



wwPDB X-ray Structure Validation Summary Report ⓘ

Sep 14, 2023 – 10:53 PM EDT

PDB ID : 4V99
Title : The Crystallographic Structure of Panicum Mosaic Virus
Authors : Makino, D.L.; Larson, S.B.; McPherson, A.
Deposited on : 2012-07-04
Resolution : 2.90 Å(reported)

This is a wwPDB X-ray Structure 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/XrayValidationReportHelp>

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:

MolProbity : 4.02b-467
Xtrriage (Phenix) : 1.13
EDS : 2.35.1
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac : 5.8.0158
CCP4 : 7.0.044 (Gargrove)
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.35.1

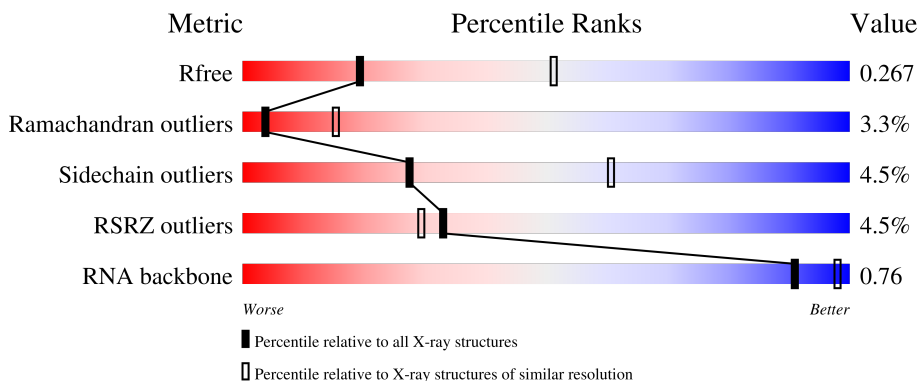
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.90 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1957 (2.90-2.90)
Ramachandran outliers	138981	2115 (2.90-2.90)
Sidechain outliers	138945	2117 (2.90-2.90)
RSRZ outliers	127900	1906 (2.90-2.90)
RNA backbone	3102	1007 (3.16-2.64)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A1	242	 2% 83% 6% • 10%
1	A4	242	 71% 5% 24%
1	A5	242	 % 70% 8% 22%
1	A6	242	 3% 83% 6% • 10%
1	AA	242	 71% 5% 24%

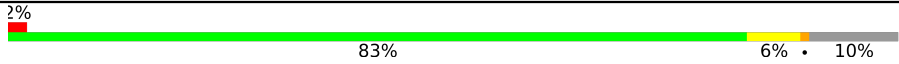




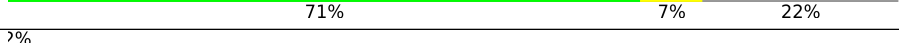



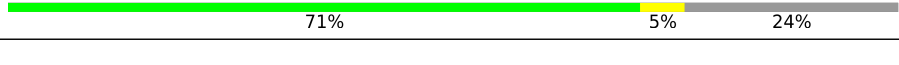


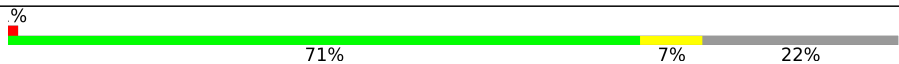







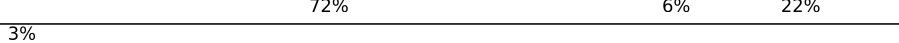
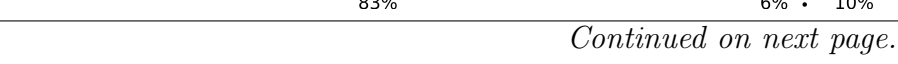



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	AB	242	% 71% 6% • 22%
1	AC	242	3% 83% 6% • 10%
1	AF	242	72% • 24%
1	AG	242	71% 7% 22%
1	AH	242	3% 83% 7% 10%
1	AK	242	70% 5% • 24%
1	AL	242	% 71% 7% 22%
1	AM	242	2% 83% 6% • 10%
1	AP	242	70% 6% 24%
1	AQ	242	% 71% 7% 22%
1	AR	242	2% 83% 5% • 10%
1	AU	242	71% 5% 24%
1	AV	242	% 72% 6% 22%
1	AW	242	3% 83% 6% 10%
1	AZ	242	71% 5% 24%
1	Aa	242	72% 6% 22%
1	Ab	242	2% 83% 5% • 10%
1	Ae	242	71% 5% 24%
1	Af	242	% 71% 7% • 22%
1	Ag	242	2% 83% 6% • 10%
1	Aj	242	71% 5% 24%
1	Ak	242	71% 7% 22%
1	Al	242	2% 83% 6% • 10%
1	Ao	242	% 71% 5% 24%
1	Ap	242	71% 7% • 22%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	Aq	242	 2% 83% 6% 10%
1	At	242	 72% 24%
1	Au	242	 71% 7% 22%
1	Av	242	 2% 82% 7% 10%
1	Ay	242	 71% 5% 24%
1	Az	242	 71% 7% 22%
1	B1	242	 2% 83% 5% 10%
1	B4	242	 71% 5% 24%
1	B5	242	 1% 72% 6% 22%
1	B6	242	 3% 83% 6% 10%
1	BA	242	 71% 5% 24%
1	BB	242	 71% 6% 22%
1	BC	242	 3% 83% 6% 10%
1	BF	242	 71% 5% 24%
1	BG	242	 1% 71% 7% 22%
1	BH	242	 2% 83% 5% 10%
1	BK	242	 71% 5% 24%
1	BL	242	 71% 7% 22%
1	BM	242	 3% 82% 7% 10%
1	BP	242	 71% 5% 24%
1	BQ	242	 70% 7% 22%
1	BR	242	 2% 83% 6% 10%
1	BU	242	 1% 71% 5% 24%
1	BV	242	 72% 6% 22%
1	BW	242	 3% 83% 6% 10%




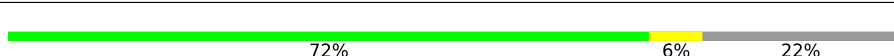
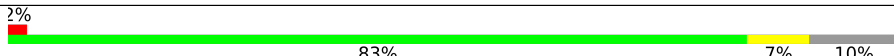
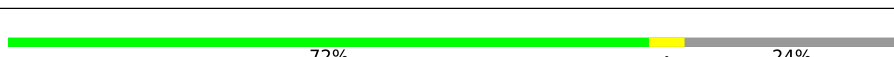
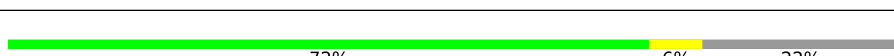
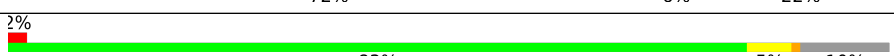
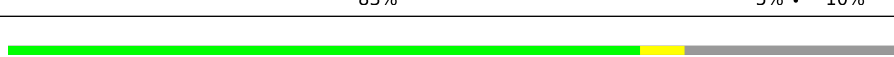

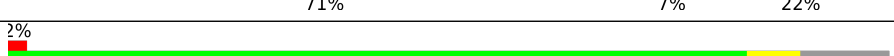
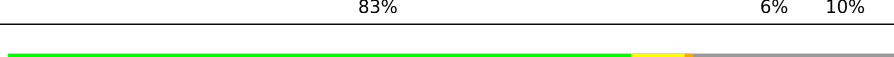

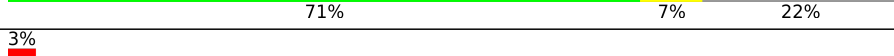
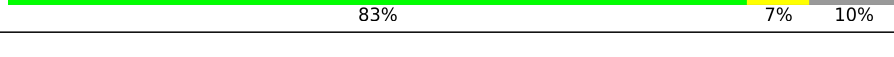




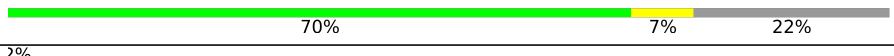

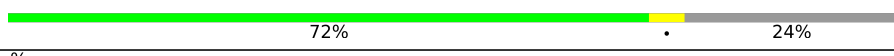



Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	BZ	242	71% 5% 24%
1	Ba	242	72% 6% 22%
1	Bb	242	2% 82% 7% 10%
1	Be	242	71% 5% 24%
1	Bf	242	71% 7% 22%
1	Bg	242	3% 82% 7% 10%
1	Bj	242	71% 5% 24%
1	Bk	242	72% 6% 22%
1	Bl	242	3% 83% 6% 10%
1	Bo	242	71% 5% 24%
1	Bp	242	70% 8% 22%
1	Bq	242	2% 82% 7% 10%
1	Bt	242	72% 24%
1	Bu	242	72% 6% 22%
1	Bv	242	3% 83% 6% 10%
1	By	242	69% 7% 24%
1	Bz	242	71% 7% 22%
1	C1	242	2% 83% 6% 10%
1	C4	242	71% 5% 24%
1	C5	242	71% 7% 22%
1	C6	242	2% 83% 7% 10%
1	CA	242	71% 5% 24%
1	CB	242	71% 7% 22%
1	CC	242	3% 82% 7% 10%
1	CF	242	71% 5% 24%



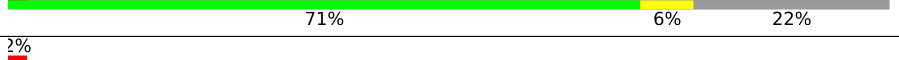
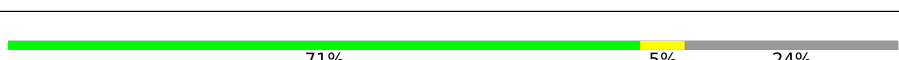



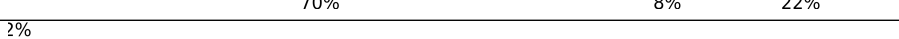
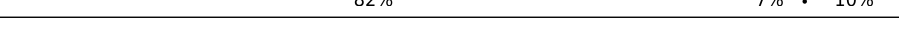



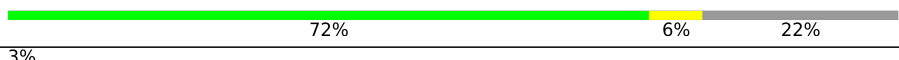
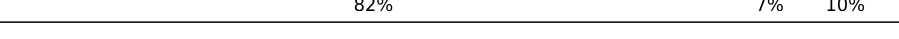






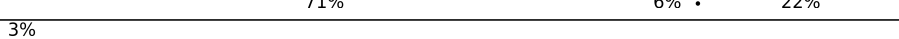




Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	CG	242	
1	CH	242	
1	CK	242	
1	CL	242	
1	CM	242	
1	CP	242	
1	CQ	242	
1	CR	242	
1	CU	242	
1	CV	242	
1	CW	242	
1	CZ	242	
1	Ca	242	
1	Cb	242	
1	Ce	242	
1	Cf	242	
1	Cg	242	
1	Cj	242	
1	Ck	242	
1	Cl	242	
1	Co	242	
1	Cp	242	
1	Cq	242	
1	Ct	242	
1	Cu	242	


























Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	Cv	242	 4% 83% 6% • 10%
1	Cy	242	 71% 5% 24%
1	Cz	242	 2% 71% 6% 22%
1	D1	242	 2% 82% 7% • 10%
1	D4	242	 71% 5% 24%
1	D5	242	 72% 6% 22%
1	D6	242	 3% 83% 6% • 10%
1	DA	242	 71% 5% 24%
1	DB	242	 70% 8% 22%
1	DC	242	 2% 82% 7% • 10%
1	DF	242	 72% • 24%
1	DG	242	 71% 7% 22%
1	DH	242	 2% 83% 6% • 10%
1	DK	242	 71% 5% • 24%
1	DL	242	 72% 6% 22%
1	DM	242	 3% 82% 7% 10%
1	DP	242	 72% 5% 24%
1	DQ	242	 71% 7% 22%
1	DR	242	 2% 83% 6% 10%
1	DU	242	 71% 5% 24%
1	DV	242	 71% 7% 22%
1	DW	242	 4% 83% 6% • 10%
1	DZ	242	 71% 5% 24%
1	Da	242	 71% 6% • 22%
1	Db	242	 3% 83% 6% • 10%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	De	242	 71% 5% 24%
1	Df	242	 72% 6% 22%
1	Dg	242	 2% 83% 6% 10%
1	Dj	242	 70% 6% 24%
1	Dk	242	 73% 5% 22%
1	Dl	242	 2% 83% 6% 10%
1	Do	242	 72% 24%
1	Dp	242	 71% 7% 22%
1	Dq	242	 3% 82% 7% 10%
1	Dt	242	 71% 5% 24%
1	Du	242	 72% 6% 22%
1	Dv	242	 2% 83% 6% 10%
1	Dy	242	 70% 5% 24%
1	Dz	242	 71% 7% 22%
1	E1	242	 2% 83% 6% 10%
1	E4	242	 71% 5% 24%
1	E5	242	 72% 6% 22%
1	E6	242	 2% 83% 6% 10%
1	EA	242	 71% 5% 24%
1	EB	242	 70% 8% 22%
1	EC	242	 2% 82% 7% 10%
1	EF	242	 72% 24%
1	EG	242	 72% 6% 22%
1	EH	242	 3% 83% 6% 10%
1	EK	242	 72% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	EL	242	
1	EM	242	
1	EP	242	
1	EQ	242	
1	ER	242	
1	EU	242	
1	EV	242	
1	EW	242	
1	EZ	242	
1	Ea	242	
1	Eb	242	
1	Ee	242	
1	Ef	242	
1	Eg	242	
1	Ej	242	
1	Ek	242	
1	El	242	
1	Eo	242	
1	Ep	242	
1	Eq	242	
1	Et	242	
1	Eu	242	
1	Ev	242	
1	Ey	242	
1	Ez	242	

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	F1	242	4% 84% 5% 10%
1	F4	242	73% 24%
1	F5	242	73% 5% 22%
1	F6	242	4% 83% 6% 10%
1	FA	242	73% 24%
1	FB	242	74% 22%
1	FC	242	4% 84% 5% 10%
1	FF	242	72% 5% 24%
1	FG	242	74% 5% 22%
1	FH	242	2% 84% 5% 10%
1	FK	242	73% 24%
1	FL	242	2% 73% 5% 22%
1	FM	242	2% 83% 5% 10%
1	FP	242	72% 24%
1	FQ	242	73% 5% 22%
1	FR	242	4% 84% 5% 10%
1	FU	242	71% 5% 24%
1	FV	242	73% 5% 22%
1	FW	242	3% 82% 7% 10%
1	FZ	242	72% 24%
1	Fa	242	2% 73% 5% 22%
1	Fb	242	3% 84% 5% 10%
1	Fe	242	5% 73% 24% 1%
1	Ff	242	6% 73% 5% 22%
1	Fg	242	8% 84% 5% 10%






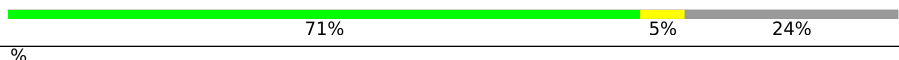


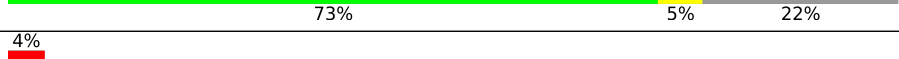
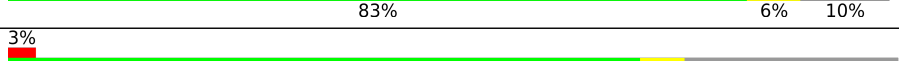
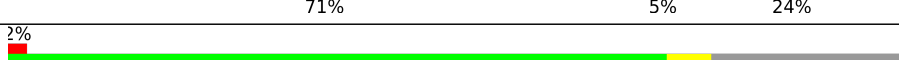
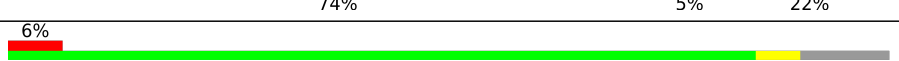
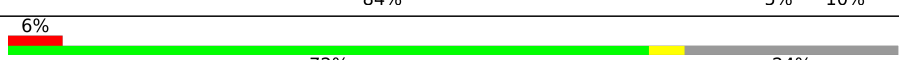
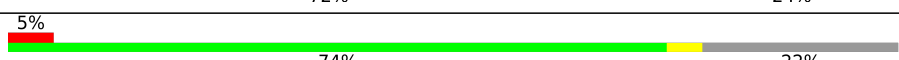
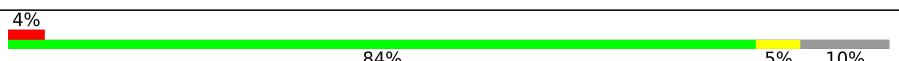
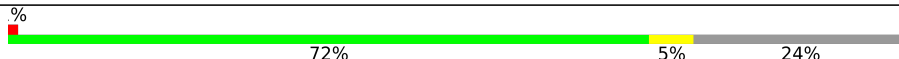
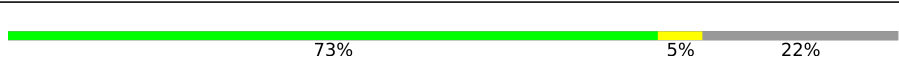



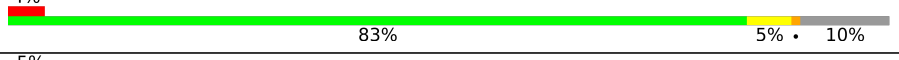
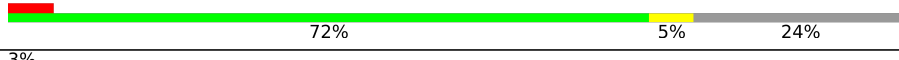
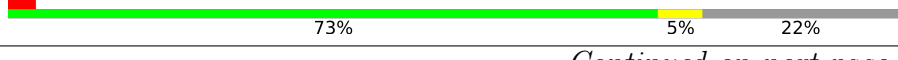

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	Fj	242	% 71% 5% 24%
1	Fk	242	3% 74% 22%
1	Fl	242	3% 84% 5% 10%
1	Fo	242	2% 73% 24%
1	Fp	242	74% 22%
1	Fq	242	2% 83% 6% 10%
1	Ft	242	71% 5% 24%
1	Fu	242	73% 5% 22%
1	Fv	242	2% 84% 5% 10%
1	Fy	242	73% 24%
1	Fz	242	2% 74% 22%
1	G1	242	4% 84% 5% 10%
1	G4	242	2% 73% 24%
1	G5	242	4% 73% 5% 22%
1	G6	242	5% 84% 5% 10%
1	GA	242	73% 24%
1	GB	242	73% 5% 22%
1	GC	242	4% 84% 5% 10%
1	GF	242	72% 5% 24%
1	GG	242	73% 5% 22%
1	GH	242	2% 84% 5% 10%
1	GK	242	3% 71% 5% 24%
1	GL	242	4% 73% 5% 22%
1	GM	242	3% 84% 5% 10%
1	GP	242	72% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	GQ	242	 % 73% 5% 22%
1	GR	242	 2% 84% 5% 10%
1	GU	242	 % 72% 5% 24%
1	GV	242	 % 74% 5% 22%
1	GW	242	 2% 83% 6% 10%
1	GZ	242	 % 71% 5% 24%
1	Ga	242	 % 73% 5% 22%
1	Gb	242	 4% 84% 5% 10%
1	Ge	242	 2% 73% 5% 24%
1	Gf	242	 % 73% 5% 22%
1	Gg	242	 4% 83% 6% 10%
1	Gj	242	 3% 71% 5% 24%
1	Gk	242	 2% 74% 5% 22%
1	Gl	242	 6% 84% 5% 10%
1	Go	242	 6% 72% 5% 24%
1	Gp	242	 5% 74% 5% 22%
1	Gq	242	 4% 84% 5% 10%
1	Gt	242	 % 72% 5% 24%
1	Gu	242	 % 73% 5% 22%
1	Gv	242	 2% 84% 5% 10%
1	Gy	242	 % 71% 5% 24%
1	Gz	242	 % 74% 5% 22%
1	H1	242	 4% 83% 5% 10%
1	H4	242	 5% 72% 5% 24%
1	H5	242	 3% 73% 5% 22%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	H6	242	6% 84% 5% 10%
1	HA	242	% 72% 5% 24%
1	HB	242	% 74% 5% 22%
1	HC	242	4% 83% 6% 10%
1	HF	242	% 73% • 24%
1	HG	242	% 74% 5% 22%
1	HH	242	3% 83% 6% 10%
1	HK	242	% 72% • 24%
1	HL	242	% 74% • 22%
1	HM	242	2% 84% 5% 10%
1	HP	242	% 72% • 24%
1	HQ	242	% 73% 5% 22%
1	HR	242	4% 83% 6% 10%
1	HU	242	% 72% • 24%
1	HV	242	% 73% 5% 22%
1	HW	242	5% 82% 7% 10%
1	HZ	242	% 71% 5% 24%
1	Ha	242	% 74% • 22%
1	Hb	242	3% 84% 5% 10%
1	He	242	3% 71% 5% 24%
1	Hf	242	5% 74% 5% 22%
1	Hg	242	7% 83% 6% 10%
1	Hj	242	3% 73% • 24%
1	Hk	242	% 73% 5% 22%
1	Hl	242	4% 83% 5% • 10%









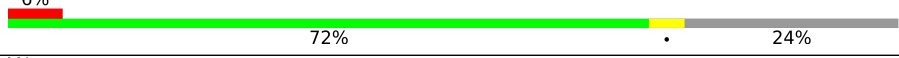


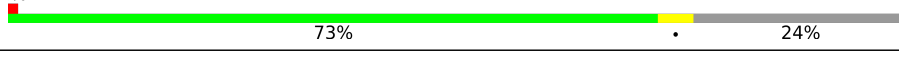


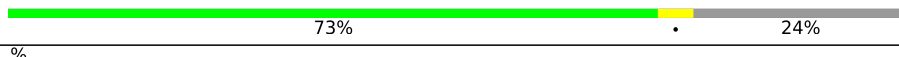
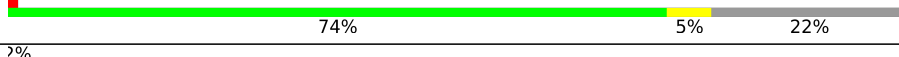








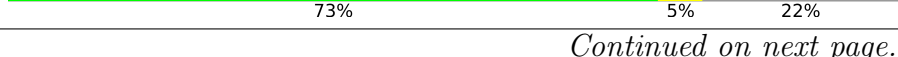
Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	Ho	242	72% 24%
1	Hp	242	74% 22%
1	Hq	242	84% 10%
1	Ht	242	72% 24%
1	Hu	242	74% 22%
1	Hv	242	83% 10%
1	Hy	242	73% 24%
1	Hz	242	74% 22%
1	I1	242	84% 10%
1	I4	242	71% 24%
1	I5	242	73% 22%
1	I6	242	83% 10%
1	IA	242	72% 24%
1	IB	242	74% 22%
1	IC	242	83% 10%
1	IF	242	73% 24%
1	IG	242	74% 22%
1	IH	242	84% 10%
1	IK	242	72% 24%
1	IL	242	73% 22%
1	IM	242	84% 10%
1	IP	242	72% 24%
1	IQ	242	74% 22%
1	IR	242	83% 10%
1	IU	242	72% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	IV	242	 73% 5% 22%
1	IW	242	 2% 83% 6% 10%
1	IZ	242	 72% 5% 24%
1	Ia	242	 73% 5% 22%
1	Ib	242	 3% 83% 6% 10%
1	Ie	242	 2% 72% 5% 24%
1	If	242	 1% 74% 22%
1	Ig	242	 4% 84% 5% 10%
1	Ij	242	 6% 72% 24%
1	Ik	242	 2% 73% 5% 22%
1	Il	242	 5% 83% 6% 10%
1	Io	242	 1% 73% 24%
1	Ip	242	 74% 22%
1	Iq	242	 3% 84% 5% 10%
1	It	242	 73% 24%
1	Iu	242	 1% 74% 5% 22%
1	Iv	242	 2% 83% 6% 10%
1	Iy	242	 1% 72% 24%
1	Iz	242	 1% 73% 5% 22%
1	J1	242	 2% 84% 5% 10%
1	J4	242	 5% 72% 24%
1	J5	242	 2% 72% 6% 22%
1	J6	242	 4% 83% 5% 10%
1	JA	242	 2% 72% 24%
1	JB	242	 1% 73% 5% 22%






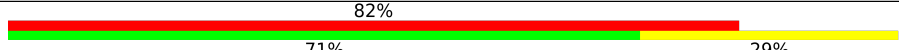
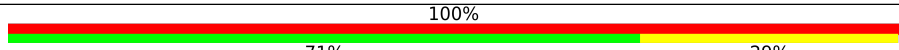

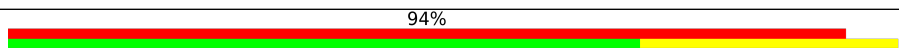
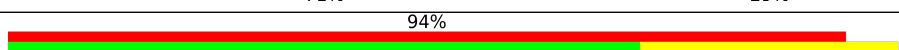



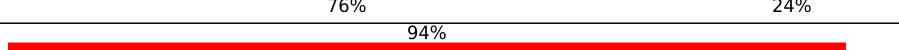
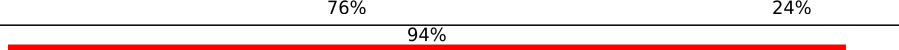

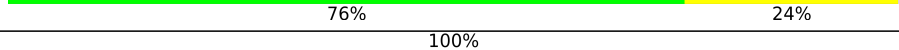
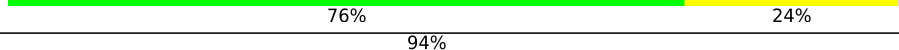

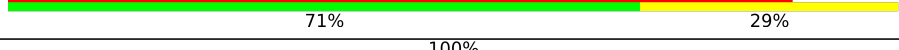





Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	JC	242	4% 84% 5% 10%
1	JF	242	% 72% 24%
1	JG	242	% 73% 5% 22%
1	JH	242	3% 83% 5% 10%
1	JK	242	8% 73% 24%
1	JL	242	2% 74% 22%
1	JM	242	6% 84% 5% 10%
1	JP	242	4% 72% 24%
1	JQ	242	% 74% 22%
1	JR	242	5% 84% 5% 10%
1	JU	242	2% 73% 24%
1	JV	242	72% 5% 22%
1	JW	242	5% 84% 5% 10%
1	JZ	242	2% 73% 24%
1	Ja	242	2% 74% 22%
1	Jb	242	3% 83% 6% 10%
1	Je	242	73% 24%
1	Jf	242	74% 22%
1	Jg	242	2% 84% 5% 10%
1	Jj	242	72% 24%
1	JK	242	73% 5% 22%
1	Jl	242	2% 84% 5% 10%
1	Jo	242	73% 24%
1	Jp	242	73% 5% 22%
1	Jq	242	3% 84% 5% 10%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	Jt	242	 71% 5% 24%
1	Ju	242	 2% 74% 22%
1	Jv	242	 2% 84% 5% 10%
1	Jy	242	 2% 71% 5% 24%
1	Jz	242	 2% 72% 6% 22%
2	A2	17	 82% 71% 29%
2	A7	17	 100% 71% 29%
2	AD	17	 88% 71% 29%
2	AI	17	 94% 71% 29%
2	AN	17	 94% 71% 29%
2	AS	17	 71% 71% 29%
2	AX	17	 76% 71% 29%
2	Ac	17	 88% 76% 24%
2	Ah	17	 94% 76% 24%
2	Am	17	 94% 76% 24%
2	Ar	17	 88% 76% 24%
2	Aw	17	 100% 76% 24%
2	B2	17	 94% 71% 29%
2	B7	17	 88% 71% 29%
2	BD	17	 100% 71% 29%
2	BI	17	 94% 71% 29%
2	BN	17	 65% 71% 29%
2	BS	17	 88% 71% 29%
2	BX	17	 94% 71% 29%
2	Bc	17	 82% 76% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	Bh	17	94% 76% 24%
2	Bm	17	94% 76% 24%
2	Br	17	94% 76% 24%
2	Bw	17	94% 76% 24%
2	C2	17	76% 71% 29%
2	C7	17	82% 71% 29%
2	CD	17	94% 71% 29%
2	CI	17	94% 71% 29%
2	CN	17	94% 71% 29%
2	CS	17	76% 71% 29%
2	CX	17	94% 71% 29%
2	Cc	17	94% 76% 24%
2	Ch	17	65% 76% 24%
2	Cm	17	100% 76% 24%
2	Cr	17	82% 76% 24%
2	Cw	17	88% 76% 24%
2	D2	17	100% 71% 29%
2	D7	17	88% 71% 29%
2	DD	17	94% 71% 29%
2	DI	17	76% 71% 29%
2	DN	17	100% 71% 29%
2	DS	17	82% 71% 29%
2	DX	17	100% 71% 29%
2	Dc	17	88% 76% 24%
2	Dh	17	100% 76% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	Dm	17	82% 76% 24%
2	Dr	17	100% 76% 24%
2	Dw	17	88% 76% 24%
2	E2	17	94% 71% 29%
2	E7	17	88% 71% 29%
2	ED	17	88% 71% 29%
2	EI	17	82% 71% 29%
2	EN	17	88% 71% 29%
2	ES	17	88% 71% 29%
2	EX	17	88% 71% 29%
2	Ec	17	82% 76% 24%
2	Eh	17	94% 76% 24%
2	Em	17	76% 76% 24%
2	Er	17	100% 76% 24%
2	Ew	17	100% 76% 24%
2	F2	17	100% 71% 29%
2	F7	17	88% 71% 29%
2	FD	17	76% 71% 29%
2	FI	17	88% 71% 29%
2	FN	17	100% 71% 29%
2	FS	17	76% 71% 29%
2	FX	17	94% 71% 29%
2	Fc	17	100% 76% 24%
2	Fh	17	76% 76% 24%
2	Fm	17	100% 76% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	Fr	17	94% 76% 24%
2	Fw	17	88% 76% 24%
2	G2	17	94% 71% 29%
2	G7	17	88% 71% 29%
2	GD	17	100% 71% 29%
2	GI	17	100% 71% 29%
2	GN	17	100% 71% 29%
2	GS	17	100% 71% 29%
2	GX	17	71% 71% 29%
2	Gc	17	76% 76% 24%
2	Gh	17	100% 76% 24%
2	Gm	17	100% 76% 24%
2	Gr	17	82% 76% 24%
2	Gw	17	94% 76% 24%
2	H2	17	100% 71% 29%
2	H7	17	100% 71% 29%
2	HD	17	88% 71% 29%
2	HI	17	94% 71% 29%
2	HN	17	100% 71% 29%
2	HS	17	88% 71% 29%
2	HX	17	65% 71% 29%
2	Hc	17	65% 76% 24%
2	Hh	17	94% 76% 24%
2	Hm	17	88% 76% 24%
2	Hr	17	94% 76% 24%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
2	Hw	17	94% 76% 24%
2	I2	17	82% 71% 29%
2	I7	17	88% 71% 29%
2	ID	17	100% 71% 29%
2	II	17	100% 71% 29%
2	IN	17	82% 71% 29%
2	IS	17	100% 71% 29%
2	IX	17	94% 71% 29%
2	Ic	17	82% 76% 24%
2	Ih	17	100% 76% 24%
2	Im	17	82% 76% 24%
2	Ir	17	94% 76% 24%
2	Iw	17	94% 76% 24%
2	J2	17	100% 71% 29%
2	J7	17	100% 71% 29%
2	JD	17	71% 71% 29%
2	JI	17	94% 71% 29%
2	JN	17	88% 71% 29%
2	JS	17	94% 71% 29%
2	JX	17	100% 71% 29%
2	Jc	17	100% 76% 24%
2	Jh	17	76% 76% 24%
2	Jm	17	88% 76% 24%
2	Jr	17	100% 76% 24%
2	Jw	17	76% 76% 24%

2 Entry composition

There are 3 unique types of molecules in this entry. The entry contains 588120 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 Capsid protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	AA	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	AB	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	AC	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	AF	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	AG	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	AH	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	AK	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	AL	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	AM	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	AP	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	AQ	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	AR	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	AU	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0
1	AV	189	Total 1451	C 915	N 253	O 278	S 5	0	0	0
1	AW	217	Total 1674	C 1049	N 304	O 316	S 5	0	0	0
1	AZ	185	Total 1426	C 901	N 248	O 273	S 4	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Aa	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ab	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ae	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Af	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ag	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Aj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ak	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Al	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ao	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ap	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Aq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	At	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Au	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Av	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ay	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Az	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	A1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	A4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	A5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	A6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	BB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	BV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	BW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	BZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ba	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Be	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Bj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Bk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Bo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Bt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Bv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	By	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Bz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	B1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	B4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	B5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	B6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	CL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	CV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	CW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	CZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ca	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ce	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Cf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Cj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ck	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Co	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Cp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ct	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Cu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Cv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Cy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Cz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	C1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	C4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	C5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	C6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	DQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	DV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	DZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Da	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Db	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	De	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Df	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Dj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Dk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	DI	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Do	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Dp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Dt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Du	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Dv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Dy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Dz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	D1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	D4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	D5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	D6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	ER	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	EV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	EW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	EZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ea	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Eb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ee	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ef	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Eg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ej	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ek	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	El	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Eo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ep	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Eq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Et	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Eu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ev	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ey	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ez	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	E1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	E4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	E5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	E6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	FG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	FV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	FW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	FZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Fa	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fe	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ff	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Fk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Fp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ft	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Fu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Fv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Fy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Fz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	F1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	F4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	F5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	F6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	GA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	GB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	GC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	GF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	GG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	GH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	GK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	GL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	GM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	GP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	GQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	GR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	GU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	GV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	GW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	GZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ga	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Gb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ge	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Gf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Gg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Gj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Gk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Gl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Go	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Gp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Gq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Gt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Gu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Gv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Gy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Gz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	G1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	G4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	G5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	G6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	HV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	HW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	HZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ha	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	He	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Hj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ho	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ht	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Hv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Hy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Hz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	H1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	H4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	H5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	H6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	IB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	IV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	IW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	IZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ia	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ib	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ie	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	If	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Ig	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Ij	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ik	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Il	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Io	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ip	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Iq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	It	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Iu	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Iv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Iy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Iz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	I1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	I4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	I5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	I6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JA	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JB	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JC	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JF	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JG	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JH	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JK	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	JL	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JM	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JP	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JQ	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JR	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JU	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	JV	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	JW	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	JZ	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Ja	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jb	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Je	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jf	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jg	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jj	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jk	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jl	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jo	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jp	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jq	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jt	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	Ju	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	Jv	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	Jy	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	Jz	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	J1	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			
1	J4	185	Total	C	N	O	S	0	0	0
			1426	901	248	273	4			
1	J5	189	Total	C	N	O	S	0	0	0
			1451	915	253	278	5			
1	J6	217	Total	C	N	O	S	0	0	0
			1674	1049	304	316	5			

- Molecule 2 is a RNA chain called 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3'.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	AD	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AI	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AN	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AS	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	AX	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Ac	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Ah	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Am	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Ar	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	Aw	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			
2	A2	17	Total	C	N	O	P	0	0	0
			349	157	46	129	17			

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	A7	17	349	157	46	129	17	0	0	0
2	BD	17	349	157	46	129	17	0	0	0
2	BI	17	349	157	46	129	17	0	0	0
2	BN	17	349	157	46	129	17	0	0	0
2	BS	17	349	157	46	129	17	0	0	0
2	BX	17	349	157	46	129	17	0	0	0
2	Bc	17	349	157	46	129	17	0	0	0
2	Bh	17	349	157	46	129	17	0	0	0
2	Bm	17	349	157	46	129	17	0	0	0
2	Br	17	349	157	46	129	17	0	0	0
2	Bw	17	349	157	46	129	17	0	0	0
2	B2	17	349	157	46	129	17	0	0	0
2	B7	17	349	157	46	129	17	0	0	0
2	CD	17	349	157	46	129	17	0	0	0
2	CI	17	349	157	46	129	17	0	0	0
2	CN	17	349	157	46	129	17	0	0	0
2	CS	17	349	157	46	129	17	0	0	0
2	CX	17	349	157	46	129	17	0	0	0
2	Cc	17	349	157	46	129	17	0	0	0
2	Ch	17	349	157	46	129	17	0	0	0
2	Cm	17	349	157	46	129	17	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	Cr	17	349	157	46	129	17	0	0	0
2	Cw	17	349	157	46	129	17	0	0	0
2	C2	17	349	157	46	129	17	0	0	0
2	C7	17	349	157	46	129	17	0	0	0
2	DD	17	349	157	46	129	17	0	0	0
2	DI	17	349	157	46	129	17	0	0	0
2	DN	17	349	157	46	129	17	0	0	0
2	DS	17	349	157	46	129	17	0	0	0
2	DX	17	349	157	46	129	17	0	0	0
2	Dc	17	349	157	46	129	17	0	0	0
2	Dh	17	349	157	46	129	17	0	0	0
2	Dm	17	349	157	46	129	17	0	0	0
2	Dr	17	349	157	46	129	17	0	0	0
2	Dw	17	349	157	46	129	17	0	0	0
2	D2	17	349	157	46	129	17	0	0	0
2	D7	17	349	157	46	129	17	0	0	0
2	ED	17	349	157	46	129	17	0	0	0
2	EI	17	349	157	46	129	17	0	0	0
2	EN	17	349	157	46	129	17	0	0	0
2	ES	17	349	157	46	129	17	0	0	0
2	EX	17	349	157	46	129	17	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	Ec	17	349	157	46	129	17	0	0	0
2	Eh	17	349	157	46	129	17	0	0	0
2	Em	17	349	157	46	129	17	0	0	0
2	Er	17	349	157	46	129	17	0	0	0
2	Ew	17	349	157	46	129	17	0	0	0
2	E2	17	349	157	46	129	17	0	0	0
2	E7	17	349	157	46	129	17	0	0	0
2	FD	17	349	157	46	129	17	0	0	0
2	FI	17	349	157	46	129	17	0	0	0
2	FN	17	349	157	46	129	17	0	0	0
2	FS	17	349	157	46	129	17	0	0	0
2	FX	17	349	157	46	129	17	0	0	0
2	Fc	17	349	157	46	129	17	0	0	0
2	Fh	17	349	157	46	129	17	0	0	0
2	Fm	17	349	157	46	129	17	0	0	0
2	Fr	17	349	157	46	129	17	0	0	0
2	Fw	17	349	157	46	129	17	0	0	0
2	F2	17	349	157	46	129	17	0	0	0
2	F7	17	349	157	46	129	17	0	0	0
2	GD	17	349	157	46	129	17	0	0	0
2	GI	17	349	157	46	129	17	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	GN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	GS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	GX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Gw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	G2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	G7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HD	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HI	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HN	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HS	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	HX	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hc	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hh	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hm	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Hw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	H2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	P			
2	H7	17	349	157	46	129	17	0	0	0
2	ID	17	349	157	46	129	17	0	0	0
2	II	17	349	157	46	129	17	0	0	0
2	IN	17	349	157	46	129	17	0	0	0
2	IS	17	349	157	46	129	17	0	0	0
2	IX	17	349	157	46	129	17	0	0	0
2	Ic	17	349	157	46	129	17	0	0	0
2	Ih	17	349	157	46	129	17	0	0	0
2	Im	17	349	157	46	129	17	0	0	0
2	Ir	17	349	157	46	129	17	0	0	0
2	Iw	17	349	157	46	129	17	0	0	0
2	I2	17	349	157	46	129	17	0	0	0
2	I7	17	349	157	46	129	17	0	0	0
2	JD	17	349	157	46	129	17	0	0	0
2	JI	17	349	157	46	129	17	0	0	0
2	JN	17	349	157	46	129	17	0	0	0
2	JS	17	349	157	46	129	17	0	0	0
2	JX	17	349	157	46	129	17	0	0	0
2	Jc	17	349	157	46	129	17	0	0	0
2	Jh	17	349	157	46	129	17	0	0	0
2	Jm	17	349	157	46	129	17	0	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	Jr	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	Jw	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	J2	17	Total 349	C 157	N 46	O 129	P 17	0	0	0
2	J7	17	Total 349	C 157	N 46	O 129	P 17	0	0	0

- Molecule 3 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
3	AA	1	Total 1	Ca 1	0	0
3	AF	1	Total 1	Ca 1	0	0
3	AL	1	Total 1	Ca 1	0	0
3	AP	1	Total 1	Ca 1	0	0
3	AU	1	Total 1	Ca 1	0	0
3	AZ	1	Total 1	Ca 1	0	0
3	Af	1	Total 1	Ca 1	0	0
3	Aj	1	Total 1	Ca 1	0	0
3	Ao	1	Total 1	Ca 1	0	0
3	At	1	Total 1	Ca 1	0	0
3	A1	1	Total 1	Ca 1	0	0
3	A4	1	Total 1	Ca 1	0	0
3	BB	1	Total 1	Ca 1	0	0
3	BF	1	Total 1	Ca 1	0	0
3	BK	1	Total 1	Ca 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	BQ	1	Total Ca 1 1	0	0
3	BU	1	Total Ca 1 1	0	0
3	BZ	1	Total Ca 1 1	0	0
3	Be	1	Total Ca 1 1	0	0
3	Bk	1	Total Ca 1 1	0	0
3	Bo	1	Total Ca 1 1	0	0
3	Bt	1	Total Ca 1 1	0	0
3	By	1	Total Ca 1 1	0	0
3	B5	1	Total Ca 1 1	0	0
3	CA	1	Total Ca 1 1	0	0
3	CG	1	Total Ca 1 1	0	0
3	CK	1	Total Ca 1 1	0	0
3	CP	1	Total Ca 1 1	0	0
3	CU	1	Total Ca 1 1	0	0
3	CZ	1	Total Ca 1 1	0	0
3	Ce	1	Total Ca 1 1	0	0
3	Cj	1	Total Ca 1 1	0	0
3	Co	1	Total Ca 1 1	0	0
3	Ct	1	Total Ca 1 1	0	0
3	Cy	1	Total Ca 1 1	0	0
3	C4	1	Total Ca 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	DA	1	Total Ca 1 1	0	0
3	DF	1	Total Ca 1 1	0	0
3	DK	1	Total Ca 1 1	0	0
3	DP	1	Total Ca 1 1	0	0
3	DU	1	Total Ca 1 1	0	0
3	DZ	1	Total Ca 1 1	0	0
3	Df	1	Total Ca 1 1	0	0
3	Dj	1	Total Ca 1 1	0	0
3	Do	1	Total Ca 1 1	0	0
3	Dt	1	Total Ca 1 1	0	0
3	Dy	1	Total Ca 1 1	0	0
3	D4	1	Total Ca 1 1	0	0
3	EC	1	Total Ca 1 1	0	0
3	EF	1	Total Ca 1 1	0	0
3	EK	1	Total Ca 1 1	0	0
3	EP	1	Total Ca 1 1	0	0
3	EU	1	Total Ca 1 1	0	0
3	EZ	1	Total Ca 1 1	0	0
3	Ee	1	Total Ca 1 1	0	0
3	Ek	1	Total Ca 1 1	0	0
3	Eo	1	Total Ca 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	Et	1	Total Ca 1 1	0	0
3	Ey	1	Total Ca 1 1	0	0
3	E4	1	Total Ca 1 1	0	0
3	FA	1	Total Ca 1 1	0	0
3	FF	1	Total Ca 1 1	0	0
3	FK	1	Total Ca 1 1	0	0
3	FP	1	Total Ca 1 1	0	0
3	FU	1	Total Ca 1 1	0	0
3	FZ	1	Total Ca 1 1	0	0
3	Fe	1	Total Ca 1 1	0	0
3	Fk	1	Total Ca 1 1	0	0
3	Fo	1	Total Ca 1 1	0	0
3	Ft	1	Total Ca 1 1	0	0
3	F1	1	Total Ca 1 1	0	0
3	F4	1	Total Ca 1 1	0	0
3	GA	1	Total Ca 1 1	0	0
3	GF	1	Total Ca 1 1	0	0
3	GK	1	Total Ca 1 1	0	0
3	GP	1	Total Ca 1 1	0	0
3	GU	1	Total Ca 1 1	0	0
3	GZ	1	Total Ca 1 1	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	Ge	1	Total Ca 1 1	0	0
3	Gj	1	Total Ca 1 1	0	0
3	Go	1	Total Ca 1 1	0	0
3	Gt	1	Total Ca 1 1	0	0
3	G1	1	Total Ca 1 1	0	0
3	G4	1	Total Ca 1 1	0	0
3	HA	1	Total Ca 1 1	0	0
3	HF	1	Total Ca 1 1	0	0
3	HK	1	Total Ca 1 1	0	0
3	HP	1	Total Ca 1 1	0	0
3	HU	1	Total Ca 1 1	0	0
3	HZ	1	Total Ca 1 1	0	0
3	Hg	1	Total Ca 1 1	0	0
3	Hj	1	Total Ca 1 1	0	0
3	Ho	1	Total Ca 1 1	0	0
3	Ht	1	Total Ca 1 1	0	0
3	Hy	1	Total Ca 1 1	0	0
3	H4	1	Total Ca 1 1	0	0
3	IA	1	Total Ca 1 1	0	0
3	IF	1	Total Ca 1 1	0	0
3	IK	1	Total Ca 1 1	0	0

Continued on next page...

Continued from previous page...

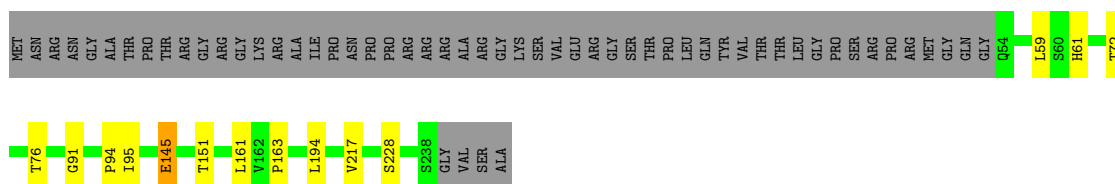
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	IR	1	Total Ca 1 1	0	0
3	IU	1	Total Ca 1 1	0	0
3	IZ	1	Total Ca 1 1	0	0
3	If	1	Total Ca 1 1	0	0
3	Ij	1	Total Ca 1 1	0	0
3	Io	1	Total Ca 1 1	0	0
3	It	1	Total Ca 1 1	0	0
3	Ii	1	Total Ca 1 1	0	0
3	I4	1	Total Ca 1 1	0	0
3	JA	1	Total Ca 1 1	0	0
3	JF	1	Total Ca 1 1	0	0
3	JL	1	Total Ca 1 1	0	0
3	JP	1	Total Ca 1 1	0	0
3	JU	1	Total Ca 1 1	0	0
3	JZ	1	Total Ca 1 1	0	0
3	Je	1	Total Ca 1 1	0	0
3	Jj	1	Total Ca 1 1	0	0
3	Jo	1	Total Ca 1 1	0	0
3	Jt	1	Total Ca 1 1	0	0
3	Jy	1	Total Ca 1 1	0	0
3	J4	1	Total Ca 1 1	0	0

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 electron 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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.

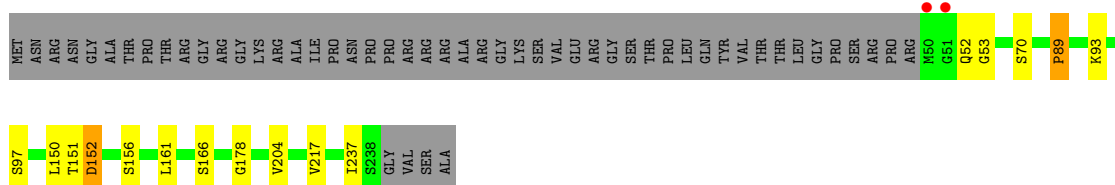
- Molecule 1: Capsid protein

Chain AA:  71% 5% 24%




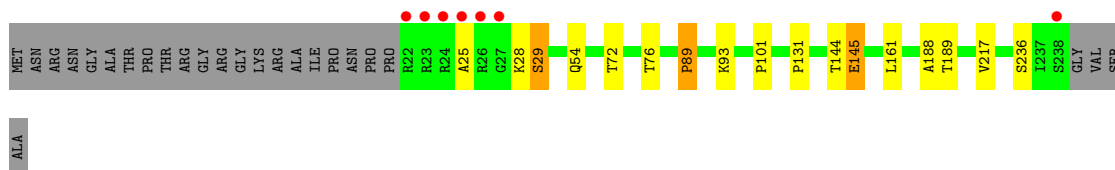
- Molecule 1: Capsid protein

Chain AB:  % 71% 6% 22%



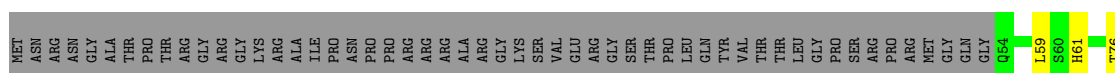
- Molecule 1: Capsid protein

Chain AC:  3% 83% 6% 10%



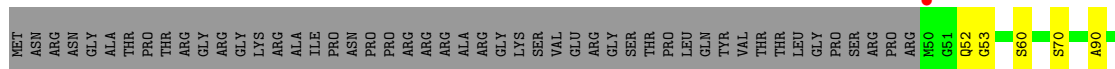
- Molecule 1: Capsid protein

Chain AF:  72% 24%

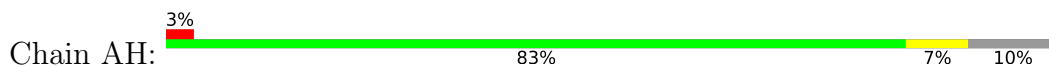




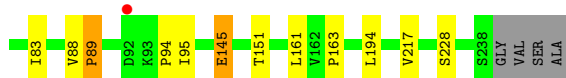
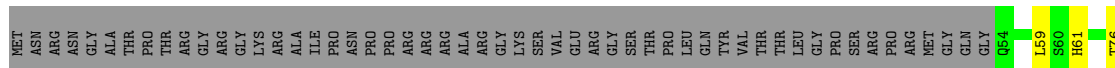
• Molecule 1: Capsid protein



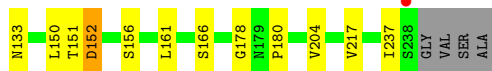
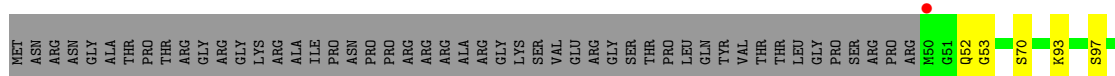
• Molecule 1: Capsid protein



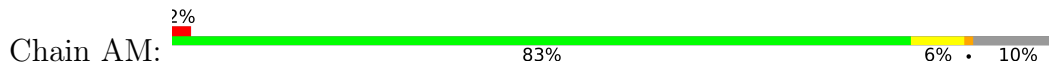
• Molecule 1: Capsid protein

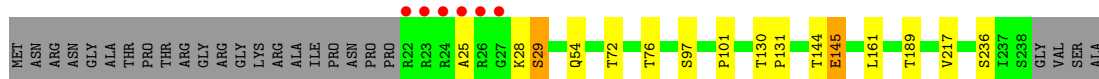


• Molecule 1: Capsid protein

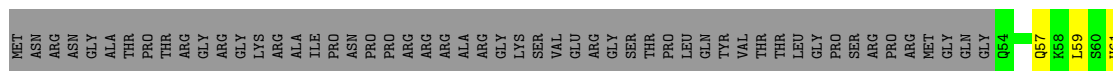


• Molecule 1: Capsid protein

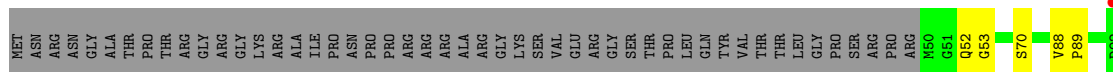




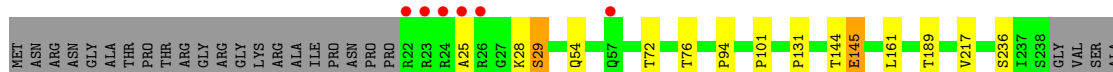
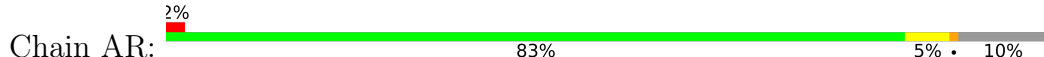
• Molecule 1: Capsid protein



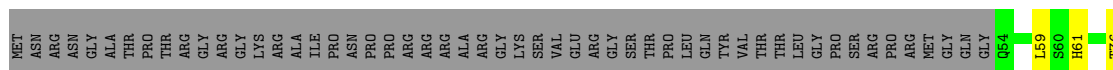
• Molecule 1: Capsid protein



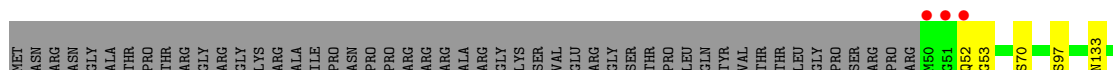
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

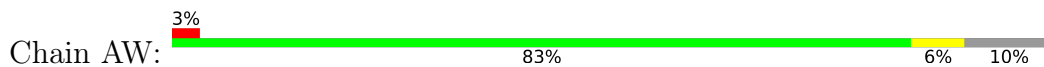


• Molecule 1: Capsid protein

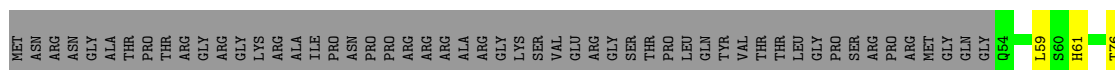




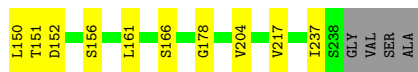
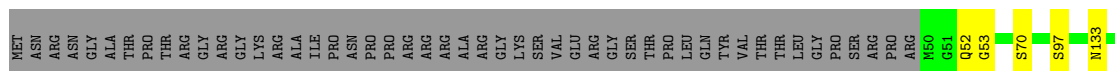
● Molecule 1: Capsid protein



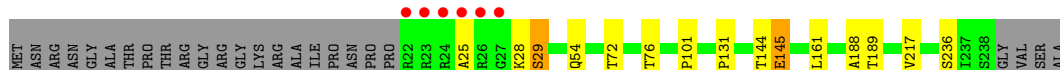
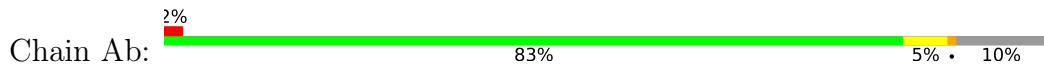
● Molecule 1: Capsid protein



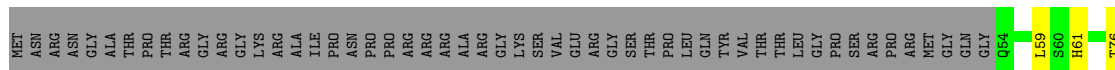
● Molecule 1: Capsid protein



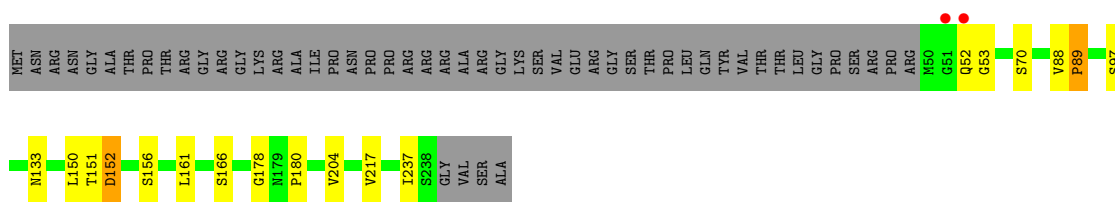
● Molecule 1: Capsid protein



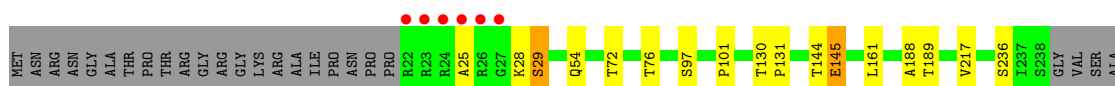
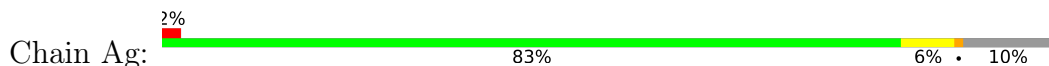
● Molecule 1: Capsid protein



