

PRODUCT INFORMATION

Tag	C-Flag Tag
Expression Host	HEK293
Target	CCR5
Synonyms	CC-CKR-5; CCKR5; CCR-5; CD195; CKR-5; CKR5; CMKBR5; IDDM22
Description	Human CCR5 full length protein-synthetic nanodisc
Uniprot ID	P51681
Protein Families	Druggable Genome, ES Cell Differentiation/IPS, GPCR, Transmembrane
Protein Pathways	Chemokine signaling pathway, Cytokine-cytokine receptor interaction, Endocytosis
Molecular Weight	The human full length CCR5 protein has a MW of 40.5 kDa
Delivery	In Stock
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. 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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
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.
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.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate CCR5-Nanodisc
0.2 μ g Human CCR5-Nanodisc per well

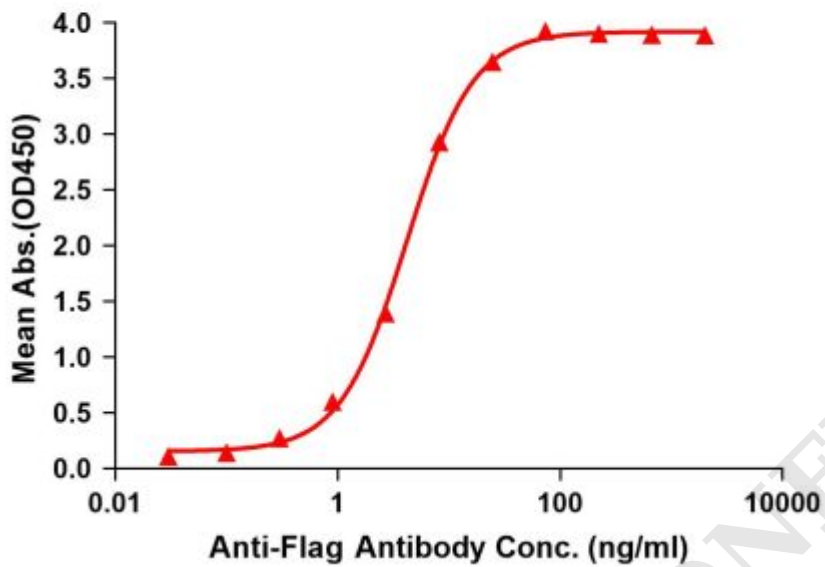


Figure1. Elisa plates were pre-coated with Flag Tag CCR5-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with CCR5-Nanodisc is 4.18ng/ml.

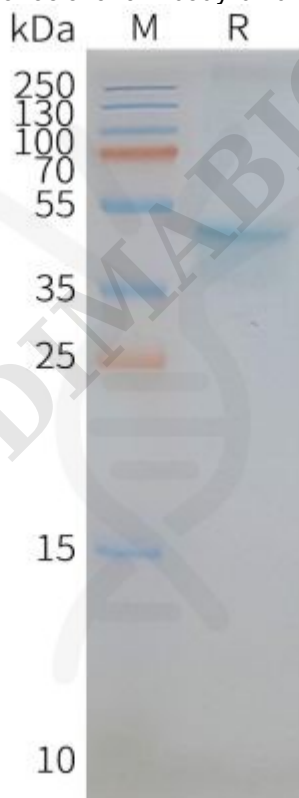


Figure2. Human CCR5-Nanodisc, Flag Tag on SDS-PAGE

