

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Target	GPR75
Synonyms	GPRchr2; WI31133
Description	Human GPR75-Strep full length protein-synthetic nanodisc
Delivery	6~8weeks
Uniprot ID	O95800
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length GPR75-Strep protein has a MW of 59.4 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	G protein-coupled receptor that is activated by the chemokine CCL5/RANTES. Probably coupled to heterotrimeric Gq proteins, it stimulates inositol trisphosphate production and calcium mobilization upon activation. Together with CCL5/RANTES, may play a role in neuron survival through activation of a downstream signaling pathway involving the PI3, Akt and MAP kinases. CCL5/RANTES may also regulate insulin secretion by pancreatic islet cells through activation of this receptor.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate GPR75-Strep-Nanodisc 0.2 μ g Human GPR75-Strep-Nanodisc per well

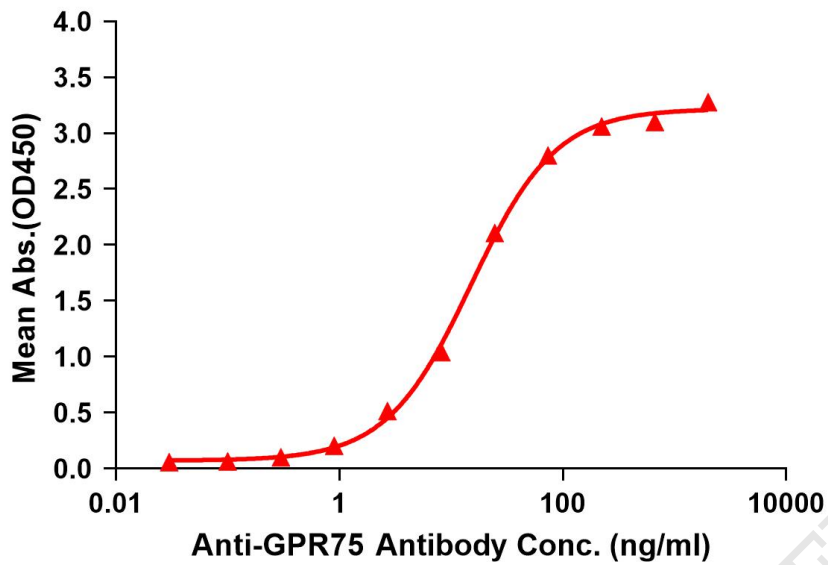


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag GPR75-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-GPR75 monoclonal antibody (DMC100368) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC₅₀ for anti-GPR75 monoclonal antibody binding with GPR75-Strep-Nanodisc is 15.14ng/ml.

kDa M R

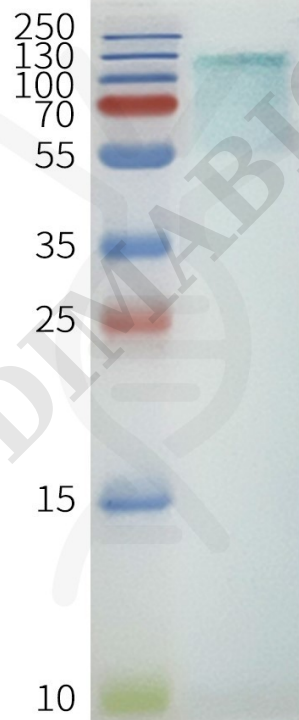


Figure 2. Human GPR75-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE



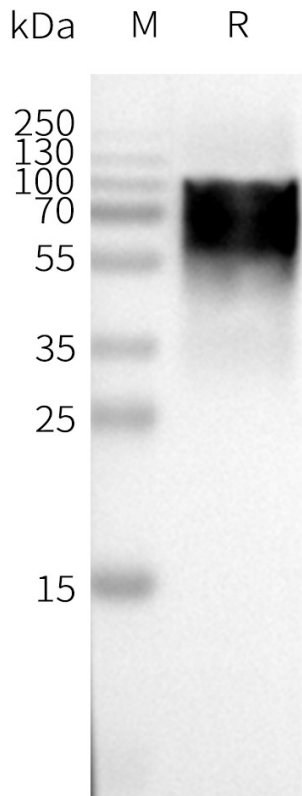


Figure 3. WB analysis of GPR75-Strep-Nanodisc with anti-GPR75 monoclonal antibody (DMC100368), followed by Goat Anti-Human IgG HRP at 1/5000 dilution

SPR assay to evaluate GPR75-Strep-Nanodisc

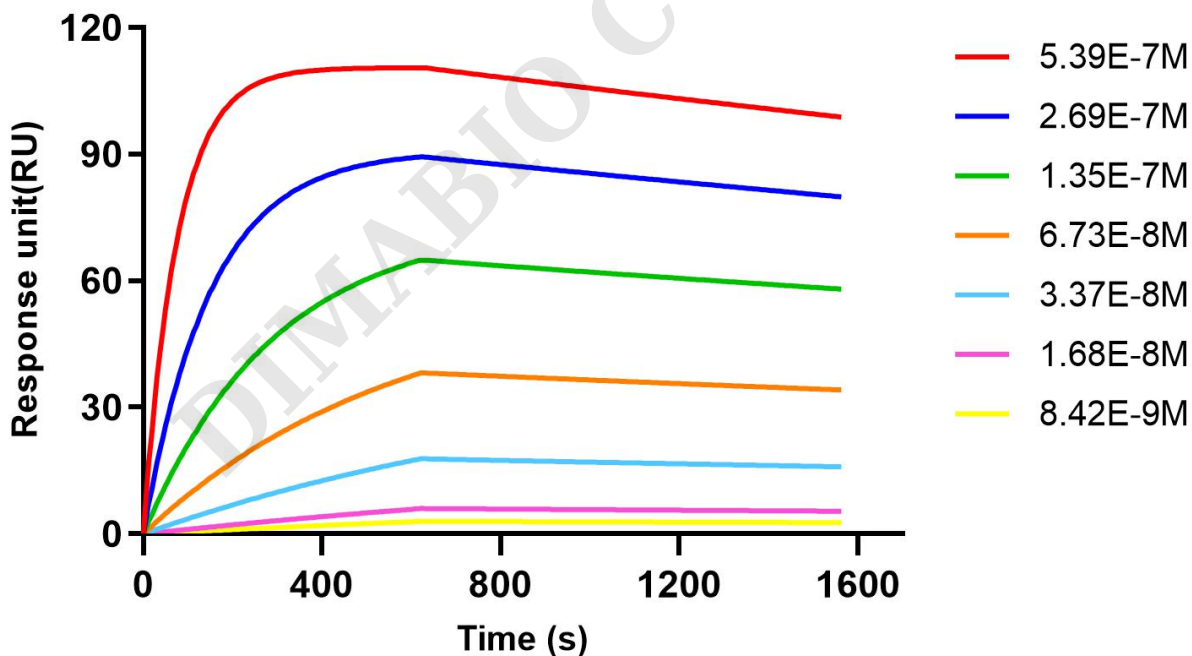


Figure 4. Loaded Human GPR75 monoclonal antibody (DMC100368) on Pro-A Biosensor, can bind human GPR75-Strep full length protein-synthetic nanodisc with an affinity constant of 5.02nM as determined in SPR assay.

