

Summary of integrative structure determination of Structure of the alpha7nAChR Transmembrane and Intracellular Domains in Complex with the PICK1 PDZ Domain (PDB ID: 9A49, PDB-Dev ID: PDBDEV_00000230)

1. Model Composition	
<u>Entry composition</u>	<ul style="list-style-type: none"> - CHRNA7-FAM7A fusion protein: Chain D (264 residues) - CHRNA7-FAM7A fusion protein: Chain C (264 residues) - CHRNA7-FAM7A fusion protein: Chain A (264 residues) - CHRNA7-FAM7A fusion protein: Chain E (264 residues) - PRKCA-binding protein: Chain F (86 residues) - CHRNA7-FAM7A fusion protein: Chain B (264 residues)
<u>Datasets used for modeling</u>	<ul style="list-style-type: none"> - NMR data, Not available - NMR data, Not available - Experimental model, PDB ID: 7RPM - Experimental model, PDB ID: 2LUI - NMR data, Not available - NMR data, BMRB: 52246 - NMR data, BMRB: 52247 - NMR data, BMRB: 52248 - NMR data, BMRB: 52249
2. Representation	
<u>Resolution</u>	Atomic
<u>Number of rigid bodies, flexible units</u>	0, 6
<u>Flexible units</u>	<ul style="list-style-type: none"> - A: 1-264 - F: 1-86 - B: 1-264 - C: 1-264 - D: 1-264 - E: 1-264
<u>Structural coverage (rigid bodies)</u>	100%
3. Restraints	
<u>Physical principles</u>	Information about physical principles was not provided
<u>Experimental data</u>	<ul style="list-style-type: none"> - 4 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 16.0-24.0 - 2 unique DerivedDistanceRestraint: Lower Upper Bound Distance: 3.0-9.0
4. Validation	
<u>Number of ensembles</u>	0

<u>Number of models in ensembles</u>	Not applicable
<u>Number of deposited models</u>	1
<u>Model precision (uncertainty of models)</u>	Model precision can not be calculated with one structure
<u>Data quality</u>	Data quality has not been assessed
<u>Model quality: assessment of atomic segments</u>	Model-1: Clashscore = 1.8, Number of Ramachandran outliers = 0, Number of sidechain outliers = 1
<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
5. Methodology and Software	
1. <u>Method</u>	docking
<u>Name</u>	None
<u>Description</u>	docking using distance restraints between two proteins
2. <u>Method</u>	docking
<u>Name</u>	None
<u>Description</u>	docking using alpha7nAChR E222, V226, E229, W230 as interface residues between two proteins (obtained from alpha7nAChR CSP NMR data)
3. <u>Method</u>	docking
<u>Name</u>	None
<u>Description</u>	docking using PICK1 I15, I17, I19 as interface residues between two proteins (obtained from PICK1 CSP NMR data)
4. <u>Method</u>	refinement
<u>Name</u>	None
5. <u>Method</u>	refinement
<u>Name</u>	None
6. <u>Method</u>	refinement

<u>Name</u>	None
7. <u>Method</u>	refinement
<u>Name</u>	None
<u>Software</u>	<ul style="list-style-type: none">- HADDOCK (version 2.4)- PHENIX (version Not available)- Chiron (version Not available)- MolProbit (version Not available)