# SANTA CRUZ BIOTECHNOLOGY, INC.

# MCP-3 (G-2): sc-515890



# BACKGROUND

Eotaxin and the monocyte chemotactic proteins, MCP-1–5, form a subfamily of the C-C (or  $\beta$ ) 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 $\alpha$  and IFN- $\gamma$ . *In vitro* studies have shown that the MCP isoforms exhibit their chemotactic effects on different subpopulations of lymphocytes. MCP-3 has been shown to have the broadest range of influence, activating monocytes, dendritic cells, lymphocytes, NK cells, eosinophils, basophils and neutrophils.

## **REFERENCES**

- Charo, I.F., et al. 1994. Molecular cloning and functional expression of two monocyte chemoattractant protein 1 receptors reveals alternative splicing of the carboxyl-terminal tails. Proc. Natl. Acad. Sci. USA 91: 2752-2756.
- Taub, D.D., et al. 1995. Monocyte chemotactic protein-1 (MCP-1), -2 and -3 are chemotactic for human T lymphocytes. J. Clin. Invest. 95: 1370-1376.
- 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.
- Combadiere, C., et al. 1995. Monocyte chemoattractant protein-3 is a functional ligand for CC chemokine receptors 1 and 2B. J. Biol. Chem. 270: 29671-29675.
- Proost, P., et al. 1996. Human monocyte chemotactic proteins-2 and -3: structural and functional comparison with MCP-1. J. Leukoc. Biol. 59: 67-74.
- 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.
- 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.
- Kuna, P., et al. 1996. Chemokines in seasonal allergic rhinitis. J. Allergy Clin. Immunol. 97: 104-112.

## **CHROMOSOMAL LOCATION**

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

# SOURCE

MCP-3 (G-2) is a mouse monoclonal antibody raised against amino acids 43-99 mapping at the C-terminus of MCP-3 of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  IgG\_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **STORAGE**

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

## **APPLICATIONS**

MCP-3 (G-2) is recommended for detection of MCP-3 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and 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.

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG א BP-HRP: sc-516102 or m-IgG א BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG א BP-FITC: sc-516140 or m-IgG א BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



human recombinant MCP-3.

#### **RESEARCH USE**

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

#### **PROTOCOLS**

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