

An Affymetrix Company

Human CCL7 (MCP-3) Recombinant Protein Carrier-Free

Catalog Number: 34-8198

Also known as: C-C Motif Chemokine 7

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

Product Information

Contents: Human CCL7 (MCP-3) Recombinant Protein Carrier-Free

REF Catalog Number: 34-8198 Concentration: 0.5 mg/mL

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

sterile environment.

Source: E. coli expressed amino acids Gln34-Leu109, accession number

NM 006273

Molecular Mass: 9 kDa

Purity: > 97%, as determined by SDS-PAGE. **Endotoxin:** Less than 0.01 ng/ug cytokine,

as determined by the LAL assay.

Bioactivity: The bioactivity of this protein was determined by transmigration assay of

human monocytes, with maximum chemotaxis observed at 100-150 ng/mL.



LOT

Formulation: Sterile liquid; 0.1 M glycine, pH 3.0 **Temperature Limitation:** Store at less than or

equal to -70°C.

Batch Code: Refer to vial Use By: Refer to vial

Description

CCL7, also known as MCP-3 (Monocyte Chemotactic Protein 3), is a member of the CC- subfamily of chemokines and is most closely related to CCL2 (MCP-1) and CCL8 (MCP-2). They are secreted by a variety of cell types in response to inflammatory stimuli and play critical roles in the recruitment of leukocytes to areas of inflammation. While all three MCP proteins are potent chemoattractants of monocytes and T cells, CCL7 appears to have the broadest range of activity, as it has also been demonstrated to attract activated NK cells, eosinophils, basophils, and neutrophils. CCL7 signals via the g protein-coupled receptors CCR1 and CCR2, both of which are shared with other CC-chemokines.

Applications Reported

Human CCL7 Recombinant Protein Carrier-Free is biologically active.

Applications Tested

The bioactivity of this protein was determined by transmigration assay of human monocytes, with maximum chemotaxis observed at 100-150 ng/mL. The ED50 for this effect is less than or equal to 50 ng/mL, which corresponds to a specific activity of greater than or equal to 2 x 10e4 Units/mg.

References

Thompson WL, Van Eldik LJ. Inflammatory cytokines stimulate the chemokines CCL2/MCP-1 and CCL7/MCP-3 through NFkB and MAPK dependent pathways in rat astrocytes. Brain Res. 2009 Sep 1;1287:47-57.

Jia T, Serbina NV, Brandl K, Zhong MX, Leiner IM, Charo IF, Pamer EG. Additive roles for MCP-1 and MCP-3 in CCR2-mediated recruitment of inflammatory monocytes during Listeria monocytogenes infection. J Immunol. 2008 May 15; 180(10):6846-53.

Proost P, Wuyts A, Van Damme J. Human monocyte chemotactic proteins-2 and -3: structural and functional comparison with MCP-1. J Leukoc Biol. 1996 Jan;59(1):67-74.

Related Products

14-8398 Human CCL2 (MCP-1) Recombinant Protein



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