

HUMAN GRM7 FULL LENGTH PROTEIN

Cat.#: 11100

Product Name: Human GRM7 Full Length Protein

Size: 10 µg; 50 µg and 100 µg

Synonyms: GLUR7; GPRC1G; MGLU7; MGLUR7; NEDSHBA; PPP1R87

Target: GRM7

UNIPROT ID: Q14831

Description: Human GRM7 Full Length Protein-Synthetic Nanodisc

Background: L-glutamate is the major excitatory neurotransmitter in the central nervous system, and it activates both ionotropic and metabotropic glutamate receptors. Glutamatergic neurotransmission is involved in most aspects of normal brain function and can be perturbed in many neuropathologic conditions. The metabotropic glutamate receptors are a family of G protein-coupled receptors that have been divided into three groups on the basis of sequence homology, putative signal transduction mechanisms, and pharmacologic properties. Group I includes GRM1 and GRM5, and these receptors have been shown to activate phospholipase C. Group II includes GRM2 and GRM3, while Group III includes GRM4, GRM6, GRM7 and GRM8. Group II and III receptors are linked to the inhibition of the cyclic AMP cascade but differ in their agonist selectivities.

Species/Host: HEK293

Molecular Weight: The human full length GRM7 protein has a MW of 102.3 kDa

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

Protein Families: Druggable Genome, GPCR, Transmembrane

Protein Pathways: Neuroactive ligand-receptor interaction

ELISA assay to evaluate GRM7-Nanodisc 0.2µg Human GRM7-Nanodisc per well

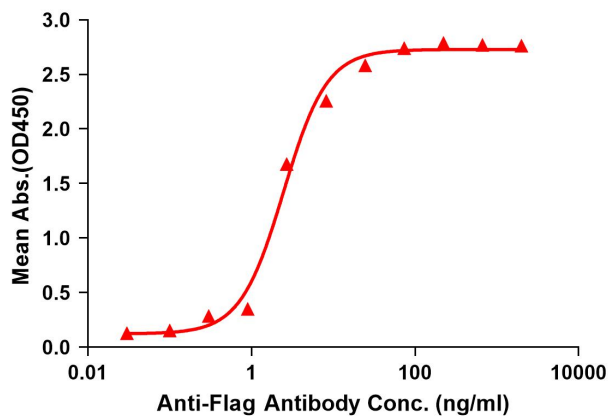


Figure 1. Elisa plates were pre-coated with Flag Tag GRM7-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GRM7-Nanodisc is 2.478ng/ml.

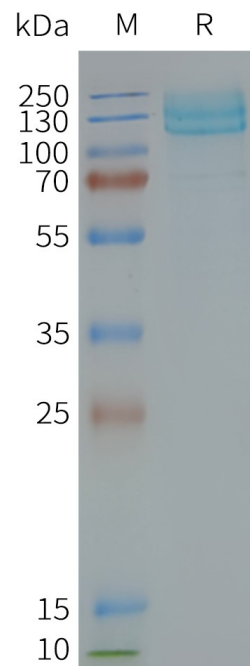


Figure 2. Human GRM7-Nanodisc, Flag Tag on SDS-PAGE