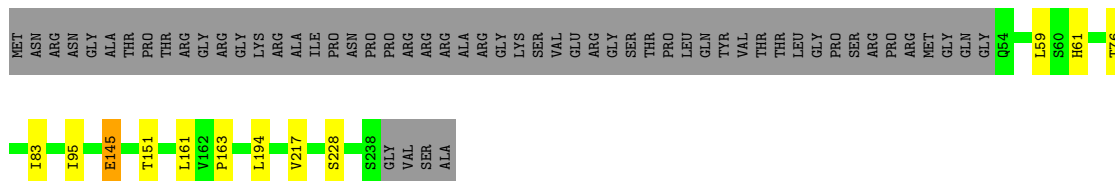
• Molecule 1: Capsid protein



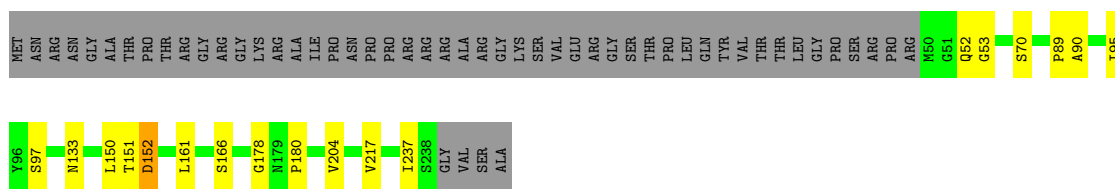
• Molecule 1: Capsid protein



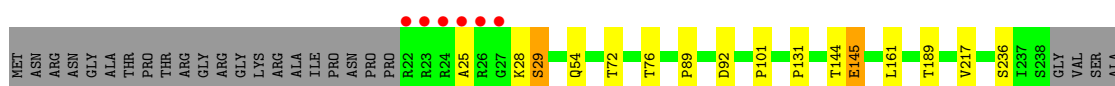
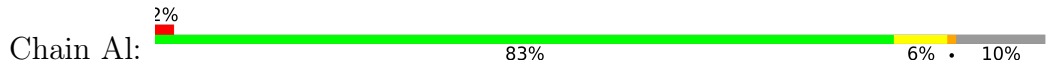
• Molecule 1: Capsid protein



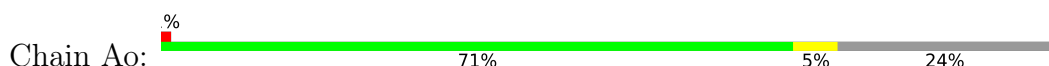
• Molecule 1: Capsid protein

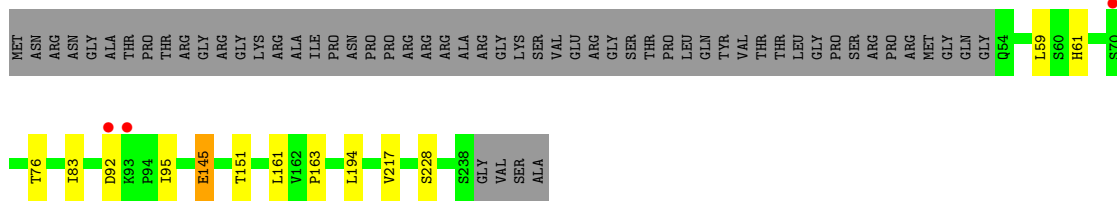


• Molecule 1: Capsid protein

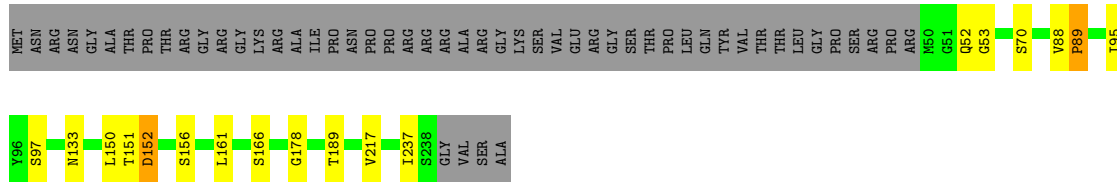


• Molecule 1: Capsid protein

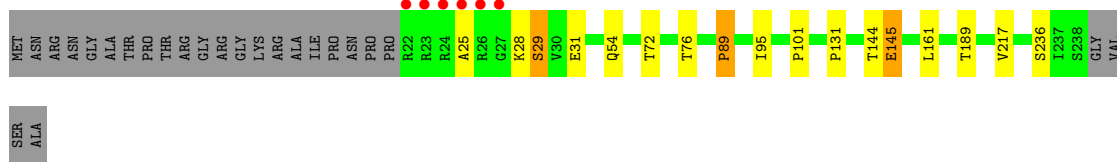
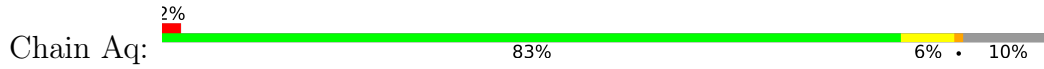




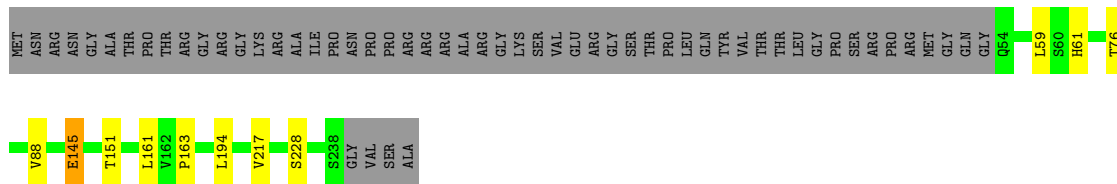
• Molecule 1: Capsid protein



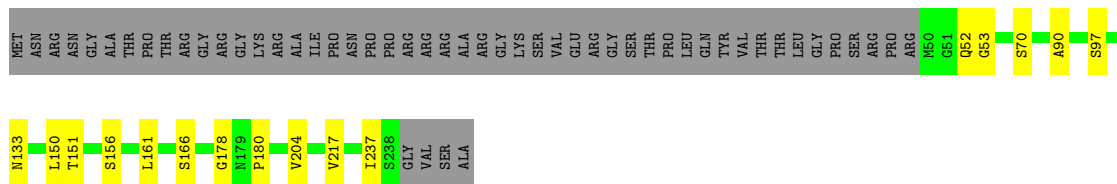
• Molecule 1: Capsid protein



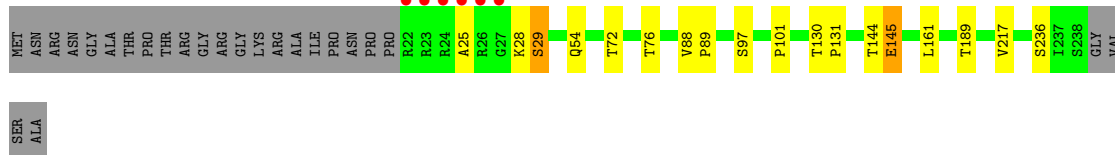
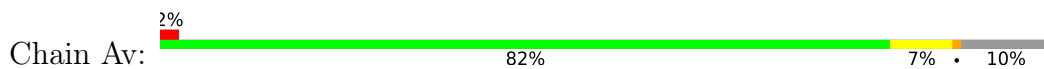
• Molecule 1: Capsid protein



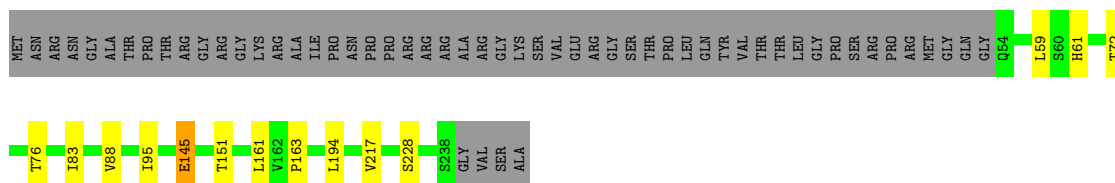
• Molecule 1: Capsid protein



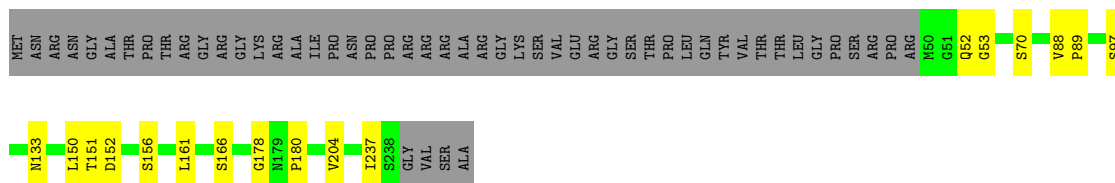
• Molecule 1: Capsid protein



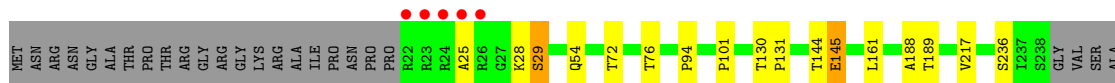
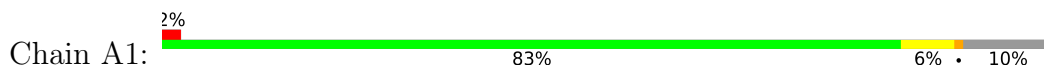
• Molecule 1: Capsid protein



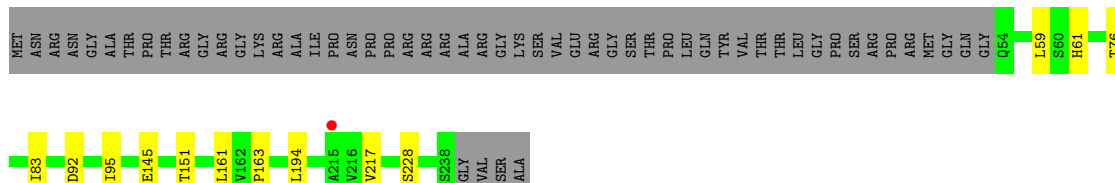
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

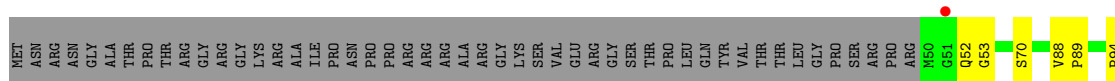


• Molecule 1: Capsid protein

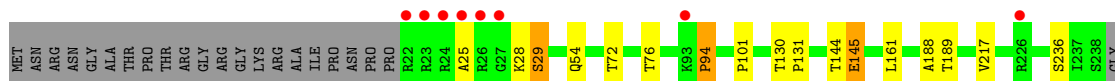
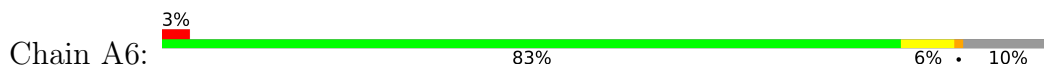


• Molecule 1: Capsid protein

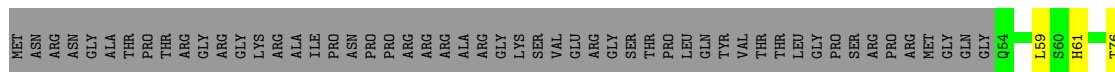




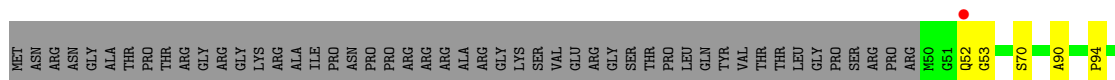
● Molecule 1: Capsid protein



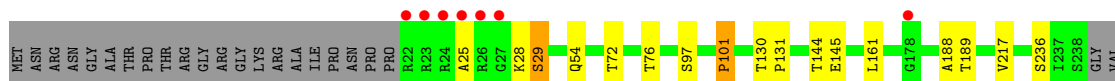
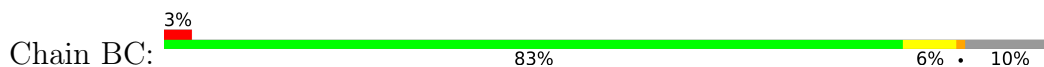
● Molecule 1: Capsid protein



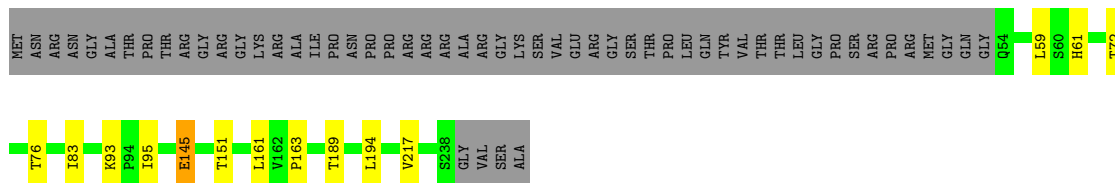
● Molecule 1: Capsid protein



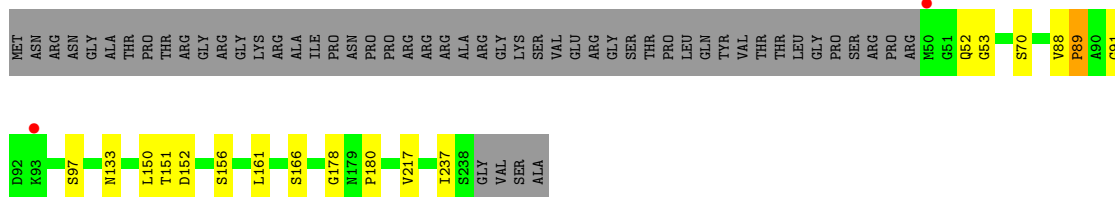
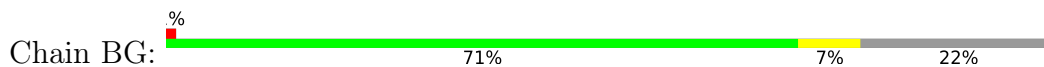
● Molecule 1: Capsid protein



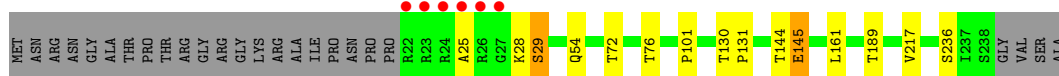
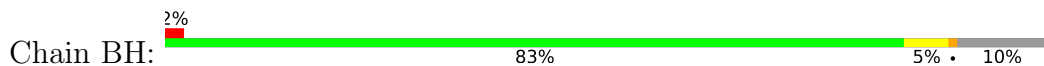
● Molecule 1: Capsid protein



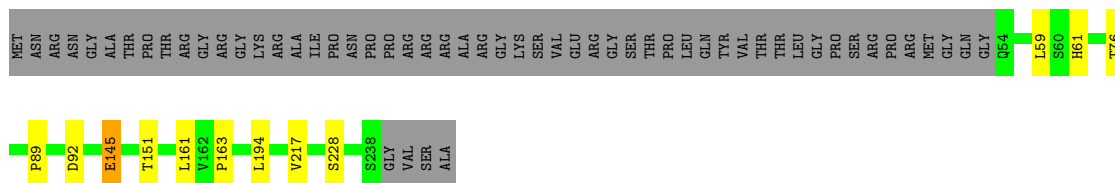
● Molecule 1: Capsid protein



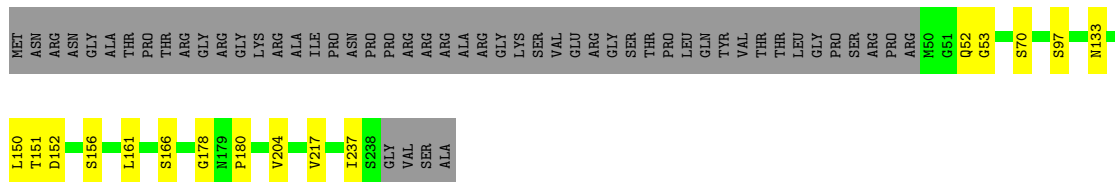
● Molecule 1: Capsid protein



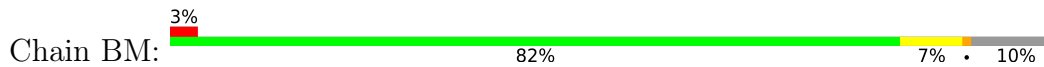
● Molecule 1: Capsid protein

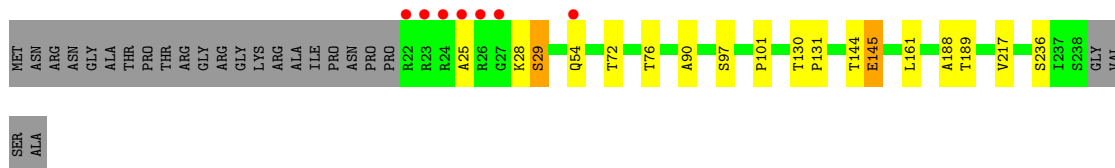


● Molecule 1: Capsid protein

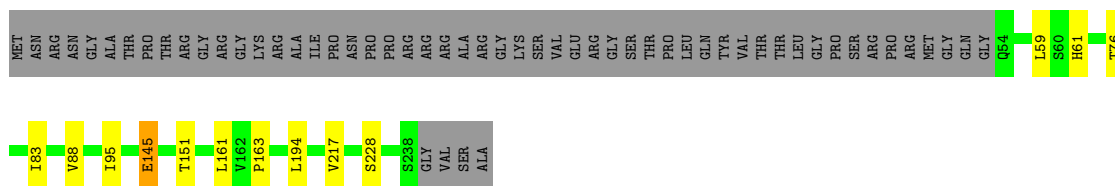


● Molecule 1: Capsid protein

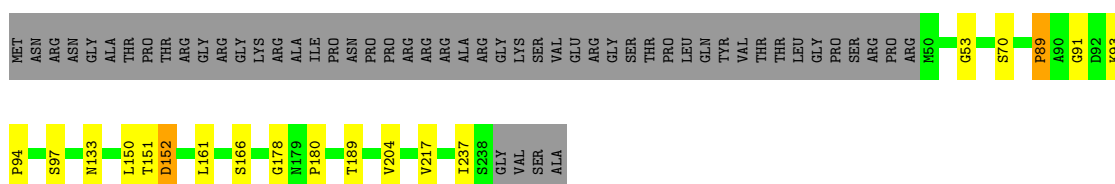




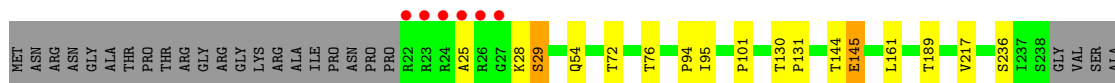
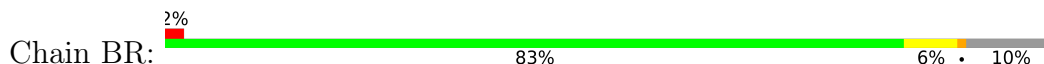
● Molecule 1: Capsid protein



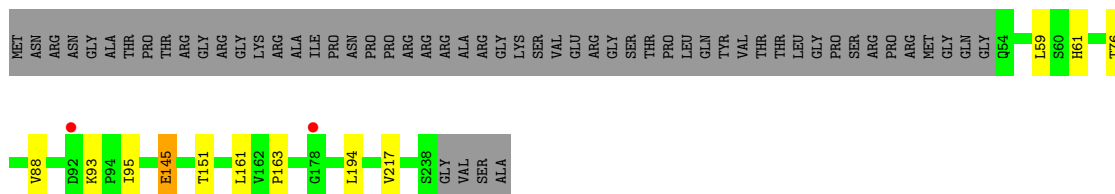
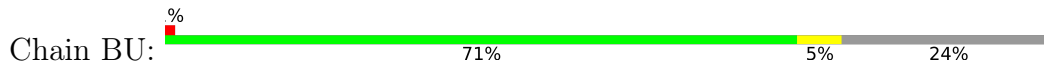
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

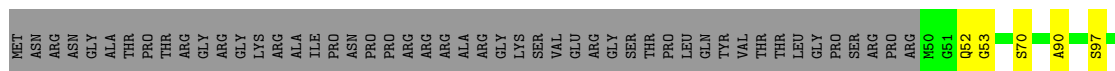


● Molecule 1: Capsid protein

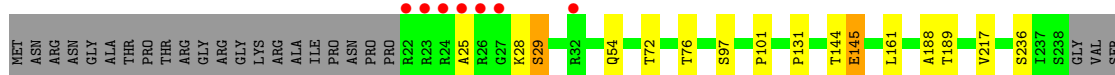
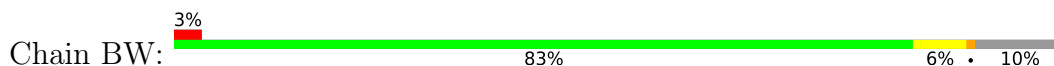


● Molecule 1: Capsid protein

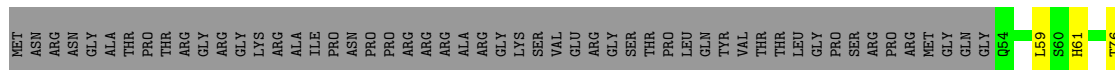




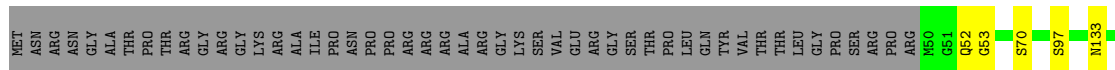
• Molecule 1: Capsid protein



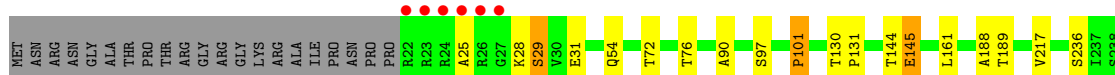
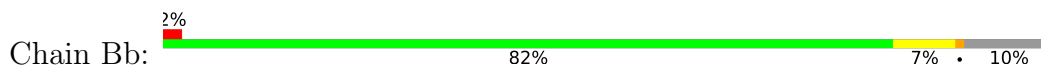
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

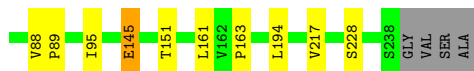
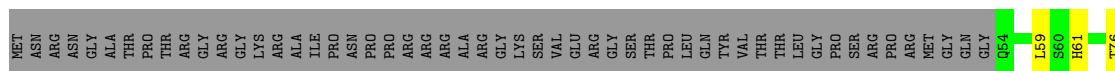


• Molecule 1: Capsid protein

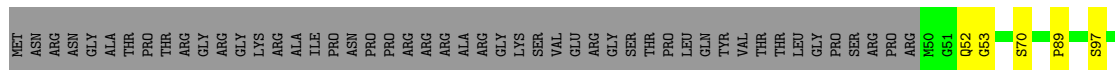


• Molecule 1: Capsid protein

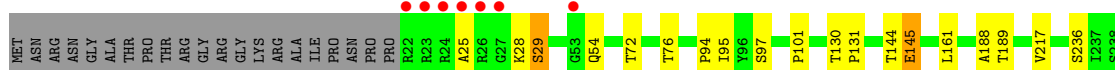
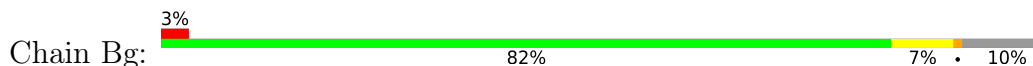




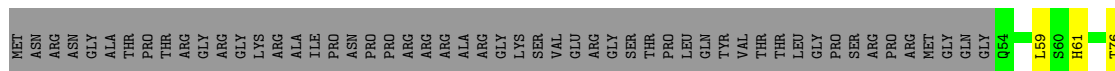
• Molecule 1: Capsid protein



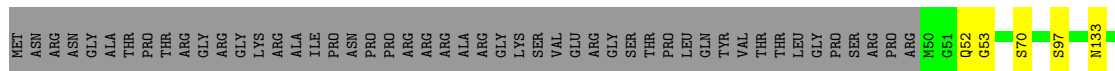
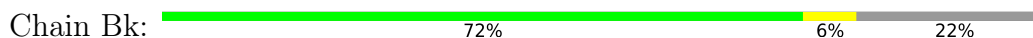
• Molecule 1: Capsid protein



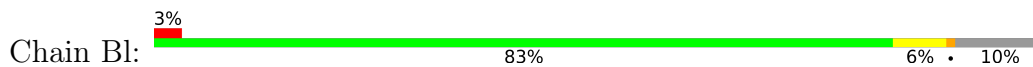
• Molecule 1: Capsid protein

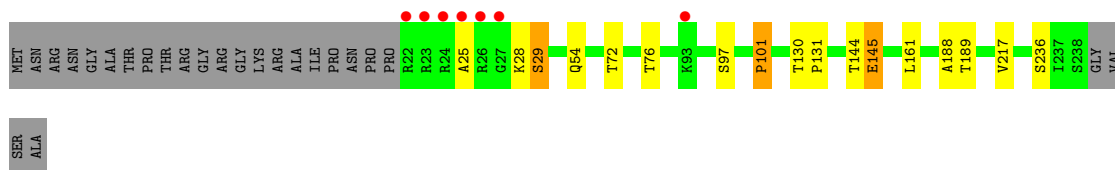


• Molecule 1: Capsid protein

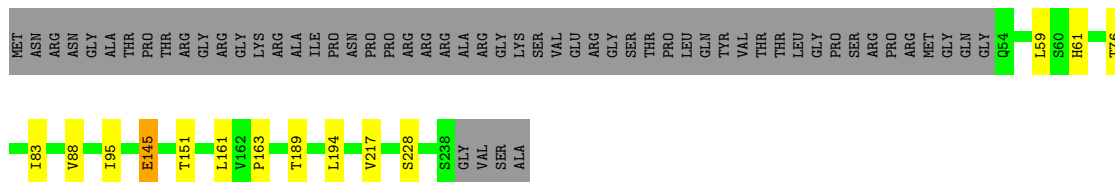


• Molecule 1: Capsid protein

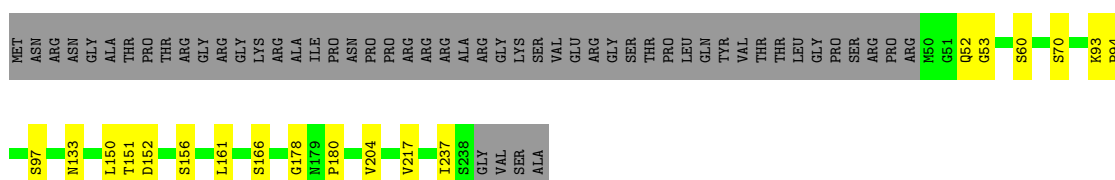




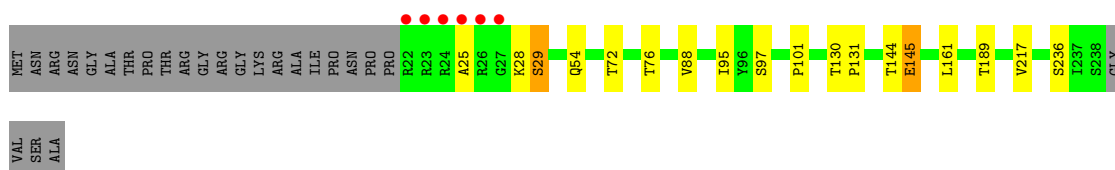
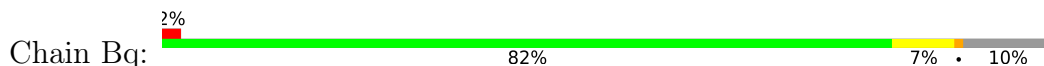
• Molecule 1: Capsid protein



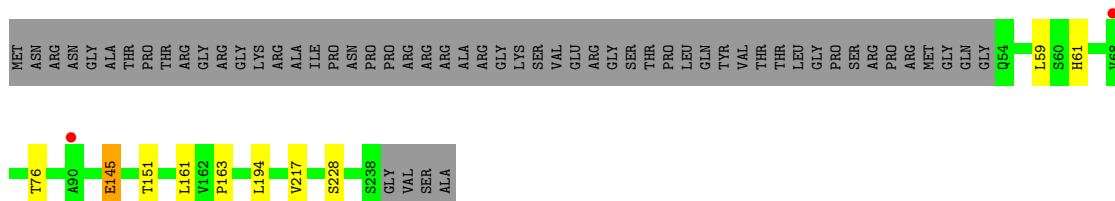
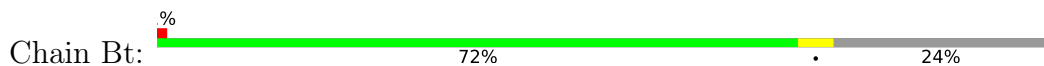
• Molecule 1: Capsid protein



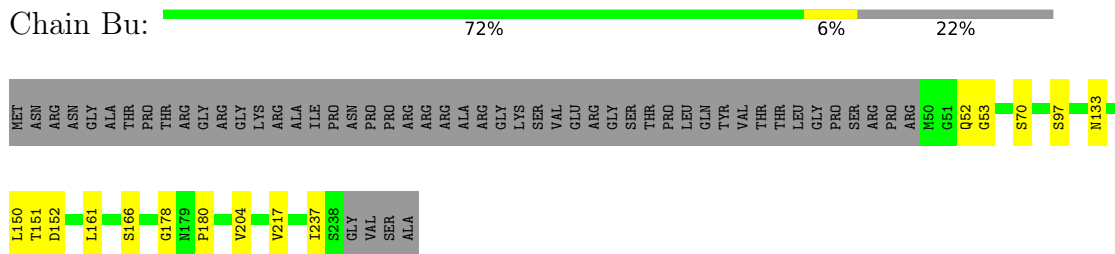
• Molecule 1: Capsid protein



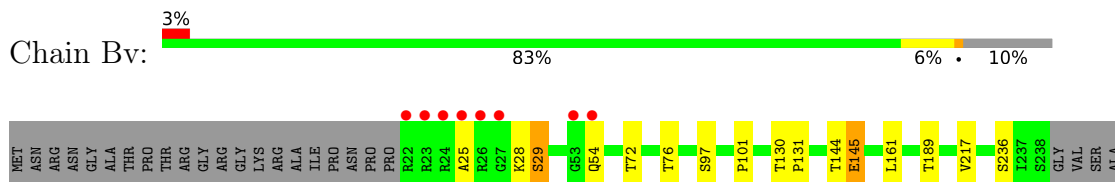
• Molecule 1: Capsid protein



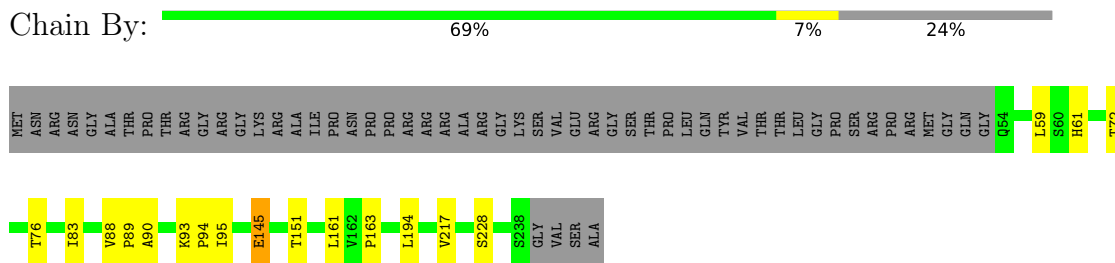
• Molecule 1: Capsid protein



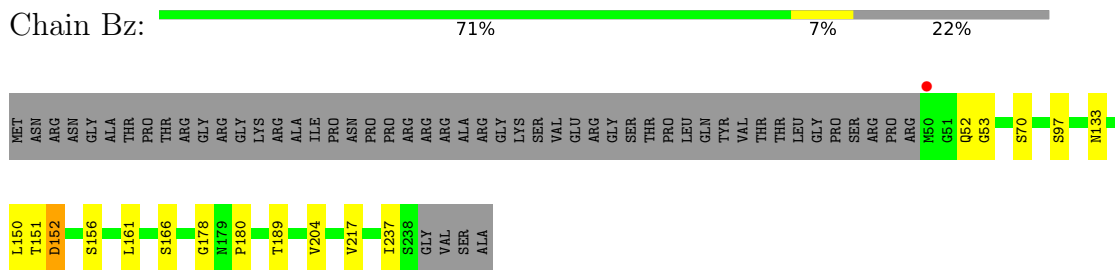
● Molecule 1: Capsid protein



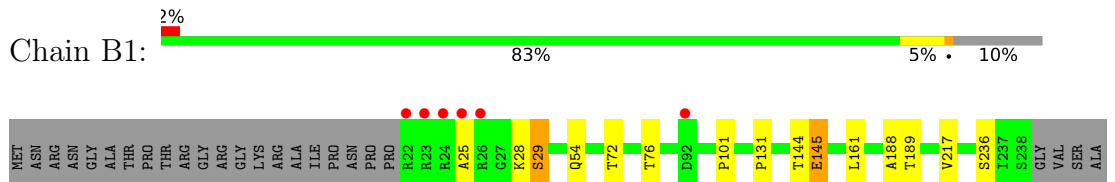
● Molecule 1: Capsid protein



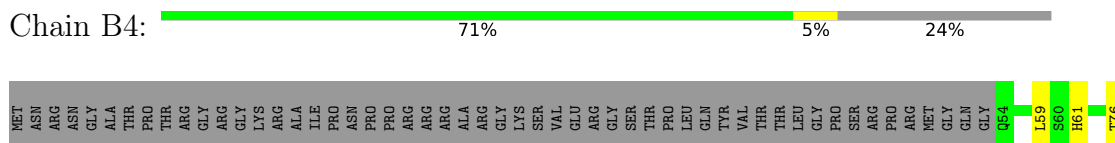
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

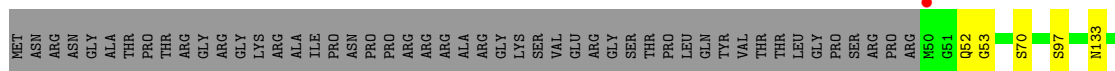
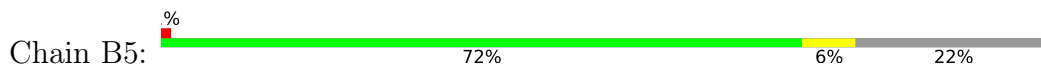


● Molecule 1: Capsid protein

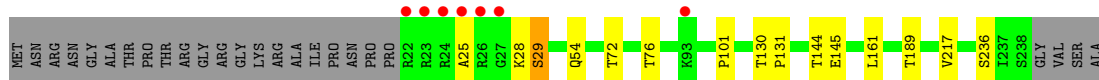
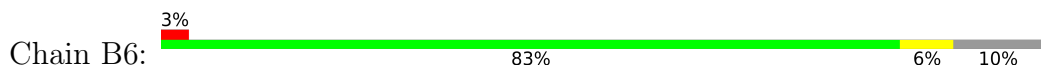




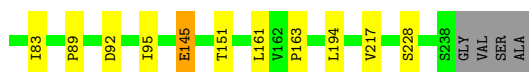
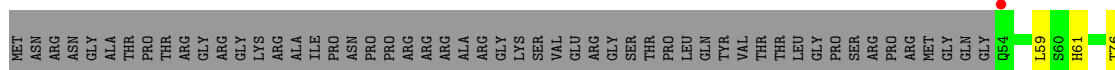
• Molecule 1: Capsid protein



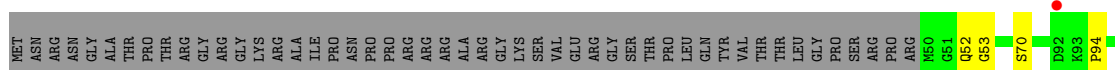
• Molecule 1: Capsid protein



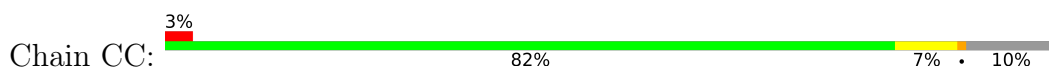
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

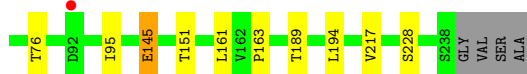
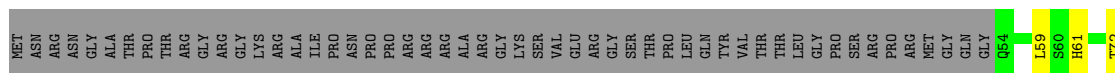


• Molecule 1: Capsid protein

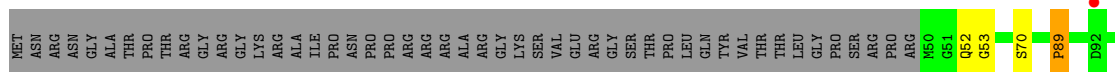


SER
ALA

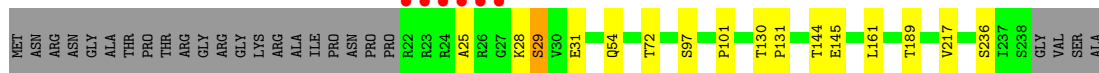
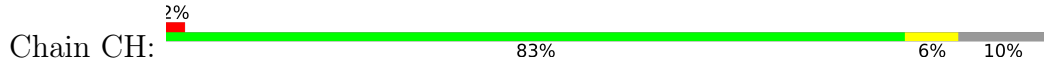
• Molecule 1: Capsid protein



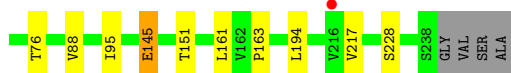
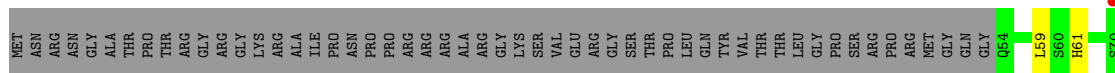
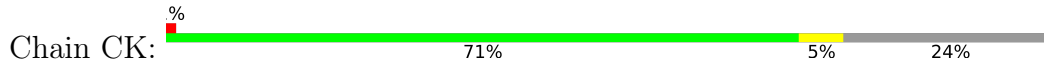
• Molecule 1: Capsid protein



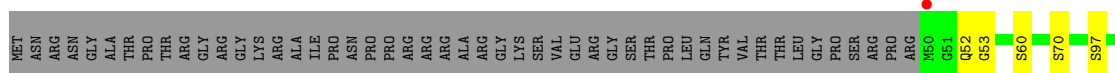
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

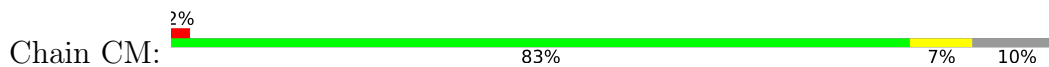


• Molecule 1: Capsid protein

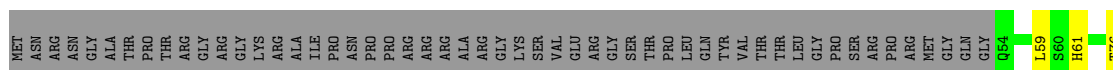




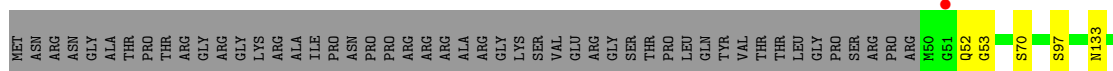
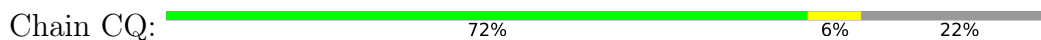
• Molecule 1: Capsid protein



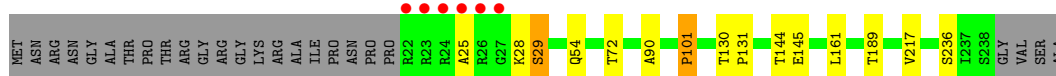
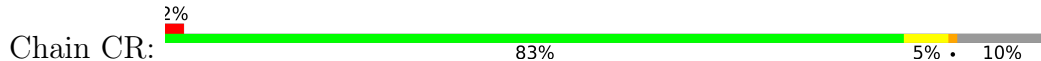
• Molecule 1: Capsid protein



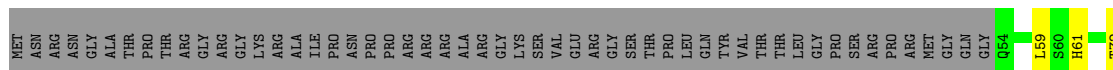
• Molecule 1: Capsid protein

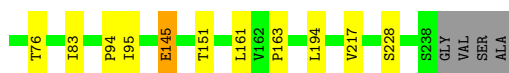


• Molecule 1: Capsid protein

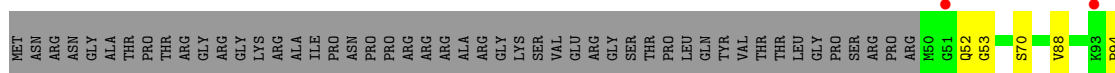
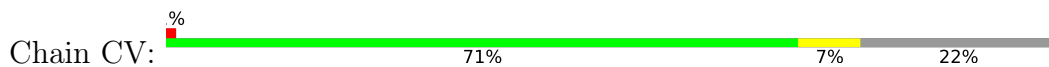


• Molecule 1: Capsid protein

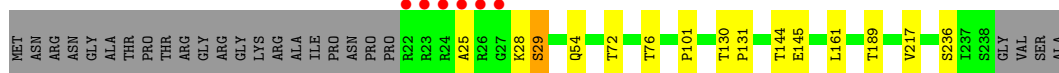
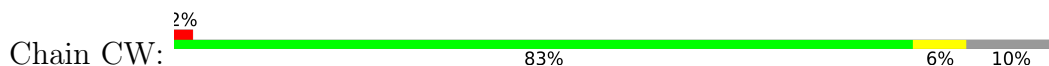




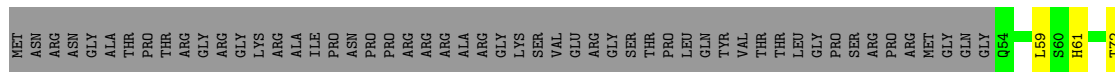
• Molecule 1: Capsid protein



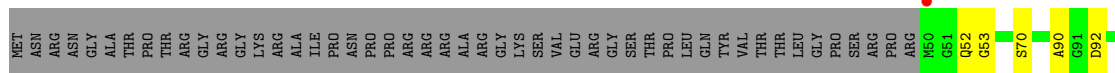
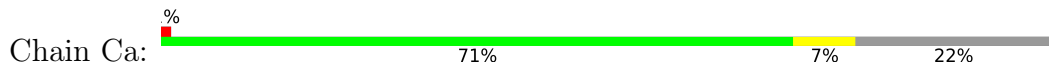
• Molecule 1: Capsid protein



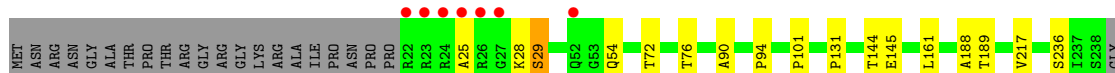
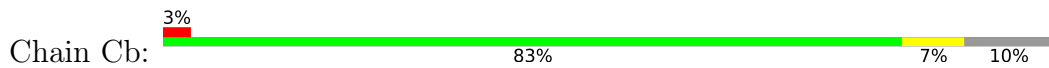
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

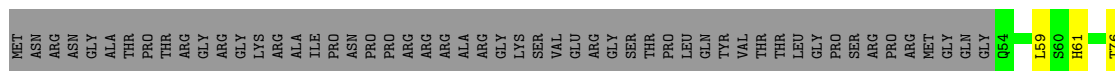


• Molecule 1: Capsid protein

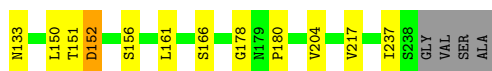
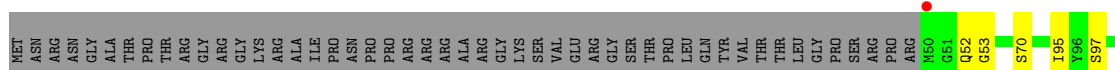


VAL
SER
ALA

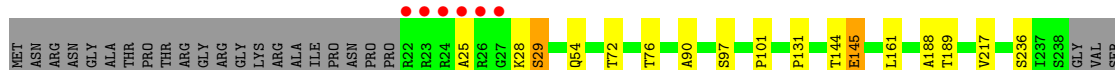
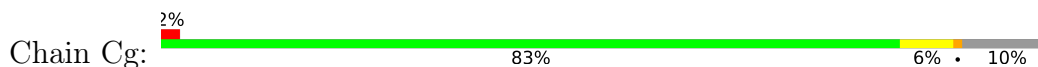
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

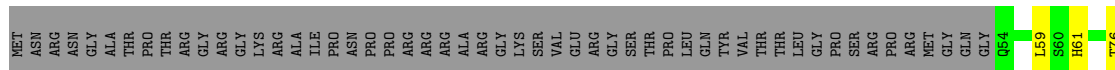


• Molecule 1: Capsid protein

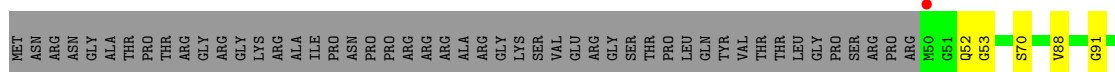


ALA

• Molecule 1: Capsid protein

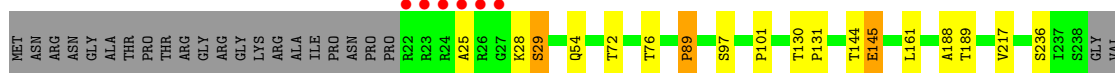
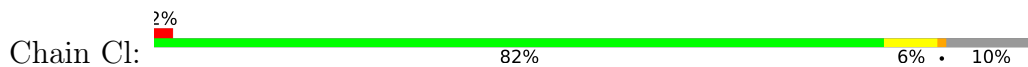


• Molecule 1: Capsid protein

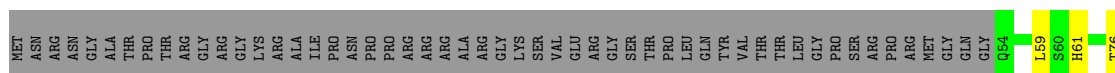




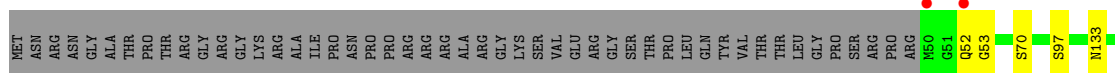
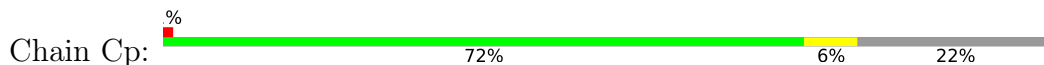
● Molecule 1: Capsid protein



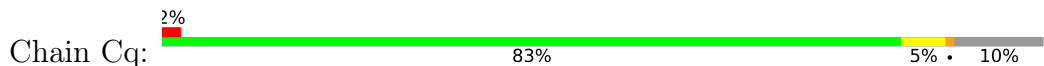
● Molecule 1: Capsid protein



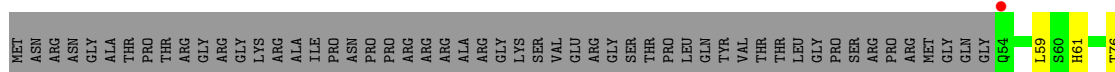
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

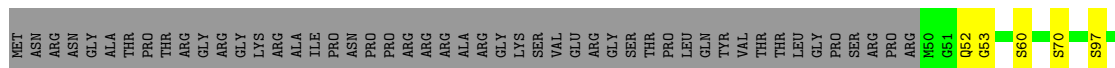


● Molecule 1: Capsid protein

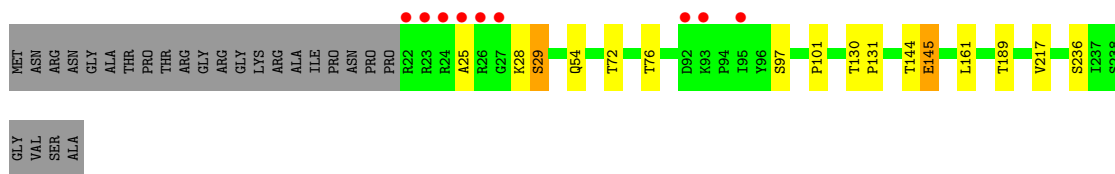
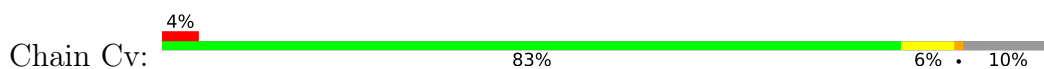




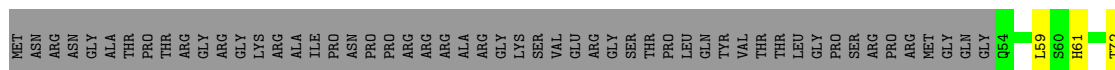
• Molecule 1: Capsid protein



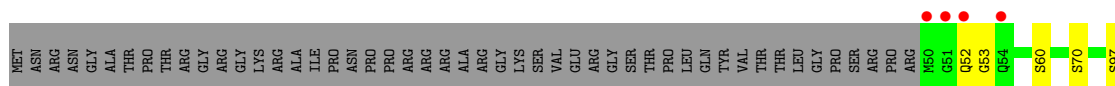
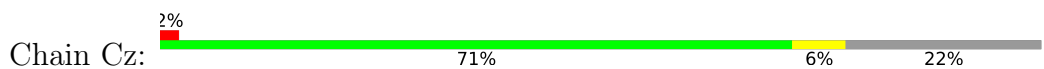
• Molecule 1: Capsid protein



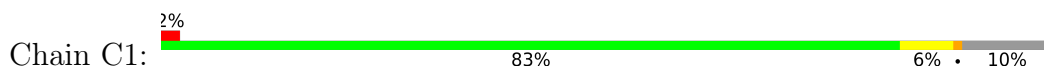
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

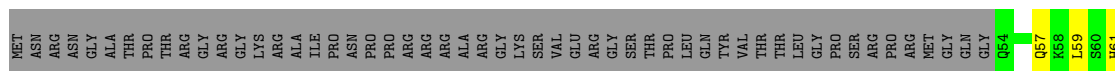


• Molecule 1: Capsid protein

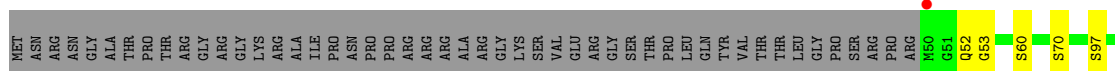




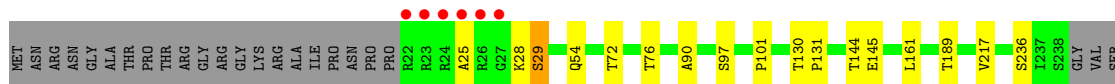
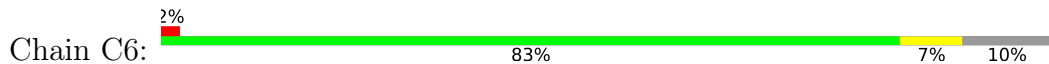
• Molecule 1: Capsid protein



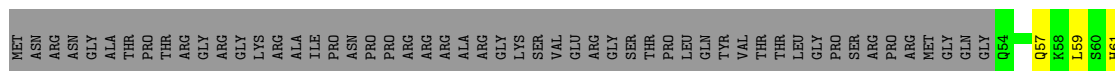
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

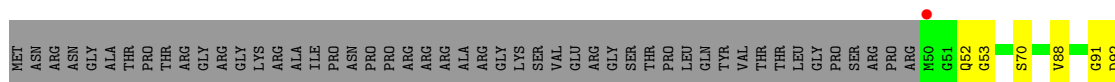


• Molecule 1: Capsid protein

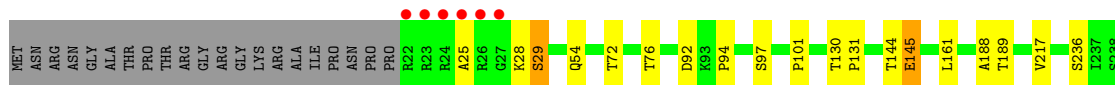
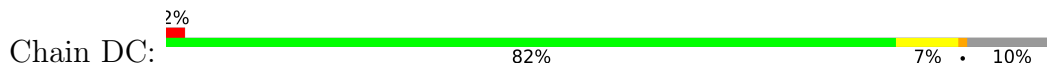


• Molecule 1: Capsid protein

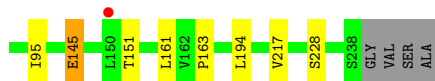
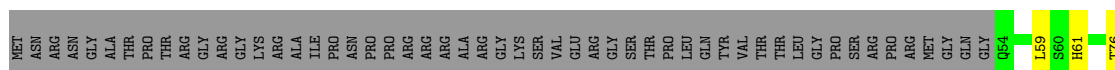




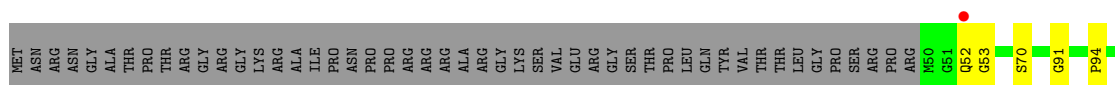
● Molecule 1: Capsid protein



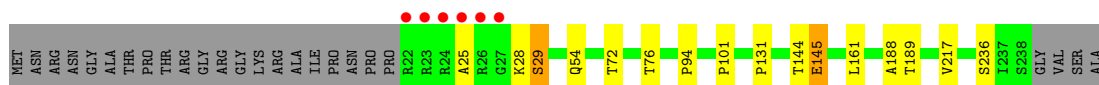
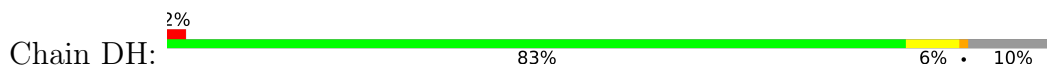
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

