



wwPDB EM Validation Summary Report ⓘ

Mar 20, 2026 – 04:37 PM UTC

PDB ID : 8V43 / pdb_00008v43
EMDB ID : EMD-42964
Title : CryoEM Structure of Diffocin - postcontracted - Baseplate - final state
Authors : Cai, X.Y.; He, Y.; Zhou, Z.H.
Deposited on : 2023-11-28
Resolution : 6.10 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.dev132
MolProbity : 4-5-2 with Phenix2.0
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : **NOT EXECUTED**
MapQ : **FAILED**
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.49

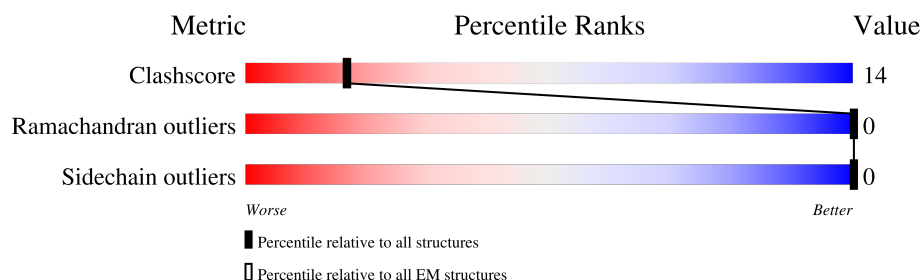
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 6.10 Å.

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



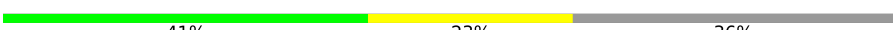
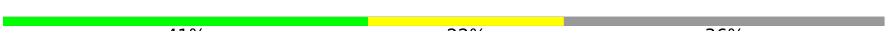
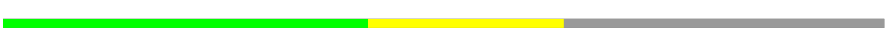
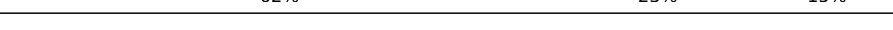
Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	229148	23984
Ramachandran outliers	224038	23583
Sidechain outliers	223484	23102

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 $\leq 5\%$.

Mol	Chain	Length	Quality of chain
1	B	350	62% 37% .
1	F	350	63% 36% .
1	K	350	69% 30% .
1	O	350	62% 37% .
1	Q	350	63% 36% .
1	R	350	63% 36% .
1	Z	350	63% 36% .
1	e	350	68% 31% .
1	m	350	68% 31% .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	n	350	 69% 30% .
1	o	350	 69% 30% .
1	v	350	 68% 31% .
2	A	232	 41% 23% 36%
2	E	232	 41% 22% 36%
2	L	232	 41% 22% 36%
2	M	232	 42% 22% 36%
2	N	232	 40% 24% 36%
2	Y	232	 41% 22% 36%
3	J	142	 61% 23% 15%
3	d	142	 61% 23% 15%
3	i	142	 61% 24% 15%
3	j	142	 61% 23% 15%
3	k	142	 62% 23% 15%
3	l	142	 62% 23% 15%
4	C	354	 65% 34% .
4	D	354	 68% 31% .
4	G	354	 64% 35% .
4	H	354	 67% 32% .
4	I	354	 73% 26% .
4	P	354	 70% 28% .
4	S	354	 64% 36% .
4	T	354	 65% 34% .
4	U	354	 65% 34% .
4	V	354	 66% 33% .

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
4	W	354	 67% 32% .
4	X	354	 68% 32% .
4	a	354	 65% 35% .
4	b	354	 66% 34% .
4	c	354	 71% 27% .
4	f	354	 71% 27% .
4	g	354	 71% 27% .
4	h	354	 73% 26% .

2 Entry composition [i](#)

There are 4 unique types of molecules in this entry. The entry contains 95334 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 TRI-2 (CD1371).

Mol	Chain	Residues	Atoms					AltConf	Trace
1	v	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	B	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	m	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	O	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	n	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	Q	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	K	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	F	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	o	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	R	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	e	346	Total 2751	C 1736	N 452	O 555	S 8	0	0
1	Z	346	Total 2751	C 1736	N 452	O 555	S 8	0	0

- Molecule 2 is a protein called TRI-1 (CD1372).

Mol	Chain	Residues	Atoms					AltConf	Trace
2	A	148	Total 1214	C 774	N 192	O 240	S 8	0	0
2	L	148	Total 1214	C 774	N 192	O 240	S 8	0	0
2	M	148	Total 1214	C 774	N 192	O 240	S 8	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
2	E	148	Total	C	N	O	S	0	0
			1214	774	192	240	8		
2	N	148	Total	C	N	O	S	0	0
			1214	774	192	240	8		
2	Y	148	Total	C	N	O	S	0	0
			1214	774	192	240	8		

- Molecule 3 is a protein called Sheath initiator (CD1370).

Mol	Chain	Residues	Atoms					AltConf	Trace
3	j	120	Total	C	N	O	S	0	0
			995	648	157	189	1		
3	i	120	Total	C	N	O	S	0	0
			995	648	157	189	1		
3	k	120	Total	C	N	O	S	0	0
			995	648	157	189	1		
3	J	120	Total	C	N	O	S	0	0
			995	648	157	189	1		
3	l	120	Total	C	N	O	S	0	0
			995	648	157	189	1		
3	d	120	Total	C	N	O	S	0	0
			995	648	157	189	1		

- Molecule 4 is a protein called Sheath (CD1363).

Mol	Chain	Residues	Atoms					AltConf	Trace
4	P	348	Total	C	N	O	S	0	0
			2710	1727	439	535	9		
4	C	352	Total	C	N	O	S	0	0
			2738	1747	443	539	9		
4	D	351	Total	C	N	O	S	0	0
			2730	1741	442	538	9		
4	f	348	Total	C	N	O	S	0	0
			2710	1727	439	535	9		
4	S	352	Total	C	N	O	S	0	0
			2738	1747	443	539	9		
4	V	351	Total	C	N	O	S	0	0
			2730	1741	442	538	9		
4	g	348	Total	C	N	O	S	0	0
			2710	1727	439	535	9		
4	T	352	Total	C	N	O	S	0	0
			2738	1747	443	539	9		

Continued on next page...

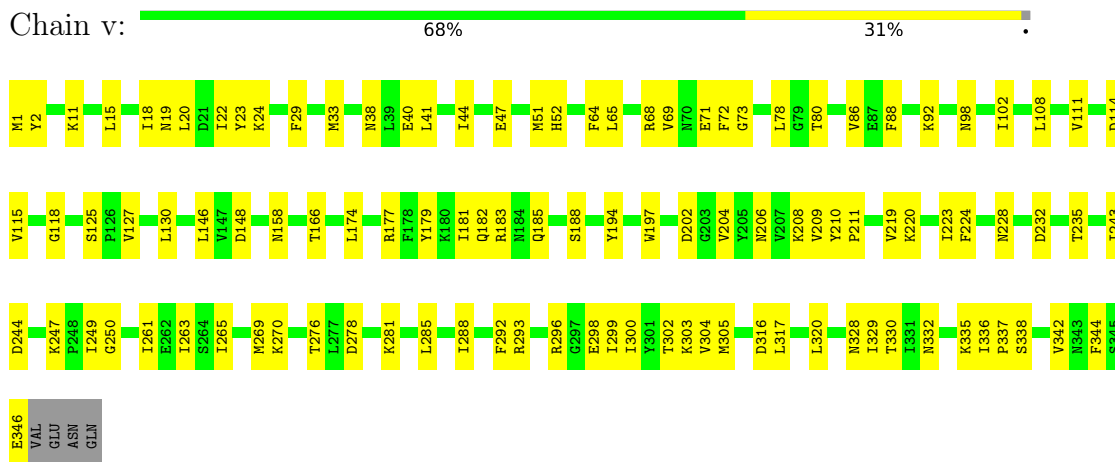
Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
4	W	351	Total	C	N	O	S	0	0
			2730	1741	442	538	9		
4	I	348	Total	C	N	O	S	0	0
			2710	1727	439	535	9		
4	G	352	Total	C	N	O	S	0	0
			2738	1747	443	539	9		
4	H	351	Total	C	N	O	S	0	0
			2730	1741	442	538	9		
4	h	348	Total	C	N	O	S	0	0
			2710	1727	439	535	9		
4	U	352	Total	C	N	O	S	0	0
			2738	1747	443	539	9		
4	X	351	Total	C	N	O	S	0	0
			2730	1741	442	538	9		
4	c	348	Total	C	N	O	S	0	0
			2710	1727	439	535	9		
4	a	352	Total	C	N	O	S	0	0
			2738	1747	443	539	9		
4	b	351	Total	C	N	O	S	0	0
			2730	1741	442	538	9		

