

HUMAN CCR5 PROTEIN, HFC TAG

Cat.#: 11674

Product Name: Human CCR5 Protein

Size: 10 µg, 50 µg and 100 µg

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

Target: CCR5

UNIPROT ID: P51681

Description: Recombinant Human CCR5 Protein with C-terminal human Fc tag

Background: 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 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]

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 29.6 kDa after removal of the signal peptide. The apparent molecular mass of CCR5-hFc is approximately 35-55 kDa due to glycosylation.

Molecular Characterization: CCR5(Met1-Ala30) hFc(Glu99-Ala330)

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: 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 & 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.



Figure 1. Human CCR5 Protein, hFc Tag on SDS-PAGE under reducing condition.