wwPDB EM Validation Summary Report

Oct 6, 2024 – 02:28 PM EDT

PDB ID	:	7MUV
EMDB ID	:	EMD-24023
Title	:	Reconstruction of the Legionella pneumophila Dot/Icm T4SS 3DVA Map 3
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:

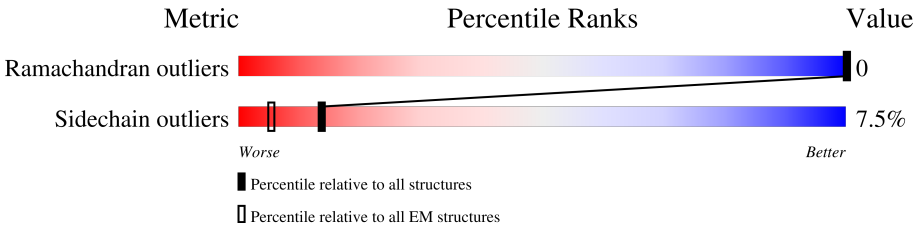
EMDB validation analysis	:	0.0.1.dev113
MolProbity	:	4.02b-467
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	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	15% 84%
1	Ag	1048	97%
1	BG	1048	15% 84%
1	Bg	1048	97%
1	CG	1048	15% 84%
1	Cg	1048	97%
1	DG	1048	14% 84%
1	Dg	1048	97%
1	EG	1048	15% 84%

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Mol	Chain	Length	Quality of chain
1	Eg	1048	97%
1	FG	1048	15% 84%
1	Fg	1048	97%
1	GG	1048	15% 84%
1	Gg	1048	97%
1	HG	1048	15% 84%
1	Hg	1048	97%
1	IG	1048	15% 84%
1	Ig	1048	97%
1	JG	1048	14% 84%
1	Jg	1048	97%
1	KG	1048	15% 84%
1	Kg	1048	97%
1	LG	1048	15% 84%
1	Lg	1048	97%
1	MG	1048	15% 84%
1	Mg	1048	97%
1	NG	1048	15% 84%
1	OG	1048	15% 84%
1	PG	1048	15% 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	66% 5% 29%
2	BH	361	67% 29%
2	CH	361	68% 29%
2	DH	361	68% 29%
2	EH	361	65% 6% 29%
2	FH	361	68% 29%
2	GH	361	68% 29%
2	HH	361	68% 29%
2	IH	361	69% 29%
2	JH	361	66% 5% 29%
2	KH	361	66% 5% 29%
2	LH	361	67% 5% 29%
2	MH	361	66% 5% 29%
2	VH	361	12% 64% 33%
2	WH	361	23% 61% 6% 33%
2	XH	361	9% 62% 5% 33%
2	YH	361	23% 61% 7% 33%
2	ZH	361	14% 62% 6% 33%
3	AK	189	76% 20%
3	BK	189	76% 20%
3	CK	189	77% 20%
3	DK	189	75% 5% 20%
3	EK	189	77% 20%
3	FK	189	76% 20%
3	GK	189	75% 5% 20%

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Mol	Chain	Length	Quality of chain
3	HK	189	77% 20%
3	IK	189	75% 5% 20%
3	JK	189	72% 7% 20%
3	KK	189	75% 5% 20%
3	LK	189	75% 5% 20%
3	MK	189	71% 9% 20%
4	AL	249	67% 31%
4	BL	249	64% 5% 31%
4	CL	249	65% 31%
4	DL	249	65% 31%
4	EL	249	66% 31%
4	FL	249	64% 6% 31%
4	GL	249	67% 31%
4	HL	249	68% 31%
4	IL	249	67% 31%
4	JL	249	66% 31%
4	KL	249	63% 7% 31%
4	LL	249	65% 31%
4	ML	249	64% 5% 31%
5	AN	124	5% 57% 6% 37%
5	BN	124	7% 57% 6% 37%
5	CN	124	58% 5% 37%
5	DN	124	59% 37%
5	EN	124	57% 6% 37%
5	FN	124	5% 59% 37%

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Mol	Chain	Length	Quality of chain
5	GN	124	58% 5% 37%
5	HN	124	60% 37%
5	IN	124	60% 37%
5	JN	124	57% 6% 37%
5	KN	124	60% 37%
5	LN	124	59% 37%
5	MN	124	56% 7% 37%
6	AU	9	100%
6	BU	9	100%
6	CU	9	100%
6	DU	9	100%
6	EU	9	100%
6	FU	9	100%
6	GU	9	100%
6	HU	9	100%
6	IU	9	100%
6	JU	9	100%
6	KU	9	100%
6	LU	9	100%
6	MU	9	100%
7	AX	48	31% 100%
7	BX	48	35% 100%
7	CX	48	40% 100%
7	DX	48	42% 100%
7	EX	48	46% 100%

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Mol	Chain	Length	Quality of chain
7	FX	48	29% 100%
7	GX	48	33% 100%
7	HX	48	44% 100%
7	IX	48	46% 100%
7	JX	48	31% 100%
7	KX	48	42% 100%
7	LX	48	29% 100%
7	MX	48	31% 100%
7	VX	48	42% 100%
7	WX	48	40% 100%
7	XX	48	29% 100%
7	YX	48	40% 100%
7	ZX	48	38% 100%
8	AD	163	82% 14%
8	Ad	163	79% 5% 16%
8	BD	163	82% 14%
8	Bd	163	80% 16%
8	CD	163	83% 14%
8	Cd	163	81% 16%
8	DD	163	83% 14%
8	Dd	163	80% 16%
8	ED	163	83% 14%
8	Ed	163	75% 9% 16%
8	FD	163	82% 14%
8	Fd	163	80% 16%

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Mol	Chain	Length	Quality of chain
8	GD	163	81% 5% 14%
8	Gd	163	82% 16%
8	HD	163	80% 6% 14%
8	Hd	163	79% 5% 16%
8	ID	163	81% 5% 14%
8	Id	163	83% 16%
8	JD	163	82% 14%
8	Jd	163	80% 16%
8	KD	163	80% 6% 14%
8	Kd	163	82% 16%
8	LD	163	79% 7% 14%
8	Ld	163	80% 16%
8	MD	163	82% 14%
8	Md	163	79% 6% 16%
9	AF	269	23% 77%
9	Af	269	22% 78%
9	BF	269	23% 77%
9	Bf	269	21% 78%
9	CF	269	22% 77%
9	Cf	269	20% 78%
9	DF	269	23% 77%
9	Df	269	21% 78%
9	EF	269	23% 77%
9	Ef	269	21% 78%
9	FF	269	23% 77%

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Mol	Chain	Length	Quality of chain
9	Ff	269	21% 78%
9	GF	269	22% 77%
9	Gf	269	22% 78%
9	HF	269	22% 77%
9	Hf	269	22% 78%
9	IF	269	22% 77%
9	If	269	20% 78%
9	JF	269	22% 77%
9	Jf	269	22% 78%
9	KF	269	22% 77%
9	Kf	269	21% 78%
9	LF	269	22% 77%
9	Lf	269	20% 78%
9	MF	269	22% 77%
9	Mf	269	22% 78%
9	VF	269	23% 77%
9	WF	269	23% 77%
9	XF	269	23% 77%
9	YF	269	22% 77%
9	ZF	269	22% 77%
10	AC	303	5% 76% 20%
10	BC	303	73% 7% 20%
10	CC	303	63% 6% 31%
10	DC	303	64% 5% 31%
10	EC	303	63% 6% 31%

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Mol	Chain	Length	Quality of chain
10	FC	303	75% 5% 20%
10	GC	303	62% 7% 31%
10	HC	303	63% 6% 31%
10	IC	303	62% 7% 31%
10	JC	303	76% 5% 20%
10	KC	303	73% 7% 20%
10	LC	303	62% 7% 31%
10	MC	303	61% 8% 31%
11	AM	320	61% 35%
11	BM	320	61% 35%
11	CM	320	61% 35%
11	DM	320	62% 35%
11	EM	320	60% 5% 35%
11	FM	320	60% 5% 35%
11	GM	320	61% 35%
11	HM	320	62% 35%
11	IM	320	60% 5% 35%
11	JM	320	59% 6% 35%
11	KM	320	62% 35%
11	LM	320	60% 5% 35%
11	MM	320	60% 5% 35%

2 Entry composition (i)

There are 11 unique types of molecules in this entry. The entry contains 192370 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	ZG	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	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 Neurogenic locus notch.

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

- Molecule 6 is a protein called Unknown protein fragment.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	EU	9	Total	C	N	O	0	0
			45	27	9	9		
6	FU	9	Total	C	N	O	0	0
			45	27	9	9		
6	GU	9	Total	C	N	O	0	0
			45	27	9	9		
6	HU	9	Total	C	N	O	0	0
			45	27	9	9		
6	IU	9	Total	C	N	O	0	0
			45	27	9	9		
6	JU	9	Total	C	N	O	0	0
			45	27	9	9		
6	KU	9	Total	C	N	O	0	0
			45	27	9	9		
6	LU	9	Total	C	N	O	0	0
			45	27	9	9		
6	MU	9	Total	C	N	O	0	0
			45	27	9	9		
6	AU	9	Total	C	N	O	0	0
			45	27	9	9		
6	BU	9	Total	C	N	O	0	0
			45	27	9	9		
6	CU	9	Total	C	N	O	0	0
			45	27	9	9		
6	DU	9	Total	C	N	O	0	0
			45	27	9	9		

- Molecule 7 is a protein called Unknown protein fragment.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	EX	48	Total	C	N	O	0	0
			240	144	48	48		
7	FX	48	Total	C	N	O	0	0
			240	144	48	48		
7	GX	48	Total	C	N	O	0	0
			240	144	48	48		
7	HX	48	Total	C	N	O	0	0
			240	144	48	48		
7	IX	48	Total	C	N	O	0	0
			240	144	48	48		
7	JX	48	Total	C	N	O	0	0
			240	144	48	48		
7	KX	48	Total	C	N	O	0	0
			240	144	48	48		

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Mol	Chain	Residues	Atoms				AltConf	Trace
7	LX	48	Total 240	C 144	N 48	O 48	0	0
7	MX	48	Total 240	C 144	N 48	O 48	0	0
7	VX	48	Total 240	C 144	N 48	O 48	0	0
7	WX	48	Total 240	C 144	N 48	O 48	0	0
7	XX	48	Total 240	C 144	N 48	O 48	0	0
7	YX	48	Total 240	C 144	N 48	O 48	0	0
7	ZX	48	Total 240	C 144	N 48	O 48	0	0
7	AX	48	Total 240	C 144	N 48	O 48	0	0
7	BX	48	Total 240	C 144	N 48	O 48	0	0
7	CX	48	Total 240	C 144	N 48	O 48	0	0
7	DX	48	Total 240	C 144	N 48	O 48	0	0

- Molecule 8 is a protein called DotD.

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

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

- Molecule 9 is a protein called DotF.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	Ef	59	Total	C	N	O	S	0	0
			449	290	77	81	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
9	FF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Ff	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	AF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	GF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Gf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	HF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Hf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	IF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	If	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	JF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Jf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	KF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Kf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	LF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Lf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	MF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Mf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	VF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	CF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	WF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	XF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
9	YF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	ZF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Af	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	BF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Bf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	Cf	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	DF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		
9	Df	59	Total	C	N	O	S	0	0
			449	290	77	81	1		
9	EF	63	Total	C	N	O	S	0	0
			483	308	84	90	1		

- Molecule 10 is a protein called DotC.

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

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	LC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
10	MC	209	Total	C	N	O	S	0	0
			1667	1061	292	309	5		
10	AC	243	Total	C	N	O	S	0	0
			1921	1216	340	357	8		

- Molecule 11 is a protein called DUF2807 domain-containing protein.

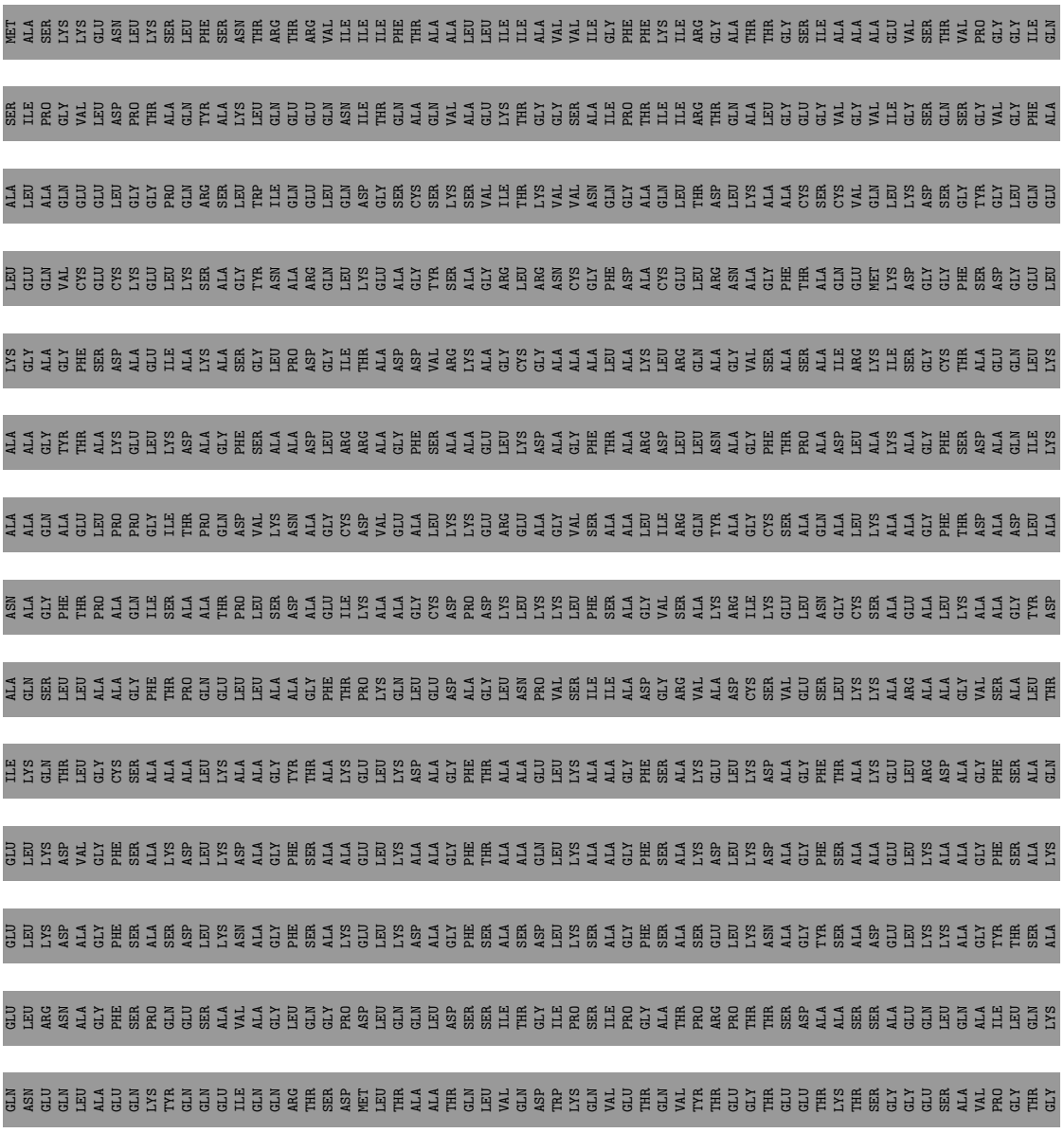
Mol	Chain	Residues	Atoms					AltConf	Trace
11	HM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
11	IM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
11	KM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
11	LM	208	Total	C	N	O	S	0	0
			1650	1046	293	308	3		
11	MM	208	Total	C	N	O	S	0	0
			1650	1046	293	308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

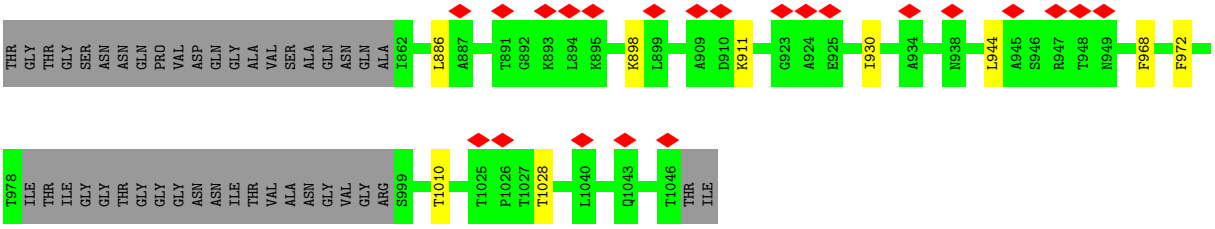
3 Residue-property plots (i)

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

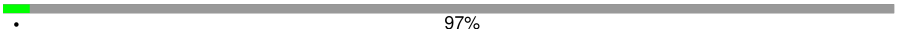
Chain AG:

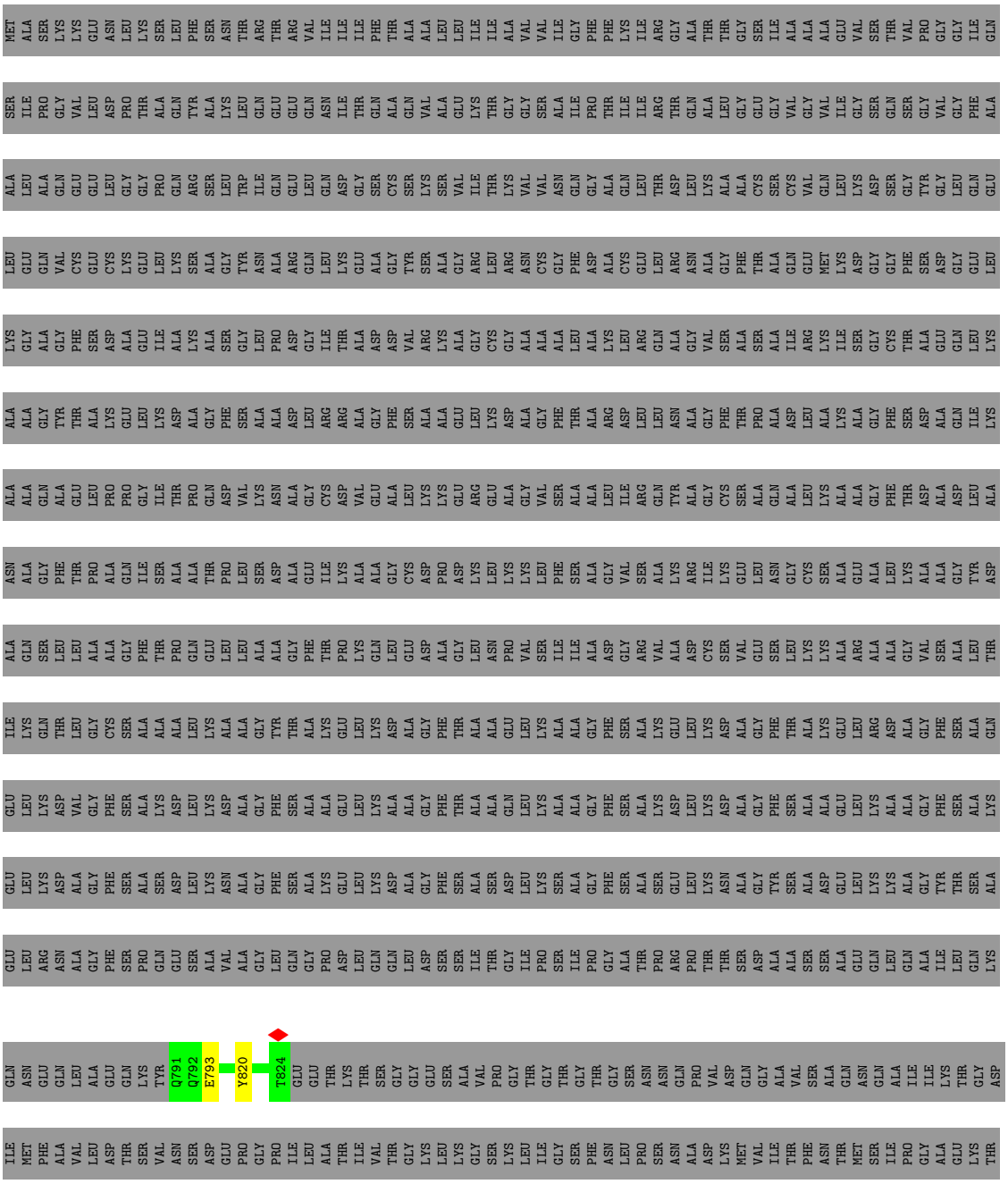


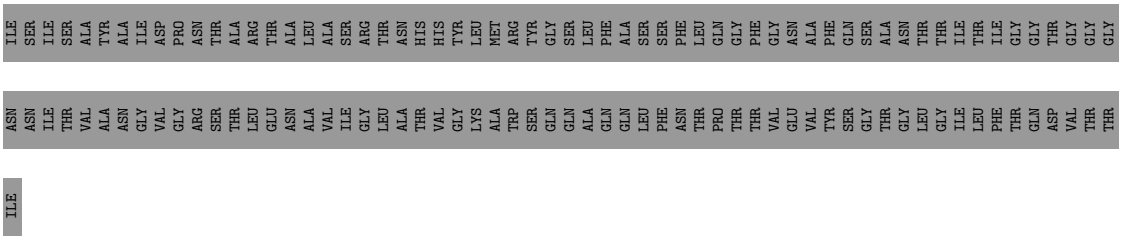


• Molecule 1: IcmE protein

Chain Fg:

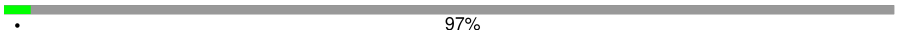


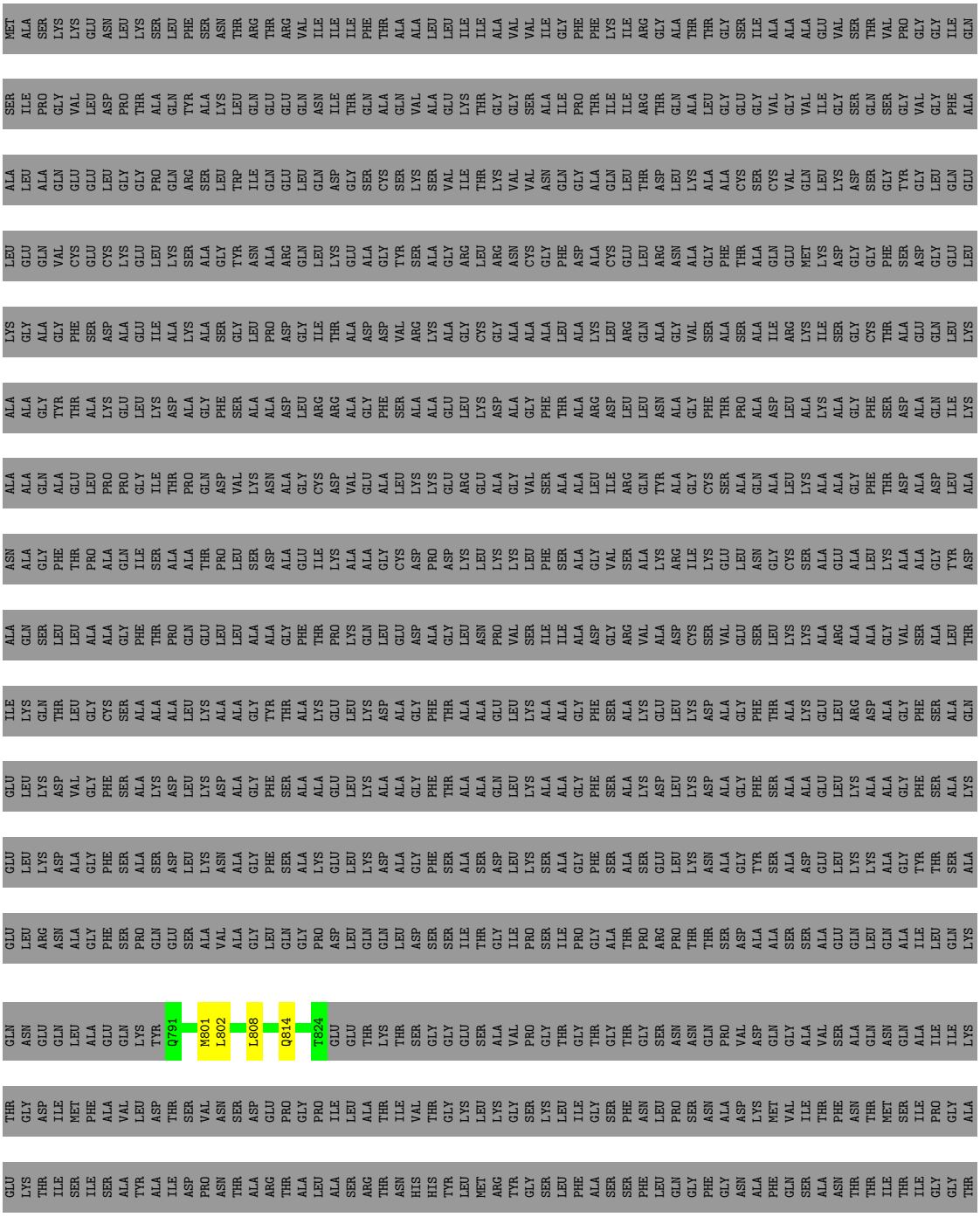


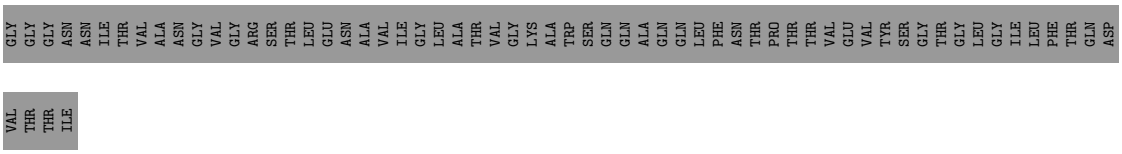


• Molecule 1: IcmE protein

Chain Gg:

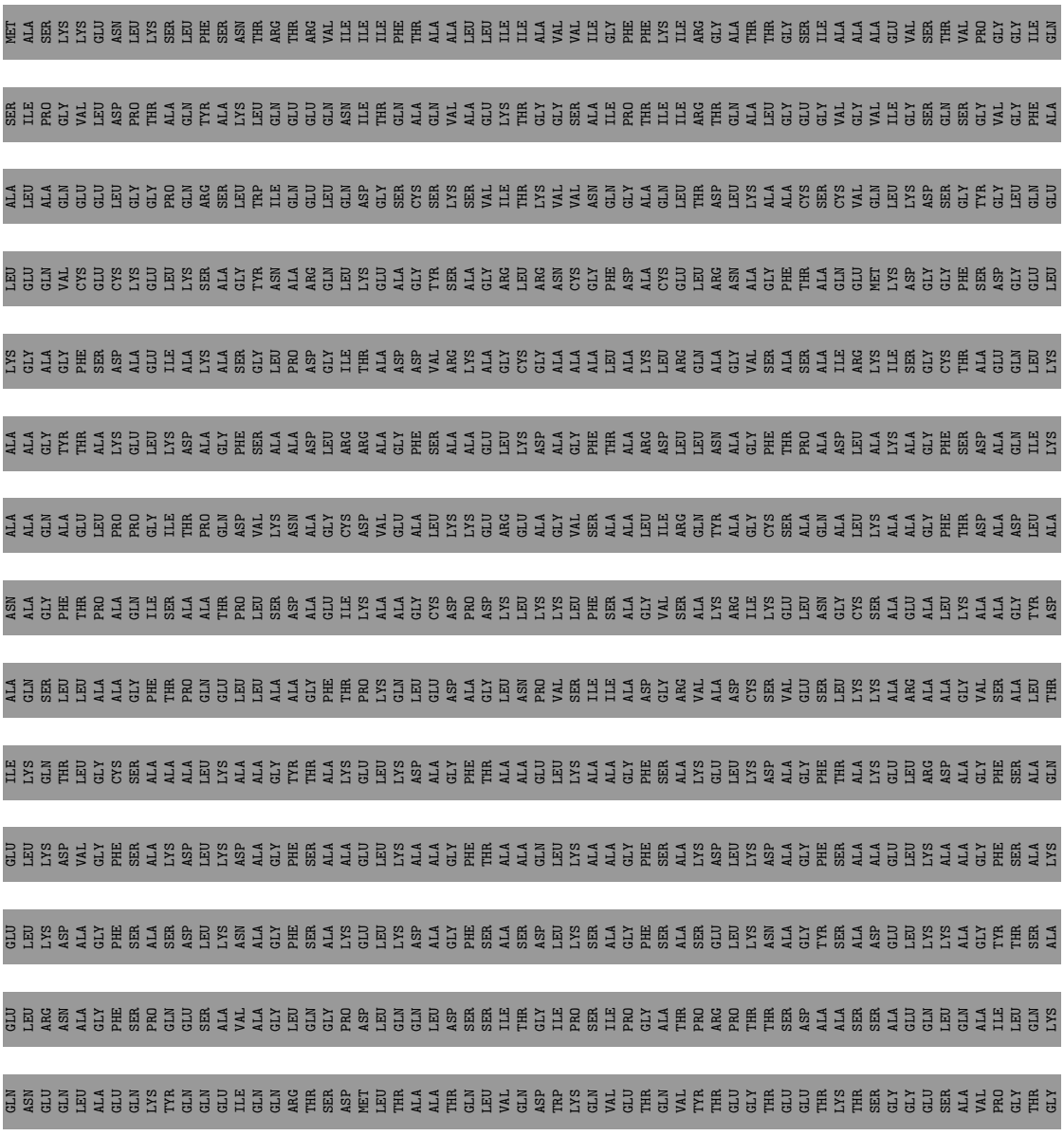


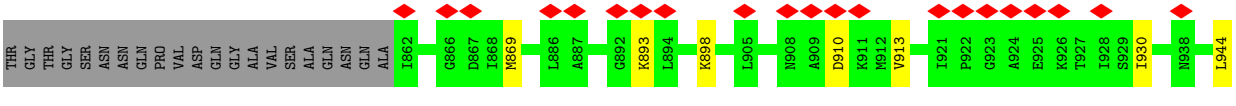


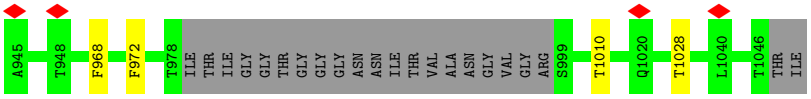


• Molecule 1: IcmE protein

Chain BG:

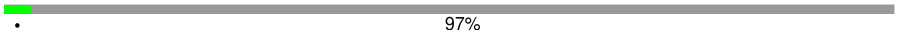


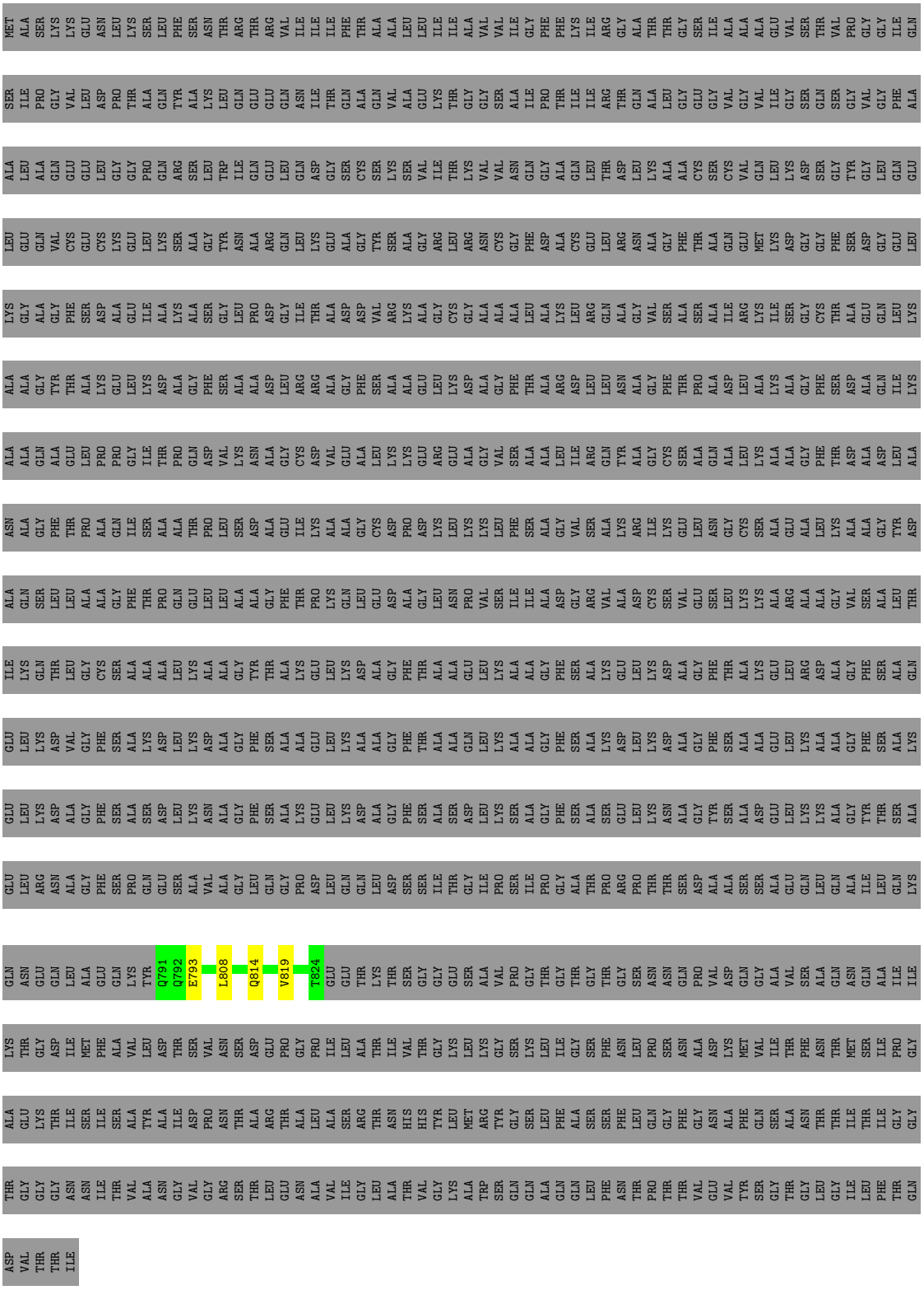




• Molecule 1: IcmE protein

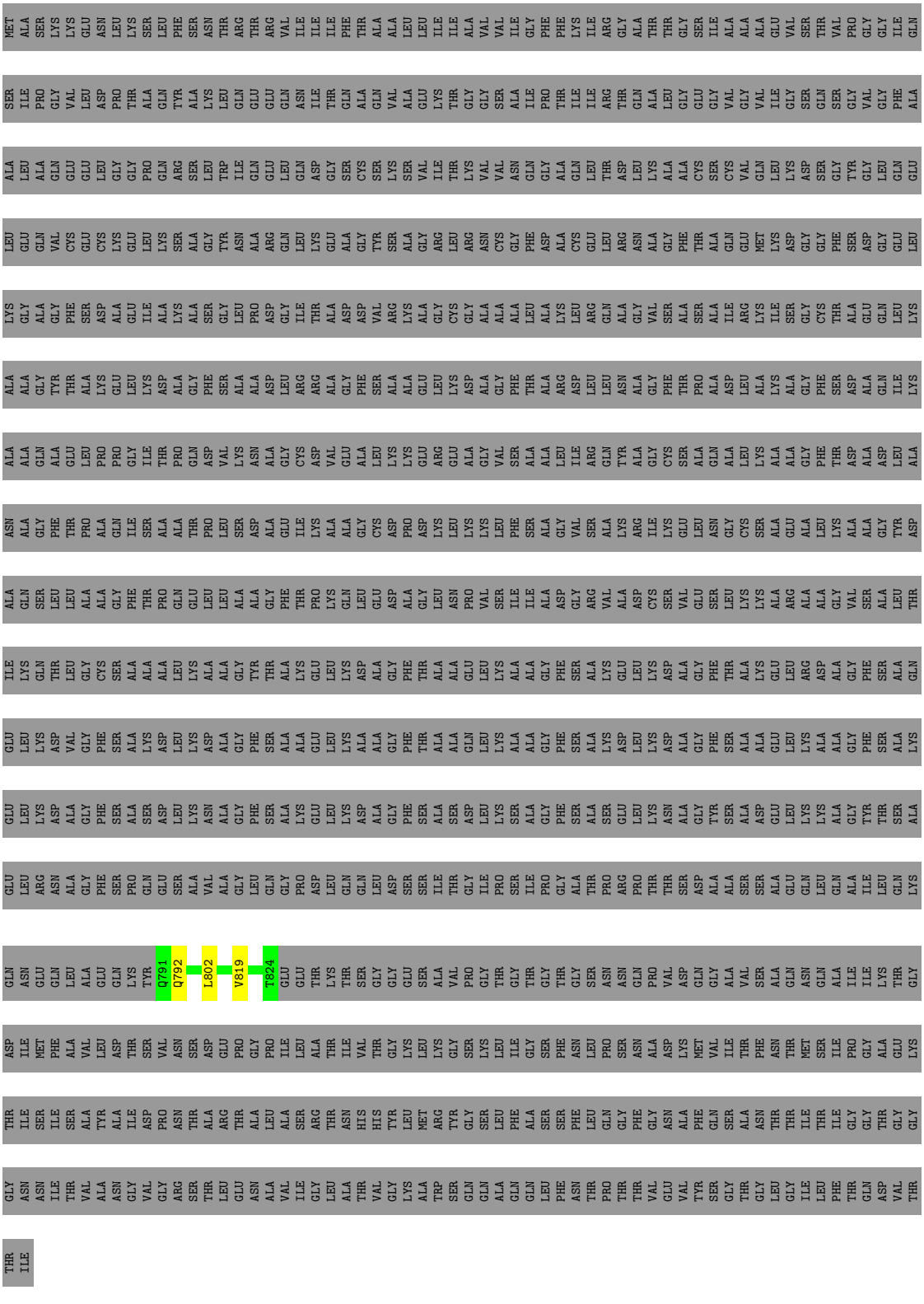
Chain Hg:





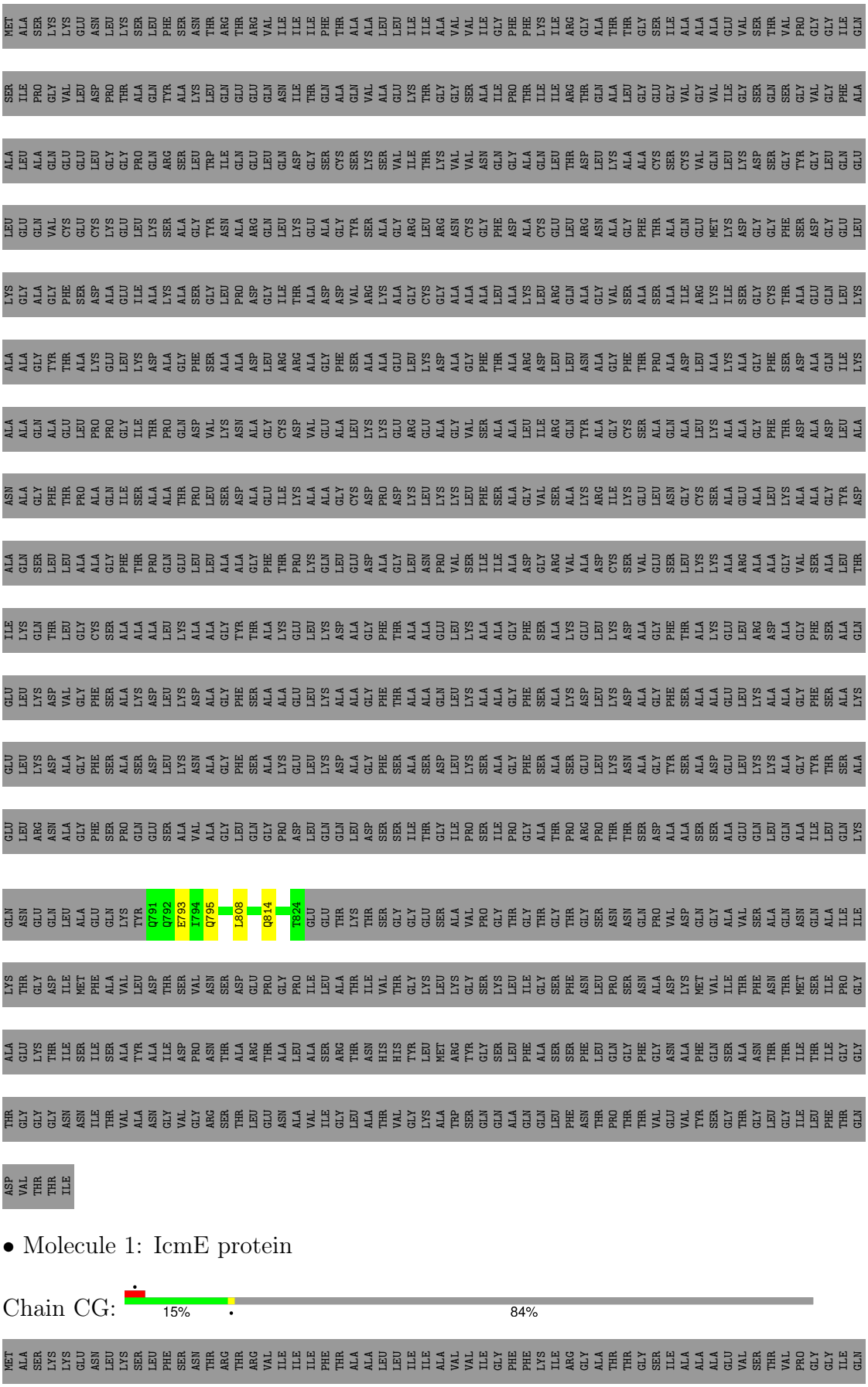
• Molecule 1: IcmE protein

Chain Bg: 97%



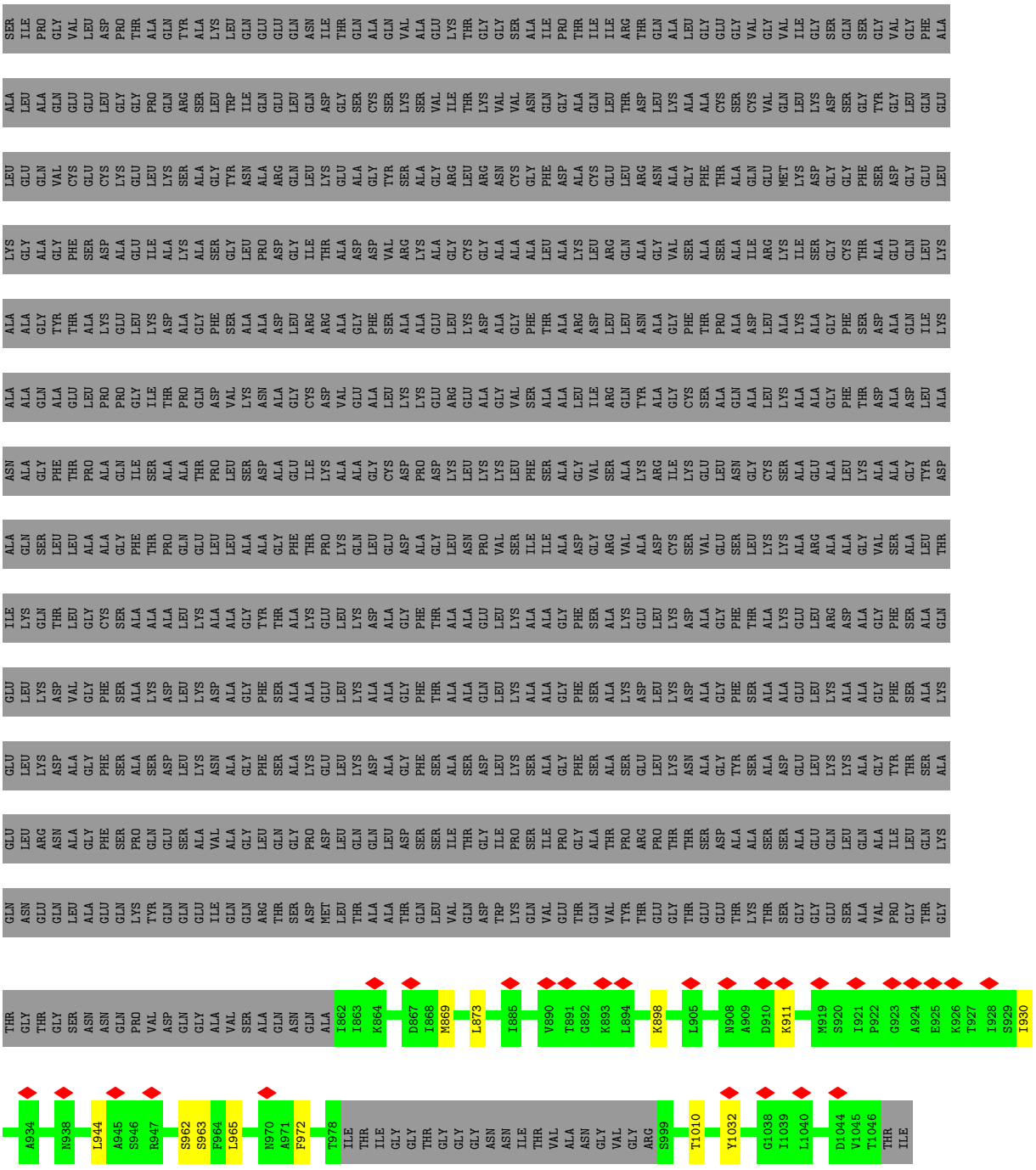
• Molecule 1: IcmE protein

Chain Ig: 97%



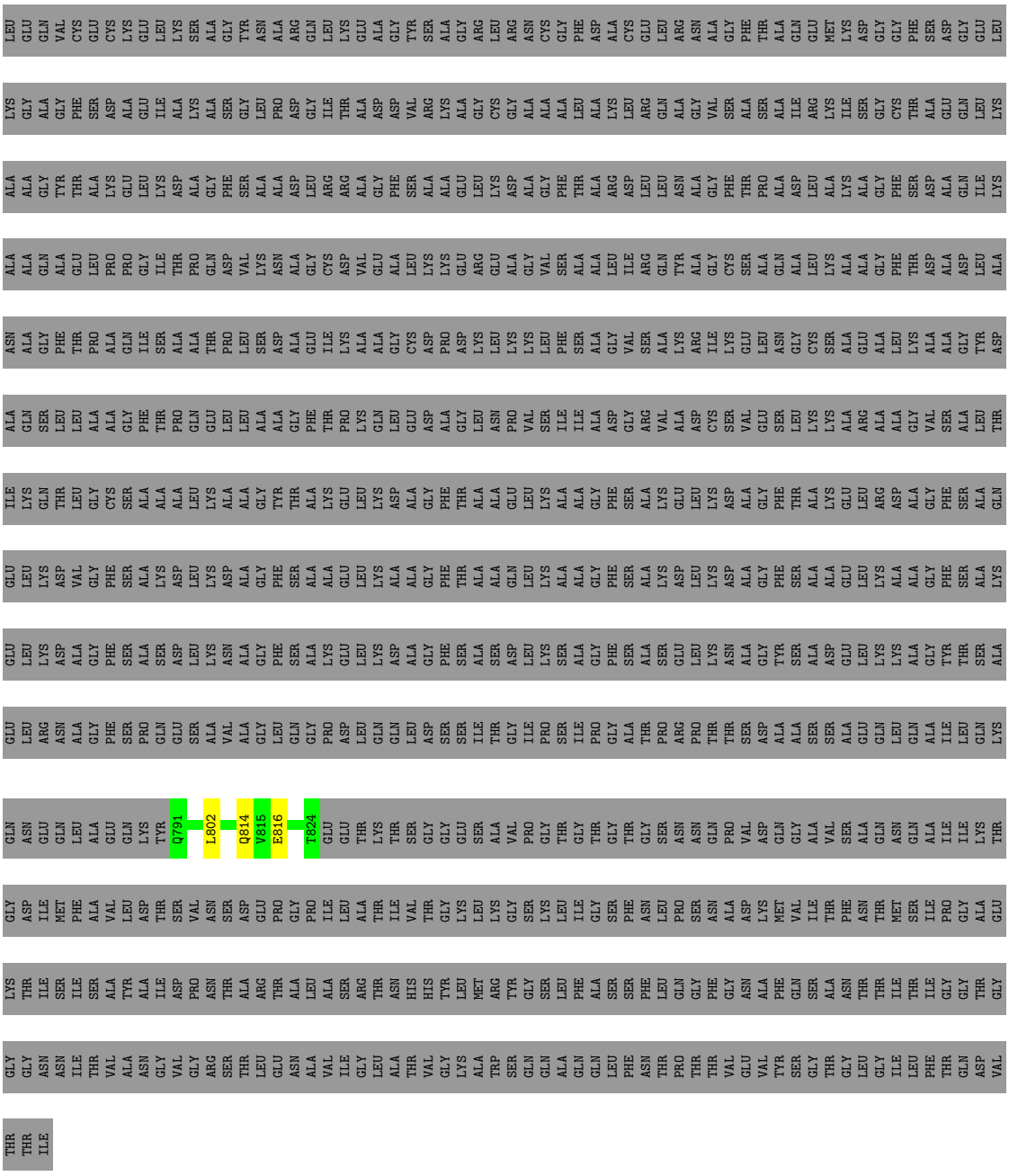
• Molecule 1: IcmE protein

Chain CG:



