

Recombinant Mouse Monocyte Chemotactic Protein-1 (rm CCL2 / rm MCP-1)

Synonyms: Small inducible cytokine A2, MCAF, Platelet-derived growth factor-inducible protein JE.

Introduction: MCP-1 is a small cytokine belonging to the CC chemokine family. It is found at the site of tooth eruption and bone degradation. In the bone MCP-1 is expressed by mature osteoclasts and osteoblasts and is under the control of nuclear factor κ B (NF κ B). MCP-1 recruits immune cells, such as monocytes, to sites of tissue injury and infection. It 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 MCP-1 is located on chromosome 17 in humans. The cell surface receptors that bind MCP-1 are CCR2 and CCR5.

Description: Recombinant murine MCP-1 produced in *E.Coli* is a single non-glycosylated, polypeptide chain containing 125 amino acids and having a molecular mass of 14 kDa. The rm MCP-1 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a sterile (0.2 micron) filtered solution containing 0.1% Trifluoroacetic Acid (TFA).

Solubility: It is recommended to reconstitute the lyophilized rm MCP-1 in sterile H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm MCP-1 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm MCP-1 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.

Purity: Greater than 95.0% as determined by
1) SDS-PAGE.
2)RP-HPLC

Amino Acid Sequence: QPDAVNAPLT CCYSFTSKMI PMSRLESYKR ITSSRCPKEA VVFTKLRKRE VCADPKKEWV QTYIKNLDRN QMRSEPTTLF KTASALRSSA PLNVKLRKRS EANASTTFST TTSSTSVGVT SVTVN.

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<i>small</i>	2 μ g	Cat.N°	12343382
<i>medium</i>	10 μ g	Cat.N°	12343383
<i>large</i>	50 μ g	Cat.N°	12343385
<i>x-large</i>	250 μ g	Cat.N°	12343387
<i>xx-large</i>	1000 μ g	Cat.N°	12343388

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