Summary of integrative structure determination of Rosetta model of human LRH-1 nuclear receptor generated with XL-MS, HDX-MS, and SAXS data (PDB ID: 8ZZZ, PDB-Dev ID: PDBDEV_00000035)

1. Model Composition	
Entry composition	- Zinc ion: Chain Z (Not available residues) - LRH-1 DNA-binding domain: Chain A (102 residues) - Zinc ion: Chain Y (Not available residues) - LRH-1 full length polypeptide: Chain C (538 residues) - LRH-1 Ligand-binding domain: Chain B (240 residues) - PGC1-alpha coactivator peptide: Chain D (10 residues) - DNA strand 1: Chain E (12 residues) - DNA strand 2: Chain F (12 residues) - Phospholipid ligand: Chain X (Not available residues)
Datasets used for modeling	- Experimental model, PDB ID: 2A66 - Experimental model, PDB ID: 1YOK - Comparative model, template PDB ID: Not available - Comparative model, template PDB ID: Not available - Crosslinking-MS data, Linker name and number of cross-links: BS3, 3 cross-links - H/D exchange data, File: 10.5281/zenodo.3405545 - Integrative model, File: 10.5281/zenodo.3405545 - Crosslinking-MS data, Linker name and number of cross-links: BS3, 10 cross-links - SAS data, SASBDB: SASDG85
2. Representation	
Resolution	Atomic
Number of rigid bodies, flexible units	10, 5
Rigid bodies	- A: - - B: - - C: - - D: 1-10 - E: 1-121-12 - F: 1-121-12 - X: None-None - Y: None-NoneNone-None - Z: None-NoneNone-None

Flexible units	- A: 1-102 - B: 1-240 - C: 1-538 - D: 1-10 - E: - - F: - - X: None-None - Y: - - Z: -
Structural coverage (rigid bodies)	100%
3. Restraints	
Physical principles	Information about physical principles was not provided
Experimental data	- 1 unique CrossLinkRestraint: BS3, 3 cross-links - 1 unique CrossLinkRestraint: BS3, 10 cross-links - 1 unique SASRestraint: Assembly name: Assembly of full-length LRH-1 with DNA, coactivator and P6L Ligand Fitting method: CRYSOL Multi-state: True
4. Validation	
Number of ensembles	1
Number of models in ensembles	10
Number of deposited models	11
Model precision (uncertainty of models)	None, Å
Data quality	SASDG85: Rg from Gunier is 3.82nm and Rg from p(r) is 3.91nm

Model quality: assessment of atomic segments	- Model-1: Clashscore = 0.0, Number of Ramachandran outliers = 8, Number of sidechain outliers = 0 - Model-2: Clashscore = 0.0, Number of Ramachandran outliers = 6, Number of sidechain outliers = 1 - Model-3: Clashscore = 0.0, Number of Ramachandran outliers = 7, Number of sidechain outliers = 1 - Model-4: Clashscore = 0.0, Number of Ramachandran outliers = 12, Number of sidechain outliers = 1 - Model-5: Clashscore = 0.0, Number of Ramachandran outliers = 7, Number of sidechain outliers = 0 - Model-6: Clashscore = 0.0, Number of Ramachandran outliers = 8, Number of sidechain outliers = 1 - Model-7: Clashscore = 0.0, Number of Ramachandran outliers = 9, Number of sidechain outliers = 1 - Model-8: Clashscore = 0.0, Number of Ramachandran outliers = 3, Number of sidechain outliers = 1 - Model-9: Clashscore = 0.0, Number of Ramachandran outliers = 8, Number of sidechain outliers = 0 - Model-10: Clashscore = 0.0, Number of Ramachandran outliers = 4, Number of sidechain outliers = 0 - Model-11: Clashscore = 0.0, Number of Ramachandran outliers = 11, Number of sidechain outliers = 0
Model quality: assessment of excluded volume	Not applicable
Fit to data used for modeling	Fit of model to information used to compute it has not been determined
Fit to data used for validation	Fit of model to information not used to compute it has not been determined
5. Methodology and Software	
1. Method	Loop modeling
Name	RosettaRemodel
Number of computed models	100
2. Method	Docking
Name	RosettaDock
Number of computed models	40000
3. Method	Linker modeling
Name	Ranch and RosettaMinimize

Number of computed models	45000
Software	- Rosetta (version 3.10) - ATSAS (version 2.8.4) - REMO (version 1)