

Recombinant Mouse Monocyte Chemotactic Protein-2 (rm MCP-2 / CCL8)

Synonyms: Small inducible cytokine A28 (SCYA8), Monocyte chemoattractant factor, HC14, chemokine (C-C motif) ligand 8, MCP2, SCYA8, SCYA10, AB023418, 1810063B20Rik.

Introduction: MCP-2 (CCL8) is a small cytokine belonging to the CC chemokine family that was once called monocyte chemotactic protein-2 (MCP-2). The protein is produced as a precursor containing 109 amino acids, which is cleaved to produce mature CCL8 containing 75 amino acids. The gene for MCP-2 is encoded by 3 exons and is located within a large cluster of CC chemokines on chromosome 17q11.2 in humans. MCP-2 is chemotactic for and activates a many different immune cells, including mast cells, eosinophils and basophils, (that are implicated in allergic responses), and monocytes, T cells, and NK cells that are involved in the inflammatory response. MCP-2 elicits its effects by binding to several different cell surface receptors called chemokine receptors. These receptors include CCR1, CCR2B and CCR5.

Description: Recombinant mouse MCP-2 produced in *E.Coli* is a non-glycosylated, polypeptide chain containing 74 amino acids and having a molecular mass of 8507 Dalton. The rm MCP-2 is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

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

Formulation: Lyophilized from a 0.2µm filtered solution in 20mM PB, pH7.4, 150mM NaCl. The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized rm MCP-2 in sterile H₂O not less than 100 µg/ml which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rm MCP-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18° C. Upon reconstitution rm MCP-2 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 97.0% as determined by RP-HPLC and by SDS-PAGE

Amino Acid Sequence: GPKAPVTCC FHVLLKLIPL RVLKSYERIN NIQCPMEAVV FQTKQGMSLC VDPTQKWVSE YMEILDQKSQ ILQP.

Biological Activity: Determined by its ability to chemoattract human peripheral blood monocytes using a concentration range of 10 -100 ng/ml corresponding to a specific activity of 10,000 - 100,000 IU/mg.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	2 µg	Cat.N°	12343892
<i>medium</i>	10 µg	Cat.N°	12343893

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