:LEU:O	1:E:814:TYR:OH	2.30	0.42
1:F:780:ASP:N	1:F:780:ASP:OD1	2.53	0.42
1:F:1057:ARG:HB3	1:F:1119:VAL:HB	2.01	0.42
7:T:235:VAL:HB	7:T:323:GLU:HB3	2.02	0.42
1:A:684:GLU:O	1:A:688:ALA:N	2.48	0.42
1:B:1081:ALA:HB1	1:B:1083:HIS:CE1	2.54	0.42
1:E:836:TYR:OH	1:E:902:ALA:N	2.51	0.42
1:E:1067:GLU:HB2	1:E:1107:THR:HG23	2.02	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:840:GLN:H	1:F:840:GLN:HG2	1.51	0.42
1:F:884:VAL:HG12	1:F:886:VAL:HG23	2.01	0.42
2:G:529:VAL:HG12	2:G:533:ASN:HD21	1.84	0.42
1:A:272:ARG:HA	1:A:273:PRO:HD3	1.92	0.42
1:A:708:THR:HA	1:A:1038:HIS:CE1	2.55	0.42
1:A:1072:ALA:HB3	1:A:1100:VAL:H	1.84	0.42
1:B:945:LEU:HD23	1:B:945:LEU:HA	1.83	0.42
1:C:475:GLY:O	1:C:478:HIS:NE2	2.53	0.42
1:D:700:LEU:HD22	1:D:1025:MET:HG2	2.01	0.42
1:D:1206:ARG:HH12	1:D:1208:ARG:HD3	1.84	0.42
1:E:751:HIS:NE2	1:E:754:CYS:HB2	2.35	0.42
4:J:89:ARG:HE	4:K:29:THR:HB	1.85	0.42
4:K:81:GLY:N	4:K:91:SER:OG	2.39	0.42
1:B:750:ARG:HD3	1:B:750:ARG:HH11	1.74	0.42
1:B:950:GLN:HB2	4:O:80:ALA:HB1	2.02	0.42
1:B:1057:ARG:HH22	1:B:1319:GLU:HB3	1.84	0.42
1:B:1201:ARG:O	1:B:1203:CYS:N	2.39	0.42
1:C:962:ALA:HB3	1:C:1007:VAL:HG21	2.02	0.42
1:D:671:VAL:HG13	1:D:690:TYR:HD1	1.85	0.42
1:E:986:ASP:OD2	1:F:705:ASP:HB3	2.20	0.42
1:E:1289:LEU:HD13	1:E:1292:LEU:HB2	2.02	0.42
1:F:367:LEU:HB3	1:F:374:LEU:HD11	2.02	0.42
1:F:417:ALA:HB2	1:F:1358:PHE:CE1	2.55	0.42
2:G:394:LYS:HE2	3:I:63:ALA:HB1	2.02	0.42
6:R:18:ARG:O	6:R:22:ALA:N	2.45	0.42
1:A:340:GLN:HB2	1:B:156:HIS:NE2	2.34	0.41
1:B:514:ALA:HB2	1:B:980:LEU:HD21	2.01	0.41
1:B:530:GLN:HG3	1:B:536:ASN:HD21	1.84	0.41
1:C:604:HIS:O	1:C:1022:TYR:OH	2.36	0.41
1:E:272:ARG:NH1	1:E:374:LEU:HB2	2.35	0.41
1:F:1075:LEU:HD13	1:F:1075:LEU:HA	1.92	0.41
2:G:582:ASP:O	2:G:655:ARG:NH2	2.53	0.41
1:A:143:LEU:HD12	1:A:143:LEU:HA	1.96	0.41
1:B:920:THR:N	1:B:923:THR:OG1	2.42	0.41
1:B:1054:ARG:NH1	1:B:1122:MET:HB3	2.36	0.41
1:B:1221:ASP:O	1:B:1225:LEU:HB2	2.20	0.41
1:C:83:LYS:HG2	1:C:1075:LEU:HB2	2.03	0.41
1:C:606:MET:HB2	1:C:611:ILE:HD11	2.02	0.41
1:C:917:GLY:HA3	1:C:1034:VAL:HG23	2.02	0.41
1:E:1118:PRO:HG3	1:E:1374:LEU:HD13	2.02	0.41
2:G:62:THR:H	2:G:71:THR:HB	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:87:LEU:HB2	1:B:1097:ARG:HH21	1.84	0.41
1:C:728:ASP:HA	1:C:729:PRO:HD3	1.88	0.41
1:D:657:ASN:HA	1:D:660:ARG:HH12	1.85	0.41
1:E:433:ARG:HA	1:E:433:ARG:HD3	1.93	0.41
1:E:1125:LEU:HD11	1:E:1157:LEU:HG	2.02	0.41
2:G:260:ILE:H	2:G:260:ILE:HG12	1.58	0.41
6:S:178:VAL:HG13	6:S:185:ARG:HG2	2.00	0.41
1:A:872:ALA:H	4:J:76:GLN:HG2	1.85	0.41
1:B:429:HIS:HA	1:B:430:PRO:HD3	1.77	0.41
1:B:1202:PRO:HB3	1:B:1332:TYR:HA	2.02	0.41
1:C:528:ALA:HA	1:C:531:PHE:HB2	2.03	0.41
1:C:770:ASN:H	1:C:773:THR:HB	1.85	0.41
1:D:918:ALA:O	1:D:923:THR:OG1	2.24	0.41
1:E:770:ASN:H	1:E:773:THR:HB	1.84	0.41
1:F:531:PHE:HE2	1:F:1194:THR:HG22	1.85	0.41
1:F:596:GLY:O	1:F:600:GLY:N	2.54	0.41
1:F:826:CYS:HB2	1:F:966:GLY:H	1.85	0.41
1:F:1244:PRO:O	1:F:1251:SER:OG	2.31	0.41
1:A:212:THR:O	1:A:215:ALA:N	2.36	0.41
1:A:606:MET:HG3	1:A:696:HIS:CG	2.56	0.41
1:A:1039:GLN:O	1:A:1042:THR:OG1	2.39	0.41
1:B:278:LEU:O	1:B:378:GLU:N	2.53	0.41
1:B:991:PRO:HG2	1:B:994:LEU:HD12	2.01	0.41
1:C:274:VAL:HG22	1:C:374:LEU:HD22	2.02	0.41
1:C:422:ASP:OD1	1:C:422:ASP:N	2.52	0.41
1:C:534:PRO:HB3	1:D:1154:GLY:HA3	2.02	0.41
1:C:624:PRO:HB3	1:C:882:GLY:HA3	2.01	0.41
1:C:1125:LEU:HD13	1:C:1156:ARG:HH11	1.85	0.41
1:D:470:ASP:OD1	1:D:470:ASP:N	2.51	0.41
1:E:423:LEU:HD12	1:E:1357:HIS:CE1	2.55	0.41
1:E:733:PRO:HG2	1:E:736:VAL:HG22	2.02	0.41
1:E:1223:ILE:H	1:E:1223:ILE:HG13	1.63	0.41
1:F:946:ASP:N	1:F:946:ASP:OD1	2.53	0.41
2:G:65:HIS:HE1	2:G:470:PHE:N	2.19	0.41
2:G:536:ARG:O	2:G:540:GLY:N	2.51	0.41
1:A:866:HIS:CD2	1:A:868:ALA:H	2.39	0.41
1:A:903:GLU:HG2	1:A:904:ARG:H	1.85	0.41
1:A:1084:GLU:HA	1:A:1089:VAL:HB	2.03	0.41
1:B:638:GLU:OE1	1:B:801:ARG:NH2	2.53	0.41
1:B:873:ASN:HA	4:O:92:PHE:CD2	2.56	0.41
1:D:278:LEU:HD23	1:D:278:LEU:HA	1.90	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:D:1056:ASP:HA	1:D:1120:THR:HG21	2.03	0.41
1:E:404:LEU:HD23	1:E:440:LEU:HD23	2.02	0.41
1:E:1008:GLN:HA	1:E:1011:ARG:HG2	2.03	0.41
1:F:231:SER:H	1:F:236:LYS:HZ2	1.68	0.41
1:F:269:THR:HG22	1:F:300:ALA:HB2	2.01	0.41
1:F:951:ASN:ND2	1:F:972:ASN:O	2.54	0.41
6:R:32:VAL:O	6:R:73:ALA:N	2.51	0.41
1:B:413:MET:O	1:C:433:ARG:NH1	2.46	0.41
2:G:514:PRO:HD3	3:I:17:ARG:HB2	2.02	0.41
1:A:735:LEU:HD12	1:A:813:TYR:CZ	2.56	0.41
1:B:13:TYR:O	1:B:17:ILE:HG13	2.21	0.41
1:B:526:MET:N	1:B:529:GLU:OE1	2.50	0.41
1:B:788:GLN:HG2	1:B:790:ARG:H	1.86	0.41
1:C:441:PHE:HE1	1:C:451:ARG:HG3	1.85	0.41
1:C:450:LEU:HD23	1:C:450:LEU:HA	1.90	0.41
1:E:91:ASN:O	1:E:126:ARG:NH2	2.54	0.41
1:E:185:LEU:HD12	1:E:185:LEU:HA	1.90	0.41
1:E:720:ALA:HB1	1:E:727:ARG:HG3	2.02	0.41
3:H:62:ALA:O	3:H:66:LEU:N	2.47	0.41
1:A:942:PRO:HB3	1:A:969:HIS:CD2	2.56	0.41
1:A:1271:SER:HB3	1:A:1274:PHE:HB2	2.03	0.41
1:C:348:ARG:NE	1:D:170:GLN:OE1	2.54	0.41
1:C:519:ARG:HG3	1:C:538:ASN:ND2	2.36	0.41
1:C:520:TRP:HZ3	1:C:988:PRO:HD2	1.85	0.41
1:C:545:PRO:HG3	1:C:1245:TRP:CD2	2.56	0.41
1:D:104:ILE:HG12	1:E:178:ARG:HB3	2.03	0.41
1:D:608:PRO:HA	1:D:611:ILE:HD12	2.03	0.41
1:D:746:ALA:HA	1:D:751:HIS:CD2	2.56	0.41
1:E:197:LEU:HA	1:E:223:LEU:HD11	2.02	0.41
1:E:746:ALA:HA	1:E:751:HIS:CD2	2.56	0.41
1:E:826:CYS:HB2	1:E:966:GLY:H	1.86	0.41
1:E:960:VAL:HA	1:E:994:LEU:HD13	2.03	0.41
1:E:1204:ASN:HB3	1:E:1206:ARG:HG2	2.02	0.41
1:F:617:ALA:HB2	1:F:661:CYS:HB3	2.01	0.41
1:F:776:PHE:HD1	1:F:903:GLU:HA	1.85	0.41
1:F:1374:LEU:H	1:F:1374:LEU:HG	1.68	0.41
2:G:473:ALA:HB2	3:I:57:ALA:HB3	2.02	0.41
4:N:25:LEU:HD21	4:N:57:GLN:HG2	2.03	0.41
6:R:191:ASP:HA	6:R:195:LEU:HD13	2.02	0.41
1:A:776:PHE:HD1	1:A:903:GLU:HA	1.84	0.41
1:B:91:ASN:H	1:B:126:ARG:HH22	1.69	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:B:280:THR:O	1:B:392:TYR:OH	2.34	0.41
1:B:656:TRP:CD2	1:B:686:CYS:HB3	2.56	0.41
1:C:336:LEU:HD23	1:C:336:LEU:HA	1.91	0.41
1:C:1121:ASP:N	1:C:1181:GLN:O	2.51	0.41
1:D:436:PRO:HA	1:D:437:PRO:HD3	1.92	0.41
1:D:1125:LEU:HD23	1:D:1184:VAL:HG22	2.03	0.41
2:G:63:ARG:NH1	2:G:475:GLU:OE2	2.54	0.41
2:G:546:PHE:O	2:G:549:THR:OG1	2.36	0.41
6:R:90:LEU:O	6:R:316:ARG:NE	2.54	0.41
1:A:644:LEU:HG	1:A:893:THR:HG22	2.03	0.40
1:A:705:ASP:OD2	1:F:985:ARG:NH1	2.54	0.40
1:A:746:ALA:HA	1:A:751:HIS:CD2	2.56	0.40
1:B:714:LEU:HB2	1:B:722:LEU:HD11	2.02	0.40
1:B:1223:ILE:H	1:B:1223:ILE:HG13	1.50	0.40
1:C:577:VAL:HG12	1:C:578:VAL:HG13	2.03	0.40
1:E:639:HIS:HA	4:M:79:PHE:HE2	1.86	0.40
1:F:742:LEU:O	1:F:746:ALA:N	2.47	0.40
1:F:818:PRO:HA	1:F:821:SER:HB3	2.02	0.40
6:S:58:PRO:HB2	6:S:63:LEU:HG	2.04	0.40
7:T:286:VAL:C	7:T:288:ILE:H	2.24	0.40
1:A:490:TYR:OH	1:A:560:GLY:O	2.35	0.40
1:A:734:PRO:HB3	1:A:960:VAL:HG21	2.02	0.40
1:A:1053:VAL:HG12	1:A:1272:PRO:HB2	2.03	0.40
1:A:1268:PRO:HB2	1:A:1311:PHE:HD1	1.86	0.40
1:D:998:TYR:O	1:D:1003:ARG:NH2	2.49	0.40
1:E:194:PRO:HD2	1:E:197:LEU:HD12	2.02	0.40
1:E:1249:ARG:HG2	1:E:1250:PHE:CD2	2.56	0.40
1:F:57:LEU:HD22	1:F:57:LEU:HA	1.95	0.40
2:G:263:LEU:O	5:Q:3084:VAL:HG13	2.22	0.40
4:J:76:GLN:O	4:J:96:ARG:NH2	2.43	0.40
1:A:694:VAL:O	1:A:698:GLU:N	2.45	0.40
1:A:847:ILE:HD12	1:A:847:ILE:HA	1.98	0.40
1:B:188:LEU:HD12	1:B:188:LEU:HA	1.89	0.40
1:B:207:ASN:OD1	1:B:208:GLY:N	2.54	0.40
1:B:700:LEU:HD11	1:B:1021:THR:HG22	2.03	0.40
1:B:751:HIS:NE2	1:B:754:CYS:HB2	2.36	0.40
1:C:246:ALA:HA	1:C:249:VAL:HG12	2.04	0.40
1:C:1061:GLU:OE2	1:C:1116:ARG:NH1	2.54	0.40
1:E:580:GLY:HA2	1:E:592:ARG:HH12	1.86	0.40
1:E:681:ASP:N	1:E:681:ASP:OD1	2.54	0.40
1:F:1017:GLU:O	1:F:1021:THR:OG1	2.30	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:G:62:THR:HA	2:G:130:ALA:HA	2.04	0.40
6:S:32:VAL:HG13	6:S:46:VAL:HG13	2.03	0.40
6:S:177:ASN:OD1	6:S:188:LEU:N	2.37	0.40
7:T:236:HIS:HA	7:T:323:GLU:HG2	2.03	0.40
1:A:765:TYR:HA	1:A:782:ARG:HG3	2.04	0.40
1:B:784:LEU:HD23	1:B:784:LEU:HA	1.90	0.40
1:D:173:LEU:HD23	1:D:173:LEU:HA	1.91	0.40
1:F:227:PHE:O	1:F:231:SER:OG	2.35	0.40
1:F:423:LEU:HD12	1:F:1357:HIS:CD2	2.56	0.40
3:H:6:PRO:HB3	3:I:24:ARG:HB2	2.02	0.40
6:R:90:LEU:HD23	6:R:90:LEU:HA	1.92	0.40
6:R:227:LEU:HD13	6:R:228:LEU:H	1.86	0.40
1:A:1008:GLN:HA	1:A:1011:ARG:HG2	2.03	0.40
1:A:1229:HIS:HE1	1:A:1248:GLN:HA	1.86	0.40
1:B:502:GLN:HE22	1:B:970:VAL:HG22	1.85	0.40
1:C:194:PRO:HG2	1:C:197:LEU:HB2	2.04	0.40
1:C:707:PHE:HA	1:C:1042:THR:HG21	2.04	0.40
1:C:1201:ARG:HH11	1:D:448:GLN:HG3	1.86	0.40
1:D:545:PRO:HG3	1:D:1245:TRP:CD2	2.57	0.40
1:E:33:ARG:NH1	1:E:39:PHE:H	2.20	0.40
1:E:473:VAL:HA	1:E:476:VAL:HG12	2.03	0.40
1:E:671:VAL:HG13	1:E:690:TYR:HD1	1.87	0.40
2:G:181:LEU:HG	2:G:184:ALA:HB3	2.03	0.40
2:G:505:PHE:CD1	3:I:26:PHE:HB2	2.57	0.40
6:S:73:ALA:HB1	6:S:85:ALA:HB1	2.02	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	A	1311/1374 (95%)	1118 (85%)	188 (14%)	5 (0%)	30 68

