wwPDB EM Validation Summary Report

Nov 4, 2024 – 03:47 am GMT

PDB ID	:	7B5H
EMDB ID	:	EMD-12029
Title	:	Cryo-EM structure of the contractile injection system base plate from Anabaena PCC7120
Authors	:	Eisenstein, F.; Weiss, G.L.; Pilhofer, M.
Deposited on	:	2020-12-03
Resolution	:	3.20 Å(reported)

This is a wwPDB EM Validation Summary 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:

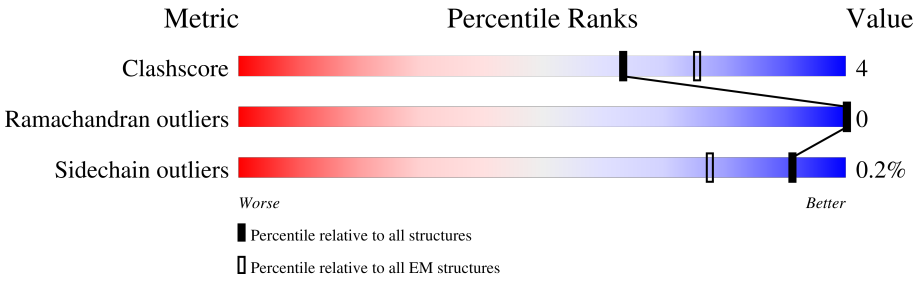
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	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 3.20 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	AA	1476	22% 44% 5% 51%
1	AB	1476	22% 45% · 51%
1	AC	1476	18% 43% · 53%
1	BA	1476	22% 44% 5% 51%
1	BB	1476	22% 45% · 51%
1	BC	1476	18% 43% 5% 53%
1	CA	1476	22% 44% 5% 51%
1	CB	1476	22% 45% · 51%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	CC	1476	18% 43% 5% 53%
1	DA	1476	21% 44% 5% 51%
1	DB	1476	22% 45% 51%
1	DC	1476	18% 43% 53%
1	EA	1476	22% 44% 5% 51%
1	EB	1476	23% 44% 5% 51%
1	EC	1476	18% 43% 53%
1	FA	1476	22% 44% 5% 51%
1	FB	1476	23% 44% 5% 51%
1	FC	1476	18% 43% 53%
2	AD	1335	12% 73% 10% 17%
2	BD	1335	11% 73% 10% 17%
2	CD	1335	12% 73% 10% 17%
2	DD	1335	11% 72% 10% 17%
2	ED	1335	12% 73% 10% 17%
2	FD	1335	12% 73% 10% 17%
3	AE	154	9% 56% 9% 35%
3	AF	154	6% 58% 6% 35%
3	AG	154	14% 54% 11% 35%
3	BE	154	11% 56% 9% 35%
3	BF	154	8% 58% 6% 35%
3	BG	154	14% 54% 11% 35%
3	CE	154	10% 55% 10% 35%
3	CF	154	6% 58% 6% 35%
3	CG	154	14% 54% 11% 35%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	DE	154	8% 56% 8% 35%
3	DF	154	9% 58% 6% 35%
3	DG	154	15% 54% 11% 35%
3	EE	154	8% 56% 9% 35%
3	EF	154	6% 59% 6% 35%
3	EG	154	14% 54% 11% 35%
3	FE	154	10% 56% 9% 35%
3	FF	154	8% 58% 6% 35%
3	FG	154	16% 55% 10% 35%
4	AH	1231	90% 9%
4	BH	1231	90% 9%
4	CH	1231	91% 9%
4	DH	1231	90% 9%
4	EH	1231	90% 9%
4	FH	1231	91% 9%
5	AJ	589	95% 5%
5	CJ	589	94% 5%
5	EJ	589	94% 5%
6	AL	50	8% 64% 10% 26%
6	CL	50	8% 64% 10% 26%
6	EL	50	10% 64% 10% 26%
7	AI	149	87% 6% 7%
7	BI	149	86% 7% 7%
7	CI	149	86% 7% 7%
7	DI	149	87% 6% 7%

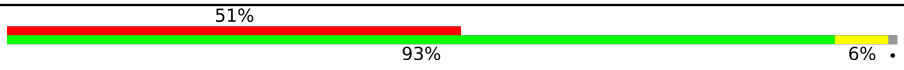
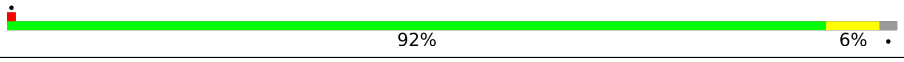
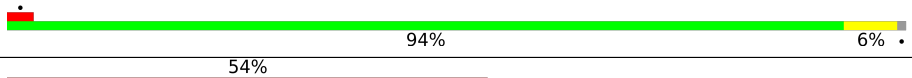
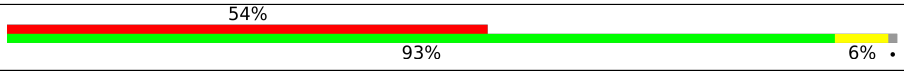
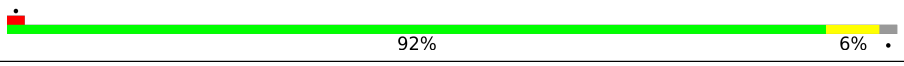
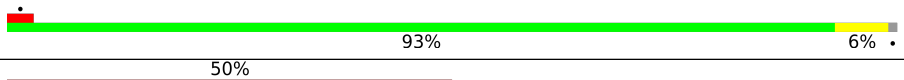
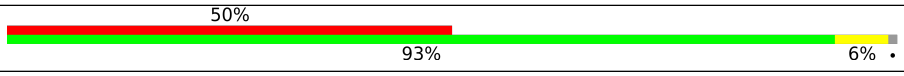
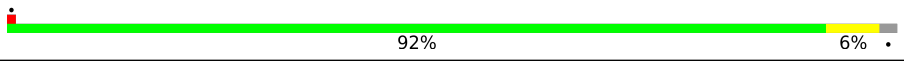
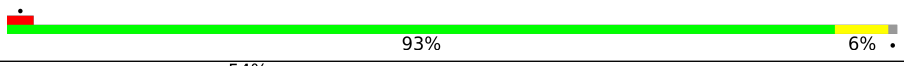
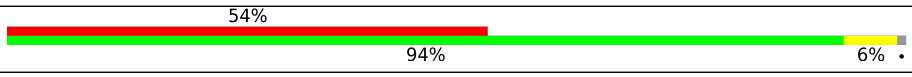
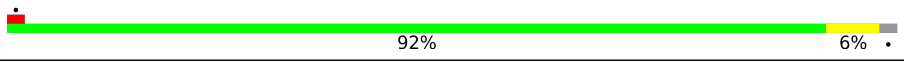
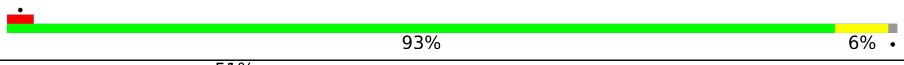
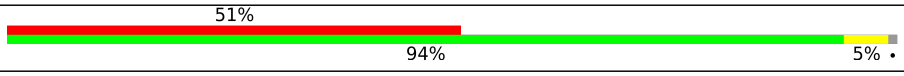
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
7	EI	149	87% 6% 7%
7	FI	149	85% 7% 7%
8	AK	234	87% 12%
8	BK	234	88% 11%
8	CK	234	86% 13%
8	DK	234	88% 11%
8	EK	234	87% 12%
8	FK	234	87% 12%
9	AM	167	87% 5% 8%
9	BM	167	87% 5% 8%
9	CM	167	87% 5% 8%
9	DM	167	87% 5% 8%
9	EM	167	86% 6% 8%
9	FM	167	87% 5% 8%
10	AN	143	9% 77% 22%
10	BN	143	10% 76% 24%
10	CN	143	9% 78% 22%
10	DN	143	10% 77% 22%
10	EN	143	9% 77% 22%
10	FN	143	10% 76% 23%
11	AO	484	92% 6%
11	AP	484	93% 6%
11	AQ	484	53% 93% 6%
11	BO	484	92% 6%
11	BP	484	93% 6%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
11	BQ	484	
11	CO	484	
11	CP	484	
11	CQ	484	
11	DO	484	
11	DP	484	
11	DQ	484	
11	EO	484	
11	EP	484	
11	EQ	484	
11	FO	484	
11	FP	484	
11	FQ	484	

2 Entry composition (i)

There are 11 unique types of molecules in this entry. The entry contains 346635 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 All3314 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	729	Total	C	N	O	S	0	0
			5899	3784	991	1111	13		
1	AB	724	Total	C	N	O	S	0	0
			5886	3781	989	1103	13		
1	AC	700	Total	C	N	O	S	0	0
			5690	3659	957	1063	11		
1	BA	729	Total	C	N	O	S	0	0
			5899	3784	991	1111	13		
1	BB	724	Total	C	N	O	S	0	0
			5886	3781	989	1103	13		
1	BC	700	Total	C	N	O	S	0	0
			5690	3659	957	1063	11		
1	CA	729	Total	C	N	O	S	0	0
			5899	3784	991	1111	13		
1	CB	724	Total	C	N	O	S	0	0
			5886	3781	989	1103	13		
1	CC	700	Total	C	N	O	S	0	0
			5690	3659	957	1063	11		
1	DA	729	Total	C	N	O	S	0	0
			5899	3784	991	1111	13		
1	DB	724	Total	C	N	O	S	0	0
			5886	3781	989	1103	13		
1	DC	700	Total	C	N	O	S	0	0
			5690	3659	957	1063	11		
1	EA	729	Total	C	N	O	S	0	0
			5899	3784	991	1111	13		
1	EB	724	Total	C	N	O	S	0	0
			5886	3781	989	1103	13		
1	EC	700	Total	C	N	O	S	0	0
			5690	3659	957	1063	11		
1	FA	729	Total	C	N	O	S	0	0
			5899	3784	991	1111	13		
1	FB	724	Total	C	N	O	S	0	0
			5886	3781	989	1103	13		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
1	FC	700	Total	C	N	O	S	0	0
			5690	3659	957	1063	11		

- Molecule 2 is a protein called All3315 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	AD	1109	Total	C	N	O	S	0	0
			9112	5798	1557	1744	13		
2	BD	1109	Total	C	N	O	S	0	0
			9112	5798	1557	1744	13		
2	CD	1109	Total	C	N	O	S	0	0
			9112	5798	1557	1744	13		
2	DD	1109	Total	C	N	O	S	0	0
			9112	5798	1557	1744	13		
2	ED	1109	Total	C	N	O	S	0	0
			9112	5798	1557	1744	13		
2	FD	1109	Total	C	N	O	S	0	0
			9112	5798	1557	1744	13		

- Molecule 3 is a protein called All3316 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	AE	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	AF	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	AG	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	BE	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	BF	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	BG	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	CE	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	CF	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	CG	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	DE	100	Total	C	N	O	S	0	0
			845	532	148	163	2		

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
3	DF	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	DG	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	EE	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	EF	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	EG	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	FE	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	FF	100	Total	C	N	O	S	0	0
			845	532	148	163	2		
3	FG	100	Total	C	N	O	S	0	0
			845	532	148	163	2		

- Molecule 4 is a protein called All3317 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	AH	1227	Total	C	N	O	S	0	0
			9792	6278	1676	1825	13		
4	BH	1227	Total	C	N	O	S	0	0
			9792	6278	1676	1825	13		
4	CH	1227	Total	C	N	O	S	0	0
			9792	6278	1676	1825	13		
4	DH	1227	Total	C	N	O	S	0	0
			9792	6278	1676	1825	13		
4	EH	1227	Total	C	N	O	S	0	0
			9792	6278	1676	1825	13		
4	FH	1227	Total	C	N	O	S	0	0
			9792	6278	1676	1825	13		

- Molecule 5 is a protein called All3320 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	AJ	585	Total	C	N	O	S	0	0
			4438	2782	775	870	11		
5	CJ	585	Total	C	N	O	S	0	0
			4438	2782	775	870	11		
5	EJ	585	Total	C	N	O	S	0	0
			4438	2782	775	870	11		

- Molecule 6 is a protein called Asl3322 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	AL	37	Total	C	N	O	S	0	0
			285	179	49	56	1		
6	CL	37	Total	C	N	O	S	0	0
			285	179	49	56	1		
6	EL	37	Total	C	N	O	S	0	0
			285	179	49	56	1		

- Molecule 7 is a protein called All3318 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	AI	138	Total	C	N	O	S	0	0
			1098	696	184	215	3		
7	BI	138	Total	C	N	O	S	0	0
			1098	696	184	215	3		
7	CI	138	Total	C	N	O	S	0	0
			1098	696	184	215	3		
7	DI	138	Total	C	N	O	S	0	0
			1098	696	184	215	3		
7	EI	138	Total	C	N	O	S	0	0
			1098	696	184	215	3		
7	FI	138	Total	C	N	O	S	0	0
			1098	696	184	215	3		

- Molecule 8 is a protein called All3321 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	AK	232	Total	C	N	O	S	0	0
			1898	1210	328	357	3		
8	BK	232	Total	C	N	O	S	0	0
			1898	1210	328	357	3		
8	CK	232	Total	C	N	O	S	0	0
			1898	1210	328	357	3		
8	DK	232	Total	C	N	O	S	0	0
			1898	1210	328	357	3		
8	EK	232	Total	C	N	O	S	0	0
			1898	1210	328	357	3		
8	FK	232	Total	C	N	O	S	0	0
			1898	1210	328	357	3		

- Molecule 9 is a protein called All3323 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	AM	153	Total	C	N	O	S	0	0
			1254	808	208	232	6		
9	BM	153	Total	C	N	O	S	0	0
			1254	808	208	232	6		
9	CM	153	Total	C	N	O	S	0	0
			1254	808	208	232	6		
9	DM	153	Total	C	N	O	S	0	0
			1254	808	208	232	6		
9	EM	153	Total	C	N	O	S	0	0
			1254	808	208	232	6		
9	FM	153	Total	C	N	O	S	0	0
			1254	808	208	232	6		

- Molecule 10 is a protein called All3324 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	AN	142	Total	C	N	O	S	0	0
			1152	734	198	217	3		
10	BN	142	Total	C	N	O	S	0	0
			1152	734	198	217	3		
10	CN	142	Total	C	N	O	S	0	0
			1152	734	198	217	3		
10	DN	142	Total	C	N	O	S	0	0
			1152	734	198	217	3		
10	EN	142	Total	C	N	O	S	0	0
			1152	734	198	217	3		
10	FN	142	Total	C	N	O	S	0	0
			1152	734	198	217	3		

- Molecule 11 is a protein called All3325 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	AO	473	Total	C	N	O	S	0	0
			3663	2328	616	705	14		
11	AP	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	AQ	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	BO	473	Total	C	N	O	S	0	0
			3663	2328	616	705	14		
11	BP	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	BQ	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		

Continued on next page...

Continued from previous page...

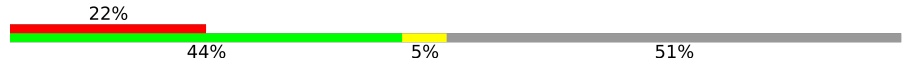
Mol	Chain	Residues	Atoms					AltConf	Trace
11	CO	473	Total	C	N	O	S	0	0
			3663	2328	616	705	14		
11	CP	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	CQ	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	DO	473	Total	C	N	O	S	0	0
			3663	2328	616	705	14		
11	DP	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	DQ	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	EO	473	Total	C	N	O	S	0	0
			3663	2328	616	705	14		
11	EP	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	EQ	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	FO	473	Total	C	N	O	S	0	0
			3663	2328	616	705	14		
11	FP	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		
11	FQ	480	Total	C	N	O	S	0	0
			3716	2365	624	713	14		

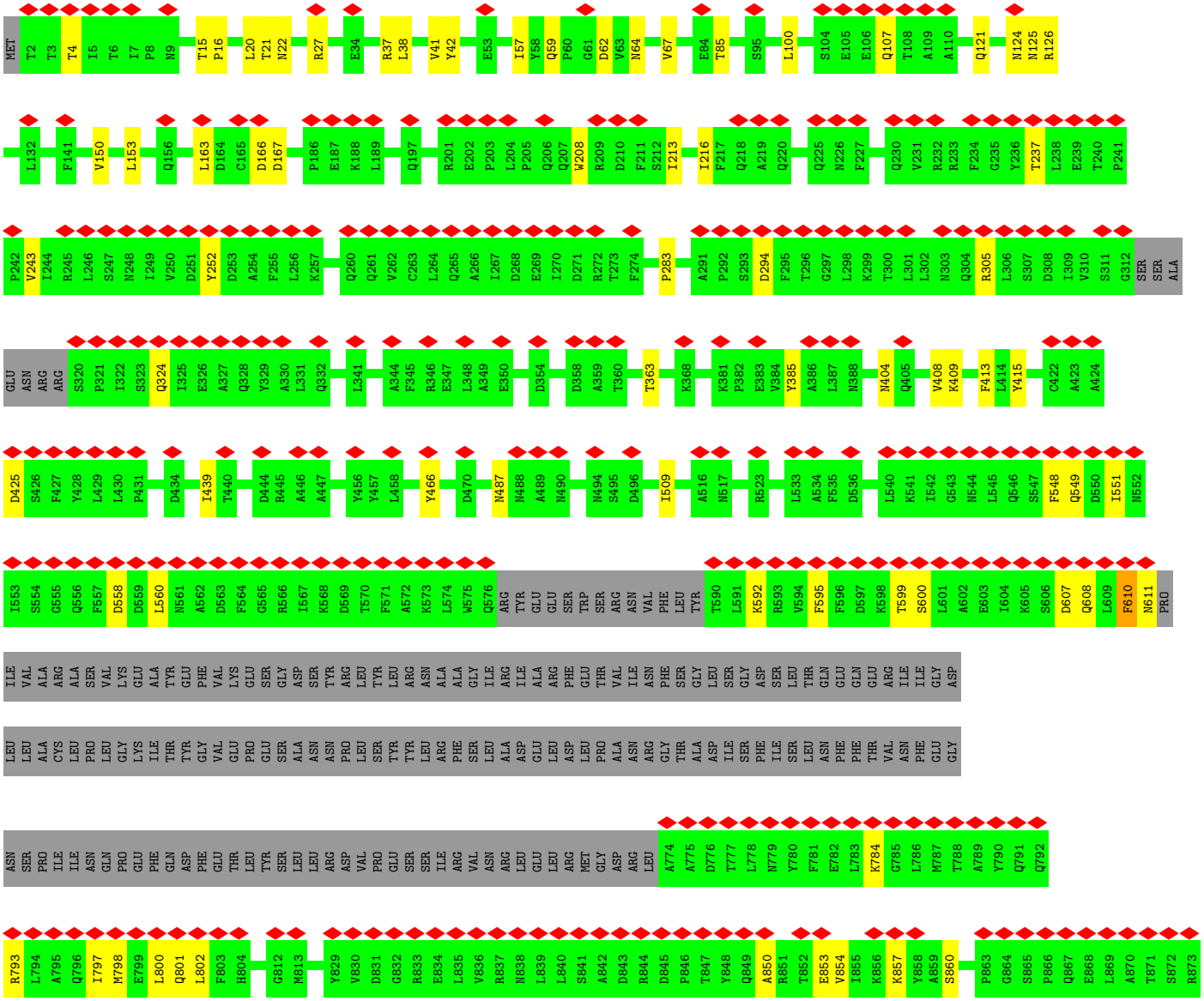
3 Residue-property plots (i)

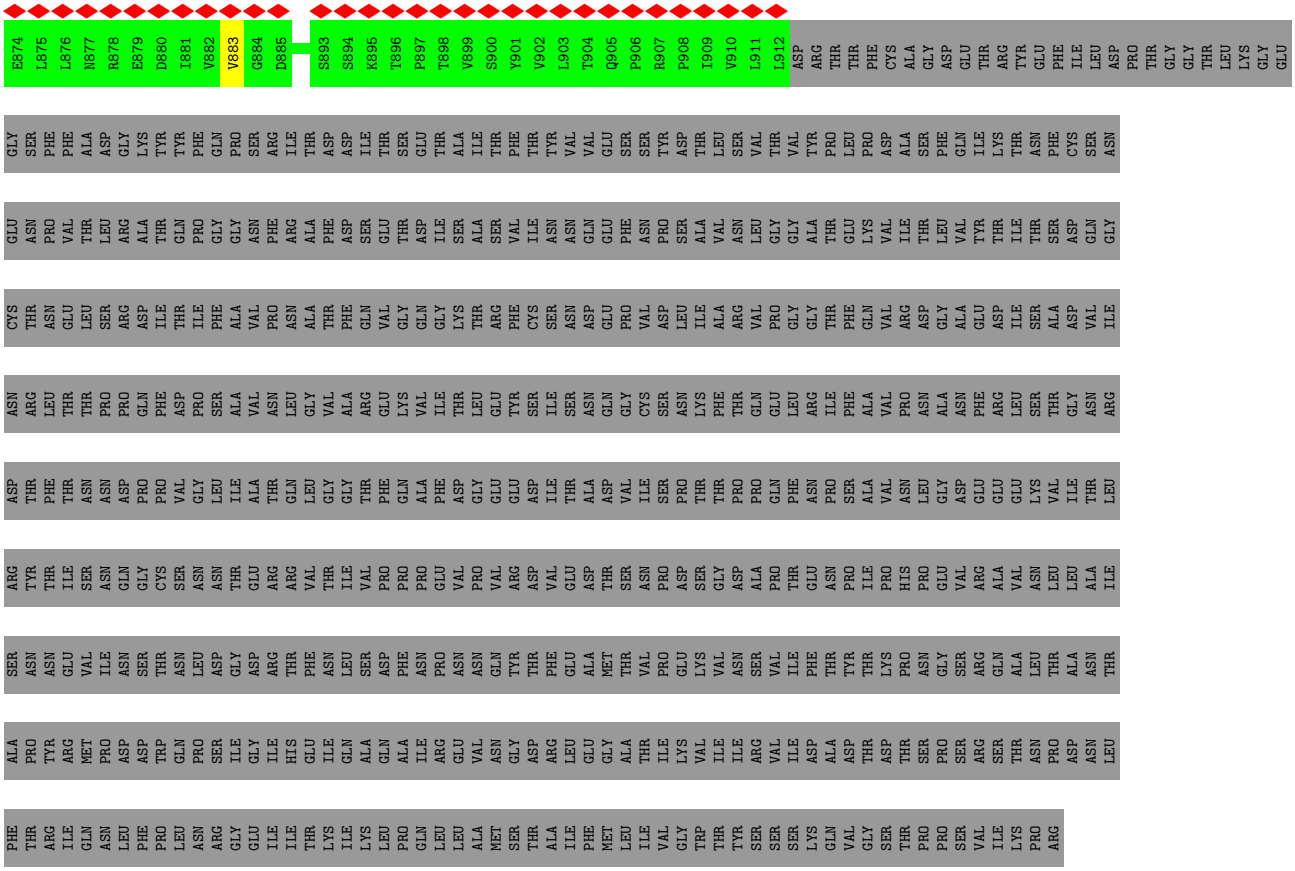
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion 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: All3314 protein

Chain AA:

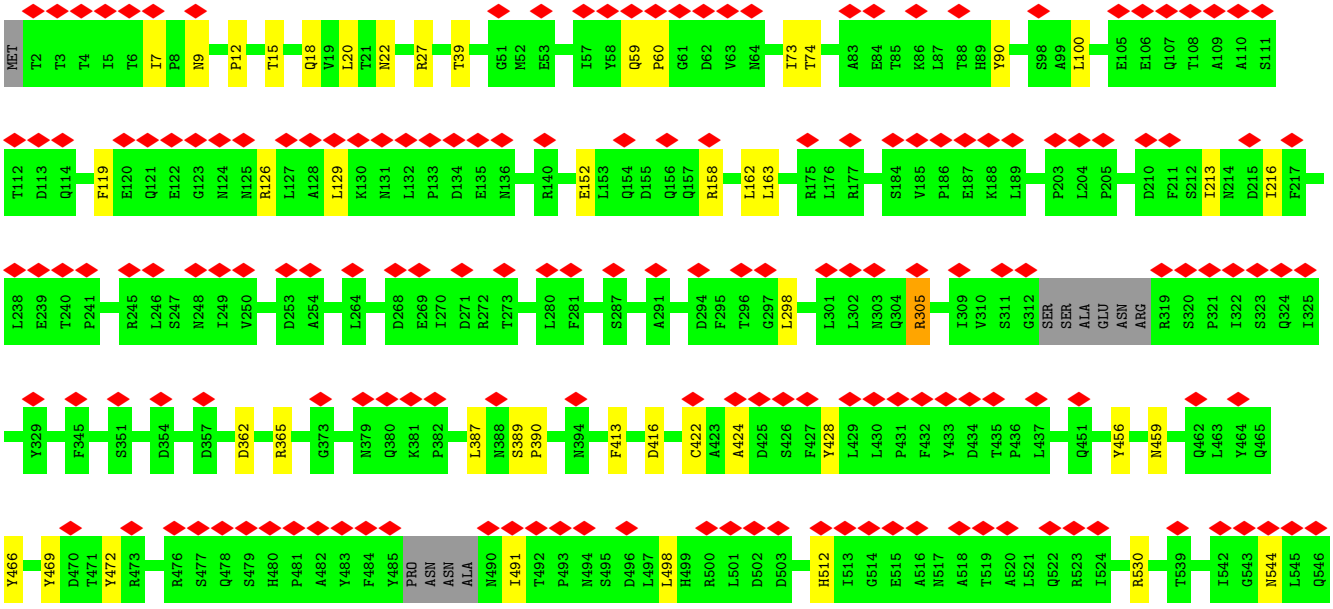


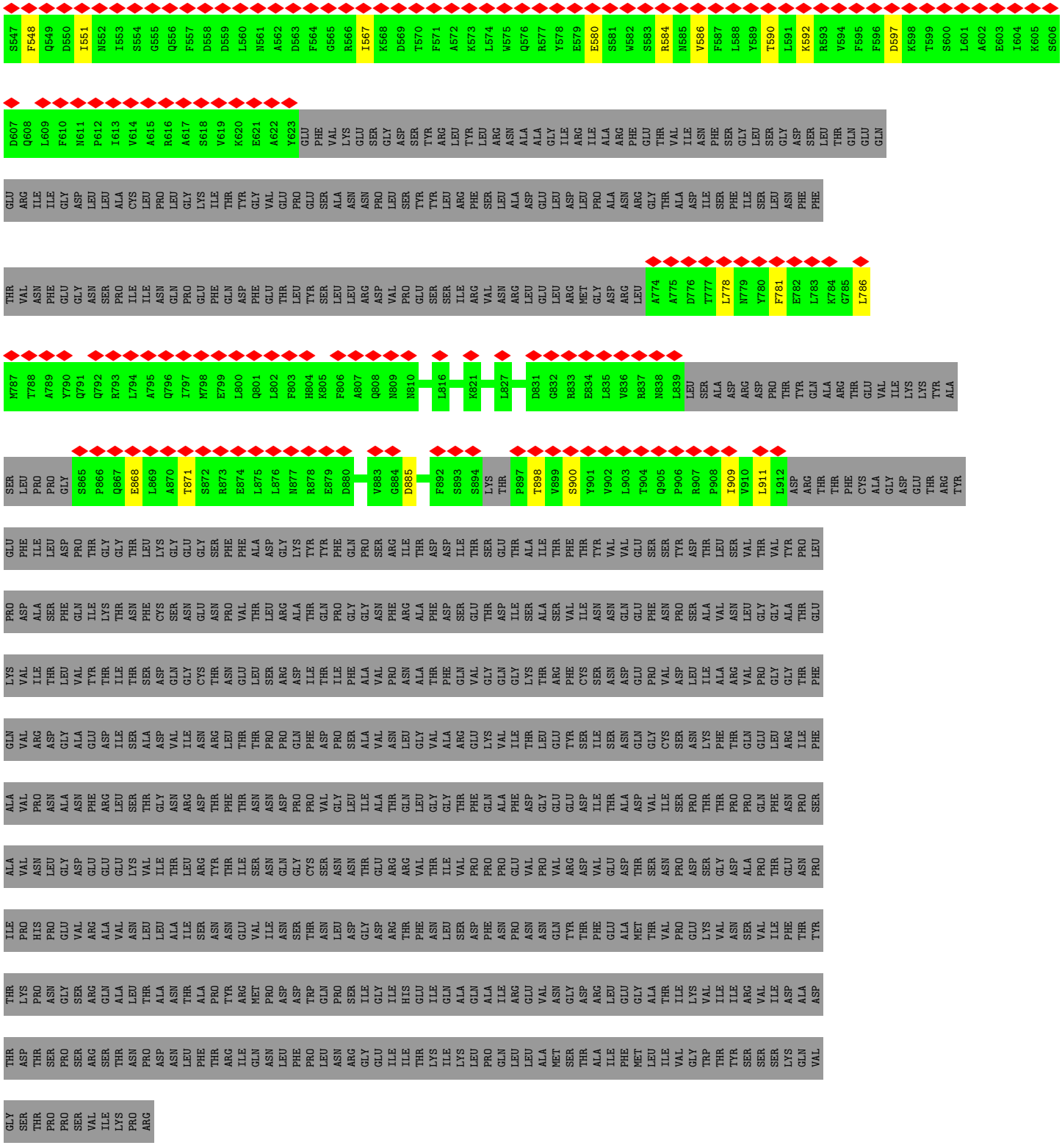




• Molecule 1: All3314 protein

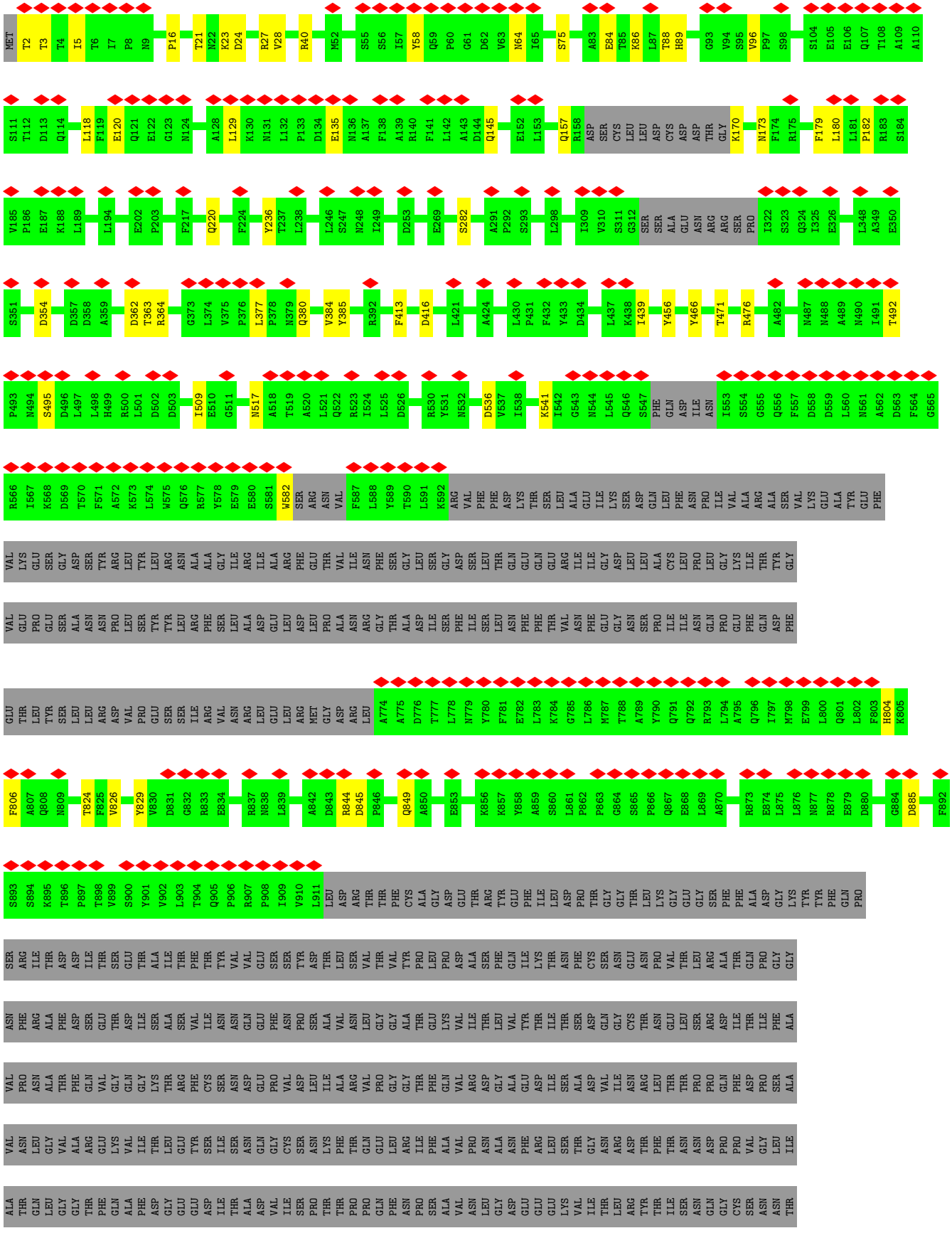
Chain AB:

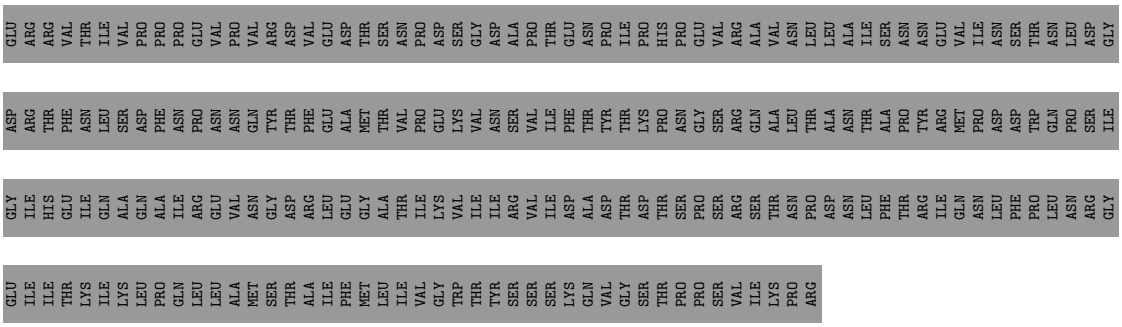




• Molecule 1: All3314 protein

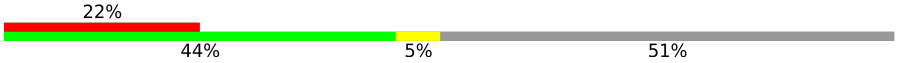
Chain AC:

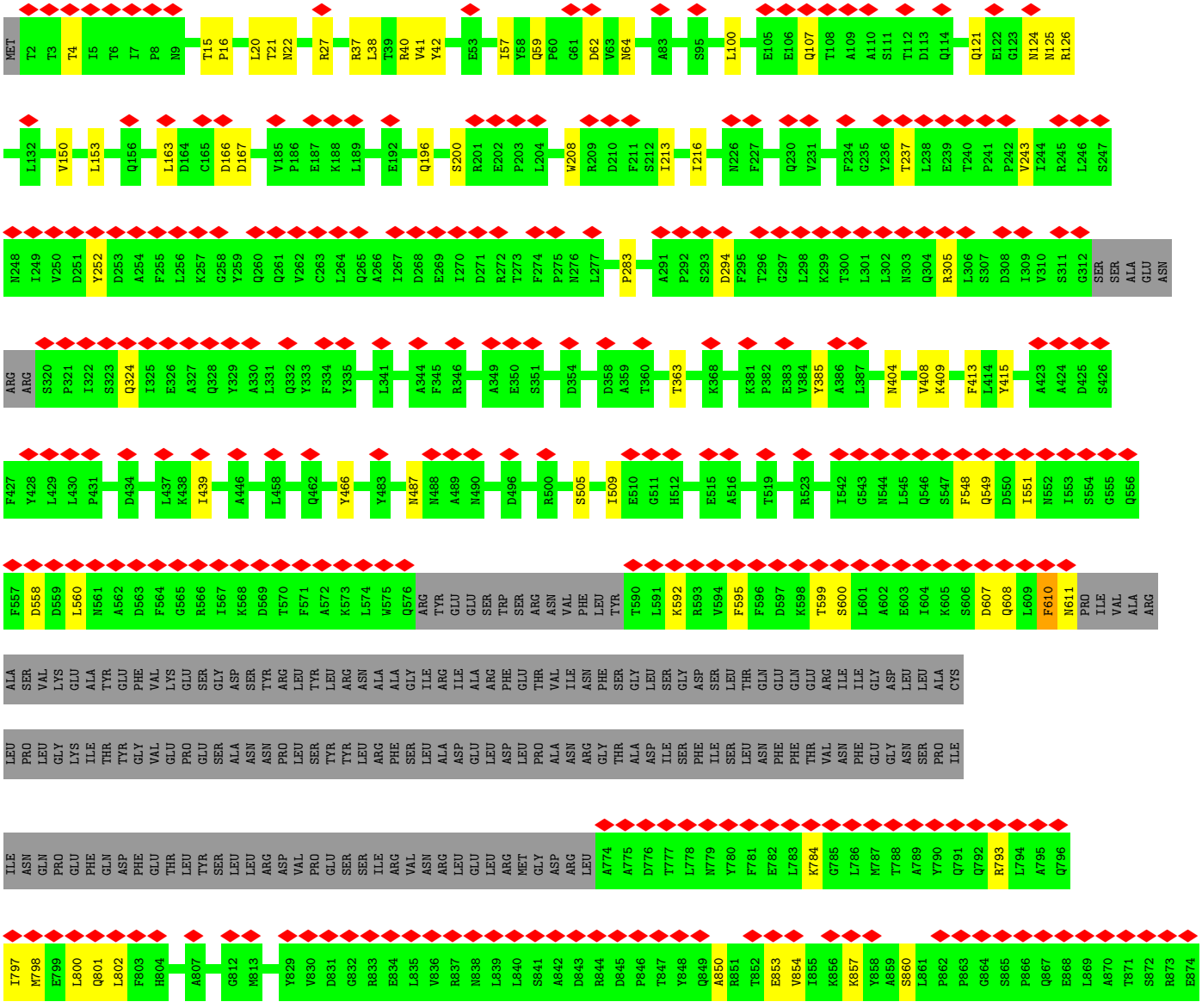

MET T2 T3 T4 I5 T6 I7 P8 N9 P16 T21 N22 K23 D24 R27 V28 R40 M52 S55 S56 I57 Y58 Q59 P60 G61 D62 V63 N64 I65 S75 A83 E84 T85 K86 L87 T88 H89 G93 V94 S95 V96 P97 S98 S104 E105 E106 Q107 T108 A109 A110
S111 T112 D113 Q114 L118 F119 E120 Q121 E122 G123 N124 A128 L129 K130 N131 L132 P133 D134 E135 N136 A137 F138 A139 R140 F141 L142 A143 D144 Q145 E152 L153 Q157 R158 ASP SER CYS LEU LEU ASP CYS ASP ASP THR GLY K170 N173 F174 R175 F179 L180 L181 P182 R183 S184
V185 P186 E187 K188 L189 L194 E202 P203 F217 Q220 F224 Y236 T237 L238 L246 S247 N248 I249 D253 E269 S282 A291 P292 S293 L298 I309 V310 S311 G312 SER SER ALA GLU ASN ARG ARG SER PRO I322 S323 Q324 I325 E326 L348 A349 E350
S351 D354 D357 D358 A359 D362 T363 R364 G373 L374 V375 P376 L377 P378 N379 Q380 V384 Y385 R392 F413 D416 L421 A424 L430 P431 F432 Y433 D434 L437 K438 I439 Y456 Y466 T471 R476 A482 N487 N488 A489 N490 I491 T492
P493 N494 S495 D496 L497 L498 H499 R500 L501 D502 D503 I509 E510 G511 N517 A518 T519 A520 L521 Q522 R523 I524 L525 D526 R530 Y531 N532 D536 V537 I538 K541 I542 G543 N544 L545 Q546 S547 PHE GLN ASP ILE ASN I553 S554 G555 Q556 F557 D558 D559 L560 N561 A562 D563 F564 G565
R566 I567 K568 D569 T570 F571 A572 K573 L574 W575 Q576 R577 Y578 E579 E580 S581 W582 SER ARG ASN VAL F587 L588 Y589 T590 L591 K592 ARG VAL PHE PHE ASP LYS THR SER LEU ALA GLU ILE LYS SER ASP GLN LEU PHE ASN PRO ILE VAL ALA ARG ALA SER VAL LYS GLU ALA TYR GLU PHE
VAL LYS GLU SER GLY ASP SER TYR ARG LEU TYR LEU ARG ASN ALA ALA GLY ILE ARG ILE ALA ARG PHE GLU THR VAL ILE ASN PHE SER GLY LEU SER GLY ASP SER LEU THR GLN GLU GLN GLU ARG ILE ILE GLY ASP LEU LEU ALA CYS LEU PRO LEU GLY LYS ILE THR TYR GLY
VAL GLU PRO GLU SER ALA ASN ASN PRO LEU SER TYR TYR LEU ARG PHE SER LEU ALA ASP GLU LEU ASP LEU PRO ALA ASN ARG GLY THR ALA ASP ILE SER PHE ILE SER LEU ASN PHE PHE THR VAL ASN PHE GLU GLY ASN SER PRO ILE ILE ASN GLN PRO GLU PHE GLN ASP PHE
GLU THR LEU TYR SER LEU LEU ARG ASP VAL PRO GLU SER SER ILE ARG VAL ASN ARG LEU LEU GLU LEU ARG MET GLY ASP ARG LEU A774 A775 D776 T777 L778 N779 Y780 F781 E782 L783 K784 G785 L786 M787 T788 A789 Y790 Q791 Q792 R793 L794 A795 Q796 I797 M798 E799 L800 Q801 L802 F803 H804 K805
F806 A807 Q808 N809 T824 F825 V826 Y829 V830 D831 G832 R833 E834 R837 N838 L839 A842 D843 R844 D845 P846 Q849 A850 E853 K856 K857 Y858 A859 S860 L861 P862 P863 G864 S865 P866 Q867 E868 L869 A870 R873 E874 L875 L876 N877 R878 E879 D880 G884 D885 F892
S893 S894 K895 T896 P897 T898 V899 S900 Y901 V902 L903 T904 Q905 P906 R907 P908 I909 V910 L911 LEU ASP ARG THR THR PHE CYS ALA GLY ASP GLU THR ARG TYR GLU PHE ILE LEU ASP PRO THR GLY GLY THR LEU LYS GLY GLU GLY SER PHE PHE ALA ASP GLY LYS TYR TYR PHE GLN PRO
SER ARG ILE THR ASP ASP ILE THR SER GLU THR ALA ILE THR PHE THR TYR VAL VAL GLU SER SER TYR ASP THR LEU SER VAL THR THR VAL TYR PRO LEU PRO ASP ALA SER PHE GLN ILE LYS THR ASN PHE CYS SER ASN GLU ASN PRO VAL THR LEU LEU ARG ALA THR GLN PRO GLY GLY
ASN PHE ARG ALA PHE ASP SER GLU THR ASP ILE SER ALA SER VAL ILE ASN GLN GLU PHE ASN PRO SER ALA VAL ASN LEU GLY GLY GLY ALA THR GLU LYS VAL ILE THR LEU VAL TYR THR ILE THR SER ASP GLN GLY CYS THR ASN GLU LEU SER ARG ASP ILE THR ILE PHE ALA
VAL PRO ASN ALA THR PHE GLN VAL GLY GLN GLY LYS THR ARG PHE CYS SER ASN ASP GLU PRO VAL ASP LEU ILE ALA ARG VAL PRO GLY GLY THR PHE GLN VAL ARG ASP GLY ALA GLU ASP ILE SER ALA ASP VAL ILE ASN ARG LEU THR THR PRO PRO GLN PHE ASP ALA SER
VAL ASN LEU GLY VAL ALA ARG GLU LYS VAL ILE THR LEU GLU GLY TYR SER ILE SER ASN GLN GLY GLU LEU GLU GLN LEU ARG ILE PHE PHE ALA VAL PRO ASN ALA ASN PHE ARG LEU SER THR GLY ASN ARG ASP THR PHE THR ASN ASN ASP PRO VAL GLY LEU ILE
ALA THR GLN LEU GLY GLY THR PHE GLN ASP GLY GLU GLU ASP ILE THR ALA ASP VAL ILE SER PRO THR THR PRO PRO GLN PHE ASN PRO SER ALA VAL ASN LEU GLY ASP GLU GLU GLU LYS VAL THR PHE THR LEU ARG TYR THR ILE SER ASN GLN GLY CYS SER ASN ASN THR

