

BACKGROUND

Monocyte Chemoattractant Protein 1 (MCP-1), also known as CCL2, is thought to be produced by injured or infected tissues. MCP-1 signals through G protein-coupled receptors, CCR2 and CCR4, to recruit memory T cells, monocytes and dendritic cells.

Recombinant rat MCP-1 is a non-glycosylated protein, containing 125 amino acids and having a molecular mass of 14.1 kDa.

Alternative Names:

CCL2, JE, MCAF

Amino Acid Sequence:

QPDVAVNAPLT CCYSFTGKMI PMSRLENYKR ITSSRCPKEA
VVFVTKLKRE ICADPNKEWV QKYIRKLDQN QVRSETTVFY
KIASTLR TSA PLNVNLTHKS EANASTLFST TTSSTSVEVT SMTEN

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant rat MCP-1 is lyophilized with no additives.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the ability of MCP-1 to chemoattract human monocytes at 4 - 15 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