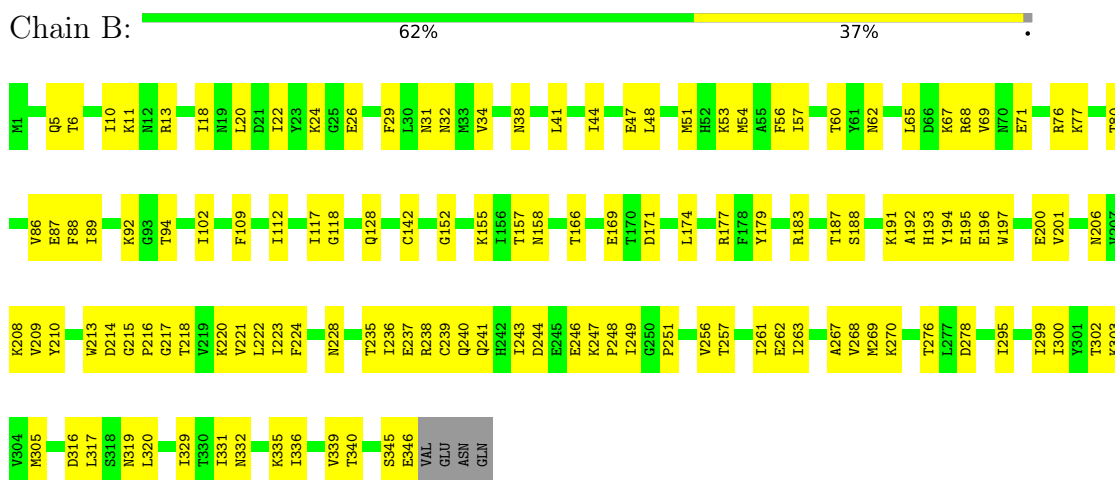
3 Residue-property plots

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. 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. 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.

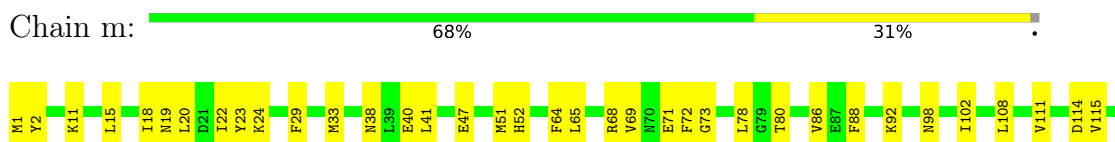
- Molecule 1: TRI-2 (CD1371)

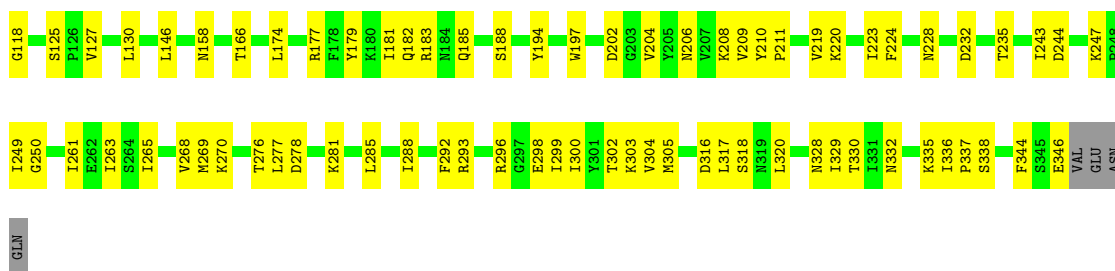


- Molecule 1: TRI-2 (CD1371)

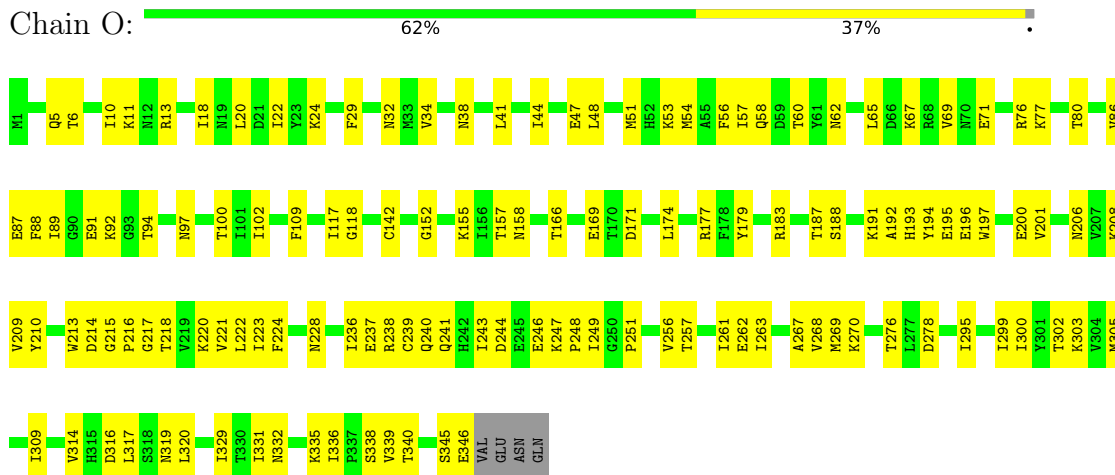


- Molecule 1: TRI-2 (CD1371)

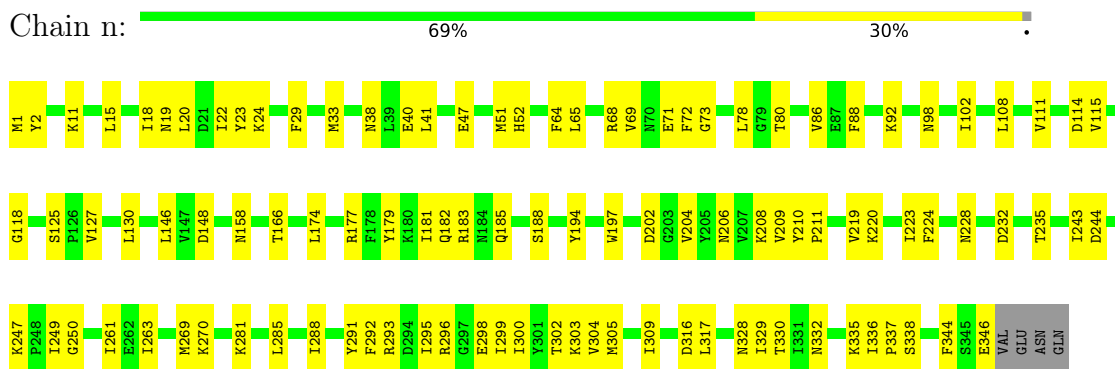




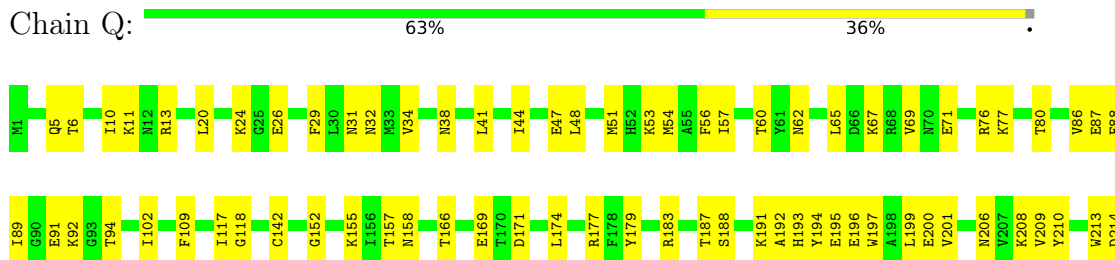
• Molecule 1: TRI-2 (CD1371)