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	B	1356/1374 (99%)	1206 (89%)	143 (10%)	7 (0%)	25	64
1	C	1356/1374 (99%)	1223 (90%)	130 (10%)	3 (0%)	44	78
1	D	1356/1374 (99%)	1205 (89%)	146 (11%)	5 (0%)	30	68
1	E	1345/1374 (98%)	1193 (89%)	151 (11%)	1 (0%)	48	83
1	F	1347/1374 (98%)	1162 (86%)	183 (14%)	2 (0%)	48	83
2	G	540/702 (77%)	507 (94%)	32 (6%)	1 (0%)	44	78
3	H	92/585 (16%)	84 (91%)	8 (9%)	0	100	100
3	I	78/585 (13%)	72 (92%)	6 (8%)	0	100	100
4	J	99/112 (88%)	93 (94%)	6 (6%)	0	100	100
4	K	99/112 (88%)	89 (90%)	10 (10%)	0	100	100
4	L	99/112 (88%)	90 (91%)	9 (9%)	0	100	100
4	M	99/112 (88%)	91 (92%)	8 (8%)	0	100	100
4	N	99/112 (88%)	93 (94%)	6 (6%)	0	100	100
4	O	99/112 (88%)	96 (97%)	3 (3%)	0	100	100
5	P	45/3122 (1%)	44 (98%)	1 (2%)	0	100	100
5	Q	45/3122 (1%)	45 (100%)	0	0	100	100
6	R	291/318 (92%)	253 (87%)	38 (13%)	0	100	100
6	S	301/318 (95%)	274 (91%)	27 (9%)	0	100	100
7	T	275/466 (59%)	222 (81%)	50 (18%)	3 (1%)	12	46
All	All	10332/18134 (57%)	9160 (89%)	1145 (11%)	27 (0%)	38	72

