

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	GRM3
Synonyms	GLUR3; GPRC1C; mGlu3; MGLUR3
Description	Human GRM3-Strep full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q14832
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length GRM3-Strep protein has a MW of 98.9 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. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.
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.
Background	L-glutamate is the major excitatory neurotransmitter in the central nervous system and 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 3 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.
Usage	Research use only
Conjugate	Unconjugated



**ELISA assay to evaluate GRM3-Strep-Nanodisc**  
**0.2µg Human GRM3-Strep-Nanodisc per well**

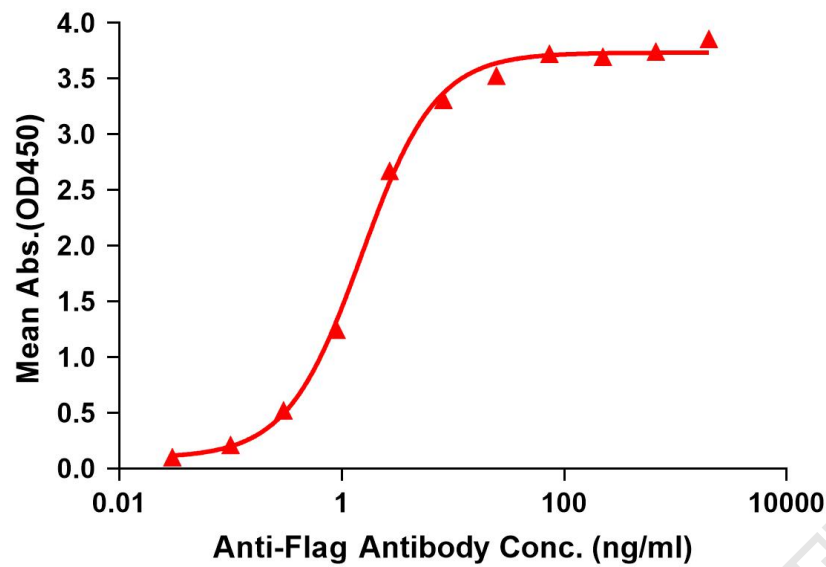


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag GRM3-Strep-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GRM3-Strep-nanodisc is 1.509ng/ml.

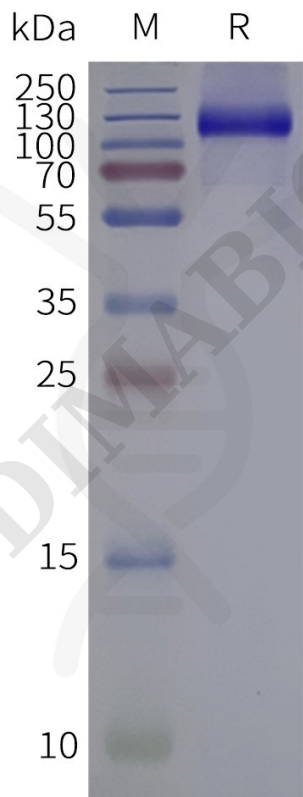


Figure 2. Human GRM3-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

