Integrative Structure Validation Report

October 09, 2025 - 04:40 PM PDT

The following software was used in the production of this report:

IHMValidation Version 3.0
Python-IHM Version 2.5

PDB ID	9A25 | pdb_00009a25
PDB-Dev ID	PDBDEV_00000142
Structure Title	Molecular assembly pathway of the human Nuclear Pore Complex after cell division
Structure Authors	Jeremy O. B. Tempkin
Deposited on	2022-07-25

This is a PDB-IHM Structure Validation Report.

We welcome your comments at helpdesk@pdb-ihm.org

A user guide is available at https://pdb-ihm.org/validation_help.html with specific help available everywhere you see the ? symbol.

List of references used to build this report is available here.

1. Overview

1.1. Summary

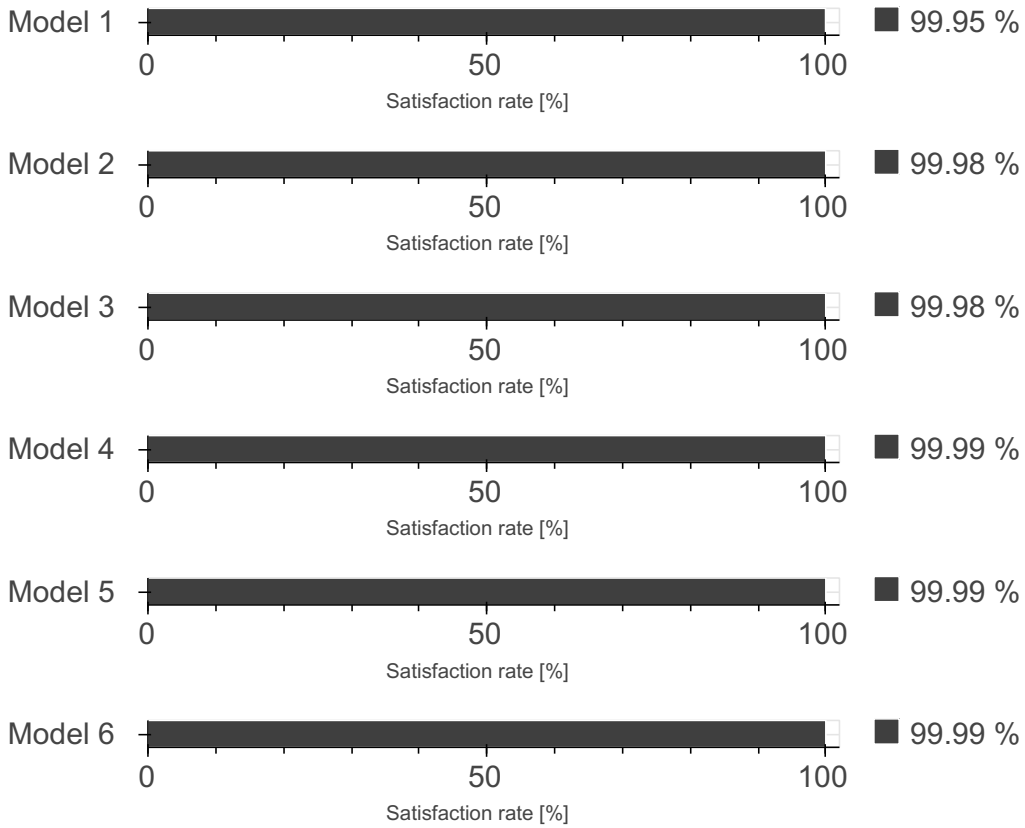
This entry consists of 6 model(s). A total of 8 dataset(s) were used to build this entry.

Name	Type	Count
3DEM volume	Experimental data	6
Experimental model	Starting model	2

1.2. Overall quality

This validation report contains model quality assessments for all structures, data quality and fit to model assessments for SAS and crosslinking-MS datasets. Data quality and fit to model assessments for other datasets and model uncertainty are under development. Number of plots is limited to 256.

Model Quality: Excluded Volume Analysis



2. Model Details

2.1. Ensemble information

This entry consists of 0 distinct ensemble(s).

2.2. Representation

This entry has 6 representation(s).