All (27) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	B	294	LYS
1	B	299	GLU
1	B	1223	ILE
1	C	1223	ILE
1	D	1085	THR
1	D	1223	ILE
1	E	1223	ILE
2	G	261	LEU
1	A	211	ALA
1	C	1084	GLU
1	F	454	MET

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Mol	Chain	Res	Type
7	T	120	CYS
7	T	286	VAL
1	B	1202	PRO
1	D	1107	THR
7	T	275	HIS
1	A	205	LEU
1	A	213	ARG
1	A	1013	SER
1	B	1203	CYS
1	F	1286	HIS
1	A	575	TRP
1	B	1201	ARG
1	B	1222	VAL
1	C	1202	PRO
1	D	920	THR
1	D	1222	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	A	969/1080 (90%)	952 (98%)	17 (2%)	54 71
1	B	1009/1080 (93%)	1000 (99%)	9 (1%)	75 83
1	C	1018/1080 (94%)	1014 (100%)	4 (0%)	89 90
1	D	1020/1080 (94%)	1014 (99%)	6 (1%)	84 88
1	E	1018/1080 (94%)	1017 (100%)	1 (0%)	92 94
1	F	968/1080 (90%)	963 (100%)	5 (0%)	86 89
2	G	427/529 (81%)	421 (99%)	6 (1%)	62 75
3	H	77/451 (17%)	77 (100%)	0	100 100
3	I	64/451 (14%)	63 (98%)	1 (2%)	58 74
4	J	78/88 (89%)	78 (100%)	0	100 100
4	K	78/88 (89%)	78 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
4	L	78/88 (89%)	78 (100%)	0	100 100
4	M	78/88 (89%)	78 (100%)	0	100 100
4	N	78/88 (89%)	78 (100%)	0	100 100
4	O	78/88 (89%)	78 (100%)	0	100 100
5	P	41/2370 (2%)	40 (98%)	1 (2%)	44 63
5	Q	40/2370 (2%)	39 (98%)	1 (2%)	42 62
6	R	195/264 (74%)	193 (99%)	2 (1%)	73 81
6	S	214/264 (81%)	214 (100%)	0	100 100
7	T	184/365 (50%)	184 (100%)	0	100 100
All	All	7712/14072 (55%)	7659 (99%)	53 (1%)	80 87

