

Integrative Structure Validation Report

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

Python-IHM Version 1.3

MolProbity Version 4.5.2

Integrative Modeling Validation Version 1.2

PDB ID	9A1N
PDB-Dev ID	PDBDEV_00000095
Structure Title	Integrative model of the nuclear pore complex with intermediate diameter from energy depleted Schizosaccharomyces pombe
Structure Authors	Christian E. Zimmerli; Matteo Allegretti; Vasileios Rantos; Sara K. Goetz; Agnieszka Obarska-Kosinska; levgeniia Zagoriy; Aliaksandr Halavatyi; Gerhard Hummer; Julia Mahamid; Jan Kosinski; Martin Beck

This is a PDB-Dev IM Structure Validation Report for a publicly released PDB-Dev entry.

We welcome your comments at pdb-dev@mail.wwpdb.org

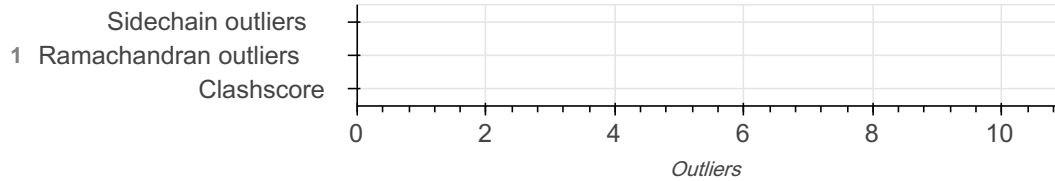
A user guide is available at https://pdb-dev.wwpdb.org/validation_help.html with specific help available everywhere you see the  symbol.

List of references used to build this report is available [here](#).

Overall quality

This validation report contains model quality assessments for all structures, data quality assessment for SAS datasets and fit to model assessments for SAS 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: MolProbity Analysis



Ensemble information ?

This entry consists of 0 distinct ensemble(s).

Summary ?

This entry consists of 1 unique models, with 392 subunits in each model. A total of 5 datasets or restraints were used to build this entry. Each model is represented by 392 rigid bodies and 0 flexible or non-rigid units.

Entry composition ?

There is 1 unique type of models in this entry. This model is titled None/None.

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	1	1	Nup107	L	L	813
1	2	1	Nup107	L1	L1	813
1	3	1	Nup107	L2	L2	813
1	4	1	Nup107	L3	L3	813
1	5	1	Nup107	L4	L4	813
1	6	1	Nup107	L5	L5	813
1	7	1	Nup107	L6	L6	813
1	8	1	Nup107	L7	L7	813
1	9	1	Nup107	L8	L8	813
1	10	1	Nup107	L9	L9	813
1	11	1	Nup107	L10	L10	813

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	12	1	Nup107	L11	L11	813
1	13	1	Nup107	L12	L12	813
1	14	1	Nup107	L13	L13	813
1	15	1	Nup107	L14	L14	813
1	16	1	Nup107	L15	L15	813
1	17	2	Nup85	P	P	675
1	18	2	Nup85	P1	P1	675
1	19	2	Nup85	P2	P2	675
1	20	2	Nup85	P3	P3	675
1	21	2	Nup85	P4	P4	675
1	22	2	Nup85	P5	P5	675
1	23	2	Nup85	P6	P6	675
1	24	2	Nup85	P7	P7	675
1	25	2	Nup85	P8	P8	675
1	26	2	Nup85	P9	P9	675
1	27	2	Nup85	P10	P10	675
1	28	2	Nup85	P11	P11	675
1	29	2	Nup85	P12	P12	675
1	30	2	Nup85	P13	P13	675
1	31	2	Nup85	P14	P14	675
1	32	2	Nup85	P15	P15	675
1	33	2	Nup85	P16	P16	675
1	34	2	Nup85	P17	P17	675

