# SANTA CRUZ BIOTECHNOLOGY, INC.

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



# BACKGROUND

C-C or  $\beta$  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  $\mu g$  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  $\mu g$  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  $\mu$ g per 100-500  $\mu$ 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.

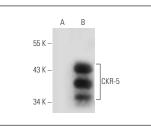
### PROTOCOLS

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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- 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).