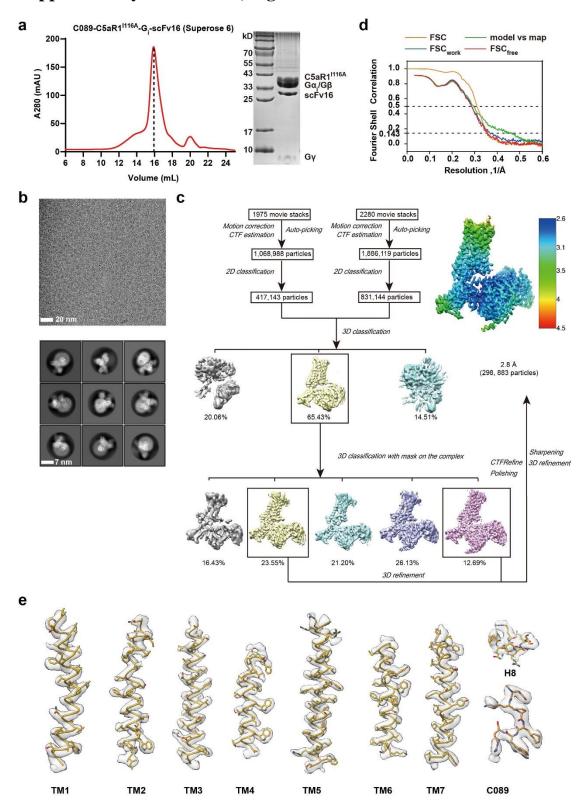
## Supplementary information, Fig. S13



**Fig. S13. Single-particle reconstruction of C089-C5aR1**<sup>II16A</sup>-**G**<sub>i</sub> **complex. a,** Representative elution profile of the purified C089-C5aR1<sup>II16A</sup>-**G**<sub>i</sub> complex (left panel) and SDS-PAGE of the size-exclusion chromatography peak (right panel).

- **b,** Representative cryo-EM micrographs (upper panel) and 2D classification averages (lower panel) of the C089-C5aR1<sup>I116A</sup>-G<sub>i</sub> complex.
- ${f c}$ , Cryo-EM data processing flowcharts and local resolution for the C089-C5aR1  $^{\rm II116A}$ -G $_{\rm i}$  complex.
- **d,** Gold-standard FSC curve (orange), the model-vs-map curve (green),  $FSC_{work}$  (blue) and  $FSC_{free}$  (red) validation curve of  $C089-C5aR1^{I116A}-G_i$  complex. The marginal gap between the  $FSC_{work}$  and  $FSC_{free}$  validation curve indicate no over-fitting of the model.
- **e,** Cryo-EM density maps and models for transmembrane helixes TM1-TM7 and H8 of C5aR1, as well as the ligand C089.