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	35	2	Nup85	P18	P18	675
1	36	2	Nup85	P19	P19	675
1	37	2	Nup85	P20	P20	675
1	38	2	Nup85	P21	P21	675
1	39	2	Nup85	P22	P22	675
1	40	2	Nup85	P23	P23	675
1	41	3	Nup120	R	R	1136
1	42	3	Nup120	R1	R1	1136
1	43	3	Nup120	R2	R2	1136
1	44	3	Nup120	R3	R3	1136
1	45	3	Nup120	R4	R4	1136
1	46	3	Nup120	R5	R5	1136
1	47	3	Nup120	R6	R6	1136
1	48	3	Nup120	R7	R7	1136
1	49	3	Nup120	R8	R8	1136
1	50	3	Nup120	R9	R9	1136
1	51	3	Nup120	R10	R10	1136
1	52	3	Nup120	R11	R11	1136
1	53	3	Nup120	R12	R12	1136
1	54	3	Nup120	R13	R13	1136
1	55	3	Nup120	R14	R14	1136
1	56	3	Nup120	R15	R15	1136
1	57	3	Nup120	R16	R16	1136

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	58	3	Nup120	R17	R17	1136
1	59	3	Nup120	R18	R18	1136
1	60	3	Nup120	R19	R19	1136
1	61	3	Nup120	R20	R20	1136
1	62	3	Nup120	R21	R21	1136
1	63	3	Nup120	R22	R22	1136
1	64	3	Nup120	R23	R23	1136
1	65	4	Nup37	S	S	391
1	66	4	Nup37	S1	S1	391
1	67	4	Nup37	S2	S2	391
1	68	4	Nup37	S3	S3	391
1	69	4	Nup37	S4	S4	391
1	70	4	Nup37	S5	S5	391
1	71	4	Nup37	S6	S6	391
1	72	4	Nup37	S7	S7	391
1	73	4	Nup37	S8	S8	391
1	74	4	Nup37	S9	S9	391
1	75	4	Nup37	S10	S10	391
1	76	4	Nup37	S11	S11	391
1	77	4	Nup37	S12	S12	391
1	78	4	Nup37	S13	S13	391
1	79	4	Nup37	S14	S14	391
1	80	4	Nup37	S15	S15	391

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	81	4	Nup37	S16	S16	391
1	82	4	Nup37	S17	S17	391
1	83	4	Nup37	S18	S18	391
1	84	4	Nup37	S19	S19	391
1	85	4	Nup37	S20	S20	391
1	86	4	Nup37	S21	S21	391
1	87	4	Nup37	S22	S22	391
1	88	4	Nup37	S23	S23	391
1	89	5	Nup132	Q	Q	1162
1	90	5	Nup132	Q1	Q1	1162
1	91	5	Nup132	Q2	Q2	1162
1	92	5	Nup132	Q3	Q3	1162
1	93	5	Nup132	Q4	Q4	1162
1	94	5	Nup132	Q5	Q5	1162
1	95	5	Nup132	Q6	Q6	1162
1	96	5	Nup132	Q7	Q7	1162
1	97	5	Nup132	Q8	Q8	1162
1	98	5	Nup132	Q9	Q9	1162
1	99	5	Nup132	Q10	Q10	1162
1	100	5	Nup132	Q11	Q11	1162
1	101	5	Nup132	Q12	Q12	1162
1	102	5	Nup132	Q13	Q13	1162
1	103	5	Nup132	Q14	Q14	1162

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	104	5	Nup132	Q15	Q15	1162
1	105	6	Nup189c	M	M	844
1	106	6	Nup189c	M1	M1	844
1	107	6	Nup189c	M2	M2	844
1	108	6	Nup189c	M3	M3	844
1	109	6	Nup189c	M4	M4	844
1	110	6	Nup189c	M5	M5	844
1	111	6	Nup189c	M6	M6	844
1	112	6	Nup189c	M7	M7	844
1	113	6	Nup189c	M8	M8	844
1	114	6	Nup189c	M9	M9	844
1	115	6	Nup189c	M10	M10	844
1	116	6	Nup189c	M11	M11	844
1	117	6	Nup189c	M12	M12	844
1	118	6	Nup189c	M13	M13	844
1	119	6	Nup189c	M14	M14	844
1	120	6	Nup189c	M15	M15	844
1	121	6	Nup189c	M16	M16	844
1	122	6	Nup189c	M17	M17	844
1	123	6	Nup189c	M18	M18	844
1	124	6	Nup189c	M19	M19	844
1	125	6	Nup189c	M20	M20	844
1	126	6	Nup189c	M21	M21	844

