Datasheet for ABIN7491673

GPRC5D Protein

2 Images

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Overview

Quantity:	100 µg
Target:	GPRC5D
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human GPRC5D 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:	GPRC5D
Alternative Name:	GPRC5D (GPRC5D Products)
Background:	The protein encoded by this gene is a member of the G protein-coupled receptor family. Recent studies demonstrate that GPRC5D is expressed on malignant bone marrow plasma cells, whereas normal tissue expression is limited to the hair follicle. It may represent a potential target for effector-cell-mediated therapy to treat plasma-cell disorders like MM.
Molecular Weight:	The human full length GPRC5D Protein has a MW of 38.6 kDa

Target Details

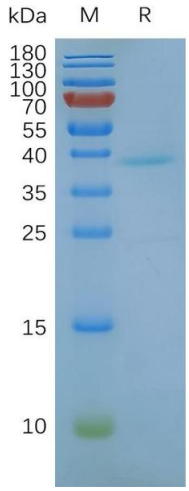
UniProt:	Q9NZD1

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

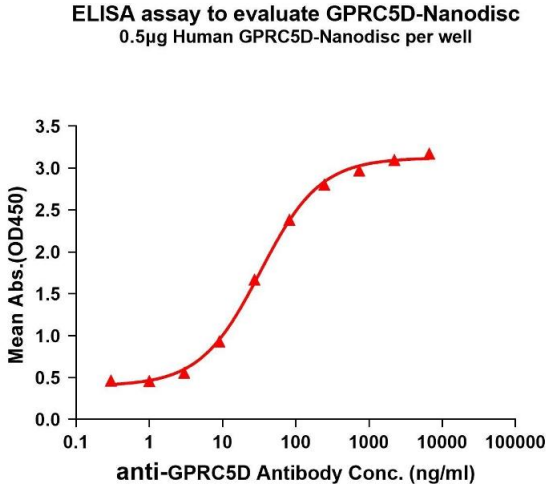
Handling

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 GD-Nanodisc, Flag Tag on SDS-PAGE



ELISA

Image 2. Elisa plates were added with Flag Tag GD-Nanodisc (0.5 μg/per well) on an anti-Flag monoclonal antibody pre-coated (0.5 μg/per well) plate. Serial diluted anti-GD monoclonal antibody (ABIN7092891, ABIN7272748 and ABIN7289737) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-GD monoclonal antibody binding with GD-Nanodisc is 32.86 ng/mL.