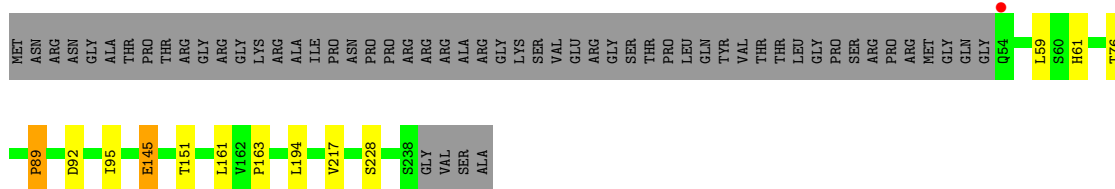


● Molecule 1: Capsid protein

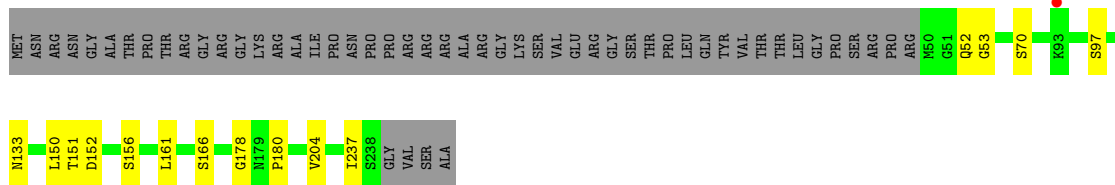


● Molecule 1: Capsid protein

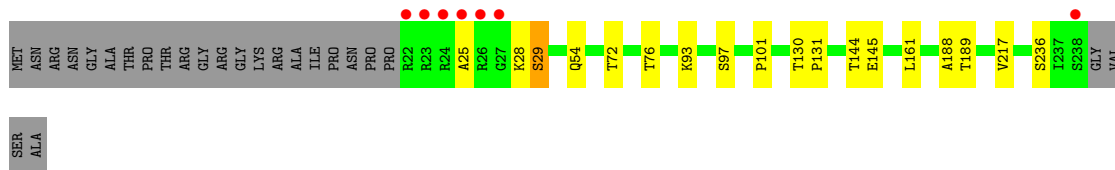
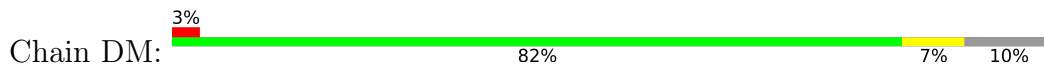




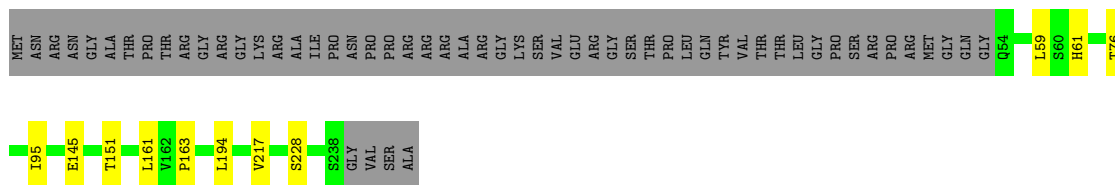
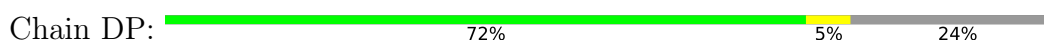
• Molecule 1: Capsid protein



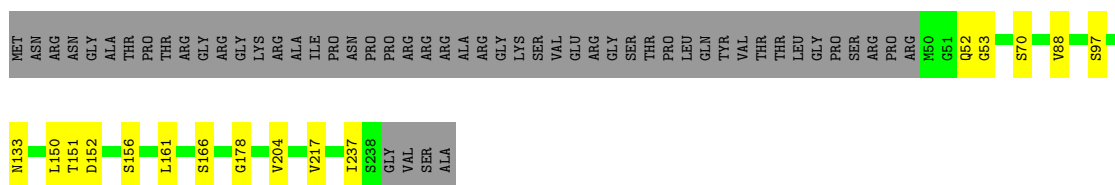
• Molecule 1: Capsid protein



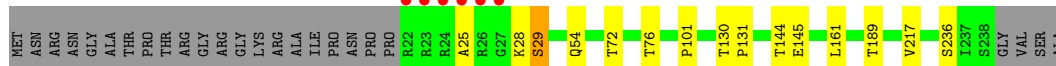
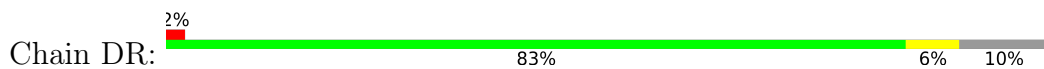
• Molecule 1: Capsid protein



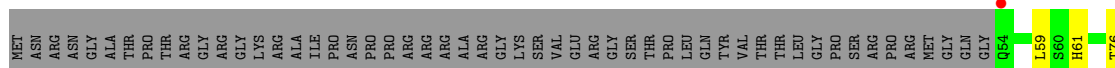
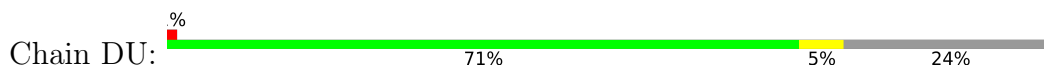
• Molecule 1: Capsid protein



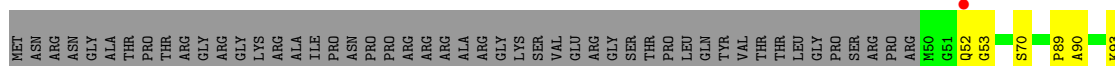
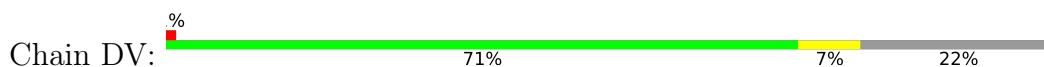
• Molecule 1: Capsid protein



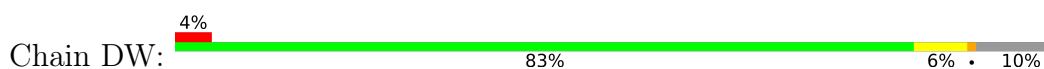
• Molecule 1: Capsid protein



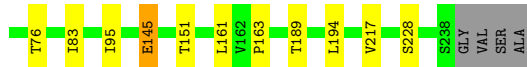
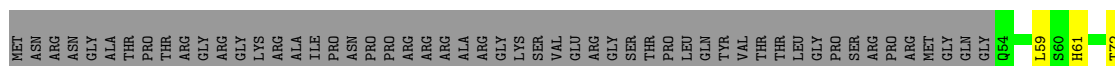
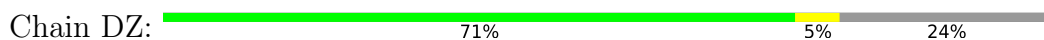
• Molecule 1: Capsid protein



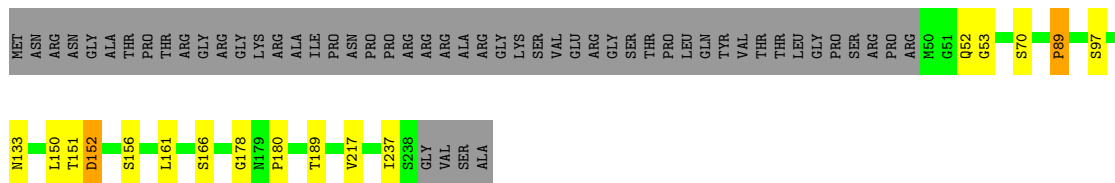
• Molecule 1: Capsid protein



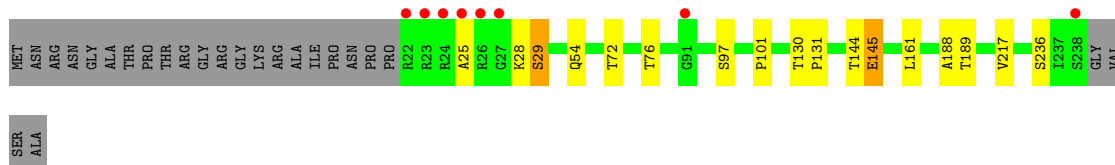
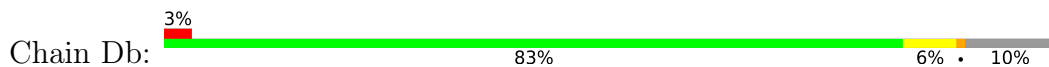
• Molecule 1: Capsid protein



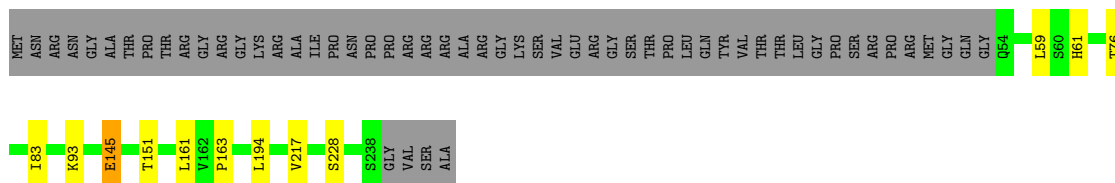
• Molecule 1: Capsid protein



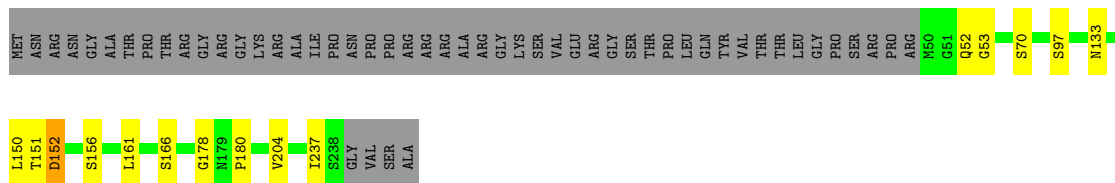
• Molecule 1: Capsid protein



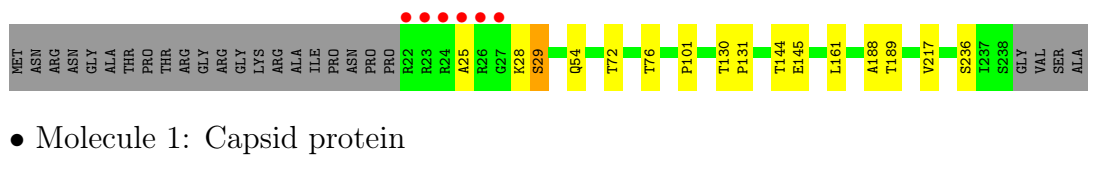
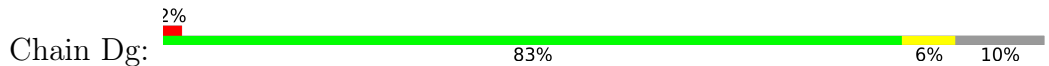
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

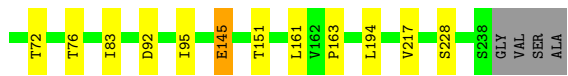
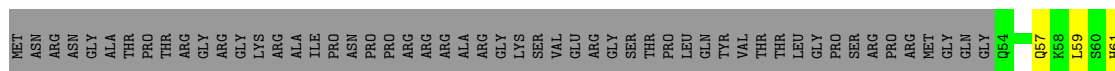


• Molecule 1: Capsid protein

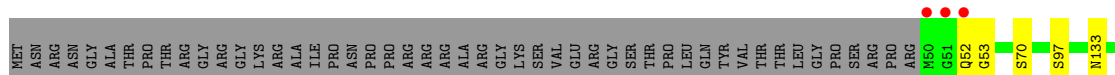
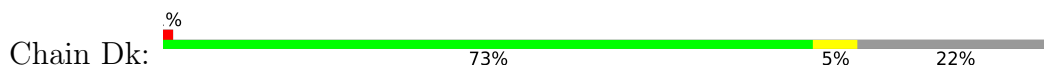


• Molecule 1: Capsid protein

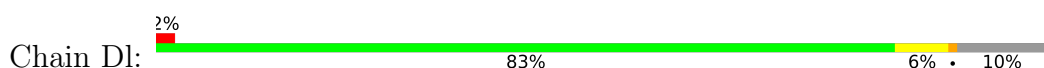




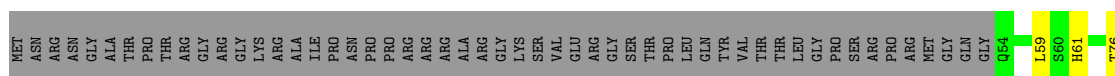
• Molecule 1: Capsid protein



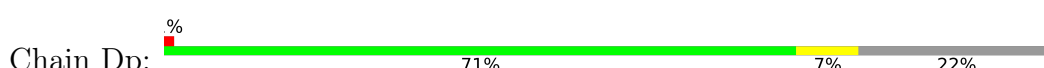
• Molecule 1: Capsid protein



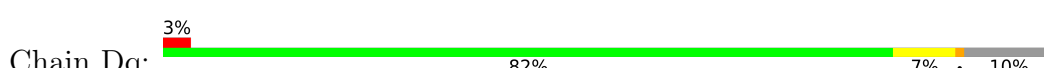
• Molecule 1: Capsid protein

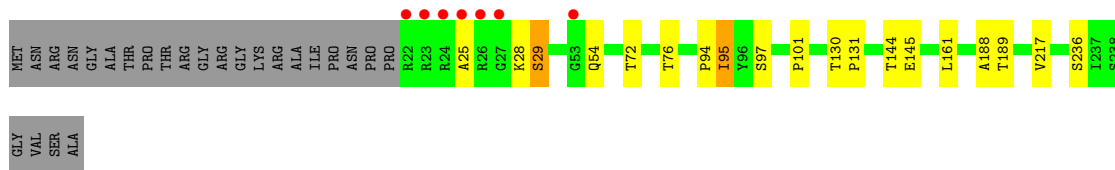


• Molecule 1: Capsid protein

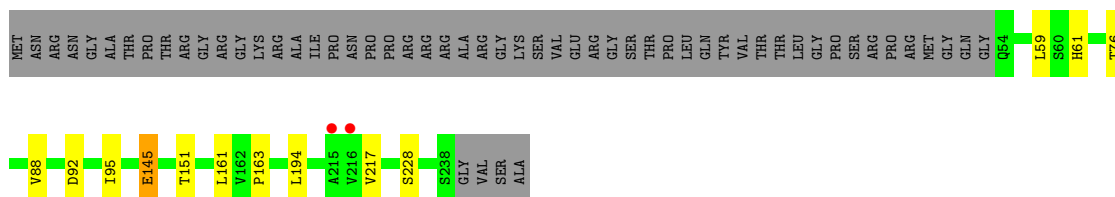
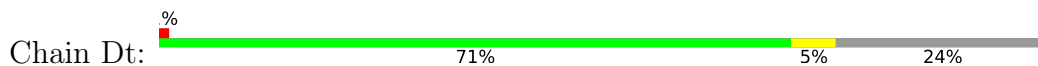


• Molecule 1: Capsid protein

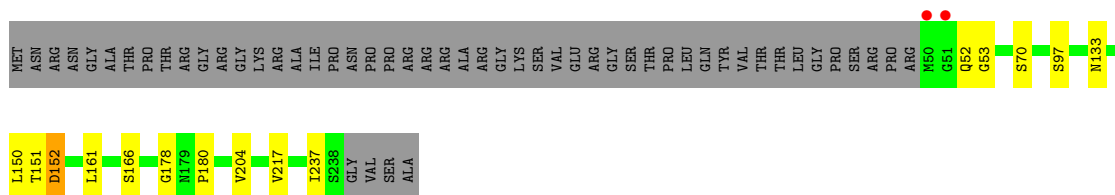
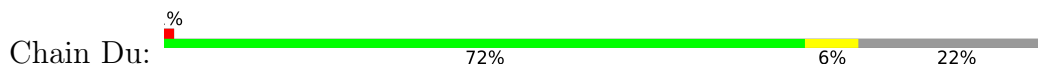




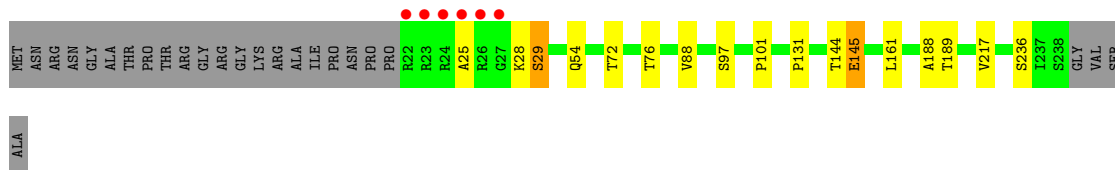
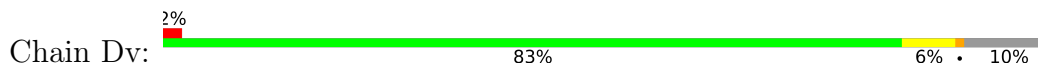
● Molecule 1: Capsid protein



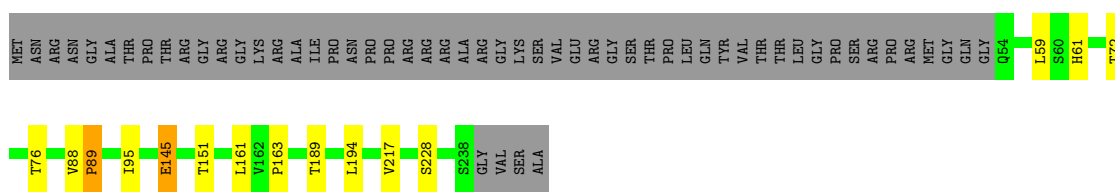
● Molecule 1: Capsid protein



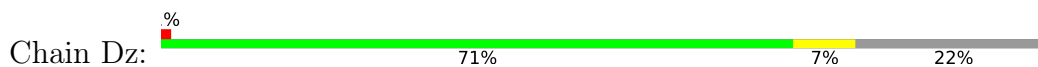
● Molecule 1: Capsid protein

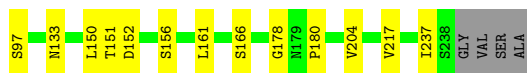
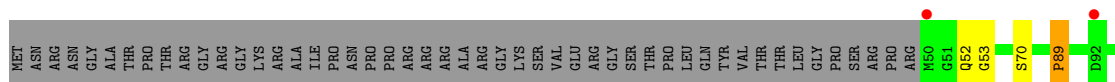


● Molecule 1: Capsid protein

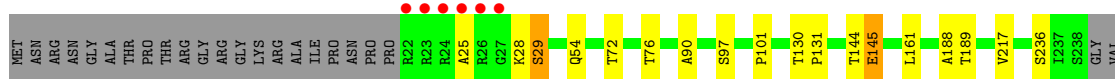
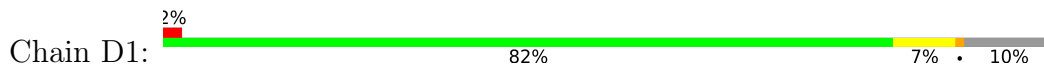


● Molecule 1: Capsid protein

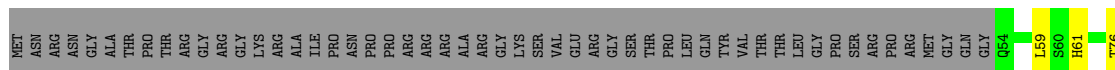




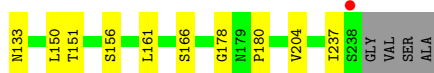
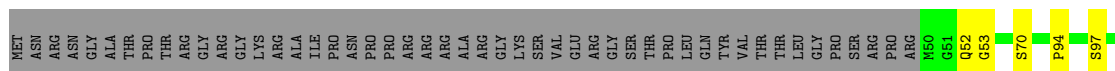
• Molecule 1: Capsid protein



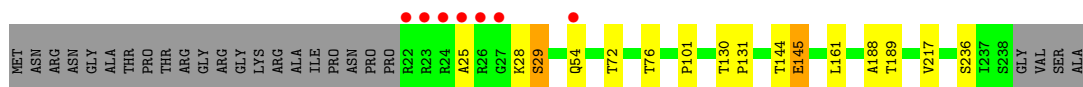
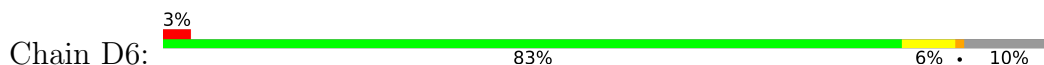
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

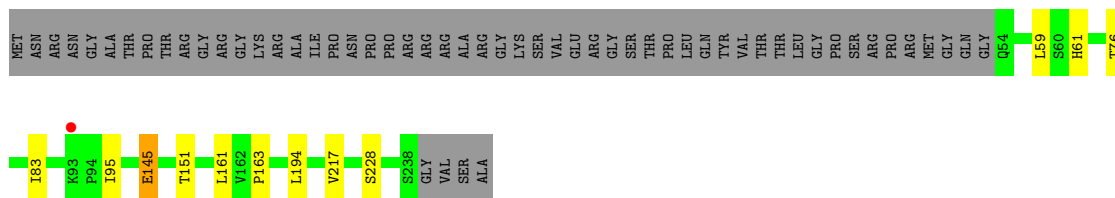


• Molecule 1: Capsid protein

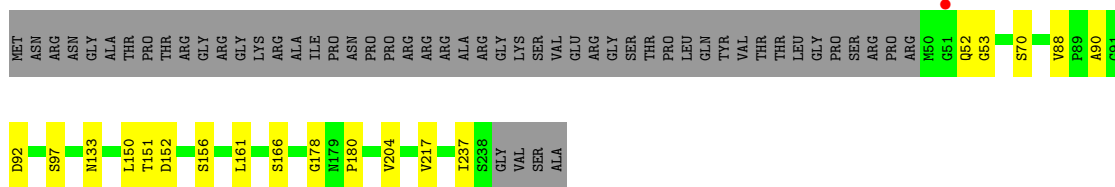


• Molecule 1: Capsid protein

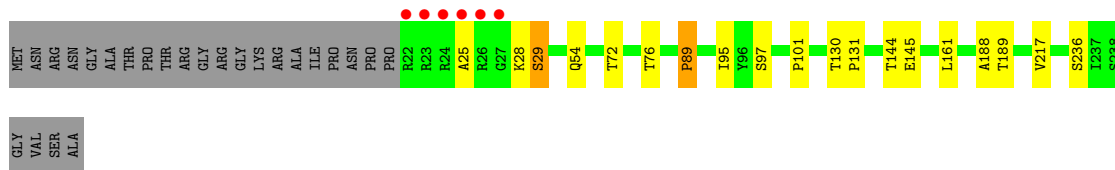
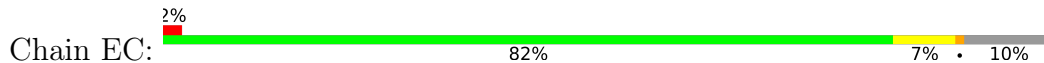




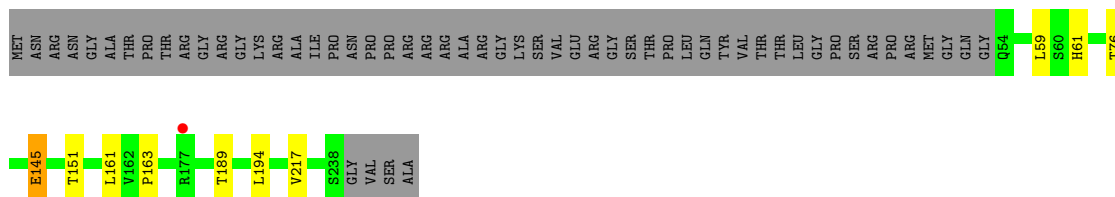
● Molecule 1: Capsid protein



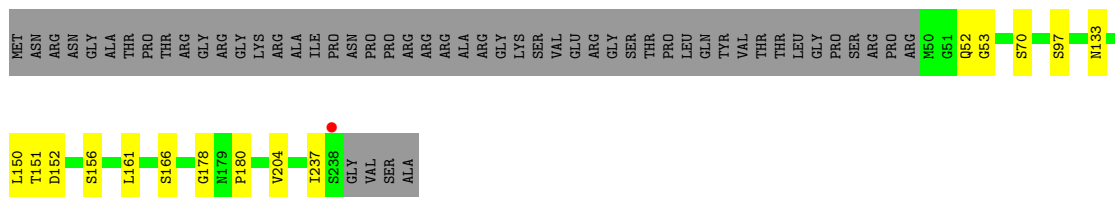
● Molecule 1: Capsid protein



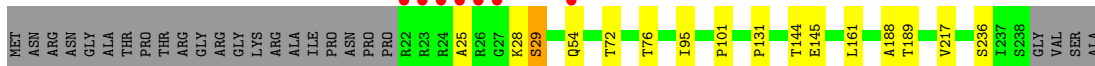
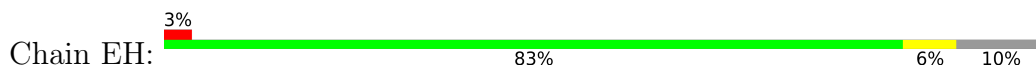
● Molecule 1: Capsid protein



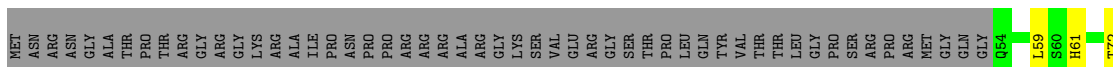
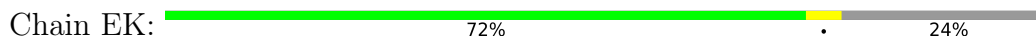
● Molecule 1: Capsid protein



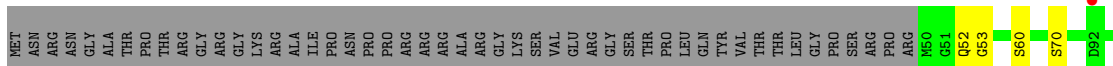
● Molecule 1: Capsid protein



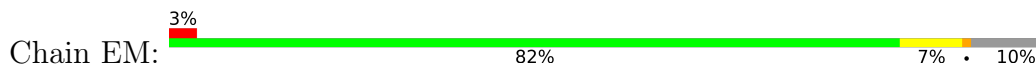
- Molecule 1: Capsid protein



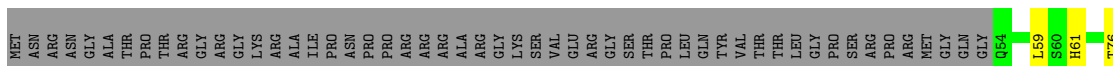
- Molecule 1: Capsid protein



- Molecule 1: Capsid protein

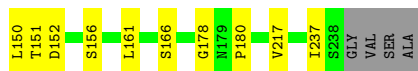
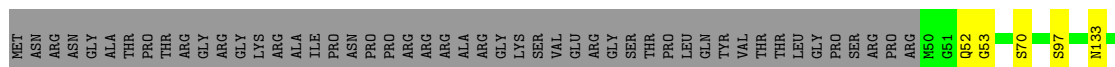


- Molecule 1: Capsid protein

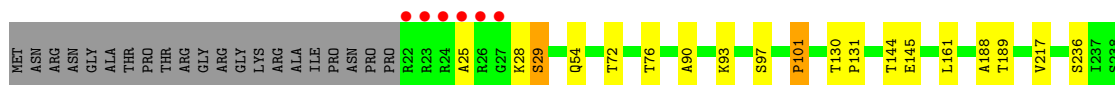
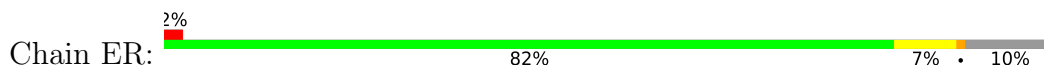


- Molecule 1: Capsid protein

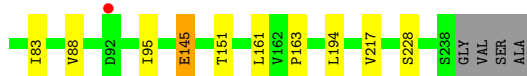
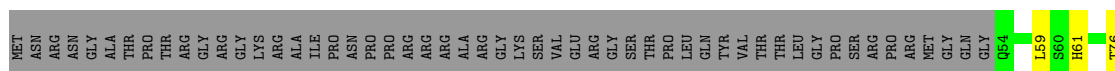




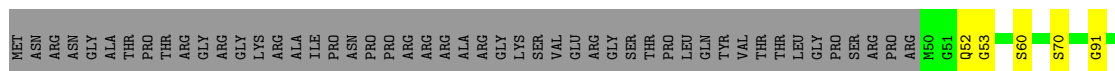
• Molecule 1: Capsid protein



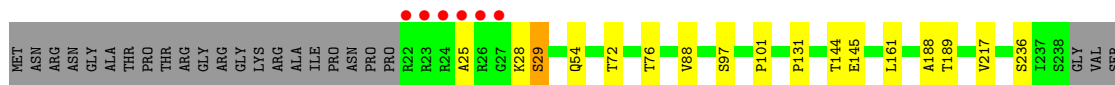
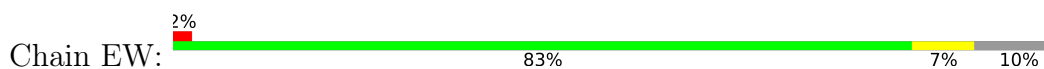
• Molecule 1: Capsid protein



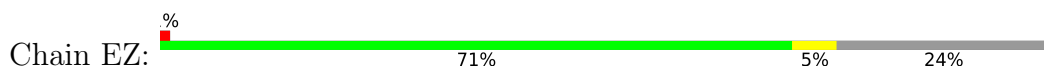
• Molecule 1: Capsid protein

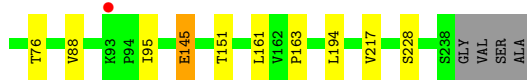
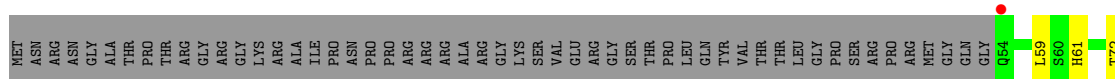


• Molecule 1: Capsid protein

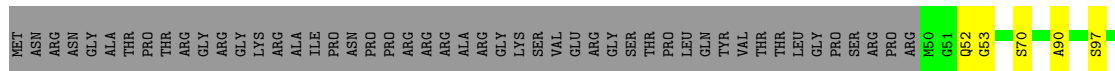


• Molecule 1: Capsid protein

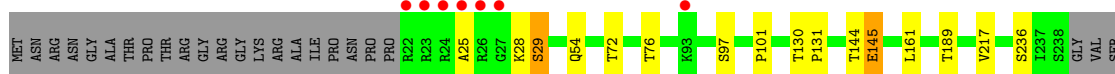
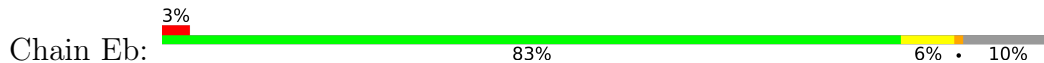




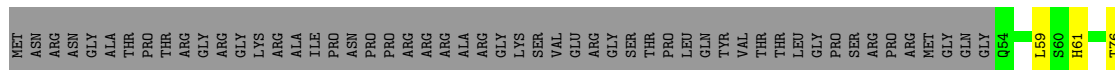
• Molecule 1: Capsid protein



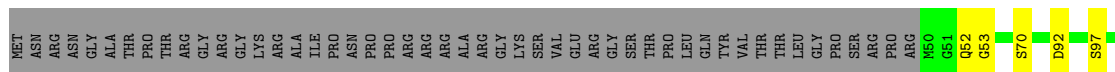
• Molecule 1: Capsid protein



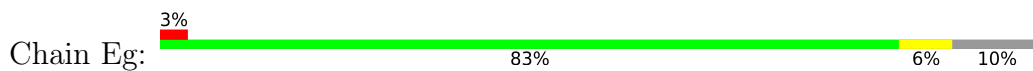
• Molecule 1: Capsid protein



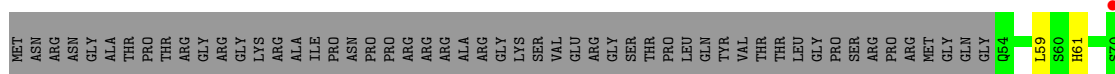
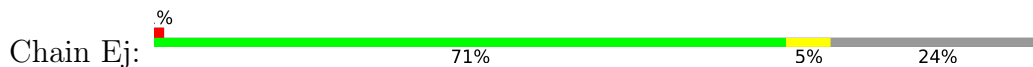
• Molecule 1: Capsid protein



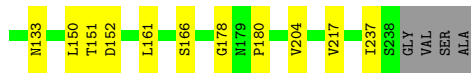
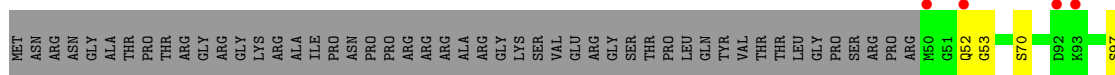
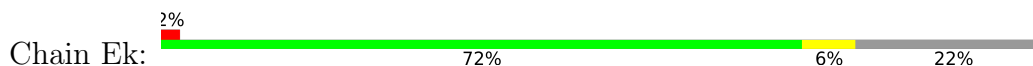
• Molecule 1: Capsid protein



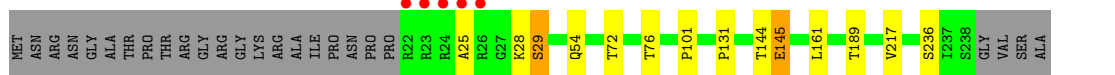
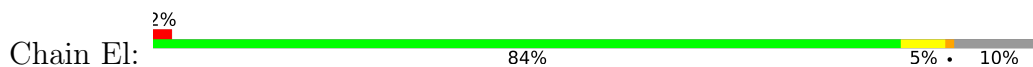
• Molecule 1: Capsid protein



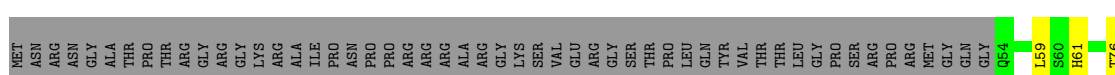
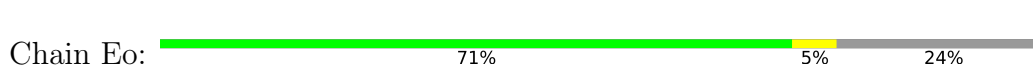
• Molecule 1: Capsid protein



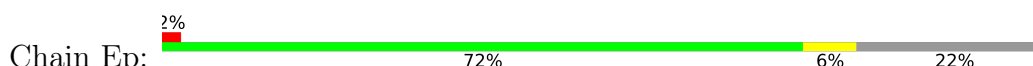
• Molecule 1: Capsid protein

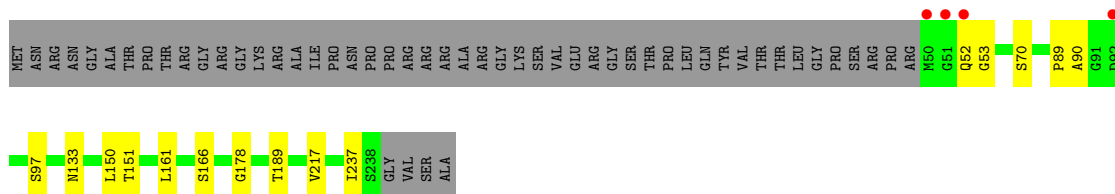


• Molecule 1: Capsid protein

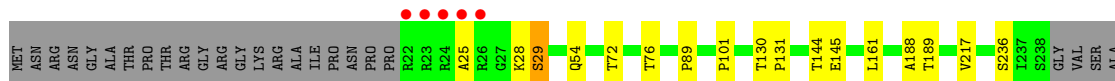
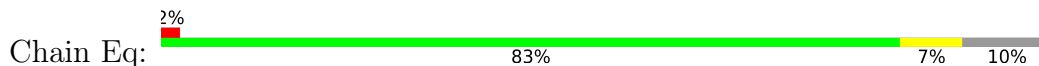


• Molecule 1: Capsid protein

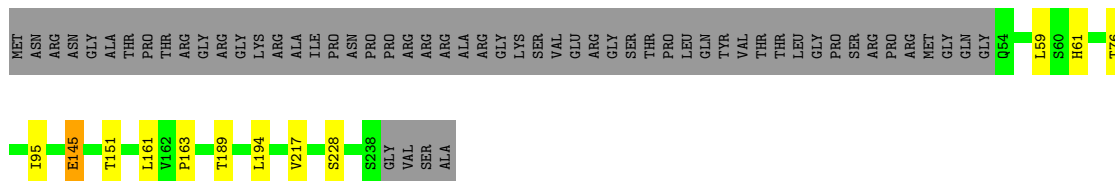




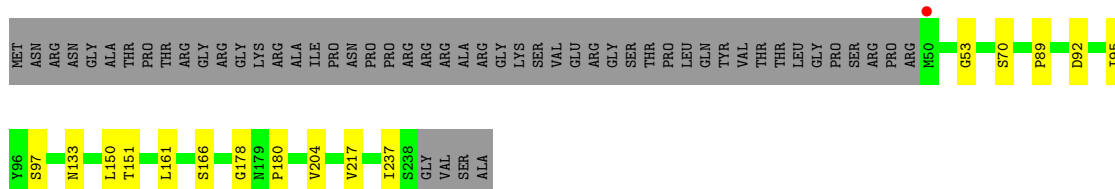
- Molecule 1: Capsid protein



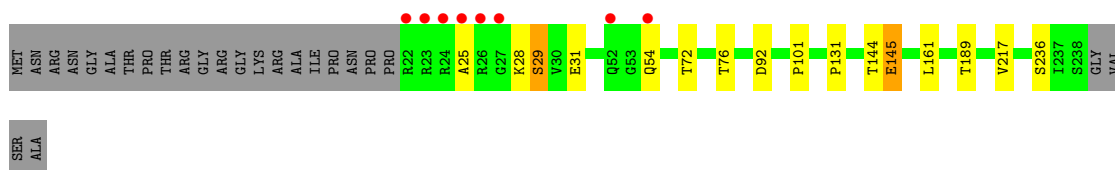
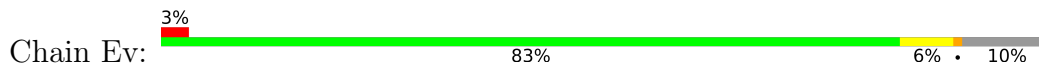
- Molecule 1: Capsid protein



- Molecule 1: Capsid protein

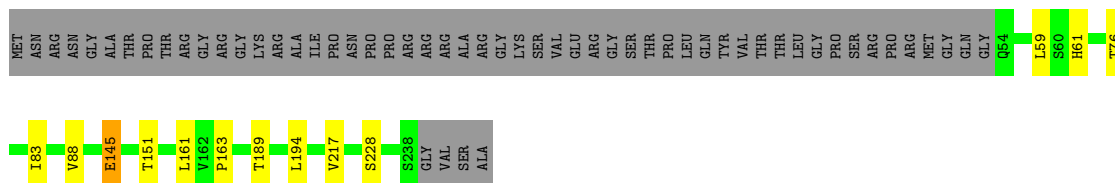


- Molecule 1: Capsid protein

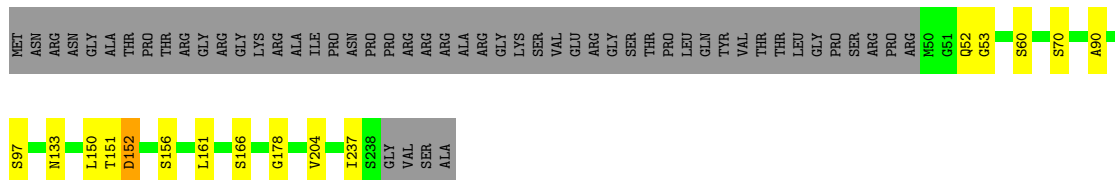


- Molecule 1: Capsid protein

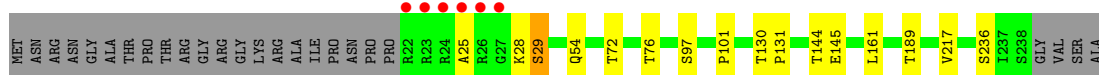
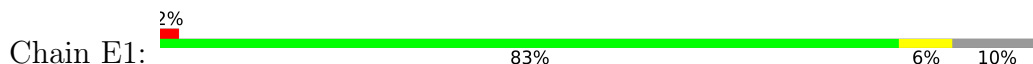




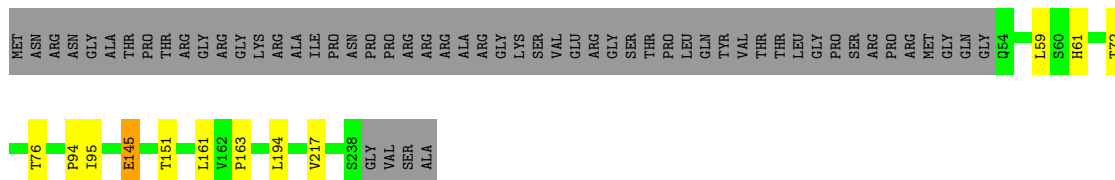
● Molecule 1: Capsid protein



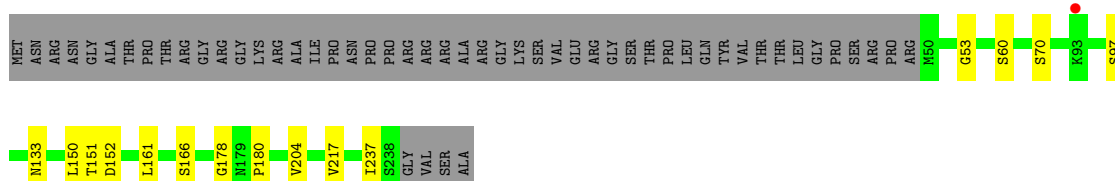
● Molecule 1: Capsid protein



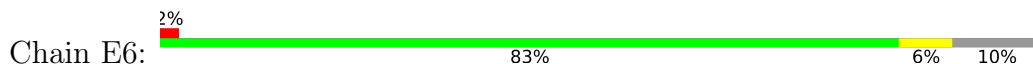
● Molecule 1: Capsid protein

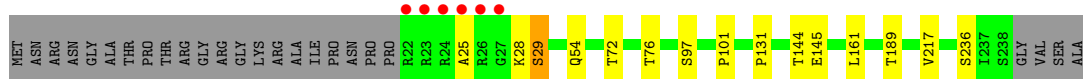


● Molecule 1: Capsid protein

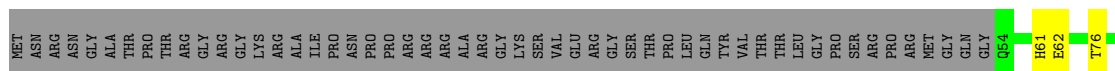


● Molecule 1: Capsid protein

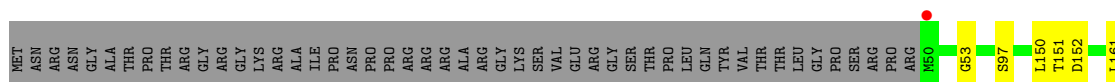
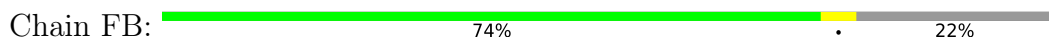




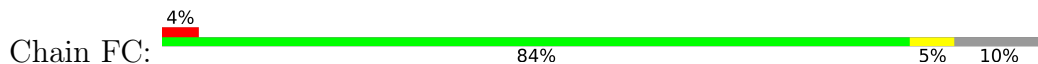
• Molecule 1: Capsid protein



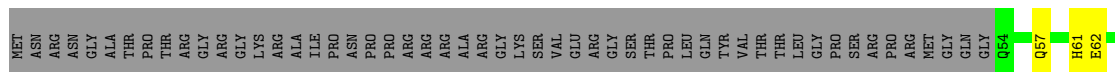
• Molecule 1: Capsid protein



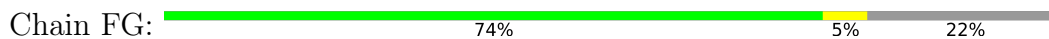
• Molecule 1: Capsid protein

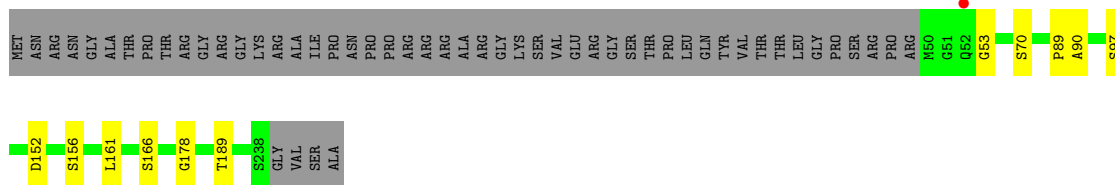


• Molecule 1: Capsid protein

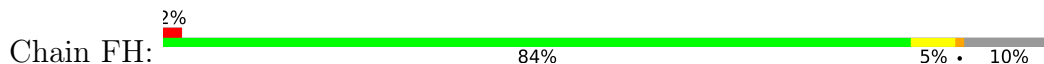


• Molecule 1: Capsid protein

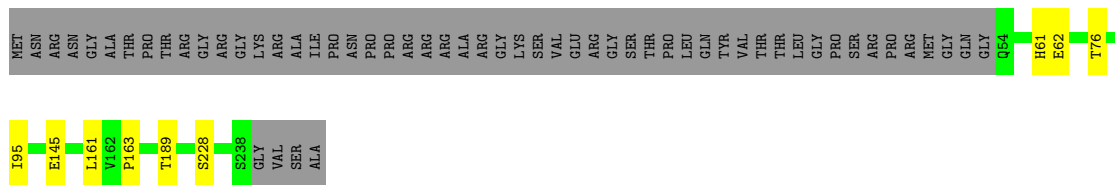




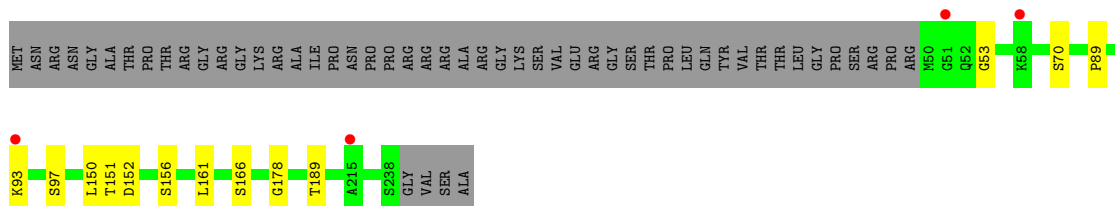
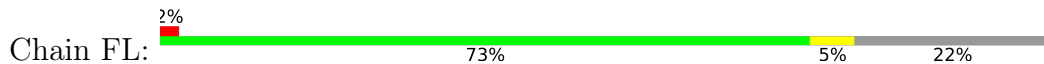
● Molecule 1: Capsid protein



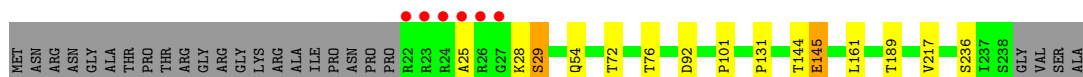
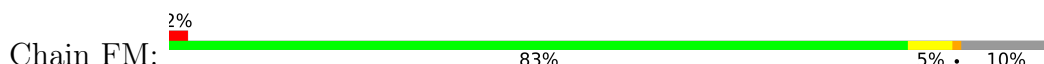
● Molecule 1: Capsid protein



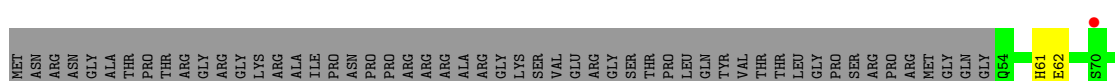
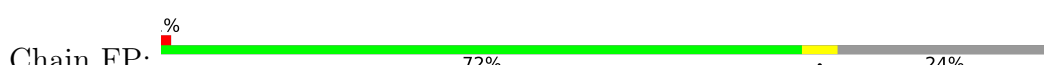
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

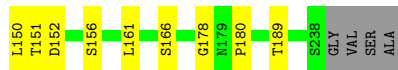
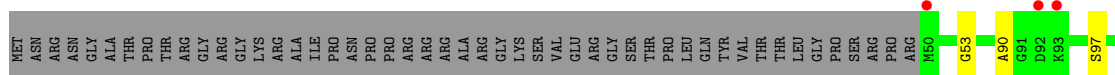
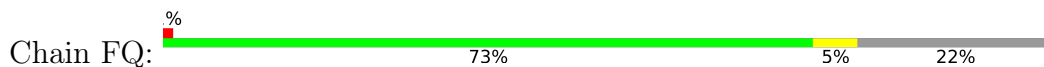


● Molecule 1: Capsid protein

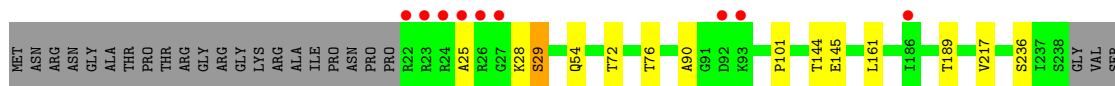
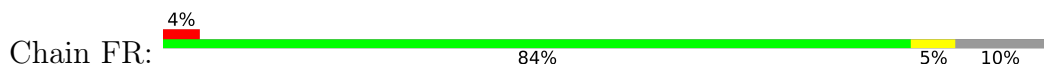




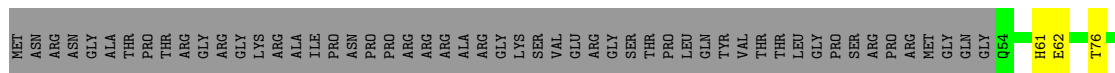
• Molecule 1: Capsid protein



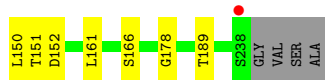
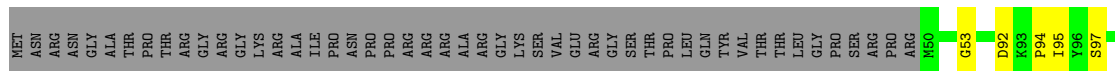
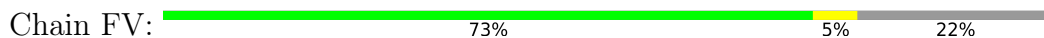
• Molecule 1: Capsid protein



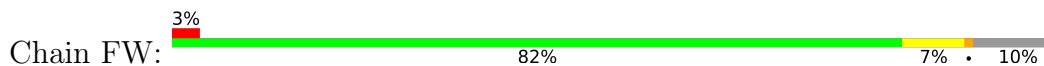
• Molecule 1: Capsid protein

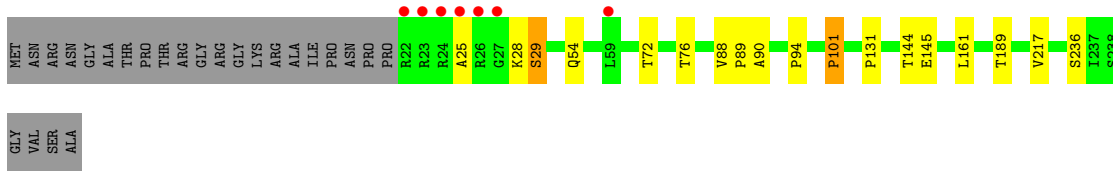


• Molecule 1: Capsid protein

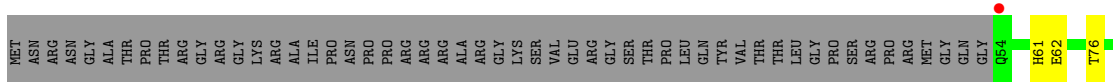
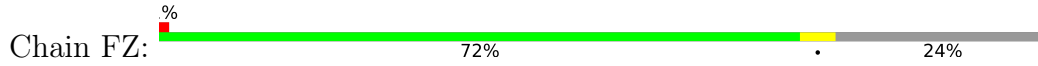


• Molecule 1: Capsid protein

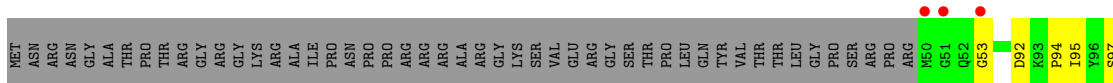
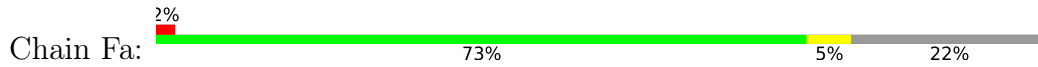




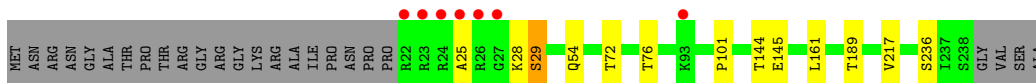
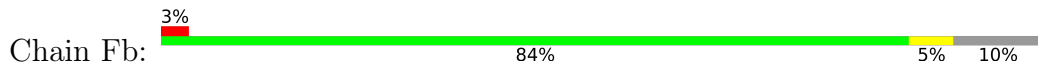
• Molecule 1: Capsid protein



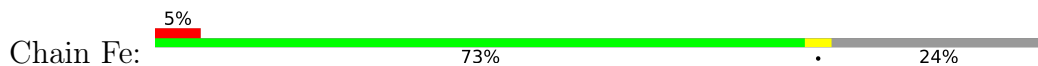
• Molecule 1: Capsid protein



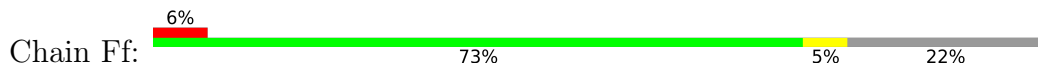
• Molecule 1: Capsid protein

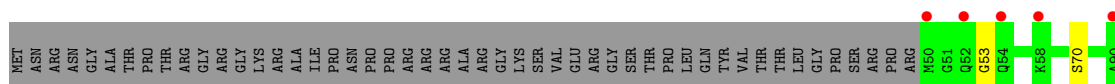


• Molecule 1: Capsid protein

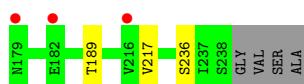
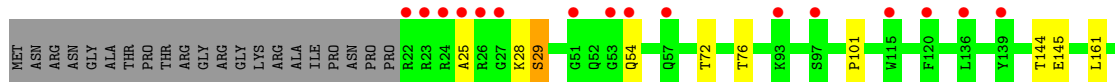
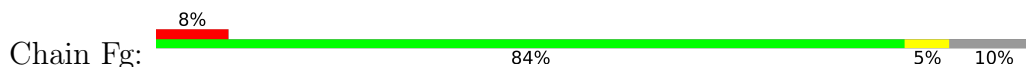


• Molecule 1: Capsid protein

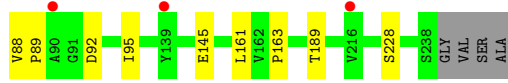
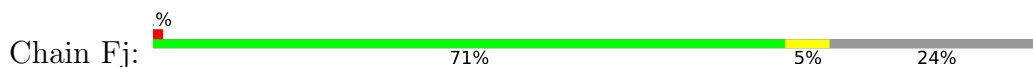




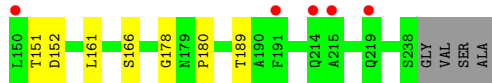
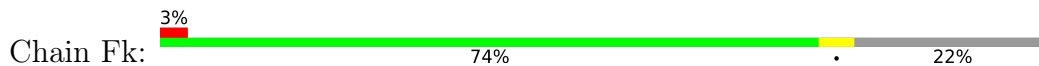
• Molecule 1: Capsid protein



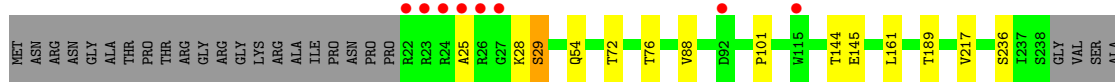
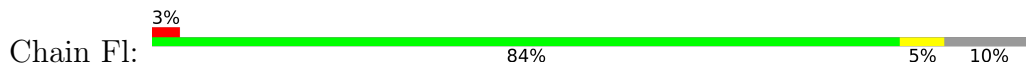
• Molecule 1: Capsid protein