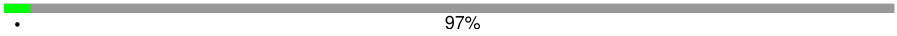
• Molecule 1: IcmE protein

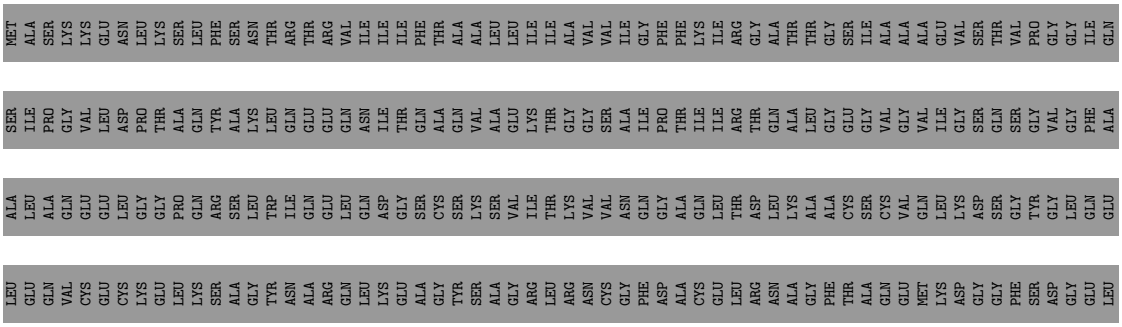
Chain Jg:

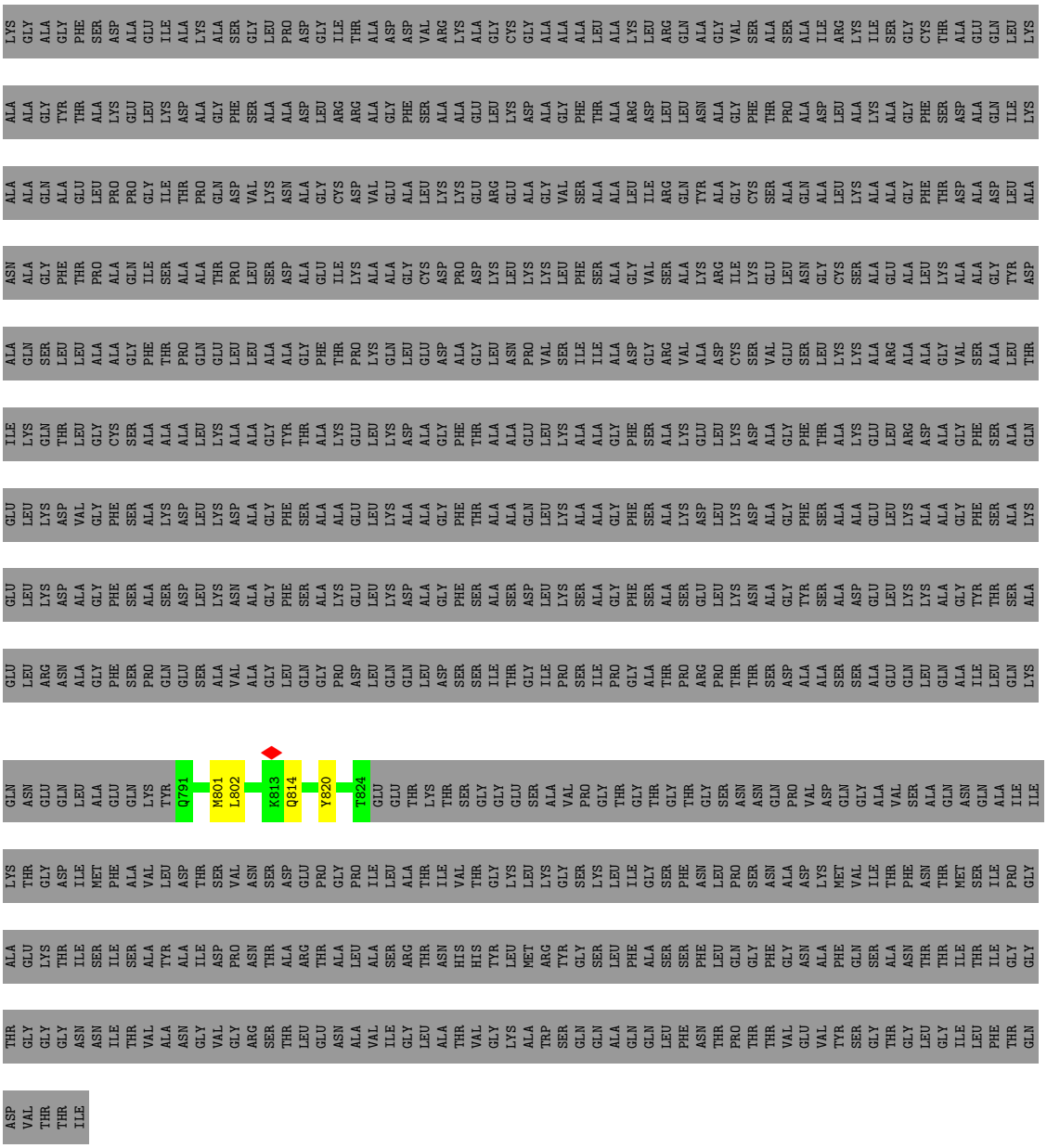


• Molecule 1: IcmE protein

Chain Kg:

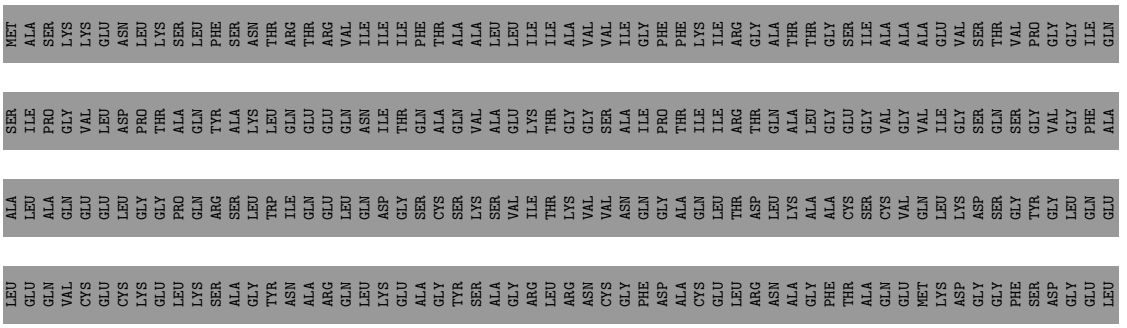


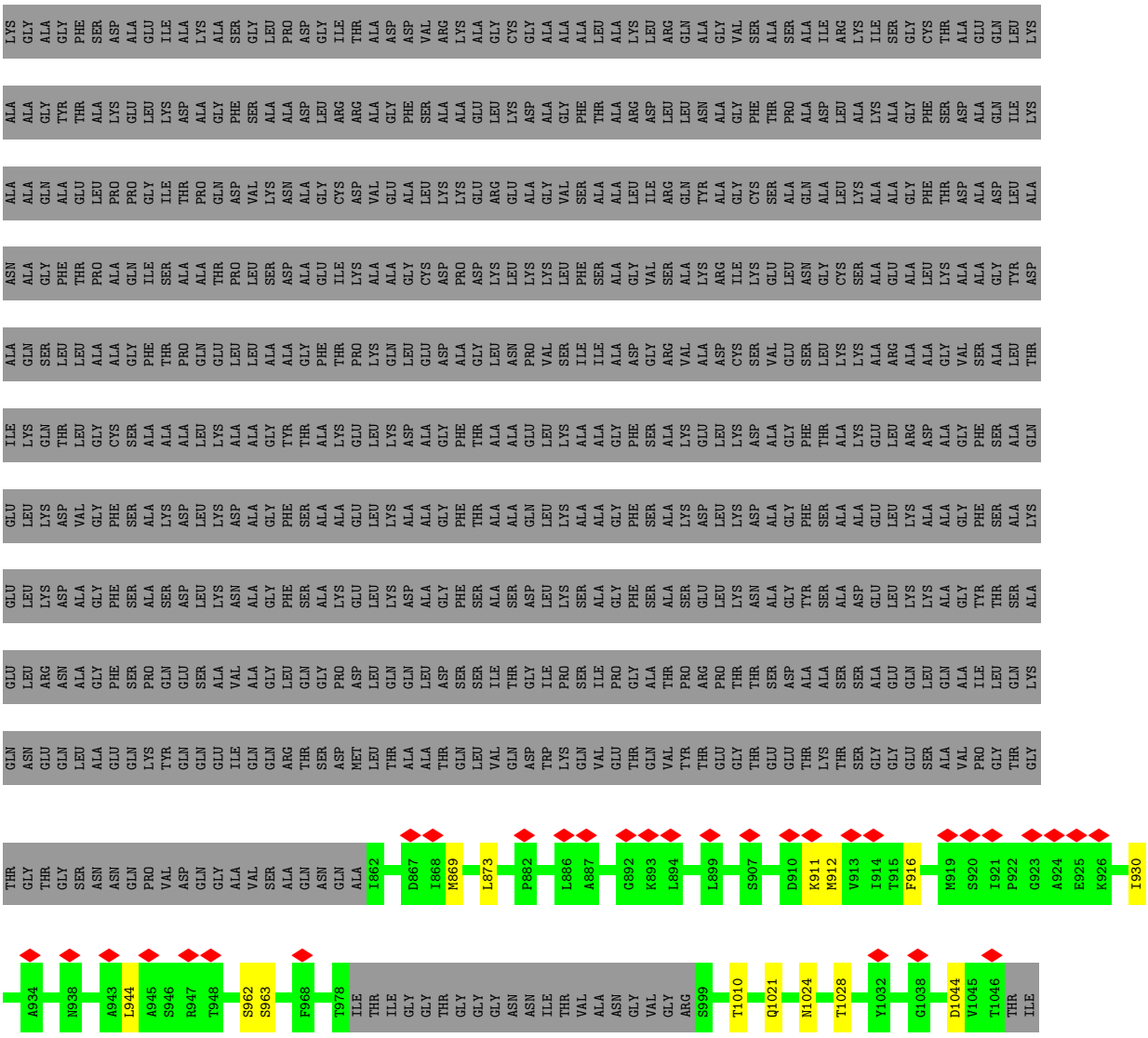




• Molecule 1: IcmE protein

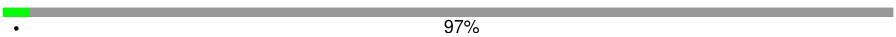
Chain DG:

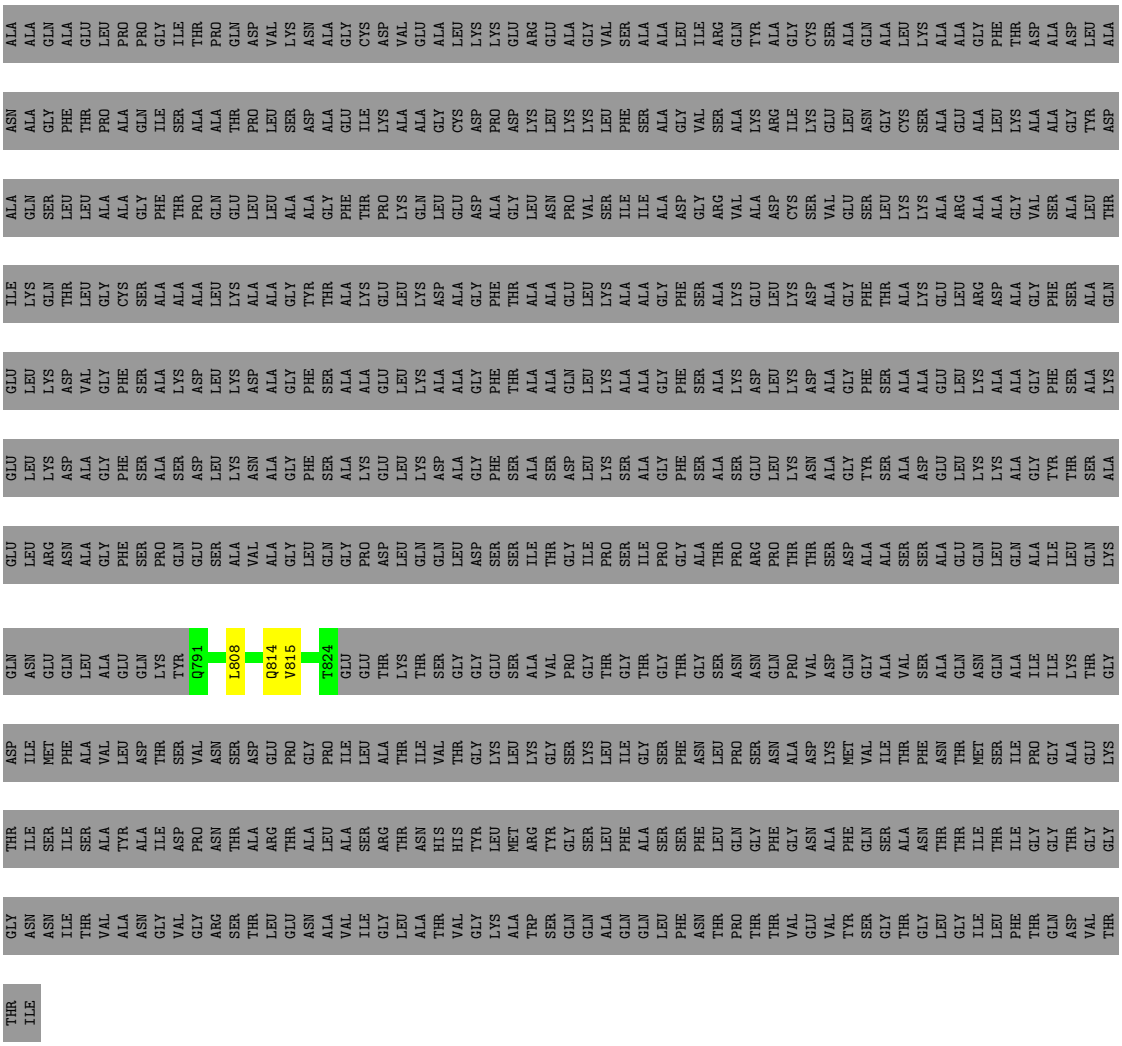




- Molecule 1: IcmE protein

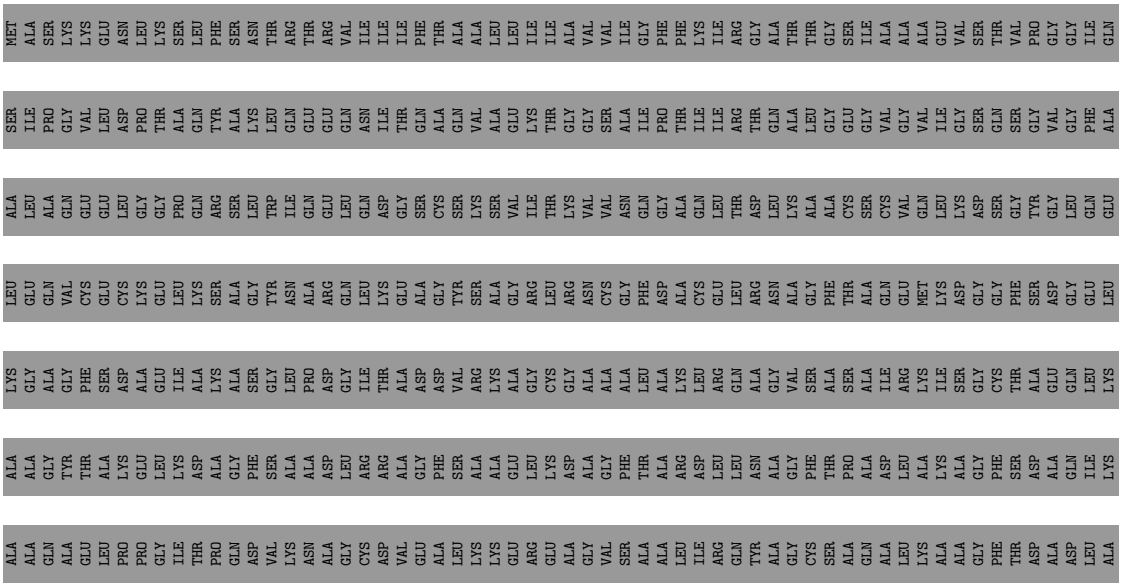
Chain Lg:

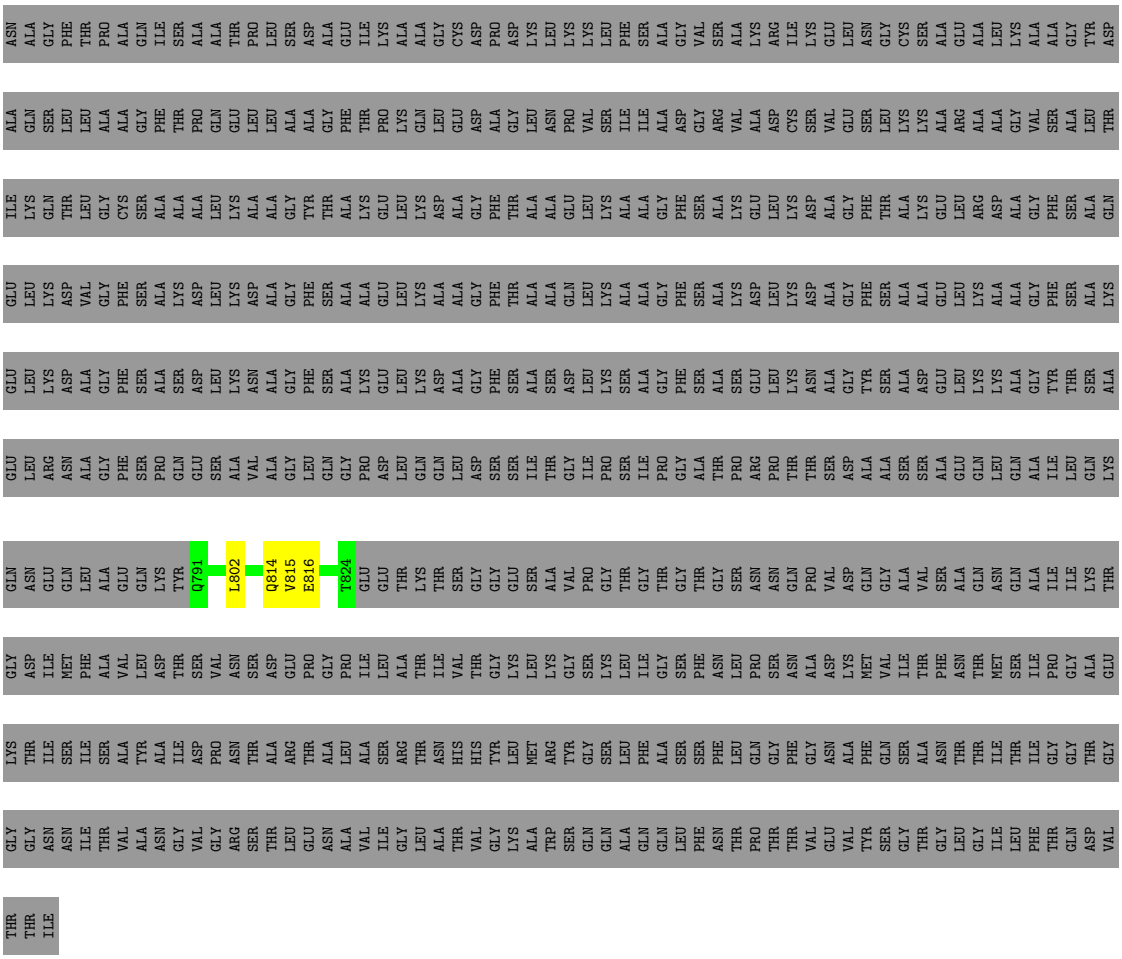




• Molecule 1: IcmE protein

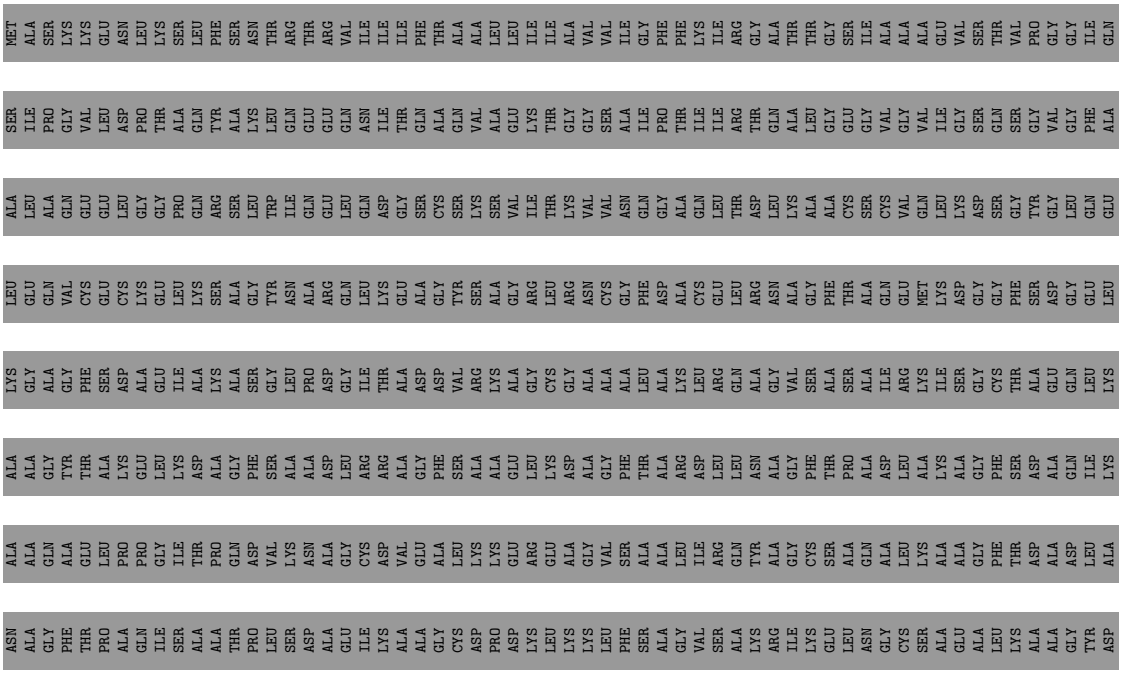
Chain Mg:

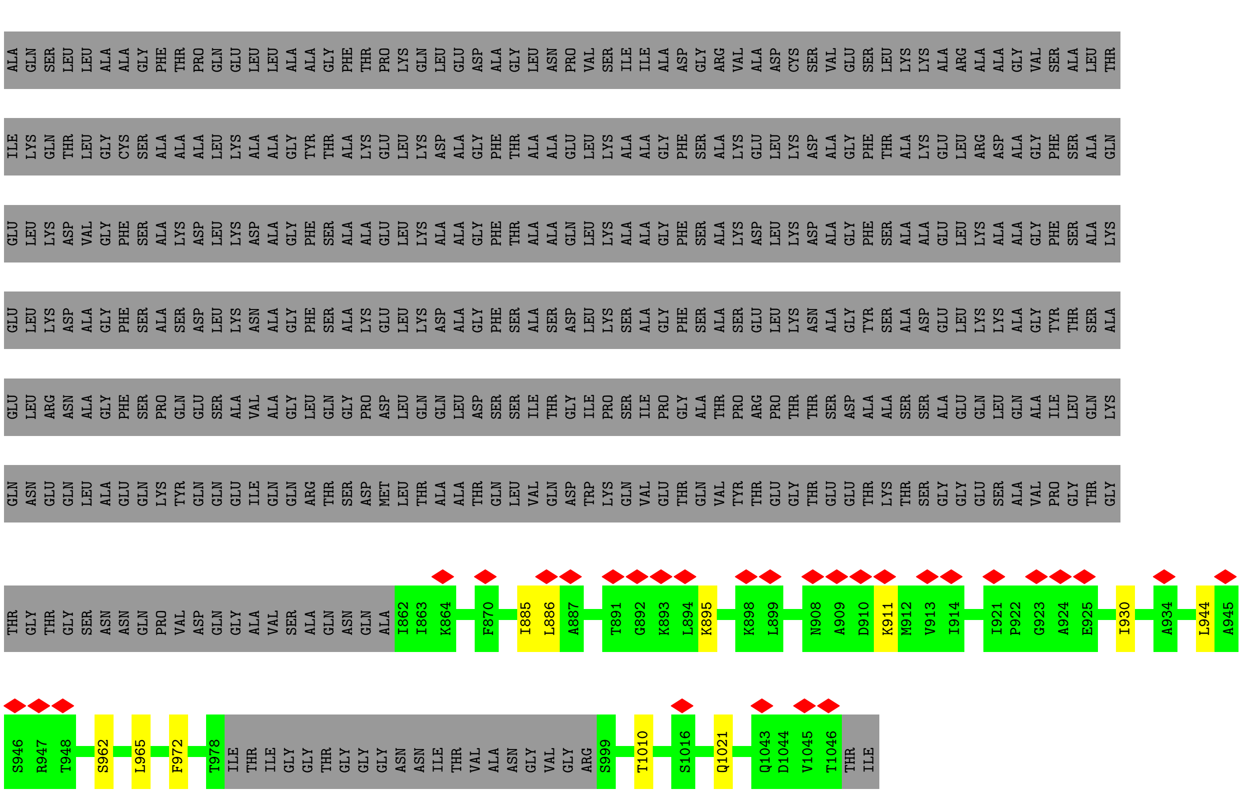




• Molecule 1: IcmE protein

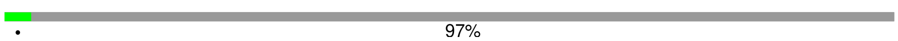
Chain EG:

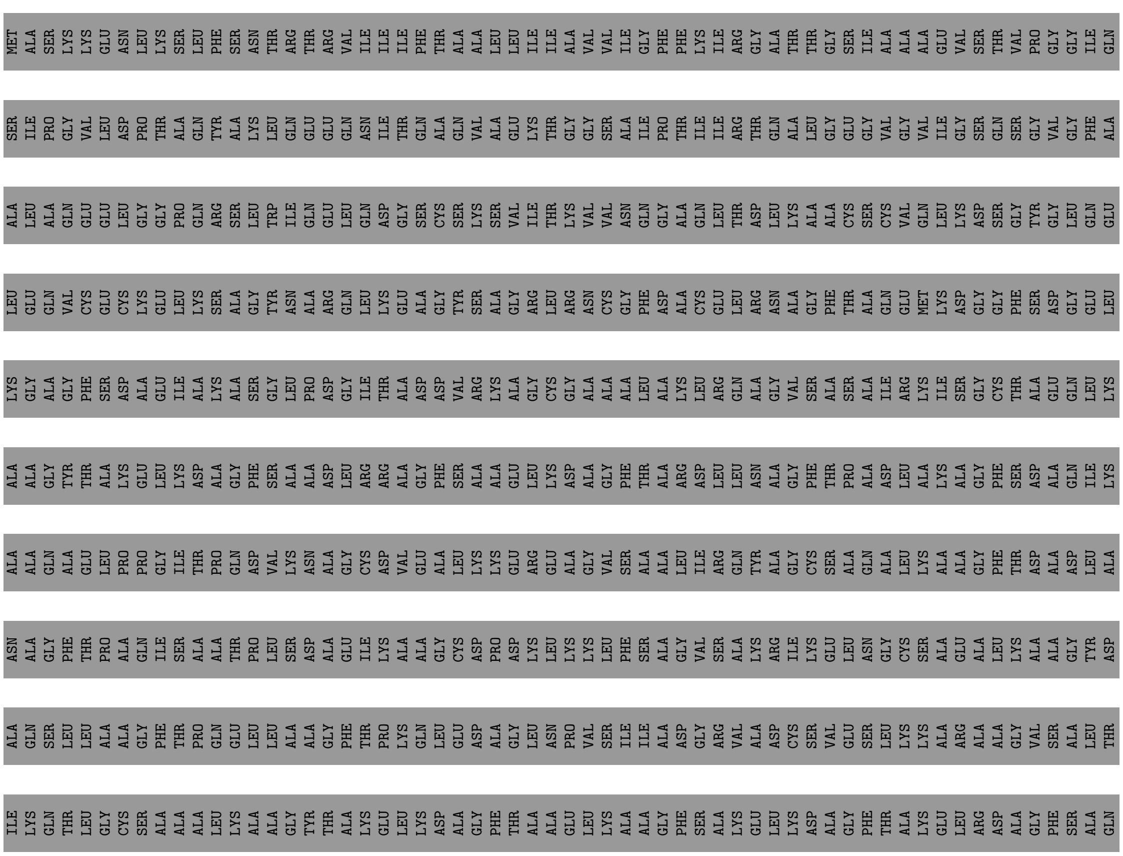




- Molecule 1: IcmE protein

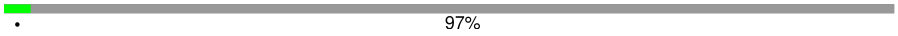
Chain VG:

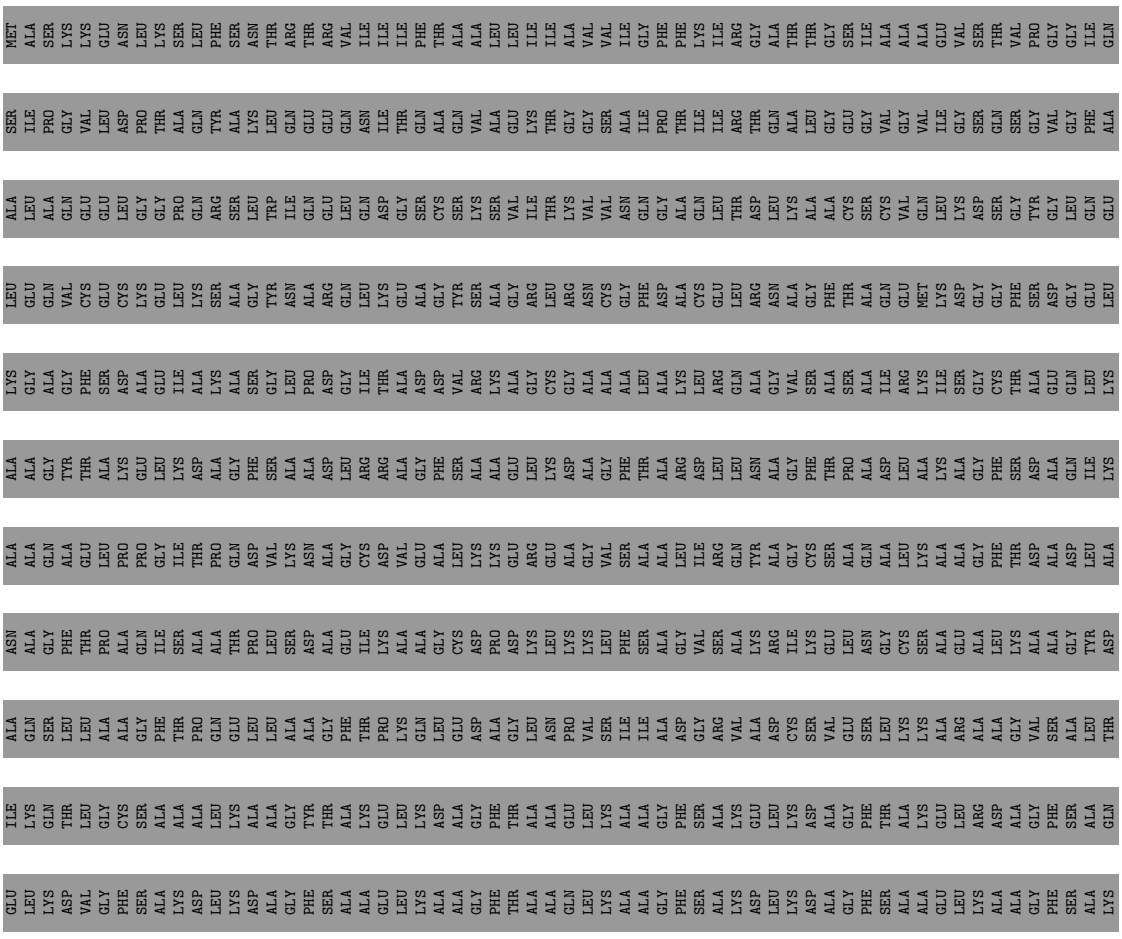




• Molecule 1: IcmE protein

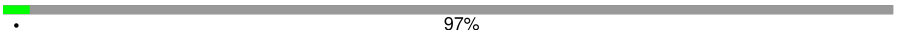
Chain WG:

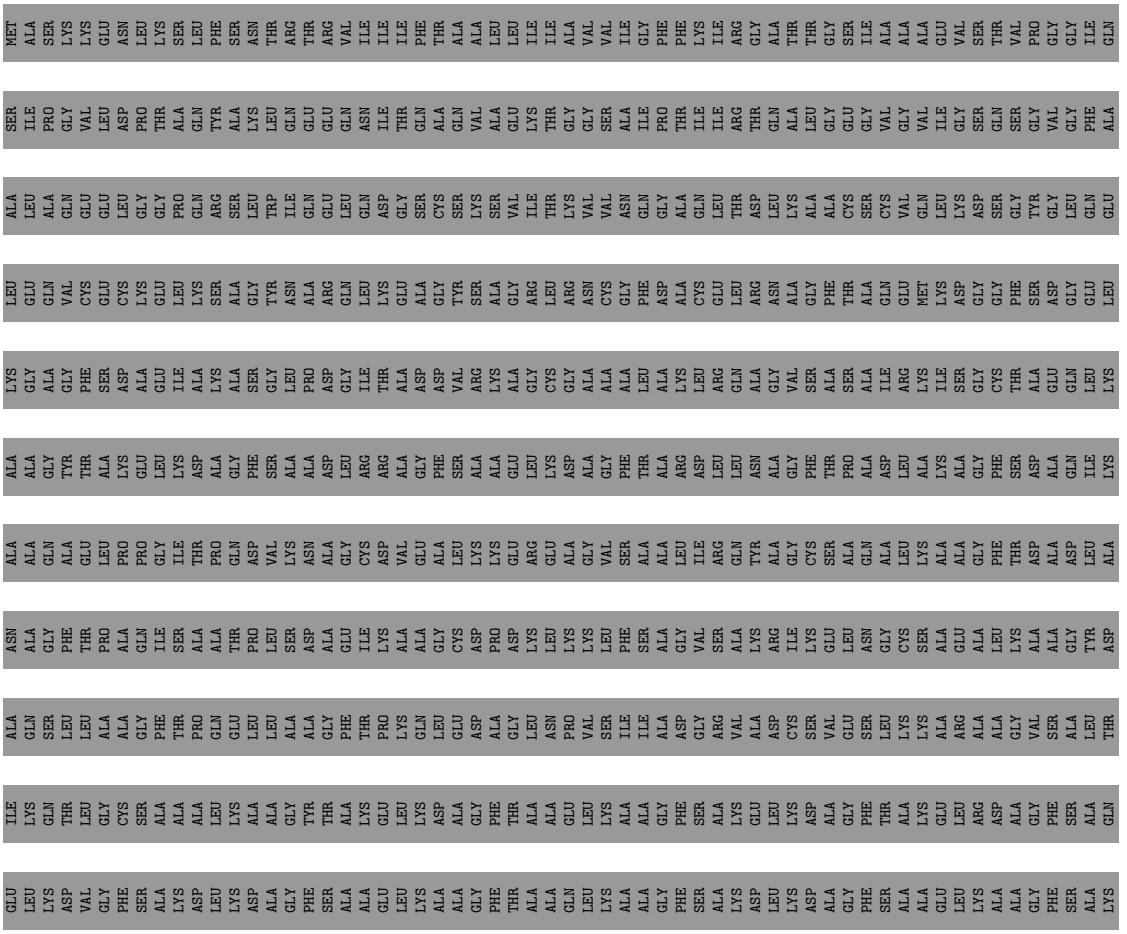


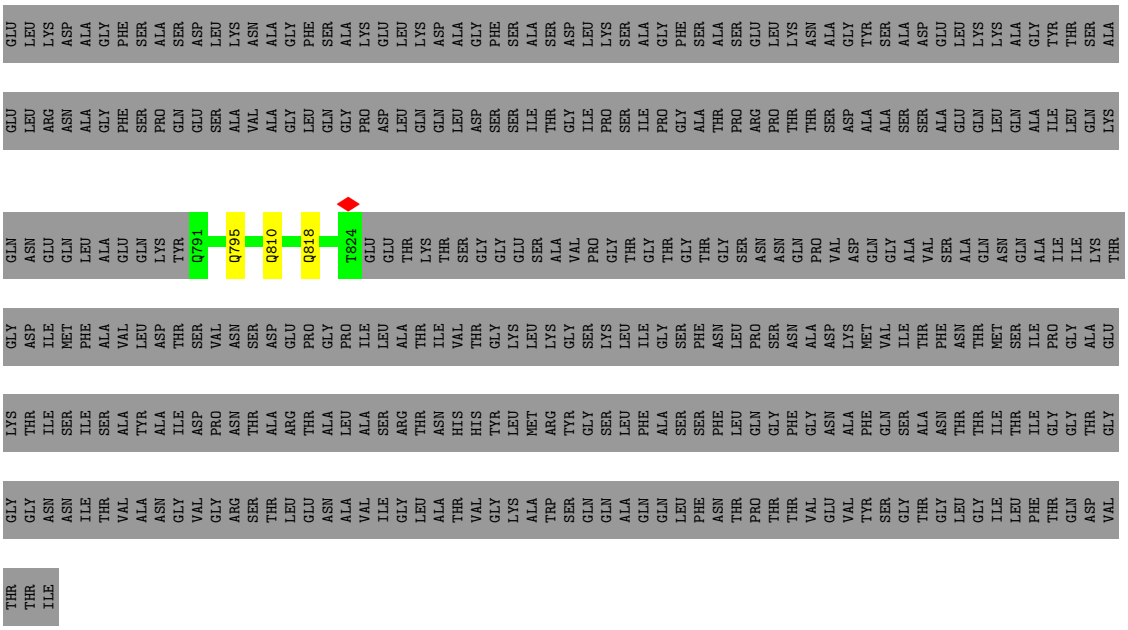


• Molecule 1: IcmE protein

Chain XG:

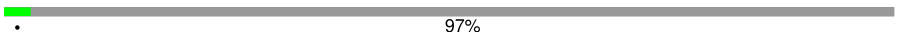


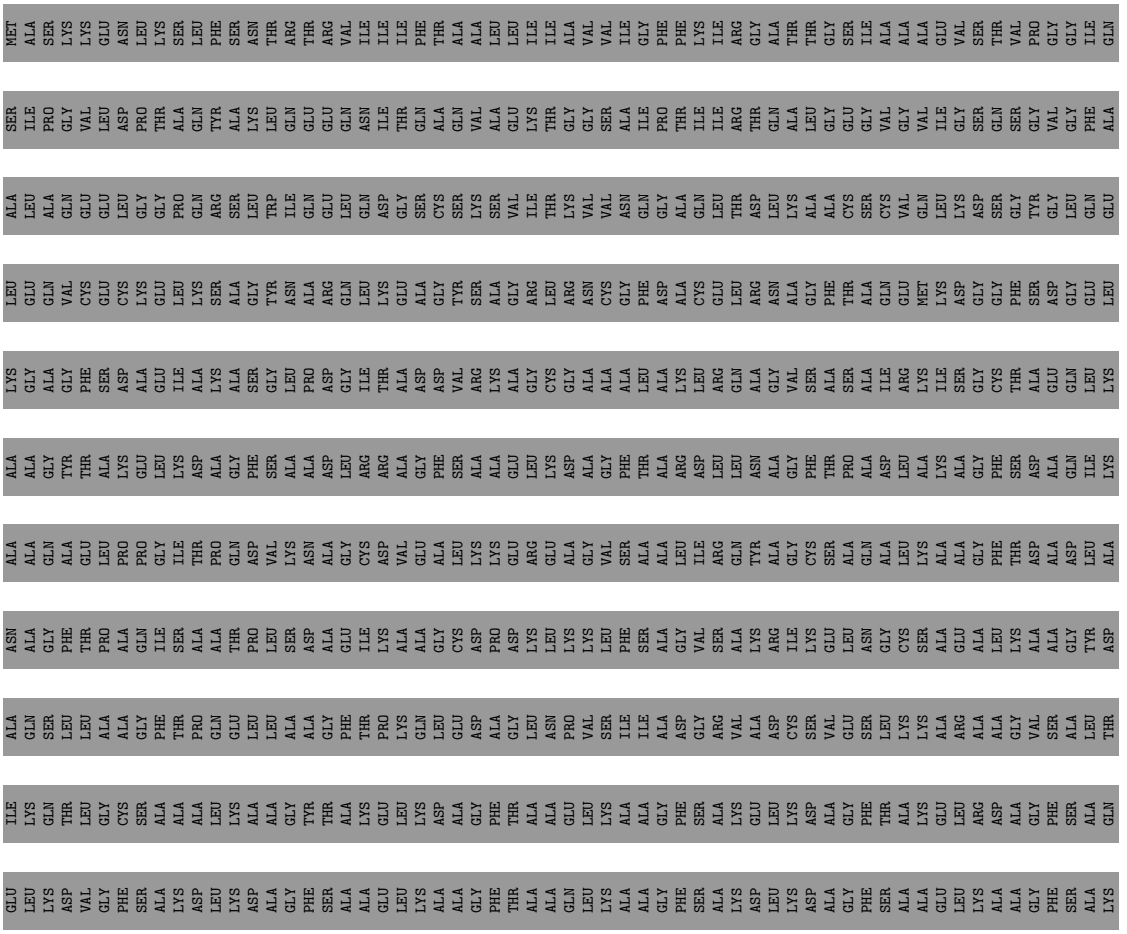


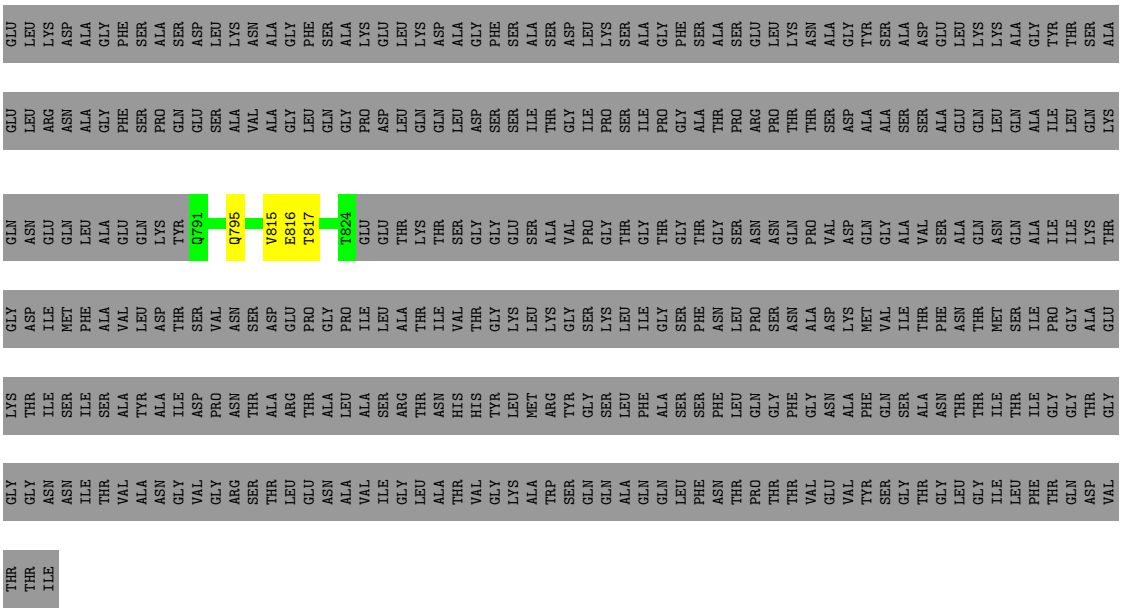


• Molecule 1: IcmE protein

Chain YG:

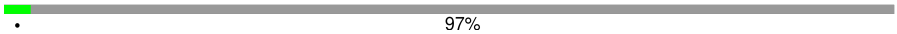


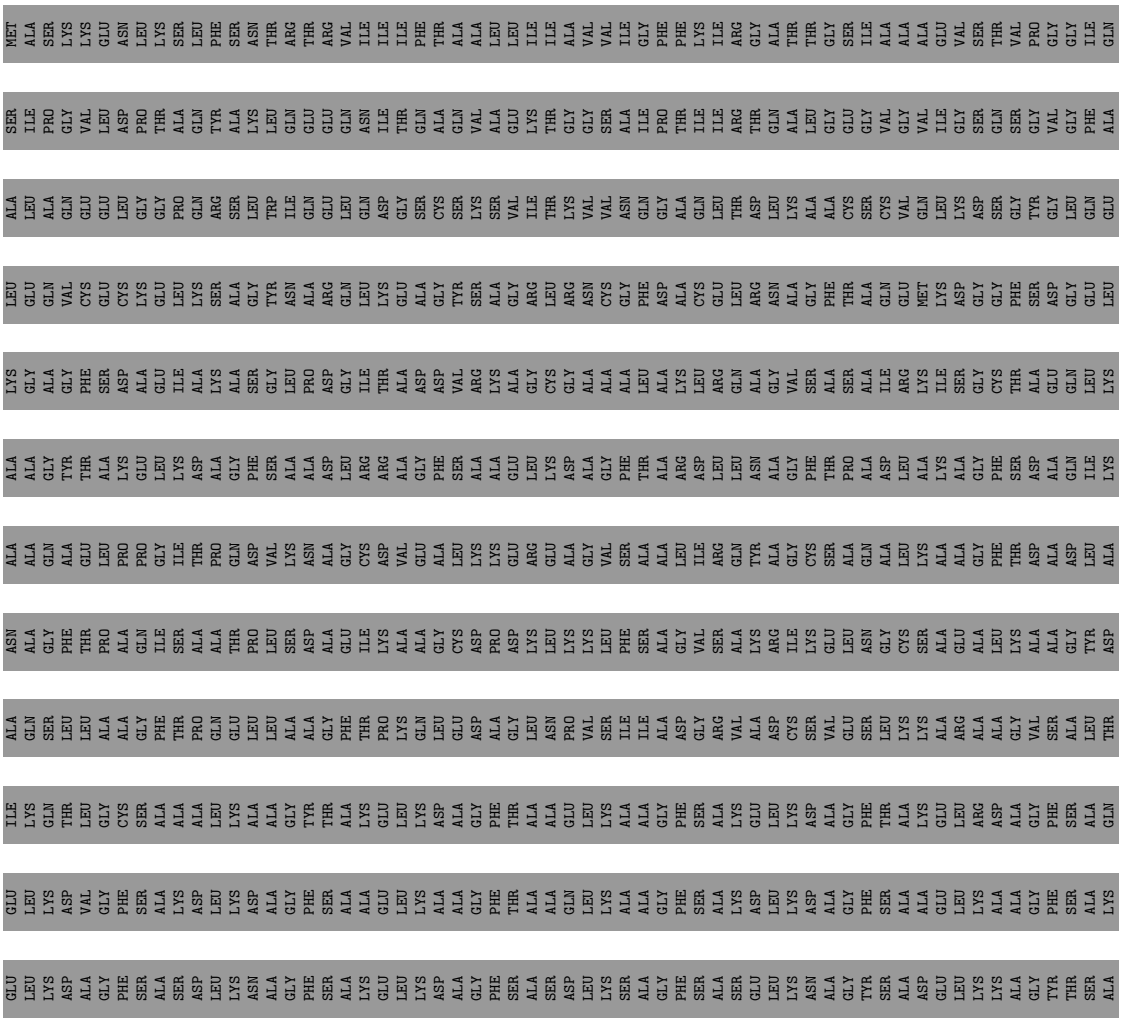




• Molecule 1: IcmE protein

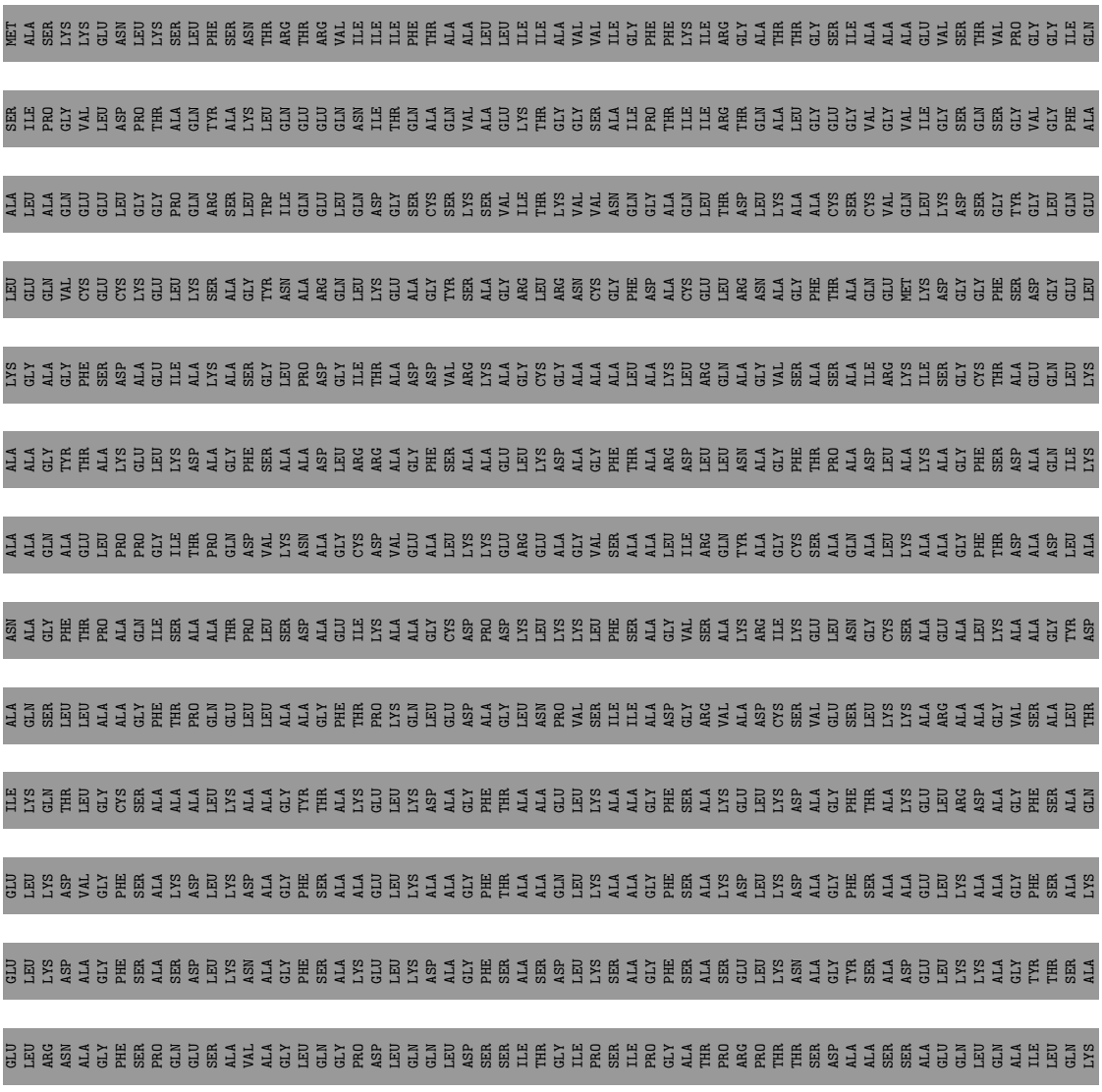
Chain ZG:

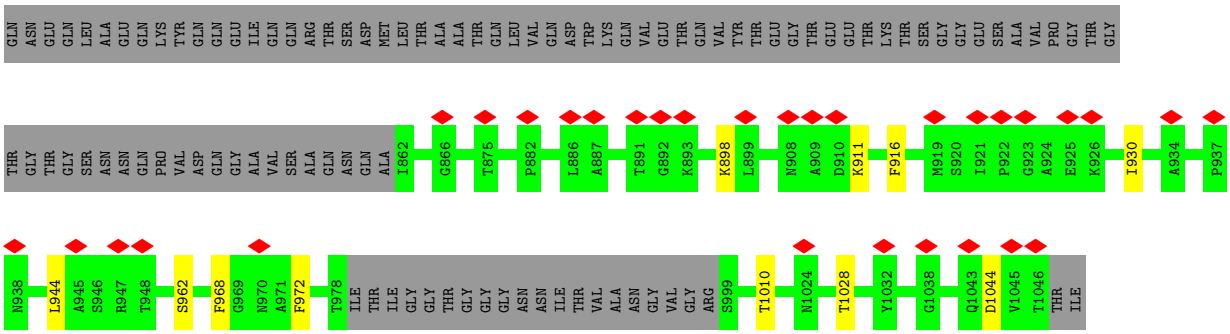




• Molecule 1: IcmE protein

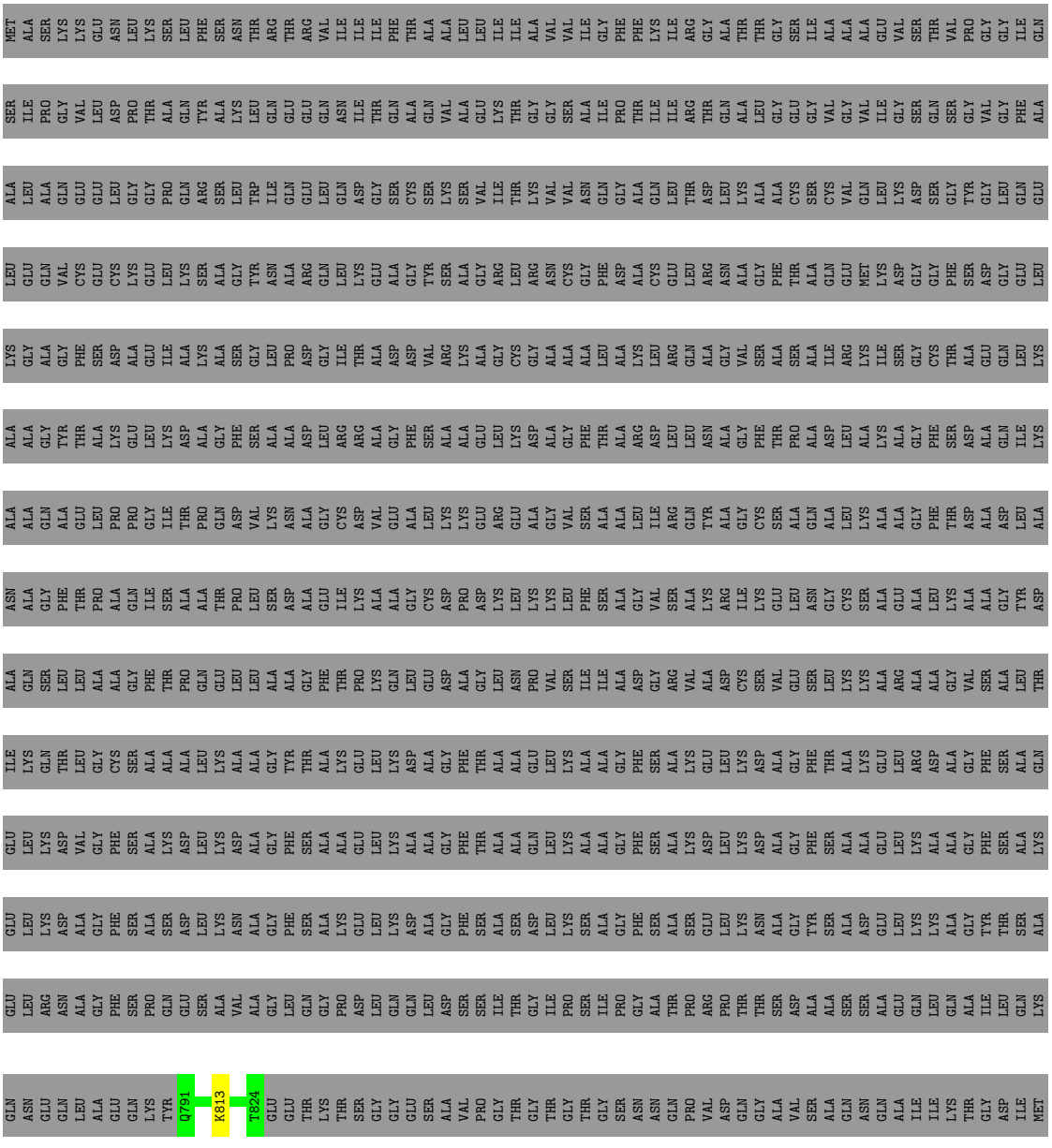
Chain FG:

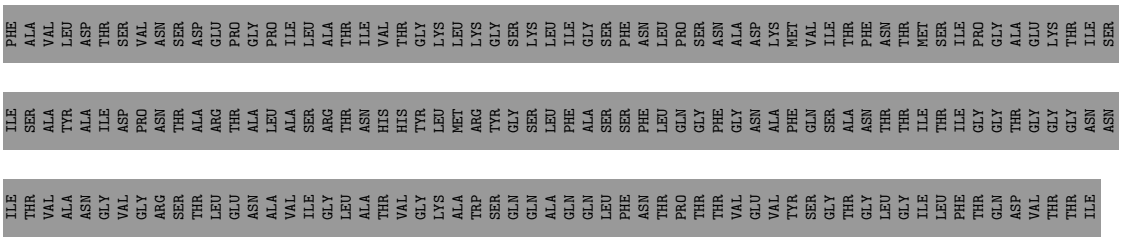




• Molecule 1: IcmE protein

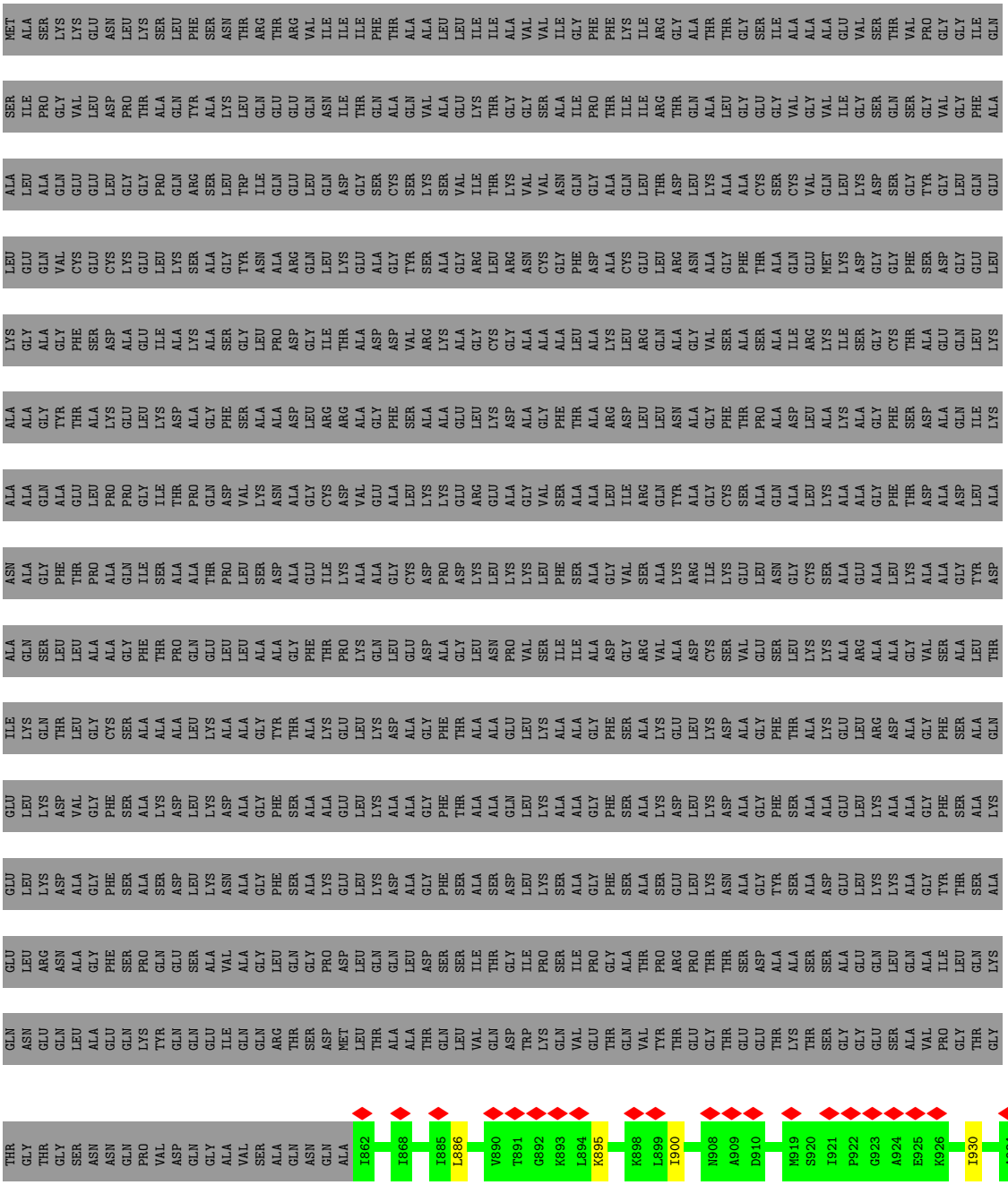
Chain Cg:

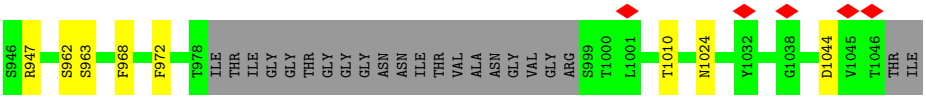




• Molecule 1: IcmE protein

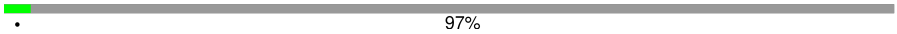
Chain GG:

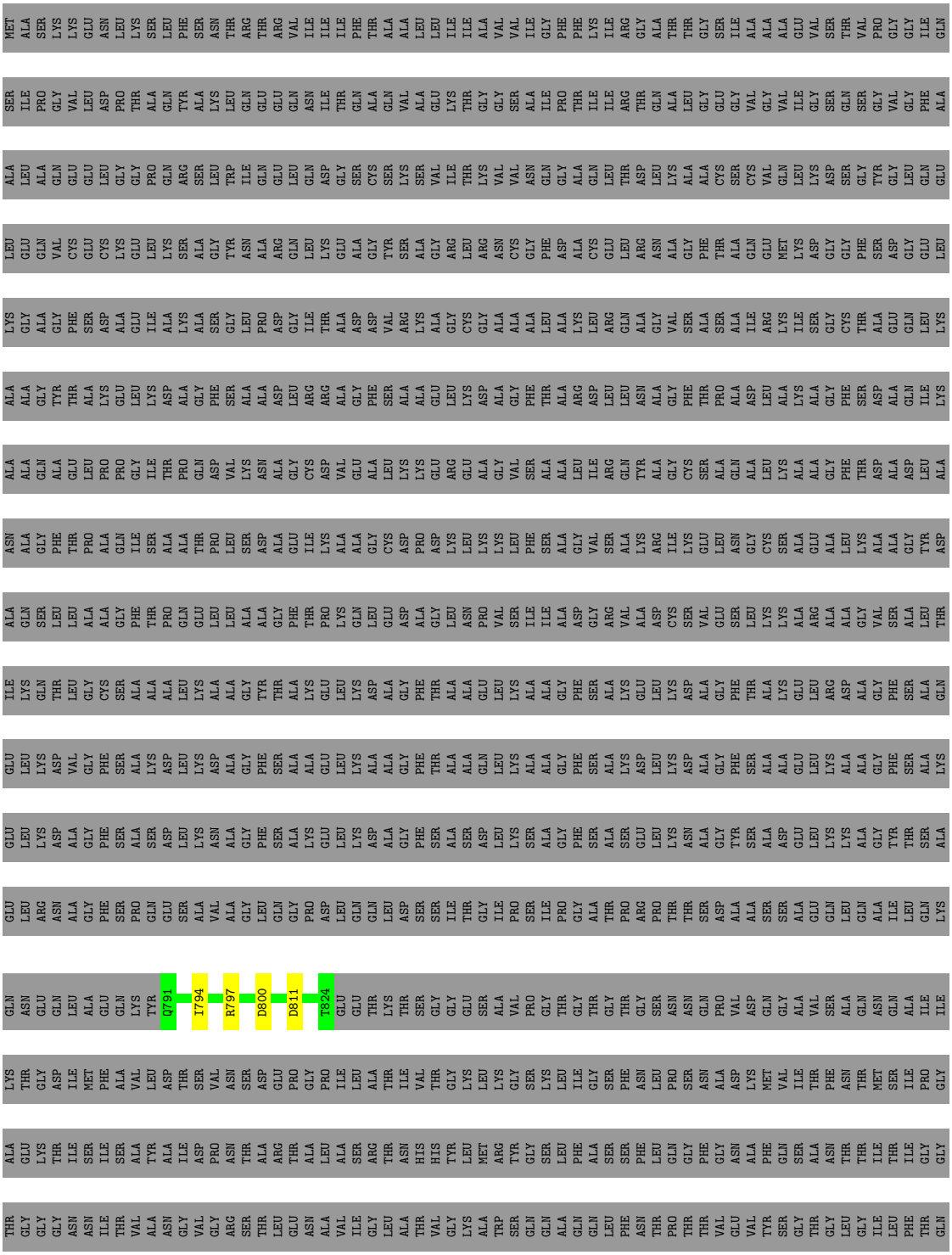




- Molecule 1: IcmE protein

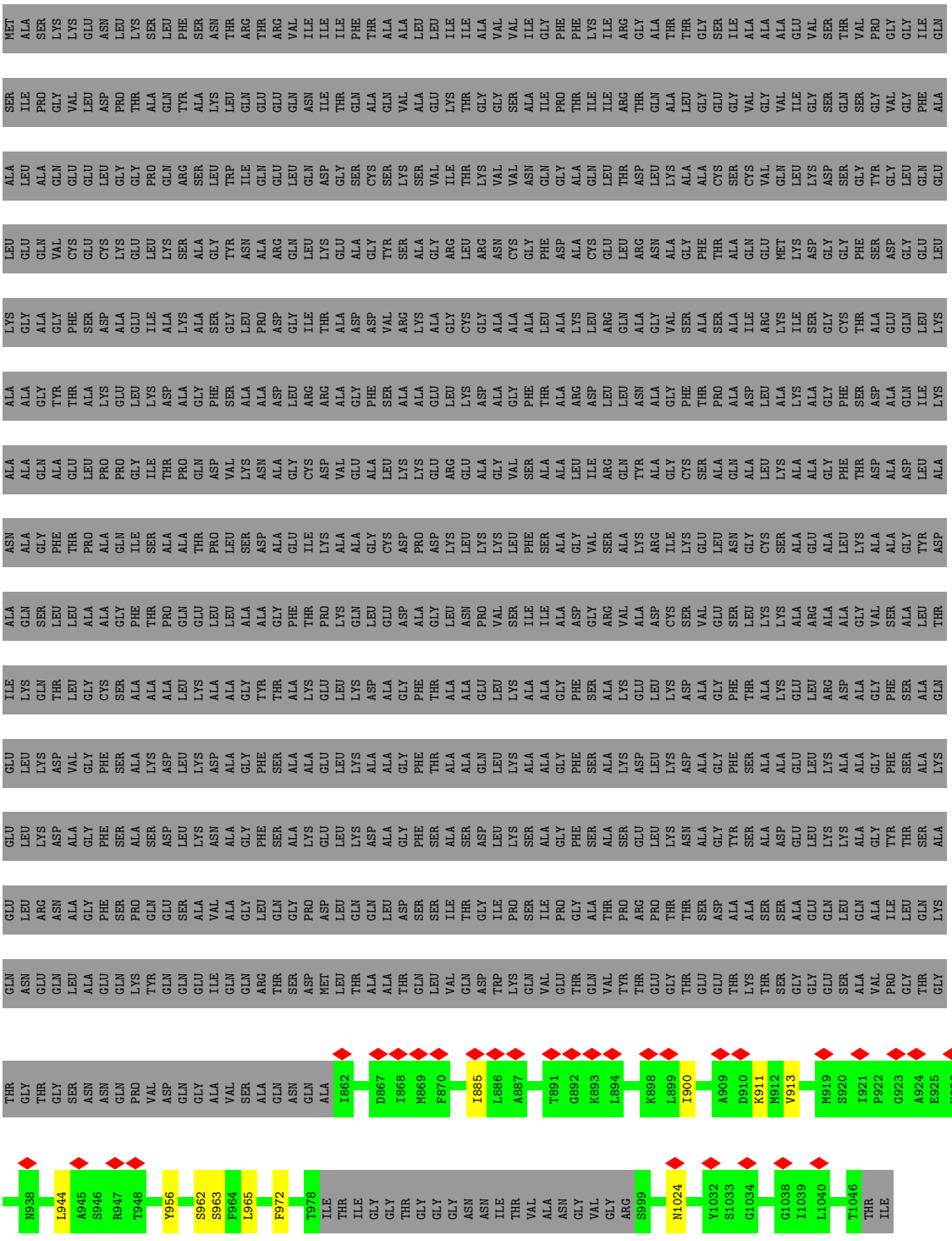
Chain Dg:





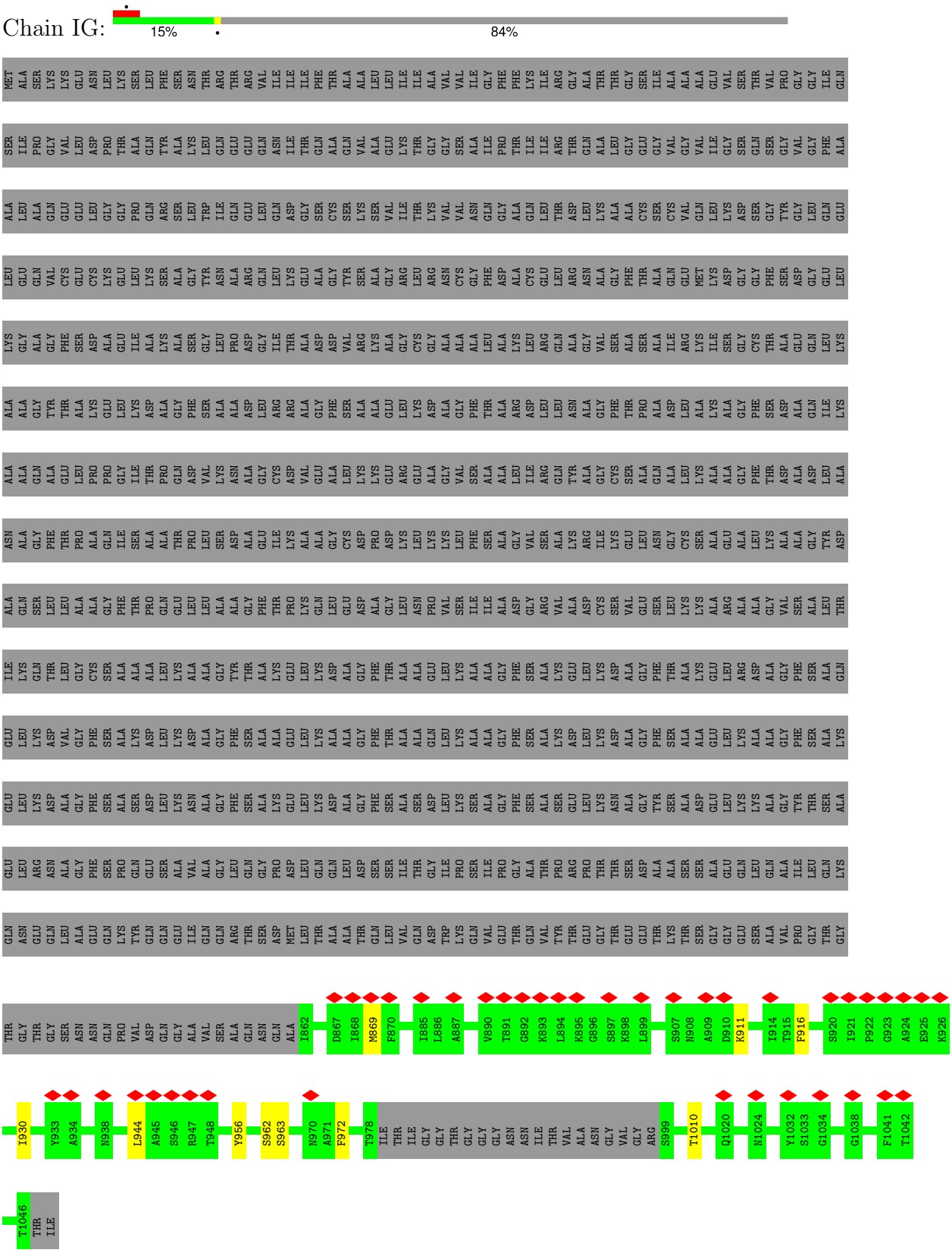
- Molecule 1: IcmE protein

Chain HG:



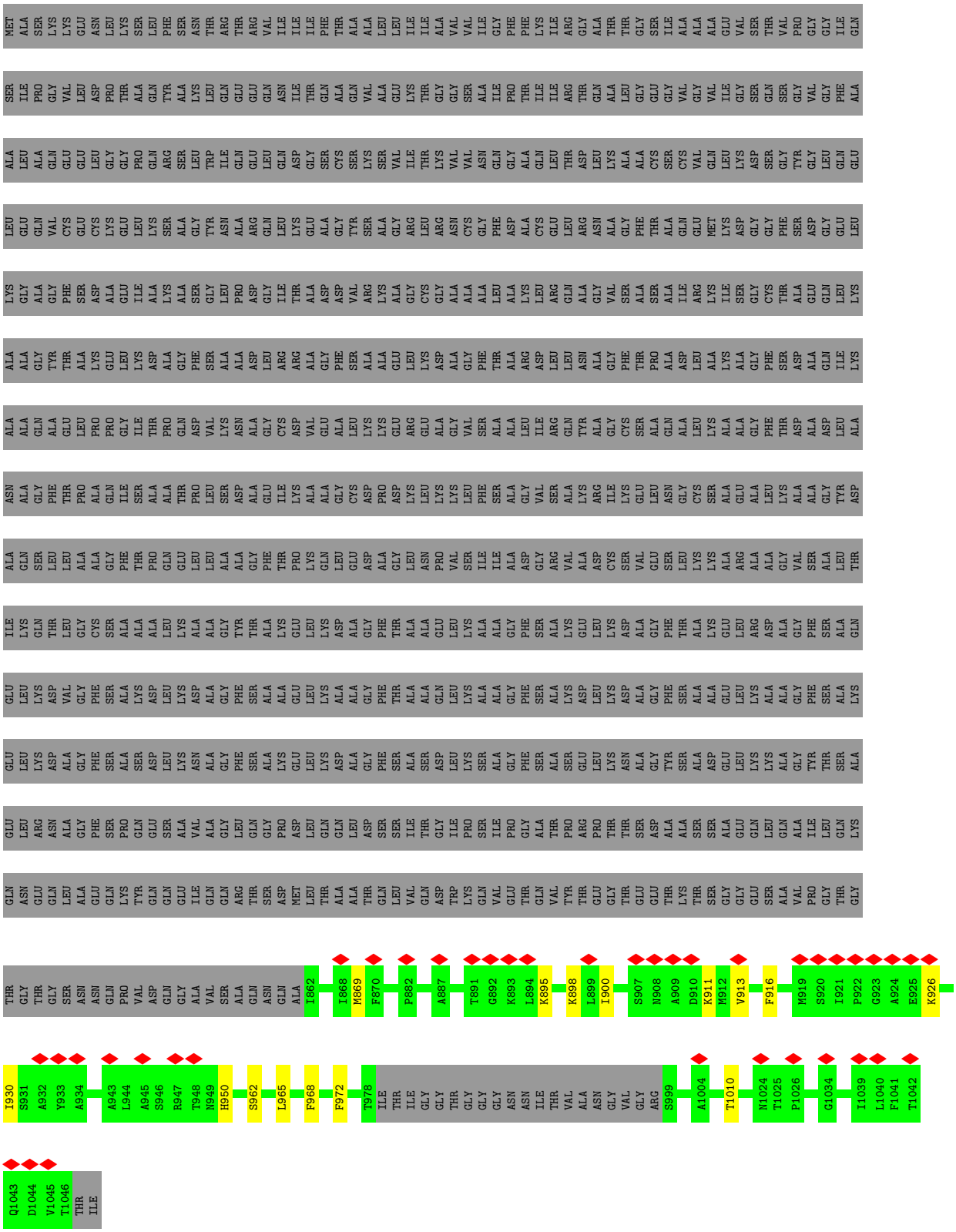
- Molecule 1: IcmE protein

Chain IG:



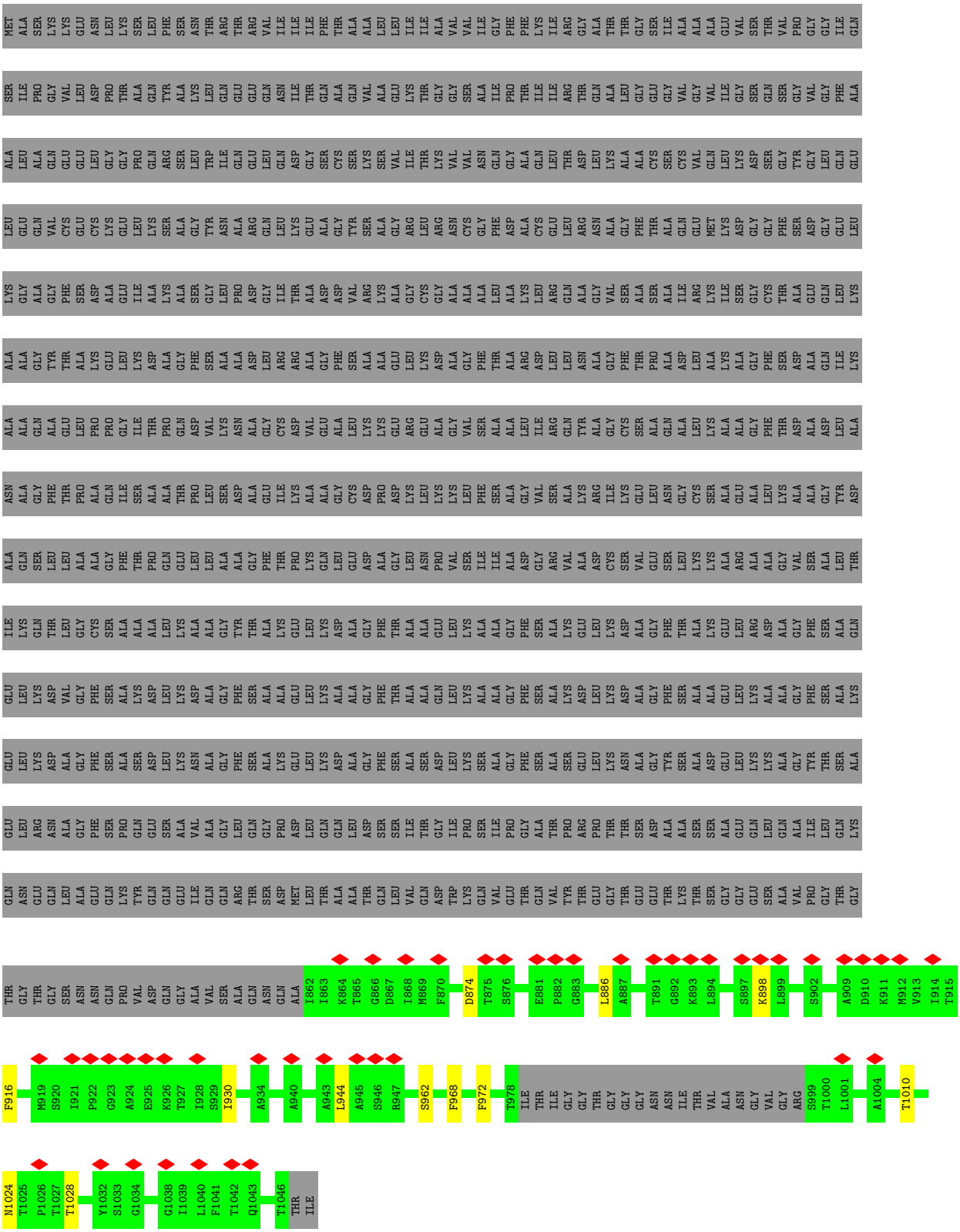
• Molecule 1: IcmE protein

Chain JG:



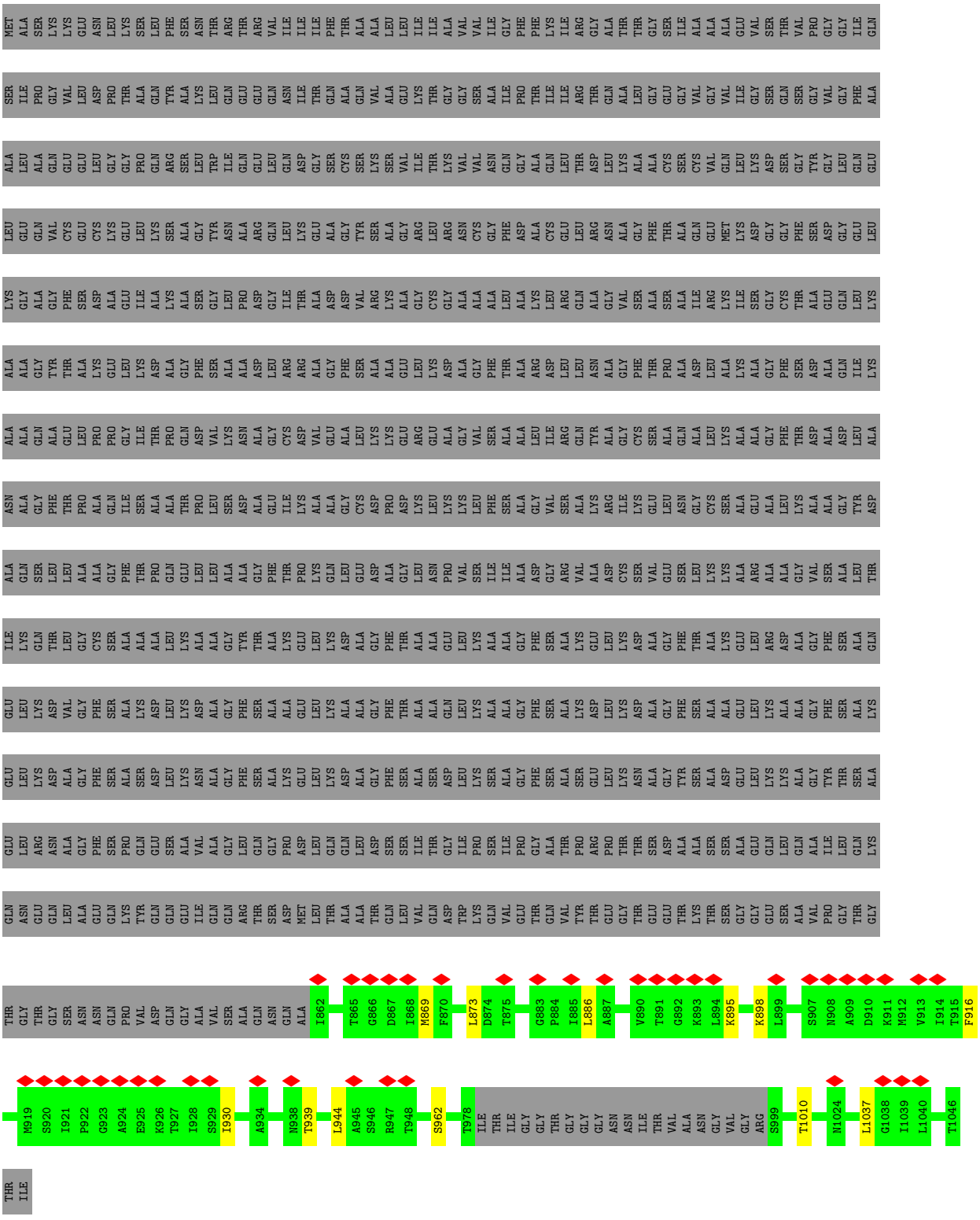
• Molecule 1: IcmE protein

Chain KG:



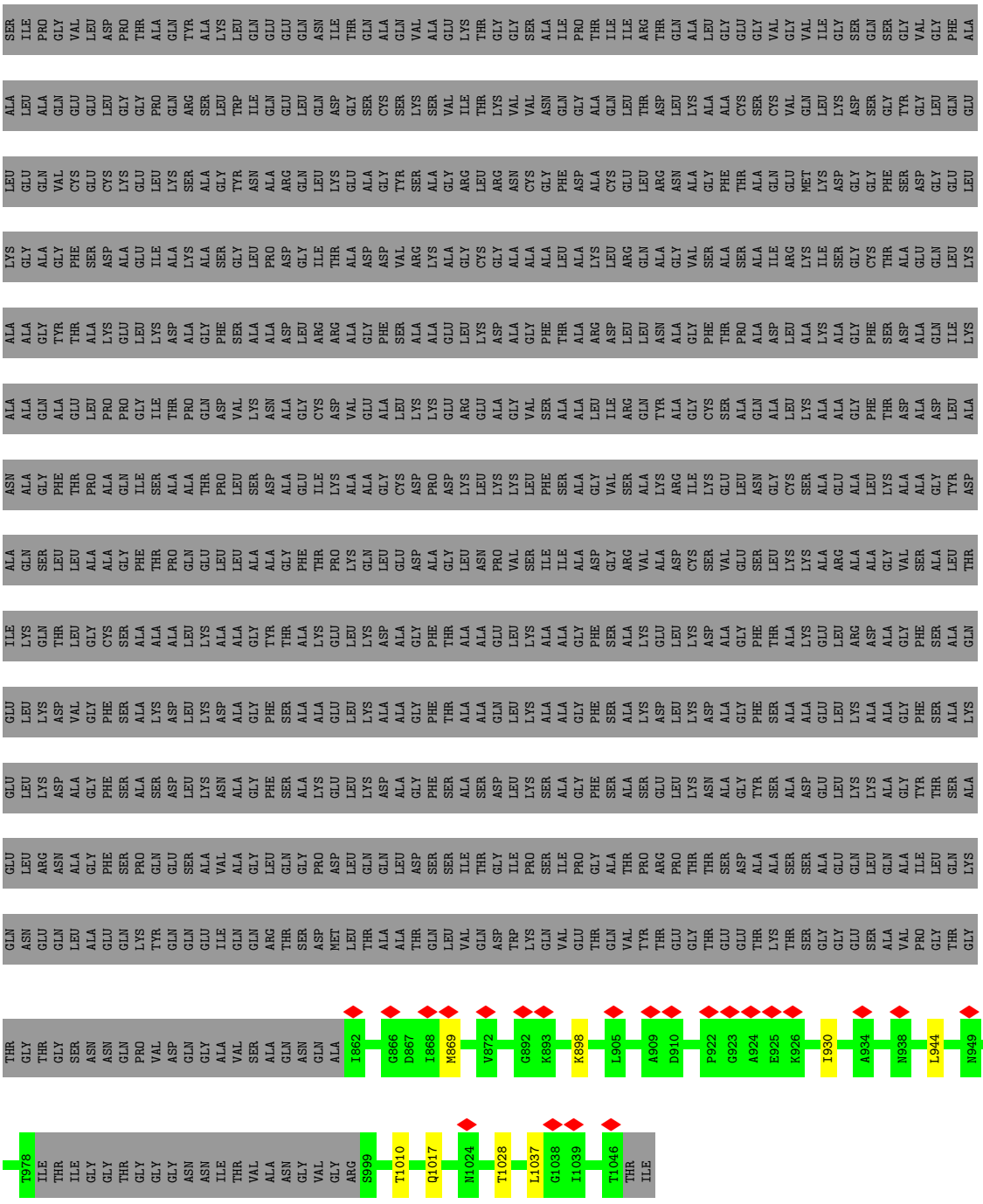
• Molecule 1: IcmE protein

Chain LG:



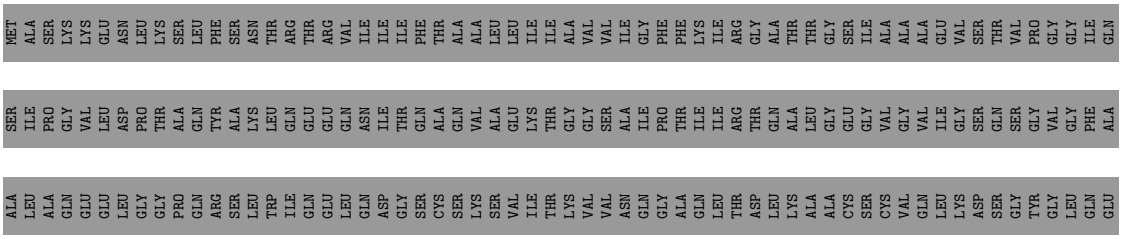
• Molecule 1: IcmE protein

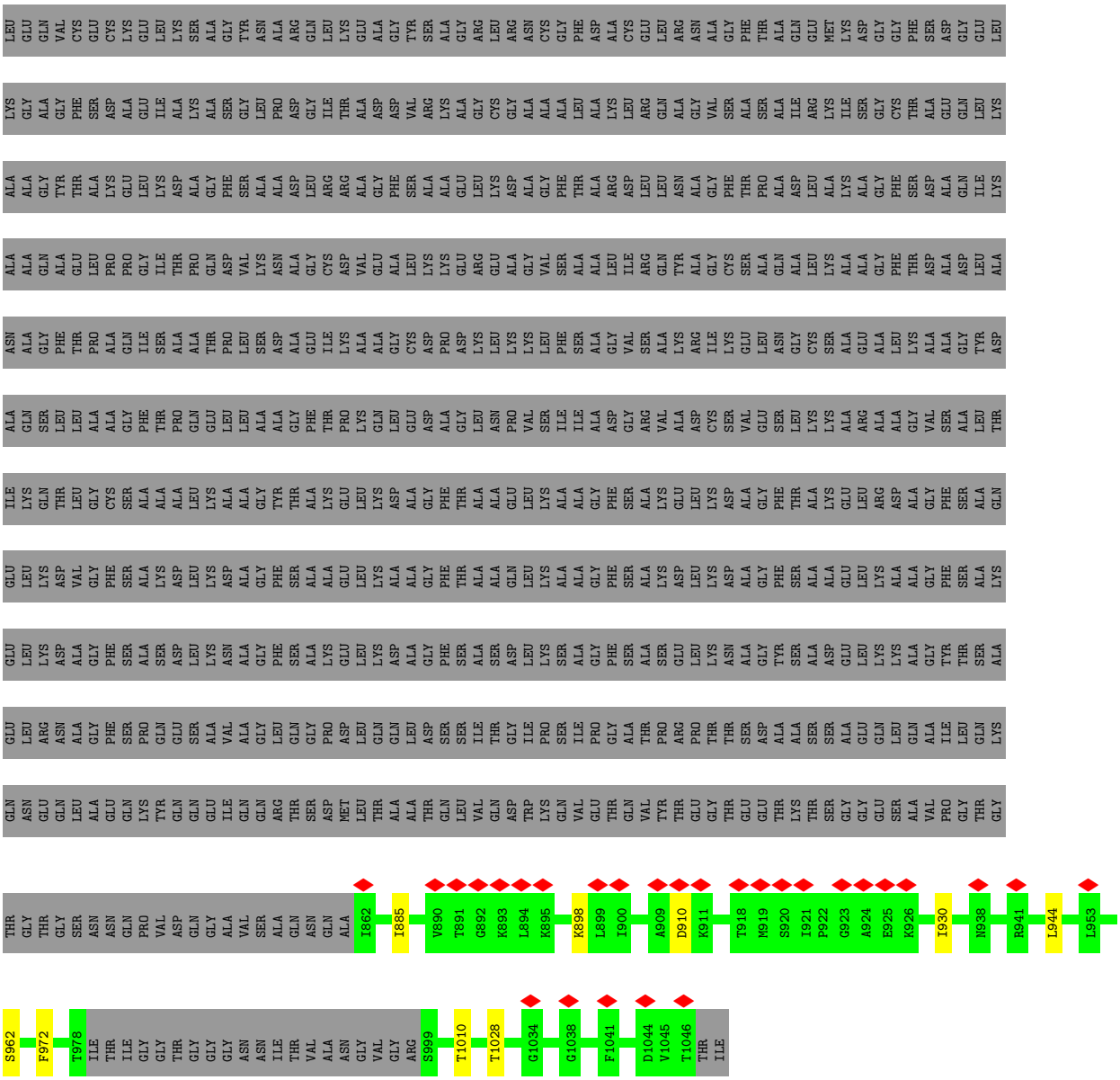
Chain MG:



• Molecule 1: IcmE protein

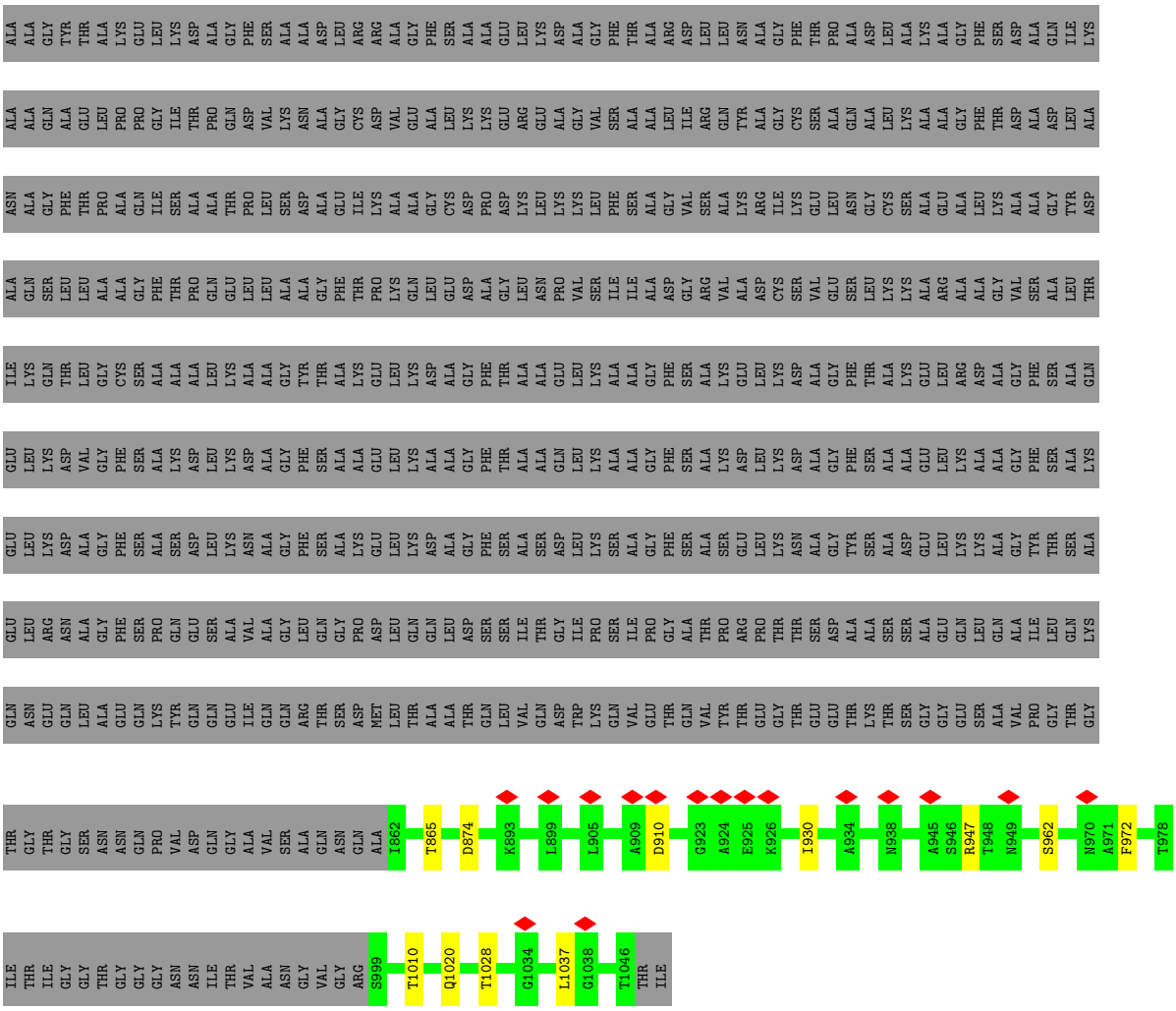
Chain NG:





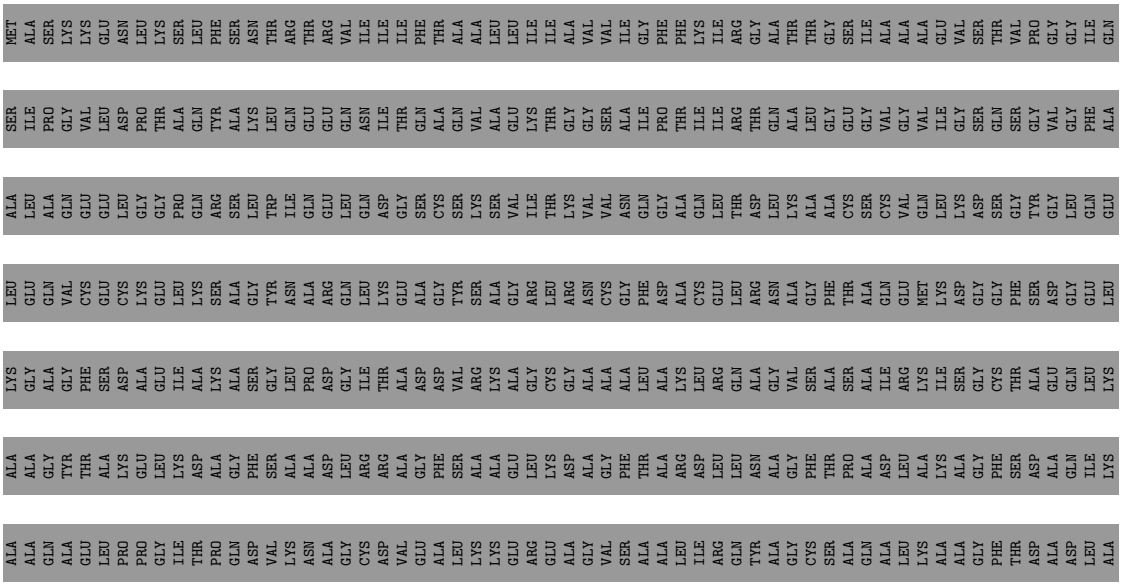
• Molecule 1: IcmE protein

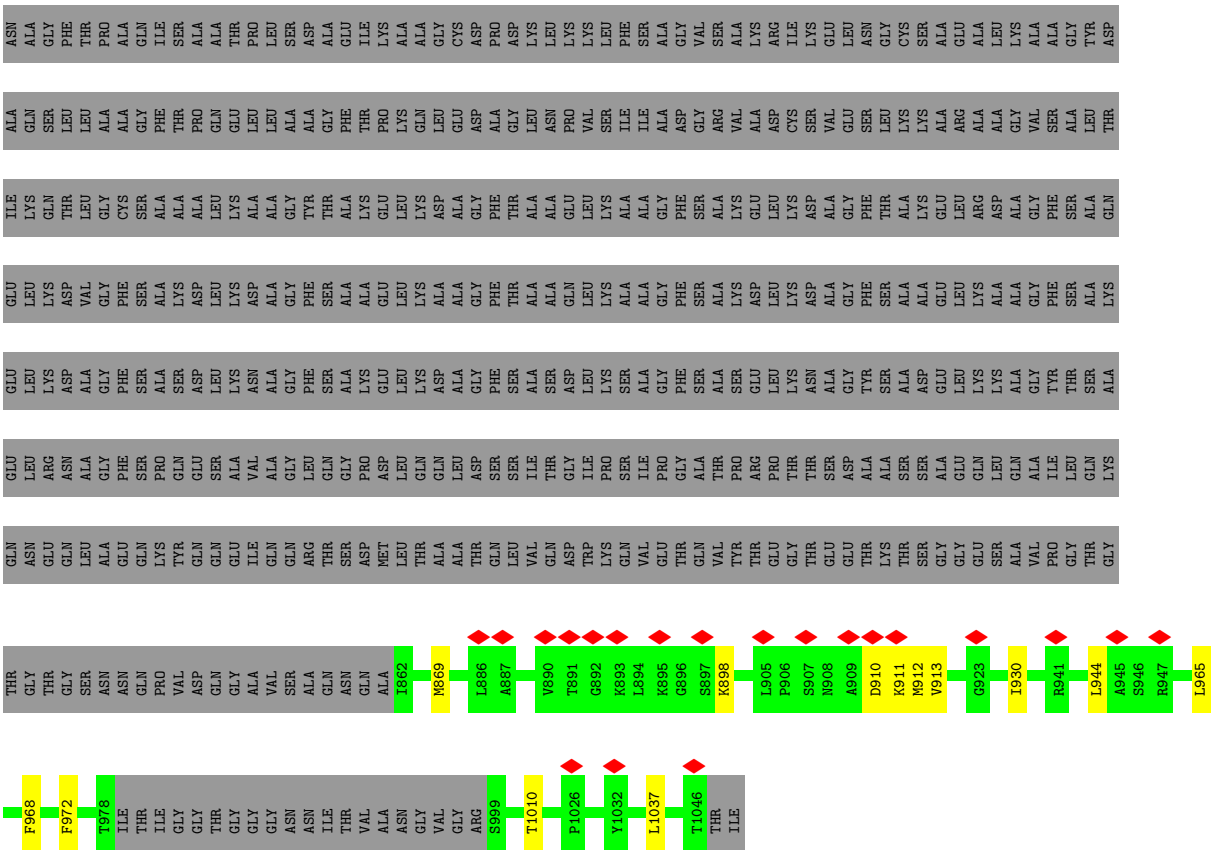
Chain OG:



• Molecule 1: IcmE protein

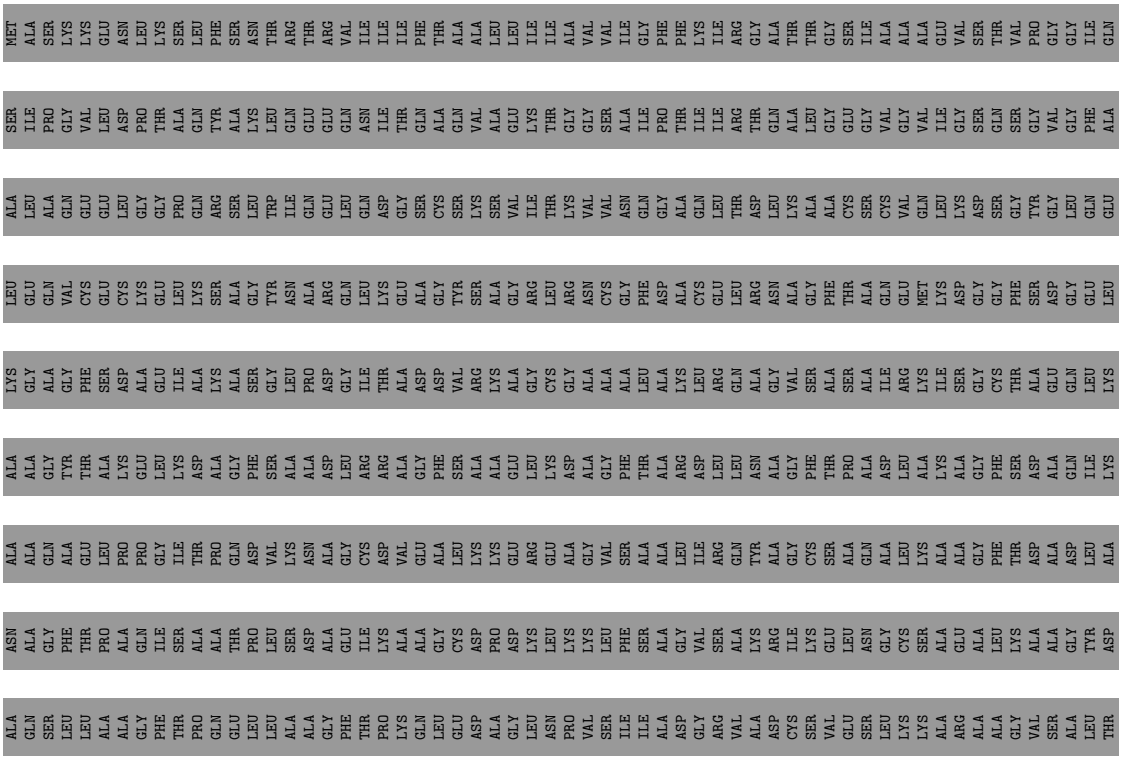
Chain PG:

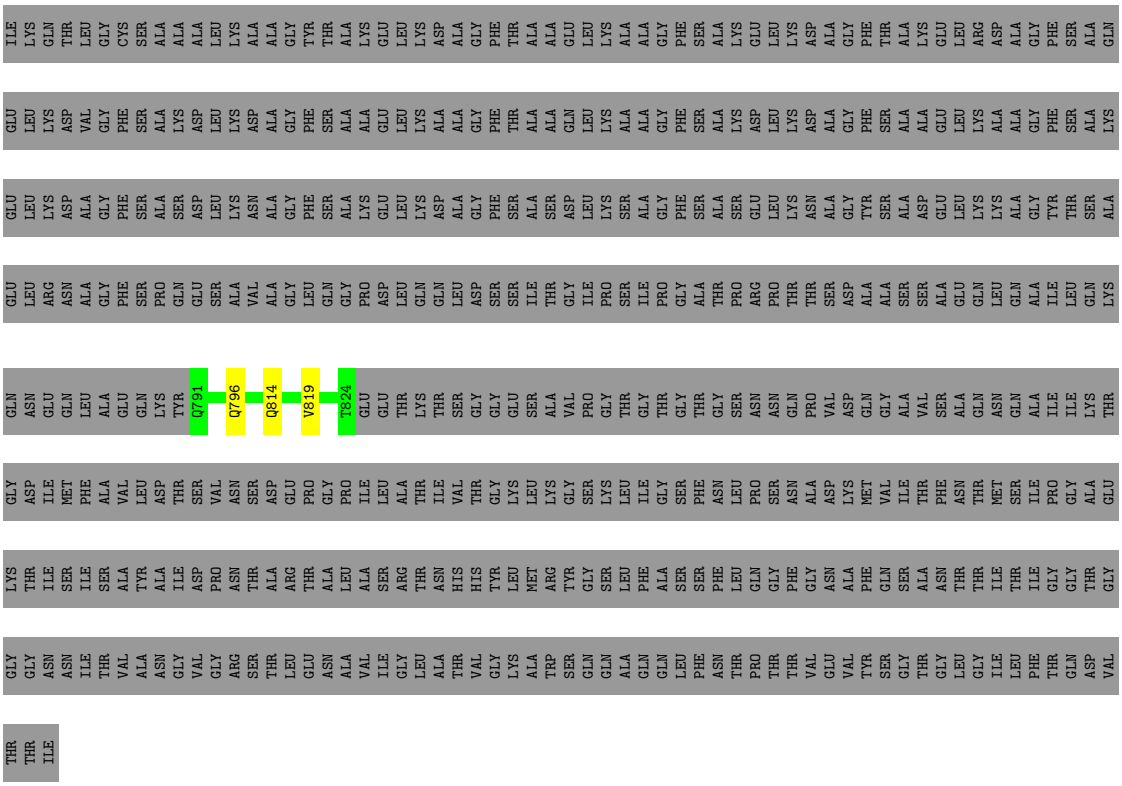




• Molecule 1: IcmE protein

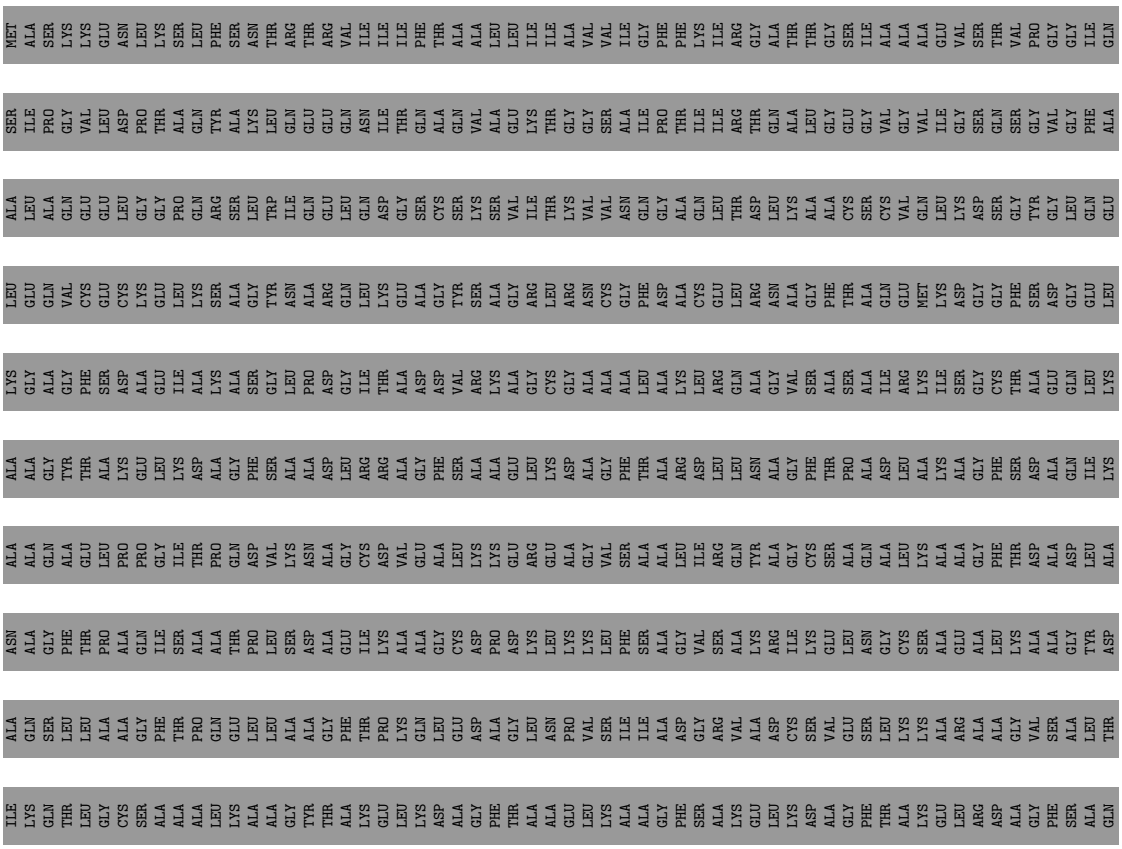
Chain Ag:

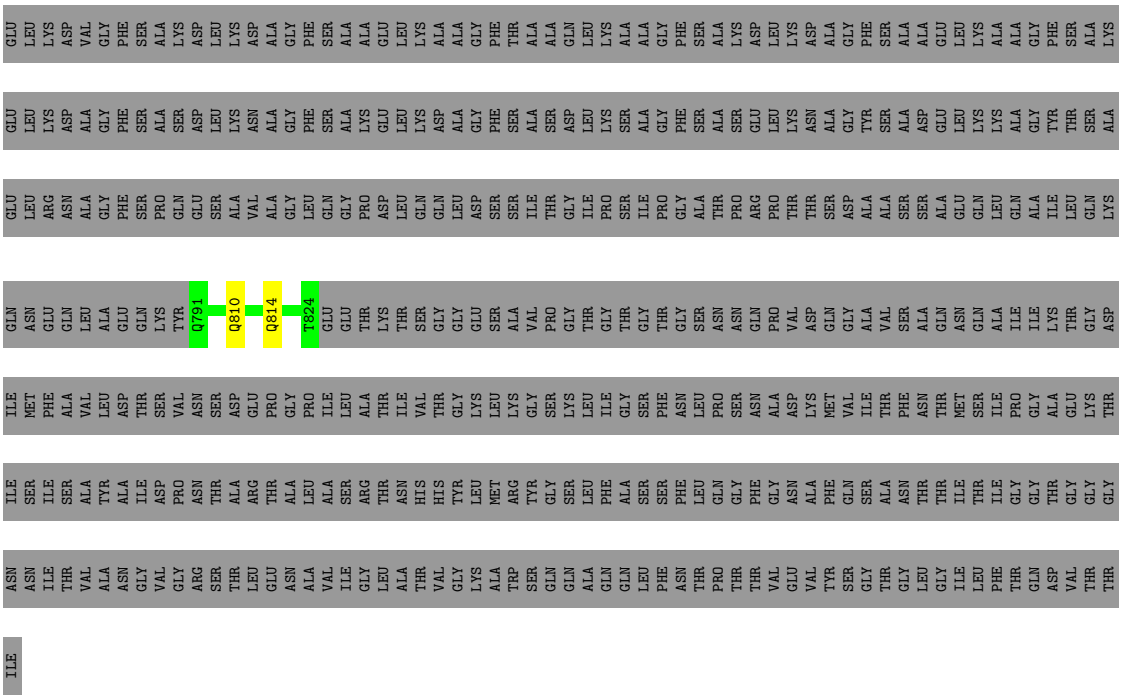




• Molecule 1: IcmE protein

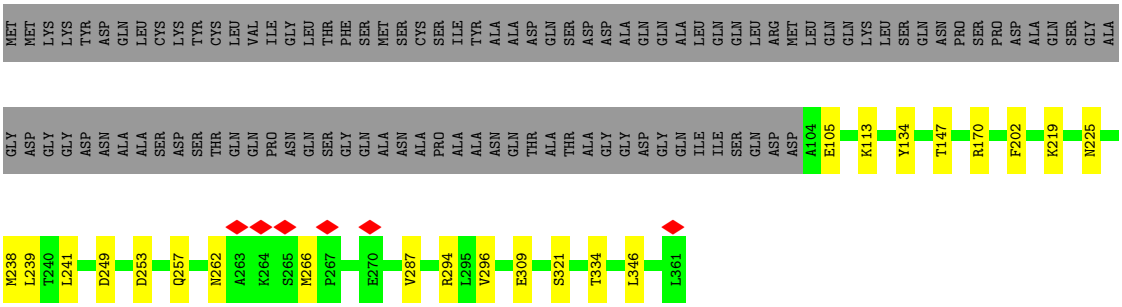
Chain Eg: 97%





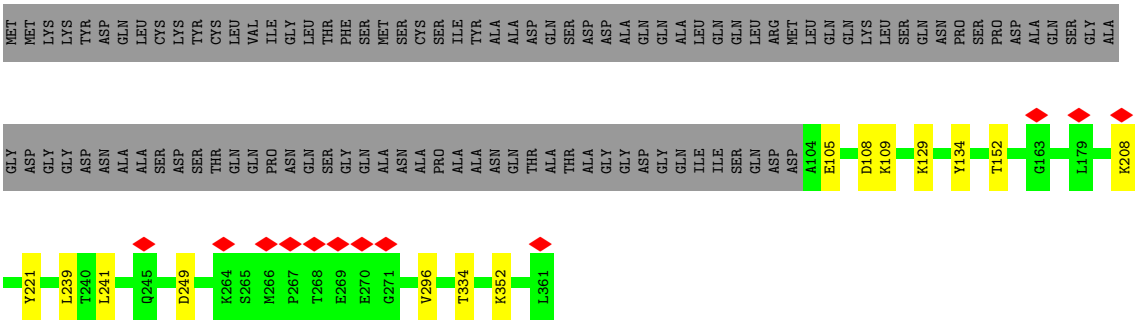
• Molecule 2: Type IV secretion protein IcmK

Chain EH:



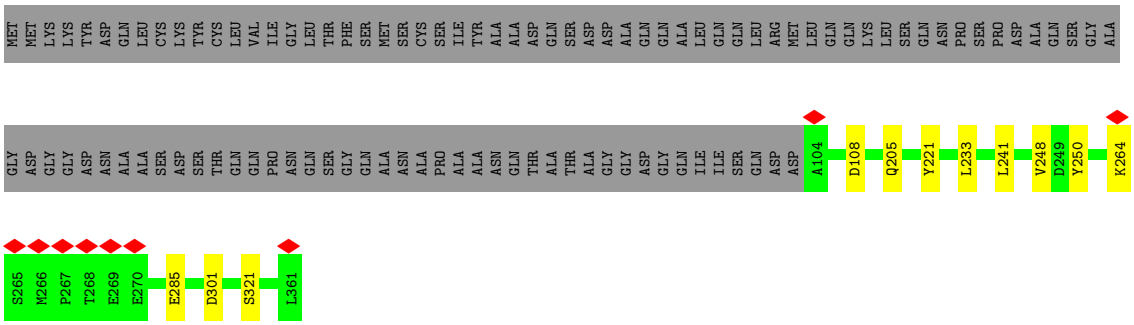
• Molecule 2: Type IV secretion protein IcmK

Chain FH:



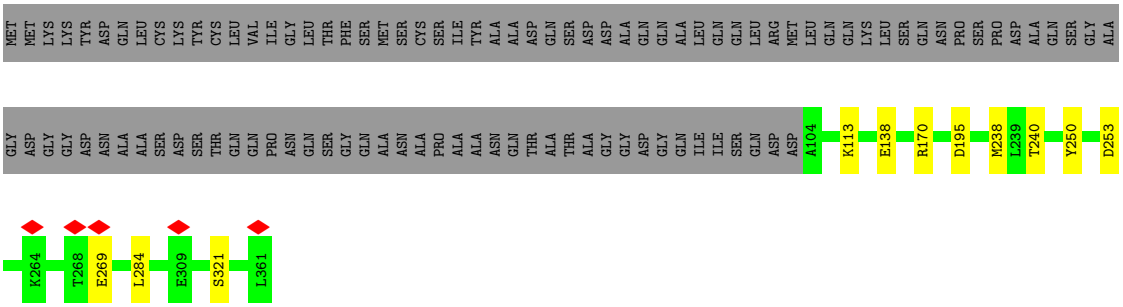
• Molecule 2: Type IV secretion protein IcmK

Chain GH:



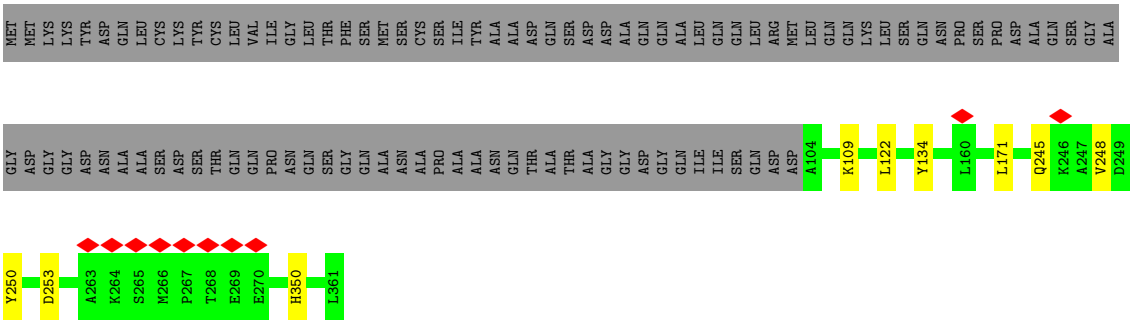
• Molecule 2: Type IV secretion protein IcmK

Chain HH:



• Molecule 2: Type IV secretion protein IcmK

Chain IH:



• Molecule 2: Type IV secretion protein IcmK

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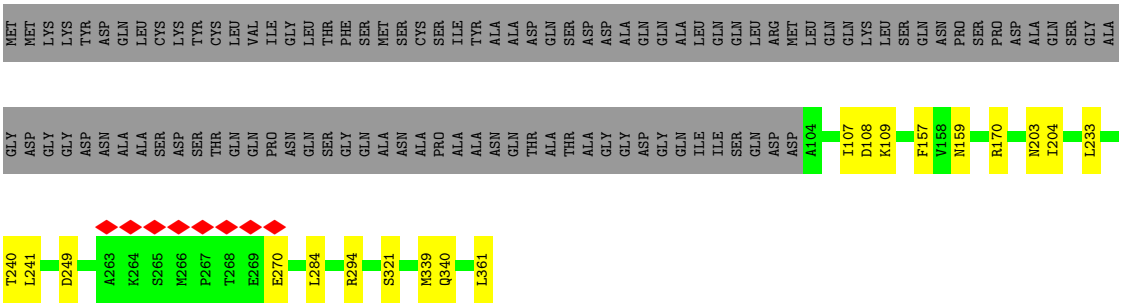
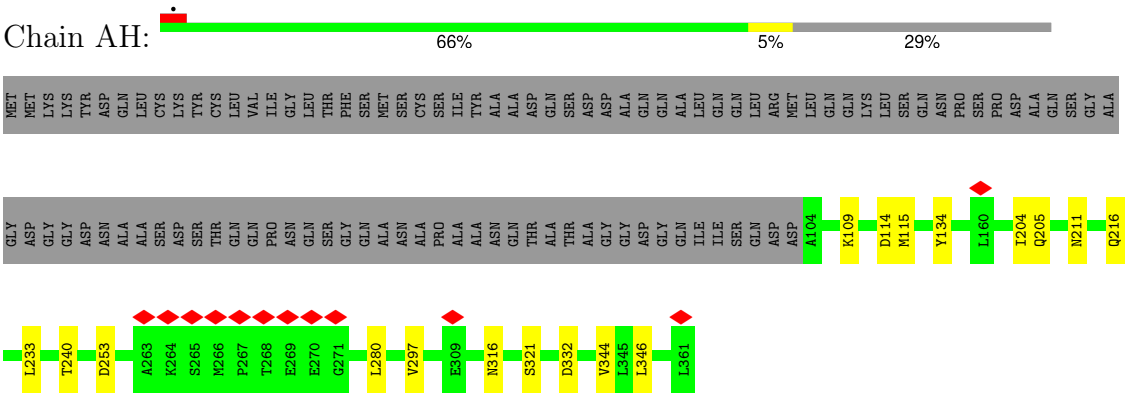


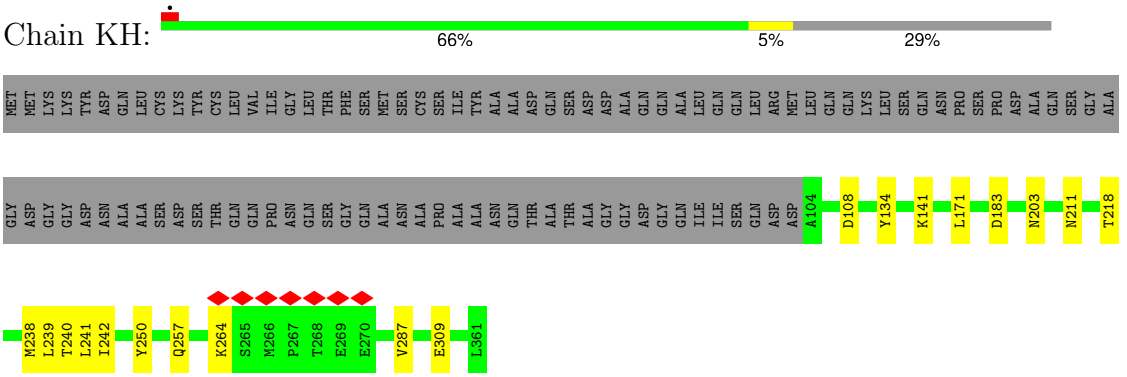
• Molecule 2: Type IV secretion protein IcmK

Chain AH:



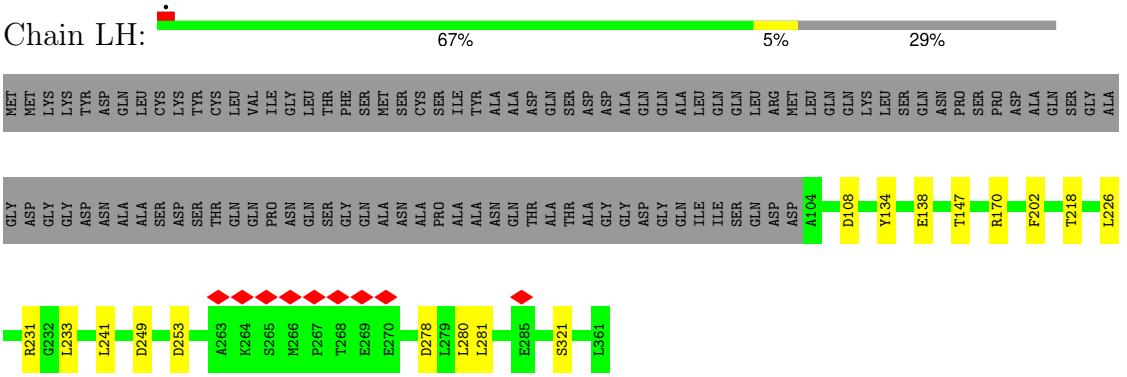
• Molecule 2: Type IV secretion protein IcmK

Chain KH:



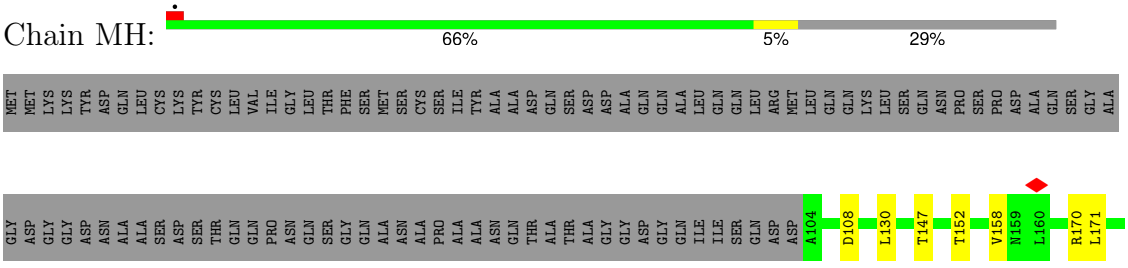
• Molecule 2: Type IV secretion protein IcmK

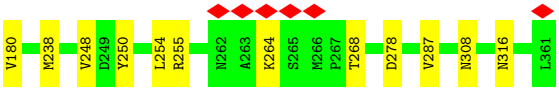
Chain LH:



• Molecule 2: Type IV secretion protein IcmK

Chain MH:





• Molecule 2: Type IV secretion protein IcmK

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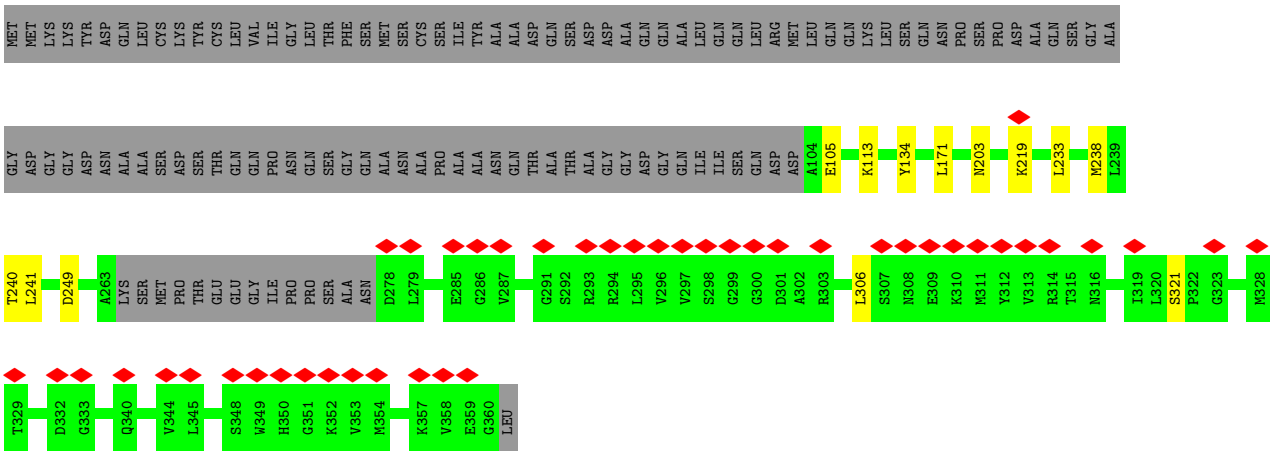
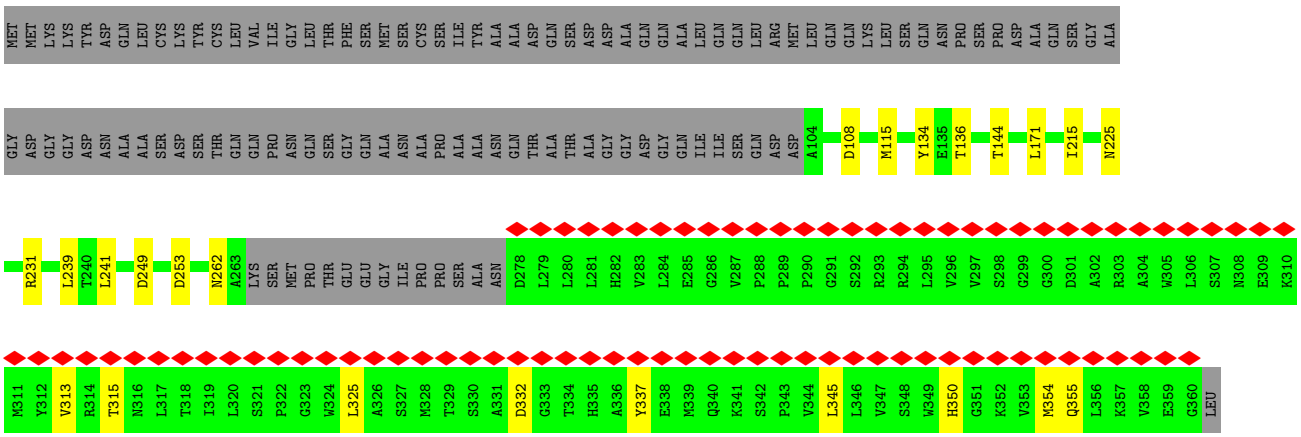


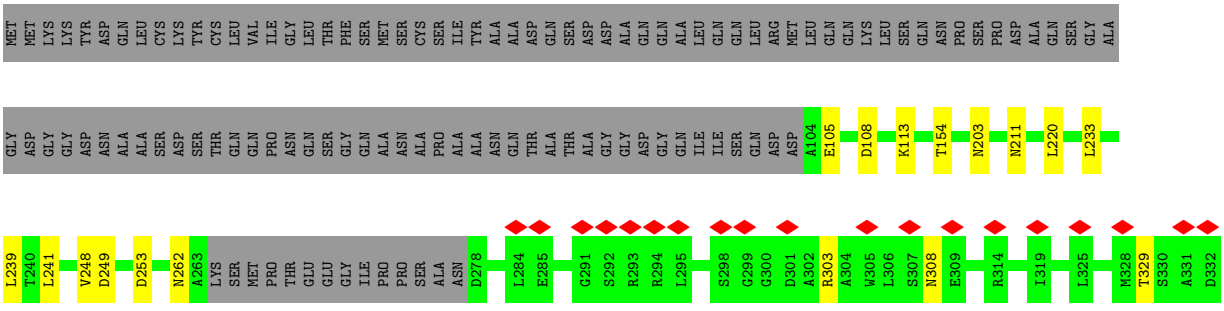
• Molecule 2: Type IV secretion protein IcmK

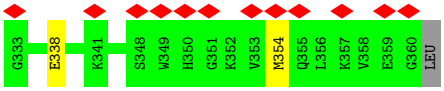
Chain WH:



• Molecule 2: Type IV secretion protein IcmK

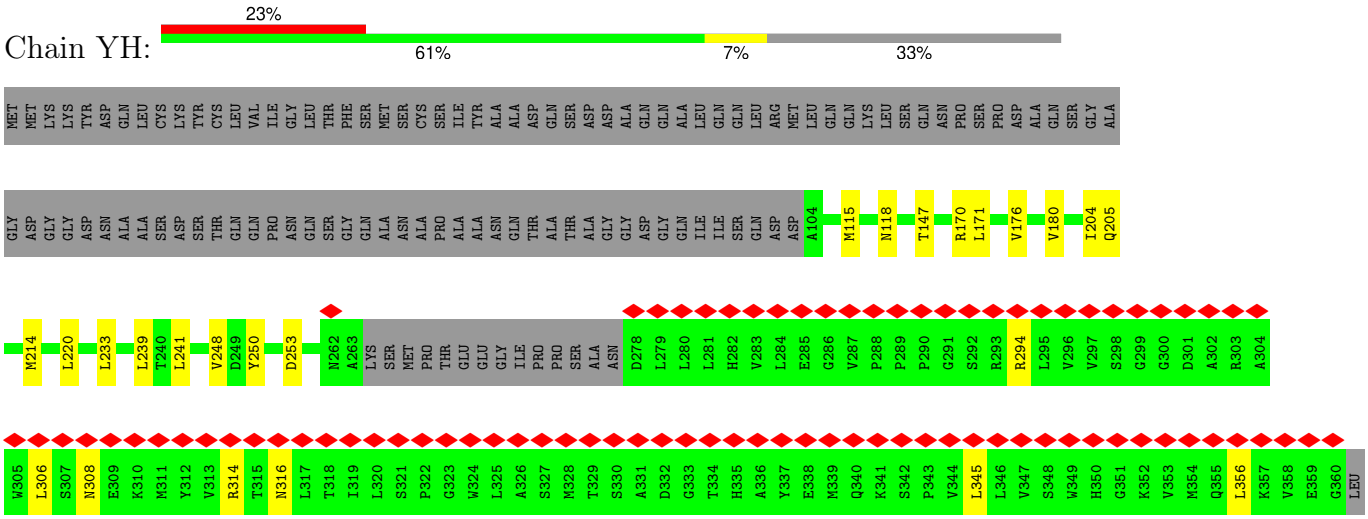
Chain XH:





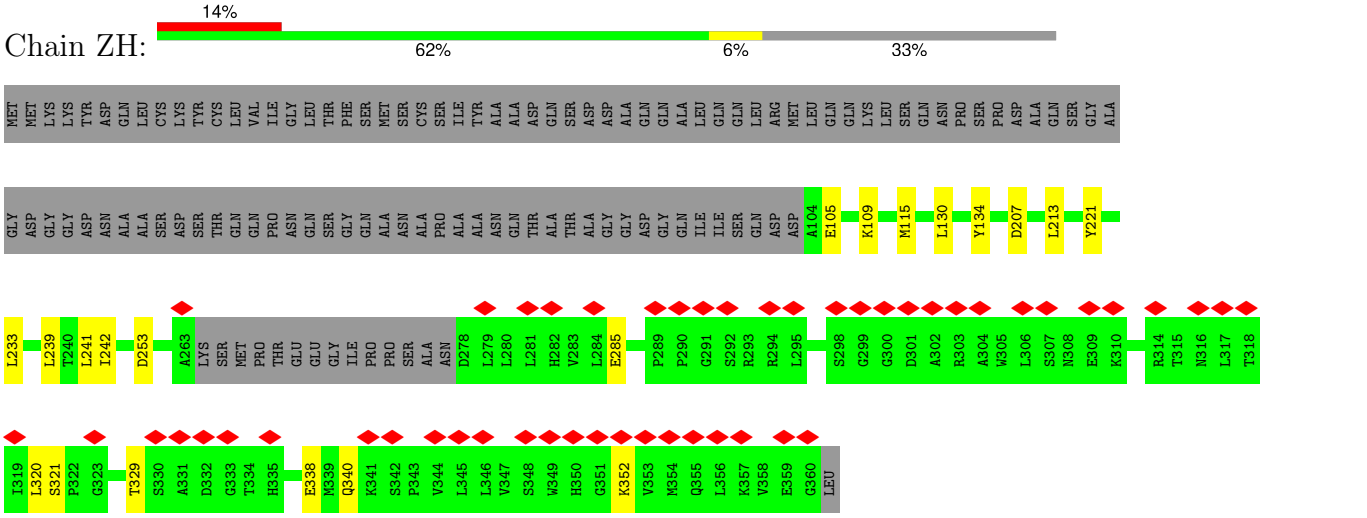
• Molecule 2: Type IV secretion protein IcmK

Chain YH:



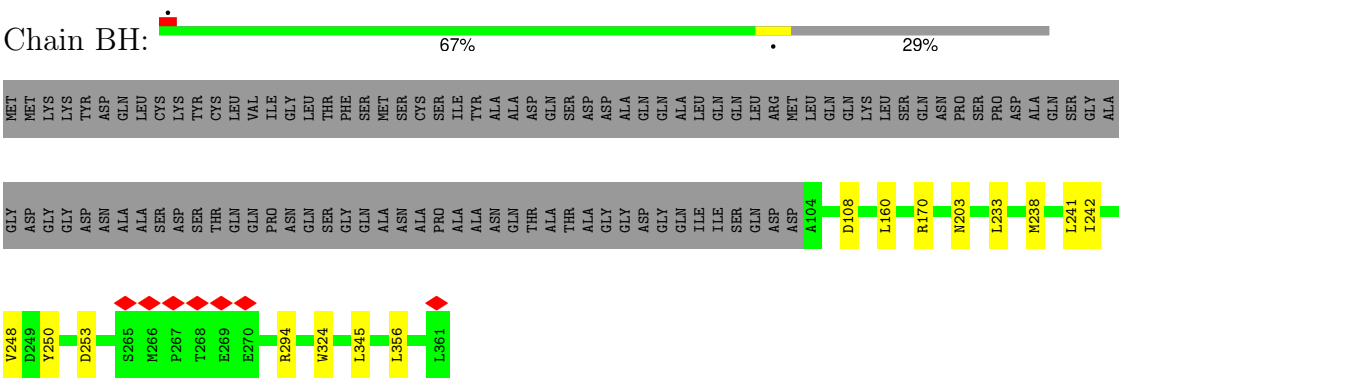
• Molecule 2: Type IV secretion protein IcmK

Chain ZH:



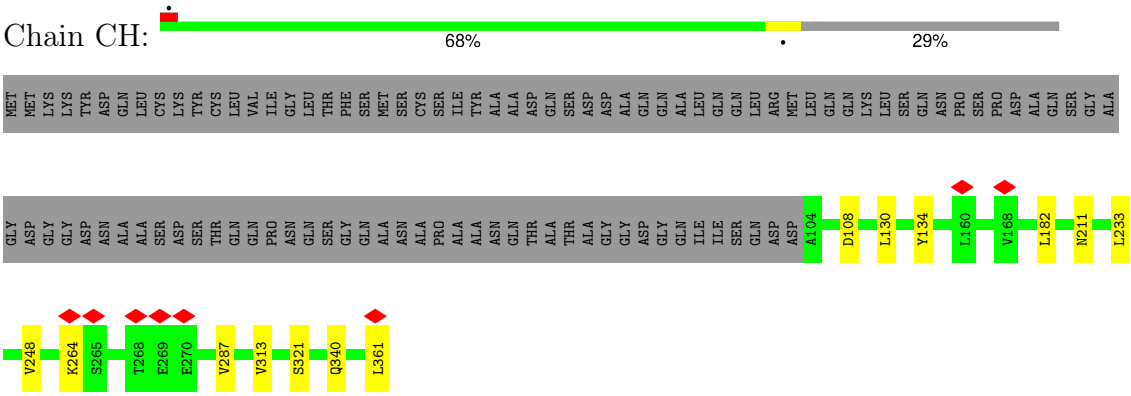
• Molecule 2: Type IV secretion protein IcmK

Chain BH:



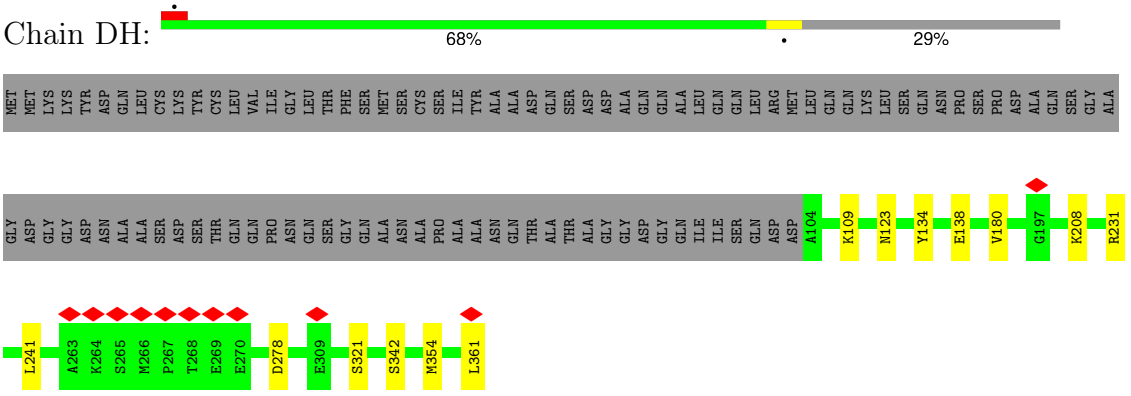
• Molecule 2: Type IV secretion protein IcmK