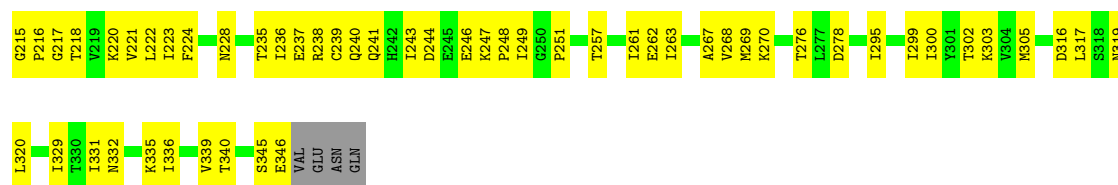


• Molecule 1: TRI-2 (CD1371)



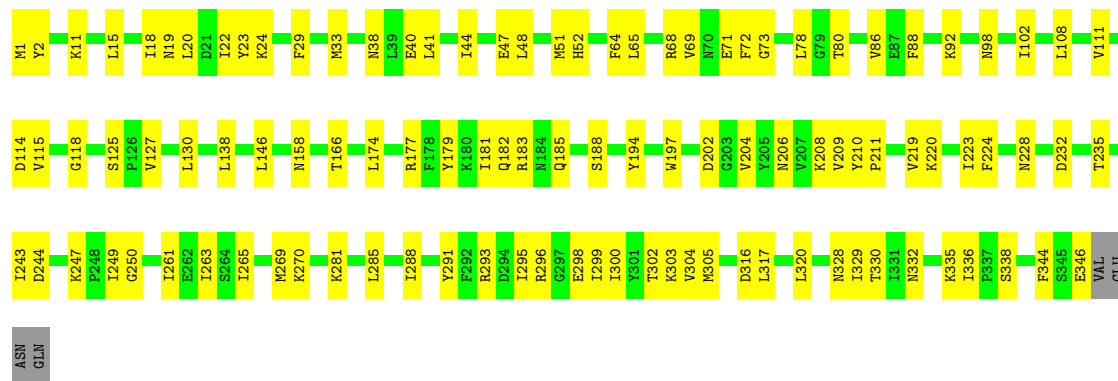
• Molecule 1: TRI-2 (CD1371)





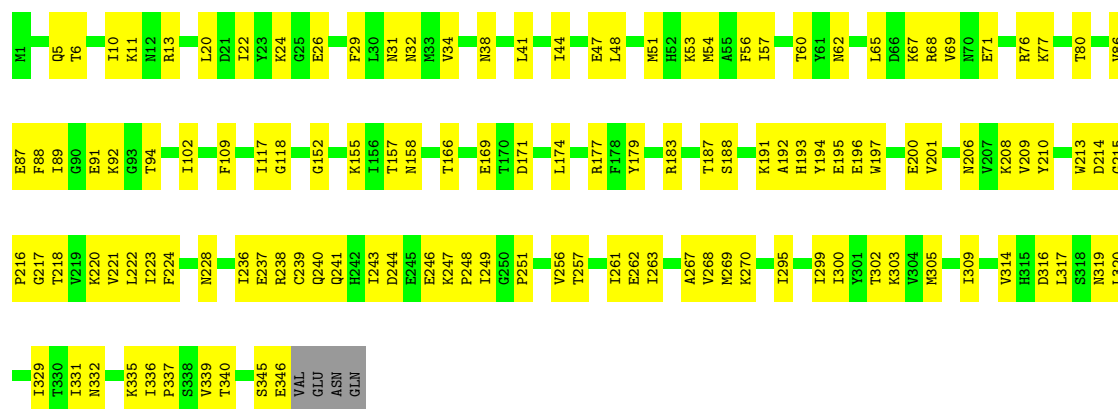
• Molecule 1: TRI-2 (CD1371)

Chain K: 69% 30%



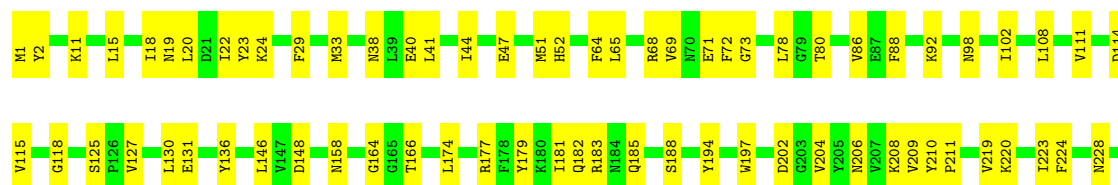
• Molecule 1: TRI-2 (CD1371)

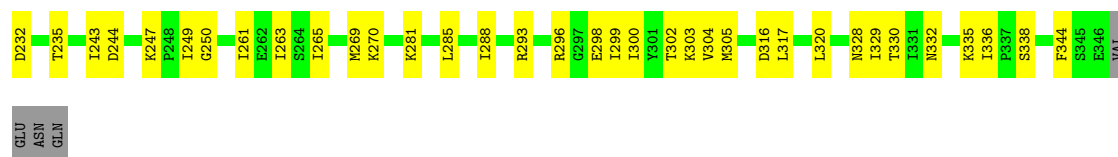
Chain F: 63% 36%



• Molecule 1: TRI-2 (CD1371)

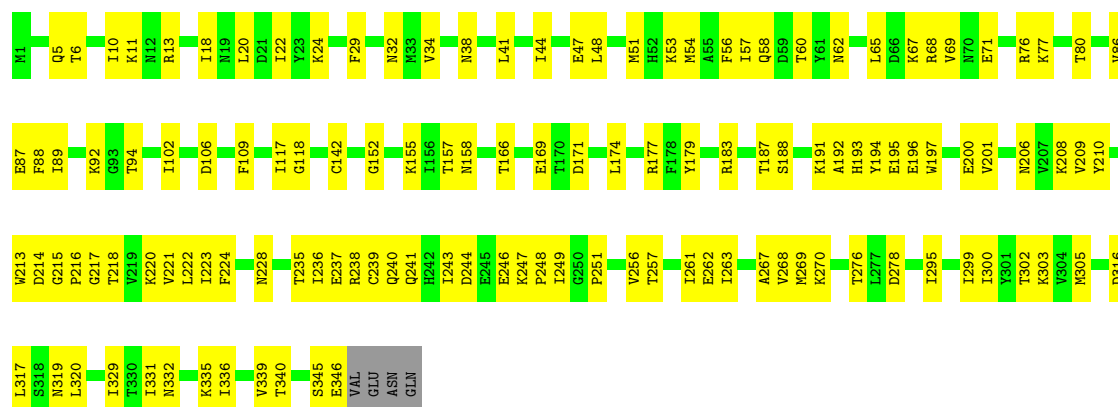
Chain o: 69% 30%





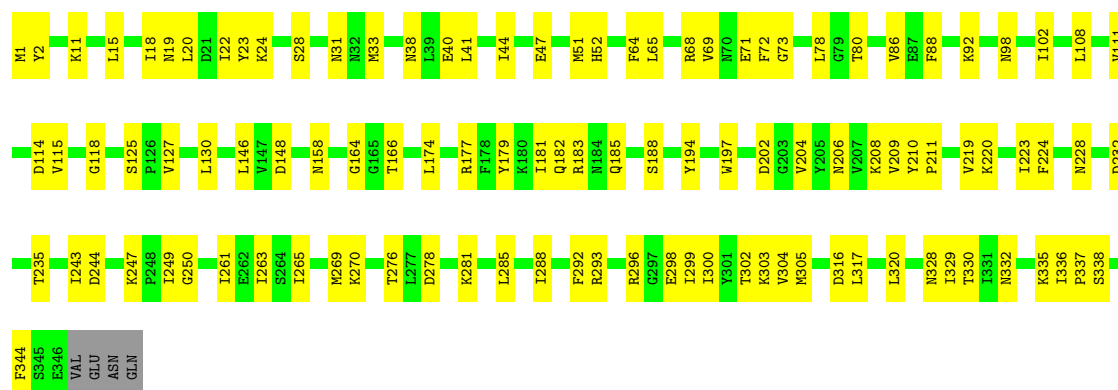
• Molecule 1: TRI-2 (CD1371)

