

CKR-5 (D-6): sc-17833



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. 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 (D-6) is a mouse monoclonal antibody raised against amino acids 66-250 of C-C chemokine receptor gene 5 (CKR-5) of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CKR-5 (D-6) is available conjugated to agarose (sc-17833 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-17833 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-17833 PE), fluorescein (sc-17833 FITC), Alexa Fluor[®] 488 (sc-17833 AF488), Alexa Fluor[®] 546 (sc-17833 AF546), Alexa Fluor[®] 594 (sc-17833 AF594) or Alexa Fluor[®] 647 (sc-17833 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-17833 AF680) or Alexa Fluor[®] 790 (sc-17833 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

CKR-5 (D-6) is recommended for detection of CKR-5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:200-1:1,000), 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.

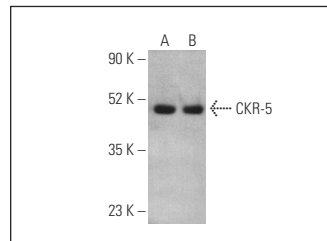
Molecular Weight of CKR-5: 46 kDa.

Positive Controls: PC-3 cell lysate: sc-2220, CTLL-2 cell lysate: sc-2242 or MOLT-4 cell lysate: sc-2233.

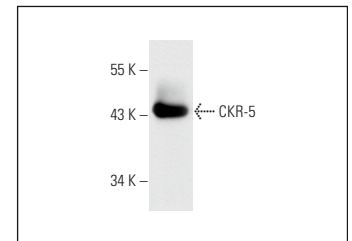
STORAGE

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

DATA



CKR-5 (D-6) HRP: sc-17833 HRP. Direct western blot analysis of CKR-5 expression in CTLL-2 (A) and MOLT-4 (B) whole cell lysates.



CKR-5 (D-6): sc-17833. Western blot analysis of CKR-5 expression in 293T whole cell lysate.

SELECT PRODUCT CITATIONS

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- Bixler, G.V., et al. 2011. Chronic Insulin treatment of diabetes does not fully normalize alterations in the retinal transcriptome. *BMC Med. Genomics* 4: 40.
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- Sax, M.J., et al. 2016. Cancer cell CCL5 mediates bone marrow independent angiogenesis in breast cancer. *Oncotarget* 7: 85437-85449.
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- Xie, L., et al. 2021. Chemokine CCL5 promotes robust optic nerve regeneration and mediates many of the effects of CNTF gene therapy. *Proc. Natl. Acad. Sci. USA* 118: e2017282118.

RESEARCH USE

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