# SANTA CRUZ BIOTECHNOLOGY, INC.

# MIP-2 (I-12): sc-26537



#### 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 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.

## REFERENCES

- 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. Exper. 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+ 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 (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MIP-2 of mouse origin.

#### PRODUCT

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

Blocking peptide available for competition studies, sc-26537 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### APPLICATIONS

MIP-2 (I-12) is recommended for detection of precursor and mature chain of MIP-2 of mouse and rat 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-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 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

### SELECT PRODUCT CITATIONS

 El-Achkar, T.M., et al. 2011. Tamm-Horsfall protein-deficient thick ascending limbs promote injury to neighboring S3 segments in an MIP-2-dependent mechanism. Am. J. Physiol. Renal Physiol. 300: F999-F1007.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

# MONOS Satisfation Guaranteed

Try **MIP-2 (JJ19): sc-80518**, our highly recommended monoclonal alternative to MIP-2 (I-12).