

Recombinant Rat CCL2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52280

Size: 10ug, 100ug

Protein Name: C-C motif chemokine 2 (Immediate-early serum-responsive protein JE) (Monocyte chemoattractant protein 1) (Monocyte chemotactic protein 1) (MCP-1) (Small-inducible cytokine A2)

Synonym: Ccl2, Je, Mcp1, Scya2

UniProt ID: P14844

UniProt Link: www.uniprot.org/uniprotkb/P14844/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 148 AA

Molecular Weight: 16 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MQVSVTLGLLFTVAACSIHVLSQPDVNAPLTCCYSFTGKMIPMSRLENYKRITSSRCPKEAVVFVT
KLKREICADPNKEWVQKYIRKLDQNQVRSETTVFYKIASTLRTSAPLNVNLTHKSEANASTLFSTTTS
STSVEVTSMTEN

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 motif chemokine 2 (Immediate-early serum-responsive protein JE) (Monocyte chemoattractant protein 1) (Monocyte chemotactic protein 1) (MCP-1) (Small-inducible cytokine A2) 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: Acts as a ligand for C-C chemokine receptor CCR2 (By similarity). Signals through binding and activation of CCR2 and induces a strong chemotactic response and mobilization of intracellular calcium ions (By similarity). Exhibits a chemotactic activity for monocytes and basophils but not neutrophils or eosinophils (By similarity). Plays an important role in mediating peripheral nerve injury-induced neuropathic pain (By similarity). Increases NMDA-mediated synaptic transmission in both dopamine D1 and D2 receptor-containing neurons, which may be caused by MAPK/ERK-dependent phosphorylation of GRIN2B/NMDAR2B (By similarity).

Subcellular Localization: Secreted .

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.