DIMA BIOTECH

PRODUCT INFORMATION

Tag	C-Flag Tag
Target	GPR75
Synonyms	GPRchr2; WI31133
Description	Human BRIL-GPR75 full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	O95800
Expression Host	HEK293
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
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 of reconstitution.
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

Human BRIL-GPR75 full length protein-synthetic nanodisc

Cat. No. FLP100031C

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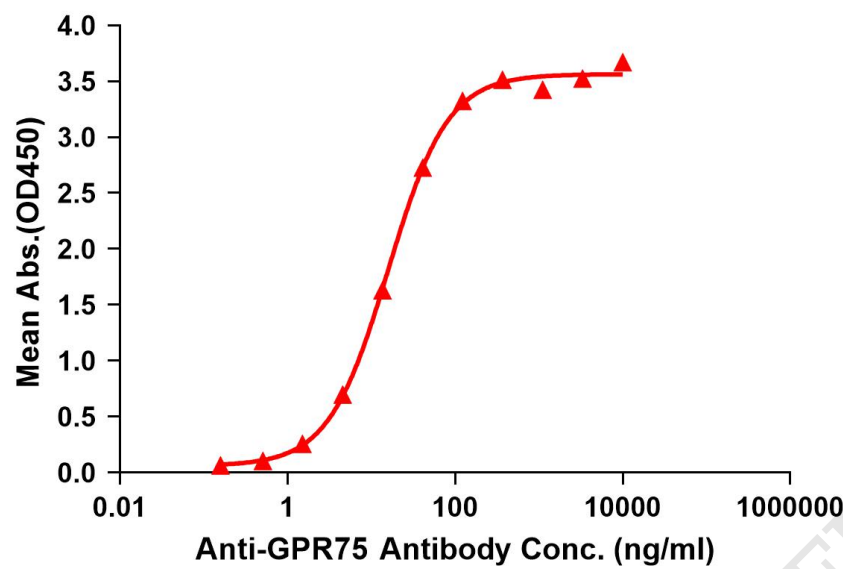**0.2µg Human BRIL-GPR75-Nanodisc per well**

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.
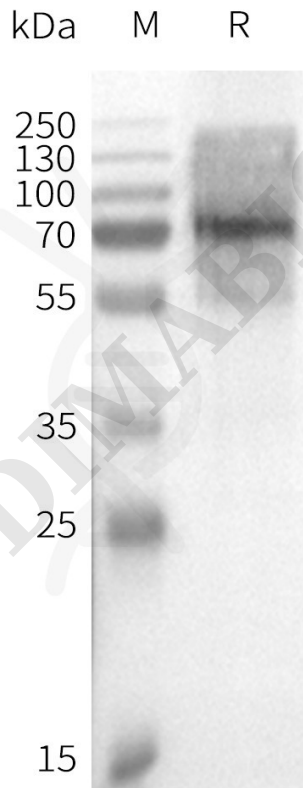

Figure 2. WB analysis of BRIL-GPR75-Nanodisc with anti-GPR75 monoclonal antibody (DMC100368), followed by Goat Anti-Human IgG HRP at 1/5000 dilution