

**Summary of integrative structure determination of Complex structure of holo-GmHO-1 and Ferredoxin III from maize root (PDB ID: 9A8X)**

<b>1. Model Composition</b>	
<a href="#"><u>Entry composition</u></a>	<ul style="list-style-type: none"> <li>- Heme oxygenase (biliverdin-producing): Chain A (211 residues)</li> <li>- FE2/S2 (INORGANIC) CLUSTER: Chain C (Not available residues)</li> <li>- Ferredoxin-3, chloroplastic: Chain B (97 residues)</li> <li>- PROTOPORPHYRIN IX CONTAINING FE: Chain D (Not available residues)</li> </ul>
<a href="#"><u>Datasets used for modeling</u></a>	<ul style="list-style-type: none"> <li>- NMR data, BMRB: 26301</li> <li>- Experimental model, PDB ID: 7CKA</li> <li>- Experimental model, PDB ID: 5H57</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, 4
<a href="#"><u>Flexible units</u></a>	<ul style="list-style-type: none"> <li>- B: 1-97</li> <li>- A: 1-211</li> <li>- C: None-None</li> <li>- D: None-None</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>	
<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>	3
<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

<u><a href="#">Model quality: assessment of atomic segments</a></u>	- Model-1: Clashscore = 12.43, Number of Ramachandran outliers = 2, Number of sidechain outliers = 14 - Model-2: Clashscore = 11.0, Number of Ramachandran outliers = 0, Number of sidechain outliers = 9 - Model-3: Clashscore = 15.69, Number of Ramachandran outliers = 0, Number of sidechain outliers = 10
<u><a href="#">Model quality: assessment of excluded volume</a></u>	Not applicable
<u><a href="#">Fit to data used for modeling</a></u>	Fit of model to information used to compute it has not been determined
<u><a href="#">Fit to data used for validation</a></u>	Fit of model to information not used to compute it has not been determined
<b>5. Methodology and Software</b>	
1. <u><a href="#">Method</a></u>	docking
<u><a href="#">Name</a></u>	None
<u><a href="#">Description</a></u>	A docking simulation was performed with holo-GmHO-1 (Protein Data Bank [PDB] ID:7CKA) and maize Fd (Protein Data Bank [PDB] ID: 5h57) using the HADDOCK server based on NMR chemical shift perturbation experiments of apo-GmHO-1. Ten HADDOCK models were successfully obtained, from which the top cluster of models with a HADDOCK score of -57.0 +/- 2.2 were adopted.
<u><a href="#">Software</a></u>	<u><a href="#">HADDOCK</a></u> (version 2.4)