SANTA CRUZ BIOTECHNOLOGY, INC.

CXCR-3 (N-15): sc-9900

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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^{2+} 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. 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.

CHROMOSOMAL LOCATION

Genetic locus: CXCR3 (human) mapping to Xq13.1.

SOURCE

CXCR-3 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus 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.

Blocking peptide available for competition studies, sc-9900 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CXCR-3 (N-15) is recommended for detection of CXCR-3 of 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 shRNA Plasmid (h): sc-39902-SH and CXCR-3 shRNA (h) Lentiviral Particles: sc-39902-V.

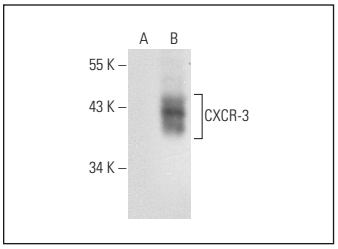
Molecular Weight of CXCR-3: 38 kDa.

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

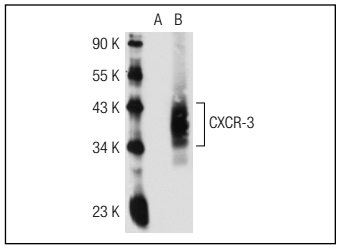
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CXCR-3 (N-15): sc-9900. Western blot analysis of CXCR-3 expression in non-transfected: sc-117752 (**A**) and human CXCR-3 transfected: sc-176249 (**B**) 293T whole cell lysates.



CXCR-3 (N-15): sc-9900. 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.

SELECT PRODUCT CITATIONS

1. Kelsen, S.G., et al. 2004. The chemokine receptor CXCR-3 and its splice variant are expressed in human airway epithelial cells. Am. J. Physiol. Lung Cell. Mol. Physiol. 287: L584-L591.
2. Rubie, C., et al. 2008. Differential CXC receptor expression in colorectal carcinomas. Scand. J. Immunol. 68: 635-644.

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.

PROTOCOLS

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