

**Summary of integrative structure determination of Plasmid replication initiator protein TrfA complexed with double stranded DNA (PDB ID: 9A0W, PDB-Dev ID: PDBDEV\_00000068)**

| <b>1. Model Composition</b>   |   |
|---|---|
| <a href="#"><u>Entry composition</u></a>                            | <ul style="list-style-type: none"> <li>- TrfA33: Chain A (285 residues)</li> <li>- DNA (26-MER): Chain B (26 residues)</li> <li>- DNA (26-MER): Chain C (26 residues)</li> </ul>  |
| <a href="#"><u>Datasets used for modeling</u></a>                   | <ul style="list-style-type: none"> <li>- Crosslinking-MS data, Linker name and number of cross-links: BrdU, 6 cross-links</li> <li>- De Novo model, Not available</li> <li>- Comparative model, template PDB ID: Not available</li> <li>- Comparative model, template PDB ID: Not available</li> <li>- Comparative model, template PDB ID: Not available</li> </ul> |
| <b>2. Representation</b>  |   |
| <a href="#"><u>Resolution</u></a>                                   | Atomic  |
| <a href="#"><u>Number of rigid bodies, flexible units</u></a>       | 0, 5  |
| <a href="#"><u>Flexible units</u></a>                               | <ul style="list-style-type: none"> <li>- A: 1-92, 93-99, 100-285</li> <li>- B: 1-26</li> <li>- C: 1-26</li> </ul>   |
| <a href="#"><u>Structural coverage (rigid bodies)</u></a>           | 100%  |
| <b>3. Restraints</b>  |   |
| <a href="#"><u>Physical principles</u></a>                          | Information about physical principles was not provided  |
| <a href="#"><u>Experimental data</u></a>                            | - 1 unique CrossLinkRestraint: BrdU, 6 cross-links  |
| <b>4. Validation</b>  |   |
| <a href="#"><u>Number of ensembles</u></a>                          | 0   |
| <a href="#"><u>Number of models in ensembles</u></a>                | Not applicable  |
| <a href="#"><u>Number of deposited models</u></a>                   | 1   |
| <a href="#"><u>Model precision (uncertainty of models)</u></a>      | Model precision can not be calculated with one structure  |
| <a href="#"><u>Data quality</u></a>                                 | Data quality has not been assessed  |
| <a href="#"><u>Model quality: assessment of atomic segments</u></a> | Model-1: Clashscore = 0.95, Number of Ramachandran outliers = 5, Number of sidechain outliers = 5   |

|   |   |
|---|---|
| <u>Model quality: assessment of excluded volume</u> | Not applicable  |
| <u>Fit to data used for modeling</u>                | Fit of model to information used to compute it has not been determined  |
| <u>Fit to data used for validation</u>              | Fit of model to information not used to compute it has not been determined  |
| <b>5. Methodology and Software</b>                  |   |
| <u>1. Method</u>                                    | None  |
| <u>Name</u>   | Rosetta ab initio modeling  |
| <u>2. Method</u>                                    | None  |
| <u>Name</u>   | Modeller modeling using crosslinks  |
| <u>Software</u>                                     | <ul style="list-style-type: none"> <li>- <a href="#">Rosetta</a> (version Not available)</li> <li>- <a href="#">Modeller</a> (version Not available)</li> <li>- <a href="#">Gromacs</a> (version Not available)</li> <li>- <a href="#">PROSESS</a> (version Not available)</li> <li>- <a href="#">Molprobity</a> (version Not available)</li> <li>- <a href="#">mCSM</a> (version Not available)</li> </ul> |