

# MIP-3 $\beta$ (N-18): sc-9777

## BACKGROUND

Chemokines are members of a superfamily of small inducible, secreted, pro-inflammatory cytokines. Members of the chemokine family exhibit 20 to 50% homology in their predicted amino acid sequences and are divided into four subfamilies. In the C-X-C (or  $\alpha$ ) subfamily, the first two of four cysteine residues are separated by a single amino acid. In C-C (or  $\beta$ ) subfamily, the first two cysteines are adjacent. C subfamily members, also designated  $\gamma$  chemokines, lack the first and third cysteine residues of the conserved motif. 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

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- Schall, T.J., et al. 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.
- Ugucione, M., et al. 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.
- Cocchi, F., et al. 1995. Identification of RANTES, MIP-1 $\alpha$ , and MIP-1 $\beta$  as the major HIV-suppressive factors produced by CD8<sup>+</sup> T cells. *Science* 270: 1811-1815.
- Cook, D.N. 1996. The role of MIP-1 $\alpha$  in inflammation and hematopoiesis. *J. Leukoc. Biol.* 59: 61-66.
- Taub, D.D., et al. 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; Ccl19 (mouse) mapping to 4 A5.

## SOURCE

MIP-3 $\beta$  (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MIP-3 $\beta$  of human origin.

## STORAGE

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

## PRODUCT

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

Blocking peptide available for competition studies, sc-9777 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

MIP-3 $\beta$  (N-18) is recommended for detection of MIP-3 $\beta$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 MIP-3 $\beta$  siRNA (h): sc-60001, MIP-3 $\beta$  siRNA (m): sc-60002, MIP-3 $\beta$  shRNA Plasmid (h): sc-60001-SH, MIP-3 $\beta$  shRNA Plasmid (m): sc-60002-SH, MIP-3 $\beta$  shRNA (h) Lentiviral Particles: sc-60001-V and MIP-3 $\beta$  shRNA (m) Lentiviral Particles: sc-60002-V.

Molecular Weight of MIP-3 $\beta$ : 9 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## SELECT PRODUCT CITATIONS

- Oliveira-Neto, H.H., et al. 2013. The expression of chemokines CCL19, CCL21 and their receptor CCR7 in oral squamous cell carcinoma and its relevance to cervical lymph node metastasis. *Tumour Biol.* 34: 65-70.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **MIP-3 $\beta$  (ZZ22): sc-74233**, our highly recommended monoclonal alternative to MIP-3 $\beta$  (N-18).