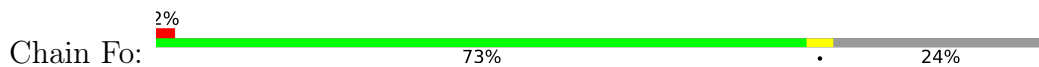
• Molecule 1: Capsid protein

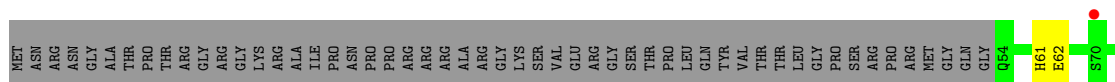


• Molecule 1: Capsid protein

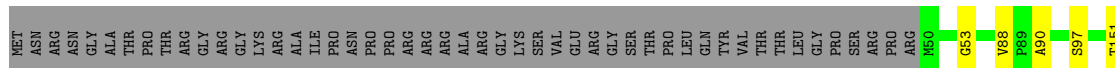
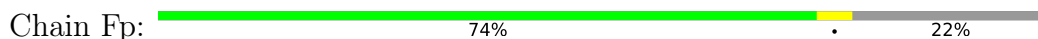


• Molecule 1: Capsid protein

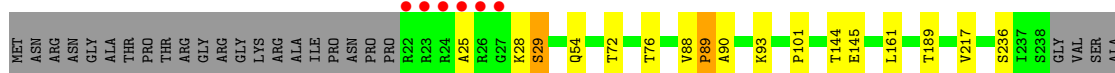
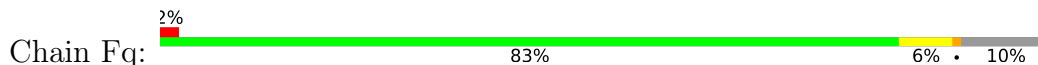




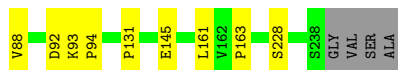
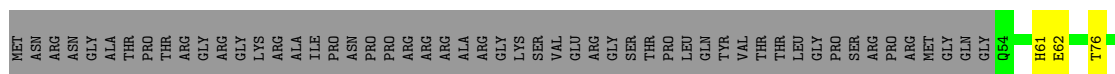
● Molecule 1: Capsid protein



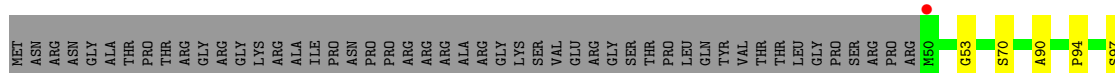
● Molecule 1: Capsid protein



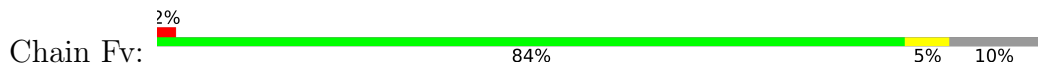
● Molecule 1: Capsid protein

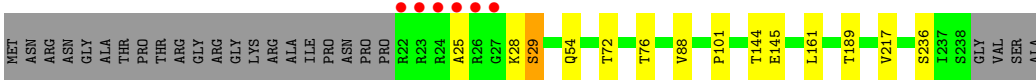


● Molecule 1: Capsid protein

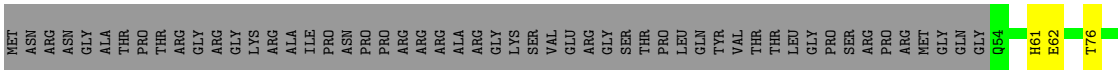


● Molecule 1: Capsid protein

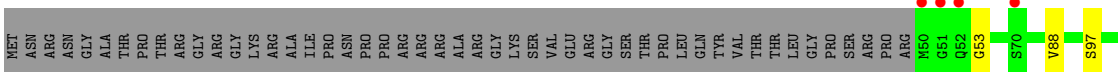
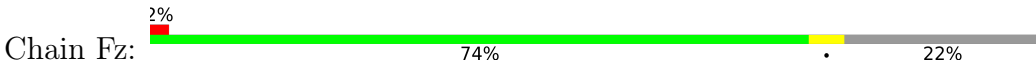




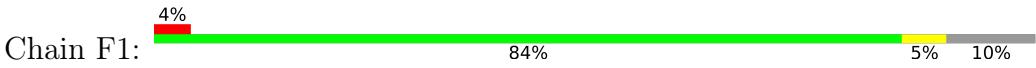
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein



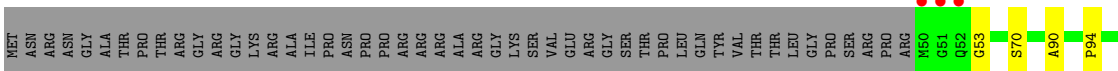
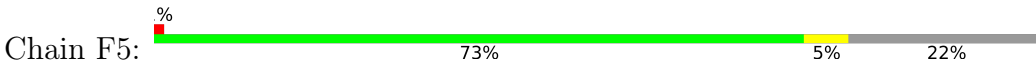
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

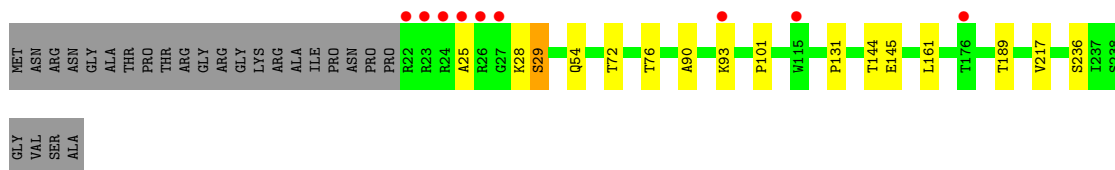
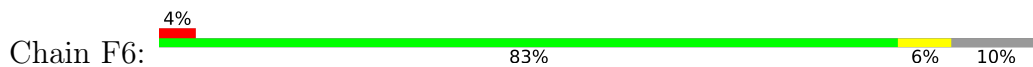


● Molecule 1: Capsid protein

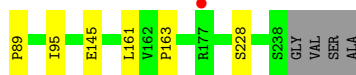
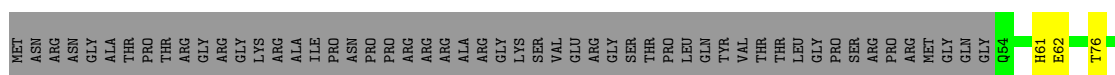




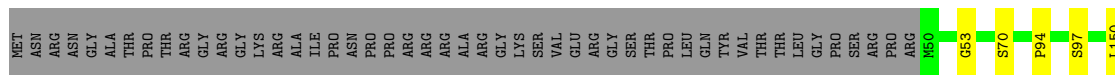
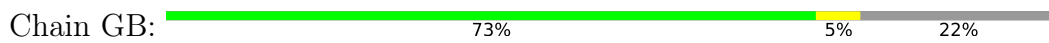
● Molecule 1: Capsid protein



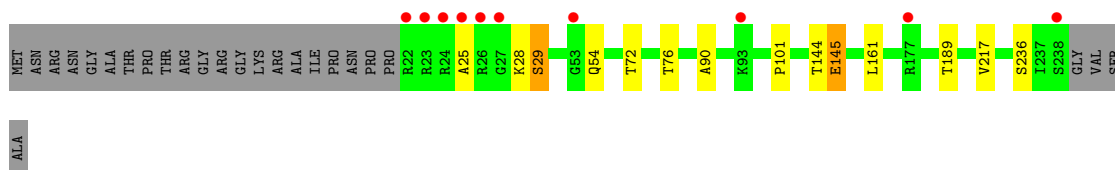
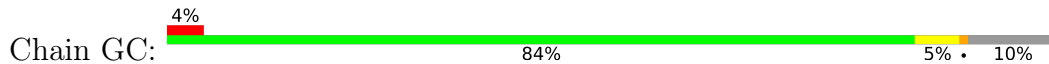
● Molecule 1: Capsid protein



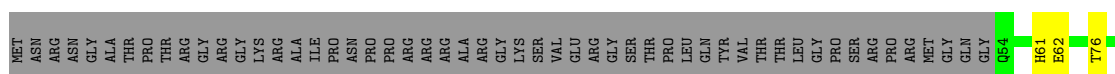
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

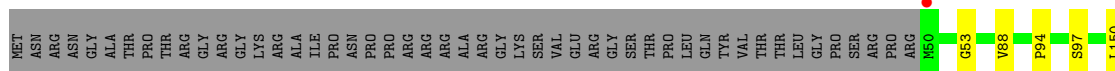
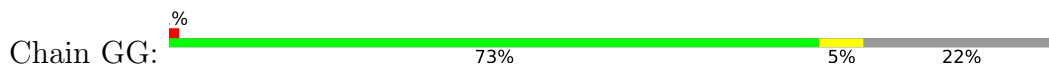


● Molecule 1: Capsid protein

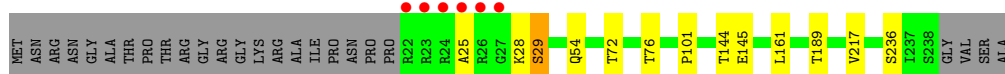
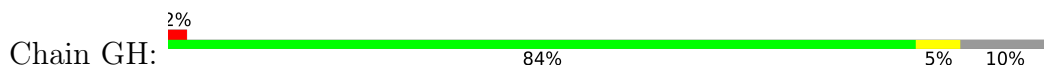




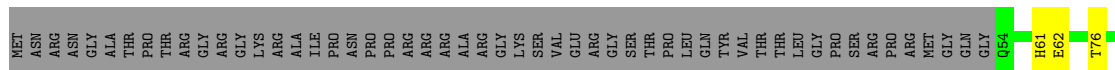
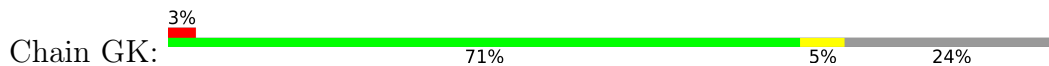
• Molecule 1: Capsid protein



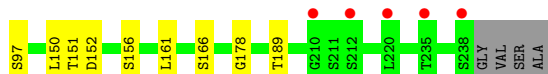
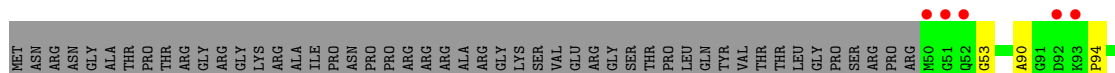
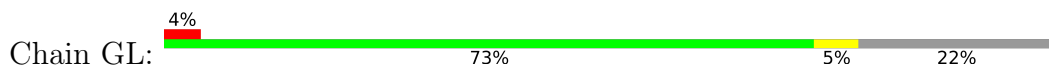
• Molecule 1: Capsid protein



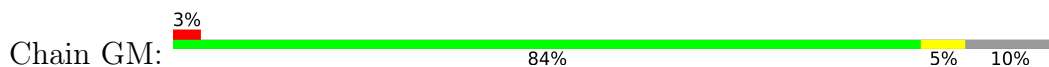
• Molecule 1: Capsid protein



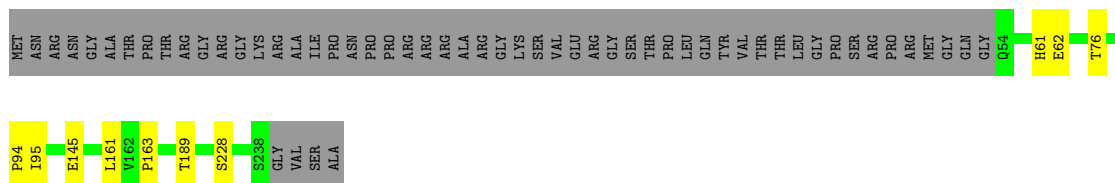
• Molecule 1: Capsid protein



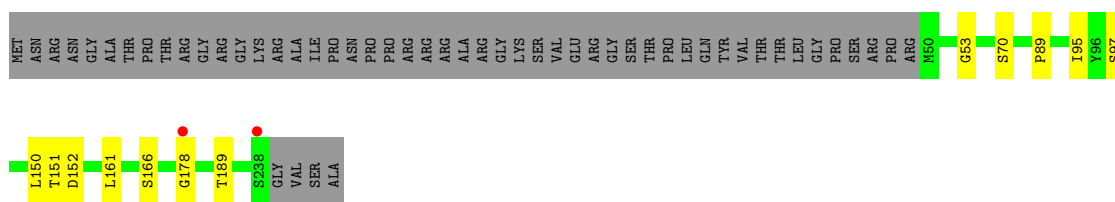
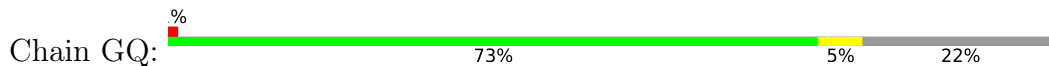
• Molecule 1: Capsid protein



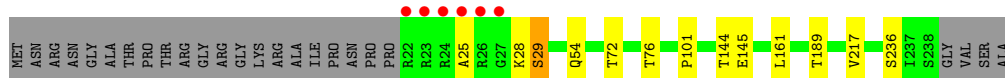
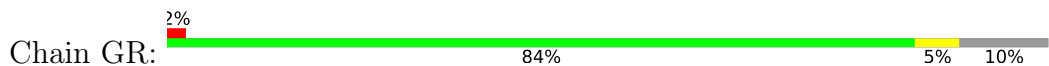
• Molecule 1: Capsid protein



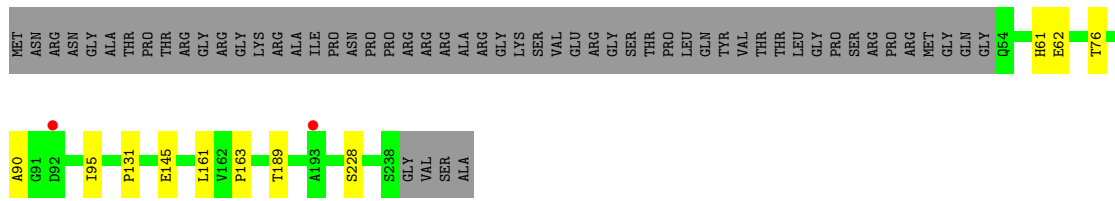
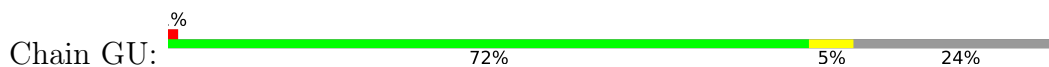
• Molecule 1: Capsid protein



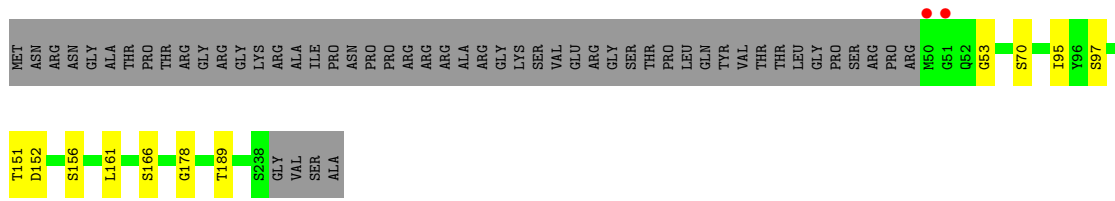
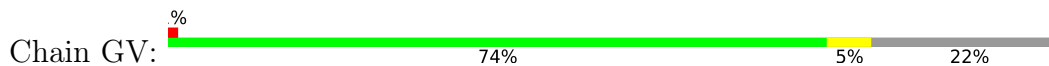
• Molecule 1: Capsid protein



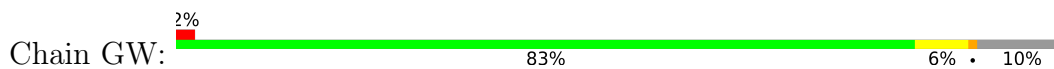
• Molecule 1: Capsid protein



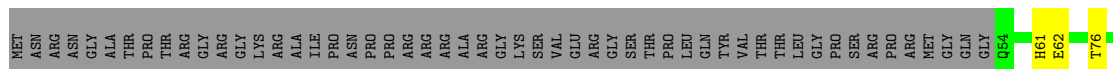
• Molecule 1: Capsid protein



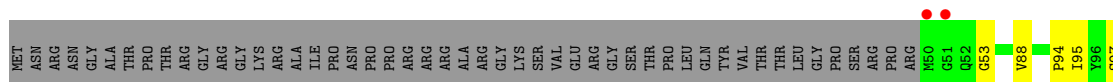
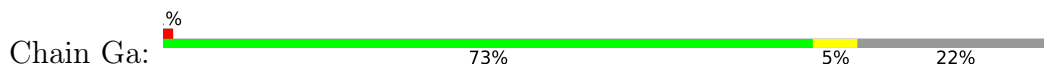
• Molecule 1: Capsid protein



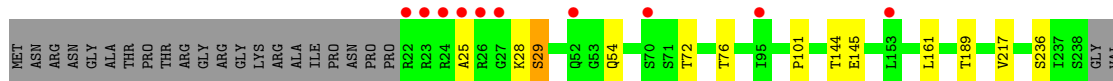
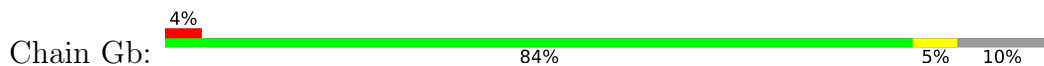
• Molecule 1: Capsid protein



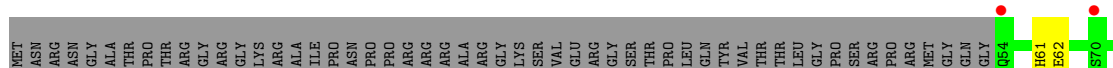
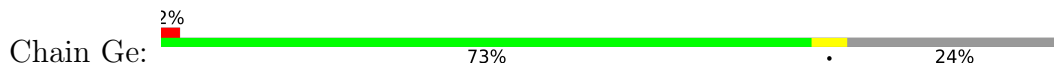
• Molecule 1: Capsid protein



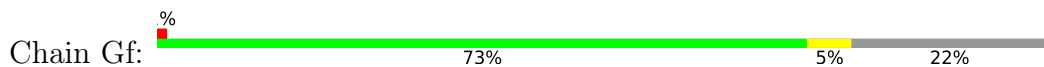
• Molecule 1: Capsid protein

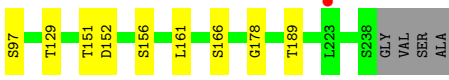
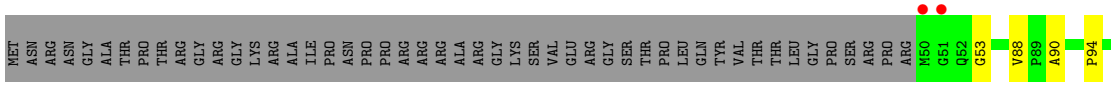


• Molecule 1: Capsid protein

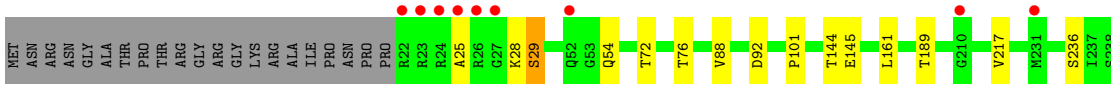
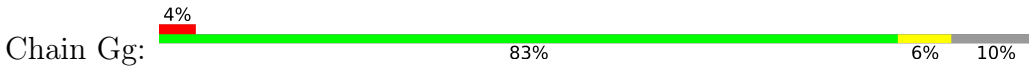


• Molecule 1: Capsid protein

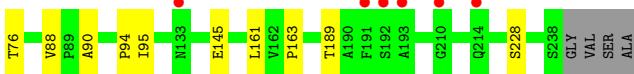
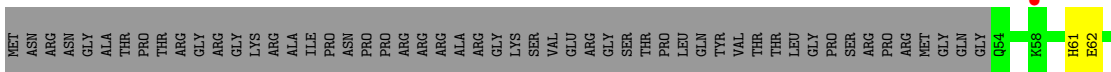
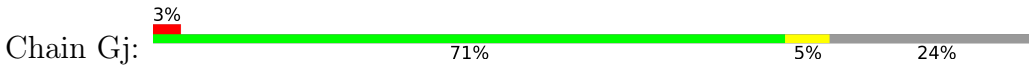




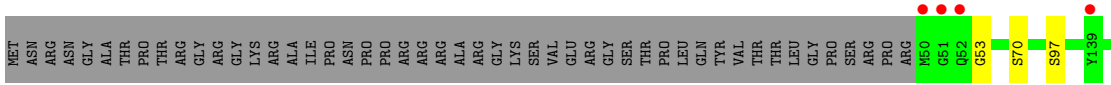
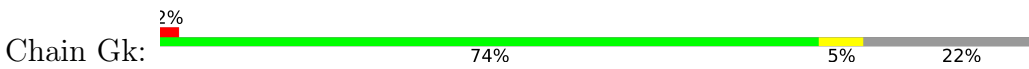
● Molecule 1: Capsid protein



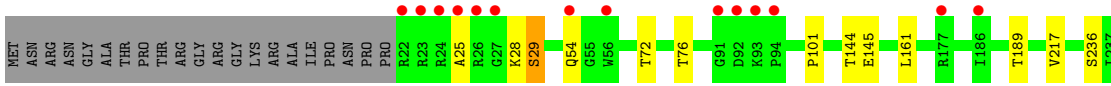
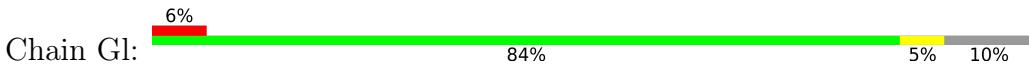
● Molecule 1: Capsid protein



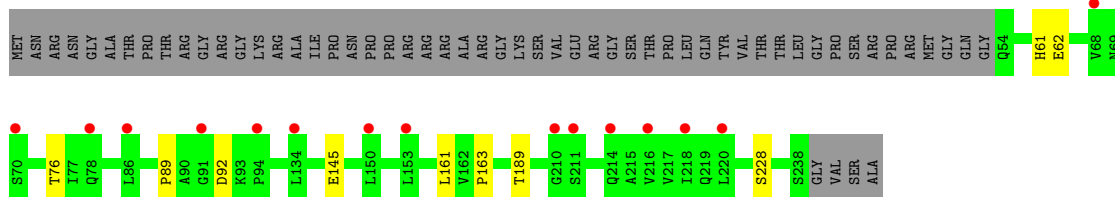
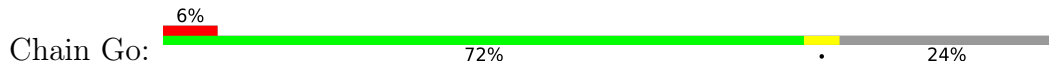
● Molecule 1: Capsid protein



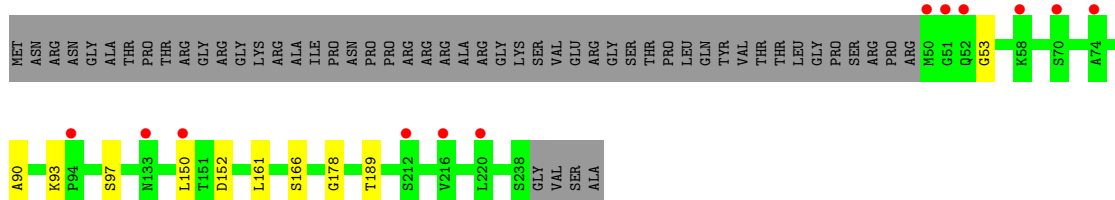
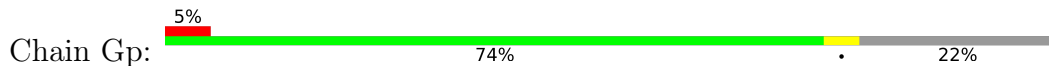
● Molecule 1: Capsid protein



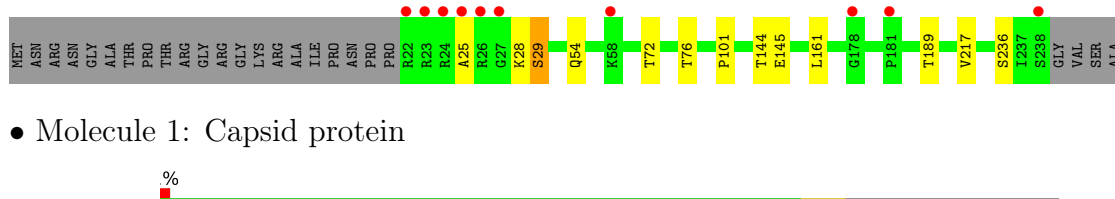
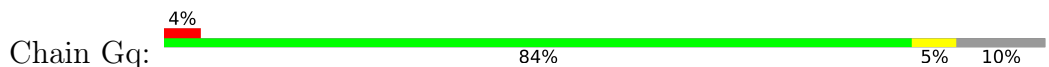
• Molecule 1: Capsid protein



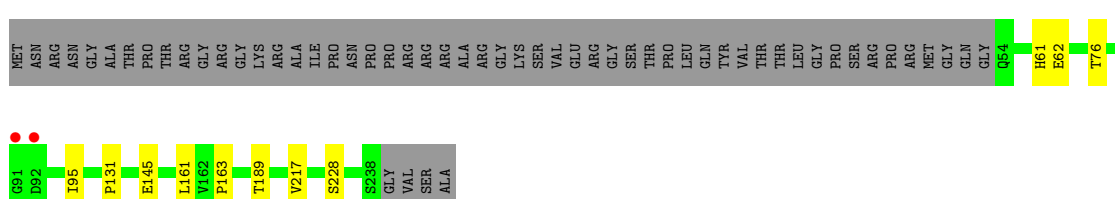
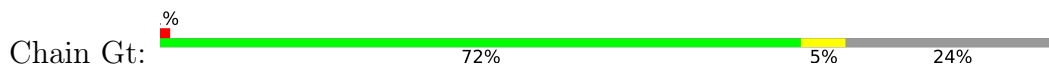
• Molecule 1: Capsid protein



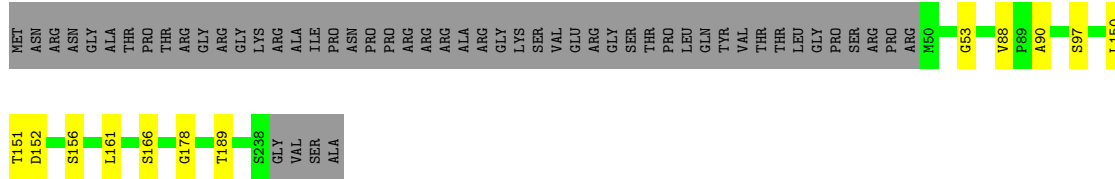
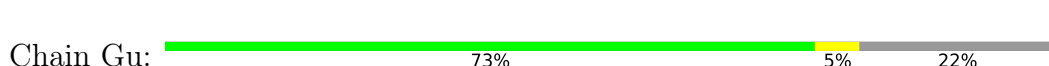
• Molecule 1: Capsid protein



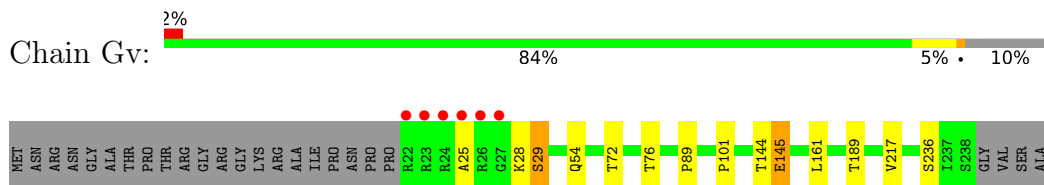
• Molecule 1: Capsid protein



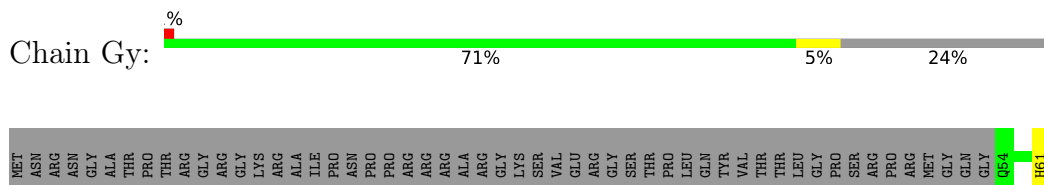
• Molecule 1: Capsid protein



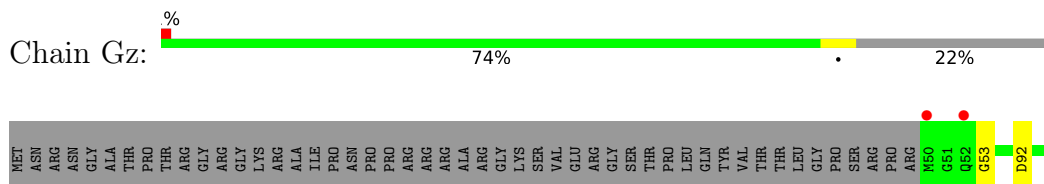
• Molecule 1: Capsid protein



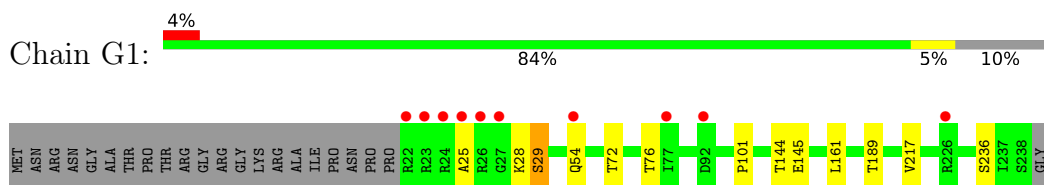
• Molecule 1: Capsid protein



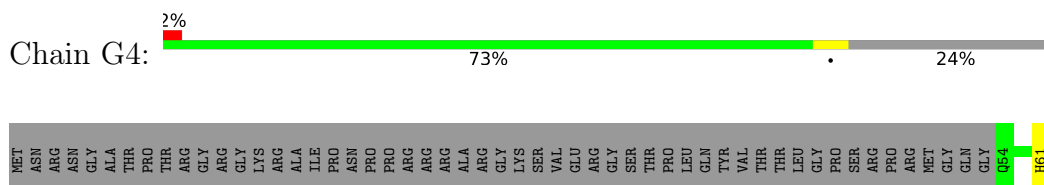
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

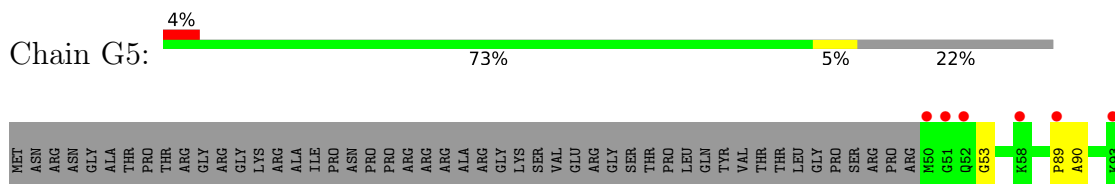


• Molecule 1: Capsid protein

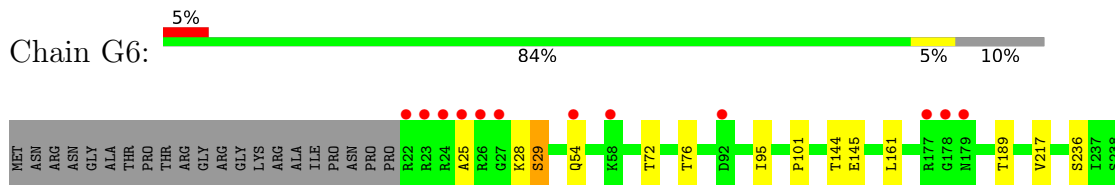


• Molecule 1: Capsid protein

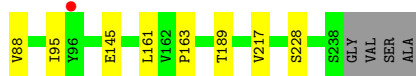
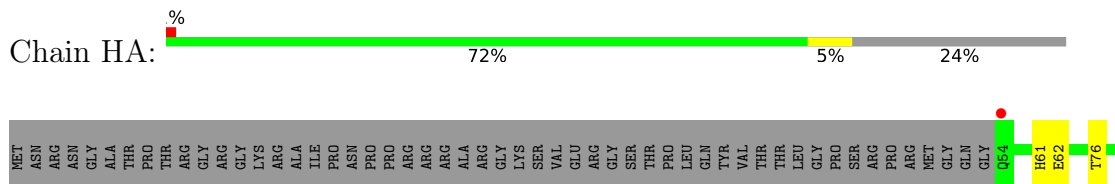




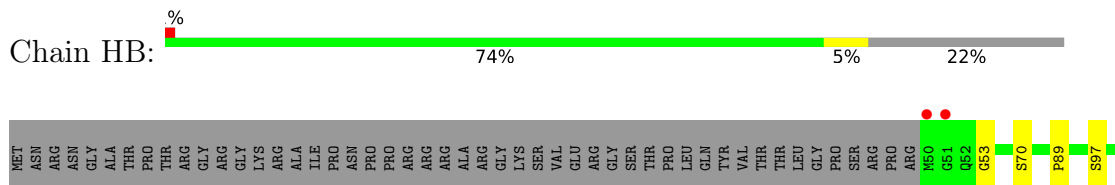
• Molecule 1: Capsid protein



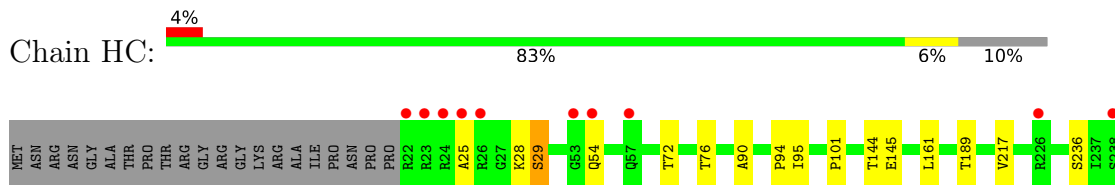
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

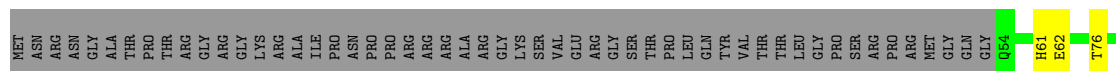


• Molecule 1: Capsid protein




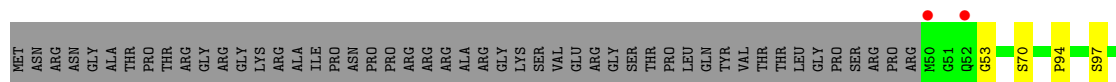
- Molecule 1: Capsid protein

Chain HF:  73% 24%




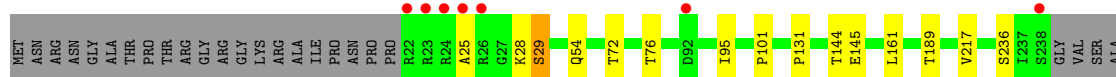
- Molecule 1: Capsid protein

Chain HG:  74% 5% 22%



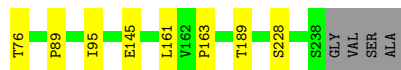
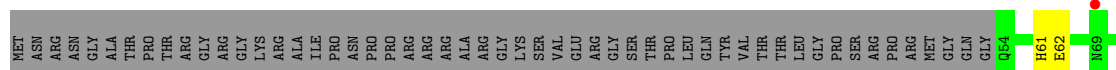
- Molecule 1: Capsid protein

Chain HH:  83% 6% 10% 3%




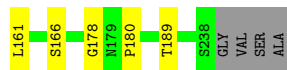
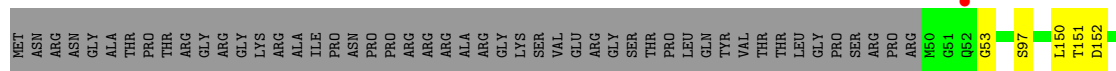
- Molecule 1: Capsid protein

Chain HK:  72% 24%

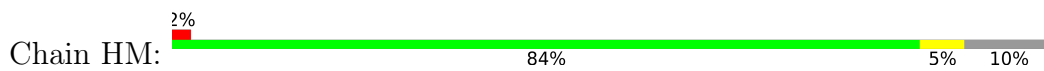


- Molecule 1: Capsid protein

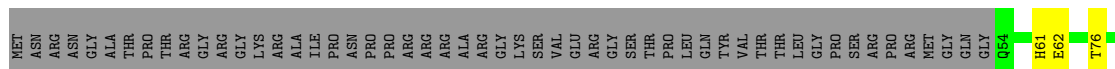
Chain HL:  74% 22%



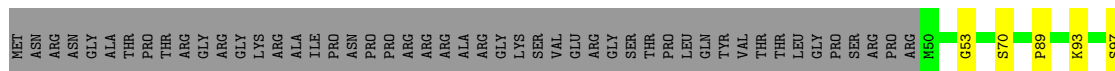
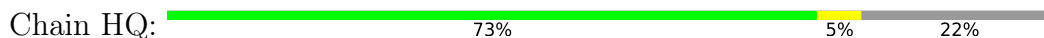
- Molecule 1: Capsid protein



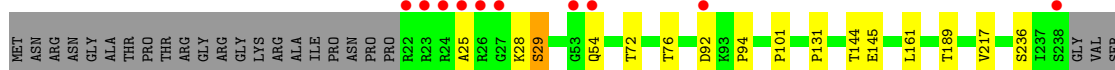
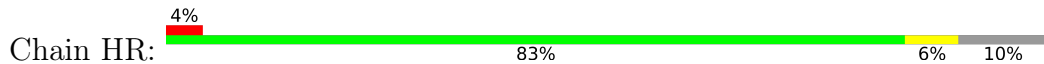
● Molecule 1: Capsid protein



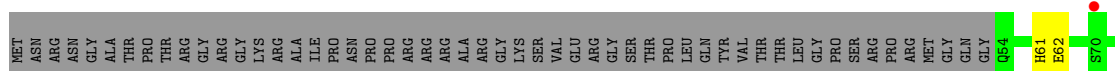
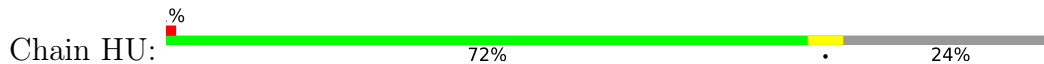
● Molecule 1: Capsid protein



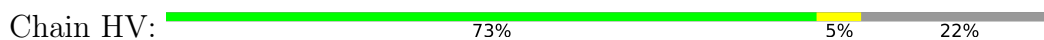
● Molecule 1: Capsid protein

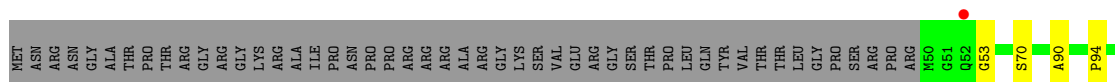


● Molecule 1: Capsid protein

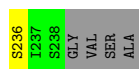
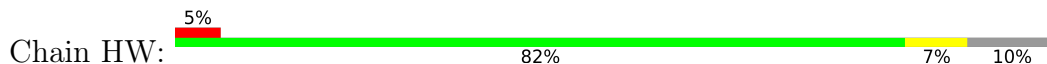


● Molecule 1: Capsid protein

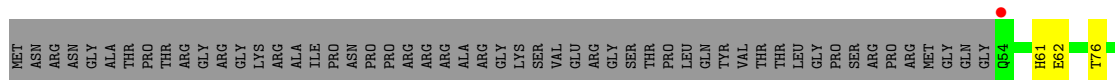




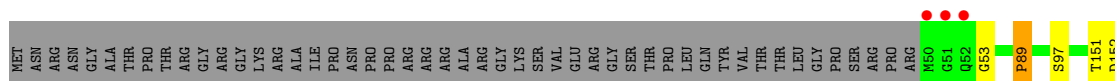
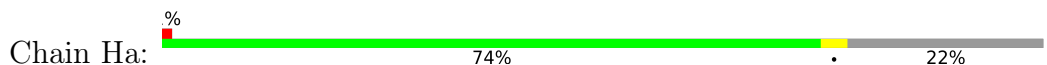
● Molecule 1: Capsid protein



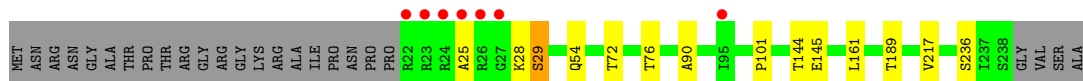
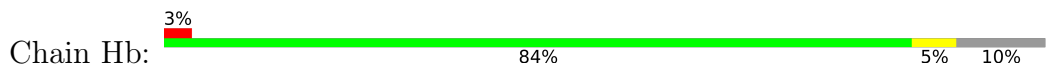
● Molecule 1: Capsid protein



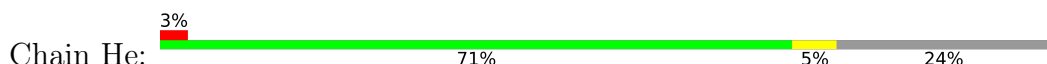
● Molecule 1: Capsid protein

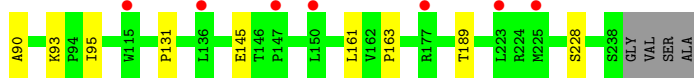
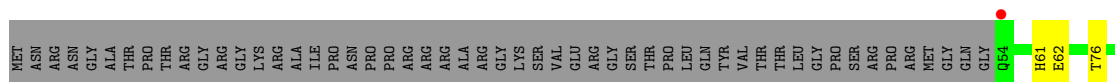


● Molecule 1: Capsid protein

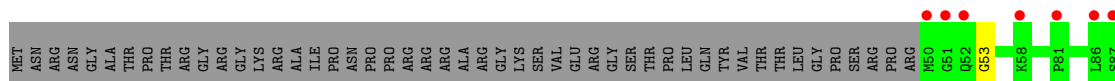
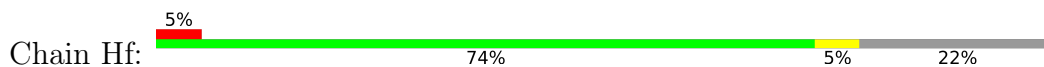


● Molecule 1: Capsid protein

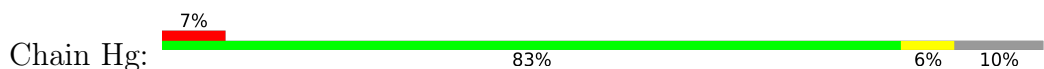




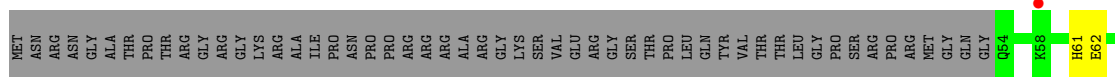
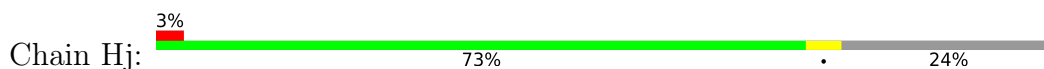
• Molecule 1: Capsid protein



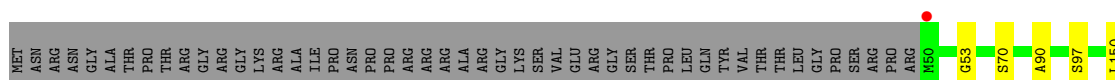
• Molecule 1: Capsid protein



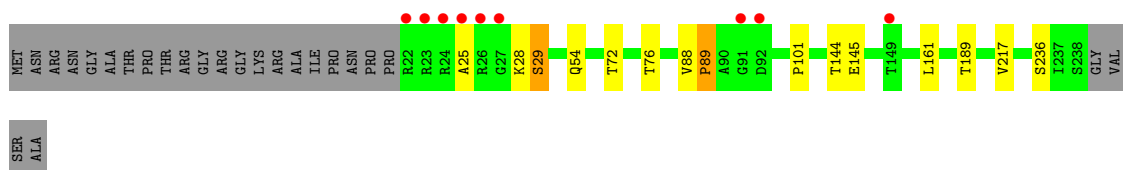
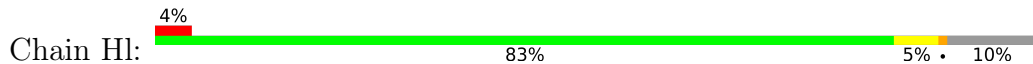
• Molecule 1: Capsid protein



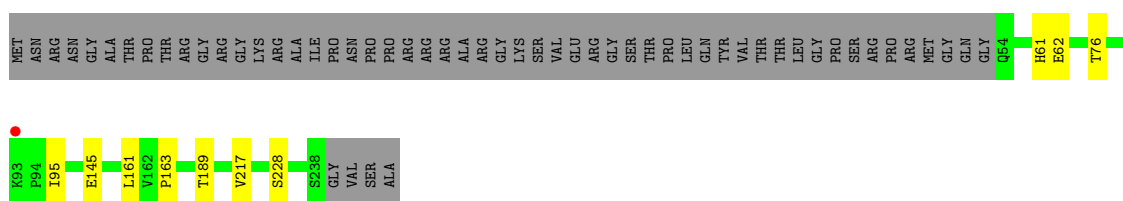
• Molecule 1: Capsid protein



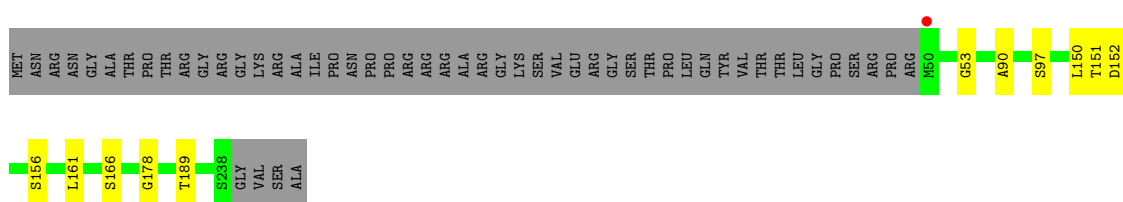
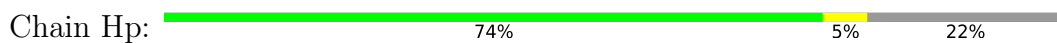
• Molecule 1: Capsid protein



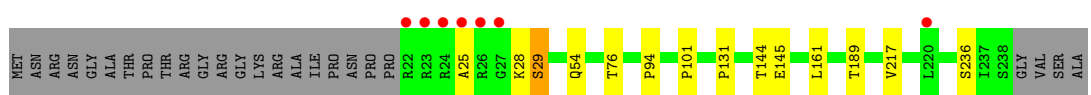
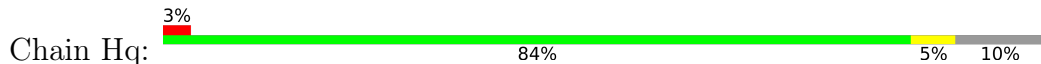
• Molecule 1: Capsid protein



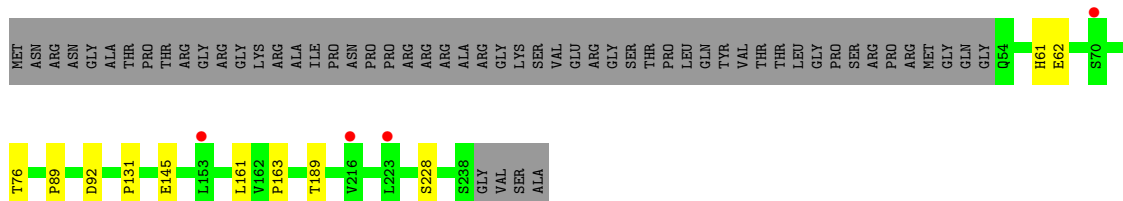
• Molecule 1: Capsid protein



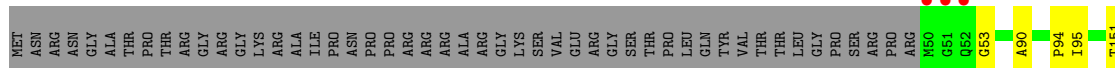
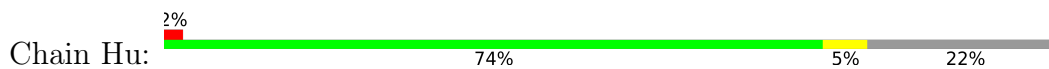
• Molecule 1: Capsid protein



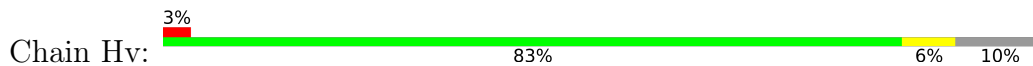
• Molecule 1: Capsid protein



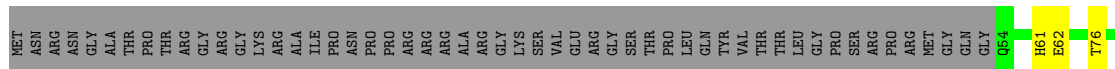
• Molecule 1: Capsid protein



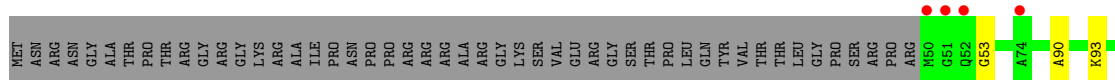
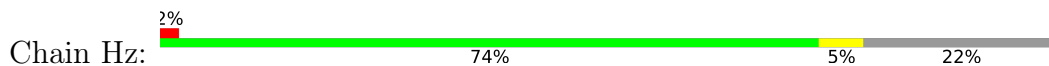
• Molecule 1: Capsid protein



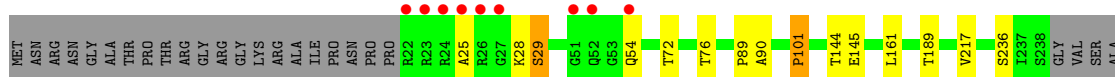
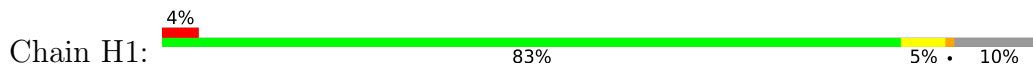
• Molecule 1: Capsid protein



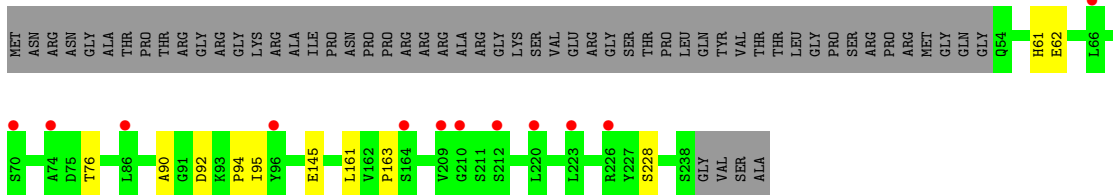
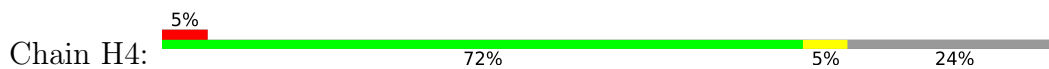
• Molecule 1: Capsid protein



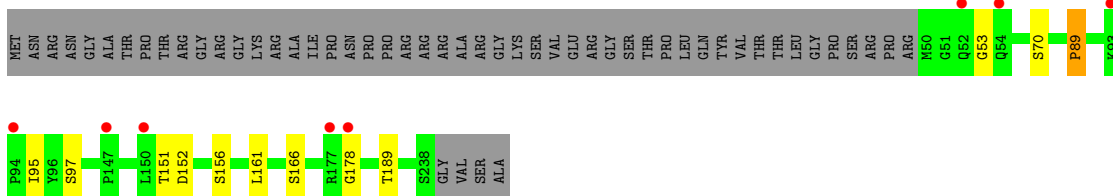
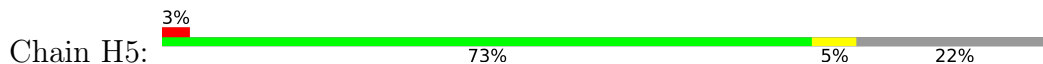
• Molecule 1: Capsid protein



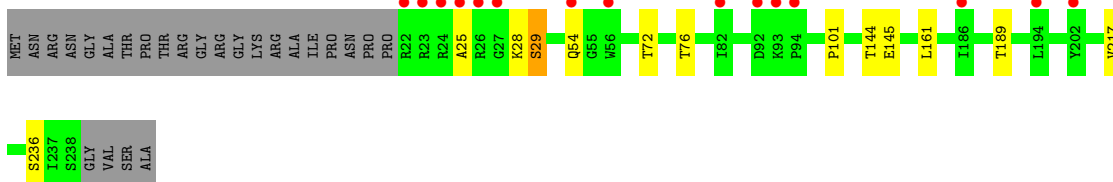
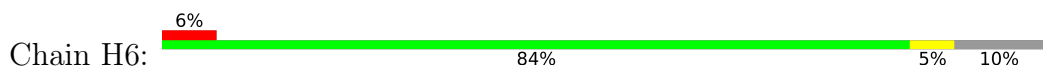
• Molecule 1: Capsid protein



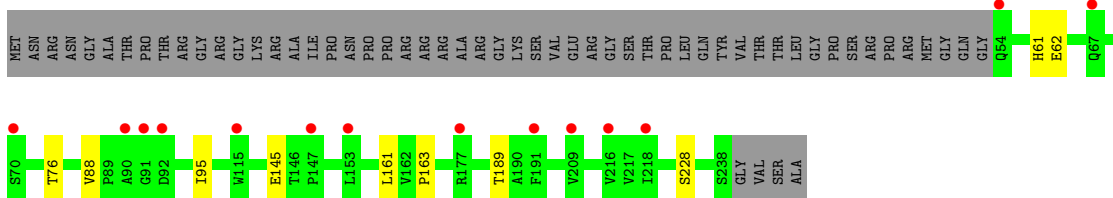
- Molecule 1: Capsid protein



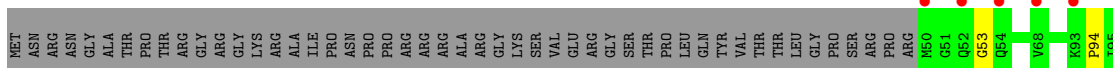
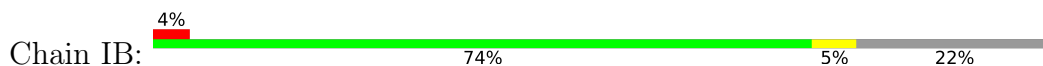
- Molecule 1: Capsid protein



- Molecule 1: Capsid protein

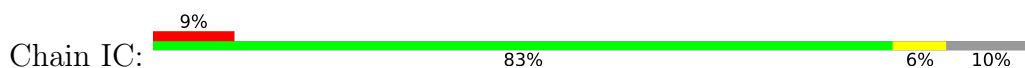


- Molecule 1: Capsid protein

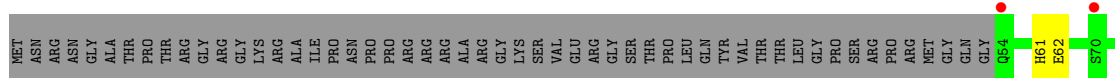
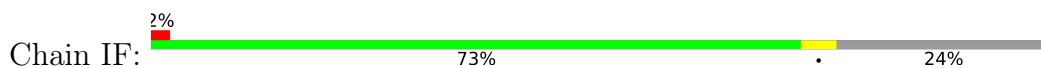