Chain R: 63% 36%



• Molecule 1: TRI-2 (CD1371)

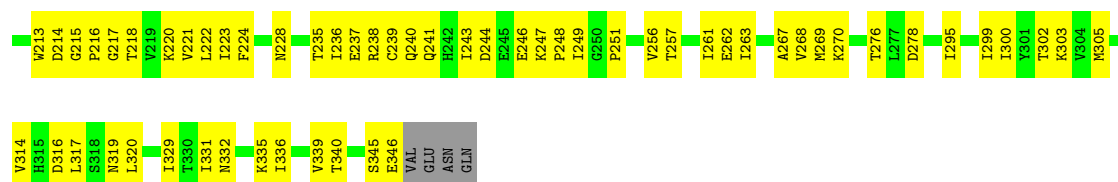
Chain e: 68% 31%



• Molecule 1: TRI-2 (CD1371)

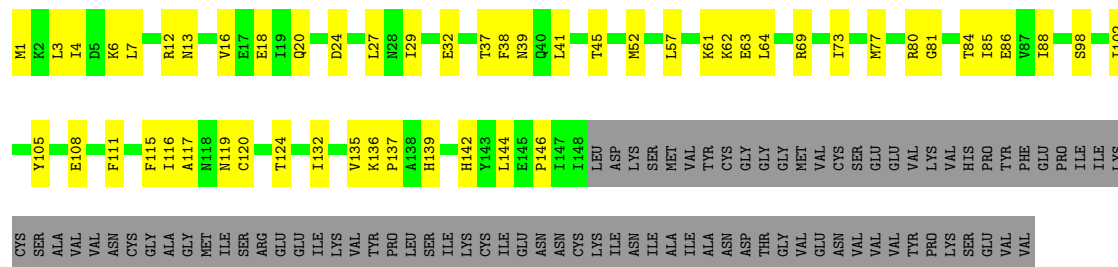
Chain Z: 63% 36%





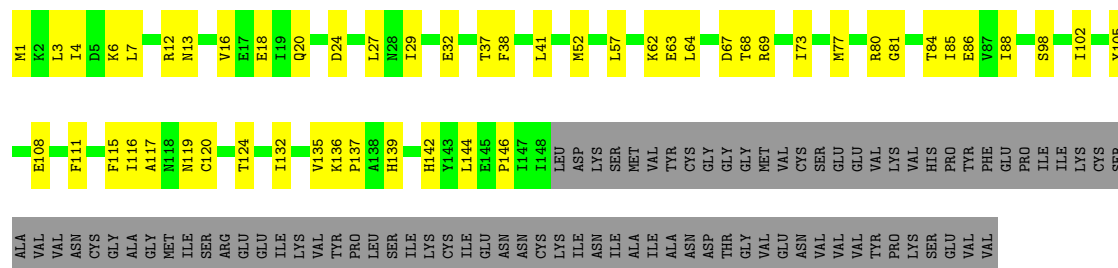
• Molecule 2: TRI-1 (CD1372)

Chain A: 41% 23% 36%



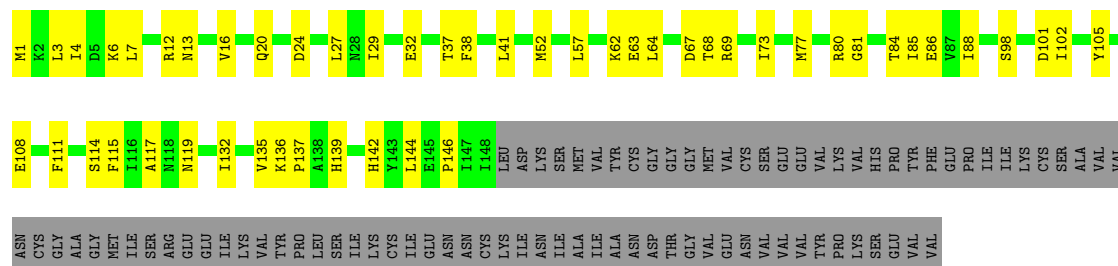
• Molecule 2: TRI-1 (CD1372)

Chain L: 41% 22% 36%



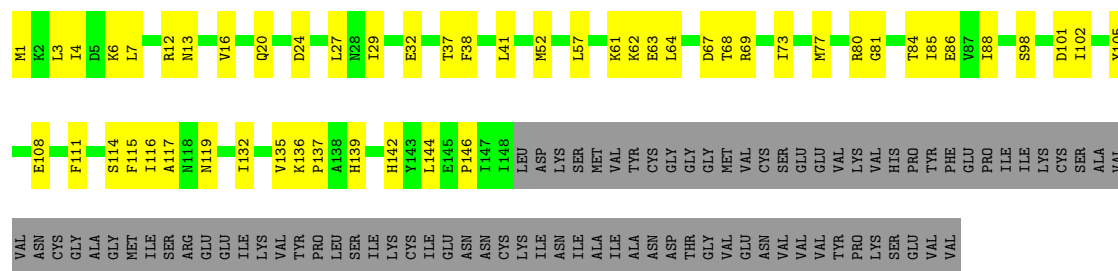
• Molecule 2: TRI-1 (CD1372)

Chain M: 42% 22% 36%



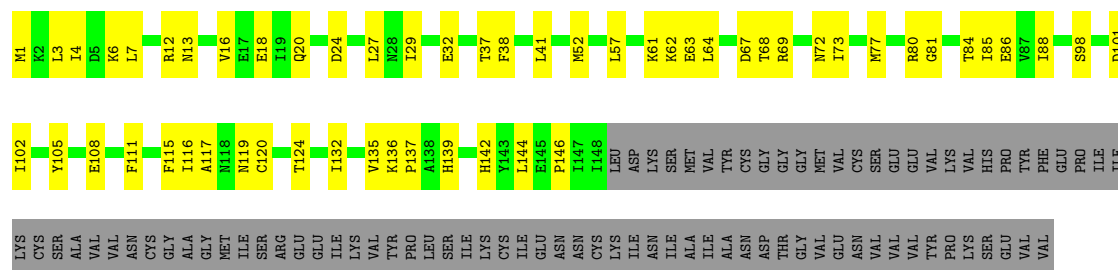
• Molecule 2: TRI-1 (CD1372)

Chain E: 41% 22% 36%



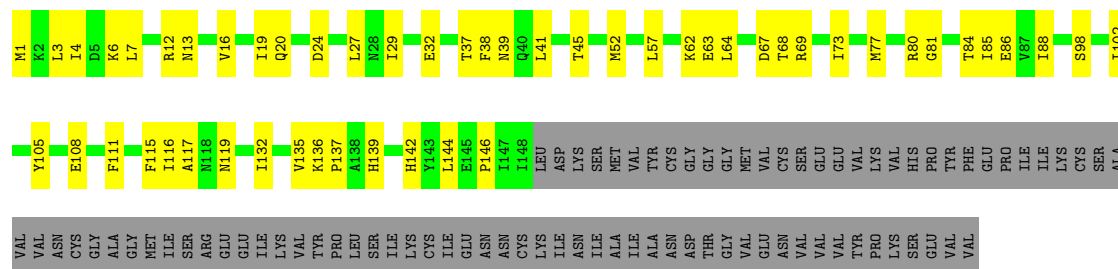
• Molecule 2: TRI-1 (CD1372)

