SANTA CRUZ BIOTECHNOLOGY, INC.

CKR-10 (H-150): sc-30035

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. 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 7q21.2 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 endothelial cells, which suggest a role for CKR-10 in skin homeostasis and inflammatory response.

REFERENCES

1. Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. Nature 381: 661-666.
2. 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. CC CKR5: a RANTES, MIP-1α, MIP-1β receptor as a fusion cofactor for macrophage-tropic HIV-1. Science 272: 1955-1958.
5. Choe, H.,et al. 1996. The β 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 β 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.

CHROMOSOMAL LOCATION

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

SOURCE

CKR-10 (H-150) is a rabbit polyclonal antibody raised against amino acids 141-290 mapping within an internal region of CKR-10 of human origin.

PRODUCT

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

RESEARCH USE

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

APPLICATIONS

CKR-10 (H-150) is recommended for detection of CKR-10 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-10 (H-150) is also recommended for detection of CKR-10 in additional species, including equine, canine, bovine and porcine.

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.

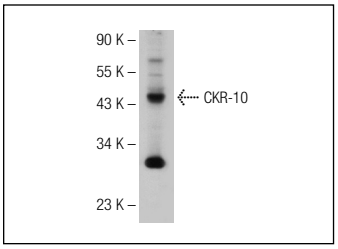
Molecular Weight of CKR-10: 38 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CKR-10 (H-150): sc-30035. Western blot analysis of CKR-10 expression in HeLa 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.