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
1	1	4	Nup133	A	1156	1-1156	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				R					
				AI					
				AZ					
				BQ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				CH					
				CY					
				DP					
		5	Nup107	B	925	1-925	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				S					
				AJ					
				BA					
				BR					
				CI					
				CZ					
				DQ					
		6	Nup96	C	1817	1-1817	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				T					
				AK					
				BB					
				BS					
				CJ					
				DA					
				DR					
		7	SEC13	D	322	1-322	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				U					
				AL					
				BC					
				BT					
				CK					
				DB					
				DS					
		8	SEH1	E	360	1-360	-	100.00 / 100.00	Multiscale: Coarse-grained: 2 - 10 residue(s) per bead
				V					
				AM					
				BD					
				BU					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				CL					
				DC					
				DT					
		9	Nup85	F	656	1-656	-	100.00 / 100.00	Multiscale: Coarse-grained: 3 - 10 residue(s) per bead
				W					
				AN					
				BE					
				BV					
				CM					
				DD					
				DU					
		1	Nup43	G	380	1-380	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				X					
				AO					
				BF					
				BW					
				CN					
				DE					
				DV					
		2	Nup160	H	1436	1-1436	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				Y					
				AP					
				BG					
				BX					
				CO					
				DF					
				DW					
		3	Nup37	I	326	1-326	-	100.00 / 100.00	Multiscale: Coarse-grained: 8 - 10 residue(s) per bead
				Z					
				AQ					
				BH					
				BY					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				CP					
				DG					
				DX					
		11	Nup93	J	819	1-819	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AA					
				AR					
				BI					
				BZ					
				CQ					
				DH					
				DY					
		12	Nup205	K	2012	1-2012	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AB					
				AS					
				BJ					
				CA					
				CR					
				DI					
				DZ					
		10	Nup155	L	1391	1-1391	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				P					
				Q					
				AC					
				AG					
				AH					
				AT					
				AX					
				AY					
				BK					
				BO					
				BP					
				CB					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				CF					
				CG					
				CS					
				CW					
				CX					
				DJ					
				DN					
				DO					
				EA					
				EE					
				EF					
		14	p54	M	507	1-507	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AD					
				AU					
				BL					
				CC					
				CT					
				DK					
				EB					
		15	p58	N	599	1-599	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AE					
				AV					
				BM					
				CD					
				CU					
				DL					
				EC					
		16	p62	O	522	1-522	-	100.00 / 100.00	Multiscale: Coarse-grained: 9 - 10 residue(s) per bead
				AF					
				AW					
				BN					
				CE					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				CV					
				DM					
				ED					
2	2	4	Nup133	EG	1156	1-1156	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FA					
				FU					
				GO					
				HI					
				IC					
				IW					
				JQ					
		5	Nup107	EH	925	1-925	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FB					
				FV					
				GP					
				HJ					
				ID					
				IX					
				JR					
		6	Nup96	EI	1817	1-1817	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FC					
				FW					
				GQ					
				HK					
				IE					
				IY					
				JS					
		7	SEC13	EJ	322	1-322	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FD					
				FX					
				GR					
				HL					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				IF					
				IZ					
				JT					
		8	SEH1	EK	360	1-360	-	100.00 / 100.00	Multiscale: Coarse-grained: 2 - 10 residue(s) per bead
				FE					
				FY					
				GS					
				HM					
				IG					
				JA					
				JU					
		9	Nup85	EL	656	1-656	-	100.00 / 100.00	Multiscale: Coarse-grained: 3 - 10 residue(s) per bead
				FF					
				FZ					
				GT					
				HN					
				IH					
				JB					
				JV					
		1	Nup43	EM	380	1-380	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FG					
				GA					
				GU					
				HO					
				II					
				JC					
				JW					
		2	Nup160	EN	1436	1-1436	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FH					
				GB					
				GV					
				HP					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				IJ					
				JD					
				JX					
		3	Nup37	EO	326	1-326	-	100.00 / 100.00	Multiscale: Coarse-grained: 8 - 10 residue(s) per bead
				FI					
				GC					
				GW					
				HQ					
				IK					
				JE					
				JY					
		11	Nup93	EP	819	1-819	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				ES					
				FJ					
				FM					
				GD					
				GG					
				GX					
				HA					
				HR					
				HU					
				IL					
				IO					
				JF					
				JI					
				JZ					
				KC					
		12	Nup205	EQ	2012	1-2012	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				ET					
				FK					
				FN					
				GE					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				GH					
				GY					
				HB					
				HS					
				HV					
				IM					
				IP					
				JG					
				JJ					
				KA					
				KD					
		10	Nup155	ER	1391	1-1391	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				EU					
				EY					
				EZ					
				FL					
				FO					
				FS					
				FT					
				GF					
