

## Recombinant Human Monocyte Chemotactic Protein-4 (rh MCP-4 / CCL13)

**Synonyms:** Small inducible cytokine A13, Monocyte chemoattractant protein 4, CK-beta-10, chemokine (C-C motif) ligand 13, NCC1, CKb10, SCYL1, SCYA13

**Introduction:** Chemokine (C-C motif) ligand 13 is a small cytokine belonging to the CC chemokine family. Its genes located on human chromosome 17 within a large cluster of other CC chemokines. MCP-4 induces chemotaxis in monocytes, eosinophils, T lymphocytes, and basophils by binding cell surface G-protein linked chemokine receptors such as CCR2, CCR3 and CCR5. Activity of this chemokine has been implicated in allergic reactions such as asthma. MCP-4 can be induced by the inflammatory cytokines IL-1 and TNF- $\alpha$ .

**Description:** Rh Monocyte Chemotactic Protein-4 produced in E.Coli is a non-glycosylated, Polypeptide chain containing 75 amino acids and having a molecular mass of 8.6 kDa. The MCP-4 is purified by proprietary chromatographic techniques.

**Source:** *Escherichia Coli*.

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

**Formulation:** Lyophilized from a concentrated (1mg/ml) sterile solution in 20mM PB, pH 7.4, 130mM NaCl. The aliquots of 1 $\mu$ g and 2 $\mu$ g contain Trehalose 5% (w/vol) for better recovery

**Solubility:** It is recommended to reconstitute the lyophilized rh MCP-4 in sterile H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized rh MCP-4, although stable at room temperature for 3 weeks, should be stored desiccated below -18 $^{\circ}$  C. Upon reconstitution rh MCP-4 should be stored at 4 $^{\circ}$  C between 2-7 days and for future use below -18 $^{\circ}$  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 96.0% as determined by RP-HPLC and by SDS-PAGE.

**Amino acid sequence:**

QPDALNVPSTCCFTFSSKISLQRLKSYVITTSRCPQKAVIFRTKLGKEICADPKEKWVQNYMKHLGRKAHTLKT

**Biological Activity:** The specific activity as determined by the ability of MCP-4 to chemoattract human monocytes at 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 $\mu$ g	Cat.N $^{\circ}$	11343922
<i>medium</i>	10 $\mu$ g	Cat.N $^{\circ}$	11343923
<i>large</i>	50 $\mu$ g	Cat.N $^{\circ}$	11343925

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