

CXCR-3 (H-95): sc-13951

BACKGROUND

The CXC or a chemokine family is characterized by a pair of cysteine residues separated by a single amino acid and primarily functions as chemo-attractants for neutrophils. The CXC family includes IL-8, NAP-2, MSGA and stromal cell derived factor-1 or SDF-1. SDF-1 was originally described as a pre-B cell stimulatory factor, but has now been shown to function as a potent chemo-attractant for T cells and monocytes but not neutrophils. Receptors for the CXC family are G protein-coupled, seven pass transmembrane domain proteins which include IL-8RA, IL-8RB, CXCR-3 and fusin (variously referred to as LESTR or CXCR-4). CXCR-3, also known as IP-10/Mig receptor, mediates Ca⁺⁺ mobilization and chemotaxis in response to the CXC chemokines IP-10 and Mig. CXCR-3 is highly expressed in IL-2-activated T lymphocytes, but not in resting T lymphocytes, B lymphocytes, monocytes or granulocytes.

REFERENCES

1. Laterveer, L., et al. 1996. Rapid mobilization of hematopoietic progenitor cells in rhesus monkeys by a single intravenous injection of interleukin-8. *Blood* 87: 781-788.
2. Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
3. Nagasawa, T., et al. 1996. Defects of B-cell lymphopoiesis and bone-marrow myelopoiesis in mice lacking the CXC chemokine PBSF/SDF-1. *Nature* 382: 635-638.
4. Ahuja, S.K., et al. 1996. CXC chemokines bind to unique sets of selectivity determinants that can function independently and are broadly distributed on multiple domains of human interleukin-8 receptor B. Determinants of high affinity binding and receptor activation are distinct. *J. Biol. Chem.* 271: 225-232.
5. Feng, Y., et al. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 272: 872-877.

CHROMOSOMAL LOCATION

Genetic locus: CXCR3 (human) mapping to Xq13.1; Cxcr3 (mouse) mapping to X D.

SOURCE

CXCR-3 (H-95) is a rabbit polyclonal antibody raised against amino acids 1-95 of CXCR-3 of human origin.

PRODUCT

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

STORAGE

Store at 4° C, ****DO 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.

APPLICATIONS

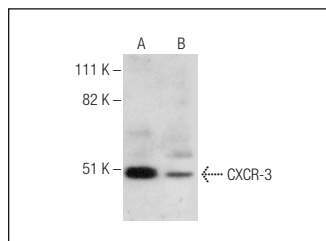
CXCR-3 (H-95) is recommended for detection of CXCR-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 CXCR-3 siRNA (h): sc-39902, CXCR-3 siRNA (m): sc-39903, CXCR-3 shRNA Plasmid (h): sc-39902-SH, CXCR-3 shRNA Plasmid (m): sc-39903-SH, CXCR-3 shRNA (h) Lentiviral Particles: sc-39902-V and CXCR-3 shRNA (m) Lentiviral Particles: sc-39903-V.

Molecular Weight of CXCR-3: 38 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or MES-SA/Dx5 cell lysate: sc-2284.

DATA



CXCR-3 (H-95): sc-13951. Western blot analysis of CXCR-3 expression in MES-SA/Dx5 (A) and K-562 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Pluchino, S., et al. 2005. Neurosphere-derived multipotent precursors promote neuroprotection by an immunomodulatory mechanism. *Nature* 436: 266-271.
2. Nakaya, I., et al. 2007. Blockade of IP-10/CXCR-3 promotes progressive renal fibrosis. *Nephron. Exp. Nephrol.* 107: e12-e21.
3. Pradelli, E., et al. 2009. Antagonism of chemokine receptor CXCR3 inhibits osteosarcoma metastasis to lungs. *Int. J. Cancer* 125: 2586-2594.

PROTOCOLS

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