

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag Tag
<b>Target</b>	GRPR
<b>Synonyms</b>	BB2; BB2R; BRS2
<b>Description</b>	Human GRPR full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P30550
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Druggable Genome, GPCR, Transmembrane
<b>Protein Pathways</b>	Calcium signaling pathway, Neuroactive ligand-receptor interaction
<b>Molecular Weight</b>	The human full length GRPR protein has a MW of 43.2 kDa
<b>Formulation &amp; Reconstitution</b>	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.
<b>Storage &amp; Shipping</b>	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.
<b>Background</b>	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.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate GRPR-Nanodisc 0.2 $\mu$ g Human GRPR-Nanodisc per well

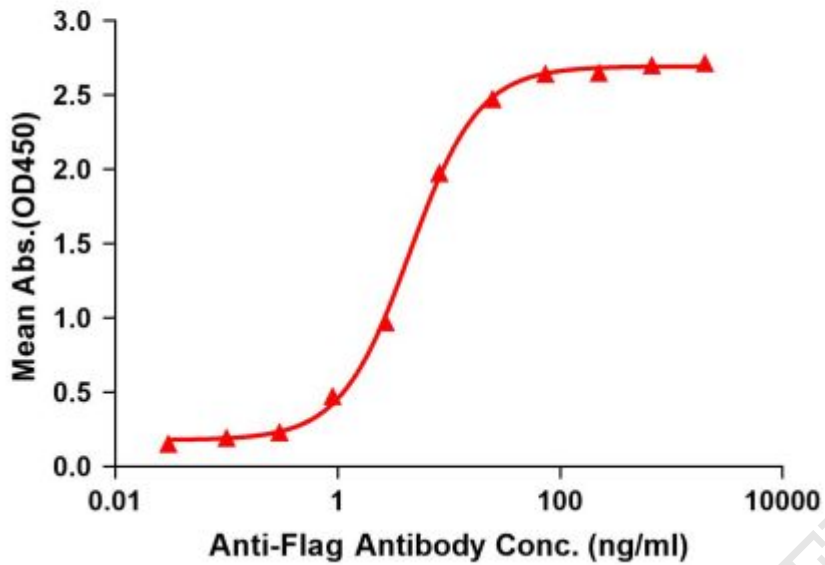


Figure1. Elisa plates were pre-coated with Flag Tag GRPR-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GRPR-Nanodisc is 4.434ng/ml.



Figure2. Human GRPR-Nanodisc, Flag Tag on SDS-PAGE