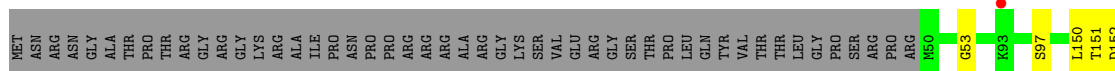
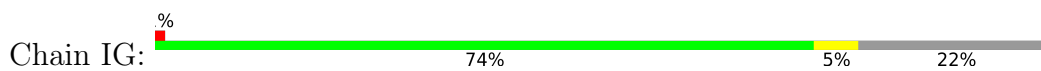
• Molecule 1: Capsid protein



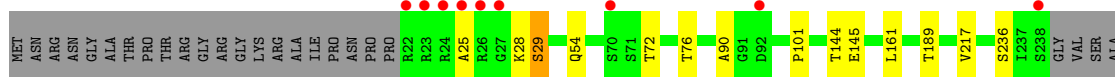
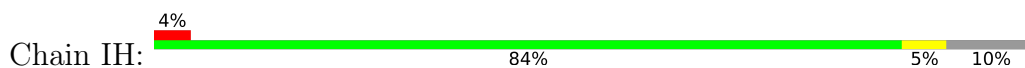
• Molecule 1: Capsid protein



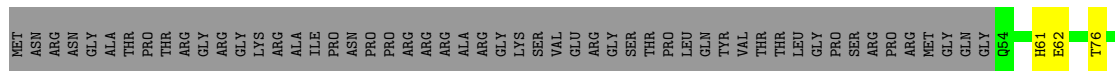
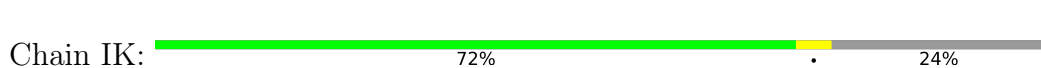
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

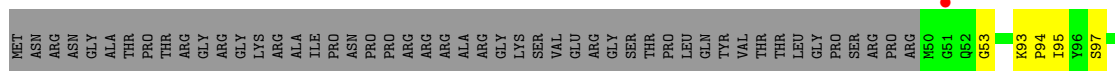


• Molecule 1: Capsid protein

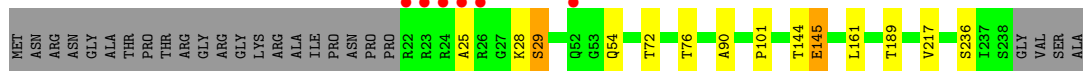
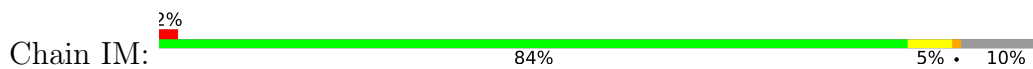




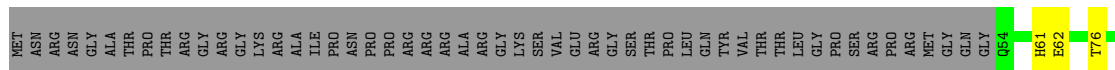
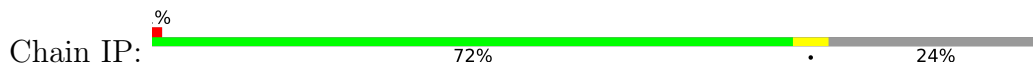
● Molecule 1: Capsid protein



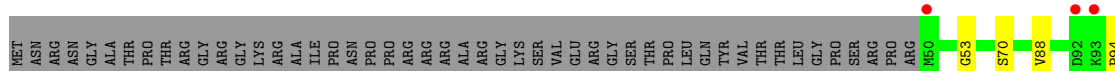
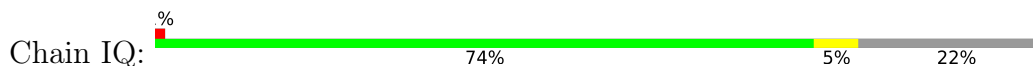
● Molecule 1: Capsid protein



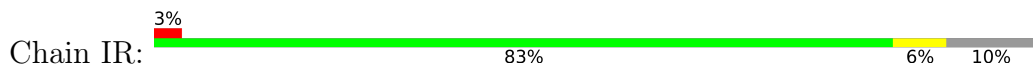
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

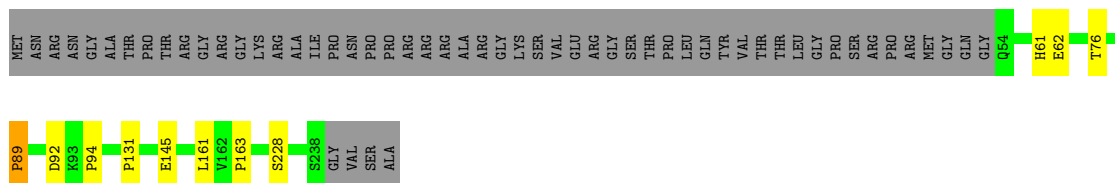


● Molecule 1: Capsid protein



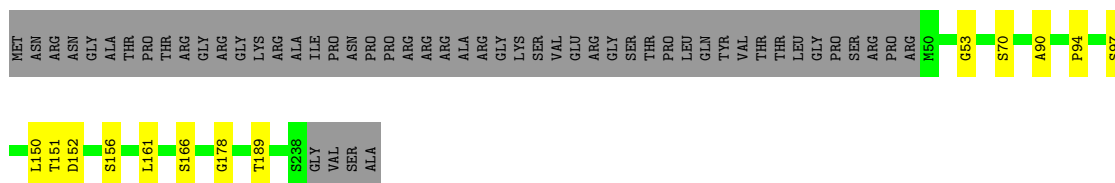
• Molecule 1: Capsid protein

Chain IU: 72% 24%



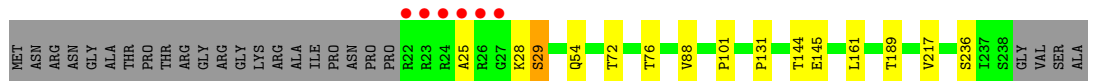
• Molecule 1: Capsid protein

Chain IV: 73% 5% 22%



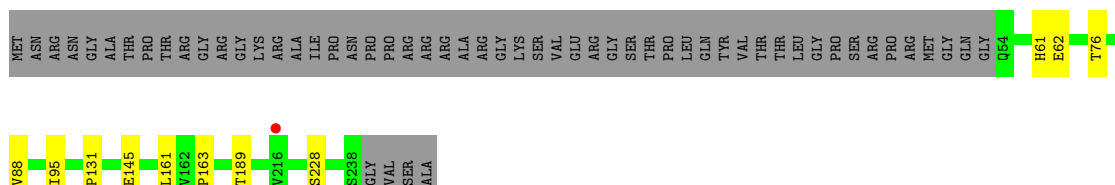
• Molecule 1: Capsid protein

Chain IW: 2% 83% 6% 10%



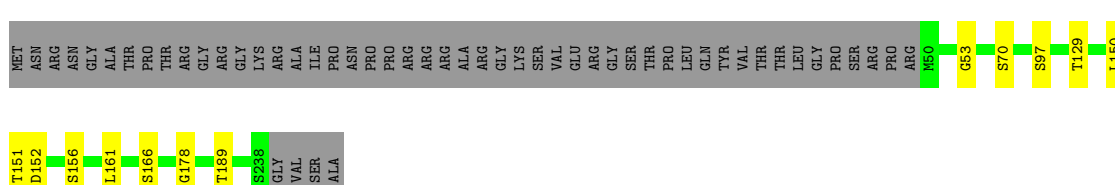
• Molecule 1: Capsid protein

Chain IZ: 72% 5% 24%

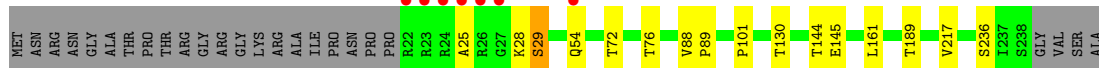
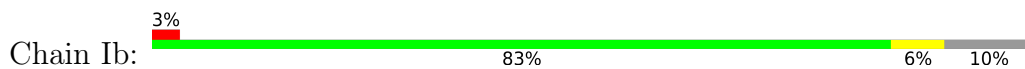


• Molecule 1: Capsid protein

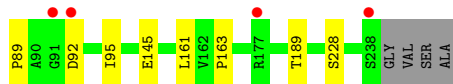
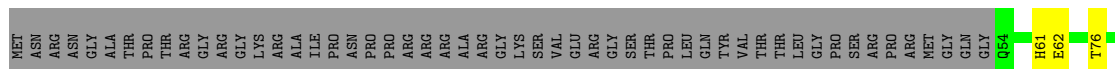
Chain Ia: 73% 5% 22%



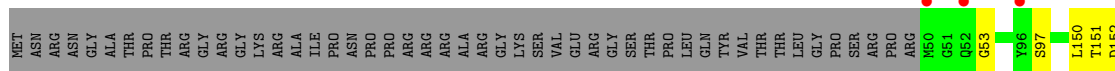
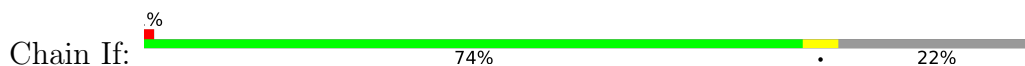
• Molecule 1: Capsid protein



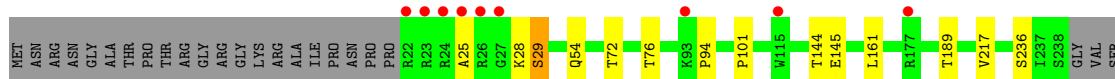
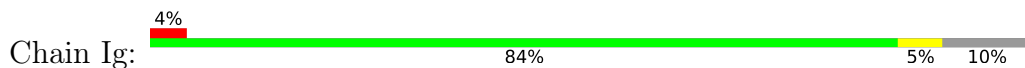
• Molecule 1: Capsid protein



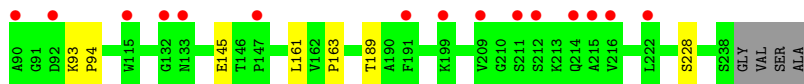
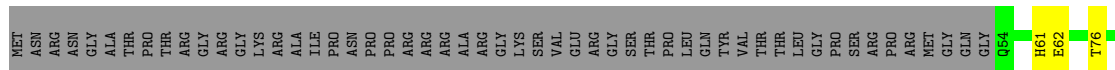
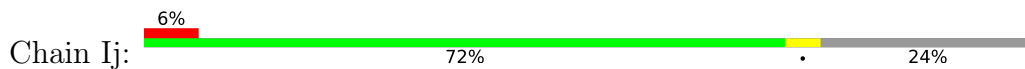
• Molecule 1: Capsid protein



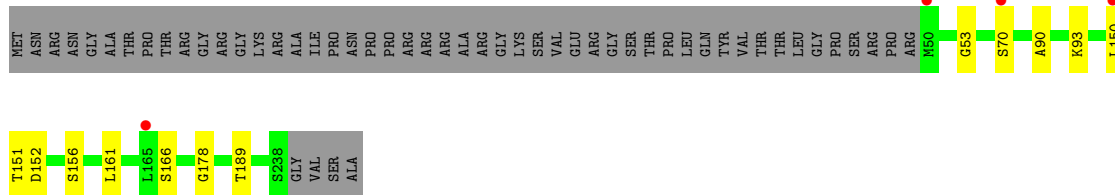
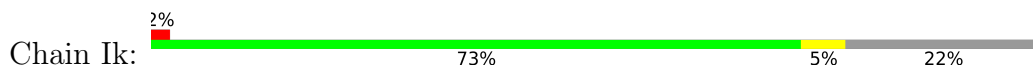
• Molecule 1: Capsid protein



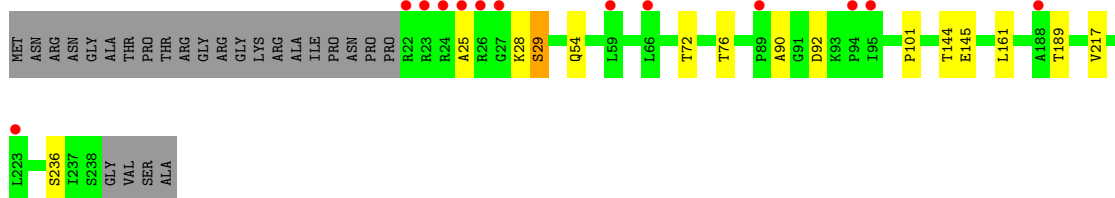
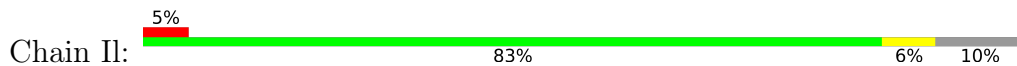
• Molecule 1: Capsid protein



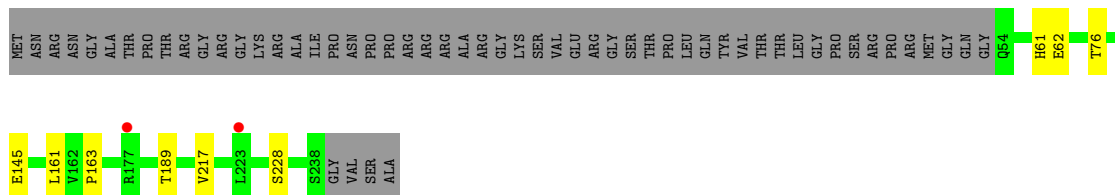
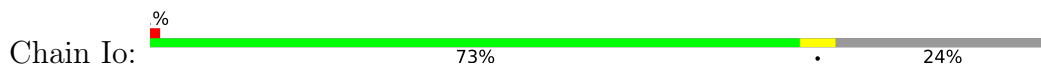
• Molecule 1: Capsid protein



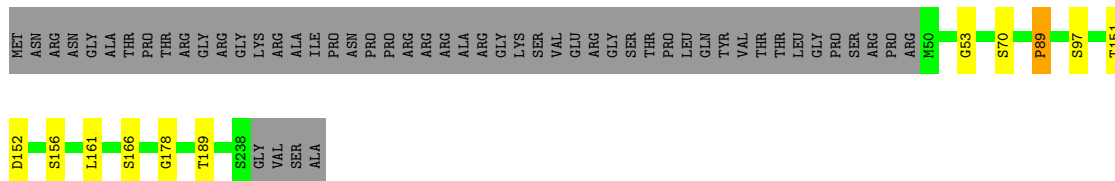
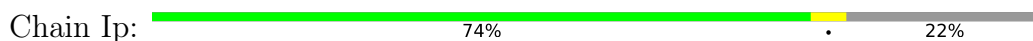
• Molecule 1: Capsid protein



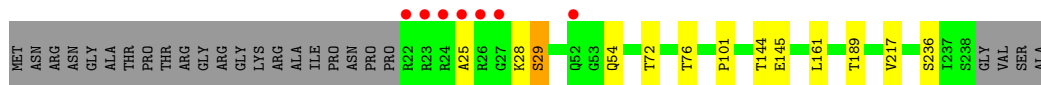
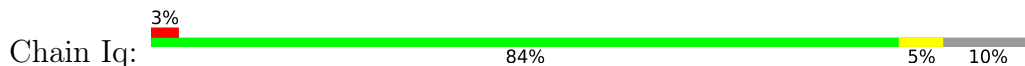
• Molecule 1: Capsid protein



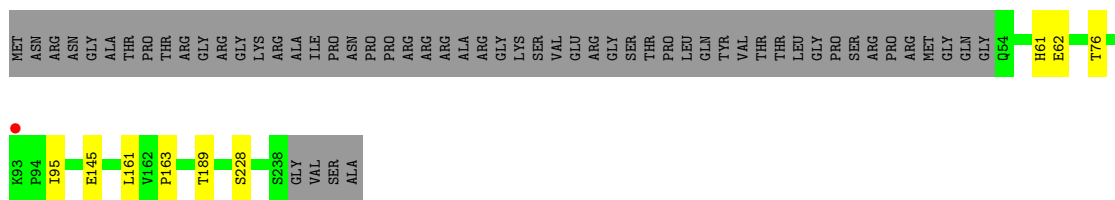
• Molecule 1: Capsid protein



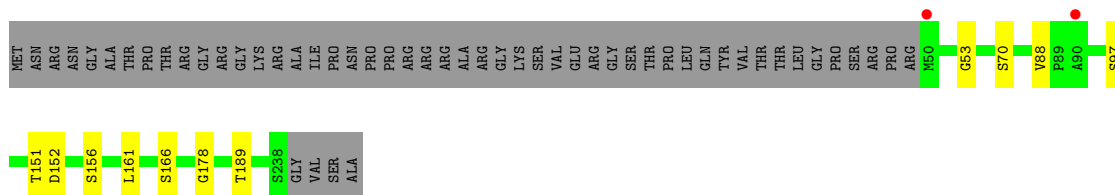
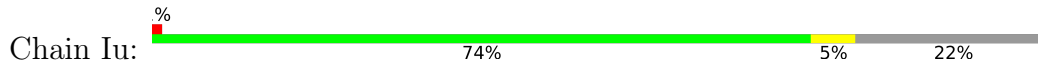
• Molecule 1: Capsid protein



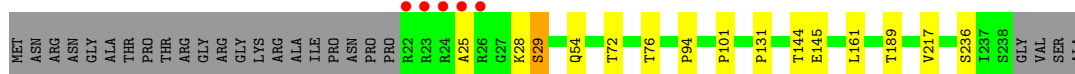
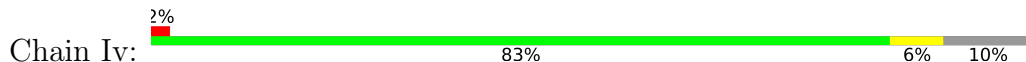
• Molecule 1: Capsid protein



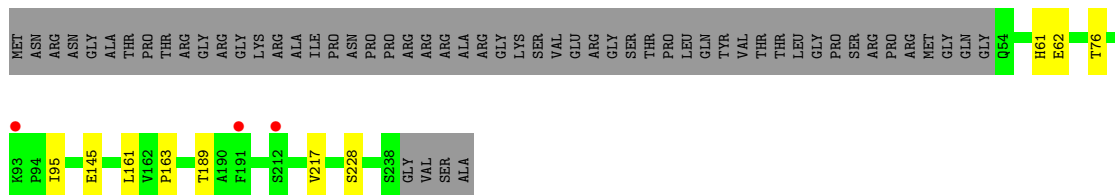
● Molecule 1: Capsid protein



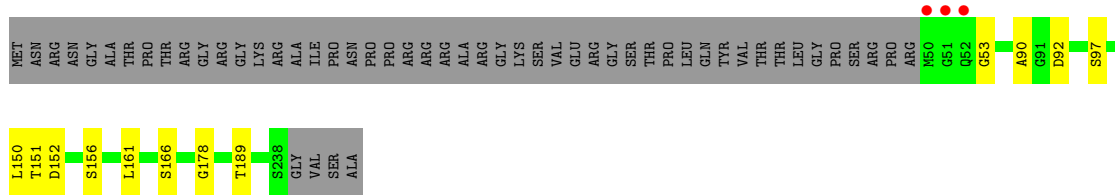
● Molecule 1: Capsid protein



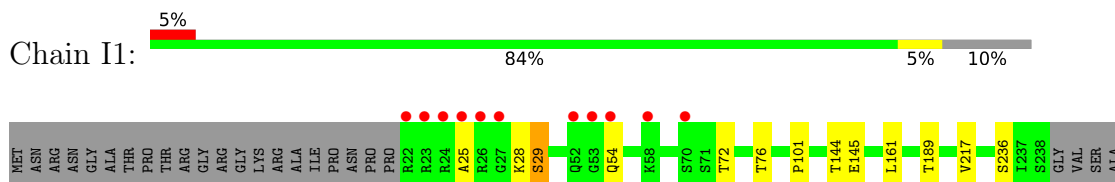
● Molecule 1: Capsid protein



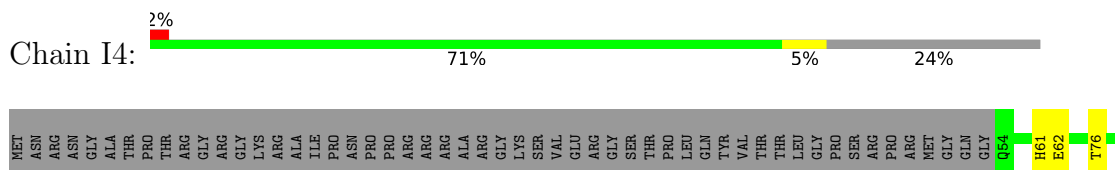
● Molecule 1: Capsid protein



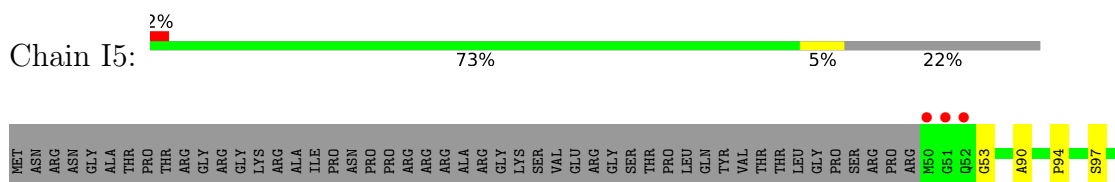
● Molecule 1: Capsid protein



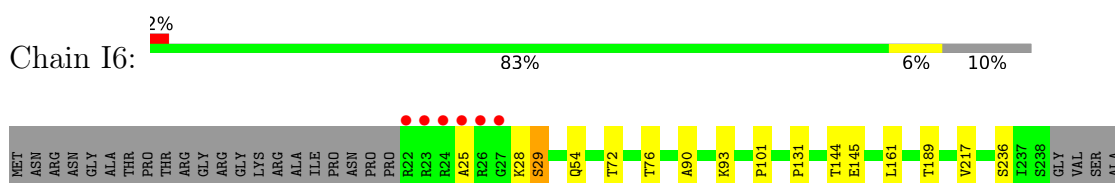
• Molecule 1: Capsid protein



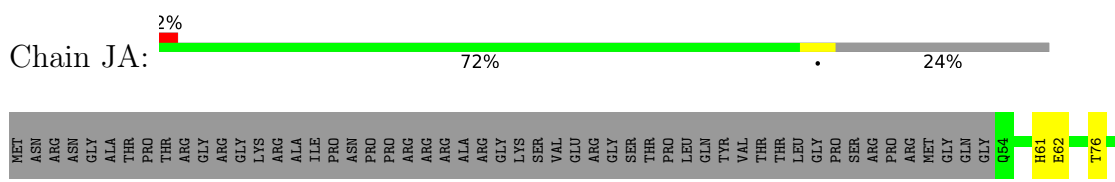
• Molecule 1: Capsid protein



• Molecule 1: Capsid protein

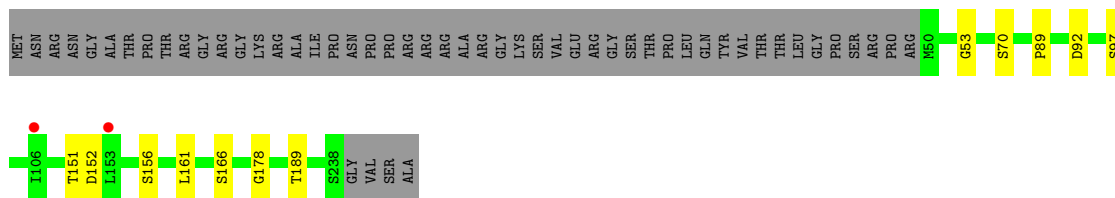


• Molecule 1: Capsid protein

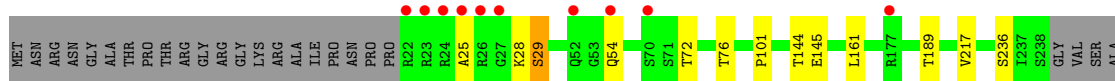
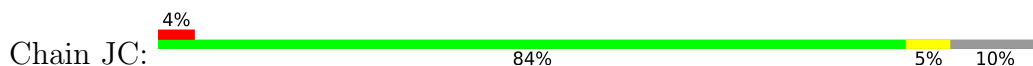


• Molecule 1: Capsid protein

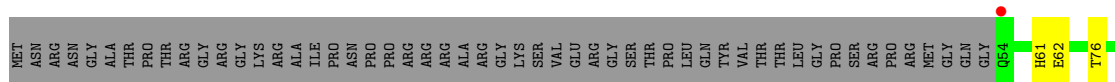
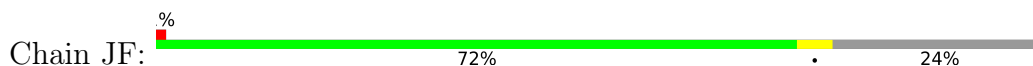




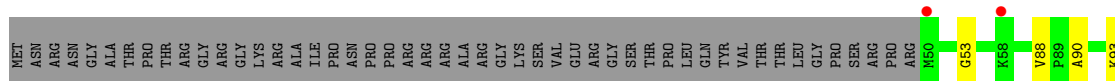
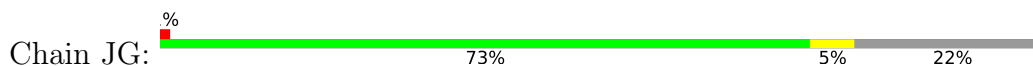
• Molecule 1: Capsid protein



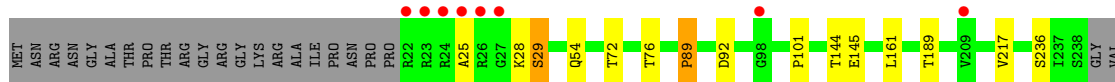
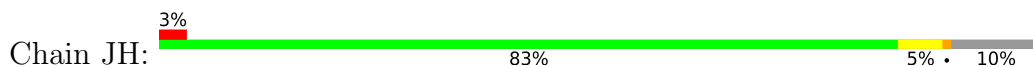
• Molecule 1: Capsid protein



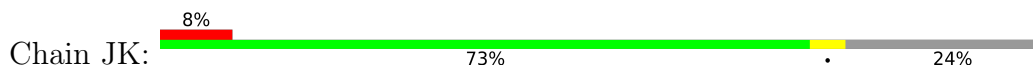
• Molecule 1: Capsid protein

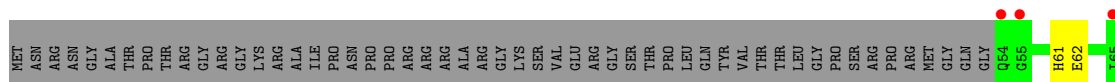


• Molecule 1: Capsid protein

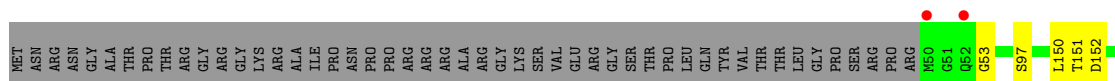
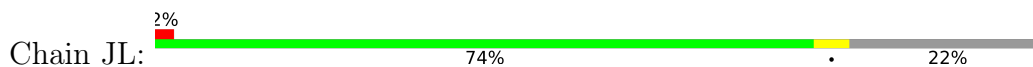


• Molecule 1: Capsid protein

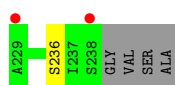
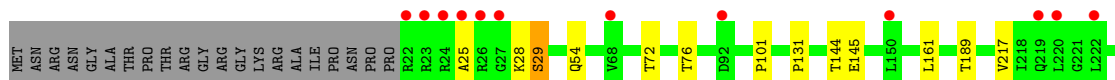
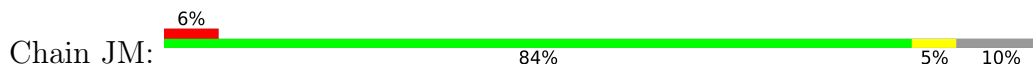




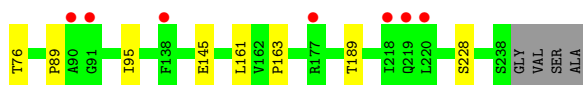
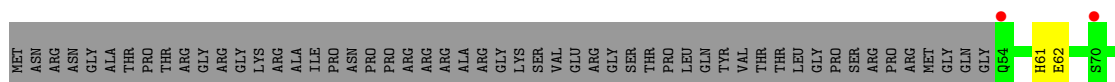
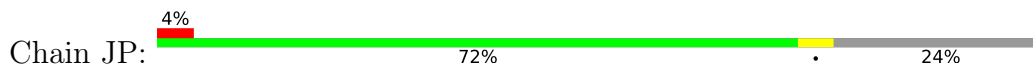
• Molecule 1: Capsid protein



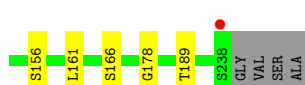
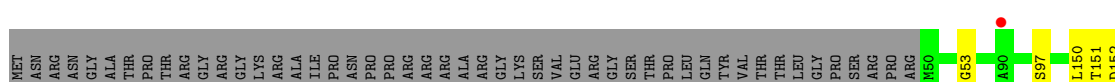
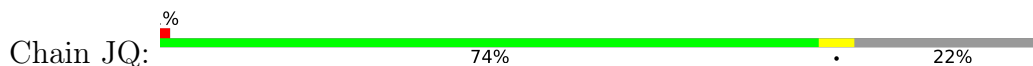
• Molecule 1: Capsid protein



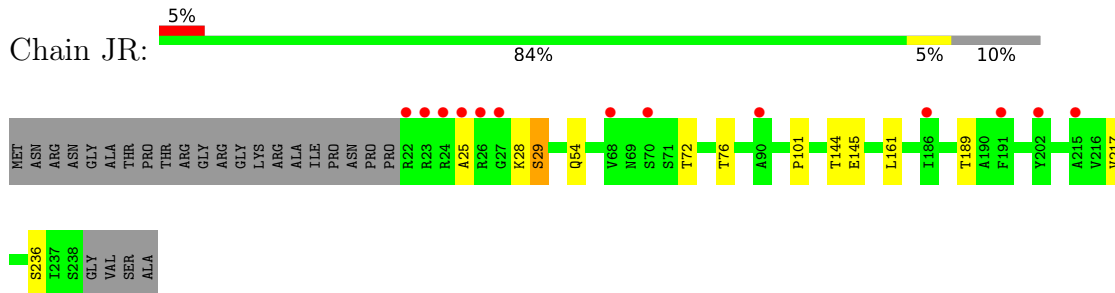
• Molecule 1: Capsid protein



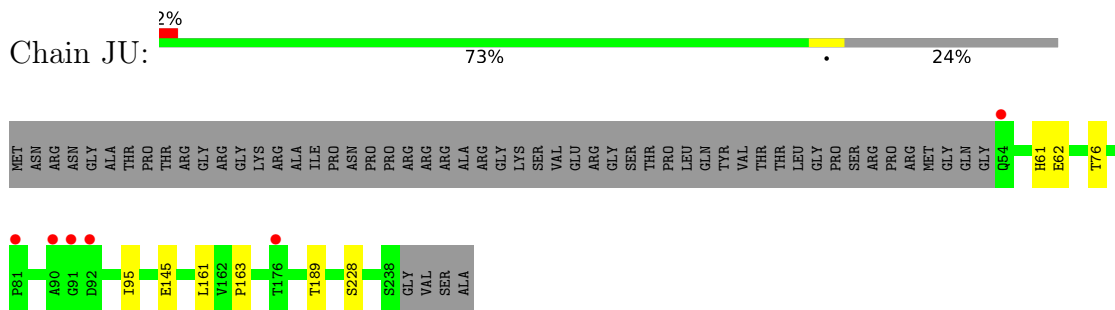
• Molecule 1: Capsid protein



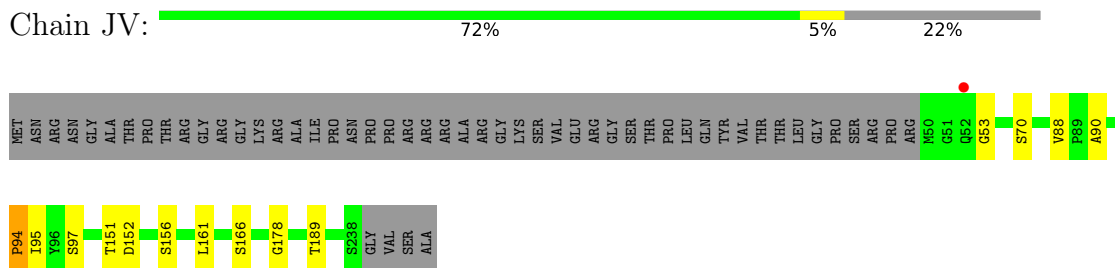
• Molecule 1: Capsid protein



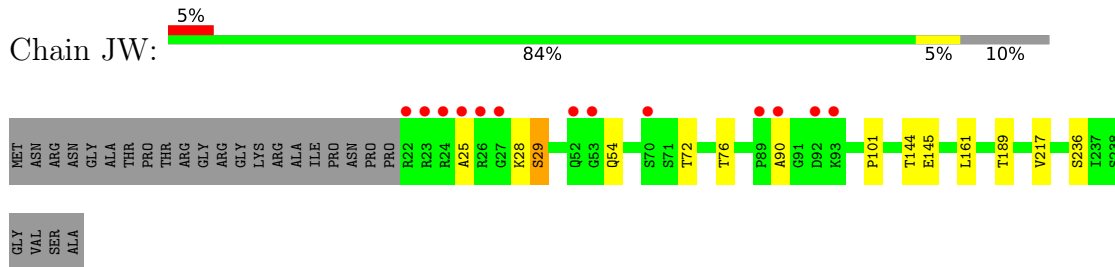
• Molecule 1: Capsid protein



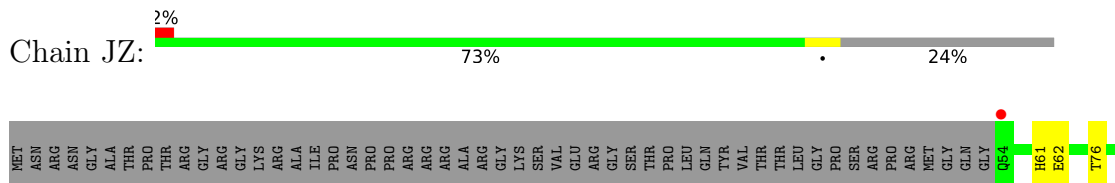
• Molecule 1: Capsid protein

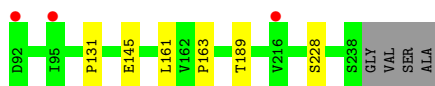


• Molecule 1: Capsid protein

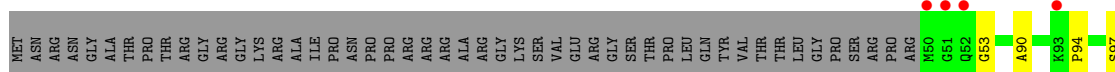
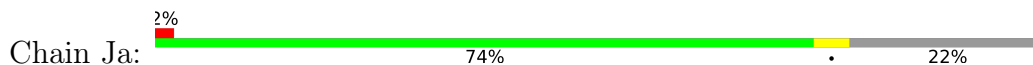


• Molecule 1: Capsid protein

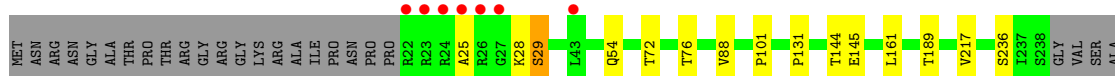
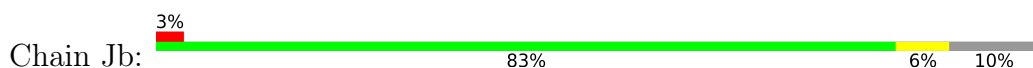




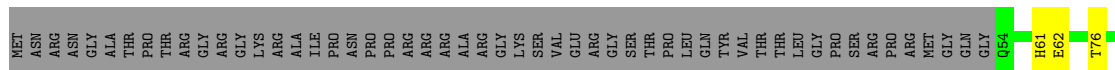
● Molecule 1: Capsid protein



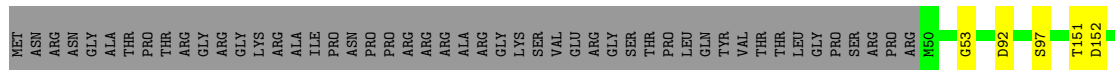
● Molecule 1: Capsid protein



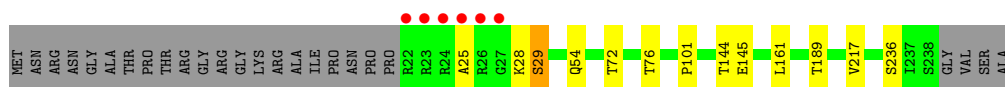
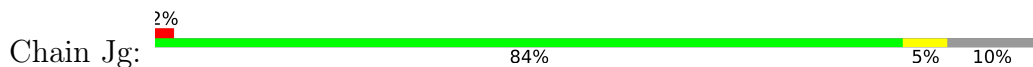
● Molecule 1: Capsid protein



● Molecule 1: Capsid protein

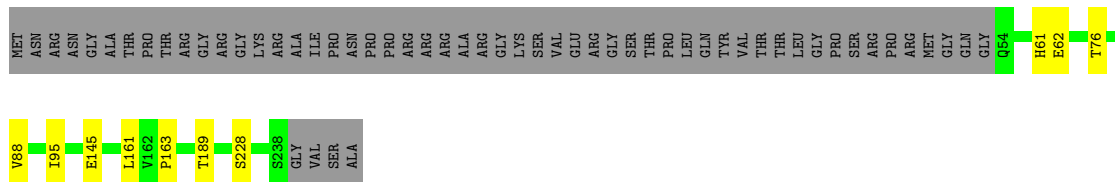


● Molecule 1: Capsid protein



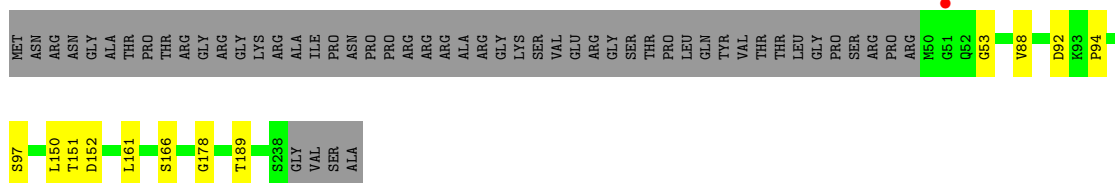
● Molecule 1: Capsid protein

Chain Jj: 72% 24%



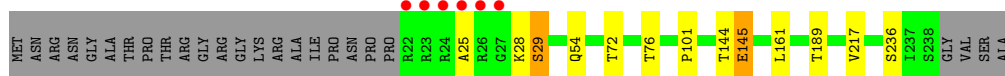
● Molecule 1: Capsid protein

Chain Jk: 73% 5% 22%



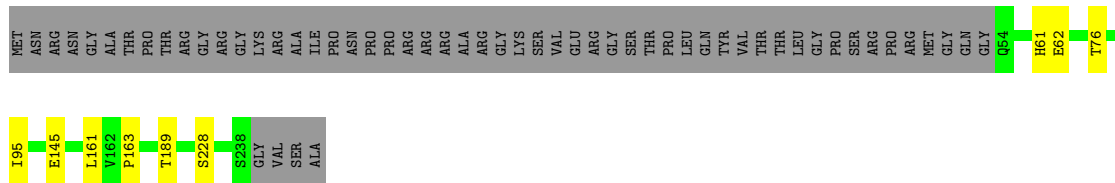
● Molecule 1: Capsid protein

Chain Jl: 2% 84% 5% 10%



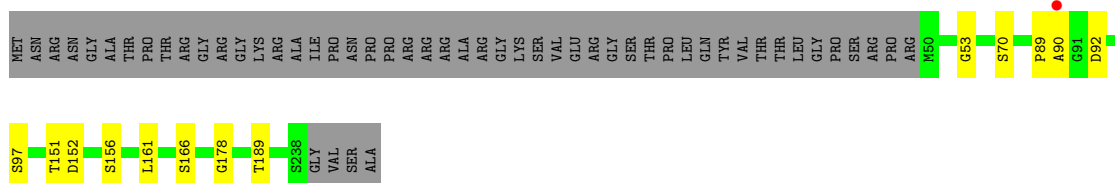
● Molecule 1: Capsid protein

Chain Jo: 73% 24%

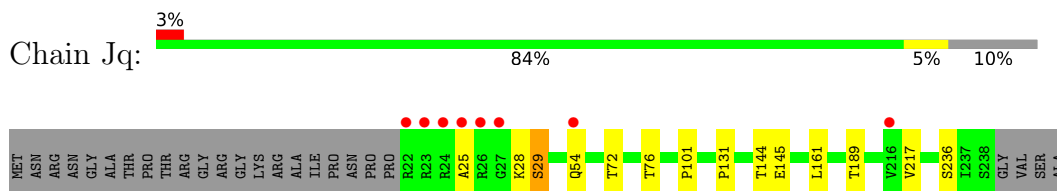


● Molecule 1: Capsid protein

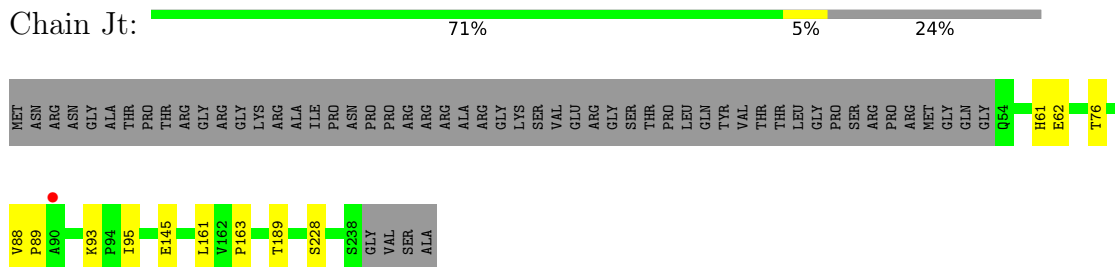
Chain Jp: 73% 5% 22%



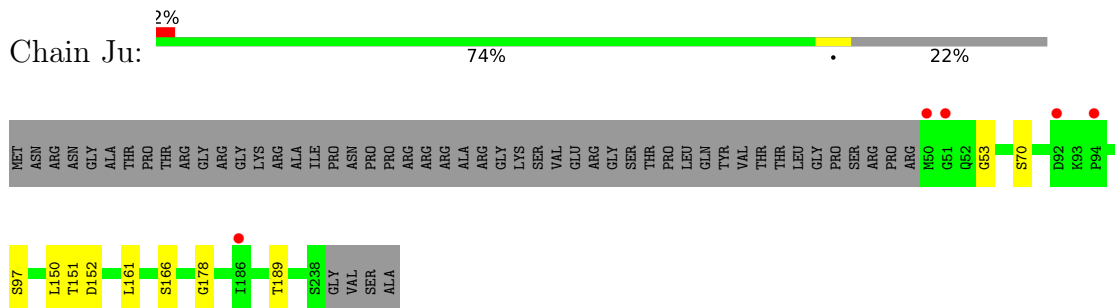
● Molecule 1: Capsid protein



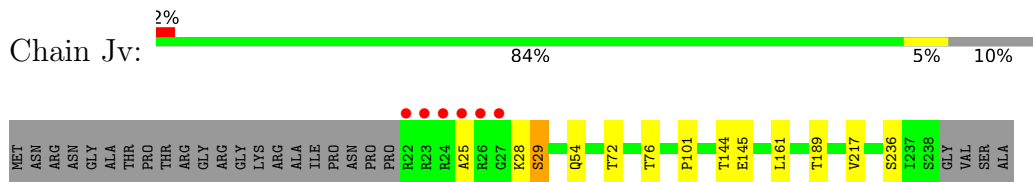
● Molecule 1: Capsid protein



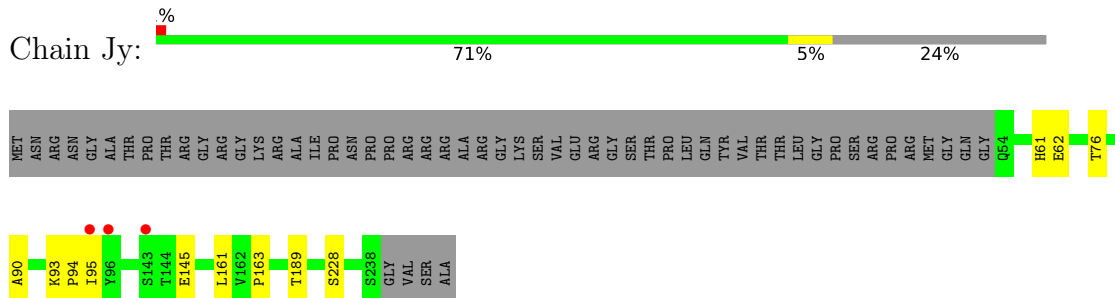
● Molecule 1: Capsid protein



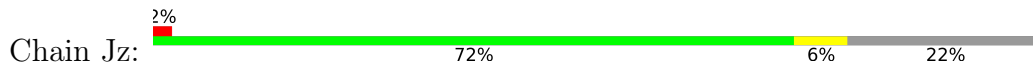
● Molecule 1: Capsid protein

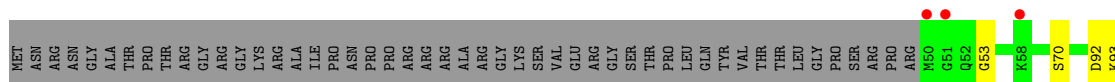


● Molecule 1: Capsid protein

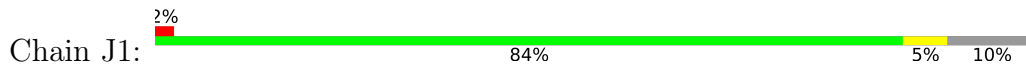


● Molecule 1: Capsid protein

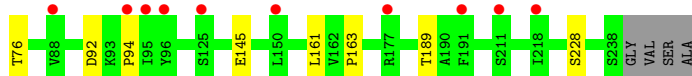
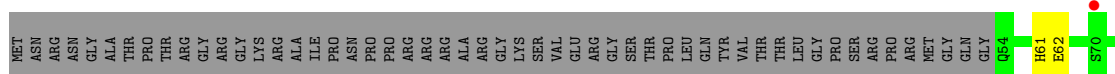
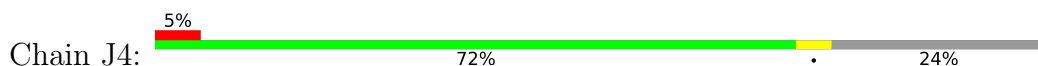




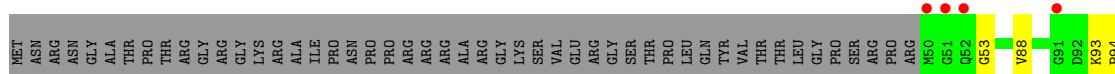
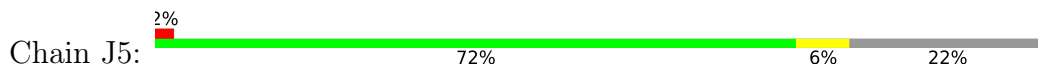
• Molecule 1: Capsid protein



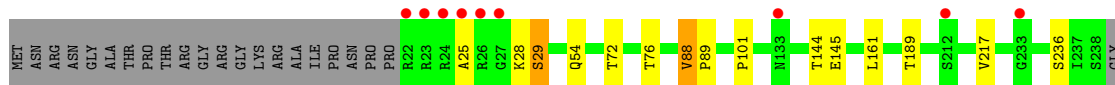
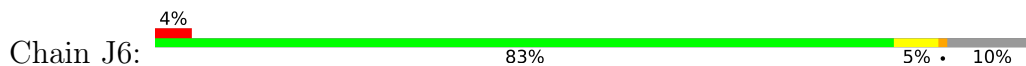
• Molecule 1: Capsid protein



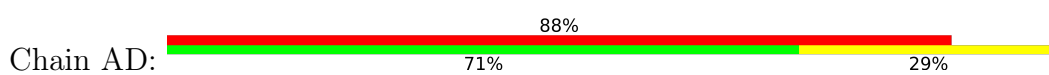
• Molecule 1: Capsid protein

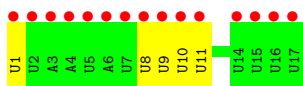


• Molecule 1: Capsid protein

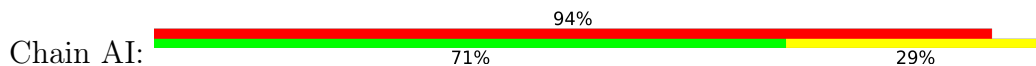


• Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3

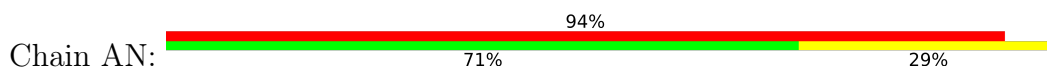




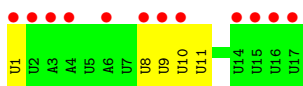
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



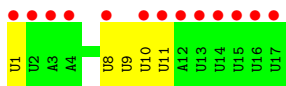
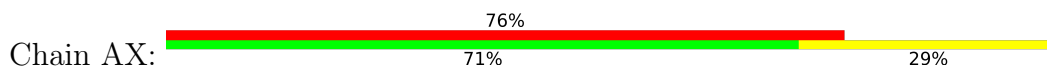
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



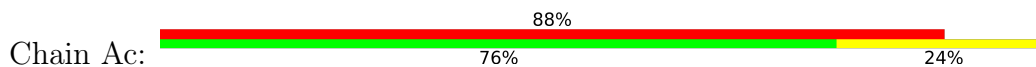
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



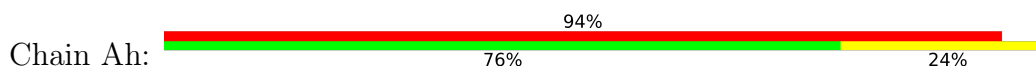
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

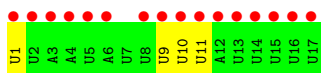


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

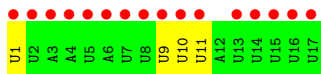
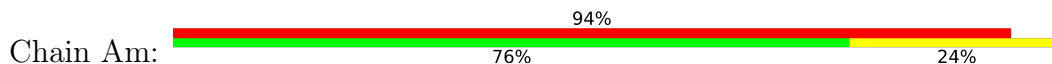


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

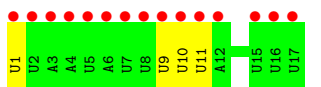
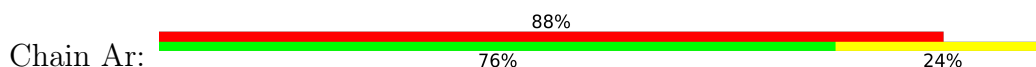




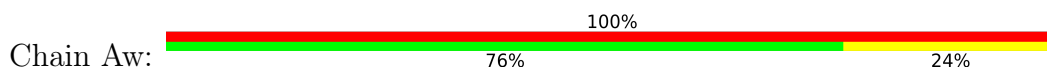
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



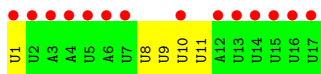
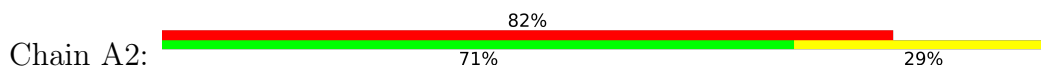
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



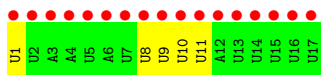
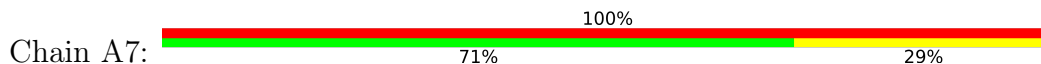
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



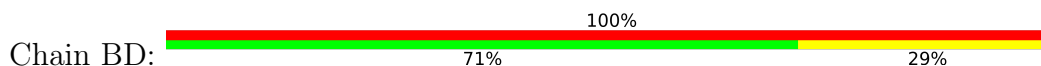
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

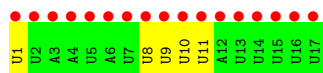


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

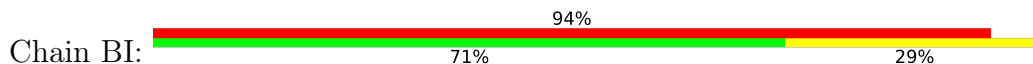


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

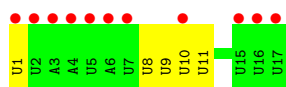




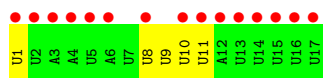
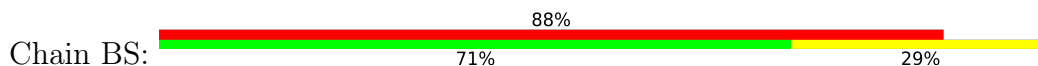
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



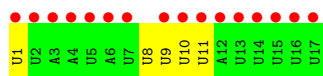
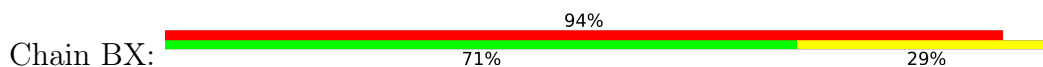
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



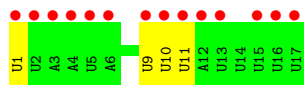
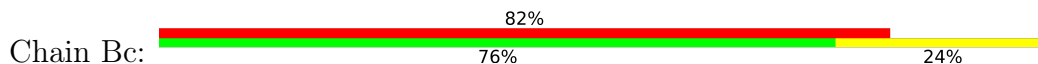
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



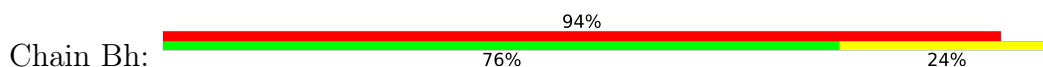
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

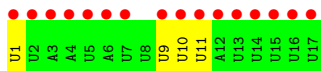


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

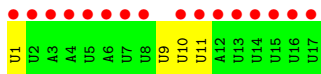
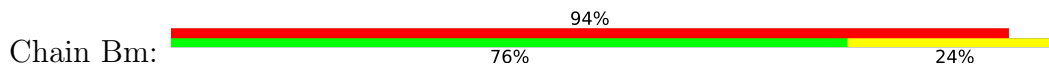


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

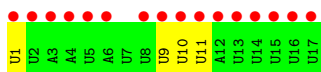
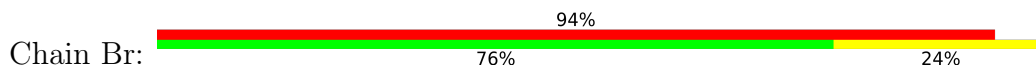




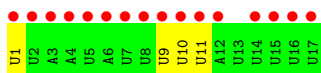
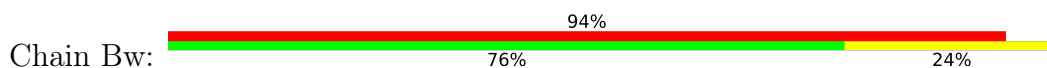
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



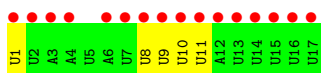
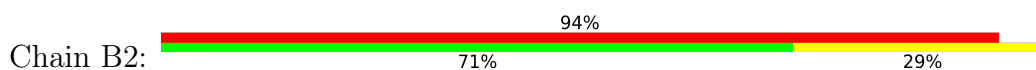
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



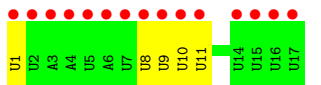
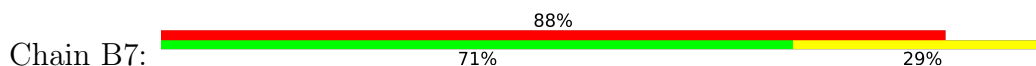
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



