SANTA CRUZ BIOTECHNOLOGY, INC.

CKR-7 (C-18): sc-9700



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, 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 β and is thought to be involved in mediating normal lymphocyte function.

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.

CHROMOSOMAL LOCATION

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

SOURCE

CKR-7 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CKR-7 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9700 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CKR-7 (C-18) is recommended for detection of CKR-7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

CKR-7 (C-18) is also recommended for detection of CKR-7 in additional species, including equine, canine, bovine and porcine.

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.

Positive Controls: Ramos cell lysate: sc-2216.

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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CKR-7 (C-18): sc-9700. Immunofluorescence staining of methanol-fixed Ramos cells showing membrane localization.

SELECT PRODUCT CITATIONS

- Di Carlo, E., et al. 2007. The prostate-associated lymphoid tissue (PALT) is linked to the expression of homing chemokines CXCL13 and CCL21. Prostate 67: 1070-1080.
- 2. Di Carlo, E., et al. 2009. The lack of epithelial interleukin-7 and BAFF/BLyS gene expression in prostate cancer as a possible mechanism of tumor escape from immunosurveillance. Clin. Cancer Res. 15: 2979-2987.
- 3. Shannon, L.A., et al. 2012. CCR7/CCL19 controls expression of EDG-1 in T cells. J. Biol. Chem. 287: 11656-11664.

STORAGE

Store at 4° C, **D0 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.