SANTA CRUZ BIOTECHNOLOGY, INC.

CKR-5 (M-20): sc-6129



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. However, this receptor family has also been shown to facilitate viral infection. Termed a "co-receptor", CKR-5, along with CD4, has been shown to be a major receptor for HIV. CKR-5 tends to associate with macrophage-tropic viruses, such as macrophage tropic HIV-1, while CKR-2B and CKR-3 bind a minority of viruses.

CHROMOSOMAL LOCATION

Genetic locus: CCR5 (human) mapping to 3p21.31; Ccr5 (mouse) mapping to 9 F4.

SOURCE

CKR-5 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CKR-5 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6129 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CKR-5 (M-20) is recommended for detection of CKR-5 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CKR-5 siRNA (h): sc-35062, CKR-5 siRNA (m): sc-35063, CKR-5 shRNA Plasmid (h): sc-35062-SH, CKR-5 shRNA Plasmid (m): sc-35063-SH, CKR-5 shRNA (h) Lentiviral Particles: sc-35062-V and CKR-5 shRNA (m) Lentiviral Particles: sc-35063-V.

Molecular Weight of CKR-5: 46 kDa.

Positive Controls: CKR-5 (h): 293T Lysate: sc-115607, U-937 cell lysate: sc-2239 or CTLL-2 cell lysate: sc-2242.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

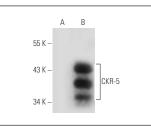
PROTOCOLS

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

RESEARCH USE

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

DATA



CKR-5 (M-20): sc-6129. Western blot analysis of CKR-5 expression in non-transfected: sc-117752 (**A**) and human CKR-5 transfected: sc-115607 (**B**) 293T whole cell lysates

SELECT PRODUCT CITATIONS

- Galasso, J.M., et al. 1998. Excitotoxic brain injury stimulates expression of the chemokine receptor CCR5 in neonatal rats. Am. J. Pathol. 153: 1631-1640.
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- Ma, B., et al. 2005. Role of CCR5 in IFN-γ-induced and cigarette smokeinduced emphysema. J. Clin. Invest. 116: 3460-3472.
- Barassi, C., et al. 2005. Induction of murine mucosal CCR5-reactive antibodies as an anti-human immunodeficiency virus strategy. J. Virol. 79: 6848-6858.
- 5. Oba, Y., et al. 2005. MIP-1 α utilizes both CCR1 and CCR5 to induce osteoclast formation and increase adhesion of myeloma cells to marrow stromal cells. Exp. Hematol. 33: 272-278.
- Ryschich, E., et al. 2006. Molecular fingerprinting and autocrine growth regulation of endothelial cells in a murine model of hepatocellular carcinoma. Cancer Res. 66: 198-211.
- Cowell, R.M., et al. 2006. Microglial expression of chemokine receptor CCR5 during rat forebrain development and after perinatal hypoxiaischemia. J. Neuroimmunol. 173: 155-165.
- Fujitani, S., et al. 2007. Increased number of CCR4-positive cells in the duodenum of ovalbumin-induced food allergy model Nc/jic mice and antiallergic activity of fructooligosaccharides. Allergol. Int. 56: 131-138.
- Venuti, A., et al. 2015. ERK1-based pathway as a new selective mechanism to modulate CCR5 with natural antibodies. J. Immunol.195: 3045-3057.

MONOS Satisfation Guaranteed

Try CKR-5 (D-6): sc-17833 or CKR-5 (R22/7): sc-32304, our highly recommended monoclonal alternatives to CKR-5 (M-20).