

# CKR-2A (N-12): sc-46862

## 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 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.

## REFERENCES

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- Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
- Dragic, T., et al. 1996. HIV-1 entry into CD4<sup>+</sup> 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 CKR-5: a RANTES, MIP-1 $\alpha$ , MIP-1 $\beta$  receptor as a fusion co-factor for macrophage-tropic HIV-1. *Science* 272: 1955-1958.
- Choe, H., et al. 1996. The  $\beta$ -chemokine receptors CCR-3 and CCR-5 facilitate infection by primary HIV-1 isolates. *Cell* 85: 1135-1148.
- Doranz, B.J., et al. 1996. A dual-tropic primary HIV-1 isolate that uses fusin and the  $\beta$ -chemokine receptors CKR-5, CKR-3 and CKR-2B as fusion co-factors. *Cell* 85: 1149-1158.
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## CHROMOSOMAL LOCATION

Genetic locus: CCR2 (human) mapping to 3p21.31; Ccr2 (mouse) mapping to 9 F.

## SOURCE

CKR-2A (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of CKR-2A of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46862 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CKR-2A (N-12) is recommended for detection of CKR-2A of mouse and rat 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).

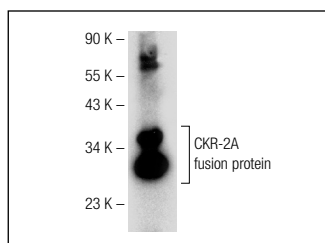
Suitable for use as control antibody for CKR-2 siRNA (m): sc-44766, CKR-2 shRNA Plasmid (m): sc-44766-SH and CKR-2 shRNA (m) Lentiviral Particles: sc-44766-V.

Molecular Weight of CKR-2A: 46-52 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



CKR-2A (N-12): sc-46862. Western blot analysis of mouse recombinant CKR-2A fusion protein.

## STORAGE

Store at 4° C, **\*\*DO 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](http://www.scbt.com) or our catalog for detailed protocols and support products.