				GI					
				GM					
				GN					
				GZ					
				HC					
				HG					
				HH					
				HT					
				HW					
				IA					
				IB					
				IN					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				IQ					
				IU					
				IV					
				JH					
				JK					
				JO					
				JP					
				KB					
				KE					
				KI					
				KJ					
		14	p54	EV	507	1-507	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FP					
				GJ					
				HD					
				HX					
				IR					
				JL					
				KF					
		15	p58	EW	599	1-599	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				FQ					
				GK					
				HE					
				HY					
				IS					
				JM					
				KG					
		16	p62	EX	522	1-522	-	100.00 / 100.00	Multiscale: Coarse-grained: 9 - 10 residue(s) per bead
				FR					
				GL					
				HF					
				HZ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				IT					
				JN					
				KH					
3	3	4	Nup133	KK	1156	1-1156	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				KT					
				LT					
				MC					
				NC					
				NL					
				OL					
				OU					
				PU					
				QD					
				RD					
				RM					
				SM					
				SV					
				TV					
				UE					
		5	Nup107	KL	925	1-925	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				KU					
				LU					
				MD					
				ND					
				NM					
				OM					
				OV					
				PV					
				QE					
				RE					
				RN					
				SN					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				SW					
				TW					
				UF					
		6	Nup96	KM	1817	1-1817	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				KV					
				LV					
				ME					
				NE					
				NN					
				ON					
				OW					
				PW					
				QF					
				RF					
				RO					
				SO					
				SX					
				TX					
				UG					
		7	SEC13	KN	322	1-322	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				KW					
				LW					
				MF					
				NF					
				NO					
				OO					
				OX					
				PX					
				QG					
				RG					
				RP					
				SP					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				SY					
				TY					
				UH					
		8	SEH1	KO	360	1-360	-	100.00 / 100.00	Multiscale: Coarse-grained: 2 - 10 residue(s) per bead
				KX					
				LX					
				MG					
				NG					
				NP					
				OP					
				OY					
				PY					
				QH					
				RH					
				RQ					
				SQ					
				SZ					
				TZ					
				UI					
		9	Nup85	KP	656	1-656	-	100.00 / 100.00	Multiscale: Coarse-grained: 3 - 10 residue(s) per bead
				KY					
				LY					
				MH					
				NH					
				NQ					
				OQ					
				OZ					
				PZ					
				QI					
				RI					
				RR					
				SR					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				TA					
				UA					
				UJ					
		1	Nup43	KQ	380	1-380	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				KZ					
				LZ					
				MI					
				NI					
				NR					
				OR					
				PA					
				QA					
				QJ					
				RJ					
				RS					
				SS					
				TB					
				UB					
				UK					
		2	Nup160	KR	1436	1-1436	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				LA					
				MA					
				MJ					
				NJ					
				NS					
				OS					
				PB					
				QB					
				QK					
				RK					
				RT					
				ST					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				TC					
				UC					
				UL					
		3	Nup37	KS	326	1-326	-	100.00 / 100.00	Multiscale: Coarse-grained: 8 - 10 residue(s) per bead
				LB					
				MB					
				MK					
				NK					
				NT					
				OT					
				PC					
				QC					
				QL					
				RL					
				RU					
				SU					
				TD					
				UD					
				UM					
		11	Nup93	LC	819	1-819	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				LF					
				ML					
				MO					
				NU					
				NX					
				PD					
				PG					
				QM					
				QP					
				RV					
				RY					
				TE					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				TH					
				UN					
				UQ					
		12	Nup205	LD	2012	1-2012	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				LG					
				MM					
				MP					
				NV					
				NY					
				PE					
				PH					
				QN					
				QQ					
				RW					
				RZ					
				TF					
				TI					
				UO					
				UR					
		10	Nup155	LE	1391	1-1391	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				LH					
				LR					
				LS					
				MN					
				MQ					
				NA					
				NB					
				NW					
				NZ					
				OJ					
				OK					
				PF					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				PI					
				PS					
				PT					
				QO					
				QR					
				RB					
				RC					
				RX					
				SA					
				SK					
				SL					
				TG					
				TJ					
				TT					
				TU					
				UP					
				US					
				VC					
				VD					
		14	p54	LI	507	1-507	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				LL					
				LO					
				MR					
				MU					
				MX					
				OA					
				OD					
				OG					
				PJ					
				PM					
				PP					
				QS					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				QV					
				QY					
				SB					
				SE					
				SH					
				TK					
				TN					
				TQ					
				UT					
				UW					
				UZ					
		15	p58	LJ	599	1-599	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				LM					
				LP					
				MS					
				MV					
				MY					
				OB					
				OE					
				OH					
				PK					
				PN					
				PQ					
				QT					
				QW					
				QZ					
				SC					
				SF					
				SI					
				TL					
				TO					
				TR					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				UU					
