CXCR-3 (h3): 293T Lysate: sc-176329



The Power to Questio

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 now 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 known as LESTR or CXCR-4). CXCR-3, also known as IP-10/Mig receptor, mediates Ca²⁺ 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.

REFERENCES

- Laterveer, L., Lindley, I.J., Heemskerk, D.P., Camps, J.A., Pauwels, E.K., Willemze, R. and Fibbe, W.E. 1996. Rapid mobilization of hematopoietic progenitor cells in rhesus monkeys by a single intravenous injection of interleukin-8. Blood 87: 781-788.
- Deng, H., Liu, R., Ellmeier, W., Choe, S., Unutmaz, D., Burkhart, M., Di Marzio, P., Marmon, S., Sutton, R.E., Hill, C.M., Davis, C.B., Peiper, S.C., Schall, T.J., Littman, D.R. and Landau, N.R. 1996. Identification of a major co-receptor for primary isolates of HIV-1. Nature 381: 661-666.
- 3. Nagasawa, T., Hirota, S., Tachibana, K., Takakura, N., Nishikawa, S., Kitamura, Y., Yoshida, N., Kikutani, H. and Kishimoto, T. 1996. Defects of B cell lymphopoiesis and bone-marrow myelopoiesis in mice lacking the C-X-C chemokine PBSF/SDF-1. Nature 382: 635-638.
- 4. Ahuja, S.K., Lee, J.C. and Murphy, P.M. 1996. C-X-C 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.
- Feng, Y., Broder, C.C., Kennedy, P.E. and Berger, E.A. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G proteincoupled receptor. Science 272: 872-877.
- Bleul, C.C., Farzan, M., Choe, H., Parolin, C., Clark-Lewis, I., Sodroski, J. and Springer, T.A. 1996. The lymphocyte chemoattractant SDF-1 is a ligand for LESTR/fusin and blocks HIV-1 entry. Nature 382: 829-833.
- Loetscher, M., Gerber, B., Loetscher, P., Jones, S.A., Piali, L., Clark-Lewis, I., Baggiolini, M. and Moser, B. 1996. Chemokine receptor specific for IP-10 and Mig: structure, function and expression in activated T lymphocytes. J. Exp. Med. 184: 963-969.
- Krug, A., Uppaluri, R., Facchetti, F., Dorner, B.G., Sheehan, K.C., Schreiber, R.D., Cella, M. and Colonna, M. 2002. IFN-producing cells respond to CXCR-3 ligands in the presence of CXCL12 and secrete inflammatory chemokines upon activation. J. Immunol. 169: 6079-6083.

CHROMOSOMAL LOCATION

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

PRODUCT

CXCR-3 (h3): 293T Lysate represents a lysate of human CXCR-3 transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

APPLICATIONS

CXCR-3 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive CXCR-3 antibodies. Recommended use: 10-20 µl per lane

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com