

MIP-3 α (530): sc-74234

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 β) 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 α , MIP-1 β , MIP-2, MIP-3 α , MIP-3 β , 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 α is expressed in several tissues and cell lines. MIP-3 β expression is restricted to lymph nodes, thymus and appendix.

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 α and MIP-1 β , members of the chemokine superfamily of proinflammatory cytokines. *J. Immunol.* 150: 4996-5012.
3. Schall, T.J., et al. 1993. Human macrophage inflammatory protein α (MIP-1 α) and MIP-1 β 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 α and MIP-1 β on human monocytes. *Eur. J. Immunol.* 25: 64-68.
5. Cocchi, F., et al. 1995. Identification of RANTES, MIP-1 α and MIP-1 β 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 α in inflammation and hematopoiesis. *J. Leukoc. Biol.* 59: 61-66.
7. Taub, D.D., et al. 1996. β chemokines costimulate lymphocyte cytotoxicity, proliferation and lymphokine production. *J. Leukoc. Biol.* 59: 81-89.

CHROMOSOMAL LOCATION

Genetic locus: CCL20 (human) mapping to 2q36.3.

SOURCE

MIP-3 α (530) is a mouse monoclonal antibody raised against amino acids 27-96 of MIP-3 α of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

STORAGE

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

APPLICATIONS

MIP-3 α (530) is recommended for detection of MIP-3 α of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), flow cytometry (1 μ g per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with MIP-3 β , GRO α , HCC-4 or eotaxin.

Suitable for use as control antibody for MIP-3 α siRNA (h): sc-43935, MIP-3 α shRNA Plasmid (h): sc-43935-SH and MIP-3 α shRNA (h) Lentiviral Particles: sc-43935-V.

Molecular Weight of MIP-3 α : 9 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. Xu, Q., et al. 2016. Enhanced efficacy of DNA vaccination against botulinum neurotoxin serotype A by co-administration of plasmids encoding DC-stimulating Flt3L and MIP-3 α cytokines. *Biologicals* 44: 441-447.
2. Su, S., et al. 2019. CCL20 promotes ovarian cancer chemotherapy resistance by regulating ABCB1 expression. *Cell Struct. Funct.* 44: 21-28.

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.