

# CKR-7 (617CT2.2.1): sc-517322

## BACKGROUND

C-C or  $\beta$  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, CKR-8, CKR-9, CKR-10 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. CKR-7 (C-C chemokine receptor type 7), also known as CCR7, CMKBR7, EBI1 or EVI1, is a 378 amino acid multi-pass membrane protein that belongs to the CC-chemokine receptor family. Expressed in activated B- and T-lymphocytes, as well as in various lymphoid tissues, CKR-7 functions as a receptor for MIP-3 and is thought to be involved in mediating normal lymphocyte function.

## REFERENCES

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2. Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
3. Dragic, T., et al. 1996. HIV-1 entry into CD4<sup>+</sup> cells is mediated by the chemokine receptor CC-CKR-5. *Nature* 381: 667-673.
4. Feng, Y., et al. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 272: 872-877.
5. Alkhatib, G., et al. 1996. CC CKR5: a RANTES, MIP-1 $\alpha$ , MIP-1 $\beta$  receptor as a fusion cofactor for macrophage tropic HIV-1. *Science* 272: 1955-1958.
6. Choe, H., et al. 1996. The  $\beta$ -chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. *Cell* 85: 1135-1148.
7. Doranz, B.J., et al. 1996. A dual-tropic primary HIV-1 isolate that uses fusin and the  $\beta$ -chemokine receptors CKR-5, CKR-3, and CKR-2b as fusion cofactors. *Cell* 85: 1149-1158.
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## CHROMOSOMAL LOCATION

Genetic locus: CCR7 (human) mapping to 17q21.2.

## SOURCE

CKR-7 (617CT2.2.1) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 11-37 in the N-terminal region of CKR-7 of human origin.

## PRODUCT

Each vial contains 50  $\mu$ l ascites containing IgG<sub>1</sub> with < 0.1% sodium azide.

## APPLICATIONS

CKR-7 (617CT2.2.1) is recommended for detection of CKR-7 of human origin by Western Blotting (starting dilution: to be determined by researcher, dilution range 1:100-1:5000).

Suitable for use as control antibody for CKR-7 siRNA (h): sc-39888, CKR-7 shRNA Plasmid (h): sc-39888-SH and CKR-7 shRNA (h) Lentiviral Particles: sc-39888-V.

Molecular Weight of CKR-7: 43 kDa.

## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.