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2 **Fig. S6 Structure determination of ALMT1<sub>malate/pH7.5</sub>.**  
3 **a**, Representative cryo-EM micrograph of ALMT1<sub>malate/pH7.5</sub>. **b**, Flowchart of image processing for  
4 ALMT1<sub>malate/pH7.5</sub> particles. **c**, The density map of ALMT1<sub>malate/pH7.5</sub> colored by local resolution in  
5 Å. **d**, The Gold standard Fourier Shell Correlation (FSC) curve of the final 3D reconstruction of  
6 ALMT1<sub>malate/pH7.5</sub>, and the FSC curve for cross-validation between the map and the model of  
7 ALMT1<sub>malate/pH7.5</sub>. **e**, Sample maps at the 13 helices from ALMT1<sub>malate/pH7.5</sub> at the contour level of  
8 4  $\sigma$ . **f**, Structure alignment of ALMT1<sub>malate/pH7.5</sub> and ALMT1<sub>apo/pH7.5</sub>.

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