SANTA CRUZ BIOTECHNOLOGY, INC.

CKR-9 (7E7): sc-53983

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 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-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

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2. Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. Nature 381: 661-666.
3. 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.
4. Alkhatib, G., et al. 1996. C-C CKR5: a RANTES, MIP-1, MIP-1 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 C-C chemokine TARC and macrophage inflammatory protein-1 β as novel functional ligands for the CCR8 receptor. Eur. J. Immunol. 28: 582-588.
7. Napolitano, M. and Santoni, A. 1999. Structure and function of the C-C chemokine receptor (CCR) 8. Forum 9: 315-324.
8. Kunkel, E.J., et al. 2000. Lymphocyte C-C chemokine receptor 9 and epithelial thymus-expressed chemokine (TECK) expression distinguish the small intestinal immune compartment: Epithelial expression of tissue-specific chemokines as an organizing principle in regional immunity. J. Exp. Med. 192: 761-768.
9. Papadakis, K.A., et al. 2000. The role of thymus-expressed chemokine and its receptor CCR9 on lymphocytes in the regional specialization of the mucosal immune system. J. Immunol. 165: 5069-5076.

CHROMOSOMAL LOCATION

Genetic locus: Ccr9 (mouse) mapping to 9 F4.

SOURCE

CKR-9 (7E7) is a rat monoclonal antibody raised against a synthetic peptide corresponding to amino acids 3-22 of CKR-9 of mouse origin.

RESEARCH USE

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

PRODUCT

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

CKR-9 (7E7) is available conjugated to either phycoerythrin (sc-53983 PE) or fluorescein (sc-53983 FITC), 200 µg/ml, for IF, IHC(P) and FCM.

APPLICATIONS

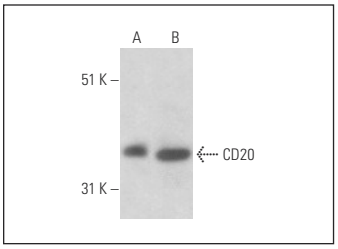
CKR-9 (7E7) is recommended for detection of CKR-9 of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

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

Molecular Weight of CKR-9: 42 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207 or GA-10 whole cell lysate: sc-364230.

DATA



CD20 (BC-1): sc-58983. Western blot analysis of CD20 expression in BJAB (**A**) and GA-10 (**B**) whole cell lysates.

STORAGE

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

PROTOCOLS

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