Nanodisc Human CCR5-Strep Protein



HDFP836

Product Information

Product SKU: HDFP836 Expression Host: HEK293 Size: 10μg

Target: CCR5 **Tag**: C-Flag&Strep Tag

Additional Information

Conjugate: Unconjugated Uniprot ID: P51681

Molecular Weight: The human full length CCR5-Strep protein has a MW of 40.5 kDa

Protein Information

Background: 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 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.

Synonyms: CC-CKR-5; CCCKR5; CCR-5; CD195; CKR-5; CKR5; CMKBR5; IDDM22

Protein Description: Human CCR5-Strep full length protein-synthetic nanodisc

Formulation: 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. Please

see Certificate of Analysis for specific instructions. Do not use solvents with a pH

below 6.5 or those containing high concentrations of divalent metal ions (greater

than 5 mM) in subsequent experiments.

Protein Pathways: Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Endocytosis.

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, GPCR, Transmembrane.

Usage: Research use only

Storage & Shipping: 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.