Monocyte Chemotactic Protein-1 Rat E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Rat
Other names: MCP-1, CCL2, C-C motif chemokine 2, MCAF

Cat. No.:

RBG30065002	(2 µg)
RBG30065010	(10 µg)
RBG30065100	(100 µg)

Description

The MCP proteins are members of the CC chemokine family that 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. Recombinant Rat MCP-1 is a 14.0 kDa protein containing 125 amino acid residues, including the four highly conserved cysteine residues present in the CC chemokines.

Introduction to the Molecule

Monocyte chemotactic protein-1 (MCP-1) is a member of the C-C family of chemokines. Chemokines are mediators that share the capacity to induce directional migration of leukocytes. MCP-1 is a chemoattractant for many cell types such as monocytes, neutrophils, hepatic stellate cells, granulocytes and T lymphocytes. MCP-1 is believed to play a role in a variety of pathological conditions, including inflammatory and immune reactions, atherosclerosis and neoplasia. Monocyte Chemotactic Protein-1 (MCP-1) is also known as Monocyte Chemotactic Activating Factor (MCAF) or CCL2.

Research topic

Animal studies, Cytokines and chemokines and related molecules, Energy metabolism and body weight regulation

Amino Acid Sequence

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QPDAVNAPLT CCYSFTGKMI PMSRLENYKR ITSSRCPKEA VVFVTKLKRE ICADPNKEWV QKYIRKLDQN QVRSETTVFY
KIASTLRTSA PLNVNLTHKS EANASTLFST TTSSTSVEVT SMTEN
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Source

E. coli

Purity

98%

Biological Activity

Determined by its ability to chemoattract human monocytes using a concentration range of 10.0-100.0 ng/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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