

HUMAN GRPR FULL LENGTH PROTEIN

Cat.#: 11099

Product Name: Human GRPR Full Length Protein

Size: 10 µg; 50 µg and 100 µg

Synonyms: BB2; BB2R; BRS2

Target: GRPR

UNIPROT ID: P30550

Description: Human GRPR Full Length Protein-Synthetic Nanodisc

Background: Gastrin-releasing peptide (GRP) regulates numerous functions of the gastrointestinal and central nervous systems, including release of gastrointestinal hormones, smooth muscle cell contraction, and epithelial cell proliferation and is a potent mitogen for neoplastic tissues. The effects of GRP are mediated through the gastrin-releasing peptide receptor. This receptor is a glycosylated, 7-transmembrane G-protein coupled receptor that activates the phospholipase C signaling pathway. The receptor is aberrantly expressed in numerous cancers such as those of the lung, colon, and prostate. An individual with autism and multiple exostoses was found to have a balanced translocation between chromosome 8 and a chromosome X breakpoint located within the gastrin-releasing peptide receptor gene.

Species/Host: HEK293

Molecular Weight: The human full length GRPR protein has a MW of 43.2 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: Calcium signaling pathway, Neuroactive ligand-receptor interaction

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

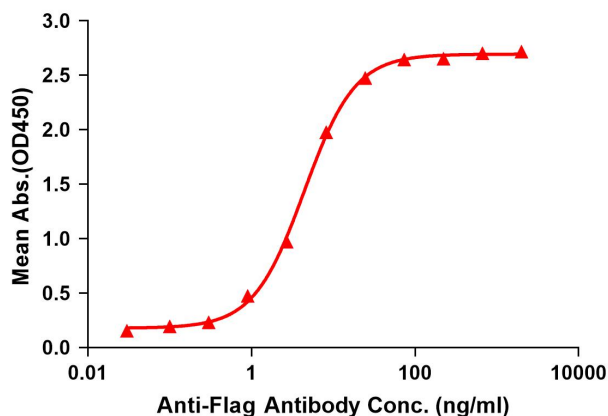


Figure 1. Elisa plates were pre-coated with Flag Tag GRPR-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GRPR-Nanodisc is 4.434ng/ml.

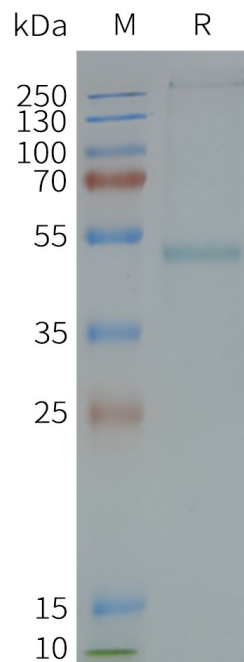


Figure 2. Human GRPR-Nanodisc, Flag Tag on SDS-PAGE