All (53) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	142	LEU
1	A	158	GLN
1	A	210	LEU
1	A	213	ARG
1	A	380	LEU
1	A	510	ARG
1	A	512	ARG
1	A	519	ARG
1	A	574	THR
1	A	732	LEU
1	A	894	LEU
1	A	900	ASN
1	A	904	ARG
1	A	906	THR
1	A	1093	LEU
1	A	1204	ASN
1	A	1356	THR
1	B	97	PHE
1	B	291	SER
1	B	293	LEU
1	B	347	ASN
1	B	519	ARG
1	B	1084	GLU
1	B	1149	ASN
1	B	1173	ARG

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Mol	Chain	Res	Type
1	B	1201	ARG
1	C	162	ILE
1	C	168	ASN
1	C	415	ARG
1	C	1107	THR
1	D	327	ARG
1	D	519	ARG
1	D	756	ILE
1	D	1107	THR
1	D	1133	ARG
1	D	1141	ASN
1	E	674	ILE
1	F	90	MET
1	F	519	ARG
1	F	732	LEU
1	F	919	ASN
1	F	1201	ARG
2	G	13	LEU
2	G	14	THR
2	G	18	SER
2	G	103	ARG
2	G	260	ILE
2	G	261	LEU
3	I	82	ARG
5	P	3098	ARG
5	Q	3098	ARG
6	R	227	LEU
6	R	295	VAL

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

Mol	Chain	Res	Type
1	A	118	ASN
1	A	266	HIS
1	A	419	HIS
1	A	502	GLN
1	A	507	ASN
1	A	544	HIS
1	A	604	HIS
1	A	696	HIS
1	A	724	HIS
1	A	777	ASN

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Mol	Chain	Res	Type
1	A	880	HIS
1	A	900	ASN
1	A	1004	GLN
1	A	1008	GLN
1	A	1018	ASN
1	A	1204	ASN
1	A	1264	ASN
1	A	1329	GLN
1	B	63	ASN
1	B	168	ASN
1	B	347	ASN
1	B	536	ASN
1	B	544	HIS
1	B	717	GLN
1	B	724	HIS
1	B	866	HIS
1	B	1008	GLN
1	B	1018	ASN
1	B	1038	HIS
1	B	1124	ASN
1	B	1127	GLN
1	B	1149	ASN
1	B	1161	GLN
1	B	1170	GLN
1	B	1329	GLN
1	C	163	GLN
1	C	168	ASN
1	C	485	ASN
1	C	544	HIS
1	C	657	ASN
1	C	745	HIS
1	C	751	HIS
1	C	777	ASN
1	C	866	HIS
1	C	1008	GLN
1	C	1018	ASN
1	C	1179	HIS
1	C	1204	ASN
1	C	1310	GLN
1	C	1329	GLN
1	D	118	ASN
1	D	315	ASN

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Mol	Chain	Res	Type
1	D	530	GLN
1	D	544	HIS
1	D	657	ASN
1	D	696	HIS
1	D	717	GLN
1	D	1004	GLN
1	D	1008	GLN
1	D	1009	HIS
1	D	1018	ASN
1	D	1124	ASN
1	D	1141	ASN
1	E	156	HIS
1	E	164	GLN
1	E	410	ASN
1	E	463	HIS
1	E	544	HIS
1	E	657	ASN
1	E	696	HIS
1	E	723	ASN
1	E	777	ASN
1	E	1018	ASN
1	E	1124	ASN
1	E	1329	GLN
1	F	100	HIS
1	F	544	HIS
1	F	658	ASN
1	F	696	HIS
1	F	702	GLN
1	F	717	GLN
1	F	723	ASN
1	F	770	ASN
1	F	880	HIS
1	F	919	ASN
1	F	1004	GLN
1	F	1018	ASN
1	F	1039	GLN
1	F	1062	ASN
1	F	1090	ASN
1	F	1286	HIS
1	F	1310	GLN
2	G	61	GLN
2	G	506	GLN

Continued on next page...

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Mol	Chain	Res	Type
2	G	533	ASN
2	G	619	GLN
3	H	93	HIS
3	I	68	ASN
4	J	16	ASN
4	K	16	ASN
4	K	33	GLN
4	K	68	HIS
4	M	7	HIS
4	M	16	ASN
4	M	42	HIS
4	M	47	GLN
4	N	7	HIS
4	N	16	ASN
4	N	44	HIS
4	O	7	HIS
4	O	16	ASN
4	O	47	GLN
6	R	208	ASN
6	S	233	GLN
7	T	123	ASN
7	T	188	ASN
7	T	210	HIS
7	T	278	HIS

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 (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

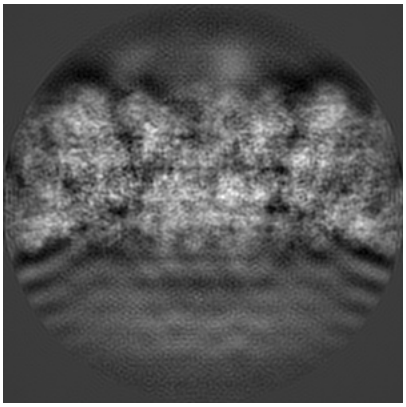
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-30124. These allow visual inspection of the internal detail of the map and identification of artifacts.

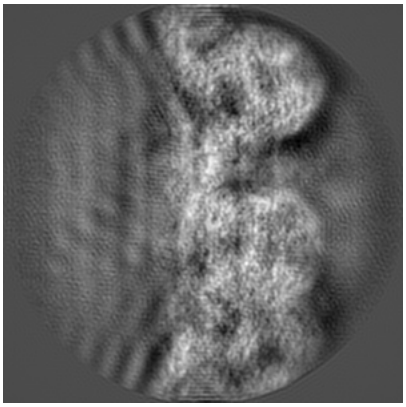
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

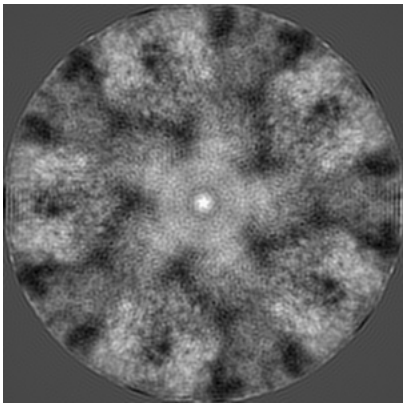
6.1.1 Primary map



X



Y

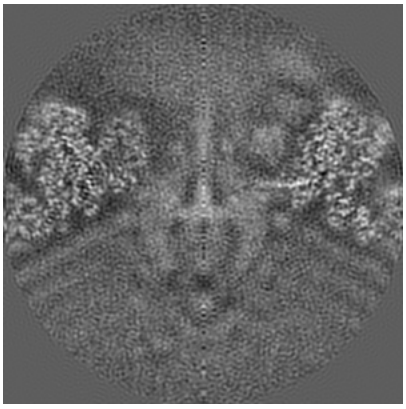


Z

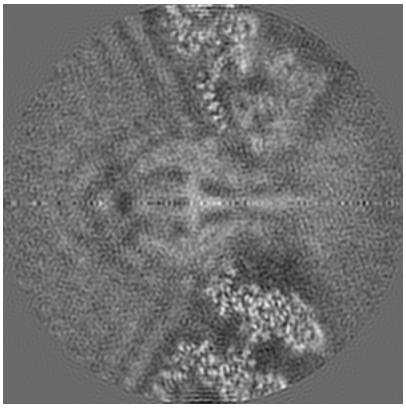
The images above show the map projected in three orthogonal directions.

