

PRODUCT INFORMATION

Tag	C-Flag Tag
Target	GPR20
Synonyms	G-protein coupled receptor 20
Description	Human GPR20 full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q99678
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length GPR20 protein has a MW of 38.7 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	GPR20 is one of the orphan GPCRs that has been identified from human genomic DNA by PCR amplification using primers based on the sequences of the opioid/somatostatin-related receptors, GPR7 and GPR8. The expression of human GPR20 has been detected in several brain regions, including the caudate nuclei, putamen, and the thalamus. A recently disclosed patent demonstrated that GPR20-deficient mice exhibited a hyperactivity disorder characterized by an increase in total distance traveled in an open field test, implying a substantial role of GPR20 in neurophysiological function. However, the physiological mechanisms of GPR20 action, including the identification of natural ligands for GPR20, have not yet been elucidated.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate GPR20-Nanodisc 0.2 μ g Human GPR20-Nanodisc per well

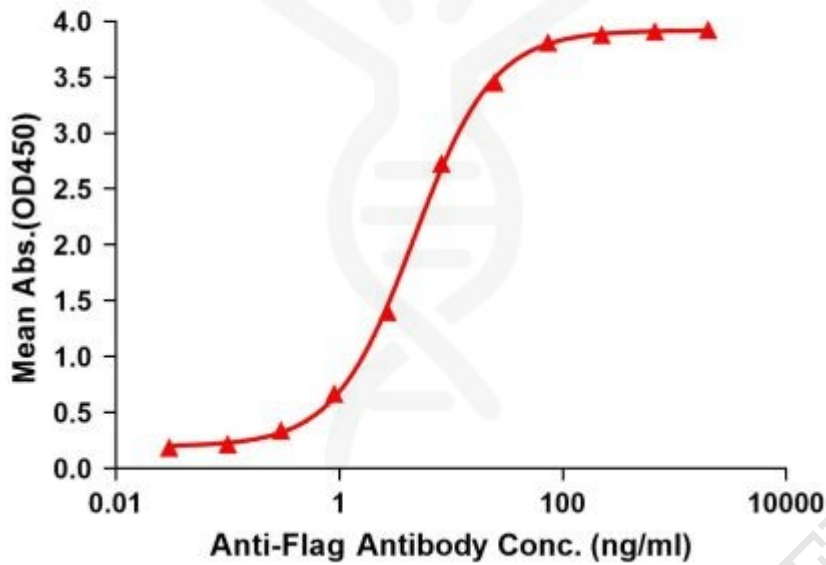


Figure1. Elisa plates were pre-coated with Flag Tag GPR20-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with GPR20-Nanodisc is 4.663ng/ml.



Figure2. Human GPR20-Nanodisc, Flag Tag on SDS-PAGE

