# SANTA CRUZ BIOTECHNOLOGY, INC.

# CKR-7 (A-19): sc-9699



# 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 multipass 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 $\beta$  and is thought to be involved in mediating normal lymphocyte function.

# CHROMOSOMAL LOCATION

Genetic locus: CCR7 (human) mapping to 17q21.2; Ccr7 (mouse) mapping to 11 D.

### SOURCE

CKR-7 (A-19) 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  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9699 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **RESEARCH USE**

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

#### **APPLICATIONS**

CKR-7 (A-19) is recommended for detection of CKR-7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 (A-19) is also recommended for detection of CKR-7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CKR-7 siRNA (h): sc-39888, CKR-7 siRNA (m): sc-39889, CKR-7 shRNA Plasmid (h): sc-39888-SH, CKR-7 shRNA Plasmid (m): sc-39889-SH, CKR-7 shRNA (h) Lentiviral Particles: sc-39888-V and CKR-7 shRNA (m) Lentiviral Particles: sc-39889-V.

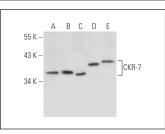
Molecular Weight of CKR-7: 43 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, Daudi cell lysate: sc-2415 or WEHI-231 whole cell lysate: sc-2213.

#### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# DATA



CKR-7 (A-19): sc-9699. Western blot analysis of CKR-7 expression in K-562 (**A**), Daudi (**B**), SP2/0 (**C**), WEHI-231 (**D**) and RAW 264.7 (**E**) whole cell lysates

## SELECT PRODUCT CITATIONS

- Flugel, A., et al. 2001. Migratory activity and functional changes of green fluorescent effector cells before and during experimental autoimmune encephalomyelitis. Immunity 14: 547-560.
- Yrlid, U., et al. 2006. Relationships between distinct blood monocyte subsets and migrating intestinal lymph dendritic cells *in vivo* under steady-state conditions. J. Immunol. 176: 4155-4162.
- Blocki, F.A., et al. 2006. Induction of a gene expression program in dendritic cells with a cross-linking IgM antibody to the co-stimulatory molecule B7-DC. FASEB J. 20: 2408-2410.
- 4. Liu, Q., et al. 2007. Triptolide impairs dendritic cell migration by inhibiting CCR7 and COX-2 expression through PI3-K/Akt and NF $\kappa$ B pathways. Mol. Immunol. 44: 2686-2696.
- Gomez-Nicola, D., et al. 2010. CCR7 is expressed in astrocytes and upregulated after an inflammatory injury. J. Neuroimmunol. 227: 87-92.

# PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# MONOS Satisfation Guaranteed

Try **CKR-7 (4B12): sc-57074**, our highly recommended monoclonal alternative to CKR-7 (A-19).