6.2 Central slices

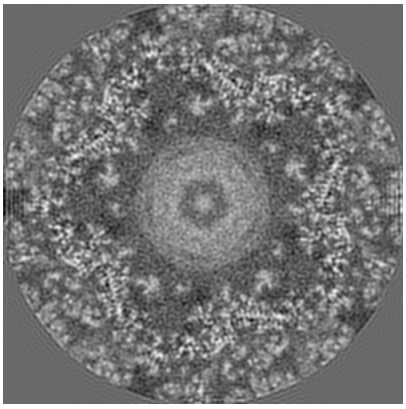
6.2.1 Primary map



X Index: 150



Y Index: 150

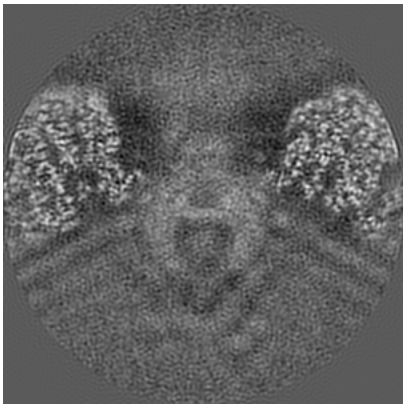


Z Index: 150

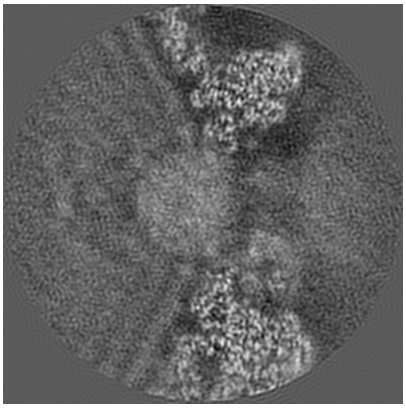
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

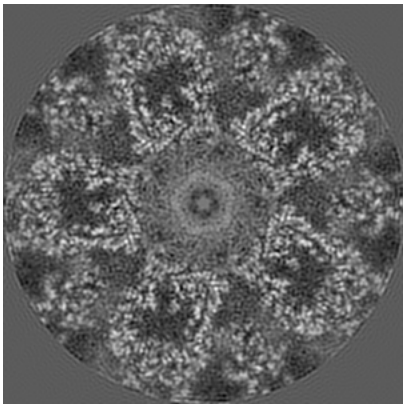
6.3.1 Primary map



X Index: 135



Y Index: 121

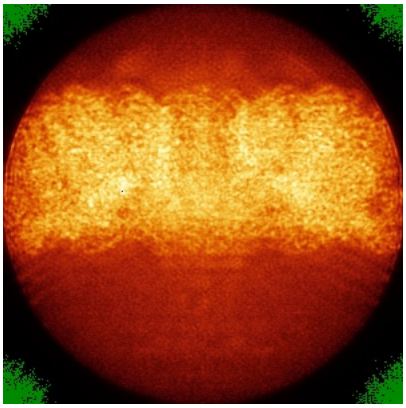


Z Index: 169

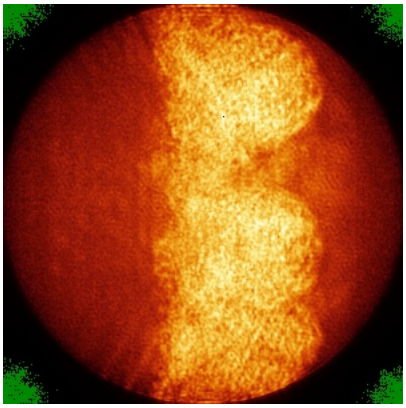
The images above show the largest variance slices of the map in three orthogonal directions.

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

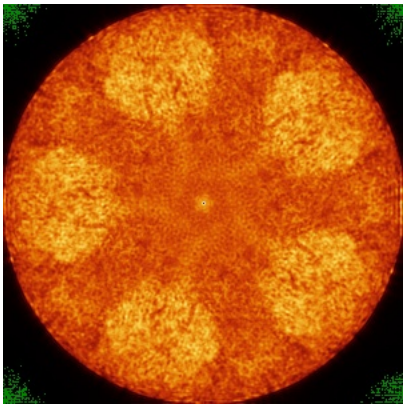
6.4.1 Primary map



X



Y



Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.02. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

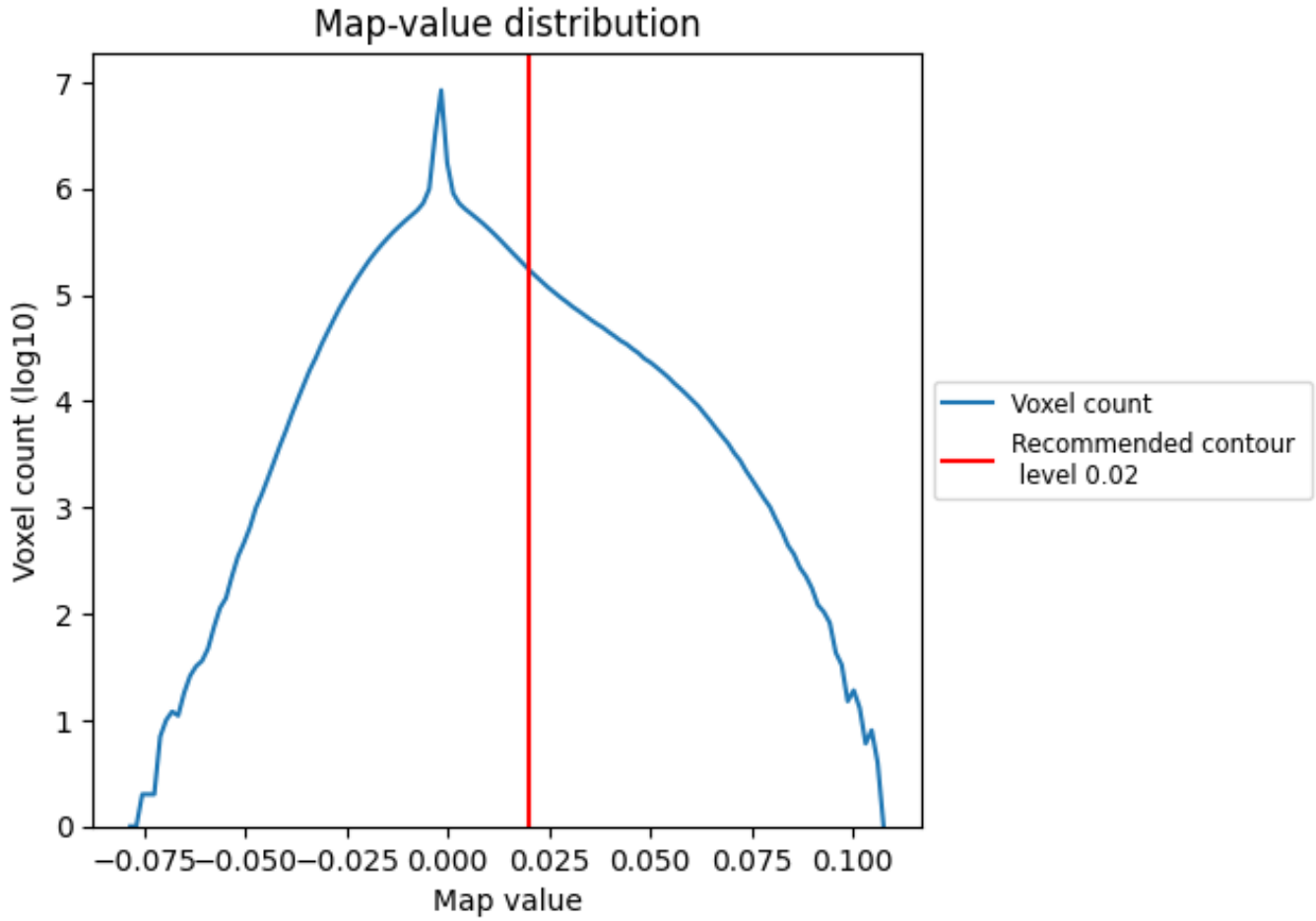
6.6 Mask visualisation (i)