				UX					
				VA					
		16	p62	LK	522	1-522	-	100.00 / 100.00	Multiscale: Coarse-grained: 9 - 10 residue(s) per bead
				LN					
				LQ					
				MT					
				MW					
				MZ					
				OC					
				OF					
				OI					
				PL					
				PO					
				PR					
				QU					
				QX					
				RA					
				SD					
				SG					
				SJ					
				TM					
				TP					
				TS					
				UV					
				UY					
				VB					
4	4	4	Nup133	VE	1156	1-1156	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				VN					
				VW					
				WW					
				XF					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				XO					
				YO					
				YX					
				ZG					
				AAG					
				AAP					
				AAY					
				ABY					
				ACH					
				ACQ					
				ADQ					
				ADZ					
				AEI					
				AFI					
				AFR					
				AGA					
				AHA					
				AHJ					
				AHS					
		5	Nup107	VF	925	1-925	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				VO					
				VX					
				WX					
				XG					
				XP					
				YP					
				YY					
				ZH					
				AAH					
				AAQ					
				AAZ					
				ABZ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ACI					
				ACR					
				ADR					
				AEA					
				AEJ					
				AFJ					
				AFS					
				AGB					
				AHB					
				AHK					
				AHT					
		6	Nup96	VG	1817	1-1817	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				VP					
				VY					
				WY					
				XH					
				XQ					
				YQ					
				YZ					
				ZI					
				AAI					
				AAR					
				ABA					
				ACA					
				ACJ					
				ACS					
				ADS					
				AEB					
				AEK					
				AFK					
				AFT					
				AGC					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AHC					
				AHL					
				AHU					
		7	SEC13	VH	322	1-322	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				VQ					
				VZ					
				WZ					
				XI					
				XR					
				YR					
				ZA					
				ZJ					
				AAJ					
				AAS					
				ABB					
				ACB					
				ACK					
				ACT					
				ADT					
				AEC					
				AEL					
				AFL					
				AFU					
				AGD					
				AHD					
				AHM					
				AHV					
		8	SEH1	VI	360	1-360	-	100.00 / 100.00	Multiscale: Coarse-grained: 2 - 10 residue(s) per bead
				VR					
				WA					
				XA					
				XJ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				XS					
				YS					
				ZB					
				ZK					
				AAK					
				AAT					
				ABC					
				ACC					
				ACL					
				ACU					
				ADU					
				AED					
				AEM					
				AFM					
				AFV					
				AGE					
				AHE					
				AHN					
				AHW					
		9	Nup85	VJ	656	1-656	-	100.00 / 100.00	Multiscale: Coarse-grained: 3 - 10 residue(s) per bead
				VS					
				WB					
				XB					
				XK					
				XT					
				YT					
				ZC					
				ZL					
				AAL					
				AAU					
				ABD					
				ACD					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ACM					
				ACV					
				ADV					
				AEE					
				AEN					
				AFN					
				AFW					
				AGF					
				AHF					
				AHO					
				AHX					
		1	Nup43	VK	380	1-380	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				VT					
				WC					
				XC					
				XL					
				XU					
				YU					
				ZD					
				ZM					
				AAM					
				AAV					
				ABE					
				ACE					
				ACN					
				ACW					
				ADW					
				AEF					
				AEO					
				AFO					
				AFX					
				AGG					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AHG					
				AHP					
				AHY					
		2	Nup160	VL	1436	1-1436	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				VU					
				WD					
				XD					
				XM					
				XV					
				YV					
				ZE					
				ZN					
				AAN					
				AAW					
				ABF					
				ACF					
				ACO					
				ACX					
				ADX					
				AEG					
				AEP					
				AFP					
				AFY					
				AGH					
				AHH					
				AHQ					
				AHZ					
		3	Nup37	VM	326	1-326	-	100.00 / 100.00	Multiscale: Coarse-grained: 8 - 10 residue(s) per bead
				VV					
				WE					
				XE					
				XN					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				XW					
				YW					
				ZF					
				ZO					
				AAO					
				AAX					
				ABG					
				ACG					
				ACP					
				ACY					
				ADY					
				AEH					
				AEQ					
				AFQ					
				AFZ					
				AGI					
				AHI					
				AHR					
				AIA					
		11	Nup93	WF	819	1-819	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				WI					
				XX					
				YA					
				ZP					
				ZS					
				ABH					
				ABK					
				ACZ					
				ADC					
				AER					
				AEU					
				AGJ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AGM					
				AIB					
				AIE					
		12	Nup205	WG	2012	1-2012	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				WJ					
				XY					
				YB					
				ZQ					
				ZT					
				ABI					
				ABL					
				ADA					
				ADD					
				AES					
				AEV					
				AGK					
				AGN					
				AIC					
				AIF					
		10	Nup155	WH	1391	1-1391	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				WK					
				WU					
				WV					
				XZ					
				YC					
				YM					
				YN					
				ZR					
				ZU					
				AAE					
				AAF					
				ABJ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ABM					
				ABW					
				ABX					
				ADB					
				ADE					
				ADO					
				ADP					
				AET					
				AEW					
				AFG					
				AFH					
				AGL					
				AGO					
				AGY					
				AGZ					
				AID					
				AIG					
				AIQ					
				AIR					
		14	p54	WL	507	1-507	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				WO					
