

# MIP-1 $\alpha$ (FL-92): sc-33203

## 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  $\beta$ ) 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. Research has shown that MIP-1 $\beta$  is more selective than MIP-1 $\alpha$ , primarily attracting CD4<sup>+</sup> T lymphocytes, with a preference for T cells of the naive phenotype. MIP-1 $\alpha$  is a more potent lymphocyte chemoattractant than MIP-1 $\beta$  and exhibits a broader range of chemoattractant specificities. It has been suggested that CD8<sup>+</sup> T lymphocytes are involved in the control of HIV infection *in vivo* by the release of HIV-suppressive factors (HIV-SF). MIP-1 $\alpha$  has been identified as one of the major HIV-SFs produced by CD8<sup>+</sup> T cells, along with MIP-1 $\beta$  and RANTES. Recombinant human MIP-1 $\alpha$  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; Ccl3 (mouse) mapping to 11 C.

## SOURCE

MIP-1 $\alpha$  (FL-92) is a rabbit polyclonal antibody raised against amino acids 1-92 representing full length MIP-1 $\alpha$  of human origin.

## PRODUCT

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

## 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-1 $\alpha$  (FL-92) is recommended for detection of MIP-1 $\alpha$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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-1 $\alpha$  siRNA (h): sc-43933, MIP-1 $\alpha$  siRNA (m): sc-44722, MIP-1 $\alpha$  shRNA Plasmid (h): sc-43933-SH, MIP-1 $\alpha$  shRNA Plasmid (m): sc-44722-SH, MIP-1 $\alpha$  shRNA (h) Lentiviral Particles: sc-43933-V and MIP-1 $\alpha$  shRNA (m) Lentiviral Particles: sc-44722-V.

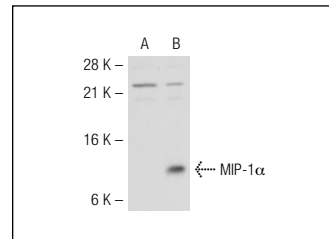
Molecular Weight of MIP-1 $\alpha$ : 10 kDa.

Positive Controls: MIP-1 $\alpha$  (h): 293T Lysate: sc-114143.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>TM</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>TM</sup> Mounting Medium: sc-24941.

## DATA



MIP-1 $\alpha$  (FL-92): sc-33203. Western blot analysis of MIP-1 $\alpha$  expression in non-transfected: sc-117752 (A) and human MIP-1 $\alpha$  transfected: sc-114143 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Tsutsumi, T., et al. 2013. Hyperocclusion up-regulates CCL3 expression in CCL2- and CCR2-deficient mice. J. Dent. Res. 92: 65-70.

## 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) or our catalog for detailed protocols and support products.

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Try **MIP-1 $\alpha$  (D-3): sc-166942** or **MIP-1 $\alpha$  (F-8): sc-166911**, our highly recommended monoclonal alternatives to MIP-1 $\alpha$  (FL-92).