Chain CH:



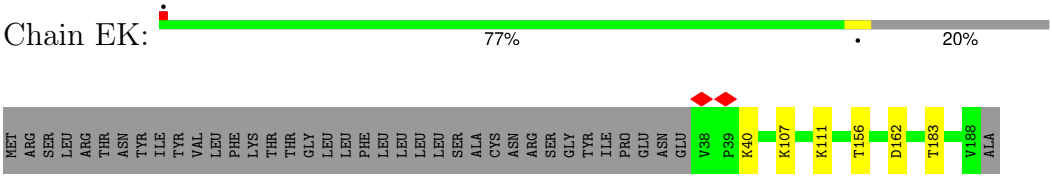
• Molecule 2: Type IV secretion protein IcmK

Chain DH:



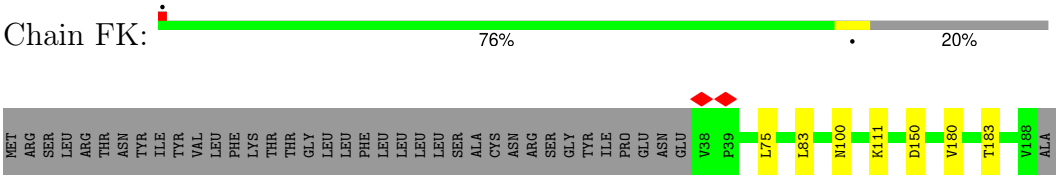
• Molecule 3: Inner membrane lipoprotein YiaD

Chain EK:



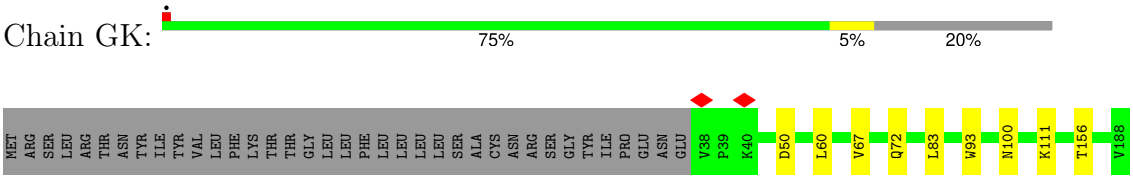
• Molecule 3: Inner membrane lipoprotein YiaD

Chain FK:



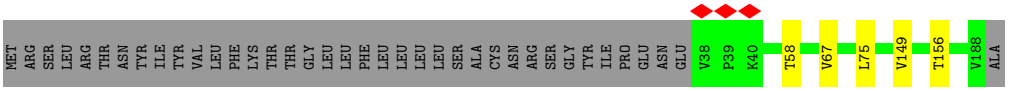
• Molecule 3: Inner membrane lipoprotein YiaD

Chain GK:



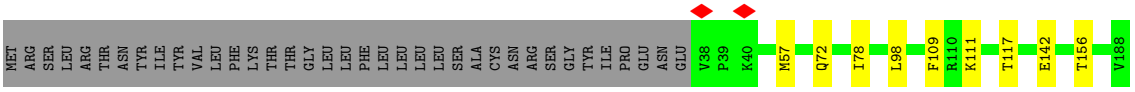
• Molecule 3: Inner membrane lipoprotein YiaD

Chain HK:



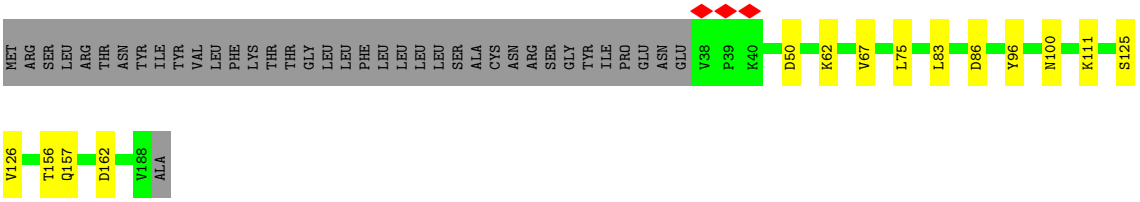
• Molecule 3: Inner membrane lipoprotein YiaD

Chain IK:



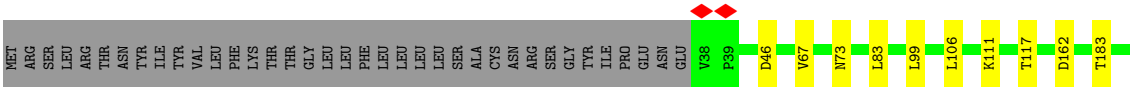
• Molecule 3: Inner membrane lipoprotein YiaD

Chain JK:



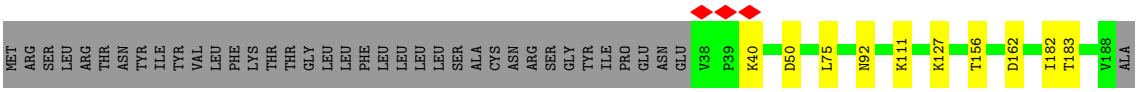
• Molecule 3: Inner membrane lipoprotein YiaD

Chain KK:



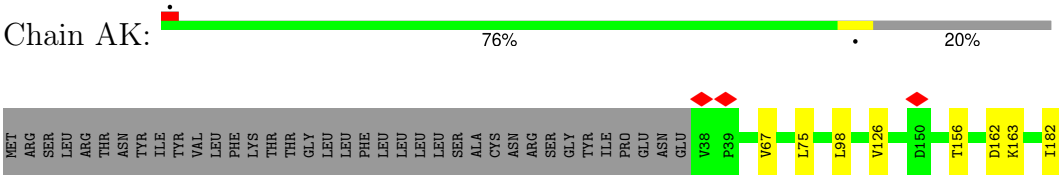
• Molecule 3: Inner membrane lipoprotein YiaD

Chain LK:



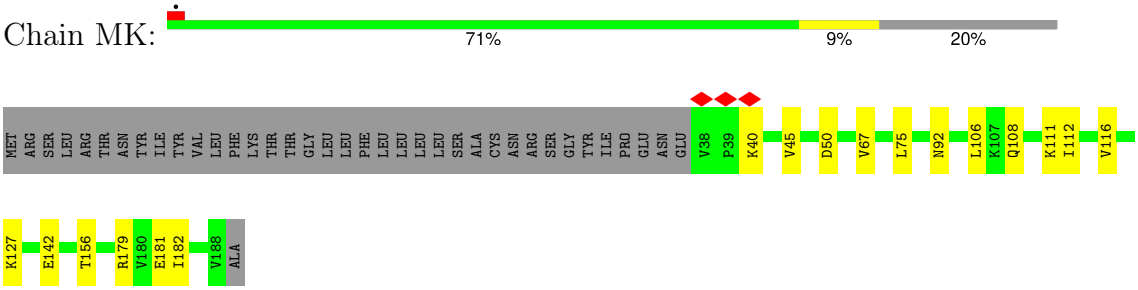
• Molecule 3: Inner membrane lipoprotein YiaD

Chain AK:



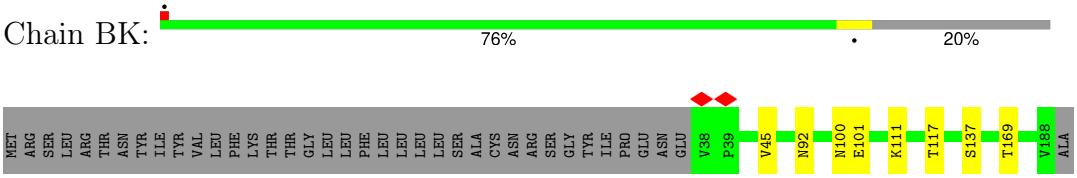
• Molecule 3: Inner membrane lipoprotein YiaD

Chain MK:



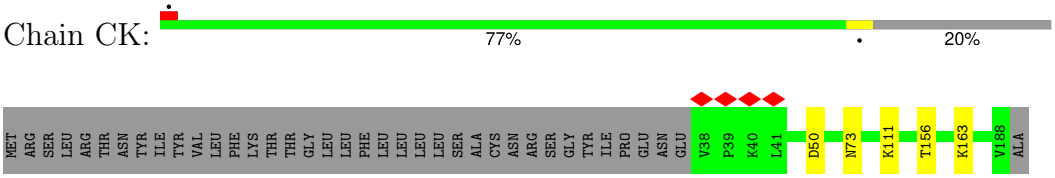
• Molecule 3: Inner membrane lipoprotein YiaD

Chain BK:



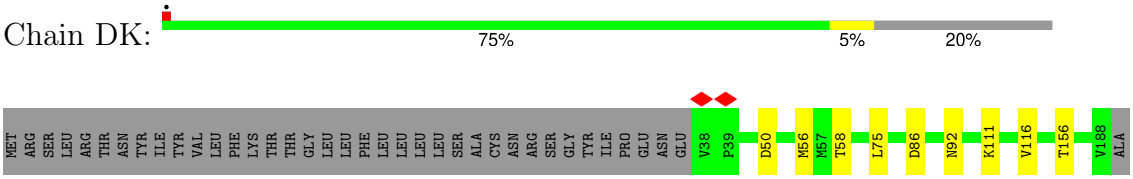
• Molecule 3: Inner membrane lipoprotein YiaD

Chain CK:



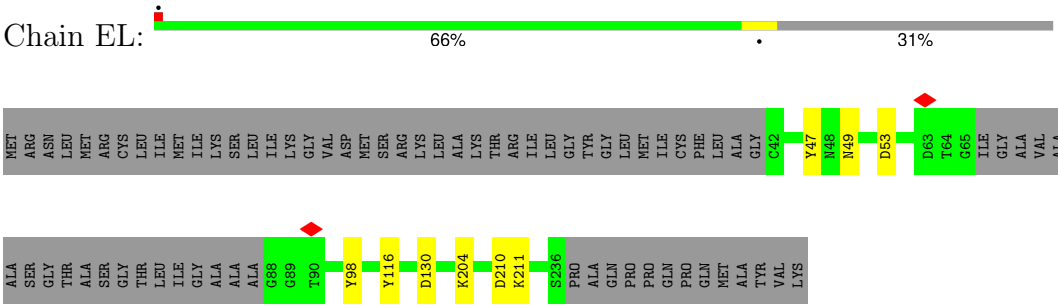
• Molecule 3: Inner membrane lipoprotein YiaD

Chain DK:



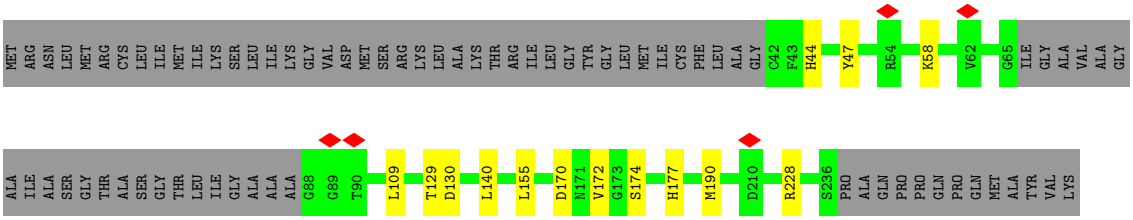
• Molecule 4: Outer membrane protein, OmpA family protein

Chain EL:



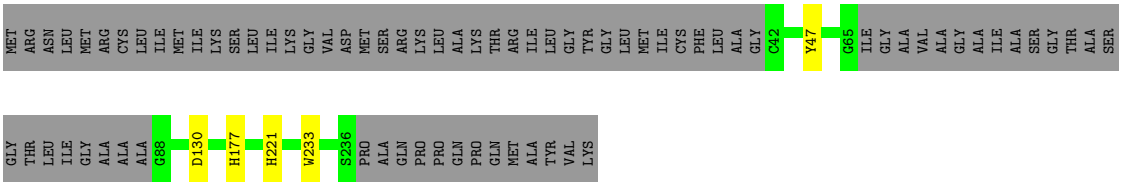
• Molecule 4: Outer membrane protein, OmpA family protein

Chain FL:



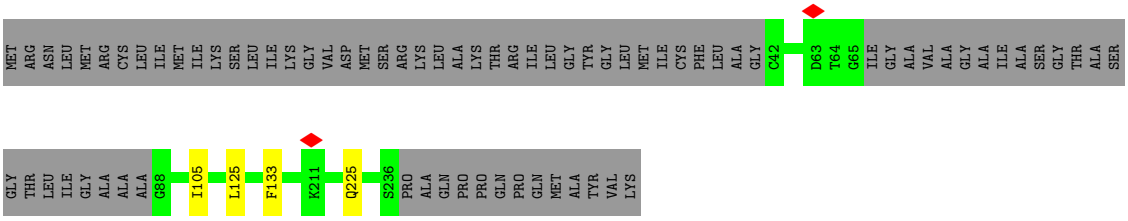
• Molecule 4: Outer membrane protein, OmpA family protein

Chain GL:



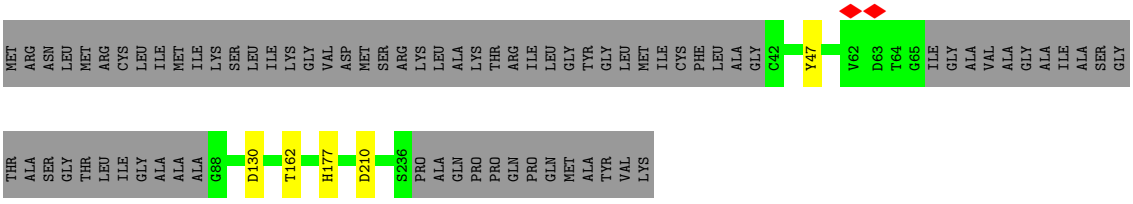
• Molecule 4: Outer membrane protein, OmpA family protein

Chain HL:



• Molecule 4: Outer membrane protein, OmpA family protein

Chain IL:

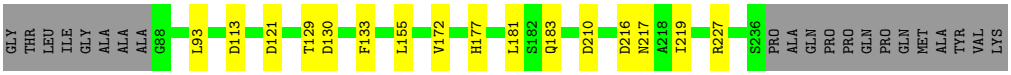


• Molecule 4: Outer membrane protein, OmpA family protein

Chain JL:

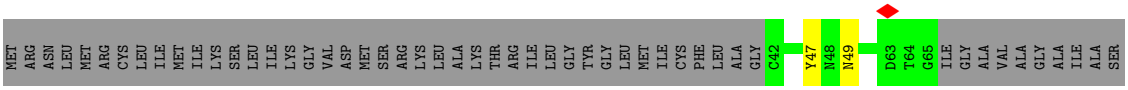
• Molecule 4: Outer membrane protein, OmpA family protein

Chain KL:



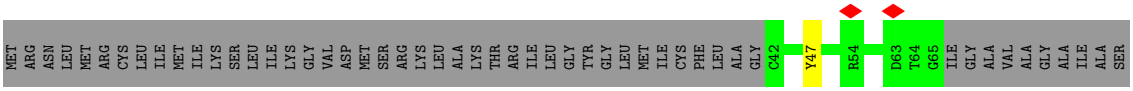
• Molecule 4: Outer membrane protein, OmpA family protein

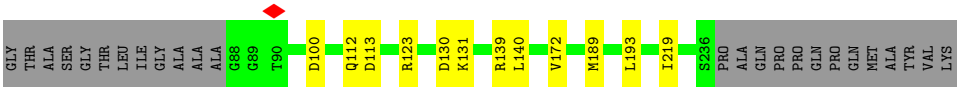
Chain LL:



• Molecule 4: Outer membrane protein, OmpA family protein

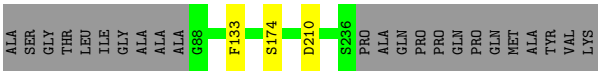
Chain ML:





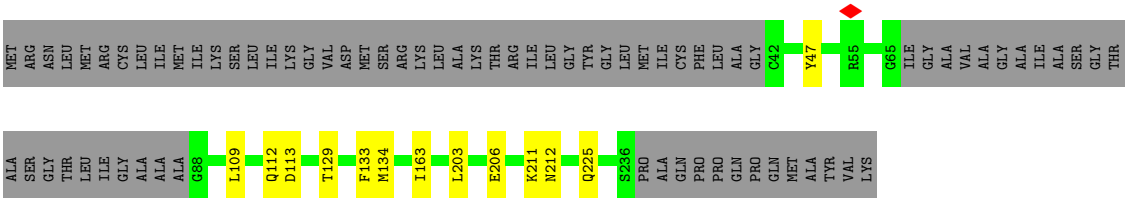
• Molecule 4: Outer membrane protein, OmpA family protein

Chain AL:



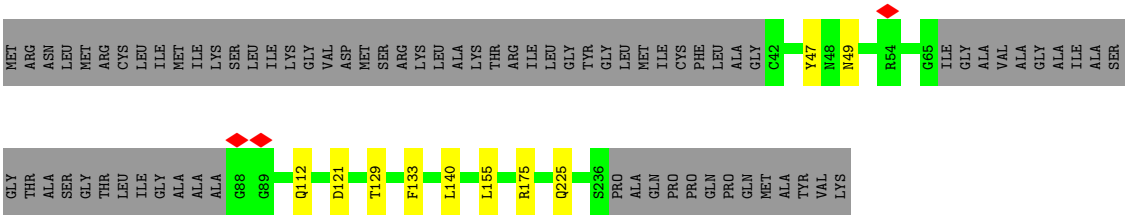
• Molecule 4: Outer membrane protein, OmpA family protein

Chain BL:



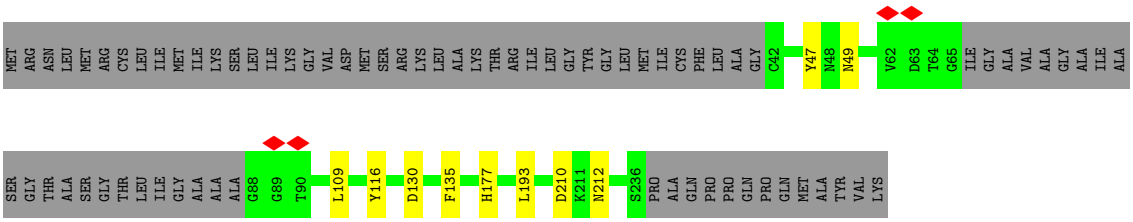
• Molecule 4: Outer membrane protein, OmpA family protein

Chain CL:



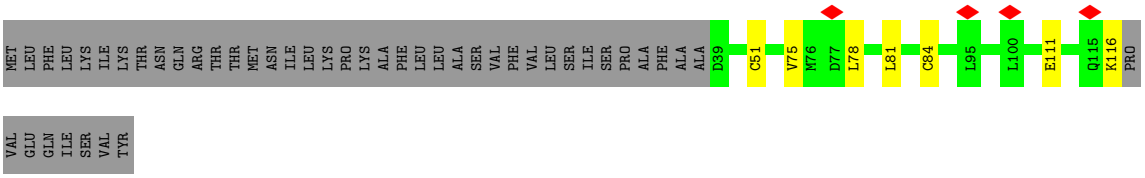
• Molecule 4: Outer membrane protein, OmpA family protein

Chain DL:



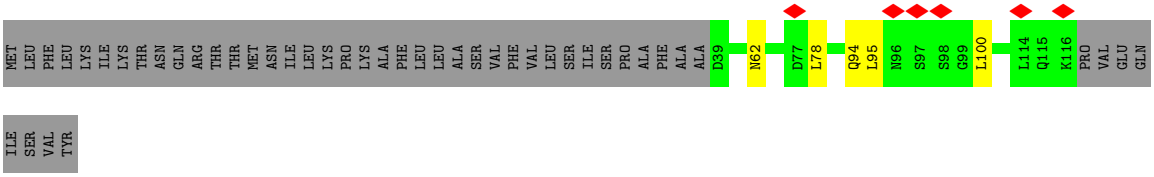
• Molecule 5: Neurogenic locus notch

Chain EN:



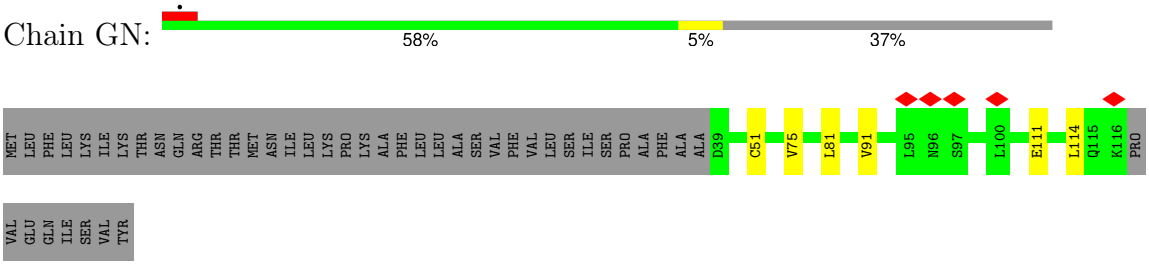
• Molecule 5: Neurogenic locus notch

Chain FN:



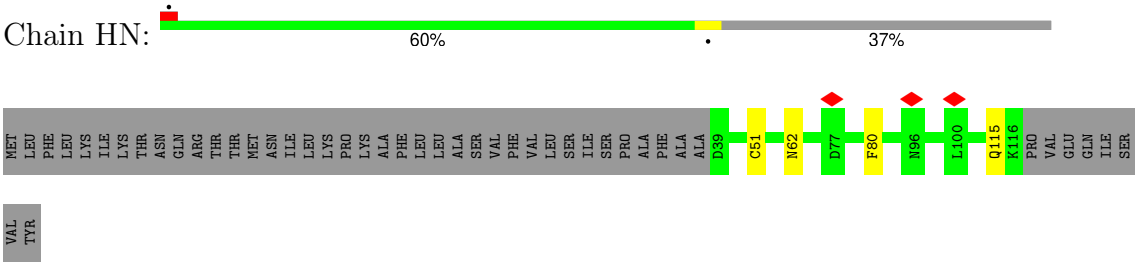
• Molecule 5: Neurogenic locus notch

Chain GN:



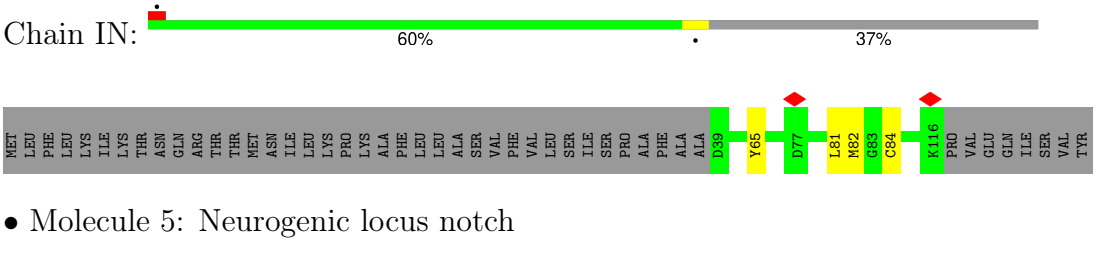
• Molecule 5: Neurogenic locus notch

Chain HN:



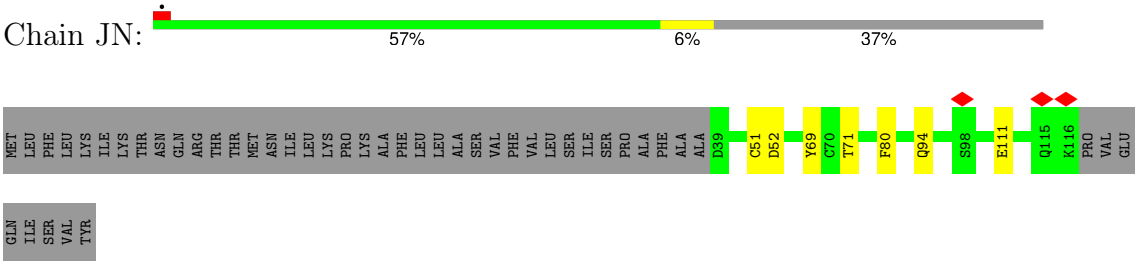
• Molecule 5: Neurogenic locus notch

Chain IN:



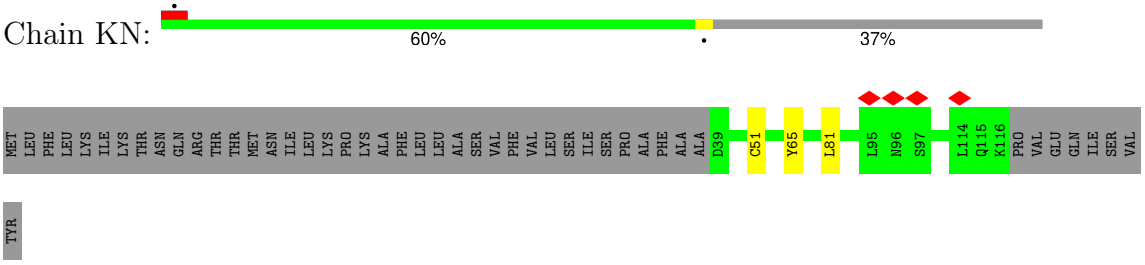
• Molecule 5: Neurogenic locus notch

Chain JN:



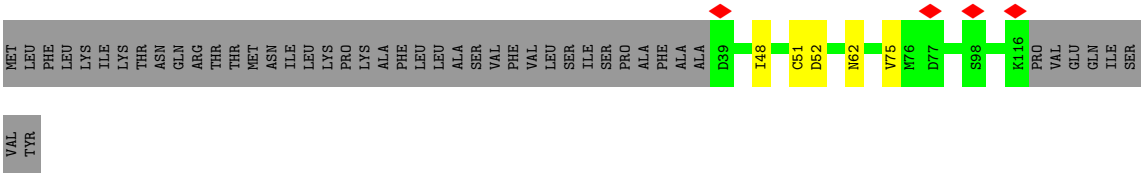
• Molecule 5: Neurogenic locus notch

Chain KN:



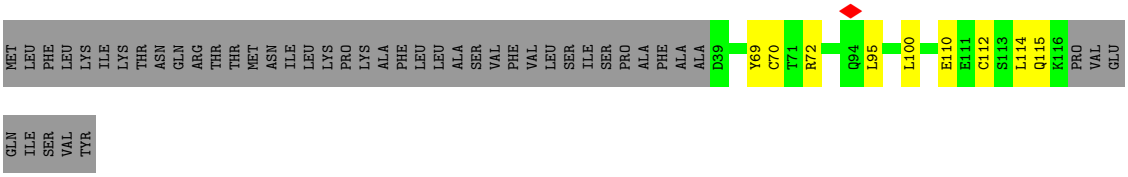
• Molecule 5: Neurogenic locus notch

Chain LN:



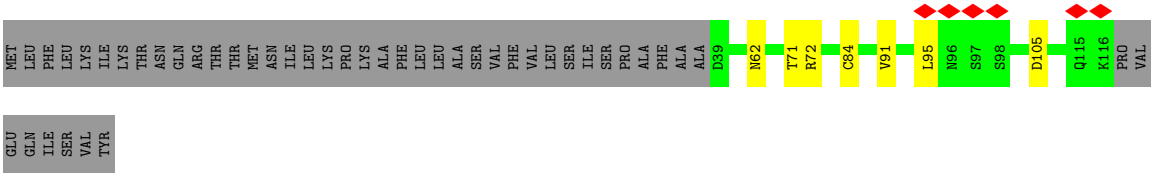
• Molecule 5: Neurogenic locus notch

Chain MN:



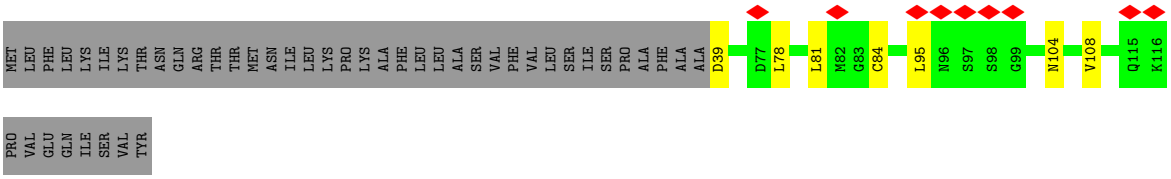
• Molecule 5: Neurogenic locus notch

Chain AN:



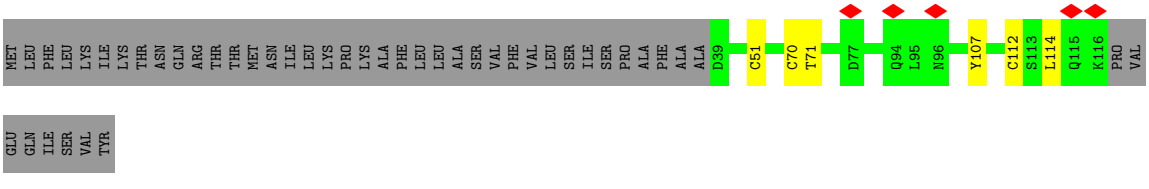
• Molecule 5: Neurogenic locus notch

Chain BN:



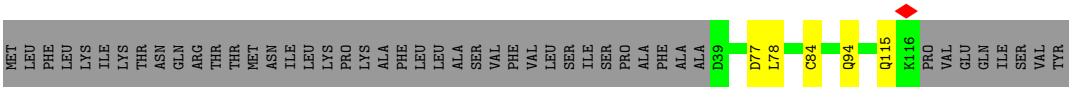
• Molecule 5: Neurogenic locus notch

Chain CN:



• Molecule 5: Neurogenic locus notch

Chain DN:



• Molecule 6: Unknown protein fragment

Chain EU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain FU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain GU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain HU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain IU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain JU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain KU: 100%

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain LU: 100%

There are no outlier residues recorded for this chain.

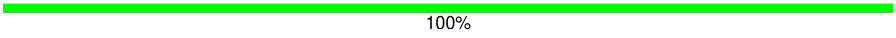
• Molecule 6: Unknown protein fragment

Chain MU:

There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

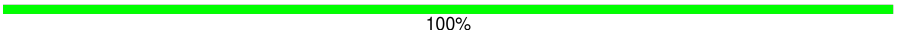
Chain AU:



There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain BU:



There are no outlier residues recorded for this chain.

• Molecule 6: Unknown protein fragment

Chain CU:

There are no outlier residues recorded for this chain.

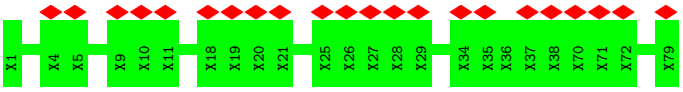
• Molecule 6: Unknown protein fragment

Chain DU:

There are no outlier residues recorded for this chain.

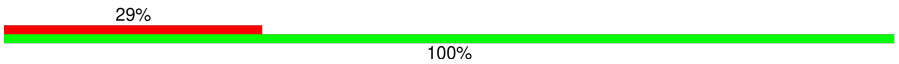
• Molecule 7: Unknown protein fragment

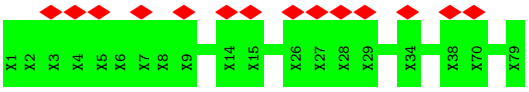
Chain EX:



• Molecule 7: Unknown protein fragment

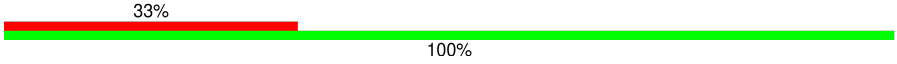
Chain FX:

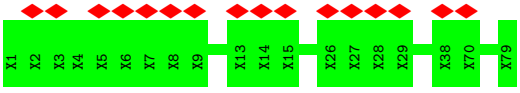




• Molecule 7: Unknown protein fragment

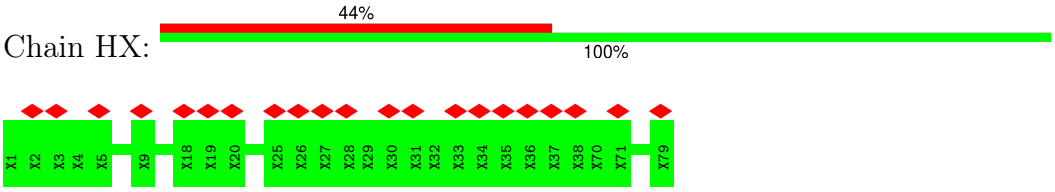
Chain GX:





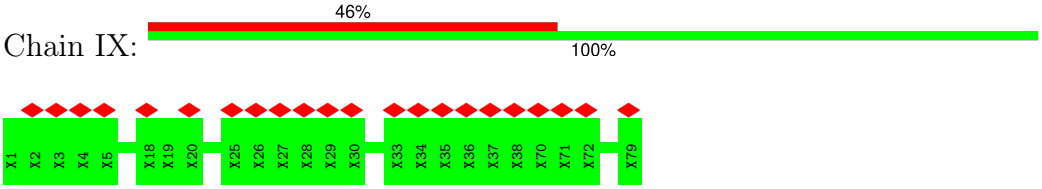
• Molecule 7: Unknown protein fragment

Chain HX:



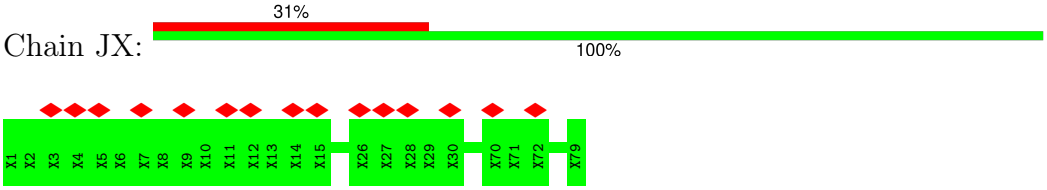
• Molecule 7: Unknown protein fragment

Chain IX:



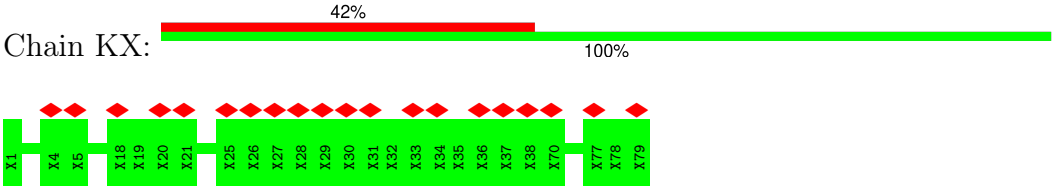
• Molecule 7: Unknown protein fragment

Chain JX:



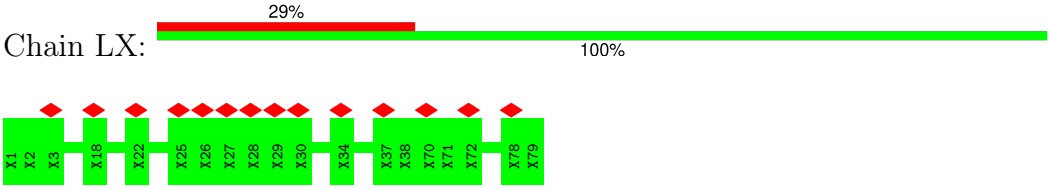
• Molecule 7: Unknown protein fragment

Chain KX:



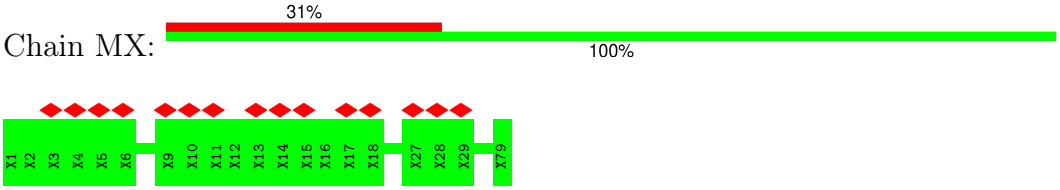
• Molecule 7: Unknown protein fragment

Chain LX:



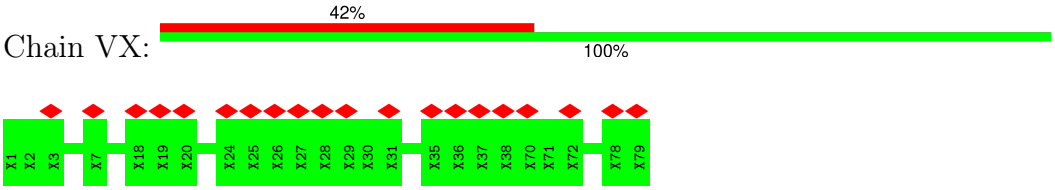
• Molecule 7: Unknown protein fragment

Chain MX:



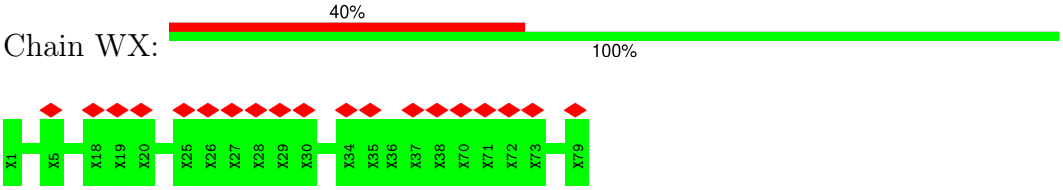
• Molecule 7: Unknown protein fragment

Chain VX:



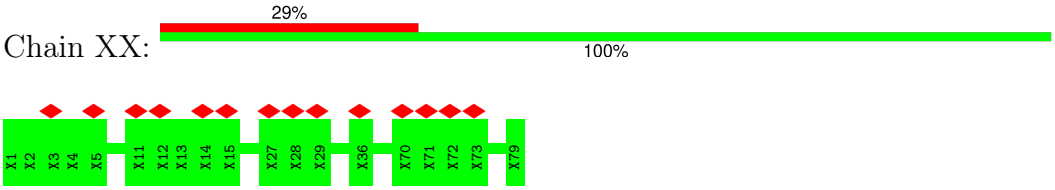
• Molecule 7: Unknown protein fragment

Chain WX:



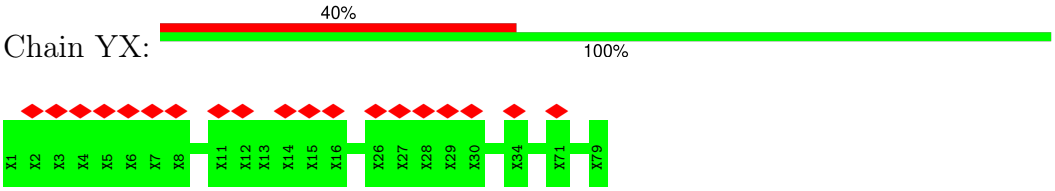
• Molecule 7: Unknown protein fragment

Chain XX:



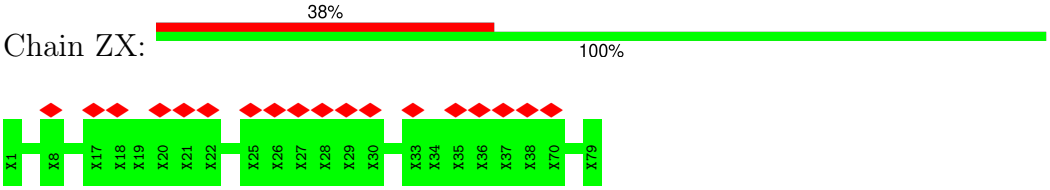
• Molecule 7: Unknown protein fragment

Chain YX:



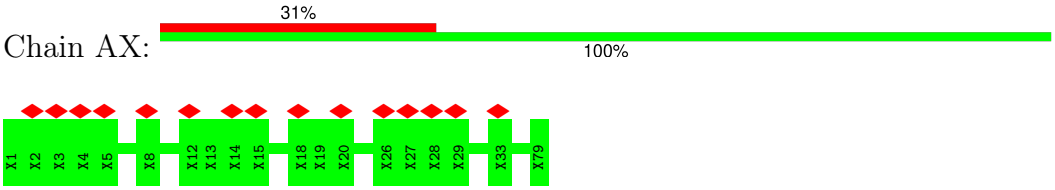
• Molecule 7: Unknown protein fragment

Chain ZX:



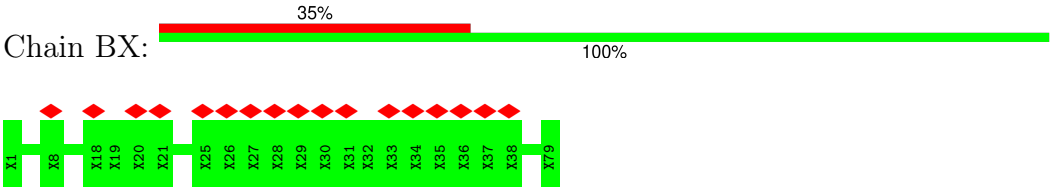
• Molecule 7: Unknown protein fragment

Chain AX:



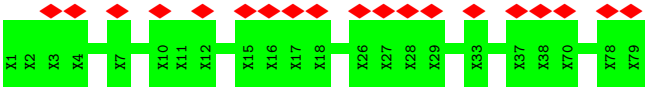
• Molecule 7: Unknown protein fragment

Chain BX:



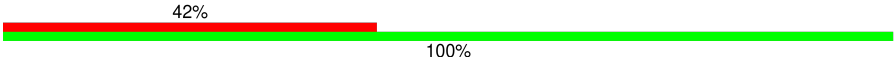
• Molecule 7: Unknown protein fragment

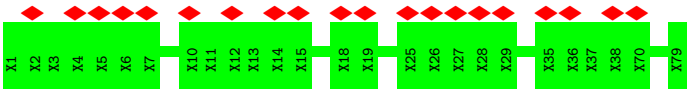
Chain CX:



• Molecule 7: Unknown protein fragment

Chain DX:



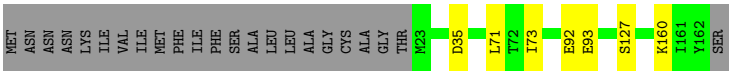


• Molecule 8: DotD

Chain Ed:

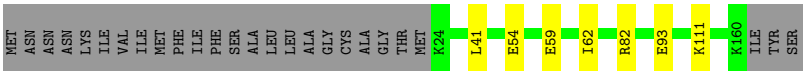
• Molecule 8: DotD

Chain FD:



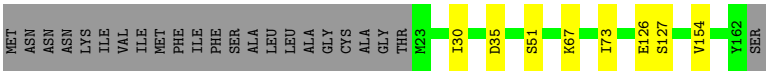
• Molecule 8: DotD

Chain Fd:



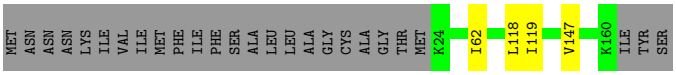
• Molecule 8: DotD

Chain GD:



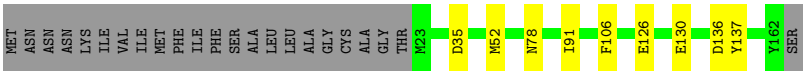
• Molecule 8: DotD

Chain Gd:



• Molecule 8: DotD

Chain HD:

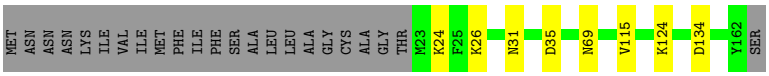


• Molecule 8: DotD

Chain Hd:

• Molecule 8: DotD

Chain ID:



• Molecule 8: DotD

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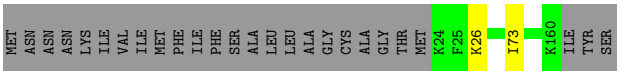
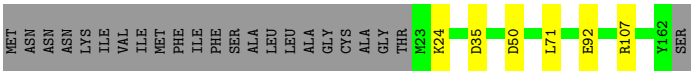


• Molecule 8: DotD

Chain JD:

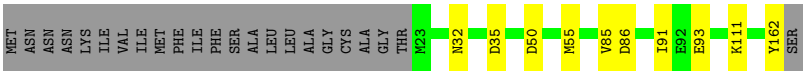


• Molecule 8: DotD

Chain Jd:

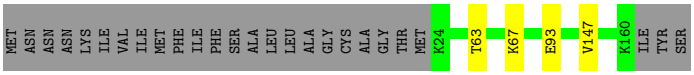
• Molecule 8: DotD

Chain KD:



• Molecule 8: DotD

Chain Kd:

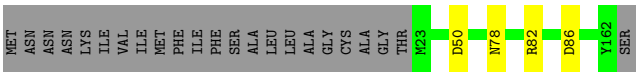


• Molecule 8: DotD

Chain LD:

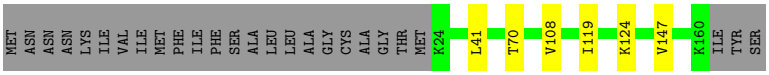
• Molecule 8: DotD

Chain CD:



• Molecule 8: DotD

Chain Ld:

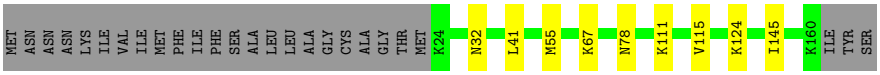


• Molecule 8: DotD

Chain MD:

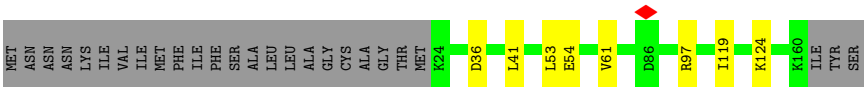
• Molecule 8: DotD

Chain Md:



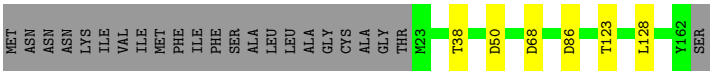
• Molecule 8: DotD

Chain Ad:



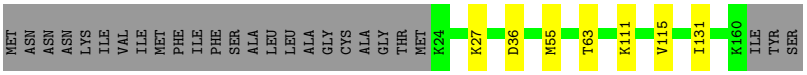
• Molecule 8: DotD

Chain BD:



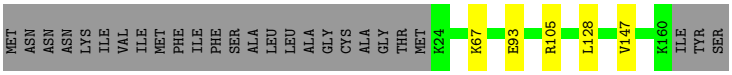
• Molecule 8: DotD

Chain Bd:



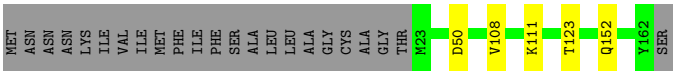
• Molecule 8: DotD

Chain Cd:



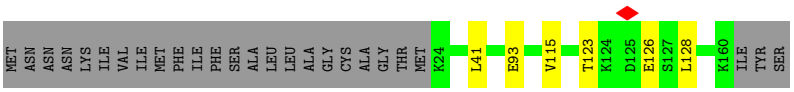
• Molecule 8: DotD

Chain DD:



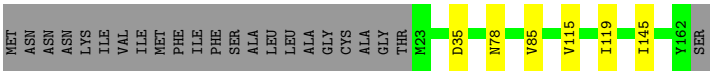
• Molecule 8: DotD

Chain Dd:



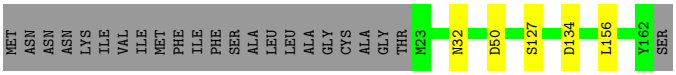
• Molecule 8: DotD

Chain AD:



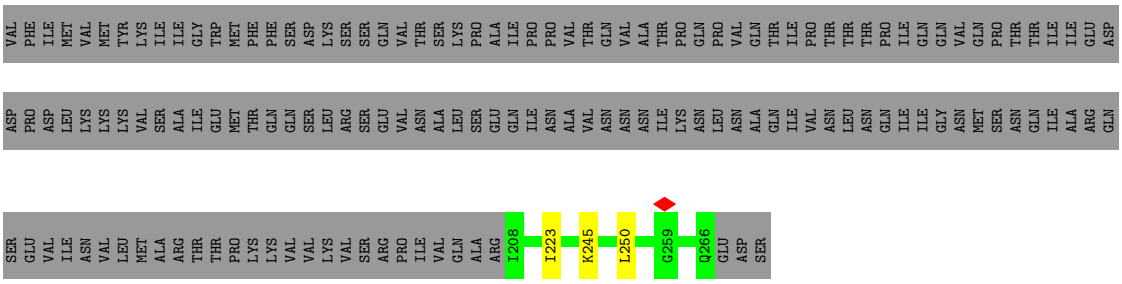
• Molecule 8: DotD

Chain ED:



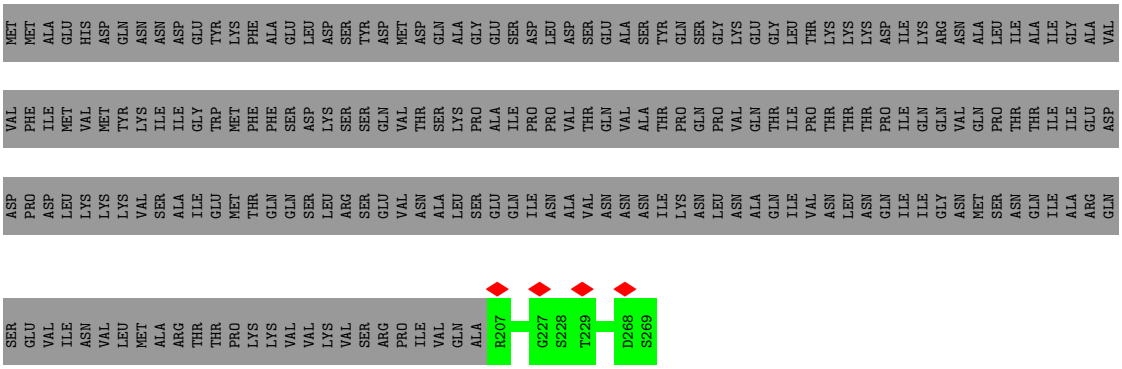
• Molecule 9: DotF

Chain Ef:



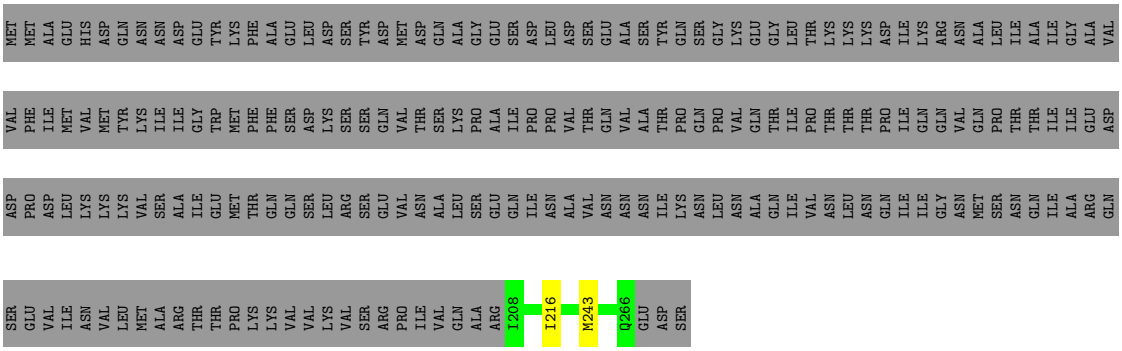
• Molecule 9: DotF

Chain FF:



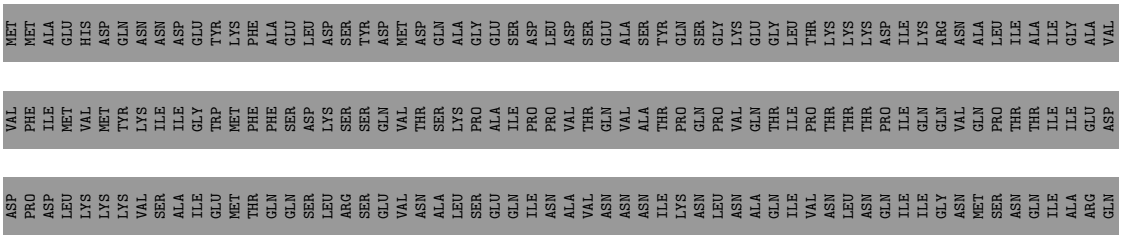
• Molecule 9: DotF

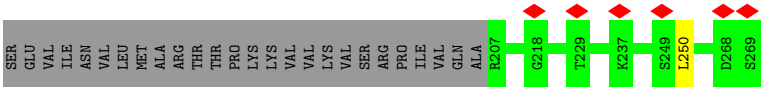
Chain Ff:



• Molecule 9: DotF

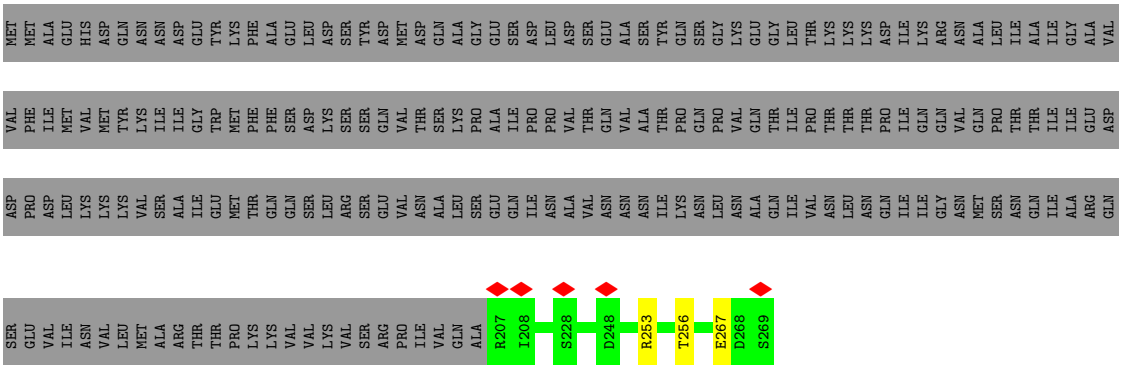
Chain AF:





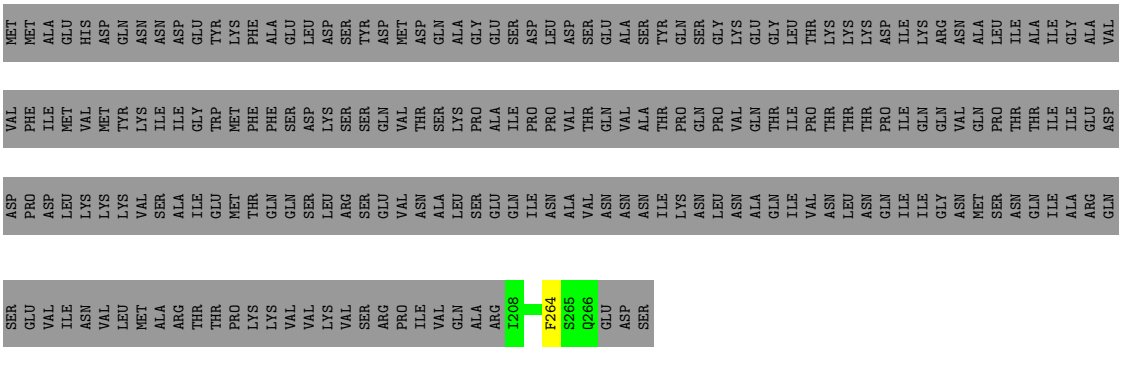
• Molecule 9: DotF

Chain GF:



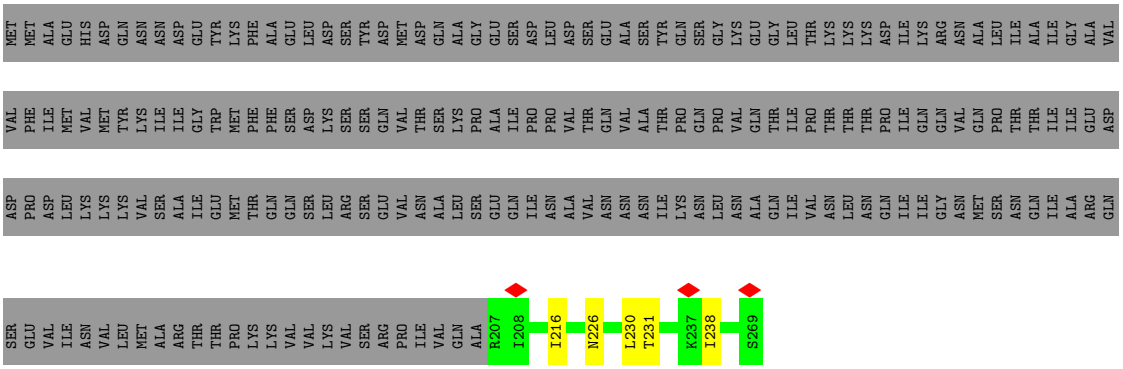
• Molecule 9: DotF

Chain Gf:



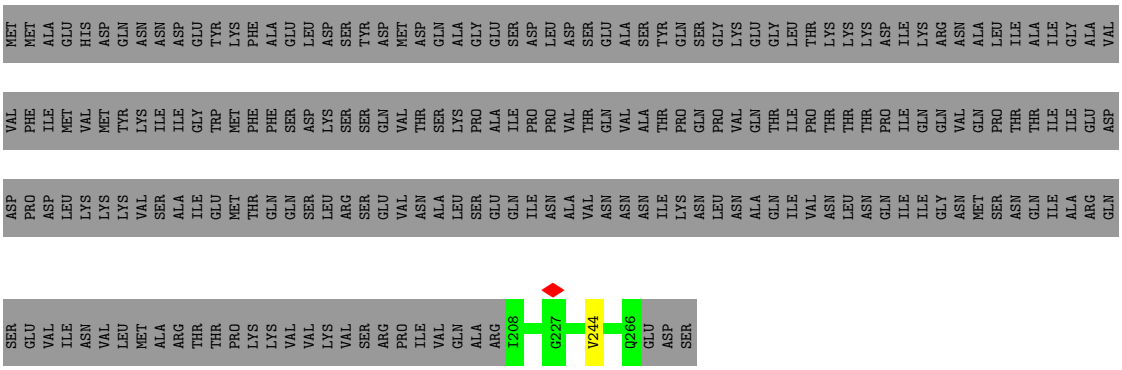
• Molecule 9: DotF

Chain HF:



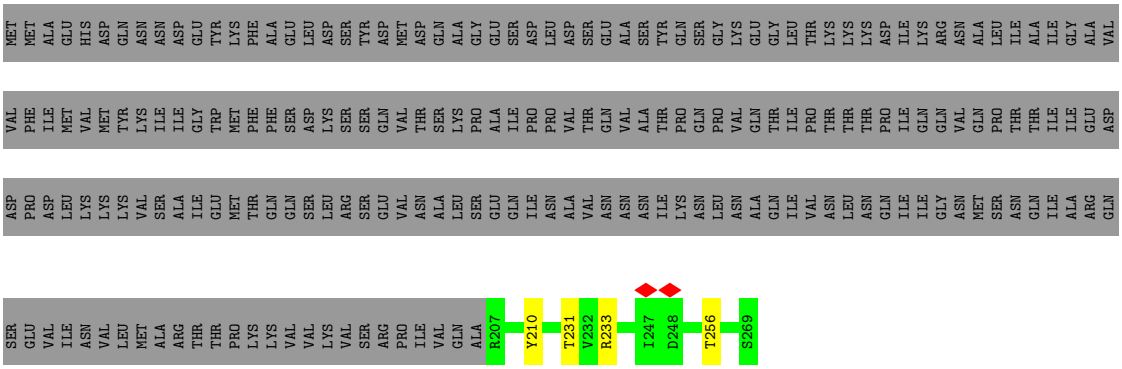
• Molecule 9: DotF

Chain Hf:



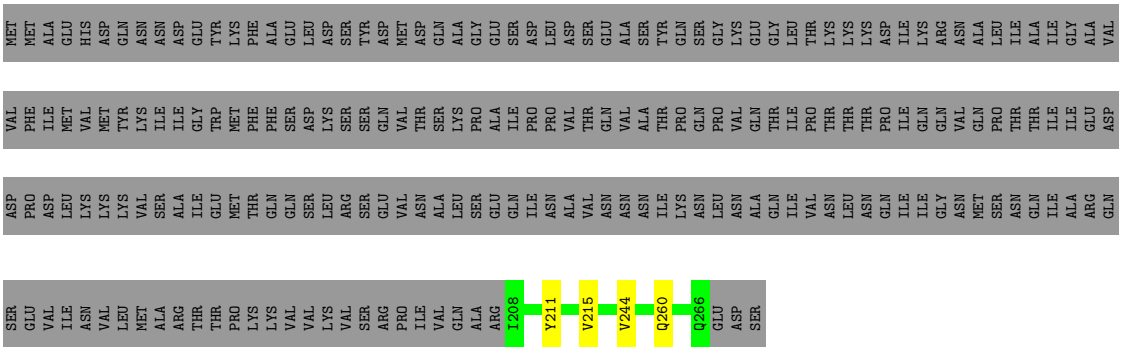
• Molecule 9: DotF

Chain IF:



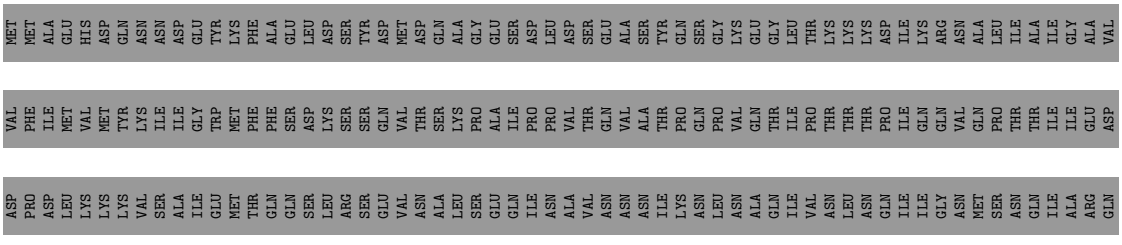
• Molecule 9: DotF

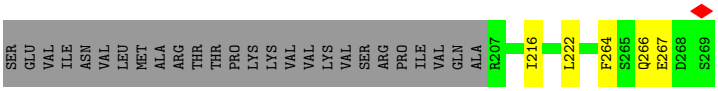
Chain If:



• Molecule 9: DotF

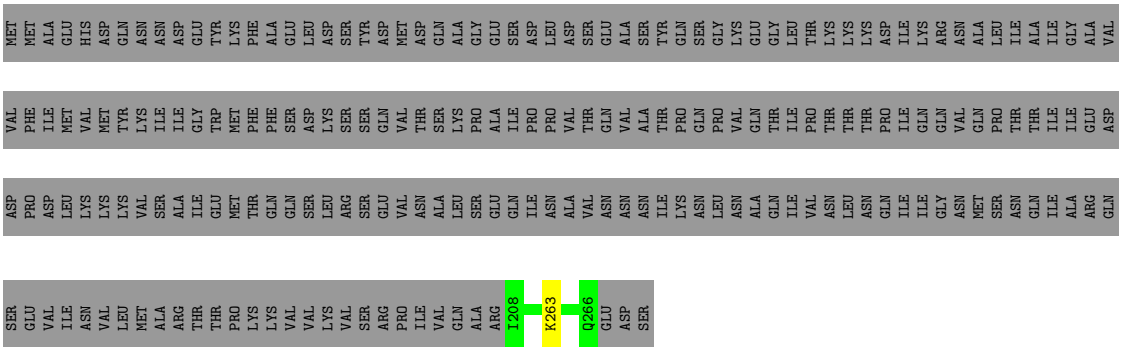
Chain JF:





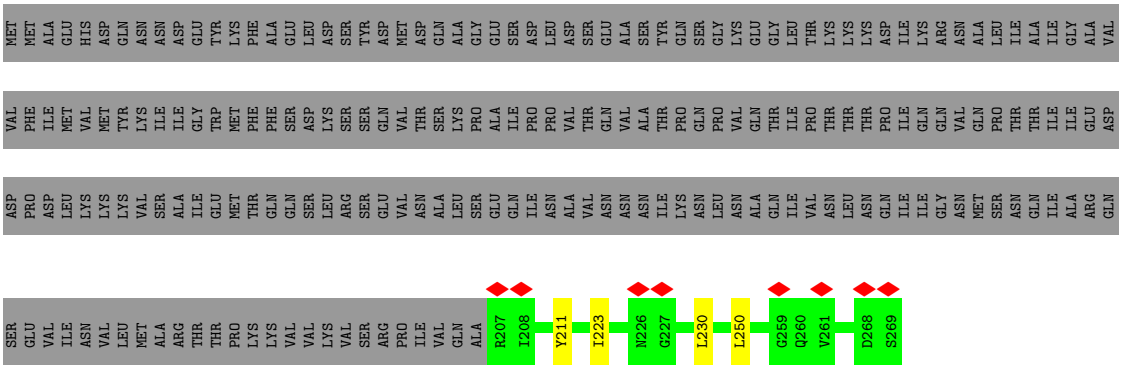
• Molecule 9: DotF

Chain Jf:



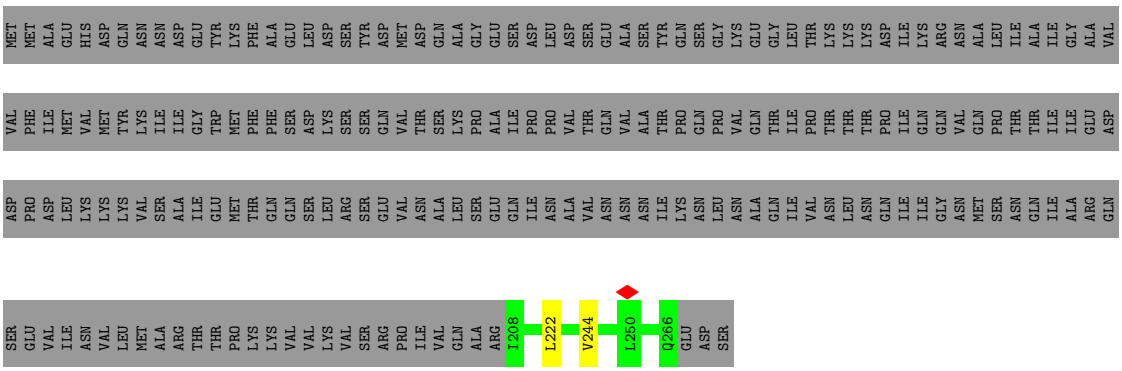
• Molecule 9: DotF

Chain KF:



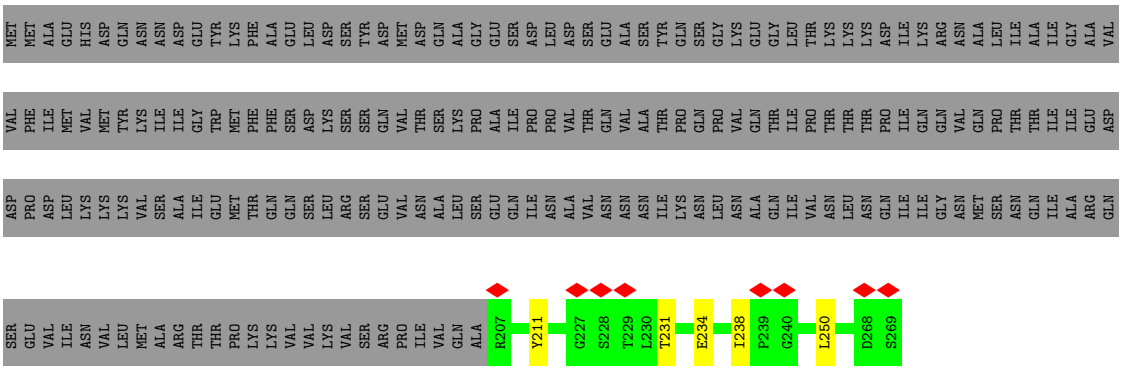
• Molecule 9: DotF

Chain Kf:



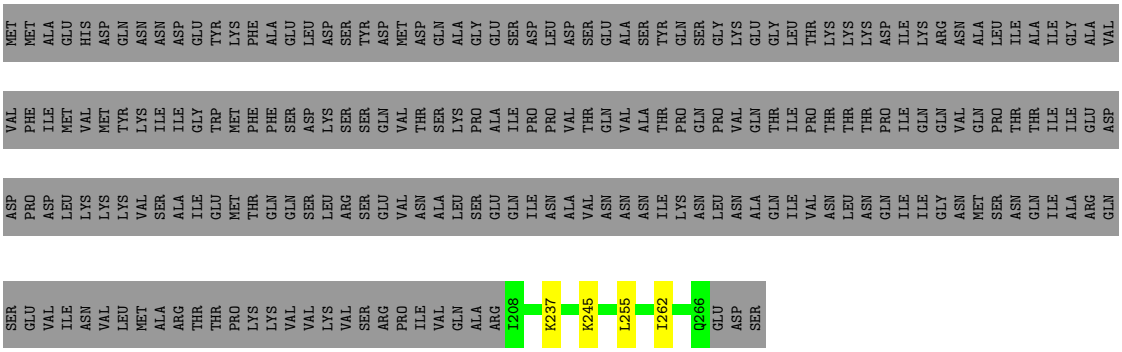
• Molecule 9: DotF

Chain LF:



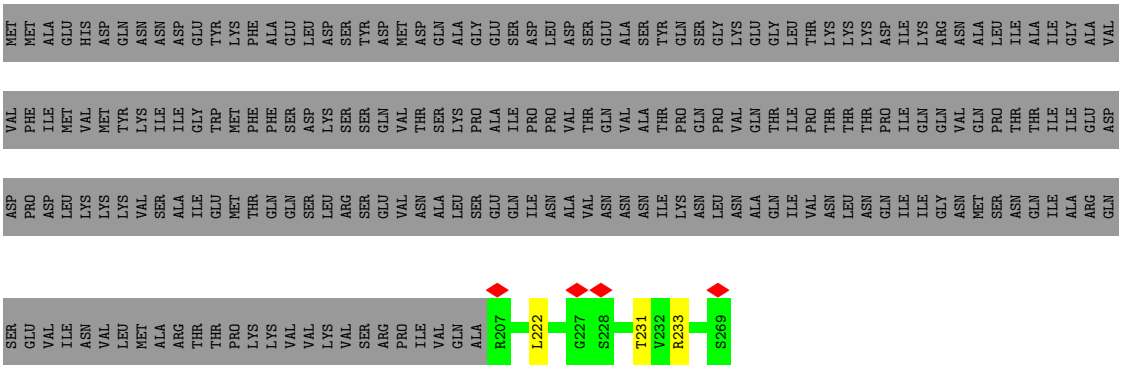
• Molecule 9: DotF

Chain Lf:



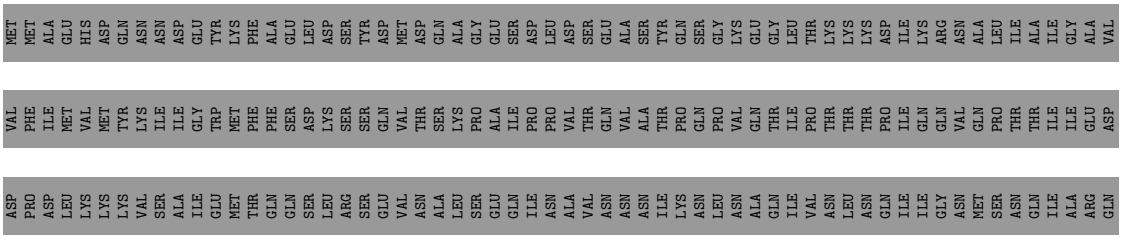
• Molecule 9: DotF

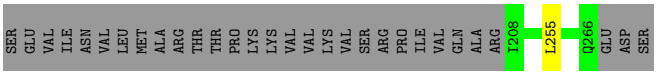
Chain MF:



• Molecule 9: DotF

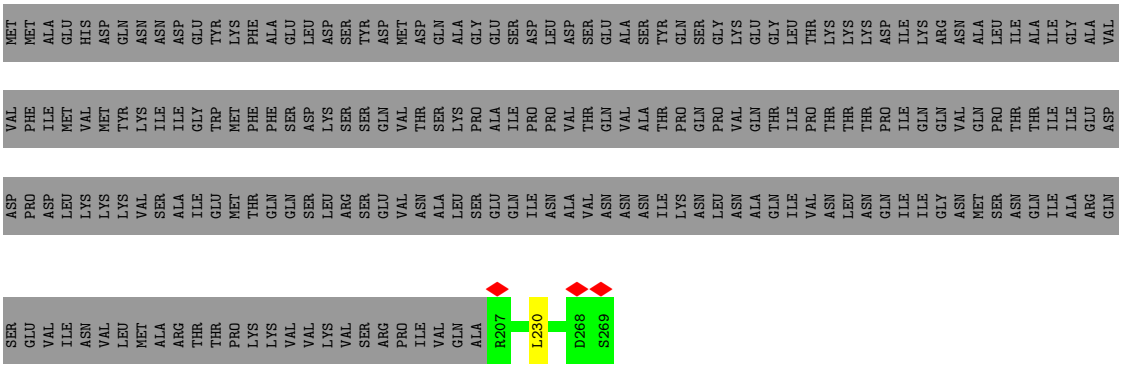
Chain Mf:





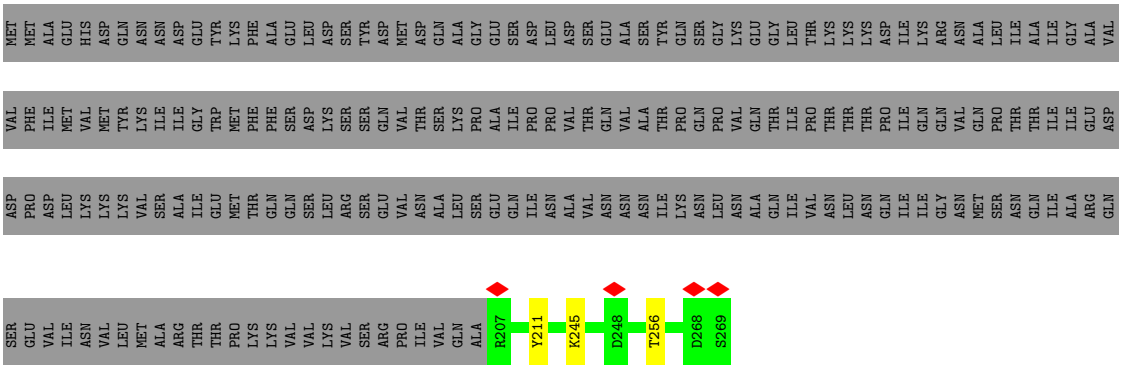
• Molecule 9: DotF

Chain VF:



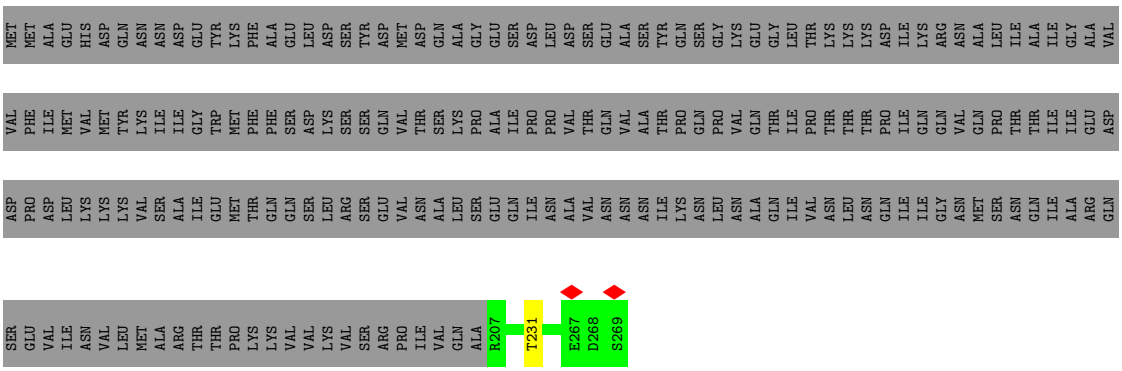
• Molecule 9: DotF

Chain CF:



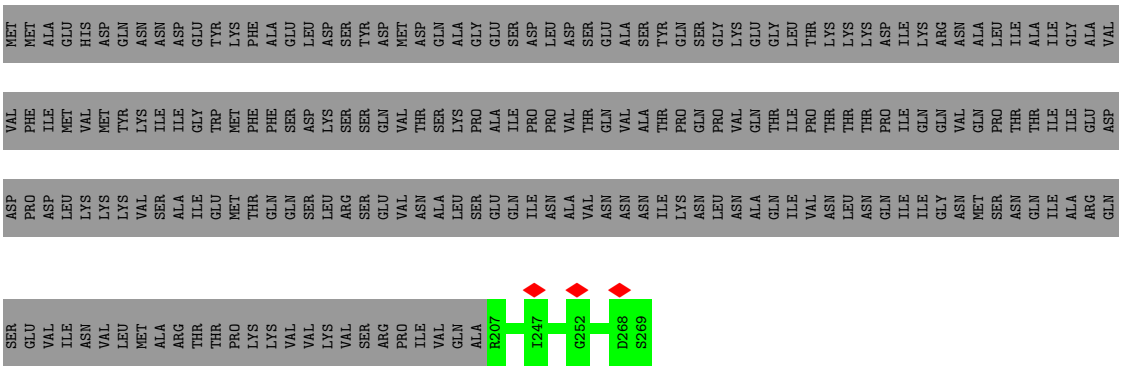
• Molecule 9: DotF

Chain WF:



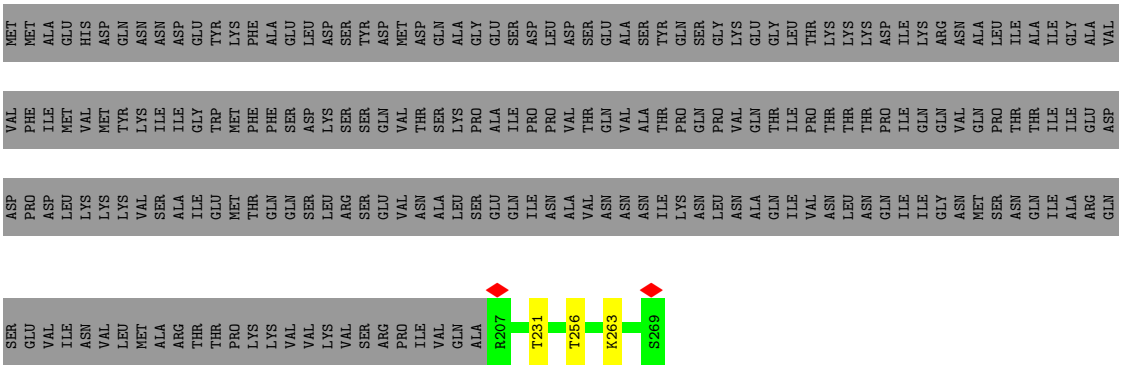
• Molecule 9: DotF

Chain XF:



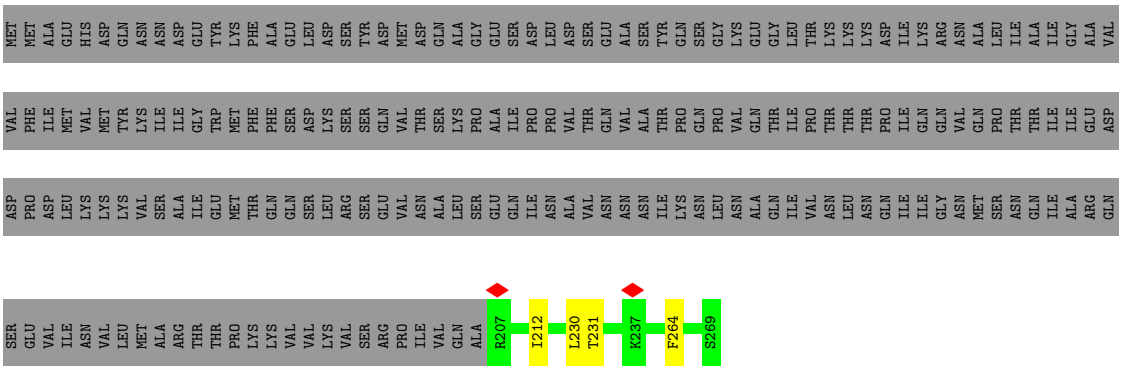
• Molecule 9: DotF

Chain YF:



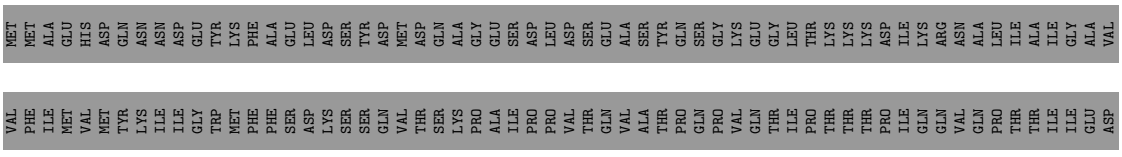
• Molecule 9: DotF

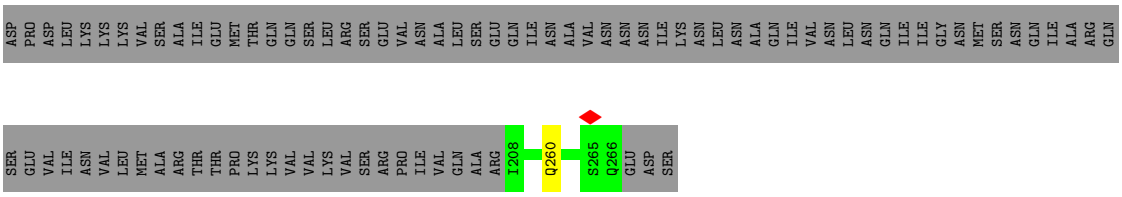
Chain ZF:



• Molecule 9: DotF

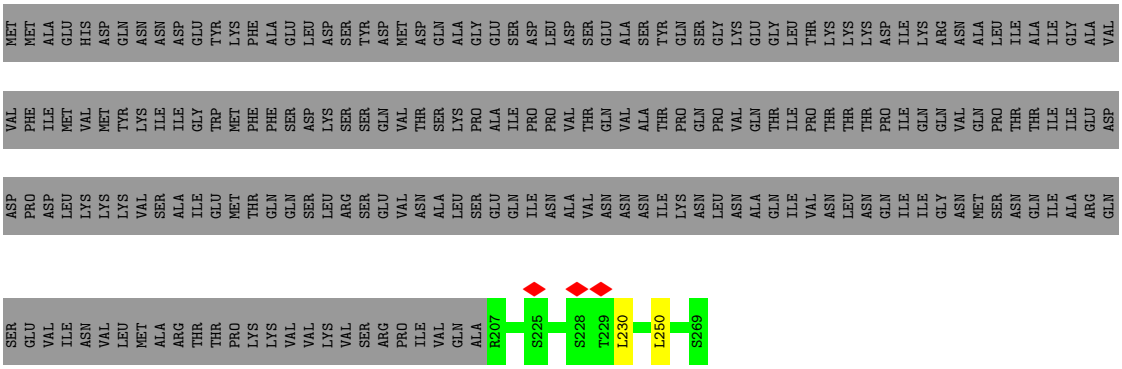
Chain Af:





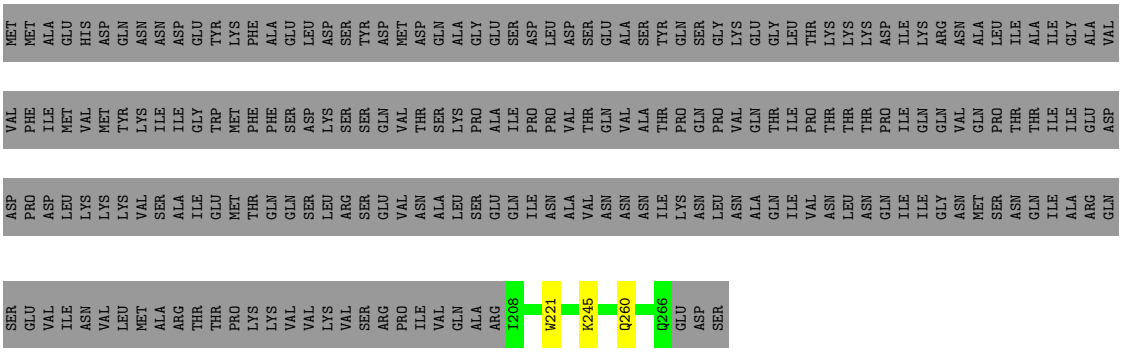
• Molecule 9: DotF

Chain BF:



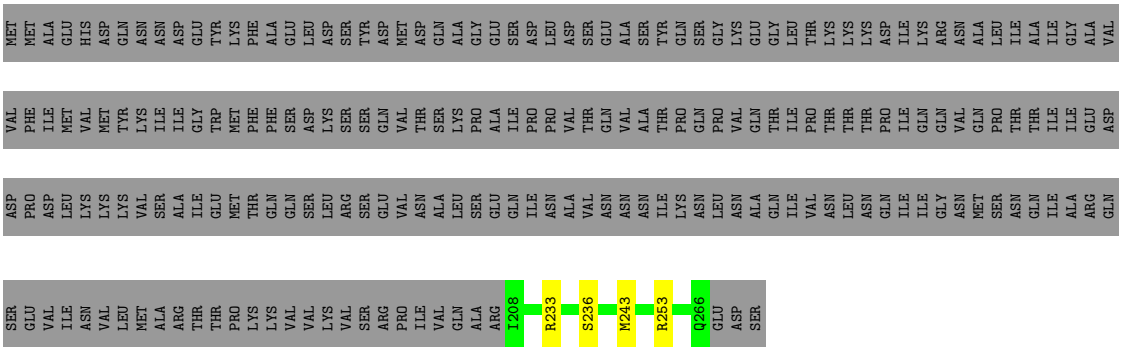
• Molecule 9: DotF

Chain Bf:



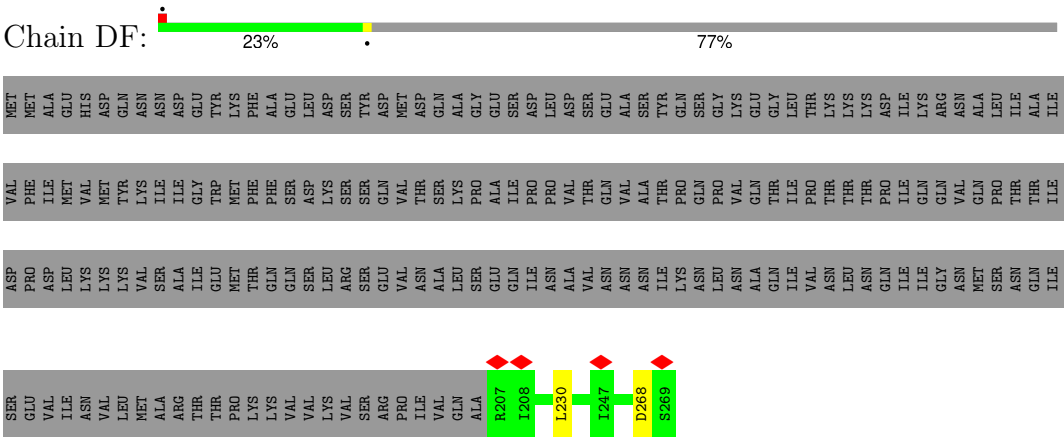
• Molecule 9: DotF

Chain Cf:



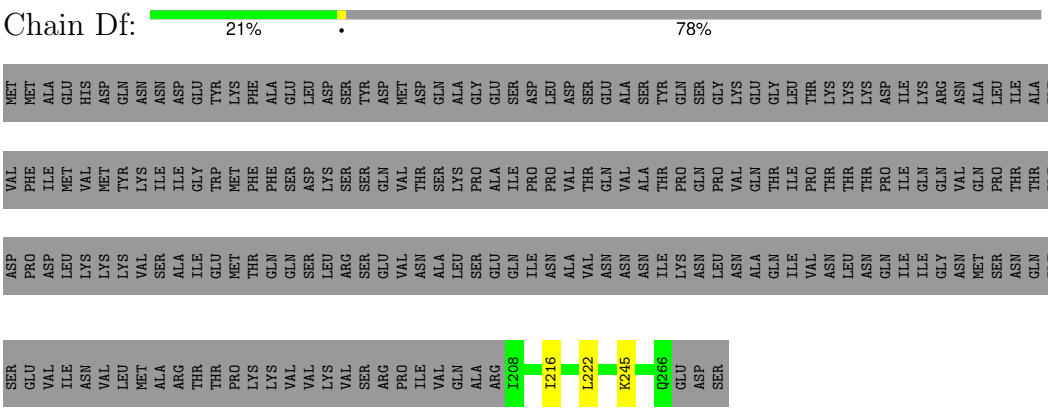
• Molecule 9: DotF

Chain DF:



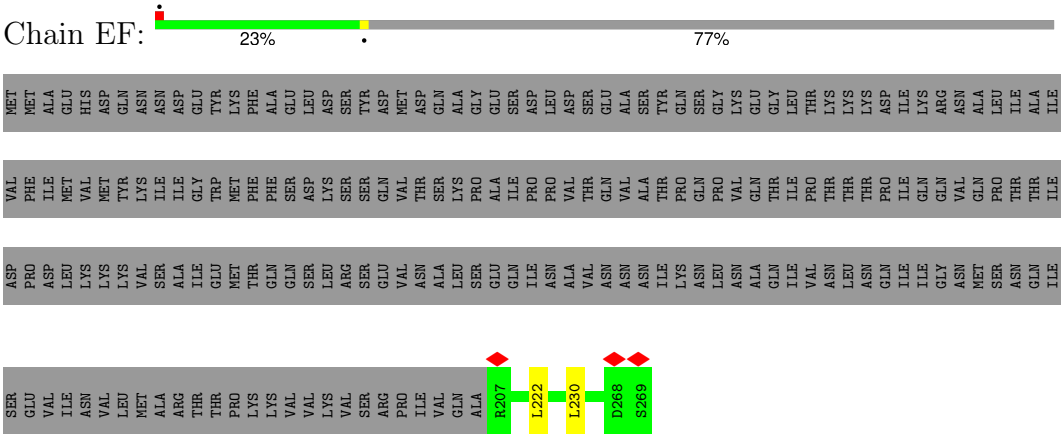
• Molecule 9: DotF

Chain Df:



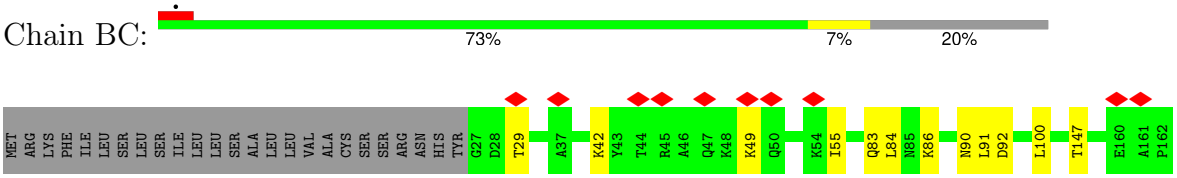
• Molecule 9: DotF

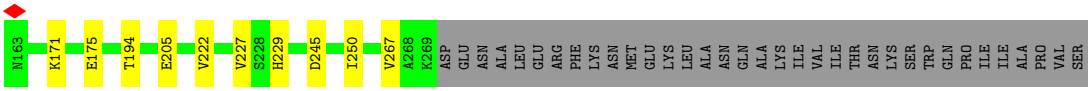
Chain EF:



• Molecule 10: DotC

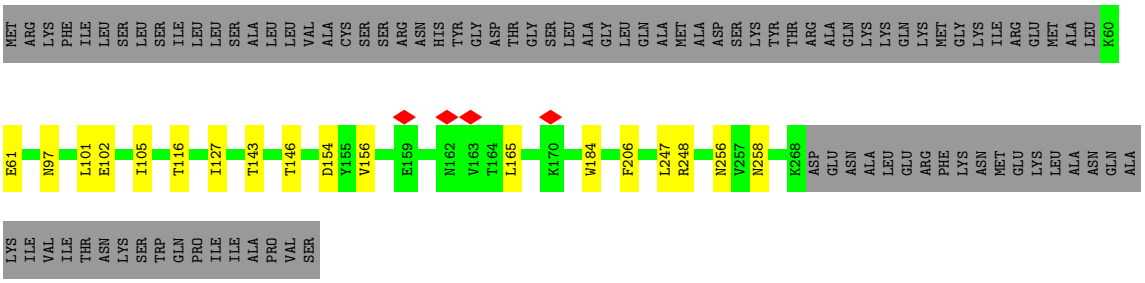
Chain BC:





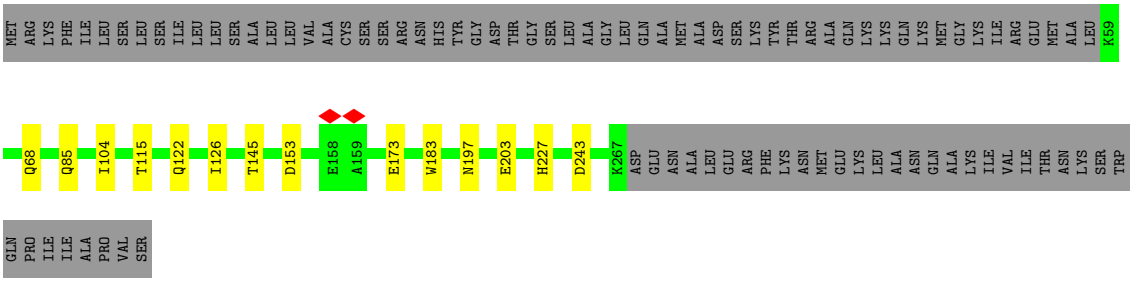
• Molecule 10: DotC

Chain CC:



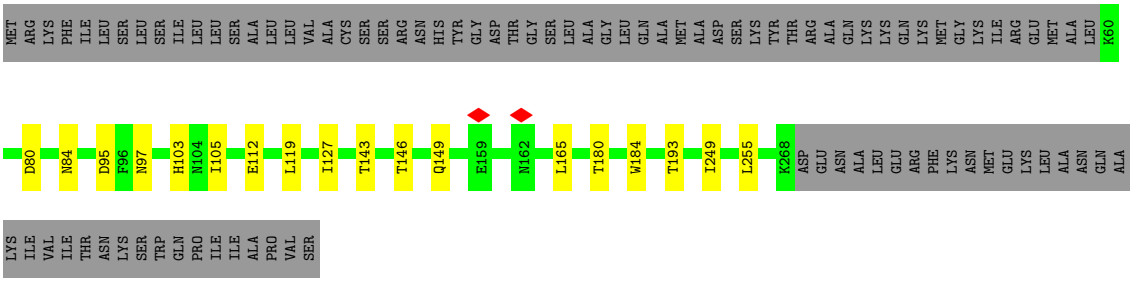
• Molecule 10: DotC

Chain DC:



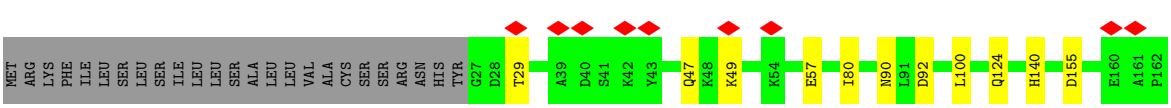
• Molecule 10: DotC

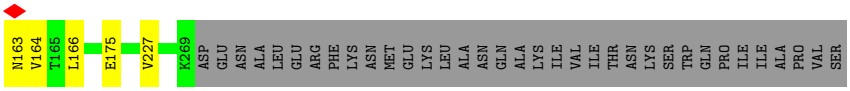
Chain EC:



• Molecule 10: DotC

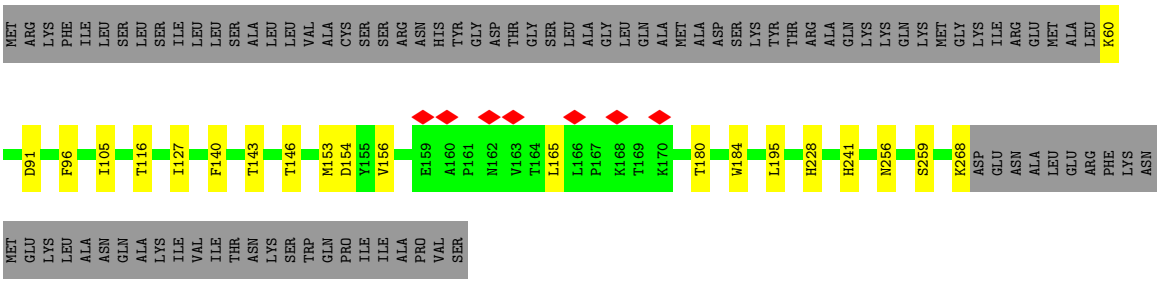
Chain FC:





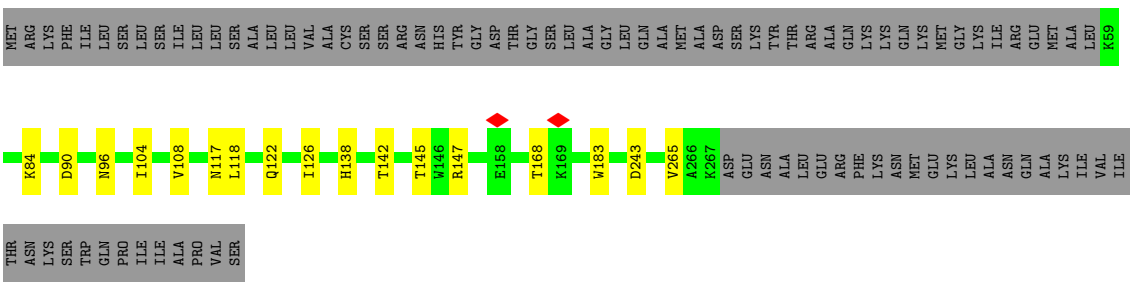
• Molecule 10: DotC

Chain GC:



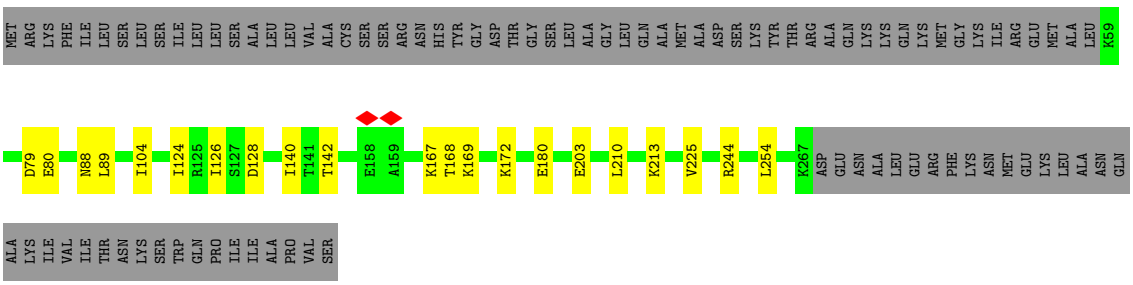
• Molecule 10: DotC

Chain HC:



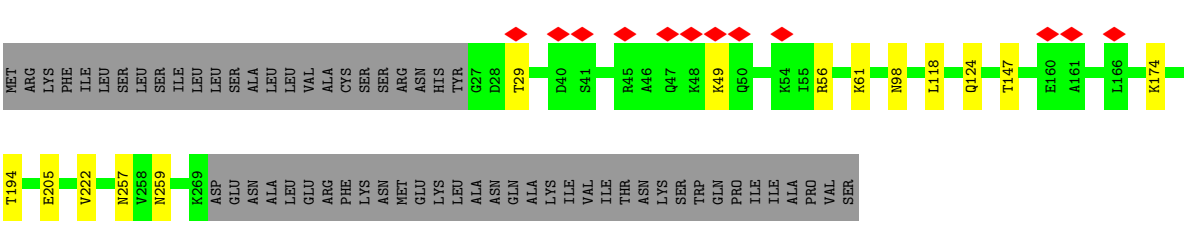
• Molecule 10: DotC

Chain IC:



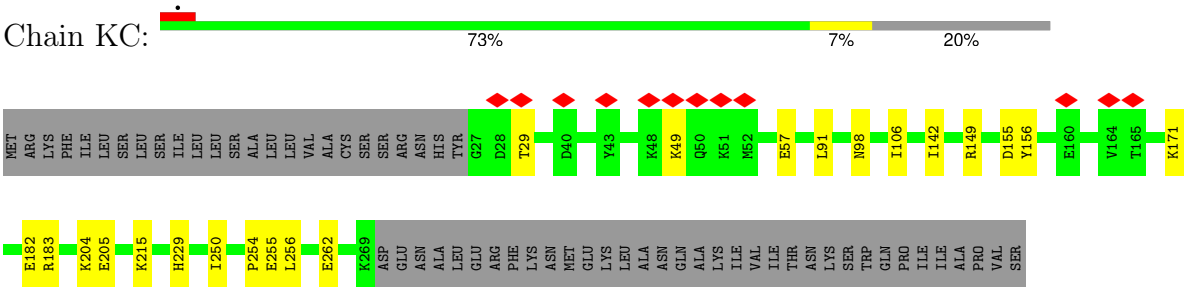
• Molecule 10: DotC

Chain JC:



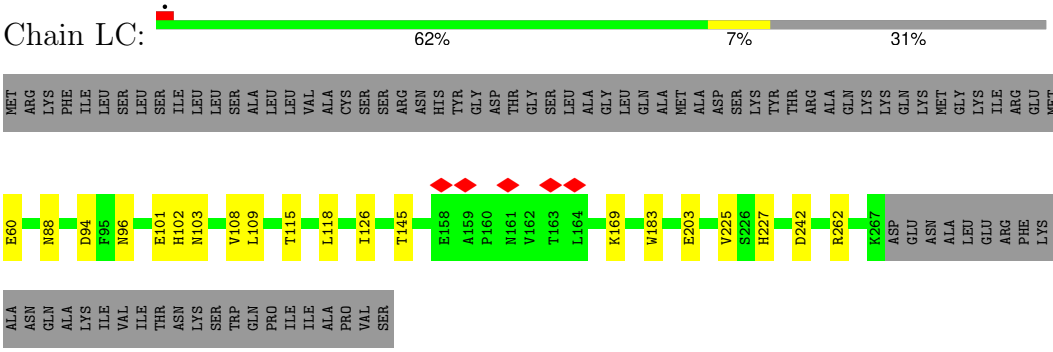
• Molecule 10: DotC

Chain KC:



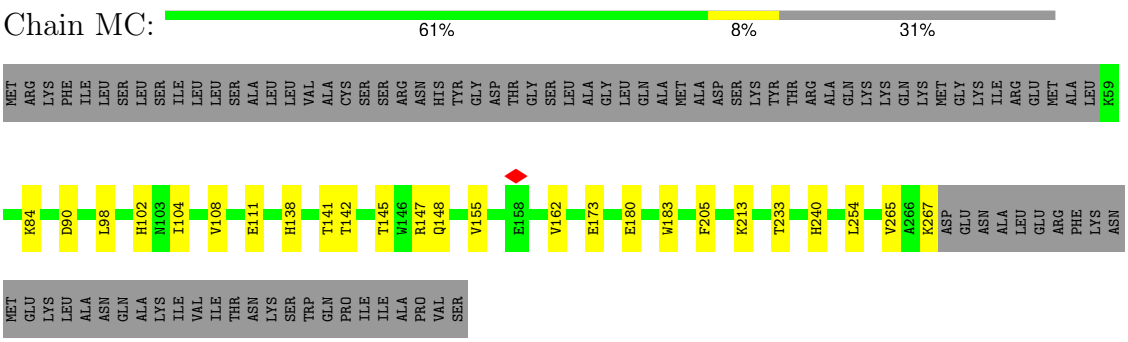
• Molecule 10: DotC

Chain LC:



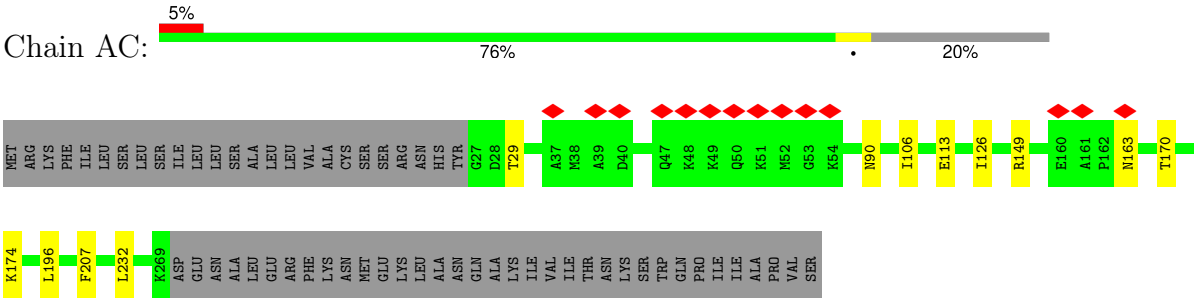
• Molecule 10: DotC

Chain MC:



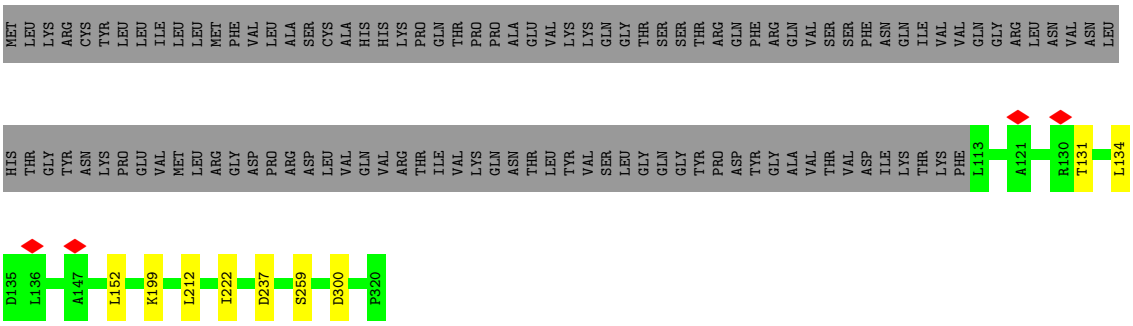
• Molecule 10: DotC

Chain AC:



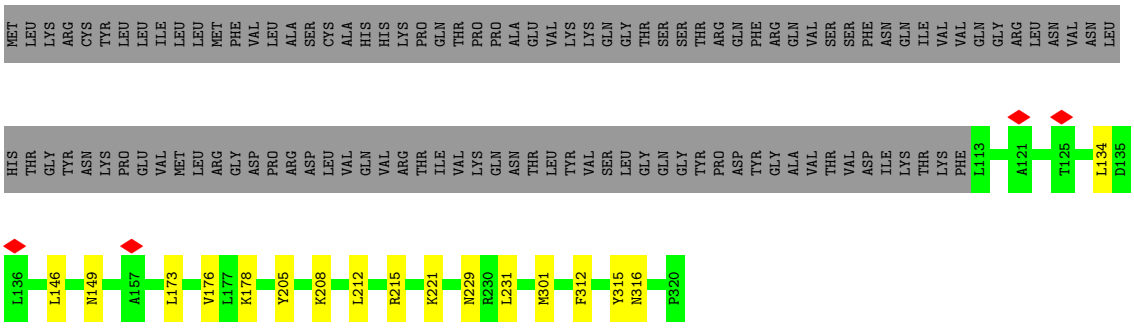
• Molecule 11: DUF2807 domain-containing protein

Chain HM:



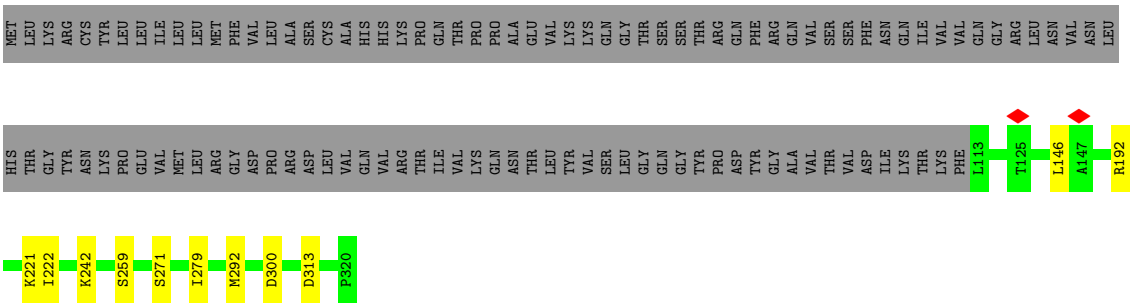
• Molecule 11: DUF2807 domain-containing protein

Chain IM:



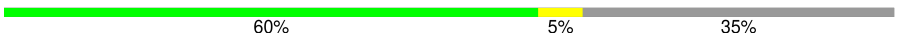
• Molecule 11: DUF2807 domain-containing protein

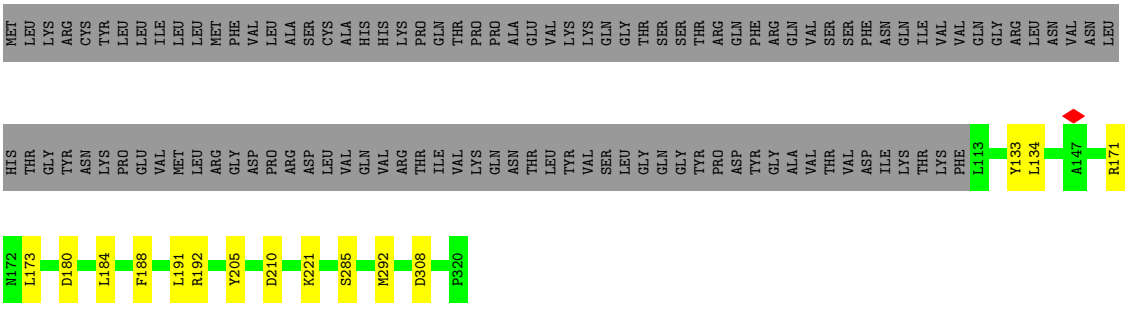
Chain KM:



• Molecule 11: DUF2807 domain-containing protein

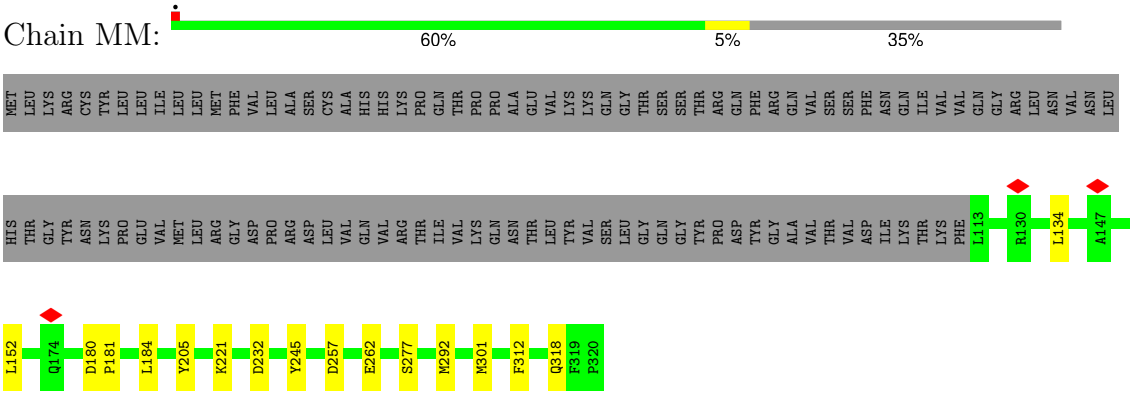
Chain LM:





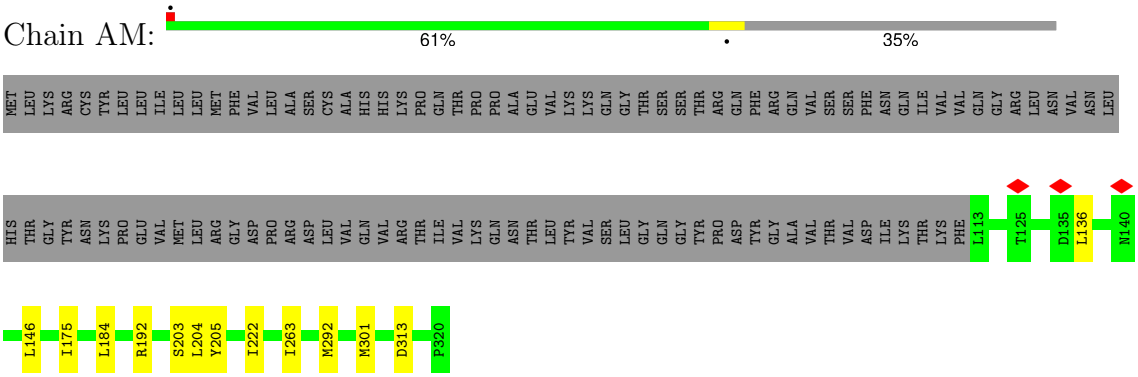
• Molecule 11: DUF2807 domain-containing protein

Chain MM:



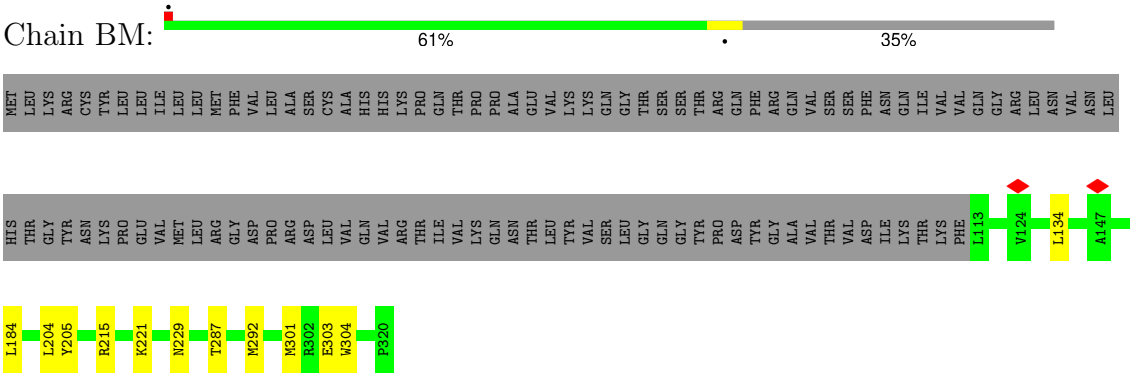
• Molecule 11: DUF2807 domain-containing protein

Chain AM:



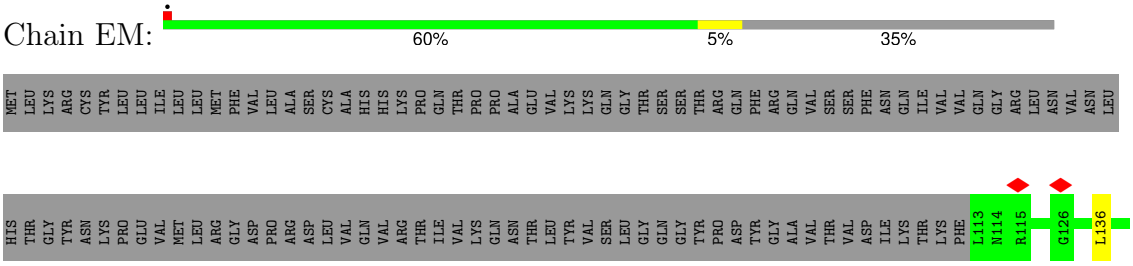
• Molecule 11: DUF2807 domain-containing protein

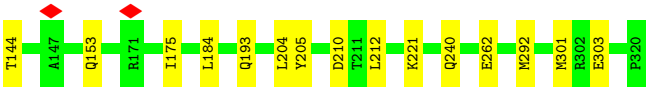
Chain BM:



• Molecule 11: DUF2807 domain-containing protein

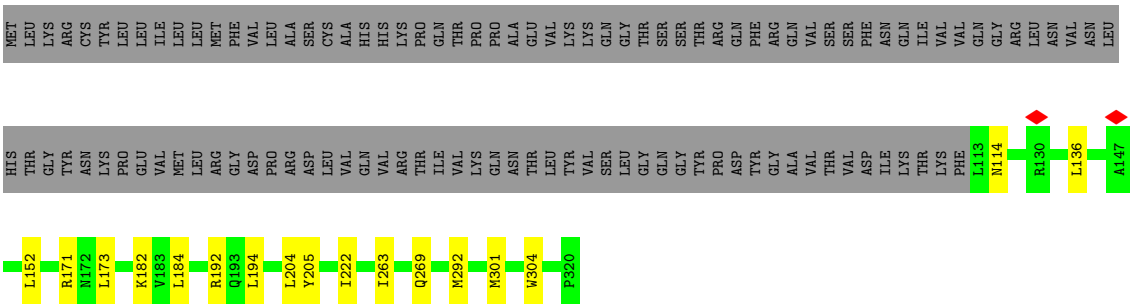
Chain EM:





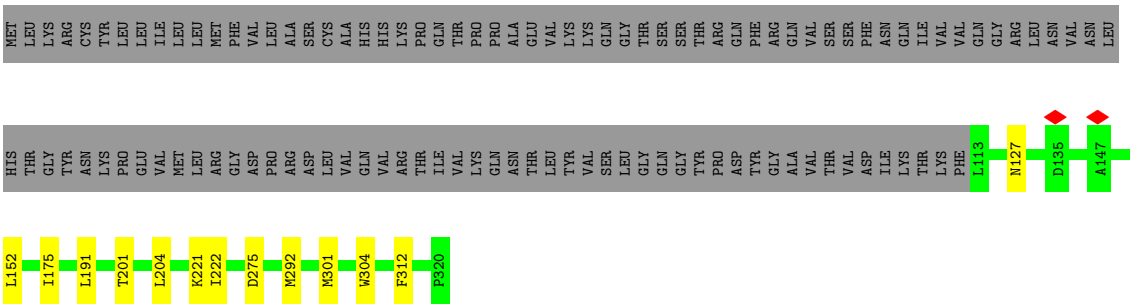
• Molecule 11: DUF2807 domain-containing protein

Chain FM:



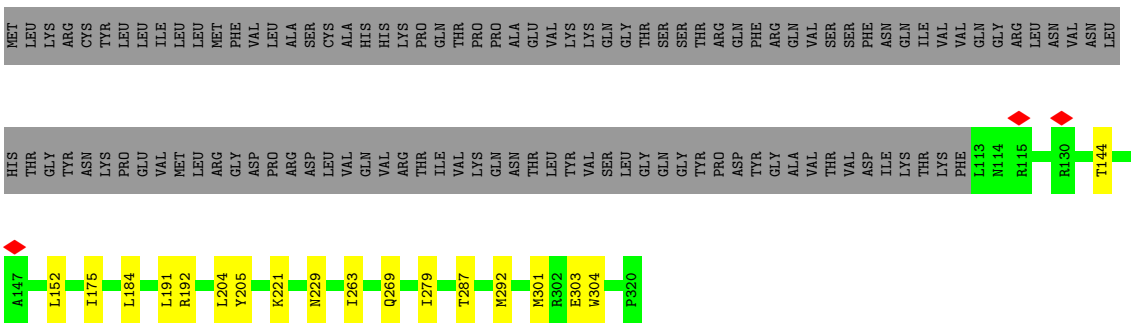
• Molecule 11: DUF2807 domain-containing protein

Chain GM:



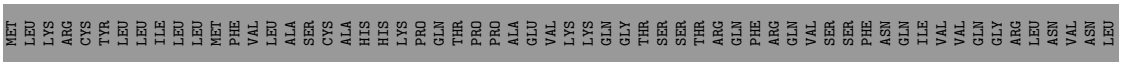
• Molecule 11: DUF2807 domain-containing protein

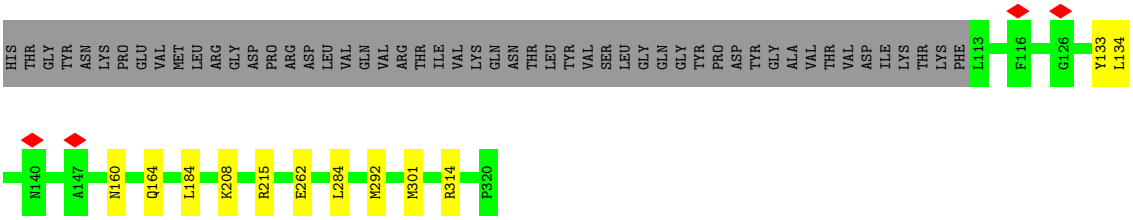
Chain JM:



• Molecule 11: DUF2807 domain-containing protein

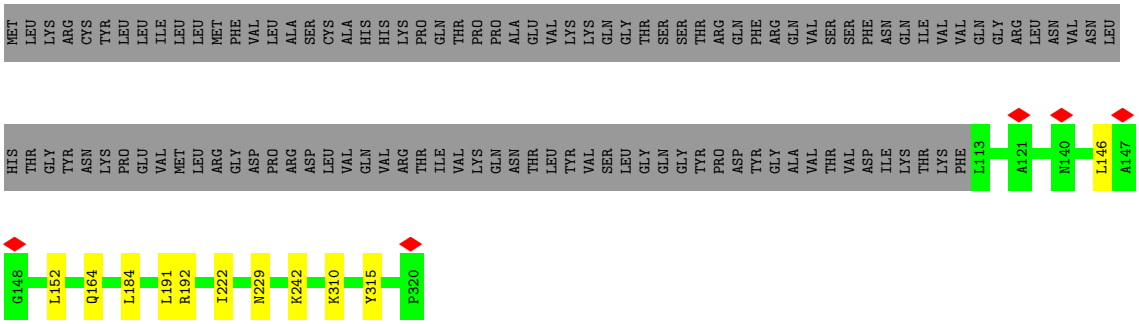
Chain CM:





• Molecule 11: DUF2807 domain-containing protein

Chain DM:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	64698	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	9.229	Depositor
Minimum map value	-3.621	Depositor
Average map value	0.091	Depositor
Map value standard deviation	0.546	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	0.27	0/1250	0.49	0/1699
1	Ag	0.24	0/278	0.46	0/377
1	BG	0.27	0/1250	0.49	0/1699
1	Bg	0.25	0/278	0.43	0/377
1	CG	0.27	0/1250	0.50	0/1699
1	Cg	0.24	0/278	0.44	0/377
1	DG	0.27	0/1250	0.50	0/1699
1	Dg	0.24	0/278	0.46	0/377
1	EG	0.27	0/1250	0.50	0/1699
1	Eg	0.25	0/278	0.44	0/377
1	FG	0.27	0/1250	0.49	0/1699
1	Fg	0.24	0/278	0.44	0/377
1	GG	0.26	0/1250	0.50	0/1699
1	Gg	0.23	0/278	0.43	0/377
1	HG	0.27	0/1250	0.50	0/1699
1	Hg	0.23	0/278	0.43	0/377
1	IG	0.27	0/1250	0.50	0/1699
1	Ig	0.23	0/278	0.43	0/377
1	JG	0.26	0/1250	0.49	0/1699
1	Jg	0.24	0/278	0.43	0/377
1	KG	0.26	0/1250	0.48	0/1699
1	Kg	0.24	0/278	0.45	0/377
1	LG	0.27	0/1250	0.50	0/1699
1	Lg	0.24	0/278	0.45	0/377
1	MG	0.27	0/1250	0.49	0/1699
1	Mg	0.23	0/278	0.44	0/377
1	NG	0.27	0/1250	0.49	0/1699
1	OG	0.27	0/1250	0.49	0/1699
1	PG	0.27	0/1250	0.49	0/1699
1	VG	0.25	0/278	0.49	0/377
1	WG	0.25	0/278	0.46	0/377
1	XG	0.25	0/278	0.47	0/377
1	YG	0.25	0/278	0.47	0/377
1	ZG	0.24	0/278	0.46	0/377

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
2	AH	0.27	0/2033	0.49	0/2775
2	BH	0.27	0/2033	0.48	0/2775
2	CH	0.27	0/2033	0.48	0/2775
2	DH	0.27	0/2033	0.48	0/2775
2	EH	0.27	0/2033	0.49	0/2775
2	FH	0.27	0/2033	0.48	0/2775
2	GH	0.27	0/2033	0.47	0/2775
2	HH	0.27	0/2033	0.47	0/2775
2	IH	0.27	0/2033	0.48	0/2775
2	JH	0.27	0/2033	0.47	0/2775
2	KH	0.26	0/2033	0.47	0/2775
2	LH	0.27	0/2033	0.49	0/2775
2	MH	0.27	0/2033	0.48	0/2775
2	VH	0.25	0/1921	0.48	0/2620
2	WH	0.25	0/1921	0.48	0/2620
2	XH	0.26	0/1921	0.47	0/2620
2	YH	0.26	0/1921	0.49	0/2620
2	ZH	0.26	0/1921	0.48	0/2620
3	AK	0.28	0/1195	0.50	0/1616
3	BK	0.28	0/1195	0.50	0/1616
3	CK	0.28	0/1195	0.51	0/1616
3	DK	0.27	0/1195	0.50	0/1616
3	EK	0.28	0/1195	0.49	0/1616
3	FK	0.28	0/1195	0.49	0/1616
3	GK	0.27	0/1195	0.50	0/1616
3	HK	0.27	0/1195	0.50	0/1616
3	IK	0.27	0/1195	0.51	0/1616
3	JK	0.28	0/1195	0.50	0/1616
3	KK	0.28	0/1195	0.49	0/1616
3	LK	0.28	0/1195	0.49	0/1616
3	MK	0.28	0/1195	0.50	0/1616
4	AL	0.27	0/1417	0.49	0/1912
4	BL	0.28	0/1417	0.50	0/1912
4	CL	0.27	0/1417	0.50	0/1912
4	DL	0.27	0/1417	0.50	0/1912
4	EL	0.27	0/1417	0.51	0/1912
4	FL	0.27	0/1417	0.50	0/1912
4	GL	0.28	0/1417	0.51	0/1912
4	HL	0.27	0/1417	0.50	0/1912
4	IL	0.27	0/1417	0.50	0/1912
4	JL	0.27	0/1417	0.50	0/1912
4	KL	0.27	0/1417	0.50	0/1912
4	LL	0.27	0/1417	0.49	0/1912

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
4	ML	0.27	0/1417	0.49	0/1912
5	AN	0.29	0/593	0.47	0/799
5	BN	0.29	0/593	0.46	0/799
5	CN	0.28	0/593	0.47	0/799
5	DN	0.29	0/593	0.48	0/799
5	EN	0.29	0/593	0.48	0/799
5	FN	0.29	0/593	0.47	0/799
5	GN	0.29	0/593	0.48	0/799
5	HN	0.28	0/593	0.46	0/799
5	IN	0.29	0/593	0.48	0/799
5	JN	0.28	0/593	0.47	0/799
5	KN	0.28	0/593	0.48	0/799
5	LN	0.29	0/593	0.48	0/799
5	MN	0.29	0/593	0.47	0/799
8	AD	0.28	0/1107	0.46	0/1502
8	Ad	0.27	0/1078	0.47	0/1463
8	BD	0.28	0/1107	0.46	0/1502
8	Bd	0.28	0/1078	0.46	0/1463
8	CD	0.27	0/1107	0.47	0/1502
8	Cd	0.26	0/1078	0.47	0/1463
8	DD	0.27	0/1107	0.47	0/1502
8	Dd	0.27	0/1078	0.47	0/1463
8	ED	0.27	0/1107	0.48	0/1502
8	Ed	0.26	0/1078	0.46	0/1463
8	FD	0.28	0/1107	0.47	0/1502
8	Fd	0.27	0/1078	0.47	0/1463
8	GD	0.27	0/1107	0.47	0/1502
8	Gd	0.27	0/1078	0.46	0/1463
8	HD	0.28	0/1107	0.48	0/1502
8	Hd	0.26	0/1078	0.46	0/1463
8	ID	0.28	0/1107	0.49	0/1502
8	Id	0.27	0/1078	0.45	0/1463
8	JD	0.27	0/1107	0.47	0/1502
8	Jd	0.27	0/1078	0.47	0/1463
8	KD	0.27	0/1107	0.48	0/1502
8	Kd	0.27	0/1078	0.46	0/1463
8	LD	0.27	0/1107	0.47	0/1502
8	Ld	0.27	0/1078	0.46	0/1463
8	MD	0.27	0/1107	0.46	0/1502
8	Md	0.26	0/1078	0.47	0/1463
9	AF	0.25	0/490	0.50	0/660
9	Af	0.25	0/456	0.51	0/615
9	BF	0.25	0/490	0.50	0/660

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
9	Bf	0.26	0/456	0.52	0/615
9	CF	0.25	0/490	0.53	0/660
9	Cf	0.27	0/456	0.48	0/615
9	DF	0.25	0/490	0.50	0/660
9	Df	0.26	0/456	0.49	0/615
9	EF	0.25	0/490	0.49	0/660
9	Ef	0.26	0/456	0.50	0/615
9	FF	0.25	0/490	0.50	0/660
9	Ff	0.26	0/456	0.51	0/615
9	GF	0.25	0/490	0.51	0/660
9	Gf	0.26	0/456	0.50	0/615
9	HF	0.25	0/490	0.51	0/660
9	Hf	0.27	0/456	0.51	0/615
9	IF	0.25	0/490	0.52	0/660
9	If	0.26	0/456	0.50	0/615
9	JF	0.25	0/490	0.52	0/660
9	Jf	0.26	0/456	0.49	0/615
9	KF	0.25	0/490	0.51	0/660
9	Kf	0.26	0/456	0.50	0/615
9	LF	0.25	0/490	0.51	0/660
9	Lf	0.26	0/456	0.49	0/615
9	MF	0.26	0/490	0.51	0/660
9	Mf	0.26	0/456	0.51	0/615
9	VF	0.25	0/490	0.50	0/660
9	WF	0.25	0/490	0.49	0/660
9	XF	0.25	0/490	0.50	0/660
9	YF	0.25	0/490	0.50	0/660
9	ZF	0.25	0/490	0.50	0/660
10	AC	0.27	0/1957	0.49	0/2651
10	BC	0.27	0/1957	0.48	0/2651
10	CC	0.27	0/1702	0.49	0/2315
10	DC	0.28	0/1702	0.47	0/2315
10	EC	0.27	0/1702	0.48	0/2315
10	FC	0.27	0/1957	0.48	0/2651
10	GC	0.28	0/1702	0.48	0/2315
10	HC	0.27	0/1702	0.48	0/2315
10	IC	0.28	0/1702	0.47	0/2315
10	JC	0.28	0/1957	0.49	0/2651
10	KC	0.27	0/1957	0.48	0/2651
10	LC	0.27	0/1702	0.49	0/2315
10	MC	0.28	0/1702	0.48	0/2315
11	AM	0.27	0/1678	0.52	0/2262
11	BM	0.26	0/1678	0.52	0/2262

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
11	CM	0.27	0/1678	0.53	0/2262
11	DM	0.27	0/1678	0.52	0/2262
11	EM	0.26	0/1678	0.53	0/2262
11	FM	0.27	0/1678	0.53	0/2262
11	GM	0.27	0/1678	0.53	0/2262
11	HM	0.27	0/1678	0.53	0/2262
11	IM	0.26	0/1678	0.53	0/2262
11	JM	0.27	0/1678	0.53	0/2262
11	KM	0.27	0/1678	0.52	0/2262
11	LM	0.27	0/1678	0.52	0/2262
11	MM	0.26	0/1678	0.52	0/2262
All	All	0.27	0/191071	0.49	0/258997

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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%)	149 (92%)	12 (8%)	0	100	100
1	Ag	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100
1	BG	161/1048 (15%)	154 (96%)	7 (4%)	0	100	100
1	Bg	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	CG	161/1048 (15%)	155 (96%)	6 (4%)	0	100	100
1	Cg	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100
1	DG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Dg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	EG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Eg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	FG	161/1048 (15%)	151 (94%)	10 (6%)	0	100	100
1	Fg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	GG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	Gg	32/1048 (3%)	32 (100%)	0	0	100	100
1	HG	161/1048 (15%)	156 (97%)	5 (3%)	0	100	100
1	Hg	32/1048 (3%)	32 (100%)	0	0	100	100
1	IG	161/1048 (15%)	154 (96%)	7 (4%)	0	100	100
1	Ig	32/1048 (3%)	30 (94%)	2 (6%)	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%)	150 (93%)	11 (7%)	0	100	100
1	Kg	32/1048 (3%)	30 (94%)	2 (6%)	0	100	100
1	LG	161/1048 (15%)	151 (94%)	10 (6%)	0	100	100
1	Lg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	MG	161/1048 (15%)	150 (93%)	11 (7%)	0	100	100
1	Mg	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	NG	161/1048 (15%)	153 (95%)	8 (5%)	0	100	100
1	OG	161/1048 (15%)	154 (96%)	7 (4%)	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%)	31 (97%)	1 (3%)	0	100	100
1	YG	32/1048 (3%)	31 (97%)	1 (3%)	0	100	100
1	ZG	32/1048 (3%)	32 (100%)	0	0	100	100
2	AH	256/361 (71%)	241 (94%)	15 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	BH	256/361 (71%)	242 (94%)	14 (6%)	0	100	100
2	CH	256/361 (71%)	244 (95%)	12 (5%)	0	100	100
2	DH	256/361 (71%)	241 (94%)	15 (6%)	0	100	100
2	EH	256/361 (71%)	239 (93%)	17 (7%)	0	100	100
2	FH	256/361 (71%)	245 (96%)	11 (4%)	0	100	100
2	GH	256/361 (71%)	238 (93%)	18 (7%)	0	100	100
2	HH	256/361 (71%)	246 (96%)	10 (4%)	0	100	100
2	IH	256/361 (71%)	240 (94%)	16 (6%)	0	100	100
2	JH	256/361 (71%)	245 (96%)	11 (4%)	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%)	227 (95%)	12 (5%)	0	100	100
2	WH	239/361 (66%)	235 (98%)	4 (2%)	0	100	100
2	XH	239/361 (66%)	234 (98%)	5 (2%)	0	100	100
2	YH	239/361 (66%)	229 (96%)	10 (4%)	0	100	100
2	ZH	239/361 (66%)	230 (96%)	9 (4%)	0	100	100
3	AK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	BK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	CK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	DK	149/189 (79%)	142 (95%)	7 (5%)	0	100	100
3	EK	149/189 (79%)	144 (97%)	5 (3%)	0	100	100
3	FK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	GK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
3	HK	149/189 (79%)	140 (94%)	9 (6%)	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%)	144 (97%)	5 (3%)	0	100	100
3	LK	149/189 (79%)	141 (95%)	8 (5%)	0	100	100
3	MK	149/189 (79%)	143 (96%)	6 (4%)	0	100	100
4	AL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	BL	169/249 (68%)	165 (98%)	4 (2%)	0	100	100
4	CL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100
4	DL	169/249 (68%)	161 (95%)	8 (5%)	0	100	100
4	EL	169/249 (68%)	161 (95%)	8 (5%)	0	100	100
4	FL	169/249 (68%)	163 (96%)	6 (4%)	0	100	100
4	GL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100
4	HL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100
4	IL	169/249 (68%)	162 (96%)	7 (4%)	0	100	100
4	JL	169/249 (68%)	163 (96%)	6 (4%)	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%)	161 (95%)	8 (5%)	0	100	100
5	AN	76/124 (61%)	72 (95%)	4 (5%)	0	100	100
5	BN	76/124 (61%)	70 (92%)	6 (8%)	0	100	100
5	CN	76/124 (61%)	69 (91%)	7 (9%)	0	100	100
5	DN	76/124 (61%)	69 (91%)	7 (9%)	0	100	100
5	EN	76/124 (61%)	67 (88%)	9 (12%)	0	100	100
5	FN	76/124 (61%)	70 (92%)	6 (8%)	0	100	100
5	GN	76/124 (61%)	72 (95%)	4 (5%)	0	100	100
5	HN	76/124 (61%)	73 (96%)	3 (4%)	0	100	100
5	IN	76/124 (61%)	72 (95%)	4 (5%)	0	100	100
5	JN	76/124 (61%)	70 (92%)	6 (8%)	0	100	100
5	KN	76/124 (61%)	70 (92%)	6 (8%)	0	100	100
5	LN	76/124 (61%)	72 (95%)	4 (5%)	0	100	100
5	MN	76/124 (61%)	71 (93%)	5 (7%)	0	100	100
8	AD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
8	Ad	135/163 (83%)	128 (95%)	7 (5%)	0	100	100
8	BD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
8	Bd	135/163 (83%)	128 (95%)	7 (5%)	0	100	100
8	CD	138/163 (85%)	130 (94%)	8 (6%)	0	100	100
8	Cd	135/163 (83%)	129 (96%)	6 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
8	DD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
8	Dd	135/163 (83%)	131 (97%)	4 (3%)	0	100	100
8	ED	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
8	Ed	135/163 (83%)	130 (96%)	5 (4%)	0	100	100
8	FD	138/163 (85%)	133 (96%)	5 (4%)	0	100	100
8	Fd	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
8	GD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
8	Gd	135/163 (83%)	125 (93%)	10 (7%)	0	100	100
8	HD	138/163 (85%)	131 (95%)	7 (5%)	0	100	100
8	Hd	135/163 (83%)	127 (94%)	8 (6%)	0	100	100
8	ID	138/163 (85%)	131 (95%)	7 (5%)	0	100	100
8	Id	135/163 (83%)	131 (97%)	4 (3%)	0	100	100
8	JD	138/163 (85%)	128 (93%)	10 (7%)	0	100	100
8	Jd	135/163 (83%)	128 (95%)	7 (5%)	0	100	100
8	KD	138/163 (85%)	131 (95%)	7 (5%)	0	100	100
8	Kd	135/163 (83%)	125 (93%)	10 (7%)	0	100	100
8	LD	138/163 (85%)	127 (92%)	11 (8%)	0	100	100
8	Ld	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
8	MD	138/163 (85%)	132 (96%)	6 (4%)	0	100	100
8	Md	135/163 (83%)	129 (96%)	6 (4%)	0	100	100
9	AF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
9	Af	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
9	BF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
9	Bf	57/269 (21%)	54 (95%)	3 (5%)	0	100	100
9	CF	61/269 (23%)	60 (98%)	1 (2%)	0	100	100
9	Cf	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
9	DF	61/269 (23%)	61 (100%)	0	0	100	100
9	Df	57/269 (21%)	54 (95%)	3 (5%)	0	100	100
9	EF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
9	Ef	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
9	FF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	Ff	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
9	GF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
9	Gf	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
9	HF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
9	Hf	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
9	IF	61/269 (23%)	53 (87%)	8 (13%)	0	100	100
9	If	57/269 (21%)	54 (95%)	3 (5%)	0	100	100
9	JF	61/269 (23%)	59 (97%)	2 (3%)	0	100	100
9	Jf	57/269 (21%)	55 (96%)	2 (4%)	0	100	100
9	KF	61/269 (23%)	55 (90%)	6 (10%)	0	100	100
9	Kf	57/269 (21%)	51 (90%)	6 (10%)	0	100	100
9	LF	61/269 (23%)	56 (92%)	5 (8%)	0	100	100
9	Lf	57/269 (21%)	53 (93%)	4 (7%)	0	100	100
9	MF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
9	Mf	57/269 (21%)	56 (98%)	1 (2%)	0	100	100
9	VF	61/269 (23%)	56 (92%)	5 (8%)	0	100	100
9	WF	61/269 (23%)	57 (93%)	4 (7%)	0	100	100
9	XF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
9	YF	61/269 (23%)	60 (98%)	1 (2%)	0	100	100
9	ZF	61/269 (23%)	58 (95%)	3 (5%)	0	100	100
10	AC	241/303 (80%)	225 (93%)	16 (7%)	0	100	100
10	BC	241/303 (80%)	229 (95%)	12 (5%)	0	100	100
10	CC	207/303 (68%)	191 (92%)	16 (8%)	0	100	100
10	DC	207/303 (68%)	188 (91%)	19 (9%)	0	100	100
10	EC	207/303 (68%)	192 (93%)	15 (7%)	0	100	100
10	FC	241/303 (80%)	231 (96%)	10 (4%)	0	100	100
10	GC	207/303 (68%)	194 (94%)	13 (6%)	0	100	100
10	HC	207/303 (68%)	198 (96%)	9 (4%)	0	100	100
10	IC	207/303 (68%)	188 (91%)	19 (9%)	0	100	100
10	JC	241/303 (80%)	227 (94%)	14 (6%)	0	100	100
10	KC	241/303 (80%)	226 (94%)	15 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	LC	207/303 (68%)	193 (93%)	14 (7%)	0	100	100
10	MC	207/303 (68%)	193 (93%)	14 (7%)	0	100	100
11	AM	206/320 (64%)	188 (91%)	18 (9%)	0	100	100
11	BM	206/320 (64%)	190 (92%)	16 (8%)	0	100	100
11	CM	206/320 (64%)	194 (94%)	12 (6%)	0	100	100
11	DM	206/320 (64%)	192 (93%)	14 (7%)	0	100	100
11	EM	206/320 (64%)	187 (91%)	19 (9%)	0	100	100
11	FM	206/320 (64%)	192 (93%)	14 (7%)	0	100	100
11	GM	206/320 (64%)	187 (91%)	19 (9%)	0	100	100
11	HM	206/320 (64%)	185 (90%)	21 (10%)	0	100	100
11	IM	206/320 (64%)	188 (91%)	18 (9%)	0	100	100
11	JM	206/320 (64%)	192 (93%)	14 (7%)	0	100	100
11	KM	206/320 (64%)	193 (94%)	13 (6%)	0	100	100
11	LM	206/320 (64%)	193 (94%)	13 (6%)	0	100	100
11	MM	206/320 (64%)	194 (94%)	12 (6%)	0	100	100
All	All	23724/70112 (34%)	22448 (95%)	1276 (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%)	126 (93%)	9 (7%)	13	34
1	Ag	31/765 (4%)	28 (90%)	3 (10%)	6	22
1	BG	135/765 (18%)	124 (92%)	11 (8%)	9	29
1	Bg	31/765 (4%)	28 (90%)	3 (10%)	6	22
1	CG	135/765 (18%)	123 (91%)	12 (9%)	8	25
1	Cg	31/765 (4%)	30 (97%)	1 (3%)	34	54