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

7 Map analysis

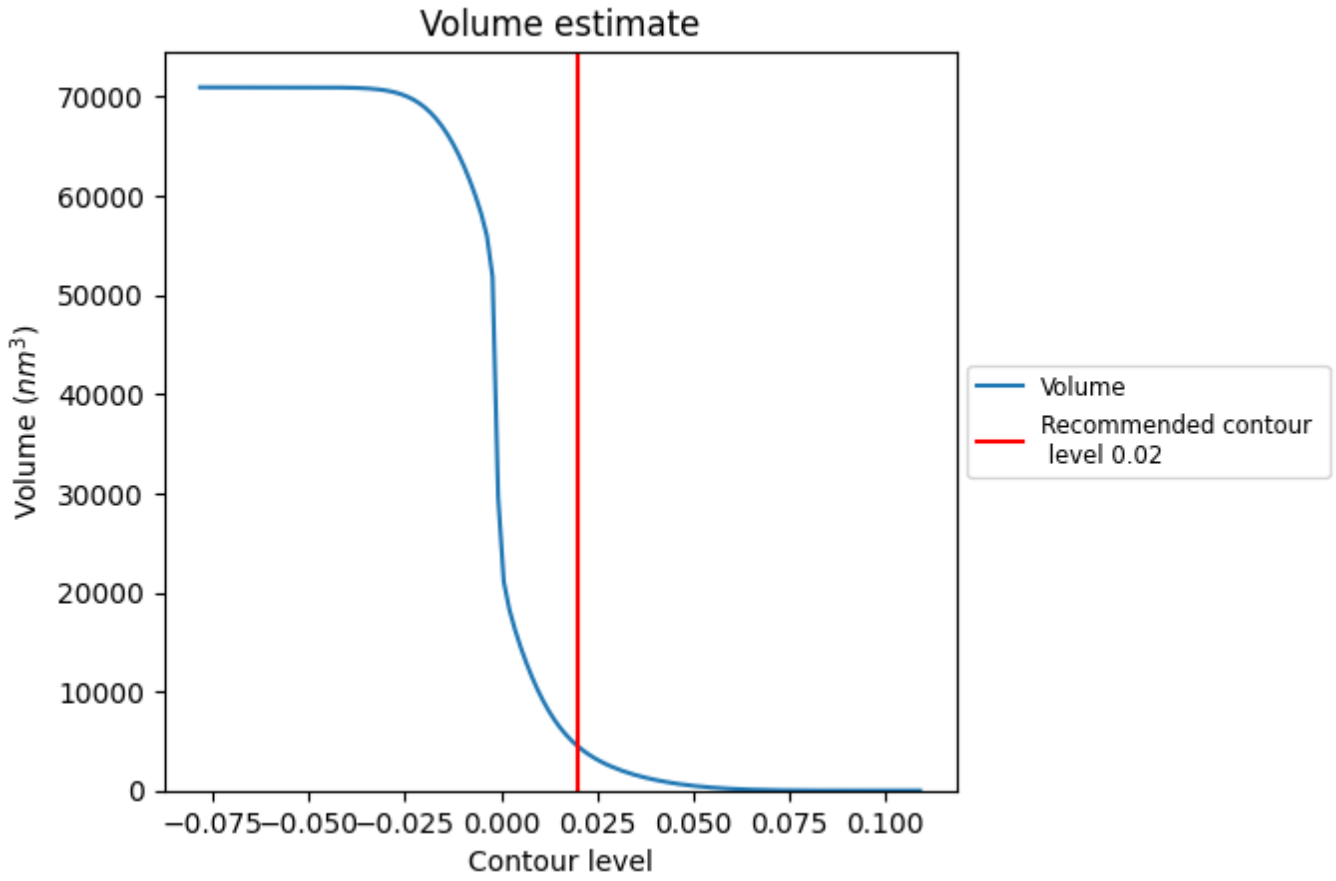
This section contains the results of statistical analysis of the map.

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.