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	127	6	Nup189c	M22	M22	844
1	128	6	Nup189c	M23	M23	844
1	129	7	Seh1	O	O	339
1	130	7	Seh1	O1	O1	339
1	131	7	Seh1	O2	O2	339
1	132	7	Seh1	O3	O3	339
1	133	7	Seh1	O4	O4	339
1	134	7	Seh1	O5	O5	339
1	135	7	Seh1	O6	O6	339
1	136	7	Seh1	O7	O7	339
1	137	7	Seh1	O8	O8	339
1	138	7	Seh1	O9	O9	339
1	139	7	Seh1	O10	O10	339
1	140	7	Seh1	O11	O11	339
1	141	7	Seh1	O12	O12	339
1	142	7	Seh1	O13	O13	339
1	143	7	Seh1	O14	O14	339
1	144	7	Seh1	O15	O15	339
1	145	7	Seh1	O16	O16	339
1	146	7	Seh1	O17	O17	339
1	147	7	Seh1	O18	O18	339
1	148	7	Seh1	O19	O19	339
1	149	7	Seh1	O20	O20	339

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	150	7	Seh1	O21	O21	339
1	151	7	Seh1	O22	O22	339
1	152	7	Seh1	O23	O23	339
1	153	8	Sec13	N	N	297
1	154	8	Sec13	N1	N1	297
1	155	8	Sec13	N2	N2	297
1	156	8	Sec13	N3	N3	297
1	157	8	Sec13	N4	N4	297
1	158	8	Sec13	N5	N5	297
1	159	8	Sec13	N6	N6	297
1	160	8	Sec13	N7	N7	297
1	161	8	Sec13	N8	N8	297
1	162	8	Sec13	N9	N9	297
1	163	8	Sec13	N10	N10	297
1	164	8	Sec13	N11	N11	297
1	165	8	Sec13	N12	N12	297
1	166	8	Sec13	N13	N13	297
1	167	8	Sec13	N14	N14	297
1	168	8	Sec13	N15	N15	297
1	169	8	Sec13	N16	N16	297
1	170	8	Sec13	N17	N17	297
1	171	8	Sec13	N18	N18	297
1	172	8	Sec13	N19	N19	297

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	173	8	Sec13	N20	N20	297
1	174	8	Sec13	N21	N21	297
1	175	8	Sec13	N22	N22	297
1	176	8	Sec13	N23	N23	297
1	177	9	Ely5	T	T	298
1	178	9	Ely5	T1	T1	298
1	179	9	Ely5	T2	T2	298
1	180	9	Ely5	T3	T3	298
1	181	9	Ely5	T4	T4	298
1	182	9	Ely5	T5	T5	298
1	183	9	Ely5	T6	T6	298
1	184	9	Ely5	T7	T7	298
1	185	9	Ely5	T8	T8	298
1	186	9	Ely5	T9	T9	298
1	187	9	Ely5	T10	T10	298
1	188	9	Ely5	T11	T11	298
1	189	9	Ely5	T12	T12	298
1	190	9	Ely5	T13	T13	298
1	191	9	Ely5	T14	T14	298
1	192	9	Ely5	T15	T15	298
1	193	9	Ely5	T16	T16	298
1	194	9	Ely5	T17	T17	298
1	195	9	Ely5	T18	T18	298

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	196	9	Ely5	T19	T19	298
1	197	9	Ely5	T20	T20	298
1	198	9	Ely5	T21	T21	298
1	199	9	Ely5	T22	T22	298
1	200	9	Ely5	T23	T23	298
1	201	10	Nup184	B	B	1564
1	202	10	Nup184	B1	B1	1564
1	203	10	Nup184	B2	B2	1564
1	204	10	Nup184	B3	B3	1564
1	205	10	Nup184	B4	B4	1564
1	206	10	Nup184	B5	B5	1564
1	207	10	Nup184	B6	B6	1564
1	208	10	Nup184	B7	B7	1564
1	209	10	Nup184	B8	B8	1564
1	210	10	Nup184	B9	B9	1564
1	211	10	Nup184	B10	B10	1564
1	212	10	Nup184	B11	B11	1564
1	213	10	Nup184	B12	B12	1564
1	214	10	Nup184	B13	B13	1564
1	215	10	Nup184	B14	B14	1564
1	216	10	Nup184	B15	B15	1564
1	217	11	Nup186	C	C	1647
1	218	11	Nup186	C1	C1	1647

