SANTA CRUZ BIOTECHNOLOGY, INC.

CKR-10 (E-2): sc-365957

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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

CHROMOSOMAL LOCATION

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

SOURCE

CKR-10 (E-2) 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 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CKR-10 (E-2) is available conjugated to agarose (sc-365957 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-365957 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365957 PE), fluorescein (sc-365957 FITC), Alexa Fluor® 488 (sc-365957 AF488), Alexa Fluor® 546 (sc-365957 AF546), Alexa Fluor® 594 (sc-365957 AF594) or Alexa Fluor® 647 (sc-365957 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365957 AF680) or Alexa Fluor® 790 (sc-365957 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CKR-10 (E-2) 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 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

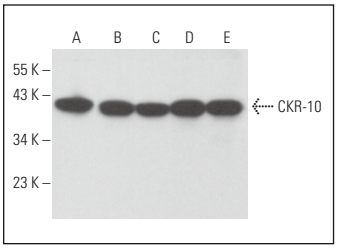
Suitable for use as control antibody for CKR-10 siRNA (h): sc-39894, CKR-10 siRNA (m): sc-142357, CKR-10 shRNA Plasmid (h): sc-39894-SH, CKR-10 shRNA Plasmid (m): sc-142357-SH, CKR-10 shRNA (h) Lentiviral Particles: sc-39894-V and CKR-10 shRNA (m) Lentiviral Particles: sc-142357-V.

Molecular Weight of CKR-10: 38 kDa.

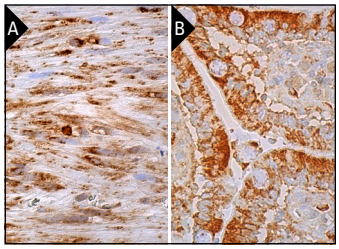
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CKR-10 (E-2): sc-365957. Western blot analysis of CKR-10 expression in MCF7 (**A**), SJRH30 (**B**), TK-1 (**C**), C2C12 (**D**) and C6 (**E**) whole cell lysates.



CKR-10 (E-2): sc-365957. Immunoperoxidase staining of formalin fixed, paraffin-embedded human smooth muscle tissue showing cytoplasmic staining of smooth muscle cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216 (**B**).

SELECT PRODUCT CITATIONS

1. Chen, Z., et al. 2015. Characterising the expression and function of CCL28 and its corresponding receptor, CCR10, in RA pathogenesis. Ann. Rheum. Dis. 74: 1898-1906.
2. Wu, Q., et al. 2018. The chemokine receptor CCR10 promotes inflammation-driven hepatocarcinogenesis via PI3K/Akt pathway activation. Cell Death Dis. 9: 232.
3. Park, J., et al. 2019. CCL28-induced RARβ expression inhibits oral squamous cell carcinoma bone invasion. J. Clin. Invest. 129: 5381-5399.

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.