а

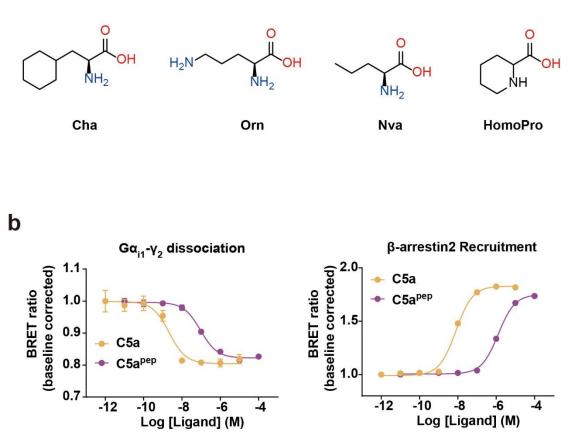


Fig. S1. C5a and C5a<sup>pep</sup> induced G<sub>i</sub> and β-arrestin signaling.

**a**, The chemical structures of non-natural amino acids used in this study. Cha, Cyclohexylalanine; Orn, Ornithine; Nva, 2-Amino-3-methylbutyric acid; HomoPro, Homoproline.

**b**, C5a and C5a<sup>pep</sup> induced  $G_i$  and  $\beta$ -arrestin signaling. The  $G_i$  protein signaling was detected by  $G_i$  protein dissociation assays and the  $\beta$ -arrestin2 recruitment was examined by BRET assay. Data are presented as the mean  $\pm$  SEM of three independent experiments performed in triplicate.