

## 32-1931: MCP 1 Recombinant Protein

### Alternative Name :

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,

### Description

Source : Escherichia Coli. 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 76 amino acids and having a molecular mass of 8.6kDa. The MCP-1 is purified by proprietary chromatographic techniques. 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 B (NFB). 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 13kDa. 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.

### Product Info

#### Amount :

20 µg

#### Purification :

Greater than 97.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

#### Content :

The protein was lyophilized from a concentrated (1mg/ml) sterile solution in 20mM PB pH 7.4 and 150mM NaCl.

#### Storage condition :

Lyophilized MCP-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL2 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

#### Amino Acid :

QPDAINAPVT CCYNFTNRKI SVQRLASYRR ITSSKCPKEA VIFKTIVAKE ICADPKQKWV QDSMDHLDKQ TQTPKT.

### Application Note

It is recommended to reconstitute the lyophilized Monocyte Chemotactic Protein-1 in sterile 18MΩ·cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The specific activity as determined by the ability of MCP-1 to chemoattract human Monocytes using a concentration of 5-20 ng/ml corresponding to a Specific Activity of 50,000-200,000IU/mg.