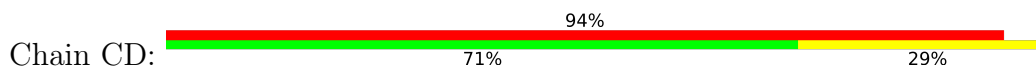
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

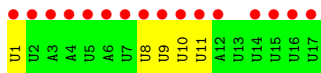


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

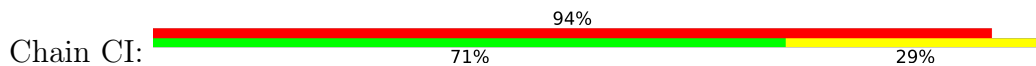


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

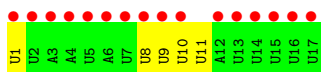
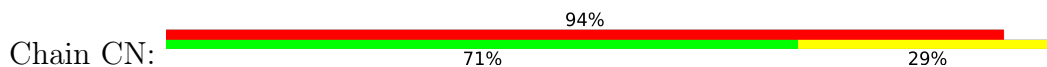




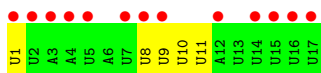
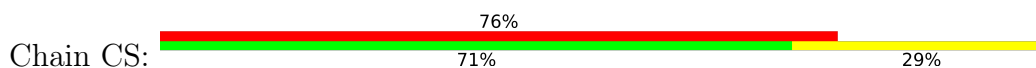
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



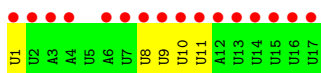
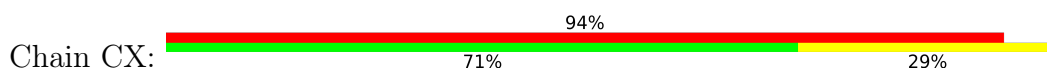
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



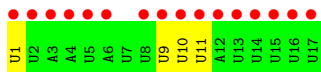
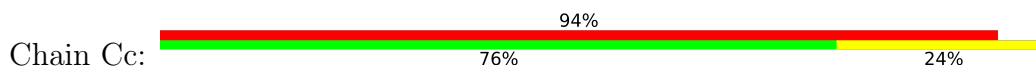
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



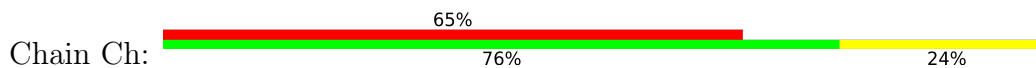
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

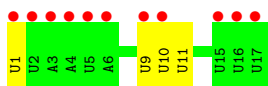


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

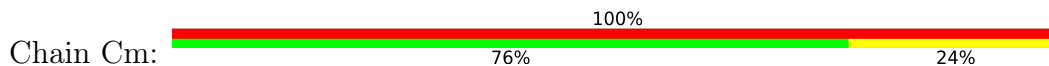


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

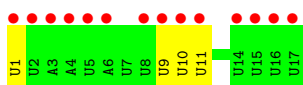
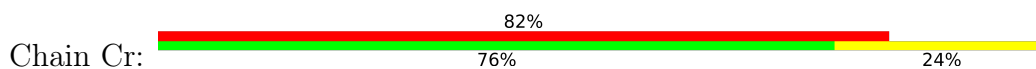




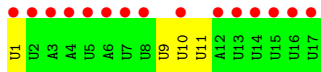
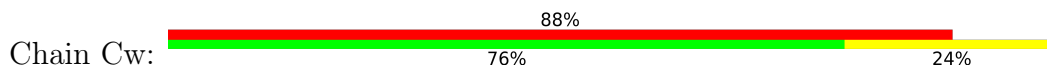
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



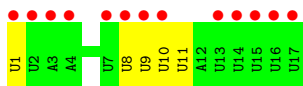
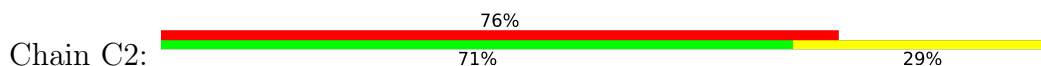
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



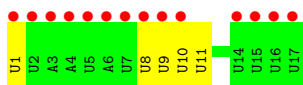
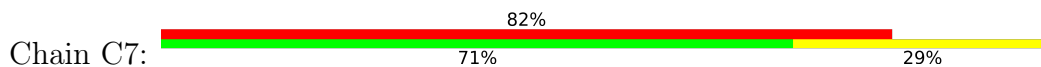
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



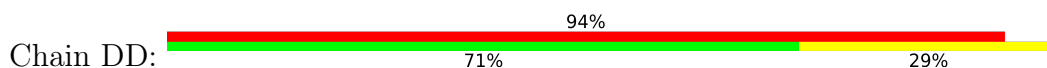
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

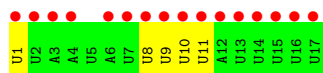


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

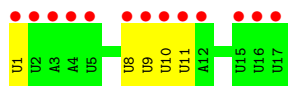
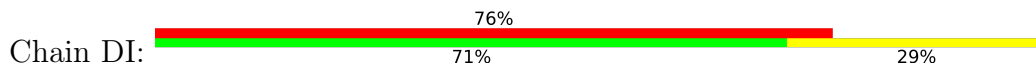


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

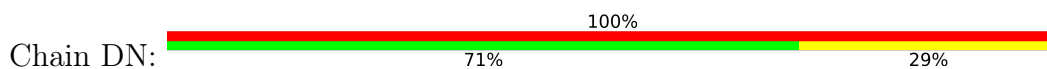




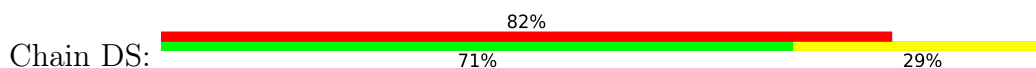
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



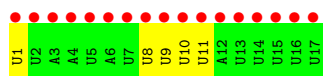
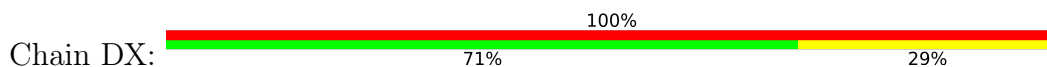
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



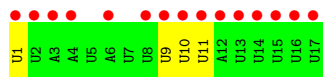
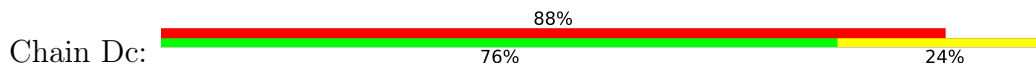
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



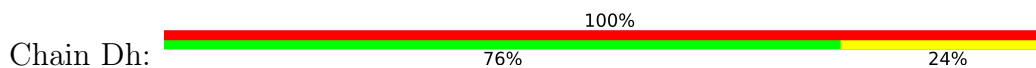
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

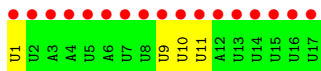


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

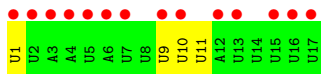
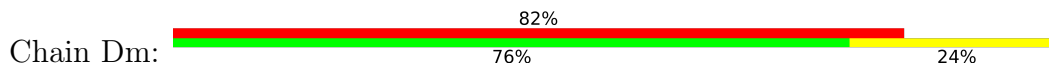


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

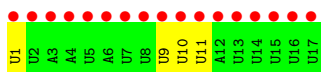
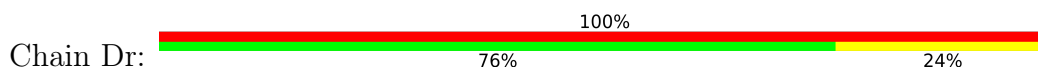




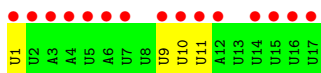
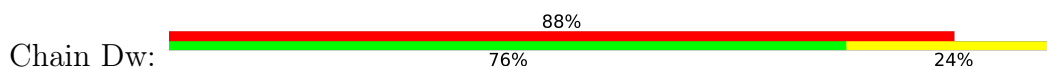
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



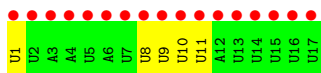
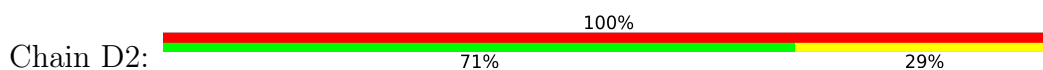
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



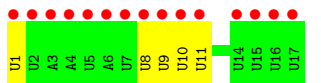
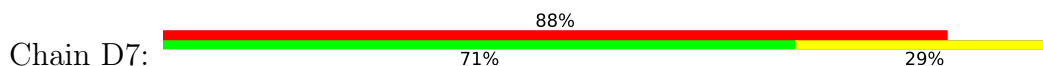
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



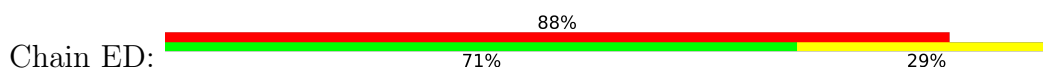
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

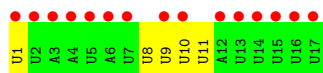


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

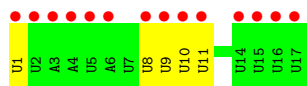
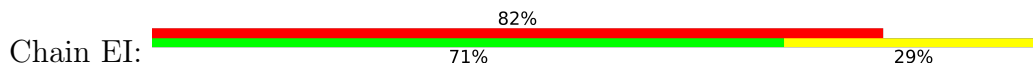


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

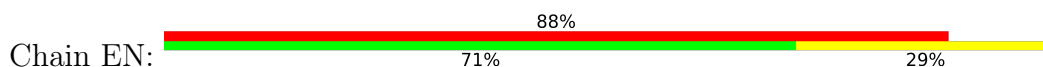




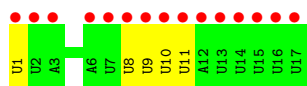
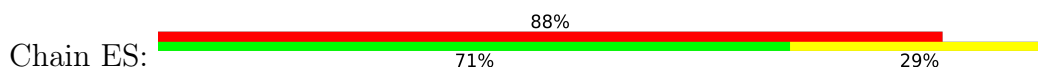
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



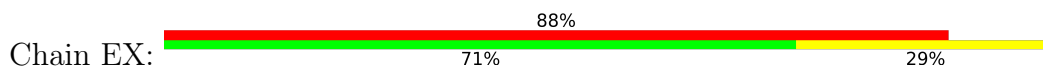
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



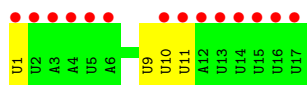
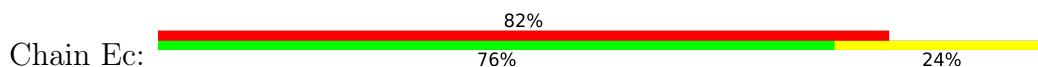
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



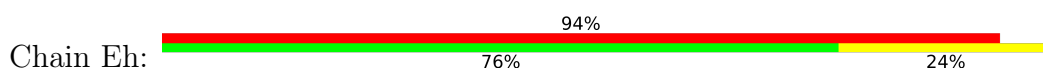
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

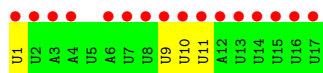


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

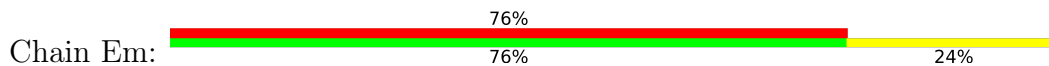


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

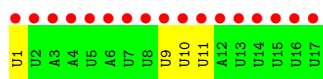
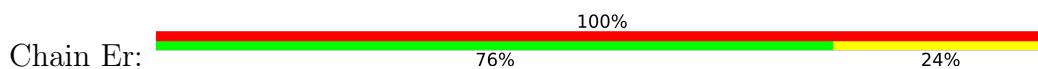




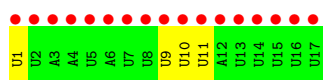
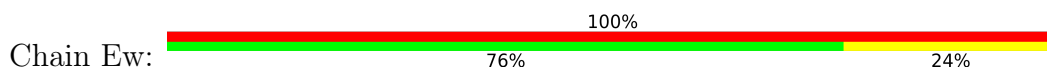
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



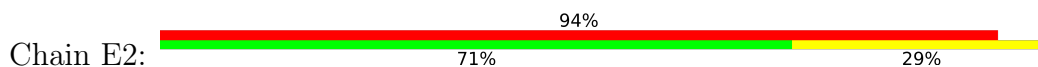
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



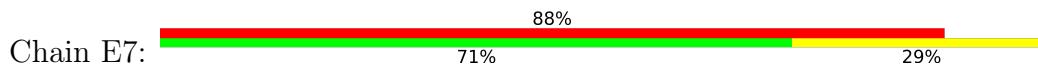
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



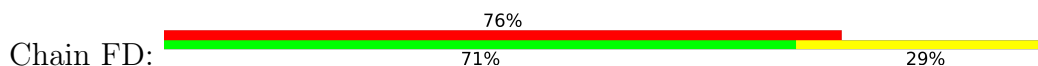
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

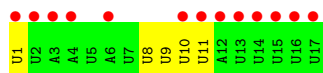


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

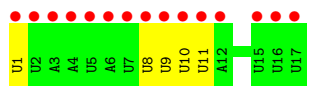
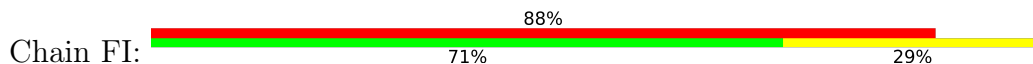


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

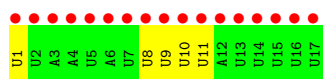
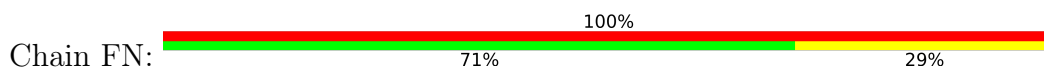




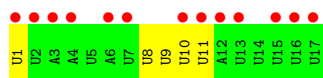
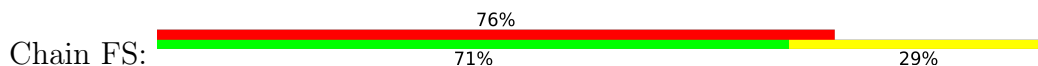
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



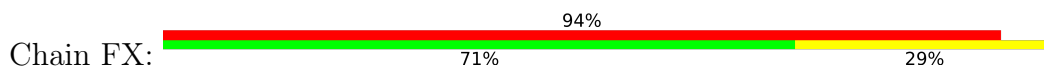
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



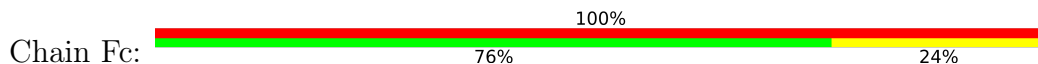
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



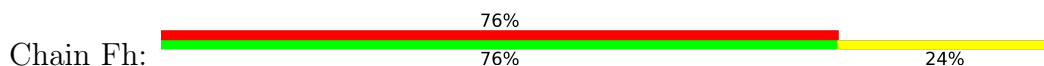
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

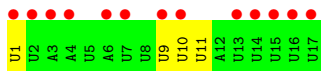


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

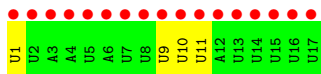
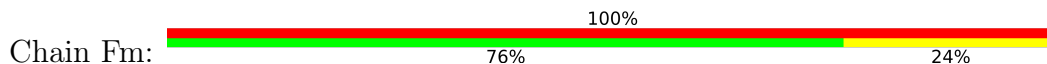


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

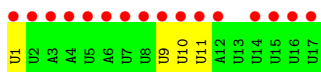
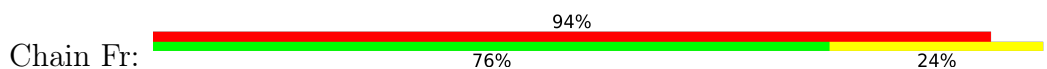




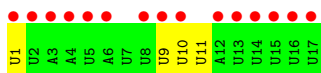
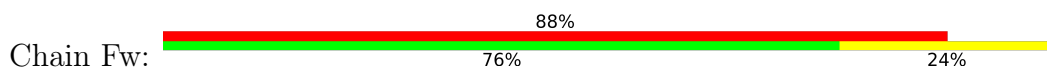
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



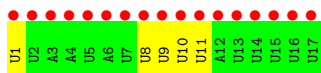
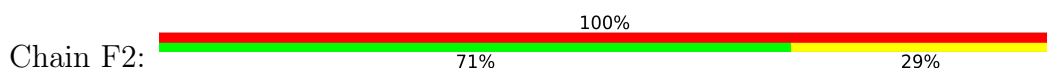
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



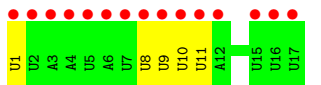
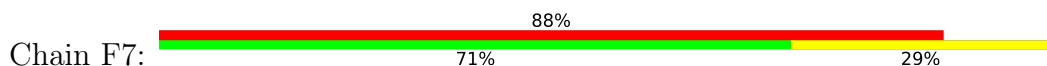
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



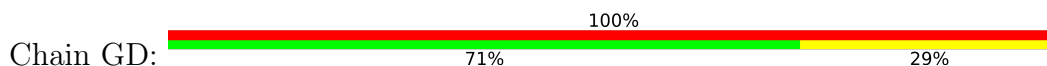
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

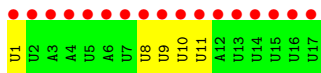


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

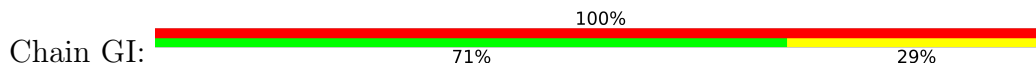


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

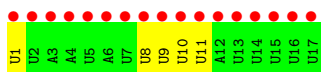
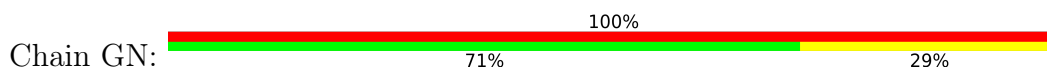




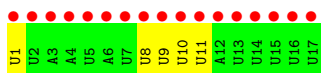
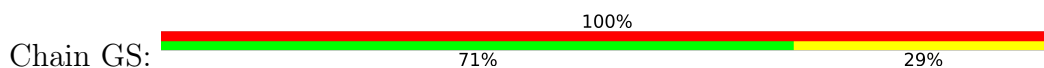
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



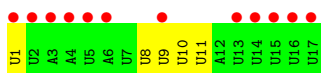
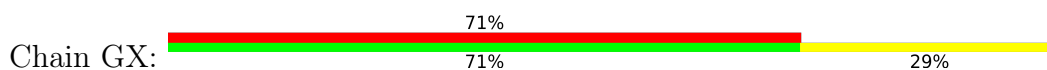
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



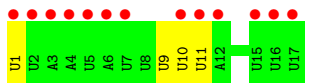
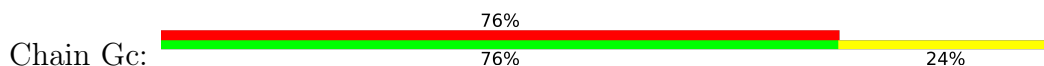
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



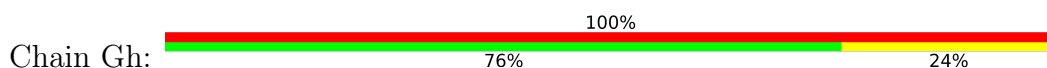
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

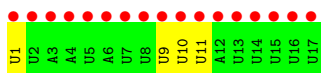


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

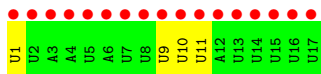
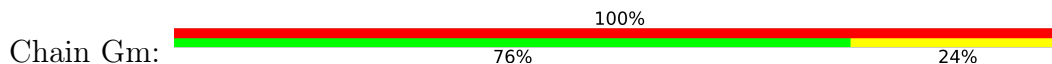


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

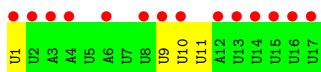
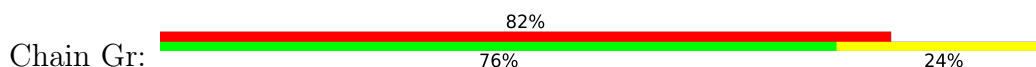




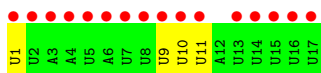
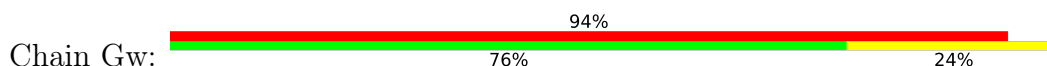
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



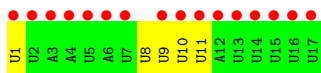
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



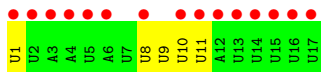
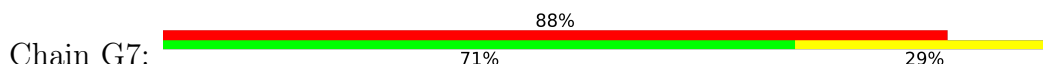
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



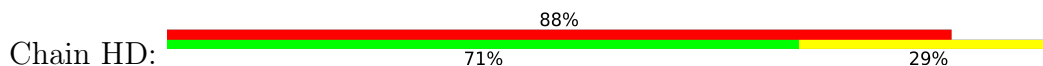
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

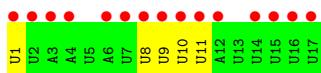


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

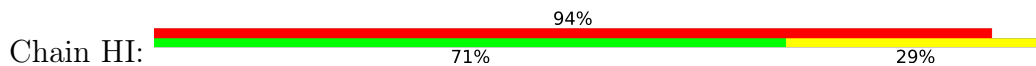


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

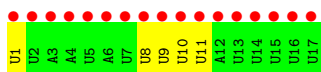




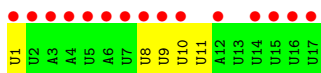
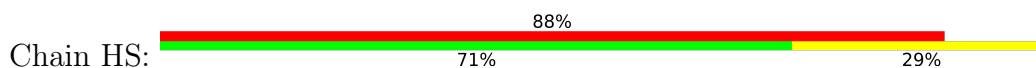
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



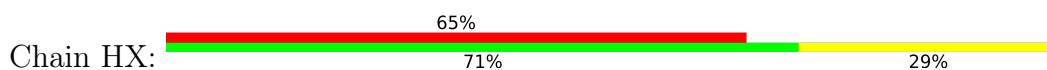
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



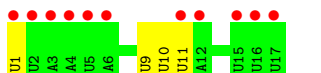
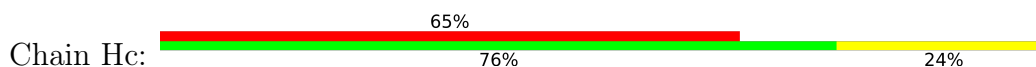
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



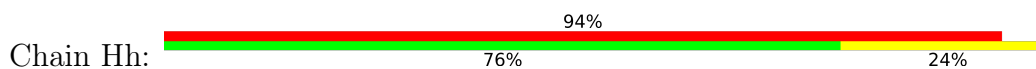
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

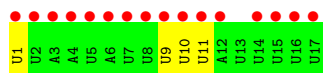


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

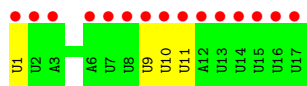
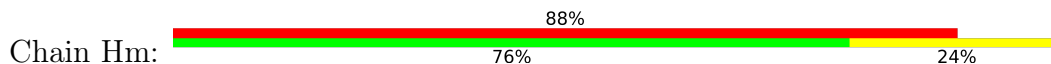


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

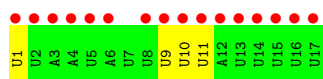
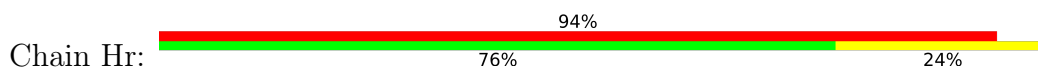




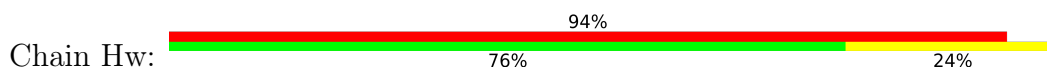
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



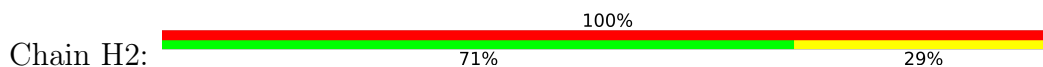
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



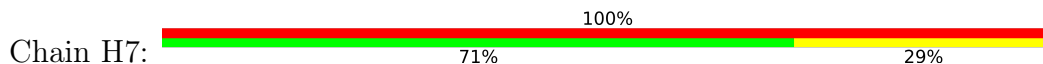
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



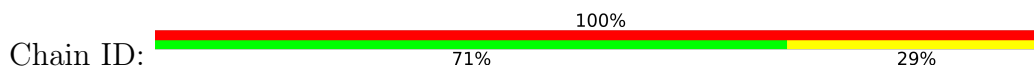
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

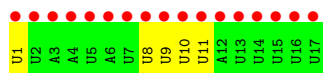


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,



● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3
,

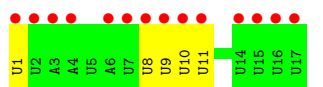
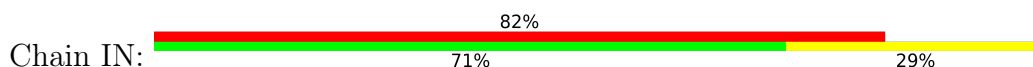




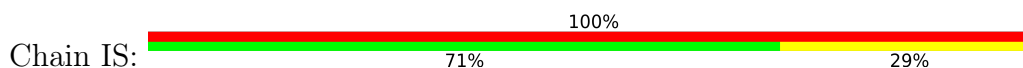
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



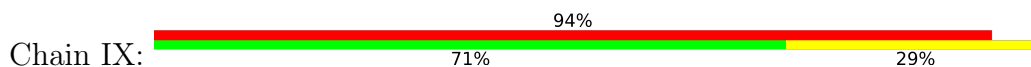
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



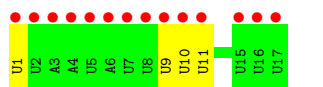
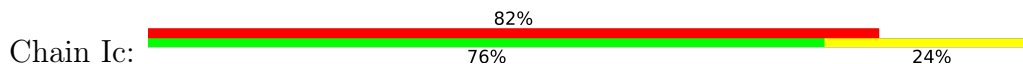
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



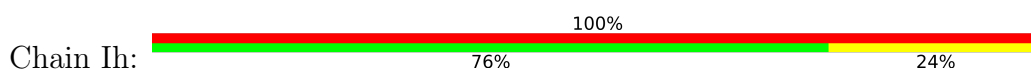
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

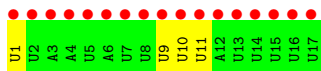


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

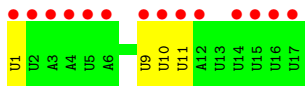
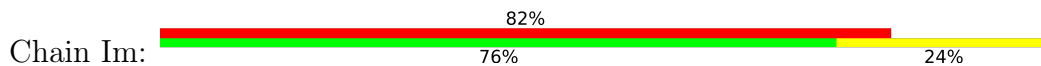


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

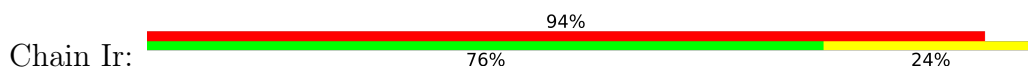




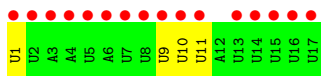
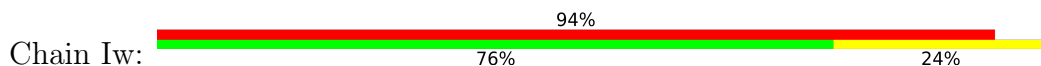
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



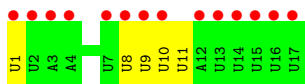
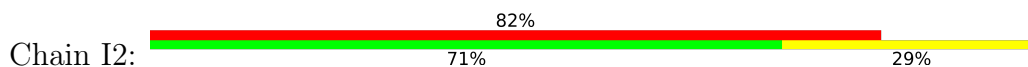
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



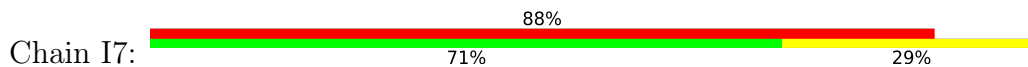
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



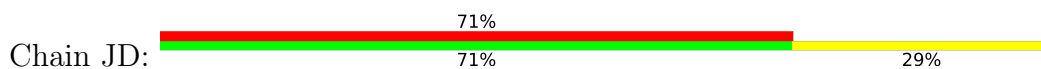
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

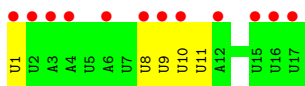


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

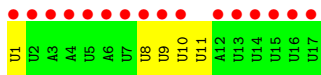
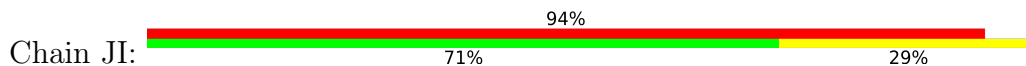


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

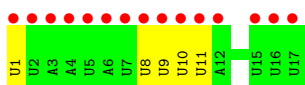
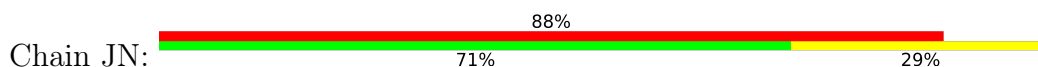




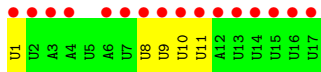
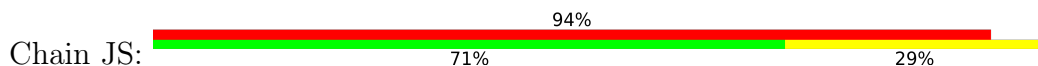
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



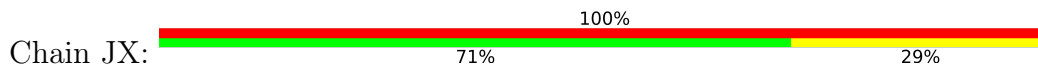
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



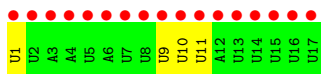
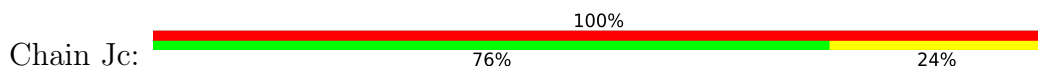
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',



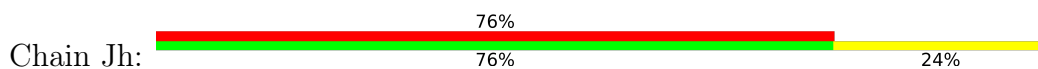
● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

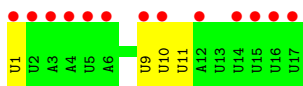


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

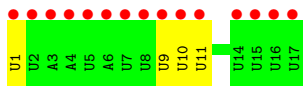
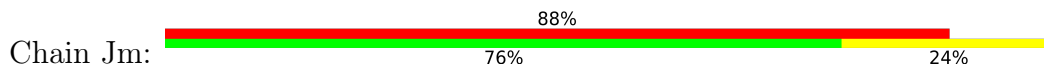


● Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*UP*U)-3',

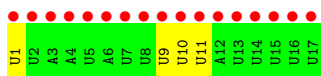
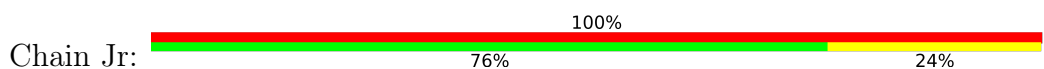




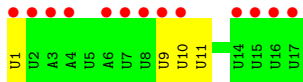
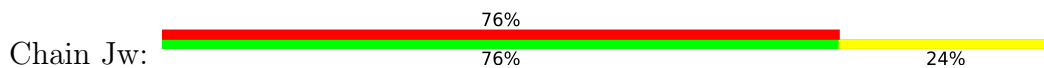
- Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*U)-3



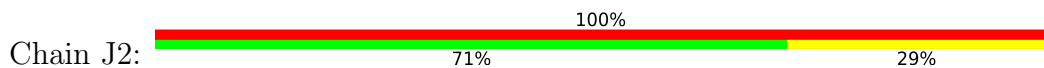
- Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*U)-3



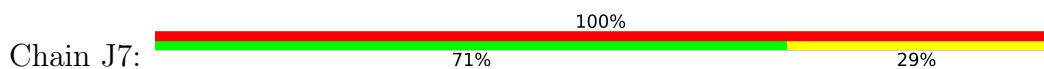
- Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*U)-3



- Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*U)-3



- Molecule 2: 5'-R(P*UP*UP*AP*AP*UP*AP*UP*UP*UP*UP*UP*AP*UP*UP*UP*U)-3



4 Data and refinement statistics i

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	411.74Å 403.90Å 412.46Å 90.00° 89.65° 90.00°	Depositor
Resolution (Å)	50.01 – 2.90 50.01 – 2.90	Depositor EDS
% Data completeness (in resolution range)	74.9 (50.01-2.90) 74.9 (50.01-2.90)	Depositor EDS
R_{merge}	0.14	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.99 (at 2.91Å)	Xtriage
Refinement program	CNS 1.3	Depositor
R, R_{free}	0.251 , 0.285 0.235 , 0.267	Depositor DCC
R_{free} test set	221945 reflections (10.01%)	wwPDB-VP
Wilson B-factor (Å ²)	45.5	Xtriage
Anisotropy	0.138	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.26 , 51.3	EDS
L-test for twinning ²	$\langle L \rangle = 0.39$, $\langle L^2 \rangle = 0.22$	Xtriage
Estimated twinning fraction	0.025 for -l,k,h 0.034 for -h,-l,-k 0.024 for -h,l,k 0.044 for -k,-h,-l 0.024 for k,h,-l 0.017 for -l,-h,k 0.030 for -k,l,-h 0.038 for l,h,k 0.027 for k,-l,-h 0.035 for h,-k,-l 0.030 for -l,-k,-h	Xtriage
F_o, F_c correlation	0.87	EDS
Total number of atoms	588120	wwPDB-VP
Average B, all atoms (Å ²)	73.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.47% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: CA

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	A1	0.46	1/1710 (0.1%)	0.72	0/2323
1	A4	0.45	0/1458	0.72	0/1986
1	A5	0.41	0/1483	0.67	0/2018
1	A6	0.46	2/1710 (0.1%)	0.71	0/2323
1	AA	0.48	1/1458 (0.1%)	0.74	1/1986 (0.1%)
1	AB	0.43	0/1483	0.71	0/2018
1	AC	0.48	1/1710 (0.1%)	0.72	0/2323
1	AF	0.51	1/1458 (0.1%)	0.75	0/1986
1	AG	0.47	0/1483	0.71	0/2018
1	AH	0.47	0/1710	0.72	0/2323
1	AK	0.49	1/1458 (0.1%)	0.74	0/1986
1	AL	0.46	0/1483	0.69	0/2018
1	AM	0.48	1/1710 (0.1%)	0.73	0/2323
1	AP	0.49	1/1458 (0.1%)	0.75	0/1986
1	AQ	0.43	0/1483	0.69	0/2018
1	AR	0.48	2/1710 (0.1%)	0.72	0/2323
1	AU	0.45	1/1458 (0.1%)	0.71	0/1986
1	AV	0.39	0/1483	0.67	0/2018
1	AW	0.45	0/1710	0.70	0/2323
1	AZ	0.52	2/1458 (0.1%)	0.76	0/1986
1	Aa	0.45	0/1483	0.70	0/2018
1	Ab	0.49	2/1710 (0.1%)	0.73	0/2323
1	Ae	0.50	1/1458 (0.1%)	0.76	0/1986
1	Af	0.46	0/1483	0.70	0/2018
1	Ag	0.51	2/1710 (0.1%)	0.74	0/2323
1	Aj	0.47	1/1458 (0.1%)	0.73	0/1986
1	Ak	0.44	0/1483	0.70	0/2018
1	Al	0.51	2/1710 (0.1%)	0.73	0/2323
1	Ao	0.51	1/1458 (0.1%)	0.76	0/1986
1	Ap	0.49	0/1483	0.70	0/2018
1	Aq	0.51	1/1710 (0.1%)	0.74	0/2323
1	At	0.51	2/1458 (0.1%)	0.76	0/1986

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	Au	0.45	0/1483	0.69	0/2018
1	Av	0.51	1/1710 (0.1%)	0.73	0/2323
1	Ay	0.46	1/1458 (0.1%)	0.72	0/1986
1	Az	0.40	0/1483	0.67	0/2018
1	B1	0.49	1/1710 (0.1%)	0.72	0/2323
1	B4	0.44	1/1458 (0.1%)	0.72	0/1986
1	B5	0.42	0/1483	0.67	0/2018
1	B6	0.45	0/1710	0.71	0/2323
1	BA	0.49	1/1458 (0.1%)	0.74	0/1986
1	BB	0.46	0/1483	0.69	0/2018
1	BC	0.49	0/1710	0.72	0/2323
1	BF	0.48	1/1458 (0.1%)	0.75	0/1986
1	BG	0.45	0/1483	0.71	0/2018
1	BH	0.50	1/1710 (0.1%)	0.74	0/2323
1	BK	0.53	1/1458 (0.1%)	0.76	0/1986
1	BL	0.45	0/1483	0.69	0/2018
1	BM	0.49	1/1710 (0.1%)	0.72	0/2323
1	BP	0.47	2/1458 (0.1%)	0.73	0/1986
1	BQ	0.42	0/1483	0.68	0/2018
1	BR	0.48	1/1710 (0.1%)	0.72	0/2323
1	BU	0.44	1/1458 (0.1%)	0.71	0/1986
1	BV	0.42	0/1483	0.67	0/2018
1	BW	0.44	1/1710 (0.1%)	0.71	0/2323
1	BZ	0.50	1/1458 (0.1%)	0.75	0/1986
1	Ba	0.43	0/1483	0.68	0/2018
1	Bb	0.49	2/1710 (0.1%)	0.73	0/2323
1	Be	0.50	1/1458 (0.1%)	0.74	0/1986
1	Bf	0.45	0/1483	0.71	0/2018
1	Bg	0.51	2/1710 (0.1%)	0.73	0/2323
1	Bj	0.50	1/1458 (0.1%)	0.74	0/1986
1	Bk	0.45	0/1483	0.70	0/2018
1	Bl	0.49	2/1710 (0.1%)	0.72	0/2323
1	Bo	0.49	1/1458 (0.1%)	0.74	0/1986
1	Bp	0.44	0/1483	0.70	0/2018
1	Bq	0.48	2/1710 (0.1%)	0.72	0/2323
1	Bt	0.47	1/1458 (0.1%)	0.73	0/1986
1	Bu	0.43	0/1483	0.69	0/2018
1	Bv	0.46	1/1710 (0.1%)	0.72	0/2323
1	By	0.51	2/1458 (0.1%)	0.74	0/1986
1	Bz	0.46	0/1483	0.71	0/2018
1	C1	0.50	2/1710 (0.1%)	0.73	0/2323
1	C4	0.48	2/1458 (0.1%)	0.73	0/1986
1	C5	0.43	0/1483	0.68	0/2018

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	C6	0.47	0/1710	0.71	0/2323
1	CA	0.49	1/1458 (0.1%)	0.75	0/1986
1	CB	0.45	0/1483	0.69	0/2018
1	CC	0.47	1/1710 (0.1%)	0.73	0/2323
1	CF	0.56	2/1458 (0.1%)	0.77	0/1986
1	CG	0.47	0/1483	0.70	0/2018
1	CH	0.52	0/1710	0.75	0/2323
1	CK	0.50	1/1458 (0.1%)	0.74	0/1986
1	CL	0.46	0/1483	0.71	0/2018
1	CM	0.48	0/1710	0.73	0/2323
1	CP	0.47	2/1458 (0.1%)	0.73	0/1986
1	CQ	0.42	0/1483	0.68	0/2018
1	CR	0.46	0/1710	0.71	0/2323
1	CU	0.49	1/1458 (0.1%)	0.73	0/1986
1	CV	0.44	0/1483	0.69	0/2018
1	CW	0.47	0/1710	0.73	0/2323
1	CZ	0.45	1/1458 (0.1%)	0.73	0/1986
1	Ca	0.42	0/1483	0.68	0/2018
1	Cb	0.47	0/1710	0.71	0/2323
1	Ce	0.51	1/1458 (0.1%)	0.74	0/1986
1	Cf	0.43	0/1483	0.69	0/2018
1	Cg	0.47	2/1710 (0.1%)	0.71	0/2323
1	Cj	0.48	1/1458 (0.1%)	0.75	0/1986
1	Ck	0.45	0/1483	0.70	0/2018
1	Cl	0.50	2/1710 (0.1%)	0.74	0/2323
1	Co	0.49	1/1458 (0.1%)	0.75	0/1986
1	Cp	0.43	0/1483	0.68	0/2018
1	Cq	0.49	2/1710 (0.1%)	0.72	0/2323
1	Ct	0.49	1/1458 (0.1%)	0.74	0/1986
1	Cu	0.45	0/1483	0.69	0/2018
1	Cv	0.49	2/1710 (0.1%)	0.73	0/2323
1	Cy	0.52	2/1458 (0.1%)	0.75	0/1986
1	Cz	0.47	0/1483	0.70	0/2018
1	D1	0.51	2/1710 (0.1%)	0.75	0/2323
1	D4	0.51	1/1458 (0.1%)	0.75	0/1986
1	D5	0.48	0/1483	0.71	0/2018
1	D6	0.51	1/1710 (0.1%)	0.74	0/2323
1	DA	0.49	1/1458 (0.1%)	0.75	0/1986
1	DB	0.46	0/1483	0.70	0/2018
1	DC	0.48	1/1710 (0.1%)	0.73	0/2323
1	DF	0.49	2/1458 (0.1%)	0.75	0/1986
1	DG	0.42	0/1483	0.68	0/2018
1	DH	0.48	1/1710 (0.1%)	0.71	0/2323

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	DK	0.50	2/1458 (0.1%)	0.75	0/1986
1	DL	0.47	0/1483	0.70	0/2018
1	DM	0.50	0/1710	0.73	0/2323
1	DP	0.44	0/1458	0.72	0/1986
1	DQ	0.42	0/1483	0.69	0/2018
1	DR	0.48	0/1710	0.72	0/2323
1	DU	0.46	2/1458 (0.1%)	0.73	0/1986
1	DV	0.41	0/1483	0.68	0/2018
1	DW	0.45	1/1710 (0.1%)	0.71	0/2323
1	DZ	0.50	1/1458 (0.1%)	0.75	0/1986
1	Da	0.47	0/1483	0.71	0/2018
1	Db	0.50	1/1710 (0.1%)	0.74	0/2323
1	De	0.46	1/1458 (0.1%)	0.72	0/1986
1	Df	0.40	0/1483	0.68	0/2018
1	Dg	0.44	0/1710	0.70	0/2323
1	Dj	0.51	2/1458 (0.1%)	0.75	0/1986
1	Dk	0.46	0/1483	0.70	0/2018
1	Dl	0.49	1/1710 (0.1%)	0.73	0/2323
1	Do	0.47	1/1458 (0.1%)	0.71	0/1986
1	Dp	0.41	0/1483	0.67	0/2018
1	Dq	0.45	0/1710	0.70	0/2323
1	Dt	0.51	1/1458 (0.1%)	0.74	0/1986
1	Du	0.44	0/1483	0.70	0/2018
1	Dv	0.48	1/1710 (0.1%)	0.73	0/2323
1	Dy	0.52	2/1458 (0.1%)	0.77	0/1986
1	Dz	0.46	0/1483	0.72	0/2018
1	E1	0.50	0/1710	0.73	0/2323
1	E4	0.52	2/1458 (0.1%)	0.77	0/1986
1	E5	0.47	0/1483	0.70	0/2018
1	E6	0.49	0/1710	0.72	0/2323
1	EA	0.50	2/1458 (0.1%)	0.74	0/1986
1	EB	0.47	0/1483	0.70	0/2018
1	EC	0.49	0/1710	0.74	0/2323
1	EF	0.47	1/1458 (0.1%)	0.73	0/1986
1	EG	0.40	0/1483	0.68	0/2018
1	EH	0.46	0/1710	0.70	0/2323
1	EK	0.46	1/1458 (0.1%)	0.73	0/1986
1	EL	0.42	0/1483	0.69	0/2018
1	EM	0.48	2/1710 (0.1%)	0.72	0/2323
1	EP	0.51	2/1458 (0.1%)	0.75	0/1986
1	EQ	0.49	0/1483	0.71	0/2018
1	ER	0.48	0/1710	0.72	0/2323
1	EU	0.47	1/1458 (0.1%)	0.74	0/1986

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	EV	0.46	0/1483	0.69	0/2018
1	EW	0.49	0/1710	0.72	0/2323
1	EZ	0.46	1/1458 (0.1%)	0.73	0/1986
1	Ea	0.43	0/1483	0.70	0/2018
1	Eb	0.49	1/1710 (0.1%)	0.73	0/2323
1	Ee	0.48	2/1458 (0.1%)	0.72	0/1986
1	Ef	0.42	0/1483	0.68	0/2018
1	Eg	0.45	0/1710	0.70	0/2323
1	Ej	0.46	1/1458 (0.1%)	0.72	0/1986
1	Ek	0.39	0/1483	0.66	0/2018
1	El	0.44	1/1710 (0.1%)	0.70	0/2323
1	Eo	0.46	1/1458 (0.1%)	0.71	0/1986
1	Ep	0.42	0/1483	0.68	0/2018
1	Eq	0.45	0/1710	0.71	0/2323
1	Et	0.51	2/1458 (0.1%)	0.75	0/1986
1	Eu	0.47	0/1483	0.71	0/2018
1	Ev	0.51	2/1710 (0.1%)	0.73	0/2323
1	Ey	0.49	1/1458 (0.1%)	0.74	0/1986
1	Ez	0.44	0/1483	0.69	0/2018
1	F1	0.39	0/1710	0.64	0/2323
1	F4	0.48	0/1458	0.71	0/1986
1	F5	0.43	0/1483	0.67	0/2018
1	F6	0.47	0/1710	0.67	0/2323
1	FA	0.46	1/1458 (0.1%)	0.69	0/1986
1	FB	0.43	0/1483	0.67	0/2018
1	FC	0.45	0/1710	0.67	0/2323
1	FF	0.46	0/1458	0.71	0/1986
1	FG	0.44	0/1483	0.68	0/2018
1	FH	0.46	2/1710 (0.1%)	0.68	0/2323
1	FK	0.45	0/1458	0.69	0/1986
1	FL	0.41	0/1483	0.66	0/2018
1	FM	0.48	1/1710 (0.1%)	0.69	0/2323
1	FP	0.48	0/1458	0.70	0/1986
1	FQ	0.44	0/1483	0.67	0/2018
1	FR	0.47	0/1710	0.70	0/2323
1	FU	0.45	0/1458	0.69	0/1986
1	FV	0.43	0/1483	0.66	0/2018
1	FW	0.48	0/1710	0.70	0/2323
1	FZ	0.40	0/1458	0.67	0/1986
1	Fa	0.37	0/1483	0.63	0/2018
1	Fb	0.40	0/1710	0.66	0/2323
1	Fe	0.40	0/1458	0.66	0/1986
1	Ff	0.36	0/1483	0.63	0/2018

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	Fg	0.39	0/1710	0.66	0/2323
1	Fj	0.46	0/1458	0.69	0/1986
1	Fk	0.42	0/1483	0.66	0/2018
1	Fl	0.44	0/1710	0.67	0/2323
1	Fo	0.46	1/1458 (0.1%)	0.70	0/1986
1	Fp	0.44	0/1483	0.68	0/2018
1	Fq	0.51	0/1710	0.71	0/2323
1	Ft	0.45	0/1458	0.70	0/1986
1	Fu	0.43	0/1483	0.66	0/2018
1	Fv	0.47	0/1710	0.69	0/2323
1	Fy	0.38	0/1458	0.65	0/1986
1	Fz	0.36	0/1483	0.63	0/2018
1	G1	0.43	0/1710	0.66	0/2323
1	G4	0.39	0/1458	0.66	0/1986
1	G5	0.38	0/1483	0.63	0/2018
1	G6	0.43	0/1710	0.67	0/2323
1	GA	0.47	0/1458	0.71	0/1986
1	GB	0.42	0/1483	0.66	0/2018
1	GC	0.47	1/1710 (0.1%)	0.68	0/2323
1	GF	0.47	0/1458	0.71	0/1986
1	GG	0.43	0/1483	0.67	0/2018
1	GH	0.46	0/1710	0.68	0/2323
1	GK	0.38	0/1458	0.66	0/1986
1	GL	0.36	0/1483	0.63	0/2018
1	GM	0.41	0/1710	0.65	0/2323
1	GP	0.47	0/1458	0.70	0/1986
1	GQ	0.46	0/1483	0.67	0/2018
1	GR	0.47	0/1710	0.70	0/2323
1	GU	0.44	0/1458	0.69	0/1986
1	GV	0.43	0/1483	0.67	0/2018
1	GW	0.47	0/1710	0.69	0/2323
1	GZ	0.44	0/1458	0.70	0/1986
1	Ga	0.42	0/1483	0.66	0/2018
1	Gb	0.45	0/1710	0.67	0/2323
1	Ge	0.47	0/1458	0.71	0/1986
1	Gf	0.46	0/1483	0.68	0/2018
1	Gg	0.46	0/1710	0.69	0/2323
1	Gj	0.42	0/1458	0.67	0/1986
1	Gk	0.39	0/1483	0.64	0/2018
1	Gl	0.42	0/1710	0.66	0/2323
1	Go	0.38	0/1458	0.66	0/1986
1	Gp	0.35	0/1483	0.62	0/2018
1	Gq	0.39	0/1710	0.65	0/2323

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	Gt	0.49	0/1458	0.72	0/1986
1	Gu	0.44	0/1483	0.67	0/2018
1	Gv	0.49	1/1710 (0.1%)	0.70	0/2323
1	Gy	0.43	0/1458	0.67	0/1986
1	Gz	0.38	0/1483	0.65	0/2018
1	H1	0.45	0/1710	0.68	0/2323
1	H4	0.38	0/1458	0.66	0/1986
1	H5	0.36	0/1483	0.64	0/2018
1	H6	0.39	0/1710	0.65	0/2323
1	HA	0.41	0/1458	0.68	0/1986
1	HB	0.38	0/1483	0.65	0/2018
1	HC	0.41	0/1710	0.66	0/2323
1	HF	0.43	0/1458	0.68	0/1986
1	HG	0.40	0/1483	0.66	0/2018
1	HH	0.43	0/1710	0.67	0/2323
1	HK	0.44	0/1458	0.69	0/1986
1	HL	0.44	0/1483	0.67	0/2018
1	HM	0.43	0/1710	0.67	0/2323
1	HP	0.45	0/1458	0.69	0/1986
1	HQ	0.46	0/1483	0.69	0/2018
1	HR	0.45	0/1710	0.68	0/2323
1	HU	0.45	0/1458	0.69	0/1986
1	HV	0.40	0/1483	0.65	0/2018
1	HW	0.43	0/1710	0.67	0/2323
1	HZ	0.44	0/1458	0.69	0/1986
1	Ha	0.40	0/1483	0.66	0/2018
1	Hb	0.43	0/1710	0.67	0/2323
1	He	0.40	0/1458	0.66	0/1986
1	Hf	0.37	0/1483	0.62	0/2018
1	Hg	0.40	0/1710	0.65	0/2323
1	Hj	0.39	0/1458	0.67	0/1986
1	Hk	0.37	0/1483	0.63	0/2018
1	Hl	0.41	0/1710	0.66	0/2323
1	Ho	0.43	0/1458	0.68	0/1986
1	Hp	0.40	0/1483	0.65	0/2018
1	Hq	0.43	0/1710	0.68	0/2323
1	Ht	0.47	0/1458	0.70	0/1986
1	Hu	0.42	0/1483	0.67	0/2018
1	Hv	0.49	0/1710	0.69	0/2323
1	Hy	0.44	0/1458	0.68	0/1986
1	Hz	0.43	0/1483	0.67	0/2018
1	I1	0.41	0/1710	0.66	0/2323
1	I4	0.47	0/1458	0.70	0/1986

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	I5	0.44	0/1483	0.67	0/2018
1	I6	0.45	0/1710	0.69	0/2323
1	IA	0.38	0/1458	0.65	0/1986
1	IB	0.35	0/1483	0.63	0/2018
1	IC	0.38	0/1710	0.65	0/2323
1	IF	0.41	0/1458	0.66	0/1986
1	IG	0.37	0/1483	0.64	0/2018
1	IH	0.41	0/1710	0.67	0/2323
1	IK	0.42	0/1458	0.68	0/1986
1	IL	0.42	0/1483	0.67	0/2018
1	IM	0.46	2/1710 (0.1%)	0.68	0/2323
1	IP	0.41	0/1458	0.67	0/1986
1	IQ	0.38	0/1483	0.64	0/2018
1	IR	0.41	0/1710	0.66	0/2323
1	IU	0.48	0/1458	0.72	0/1986
1	IV	0.44	0/1483	0.69	0/2018
1	IW	0.48	0/1710	0.69	0/2323
1	IZ	0.45	0/1458	0.70	0/1986
1	Ia	0.45	0/1483	0.67	0/2018
1	Ib	0.48	0/1710	0.69	0/2323
1	Ie	0.40	0/1458	0.65	0/1986
1	If	0.38	0/1483	0.65	0/2018
1	Ig	0.42	0/1710	0.66	0/2323
1	Ij	0.42	0/1458	0.67	0/1986
1	Ik	0.43	0/1483	0.68	0/2018
1	Il	0.43	0/1710	0.67	0/2323
1	Io	0.48	0/1458	0.71	0/1986
1	Ip	0.44	0/1483	0.67	0/2018
1	Iq	0.45	0/1710	0.68	0/2323
1	It	0.45	0/1458	0.70	0/1986
1	Iu	0.43	0/1483	0.68	0/2018
1	Iv	0.46	0/1710	0.70	0/2323
1	Iy	0.41	0/1458	0.67	0/1986
1	Iz	0.37	0/1483	0.64	0/2018
1	J1	0.47	0/1710	0.68	0/2323
1	J4	0.44	0/1458	0.68	0/1986
1	J5	0.43	0/1483	0.70	0/2018
1	J6	0.46	0/1710	0.68	0/2323
1	JA	0.47	0/1458	0.69	0/1986
1	JB	0.45	0/1483	0.67	0/2018
1	JC	0.46	0/1710	0.68	0/2323
1	JF	0.45	0/1458	0.69	0/1986
1	JG	0.41	0/1483	0.66	0/2018

