Datasheet for ABIN7491629

CXCR6 Protein

2 Images

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Overview

Quantity:	100 µg
Target:	CXCR6
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human CXCR6 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:	CXCR6
Alternative Name:	CXCR6 (CXCR6 Products)
Background:	A G protein-coupled receptor with seven transmembrane domains that belongs to the CXC chemokine receptor family. This family also includes CXCR1, CXCR2, CXCR3, CXCR4, CXCR5, and CXCR7. This gene, which maps to the chemokine receptor gene cluster, is expressed in several T lymphocyte subsets and bone marrow stromal cells. The encoded protein and its exclusive ligand, chemokine ligand 16 (CCL16), are part of a signalling pathway that regulates T

Target Details

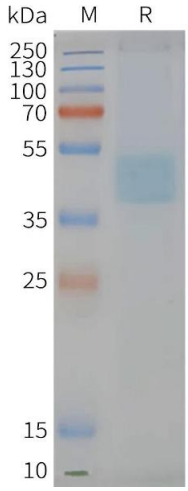
	lymphocyte migration to various peripheral tissues (the liver, spleen red pulp, intestine, lungs, and skin) and promotes cell-cell interaction with dendritic cells and fibroblastic reticular cells. CXCR6/CCL16 also controls the localization of resident memory T lymphocytes to different compartments of the lung and maintains airway resident memory T lymphocytes, which are an important first line of defense against respiratory pathogens. The encoded protein serves as an entry coreceptor used by HIV-1 and SIV to enter target cells, in conjunction with CD4.
Molecular Weight:	The human full length CXCR6 protein has a MW of 39.3 kDa
UniProt:	O00574

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

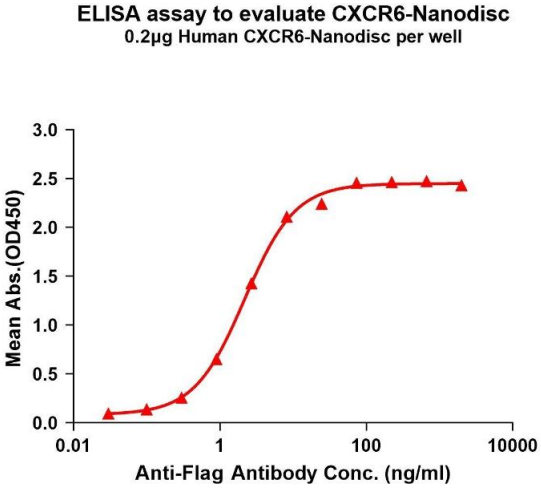
Handling

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 C-Nanodisc, Flag Tag on SDS-PAGE



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag C-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 C-Nanodisc is 2.190 ng/mL.