

## Recombinant Human Monocyte Chemotactic Protein-2 (rh MCP-2 / CCL8)

**Synonyms:** Small inducible cytokine A8, Monocyte chemoattractant protein 2, chemokine (C-C motif) ligand 8, HC14

**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. The CCL8 is produced as a precursor containing 109 amino acids, which is cleaved to produce mature CCL8 containing 75 amino acids. The gene for CCL8 is encoded by 3 exons and is located within a large cluster of CC chemokines on chromosome 17q11.2 in humans. CCL8 elicits its effects by binding to several different cell surface receptors called chemokine receptors. These receptors include CCR1, CCR2B and CCR5.

**Description:** Human Recombinant Monocyte Chemotactic Protein-2 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 8.9 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-2 in sterile H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized MCP-2 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CCL8 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/µg determined by LAL method

**Amino acid sequence:** QPDSVSIPIT CCFNVINRKI PIQRLESYTR ITNIQCPKEA VIFKTKRGKE  
VCADPKERWV RDSMKHLDQI FQNLKP

**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.

<i>small</i>	2 µg	Cat.N°	11343892
<i>medium</i>	10 µg	Cat.N°	11343893
<i>large</i>	50 µg	Cat.N°	11343895
<i>x-large</i>	250 µg	Cat.N°	11343897
<i>xx-large</i>	1000 µg	Cat.N°	11343898

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