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	219	11	Nup186	C2	C2	1647
1	220	11	Nup186	C3	C3	1647
1	221	11	Nup186	C4	C4	1647
1	222	11	Nup186	C5	C5	1647
1	223	11	Nup186	C6	C6	1647
1	224	11	Nup186	C7	C7	1647
1	225	11	Nup186	C8	C8	1647
1	226	11	Nup186	C9	C9	1647
1	227	11	Nup186	C10	C10	1647
1	228	11	Nup186	C11	C11	1647
1	229	11	Nup186	C12	C12	1647
1	230	11	Nup186	C13	C13	1647
1	231	11	Nup186	C14	C14	1647
1	232	11	Nup186	C15	C15	1647
1	233	12	Nup155	D	D	1315
1	234	12	Nup155	D1	D1	1315
1	235	12	Nup155	D2	D2	1315
1	236	12	Nup155	D3	D3	1315
1	237	12	Nup155	D4	D4	1315
1	238	12	Nup155	D5	D5	1315
1	239	12	Nup155	D6	D6	1315
1	240	12	Nup155	D7	D7	1315
1	241	12	Nup155	D8	D8	1315

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	242	12	Nup155	D9	D9	1315
1	243	12	Nup155	D10	D10	1315
1	244	12	Nup155	D11	D11	1315
1	245	12	Nup155	D12	D12	1315
1	246	12	Nup155	D13	D13	1315
1	247	12	Nup155	D14	D14	1315
1	248	12	Nup155	D15	D15	1315
1	249	12	Nup155	D16	D16	1315
1	250	12	Nup155	D17	D17	1315
1	251	12	Nup155	D18	D18	1315
1	252	12	Nup155	D19	D19	1315
1	253	12	Nup155	D20	D20	1315
1	254	12	Nup155	D21	D21	1315
1	255	12	Nup155	D22	D22	1315
1	256	12	Nup155	D23	D23	1315
1	257	12	Nup155	D24	D24	1315
1	258	12	Nup155	D25	D25	1315
1	259	12	Nup155	D26	D26	1315
1	260	12	Nup155	D27	D27	1315
1	261	12	Nup155	D28	D28	1315
1	262	12	Nup155	D29	D29	1315
1	263	12	Nup155	D30	D30	1315
1	264	12	Nup155	D31	D31	1315

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	265	13	Nup97	Y	Y	851
1	266	13	Nup97	Y1	Y1	851
1	267	13	Nup97	Y2	Y2	851
1	268	13	Nup97	Y3	Y3	851
1	269	13	Nup97	Y4	Y4	851
1	270	13	Nup97	Y5	Y5	851
1	271	13	Nup97	Y6	Y6	851
1	272	13	Nup97	Y7	Y7	851
1	273	13	Nup97	Y8	Y8	851
1	274	13	Nup97	Y9	Y9	851
1	275	13	Nup97	Y10	Y10	851
1	276	13	Nup97	Y11	Y11	851
1	277	13	Nup97	Y12	Y12	851
1	278	13	Nup97	Y13	Y13	851
1	279	13	Nup97	Y14	Y14	851
1	280	13	Nup97	Y15	Y15	851
1	281	13	Nup97	Y16	Y16	851
1	282	13	Nup97	Y17	Y17	851
1	283	13	Nup97	Y18	Y18	851
1	284	13	Nup97	Y19	Y19	851
1	285	13	Nup97	Y20	Y20	851
1	286	13	Nup97	Y21	Y21	851
1	287	13	Nup97	Y22	Y22	851

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	288	13	Nup97	Y23	Y23	851
1	289	13	Nup97	Y24	Y24	851
1	290	13	Nup97	Y25	Y25	851
1	291	13	Nup97	Y26	Y26	851
1	292	13	Nup97	Y27	Y27	851
1	293	13	Nup97	Y28	Y28	851
1	294	13	Nup97	Y29	Y29	851
1	295	13	Nup97	Y30	Y30	851
1	296	13	Nup97	Y31	Y31	851
1	297	14	Nsp1	J	J	598
1	298	14	Nsp1	J1	J1	598
1	299	14	Nsp1	J2	J2	598
1	300	14	Nsp1	J3	J3	598
1	301	14	Nsp1	J4	J4	598
1	302	14	Nsp1	J5	J5	598
1	303	14	Nsp1	J6	J6	598
1	304	14	Nsp1	J7	J7	598
1	305	14	Nsp1	J8	J8	598
1	306	14	Nsp1	J9	J9	598
1	307	14	Nsp1	J10	J10	598
1	308	14	Nsp1	J11	J11	598
1	309	14	Nsp1	J12	J12	598
1	310	14	Nsp1	J13	J13	598

