## Supplementary Information for

## Refinement of AlphaFold2 Models against Experimental and Hybrid Cryo-EM Density Maps

Maytha Alshammari, Willy Wriggers, Jiangwen Sun and Jing He

Extension of Figure 3: We provide additional Figures S1 and S2, in the style of Figures 1 and 2, for the two cases 23530-7LV9-B and 23208-7L6U-A described in Figure 3.


Figure S1: Models obtained from AlphaFold2 and the refinements using Cryo-EM map 23530-7LV9-B (EMDB-PDB-chain ID) and hybrid density maps at $6 \AA$ and $8 \AA$ resolutions. (A) Superposition of the protein structure (red, chain B of 7LV9) and the model obtained from AlphaFold2 (yellow). (B1) The box-cropped region of cryo-EM map 23530 (EMDB ID, cyan) superimposed with the model (blue) refined using Phenix and the cryo-EM map. (B2) Superposition of the structure (red, chain B of 7LV9) and the refined model (blue) using Phenix and the box-cropped cryo-EM map in B1. Hybrid maps of $6 \AA$ (gray in C1), $8 \AA$ (yellow in D1) resolutions are superimposed with the model refined from the corresponding map. The $6 \AA$-maprefined model (Cyan ribbon in C1, C2) and $8 \AA$-map-refined model (green in D1, D2) are superimposed with the structure (red) in C 2 and D 2 .


Figure S2: Models obtained from AlphaFold2 and the refinements using Cryo-EM map 23208-7L6U-A (EMDB-PDB-chain ID) and hybrid density maps at $6 \AA$ and $8 \AA$ resolutions. (A) Superposition of the protein structure (red, chain A of 7L6U) and the model obtained from AlphaFold2 (yellow). (B1) The box-cropped region of cryo-EM map 23208 (EMDB ID, cyan) superimposed with the model (blue) refined using Phenix and the cryo-EM map. (B2) Superposition of the structure (red, chain A of 7L6U) and the refined model (blue) using Phenix and the box-cropped cryo-EM map in B1. Hybrid maps of $6 \AA$ (gray in C1), $8 \AA$ (yellow in D1) resolutions are superimposed with the model refined from the corresponding map. The $6 \AA \begin{aligned} & \text {-map- }\end{aligned}$ refined model (Cyan ribbon in C1, C2) and 8 $\AA$-map-refined model (green in D1, D2) are superimposed with the structure (red) in C 2 and D 2 .

