

MIP-1 α (C-16): sc-1381

BACKGROUND

Chemokines are members of a superfamily of small inducible, secreted, pro-inflammatory cytokines. Members of the chemokine family exhibit 20-50% homology in their predicted amino acid sequences and are divided into four subfamilies. In the 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. Research has shown that MIP-1 β is more selective than MIP-1 α , primarily attracting CD4⁺ T lymphocytes, with a preference for T cells of the naive phenotype. MIP-1 α is a more potent lymphocyte chemoattractant than MIP-1 β and exhibits a broader range of chemoattractant specificities. It has been suggested that CD8⁺ T lymphocytes are involved in the control of HIV infection *in vivo* by the release of HIV-suppressive factors (HIV-SF). MIP-1 α has been identified as one of the major HIV-SFs produced by CD8⁺ T cells, along with MIP-1 β and RANTES. Recombinant human MIP-1 α acts as an inhibitor of different strains of HIV-1, HIV-2 and SIV infection in a dose-dependent manner.

CHROMOSOMAL LOCATION

Genetic locus: CCL3 (human) mapping to 17q12.

SOURCE

MIP-1 α (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MIP-1 α of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-1381 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MIP-1 α (C-16) is recommended for detection of MIP-1 α of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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-1 α siRNA (h): sc-43933, MIP-1 α shRNA Plasmid (h): sc-43933-SH and MIP-1 α shRNA (h) Lentiviral Particles: sc-43933-V.

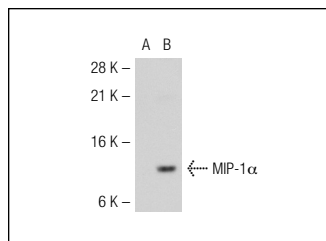
Molecular Weight of MIP-1 α : 10 kDa.

Positive Controls: MIP-1 α (h): 293T Lysate: sc-114143.

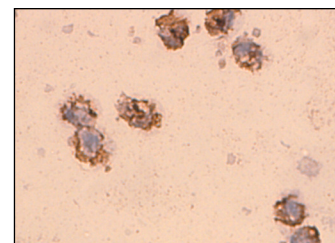
RESEARCH USE

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

DATA



MIP-1 α (C-16): sc-1381. Western blot analysis of MIP-1 α expression in non-transfected: sc-117752 (A) and human MIP-1 α transfected: sc-114143 (B) 293T whole cell lysates.



MIP-1 α (C-16): sc-1381. Immunoperoxidase staining of formalin fixed human leukocytes showing cell surface localization.

SELECT PRODUCT CITATIONS

1. Drake, P.M., et al. 2001. Human placental cytotrophoblasts attract monocytes and CD56(bright) natural killer cells via the actions of monocyte inflammatory protein 1 α . *J. Exp. Med.* 193: 1199-1212.
2. Cheon, H., et al. 2004. Platelet-derived growth factor-AA increases IL-1 β and IL-8 expression and activates NF κ B in rheumatoid fibroblast-like synoviocytes. *Scand. J. Immunol.* 60: 455-462.
3. Liu, S., et al. 2006. Distribution and chemical coding of corticotropin-releasing factor-immunoreactive neurons in the guinea pig enteric nervous system. *J. Comp. Neurol.* 494: 63-74.
4. Tátrai, E., et al. 2006. The effect of stone-wool on rat lungs and on the primary culture of rat alveolar macrophages and type II pneumocytes. *J. Appl. Toxicol.* 26: 16-24.
5. Sá, V.C., et al. 2007. The pattern of immune cell infiltration in chromoblastomycosis: involvement of macrophage inflammatory protein-1 α /CCL3 and fungi persistence. *Rev. Inst. Med. Trop.* 49: 49-53.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **MIP-1 α (D-3): sc-166942** or **MIP-1 α (F-8): sc-166911**, our highly recommended monoclonal alternatives to MIP-1 α (C-16).