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	311	14	Nsp1	J14	J14	598
1	312	14	Nsp1	J15	J15	598
1	313	14	Nsp1	J16	J16	598
1	314	14	Nsp1	J17	J17	598
1	315	14	Nsp1	J18	J18	598
1	316	14	Nsp1	J19	J19	598
1	317	14	Nsp1	J20	J20	598
1	318	14	Nsp1	J21	J21	598
1	319	14	Nsp1	J22	J22	598
1	320	14	Nsp1	J23	J23	598
1	321	14	Nsp1	J24	J24	598
1	322	14	Nsp1	J25	J25	598
1	323	14	Nsp1	J26	J26	598
1	324	14	Nsp1	J27	J27	598
1	325	14	Nsp1	J28	J28	598
1	326	14	Nsp1	J29	J29	598
1	327	14	Nsp1	J30	J30	598
1	328	14	Nsp1	J31	J31	598
1	329	15	Nup44	H	H	403
1	330	15	Nup44	H1	H1	403
1	331	15	Nup44	H2	H2	403
1	332	15	Nup44	H3	H3	403
1	333	15	Nup44	H4	H4	403

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	334	15	Nup44	H5	H5	403
1	335	15	Nup44	H6	H6	403
1	336	15	Nup44	H7	H7	403
1	337	15	Nup44	H8	H8	403
1	338	15	Nup44	H9	H9	403
1	339	15	Nup44	H10	H10	403
1	340	15	Nup44	H11	H11	403
1	341	15	Nup44	H12	H12	403
1	342	15	Nup44	H13	H13	403
1	343	15	Nup44	H14	H14	403
1	344	15	Nup44	H15	H15	403
1	345	15	Nup44	H16	H16	403
1	346	15	Nup44	H17	H17	403
1	347	15	Nup44	H18	H18	403
1	348	15	Nup44	H19	H19	403
1	349	15	Nup44	H20	H20	403
1	350	15	Nup44	H21	H21	403
1	351	15	Nup44	H22	H22	403
1	352	15	Nup44	H23	H23	403
1	353	15	Nup44	H24	H24	403
1	354	15	Nup44	H25	H25	403
1	355	15	Nup44	H26	H26	403
1	356	15	Nup44	H27	H27	403

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	357	15	Nup44	H28	H28	403
1	358	15	Nup44	H29	H29	403
1	359	15	Nup44	H30	H30	403
1	360	15	Nup44	H31	H31	403
1	361	16	Nup45	I	I	425
1	362	16	Nup45	I1	I1	425
1	363	16	Nup45	I2	I2	425
1	364	16	Nup45	I3	I3	425
1	365	16	Nup45	I4	I4	425
1	366	16	Nup45	I5	I5	425
1	367	16	Nup45	I6	I6	425
1	368	16	Nup45	I7	I7	425
1	369	16	Nup45	I8	I8	425
1	370	16	Nup45	I9	I9	425
1	371	16	Nup45	I10	I10	425
1	372	16	Nup45	I11	I11	425
1	373	16	Nup45	I12	I12	425
1	374	16	Nup45	I13	I13	425
1	375	16	Nup45	I14	I14	425
1	376	16	Nup45	I15	I15	425
1	377	16	Nup45	I16	I16	425
1	378	16	Nup45	I17	I17	425
1	379	16	Nup45	I18	I18	425

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	380	16	Nup45	I19	I19	425
1	381	16	Nup45	I20	I20	425
1	382	16	Nup45	I21	I21	425
1	383	16	Nup45	I22	I22	425
1	384	16	Nup45	I23	I23	425
1	385	16	Nup45	I24	I24	425
1	386	16	Nup45	I25	I25	425
1	387	16	Nup45	I26	I26	425
1	388	16	Nup45	I27	I27	425
1	389	16	Nup45	I28	I28	425
1	390	16	Nup45	I29	I29	425
1	391	16	Nup45	I30	I30	425
1	392	16	Nup45	I31	I31	425

Datasets used for modeling

There are 5 unique datasets used to build the models in this entry.

