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Datasheet for ABIN7491564 CCR5 Protein

Overview

Quantity:	100 µg
Target:	CCR5
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Synthetic

Product Details

Purpose:	Human CCR5 full length protein-synthetic nanodisc
Characteristics:	Full Length Transmembrane Proteins (synthetic Nanodisc)

Target Details

Target:	CCR5
Alternative Name:	CCR5 (CCR5 Products)
Background:	<p>CC-CKR-5, CCCKR5, CCR-5, CD195, CKR-5, CKR5, CMKBR5, IDDM22</p> <p>Description: This gene encodes a member of the beta chemokine receptor family, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. This protein is expressed by T cells and macrophages, and is known to be an important co-receptor for macrophage-tropic virus, including HIV, to enter host cells. Defective alleles of this gene have been associated with the HIV infection resistance. The ligands of this receptor include monocyte chemoattractant protein 2 (MCP-2), macrophage inflammatory protein 1 alpha (MIP-1 alpha), macrophage inflammatory protein 1 beta (MIP-1 beta) and regulated on activation normal T expressed and secreted protein (RANTES). Expression of this gene was also detected</p>

Target Details

in a promyeloblastic cell line, suggesting that this protein may play a role in granulocyte lineage proliferation and differentiation. This gene is located at the chemokine receptor gene cluster region. An allelic polymorphism in this gene results in both functional and non-functional alleles, the reference genome represents the functional allele. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2015]

Molecular Weight: The human full length CCR5 protein has a MW of 40.3 kDa

UniProt: [P51681](#)

Pathways: [Cellular Response to Molecule of Bacterial Origin](#), [cAMP Metabolic Process](#), [Regulation of Cell Size](#)

Application Details

Application Notes:

- Applications for VLPs:
- ELISA
- SPR affinity analysis
- Phage display screening
- Immunization
- Cell based assays
- CAR-T cell screening
- Protein crystal structure analysis

Comment: 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.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: Supplied in nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0)

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