SANTA CRUZ BIOTECHNOLOGY, INC.

CXCR-3 (L-17): sc-9901



BACKGROUND

The CXC or α 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 Ca²⁺ mobilization and chemotaxis in response to the CXC chemo-kines 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.
- Nagasawa, T., et al. 1996. Defects of B-cell lymphopoiesis and bonemarrow 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.

CHROMOSOMAL LOCATION

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

SOURCE

CXCR-3 (L-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CXCR-3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-9901 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 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 (L-17) is recommended for detection of CXCR-3 of human and, to a lesser extent, mouse and rat 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).

CXCR-3 (L-17) is also recommended for detection of CXCR-3 in additional species, including canine and porcine.

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: CXCR-3 (h): 293T Lysate: sc-114511, Caki-1 cell lysate: sc-2224 or HeLa whole cell lysate: sc-2200.

DATA





CXCR-3 (L-17): sc-9901. Western blot analysis of CXCR-3 expression in non-transfected: sc-117752 (A) and human CXCR-3 transfected: sc-114511 (B) 293T whole cell lysates.

CXCR-3 (L-17): sc-9901. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing membrane and cytoplasmic staining of follicle cells and cytoplasmic staining of ovarian stroma cells.

SELECT PRODUCT CITATIONS

- Flugel, A., et al. 2001. Migratory activity and functional changes of green fluorescent effector cells before and during experimental autoimmune encephalomyelitis. Immunity 14: 547-560.
- Kallapur, S.G., et al. 2003. Increased IP-10 and MIG expression after intra-amniotic endotoxin in preterm lamb lung. Am. J. Respir. Crit. Care Med. 167: 779-786.

MONOS Satisfation Guaranteed

Try CXCR-3 (H-1): sc-133087 or CXCR-3 (G-8): sc-137140, our highly recommended monoclonal aternatives to CXCR-3 (L-17).