wwPDB EM Validation Summary Report

Oct 20, 2024 – 06:36 PM EDT

PDB ID	:	7MUW
EMDB ID	:	EMD-24024
Title	:	Reconstruction of the Legionella pneumophila Dot/Icm T4SS 3DVA Map 4
Authors	:	Sheedlo, M.J.; Durie, C.L.; Swanson, M.; Lacy, D.B.; Ohi, M.D.
Deposited on	:	2021-05-14
Resolution	:	4.60 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:

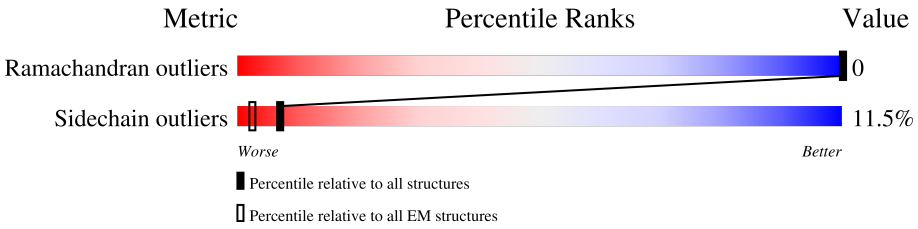
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	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 4.60 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)
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	AG	1048	14% 84%
1	Ag	1048	97%
1	BG	1048	14% 84%
1	Bg	1048	97%
1	CG	1048	14% 84%
1	Cg	1048	97%
1	DG	1048	14% 84%
1	Dg	1048	97%
1	EG	1048	14% 84%

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Mol	Chain	Length	Quality of chain
1	Eg	1048	97%
1	FG	1048	14% 84%
1	Fg	1048	97%
1	GG	1048	14% 84%
1	Gg	1048	97%
1	HG	1048	14% 84%
1	Hg	1048	97%
1	IG	1048	14% 84%
1	Ig	1048	97%
1	JG	1048	15% 84%
1	Jg	1048	97%
1	KG	1048	15% 84%
1	Kg	1048	97%
1	LG	1048	14% 84%
1	Lg	1048	97%
1	MG	1048	14% 84%
1	Mg	1048	97%
1	NG	1048	14% 84%
1	OG	1048	14% 84%
1	PG	1048	14% 84%
1	VG	1048	97%
1	WG	1048	97%
1	XG	1048	97%
1	YG	1048	97%
1	ZG	1048	97%

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Mol	Chain	Length	Quality of chain
2	AH	361	64% 8% 29%
2	BH	361	64% 7% 29%
2	CH	361	65% 6% 29%
2	DH	361	65% 7% 29%
2	EH	361	63% 8% 29%
2	FH	361	64% 7% 29%
2	GH	361	66% 6% 29%
2	HH	361	67% 5% 29%
2	IH	361	65% 6% 29%
2	JH	361	63% 8% 29%
2	KH	361	66% 6% 29%
2	LH	361	65% 7% 29%
2	MH	361	64% 8% 29%
2	VH	361	14% 60% 7% 33%
2	WH	361	18% 60% 7% 33%
2	XH	361	21% 61% 7% 33%
2	YH	361	10% 60% 7% 33%
2	ZH	361	23% 60% 8% 33%
3	AK	189	72% 8% 20%
3	BK	189	71% 9% 20%
3	CK	189	72% 8% 20%
3	DK	189	76% 20%
3	EK	189	74% 6% 20%
3	FK	189	74% 6% 20%
3	GK	189	74% 6% 20%

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Mol	Chain	Length	Quality of chain
3	HK	189	74% 6% 20%
3	IK	189	74% 6% 20%
3	JK	189	73% 7% 20%
3	KK	189	70% 10% 20%
3	LK	189	74% 6% 20%
3	MK	189	70% 10% 20%
4	AL	249	65% 31%
4	BL	249	62% 8% 31%
4	CL	249	65% 31%
4	DL	249	64% 6% 31%
4	EL	249	63% 6% 31%
4	FL	249	63% 6% 31%
4	GL	249	62% 7% 31%
4	HL	249	65% 5% 31%
4	IL	249	65% 31%
4	JL	249	65% 31%
4	KL	249	63% 6% 31%
4	LL	249	66% 31%
4	ML	249	65% 31%
5	AM	320	55% 10% 35%
5	BM	320	59% 6% 35%
5	CM	320	57% 8% 35%
5	DM	320	59% 6% 35%
5	EM	320	58% 7% 35%
5	FM	320	57% 8% 35%

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Mol	Chain	Length	Quality of chain
5	GM	320	55% 10% 35%
5	HM	320	58% 7% 35%
5	IM	320	60% 5% 35%
5	JM	320	57% 8% 35%
5	KM	320	58% 7% 35%
5	LM	320	59% 6% 35%
5	MM	320	59% 6% 35%
6	AN	124	6% 54% 9% 37%
6	BN	124	8% 52% 10% 37%
6	CN	124	8% 53% 10% 37%
6	DN	124	55% 8% 37%
6	EN	124	56% 6% 37%
6	FN	124	6% 59% 37%
6	GN	124	6% 54% 9% 37%
6	HN	124	5% 56% 7% 37%
6	IN	124	6% 55% 8% 37%
6	JN	124	6% 54% 9% 37%
6	KN	124	6% 54% 9% 37%
6	LN	124	57% 6% 37%
6	MN	124	53% 10% 37%
7	AU	9	100%
7	BU	9	100%
7	CU	9	100%
7	DU	9	100%
7	EU	9	100%

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Mol	Chain	Length	Quality of chain
7	FU	9	100%
7	GU	9	100%
7	HU	9	100%
7	IU	9	100%
7	JU	9	100%
7	KU	9	100%
7	LU	9	100%
7	MU	9	100%
8	AX	48	29% 100%
8	BX	48	42% 100%
8	CX	48	38% 100%
8	DX	48	23% 100%
8	EX	48	38% 100%
8	FX	48	21% 100%
8	GX	48	54% 100%
8	HX	48	38% 100%
8	IX	48	29% 100%
8	JX	48	33% 100%
8	KX	48	46% 100%
8	LX	48	46% 100%
8	MX	48	40% 100%
8	VX	48	33% 100%
8	WX	48	31% 100%
8	XX	48	29% 100%
8	YX	48	33% 100%

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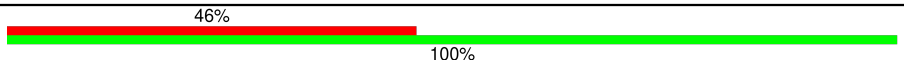
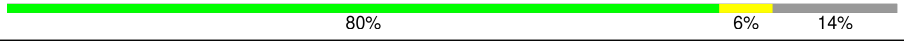
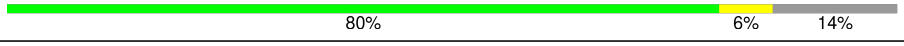
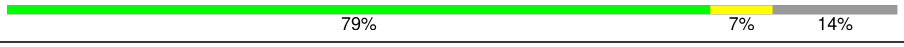
Mol	Chain	Length	Quality of chain
8	ZX	48	
9	AD	163	
9	Ad	163	
9	BD	163	
9	Bd	163	
9	CD	163	
9	Cd	163	
9	DD	163	
9	Dd	163	
9	ED	163	
9	Ed	163	
9	FD	163	
9	Fd	163	
9	GD	163	
9	Gd	163	
9	HD	163	
9	Hd	163	
9	ID	163	
9	Id	163	
9	JD	163	
9	Jd	163	
9	KD	163	
9	Kd	163	
9	LD	163	
9	Ld	163	

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Mol	Chain	Length	Quality of chain
9	MD	163	82% 14%
9	Md	163	74% 10% 16%
10	AF	269	21% 77%
10	Af	269	20% 78%
10	BF	269	21% 77%
10	Bf	269	20% 78%
10	CF	269	21% 77%
10	Cf	269	19% 78%
10	DF	269	21% 77%
10	Df	269	19% 78%
10	EF	269	20% 77%
10	Ef	269	20% 78%
10	FF	269	21% 77%
10	Ff	269	19% 78%
10	GF	269	22% 77%
10	Gf	269	20% 78%
10	HF	269	21% 77%
10	Hf	269	21% 78%
10	IF	269	22% 77%
10	If	269	20% 78%
10	JF	269	22% 77%
10	Jf	269	20% 78%
10	KF	269	20% 77%
10	Kf	269	20% 78%
10	LF	269	21% 77%

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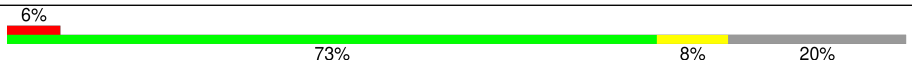
Mol	Chain	Length	Quality of chain
10	Lf	269	
10	MF	269	
10	Mf	269	
10	VF	269	
10	WF	269	
10	XF	269	
10	YF	269	
10	ZF	269	
11	AC	303	
11	BC	303	
11	CC	303	
11	DC	303	
11	EC	303	
11	FC	303	
11	GC	303	
11	HC	303	
11	IC	303	
11	JC	303	
11	KC	303	
11	LC	303	
11	MC	303	

2 Entry composition (i)

There are 11 unique types of molecules in this entry. The entry contains 192116 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 IcmE protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AG	165	Total	C	N	O	S	0	0
			1229	780	203	242	4		
1	Fg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	Gg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	BG	165	Total	C	N	O	S	0	0
			1229	780	203	242	4		
1	Hg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	Bg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	Ig	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	CG	165	Total	C	N	O	S	0	0
			1229	780	203	242	4		
1	Jg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	Kg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	DG	165	Total	C	N	O	S	0	0
			1229	780	203	242	4		
1	Lg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	Mg	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	EG	165	Total	C	N	O	S	0	0
			1229	780	203	242	4		
1	VG	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	WG	34	Total	C	N	O	S	0	0
			276	168	47	60	1		
1	XG	34	Total	C	N	O	S	0	0
			276	168	47	60	1		

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Mol	Chain	Residues	Atoms	AltConf	Trace
1	YG	34	Total C N O S 276 168 47 60 1	0	0
1	FG	165	Total C N O S 1229 780 203 242 4	0	0
1	ZG	34	Total C N O S 276 168 47 60 1	0	0
1	Cg	34	Total C N O S 276 168 47 60 1	0	0
1	GG	165	Total C N O S 1229 780 203 242 4	0	0
1	Dg	34	Total C N O S 276 168 47 60 1	0	0
1	HG	165	Total C N O S 1229 780 203 242 4	0	0
1	IG	165	Total C N O S 1229 780 203 242 4	0	0
1	JG	165	Total C N O S 1229 780 203 242 4	0	0
1	KG	165	Total C N O S 1229 780 203 242 4	0	0
1	LG	165	Total C N O S 1229 780 203 242 4	0	0
1	MG	165	Total C N O S 1229 780 203 242 4	0	0
1	NG	165	Total C N O S 1229 780 203 242 4	0	0
1	OG	165	Total C N O S 1229 780 203 242 4	0	0
1	PG	165	Total C N O S 1229 780 203 242 4	0	0
1	Ag	34	Total C N O S 276 168 47 60 1	0	0
1	Eg	34	Total C N O S 276 168 47 60 1	0	0

- Molecule 2 is a protein called Type IV secretion protein IcmK.

Mol	Chain	Residues	Atoms	AltConf	Trace
2	EH	258	Total C N O S 1983 1268 336 371 8	0	0
2	FH	258	Total C N O S 1983 1268 336 371 8	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
2	GH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	HH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	IH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	JH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	AH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	KH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	LH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	MH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	VH	243	Total	C	N	O	S	0	0
			1875	1201	319	348	7		
2	WH	243	Total	C	N	O	S	0	0
			1875	1201	319	348	7		
2	XH	243	Total	C	N	O	S	0	0
			1875	1201	319	348	7		
2	YH	243	Total	C	N	O	S	0	0
			1875	1201	319	348	7		
2	ZH	243	Total	C	N	O	S	0	0
			1875	1201	319	348	7		
2	BH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	CH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		
2	DH	258	Total	C	N	O	S	0	0
			1983	1268	336	371	8		

- Molecule 3 is a protein called Inner membrane lipoprotein YiaD.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	EK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	FK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	GK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		

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Mol	Chain	Residues	Atoms					AltConf	Trace
3	HK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	IK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	JK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	KK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	LK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	AK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	MK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	BK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	CK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		
3	DK	151	Total	C	N	O	S	0	0
			1175	747	209	215	4		

- Molecule 4 is a protein called Outer membrane protein, OmpA family protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	EL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	FL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	GL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	HL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	IL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	JL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	KL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	LL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	ML	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		

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Mol	Chain	Residues	Atoms					AltConf	Trace
4	AL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	BL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	CL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		
4	DL	173	Total	C	N	O	S	0	0
			1388	877	253	253	5		

- Molecule 5 is a protein called DUF2807 domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	EM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	FM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	GM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	HM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	IM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	JM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	KM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	LM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	MM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	AM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	BM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	CM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
5	DM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		

- Molecule 6 is a protein called Neurogenic locus notch.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	EN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	FN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	GN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	HN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	IN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	JN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	KN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	LN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	MN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	AN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	BN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	CN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		
6	DN	78	Total	C	N	O	S	0	0
			582	357	99	113	13		

- Molecule 7 is a protein called Unknown protein fragment.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	EU	9	Total	C	N	O	0	0
			45	27	9	9		
7	FU	9	Total	C	N	O	0	0
			45	27	9	9		
7	GU	9	Total	C	N	O	0	0
			45	27	9	9		
7	HU	9	Total	C	N	O	0	0
			45	27	9	9		
7	IU	9	Total	C	N	O	0	0
			45	27	9	9		
7	JU	9	Total	C	N	O	0	0
			45	27	9	9		
7	KU	9	Total	C	N	O	0	0
			45	27	9	9		

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Mol	Chain	Residues	Atoms				AltConf	Trace
7	LU	9	Total 45	C 27	N 9	O 9	0	0
7	MU	9	Total 45	C 27	N 9	O 9	0	0
7	AU	9	Total 45	C 27	N 9	O 9	0	0
7	BU	9	Total 45	C 27	N 9	O 9	0	0
7	CU	9	Total 45	C 27	N 9	O 9	0	0
7	DU	9	Total 45	C 27	N 9	O 9	0	0

- Molecule 8 is a protein called Unknown protein fragment.

Mol	Chain	Residues	Atoms				AltConf	Trace
8	EX	48	Total 240	C 144	N 48	O 48	0	0
8	FX	48	Total 240	C 144	N 48	O 48	0	0
8	GX	48	Total 240	C 144	N 48	O 48	0	0
8	HX	48	Total 240	C 144	N 48	O 48	0	0
8	IX	48	Total 240	C 144	N 48	O 48	0	0
8	JX	48	Total 240	C 144	N 48	O 48	0	0
8	KX	48	Total 240	C 144	N 48	O 48	0	0
8	LX	48	Total 240	C 144	N 48	O 48	0	0
8	MX	48	Total 240	C 144	N 48	O 48	0	0
8	VX	48	Total 240	C 144	N 48	O 48	0	0
8	WX	48	Total 240	C 144	N 48	O 48	0	0
8	XX	48	Total 240	C 144	N 48	O 48	0	0
8	YX	48	Total 240	C 144	N 48	O 48	0	0

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Mol	Chain	Residues	Atoms				AltConf	Trace
8	ZX	48	Total	C	N	O	0	0
			240	144	48	48		
8	AX	48	Total	C	N	O	0	0
			240	144	48	48		
8	BX	48	Total	C	N	O	0	0
			240	144	48	48		
8	CX	48	Total	C	N	O	0	0
			240	144	48	48		
8	DX	48	Total	C	N	O	0	0
			240	144	48	48		

- Molecule 9 is a protein called DotD.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	Ed	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	FD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Fd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	GD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Gd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	HD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Hd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	ID	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Id	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	JD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Jd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	KD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Kd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	CD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		

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Mol	Chain	Residues	Atoms					AltConf	Trace
9	LD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Ld	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	MD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Md	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	Ad	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	BD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Bd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	Cd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	DD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	Dd	137	Total	C	N	O	S	0	0
			1058	672	182	202	2		
9	AD	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		
9	ED	140	Total	C	N	O	S	0	0
			1086	692	185	206	3		

- Molecule 10 is a protein called DotF.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	Ef	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	FF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Ff	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	AF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	GF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Gf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	HF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	Hf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	IF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	If	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	JF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Jf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	KF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Kf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	LF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Lf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	MF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	CF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Mf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	VF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	WF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	XF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	YF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	ZF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Af	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	BF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Bf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	Cf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	DF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
10	Df	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
10	EF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		

- Molecule 11 is a protein called DotC.

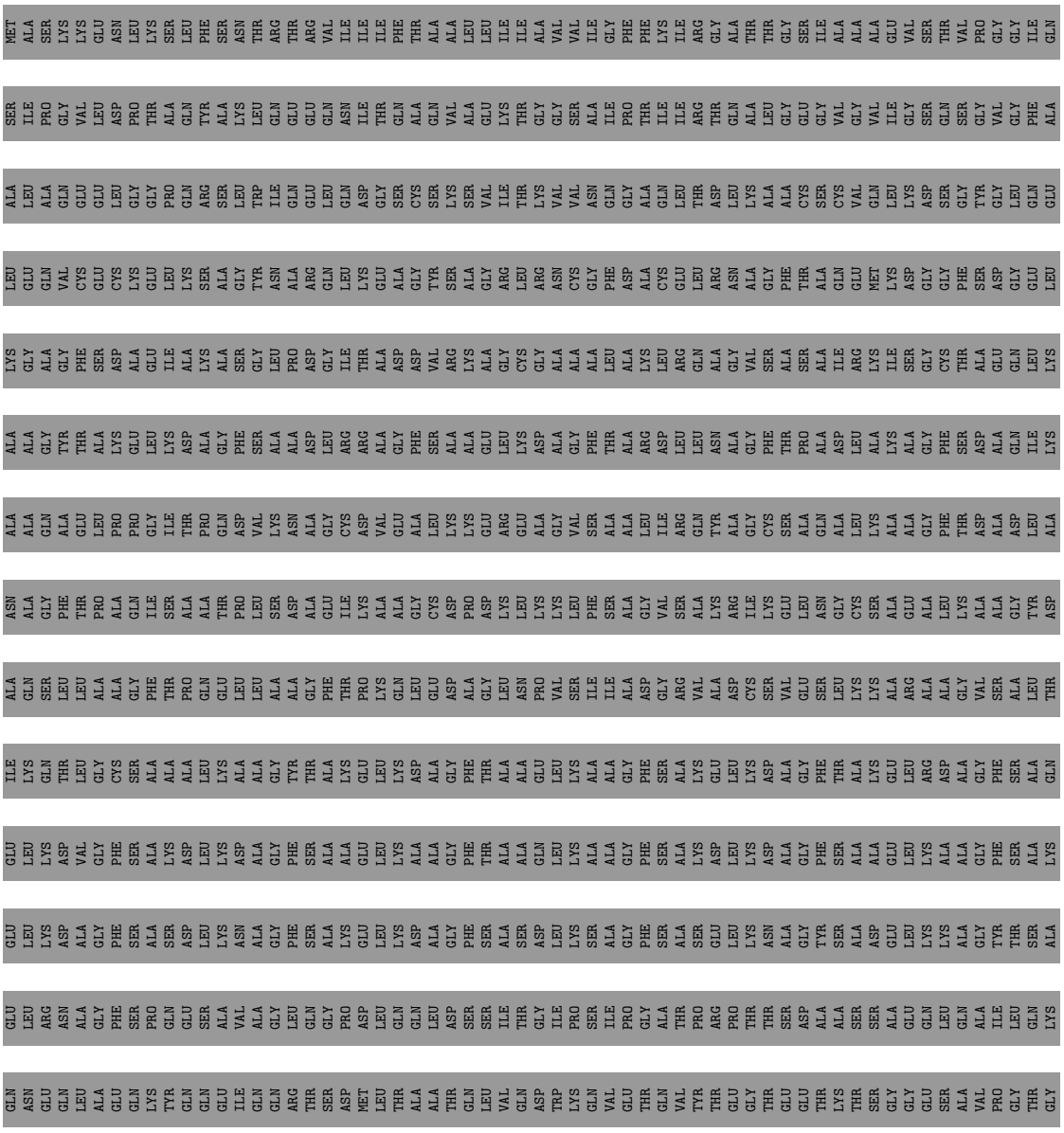
Mol	Chain	Residues	Atoms					AltConf	Trace
11	BC	243	Total	C	N	O	S	0	0
			1921	1216	340	357	8		
11	CC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	DC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	EC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	FC	243	Total	C	N	O	S	0	0
			1921	1216	340	357	8		
11	GC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	HC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	IC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	JC	243	Total	C	N	O	S	0	0
			1921	1216	340	357	8		
11	KC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	LC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	MC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
11	AC	243	Total	C	N	O	S	0	0
			1921	1216	340	357	8		

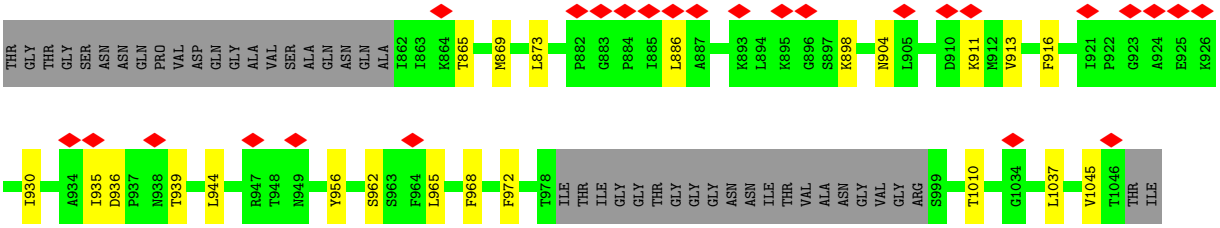
3 Residue-property plots (i)

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: IcmE protein

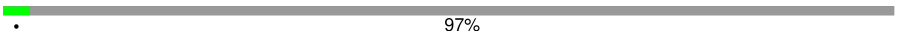
Chain AG:

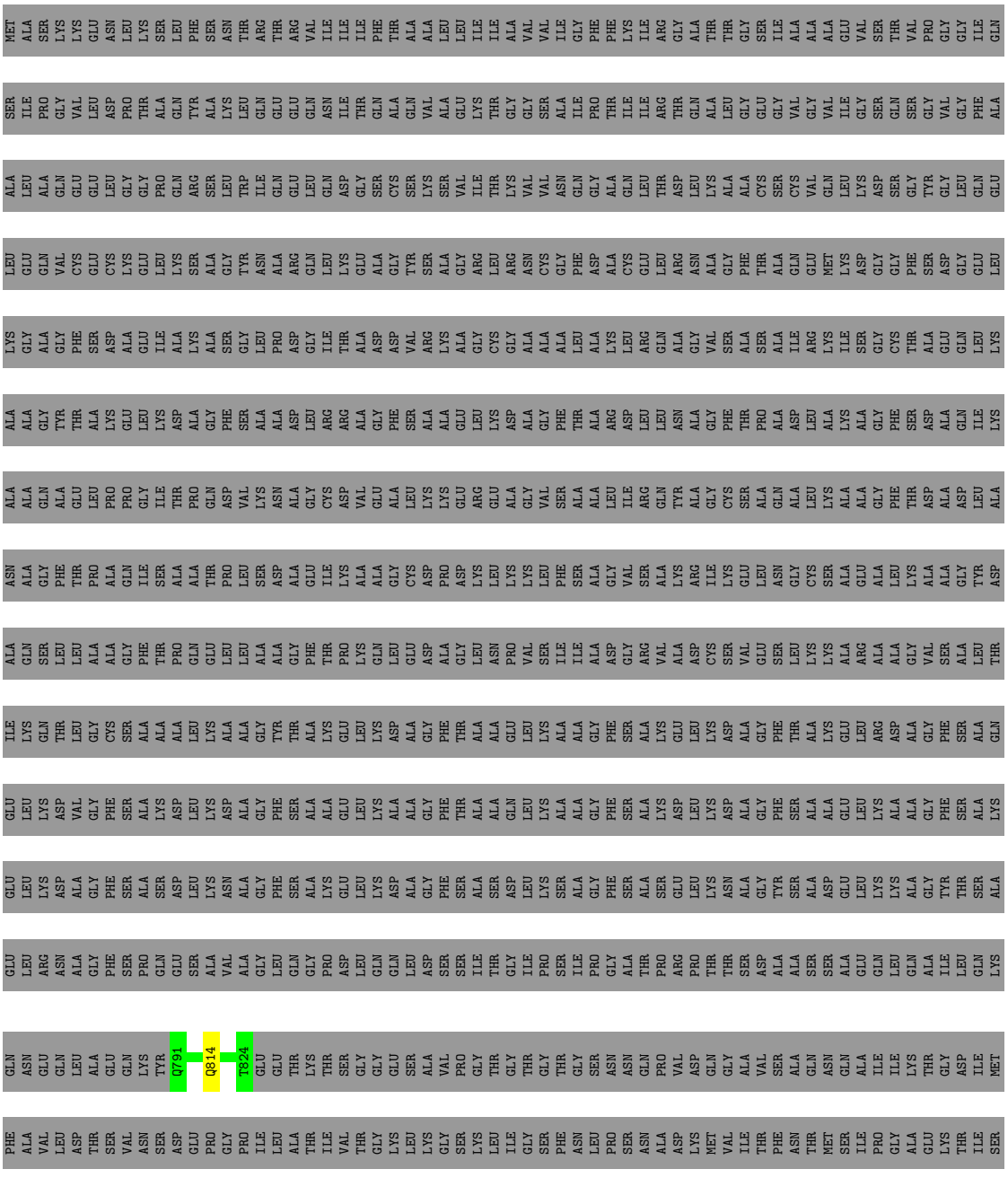


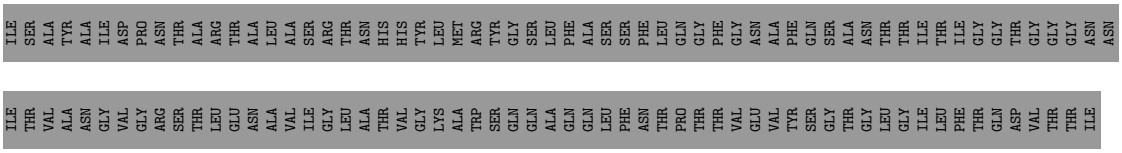


- Molecule 1: IcmE protein

Chain Fg:

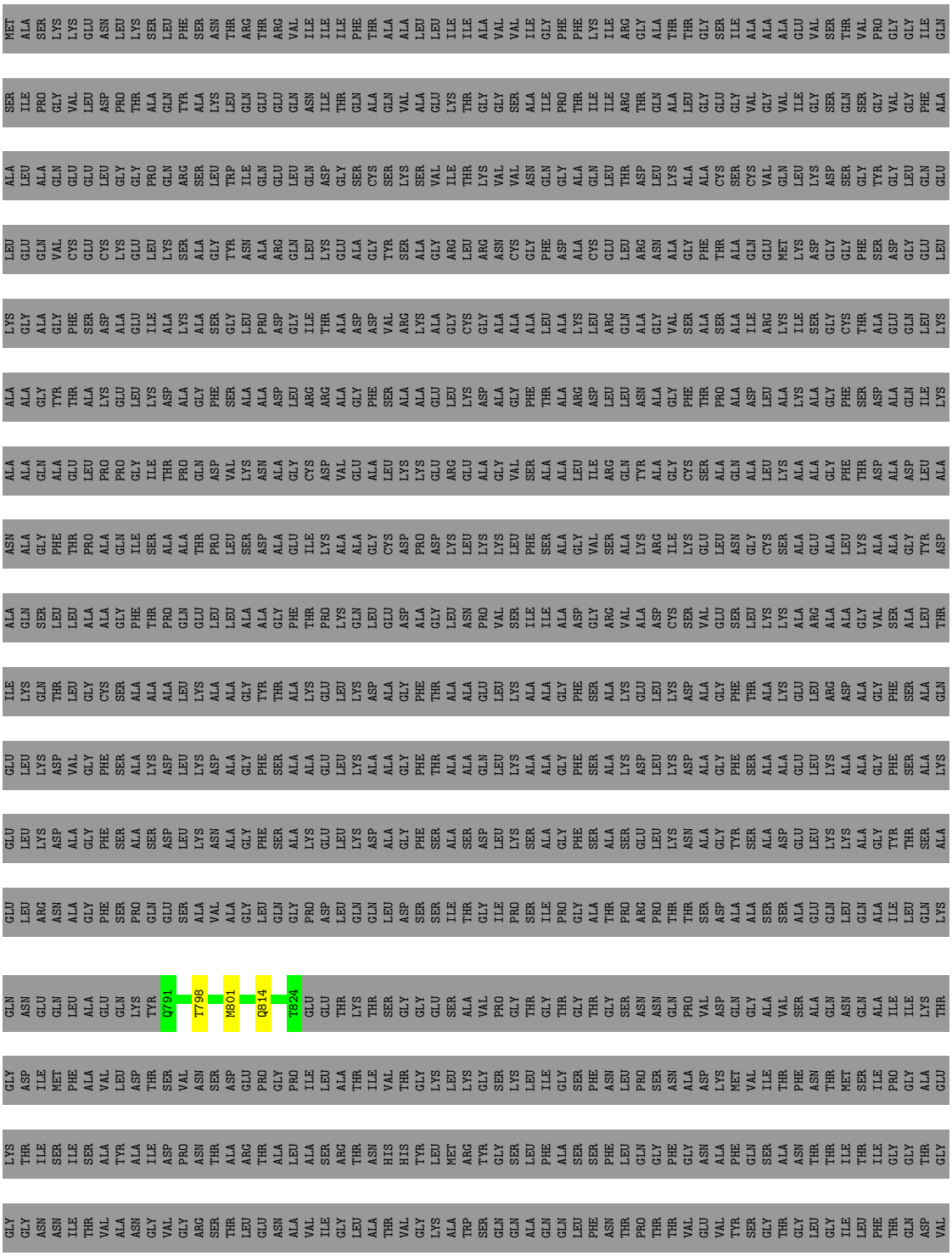






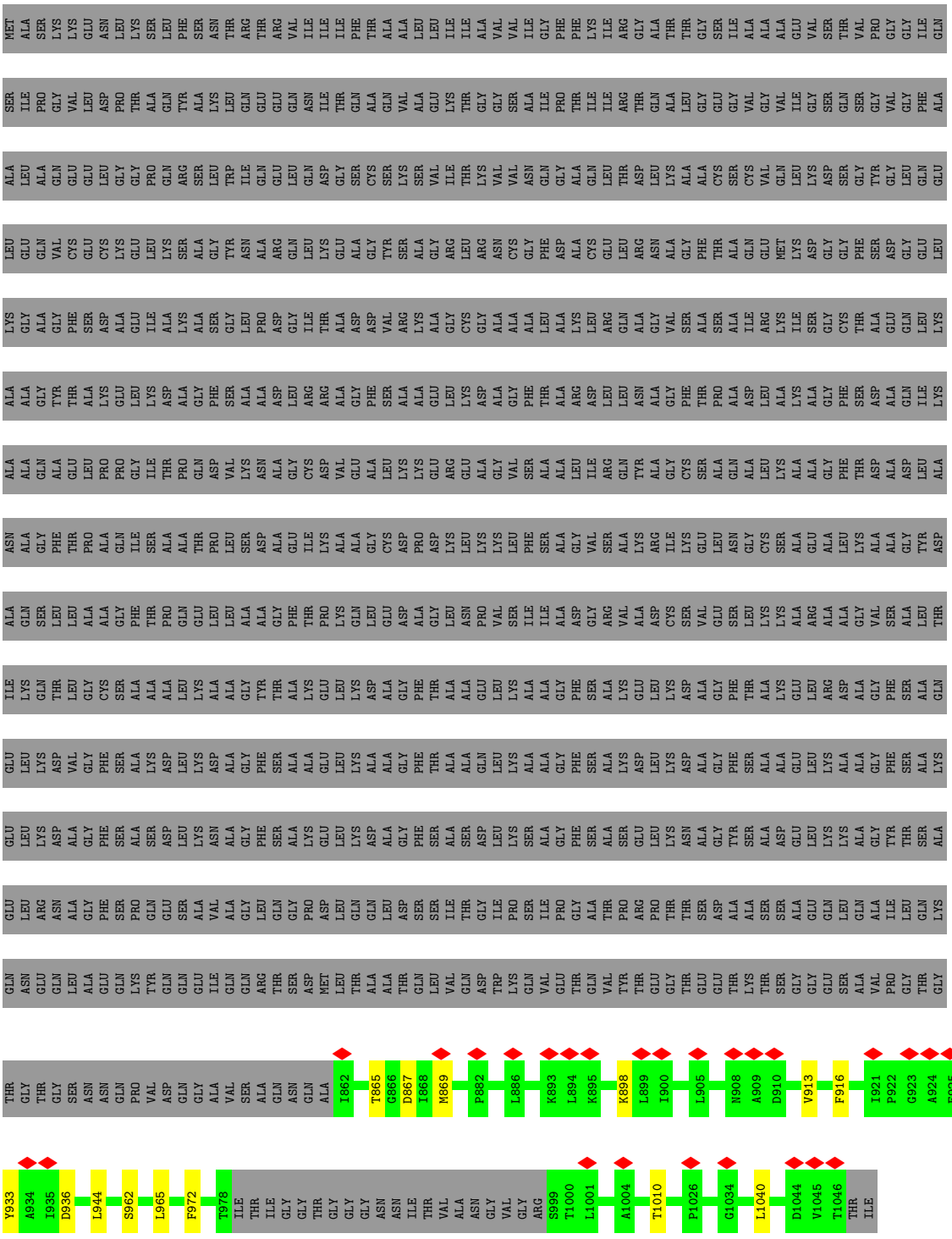
• Molecule 1: IcmE protein

Chain Gg: 97%



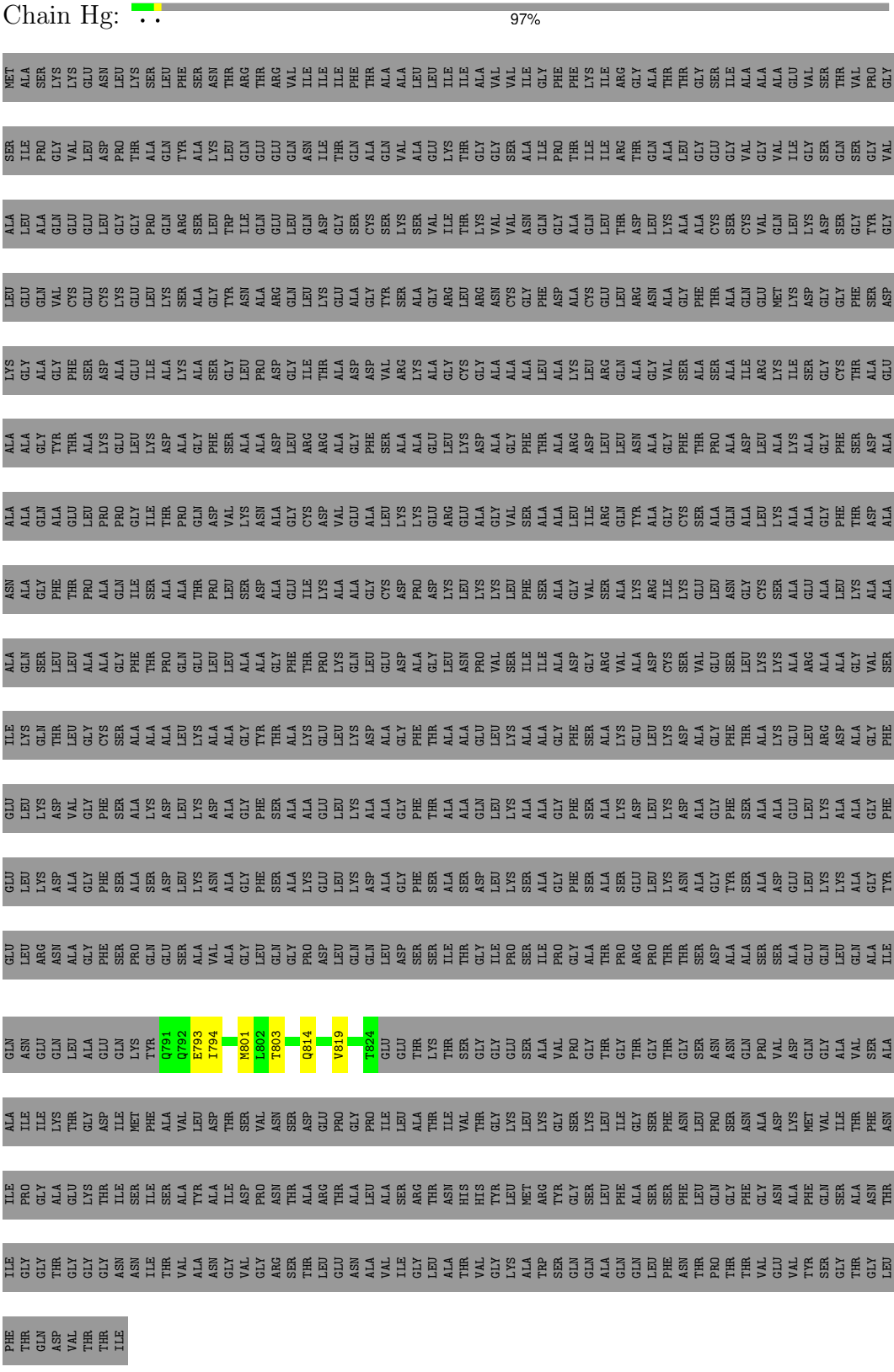
- Molecule 1: IcmE protein

Chain BG:



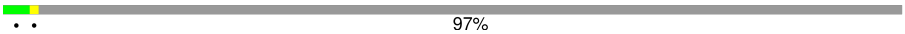
- Molecule 1: IcmE protein

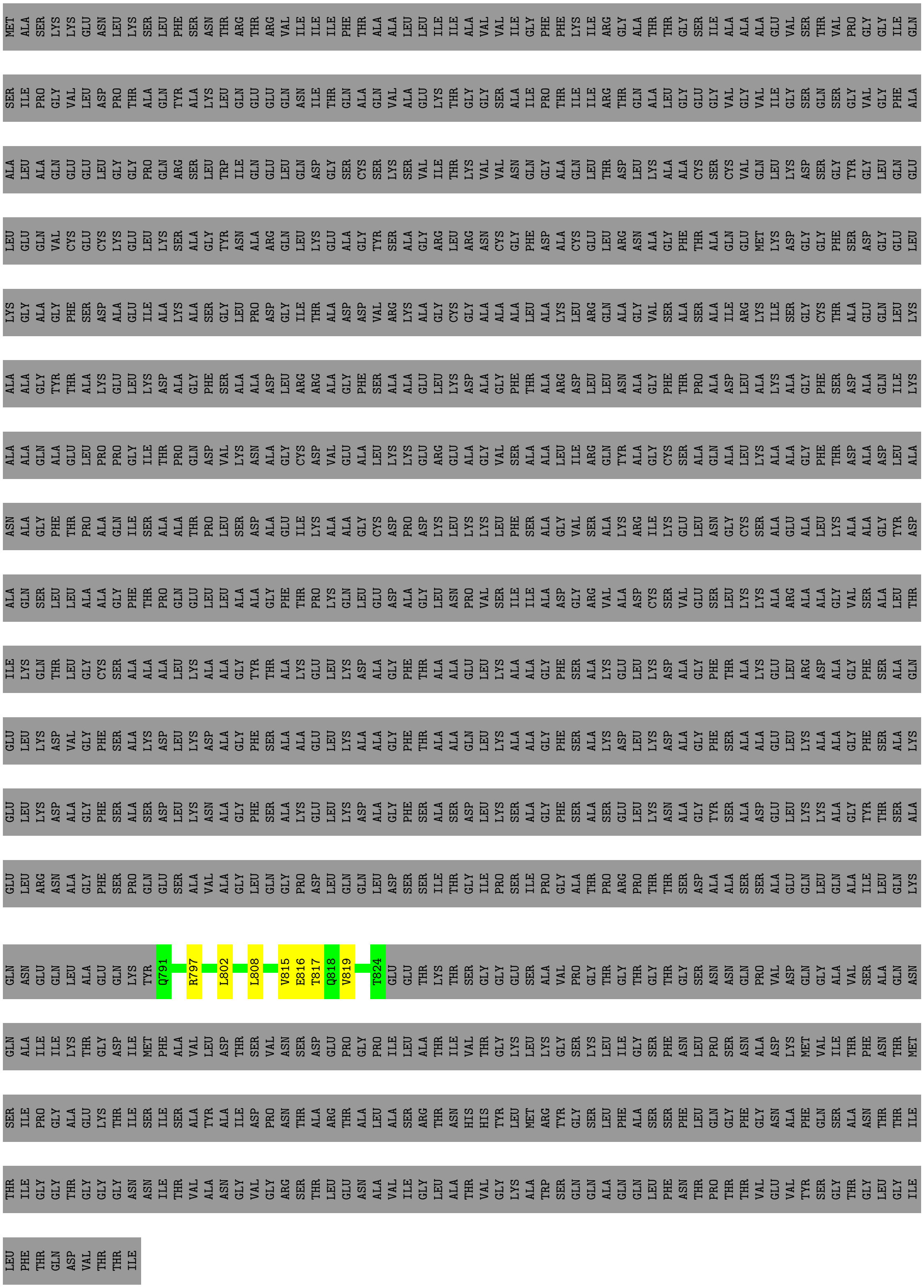
Chain Hg:



• Molecule 1: IcmE protein

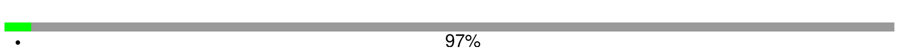
Chain Bg:

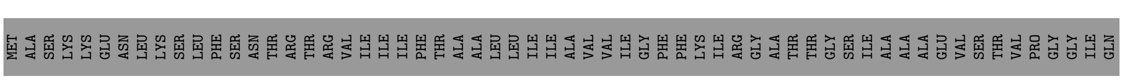


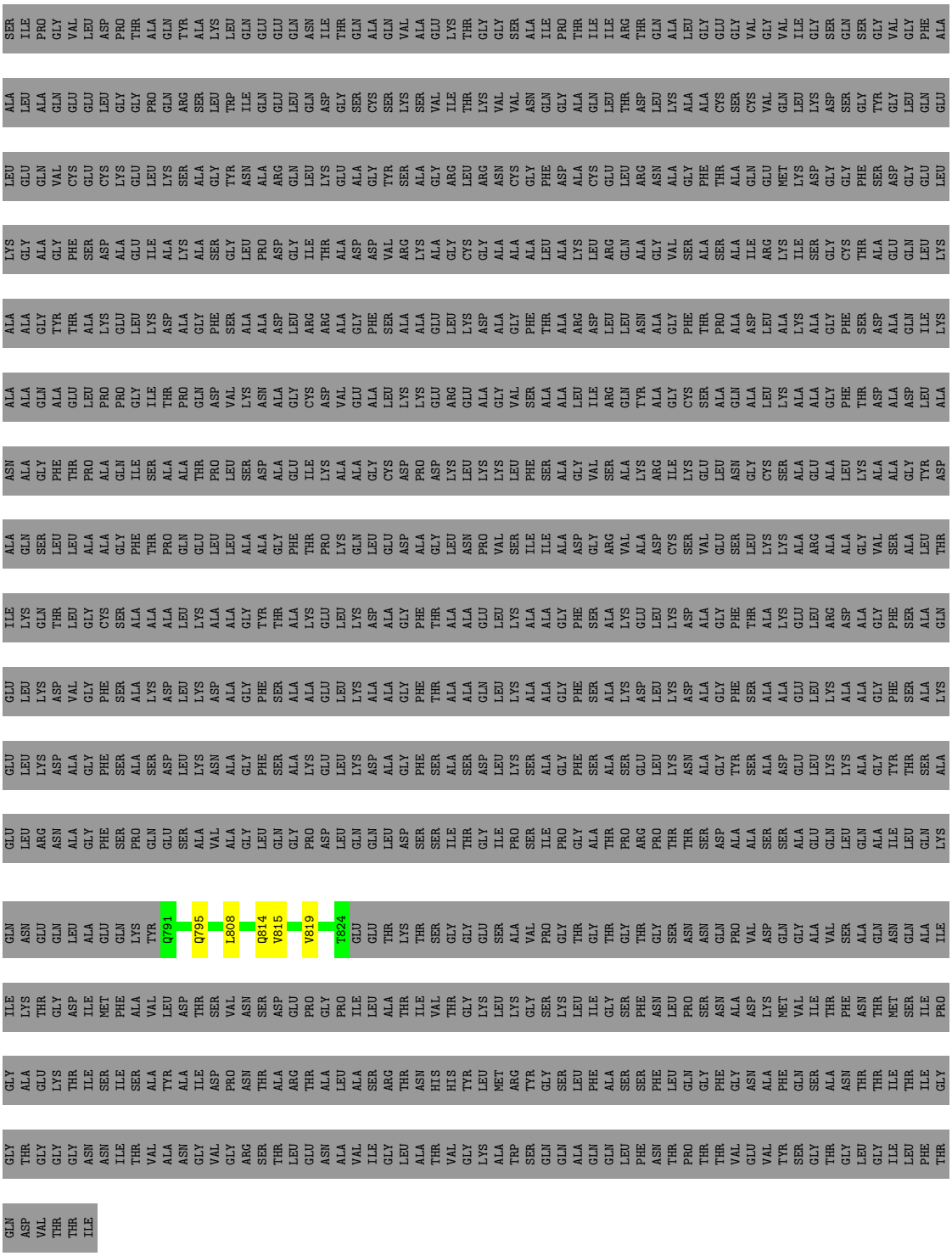


- Molecule 1: IcmE protein

Chain Ig:

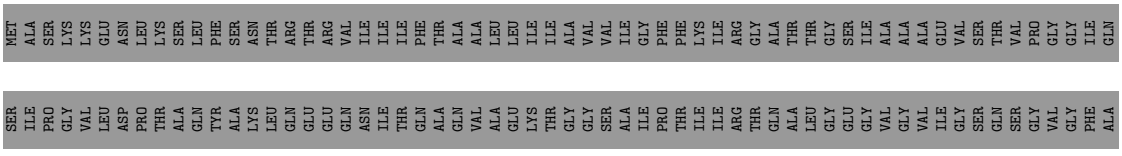


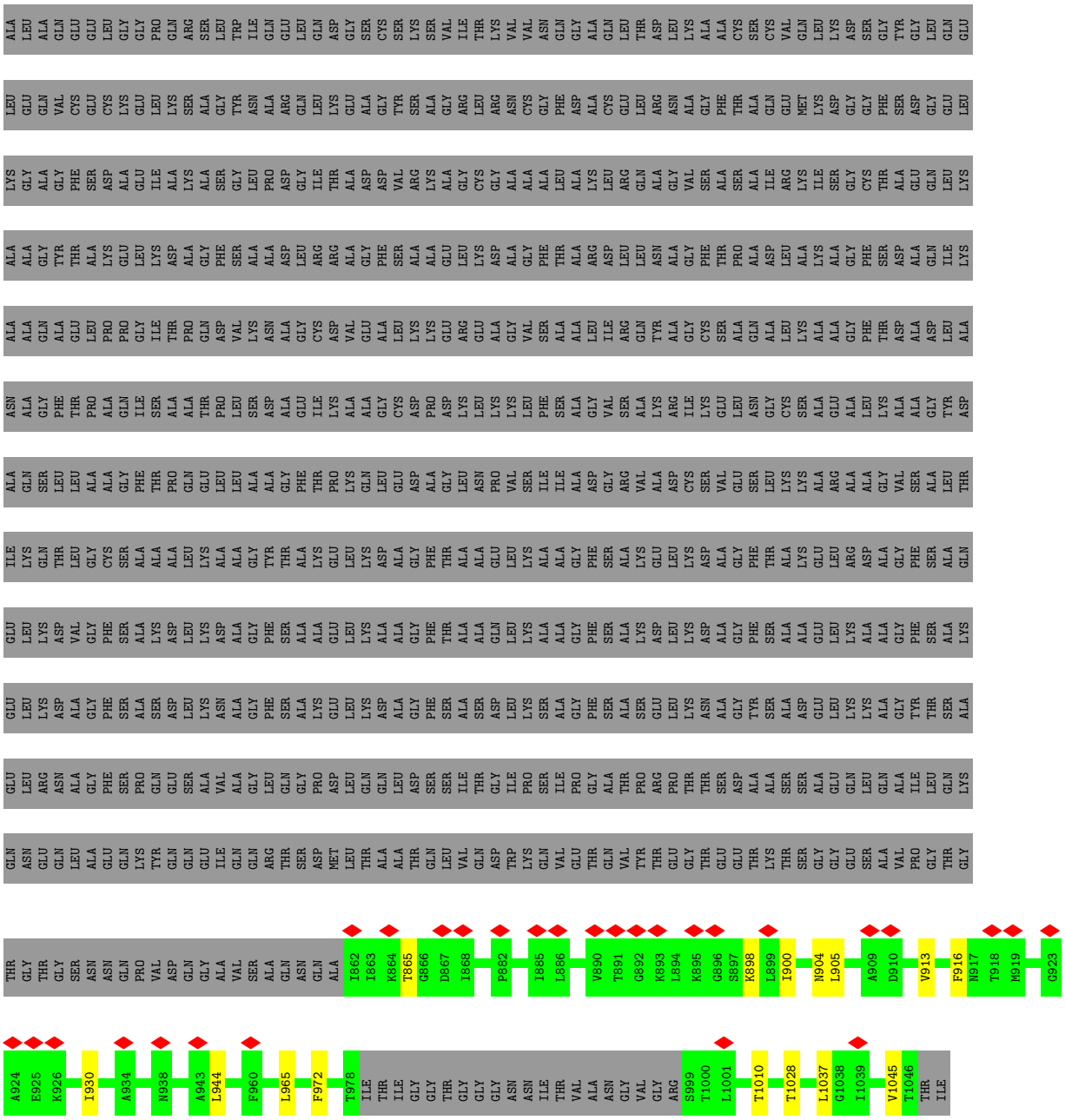




• Molecule 1: IcmE protein

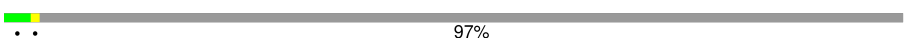
Chain CG:

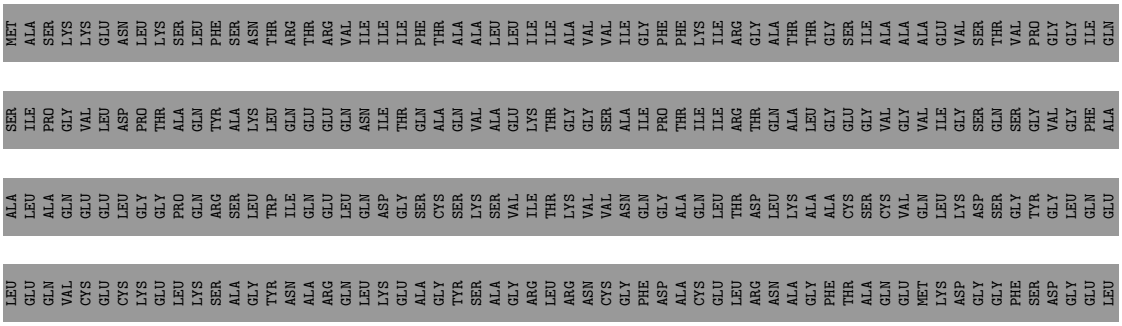


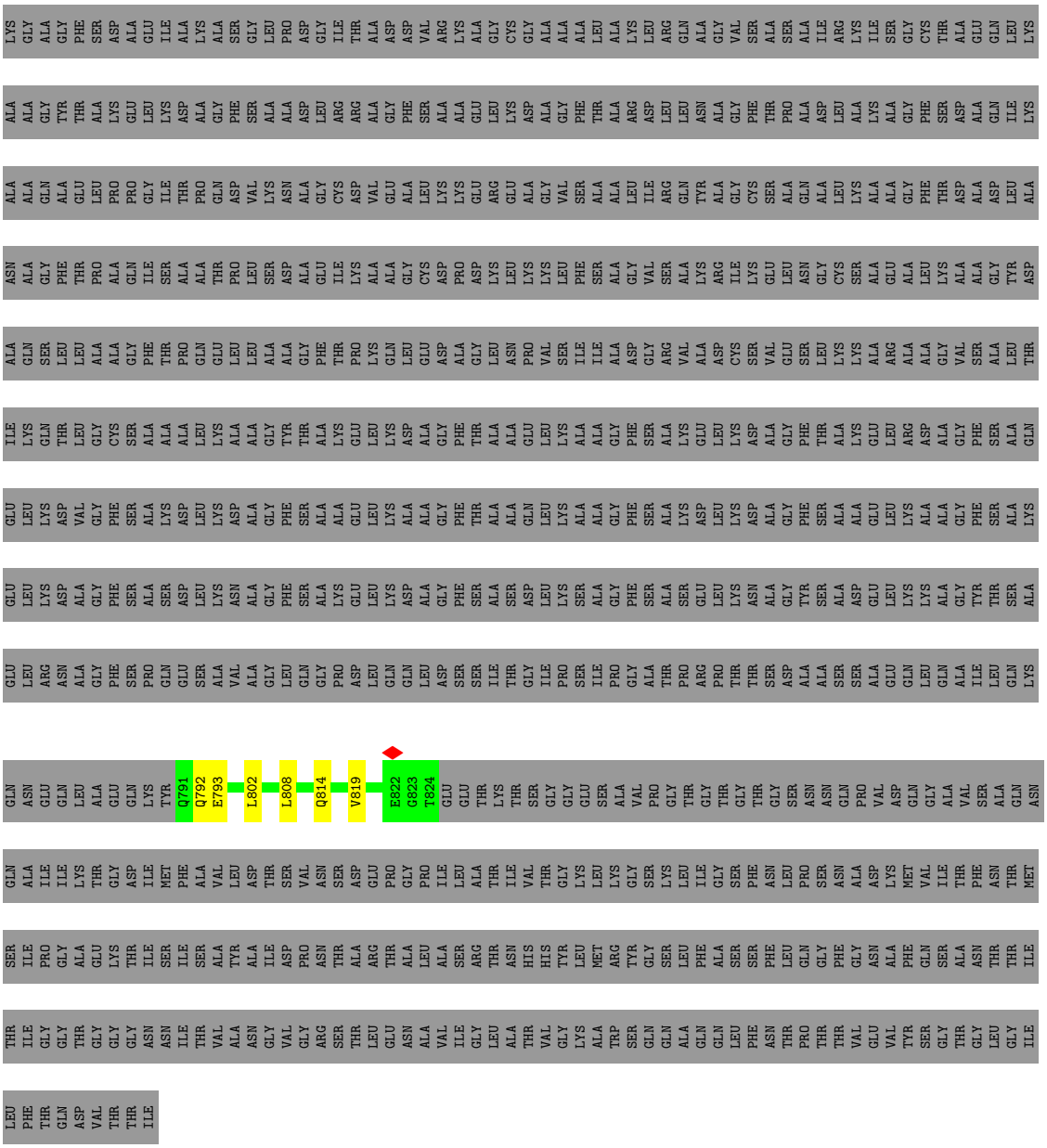


• Molecule 1: IcmE protein

Chain Jg:

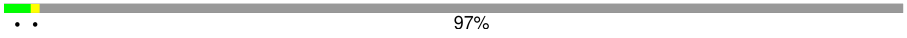


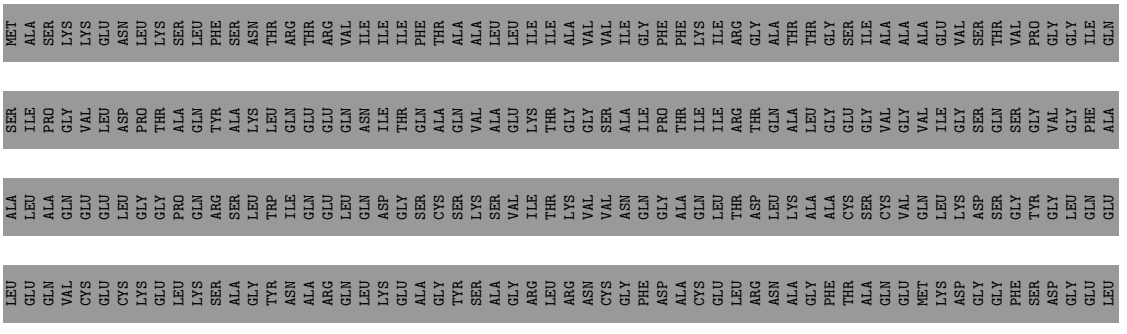


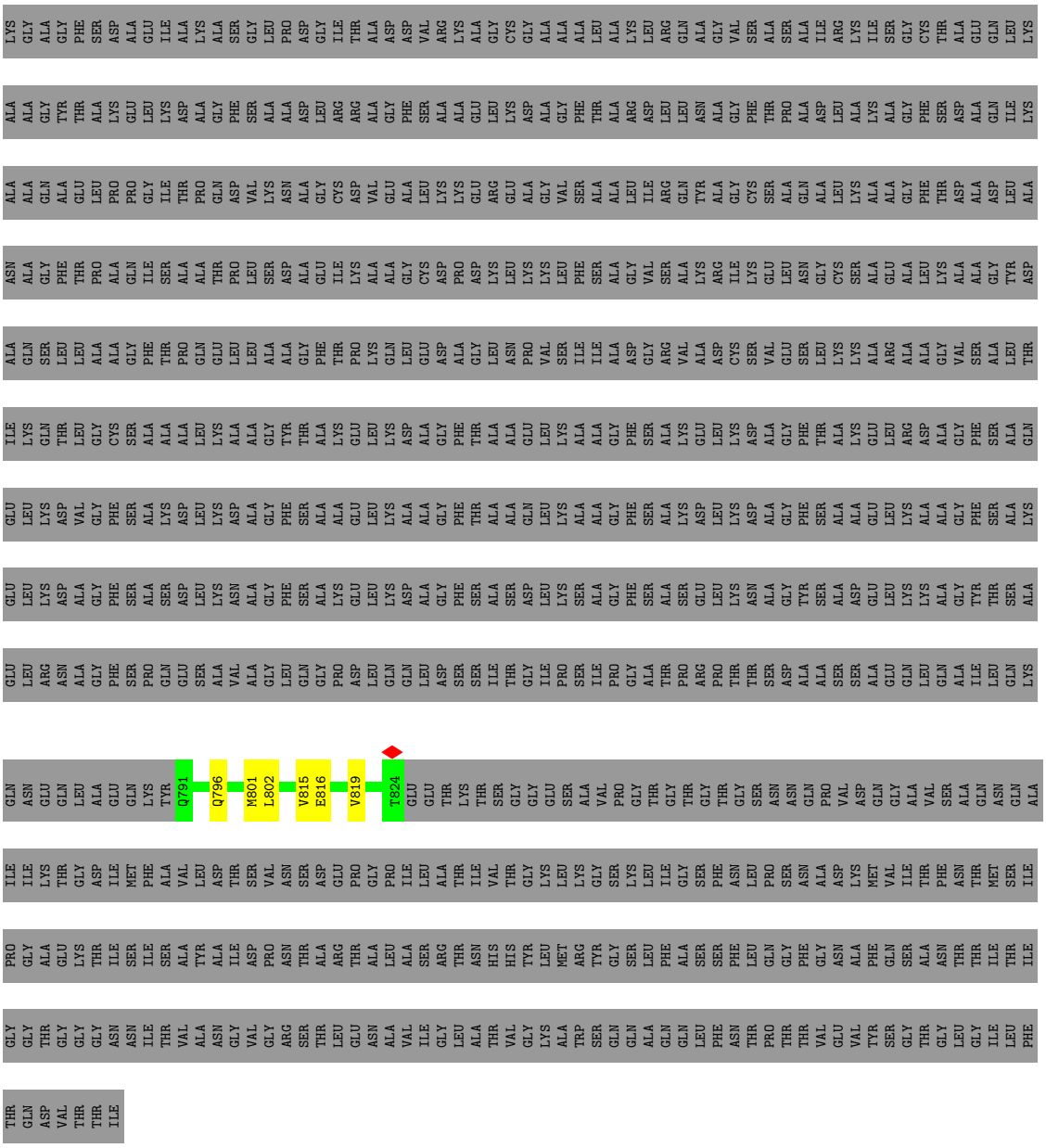


• Molecule 1: IcmE protein

Chain Kg:

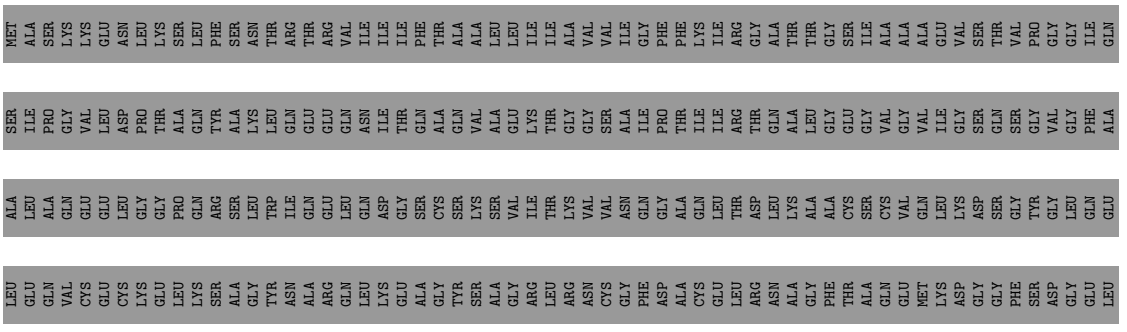


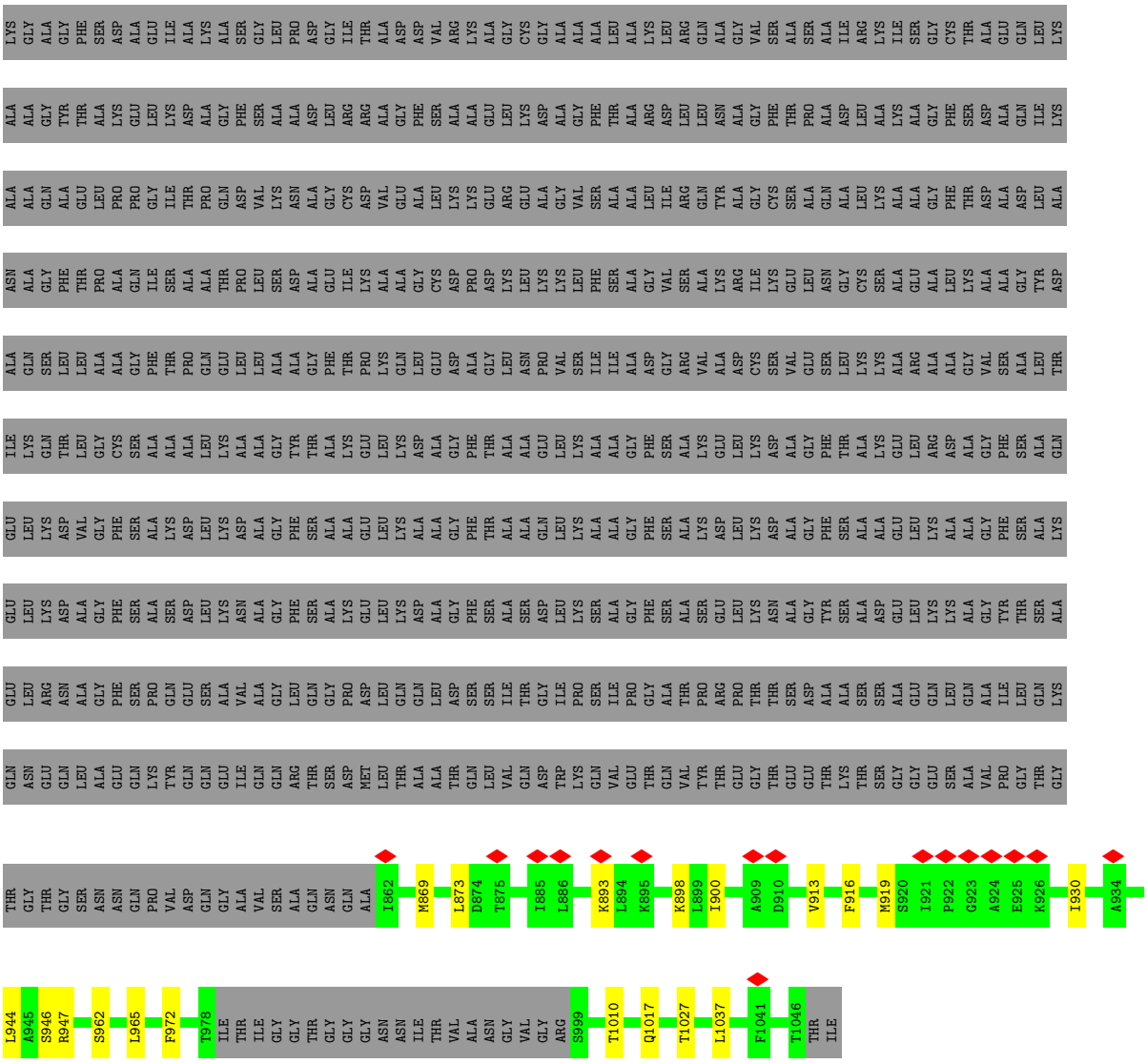




• Molecule 1: IcmE protein

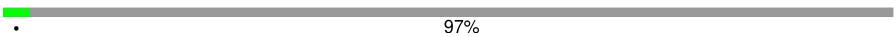
Chain DG:

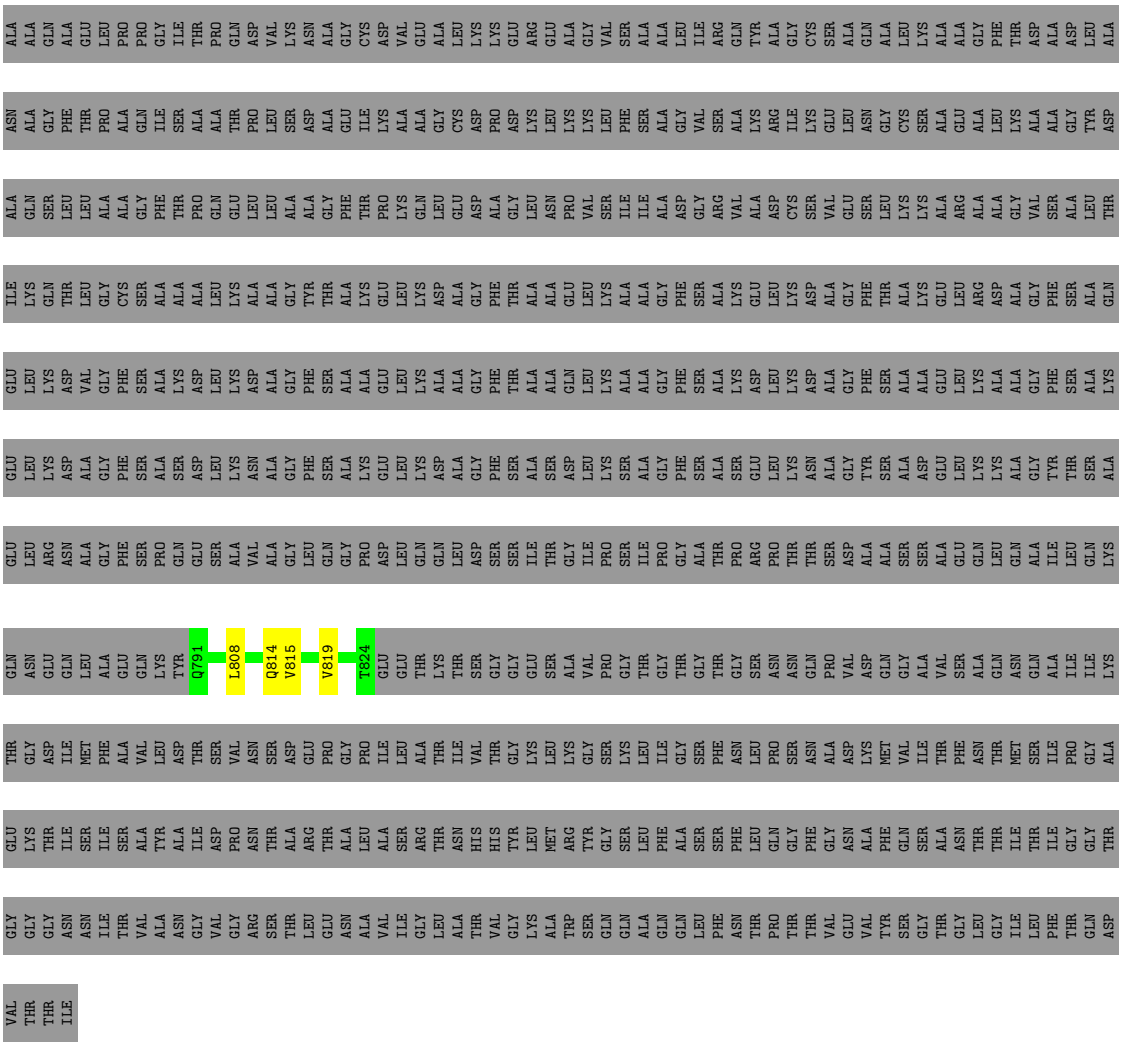




• Molecule 1: IcmE protein

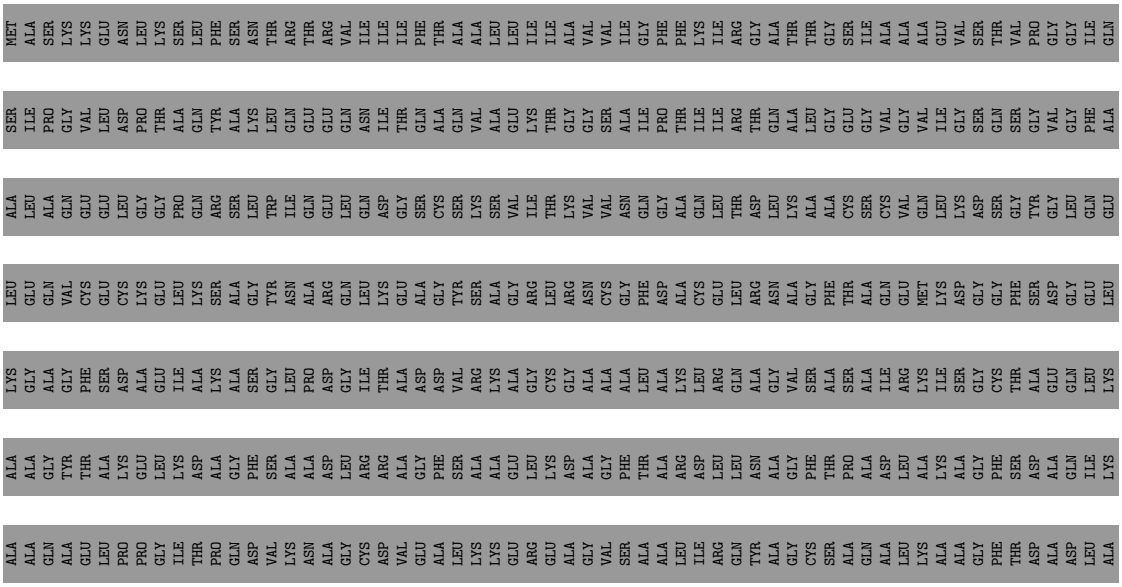
Chain Lg:

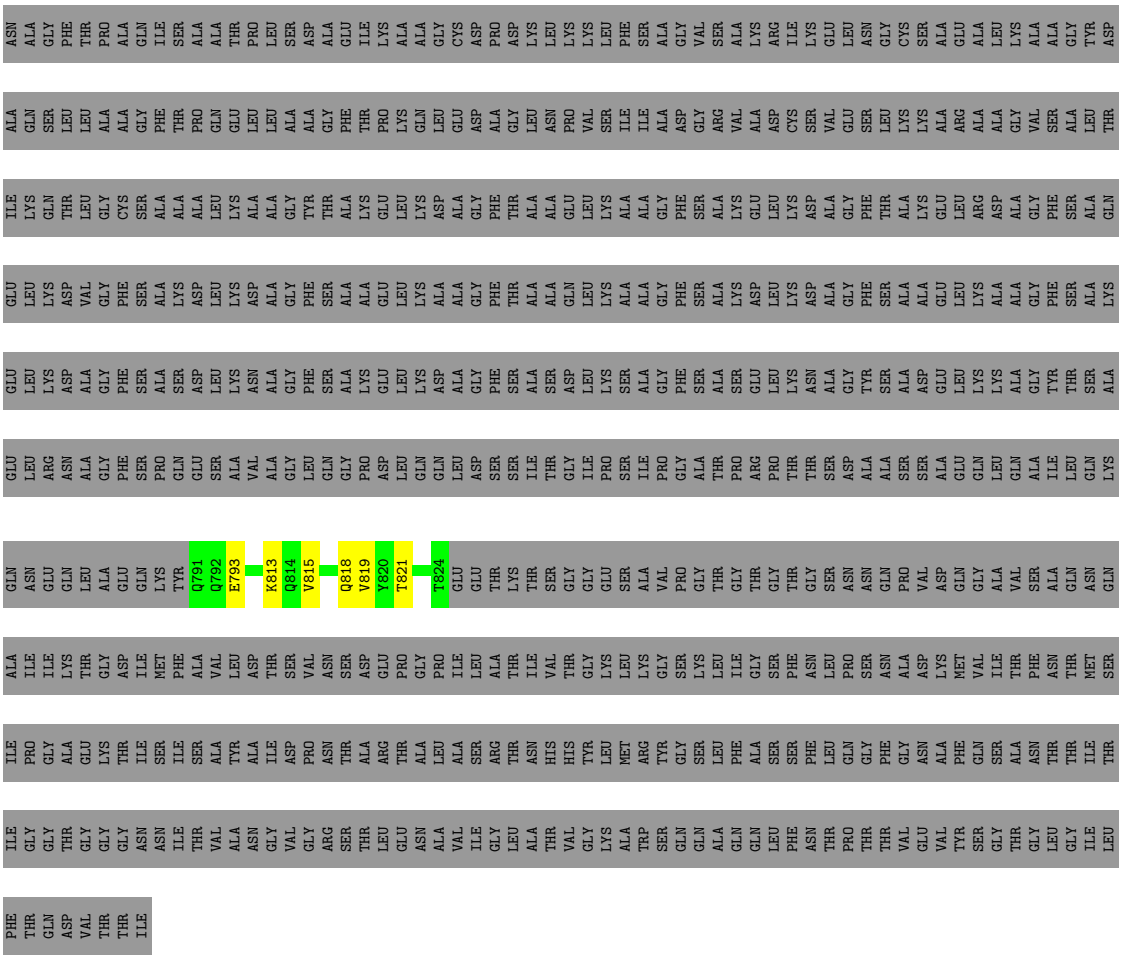




• Molecule 1: IcmE protein

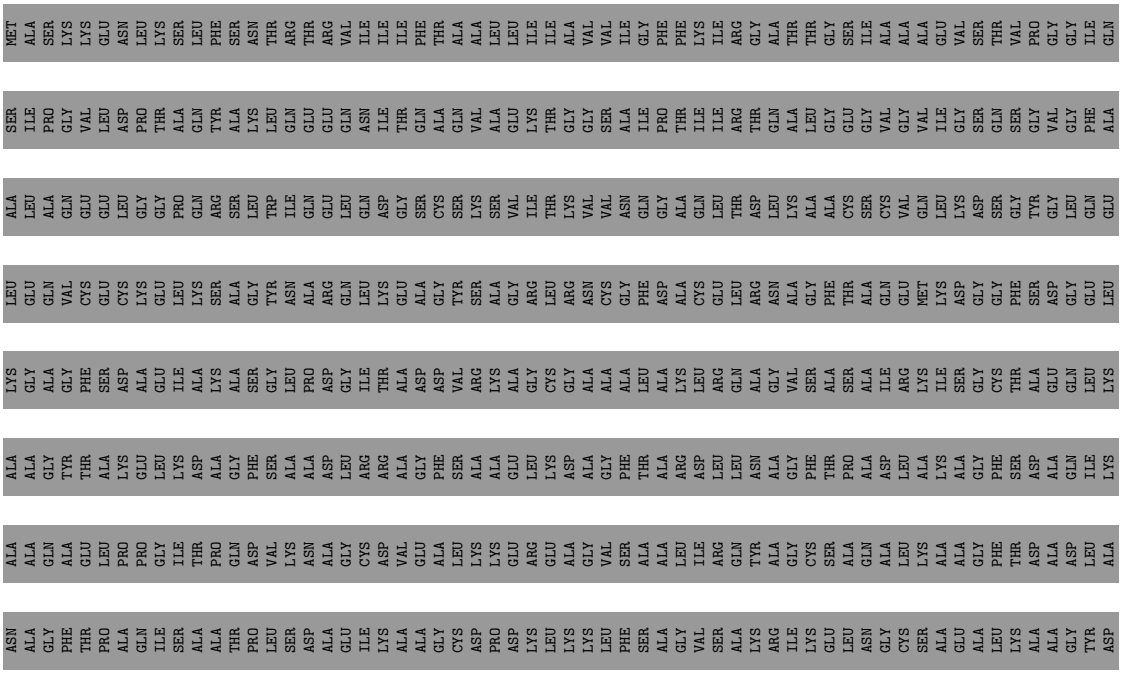
Chain Mg:

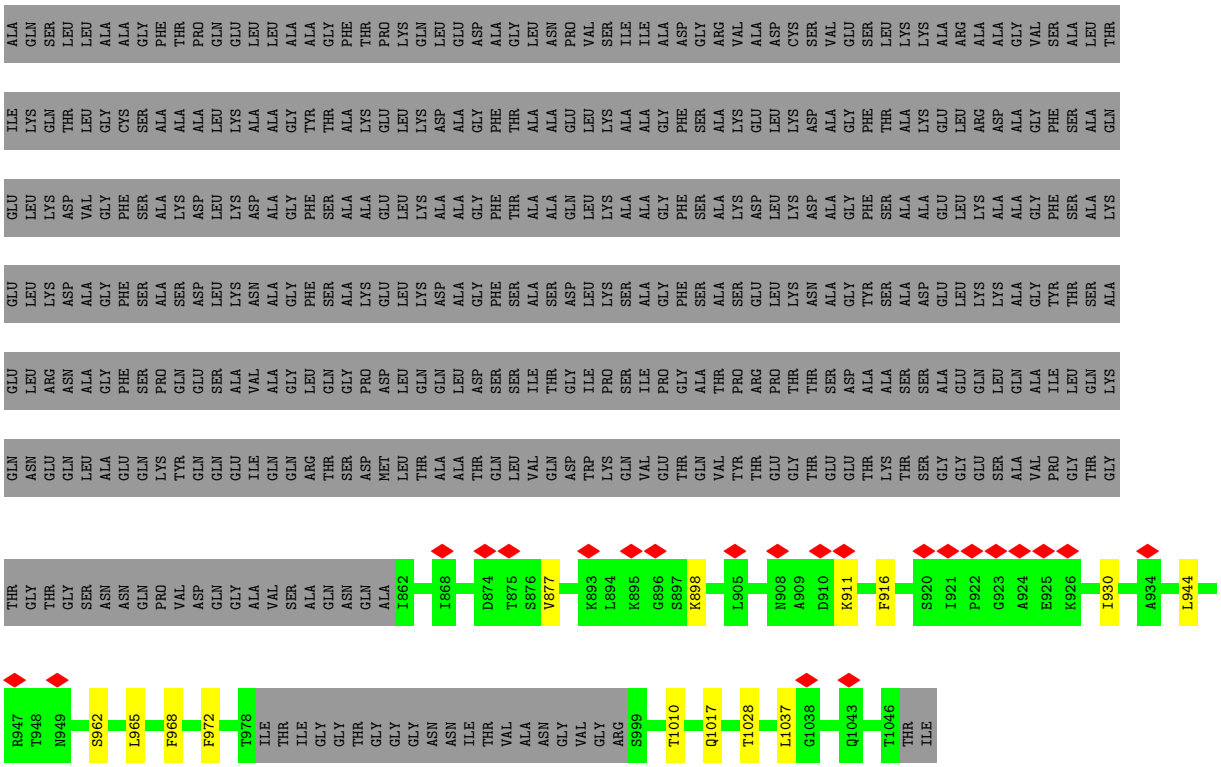




• Molecule 1: IcmE protein

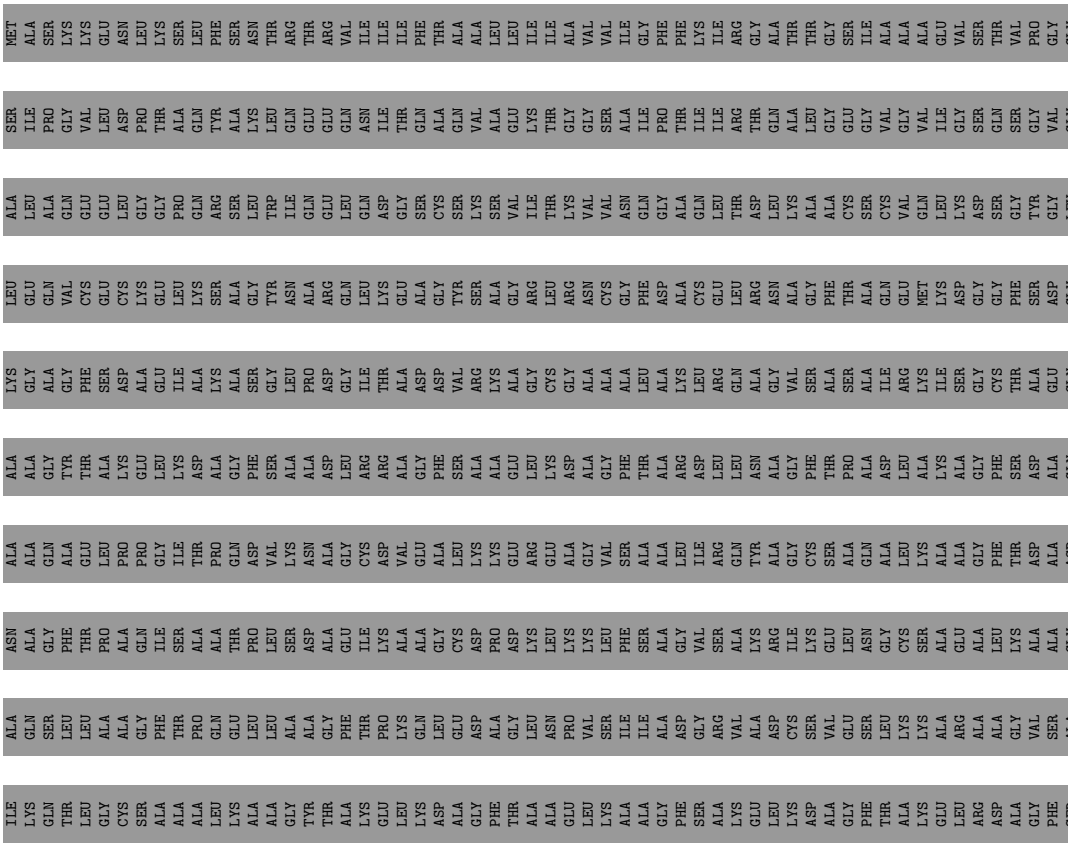
Chain EG:





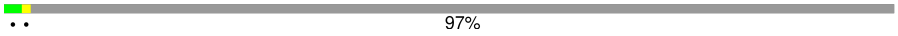
• Molecule 1: IcmE protein

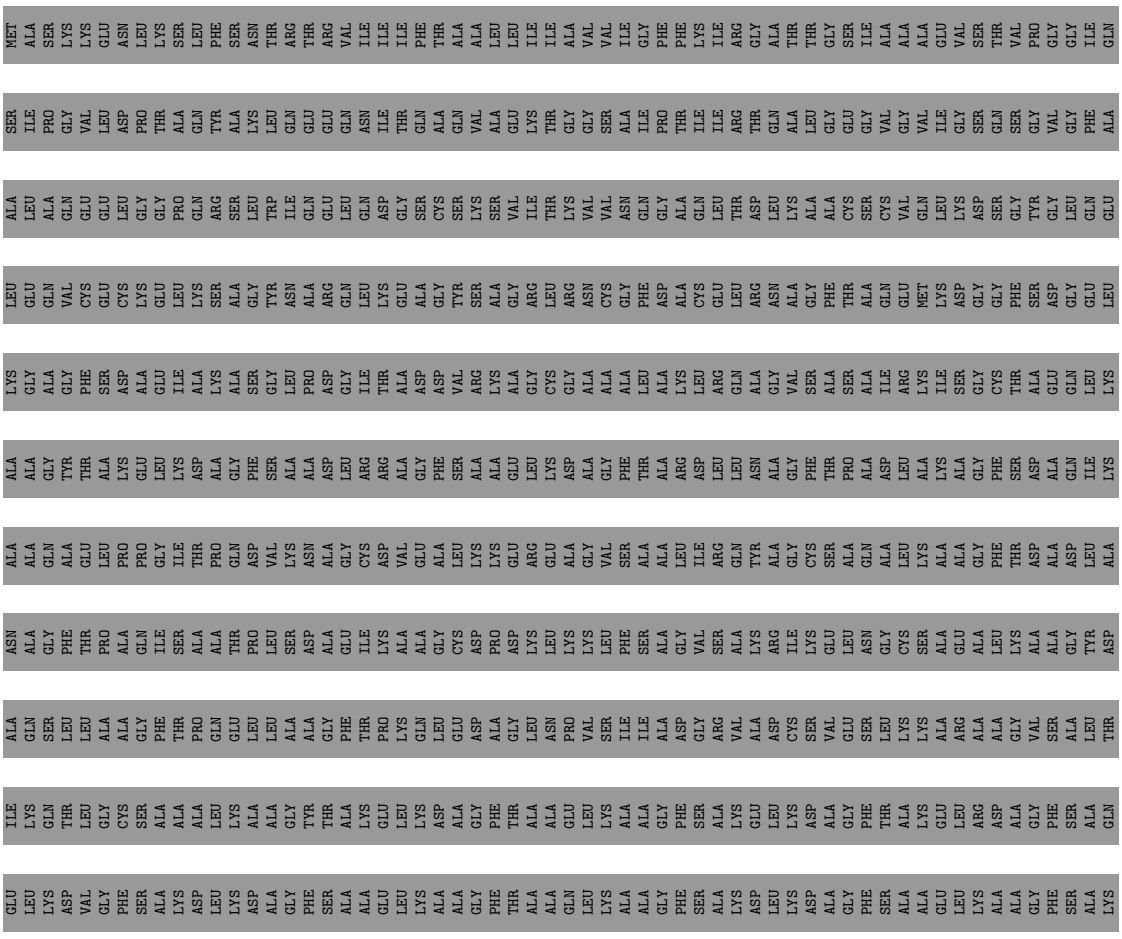
Chain VG: 97%

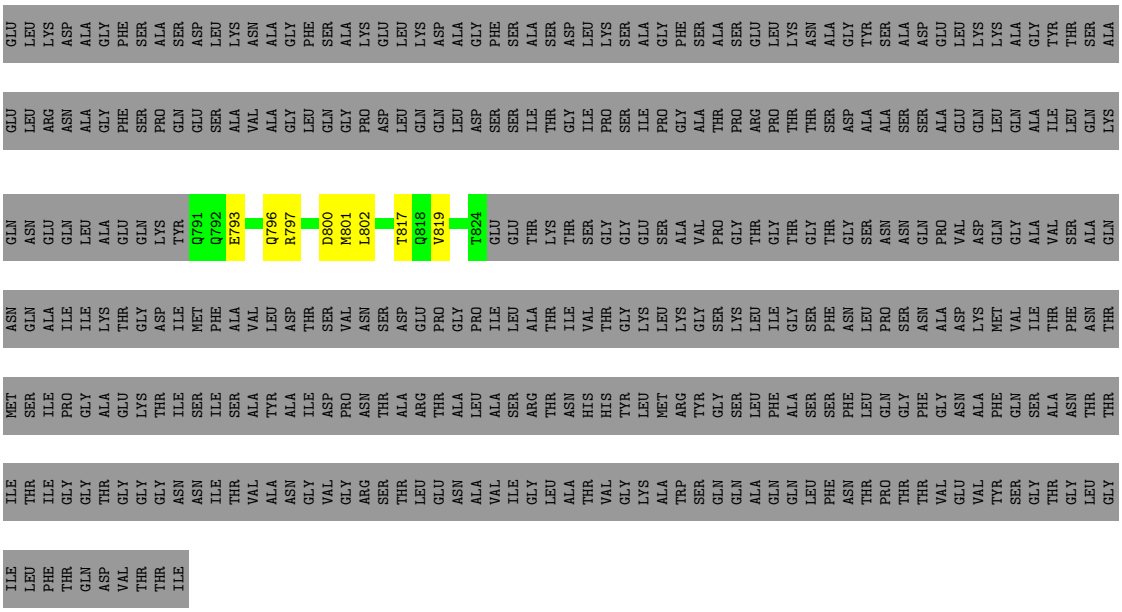


• Molecule 1: IcmE protein

Chain WG:

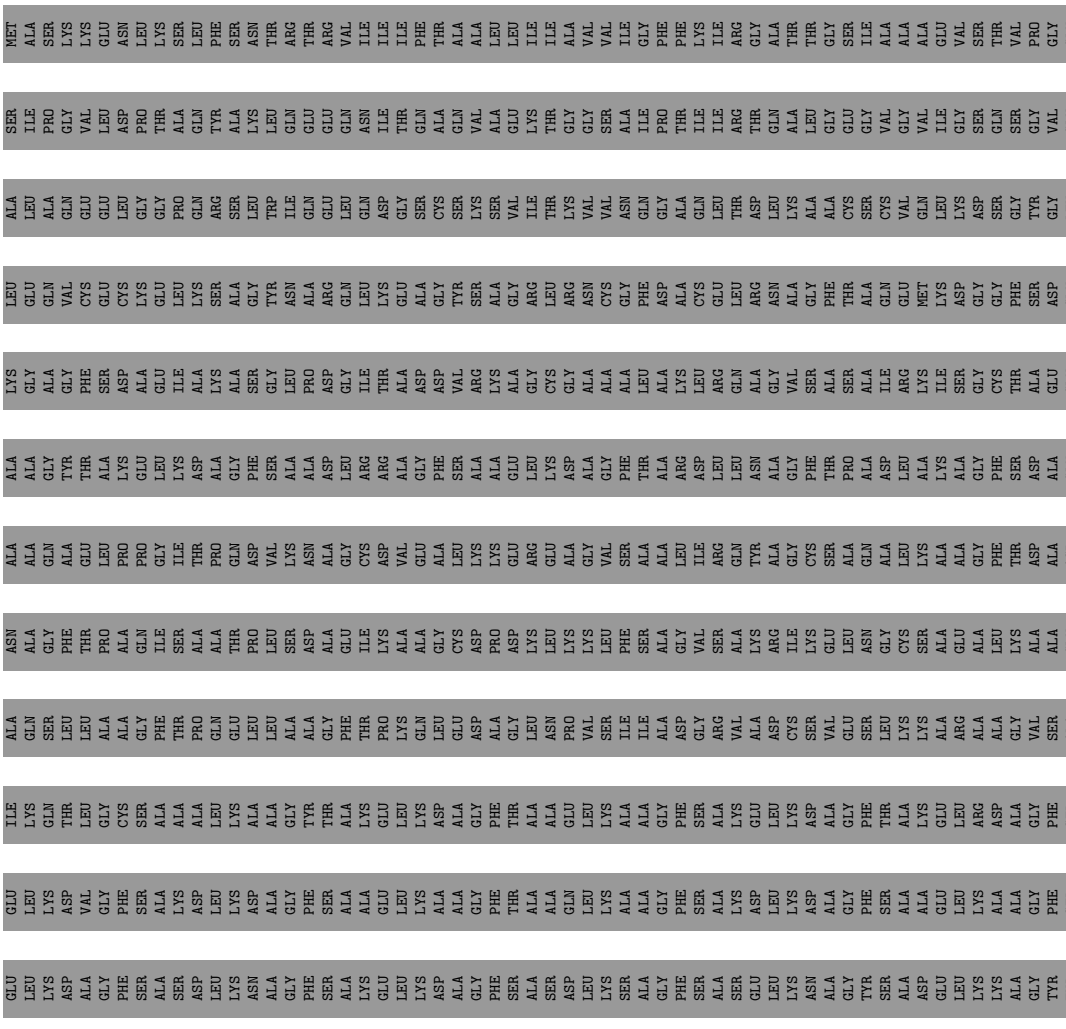


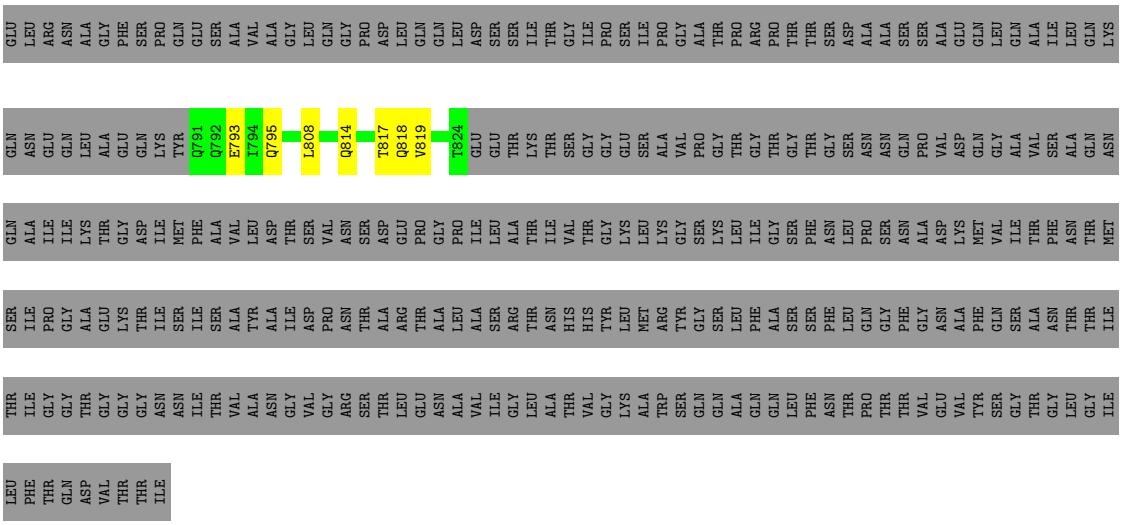




• Molecule 1: IcmE protein

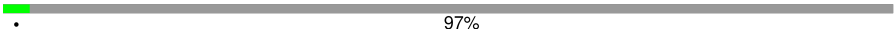
Chain XG: 97%

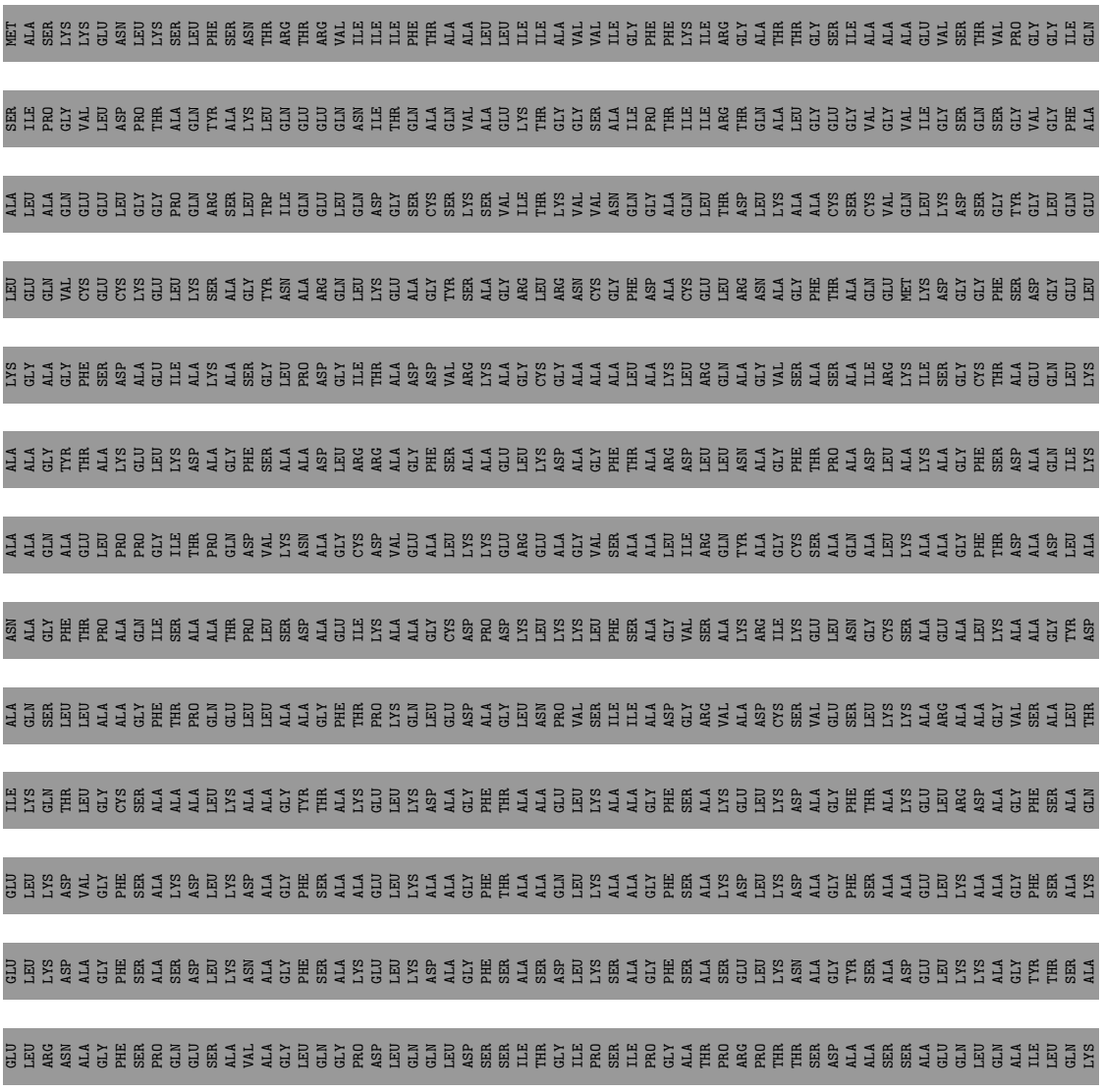


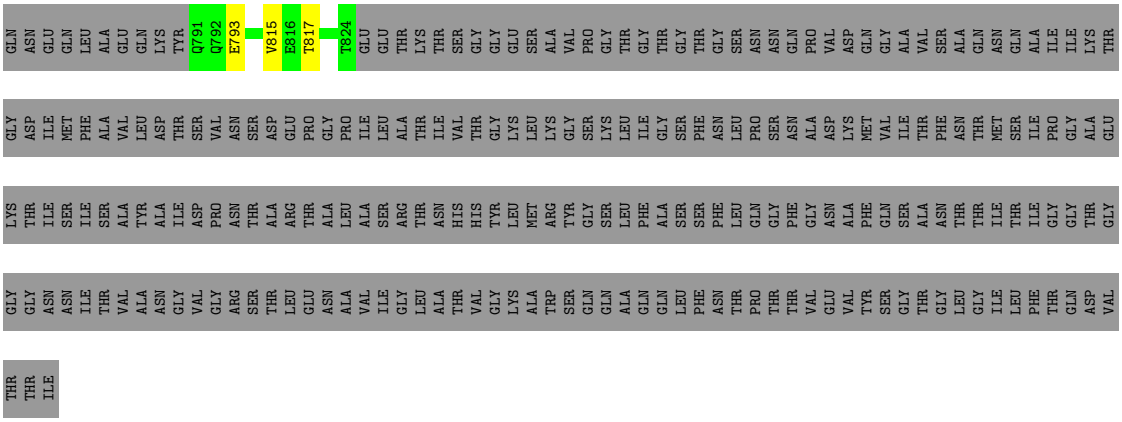


• Molecule 1: IcmE protein

Chain YG:

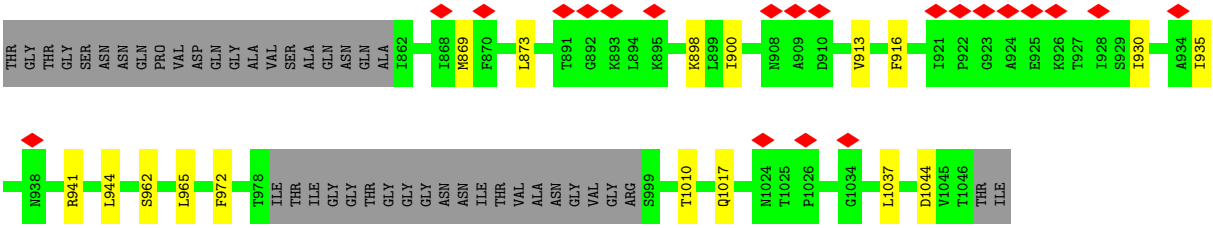






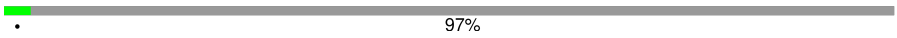
• Molecule 1: IcmE protein

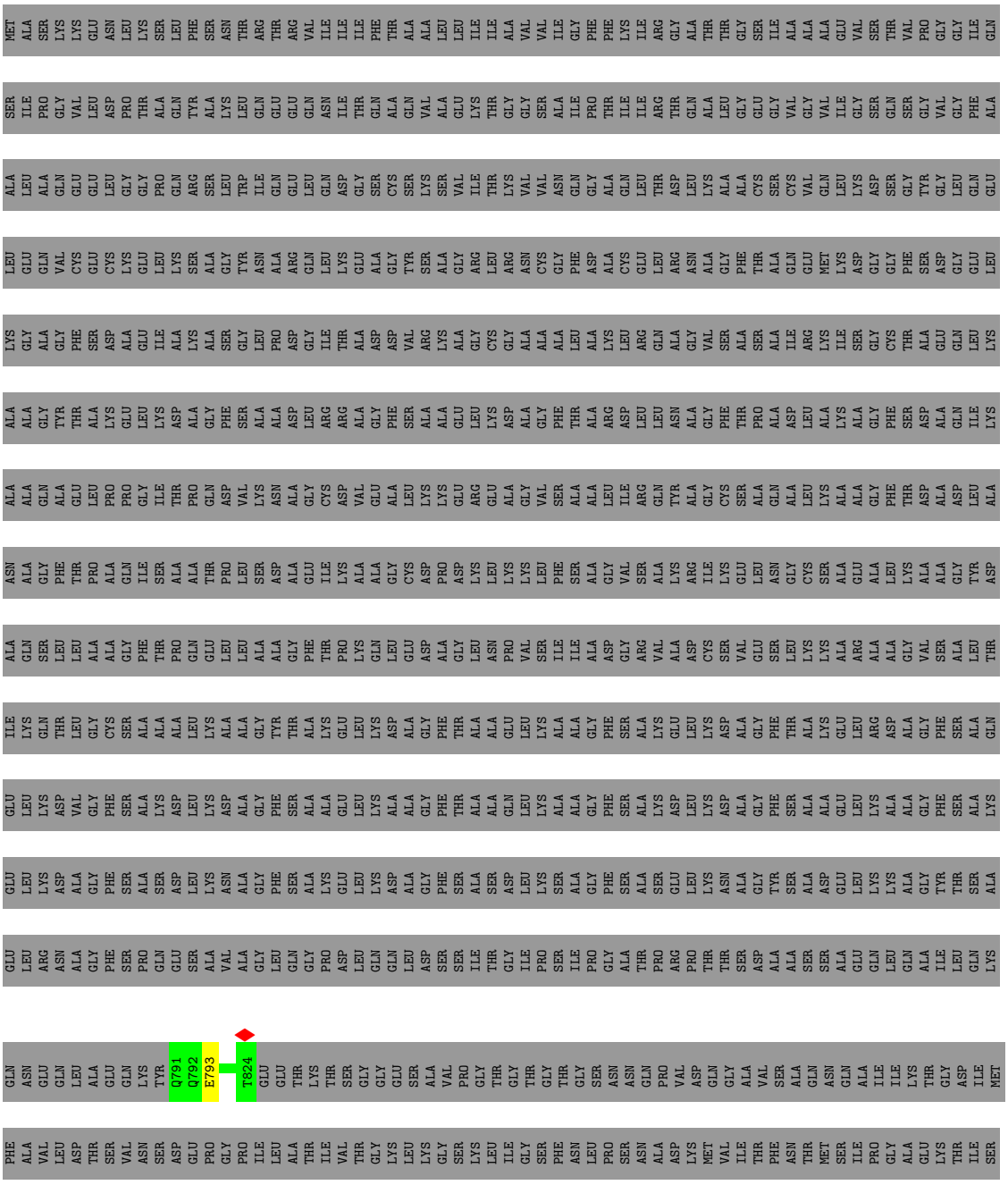
Chain FG:

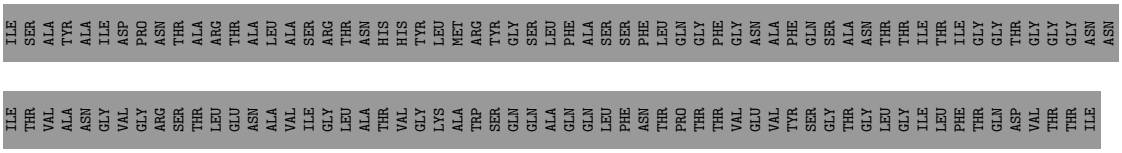


- Molecule 1: IcmE protein

Chain ZG:

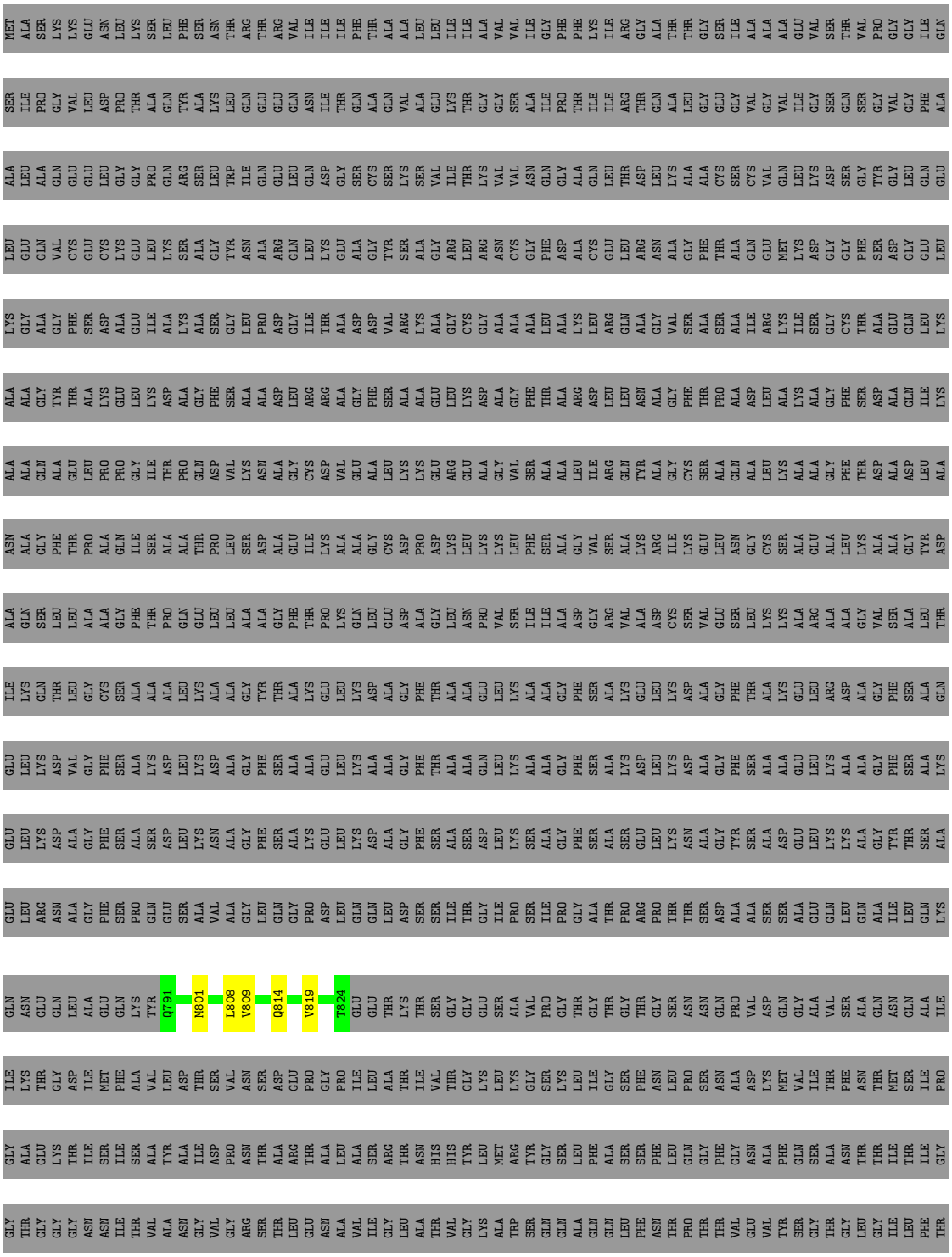






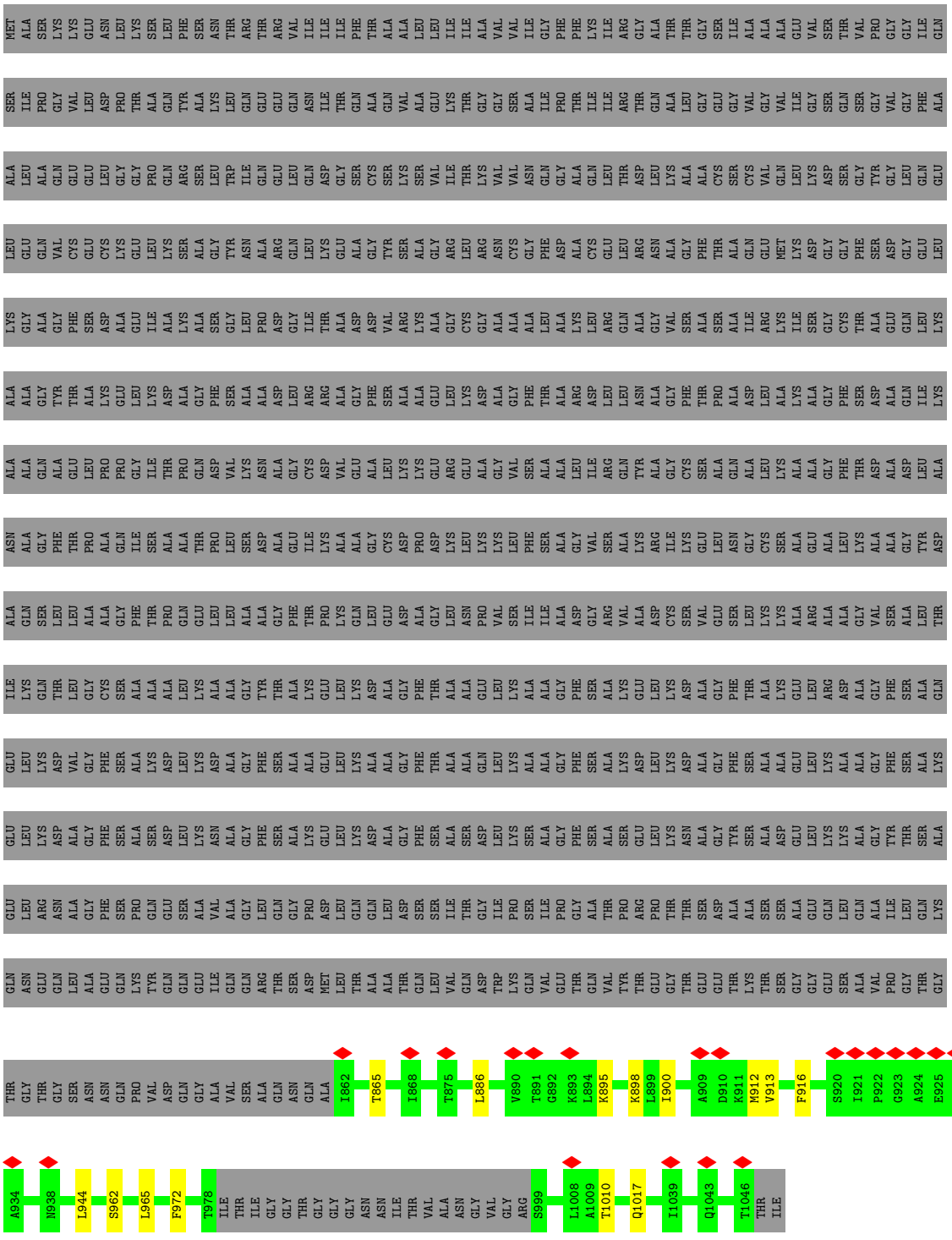
• Molecule 1: IcmE protein

Chain Cg: 97%



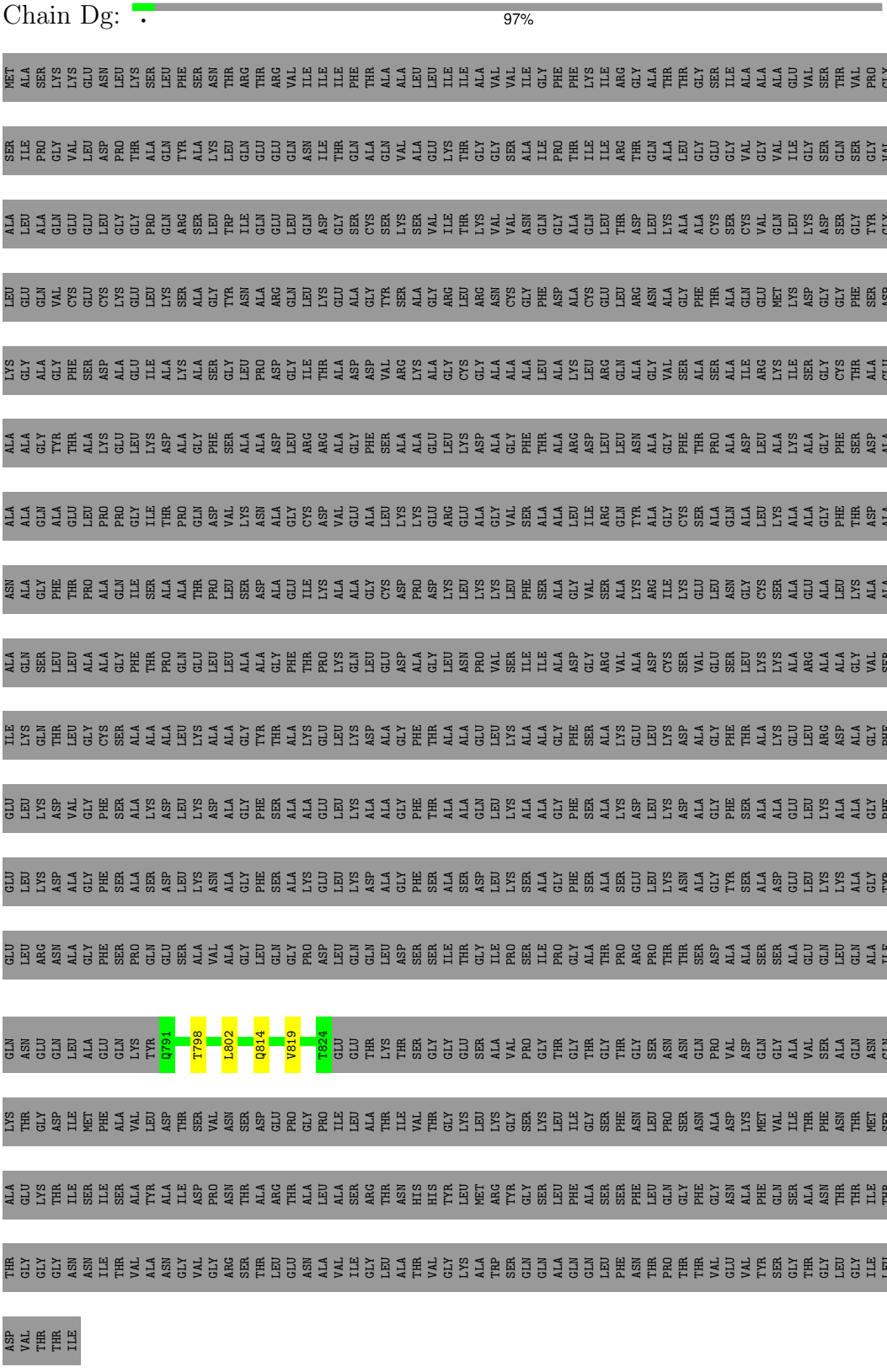
• Molecule 1: IcmE protein

Chain GG:



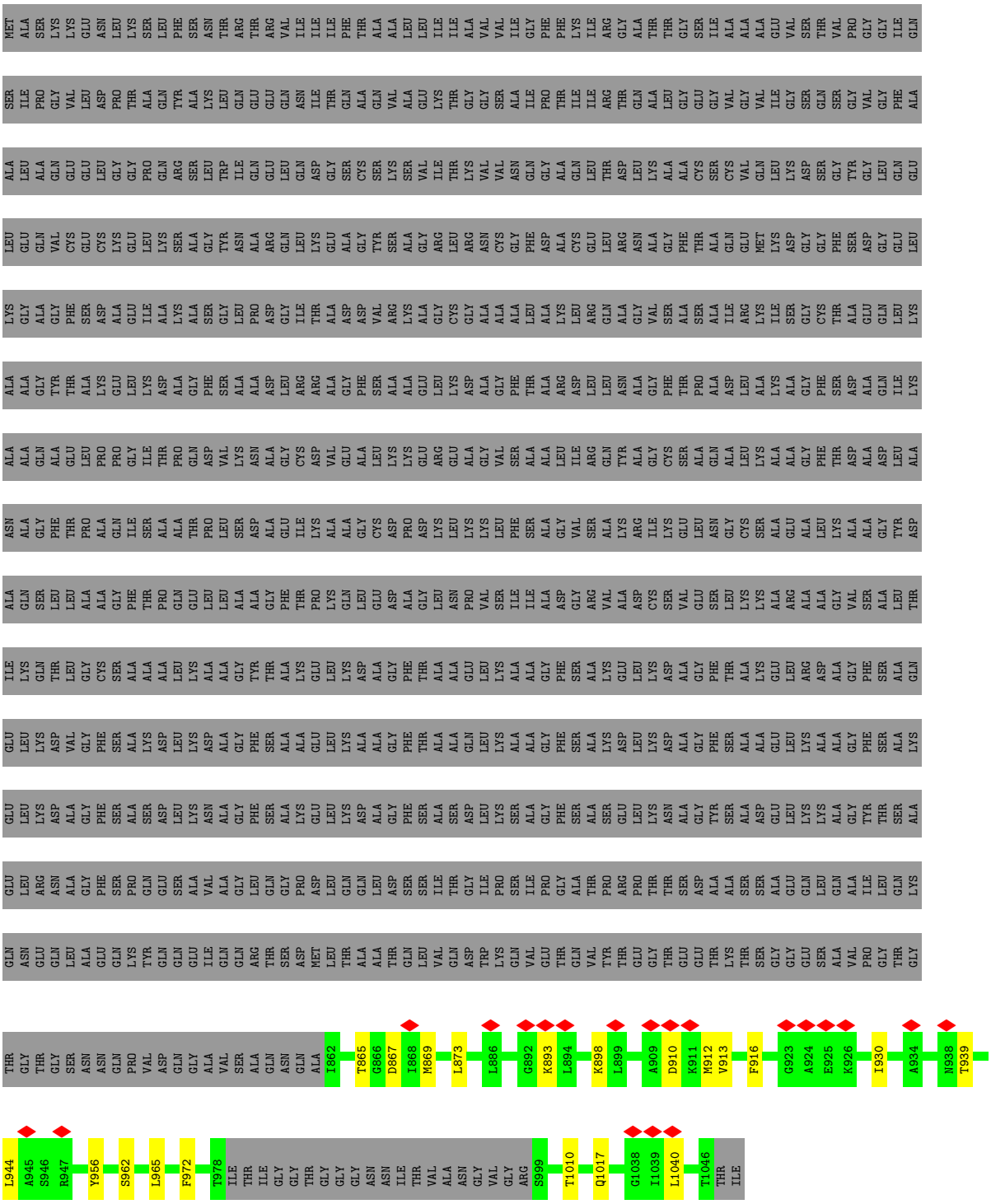
• Molecule 1: IcmE protein

Chain Dg:



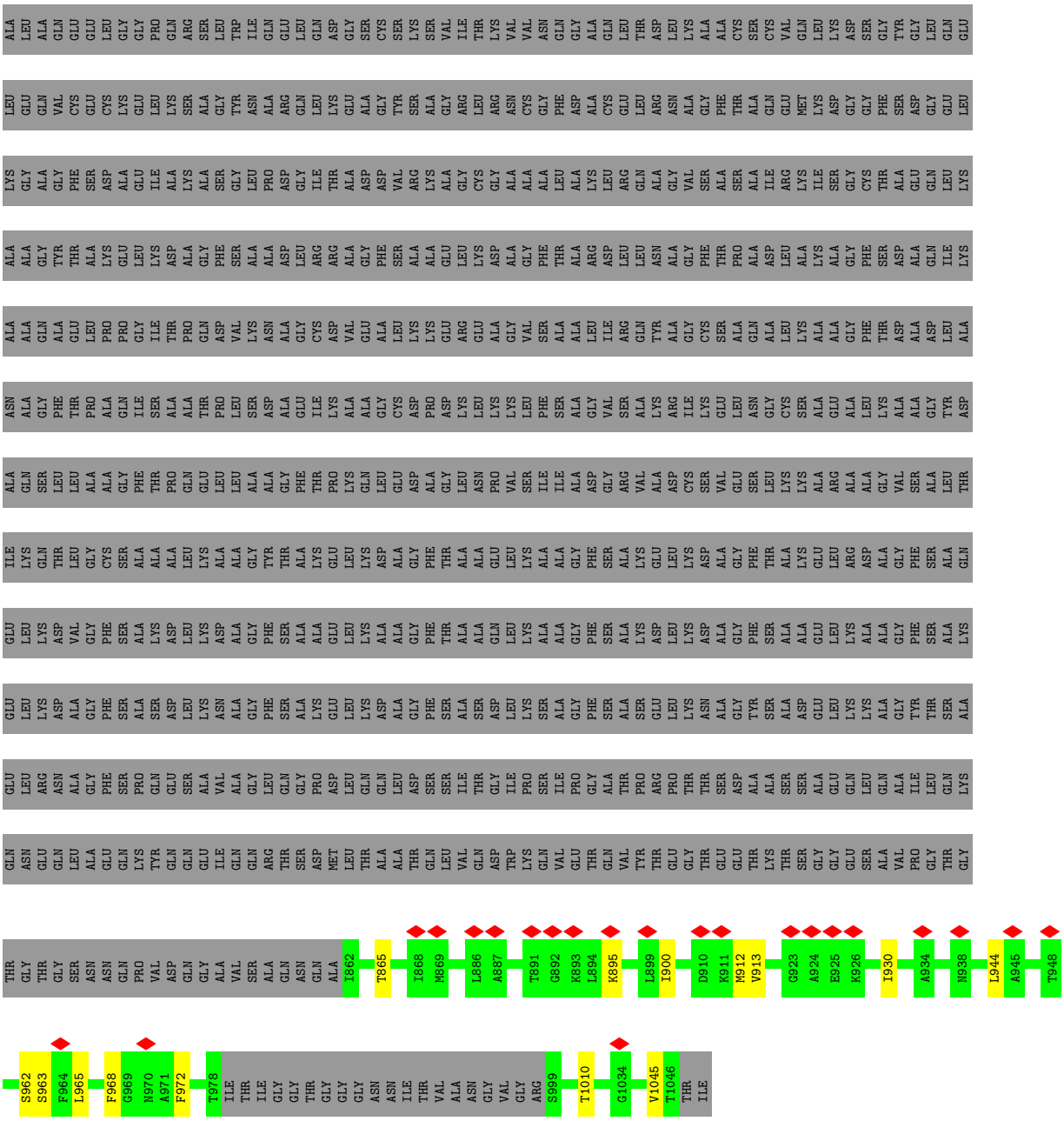
• Molecule 1: IcmE protein

Chain HG:



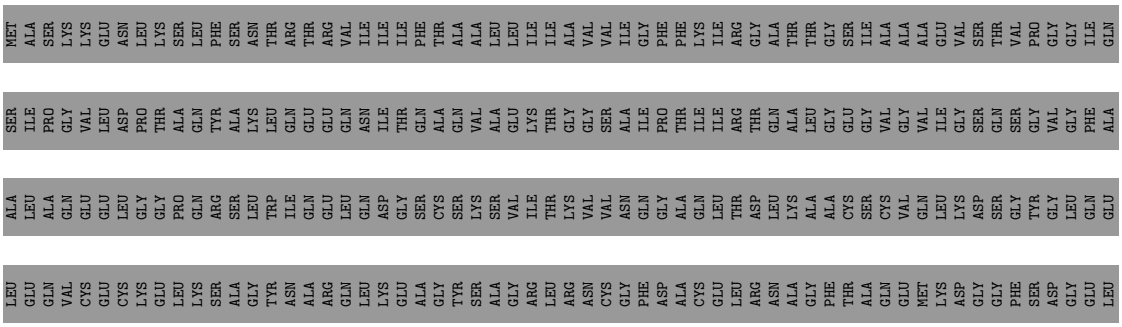
• Molecule 1: IcmE protein

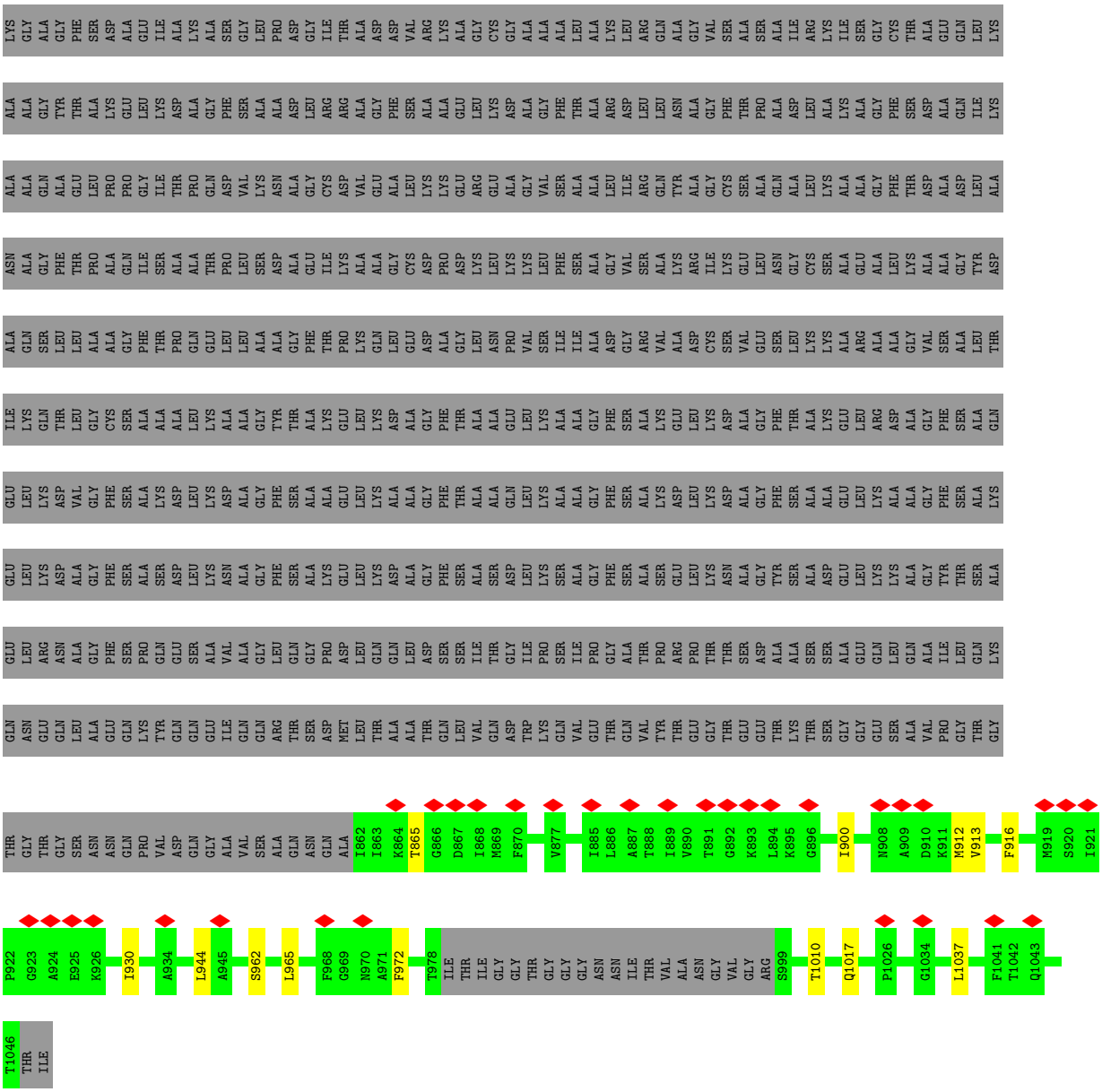
Chain IG:



• Molecule 1: IcmE protein

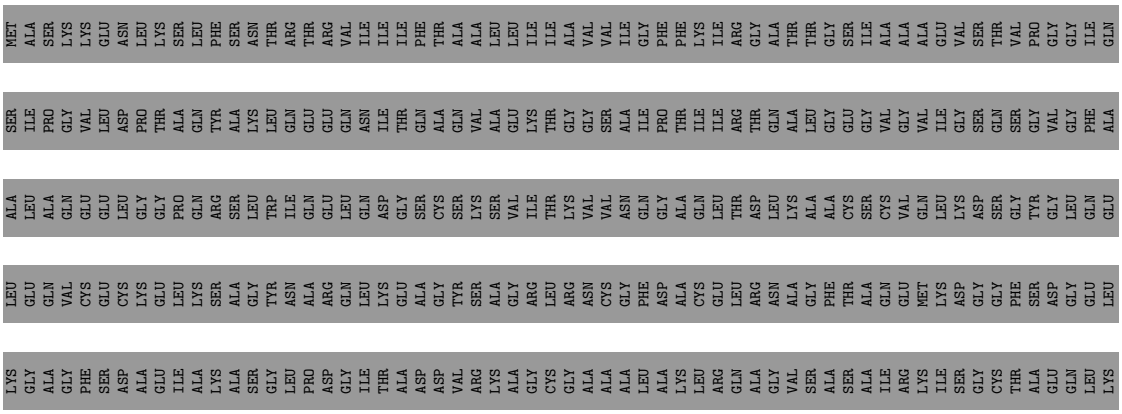
Chain JG:

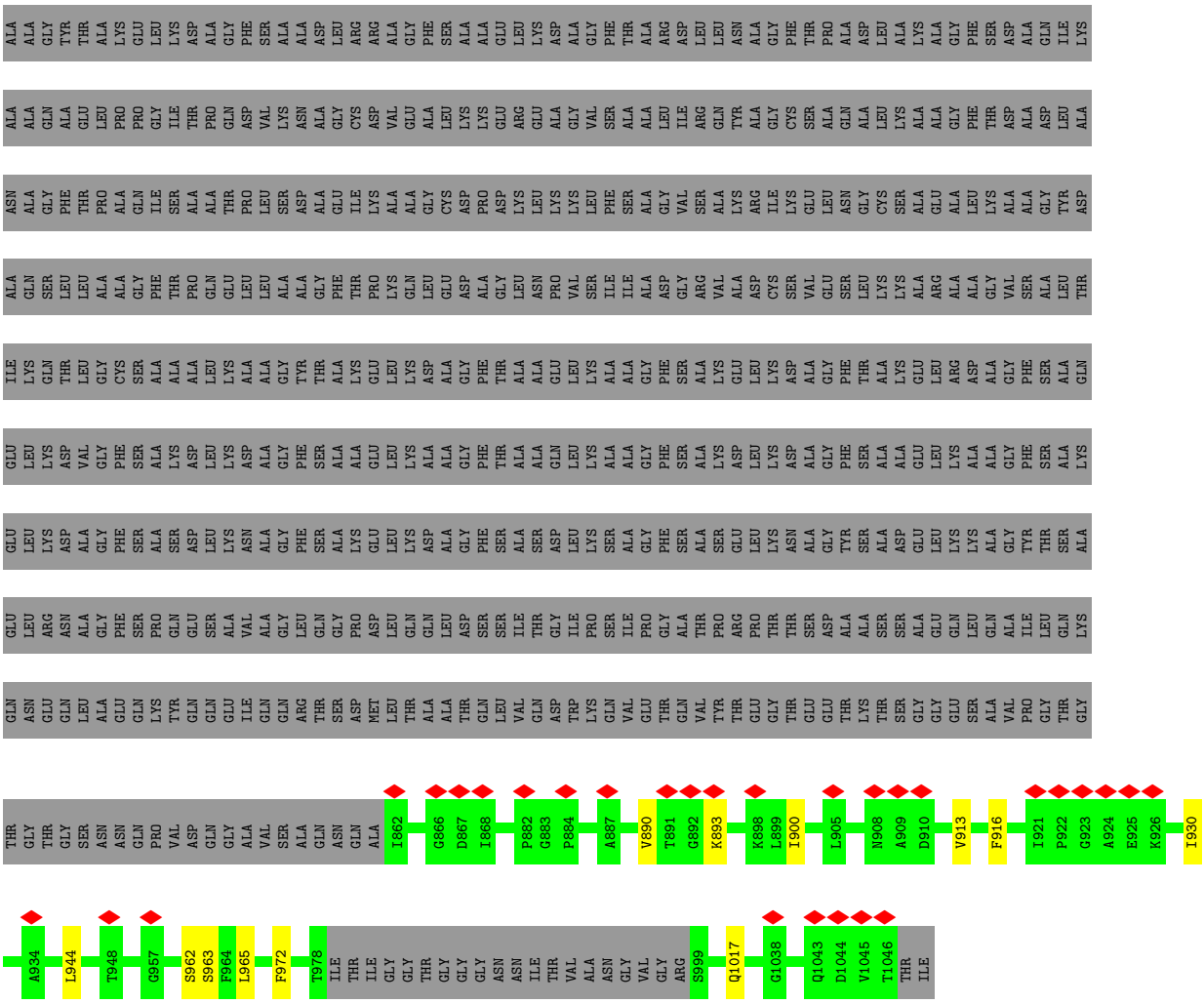




• Molecule 1: IcmE protein

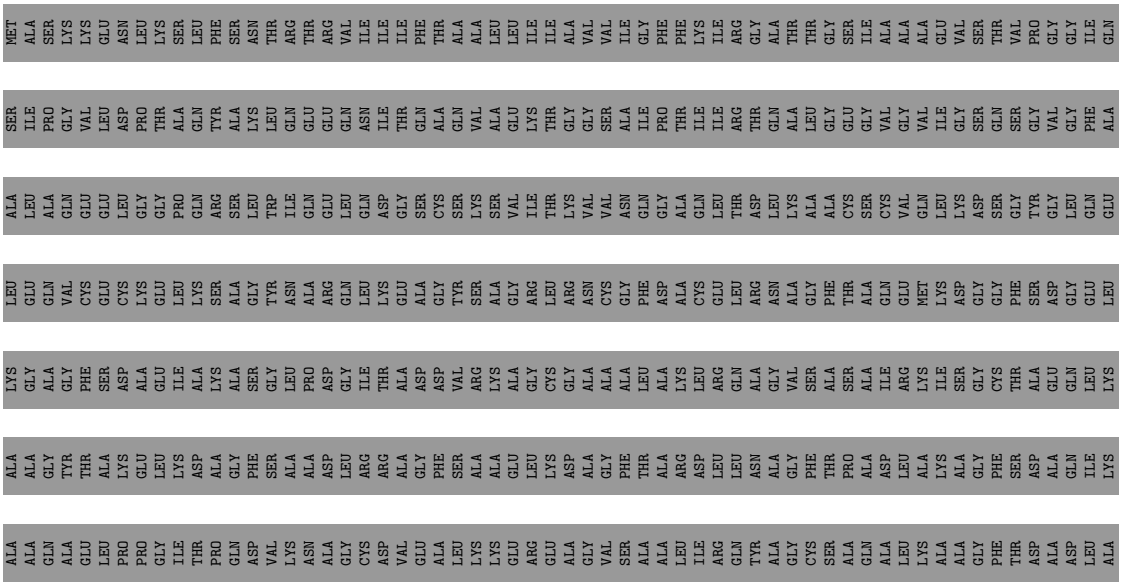
Chain KG:

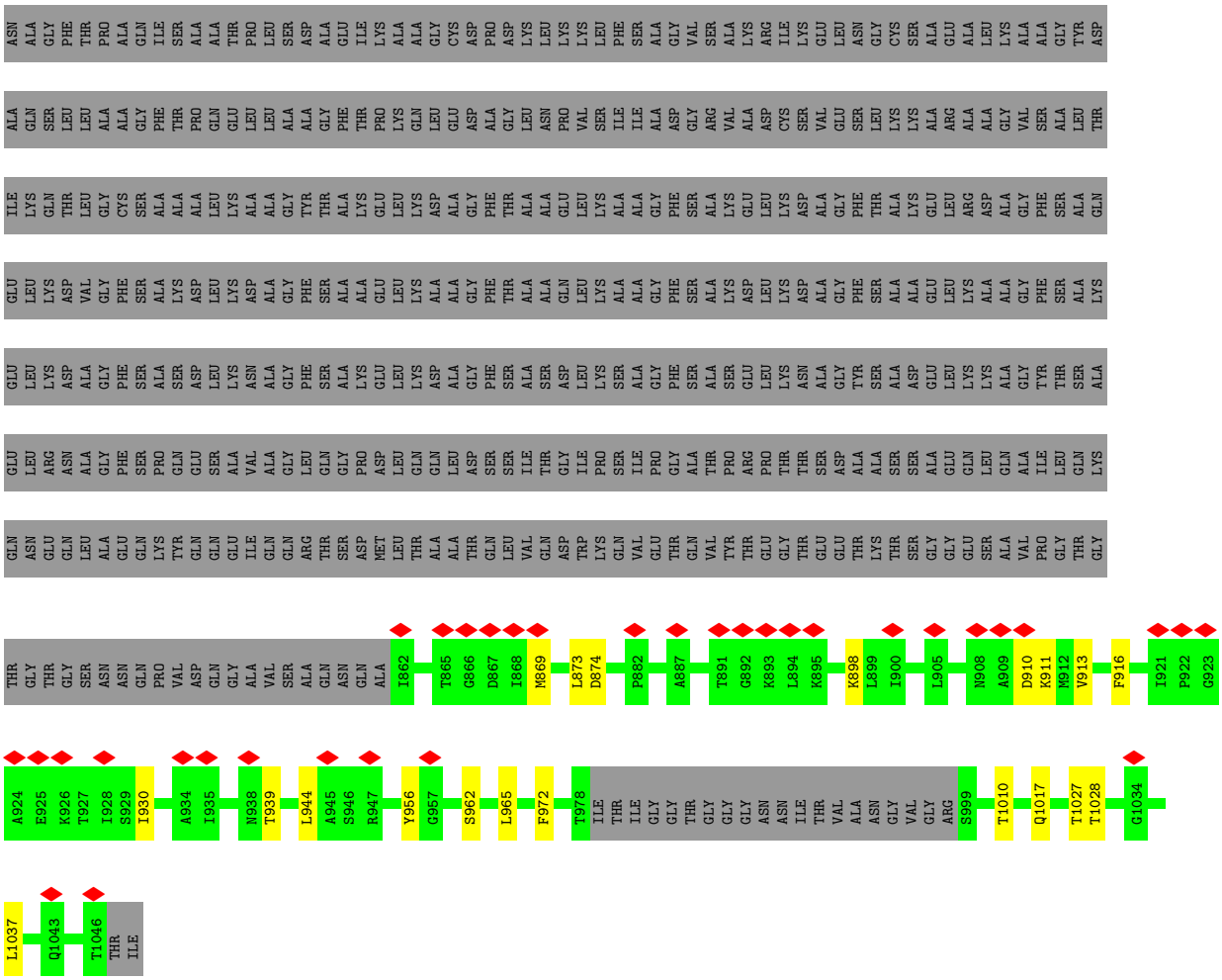




• Molecule 1: IcmE protein

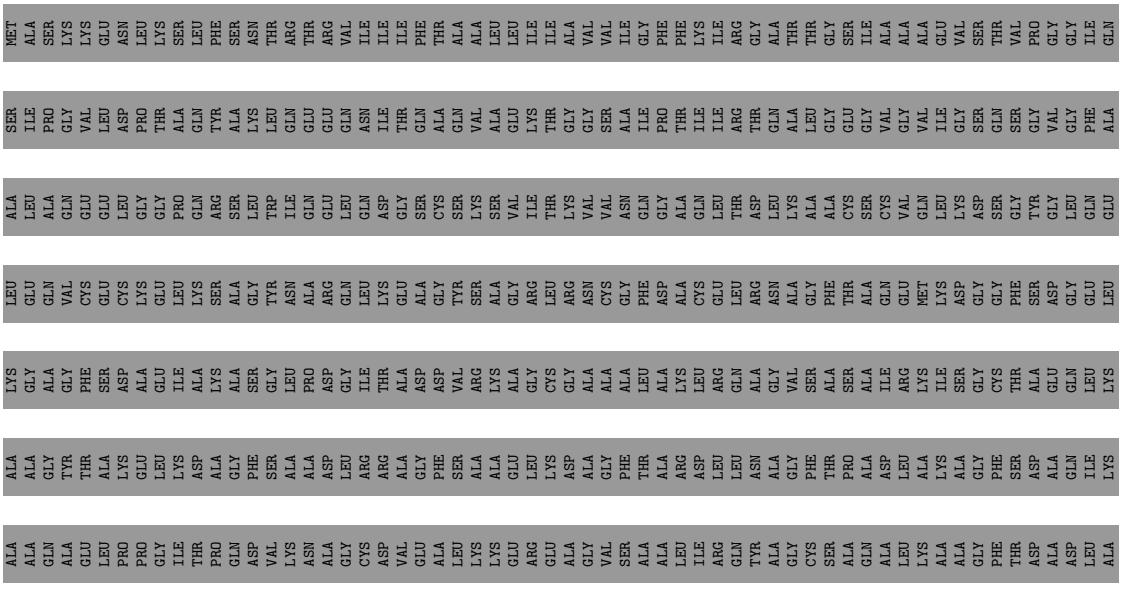
Chain LG:

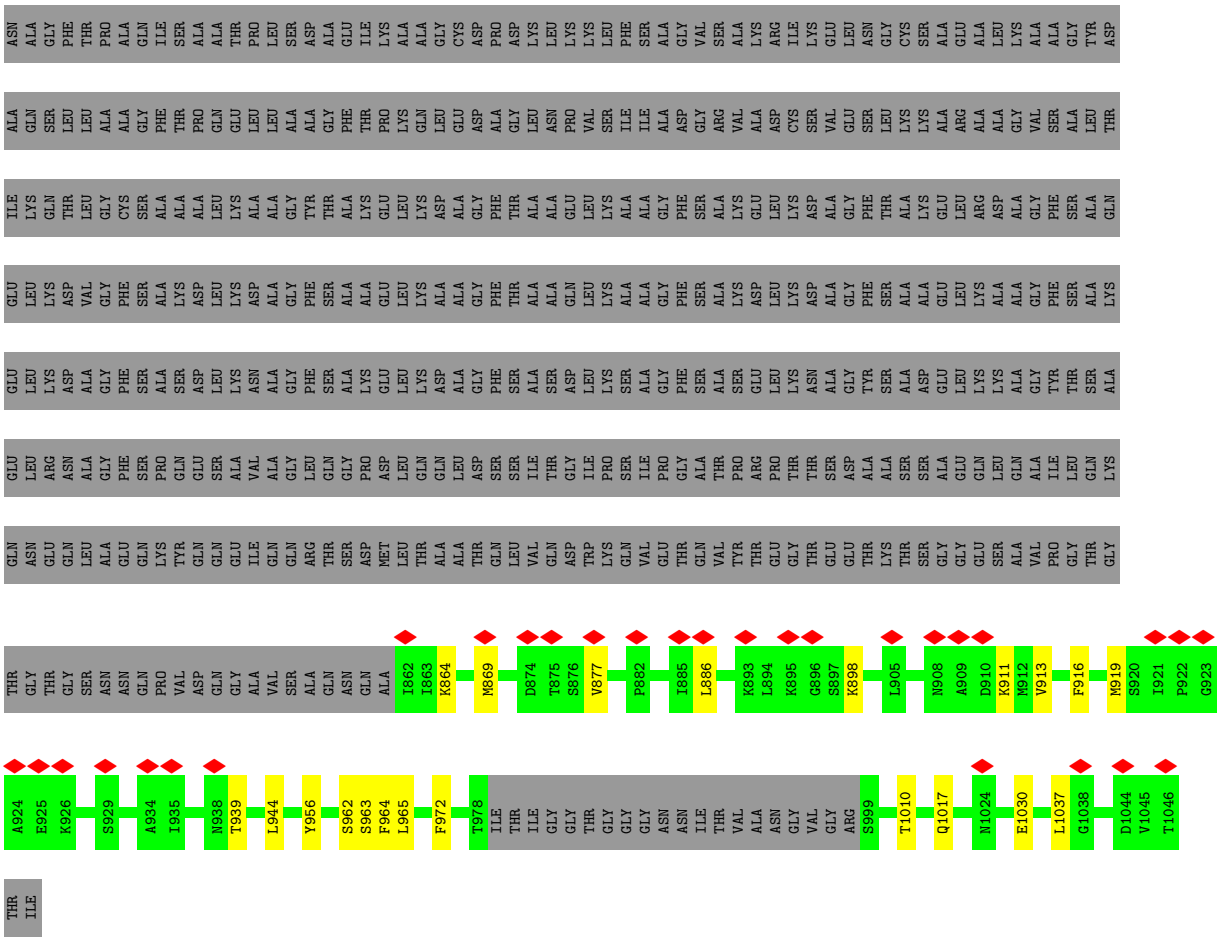




• Molecule 1: IcmE protein

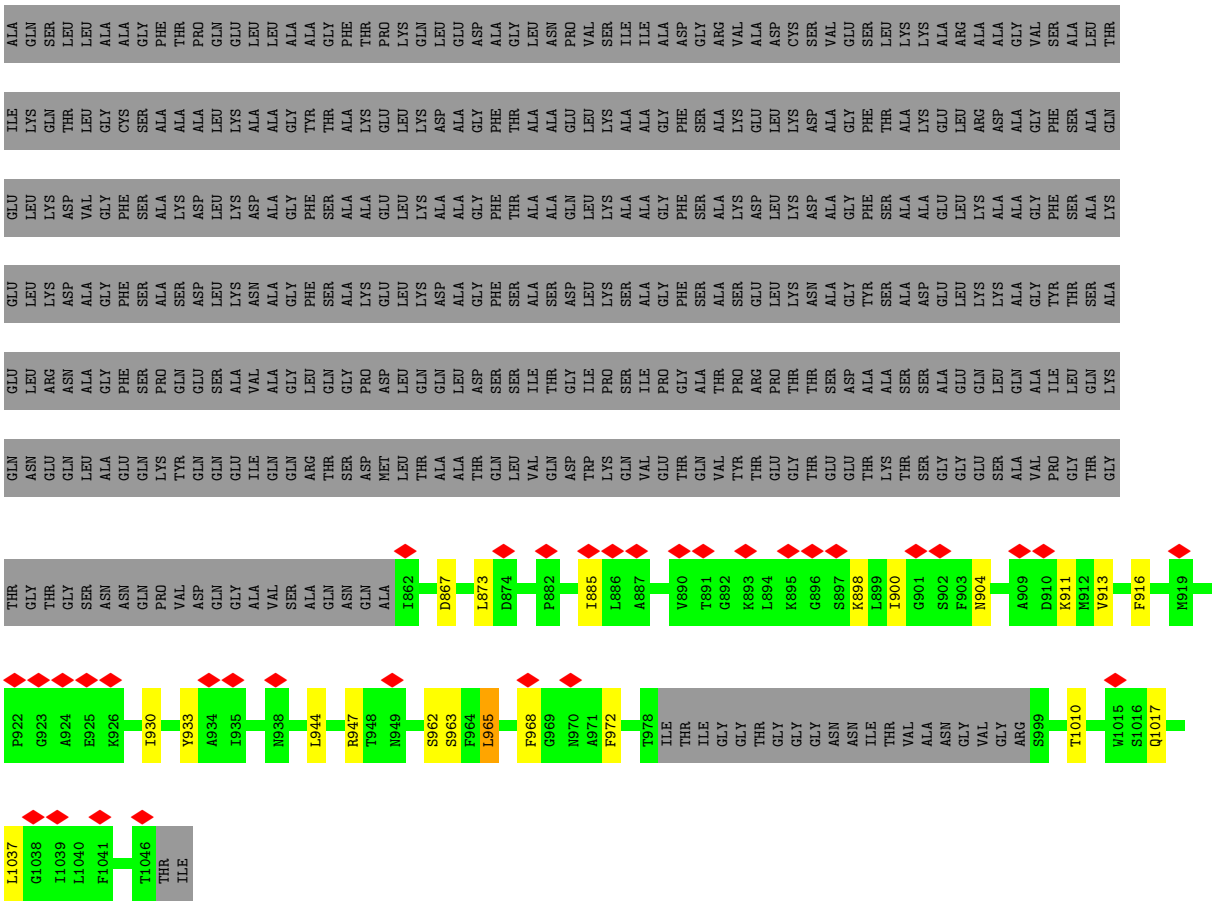
Chain MG:





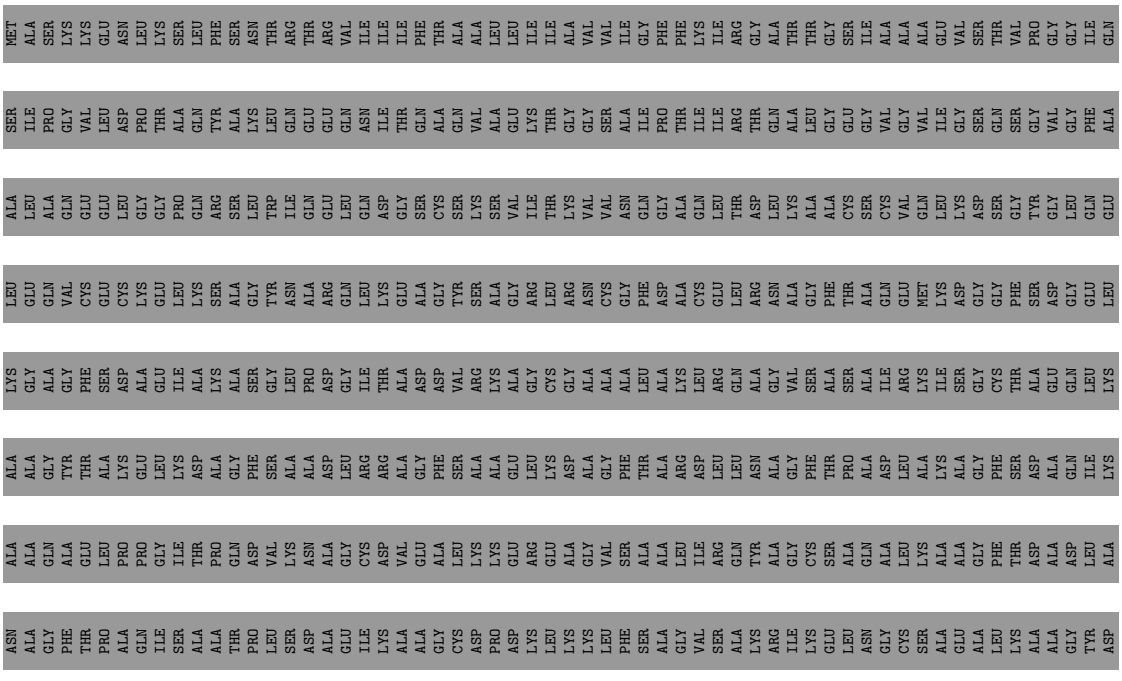
• Molecule 1: IcmE protein

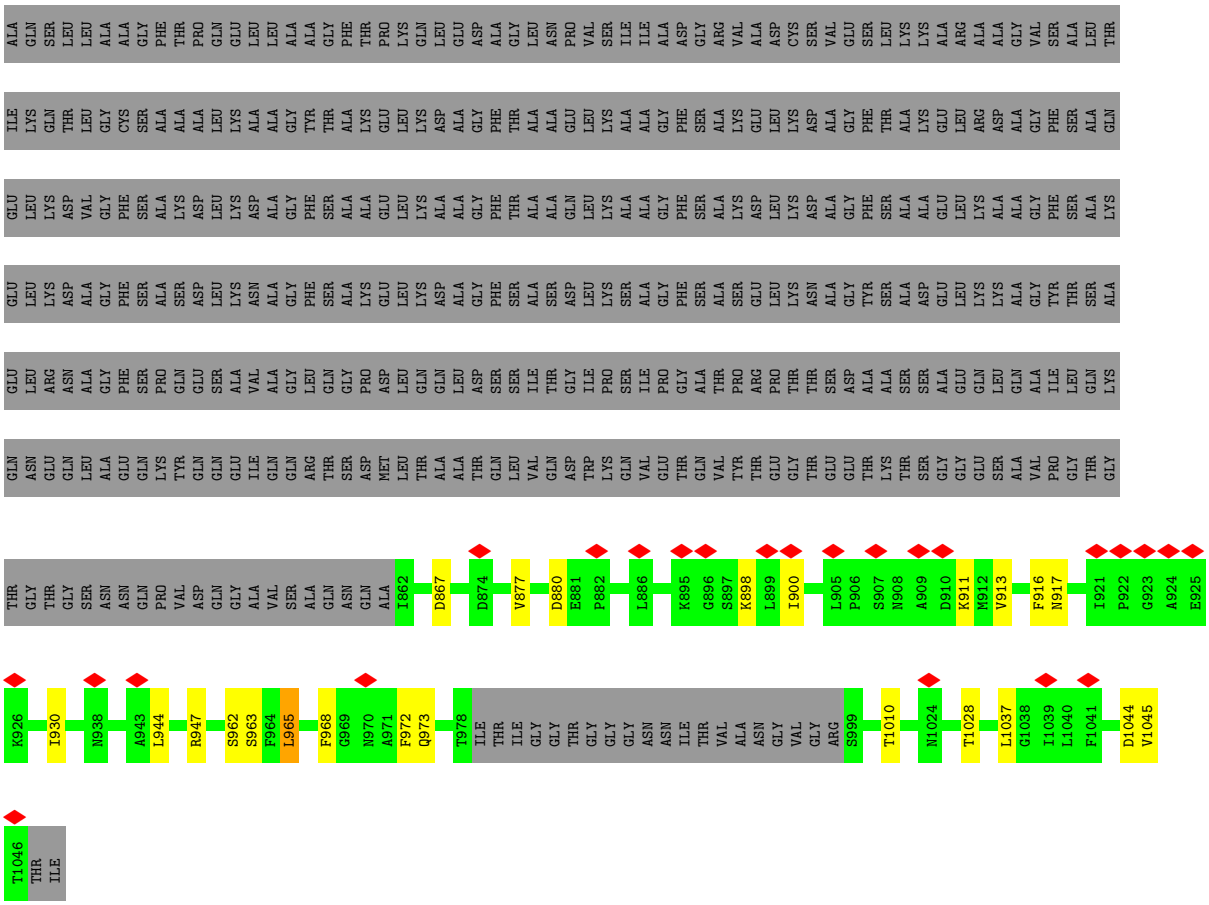
Chain NG:



• Molecule 1: IcmE protein

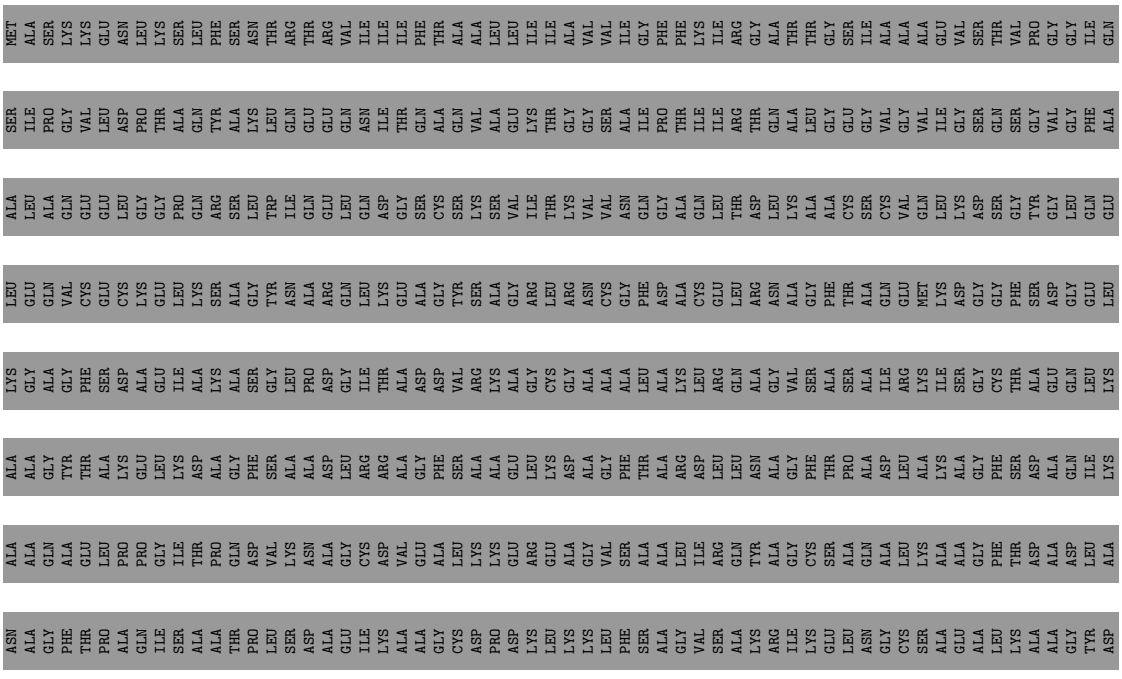
Chain OG:

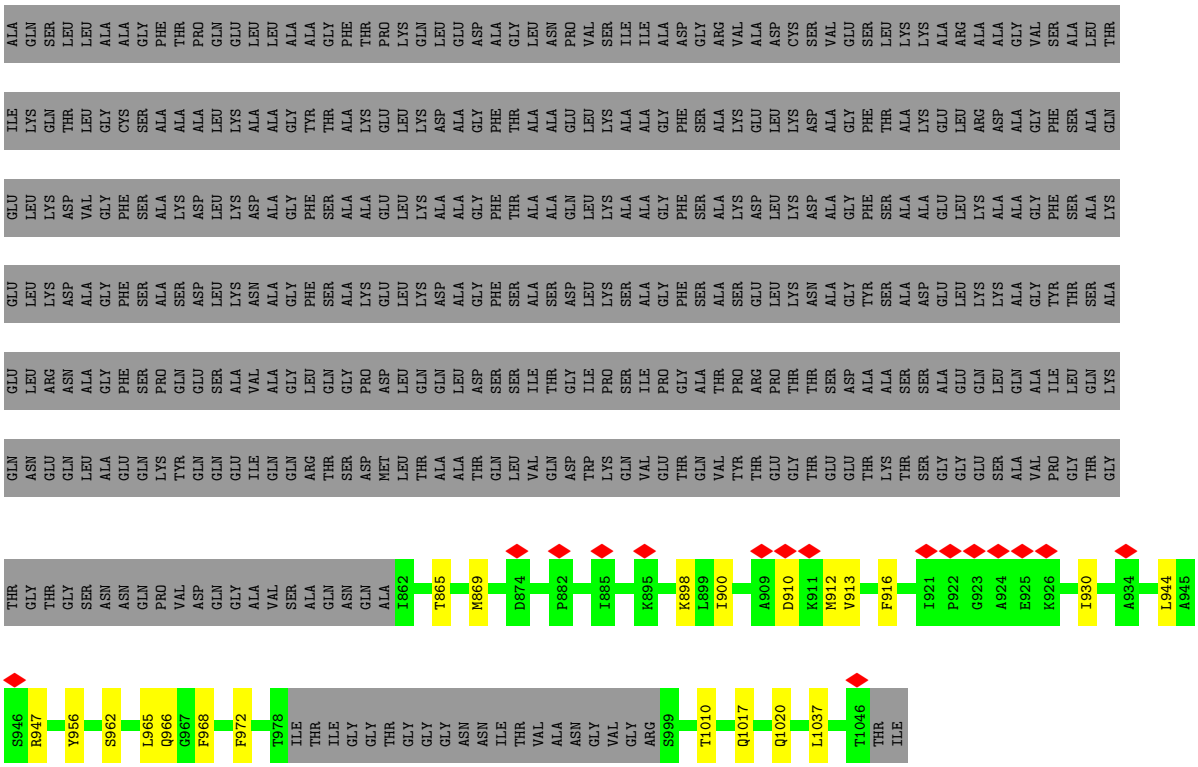




• Molecule 1: IcmE protein

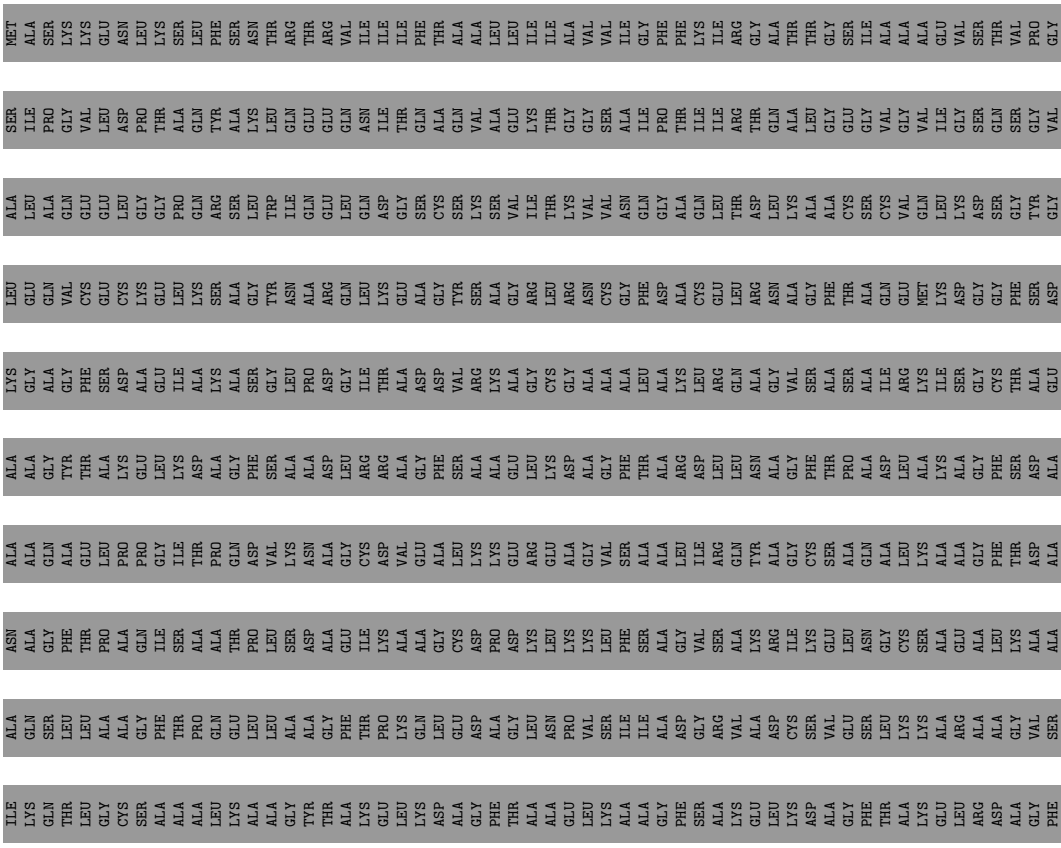
Chain PG:

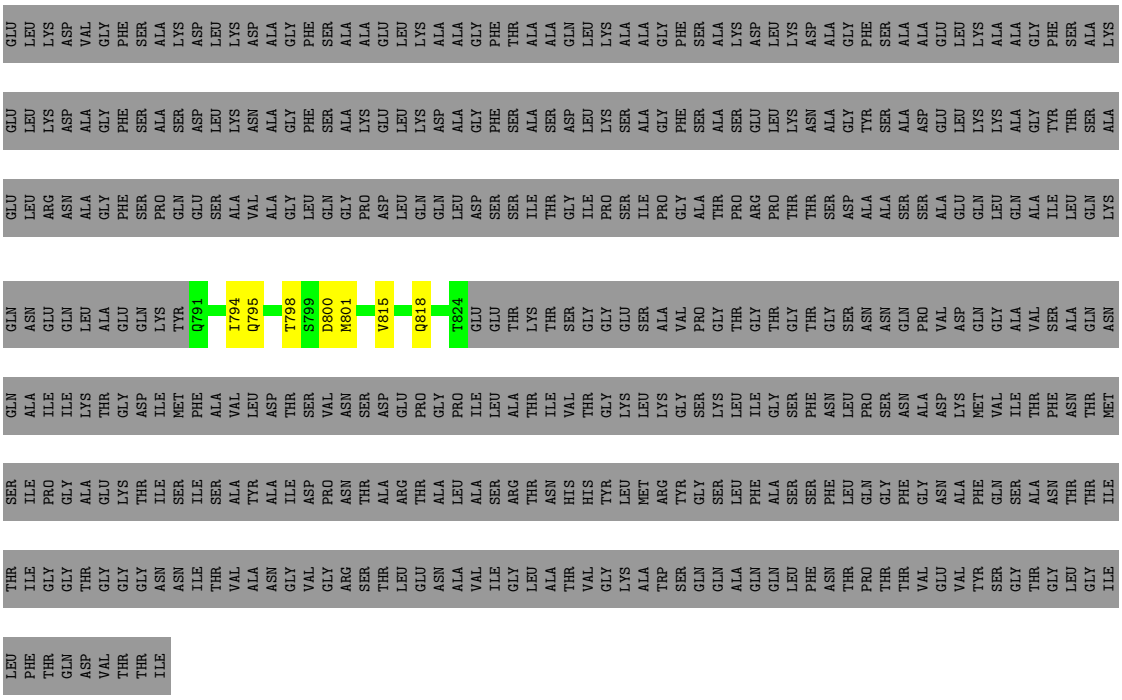




• Molecule 1: IcmE protein

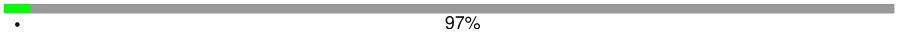
Chain Ag: 97%

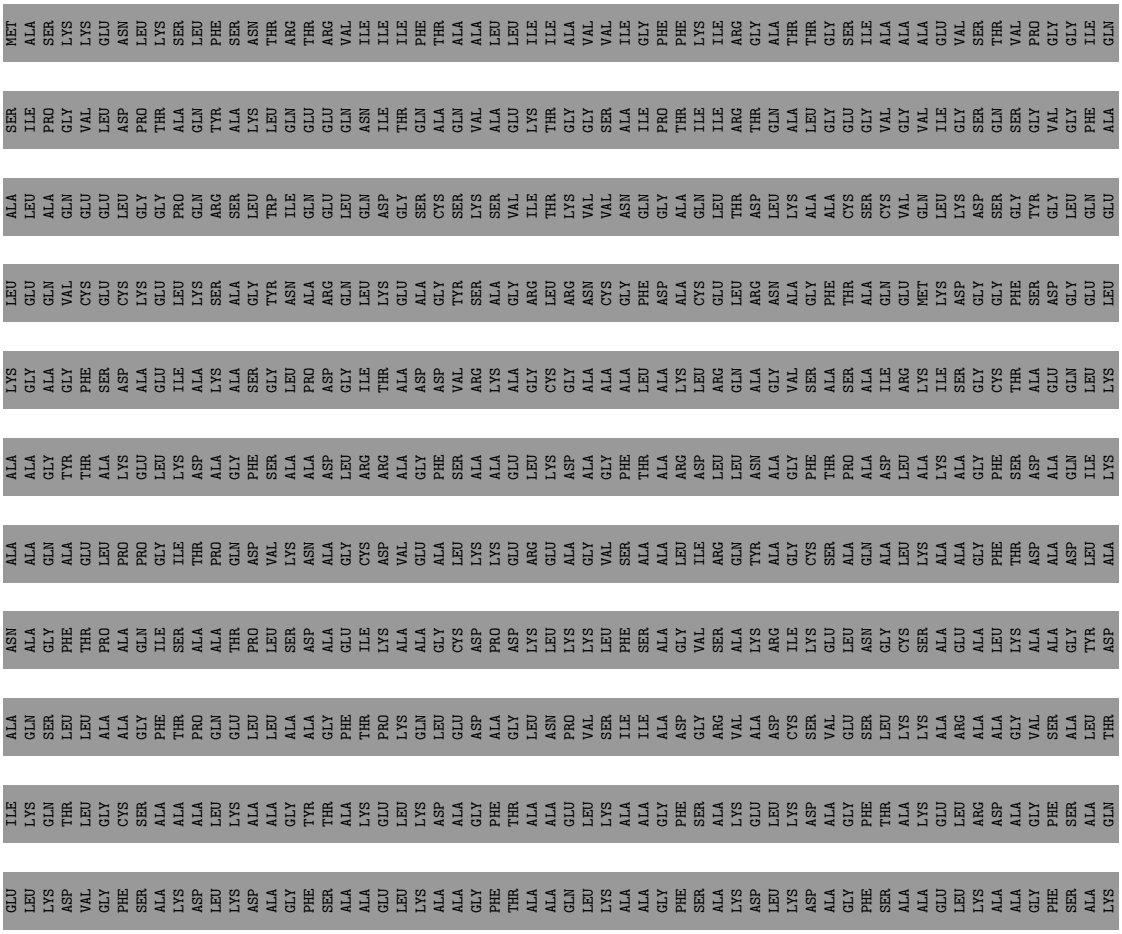


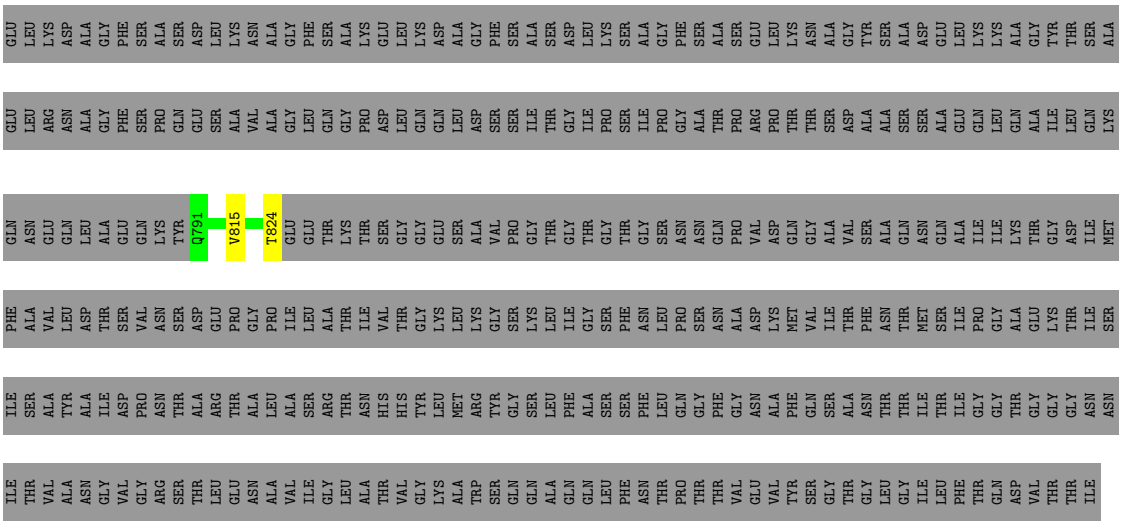


• Molecule 1: IcmE protein

Chain Eg:

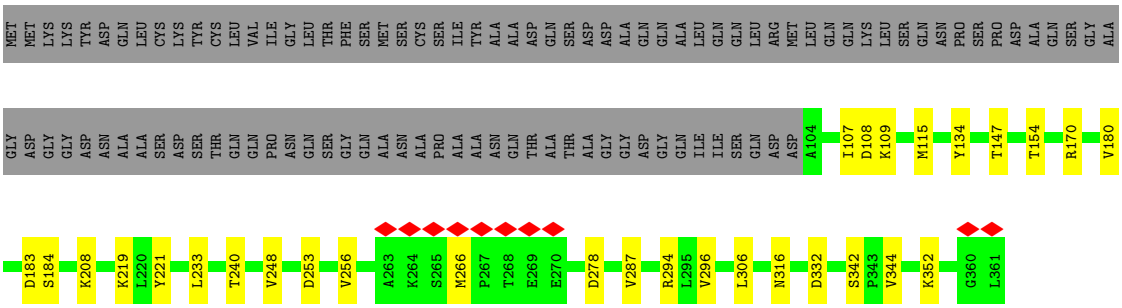






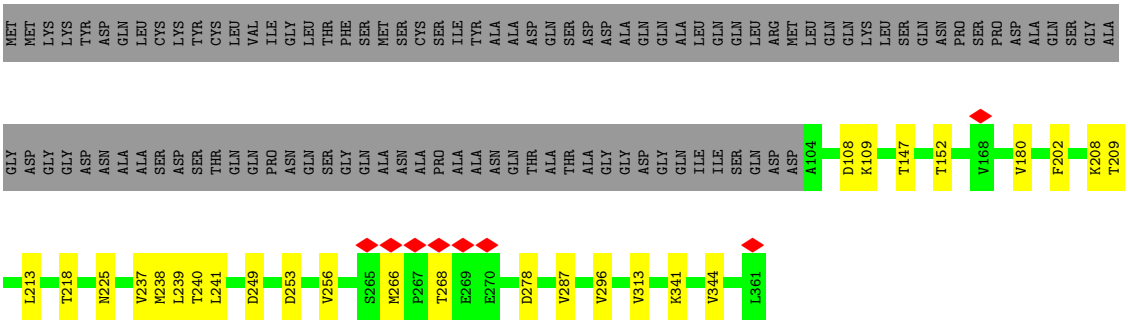
• Molecule 2: Type IV secretion protein IcmK

Chain EH:



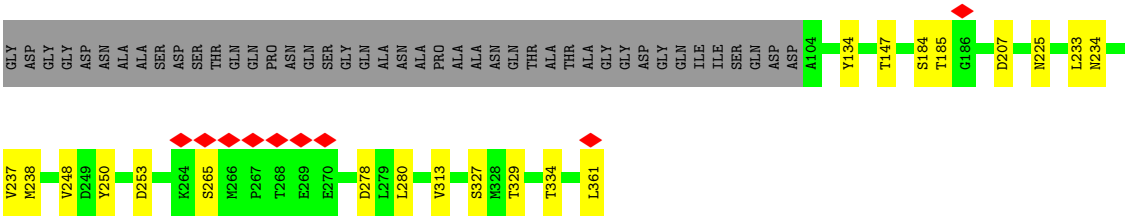
• Molecule 2: Type IV secretion protein IcmK

Chain FH:



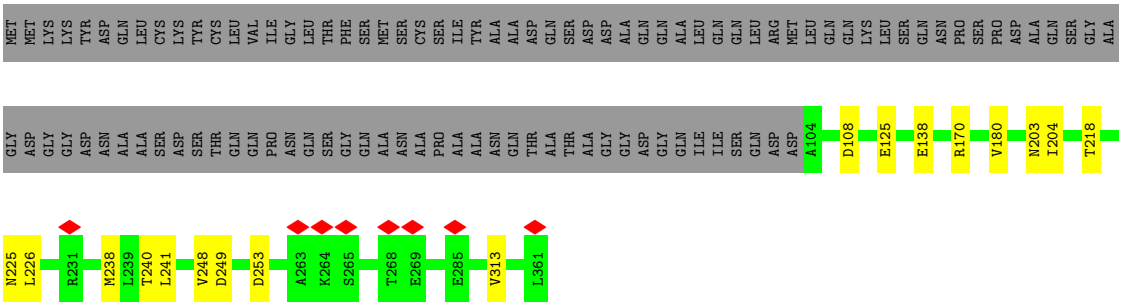
• Molecule 2: Type IV secretion protein IcmK

Chain GH:



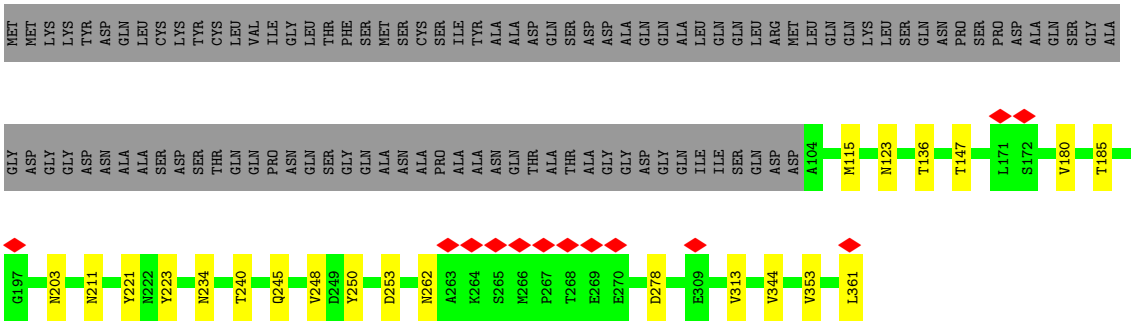
• Molecule 2: Type IV secretion protein IcmK

Chain HH:



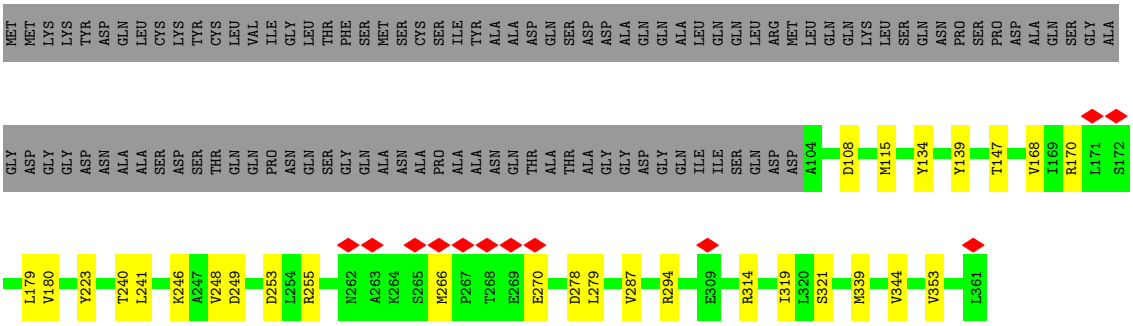
• Molecule 2: Type IV secretion protein IcmK

Chain IH:



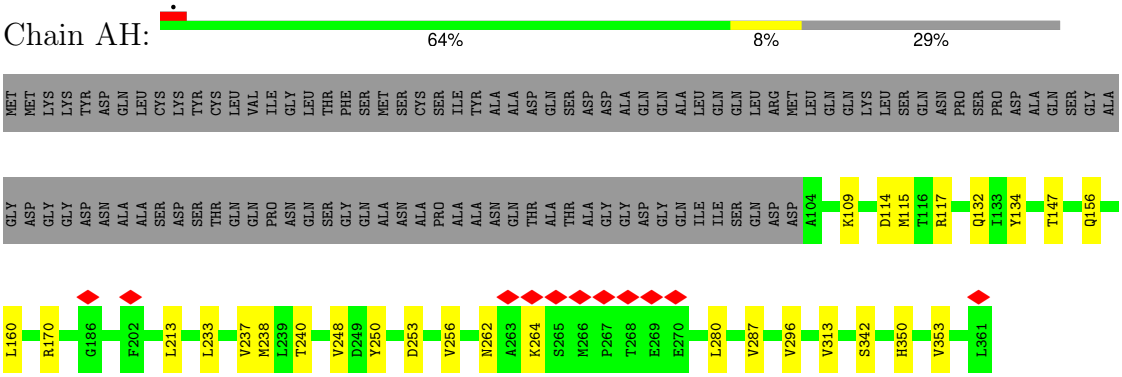
• Molecule 2: Type IV secretion protein IcmK

Chain JH:



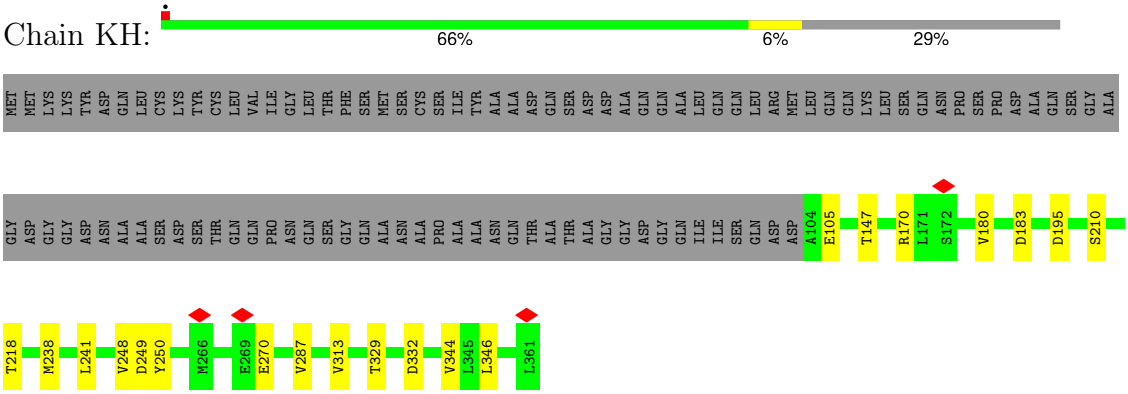
• Molecule 2: Type IV secretion protein IcmK

Chain AH:



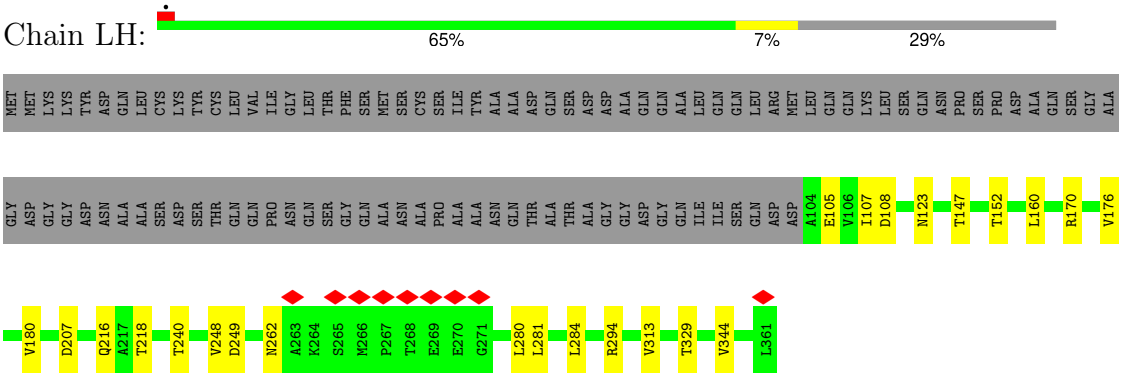
• Molecule 2: Type IV secretion protein IcmK

Chain KH:



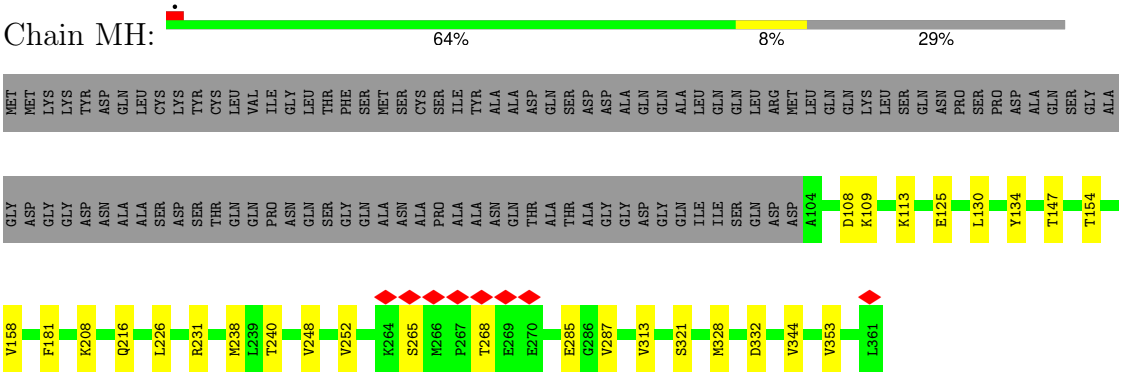
• Molecule 2: Type IV secretion protein IcmK

Chain LH:



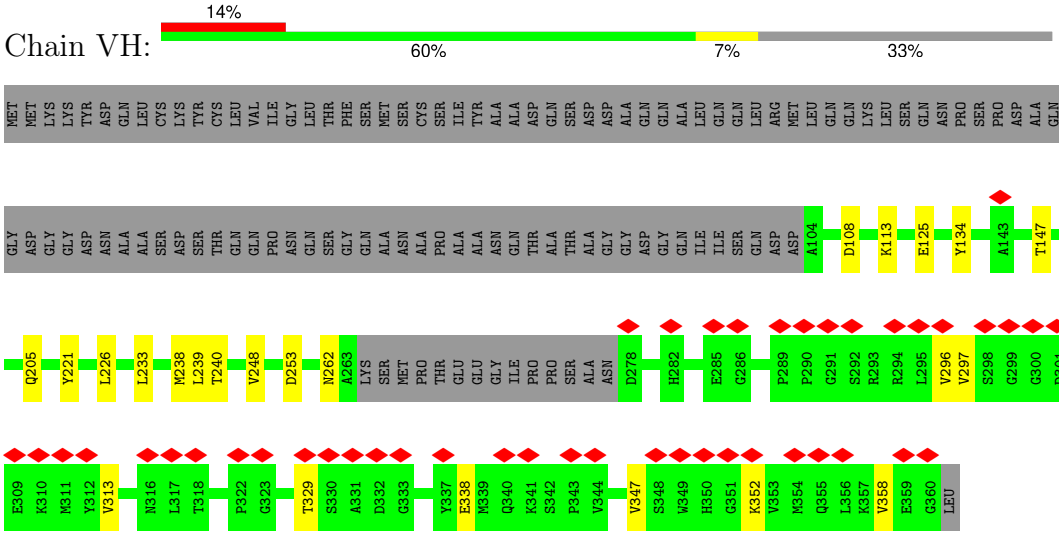
• Molecule 2: Type IV secretion protein IcmK

Chain MH:



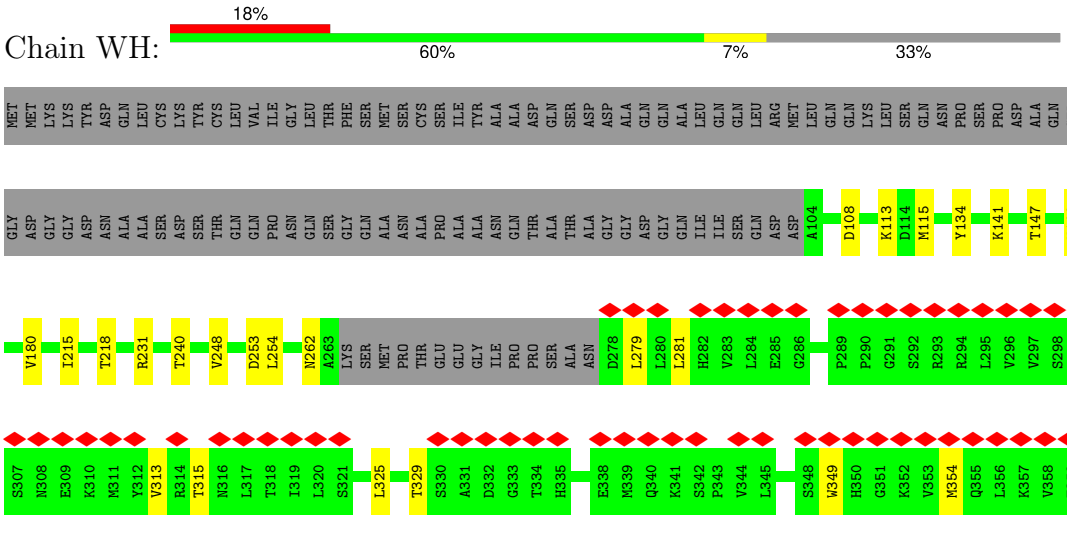
• Molecule 2: Type IV secretion protein IcmK

Chain VH:



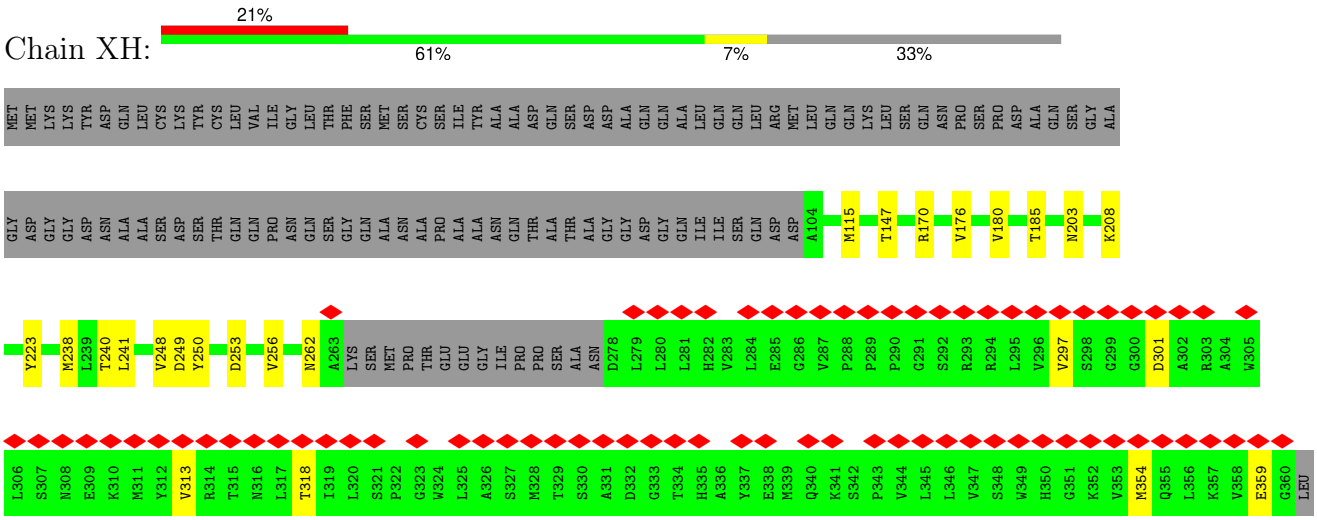
• Molecule 2: Type IV secretion protein IcmK

Chain WH:



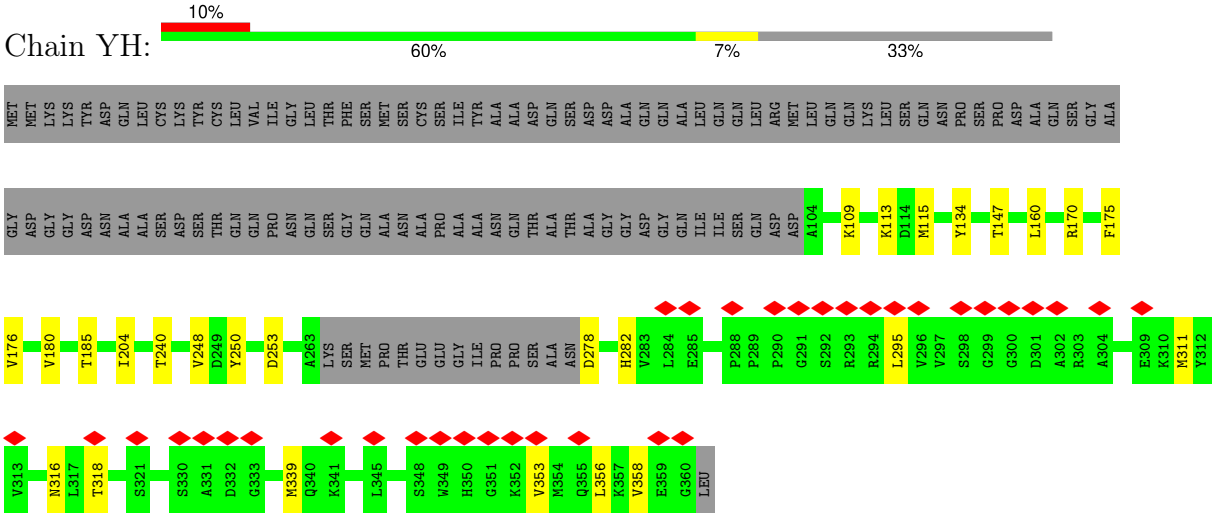
• Molecule 2: Type IV secretion protein IcmK

Chain XH:



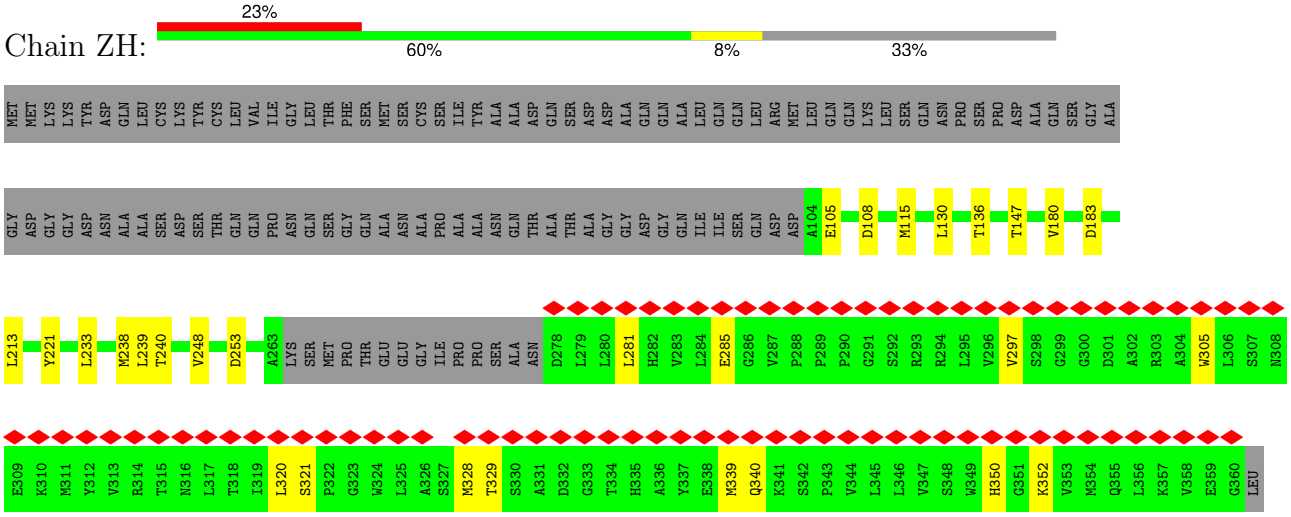
• Molecule 2: Type IV secretion protein IcmK

Chain YH:



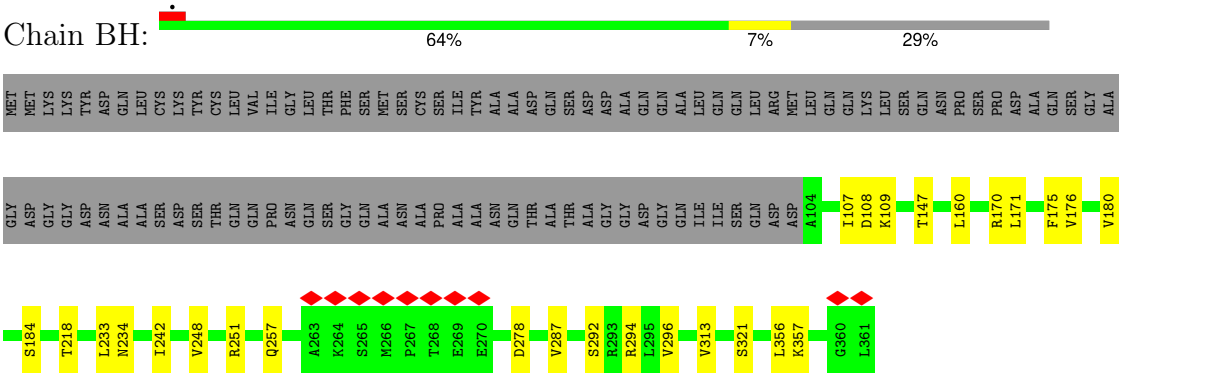
• Molecule 2: Type IV secretion protein IcmK

Chain ZH:



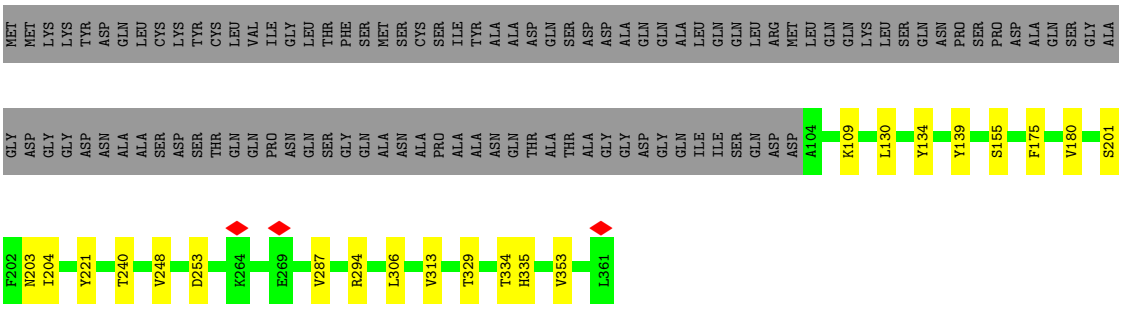
• Molecule 2: Type IV secretion protein IcmK

Chain BH:



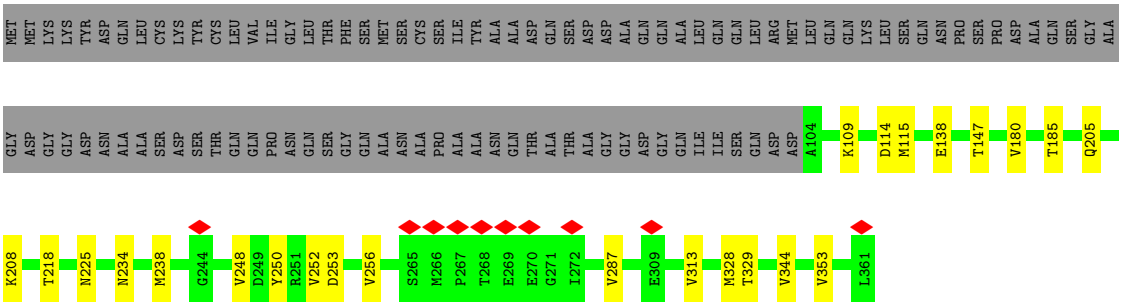
• Molecule 2: Type IV secretion protein IcmK

Chain CH:



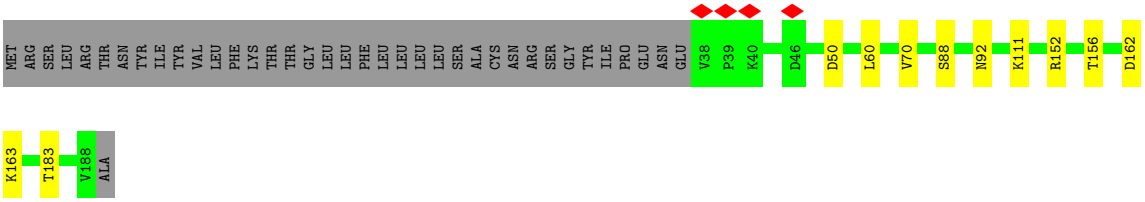
• Molecule 2: Type IV secretion protein IcmK

Chain DH:



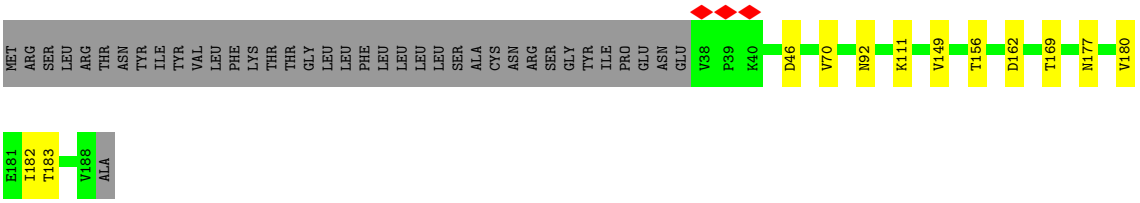
• Molecule 3: Inner membrane lipoprotein YiaD

Chain EK:



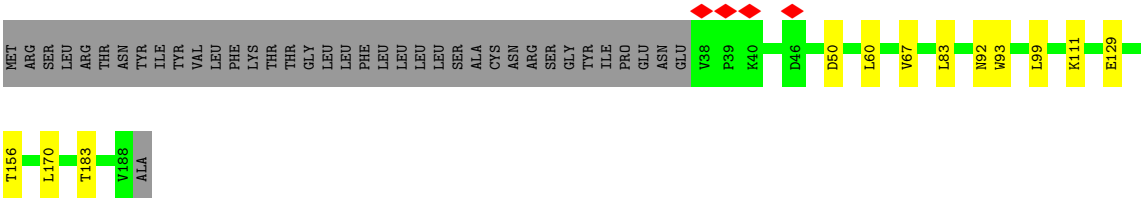
• Molecule 3: Inner membrane lipoprotein YiaD

Chain FK:



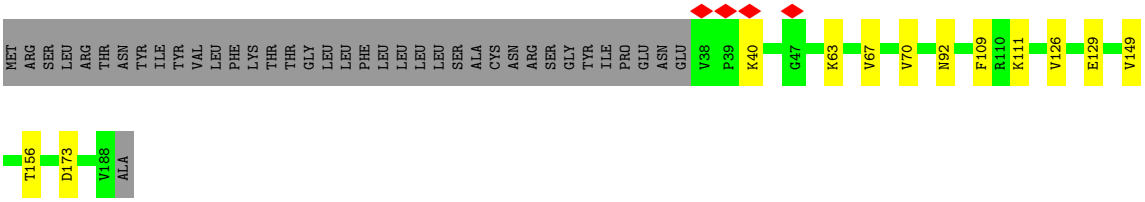
• Molecule 3: Inner membrane lipoprotein YiaD

Chain GK:



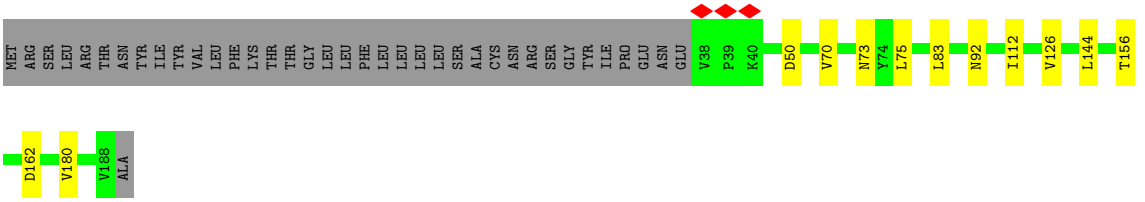
• Molecule 3: Inner membrane lipoprotein YiaD

Chain HK:



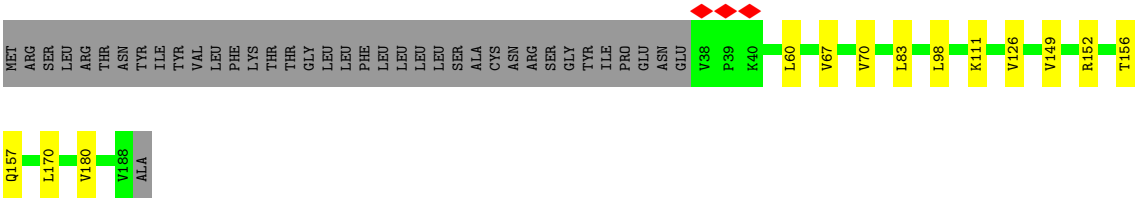
• Molecule 3: Inner membrane lipoprotein YiaD

Chain IK:



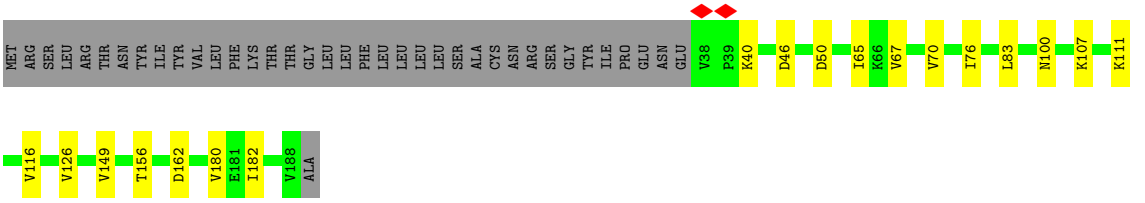
• Molecule 3: Inner membrane lipoprotein YiaD

Chain JK:



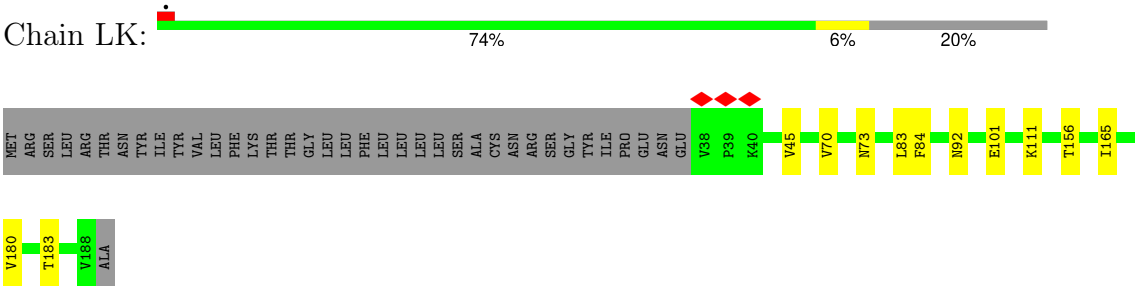
• Molecule 3: Inner membrane lipoprotein YiaD

Chain KK:



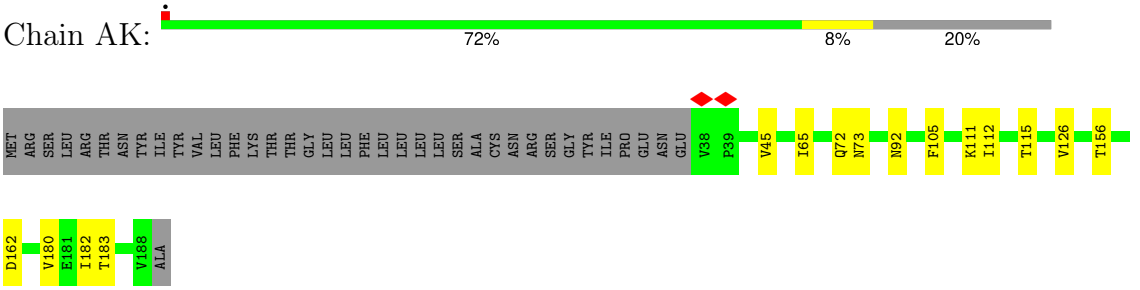
• Molecule 3: Inner membrane lipoprotein YiaD

Chain LK:



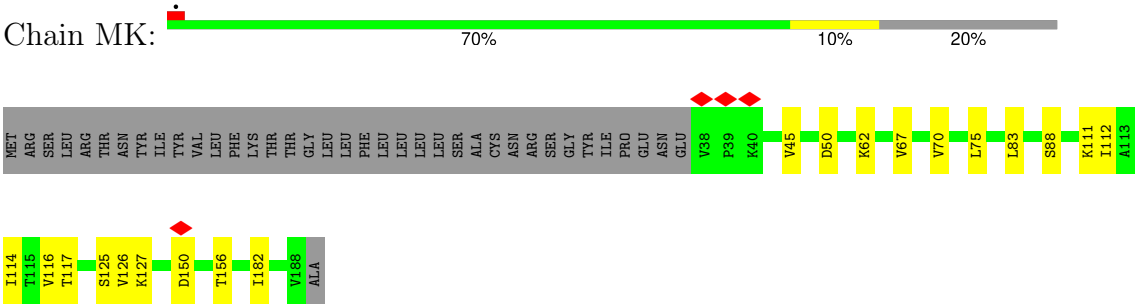
• Molecule 3: Inner membrane lipoprotein YiaD

Chain AK:



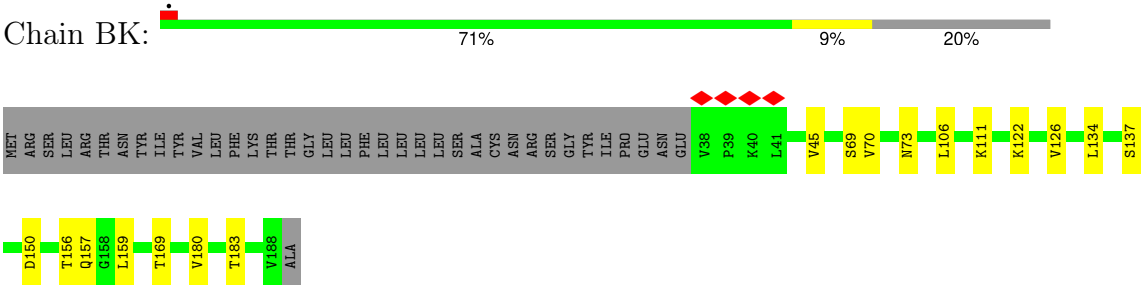
• Molecule 3: Inner membrane lipoprotein YiaD

Chain MK:



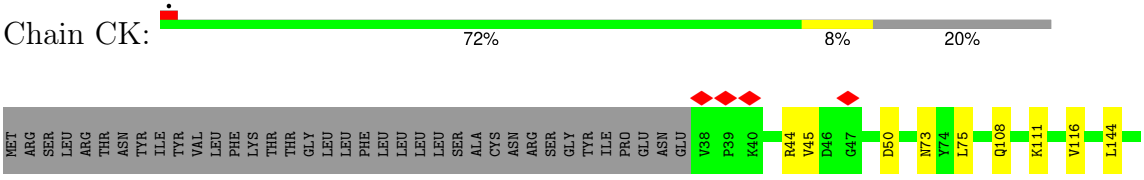
• Molecule 3: Inner membrane lipoprotein YiaD

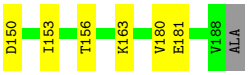
Chain BK:



• Molecule 3: Inner membrane lipoprotein YiaD

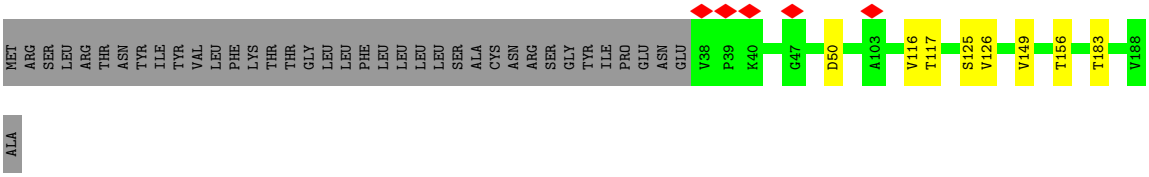
Chain CK:





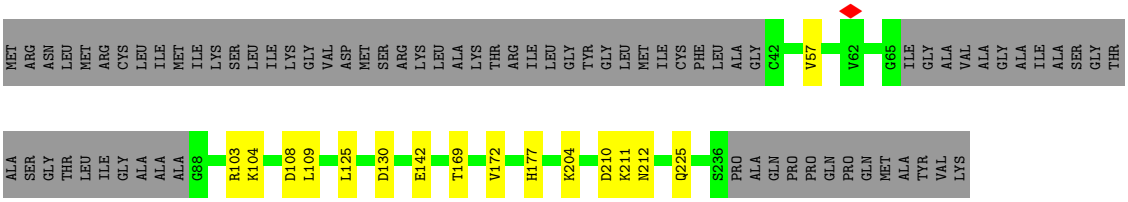
• Molecule 3: Inner membrane lipoprotein YiaD

Chain DK:



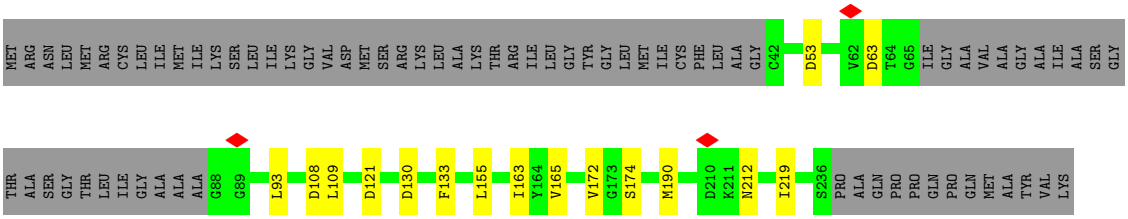
• Molecule 4: Outer membrane protein, OmpA family protein

Chain EL:



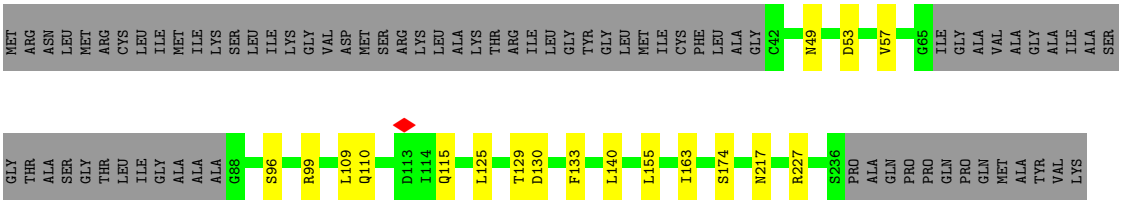
• Molecule 4: Outer membrane protein, OmpA family protein

Chain FL:



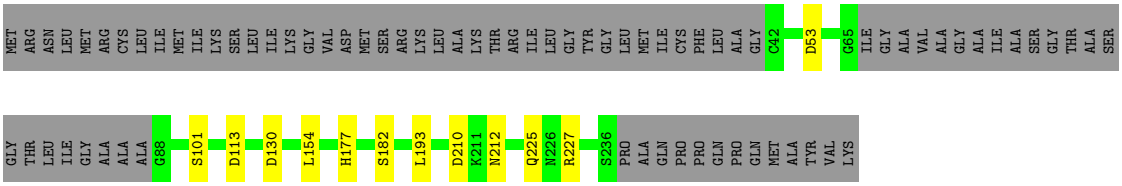
• Molecule 4: Outer membrane protein, OmpA family protein

Chain GL:



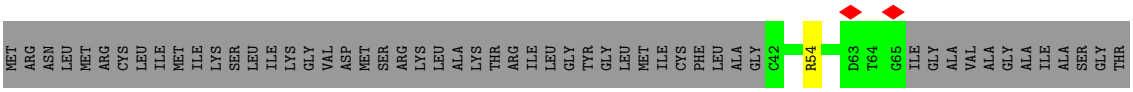
• Molecule 4: Outer membrane protein, OmpA family protein

Chain HL:



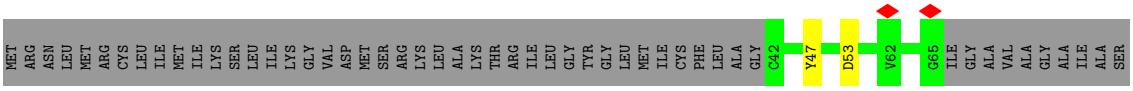
• Molecule 4: Outer membrane protein, OmpA family protein

Chain IL:



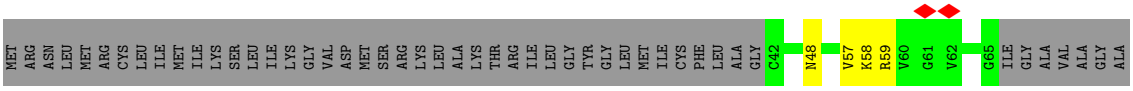
• Molecule 4: Outer membrane protein, OmpA family protein

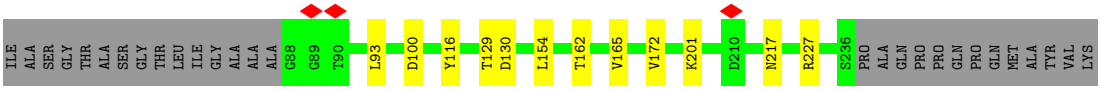
Chain JL:



• Molecule 4: Outer membrane protein, OmpA family protein

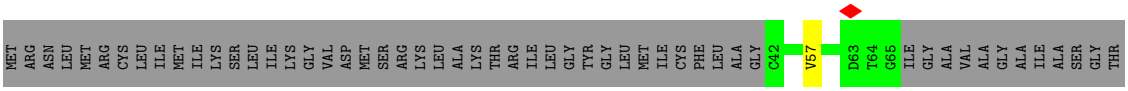
Chain KL:





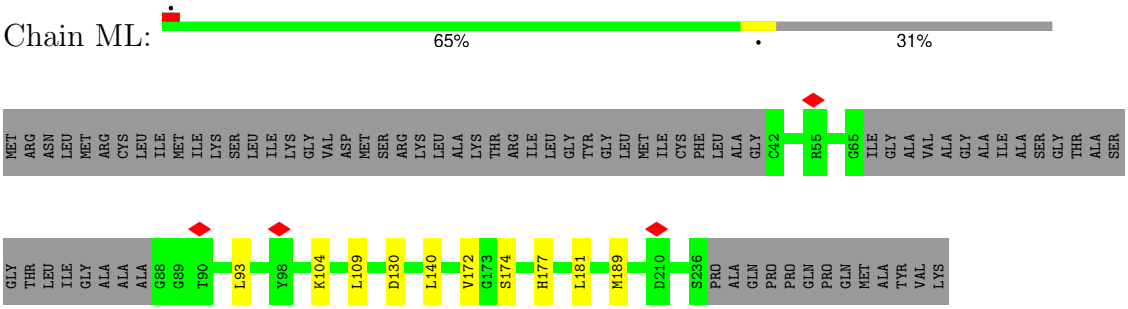
• Molecule 4: Outer membrane protein, OmpA family protein

Chain LL:



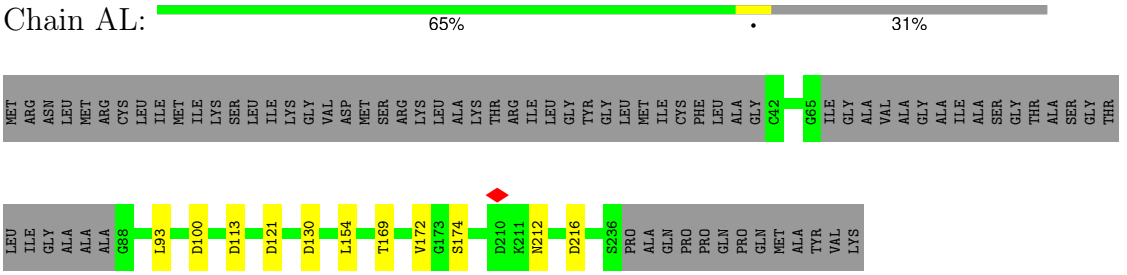
• Molecule 4: Outer membrane protein, OmpA family protein

Chain ML:



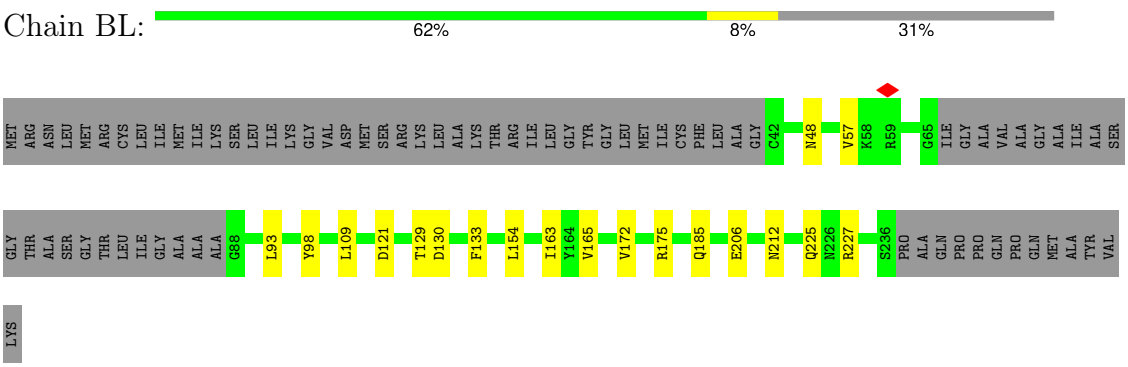
• Molecule 4: Outer membrane protein, OmpA family protein

Chain AL:



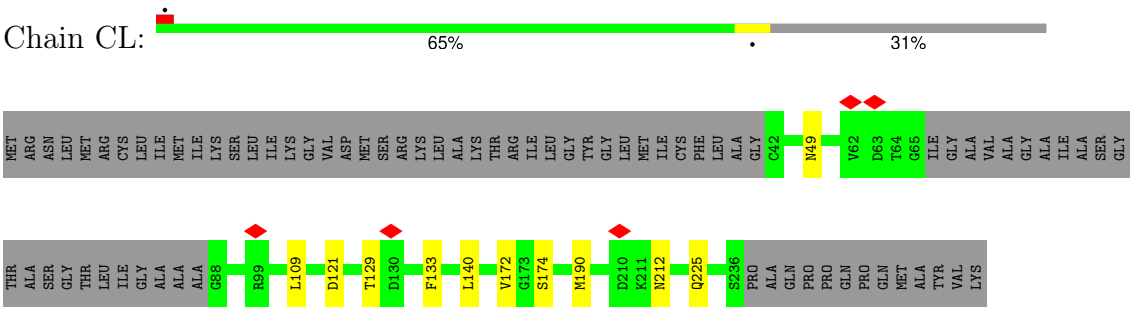
• Molecule 4: Outer membrane protein, OmpA family protein

Chain BL:



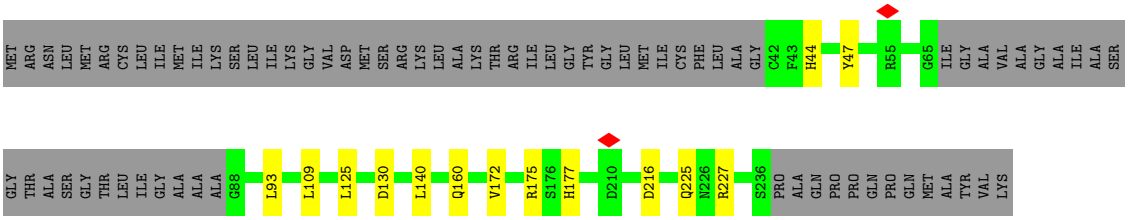
• Molecule 4: Outer membrane protein, OmpA family protein

Chain CL:



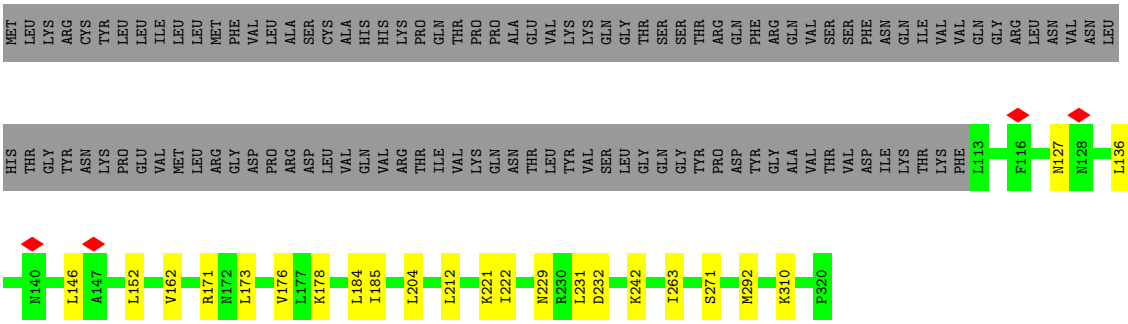
• Molecule 4: Outer membrane protein, OmpA family protein

Chain DL:



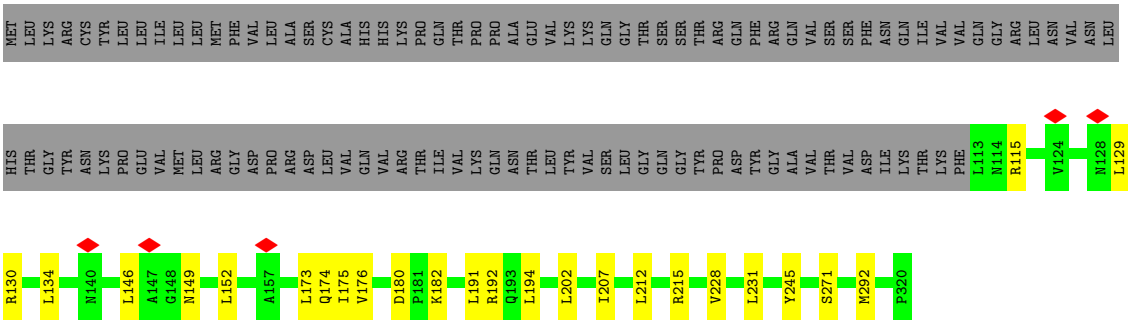
• Molecule 5: DUF2807 domain-containing protein

Chain EM:



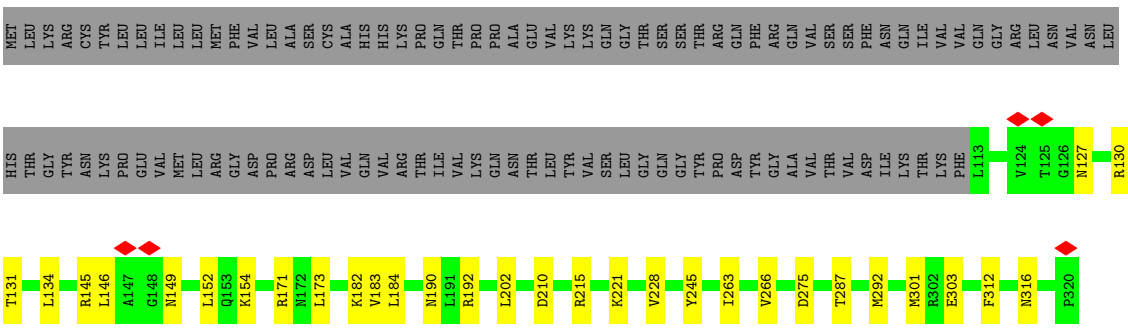
• Molecule 5: DUF2807 domain-containing protein

Chain FM:



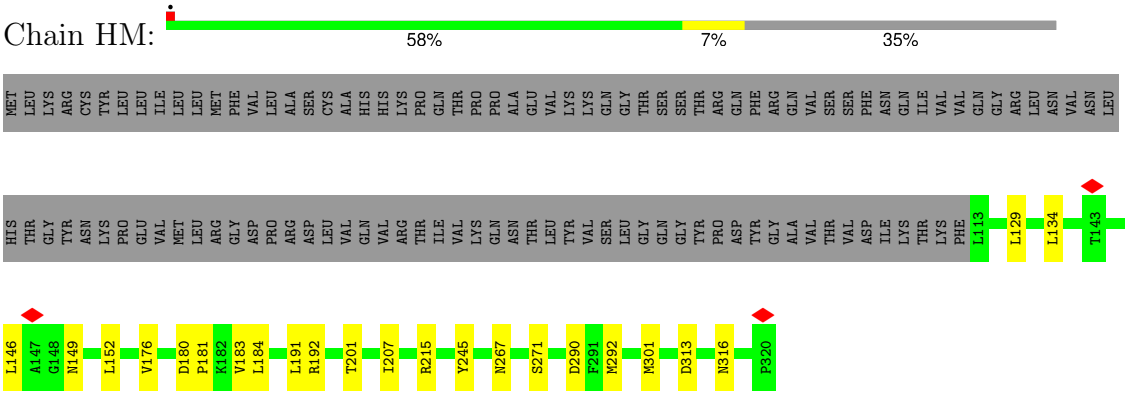
• Molecule 5: DUF2807 domain-containing protein

Chain GM:



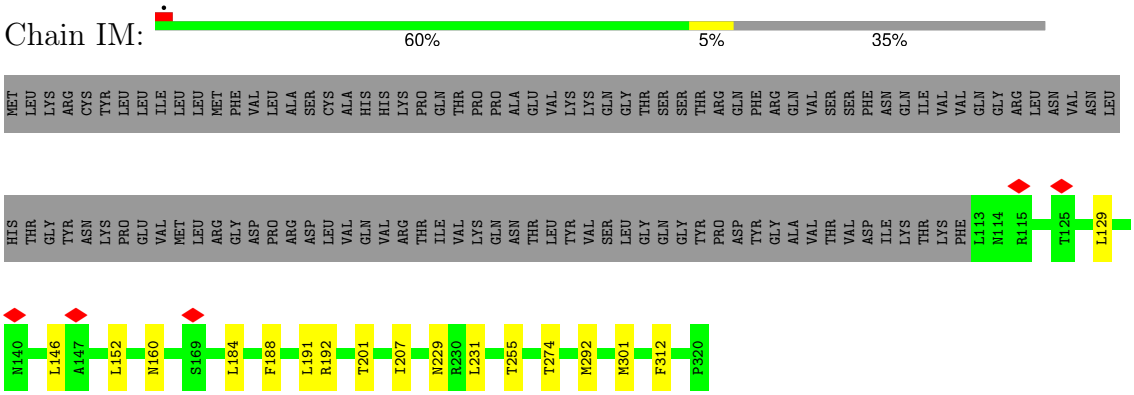
• Molecule 5: DUF2807 domain-containing protein

Chain HM:



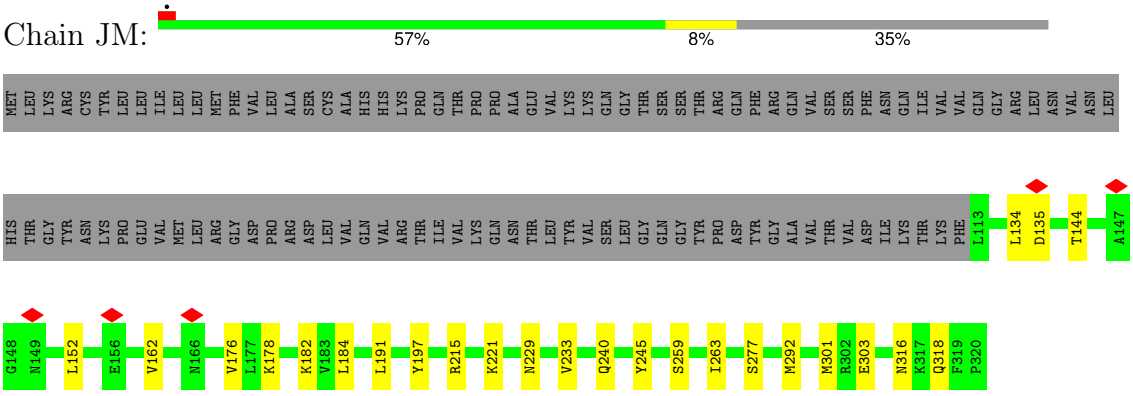
• Molecule 5: DUF2807 domain-containing protein

Chain IM:



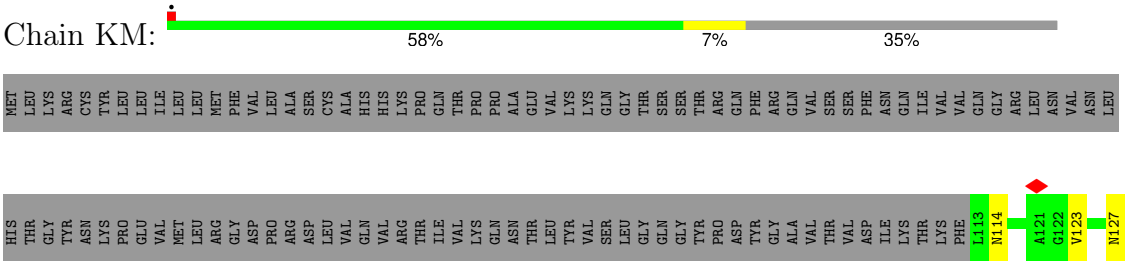
• Molecule 5: DUF2807 domain-containing protein

Chain JM:



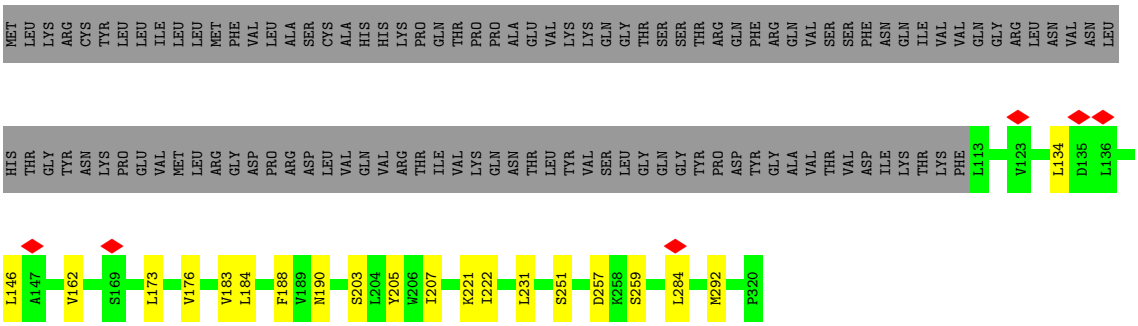
• Molecule 5: DUF2807 domain-containing protein

Chain KM:



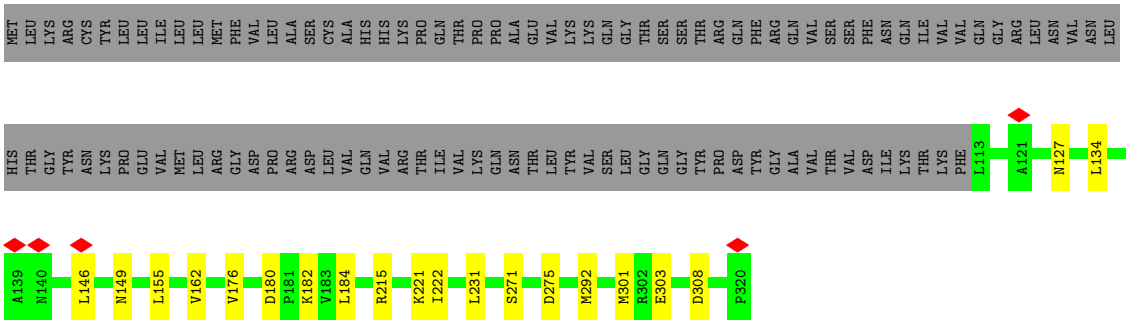
• Molecule 5: DUF2807 domain-containing protein

Chain LM:



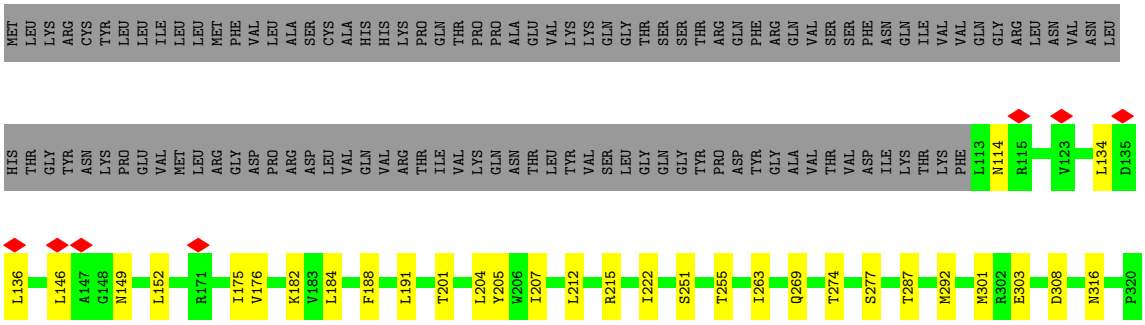
• Molecule 5: DUF2807 domain-containing protein

Chain MM:



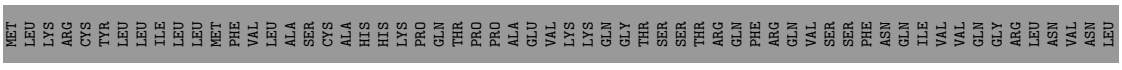
• Molecule 5: DUF2807 domain-containing protein

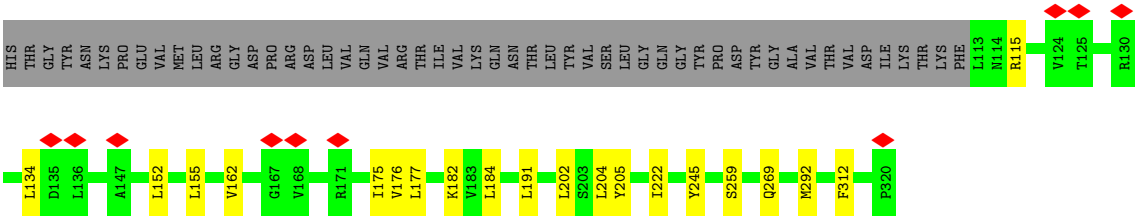
Chain AM:



• Molecule 5: DUF2807 domain-containing protein

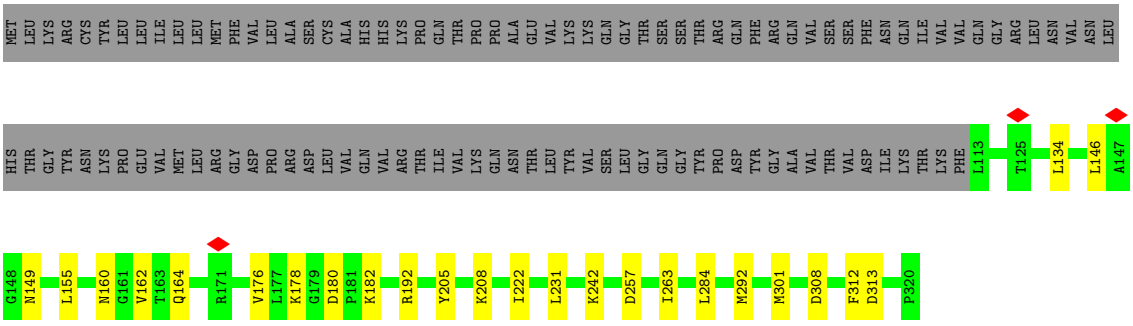
Chain BM:





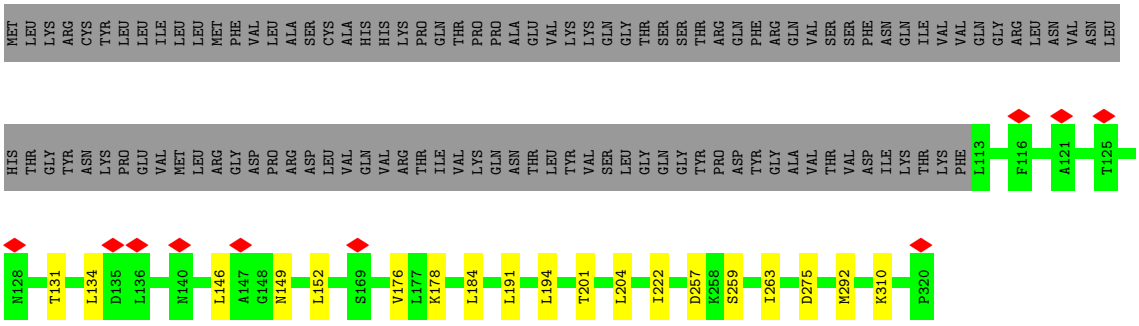
• Molecule 5: DUF2807 domain-containing protein

Chain CM:



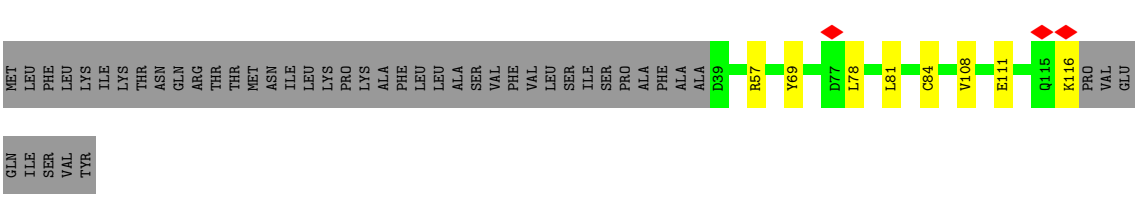
• Molecule 5: DUF2807 domain-containing protein

Chain DM:



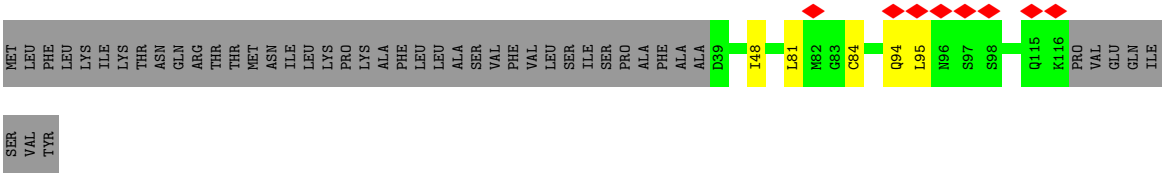
• Molecule 6: Neurogenic locus notch

Chain EN:



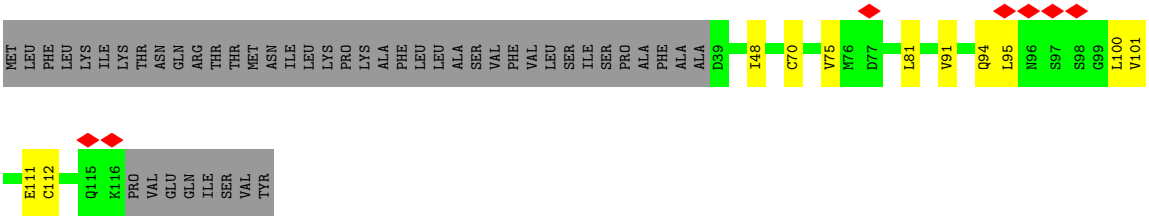
• Molecule 6: Neurogenic locus notch

Chain FN:



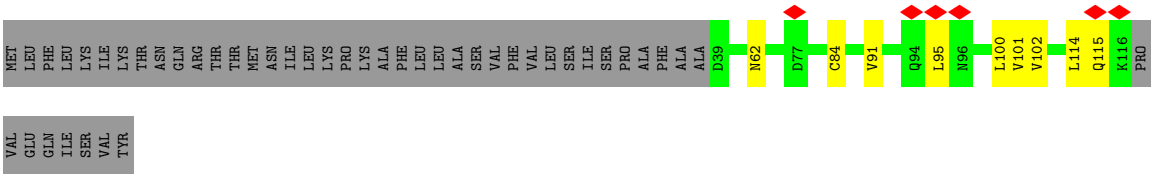
• Molecule 6: Neurogenic locus notch

Chain GN:



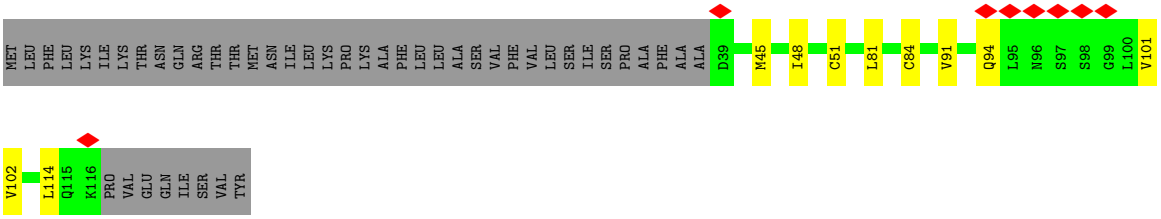
• Molecule 6: Neurogenic locus notch

Chain HN:



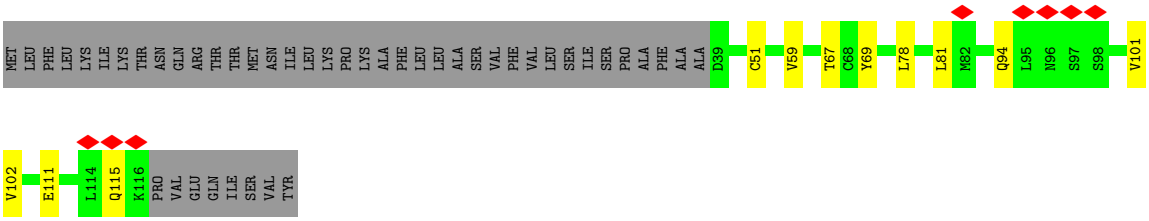
• Molecule 6: Neurogenic locus notch

Chain IN:



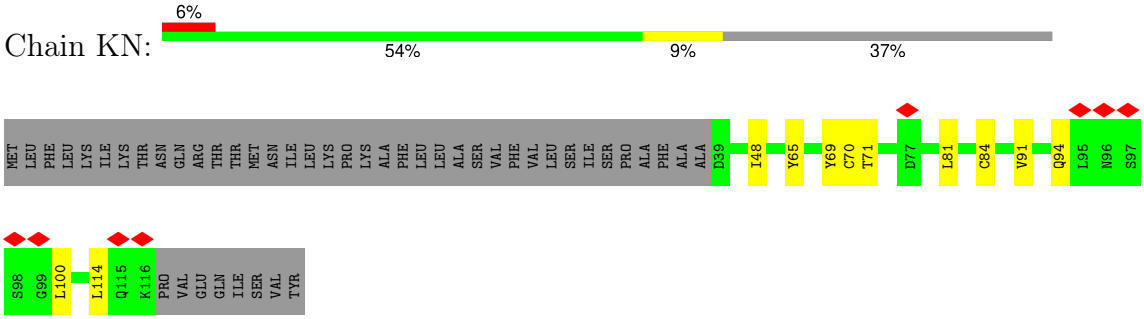
• Molecule 6: Neurogenic locus notch

Chain JN:



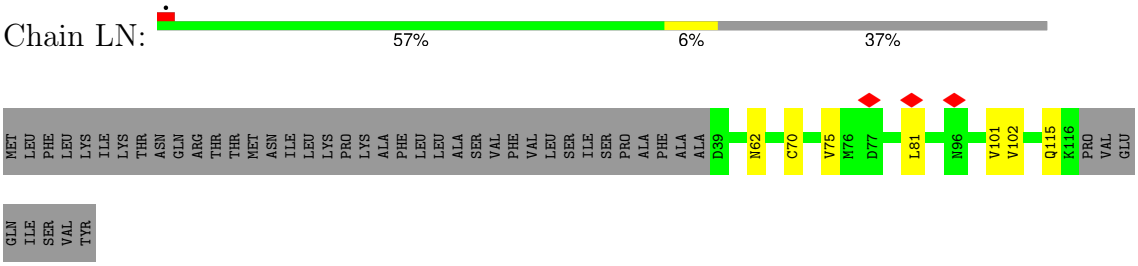
• Molecule 6: Neurogenic locus notch

Chain KN:



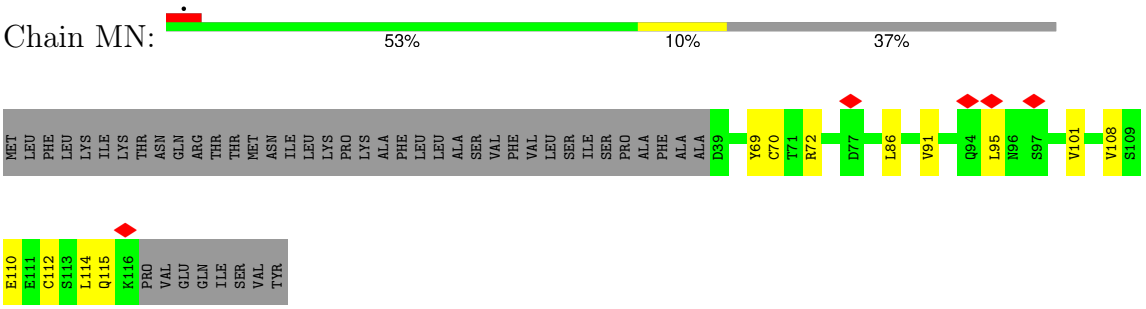
• Molecule 6: Neurogenic locus notch

Chain LN:



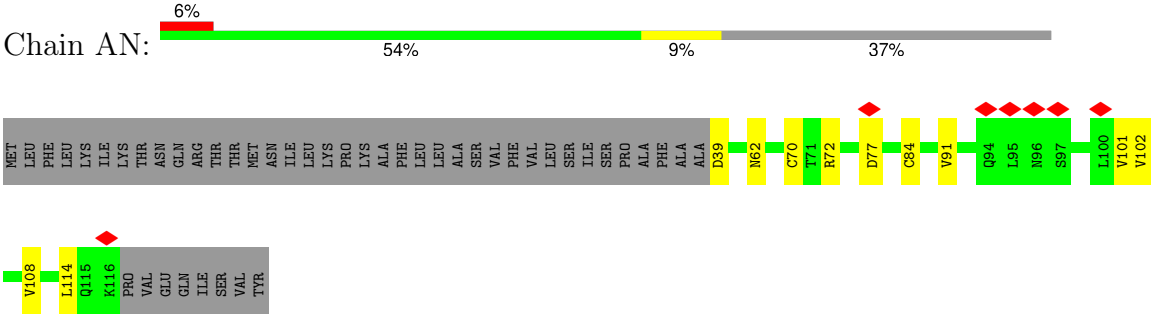
• Molecule 6: Neurogenic locus notch

Chain MN:



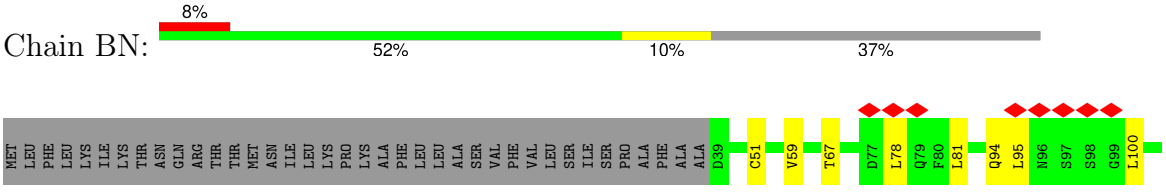
• Molecule 6: Neurogenic locus notch

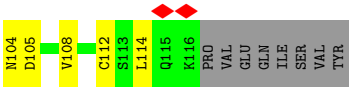
Chain AN:



• Molecule 6: Neurogenic locus notch

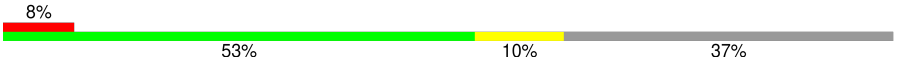
Chain BN:

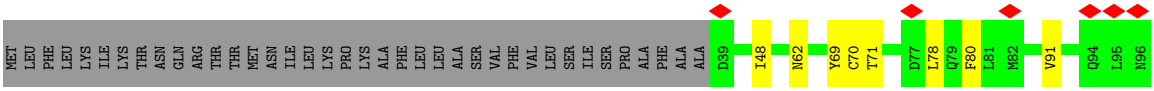


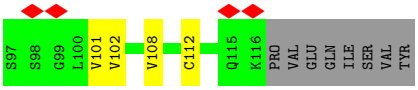


• Molecule 6: Neurogenic locus notch

Chain CN:

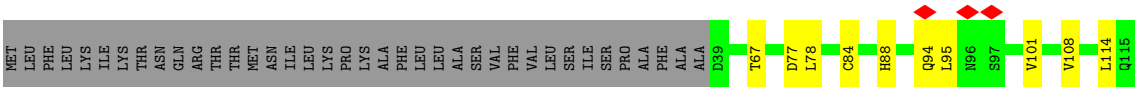


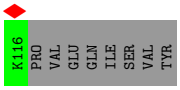




• Molecule 6: Neurogenic locus notch

Chain DN:





• Molecule 7: Unknown protein fragment

Chain EU:

There are no outlier residues recorded for this chain.

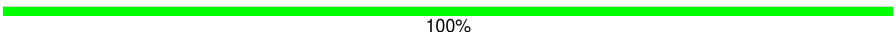
• Molecule 7: Unknown protein fragment

Chain FU:

There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

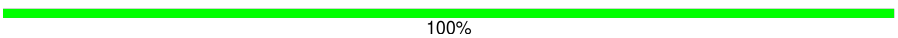
Chain GU:



There are no outlier residues recorded for this chain.

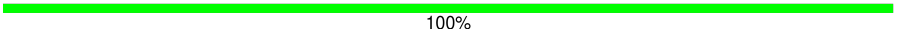
• Molecule 7: Unknown protein fragment

Chain HU:



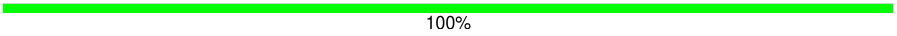
There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain IU: 

There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain JU: 

There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain KU: 

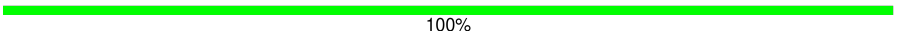
There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain LU: 

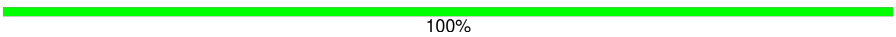
There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain MU: 

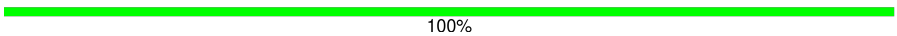
There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain AU: 

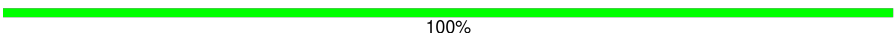
There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain BU: 

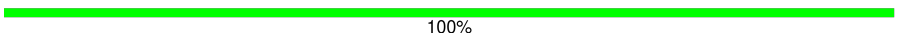
There are no outlier residues recorded for this chain.

• Molecule 7: Unknown protein fragment

Chain CU: 

There are no outlier residues recorded for this chain.

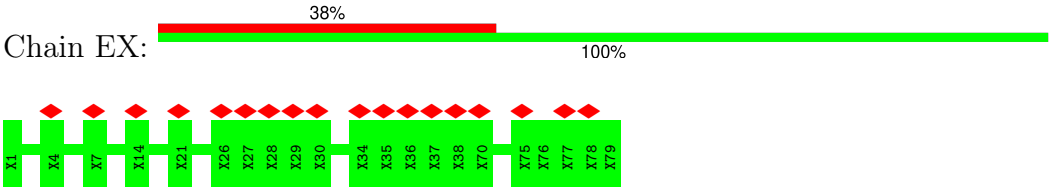
• Molecule 7: Unknown protein fragment

Chain DU: 

There are no outlier residues recorded for this chain.

