

MCP-3 (500-M73): sc-57364

BACKGROUND

The monocyte chemotactic proteins, MCP-1, MCP-2 and MCP-3, form a sub-family of the C-C or β -chemokines, which are characterized by a set of conserved adjacent cysteines. MCPs are produced by a variety of cells, including T lymphocytes, subsequent to their activation with cytokines such as IL-1, TNF α and IFN- γ . MCP-1 levels are increased during infection and inflammation, which are both characterized by leukocyte infiltration. *In vitro* studies have shown that the MCP isoforms exhibit their chemotactic effects on different subpopulations of lymphocytes. MCP-1 is a potent basophil activator but does not effect eosinophils, whereas MCP-2 stimulates both eosinophils and basophils. MCP-3 has been shown to have the broadest range of influence, activating monocytes, dendritic cells, lymphocytes, natural killer cells, eosinophils, basophils and neutrophils. Two MCP-1 receptors that differ in their carboxy termini have been identified.

REFERENCES

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3. Weber, M., et al. 1995. Monocyte chemotactic protein MCP-2 activates human basophil and eosinophil leukocytes similar to MCP-3. *J. Immunol.* 154: 4166-4172.
4. Combadiere, C., et al. 1995. Monocyte chemoattractant protein-3 is a functional ligand for C-C chemokine receptors 1 and 2B. *J. Biol. Chem.* 270: 29671-29675.
5. Proost, P., et al. 1996. Human monocyte chemotactic proteins-2 and -3: structural and functional comparison with MCP-1. *J. Leukocyte Biol.* 59: 67-74.
6. Dubois, P.M., et al. 1996. Early signal transduction by the receptor to the chemokine monocyte chemotactic protein-1 in a murine T cell hybrid. *J. Immunol.* 156: 1356-1361.
7. Beall, C.J., et al. 1996. Site-directed mutagenesis of monocyte chemoattractant protein-1 identifies two regions of the polypeptide essential for biological activity. *Biochem. J.* 313: 633-640.
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CHROMOSOMAL LOCATION

Genetic locus: CCL7 (human) mapping to 17q12.

SOURCE

MCP-3 (500-M73) is a mouse monoclonal antibody raised against a recombinant MCP-3 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MCP-3 (500-M73) is recommended for detection of MCP-3 of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MCP-3 siRNA (h): sc-72035, MCP-3 shRNA Plasmid (h): sc-72035-SH and MCP-3 shRNA (h) Lentiviral Particles: sc-72035-V.

Molecular Weight of MCP-3: 11 kDa.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.



See **MCP-1-4/eotaxin (B-2): sc-377082** for MCP-1-4/eotaxin antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647.