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	JH	0.44	0/1710	0.67	0/2323
1	JK	0.38	0/1458	0.65	0/1986
1	JL	0.37	0/1483	0.63	0/2018
1	JM	0.39	0/1710	0.64	0/2323
1	JP	0.40	0/1458	0.65	0/1986
1	JQ	0.37	0/1483	0.64	0/2018
1	JR	0.39	0/1710	0.65	0/2323
1	JU	0.42	0/1458	0.68	0/1986
1	JV	0.39	0/1483	0.65	0/2018
1	JW	0.41	0/1710	0.66	0/2323
1	JZ	0.42	0/1458	0.68	0/1986
1	Ja	0.36	0/1483	0.63	0/2018
1	Jb	0.42	0/1710	0.67	0/2323
1	Je	0.46	0/1458	0.69	0/1986
1	Jf	0.41	0/1483	0.67	0/2018
1	Jg	0.48	0/1710	0.70	0/2323
1	Jj	0.46	0/1458	0.70	0/1986
1	Jk	0.45	0/1483	0.68	0/2018
1	Jl	0.48	2/1710 (0.1%)	0.71	0/2323
1	Jo	0.43	0/1458	0.67	0/1986
1	Jp	0.39	0/1483	0.65	0/2018
1	Jq	0.45	0/1710	0.68	0/2323
1	Jt	0.42	0/1458	0.68	0/1986
1	Ju	0.40	0/1483	0.66	0/2018
1	Jv	0.44	0/1710	0.67	0/2323
1	Jy	0.46	0/1458	0.70	0/1986
1	Jz	0.43	0/1483	0.67	0/2018
2	A2	0.56	1/386 (0.3%)	0.70	0/594
2	A7	0.56	1/386 (0.3%)	0.70	0/594
2	AD	0.55	1/386 (0.3%)	0.69	0/594
2	AI	0.56	1/386 (0.3%)	0.69	0/594
2	AN	0.55	1/386 (0.3%)	0.68	0/594
2	AS	0.56	1/386 (0.3%)	0.69	0/594
2	AX	0.54	1/386 (0.3%)	0.70	0/594
2	Ac	0.56	1/386 (0.3%)	0.70	0/594
2	Ah	0.55	1/386 (0.3%)	0.69	0/594
2	Am	0.55	1/386 (0.3%)	0.69	0/594
2	Ar	0.55	1/386 (0.3%)	0.70	0/594
2	Aw	0.55	1/386 (0.3%)	0.69	0/594
2	B2	0.56	1/386 (0.3%)	0.69	0/594
2	B7	0.55	1/386 (0.3%)	0.69	0/594
2	BD	0.55	1/386 (0.3%)	0.69	0/594
2	BI	0.55	1/386 (0.3%)	0.70	0/594

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
2	BN	0.56	1/386 (0.3%)	0.70	0/594
2	BS	0.55	1/386 (0.3%)	0.69	0/594
2	BX	0.54	1/386 (0.3%)	0.69	0/594
2	Bc	0.55	1/386 (0.3%)	0.69	0/594
2	Bh	0.56	1/386 (0.3%)	0.69	0/594
2	Bm	0.56	1/386 (0.3%)	0.70	0/594
2	Br	0.55	1/386 (0.3%)	0.70	0/594
2	Bw	0.55	1/386 (0.3%)	0.69	0/594
2	C2	0.57	1/386 (0.3%)	0.69	0/594
2	C7	0.56	1/386 (0.3%)	0.69	0/594
2	CD	0.55	1/386 (0.3%)	0.70	0/594
2	CI	0.57	1/386 (0.3%)	0.71	0/594
2	CN	0.56	1/386 (0.3%)	0.69	0/594
2	CS	0.55	1/386 (0.3%)	0.69	0/594
2	CX	0.55	1/386 (0.3%)	0.69	0/594
2	Cc	0.55	1/386 (0.3%)	0.70	0/594
2	Ch	0.56	1/386 (0.3%)	0.70	0/594
2	Cm	0.56	1/386 (0.3%)	0.70	0/594
2	Cr	0.55	1/386 (0.3%)	0.70	0/594
2	Cw	0.56	1/386 (0.3%)	0.70	0/594
2	D2	0.55	1/386 (0.3%)	0.70	0/594
2	D7	0.54	1/386 (0.3%)	0.70	0/594
2	DD	0.55	1/386 (0.3%)	0.68	0/594
2	DI	0.56	1/386 (0.3%)	0.70	0/594
2	DN	0.56	1/386 (0.3%)	0.69	0/594
2	DS	0.54	1/386 (0.3%)	0.70	0/594
2	DX	0.54	1/386 (0.3%)	0.69	0/594
2	Dc	0.55	1/386 (0.3%)	0.69	0/594
2	Dh	0.55	1/386 (0.3%)	0.69	0/594
2	Dm	0.56	1/386 (0.3%)	0.70	0/594
2	Dr	0.55	1/386 (0.3%)	0.68	0/594
2	Dw	0.56	1/386 (0.3%)	0.68	0/594
2	E2	0.56	1/386 (0.3%)	0.71	0/594
2	E7	0.54	1/386 (0.3%)	0.70	0/594
2	ED	0.56	1/386 (0.3%)	0.70	0/594
2	EI	0.55	1/386 (0.3%)	0.70	0/594
2	EN	0.54	1/386 (0.3%)	0.69	0/594
2	ES	0.55	1/386 (0.3%)	0.69	0/594
2	EX	0.56	1/386 (0.3%)	0.71	0/594
2	Ec	0.55	1/386 (0.3%)	0.70	0/594
2	Eh	0.56	1/386 (0.3%)	0.69	0/594
2	Em	0.55	1/386 (0.3%)	0.69	0/594
2	Er	0.55	1/386 (0.3%)	0.70	0/594

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
2	Ew	0.55	1/386 (0.3%)	0.70	0/594
2	F2	0.54	1/386 (0.3%)	0.70	0/594
2	F7	0.55	1/386 (0.3%)	0.70	0/594
2	FD	0.56	1/386 (0.3%)	0.71	0/594
2	FI	0.54	1/386 (0.3%)	0.71	0/594
2	FN	0.57	1/386 (0.3%)	0.69	0/594
2	FS	0.55	1/386 (0.3%)	0.70	0/594
2	FX	0.55	1/386 (0.3%)	0.69	0/594
2	Fc	0.54	1/386 (0.3%)	0.71	0/594
2	Fh	0.54	1/386 (0.3%)	0.70	0/594
2	Fm	0.54	1/386 (0.3%)	0.70	0/594
2	Fr	0.55	1/386 (0.3%)	0.70	0/594
2	Fw	0.55	1/386 (0.3%)	0.70	0/594
2	G2	0.54	1/386 (0.3%)	0.70	0/594
2	G7	0.54	1/386 (0.3%)	0.70	0/594
2	GD	0.55	1/386 (0.3%)	0.70	0/594
2	GI	0.56	1/386 (0.3%)	0.70	0/594
2	GN	0.54	1/386 (0.3%)	0.70	0/594
2	GS	0.55	1/386 (0.3%)	0.69	0/594
2	GX	0.55	1/386 (0.3%)	0.71	0/594
2	Gc	0.56	1/386 (0.3%)	0.71	0/594
2	Gh	0.55	1/386 (0.3%)	0.71	0/594
2	Gm	0.54	1/386 (0.3%)	0.70	0/594
2	Gr	0.54	1/386 (0.3%)	0.69	0/594
2	Gw	0.56	1/386 (0.3%)	0.70	0/594
2	H2	0.54	1/386 (0.3%)	0.70	0/594
2	H7	0.53	1/386 (0.3%)	0.70	0/594
2	HD	0.54	1/386 (0.3%)	0.69	0/594
2	HI	0.54	1/386 (0.3%)	0.71	0/594
2	HN	0.55	1/386 (0.3%)	0.70	0/594
2	HS	0.54	1/386 (0.3%)	0.70	0/594
2	HX	0.55	1/386 (0.3%)	0.71	0/594
2	Hc	0.54	1/386 (0.3%)	0.69	0/594
2	Hh	0.54	1/386 (0.3%)	0.70	0/594
2	Hm	0.54	1/386 (0.3%)	0.71	0/594
2	Hr	0.54	1/386 (0.3%)	0.70	0/594
2	Hw	0.55	1/386 (0.3%)	0.70	0/594
2	I2	0.55	1/386 (0.3%)	0.71	0/594
2	I7	0.54	1/386 (0.3%)	0.70	0/594
2	ID	0.53	1/386 (0.3%)	0.70	0/594
2	II	0.55	1/386 (0.3%)	0.70	0/594
2	IN	0.55	1/386 (0.3%)	0.70	0/594
2	IS	0.54	1/386 (0.3%)	0.70	0/594

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
2	IX	0.55	1/386 (0.3%)	0.70	0/594
2	Ic	0.54	1/386 (0.3%)	0.71	0/594
2	Ih	0.53	1/386 (0.3%)	0.69	0/594
2	Im	0.54	1/386 (0.3%)	0.70	0/594
2	Ir	0.55	1/386 (0.3%)	0.71	0/594
2	Iw	0.54	1/386 (0.3%)	0.71	0/594
2	J2	0.54	1/386 (0.3%)	0.70	0/594
2	J7	0.54	1/386 (0.3%)	0.70	0/594
2	JD	0.53	1/386 (0.3%)	0.70	0/594
2	JI	0.54	1/386 (0.3%)	0.70	0/594
2	JN	0.54	1/386 (0.3%)	0.71	0/594
2	JS	0.54	1/386 (0.3%)	0.71	0/594
2	JX	0.54	1/386 (0.3%)	0.71	0/594
2	Jc	0.53	1/386 (0.3%)	0.71	0/594
2	Jh	0.55	1/386 (0.3%)	0.71	0/594
2	Jm	0.54	1/386 (0.3%)	0.70	0/594
2	Jr	0.54	1/386 (0.3%)	0.70	0/594
2	Jw	0.55	1/386 (0.3%)	0.70	0/594
All	All	0.46	262/604440 (0.0%)	0.70	1/830520 (0.0%)

The worst 5 of 262 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	BN	1	U	OP3-P	-7.52	1.52	1.61
2	FN	1	U	OP3-P	-7.50	1.52	1.61
2	Dw	1	U	OP3-P	-7.50	1.52	1.61
2	C2	1	U	OP3-P	-7.44	1.52	1.61
2	Dc	1	U	OP3-P	-7.43	1.52	1.61

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AA	91	GLY	N-CA-C	-5.08	100.40	113.10

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [\(i\)](#)

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

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	A1	215/242 (89%)	187 (87%)	19 (9%)	9 (4%)	3	10
1	A4	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	A5	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	A6	215/242 (89%)	187 (87%)	18 (8%)	10 (5%)	2	8
1	AA	183/242 (76%)	165 (90%)	13 (7%)	5 (3%)	5	19
1	AB	187/242 (77%)	158 (84%)	21 (11%)	8 (4%)	2	10
1	AC	215/242 (89%)	187 (87%)	18 (8%)	10 (5%)	2	8
1	AF	183/242 (76%)	167 (91%)	12 (7%)	4 (2%)	6	24
1	AG	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	AH	215/242 (89%)	189 (88%)	17 (8%)	9 (4%)	3	10
1	AK	183/242 (76%)	163 (89%)	14 (8%)	6 (3%)	4	15
1	AL	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	AM	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	AP	183/242 (76%)	164 (90%)	13 (7%)	6 (3%)	4	15
1	AQ	187/242 (77%)	163 (87%)	18 (10%)	6 (3%)	4	16
1	AR	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	AU	183/242 (76%)	165 (90%)	11 (6%)	7 (4%)	3	13
1	AV	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	AW	215/242 (89%)	190 (88%)	16 (7%)	9 (4%)	3	10
1	AZ	183/242 (76%)	167 (91%)	12 (7%)	4 (2%)	6	24
1	Aa	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	Ab	215/242 (89%)	189 (88%)	17 (8%)	9 (4%)	3	10
1	Ae	183/242 (76%)	164 (90%)	14 (8%)	5 (3%)	5	19
1	Af	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	Ag	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Aj	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	Ak	187/242 (77%)	159 (85%)	21 (11%)	7 (4%)	3	13
1	Al	215/242 (89%)	185 (86%)	21 (10%)	9 (4%)	3	10
1	Ao	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	Ap	187/242 (77%)	160 (86%)	20 (11%)	7 (4%)	3	13
1	Aq	215/242 (89%)	185 (86%)	21 (10%)	9 (4%)	3	10
1	At	183/242 (76%)	163 (89%)	16 (9%)	4 (2%)	6	24
1	Au	187/242 (77%)	159 (85%)	21 (11%)	7 (4%)	3	13
1	Av	215/242 (89%)	186 (86%)	20 (9%)	9 (4%)	3	10
1	Ay	183/242 (76%)	163 (89%)	16 (9%)	4 (2%)	6	24
1	Az	187/242 (77%)	161 (86%)	19 (10%)	7 (4%)	3	13
1	B1	215/242 (89%)	187 (87%)	19 (9%)	9 (4%)	3	10
1	B4	183/242 (76%)	164 (90%)	13 (7%)	6 (3%)	4	15
1	B5	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	B6	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	BA	183/242 (76%)	163 (89%)	14 (8%)	6 (3%)	4	15
1	BB	187/242 (77%)	158 (84%)	22 (12%)	7 (4%)	3	13
1	BC	215/242 (89%)	186 (86%)	20 (9%)	9 (4%)	3	10
1	BF	183/242 (76%)	167 (91%)	12 (7%)	4 (2%)	6	24
1	BG	187/242 (77%)	161 (86%)	17 (9%)	9 (5%)	2	8
1	BH	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	BK	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	BL	187/242 (77%)	160 (86%)	20 (11%)	7 (4%)	3	13
1	BM	215/242 (89%)	187 (87%)	18 (8%)	10 (5%)	2	8
1	BP	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	BQ	187/242 (77%)	155 (83%)	22 (12%)	10 (5%)	2	6
1	BR	215/242 (89%)	188 (87%)	17 (8%)	10 (5%)	2	8
1	BU	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	BV	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	BW	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	BZ	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Ba	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	Bb	215/242 (89%)	188 (87%)	17 (8%)	10 (5%)	2	8
1	Be	183/242 (76%)	166 (91%)	12 (7%)	5 (3%)	5	19
1	Bf	187/242 (77%)	159 (85%)	20 (11%)	8 (4%)	2	10
1	Bg	215/242 (89%)	189 (88%)	15 (7%)	11 (5%)	2	7
1	Bj	183/242 (76%)	162 (88%)	16 (9%)	5 (3%)	5	19
1	Bk	187/242 (77%)	157 (84%)	25 (13%)	5 (3%)	5	19
1	Bl	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	Bo	183/242 (76%)	163 (89%)	15 (8%)	5 (3%)	5	19
1	Bp	187/242 (77%)	158 (84%)	21 (11%)	8 (4%)	2	10
1	Bq	215/242 (89%)	190 (88%)	17 (8%)	8 (4%)	3	13
1	Bt	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	Bu	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	Bv	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	By	183/242 (76%)	162 (88%)	13 (7%)	8 (4%)	2	10
1	Bz	187/242 (77%)	163 (87%)	17 (9%)	7 (4%)	3	13
1	C1	215/242 (89%)	190 (88%)	15 (7%)	10 (5%)	2	8
1	C4	183/242 (76%)	166 (91%)	12 (7%)	5 (3%)	5	19
1	C5	187/242 (77%)	158 (84%)	23 (12%)	6 (3%)	4	16
1	C6	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	CA	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	CB	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	CC	215/242 (89%)	186 (86%)	19 (9%)	10 (5%)	2	8
1	CF	183/242 (76%)	166 (91%)	12 (7%)	5 (3%)	5	19
1	CG	187/242 (77%)	162 (87%)	19 (10%)	6 (3%)	4	16
1	CH	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	CK	183/242 (76%)	164 (90%)	15 (8%)	4 (2%)	6	24
1	CL	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	CM	215/242 (89%)	191 (89%)	15 (7%)	9 (4%)	3	10
1	CP	183/242 (76%)	164 (90%)	15 (8%)	4 (2%)	6	24
1	CQ	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	CR	215/242 (89%)	191 (89%)	15 (7%)	9 (4%)	3	10
1	CU	183/242 (76%)	163 (89%)	15 (8%)	5 (3%)	5	19
1	CV	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	CW	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	CZ	183/242 (76%)	164 (90%)	14 (8%)	5 (3%)	5	19
1	Ca	187/242 (77%)	161 (86%)	19 (10%)	7 (4%)	3	13
1	Cb	215/242 (89%)	186 (86%)	18 (8%)	11 (5%)	2	7
1	Ce	183/242 (76%)	165 (90%)	13 (7%)	5 (3%)	5	19
1	Cf	187/242 (77%)	159 (85%)	21 (11%)	7 (4%)	3	13
1	Cg	215/242 (89%)	190 (88%)	15 (7%)	10 (5%)	2	8
1	Cj	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	Ck	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	Cl	215/242 (89%)	185 (86%)	20 (9%)	10 (5%)	2	8
1	Co	183/242 (76%)	167 (91%)	12 (7%)	4 (2%)	6	24
1	Cp	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	Cq	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	Ct	183/242 (76%)	164 (90%)	13 (7%)	6 (3%)	4	15
1	Cu	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	Cv	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	Cy	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	Cz	187/242 (77%)	158 (84%)	23 (12%)	6 (3%)	4	16
1	D1	215/242 (89%)	189 (88%)	16 (7%)	10 (5%)	2	8
1	D4	183/242 (76%)	165 (90%)	13 (7%)	5 (3%)	5	19
1	D5	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	D6	215/242 (89%)	190 (88%)	16 (7%)	9 (4%)	3	10
1	DA	183/242 (76%)	163 (89%)	15 (8%)	5 (3%)	5	19
1	DB	187/242 (77%)	163 (87%)	16 (9%)	8 (4%)	2	10
1	DC	215/242 (89%)	186 (86%)	20 (9%)	9 (4%)	3	10
1	DF	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	DG	187/242 (77%)	161 (86%)	18 (10%)	8 (4%)	2	10
1	DH	215/242 (89%)	186 (86%)	19 (9%)	10 (5%)	2	8

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	DK	183/242 (76%)	161 (88%)	17 (9%)	5 (3%)	5	19
1	DL	187/242 (77%)	157 (84%)	24 (13%)	6 (3%)	4	16
1	DM	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	DP	183/242 (76%)	163 (89%)	16 (9%)	4 (2%)	6	24
1	DQ	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	DR	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	DU	183/242 (76%)	167 (91%)	12 (7%)	4 (2%)	6	24
1	DV	187/242 (77%)	159 (85%)	19 (10%)	9 (5%)	2	8
1	DW	215/242 (89%)	187 (87%)	18 (8%)	10 (5%)	2	8
1	DZ	183/242 (76%)	165 (90%)	13 (7%)	5 (3%)	5	19
1	Da	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	Db	215/242 (89%)	186 (86%)	20 (9%)	9 (4%)	3	10
1	De	183/242 (76%)	168 (92%)	11 (6%)	4 (2%)	6	24
1	Df	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	Dg	215/242 (89%)	191 (89%)	15 (7%)	9 (4%)	3	10
1	Dj	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	Dk	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	Dl	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	Do	183/242 (76%)	167 (91%)	12 (7%)	4 (2%)	6	24
1	Dp	187/242 (77%)	161 (86%)	19 (10%)	7 (4%)	3	13
1	Dq	215/242 (89%)	187 (87%)	17 (8%)	11 (5%)	2	7
1	Dt	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	Du	187/242 (77%)	158 (84%)	23 (12%)	6 (3%)	4	16
1	Dv	215/242 (89%)	187 (87%)	19 (9%)	9 (4%)	3	10
1	Dy	183/242 (76%)	165 (90%)	12 (7%)	6 (3%)	4	15
1	Dz	187/242 (77%)	160 (86%)	20 (11%)	7 (4%)	3	13
1	E1	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	E4	183/242 (76%)	164 (90%)	15 (8%)	4 (2%)	6	24
1	E5	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	E6	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	EA	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	EB	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	EC	215/242 (89%)	185 (86%)	20 (9%)	10 (5%)	2	8
1	EF	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	EG	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	EH	215/242 (89%)	189 (88%)	17 (8%)	9 (4%)	3	10
1	EK	183/242 (76%)	163 (89%)	16 (9%)	4 (2%)	6	24
1	EL	187/242 (77%)	158 (84%)	23 (12%)	6 (3%)	4	16
1	EM	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	EP	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	EQ	187/242 (77%)	160 (86%)	20 (11%)	7 (4%)	3	13
1	ER	215/242 (89%)	186 (86%)	18 (8%)	11 (5%)	2	7
1	EU	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	EV	187/242 (77%)	160 (86%)	19 (10%)	8 (4%)	2	10
1	EW	215/242 (89%)	187 (87%)	19 (9%)	9 (4%)	3	10
1	EZ	183/242 (76%)	166 (91%)	13 (7%)	4 (2%)	6	24
1	Ea	187/242 (77%)	159 (85%)	21 (11%)	7 (4%)	3	13
1	Eb	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	Ee	183/242 (76%)	165 (90%)	13 (7%)	5 (3%)	5	19
1	Ef	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	Eg	215/242 (89%)	187 (87%)	19 (9%)	9 (4%)	3	10
1	Ej	183/242 (76%)	165 (90%)	14 (8%)	4 (2%)	6	24
1	Ek	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	El	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	Eo	183/242 (76%)	164 (90%)	15 (8%)	4 (2%)	6	24
1	Ep	187/242 (77%)	157 (84%)	25 (13%)	5 (3%)	5	19
1	Eq	215/242 (89%)	189 (88%)	17 (8%)	9 (4%)	3	10
1	Et	183/242 (76%)	165 (90%)	13 (7%)	5 (3%)	5	19
1	Eu	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	Ev	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	Ey	183/242 (76%)	164 (90%)	14 (8%)	5 (3%)	5	19
1	Ez	187/242 (77%)	162 (87%)	19 (10%)	6 (3%)	4	16

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	F1	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	F4	183/242 (76%)	154 (84%)	24 (13%)	5 (3%)	5	19
1	F5	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	F6	215/242 (89%)	184 (86%)	21 (10%)	10 (5%)	2	8
1	FA	183/242 (76%)	155 (85%)	24 (13%)	4 (2%)	6	24
1	FB	187/242 (77%)	164 (88%)	20 (11%)	3 (2%)	9	32
1	FC	215/242 (89%)	182 (85%)	24 (11%)	9 (4%)	3	10
1	FF	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	FG	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	FH	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	FK	183/242 (76%)	154 (84%)	25 (14%)	4 (2%)	6	24
1	FL	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	FM	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	FP	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	FQ	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	FR	215/242 (89%)	185 (86%)	21 (10%)	9 (4%)	3	10
1	FU	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	FV	187/242 (77%)	159 (85%)	24 (13%)	4 (2%)	7	26
1	FW	215/242 (89%)	182 (85%)	22 (10%)	11 (5%)	2	7
1	FZ	183/242 (76%)	153 (84%)	25 (14%)	5 (3%)	5	19
1	Fa	187/242 (77%)	162 (87%)	19 (10%)	6 (3%)	4	16
1	Fb	215/242 (89%)	183 (85%)	24 (11%)	8 (4%)	3	13
1	Fe	183/242 (76%)	155 (85%)	23 (13%)	5 (3%)	5	19
1	Ff	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	Fg	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	Fj	183/242 (76%)	158 (86%)	20 (11%)	5 (3%)	5	19
1	Fk	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	Fl	215/242 (89%)	183 (85%)	24 (11%)	8 (4%)	3	13
1	Fo	183/242 (76%)	158 (86%)	22 (12%)	3 (2%)	9	32
1	Fp	187/242 (77%)	160 (86%)	23 (12%)	4 (2%)	7	26
1	Fq	215/242 (89%)	184 (86%)	20 (9%)	11 (5%)	2	7

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Ft	183/242 (76%)	159 (87%)	19 (10%)	5 (3%)	5	19
1	Fu	187/242 (77%)	162 (87%)	20 (11%)	5 (3%)	5	19
1	Fv	215/242 (89%)	184 (86%)	23 (11%)	8 (4%)	3	13
1	Fy	183/242 (76%)	159 (87%)	20 (11%)	4 (2%)	6	24
1	Fz	187/242 (77%)	160 (86%)	24 (13%)	3 (2%)	9	32
1	G1	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	G4	183/242 (76%)	154 (84%)	25 (14%)	4 (2%)	6	24
1	G5	187/242 (77%)	159 (85%)	21 (11%)	7 (4%)	3	13
1	G6	215/242 (89%)	180 (84%)	27 (13%)	8 (4%)	3	13
1	GA	183/242 (76%)	158 (86%)	21 (12%)	4 (2%)	6	24
1	GB	187/242 (77%)	162 (87%)	21 (11%)	4 (2%)	7	26
1	GC	215/242 (89%)	183 (85%)	23 (11%)	9 (4%)	3	10
1	GF	183/242 (76%)	158 (86%)	20 (11%)	5 (3%)	5	19
1	GG	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	GH	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	GK	183/242 (76%)	159 (87%)	17 (9%)	7 (4%)	3	13
1	GL	187/242 (77%)	158 (84%)	23 (12%)	6 (3%)	4	16
1	GM	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	GP	183/242 (76%)	158 (86%)	20 (11%)	5 (3%)	5	19
1	GQ	187/242 (77%)	162 (87%)	21 (11%)	4 (2%)	7	26
1	GR	215/242 (89%)	185 (86%)	22 (10%)	8 (4%)	3	13
1	GU	183/242 (76%)	155 (85%)	23 (13%)	5 (3%)	5	19
1	GV	187/242 (77%)	162 (87%)	21 (11%)	4 (2%)	7	26
1	GW	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	GZ	183/242 (76%)	157 (86%)	20 (11%)	6 (3%)	4	15
1	Ga	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	Gb	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	Ge	183/242 (76%)	156 (85%)	23 (13%)	4 (2%)	6	24
1	Gf	187/242 (77%)	159 (85%)	22 (12%)	6 (3%)	4	16
1	Gg	215/242 (89%)	185 (86%)	22 (10%)	8 (4%)	3	13
1	Gj	183/242 (76%)	153 (84%)	24 (13%)	6 (3%)	4	15

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Gk	187/242 (77%)	159 (85%)	24 (13%)	4 (2%)	7	26
1	Gl	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	Go	183/242 (76%)	158 (86%)	21 (12%)	4 (2%)	6	24
1	Gp	187/242 (77%)	160 (86%)	23 (12%)	4 (2%)	7	26
1	Gq	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	Gt	183/242 (76%)	158 (86%)	20 (11%)	5 (3%)	5	19
1	Gu	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	Gv	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	Gy	183/242 (76%)	159 (87%)	18 (10%)	6 (3%)	4	15
1	Gz	187/242 (77%)	163 (87%)	20 (11%)	4 (2%)	7	26
1	H1	215/242 (89%)	187 (87%)	18 (8%)	10 (5%)	2	8
1	H4	183/242 (76%)	157 (86%)	21 (12%)	5 (3%)	5	19
1	H5	187/242 (77%)	160 (86%)	22 (12%)	5 (3%)	5	19
1	H6	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	HA	183/242 (76%)	159 (87%)	19 (10%)	5 (3%)	5	19
1	HB	187/242 (77%)	160 (86%)	23 (12%)	4 (2%)	7	26
1	HC	215/242 (89%)	184 (86%)	21 (10%)	10 (5%)	2	8
1	HF	183/242 (76%)	155 (85%)	23 (13%)	5 (3%)	5	19
1	HG	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	HH	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	HK	183/242 (76%)	159 (87%)	19 (10%)	5 (3%)	5	19
1	HL	187/242 (77%)	159 (85%)	24 (13%)	4 (2%)	7	26
1	HM	215/242 (89%)	184 (86%)	23 (11%)	8 (4%)	3	13
1	HP	183/242 (76%)	159 (87%)	19 (10%)	5 (3%)	5	19
1	HQ	187/242 (77%)	162 (87%)	19 (10%)	6 (3%)	4	16
1	HR	215/242 (89%)	185 (86%)	21 (10%)	9 (4%)	3	10
1	HU	183/242 (76%)	155 (85%)	24 (13%)	4 (2%)	6	24
1	HV	187/242 (77%)	161 (86%)	20 (11%)	6 (3%)	4	16
1	HW	215/242 (89%)	185 (86%)	19 (9%)	11 (5%)	2	7
1	HZ	183/242 (76%)	159 (87%)	18 (10%)	6 (3%)	4	15
1	Ha	187/242 (77%)	163 (87%)	20 (11%)	4 (2%)	7	26

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	Hb	215/242 (89%)	184 (86%)	22 (10%)	9 (4%)	3	10
1	He	183/242 (76%)	156 (85%)	21 (12%)	6 (3%)	4	15
1	Hf	187/242 (77%)	160 (86%)	22 (12%)	5 (3%)	5	19
1	Hg	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	Hj	183/242 (76%)	157 (86%)	22 (12%)	4 (2%)	6	24
1	Hk	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	Hl	215/242 (89%)	185 (86%)	21 (10%)	9 (4%)	3	10
1	Ho	183/242 (76%)	159 (87%)	19 (10%)	5 (3%)	5	19
1	Hp	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	Hq	215/242 (89%)	185 (86%)	22 (10%)	8 (4%)	3	13
1	Ht	183/242 (76%)	155 (85%)	23 (13%)	5 (3%)	5	19
1	Hu	187/242 (77%)	160 (86%)	21 (11%)	6 (3%)	4	16
1	Hv	215/242 (89%)	184 (86%)	22 (10%)	9 (4%)	3	10
1	Hy	183/242 (76%)	153 (84%)	26 (14%)	4 (2%)	6	24
1	Hz	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	I1	215/242 (89%)	185 (86%)	22 (10%)	8 (4%)	3	13
1	I4	183/242 (76%)	155 (85%)	21 (12%)	7 (4%)	3	13
1	I5	187/242 (77%)	158 (84%)	22 (12%)	7 (4%)	3	13
1	I6	215/242 (89%)	187 (87%)	18 (8%)	10 (5%)	2	8
1	IA	183/242 (76%)	156 (85%)	23 (13%)	4 (2%)	6	24
1	IB	187/242 (77%)	160 (86%)	22 (12%)	5 (3%)	5	19
1	IC	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	IF	183/242 (76%)	158 (86%)	21 (12%)	4 (2%)	6	24
1	IG	187/242 (77%)	162 (87%)	20 (11%)	5 (3%)	5	19
1	IH	215/242 (89%)	187 (87%)	19 (9%)	9 (4%)	3	10
1	IK	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	IL	187/242 (77%)	160 (86%)	20 (11%)	7 (4%)	3	13
1	IM	215/242 (89%)	183 (85%)	23 (11%)	9 (4%)	3	10
1	IP	183/242 (76%)	155 (85%)	23 (13%)	5 (3%)	5	19
1	IQ	187/242 (77%)	161 (86%)	22 (12%)	4 (2%)	7	26
1	IR	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	IU	183/242 (76%)	158 (86%)	20 (11%)	5 (3%)	5	19
1	IV	187/242 (77%)	160 (86%)	22 (12%)	5 (3%)	5	19
1	IW	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	IZ	183/242 (76%)	155 (85%)	24 (13%)	4 (2%)	6	24
1	Ia	187/242 (77%)	161 (86%)	22 (12%)	4 (2%)	7	26
1	Ib	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	Ie	183/242 (76%)	158 (86%)	20 (11%)	5 (3%)	5	19
1	If	187/242 (77%)	162 (87%)	22 (12%)	3 (2%)	9	32
1	Ig	215/242 (89%)	185 (86%)	21 (10%)	9 (4%)	3	10
1	Ij	183/242 (76%)	156 (85%)	21 (12%)	6 (3%)	4	15
1	Ik	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	Il	215/242 (89%)	180 (84%)	26 (12%)	9 (4%)	3	10
1	Io	183/242 (76%)	157 (86%)	21 (12%)	5 (3%)	5	19
1	Ip	187/242 (77%)	161 (86%)	21 (11%)	5 (3%)	5	19
1	Iq	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	It	183/242 (76%)	156 (85%)	23 (13%)	4 (2%)	6	24
1	Iu	187/242 (77%)	158 (84%)	25 (13%)	4 (2%)	7	26
1	Iv	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	Iy	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	Iz	187/242 (77%)	162 (87%)	20 (11%)	5 (3%)	5	19
1	J1	215/242 (89%)	185 (86%)	22 (10%)	8 (4%)	3	13
1	J4	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	J5	187/242 (77%)	158 (84%)	23 (12%)	6 (3%)	4	16
1	J6	215/242 (89%)	185 (86%)	20 (9%)	10 (5%)	2	8
1	JA	183/242 (76%)	158 (86%)	19 (10%)	6 (3%)	4	15
1	JB	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	JC	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	JF	183/242 (76%)	157 (86%)	22 (12%)	4 (2%)	6	24
1	JG	187/242 (77%)	161 (86%)	19 (10%)	7 (4%)	3	13
1	JH	215/242 (89%)	188 (87%)	18 (8%)	9 (4%)	3	10
1	JK	183/242 (76%)	158 (86%)	21 (12%)	4 (2%)	6	24

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	JL	187/242 (77%)	162 (87%)	21 (11%)	4 (2%)	7	26
1	JM	215/242 (89%)	184 (86%)	23 (11%)	8 (4%)	3	13
1	JP	183/242 (76%)	156 (85%)	22 (12%)	5 (3%)	5	19
1	JQ	187/242 (77%)	163 (87%)	20 (11%)	4 (2%)	7	26
1	JR	215/242 (89%)	189 (88%)	18 (8%)	8 (4%)	3	13
1	JU	183/242 (76%)	157 (86%)	22 (12%)	4 (2%)	6	24
1	JV	187/242 (77%)	158 (84%)	22 (12%)	7 (4%)	3	13
1	JW	215/242 (89%)	184 (86%)	22 (10%)	9 (4%)	3	10
1	JZ	183/242 (76%)	155 (85%)	24 (13%)	4 (2%)	6	24
1	Ja	187/242 (77%)	159 (85%)	23 (12%)	5 (3%)	5	19
1	Jb	215/242 (89%)	184 (86%)	23 (11%)	8 (4%)	3	13
1	Je	183/242 (76%)	161 (88%)	18 (10%)	4 (2%)	6	24
1	Jf	187/242 (77%)	164 (88%)	19 (10%)	4 (2%)	7	26
1	Jg	215/242 (89%)	186 (86%)	21 (10%)	8 (4%)	3	13
1	Jj	183/242 (76%)	156 (85%)	23 (13%)	4 (2%)	6	24
1	Jk	187/242 (77%)	160 (86%)	23 (12%)	4 (2%)	7	26
1	Jl	215/242 (89%)	188 (87%)	19 (9%)	8 (4%)	3	13
1	Jo	183/242 (76%)	153 (84%)	26 (14%)	4 (2%)	6	24
1	Jp	187/242 (77%)	160 (86%)	22 (12%)	5 (3%)	5	19
1	Jq	215/242 (89%)	190 (88%)	17 (8%)	8 (4%)	3	13
1	Jt	183/242 (76%)	157 (86%)	21 (12%)	5 (3%)	5	19
1	Ju	187/242 (77%)	161 (86%)	23 (12%)	3 (2%)	9	32
1	Jv	215/242 (89%)	187 (87%)	20 (9%)	8 (4%)	3	13
1	Jy	183/242 (76%)	157 (86%)	19 (10%)	7 (4%)	3	13
1	Jz	187/242 (77%)	161 (86%)	19 (10%)	7 (4%)	3	13
All	All	70200/87120 (81%)	60905 (87%)	6970 (10%)	2325 (3%)	4	15

5 of 2325 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	AC	28	LYS
1	AC	29	SER
1	AH	28	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	AH	29	SER
1	AM	28	LYS

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 X-ray entries followed by that with respect to entries of similar resolution.

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	A1	186/204 (91%)	177 (95%)	9 (5%)	25 58
1	A4	160/204 (78%)	151 (94%)	9 (6%)	21 52
1	A5	162/204 (79%)	151 (93%)	11 (7%)	16 42
1	A6	186/204 (91%)	177 (95%)	9 (5%)	25 58
1	AA	160/204 (78%)	152 (95%)	8 (5%)	24 57
1	AB	162/204 (79%)	152 (94%)	10 (6%)	18 47
1	AC	186/204 (91%)	177 (95%)	9 (5%)	25 58
1	AF	160/204 (78%)	153 (96%)	7 (4%)	28 61
1	AG	162/204 (79%)	152 (94%)	10 (6%)	18 47
1	AH	186/204 (91%)	177 (95%)	9 (5%)	25 58
1	AK	160/204 (78%)	150 (94%)	10 (6%)	18 46
1	AL	162/204 (79%)	152 (94%)	10 (6%)	18 47
1	AM	186/204 (91%)	177 (95%)	9 (5%)	25 58
1	AP	160/204 (78%)	150 (94%)	10 (6%)	18 46
1	AQ	162/204 (79%)	152 (94%)	10 (6%)	18 47
1	AR	186/204 (91%)	178 (96%)	8 (4%)	29 62
1	AU	160/204 (78%)	153 (96%)	7 (4%)	28 61
1	AV	162/204 (79%)	152 (94%)	10 (6%)	18 47
1	AW	186/204 (91%)	179 (96%)	7 (4%)	33 67
1	AZ	160/204 (78%)	152 (95%)	8 (5%)	24 57
1	Aa	162/204 (79%)	153 (94%)	9 (6%)	21 52
1	Ab	186/204 (91%)	179 (96%)	7 (4%)	33 67

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	Ae	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Af	162/204 (79%)	150 (93%)	12 (7%)	13	38
1	Ag	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Aj	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Ak	162/204 (79%)	150 (93%)	12 (7%)	13	38
1	Al	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Ao	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Ap	162/204 (79%)	149 (92%)	13 (8%)	12	33
1	Aq	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	At	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Au	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Av	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	Ay	160/204 (78%)	150 (94%)	10 (6%)	18	46
1	Az	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	B1	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	B4	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	B5	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	B6	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	BA	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	BB	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	BC	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	BF	160/204 (78%)	150 (94%)	10 (6%)	18	46
1	BG	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	BH	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	BK	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	BL	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	BM	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	BP	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	BQ	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	BR	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	BU	160/204 (78%)	152 (95%)	8 (5%)	24	57

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	BV	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	BW	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	BZ	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Ba	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Bb	186/204 (91%)	175 (94%)	11 (6%)	19	49
1	Be	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Bf	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Bg	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Bj	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Bk	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Bl	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	Bo	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Bp	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	Bq	186/204 (91%)	175 (94%)	11 (6%)	19	49
1	Bt	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Bu	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Bv	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	By	160/204 (78%)	150 (94%)	10 (6%)	18	46
1	Bz	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	C1	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	C4	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	C5	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	C6	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	CA	160/204 (78%)	150 (94%)	10 (6%)	18	46
1	CB	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	CC	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	CF	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	CG	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	CH	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	CK	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	CL	162/204 (79%)	152 (94%)	10 (6%)	18	47

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	CM	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	CP	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	CQ	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	CR	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	CU	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	CV	162/204 (79%)	150 (93%)	12 (7%)	13	38
1	CW	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	CZ	160/204 (78%)	148 (92%)	12 (8%)	13	37
1	Ca	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	Cb	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Ce	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Cf	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	Cg	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Cj	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Ck	162/204 (79%)	150 (93%)	12 (7%)	13	38
1	Cl	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	Co	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Cp	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Cq	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Ct	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Cu	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	Cv	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Cy	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Cz	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	D1	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	D4	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	D5	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	D6	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	DA	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	DB	162/204 (79%)	150 (93%)	12 (7%)	13	38
1	DC	186/204 (91%)	175 (94%)	11 (6%)	19	49

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	DF	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	DG	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	DH	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	DK	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	DL	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	DM	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	DP	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	DQ	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	DR	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	DU	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	DV	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	DW	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	DZ	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Da	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	Db	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	De	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Df	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	Dg	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Dj	160/204 (78%)	149 (93%)	11 (7%)	15	41
1	Dk	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	Dl	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Do	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Dp	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	Dq	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	Dt	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Du	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	Dv	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Dy	160/204 (78%)	150 (94%)	10 (6%)	18	46
1	Dz	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	E1	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	E4	160/204 (78%)	152 (95%)	8 (5%)	24	57

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	E5	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	E6	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	EA	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	EB	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	EC	186/204 (91%)	175 (94%)	11 (6%)	19	49
1	EF	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	EG	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	EH	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	EK	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	EL	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	EM	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	EP	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	EQ	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	ER	186/204 (91%)	176 (95%)	10 (5%)	22	54
1	EU	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	EV	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	EW	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	EZ	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Ea	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	Eb	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Ee	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Ef	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	Eg	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Ej	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Ek	162/204 (79%)	153 (94%)	9 (6%)	21	52
1	El	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Eo	160/204 (78%)	151 (94%)	9 (6%)	21	52
1	Ep	162/204 (79%)	152 (94%)	10 (6%)	18	47
1	Eq	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Et	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Eu	162/204 (79%)	152 (94%)	10 (6%)	18	47

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	Ev	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	Ey	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	Ez	162/204 (79%)	151 (93%)	11 (7%)	16	42
1	F1	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	F4	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	F5	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	F6	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	FA	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	FB	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	FC	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	FF	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	FG	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	FH	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	FK	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	FL	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	FM	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	FP	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	FQ	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	FR	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	FU	160/204 (78%)	152 (95%)	8 (5%)	24	57
1	FV	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	FW	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	FZ	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Fa	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Fb	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Fe	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Ff	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Fg	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Fj	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Fk	162/204 (79%)	157 (97%)	5 (3%)	40	74
1	Fl	186/204 (91%)	179 (96%)	7 (4%)	33	67

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	Fo	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Fp	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Fq	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Ft	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Fu	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	Fv	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Fy	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Fz	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	G1	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	G4	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	G5	162/204 (79%)	157 (97%)	5 (3%)	40	74
1	G6	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	GA	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	GB	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	GC	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	GF	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	GG	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	GH	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	GK	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	GL	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	GM	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	GP	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	GQ	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	GR	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	GU	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	GV	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	GW	186/204 (91%)	177 (95%)	9 (5%)	25	58
1	GZ	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Ga	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	Gb	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Ge	160/204 (78%)	155 (97%)	5 (3%)	40	74

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	Gf	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Gg	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Gj	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Gk	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Gl	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Go	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Gp	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Gq	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Gt	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Gu	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Gv	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Gy	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Gz	162/204 (79%)	157 (97%)	5 (3%)	40	74
1	H1	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	H4	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	H5	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	H6	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	HA	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	HB	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	HC	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	HF	160/204 (78%)	156 (98%)	4 (2%)	47	78
1	HG	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	HH	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	HK	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	HL	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	HM	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	HP	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	HQ	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	HR	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	HU	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	HV	162/204 (79%)	156 (96%)	6 (4%)	34	68

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	HW	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	HZ	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Ha	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Hb	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	He	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Hf	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Hg	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Hj	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Hk	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Hl	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Ho	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Hp	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Hq	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Ht	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Hu	162/204 (79%)	157 (97%)	5 (3%)	40	74
1	Hv	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Hy	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Hz	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	I1	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	I4	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	I5	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	I6	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	IA	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	IB	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	IC	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	IF	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	IG	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	IH	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	IK	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	IL	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	IM	186/204 (91%)	180 (97%)	6 (3%)	39	73

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	IP	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	IQ	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	IR	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	IU	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	IV	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	IW	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	IZ	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Ia	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	Ib	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Ie	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	If	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Ig	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Ij	160/204 (78%)	156 (98%)	4 (2%)	47	78
1	Ik	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Il	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Io	160/204 (78%)	156 (98%)	4 (2%)	47	78
1	Ip	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Iq	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	It	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Iu	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Iv	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Iy	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Iz	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	J1	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	J4	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	J5	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	J6	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	JA	160/204 (78%)	156 (98%)	4 (2%)	47	78
1	JB	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	JC	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	JF	160/204 (78%)	154 (96%)	6 (4%)	33	67

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	JG	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	JH	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	JK	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	JL	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	JM	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	JP	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	JQ	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	JR	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	JU	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	JV	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	JW	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	JZ	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Ja	162/204 (79%)	157 (97%)	5 (3%)	40	74
1	Jb	186/204 (91%)	178 (96%)	8 (4%)	29	62
1	Je	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Jf	162/204 (79%)	156 (96%)	6 (4%)	34	68
1	Jg	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Jj	160/204 (78%)	154 (96%)	6 (4%)	33	67
1	Jk	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	Jl	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Jo	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Jp	162/204 (79%)	154 (95%)	8 (5%)	25	57
1	Jq	186/204 (91%)	179 (96%)	7 (4%)	33	67
1	Jt	160/204 (78%)	153 (96%)	7 (4%)	28	61
1	Ju	162/204 (79%)	155 (96%)	7 (4%)	29	62
1	Jv	186/204 (91%)	180 (97%)	6 (3%)	39	73
1	Jy	160/204 (78%)	155 (97%)	5 (3%)	40	74
1	Jz	162/204 (79%)	154 (95%)	8 (5%)	25	57
All	All	60960/73440 (83%)	58192 (96%)	2768 (4%)	27	61

5 of 2768 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	F6	131	PRO
1	H1	189	THR
1	GM	76	THR
1	F6	72	THR
1	G6	76	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 1669 such sidechains are listed below:

Mol	Chain	Res	Type
1	FV	67	GLN
1	Gp	113	HIS
1	Jg	69	ASN
1	Fg	52	GLN
1	FV	52	GLN

5.3.3 RNA [i](#)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	A2	16/17 (94%)	3 (18%)	3 (18%)
2	A7	16/17 (94%)	3 (18%)	3 (18%)
2	AD	16/17 (94%)	3 (18%)	3 (18%)
2	AI	16/17 (94%)	3 (18%)	3 (18%)
2	AN	16/17 (94%)	3 (18%)	3 (18%)
2	AS	16/17 (94%)	3 (18%)	3 (18%)
2	AX	16/17 (94%)	3 (18%)	3 (18%)
2	Ac	16/17 (94%)	3 (18%)	0
2	Ah	16/17 (94%)	3 (18%)	0
2	Am	16/17 (94%)	3 (18%)	0
2	Ar	16/17 (94%)	3 (18%)	0
2	Aw	16/17 (94%)	3 (18%)	0
2	B2	16/17 (94%)	3 (18%)	3 (18%)
2	B7	16/17 (94%)	3 (18%)	3 (18%)
2	BD	16/17 (94%)	3 (18%)	3 (18%)
2	BI	16/17 (94%)	3 (18%)	3 (18%)
2	BN	16/17 (94%)	3 (18%)	3 (18%)
2	BS	16/17 (94%)	3 (18%)	3 (18%)
2	BX	16/17 (94%)	3 (18%)	3 (18%)
2	Bc	16/17 (94%)	3 (18%)	0
2	Bh	16/17 (94%)	3 (18%)	0
2	Bm	16/17 (94%)	3 (18%)	0
2	Br	16/17 (94%)	3 (18%)	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	Bw	16/17 (94%)	3 (18%)	0
2	C2	16/17 (94%)	3 (18%)	3 (18%)
2	C7	16/17 (94%)	3 (18%)	3 (18%)
2	CD	16/17 (94%)	3 (18%)	3 (18%)
2	CI	16/17 (94%)	3 (18%)	3 (18%)
2	CN	16/17 (94%)	3 (18%)	3 (18%)
2	CS	16/17 (94%)	3 (18%)	3 (18%)
2	CX	16/17 (94%)	3 (18%)	3 (18%)
2	Cc	16/17 (94%)	3 (18%)	0
2	Ch	16/17 (94%)	3 (18%)	0
2	Cm	16/17 (94%)	3 (18%)	0
2	Cr	16/17 (94%)	3 (18%)	0
2	Cw	16/17 (94%)	3 (18%)	0
2	D2	16/17 (94%)	3 (18%)	3 (18%)
2	D7	16/17 (94%)	3 (18%)	3 (18%)
2	DD	16/17 (94%)	3 (18%)	3 (18%)
2	DI	16/17 (94%)	3 (18%)	3 (18%)
2	DN	16/17 (94%)	3 (18%)	3 (18%)
2	DS	16/17 (94%)	3 (18%)	3 (18%)
2	DX	16/17 (94%)	3 (18%)	3 (18%)
2	Dc	16/17 (94%)	3 (18%)	0
2	Dh	16/17 (94%)	3 (18%)	0
2	Dm	16/17 (94%)	3 (18%)	0
2	Dr	16/17 (94%)	3 (18%)	0
2	Dw	16/17 (94%)	3 (18%)	0
2	E2	16/17 (94%)	3 (18%)	3 (18%)
2	E7	16/17 (94%)	3 (18%)	3 (18%)
2	ED	16/17 (94%)	3 (18%)	3 (18%)
2	EI	16/17 (94%)	3 (18%)	3 (18%)
2	EN	16/17 (94%)	3 (18%)	3 (18%)
2	ES	16/17 (94%)	3 (18%)	3 (18%)
2	EX	16/17 (94%)	3 (18%)	3 (18%)
2	Ec	16/17 (94%)	3 (18%)	0
2	Eh	16/17 (94%)	3 (18%)	0
2	Em	16/17 (94%)	3 (18%)	0
2	Er	16/17 (94%)	3 (18%)	0
2	Ew	16/17 (94%)	3 (18%)	0
2	F2	16/17 (94%)	3 (18%)	3 (18%)
2	F7	16/17 (94%)	3 (18%)	3 (18%)
2	FD	16/17 (94%)	3 (18%)	3 (18%)
2	FI	16/17 (94%)	3 (18%)	3 (18%)
2	FN	16/17 (94%)	3 (18%)	3 (18%)

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	FS	16/17 (94%)	3 (18%)	3 (18%)
2	FX	16/17 (94%)	3 (18%)	3 (18%)
2	Fc	16/17 (94%)	3 (18%)	0
2	Fh	16/17 (94%)	3 (18%)	0
2	Fm	16/17 (94%)	3 (18%)	0
2	Fr	16/17 (94%)	3 (18%)	0
2	Fw	16/17 (94%)	3 (18%)	0
2	G2	16/17 (94%)	3 (18%)	3 (18%)
2	G7	16/17 (94%)	3 (18%)	3 (18%)
2	GD	16/17 (94%)	3 (18%)	3 (18%)
2	GI	16/17 (94%)	3 (18%)	3 (18%)
2	GN	16/17 (94%)	3 (18%)	3 (18%)
2	GS	16/17 (94%)	3 (18%)	3 (18%)
2	GX	16/17 (94%)	3 (18%)	3 (18%)
2	Gc	16/17 (94%)	3 (18%)	0
2	Gh	16/17 (94%)	3 (18%)	0
2	Gm	16/17 (94%)	3 (18%)	0
2	Gr	16/17 (94%)	3 (18%)	0
2	Gw	16/17 (94%)	3 (18%)	0
2	H2	16/17 (94%)	3 (18%)	3 (18%)
2	H7	16/17 (94%)	3 (18%)	3 (18%)
2	HD	16/17 (94%)	3 (18%)	3 (18%)
2	HI	16/17 (94%)	3 (18%)	3 (18%)
2	HN	16/17 (94%)	3 (18%)	3 (18%)
2	HS	16/17 (94%)	3 (18%)	3 (18%)
2	HX	16/17 (94%)	3 (18%)	3 (18%)
2	Hc	16/17 (94%)	3 (18%)	0
2	Hh	16/17 (94%)	3 (18%)	0
2	Hm	16/17 (94%)	3 (18%)	0
2	Hr	16/17 (94%)	3 (18%)	0
2	Hw	16/17 (94%)	3 (18%)	0
2	I2	16/17 (94%)	3 (18%)	3 (18%)
2	I7	16/17 (94%)	3 (18%)	3 (18%)
2	ID	16/17 (94%)	3 (18%)	3 (18%)
2	II	16/17 (94%)	3 (18%)	3 (18%)
2	IN	16/17 (94%)	3 (18%)	3 (18%)
2	IS	16/17 (94%)	3 (18%)	3 (18%)
2	IX	16/17 (94%)	3 (18%)	3 (18%)
2	Ic	16/17 (94%)	3 (18%)	0
2	Ih	16/17 (94%)	3 (18%)	0
2	Im	16/17 (94%)	3 (18%)	0
2	Ir	16/17 (94%)	3 (18%)	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
2	Iw	16/17 (94%)	3 (18%)	0
2	J2	16/17 (94%)	3 (18%)	3 (18%)
2	J7	16/17 (94%)	3 (18%)	3 (18%)
2	JD	16/17 (94%)	3 (18%)	3 (18%)
2	JI	16/17 (94%)	3 (18%)	3 (18%)
2	JN	16/17 (94%)	3 (18%)	3 (18%)
2	JS	16/17 (94%)	3 (18%)	3 (18%)
2	JX	16/17 (94%)	3 (18%)	3 (18%)
2	Jc	16/17 (94%)	3 (18%)	0
2	Jh	16/17 (94%)	3 (18%)	0
2	Jm	16/17 (94%)	3 (18%)	0
2	Jr	16/17 (94%)	3 (18%)	0
2	Jw	16/17 (94%)	3 (18%)	0
All	All	1920/2040 (94%)	360 (18%)	210 (10%)

5 of 360 RNA backbone outliers are listed below:

Mol	Chain	Res	Type
2	AD	9	U
2	AD	10	U
2	AD	11	U
2	AI	9	U
2	AI	10	U

5 of 210 RNA pucker outliers are listed below:

Mol	Chain	Res	Type
2	FS	9	U
2	G2	10	U
2	JS	9	U
2	FX	10	U
2	GI	9	U

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 monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 120 ligands modelled in this entry, 120 are monoatomic - leaving 0 for Mogul analysis.

