# MIP-3β (A00053.01): sc-81032



The Power to Question

## **BACKGROUND**

Chemokines are members of a superfamily of small inducible, secreted, proinflammatory cytokines. Members of the chemokine family exhibit 20 to 50% homology in their predicted amino acid sequences and are divided into four subfamilies. In C-C (or  $\beta$ ) subfamily, the first two cysteines are adjacent. C-C chemokines are chemoattractants and activators for monocytes and T cells. C-C subfamily members include macrophage inflammatory protein (MIP)-1 $\alpha$ , MIP-1 $\beta$ , MIP-2, MIP-3 $\alpha$ , MIP-3 $\beta$ , MIP-4, HCC-1, MIP-5 (or HCC-2), RANTES, MCP-1/2/3 (and the murine homologs JE and MARC), I-309, murine C10 and TCA3. MIP-3 $\alpha$  is expressed in several tissues and cell lines. MIP-3 $\beta$  expression is restricted to lymph nodes, thymus and appendix.

# **REFERENCES**

- Zipfel, P.F., Balke, J., Irving, S.G., Kelly, K. and Siebenlist, U. 1989. Mitogenic activation of human T cells induces two closely related genes which share structural similarities with a new family of secreted factors. J. Immunol. 142: 1582-1590.
- 2. Widmer, U., Manogue, K.R., Cerami, A. and Sherry, B. 1993. Genomic cloning and promoter analysis of macrophage inflammatory protein MIP-2, MIP-1 $\alpha$ , and MIP-1 $\beta$ , members of the chemokine superfamily of proinflammatory cytokines. J. Immunol. 150: 4996-5012.
- 3. Schall, T.J., Bacon, K., Camp, R.D., Kaspari, J.W. and Goeddel, D.V. 1993. Human macrophage inflammatory protein  $\alpha$  (MIP-1 $\alpha$ ) and MIP-1 $\beta$  chemokines attract distinct populations of lymphocytes. J. Exp. Med. 177: 1821-1826.
- 4. Uguccioni, M., D'Apuzzo, M., Loetscher, M., Dewald, B. and Baggiolini, M. 1995. Actions of the chemotactic cytokines MCP-1, MCP-2, MCP-3, RANTES, MIP-1 $\alpha$  and MIP-1 $\beta$  on human monocytes. Eur. J. Immunol. 25: 64-68.
- 5. Cocchi, F., DeVico, A.L., Garzino-Demo, A., Arya, S.K., Gallo, R.C. and Lusso, P. 1995. Identification of RANTES, MIP-1 $\alpha$ , and MIP-1 $\beta$  as the major HIV-suppressive factors produced by CD8+ T cells. Science 270: 1811-1815.
- 6. Cook, D.N. 1996. The role of MIP-1 $\alpha$  in inflammation and hematopoiesis. J. Leukoc. Biol. 59: 61-66.
- 7. Taub, D.D., Ortaldo, J.R., Turcovski-Corrales, S.M., Key, M.L., Longo, D.L. and Murphy, W.J. 1996.  $\beta$  chemokines costimulate lymphocyte cytolysis, proliferation, and lymphokine production. J. Leukoc. Biol. 59: 81-89.

## CHROMOSOMAL LOCATION

Genetic locus: CCL19 (human) mapping to 9p13.3.

# SOURCE

MIP-3 $\beta$  (A00053.01) is a mouse monoclonal antibody raised against recombinant MIP-3 $\beta$  of human origin.

# **PRODUCT**

Each vial contains 100  $\mu g$   $lgG_1$  in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

MIP-3 $\beta$  (A00053.01) is recommended for detection of MIP-3 $\beta$  of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MIP-3 $\beta$  siRNA (h): sc-60001, MIP-3 $\beta$  shRNA Plasmid (h): sc-60001-SH and MIP-3 $\beta$  shRNA (h) Lentiviral Particles: sc-60001-V.

Molecular Weight of MIP-3β: 8.8 kDa.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

#### **STORAGE**

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

# **RESEARCH USE**

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

#### **PROTOCOLS**

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

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