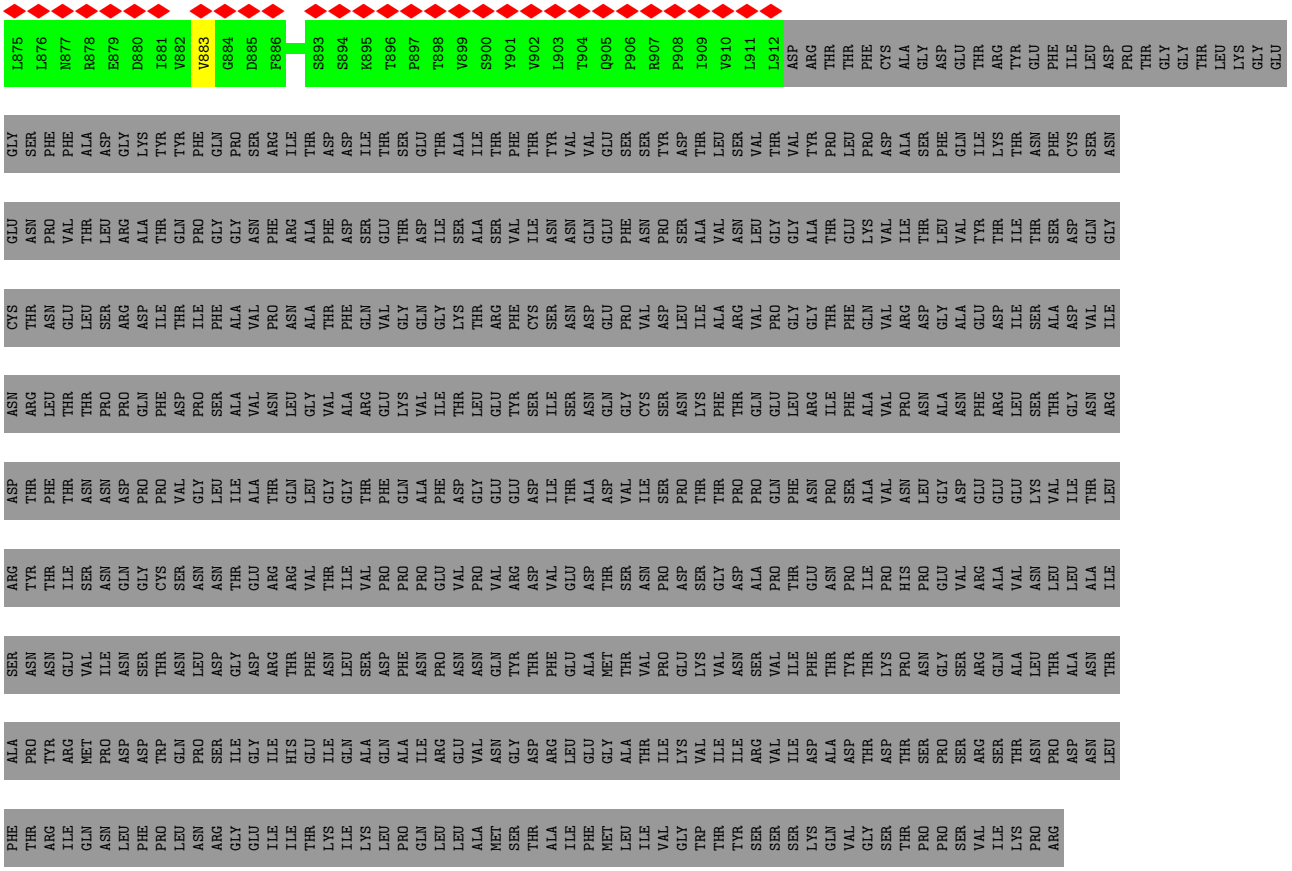


• Molecule 1: All3314 protein

Chain BA:

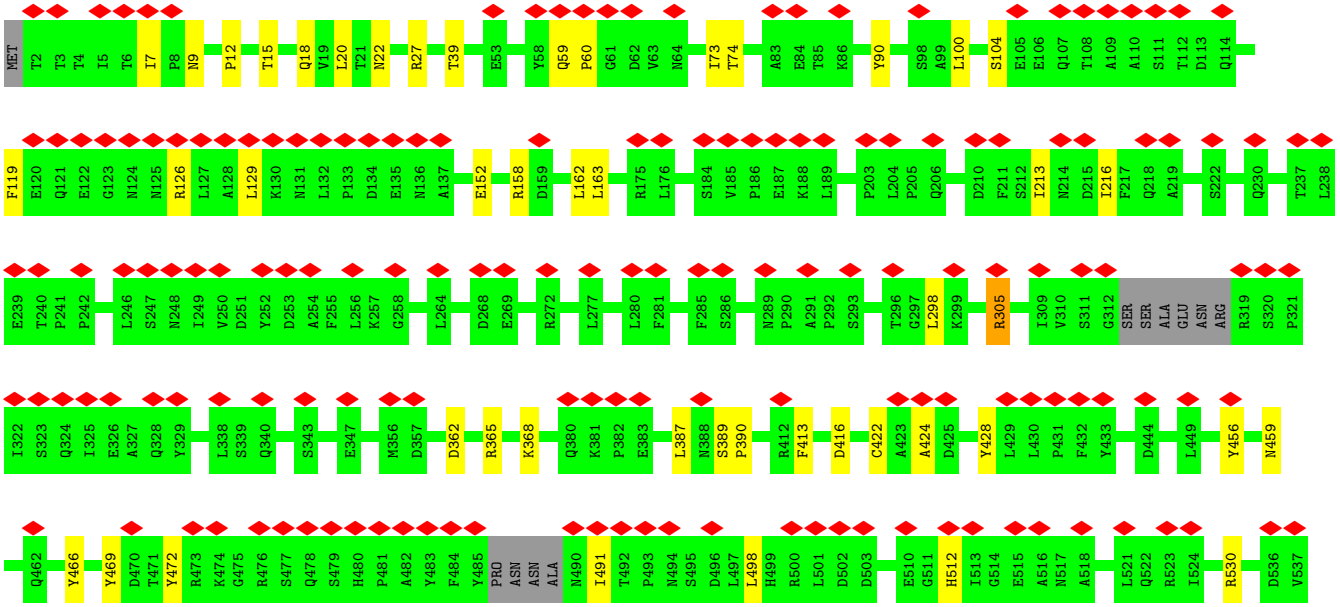


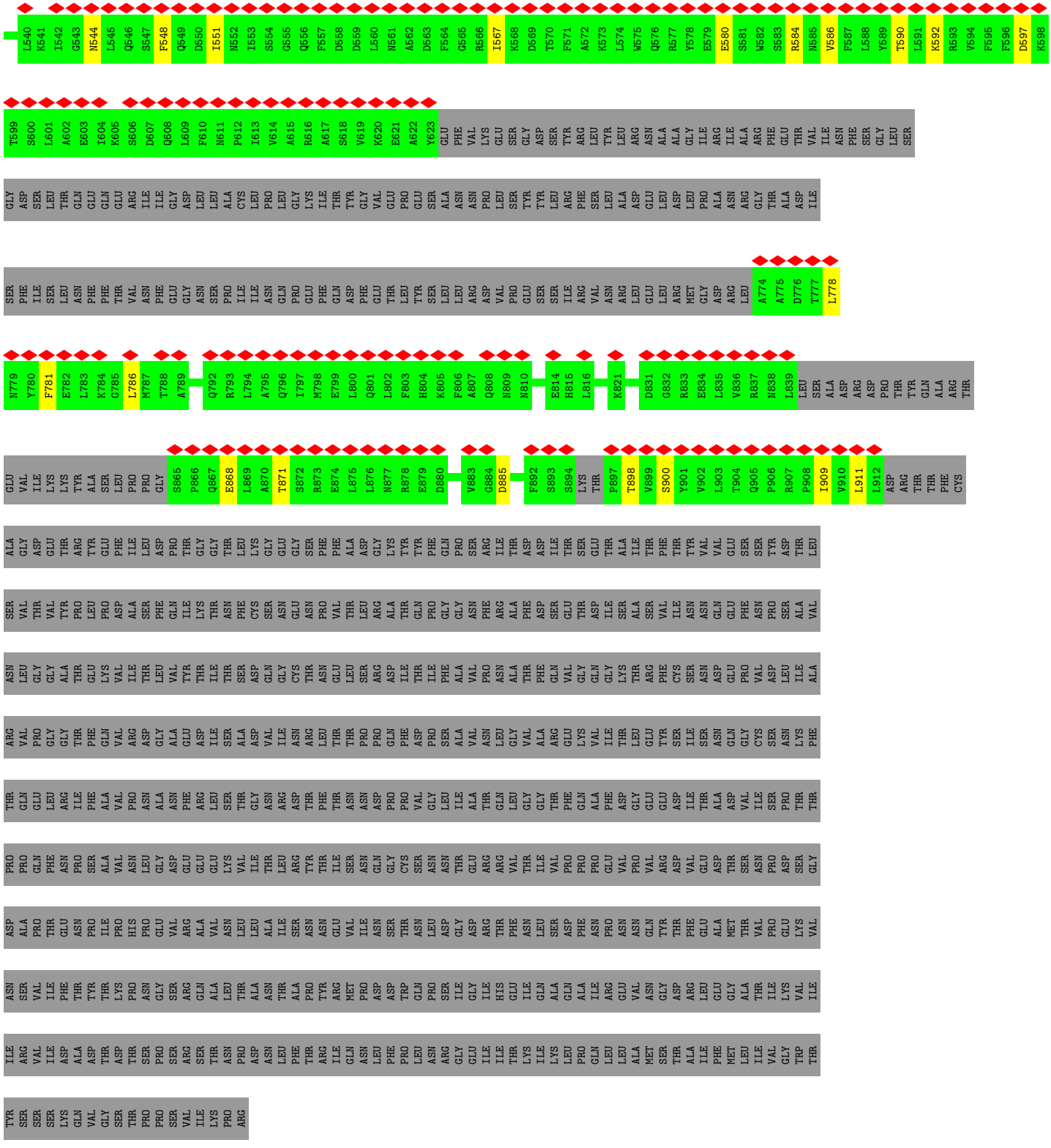




• Molecule 1: All3314 protein

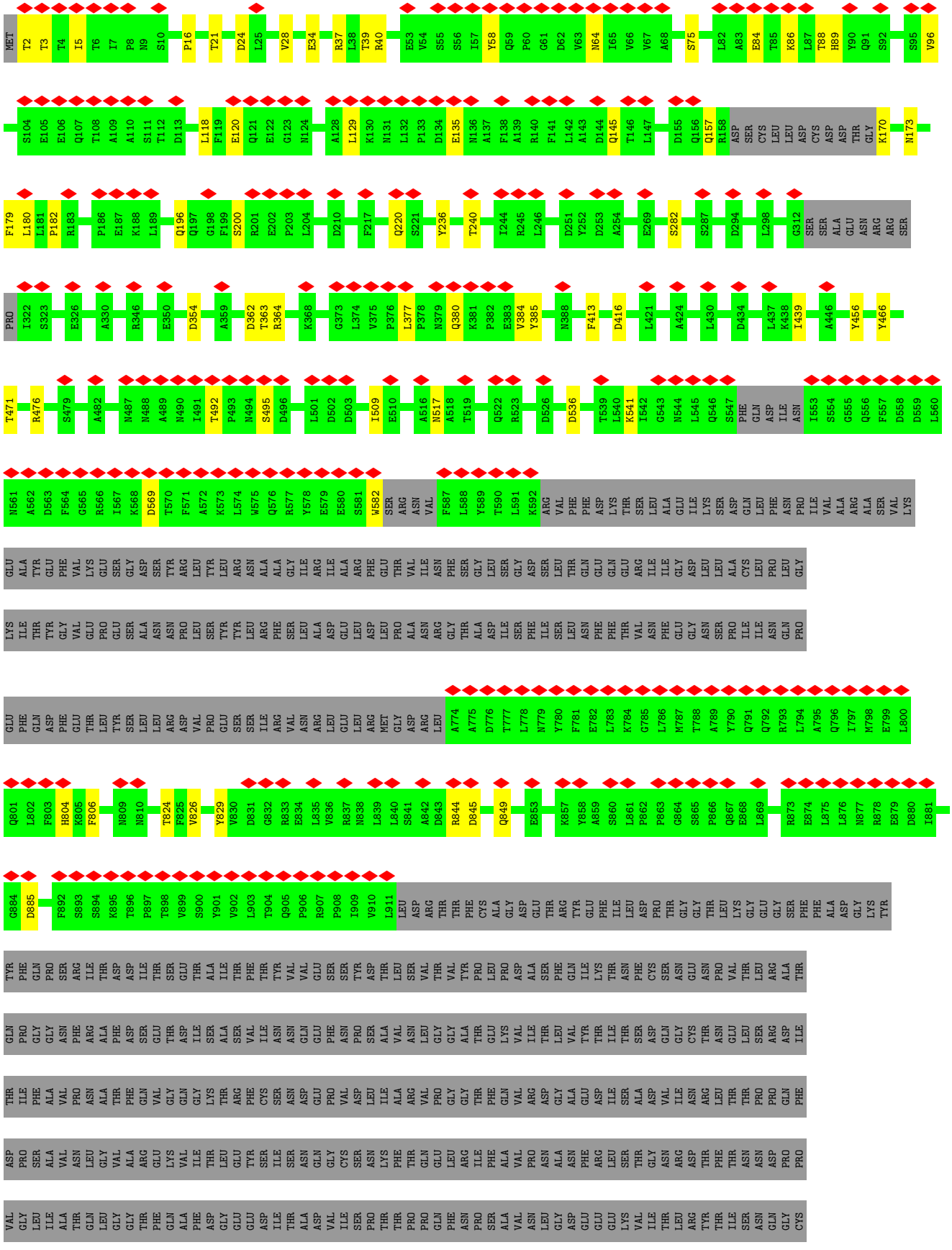
Chain BB:

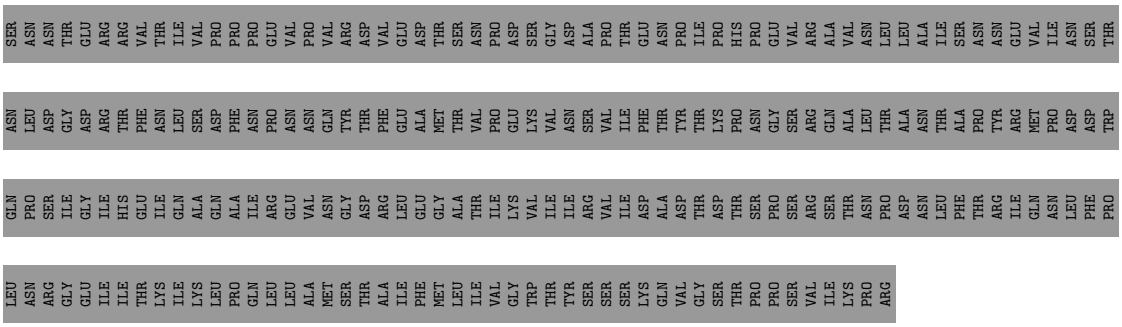




- Molecule 1: All3314 protein

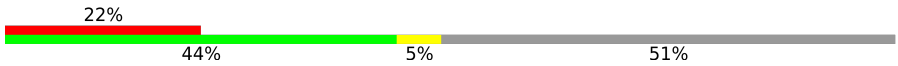
Chain BC:

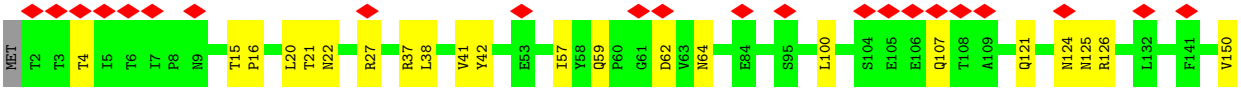

MET T2 T3 T4 I5 T6 I7 P8 N9 S10 P16 T21 D24 L25 V28 E34 R37 L38 T39 R40 E53 V54 S55 S56 I57 Y58 Q59 P60 G61 D62 V63 N64 I65 V66 V67 A68 S75 L82 A83 E84 T85 K86 L87 T88 H89 Y90 Q91 S92 S95 V96
S104 E105 E106 Q107 T108 A109 A110 S111 T112 D113 L118 F119 E120 Q121 E122 G123 N124 A128 L129 K130 N131 L132 P133 D134 E135 N136 A137 F138 A139 R140 F141 L142 A143 D144 Q145 T146 L147 D155 Q156 Q157 R158 ASP SER CYS LEU LEU ASP CYS ASP ASP THR GLY K170 N173
F179 L180 L181 P182 R183 P186 E187 K188 L189 Q196 Q197 G198 F199 S200 R201 E202 P203 L204 D210 F217 Q220 S221 Y236 T240 I244 R245 L246 D251 Y252 D253 A254 E269 S282 S287 D294 L298 G312 SER SER ALA GLU ASN ARG ARG SER
PRO I322 S323 E326 A330 R346 E350 D354 A359 D362 T363 R364 K368 G373 L374 V375 P376 L377 P378 N379 Q380 K381 P382 E383 V384 Y385 N388 F413 D416 L421 A424 L430 D434 L437 K438 I439 A446 Y456 Y466
T471 R476 S479 A482 N487 N488 A489 N490 I491 T492 P493 N494 S495 D496 L501 D502 D503 I509 E510 A516 N517 A518 T519 Q522 R523 D526 D536 T539 L540 K541 I542 G543 N544 L545 Q546 S547 PHE GLN ASP ILE ASN I553 S554 G555 Q556 F557 D558 D559 L560
N561 A562 D563 F564 G565 R566 I567 K568 D569 T570 F571 A572 K573 L574 W575 Q576 R577 Y578 E579 E580 S581 W582 SER ARG ASN VAL F587 L588 Y589 T590 L591 K592 ARG VAL PHE PHE ASP LYS THR SER LEU ALA GLU ILE LYS SER ASP GLN LEU PHE ASN PRO ILE VAL ALA ARG ALA SER VAL LYS
GLU ALA TYR GLU PHE VAL LYS GLU SER GLY ASP SER TYR ARG LEU TYR LEU ARG ASN ALA ALA GLY ILE ARG ILE ALA ARG PHE GLU THR VAL ILE ASN PHE SER GLY LEU SER GLY ASP SER LEU THR GLN GLU GLN GLU ARG ILE ILE GLY ASP LEU LEU LEU ALA CYS LEU PRO LEU GLY
LYS ILE THR TYR GLY VAL GLU PRO GLU SER ALA ASN ASN PRO LEU SER TYR TYR LEU ARG PHE SER LEU ALA ASP GLU LEU ASP LEU PRO ALA ASN ARG GLY THR ALA ASP ILE SER PHE ILE SER LEU ASN PHE PHE THR VAL ASN PHE GLU GLY ASN SER PRO ILE ILE ASN GLN PRO
GLU PHE GLN ASP PHE GLU THR LEU TYR SER LEU LEU LEU ARG ASP VAL PRO GLU SER SER ILE ARG VAL ASN ARG LEU GLU LEU ARG MET GLY ASP ARG LEU A774 A775 D776 T777 L778 N779 Y780 F781 E782 L783 K784 G785 L786 M787 T788 A789 Y790 Q791 Q792 R793 L794 A795 Q796 I797 M798 E799 L800
Q801 L802 F803 H804 K805 F806 N809 N810 T824 F825 V826 Y829 V830 D831 G832 R833 E834 L835 V836 R837 N838 L839 L840 S841 A842 D843 R844 D845 Q849 E853 K857 Y858 A859 S860 L861 P862 P863 G864 S865 P866 Q867 E868 L869 R873 E874 L875 L876 N877 R878 E879 D880 I881
G884 D885 F892 S893 S894 K895 T896 P897 T898 V899 S900 Y901 V902 L903 T904 Q905 P906 R907 P908 I909 V910 L911 LEU ASP ARG THR THR PHE CYS ALA GLY ASP GLU THR ARG TYR GLU PHE ILE LEU ASP PRO THR GLY GLY THR LEU LYS GLY GLU GLY SER PHE PHE ALA ASP GLY LYS TYR
TYR PHE GLN PRO SER ARG ILE THR ASP ILE THR SER GLU THR ALA ILE THR PHE THR TYR VAL VAL GLU SER SER TYR ASP THR LEU SER VAL THR VAL TYR PRO LEU PRO ASP ALA SER PHE GLN ILE LYS THR ASN PHE CYS SER ASN GLU GLU ASN PRO LEU VAL THR LEU GLY ALA ARG THR
GLN PRO GLY GLY ASN PHE ARG ALA PHE ASP SER GLU THR ASP ILE SER ALA ALA SER VAL ILE ASN ASN GLN GLU PHE ASN PRO SER ALA VAL ASN LEU GLY GLY ALA THR GLU LYS VAL ILE THR LEU VAL TYR THR ILE THR SER ASP GLN GLY CYS THR ASN GLU LEU SER ARG ASP ILE
THR ILE PHE ALA VAL PRO ASN ALA THR PHE GLN VAL GLY GLN GLY LYS THR ARG PHE CYS SER ASN ASP GLU PRO VAL ASP PRO ILE ALA ARG VAL PRO GLY GLY THR PHE GLN VAL ARG ASP GLY ALA GLU ASP ILE SER ALA ASP VAL ILE ARG LEU THR THR PRO PRO GLN PHE
ASP PRO SER ALA VAL ASN LEU GLY VAL ALA ARG GLU LYS VAL ILE THR LEU GLU GLU TYR SER ILE SER ASN GLN GLY CYS SER ASN LYS PHE THR GLN GLU LEU ARG ILE PHE ALA VAL PRO ASN ALA ASN PHE ARG LEU SER THR GLY ASN ARG ASP THR PHE THR ASN ASN ASP PRO PRO
VAL GLY LEU ILE ALA THR GLN LEU GLY VAL GLY THR PHE GLN ALA PHE ASP GLY GLU GLU ASP ILE THR ALA ASP VAL ALA ILE SER PRO THR THR PRO PRO ASN PRO SER ALA VAL ASN LEU GLY ASP GLU GLU LYS VAL ILE THR LEU ARG TYR THR ILE SER ASN GLN GLY CYS

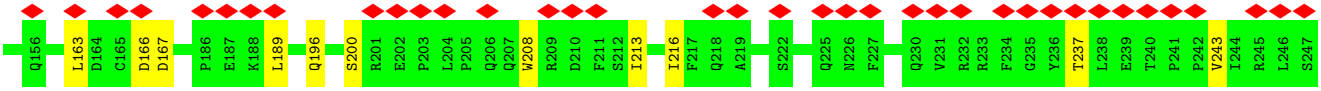


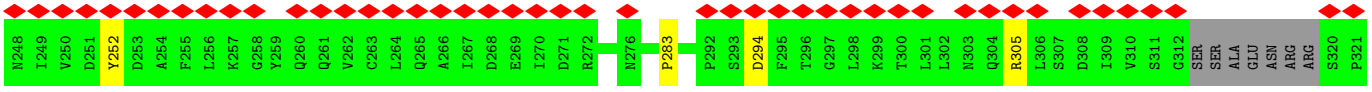
- Molecule 1: All3314 protein

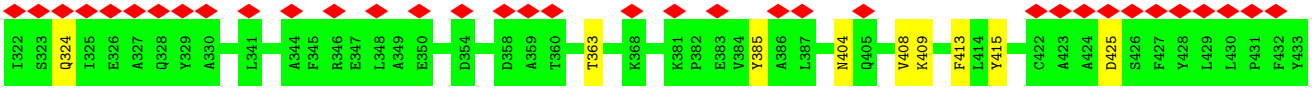
Chain CA:

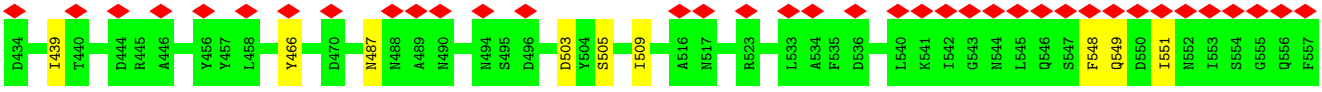


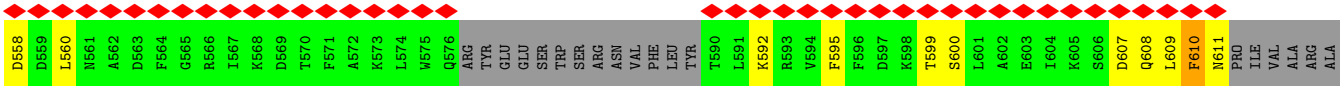


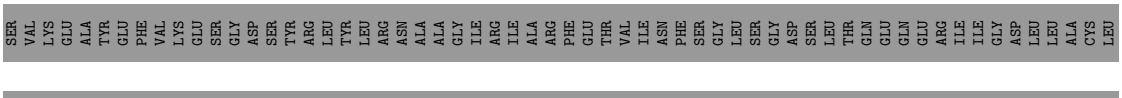


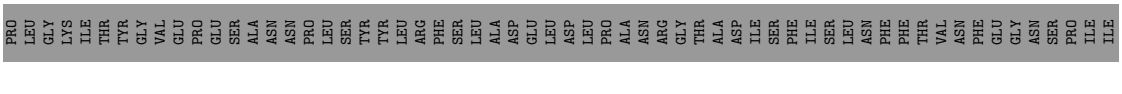


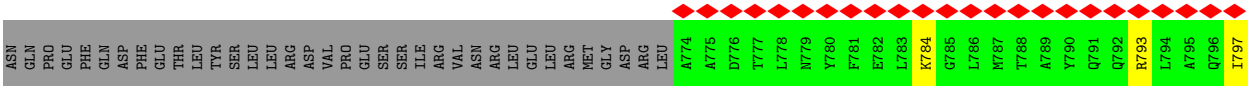


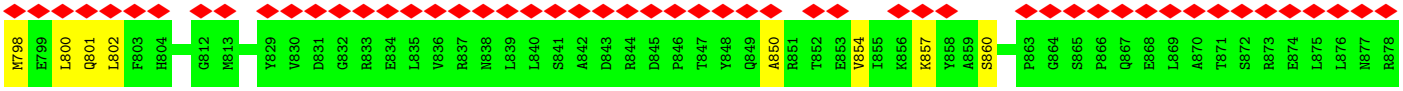


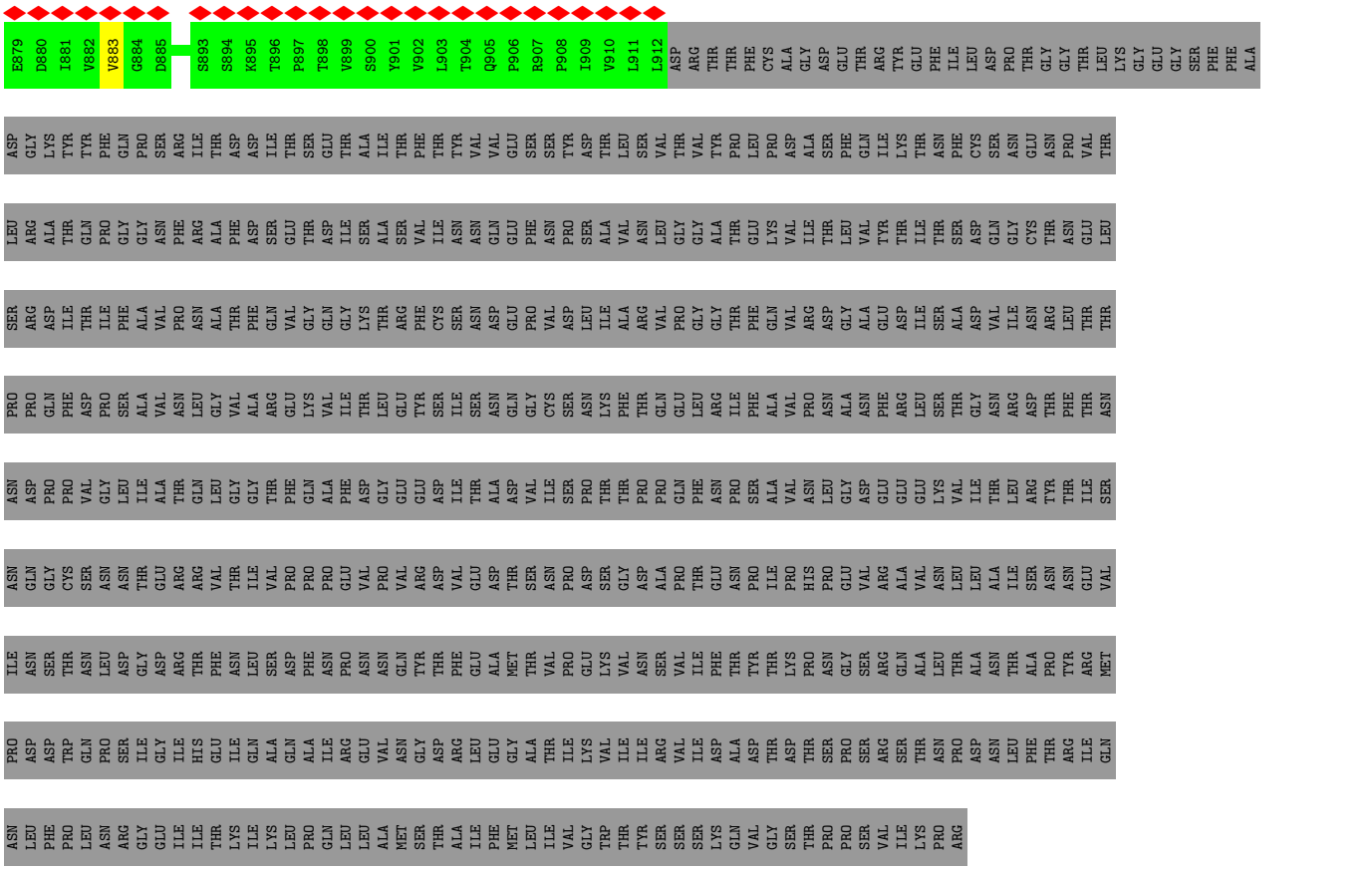






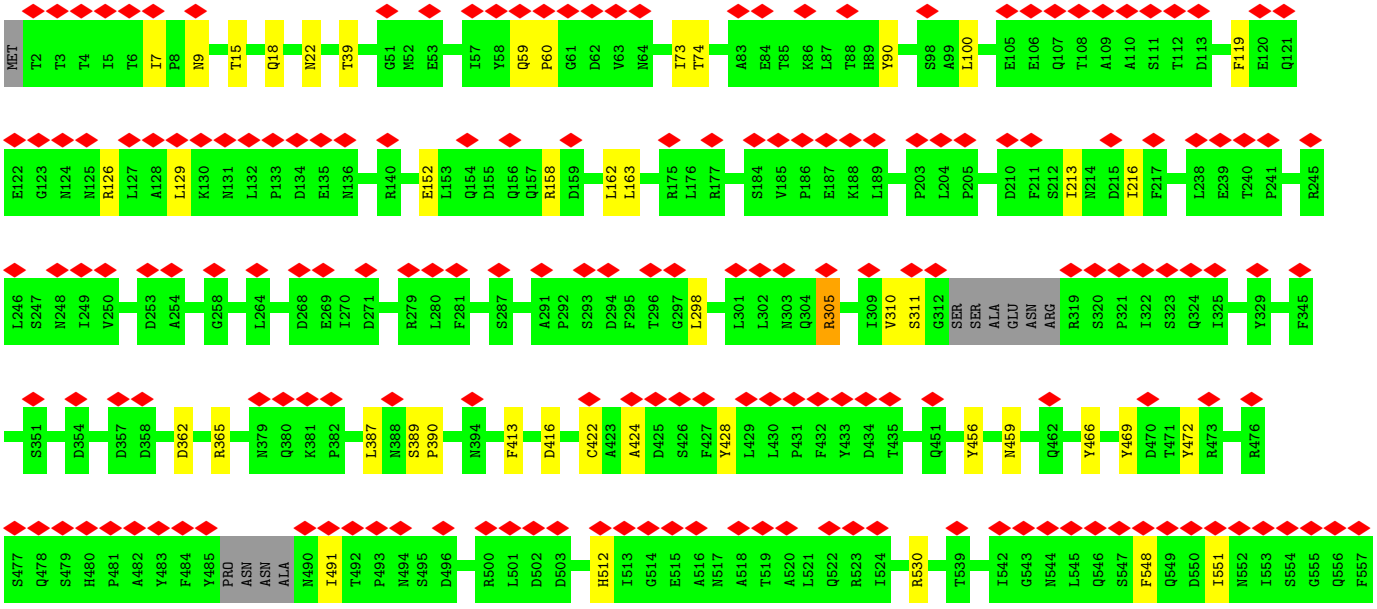


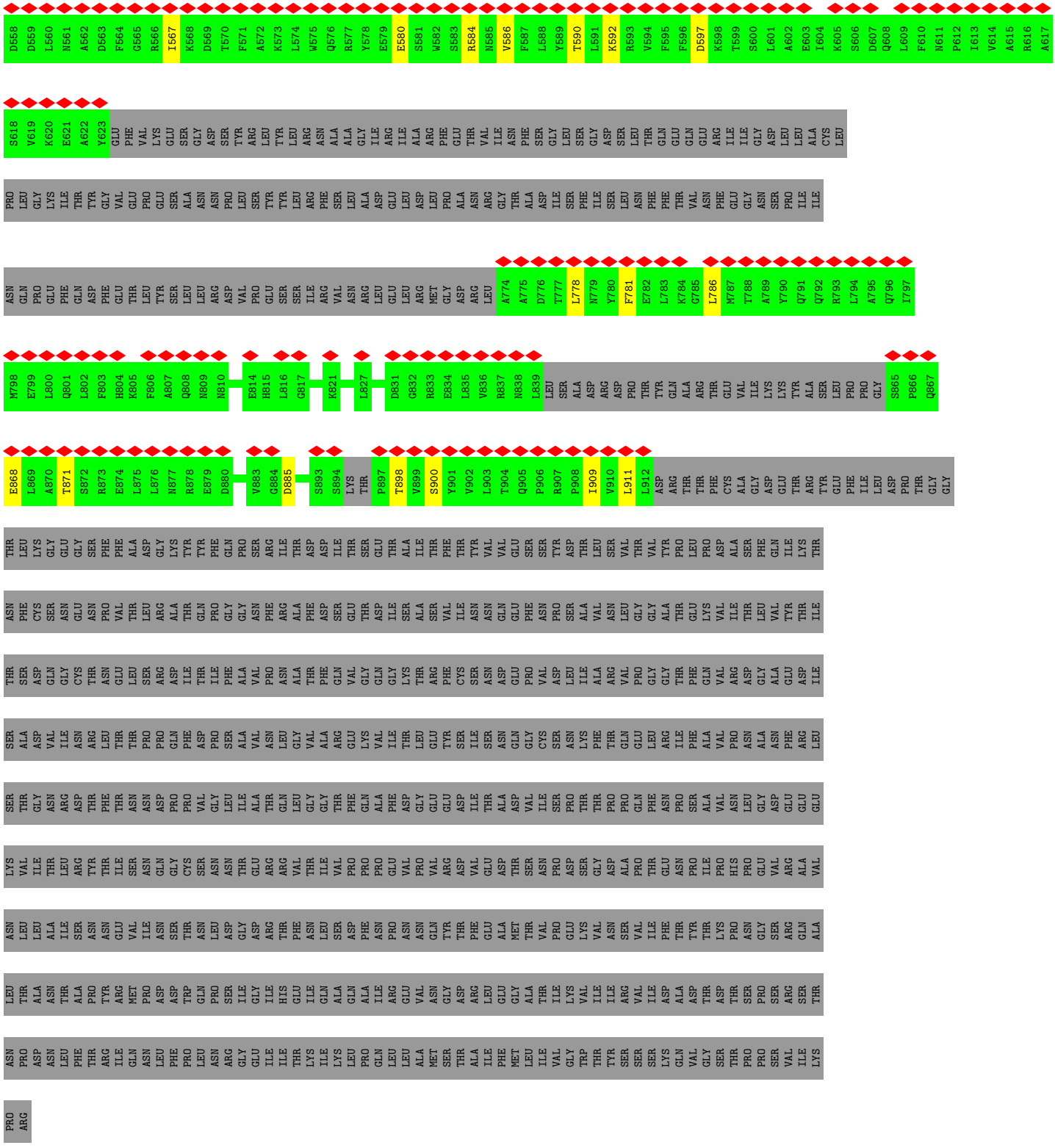




• Molecule 1: All3314 protein

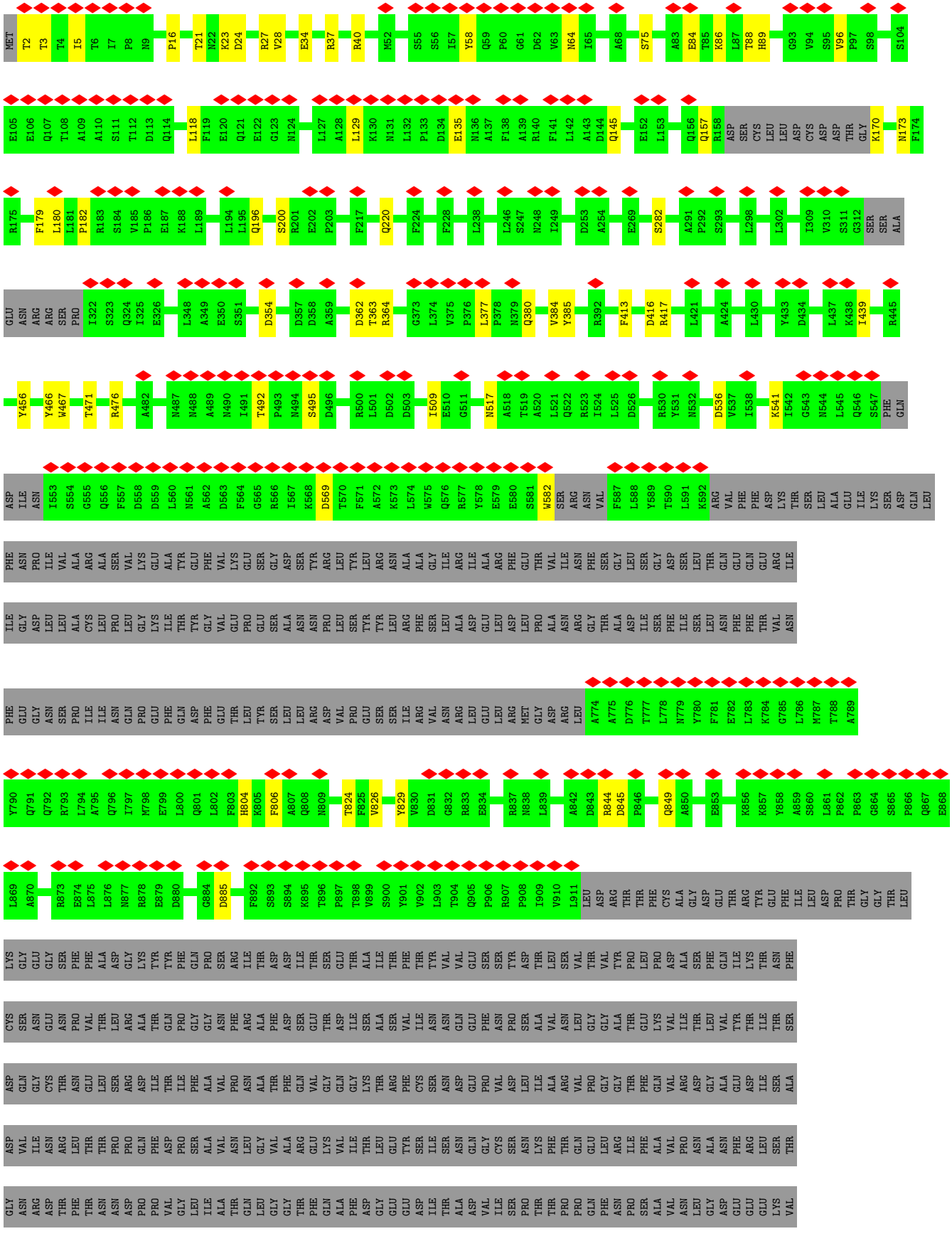
Chain CB:

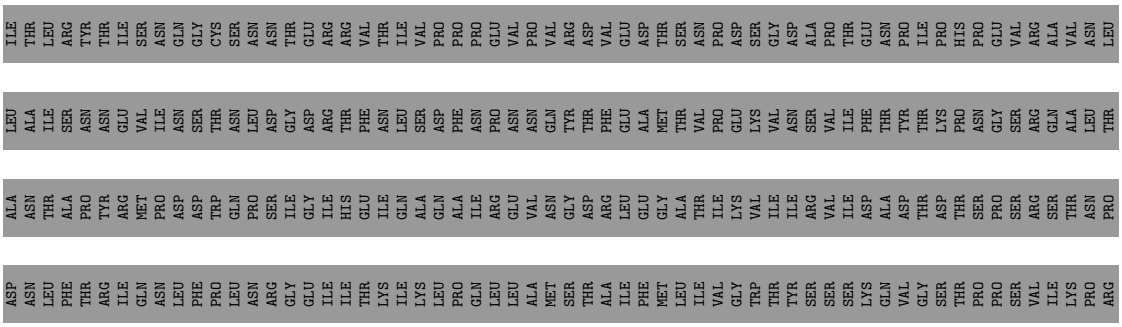




- Molecule 1: All3314 protein

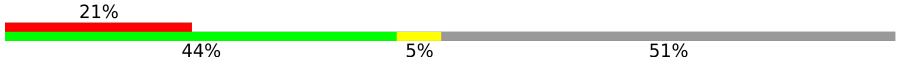
Chain CC:

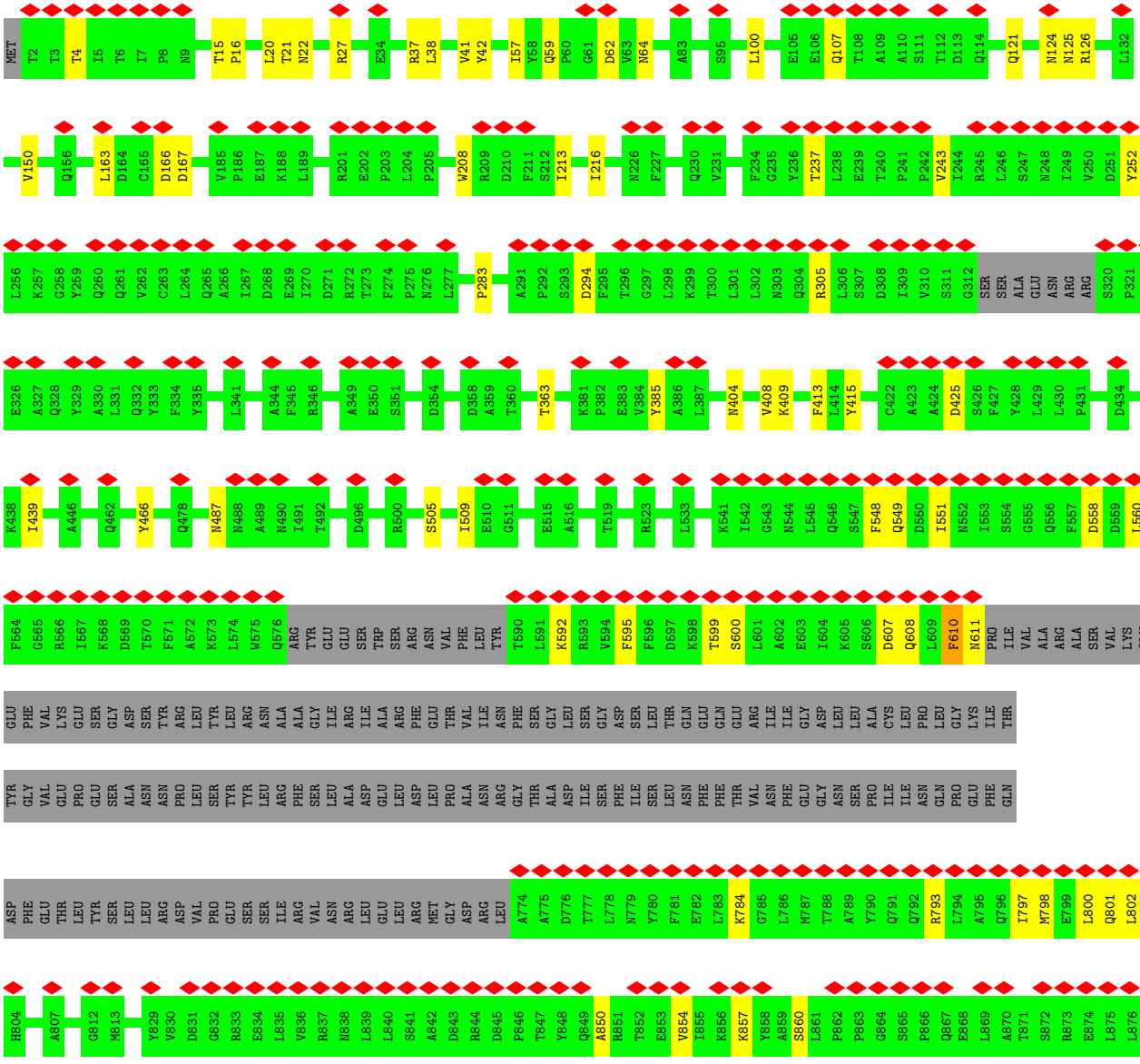

MET T2 T3 T4 I5 T6 I7 P8 N9 P16 T21 N22 K23 D24 R27 V28 E34 R37 R40 M52 S55 S56 I57 Y58 Q59 P60 G61 D62 V63 N64 I65 A68 S75 A83 E84 T85 K86 L87 T88 H89 G93 V94 S95 V96 P97 S98 S104
E105 E106 Q107 T108 A109 A110 S111 T112 D113 Q114 L118 F119 E120 Q121 E122 G123 N124 L127 A128 L129 K130 N131 L132 P133 D134 E135 N136 A137 F138 A139 R140 F141 L142 A143 D144 Q145 E152 L153 Q156 Q157 R158 ASP SER CYS LEU LEU ASP CYS ASP ASP THR GLY K170 N173 F174
R175 F179 L180 L181 P182 R183 S184 V185 P186 E187 K188 L189 L194 L195 Q196 S200 R201 E202 P203 F217 Q220 F224 F228 L238 L246 S247 N248 I249 D253 A254 E269 S282 A291 P292 S293 L298 L302 I309 V310 S311 G312 SER SER ALA
GLU ASN ARG ARG SER PRO I322 S323 Q324 I325 E326 L348 A349 E350 S351 D354 D357 D358 A359 D362 T363 R364 G373 L374 V375 P376 L377 P378 N379 Q380 V384 Y385 R392 F413 D416 R417 L421 A424 L430 Y433 D434 L437 K438 I439 R445
Y456 Y466 W467 T471 R476 A482 N487 N488 A489 N490 I491 T492 P493 N494 S495 D496 R500 L501 D502 D503 I509 E510 G511 N517 A518 T519 A520 L521 Q522 R523 I524 L525 D526 R530 Y531 N532 D536 V537 I538 K541 I542 G543 N544 L545 Q546 S547 PHE GLN
ASP ILE ASN I553 S554 G555 Q556 F557 D558 D559 L560 N561 A562 D563 F564 G565 R566 I567 K568 D569 T570 F571 A572 K573 L574 W575 Q576 R577 Y578 E579 E580 S581 W582 SER ARG ASN VAL F587 L588 Y589 T590 L591 K592 ARG VAL PHE PHE ASP LYS THR SER LEU ALA GLU ILE LYS SER ASP GLN LEU
PHE ASN PRO ILE VAL ALA ARG ALA SER VAL LYS GLU ALA TYR GLU PHE VAL LYS GLU SER GLY ASP SER TYR ARG LEU TYR LEU ARG ASN ALA ALA GLY ILE ARG ILE ALA ARG PHE GLU THR VAL ILE ASN PHE SER GLY LEU SER GLY ASP SER LEU THR GLN GLU GLN GLU ARG ILE
ILE GLY ASP LEU LEU ALA CYS LEU PRO LEU GLY LYS ILE THR TYR GLY VAL GLU PRO GLU SER ALA ASN ASN PRO LEU SER TYR TYR LEU ARG PHE SER LEU ALA ASP GLU LEU ASP LEU PRO ALA ASN ARG GLY THR ALA ASP ILE SER PHE ILE SER LEU ASN PHE PHE THR VAL ASN
PHE GLU GLY ASN SER PRO ILE ILE ASN GLN PRO GLU PHE GLN ASP PHE GLU THR LEU TYR SER LEU LEU ARG ASP VAL PRO GLU SER SER ILE ARG VAL ASN ARG LEU GLU LEU ARG MET GLY ASP ARG LEU A774 A775 D776 T777 L778 N779 Y780 F781 E782 L783 K784 G785 L786 M787 T788 A789
Y790 Q791 Q792 R793 L794 A795 Q796 I797 M798 E799 L800 Q801 L802 F803 H804 K805 F806 A807 Q808 N809 T824 F825 V826 Y829 V830 D831 G832 R833 E834 R837 N838 L839 A842 D843 R844 D845 P846 Q849 A850 E853 K856 K857 Y858 A859 S860 L861 P862 P863 G864 S865 P866 Q867 E868
L869 A870 R873 E874 L875 L876 N877 R878 E879 D880 G884 D885 F892 S893 S894 K895 T896 P897 T898 V899 S900 Y901 V902 L903 T904 Q905 P906 R907 P908 I909 V910 L911 LEU ASP ARG THR THR PHE CYS ALA GLY ASP GLU THR ARG TYR GLU PHE ILE LEU ASP PRO THR GLY GLY THR LEU
LYS GLY GLU GLY SER PHE PHE ALA ASP GLY LYS TYR TYR PHE GLN PRO SER ARG ILE THR ASP ASP ILE THR SER GLU THR ALA ILE THR PHE THR TYR VAL SER GLU GLY ASP SER SER TYR ASP THR LEU SER VAL THR VAL TYR PRO LEU PRO ASP ALA ALA SER PHE GLN ILE LYS THR ASN PHE
CYS SER ASN GLU ASN PRO VAL THR LEU ARG ALA THR GLN PRO GLY GLY ASN PHE ARG ALA PHE ASP SER GLU THR ASP ILE SER ALA SER VAL ILE ASN GLN GLU PHE ASN PRO SER ALA VAL ASN LEU GLY GLY ALA THR GLU LYS VAL ILE THR LEU VAL TYR THR ILE THR SER
ASP GLN GLY CYS THR ASN GLU LEU SER ARG ASP ILE THR ILE PHE ALA VAL PRO ASN ALA THR PHE GLN VAL GLY GLN GLY LYS THR ARG PHE CYS SER ASN ASP GLU PRO VAL ASP LEU ILE ALA ARG VAL PRO GLY GLY THR PHE GLN VAL ARG ASP GLY ALA GLU ASP ILE SER ALA
ASP VAL ILE ASN ARG LEU THR THR PRO PRO GLN PHE ASP PRO SER ALA VAL ASN LEU GLY VAL ALA ARG GLU LYS VAL ILE THR LEU GLU TYR SER ILE SER ASN GLN GLY CYS SER ASP ILE ARG PHE ILE ALA VAL PRO ASN ALA GLU ASP ILE SER ALA LEU ARG ILE PHE ALA VAL ASN LEU GLY ALA ILE ARG GLU LEU SER THR
GLY ASN ARG ASP THR PHE THR ASN ASN PRO PRO VAL GLY LEU ILE ALA THR GLN LEU GLY ALA THR PHE GLN ALA PHE ASP GLY GLU GLU ASP ILE THR ALA ASP VAL ILE SER PRO THR THR PRO PRO GLN PHE ASN PRO SER ALA VAL ASN LEU GLY ASP GLU GLU GLU LYS VAL

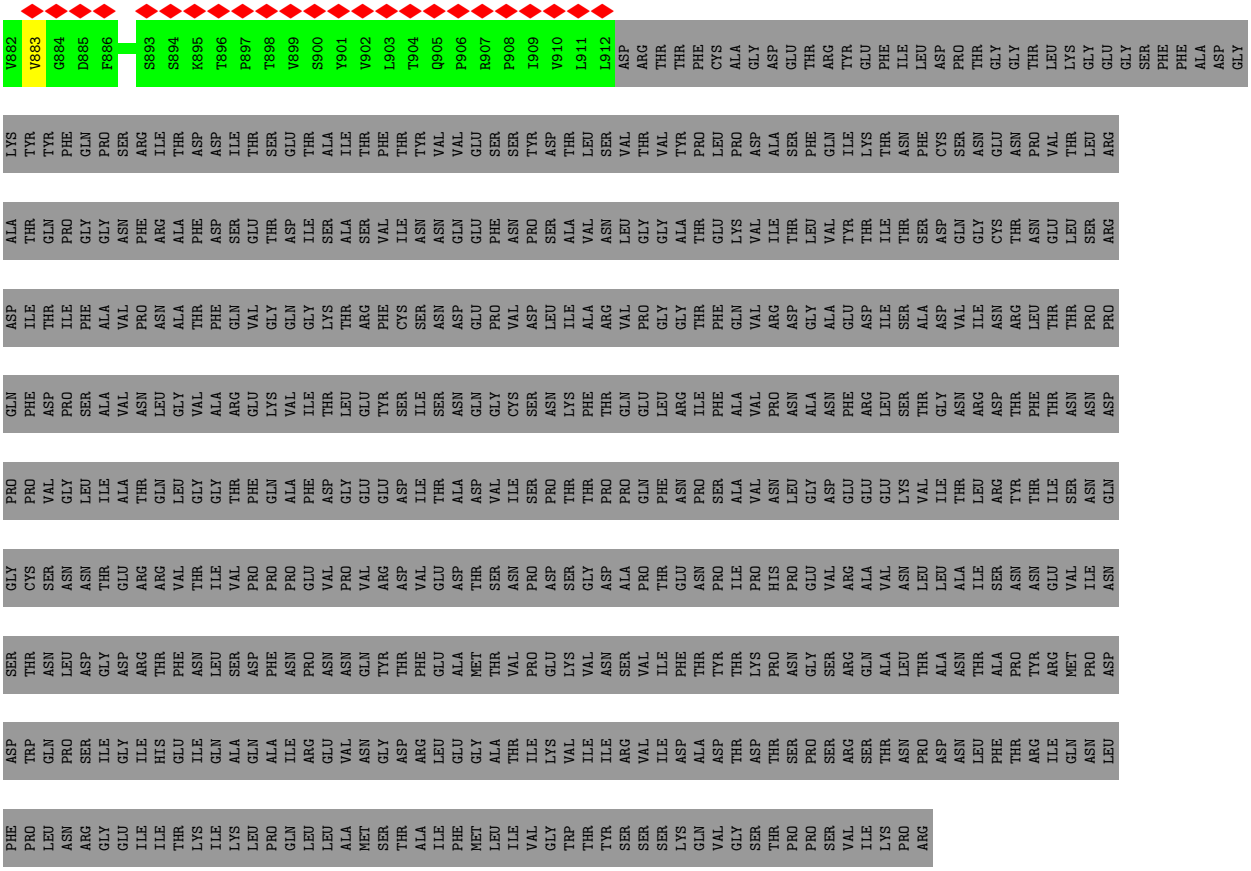


- Molecule 1: All3314 protein

Chain DA:

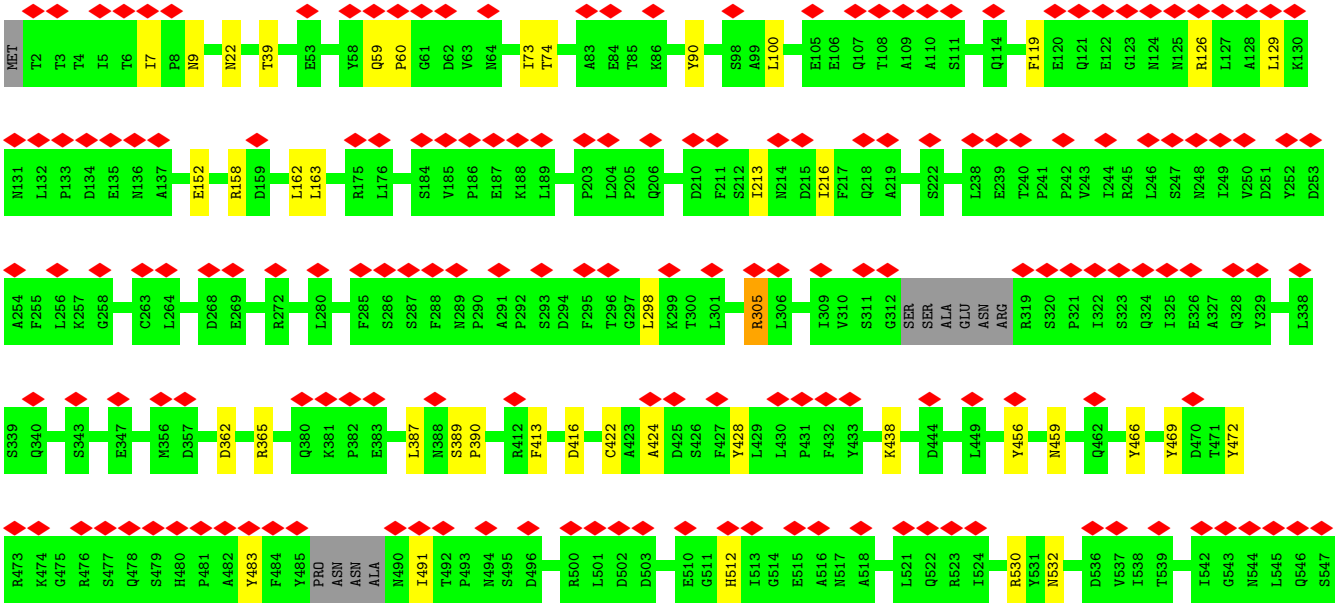


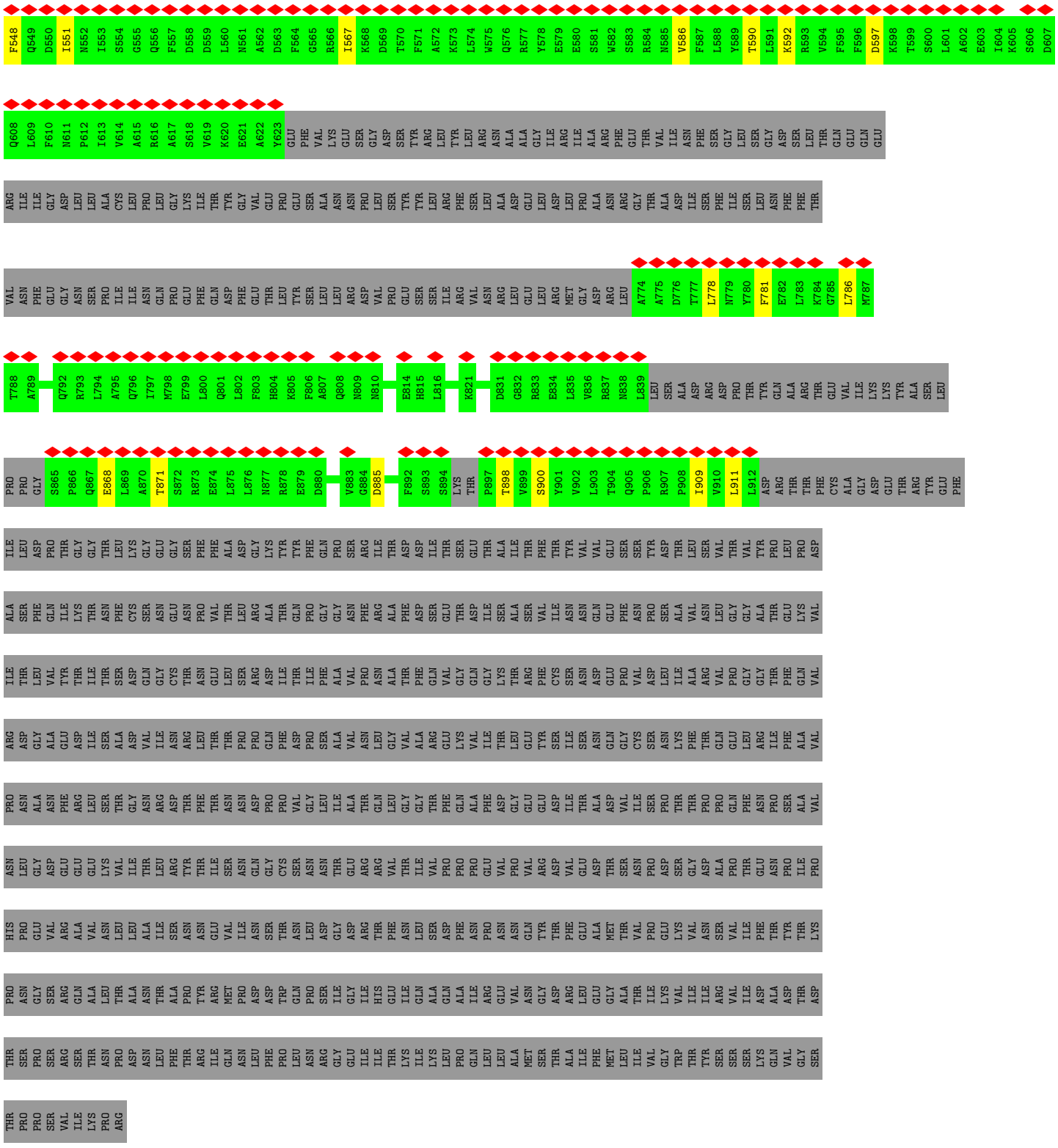




• Molecule 1: All3314 protein

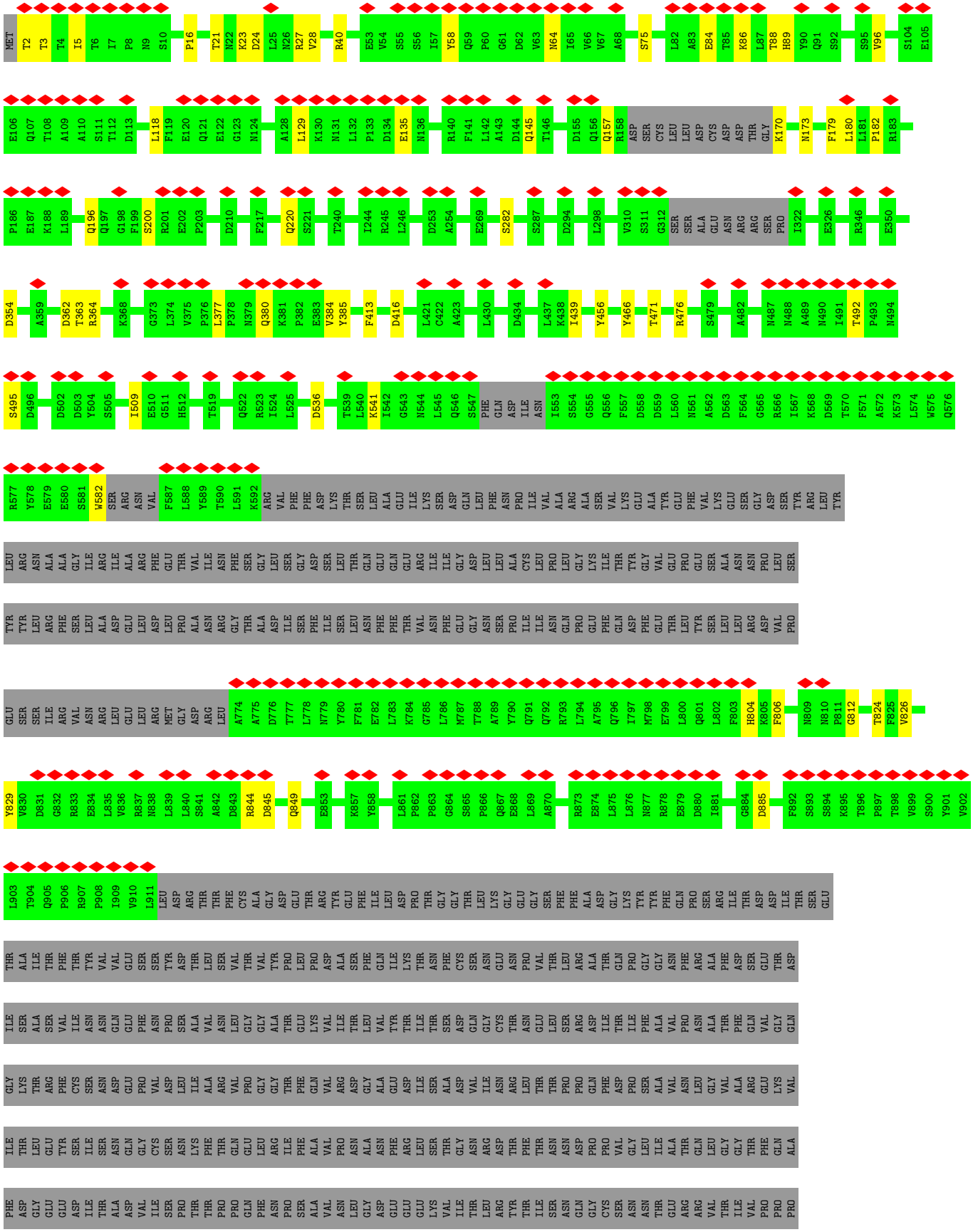
Chain DB:

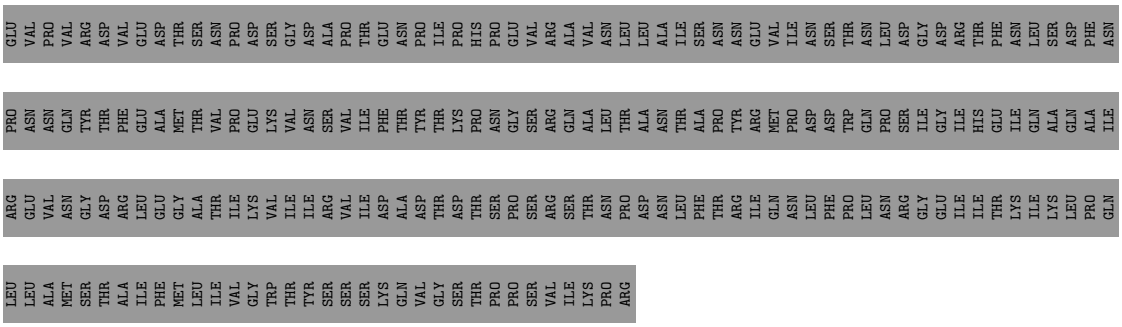




• Molecule 1: All3314 protein

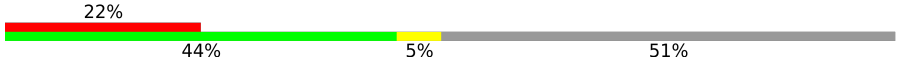
Chain DC:

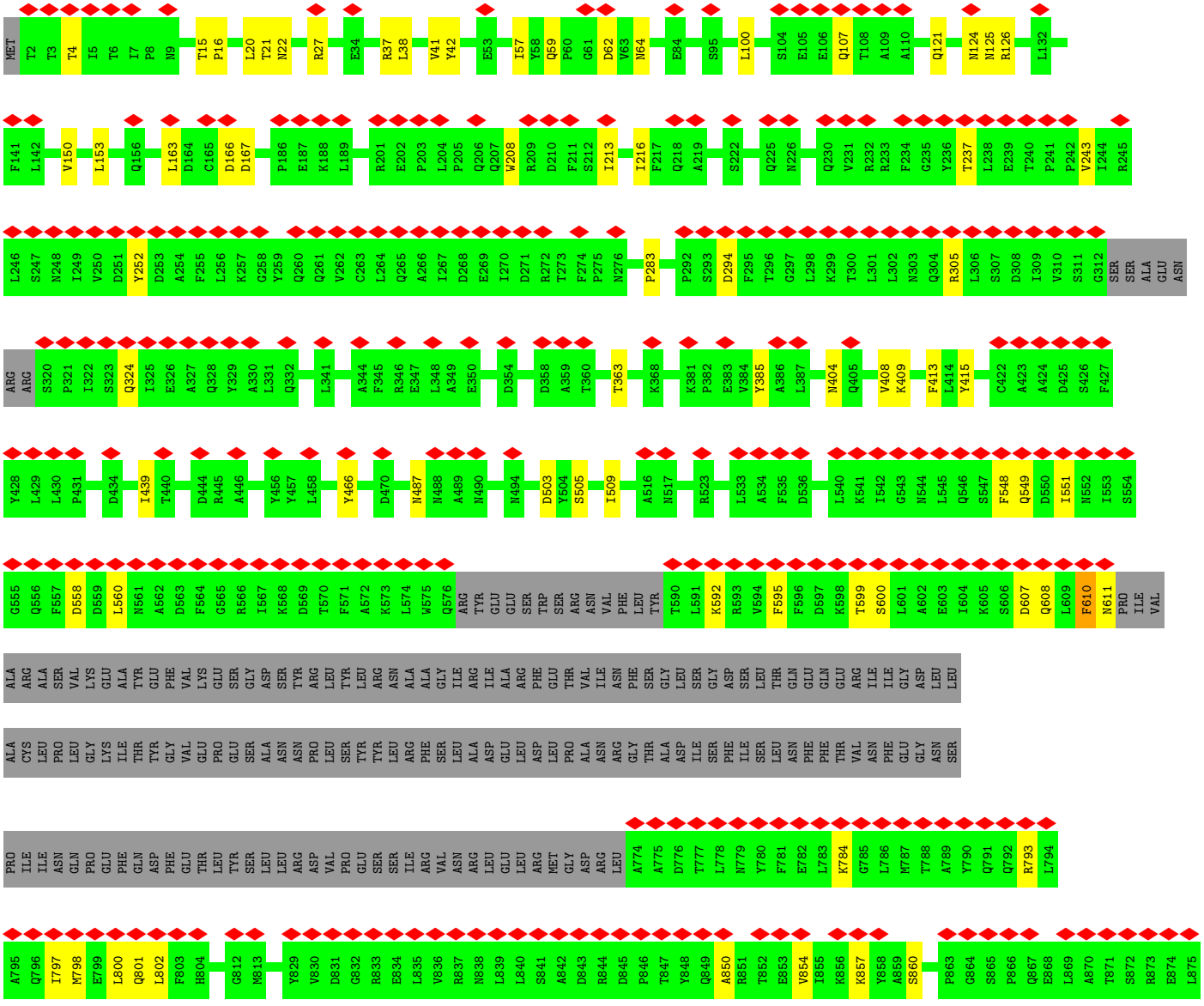

MET T2 T3 T4 I5 T6 I7 P8 N9 S10 P16 T21 N22 K23 D24 L25 N26 R27 V28 R40 E53 V54 S55 S56 I57 Y58 Q59 P60 G61 D62 V63 N64 I65 V66 V67 A68 S75 L82 A83 E84 T85 K86 L87 T88 H89 Y90 Q91 S92 S95 V96 S104 E105
E106 Q107 T108 A109 A110 S111 T112 D113 L118 F119 E120 Q121 E122 G123 N124 A128 L129 K130 N131 L132 P133 D134 E135 N136 R140 F141 L142 A143 D144 Q145 T146 D155 Q156 Q157 R158 ASP SER CYS LEU LEU ASP CYS ASP ASP THR GLY K170 N173 F179 L180 L181 P182 R183
P186 E187 K188 L189 Q196 Q197 G198 F199 S200 R201 E202 P203 D210 F217 Q220 S221 T240 I244 R245 L246 D253 A254 E269 S282 S287 D294 L298 V310 S311 G312 SER SER ALA GLU ASN ARG ARG SER PRO I322 E326 R346 E350
D354 A359 D362 T363 R364 K368 G373 L374 V375 P376 L377 P378 N379 Q380 K381 P382 E383 V384 Y385 F413 D416 L421 C422 A423 L430 D434 L437 K438 I439 Y456 Y466 T471 R476 S479 A482 N487 N488 A489 N490 I491 T492 P493 N494
S495 D496 D502 D503 Y504 S505 I509 E510 G511 H512 T519 Q522 R523 I524 L525 D536 T539 L540 K541 I542 G543 N544 L545 Q546 S547 PHE GLN ASP ILE ASN I553 S554 G555 Q556 F557 D558 D559 L560 N561 A562 D563 F564 G565 R566 I567 K568 D569 T570 F571 A572 K573 L574 W575 Q576
R577 Y578 E579 E580 S581 W582 SER ARG ASN VAL F587 L588 Y589 T590 L591 K592 ARG VAL PHE PHE ASP LYS THR SER LEU ALA GLU ILE LYS SER ASP GLN LEU PHE ASN PRO ILE VAL ALA ARG ALA SER VAL LYS GLU ALA TYR GLU PHE VAL LYS GLU SER GLY ASP SER TYR ARG LEU TYR
LEU ARG ASN ALA ALA GLY ILE ARG ILE ALA ARG PHE GLU THR VAL ILE ASN PHE SER GLY LEU SER GLY ASP SER LEU THR GLN GLU GLN GLU ARG ILE ILE GLY ASP LEU LEU ALA CYS LEU PRO LEU GLY LYS ILE THR TYR GLY VAL GLU PRO GLU SER ALA ASN ASN PRO LEU SER
TYR TYR LEU ARG PHE SER LEU ALA ASP GLU LEU ASP LEU PRO ALA ASN ARG GLY THR ALA ASP ILE SER PHE ILE SER LEU ASN PHE PHE THR VAL ASN PHE GLU GLY ASN SER PRO ILE ILE ASN GLN PRO GLU PHE GLN ASP PHE GLU THR LEU TYR SER LEU LEU ARG ASP VAL PRO
GLU SER SER ILE ARG VAL ASN ARG LEU GLU LEU ARG MET GLY GLY ASP ARG LEU A774 A775 D776 T777 L778 N779 Y780 F781 E782 L783 K784 G785 L786 M787 T788 A789 Y790 Q791 Q792 R793 L794 A795 Q796 I797 M798 E799 L800 Q801 L802 F803 H804 K805 F806 N809 N810 P811 G812 T824 F825 V826
Y829 V830 D831 G832 R833 E834 L835 V836 R837 N838 L839 L840 S841 A842 D843 R844 D845 Q849 E853 K857 Y858 L861 P862 P863 G864 S865 P866 Q867 E868 L869 A870 R873 E874 L875 L876 N877 R878 E879 D880 I881 G884 D885 F892 S893 S894 K895 T896 P897 T898 V899 S900 Y901 V902
L903 T904 Q905 P906 R907 P908 I909 V910 L911 LEU ASP ARG THR THR PHE CYS ALA GLY ASP GLU THR ARG TYR GLU PHE ILE LEU ASP PRO THR GLY GLY THR LEU LYS GLY GLU GLY SER PHE PHE ALA ASP GLY LYS TYR TYR PHE GLN PRO SER ARG ILE THR ASP ASP ILE THR SER GLU
THR ALA ILE THR PHE THR TYR VAL VAL GLU SER SER TYR ASP THR LEU SER VAL THR VAL TYR PRO LEU PRO ASP ALA SER PHE GLN ILE LYS THR ASN PHE CYS SER ASN GLU ASN PRO VAL THR LEU ARG ALA THR GLN PRO GLY GLY ASN PHE ARG ALA PHE ASP SER GLU THR ASP
ILE SER ALA SER VAL ILE ASN GLN GLU PHE ASN PRO SER ALA VAL ASN LEU GLY GLY ALA THR GLU LYS VAL ILE THR ILE SER ASP GLN GLY CYS THR ASN GLU LEU SER ARG ASP ILE THR ILE PHE ALA VAL PRO ASN ALA THR PHE GLN VAL GLY GLN
GLY LYS THR ARG PHE CYS SER ASN ASP GLU PRO VAL ASP LEU ILE ALA ARG VAL PRO GLY GLY THR PHE GLN VAL ARG ASP GLY ALA GLU ASP ILE SER ALA ASP VAL ILE ASN ARG LEU THR THR PRO PRO GLN PHE ASP PRO SER ALA VAL ALA ILE LEU ASN LEU GLY VAL ALA
ILE THR LEU GLU TYR SER ILE SER ASN GLN GLN GLY CYS SER ASN LYS PHE THR GLN GLU LEU ARG ILE PHE ALA VAL PRO ASN ALA ASN PHE ARG LEU SER THR GLY ASN ARG ASP THR PHE THR ASN ASN ASP PRO PRO VAL GLY LEU ILE ALA THR GLN LEU GLY GLY THR PHE GLN ALA
PHE ASP GLY GLU ASP VAL ILE SER PRO THR THR PRO PRO GLN PHE ASN PRO SER ALA VAL ASN LEU GLY ASP GLU GLU GLU LYS VAL ILE THR LEU ARG TYR THR ILE SER ASN GLN GLY CYS SER ASN THR GLU ARG VAL THR ILE VAL PRO PRO GLN ALA

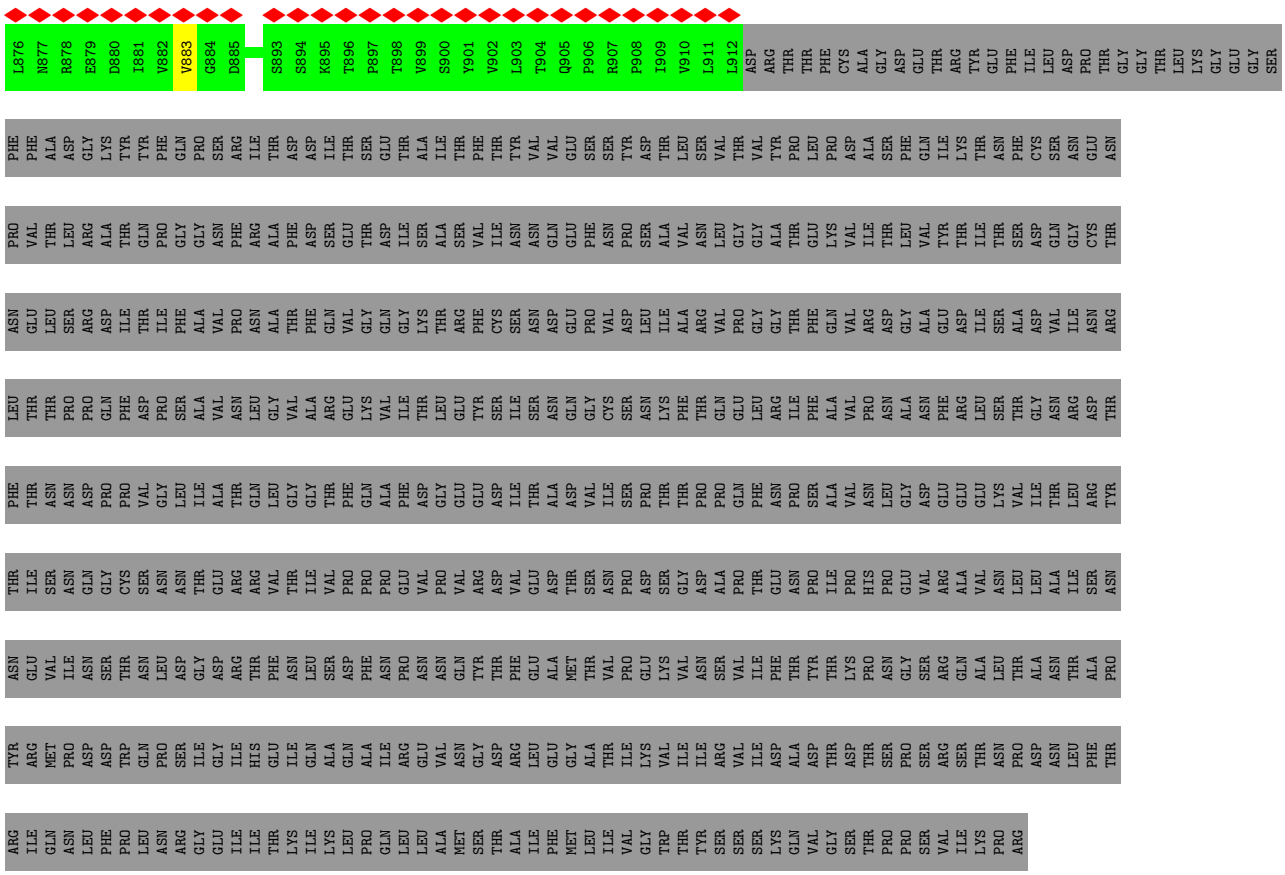


• Molecule 1: All3314 protein

Chain EA:

