Datasheet for ABIN7491721

PTGER4 Protein

2 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	PTGER4
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human PTGER4 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:	PTGER4
Alternative Name:	PTGER4 (PTGER4 Products)
Background:	The protein is a member of the G-protein coupled receptor family. This protein is one of four receptors identified for prostaglandin E2 (PGE2). This receptor can activate T-cell factor signaling. It has been shown to mediate PGE2 induced expression of early growth response 1 (EGR1), regulate the level and stability of cyclooxygenase-2 mRNA, and lead to the phosphorylation of glycogen synthase kinase-3. Knockout studies in mice suggest that this

Target Details

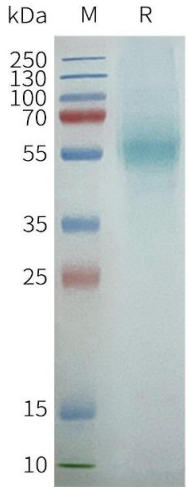
	receptor may be involved in the neonatal adaptation of circulatory system, osteoporosis, as well as initiation of skin immune responses.
Molecular Weight:	The human full length PTGER4 protein has a MW of 53.1 kDa
UniProt:	P35408

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

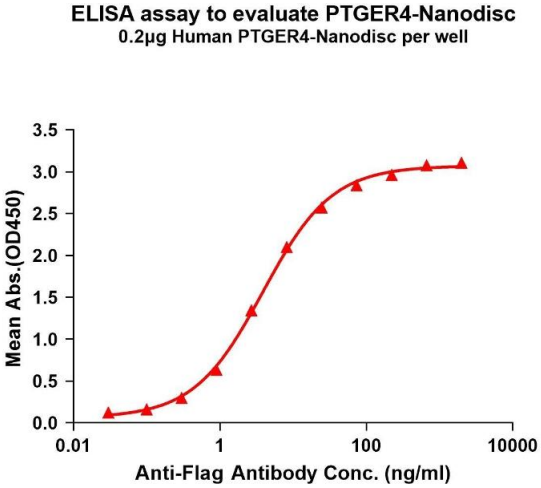
Handling

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 PT-Nanodisc, Flag Tag on SDS-PAGE



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag PT-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 PT-Nanodisc is 3.882 ng/mL.