

Datasheet for ABIN7491572

CCR9 Protein

2 Images

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Overview

Quantity:	100 µg
Target:	CCR9
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human CCR9 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:	CCR9
Alternative Name:	CCR9 (CCR9 Products)
Background:	The protein is a G protein-coupled receptor with seven transmembrane domains that belongs to the beta chemokine receptor family. Chemokines and their receptors are key regulators of thymocyte migration and maturation in normal and inflammation conditions. This gene is differentially expressed in T lymphocytes of the small intestine and colon, and its interaction with chemokine 25 contributes to intestinal intra-epithelial lymphocyte homing to the small

Target Details

intestine. This suggests a role for this gene in directing immune responses to different segments of the gastrointestinal tract. This gene and its exclusive ligand, chemokine 25, are overexpressed in a variety of malignant tumors and are closely associated with tumor proliferation, apoptosis, invasion, migration and drug resistance. This gene maps to the chemokine receptor gene cluster.

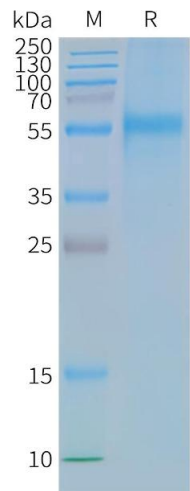
Molecular Weight:	The human full length CCR9 protein has a MW of 42.0 kDa
UniProt:	P51686

Application Details

Comment:	<p>Advantages of Synthetic Nanodiscs:</p> <ul style="list-style-type: none">• 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 <p>Limitations of Synthetic Nanodiscs:</p> <ul style="list-style-type: none">• Intolerant to acids and high concentrations of divalent metal ions
Restrictions:	For Research Use only

Handling

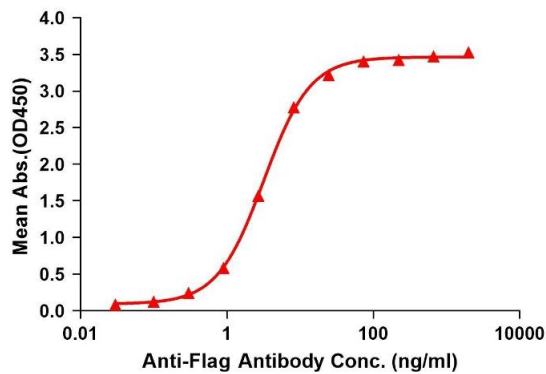
Format:	Lyophilized
Buffer:	Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5 % - 8 % trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, 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 -Nanodisc, Flag Tag on SDS-PAGE

ELISA assay to evaluate CCR9-Nanodisc
0.2µg Human CCR9-Nanodisc per well



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag - 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 -Nanodisc is 3.205 ng/mL.