Chain N: 40% 24% 36%



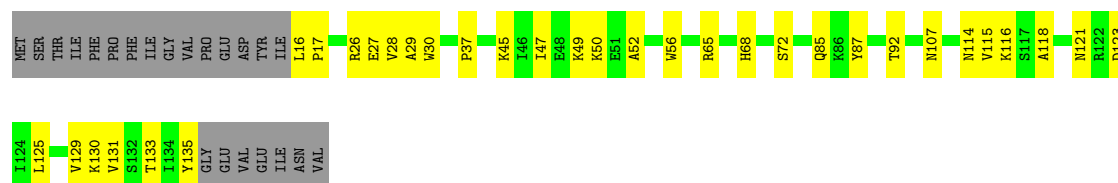
• Molecule 2: TRI-1 (CD1372)

Chain Y: 41% 22% 36%



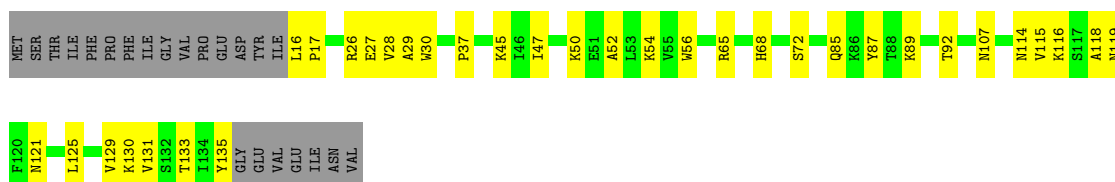
• Molecule 3: Sheath initiator (CD1370)

Chain j: 61% 23% 15%



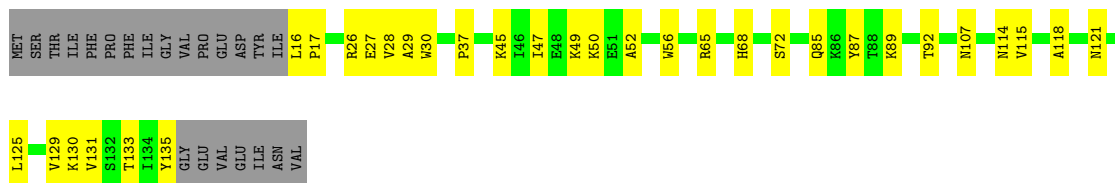
• Molecule 3: Sheath initiator (CD1370)

Chain i: 61% 24% 15%



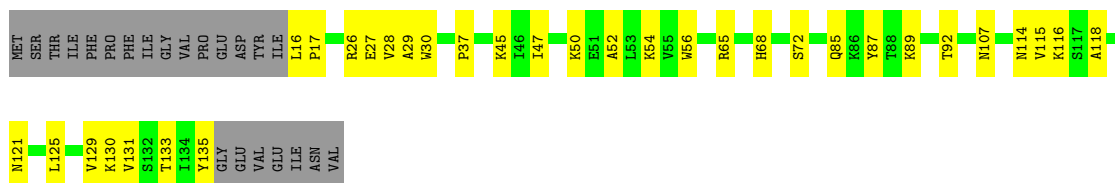
- Molecule 3: Sheath initiator (CD1370)

Chain k: 62% 23% 15%



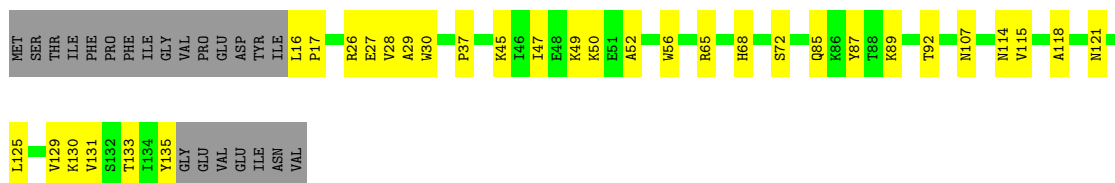
- Molecule 3: Sheath initiator (CD1370)

Chain J: 61% 23% 15%



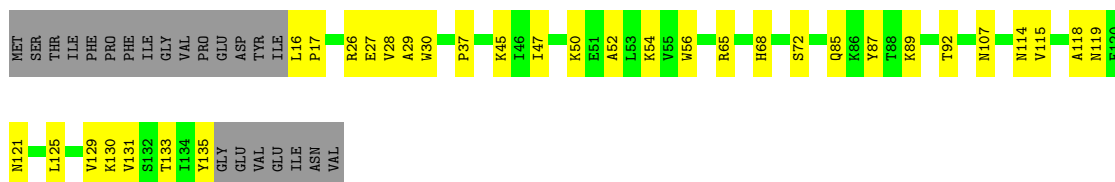
- Molecule 3: Sheath initiator (CD1370)

Chain l: 62% 23% 15%



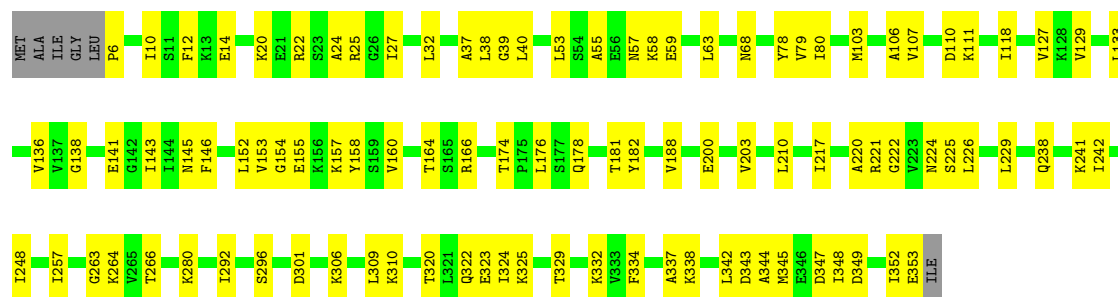
- Molecule 3: Sheath initiator (CD1370)

Chain d: 61% 23% 15%



- Molecule 4: Sheath (CD1363)

Chain P: 70% 28% .



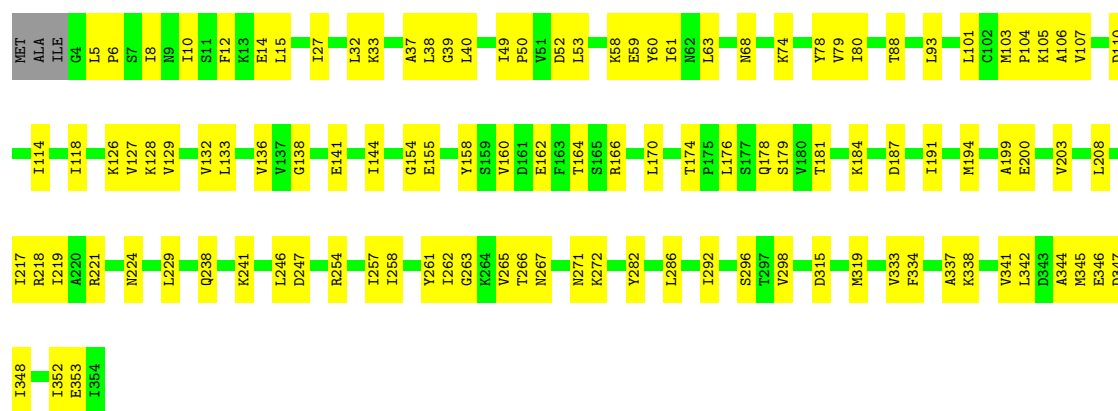
• Molecule 4: Sheath (CD1363)

Chain C: 65% 34%



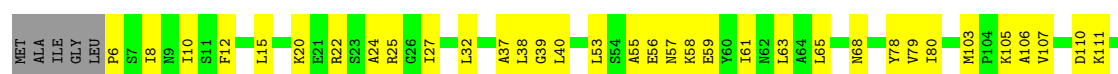
• Molecule 4: Sheath (CD1363)

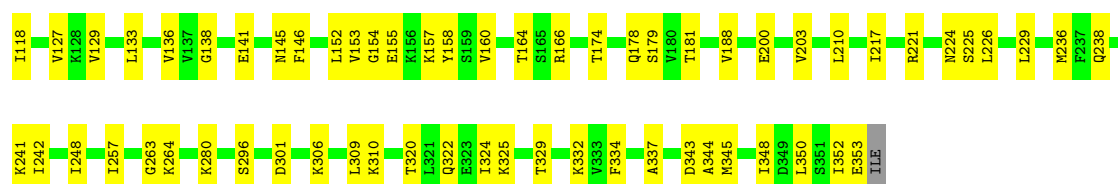
Chain D: 68% 31%



• Molecule 4: Sheath (CD1363)