				WR					
				YD					
				YG					
				YJ					
				ZV					
				ZY					
				AAB					
				ABN					
				ABQ					
				ABT					
				ADF					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ADI					
				ADL					
				AEX					
				AFA					
				AFD					
				AGP					
				AGS					
				AGV					
				AIH					
				AIK					
				AIN					
		15	p58	WM	599	1-599	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				WP					
				WS					
				YE					
				YH					
				YK					
				ZW					
				ZZ					
				AAC					
				ABO					
				ABR					
				ABU					
				ADG					
				ADJ					
				ADM					
				AEY					
				AFB					
				AFE					
				AGQ					
				AGT					
				AGW					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AII					
				AIL					
				AIO					
		16	p62	WN	522	1-522	-	100.00 / 100.00	Multiscale: Coarse-grained: 9 - 10 residue(s) per bead
				WQ					
				WT					
				YF					
				YI					
				YL					
				ZX					
				AAA					
				AAD					
				ABP					
				ABS					
				ABV					
				ADH					
				ADK					
				ADN					
				AEZ					
				AFC					
				AFF					
				AGR					
				AGU					
				AGX					
				AIJ					
				AIM					
				AIP					
5	5	4	Nup133	AIS	1156	1-1156	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJB					
				AJK					
				AKN					
				AKW					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ALF					
				AMI					
				AMR					
				ANA					
				AOD					
				AOM					
				AOV					
				APY					
				AQH					
				AQQ					
				ART					
				ASC					
				ASL					
				ATO					
				ATX					
				AUG					
				AVJ					
				AVS					
				AWB					
		5	Nup107	AIT	925	1-925	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJC					
				AJL					
				AKO					
				AKX					
				ALG					
				AMJ					
				AMS					
				ANB					
				AOE					
				AON					
				AOW					
				APZ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AQI					
				AQR					
				ARU					
				ASD					
				ASM					
				ATP					
				ATY					
				AUH					
				AVK					
				AVT					
				AWC					
		6	Nup96	AIU	1817	1-1817	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJD					
				AJM					
				AKP					
				AKY					
				ALH					
				AMK					
				AMT					
				ANC					
				AOF					
				AOO					
				AOX					
				AQA					
				AQJ					
				AQS					
				ARV					
				ASE					
				ASN					
				ATQ					
				ATZ					
				AUI					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AVL					
				AVU					
				AWD					
		7	SEC13	AIV	322	1-322	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJE					
				AJN					
				AKQ					
				AKZ					
				ALI					
				AML					
				AMU					
				AND					
				AOG					
				AOP					
				AOY					
				AQB					
				AQK					
				AQT					
				ARW					
				ASF					
				ASO					
				ATR					
				AUA					
				AUJ					
				AVM					
				AVV					
				AWE					
		8	SEH1	AIW	360	1-360	-	100.00 / 100.00	Multiscale: Coarse-grained: 2 - 10 residue(s) per bead
				AJF					
				AJO					
				AKR					
				ALA					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ALJ					
				AMM					
				AMV					
				ANE					
				AOH					
				AOQ					
				AOZ					
				AQC					
				AQL					
				AQU					
				ARX					
				ASG					
				ASP					
				ATS					
				AUB					
				AUK					
				AVN					
				AVW					
				AWF					
		9	Nup85	AIX	656	1-656	-	100.00 / 100.00	Multiscale: Coarse-grained: 3 - 10 residue(s) per bead
				AJG					
				AJP					
				AKS					
				ALB					
				ALK					
				AMN					
				AMW					
				ANF					
				AOI					
				AOR					
				APA					
				AQD					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AQM					
				AQV					
				ARY					
				ASH					
				ASQ					
				ATT					
				AUC					
				AUL					
				AVO					
				AVX					
				AWG					
		1	Nup43	AIY	380	1-380	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJH					
				AJQ					
				AKT					
				ALC					
				ALL					
				AMO					
				AMX					
				ANG					
				AOJ					
				AOS					
				APB					
				AQE					
				AQN					
				AQW					
				ARZ					
				ASI					
				ASR					
				ATU					
				AUD					
				AUM					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AVP					
				AVY					
				AWH					
		2	Nup160	AIZ	1436	1-1436	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJI					
				AJR					
				AKU					
				ALD					
				ALM					
				AMP					
				AMY					
				ANH					
				AOK					
				AOT					
				APC					
				AQF					
				AQO					
				AQX					
				ASA					
				ASJ					
				ASS					
				ATV					
				AUE					
				AUN					
				AVQ					
				AVZ					
				AWI					
		3	Nup37	AJA	326	1-326	-	100.00 / 100.00	Multiscale: Coarse-grained: 8 - 10 residue(s) per bead
				AJJ					
				AJS					
				AKV					
				ALE					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				ALN					
				AMQ					
				AMZ					
				ANI					
				AOL					
				AOU					
				APD					
				AQG					
				AQP					
				AQY					
				ASB					
				ASK					
				AST					
				ATW					
				AUF					
				AUO					
				AVR					
				AWA					
				AWJ					
		11	Nup93	AJT	819	1-819	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJW					
				ALO					
				ALR					
				ANJ					
				ANM					
				APE					
				APH					
				AQZ					
				ARC					
				ASU					
				ASX					
				AUP					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				AUS					
				AWK					
				AWN					
		12	Nup205	AJU	2012	1-2012	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJX					
