

PRODUCT INFORMATION

Tag	C-Flag&Strep Tag
Expression Host	HEK293
Target	CCR1
Synonyms	CD191; CKR-1; CKR1; CMKBR1; HM145; MIP1aR; SCYAR1
Description	Human CCR1-Strep full length protein-synthetic nanodisc
Uniprot ID	P32246
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Chemokine signaling pathway, Cytokine-cytokine receptor interaction
Molecular Weight	The human full length CCR1-Strep protein has a MW of 41.2 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. 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 (MPIF-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.
Usage	Research use only
Conjugate	Unconjugated



ELISA assay to evaluate CCR1-Strep-Nanodisc 0.2 μ g Human CCR1-Strep-Nanodisc per well

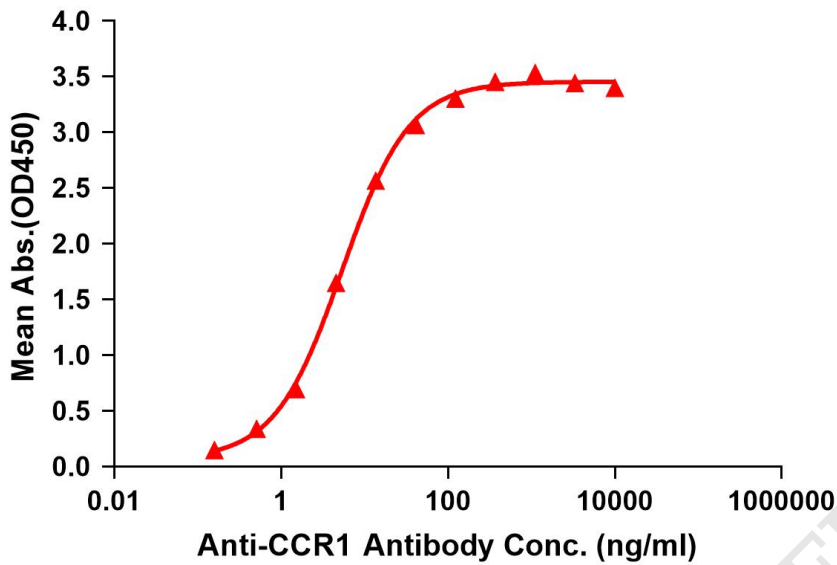


Figure 1. Elisa plates were pre-coated with C-Flag&Strep Tag CCR1-Strep-Nanodisc (0.2 μ g/per well). Serial diluted anti-CCR1 monoclonal antibody (DMC100465) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CCR1 monoclonal antibody binding with CCR1-Strep-Nanodisc is 5.383ng/ml.

kDa M R

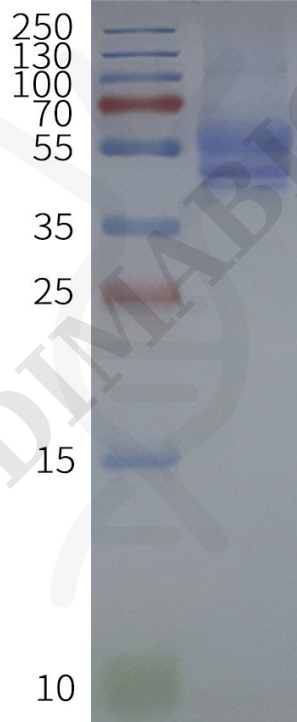


Figure 2. Human CCR1-Strep-Nanodisc, C-Flag&Strep Tag on SDS-PAGE

