

Datasheet for ABIN7491667

GPR75 Protein**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	GPR75
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human GPR75 full length protein-synthetic nanodisc
Characteristics:	Unlike other membrane scaffold protein (MSP) Nanodisc on the market, our synthetic Nanodisc can be prepared directly from the cells. The polymers used during this process have a dual function. It dissolves the cell membranes, like the detergent, and uses cellular phospholipids to form Nanodisc around the membrane proteins. The target protein embedded Nanodiscs can then be purified.

Target Details

Target:	GPR75
Alternative Name:	GPR75 (GPR75 Products)
Background:	G protein-coupled receptor that is activated by the chemokine CCL5/RANTES. Probably coupled to heterotrimeric Gq proteins, it stimulates inositol trisphosphate production and calcium mobilization upon activation. Together with CCL5/RANTES, may play a role in neuron survival through activation of a downstream signaling pathway involving the PI3, Akt and MAP kinases. CCL5/RANTES may also regulate insulin secretion by pancreatic islet cells through activation of

Target Details

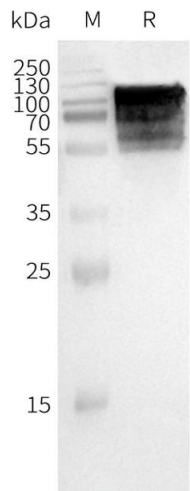
	this receptor.
Molecular Weight:	The human full length GPR75 protein has a MW of 59.4 kDa
UniProt:	O95800

Application Details

Comment:	<p>Advantages of Synthetic Nanodiscs:</p> <ul style="list-style-type: none">• 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 <p>Limitations of Synthetic Nanodiscs:</p> <ul style="list-style-type: none">• Intolerant to acids and high concentrations of divalent metal ions
Restrictions:	For Research Use only

Handling

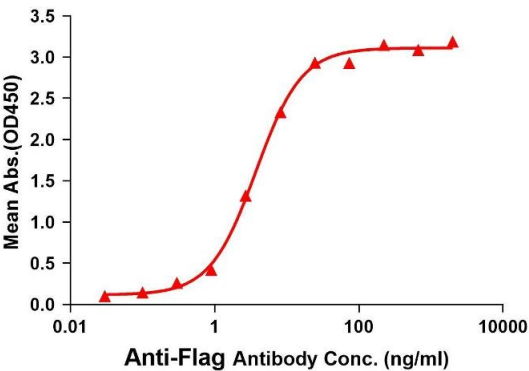
Format:	Lyophilized
Buffer:	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5 % - 8 % trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, 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



Western Blotting

Image 1. WB analysis of Human -Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution

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



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag - Nanodisc (0.2 µg/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 -Nanodisc is 3.747 ng/mL.