# CKR-10 (C-5): sc-365531



The Power to Question

# **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. CKR-10 (also designated CCR10 and GPR2) is the specific receptor for CCL27 (also designated CTACK, ESkine, ALP or ILC) and CCL28. The gene encoding CKR-10 has been mapped to human chromosome 17q21.2 and is highly expressed in testis, small intestine, fetal lung and fetal kidney. CKR-10 also has weaker expression in many adult tissues, including melanocytes, dermal fibroblasts and dermal microvascular endo-thelial cells, which suggest a role for CKR-10 in skin homeostasis and inflammatory response.

# **REFERENCES**

- 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.
- 3. Feng, Y., et al. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. Science 272: 872-877.
- 4. Alkhatib, G., et al. 1996. C-C CKR5: a RANTES, MIP-1 $\alpha$ , MIP-1 $\beta$  receptor as a fusion cofactor for macrophage-tropic HIV-1. Science 272: 1955-1958.
- 5. Choe, H., et al. 1996. The  $\beta$  chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. Cell 85: 1135-1148.
- 6. Bernardini, G., et al. 1998. Identification of the CC chemokine TARC and macrophage inflammatory protein-1  $\beta$  as novel functional ligands for the CCR8 receptor. Eur. J. Immunol. 28: 582-588.
- 7. Homey, B., et al. 2000. Cutting edge: the orphan chemokine receptor G protein-coupled receptor-2 (GPR-2, CCR10) binds the skin-associated chemokine CCL27 (CTACK/ALP/ILC). J. Immunol. 164: 3465-3470.
- 8. Wang, W., et al. 2000. Identification of a novel chemokine (CCL28), which binds CCR10 (GPR2). J. Biol. Chem. 275: 22313-22323.

# CHROMOSOMAL LOCATION

Genetic locus: CCR10 (human) mapping to 17q21.2; Ccr10 (mouse) mapping to 11 D.

#### SOURCE

CKR-10 (C-5) is a mouse monoclonal antibody raised against amino acids 141-290 mapping within an internal region of CKR-10 of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g \; lgG_{2b}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

CKR-10 (C-5) is recommended for detection of CKR-10 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for CKR-10 siRNA (h): sc-39894, CKR-10 siRNA (m): sc-142357, CKR-10 shRNA Plasmid (h): sc-39894-SH, CKR-10 shRNA Plasmid (m): sc-142357-SH, CKR-10 shRNA (h) Lentiviral Particles: sc-39894-V and CKR-10 shRNA (m) Lentiviral Particles: sc-142357-V.

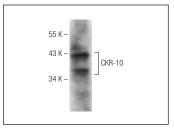
Molecular Weight of CKR-10: 38 kDa.

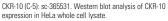
Positive Controls: HeLa whole cell lysate: sc-2200 or KNRK whole cell lysate: sc-2214.

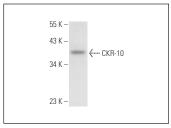
# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

#### **DATA**







CKR-10 (C-5): sc-365531. Western blot analysis of CKR-10 expression in KNRK whole cell lysate.

# **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 for detailed protocols and support products.