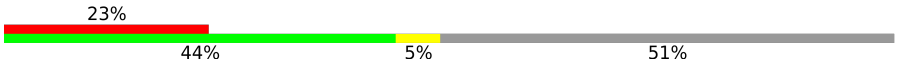


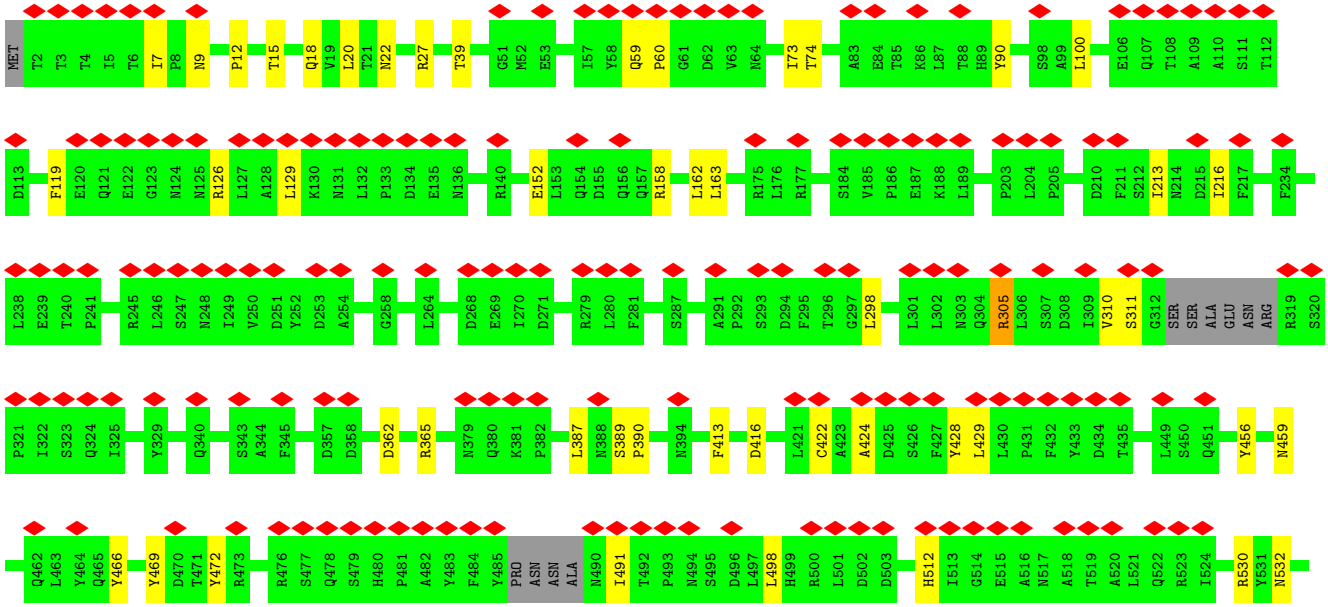


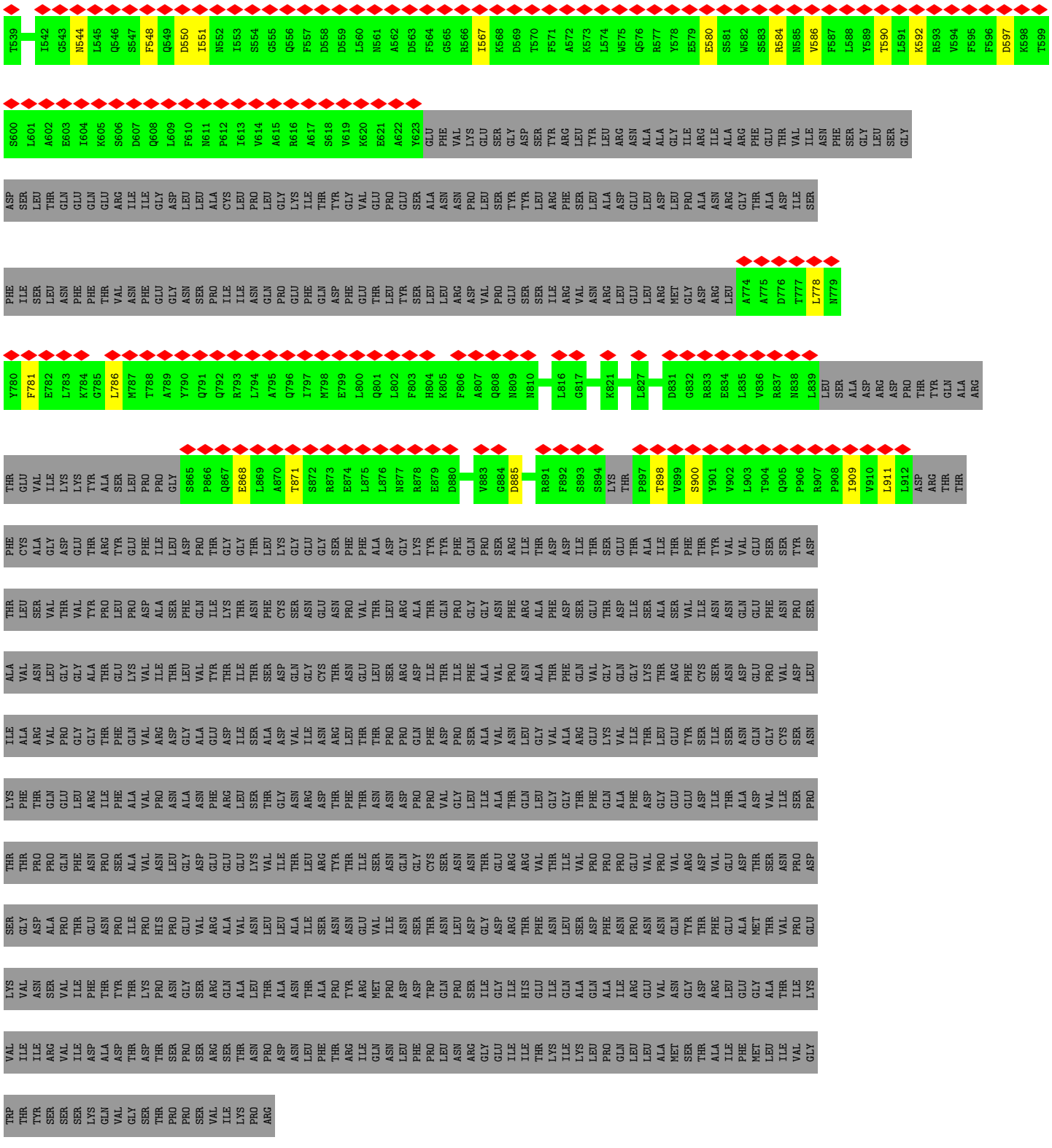


• Molecule 1: All3314 protein

Chain EB:

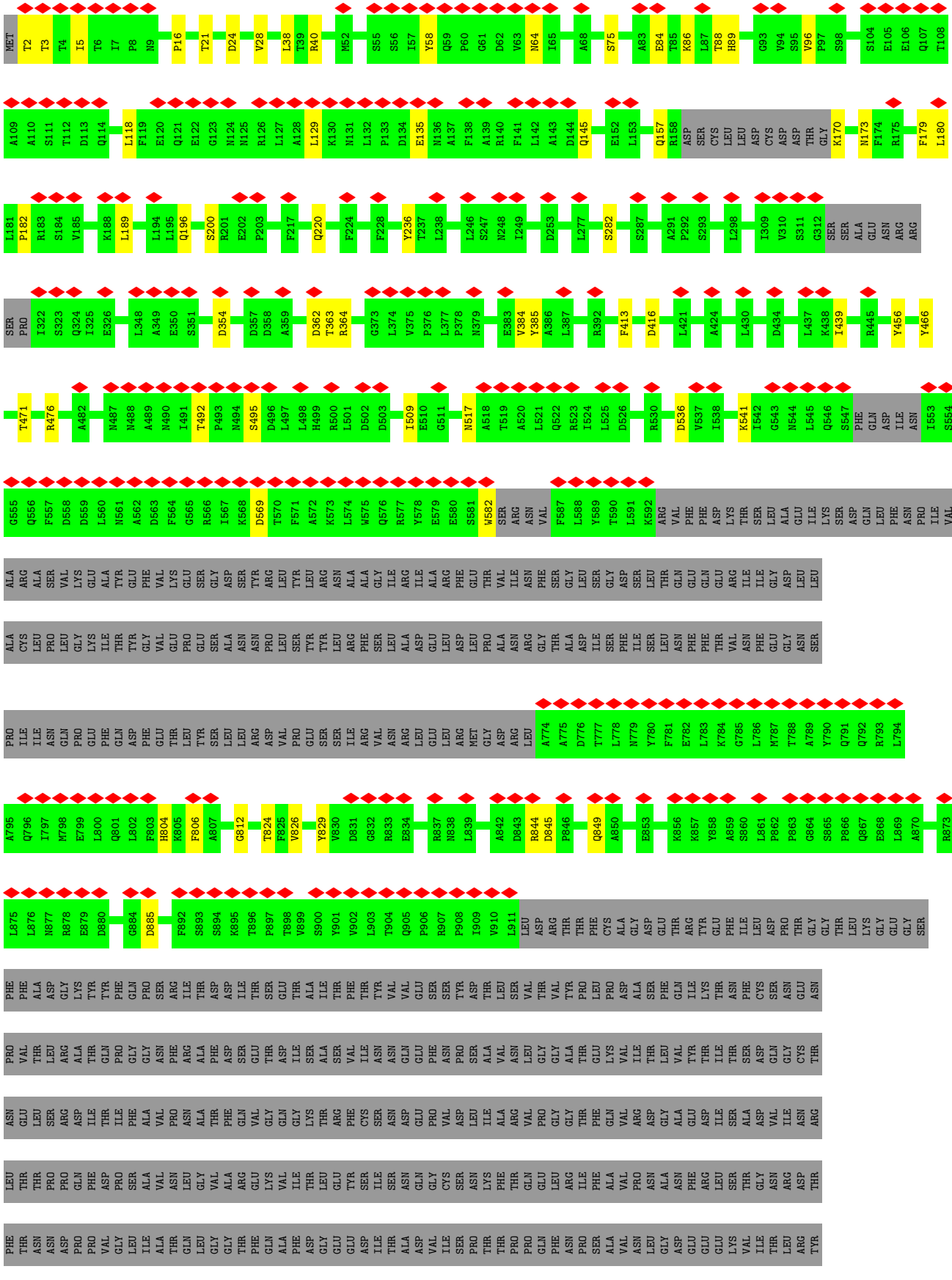


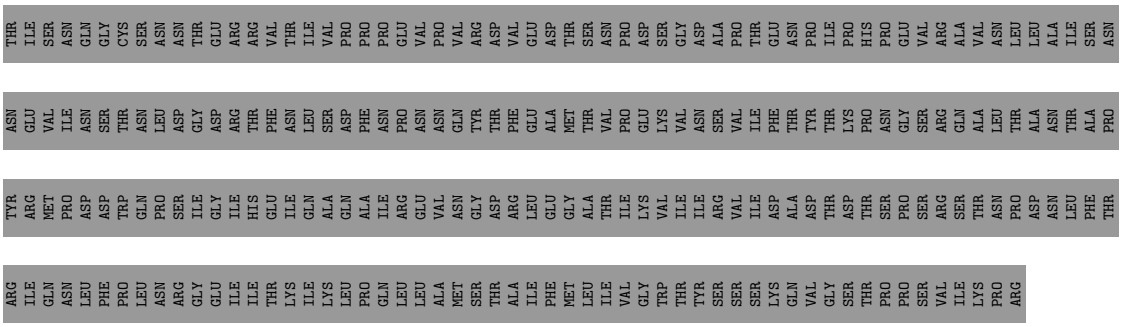




- Molecule 1: All3314 protein

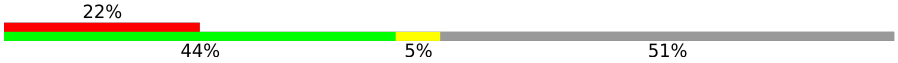
Chain EC:

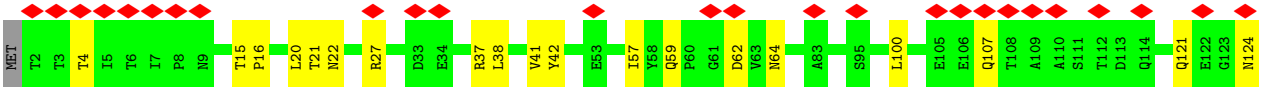

MET T2 T3 T4 I5 T6 I7 P8 N9 P16 T21 D24 V28 L38 T39 R40 M52 S55 S56 I57 Y58 Q59 P60 G61 D62 V63 N64 I65 A68 S75 A83 E84 T85 K86 L87 T88 H89 G93 V94 S95 V96 P97 S98 S104 E105 E106 Q107 T108
A109 A110 S111 T112 D113 Q114 L118 F119 E120 Q121 E122 G123 N124 N125 R126 L127 A128 L129 K130 N131 L132 P133 D134 E135 N136 A137 F138 A139 R140 F141 L142 A143 D144 Q145 E152 L153 Q157 R158 ASP SER CYS LEU LEU ASP CYS ASP ASP THR GLY K170 N173 F174 R175 F179 L180
L181 P182 R183 S184 V185 K188 L189 L194 L195 Q196 S200 R201 E202 P203 F217 Q220 F224 F228 Y236 T237 L238 L246 S247 N248 I249 D253 L277 S282 S287 A291 P292 S293 L298 I309 V310 S311 G312 SER SER ALA GLU ASN ARG ARG
SER PRO I322 S323 Q324 I325 E326 L348 A349 E360 S351 D354 D357 D358 A359 D362 T363 R364 G373 L374 V375 P376 L377 P378 N379 E383 V384 Y385 A386 L387 R392 F413 D416 L421 A424 L430 D434 L437 K438 I439 R445 Y456 Y466
T471 R476 A482 N487 N488 A489 N490 I491 T492 P493 N494 S495 D496 L497 L498 H499 R500 L501 D502 D503 I509 E510 G511 N517 A518 T519 A520 L521 Q522 R523 I524 L525 D526 R530 D536 V537 I538 K541 I542 G543 N544 L545 Q546 S547 PHE GLN ASP ILE ASN I553 S554
G555 Q556 F557 D558 D559 L560 N561 A562 D563 F564 G565 R566 I567 K568 D569 T570 F571 A572 K573 L574 W575 Q576 R577 Y578 E579 E580 S581 W582 SER ARG ASN VAL F587 L588 Y589 T590 L591 K592 ARG VAL PHE PHE ASP LYS THR SER LEU ALA GLU ILE LYS SER ASP GLN LEU PHE ASN PRO ILE VAL
ALA ARG ALA SER VAL LYS GLU ALA TYR GLU PHE VAL LYS GLU SER GLY ASP SER TYR ARG LEU TYR LEU ARG ASN ALA ALA GLY ILE ARG ILE ALA ARG PHE GLU THR VAL ILE ASN PHE SER GLY LEU SER GLY ASP SER LEU THR GLN GLU GLN GLU ARG ILE ILE GLY ASP LEU LEU
ALA CYS LEU PRO LEU GLY LYS ILE THR TYR GLY VAL GLU PRO GLU SER ALA ASN ASN PRO LEU SER TYR TYR LEU ARG PHE SER LEU LEU ALA ASP GLU LEU ASP LEU PRO ALA ASN ARG GLY THR ALA ASP ILE SER PHE ILE SER LEU ASN PHE PHE THR VAL ASN PHE GLU GLY ASN SER
PRO ILE ILE ASN GLN PRO GLU PHE GLN ASP PHE GLU THR LEU TYR SER LEU LEU ARG ASP VAL PRO GLU SER SER ILE ARG VAL ASN ARG LEU GLU LEU GLU ARG MET GLY ASP ARG LEU A774 A775 D776 T777 L778 N779 Y780 F781 E782 L783 K784 G785 L786 M787 T788 A789 Y790 Q791 Q792 R793 L794
A795 Q796 I797 M798 E799 L800 Q801 L802 F803 H804 K805 F806 A807 G812 T824 F825 V826 Y829 V830 D831 G832 R833 E834 R837 N838 L839 A842 D843 R844 D845 P846 Q849 A850 E853 K856 K857 Y858 A859 S860 L861 P862 P863 G864 S865 P866 Q867 E868 L869 A870 R873 E874
L875 L876 N877 R878 E879 D880 G884 D885 F892 S893 S894 K895 T896 P897 T898 V899 S900 Y901 V902 L903 T904 Q905 P906 R907 P908 I909 V910 L911 LEU ASP ARG THR THR PHE CYS ALA GLY ASP GLU THR ARG TYR GLU PHE ILE LEU ASP PRO THR GLY GLY THR LEU LYS GLY GLU GLY SER
PHE PHE ALA ASP GLY LYS TYR TYR PHE GLN PRO SER ARG ILE THR ASP ASP ILE THR PHE THR TYR VAL VAL GLU SER SER TYR ASP THR VAL LEU SER VAL THR VAL TYR PRO LEU PRO ASP ALA SER PHE GLN ILE LYS THR ASN PHE CYS SER ASN GLU ASN
PRO VAL THR LEU ARG ALA THR GLN PRO GLY GLY ASN PHE ARG ALA PHE ASP SER GLU THR ASP ILE SER ALA SER VAL ILE ILE ASN ASN GLN GLU PHE ASN PRO SER ALA VAL ASN LEU GLY GLY ALA THR GLU LYS VAL ILE THR LEU VAL TYR THR ILE THR SER ASP GLN GLY CYS THR
ASN GLU LEU SER ARG ASP ILE THR ILE PHE ALA VAL PRO ASN ALA THR PHE GLN VAL GLY GLN GLY LYS THR ARG PHE CYS SER ASN ASP GLU PRO VAL ASP LEU ILE ALA ARG VAL PRO GLY GLY THR PHE GLN VAL ARG ASP GLY ALA GLU ASP ILE SER ALA ASP VAL ILE ASN ARG
LEU THR THR PRO PRO GLN PHE ASP PRO ALA VAL ASN LEU GLU GLU TYR SER ILE SER ASN GLN GLY CYS SER ASN LYS PHE THR GLN GLU LEU ARG ILE PHE ALA VAL PRO ASN ALA ASN GLY PHE ARG LEU LEU SER THR GLY ASN ARG ASP THR
PHE THR ASN ASN ASP PRO PRO VAL GLY LEU ILE ALA THR GLN LEU GLY GLY THR PHE GLU GLN ALA PHE ASP GLY GLU GLU ASP ILE THR ALA ASP VAL ILE SER PRO THR THR PRO PRO GLN PHE ASN PRO SER ALA VAL ASN LEU GLY ASP GLU GLU LYS VAL ILE THR LEU ARG TYR

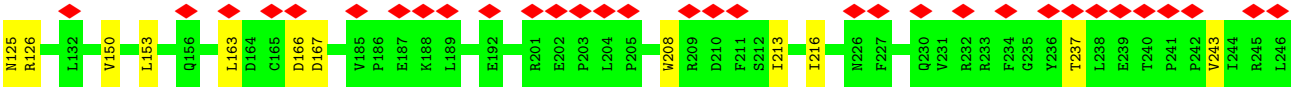


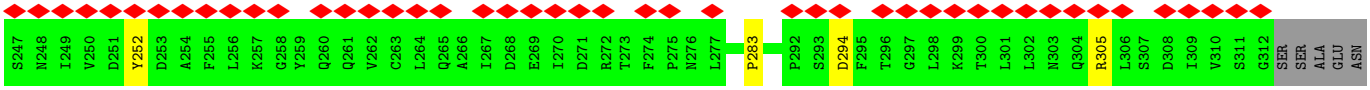
• Molecule 1: All3314 protein

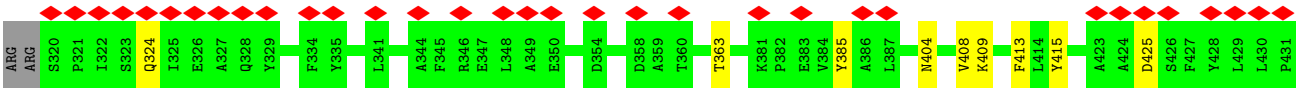
Chain FA:

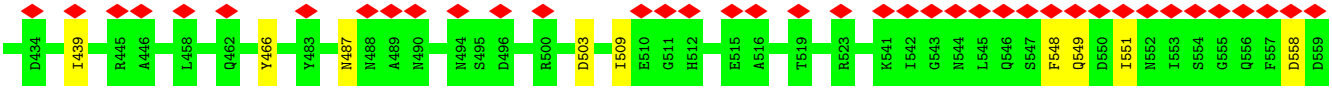


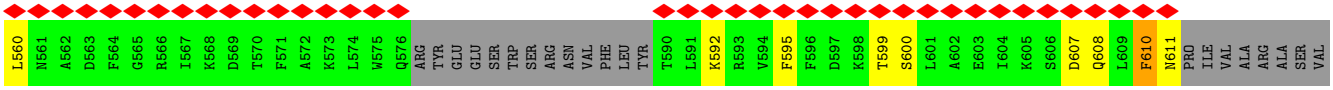


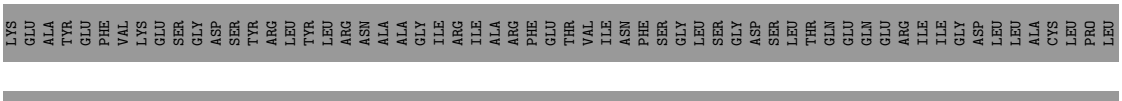


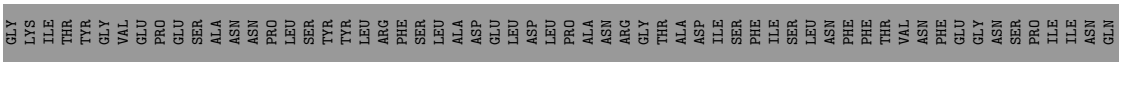


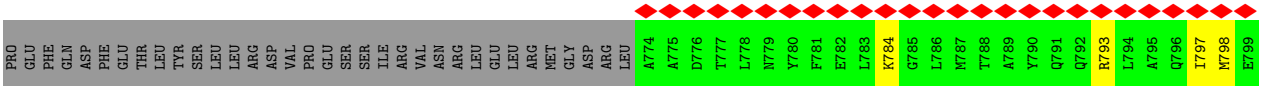


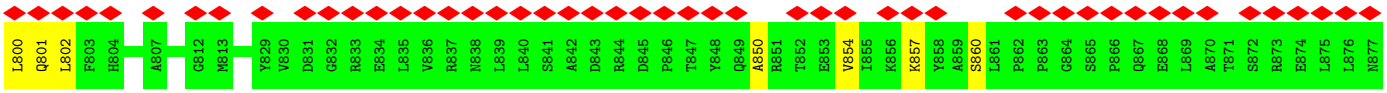


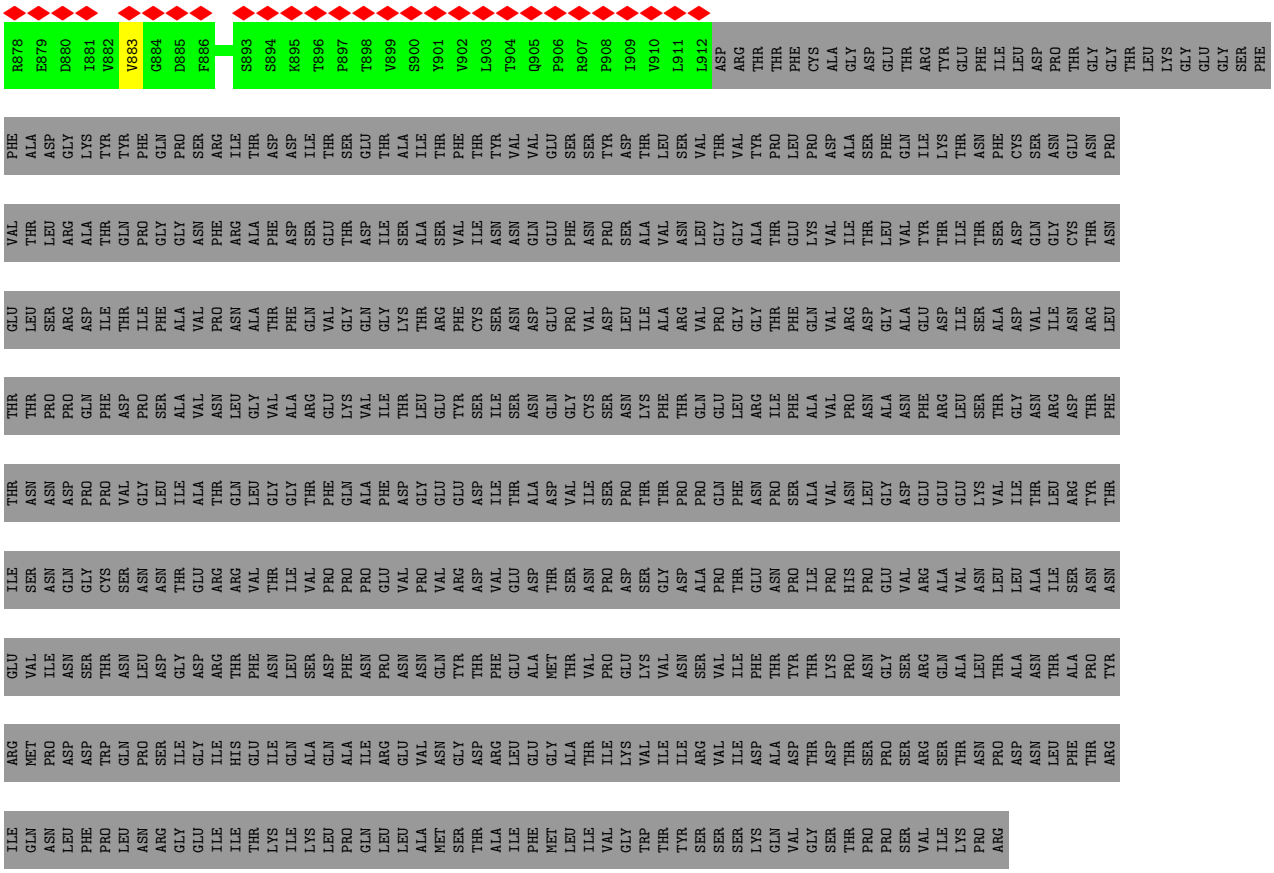






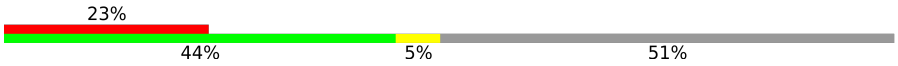


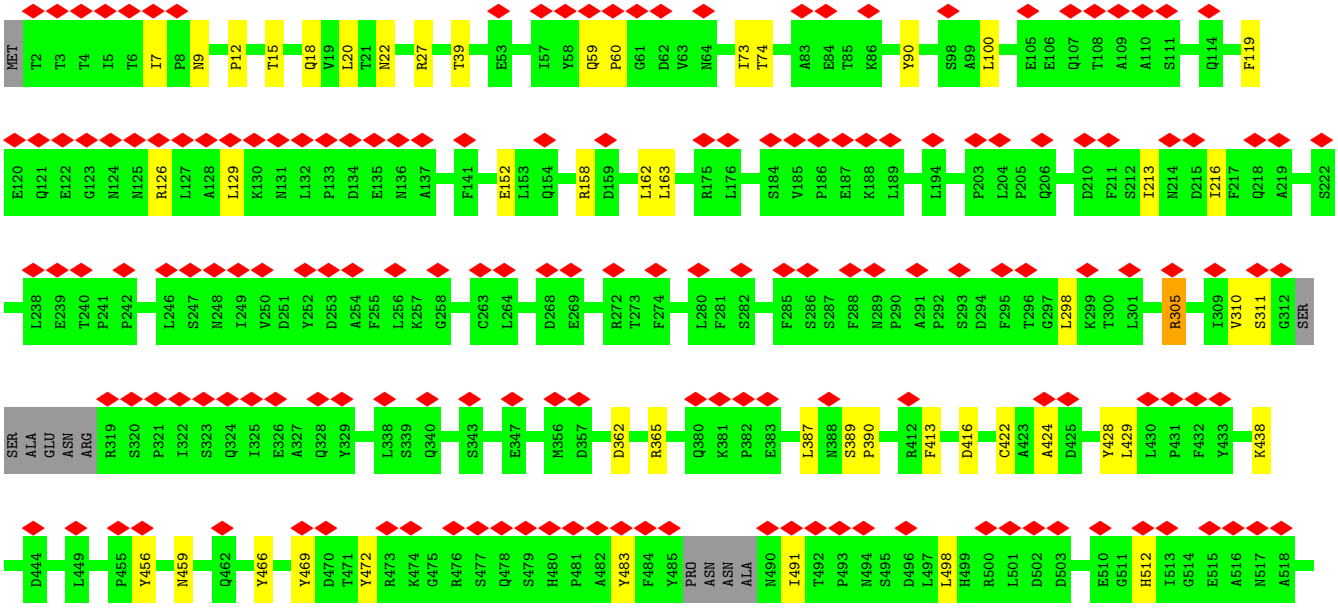


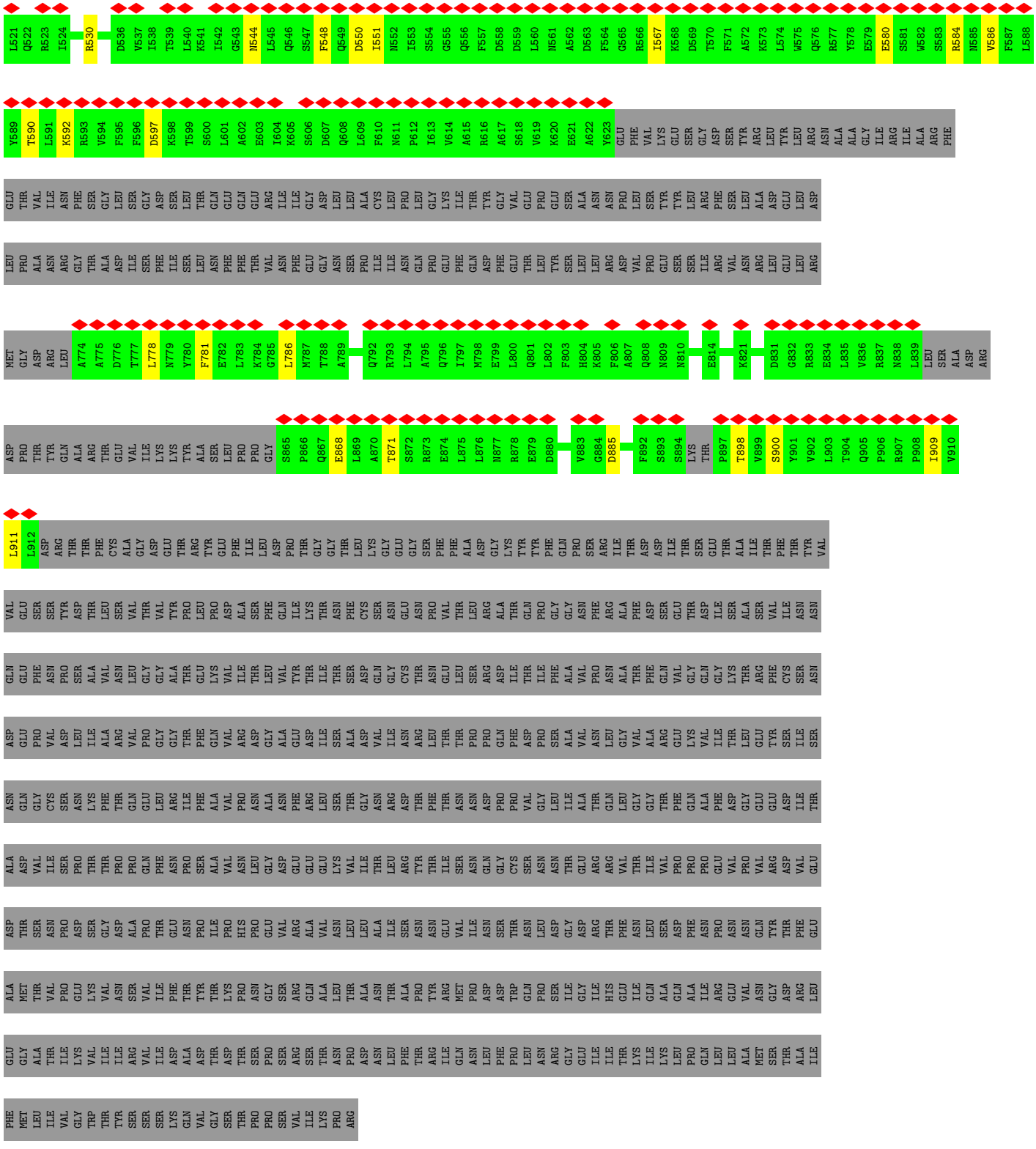


• Molecule 1: All3314 protein

Chain FB:

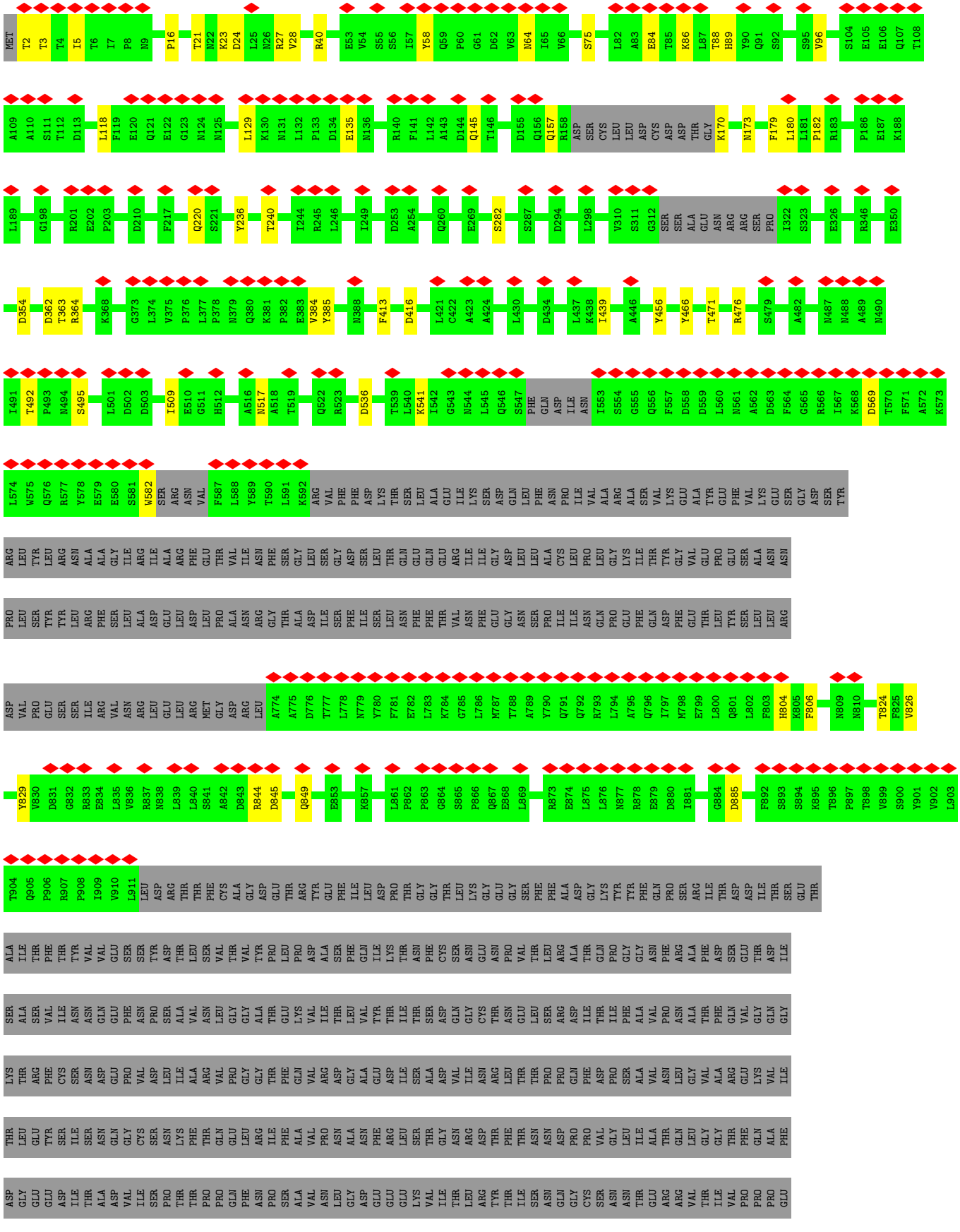


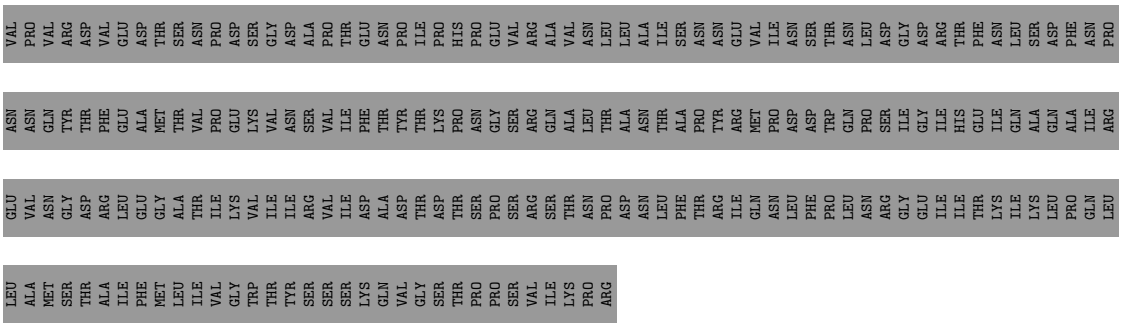




- Molecule 1: All3314 protein

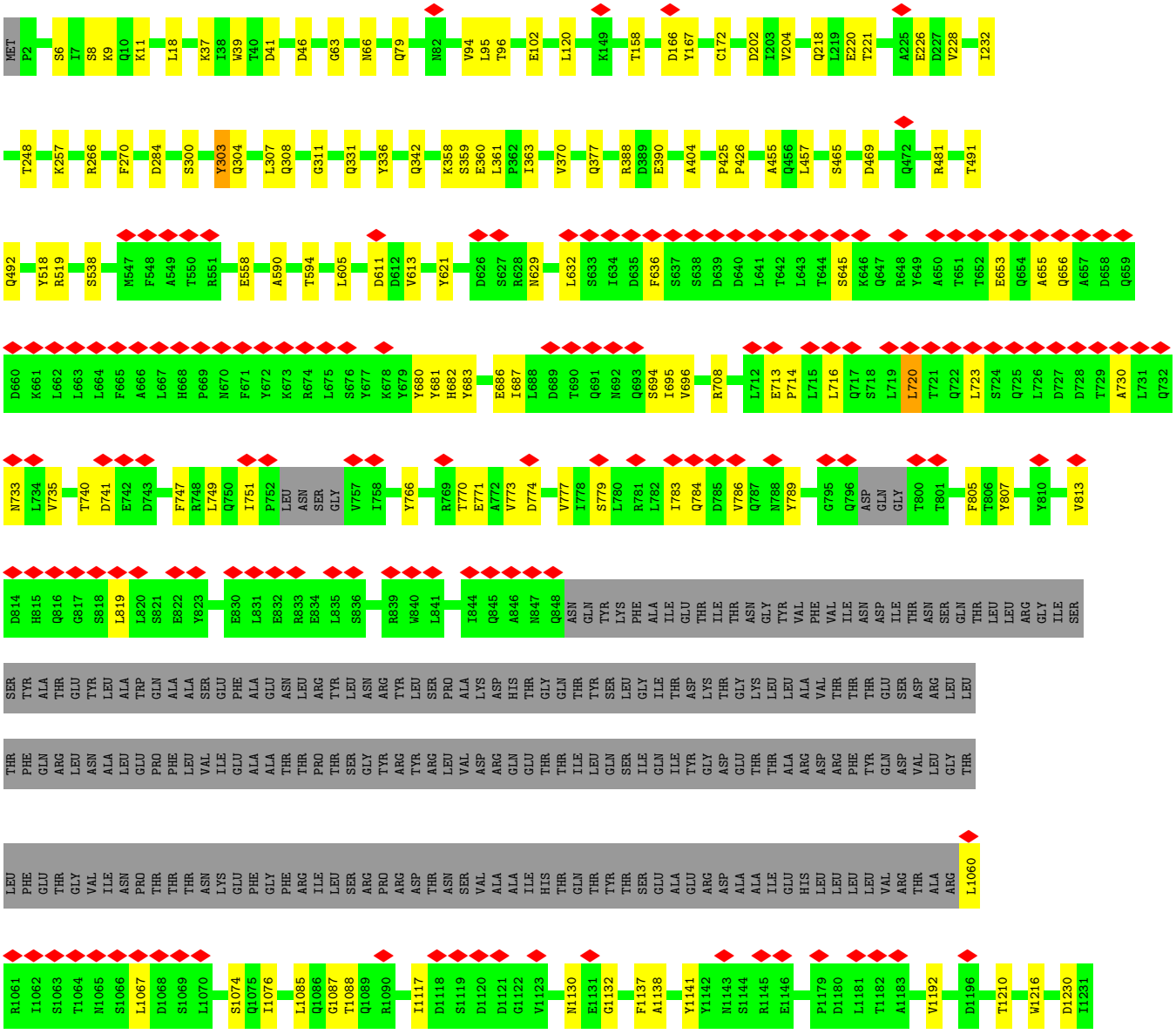
Chain FC:

