

PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	GPR75
Synonyms	GPRchr2; WI31133
Description	Human BRIL-GPR75 full length protein-synthetic nanodisc
Uniprot ID	O95800
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	N/A
Molecular Weight	The human full length BRIL-GPR75 protein has a MW of 70.3 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	GPR75 is a member of the G protein-coupled receptor family and is a novel target for the clinical treatment of obesity. Human GPR75 haploinsufficiency exhibits a striking phenotype of low body fat, and GPR75 knockout mice are hypophagic and thin, improving glucose tolerance and insulin sensitivity. The BRIL sequence was added to the N-terminal of GPR75 to enhance receptor stability. BRIL is thermostabilized apocytochrome b562 with mutations M7W, H102I, R106L, PDB ID 1M6T.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate BRIL-GPR75-Nanodisc 0.2µg Human BRIL-GPR75-Nanodisc per well

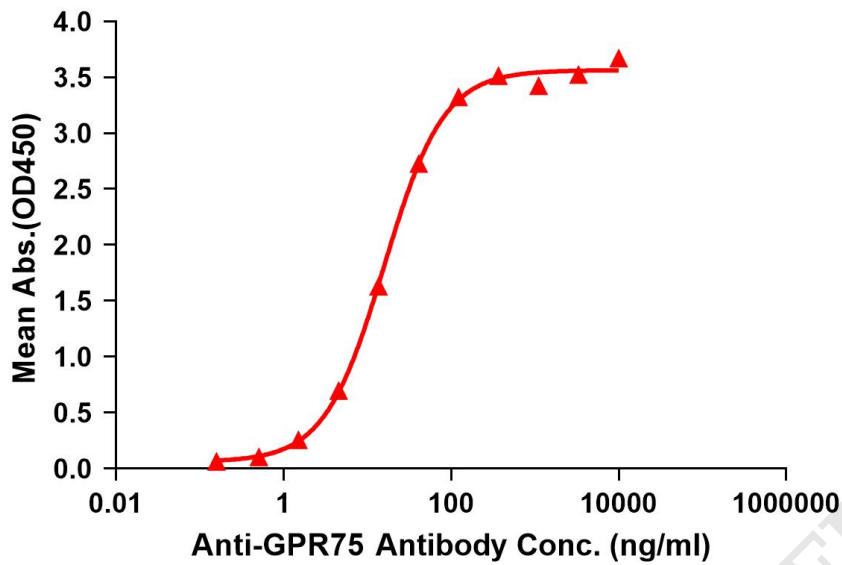


Figure 1. Elisa plates were pre-coated with C-Flag Tag BRIL-GPR75-Nanodisc (0.2µg/per well). Serial diluted anti-GPR75 monoclonal antibody (DMC100368) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-GPR75 monoclonal antibody binding with BRIL-GPR75-Nanodisc is 15.94ng/ml.

kDa M R



Figure 2. WB analysis of BRIL-GPR75-Nanodisc with anti-GPR75 monoclonal antibody (DMC100368), followed by Goat Anti-Human IgG HRP at 1/5000 dilution

