PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	GCGR
Synonyms	GGR; GL-R; MVAH
Description	Human GCGR full length protein-synthetic nanodisc
Uniprot ID	P47871
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction
Molecular Weight	The human full length GCGR protein has a MW of 54.0 kDa
Delivery	In Stock
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
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 for glucagon that plays a central role in the regulation of blood glucose levels and glucose homeostasis. Regulates the rate of hepatic glucose production by promoting glycogen hydrolysis and gluconeogenesis. Plays an important role in mediating the responses to fasting. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Promotes activation of adenylate cyclase. Besides, plays a role in signaling via a phosphatidylinositol-calcium second messenger system.
Usage	Research use only
Conjugate	Unconjugated

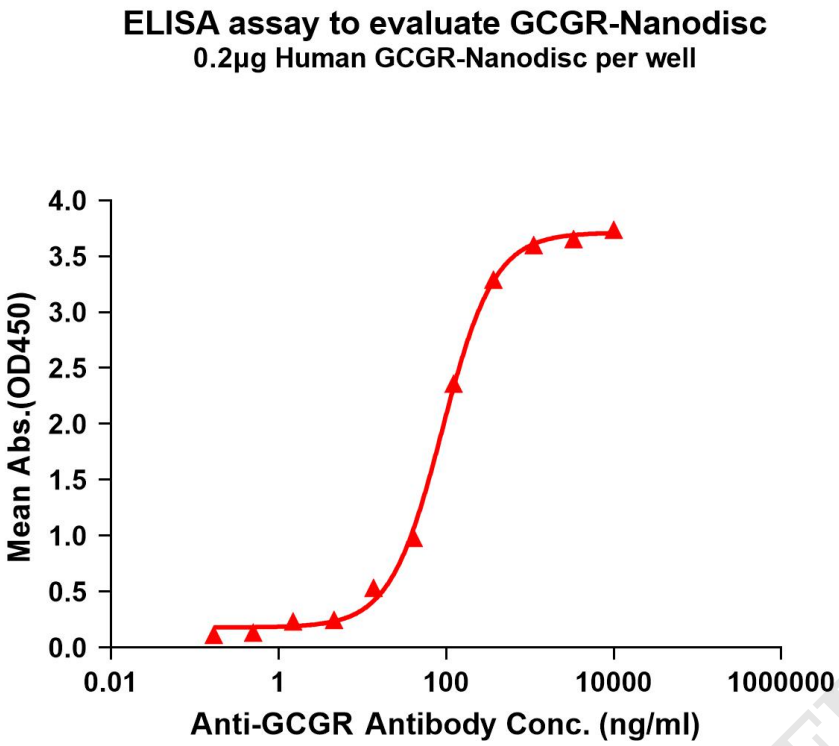

Figure1. Elisa plates were pre-coated with Flag Tag GCGR-Nanodisc (0.2μg/per well). Serial diluted anti-GCGR monoclonal antibody (BME100142) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-GCGR monoclonal antibody binding with GCGR-Nanodisc is 90.10ng/ml.

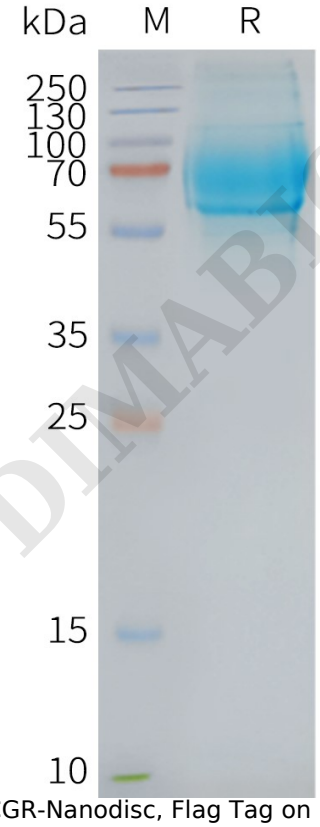

Figure2. Human GCGR-Nanodisc, Flag Tag on SDS-PAGE