

Monocyte Chemotactic Protein-5 (CCL12), mouse recombinant (rmMCP-5)

Catalog No: 97545 Lot No: XXXXX Source: *E. coli*

Synonyms: C-C motif chemokine 12, MCP-1-related chemokine, Monocyte chemoattractant protein 5, Monocyte

chemotactic protein 5, MCP-5, Small-inducible cytokine A12, Ccl12, Mcp5, Scya12

Background

MCP-5 (CCL12) is a cloned mouse CC chemokine most closely related to human MCP1 (66% amino acid sequence identity in the mature protein). MCP5 is expressed constitutively in the thymus and the lymph nodes. Under inflammatory conditions, moreover CCL12 expression is induced in activated macrophages and mast cells. The mouse MCP1 gene is mapped to the CC chemokine cluster on chromosome 11. Recombinant CCL12 is a potent chemoattractant for monocytes and lymphocytes but not neutrophils. At high concentrations, MCP-5 also chemoattracts eosinophils. CCL12 is a functional ligand for CCR2.

Description

Monocyte Chemotactic Protein-5 mouse recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 82 amino acids and having a molecular mass of 9.3 kDa. MCP5 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

Formulation

Lyophilized from a 0.2 μm filtered concentrated solution in 1xPBS, pH 7.4.

Solubility

It is recommended to reconstitute the lyophilized MCP5 in sterile 18 $M\Omega$ -cm H_2O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized CCL12, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution MCP5 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 (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

Amino Acid Sequence

GPDAVSTPVT CCYNVVKQKI HVRKLKSYRR ITSSQCPREA VIFRTILDKE ICADPKEKWV KNSINHLDKT SQTFILEPSC LG

Activity

Determined by its ability to chemoattract human peripheral blood monocytes using a concentration range of 10.0 - 50.0 ng/ml.





Usage

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