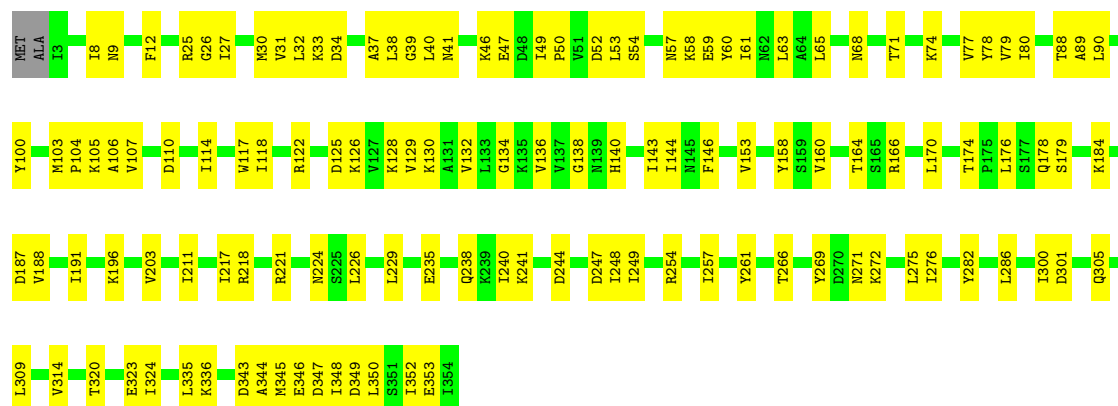
Chain f: 71% 27%





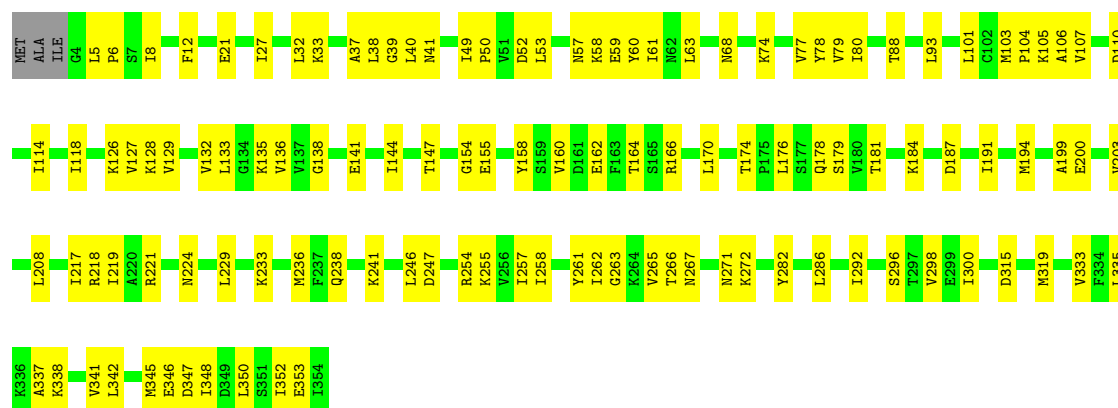
• Molecule 4: Sheath (CD1363)

Chain S: 64% 36% .



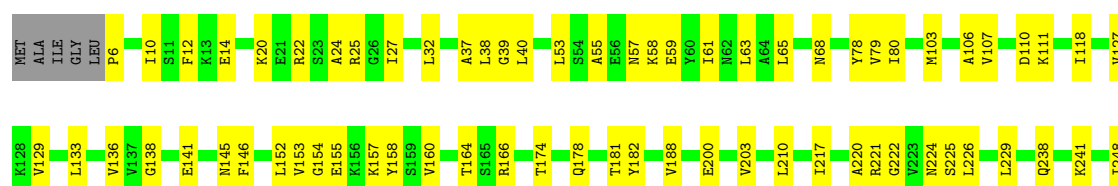
• Molecule 4: Sheath (CD1363)

Chain V: 66% 33% .



• Molecule 4: Sheath (CD1363)

Chain g: 71% 27% .





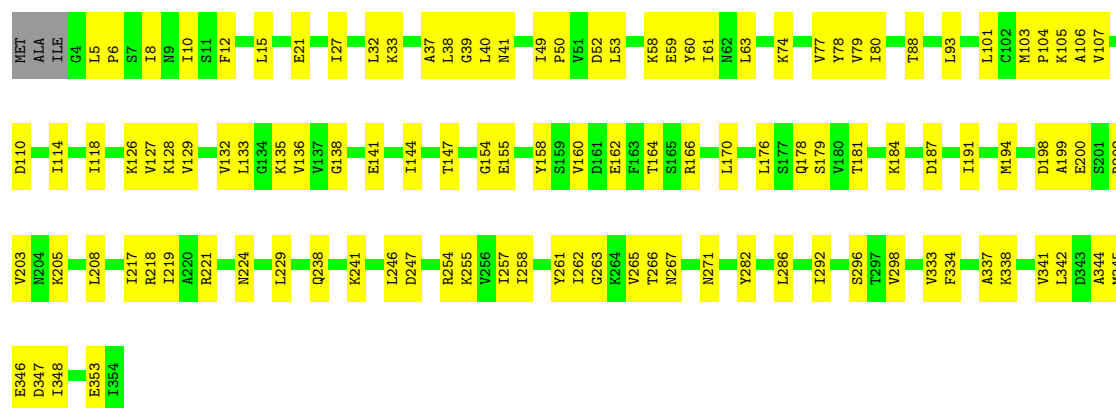
• Molecule 4: Sheath (CD1363)

Chain T: 65% 34%



• Molecule 4: Sheath (CD1363)

Chain W: 67% 32%



• Molecule 4: Sheath (CD1363)

Chain I: 73% 26%



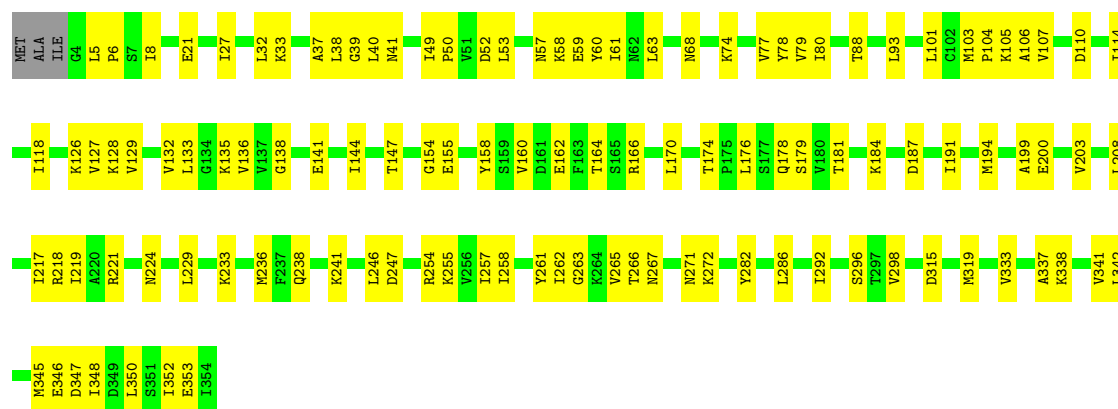
• Molecule 4: Sheath (CD1363)

Chain G:  64% 35%



• Molecule 4: Sheath (CD1363)

