

Recombinant Human CCR1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50143

Size: 10ug, 100ug

Protein Name: C-C chemokine receptor type 1 (C-C CKR-1) (CC-CKR-1) (CCR-1) (CCR1) (HM145) (LD78 receptor) (Macrophage inflammatory protein 1-alpha receptor) (MIP-1alpha-R) (RANTES-R) (CD antigen CD191)

Synonym: CCR1, CMKBR1, CMKR1, SCYAR1

UniProt ID: P32246

UniProt Link: www.uniprot.org/uniprotkb/P32246/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 355 AA

Molecular Weight: 41 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

METPNTTEDYDTTTEFDYGDATPCQKVNERAFGAQLLPPLYSLVFVIGLVGNILVVLVLVQYKRLKNM
TSIYLLNLAISDLLFLFTLPFWIDYKLKDDWVFGDAMCKILSGFYTGGLYSEIFFIILLTIDRYLAIVHAVFA
LRARTVTFGVITSIWALAILASMPGLYFSKTQWEFTHHTCSLHFPHESLREWKLQALKLNLFGLVLP
LLVMIIICYTGIIKILLRRPNEKSKAVRLIFVIMIIFFLFWTPYNLTILISVFQDFLFTHECEQSRHLDLAVQ
VTEVIAYTHCCVNPVIYAFVGERFRKYLRQLFHRRVAVHLVKWLPFLSVDRLERVSSTSPSTGEHEL
SAGF

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant C-C chemokine receptor type 1 (C-C CKR-1) (CC-CKR-1) (CCR-1) (CCR1) (HM145) (LD78 receptor) (Macrophage inflammatory protein 1-alpha receptor) (MIP-1alpha-R) (RANTES-R) (CD antigen CD191) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Chemokine receptor that plays a crucial role in regulating immune cell migration, inflammation, and immune responses (PubMed:14991608). Contributes to the inflammatory response by recruiting immune cells, such as monocytes, macrophages, T-cells, and dendritic cells, to sites of inflammation for the clearance of pathogens and the resolution of tissue damage. When activated by its ligands including CCL3, CCL5-9, CCL13-16 and CCL23, triggers a signaling cascade within immune cells, leading to their migration towards the source of the chemokine (PubMed:15905581, PubMed:38417634). For example, mediates neutrophil migration after activation by CCL3 leading to the sequential release of TNF and leukotriene B4 (By similarity). Also mediates monocyte migration upon CXCL4 binding (PubMed:29930254). Activation by CCL5 results in neuroinflammation through the ERK1/2 signaling pathway (By similarity).

Subcellular Localization: Cell membrane ; Multi-pass membrane protein .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.