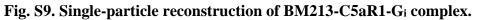


Supplementary information, Fig. S9



a, Representative elution profile of the purified BM213-C5aR1-G_i 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

b, Representative cryo-EM micrographs (upper panel) and 2D classification averages (lower panel) of the BM213-C5aR1- G_i complex.

c, Cryo-EM data processing flowcharts and local resolution for the BM213-C5aR1- G_i complex.

d, Gold-standard FSC curve (orange), the model-vs-map curve (green), FSC_{work} (blue) and FSC_{free} (red) validation curve of C5a^{pep}-C5aR1-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, ECL2 and H8 of C5aR1, as well as the α 5 helix of G α_{i1} .