SANTA CRUZ BIOTECHNOLOGY, INC.

MIP-3α (A-20): sc-9776

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 α) subfamily, the first two of four cysteine residues are separated by a single amino acid. In C-C (or β) subfamily, the first two cysteines are adjacent. C subfamily members, also designated γ 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)-1α, MIP-1β, MIP-2, MIP-3α, MIP-3β, 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-3α is expressed in several tissues and cell lines. MIP-3β 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-1α and MIP-1β, 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-1α) and MIP-1β 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-1α and MIP-1β on human monocytes. Eur. J. Immunol. 25: 64-68.
5. Cocchi, F. et al. 1995. Identification of RANTES, MIP-1α and MIP-1β as the major HIV-suppressive factors produced by $CD8^+$ T cells. Science 270: 1811-1815.
6. Cook, D.N. 1996. The role of MIP-1α in inflammation and hematopoiesis. J. Leukoc. Biol. 59: 61-66.
7. Taub, D.D. et al. 1996. β chemokines costimulate lymphocyte cytolysis, proliferation and lymphokine production. J. Leukoc. Biol. 59: 81-89.

CHROMOSOMAL LOCATION

Genetic locus: CCL20 (human) mapping to 2q33-q37; Ccl20 (mouse) mapping to 1 C5.

SOURCE

MIP-3α (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MIP-3α of mouse 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9776 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MIP-3α (A-20) is recommended for detection of MIP-3α 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-3α siRNA (m): sc-60000, MIP-3α shRNA Plasmid (m): sc-60000-SH and MIP-3α shRNA (m) Lentiviral Particles: sc-60000-V.

Molecular Weight of MIP-3α: 12 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

1. Bennouna, S., et al. 2003. Cross-talk in the innate immune system: neutrophils instruct recruitment and activation of dendritic cells during microbial infection. J. Immunol. 171: 6052-6058.

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.