				ALP					
				ALS					
				ANK					
				ANN					
				APF					
				API					
				ARA					
				ARD					
				ASV					
				ASY					
				AUQ					
				AUT					
				AWL					
				AWO					
		10	Nup155	AJV	1391	1-1391	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AJY					
				AKL					
				AKM					
				ALQ					
				ALT					
				AMG					
				AMH					
				ANL					
				ANO					
				AOB					
				AOC					
				APG					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				APJ					
				APW					
				APX					
				ARB					
				ARE					
				ARR					
				ARS					
				ASW					
				ASZ					
				ATM					
				ATN					
				AUR					
				AUU					
				AVH					
				AVI					
				AWM					
				AWP					
				AXC					
				AXD					
		14	p54	AJZ	507	1-507	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AKC					
				AKF					
				AKI					
				ALU					
				ALX					
				AMA					
				AMD					
				ANP					
				ANS					
				ANV					
				ANY					
				APK					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				APN					
				APQ					
				APT					
				ARF					
				ARI					
				ARL					
				ARO					
				ATA					
				ATD					
				ATG					
				ATJ					
				AUV					
				AUY					
				AVB					
				AVE					
				AWQ					
				AWT					
				AWW					
				AWZ					
		15	p58	AKA	599	1-599	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AKD					
				AKG					
				AKJ					
				ALV					
				ALY					
				AMB					
				AME					
				ANQ					
				ANT					
				ANW					
				ANZ					
				APL					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				APO					
				APR					
				APU					
				ARG					
				ARJ					
				ARM					
				ARP					
				ATB					
				ATE					
				ATH					
				ATK					
				AUW					
				AUZ					
				AVC					
				AVF					
				AWR					
				AWU					
				AWX					
				AXA					
		16	p62	AKB	522	1-522	-	100.00 / 100.00	Multiscale: Coarse-grained: 9 - 10 residue(s) per bead
				AKE					
				AKH					
				AKK					
				ALW					
				ALZ					
				AMC					
				AMF					
				ANR					
				ANU					
				ANX					
				AOA					
				APM					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				APP					
				APS					
				APV					
				ARH					
				ARK					
				ARN					
				ARQ					
				ATC					
				ATF					
				ATI					
				ATL					
				AUX					
				AVA					
				AVD					
				AVG					
				AWS					
				AWV					
				AWY					
				AXB					
6	6	4	Nup133	AXE	1156	1-1156	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AXN					
				AXW					
				AYF					
				AZO					
				AZX					
				BAG					
				BAP					
				BBY					
				BCH					
				BCQ					
				BCZ					
				BEI					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BER					
				BFA					
				BFJ					
				BGS					
				BHB					
				BHK					
				BHT					
				BJC					
				BJL					
				BJU					
				BKD					
				BLM					
				BLV					
				BME					
				BMN					
				BNW					
				BOF					
				BOO					
				BOX					
		5	Nup107	AXF	925	1-925	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AXO					
				AXX					
				AYG					
				AZP					
				AZY					
				BAH					
				BAQ					
				BBZ					
				BCI					
				BCR					
				BDA					
				BEJ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BES					
				BFB					
				BFK					
				BGT					
				BHC					
				BHL					
				BHU					
				BJD					
				BJM					
				BJV					
				BKE					
				BLN					
				BLW					
				BMF					
				BMO					
				BNX					
				BOG					
				BOP					
				BOY					
		6	Nup96	AXG	1817	1-1817	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AXP					
				AXY					
				AYH					
				AZQ					
				AZZ					
				BAI					
				BAR					
				BCA					
				BCJ					
				BCS					
				BDB					
				BEK					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BET					
				BFC					
				BFL					
				BGU					
				BHD					
				BHM					
				BHV					
				BJE					
				BJN					
				BJW					
				BKF					
				BLO					
				BLX					
				BMG					
				BMP					
				BNY					
				BOH					
				BOQ					
				BOZ					
		7	SEC13	AXH	322	1-322	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AXQ					
				AXZ					
				AYI					
				AZR					
				BAA					
				BAJ					
				BAS					
				BCB					
				BCK					
				BCT					
				BDC					
				BEL					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BEU					
				BFD					
				BFM					
				BGV					
				BHE					
				BHN					
				BHW					
				BJF					
				BJO					
				BJX					
				BKG					
				BLP					
				BLY					
				BMH					
				BMQ					
				BNZ					
				BOI					
				BOR					
				BPA					
		8	SEH1	AXI	360	1-360	-	100.00 / 100.00	Multiscale: Coarse-grained: 2 - 10 residue(s) per bead
				AXR					
				AYA					
				AYJ					
				AZS					
				BAB					
				BAK					
				BAT					
				BCC					
				BCL					
				BCU					
				BDD					
				BEM					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BEV					
				BFE					
				BFN					
				BGW					
				BHF					
				BHO					
				BHX					
				BJG					
				BJP					
				BJY					
				BKH					
				BLQ					
				BLZ					
				BMI					
				BMR					
				BOA					
				BOJ					
				BOS					
				BPB					
		9	Nup85	AXJ	656	1-656	-	100.00 / 100.00	Multiscale: Coarse-grained: 3 - 10 residue(s) per bead
				AXS					
				AYB					
				AYK					
				AZT					
				BAC					
				BAL					
				BAU					
				BCD					
				BCM					
				BCV					
				BDE					
				BEN					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BEW					