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	DG	135/765 (18%)	121 (90%)	14 (10%)	5 20
1	Dg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	EG	135/765 (18%)	124 (92%)	11 (8%)	9 29
1	Eg	31/765 (4%)	29 (94%)	2 (6%)	14 35
1	FG	135/765 (18%)	124 (92%)	11 (8%)	9 29
1	Fg	31/765 (4%)	29 (94%)	2 (6%)	14 35
1	GG	135/765 (18%)	122 (90%)	13 (10%)	7 22
1	Gg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	HG	135/765 (18%)	123 (91%)	12 (9%)	8 25
1	Hg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	IG	135/765 (18%)	125 (93%)	10 (7%)	11 31
1	Ig	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	JG	135/765 (18%)	120 (89%)	15 (11%)	5 18
1	Jg	31/765 (4%)	28 (90%)	3 (10%)	6 22
1	KG	135/765 (18%)	123 (91%)	12 (9%)	8 25
1	Kg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	LG	135/765 (18%)	123 (91%)	12 (9%)	8 25
1	Lg	31/765 (4%)	28 (90%)	3 (10%)	6 22
1	MG	135/765 (18%)	125 (93%)	10 (7%)	11 31
1	Mg	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	NG	135/765 (18%)	126 (93%)	9 (7%)	13 34
1	OG	135/765 (18%)	124 (92%)	11 (8%)	9 29
1	PG	135/765 (18%)	122 (90%)	13 (10%)	7 22
1	VG	31/765 (4%)	29 (94%)	2 (6%)	14 35
1	WG	31/765 (4%)	26 (84%)	5 (16%)	2 11
1	XG	31/765 (4%)	28 (90%)	3 (10%)	6 22
1	YG	31/765 (4%)	27 (87%)	4 (13%)	3 15
1	ZG	31/765 (4%)	27 (87%)	4 (13%)	3 15
2	AH	220/300 (73%)	202 (92%)	18 (8%)	9 28
2	BH	220/300 (73%)	205 (93%)	15 (7%)	13 34
2	CH	220/300 (73%)	207 (94%)	13 (6%)	16 38

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
2	DH	220/300 (73%)	207 (94%)	13 (6%)	16 38
2	EH	220/300 (73%)	197 (90%)	23 (10%)	5 20
2	FH	220/300 (73%)	206 (94%)	14 (6%)	14 36
2	GH	220/300 (73%)	209 (95%)	11 (5%)	20 42
2	HH	220/300 (73%)	209 (95%)	11 (5%)	20 42
2	IH	220/300 (73%)	211 (96%)	9 (4%)	26 48
2	JH	220/300 (73%)	201 (91%)	19 (9%)	8 27
2	KH	220/300 (73%)	202 (92%)	18 (8%)	9 28
2	LH	220/300 (73%)	203 (92%)	17 (8%)	10 30
2	MH	220/300 (73%)	201 (91%)	19 (9%)	8 27
2	VH	207/300 (69%)	194 (94%)	13 (6%)	15 36
2	WH	207/300 (69%)	184 (89%)	23 (11%)	5 18
2	XH	207/300 (69%)	188 (91%)	19 (9%)	7 24
2	YH	207/300 (69%)	183 (88%)	24 (12%)	4 17
2	ZH	207/300 (69%)	187 (90%)	20 (10%)	6 22
3	AK	129/163 (79%)	121 (94%)	8 (6%)	15 37
3	BK	129/163 (79%)	121 (94%)	8 (6%)	15 37
3	CK	129/163 (79%)	124 (96%)	5 (4%)	27 49
3	DK	129/163 (79%)	120 (93%)	9 (7%)	12 32
3	EK	129/163 (79%)	123 (95%)	6 (5%)	22 44
3	FK	129/163 (79%)	122 (95%)	7 (5%)	18 40
3	GK	129/163 (79%)	120 (93%)	9 (7%)	12 32
3	HK	129/163 (79%)	124 (96%)	5 (4%)	27 49
3	IK	129/163 (79%)	120 (93%)	9 (7%)	12 32
3	JK	129/163 (79%)	115 (89%)	14 (11%)	5 19
3	KK	129/163 (79%)	119 (92%)	10 (8%)	10 29
3	LK	129/163 (79%)	119 (92%)	10 (8%)	10 29
3	MK	129/163 (79%)	112 (87%)	17 (13%)	3 15
4	AL	148/203 (73%)	143 (97%)	5 (3%)	32 53
4	BL	148/203 (73%)	135 (91%)	13 (9%)	8 25
4	CL	148/203 (73%)	138 (93%)	10 (7%)	13 34

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	DL	148/203 (73%)	138 (93%)	10 (7%)	13	34
4	EL	148/203 (73%)	139 (94%)	9 (6%)	15	37
4	FL	148/203 (73%)	134 (90%)	14 (10%)	7	22
4	GL	148/203 (73%)	143 (97%)	5 (3%)	32	53
4	HL	148/203 (73%)	144 (97%)	4 (3%)	40	59
4	IL	148/203 (73%)	143 (97%)	5 (3%)	32	53
4	JL	148/203 (73%)	140 (95%)	8 (5%)	18	40
4	KL	148/203 (73%)	131 (88%)	17 (12%)	4	17
4	LL	148/203 (73%)	138 (93%)	10 (7%)	13	34
4	ML	148/203 (73%)	135 (91%)	13 (9%)	8	25
5	AN	66/107 (62%)	59 (89%)	7 (11%)	5	19
5	BN	66/107 (62%)	59 (89%)	7 (11%)	5	19
5	CN	66/107 (62%)	60 (91%)	6 (9%)	7	24
5	DN	66/107 (62%)	61 (92%)	5 (8%)	11	30
5	EN	66/107 (62%)	59 (89%)	7 (11%)	5	19
5	FN	66/107 (62%)	61 (92%)	5 (8%)	11	30
5	GN	66/107 (62%)	60 (91%)	6 (9%)	7	24
5	HN	66/107 (62%)	62 (94%)	4 (6%)	15	37
5	IN	66/107 (62%)	62 (94%)	4 (6%)	15	37
5	JN	66/107 (62%)	59 (89%)	7 (11%)	5	19
5	KN	66/107 (62%)	63 (96%)	3 (4%)	23	45
5	LN	66/107 (62%)	61 (92%)	5 (8%)	11	30
5	MN	66/107 (62%)	57 (86%)	9 (14%)	3	14
8	AD	121/139 (87%)	115 (95%)	6 (5%)	20	42
8	Ad	118/139 (85%)	110 (93%)	8 (7%)	13	34
8	BD	121/139 (87%)	115 (95%)	6 (5%)	20	42
8	Bd	118/139 (85%)	111 (94%)	7 (6%)	16	38
8	CD	121/139 (87%)	117 (97%)	4 (3%)	33	54
8	Cd	118/139 (85%)	113 (96%)	5 (4%)	25	47
8	DD	121/139 (87%)	116 (96%)	5 (4%)	26	48
8	Dd	118/139 (85%)	112 (95%)	6 (5%)	20	41

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
8	ED	121/139 (87%)	116 (96%)	5 (4%)	26 48
8	Ed	118/139 (85%)	104 (88%)	14 (12%)	4 17
8	FD	121/139 (87%)	114 (94%)	7 (6%)	17 38
8	Fd	118/139 (85%)	111 (94%)	7 (6%)	16 38
8	GD	121/139 (87%)	113 (93%)	8 (7%)	14 34
8	Gd	118/139 (85%)	114 (97%)	4 (3%)	32 53
8	HD	121/139 (87%)	112 (93%)	9 (7%)	11 31
8	Hd	118/139 (85%)	110 (93%)	8 (7%)	13 34
8	ID	121/139 (87%)	113 (93%)	8 (7%)	14 34
8	Id	118/139 (85%)	116 (98%)	2 (2%)	56 72
8	JD	121/139 (87%)	115 (95%)	6 (5%)	20 42
8	Jd	118/139 (85%)	112 (95%)	6 (5%)	20 41
8	KD	121/139 (87%)	111 (92%)	10 (8%)	9 28
8	Kd	118/139 (85%)	114 (97%)	4 (3%)	32 53
8	LD	121/139 (87%)	110 (91%)	11 (9%)	7 24
8	Ld	118/139 (85%)	112 (95%)	6 (5%)	20 41
8	MD	121/139 (87%)	114 (94%)	7 (6%)	17 38
8	Md	118/139 (85%)	109 (92%)	9 (8%)	11 30
9	AF	53/237 (22%)	52 (98%)	1 (2%)	52 69
9	Af	49/237 (21%)	48 (98%)	1 (2%)	50 68
9	BF	53/237 (22%)	51 (96%)	2 (4%)	28 49
9	Bf	49/237 (21%)	46 (94%)	3 (6%)	15 37
9	CF	53/237 (22%)	50 (94%)	3 (6%)	17 39
9	Cf	49/237 (21%)	45 (92%)	4 (8%)	9 28
9	DF	53/237 (22%)	51 (96%)	2 (4%)	28 49
9	Df	49/237 (21%)	46 (94%)	3 (6%)	15 37
9	EF	53/237 (22%)	51 (96%)	2 (4%)	28 49
9	Ef	49/237 (21%)	46 (94%)	3 (6%)	15 37
9	FF	53/237 (22%)	53 (100%)	0	100 100
9	Ff	49/237 (21%)	47 (96%)	2 (4%)	26 48
9	GF	53/237 (22%)	50 (94%)	3 (6%)	17 39

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
9	Gf	49/237 (21%)	48 (98%)	1 (2%)	50 68
9	HF	53/237 (22%)	48 (91%)	5 (9%)	7 23
9	Hf	49/237 (21%)	48 (98%)	1 (2%)	50 68
9	IF	53/237 (22%)	49 (92%)	4 (8%)	11 31
9	If	49/237 (21%)	45 (92%)	4 (8%)	9 28
9	JF	53/237 (22%)	48 (91%)	5 (9%)	7 23
9	Jf	49/237 (21%)	48 (98%)	1 (2%)	50 68
9	KF	53/237 (22%)	49 (92%)	4 (8%)	11 31
9	Kf	49/237 (21%)	47 (96%)	2 (4%)	26 48
9	LF	53/237 (22%)	48 (91%)	5 (9%)	7 23
9	Lf	49/237 (21%)	45 (92%)	4 (8%)	9 28
9	MF	53/237 (22%)	50 (94%)	3 (6%)	17 39
9	Mf	49/237 (21%)	48 (98%)	1 (2%)	50 68
9	VF	53/237 (22%)	52 (98%)	1 (2%)	52 69
9	WF	53/237 (22%)	52 (98%)	1 (2%)	52 69
9	XF	53/237 (22%)	53 (100%)	0	100 100
9	YF	53/237 (22%)	50 (94%)	3 (6%)	17 39
9	ZF	53/237 (22%)	49 (92%)	4 (8%)	11 31
10	AC	203/257 (79%)	191 (94%)	12 (6%)	16 38
10	BC	203/257 (79%)	181 (89%)	22 (11%)	5 19
10	CC	178/257 (69%)	160 (90%)	18 (10%)	6 21
10	DC	178/257 (69%)	164 (92%)	14 (8%)	10 29
10	EC	178/257 (69%)	160 (90%)	18 (10%)	6 21
10	FC	203/257 (79%)	187 (92%)	16 (8%)	10 29
10	GC	178/257 (69%)	157 (88%)	21 (12%)	4 17
10	HC	178/257 (69%)	161 (90%)	17 (10%)	7 22
10	IC	178/257 (69%)	157 (88%)	21 (12%)	4 17
10	JC	203/257 (79%)	189 (93%)	14 (7%)	13 33
10	KC	203/257 (79%)	181 (89%)	22 (11%)	5 19
10	LC	178/257 (69%)	158 (89%)	20 (11%)	5 18
10	MC	178/257 (69%)	153 (86%)	25 (14%)	3 14

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
11	AM	175/276 (63%)	162 (93%)	13 (7%)	11 31
11	BM	175/276 (63%)	163 (93%)	12 (7%)	13 33
11	CM	175/276 (63%)	163 (93%)	12 (7%)	13 33
11	DM	175/276 (63%)	164 (94%)	11 (6%)	15 36
11	EM	175/276 (63%)	159 (91%)	16 (9%)	7 24
11	FM	175/276 (63%)	158 (90%)	17 (10%)	6 22
11	GM	175/276 (63%)	162 (93%)	13 (7%)	11 31
11	HM	175/276 (63%)	166 (95%)	9 (5%)	20 41
11	IM	175/276 (63%)	158 (90%)	17 (10%)	6 22
11	JM	175/276 (63%)	157 (90%)	18 (10%)	6 20
11	KM	175/276 (63%)	164 (94%)	11 (6%)	15 36
11	LM	175/276 (63%)	160 (91%)	15 (9%)	8 27
11	MM	175/276 (63%)	159 (91%)	16 (9%)	7 24
All	All	20484/55449 (37%)	18950 (92%)	1534 (8%)	14 31

5 of 1534 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
11	AM	184	LEU
1	GG	895	LYS
11	EM	193	GLN
11	AM	175	ILE
2	BH	203	ASN

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 92 such sidechains are listed below:

Mol	Chain	Res	Type
1	Cg	810	GLN
11	CM	164	GLN
2	BH	225	ASN
1	GG	1020	GLN
4	DL	115	GLN

5.3.3 RNA

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
7	EX	1
7	GX	1
7	YX	1
7	VX	1
7	CX	1
7	AX	1
7	FX	1
7	JX	1
7	KX	1
7	MX	1
7	WX	1
7	XX	1
7	LX	1
7	BX	1
7	HX	1
7	ZX	1
7	IX	1
7	DX	1

The worst 5 of 18 chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	EX	38:UNK	C	70:UNK	N	24.84
1	GX	38:UNK	C	70:UNK	N	24.65
1	YX	38:UNK	C	70:UNK	N	24.61
1	VX	38:UNK	C	70:UNK	N	24.52
1	CX	38:UNK	C	70:UNK	N	24.52

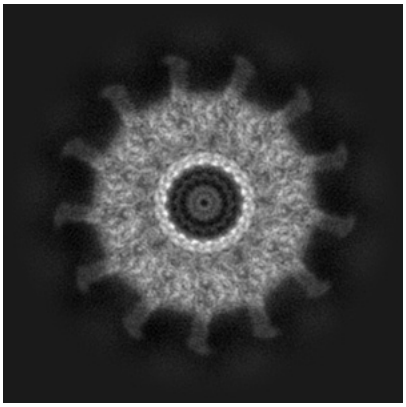
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-24023. These allow visual inspection of the internal detail of the map and identification of artifacts.

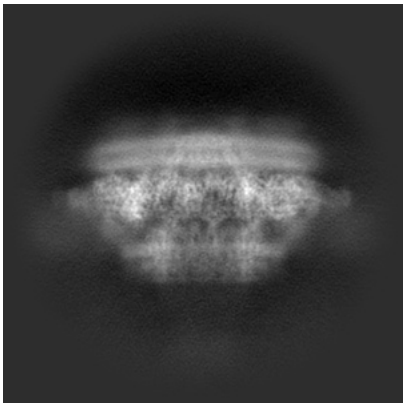
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

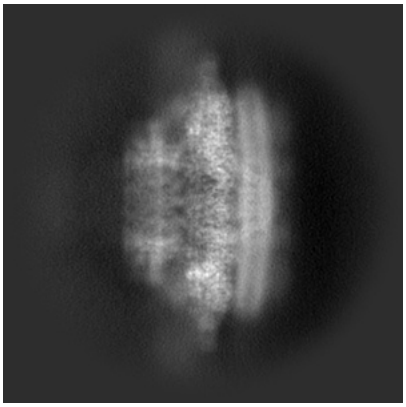
6.1.1 Primary map



X



Y

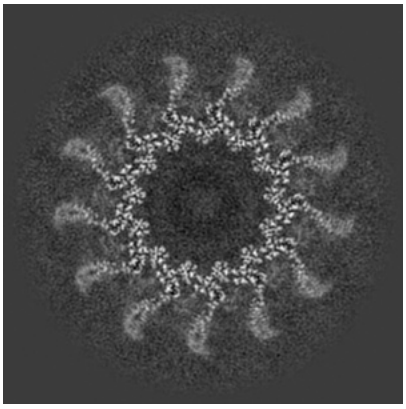


Z

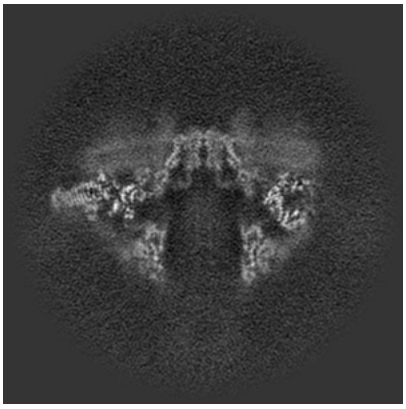
The images above show the map projected in three orthogonal directions.

6.2 Central slices

6.2.1 Primary map



X Index: 125



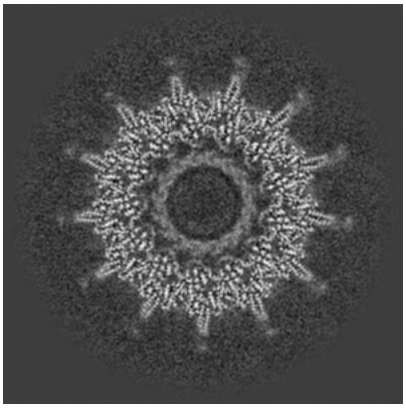
Y Index: 125

Z Index: 125

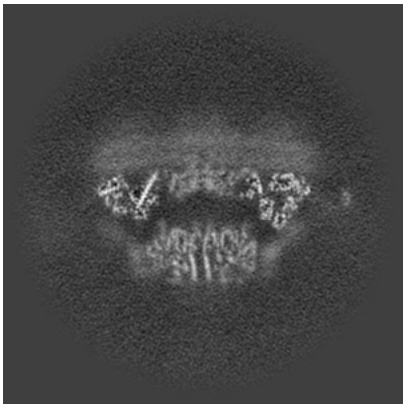
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

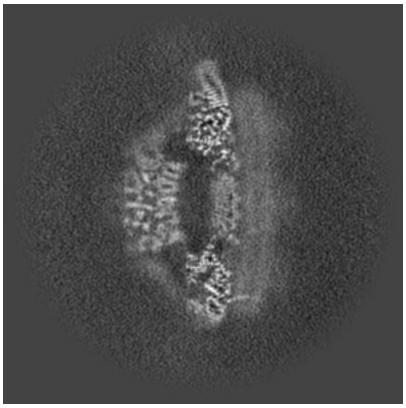
6.3.1 Primary map



X Index: 134



Y Index: 101

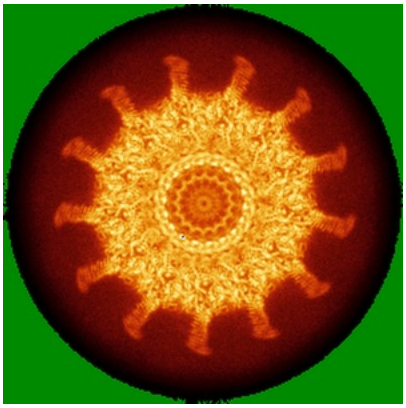


Z Index: 151

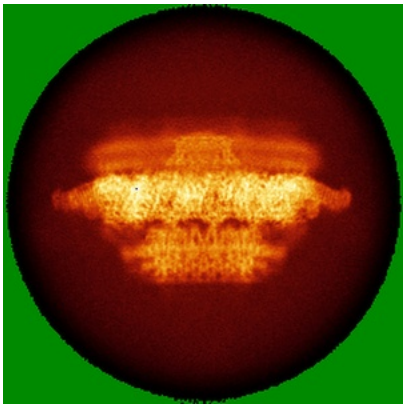
The images above show the largest variance slices of the map in three orthogonal directions.

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

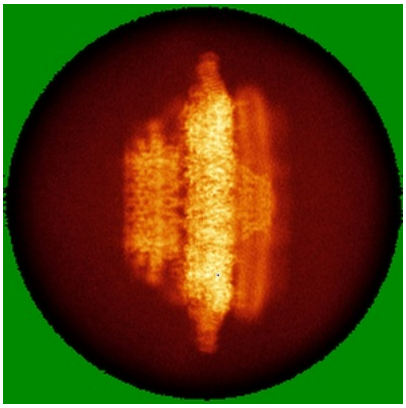
6.4.1 Primary map



X



Y

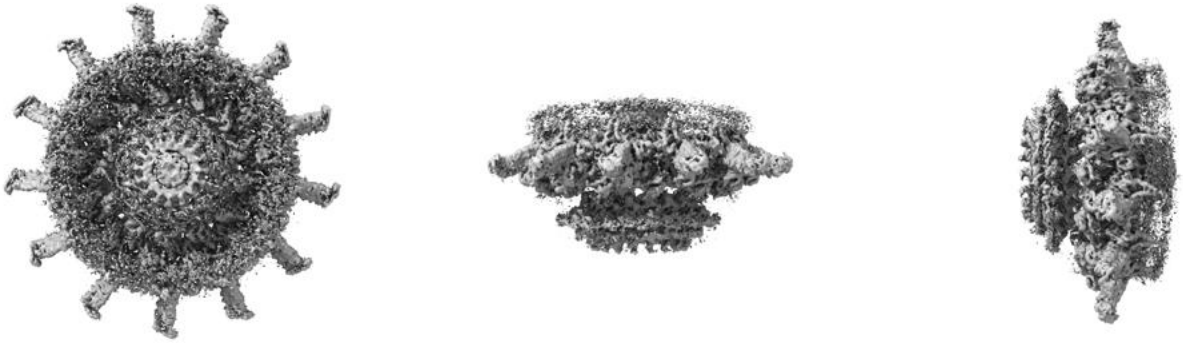


Z

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.

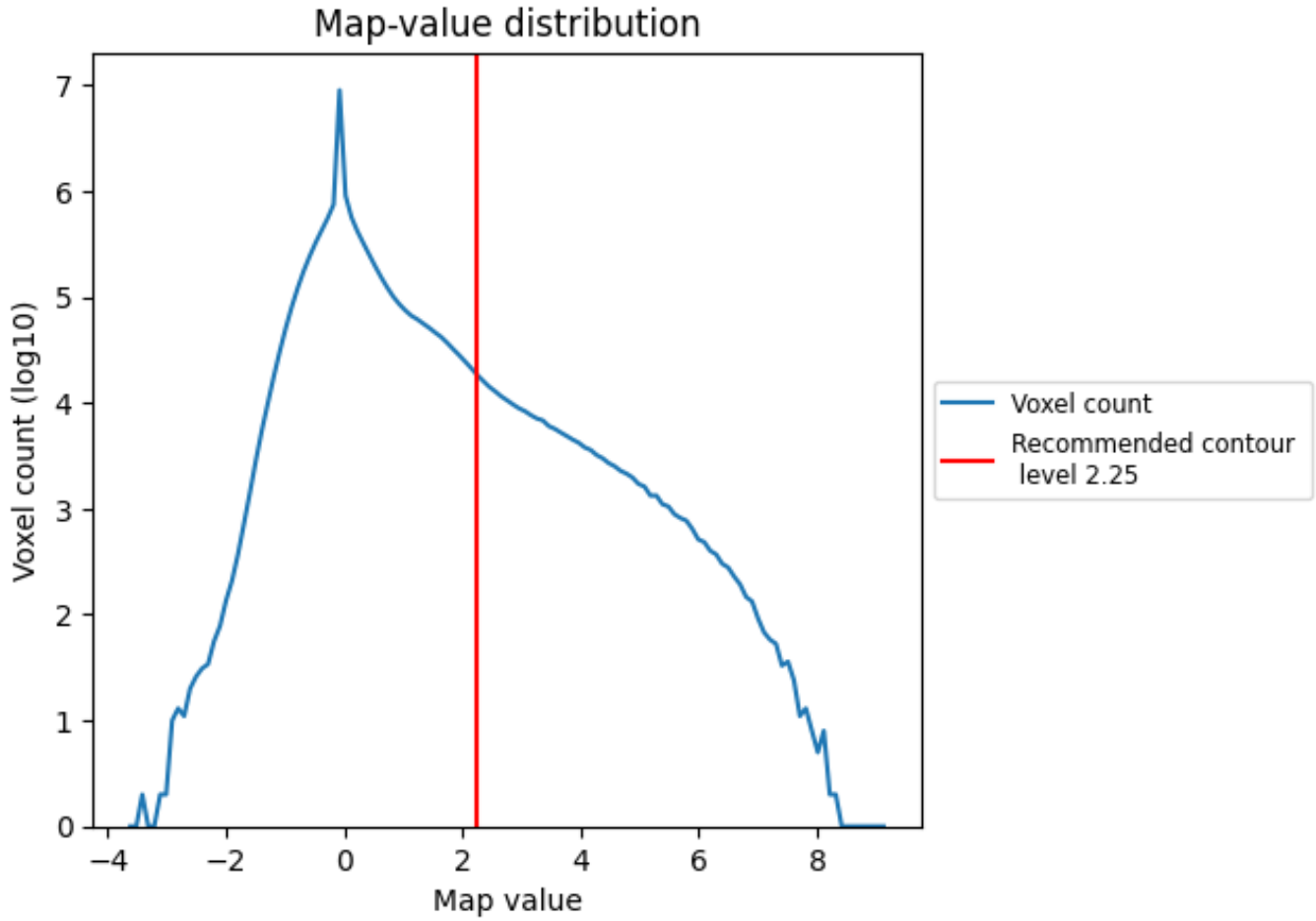
6.6 Mask visualisation (i)

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

7 Map analysis

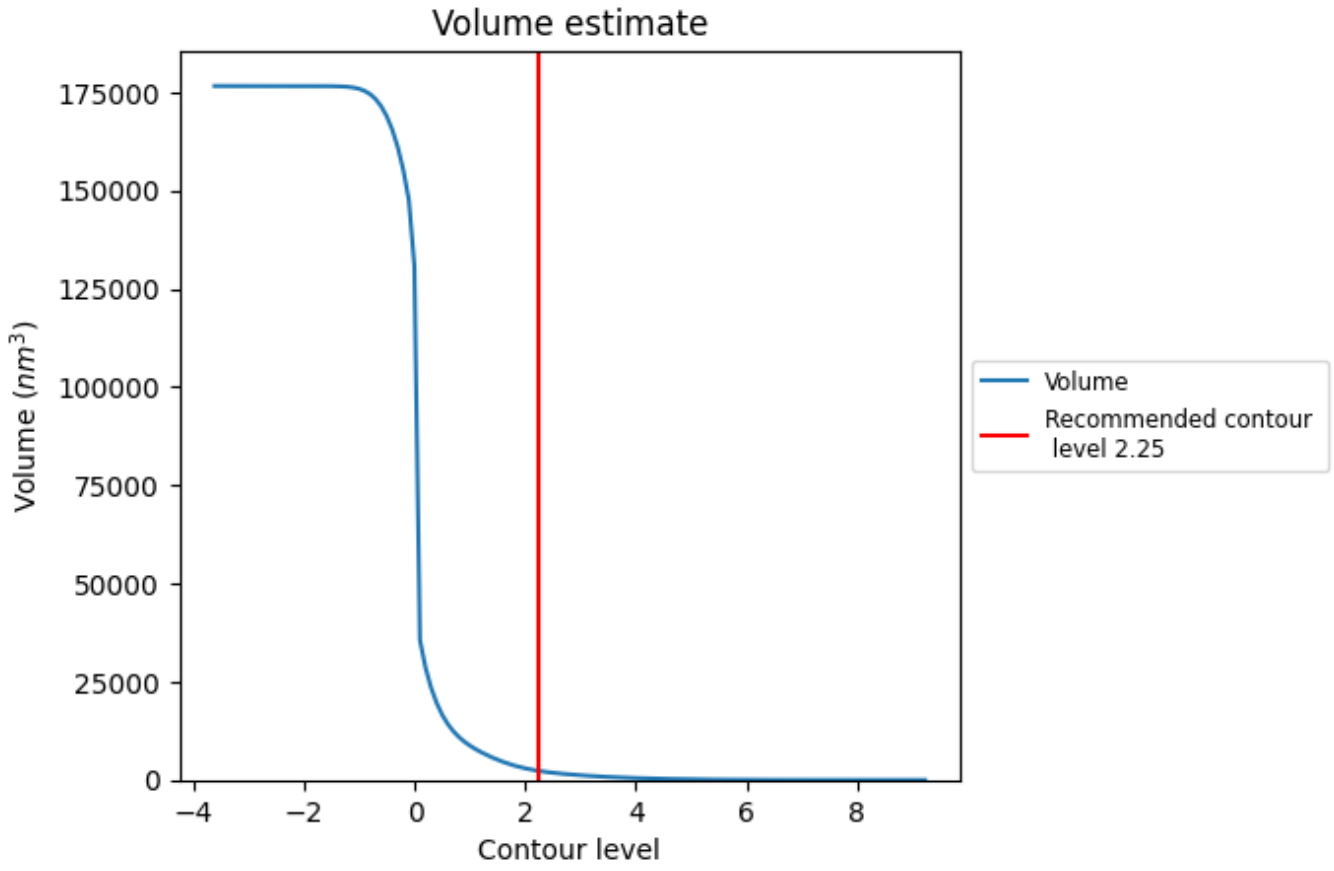
This section contains the results of statistical analysis of the map.

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.

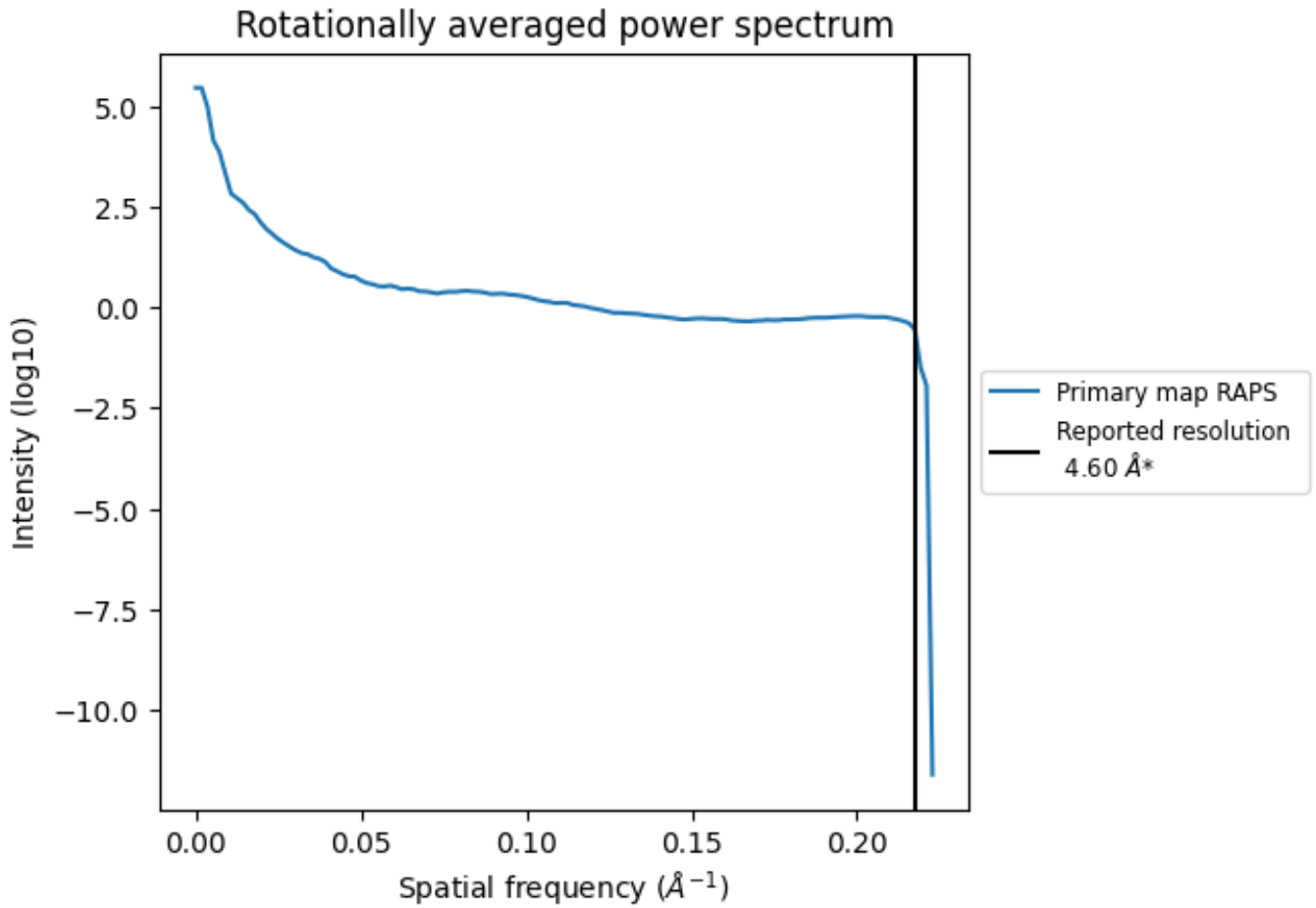
7.2 Volume estimate (i)



The volume at the recommended contour level is 2290 nm^3; this corresponds to an approximate mass of 2069 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}

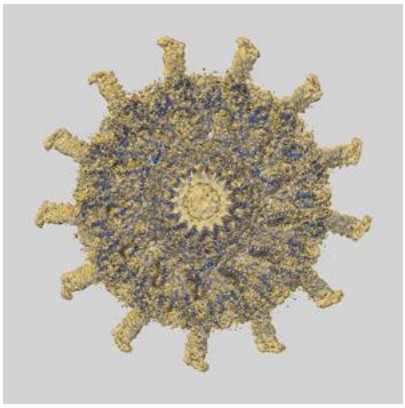
8 Fourier-Shell correlation

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

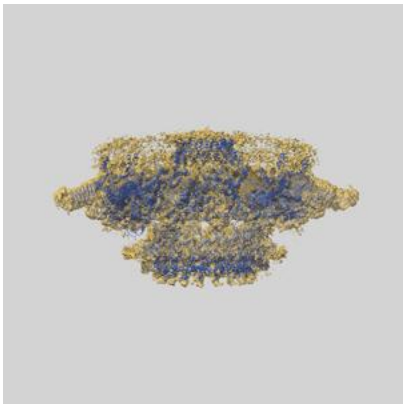
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-24023 and PDB model 7MUV. Per-residue inclusion information can be found in section 3 on page 22.

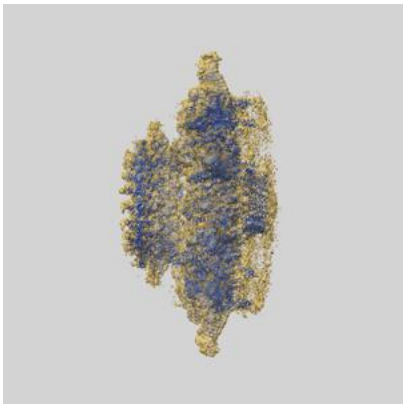
9.1 Map-model overlay



X



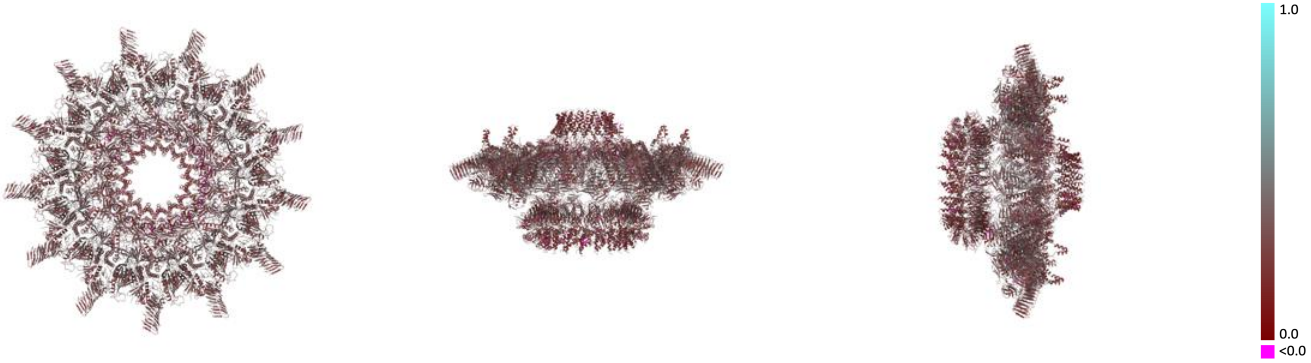
Y



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.

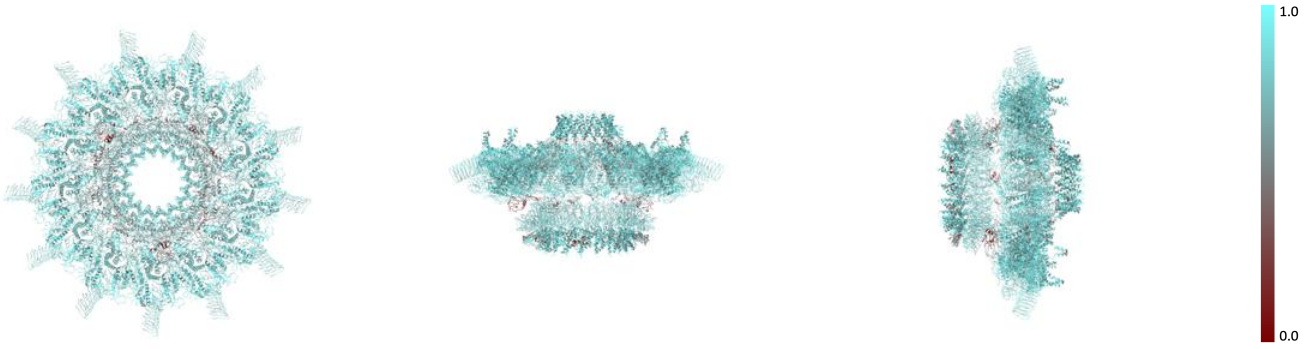
9.2 Q-score mapped to coordinate model



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.

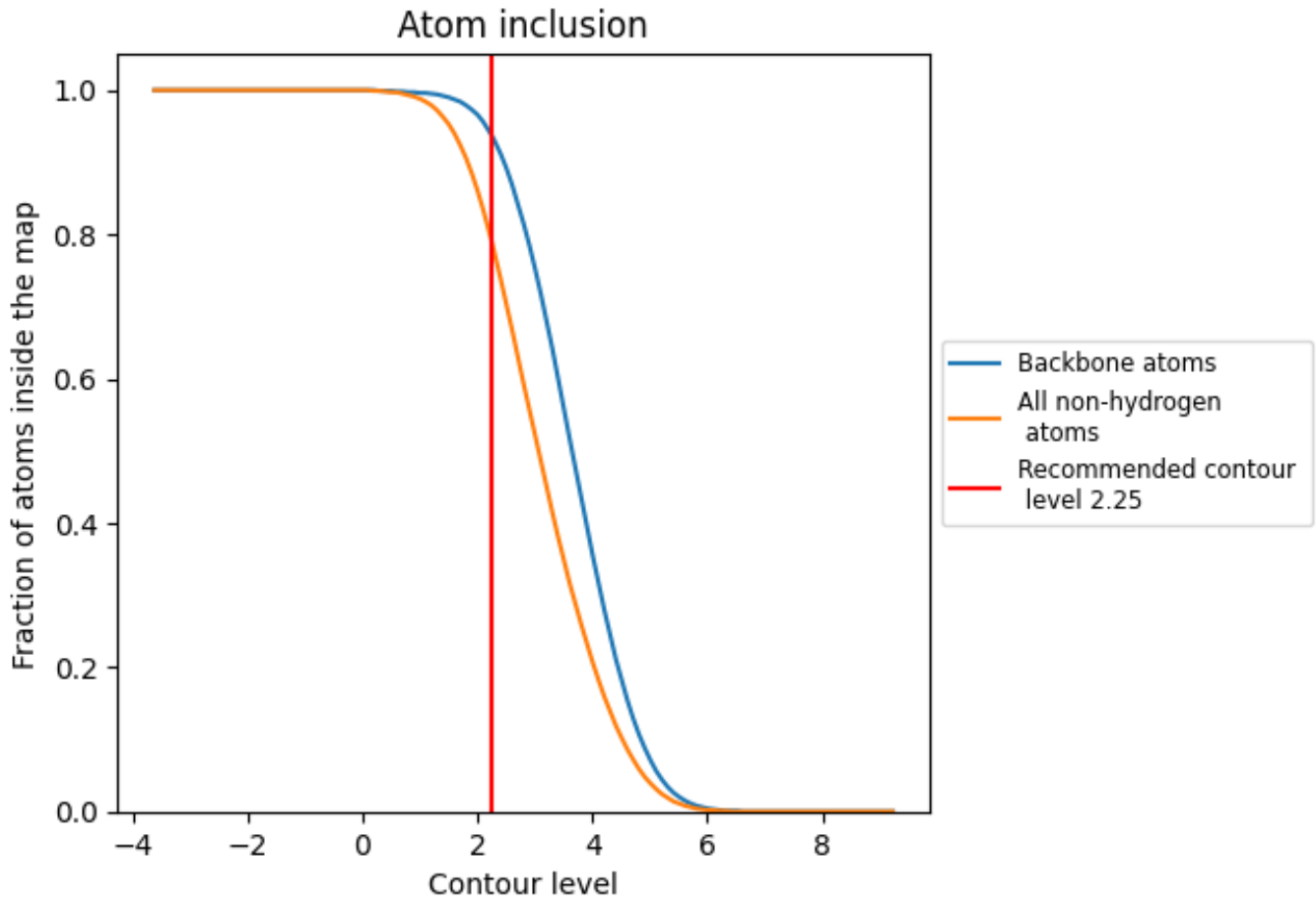
9.3 Atom inclusion mapped to coordinate model



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, 79% 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	0.7900	0.3160
AC	0.7910	0.3300
AD	0.8170	0.3540
AF	0.7810	0.2420
AG	0.6540	0.2680
AH	0.8060	0.3150
AK	0.8390	0.3520
AL	0.8400	0.3280
AM	0.8120	0.3270
AN	0.7920	0.3720
AU	0.9780	0.4790
AX	0.6210	0.2160
Ad	0.8370	0.3450
Af	0.7950	0.3120
Ag	0.8310	0.2930
BC	0.7890	0.3280
BD	0.8170	0.3640
BF	0.7880	0.2480
BG	0.6470	0.2540
BH	0.7950	0.3180
BK	0.8320	0.3460
BL	0.8350	0.3320
BM	0.8190	0.3220
BN	0.7670	0.3530
BU	1.0000	0.4510
BX	0.5710	0.2670
Bd	0.8310	0.3400
Bf	0.8180	0.3170
Bg	0.8310	0.2720
CC	0.8250	0.3270
CD	0.8240	0.3540
CF	0.7220	0.2560
CG	0.6560	0.2470
CH	0.8150	0.3260
CK	0.8350	0.3520

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Chain	Atom inclusion	Q-score
CL	0.8490	0.3310
CM	0.8060	0.3270
CN	0.7710	0.3610
CU	1.0000	0.4840
CX	0.6330	0.3280
Cd	0.8370	0.3330
Cf	0.7860	0.3050
Cg	0.8050	0.2830
DC	0.8530	0.3310
DD	0.8330	0.3500
DF	0.7900	0.2560
DG	0.6650	0.2520
DH	0.8020	0.3090
DK	0.8520	0.3550
DL	0.8430	0.3320
DM	0.8000	0.3230
DN	0.8090	0.3700
DU	0.9560	0.4600
DX	0.6000	0.2440
Dd	0.8240	0.3380
Df	0.7900	0.3130
Dg	0.8490	0.2700
EC	0.8360	0.3380
ED	0.8120	0.3470
EF	0.7920	0.2660
EG	0.6560	0.2530
EH	0.8160	0.3140
EK	0.8390	0.3450
EL	0.8470	0.3380
EM	0.8230	0.3300
EN	0.8040	0.3600
EU	1.0000	0.4750
EX	0.5330	0.2410
Ed	0.8380	0.3450
Ef	0.7930	0.3120
Eg	0.8710	0.2920
FC	0.7930	0.3300
FD	0.8320	0.3460
FF	0.7620	0.2750
FG	0.6910	0.2440
FH	0.7920	0.3080
FK	0.8280	0.3490

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Chain	Atom inclusion	Q-score
FL	0.8580	0.3350
FM	0.8190	0.3170
FN	0.7850	0.3610
FU	0.9330	0.4430
FX	0.6620	0.2630
Fd	0.8400	0.3330
Ff	0.7810	0.3070
Fg	0.8640	0.2760
GC	0.8310	0.3350
GD	0.8190	0.3590
GF	0.7660	0.2370
GG	0.6690	0.2290
GH	0.8110	0.3180
GK	0.8410	0.3520
GL	0.8440	0.3350
GM	0.8420	0.3320
GN	0.7710	0.3580
GU	1.0000	0.4310
GX	0.6210	0.2760
Gd	0.8340	0.3420
Gf	0.7490	0.3190
Gg	0.8270	0.2770
HC	0.8490	0.3370
HD	0.8240	0.3560
HF	0.7920	0.2750
HG	0.6470	0.2210
HH	0.8060	0.3160
HK	0.8490	0.3450
HL	0.8490	0.3290
HM	0.8400	0.3300
HN	0.8250	0.3720
HU	0.9560	0.4740
HX	0.5330	0.2320
Hd	0.8470	0.3440
Hf	0.8430	0.3040
Hg	0.8090	0.2740
IC	0.8410	0.3450
ID	0.8390	0.3520
IF	0.8020	0.2490
IG	0.6130	0.2190
IH	0.8020	0.3150
IK	0.8500	0.3530

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Chain	Atom inclusion	Q-score
IL	0.8360	0.3350
IM	0.8140	0.3230
IN	0.8250	0.3640
IU	0.9780	0.4440
IX	0.5460	0.2540
Id	0.8420	0.3400
If	0.8130	0.2930
Ig	0.8460	0.2780
JC	0.7810	0.3290
JD	0.8290	0.3430
JF	0.7750	0.2470
JG	0.6050	0.2030
JH	0.8210	0.3110
JK	0.8500	0.3450
JL	0.8510	0.3270
JM	0.8310	0.3370
JN	0.7970	0.3470
JU	1.0000	0.4940
JX	0.6540	0.2890
Jd	0.8310	0.3310
Jf	0.7930	0.3150
Jg	0.8380	0.2510
KC	0.7800	0.3320
KD	0.8290	0.3440
KF	0.7620	0.2430
KG	0.6030	0.1930
KH	0.8140	0.3070
KK	0.8530	0.3620
KL	0.8500	0.3270
KM	0.8350	0.3340
KN	0.7760	0.3630
KU	0.9560	0.4680
KX	0.5670	0.2750
Kd	0.8520	0.3390
Kf	0.8020	0.3060
Kg	0.8350	0.2850
LC	0.8370	0.3450
LD	0.8400	0.3450
LF	0.7640	0.2590
LG	0.6220	0.1990
LH	0.8190	0.3190
LK	0.8510	0.3500

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Chain	Atom inclusion	Q-score
LL	0.8410	0.3350
LM	0.8200	0.3280
LN	0.7880	0.3650
LU	0.9780	0.4900
LX	0.6710	0.2650
Ld	0.8210	0.3420
Lf	0.8060	0.3300
Lg	0.8600	0.2730
MC	0.8440	0.3440
MD	0.8250	0.3510
MF	0.7600	0.2660
MG	0.6780	0.2680
MH	0.8180	0.3190
MK	0.8430	0.3510
ML	0.8410	0.3290
MM	0.8130	0.3180
MN	0.8510	0.3560
MU	1.0000	0.4940
MX	0.6250	0.2650
Md	0.8440	0.3390
Mf	0.8130	0.3070
Mg	0.8310	0.2970
NG	0.6620	0.2630
OG	0.7310	0.2650
PG	0.6860	0.2770
VF	0.8130	0.2690
VG	0.8420	0.2760
VH	0.6680	0.2990
VX	0.5210	0.2560
WF	0.7640	0.2630
WG	0.8160	0.2840
WH	0.5420	0.2340
WX	0.5880	0.2760
XF	0.7880	0.2710
XG	0.7900	0.2520
XH	0.6960	0.2910
XX	0.6420	0.2460
YF	0.7750	0.2460
YG	0.8460	0.2770
YH	0.5510	0.2760
YX	0.6370	0.2940
ZF	0.7960	0.2710

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Chain	Atom inclusion	Q-score
ZG	0.8120	0.2820
ZH	0.6650	0.3070
ZX	0.5500	0.2810