
Human CCL2 (MCP-1) Recombinant Protein

Catalog Number: 14-8398

Also Known As: Monocyte chemotactic protein 1

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Human CCL2 (MCP-1) Recombinant Protein

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Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment

Source: *E. coli* expressed amino acids Gln24 – Thr99, accession number AAB29926


Molecular Mass: 8.6 kDa

Purity: Greater than 98%, as determined by SDS-PAGE


Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: Measured by chemotaxis assay of human monocytes. Maximal chemoattractant activity was observed between 10-100 ng/ml.

Formulation: Sterile liquid; phosphate buffered saline, pH 7.2, with 1.0% BSA

 **Temperature Limitation:** Store at less than or equal to -70°C.

LOT **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

Description

CCL2, also known as Monocyte Chemotactic Protein-1 (MCP-1) and Monocyte Chemotactic and Activating Factor (MCAF), is a member of the β (CC) subfamily of chemokines. CCL2 is a chemoattractant for monocytes and regulates their adhesion molecule and cytokine expression patterns. It has also been shown to activate monocytes to be cytostatic for some human tumor cell lines. CCL2 is also capable of chemoattracting, activating and inducing histamine release from basophils. Recombinant human CCL2 produced in *E. coli* is a non-glycosylated peptide chain of 76 amino acids.

Applications Reported

Recombinant human CCL2 is biologically active.

Applications Tested

This recombinant human CCL2 has been tested in bioassays for chemoattractant activity. Measured by chemotaxis assay of human monocytes, the maximal chemoattractant activity was observed between 10-100 ng/mL.

References

Wang L, Yang L, Gao L, Gao TW, Li W, Liu YF. A functional promoter polymorphism in monocyte chemoattractant protein-1 is associated with psoriasis. *Int J Immunogenet.* 2008 Feb;35(1):45-9. (ELISA, PubMed)

Arlan LG, Morgan MS, Peterson KT. House dust and storage mite extracts influence skin keratinocyte and fibroblast function. *Int Arch Allergy Immunol.* 2008;145(1):33-42. (ELISA, PubMed)

Fouts AE, Boothroyd JC. Infection with *Toxoplasma gondii* bradyzoites has a diminished impact on host transcript levels relative to tachyzoite infection. *Infect Immun.* 2007 Feb;75(2):634-42. (ELISA, PubMed)

Kohwiwattanagun J, Kawamura I, Fujimura T, Mitsuyama M. Mycobacterial mammalian cell entry protein 1A (Mce1A)-mediated adherence enhances the chemokine production by A549 alveolar epithelial cells. *Microbiol Immunol.* 2007;51(2):253-61. (ELISA, PubMed)

Related Products

14-7091 Anti-Mouse CCL2 (MCP-1) Purified (4E2)

14-7096 Anti-CCL2 (MCP-1) Purified (2H5)

14-7099 Anti-Human CCL2 (MCP-1) Purified (5D3-F7)

14-7996 Anti-Mouse/Rat CCL2 (MCP-1) Purified (Polyclonal)

