

Datasheet for ABIN7596496 **GPR75 Protein (DYKDDDDK Tag)**



Overview

Quantity:	10 μg
Target:	GPR75
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc
Purification tag / Conjugate:	This GPR75 protein is labelled with DYKDDDDK Tag.
Application:	ELISA, Surface Plasmon Resonance (SPR), Phage Display (PhD), Immunogen (Imm), Cryogenic electron microscopy (cryo-EM)

Product Details

Purpose:	Human β2AR-GPR75-BRIL full length protein-synthetic nanodisc
Purpose:	Human β2AR-GPR/5-BRIL full length protein-synthetic nanodisc

Target Details

Target:	GPR75
Alternative Name:	GPR75 (GPR75 Products)
Background:	GPRchr2, WI31133
	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 β2AR receptor (MGQPGNGSAFLLAPNRSHAPDHDV) were used to replace the original
	residues1-31 in a modified version of the GPR75 receptor. Furthermore, the BRIL sequence was

Target Details

	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.
Molecular Weight:	The human full length β2AR-GPR75-BRIL protein has a MW of 59.4 kDa
UniProt:	095800

Comment:	Advantages:
	Highly purified membrane proteins
	 High solubility in aqueous solutions
	High stability
	 Proteins are in a native membrane environment and remain biologically active
	 No detergent and can be used for cell-based assays
	No MSP backbone proteins
	 Mammalian cell expression system ensures post- translational modifications

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Buffer:	Solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	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.
Expiry Date:	12 months