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

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 Fit of model and data i

6.1 Protein, DNA and RNA chains i

In the following table, the column labelled '#RSRZ > 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q < 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A1	217/242 (89%)	-0.14	5 (2%) 60 58	26, 56, 111, 194	0
1	A4	185/242 (76%)	-0.23	1 (0%) 91 91	23, 52, 88, 132	0
1	A5	189/242 (78%)	-0.31	2 (1%) 80 80	18, 52, 92, 153	0
1	A6	217/242 (89%)	-0.15	8 (3%) 41 37	20, 53, 107, 200	0
1	AA	185/242 (76%)	-0.38	0 100 100	29, 54, 87, 113	0
1	AB	189/242 (78%)	-0.38	2 (1%) 80 80	25, 49, 90, 154	0
1	AC	217/242 (89%)	-0.16	7 (3%) 47 43	21, 50, 108, 201	0
1	AF	185/242 (76%)	-0.43	0 100 100	22, 48, 85, 115	0
1	AG	189/242 (78%)	-0.50	1 (0%) 91 91	17, 42, 85, 140	0
1	AH	217/242 (89%)	-0.23	7 (3%) 47 43	21, 50, 114, 203	0
1	AK	185/242 (76%)	-0.34	1 (0%) 91 91	17, 51, 88, 123	0
1	AL	189/242 (78%)	-0.39	2 (1%) 80 80	24, 47, 91, 137	0
1	AM	217/242 (89%)	-0.24	6 (2%) 53 49	19, 48, 106, 200	0
1	AP	185/242 (76%)	-0.40	0 100 100	21, 47, 87, 124	0
1	AQ	189/242 (78%)	-0.45	2 (1%) 80 80	17, 47, 87, 127	0
1	AR	217/242 (89%)	-0.24	6 (2%) 53 49	17, 48, 103, 199	0
1	AU	185/242 (76%)	-0.29	0 100 100	36, 61, 96, 124	0
1	AV	189/242 (78%)	-0.36	3 (1%) 72 71	35, 58, 91, 153	0
1	AW	217/242 (89%)	-0.07	8 (3%) 41 37	27, 58, 108, 201	0
1	AZ	185/242 (76%)	-0.54	0 100 100	14, 38, 69, 107	0
1	Aa	189/242 (78%)	-0.46	0 100 100	14, 37, 79, 138	0
1	Ab	217/242 (89%)	-0.17	6 (2%) 53 49	16, 43, 107, 197	0
1	Ae	185/242 (76%)	-0.47	0 100 100	17, 48, 92, 113	0
1	Af	189/242 (78%)	-0.38	2 (1%) 80 80	19, 44, 87, 140	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Ag	217/242 (89%)	-0.26	6 (2%) 53 49	18, 48, 95, 199	0
1	Aj	185/242 (76%)	-0.44	0 100 100	15, 48, 82, 114	0
1	Ak	189/242 (78%)	-0.39	0 100 100	21, 47, 85, 136	0
1	Al	217/242 (89%)	-0.19	6 (2%) 53 49	19, 44, 104, 191	0
1	Ao	185/242 (76%)	-0.28	3 (1%) 72 71	20, 46, 79, 105	0
1	Ap	189/242 (78%)	-0.50	0 100 100	19, 44, 80, 137	0
1	Aq	217/242 (89%)	-0.19	6 (2%) 53 49	16, 46, 100, 197	0
1	At	185/242 (76%)	-0.49	0 100 100	19, 45, 81, 112	0
1	Au	189/242 (78%)	-0.47	0 100 100	9, 41, 85, 128	0
1	Av	217/242 (89%)	-0.10	6 (2%) 53 49	10, 45, 106, 196	0
1	Ay	185/242 (76%)	-0.30	0 100 100	26, 57, 89, 119	0
1	Az	189/242 (78%)	-0.40	0 100 100	27, 54, 96, 132	0
1	B1	217/242 (89%)	-0.31	6 (2%) 53 49	18, 44, 101, 188	0
1	B4	185/242 (76%)	-0.30	0 100 100	36, 61, 85, 117	0
1	B5	189/242 (78%)	-0.30	2 (1%) 80 80	29, 55, 93, 145	0
1	B6	217/242 (89%)	-0.13	7 (3%) 47 43	26, 54, 116, 209	0
1	BA	185/242 (76%)	-0.31	1 (0%) 91 91	17, 56, 91, 116	0
1	BB	189/242 (78%)	-0.36	1 (0%) 91 91	22, 50, 92, 146	0
1	BC	217/242 (89%)	-0.18	7 (3%) 47 43	8, 50, 108, 193	0
1	BF	185/242 (76%)	-0.42	0 100 100	18, 45, 81, 116	0
1	BG	189/242 (78%)	-0.55	2 (1%) 80 80	10, 38, 85, 127	0
1	BH	217/242 (89%)	-0.18	6 (2%) 53 49	13, 40, 95, 200	0
1	BK	185/242 (76%)	-0.33	0 100 100	12, 48, 87, 133	0
1	BL	189/242 (78%)	-0.40	0 100 100	17, 47, 86, 130	0
1	BM	217/242 (89%)	-0.18	7 (3%) 47 43	21, 48, 107, 209	0
1	BP	185/242 (76%)	-0.44	0 100 100	22, 48, 84, 109	0
1	BQ	189/242 (78%)	-0.44	0 100 100	27, 48, 84, 139	0
1	BR	217/242 (89%)	-0.30	6 (2%) 53 49	15, 46, 101, 202	0
1	BU	185/242 (76%)	-0.27	2 (1%) 80 80	29, 59, 97, 130	0
1	BV	189/242 (78%)	-0.42	0 100 100	26, 54, 93, 137	0
1	BW	217/242 (89%)	-0.12	7 (3%) 47 43	27, 59, 110, 219	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	BZ	185/242 (76%)	-0.46	0 100 100	15, 43, 81, 120	0
1	Ba	189/242 (78%)	-0.48	0 100 100	22, 46, 88, 121	0
1	Bb	217/242 (89%)	-0.27	6 (2%) 53 49	19, 45, 111, 192	0
1	Be	185/242 (76%)	-0.44	0 100 100	17, 44, 83, 112	0
1	Bf	189/242 (78%)	-0.46	0 100 100	14, 41, 86, 119	0
1	Bg	217/242 (89%)	-0.29	7 (3%) 47 43	18, 45, 105, 176	0
1	Bj	185/242 (76%)	-0.42	0 100 100	19, 46, 79, 117	0
1	Bk	189/242 (78%)	-0.46	0 100 100	18, 47, 88, 127	0
1	Bl	217/242 (89%)	-0.21	7 (3%) 47 43	16, 48, 101, 206	0
1	Bo	185/242 (76%)	-0.36	0 100 100	20, 50, 77, 121	0
1	Bp	189/242 (78%)	-0.40	0 100 100	21, 46, 92, 129	0
1	Bq	217/242 (89%)	-0.22	6 (2%) 53 49	26, 48, 106, 189	0
1	Bt	185/242 (76%)	-0.19	2 (1%) 80 80	33, 60, 94, 120	0
1	Bu	189/242 (78%)	-0.33	0 100 100	20, 51, 94, 133	0
1	Bv	217/242 (89%)	-0.09	8 (3%) 41 37	25, 56, 111, 187	0
1	By	185/242 (76%)	-0.41	0 100 100	14, 46, 84, 123	0
1	Bz	189/242 (78%)	-0.54	1 (0%) 91 91	14, 40, 80, 139	0
1	C1	217/242 (89%)	-0.12	6 (2%) 53 49	12, 39, 104, 212	0
1	C4	185/242 (76%)	-0.36	0 100 100	19, 55, 92, 112	0
1	C5	189/242 (78%)	-0.42	1 (0%) 91 91	23, 51, 89, 164	0
1	C6	217/242 (89%)	-0.16	6 (2%) 53 49	24, 52, 109, 189	0
1	CA	185/242 (76%)	-0.28	1 (0%) 91 91	28, 52, 94, 114	0
1	CB	189/242 (78%)	-0.38	1 (0%) 91 91	18, 50, 81, 123	0
1	CC	217/242 (89%)	-0.12	7 (3%) 47 43	22, 51, 107, 181	0
1	CF	185/242 (76%)	-0.52	1 (0%) 91 91	15, 37, 79, 119	0
1	CG	189/242 (78%)	-0.53	1 (0%) 91 91	9, 36, 82, 131	0
1	CH	217/242 (89%)	-0.27	6 (2%) 53 49	15, 35, 90, 195	0
1	CK	185/242 (76%)	-0.27	2 (1%) 80 80	23, 53, 82, 125	0
1	CL	189/242 (78%)	-0.37	1 (0%) 91 91	13, 47, 84, 149	0
1	CM	217/242 (89%)	-0.12	6 (2%) 53 49	16, 50, 108, 206	0
1	CP	185/242 (76%)	-0.36	1 (0%) 91 91	23, 49, 77, 129	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	CQ	189/242 (78%)	-0.42	1 (0%) 91 91	16, 44, 92, 126	0
1	CR	217/242 (89%)	-0.20	6 (2%) 53 49	24, 50, 106, 195	0
1	CU	185/242 (76%)	-0.31	0 100 100	28, 56, 91, 117	0
1	CV	189/242 (78%)	-0.36	3 (1%) 72 71	21, 52, 92, 144	0
1	CW	217/242 (89%)	-0.22	6 (2%) 53 49	21, 51, 107, 194	0
1	CZ	185/242 (76%)	-0.37	0 100 100	26, 55, 91, 108	0
1	Ca	189/242 (78%)	-0.44	2 (1%) 80 80	22, 53, 93, 141	0
1	Cb	217/242 (89%)	-0.23	7 (3%) 47 43	15, 50, 106, 197	0
1	Ce	185/242 (76%)	-0.45	0 100 100	17, 49, 82, 117	0
1	Cf	189/242 (78%)	-0.40	1 (0%) 91 91	20, 46, 96, 130	0
1	Cg	217/242 (89%)	-0.09	6 (2%) 53 49	16, 50, 104, 215	0
1	Cj	185/242 (76%)	-0.43	0 100 100	20, 48, 84, 109	0
1	Ck	189/242 (78%)	-0.43	1 (0%) 91 91	20, 49, 98, 146	0
1	Cl	217/242 (89%)	-0.18	6 (2%) 53 49	20, 46, 105, 204	0
1	Co	185/242 (76%)	-0.43	0 100 100	24, 49, 77, 110	0
1	Cp	189/242 (78%)	-0.45	2 (1%) 80 80	16, 47, 90, 145	0
1	Cq	217/242 (89%)	-0.14	5 (2%) 60 58	27, 52, 109, 204	0
1	Ct	185/242 (76%)	-0.44	1 (0%) 91 91	21, 45, 78, 116	0
1	Cu	189/242 (78%)	-0.55	0 100 100	11, 39, 89, 136	0
1	Cv	217/242 (89%)	-0.24	9 (4%) 37 32	19, 42, 99, 199	0
1	Cy	185/242 (76%)	-0.52	0 100 100	13, 38, 78, 107	0
1	Cz	189/242 (78%)	-0.55	4 (2%) 63 61	12, 34, 82, 123	0
1	D1	217/242 (89%)	-0.18	6 (2%) 53 49	14, 42, 106, 203	0
1	D4	185/242 (76%)	-0.44	0 100 100	19, 41, 85, 110	0
1	D5	189/242 (78%)	-0.56	1 (0%) 91 91	12, 35, 78, 121	0
1	D6	217/242 (89%)	-0.24	7 (3%) 47 43	15, 38, 95, 205	0
1	DA	185/242 (76%)	-0.32	1 (0%) 91 91	20, 49, 83, 111	0
1	DB	189/242 (78%)	-0.34	1 (0%) 91 91	16, 47, 85, 130	0
1	DC	217/242 (89%)	-0.19	6 (2%) 53 49	17, 48, 103, 188	0
1	DF	185/242 (76%)	-0.30	1 (0%) 91 91	25, 54, 85, 123	0
1	DG	189/242 (78%)	-0.45	1 (0%) 91 91	25, 51, 89, 164	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
1	DH	217/242 (89%)	-0.19	6 (2%)	53	49	22, 53, 106, 186	0
1	DK	185/242 (76%)	-0.40	1 (0%)	91	91	18, 45, 78, 105	0
1	DL	189/242 (78%)	-0.45	1 (0%)	91	91	13, 40, 84, 129	0
1	DM	217/242 (89%)	-0.27	7 (3%)	47	43	15, 43, 105, 207	0
1	DP	185/242 (76%)	-0.35	0	100	100	26, 52, 91, 123	0
1	DQ	189/242 (78%)	-0.40	0	100	100	19, 47, 86, 137	0
1	DR	217/242 (89%)	-0.22	6 (2%)	53	49	17, 46, 102, 190	0
1	DU	185/242 (76%)	-0.24	3 (1%)	72	71	26, 63, 95, 128	0
1	DV	189/242 (78%)	-0.40	2 (1%)	80	80	27, 57, 94, 149	0
1	DW	217/242 (89%)	-0.08	9 (4%)	37	32	32, 60, 111, 195	0
1	DZ	185/242 (76%)	-0.40	0	100	100	22, 50, 94, 123	0
1	Da	189/242 (78%)	-0.47	0	100	100	18, 46, 89, 134	0
1	Db	217/242 (89%)	-0.01	8 (3%)	41	37	19, 49, 102, 207	0
1	De	185/242 (76%)	-0.31	0	100	100	31, 62, 93, 116	0
1	Df	189/242 (78%)	-0.43	0	100	100	22, 54, 92, 139	0
1	Dg	217/242 (89%)	-0.14	6 (2%)	53	49	24, 56, 108, 184	0
1	Dj	185/242 (76%)	-0.40	0	100	100	22, 48, 84, 115	0
1	Dk	189/242 (78%)	-0.49	3 (1%)	72	71	14, 41, 88, 147	0
1	Dl	217/242 (89%)	-0.21	6 (2%)	53	49	21, 47, 102, 192	0
1	Do	185/242 (76%)	-0.27	0	100	100	32, 59, 96, 120	0
1	Dp	189/242 (78%)	-0.33	2 (1%)	80	80	26, 57, 97, 164	0
1	Dq	217/242 (89%)	-0.12	7 (3%)	47	43	24, 56, 111, 193	0
1	Dt	185/242 (76%)	-0.31	2 (1%)	80	80	16, 48, 80, 132	0
1	Du	189/242 (78%)	-0.38	2 (1%)	80	80	23, 47, 90, 143	0
1	Dv	217/242 (89%)	-0.22	6 (2%)	53	49	18, 50, 101, 190	0
1	Dy	185/242 (76%)	-0.45	0	100	100	7, 38, 76, 98	0
1	Dz	189/242 (78%)	-0.48	2 (1%)	80	80	16, 38, 75, 130	0
1	E1	217/242 (89%)	-0.28	6 (2%)	53	49	14, 43, 102, 207	0
1	E4	185/242 (76%)	-0.46	0	100	100	18, 46, 87, 114	0
1	E5	189/242 (78%)	-0.44	1 (0%)	91	91	15, 43, 84, 124	0
1	E6	217/242 (89%)	-0.32	6 (2%)	53	49	16, 44, 106, 194	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	EA	185/242 (76%)	-0.35	1 (0%) 91 91	12, 43, 74, 108	0
1	EB	189/242 (78%)	-0.46	1 (0%) 91 91	12, 41, 81, 122	0
1	EC	217/242 (89%)	-0.21	6 (2%) 53 49	18, 43, 98, 186	0
1	EF	185/242 (76%)	-0.35	1 (0%) 91 91	22, 52, 90, 126	0
1	EG	189/242 (78%)	-0.42	1 (0%) 91 91	21, 51, 92, 151	0
1	EH	217/242 (89%)	-0.17	7 (3%) 47 43	24, 55, 114, 189	0
1	EK	185/242 (76%)	-0.34	0 100 100	25, 54, 89, 122	0
1	EL	189/242 (78%)	-0.32	1 (0%) 91 91	27, 53, 95, 126	0
1	EM	217/242 (89%)	-0.21	7 (3%) 47 43	21, 52, 108, 195	0
1	EP	185/242 (76%)	-0.41	0 100 100	17, 45, 86, 118	0
1	EQ	189/242 (78%)	-0.50	0 100 100	15, 43, 78, 131	0
1	ER	217/242 (89%)	-0.22	6 (2%) 53 49	15, 46, 105, 192	0
1	EU	185/242 (76%)	-0.40	1 (0%) 91 91	22, 52, 83, 128	0
1	EV	189/242 (78%)	-0.47	1 (0%) 91 91	16, 46, 89, 135	0
1	EW	217/242 (89%)	-0.17	6 (2%) 53 49	21, 50, 103, 200	0
1	EZ	185/242 (76%)	-0.31	2 (1%) 80 80	30, 53, 85, 118	0
1	Ea	189/242 (78%)	-0.37	0 100 100	20, 48, 90, 143	0
1	Eb	217/242 (89%)	-0.16	7 (3%) 47 43	16, 50, 105, 190	0
1	Ee	185/242 (76%)	-0.36	0 100 100	33, 59, 88, 116	0
1	Ef	189/242 (78%)	-0.39	0 100 100	21, 54, 93, 136	0
1	Eg	217/242 (89%)	0.01	8 (3%) 41 37	24, 60, 113, 203	0
1	Ej	185/242 (76%)	-0.16	2 (1%) 80 80	22, 58, 90, 113	0
1	Ek	189/242 (78%)	-0.38	4 (2%) 63 61	29, 57, 94, 139	0
1	El	217/242 (89%)	-0.06	5 (2%) 60 58	30, 56, 107, 191	0
1	Eo	185/242 (76%)	-0.36	0 100 100	25, 54, 84, 113	0
1	Ep	189/242 (78%)	-0.38	4 (2%) 63 61	20, 46, 89, 162	0
1	Eq	217/242 (89%)	-0.27	5 (2%) 60 58	23, 52, 112, 190	0
1	Et	185/242 (76%)	-0.46	0 100 100	17, 38, 77, 114	0
1	Eu	189/242 (78%)	-0.50	1 (0%) 91 91	13, 37, 80, 134	0
1	Ev	217/242 (89%)	-0.22	8 (3%) 41 37	12, 38, 97, 197	0
1	Ey	185/242 (76%)	-0.47	0 100 100	24, 48, 79, 120	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Ez	189/242 (78%)	-0.54	0 100 100	19, 43, 84, 139	0
1	F1	217/242 (89%)	0.25	10 (4%) 32 29	49, 80, 118, 186	0
1	F4	185/242 (76%)	-0.34	0 100 100	26, 57, 86, 112	0
1	F5	189/242 (78%)	-0.31	3 (1%) 72 71	28, 57, 94, 140	0
1	F6	217/242 (89%)	-0.06	9 (4%) 37 32	31, 64, 117, 195	0
1	FA	185/242 (76%)	-0.26	1 (0%) 91 91	22, 59, 95, 134	0
1	FB	189/242 (78%)	-0.46	1 (0%) 91 91	20, 47, 90, 148	0
1	FC	217/242 (89%)	0.15	10 (4%) 32 29	29, 62, 110, 205	0
1	FF	185/242 (76%)	-0.29	0 100 100	30, 55, 92, 114	0
1	FG	189/242 (78%)	-0.36	1 (0%) 91 91	20, 51, 92, 133	0
1	FH	217/242 (89%)	-0.11	6 (2%) 53 49	24, 60, 106, 197	0
1	FK	185/242 (76%)	-0.24	0 100 100	28, 59, 90, 131	0
1	FL	189/242 (78%)	-0.19	4 (2%) 63 61	24, 59, 100, 150	0
1	FM	217/242 (89%)	-0.11	6 (2%) 53 49	22, 54, 101, 200	0
1	FP	185/242 (76%)	-0.11	2 (1%) 80 80	24, 62, 101, 112	0
1	FQ	189/242 (78%)	-0.11	3 (1%) 72 71	23, 61, 94, 134	0
1	FR	217/242 (89%)	0.03	9 (4%) 37 32	26, 55, 118, 222	0
1	FU	185/242 (76%)	-0.37	0 100 100	32, 55, 86, 119	0
1	FV	189/242 (78%)	-0.41	1 (0%) 91 91	21, 48, 87, 130	0
1	FW	217/242 (89%)	-0.08	7 (3%) 47 43	19, 52, 105, 190	0
1	FZ	185/242 (76%)	-0.05	3 (1%) 72 71	42, 78, 106, 129	0
1	Fa	189/242 (78%)	-0.17	5 (2%) 56 52	34, 70, 104, 157	0
1	Fb	217/242 (89%)	0.09	7 (3%) 47 43	41, 70, 117, 212	0
1	Fe	185/242 (76%)	0.41	13 (7%) 16 12	63, 97, 124, 151	0
1	Ff	189/242 (78%)	0.25	14 (7%) 14 11	52, 93, 121, 163	0
1	Fg	217/242 (89%)	0.61	19 (8%) 10 7	58, 92, 134, 190	0
1	Fj	185/242 (76%)	0.06	3 (1%) 72 71	38, 74, 107, 128	0
1	Fk	189/242 (78%)	0.07	8 (4%) 36 32	35, 75, 111, 141	0
1	Fl	217/242 (89%)	0.30	8 (3%) 41 37	41, 79, 127, 203	0
1	Fo	185/242 (76%)	-0.23	5 (2%) 54 50	26, 54, 92, 120	0
1	Fp	189/242 (78%)	-0.28	0 100 100	14, 49, 93, 134	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Fq	217/242 (89%)	-0.19	6 (2%) 53 49	11, 50, 103, 203	0
1	Ft	185/242 (76%)	-0.30	0 100 100	27, 55, 92, 127	0
1	Fu	189/242 (78%)	-0.40	1 (0%) 91 91	24, 51, 88, 140	0
1	Fv	217/242 (89%)	-0.18	6 (2%) 53 49	20, 53, 102, 187	0
1	Fy	185/242 (76%)	0.10	0 100 100	59, 90, 117, 135	0
1	Fz	189/242 (78%)	-0.16	5 (2%) 56 52	40, 76, 113, 150	0
1	G1	217/242 (89%)	0.08	10 (4%) 32 29	34, 66, 116, 201	0
1	G4	185/242 (76%)	0.12	6 (3%) 47 43	57, 89, 114, 148	0
1	G5	189/242 (78%)	0.16	10 (5%) 26 22	45, 83, 114, 159	0
1	G6	217/242 (89%)	0.22	12 (5%) 25 21	38, 73, 126, 187	0
1	GA	185/242 (76%)	-0.21	1 (0%) 91 91	20, 57, 92, 118	0
1	GB	189/242 (78%)	-0.29	0 100 100	28, 59, 96, 125	0
1	GC	217/242 (89%)	-0.02	10 (4%) 32 29	23, 58, 113, 202	0
1	GF	185/242 (76%)	-0.28	0 100 100	20, 56, 83, 116	0
1	GG	189/242 (78%)	-0.31	2 (1%) 80 80	22, 53, 94, 132	0
1	GH	217/242 (89%)	-0.14	6 (2%) 53 49	25, 54, 105, 188	0
1	GK	185/242 (76%)	0.27	7 (3%) 40 36	61, 90, 117, 142	0
1	GL	189/242 (78%)	0.12	10 (5%) 26 22	52, 84, 119, 165	0
1	GM	217/242 (89%)	0.22	8 (3%) 41 37	42, 77, 118, 205	0
1	GP	185/242 (76%)	-0.31	0 100 100	20, 55, 91, 125	0
1	GQ	189/242 (78%)	-0.21	2 (1%) 80 80	26, 58, 93, 117	0
1	GR	217/242 (89%)	-0.07	6 (2%) 53 49	25, 55, 106, 199	0
1	GU	185/242 (76%)	-0.34	2 (1%) 80 80	26, 55, 87, 128	0
1	GV	189/242 (78%)	-0.44	2 (1%) 80 80	15, 46, 88, 131	0
1	GW	217/242 (89%)	-0.09	6 (2%) 53 49	23, 48, 102, 194	0
1	GZ	185/242 (76%)	0.02	0 100 100	26, 67, 96, 131	0
1	Ga	189/242 (78%)	-0.27	2 (1%) 80 80	20, 55, 99, 172	0
1	Gb	217/242 (89%)	0.08	10 (4%) 32 29	32, 61, 109, 200	0
1	Ge	185/242 (76%)	0.10	6 (3%) 47 43	33, 67, 100, 126	0
1	Gf	189/242 (78%)	-0.03	3 (1%) 72 71	28, 70, 108, 147	0
1	Gg	217/242 (89%)	0.22	9 (4%) 37 32	34, 69, 117, 199	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Gj	185/242 (76%)	0.26	7 (3%) 40 36	51, 89, 118, 144	0
1	Gk	189/242 (78%)	0.08	5 (2%) 56 52	53, 82, 114, 143	0
1	Gl	217/242 (89%)	0.27	15 (6%) 16 13	38, 75, 119, 194	0
1	Go	185/242 (76%)	0.49	15 (8%) 12 9	62, 92, 120, 144	0
1	Gp	189/242 (78%)	0.32	12 (6%) 20 16	56, 95, 124, 162	0
1	Gq	217/242 (89%)	0.23	10 (4%) 32 29	57, 91, 129, 191	0
1	Gt	185/242 (76%)	-0.24	2 (1%) 80 80	25, 56, 90, 118	0
1	Gu	189/242 (78%)	-0.32	0 100 100	24, 51, 89, 145	0
1	Gv	217/242 (89%)	-0.13	6 (2%) 53 49	24, 53, 105, 199	0
1	Gy	185/242 (76%)	-0.07	2 (1%) 80 80	35, 64, 98, 129	0
1	Gz	189/242 (78%)	-0.30	2 (1%) 80 80	34, 63, 97, 153	0
1	H1	217/242 (89%)	0.09	9 (4%) 37 32	32, 69, 116, 189	0
1	H4	185/242 (76%)	0.32	12 (6%) 18 14	56, 91, 125, 144	0
1	H5	189/242 (78%)	0.32	8 (4%) 36 32	57, 93, 122, 143	0
1	H6	217/242 (89%)	0.41	15 (6%) 16 13	55, 92, 133, 193	0
1	HA	185/242 (76%)	-0.22	2 (1%) 80 80	41, 71, 100, 130	0
1	HB	189/242 (78%)	-0.23	2 (1%) 80 80	34, 67, 106, 131	0
1	HC	217/242 (89%)	0.19	10 (4%) 32 29	46, 78, 133, 205	0
1	HF	185/242 (76%)	-0.03	1 (0%) 91 91	40, 70, 98, 130	0
1	HG	189/242 (78%)	-0.25	2 (1%) 80 80	32, 58, 99, 136	0
1	HH	217/242 (89%)	-0.05	7 (3%) 47 43	26, 60, 105, 206	0
1	HK	185/242 (76%)	-0.26	1 (0%) 91 91	30, 62, 97, 119	0
1	HL	189/242 (78%)	-0.24	1 (0%) 91 91	24, 52, 93, 141	0
1	HM	217/242 (89%)	0.02	6 (2%) 53 49	25, 64, 112, 190	0
1	HP	185/242 (76%)	-0.18	0 100 100	23, 66, 103, 127	0
1	HQ	189/242 (78%)	-0.35	0 100 100	21, 54, 99, 137	0
1	HR	217/242 (89%)	0.09	10 (4%) 32 29	24, 62, 118, 186	0
1	HU	185/242 (76%)	-0.20	2 (1%) 80 80	27, 60, 89, 126	0
1	HV	189/242 (78%)	-0.30	1 (0%) 91 91	31, 60, 104, 142	0
1	HW	217/242 (89%)	0.09	11 (5%) 28 24	38, 67, 112, 183	0
1	HZ	185/242 (76%)	-0.11	2 (1%) 80 80	36, 66, 93, 130	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	Ha	189/242 (78%)	-0.30	3 (1%) 72 71	26, 57, 95, 154	0
1	Hb	217/242 (89%)	0.14	7 (3%) 47 43	33, 65, 107, 199	0
1	He	185/242 (76%)	0.30	8 (4%) 35 31	55, 96, 127, 153	0
1	Hf	189/242 (78%)	0.34	12 (6%) 20 16	50, 88, 122, 171	0
1	Hg	217/242 (89%)	0.50	18 (8%) 11 8	54, 94, 131, 203	0
1	Hj	185/242 (76%)	0.12	7 (3%) 40 36	51, 88, 110, 134	0
1	Hk	189/242 (78%)	-0.18	1 (0%) 91 91	35, 73, 112, 169	0
1	Hl	217/242 (89%)	0.16	9 (4%) 37 32	39, 71, 121, 178	0
1	Ho	185/242 (76%)	-0.24	1 (0%) 91 91	37, 65, 100, 127	0
1	Hp	189/242 (78%)	-0.28	1 (0%) 91 91	32, 61, 96, 139	0
1	Hq	217/242 (89%)	-0.07	7 (3%) 47 43	31, 62, 106, 201	0
1	Ht	185/242 (76%)	-0.02	4 (2%) 62 59	27, 67, 98, 131	0
1	Hu	189/242 (78%)	-0.10	5 (2%) 56 52	23, 62, 106, 162	0
1	Hv	217/242 (89%)	-0.06	8 (3%) 41 37	25, 57, 111, 205	0
1	Hy	185/242 (76%)	-0.16	0 100 100	37, 68, 108, 132	0
1	Hz	189/242 (78%)	-0.19	4 (2%) 63 61	25, 62, 101, 141	0
1	I1	217/242 (89%)	0.10	11 (5%) 28 24	23, 63, 112, 193	0
1	I4	185/242 (76%)	-0.05	4 (2%) 62 59	29, 67, 97, 116	0
1	I5	189/242 (78%)	-0.26	4 (2%) 63 61	31, 58, 97, 146	0
1	I6	217/242 (89%)	0.10	6 (2%) 53 49	30, 69, 117, 212	0
1	IA	185/242 (76%)	0.40	14 (7%) 13 10	67, 98, 122, 151	0
1	IB	189/242 (78%)	0.23	9 (4%) 30 27	53, 89, 127, 196	0
1	IC	217/242 (89%)	0.63	22 (10%) 7 5	56, 98, 138, 201	0
1	IF	185/242 (76%)	-0.06	5 (2%) 54 50	34, 68, 102, 130	0
1	IG	189/242 (78%)	-0.02	3 (1%) 72 71	46, 73, 104, 142	0
1	IH	217/242 (89%)	0.11	9 (4%) 37 32	42, 71, 118, 184	0
1	IK	185/242 (76%)	-0.28	0 100 100	35, 60, 90, 127	0
1	IL	189/242 (78%)	-0.38	1 (0%) 91 91	22, 50, 90, 138	0
1	IM	217/242 (89%)	-0.13	6 (2%) 53 49	27, 58, 112, 188	0
1	IP	185/242 (76%)	-0.11	3 (1%) 72 71	36, 68, 101, 128	0
1	IQ	189/242 (78%)	-0.22	3 (1%) 72 71	39, 65, 102, 162	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	IR	217/242 (89%)	-0.03	7 (3%) 47 43	40, 69, 111, 186	0
1	IU	185/242 (76%)	-0.27	0 100 100	21, 55, 88, 116	0
1	IV	189/242 (78%)	-0.47	0 100 100	18, 48, 81, 134	0
1	IW	217/242 (89%)	-0.03	6 (2%) 53 49	21, 52, 107, 195	0
1	IZ	185/242 (76%)	-0.29	1 (0%) 91 91	21, 58, 87, 123	0
1	Ia	189/242 (78%)	-0.42	0 100 100	17, 46, 86, 144	0
1	Ib	217/242 (89%)	-0.15	7 (3%) 47 43	23, 50, 105, 194	0
1	Ie	185/242 (76%)	0.10	4 (2%) 62 59	53, 85, 115, 136	0
1	If	189/242 (78%)	-0.03	3 (1%) 72 71	37, 71, 116, 154	0
1	Ig	217/242 (89%)	0.09	9 (4%) 37 32	34, 70, 116, 193	0
1	Ij	185/242 (76%)	0.44	15 (8%) 12 9	56, 89, 121, 143	0
1	Ik	189/242 (78%)	0.12	4 (2%) 63 61	34, 76, 114, 152	0
1	Il	217/242 (89%)	0.44	13 (5%) 21 18	40, 85, 123, 212	0
1	Io	185/242 (76%)	-0.29	2 (1%) 80 80	26, 56, 94, 123	0
1	Ip	189/242 (78%)	-0.42	0 100 100	21, 51, 90, 140	0
1	Iq	217/242 (89%)	-0.06	7 (3%) 47 43	26, 58, 112, 189	0
1	It	185/242 (76%)	-0.22	1 (0%) 91 91	29, 59, 94, 132	0
1	Iu	189/242 (78%)	-0.32	2 (1%) 80 80	21, 53, 102, 135	0
1	Iv	217/242 (89%)	-0.14	5 (2%) 60 58	26, 54, 103, 186	0
1	Iy	185/242 (76%)	-0.11	3 (1%) 72 71	44, 73, 104, 132	0
1	Iz	189/242 (78%)	-0.26	3 (1%) 72 71	37, 67, 105, 162	0
1	J1	217/242 (89%)	0.14	6 (2%) 53 49	23, 66, 107, 195	0
1	J4	185/242 (76%)	0.32	11 (5%) 22 18	43, 83, 113, 139	0
1	J5	189/242 (78%)	0.06	6 (3%) 47 43	27, 73, 118, 145	0
1	J6	217/242 (89%)	0.32	9 (4%) 37 32	34, 74, 126, 198	0
1	JA	185/242 (76%)	0.09	4 (2%) 62 59	35, 70, 105, 127	0
1	JB	189/242 (78%)	-0.04	2 (1%) 80 80	32, 65, 110, 139	0
1	JC	217/242 (89%)	0.28	10 (4%) 32 29	31, 74, 118, 188	0
1	JF	185/242 (76%)	-0.03	3 (1%) 72 71	39, 73, 109, 134	0
1	JG	189/242 (78%)	-0.09	2 (1%) 80 80	24, 70, 109, 153	0
1	JH	217/242 (89%)	0.31	8 (3%) 41 37	42, 77, 115, 192	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	JK	185/242 (76%)	0.49	19 (10%) 6 5	63, 97, 126, 150	0
1	JL	189/242 (78%)	0.03	4 (2%) 63 61	52, 87, 125, 168	0
1	JM	217/242 (89%)	0.53	14 (6%) 18 14	62, 98, 136, 192	0
1	JP	185/242 (76%)	0.26	9 (4%) 29 26	58, 90, 114, 148	0
1	JQ	189/242 (78%)	-0.09	2 (1%) 80 80	44, 77, 116, 137	0
1	JR	217/242 (89%)	0.34	13 (5%) 21 18	47, 85, 125, 215	0
1	JU	185/242 (76%)	-0.03	6 (3%) 47 43	38, 69, 105, 133	0
1	JV	189/242 (78%)	-0.18	1 (0%) 91 91	35, 67, 102, 152	0
1	JW	217/242 (89%)	0.18	13 (5%) 21 18	42, 79, 121, 215	0
1	JZ	185/242 (76%)	-0.13	4 (2%) 62 59	38, 68, 101, 131	0
1	Ja	189/242 (78%)	-0.06	4 (2%) 63 61	41, 76, 108, 163	0
1	Jb	217/242 (89%)	0.00	7 (3%) 47 43	36, 69, 115, 195	0
1	Je	185/242 (76%)	-0.27	0 100 100	29, 57, 92, 124	0
1	Jf	189/242 (78%)	-0.31	0 100 100	28, 58, 98, 135	0
1	Jg	217/242 (89%)	-0.14	6 (2%) 53 49	19, 51, 99, 197	0
1	Jj	185/242 (76%)	-0.40	0 100 100	22, 49, 80, 117	0
1	Jk	189/242 (78%)	-0.46	1 (0%) 91 91	14, 44, 91, 123	0
1	Jl	217/242 (89%)	-0.16	6 (2%) 53 49	17, 44, 92, 208	0
1	Jo	185/242 (76%)	-0.27	0 100 100	31, 59, 91, 124	0
1	Jp	189/242 (78%)	-0.20	1 (0%) 91 91	31, 62, 101, 130	0
1	Jq	217/242 (89%)	-0.12	8 (3%) 41 37	24, 54, 108, 199	0
1	Jt	185/242 (76%)	-0.07	1 (0%) 91 91	36, 73, 106, 129	0
1	Ju	189/242 (78%)	-0.04	5 (2%) 56 52	34, 69, 102, 152	0
1	Jv	217/242 (89%)	0.11	6 (2%) 53 49	34, 68, 121, 185	0
1	Jy	185/242 (76%)	0.07	3 (1%) 72 71	36, 71, 108, 126	0
1	Jz	189/242 (78%)	0.05	5 (2%) 56 52	34, 73, 110, 141	0
2	A2	17/17 (100%)	4.80	14 (82%) 0 0	159, 199, 279, 304	0
2	A7	17/17 (100%)	4.93	17 (100%) 0 0	154, 204, 269, 286	0
2	AD	17/17 (100%)	5.47	15 (88%) 0 0	157, 204, 281, 286	0
2	AI	17/17 (100%)	4.65	16 (94%) 0 0	164, 188, 256, 267	0
2	AN	17/17 (100%)	4.27	16 (94%) 0 0	159, 190, 274, 277	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2			OWAB(Å ²)	Q<0.9
2	AS	17/17 (100%)	3.86	12 (70%)	0	0	154, 202, 274, 275	0
2	AX	17/17 (100%)	4.06	13 (76%)	0	0	164, 193, 269, 273	0
2	Ac	17/17 (100%)	4.29	15 (88%)	0	0	141, 188, 262, 275	0
2	Ah	17/17 (100%)	5.02	16 (94%)	0	0	154, 193, 271, 272	0
2	Am	17/17 (100%)	4.49	16 (94%)	0	0	137, 213, 264, 277	0
2	Ar	17/17 (100%)	5.11	15 (88%)	0	0	149, 198, 271, 283	0
2	Aw	17/17 (100%)	4.75	17 (100%)	0	0	163, 197, 284, 286	0
2	B2	17/17 (100%)	5.12	16 (94%)	0	0	162, 190, 261, 267	0
2	B7	17/17 (100%)	4.42	15 (88%)	0	0	177, 200, 254, 265	0
2	BD	17/17 (100%)	5.58	17 (100%)	0	0	160, 209, 274, 279	0
2	BI	17/17 (100%)	4.85	16 (94%)	0	0	156, 207, 280, 280	0
2	BN	17/17 (100%)	4.37	11 (64%)	0	0	156, 200, 262, 264	0
2	BS	17/17 (100%)	4.93	15 (88%)	0	0	159, 208, 260, 270	0
2	BX	17/17 (100%)	4.80	16 (94%)	0	0	174, 199, 274, 277	0
2	Bc	17/17 (100%)	4.66	14 (82%)	0	0	165, 199, 272, 280	0
2	Bh	17/17 (100%)	4.40	16 (94%)	0	0	163, 199, 271, 273	0
2	Bm	17/17 (100%)	4.59	16 (94%)	0	0	154, 202, 276, 289	0
2	Br	17/17 (100%)	4.91	16 (94%)	0	0	144, 200, 289, 290	0
2	Bw	17/17 (100%)	4.25	16 (94%)	0	0	154, 195, 277, 282	0
2	C2	17/17 (100%)	3.53	13 (76%)	0	0	144, 205, 267, 273	0
2	C7	17/17 (100%)	4.53	14 (82%)	0	0	164, 209, 267, 273	0
2	CD	17/17 (100%)	5.34	16 (94%)	0	0	158, 202, 277, 281	0
2	CI	17/17 (100%)	5.99	16 (94%)	0	0	159, 206, 278, 289	0
2	CN	17/17 (100%)	5.04	16 (94%)	0	0	168, 187, 268, 276	0
2	CS	17/17 (100%)	4.28	13 (76%)	0	0	157, 199, 273, 276	0
2	CX	17/17 (100%)	5.14	16 (94%)	0	0	162, 189, 274, 293	0
2	Cc	17/17 (100%)	5.33	16 (94%)	0	0	161, 205, 260, 270	0
2	Ch	17/17 (100%)	4.25	11 (64%)	0	0	151, 201, 273, 279	0
2	Cm	17/17 (100%)	5.39	17 (100%)	0	0	152, 201, 267, 268	0
2	Cr	17/17 (100%)	4.73	14 (82%)	0	0	152, 206, 261, 272	0
2	Cw	17/17 (100%)	4.94	15 (88%)	0	0	160, 193, 274, 284	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	D2	17/17 (100%)	4.31	17 (100%) 0 0	152, 201, 267, 269	0
2	D7	17/17 (100%)	4.96	15 (88%) 0 0	152, 194, 266, 269	0
2	DD	17/17 (100%)	4.80	16 (94%) 0 0	161, 204, 270, 283	0
2	DI	17/17 (100%)	4.53	13 (76%) 0 0	164, 212, 272, 278	0
2	DN	17/17 (100%)	5.20	17 (100%) 0 0	162, 207, 268, 275	0
2	DS	17/17 (100%)	4.49	14 (82%) 0 0	168, 199, 259, 264	0
2	DX	17/17 (100%)	5.43	17 (100%) 0 0	176, 203, 267, 271	0
2	Dc	17/17 (100%)	4.16	15 (88%) 0 0	159, 209, 267, 279	0
2	Dh	17/17 (100%)	5.72	17 (100%) 0 0	164, 208, 269, 280	0
2	Dm	17/17 (100%)	4.70	14 (82%) 0 0	148, 199, 269, 272	0
2	Dr	17/17 (100%)	5.90	17 (100%) 0 0	157, 207, 277, 281	0
2	Dw	17/17 (100%)	4.90	15 (88%) 0 0	152, 191, 275, 293	0
2	E2	17/17 (100%)	5.19	16 (94%) 0 0	156, 193, 283, 293	0
2	E7	17/17 (100%)	4.76	15 (88%) 0 0	156, 195, 271, 287	0
2	ED	17/17 (100%)	4.49	15 (88%) 0 0	152, 188, 275, 277	0
2	EI	17/17 (100%)	4.57	14 (82%) 0 0	160, 206, 260, 264	0
2	EN	17/17 (100%)	4.45	15 (88%) 0 0	156, 192, 258, 286	0
2	ES	17/17 (100%)	4.91	15 (88%) 0 0	162, 204, 265, 279	0
2	EX	17/17 (100%)	4.62	15 (88%) 0 0	158, 195, 272, 273	0
2	Ec	17/17 (100%)	4.09	14 (82%) 0 0	157, 196, 258, 270	0
2	Eh	17/17 (100%)	4.04	16 (94%) 0 0	172, 198, 263, 268	0
2	Em	17/17 (100%)	4.19	13 (76%) 0 0	147, 194, 261, 261	0
2	Er	17/17 (100%)	5.03	17 (100%) 0 0	159, 202, 272, 280	0
2	Ew	17/17 (100%)	5.15	17 (100%) 0 0	150, 183, 263, 264	0
2	F2	17/17 (100%)	5.40	17 (100%) 0 0	194, 214, 267, 274	0
2	F7	17/17 (100%)	4.10	15 (88%) 0 0	159, 205, 277, 288	0
2	FD	17/17 (100%)	3.84	13 (76%) 0 0	167, 208, 268, 288	0
2	FI	17/17 (100%)	3.93	15 (88%) 0 0	170, 198, 262, 266	0
2	FN	17/17 (100%)	5.26	17 (100%) 0 0	163, 208, 292, 304	0
2	FS	17/17 (100%)	4.06	13 (76%) 0 0	174, 204, 274, 289	0
2	FX	17/17 (100%)	5.25	16 (94%) 0 0	158, 198, 284, 293	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	Fc	17/17 (100%)	5.04	17 (100%) 0 0	179, 218, 269, 281	0
2	Fh	17/17 (100%)	4.01	13 (76%) 0 0	180, 240, 287, 293	0
2	Fm	17/17 (100%)	5.38	17 (100%) 0 0	181, 216, 278, 291	0
2	Fr	17/17 (100%)	5.66	16 (94%) 0 0	167, 200, 274, 280	0
2	Fw	17/17 (100%)	4.23	15 (88%) 0 0	165, 214, 286, 290	0
2	G2	17/17 (100%)	4.51	16 (94%) 0 0	170, 212, 259, 261	0
2	G7	17/17 (100%)	4.27	15 (88%) 0 0	189, 209, 259, 271	0
2	GD	17/17 (100%)	5.45	17 (100%) 0 0	168, 211, 280, 286	0
2	GI	17/17 (100%)	5.37	17 (100%) 0 0	163, 209, 263, 277	0
2	GN	17/17 (100%)	5.81	17 (100%) 0 0	185, 217, 288, 291	0
2	GS	17/17 (100%)	4.82	17 (100%) 0 0	184, 209, 263, 275	0
2	GX	17/17 (100%)	4.11	12 (70%) 0 0	166, 203, 273, 303	0
2	Gc	17/17 (100%)	4.21	13 (76%) 0 0	165, 211, 270, 276	0
2	Gh	17/17 (100%)	5.73	17 (100%) 0 0	162, 216, 260, 260	0
2	Gm	17/17 (100%)	6.02	17 (100%) 0 0	191, 213, 278, 289	0
2	Gr	17/17 (100%)	3.98	14 (82%) 0 0	192, 219, 275, 295	0
2	Gw	17/17 (100%)	5.79	16 (94%) 0 0	165, 218, 280, 284	0
2	H2	17/17 (100%)	5.56	17 (100%) 0 0	173, 207, 289, 293	0
2	H7	17/17 (100%)	5.47	17 (100%) 0 0	195, 214, 276, 279	0
2	HD	17/17 (100%)	4.92	15 (88%) 0 0	177, 229, 281, 286	0
2	HI	17/17 (100%)	4.61	16 (94%) 0 0	173, 194, 258, 289	0
2	HN	17/17 (100%)	5.18	17 (100%) 0 0	167, 214, 281, 292	0
2	HS	17/17 (100%)	4.14	15 (88%) 0 0	174, 213, 281, 294	0
2	HX	17/17 (100%)	3.92	11 (64%) 0 0	158, 206, 276, 283	0
2	Hc	17/17 (100%)	4.48	11 (64%) 0 0	173, 208, 274, 293	0
2	Hh	17/17 (100%)	5.60	16 (94%) 0 0	196, 227, 270, 292	0
2	Hm	17/17 (100%)	5.12	15 (88%) 0 0	191, 215, 278, 297	0
2	Hr	17/17 (100%)	4.63	16 (94%) 0 0	170, 214, 284, 291	0
2	Hw	17/17 (100%)	5.62	16 (94%) 0 0	170, 214, 272, 286	0
2	I2	17/17 (100%)	4.55	14 (82%) 0 0	173, 227, 265, 269	0
2	I7	17/17 (100%)	5.34	15 (88%) 0 0	169, 209, 277, 284	0

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
2	ID	17/17 (100%)	5.49	17 (100%) 0 0	197, 230, 270, 282	0
2	II	17/17 (100%)	5.36	17 (100%) 0 0	181, 209, 283, 298	0
2	IN	17/17 (100%)	4.78	14 (82%) 0 0	170, 195, 279, 286	0
2	IS	17/17 (100%)	5.82	17 (100%) 0 0	180, 207, 271, 276	0
2	IX	17/17 (100%)	4.48	16 (94%) 0 0	168, 215, 279, 286	0
2	Ic	17/17 (100%)	4.15	14 (82%) 0 0	165, 214, 265, 278	0
2	Ih	17/17 (100%)	5.42	17 (100%) 0 0	176, 208, 264, 275	0
2	Im	17/17 (100%)	4.53	14 (82%) 0 0	193, 215, 278, 294	0
2	Ir	17/17 (100%)	5.09	16 (94%) 0 0	175, 206, 269, 274	0
2	Iw	17/17 (100%)	4.69	16 (94%) 0 0	167, 208, 273, 276	0
2	J2	17/17 (100%)	5.61	17 (100%) 0 0	187, 220, 287, 302	0
2	J7	17/17 (100%)	4.60	17 (100%) 0 0	181, 227, 279, 294	0
2	JD	17/17 (100%)	3.84	12 (70%) 0 0	169, 211, 260, 265	0
2	JI	17/17 (100%)	5.86	16 (94%) 0 0	179, 213, 269, 274	0
2	JN	17/17 (100%)	4.88	15 (88%) 0 0	193, 227, 264, 264	0
2	JS	17/17 (100%)	5.36	16 (94%) 0 0	203, 222, 276, 276	0
2	JX	17/17 (100%)	5.35	17 (100%) 0 0	175, 221, 275, 281	0
2	Jc	17/17 (100%)	4.93	17 (100%) 0 0	177, 215, 290, 291	0
2	Jh	17/17 (100%)	4.52	13 (76%) 0 0	156, 200, 280, 285	0
2	Jm	17/17 (100%)	5.02	15 (88%) 0 0	165, 207, 294, 298	0
2	Jr	17/17 (100%)	4.49	17 (100%) 0 0	165, 208, 270, 278	0
2	Jw	17/17 (100%)	4.02	13 (76%) 0 0	180, 215, 280, 291	0
All	All	72960/89160 (81%)	-0.04	3296 (4%) 33 29	7, 58, 123, 304	0

The worst 5 of 3296 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	IW	25	ALA	25.7
1	DC	25	ALA	20.7
1	AC	25	ALA	20.2
1	Cg	25	ALA	19.6
1	Ab	25	ALA	19.3

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

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

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
3	CA	Ij	301	1/1	0.63	0.17	130,130,130,130	0
3	CA	Hy	301	1/1	0.65	0.21	138,138,138,138	0
3	CA	I4	301	1/1	0.69	0.22	147,147,147,147	0
3	CA	JL	301	1/1	0.73	0.11	141,141,141,141	0
3	CA	JF	301	1/1	0.74	0.09	103,103,103,103	0
3	CA	C4	301	1/1	0.77	0.12	127,127,127,127	0
3	CA	Ht	301	1/1	0.78	0.11	88,88,88,88	0
3	CA	Ce	301	1/1	0.78	0.16	113,113,113,113	0
3	CA	FA	301	1/1	0.78	0.14	94,94,94,94	0
3	CA	IR	301	1/1	0.80	0.10	119,119,119,119	0
3	CA	Io	301	1/1	0.81	0.09	85,85,85,85	0
3	CA	Jt	301	1/1	0.81	0.11	154,154,154,154	0
3	CA	IA	301	1/1	0.82	0.09	115,115,115,115	0
3	CA	Eo	301	1/1	0.82	0.13	105,105,105,105	0
3	CA	If	301	1/1	0.82	0.11	124,124,124,124	0
3	CA	F1	301	1/1	0.83	0.10	102,102,102,102	0
3	CA	Bt	301	1/1	0.83	0.08	90,90,90,90	0
3	CA	Ge	301	1/1	0.86	0.18	121,121,121,121	0
3	CA	Ee	301	1/1	0.86	0.11	102,102,102,102	0
3	CA	At	301	1/1	0.87	0.09	99,99,99,99	0
3	CA	JP	301	1/1	0.87	0.31	143,143,143,143	0
3	CA	CU	301	1/1	0.87	0.07	96,96,96,96	0
3	CA	Jo	301	1/1	0.88	0.11	105,105,105,105	0
3	CA	AF	301	1/1	0.88	0.11	92,92,92,92	0
3	CA	J4	301	1/1	0.88	0.07	110,110,110,110	0
3	CA	H4	301	1/1	0.89	0.11	115,115,115,115	0
3	CA	G1	301	1/1	0.89	0.12	103,103,103,103	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
3	CA	Jy	301	1/1	0.89	0.08	123,123,123,123	0
3	CA	JU	301	1/1	0.89	0.10	100,100,100,100	0
3	CA	Fe	301	1/1	0.90	0.09	123,123,123,123	0
3	CA	Do	301	1/1	0.90	0.10	87,87,87,87	0
3	CA	A1	301	1/1	0.90	0.09	106,106,106,106	0
3	CA	A4	301	1/1	0.90	0.13	81,81,81,81	0
3	CA	G4	301	1/1	0.90	0.07	109,109,109,109	0
3	CA	AP	301	1/1	0.90	0.09	81,81,81,81	0
3	CA	FZ	301	1/1	0.90	0.07	106,106,106,106	0
3	CA	JA	301	1/1	0.90	0.14	109,109,109,109	0
3	CA	IU	301	1/1	0.91	0.09	88,88,88,88	0
3	CA	DU	301	1/1	0.91	0.20	113,113,113,113	0
3	CA	Gt	301	1/1	0.91	0.09	92,92,92,92	0
3	CA	Je	301	1/1	0.91	0.12	112,112,112,112	0
3	CA	Fk	301	1/1	0.91	0.09	96,96,96,96	0
3	CA	E4	301	1/1	0.91	0.19	98,98,98,98	0
3	CA	IF	301	1/1	0.91	0.12	111,111,111,111	0
3	CA	HZ	301	1/1	0.91	0.11	88,88,88,88	0
3	CA	HF	301	1/1	0.92	0.11	101,101,101,101	0
3	CA	DZ	301	1/1	0.92	0.12	68,68,68,68	0
3	CA	GF	301	1/1	0.92	0.20	105,105,105,105	0
3	CA	Af	301	1/1	0.92	0.13	105,105,105,105	0
3	CA	EZ	301	1/1	0.92	0.08	88,88,88,88	0
3	CA	By	301	1/1	0.92	0.11	90,90,90,90	0
3	CA	BU	301	1/1	0.92	0.07	110,110,110,110	0
3	CA	IK	301	1/1	0.92	0.11	105,105,105,105	0
3	CA	I1	301	1/1	0.93	0.07	117,117,117,117	0
3	CA	Ft	301	1/1	0.93	0.05	88,88,88,88	0
3	CA	BQ	301	1/1	0.93	0.10	93,93,93,93	0
3	CA	It	301	1/1	0.93	0.07	102,102,102,102	0
3	CA	GP	301	1/1	0.94	0.04	91,91,91,91	0
3	CA	GU	301	1/1	0.94	0.09	84,84,84,84	0
3	CA	GZ	301	1/1	0.94	0.12	104,104,104,104	0
3	CA	BZ	301	1/1	0.94	0.14	97,97,97,97	0
3	CA	Gj	301	1/1	0.94	0.09	126,126,126,126	0
3	CA	Go	301	1/1	0.94	0.07	102,102,102,102	0
3	CA	DP	301	1/1	0.94	0.08	67,67,67,67	0
3	CA	CP	301	1/1	0.94	0.12	71,71,71,71	0
3	CA	Be	301	1/1	0.94	0.09	53,53,53,53	0
3	CA	HA	301	1/1	0.94	0.07	93,93,93,93	0
3	CA	Dj	301	1/1	0.94	0.11	86,86,86,86	0
3	CA	HK	301	1/1	0.94	0.08	88,88,88,88	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
3	CA	BK	301	1/1	0.94	0.15	96,96,96,96	0
3	CA	Hg	301	1/1	0.94	0.07	102,102,102,102	0
3	CA	D4	301	1/1	0.94	0.15	77,77,77,77	0
3	CA	EK	301	1/1	0.94	0.10	89,89,89,89	0
3	CA	EP	301	1/1	0.94	0.17	84,84,84,84	0
3	CA	F4	301	1/1	0.94	0.06	95,95,95,95	0
3	CA	Cy	301	1/1	0.94	0.08	78,78,78,78	0
3	CA	Dt	301	1/1	0.95	0.08	76,76,76,76	0
3	CA	Hj	301	1/1	0.95	0.12	104,104,104,104	0
3	CA	Ho	301	1/1	0.95	0.16	95,95,95,95	0
3	CA	FF	301	1/1	0.95	0.09	100,100,100,100	0
3	CA	CG	301	1/1	0.95	0.07	79,79,79,79	0
3	CA	EC	301	1/1	0.95	0.16	90,90,90,90	0
3	CA	DK	301	1/1	0.95	0.10	101,101,101,101	0
3	CA	CK	301	1/1	0.95	0.09	105,105,105,105	0
3	CA	BB	301	1/1	0.95	0.15	114,114,114,114	0
3	CA	JZ	301	1/1	0.95	0.10	109,109,109,109	0
3	CA	Ao	301	1/1	0.95	0.05	93,93,93,93	0
3	CA	B5	301	1/1	0.95	0.10	95,95,95,95	0
3	CA	IZ	301	1/1	0.95	0.14	94,94,94,94	0
3	CA	Ey	301	1/1	0.95	0.24	95,95,95,95	0
3	CA	CA	301	1/1	0.95	0.04	93,93,93,93	0
3	CA	GA	301	1/1	0.96	0.07	90,90,90,90	0
3	CA	Et	301	1/1	0.96	0.07	71,71,71,71	0
3	CA	DF	301	1/1	0.96	0.05	94,94,94,94	0
3	CA	Dy	301	1/1	0.96	0.18	65,65,65,65	0
3	CA	CZ	301	1/1	0.96	0.07	84,84,84,84	0
3	CA	AU	301	1/1	0.96	0.11	102,102,102,102	0
3	CA	FU	301	1/1	0.96	0.11	91,91,91,91	0
3	CA	Cj	301	1/1	0.96	0.07	87,87,87,87	0
3	CA	Co	301	1/1	0.96	0.09	86,86,86,86	0
3	CA	EU	301	1/1	0.96	0.11	109,109,109,109	0
3	CA	Fo	301	1/1	0.96	0.07	96,96,96,96	0
3	CA	Df	301	1/1	0.96	0.05	74,74,74,74	0
3	CA	AA	301	1/1	0.96	0.13	75,75,75,75	0
3	CA	Aj	301	1/1	0.96	0.09	70,70,70,70	0
3	CA	HU	301	1/1	0.96	0.09	78,78,78,78	0
3	CA	EF	301	1/1	0.97	0.10	112,112,112,112	0
3	CA	GK	301	1/1	0.97	0.04	97,97,97,97	0
3	CA	Ct	301	1/1	0.97	0.11	79,79,79,79	0
3	CA	AL	301	1/1	0.97	0.13	85,85,85,85	0
3	CA	AZ	301	1/1	0.97	0.12	82,82,82,82	0

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
3	CA	Jj	301	1/1	0.97	0.13	74,74,74,74	0
3	CA	Bk	301	1/1	0.97	0.06	90,90,90,90	0
3	CA	Bo	301	1/1	0.97	0.11	74,74,74,74	0
3	CA	FK	301	1/1	0.97	0.11	91,91,91,91	0
3	CA	Ek	301	1/1	0.97	0.10	74,74,74,74	0
3	CA	FP	301	1/1	0.98	0.13	80,80,80,80	0
3	CA	BF	301	1/1	0.98	0.04	88,88,88,88	0
3	CA	DA	301	1/1	0.98	0.09	67,67,67,67	0
3	CA	HP	301	1/1	0.98	0.12	81,81,81,81	0

6.5 Other polymers [i](#)

There are no such residues in this entry.