



CKR-3 (S-17): sc-31559

BACKGROUND

C-C or β -chemokine family members are characterized by a pair of adjacent cysteine residues and serve as potent chemoattractants and activators of monocytes and T cells. C-C chemokine receptor family members include, CKR-1, CKR-2A, CKR-2B, CKR-3, CKR-4, CKR-5, CKR-6, CKR-7 and the Duffy blood group antigen. Each of these receptors are G protein-coupled, seven pass transmembrane domain proteins whose major physiological role is to function in the chemotaxis of T cells and phagocytic cells to areas of inflammation. However, this receptor family has also been shown to facilitate viral infection. Termed a "co-receptor", CKR-5, along with CD4, has been shown to be a major receptor for HIV. CKR-5 tends to associate with macrophage-tropic viruses, such as macrophage tropic HIV-1, while CKR-2B and CKR-3 bind a minority of viruses.

REFERENCES

- Schweickart, V.L., et al. 1994. Cloning of human and mouse EBI1, a lymphoid-specific G protein-coupled receptor encoded on human chromosome 17q12-q21.2. *Genomics* 23: 643-650.
- Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
- Dragic, T., et al. 1996. HIV-1 entry into CD4⁺ cells is mediated by the chemokine receptor CC-CKR-5. *Nature* 381: 667-673.
- Feng, Y., et al. 1996. HIV-1 entry co-factor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 272: 872-877.
- Alkhatib, G., et al. 1996. C-C CKR5: a RANTES, MIP-1 α , MIP-1 β receptor as a fusion co-factor for macrophage-tropic HIV-1. *Science* 272: 1955-1958.
- Choe, H., et al. 1996. The β -chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. *Cell* 85: 1135-1148.
- Doranz, B.J., et al. 1996. A dual-tropic primary HIV-1 isolate that uses fusin and the β -chemokine receptors CKR-5, CKR-3, and CKR-2B as fusion co-factors. *Cell* 85: 1149-1158.
- Baba, M., et al. 1997. Identification of CCR6, the specific receptor for a novel lymphocyte-directed C-C chemokine LARC. *J. Biol. Chem.* 272: 14893-14898.

CHROMOSOMAL LOCATION

Genetic locus: CCR3 (human) mapping to 3p21.3; Ccr3 (mouse) mapping to 9 F.

SOURCE

CKR-3 (S-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CKR-3 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-31559 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CKR-3 (S-17) is recommended for detection of CKR-3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for CKR-3 siRNA (h): sc-39884.

Molecular Weight of CKR-3: 41 kDa.

Positive Controls: human eosinophils.

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) 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.

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.