ID	Dataset type	Database name	Data access code
1	3DEM volume	EMDB	EMD-11374
2	3DEM volume	File	10.5281/zenodo.5585949
3	Integrative model	PDB-Dev	PDBDEV_00000094
4	Other	File	https://doi.org/10.1038/nsmb1194
5	Other	File	https://doi.org/10.1038/nature15381

Representation ?

This entry has only one representation and includes 392 rigid bodies and 0 flexible units

Chain ID	Rigid bodies	Non-rigid segments
L	1-813	-
L1	1-813	-
L2	1-813	-
L3	1-813	-
L4	1-813	-
L5	1-813	-
L6	1-813	-
L7	1-813	-
L8	1-813	-
L9	1-813	-
L10	1-813	-
L11	1-813	-
L12	1-813	-
L13	1-813	-
L14	1-813	-
L15	1-813	-
P	1-675	-
P1	1-675	-
P2	1-675	-
P3	1-675	-
P4	1-675	-

Chain ID	Rigid bodies	Non-rigid segments
P5	1-675	-
P6	1-675	-
P7	1-675	-
P8	1-675	-
P9	1-675	-
P10	1-675	-
P11	1-675	-
P12	1-675	-
P13	1-675	-
P14	1-675	-
P15	1-675	-
P16	1-675	-
P17	1-675	-
P18	1-675	-
P19	1-675	-
P20	1-675	-
P21	1-675	-
P22	1-675	-
P23	1-675	-
R	1-1136	-
R1	1-1136	-
R2	1-1136	-
R3	1-1136	-

Chain ID	Rigid bodies	Non-rigid segments
R4	1-1136	-
R5	1-1136	-
R6	1-1136	-
R7	1-1136	-
R8	1-1136	-
R9	1-1136	-
R10	1-1136	-
R11	1-1136	-
R12	1-1136	-
R13	1-1136	-
R14	1-1136	-
R15	1-1136	-
R16	1-1136	-
R17	1-1136	-
R18	1-1136	-
R19	1-1136	-
R20	1-1136	-
R21	1-1136	-
R22	1-1136	-
R23	1-1136	-
S	1-391	-
S1	1-391	-
S2	1-391	-

Chain ID	Rigid bodies	Non-rigid segments
S3	1-391	-
S4	1-391	-
S5	1-391	-
S6	1-391	-
S7	1-391	-
S8	1-391	-
S9	1-391	-
S10	1-391	-
S11	1-391	-
S12	1-391	-
S13	1-391	-
S14	1-391	-
S15	1-391	-
S16	1-391	-
S17	1-391	-
S18	1-391	-
S19	1-391	-
S20	1-391	-
S21	1-391	-
S22	1-391	-
S23	1-391	-
Q	1-1162	-
Q1	1-1162	-

Chain ID	Rigid bodies	Non-rigid segments
Q2	1-1162	-
Q3	1-1162	-
Q4	1-1162	-
Q5	1-1162	-
Q6	1-1162	-
Q7	1-1162	-
Q8	1-1162	-
Q9	1-1162	-
Q10	1-1162	-
Q11	1-1162	-
Q12	1-1162	-
Q13	1-1162	-
Q14	1-1162	-
Q15	1-1162	-
M	1-844	-
M1	1-844	-
M2	1-844	-
M3	1-844	-
M4	1-844	-
M5	1-844	-
M6	1-844	-
M7	1-844	-
M8	1-844	-

Chain ID	Rigid bodies	Non-rigid segments
M9	1-844	-
M10	1-844	-
M11	1-844	-
M12	1-844	-
M13	1-844	-
M14	1-844	-
M15	1-844	-
M16	1-844	-
M17	1-844	-
M18	1-844	-
M19	1-844	-
M20	1-844	-
M21	1-844	-
M22	1-844	-
M23	1-844	-
O	1-339	-
O1	1-339	-
O2	1-339	-
O3	1-339	-
O4	1-339	-
O5	1-339	-
O6	1-339	-
O7	1-339	-