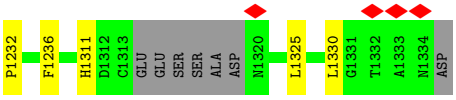

MET T2 T3 T4 I5 T6 I7 P8 N9 P16 T21 N22 K23 D24 L25 N26 R27 V28 R40 E53 V54 S55 S56 I57 Y58 Q59 P60 G61 D62 V63 N64 I65 V66 S75 L82 A83 E84 T85 K86 L87 T88 H89 Y90 Q91 S92 S95 V96 S104 E105 E106 Q107 T108
A109 A110 S111 T112 D113 L118 F119 E120 Q121 E122 G123 N124 N125 L129 K130 N131 L132 P133 D134 E135 N136 R140 F141 L142 A143 D144 Q145 T146 D155 Q156 Q157 R158 ASP SER CYS LEU LEU ASP CYS ASP ASP THR GLY K170 N173 F179 L180 L181 P182 R183 P186 E187 K188
L189 G198 R201 E202 P203 D210 F217 Q220 S221 Y236 T240 I244 R245 L246 I249 D253 A254 Q260 E269 S282 S287 D294 L298 V310 S311 G312 SER SER ALA GLU ASN ARG ARG SER PRO I322 S323 E326 R346 E350
D354 D362 T363 R364 K368 G373 L374 V375 P376 L377 P378 N379 Q380 K381 P382 E383 V384 Y385 N388 F413 D416 L421 C422 A423 A424 L430 D434 L437 K438 I439 A446 Y456 Y466 T471 R476 S479 A482 N487 N488 A489 N490
I491 T492 P493 N494 S495 L501 D502 D503 I509 E510 G511 H512 A516 N517 A518 T519 Q522 R523 D536 T539 L540 K541 I542 G543 N544 L545 Q546 S547 PHE GLN ASP ILE ASN I553 S554 G555 Q556 F557 D558 D559 L560 N561 A562 D563 F564 G565 R566 I567 K568 D569 T570 F571 A572 K573
L574 W575 Q576 R577 Y578 E579 E580 S581 W582 SER ARG ASN VAL F587 L588 Y589 T590 L591 K592 ARG VAL PHE PHE ASP LYS THR SER LEU ALA GLU ILE LYS SER ASP GLN LEU PHE ASN PRO ILE VAL ALA ARG ALA SER VAL LYS GLU ALA TYR GLU PHE VAL LYS GLU SER GLY ASP SER TYR
ARG LEU TYR LEU ARG ASN ALA ALA GLY ILE ARG ILE ALA ARG PHE GLU THR VAL ILE ASN PHE SER GLY LEU SER GLY ASP SER LEU THR GLN GLU GLN GLU ARG ILE ILE GLY ASP LEU LEU ALA CYS LEU PRO LEU GLY LYS ILE THR TYR GLY VAL GLU PRO GLU SER ALA ASN
PRO LEU SER TYR TYR LEU ARG PHE SER LEU ALA ASP GLU LEU ASP LEU PRO ALA ASN ARG GLY THR ALA ASP ILE SER PHE ILE SER LEU ASN PHE PHE THR VAL ASN PHE GLU GLY ASN SER PRO ILE ILE ASN GLN PRO GLU PHE GLN ASP PHE GLU THR LEU TYR SER LEU LEU ARG
ASP VAL PRO GLU SER SER ILE ARG VAL ASN ARG LEU GLU LEU ARG MET GLY ASP ARG LEU A774 A775 D776 T777 L778 N779 Y780 F781 E782 L783 K784 G785 L786 M787 T788 A789 Y790 Q791 Q792 R793 L794 A795 Q796 I797 M798 E799 L800 Q801 L802 F803 H804 K805 F806 N809 N810 T824 F825 V826
Y829 V830 D831 G832 R833 E834 L835 V836 R837 N838 L839 L840 S841 A842 D843 R844 D845 Q849 E853 K857 L861 P862 P863 G864 S865 P866 Q867 E868 L869 R873 E874 L875 L876 N877 R878 E879 D880 I881 G884 D885 F892 S893 S894 K895 T896 P897 T898 V899 S900 Y901 V902 L903
T904 Q905 P906 R907 P908 I909 V910 L911 LEU ASP ARG THR THR PHE CYS ALA GLY ASP GLU THR ARG TYR GLU PHE ILE LEU ASP PRO THR GLY GLY THR LEU LYS GLY GLU GLY SER PHE PHE ALA ASP GLY LYS TYR TYR PHE GLN PRO SER ARG ILE THR ASP ILE THR SER GLU THR
ALA ILE THR PHE THR TYR VAL VAL GLU SER SER TYR ASP THR LEU SER VAL THR VAL TYR PRO LEU PRO ASP ALA SER PHE GLN ILE LYS THR ASN PHE CYS SER ASN GLU ASN PRO VAL THR LEU ARG ALA THR GLN PRO GLY GLY ASN PHE ARG ALA PHE ASP SER GLU THR ASP ILE
SER ALA SER VAL ILE ASN ASN GLN GLU PHE ASN PRO SER ALA VAL ASN LEU GLY GLY ALA THR GLU LYS VAL ILE THR ILE THR LEU VAL TYR THR ILE THR SER ASP GLN GLY CYS THR ASN GLU LEU SER ARG ASP ILE THR ILE PHE ALA VAL PRO ALA GLU ASP ILE SER ALA ASP VAL ILE ASN ARG LEU THR THR PRO PRO GLN PHE ASP PRO SER ALA VAL ALA GLU GLN GLY
LYS THR ARG PHE CYS SER ASN ASP GLU PRO VAL ASP LEU ILE ALA ARG VAL PRO GLY GLY THR PHE GLN VAL ARG ASP GLY ALA GLU ASP ILE SER ALA ASP VAL ILE ASN ARG LEU THR THR PRO PRO GLN PHE ASP PRO SER ALA VAL ALA GLU GLY VAL ALA ARG GLU LYS VAL ILE
THR LEU GLU TYR SER ILE SER ASN GLN GLY CYS SER ASN LYS PHE THR GLN GLU LEU ARG ILE PHE THR ALA VAL PRO ASN ALA ASN PHE ARG LEU SER THR GLY ASN ARG ASP THR PHE THR ASN ASN ASP PRO PRO VAL GLY LEU ILE ALA THR GLN LEU GLY GLY THR PHE GLN ALA PHE
ASP GLY GLU GLU ASP VAL ILE SER PRO THR THR PRO PRO GLN PHE ASN PRO SER ALA ALA VAL ASN LEU GLY GLU GLU GLU LYS VAL ILE THR LEU ARG TYR THR ILE SER ASN GLN GLY CYS SER ASN ASN THR GLU ARG ARG VAL THR ILE VAL PRO PRO PRO GLU



• Molecule 2: All3315 protein

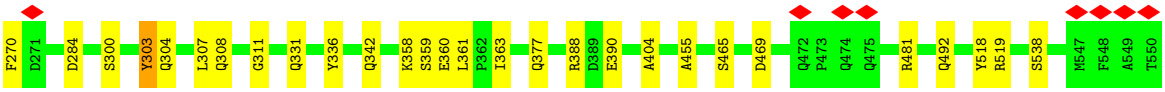
Chain AD:

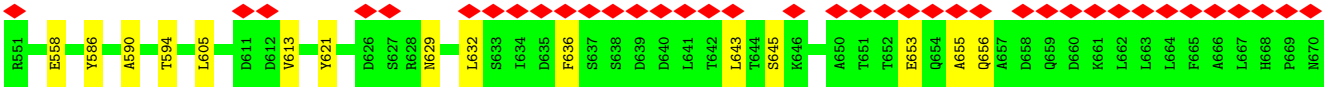


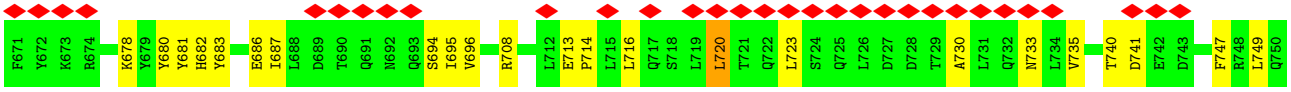


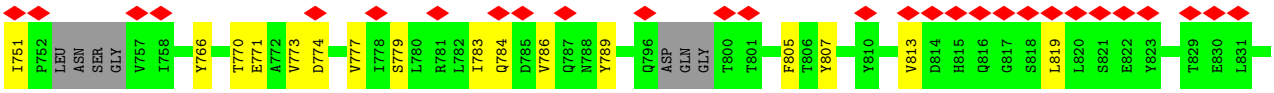
• Molecule 2: All3315 protein

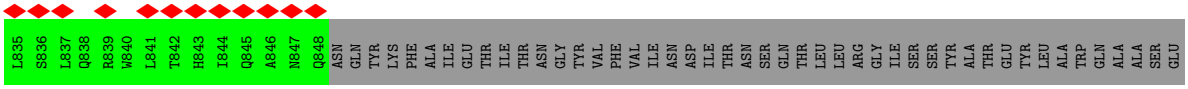
Chain BD:

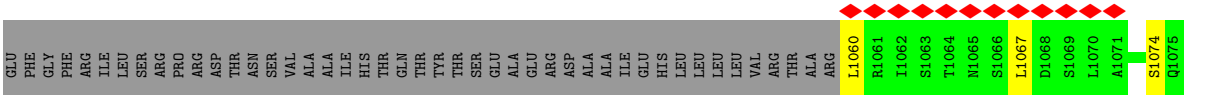


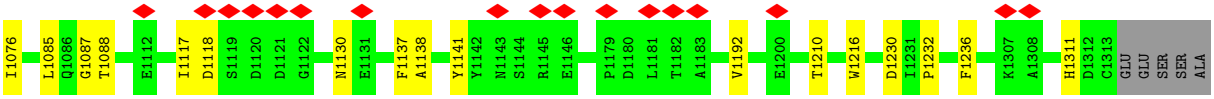


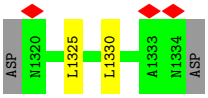






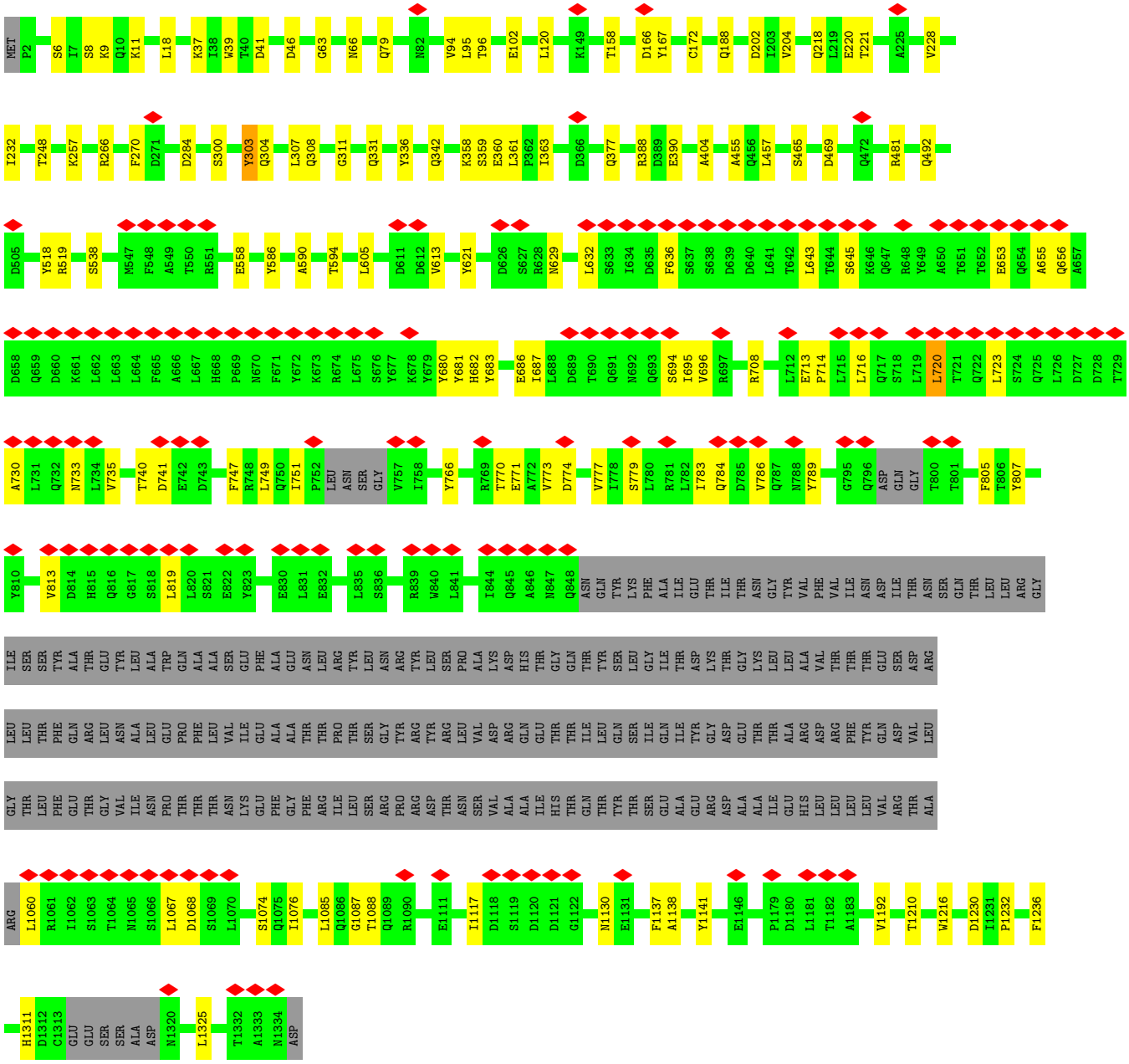






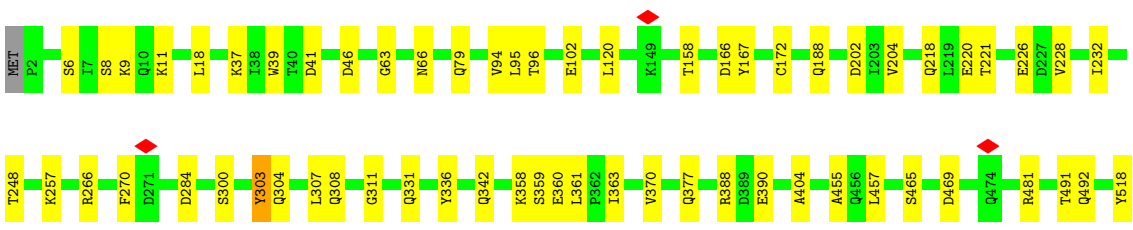
• Molecule 2: All3315 protein

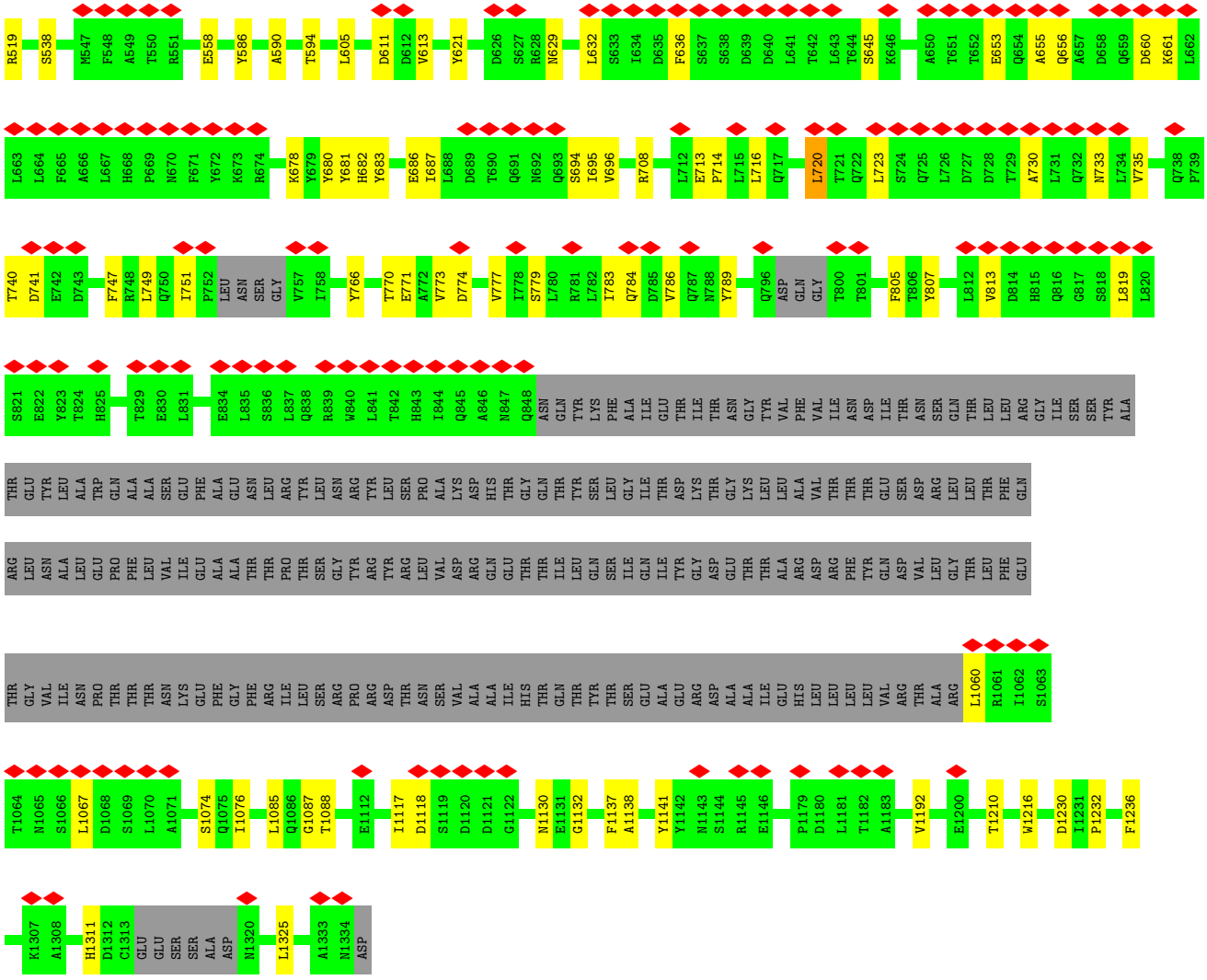
Chain CD:



• Molecule 2: All3315 protein

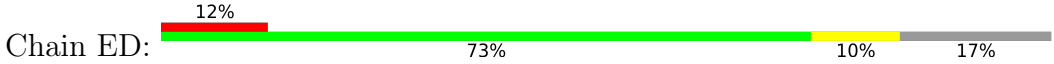
Chain DD:

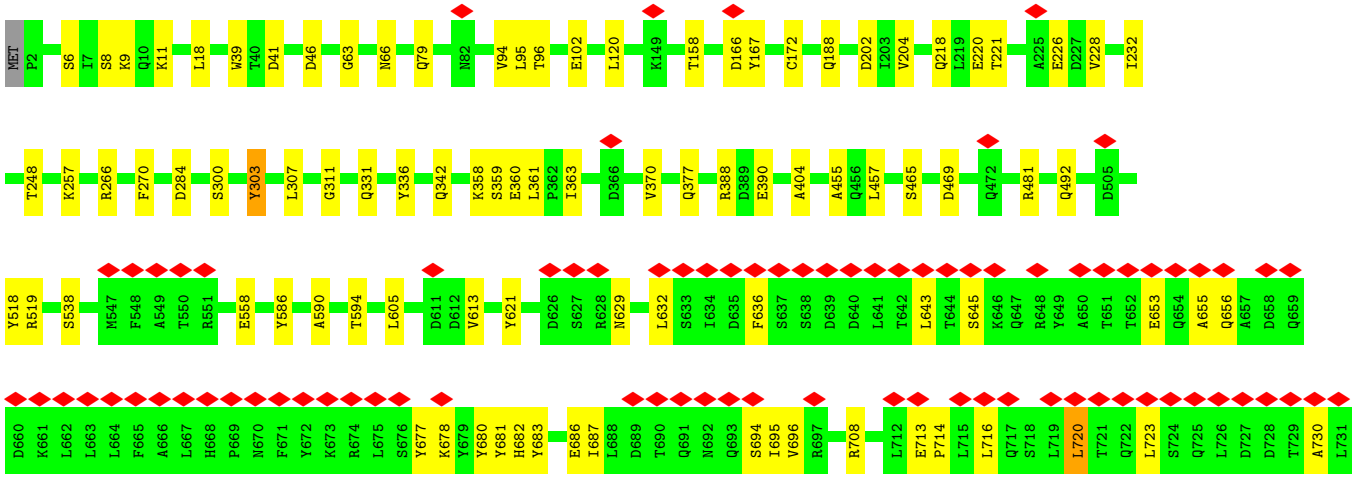


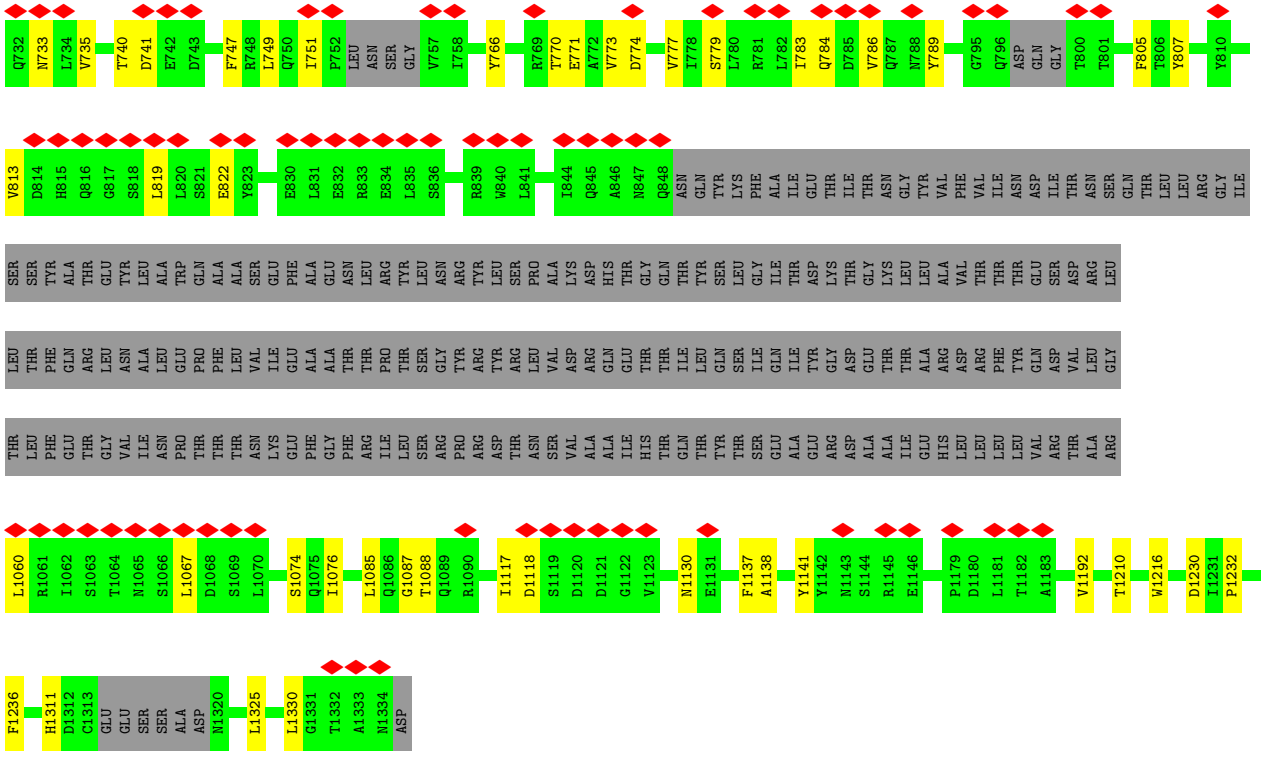


• Molecule 2: All3315 protein

Chain ED:

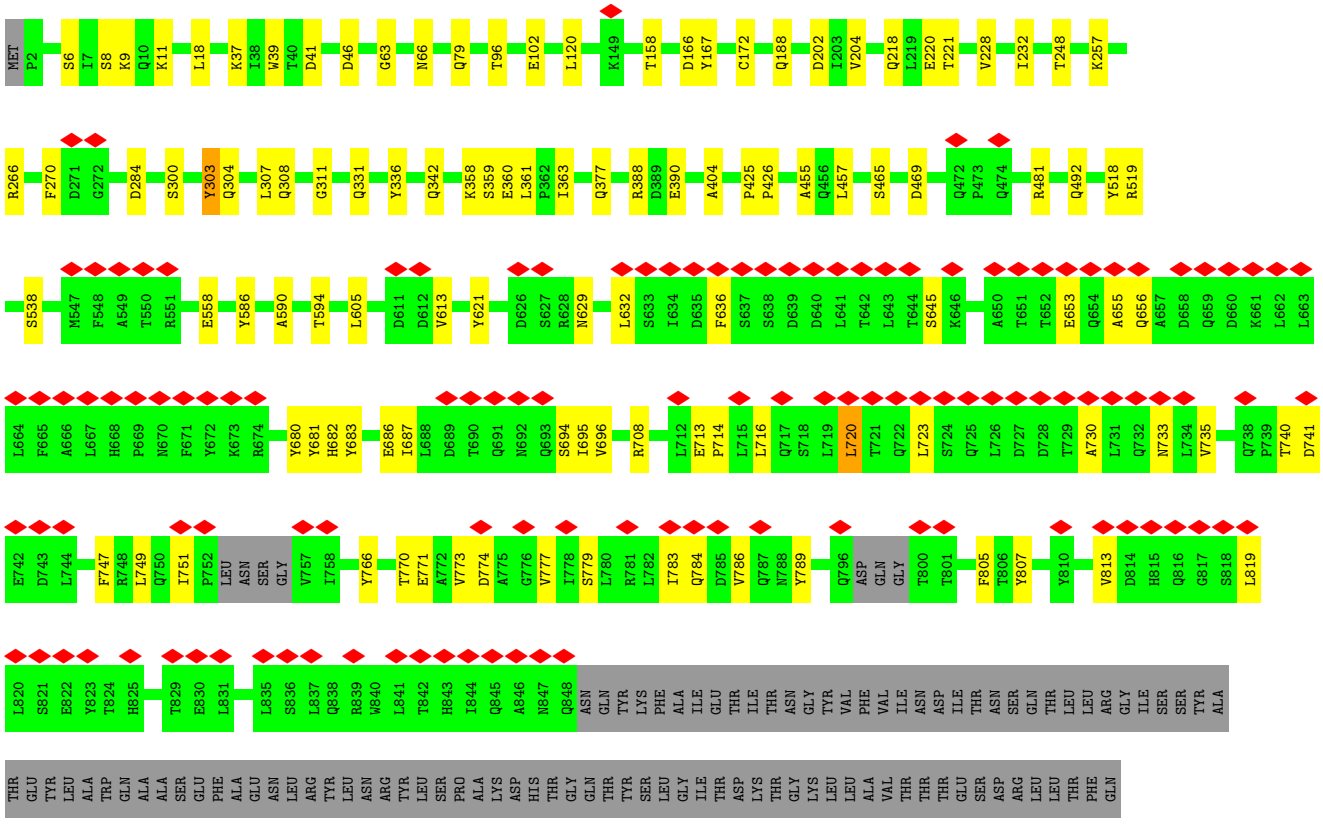


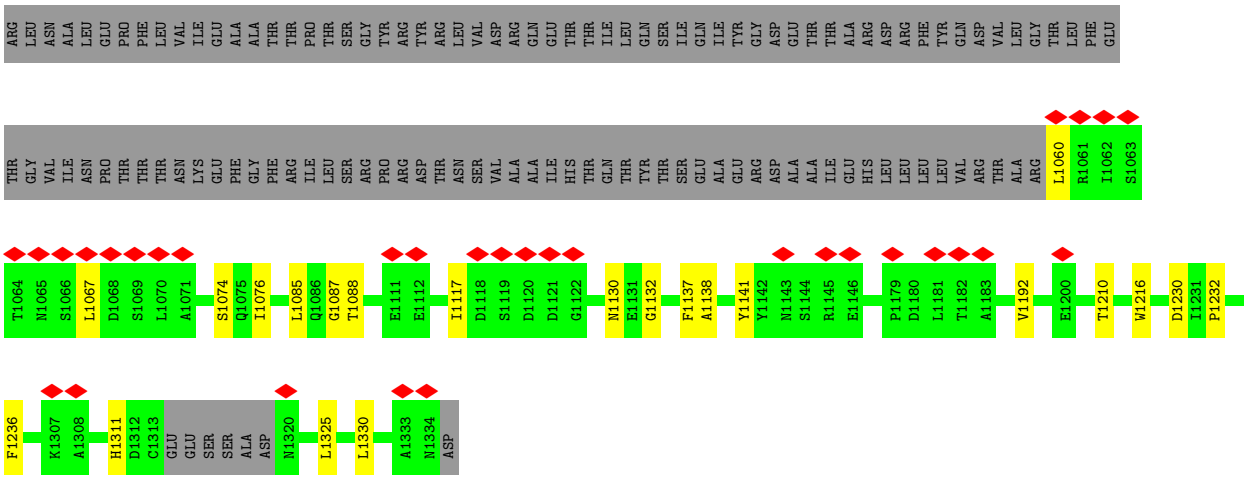




• Molecule 2: All3315 protein

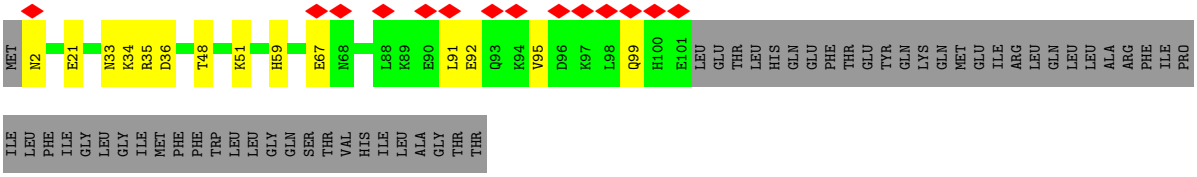
Chain FD:





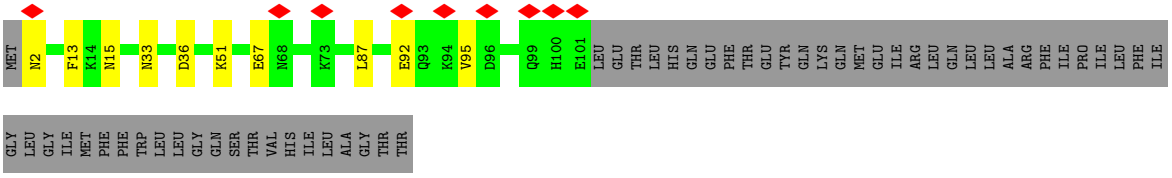
• Molecule 3: All3316 protein

Chain AE:



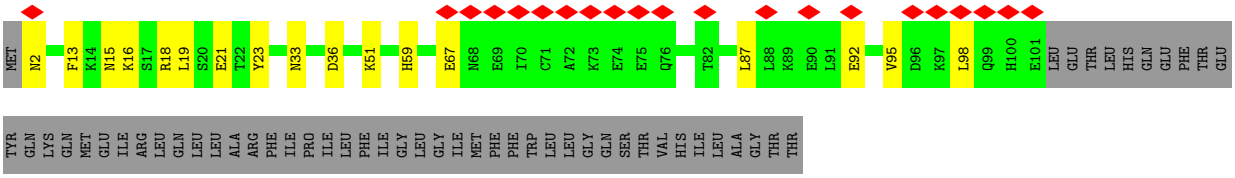
• Molecule 3: All3316 protein

Chain AF:



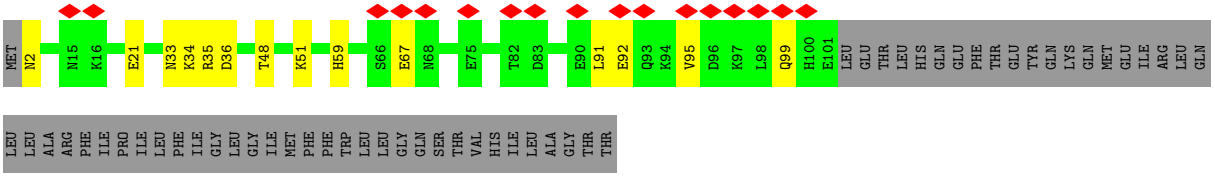
• Molecule 3: All3316 protein

Chain AG:



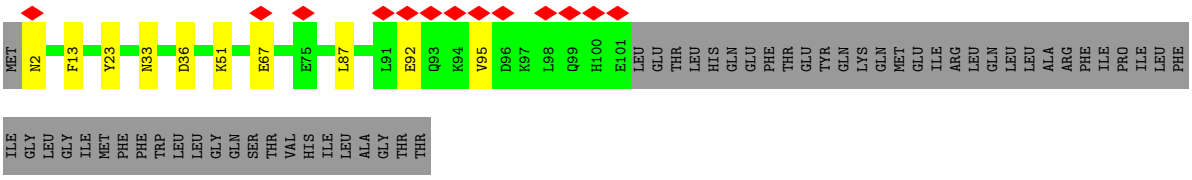
• Molecule 3: All3316 protein

Chain BE:



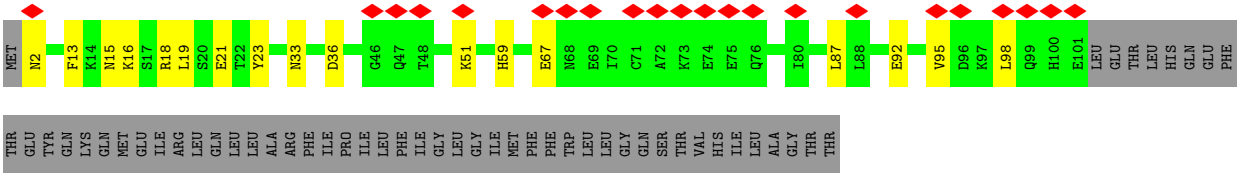
• Molecule 3: All3316 protein

Chain BF:



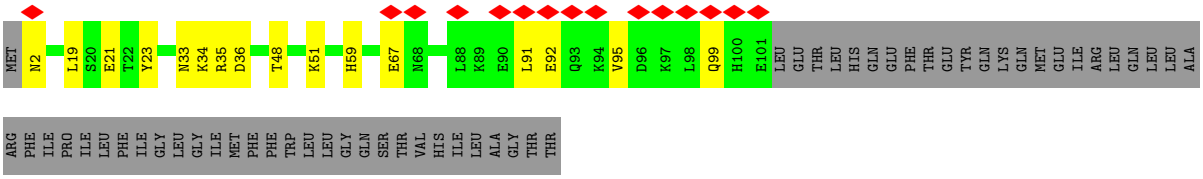
• Molecule 3: All3316 protein

Chain BG:



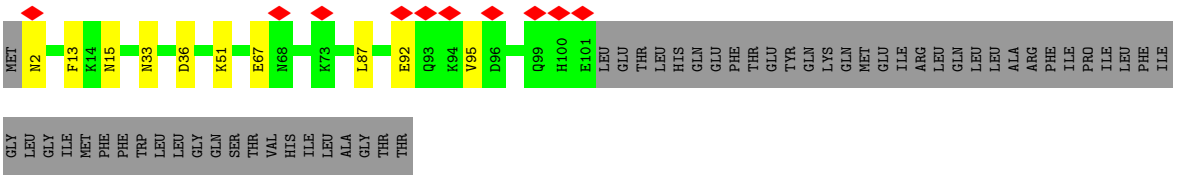
• Molecule 3: All3316 protein

Chain CE:



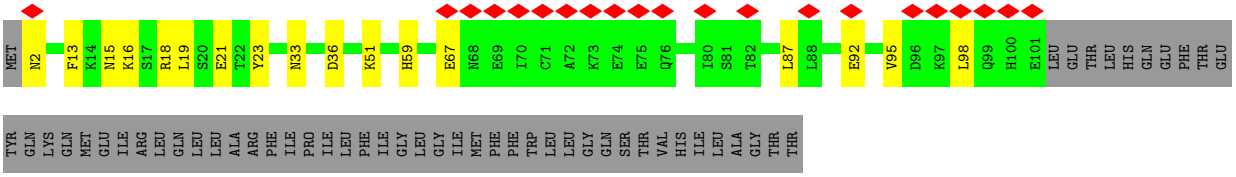
• Molecule 3: All3316 protein

Chain CF:



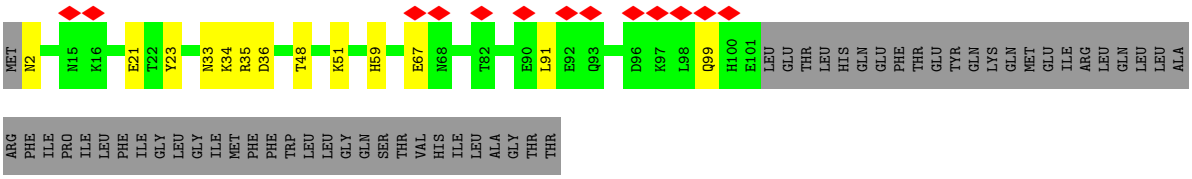
• Molecule 3: All3316 protein

Chain CG:



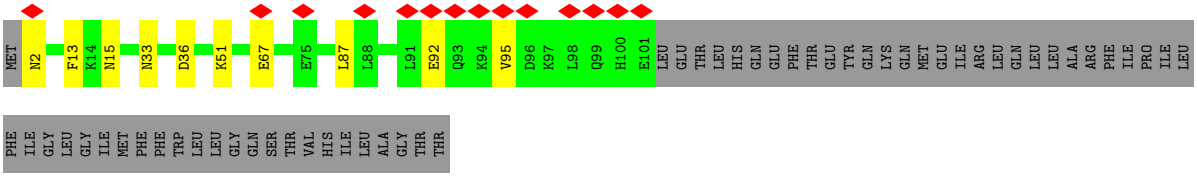
• Molecule 3: All3316 protein

Chain DE:



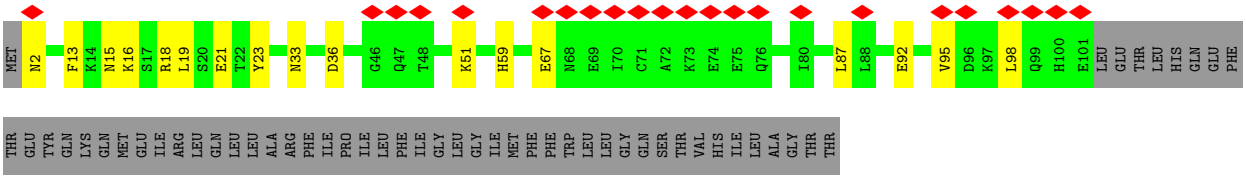
• Molecule 3: All3316 protein

Chain DF:



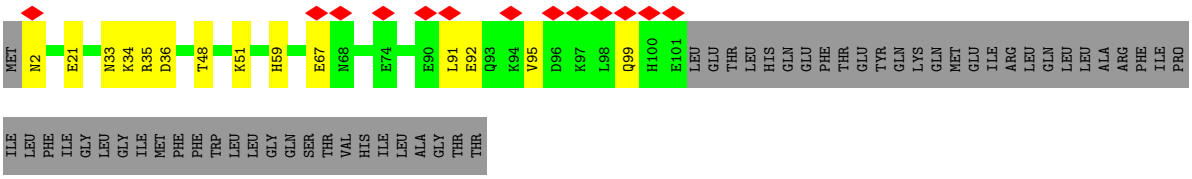
• Molecule 3: All3316 protein

Chain DG:



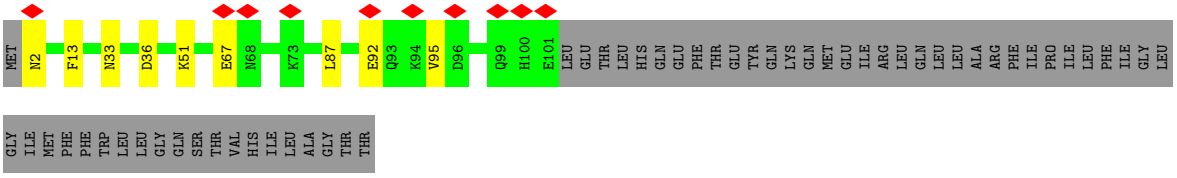
• Molecule 3: All3316 protein

Chain EE:



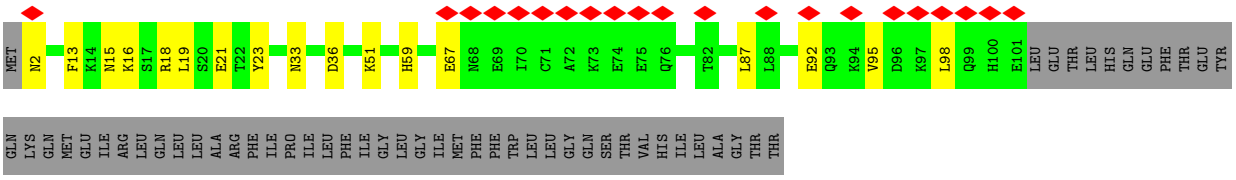
• Molecule 3: All3316 protein

Chain EF:



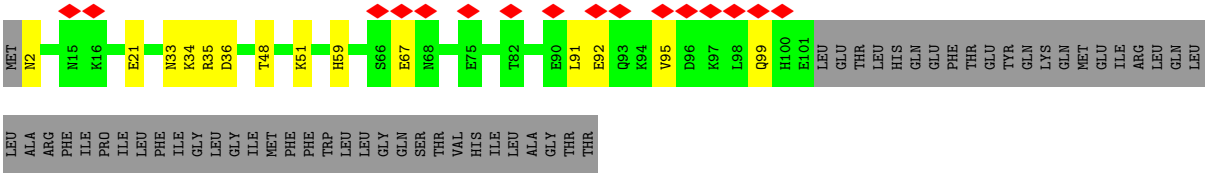
• Molecule 3: All3316 protein

Chain EG:



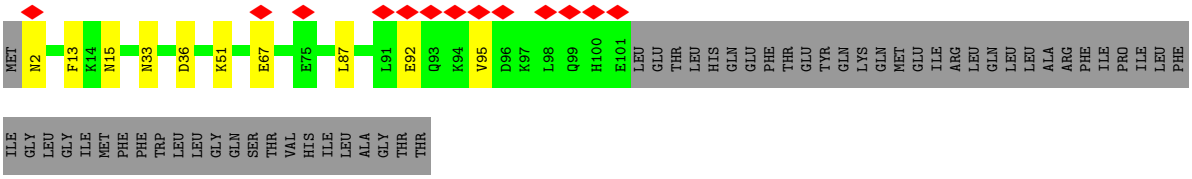
• Molecule 3: All3316 protein

Chain FE:



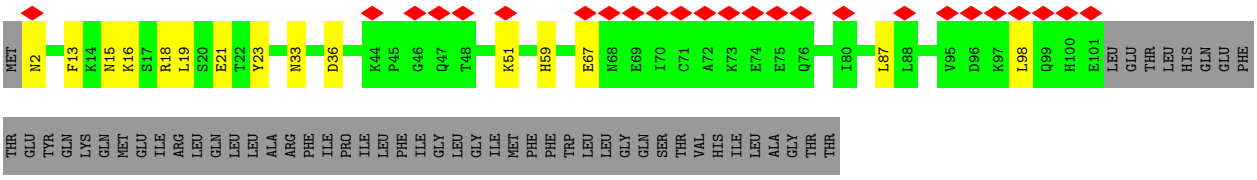
• Molecule 3: All3316 protein

Chain FF:



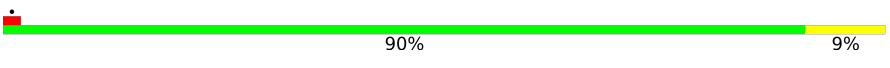
• Molecule 3: All3316 protein

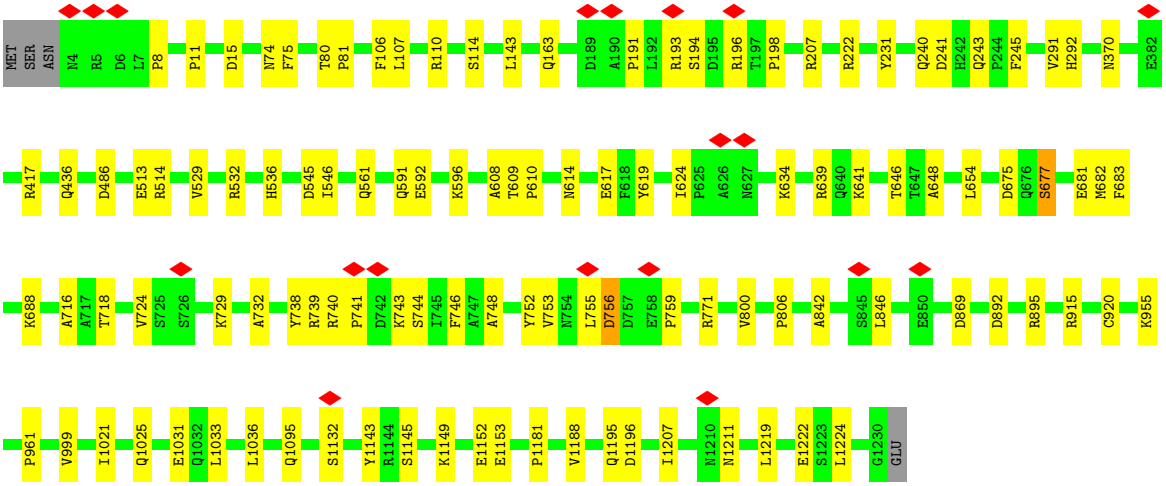
Chain FG:



