

HUMAN CCR1 FULL LENGTH PROTEIN

Cat.#: 11075

Product Name: Human CCR1 Full Length Protein

Size: 10 µg; 50 µg and 100 µg

Synonyms: CD191; CKR-1; CKR1; CMKBRI; HMI45; MIP1aR; SCYAR1

Target: CCR1

UNIPROT ID: P32246

Description: Human CCR1 Full Length Protein-Synthetic Nanodisc

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 (MPLF-1). Chemokines and their receptors mediated 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.

Species/Host: HEK293

Molecular Weight: The human full length CCR1 protein has a MW of 41.2 kDa

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.

Protein Families: Druggable Genome, GPCR, Transmembrane

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

ELISA assay to evaluate CCR1-Nanodisc 0.2µg Human CCR1-Nanodisc per well

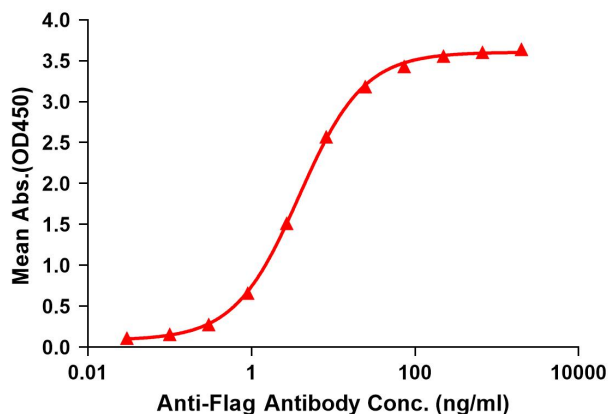


Figure 1. Elisa plates were pre-coated with Flag Tag CCR1-Nanodisc (0.2µg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with CCR1-Nanodisc is 3.825ng/ml.

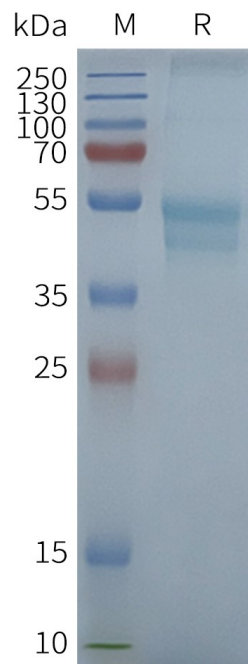


Figure 2. Human CCR1-Nanodisc, Flag Tag on SDS-PAGE