				BFF					
				BFO					
				BGX					
				BHG					
				BHP					
				BHY					
				BJH					
				BJQ					
				BJZ					
				BKI					
				BLR					
				BMA					
				BMJ					
				BMS					
				BOB					
				BOK					
				BOT					
				BPC					
		1	Nup43	AXK	380	1-380	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AXT					
				AYC					
				AYL					
				AZU					
				BAD					
				BAM					
				BAV					
				BCE					
				BCN					
				BCW					
				BDF					
				BEO					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BEX					
				BFG					
				BFP					
				BGY					
				BHH					
				BHQ					
				BHZ					
				BJI					
				BJR					
				BKA					
				BKJ					
				BLS					
				BMB					
				BMK					
				BMT					
				BOC					
				BOL					
				BOU					
				BPD					
		2	Nup160	AXL	1436	1-1436	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AXU					
				AYD					
				AYM					
				AZV					
				BAE					
				BAN					
				BAW					
				BCF					
				BCO					
				BCX					
				BDG					
				BEP					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BEY					
				BFH					
				BFQ					
				BGZ					
				BHI					
				BHR					
				BIA					
				BJJ					
				BJS					
				BKB					
				BKK					
				BLT					
				BMC					
				BML					
				BMU					
				BOD					
				BOM					
				BOV					
				BPE					
		3	Nup37	AXM	326	1-326	-	100.00 / 100.00	Multiscale: Coarse-grained: 8 - 10 residue(s) per bead
				AXV					
				AYE					
				AYN					
				AZW					
				BAF					
				BAO					
				BAX					
				BCG					
				BCP					
				BCY					
				BDH					
				BEQ					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BEZ					
				BFI					
				BFR					
				BHA					
				BHJ					
				BHS					
				BIB					
				BJK					
				BJT					
				BKC					
				BKL					
				BLU					
				BMD					
				BMM					
				BMV					
				BOE					
				BON					
				BOW					
				BPF					
		11	Nup93	AYO	819	1-819	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AYR					
				AYU					
				AYX					
				BAY					
				BBB					
				BBE					
				BBH					
				BDI					
				BDL					
				BDO					
				BDR					
				BFS					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BFV					
				BFY					
				BGB					
				BIC					
				BIF					
				BII					
				BIL					
				BKM					
				BKP					
				BKS					
				BKV					
				BMW					
				BMZ					
				BNC					
				BNF					
				BPG					
				BPJ					
				BPM					
				BPP					
		12	Nup205	AYP	2012	1-2012	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AYV					
				BAZ					
				BBF					
				BDJ					
				BDP					
				BFT					
				BFZ					
				BID					
				BIJ					
				BKN					
				BKT					
				BMX					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BND					
				BPH					
				BPN					
		10	Nup155	AYQ	1391	1-1391	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AYT					
				AYW					
				AYZ					
				AZM					
				AZN					
				BBA					
				BBD					
				BBG					
				BBJ					
				BBW					
				BBX					
				BDK					
				BDN					
				BDQ					
				BDT					
				BEG					
				BEH					
				BFU					
				BFX					
				BGA					
				BGD					
				BGQ					
				BGR					
				BIE					
				BIH					
				BIK					
				BIN					
				BJA					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BJB					
				BKO					
				BKR					
				BKU					
				BKX					
				BLK					
				BLL					
				BMY					
				BNB					
				BNE					
				BNH					
				BNU					
				BNV					
				BPI					
				BPL					
				BPO					
				BPR					
				BQE					
				BQF					
		13	Nup188	AYS	1749	1-1749	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AYY					
				BBC					
				BBI					
				BDM					
				BDS					
				BFW					
				BGC					
				BIG					
				BIM					
				BKQ					
				BKW					
				BNA					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BNG					
				BPK					
				BPQ					
		14	p54	AZA	507	1-507	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AZD					
				AZG					
				AZJ					
				BBK					
				BBN					
				BBQ					
				BBT					
				BDU					
				BDX					
				BEA					
				BED					
				BGE					
				BGH					
				BGK					
				BGN					
				BIO					
				BIR					
				BIU					
				BIX					
				BKY					
				BLB					
				BLE					
				BLH					
				BNI					
				BNL					
				BNO					
				BNR					
				BPS					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BPV					
				BPY					
				BQB					
		15	p58	AZB	599	1-599	-	100.00 / 100.00	Multiscale: Coarse-grained: 1 - 10 residue(s) per bead
				AZE					
				AZH					
				AZK					
				BBL					
				BBO					
				BBR					
				BBU					
				BDV					
				BDY					
				BEB					
				BEE					
				BGF					
				BGI					
				BGL					
				BGO					
				BIP					
				BIS					
				BIV					
				BIY					
				BKZ					
				BLC					
				BLF					
				BLI					
				BNJ					
				BNM					
				BNP					
				BNS					
				BPT					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BPW					
				BPZ					
				BQC					
		16	p62	AZC	522	1-522	-	100.00 / 100.00	Multiscale: Coarse-grained: 9 - 10 residue(s) per bead
				AZF					
				AZI					
				AZL					
				BBM					
				BBP					
				BBS					
				BBV					
				BDW					
				BDZ					
				BEC					
				BEF					
				BGG					
				BGJ					
				BGM					
				BGP					
				BIQ					
				BIT					
				BIW					
				BIZ					
				BLA					
				BLD					
				BLG					
				BLJ					
				BNK					
				BNN					
				BNQ					
				BNT					
				BPU					