Chain ID	Rigid bodies	Non-rigid segments
O8	1-339	-
O9	1-339	-
O10	1-339	-
O11	1-339	-
O12	1-339	-
O13	1-339	-
O14	1-339	-
O15	1-339	-
O16	1-339	-
O17	1-339	-
O18	1-339	-
O19	1-339	-
O20	1-339	-
O21	1-339	-
O22	1-339	-
O23	1-339	-
N	1-297	-
N1	1-297	-
N2	1-297	-
N3	1-297	-
N4	1-297	-
N5	1-297	-
N6	1-297	-

Chain ID	Rigid bodies	Non-rigid segments
N7	1-297	-
N8	1-297	-
N9	1-297	-
N10	1-297	-
N11	1-297	-
N12	1-297	-
N13	1-297	-
N14	1-297	-
N15	1-297	-
N16	1-297	-
N17	1-297	-
N18	1-297	-
N19	1-297	-
N20	1-297	-
N21	1-297	-
N22	1-297	-
N23	1-297	-
T	1-298	-
T1	1-298	-
T2	1-298	-
T3	1-298	-
T4	1-298	-
T5	1-298	-

Chain ID	Rigid bodies	Non-rigid segments
T6	1-298	-
T7	1-298	-
T8	1-298	-
T9	1-298	-
T10	1-298	-
T11	1-298	-
T12	1-298	-
T13	1-298	-
T14	1-298	-
T15	1-298	-
T16	1-298	-
T17	1-298	-
T18	1-298	-
T19	1-298	-
T20	1-298	-
T21	1-298	-
T22	1-298	-
T23	1-298	-
B	1-1564	-
B1	1-1564	-
B2	1-1564	-
B3	1-1564	-
B4	1-1564	-

Chain ID	Rigid bodies	Non-rigid segments
B5	1-1564	-
B6	1-1564	-
B7	1-1564	-
B8	1-1564	-
B9	1-1564	-
B10	1-1564	-
B11	1-1564	-
B12	1-1564	-
B13	1-1564	-
B14	1-1564	-
B15	1-1564	-
C	1-1647	-
C1	1-1647	-
C2	1-1647	-
C3	1-1647	-
C4	1-1647	-
C5	1-1647	-
C6	1-1647	-
C7	1-1647	-
C8	1-1647	-
C9	1-1647	-
C10	1-1647	-
C11	1-1647	-

Chain ID	Rigid bodies	Non-rigid segments
C12	1-1647	-
C13	1-1647	-
C14	1-1647	-
C15	1-1647	-
D	1-1315	-
D1	1-1315	-
D2	1-1315	-
D3	1-1315	-
D4	1-1315	-
D5	1-1315	-
D6	1-1315	-
D7	1-1315	-
D8	1-1315	-
D9	1-1315	-
D10	1-1315	-
D11	1-1315	-
D12	1-1315	-
D13	1-1315	-
D14	1-1315	-
D15	1-1315	-
D16	1-1315	-
D17	1-1315	-
D18	1-1315	-

Chain ID	Rigid bodies	Non-rigid segments
D19	1-1315	-
D20	1-1315	-
D21	1-1315	-
D22	1-1315	-
D23	1-1315	-
D24	1-1315	-
D25	1-1315	-
D26	1-1315	-
D27	1-1315	-
D28	1-1315	-
D29	1-1315	-
D30	1-1315	-
D31	1-1315	-
Y	1-851	-
Y1	1-851	-
Y2	1-851	-
Y3	1-851	-
Y4	1-851	-
Y5	1-851	-
Y6	1-851	-
Y7	1-851	-
Y8	1-851	-
Y9	1-851	-

Chain ID	Rigid bodies	Non-rigid segments
Y10	1-851	-
Y11	1-851	-
Y12	1-851	-
Y13	1-851	-
Y14	1-851	-
Y15	1-851	-
Y16	1-851	-
Y17	1-851	-
Y18	1-851	-
Y19	1-851	-
Y20	1-851	-
Y21	1-851	-
Y22	1-851	-
Y23	1-851	-
Y24	1-851	-
Y25	1-851	-
Y26	1-851	-
Y27	1-851	-
Y28	1-851	-
Y29	1-851	-
Y30	1-851	-
Y31	1-851	-
J	1-598	-