• Molecule 4: All3317 protein

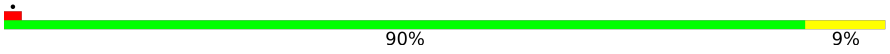
Chain AH:

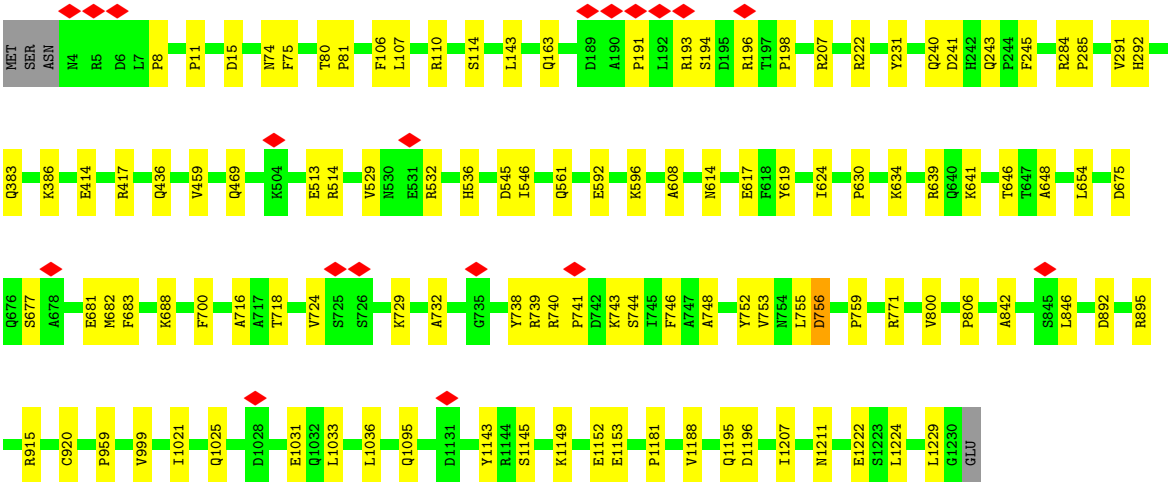




• Molecule 4: All3317 protein

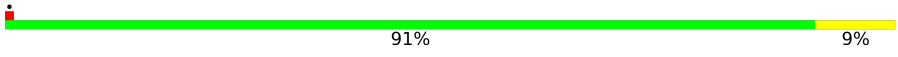
Chain BH:

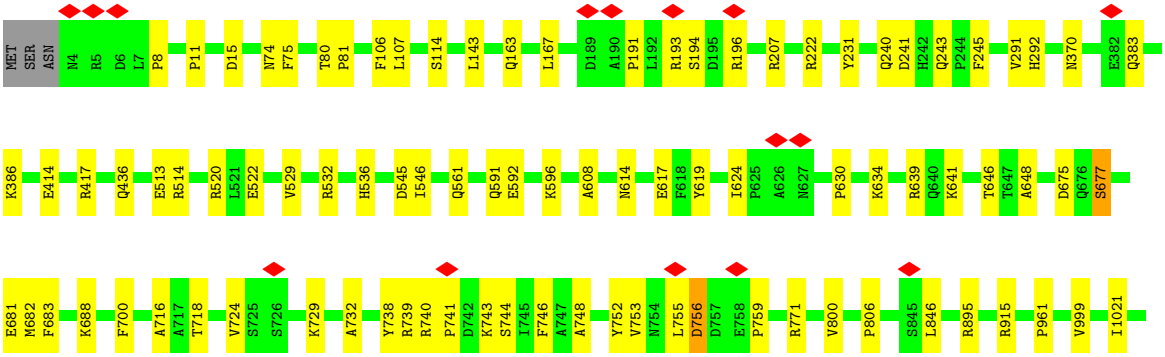


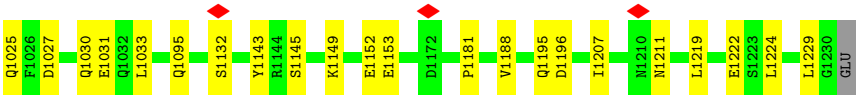


• Molecule 4: All3317 protein

Chain CH:

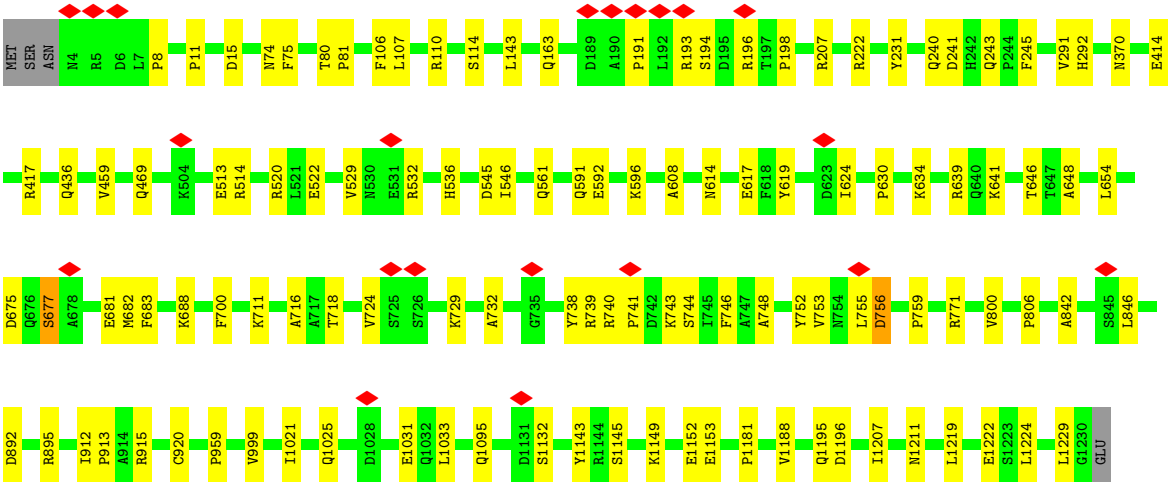






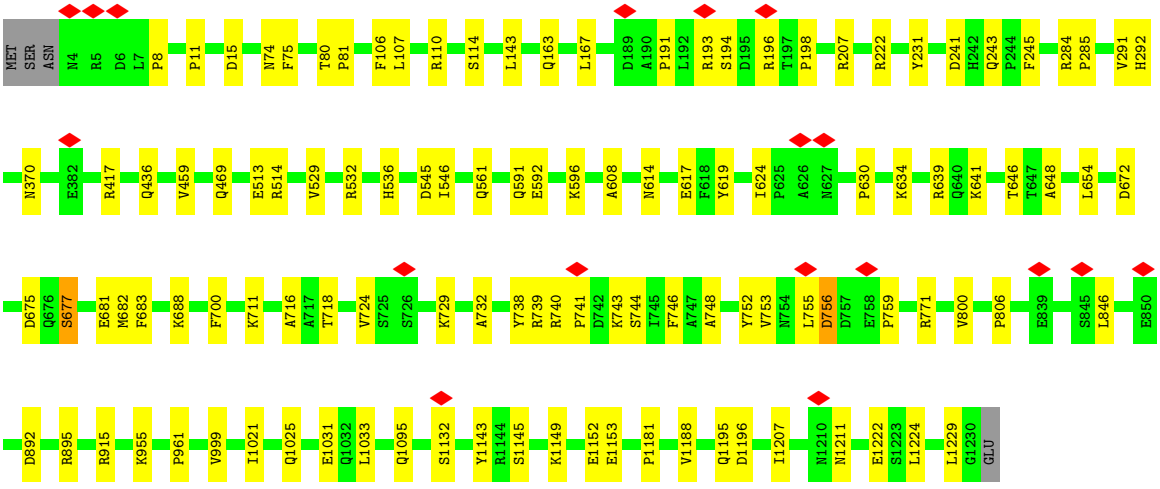
• Molecule 4: All3317 protein

Chain DH:



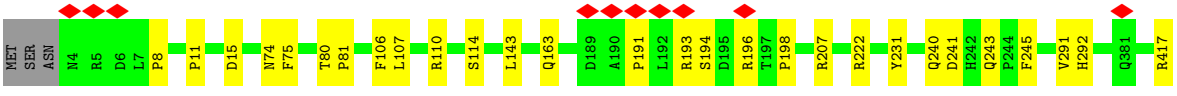
• Molecule 4: All3317 protein

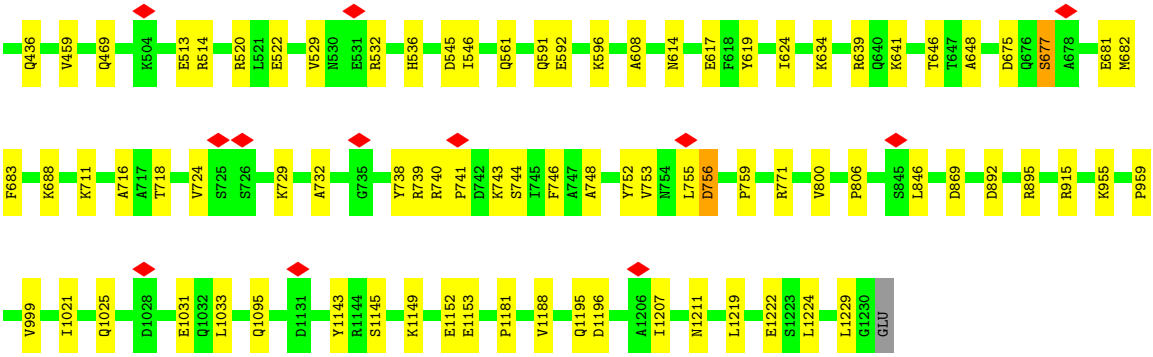
Chain EH:



• Molecule 4: All3317 protein

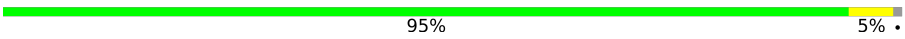
Chain FH:





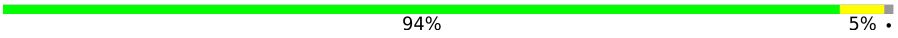
• Molecule 5: All3320 protein

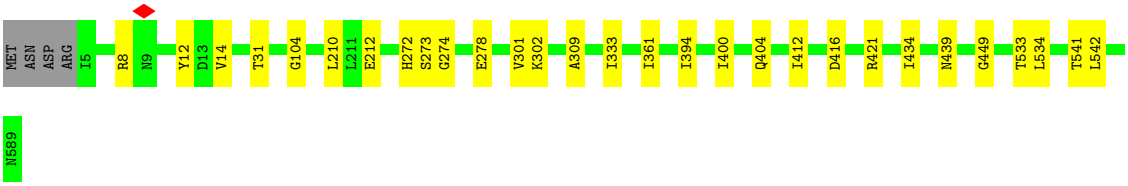
Chain AJ:



• Molecule 5: All3320 protein

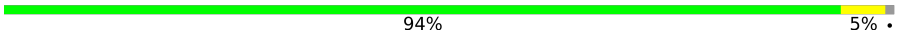
Chain CJ:

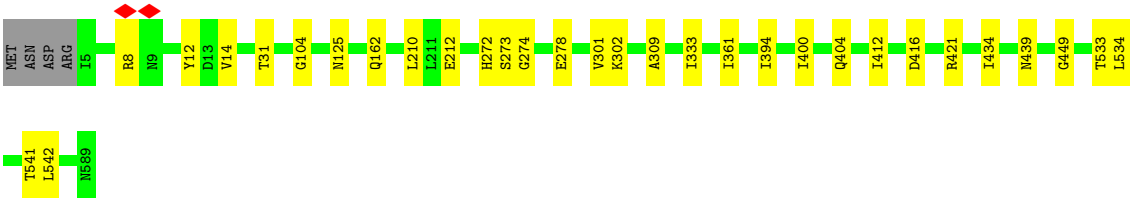




• Molecule 5: All3320 protein

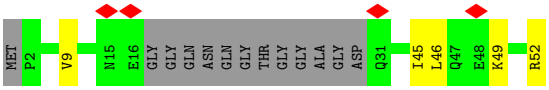
Chain EJ:





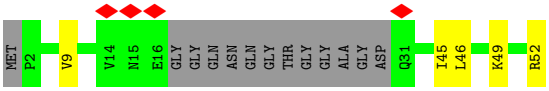
• Molecule 6: Asl3322 protein

Chain AL:



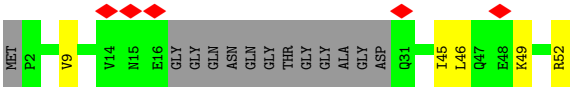
• Molecule 6: Asl3322 protein

Chain CL:



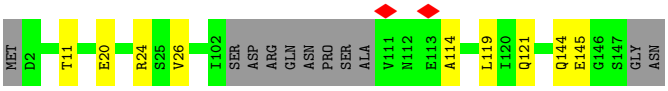
• Molecule 6: Asl3322 protein

Chain EL:



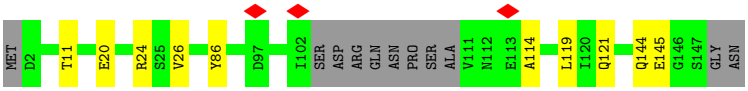
• Molecule 7: All3318 protein

Chain AI:



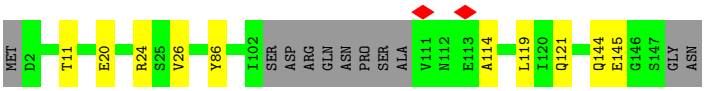
• Molecule 7: All3318 protein

Chain BI:



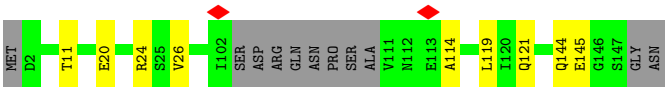
• Molecule 7: All3318 protein

Chain CI:



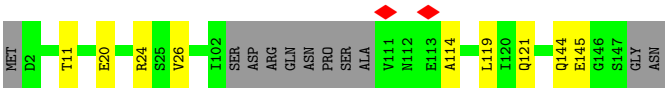
• Molecule 7: All3318 protein

Chain DI:



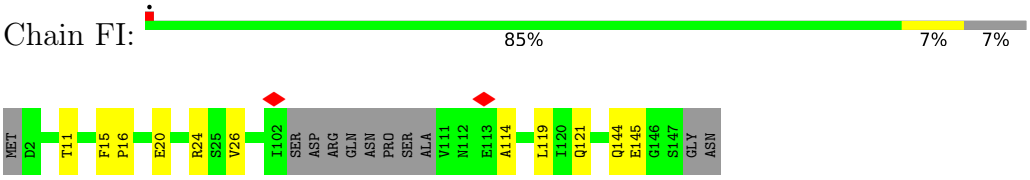
• Molecule 7: All3318 protein

Chain EI:



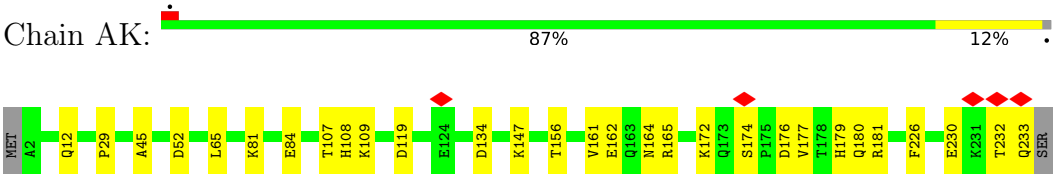
• Molecule 7: All3318 protein

Chain FI:



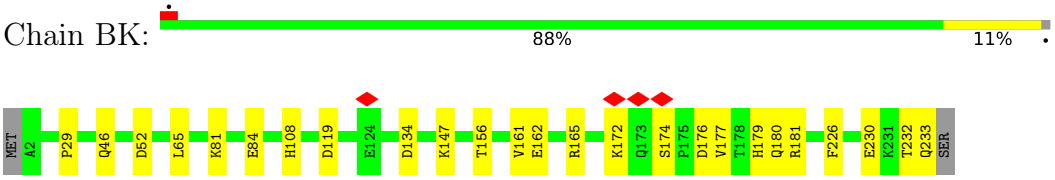
• Molecule 8: All3321 protein

Chain AK:



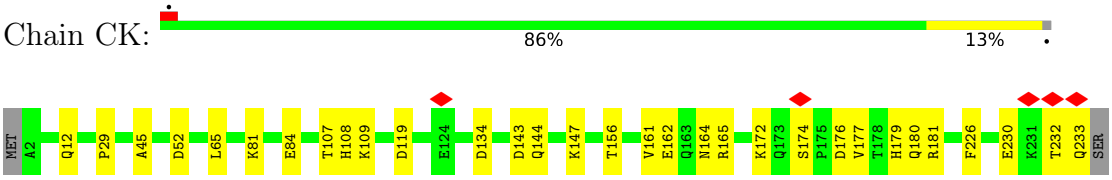
• Molecule 8: All3321 protein

Chain BK:



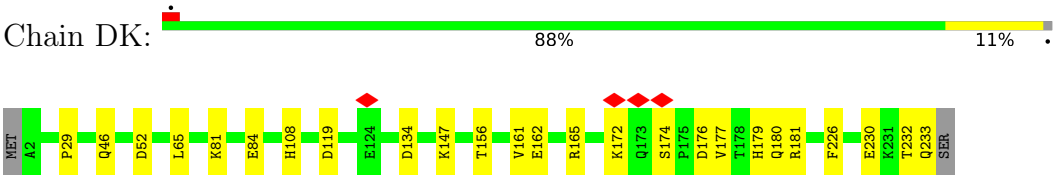
• Molecule 8: All3321 protein

Chain CK:



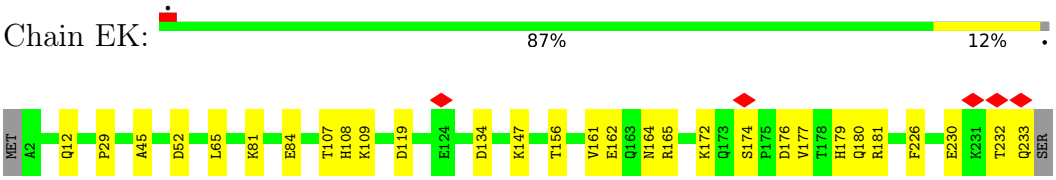
• Molecule 8: All3321 protein

Chain DK:



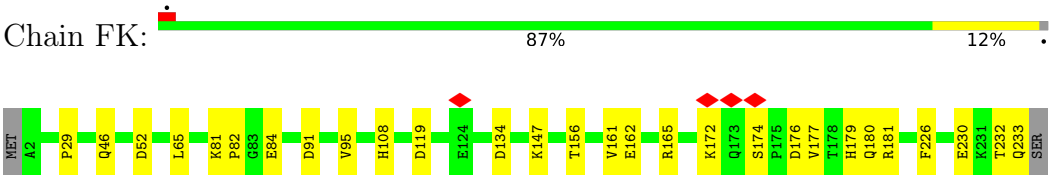
• Molecule 8: All3321 protein

Chain EK:



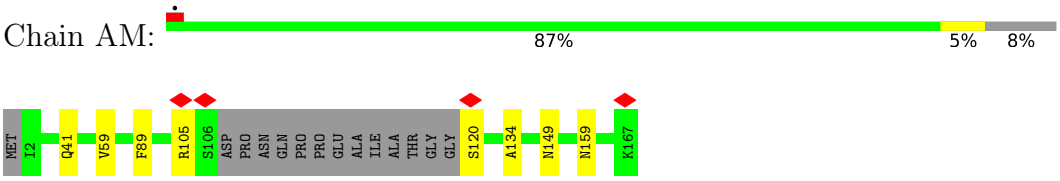
• Molecule 8: All3321 protein

Chain FK:



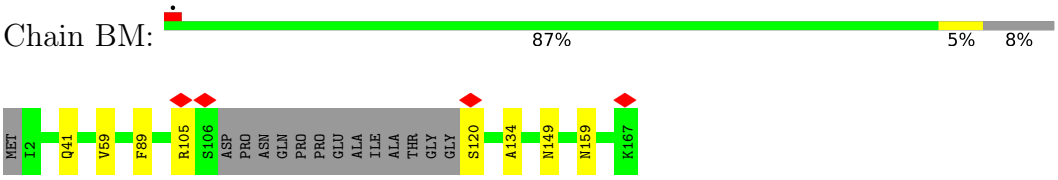
- Molecule 9: All3323 protein

Chain AM:



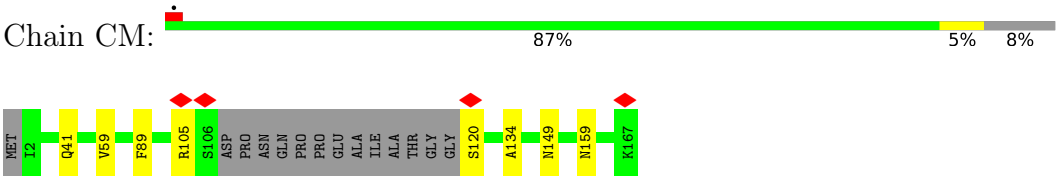
- Molecule 9: All3323 protein

Chain BM:



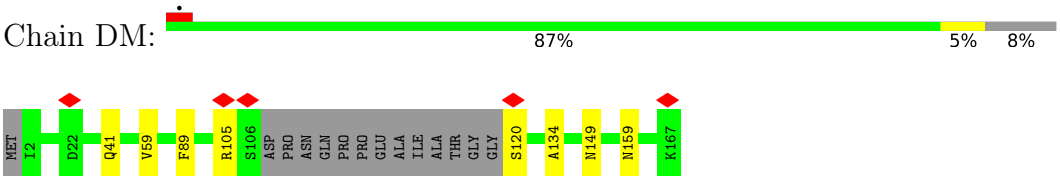
- Molecule 9: All3323 protein

Chain CM:



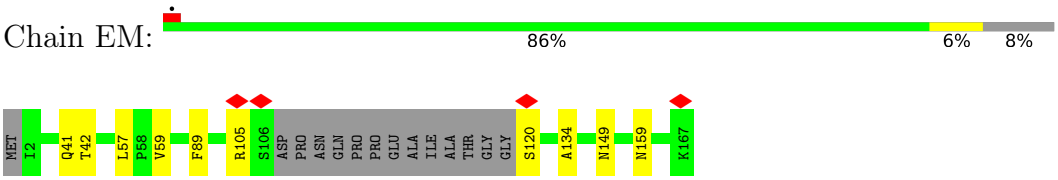
- Molecule 9: All3323 protein

Chain DM:



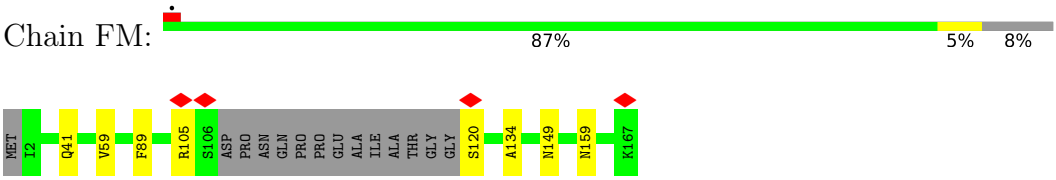
- Molecule 9: All3323 protein

Chain EM:



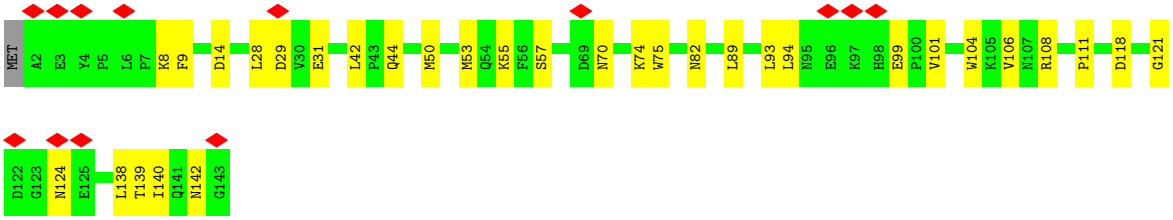
- Molecule 9: All3323 protein

Chain FM:

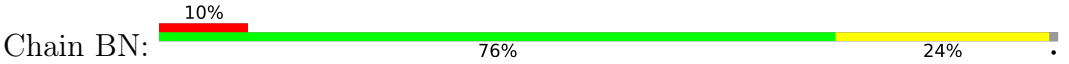


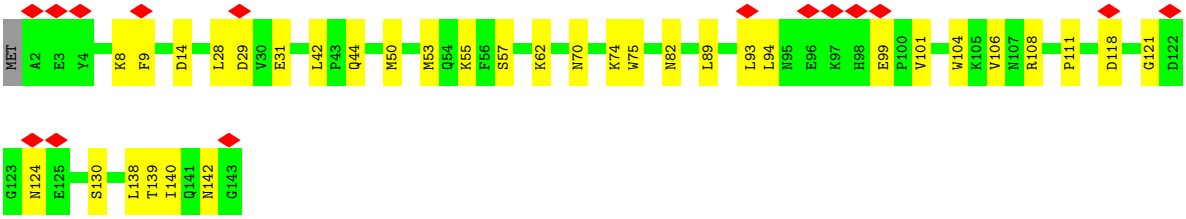
- Molecule 10: All3324 protein

Chain AN:

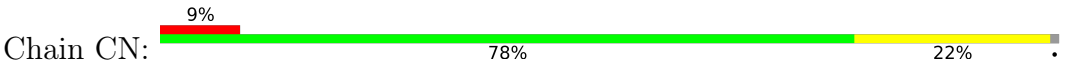


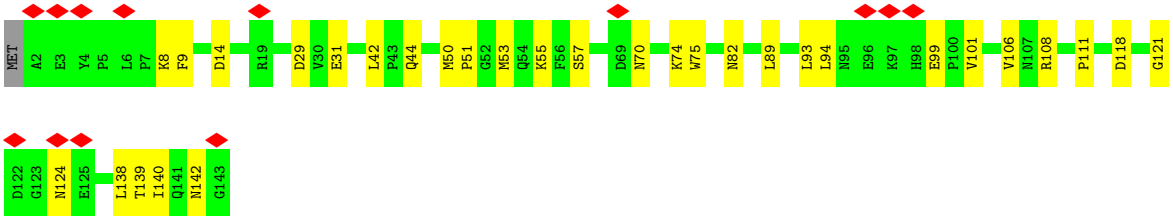
• Molecule 10: All3324 protein



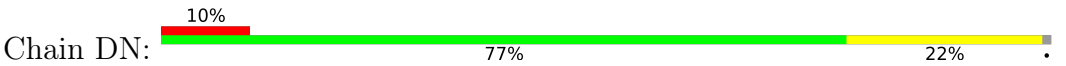


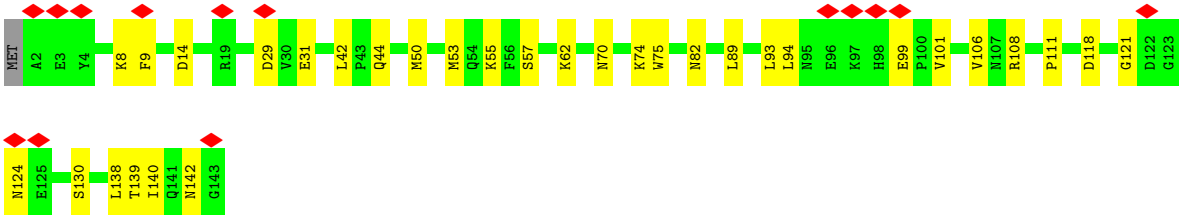
• Molecule 10: All3324 protein



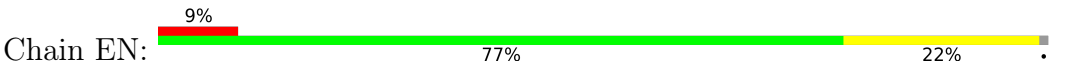


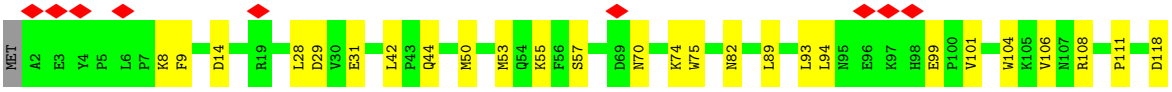
• Molecule 10: All3324 protein

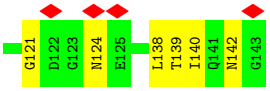




• Molecule 10: All3324 protein

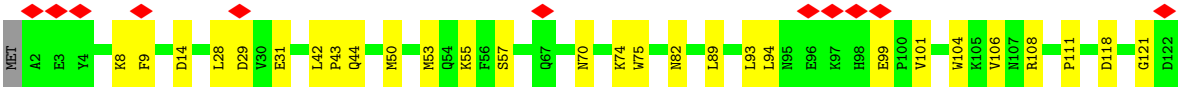


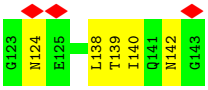




• Molecule 10: All3324 protein

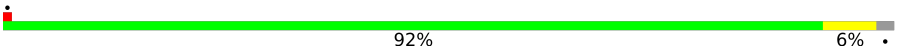
Chain FN:

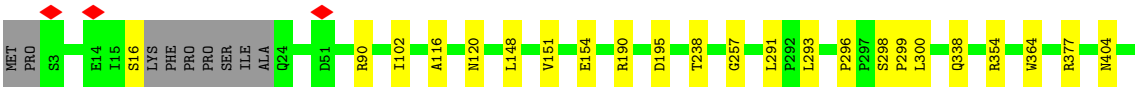


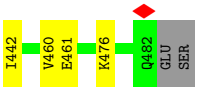


• Molecule 11: All3325 protein

Chain AO:

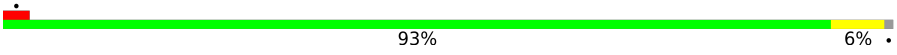


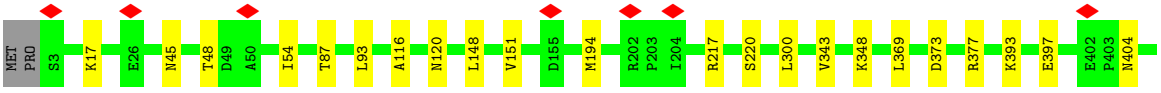


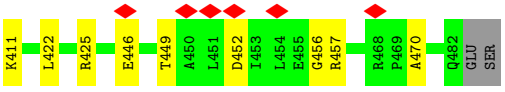


• Molecule 11: All3325 protein

Chain AP:

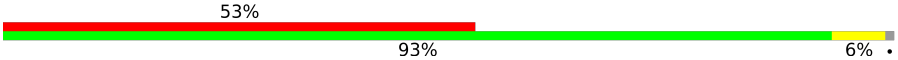


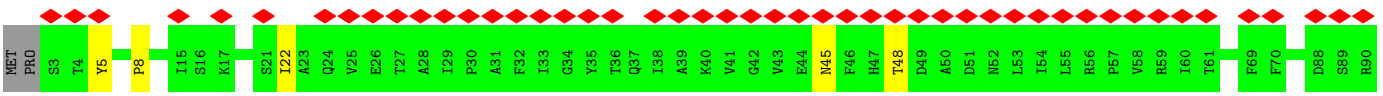


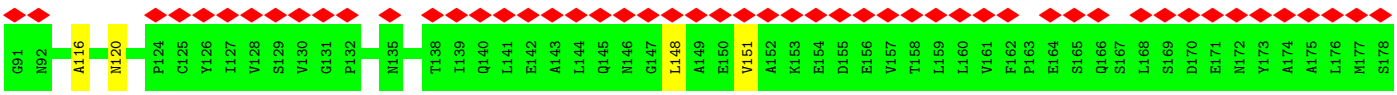


• Molecule 11: All3325 protein

Chain AQ:

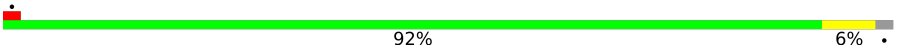


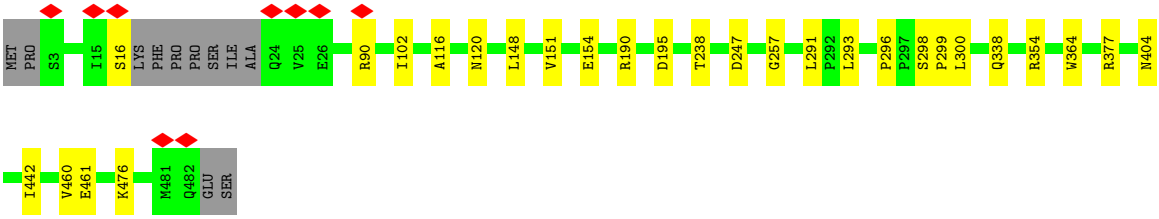




• Molecule 11: All3325 protein

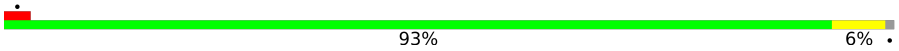
Chain BO:

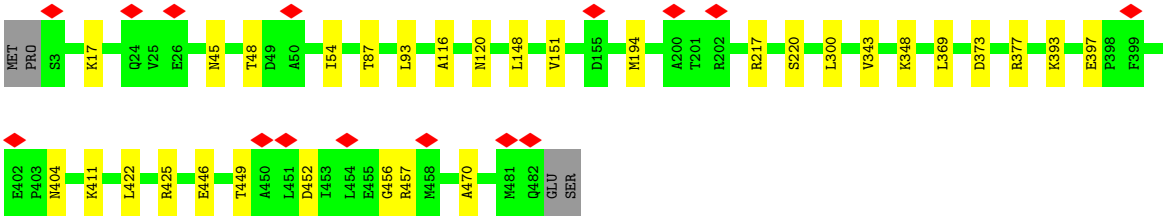




• Molecule 11: All3325 protein

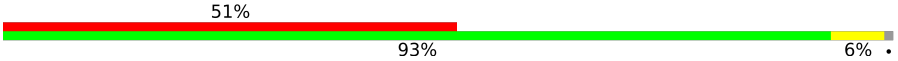
Chain BP:

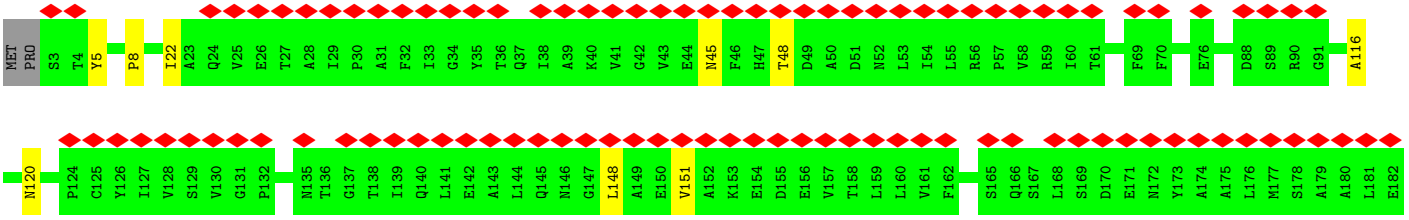


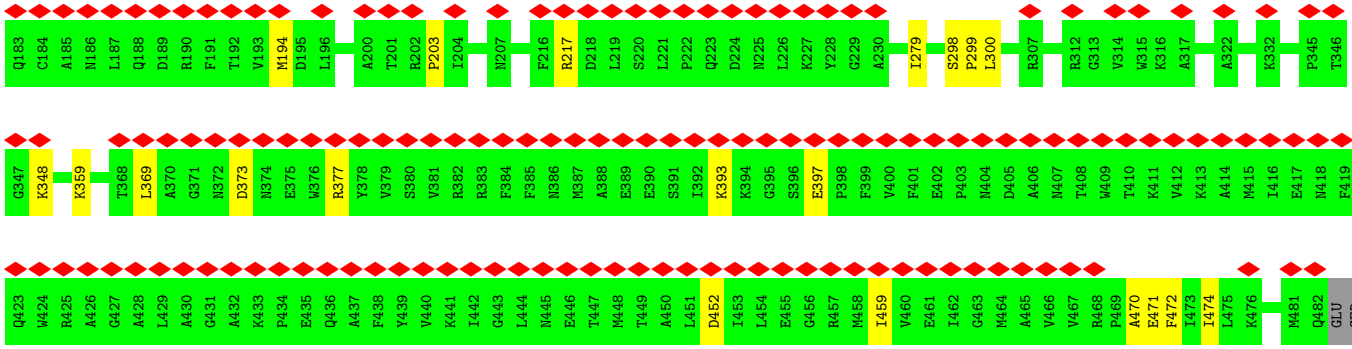


• Molecule 11: All3325 protein

Chain BQ:

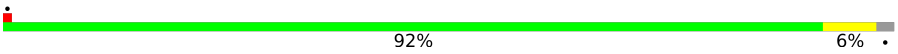


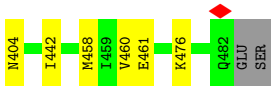




• Molecule 11: All3325 protein

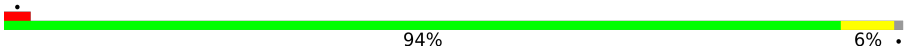
Chain CO:

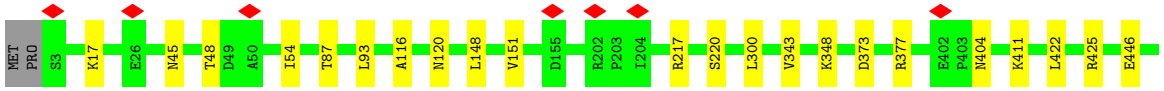


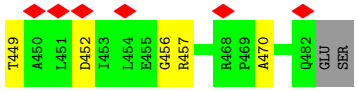


• Molecule 11: All3325 protein

Chain CP:

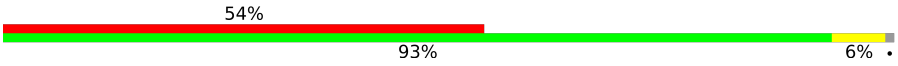


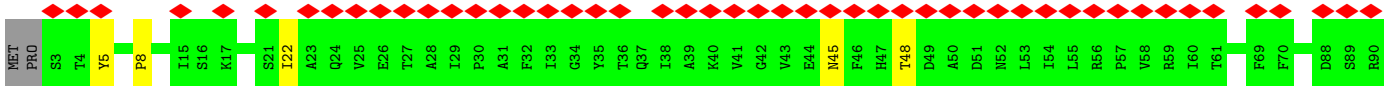


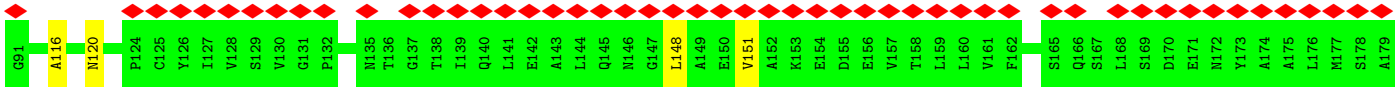


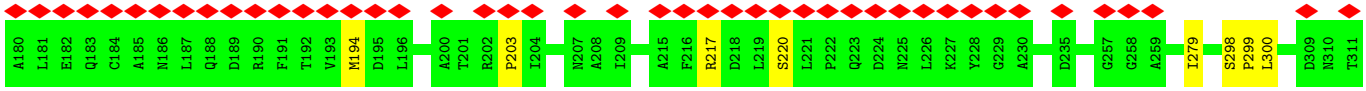
• Molecule 11: All3325 protein

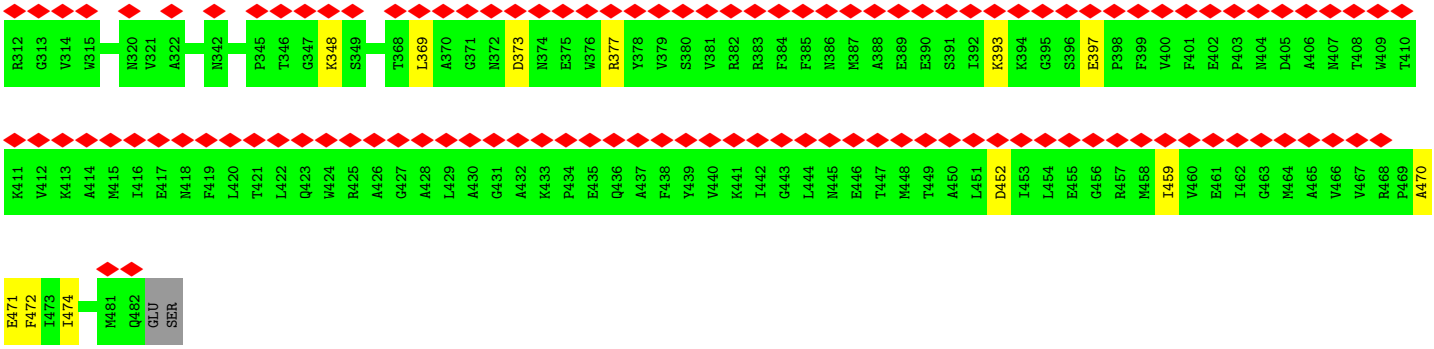
Chain CQ:





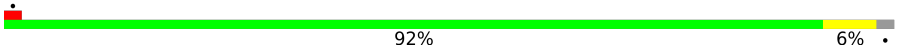


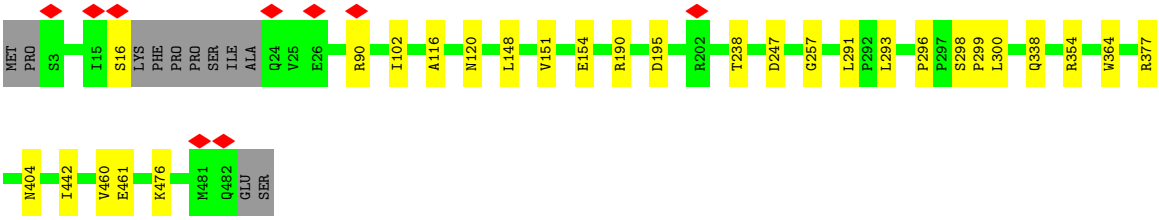




• Molecule 11: All3325 protein

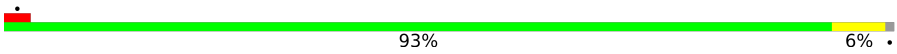
Chain DO:

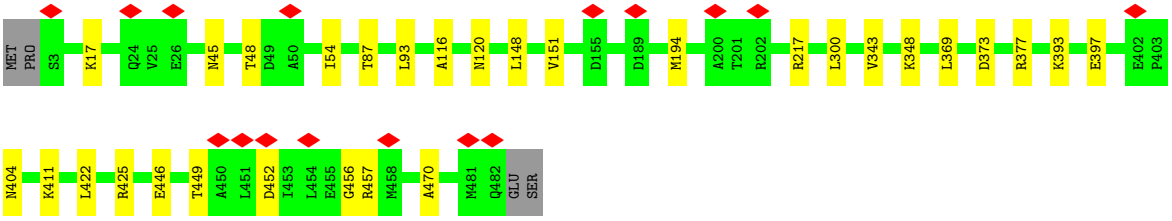




• Molecule 11: All3325 protein

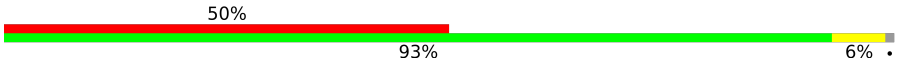
Chain DP:

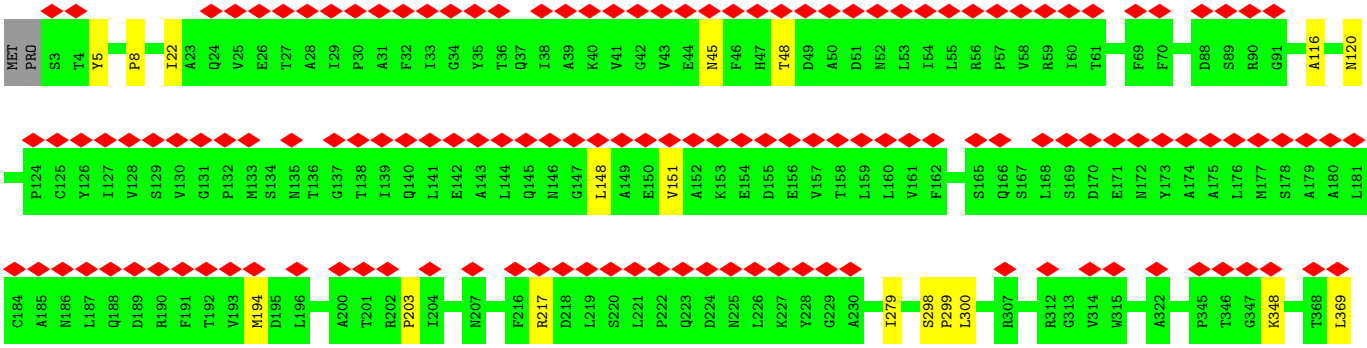


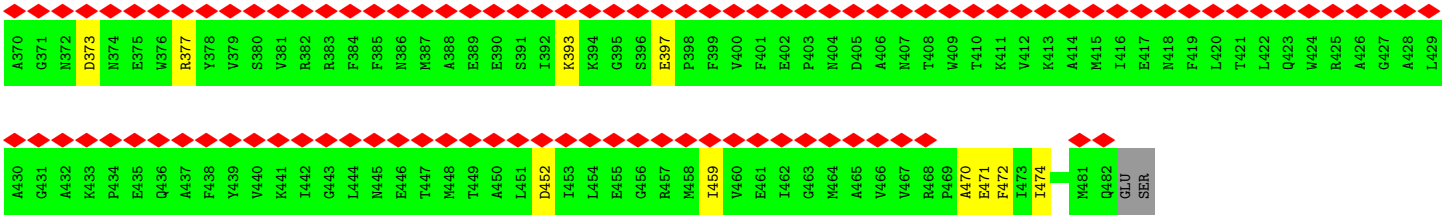


• Molecule 11: All3325 protein

Chain DQ:

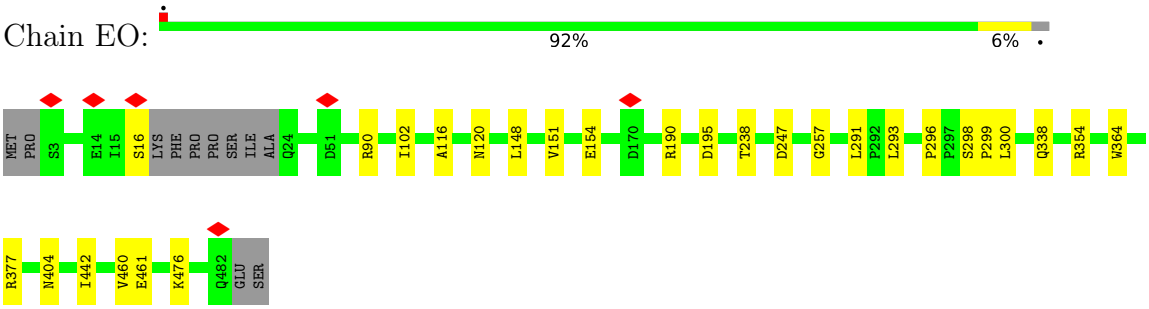






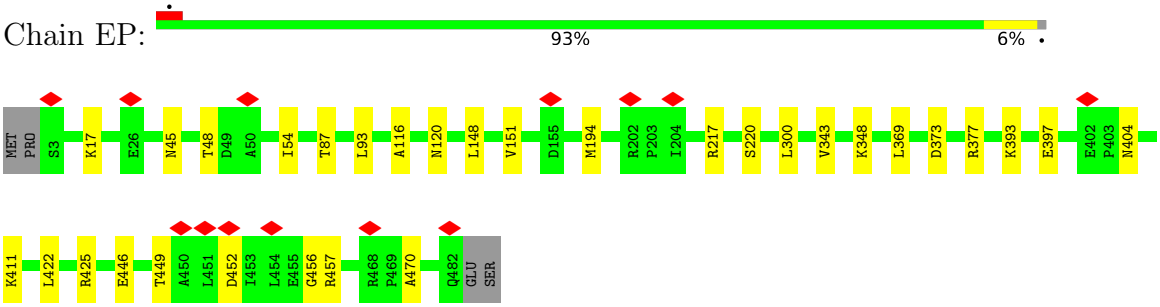
• Molecule 11: All3325 protein

Chain EO:



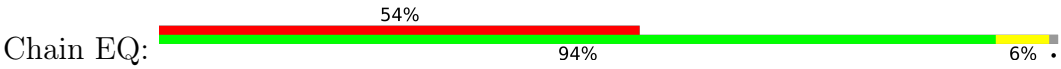
• Molecule 11: All3325 protein

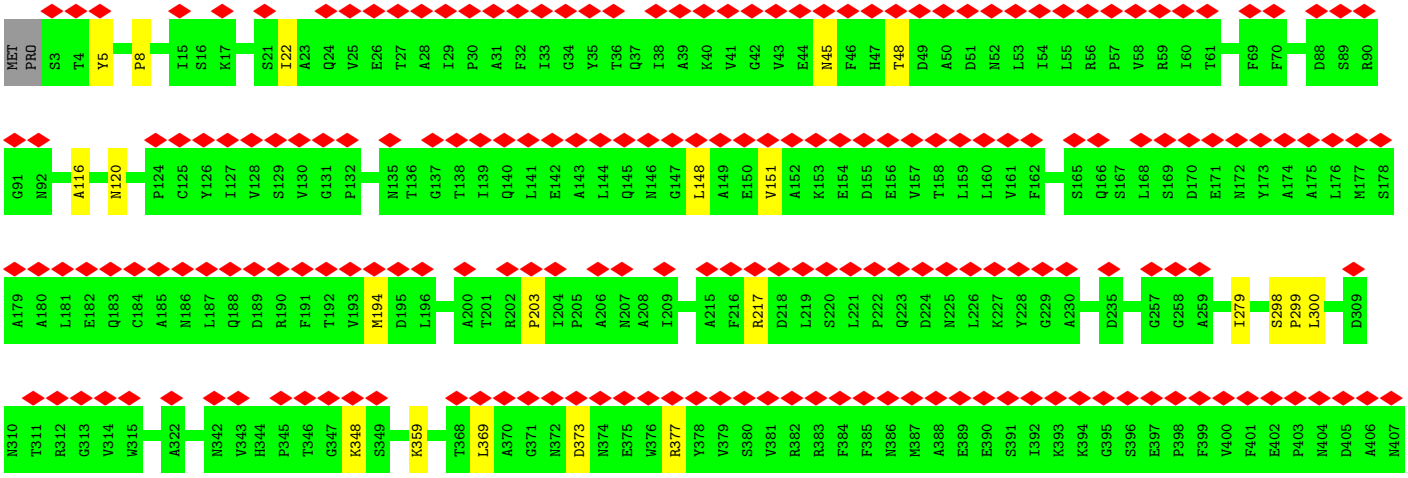
Chain EP:

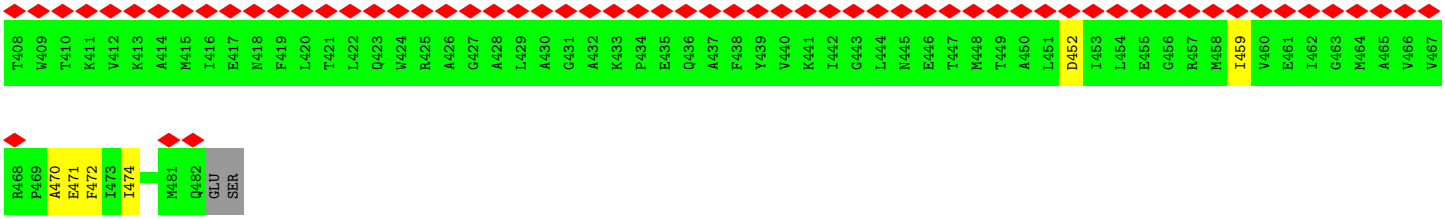


• Molecule 11: All3325 protein

Chain EQ:

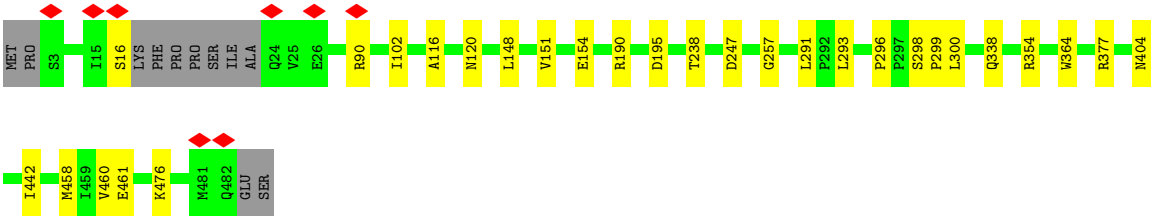






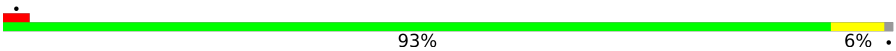
• Molecule 11: All3325 protein

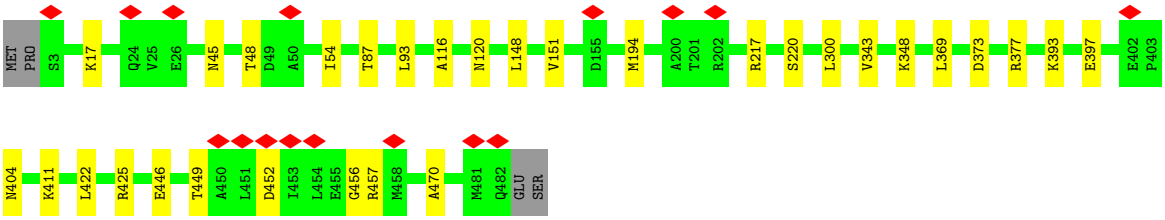
Chain FO:



• Molecule 11: All3325 protein

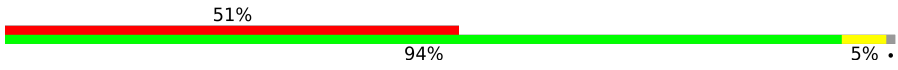
Chain FP:

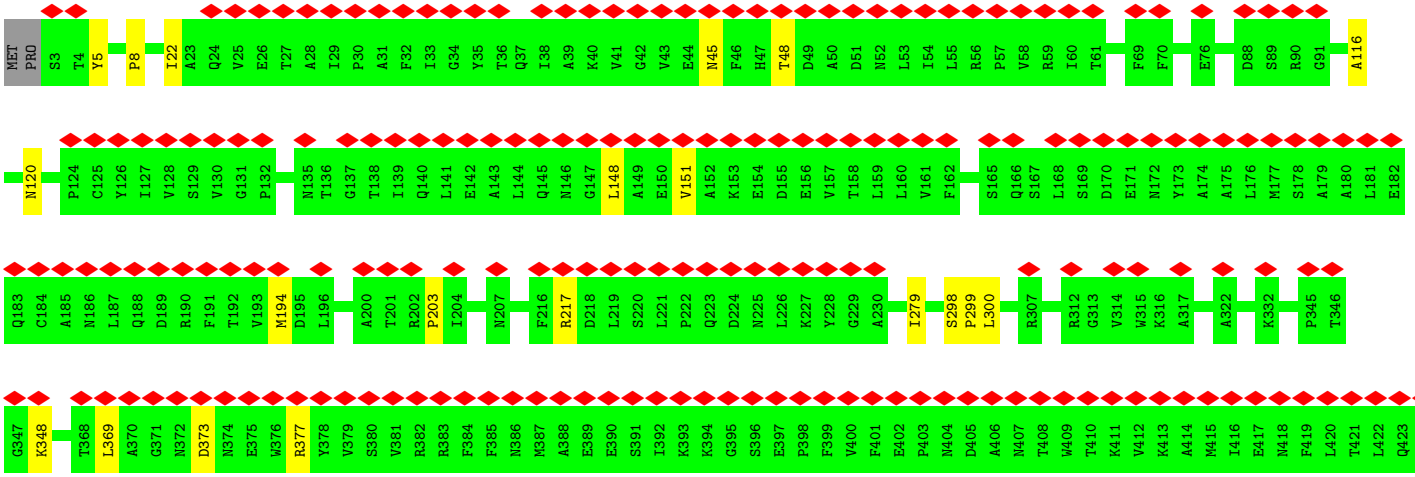


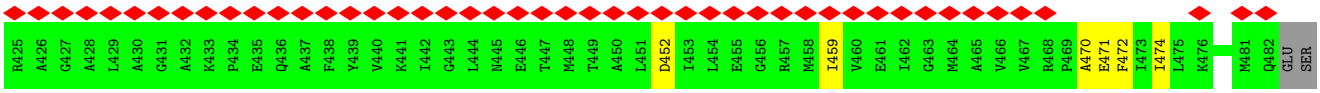


• Molecule 11: All3325 protein

Chain FQ:






R425
A426
G427
A428
L429
A430
G431
A432
K433
P434
E435
Q436
A437
F438
Y439
V440
K441
I442
G443
L444
N445
E446
T447
M448
T449
A450
L451
D452
I453
L454
E455
G456
R457
M458
I459
V460
E461
I462
G463
M464
A465
V466
V467
R468
P469
A470
E471
F472
I473
I474
L475
K476
M481
Q482
GLU
SER

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C3	Depositor
Number of particles used	36909	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 ($e^-/Å^2$)	52	Depositor
Minimum defocus (nm)	900	Depositor
Maximum defocus (nm)	1500	Depositor
Magnification	Not provided	
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	0.125	Depositor
Minimum map value	-0.048	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.0275	Depositor
Map size (Å)	563.2, 563.2, 563.2	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.1, 1.1, 1.1	Depositor

5 Model quality

5.1 Standard geometry

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
1	AA	0.40	0/6041	0.50	0/8212
1	AB	0.38	0/6027	0.48	0/8186
1	AC	0.40	0/5830	0.49	0/7924
1	BA	0.40	0/6041	0.50	0/8212
1	BB	0.38	0/6027	0.48	0/8186
1	BC	0.40	0/5830	0.49	0/7924
1	CA	0.40	0/6041	0.50	0/8212
1	CB	0.38	0/6027	0.48	0/8186
1	CC	0.40	0/5830	0.49	0/7924
1	DA	0.40	0/6041	0.50	0/8212
1	DB	0.38	0/6027	0.48	0/8186
1	DC	0.40	0/5830	0.49	0/7924
1	EA	0.40	0/6041	0.50	0/8212
1	EB	0.38	0/6027	0.48	0/8186
1	EC	0.40	0/5830	0.49	0/7924
1	FA	0.40	0/6041	0.50	0/8212
1	FB	0.38	0/6027	0.48	0/8186
1	FC	0.40	0/5830	0.49	0/7924
2	AD	0.31	0/9323	0.48	0/12684
2	BD	0.31	0/9323	0.48	0/12684
2	CD	0.31	0/9323	0.48	0/12684
2	DD	0.31	0/9323	0.48	0/12684
2	ED	0.31	0/9323	0.48	0/12684
2	FD	0.31	0/9323	0.48	0/12684
3	AE	0.43	0/862	0.53	0/1157
3	AF	0.41	0/862	0.47	0/1157
3	AG	0.41	0/862	0.46	0/1157
3	BE	0.43	0/862	0.53	0/1157
3	BF	0.42	0/862	0.47	0/1157
3	BG	0.41	0/862	0.46	0/1157
3	CE	0.43	0/862	0.53	0/1157
3	CF	0.41	0/862	0.47	0/1157
3	CG	0.41	0/862	0.46	0/1157
3	DE	0.43	0/862	0.53	0/1157

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
3	DF	0.42	0/862	0.47	0/1157
3	DG	0.41	0/862	0.46	0/1157
3	EE	0.43	0/862	0.53	0/1157
3	EF	0.42	0/862	0.47	0/1157
3	EG	0.41	0/862	0.46	0/1157
3	FE	0.43	0/862	0.53	0/1157
3	FF	0.42	0/862	0.47	0/1157
3	FG	0.41	0/862	0.46	0/1157
4	AH	0.32	0/10021	0.51	0/13644
4	BH	0.32	0/10021	0.51	0/13644
4	CH	0.32	0/10021	0.51	0/13644
4	DH	0.32	0/10021	0.51	0/13644
4	EH	0.32	0/10021	0.51	0/13644
4	FH	0.32	0/10021	0.51	0/13644
5	AJ	0.33	0/4507	0.50	0/6122
5	CJ	0.33	0/4507	0.50	0/6122
5	EJ	0.33	0/4507	0.50	0/6122
6	AL	0.34	0/284	0.60	0/380
6	CL	0.34	0/284	0.60	0/380
6	EL	0.34	0/284	0.61	0/380
7	AI	0.32	0/1116	0.50	0/1513
7	BI	0.32	0/1116	0.50	0/1513
7	CI	0.32	0/1116	0.50	0/1513
7	DI	0.32	0/1116	0.50	0/1513
7	EI	0.32	0/1116	0.50	0/1513
7	FI	0.32	0/1116	0.50	0/1513
8	AK	0.33	0/1942	0.52	0/2623
8	BK	0.32	0/1942	0.51	0/2623
8	CK	0.33	0/1942	0.52	0/2623
8	DK	0.32	0/1942	0.51	0/2623
8	EK	0.33	0/1942	0.52	0/2623
8	FK	0.32	0/1942	0.51	0/2623
9	AM	0.32	0/1282	0.54	0/1737
9	BM	0.32	0/1282	0.54	0/1737
9	CM	0.32	0/1282	0.54	0/1737
9	DM	0.32	0/1282	0.54	0/1737
9	EM	0.32	0/1282	0.54	0/1737
9	FM	0.32	0/1282	0.54	0/1737
10	AN	0.38	0/1181	0.55	0/1601
10	BN	0.38	0/1181	0.55	0/1601
10	CN	0.38	0/1181	0.55	0/1601
10	DN	0.38	0/1181	0.55	0/1601
10	EN	0.38	0/1181	0.55	0/1601

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
10	FN	0.38	0/1181	0.55	0/1601
11	AO	0.34	0/3738	0.51	0/5085
11	AP	0.32	0/3795	0.50	0/5165
11	AQ	0.33	0/3795	0.51	0/5165
11	BO	0.34	0/3738	0.51	0/5085
11	BP	0.32	0/3795	0.50	0/5165
11	BQ	0.33	0/3795	0.51	0/5165
11	CO	0.34	0/3738	0.51	0/5085
11	CP	0.32	0/3795	0.50	0/5165
11	CQ	0.33	0/3795	0.51	0/5165
11	DO	0.34	0/3738	0.51	0/5085
11	DP	0.32	0/3795	0.50	0/5165
11	DQ	0.33	0/3795	0.51	0/5165
11	EO	0.34	0/3738	0.51	0/5085
11	EP	0.32	0/3795	0.50	0/5165
11	EQ	0.33	0/3795	0.51	0/5165
11	FO	0.34	0/3738	0.51	0/5085
11	FP	0.32	0/3795	0.50	0/5165
11	FQ	0.33	0/3795	0.51	0/5165
All	All	0.35	0/354435	0.50	0/481566

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

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	AA	5899	0	5787	56	0
1	AB	5886	0	5764	48	0
1	AC	5690	0	5581	37	0
1	BA	5899	0	5787	56	0
1	BB	5886	0	5764	47	0
1	BC	5690	0	5581	41	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	CA	5899	0	5787	58	0
1	CB	5886	0	5764	43	0
1	CC	5690	0	5581	39	0
1	DA	5899	0	5787	55	0
1	DB	5886	0	5764	43	0
1	DC	5690	0	5581	36	0
1	EA	5899	0	5787	53	0
1	EB	5886	0	5764	49	0
1	EC	5690	0	5581	39	0
1	FA	5899	0	5787	55	0
1	FB	5886	0	5764	50	0
1	FC	5690	0	5581	37	0
2	AD	9112	0	8875	116	0
2	BD	9112	0	8875	110	0
2	CD	9112	0	8875	109	0
2	DD	9112	0	8875	116	0
2	ED	9112	0	8875	112	0
2	FD	9112	0	8875	111	0
3	AE	845	0	828	11	0
3	AF	845	0	828	9	0
3	AG	845	0	829	17	0
3	BE	845	0	828	12	0
3	BF	845	0	828	9	0
3	BG	845	0	829	17	0
3	CE	845	0	828	13	0
3	CF	845	0	828	9	0
3	CG	845	0	829	18	0
3	DE	845	0	828	12	0
3	DF	845	0	828	9	0
3	DG	845	0	829	16	0
3	EE	845	0	828	12	0
3	EF	845	0	828	8	0
3	EG	845	0	829	17	0
3	FE	845	0	828	12	0
3	FF	845	0	828	9	0
3	FG	845	0	829	16	0
4	AH	9792	0	9799	103	0
4	BH	9792	0	9799	101	0
4	CH	9792	0	9799	100	0
4	DH	9792	0	9799	106	0
4	EH	9792	0	9799	103	0
4	FH	9792	0	9799	99	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	AJ	4438	0	4441	27	0
5	CJ	4438	0	4441	29	0
5	EJ	4438	0	4441	29	0
6	AL	285	0	304	5	0
6	CL	285	0	304	5	0
6	EL	285	0	304	6	0
7	AI	1098	0	1086	11	0
7	BI	1098	0	1086	12	0
7	CI	1098	0	1086	12	0
7	DI	1098	0	1086	11	0
7	EI	1098	0	1086	11	0
7	FI	1098	0	1086	12	0
8	AK	1898	0	1868	31	0
8	BK	1898	0	1868	25	0
8	CK	1898	0	1868	32	0
8	DK	1898	0	1868	24	0
8	EK	1898	0	1868	28	0
8	FK	1898	0	1868	26	0
9	AM	1254	0	1251	4	0
9	BM	1254	0	1251	4	0
9	CM	1254	0	1251	4	0
9	DM	1254	0	1251	4	0
9	EM	1254	0	1251	5	0
9	FM	1254	0	1251	4	0
10	AN	1152	0	1119	31	0
10	BN	1152	0	1119	32	0
10	CN	1152	0	1119	31	0
10	DN	1152	0	1119	30	0
10	EN	1152	0	1119	30	0
10	FN	1152	0	1119	32	0
11	AO	3663	0	3628	21	0
11	AP	3716	0	3686	30	0
11	AQ	3716	0	3686	25	0
11	BO	3663	0	3628	21	0
11	BP	3716	0	3686	32	0
11	BQ	3716	0	3686	24	0
11	CO	3663	0	3628	22	0
11	CP	3716	0	3686	28	0
11	CQ	3716	0	3686	26	0
11	DO	3663	0	3628	21	0
11	DP	3716	0	3686	29	0
11	DQ	3716	0	3686	24	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
11	EO	3663	0	3628	21	0
11	EP	3716	0	3686	32	0
11	EQ	3716	0	3686	25	0
11	FO	3663	0	3628	22	0
11	FP	3716	0	3686	31	0
11	FQ	3716	0	3686	24	0
All	All	346635	0	341925	2730	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 4.

The worst 5 of 2730 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)
2:AD:783:ILE:C	2:AD:783:ILE:HD12	2.22	0.60
2:BD:783:ILE:C	2:BD:783:ILE:HD12	2.22	0.60
2:ED:783:ILE:C	2:ED:783:ILE:HD12	2.22	0.60
2:DD:783:ILE:C	2:DD:783:ILE:HD12	2.22	0.60
4:DH:739:ARG:HA	4:DH:744:SER:O	2.02	0.60

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	AA	721/1476 (49%)	690 (96%)	31 (4%)	0	100	100
1	AB	712/1476 (48%)	686 (96%)	26 (4%)	0	100	100
1	AC	688/1476 (47%)	667 (97%)	21 (3%)	0	100	100
1	BA	721/1476 (49%)	690 (96%)	31 (4%)	0	100	100
1	BB	712/1476 (48%)	686 (96%)	26 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	BC	688/1476 (47%)	667 (97%)	21 (3%)	0	100	100
1	CA	721/1476 (49%)	690 (96%)	31 (4%)	0	100	100
1	CB	712/1476 (48%)	686 (96%)	26 (4%)	0	100	100
1	CC	688/1476 (47%)	667 (97%)	21 (3%)	0	100	100
1	DA	721/1476 (49%)	690 (96%)	31 (4%)	0	100	100
1	DB	712/1476 (48%)	686 (96%)	26 (4%)	0	100	100
1	DC	688/1476 (47%)	667 (97%)	21 (3%)	0	100	100
1	EA	721/1476 (49%)	690 (96%)	31 (4%)	0	100	100
1	EB	712/1476 (48%)	686 (96%)	26 (4%)	0	100	100
1	EC	688/1476 (47%)	667 (97%)	21 (3%)	0	100	100
1	FA	721/1476 (49%)	690 (96%)	31 (4%)	0	100	100
1	FB	712/1476 (48%)	686 (96%)	26 (4%)	0	100	100
1	FC	688/1476 (47%)	667 (97%)	21 (3%)	0	100	100
2	AD	1099/1335 (82%)	1075 (98%)	24 (2%)	0	100	100
2	BD	1099/1335 (82%)	1075 (98%)	24 (2%)	0	100	100
2	CD	1099/1335 (82%)	1075 (98%)	24 (2%)	0	100	100
2	DD	1099/1335 (82%)	1075 (98%)	24 (2%)	0	100	100
2	ED	1099/1335 (82%)	1075 (98%)	24 (2%)	0	100	100
2	FD	1099/1335 (82%)	1075 (98%)	24 (2%)	0	100	100
3	AE	98/154 (64%)	93 (95%)	5 (5%)	0	100	100
3	AF	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	AG	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	BE	98/154 (64%)	93 (95%)	5 (5%)	0	100	100
3	BF	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	BG	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	CE	98/154 (64%)	93 (95%)	5 (5%)	0	100	100
3	CF	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	CG	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	DE	98/154 (64%)	93 (95%)	5 (5%)	0	100	100
3	DF	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	DG	98/154 (64%)	94 (96%)	4 (4%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	EE	98/154 (64%)	93 (95%)	5 (5%)	0	100	100
3	EF	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	EG	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	FE	98/154 (64%)	93 (95%)	5 (5%)	0	100	100
3	FF	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
3	FG	98/154 (64%)	94 (96%)	4 (4%)	0	100	100
4	AH	1225/1231 (100%)	1186 (97%)	39 (3%)	0	100	100
4	BH	1225/1231 (100%)	1186 (97%)	39 (3%)	0	100	100
4	CH	1225/1231 (100%)	1186 (97%)	39 (3%)	0	100	100
4	DH	1225/1231 (100%)	1186 (97%)	39 (3%)	0	100	100
4	EH	1225/1231 (100%)	1185 (97%)	40 (3%)	0	100	100
4	FH	1225/1231 (100%)	1186 (97%)	39 (3%)	0	100	100
5	AJ	583/589 (99%)	571 (98%)	12 (2%)	0	100	100
5	CJ	583/589 (99%)	571 (98%)	12 (2%)	0	100	100
5	EJ	583/589 (99%)	571 (98%)	12 (2%)	0	100	100
6	AL	33/50 (66%)	32 (97%)	1 (3%)	0	100	100
6	CL	33/50 (66%)	32 (97%)	1 (3%)	0	100	100
6	EL	33/50 (66%)	32 (97%)	1 (3%)	0	100	100
7	AI	134/149 (90%)	131 (98%)	3 (2%)	0	100	100
7	BI	134/149 (90%)	131 (98%)	3 (2%)	0	100	100
7	CI	134/149 (90%)	131 (98%)	3 (2%)	0	100	100
7	DI	134/149 (90%)	131 (98%)	3 (2%)	0	100	100
7	EI	134/149 (90%)	131 (98%)	3 (2%)	0	100	100
7	FI	134/149 (90%)	131 (98%)	3 (2%)	0	100	100
8	AK	230/234 (98%)	224 (97%)	6 (3%)	0	100	100
8	BK	230/234 (98%)	223 (97%)	7 (3%)	0	100	100
8	CK	230/234 (98%)	223 (97%)	7 (3%)	0	100	100
8	DK	230/234 (98%)	223 (97%)	7 (3%)	0	100	100
8	EK	230/234 (98%)	224 (97%)	6 (3%)	0	100	100
8	FK	230/234 (98%)	223 (97%)	7 (3%)	0	100	100
9	AM	149/167 (89%)	145 (97%)	4 (3%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	BM	149/167 (89%)	145 (97%)	4 (3%)	0	100	100
9	CM	149/167 (89%)	145 (97%)	4 (3%)	0	100	100
9	DM	149/167 (89%)	145 (97%)	4 (3%)	0	100	100
9	EM	149/167 (89%)	145 (97%)	4 (3%)	0	100	100
9	FM	149/167 (89%)	145 (97%)	4 (3%)	0	100	100
10	AN	140/143 (98%)	131 (94%)	9 (6%)	0	100	100
10	BN	140/143 (98%)	131 (94%)	9 (6%)	0	100	100
10	CN	140/143 (98%)	131 (94%)	9 (6%)	0	100	100
10	DN	140/143 (98%)	131 (94%)	9 (6%)	0	100	100
10	EN	140/143 (98%)	131 (94%)	9 (6%)	0	100	100
10	FN	140/143 (98%)	131 (94%)	9 (6%)	0	100	100
11	AO	469/484 (97%)	456 (97%)	13 (3%)	0	100	100
11	AP	478/484 (99%)	471 (98%)	7 (2%)	0	100	100
11	AQ	478/484 (99%)	472 (99%)	6 (1%)	0	100	100
11	BO	469/484 (97%)	456 (97%)	13 (3%)	0	100	100
11	BP	478/484 (99%)	471 (98%)	7 (2%)	0	100	100
11	BQ	478/484 (99%)	472 (99%)	6 (1%)	0	100	100
11	CO	469/484 (97%)	456 (97%)	13 (3%)	0	100	100
11	CP	478/484 (99%)	471 (98%)	7 (2%)	0	100	100
11	CQ	478/484 (99%)	472 (99%)	6 (1%)	0	100	100
11	DO	469/484 (97%)	456 (97%)	13 (3%)	0	100	100
11	DP	478/484 (99%)	471 (98%)	7 (2%)	0	100	100
11	DQ	478/484 (99%)	472 (99%)	6 (1%)	0	100	100
11	EO	469/484 (97%)	456 (97%)	13 (3%)	0	100	100
11	EP	478/484 (99%)	471 (98%)	7 (2%)	0	100	100
11	EQ	478/484 (99%)	472 (99%)	6 (1%)	0	100	100
11	FO	469/484 (97%)	456 (97%)	13 (3%)	0	100	100
11	FP	478/484 (99%)	471 (98%)	7 (2%)	0	100	100
11	FQ	478/484 (99%)	472 (99%)	6 (1%)	0	100	100
All	All	42750/59523 (72%)	41494 (97%)	1256 (3%)	0	100	100

There are no Ramachandran outliers to report.

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	AA	650/1306 (50%)	649 (100%)	1 (0%)	92	97
1	AB	647/1306 (50%)	645 (100%)	2 (0%)	91	96
1	AC	623/1306 (48%)	619 (99%)	4 (1%)	84	92
1	BA	650/1306 (50%)	649 (100%)	1 (0%)	92	97
1	BB	647/1306 (50%)	645 (100%)	2 (0%)	91	96
1	BC	623/1306 (48%)	619 (99%)	4 (1%)	84	92
1	CA	650/1306 (50%)	649 (100%)	1 (0%)	92	97
1	CB	647/1306 (50%)	645 (100%)	2 (0%)	91	96
1	CC	623/1306 (48%)	619 (99%)	4 (1%)	84	92
1	DA	650/1306 (50%)	649 (100%)	1 (0%)	92	97
1	DB	647/1306 (50%)	645 (100%)	2 (0%)	91	96
1	DC	623/1306 (48%)	619 (99%)	4 (1%)	84	92
1	EA	650/1306 (50%)	649 (100%)	1 (0%)	92	97
1	EB	647/1306 (50%)	645 (100%)	2 (0%)	91	96
1	EC	623/1306 (48%)	619 (99%)	4 (1%)	84	92
1	FA	650/1306 (50%)	649 (100%)	1 (0%)	92	97
1	FB	647/1306 (50%)	645 (100%)	2 (0%)	91	96
1	FC	623/1306 (48%)	619 (99%)	4 (1%)	84	92
2	AD	1000/1195 (84%)	998 (100%)	2 (0%)	92	97
2	BD	1000/1195 (84%)	998 (100%)	2 (0%)	92	97
2	CD	1000/1195 (84%)	998 (100%)	2 (0%)	92	97
2	DD	1000/1195 (84%)	998 (100%)	2 (0%)	92	97
2	ED	1000/1195 (84%)	998 (100%)	2 (0%)	92	97
2	FD	1000/1195 (84%)	998 (100%)	2 (0%)	92	97
3	AE	95/143 (66%)	95 (100%)	0	100	100
3	AF	95/143 (66%)	95 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	AG	95/143 (66%)	95 (100%)	0	100	100
3	BE	95/143 (66%)	95 (100%)	0	100	100
3	BF	95/143 (66%)	95 (100%)	0	100	100
3	BG	95/143 (66%)	95 (100%)	0	100	100
3	CE	95/143 (66%)	95 (100%)	0	100	100
3	CF	95/143 (66%)	95 (100%)	0	100	100
3	CG	95/143 (66%)	95 (100%)	0	100	100
3	DE	95/143 (66%)	95 (100%)	0	100	100
3	DF	95/143 (66%)	95 (100%)	0	100	100
3	DG	95/143 (66%)	95 (100%)	0	100	100
3	EE	95/143 (66%)	95 (100%)	0	100	100
3	EF	95/143 (66%)	95 (100%)	0	100	100
3	EG	95/143 (66%)	95 (100%)	0	100	100
3	FE	95/143 (66%)	95 (100%)	0	100	100
3	FF	95/143 (66%)	95 (100%)	0	100	100
3	FG	95/143 (66%)	95 (100%)	0	100	100
4	AH	1071/1075 (100%)	1067 (100%)	4 (0%)	89	94
4	BH	1071/1075 (100%)	1067 (100%)	4 (0%)	89	94
4	CH	1071/1075 (100%)	1067 (100%)	4 (0%)	89	94
4	DH	1071/1075 (100%)	1067 (100%)	4 (0%)	89	94
4	EH	1071/1075 (100%)	1067 (100%)	4 (0%)	89	94
4	FH	1071/1075 (100%)	1067 (100%)	4 (0%)	89	94
5	AJ	471/475 (99%)	471 (100%)	0	100	100
5	CJ	471/475 (99%)	471 (100%)	0	100	100
5	EJ	471/475 (99%)	471 (100%)	0	100	100
6	AL	32/38 (84%)	32 (100%)	0	100	100
6	CL	32/38 (84%)	32 (100%)	0	100	100
6	EL	32/38 (84%)	32 (100%)	0	100	100
7	AI	123/132 (93%)	123 (100%)	0	100	100
7	BI	123/132 (93%)	123 (100%)	0	100	100
7	CI	123/132 (93%)	123 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	DI	123/132 (93%)	123 (100%)	0	100	100
7	EI	123/132 (93%)	123 (100%)	0	100	100
7	FI	123/132 (93%)	123 (100%)	0	100	100
8	AK	209/211 (99%)	208 (100%)	1 (0%)	86	93
8	BK	209/211 (99%)	208 (100%)	1 (0%)	86	93
8	CK	209/211 (99%)	208 (100%)	1 (0%)	86	93
8	DK	209/211 (99%)	208 (100%)	1 (0%)	86	93
8	EK	209/211 (99%)	208 (100%)	1 (0%)	86	93
8	FK	209/211 (99%)	208 (100%)	1 (0%)	86	93
9	AM	143/153 (94%)	142 (99%)	1 (1%)	81	92
9	BM	143/153 (94%)	142 (99%)	1 (1%)	81	92
9	CM	143/153 (94%)	142 (99%)	1 (1%)	81	92
9	DM	143/153 (94%)	142 (99%)	1 (1%)	81	92
9	EM	143/153 (94%)	142 (99%)	1 (1%)	81	92
9	FM	143/153 (94%)	142 (99%)	1 (1%)	81	92
10	AN	125/126 (99%)	125 (100%)	0	100	100
10	BN	125/126 (99%)	125 (100%)	0	100	100
10	CN	125/126 (99%)	125 (100%)	0	100	100
10	DN	125/126 (99%)	125 (100%)	0	100	100
10	EN	125/126 (99%)	125 (100%)	0	100	100
10	FN	125/126 (99%)	125 (100%)	0	100	100
11	AO	392/402 (98%)	392 (100%)	0	100	100
11	AP	398/402 (99%)	398 (100%)	0	100	100
11	AQ	398/402 (99%)	398 (100%)	0	100	100
11	BO	392/402 (98%)	392 (100%)	0	100	100
11	BP	398/402 (99%)	398 (100%)	0	100	100
11	BQ	398/402 (99%)	398 (100%)	0	100	100
11	CO	392/402 (98%)	392 (100%)	0	100	100
11	CP	398/402 (99%)	398 (100%)	0	100	100
11	CQ	398/402 (99%)	398 (100%)	0	100	100
11	DO	392/402 (98%)	392 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	DP	398/402 (99%)	398 (100%)	0	100	100
11	DQ	398/402 (99%)	398 (100%)	0	100	100
11	EO	392/402 (98%)	392 (100%)	0	100	100
11	EP	398/402 (99%)	398 (100%)	0	100	100
11	EQ	398/402 (99%)	398 (100%)	0	100	100
11	FO	392/402 (98%)	392 (100%)	0	100	100
11	FP	398/402 (99%)	398 (100%)	0	100	100
11	FQ	398/402 (99%)	398 (100%)	0	100	100
All	All	37893/52209 (73%)	37803 (100%)	90 (0%)	91	97

5 of 90 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	DH	999	VAL
4	EH	756	ASP
9	DM	89	PHE
1	EC	456	TYR
1	FA	610	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 331 such sidechains are listed below:

Mol	Chain	Res	Type
1	EB	131	ASN
1	FA	552	ASN
1	EC	499	HIS
4	EH	381	GLN
2	FD	87	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

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.

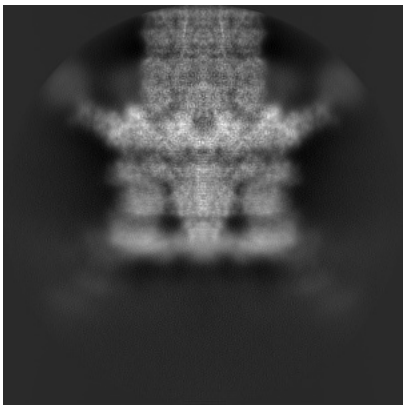
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-12029. These allow visual inspection of the internal detail of the map and identification of artifacts.