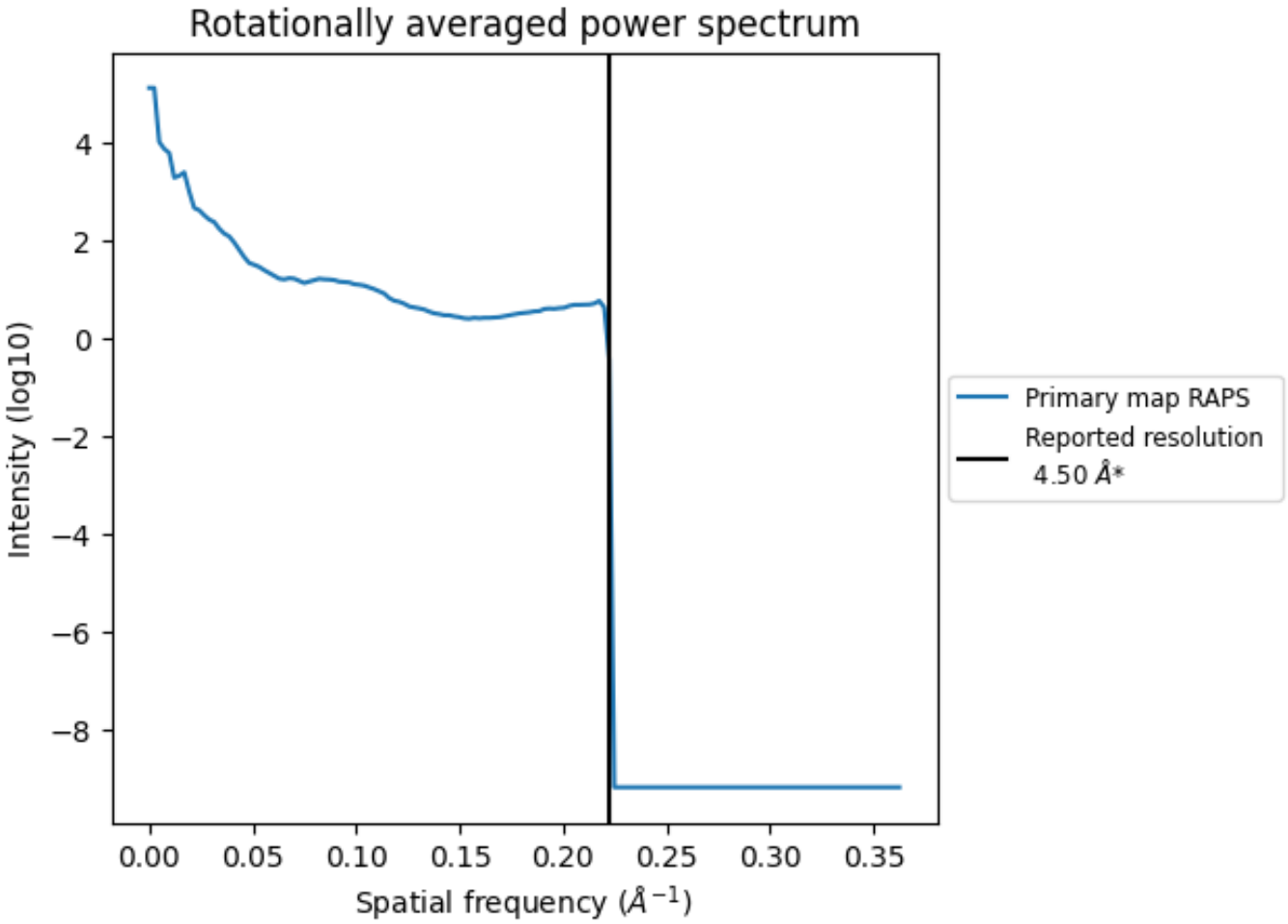
7.2 Volume estimate



The volume at the recommended contour level is 4481 nm^3; this corresponds to an approximate mass of 4048 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 0.222 Å^{-1}

8 Fourier-Shell correlation (i)

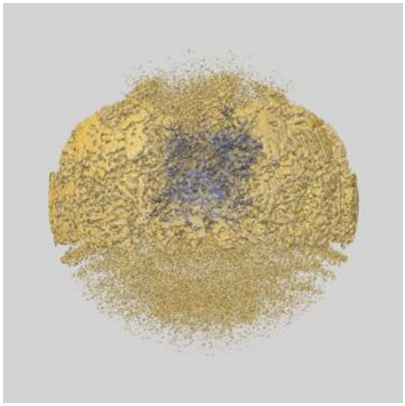
This section was not generated. No FSC curve or half-maps provided.

9 Map-model fit

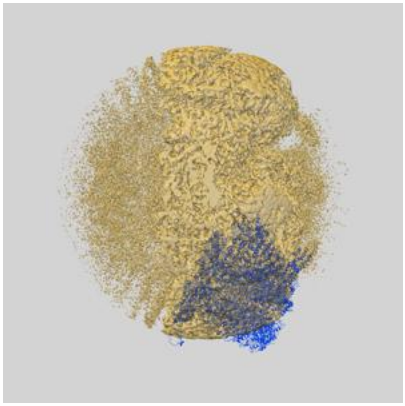
This section contains information regarding the fit between EMDB map EMD-30124 and PDB model 6M6H. Per-residue inclusion information can be found in section 3 on page 7.

9.1 Map-model overlays

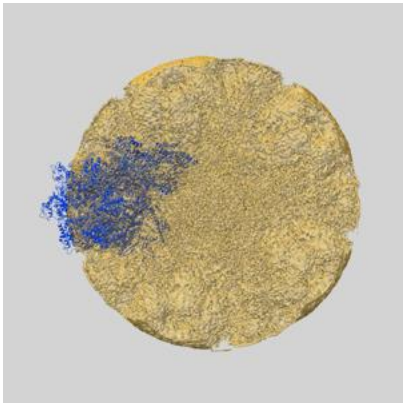
9.1.1 Map-model overlay



X

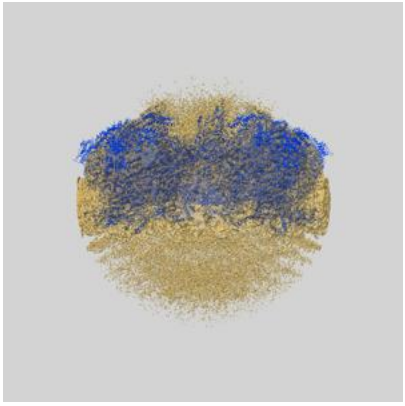


Y

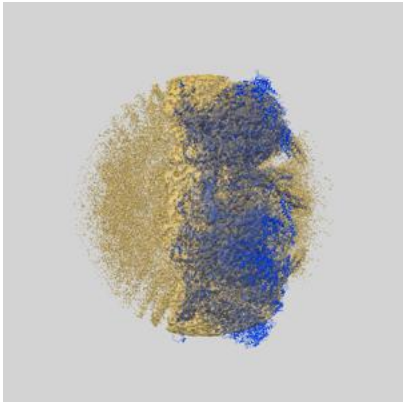


Z

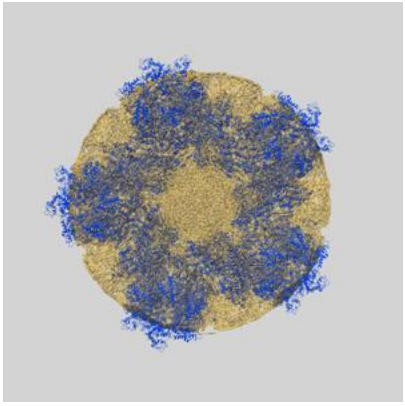
9.1.2 Map-model assembly overlay



X



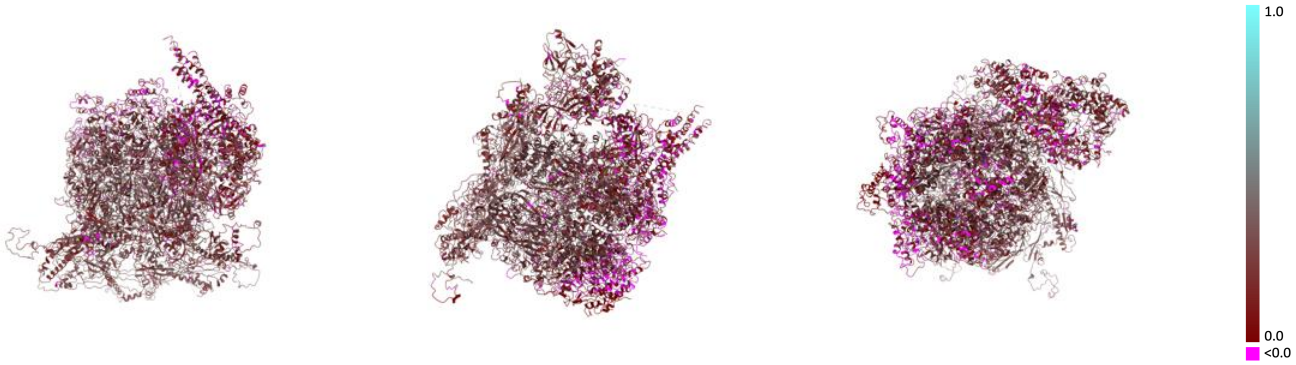
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.02 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.

