## Recombinant Human Monocyte Chemotactic Protein-3 (rh MCP-3 / CCL7)

**Synonyms:** Small inducible cytokine A7, Monocyte chemoattractant protein 3, chemokine (C-C motif) ligand 7, MARC

**Introduction:** The MCP proteins belong to the CC chemokine family and signal through CCR2 and - with the exception of MCP-1 - other CCR receptors. The MCP proteins chemoattract and activate monocytes, activated T cells, basophils, NK cells, and immature dendritic cells. The MCP family cross- reacts across species. CCL7 specifically attracts monocytes and regulates macrophage function. It is produced by certain tumor cell lines and by macrophages. This chemokine is located on chromosome 17 in humans, in a large cluster containing many other CC chemokines and is most closely related to CCL2(previously called MCP-1).

**Description:** Human Recombinant Monocyte Chemotactic Protein-3 produced in E.Coli is a non-glycosylated, polypeptide chain containing 76 amino acids (including the four highly conserved cysteine residues present in the CC chemokines) and having a molecular mass of 9 kDa.

Source: Escherichia Coli.

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

**Formulation:** Lyophilized from a 0.22 µm filtered solution in 50 mM Sodiumphosphate, 50 mM NaCl, pH 7.8 The aliquots of 1µg and 2µg contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized MCP-3 in sterile H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized MCP-3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL7 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 SDS-PAGE / silver stain

Endotoxicity: The endotoxin level is less than 1 EU/ $\mu$ g determined by LAL method

Amino acid sequence: QPVGINTSTT CCYRFINKKI PKQRLESYRR TTSSHCPREA VIFKTKLDKE ICADPTQKWV QDFMKHLDKK TQTPKL

**Biological Activity:** Determined by its ability to induce chemotaxis of human PBMCs within a concentration range of 10 - 100 ng/ml.

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.

| small    | 2 µg    | Cat.N° | 11343902 |
|----------|---------|--------|----------|
| medium   | 10 µg   | Cat.N° | 11343903 |
| large    | 50 µg   | Cat.N° | 11343905 |
| x-large  | 250 µg  | Cat.N° | 11343907 |
| xx-large | 1000 µg | Cat.N° | 11343908 |

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