Datasheet for ABIN7491651

GIPR Protein

2 Images

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Overview

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

Product Details

Purpose:	Human GIPR 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:	GIPR
Alternative Name:	GIPR (GIPR Products)
Background:	A G-protein coupled receptor for gastric inhibitory polypeptide (GIP), which was originally identified as an activity in gut extracts that inhibited gastric acid secretion and gastrin release, but subsequently was demonstrated to stimulate insulin release in the presence of elevated glucose. Mice lacking this gene exhibit higher blood glucose levels with impaired initial insulin response after oral glucose load. Defect in this gene thus may contribute to the pathogenesis of

Target Details

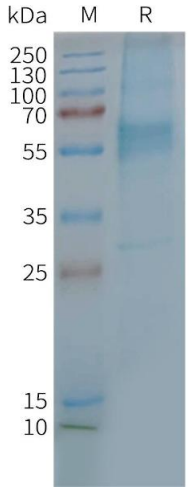
	diabetes.
Molecular Weight:	The human full length GIPR protein has a MW of 53.2 kDa
UniProt:	P48546
Pathways:	Positive Regulation of Peptide Hormone Secretion, cAMP Metabolic Process, Regulation of G-Protein Coupled Receptor Protein Signaling

Application Details

Comment:	Advantages of Synthetic Nanodiscs: • 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 Limitations of Synthetic Nanodiscs: • Intolerant to acids and high concentrations of divalent metal ions
Restrictions:	For Research Use only

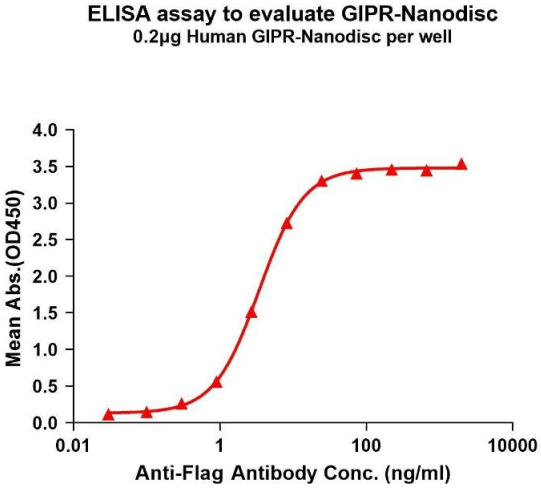
Handling

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



SDS-PAGE

Image 1. Human GIPR-Nanodisc, Flag Tag on SDS-PAGE



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag GIPR-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 GIPR-Nanodisc is 3.437 ng/mL.