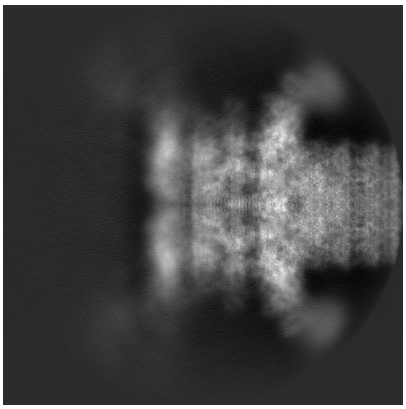
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

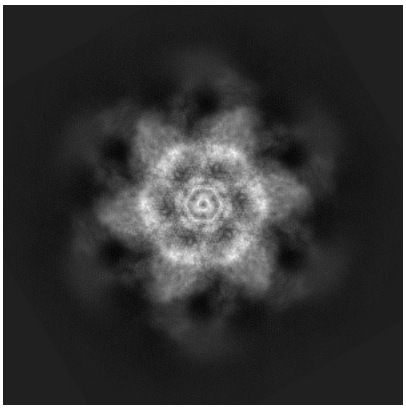
6.1.1 Primary map



X

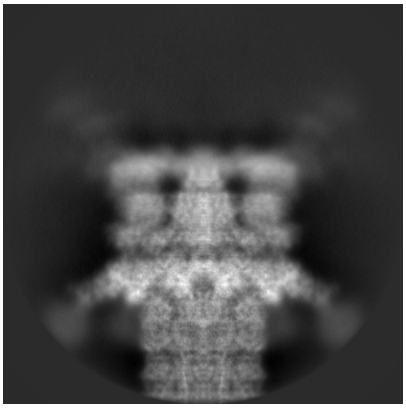


Y

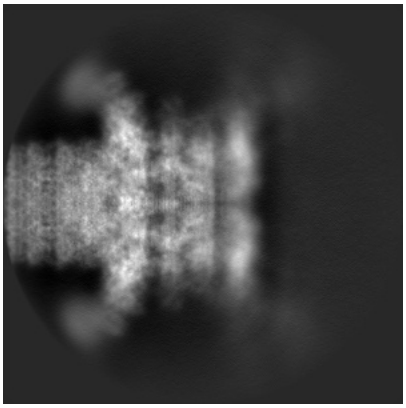


Z

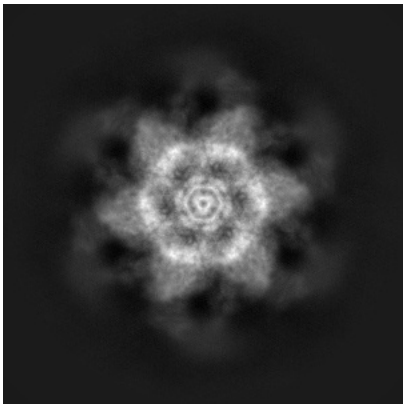
6.1.2 Raw map



X



Y

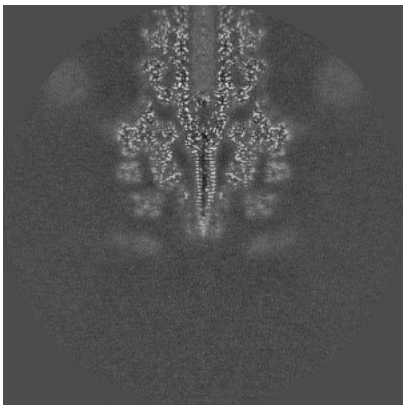


Z

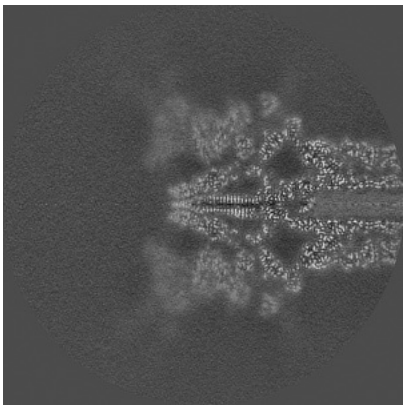
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

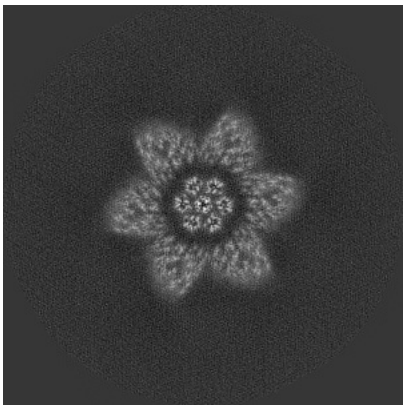
6.2.1 Primary map



X Index: 256

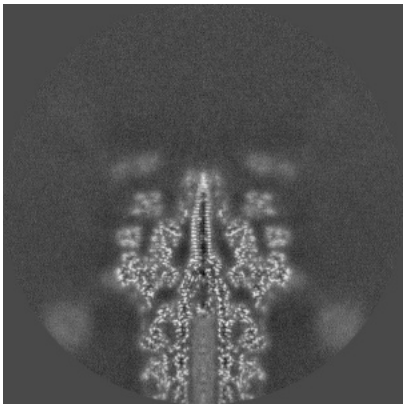


Y Index: 256

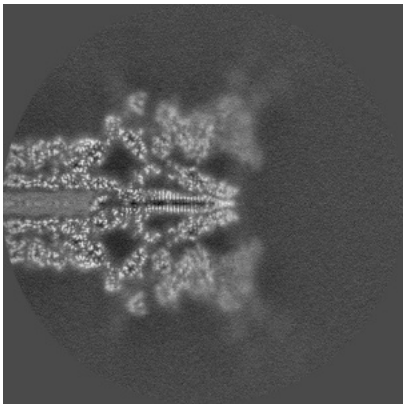


Z Index: 256

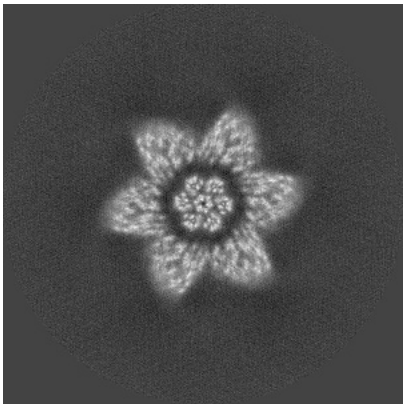
6.2.2 Raw map



X Index: 256



Y Index: 256

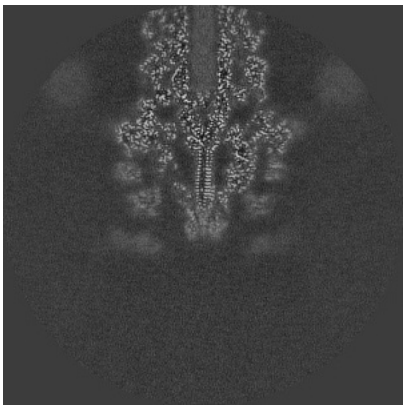


Z Index: 256

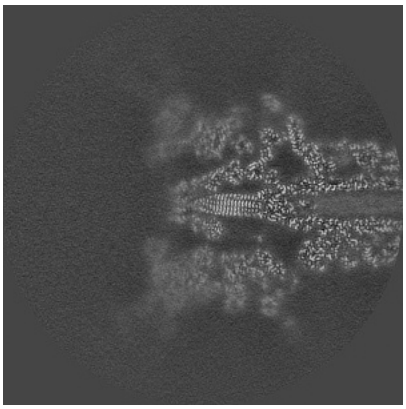
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

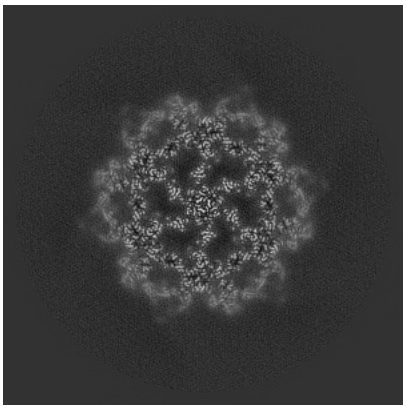
6.3.1 Primary map



X Index: 252

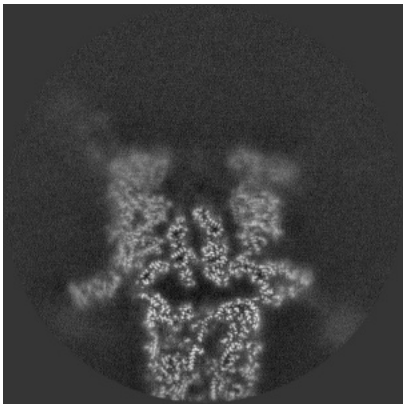


Y Index: 249

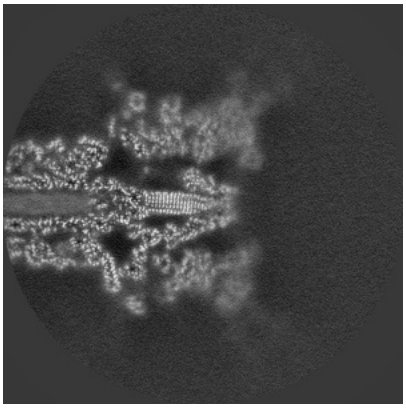


Z Index: 349

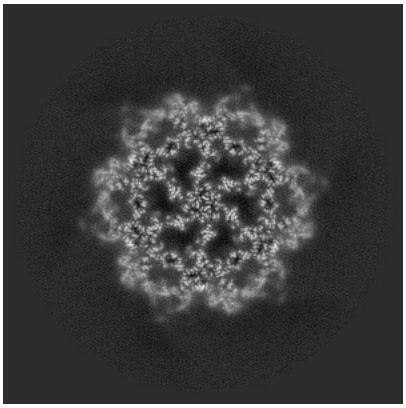
6.3.2 Raw map



X Index: 216



Y Index: 262

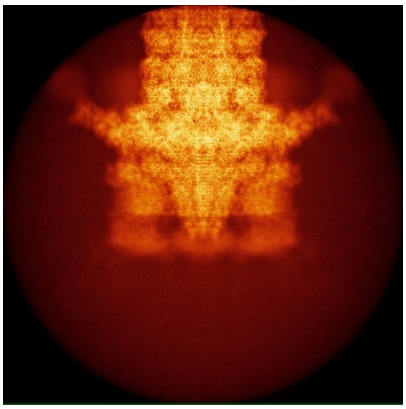


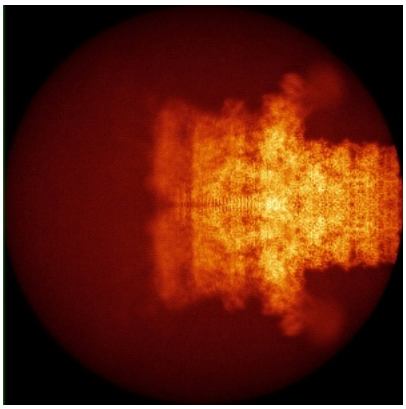
Z Index: 162

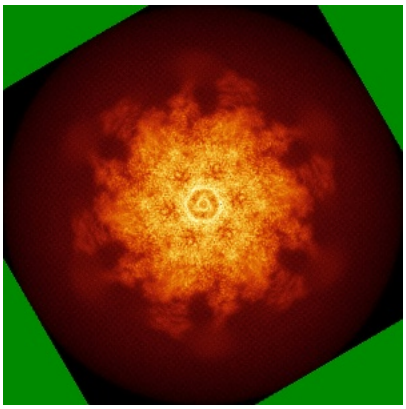
The images above show the largest variance slices of the map in three orthogonal directions.

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

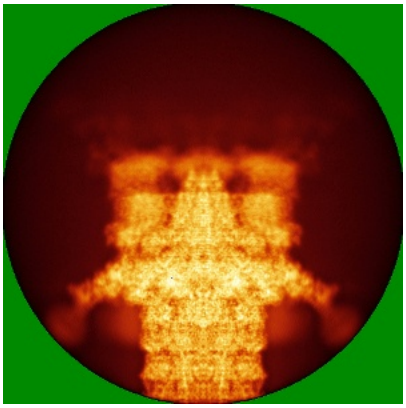
6.4.1 Primary map

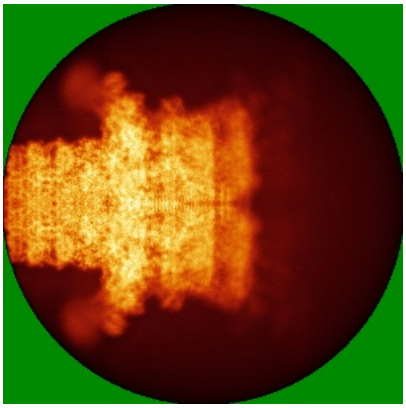

X

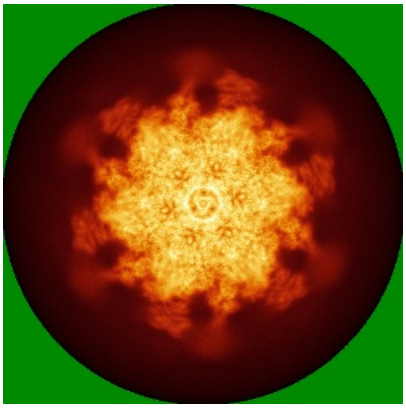

Y


Z

6.4.2 Raw map


X

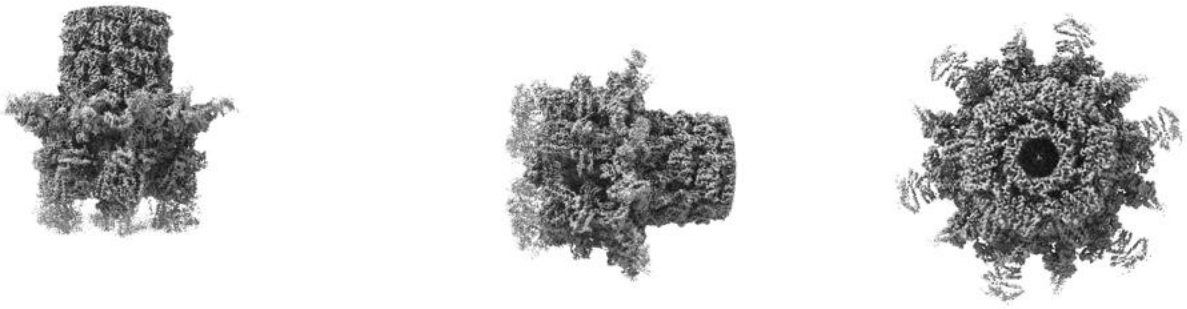

Y


Z

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

6.5 Orthogonal surface views (i)

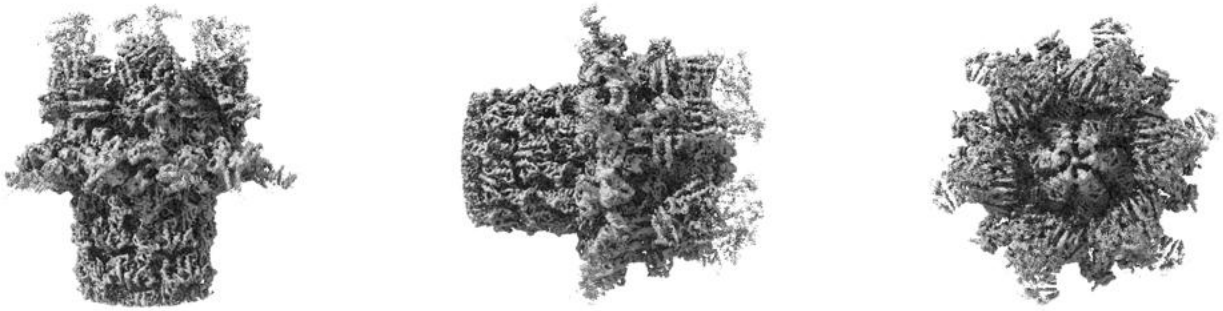
6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.0275. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

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

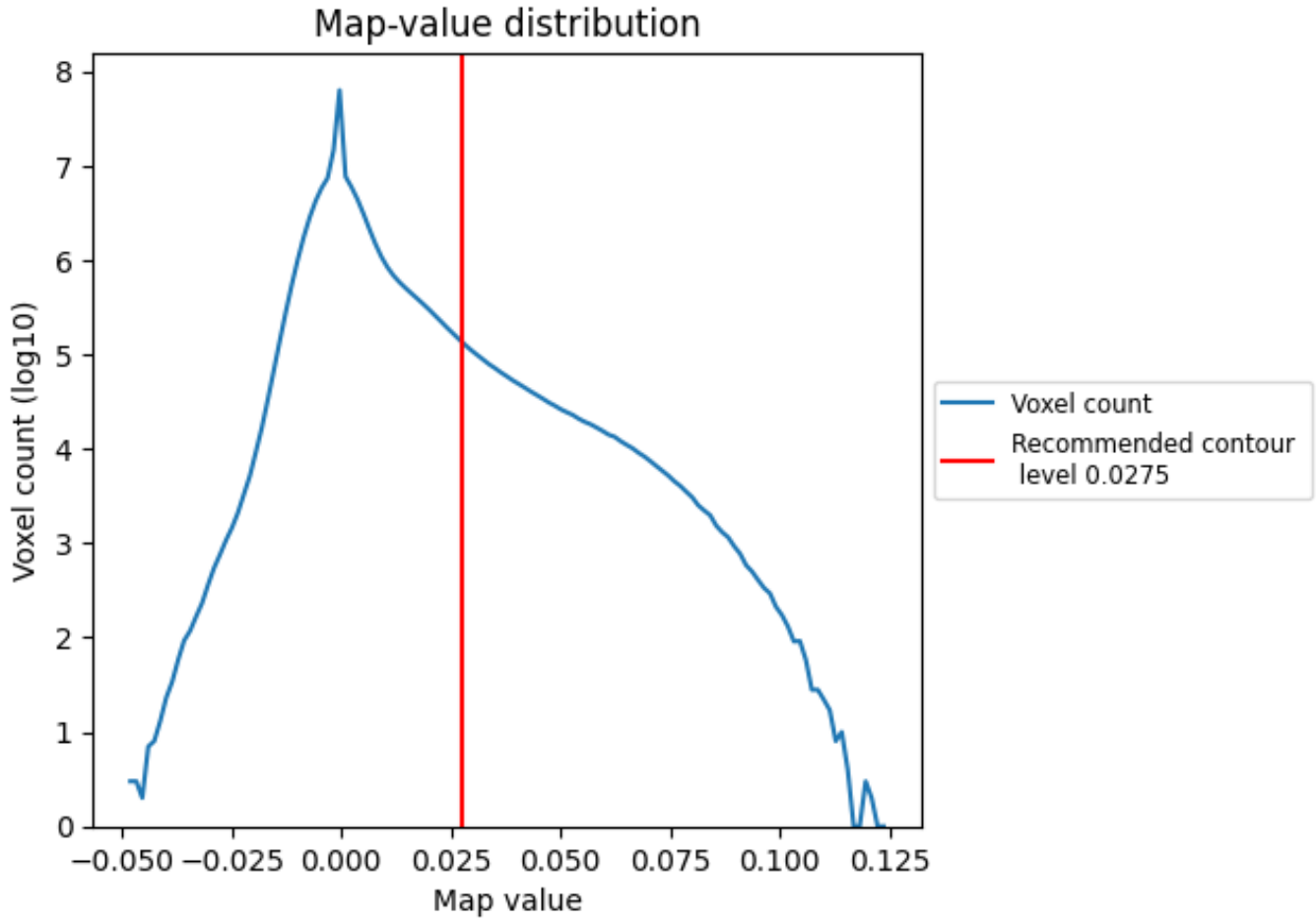
6.6 Mask visualisation (i)

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

7 Map analysis

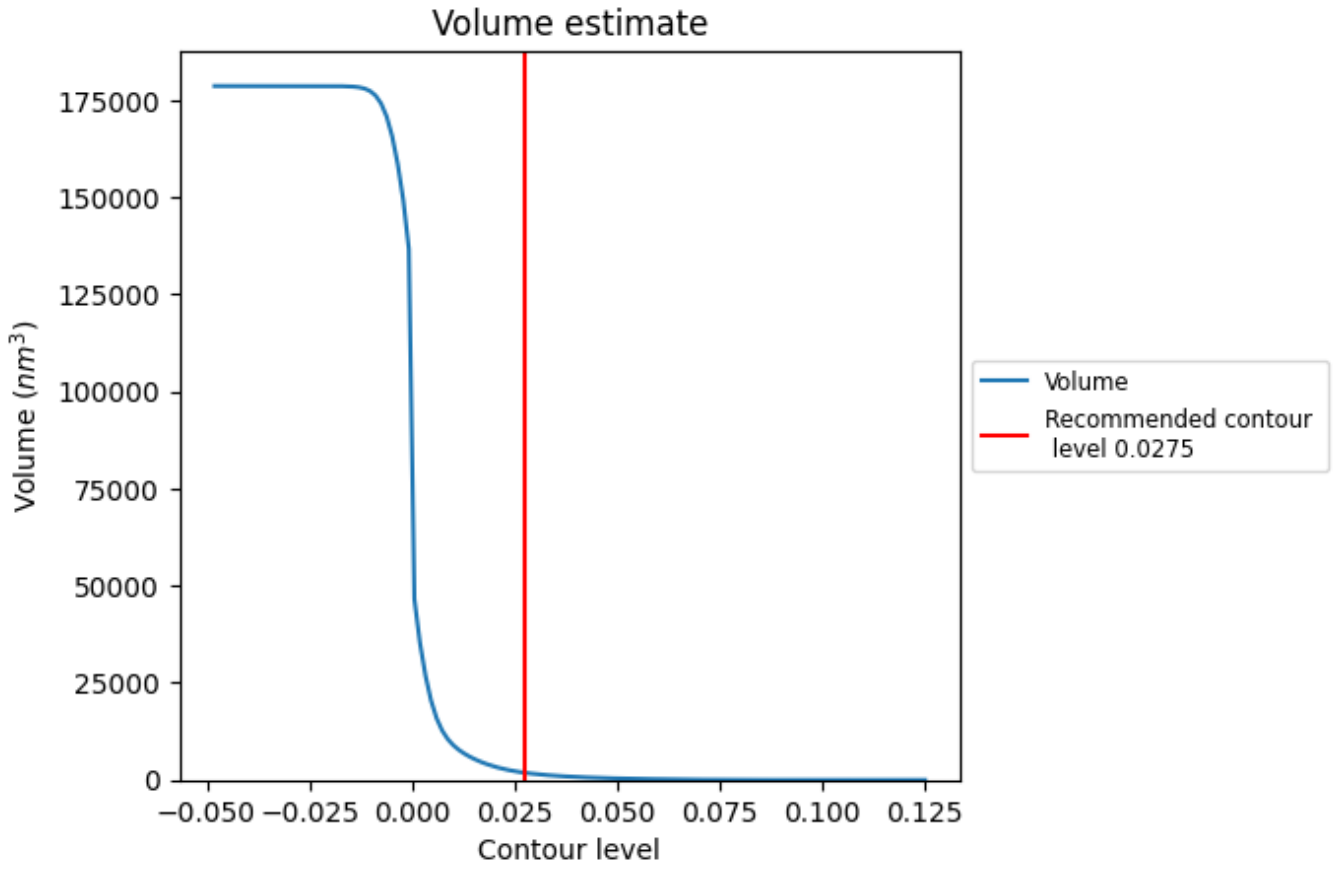
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

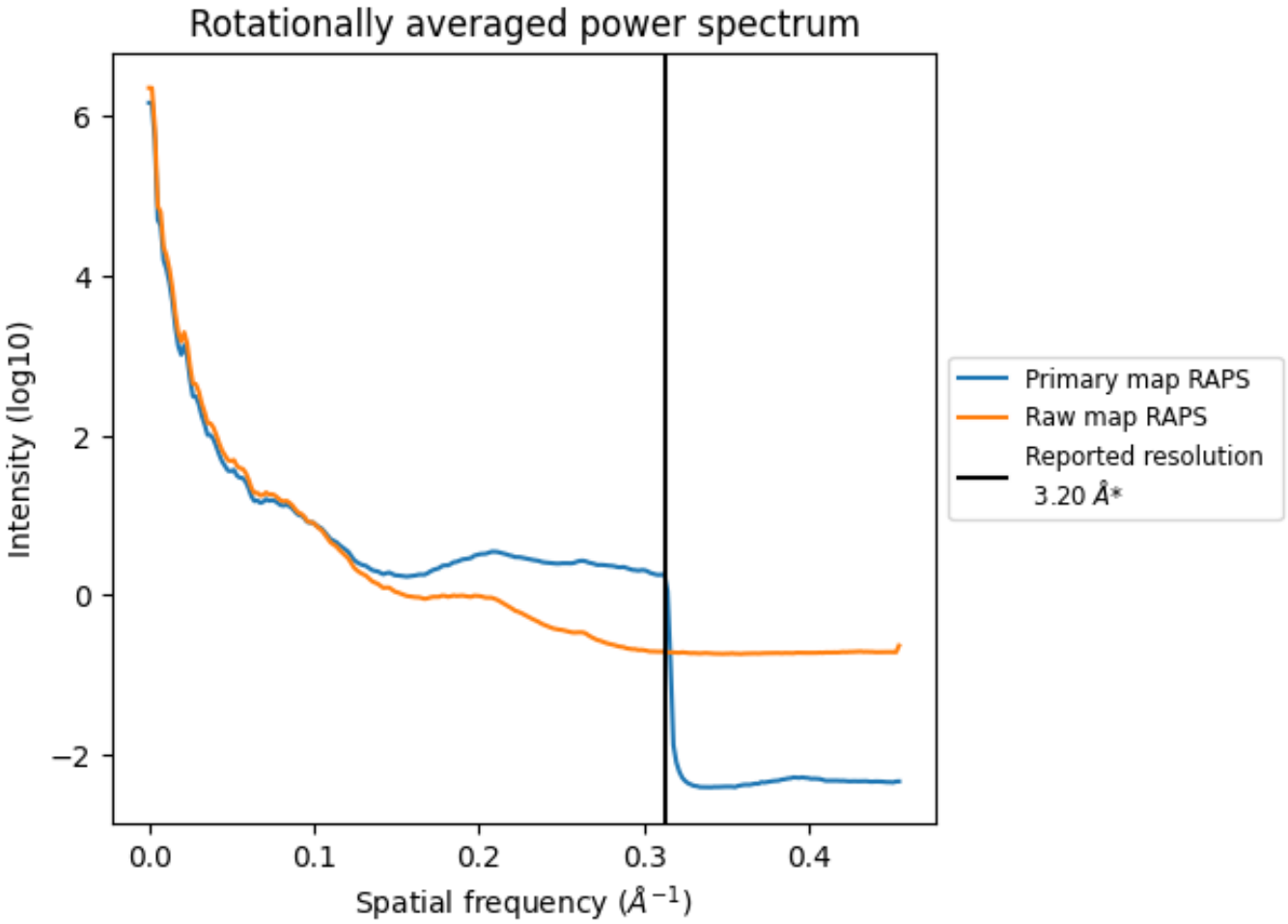
7.2 Volume estimate (i)



The volume at the recommended contour level is 1849 nm^3; this corresponds to an approximate mass of 1670 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)

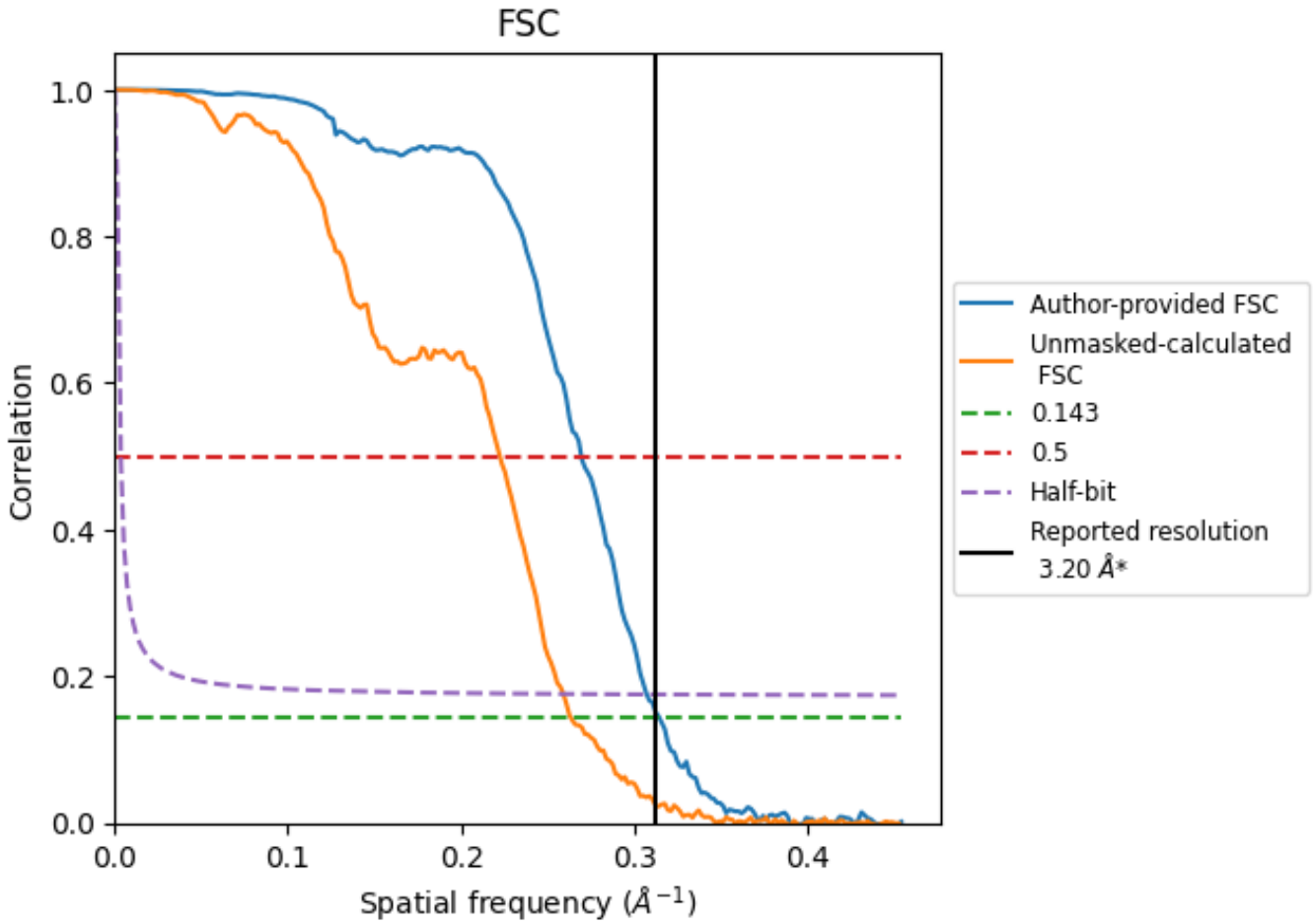


*Reported resolution corresponds to spatial frequency of 0.312 $Å^{-1}$

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.312 Å^{-1}

8.2 Resolution estimates (i)

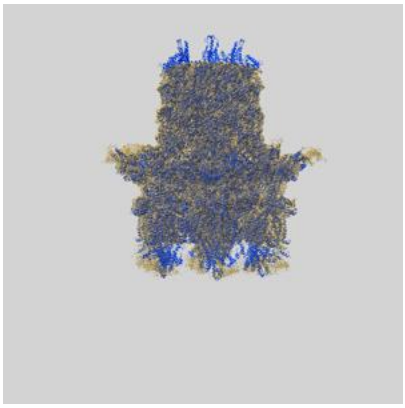
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.20	-	-
Author-provided FSC curve	3.18	3.71	3.25
Unmasked-calculated*	3.79	4.49	3.86

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.79 differs from the reported value 3.2 by more than 10 %

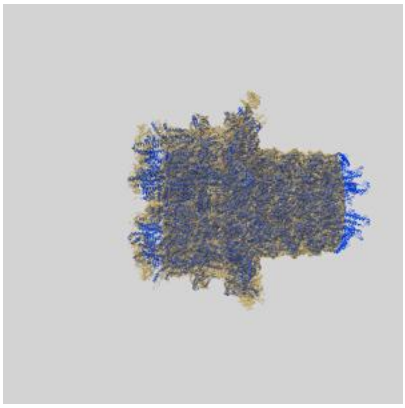
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-12029 and PDB model 7B5H. Per-residue inclusion information can be found in section 3 on page 13.

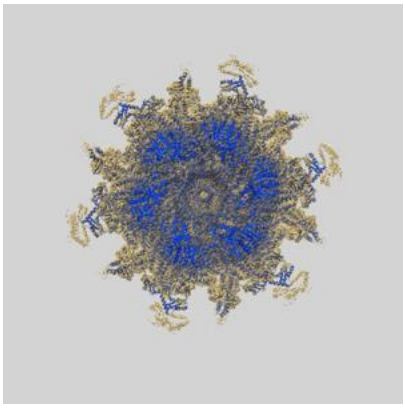
9.1 Map-model overlay



X



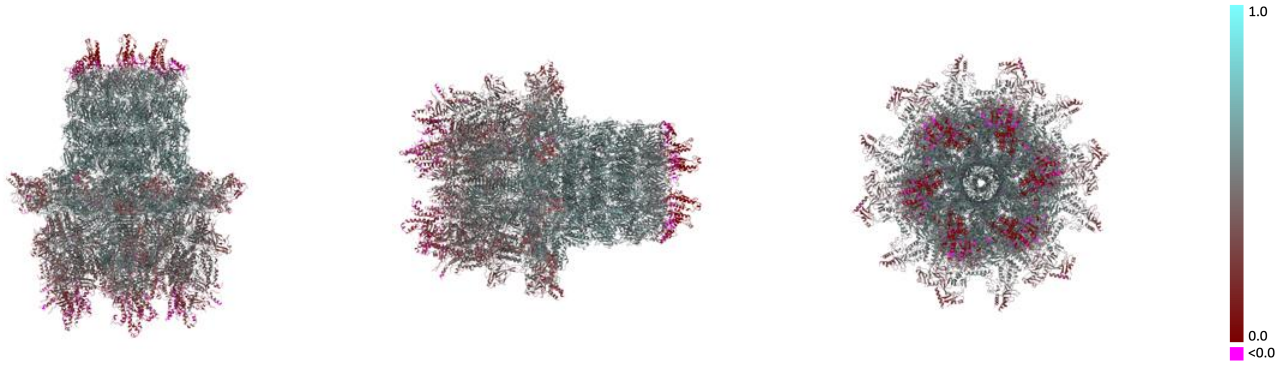
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0275 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.

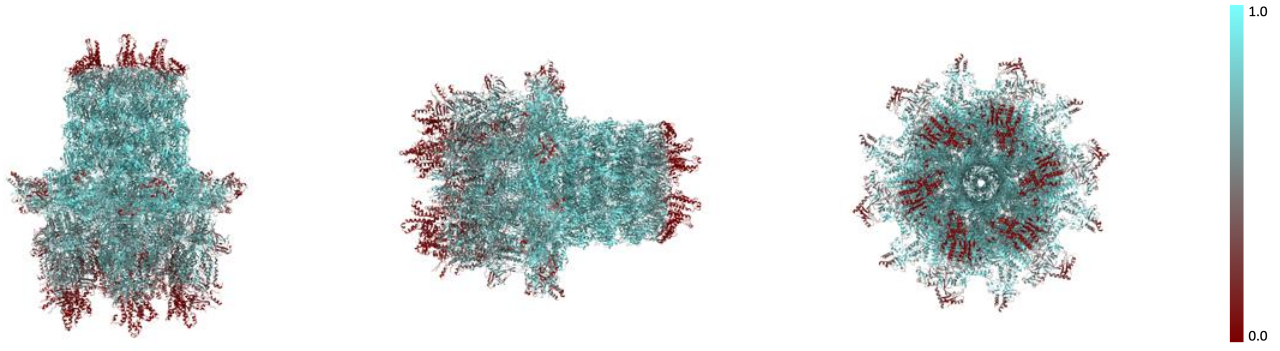
9.2 Q-score mapped to coordinate model



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.

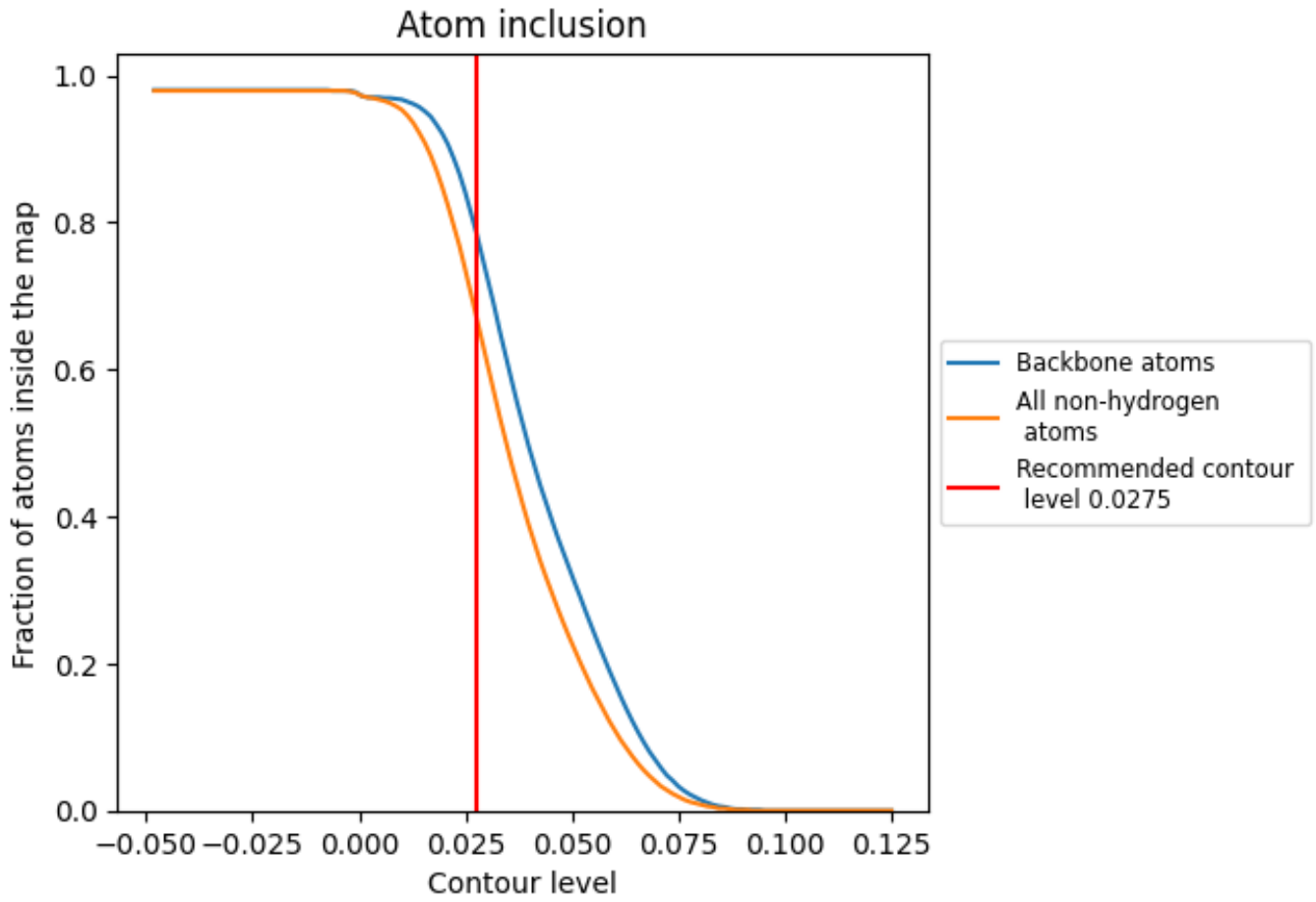
9.3 Atom inclusion mapped to coordinate model



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 (0.0275).

9.4 Atom inclusion (i)



At the recommended contour level, 79% of all backbone atoms, 67% 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 (0.0275) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6730	0.4590
AA	0.4530	0.3810
AB	0.4450	0.3390
AC	0.4950	0.3720
AD	0.7380	0.4730
AE	0.6960	0.4270
AF	0.6710	0.3870
AG	0.6320	0.3600
AH	0.8620	0.5540
AI	0.8570	0.5680
AJ	0.9080	0.5950
AK	0.8780	0.5810
AL	0.6760	0.5460
AM	0.8330	0.5670
AN	0.6940	0.4970
AO	0.8640	0.5660
AP	0.7940	0.5380
AQ	0.3400	0.2670
BA	0.4520	0.3790
BB	0.4460	0.3510
BC	0.5030	0.3730
BD	0.7350	0.4740
BE	0.6640	0.4080
BF	0.6760	0.3740
BG	0.6400	0.3790
BH	0.8580	0.5500
BI	0.8610	0.5640
BK	0.8780	0.5810
BM	0.8230	0.5660
BN	0.6860	0.4980
BO	0.8520	0.5610
BP	0.7880	0.5350
BQ	0.3450	0.2620
CA	0.4560	0.3780
CB	0.4430	0.3390

Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
CC	0.4940	0.3720
CD	0.7400	0.4730
CE	0.6920	0.4310
CF	0.6840	0.3920
CG	0.6390	0.3620
CH	0.8610	0.5510
CI	0.8560	0.5660
CJ	0.9060	0.5930
CK	0.8740	0.5790
CL	0.6730	0.5420
CM	0.8340	0.5690
CN	0.6880	0.4990
CO	0.8670	0.5640
CP	0.7940	0.5370
CQ	0.3370	0.2660
DA	0.4550	0.3760
DB	0.4480	0.3510
DC	0.5070	0.3740
DD	0.7390	0.4740
DE	0.6740	0.4100
DF	0.6710	0.3740
DG	0.6400	0.3760
DH	0.8600	0.5500
DI	0.8600	0.5640
DK	0.8820	0.5850
DM	0.8250	0.5700
DN	0.6830	0.5030
DO	0.8550	0.5620
DP	0.7950	0.5340
DQ	0.3460	0.2650
EA	0.4530	0.3810
EB	0.4410	0.3380
EC	0.4930	0.3710
ED	0.7410	0.4710
EE	0.6990	0.4290
EF	0.6790	0.3890
EG	0.6350	0.3600
EH	0.8610	0.5510
EI	0.8500	0.5670
EJ	0.9080	0.5930
EK	0.8780	0.5820
EL	0.6760	0.5470

Continued on next page...

Continued from previous page...

Chain	Atom inclusion	Q-score
EM	0.8300	0.5720
EN	0.6900	0.5000
EO	0.8620	0.5640
EP	0.7920	0.5360
EQ	0.3340	0.2650
FA	0.4540	0.3790
FB	0.4450	0.3500
FC	0.5070	0.3740
FD	0.7330	0.4740
FE	0.6650	0.4120
FF	0.6690	0.3790
FG	0.6350	0.3770
FH	0.8590	0.5520
FI	0.8610	0.5630
FK	0.8790	0.5810
FM	0.8180	0.5670
FN	0.6800	0.5000
FO	0.8550	0.5630
FP	0.7940	0.5360
FQ	0.3430	0.2640