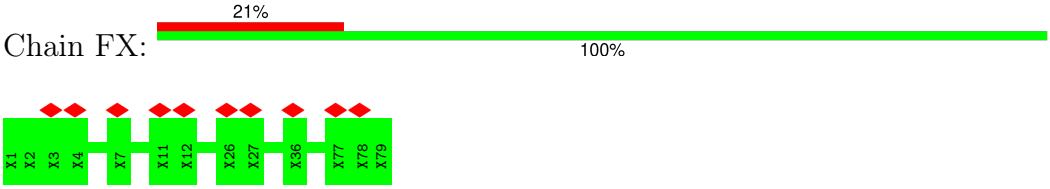
• Molecule 8: Unknown protein fragment

Chain EX:



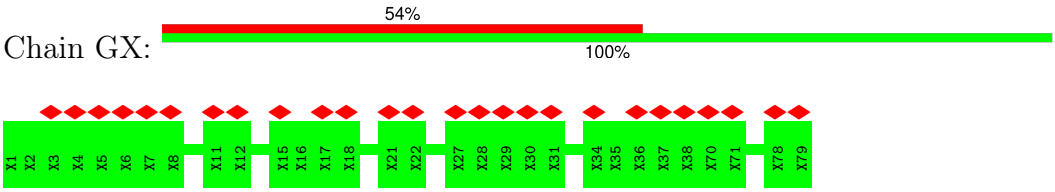
• Molecule 8: Unknown protein fragment

Chain FX:



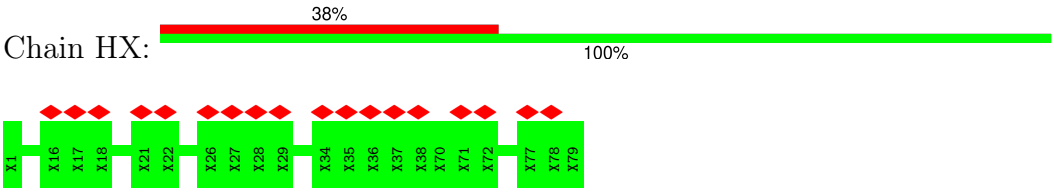
• Molecule 8: Unknown protein fragment

Chain GX:



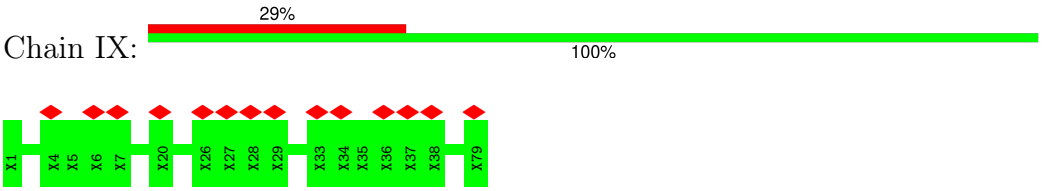
• Molecule 8: Unknown protein fragment

Chain HX:



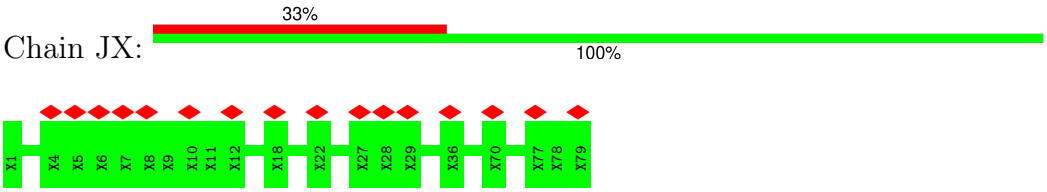
• Molecule 8: Unknown protein fragment

Chain IX:



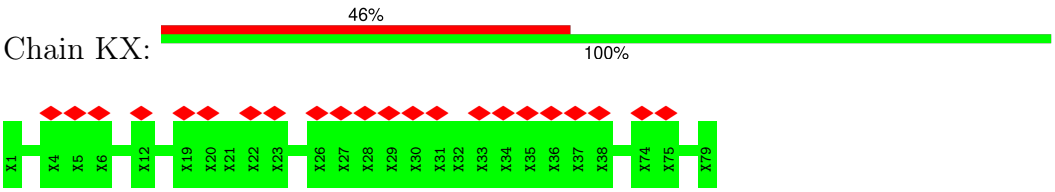
• Molecule 8: Unknown protein fragment

Chain JX:



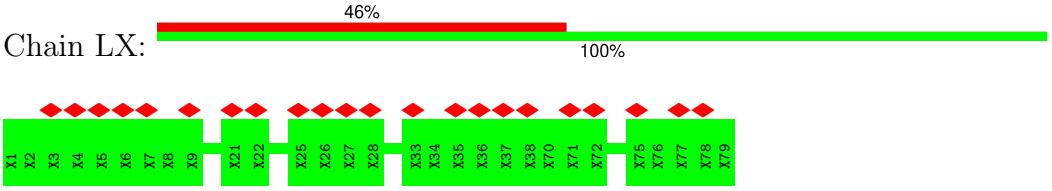
• Molecule 8: Unknown protein fragment

Chain KX:



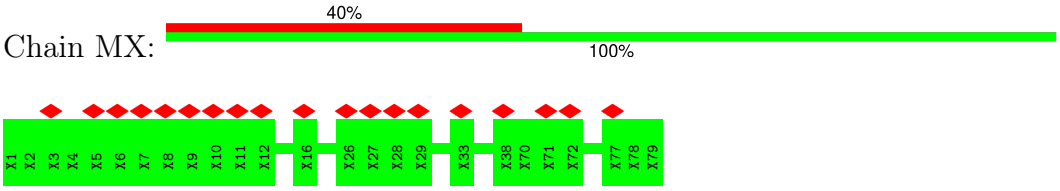
• Molecule 8: Unknown protein fragment

Chain LX:



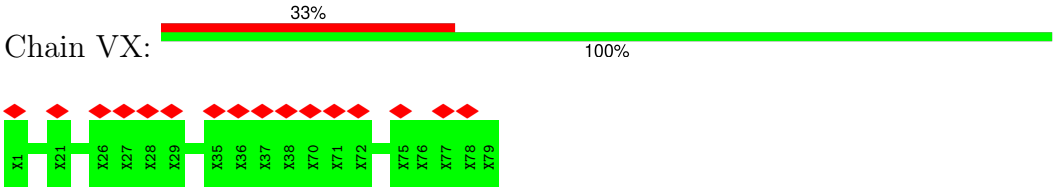
• Molecule 8: Unknown protein fragment

Chain MX:



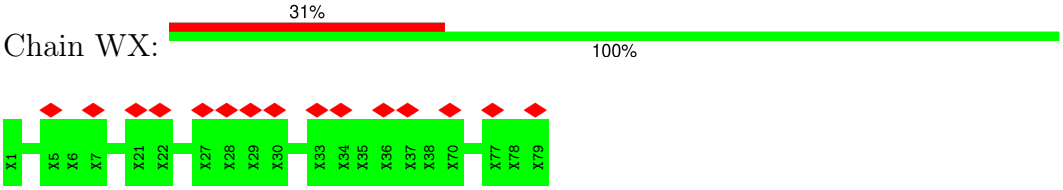
• Molecule 8: Unknown protein fragment

Chain VX:



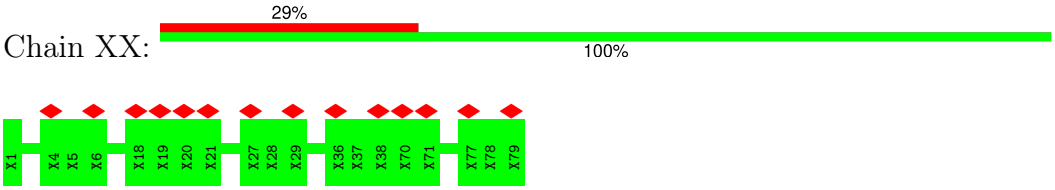
• Molecule 8: Unknown protein fragment

Chain WX:



• Molecule 8: Unknown protein fragment

Chain XX:



• Molecule 8: Unknown protein fragment

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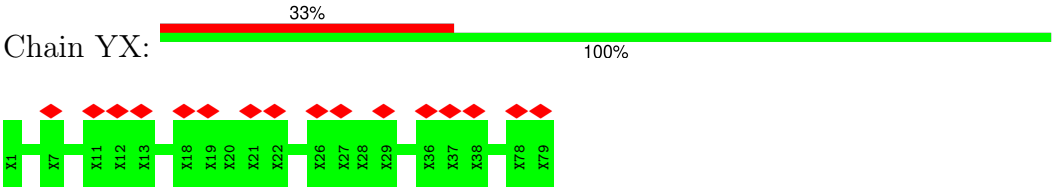
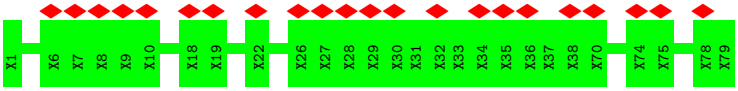


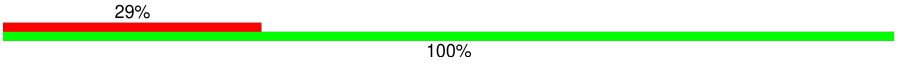
• Molecule 8: Unknown protein fragment

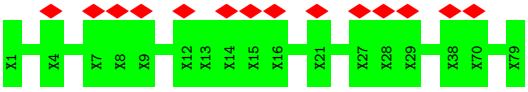
Chain ZX:



• Molecule 8: Unknown protein fragment

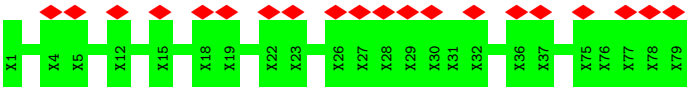
Chain AX:





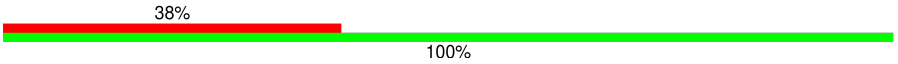
• Molecule 8: Unknown protein fragment

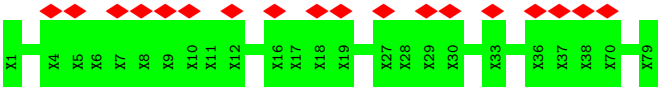
Chain BX:



• Molecule 8: Unknown protein fragment

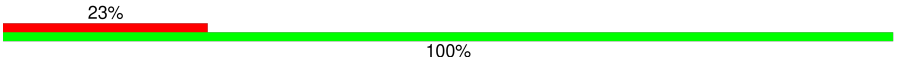
Chain CX:

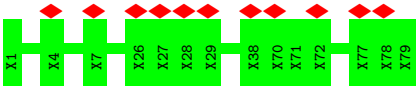




• Molecule 8: Unknown protein fragment

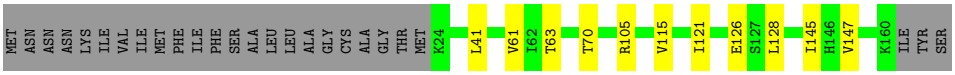
Chain DX:





• Molecule 9: DotD

Chain Ed:

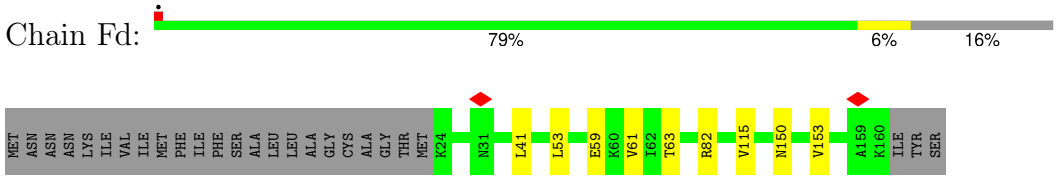


• Molecule 9: DotD

Chain FD:

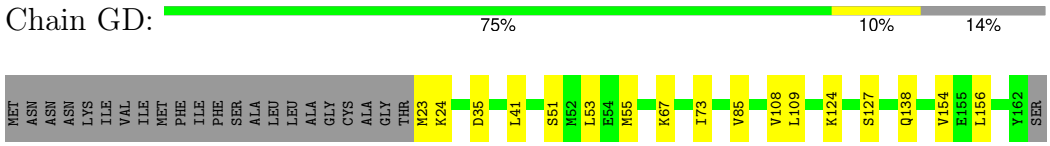
• Molecule 9: DotD

Chain Fd:



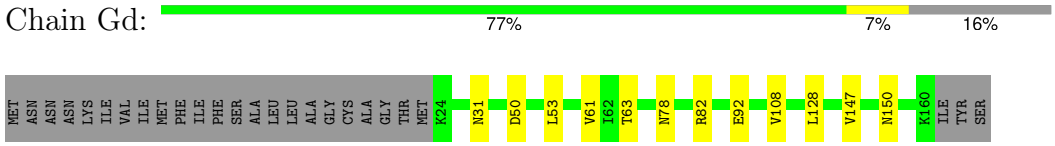
• Molecule 9: DotD

Chain GD:



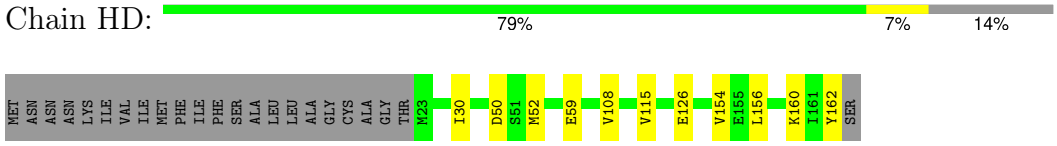
• Molecule 9: DotD

Chain Gd:



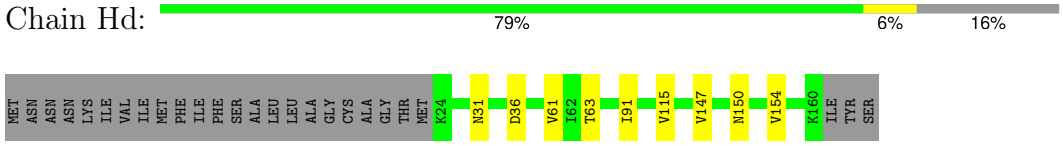
• Molecule 9: DotD

Chain HD:



• Molecule 9: DotD

Chain Hd:



• Molecule 9: DotD

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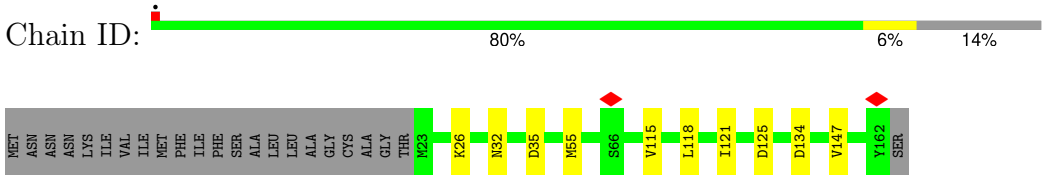

• Molecule 9: DotD

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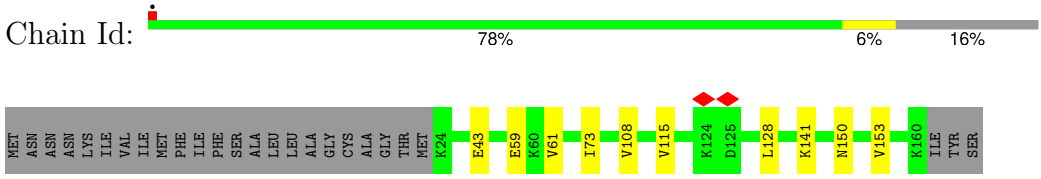

• Molecule 9: DotD

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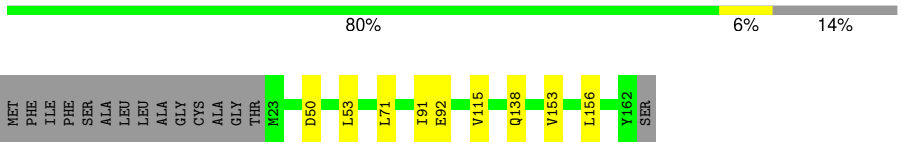
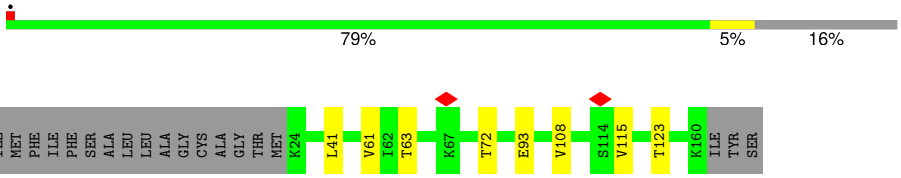


• Molecule 9: DotD

Chain Jd:



• Molecule 9: DotD

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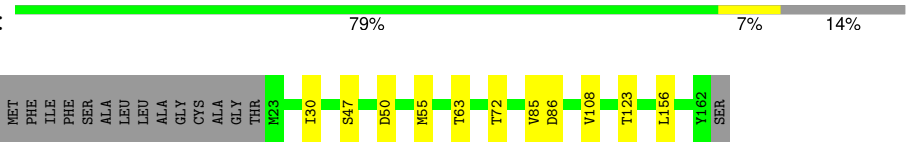
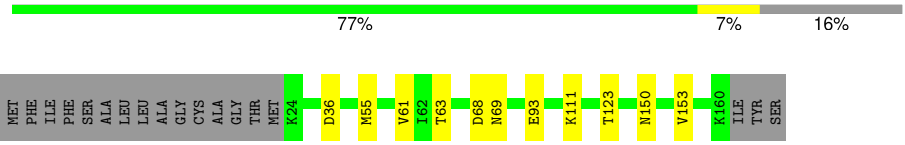


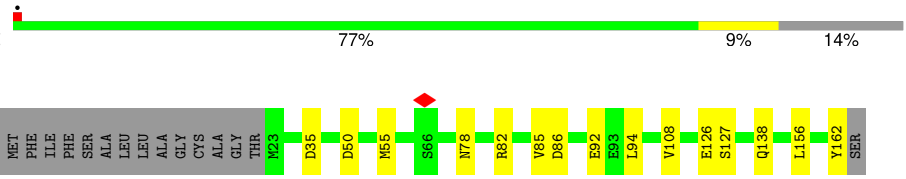
• Molecule 9: DotD

Chain Kd:



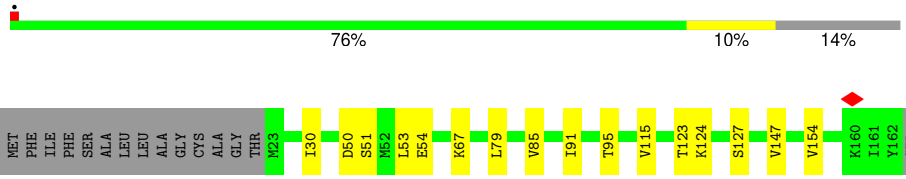
• Molecule 9: DotD

Chain CD:



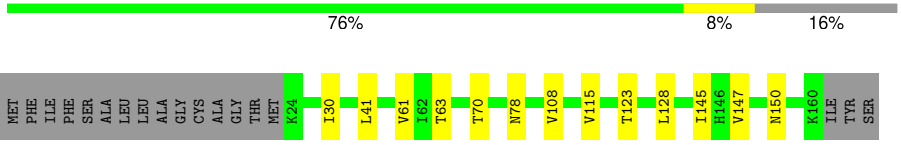
• Molecule 9: DotD

Chain LD:



• Molecule 9: DotD

Chain Ld:



• Molecule 9: DotD

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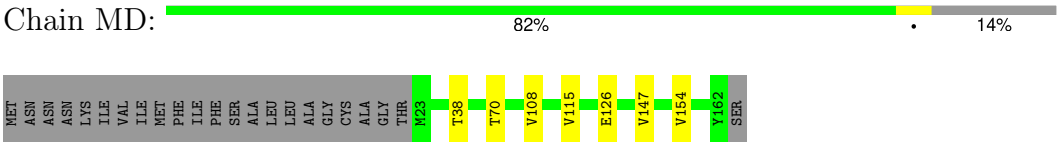
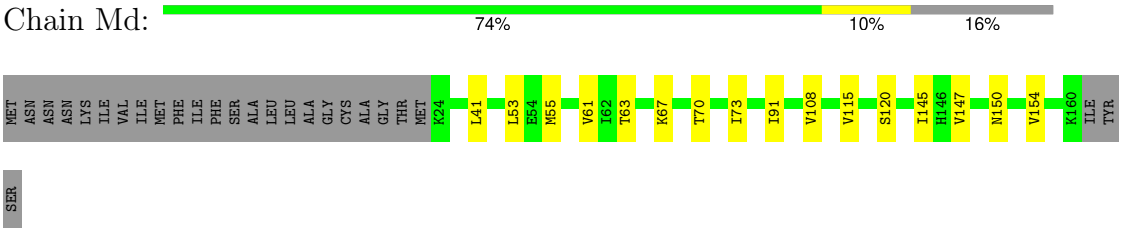


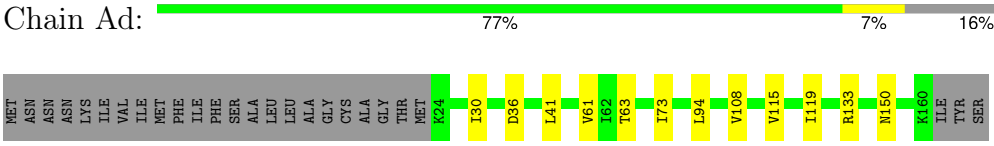
• Molecule 9: DotD

Chain Md:



• Molecule 9: DotD

Chain Ad:



• Molecule 9: DotD

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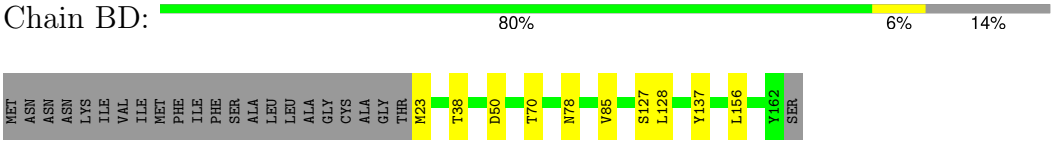
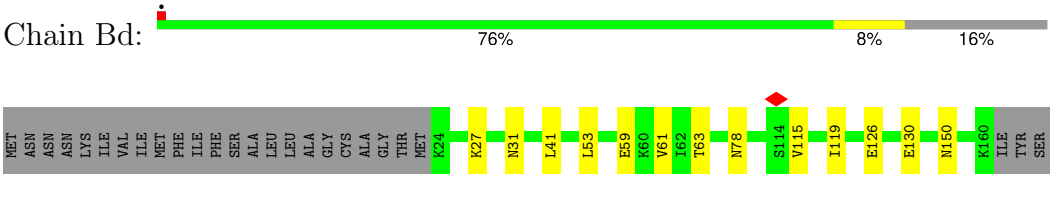


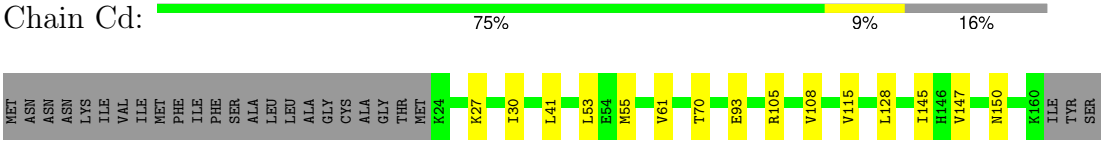
• Molecule 9: DotD

Chain Bd:



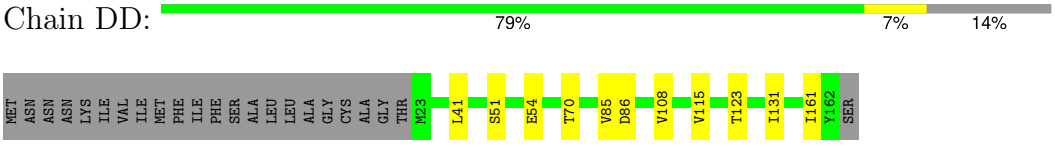
• Molecule 9: DotD

Chain Cd:



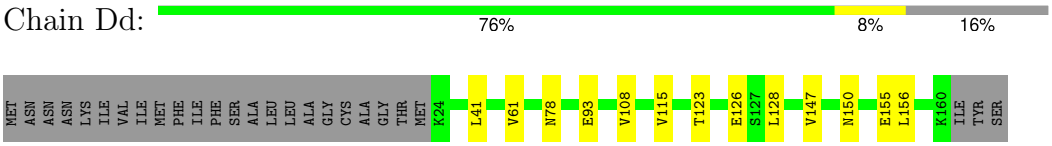
• Molecule 9: DotD

Chain DD:



• Molecule 9: DotD

Chain Dd:



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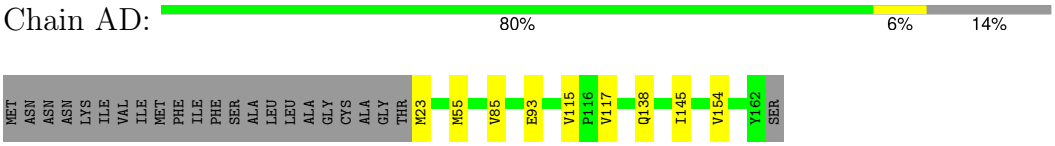
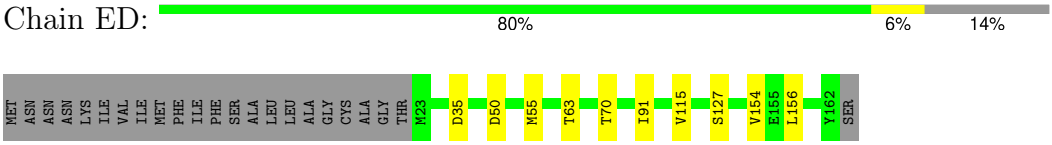
Chain AD:



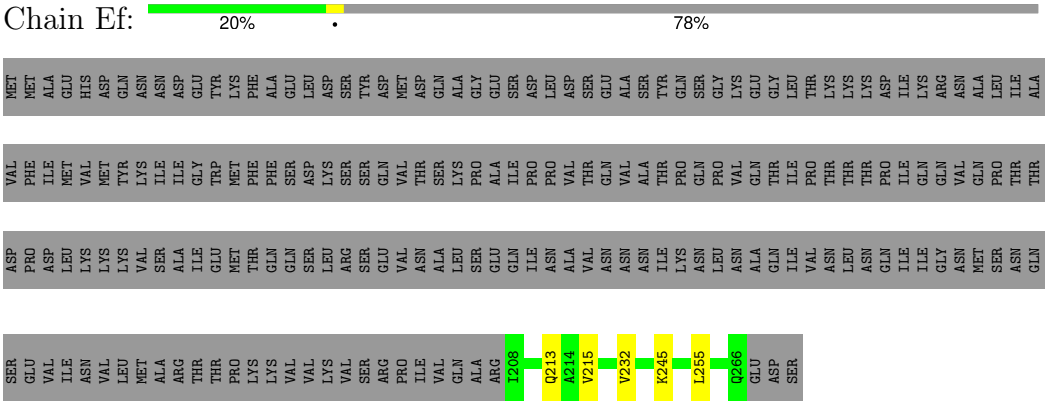
• Molecule 9: DotD

Chain ED:



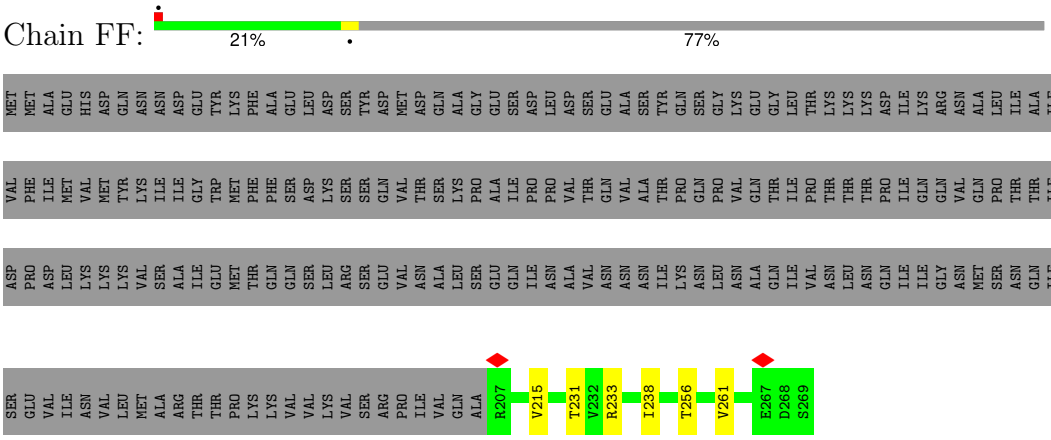
• Molecule 10: DotF

Chain Ef:



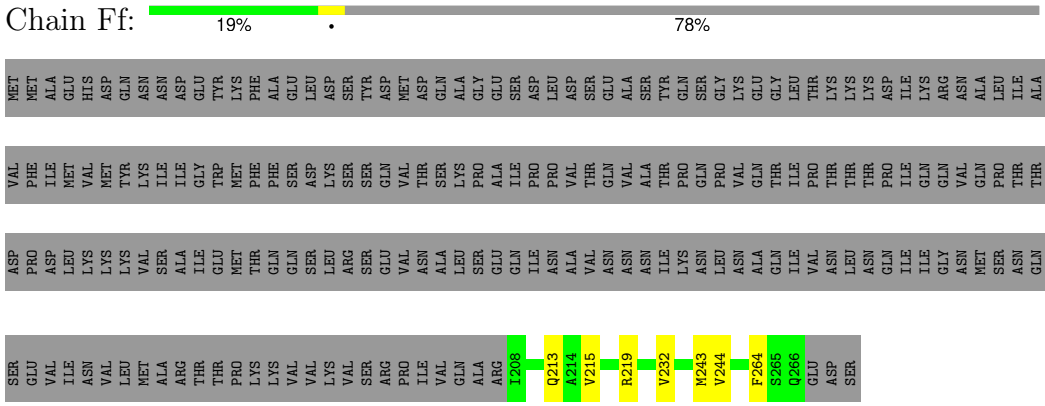
• Molecule 10: DotF

Chain FF:



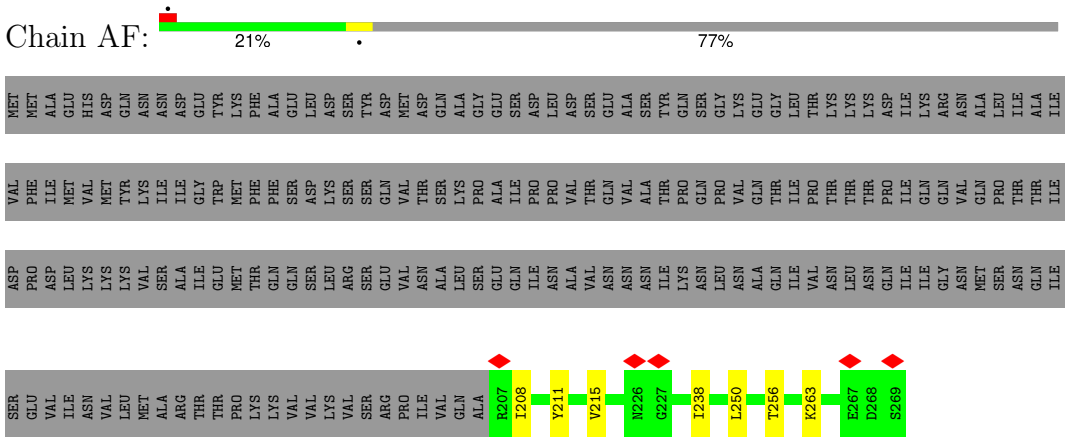
• Molecule 10: DotF

Chain Ff:



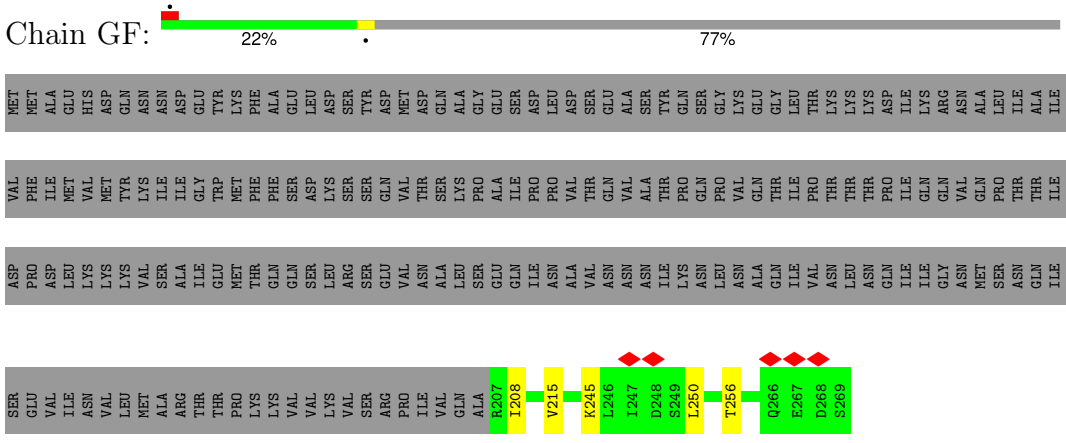
• Molecule 10: DotF

Chain AF:



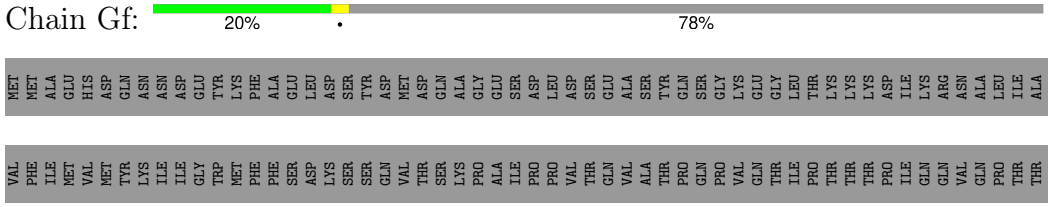
• Molecule 10: DotF

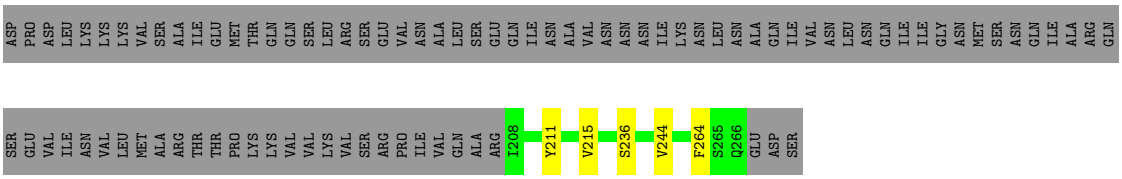
Chain GF:



• Molecule 10: DotF

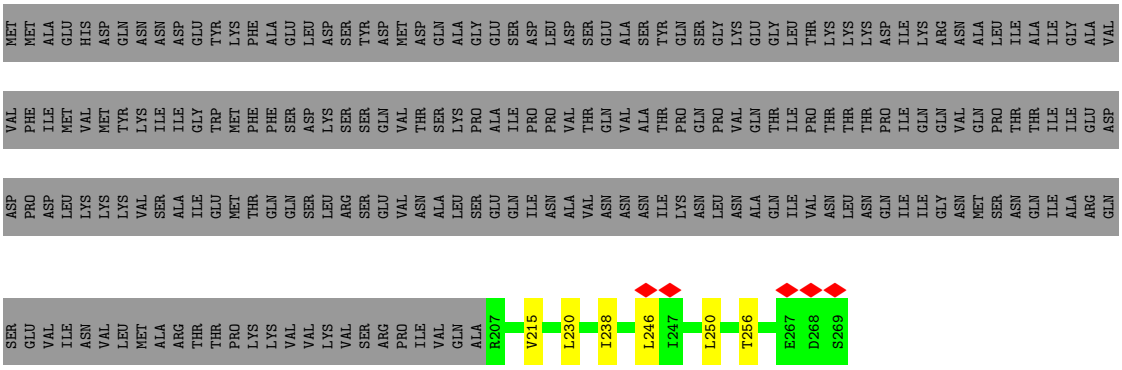
Chain Gf:





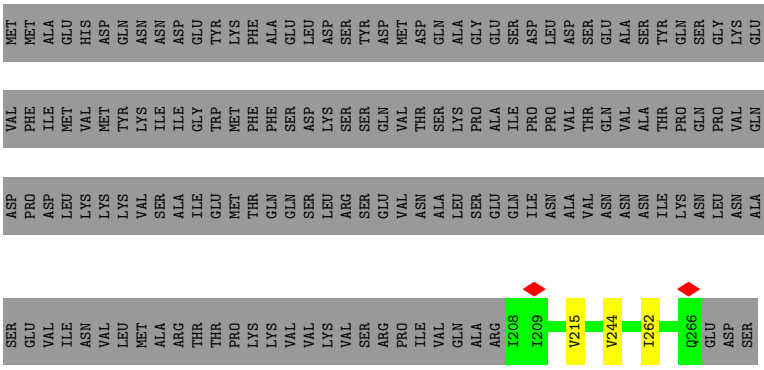
• Molecule 10: DotF

Chain HF:



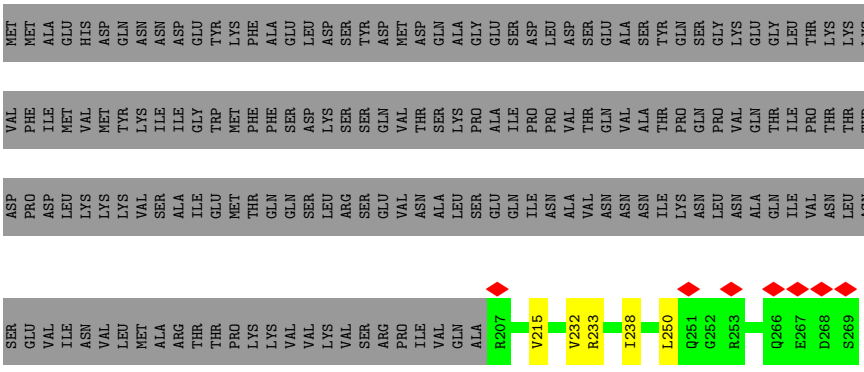
• Molecule 10: DotF

Chain Hf:



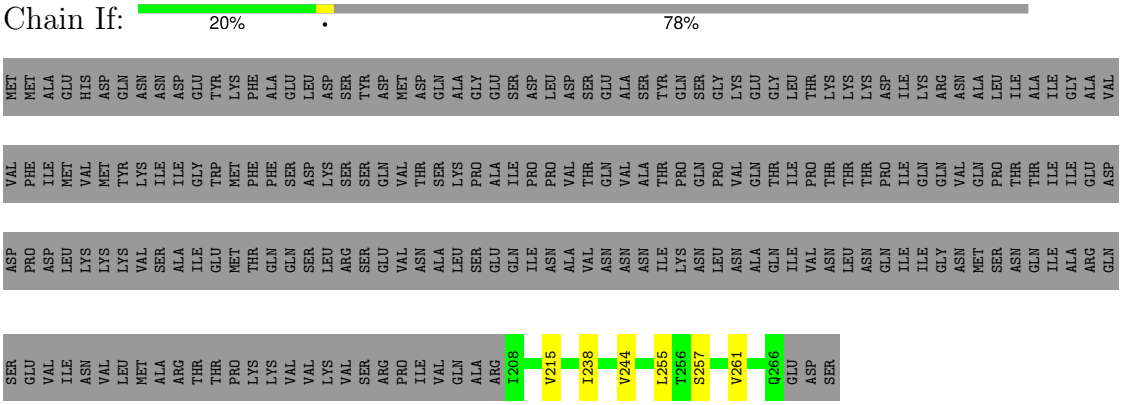
• Molecule 10: DotF

Chain IF:



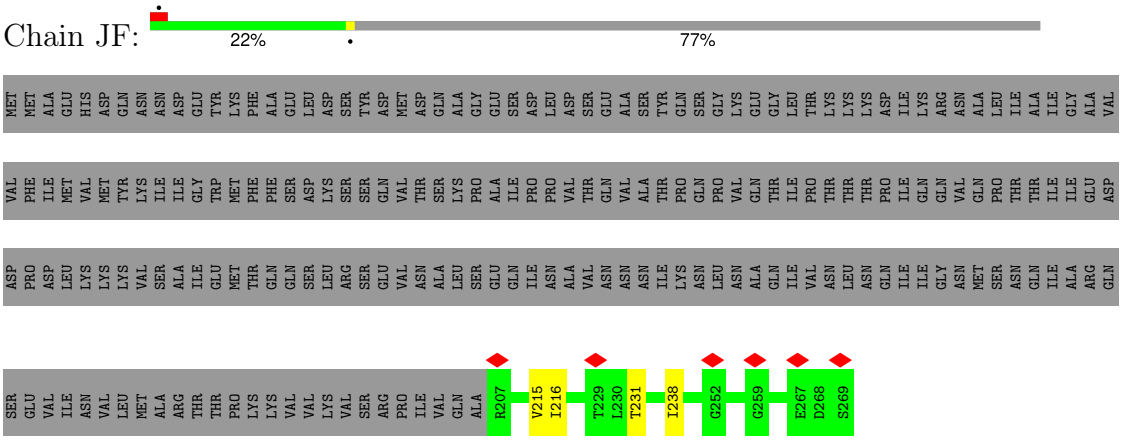
• Molecule 10: DotF

Chain If:



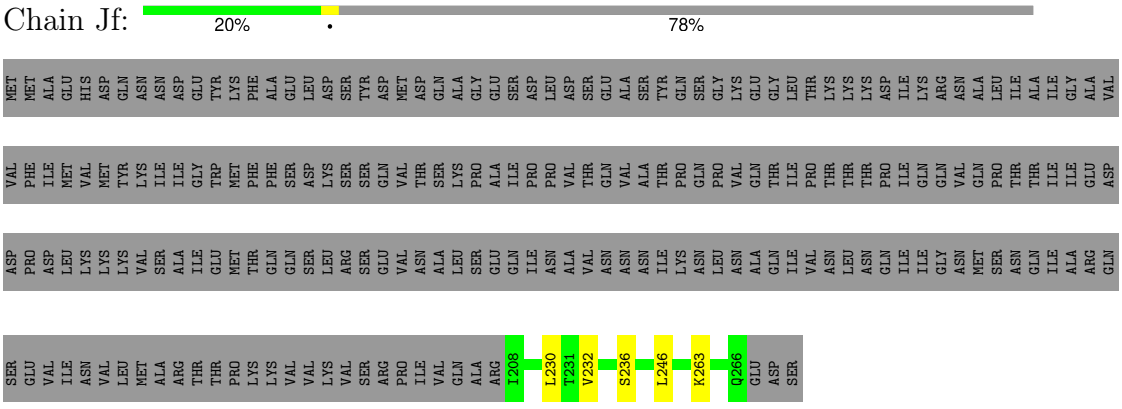
• Molecule 10: DotF

Chain JF:



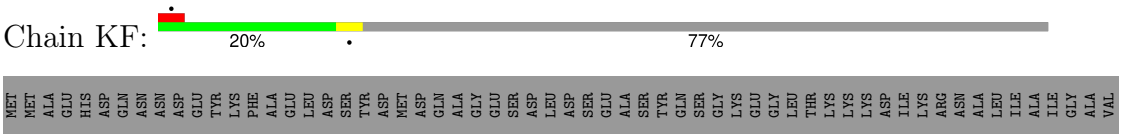
• Molecule 10: DotF

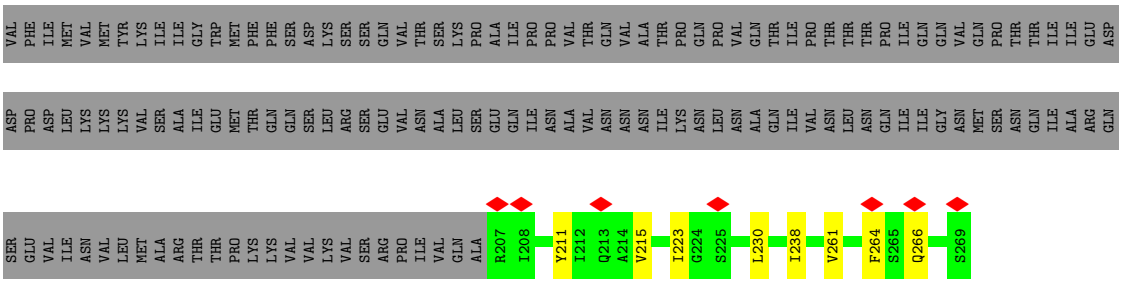
Chain Jf:



• Molecule 10: DotF

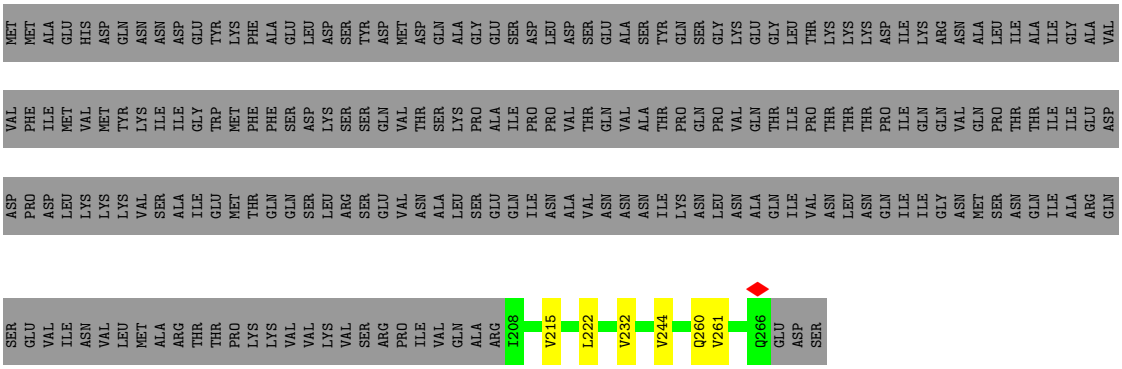
Chain KF:





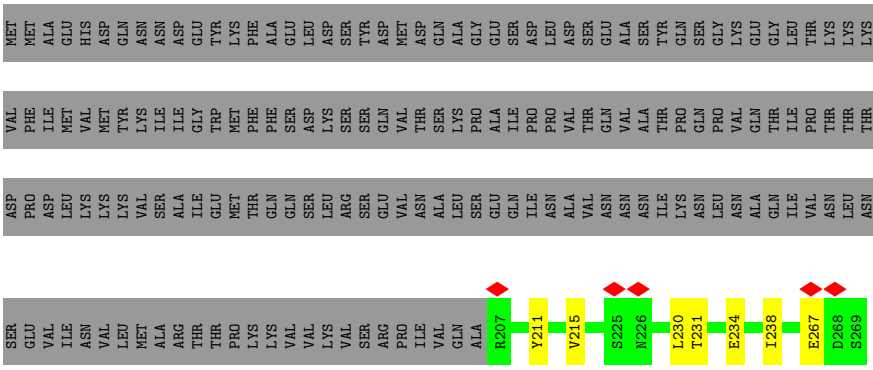
• Molecule 10: DotF

Chain Kf:



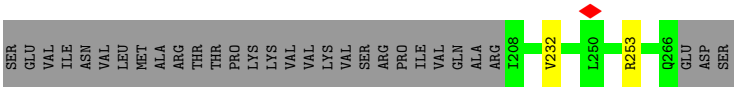
• Molecule 10: DotF

Chain LF:



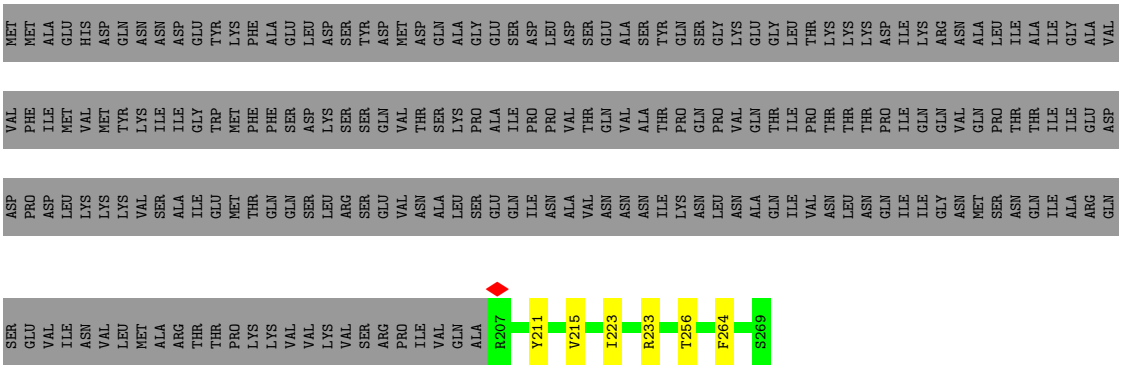
• Molecule 10: DotF

Chain Lf:



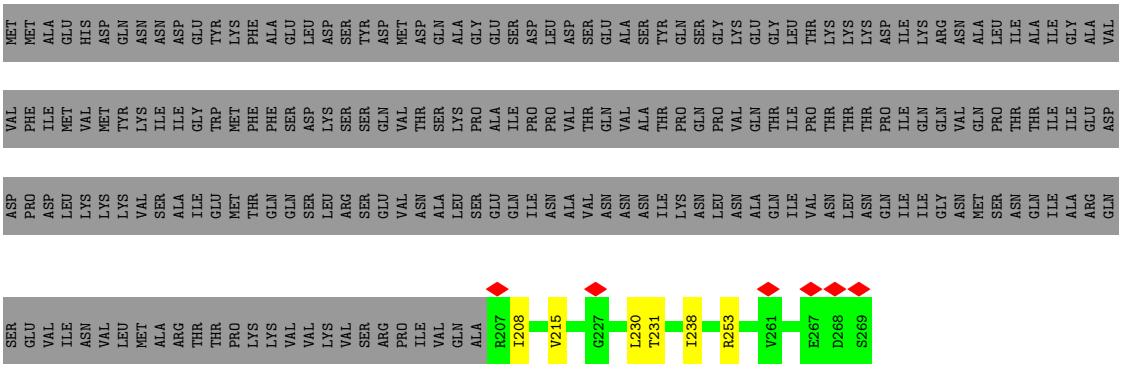
• Molecule 10: DotF

Chain MF:



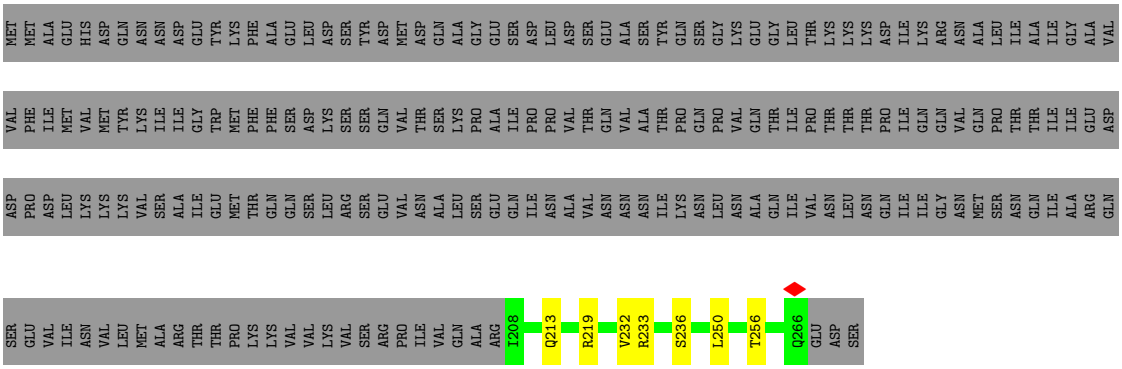
• Molecule 10: DotF

Chain CF:



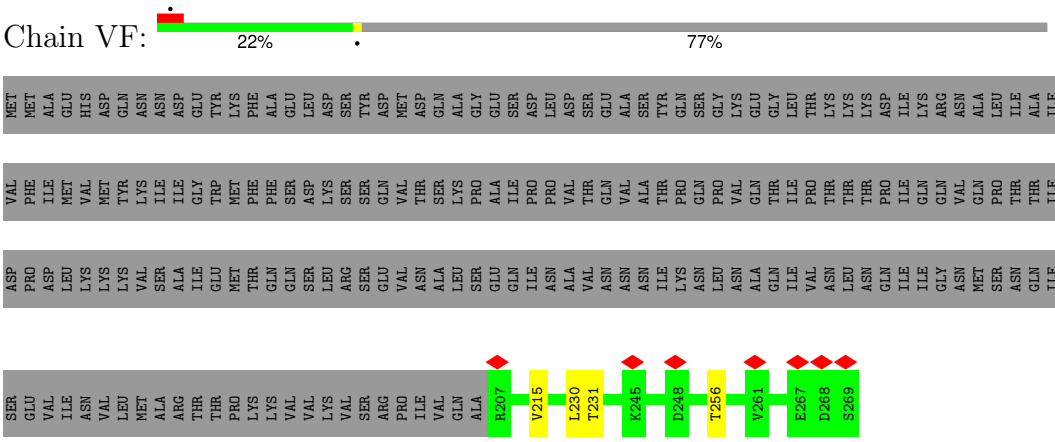
• Molecule 10: DotF

Chain Mf:



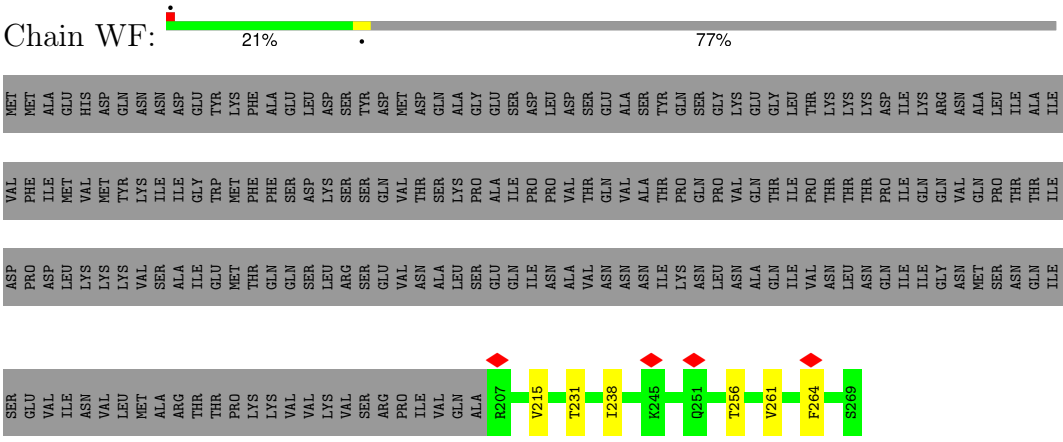
• Molecule 10: DotF

Chain VF:



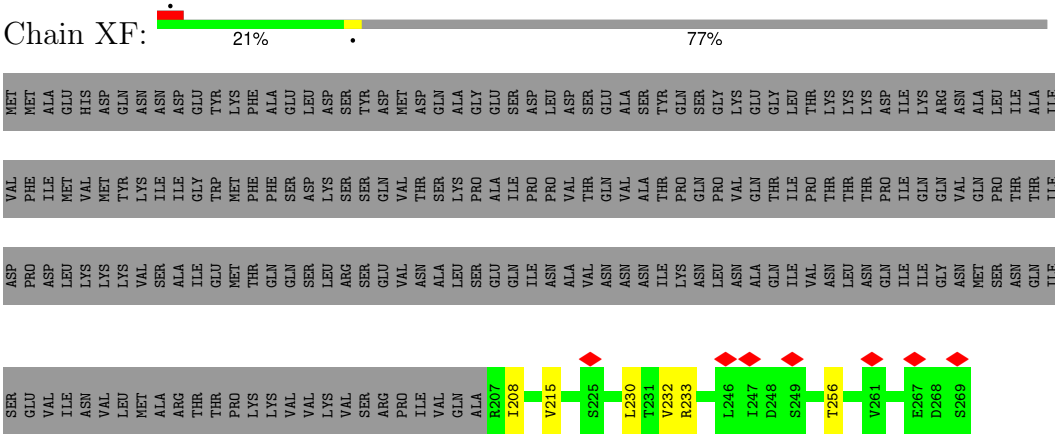
• Molecule 10: DotF

Chain WF:



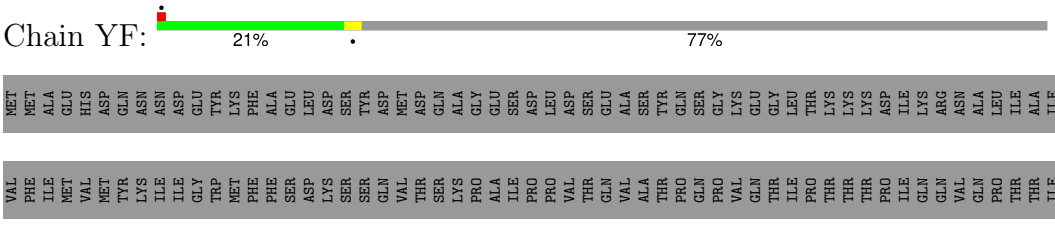
• Molecule 10: DotF

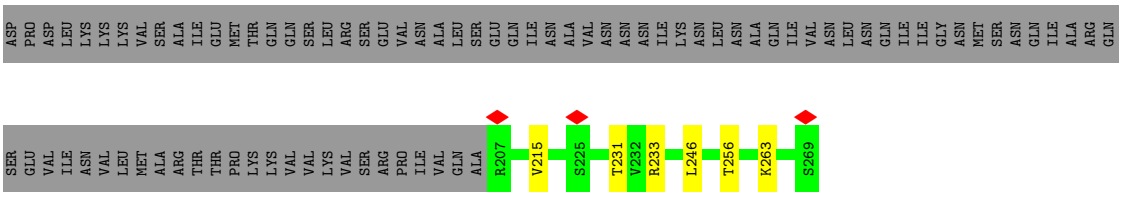
Chain XF:



• Molecule 10: DotF

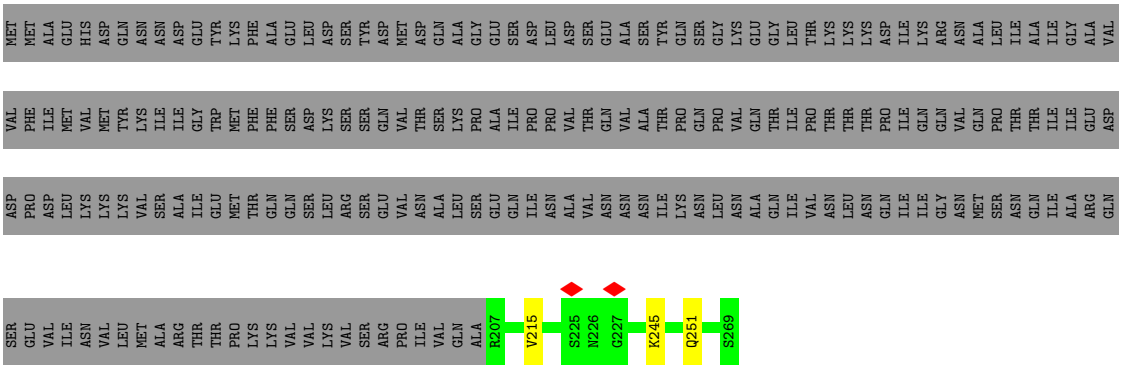
Chain YF:





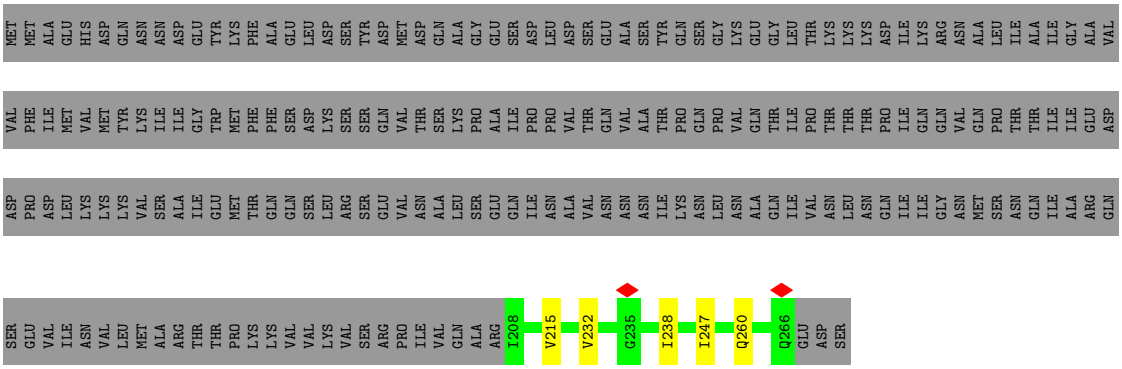
• Molecule 10: DotF

Chain ZF:



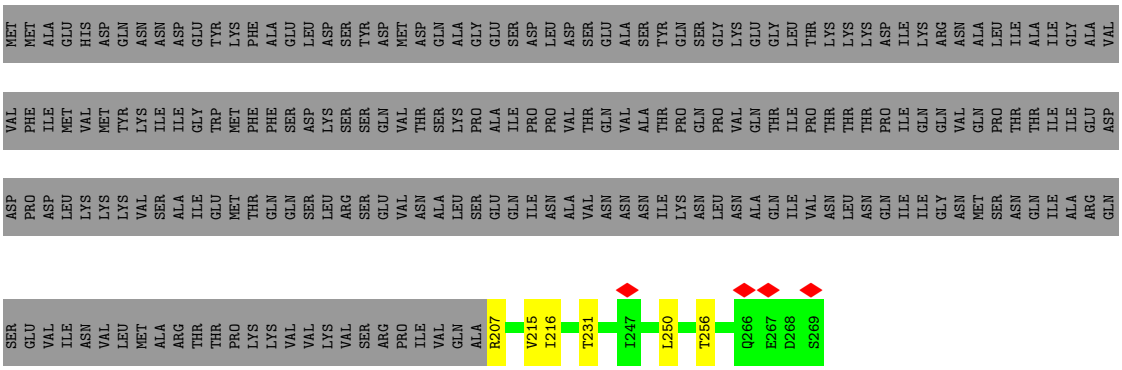
• Molecule 10: DotF

Chain Af:



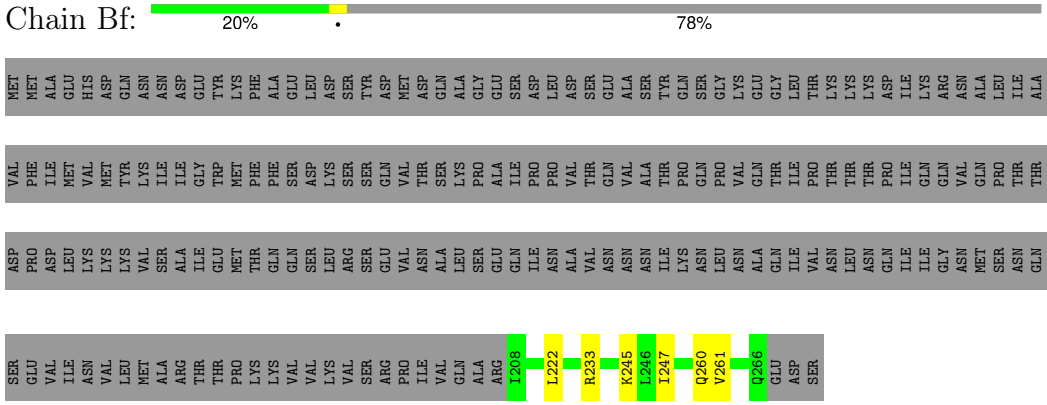
• Molecule 10: DotF

Chain BF:



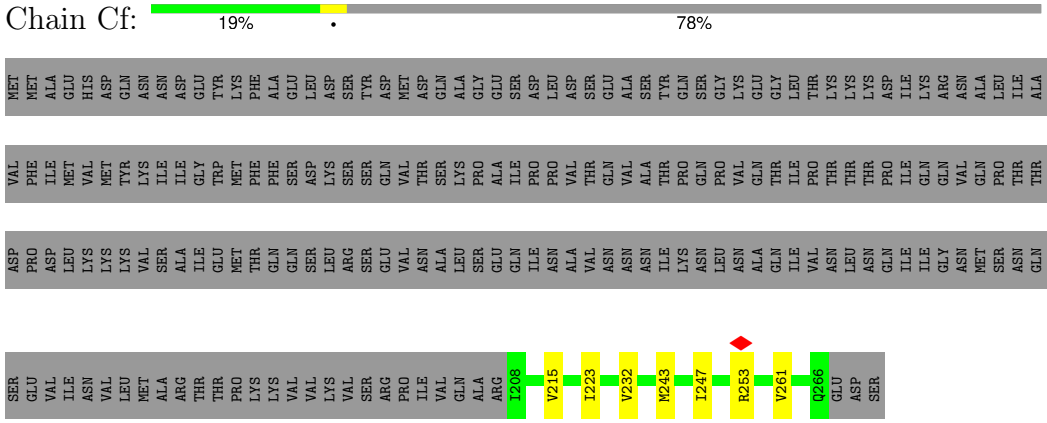
• Molecule 10: DotF

Chain Bf:



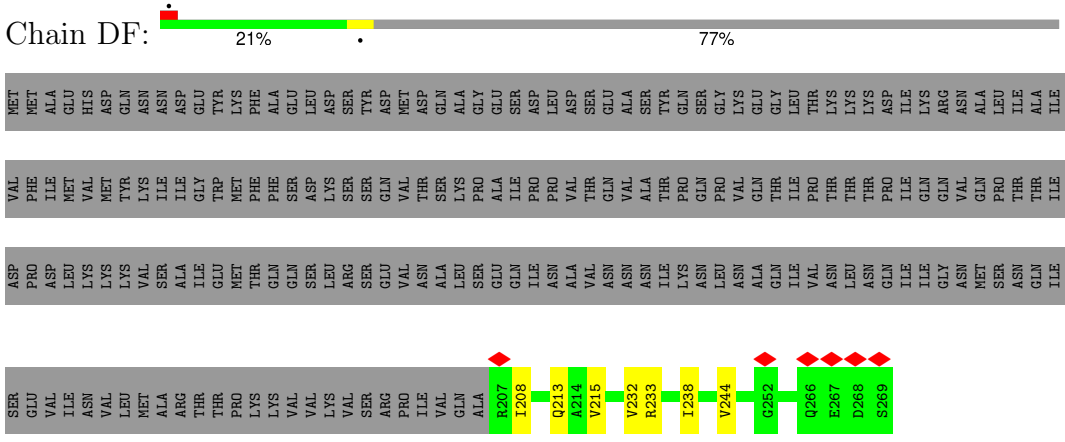
• Molecule 10: DotF

Chain Cf:



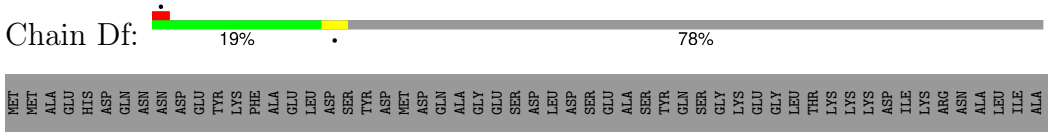
• Molecule 10: DotF

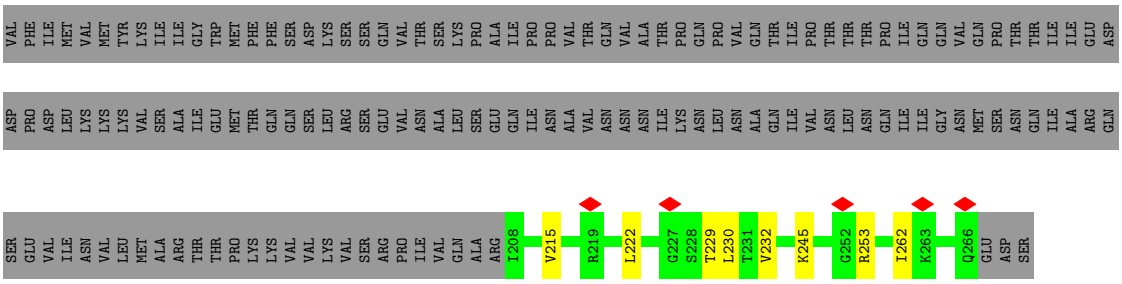
Chain DF:



• Molecule 10: DotF

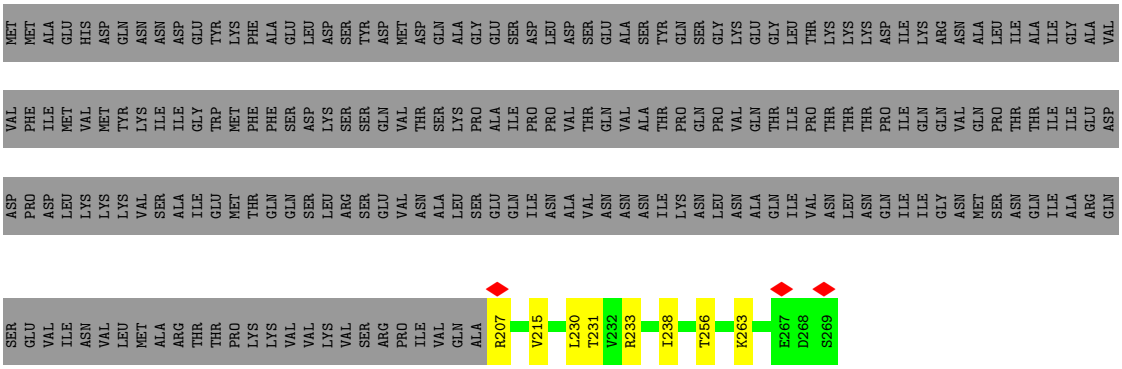
Chain Df:





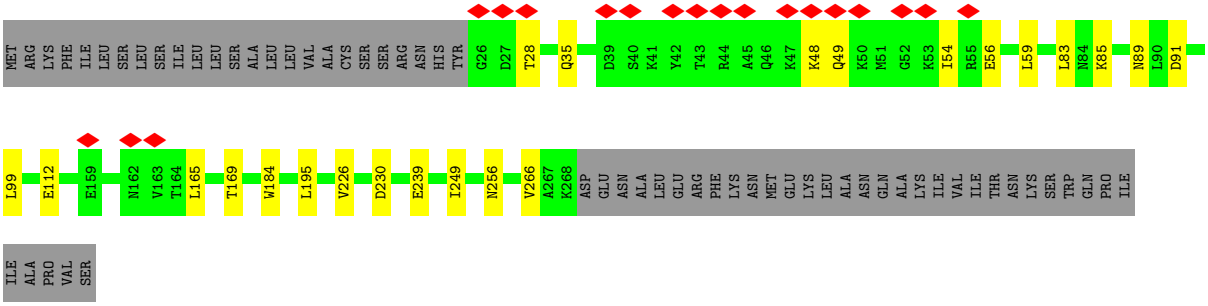
• Molecule 10: DotF

Chain EF:



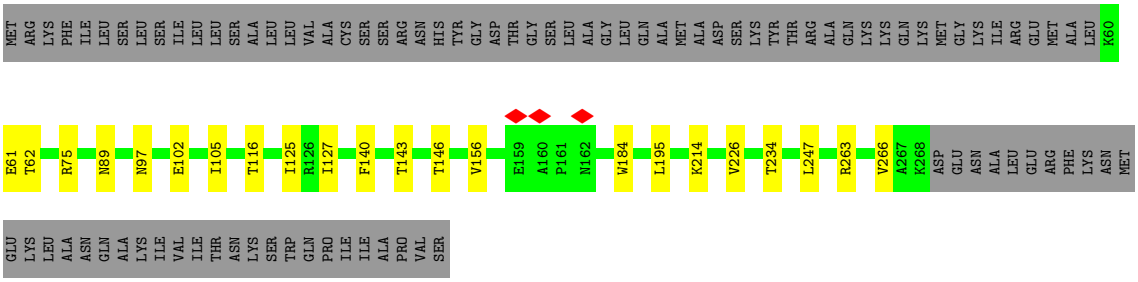
• Molecule 11: DotC

Chain BC:



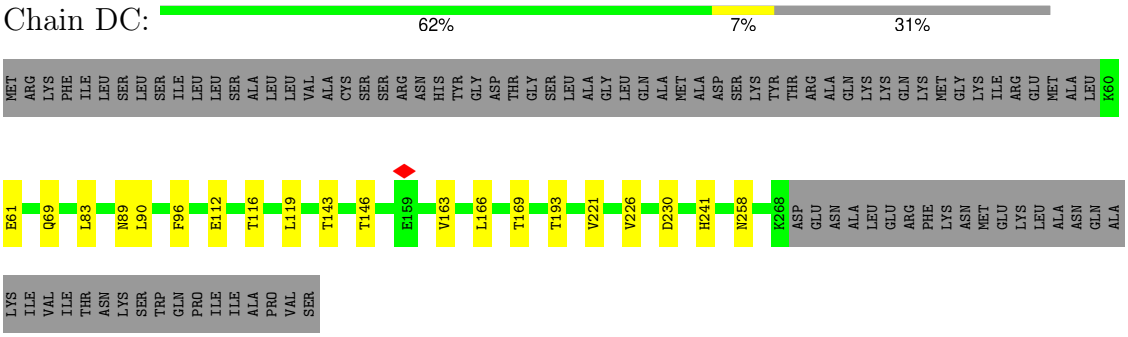
• Molecule 11: DotC

Chain CC:



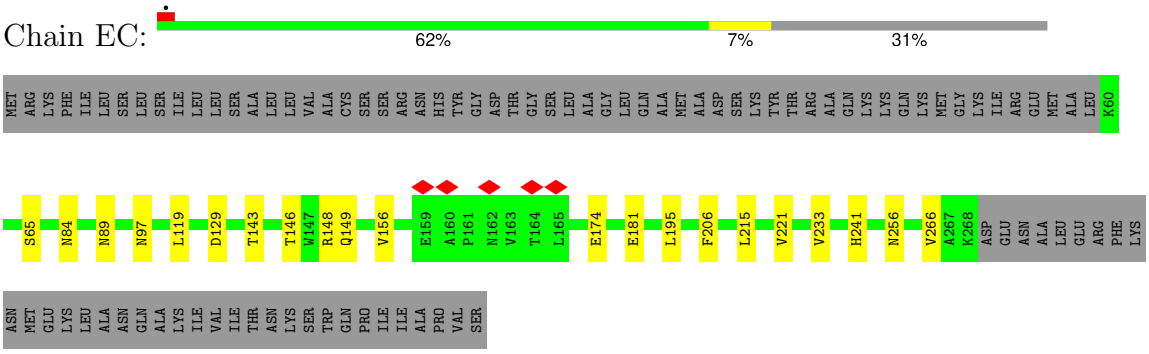
• Molecule 11: DotC

Chain DC:



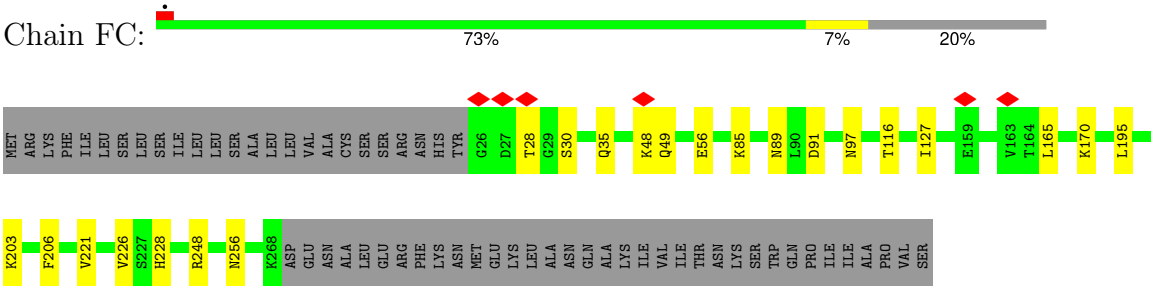
• Molecule 11: DotC

Chain EC:



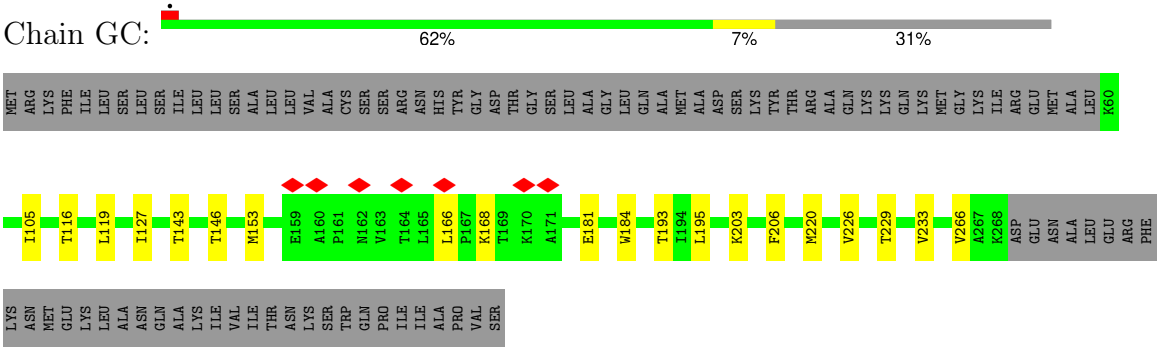
• Molecule 11: DotC

Chain FC:



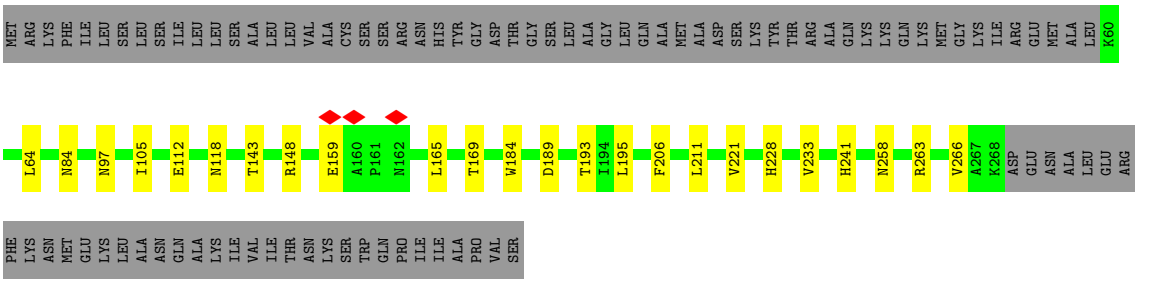
• Molecule 11: DotC

Chain GC:



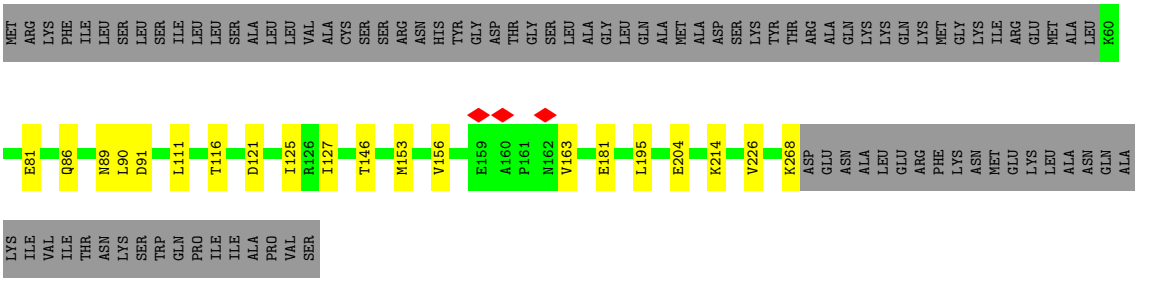
• Molecule 11: DotC

Chain HC:



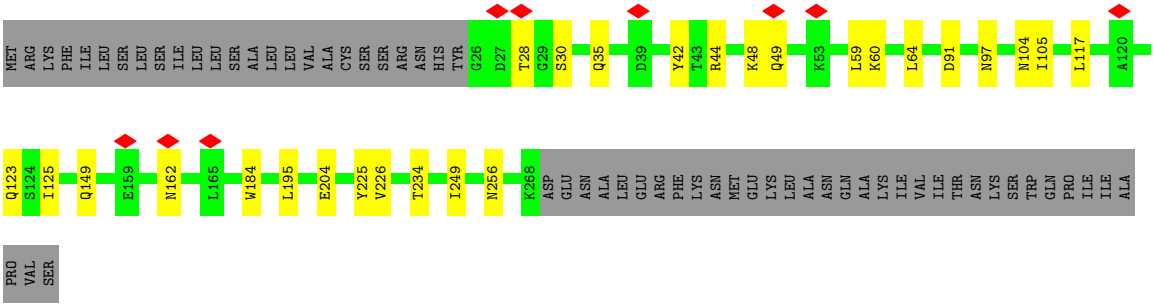
• Molecule 11: DotC

Chain IC:



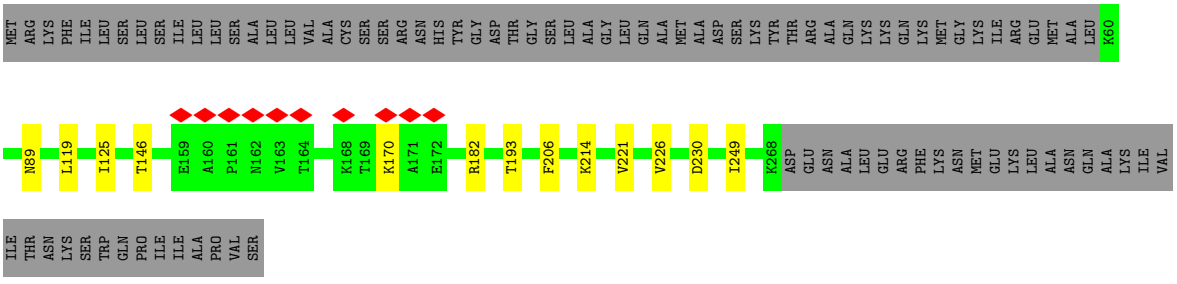
• Molecule 11: DotC

Chain JC:



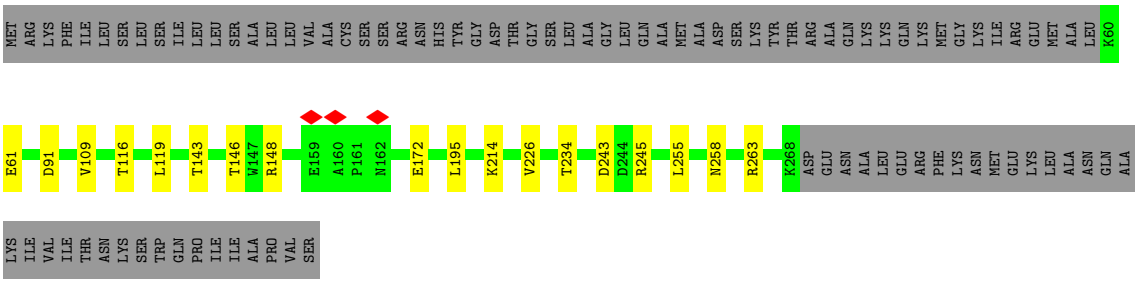
• Molecule 11: DotC

Chain KC:



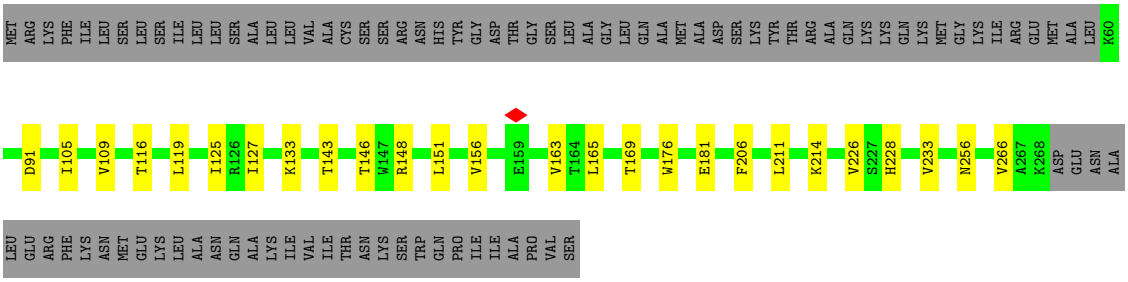
• Molecule 11: DotC

Chain LC:



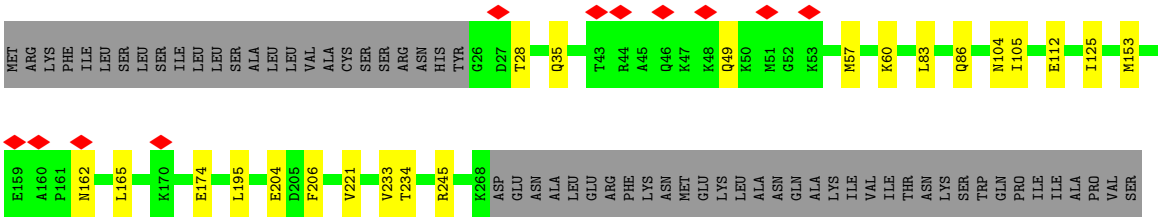
• Molecule 11: DotC

Chain MC:



• Molecule 11: DotC

Chain AC:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	42013	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 ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	7.809	Depositor
Minimum map value	-3.314	Depositor
Average map value	0.095	Depositor
Map value standard deviation	0.541	Depositor
Recommended contour level	2.25	Depositor
Map size (Å)	561.0, 561.0, 561.0	wwPDB
Map dimensions	250, 250, 250	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	2.244, 2.244, 2.244	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	AG	0.30	0/1250	0.54	0/1699
1	Ag	0.25	0/278	0.45	0/377
1	BG	0.29	0/1250	0.55	0/1699
1	Bg	0.28	0/278	0.46	0/377
1	CG	0.29	0/1250	0.55	0/1699
1	Cg	0.26	0/278	0.44	0/377
1	DG	0.29	0/1250	0.56	0/1699
1	Dg	0.28	0/278	0.50	0/377
1	EG	0.30	0/1250	0.54	0/1699
1	Eg	0.25	0/278	0.47	0/377
1	FG	0.29	0/1250	0.55	0/1699
1	Fg	0.26	0/278	0.46	0/377
1	GG	0.30	0/1250	0.55	0/1699
1	Gg	0.26	0/278	0.49	0/377
1	HG	0.29	0/1250	0.55	0/1699
1	Hg	0.26	0/278	0.46	0/377
1	IG	0.29	0/1250	0.56	0/1699
1	Ig	0.25	0/278	0.44	0/377
1	JG	0.29	0/1250	0.54	0/1699
1	Jg	0.26	0/278	0.46	0/377
1	KG	0.30	0/1250	0.56	0/1699
1	Kg	0.26	0/278	0.46	0/377
1	LG	0.29	0/1250	0.56	0/1699
1	Lg	0.25	0/278	0.45	0/377
1	MG	0.28	0/1250	0.55	0/1699
1	Mg	0.26	0/278	0.47	0/377
1	NG	0.28	0/1250	0.57	1/1699 (0.1%)
1	OG	0.29	0/1250	0.56	1/1699 (0.1%)
1	PG	0.29	0/1250	0.55	0/1699
1	VG	0.26	0/278	0.53	0/377
1	WG	0.27	0/278	0.46	0/377
1	XG	0.26	0/278	0.55	0/377
1	YG	0.28	0/278	0.50	0/377
1	ZG	0.28	0/278	0.53	0/377

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
2	AH	0.29	0/2033	0.53	0/2775
2	BH	0.29	0/2033	0.53	0/2775
2	CH	0.29	0/2033	0.52	0/2775
2	DH	0.29	0/2033	0.52	0/2775
2	EH	0.28	0/2033	0.52	0/2775
2	FH	0.28	0/2033	0.51	0/2775
2	GH	0.29	0/2033	0.53	0/2775
2	HH	0.29	0/2033	0.51	0/2775
2	IH	0.28	0/2033	0.52	0/2775
2	JH	0.28	0/2033	0.51	0/2775
2	KH	0.29	0/2033	0.53	0/2775
2	LH	0.30	0/2033	0.55	0/2775
2	MH	0.28	0/2033	0.51	0/2775
2	VH	0.27	0/1921	0.53	0/2620
2	WH	0.28	0/1921	0.52	0/2620
2	XH	0.28	0/1921	0.53	0/2620
2	YH	0.27	0/1921	0.52	0/2620
2	ZH	0.27	0/1921	0.54	0/2620
3	AK	0.29	0/1195	0.54	0/1616
3	BK	0.29	0/1195	0.55	0/1616
3	CK	0.31	0/1195	0.53	0/1616
3	DK	0.29	0/1195	0.53	0/1616
3	EK	0.29	0/1195	0.53	0/1616
3	FK	0.30	0/1195	0.53	0/1616
3	GK	0.30	0/1195	0.54	0/1616
3	HK	0.29	0/1195	0.52	0/1616
3	IK	0.30	0/1195	0.55	0/1616
3	JK	0.30	0/1195	0.54	0/1616
3	KK	0.30	0/1195	0.53	0/1616
3	LK	0.30	0/1195	0.54	0/1616
3	MK	0.29	0/1195	0.52	0/1616
4	AL	0.30	0/1417	0.54	0/1912
4	BL	0.30	0/1417	0.54	0/1912
4	CL	0.30	0/1417	0.53	0/1912
4	DL	0.30	0/1417	0.55	0/1912
4	EL	0.29	0/1417	0.55	0/1912
4	FL	0.29	0/1417	0.54	0/1912
4	GL	0.30	0/1417	0.55	0/1912
4	HL	0.29	0/1417	0.55	0/1912
4	IL	0.29	0/1417	0.55	0/1912
4	JL	0.29	0/1417	0.54	0/1912
4	KL	0.29	0/1417	0.54	0/1912
4	LL	0.30	0/1417	0.54	0/1912

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
4	ML	0.30	0/1417	0.54	0/1912
5	AM	0.28	0/1678	0.57	0/2262
5	BM	0.28	0/1678	0.56	0/2262
5	CM	0.29	0/1678	0.58	0/2262
5	DM	0.29	0/1678	0.56	0/2262
5	EM	0.29	0/1678	0.56	0/2262
5	FM	0.29	0/1678	0.57	0/2262
5	GM	0.28	0/1678	0.55	0/2262
5	HM	0.28	0/1678	0.57	0/2262
5	IM	0.29	0/1678	0.60	0/2262
5	JM	0.28	0/1678	0.59	0/2262
5	KM	0.29	0/1678	0.58	0/2262
5	LM	0.28	0/1678	0.57	0/2262
5	MM	0.28	0/1678	0.57	0/2262
6	AN	0.32	0/593	0.51	0/799
6	BN	0.31	0/593	0.52	0/799
6	CN	0.30	0/593	0.50	0/799
6	DN	0.30	0/593	0.51	0/799
6	EN	0.31	0/593	0.53	0/799
6	FN	0.31	0/593	0.51	0/799
6	GN	0.30	0/593	0.52	0/799
6	HN	0.30	0/593	0.50	0/799
6	IN	0.31	0/593	0.53	0/799
6	JN	0.30	0/593	0.53	0/799
6	KN	0.32	0/593	0.53	0/799
6	LN	0.32	0/593	0.52	0/799
6	MN	0.30	0/593	0.54	0/799
9	AD	0.32	0/1107	0.53	0/1502
9	Ad	0.28	0/1078	0.49	0/1463
9	BD	0.28	0/1107	0.51	0/1502
9	Bd	0.28	0/1078	0.50	0/1463
9	CD	0.29	0/1107	0.52	0/1502
9	Cd	0.28	0/1078	0.48	0/1463
9	DD	0.30	0/1107	0.52	0/1502
9	Dd	0.28	0/1078	0.51	0/1463
9	ED	0.29	0/1107	0.52	0/1502
9	Ed	0.28	0/1078	0.49	0/1463
9	FD	0.30	0/1107	0.53	0/1502
9	Fd	0.28	0/1078	0.51	0/1463
9	GD	0.29	0/1107	0.54	0/1502
9	Gd	0.28	0/1078	0.50	0/1463
9	HD	0.29	0/1107	0.54	0/1502
9	Hd	0.27	0/1078	0.50	0/1463

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
9	ID	0.29	0/1107	0.54	0/1502
9	Id	0.29	0/1078	0.48	0/1463
9	JD	0.30	0/1107	0.50	0/1502
9	Jd	0.29	0/1078	0.49	0/1463
9	KD	0.30	0/1107	0.52	0/1502
9	Kd	0.28	0/1078	0.48	0/1463
9	LD	0.29	0/1107	0.51	0/1502
9	Ld	0.28	0/1078	0.50	0/1463
9	MD	0.30	0/1107	0.53	0/1502
9	Md	0.29	0/1078	0.49	0/1463
10	AF	0.26	0/490	0.55	0/660
10	Af	0.28	0/456	0.57	0/615
10	BF	0.27	0/490	0.53	0/660
10	Bf	0.27	0/456	0.51	0/615
10	CF	0.27	0/490	0.53	0/660
10	Cf	0.27	0/456	0.52	0/615
10	DF	0.27	0/490	0.57	0/660
10	Df	0.27	0/456	0.53	0/615
10	EF	0.26	0/490	0.53	0/660
10	Ef	0.27	0/456	0.51	0/615
10	FF	0.27	0/490	0.55	0/660
10	Ff	0.27	0/456	0.53	0/615
10	GF	0.26	0/490	0.53	0/660
10	Gf	0.26	0/456	0.54	0/615
10	HF	0.27	0/490	0.56	0/660
10	Hf	0.28	0/456	0.54	0/615
10	IF	0.27	0/490	0.55	0/660
10	If	0.27	0/456	0.53	0/615
10	JF	0.26	0/490	0.54	0/660
10	Jf	0.26	0/456	0.52	0/615
10	KF	0.26	0/490	0.55	0/660
10	Kf	0.27	0/456	0.51	0/615
10	LF	0.26	0/490	0.54	0/660
10	Lf	0.28	0/456	0.52	0/615
10	MF	0.27	0/490	0.53	0/660
10	Mf	0.27	0/456	0.53	0/615
10	VF	0.26	0/490	0.53	0/660
10	WF	0.26	0/490	0.55	0/660
10	XF	0.26	0/490	0.53	0/660
10	YF	0.27	0/490	0.53	0/660
10	ZF	0.27	0/490	0.55	0/660
11	AC	0.29	0/1957	0.51	0/2651
11	BC	0.28	0/1957	0.51	0/2651

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
11	CC	0.29	0/1702	0.52	0/2315
11	DC	0.30	0/1702	0.51	0/2315
11	EC	0.30	0/1702	0.52	0/2315
11	FC	0.29	0/1957	0.51	0/2651
11	GC	0.29	0/1702	0.52	0/2315
11	HC	0.29	0/1702	0.51	0/2315
11	IC	0.30	0/1702	0.50	0/2315
11	JC	0.28	0/1957	0.51	0/2651
11	KC	0.29	0/1702	0.51	0/2315
11	LC	0.29	0/1702	0.52	0/2315
11	MC	0.29	0/1702	0.51	0/2315
All	All	0.29	0/190816	0.53	2/258661 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	BH	0	1
2	JH	0	1
2	MH	0	1
All	All	0	3

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	NG	965	LEU	CA-CB-CG	5.15	127.15	115.30
1	OG	965	LEU	CA-CB-CG	5.01	126.81	115.30

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	BH	321	SER	Peptide
2	JH	321	SER	Peptide
2	MH	321	SER	Peptide

5.2 Too-close contacts

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles

5.3.1 Protein backbone

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Ag	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100
1	BG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Bg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	CG	161/1048 (15%)	156 (97%)	5 (3%)	0	100	100
1	Cg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	DG	161/1048 (15%)	157 (98%)	4 (2%)	0	100	100
1	Dg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	EG	161/1048 (15%)	158 (98%)	3 (2%)	0	100	100
1	Eg	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100
1	FG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Fg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	GG	161/1048 (15%)	155 (96%)	6 (4%)	0	100	100
1	Gg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	HG	161/1048 (15%)	151 (94%)	10 (6%)	0	100	100
1	Hg	32/1048 (3%)	32 (100%)	0	0	100	100
1	IG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Ig	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	JG	161/1048 (15%)	154 (96%)	7 (4%)	0	100	100
1	Jg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	KG	161/1048 (15%)	157 (98%)	4 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Kg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	LG	161/1048 (15%)	154 (96%)	7 (4%)	0	100	100
1	Lg	32/1048 (3%)	32 (100%)	0	0	100	100
1	MG	161/1048 (15%)	152 (94%)	9 (6%)	0	100	100
1	Mg	32/1048 (3%)	29 (91%)	3 (9%)	0	100	100
1	NG	161/1048 (15%)	154 (96%)	7 (4%)	0	100	100
1	OG	161/1048 (15%)	158 (98%)	3 (2%)	0	100	100
1	PG	161/1048 (15%)	155 (96%)	6 (4%)	0	100	100
1	VG	32/1048 (3%)	32 (100%)	0	0	100	100
1	WG	32/1048 (3%)	32 (100%)	0	0	100	100
1	XG	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100
1	YG	32/1048 (3%)	32 (100%)	0	0	100	100
1	ZG	32/1048 (3%)	32 (100%)	0	0	100	100
2	AH	256/361 (71%)	240 (94%)	16 (6%)	0	100	100
2	BH	256/361 (71%)	239 (93%)	17 (7%)	0	100	100
2	CH	256/361 (71%)	247 (96%)	9 (4%)	0	100	100
2	DH	256/361 (71%)	244 (95%)	12 (5%)	0	100	100
2	EH	256/361 (71%)	245 (96%)	11 (4%)	0	100	100
2	FH	256/361 (71%)	246 (96%)	10 (4%)	0	100	100
2	GH	256/361 (71%)	246 (96%)	10 (4%)	0	100	100
2	HH	256/361 (71%)	247 (96%)	9 (4%)	0	100	100
2	IH	256/361 (71%)	240 (94%)	16 (6%)	0	100	100
2	JH	256/361 (71%)	242 (94%)	14 (6%)	0	100	100
2	KH	256/361 (71%)	242 (94%)	14 (6%)	0	100	100
2	LH	256/361 (71%)	243 (95%)	13 (5%)	0	100	100
2	MH	256/361 (71%)	240 (94%)	16 (6%)	0	100	100
2	VH	239/361 (66%)	229 (96%)	10 (4%)	0	100	100
2	WH	239/361 (66%)	232 (97%)	7 (3%)	0	100	100
2	XH	239/361 (66%)	232 (97%)	7 (3%)	0	100	100
2	YH	239/361 (66%)	231 (97%)	8 (3%)	0	100	100
2	ZH	239/361 (66%)	231 (97%)	8 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	AK	149/189 (79%)	140 (94%)	9 (6%)	0	100	100
3	BK	149/189 (79%)	145 (97%)	4 (3%)	0	100	100
3	CK	149/189 (79%)	144 (97%)	5 (3%)	0	100	100
3	DK	149/189 (79%)	144 (97%)	5 (3%)	0	100	100
3	EK	149/189 (79%)	144 (97%)	5 (3%)	0	100	100
3	FK	149/189 (79%)	144 (97%)	5 (3%)	0	100	100
3	GK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	HK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	IK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	JK	149/189 (79%)	144 (97%)	5 (3%)	0	100	100
3	KK	149/189 (79%)	142 (95%)	7 (5%)	0	100	100
3	LK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	MK	149/189 (79%)	142 (95%)	7 (5%)	0	100	100
4	AL	169/249 (68%)	160 (95%)	9 (5%)	0	100	100
4	BL	169/249 (68%)	161 (95%)	8 (5%)	0	100	100
4	CL	169/249 (68%)	163 (96%)	6 (4%)	0	100	100
4	DL	169/249 (68%)	163 (96%)	6 (4%)	0	100	100
4	EL	169/249 (68%)	160 (95%)	9 (5%)	0	100	100
4	FL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100
4	GL	169/249 (68%)	164 (97%)	5 (3%)	0	100	100
4	HL	169/249 (68%)	161 (95%)	8 (5%)	0	100	100
4	IL	169/249 (68%)	161 (95%)	8 (5%)	0	100	100
4	JL	169/249 (68%)	161 (95%)	8 (5%)	0	100	100
4	KL	169/249 (68%)	165 (98%)	4 (2%)	0	100	100
4	LL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100
4	ML	169/249 (68%)	164 (97%)	5 (3%)	0	100	100
5	AM	206/320 (64%)	189 (92%)	17 (8%)	0	100	100
5	BM	206/320 (64%)	193 (94%)	13 (6%)	0	100	100
5	CM	206/320 (64%)	191 (93%)	15 (7%)	0	100	100
5	DM	206/320 (64%)	194 (94%)	12 (6%)	0	100	100
5	EM	206/320 (64%)	189 (92%)	17 (8%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	FM	206/320 (64%)	193 (94%)	13 (6%)	0	100	100
5	GM	206/320 (64%)	194 (94%)	12 (6%)	0	100	100
5	HM	206/320 (64%)	191 (93%)	15 (7%)	0	100	100
5	IM	206/320 (64%)	192 (93%)	14 (7%)	0	100	100
5	JM	206/320 (64%)	191 (93%)	15 (7%)	0	100	100
5	KM	206/320 (64%)	191 (93%)	15 (7%)	0	100	100
5	LM	206/320 (64%)	197 (96%)	9 (4%)	0	100	100
5	MM	206/320 (64%)	195 (95%)	11 (5%)	0	100	100
6	AN	76/124 (61%)	71 (93%)	5 (7%)	0	100	100
6	BN	76/124 (61%)	69 (91%)	7 (9%)	0	100	100
6	CN	76/124 (61%)	68 (90%)	8 (10%)	0	100	100
6	DN	76/124 (61%)	70 (92%)	6 (8%)	0	100	100
6	EN	76/124 (61%)	72 (95%)	4 (5%)	0	100	100
6	FN	76/124 (61%)	69 (91%)	7 (9%)	0	100	100
6	GN	76/124 (61%)	68 (90%)	8 (10%)	0	100	100
6	HN	76/124 (61%)	70 (92%)	6 (8%)	0	100	100
6	IN	76/124 (61%)	72 (95%)	4 (5%)	0	100	100
6	JN	76/124 (61%)	73 (96%)	3 (4%)	0	100	100
6	KN	76/124 (61%)	69 (91%)	7 (9%)	0	100	100
6	LN	76/124 (61%)	67 (88%)	9 (12%)	0	100	100
6	MN	76/124 (61%)	73 (96%)	3 (4%)	0	100	100
9	AD	138/163 (85%)	131 (95%)	7 (5%)	0	100	100
9	Ad	135/163 (83%)	130 (96%)	5 (4%)	0	100	100
9	BD	138/163 (85%)	134 (97%)	4 (3%)	0	100	100
9	Bd	135/163 (83%)	128 (95%)	7 (5%)	0	100	100
9	CD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
9	Cd	135/163 (83%)	127 (94%)	8 (6%)	0	100	100
9	DD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
9	Dd	135/163 (83%)	128 (95%)	7 (5%)	0	100	100
9	ED	138/163 (85%)	133 (96%)	5 (4%)	0	100	100
9	Ed	135/163 (83%)	130 (96%)	5 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	FD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
9	Fd	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
9	GD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
9	Gd	135/163 (83%)	130 (96%)	5 (4%)	0	100	100
9	HD	138/163 (85%)	135 (98%)	3 (2%)	0	100	100
9	Hd	135/163 (83%)	127 (94%)	8 (6%)	0	100	100
9	ID	138/163 (85%)	134 (97%)	4 (3%)	0	100	100
9	Id	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
9	JD	138/163 (85%)	130 (94%)	8 (6%)	0	100	100
9	Jd	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
9	KD	138/163 (85%)	134 (97%)	4 (3%)	0	100	100
9	Kd	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
9	LD	138/163 (85%)	130 (94%)	8 (6%)	0	100	100
9	Ld	135/163 (83%)	126 (93%)	9 (7%)	0	100	100
9	MD	138/163 (85%)	131 (95%)	7 (5%)	0	100	100
9	Md	135/163 (83%)	127 (94%)	8 (6%)	0	100	100
10	AF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	Af	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
10	BF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
10	Bf	57/269 (21%)	54 (95%)	3 (5%)	0	100	100
10	CF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
10	Cf	57/269 (21%)	50 (88%)	7 (12%)	0	100	100
10	DF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
10	Df	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
10	EF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
10	Ef	57/269 (21%)	51 (90%)	6 (10%)	0	100	100
10	FF	61/269 (23%)	56 (92%)	5 (8%)	0	100	100
10	Ff	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
10	GF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	Gf	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
10	HF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	Hf	57/269 (21%)	52 (91%)	5 (9%)	0	100	100
10	IF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	If	57/269 (21%)	54 (95%)	3 (5%)	0	100	100
10	JF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
10	Jf	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
10	KF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
10	Kf	57/269 (21%)	52 (91%)	5 (9%)	0	100	100
10	LF	61/269 (23%)	56 (92%)	5 (8%)	0	100	100
10	Lf	57/269 (21%)	52 (91%)	5 (9%)	0	100	100
10	MF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	Mf	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
10	VF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
10	WF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	XF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	YF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
10	ZF	61/269 (23%)	60 (98%)	1 (2%)	0	100	100
11	AC	241/303 (80%)	231 (96%)	10 (4%)	0	100	100
11	BC	241/303 (80%)	236 (98%)	5 (2%)	0	100	100
11	CC	207/303 (68%)	191 (92%)	16 (8%)	0	100	100
11	DC	207/303 (68%)	196 (95%)	11 (5%)	0	100	100
11	EC	207/303 (68%)	198 (96%)	9 (4%)	0	100	100
11	FC	241/303 (80%)	231 (96%)	10 (4%)	0	100	100
11	GC	207/303 (68%)	196 (95%)	11 (5%)	0	100	100
11	HC	207/303 (68%)	196 (95%)	11 (5%)	0	100	100
11	IC	207/303 (68%)	189 (91%)	18 (9%)	0	100	100
11	JC	241/303 (80%)	229 (95%)	12 (5%)	0	100	100
11	KC	207/303 (68%)	195 (94%)	12 (6%)	0	100	100
11	LC	207/303 (68%)	195 (94%)	12 (6%)	0	100	100
11	MC	207/303 (68%)	192 (93%)	15 (7%)	0	100	100
All	All	23690/70112 (34%)	22525 (95%)	1165 (5%)	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	AG	135/765 (18%)	113 (84%)	22 (16%)	2 11
1	Ag	31/765 (4%)	24 (77%)	7 (23%)	1 5
1	BG	135/765 (18%)	120 (89%)	15 (11%)	5 18
1	Bg	31/765 (4%)	24 (77%)	7 (23%)	1 5
1	CG	135/765 (18%)	120 (89%)	15 (11%)	5 18
1	Cg	31/765 (4%)	26 (84%)	5 (16%)	2 11
1	DG	135/765 (18%)	116 (86%)	19 (14%)	3 14
1	Dg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	EG	135/765 (18%)	121 (90%)	14 (10%)	5 20
1	Eg	31/765 (4%)	29 (94%)	2 (6%)	14 35
1	FG	135/765 (18%)	118 (87%)	17 (13%)	3 16
1	Fg	31/765 (4%)	30 (97%)	1 (3%)	34 54
1	GG	135/765 (18%)	120 (89%)	15 (11%)	5 18
1	Gg	31/765 (4%)	28 (90%)	3 (10%)	6 22
1	HG	135/765 (18%)	115 (85%)	20 (15%)	2 13
1	Hg	31/765 (4%)	25 (81%)	6 (19%)	1 7
1	IG	135/765 (18%)	121 (90%)	14 (10%)	5 20
1	Ig	31/765 (4%)	26 (84%)	5 (16%)	2 11
1	JG	135/765 (18%)	122 (90%)	13 (10%)	7 22
1	Jg	31/765 (4%)	25 (81%)	6 (19%)	1 7
1	KG	135/765 (18%)	123 (91%)	12 (9%)	8 25
1	Kg	31/765 (4%)	25 (81%)	6 (19%)	1 7
1	LG	135/765 (18%)	115 (85%)	20 (15%)	2 13
1	Lg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	MG	135/765 (18%)	114 (84%)	21 (16%)	2 12
1	Mg	31/765 (4%)	25 (81%)	6 (19%)	1 7

