

beta2AR-GPR75-BRIL Protein | GPR75 protein

Human beta2AR-GPR75-BRIL full length protein-synthetic nanodisc

CATALOG #
AAA129473

HOST
HEK293

PRODUCT SYNONYMS

beta2AR-GPR75-BRIL; Human beta2AR-GPR75-BRIL full length protein-synthetic nanodisc; GPRchr2; WI31133; GPR75 protein

PRODUCT SPECIFICATIONS

Host	HEK293
Form/Format	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. Lyophilized from PBS. Normally 5%-
Tag	C-DYKDDDDK
Preparation and Storage	Store at -20 degree C to -80 degree C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80 degree C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

IMAGES

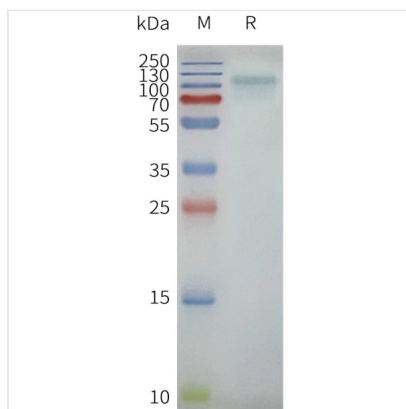

SDS-PAGE

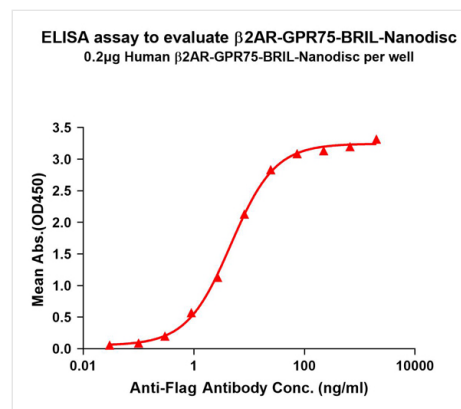
Figure 2. Human β 2AR-GPR75-BRIL-Nanodisc, DYKDDDDK Tag on SDS-PAGE

ELISA

Figure 1. Elisa plates were pre-coated with DYKDDDDK Tag β 2AR-GPR75-BRIL-Nanodisc (0.2ug/per well). Serial diluted anti-DYKDDDDK monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-DYKDDDDK monoclonal antibody binding with β 2AR-GPR75-BRIL-Nanodisc is 4.678ng/ml.

ADDITIONAL INFORMATION

Related Product Information for GPR75 protein

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. To enhance the expression level of GPR75, twenty-four amino acids from the beta2AR receptor (MGQPGNGSAFLAPNRSHAPDHDV) were used to replace the original residues1-31 in a modified version of the GPR75 receptor. Furthermore, the BRIL sequence was used to replace the original ICL3 loop (237-306) to enhance receptor stability. BRIL is thermostabilized apocytochrome b562 with mutations M7W, H102I, R106L, PDB ID 1M6T.

NCBI AND UNIPROT INFORMATION

NCBI GI #	5803025
NCBI GeneID	10936
NCBI Accession #	NP_006785.1
NCBI GenBank Nucleotide #	NM_006794.3
UniProt Accession #	O95800; Q6NWR2; B2RC02
Molecular Weight	59,359 Da
NCBI Official Full Name	probable G-protein coupled receptor 75
NCBI Official Synonym Full Names	G protein-coupled receptor 75
NCBI Official Symbol	GPR75
NCBI Official Synonym Symbols	GPRchr2; WI31133
NCBI Protein Information	probable G-protein coupled receptor 75
UniProt Protein Name	Probable G-protein coupled receptor 75
UniProt Gene Name	GPR75
UniProt Entry Name	GPR75_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-protein/beta2ar-gpr75-bril/129473>