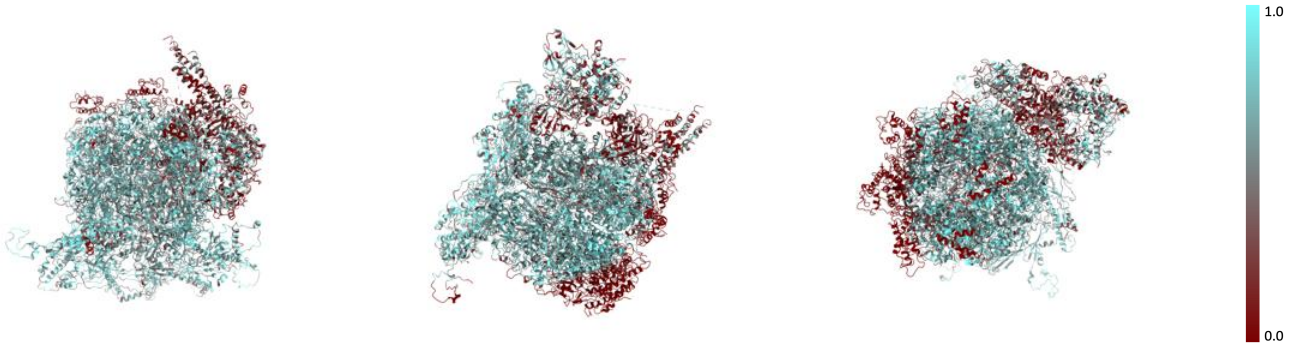
9.2 Q-score mapped to coordinate model



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.

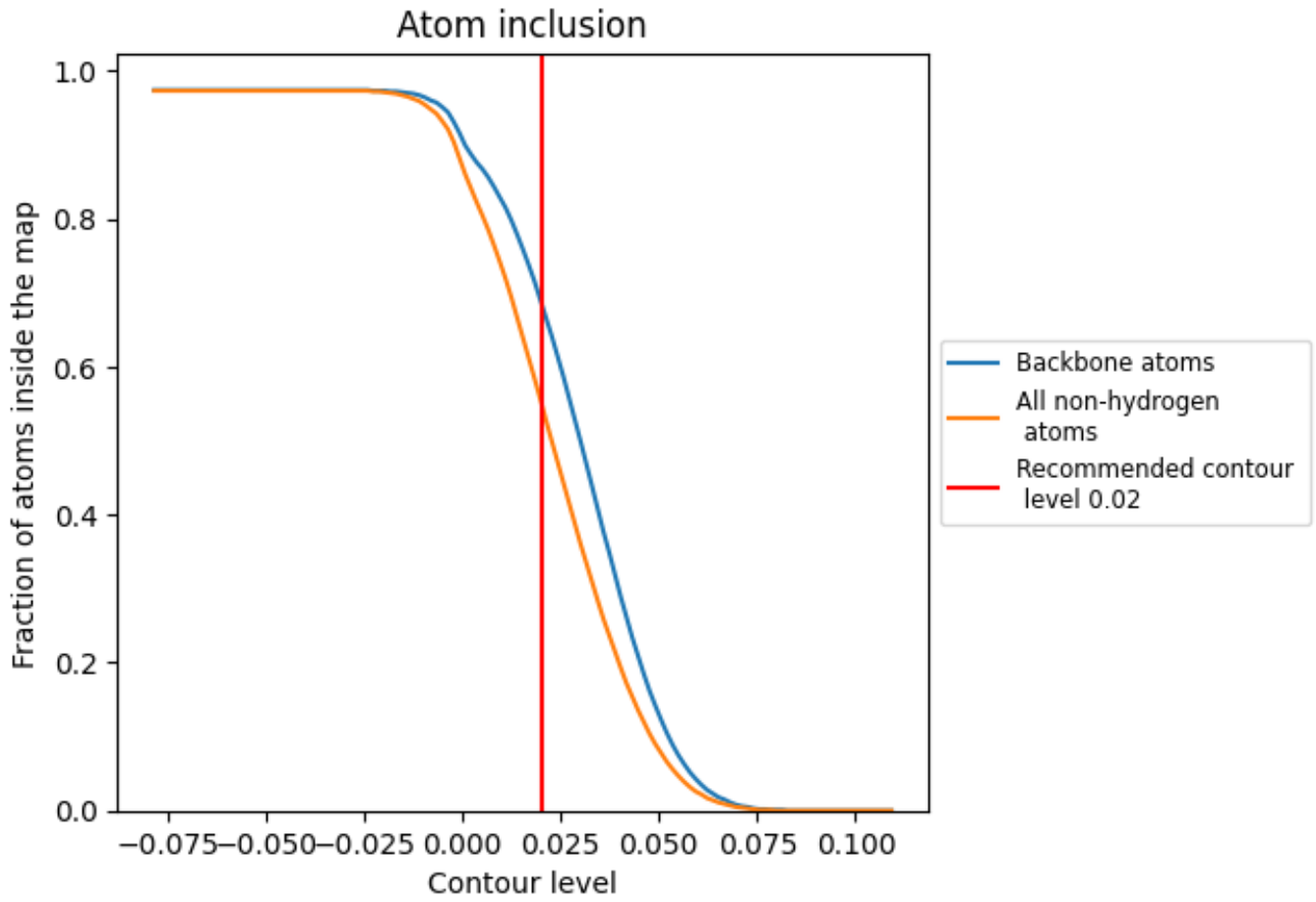
9.3 Atom inclusion mapped to coordinate model



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 (0.02).

9.4 Atom inclusion (i)



At the recommended contour level, 69% of all backbone atoms, 55% 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 (0.02) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.5530	0.2020
A	0.6680	0.2250
B	0.6400	0.2160
C	0.5110	0.1970
D	0.6210	0.2230
E	0.6930	0.2410
F	0.6520	0.2310
G	0.2760	0.1380
H	0.2950	0.1610
I	0.2960	0.1430
J	0.1120	0.0070
K	0.1280	0.0710
L	0.1060	0.0810
M	0.1190	0.0620
N	0.0000	0.0350
O	0.0000	0.0180
P	0.2870	0.1280
Q	0.2620	0.1210
R	0.4900	0.2060
S	0.3410	0.1980
T	0.4650	0.1500