



## Monocyte Chemotactic Protein-1/MCAF (CCL2), His Tag, human recombinant (rHuMCP1-His)

**Catalog No:** 97335  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** Small inducible cytokine A2, CCL2, Monocyte chemotactic protein 1, MCP-1, Monocyte chemoattractant protein 1, Monocyte chemotactic and activating factor, MCAF, Monocyte secretory protein JE, HC11, chemokine (C-C motif) ligand 2, MCP1, SCYA2, GDCF-2, SMC-CF, HSMCR30, MGC9434, GDCF-2 HC11, Platelet-derived growth factor-inducible protein JE

### Background

Chemokine (C-C motif) ligand 2 (CCL2) is a small cytokine belonging to the CC chemokine family that is also known as monocyte chemotactic protein-1 (MCP-1). It is found at the site of tooth eruption and bone degradation. In the bone, CCL2 is expressed by mature osteoclasts and osteoblasts and is under the control of nuclear factor  $\kappa$ B (NF $\kappa$ B). CCL2 recruits immune cells, such as monocytes, to sites of tissue injury and infection. This chemokine is produced as a protein precursor containing signal peptide of 23 amino acids and a mature peptide of 76 amino acids. It is a monomeric polypeptide, with a molecular weight of approximately 13 kDa. As with many other CC chemokines, CCL2 is located on chromosome 17 in humans. The cell surface receptors that bind CCL2 are CCR2 and CCR5.

### Description

Monocyte Chemotactic protein-1 human recombinant also known as Monocyte Chemotactic and Activating Factor (MCAF) produced in *E. coli* is a non-glycosylated, polypeptide chain containing 97 amino acids (24-99) and having a molecular mass of 10.9 kDa. MCP-1 is fused to 20 amino acids His Tag at N-terminus and purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered colorless clear solution.

### Formulation

The His Tag MCP-1 protein (1 mg/ml) solution contains 20 mM Tris-HCL pH 8.0, 1 mM DTT and 20% glycerol.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Amino Acid Sequence

MGSSHHHHHH SSGLVPRGSH MQPDAINAPV TCCYNFTNRK ISVQRLASYR RITSSKCPKE AVIFKTIVAK EICADPKQKW  
VQDSMDHLDK QTQTPKT

### Usage

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**

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