Chain H:  67% 32%



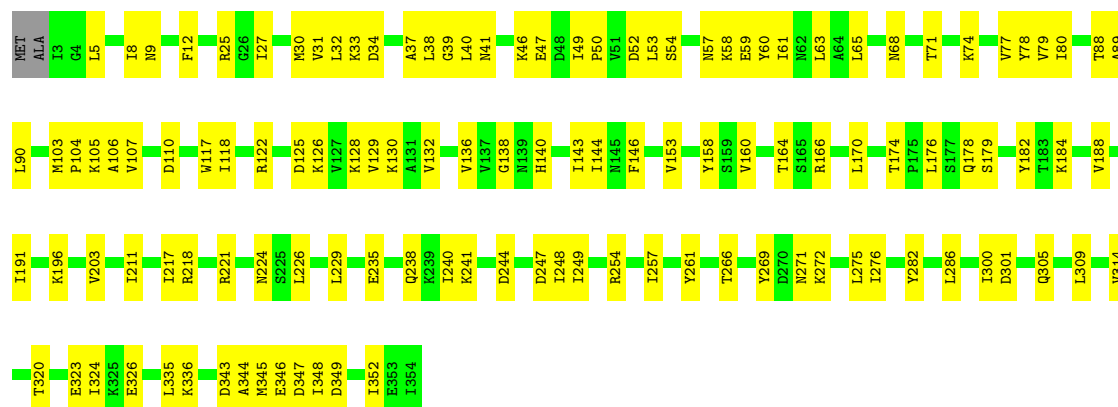
• Molecule 4: Sheath (CD1363)

Chain h:  73% 26%



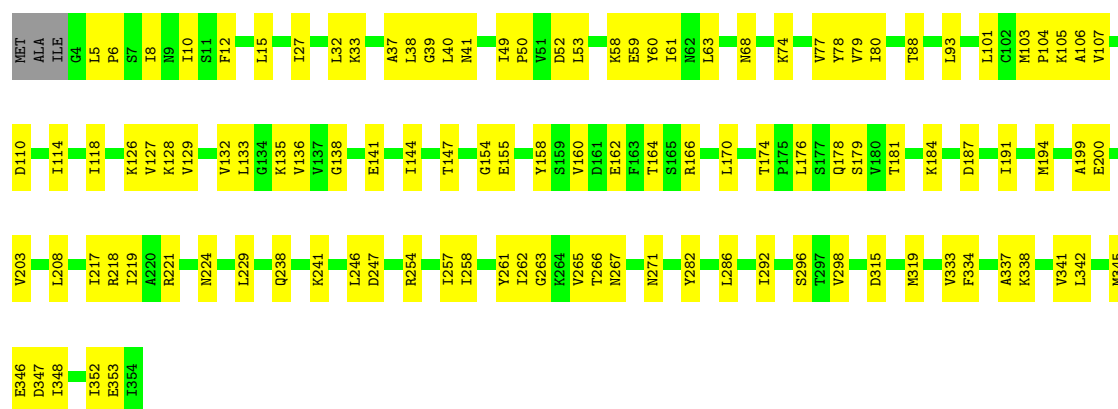
• Molecule 4: Sheath (CD1363)

Chain U:  65% 34%



• Molecule 4: Sheath (CD1363)

Chain X: 68% 32% .



• Molecule 4: Sheath (CD1363)

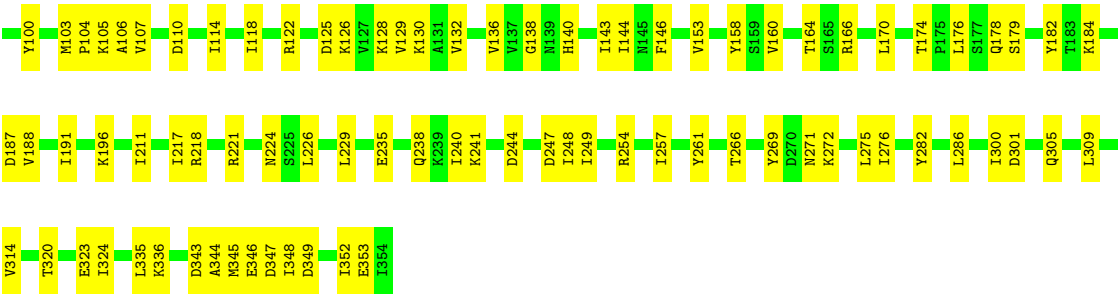
Chain c: 71% 27% .



• Molecule 4: Sheath (CD1363)

Chain a: 65% 35% .





● Molecule 4: Sheath (CD1363)



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	11219	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 ($e^-/\text{\AA}^2$)	50.0	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	3000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor

5 Model quality [i](#)

5.1 Standard geometry [i](#)

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	B	0.09	0/2795	0.25	0/3784
1	F	0.09	0/2795	0.25	0/3784
1	K	0.10	0/2795	0.28	0/3784
1	O	0.09	0/2795	0.25	0/3784
1	Q	0.09	0/2795	0.25	0/3784
1	R	0.09	0/2795	0.25	0/3784
1	Z	0.09	0/2795	0.25	0/3784
1	e	0.10	0/2795	0.28	0/3784
1	m	0.10	0/2795	0.28	0/3784
1	n	0.10	0/2795	0.28	0/3784
1	o	0.10	0/2795	0.28	0/3784
1	v	0.10	0/2795	0.28	0/3784
2	A	0.09	0/1235	0.26	0/1668
2	E	0.09	0/1235	0.26	0/1668
2	L	0.09	0/1235	0.26	0/1668
2	M	0.09	0/1235	0.26	0/1668
2	N	0.09	0/1235	0.26	0/1668
2	Y	0.09	0/1235	0.26	0/1668
3	J	0.09	0/1015	0.25	0/1369
3	d	0.09	0/1015	0.25	0/1369
3	i	0.09	0/1015	0.25	0/1369
3	j	0.09	0/1015	0.25	0/1369
3	k	0.10	0/1015	0.25	0/1369
3	l	0.10	0/1015	0.26	0/1369
4	C	0.10	0/2766	0.28	0/3729
4	D	0.10	0/2758	0.28	0/3718
4	G	0.10	0/2766	0.28	0/3729
4	H	0.10	0/2758	0.28	0/3718
4	I	0.09	0/2738	0.28	0/3690
4	P	0.09	0/2738	0.28	0/3690
4	S	0.10	0/2766	0.28	0/3729
4	T	0.10	0/2766	0.30	0/3729
4	U	0.10	0/2766	0.29	0/3729
4	V	0.10	0/2758	0.28	0/3718

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
4	W	0.10	0/2758	0.29	0/3718
4	X	0.10	0/2758	0.28	0/3718
4	a	0.10	0/2766	0.29	0/3729
4	b	0.10	0/2758	0.28	0/3718
4	c	0.09	0/2738	0.28	0/3690
4	f	0.09	0/2738	0.28	0/3690
4	g	0.09	0/2738	0.28	0/3690
4	h	0.10	0/2738	0.28	0/3690
All	All	0.10	0/96612	0.27	0/130452

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

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	B	2751	0	2720	94	0
1	F	2751	0	2720	95	0
1	K	2751	0	2720	79	0
1	O	2751	0	2720	97	0
1	Q	2751	0	2720	91	0
1	R	2751	0	2720	96	0
1	Z	2751	0	2720	95	0
1	e	2751	0	2720	83	0
1	m	2751	0	2720	79	0
1	n	2751	0	2720	77	0
1	o	2751	0	2720	80	0
1	v	2751	0	2720	80	0
2	A	1214	0	1203	44	0
2	E	1214	0	1203	42	0
2	L	1214	0	1203	43	0
2	M	1214	0	1203	38	0
2	N	1214	0	1203	46	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	Y	1214	0	1203	41	0
3	J	995	0	1011	26	0
3	d	995	0	1011	27	0
3	i	995	0	1011	28	0
3	j	995	0	1011	26	0
3	k	995	0	1011	25	0
3	l	995	0	1011	25	0
4	C	2738	0	2864	96	0
4	D	2730	0	2853	98	0
4	G	2738	0	2864	98	0
4	H	2730	0	2853	101	0
4	I	2710	0	2829	81	0
4	P	2710	0	2829	86	0
4	S	2738	0	2864	100	0
4	T	2738	0	2864	95	0
4	U	2738	0	2864	97	0
4	V	2730	0	2853	105	0
4	W	2730	0	2853	97	0
4	X	2730	0	2853	98	0
4	a	2738	0	2864	96	0
4	b	2730	0	2853	104	0
4	c	2710	0	2829	83	0
4	f	2710	0	2829	82	0
4	g	2710	0	2829	83	0
4	h	2710	0	2829	78	0
All	All	95334	0	97200	2701	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 14.

