SANTA CRUZ BIOTECHNOLOGY, INC.

CKR-9 (CW-2.2.1): sc-47722



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 and the Duffy blood group antigen. Each of these receptors are G proteincoupled, 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-8 is expressed on monocytes and type 2 T lymphocytes that are found in lymphoid tissues, such as thymus, spleen and lymph nodes. CKR-8 is a receptor for I-309 and the monocyte inflammatory protein-1 (vMIP-I) and is thought to mediate the activation, migration and proliferation of lymphoid cells. CKR-9, also designated GPR-9-6, is a receptor for the thymus expressed chemokine TECK. CKR-9 and TECK are thought to have a specialized role in the immune response because both are highly expressed by T lymphocytes in the small intestine, while T lymphocytes in several other tissues are CKR-9/TECK negative.

REFERENCES

- 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 C-C-CKR-5. Nature 381: 667-673.
- Feng, Y., et al. 1996. HIV-1 entry co-factor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. Science 272: 872-877.
- Alkhatib, G., et al. 1996. C-C 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.

CHROMOSOMAL LOCATION

Genetic locus: CCR9 (human) mapping to 3p21.31; Ccr9 (mouse) mapping to 9 F4.

SOURCE

CKR-9 (CW-2.2.1) is a mouse monoclonal antibody raised against murine wildtype thymocytes.

PRODUCT

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

CKR-9 (CW-2.2.1) is available conjugated to agarose (sc-47722 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-47722 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-47722 PE), fluorescein (sc-47722 FITC), Alexa Fluor[®] 488 (sc-47722 AF488), Alexa Fluor[®] 546 (sc-47722 AF546), Alexa Fluor[®] 594 (sc-47722 AF594) or Alexa Fluor[®] 647 (sc-47722 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-47722 AF680) or Alexa Fluor[®] 790 (sc-47722 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CKR-9 (CW-2.2.1) is recommended for detection of CKR-9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1 x 10⁶ cells).

Suitable for use as control antibody for CKR-9 siRNA (h): sc-39892, CKR-9 siRNA (m): sc-39893, CKR-9 shRNA Plasmid (h): sc-39892-SH, CKR-9 shRNA Plasmid (m): sc-39893-SH, CKR-9 shRNA (h) Lentiviral Particles: sc-39892-V and CKR-9 shRNA (m) Lentiviral Particles: sc-39893-V.

Molecular Weight of CKR-9: 42 kDa.

Positive Controls: TK-1 whole cell lysate: sc-364798.

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.

DATA





CKR-9 (CW-2.2.1): sc-47722. Western blot analysis of CKR-9 expression in TK-1 whole cell lysate.

CKR-9 (CW-2.2.1) FITC: sc-47722 FITC. FCM analysis of Jurkat cells. Black line histogram represents the isotype control, normal mouse $lgG_{2b}\mbox{-}FITC:$ sc-2857.

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 for detailed protocols and support products.

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