Datasheet for ABIN7491570

CCR8 Protein

3 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	CCR8
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human CCR8 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:	CCR8
Alternative Name:	CCR8 (CCR8 Products)
Background:	A member of the beta chemokine receptor family,which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. Chemokines and their receptors are important for the migration of various cell types into the inflammatory sites. This receptor protein preferentially expresses in the thymus. I-309,thymus activation-regulated cytokine (TARC) and macrophage inflammatory protein-1 beta (MIP-1 beta) have been identified as

Target Details

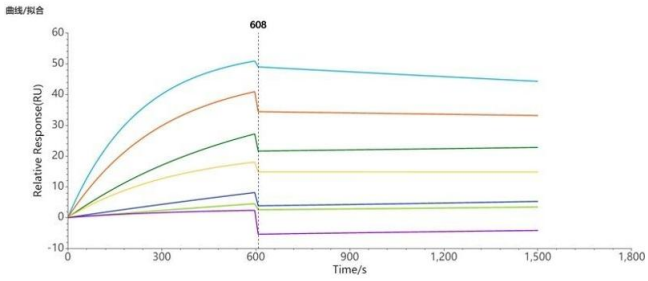
	ligands of this receptor. Studies of this receptor and its ligands suggested its role in regulation of monocyte chemotaxis and thymic cell apoptosis. More specifically,this receptor may contribute to the proper positioning of activated T cells within the antigenic challenge sites and specialized areas of lymphoid tissues. This gene is located at the chemokine receptor gene cluster region.
Molecular Weight:	The human full length CCR8 Protein has a MW of 40.7 kDa
UniProt:	P51685

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

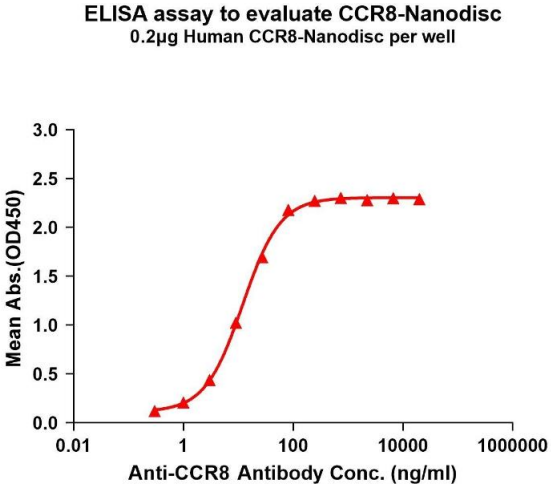
Handling

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



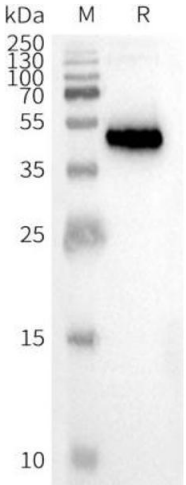
Surface Plasmon Resonance

Image 1. Human -Nanodisc can bind Anti- antibody (ABIN7478011 and ABIN7490961) with an affinity constant of 1.408 nM as determined in a SPR assay.



ELISA

Image 2. Elisa plates were pre-coated with Flag Tag -Nanodisc (0.2 μg/per well). Serial diluted anti- monoclonal antibody (ABIN7478011 and ABIN7490961) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti- monoclonal antibody binding with -Nanodisc is 12.07 ng/mL.



Western Blotting

Image 3. WB analysis of Human -Nanodisc with anti- monoclonal antibody (ABIN7478011 and ABIN7490961) at 1 μg/mL, followed by Goat Anti-Human IgG HRP at 1/5000 dilution