The worst 5 of 2701 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:I:329:THR:HG21	4:I:334:PHE:CE2	1.72	1.22
4:h:329:THR:HG21	4:h:334:PHE:CE2	1.73	1.20
4:I:329:THR:CG2	4:I:334:PHE:CE2	2.32	1.12
4:I:329:THR:CG2	4:I:334:PHE:HE2	1.62	1.12
4:h:329:THR:CG2	4:h:334:PHE:CE2	2.34	1.10

There are no symmetry-related clashes.

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	B	344/350 (98%)	336 (98%)	8 (2%)	0	100	100
1	F	344/350 (98%)	336 (98%)	8 (2%)	0	100	100
1	K	344/350 (98%)	338 (98%)	6 (2%)	0	100	100
1	O	344/350 (98%)	337 (98%)	7 (2%)	0	100	100
1	Q	344/350 (98%)	336 (98%)	8 (2%)	0	100	100
1	R	344/350 (98%)	337 (98%)	7 (2%)	0	100	100
1	Z	344/350 (98%)	335 (97%)	9 (3%)	0	100	100
1	e	344/350 (98%)	338 (98%)	6 (2%)	0	100	100
1	m	344/350 (98%)	338 (98%)	6 (2%)	0	100	100
1	n	344/350 (98%)	338 (98%)	6 (2%)	0	100	100
1	o	344/350 (98%)	338 (98%)	6 (2%)	0	100	100
1	v	344/350 (98%)	338 (98%)	6 (2%)	0	100	100
2	A	146/232 (63%)	143 (98%)	3 (2%)	0	100	100
2	E	146/232 (63%)	145 (99%)	1 (1%)	0	100	100
2	L	146/232 (63%)	143 (98%)	3 (2%)	0	100	100
2	M	146/232 (63%)	144 (99%)	2 (1%)	0	100	100
2	N	146/232 (63%)	143 (98%)	3 (2%)	0	100	100
2	Y	146/232 (63%)	143 (98%)	3 (2%)	0	100	100
3	J	118/142 (83%)	112 (95%)	6 (5%)	0	100	100
3	d	118/142 (83%)	112 (95%)	6 (5%)	0	100	100
3	i	118/142 (83%)	112 (95%)	6 (5%)	0	100	100
3	j	118/142 (83%)	112 (95%)	6 (5%)	0	100	100
3	k	118/142 (83%)	113 (96%)	5 (4%)	0	100	100
3	l	118/142 (83%)	113 (96%)	5 (4%)	0	100	100
4	C	350/354 (99%)	338 (97%)	12 (3%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	D	349/354 (99%)	337 (97%)	12 (3%)	0	100	100
4	G	350/354 (99%)	336 (96%)	14 (4%)	0	100	100
4	H	349/354 (99%)	337 (97%)	12 (3%)	0	100	100
4	I	346/354 (98%)	336 (97%)	10 (3%)	0	100	100
4	P	346/354 (98%)	336 (97%)	10 (3%)	0	100	100
4	S	350/354 (99%)	337 (96%)	13 (4%)	0	100	100
4	T	350/354 (99%)	337 (96%)	13 (4%)	0	100	100
4	U	350/354 (99%)	338 (97%)	12 (3%)	0	100	100
4	V	349/354 (99%)	337 (97%)	12 (3%)	0	100	100
4	W	349/354 (99%)	337 (97%)	12 (3%)	0	100	100
4	X	349/354 (99%)	337 (97%)	12 (3%)	0	100	100
4	a	350/354 (99%)	336 (96%)	14 (4%)	0	100	100
4	b	349/354 (99%)	337 (97%)	12 (3%)	0	100	100
4	c	346/354 (98%)	336 (97%)	10 (3%)	0	100	100
4	f	346/354 (98%)	336 (97%)	10 (3%)	0	100	100
4	g	346/354 (98%)	336 (97%)	10 (3%)	0	100	100
4	h	346/354 (98%)	336 (97%)	10 (3%)	0	100	100
All	All	11982/12816 (94%)	11640 (97%)	342 (3%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains ⓘ

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	313/317 (99%)	313 (100%)	0	100	100
1	F	313/317 (99%)	313 (100%)	0	100	100
1	K	313/317 (99%)	313 (100%)	0	100	100
1	O	313/317 (99%)	313 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	Q	313/317 (99%)	313 (100%)	0	100	100
1	R	313/317 (99%)	313 (100%)	0	100	100
1	Z	313/317 (99%)	313 (100%)	0	100	100
1	e	313/317 (99%)	313 (100%)	0	100	100
1	m	313/317 (99%)	313 (100%)	0	100	100
1	n	313/317 (99%)	313 (100%)	0	100	100
1	o	313/317 (99%)	313 (100%)	0	100	100
1	v	313/317 (99%)	313 (100%)	0	100	100
2	A	139/213 (65%)	139 (100%)	0	100	100
2	E	139/213 (65%)	139 (100%)	0	100	100
2	L	139/213 (65%)	139 (100%)	0	100	100
2	M	139/213 (65%)	139 (100%)	0	100	100
2	N	139/213 (65%)	139 (100%)	0	100	100
2	Y	139/213 (65%)	139 (100%)	0	100	100
3	J	110/130 (85%)	110 (100%)	0	100	100
3	d	110/130 (85%)	110 (100%)	0	100	100
3	i	110/130 (85%)	110 (100%)	0	100	100
3	j	110/130 (85%)	110 (100%)	0	100	100
3	k	110/130 (85%)	110 (100%)	0	100	100
3	l	110/130 (85%)	110 (100%)	0	100	100
4	C	308/309 (100%)	308 (100%)	0	100	100
4	D	307/309 (99%)	307 (100%)	0	100	100
4	G	308/309 (100%)	308 (100%)	0	100	100
4	H	307/309 (99%)	307 (100%)	0	100	100
4	I	305/309 (99%)	305 (100%)	0	100	100
4	P	305/309 (99%)	305 (100%)	0	100	100
4	S	308/309 (100%)	308 (100%)	0	100	100
4	T	308/309 (100%)	308 (100%)	0	100	100
4	U	308/309 (100%)	308 (100%)	0	100	100
4	V	307/309 (99%)	307 (100%)	0	100	100
4	W	307/309 (99%)	307 (100%)	0	100	100

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	X	307/309 (99%)	307 (100%)	0	100	100
4	a	308/309 (100%)	308 (100%)	0	100	100
4	b	307/309 (99%)	307 (100%)	0	100	100
4	c	305/309 (99%)	305 (100%)	0	100	100
4	f	305/309 (99%)	305 (100%)	0	100	100
4	g	305/309 (99%)	305 (100%)	0	100	100
4	h	305/309 (99%)	305 (100%)	0	100	100
All	All	10770/11424 (94%)	10770 (100%)	0	100	100

There are no protein residues with a non-rotameric sidechain to report.

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 110 such sidechains are listed below:

Mol	Chain	Res	Type
2	E	119	ASN
1	o	38	ASN
1	Z	227	ASN
4	a	57	ASN
4	I	224	ASN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

There are no ligands in this entry.

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Map visualisation

This section contains visualisations of the EMDB entry EMD-42964. These allow visual inspection of the internal detail of the map and identification of artifacts.

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

6.1 Orthogonal projections

This section was not generated.

6.2 Central slices

This section was not generated.

6.3 Largest variance slices

This section was not generated.

6.4 Orthogonal standard-deviation projections (False-color)

This section was not generated.

6.5 Orthogonal surface views

This section was not generated.

6.6 Mask visualisation

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 ⓘ

This section was not generated.

7.2 Volume estimate versus contour level ⓘ

This section was not generated.

7.3 Rotationally averaged power spectrum ⓘ

This section was not generated. The rotationally averaged power spectrum had issues being displayed.

8 Fourier-Shell correlation

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

9 Map-model fit

This section was not generated.