ID	Model(s)	Entity ID	Molecule name	Chain(s) [auth]	Total residues	Rigid segments	Flexible segments	Model coverage/ Starting model coverage (%)	Scale
				BPX					
				BQA					
				BQD					

2.3. Datasets used for modeling

There are 8 unique datasets used to build the models in this entry.

ID	Dataset type	Database name	Data access code
1	Experimental model	PDB	pdb_00005a9q
2	Experimental model	PDB	pdb_00005ijn
3	3DEM volume	Zenodo	10.5281/zenodo.6908584
4	3DEM volume	Zenodo	10.5281/zenodo.6908584
5	3DEM volume	Zenodo	10.5281/zenodo.6908584
6	3DEM volume	Zenodo	10.5281/zenodo.6908584
7	3DEM volume	Zenodo	10.5281/zenodo.6908584
8	3DEM volume	Zenodo	10.5281/zenodo.6908584

2.4. Methodology and software

This entry is a result of 6 distinct protocol(s).

Step number	Protocol ID	Method name	Method type	Method description	Number of computed models	Multi state modeling	Multi scale modeling
1	1	Sampling	MC sampling	MC sampling with 1000000 steps	Not available	True	True
1	2	Sampling	MC sampling	MC sampling with 1000000 steps	Not available	True	True
1	3	Sampling	MC sampling	MC sampling with 1000000 steps	Not available	True	True
1	4	Sampling	MC sampling	MC sampling with 1000000 steps	Not available	True	True
1	5	Sampling	MC sampling	MC sampling with 1000000 steps	Not available	True	True
1	6	Sampling	MC sampling	MC sampling with 1000000 steps	Not available	True	True

There are 2 software packages reported in this entry.

ID	Software name	Software version	Software classification	Software location
1	Integrative Modeling Platform	2.13.0	model preparation, model representation, sampling, data processing, data analysis	https://integrativemodeling.org/
2	gmconvert	v2020.05.10	processing of input data to modeling	https://pdbj.org/gmfit/doc_gmconvert/README_gmconvert.html#install

3. Data quality

3.3. 3DEM

This section describes quality of the 3DEM datasets

3DEM dataset is not available in the EMDB database.

4. Model quality

For models with atomic structures, MolProbity analysis is performed. For models with coarse-grained or multi-scale structures, excluded volume analysis is performed.

4.1a. Excluded Volume Analysis

Excluded volume satisfaction for the models in the entry are listed below. The Analysed column shows the number of particle-partice or particle-atom pairs for which excluded volume was analysed.

Model ID	Analysed	Number of violations	Excluded Volume Satisfaction (%)
1	47467896	24403	99.95
2	82426380	20338	99.98
3	159981328	27358	99.98
4	237260436	33439	99.99
5	249973620	33709	99.99
6	520208640	49024	99.99

5. Fit to Data Used for Modeling Assessment

5.3. 3DEM

This section describes fit of models to the 3DEM data. Only results for the representative model, selected as a first model with the largest number of asymmetric units.

3DEM validation for coarse-grained structures is under development.

6. Fit to Data Used for Validation Assessment

Validation for this section is under development.

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