

Description of Additional Supplementary Files

File name: Supplementary Movie 1

Description: Cryo-EM density of ADGRL3/LK3 complex. Video displaying cryo-EM density of the ADGRL3/LK3 complex (low-pass filtered to 6 Å), along with a 3.9 Å reconstruction of HormR/GAIN domains from local refinement. Densities are colored by appropriate domains: HormR – purple, GAIN – green, TA peptide – pink, 7TM – blue. sAB LK3 is colored yellow. Structures of HormR/GAIN/LK3 (this paper) and 7TM region (PDB: 8jmt) are fitted within their respective densities.

File name: Supplementary Movie 2

Description: 3D Variability Display of ADGRL3 HormR/GAIN/7TM. Output of 20 frames from 3D Variability Analysis visualized as a movie using USCF Chimera, demonstrating the movement of HormR/GAIN domains relative to the 7TM/micelle.