Chain ID	Rigid bodies	Non-rigid segments
J1	1-598	-
J2	1-598	-
J3	1-598	-
J4	1-598	-
J5	1-598	-
J6	1-598	-
J7	1-598	-
J8	1-598	-
J9	1-598	-
J10	1-598	-
J11	1-598	-
J12	1-598	-
J13	1-598	-
J14	1-598	-
J15	1-598	-
J16	1-598	-
J17	1-598	-
J18	1-598	-
J19	1-598	-
J20	1-598	-
J21	1-598	-
J22	1-598	-
J23	1-598	-

Chain ID	Rigid bodies	Non-rigid segments
J24	1-598	-
J25	1-598	-
J26	1-598	-
J27	1-598	-
J28	1-598	-
J29	1-598	-
J30	1-598	-
J31	1-598	-
H	1-403	-
H1	1-403	-
H2	1-403	-
H3	1-403	-
H4	1-403	-
H5	1-403	-
H6	1-403	-
H7	1-403	-
H8	1-403	-
H9	1-403	-
H10	1-403	-
H11	1-403	-
H12	1-403	-
H13	1-403	-
H14	1-403	-

Chain ID	Rigid bodies	Non-rigid segments
H15	1-403	-
H16	1-403	-
H17	1-403	-
H18	1-403	-
H19	1-403	-
H20	1-403	-
H21	1-403	-
H22	1-403	-
H23	1-403	-
H24	1-403	-
H25	1-403	-
H26	1-403	-
H27	1-403	-
H28	1-403	-
H29	1-403	-
H30	1-403	-
H31	1-403	-
I	1-425	-
I1	1-425	-
I2	1-425	-
I3	1-425	-
I4	1-425	-
I5	1-425	-

Chain ID	Rigid bodies	Non-rigid segments
I6	1-425	-
I7	1-425	-
I8	1-425	-
I9	1-425	-
I10	1-425	-
I11	1-425	-
I12	1-425	-
I13	1-425	-
I14	1-425	-
I15	1-425	-
I16	1-425	-
I17	1-425	-
I18	1-425	-
I19	1-425	-
I20	1-425	-
I21	1-425	-
I22	1-425	-
I23	1-425	-
I24	1-425	-
I25	1-425	-
I26	1-425	-
I27	1-425	-
I28	1-425	-

Chain ID	Rigid bodies	Non-rigid segments
I29	1-425	-
I30	1-425	-
I31	1-425	-

Methodology and software ?

This entry is a result of 1 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	Refinement optimization with Assemblin	Modeling the full nuclear pore complex at intermediate diameter based on the model of the nuclear pore complex with the normal diameter	None	None	False	False

There are 3 software packages reported in this entry.

ID	Software name	Software version	Software classification	Software location
1	Assemblin	0.99beta	integrative model building	https://www.embl-hamburg.de/Assemblin/
2	Integrative Modeling Platform (IMP)	2.15.0	integrative model building	https://integrativemodeling.org
3	UCSF Chimera	1.14	rigid body fitting to EM maps	https://www.cgl.ucsf.edu/chimera/

Data quality ?

3DEM volume

Validation for this section is under development.

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.

Standard geometry: bond outliers ?

Bond length outliers can not be evaluated for this model

Standard geometry: angle outliers ?

Bond angle outliers do not exist or can not be evaluated for this model

Too-close contacts ?

The following all-atom clashscore is based on a MolProbity analysis. All-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The table below contains clashscores for all the models in this entry.

Model ID	Clash score	Number of clashes
1	0.0	0

All 0 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Torsion angles: Protein backbone ?

In the following table, Ramachandran outliers are listed. The Analysed column shows the number of residues for which the backbone conformation was analysed.

Model ID	Analysed	Favored	Allowed	Outliers
1	0	0	0	0

Detailed list of outliers are tabulated below.

Torsion angles: Protein sidechains ?

In the following table, sidechain outliers are listed. The Analysed column shows the number of residues for which the sidechain conformation was analysed.

Model ID	Analysed	Favored	Allowed	Outliers
1	0	0	0	0

Detailed list of outliers are tabulated below.

Fit of model to data used for modeling ?3DEM volume

Validation for this section is under development.

Fit of model to data used for validation

Validation for this section is under development.

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