Datasheet for ABIN7491555

CCR1 Protein

2 Images

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Overview

Quantity:	100 µg
Target:	CCR1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic Nanodisc

Product Details

Purpose:	Human CCR1 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:	CCR1
Alternative Name:	CCR1 (CCR1 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. The ligands of this receptor include macrophage inflammatory protein 1 alpha (MIP-1 alpha), regulated on activation normal T expressed and secreted protein (RANTES), monocyte chemoattractant protein 3 (MCP-3), and myeloid progenitor inhibitory factor-1 (MPIF-1). Chemokines and their receptors mediated

Target Details

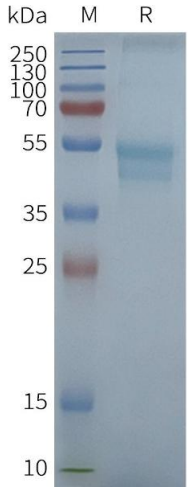
	signal transduction are critical for the recruitment of effector immune cells to the site of inflammation. Knockout studies of the mouse homolog suggested the roles of this gene in host protection from inflammatory response, and susceptibility to virus and parasite. This gene and other chemokine receptor genes, including CCR2, CCRL2, CCR3, CCR5 and CCXCR1, are found to form a gene cluster on chromosome 3p.
Molecular Weight:	The human full length CCR1 protein has a MW of 41.2 kDa
UniProt:	P32246

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

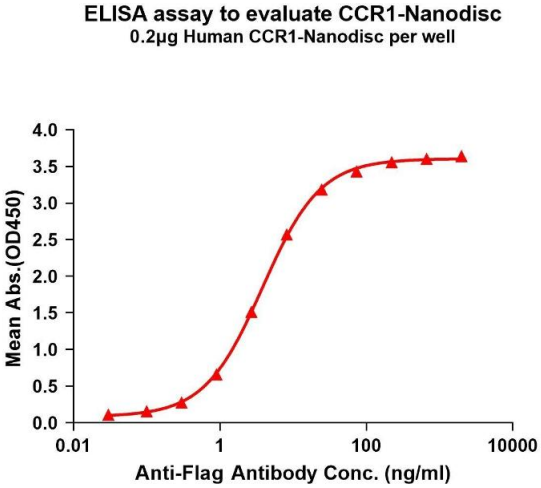
Handling

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 -Nanodisc, Flag Tag on SDS-PAGE



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 3.825 ng/mL.