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Model building, validation, and visualization

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ABSTRACT

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We use this protocol and it's working

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Model building

- 1 Generate a model by
[1] existing model in PDB
[2] creating a homology model by SWISS-MODEL
[3] creating a ab-initial model by AlphaFold
- 2 Do the flexible model fitting by [ISOLDE]
Roughly fit the secondary structures into the map
- 3 Do model fitting manually in [Coot] or automatically in [Phenix]
Repeat the model fitting until the coordinates fit the map reasonably

Validation

- 4 Validate the quality of the models by using the validation tools in Phenix and the online validation service provided by wwPDB (<https://www.wwpdb.org/validation/validation-reports>)

Make sure the statistics, particularly the Ramachandran plot, Rotamers, R.m.s. deviations and B-factors are reasonable.

Visualization

- 5 Visualize the models and maps by [ChimeraX]
Create figures by [Adobe Illustrator]
Create movies by [iMovie]