

Recombinant Mouse CCR1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51459

Size: 10ug, 100ug

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

Synonym: Ccr1, Cmkbr1

UniProt ID: P51675

UniProt Link: www.uniprot.org/uniprotkb/P51675/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 355 AA

Molecular Weight: 41 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MEISDFTEAYPTTTEFDYGDSTPCQKTAVRAFGAGLLPPLYSLVFIIGVVGNVLVILVLMQHRRLQSM
TSIYLFNLAVSDLVFLFTLPFWIDYKLKDDWIFGDAMCKLLSGFYLLGLYSEIFFIILLTIDRYLAIVHAVF
ALRARTVTFGIITSITWALAILASMPALYFFKAQWEFTHRTCSPHFPYKSLKQWKRFQALKLNLLGLIL
PLLVMICYAGIIRILLRRPSEKKVKAVRLIFAITLLFFLLWTPYNLSVFVSAFQDVLFTNQCEQSKQLDL
AMQVTEVIAYTHCCVNPIIYFVGERFWKYLRQLFQRHVAIPLAKWLPFLSVDQLERTSSISPSTGEH
ELSAGF

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) (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:9166425). 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 (By similarity). For example, mediates neutrophil migration after activation by CCL3 leading to the sequential release of TNF and leukotriene B4 (PubMed:15831559). Also mediates monocyte migration upon CXCL4 binding (By similarity). Activation by CCL5 results in neuroinflammation through the ERK1/2 signaling pathway (PubMed:31898284).

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.