Integrative Structure Validation Report July 22, 2024 - 03:48 PM PDT

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

Python-IHM Version 1.3
Integrative Modeling Validation Version 1.2

PDB ID	8ZZP
PDB-Dev ID	PDBDEV_00000025
Structure Title	Architecture of Pol II(G) and molecular mechanism of transcription regulation by Gdown1
Structure Authors	Jishage M; Yu X; Shi Y; Ganesan SJ; Chen WY; Sali A; Chait BT; Asturias FJ; Roeder RG

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: Excluded Volume Analysis



Ensemble information ?

This entry consists of 1 distinct ensemble(s).

Summary ?

This entry consists of 1 unique models, with 13 subunits in each model. A total of 3 datasets or restraints were used to build this entry. Each model is represented by 0 rigid bodies and 71 flexible or non-rigid units.

Entry composition?

There is 1 unique type of models in this entry. This model is titled Cluster 0 in state State_0/None.

Model ID	Subunit number	Subunit ID	Subunit name	Chain ID	Chain ID [auth]	Total residues
1	1	1	RPB1	Α	А	1970
1	2	2	RPB2	В	В	1174
1	3	3	RPB3	С	С	275
1	4	4	RPB4	D	D	142
1	5	5	RPB5	E	E	210
1	6	6	RPB6	F	F	127
1	7	7	RPB7	G	G	172
1	8	8	RPB8	Н	Н	150
1	9	9	RPB9	I	I	125
1	10	10	RPB10	J	J	67
1	11	11	RPB11	К	К	117
1	12	12	RPB12	L	L	58
1	13	13	GDOWN1	М	М	368

Datasets used for modeling ?

There are 3 unique datasets used to build the models in this entry.

ID	Dataset type	Database name	Data access code
1	Experimental model	PDB	5FLM
2	Experimental model	File	10.5281/zenodo.1438479
3	Crosslinking-MS data	File	10.5281/zenodo.1438479

Representation ?

This entry has only one representation and includes 0 rigid bodies and 71 flexible units

Chain ID	Rigid bodies	Non-rigid segments		
А	-	1-265, 266-270, 271-320, 321-336, 337-354, 355-421, 422-437, 438-1108, 1109-1114, 1115-1267, 1268-1277, 1278-1424, 1425-1427, 1428-1428, 1429-1450, 1451-1458, 1459-1460, 1461-1487, 1488-1970		
В	-	1-15, 16-68, 69-80, 81-833, 834-843, 844-874, 875-888, 889-1063, 1064-1076, 1077-1080, 1081-1082, 1083-1110, 1111-1174		
С	-	1-1, 2-73, 74-74, 75-132, 133-145, 146-271, 272-275		
D	-	1-13, 14-141, 142-142		
Е	-	1-1, 2-31, 32-32, 33-45, 46-46, 47-111, 112-113, 114-131, 132-132, 133-156, 157-157, 158- 185, 186-186, 187-210		
F	-	1-45, 46-127		
G	-	1-171, 172-172		
Н	-	1-1, 2-149, 150-150		
I	-	1-11, 12-125		
J	-	1-67		
К	-	1-115, 116-117		

Chain ID	Rigid bodies	Non-rigid segments
L	-	1-14, 15-58
М	-	1-368

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	Replica exchange monte carlo	Sampling	None	5000000	False	True

There are 2 software packages reported in this entry.

ID	Software name	Software version	Software classification	Software location
1	IMP PMI module	develop- 7c7c0f4348	integrative model building	https://integrativemodeling.org
2	Integrative Modeling Platform (IMP)	develop- 0a5706e202	integrative model building	https://integrativemodeling.org

Data quality ? Crosslinking-MS

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.

Excluded volume satisfaction ?

Excluded volume satisfaction for the models in the entry are listed below.

Models	Excluded Volume Satisfaction (%)	Number of violations
1	99.87	8765.0

Fit of model to data used for modeling Crosslinking-MS

Validation for this section is under development.

Fit of model to data used for validation ?

Validation for this section is under development.

Acknowledgements

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