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	NG	135/765 (18%)	114 (84%)	21 (16%)	2 12
1	OG	135/765 (18%)	112 (83%)	23 (17%)	1 10
1	PG	135/765 (18%)	114 (84%)	21 (16%)	2 12
1	VG	31/765 (4%)	24 (77%)	7 (23%)	1 5
1	WG	31/765 (4%)	23 (74%)	8 (26%)	0 3
1	XG	31/765 (4%)	24 (77%)	7 (23%)	1 5
1	YG	31/765 (4%)	28 (90%)	3 (10%)	6 22
1	ZG	31/765 (4%)	30 (97%)	1 (3%)	34 54
2	AH	220/300 (73%)	192 (87%)	28 (13%)	3 15
2	BH	220/300 (73%)	194 (88%)	26 (12%)	4 17
2	CH	220/300 (73%)	198 (90%)	22 (10%)	6 21
2	DH	220/300 (73%)	196 (89%)	24 (11%)	5 19
2	EH	220/300 (73%)	190 (86%)	30 (14%)	3 14
2	FH	220/300 (73%)	193 (88%)	27 (12%)	4 16
2	GH	220/300 (73%)	199 (90%)	21 (10%)	7 22
2	HH	220/300 (73%)	203 (92%)	17 (8%)	10 30
2	IH	220/300 (73%)	198 (90%)	22 (10%)	6 21
2	JH	220/300 (73%)	192 (87%)	28 (13%)	3 15
2	KH	220/300 (73%)	200 (91%)	20 (9%)	7 24
2	LH	220/300 (73%)	196 (89%)	24 (11%)	5 19
2	MH	220/300 (73%)	193 (88%)	27 (12%)	4 16
2	VH	207/300 (69%)	182 (88%)	25 (12%)	4 16
2	WH	207/300 (69%)	182 (88%)	25 (12%)	4 16
2	XH	207/300 (69%)	183 (88%)	24 (12%)	4 17
2	YH	207/300 (69%)	181 (87%)	26 (13%)	3 16
2	ZH	207/300 (69%)	179 (86%)	28 (14%)	3 15
3	AK	129/163 (79%)	114 (88%)	15 (12%)	4 17
3	BK	129/163 (79%)	112 (87%)	17 (13%)	3 15
3	CK	129/163 (79%)	114 (88%)	15 (12%)	4 17
3	DK	129/163 (79%)	121 (94%)	8 (6%)	15 37
3	EK	129/163 (79%)	118 (92%)	11 (8%)	8 27

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
3	FK	129/163 (79%)	117 (91%)	12 (9%)	7 23
3	GK	129/163 (79%)	117 (91%)	12 (9%)	7 23
3	HK	129/163 (79%)	117 (91%)	12 (9%)	7 23
3	IK	129/163 (79%)	117 (91%)	12 (9%)	7 23
3	JK	129/163 (79%)	116 (90%)	13 (10%)	6 21
3	KK	129/163 (79%)	111 (86%)	18 (14%)	3 14
3	LK	129/163 (79%)	117 (91%)	12 (9%)	7 23
3	MK	129/163 (79%)	110 (85%)	19 (15%)	2 13
4	AL	148/203 (73%)	137 (93%)	11 (7%)	11 31
4	BL	148/203 (73%)	129 (87%)	19 (13%)	3 15
4	CL	148/203 (73%)	137 (93%)	11 (7%)	11 31
4	DL	148/203 (73%)	134 (90%)	14 (10%)	7 22
4	EL	148/203 (73%)	132 (89%)	16 (11%)	5 19
4	FL	148/203 (73%)	132 (89%)	16 (11%)	5 19
4	GL	148/203 (73%)	130 (88%)	18 (12%)	4 16
4	HL	148/203 (73%)	136 (92%)	12 (8%)	9 29
4	IL	148/203 (73%)	137 (93%)	11 (7%)	11 31
4	JL	148/203 (73%)	137 (93%)	11 (7%)	11 31
4	KL	148/203 (73%)	132 (89%)	16 (11%)	5 19
4	LL	148/203 (73%)	140 (95%)	8 (5%)	18 40
4	ML	148/203 (73%)	138 (93%)	10 (7%)	13 34
5	AM	175/276 (63%)	144 (82%)	31 (18%)	1 9
5	BM	175/276 (63%)	155 (89%)	20 (11%)	4 17
5	CM	175/276 (63%)	150 (86%)	25 (14%)	2 13
5	DM	175/276 (63%)	156 (89%)	19 (11%)	5 19
5	EM	175/276 (63%)	152 (87%)	23 (13%)	3 15
5	FM	175/276 (63%)	150 (86%)	25 (14%)	2 13
5	GM	175/276 (63%)	144 (82%)	31 (18%)	1 9
5	HM	175/276 (63%)	152 (87%)	23 (13%)	3 15
5	IM	175/276 (63%)	158 (90%)	17 (10%)	6 22
5	JM	175/276 (63%)	150 (86%)	25 (14%)	2 13

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
5	KM	175/276 (63%)	153 (87%)	22 (13%)	3 16
5	LM	175/276 (63%)	155 (89%)	20 (11%)	4 17
5	MM	175/276 (63%)	155 (89%)	20 (11%)	4 17
6	AN	66/107 (62%)	55 (83%)	11 (17%)	2 10
6	BN	66/107 (62%)	53 (80%)	13 (20%)	1 7
6	CN	66/107 (62%)	54 (82%)	12 (18%)	1 8
6	DN	66/107 (62%)	56 (85%)	10 (15%)	2 12
6	EN	66/107 (62%)	58 (88%)	8 (12%)	4 16
6	FN	66/107 (62%)	61 (92%)	5 (8%)	11 30
6	GN	66/107 (62%)	55 (83%)	11 (17%)	2 10
6	HN	66/107 (62%)	57 (86%)	9 (14%)	3 14
6	IN	66/107 (62%)	56 (85%)	10 (15%)	2 12
6	JN	66/107 (62%)	55 (83%)	11 (17%)	2 10
6	KN	66/107 (62%)	55 (83%)	11 (17%)	2 10
6	LN	66/107 (62%)	59 (89%)	7 (11%)	5 19
6	MN	66/107 (62%)	54 (82%)	12 (18%)	1 8
9	AD	121/139 (87%)	112 (93%)	9 (7%)	11 31
9	Ad	118/139 (85%)	106 (90%)	12 (10%)	6 21
9	BD	121/139 (87%)	111 (92%)	10 (8%)	9 28
9	Bd	118/139 (85%)	105 (89%)	13 (11%)	5 19
9	CD	121/139 (87%)	106 (88%)	15 (12%)	4 16
9	Cd	118/139 (85%)	103 (87%)	15 (13%)	3 15
9	DD	121/139 (87%)	110 (91%)	11 (9%)	7 24
9	Dd	118/139 (85%)	105 (89%)	13 (11%)	5 19
9	ED	121/139 (87%)	111 (92%)	10 (8%)	9 28
9	Ed	118/139 (85%)	107 (91%)	11 (9%)	7 23
9	FD	121/139 (87%)	110 (91%)	11 (9%)	7 24
9	Fd	118/139 (85%)	109 (92%)	9 (8%)	11 30
9	GD	121/139 (87%)	104 (86%)	17 (14%)	3 14
9	Gd	118/139 (85%)	106 (90%)	12 (10%)	6 21
9	HD	121/139 (87%)	110 (91%)	11 (9%)	7 24

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	Hd	118/139 (85%)	109 (92%)	9 (8%)	11	30
9	ID	121/139 (87%)	111 (92%)	10 (8%)	9	28
9	Id	118/139 (85%)	108 (92%)	10 (8%)	8	27
9	JD	121/139 (87%)	112 (93%)	9 (7%)	11	31
9	Jd	118/139 (85%)	110 (93%)	8 (7%)	13	34
9	KD	121/139 (87%)	110 (91%)	11 (9%)	7	24
9	Kd	118/139 (85%)	107 (91%)	11 (9%)	7	23
9	LD	121/139 (87%)	105 (87%)	16 (13%)	3	15
9	Ld	118/139 (85%)	105 (89%)	13 (11%)	5	19
9	MD	121/139 (87%)	114 (94%)	7 (6%)	17	38
9	Md	118/139 (85%)	102 (86%)	16 (14%)	3	14
10	AF	53/237 (22%)	46 (87%)	7 (13%)	3	15
10	Af	49/237 (21%)	44 (90%)	5 (10%)	6	21
10	BF	53/237 (22%)	47 (89%)	6 (11%)	4	18
10	Bf	49/237 (21%)	43 (88%)	6 (12%)	4	16
10	CF	53/237 (22%)	47 (89%)	6 (11%)	4	18
10	Cf	49/237 (21%)	42 (86%)	7 (14%)	2	13
10	DF	53/237 (22%)	46 (87%)	7 (13%)	3	15
10	Df	49/237 (21%)	41 (84%)	8 (16%)	2	11
10	EF	53/237 (22%)	45 (85%)	8 (15%)	2	12
10	Ef	49/237 (21%)	44 (90%)	5 (10%)	6	21
10	FF	53/237 (22%)	47 (89%)	6 (11%)	4	18
10	Ff	49/237 (21%)	42 (86%)	7 (14%)	2	13
10	GF	53/237 (22%)	48 (91%)	5 (9%)	7	23
10	Gf	49/237 (21%)	44 (90%)	5 (10%)	6	21
10	HF	53/237 (22%)	47 (89%)	6 (11%)	4	18
10	Hf	49/237 (21%)	46 (94%)	3 (6%)	15	37
10	IF	53/237 (22%)	48 (91%)	5 (9%)	7	23
10	If	49/237 (21%)	43 (88%)	6 (12%)	4	16
10	JF	53/237 (22%)	49 (92%)	4 (8%)	11	31
10	Jf	49/237 (21%)	44 (90%)	5 (10%)	6	21

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
10	KF	53/237 (22%)	45 (85%)	8 (15%)	2 12
10	Kf	49/237 (21%)	43 (88%)	6 (12%)	4 16
10	LF	53/237 (22%)	46 (87%)	7 (13%)	3 15
10	Lf	49/237 (21%)	47 (96%)	2 (4%)	26 48
10	MF	53/237 (22%)	47 (89%)	6 (11%)	4 18
10	Mf	49/237 (21%)	42 (86%)	7 (14%)	2 13
10	VF	53/237 (22%)	49 (92%)	4 (8%)	11 31
10	WF	53/237 (22%)	47 (89%)	6 (11%)	4 18
10	XF	53/237 (22%)	47 (89%)	6 (11%)	4 18
10	YF	53/237 (22%)	47 (89%)	6 (11%)	4 18
10	ZF	53/237 (22%)	50 (94%)	3 (6%)	17 39
11	AC	203/257 (79%)	181 (89%)	22 (11%)	5 19
11	BC	203/257 (79%)	180 (89%)	23 (11%)	4 18
11	CC	178/257 (69%)	156 (88%)	22 (12%)	4 16
11	DC	178/257 (69%)	158 (89%)	20 (11%)	5 18
11	EC	178/257 (69%)	157 (88%)	21 (12%)	4 17
11	FC	203/257 (79%)	181 (89%)	22 (11%)	5 19
11	GC	178/257 (69%)	158 (89%)	20 (11%)	5 18
11	HC	178/257 (69%)	154 (86%)	24 (14%)	3 15
11	IC	178/257 (69%)	158 (89%)	20 (11%)	5 18
11	JC	203/257 (79%)	176 (87%)	27 (13%)	3 15
11	KC	178/257 (69%)	165 (93%)	13 (7%)	11 31
11	LC	178/257 (69%)	160 (90%)	18 (10%)	6 21
11	MC	178/257 (69%)	152 (85%)	26 (15%)	2 13
All	All	20459/55449 (37%)	18110 (88%)	2349 (12%)	7 17

5 of 2349 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
11	KC	214	LYS
9	Dd	41	LEU
2	CH	180	VAL
11	KC	193	THR
5	DM	152	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 39 such sidechains are listed below:

Mol	Chain	Res	Type
10	BF	251	GLN
5	CM	164	GLN
5	BM	249	GLN
1	GG	1020	GLN
5	DM	267	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)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
8	HX	1
8	JX	1
8	VX	1
8	ZX	1
8	BX	1

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Mol	Chain	Number of breaks
8	IX	1
8	YX	1
8	EX	1
8	CX	1
8	FX	1
8	KX	1
8	MX	1
8	WX	1
8	GX	1
8	DX	1
8	AX	1
8	LX	1
8	XX	1

The worst 5 of 18 chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	HX	38:UNK	C	70:UNK	N	26.96
1	JX	38:UNK	C	70:UNK	N	26.39
1	VX	38:UNK	C	70:UNK	N	26.34
1	ZX	38:UNK	C	70:UNK	N	26.34
1	BX	38:UNK	C	70:UNK	N	25.84

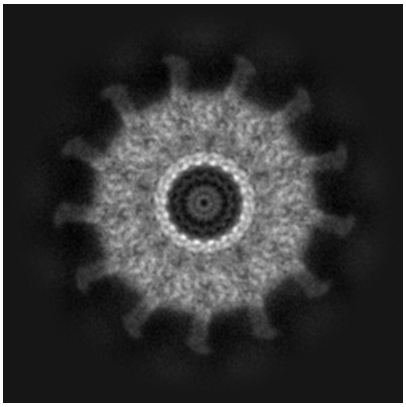
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-24024. These allow visual inspection of the internal detail of the map and identification of artifacts.

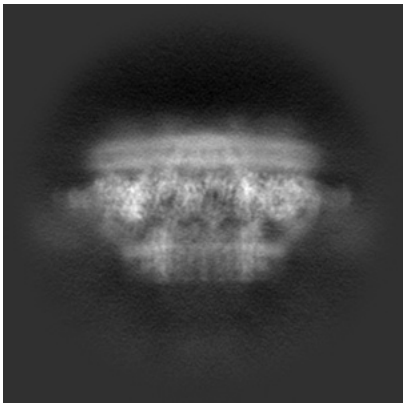
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

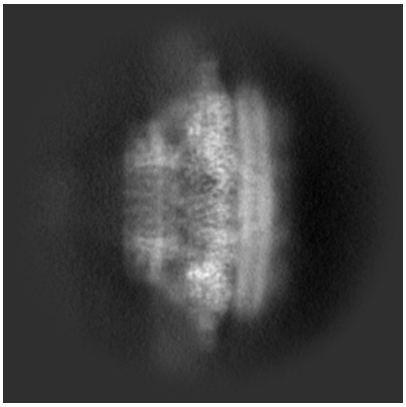
6.1.1 Primary map



X



Y

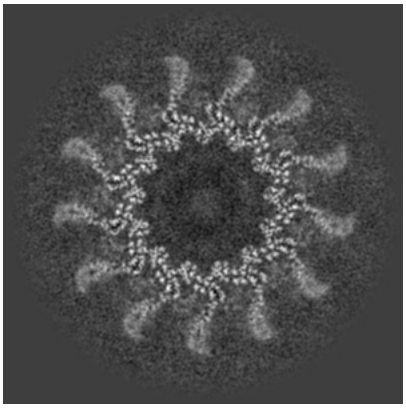


Z

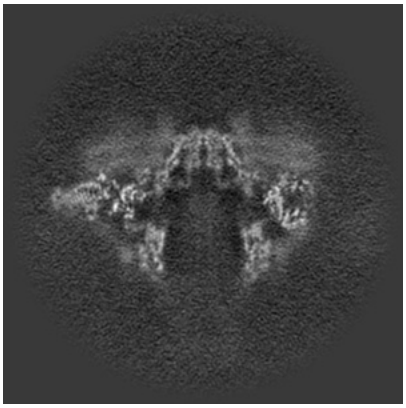
The images above show the map projected in three orthogonal directions.

6.2 Central slices

6.2.1 Primary map



X Index: 125



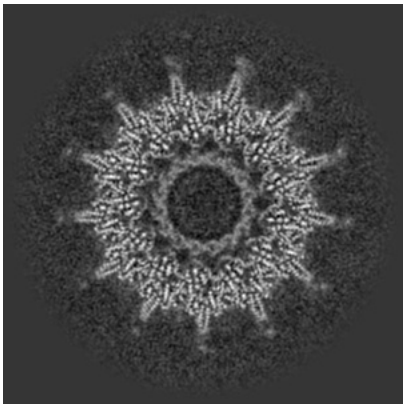
Y Index: 125

Z Index: 125

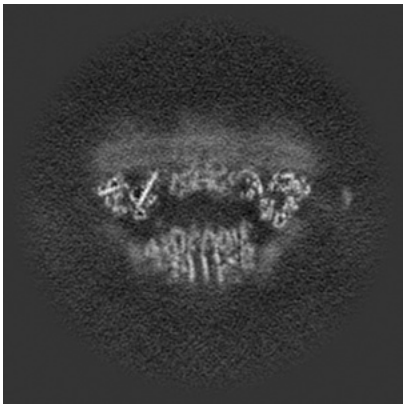
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

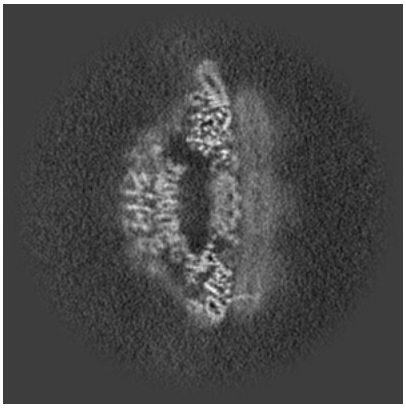
6.3.1 Primary map



X Index: 134



Y Index: 101

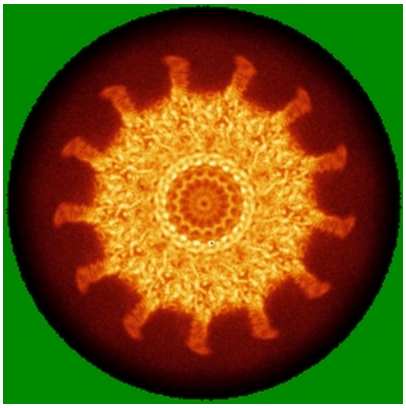


Z Index: 151

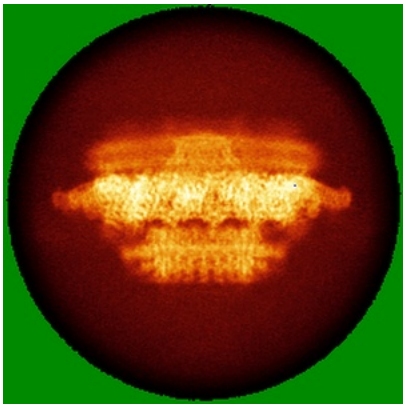
The images above show the largest variance slices of the map in three orthogonal directions.

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

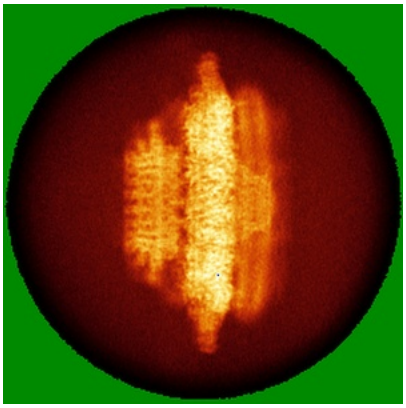
6.4.1 Primary map



X



Y



Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 2.25. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

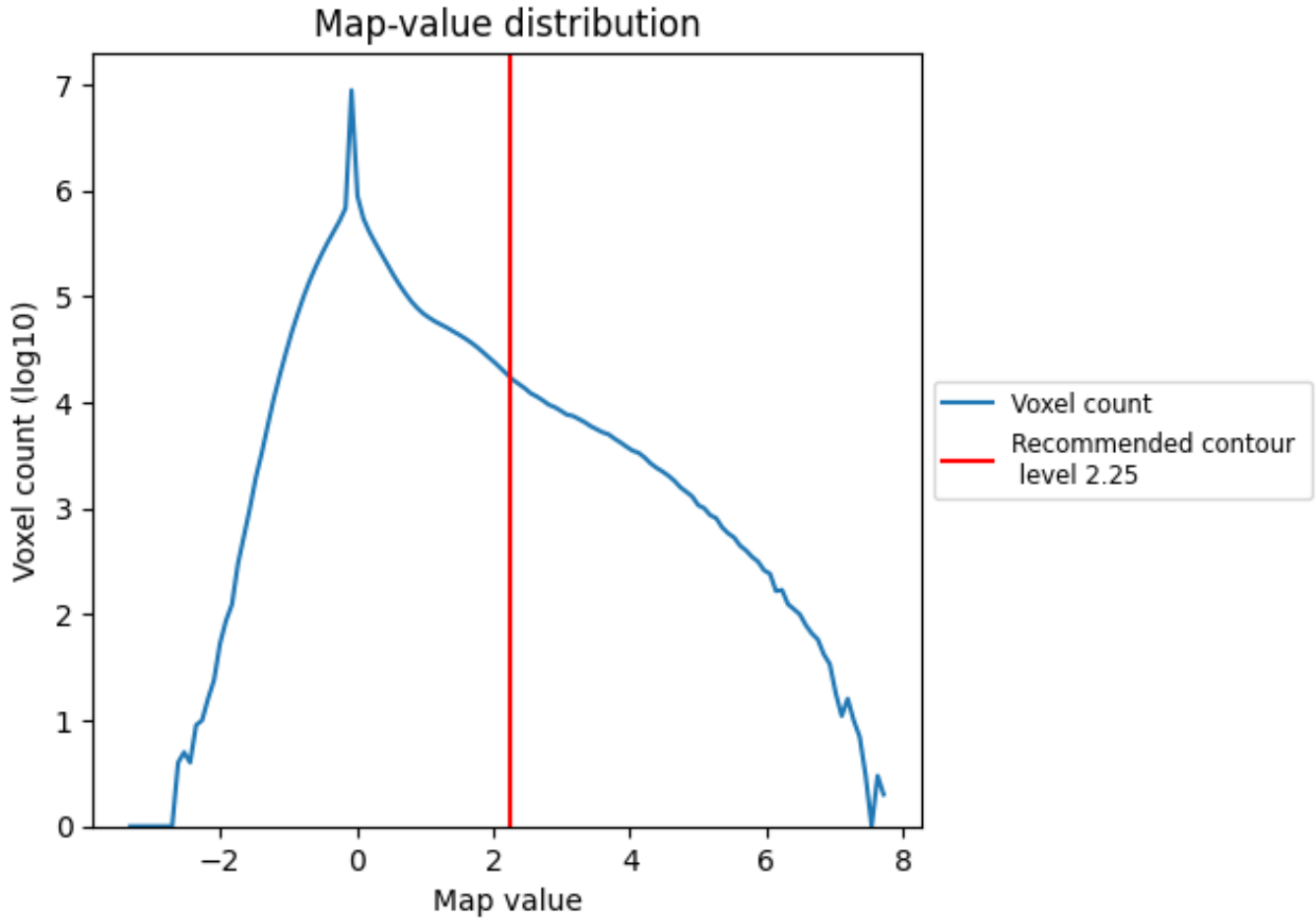
6.6 Mask visualisation (i)

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

7 Map analysis

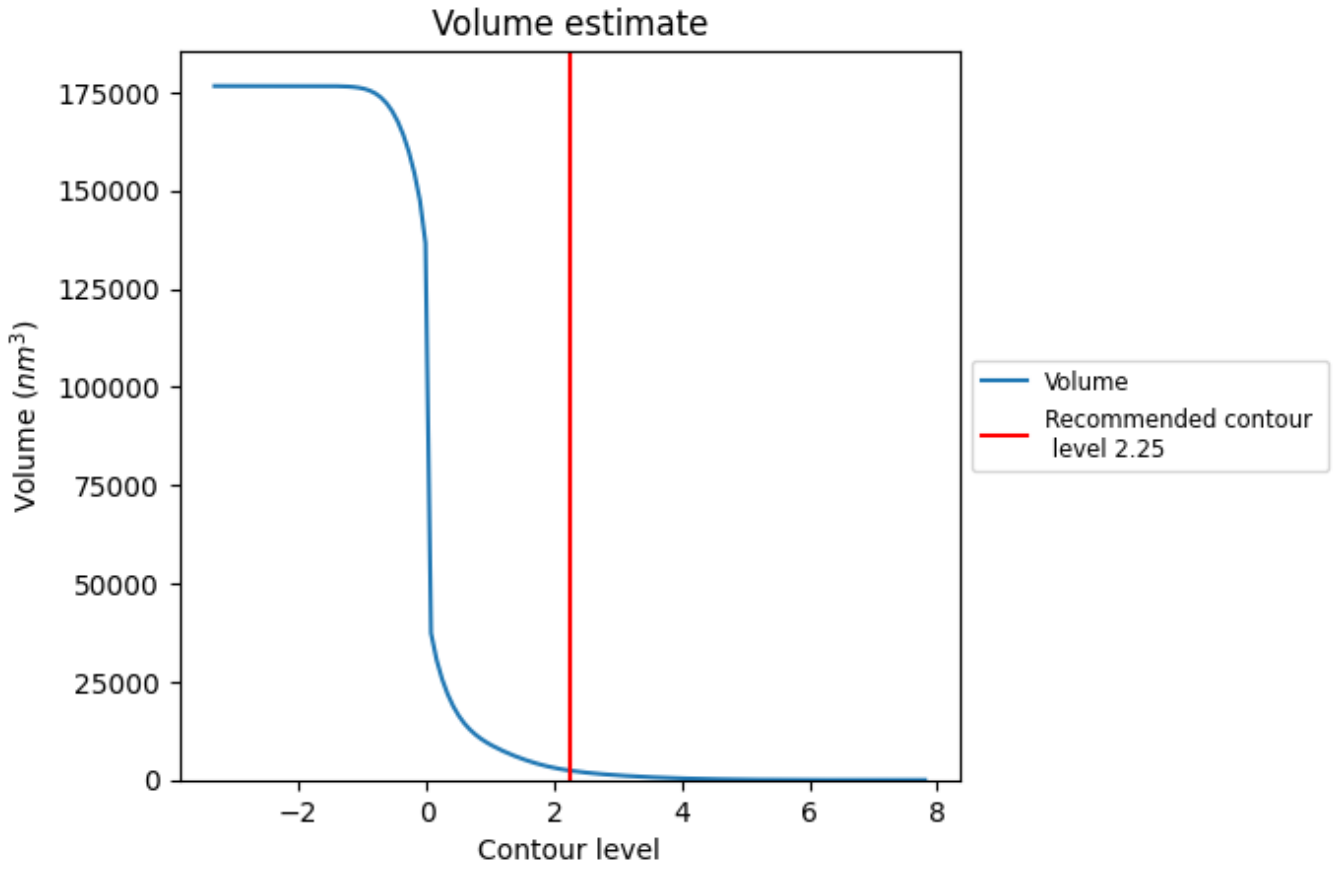
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

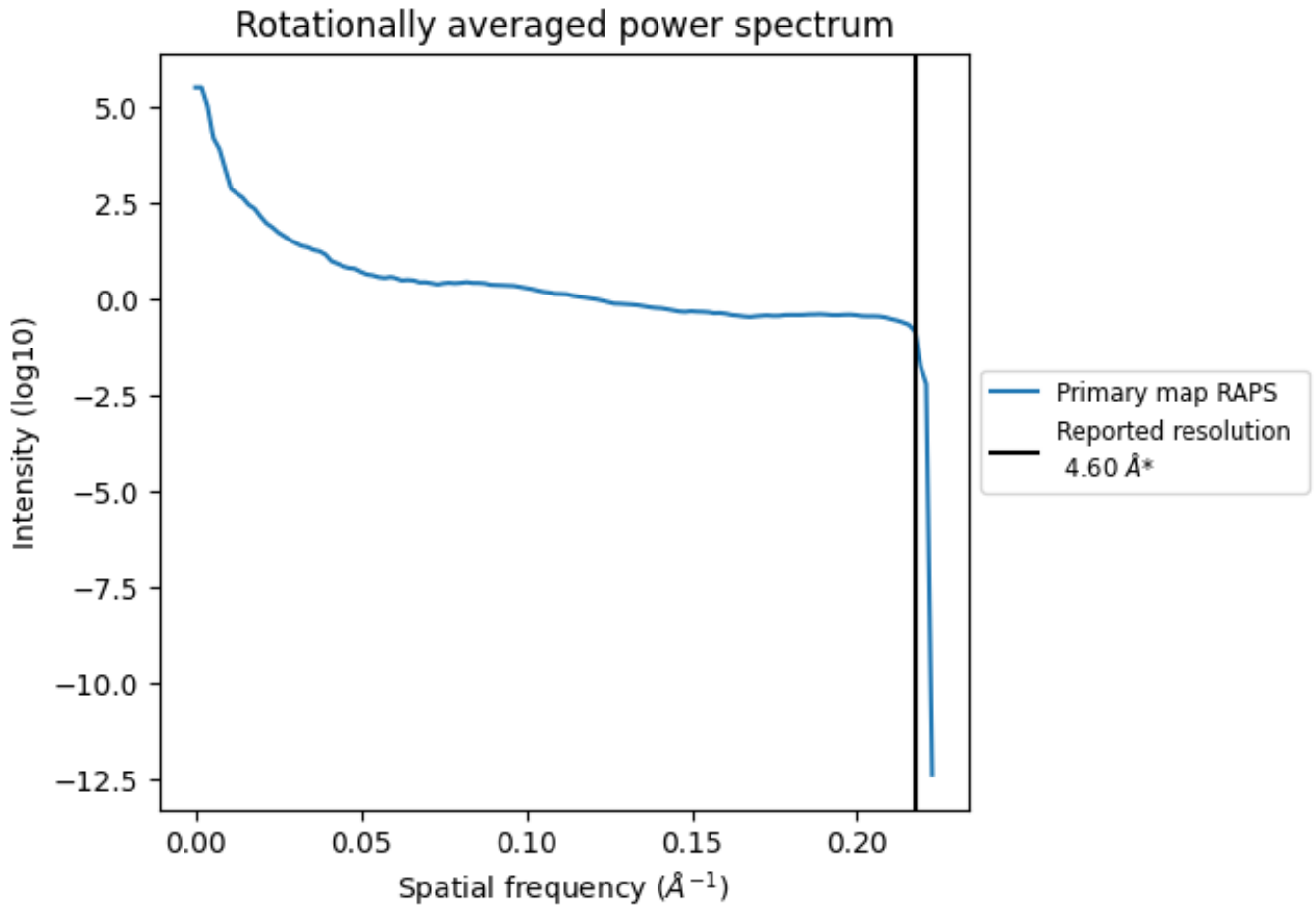
7.2 Volume estimate (i)



The volume at the recommended contour level is 2386 nm^3; this corresponds to an approximate mass of 2155 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 0.217 $Å^{-1}$

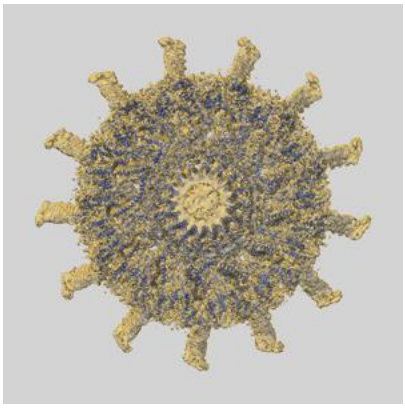
8 Fourier-Shell correlation

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

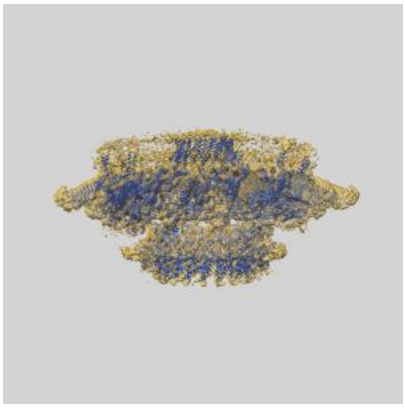
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-24024 and PDB model 7MUW. Per-residue inclusion information can be found in section 3 on page 22.

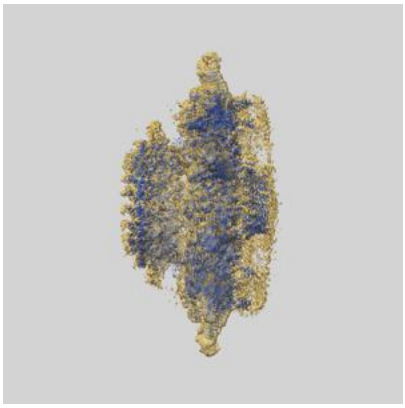
9.1 Map-model overlay



X



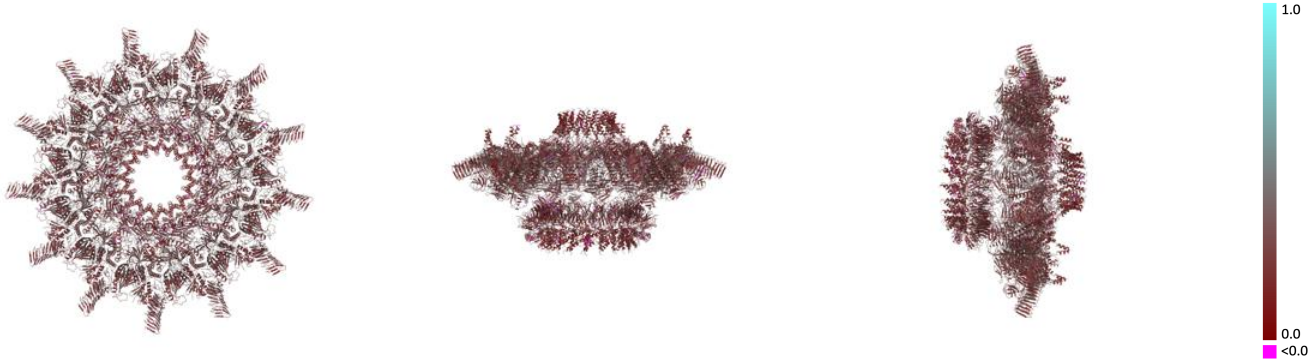
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 2.25 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.

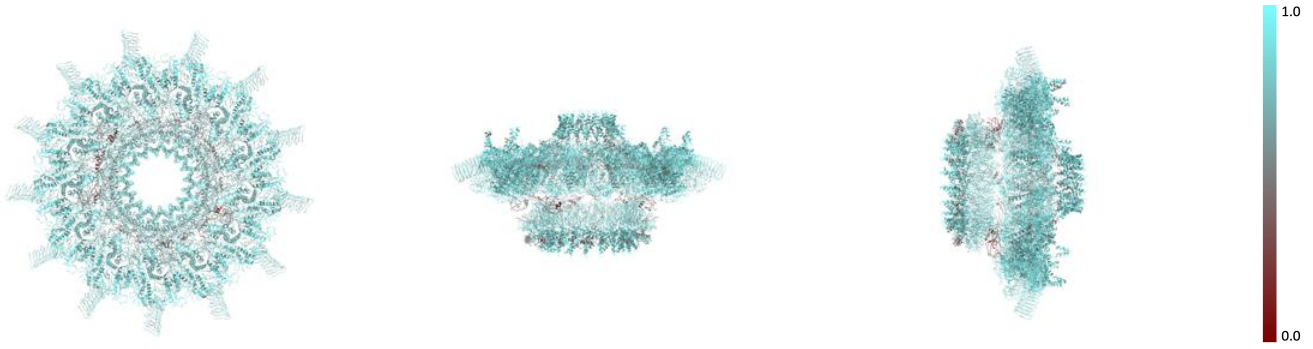
9.2 Q-score mapped to coordinate model



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.

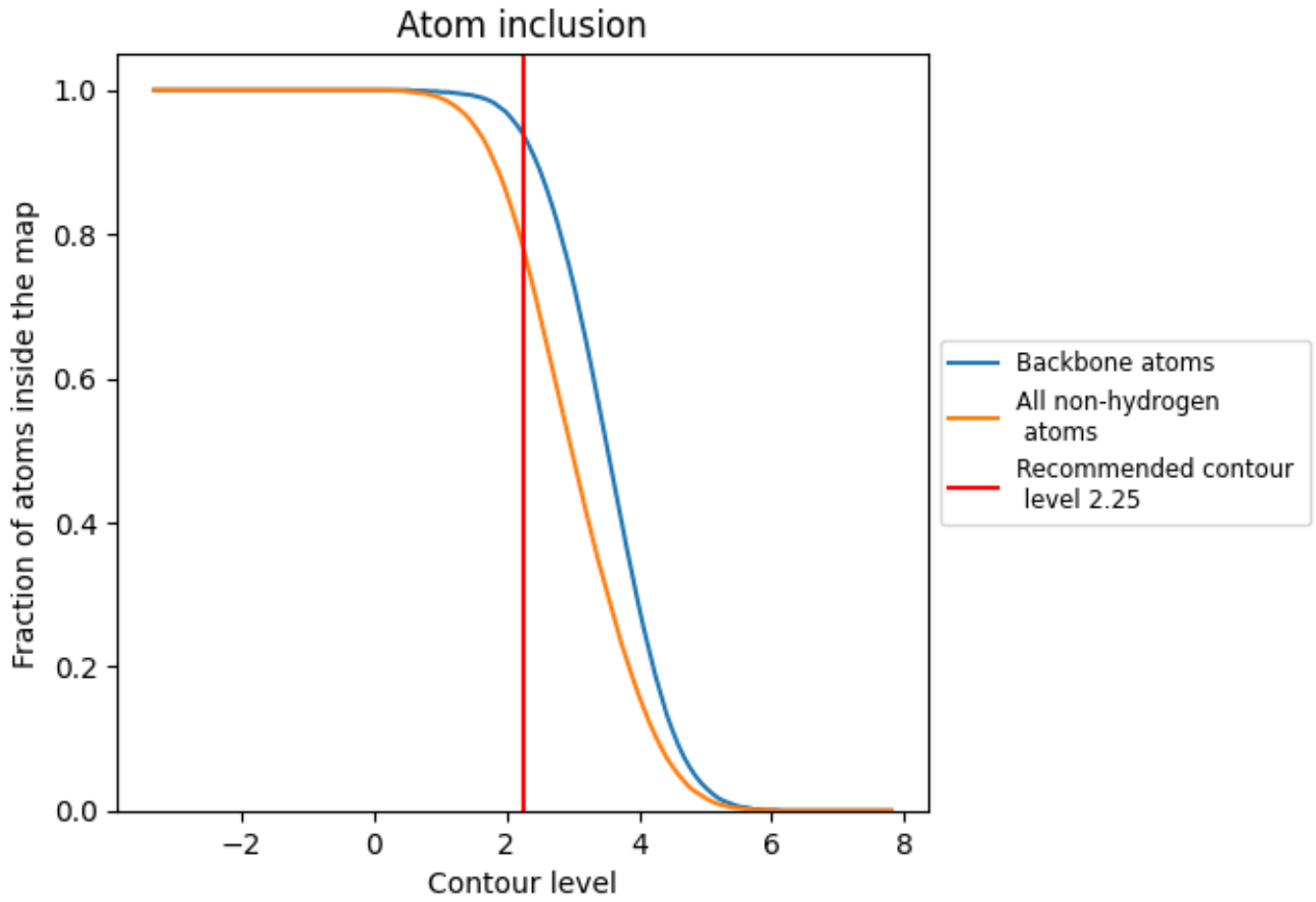
9.3 Atom inclusion mapped to coordinate model



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 (2.25).

9.4 Atom inclusion (i)



At the recommended contour level, 94% of all backbone atoms, 78% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (2.25) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7820	0.2820
AC	0.7720	0.2930
AD	0.8080	0.3200
AF	0.7980	0.2290
AG	0.6910	0.2430
AH	0.7820	0.2740
AK	0.8110	0.3060
AL	0.8200	0.2840
AM	0.7870	0.2930
AN	0.7600	0.3330
AU	0.9560	0.4410
AX	0.6540	0.2400
Ad	0.8240	0.3120
Af	0.7930	0.2740
Ag	0.8120	0.2550
BC	0.7590	0.2830
BD	0.8090	0.3110
BF	0.7790	0.2220
BG	0.6550	0.2250
BH	0.7930	0.2730
BK	0.8300	0.3040
BL	0.8300	0.2900
BM	0.7990	0.2910
BN	0.7330	0.3180
BU	0.9780	0.4590
BX	0.5670	0.2260
Bd	0.8140	0.3090
Bf	0.7790	0.2820
Bg	0.8640	0.2740
CC	0.8140	0.2900
CD	0.8110	0.3160
CF	0.7130	0.2400
CG	0.6570	0.2330
CH	0.8090	0.2930
CK	0.8240	0.3160

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Chain	Atom inclusion	Q-score
CL	0.8430	0.2900
CM	0.8110	0.2840
CN	0.7410	0.3220
CU	0.9780	0.4900
CX	0.5880	0.2190
Cd	0.8350	0.2900
Cf	0.7740	0.2780
Cg	0.8570	0.2580
DC	0.8250	0.2920
DD	0.8160	0.3020
DF	0.7730	0.2310
DG	0.7180	0.2500
DH	0.7960	0.2850
DK	0.8110	0.3100
DL	0.8490	0.2920
DM	0.7850	0.2850
DN	0.7730	0.3330
DU	1.0000	0.4410
DX	0.7330	0.2560
Dd	0.8140	0.3120
Df	0.7200	0.2600
Dg	0.8380	0.2790
EC	0.8170	0.3040
ED	0.8050	0.3150
EF	0.7980	0.2270
EG	0.6690	0.2430
EH	0.7890	0.2790
EK	0.8290	0.3130
EL	0.8450	0.2940
EM	0.8090	0.2850
EN	0.7810	0.3230
EU	0.9560	0.4260
EX	0.5420	0.2110
Ed	0.8210	0.3010
Ef	0.7880	0.2840
Eg	0.8530	0.2540
FC	0.7840	0.2970
FD	0.8130	0.3080
FF	0.7980	0.2380
FG	0.6900	0.2290
FH	0.8060	0.2820
FK	0.8030	0.3050

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Chain	Atom inclusion	Q-score
FL	0.8320	0.2990
FM	0.8140	0.3010
FN	0.7550	0.3230
FU	1.0000	0.4520
FX	0.7420	0.2780
Fd	0.8290	0.3060
Ff	0.8180	0.2950
Fg	0.8490	0.2650
GC	0.8110	0.3010
GD	0.8100	0.3150
GF	0.7770	0.2370
GG	0.7040	0.2260
GH	0.7970	0.2810
GK	0.8060	0.3080
GL	0.8240	0.2930
GM	0.8220	0.2920
GN	0.7600	0.3200
GU	0.9560	0.4710
GX	0.4750	0.2200
Gd	0.8220	0.3050
Gf	0.7740	0.2860
Gg	0.8530	0.2540
HC	0.8220	0.2950
HD	0.8220	0.3190
HF	0.7710	0.2330
HG	0.7040	0.2250
HH	0.8080	0.2820
HK	0.8190	0.3070
HL	0.8340	0.2900
HM	0.8290	0.2940
HN	0.7920	0.3310
HU	0.9560	0.4480
HX	0.5580	0.2450
Hd	0.8470	0.2990
Hf	0.8110	0.2690
Hg	0.7980	0.2550
IC	0.8140	0.3000
ID	0.8110	0.3060
IF	0.7830	0.2030
IG	0.7100	0.2390
IH	0.7910	0.2720
IK	0.8360	0.3120

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Chain	Atom inclusion	Q-score
IL	0.8350	0.2950
IM	0.8110	0.2800
IN	0.7850	0.3260
IU	0.9330	0.4260
IX	0.6540	0.2380
Id	0.8420	0.3010
If	0.8290	0.2920
Ig	0.8600	0.2490
JC	0.7810	0.2900
JD	0.8010	0.3070
JF	0.7790	0.2370
JG	0.6590	0.2230
JH	0.8040	0.2750
JK	0.8140	0.3050
JL	0.8410	0.2920
JM	0.8100	0.2950
JN	0.7410	0.3150
JU	0.9780	0.4640
JX	0.6460	0.2330
Jd	0.8000	0.3030
Jf	0.8060	0.2840
Jg	0.8570	0.2560
KC	0.7850	0.2970
KD	0.8070	0.3070
KF	0.7560	0.2220
KG	0.6730	0.2060
KH	0.8070	0.2820
KK	0.8250	0.3130
KL	0.8300	0.2990
KM	0.8300	0.2920
KN	0.7520	0.3300
KU	0.9780	0.4760
KX	0.5540	0.2180
Kd	0.8290	0.3060
Kf	0.8090	0.2910
Kg	0.8350	0.2420
LC	0.8180	0.3000
LD	0.8080	0.3160
LF	0.8020	0.2350
LG	0.6570	0.1890
LH	0.7970	0.2680
LK	0.8260	0.3160

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Chain	Atom inclusion	Q-score
LL	0.8270	0.2960
LM	0.8040	0.2770
LN	0.8110	0.3390
LU	0.9780	0.4700
LX	0.5500	0.2410
Ld	0.8290	0.2960
Lf	0.8130	0.2690
Lg	0.8530	0.2520
MC	0.8190	0.3040
MD	0.7860	0.3160
MF	0.8130	0.2280
MG	0.6760	0.2120
MH	0.8000	0.2760
MK	0.8040	0.3160
ML	0.8090	0.2910
MM	0.7940	0.2850
MN	0.7760	0.3210
MU	0.9110	0.4900
MX	0.6330	0.2400
Md	0.8170	0.2970
Mf	0.8110	0.2730
Mg	0.8600	0.2570
NG	0.6620	0.2190
OG	0.6830	0.2440
PG	0.7070	0.2390
VF	0.7410	0.2360
VG	0.8200	0.2480
VH	0.6660	0.2670
VX	0.6580	0.2130
WF	0.7810	0.2360
WG	0.8380	0.2530
WH	0.6180	0.2580
WX	0.6540	0.2510
XF	0.7710	0.2190
XG	0.7980	0.2540
XH	0.5890	0.2530
XX	0.6670	0.2320
YF	0.7940	0.2290
YG	0.8090	0.2510
YH	0.7010	0.2540
YX	0.6210	0.2590
ZF	0.8340	0.2440

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Chain	Atom inclusion	Q-score
ZG	0.7720	0.2470
ZH	0.5400	0.2220
ZX	0.5620	0.2240