

CXCR-3 (H-1): sc-133087

BACKGROUND

The C-X-C or α chemokine family is characterized by a pair of cysteine residues separated by a single amino acid and primarily functions as chemoattractants for neutrophils. The C-X-C family includes IL-8, NAP-2, MSGA and stromal cell derived factor-1 (SDF-1). SDF-1 was originally described as a pre-B cell stimulatory factor, but has since been shown to function as a potent chemoattractant for T cells and monocytes but not neutrophils. Receptors for the C-X-C family are G protein-coupled, seven pass transmembrane domain proteins which include IL-8RA, IL-8RB, CXCR-3 and fusin (also designated LESTR or CXCR-4). CXCR-3, also known as IP-10/MIG receptor, mediates Ca^{2+} mobilization and chemotaxis in response to the C-X-C 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.

CHROMOSOMAL LOCATION

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

SOURCE

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

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CXCR-3 (H-1) is available conjugated to agarose (sc-133087 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-133087 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-133087 PE), fluorescein (sc-133087 FITC), Alexa Fluor® 488 (sc-133087 AF488), Alexa Fluor® 546 (sc-133087 AF546), Alexa Fluor® 594 (sc-133087 AF594) or Alexa Fluor® 647 (sc-133087 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-133087 AF680) or Alexa Fluor® 790 (sc-133087 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CXCR-3 (H-1) is recommended for detection of CXCR-3 of human origin by Western Blotting (starting dilution 1:100, 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 CXCR-3 siRNA (h): sc-39902, CXCR-3 shRNA Plasmid (h): sc-39902-SH and CXCR-3 shRNA (h) Lentiviral Particles: sc-39902-V.

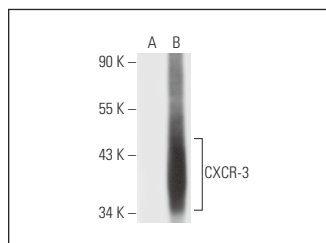
Molecular Weight of CXCR-3: 38 kDa.

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

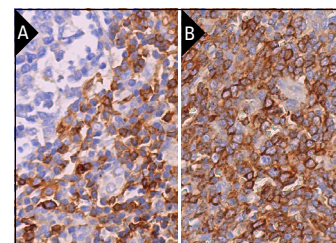
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CXCR-3 (H-1): sc-133087. 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 (H-1): sc-133087. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing membrane and cytoplasmic staining of cells in non-germinal center (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing membrane and cytoplasmic staining of cells in white pulp and cells in red pulp (B).

SELECT PRODUCT CITATIONS

- Jin, J., et al. 2018. CXCR-3 expression in colorectal cancer cells enhanced invasion through preventing CXCR-4 internalization. *Exp. Cell Res.* 371: 162-174.
- Lee, A.R., et al. 2023. Establishment of a humanized mouse model of keloid diseases following the migration of patient immune cells to the lesion: patient-derived keloid xenograft (PDKX) model. *Exp. Mol. Med.* 55: 1713-1719.
- Hamshaw, I., et al. 2024. The role of PKC and PKD in CXCL12 and CXCL13 directed malignant melanoma and acute monocytic leukemic cancer cell migration. *Cell. Signal.* 113: 110966.

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 for detailed protocols and support products.