

# MIP-2 (JJ19): sc-80518

## 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 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.

## REFERENCES

1. Zipfel, P.F., et al. 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., et al. 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., 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.
4. Uguccione, 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.
5. 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.
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., et al. 1996.  $\beta$  chemokines costimulate lymphocyte cytolysis, proliferation, and lymphokine production. *J. Leukoc. Biol.* 59: 81-89.

## CHROMOSOMAL LOCATION

Genetic locus: Cxcl2 (mouse) mapping to 5 E1.

## SOURCE

MIP-2 (JJ19) is a mouse monoclonal antibody raised against full-length recombinant MIP-2 of rat origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## APPLICATIONS

MIP-2 (JJ19) is recommended for detection of MIP-2 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MIP-2 siRNA (m): sc-45997, MIP-2 shRNA Plasmid (m): sc-45997-SH and MIP-2 shRNA (m) Lentiviral Particles: sc-45997-V.

Molecular Weight of MIP-2: 8 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## SELECT PRODUCT CITATIONS

1. Chen, C.M., et al. 2017. Surfactant effects on the viability and function of human mesenchymal stem cells: *in vitro* and *in vivo* assessment. *Stem Cell Res. Ther.* 8: 180.

## 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) for detailed protocols and support products.