Datasheet for ABIN7491637

F2RL1 Protein

2 Images

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Overview

Quantity:	100 µg
Target:	F2RL1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human F2RL1 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:	F2RL1
Alternative Name:	F2RL1 (F2RL1 Products)
Background:	A member of the G-protein coupled receptor 1 family of proteins. The encoded cell surface receptor is activated through proteolytic cleavage of its extracellular amino terminus, resulting in a new amino terminus that acts as a tethered ligand that binds to an extracellular loop domain. Activation of the receptor has been shown to stimulate vascular smooth muscle relaxation, dilate blood vessels, increase blood flow, and lower blood pressure. This protein is

Target Details

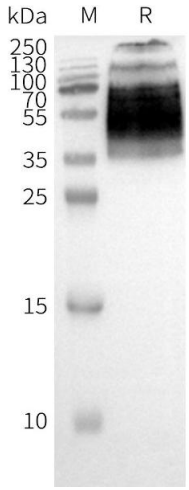
	also important in the inflammatory response, as well as innate and adaptive immunity.
Molecular Weight:	The human full length F2RL1 protein has a MW of 44.1 kDa
UniProt:	P55085
Pathways:	Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, SARS-CoV-2 Protein Interactome

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

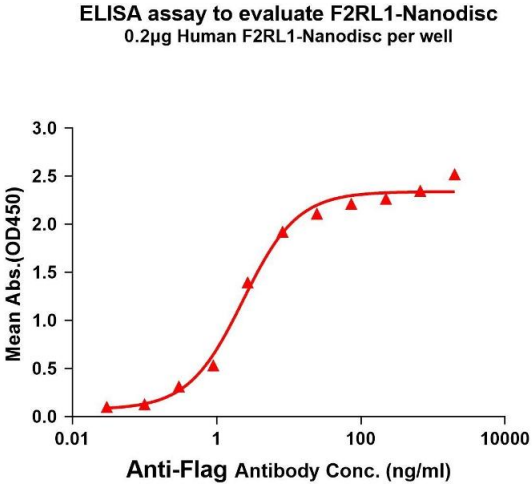
Handling

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



Western Blotting

Image 1. WB analysis of Human F2RL1-Nanodisc with anti-Flag monoclonal antibody at 1/5000 dilution, followed by Goat Anti-Rabbit IgG HRP at 1/5000 dilution



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag F2RL1-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 F2RL1-Nanodisc is 2.32 ng/mL.