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🌐 Model building, validation, and visualization

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Protocol status: Working
We use this protocol and it's working

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Abstract

Model building, validation, and visualization

Troubleshooting

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 secodary 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 resonably

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 resonable.

Visualization

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